

**LEVEL I
CONTAMINATION SCREENING EVALUATION REPORT
(MAINLINE AND DRAINAGE SITES)**

Florida Department of Transportation

Florida's Turnpike Enterprise

Project Development and Environment (PD&E) Study to

Widen Western Beltway (SR 429)

from North of I-4/SR 429 Interchange to Seidel Road

Financial Management Number: 446164-1

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1.0 Executive Summary

This Level I Contamination Screening Evaluation Report (CSER) was prepared to support the Widen Western Beltway (SR 429) Project Development and Environment (PD&E) study located in Orange and Osceola Counties, Florida. The purpose of this CSER is to present the findings of this Level I contamination screening evaluation. This report also presents recommendations for additional analysis for Medium rated sites. None were rated High. The study was performed in accordance with Part 2, Chapter 20 of the Florida Department of Transportation’s Project Development and Environment Manual (July 1, 2020). “Contamination concerns” refers to potential for contamination, if any, to impact the project.

This evaluation includes the mainline and four drainage sites. “Alt 1 Preferred” is the preferred drainage site. Additional right-of-way is anticipated to accommodate the proposed project improvements for both the mainline and drainage sites.

Based on the methodologies completed for this study, the following risk ratings were assigned to the contamination sites and drainage sites identified within and near the SR 429 right-of-way:

Number of Contamination Sites per Risk Rating			
High	Medium	Low	No
0	6	12	5
Number of Drainage Sites per Risk Rating			
0	2	0	2

Based on the conclusions of this study and the risk ratings noted above, the following recommendations are made:

- Additional information may become available or site-specific conditions may change from the time this report was prepared and should be considered prior to acquiring right-of-way (if required) and/or proceeding with roadway construction. If the preferred alignment or drainage locations change, and/or new potential contamination sites are identified, this report should be revised and updated to reflect those changes.
- For the locations rated “No” or “Low” for contamination, no further action is required. These locations have been determined not to have any contamination risk to the study area at this time.
- If deemed appropriate by the Florida Turnpike Enterprise District Contamination Impact Coordinator (DCIC), Level II testing is recommended for the six mainline sites rated Medium (none were rated High), and one of the two drainage sites rated Medium. Although the FGB Alt 3 drainage site was assigned a risk rating of Medium, no testing is recommended since it was not selected as the preferred drainage site. These sites should be marked, and notes added on future plans by the designer. A site specific Level II scope of

services should be developed for each of these sites to be reviewed and approved by the DCIC.

- Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area.

2.0 Introduction

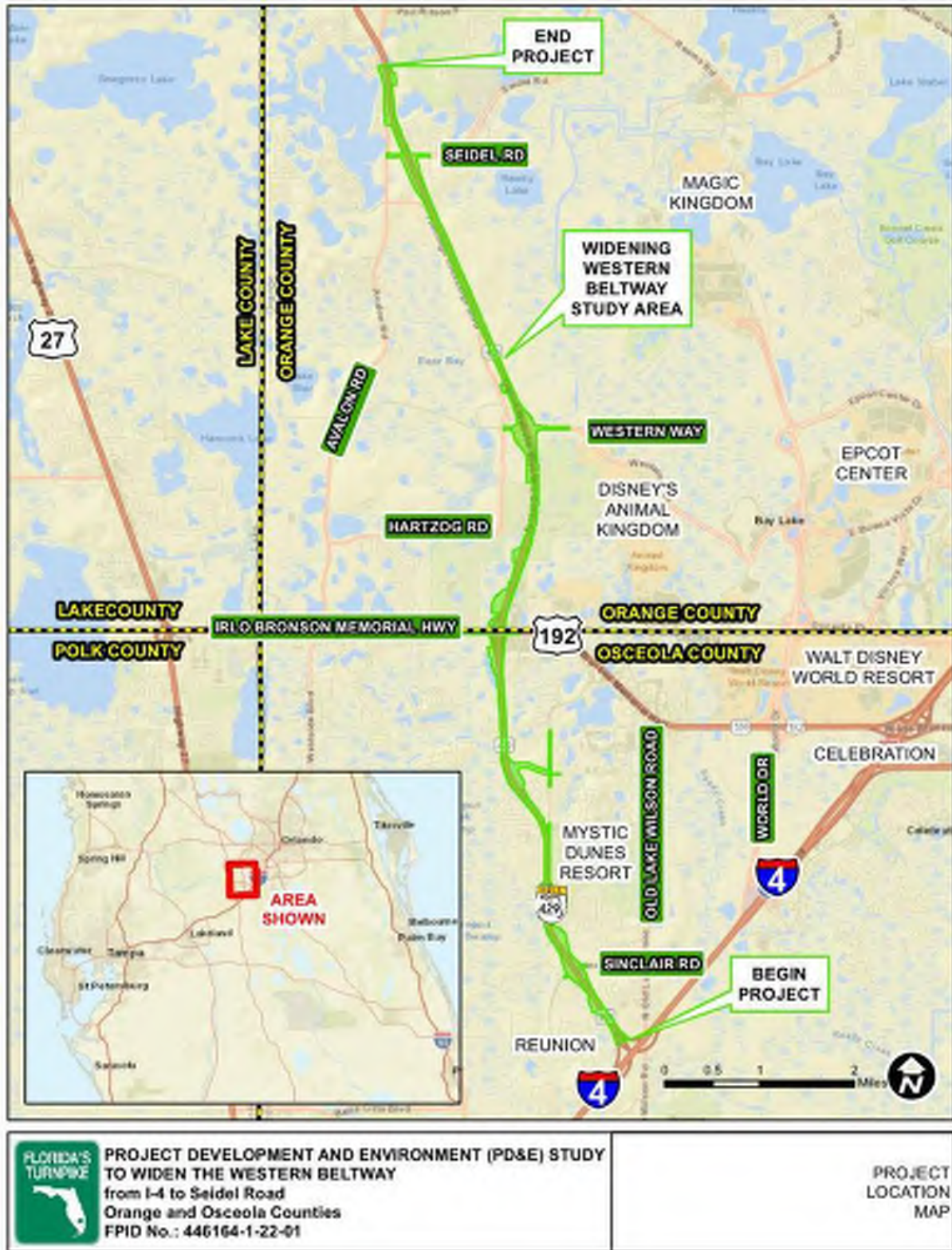
This Level I Contamination Screening Evaluation Report (CSER) was prepared to support the Widen Western Beltway (SR 429) Project Development and Environment (PD&E) study located in Orange and Osceola Counties, Florida. The purpose of this CSER is to present the findings of this Level I contamination screening evaluation. This report also presents recommendations for additional analysis for Medium rated sites. None were rated High. The study was performed in accordance with Part 2, Chapter 20 of the Florida Department of Transportation's Project Development and Environment Manual (July 1, 2020).

This evaluation includes the mainline and four drainage sites: Alt 1 (Preferred), Alt 2, Alt 3, and FGB Alt 3. "Alt 1 Preferred" is the preferred drainage site. Additional right-of-way is anticipated to accommodate the proposed project improvements for both the mainline and drainage sites. Additional right-of-way (ROW) is depicted in **Appendix A, Sheet A-2**.

Project Description

The Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise is evaluating improvements to the Western Beltway/State Road (SR) 429 from north of Interstate 4 (I-4) at milepost 1 in Osceola County to the Seidel Road interchange at milepost 11 in Orange County, a distance of approximately 10 miles. The Western Beltway (SR 429) is part of a limited-access, tolled beltway around Orlando, and is part of the overall Florida's Turnpike system of tolled expressways. Improvements being evaluated include widening from two to four lanes in each direction, incorporating interchange modifications and safety improvements along SR 429, adding or upgrading Intelligent Transportation Systems (ITS), and adding a potential new interchange location at an extension of Livingston Road. An adjacent project, the Poinciana Parkway Extension PD&E Study (Financial Project Identification Number [FPID] 446581-1) from County Road (CR) 532 to north of the I-4/SR 429 interchange will also evaluate improvements along SR 429 from the I-4 interchange to north of Sinclair Road. If Poinciana Parkway Extension moves forward, the widening of Western Beltway (SR 429) will match that project north of Sinclair Road. However, in order to maintain Independent Utility, should the Poinciana Parkway Extension not move forward, the Western Beltway widening would continue south of Sinclair Road to the I-4 interchange. The Design Year is 2050. **Figure 1: Project Location Map** shows the Project Location Map and study limits.

Figure 1: Project Location Map



3.0 Project Alternatives

There is only one Build Alternative for the mainline widening of SR 429 from four lanes to eight lanes for the length of the project. Since widening to eight lanes meets the Purpose and Need and future traffic operational needs and has minimal environmental impacts, it is recommended as the Preferred Alternative.

A total of four drainage sites were evaluated for this project: Alt 1 (Preferred), Alt 2, Alt 3, and FGB Alt 3. “Alt 1 Preferred” is the preferred drainage site. These are illustrated in **Appendix A, Sheet A-2**.

Additional right-of-way is anticipated for the mainline, and the drainage sites. These are illustrated in **Appendix A, Sheet A-2**.

4.0 Methodology

A contamination screening evaluation was conducted to identify contamination issues from properties or operations located within the vicinity of the project. Site specific details are provided, where appropriate, in **Section 8, Table 1** and **Table 2**. This evaluation consisted of the following tasks:

- Aerial photographs were reviewed to develop a history of the previous land uses within the study area and to identify sites which may have historical uses that pose contamination concerns. Aerial photographs dated 1944, 1947, 1951, 1957, 1958, 1959, 1969, 1971, 1974, 1983, 1984, 1996, 1997, 2005, 2006, 2011, 2012, and 2021 were obtained from Environmental Data Management, Inc. (EDM) on March 23, 2022. Copies of these aerial photographs are presented in **Appendix B**. Additionally, aerial photographs dated 1990, 1994, 1995, 1999, 2002, 2004-2011, 2012-2019, and 2021 were reviewed using the Google Earth database. A copy of the 2021 FDOT aerial photograph is presented in **Appendix A**.
- Topographic maps were obtained from EDM. Copies of these maps are provided in **Appendix C**. Topographic maps can be useful identifying contamination concerns such as railroads, mine lands, bulk storage tanks, and landfills/disturbed lands. Additionally, land use and water features, including elevation contours can be identified on topographic maps. The following USGS 7.5-Minute topographic maps were reviewed for this study: “Intercession City, Florida” Quadrangles dated 1953, 1953 (photorevised 1980; photoinspected 1983), and 1953 (photorevised 1980; photoinspected 1985); “Windermere, Florida” Quadrangles dated 1953, 1953 (photorevised 1970), and 1953 (photorevised 1980); and “Lake Louisa, Florida” Quadrangles dated 1959, 1959 (photorevised 1970), and 1959 (photorevised 1980).
- The Orange and Osceola County Property Appraiser databases were reviewed for information related to suspect contamination sites where other resources may not have provided ample information regarding the site, or to determine addresses, parcel boundaries and other pertinent information.
- An environmental database search using EDM was conducted on March 22, 2022 to identify sites, facilities or listings within the study area containing documented or suspected petroleum contamination or other hazardous materials. This report utilizes a 500-foot, 1,000 foot, and ½ mile search distances as specified in Part 2, Chapter 20 of the FDOT PD&E Manual. The EDM report is used as a preliminary screening tool to identify facilities that are registered with various county, state, and federal agencies. The regulatory review of federal and state environmental records utilizes an integrated geographic information system database. The database report provides geocoded and non-geocoded regulatory listings of interest that are identified within the study area. Each listing is located by address, facility identification number and field verified where possible. All are reviewed

for the potential of contamination to impact the project. The reviewed records include information compiled by the United States Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and other various reporting programs, as identified in EDM's report. A complete list of all regulatory record databases searched is included in the environmental database search report, provided in **Appendix D**. Supplemental information obtained from the FDEP OCULUS database is included in **Appendix F**.

- Performed a site reconnaissance on April 11, 2022 and May 19, 2022 to identify new and undocumented contamination sites, and to verify locations of documented contamination sites. Select photographs are provided in **Appendix E**.
- Evaluated potential for artesian conditions using the Florida State Geological Survey, Map of Florida Showing Topography, Hard Rock and Land Pebble Phosphate Deposits, and Areas of Artesian Flow dated 1913:
<https://www.floridamemory.com/items/show/322988>
- Assigned risk ratings for each contamination site or pond after evaluating the findings of each of the previously mentioned methodologies. The rating system defined in the PD&E Manual is divided into four categories of risk which express the degree of concern for contamination problems. The four degrees of risk ratings are No, Low, Medium, and High and are defined as follows:

No Risk Site

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.

Low Risk Site

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.

Medium Risk Site

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 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 Risk Site

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.

5.0 Land Uses

Determination of previous land uses and occupancies is an important factor when evaluating the potential for contamination involvement. Developing a history of the project and surrounding areas can assist in determining the potential for releases or discharges of hazardous materials or petroleum products. To determine land uses for this project, a site reconnaissance and interviews were performed along with a review of historical aerial photographs and topographic maps (**Section 8.0**).

5.1 Site Reconnaissance

A site visit was conducted on April 11, 2022 and May 19, 2022 to evaluate each property within and in close proximity to the mainline for contamination concerns. The site reconnaissance in conjunction with the desktop review allow the sites to be rated as to the degree of contamination concern as discussed in **Section 4.0**. The reconnaissance included a systematic inspection of each parcel along the corridor, and surrounding areas looking for signs of contamination. This was achieved by driving, where possible, the corridor, and walking the parcels within and surrounding the corridor (where accessible) to gain specific information regarding the usage and condition of each contamination site. Photographs of the contamination concerns were taken during the site inspection. Select images are presented in **Appendix E**.

Some of the typical physical indicators for contamination concerns include: railroad tracks, fill ports and vent pipes associated with aboveground storage tanks (ASTs), underground storage tanks (USTs), oil/petroleum staining, drums, chemical containers, refuse, illicit dumping, solid waste, stressed vegetation, dry cleaning facilities, material handling from adjacent businesses, petroleum dispensers, excavated areas, agricultural use, chemical mix/load areas, stormwater outfall areas, surface water indicators, groundwater monitor wells, restricted area/contamination/hazardous material/petroleum pipeline signage, cattle dip vats and other property uses that may present contamination concerns.

A detailed description of field observations for each contamination site is provided in **Section 8.0**.

5.2 Aerial Photograph Review

Generally, aerial photographs depict SR 429 is depicted as undeveloped land, low, wet areas, and several structures from 1944 to 2001. SR 429 is depicted under construction from 2004 to 2006, and complete in 2007. A detailed discussion of contamination concerns is provided in **Section 8.0**.

5.3 USGS Topographic Map Review

Generally, topographic maps depict SR 429 is depicted as undeveloped land, woods, groves, and low, wet areas between 1953 and 1985. Multiple hill tops and low, wet areas are depicted within the project limits and adjacent areas. Three structures are depicted on the 1970 and 1980

“Windermere, Fla.” topographic maps within the SR 429/Western Way intersection and ROW. A detailed discussion of contamination concerns is provided in **Section 8.0**.

6.0 Hydrologic Features

6.1 Aquifers of Florida

The Floridan aquifer is found throughout Florida and extends into the southern portions of Alabama, Georgia, and South Carolina. This aquifer system is comprised of a sequence of limestone and dolomite, which thickens from about 250 feet in Georgia to about 3,000 feet in south Florida. The Floridan aquifer system has been divided into an upper and lower aquifer separated by a unit of lower permeability. The upper Floridan aquifer is the principal source of water supply in most of north and central Florida. Groundwater flow is generally from high elevations within the central portion of the state towards the east and west coasts.

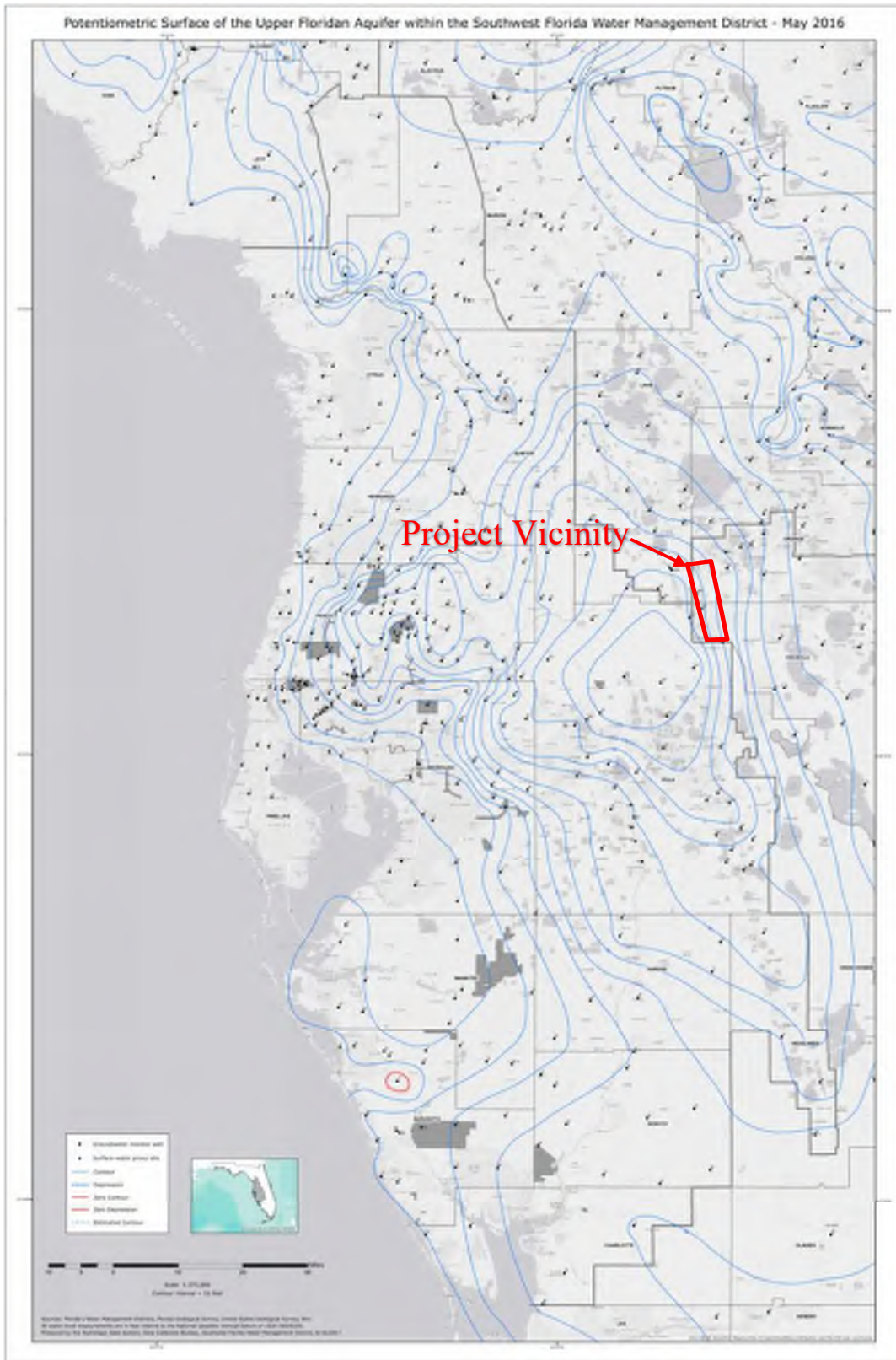
The surficial aquifer system in Florida includes any otherwise undefined aquifers that are present at land surface. The surficial aquifer is mainly used for domestic, commercial, or small municipal supplies. The surficial aquifer system is generally under unconfined, or water table conditions and is made up of mostly unconsolidated sand, shelly sand, and shell. The aquifer thickness is typically less than 50 feet. Groundwater in the surficial aquifer generally flows from areas of higher elevation towards the coast or streams where it can discharge as base flow. Water enters the aquifer from rainfall and exits as base flow to streams, discharge to the coast, evapotranspiration, and downward recharge to deeper aquifers.

Based on topography and regulatory file information for potential contamination sites, the estimated depth of the surficial aquifer ranges from land surface to greater than 40 feet below land surface (bls) in the project area.

6.2 Potentiometric Surface Map – Upper Floridan Aquifer

According to the Florida State Geological Survey, Map of Florida Showing Topography, Hard Rock and Land Pebble Phosphate Deposits, and Areas of Artesian Flow dated 1913, artesian conditions are not anticipated in the vicinity of this project. Tierra's review of the Potentiometric Surface Map dated September 2016 for the Upper Floridan Aquifer depicts groundwater flow direction generally toward the east. See **Figure 2**, next page.

Figure 2: Upper Floridan Aquifer Potentiometric Surface Map



6.3 Hydrology – Site Reconnaissance

During the site reconnaissance, surface waters observed within the study area included multiple manmade stormwater ponds, roadside ditches and swales, and low, wet areas. Land generally sloped towards manmade drainage features, and natural low, wet areas within and near the project limits. No potable wells were identified within the boundaries of the drainage sites during the site reconnaissance. One groundwater monitor well, MWB-7, was identified within the proposed ROW located west of Formosa Gardens Boulevard. MWB-7 is further discussed in **Table 1**, Site 29.

For drainage sites, the western portion of Alt 1 Preferred is an existing stormwater pond. Alt 2 and Alt 3 appeared to be wooded low, wet areas. Although surface water was not noted during the site reconnaissance, a low area surrounded by planted pine trees was noted at the southeast corner of FGB Alt 3. This low area appears to be seasonally inundated. No groundwater monitoring wells, irrigation wells or potable wells were identified within the boundaries of the drainage sites during the site reconnaissance.

6.4 Hydrology – USGS 7.5 Minute Topographic Maps

Based on the topographic maps, “Whittenhorse Creek” and Boggy Creek both intersect SR 429 in the north-central portion of this project. Multiple hill tops are depicted within the project limits and adjacent areas. Multiple low, wet areas, and submerged swamp or marsh areas are depicted within and adjoining the project limits. Surface topography in the area generally slopes to the west towards Hickorynut Lake in the northern area, Boggy Creek in the central area, and Davenport Creek Swamp in the southern area.

7.0 Interviews

Communication with landowners, facility operators, residents, and governmental agencies can aid in the understanding of past and current land uses within the study area. Where possible or when necessary, interviews or requests for information are collected in an effort to identify potential concerns associated with petroleum storage tanks; automotive or marine, maintenance, service or repair facilities; dry-cleaning processes; and other industrial or agricultural operations that could affect the project.

The following interviews were conducted, or attempted for this evaluation:

- Site 1 – Tierra emailed the Orange County Environmental Protection Division (OCEPD) on March 24, 2022, and again on June 9, 2022.
- Site 4 – Tierra emailed Ms. Amber Morgan, Toho Water Authority on March 29, 2022.
- Site 7 – Tierra emailed the Florida Department of Environmental Protection, Central District on March 23, 2022.
- Site 22 – Tierra conducted a telephone interview with Mr. Scott Ruland, Project Manager with Water Conserv II on March 29, 2022.
- Tierra requested copies of asbestos and metal base coatings reports from Mr. Eric Krebill, FTE’s DCIC via email on July 27, 2022 for structures (bridges, toll booths, and toll gantries) to be renovated/demolished. In his response on August 2, 2022, Mr. Krebill stated no asbestos or metal-based coating reports were found. See recommendations in **Section 9.2** (Additional Considerations).

These interviews and/or correspondences are documented in **Table 1** in **Section 8.0**.

8.0 Project Impacts

Based on the methodologies performed, twenty-three contamination sites were identified within the study area which may impact the proposed improvements. The location of each contamination site and drainage site is illustrated in **Appendix A**. Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc.

Table 1: Mainline Contamination Sites						
Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
1	Groves/Crops	NA	Within and adjoining east and west of SR 429 ROW	Petroleum, Herbicides, Pesticides, and Arsenic	Medium	<p>During the site reconnaissance, former groves/crops were redeveloped as SR 429, and adjacent planted pine forests, commercial, residential, utilities, and sites under construction.</p> <p>Former groves/crops were identified within the SR 429 ROW and adjoining areas on both the topographic maps (1970 and 1980) and historical aerial photographs from at least 1947 to 2018. The outline of former groves presented in Appendix A, Sheets A-1 to A-4 is based on the maximum limits of the groves between 1947 and 2018. Agricultural land uses such as citrus groves/row crops can be associated with contamination from residual pesticides, herbicides, metals, and petroleum contaminants in the soil and groundwater. Agricultural uses of organic and inorganic pesticides and herbicides are exempt from most RCRA provisions, provided that the farmers apply the chemicals on their own farms and in accordance with labeled instructions. Spills, improper application, too much application and application of disallowed pesticides are not exempted from these requirements. These groves/crops were located within the ROW and therefore present a higher likelihood for encountering residual contamination during construction. The potential for contamination is more concentrated at “source areas” such as mix/load areas, storage/maintenance facilities (i.e. pole barns, equipment maintenance shops, etc.), and at diesel-powered irrigation pumps. Three to five structures were depicted on aerial photographs between 1965 and 1984. See Site 15 and Site 16 for a review of regulatory files associated with groves.</p> <p>Additionally, three manmade ponds within the SR 429 ROW (and groves) were filled prior to, or during construction of SR 429 circa 2004. The locations are at the SR 429/Seidel Road intersection (northern project area), the SR 429/Western Way intersection (north-central project area), and one mile north of the SR 429/Western Way intersection (north-central project area). The unknown nature of the fill materials is considered a low risk.</p> <p>This site is assigned a risk rating of Medium.</p>
2	Planted Pine Trees	NA	Within and adjoining east and west of SR 429 ROW	Herbicides, Pesticides, and Arsenic	Low	<p>During the site reconnaissance, several areas of planted pine trees were noted adjoining east and west of SR 429. The planted pine trees were noted on aerial photographs from at least 1995 to 2021. No regulatory files were found and no contamination issues have been documented. According to the USEPAs <i>National Management Measures to Control Nonpoint Source Pollution from Forestry</i> (page 2-13) dated April 2005:</p> <p><i>Fertilizers, herbicides, and pesticides are used to prepare a site for regeneration and to protect forests from disease and pests. Adverse effects on water quality due to forest chemical applications typically result from not following the specific application instructions for the chemical being used, such as specifications for the quantity to apply and the distance to maintain around watercourses (Norris and Moore, 1971). Generally, the water quality and aquatic biota threats due to fertilizers, herbicides, and pesticides are small because the chemicals are applied at most only one to three times at a harvest site and they specifically target biochemical pathways present only in plants, rendering them of little danger to aquatic animals. Furthermore, the half-lives of forestry herbicides are on the order of less than 100 days.</i></p> <p>This site is assigned a risk rating of Low</p>

Table 1: Mainline Contamination Sites

Site Number/EDM Number	Site Name & Address	Databases/Facility ID/Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
3	Mystic Dunes Resort & Golf Club 7600 Mystic Dunes Lane	NA	Adjacent east of SR 429 ROW	Pesticides, Herbicides, Arsenic, Petroleum	Low	During the site reconnaissance, this site was observed as Mystic Dunes Resort and Golf Club. This site is depicted in Appendix A, Sheet A-1 . Areas of concentrated contamination concern at golf courses typically include the maintenance facilities where equipment maintenance, and storage, mixing and loading of agricultural chemicals and petroleum products takes place. The maintenance/storage facility was noted over ½ mile east of the SR 429 ROW. Application of agricultural chemicals is presumed to be consistent with manufacturer and regulatory guidelines. Aerial photos depict this site under construction in 1999, and completed in 2004. No groundwater monitor wells were noted. This site is assigned a risk rating of Low.

Table 1: Mainline Contamination Sites

Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
4 (EDM 1)	<p>Sand Hill WWTP 3211 Sand Hill Road</p> <p>Kissimmee City-Sand Hill WWTP 8000 Sand Hill Road</p> <p>KISSIMMEE City- WWTP 300 Sand Hill Road</p> <p>8200 Sand Hill Road</p>	<p>TANKS 9103166</p> <p>TANKS 9100608 (Historical Entry- no files found)</p> <p>FDEP WASTEWATER FLA010958</p>	Adjoining west of SR 429 ROW	Petroleum, Hazardous Materials	Low	<p>During the site reconnaissance, this site was observed as Sandhill Road Wastewater Treatment Facility (WWTF), an active domestic wastewater treatment plant. This site is depicted in Appendix A, Sheet A-1. Portions of this facility was under construction. This site was first depicted on the 1995 aerial photograph.</p> <p>A cell tower was also noted 200 feet west of the ROW. One emergency generator with a propane AST was observed at the cell tower. Therefore, the cell tower site is not a contamination concern.</p> <p>EDM's report states this site has three registered emergency generator diesel ASTs. Two ASTs (5,000-gallons and 6,000-gallons) remain in service. The generators/ASTs were not noted during the site reconnaissance. One 2,000-gallon AST was removed in 2005. No discharges were reported. Facility status is listed as open. Thirty-two files were found on the OCULUS database dated 1991 to 2019. The most recent inspection dated February 28, 2019 noted multiple violations which included corrosion on aboveground piping, faulty equipment, and administrative items. The Orange County Environmental Protection Division issued a "Return to Compliance" letter on May 17, 2019.</p> <p>The Tank Closure Assessment Report dated 2005 (post removal assessment of a 2,000-gallon AST) states laboratory results were below SCTLs for the one soil sample collected for analysis, and organic Vapor Analyzer (OVA) readings were not detected (0.0 parts per million) in the five soil borings performed in November 2005. Each soil boring was completed to a depth of 11 feet bls. Shallow groundwater was not encountered at the soil boring locations. However, the measured depth of shallow groundwater was 31.75 feet bls "in a nearby monitor well" at this facility. Since contaminated soils were not identified, and the depth of shallow groundwater was beyond 30 feet bls, no monitor wells were installed and no groundwater samples were collected. A figure in the report depicts the former AST located within the SR 429 ROW.</p> <p>Tierra emailed Ms. Amber Morgan of the Toho Water Authority on March 28, 2022 for further information. Ms. Morgan provided two figures depicting the monitor well locations, and the most recent Quarterly Groundwater Monitoring reports (October 2021 to December 2021) for four compliance wells (MWC-1, 60 feet bls, MWC-3, 41 feet bls, MWC-6, 39.5 feet bls, MWC-8 (depth not given)), and one background well (MWB-7). MW-2 and MW-4 were abandoned. Nitrogen, Nitrate Total (as N) exceeded the permit requirement of 10 milligrams per liter (mg/L) for MWC-3 (18.2 mg/L), MWC-6 (12.5 mg/L), and MWC-8 (13.1 mg/L). See maps and documents provided by Ms. Morgan in Appendix F. Monitor wells MWC-1, MWC-3 and MWC-6 are located west of SR 429 and basically surround the six Rapid Infiltration Basins (RIBs) located in the northern portion of the WWTP. Two wells were installed in 2013: background well MWB-7, located one mile north of the WWTP, within the Formosa Gardens Boulevard ROW; and MWC-8, located 0.4 miles southeast of the WWTP, and 550 feet east of the SR 429 ROW. Laboratory results of 0.032 mg/L for Nitrogen, Nitrate Total (as N) at MWB-7 were below the permit requirement of 10 mg/L. Depth to groundwater at the WWTP (MWC-1, MWC-3, and MWC-6) ranged from 105.88 to 106.62 relative to NGVD in December 2021. Depth to groundwater at MWC-8 was 101.29 relative to NGVD in December 2021. Although not a contamination concern, since MWB-7 is located within the proposed ROW, relocation may be required if construction impacts are anticipated.</p> <p>Based on information found on the Osceola County Property Appraiser database, this facility was built in 1991, and is owned by Tohopekaliga Water Authority (TWA); with an address of "8200 Sand Hill Road."</p> <p>Although laboratory results for Nitrogen, Nitrate Total (as N) exceed the groundwater permit requirement at three compliance wells located east (MWC-8) and west (MWC-3 and MWC-6) of SR 429, construction impacts are not anticipated within the zone of shallow groundwater. Therefore, this site is assigned a risk rating of Low.</p>

Table 1: Mainline Contamination Sites

Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
5 (EDM 2)	Lift Station 97 0 Formosa Boulevard	TANKS 9810233	Over 320 feet north of Formosa Gardens Blvd. ROW 2,300 feet east of SR 429 ROW	Petroleum	No	During the site reconnaissance, this site was observed as Lift Station 97. This site is depicted in Appendix A, Sheet A-2 . One emergency generator was noted. No stained soil or stressed vegetation was noted. EDM's report states this site has one 1,700-gallon diesel AST for an emergency generator. No discharges were reported. Given the separation distance, and lack of a reported discharge, this site is assigned a risk rating of No.
6	EDB Groundwater Contamination Zone #49263262 No address	FDEP Zone ID 49263262	1,300 feet east of the Formosa Gardens Blvd. ROW, and 3,700 east of SR 429 ROW	EDB	Low	This EDB plume is depicted in Appendix A, Sheet A-2 , and on EDM's Environmental Impact Areas Map (Appendix D) and on the FDEP MapDirect database east of the nearest project limit, Formosa Gardens Boulevard. The EDB plume is located 1,300 feet east of the project limit. According to information obtained from the FDEP Delineation database (http://www.dep.state.fl.us/water/groundwater/delineate.htm), from 1962 to mid-1983, the Florida Department of Agriculture and Consumer Services conducted widespread field application of a soil fumigant, ethylene dibromide (EDB or Dibromoethane 1,2-), to control nematodes in citrus groves. EDB was also used by private citizens on golf courses and on crops such as peanuts and soybeans. The extent of contamination is estimated by the FDEP using a geo-statistical tool called variogram analysis. Where data is incomplete, a 1000-foot protective setback is placed around the contaminated site or well to estimate the extent of the contaminated plume. Additionally, the FDEP has delineated areas of Florida where EDB was historically applied but for which little or no ground water quality data exist. The latest maps produced by the FDEP were approved in 1994. The density of EDB is greater than that of water and therefore sinks through the water column until impeded by an impermeable soil stratum. Based on the separation distance of 1,300 feet, this zone is considered a low risk to impact construction for this project. Therefore, the EDB plume is assigned a risk rating of Low.

Table 1: Mainline Contamination Sites

Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
7 (EDM 3)	Oak Island/ Central Florida Investment Oak Island Road (currently Funnie Steed Road)	SLDWST_LF 25553	Adjacent west of SR 429 ROW	Solid Waste	Medium	<p>During the site reconnaissance, this location was observed as woods. This site is depicted in Appendix A, Sheet A-2. A depression five feet below surrounding areas, with several pieces of concrete rubble and metal debris was noted in the woods 40 feet west of the SR 429 ROW. The road along the north boundary is Funie Steed Road (formerly Oak Island Road). Emerald Island Boulevard (first depicted in 2004) was constructed over the former landfill. Petroleum products and hazardous materials were not noted.</p> <p>EDM's report states this is an "old dump" used for construction and demolition debris. Status is listed as "No Further Action." Although a single 163-page document was found on OCULUS, it contained multiple files dated 1987 to 1993. Although the parcel is 46-acres, only the eastern portion (21-acres) comprised the former landfill. The most recent document on the OCULUS database, dated April 5, 1993, states site access was not properly controlled, and "land clearing debris and other materials" were still being disposed at this site. A FDEP Solid Waste Inspection report dated July 1, 1987 states this facility is operating without a permit and was receiving Class I, II and III wastes. Class I means solid waste that is not hazardous waste, and that is not prohibited from disposal in a lined landfill. Class III means yard trash, construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by the Department, that are not expected to produce leachate that poses a threat to public health or the environment. Class II means any industrial solid waste that cannot be described as hazardous, Class I, or Class III. A St. Johns River District "Meeting Documentation" memorandum dated September 22, 1987 states the types of solid waste includes "mattresses, white goods, acrylic lacquer thinner (5-gallon containers), some household garbage, tires, paper, construction and demolition debris." A Warning Notice dated July 14, 1987 states debris included "empty lab chemical bottles" among other items. Although groundwater monitoring was recommended in the Makuch Demolition and Construction Fill Management Plan dated January 11, 1988, no documentation was found to support the well installation or groundwater testing. The plan also states the site was previously used for mining "clay." See excerpts of these documents in Appendix F. Tierra emailed the FDEP Central District on March 23, 2022 for further information. The FDEP response states "no records were found." See email in Appendix F.</p> <p>Based on aerial photographs, this site is depicted as rangeland in 1944, cleared land in 1951, groves/row crops from 1959 to 1974, open field in 1983, earthwork, heavy equipment and stockpiles (possibly soil and/or debris) from 1984 to 1990, mostly overgrown with a small trail and clearing with possible illicit dumping in a small area from 1994 to 1999, and woods from 2004 to 2021. A trail and small clearing were noted in 1996. See aerial photographs dated 1983 to 1994 in Appendix B.</p> <p>Based on the topographic map, groves were depicted from 1953 to 1991. Groundwater flow appears to be south, west, and east (towards SR 429 ROW) from a high area near the north-central portion of the landfill.</p> <p>Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc.</p> <p>Given the proximity, lack of assessment, and historic lack of oversight and a permit, this site is assigned a risk rating of Medium.</p>
8	West 192 Development Authority Area (No address)	BF91301000	Within and adjoining SR 429 ROW	NA	Low	<p>The FDEP Map Direct database states this Brownfield Area is comprised of 14,490 acres. It is located within the SR 429 ROW, between W. Irlo Bronson Memorial Parkway and Funie Steed Road (Station 257+00 to 310+00). Brownfield Resolution 13-029R was authorized on July 1, 2013. A Brownfield Area is multiple sites that are contiguous (property lines touch) of real property that may or may not have environmental contamination. A Brownfield Area designation does not mean that all or any sites have contamination. Although multiple contamination sites are located within the limits of the Brownfield Area, only one potential contamination site (Site 34) was located within the study area. Site 34 is discussed in the following row (it has not been designated as a Brownfield Site). Therefore, this Brownfield Area is assigned a risk rating of Low.</p>

Table 1: Mainline Contamination Sites

Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
9	Duke Energy-Target 2370 3200 Rolling Oaks Blvd.	TANKS 9817228	Adjacent east of SR 429 ROW	Petroleum	Low	During the site reconnaissance, this site was observed as a Target store. This site is depicted in Appendix A, Sheet A-2 . One emergency generator with a base AST (diesel) was noted 30 feet east of the ROW. This site was also identified on the FDEP MapDirect database. The FDEP Site Inspection Report dated May 20, 2021 states this facility is in compliance with one 1,000-gallon diesel generator AST. No discharges were reported. Therefore, this site is assigned a risk rating of Low.
10	Publix #551 14928 Orange Lake Blvd.	TANKS 9809947	Adjacent east of SR 429 ROW	Petroleum	Low	During the site reconnaissance, this site was observed as a Publix grocery store. This site is depicted in Appendix A, Sheet A-2 . One emergency generator with a base AST (diesel) was noted 160 feet east of the ROW. This site was also identified on the FDEP MapDirect database. The FDEP Site Inspection Report dated January 11, 2022 states this facility is in compliance with one 1,000-gallon diesel generator AST. No discharges were reported. This site is assigned a risk rating of Low.
11	Orange Lake Cleaners 14896 E. Orange Lake Blvd.	NA	Adjacent east of SR 429 ROW	Drycleaning Solvents	No	During the site reconnaissance, this site was observed as Orange Lake Cleaners. This site is depicted in Appendix A, Sheet A-2 . Based on an interview with the employee, this is a “drop off” location. No contamination concerns were noted. The actual dry cleaning is performed at another location. This site is assigned a risk rating of No.
12 EDM 4	Western Beltway Mainline Toll Plaza 14000 Western Beltway	TANKS 9707758	Within SR 429 ROW	Petroleum	Low	During the site reconnaissance, this site was observed as a toll plaza, including an office building, and a diesel generator building. A generator with base tank was noted near the northwest corner of the office building. This site is depicted in Appendix A, Sheet A-4 . EDM’s report states this site has one 1,000-gallon diesel AST (EDM 4, Fac. ID 9707758, Western Beltway Mainline, 14000 Western Beltway) registered in 2005. No discharges were reported. It was situated on a concrete slab, and no stained soil or vegetation was noted. Additionally, one diesel generator with a base tank was observed 150 feet north of the registered AST, west of the building. Stained soil and stressed vegetation were not noted. These ASTs are considered a low risk. The remaining four toll plazas each have generators with propane USTs which are not considered a contamination concern. This site is assigned a risk rating of Low.
13	Former Railroad (Station 373+00)	NA	Within and adjoining ROW	Herbicides, Arsenic, Petroleum	Medium	During the site reconnaissance, this site was observed as SR 429. Adjacent areas were wooded. This site is depicted in Appendix A, Sheet A-3 . The former railroad was not evident during the site reconnaissance. The railroad track was depicted on the 1944 aerial photograph but is barely visible on the 1951 and 1969 aerial photographs. See Appendix B . The railroad track was depicted and labeled “Old Railroad Grade” on the 1953 and 1970 topographic maps. See Appendix C . Railroads historically used arsenic based herbicides for vegetation and weed control along its corridors. Additionally, the use of petroleum and creosote based compounds were used to preserve railroad ties. No regulatory files were found. Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc. Given the historic use as a railroad, this site is assigned a risk rating of Medium.
14	Orange Lake Resort/The Legend Golf Course 8505 W. Irlo Bronson Memorial Hwy. Station 393+00-396+00	NA	Adjoining north of US 192/W. Irlo Bronson Memorial Hwy.; and adjoining east of SR 429 ROW	Pesticides, Herbicides, Arsenic, Petroleum	Low	During the site reconnaissance, this site was observed as The Legends at Orange Lake Resort, including a golf course. This site is depicted in Appendix A, Sheet A-2 and Sheet A-3 . The maintenance/storage facility was noted adjoining west of the SR 429 ROW. Two 500-gallon ASTs situated in containment on asphalt were noted ten feet west of the SR 429 ROW. Petroleum stains and monitor wells were not noted. A mix/load area (presumably herbicides/pesticides) was noted on asphalt 50 feet west of the SR 429 ROW. Historically, pesticides and herbicides have been applied on the greens at greater concentrations than the fairways. Application of agricultural chemicals is presumed to be consistent with manufacturer and regulatory guidelines. Aerial photos depict this site under construction in 1999, and completed in 2004. No groundwater monitor wells were noted. No regulatory files were found. Therefore, this site is assigned a risk rating of Low.

Table 1: Mainline Contamination Sites

Site Number/EDM Number	Site Name & Address	Databases/Facility ID/Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
15	Fischer Parcel 3 Hartzog Road	Fac. ID 9101929 (Fischer-Howard Corp. Parcel 3)	Within SR 429 / Western Way Interchange ROW	Petroleum, Herbicides, Pesticides, and Arsenic	Medium	<p>During the site reconnaissance, this site was observed as the SR 429/Western Way interchange. This site is presented in Appendix A, Sheet A-3.</p> <p>Aerial photographs depict rangeland and a low, wet area in 1944, clearing and a manmade canal in 1958, groves (northwest quadrant), three structures and one AST (southwest quadrant) in 1969. Structures were no longer depicted in 1995, and groves were no longer depicted in 2002. The SR 429 / Western Way interchange were under construction from 2004 to 2006. The current configuration was first depicted in 2007.</p> <p>Topographic maps depict groves and undeveloped land in 1953. Groves, undeveloped land, one structure and a manmade canal were depicted in 1970 and 1980.</p> <p>This former site was identified on the FDEP Map Direct database. According to the Initial Remedial Actions Report (no date, although October 1993 was noted on figures within the report), two 20,000-gallon diesel ASTs, smudge pots used for heating groves, and several storage buildings were removed offsite prior to soil and groundwater abatement activities in 1991 and 1992. One diesel fuel discharge (quantity unknown) was reported on September 1, 1990. Following soil and groundwater abatement activities in 1991 and 1992, the FDEP issued a “No Further Action” letter on October 5, 1995. The depth to shallow groundwater was 8.3 feet below land surface (bls) at the time of excavation (May 1992). Although four ASTs were noted in the Initial Remedial Action Report Form, the size, contents and locations of two ASTs was not identified in the report, except a label which states “UST Pump Island (Removed)” on Figure 5-1. See excerpts in Appendix F.</p> <p>The Contamination Assessment Report (CAR) dated July 1993 states petroleum GCTL exceedances were detected at MW-3, MW-4, and MW-5. A groundwater monitoring plan was recommended. Figures depict groundwater flow to the southeast and south. A “wood frame house” was depicted north of the grove storage buildings. See excerpts in Appendix F. The Contamination Assessment Report (CAR) Addendum dated July 28, 1995 states groundwater depth at MW-1 to MW-6 ranged from 2.95 feet to 9.00 feet bls. Laboratory results were below GCTLs. The tank inspection form dated June 24, 1991 states this site has two 4,000-gallon diesel ASTs (no install or removal dates).</p> <p>Although no discharge was reported, given the lack of regulatory oversight prior to 1990, and evident poor housekeeping practices, there is reasonable suspicion for petroleum impacts associated with the former pump island/UST (unregistered, noted on figures). No assessment or testing was evident in the vicinity of the former pump island/UST. Additionally, there is reasonable suspicion herbicides, pesticides were stored/used/mixed at or near the former structures. Testing for herbicides, pesticides and arsenic was not evident. Therefore, the potential for residual petroleum contamination at or near the former pump island/UST, and herbicide and pesticide contamination at or near the former structures (where storage/use/mixing/loading likely occurred) exists. These contaminants may impact construction where subsurface work such as relocating or adding buried utilities, drilling, dewatering, etc. is required.</p> <p>This site is assigned a risk rating of Medium.</p>

Table 1: Mainline Contamination Sites

Site Number/EDM Number	Site Name & Address	Databases/Facility ID/Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
16	Fischer Parcel A Hartzog Road	Fac. ID 9101929 (Fischer-Howard Corp. Parcel 3)	Within SR 429 / Western Way Interchange ROW	Petroleum, Herbicides, Pesticides, and Arsenic	Medium	<p>During the site reconnaissance, this site was observed as the SR 429/Western Way interchange. This site is presented in Appendix A, Sheet A-3.</p> <p>Aerial photographs depict rangeland and a low, wet area in 1944, clearing in 1951, and a manmade pond and canal in 1958. Groves were depicted from 1958 to 2002. Two structures were depicted from 1969 to 1986. The SR 429 / Western Way interchange was depicted under construction from 2004 to 2006. The current configuration was first depicted in 2007.</p> <p>Topographic maps depict groves and undeveloped land in 1953. Groves, undeveloped land, two structures, a manmade pond, and a manmade canal were depicted in 1970 and 1980.</p> <p>Based on a figure included in the report (Figure 5-1) included in the Initial Remedial Actions Report (no date, although October 1993 was noted on figures within the report), Fischer "Parcel A" is located adjoining west of Parcel 3. See excerpts for Site 15 in Appendix F. Both parcels are located within the SR 429/Western Way interchange ROW. For Parcel A, the figure depicts two "grove heater storage buildings" and states "removed." One soil sample location ("3-BG1") was also depicted with TRPH reported 53.2 mg/kg, below the leachability SCTL of 340 mg/kg. Although the sample location is actually on Parcel A, it was collected as a background soil sample associated with Parcel 3. The sample location was 500 feet south of the two grove heater storage buildings on Parcel A. No further information was found for Parcel A. Therefore, Tierra emailed the OCEPD on March 24, 2022, and again on June 9, 2022. No response has been provided as of this writing.</p> <p>Although no discharge was reported, given the lack of regulatory oversight prior to 1990, and evident poor housekeeping practices (see Site 15), there is reasonable suspicion for petroleum impacts associated with the former grove heater storage buildings. Testing for petroleum was not evident. Additionally, there is reasonable suspicion herbicides, pesticides were stored/used/mixed at or near the former structures. Testing for herbicides, pesticides and arsenic was not evident. Therefore, the potential for residual petroleum contamination at or near the former grove heater storage buildings, and herbicide and pesticide contamination at or near the former structures (where storage/use/mixing/loading likely occurred) exists. These contaminants may impact construction where subsurface work such as relocating or adding buried utilities, drilling, dewatering, etc. is required.</p> <p>This site is assigned a risk rating of Medium.</p>
17	Reedy Creek Improvement District (RCID) Diesel Generators Western Way	NA	Adjacent south of Western Way ROW	Petroleum	Low	<p>During the site reconnaissance, this site was observed as three generators (each with diesel base tanks) associated with municipal water and reclaimed water pump stations. This site is depicted in Appendix A, Sheet A-3. The Orange County Property Appraiser database states this parcel is owned by Reedy Creek Improvement District. Labels on the generator tanks state the base tanks each contain 425-gallons of diesel fuel. No stained soil or stressed vegetation were noted. No regulatory files were found. This site is assigned a risk rating of Low.</p>

Table 1: Mainline Contamination Sites

Site Number/EDM Number	Site Name & Address	Databases/Facility ID/Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
18	Reedy Creek Improvement District Effluent spray ponds/RIBs/Solar Farm Station 461+00 to Station 567+00	FLA108219	Adjacent east and west of SR 429 ROW	Domestic Wastewater	Low	<p>During the site reconnaissance, this site was observed as Rapid Infiltration Basins (RIBs) and a solar panel farm. The RIBs were noted east and west of SR 429. This site was first depicted on the 1995 aerial photograph. According to the Reedy Creek Improvement District website, the wastewater system consists of a tertiary treatment plant with a permitted capacity of 20 million gallons per day, gravity interceptor and collection and transmission lines with 29 lift stations. In addition, the effluent disposal system includes a 1,000 acre site containing 85 rapid infiltration basins and a reclaimed water system with an average demand of 5.8 million gallons per day that is used for irrigation of golf courses and other landscaped areas.</p> <p>The most recent Quarterly Groundwater Monitoring Report found on the OCULUS database states groundwater sampling was performed in January 2021. Based on laboratory results, no permit exceedances were noted. The most recent FDEP Wastewater Compliance Inspection Report dated December 9, 2021 states this site was “determined to be in compliance.” Monitor wells were not noted during the site reconnaissance. Based on the monitor well locations plotted on the FDEP Map Direct database, the nearest groundwater monitor wells were located 600 feet east of the SR 429 ROW. See excerpts in Appendix F.</p> <p>This solar farm (located adjacent east of SR 429) was first depicted on the 2019 aerial photograph. It is located between Station 471+00 and Station 567+00. No battery storage sites were noted adjoining the SR 429 ROW. Metals and adhesives used to construct the solar panels are considered a low risk. No regulatory files were found for the solar farm. Contamination concerns associated with the solar farm are considered a low risk.</p> <p>This site is assigned a risk rating of Low.</p>
19	Seidel Road Property 10393 Seidel Road	LUST/TANKS 9813166	490 feet east of SR 429 ROW	Petroleum	No	<p>During the site reconnaissance, this site was observed as Horizon High School. This site is depicted in Appendix A, Sheet A-4. EDMs report states a 5-gallon used oil discharge was reported on May 3, 2011. Following cleanup, a No Further Action was issued on July 17, 2012. Given the separation distance, abatement, and regulatory status, this site is assigned a risk rating of No.</p>
20	Horizon High School 10393 Seidel Road	9818709	Adjoining east AST/Pump Island are 280 feet east of the SR 429 ROW	Petroleum	Low	<p>During the site reconnaissance, this site was observed as an active fuel facility for Horizon High School. This site is first depicted on the 2021 aerial photograph. The tank registration form found on the OCULUS database states this site has one 15,000-gallon AST registered on September 1, 2021. No discharges were reported. See excerpts in Appendix F. Given the separation distance and lack of a reported discharge, this site is assigned a risk rating of Low.</p>
21	EDB Groundwater Contamination Zone #48263255 No address	FDEP Zone ID 48263255	Within, and surrounding the SR 429 ROW, and within the Seidel Road ROW	EDB	Medium	<p>This EDB plume is depicted in Appendix A, Sheet A-4, and on EDM’s Environmental Impact Areas Map in Appendix D near the northern project limit. A total of six geotechnical hand auger borings (AB-593R, AB-597L, Seidel 1, Seidel 2, Seidel 3, and Seidel 4) were completed in January 2022 for seasonal high estimates of the shallow groundwater table within the limits of the EDB plume, the SR 429 ROW, and the Seidel Road ROWs. The shallow groundwater table was encountered at a depth of two feet bls at boring “Seidel 4” located near Station 591+00. It was not encountered to a depth of five feet bls at the remaining five boring locations. Although impacts to groundwater are unlikely, due to the potential remnant soil impacts from the application of EDB, this zone is considered a contamination concern to the SR 429/Seidel Road ROW’s. Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc. Therefore, the EDB plume is assigned a risk rating of Medium.</p>

Table 1: Mainline Contamination Sites

Site Number/ EDM Number	Site Name & Address	Databases/ Facility ID/ Or Other Source	Distance from ROW	Contaminants of Concern	Risk Rating	Comments
22	Water Conserve II 3W-01 Supplemental Well 97121 Avalon Road	NA	180 feet west of SR 429 ROW	NA	No	<p>During the site reconnaissance, this site was observed as a water well facility. This site is depicted in Appendix A, Sheet A-4.</p> <p>Based on the March 29, 2022 telephone conversation with Mr. Scott Ruland, Project Manager with Water Conserv II for five years, well “3W-01” is used to supplement the reuse water when rainfall is not sufficient for recharge. The water is not used for potable purposes and has never been tested for contaminants. The well depth extends into the Floridan Aquifer, and the well diameter is 12-inches. The program has been in place for 36-years.</p> <p>Supplemental Well “3W-01” is depicted along the west side of SR 429 on a map found on Water Conserv II’s website. According to the Water Conserv II website: <i>Water Conserv II is the largest reuse project of its kind in the world, combining agricultural irrigation with aquifer recharge via rapid infiltration basins (RIBs). The primary focus is agricultural irrigation. The RIBs are used for recharge of Florida’s primary drinking water source, the Floridan aquifer, with daily flows that are not needed for irrigation and excess flows during wet weather periods. Water Conserv II is also the first reuse project in Florida permitted by the Florida Department of Environmental Protection (FDEP) to irrigate crops produced for human consumption with reclaimed water. The project’s reclaimed water meets FDEP’s public access reuse standards and is permitted for use on all public access sites including residences and golf courses, food crops, foliage and landscape nurseries, tree farms, pasture land, the production of soil cement, and can also be used for fire protection.</i></p> <p>Therefore, this site is assigned a risk rating of No.</p>
23	Ethylene Dibromide (EDB) Groundwater Contamination Zone #49263268 No address	FDEP Zone ID 49263268	900 feet south of the SR 429 project limit and ROW	EDB	No	<p>This EDB plume is depicted on EDM’s Environmental Impact Areas Map (CSER Appendix D) and on the FDEP MapDirect database south of the project limits. However, it is not depicted in Appendix A since it is located south of the map coverage area. Using the MapDirect measuring tool, the plume is located 900 feet south of the project limit. Based on the separation distance of 900 feet, this zone is considered a low risk to impact construction for this project. Therefore, the EDB plume is assigned a risk rating of No.</p>

Table 2 presents the findings for four drainage alternatives. “Alt 1 Preferred” is the preferred pond location. These drainage sites are illustrated in **Appendix A, Sheet A-2**.

Table 2: Drainage Sites			
Drainage Site ID	Contaminants of Concern	Risk Rating	Comments
Alt 1 (Preferred)	Pesticides, Herbicides, Arsenic,	Medium	<p>Alt 1 is the preferred drainage site location. During site reconnaissance, this site was observed as planted pine trees, overhead power lines, and an existing pond.</p> <p>Historical aerial photographs depict rangeland from 1944 to 1951, groves from 1959 to 1983, pasture from 1996 to 2011, earthwork/manmade pond are depicted under construction in the western area from 2004 to 2006, and planted pine trees from 2012 to 2021. The “Intercession City, Fla.” topographic map depicts woods from 1953 to 1985. Source concentration areas such as maintenance/storage buildings, irrigation wells with ASTs, and mix/load areas were not noted. No regulatory listings were identified.</p> <p>Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc.</p> <p>Given the historical use as groves, Alt 1 (Preferred) is assigned a risk rating of Medium.</p>
Alt 2	NA	No	<p>During site reconnaissance, this site was observed as woods. Historical aerial photographs depict woods from 1944 to 2021. The “Intercession City, Fla.” topographic map depicts “Davenport Creek Swamp,” a wooded swamp or marsh from 1953 and 1985. No regulatory listings were identified. Contamination concerns were not noted. Alt 2 is assigned a risk rating of No.</p>
Alt 3	NA	No	<p>During site reconnaissance, this site was observed as woods. Historical aerial photographs depict woods from 1944 to 2021. The “Intercession City, Fla.” topographic map depicts “Davenport Creek Swamp,” a wooded swamp or marsh from 1953 and 1985. No regulatory listings were identified. Contamination concerns were not noted. Alt 3 is assigned a risk rating of No.</p>
FGB Alt 3	Pesticides, Herbicides, Arsenic,	Medium	<p>During site reconnaissance, this site was observed as planted pine trees. No regulatory listings were identified onsite. One groundwater monitor well, MWB-7, was observed 550 feet north of Alt 3 (Formosa Gardens Blvd). This background monitor well is associated with Site 29 – Sand Hill WWTP. It is not considered a contamination concern.</p> <p>Historical aerial photographs depict rangeland from 1944 to 1951, groves from 1959 to 1983, pasture from 1996 to 2011, and planted pine trees from 2012 to 2021. The “Intercession City, Fla.” topographic map depicts woods from 1953 to 1985.</p> <p>Contamination impacts to construction may occur during anticipated subsurface work activities including excavation, dewatering, moving or adding buried utilities, drilling, etc.</p> <p>Given the historical use as groves, FGB Alt 3 is assigned a risk rating of Medium.</p>

9.0 Conclusions and Recommendations

9.1 Conclusions

Based on this contamination screening evaluation, a total of twenty-three contamination sites were identified within the project limits. The following table presents a summary of the risk ratings assigned for each contamination site/facility:

Table 3: Summary of Risk Ratings – Mainline Sites			
High	Medium	Low	No
0	6	12	5

The following table presents a summary of the risk ratings assigned for drainage sites:

Table 4: Summary of Risk Ratings – Drainage Sites			
High	Medium	Low	No
0	2	0	2

9.2 Recommendations

Based on the conclusions of this study and the risk ratings noted above, the following recommendations are made.

- Additional information may become available or site-specific conditions may change from the time this report was prepared and should be considered prior to acquiring right-of-way (if required) and/or proceeding with roadway construction. If the preferred alignment or drainage locations change, and/or new potential contamination sites are identified, this report should be revised and updated to reflect those changes.
- For the locations rated “No” or “Low” for contamination, no further action is required. These locations have been determined not to have a contamination risk level which warrants further assessment at this time.
- Level II testing is recommended for the six mainline sites rated Medium (none were rated High), and one of the two drainage sites rated Medium. Although the FGB Alt 3 drainage site was assigned a risk rating of Medium, no testing is recommended since it was not selected as the preferred drainage site. A site specific Level II scope of services should be developed for each of these sites to be reviewed and approved by the District Contamination Impact Coordinator (DCIC). The scope of services should include a boring location plan depicting the soil and groundwater testing locations, including the contamination source (i.e. tanks, stained soil, etc.), sample depth intervals, and analytical parameters. The Level II can include hazardous material surveys, land boundary surveys, soil borings, monitor well installation, soil and groundwater sampling, laboratory testing,

mounding analysis, the use of an Organic Vapor Analyzer (OVA), and Ground Penetrating Radar (GPR). Level II testing is performed by the Contamination Assessment and Remediation Contractor (CAR) and coordinated with the Florida Turnpike Enterprise DCIC and the Project Manager. Further evaluation and Level II testing, if deemed appropriate by the DCIC, is recommended for the following:

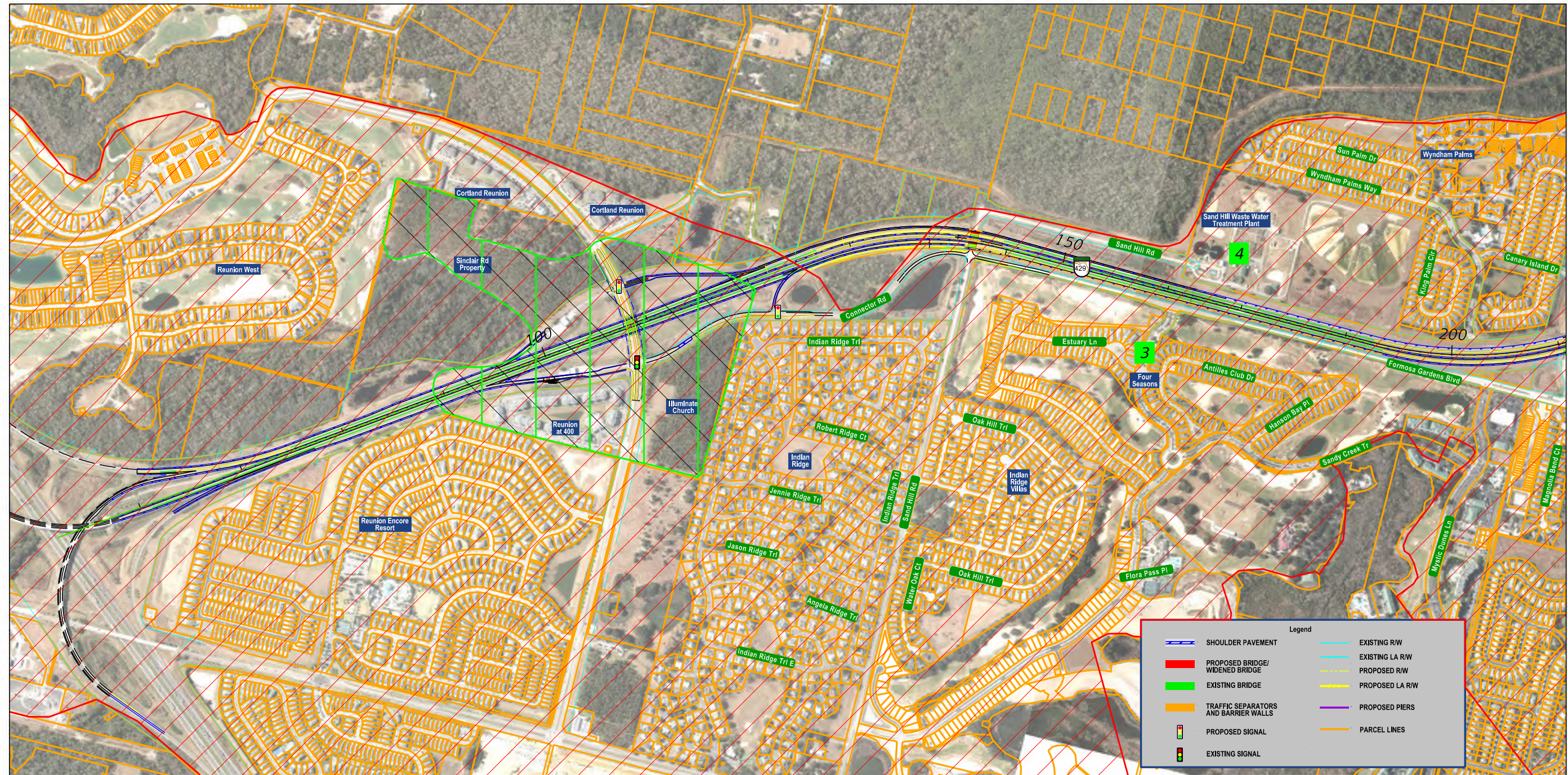
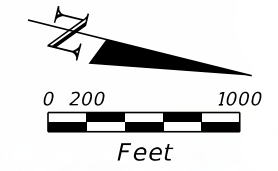
- Groves/Row Crops (Site 1 and Alt 1 Preferred) – Level II testing should include the collection of soil samples for laboratory analysis. Laboratory analysis of soil samples may include the following: Arsenic by United States Environmental Protection Agency (EPA) Method 6010, Organochlorine Pesticides by EPA Method 8081, Organophosphorus Pesticides by EPA Method 8141, and Chlorinated Herbicides by EPA Method 8151. Detections in the soil above the regulatory standard may require additional soil samples for delineation purposes and groundwater samples. Level II testing costs are estimated at \$5,000 to \$10,000 per site. If Level III support is needed for National Pollution Discharge Elimination System permitting and treatment, costs can reach up to \$100,000 per site.
- Landfill (Site 7) – Level II testing for soil and groundwater should include Volatile Organic Compounds (VOCs) by EPA Method 8260, PAHs by EPA Method 8270, TRPH by FL PRO, including fractionation when applicable. OVA screening is also recommended. Based on a review of historical aerial photographs, and regulatory file information, buried debris does not appear to be an issue within the ROW. Soil gas monitoring for combustible gases (i.e. methane) may also be warranted. Level II testing costs are estimated at \$5,000 to \$10,000 per site. If Level III support is needed for National Pollution Discharge Elimination System permitting and treatment, costs can reach up to \$100,000 per site.
- Former Railroad (Site 13) – Level II testing should include the collection of soil samples for laboratory analysis. Laboratory analysis may include the following: Arsenic by EPA Method 6010, PAHs by EPA Method 8270, Organochlorine Herbicides by EPA Method 8081, Organophosphorus Herbicides by EPA Method 8141, and Chlorinated Herbicides by EPA Method 8151. Detections in the soil above the regulatory standard may require additional soil samples for delineation purposes and groundwater samples. Level II testing costs are estimated at \$5,000 per site.
- Fischer Parcel 3 (Site 15) – Level II testing should include the collection of soil samples for laboratory analysis. For the former pump island/UST area, laboratory analysis of soil samples may include the following: VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by FL PRO (including fractionation when applicable). OVA screening is also recommended. For the former groves and agrichemical storage/use/mix/load areas, laboratory analysis of soil samples may include the following: Arsenic by EPA Method 6010, Organochlorine Pesticides by EPA Method 8081, Organophosphorus Pesticides by EPA Method 8141, and

Chlorinated Herbicides by EPA Method 8151. Detections in the soil above the regulatory standard may require additional soil samples for delineation purposes and groundwater samples. Level II testing costs are estimated at \$5,000 to \$10,000 per site. If Level III support is needed for National Pollution Discharge Elimination System permitting and treatment, costs can reach up to \$100,000 per site.

- Fischer Parcel A (Site 16) – Level II testing should include the collection of soil samples for laboratory analysis. For the former grove heater storage buildings, laboratory analysis of soil samples may include the following: VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by FL PRO (including fractionation when applicable). OVA screening is also recommended. For the former groves and agrichemical storage/use/mix/load areas, laboratory analysis of soil samples may include the following: Arsenic by EPA Method 6010, Organochlorine Pesticides by EPA Method 8081, Organophosphorus Pesticides by EPA Method 8141, and Chlorinated Herbicides by EPA Method 8151. Detections in the soil above the regulatory standard may require additional soil samples for delineation purposes and groundwater samples. Level II testing costs are estimated at \$5,000 to \$10,000 per site. If Level III support is needed for National Pollution Discharge Elimination System permitting and treatment, costs can reach up to \$100,000 per site.
- EDB (Site 21) – Level II testing should include the collection of soil samples for laboratory analysis of Ethylene Dibromide by EPA Method 8011. Detections in the soil above the regulatory standard may require additional soil samples for delineation purposes and groundwater samples. Level II testing costs are estimated at \$5,000 per site.
- Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area.
- During construction, if abnormal conditions are encountered or exposed indicating the presence of contaminated materials, cease operations immediately in the vicinity and notify the FTE’s DCIC. The presence of tanks or barrels; discolored earth, metal, wood, ground water, etc.; visible fumes; abnormal odors; excessively hot earth; smoke; or other conditions that appear abnormal may indicate the presence of contaminated materials and must be treated with extreme caution. These unidentified contamination areas should be managed in accordance with FDOT Specification **120-1.2 Unidentified Areas of Contamination**.

- **Additional Considerations:** For this project, there are a total of eighteen bridges which may require widening; and six toll plazas, and two toll gantries were identified to be removed. In accordance with PD&E Manual, Part 2, Chapter 20, Section 20.2.2.2, projects which involve existing bridges, building structures, and possibly existing or abandoned utilities which will be moved or demolished may need surveys or screenings for Asbestos Containing Materials, Lead-Based Paint, and/or other Metal Base Coatings. Those structures which have not already been tested for asbestos and metals-based coatings may require evaluation. Structures which have already been evaluated may require additional testing for new coatings, and other additions/modifications since the testing was performed.

APPENDIX A CONTAMINATION SITES MAP



CONTAMINATION SITES MAP

SOURCE: FDOT SURVEY AND MAPPING DATED 2021

- GREEN = NO/LOW RATED SITES
- RED = HIGH/MEDIUM RATED SITES
- SITE 1 - GROVES/CROPS - RISK RATING MEDIUM

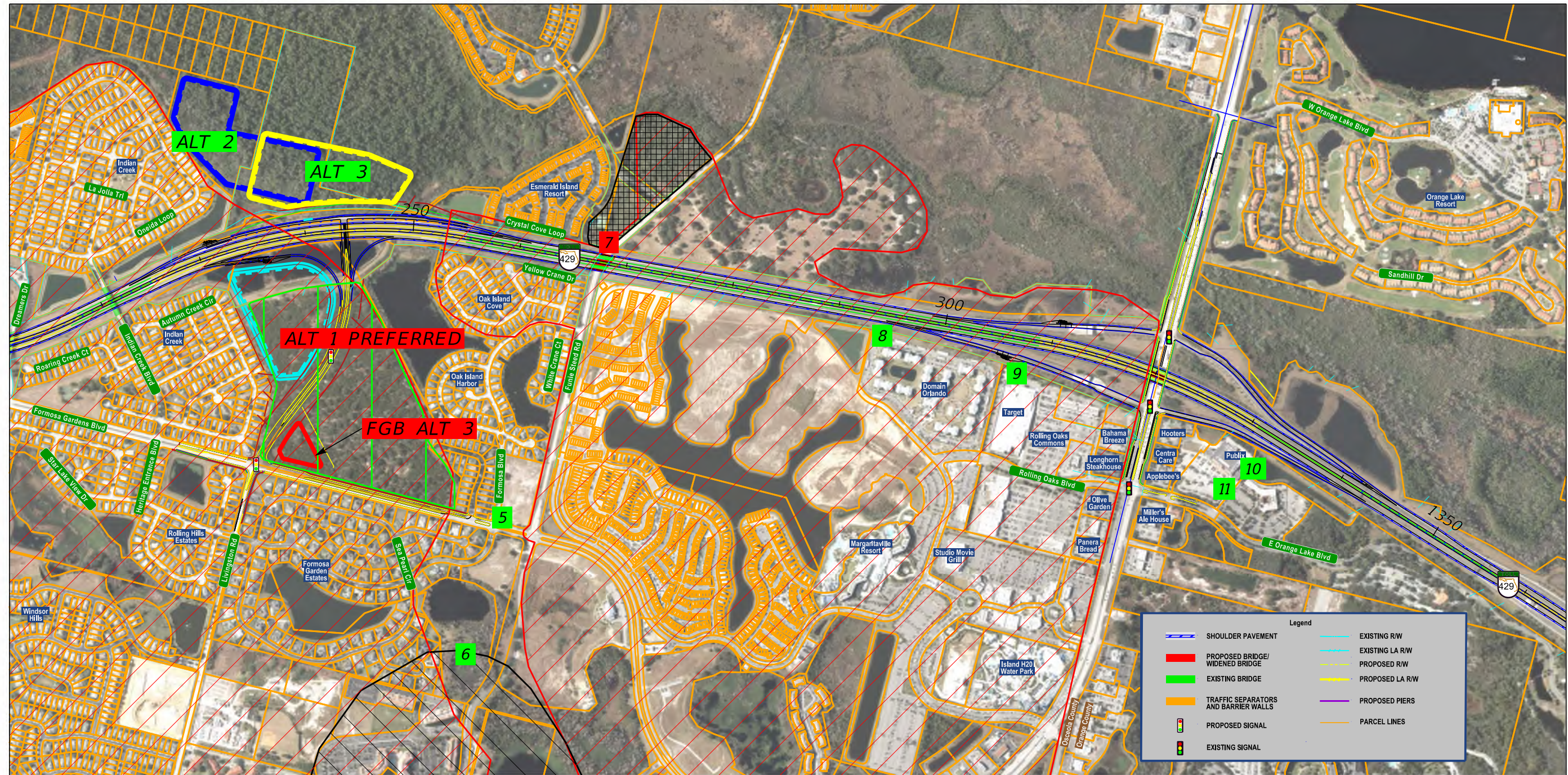
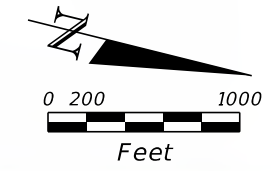


SITE 2 - PLANTED PINE TREES - RISK RATING LOW

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REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WIDEN WESTERN BELTWAY (SR 429)	SHEET NO. A-1
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 429	ORANGE OSCEOLA	446164-1-22-01		

TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637



SOURCE: FDOT SURVEY AND MAPPING DATED 2021

CONTAMINATION SITES MAP

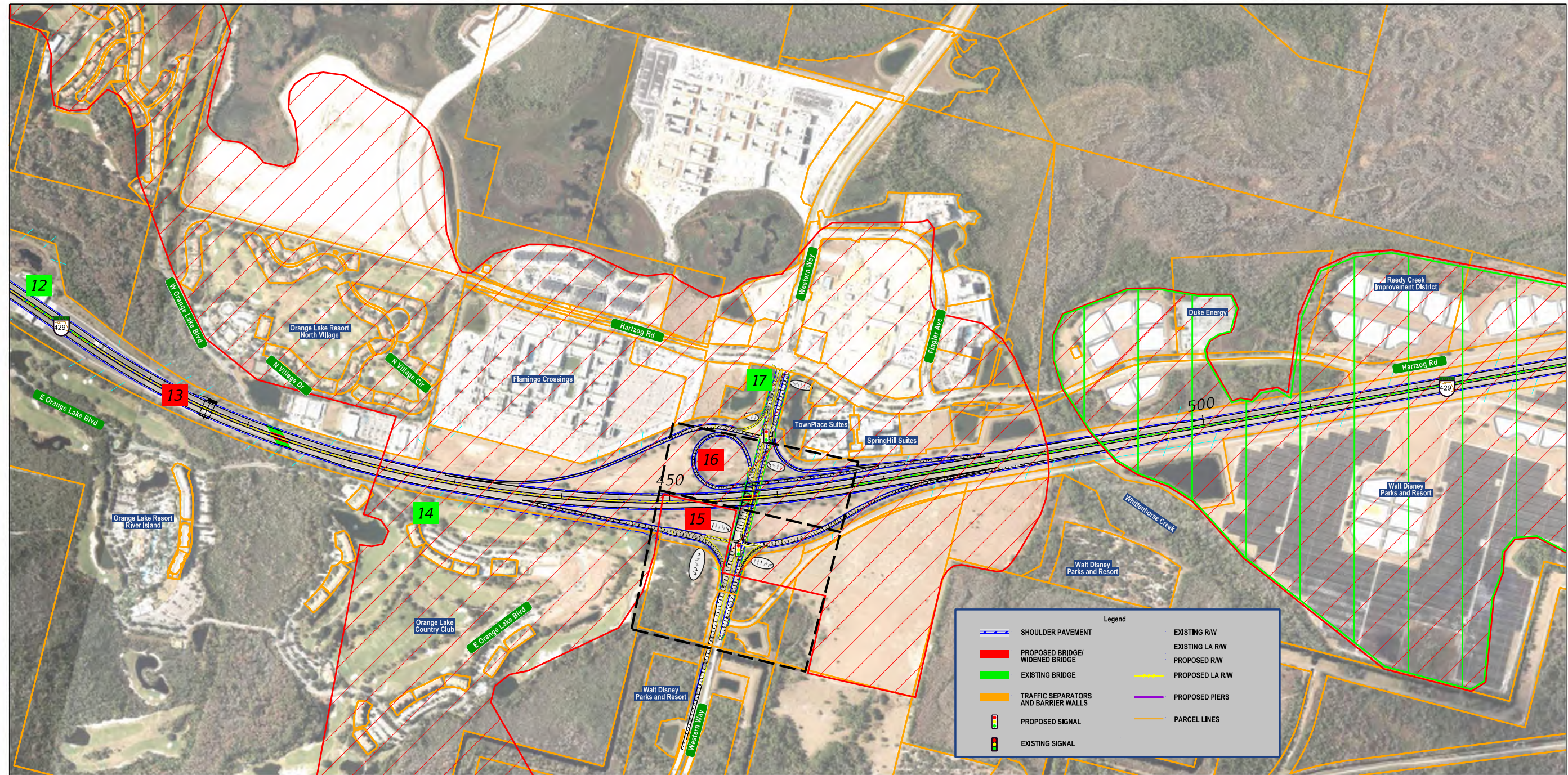
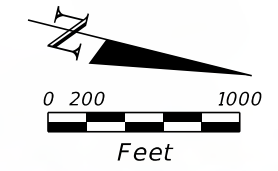


SITE 2 - PLANTED PINE TREES - RISK RATING LOW

- GREEN = NO/LOW RATED SITES
- RED = HIGH/MEDIUM RATED SITES
- SITE 1 - GROVES/CROPS - RISK RATING MEDIUM
- SITE 6 - EDB ZONE 49263262
- SITE 7 - OAK ISLAND LANDFILL - RISK RATING MEDIUM

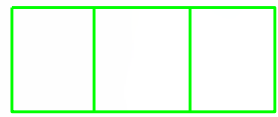
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REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WIDEN WESTERN BELTWAY (SR 429)	SHEET NO. A-2
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-20-202-002E	SR 429	ORANGE OSCEOLA	446164-1-22-01		
				TIERRA, INC. 7351 TEMPLE TERRACE HIGHWAY TAMPA, FLORIDA 33637				



SOURCE: FDOT SURVEY AND MAPPING DATED 2021

CONTAMINATION SITES MAP



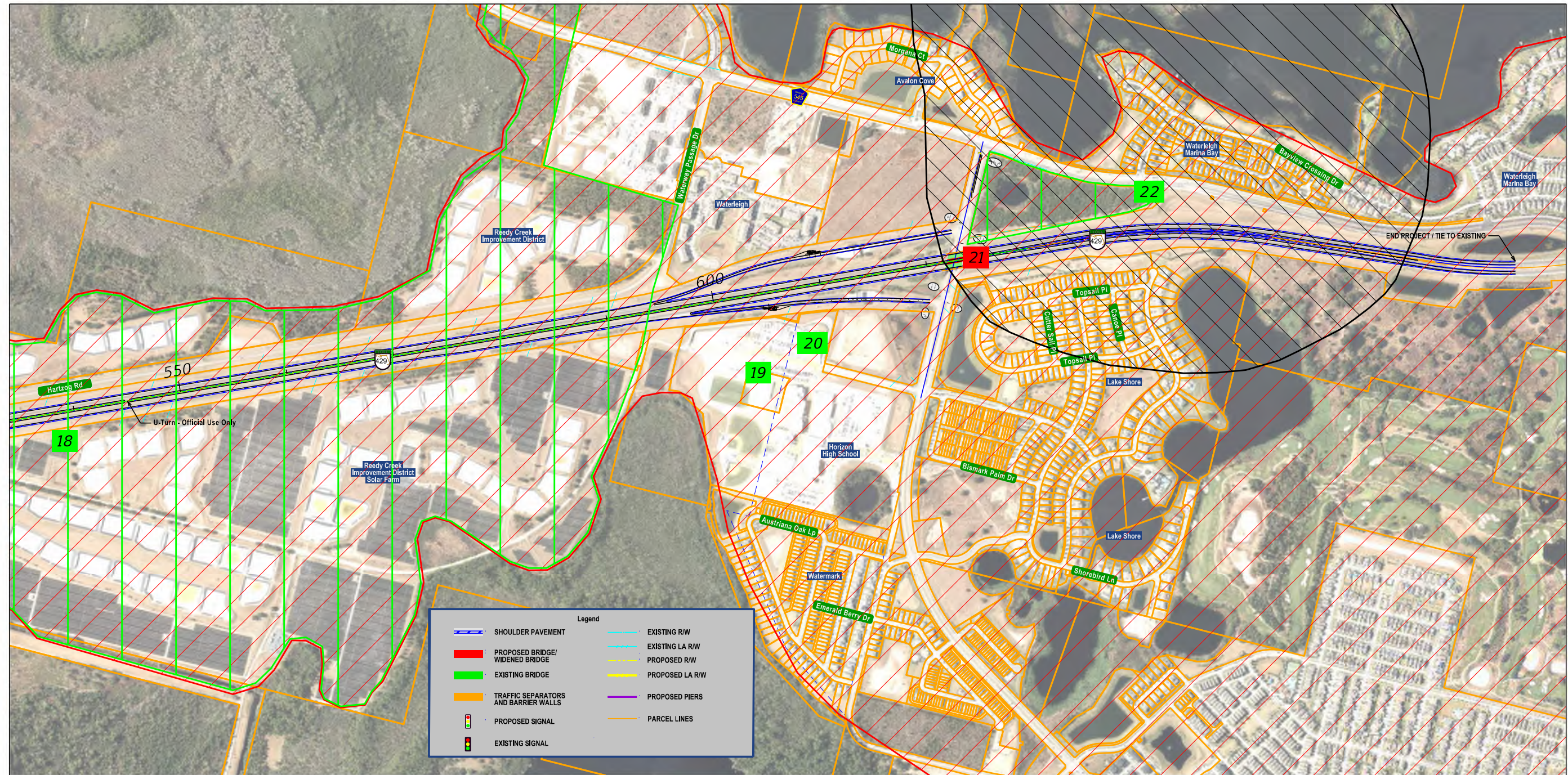
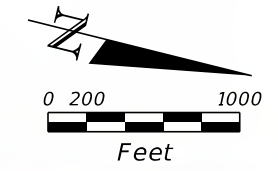
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- GREEN = NO/LOW RATED SITES
- RED = HIGH/MEDIUM RATED SITES
- SITE 1 - GROVES/CROPS - RISK RATING MEDIUM

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REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WIDEN WESTERN BELTWAY (SR 429)	SHEET NO. A-3
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-20-202-002E	SR 429	ORANGE OSCEOLA	446164-1-22-01		

TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637



SOURCE: FDOT SURVEY AND MAPPING DATED 2021

CONTAMINATION SITES MAP



SITE 2 - PLANTED PINE TREES - RISK RATING LOW

- GREEN = NO/LOW RATED SITES
- SITE 1 - GROVES/CROPS - RISK RATING MEDIUM
- RED = HIGH/MEDIUM RATED SITES
- SITE 21 - EDB ZONE 49263268

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REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WIDEN WESTERN BELTWAY (SR 429)	SHEET NO. A-4
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			TIERRA PROJECT NO.: 6511-20-202-002E	SR 429	ORANGE OSCEOLA	446164-1-22-01		

TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

APPENDIX B HISTORICAL AERIAL PHOTOGRAPHS

Historical Aerial Photograph Report

Subject Property:

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

Prepared For:

Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Prepared By:



Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770

March 23, 2022



Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770
(727) 586-1700
<http://www.edm-net.com>

March 23, 2022

Chris Garth
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **Historical Aerial Photos-- EDM Project #: 26017**
Client Project# 6511-20-202-002E

Dear Mr. Garth:

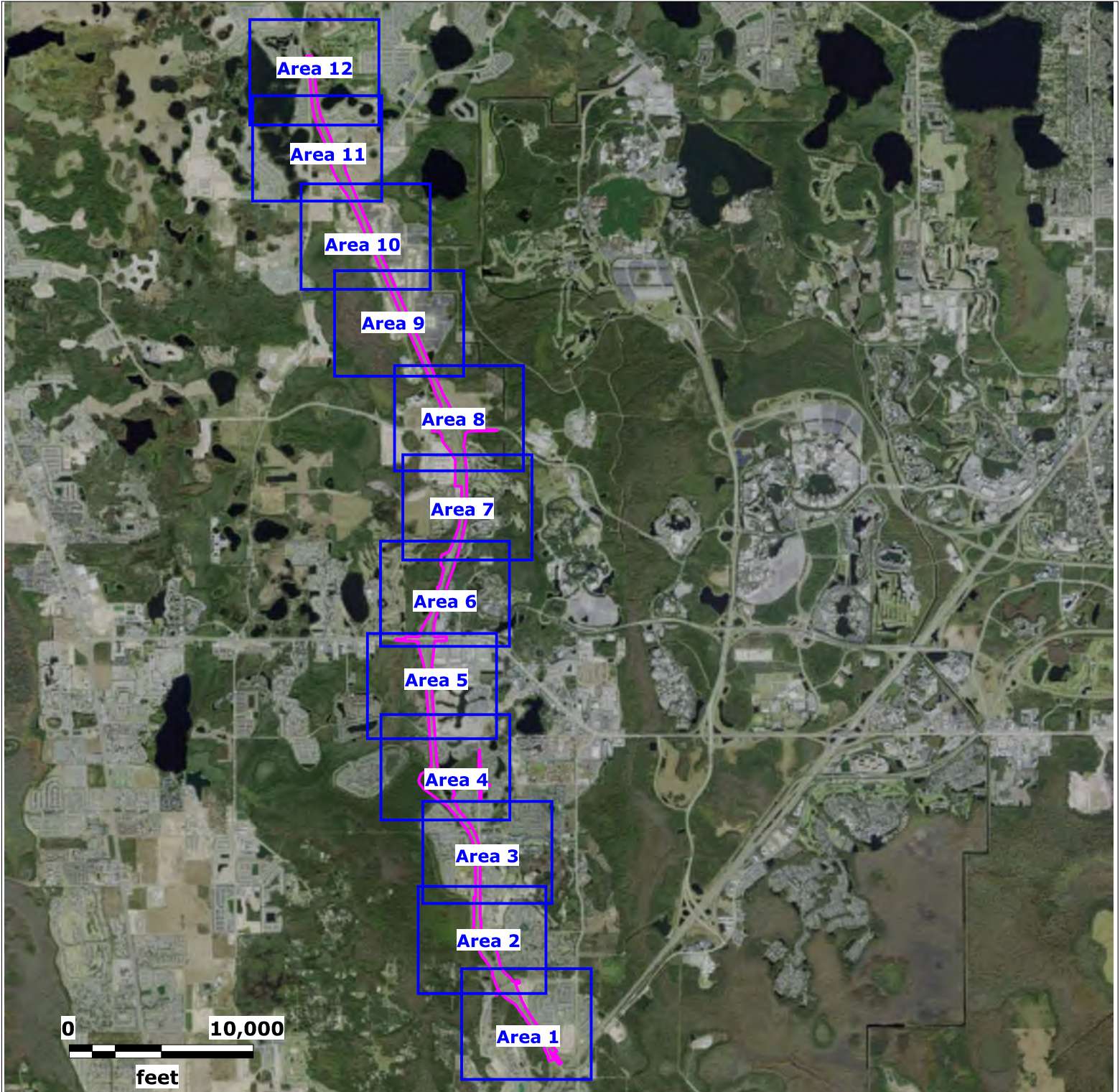
Thank you for choosing Environmental Data Management, Inc. The following report contains a series of Historical Aerial Photographic images for the following location:

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

These images were selected to provide you with an aerial photographic record of this location at approximate ten year intervals and/or one photograph per decade, where available.

Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.



Source: National Agriculture Imagery Program (NAIP)

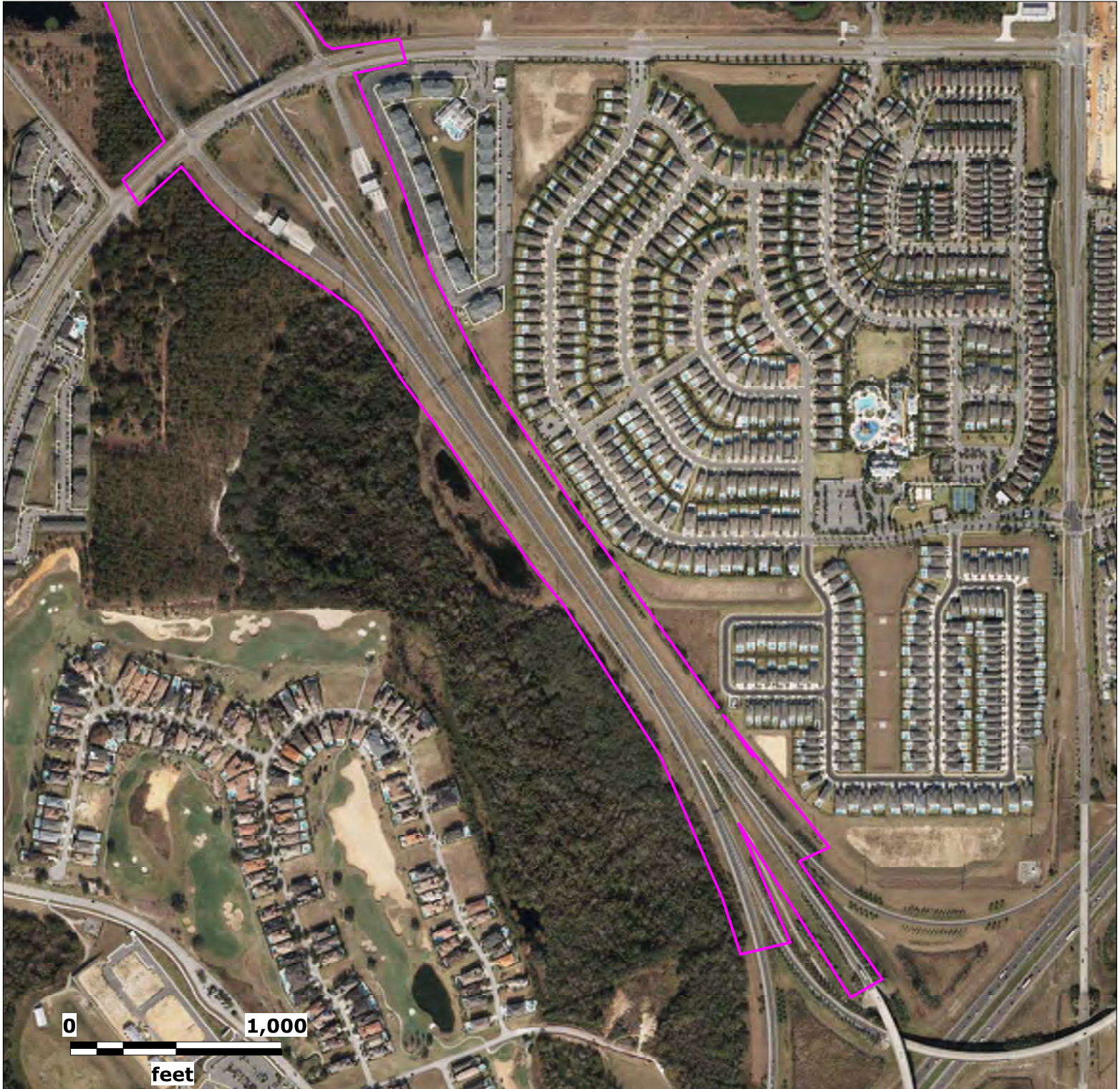
Map Scale and Property Boundaries are Approximate

Subject Property

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Orange and Osceola County, Florida

Lat (DMS): 28 25' 49.224"
Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022



Source: Florida Department of Transportation


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March 22, 2022


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Source: Florida Department of Transportation

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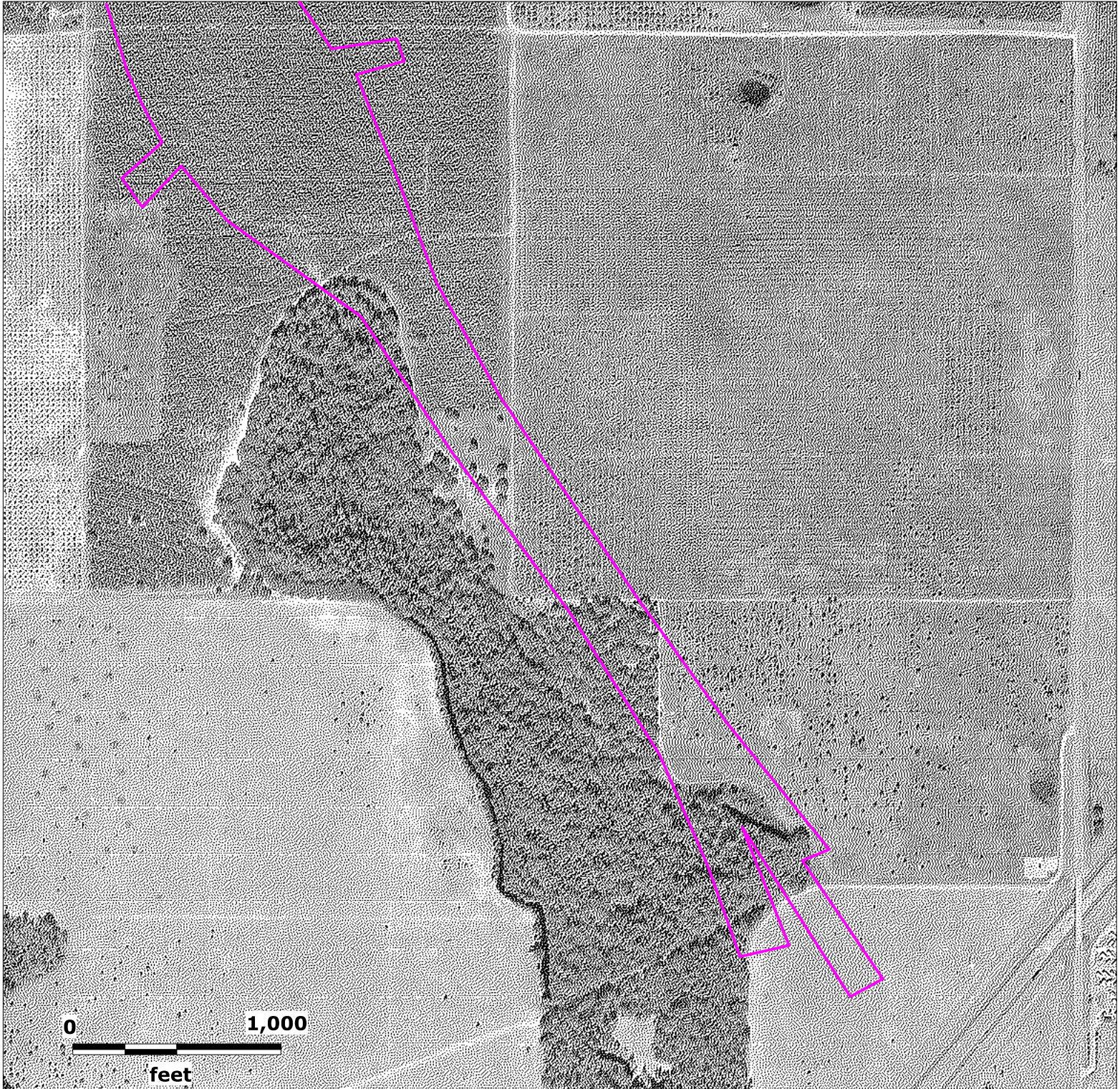
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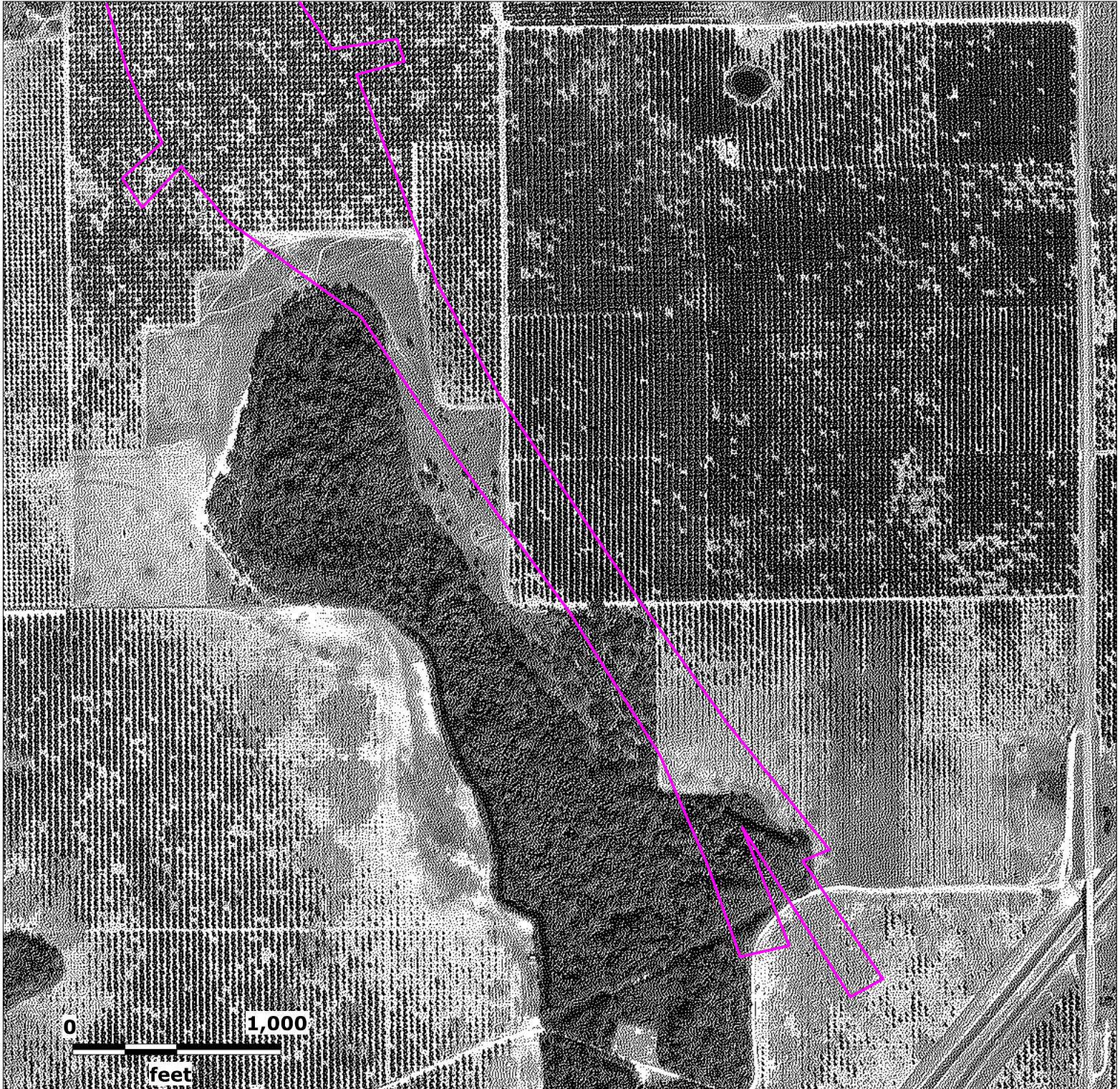
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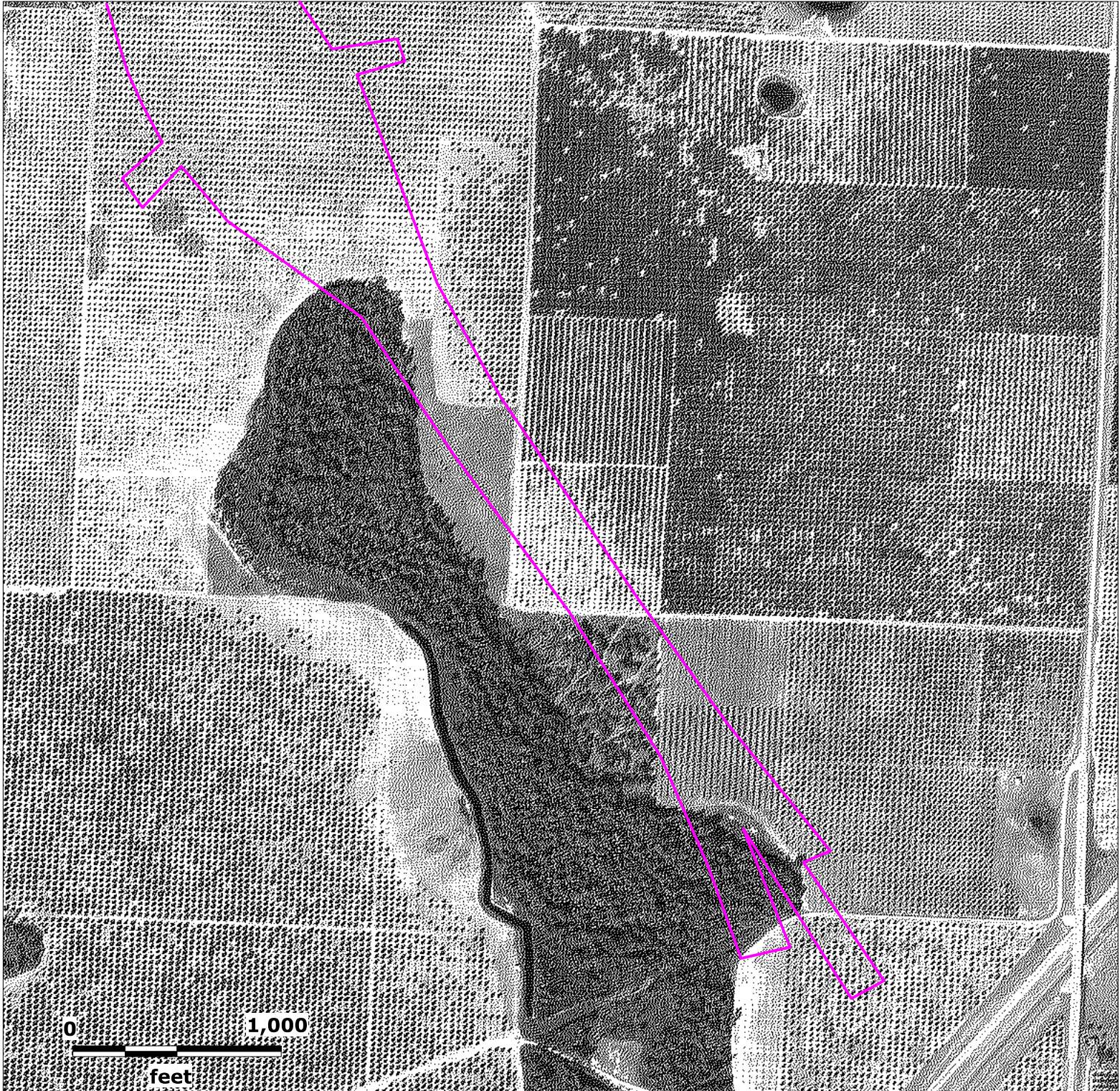
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Source: University of Florida


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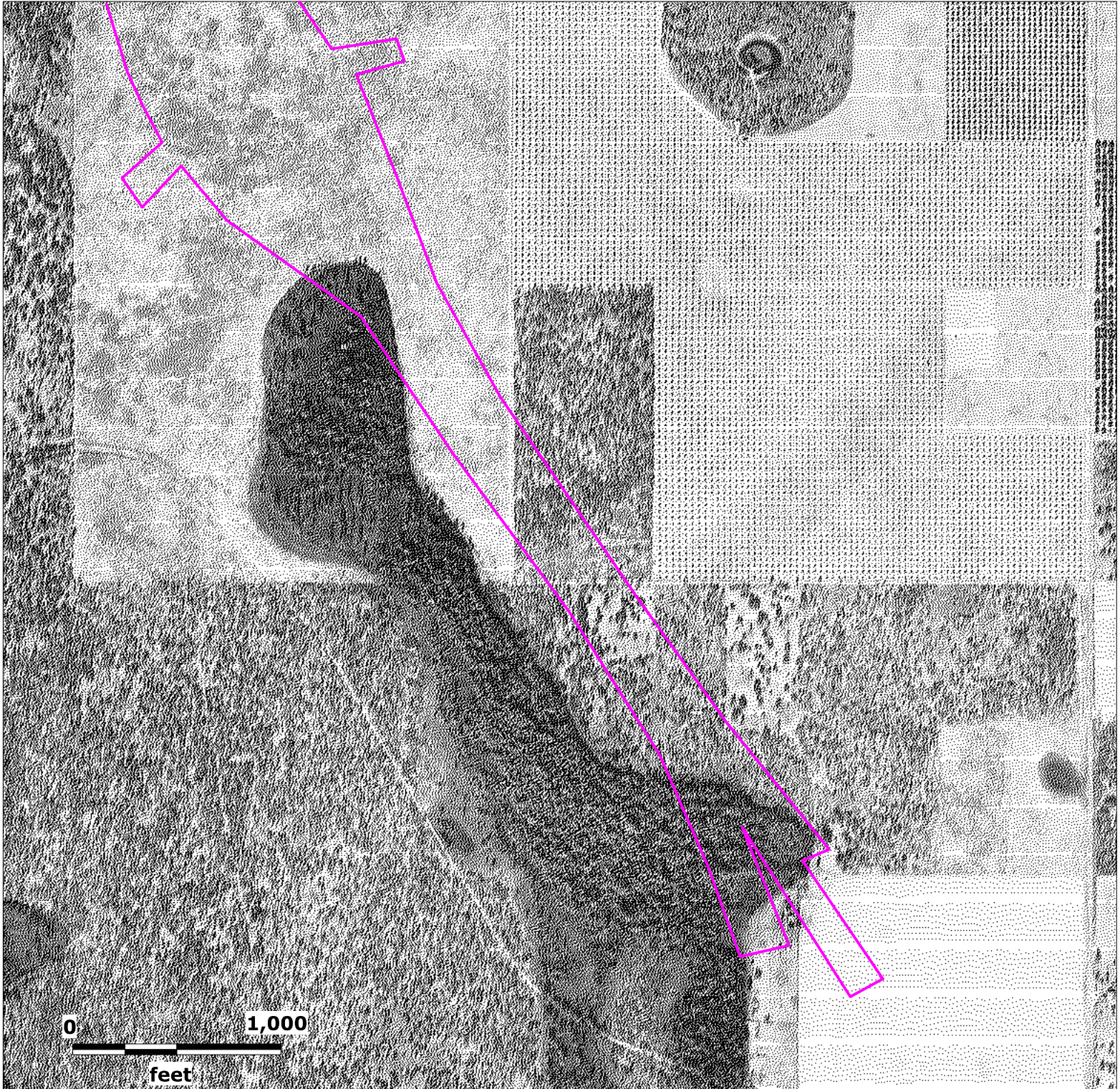
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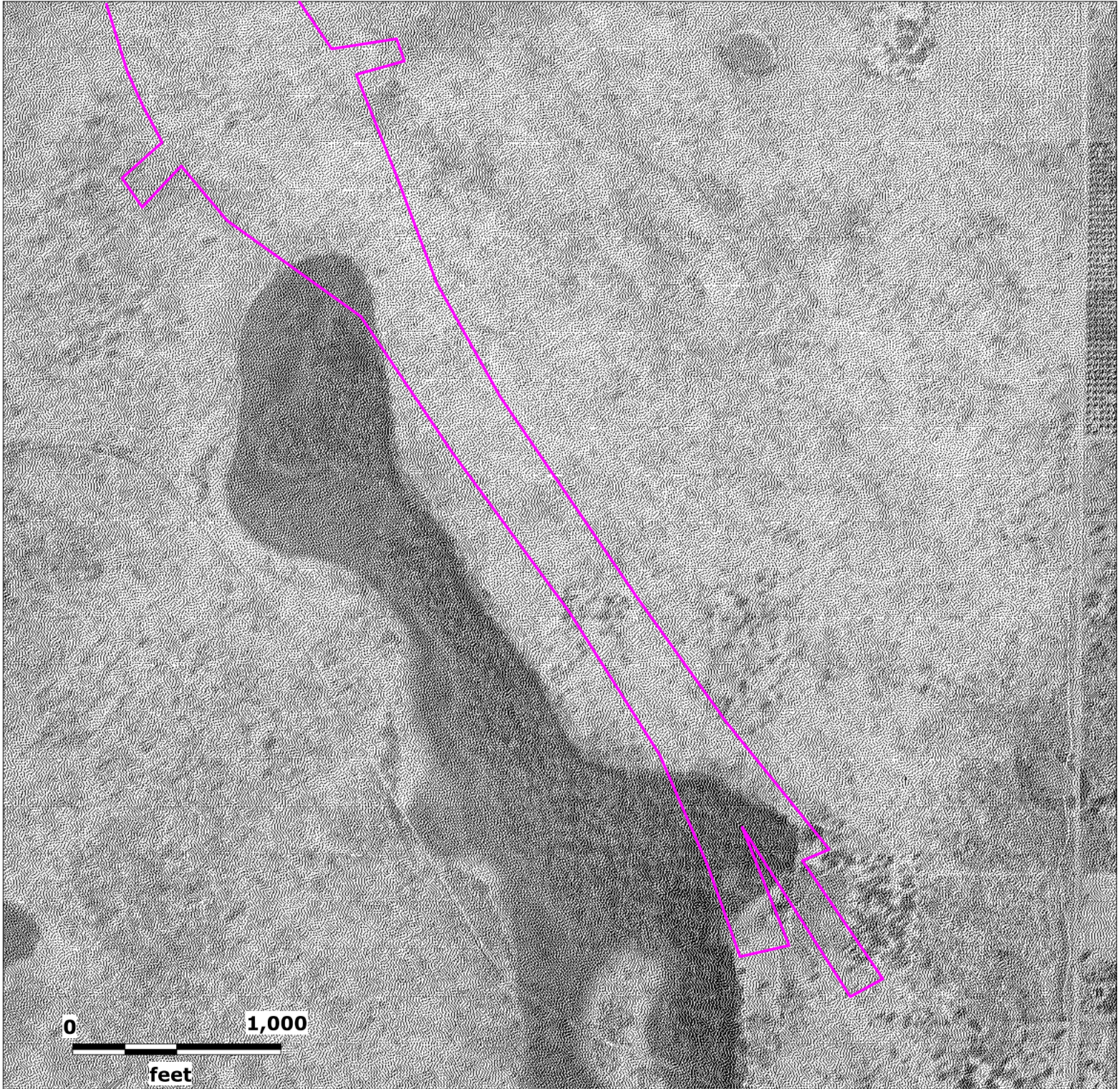
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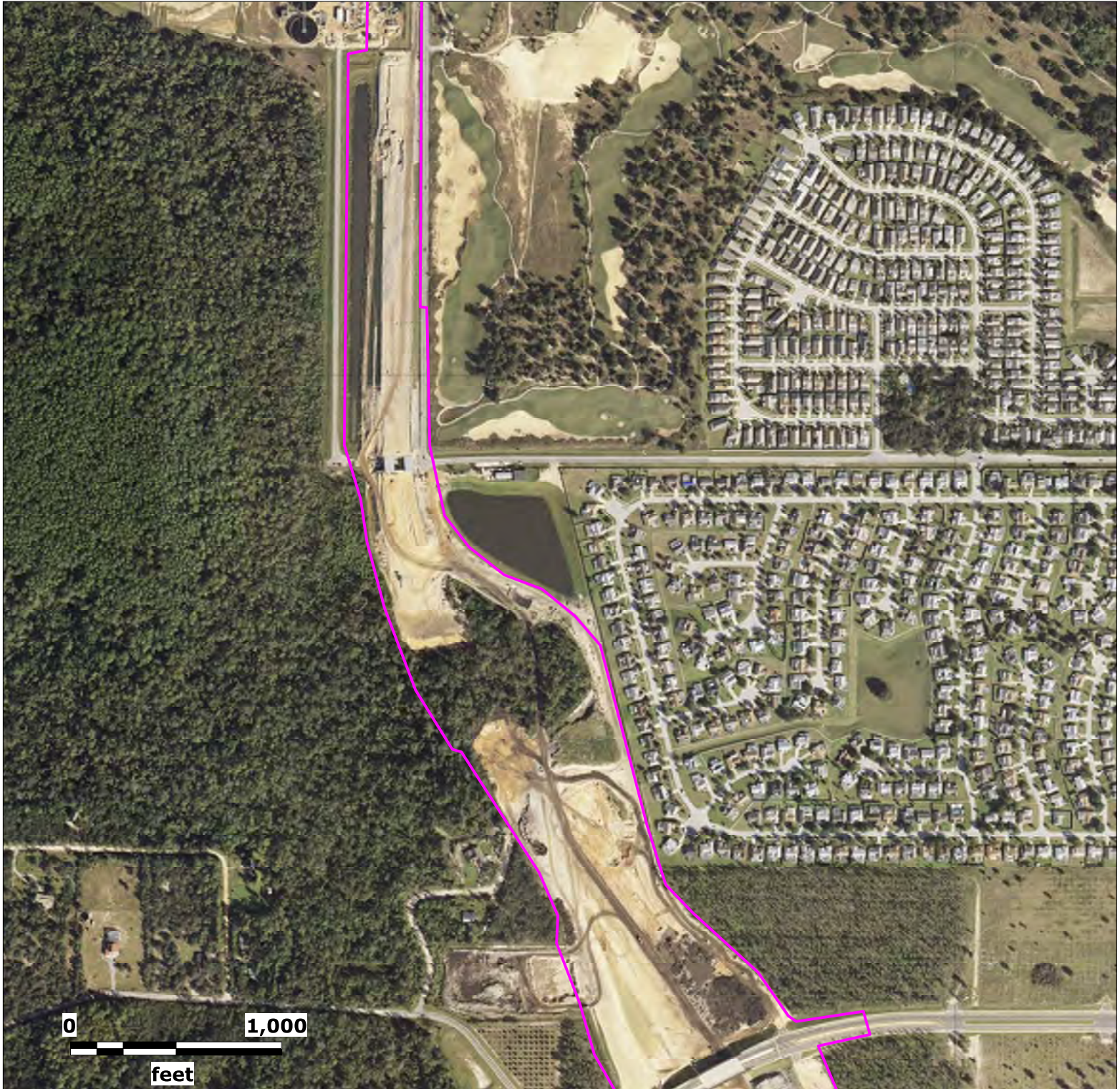
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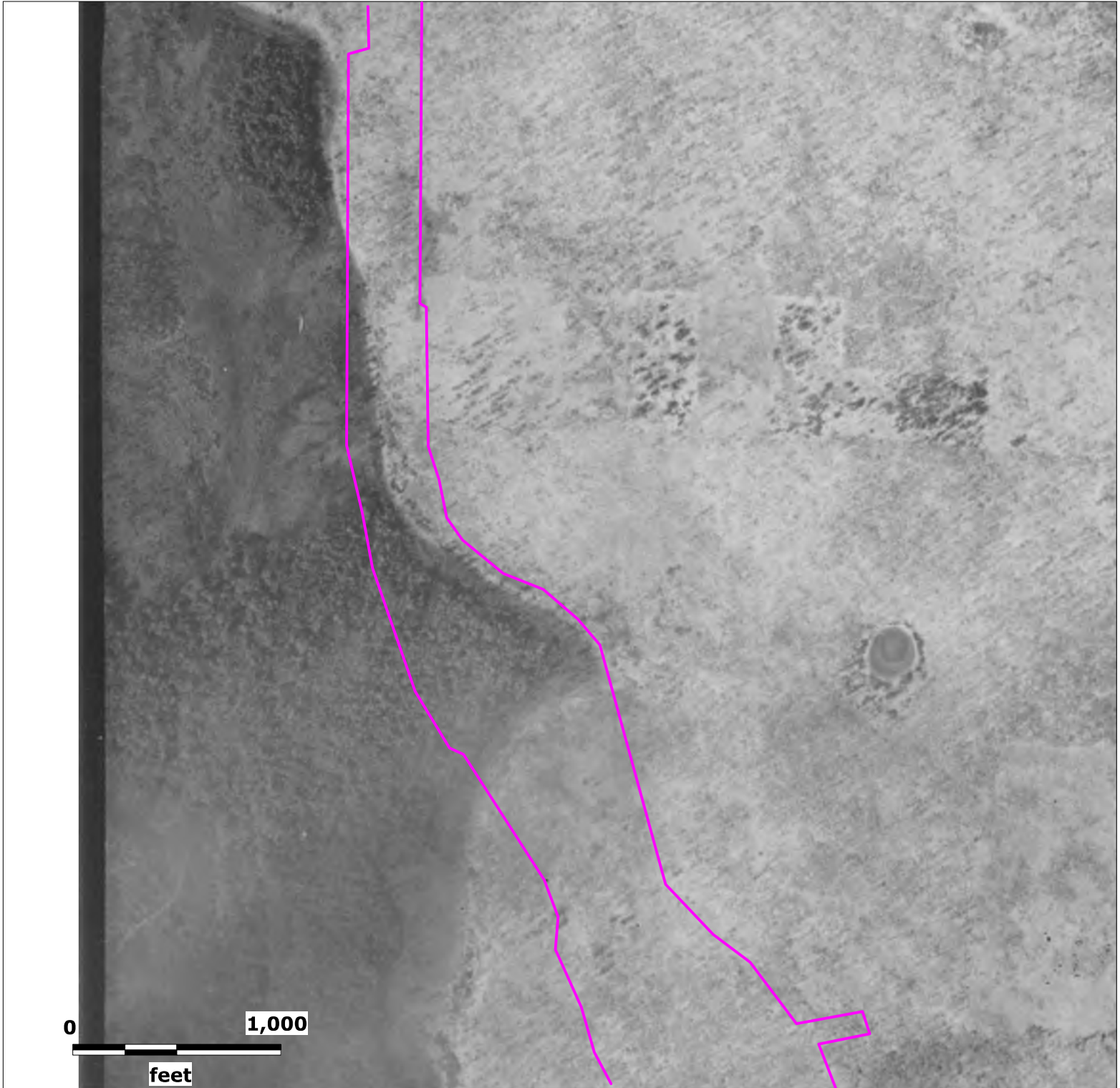
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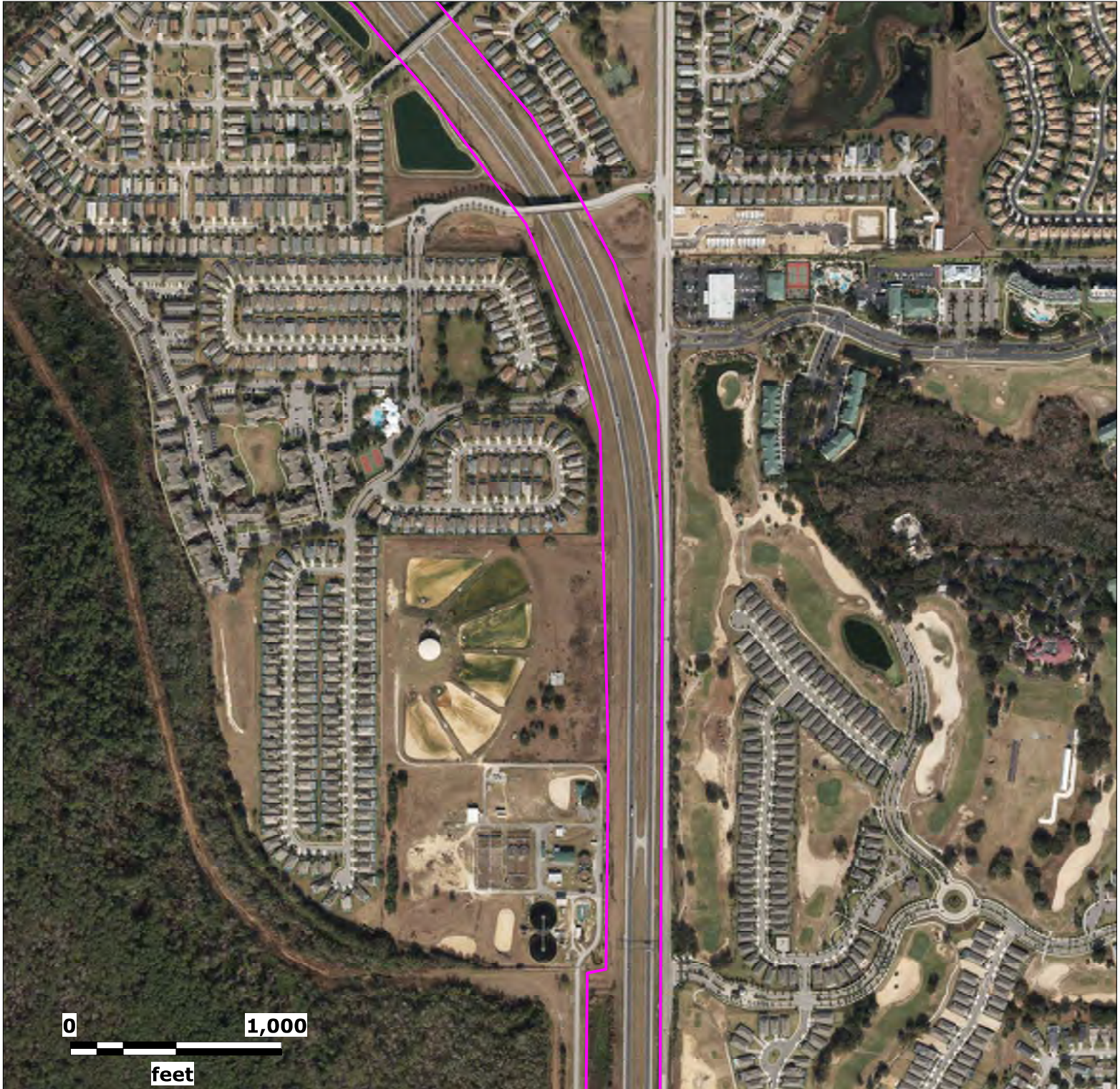
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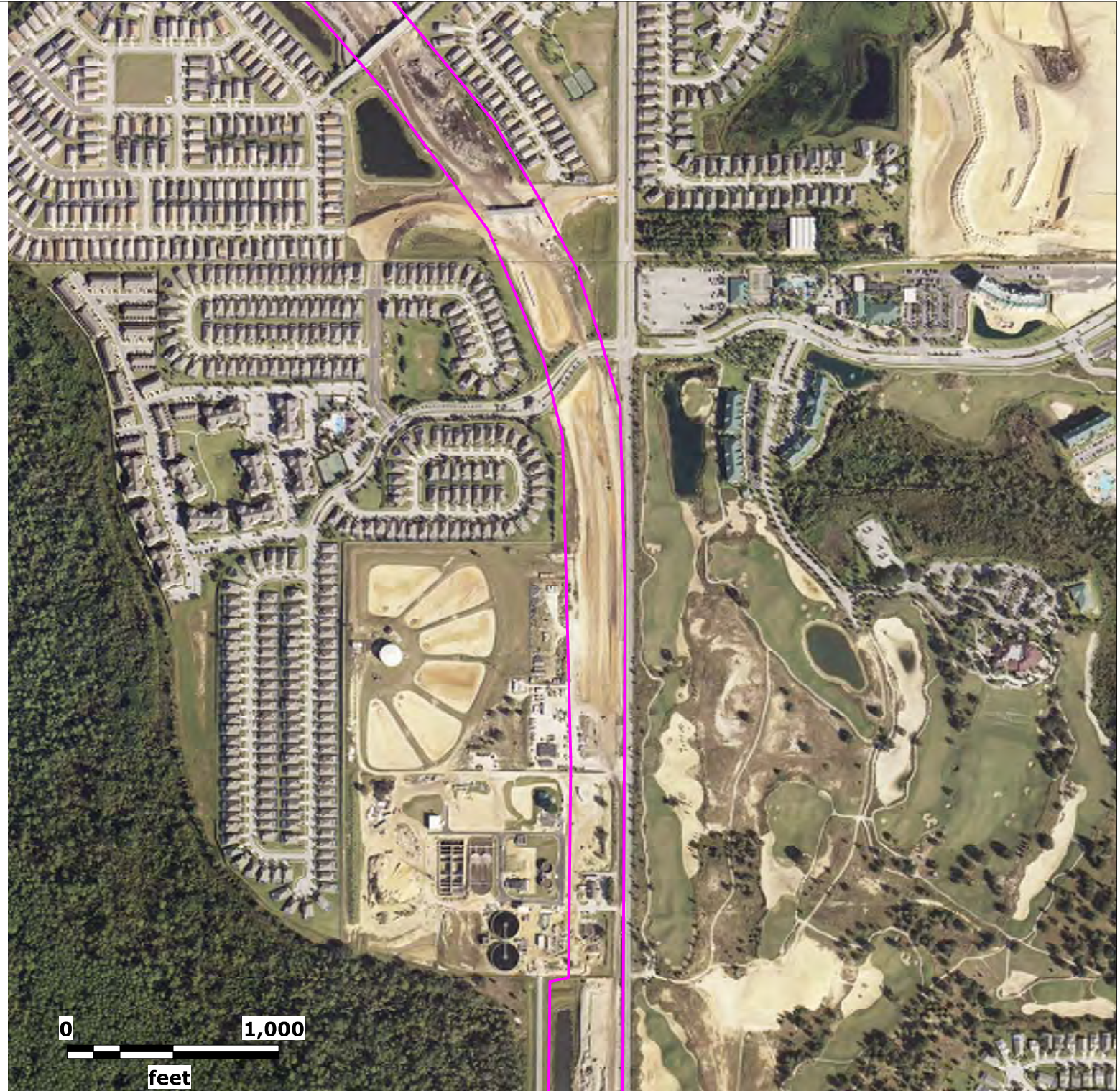
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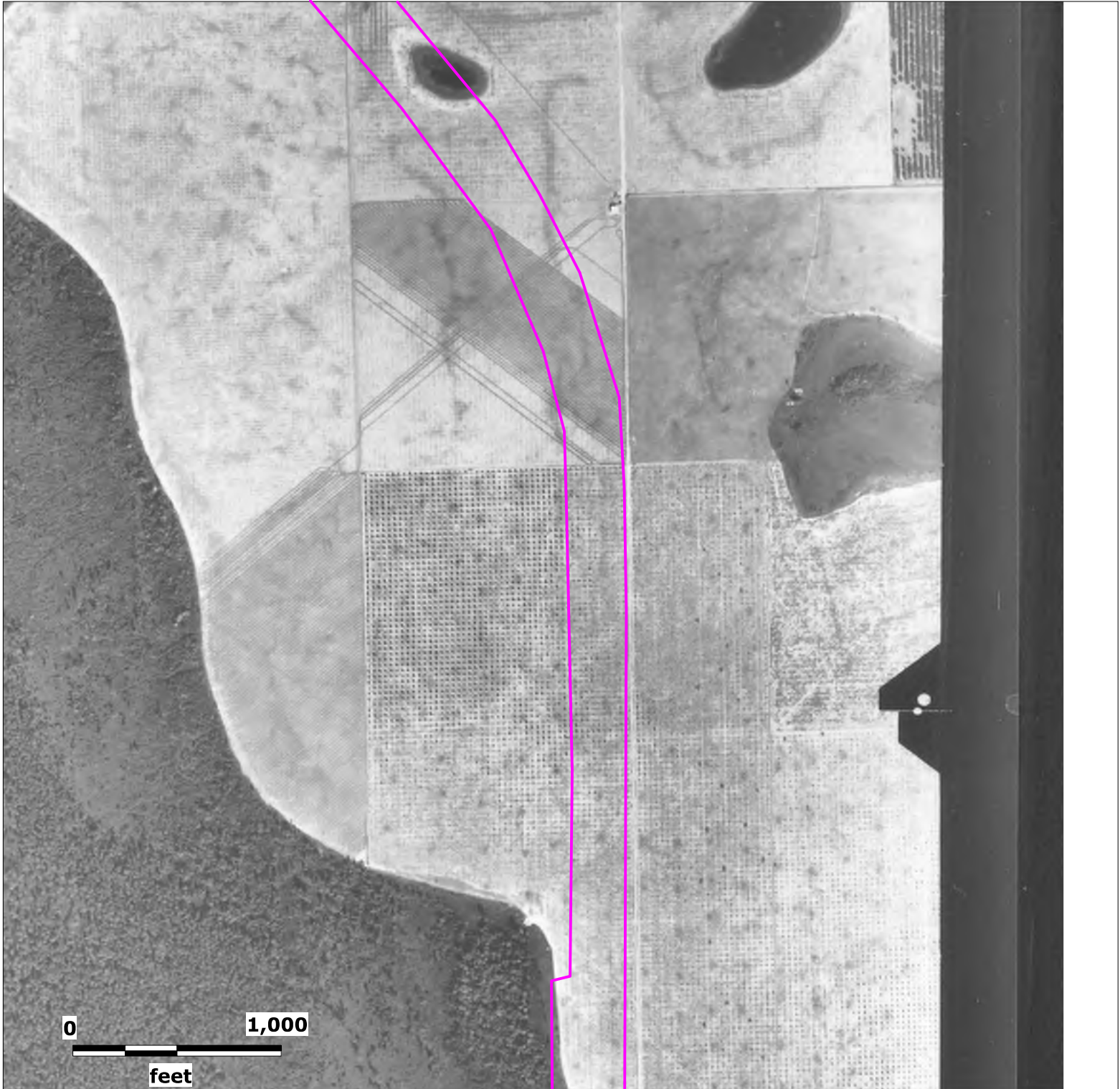
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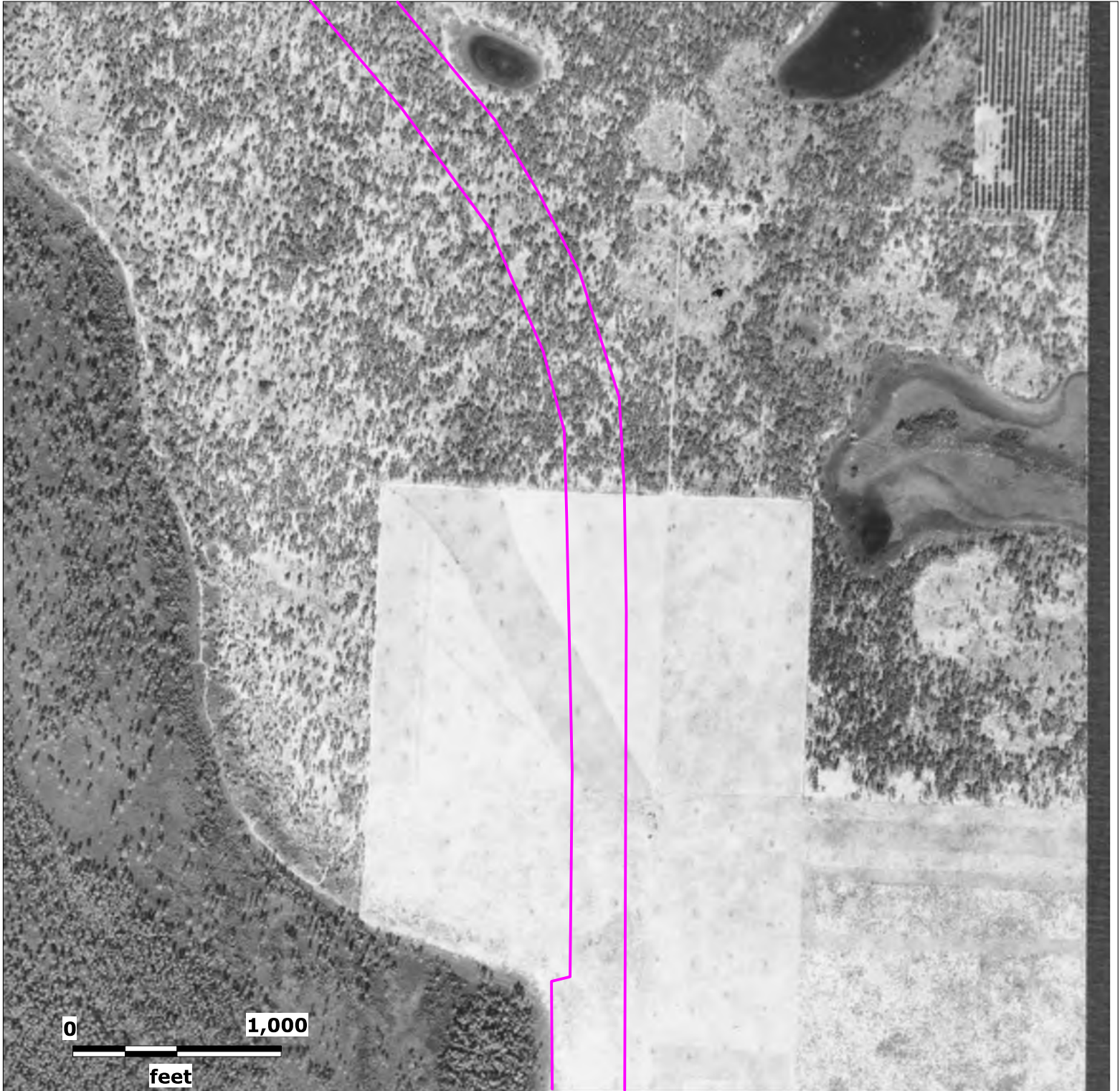
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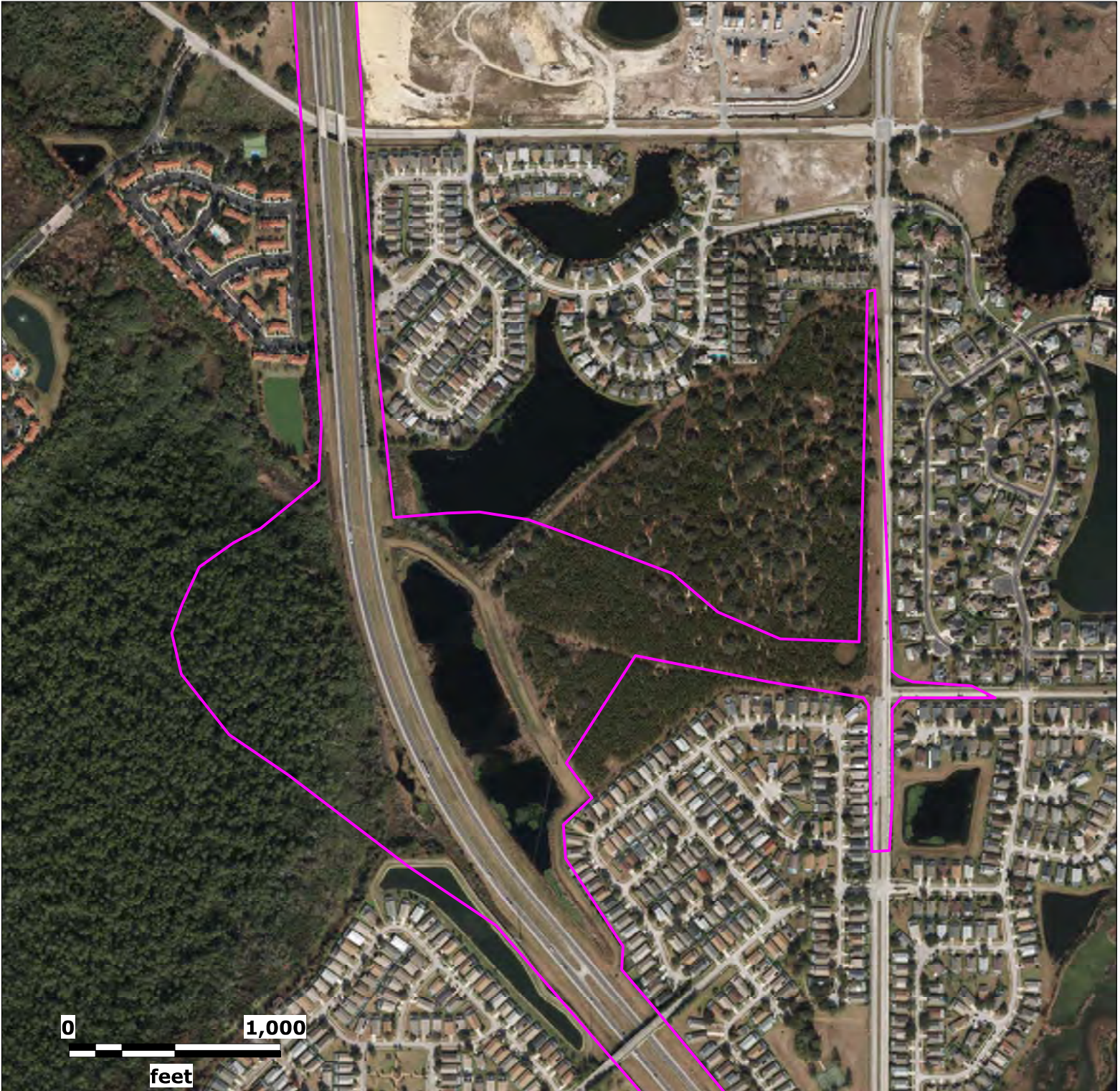
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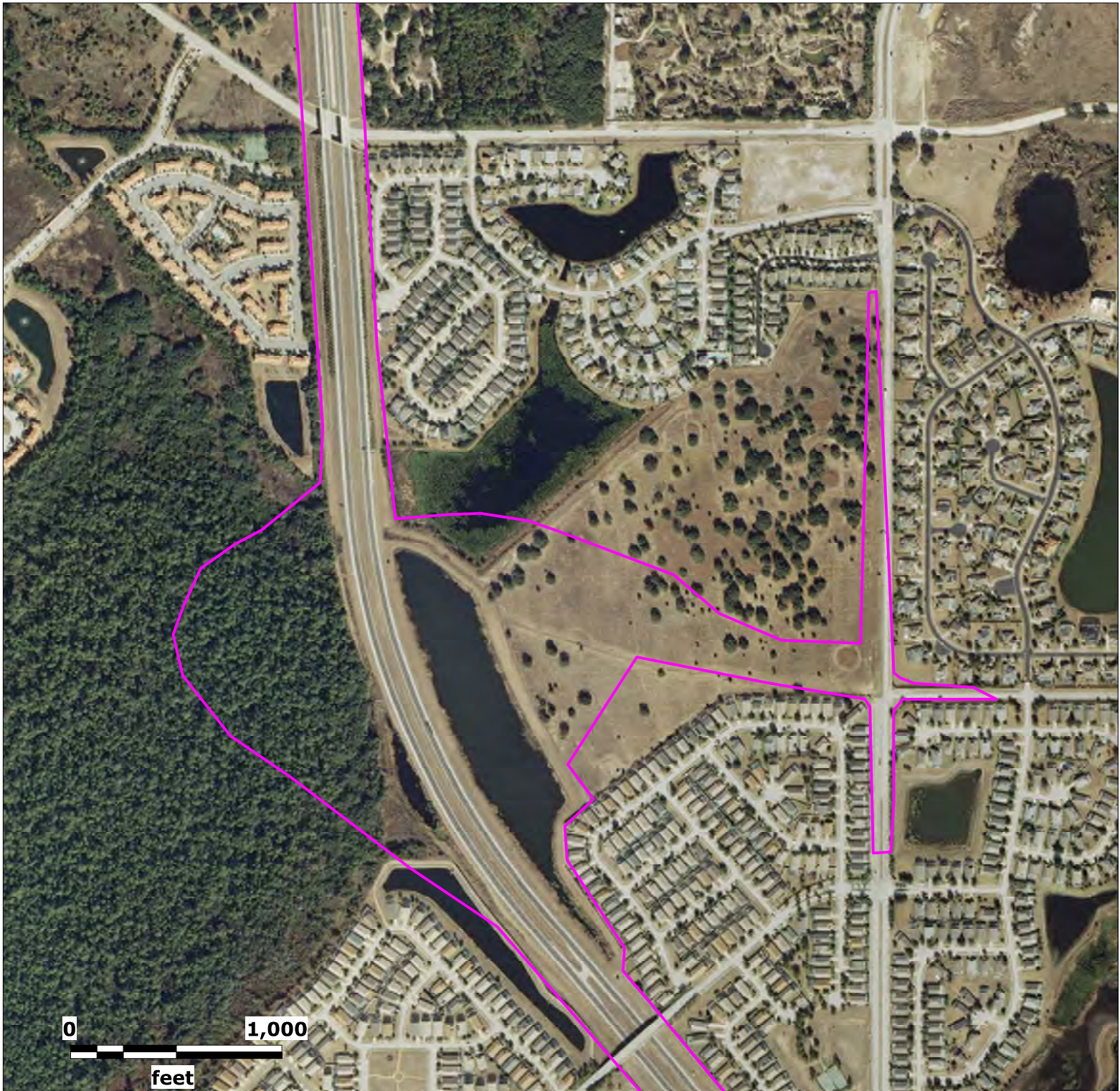
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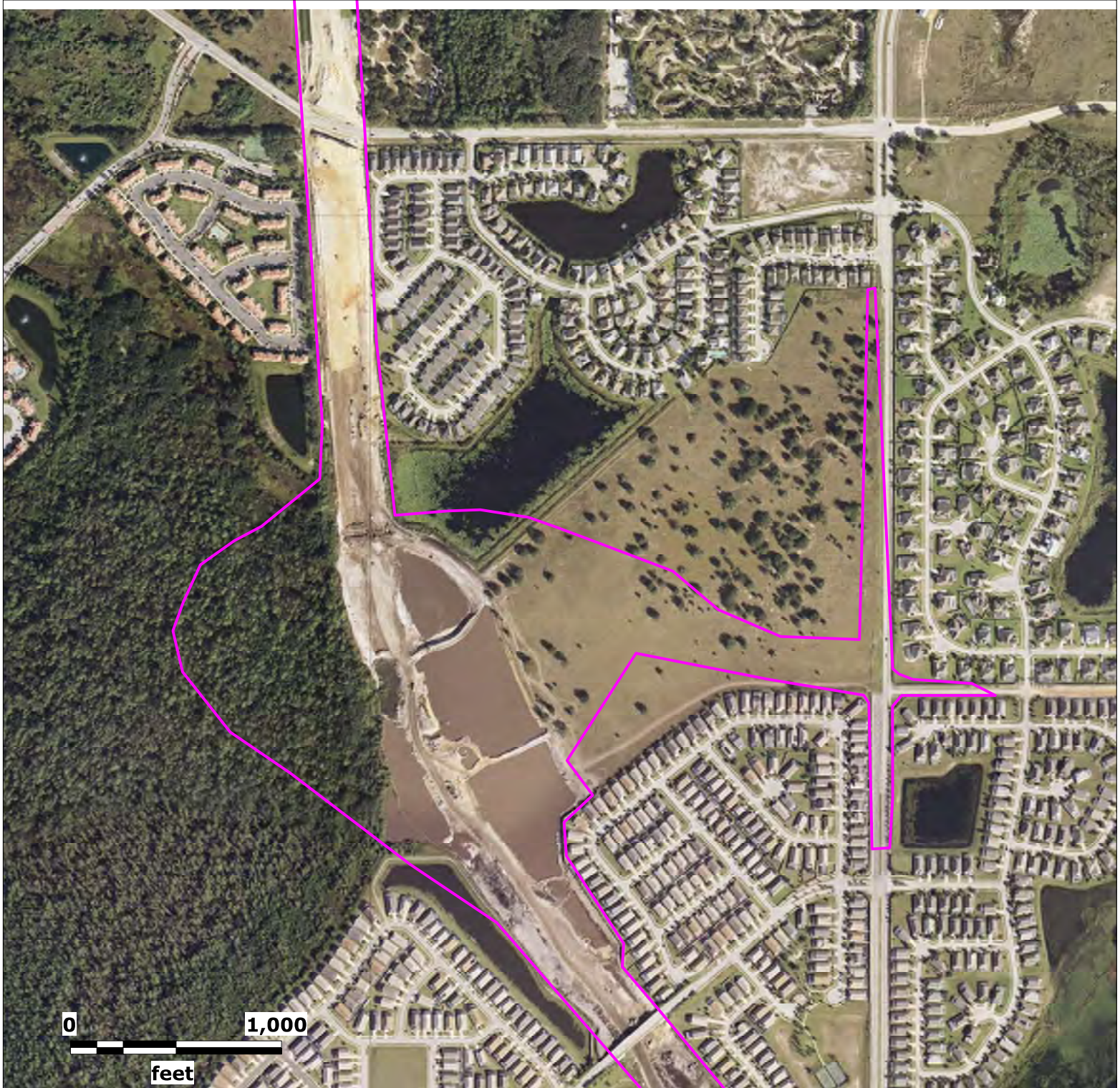
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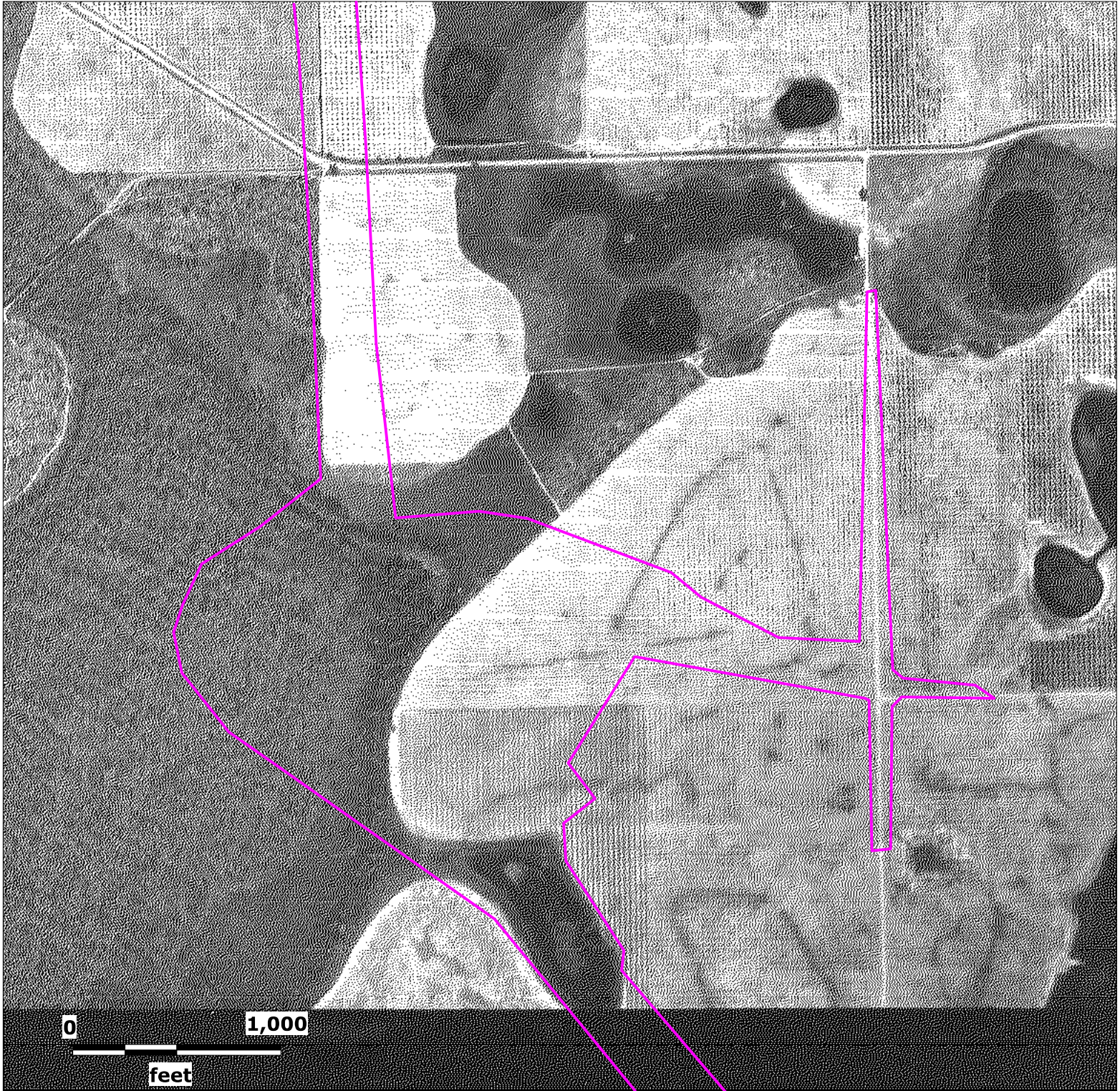
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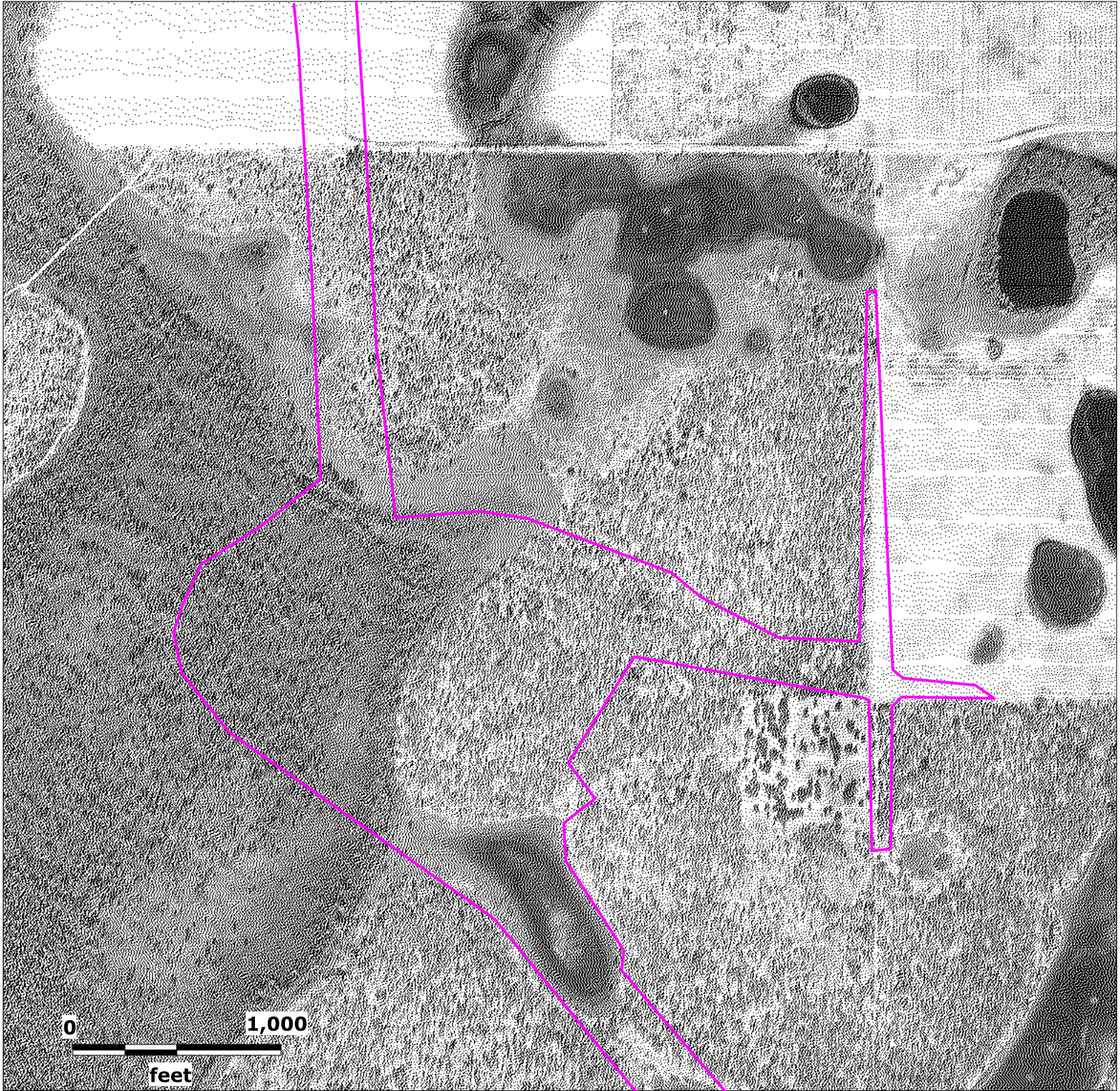
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Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

 Approximate Site Location



Source: University of Florida


Map Scale and Property Boundaries are Approximate

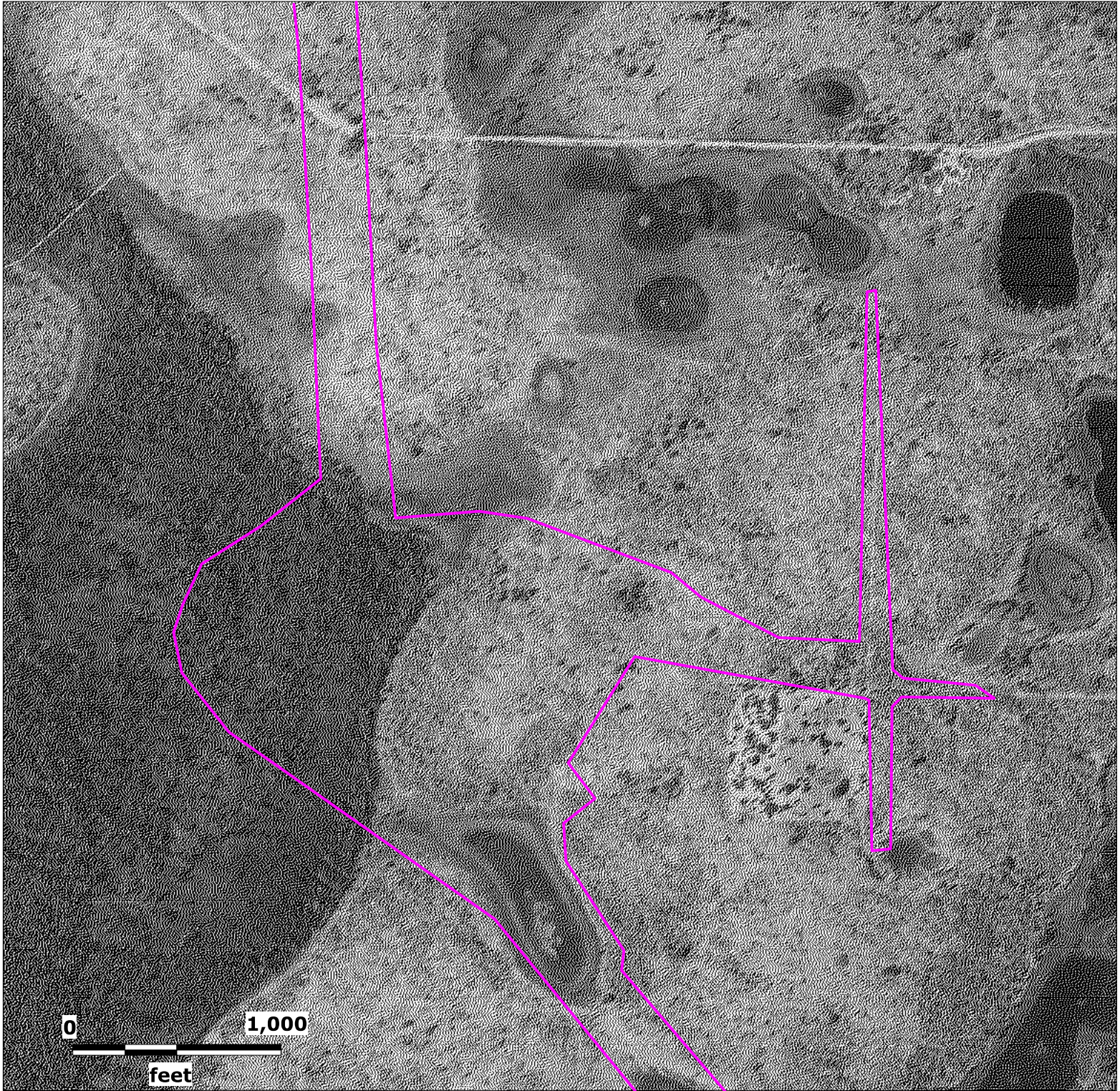
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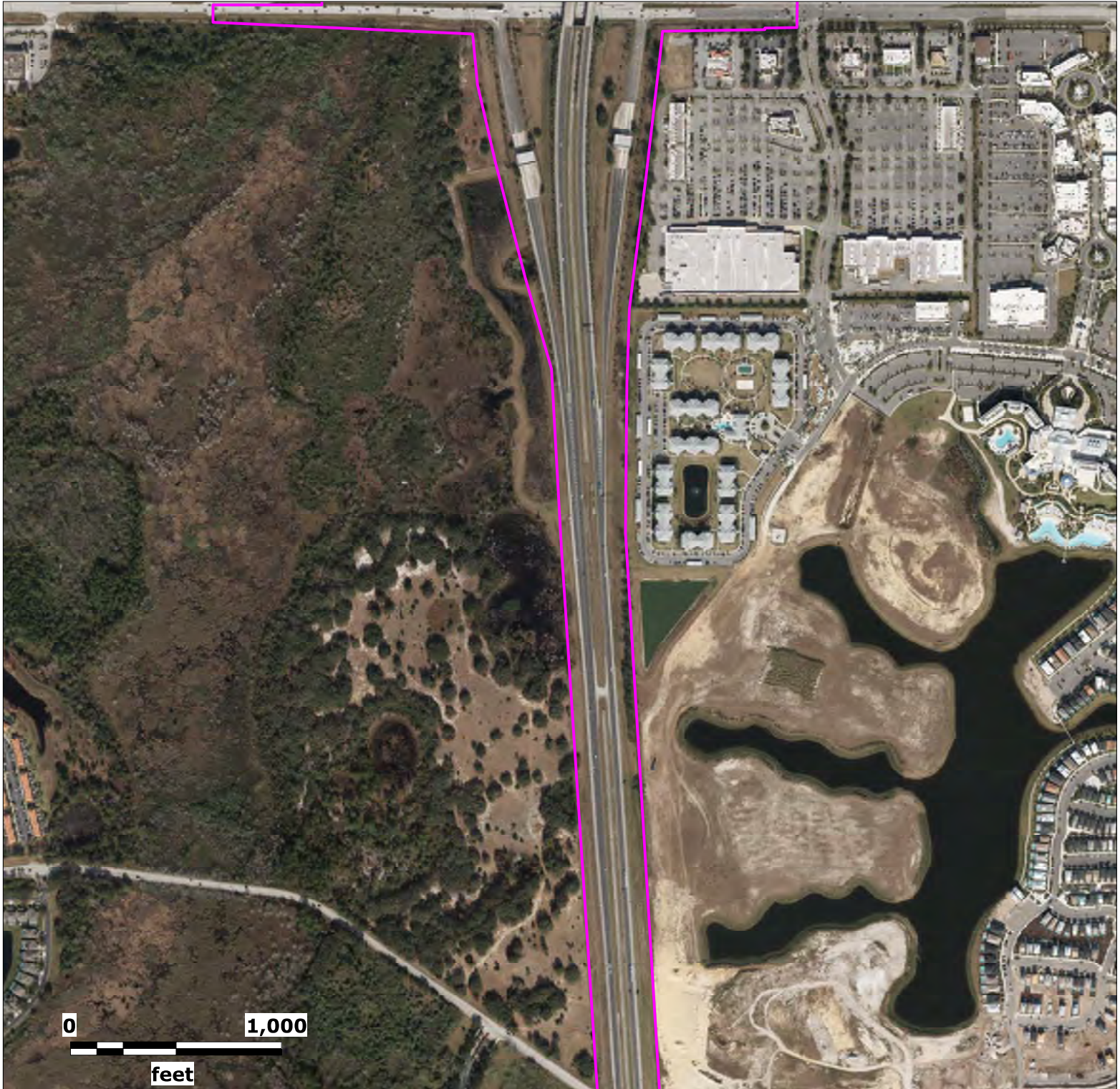
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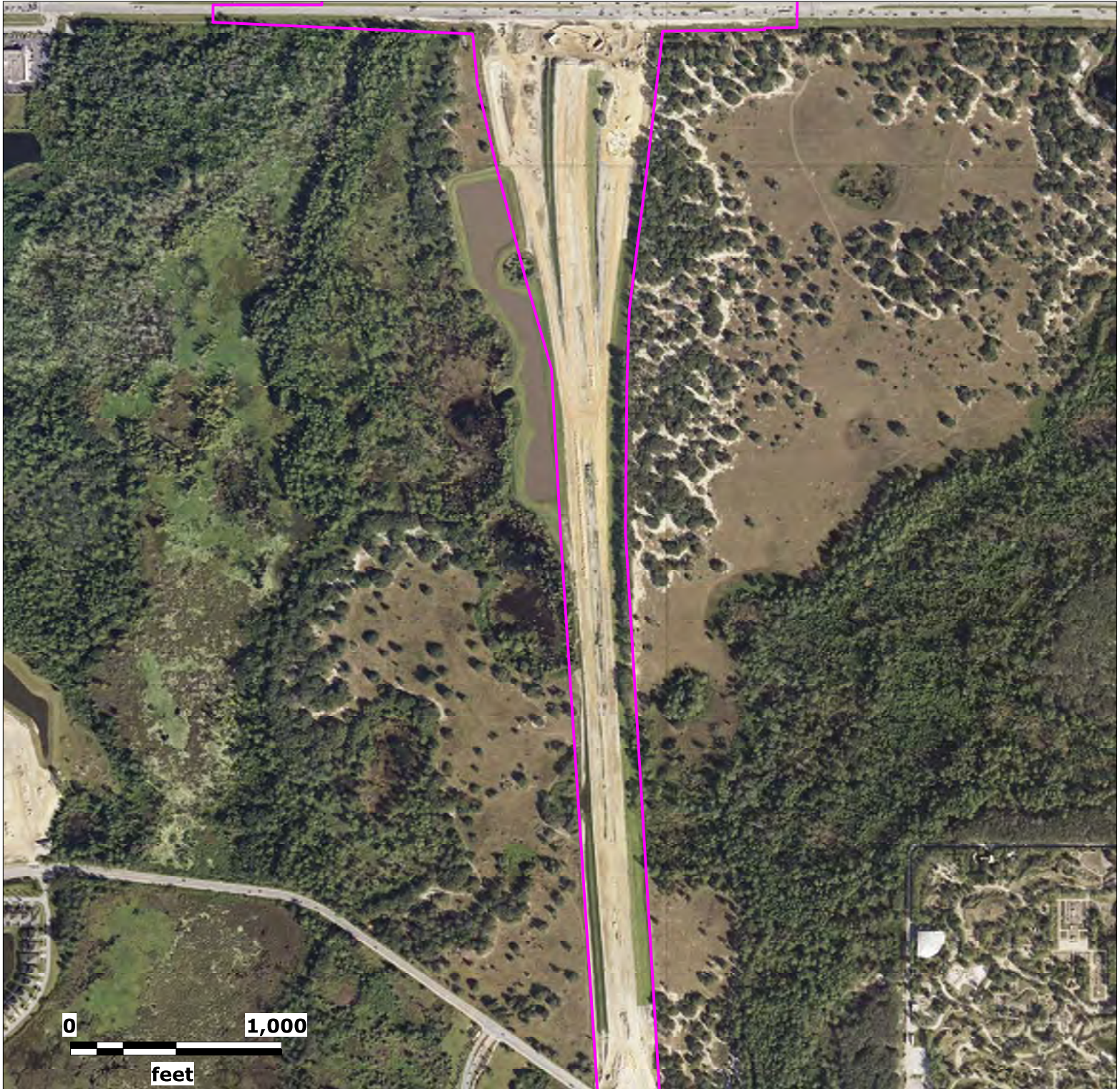
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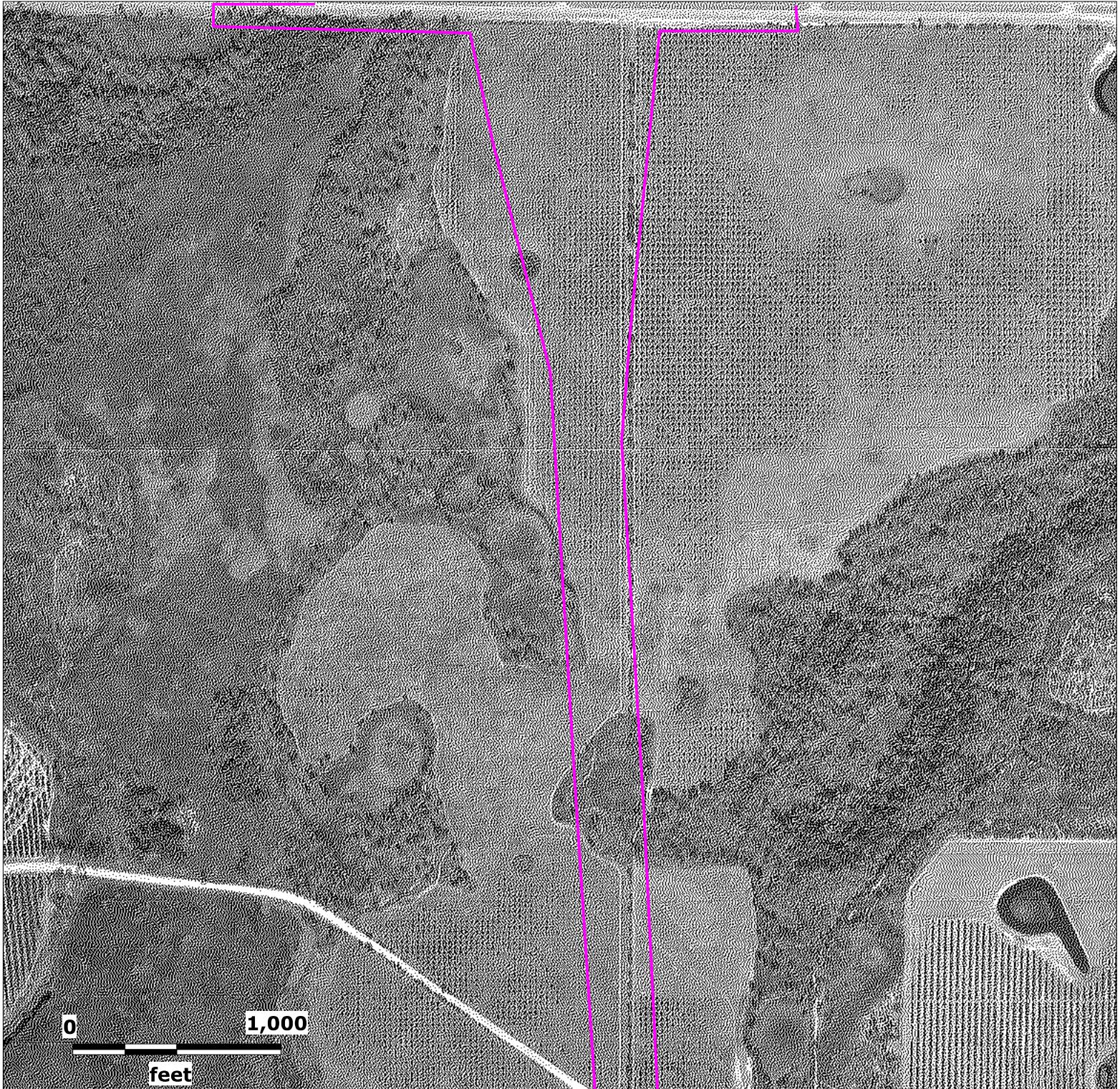
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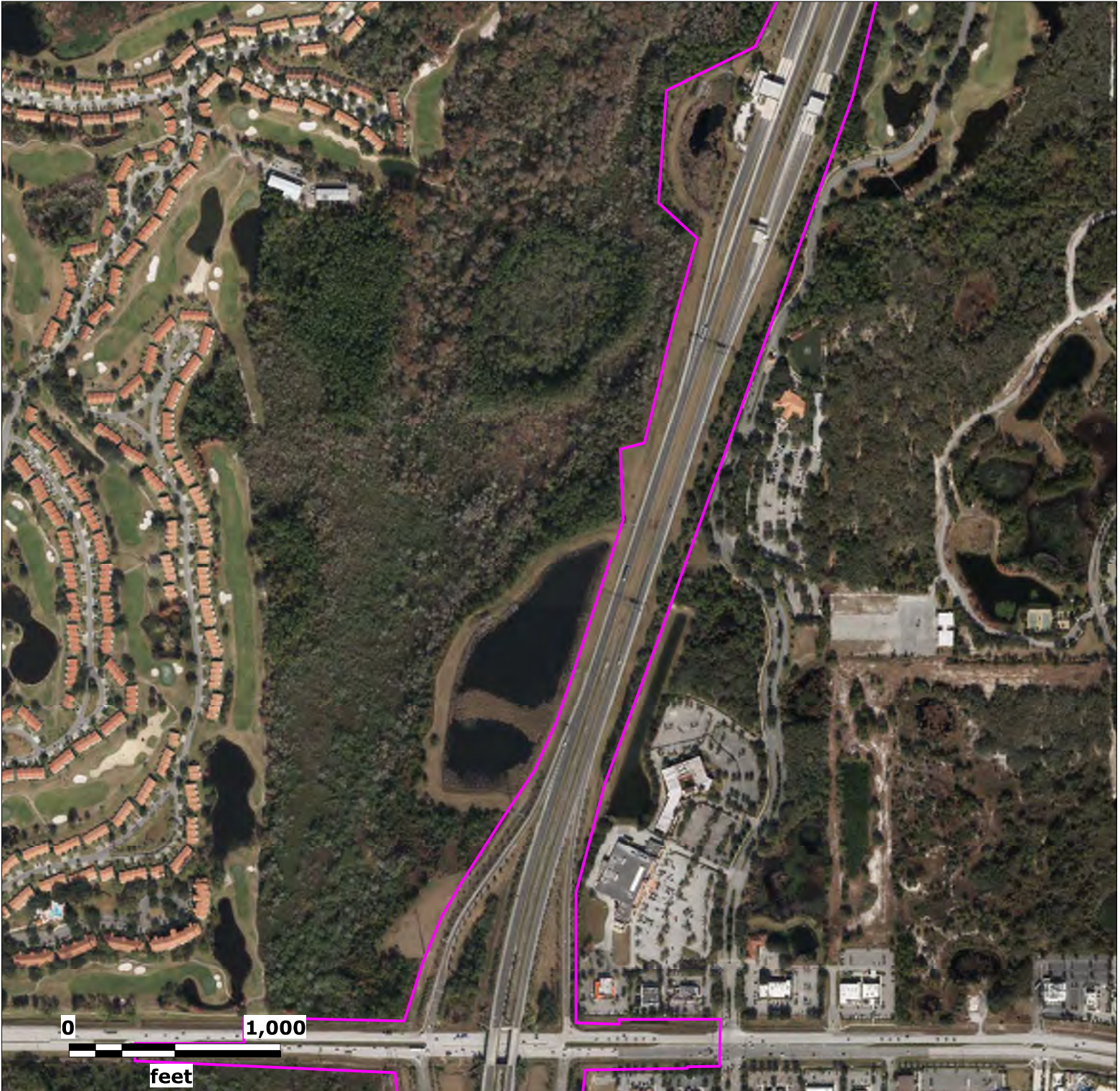
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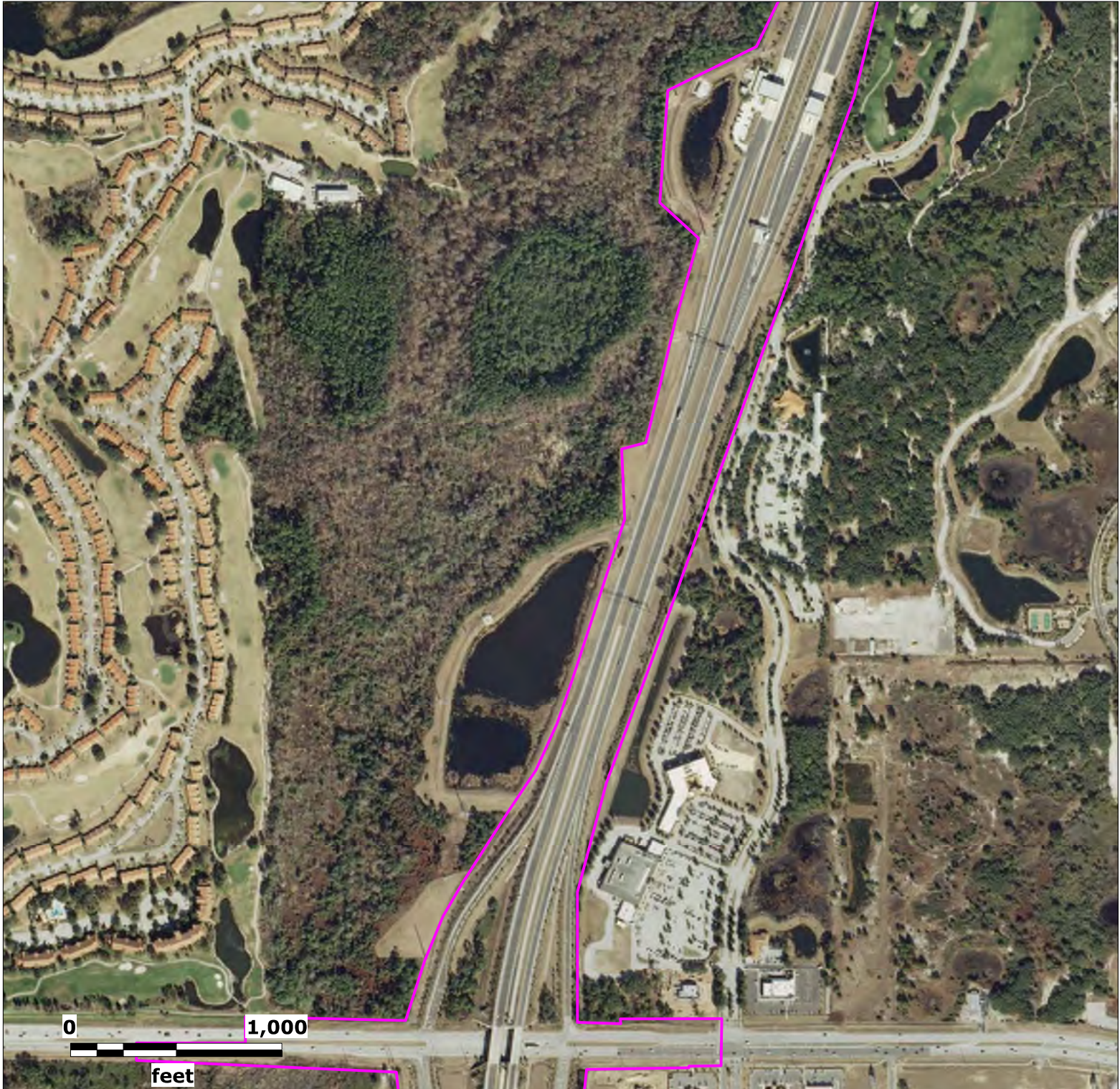
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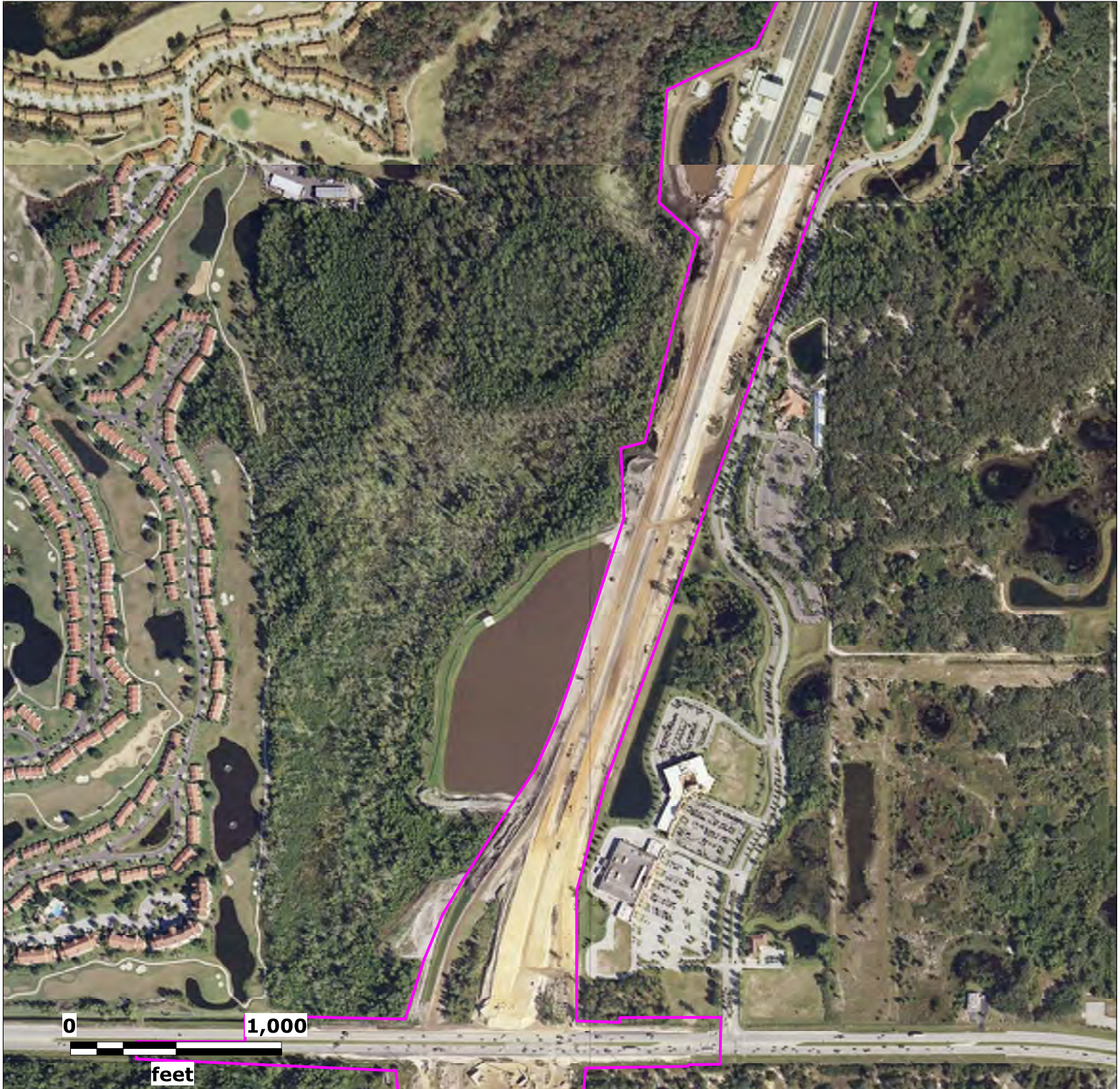
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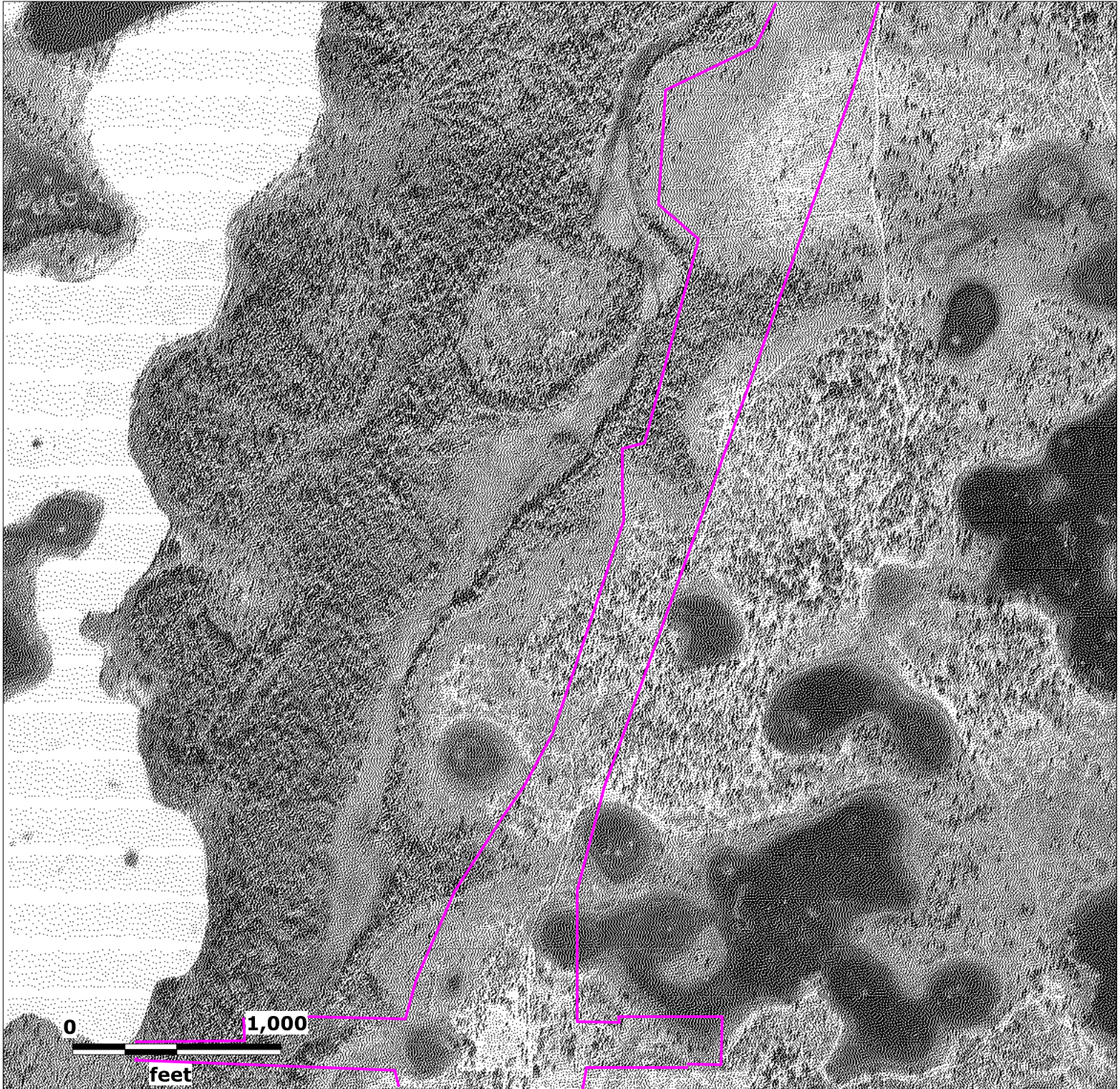
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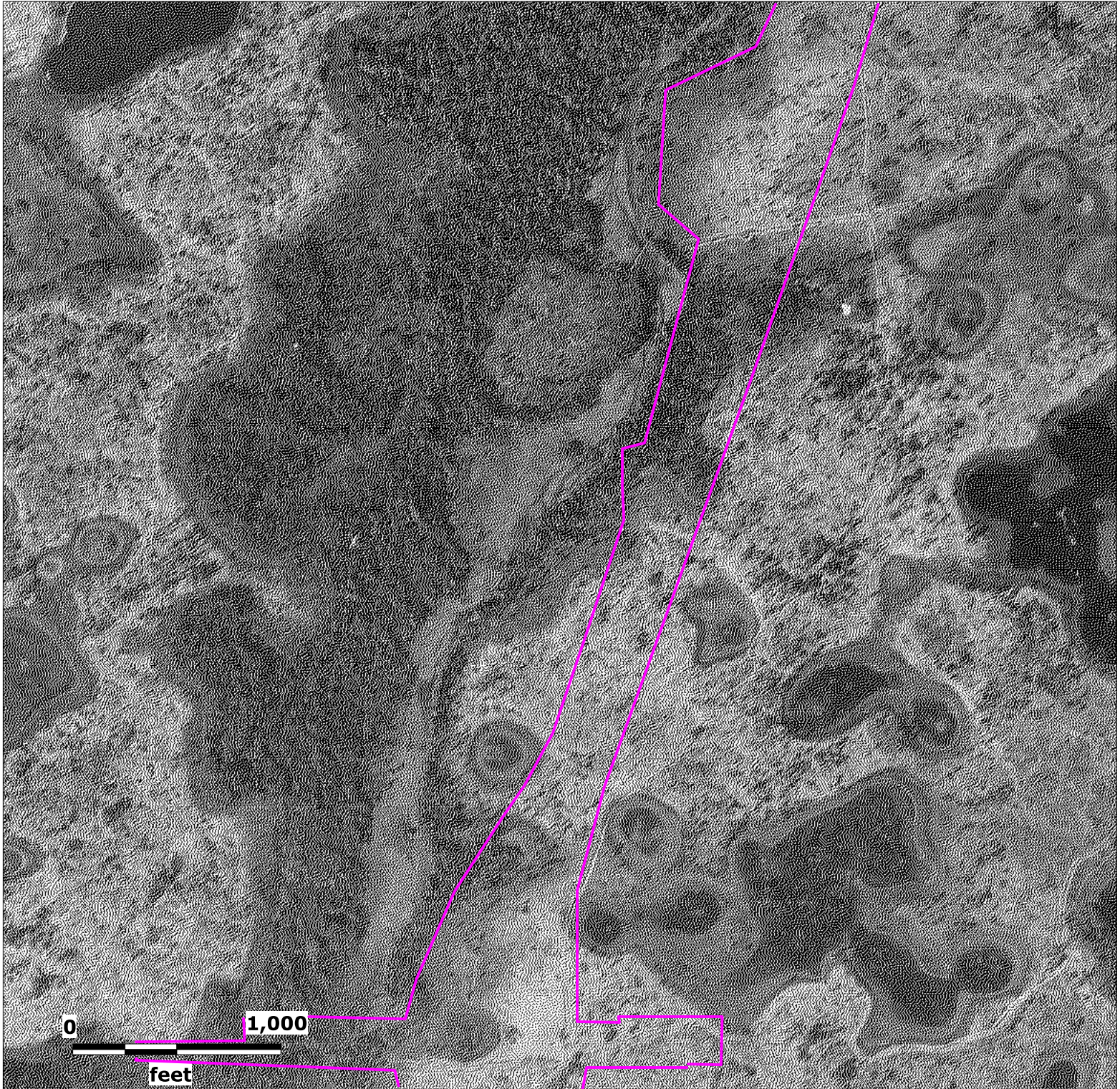
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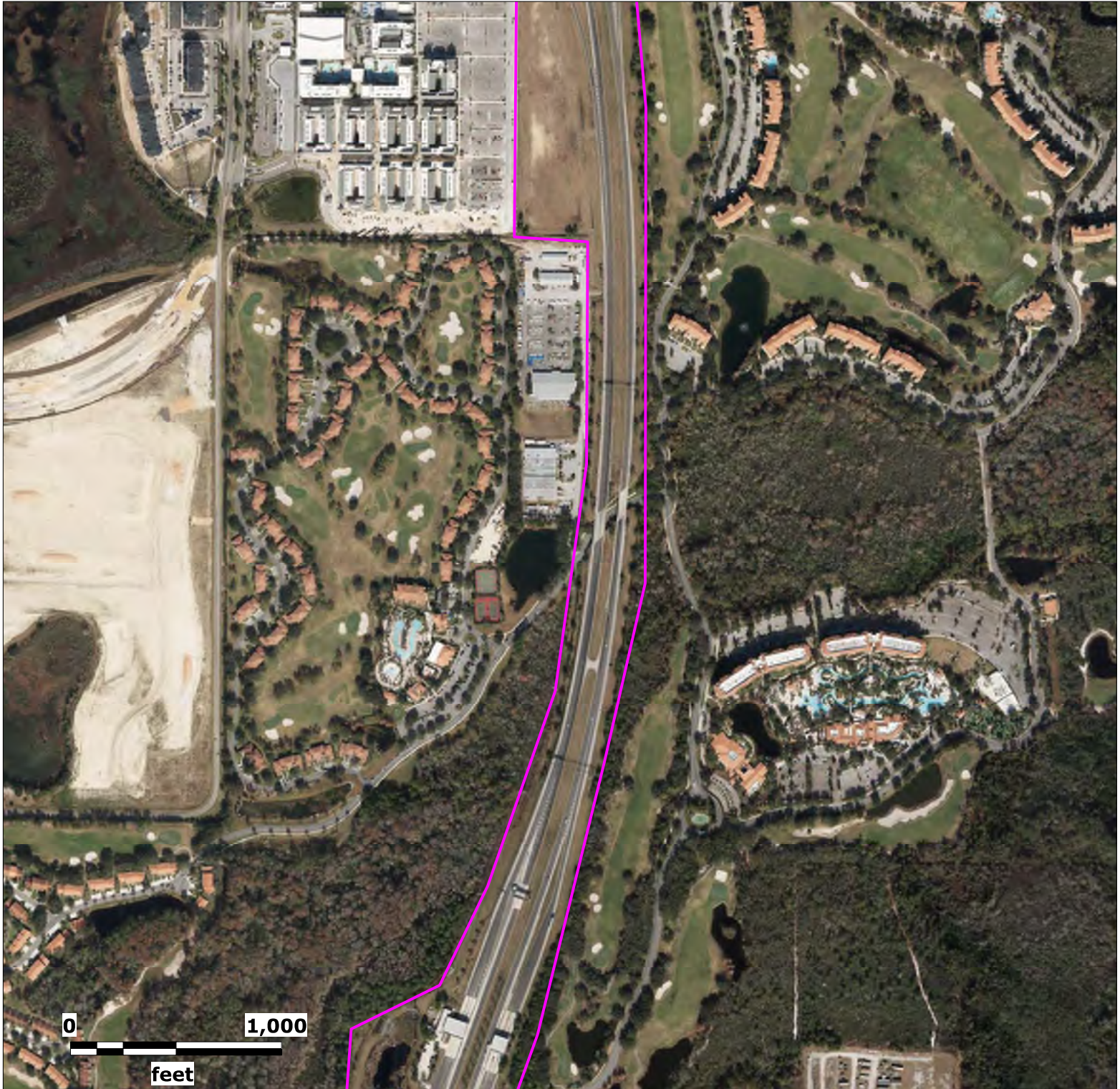
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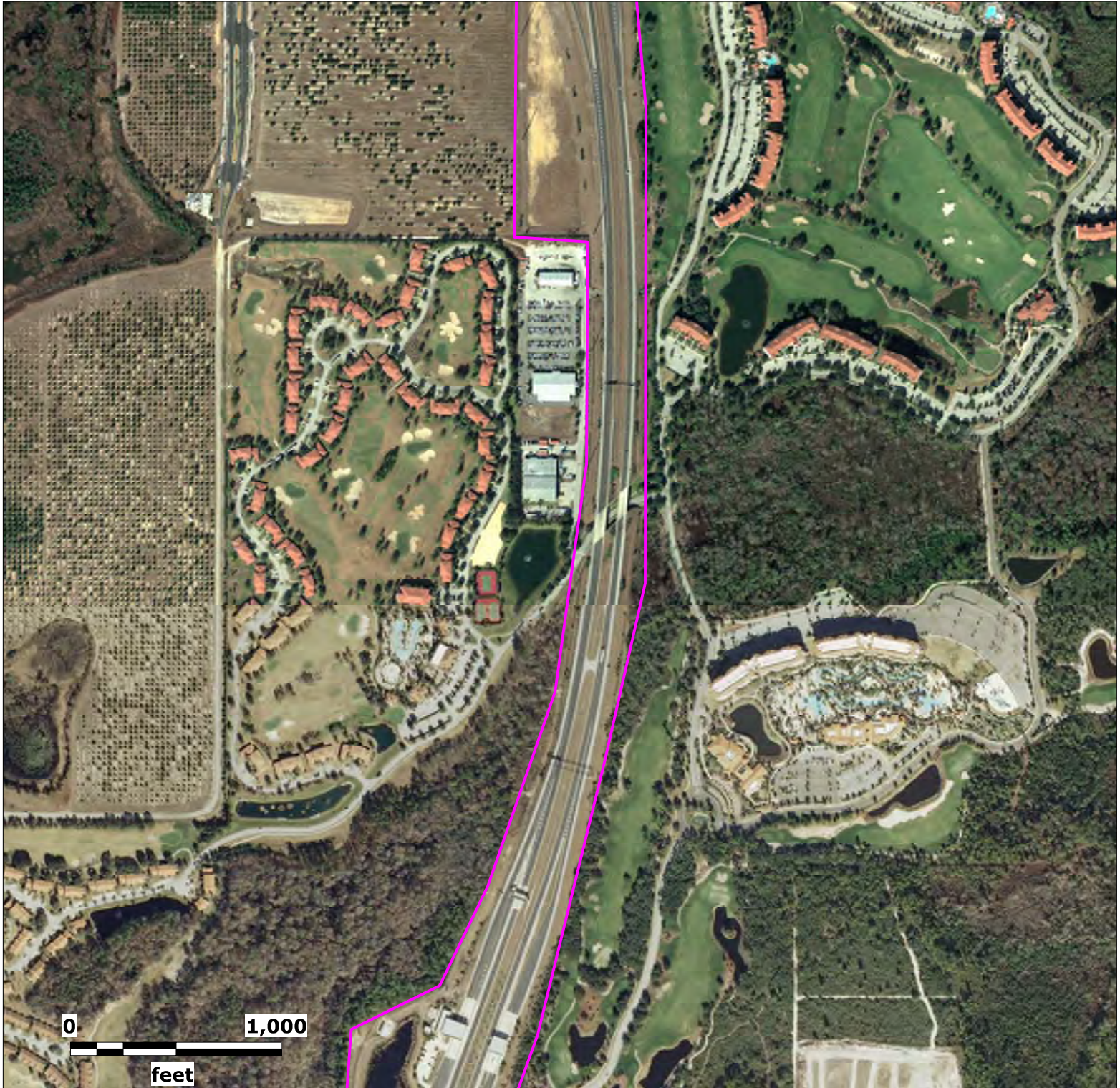
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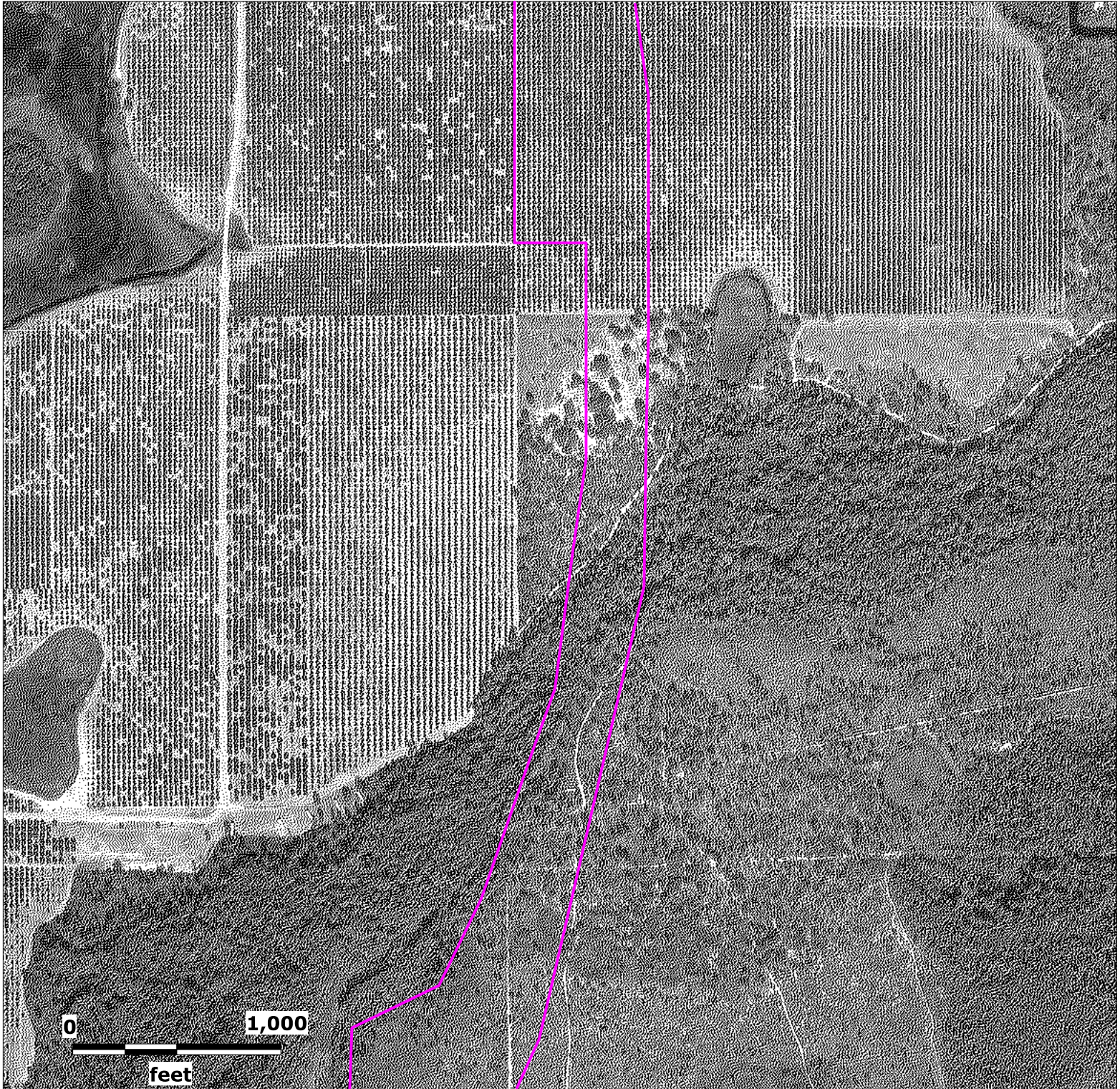
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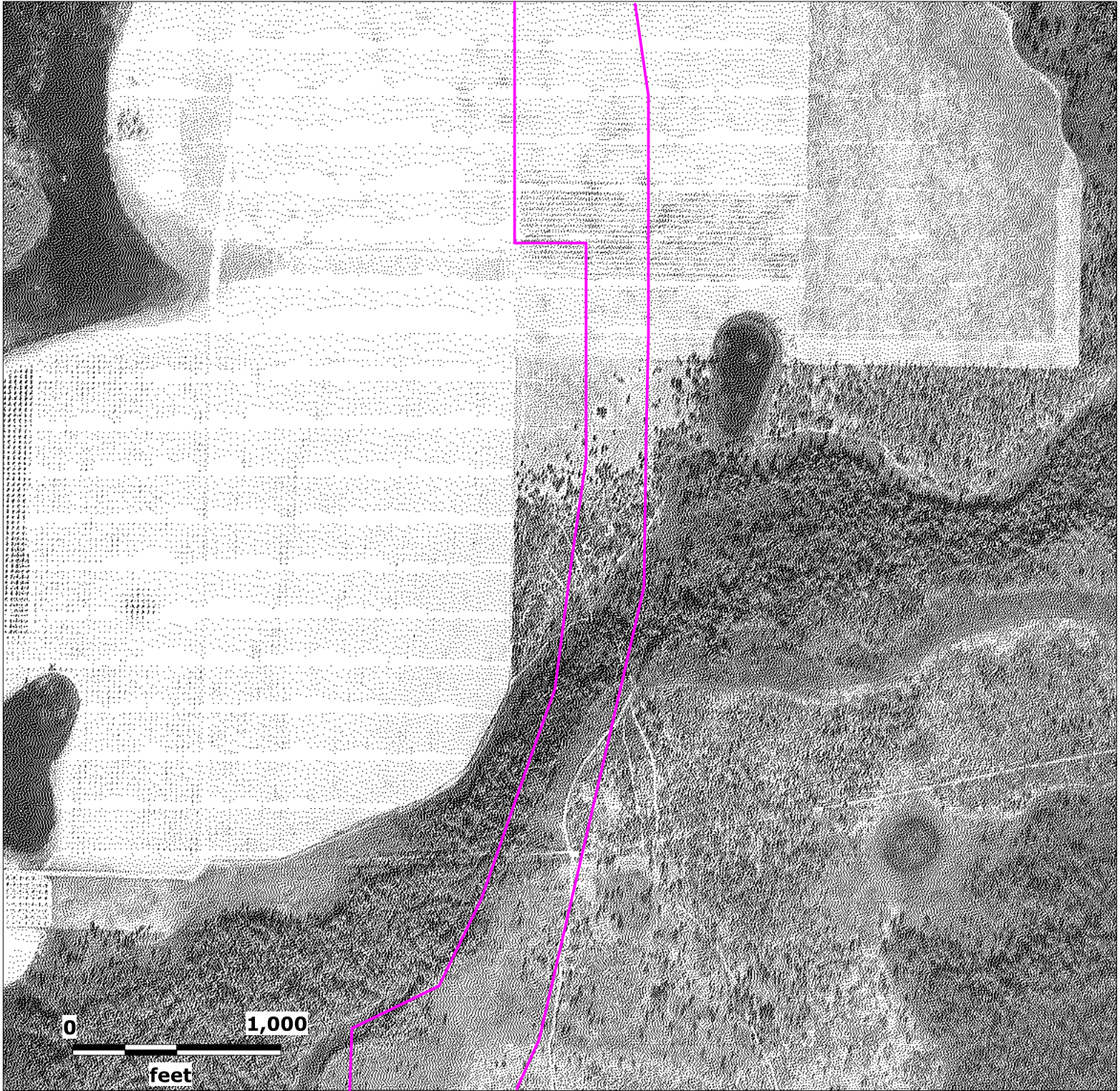
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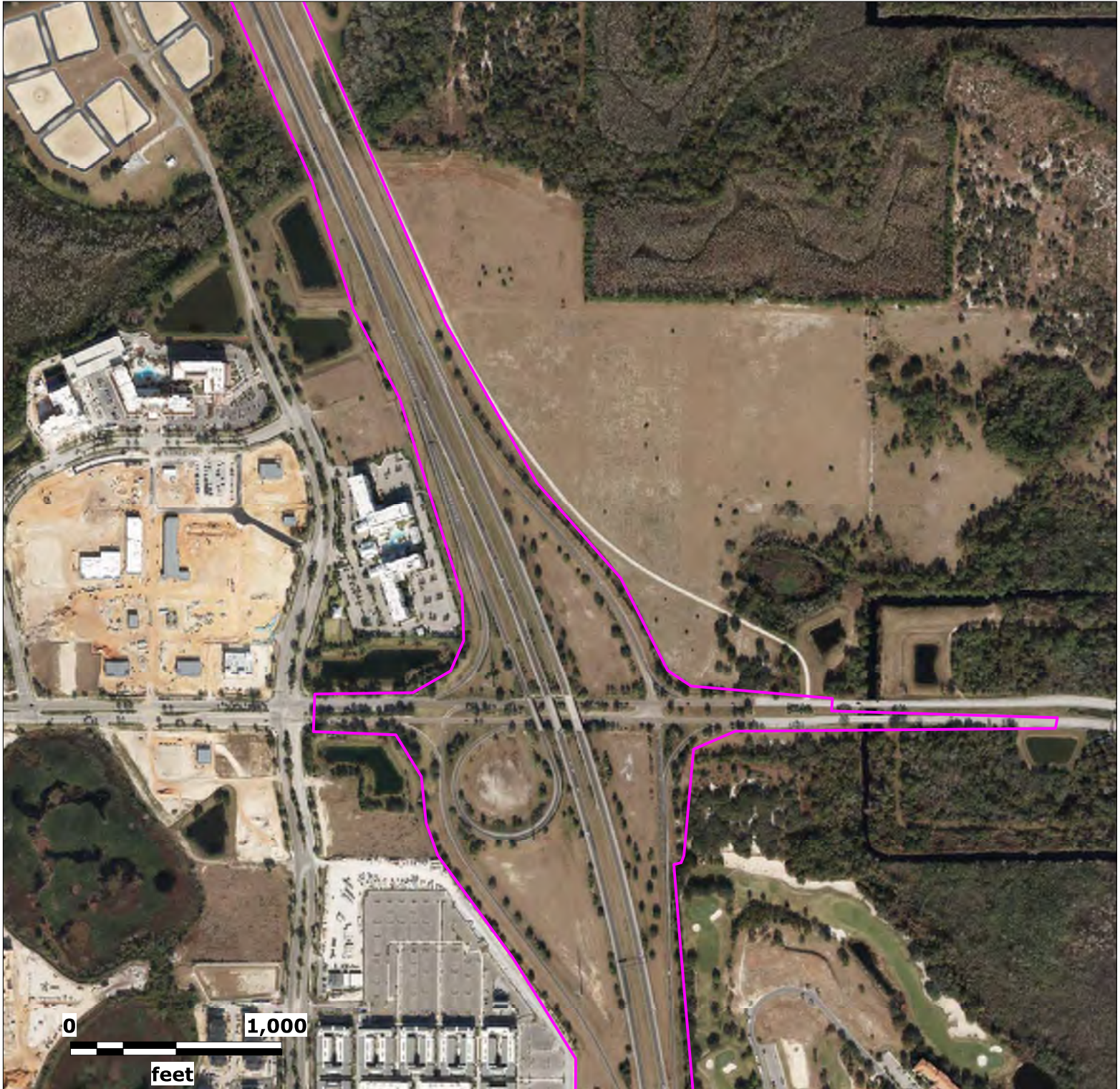
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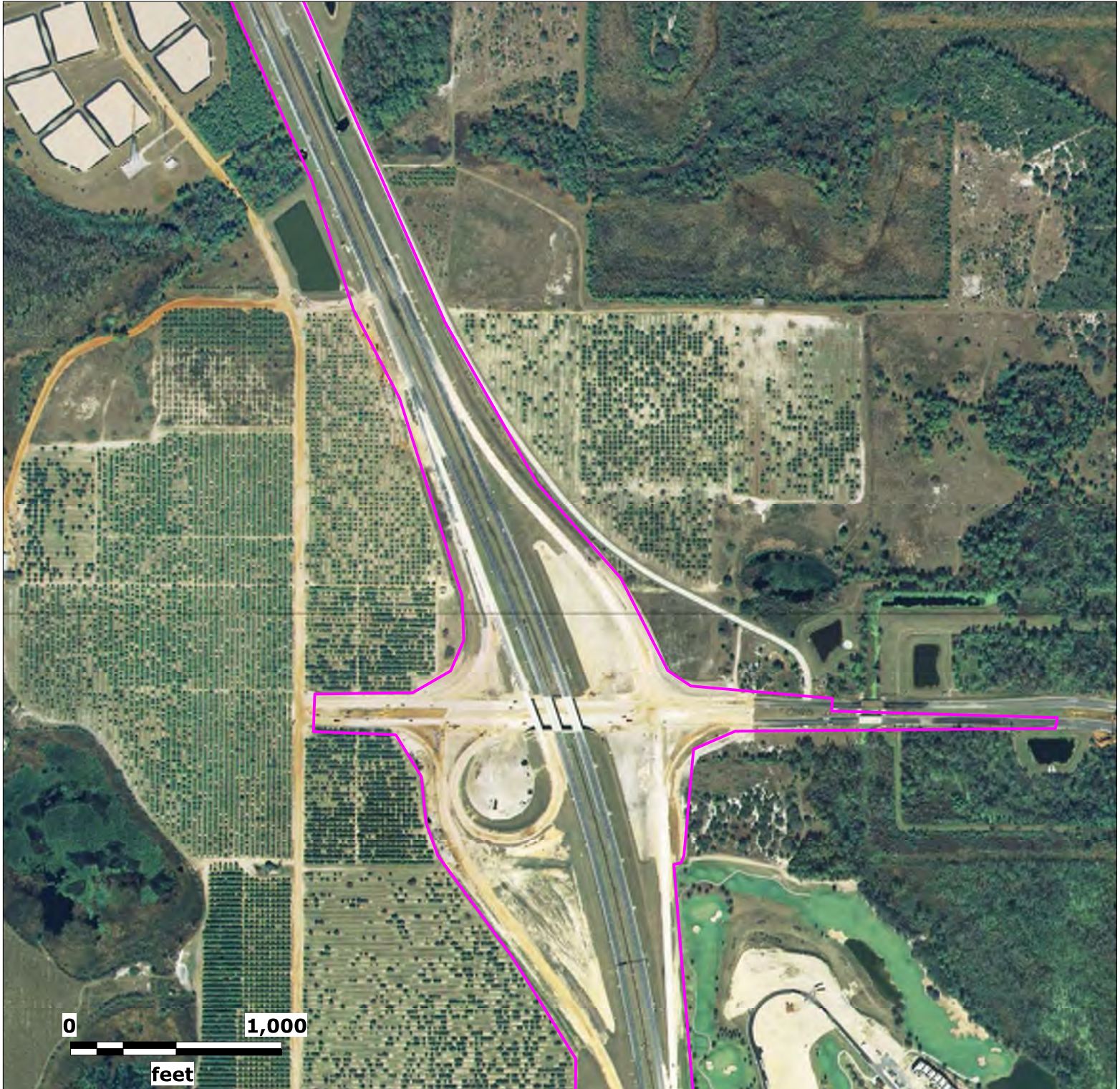
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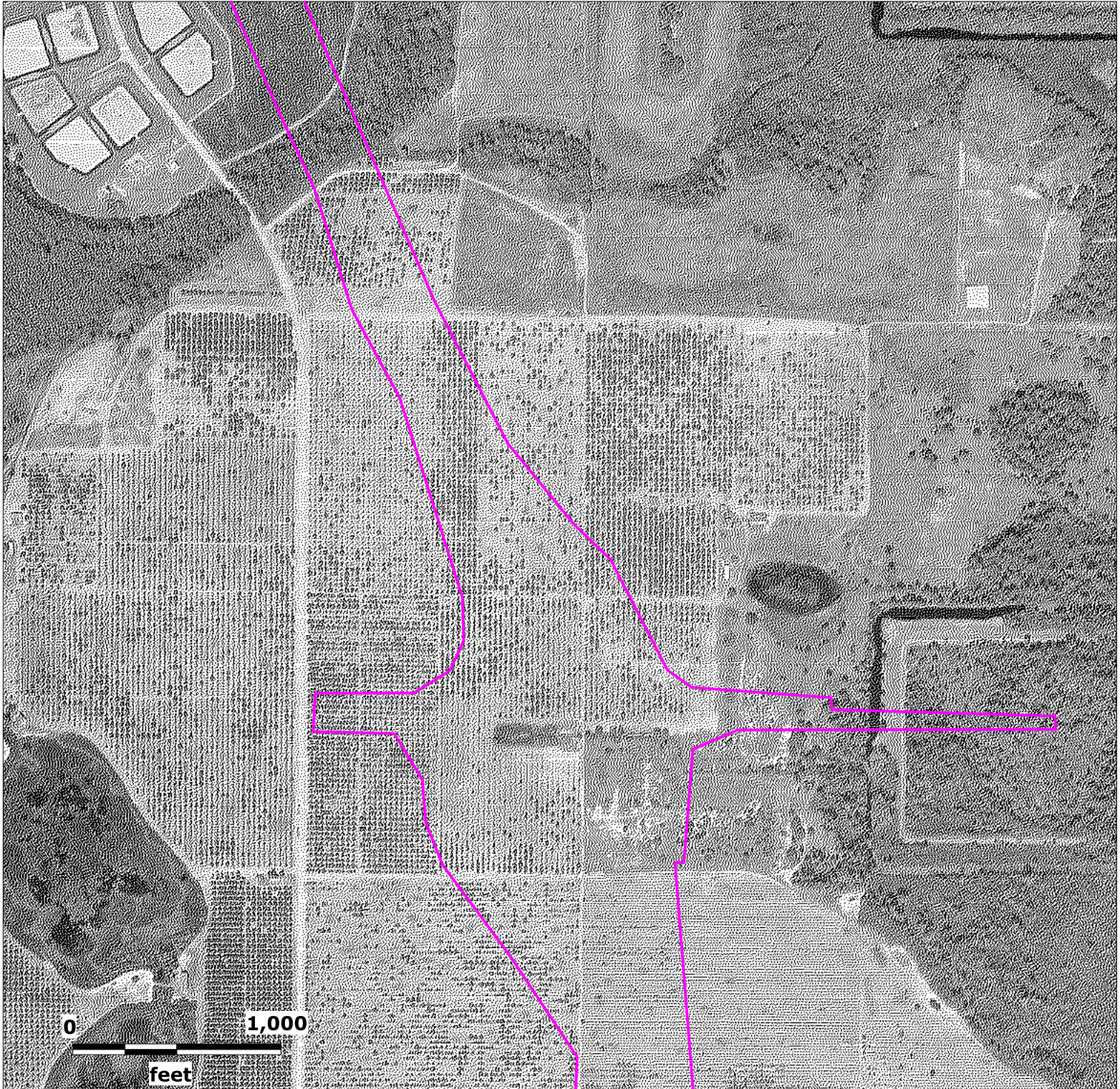
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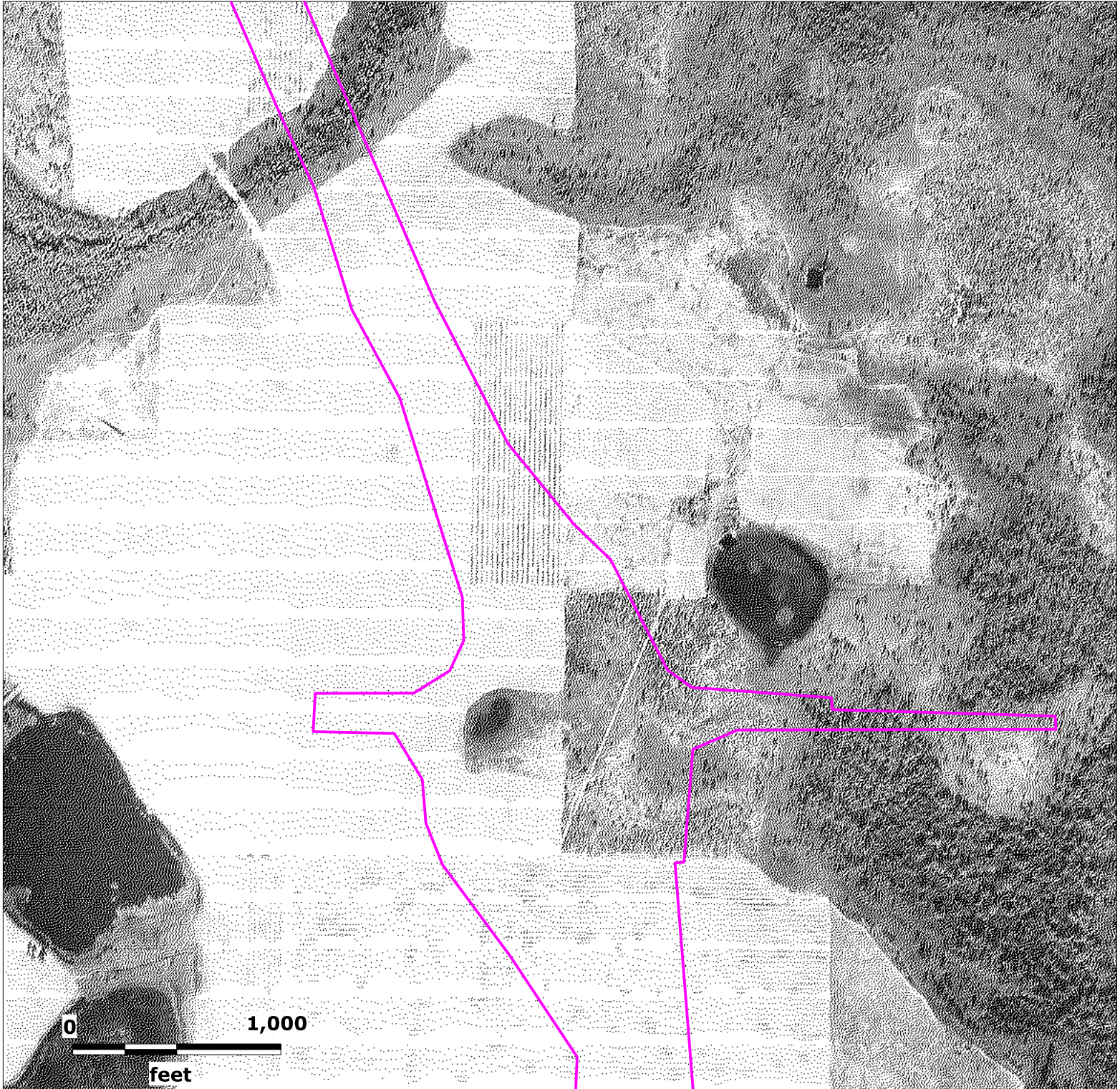
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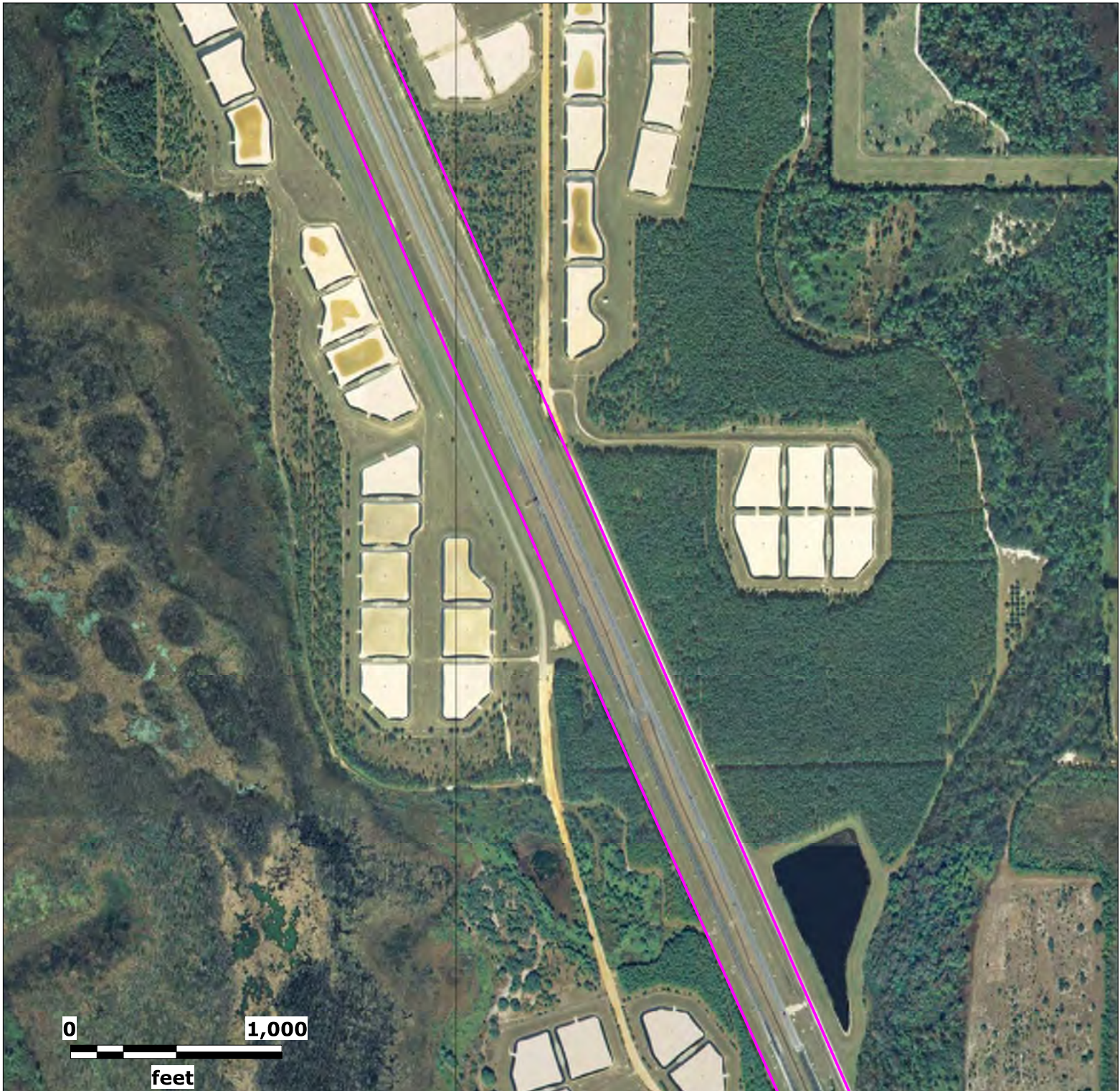
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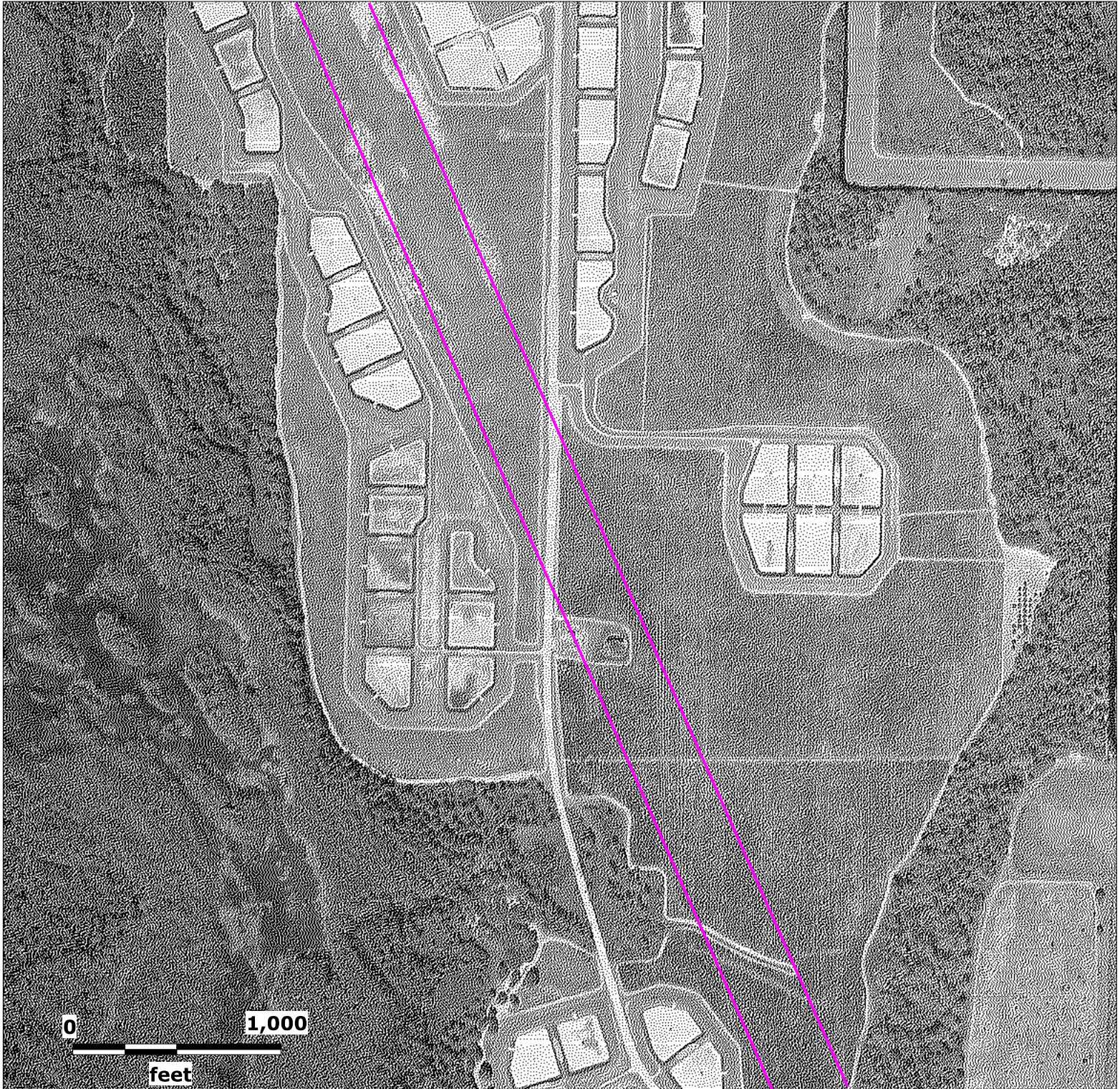
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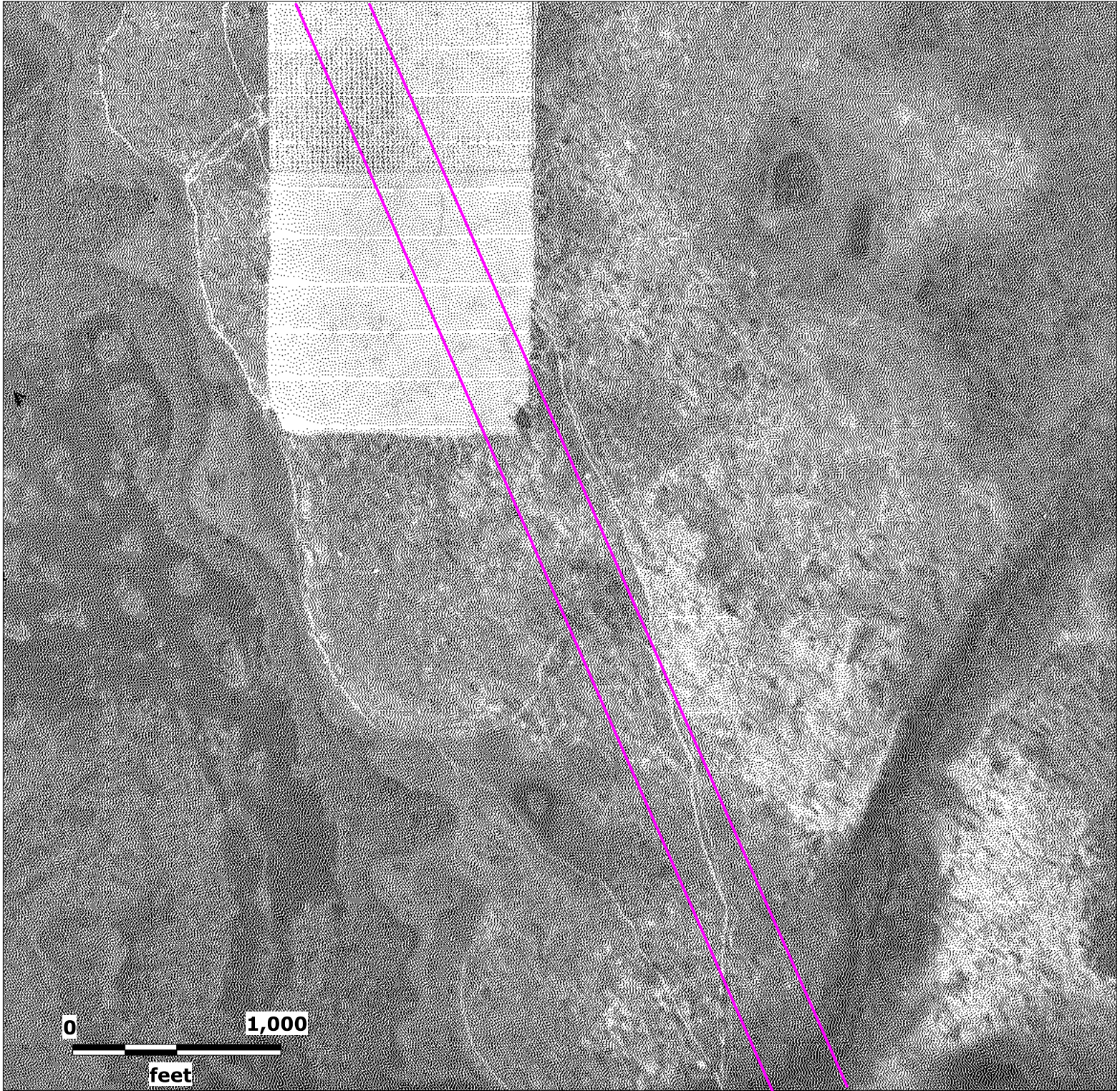
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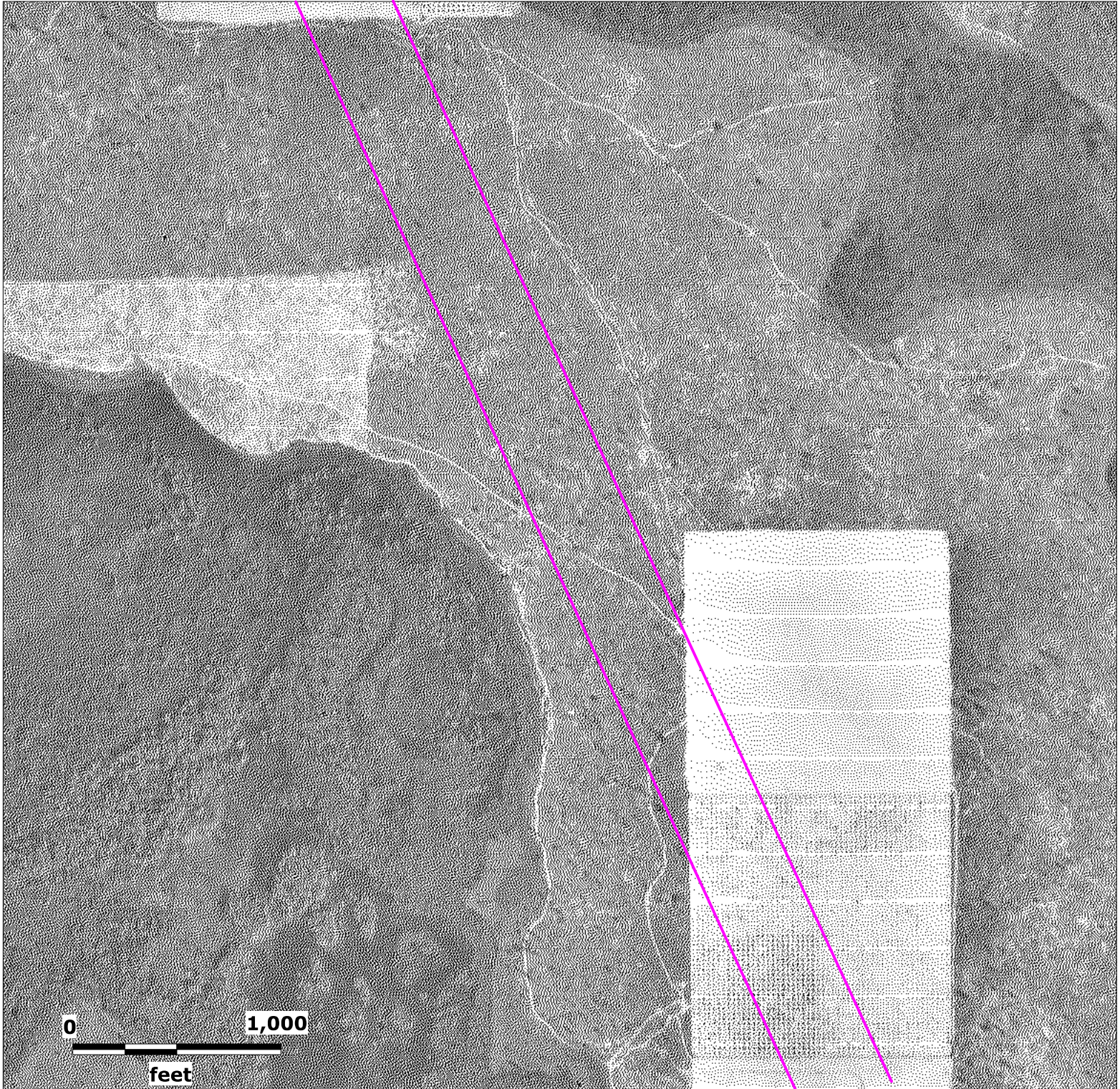
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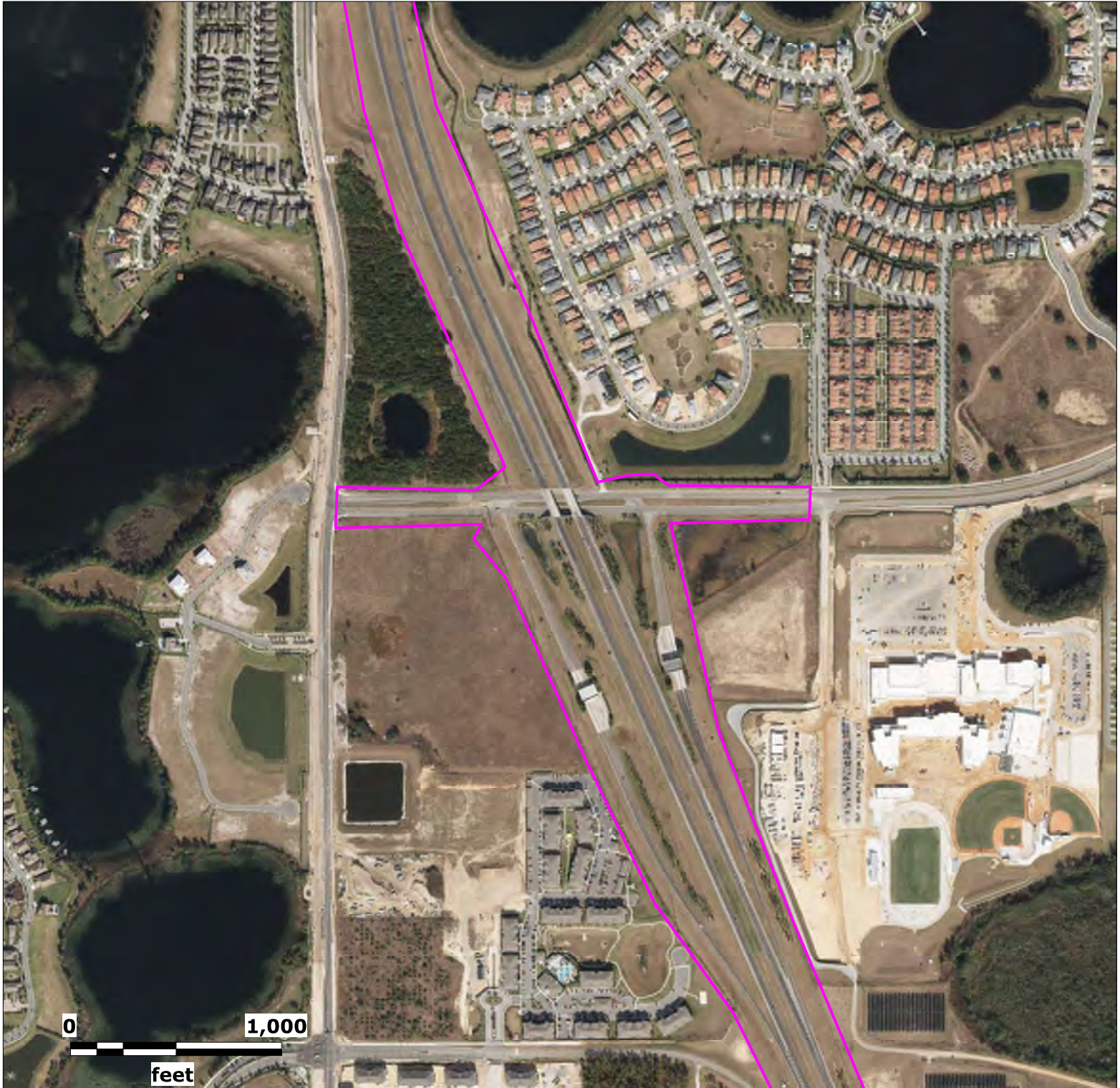
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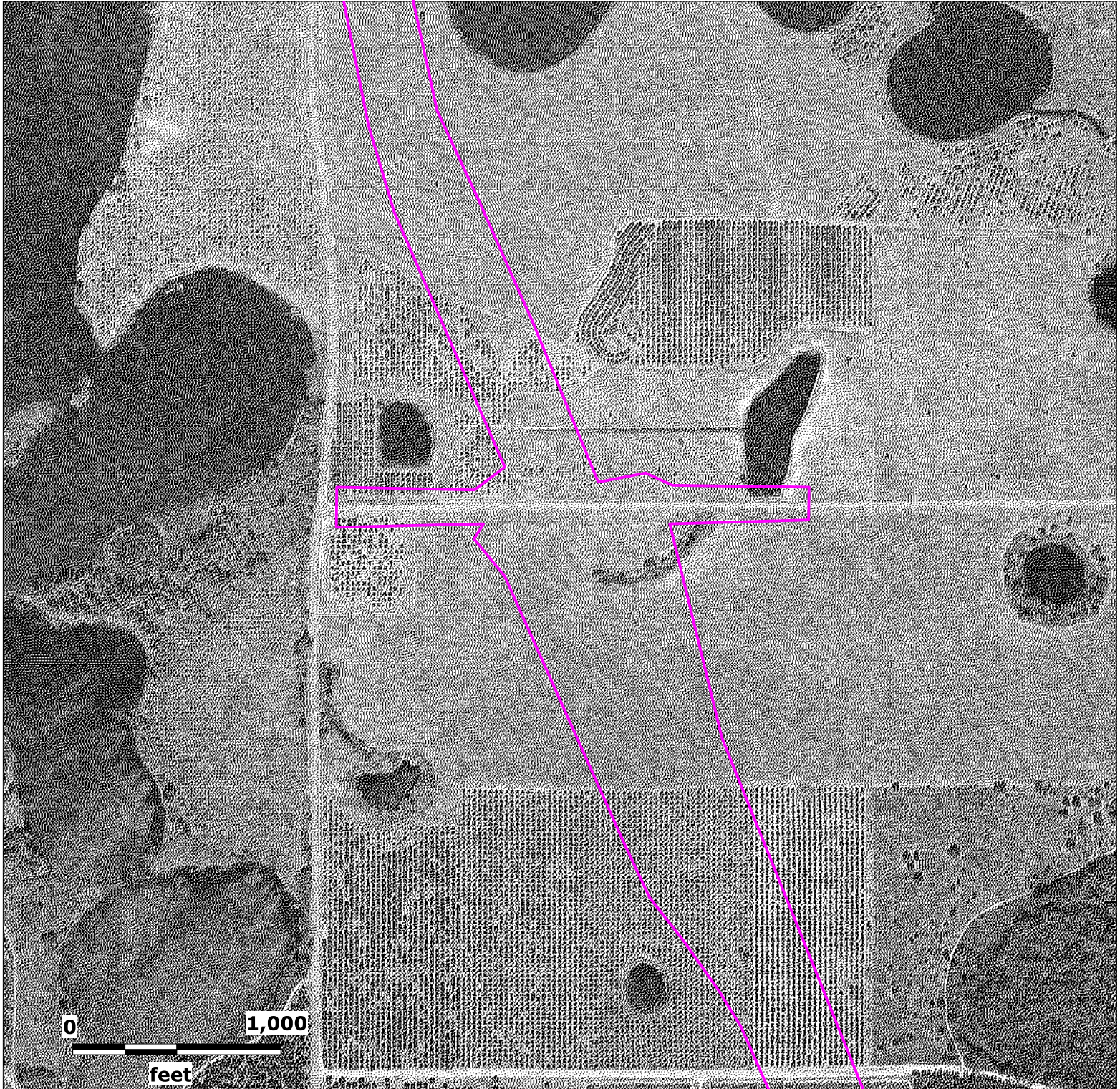
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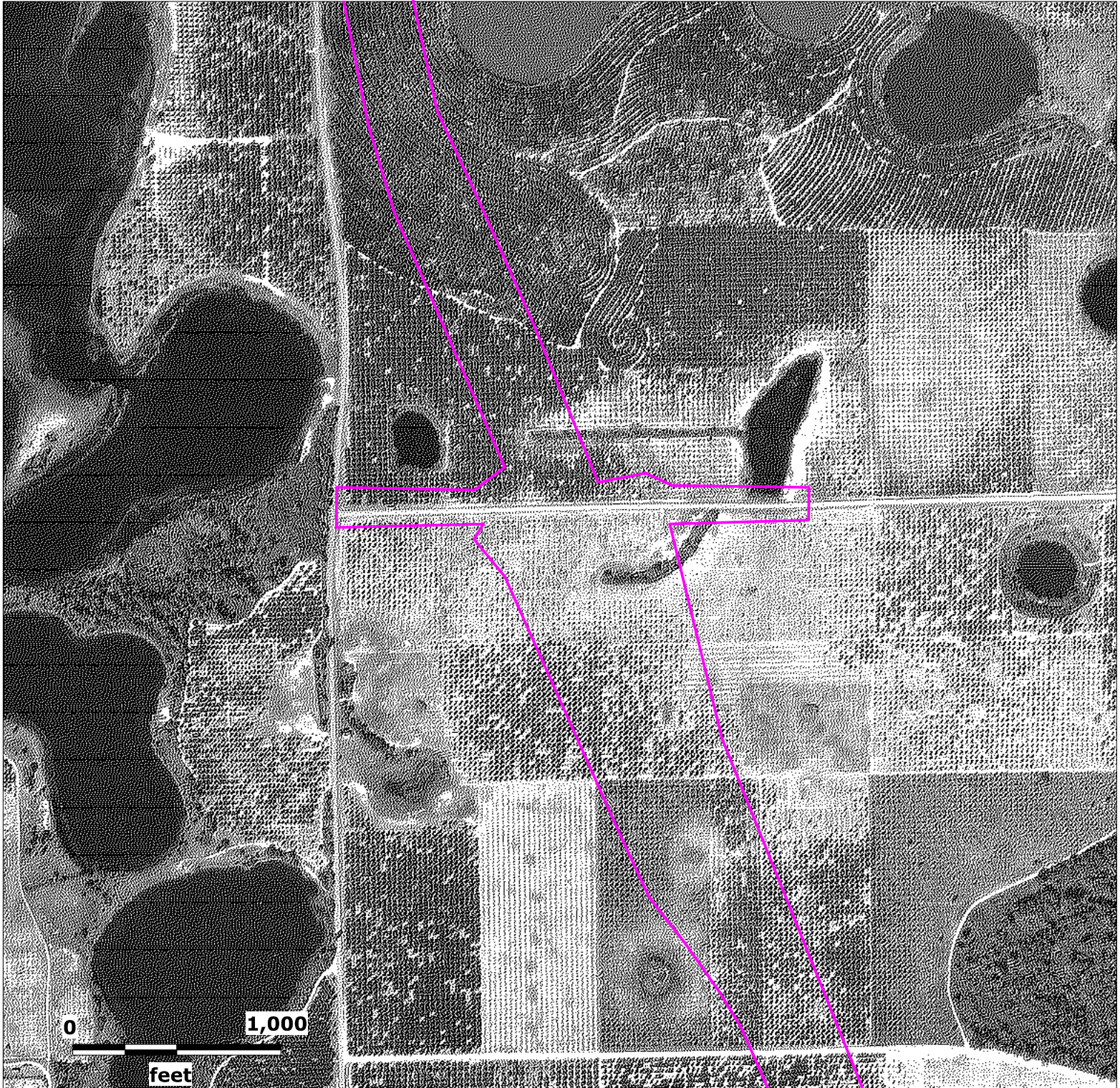
Subject Property

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

Lat (DMS): 28 25' 49.224"
Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

 Approximate Site Location



Source: Florida Department of Transportation


Map Scale and Property Boundaries are Approximate

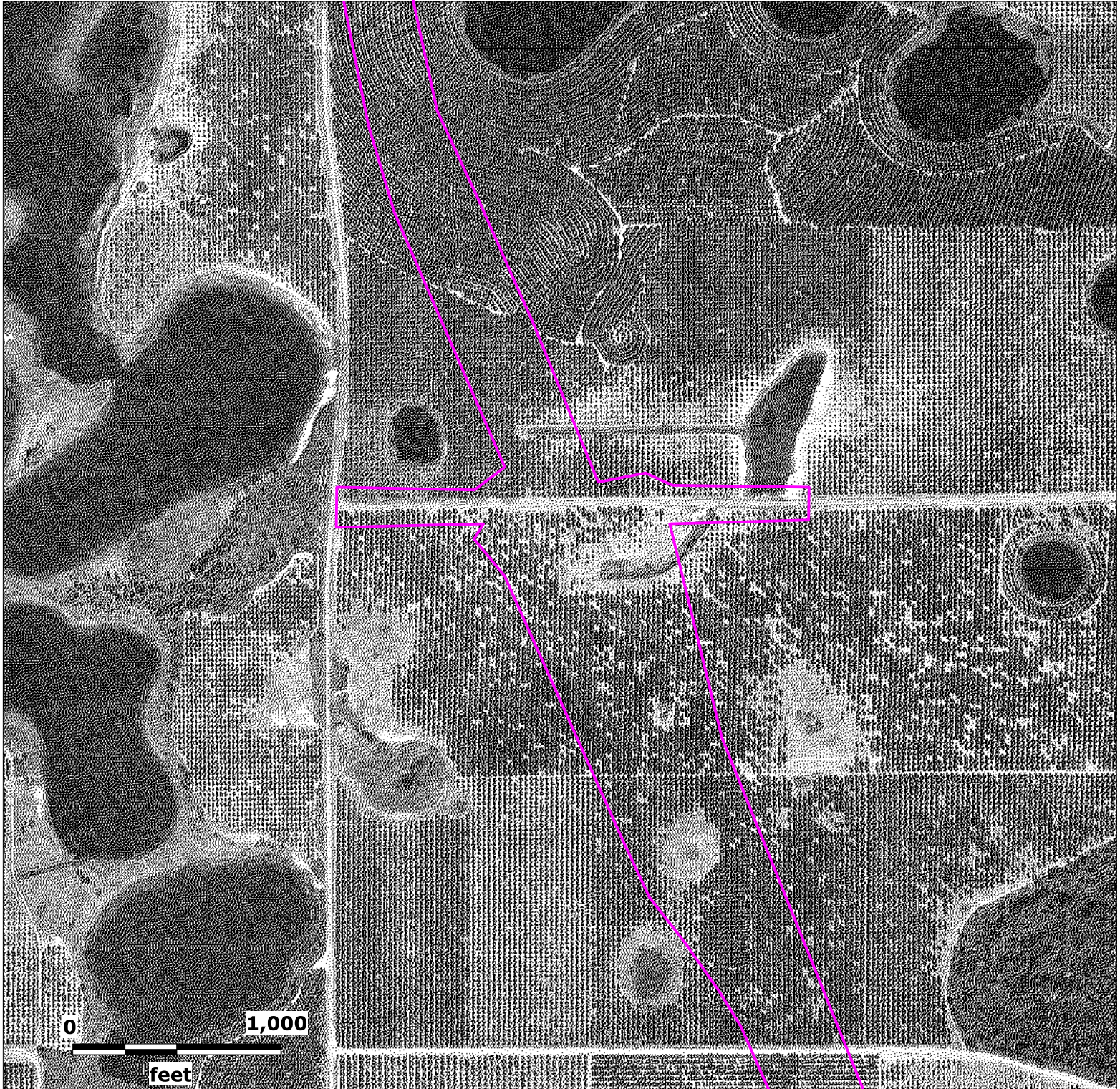
Subject Property

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 Approximate Site Location



Source: Florida Department of Transportation

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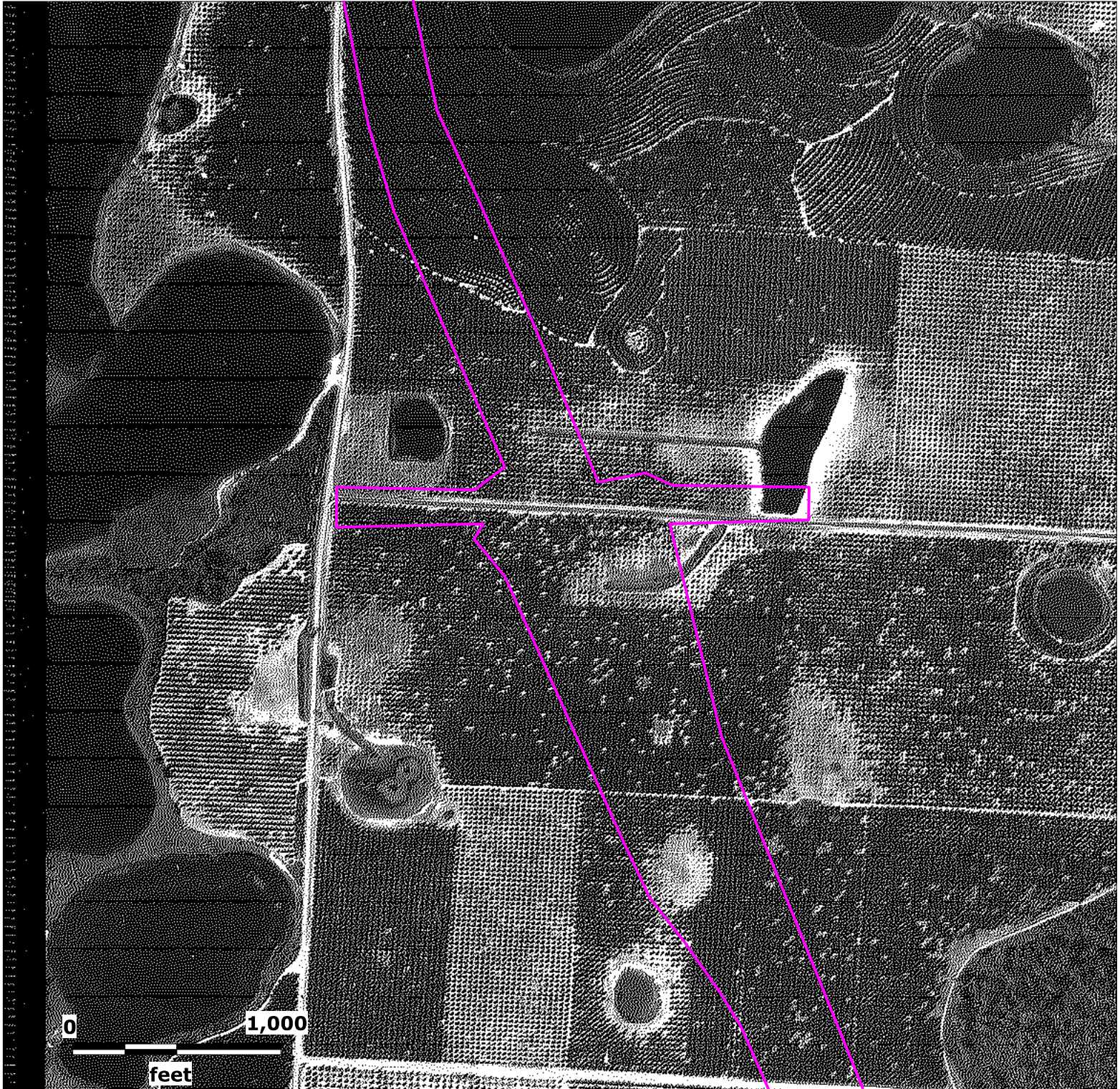
Subject Property

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March 22, 2022



Source: Florida Department of Transportation


Map Scale and Property Boundaries are Approximate

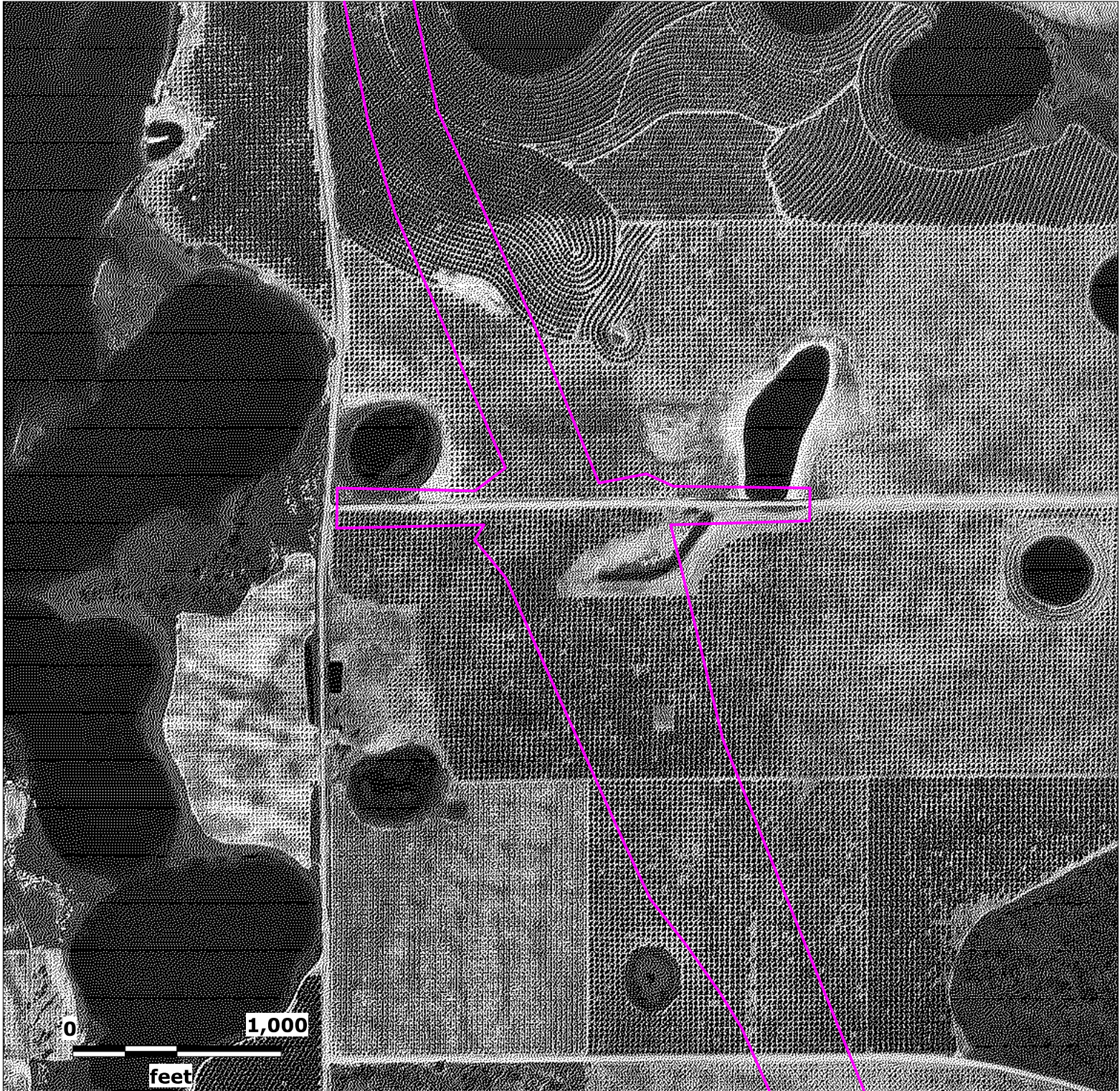
Subject Property

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EDM Job No: 26017
March 22, 2022

 Approximate Site Location



Source: USGS Single Frame Collection


Map Scale and Property Boundaries are Approximate

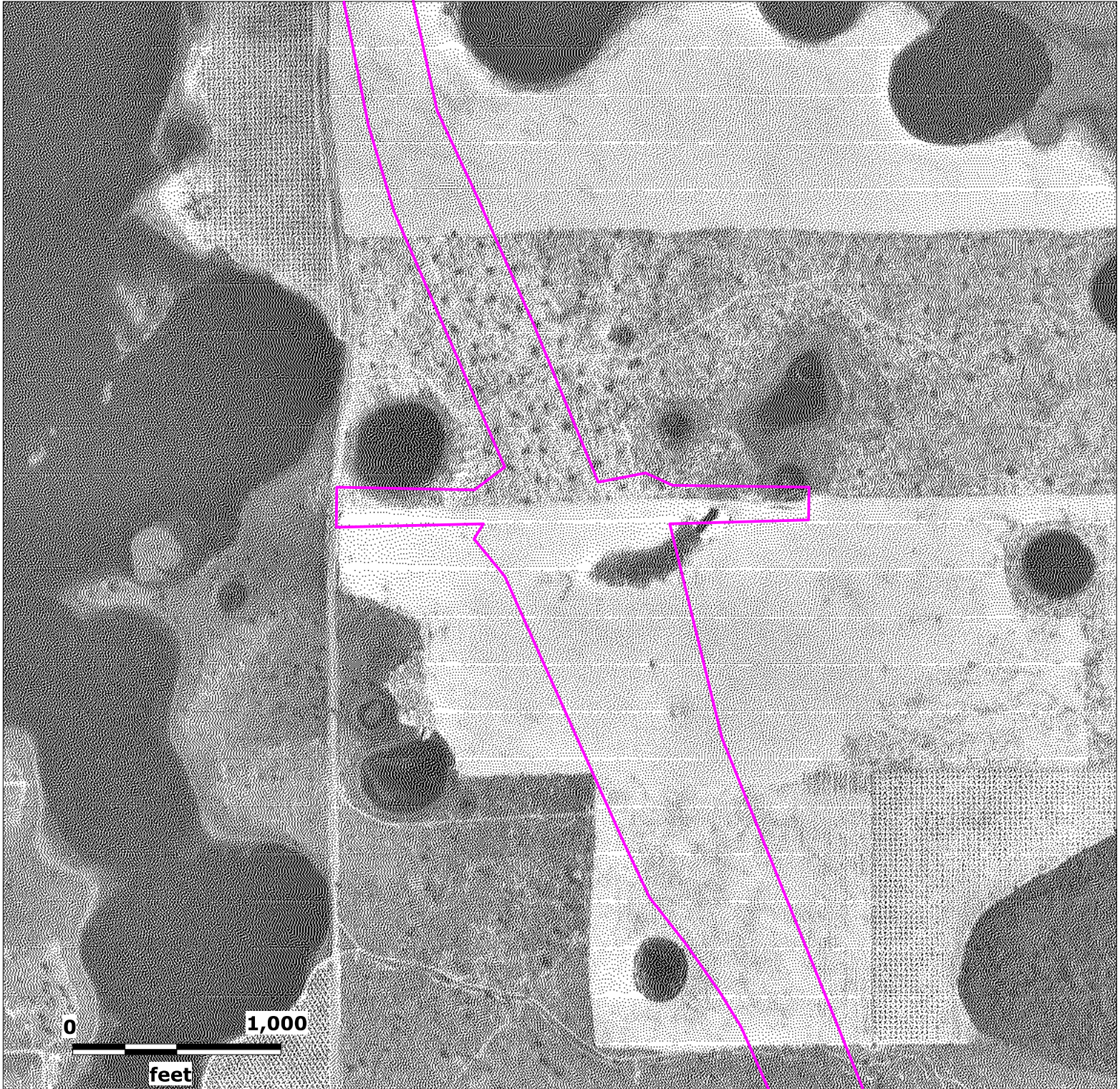
Subject Property

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March 22, 2022

 Approximate Site Location



Source: University of Florida


Map Scale and Property Boundaries are Approximate

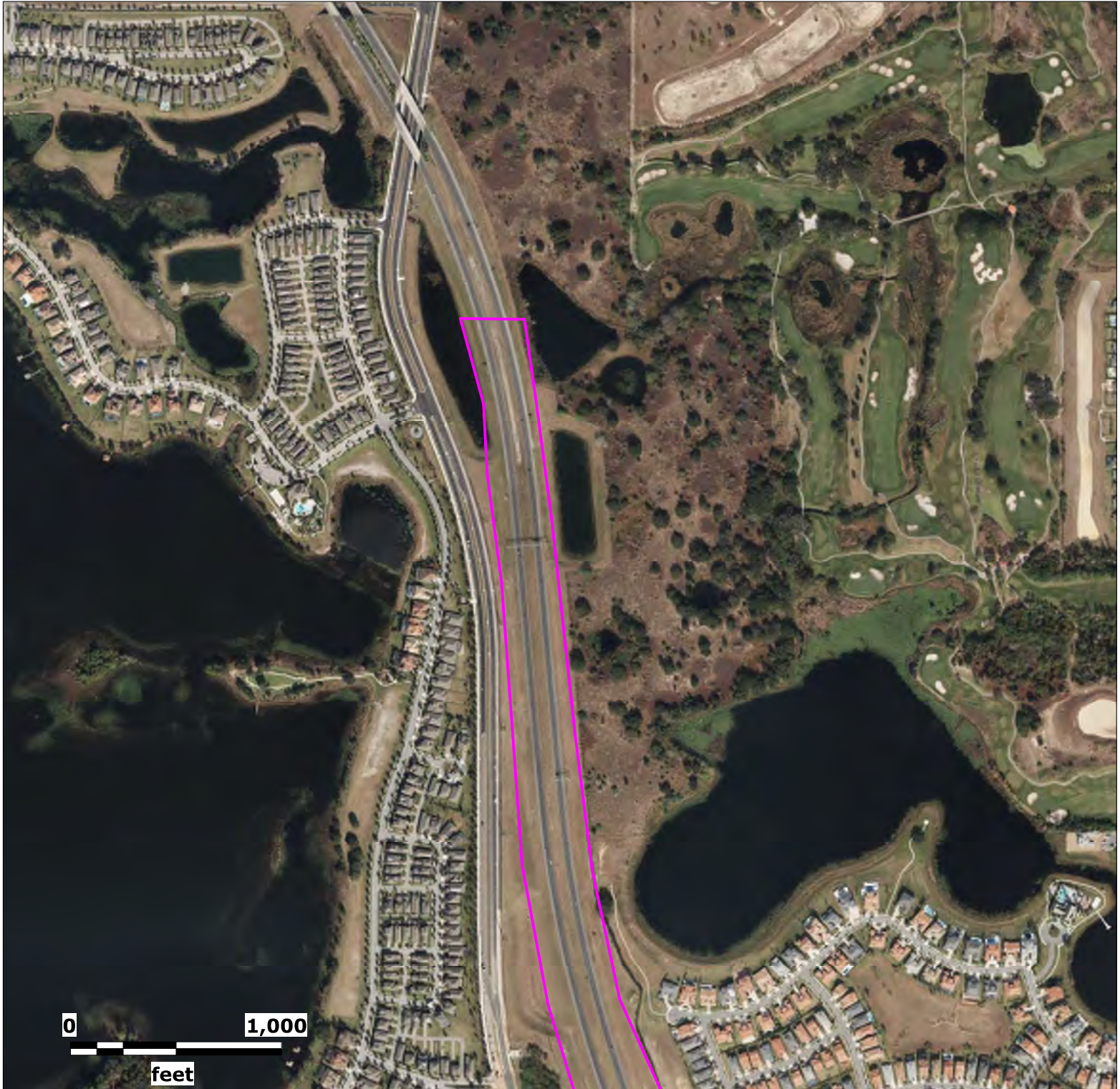
Subject Property

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Map Scale and Property Boundaries are Approximate

Subject Property

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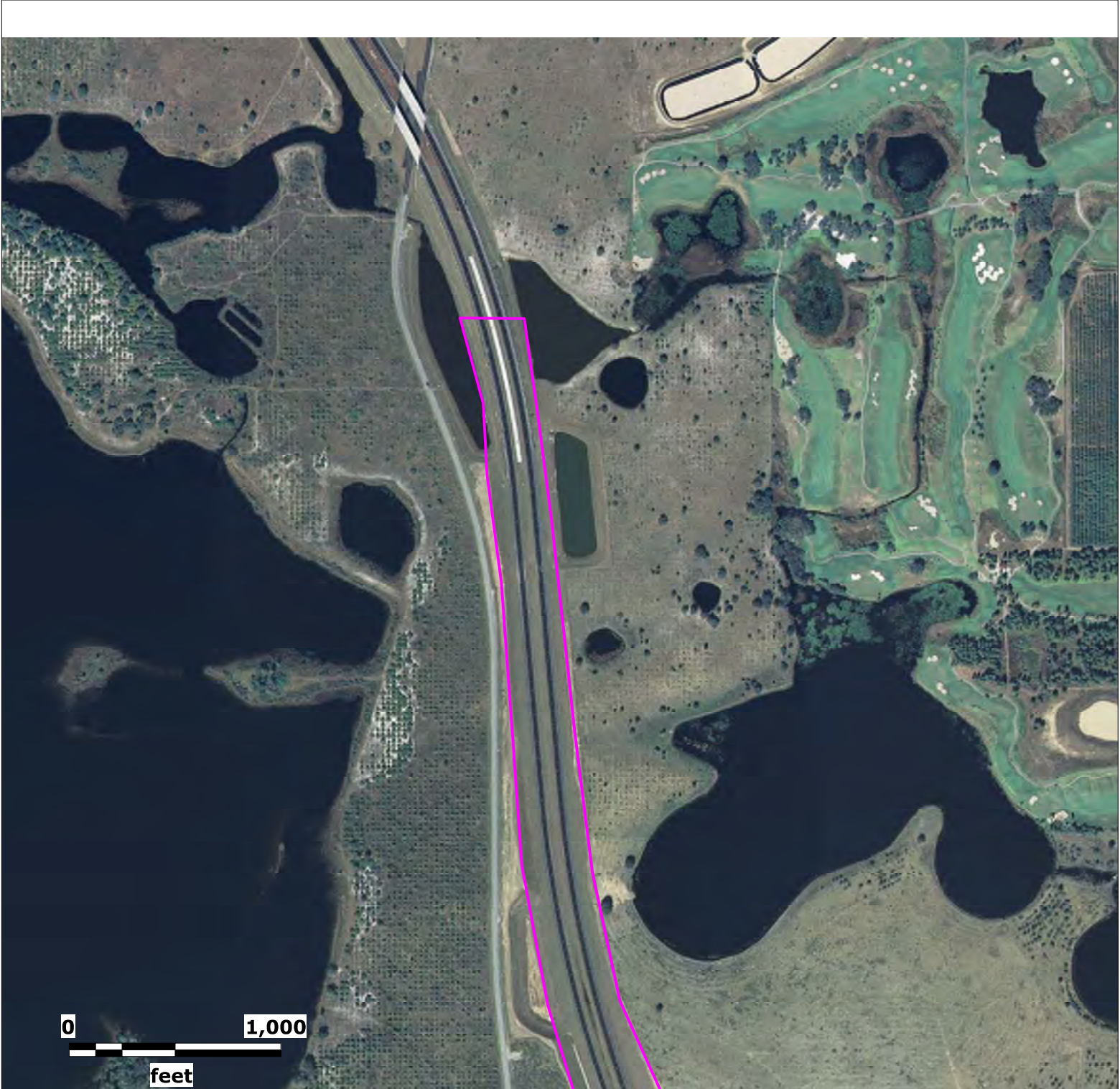
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Source: Florida Department of Transportation


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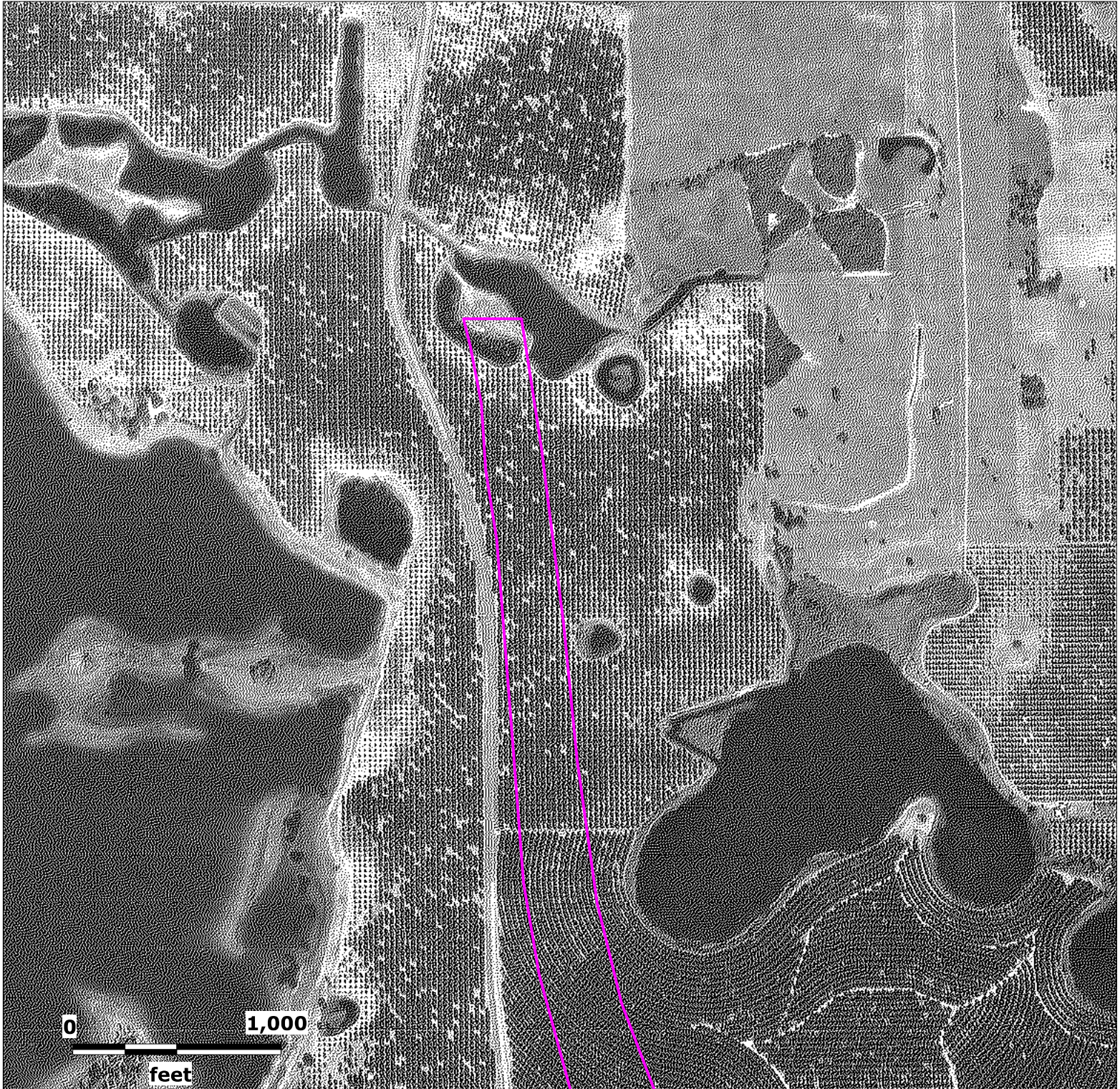
Subject Property

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EDM Job No: 26017
March 22, 2022


 Approximate Site Location



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Map Scale and Property Boundaries are Approximate

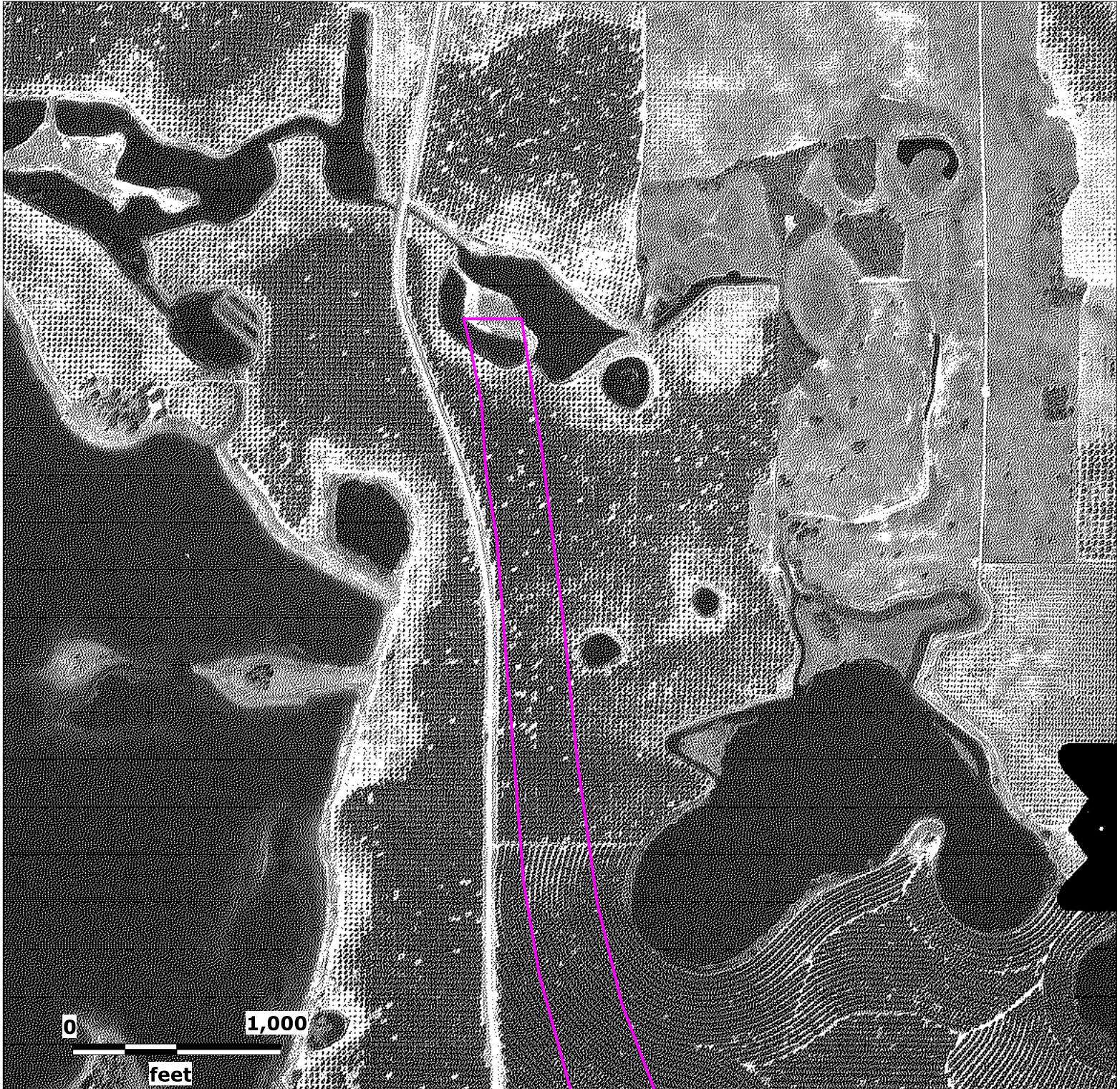
Subject Property

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March 22, 2022



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Source: USGS Single Frame Collection


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March 22, 2022

 Approximate Site Location



Source: University of Florida


Map Scale and Property Boundaries are Approximate

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March 22, 2022

 Approximate Site Location

APPENDIX C USGS TOPOGRAPHIC MAP

Historical Topographic Map Report

Subject Property:

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida
Intercession City, Windemere & Lake Louisa Quadrangles

Prepared For:

Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Prepared By:



Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770

March 24, 2022



Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770
(727) 586-1700
<http://www.edm-net.com>

March 24, 2022

Chris Garth
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **Historical Topographic Maps-- EDM Project #: 26017**

Dear Mr. Garth:

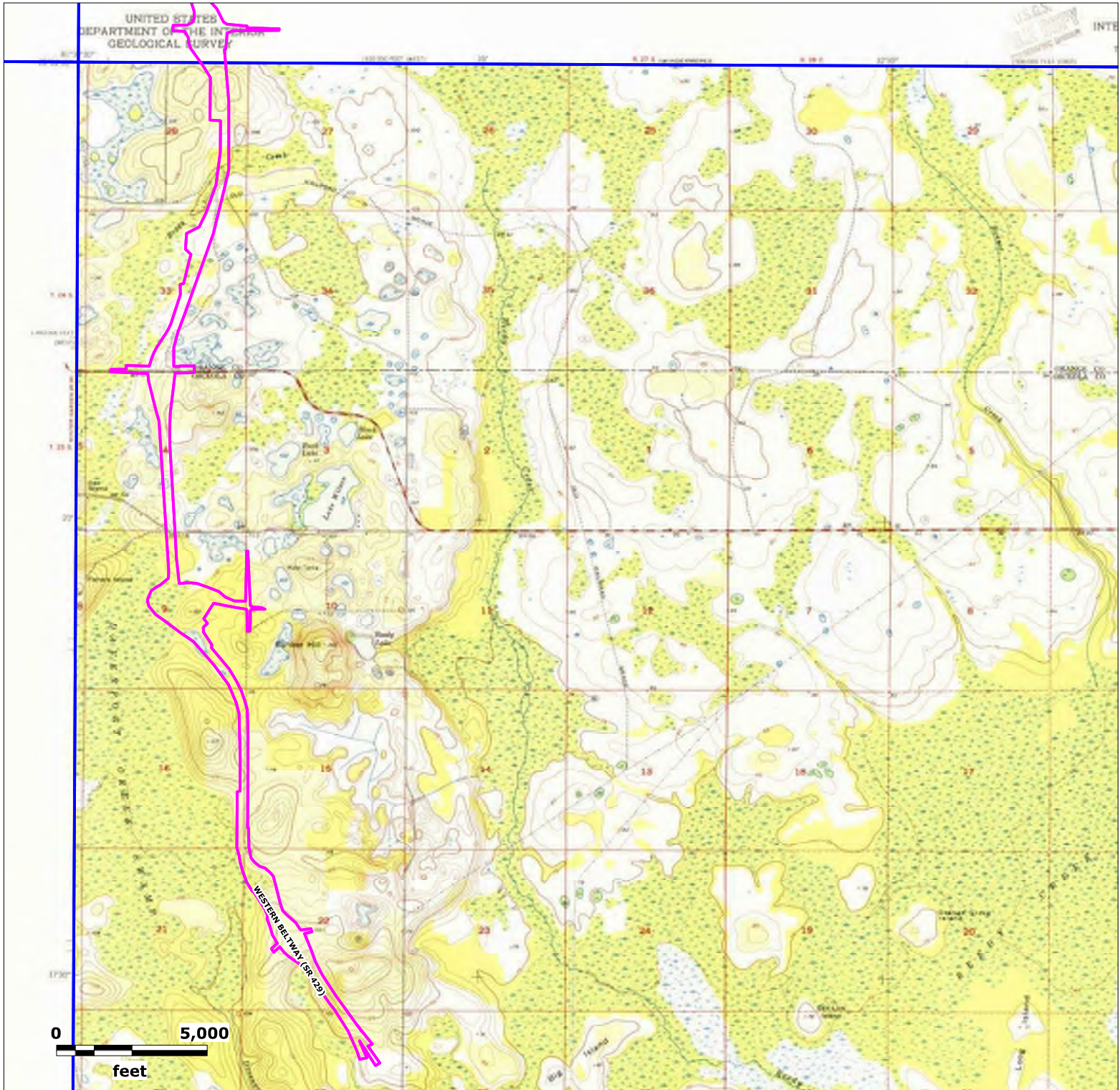
Thank you for choosing Environmental Data Management, Inc. The following report contains a series of Historical Topographic Maps for the following location:

**Widen Western Beltway (SR 429)
Orange and Osceola County, Florida**

These maps were obtained from the digital map collections of the US Geological Survey. Only 7.5 Minute Series maps were selected for this report.

Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.



Source: USGS Digital Raster Graphic (DRG)

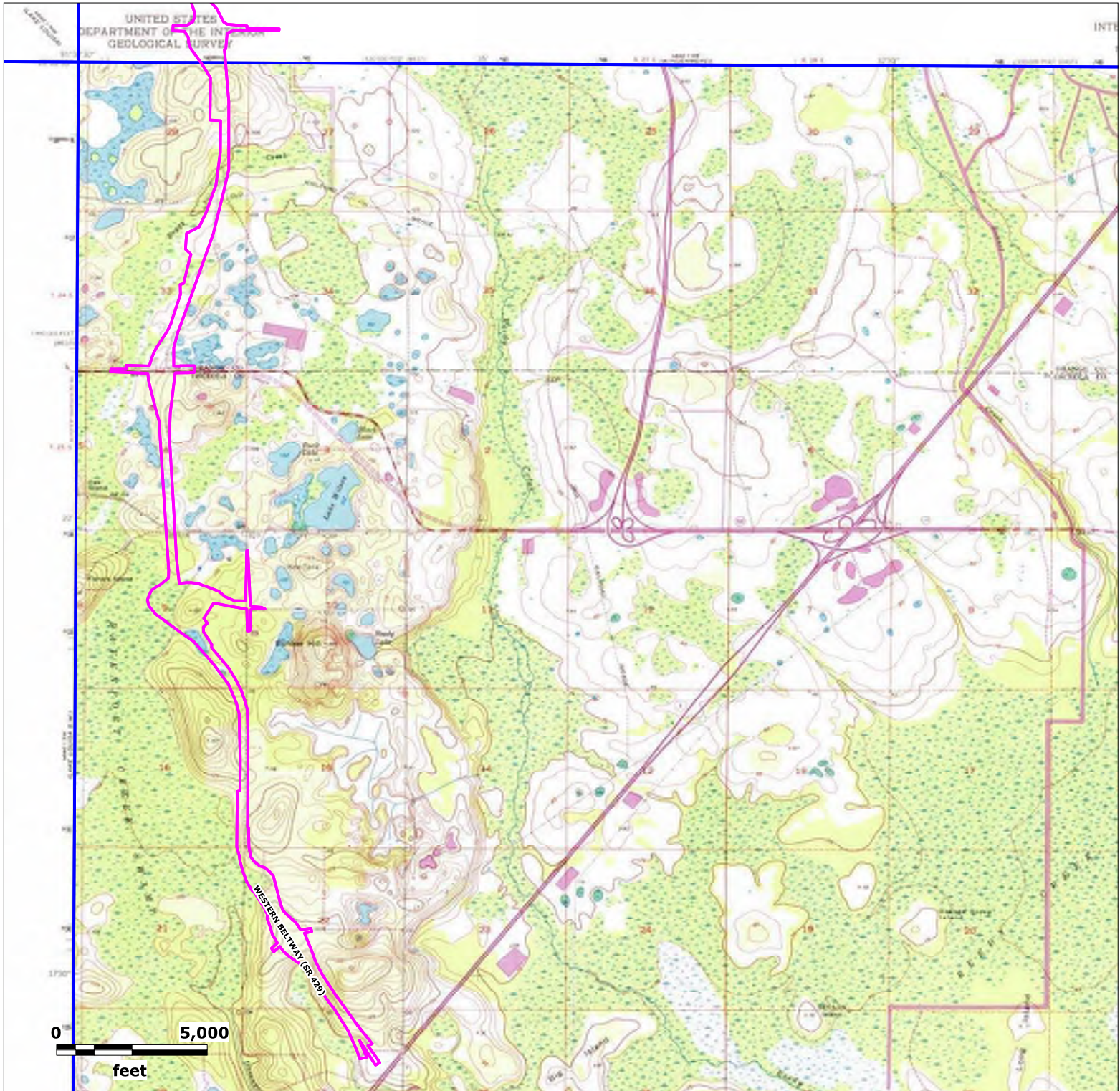
Map Scale and Property Boundaries are Approximate

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March 22, 2022



Source: USGS Digital Raster Graphic (DRG)

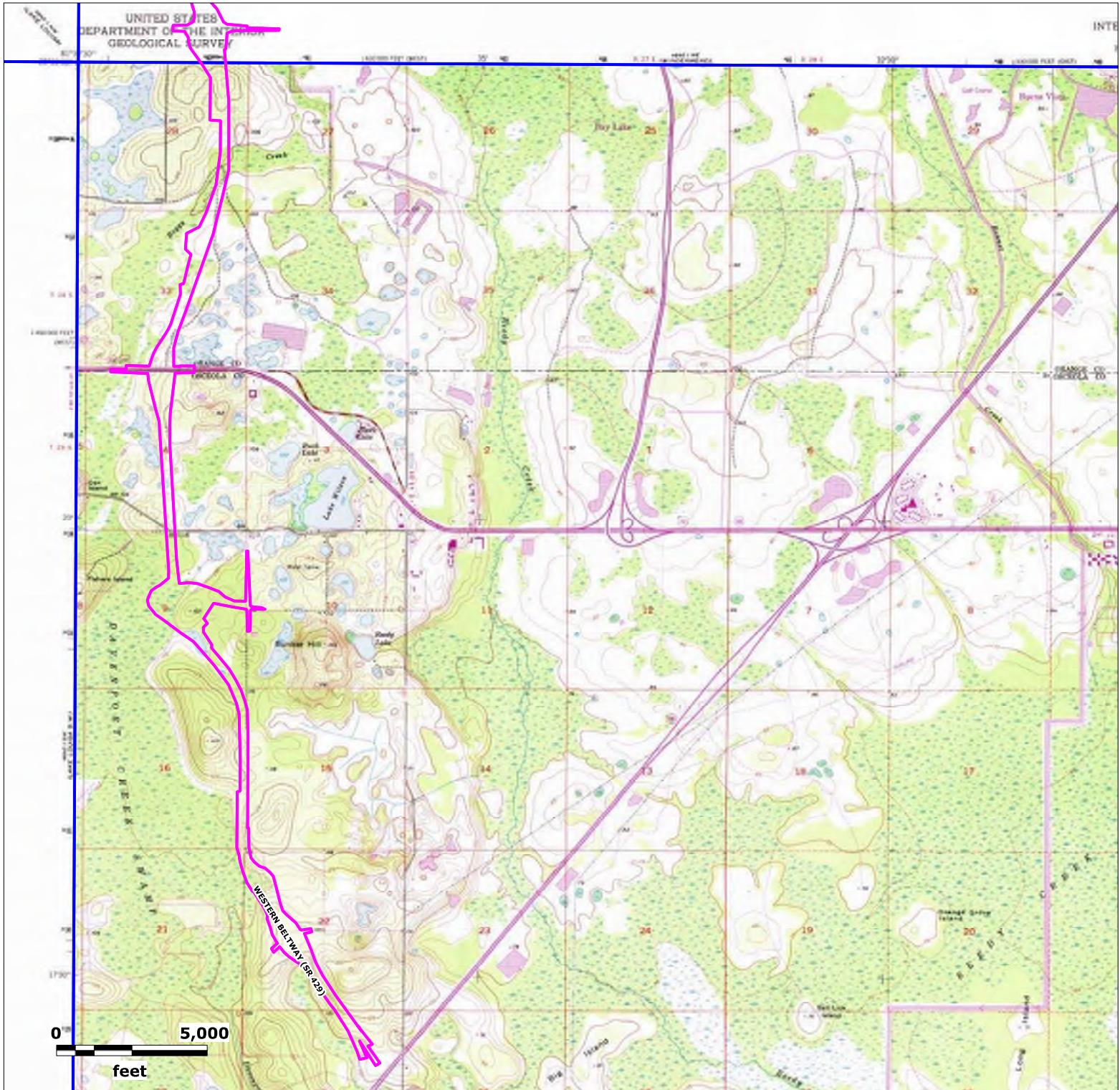
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March 22, 2022



Source: USGS Digital Raster Graphic (DRG)

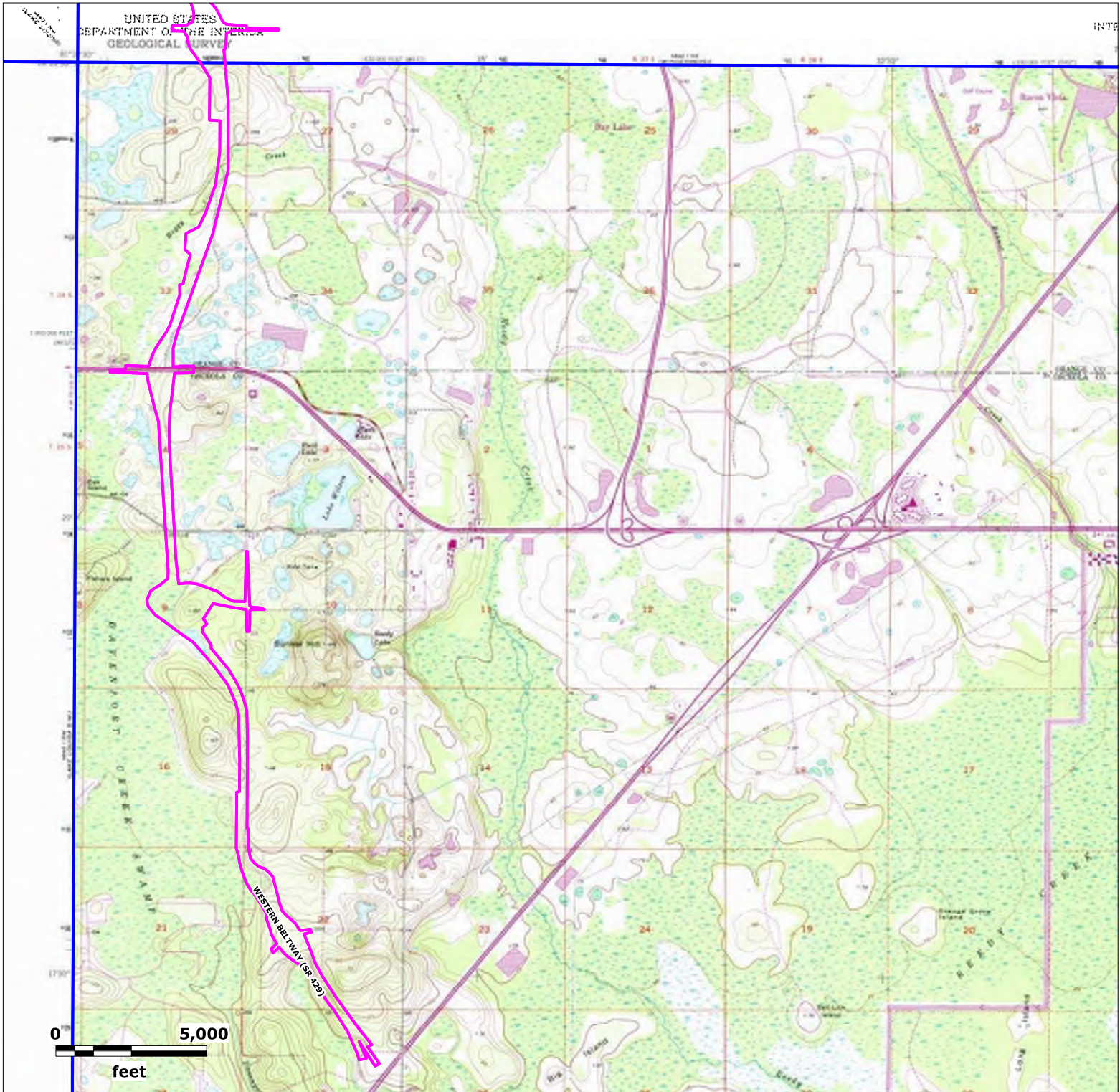
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March 22, 2022



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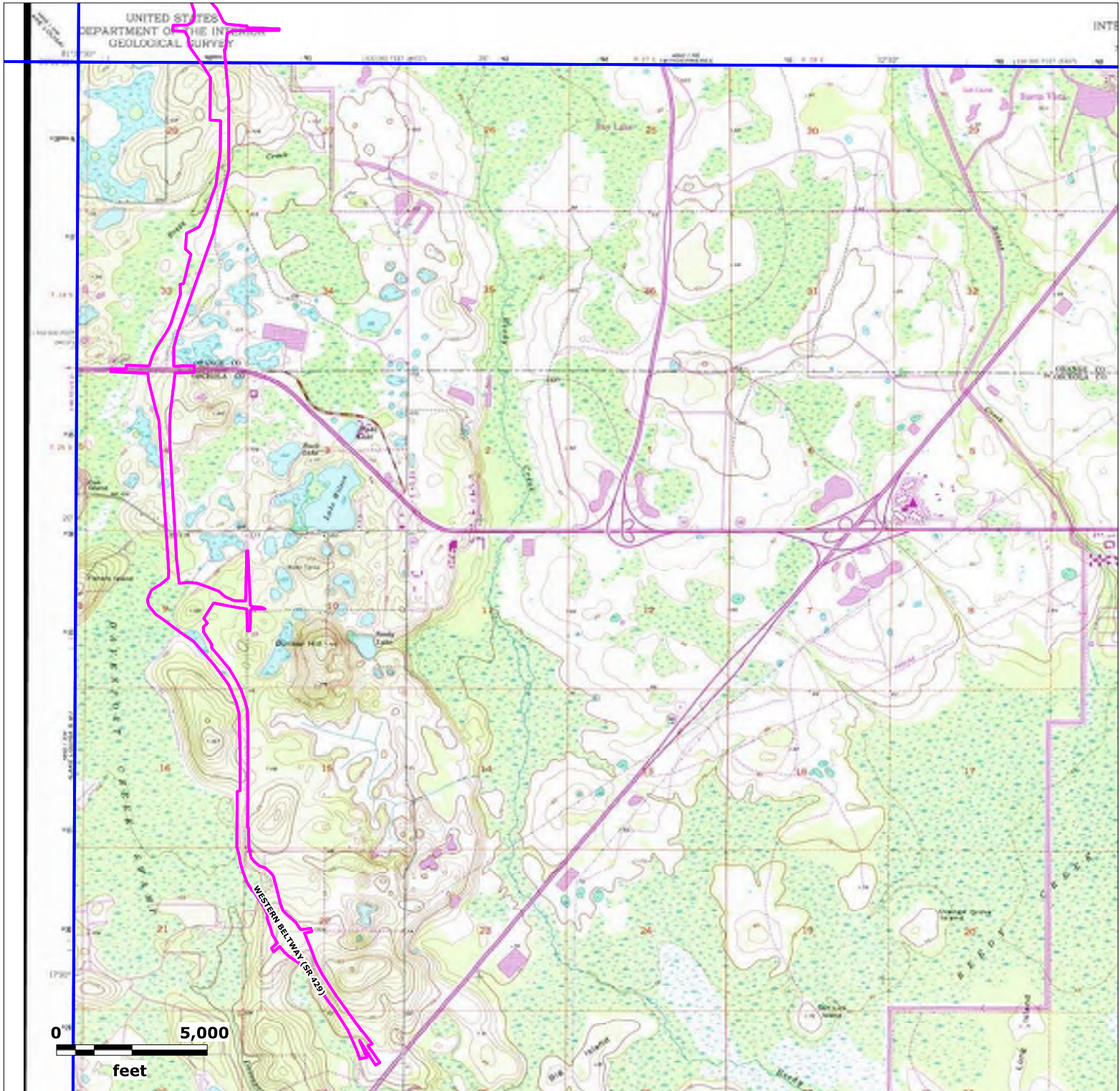
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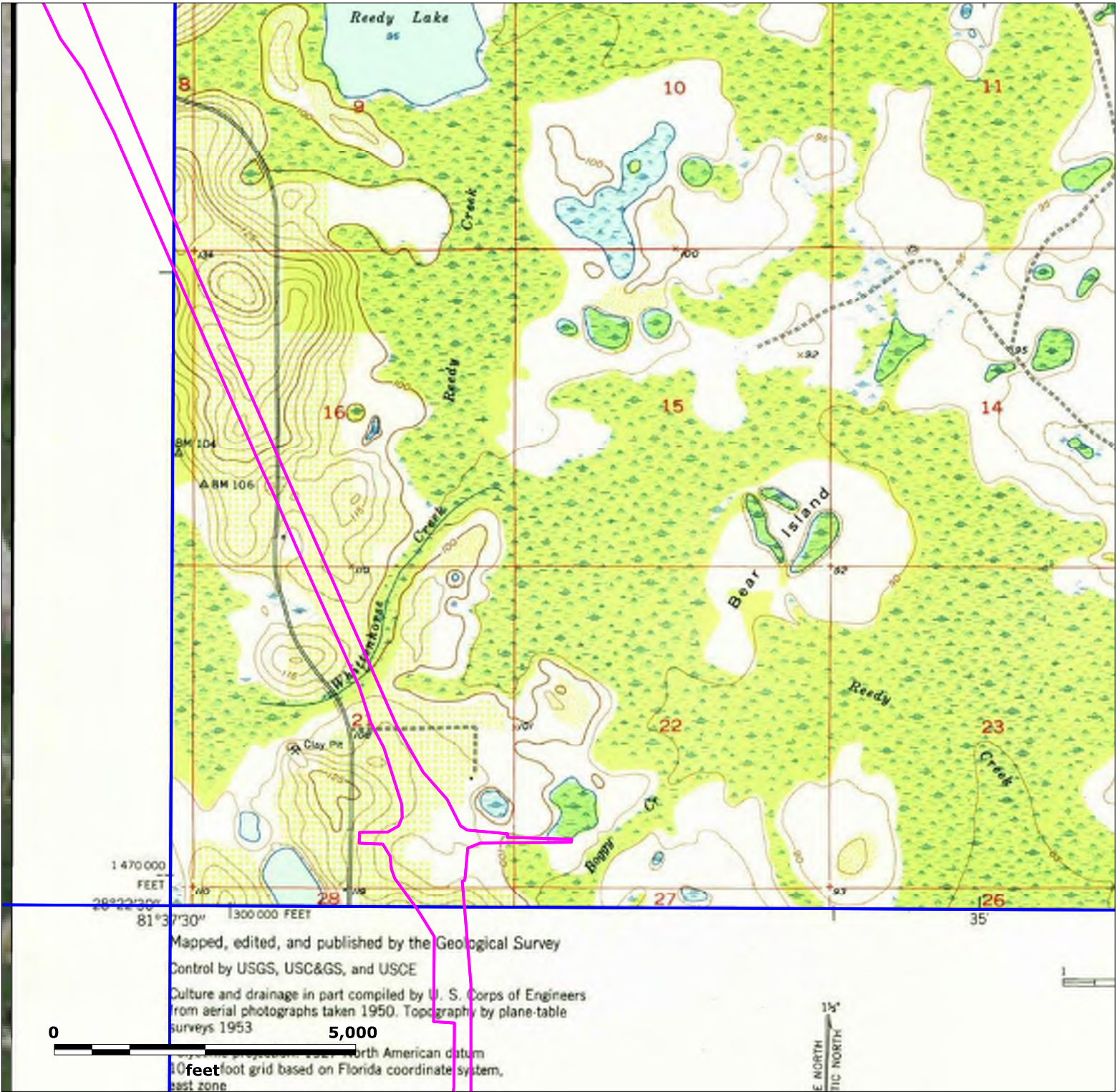
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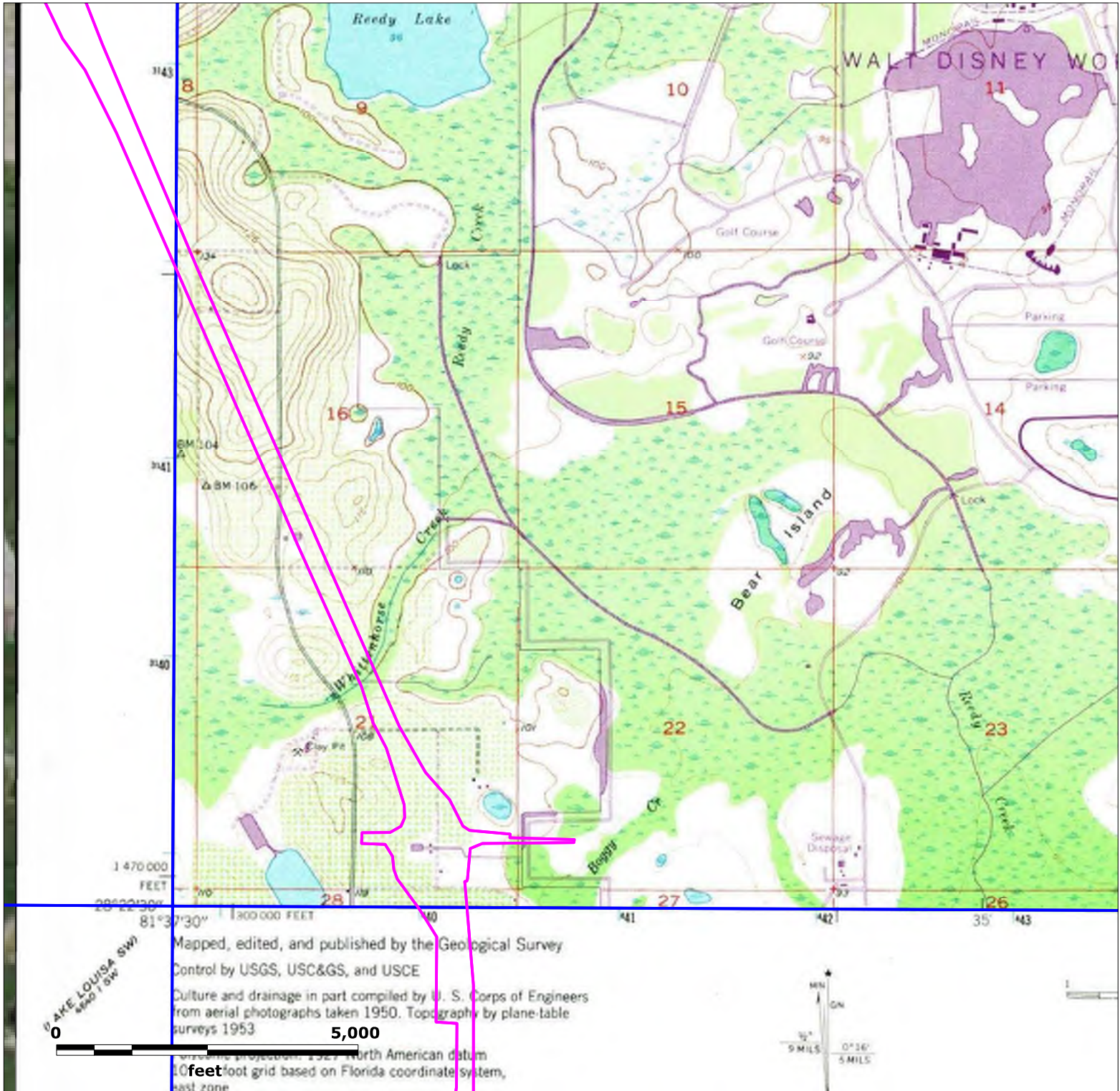
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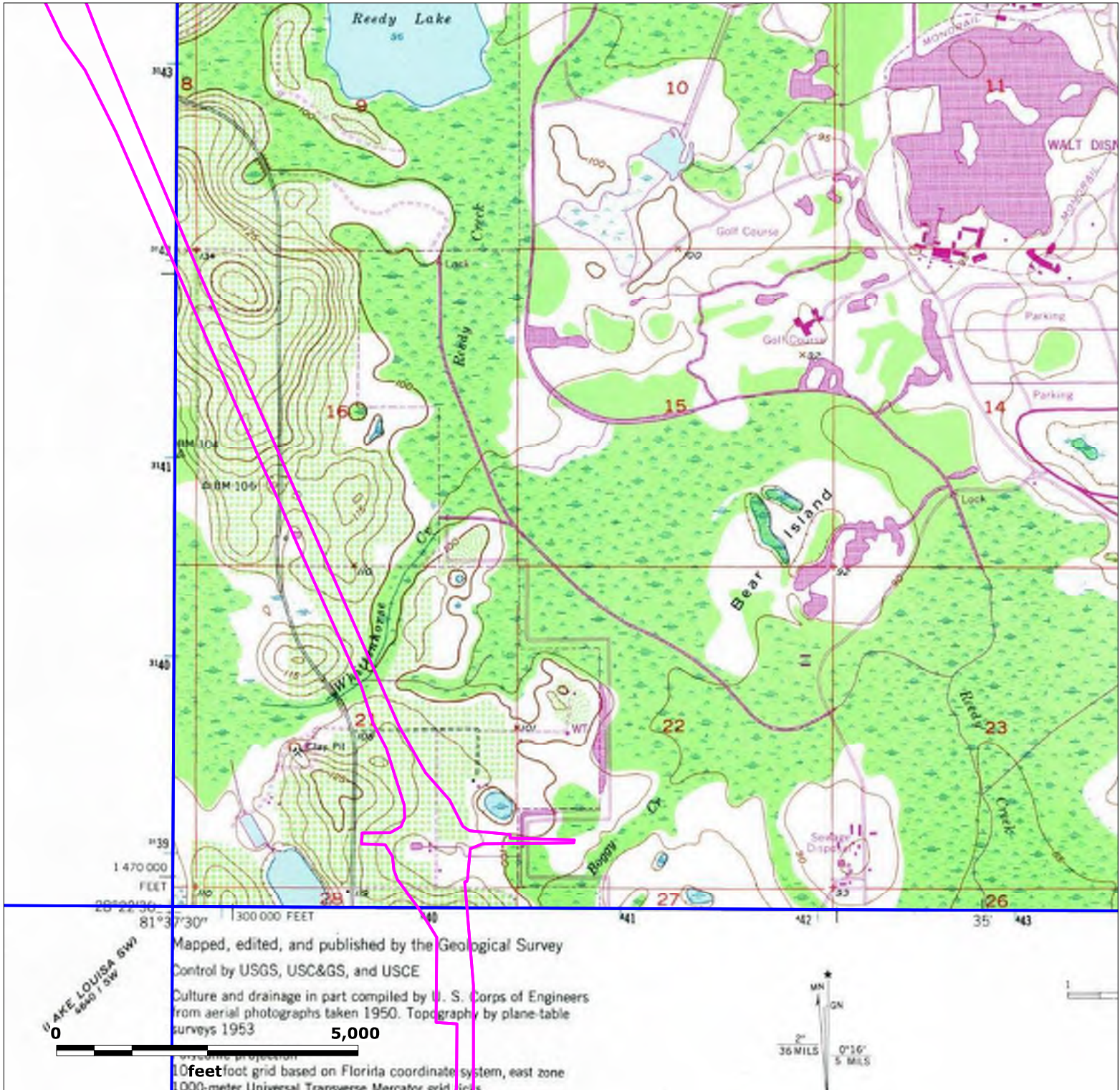
Source: USGS Digital Raster Graphic (DRG)

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EDM Job No: 26017
March 22, 2022



Source: USGS Digital Raster Graphic (DRG)

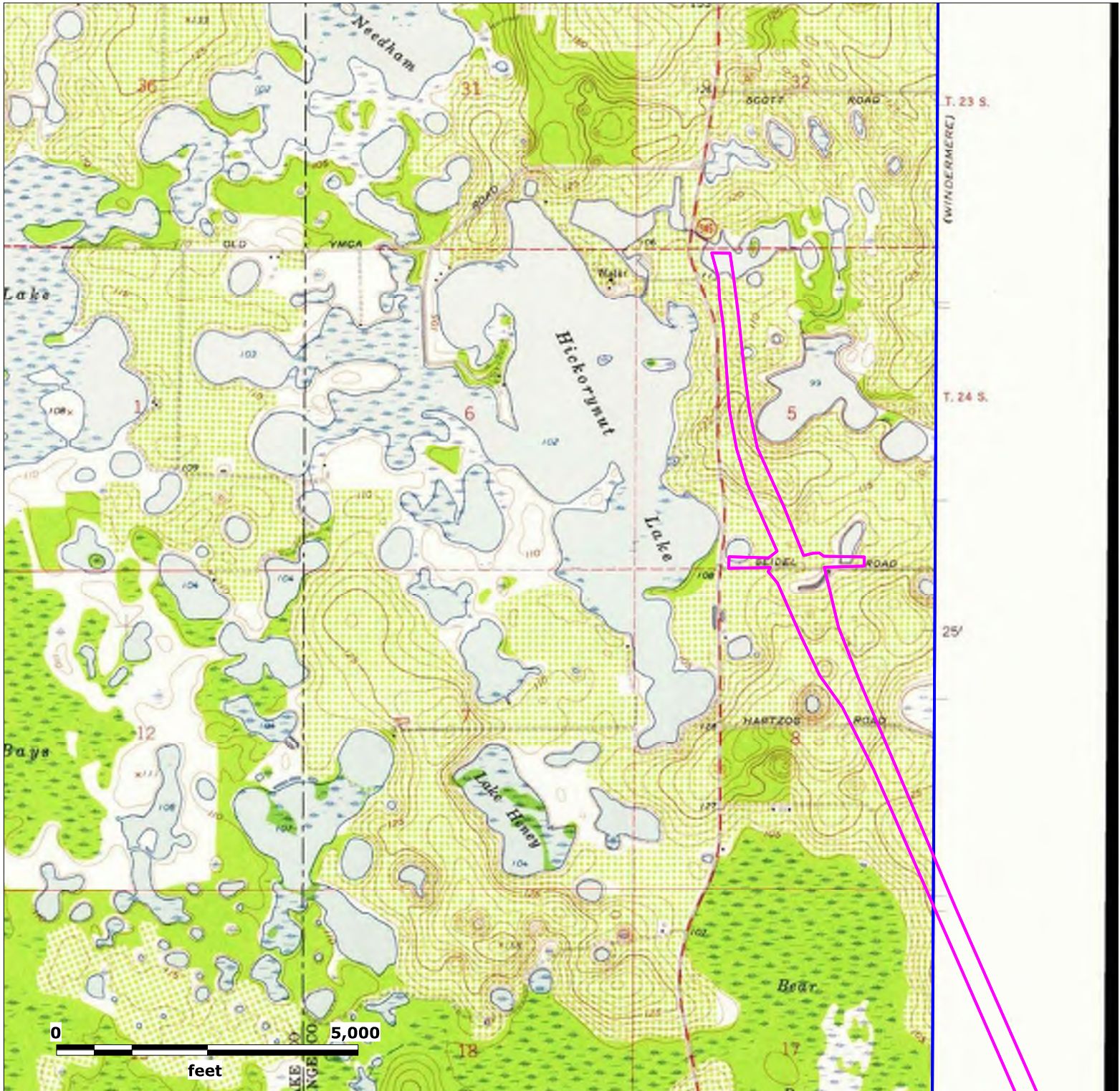
Map Scale and Property Boundaries are Approximate

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March 22, 2022

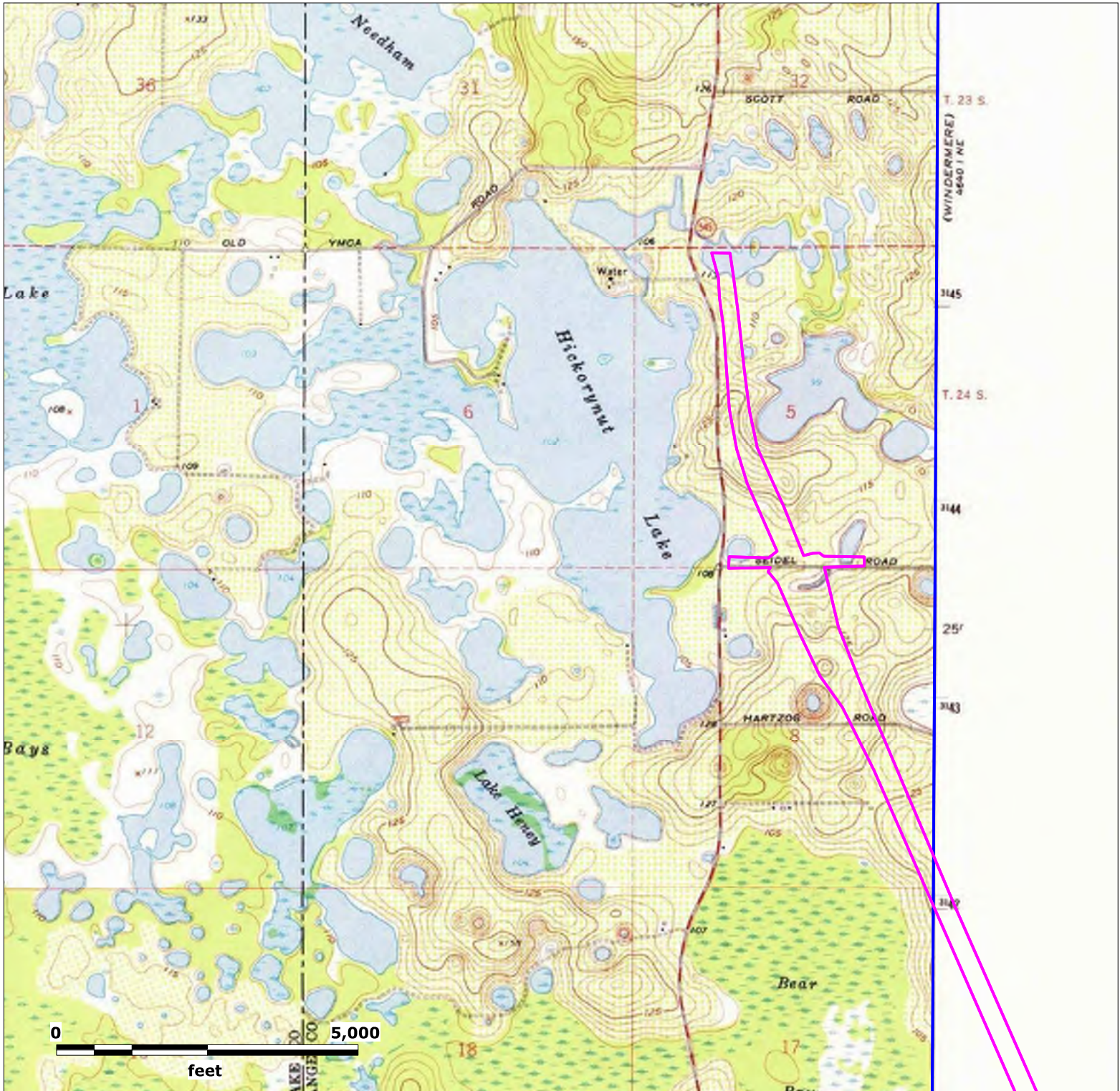


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March 22, 2022



Source: USGS Digital Raster Graphic (DRG)

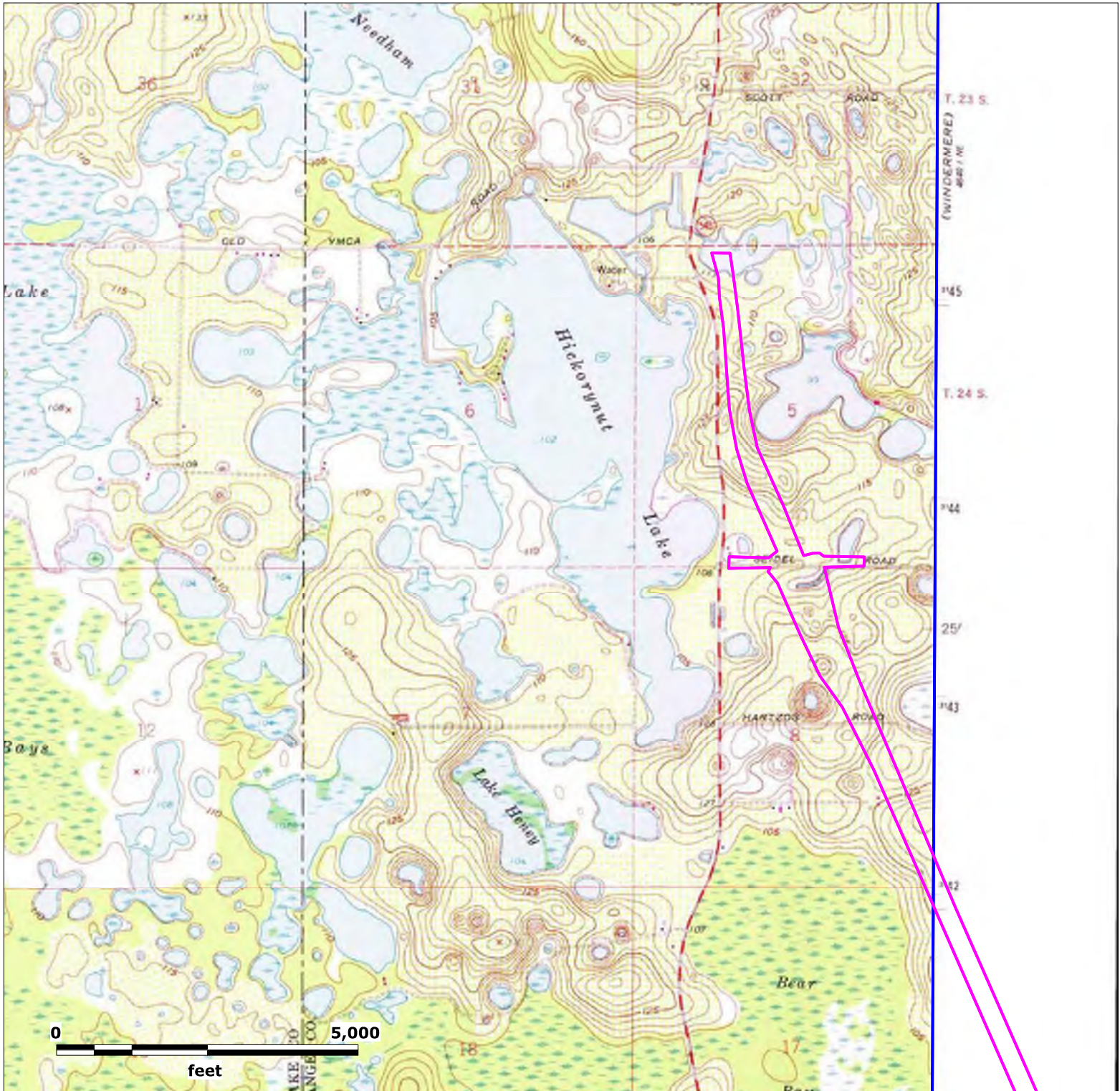
Map Scale and Property Boundaries are Approximate

Subject Property

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Subject Property

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EDM Job No: 26017
March 22, 2022

APPENDIX D REGULATORY DATABASE REPORT

Environmental Data Report

Custom Radius Research

Subject Property:

Widen Western Beltway (SR 429)

Orange and Osceola County, Florida

Prepared For:

Tierra Inc

7351 Temple Terrace Hwy

Tampa, FL 33637

Prepared By:



Environmental Data Management, Inc.

2840 West Bay Drive, Suite 208

Belleair Bluffs, Florida 33770

March 22, 2022



March 22, 2022

Chris Garth
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **Custom Radius Research - EDM Project #26017**

Dear Mr. Garth

Thank you for choosing Environmental Data Management, Inc. The following report provides the results of our environmental data research that you requested for the following location:

Widen Western Beltway (SR 429)

Orange and Osceola County, Florida

The following is a summary of the components contained within this report:

- **Executive Summary** –lists the databases that were searched for this report, the search distance criteria and the number of sites identified for each database.
- **Map of Study Area**– street map showing the location of the Subject Property and any regulatory listed sites identified within the search criteria.
- **Site Summary Table** –displays the Map ID number, Permit or Registration number, Name/Address and the Government Database(s) for the identified regulatory listed sites.
- **Detail Reports** – data detail for each database record identified.
- **Proximal Records Table** – a listing of potentially relevant sites identified just beyond the search criteria.
- **Non-Mapped Records Table** - lists those government records that do not contain sufficient address information to plot within our GIS system, but may still exist within your study area.
- **Addl Maps (where applicable)** – includes Recent Aerial Photo, USGS Topographic maps, FEMA Floodplain & NWI Wetland Map, map of statewide American Indian Lands and our Environmental Impact Areas map, showing the location of suspect sites such as NPL/STNPL, Brownfields, FUDS, etc.... Our Florida well data report is also include with the Standard and Comprehensive formats.
- **Agency List Descriptions** – defines the regulatory databases included in this report along with the dates that each database was last updated by the respective agency and EDM.

At EDM we take great pride in our work, and continually strive to provide you with the most accurate and thorough research service available. This report is only intended as a means to assist in identifying locations that may pose an environmental concern relative to the property under evaluation. Its use is not intended to replace the need for a complete environmental assessment or regulatory file review, but rather as a supplement to the overall evaluation.

Thank you again for selecting EDM as your data research provider. Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.

Executive Summary

Report Date: 3/22/2022

Client Information	Project Information
Tierra Inc 7351 Temple Terrace Hwy Tampa, FL 33637 Client Job No: 6511-20-202-002E Client P.O. No:	Custom Radius Research Widen Western Beltway (SR 429) Orange and Osceola County, Florida EDM Job No# 26017

The following table displays the databases that were included in the research provided and the number of records identified for each database. Site distance values indicated in this report are measured from the boundary of the Subject Property. The absence of records in this table and the Site Summary Tables indicates that our research found no regulated sites within the specified search distances from the Subject Property.

AGENCY DATABASES RESEARCHED	Total # Found
EPA DATABASES	
National Priorities List(NPL)	0
SEMS Active Site Inventory List(SEMSACTV)	0
Comp Env Resp, Compensation & Liability Info Sys List(CERCLIS)	0
SEMS Archived Site Inventory List(SEMSARCH)	0
Archived Cerclis Sites(NFRAP)	0
RCRIS Handlers with Corrective Action(CORRACTS)	0
Tribal Tanks List(TRIBLTANKS)	0
Tribal Lust List(TRIBLLUST)	0
Brownfields Management System(USBRWNFLDS)	0
Institutional and/or Engineering Controls(USINSTENG)	0
NPL Liens List(NPLLIENS)	0

*** Disclaimer ***

Please understand that the regulatory databases we utilize were not originally intended for our use, but rather for the source agency's internal tracking of sites for which they have jurisdiction or other interest. As a result of this difference in intended use, their data is frequently found to be incomplete or inaccurate, and is less than ideal for our use. Our report is not to be relied upon for any purpose other than to "point" at approximate locations where further evaluation may be warranted. No conclusion can be based solely upon our report. Rather, our report should be used as a first step in directing your attention at potential problem areas, which should be followed up by site inspections, interviews with relevant personnel, regulatory file review and other means as specified in the ASTM Standard E 1527-13. Readers proceed at their own risk in relying upon this data, in whole or in part, for use within any evaluation. More detailed language with regard to such limitations and our Terms and Conditions may be found on our website at edm-net.com.



AGENCY DATABASES RESEARCHED	Total # Found
FDEP DATABASES	
State NPL Equivalent(STNPL)	0
State CERCLIS/SEMS Equivalent(STCERC)	0
Solid Waste Facilities List_Landfills(SLDWST_LF)	1
Leaking Underground Storage Tanks List(LUST)	0
Underground/Aboveground Storage Tanks(TANKS)	5
State Designated Brownfields(BRWNFLDS)	0
Voluntary Cleanup List(VOLCLNUP)	0
Institutional and/or Engineering Controls(INSTENG)	0
Dry Cleaners List(DRY)	0
Solid Waste Facilities List_Non-Landfills(SLDWST_NLF)	0

*** Disclaimer ***

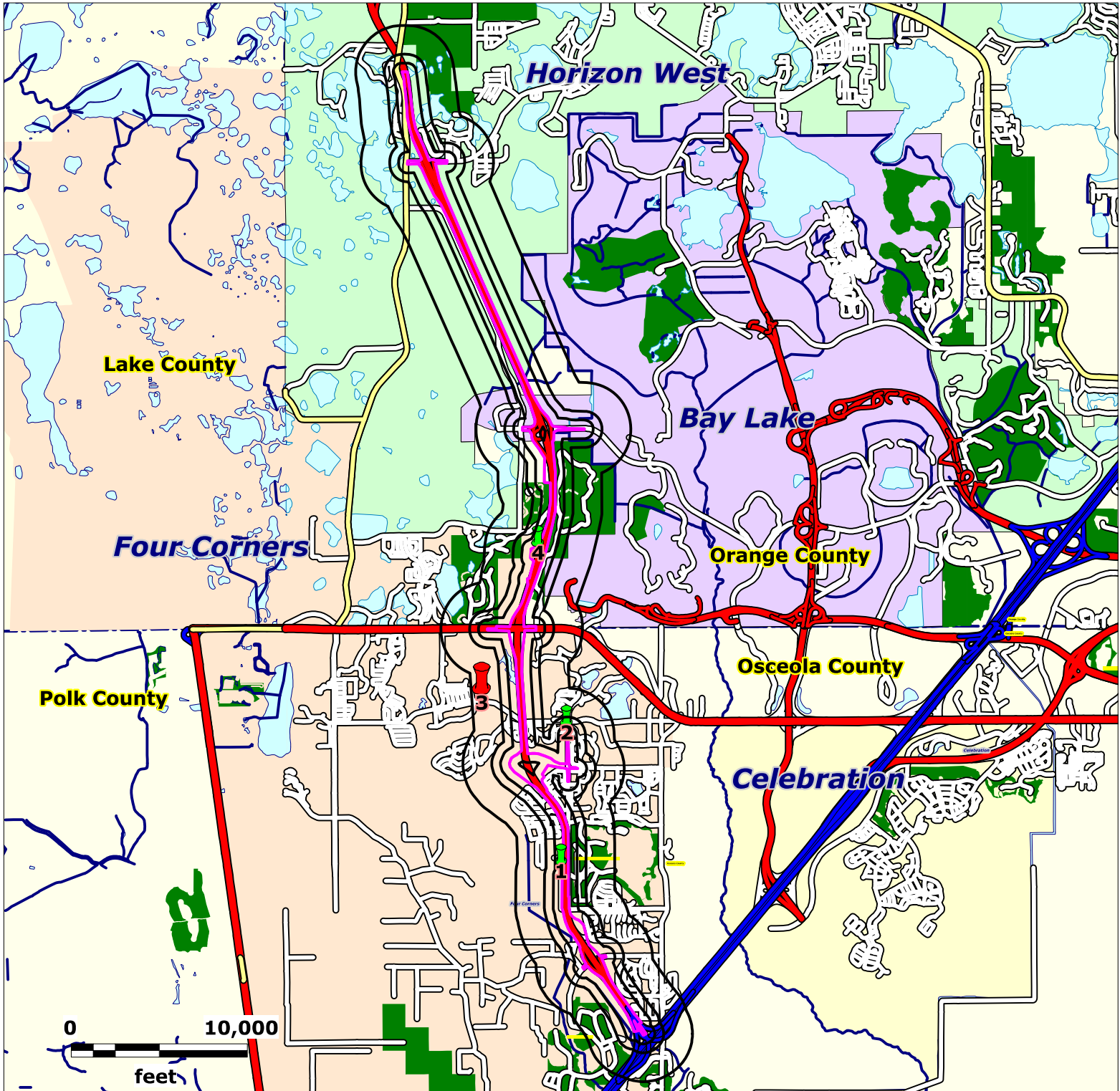
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For further information please contact us at 727-586-1700

Use of this information is strictly limited by EDM's authorization agreement, acknowledged by our clients for each report.



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

Subject Property

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

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EDM Job No: 26017
March 22, 2022

— Approximate Site Boundary



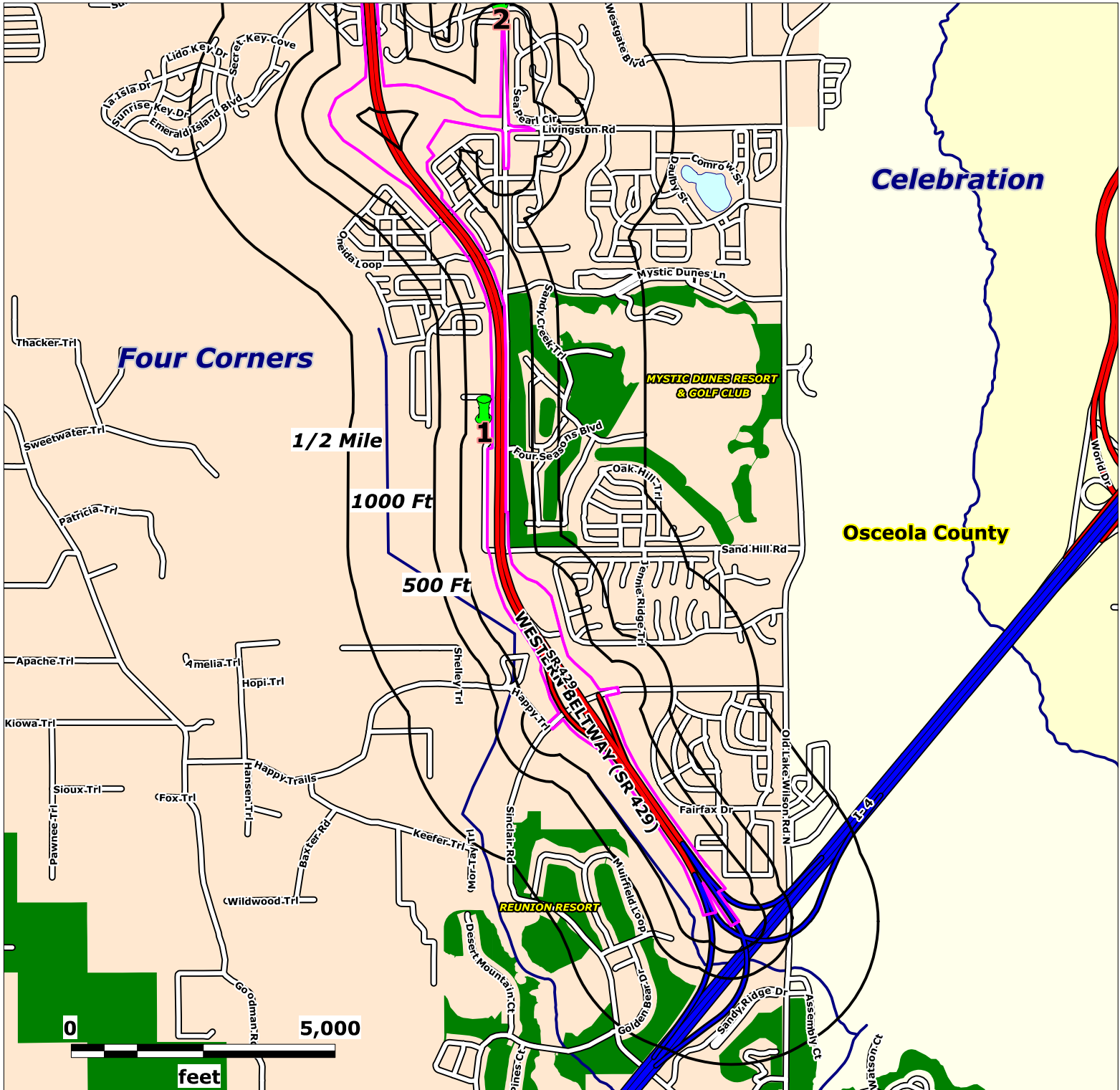
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

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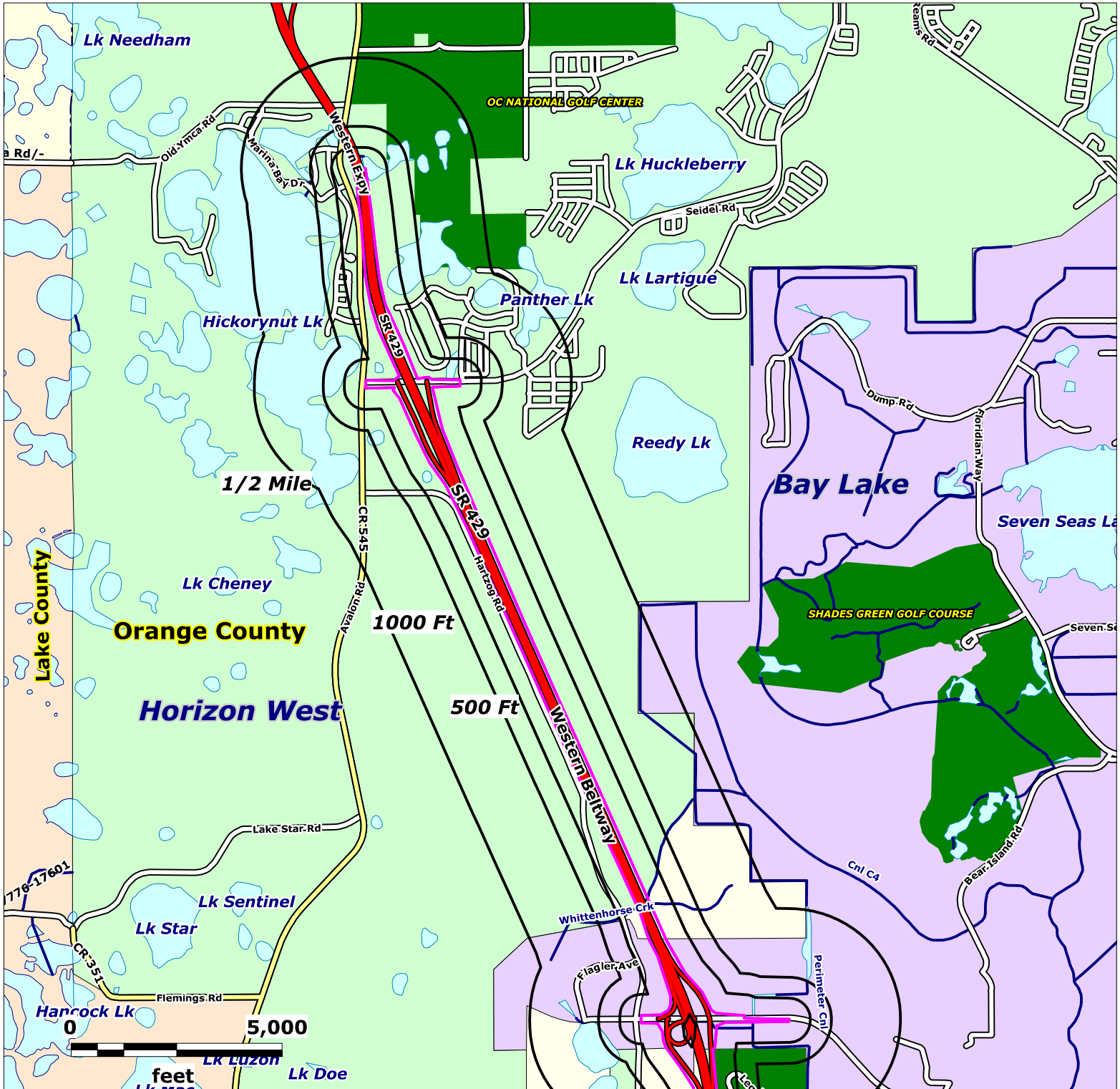
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
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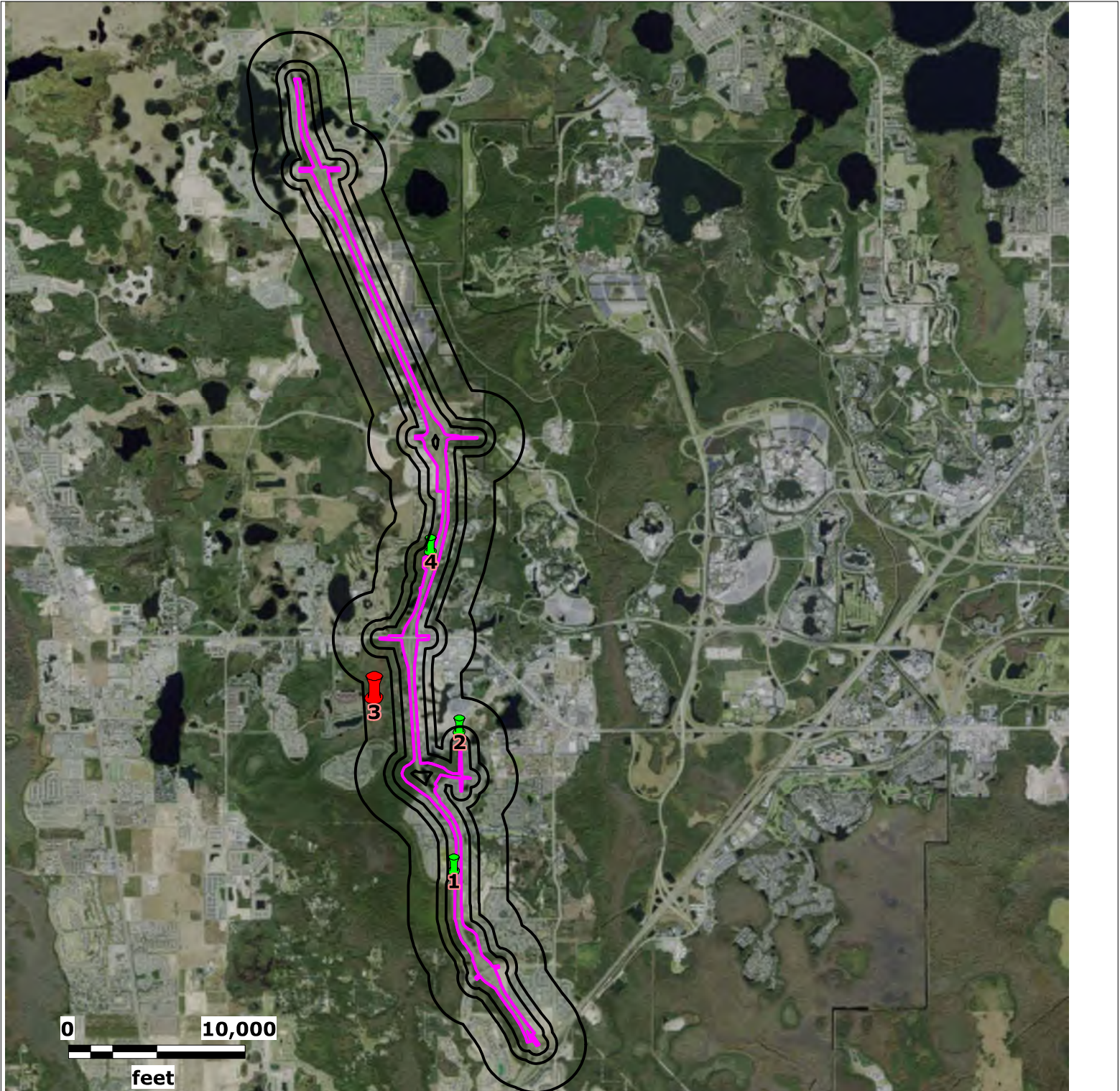
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



Source: National Agriculture Imagery Program (NAIP)

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NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



Source: Florida Department of Transportation

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NPL, STNPL, CERCLIS, SEMSACTV,
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SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
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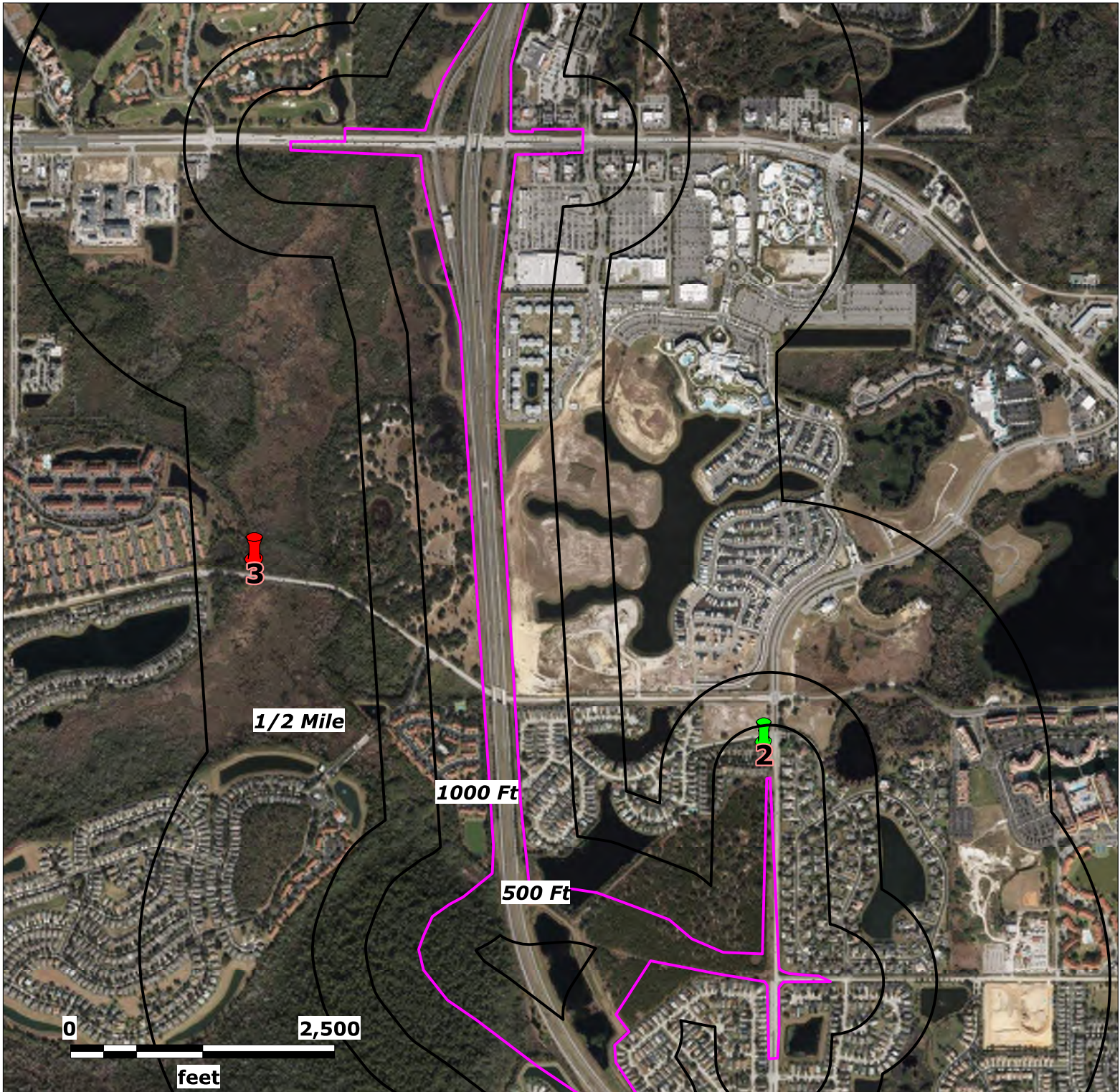
NPL, STNPL, CERCLIS, SEMSACTV, SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC, LUST, BRWNFLDS, VOLCLNUP, DRY, TANKS & INSTENG sites - 500 Feet



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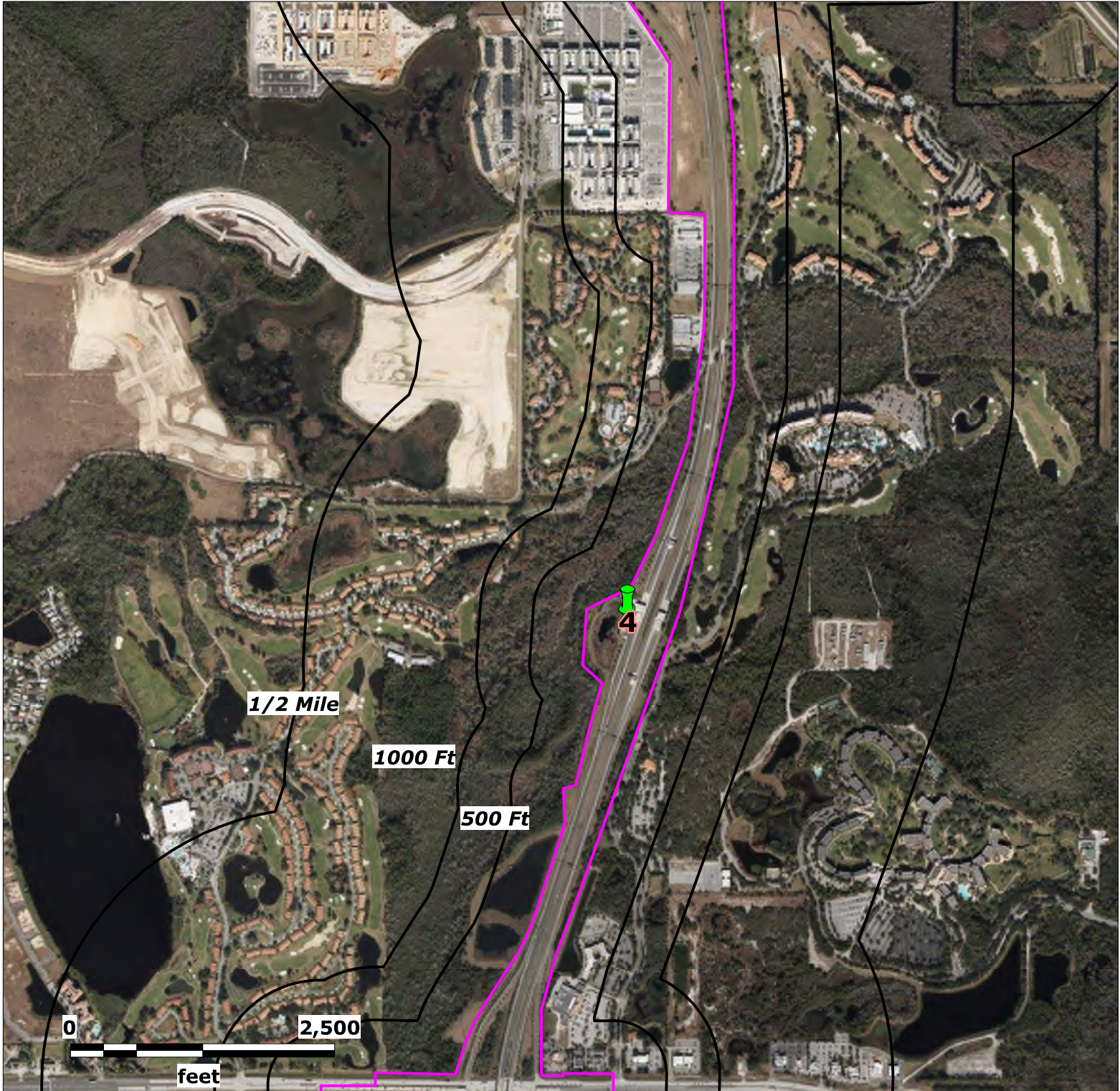
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

Lat (DMS): 28 25' 49.224"
Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

Approximate Site Boundary



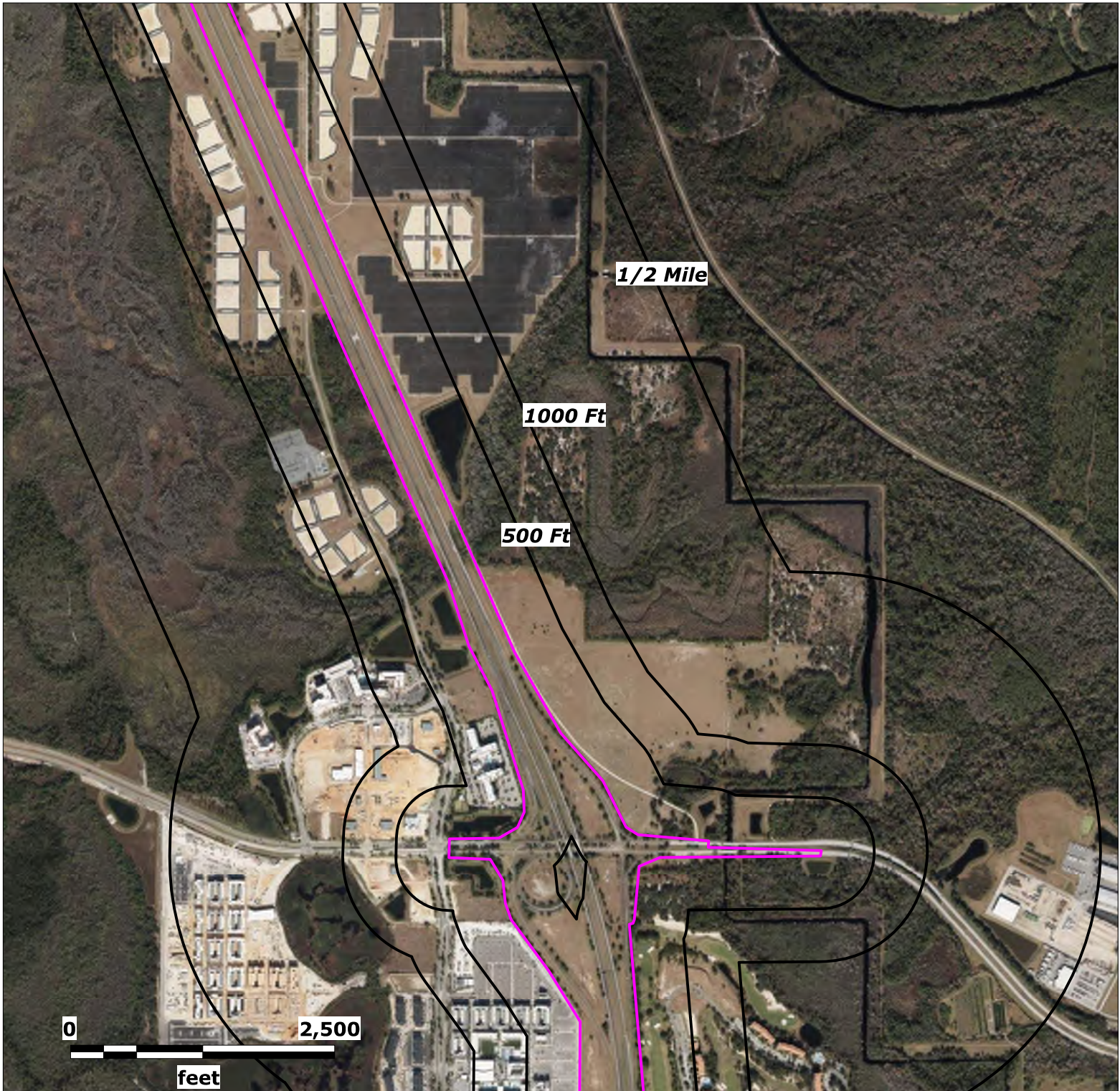
NPL, STNPL, CERCLIS, SEMSACTV, SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC, LUST, BRWNFLDS, VOLCLNUP, DRY, TANKS & INSTENG sites - 500 Feet



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

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EDM Job No: 26017
March 22, 2022

Approximate Site Boundary



NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

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EDM Job No: 26017
March 22, 2022

Approximate Site Boundary



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SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC, LUST, BRWNFLDS, VOLCLNUP, DRY, TANKS & INSTENG sites - 500 Feet



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

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Orange and Osceola County, Florida

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Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

Approximate Site Boundary



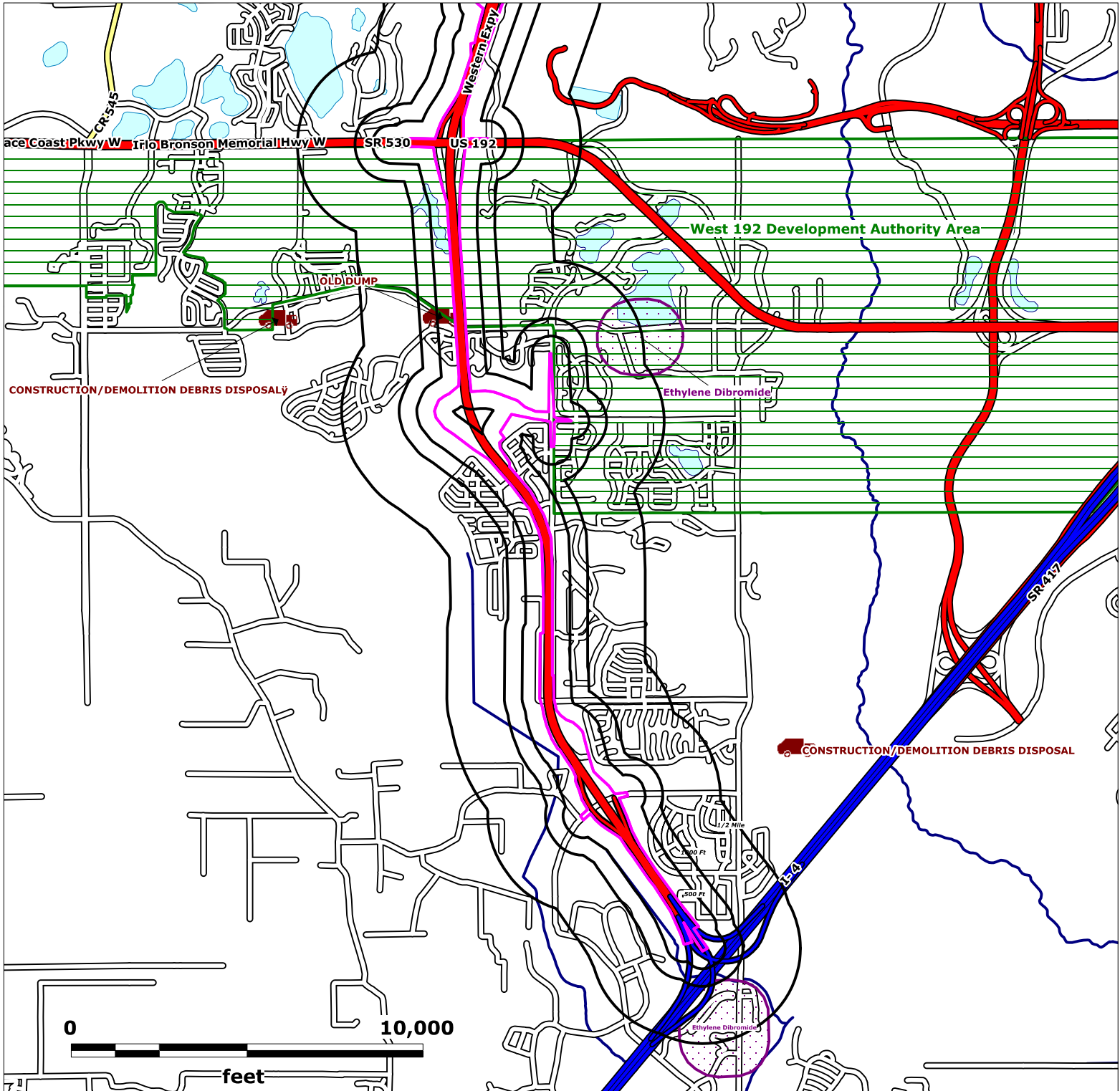
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



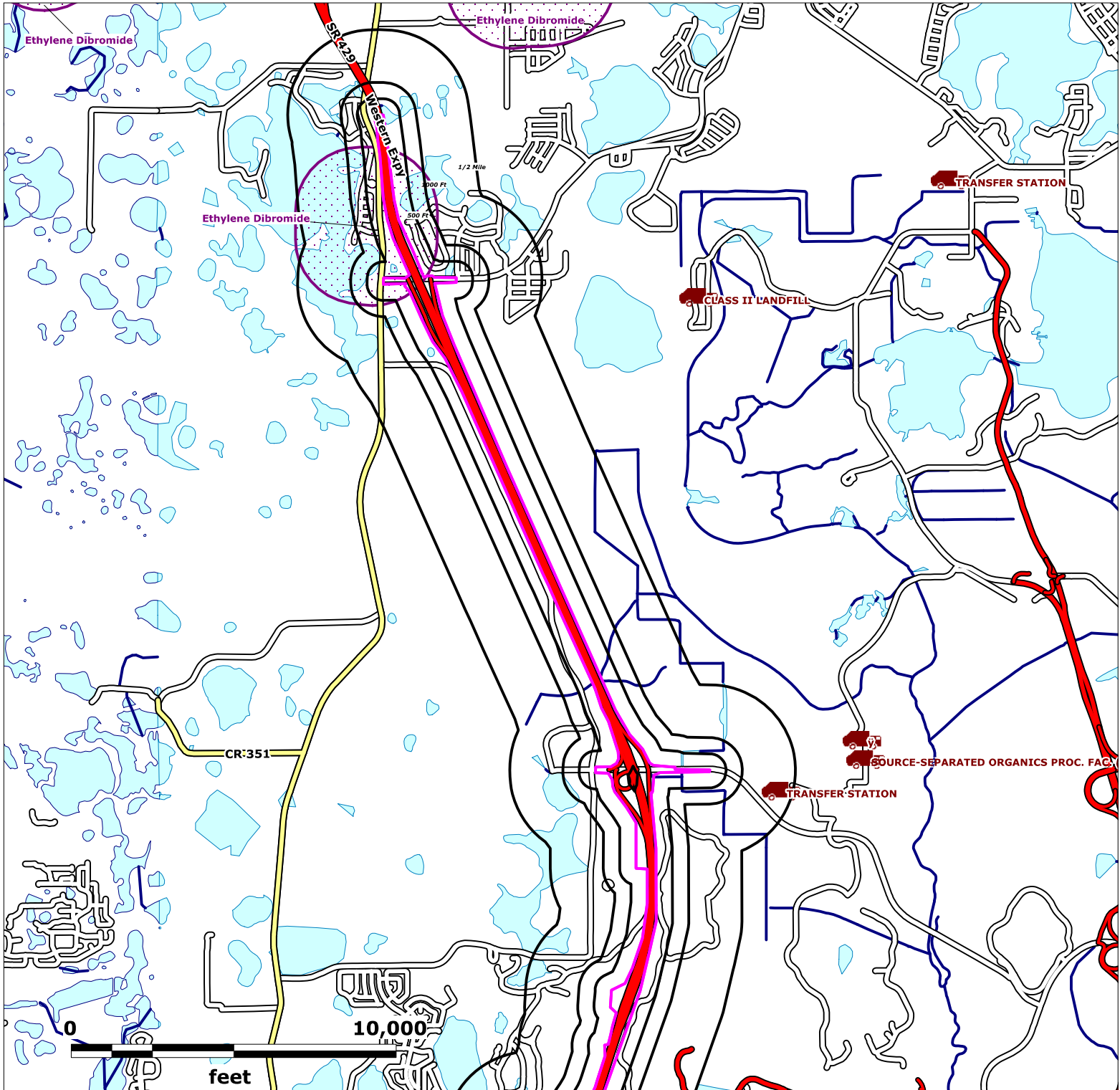
Subject Property

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

Lat (DMS): 28 25' 49.224"
Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

	FDEP Brownfield Areas		Formerly Used Defense Sites (FUDS)		Approximate Site Boundary
	FDEP Brownfield Sites		FUDS Munitions Response Areas		
	USEPA NPL & FDEP STNPL Sites		FDEP Cattle Dipping Vat		
	FDEP Delineated GW Contamination		FDEP Solid Waste Sites		Institutional Controls



Source: FDEP and USEPA Geodata











Map Scale and Property Boundaries are Approximate

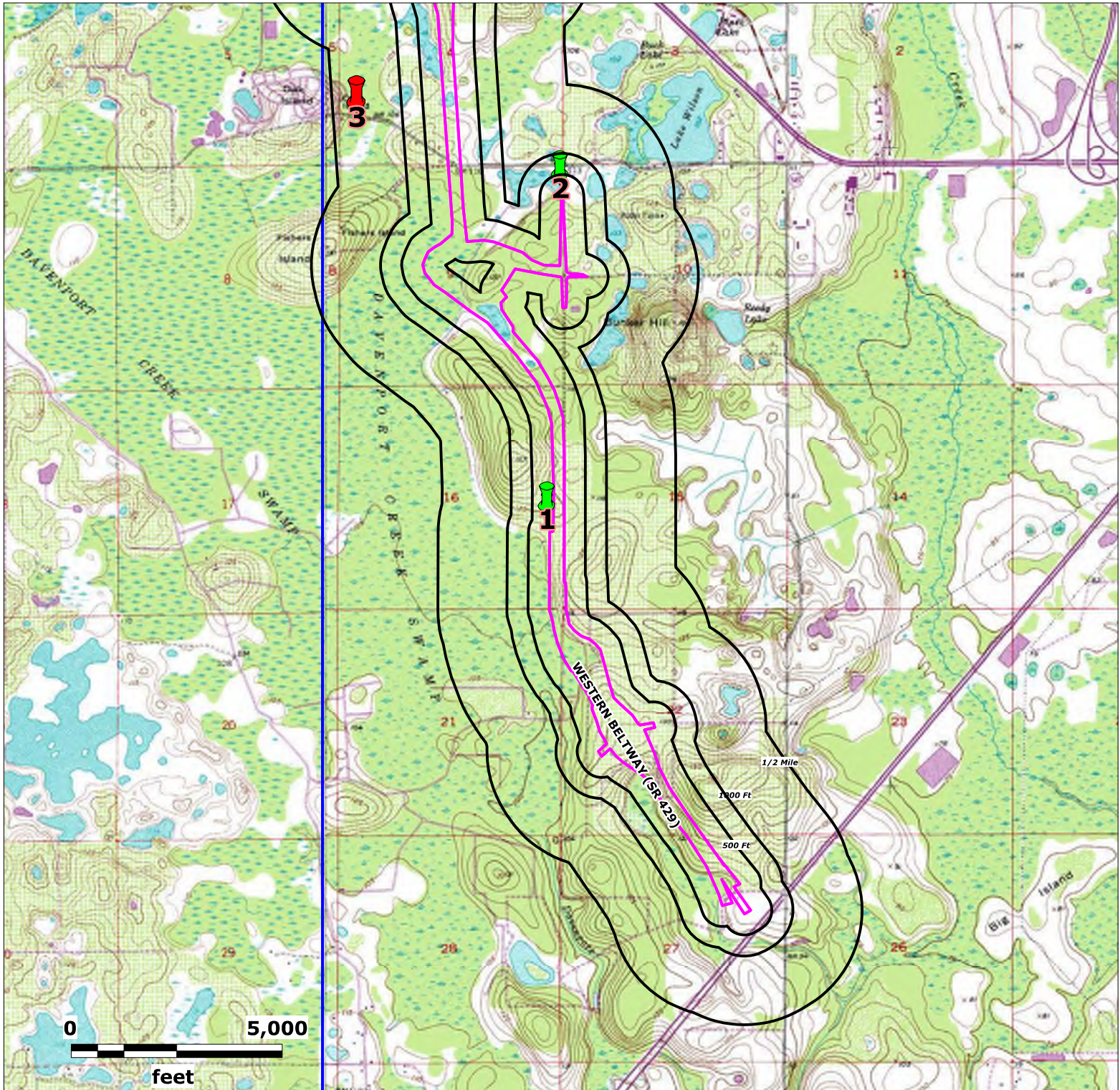
Subject Property

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Orange and Osceola County, Florida

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Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

	FDEP Brownfield Areas		Formerly Used Defense Sites FUDS		Approximate Site Boundary
	FDEP Brownfield Sites		FUDS Munitions Response Areas		
	USEPA NPL & FDEP STNPL Sites		FDEP Cattle Dipping Vat		
	FDEP Delineated GW Contamination		FDEP Solid Waste Sites		Institutional Controls



Source: USGS Digital Raster Graphic (DRG)

Map Scale and Property Boundaries are Approximate

Subject Property

Widen Western Beltway (SR 429)
Orange and Osceola County, Florida

Lat (DMS): 28 25' 49.224"
Lon (DMS): -81 38' 9.4956"

EDM Job No: 26017
March 22, 2022

Approximate Site Boundary



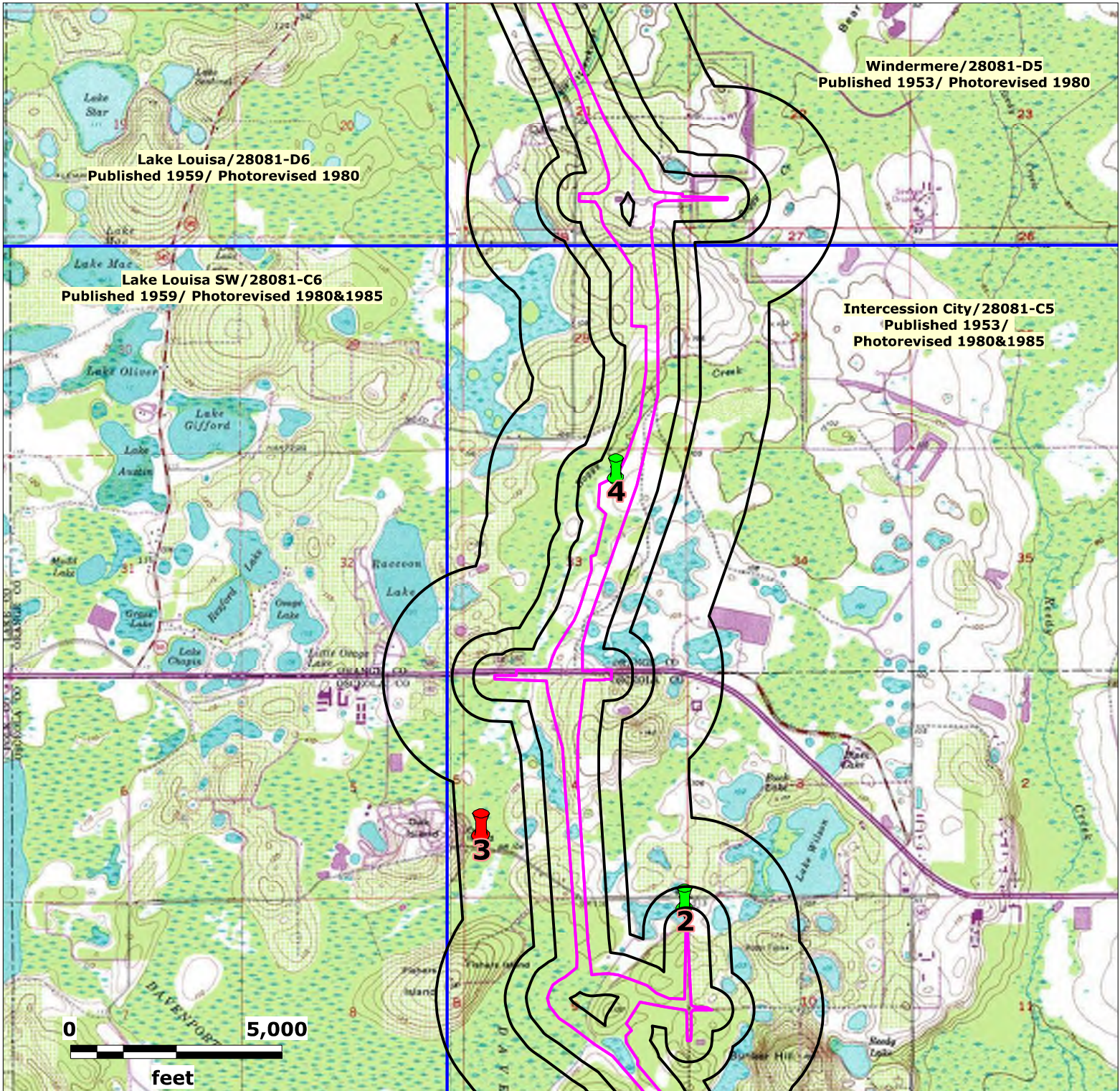
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



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Orange and Osceola County, Florida

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EDM Job No: 26017
March 22, 2022

— Approximate Site Boundary



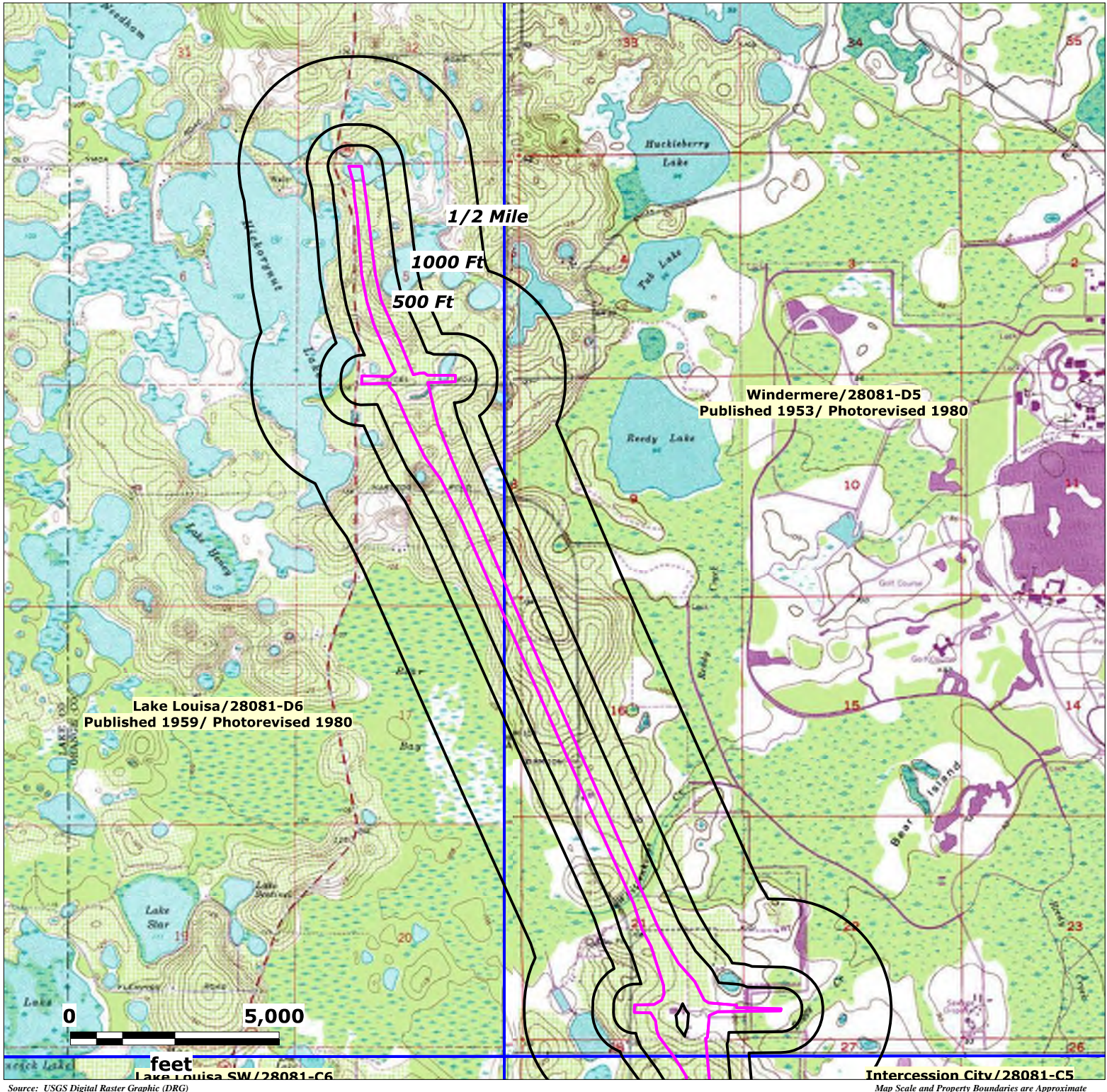
NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet



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EDM Job No: 26017
March 22, 2022

— Approximate Site Boundary



NPL, STNPL, CERCLIS, SEMSACTV,
SEMSARCH and SLDWST_LF sites - 1/2 Mile



SLDWST_NLF sites - 1000 Feet



NPLLIENS, CORRACTS, NFRAP, STCERC,
LUST, BRWNFLDS, VOLCLNUP, DRY,
TANKS & INSTENG sites - 500 Feet

ENVIRONMENTAL DATA MANAGEMENT

Custom Radius Research

Site Summary Table

Report Date: 3/22/2022

Page 1 of 1

MapID Prgm List	Fac ID No	Site Dist (mi)	Site Elev (ft)	Elev vs Sub Prop	Site Name	Site Address
1						
TANKS	9100608.	0.03	119.04	Higher	SAND HILL WTP	3211 SAND HILL RD KISSIMMEE, FL
TANKS	9103166	0.03	119.04	Higher	KISSIMMEE CITY-SAND HILL WWTP	8000 SAND HILL RD KISSIMMEE, FL 34747
TANKS	9103166.	0.03	119.04	Higher	KISSIMMEE CITY-WWTP	300 SAND HILL RD KISSIMMEE, FL
2						
TANKS	9810233	0.05	105.69	Higher	LIFT STATION 97	0 FORMOSA BLVD KISSIMMEE, FL 34741
3						
SLDWST_LF	25553	0.39	109.82	Higher	OAK ISLAND/CENTRAL FL. INVESTMENT	OAK ISLAND RD, 2MI W SR545 KISSIMMEE, FL 34747
4						
TANKS	9807758	0.05	102.72	Higher	WESTERN BELTWAY MAINLINE	14000 WESTERN BELTWAY KISSIMMEE, FL 34747



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FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 3/22/2022

TANKS Page 1 of 3

FACILITY ID NUMBER, NAME AND LOCATION

9100608. --HISTORICAL ENTRY--
SAND HILL WTP
3211 SAND HILL RD
KISSIMMEE, FL

OWNERSHIP INFORMATION

CONTACT: /
SITE COUNTY: 49 OSCEOLA
SITE LAT/LON (AGCY): /

MAP ID NUMBER:

1

Dist (Miles): 0.03
Direction:
Elev (Ft): 119.04
Elev vs Sub Prop: Higher

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[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: C / Fuel User/Non-Retail

TANK #: **TANK VOL(GALS):**

INST.DATE:

TANK CONTENTS:

TANK POSITION:

TANK STATUS (as of...)

CONSTRUCTION TYPE:

PIPING TYPE:

LEAK MONITORING:



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FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 3/22/2022

TANKS Page 2 of 3

FACILITY ID NUMBER, NAME AND LOCATION

9103166
 KISSIMMEE CITY-SAND HILL WWTP
 8000 SAND HILL RD
 KISSIMMEE, FL 34747

OWNERSHIP INFORMATION

TOHOPEKALIGA WATER AUTHORI
 951 MARTIN LUTHER KING BLVD ATT
 Kissimmee, FL 34741
CONTACT: RICHARD HAYNES/4079445000
SITE COUNTY: 49 OSCEOLA
SITE LAT/LON (AGCY): 28 18 35 / 81 36 32

MAP ID NUMBER:

Dist (Miles): 0.03
Direction:
Elev (Ft): 119.04
Elev vs Sub Prop: Higher

1

TANKS

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: Local Government

TANK #: 1 **TANK VOL(GALS):** 2000

INST.DATE: 01-Oct-1990 **TANK CONTENTS:** Emerg Generator Diesel

TANK POSITION: ABOVEGROUND

TANK STATUS (as of...) REMOVED FROM SITE 01-Sep-2005

CONSTRUCTION TYPE: C STEEL

PIPING TYPE:

LEAK MONITORING: Z DEP APPROVED MONITORING

TANK #: 2 **TANK VOL(GALS):** 6000

INST.DATE: 01-Jul-1998 **TANK CONTENTS:** Emerg Generator Diesel

TANK POSITION: ABOVEGROUND

TANK STATUS (as of...) IN SERVICE 01-Jul-1998

CONSTRUCTION TYPE: CMPR STEEL/SPILL CONTAINMENT BUCKET/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET

PIPING TYPE: BM STEEL/GALVANIZED METAL/DOUBLE WALL-PIPE JACKET

LEAK MONITORING: Z DEP APPROVED MONITORING

TANK #: 3 **TANK VOL(GALS):** 5000

INST.DATE: 01-Sep-2005 **TANK CONTENTS:** Emerg Generator Diesel

TANK POSITION: ABOVEGROUND

TANK STATUS (as of...) IN SERVICE 01-Sep-2005

CONSTRUCTION TYPE: CKP STEEL/AST CONTAINMENT/LEVEL GAUGES/ALARMS

PIPING TYPE: AB ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL

LEAK MONITORING: FQ MONITOR DBL WALL TANK SPACE/VISUAL INSPECTION OF ASTS



FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 3/22/2022

TANKS Page 3 of 3

FACILITY ID NUMBER, NAME AND LOCATION

9103166. --HISTORICAL ENTRY--
KISSIMMEE CITY-WWTP
300 SAND HILL RD
KISSIMMEE, FL

OWNERSHIP INFORMATION

CONTACT: /
SITE COUNTY: 49 OSCEOLA
SITE LAT/LON (AGCY): /

MAP ID NUMBER:

1

Dist (Miles): 0.03
Direction:
Elev (Ft): 119.04
Elev vs Sub Prop: Higher

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[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: H / Local Government

TANK #: **TANK VOL(GALS):**

INST.DATE:

TANK CONTENTS:

TANK POSITION:

TANK STATUS (as of...)

CONSTRUCTION TYPE:

PIPING TYPE:

LEAK MONITORING:



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FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 3/22/2022

TANKS Page 1 of 1

FACILITY ID NUMBER, NAME AND LOCATION

9810233
LIFT STATION 97
0 FORMOSA BLVD
KISSIMMEE, FL 34741

OWNERSHIP INFORMATION

TOHOPEKALIGA WATER AUTHORI
951 MARTIN LUTHER KING BLVD ATT
Kissimmee, FL 34741
CONTACT: RICHARD HAYNES/4079445000
SITE COUNTY: 49 OSCEOLA
SITE LAT/LON (AGCY): /

MAP ID NUMBER:

Dist (Miles): 0.05
Direction:
Elev (Ft): 105.69
Elev vs Sub Prop: Higher

2

T
A
N
K
S

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: Local Government

TANK #:	TANK VOL(GALS):
1	1700

INST.DATE:	TANK CONTENTS:
01-Dec-2007	Emerg Generator Diesel

TANK POSITION:
ABOVEGROUND

TANK STATUS (as of...)
IN SERVICE 01-Dec-2007

CONSTRUCTION TYPE: CIMP

STEEL/DOUBLE WALL/SPILL CONTAINMENT BUCKET/LEVEL GAUGES/ALARMS

PIPING TYPE: AB

ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL

LEAK MONITORING: 6FQR

EXTERNAL PIPING MONITORING/MONITOR DBL WALL TANK SPACE/VISUAL INSPECTION OF ASTS/MONITOR TANK BOTTOM SPACE



FDEP SOLID WASTE FACILITIES LIST LANDFILL SITES

(SLDWST_LF)

Report Date: 3/22/2022

SLDWST Page 1 of 1

FACILITY ID, NAME AND LOCATION:

25553
OAK ISLAND/CENTRAL FL. INVESTMENT
OAK ISLAND RD, 2MI W SR545
KISSIMMEE, FL 34747

DISTRICT CD
COUNTY OSCEOLA
SEC/TWN/RN 04 /25S /27E
AGENCY LAT: 28:19:59.79
AGENCY LON: 81:37:.86

MAP ID NUMBER:

Dist (Miles): 0.39

Direction:

Elev (Ft): 109.82

Elev vs Sub Prop: Higher

3

SLDWST

RESP AUTHORITY:

CENTRAL FLORIDA INVESTMENTS
5767 MAJOR BLVD
ORLANDO , FL 32819

SITE CONTACT:

STAN MAKUCH

LAND OWNER:

CENTRAL FLORIDA INVESTMENTS
5767 MAJOR BLVD
ORLANDO , FL 32819

FACILITY CLASS: 520/OLD DUMP

CLASS STATUS: NFA,NO FURTHER ACTION (F)

FACILITY CLASS: 540/CONSTRUCTION AND DEMOLITION DEBRIS

CLASS STATUS:

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

[FDEP INFORMATION PORTAL ON LINE REPORTS](#) (May Not Be Available For All Records)



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FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 3/22/2022

TANKS Page 1 of 1

FACILITY ID NUMBER, NAME AND LOCATION

9807758
 WESTERN BELTWAY MAINLINE
 14000 WESTERN BELTWAY
 KISSIMMEE, FL 34747

OWNERSHIP INFORMATION

FLORIDAS TURNPIKE ENTERPRI
 PO BOX 9828 ATTN: SANTIAGO ALVA
 FORT LAUDERDALE, FL 33310
CONTACT: SANTIAGO ALVAREZ/9549341261
SITE COUNTY: 48 ORANGE
SITE LAT/LON (AGCY): /

MAP ID NUMBER:

Dist (Miles): 0.05
Direction:
Elev (Ft): 102.72
Elev vs Sub Prop: Higher

4

T
A
N
K
S

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: Fuel user/Non-retail

TANK #:	TANK VOL(GALS):
1	1000

INST.DATE:	TANK CONTENTS:
01-Oct-2005	Emerg Generator Diesel

TANK POSITION:
 ABOVEGROUND

TANK STATUS (as of...)
 IN SERVICE 01-Oct-2005

CONSTRUCTION TYPE: ACMNPR

BALL CHECK VALVE/STEEL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET

PIPING TYPE: ABI

ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL/SUCTION PIPING SYSTEM

LEAK MONITORING: FIQR

MONITOR DBL WALL TANK SPACE/NOT REQUIRED/VISUAL INSPECTION OF ASTS/MONITOR TANK BOTTOM SPACE



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ENVIRONMENTAL DATA MANAGEMENT

Custom Radius Research Proximal Site Summary Table

This table includes mapped sites whose plotted coordinates fall just outside of the ASTM or client defined research distance but whose property boundaries may still extend into the search area. These sites are typically large commercial or industrial tracts that may merit inclusion in the evaluation process. Detail data reports on any of these sites may be requested and will be sent as an addendum to this report at no additional cost.

Report Date: 3/22/2022

Page 1 of 1

MapID Prgm List	Fac ID No	Site Dist (mi)	Site Elev (ft)	Elev vs Sub Prop	Site Name	Site Address
1A						
TANKS	9802869	0.12	112.69	Higher	WINTER GARDEN RADIO TOWER (REEDY CREEK)	12400 HARTZOG RD WINTER GARDEN, FL 32802
2A						
LUST	9813166	0.12	127.28	Higher	SEIDEL ROAD PROPERTY	SEIDEL RD WINTER GARDEN, FL 32787
TANKS	9813166	0.12	127.28	Higher	SEIDEL ROAD PROPERTY	SEIDEL RD WINTER GARDEN, FL 32787



ENVIRONMENTAL DATA MANAGEMENT

Custom Radius Research Non-Mapped Records Summary Table

This table is a listing of database records that have not been plotted within our mapping system. Detail data reports on any of these sites may be requested and will be sent as an addendum to this report at no additional cost.

Report Date: 3/22/2022

Page 1 of 1

Prgm List Fac ID No	Site Name	Site Address



Agency List Descriptions

USEPA and State Databases are updated on a quarterly basis. Supplemental Databases are updated on an annual basis.

Florida Department of Environmental Protection (FDEP)

State Designated Brownfields(BRWNFLDS)

The FDEP Brownfields database contains a listing of State Designated Brownfield Areas and Brownfield Sites. Brownfields are typically defined as abandoned, idled or underused industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

Agency File Date: 11/16/2021

Received by EDM: 11/17/2021

EDM Database Updated: 11/17/2021

Dry Cleaners List(DRY)

The FDEP Dry Cleaning Facilities List is comprised of data from the FDEP Storage Tank and Contamination Monitoring (STCM) database and the Drycleaning Solvent Cleanup Program- Priority Ranking List. It contains a listing of those Dry Cleaning sites (and suspected historical Dry Cleaning sites) who have registered with the FDEP and/or have applied for the Dry Cleaning Solvent Cleanup Program.

Agency File Date: 11/17/2021

Received by EDM: 11/17/2021

EDM Database Updated: 11/17/2021

Institutional and/or Engineering Controls(INSTENG)

The FDEP Institutional Controls Registry Database (INSTENG) contains sites that have had Institutional and/or Engineering Controls implemented to regulate exposure to environmental hazards

Agency File Date: 11/17/2021

Received by EDM: 11/19/2021

EDM Database Updated: 11/19/2021

Leaking Underground Storage Tanks List(LUST)

The FDEP LUST list identifies facilities and/or locations that have notified the FDEP of a possible release of contaminants from petroleum storage systems. This Report is generated from the FDEP Storage Tank and Contamination Monitoring Database (STCM).

Agency File Date: 1/11/2022

Received by EDM: 1/11/2022

EDM Database Updated: 1/11/2022

Solid Waste Facilities List_Landfills(SLDWST_LF)

The SLDWST_LF list identifies locations that have conducted solid waste landfill activities as determined by the applicable FDEP Facility Classifications. Sites listed with "##" after the Facility ID Number are historical locations, obtained from documents on record at local agencies.

Agency File Date: 12/16/2021

Received by EDM: 12/16/2021

EDM Database Updated: 12/16/2021

Solid Waste Facilities List_Non-Landfills(SLDWST_NLF)

The SLDWST_NLF list identifies locations that have conducted solid waste handling activities other than landfilling, as determined by the applicable FDEP Facility Classifications, such as Transfer Stations, Disaster Debris Staging Areas and sites handling Bio-Hazardous wastes. Sites listed with "##" after the Facility ID Number are historical locations, obtained from documents on record at local agencies.

Agency File Date: 12/16/2021

Received by EDM: 12/16/2021

EDM Database Updated: 12/16/2021

State CERCLIS/SEMS Equivalent(STCERC)

The STCERC list is compiled from the FDEP Site Investigation Section list, the Florida SITES list(historical) and the FDEP Cleanup Sites list. These sites are being assessed and/or cleaned up as a result of identified or suspected contamination from the release of hazardous substances. The FDEP Cleanup Sites list programs include: Brownfields, Petroleum, EPA Superfund (CERCLA), Drycleaning, Responsible Party Cleanup, State Funded Cleanup, State Owned Lands Cleanup and Hazardous Waste Cleanup.

Agency File Date: 2/18/2022

Received by EDM: 2/18/2022

EDM Database Updated: 2/18/2022

State NPL Equivalent(STNPL)

The FDEP State Funded Cleanup list contains facilities and/or locations where there are no viable responsible parties; the site poses an imminent hazard; and the site does not qualify for Superfund or is a low priority for EPA. Remedial efforts at these sites are currently being addressed through State funded cleanup action.

Agency File Date: 11/8/2021

Received by EDM: 11/19/2021

EDM Database Updated: 11/19/2021

Underground/Aboveground Storage Tanks(TANKS)

The FDEP TANKS list contains sites with registered aboveground and underground storage tanks containing regulated petroleum products.

Agency File Date: 11/16/2021

Received by EDM: 11/16/2021

EDM Database Updated: 11/17/2021

Voluntary Cleanup List(VOLCLNUP)

The VOLCLNUP List is derived from the FDEP Brownfields Site Rehabilitation Agreement (BSRA) database, the FDEP ERIC Waste Cleanup database and the FDEP Office of Waste Cleanup Responsible Party Sites database (not available as of June 2021). The VOLCLNUP List identifies sites that have signed an agreement to Voluntarily cleanup a site and/or sites where legal responsibility for site rehabilitation exists pursuant to Florida Statutes and is being conducted either voluntarily or pursuant to enforcement activity.

Agency File Date: 10/11/2021

Received by EDM: 10/19/2021

EDM Database Updated: 10/21/2021

United States Environmental Protection Agency (EPA)

Comp Env Resp, Compensation & Liability Info Sys List(CERCLIS)

The US EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database tracks potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are proposed to be on the NPL, are on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL. The CERCLIS database was retired in November of 2013 and has been replaced by the Superfund Enterprise Management System (SEMS).

Agency File Date: 11/12/2013

Received by EDM: 2/18/2016

EDM Database Updated: 2/18/2016

RCRIS Handlers with Corrective Action(CORRACTS)

The US EPA Corrective Action Sites (CORRACTS) database is a listing of hazardous waste handlers that have undergone RCRA corrective action activity.

Agency File Date: 1/10/2022

Received by EDM: 1/11/2022

EDM Database Updated: 1/11/2022

Archived Cerclis Sites(NFRAP)

The US EPA NFRAP list contains archived data of CERCLIS records where the EPA has completed assessment activities and determined that no further steps to list the site on the NPL will be taken. NFRAP sites may be reviewed in the future to determine if they should be returned to CERCLIS based upon newly identified contamination problems at the site. The NFRAP database was retired in November of 2013 and has been replaced by the Superfund Enterprise Management System (SEMS).

Agency File Date: 10/25/2013

Received by EDM: 2/18/2016

EDM Database Updated: 2/18/2016

National Priorities List(NPL)

The US EPA National Priorities List (NPL) contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities under the Superfund Program. EDM's NPL Report includes sites that are currently on the NPL as well as sites that have been Proposed, Withdrawn and/or Deleted from the list. Previously, information for the NPL was managed under the CERCLIS data management system. In 2014 this system was replaced with the Superfund Enterprise Management System (SEMS). EPA last updated CERCLIS in November of 2013. EDM's NPL Report contains available SEMS data and the archived CERCLIS data relative to NPL sites.

Agency File Date: 2/14/2022

Received by EDM: 2/18/2022

EDM Database Updated: 2/18/2022

NPL Liens List(NPLLIENS)

The US EPA NPL Liens List identifies those sites where under authority granted by CERCLA, liens have been filed against real property in order to recover expenditures from remedial action or when the property owner receives a notice of potential liability.

Agency File Date: 8/25/2021

Received by EDM: 9/7/2021

EDM Database Updated: 9/9/2021

SEMS Active Site Inventory List(SEMSACTV)

The US EPA Superfund Enterprise Management System (SEMS) tracks potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. The SEMSACTV list contains sites that are on the National Priorities List (NPL) as well as sites that are proposed for or in the screening and assessment phase for possible inclusion on the NPL. SEMS has replaced the CERCLIS database, which was retired in November of 2013.

Agency File Date: 12/30/2021

Received by EDM: 1/24/2022

EDM Database Updated: 1/24/2022

SEMS Archived Site Inventory List(SEMSARCH)

The US EPA Superfund Enterprise Management System (SEMS), contains archived data of CERCLIS or SEMS records where the EPA has completed assessment activities and determined that no further steps to list the site on the NPL will be taken. These sites may be reviewed in the future to determine if they should be returned to SEMS based upon newly identified contamination problems at the site. SEMS has replaced the CERCLIS database, which was retired in November of 2013. The SEMSARCH database contains these newly archived records under the SEMS database management system.

Agency File Date: 12/30/2021

Received by EDM: 1/24/2022

EDM Database Updated: 1/24/2022

Tribal LUST List(TRIBLLUST)

EDM's Tribal LUST list is derived from the USEPA Region IV Tribal Tanks database by extracting those sites with indicators of past and/or current releases.

Agency File Date: 2/24/2010

Received by EDM: 3/9/2010

EDM Database Updated: 3/9/2010

Tribal Tanks List(TRIBLTANKS)

The USEPA Region IV Tribal Tanks database lists Active and Closed storage tank facilities on Native American lands.

Agency File Date: 2/24/2010

Received by EDM: 3/9/2010

EDM Database Updated: 3/9/2010

Brownfields Management System(USBRWNFLDS)

The US EPA Brownfields program provides information on environmentally distressed properties that have received Grants or Targeted funding for cleanup and redevelopment. Tribal Brownfield sites are included in the USBRWNFLDS database.

Agency File Date: 1/11/2022

Received by EDM: 1/11/2022

EDM Database Updated: 1/24/2022

Institutional and/or Engineering Controls(USINSTENG)

The USINSTENG list is compiled from data elements contained in the NPL, CORRACTS, USBRWNFLDS and RCRAInfo databases.

Agency File Date: 8/18/2021

Received by EDM: 8/18/2021

EDM Database Updated: 8/18/2021

Environmental Impact Areas

Brownfield Areas and Sites

The FDEP Brownfields database contains a listing of State Designated Brownfield Areas and Brownfield Sites. Brownfields are typically defined as abandoned, idled or underused industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

Agency File Date: 11/16/2021

Received by EDM: 11/17/2021

EDM Database Updated: 11/17/2021

<https://floridadep.gov/waste/waste-cleanup/content/brownfields-program>

Cattle Dipping Vats

From the 1910's through the 1950's, vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides such as DDT were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Some of the sites have been located and are currently under investigation. However, most of the listings are from old records of the State Livestock Board, which listed each vat as it was put into operation. In addition, some privately operated vats may have existed which were not listed by the Livestock Board. EDM's Cattle Dipping Vat sites are retrieved from the Voluntary Cleanup and STCERC databases. For additional information on Cattle Dipping Vats visit the FDEP and FDOH websites at:

Agency File Date: 10/31/2018

Received by EDM: 1/25/2019

EDM Database Updated: 1/25/2019

<https://floridadep.gov/waste/district-business-support/content/cattle-dipping-vats-cdv>

<http://www.floridahealth.gov/environmental-health/drinking-water/cattledipvathome.html>

Formerly Used Defense Sites

The DoD is responsible for the environmental restoration of properties that were formerly owned by, leased to or otherwise possessed by the United States and operated under the jurisdiction of the Secretary of Defense prior to October 1986. Such properties are known as Formerly Used Defense Sites (FUDS). The Army is the executive agent for the program and the U.S. Army Corps of Engineers manages and directs the program's administration. For more information on the FUDS Program, including maps and data on individual sites, visit the Army Corps of Engineers website at:

Agency File Date: 5/29/2018

Received by EDM: 1/25/2019

EDM Database Updated: 1/25/2019

<http://www.usace.army.mil/Missions/Environmental/Formerly-Used-Defense-Sites/>

FUDS Munitions Response Sites

The DoD developed the Military Munitions Response Program (MMRP) in 2001 to address munitions-related concerns, including explosive safety, environmental, and health hazards from releases of unexploded ordnance (UXO), discarded military munitions (DDM), and munitions constituents (MC) found at locations, other than operational ranges, on active and Base Realignment and Closure (BRAC) installations and Formerly Used Defense Sites (FUDS) properties. The MMRP addresses non-operational range lands with suspected or known hazards from munitions and explosives of concern (MEC) which occurred prior to September 2002, but are not already included with an Installation Response Program (IRP) site cleanup activity. For more information on the FUDS MMRP Program, including maps and data on individual sites, visit the Army Corps of Engineers website at:

Agency File Date: 5/14/2018

Received by EDM: 1/25/2019

EDM Database Updated: 1/25/2019

<http://www.asaie.army.mil/Public/ESOH/mmrp.html>

Groundwater Contamination Areas

The Ground Water Contamination Areas GIS layer is a statewide map showing the boundaries of delineated areas of known groundwater contamination pursuant to Chapter 62-524, F.A.C., New Potable Water Well Permitting In Delineated Areas. 38 Florida counties have been delineated primarily for the agricultural pesticide ethylene dibromide (EDB), and to a much lesser extent, volatile organic and petroleum contaminants. This GIS layer represents approximately 427,897 acres in 38 counties in Florida that have been delineated for groundwater contamination. However, it does not represent all known sources of groundwater contamination for the state of Florida.

This information is intended to be used by regulatory agencies issuing potable water well construction permits in areas of ground water contamination to protect public health and the ground water resource. Permitted water wells in these areas must meet specific well construction criteria and water testing prior to well use. This dataset only indicates the presence or absence of specific groundwater contaminants and does not represent all known sources of groundwater contamination in the state of Florida.

Agency File Date: 11/28/2018

Received by EDM: 1/24/2019

EDM Database Updated: 1/24/2019

<https://floridadep.gov/water/source-drinking-water/content/delineated-areas>

Institutional Controls

The FDEP Institutional Controls GIS layer is a statewide map showing the approximate boundaries of delineated areas where Institutional Controls are in place.

An institutional control provides for certain restrictions on a property. For example, a site may be cleaned up to satisfy commercial contamination target levels and an institutional control may be placed on that property indicating that it may only be used for commercial activities. If the owner of the property ever wanted to use that property for residential purposes, the owner would have to ensure that any contamination meets residential target levels.

The locational data for this layer is provided by the responsible party and reviewed by FDEP staff. Neither FDEP or EDM assumes responsibility for the accuracy of the boundary data.

Agency File Date: 11/17/2021

Received by EDM: 11/19/2021

EDM Database Updated: 11/19/2021

<https://ca.dep.state.fl.us/mapdirect/?webmap=cff8d21797184421ab4763d3e4a01e48>

National Priorities List

The US EPA National Priorities List (NPL) contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities under the Superfund Program. EDM's NPL site boundaries data include sites that are currently on the NPL as well as sites that have been Proposed, Withdrawn and/or Deleted from the list.

Agency File Date: 11/14/2018

Received by EDM: 12/10/2018

EDM Database Updated: 1/22/2019

<https://www.epa.gov/superfund/search-superfund-sites-where-you-live>

Solid Waste Facilities

The FDEP SLDWST list identifies locations that have been permitted to conduct solid waste handling activities.

Agency File Date: 1/23/2019

Received by EDM: 1/24/2019

EDM Database Updated: 1/25/2019

<https://floridadep.gov/waste>

State Funded Cleanup Sites

The FDEP State Funded Cleanup list contains facilities and/or locations where there are no viable responsible parties; the site poses an imminent hazard; and the site does not qualify for Superfund or is a low priority for EPA. Remedial efforts at these sites are currently being addressed through State funded cleanup action.

Agency File Date: 3/30/2021

Received by EDM: 3/31/2021

EDM Database Updated: 3/31/2021

<https://floridadep.gov/waste/waste-cleanup/documents/state-funded-cleanup-program-site-list>

FDEP STORAGE TANKS REPORT

(TANKS)

Report Date: 6/3/2022

TANKS Page 1 of 1

FACILITY ID NUMBER, NAME AND LOCATION

9802869
WINTER GARDEN RADIO TOWER (REEDY CREEK)
12400 HARTZOG RD
WINTER GARDEN, FL 32802

OWNERSHIP INFORMATION

ORANGE CNTY FLEET MGMT OFC
4400 VINELAND RD ATTN: STORAGE
ORLANDO, FL 32811
CONTACT: INSHAN EDOO/4078368201
SITE COUNTY: 48 ORANGE
SITE LAT/LON (AGCY): 28 23 7 / 81 37 2

MAP ID NUMBER:

Dist (Miles):
Direction:
Elev (Ft): 0.00
**Elev vs
Sub Prop:**

1

T
A
N
K
S

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: OPEN

FAC TYPE: County Government

TANK #:	TANK VOL(GALS):
1	1000

INST.DATE:	TANK CONTENTS:
01-May-2000	Emerg Generator Diesel

TANK POSITION:
ABOVEGROUND

TANK STATUS (as of...)
IN SERVICE 01-May-2000

CONSTRUCTION TYPE: CMOR

STEEL/SPILL CONTAINMENT BUCKET/TIGHT FILL/DOUBLE WALL-TANK JACKET

PIPING TYPE: ABI

ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL/SUCTION PIPING SYSTEM

LEAK MONITORING: 6FQ

EXTERNAL PIPING MONITORING/MONITOR DBL WALL TANK SPACE/VISUAL INSPECTION OF ASTS



FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

(LUST)

Report Date: 6/3/2022

LUST Page 1 of 2

FACILITY ID NUMBER, NAME AND LOCATION

9813166
 SEIDEL ROAD PROPERTY
 SEIDEL RD
 WINTER GARDEN, FL 32787-

OWNERSHIP INFO:

ACCOUNT OWNER
 GRECO, MARIANNE C
 5314 SW 119TH AVE
 COOPER CITY, FL 33330-4261

MAP ID NUMBER:

2

LUST

Dist (Miles):
Direction:
Elev (Ft): 0.00
Elev vs Sub Prop:

COUNTY ID: 48 ORANGE
AGCY LAT/LON(DMS): 28,24,56.2784 81,37,38.5403
FAC OPERATOR: JENNIFER FOLWER
FAC TEL #: (407)317-3939

[FDEP INFORMATION PORTAL ON LINE DOCUMENTS](#) (May Not Be Available For All Records)

FAC STATUS: CLOSED **FAC TYPE:** X - Contamination Site

SCORE **SCORE EFF DT:** **RANK:** **SCORE WHEN RANKED:**

DISCHARGE INFORMATION

DISCHARGE DATE: 5/3/2011

Mapid: 2

INSPECTION DATE:

CLEANUP WORK STATUS: COMPLETED

CLEANUP REQUIRED: R - CLEANUP REQUIRED

CLEANUP COMBINED:

INFO SOURCE: D - DISCHARGE NOTIFICATION

DISCH CLNUP STATUS: 7/17/2012 NFA - NFA COMPLETE

CONTAMINATED MEDIA?: SOIL: Y SUR WATER: N GR WATER: N MON WELL: N # DW WELLS CONTAMINATED:

POLLUTANT: J - Used Oil GALLONS 5 OTHER

CLEANUP INFORMATION

Mapid: 2

PGM ELIG OFF:

PGM ELIG SCORE: **PGM ELIG SCORE EFF DT:** **PGM ELIG R**

ELIG STAT: **ELIG STAT DT:** **APPL RCVD:** **LOI:** **ELIG LTR SNT:** **REDETERM:**

DEDUCT AMT: **DEDUCT PD TO DT:** **COPAY AMT:** **COPAY TO DT:** **CAP AMT:**

CLNUP PROG: **CLNUP OFF:** PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

SITE ASSESSMENT*

CLNP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION PLAN*

CLEANUP RESP: -
FUND ELLIG: -
ORDER APPRV DATE:
ACTUAL COMPL DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION*

CLEANUP RESP: RP - RESPONSIBLE PARTY
FUND ELLIG: -
ACTUAL COST:
YEARS TO COMPL: 0

SITE REHABILITATION COMPLETION REPORT*

ACTION TYPE: NFA - NO FURTHER ACTION
SUBMIT DATE: 05-04-2012
REVIEW DATE: 06-29-2012
ISSUE DATE: 07-17-2012
COMPL STATUS: A - APPROVED
COMPL STATUS DT: 06-29-2012
COMMENTS:

SOURCE REMOVAL*

CLEANUP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
FREE PRODUCT REMOVAL?(Y/N):
SOIL REMOVAL?(Y/N):
SOIL TONNAGE REMOVED:
SOIL TREATMENT?(Y/N):
OTHER TREATMENT?:
ALT PROC STATUS:
ALT PROC STATUS DT:
ALT PROC COMMENT:

* Data current as of November 2019



FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

(LUST)

Report Date: 6/3/2022

LUST Page 2 of 2

TANKS Data for LUST Sites:

FACILITY ID NUMBER, NAME AND LOCATION	OWNERSHIP INFORMATION	MAP ID NUMBER:	
<p>9813166 SEIDEL ROAD PROPERTY SEIDEL RD WINTER GARDEN, FL 32787</p>	<p>GRECO, MARIANNE C 5314 SW 119TH AVE COOPER CITY, FL 33330 CONTACT TEL #: CONTACT: GRECO, MARIANNE C FACILITY TEL #: 4073173939 COUNTY ID: 48 ORANGE</p>	<p>Dist (Miles): Direction: Elev (Ft): 0.00 Elev vs Sub Prop:</p>	2
<p>FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)</p>			
<p>FAC STATUS: CLOSED FAC TYPE: Contamination Site</p>			
TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:
CONSTRUCTION TYPE:		TANK POSITION:	TANK STATUS (as of...)
PIPING TYPE:			
LEAK MONITORING:			

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A
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K
S



APPENDIX E SITE PHOTOGRAPHS

Site Photographs



**Site 2 – Planted Pine Trees
Seidel Road looking north**



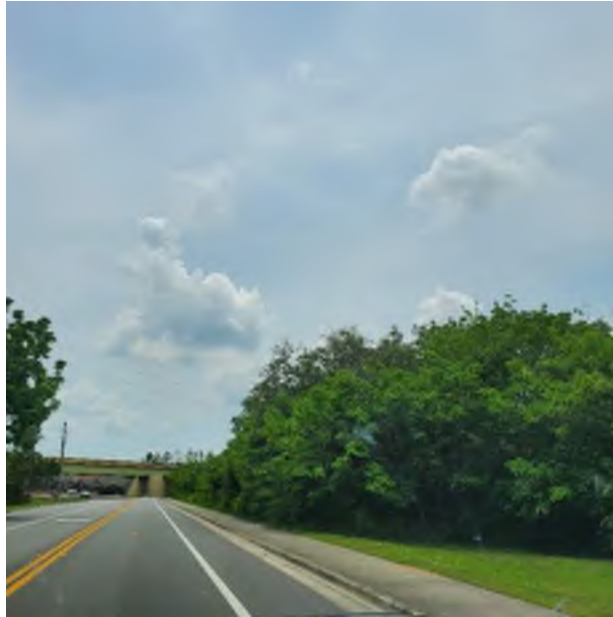
**Site 3 – Mystic Dunes Resort & Golf Club
Entrance looking south**



Site 4 – Sand Hill WWTP
Southeast corner of WWTP looking north



Site 5 – Lift Station 97
North of lift station looking southwest



**Site 7 – Oak Island Landfill (right side of road)
North boundary (Funnie Steed Road) looking southeast**



**Site 7 – Oak Island Landfill
East-central area looking west
Concrete and metal debris**



Site 9 – Duke Energy/Target
East of diesel generator looking west towards SR 429



Site 10 – Publix
Diesel Generator with base tank located at northwest corner of Publix



Site 11 – Orange Lake Cleaners
Northeast of cleaners looking southwest



Site 12 – Toll Plaza 5602
1,000-gallon diesel AST located southwest of Administrative Office



**Site 12 – Toll Plaza 5602
Diesel generator with base AST located northwest of Administrative Office**



**Site 14 – Orange Lake Resort/The Legend Golf Course maintenance facility
West of SR 429 looking west**



**Site 17 – Three diesel generators with base tanks
South of Western Way looking northeast**



**Site 18 – Reedy Creek Improvement District
SR 429 looking east
Solar Farm and Rapid Infiltration Basins**

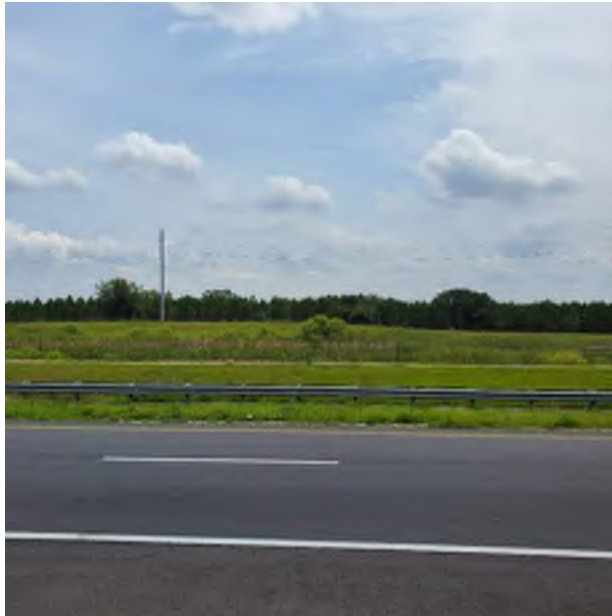


**Site 20 – Horizon High School
SR 429 looking east at fuel facility with 15,000-gallon diesel AST**



**Site 22 – Water Conserve II 3W-01 Supplemental Well
West side of facility looking east**

Drainage Site Photographs



Alt 1 Preferred
SR 429, near west boundary of Alt 1 Preferred looking east



Alt 2
West side of SR 429 looking southwest

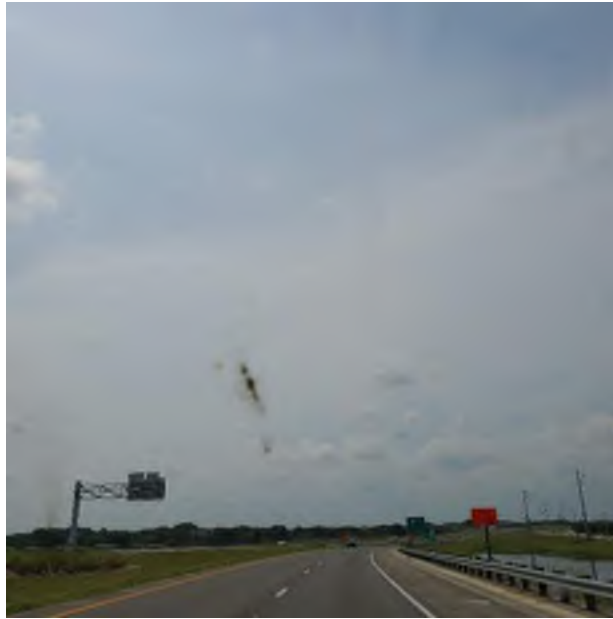


Alt 3
West side of SR 429 looking northwest



FGB Alt 3
Formosa Gardens Boulevard looking west

General Site Photographs



SR 429
Near north limit looking south



SR 429
Near south project limit looking south

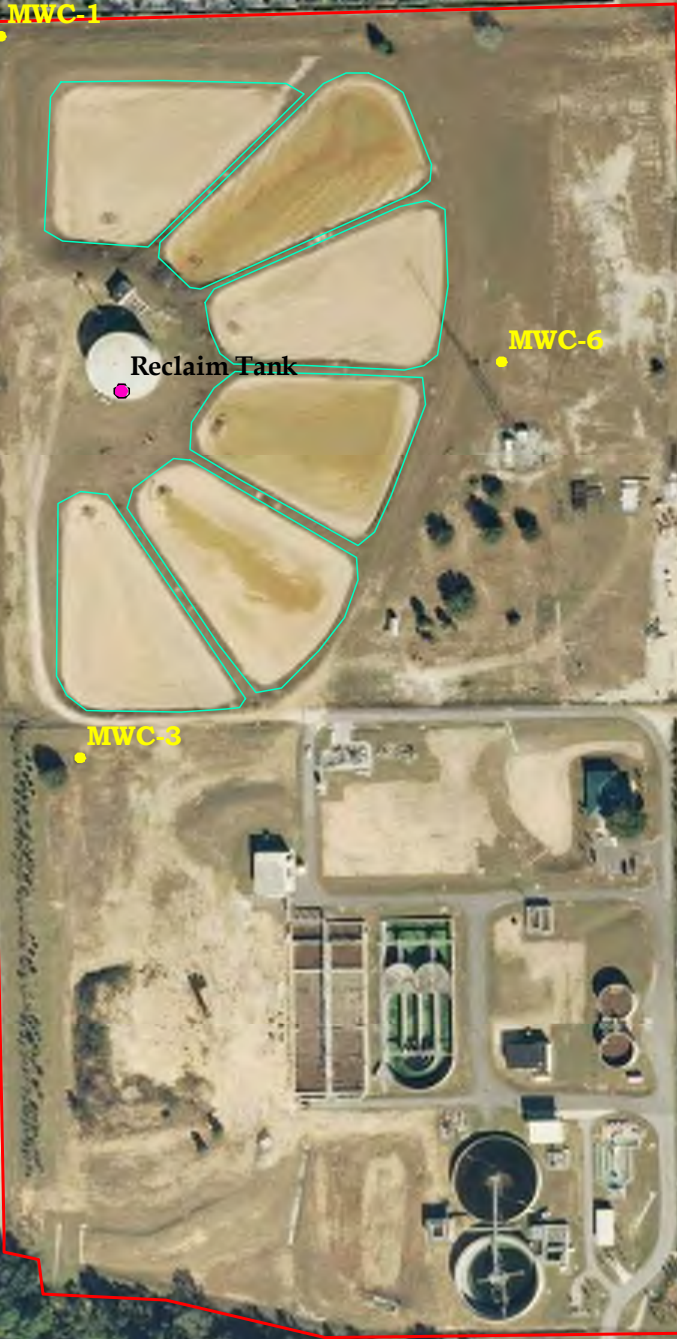
APPENDIX F SUPPLEMENTAL INFORMATION

Site 4 – Sand Hill WWTP

3211 Sand Hill Road

8200 Sand Hill Road

FLA010958 TWA Sandhill WRF



0 195 390 780 Feet

Aerial Imagery FDEP 2005-2009 Map created by SML

Legend

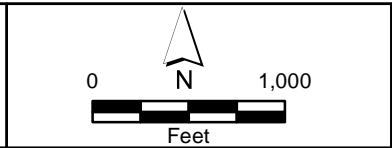
- Monitoring Wells
- Land Application
- Facility Fence



Source: Polk and Osceola County Property Appraiser Parcel Data; ESRI Aerial Imagery

- | | | |
|--|----------------------------------|----------------------------------|
| Mystic Dunes Golf Club Property Boundary | Monitor Well Location | Osceola County Parcel Boundaries |
| Wetted Edge | Existing Wells (To Be Abandoned) | |
| Zone of Discharge | MWC-2 100' setback | |

P:\IER\08466\200-08466-13002\GIS\Maps\BPL_F1_final.mxd
[alex.montalvo 4/23/2013]



Sandhill Road WRF GWMP/Toho Water Authority
Proposed Model Compliance and Background Monitoring Well Sites

FIGURE 1

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	TWA - Sandhill Road WWTF	Monitoring Well ID: MWB-7	New background well @ Slow Rate Public Access Reuse Site
Permit Number:	FLA010958018DW1P	Well Type: Background	Report Frequency: Quarterly
Facility County:	OSCEOLA		Program: Domestic
Office:	CD		

Was the well purged before sampling? Yes

Monitoring Period: From: 10/01/2021 To: 12/31/2021

Sample Date: 12/20/2021 Sample Time: 12:55 PM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	100.05	Report (Maximum)	ft	In Situ	1 Quarterly	DNP	DEP-SOP	DNP	N
Nitrogen, Nitrate, Total (as N)	00620	0.032	Report (Maximum)	mg/L	Grab	1 Quarterly	0.01	EPA353.1	DNP	N
Solids, Total Dissolved (TDS)	70295	27.0	Report (Maximum)	mg/L	Grab	1 Quarterly	2.5	EPA 160.1	DNP	N
Chloride (as Cl)	00940	6.5	Report (Maximum)	mg/L	Grab	1 Quarterly	0.3	EPA 325.2	DNP	N
Coliform, Fecal	74055	1.0	Report (Maximum)	#/100mL	Grab	1 Quarterly	1	SM 9222D	DNP	N
pH	00400	5.6	Report (Maximum)	s.u.	Grab	1 Quarterly	0.1	EPA 150.1	DNP	N
Turbidity	00070	3.9	Report (Maximum)	NTU	Grab	1 Quarterly	0.05	EPA 180.1	DNP	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Tim Burton	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 709-0724	SUBMITTED ON 01/20/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	TWA - Sandhill Road WWTF	Monitoring Well ID: MWC-1	SAND HILL ROAD/MW-1 COMPLIANCE
Permit Number:	FLA010958018DW1P	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	OSCEOLA		Program: Domestic
Office:	CD		

Monitoring Period: From: 10/01/2021 To: 12/31/2021

Was the well purged before sampling? Yes

Sample Date: 12/13/2021 Sample Time: 01:33 PM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	105.88	Report (Maximum)	ft	In Situ	1 Quarterly	DNP	DEP-SOP	GRAB	N
Nitrogen, Nitrate, Total (as N)	00620	3.2	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.01	EPA353.1	GRAB	N
Solids, Total Dissolved (TDS)	70295	342	500.0 (Maximum)	mg/L	Grab	1 Quarterly	2.5	EPA 160.1	GRAB	N
Chloride (as Cl)	00940	76.3	250.0 (Maximum)	mg/L	Grab	1 Quarterly	0.3	EPA 325.2	GRAB	N
Coliform, Fecal	74055	1.0	4.0 (Maximum)	#/100mL	Grab	1 Quarterly	1	SM 9222D	GRAB	N
pH	00400	6.9	6.5-8.5 (Range)	s.u.	Grab	1 Quarterly	0.1	EPA 150.1	GRAB	N
Turbidity	00070	0.25	Report (Maximum)	NTU	Grab	1 Quarterly	0.05	EPA 180.1	GRAB	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Tim Burton	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 709-0724	SUBMITTED ON 01/20/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	TWA - Sandhill Road WWTF	Monitoring Well ID: MWC-3	SAND HILL ROAD/MW-3 COMPLIANCE
Permit Number:	FLA010958018DW1P	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	OSCEOLA		Program: Domestic
Office:	CD		

Monitoring Period: From: 10/01/2021 To: 12/31/2021

Sample Date: 12/13/2021 Sample Time: 12:53 PM

Was the well purged before sampling? Yes

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	106.62	Report (Maximum)	ft	In Situ	1 Quarterly	DNP	DEP-SOP	GRAB	N
Nitrogen, Nitrate, Total (as N)	00620	18.2	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.01	EPA 353.1	GRAB	N
Solids, Total Dissolved (TDS)	70295	448	500.0 (Maximum)	mg/L	Grab	1 Quarterly	2.5	EPA 160.1	GRAB	N
Chloride (as Cl)	00940	62.5	250.0 (Maximum)	mg/L	Grab	1 Quarterly	0.3	EPA 325.2	GRAB	N
Coliform, Fecal	74055	1.0	4.0 (Maximum)	#/100mL	Grab	1 Quarterly	1	SM 9222D	GRAB	N
pH	00400	6.9	6.5-8.5 (Range)	s.u.	Grab	1 Quarterly	0.1	EPA 150.1	GRAB	N
Turbidity	00070	11.0	Report (Maximum)	NTU	Grab	1 Quarterly	0.05	EPA 180.1	GRAB	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Tim Burton	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 709-0724	SUBMITTED ON 01/20/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	TWA - Sandhill Road WWTF	Monitoring Well ID: MWC-6	SAND HILL ROAD/MW-6 COMPLIANCE
Permit Number:	FLA010958018DW1P	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	OSCEOLA		Program: Domestic
Office:	CD		

Monitoring Period: From: 10/01/2021 To: 12/31/2021

Was the well purged before sampling? Yes

Sample Date: 12/13/2021 Sample Time: 02:36 PM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	106.08	Report (Maximum)	ft	In Situ	1 Quarterly	DNP	DEP-SOP	GRAB	N
Nitrogen, Nitrate, Total (as N)	00620	12.5	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.01	EPA 353.1	GRAB	N
Solids, Total Dissolved (TDS)	70295	446	500.0 (Maximum)	mg/L	Grab	1 Quarterly	2.5	EPA 160.1	GRAB	N
Chloride (as Cl)	00940	68.1	250.0 (Maximum)	mg/L	Grab	1 Quarterly	0.3	EPA 325.2	GRAB	N
Coliform, Fecal	74055	1.0	4.0 (Maximum)	#/100mL	Grab	1 Quarterly	1	SM 9222D	GRAB	N
pH	00400	6.7	6.5-8.5 (Range)	s.u.	Grab	1 Quarterly	0.1	EPA 150.1	GRAB	N
Turbidity	00070	22.0	Report (Maximum)	NTU	Grab	1 Quarterly	0.05	EPA 180.1	GRAB	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Tim Burton	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 709-0724	SUBMITTED ON 01/20/2022
--	---	---	---------------------------------	--------------------------------

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	TWA - Sandhill Road WWTF	Monitoring Well ID: MWC-8	New compliance well @ Slow Rate Public Access Reuse Site
Permit Number:	FLA010958018DW1P	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	OSCEOLA		Program: Domestic
Office:	CD		

Was the well purged before sampling? Yes

Monitoring Period: From: 10/01/2021 To: 12/31/2021

Sample Date: 12/13/2021 Sample Time: 03:17 PM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	101.29	Report (Maximum)	ft	In Situ	1 Quarterly	DNP	DEP-SOP	DNP	N
Nitrogen, Nitrate, Total (as N)	00620	13.1	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.01	EPA 353.1	DNP	N
Solids, Total Dissolved (TDS)	70295	269	500.0 (Maximum)	mg/L	Grab	1 Quarterly	2.5	EPA 160.1	DNP	N
Chloride (as Cl)	00940	36.2	250.0 (Maximum)	mg/L	Grab	1 Quarterly	0.3	EPA 325.2	DNP	N
Coliform, Fecal	74055	1.0	4.0 (Maximum)	#/100mL	Grab	1 Quarterly	1	SM 9222D	DNP	N
pH	00400	6.7	6.5-8.5 (Range)	s.u.	Grab	1 Quarterly	0.1	EPA 150.1	DNP	N
Turbidity	00070	50.0	Report (Maximum)	NTU	Grab	1 Quarterly	0.05	EPA 180.1	DNP	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Tim Burton	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 709-0724	SUBMITTED ON 01/20/2022
--	---	---	---------------------------------	--------------------------------

Chris Garth

From: Amber Morgan <AMORGAN@tohowater.com>
Sent: Tuesday, March 29, 2022 11:38 AM
To: Chris Garth
Cc: Environmental
Subject: RE: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

I could easily send you years of the quarterly summary reports submittals. (the lab analysis reports would be harder to dig up). We do not have an annual-type GW report, not much other testing, certainly not GW flow direction.

From: Chris Garth <cgarth@tierraeng.com>
Sent: Tuesday, March 29, 2022 11:14 AM
To: Amber Morgan <AMORGAN@tohowater.com>
Subject: FW: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Also, if there is an annual or semi-annual groundwater monitor report that is more comprehensive in testing & includes maps, groundwater flow, etc...I would like to request it as well.

Thanks,

Chris Garth, LEP

TIERRA, INC.

T 813.989.1354 | F 813.989.1355 | C 813.766.0269

geotechnical environmental materials engineering

From: Chris Garth
Sent: Tuesday, March 29, 2022 11:08 AM
To: Amber Morgan <AMORGAN@tohowater.com>
Subject: RE: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Thanks Amber...would you please also provide a map that depicts the location of each monitor well?

Chris Garth, LEP

TIERRA, INC.

T 813.989.1354 | F 813.989.1355 | C 813.766.0269

geotechnical environmental materials engineering

From: Amber Morgan <AMORGAN@tohowater.com>
Sent: Tuesday, March 29, 2022 10:47 AM
To: Chris Garth <cgarth@tierraeng.com>; TOHO Customer Service <customerservice@tohowater.com>
Cc: Environmental <Environmental@tohowater.com>
Subject: RE: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Mr Garth: see attached for last Sandhill GMMW Reports. Address was changed to 8200 Sandhill Road.

Customer Service: subject request taken care of.

From: Chris Garth <cgarth@tierraeng.com>
Sent: Monday, March 28, 2022 6:22 PM
To: Amber Morgan <AMORGAN@tohowater.com>
Cc: Environmental <Environmental@tohowater.com>
Subject: Re: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Amber, I am thinking both please.

Sent via the Samsung Galaxy S10e, an AT&T 5G Evolution capable smartphone
Get [Outlook for Android](#)

From: Amber Morgan <AMORGAN@tohowater.com>
Sent: Monday, March 28, 2022 5:31:19 PM
To: Chris Garth <cgarth@tierraeng.com>
Cc: Environmental <Environmental@tohowater.com>
Subject: RE: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Mr Garth,
Were you interested in the complete lab analysis report or the summary of the data report submitted to regulators?

From: Amber Morgan
Sent: Monday, March 28, 2022 3:50 PM
To: 'Chris Garth' <cgarth@tierraeng.com>
Cc: Environmental <Environmental@tohowater.com>
Subject: RE: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Thank you for contacting me. Yes you have the right person. I will look up that report for you hopefully in the next couple days.

From: Chris Garth <cgarth@tierraeng.com>
Sent: Monday, March 28, 2022 10:24 AM
To: Amber Morgan <AMORGAN@tohowater.com>
Cc: Environmental <Environmental@tohowater.com>
Subject: FW: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Amber,
I found your name on some documents in some online files & figured I'd give you a try...please see my request below which was directed to Customer Service.
Please call or email if you have questions.
Thanks,
Chris Garth, LEP

TIERRA, INC.
T 813.989.1354 | F 813.989.1355 | C 813.766.0269
[geotechnical](#) [environmental](#) [materials](#) [engineering](#)

From: Chris Garth
Sent: Monday, March 28, 2022 9:53 AM
To: customerservice@tohowater.com
Subject: Groundwater Monitoring Report Request _ Sand Hill WWTP _ Osceola County

Good Morning,

I am performing a contamination evaluation on behalf of the Florida Turnpike Enterprise for a project corridor located adjacent to your Sand Hill WWTP facility. Would you please provide a pdf copy of the most recent groundwater monitoring report for this facility? Or direct me to the proper contact for this request?

I have found multiple names/addresses for this facility...so I'm not sure which address to look for:

Sand Hill WWTP
3211 Sand Hill Road

Kissimmee City-Sand Hill WWTP
8000 Sand Hill Road

KISSIMMEE City- WWTP
300 Sand Hill Road

Please call or email if you have questions.

Thanks,
Chris Garth, LEP
Senior Scientist

TIERRA, INC.

7351 Temple Terrace Highway | Tampa, Florida 33637
T 813.989.1354 | F 813.989.1355 | C 813.766.0269
cgarth@tierraeng.com | www.tierraeng.com
geotechnical environmental materials engineering

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**Site 7 – Oak Island/Central Florida Investment
Oak Island Road (currently Funnie Steed Road)**



Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

April 5, 1993

CERTIFIED

P-712 572 445

Mr. David Siegel
Central Florida Investment, Inc.
5767 Major Boulevard
Orlando, Florida 32819

OCD-SW-93-0155

Osceola County - SW
Oak Island Road Landfill

Dear Mr. Siegel:

This office has made several unsuccessful attempts to contact you by phone. The purpose of this letter is to determine the status of the above referenced site relative to ownership of the property.

As you are aware, this case has been ongoing since 1987 and is still unresolved.

On December 22, 1992, an inspection was conducted at the facility site. During the course of the inspection, it was observed that the access control to the site was inadequate and disposal activities of landclearing debris and other material were being conducted on the property.

You are requested to respond to the Department within ten (10) days of receipt of this letter to schedule a meeting in regard to the final resolution of this case.

Please direct any questions you may have to Ms. Gloria-Jean DePradine of the Solid Waste Section at 407/894-7555 or at the above address.

Sincerely,

A. Alexander, P.E.
District Director

RB
BAX
AA/gdw

LEGAL DESCRIPTION:
SECTION 2, TOWNSHIP 25 SOUTH, RANGE 27 EAST,
WEST 1/2 LYING SOUTH OF OAK ISLAND ROAD



TOTAL 46.57 AC.

HARSHLAND

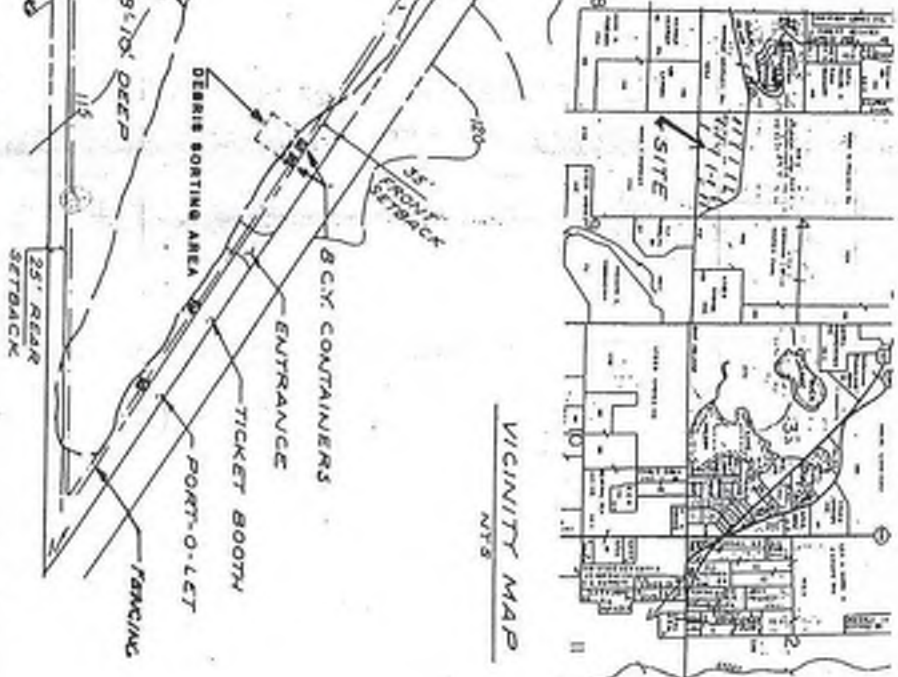


FIGURE 1
SITE PLAN
FOR
PROPOSED FILL SITE

LEGEND
 - - - - - ACTIVE FILL AREA BOUNDARY
 - - - - - PROPERTY LINE
 - - - - - FENCING

PREPARED BY: HAL BARWICK 8-13-87

1/14/87
TJM

Marsh

direction of pumping

proposed fill area

pump 40,000 gal/hour

Water Body

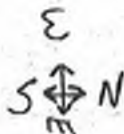
Fill area

Site Entrance

office

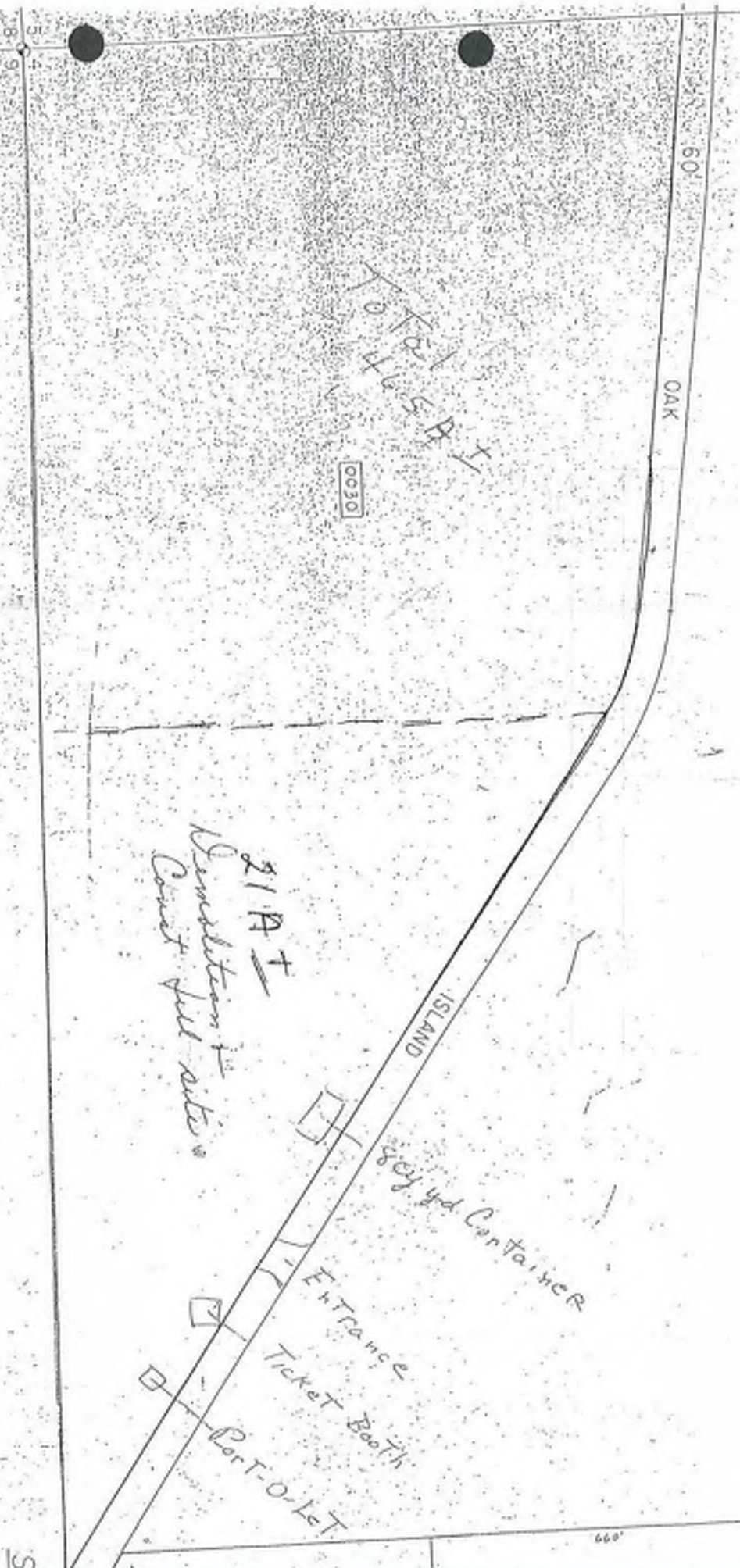
Property boundary

Oak Island Rd.



SUBDIVISION: FLORIDA FRUIT AND TRUCKLAND CO.
LOCATION: NE, SE
PAGE: 8
CODE: 3160

Oil Spill
97-113
1982





POST, BUCKLEY, SCHUH & JERNIGAN, INC.

889 NORTH ORANGE AVENUE
ORLANDO, FLORIDA 32801-1088
305/423-7275

1/11/88
Manita,
upon receipt of Blunk's
of your comments on the
plan, I will set up a
mtg. with Makuck
Siegel (ma) - Paul
JAN 11 1988
CENTRAL FLORIDA
DISTRICT

January 11, 1988

Mr. Paul Morrison, Environmental Specialist
Florida Department of Environmental Regulation
Central Florida District
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767

Dear Mr. Morrison:

read 3 copies. Give me to JBC & BW on 1/11/88 for their review & comments.

Per your telephone conversation with Mr. Biff Craine on January 5, 1988, I am forwarding to you copies of the current management plan for the Makuck Demolition and Construction Fill in Osceola County. Please be advised that the management plan will be revised by January 25, 1988, to reflect conditions imposed by the Osceola County Board of Commissioners on January 4, 1988.

Post, Buckley, Schuh & Jernigan, Inc. is providing on-going solid waste consulting services to Mr. Makuck. Please contact me if you have any technical questions regarding the enclosed management plan or operations at the Makuck Demolition and Construction Fill.

Sincerely,

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

Carolyn L. McCreedy

Carolyn L. McCreedy
Project Engineer

dg/014

22-068.10

Enclosures

cc: w/o Encl. S. Levin, PBS&J
G. McGee, Abbe'Realty
B. Craine, Stearns, Weaver, Miller

JAN 11 1988
ENFORCEMENT

MAKUCH DEMOLITION AND CONSTRUCTION FILL
MANAGEMENT PLAN

Introduction

The Makuch Demolition and Construction Fill site is located on Oak Island Road in Osceola County. The entire property, as shown in the enclosed site plan (Figure 1), encompasses 46.5 acres. All ongoing and future fill activities are and will be confined to the easternmost 16 acres (\pm) of the property, in a borrow area formed from the mining of clay. This active fill area is delineated on Figure 1. Construction fill and demolition debris will be placed in the borrow pit until elevations within this excavated area conform with those of the surrounding property.

This management plan will describe the procedures used to regulate the materials accepted at the Makuch Fill for disposal.

Description of the Site and its Operation

As was previously described, the fill operation at the Makuch Demolition and Construction Fill is confined to the eastern portion of the property as delineated on the site plan. This active fill area occupies approximately 16 acres. The perimeter of the triangular shaped disposal site will be completely fenced along two of its three sides; the southern boundary of the property, and along the property frontage on Oak Island Road. The western property boundary will be partially fenced, since access to the disposal site from the west is

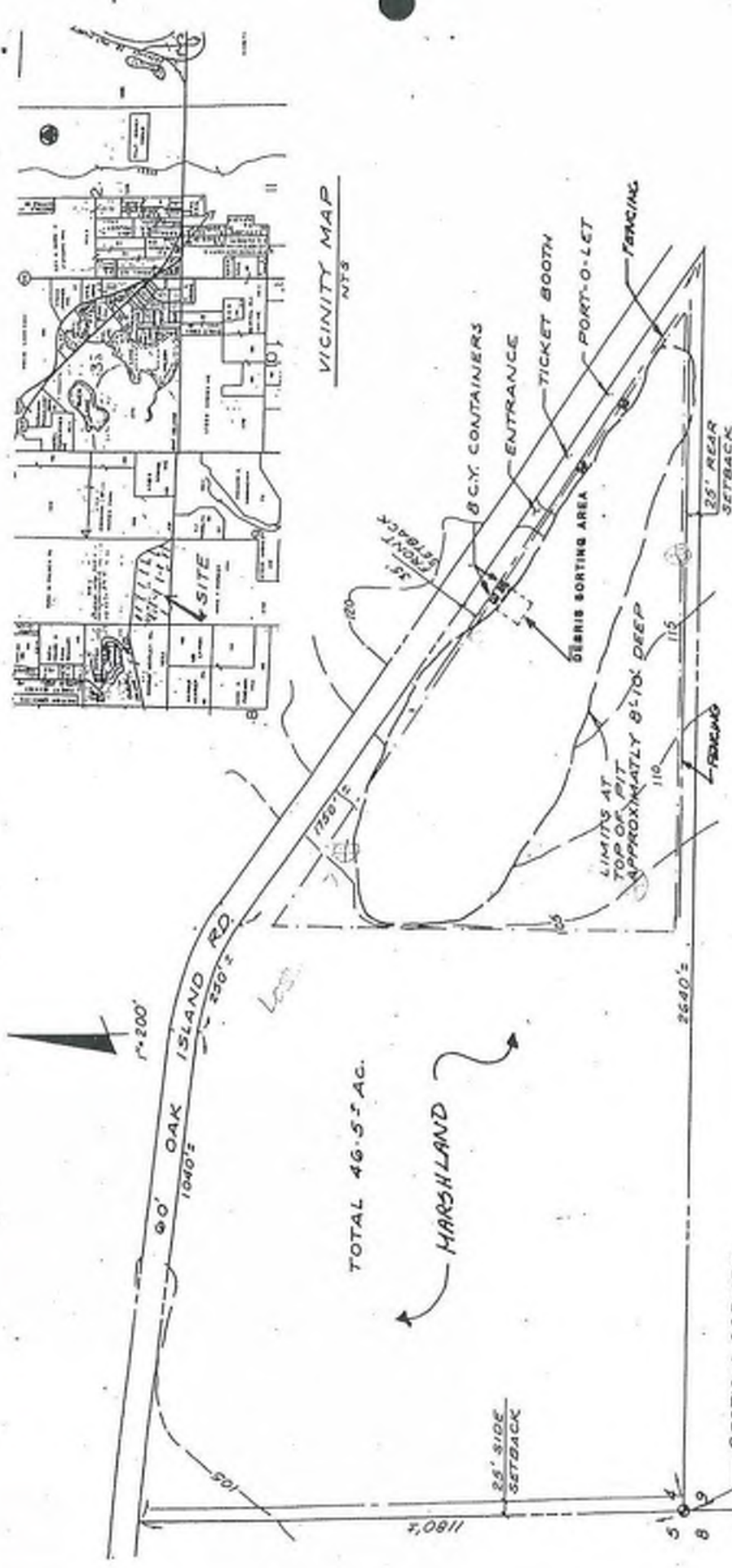


FIGURE 1
 SITE PLAN
 FOR
 PROPOSED FILL SITE

LEGEND
 - - - - - ACTIVE FILL AREA BOUNDARY
 - - - - - PROPERTY LINE
 - - - - - FENCING

LEGAL DESCRIPTION:
 SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST,
 WEST 1/2 LYING SOUTH OF OAK ISLAND ROAD

PREPARED BY: HAL BARWICK 8-13-87

restricted by the naturally-occurring marshland which occupies the western portion of the property. *They are not F.D.R.s*

To control the flow of people and construction/demolition debris onto the disposal site, the site entrance is manned between the hours of 7:00 A.M. and 5:00 P.M., Monday through Saturday. The only vehicles and/or outside personnel allowed on-site during these hours must (1) hold an account with the Makuch Demolition and Construction Fill; or (2) be employees of Osceola County or FDER present at the site for the purpose of its inspection; or (3) be adjacent property owners or their representatives who have entered into an agreement with the Fill operator which allows site inspection privileges. A gate will be installed at the entrance and will be closed and locked when the fill site is unmanned to prohibit unauthorized entry to the site.

During the hours of operation, there are employees on-site who are responsible for receiving waste at the disposal site, assessing the acceptability of the material, segregating nonconforming materials from the waste loads for disposal at an appropriate site, and placing the acceptable wastes within the active fill area.

In order for waste to be accepted, the customer must have an account with the Fill; the site is only open to customers holding active accounts with the Fill. Accounts cannot be opened at the site; they must be opened at the Fill's billing office. As wastes are received at the site, personnel inquire as to the source and nature of the material and determine if the material is construction and demolition debris as defined in 17-7.020 (14) FAC. Trucks ~~suspected~~ of containing materials other than construction/demolition debris are turned away from the site.

Construction and Demolition Debris is defined in Chapter 17-7 F.A.C. as follows:

"Construction and Demolition Debris" means non-hazardous material generally considered not to be water soluble, including but not limited to steel, concrete, glass, brick, asphalt roofing material, or lumber from a construction or demolition project including trees and vegetation from land clearing for a construction project. Contamination of construction and demolition debris with any amount of other types of solid waste will cause it to be classified as other than construction and demolition debris."

A detailed list of materials acceptable from construction and demolition debris sites, as approved by FDER, is provided as Table 1.

Once a truckload of material is accepted it is dumped onto level ground within a sorting area positioned near the fill working face. The dimensions of the sorting area and its offset from the active working face are shown in Figure 2.

Using the heavy equipment located on-site, the debris within the sorting area is spread to an approximate two-foot depth. The heavy equipment used at the site includes two front-end loaders, one bulldozer and one backhoe.

The debris is then inspected for unacceptable materials, which are removed and appropriately handled. The inspection process is repeated several times as the debris pile is rearranged.

TABLE 1

CONSTRUCTION AND DEMOLITION DEBRIS

Steel (including rebar)
Glass
Brick
Stone
Masonry
Grout
Asphalt roofing material
Shingles
Lumber
Land clearing debris (trees, vegetation, soil)
Wallpaper
7 → Carpeting
Empty cans or containers which held non-hazardous construction materials
Packaging for construction materials (includes cardboard, paper, plastics)
Pipe
Concrete
Plaster
Sheetrock
Plumbing parts
Worn electrical parts
Wire

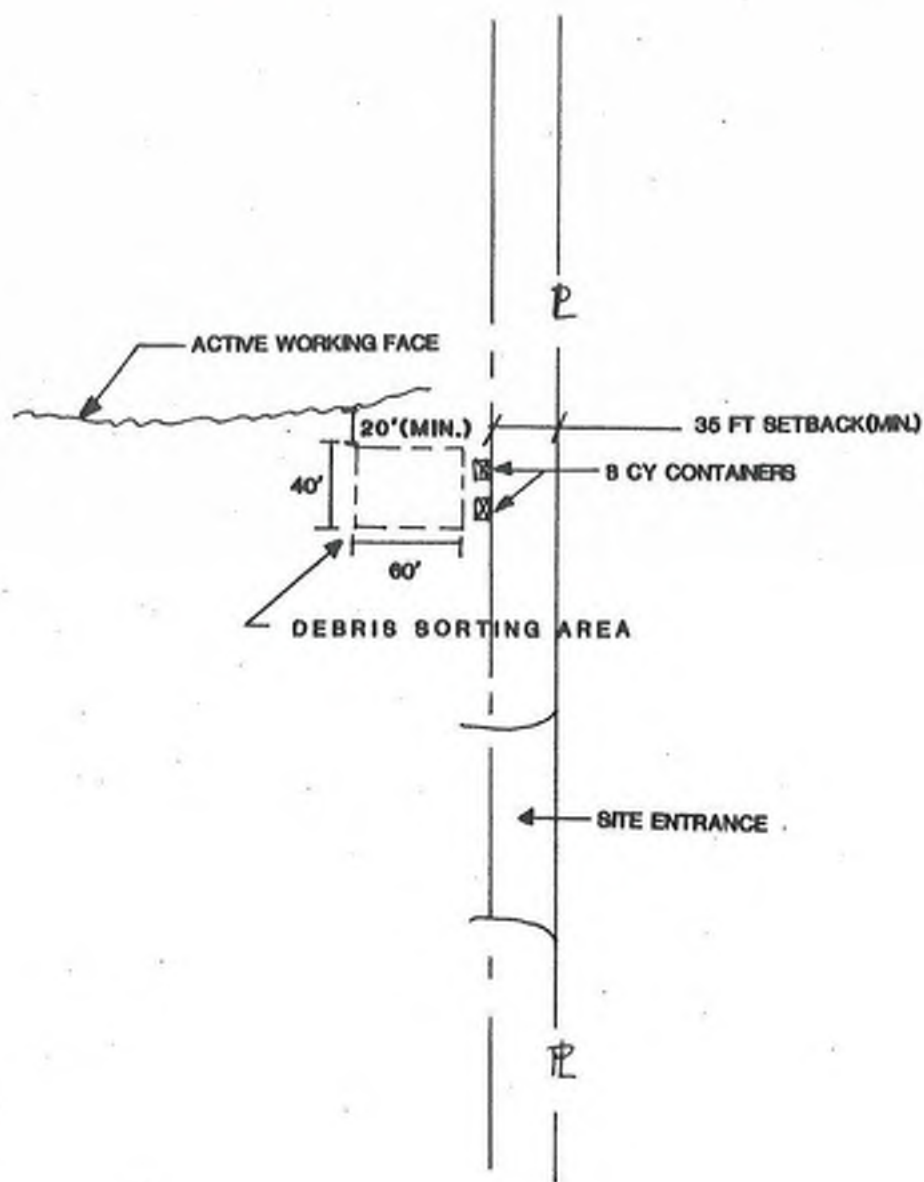


FIGURE 2
WASTE SORTING AREA
SCHEMATIC

Any nonhazardous wastes observed during the inspection which are not considered construction/demolition debris are removed to the eight cubic yard containers stationed at the site. The eight cubic yard containers are collected by front end loaders which provide garbage collection service in the vicinity of the site, and the collected materials are then disposed of at a permitted landfill. Should any hazardous material be inadvertently received at the site, such material will be segregated and the responsible hauler will be contacted and required to remove the material from the site.

At the completion of the above-described visual inspection, the debris is pushed over the edge of the pit onto the active working face. The working face is then inspected from the base of the pit to provide additional inspection for unacceptable materials.

Once a load of debris is accepted at the fill site, a trip ticket, an example of which is attached (Figure 3), is completed as follows. The customer, number of the truck, and job (or debris source) are obtained and entered on the trip ticket. The quantity of debris received is estimated and the charge for disposal is assessed, based on a per cubic yard disposal charge; this information is entered on the trip ticket. At the end of the operating day, all charges are posted to the customer's account. The trip tickets are retained, in case the source and/or quantity of a particular material disposed of at the fill would need to be traced in the future.

In addition to conducting the above-described inspection and placement activities, the personnel at the fill site will periodically inspect and clear the site frontage for litter. The personnel will periodically grade Oak Island Road from the site entrance to its intersection with pavement.

TRIP TICKET

STAN MAKUCH
Demolition and Construction Fill
333 Lind Avenue
Kissimmee FL 32741

846-7535

№ 1983

846-1231

Date _____ 19__

CUSTOMER _____

TRUCK NO. _____ JOB _____

Qty.	Description	Price	Amount
	Construction Clay		
	Fill		
	Clay		
	Trash		
	Sand		
	Muck		

VOID IF NOT SIGNED

DRIVER _____

RECEIVED BY _____

Company not responsible for damage resulting from customers operations on site, or any overloads.

FIGURE 3

I don't know what this is about

Trucks operated by certain customers are also allowed by prearranged agreement to empty their vehicles at the fill site during periods when the site is unmanned. These customers' dispatchers will be provided with the digital code to the lock at the entrance gate. The lock code will be changed periodically. The trucks are required to unload within a designated area away from the working face; heavy equipment is moved into place at the end of the operating day such that access to the working face is blocked. The loads must be emptied in such a manner that the loads are not intermixed. At the beginning of the next operating day, the debris deposited during unmanned hours are inspected using the previously described procedures.

Customers unloading debris during these unmanned periods must record the following information on the log maintained at the on-site ticket booth: date, customer name, truck number, driver name, and size of load deposited. At the beginning of the next operating day, trip tickets are filled out for all entries on the log sheet. These tickets are then signed by the appropriate drivers when they return to the site during normal operating hours.

Planned Site/Operation Improvements

Signage:

Signage will be erected at the site providing the following information:

- Individual responsible for site operation
- Hours of operation

- Restriction of materials disposed of on-site to construction/demolition debris; no household garbage accepted.
- No trespassing (in conformance with Florida Statutes).

Notification of Customers:

A letter will be sent to all customers of the Makuch Demolition and Construction Fill which will address the following items:

- Hours of operation
- Requirement that all loads received on-site must be covered.
- Materials which will be accepted on-site (list of acceptable materials)
- Procedures to be taken if unacceptable materials are discovered in debris received at the site.
- Liability for costs of removal or remedial action attributed to hazardous or inappropriate substances transported to the site.
- Proper procedures for hazardous waste handling (licensed local transporters).
- Procedures for debris dumping during unmanned hours.

Groundwater Monitoring Plan:

A Groundwater Monitoring Plan (GWMP) will be prepared for the site. This plan will consist of the following elements:

- ° Background information
 - Description of fill site (location, site history)
 - USDA/SCS soil types
 - Regional hydrogeology
 - Well and pollution source inventory (within one (1) mile of the site)

- ° Recommended Groundwater Monitoring Plan
 - Site specific hydrogeology (water table contour map, horizontal and vertical permeabilities, soils)
 - Proposed monitoring wells
 - Groundwater monitoring criteria and schedule

Initial groundwater monitoring will be accomplished by one background and one down-gradient monitoring well. The confining layer beneath the shallow aquifer will be located when the monitoring wells are installed. The initial two monitoring wells will then be installed in the upper region of the shallow aquifer. Should contamination be evident through sampling of these shallow wells, the aquifer will be monitored at a deeper

location by an additional background monitoring well and down-gradient well. If the confining layer between the shallow and Floridan aquifer is found to be present at a shallow depth relative to the ground surface, any additional wells will be installed so as to intercept groundwater beneath the confining layer.

It is recommended that all proposed groundwater monitoring wells be initially sampled for EPA priority pollutants and State primary and secondary drinking water parameters. Following the initial analyses of the proposed wells, a modified quarterly sampling schedule is recommended. This modified schedule will test for selected parameters which are considered indicators of groundwater contamination. Yearly water quality analyses are recommended for all wells and should include the indicator parameters as well as selected State primary drinking water standards. Based on review of the quarterly and yearly water quality data, modifications to the monitoring schedule will be made, if necessary.

Plot Plan:

A plot plan will be prepared for the disposal site which will show:

- Fence line
- Limits, depths of excavation
- Undisturbed surrounding property elevations
- Cover material source(s) on-site
- Boundaries of areas to be backfilled with inert materials
- Present location of working face

MEETING DOCUMENTATION

COUNTY: Osceola TYPE: SWCASE NAME: Oak Island Rd. Open DumpDATE OF MEETING: 9/22/87 TIME START AND CONCLUDE: 10:30 AM. 12:00 P.M.ENFORCEMENT PERMITTING OTHER MEETING REQUESTED BY: Biff Craine

ATTACH MEETING ATTENDANCE RECORD (Form EF-1 8/84)

OBJECTIVE(S) OF MEETING:

To discuss the 7/14/87 Warning Notices & a possible
Consent Order.

DISCUSSION:

- The 7/14/87 Warning Notices were discussed. Violations at the site include:
1. ~~Operation~~ of solid waste disposal site without appropriate permit.
 2. Disposal of biodegradable solid waste in water body. ^{Biff Craine, Stan Makuch & David Sigel denied this.}
 3. Open burning at site.

The types of solid waste at site include mattresses, white goods, acrylic lacquer thinner (5 gallon container), some household garbage, tires, paper, construction & demolition debris.

Biff Craine, attorney for Stan Makuch, said they want site to be a site which accepts construction & demolition debris only.

B. Craine stated some of the violations at site occurred prior

(Continued on Second Page - Yes No)
Page 1 of 6

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767
CERTIFIED
P-427-940-495



BOB MARTINEZ
GOVERNOR
DALE TWAGTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

July 14, 1987

David A. Siegel, President
Central Florida Investments, Inc.
5767 Major Boulevard
Orlando, Florida 32819

WARNING NOTICE
OWN-87-0108

Osceola County - SW/AP
Oak Island Road Open Dump
Section 4, Township 25 South, Range 27 East

Dear Mr. Siegel:

Under Chapter 403, Florida Statutes, the Department of Environmental Regulation was delegated the power and duty to control and prohibit pollution of air and water in accordance with the law, rules and regulations promulgated by the department.

You are hereby placed on notice that the department has reason to believe that you are presently operating in violation of Section 403.161, Florida Statutes, and department rules, as noted on the attached sheet(s).

Section 403.161(1) provides that whoever commits a violation of that Section shall be liable to the state for any damage caused and for civil penalties of up to \$10,000 per day during which the violation occurs.

Accordingly, you are hereby advised to respond to the specific violations within 10 days from receipt hereof.

You should direct your response and any questions concerning this Warning Notice to P. Morrison or J. Jarmolowski, Enforcement Section at 305/894-7555 or at the above address.

Sincerely,

Alexander, P. E.
District Manager

AA:gg:jj:ca:pmm

Enclosure

cc: Osceola County Health Department
Dean Turman, Attorney for Stan Makuch
Stan Makuch

Protecting Florida and Your Quality of Life

Violator's Name:

Island Open Dump

REV 11/11 2/1/85

Regulation Violated: 403.087(1), 403.161(8), 403.708(1)(b), 403.708(1)(c), Fla. Stat. 403.708(1)(c), Fla. Stat. 403.708(1)(c) - Operation of a landfill without appropriate Dept. permit & authorization.

The Worksheet should be filled out for all violations. If it is determined that the violation is a Class B violation, fill out only Part I. If it is determined that the violation is a Class A violation, fill out Parts II, III, and IV. Assessments for each violation should be determined on separate worksheets and totaled. If more space is needed, attach separate sheet.

Part I - Class B Determination

1. Rationale for Class B determination: N/A

Part II - Penalty Matrix Assessment

2. Potential for harm: Minor
3. Extent of deviation: Major
4. Matrix cell range: \$ 600 to \$ 1,177
5. Penalty amount chosen: \$ 900
6. Justification for penalty amount chosen: Operating a landfill without the required permit is in substantial noncompliance with the requirements of the law. The majority of the solid waste at this site is construction & demolition debris. However, there are some types of solid waste at this site which must be disposed of in either a Class I or II landfill.

Part III - Adjustments to Penalty Assessment

7. Good faith efforts to comply/lack of good faith: _____
Adjustment Amount

- Justification for adjustment: _____

8. Degree of willfulness and/or negligence: _____ Adjustment Amount

- Justification for adjustment: _____

9. History of non-compliance: 40% = \$360.00 Adjustment Amount

- Justification for adjustment: Complaint investigation on 11/16/87 by DER
representatives revealed solid waste other than construction or demolition debris
(no tires, crumpled paper, shredded paper, water, computer disc packages, cardboard boxes,
plastic bottles, plastic milk jugs) has been disposed of on-site.
This was in direct violation of what had been agreed upon in the 9/24/87 meeting between DER
& respondents.

10. Economic benefit of non-compliance: _____ Adjustment Amount

17. Justification for adjustment: _____

11. Ability to pay: _____ Adjustment Amount

- Justification for adjustment: _____

12. Other unique factors: _____ Adjustment Amount

- Justification for adjustment: _____

13. Total adjustments (lines 7 through 12): \$360.00

Chris Garth

From: noreply@salesforce.com <noreply@salesforce.com> **On Behalf Of** Susan Stephens
Sent: Thursday, March 24, 2022 10:05 AM
To: Chris Garth <cgarth@tierraeng.com>
Cc: Zoey.Carr@FloridaDEP.gov; Pamela.Ammon@dep.state.fl.us
Subject: No records found matching provided criteria [ref: _00DG0i115._5004w2MQDtg:ref]

Good morning Mr. Garth,

This email relates to your request for (Oak Island/Central Florida Investment
Oak Island Road (currently Funnie Steed Road) (2 mi. w SR 545)

SLDWST_LF 25553

- Would you please provide a pdf of the most recent closure/assessment document for this site? On OCULUS, I found nothing more recent than the single document historical file dated July 7, 1987 (includes files 1987 to 4/5/1993).
- Has an SRCO/NFA been issued? Or is assessment on-going? Or other?
- Is this a lined or unlined landfill?).

The Florida Department of Environmental Protection would like to inform you that no records were found matching the provided criteria.

Please be advised that name variations, misspellings and incorrect addresses may not indicate the existence of actual files, and the Department will not be responsible for records not retrieved based on such information being submitted to us. Although we have made a diligent search to fulfill your request, files may still exist in other agencies of which we are not the records custodian that may contain information related to your request. Therefore, please reach out to the respective county as applicable.

Osceola County - <http://www.osceola.org/>

If you have any questions, please feel free to contact us.

Thank you for contacting DEP. Have a great day!

Susan Stephens

Did you know you can access many public records from your personal computer using our free public online resources? The Florida Department of Environmental Protection has several public online databases where records are stored: OCULUS, DEP Information Portal and Map Direct.

Please look below for more information on each database. For your future records needs, you might try checking out one of these databases before submitting a request.

- OCULUS
 - You can search for records in OCULUS using a facility-site ID, facility address, or facility name.
 - You can open OCULUS [here](#).
 - If you need help maneuvering OCULUS, please use this helpful guide: [OCULUS Instruction](#).
- DEP Information Portal
 - You can search for records in the DEP Information Portal using a facility-site ID, facility address, or facility name.
 - You can open the DEP Information Portal [here](#).
 - If you need help maneuvering the DEP Information Portal, please use this helpful guide: [DEP Portal Instruction](#).
- Map Direct
 - You can search for records using Map Direct using a facility address.
 - You can open Map Direct [here](#).
 - If you need help maneuvering Map Direct, please use this helpful guide: [Map Direct Instruction](#).

In accordance with Chapter 119, Florida Statutes, public records requests will be processed within a reasonable time, and each request is processed in the order that it was received. Depending on the specific request, there may be a fee* assessed for processing.

***Notice of Fees and Charges:** Although many public records are provided at no cost there may be charges for extensive use of staff time and resources (119.07(04) F.S.). Extensive use is defined as more than 30 minutes of staff and/or computer

resource time. There may also be charges for paper copies, CD/DVDs, postage and other expenses. When possible we will provide you with an estimate of any costs in advance. Note that when charges are accrued records may not be released until payment has been made in full. For more information on public records please visit our web page at: www.dep.state.fl.us/secretary/ps/default.htm.

Please note: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure.



Public Records Request Liaison
Florida Department of Environmental Protection
Division of Water Resource Management
PublicRecordsRequests_Regulatory@dep.state.fl.us
Office: 850.245.8362 & 850.245.8391



ref: _00DG0i115._5004w2MQDtg:ref

www.dep.state.fl.us

Site 15 – Fischer-Parcel 3

Site 16 – Fischer-Parcel A

Fac. ID 9101929

Hartzog Road (currently intersection of SR 429/Western Way)



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 5, 1995

Mr. Mike Morrow, P.G.
Walt Disney World
P.O. Box 10,000
Lake Buena Vista, FL 32830-1000

Re: Walt Disney World
Fischer Property Parcel 3
Hartzog Road
Orange County, FL
D.E.P. Facility I.D. #489101929

Dear Mr. Morrow:

The Bureau of Waste Cleanup, on September 22, 1995, reviewed the Contamination Assessment Report (CAR) Addendum and No Further Action Proposal (NFAP) dated July 28, 1995, received August 1, 1995, submitted for this site. Documentation submitted with the NFAP confirms that criteria set forth in Rule 62-770.630(3), Florida Administrative Code (FAC), have been met. The NFAP is hereby incorporated by reference in this Order. Therefore, you are released from any further obligation to conduct site rehabilitation at the site, except as set forth below.

If a subsequent discharge of petroleum or petroleum product occurs at the site, the Department may require site rehabilitation in order to reduce contaminant concentrations to the levels approved through review of the NFAP or otherwise allowed by Chapter 62-770, FAC.

Additionally, you are required to properly abandon all monitoring wells except compliance wells required by Chapter 62-761, FAC, for release detection and you should abandon the out of use potable well located on site. The wells must be abandoned in accordance with the requirements of Rule 62-532.500(4), FAC.

Persons whose substantial interests are affected by this Site Rehabilitation Completion Order have the right to challenge the Department's decision. Such a challenge may include filing a petition for an administrative determination (hearing) as described in the following paragraphs. However, pursuant to Chapter 62-103, FAC, you may request an extension of time to file the Petition. All requests for extensions of time or petitions

Mike Morrow
October 5, 1995
Page 2

for administrative determinations must be filed directly with the Department's Office of General Counsel at the address given below within twenty-one (21) days of receipt of this notice (do not send them to the Bureau of Waste Cleanup).

Notwithstanding the above, a person whose substantial interests are affected by this Site Rehabilitation Completion Order may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (FS). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within twenty-one (21) days of receipt of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, FS.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the Department file number (DER facility number), and the name and address of the facility;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by each petitioner, if any;
- (e) A statement of facts which each petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action.

This Site Rehabilitation Completion Order is final and effective on the date of receipt of this Order unless a petition (or time extension) is filed in accordance with the preceding paragraphs. Upon the timely filing of a petition, this Order will not be effective until further order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, FS, by filing of a Notice of Appeal pursuant to Rule 9.110,

Mike Morrow
October 5, 1995
Page 3

Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the Clerk of the Department.

The DEP Facility Number for this site is #489101929. Please use this identification on all future correspondence with the Department.

Any questions you may have on the technical aspects of this Site Rehabilitation Completion Order should be directed to Maria Dotson at (407) 836-7400. Contact with the above-named person does not constitute a petition for administrative determination.

Sincerely,



John M. Ruddell, Director
Division of Waste Management

JMR/MHHD:lb

cc: Erik D. Swanson; FDEP Bureau of Waste Cleanup
Orange County EPD
Jose Garrido; BB&L, Orlando

REPORT

INITIAL REMEDIAL ACTIONS REPORT

489/0/929

Walt Disney World Co.
Fisher Parcel 3 Site
Orange County, Florida

REPORT

FISCHER PARCEL 3
INITIAL REMEDIAL ACTION (IRA) REPORT

FDER FACILITY ID NO. 489101929

PREPARED FOR:

WALT DISNEY WORLD CO.
P.O. BOX 10,000
LAKE BUENA VISTA, FLORIDA

PREPARED BY:

BLASLAND, BOUCK & LEE
ENGINEERS AND GEOSCIENTISTS
5050 HAZELTINE NATIONAL DRIVE
SUITE 140
ORLANDO, FLORIDA 32822

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SECTION 1

PETROLEUM CONTAMINATION
INITIAL REMEDIAL ACTION REPORT FORM

An Initial Remedial Action report, summarizing the initial remedial action (IRA), should be prepared to satisfy the requirements of Chapters 17-770.630(1)14; 17-773.500(1)(a)4; and 17-773.500(2)(a)4, Florida Administrative Code, (FAC). This form may be used for the IRA report. The report should be sent to the appropriate local program and:

Florida Department of Environmental Regulation
Bureau of Waste Cleanup
Engineering Support Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400

I. FACILITY NAME: Fischer Property Parcel "3"
Facility Address: Hartzog Road, Orange County, Florida
DER Facility Number (if applicable): 489101929
Date IRA Initiated: 8/91 Date IRA Completed: 5/16/92

II. FREE PRODUCT RECOVERY

- A. Type(s) of Product Discharged: Diesel
- B. Quantity
1. Estimated Gallons Lost: Unknown (attributed to historic use and operations.
 2. Gallons Recovered: 100 through 5/14/92 (date)
 3. Attach Exhibit Indicating Amount of Product Recovered, Dates and Cumulative Totals.
- C. Attach a Scaled Site Plan, Indicating the Locations and Product Thickness in Wells, Boreholes, Excavations, or Utility Conduits and Wells Utilized for Recovery of Free Product. See Figure 1-1.
- D. Method of Product Recovery: Oil skimmer used to collect product from water table surface during soil excavation.
- E. Type of Discharge During Product Recovery: Non-waste water collected with oil waste was recycled by Central Florida Fuels, Inc.

F. Type of Treatment, i.e., Oil/Water Separator: None

G. Attach Written Proof of Proper Disposal of Recovered Product: See burn certificates, Appendix C

III. SOIL EXCAVATION

NOTE: Soil shall be defined as excessively contaminated using the procedure stated in Chapter 17-770.200(2), FAC. Representative soil sampling shall be performed as close to the time of excavation as possible, but at no time shall exceed three (3) months prior to the start of excavation. Stockpiled soils greater than thirty (30) days on site waiting for treatment and disposal, must be re-sampled immediately prior to disposal to assure soils are still excessively contaminated.

If soil sampling data indicates that the amount of soil that is excessively contaminated exceeds 1500 cubic yards, treatment of all excessively contaminated soil at the site shall be addressed in a remedial action plan, and no soil IRA activities shall be performed except for the removal of soils in the immediate vicinity of the tanks.

Only soil above the ambient water table at the time of excavation can be considered as excessively contaminated soil.

Unless the established weight per unit volume of 1.4 tons/cubic yard (as referenced in FAC Rule 17-775) is used for the excavated soil, the weight per unit volume must be determined by a field test (in which an accurately measured volume of soil is weighed) at the time of excavation.

A. Volume of Contaminated Soil Excavated in Cubic Yards:
6147 cubic yds . Dimensions Including Depth of Excavation(s):
2 ft x 13,560 sq ft + 4 ft x 5,760 sq ft + 8.3 ft x 13,953 sq ft

NOTE: Attach written proof from the Department in the form of an Alternate Procedure Approval Order authorizing excavating over 1500 cubic yards if applicable. Authorization must be prior to the excavation of soils. (See end of Section I)

B. Type(s) of Product in Soil: Diesel

- C. Depth (ft) to Ambient Groundwater at the Time of Excavation(s): 8.3 feet
- D. Did Dewatering (i.e. groundwater depression) Occur at Time of Excavation?: No
- E. Type of Instrument and Method Used to Determine Excessive Soil Contamination: Photoionization Detector, Flame Ionization Detector, and laboratory analysis of soil samples for TRPH (total recoverable petroleum hydrocarbons)
- F. Attach a table that compares the OVA-FID readings taken with charcoal filter verses readings without filter. Include vertical depths for each sample.
- G. Using the OVA procedure for defining excessively contaminated soil as referenced in Rule 17-770.200(2), FAC, include a scaled site plan with the information listed below: Figure 3-1
1. Location of excavation, old tank farm, dispensers, and product lines, present tank farm, and all soil samples. The corresponding OVA-FID readings for each soil sample (with charcoal filter and without) and its depth must be given.
 2. Sampling Procedure is as follows:

Start sampling in a location where it is suspected that excessively contaminated soil exists. Sample from the first soil boring outward in a grid pattern, at five (5) to ten (10) foot intervals, until the perimeter of the excessively contaminated soil plume is defined. Vertical sampling should be performed starting approximately at the initial area of contamination and continued at three (3) foot intervals, or fraction thereof, until a depth approximately one (1) foot above the water table is reached.
- H. Copies of Laboratory Analyses for Pre Treatment Soil Samples as Required in Chapter 17-775.410(3), Table II, FAC Must be Attached.
- I. Were Tanks Replaced at this Site?: No. Four tanks removed prior to IRA.

IV. SOIL TREATMENT AND DISPOSAL

A. Method of Treatment of Excessively Contaminated Soil: Incineration by state-approved facilities (Soil Treatment Services Inc., Kissimmee, and C.A. Meyer, Clermont)

B. For Off Site Treatment and Disposal at Permitted STTF, Land Farms, or Landfills Attach Documentation From the Treatment Facility Which Confirms the Weight or Volume of Soil Treated and Date Received. (See Appendix C)

For Other Treatment and Disposal Methods (i.e. On-Site Land Farming, Bioremediation), Attach Post Treatment Laboratory Analyses for Each 250-300 Cubic Yards of Treated Soil in Accordance With Chapter 17-775.400 and the "Guidelines for Assessment and Remediation of Petroleum Contaminated Soils", Edition February 1991 or Most Current Revision.

For Mobile Thermal Treatment Units, Attach Laboratory Analysis per Chapter 17-775(5), FAC.

C. Method of Disposal of Contaminated Soil and Indicate Recipient and Address: Same as A.

V. ADDITIONAL COMMENTS: _____

Robert H. Penn
Person Completing Form

Walt Disney World Co.
Director, Environmental Affairs
Title, Affiliation

Signature, Date

Orange



County

Environmental Protection Department
J. M. Bateman, P.E., Manager *JMB*
2002 East Michigan Street
Orlando, Florida 32806-4999
Telephone (407) 836-7400

April 16, 1992

Mr. Mark Miller
Blasland, Bouck & Lee
5950 Hazeltine National Drive, Sta. 140
Orlando, Florida 32822

Re: Fischer Properties
Hartzog Road
Walt Disney World
Orange County, Florida

Dear Mr. Miller:

The Orange County Environmental Protection Department has received your letters requesting the removal of greater than 1,500 cubic yards of petroleum contaminated soil from each of the Fischer properties, pursuant to Chapter 17-770, Florida Administrative Code (FAC).

The Department has no objection to the removal of 2,990 cubic yards and 7,417 cubic yards from the two referenced properties. However it should be noted that the Florida Department of Environmental Regulation has indicated that they will not reimburse any volume of soils in excess of 1,500 yards, and it is limited to excessively contaminated soils pursuant to Section 17-770.300 FAC, which that must be documented and manifested for proper disposal.

Any questions concerning this matter should be directed to myself at (407)836-7400 or Charles Ziegmont at (904)487-3299.

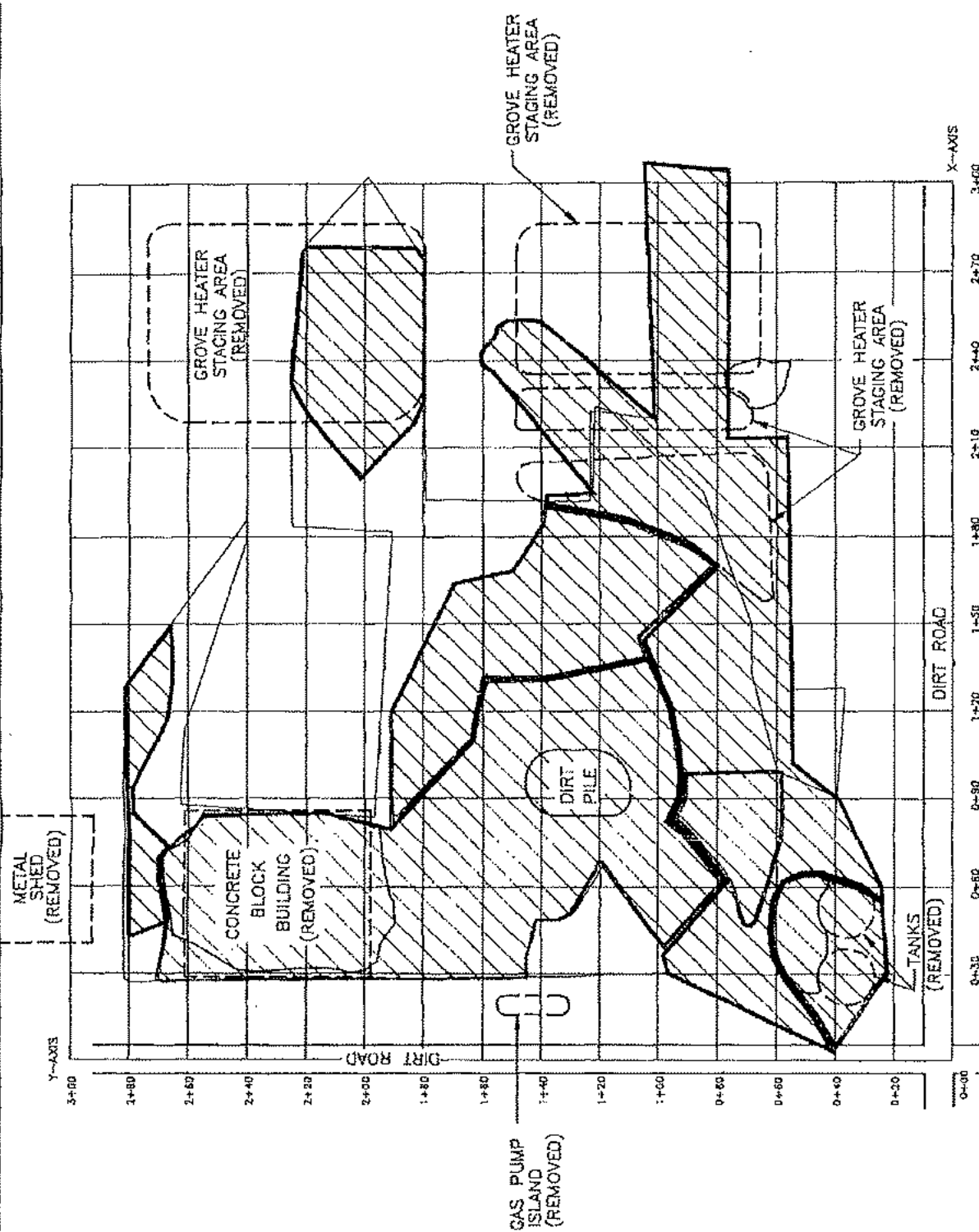
Sincerely,

A handwritten signature in cursive script that reads "John A. Benge".

John A. Benge
Technical Review Engineer

JAB/NS:1b

cc: Jeff Kosik, Walt Disney World Co.
Charles J. Ziegmont, FDER Bureau of Waste Cleanup



Scale: 1" = 40'

LEGEND

- 0'-2' CUT (13,560 SQ. FT.)
- 0'-4' CUT (5,760 SQ. FT.)
- 0'-8.3' CUT (13,953 SQ. FT.)

SCHER PARCEL 3 IRA REPORT
SUMMARY MAP

Project No.: B28.17
 Date: OCT. 1993
 Drawn By: JHD
 Checked By: MWM
 Approved By: STC

WALT DISNEY WORLD
 BLASLAND, BOUCK &
 ENGINEERS & SCIENTIST

SOURCE: BBAI, 1993

SECTION 2 - INTRODUCTION AND SITE BACKGROUND

Blasland, Bouck & Lee (BB&L) prepared this Initial Remedial Action (IRA) Report to satisfy the requirements of Chapter 17-770; Chapter 17-773.500(1)(a)4; and Chapter 17-773.500(2)(a)4 of the Florida Administrative Code (FAC). The site is identified as Fischer Parcel 3 and is located on Hartzog Road, Orange County, Florida (see Figure 2-1).

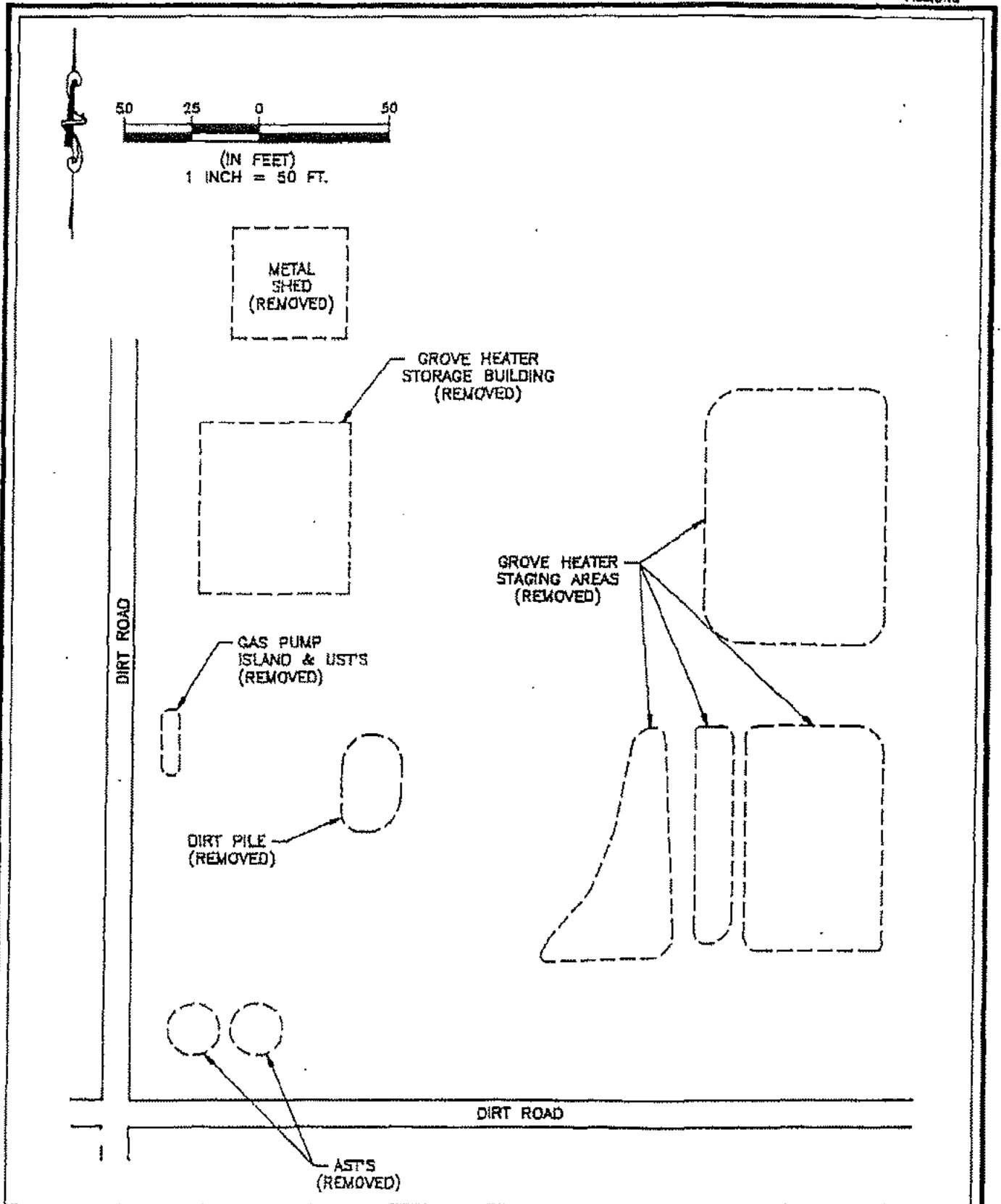
2.1 Site History

On May 24, 1991, The Walt Disney Company purchased the 40-acre subject property from Fischer & Howard Corporation. Parcel 3 and other land in the immediate vicinity were used by the previous owner for growing citrus, including activities related to agricultural equipment maintenance and storage of grove heaters (smudge pots) and bulk storage of petroleum products.

Contamination resulting from these operations was discovered during environmental assessments conducted as part of, but prior to the conclusion of, the real estate transaction. The Florida Department of Environmental Protection (FDEP), Central District, was notified of contamination on May 4, 1990, by submission of a Discharge Notification Form from the previous owner.

As a result of these environmental assessments, contamination was identified (Figure 2-2) in the vicinity of:

1. A concrete block building used for storage of farm/grove equipment and materials. This building was removed from the site by Walt Disney World Co. prior to the IRA.



FISCHER PARCEL 3 IRA REPORT

SITE MAP

FIGURE 2-2

Project No: 62B.17

Date: AUG. 1993

Drawn By: JRA/JHD

Checked By: DCW

Approved By: STC

WALT DISNEY WORLD CO.

BLASLAND, BOUCK & LEE

ENGINEERS & SCIENTISTS

2. Numerous grove heaters, which were fueled by diesel oil and used by the former owner periodically to protect citrus trees from damage in cold weather. The grove heaters were removed from the site by the previous owner.
3. A pile of visually-stained soil (soil stockpile, approximately 100 tons) that had been excavated from around the concrete building by the previous owner. The soil was removed during the IRA implemented by Walt Disney World Co.
4. Two 20,000-gallon aboveground storage tanks (ASTs) used to store diesel fuel. These ASTs were removed by the previous owner.

An application for eligibility under the Abandoned Tank Restoration Program was made by the previous owner, and notice of eligibility for reimbursement of cleanup costs associated with the two ASTs was received on April 16, 1992.

2.2 Scope of IRA Activities

IRA activities were initiated at the site in August 1991 and concluded in May 1992. The IRA was performed to remove potential sources of groundwater contamination and to remove contaminated soils which may restrict future site usage.

Site assessment and IRA activities were completed at areas of the property identified by previous investigations as having the greatest potential for petroleum contamination, and areas where visual evidence of contamination was apparent. Soil headspace sampling was performed to define the extent of "excessively contaminated" and "contaminated" soils, as defined in Chapter 17-770 of the FAC, and to provide an estimated volume of soils to be removed during

the IRA for competitive bidding purposes. Sampling and laboratory analysis for Total Recoverable Petroleum Hydrocarbons (TRPH) was performed prior to the IRA. This was performed in order to establish background concentrations and provide a site rehabilitation goal for soils other than those which were determined to be "excessively contaminated." Confirmation samples were then collected in the areas of "contaminated" soils and analyzed for TRPH to identify soils with levels above the established TRPH background concentration.

Based on the results of the investigation, and an evaluation of short-term and long-term potential future property use, site-specific cleanup goals for soils were determined. The site-specific criteria were as follows:

1. Removal and treatment of soils with a headspace reading, as measured with a photolization detector (PID), greater than 35 ppm ("excessively contaminated").
2. For soils with a PID headspace reading between 10 and 35 ppm ("contaminated"), removal and treatment of soils with a TRPH concentration above the background concentration established for the site.

The IRA proceeded by removing "excessively contaminated" soils and "contaminated" soils which exceeded the background TRPH concentration. Samples were collected during removal activities and analyzed for TRPH to verify that site rehabilitation goals had been met. Soil treatment included thermal incineration at a state-approved facilities. Additionally, free product, which was present on the water table, and groundwater collected incidentally to free product recovery, were collected from the excavation for proper disposal.

In general, all work performed at the site followed guidelines outlines in Chapter 17-770 FAC and other related chapters of the FAC, except for procedures and methodology specially developed for this site by agreement of properties present and former owner. Sampling was conducted in accordance with Blasland, Bouck & Lee's FDEP-approved Comprehensive Quality Assurance Plan (CompQAP) No. 880552G, approved on May 22, 1990.

This IRA report presents a discussion of activities performed during the soil assessment and removal operations. A summary of pertinent events and IRA activities is provided in Table 2-1.

TABLE 2-1

FISCHER PARCEL 3
SUMMARY OF EVENTS

Date	Activity
6/90	PSI Level I Environmental Survey.
8/90	PSI Level II Environmental Assessment.
9/4/90	Discharge Notification Forms submitted to FDER Central District.
3/91	Blasland, Bouck & Lee preliminary assessment.
5/24/91	The Walt Disney World Company purchased the property from the Fischer and Howard Corp. Escrow fund established for cleanup of the site.
8/5/91	Headspace assessment performed to delineate "excessively contaminated" and "contaminated" soils. 94 soil samples collected from 1 to 1.5 feet BLS were screened using a PID.
8/7/91	Depth to water measurements collected from 8 piezometers to construct a groundwater flow map.
8/12/91	Ten soil samples are collected and analyzed by a state-certified laboratory by EPA Method 9073 to determine the levels of Total Recoverable Petroleum Hydrocarbons (TRPH) in soils at the site.
9/27/91	One soil sample is collected and sent for laboratory analysis to determine a preliminary background level of TRPH in soils at the site.
10/18/91	Depth to water measurements collected from 8 piezometers to construct a groundwater flow map.
1/21/92	20 headspace samples collected from 5 feet BLS were analyzed using a PID.
2/7/92	Three pre-burn samples are collected for laboratory analysis for TRPH (EPA Method 9073), and RCRA Metals (silver, arsenic, barium, cadmium, chromium, mercury, lead, selenium).
3/19/92	The three locations sampled on 2/7 are resampled and analyzed for Purgeable Aromatics (EPA Method 8020) and Total Organic Halogen (EPA Method 450.1) to complete the pre-burn analyses for these three locations. Eight additional pre-burn samples are collected and analyzed for TRPH, RCRA Metals, Purgeable Aromatics, and Total Organic Halogen.
4/13/92	Five soil samples are collected to obtain average background concentrations and sent for laboratory analysis for TRPH.
4/16/92	Orange County Environmental Protection Department issues approval to remove greater than 1,500 cubic yards of petroleum-contaminated soil. Abandoned Tank Restoration Program application approved by FDER.
5/4/92	Remedial Contractor mobilizes on site.
Table continued next page.	

Date	Activity
5/4-16/92	Initial Remedial Action (IRA) is implemented to remove 8,433 tons of petroleum-contaminated soil and 100 gallons of free product, including 2,025 gallons of associated wastewater. Prior to excavation, 18 soil samples are collected and analyzed by a state-certified laboratory for TRPH to confirm contamination. 91 soil samples are collected during and after excavation to verify the of boundaries of removal activities.
6/19-6/22/92	Installation and development of monitor wells MW1-MW6.
7/6/92	Ground-water samples collected from wells MW1-MW6 and analyzed by EPA Methods 601, 602, 610, 504.1, 239.2, and 418.1.
3/19/93	Ground-water samples collected from wells MW3, MW4, and MW5, and analyzed by EPA Methods 602 and 610.

Source: Blasland, Bouck & Lee, 1993.

SECTION 3 - INITIAL HEADSPACE ASSESSMENT

Soil headspace sampling was performed at the site to provide an estimate of the volume of soils to be removed during the IRA for competitive bidding purposes and to delineate the initial area of soil excavation.

The initial headspace investigation was limited to areas of obvious visual contamination, areas delineated by stressed vegetation, and areas where contamination might be expected due to known past operations discussed in Section 2.1.

A 20-foot (north-south) by 30-foot (east-west) sampling grid was surveyed at the site and referenced to the property corners. The origin of the Parcel 3 grid is in the southwest corner of the site, with the x-axis along the southern boundary and the y-axis along the western boundary of the area of investigation. Grid points were marked with 1-inch by 4-foot wooden stakes and 2-inch by 2-inch wooden hubs. After establishment of the sampling grid, initial soil headspace assessment was conducted on two separate occasions prior to soil excavation activities.

Samples were collected with a stainless-steel hand auger, placed in 16-ounce glass jars, covered by a sheet of aluminum foil, and securely capped. Within approximately five minutes of acquisition, soil samples were analyzed in the field for total organic vapor content using a Photovac Microtip™ MP-100 photoionization detector (PID). Headspace analysis of each soil sample for its volatile organic vapor content was performed by inserting the PID probe through the aluminum foil and recording the instrument reading. The PID was equipped with a 10.6 eV lamp and calibrated to 100 ppm isobutylene span gas according to the manufacturer's recommended procedures.

A PID instrument reading of 35 ppm or greater was used to determine the limits of "excessively contaminated" soil, and readings between 10 ppm and 35

ppm were used to delineate "contaminated" soil. Corresponding readings using a Foxboro 128GC flame-ionization detector (FID) are 50 ppm or greater for "excessively contaminated" soil, and between 10 ppm and 50 ppm for "contaminated" soil contaminated by diesel products. Information regarding the correlation between FID and PID instrument readings is contained in Appendix A.

The first round of headspace sampling was conducted from August 5 through August 7, 1991, when soil samples were collected at the grid nodes where petroleum contamination was suspected based on the presence of stained soils or stressed vegetation. At each location, one sample was collected from approximately 1.5 feet BLS and analyzed with the PID according to the procedures described above. The results are provided in Table 3-1. Figure 3-1 depicts the horizontal extent of soils which exhibited PID headspace readings greater than 35 ppm ("excessively contaminated" soil), and soils which produced PID headspace readings between 10 ppm and 35 ppm ("contaminated" soil). Depth to groundwater on these dates was approximately 2 feet below land surface (BLS) as determined by hand auger borings.

Soil headspace sampling was performed again on January 21, 1992, at 20 source area locations within the area sampled in August 1991 (Table 3-2). The purpose of this sampling was to refine the estimated volume of soils to be removed, based on lower water table conditions, so that competitive pricing could be obtained for removal activities. The water table on this date was approximately 6 feet BLS, and samples were collected from a depth of approximately 5 feet BLS.

At the time of this second headspace sampling event, the vertical extent of "excessively contaminated" soils was approximately 6 feet at the locations of the grove heater storage building, ASTs, and soil stockpile, and approximately 2 feet in the grove heater staging areas (Figure 3-2). Based on the horizontal

TABLE 3-1

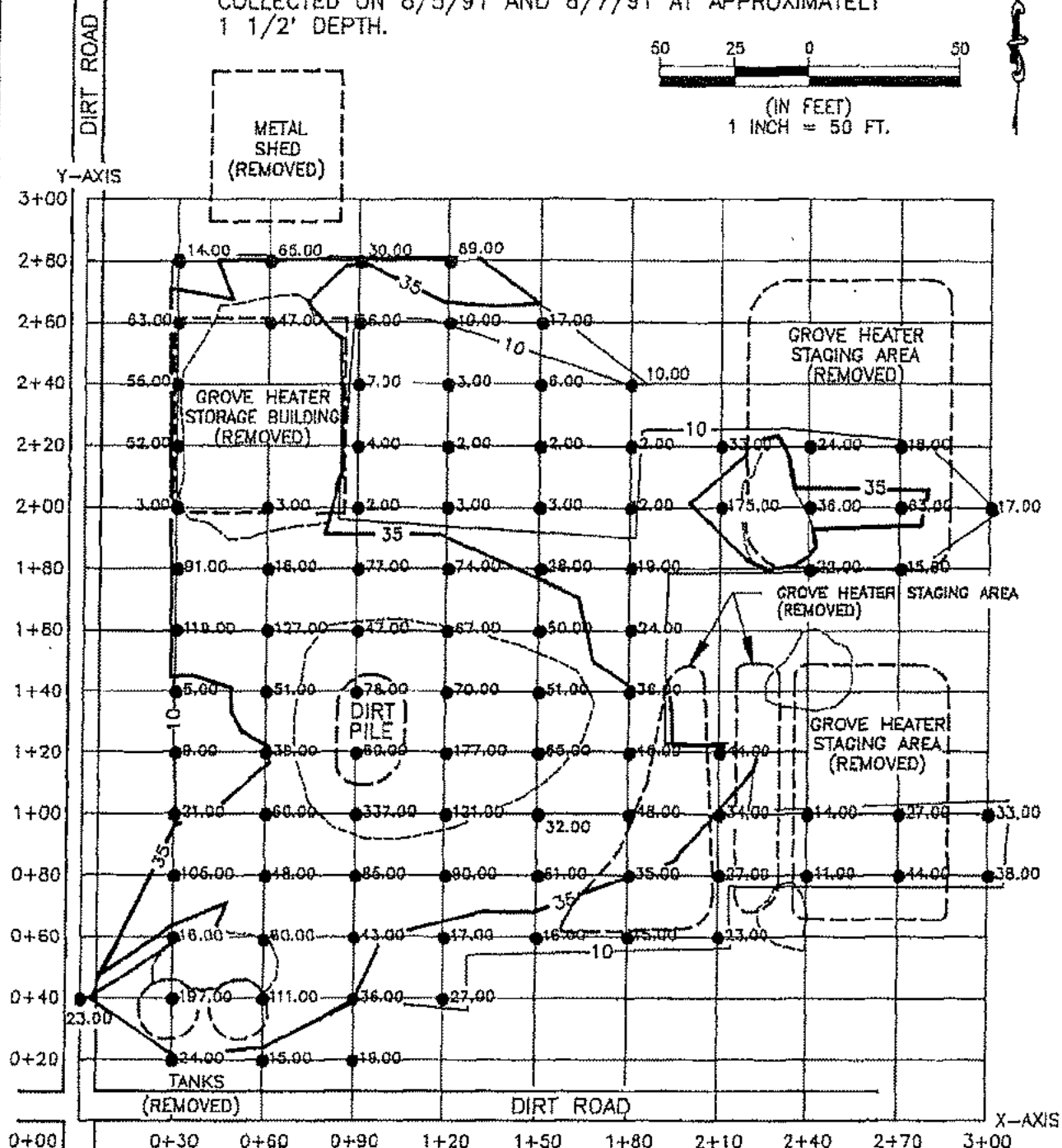
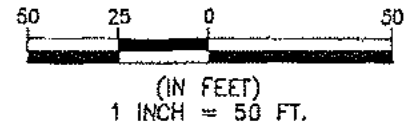
FISCHER PARCEL 3
SOIL HEADSPACE ASSESSMENT SUMMARY
AUGUST 5-7, 1991

COORDINATE LOCATION (x,y)	PID-READING (ppm)
30,180	91
60,180	16
90,180	77
120,180	74
150,180	28
180,180	19
30,200	3
60,200	3
90,200	2
120,200	3
150,200	3
180,200	2
30,220	52
90,220	4
120,220	2
150,220	2
180,220	2
30,240	55
90,240	7
120,240	3
150,240	6
180,240	10
30,260	63
60,260	47
90,260	6
120,260	10
150,260	17
30,280	14
60,280	65
90,280	30
120,280	89
30,160	119
60,160	127
90,160	47
120,160	67
150,160	50
180,160	24
30,140	5
60,140	61
90,140	78
120,140	70
150,140	51
180,140	36
30,120	9
60,120	39
90,120	60
120,120	177

COORDINATE LOCATION (x,y)	PID-READING (ppm)
150,120	65
180,120	46
30,100	21
60,100	60
90,100	337
120,100	121
150,100	32
180,100	48
30,80	105
60,80	48
90,80	65
120,80	90
150,80	61
180,80	35
30,60	16
60,60	60
90,60	43
120,60	17
150,60	18
180,60	15
0,40	23
30,40	197
60,40	111
90,40	36
120,40	27
30,20	24
60,20	15
90,20	19
210,120	44
210,100	34
210,80	27
210,60	23
240,100	14
240,80	11
270,100	27
270,80	44
300,100	33
300,80	38
210,200	175
210,220	33
240,180	22
240,200	36
240,220	24
270,180	15
270,200	63
270,220	18
300,200	17

Source: Biasland, Bouck & Lee, 1993.

NOTE: SOIL SAMPLES FOR HEADSPACE ANALYSIS WERE COLLECTED ON 8/5/91 AND 8/7/91 AT APPROXIMATELY 1 1/2' DEPTH.



LEGEND

- 15.00 SOIL HEADSPACE SAMPLE PID CONCENTRATION (PPM)
- 10— PID HEADSPACE CONCENTRATION CONTOUR - 10 PPM
- 35— PID HEADSPACE CONCENTRATION CONTOUR - 35 PPM
- - - - STAINED SOIL.

FISCHER PARCEL 3 IRA REPORT (8/7/91)
 SOIL HEADSPACE ASSESSMENT SUMMARY
 FIGURE 3-1

SOURCE: BB&L, 1993

Project No. : 628.17
 Date : OCT. 1993
 Drawn By : JRA/JHD
 Checked By : MWM
 Approved By : STC

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 ENGINEERS & SCIENTISTS

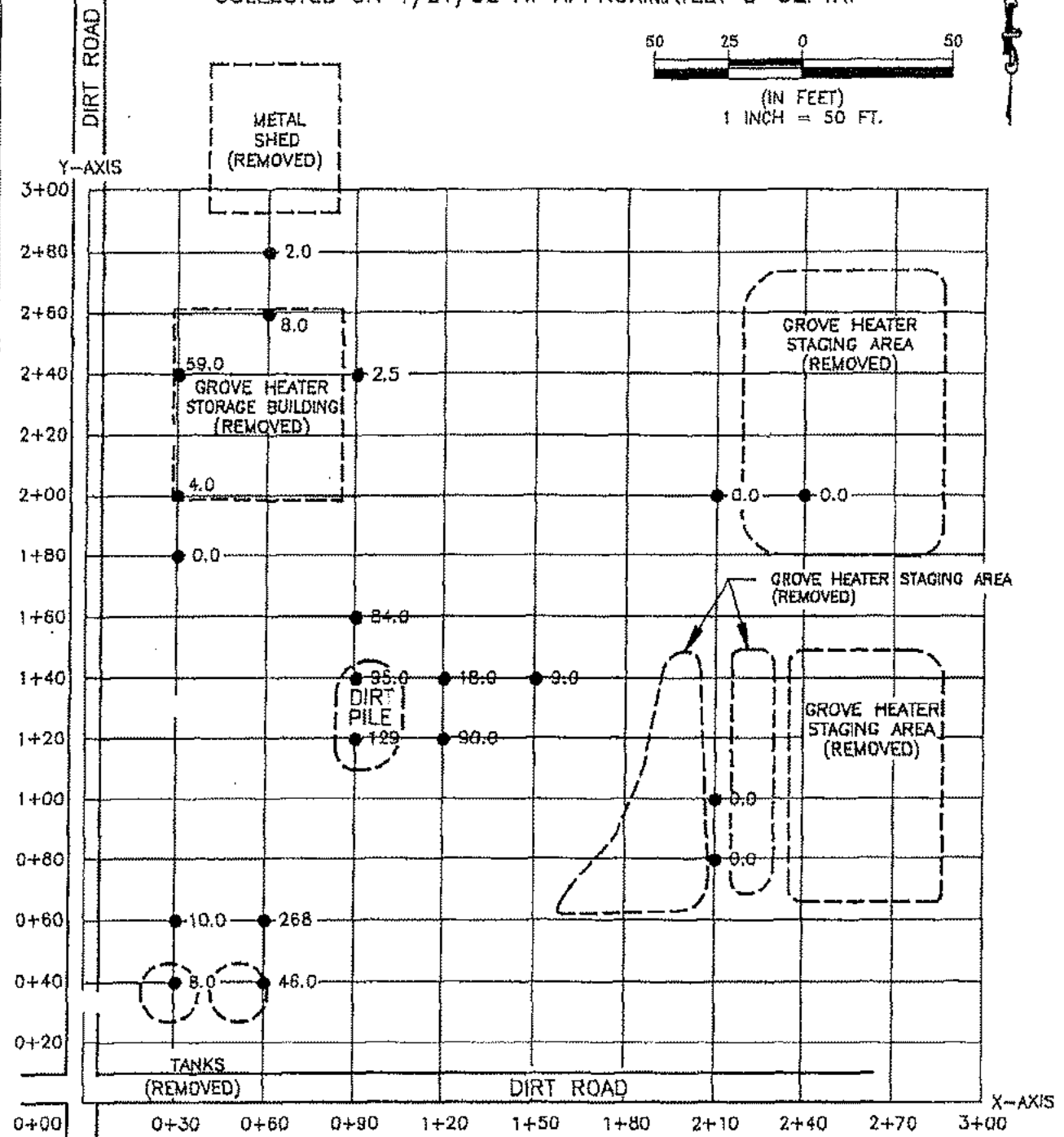
TABLE 3-2

FISCHER PARCEL 3
SOIL HEADSPACE ASSESSMENT SUMMARY
JANUARY 21, 1992

COORDINATE LOCATION (x,y)	PID READING (ppm)
30,40	8.0
60,40	46.0
60,60	268
30,60	10.0
210,80	0.0
210,100	0.0
210,200	0.0
240,200	0.0
90,160	84.0
90,140	95.0
90,120	129
120,120	90.0
120,140	18.0
150,140	9.0
30,180	0.0
30,200	4.0
30,240	59.0
60,260	8.0
60,280	2.0
90,240	2.5

Source: Blasland, Bouck & Lee, 1993.

NOTE: SOIL HEADSPACE ANALYSIS WERE COLLECTED ON 1/21/92 AT APPROXIMATELY 5' DEPTH.



LEGEND

● 18.0 SOIL HEADSPACE SAMPLE PID CONCENTRATION (ppm)

FISCHER PARCEL 3 IRA REPORT (1/21/92)

SOIL HEADSPACE ASSESSMENT SUMMARY
FIGURE 3-2

SOURCE: BB&L, 1993

Project No. : 628.17
Date : OCT. 1993
Drawn By : JRA/JHD
Checked By : MWM
Approved By : STC

WALT DISNEY WORLD CO.
BLASLAND, BOUCK & LEE ENGINEERS & SCIENTISTS

"excessively contaminated" and "contaminated" soils was estimated to be 4,639 cubic yards (6,495 tons) and 3,056 cubic yards (4,280 tons), respectively. This volume estimation was based on a conversion factor of 1.4 tons per cubic yard.

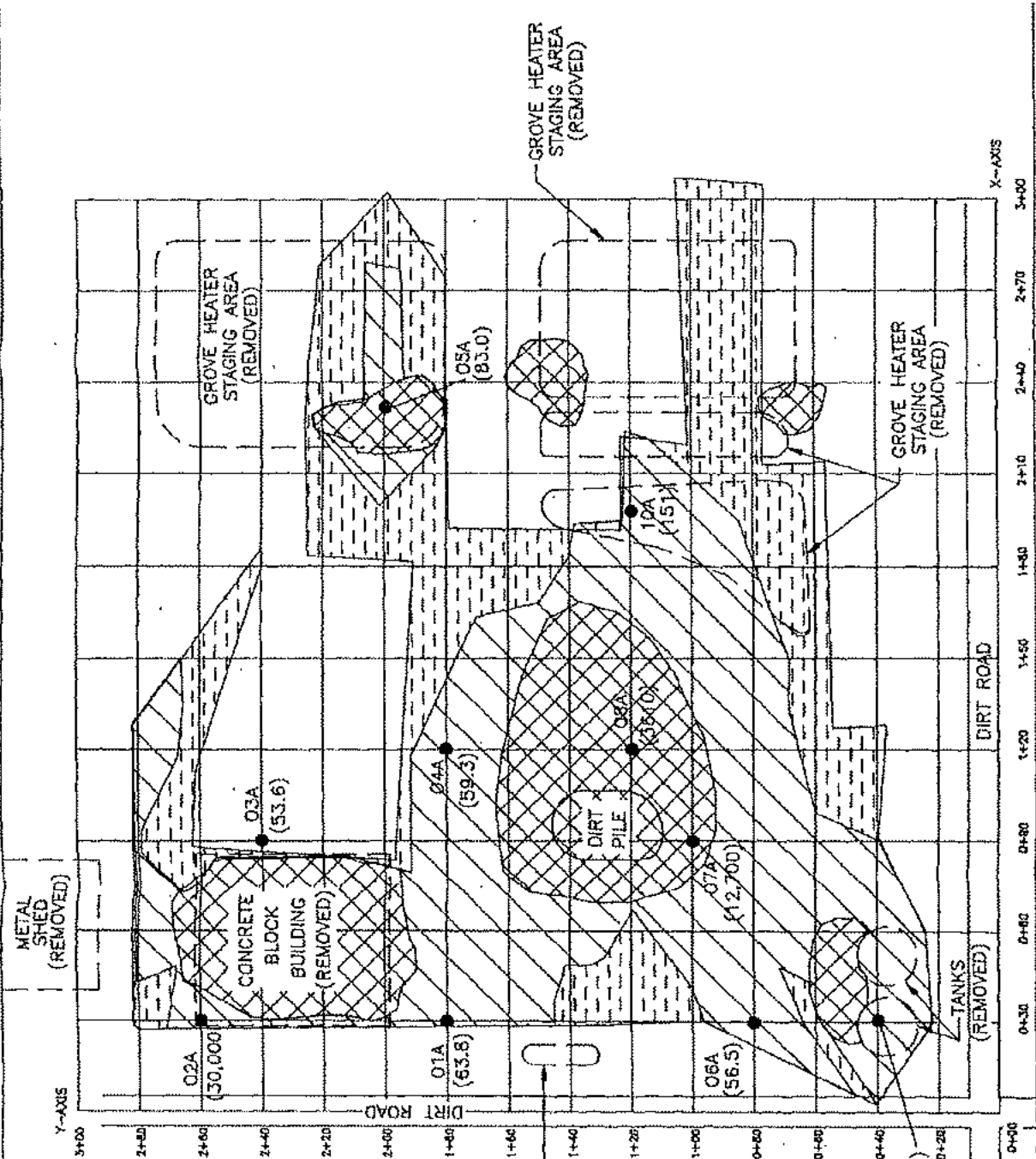
SECTION 4 - TRPH ASSESSMENT

At approximately 10 percent of the locations sampled during the headspace assessment, soil samples were collected and analyzed at a laboratory for Total Recoverable Petroleum Hydrocarbons (TRPH) by EPA Method 9073. TRPH sampling was performed to supplement the prior soil headspace sampling data.

Ten samples were collected on August 12, 1992, from a depth of 1.0 foot to 1.5 feet BLS using a pre-cleaned, stainless-steel hand auger. The hand auger was decontaminated in the field prior to each boring. The samples were placed in laboratory-prepared containers and stored on ice for shipment to a state-certified laboratory, where they were analyzed by EPA Method 9073 (TRPH).




Sampling locations and analytical results are provided on Figure 4-1. The laboratory results are summarized in Table 4-1. The complete laboratory report is included in Appendix B. Sampling results indicated TRPH values which exceeded the state clean-soil criteria (Chapter 17-775, FAC) at all sampling locations. TRPH concentrations ranged from 53.6 milligrams per kilogram (mg/kg) to 30,000 mg/kg, as compared to the clean-soil standard of 50 mg/kg.

In general, trends in contamination levels, as determined by PID data collected during the initial headspace assessment, were confirmed by the TRPH sampling results. Although no direct correlation typically exists between TRPH and PID soil analysis methods, TRPH and PID values of similar magnitude were present in approximately 90 percent of the samples collected during the TRPH assessment. That is, the highest values of both methods occurred in the vicinity of petroleum source locations, and lower values occurred near the perimeter of the study area.



Scale: 1" = 40'

LEGEND

-  APPROXIMATE LIMITS OF VISUALLY STAINED SOILS
-  LIMITS OF PID HEADSPACE READINGS ≥ 35 ppm
-  LIMITS OF PID HEADSPACE READINGS ≥ 10 ppm
- O1A LABORATORY SAMPLE NUMBER (OL#)
- TRPH SAMPLING LOCATION - 1.0 TO 1.5 FEET BLS
- (56.5) TRPH CONCENTRATION (mg/kg)

Project No. : 628.17	
Date : OCT. 1993	
Drawn By : JHD	Checked By : MMW
Approved By : STC	

WALT DISNEY WORLD
 BLASLAND, BOUCK &
 ENGINEERS & SCIENTIST

CHER PARCEL 3 IRA REPORT
 PLING MAP -- 8/12/91

TABLE 4-1

FISCHER PARCEL 3
 TRPH CONFIRMATION SUMMARY
 AUGUST 12, 1991

LAB NUMBER (OIL NUMBER)	SAMPLE ID.	LOCATION (x,y) (FIGURE 4-1)	TRPH (mg/kg)
01A	0, 30 - 3	30, 180	63.8
02A	+80, 30 - 3	30, 260	30,000
03A	+60, 90 - 3	90, 240	53.6
04A	0, 120 - 3	120, 180	59.3
05A	+20, 230 - 3	230, 200	83
06A	-100, 30 - 3	30, 80	56.5
07A	-80, 90 - 3	90, 100	12700
08A	-60, 120 - 3	120, 120	3610
09A	-140, 30 - 3	30, 40	6230
10A	-60, 200 - 3	200, 120	151

TRPH - Total Recoverable Petroleum Hydrocarbons
 mg/kg - milligrams per kilograms

Source: Blasland, Bouck & Lee, 1993.

SECTION 5 - TRPH BACKGROUND SAMPLING AND LABORATORY ANALYSIS

A site-specific cleanup goal was determined for the site based on short-term and long-term potential future property use. The site-specific criteria were as follows:

1. Removal and treatment of soils with a PID headspace reading greater than 35 ppm ("excessively contaminated").
2. For soils with a PID headspace reading between 10 and 35 ppm ("contaminated"), removal and treatment of soils with a TRPH concentration above the site-established background concentration.

Composite soil samples were collected on September 27, 1991, and April 13, 1992, for laboratory TRPH analysis to establish background TRPH concentrations at the site. The samples were collected from areas which appeared visually unimpacted by petroleum contamination, but within the immediate vicinity of (no more than 600 feet from) contaminated zones.

Six samples were collected with a stainless-steel hand auger from depths of 1.0 foot to 1.5 feet BLS. The hand auger was decontaminated in the field prior to each boring. The samples were placed in laboratory-prepared containers and stored on ice for shipment to a state-certified laboratory, where they were analyzed by EPA Method 9073 (TRPH). Sampling locations and analytical results are provided on Figure 5-1. Laboratory results are summarized in Table 5-1. The complete laboratory report is furnished in Appendix B.

TABLE 5-1

FISCHER PARCEL 3
 TRPH BACKGROUND CONCENTRATIONS
 SEPTEMBER 27, 1991, and APRIL 13, 1992

LAB NUMBER (OIL NUMBER)	SAMPLE ID	TRPH (mg/kg)
01A	3 - BG1	53.2
02A	3 - BG2	47.9
03A	3 - BG3	53.7
04A	3 - BG4	54.1
05A	3 - BG5	63.9
01A	SB - BG3	66.1

TRPH - total recoverable petroleum hydrocarbons
 mg/kg - milligrams per kilograms

Source: Blasland, Bouck & Lee, 1993.

Sampling results indicated detectable TRPH concentrations, even in samples collected from areas which visually appeared unimpacted by petroleum constituents. TRPH concentrations in the samples ranged from 47.9 mg/kg to 66.1 mg/kg as compared to the state clean-soil standard of 50 mg/kg. Based on the range of concentrations, an arbitrary background TRPH concentration of 65 mg/Kg was selected as the soil cleanup goal for "contaminated" soil. The value 65 mg/Kg was selected because it was the average value at the Fischer Parcel A property and was the higher of the two sites.

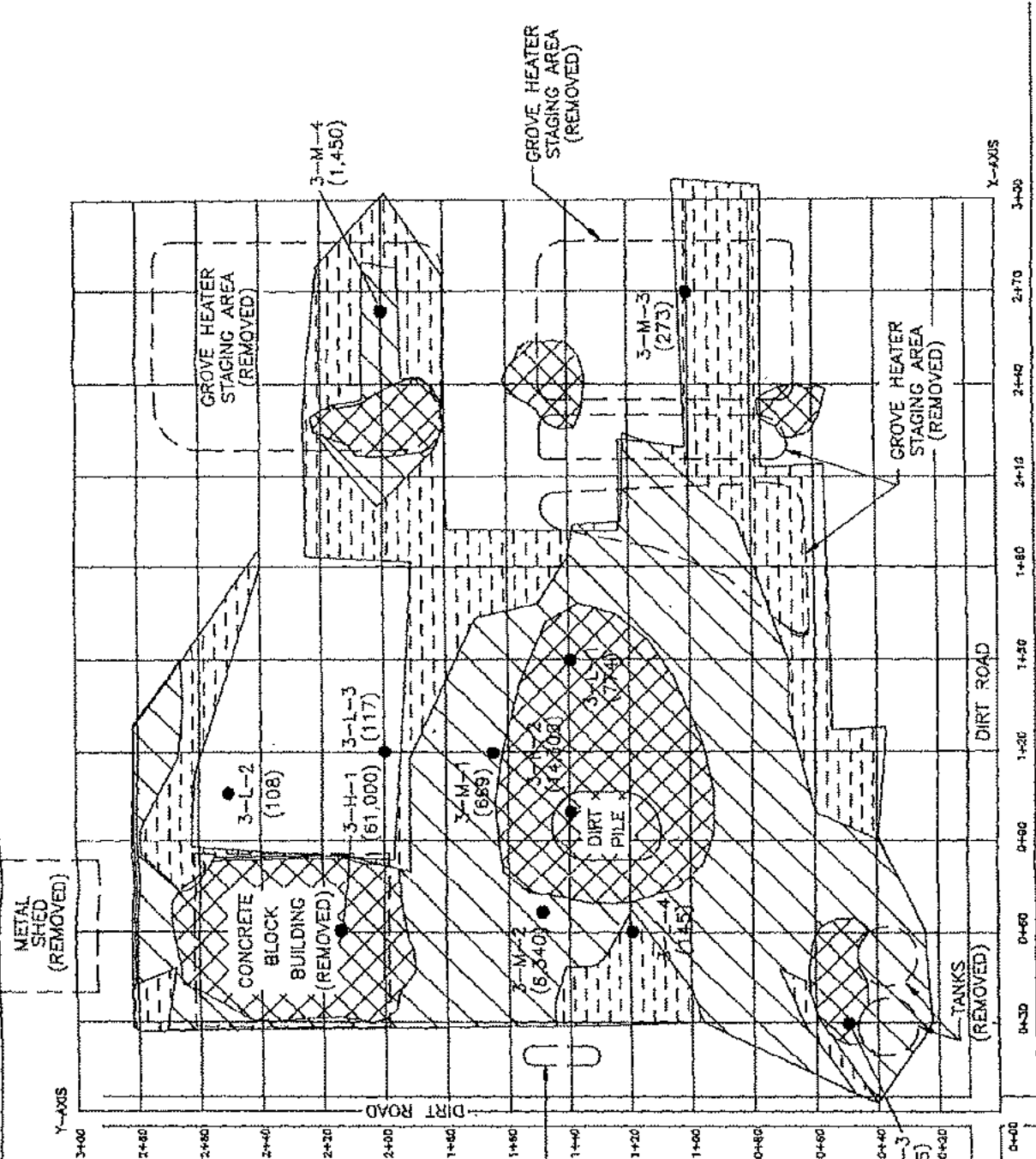
SECTION 6 - PRE-BURN SAMPLING AND LABORATORY ANALYSIS

Pre-burn sampling was conducted at the site as required by Chapter 17-775.300(10), FAC, and in accordance with BB&L's CompQAP and FDEP's *Quality Assurance Standard Operating Procedures Manual Soil Sampling for Soil Thermal Treatment Facilities*.

Eleven composite soil samples were collected at the site for laboratory pre-burn analysis prior to soil excavation. At each pre-burn sampling location, soils were collected with a stainless-steel hand auger and composited from samples collected at depths of 1.5 feet BLS, 3.5 feet BLS, and 5.5 feet BLS. The hand auger was decontaminated in the field prior to each boring. The samples were placed in laboratory-prepared containers and stored on ice for shipment to a state-certified laboratory, where they were analyzed by EPA Method 9073 (TRPH), EPA Method 8020 (Purgeable Aromatics), EPA Method 450.1 (Total Organic Halogens), and by various EPA methods for RCRA Metals (silver, arsenic, barium, cadmium, chromium, mercury, lead, and selenium).

Samples were collected in areas of varying levels of contamination to provide a representative cross-section of soils which would be sent to the thermal treatment facility. Pre-burn sampling locations are shown on Figure 6-1. Pre-burn analytical results are summarized in Table 6-1, and the complete laboratory report is contained Appendix B.




TRPH pre-burn sampling results are also shown on Figure 6-1. As indicated by these results, TRPH concentrations generally confirm trends in contamination levels determined by previous PID readings collected during the initial headspace assessment. Again, although no direct correlation exists between these two analysis methods, the highest values of both analysis methods occurred in the vicinity of petroleum source locations, and lower values occurred near the perimeter of the study area.



Scale: 1" = 40'

NOTE: SAMPLE LOCATION INDICATES CENTER OF COMPOSITE AREA. SAMPLES COMPOSITED AT EACH LOCATION FROM DEPTHS OF 1.5, 3.5, AND 5.5 FEET BLS.

LEGEND

-  APPROXIMATE LIMITS OF VISUALLY STAINED SOILS
-  LIMITS OF PID HEADSPACE READINGS ≥ 35 ppm
-  LIMITS OF PID HEADSPACE READINGS ≥ 10 ppm
- 3-H-3 SAMPLE NUMBER
- PRE-BURN ANALYSIS SAMPLE LOCATION
- (117) TRPH CONCENTRATION (mg/kg)

CHER PARCEL 3 IRA REPORT
 BURN SAMPLE LOCATION MAP WITH TRPH ANALYTICAL RESULTS - 2/7/92 AND 3/19/92

Project No. : 62E.17	WALT DISNEY WORLD
Date : OCT. 1993	BLASLAND, BOUCK &
Drawn By : JHD	ENGINEERS & SCIENTISTS
Checked By : MWM	
Approved By : STC	

SOURCE: 8884L 1993

SECTION 10 - SUMMARY

Between August 1991 and May 1992, IRA activities were implemented at Fischer Parcel 3 to excavate, treat, and dispose of soils which served as a potential source of ground-water contamination, i.e. "excessively contaminated" soils as defined by Chapter 17-770, FAC. In addition, remediation goals included the removal of contaminated soils which, if left in place, may restrict future site usage; (1) produced PID headspace readings between 10 and 35 ppm, and (2) exhibited TRPH concentrations above a background concentration of 65 mg/kg. Based on these actions and the results of sampling conducted during the course of the project, the following statements can be made:

1. The presence of contaminated soils relating to the areas of contamination identified in the transactional environmental assessments was confirmed during the IRA Investigation.
2. The extent of contaminated soils was defined during the IRA investigation, and, in general, contamination was more extensive in the vicinity of the grove heater storage building, the soil stockpile, and the former aboveground storage tanks than in other areas of the site.
3. Horizontal limits defined by PID headspace sampling were generally confirmed by subsequent laboratory analysis of soil samples for TRPH.
4. While laboratory TRPH results prior to excavation generally verified the initial headspace assessment, TRPH values recorded outside areas of concern (which were used to establish a background TRPH value of 65

mg/kg) exceeded the state clean-soil standard of 50 mg/kg. Material used for backfilling the excavation was obtained on site.

5. Vertical distribution of contamination, which is affected by the volume of product releases, varied in depth across the site. In general, vertical extent of contamination was greatest in the vicinity of the grove heater storage building and the soil stockpile (where free product was encountered on the water table), and in the vicinity of the former aboveground tanks. Soils were impacted to the water table (a depth of 8.3 feet during excavation activities) in these areas. In excavated areas where contaminated soils were not present to the water table, distribution of contamination in the subsurface was not uniform below the upper 2 to 4 feet of soils. These variations in vertical extent and subsurface distribution possibly reflect the varied nature of the releases (e.g. historic fuel storage versus incidental leakage from a grove heater).

6. The initial estimate of contaminated soils (including both "excessively contaminated" and "contaminated" soils) was 10,775 tons, based on headspace sampling data collected on two occasions when the water table was measured at 2 feet BLS and 6 feet BLS. A total of 8,433 tons of soil was actually removed from the site. The water table during remedial activities was encountered at 8.3 feet BLS, exposing a greater volume of contaminated soils in the most heavily impacted areas of the site than was anticipated in earlier stages of the project. Soil excavation was performed at seasonal low water table conditions. This resulted in the removal of greater volume of groundwater contamination source material which also minimized potential long-term impacts at the site.

7. Of the total volume of soils excavated, 953.26 tons of "excessively contaminated" soil were excavated from the former aboveground storage tank area, which is eligible for state reimbursement under the Abandoned Tank Restoration Program.

FLORIDA PETROLEUM LIABILITY INSURANCE AND RESTORATION PROGRAM COMPLIANCE CHECKLIST

DATE 6-24-91
 DER Facility # 489101929
 Facility Name Fischer - Howard Corp
 Facility Address Hartzog Rd, Orange County
 Contact Person/Telephone Everett Fisher 1-656-442
 Latitude 28-33-02 Longitude 81-22-40

For the items below that may indicate non-compliance or gross negligence, please explain in detail and provide supporting documentation.

YES NO UNKNOWN I. Compliance with Chapter 376.3072, Florida Statutes and Chapter 17-769, F.A.C.

- 1. Was any contamination discovered prior to January 1, 1989? If yes, explain.

- 2. Petroleum Liability Insurance Program Affidavit form completed? If yes, give date notarized. _____
- 3. Is the site insured by FPLIPA? If not, supply the carrier insured with, or other type of financial responsibility mechanism used. _____
- 4. Restoration Coverage Notice of Eligibility issued? If yes, give effective date. _____
- 5. Has site access ever been denied? _____
- 6. Has a Storage Tank Program compliance inspection ever been performed for this facility? If yes, give the date of the most recent inspection and supply a copy. 6-24-91
- 7. Has the suspected petroleum storage system component responsible for the discharge been removed from service within 3 days of discovery. If no, explain. _____
- 8. Have steps to obtain cleanup services been initiated within 3 days of the discharge discovery? If no, explain. _____

Jamma + Assoc.
ACTS

II. Information Required for Site Scoring and Ranking

- 9. Is there evidence of a contamination problem? If yes, explain in comment section
- If yes to 9, check one:
- a. Two or more monitoring wells/boreholes show >2" free product.
 - b. Only 1 monitoring well shows >2" free product or monitoring wells show <2" free product or petroleum sheen.

If yes to 9, check one:

- c. Monitoring wells are contaminated but contain no free product (vapors only).
- d. Soil contamination and/or recent product loss.

Check one:

- Both
- 10. Contamination Product Type
 - a. Light petroleum (kerosene, gasoline, aviation fuel, etc.)
 - b. Heavy petroleum (fuel oil, diesel or similar petroleum products)
 - c. Unknown or other _____

Check those that apply:

- 11. Potable water
 - a. Within 1/2 mile: Large wells >100,000 gpd
 - 1. Indicate direction: _____
 - 2. Estimate distance: _____
 - b. Within 1/4 mile: small wells <100,000 gpd
 - 1. Indicate direction: _____
 - 2. Estimate distance: 1/4 of mile (12 inch)
 - c. Surface water body used as a public water system.
- 12 inch irrigation wells
- 12. Indicate below proximity to population centers: (restaurant, shopping center, house, etc.)
 - a. < 500 feet: Indicate distance: _____
 - b. > 500 feet: Estimate distance: _____

Please indicate how the site scoring and ranking information was determined. Everett Fischer
+ site inspection.

Comments: When removing the tanks contamination was found. Came from a fired smudge heaters. (Diesel contamination)

Valerie H. King
Compliance Inspector

6-24-91
Inspection Date

OER District: _____ (or) Local Program: Orange County



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form #	17-773903(1)
Form Title	Petroleum or Petroleum Product Contamination Report Form
Effective Date	February 20, 1990
DER Application No.	(Filed in by DER)

Petroleum or Petroleum Product Contamination Report Form

DER Facility ID: not available 48 910 1929

Facility Name: not available

Facility Address: not available Hertzog Road

County: Orange

Other Names for this Site: Fischer & Howard Corp. Grove
Hertzog Road

Contact Person's Name: Everette Fischer

Contact Person's Phone No.: 656-4423

Contact Person's Address: P.O. Box 69
Winter Garden, FL 34777

Date of Discovery: _____

Type of Product Discharged: #2 Diesel

Estimated Amount of Product Lost: unknown

How did Discharge occur? (Tank leak, Pipe leak, Truck Accident, Explosion, etc.)
Citrus Grove Heaters Leaking

What has been done to prevent a further Discharge? All diesel fuel removed from heaters

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

Mary A. Fischer
Signature of Owner, Authorized Representative, Operator

FISCHER, HOWARD CORP.
MARY A. FISCHER, PRESIDENT
Print Name of Owner or Operator

Date 9/1/90

Submit this form to the appropriate district office at the address below

KEEP A COPY OF THIS FORM FOR YOUR RECORDS.

CONTAMINATION ASSESSMENT REPORT/
MONITORING ONLY PROPOSAL



FISCHER PROPERTY PARCEL 3
ORANGE COUNTY, FLORIDA
FDER FACILITY NO. 48910129

SUBMITTED TO:

ORANGE COUNTY ENVIRONMENTAL PROTECTION DEPARTMENT
(OCEPD)
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
(FDER)

PREPARED FOR:

WALT DISNEY WORLD CO.
LAKE BUENA VISTA, FLORIDA

Bureau of Waste Cleanup

AUG 12 1993

PREPARED BY:

BLASLAND, BOUCK & LEE
5950 HAZELTINE NATIONAL DRIVE
SUITE 140
ORLANDO, FLORIDA 32822
(407) 856-5502

Petroleum Cleanup Section

WRITTEN BY:

Mark W. Miller

Mark W. Miller
Sr. Project Geologist

REVIEWED AND SEALED BY:

Stephen T. Cook

Stephen T. Cook, P.G.
Associate

JULY 1993

SECTION 1 - INTRODUCTION

This Contamination Assessment Report/Monitoring Only Plan (CAR/MOP) was prepared on behalf of the Walt Disney World Co. (WDW) for the Fischer Parcel 3 site, located in Orange County, Florida. The Florida Department of Environmental Regulation (FDER) facility identification number for this site is No. 489101929. The purpose of the Contamination Assessment (CA) was to determine the source(s), degree, and extent of potential soil and ground-water contamination by petroleum product resulting from past site operations and to determine the factors controlling contaminant migration. Blasland, Bouck & Lee (BB&L) performed the assessment in accordance with Florida Administrative Code (FAC) Chapter 17-770 and FDER's "Guidelines for the Preparation of Contamination Assessment Reports for Petroleum Contaminated Sites." A summary of the CA is enclosed as **Appendix A**.

The subject site was previously owned by Fischer & Howard Corporation Groves and was purchased on May 24, 1991, by Harvest Groves, Inc., a subsidiary of The Walt Disney Company. Parcel 3 contains 40 acres and was purchased in conjunction with several parcels totaling approximately 270 acres of orange groves. As part of the transaction, an escrow account was established to pay for environmental restoration of the site. Funding was to be provided by the seller and cleanup was to proceed under the direction of the Walt Disney World Co.

In a related but separate transaction, adjacent land (designated in this report as Fischer Parcel A) was acquired at the same time. CA activities were also performed at Parcel A under the direction of Walt Disney World Co. Results of the Parcel A investigation are being submitted to OCEPD in a separate report.

Fischer Parcel 3 is located in a sparsely populated area primarily used for agricultural purposes (citrus). Petroleum products were stored near the southwest

5 feet, resulting in an average saturated aquifer thickness (b) of 95 feet. Approximate effective porosity (n) of the materials occurring at the site is 25 percent (Fetter, 1988).

A confining unit was not encountered at the site to a minimum depth of 100 feet BLS. Thickness of the Hawthorn Formation is estimated to be 50 feet, and the Floridan aquifer thickness is estimated to be 2,300 feet (Florida Geological Survey, 1991). The site lies near the edge of an area where potential artesian flow from the Floridan aquifer exists (Putnam, 1975).

3.6 Ground-Water Sampling

Ground-water samples were collected to assess the potential for the existence of dissolved petroleum contamination in the ground water at the site.

Ground-water samples were collected from all six monitor wells on July 6, 1992. An equipment blank was also collected for quality assurance/quality control (QA/QC). In accordance with FAC Chapter 17-770.600(8)(B), these samples subsequently were analyzed by a state-certified laboratory for the Mixed Product Analytical Group, consisting of the following analyses:

- a. Halogenated Hydrocarbons - EPA Method 601.
- b. Purgeable Aromatics - EPA Method 602.
- c. Polynuclear Aromatic Hydrocarbons (PAHs) - EPA Method 610.
- d. Total Recoverable Petroleum Hydrocarbons (TRPH) - EPA Method 418.1.
- e. Total Lead (Pb) - EPA Method 239.2.
- f. Ethylene Dibromide (EDB) - EPA Method 504.1.

To provide current data for the CAR, and to establish contaminant concentration trends, a second round of sampling was performed on March 19, 1993, at the three wells which exhibited dissolved petroleum contaminants during the first sampling event (wells MW3, MW4, and MW5). These samples, including

SECTION 5 - CONCLUSIONS AND RECOMMENDATIONS

In accordance with FAC Chapter 17-770, the Contamination Assessment was undertaken at the Fischer Parcel 3 to evaluate the presence or absence of petroleum-contaminated soils and ground water resulting from past site operations. In addition, the investigation determined the factors which affect contaminant migration at the site.

Results of the investigation confirm that there are no current releases of petroleum occurring and that free product in the subsurface is no longer present. Soil excavation and thermal treatment were performed for soils considered to be a potential threat to ground-water contamination and included removal of "excessively contaminated" and "contaminated" soils with TRPH concentrations above background levels. Results from the most recent ground-water sampling event indicate limited dissolved petroleum contamination at three former source areas:

1. Well MW3 at the location of the former ASTs exhibited concentrations which exceeded MCLs for total VOAs and total naphthalenes.
2. Well MW4 at the location of the former soil stockpile exhibited concentrations which exceeded MCLs for total VOAs and total naphthalenes.
3. Well MW5 at the location of the former grove heater storage building exhibited concentrations which exceeded MCLs for total VOAs.

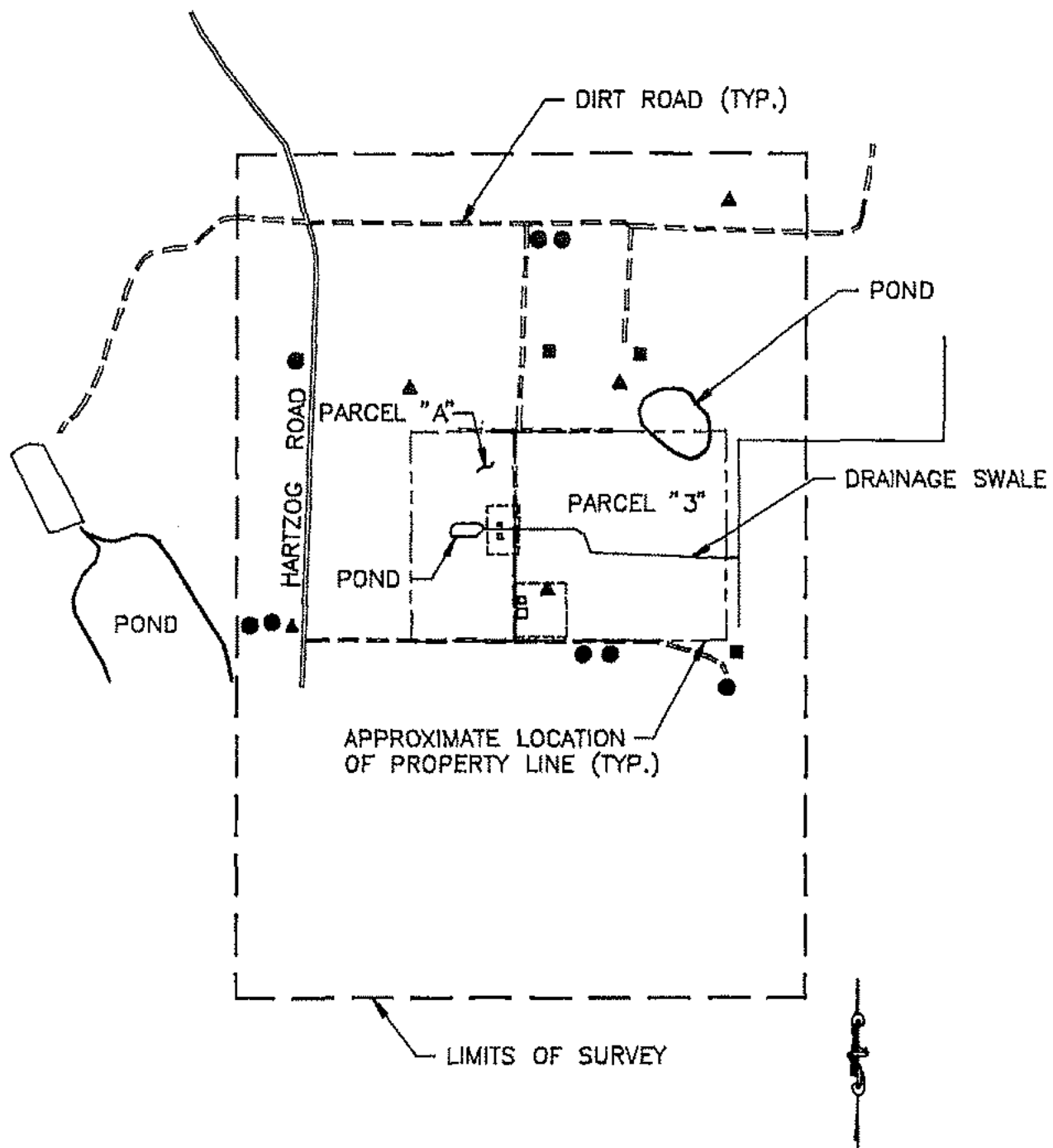
Although petroleum-impacted soils and ground water are present at the site, the extent is localized and the volume is negligible. As confirmed by these facts, expedient implementation of the IRA eliminated potential future sources of ground-water contamination from this site.

Due to site-specific conditions, relatively low concentrations of contaminants in the soil and ground water, negligible volumes of impacted soil and ground

water, and FDER's "No Further Action and Monitoring Only Guidelines For Petroleum Contaminated Sites," Monitoring Only is recommended for this site.

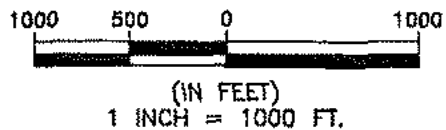
The monitoring plan will be implemented initially for one year to monitor ground-water quality trends during the year in an effort to provide assurance that natural processes will bring contaminant concentrations within MCLs. Ground-water samples will be collected quarterly from wells MW3, MW4, and MW5 and analyzed at a state-certified laboratory by EPA Methods 602 (Purgeable Aromatics) and 610 (PAHs). Quarterly reports will be submitted to OCEPD and will include ground-water sampling data and a ground-water flow map for the preceding quarter.

If results during the monitoring period indicate that natural processes will reduce contaminant concentrations to levels within MCLs, a No Further Action proposal will be submitted to OCEPD. If results during the monitoring period have not provided sufficient indication that no action will reduce contaminant concentrations to levels within MCLs, a proposal will be submitted to OCEPD recommending further monitoring, additional assessment activities, or remedial activities, as deemed appropriate.



LEGEND

- ABOVE-GROUND STORAGE TANK
- ▲ WATER WELL
- GROVE HEATER STORAGE



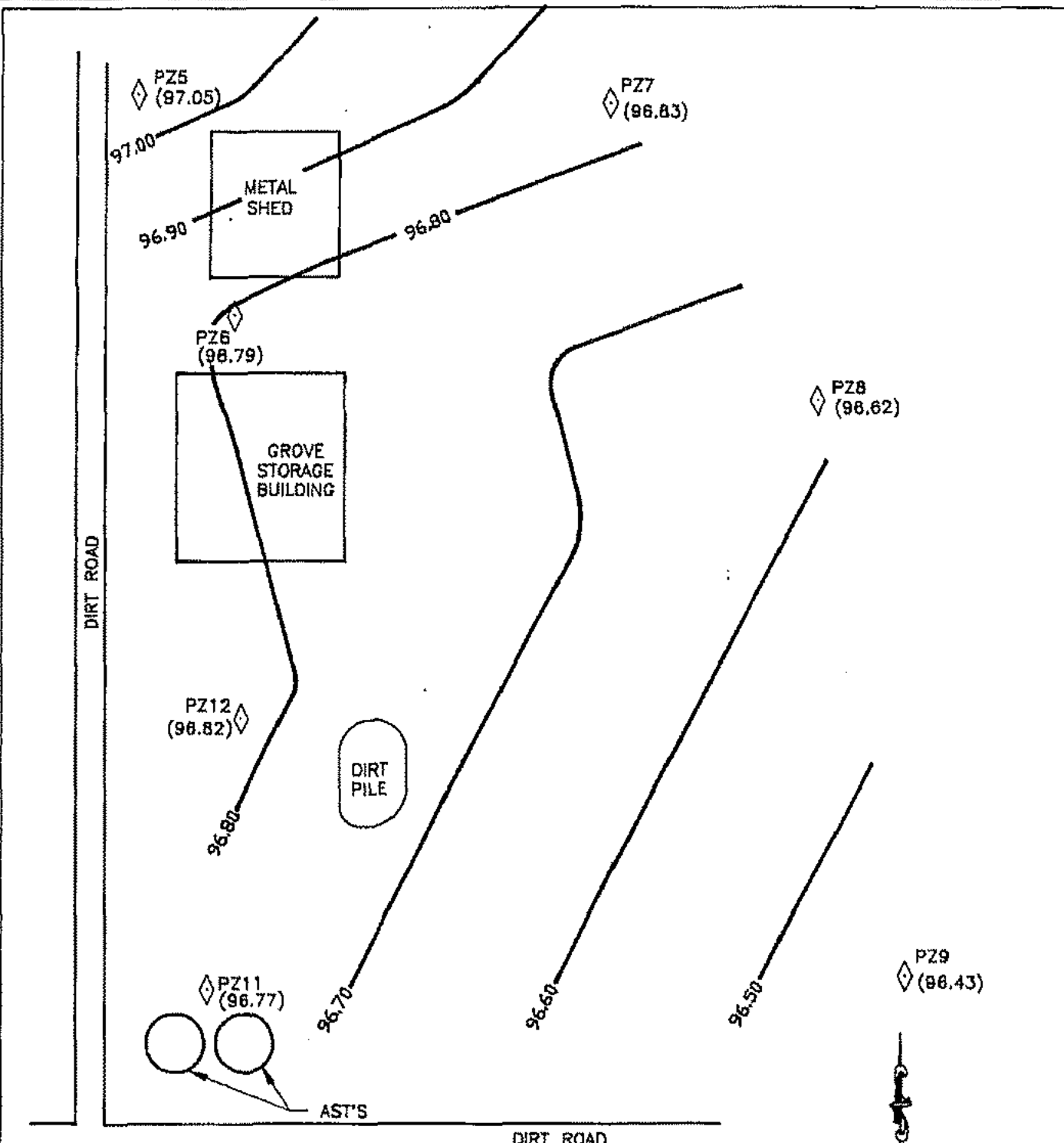
CONTAMINATION ASSESSMENT REPORT
 FISCHER PARCEL 3
 POTABLE WELLS/PETROLEUM STORAGE SURVEY
 FIGURE 2-5

SOURCE: BB&L, 1993

Project No. : 628.17
 Date : JULY 1993
 Drawn By : JHD
 Checked By : MWM
 Approved By : STC

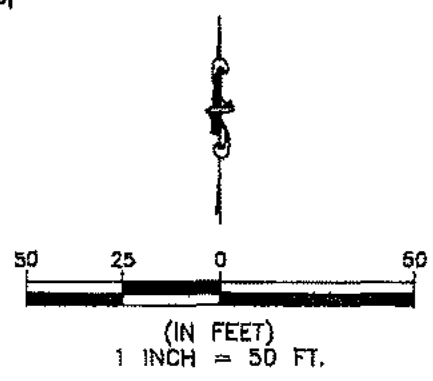
WALT DISNEY WORLD CO.

BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS



LEGEND

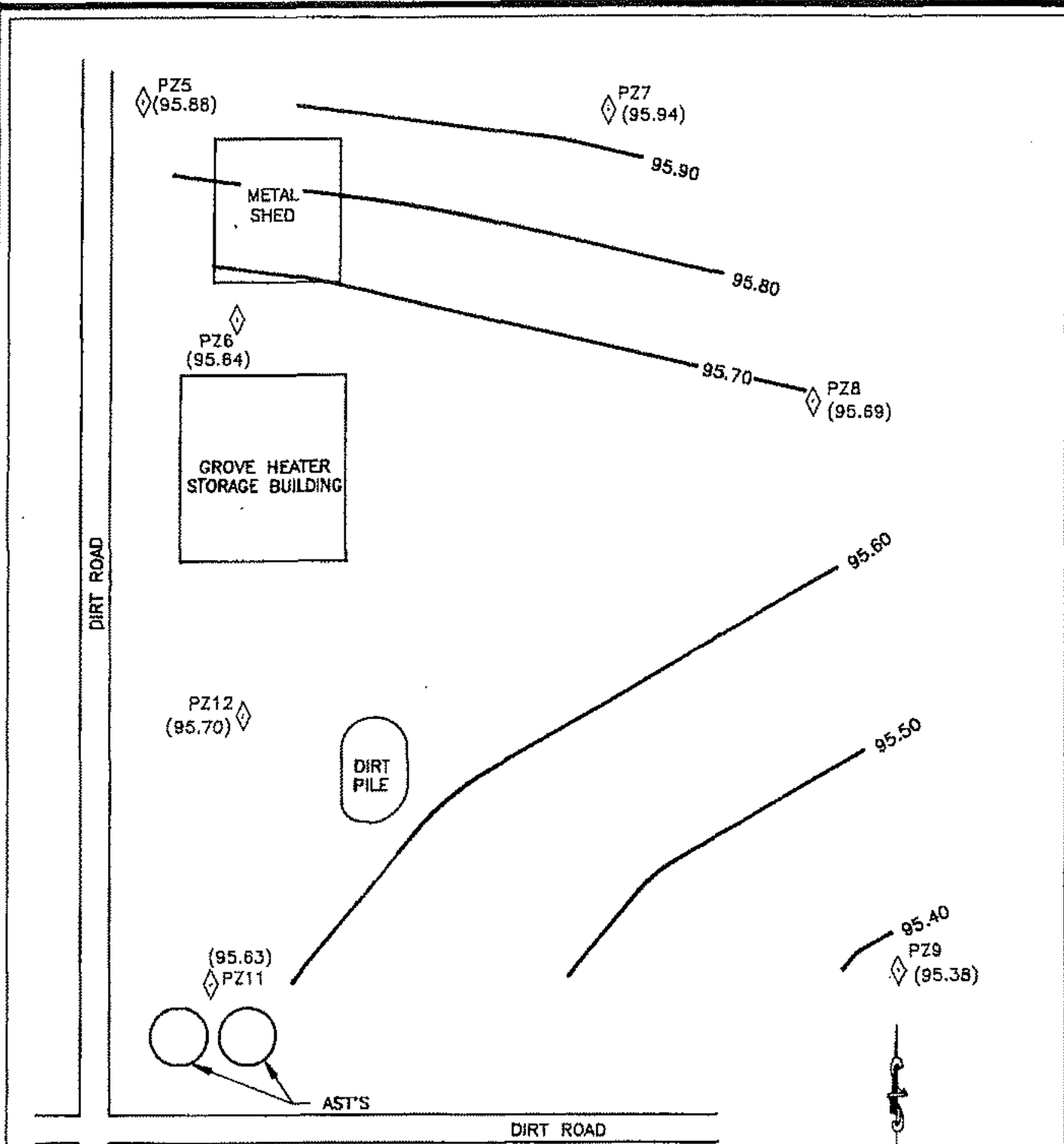
- PZ11 (96.77) PIEZOMETER LOCATION
- GROUND-WATER ELEVATION
- GROUND-WATER CONTOUR



CONTAMINATION ASSESSMENT REPORT
 FISCHER PARCEL 3
 GROUND-WATER ELEVATION MAP (8/7/91)
 FIGURE 3-4
 SOURCE: BB&L, 1993

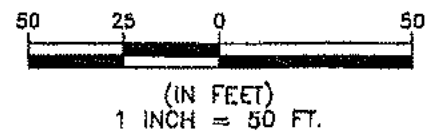
Project No. : 628.17
 Date : JULY 1993
 Drawn By : JHD
 Checked By : MWM
 Approved By : STC

WALT DISNEY WORLD CO.
 BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS



LEGEND

- PZ11 ◊ PIEZOMETER LOCATION
- (95.38) GROUND-WATER ELEVATION
- GROUND-WATER CONTOUR



PZ10
(95.66) ◊

CONTAMINATION ASSESSMENT REPORT
FISCHER PARCEL 3
GROUND-WATER ELEVATION MAP (10/18/91)
FIGURE 3-5
SOURCE: BB&L, 1993

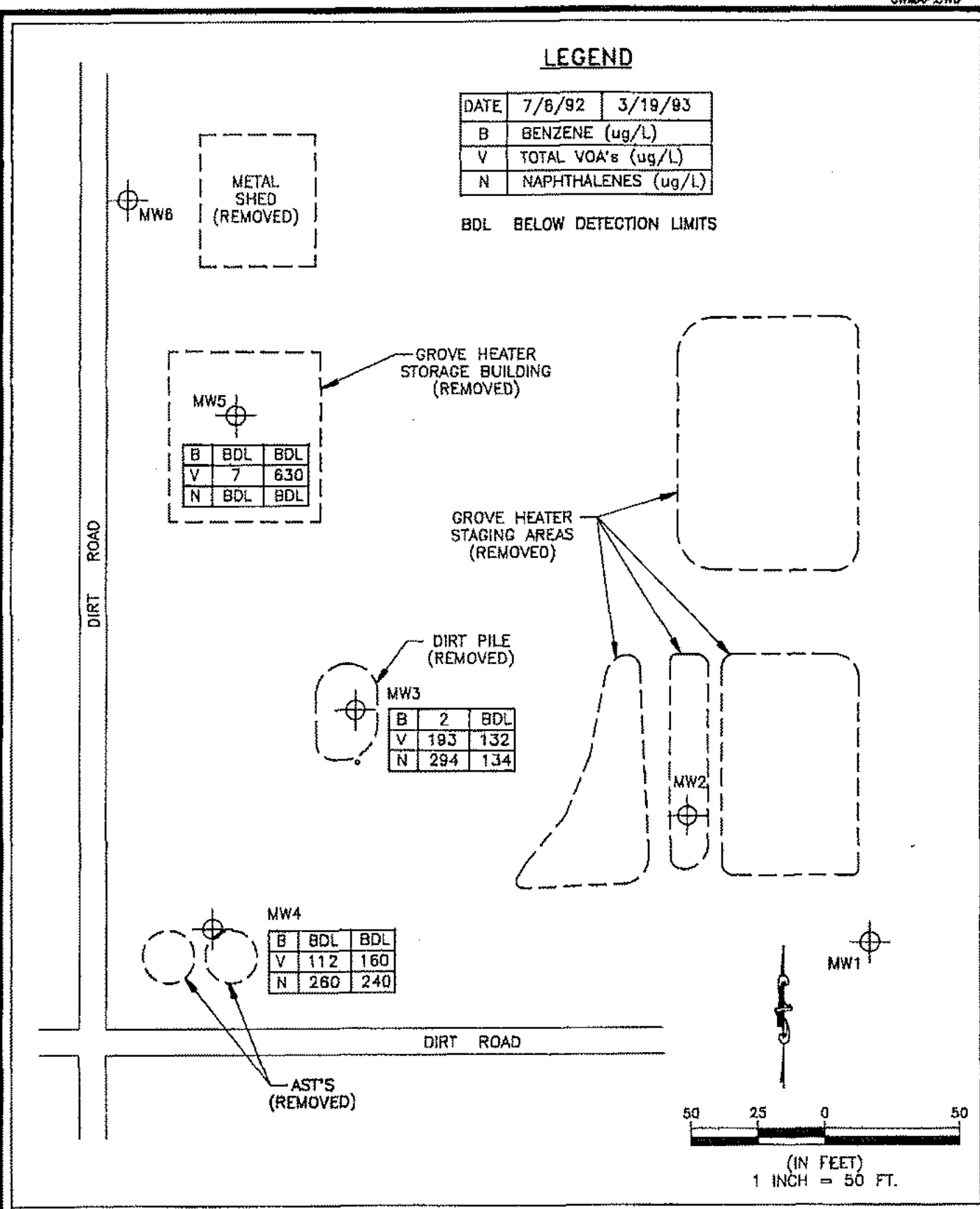
Project No. : 628.17
Date : JULY 1993
Drawn By : JHD
Checked By : MWM
Approved By : STC

WALT DISNEY WORLD CO.
BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

LEGEND

DATE	7/6/92	3/19/93
B	BENZENE (ug/L)	
V	TOTAL VOA's (ug/L)	
N	NAPHTHALENES (ug/L)	

BDL BELOW DETECTION LIMITS



CONTAMINATION ASSESSMENT REPORT
FISCHER PARCEL 3

GROUND-WATER CONTAMINATION SUMMARY
FIGURE 4-1

SOURCE: BB&L, 1993

Project No. : 628.17
Date : JULY 1993
Drawn By : JHD
Checked By : MWM
Approved By : STC

WALT DISNEY WORLD CO.

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

TABLE 3-3

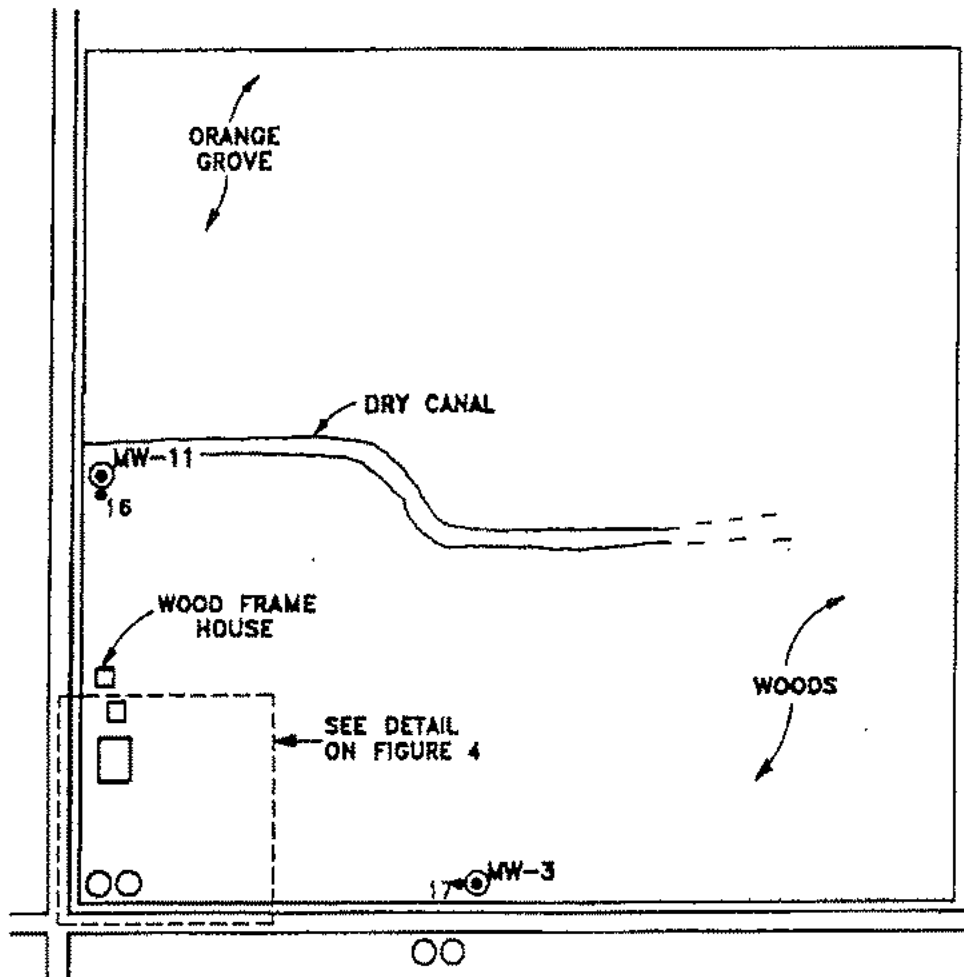
FISCHER PARCEL 3
MONITOR WELL SUMMARY

MONITOR WELL	DATE INSTALLED	BORING DIAMETER (in.)	CASING DIAMETER (in.)	STICKUP HEIGHT (ft.)	TOTAL DEPTH (ft. BLS)	SCREENED ZONE (ft. BLS)	PURPOSE
MW1	6/19/92	8	2	3.60	15	5-15	Downgradient
MW2	6/19/92	8	2	3.14	12	3-12	Source (staging area)
MW3	6/19/92	8	2	2.69	12	3-12	Source (soil pile)
MW4	6/22/92	8	2	2.49	12	3-12	Source (AST's)
MW5	6/22/92	8	2	2.83	12	3-12	Source (storage bldg.)
MW6	6/19/92	8	2	2.98	15	5-15	Upgradient

NOTES:

All wells were installed using a hollow stem auger.

Source: Blasland, Bouck & Lee, 1993.



LEGEND

- ABOVE GROUND VERTICAL STORAGE TANK
- ⊙ MONITORING WELL LOCATION
- HAND AUGER LOCATION

Location Plan - Parcel 06
 WINTER PARK CONSTRUCTION CO.
 Orange County, Florida



JAMMAL & ASSOCIATES, INC. Consulting Engineers

DRAWN: KJP	SCALE: 1" = 300' (APPROX.)	PROJ NO: 756-04208
CHKD: RBT	DATE: 8-7-80	FIGURE 3

Site 18 – Reedy Creek Improvement District
Effluent spray ponds/RIBs/Solar Farm
Station 461+00 to
Station 567+00

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWB-1	Background monitoring well; WAFR#58487
Permit Number:	FLA108219018DW1	Well Type: Background	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/03/2022 Sample Time: 09:55 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	103.7	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.812	Report (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	133	Report (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	31.4	Report (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWB-2	Re-classified Background well; WAFR#101628
Permit Number:	FLA108219018DW1	Well Type: Background	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/03/2022 Sample Time: 10:34 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	100.9	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.459	Report (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	210	Report (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	54	Report (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID:	MWC-10 1000 ACRE SITE RIBS/LW-10R; WAFR#5504
Permit Number:	FLA108219018DW1	Well Type:	Compliance Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/05/2022 Sample Time: 08:57 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	100	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	1.63	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	252	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	62.9	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.					SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE	SUBMITTED ON
Scott Roberts							Electronically Signed		(407) 824-6498	04/21/2022

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-11	1000 Acre Site RIBS/LWC-11, near RIB69;
Permit Number:	FLA108219018DW1		WAFR#95396
Facility County:	ORANGE	Well Type: Compliance	Report Frequency: Quarterly
Office:	CD		Program: Domestic

Was the well purged before sampling? Yes

Monitoring Period: From: 01/01/2022 To: 03/31/2022
 Sample Date: 01/05/2022 Sample Time: 08:10 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	101.3	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.73	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	394	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	99	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-3F	1000 ACRE SITE
Permit Number:	FLA108219018DW1		RIBS/LW-3FLORIDAN;WAFR#5511
Facility County:	ORANGE	Well Type: Compliance	Report Frequency: Quarterly
Office:	CD		Program: Domestic

Was the well purged before sampling? Yes

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Sample Date: 01/03/2022 Sample Time: 12:02 PM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	99	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.011	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	207	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	30.5	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-4	REUSE SYSTEM/MW-4; WAFR#5500
Permit Number:	FLA108219018DW1	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/03/2022 Sample Time: 09:07 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	89.4	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.01	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	276	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	101	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-5	REUSE SYSTEM/MW-5; WAFR#5499
Permit Number:	FLA108219018DW1	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/03/2022 Sample Time: 08:36 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	89.6	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.01	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	282	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	83.4	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-6	REUSE SYSTEM/MW-6; WAFR#5498
Permit Number:	FLA108219018DW1	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/03/2022 Sample Time: 07:58 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	90.5	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.01	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	497	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	151	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-7	1000 ACRE SITE RIBS/LW-7; WAFR#5507
Permit Number:	FLA108219018DW1	Well Type: Compliance	Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/04/2022 Sample Time: 09:26 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	106.7	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	1.02	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	301	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	89.2	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID:	MWC-8 1000 ACRE SITE RIBS/LW-8; WAFR#5506
Permit Number:	FLA108219018DW1	Well Type:	Compliance Report Frequency: Quarterly
Facility County:	ORANGE		Program: Domestic
Office:	CD		

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/04/2022 Sample Time: 08:49 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	107.2	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	1.37	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	375	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	107	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID: MWC-9F	1000 ACRE SITE
Permit Number:	FLA108219018DW1		RIBS/LW-9FLORIDAN;WAFR#5505
Facility County:	ORANGE	Well Type: Compliance	Report Frequency: Quarterly
Office:	CD		Program: Domestic

Was the well purged before sampling? Yes

Monitoring Period: From: 01/01/2022 To: 03/31/2022
 Sample Date: 01/04/2022 Sample Time: 08:12 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	103.6	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.014	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	400	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	88.7	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Scott Roberts	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Electronically Signed	TELEPHONE (407) 824-6498	SUBMITTED ON 04/21/2022
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DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID:	MWC-LWC-4R 1000 ACRE SITE RIBS/LW-4; WAFR # 5510
Permit Number:	FLA108219018DW1	Well Type:	Compliance
Facility County:	ORANGE	Report Frequency:	Quarterly
Office:	CD	Program:	Domestic

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/04/2022 Sample Time: 10:31 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	103.3	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.788	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	396	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	109	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART D

Facility Name:	Reedy Creek Improvement District	Monitoring Well ID:	MWC-LWC-6R 1000 ACRE SITE RIBS/LW-6; WAFR#5508
Permit Number:	FLA108219018DW1	Well Type:	Compliance
Facility County:	ORANGE	Report Frequency:	Quarterly
Office:	CD	Program:	Domestic

Monitoring Period: From: 01/01/2022 To: 03/31/2022

Was the well purged before sampling? Yes

Sample Date: 01/04/2022 Sample Time: 09:56 AM

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545	107.1	Report (Maximum)	ft	In Situ	1 Quarterly	N/A	N/A	Water level meter with bubbler	N
Nitrogen, Nitrate, Total (as N)	00620	0.012	10.0 (Maximum)	mg/L	Grab	1 Quarterly	0.006	SM20 4500-NO3 H minus SM24500-NO2 B	Bladder Pump	N
Solids, Total Dissolved (TDS)	70295	339	500.0 (Maximum)	mg/L	Grab	1 Quarterly	10	SM20 2540C	Bladder Pump	N
Chloride (as Cl)	00940	112	250.0 (Maximum)	mg/L	Grab	1 Quarterly	1.0	SM20 4500-Cl E	Bladder Pump	N
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	SUBMITTED ON	
Scott Roberts							Electronically Signed	(407) 824-6498	04/21/2022	

Site 20 – Horizon High School
10393 Seidel Road

From: [Owete, Derbra](#) on behalf of [tankregistration](#)
To: "[Fowler, Jennifer B.](#)"; [tankregistration](#)
Cc: [Glen.Becker](#)
Subject: STCM#15913 / FAC ID#9818709 RE: New Tank Registration
Date: Wednesday, September 1, 2021 11:27:30 AM
Attachments: [Horizon High School STRF.pdf](#)

Hello: Per the email and Storage Tank Fac. Regis. Form received, please note the following:

New Owner STCM#15913 / FAC ID#9818709 Fac Name: HORIZON HIGH SCHOOL Tank ID # 1 added

Invoice Notifications will be emailed annually around the end of May to:

JUAN.HORTAHERNANDEZ@OCPS.NET ; JENNIFER.FOWLER@OCPS.NET

Pursuant to Sect. 376.3077 F.S. the placard shall be displayed in plain view in the office, kiosk, or at another suitable location at the facility where the storage tank system is located. For more information on Storage Tank Systems, go to [Storage Tank System Rules, Forms and Reference Guidelines](#);

To view/print/pay invoice for the tank(s) added and/or retrieve placard, please follow the instructions indicated below.

Ctrl click: <http://www.fideportal.com/go/>

- Click on Pay
- Click on Renewals
- Click on Storage Tank Registration

Enter: e-mail address and password. If you have not registered, please click on Register to proceed.

Tank Details	Tank ID	Cap Grp	Fee Type	\$ Amount	Charge is For FY	FY First Billed	Date Fee Assessed
	1	1	INITIAL	50	2021-2022	2021-2022	09/01/2021

Storage Tank/Contamination Tracking - Facility Detail

Facility ID: 9818709 Facility Status: OPEN Create Date: 09/01/2021
 County: 48 ORANGE District: CD
 Name: HORIZON HIGH SCHOOL
 Address: 10393 SEIDEL RD
 Address2:
 City: WINTER GARDEN FL: 34787
 Comments?(Y/N): N
 Account Status:
 ASTC: 1 USTC: 0

Facility Contact Name: LAURA BEUSSE Facility Contact Phone: 407-554-7814 Phone #:
 Invoice Activity Date:
 Contact Phone Verified By: OWETE D Changes Verified?
 Current Placard Date:
 Contact Phone Last Verified: 09/01/2021
 24 HR Emergency Contact Name - Phone: RDEL SITE SEC - 407-317-3333 Exit

Facility Type: COUNTY GOVERNMENT DEP Contract Owned: P
 Financial Resp:
 Insurance Comp: Coverage Period:
 Cleanup Status: Effective:

Owner Name: ORANGE CNTY SCHOOL BD
 Address: 3999 SUMMERLIN AVE - BLDG 50
 Address2: ATTN: ENVIRONMENTAL COMPLIANCE
 City/State/Zip: ORLANDO, FL 32806
 Last Updated: 05/23/2019 Phone: 407-317-3839 Exit
 Contact: JENNIFER FOWLER
 Email Address: JUAN.HORTA@HERNANDEZ@OCPS.NET; JENNIFER.FOWLER@OCPS.NET
 Primary Role: ACCT OWN
 Owner ID#: 15913
 Begin Date: 09/01/2021
 Bad Address?: N
 Registr Coord:

STCM FACILITY

Storage Tank/Contamination Tracking - Storage Tank Registration

Facility ID: 9818709
 Name: HORIZON HIGH SCHOOL

ORANGE CNTY SCHOOL BD (ID #15913)
 JENNIFER FOWLER
 3999 SUMMERLIN AVE - BLDG 50
 ATTN: ENVIRONMENTAL COMPLIANCE
 ORLANDO FL 32806

Construction: C
 Piping: A
 Monitoring: 2

Fee assessment begin date is: 09/2021

Added	Trk ID *	Trk ID *	AU *	Gallons	Install	Construct & Date	Status & Date	Last Updated on	Repl Tank
09/2021	C	TANK	AR	15000	08/2021	D 08/2021	U 08/2021	09/01/2021	

Storage Tank/Contamination Tracking - Facility Detail

Facility ID: 9818709 Facility Status: OPEN Create Date: 09/01/2021
 County: 48 ORANGE District: CD
 Name: HORIZON HIGH SCHOOL
 Address: 10393 SEIDEL RD
 Address2:
 City: WINTER GARDEN FL: 34787
 Comments?(Y/N): N
 Account Status:
 ASTC: 1 USTC: 0

Facility Contact Name: LAURA BEUSSE Facility Contact Phone: 407-554-7814 Phone #:
 Invoice Activity Date:
 Contact Phone Verified By: OWETE D Changes Verified?
 Current Placard Date:
 Contact Phone Last Verified: 09/01/2021

Storage Tank/Contamination Tracking - Roles

Name	Role *	Own. ID	Begin *	End
ORANGE CNTY SCHOOL BD	ACCOUNT OWNER	15913	09/01/2021	

Please do not hesitate to contact me for further assistance.

Derbra B. Owete



FDEP Division of Waste Management
Waste Registration & Recycling Program

E: derbra.owete@FloridaDEP.gov

W: 850-245-8732 M-F 7:30-3:30

Main: 850-245-8839

[Storage Tank System Rules, Forms and Reference Guidelines](#)

https://floridadep.gov/sites/default/files/StorageTankComplianceContacts_05Mar2021.pdf

[Storage Tank and Petroleum Contamination/Cleanup Monitoring | Florida Department of Environmental Protection](#)

Please consider the environment before printing.

From: Fowler, Jennifer B. <jennifer.fowler@ocps.net>
Sent: Monday, August 30, 2021 1:32 PM
To: tankregistration <tankregistration@dep.state.fl.us>
Cc: Glen.Becker <Glen.Becker@ocfl.net>
Subject: RE: New Tank Registration

Good Afternoon,

I wanted to also attach a copy of the AST Registration Form, in case it is needed.

Sincerely,

Jennifer Fowler, MSPH

Director, Environmental Compliance &
Sustainability
Orange County Public Schools
3909 S. Summerlin Ave.
Orlando, FL 32806
(O) 407-317-3900 ext.2033939
Jennifer.fowler@ocps.net

From: Fowler, Jennifer B.
Sent: Monday, August 30, 2021 9:02 AM
To: TankRegistration@dep.state.fl.us
Cc: Glen.Becker@ocfl.net
Subject: New Tank Registration

Good Morning,

I am attempting to register a new tank for a new Orange County Public Schools Facility. Our STCM Number is 15913.

Unfortunately, when I get to the verification information the email address is not accurate and the portal won't let me make edits or move forward.

Any assistance would be appreciated.

Print

Account Owner Information

Entity Number:	1010
A/E/F Number:	41
Account Owner Name/Company:	ORANGE COUNTY SCHOOLS, BO
Account Owner Address:	3909 S. SUMMERLIN AVE. (SUITE 214) ENVIRONMENTAL COMPLIANCE ORLANDO, FL 32806
Account Contact Name:	JENNIFER FOWLER

Phone Number: (NET) 317-0939

Working E-mail Address: JUAN.MARTINEZ@OCPS.NET; JENNIFER.FOWLER@OCPS.NET

Please enter a valid email address.

The Account Owner is responsible for payment of the annual storage tank registration fees and will receive the annual storage tank Planar/Clog assessment.

Sincerely,

Jennifer Fowler, MSPH

Director, Environmental Compliance &
Sustainability
Orange County Public Schools
3909 S. Summerlin Ave.
Orlando, FL 32806
(O) 407-317-3900 ext.2033939
Jennifer.fowler@ocps.net

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