

TECHNICAL MEMORANDUM

December 14, 2022

Revised September 18, 2023

From: Richard McCormick, P.G. and Daniel C. Stanfill, P.E.

To: Mr. Michael Garau, P.E.

Subject: Existing Contamination Conditions Technical Memorandum
SR 408 WB CAPACITY IMPROVEMENTS FROM I-4 TO GOLDENROD ROAD
CFX 408-175
GEC Project No. 5116GE

Based on TWO 2 under Contract Number 001844 dated August 29, 2022, Geotechnical and Environmental Consultants, Inc. (GEC) is pleased to present this Existing Contamination Conditions Memorandum for the CFX SR 408 Westbound Capacity Improvements PD&E study. This PD&E Study is split into two sections of SR 408; SR 408 from east of I-4 to Bumby Avenue (Project 1) and SR 408 from SR 436 to Goldenrod Road (Project 2).

While this review of contamination status was performed using elements of the Chapter 20 of the FDOT PD&E Manual, it does not represent a complete contamination screening evaluation in accordance with Chapter 20 of the FDOT PD&E Manual.

Contamination Screening

GEC conducted this evaluation using limited elements of the Chapter 20 of the FDOT PD&E Manual dated July 1, 2020. The study area is defined by the following distances from the right-of-way:

- **All sites within 500 feet**
- **Non-landfill solid waste sites within 1,000 feet**
- **Solid waste landfills, CERCLA, or National Priorities List (NPL) sites within ½ mile**

GEC reviewed relevant information from the following sources of information:

- USGS Quadrangle Map of Orlando, Florida (**Figure 1**),
- National Resource Conservation Service (NRCS) Soil Survey (**Figure 2**), and
- Florida Department of Environmental Protection (FDEP) Map Direct and Nexus Information Portal file research for the sites of concern identified within the study area.

Based on the results of the contamination screening activities, GEC assigned Contamination Risk Ratings (CRRs) to 35 potential contamination sites in the Study Area. The Contamination Risk Rating (CRR) system was developed by FDOT and incorporates four levels of risk: **No, Low, Medium and High**. For a description of the four risk levels please refer to **Appendix A**.

The project study area is shown on a 2021 aerial photograph with site locations shown in attached **Figures 3A and 3B**. Select portions of public record documents (Map Direct maps) are included as **Appendix B**.

Table 1 – Potential Contamination Site Summary, presents the results of our evaluation. The information obtained from each source of information listed above is summarized for the study area and potential contamination site, along with the corresponding CRRs.

Contamination Risk Sites Summary

Our contamination risk ratings for the potential contamination sites are summarized below.

Table 1
Potential Contamination Site Summary

Site No.	Facility Name	Facility ID	Concerns	Risk Rating
1	Lucerne Plaza Office Bldg.	9700954	A 250-gallon underground gas tank was removed in 1987 without a closure assessment. No contamination is documented in the public file.	Low
2	Aloft Hotel	9804625	A 1,000-gallon aboveground emergency generator tank is currently out of compliance due to not being insured. No contamination is documented in the public file.	Medium
3	Orlando Utilities Commission Admin Building	FLD004076071 and 9814680	A 5,200-gallon aboveground emergency generator diesel tank is under SR 408. No contamination is documented in the public file. There is a 2007 complaint of buried asbestos material on-site that cannot be substantiated.	Medium

Site No.	Facility Name	Facility ID	Concerns	Risk Rating
4	CNL Center 1	9602184	A 3,000-gallon underground emergency generator tank was found to be in compliance in August 2021. No contamination is documented in the public file.	Medium
5	City Hall Parking Lot	9046919	An underground tank discharge was remediated, and the tank abandoned. A no further action status was assigned in March 2005.	No
6	Dr Phillips Performing Arts Center	ERIC_12729	Has a Site Rehabilitation Completion Order for the north half of the city block bounded by South Street, South Magnolia Street, East Anderson Street, and South Orange Avenue.	Low
7	Orlando City Material and Equipment	9300862	A 6,000-gallon underground tank of non-regulated product (aluminum sulfate) was installed at this location in 1993. No contamination is documented in the public file.	Medium
8	Orlando Expressway Authority	9809346	An underground 250-gallon oil tank was removed in 2007. Groundwater impacts were initially found but not confirmed. No cleanup was required.	Low
9	Orlando Fire Station #1	8629835	Has a Site Rehabilitation Completion Order for a 1991 release. There are currently no tanks on-site.	No
10	Kusner Dental Laboratory	SQG_104553	A dental laboratory that is not listed as a hazardous waste generator.	No
11	Lisa Renee Africk DC	SQG_75298	Dr. office that is not listed as a hazardous waste generator.	No
12	Kinneret II Inc.	9801328	A 550-gallon underground diesel tank was closed in-place in 2018. Soil impacts were initially found but not confirmed. No cleanup was required.	Low
13	WFTV Channel 9	8945182	A 3,000-gallon aboveground diesel tank is on-site for fueling and an emergency generator. No leaks or discharges are reported.	Medium
14	Bright House Networks	9810982	Has a 750-gallon aboveground emergency generator tank. No leaks or discharges are reported.	Medium
15	Orlando City Lift Station #001	9817675	Has a 10,000-gallon convault aboveground emergency generator tank. Site No. 17 indicates that contamination was detected and it is under a restrictive covenant.	Medium
16	FL Dept of Children & Families	8840760	A 2001 Score Sheet was found, assigning a contamination score to this facility for what was assumed to be an oil release from a historical tank.	Medium
17	Orlando City Lift Station #55	8841633, ERIC_7300	The file for 8841633 indicates that contamination was detected at this location, and it is under a restrictive covenant.	Medium
18	Greenwood Cemetery	8838411	A 280-gallon aboveground storage tank was removed in 1989. No contamination was reported.	Low

Site No.	Facility Name	Facility ID	Concerns	Risk Rating
19	Trinity United Methodist	9817573	A 1,000-gallon underground heating oil tank was removed in 2020 and a Site Rehabilitation Completion Order issued for some petroleum contamination that was remediated.	Low
20	Cabrera Auto Service & Repair	8943028	A March 2020, Low Score Site Initiative Report documents soil and groundwater impacts at this former gas station/Sonic Restaurant.	Medium
21	7-Eleven Store	9813645	Existing gas station that is currently in compliance with no reported spills or discharges.	Medium
22	Mobil Oil, Break Time Orlando	FLD984203836 , 8513195	Existing gas station. March 2021, Low Score Site Initiative Report documents soil and groundwater impacts at this location. Groundwater impacts extend into Semoran Boulevard and Lake Underhill Road right of ways.	Medium
23	Lake Underhill Coin Laundry	FLD984226068	A February 2000 Groundwater Assessment Report found petroleum and chlorine impacts on-site at low levels, apparently migrating from offsite.	Medium
24	Crest 1 Hr Cleaners	ERIC_4973, 9500727	This site scored a 27 for cleanup under the Drycleaning Solvent Cleanup Program.	Medium
25	Delia's Beauty Salon	SQG_73198	Beauty salon, not a hazardous waste generator.	No
26	Orlando ENT Associates	SQG_75691	Ear, Nose and Throat Doctor, not a hazardous waste generator.	No
27	Basewide Orange County Unknown Site	I04FL155	Large Formerly Used Defense Site. No Documented munitions or contamination concerns.	No
28	Basewide Orlando Range and Chemical Yard	ERIC_17533	Located south of SR 408 and west of Goldenrod Road. Chemical and gas training occurred here. Residentially developed.	Low
29	Bellsouth #33320	8732367	Facility has a 4,000-gallon aboveground emergency generator tank that was in compliance in 2020.	Medium
30	7-Eleven #1005	8512571	A September 2022 Natural Attenuation Monitoring Report documents petroleum impacts within the site boundaries.	Medium
31	Mobil 02-CV5	8512971	A 2017 Remedial Action Plan documents groundwater impacts on the southwest corner of the Lake Underhill Road and Goldenrod Road intersection.	Medium
32	Military Property	ERIC_17533	This area of the Orlando Range and Chemical Yard contained some buried munitions that were removed. The area was assessed prior to the recent construction on the northwest corner of the SR 408 and Goldenrod Road intersection.	Low

Site No.	Facility Name	Facility ID	Concerns	Risk Rating
33	7-Eleven #27508	8513540	A 2019 Template Site Assessment Report documents soil and groundwater impacts on the southeast corner of the Lake Underhill Road and Goldenrod Road intersection.	Medium
34	Disaster Debris Management Area	99934	This is an unused disaster debris management area. No contamination impacts are reported.	No
35	Cuban Cafe	9804818	This former gas station had 4 underground fuel tanks that were closed-in-place. No contamination is reported.	Low

Level II Impact to Construction Impact Assessments and Recommendations

Level II Impact to Construction Assessments (ICAs) or construction support will be dependent on the roadway improvement plans, dewatering requirements and the amount of right of way required that includes properties with tanks or known areas of impacts described in **Table 1**.

A Contamination Screening Evaluation Report will be required for this project.

Limitations

The findings, opinions, conclusions, and recommendations presented herein are based in part on reasonably ascertainable information contained in the public record. GEC does not warrant or guarantee the accuracy or completeness of this information. Some of this public record information may be dated and not representative of conditions at the time of this report was prepared (December 2022), or in the future. Additional limitations are as follows:

- Not discussed in this report are properties that have been historically undeveloped land, are associated with residential use and do not appear to pose a contamination risk, or are professional/commercial establishments that are not associated with hazardous materials or petroleum products.
- This study also does not include surveys of wetlands, endangered species, asbestos containing materials, lead-based paints, or other potential hazardous building materials.

Use of This Memorandum

GEC has prepared this memorandum for the exclusive use of our client, The Balmoral Group, Kimley-Horn, and CFX and for application to our client's project. GEC will not be held responsible for any other party's interpretation or use of this report's data or recommendations without our written authorization.

GEC has performed the services described in this report in a manner consistent with that level of care and skill ordinarily exercised by members of our profession currently practicing in Central Florida. No other representation is made or implied in this document.

The conclusions and recommendations should be disregarded if the final project design differs from the project description in this report. If such changes are contemplated, GEC should be retained to review the new plans to assess the applicability of this report in light of proposed changes.

We appreciate the opportunity to work with The Balmoral Group, Kimley Horn, and CFX on this project. If you have any questions concerning this report, or if we may be of further assistance, please contact us.

Sincerely,

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.



Richard P. McCormick, P.G.
Chief Geologist
Florida License No. 2096



Daniel C. Stanfill, P.E.
Senior Vice President
Florida License No. 42763

FIGURES

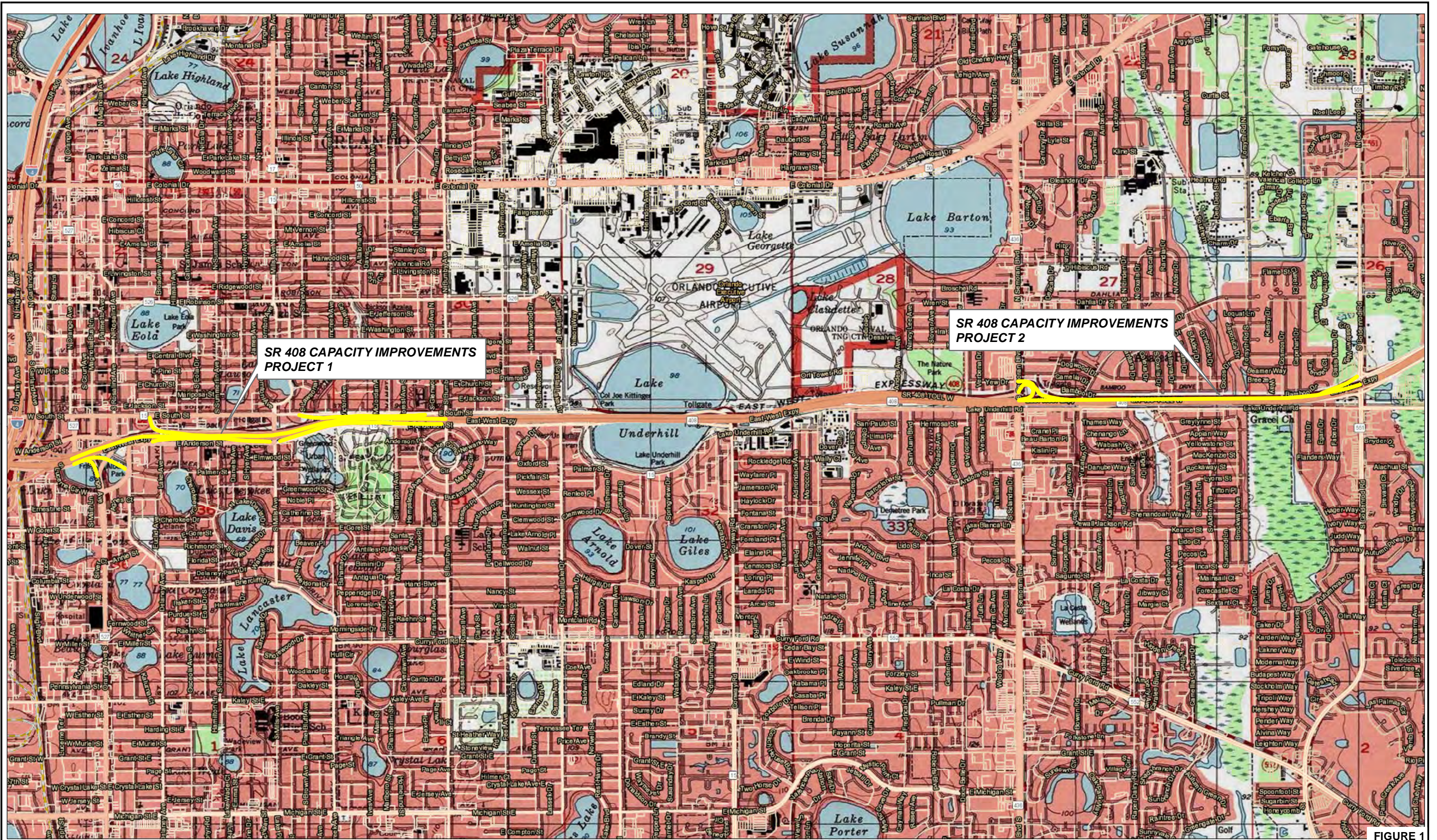
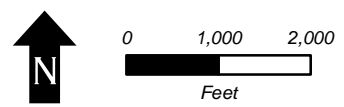


FIGURE 1

USGS Orlando East, FL Quadrangle Map
 Dated: 1980



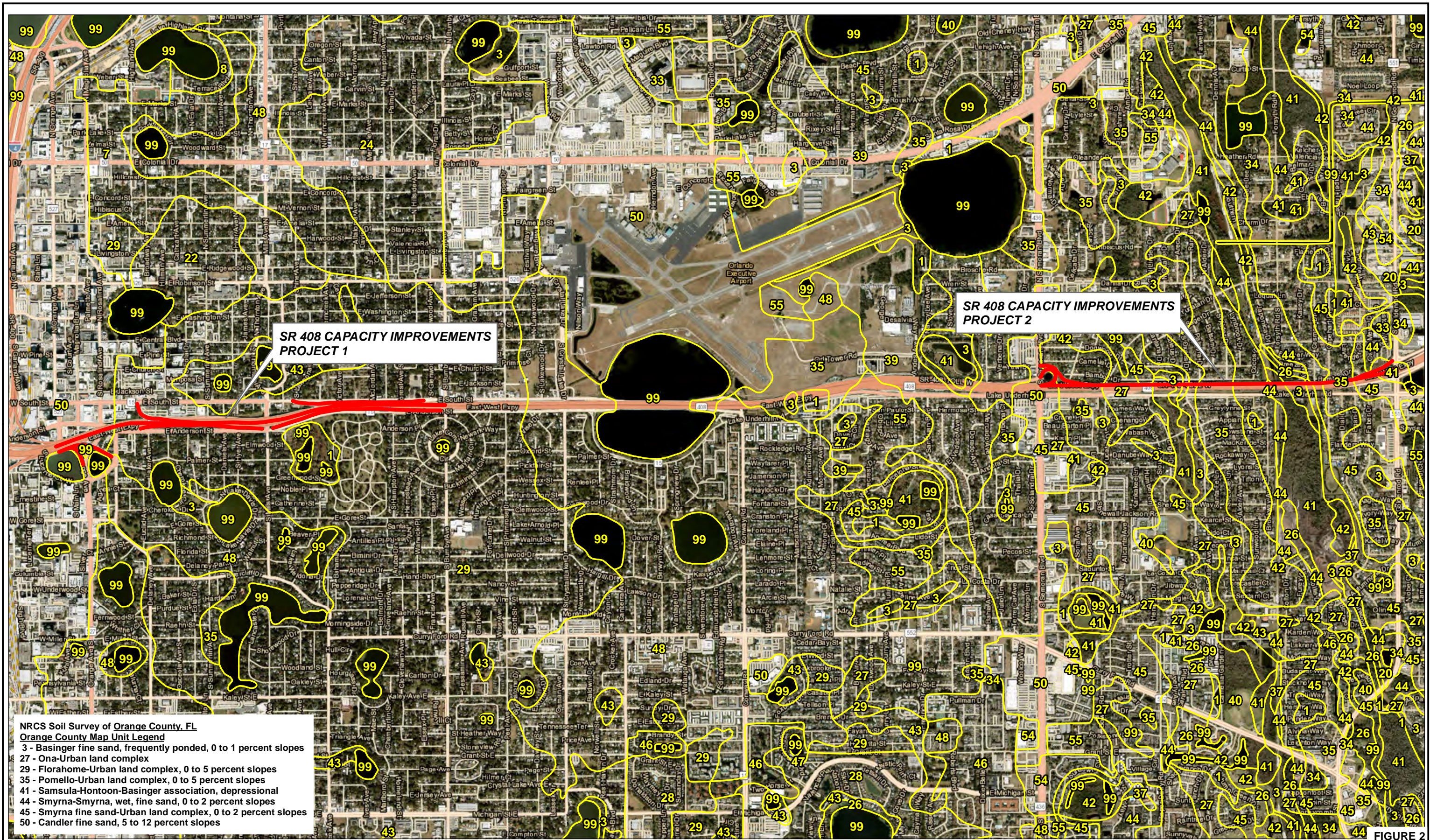
DANIEL C. STANFILL, P.E.
 P.E. LICENSE NUMBER 42763
 GEOTECHNICAL AND ENVIRONMENTAL
 CONSULTANTS, INC.
 919 LAKE BALDWIN LANE
 ORLANDO, FL. 32814

CFX PROJ. NO.:
 408-175

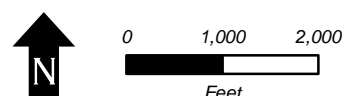
**CENTRAL
 FLORIDA
 EXPRESSWAY
 AUTHORITY**

USGS QUADRANGLE MAP

SHEET
 NO.



NRCS Soil Survey of Orange County, FL
Orange County Map Unit Legend
 3 - Basinger fine sand, frequently ponded, 0 to 1 percent slopes
 27 - Ona-Urban land complex
 29 - Florahome-Urban land complex, 0 to 5 percent slopes
 35 - Pomello-Urban land complex, 0 to 5 percent slopes
 41 - Samsula-Hontoon-Basinger association, depressional
 44 - Smyrna-Smyrna, wet, fine sand, 0 to 2 percent slopes
 45 - Smyrna fine sand-Urban land complex, 0 to 2 percent slopes
 50 - Candler fine sand, 5 to 12 percent slopes



DANIEL C. STANFILL, P.E.
 P.E. LICENSE NUMBER 42763
 GEOTECHNICAL AND ENVIRONMENTAL
 CONSULTANTS, INC.
 919 LAKE BALDWIN LANE
 ORLANDO, FL. 32814

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NRCS SOIL SURVEY MAP

SHEET NO.

FIGURE 2

**SR 408 CAPACITY IMPROVEMENTS
PROJECT 1**

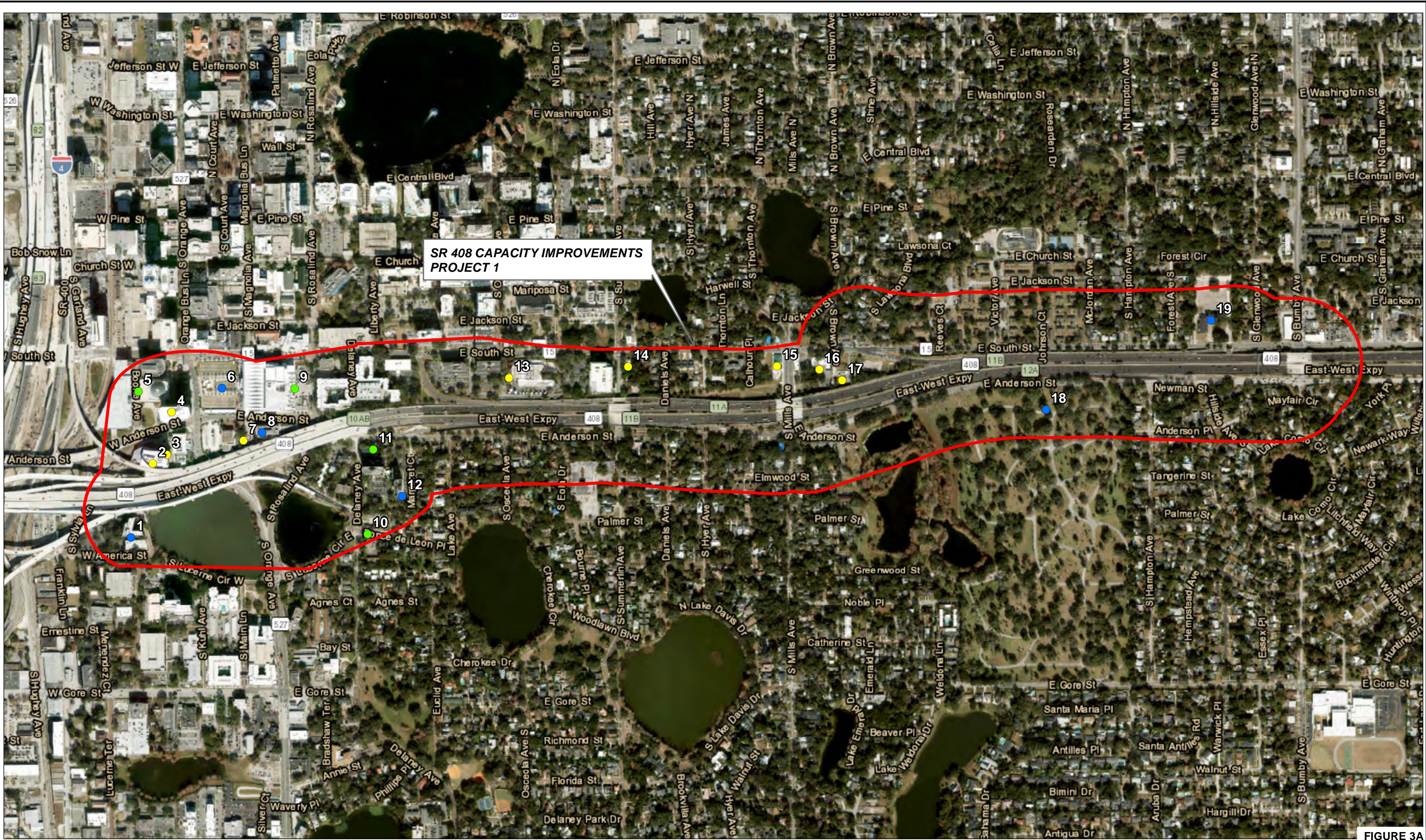
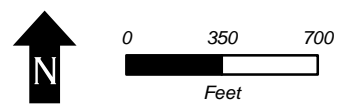


FIGURE 3A

- HIGH RISK RATING SITE LOCATION
- MEDIUM RISK RATING SITE LOCATION
- LOW RISK RATING SITE LOCATION
- NO RISK RATING SITE LOCATION



RICHARD P. McCORMICK, P.G.
P.G. LICENSE NUMBER 2096
GEOTECHNICAL AND ENVIRONMENTAL
CONSULTANTS, INC.
919 LAKE BALDWIN LANE
ORLANDO, FL. 32814

CFX PROJ. NO.:
408-175



**POTENTIAL CONTAMINATION
SITE LOCATION MAP**

SHEET NO.

**SR 408 CAPACITY IMPROVEMENTS
PROJECT 2**

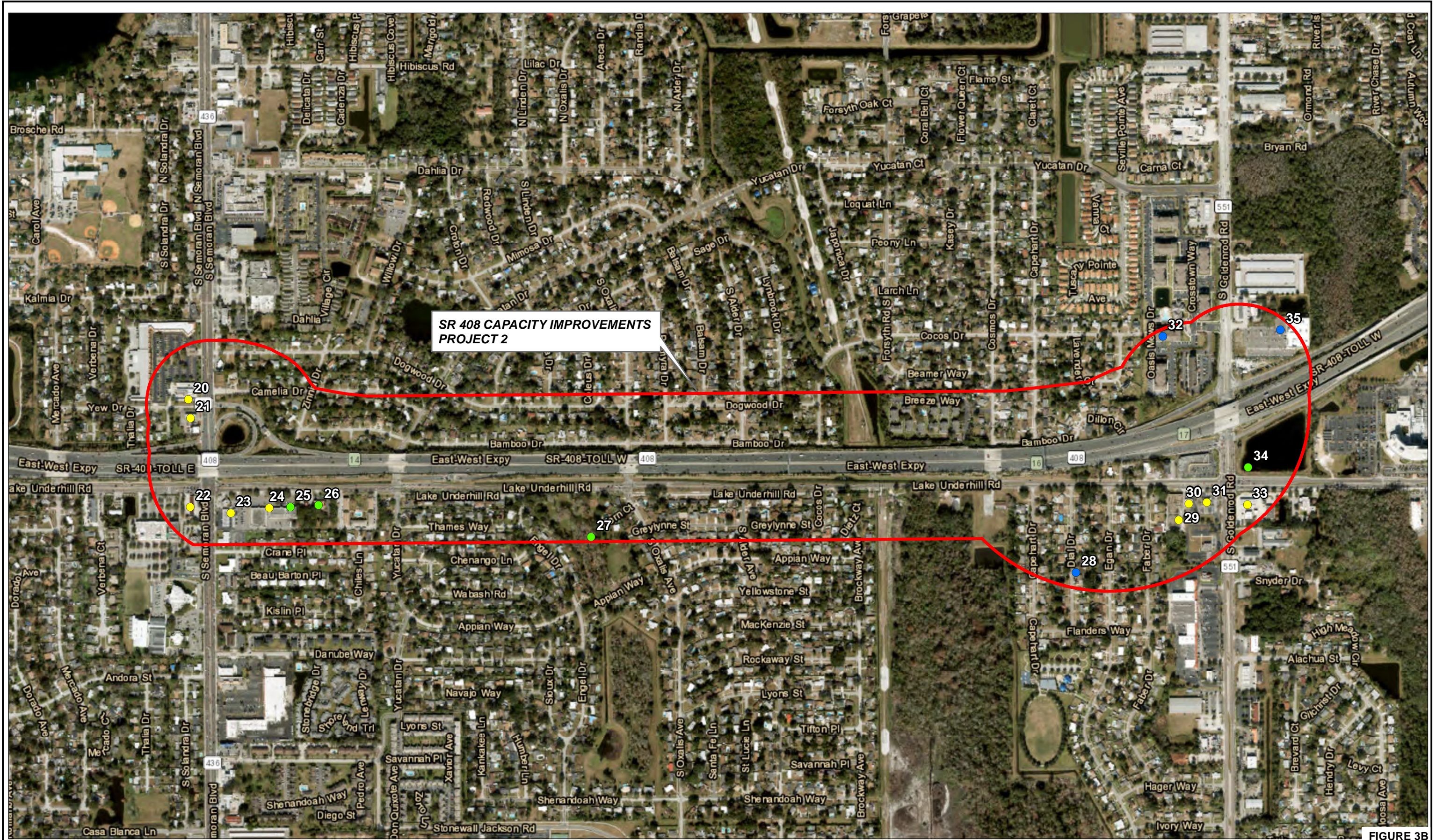


FIGURE 3B

<ul style="list-style-type: none"> ● HIGH RISK RATING SITE LOCATION ● MEDIUM RISK RATING SITE LOCATION ● LOW RISK RATING SITE LOCATION ● NO RISK RATING SITE LOCATION 		<p>RICHARD P. McCORMICK, P.G. P.G. LICENSE NUMBER 2096 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC. 919 LAKE BALDWIN LANE ORLANDO, FL. 32814</p>	<p>CFX PROJ. NO.:</p> <p>408-175</p>	<p>CENTRAL FLORIDA EXPRESSWAY AUTHORITY</p>	<p><i>POTENTIAL CONTAMINATION SITE LOCATION MAP</i></p>	<p>SHEET NO.</p>
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APPENDIX A

Contamination Risk Rating Descriptions

The contamination potential risk rating system was developed by FOOT and is included in Part 2, Chapter 20 of the PD&E Manual, dated July 1, 2020. The rating system incorporates four levels of risk:

1. **No** - 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.

2. **Low** - 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.

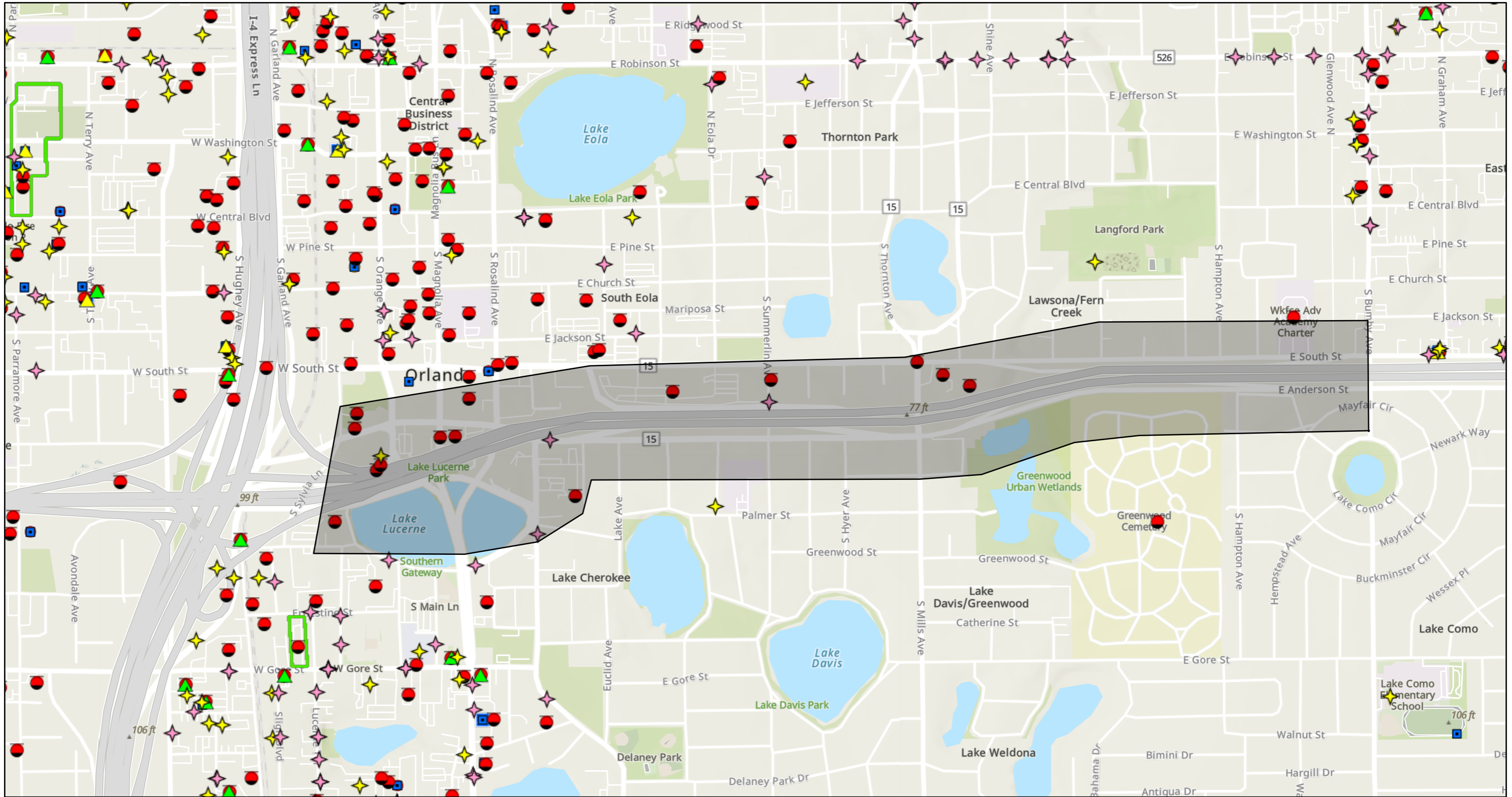
3. **Medium** - After a review of conceptual or design plans and findings from a Level I evaluation, a potential contamination impact to the project has been identified. If there is insufficient information (such as regulatory records or site historical documents) to make a determination as to the potential 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.

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

APPENDIX B














Map Direct Maps

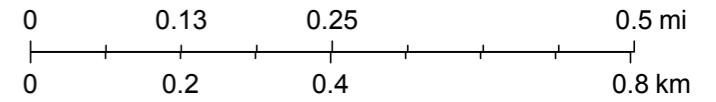
Standard Map



December 8, 2022

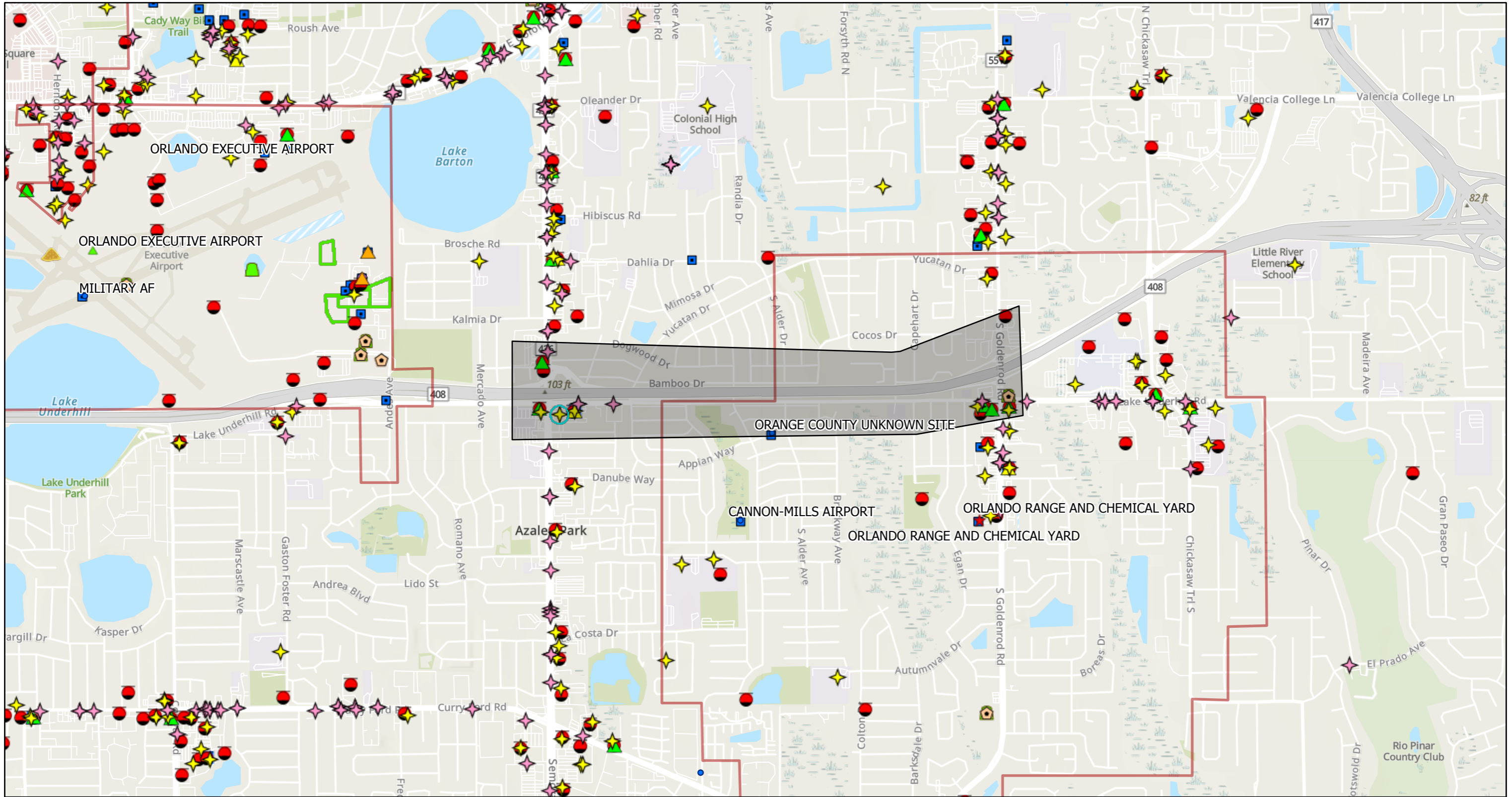
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-  Drycleaning Solvent Program Cleanup Sites
-  Site Investigation Section Sites
-  OTHER WASTE CLEANUP
-  Florida Institutional Controls Registry
-  ERIC Waste Cleanup
-  PETROLEUM
-  ERIC Waste Cleanup
-  Storage Tank Contamination Monitoring (STCM)
-  Compliance & Enforcement Tracking-Hazardous Waste Facilities
-  State-Owned Lands Cleanup Program (SOLCP) Sites
-  DEP Cleanup Sites
-  County SQGS
-  BROWNFIELD SITES



FDEP, DWM, FDEP,DWM, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User

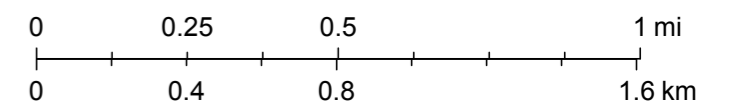
Standard Map



December 13, 2022

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- | | |
|--|--|
| ERIC PFAS Sites | ERIC PFAS Sites |
| Department of Defense,Cleanup Underway | Department of Defense,Cleanup Underway |
| Department of Defense,Evaluation in progress | Department of Defense,Evaluation in progress |
| Drycleaning Solvent Program Cleanup Sites | Storage Tank Contamination Monitoring (STCM) |
| Florida Institutional Controls Registry | DEP Cleanup Sites |
| ERIC Waste Cleanup | OTHER WASTE CLEANUP |
| ERIC Waste Cleanup | PETROLEUM |



FDEP, DWM, FDEP,DWM, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User

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