Florida Department of Transportation

US 301 (SR 35) PD&E Study

CR 470 E to State Road 44 in Sumter County

Level 1 Contamination Screening Evaluation Report

FDOT Office
District Five

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The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT.

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Contamination Screening Evaluation Report
US 301 Project Development and Environment Study
FM No. 430132-1-22-01

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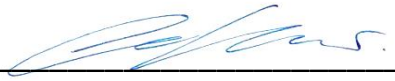
Production Check:		9/22/2017
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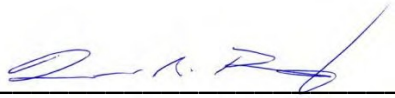
Quality Control Review:		9/22/2017
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Executive Summary

The purpose of this Level 1 Contamination Screening Evaluation Report (CSER) for the Mainline Widening, US 301 Realignment Alternative (Truck Route), and Ponds is to identify, review, and evaluate known or potential contamination problems, provide risk rankings for properties, facilities or sites that have the potential for contamination to affect the proposed improvements, and to present recommendations concerning these problems. It has been prepared in accordance with the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual, Part 2, Chapter 22 (last revision).

The screening evaluation is intended to identify and provide risk rankings of potentially contaminated sites which could have an impact on widening of the mainline roadway, the development of a new roadway corridor (Realignment Alternative), and support the Pond Siting Report (PSR). This report represents the results of our findings, based on evaluation of available data, historical aerial photographs, topographic map reviews, site reconnaissance and government database searches.

Mainline Widening

Forty-eight (48) mainline locations were investigated for sites that may present the potential for finding petroleum contamination or hazardous materials, and therefore may impact the proposed improvements for this project. Specific details for each site are outlined in **Appendix A** and their locations are presented in **Appendix B, Sheets B-2 to B-5**. Of the forty-eight (48) mainline sites investigated, the following risk rankings have been applied: **nine (9) "High" ranking sites, fourteen (14) "Medium" ranking sites, thirteen (13) "Low" ranking sites, and twelve (12) sites ranked "No"** for potential contamination concerns.

US 301 Realignment Alternatives (Truck Route)

A total of ten (10) sites of potential contamination concern were identified to be located within the Potential Realignment Area (as illustrated on Figure 1-1) during the preliminary investigation. Each site was investigated for current or past land uses that may present the potential for finding petroleum contamination or hazardous materials, and therefore may impact the proposed project. The following table summarizes the risk rankings for potential contamination concern from each of the 10 sites in relation to each alignment. The three (3) Realignment Alternatives and the Preferred Alignment (a combination of Alternative B and Alternative C) are presented in **Appendix B, Sheets B-6 and B-7**.

US 301 Realignment Alternatives Matrix Evaluation Risk Ranking Summary

	NO	LOW	MEDIUM	HIGH
Alternative A	3	2	3	2
Alternative B	2	2	5	1
Alternative C	2	2	4	2
Alternative B/C	2	5	2	1

Ponds

The pond site options identified for evaluation are located onsite within the existing right-of-way (ROW), offsite, or along the new potential US 301 Realignment ROW. In November 2016, sixty-five (65) Preliminary Pond Alternative locations and twenty-one (21) associated Easements were initially received for evaluation. Updates and additions to the Ponds and Easements were received in May 2017. The revised pond sites are presented on recent aerial photographs in **Appendix B, Sheet B-8**. The contamination screening evaluation has resulted in the following risk rankings for the revised preliminary pond sites:

Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
		Mainline Ponds	
1A	1.27	NO	Historical Pastureland.
1B	1.02	NO	Historical Pastureland.
1C	1.59	HIGH	Located on the Shady Brook golf course property. Concerns regarding residual herbicides/pesticides and fertilizers.
2A	1.93	NO	Wooded.
2B	3.20	LOW	Residential and partially wooded.
2C + Easement	2.65 + 0.30	NO	Wooded.
3A	3.47	LOW	Residential and partially wooded.
3B + Easement	2.48 + 0.26	LOW	Wooded.
3C	2.33	NO	Wooded.
4A	2.21	LOW	Residential, pasture and partially wooded.
4B	2.16	MEDIUM	Residential, pasture and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the east adjoining former railroad corridor.
4C	2.19	LOW	Residential and wooded.
5A + Easement	5.58 + 0.25	MEDIUM	Residential and partially wooded. Similar footprint as Realignment Pond 19A, with different Easement. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining former railroad corridor.
5B	3.09	MEDIUM	Residence. Concerns regarding herbicides/pesticides and petroleum-based products on the east adjoining former railroad corridor.
5C	5.58	MEDIUM	Row crops and Pastureland.
FPC-1	0.56	NO	Historical Pastureland.
6A	2.30	NO	Historical Pastureland.
6B	2.29	NO	Historical Pastureland and partially wooded.
6C	2.01 + 0.54	NO	Historical Pastureland. Similar footprint as Realignment Pond 19C, with different Easement.
FPC-3	0.61	NO	Wooded.
7A	2.37	NO	Wooded.
7B	1.24	NO	Wooded.

Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
7C	1.83	MEDIUM	Residential. South adjoining "Shade Tree" auto mechanic.
8A	1.43	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor and the east adjacent (presumed) historical fuel station. This pond site sits within the footprint of Pond 8D.
8B	1.16	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
8C	1.14	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
8D	4.19	MEDIUM	Vacant, residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor and the east adjacent (presumed) historical fuel station. This pond site encompasses the footprint of Pond 8A.
9A + Easement	1.39 + 0.29	LOW	Residential property with possible automobile salvage yard.
9B + Easement	1.37 + 0.65	NO	Historical Pastureland.
9C + Easement	1.21 + 0.22	LOW	Coleman City Hall property.
10A + Easement	2.19 + 1.18	NO	Historical Pastureland. West adjoining Plant Nursery and storage.
10B	1.96	NO	Historical Pastureland. West adjoining Plant Nursery.
10C + Easement	2.25 + 1.04	NO	Historical Pastureland. North adjoining Plant Nursery.
11A	1.84	NO	Wooded.
11B	1.78	NO	Wooded.
11C + Easement	1.70 + 0.43	NO	Historical Pastureland and partially wooded
12A	1.73	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 23A.
12B + Easement	1.48 + 0.28	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 23B.
12C	1.44	HIGH	Davis Garage auto service/repair. Similar footprint to Pond 23C. Concerns regarding residual impacts from petroleum products and other automotive fluids.
13A + Easement	2.19 + 0.54	NO	Wooded.
13B + Easement	2.35 + 0.54	LOW	Existing pond. Adjoining former quarry.
13C	3.18	LOW	Historical Pastureland. Adjoining former quarry.
14A	2.20	LOW	Historical Pastureland.
14B	1.67	LOW	Pastureland and residence.
14C + Easement	2.10 + 0.30	NO	Wooded.
FPC-4	1.68	NO	Wooded.
15A	1.75	NO	Wooded. South adjoining power easement.
15B	1.60	NO	Wooded.
15C	1.61	NO	Wooded. South adjoining power easement.

Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
FPC-5	5.17	NO	Wooded. South adjoining power easement.
FPC-6	0.56	NO	Historical Pastureland.
16A	1.27	NO	Historical Pastureland.
16B + Easement	1.72 + 0.15	NO	Wooded.
16C	1.48	NO	Historical Pastureland.
FPC-7	1.26	NO	Historical Pastureland.
17A	4.08	NO	Wooded.
17B + Easement	5.36 + 0.61	MEDIUM	Pastureland and partially wooded. The Easement passes by existing fuel stations.
17C + Easement	5.95 + 0.46	NO	Wooded.
		Realignment Ponds	
19A + Easement-1 + Easement-2	7.17 + 0.25 + 0.51	HIGH	Residential and partially wooded. Similar footprint as Mainline Pond 5A, with different Easement. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
19B	5.26	NO	Pastureland with existing pond. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
19C + Easement	5.33 + 0.27	NO	Historical Pastureland. Similar footprint as Mainline Pond 6C, with different Easement.
20A + Easement	1.93 + 0.28	NO	Historical Pastureland.
20B	1.93	NO	Historical Pastureland.
20C	1.88	NO	Historical Pastureland.
21A	3.40	NO	Historical Pastureland.
21B	3.42	NO	Historical Pastureland.
21C + Easement	3.68 + 0.28	NO	Historical Pastureland.
22A	2.77	NO	Historical Pastureland.
22B	3.18	NO	Wooded.
22C	2.91	NO	Historical Pastureland.
23A	2.36	LOW	Residential, Pastureland. ROW. Adjacent to former quarry area. Similar footprint to Pond 12A.
23A-1	1.28	NO	Wooded. ROW.
23A-2	2.30	NO	Wooded. ROW.
23B + Easement	1.57 + 0.23	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 12B.
23C	1.44	HIGH	Davis Garage auto service/repair. Similar footprint to Pond 12C. Concerns regarding residual impacts from petroleum products and other automotive fluids.
Notes: No named Pond 18, FPC-2 is removed, Easements 10B and 20B are removed			

A total of seventy-five (75) Preliminary Pond Alternatives and twenty-two (22) associated Easements were identified for evaluation based on revised files received in May 2017. Tierra completed a review of environmental record databases, historical research, site reconnaissance, and detailed file reviews; which may present the potential for finding petroleum contamination or hazardous materials and therefore may impact the proposed improvements for this project. Of the pond alternatives investigated, the following risk rankings have been applied: **four (4) "High" ranking pond sites, ten (10) "Medium" ranking pond sites, fifteen (15) "Low" ranking pond sites, and forty-six (46) pond sites ranked "No"** for potential contamination concerns.

Evaluations

For the sites ranked "No" for potential contamination, no further action is recommended. These sites have been evaluated and determined not to have any potential environmental risk to the study area at this time.

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

For those locations with a risk ranking of "Medium" or "High", that have not been previously assessed, Level 2 field screening should be conducted. These sites have been determined to have potential contaminants, which may impact the project corridor. A soil and groundwater sampling plan should be developed for each site.

The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical test to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells should be prepared. Prior to conducting any field screenings the District Contamination Impact Coordinator (DCIC) should be notified.

Regardless of the risk ranking, all ponds sites selected for final design will require Level 2 field screening. The field screening scope of work should include, at a minimum, soil borings to the proposed depth of the pond and soil sampling for total arsenic. Additional sample analyses may be required based on historical land use of the pond site and surrounding properties. The District Contamination Impact Coordinator should be consulted regarding the field screening scope of work for all final pond sites.

This *Executive Summary* provides a brief overview of the environmental contamination concerns associated with the proposed roadway improvement project. The reader should utilize the detailed information presented within this report for specific information regarding any area of particular interest.

1.0 Project Description

FDOT is conducting a Project Development and Environment (PD&E) study for an approximately 8.0 mile portion of US 301 between CR 470 East and SR 44 in Sumter County. Within these limits, US 301 (SR 35) travels through the cities of Coleman and Wildwood. While mostly a north-south route, US 301 travels in an east-west direction through the City of Coleman where it has the local road name Warm Springs Avenue. The Florida's Turnpike (SR 91) crosses US 301 with an interchange to the south of the northern project limit, and I-75 runs parallel to the study corridor on the west of US 301 through Sumter County.

The PD&E study will analyze design alternatives that widen US 301; improve the US 301 interchange at Florida's Turnpike; and consider a new corridor for US 301 south of the City of Coleman. The improvements will seek to provide additional capacity for future traffic growth. US 301 is projected to carry more than 14,000 vehicles per day by 2022 and increase to more than 24,000 per day by 2042. Based on existing 2014 conditions analysis, US 301 carried up to 9,600 vehicles per day on a 2-lane segment south of the Turnpike operating with a Level of Service of D.

Within the project limits, US 301 begins as a two-lane undivided roadway at CR 470 East with turn lanes at some intersections; makes a sharp 90° turn through the City of Coleman (Warm Springs Avenue/Commercial Street) and then curves to the north at CR 468. It then continues north as an undivided roadway until it reaches the Florida's Turnpike interchange where a median is added. North of the interchange the roadway is a four-lane divided, rural typical section facility. It has a short urban curb and gutter section approaching SR 44.

The purpose of this project is to increase the capacity of US 301 to respond to future travel demand from the intersection of CR 470 East, north through the City of Coleman, to SR 44 in the City of Wildwood. The project will also improve safety and provide multi-modal facilities for pedestrian and bicyclists, and evaluate improvements to the US 301 interchange with the Florida's Turnpike.

This study will evaluate all viable alternatives to widen US 301 on the existing project corridor as well as a potential realignment for US 301 from near CR 525 to CR 468 to minimize potential environmental impacts to the City of Coleman. Figure 1-1 shows the study corridor and potential realignment (Realignment Alternatives) area.

Figure 1-1 | Project Location Map

2.0 Study Area

The project corridor for this CSER is an approximate 8.0 mile portion of US 301 between CR 470 and SR 44 in Sumter County, Florida. For purposes of this report, the project study area includes the limits of the mainline project and an approximate 300 foot area extending beyond those boundaries. The project limits are presented in **Appendix B**.

3.0 Land Uses

Land use is an important factor when evaluating historical and current environmental conditions. Evaluating the past use of properties can assist in determining possible chemical constituents that may have been used or associated with a particular parcel. Current land use records, typically supplied by the local county or municipality, also provide environmental professionals additional information to target areas for potential contaminants.

The Sumter County zoning and land use information was viewed using the county GIS website. A recreation of the Future Land Use (FLU) Map is presented in **Appendix C**. The majority of current land uses along the US 301 corridor consists of a combination of residential and agricultural, with smaller areas of commercial, industrial, and municipal. The majority of planned future land uses in the County are designated as: agricultural and municipal with areas of commercial/industrial and residential located within the cities of Sumterville, Coleman, and Wildwood.

4.0 Hydrogeological Features

Hydrogeological features can be indicators of possible environmental concerns; therefore, they are reviewed as part of the CSER process. The hydrogeological features such as rivers, artesian wells, creeks, sinks, mines, well fields, etc. provided on governmental maps and identified in regional soils and geology literature are reviewed for the noted items which fall within the project limits. The features are evaluated to determine if there are any known areas, or other regional environmental concerns that may contribute to environmental influences within the project limits. Information for this section was derived from the USDA Published Soil Surveys for Florida and various Florida Geological Society (FGS) publications.

4.1 Regional Physiography

Sumter County is situated on the Central Highlands geomorphic region, in the Floridian section of the Atlantic Coastal Plain physiographic province. Elevation ranges from 40 to 200 feet above mean sea level. Most of Sumter County lies within the Western Valley and Tsala Apopka Plain. Other major physiographic features include Brooksville Ridge, which forms the county's western boundary and the Sumter and Lake Uplands, which occupy the northeastern corner of the county.

The major rivers in the county are the Withlacoochee and Little Withlacoochee. These rivers serve as the county line for Sumter County and Citrus and Hernando Counties on the west and Polk County on the south. Other major waterways that discharge into the Withlacoochee River include the Dead River, Outlet River, and Juniper Creek. They are fed by small lakes, four watersheds, and artesian springs.

4.2 Regional Geology

The surface sediments in Sumter County consist of quartz sand, clay, peat, limestone, and dolomite. These sediments range in age from middle Eocene age to Holocene age.

The near surface geologic deposits and formations from youngest to oldest in Sumter County include: Holocene Sediment (Qh), Undifferentiated sediments (Qu, TQu), Beach ridge and dune sediments (Qbd), the reworked Cypresshead (TQuc), Cypresshead Formation (Tc), and the Ocala Limestone (To).

The principal hydrogeologic unit under Sumter County is the Floridan Aquifer. The Floridan Aquifer system is primarily comprised of a thick sequence of permeable limestone and dolostone and consists of the Upper Floridan Aquifer, a middle semi confining unit, a middle confining unit, and the Lower Floridan Aquifer. The upper portion of the Floridan Aquifer is comprised of the Hawthorn clays and Tampa Formation limestones. The lower unit of the Floridan Aquifer is comprised of the Suwannee Limestone, Ocala Group Limestones and the Avon Park Limestone. The upper Floridan aquifer is the principal source of water supply in most of north and central Florida. Groundwater flow is generally from highs near the center of the state towards the coast. The Floridan aquifer is the source of many springs in Florida.

Groundwater conditions will vary with environmental variations and seasonal conditions, such as the frequency and magnitude of rainfall patterns, as well as man-made influences (i.e. existing water management canals, swales, drainage ponds, underdrains and areas of covered soils, such as paved parking lots and sidewalks).

4.3 USDA Soil Survey

Soil Surveys provide indications of what a soil may be useful for and can provide clues as to possible uses and potential environmental issues. Additionally, maps of the soil units provided in the surveys often show historical land features such as mines, borrow pits, railroads, etc. These can also be indications of areas of concern.

The USDA's NRCS "Soil Survey of Sumter County, Florida" issued in October 1988 and the Web Soil Survey were reviewed for general climate and near surface soil information. The soil map for the project area is included in **Appendix D**.

According to the Soil Survey, the climate of Sumter County is characterized by long warm, and relatively humid summers and mild, dry winters. In an average year, about 56 percent of the total annual precipitation falls from June through September. During summer months the daily high can reach 90 degrees or higher and in winter the high averages about 70 degrees, with overnight lows occasionally reaching the 30's.

The General Soil Units situated in the vicinity of the study area are: soils of the Upland Ridges (located throughout the study area), these are nearly level to gently sloping, somewhat poorly drained and moderately well drained, sandy soils underlain by loamy or clayey subsoils; soils of the Swamps, Marshes, and River Flood Plains (located bisecting the southern portion of the corridor), these are nearly level, poorly drained and very poorly drained mucky soils that are underlain by sandy or loamy material; and soils of the Flatwoods and Depressions (located bisecting the northern portion of the project corridor), these are nearly level, poorly drained and very poorly drained, sandy soils underlain by sandy, loamy or clayey subsoils.

The Soil Survey indicates that there are at least twenty-two (22) primary soil-mapping units noted along the project corridor. The general engineering properties of the soil-mapping units as indicated in the Soil Survey are presented in the following table below.

Table 1 – Summary of Mapped Units: USDA Soil Survey - Sumter County, Florida

USDA Map Symbol and Soil Name	Depth (in)	Soil Classification		Permeability (in/hr)	pH	Seasonal High Water Table	
		USCS	AASHTO			Depth (feet)	Months
(4) Candler	0-8	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0	---	Jan-Dec
	8-50	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0		
	50-80	SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.0		
(9) Paisley	0-5	SM, SP-SM	A-2-4, A-3	2.0 - 20.0	5.1-6.5	0.5-1.5	June-Dec
	5-16	SM, SP-SM	A-2-4, A-3	2.0 - 20.0	5.1-6.5		
	16-80	CH, CL	A-7	0.1 - 2.0	5.6-8.4		
(11) Millhopper	0-5	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5	3.5-?6.0	June-Sept
	5-50	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5		
	50-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 2.0	4.5-6.0		
(13) Tavares	0-8	SP, SP-SM	A-3	6.0 - 49.9	5.1-6.0	3.5->6.0	June-Dec
	8-80	SP, SP-SM	A-3	6.0 - 49.9	5.1-6.0		
(15) Adamsville, bouldery subsurface	0-5	SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.0	2.0-3.5	June-Nov
	5-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5		
(21) EauGallie, non-hydric	0-8	SP	A-3	6.0 - 20.0	4.5-6.0	0.5-1.5	June-Sept
	8-25	SP	A-3	6.0 - 20.0	4.5-6.0		
	25-36	SM, SP-SM	A-2-4, A-3	0.6 - 6.0	4.5-6.5		
	36-57	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.8		
	57-80	SC, SC-SM, SM	A-2-4, A-2-6	0.2 - 0.6	5.1-7.8		
---- EauGallie, Hydric	0-8	SP	A-3	6.0 - 20.0	4.5-6.0	0.0-0.5	June-Aug
	8-25	SP	A-3	6.0 - 20.0	4.5-6.0		
	25-36	SM, SP-SM	A-2-4, A-3	0.6 - 6.0	4.5-6.5		
	36-57	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.8		
	57-80	SC, SC-SM, SM	A-2-4, A-2-6	0.2 - 0.6	5.1-7.8		
(23) Ona, non-hydric	0-9	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0	0.5-1.5	June-Nov
	9-20	SM, SP-SM	A-2-4, A-3	0.6 - 2.0	4.5-6.0		
	20-80	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0		
--- Ona, hydric	0-9	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0	0.0-0.5	June-Sept
	9-20	SM, SP-SM	A-2-4, A-3	0.6 - 2.0	4.5-6.0		
	20-80	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0		
(26) Wabasso, non-hydric	0-4	SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-5.5	1.0-1.5	June-Sept
	4-15	SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-7.3		
	15-21	SM, SP-SM	A-2-4, A-3	0.6 - 2.0	4.5-7.3		
	21-60	CH, CL, SC	A-2-6, A-2-7, A-6, A-7	0.2 - 2.0	4.5-7.3		
	60-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.2 - 2.0	7.4-8.4		

Table 1 – Summary of Mapped Units: USDA Soil Survey - Sumter County, Florida

USDA Map Symbol and Soil Name	Depth (in)	Soil Classification		Permeability (in/hr)	pH	Seasonal High Water Table	
		USCS	AASHTO			Depth (feet)	Months
(26) Wabasso, Hydric	0-4	SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-5.5	0.0-1.0	June-Aug
	4-15	SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-7.3		
	15-21	SM, SP-SM	A-2-4, A-3	0.6 - 2.0	4.5-7.3		
	21-60	CH, CL, SC	A-2-6, A-2-7, A-6, A-7	0.2 - 2.0	4.5-7.3		
	60-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.2 - 2.0	7.4-8.4		
(27) Sumterville, bouldery subsurface	0-9	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.5	1.5-3.0	July-Oct
	9-29	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.5		
	29-80	CH, CL	A-7	0.1 - 0.2	5.1-7.3		
(29) Nittaw	0-5	PT	A-8	6.0 - 20.0	3.5-4.4	0.0-1.0	June-Nov
	5-12	SC-SM, SM, SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.6-7.3		
	12-65	CH, CL	A-7	0.1 - 0.2	6.6-7.8		
	65-80	SC-SM, SM, SP, SP-SM	A-2-4, A-3	6.0 - 20.0	6.6-8.4		
(30) Placid	0-16	SM, SP, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-6.5	0.0-1.0	June-Dec
	16-80	SM, SP, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-6.5		
(33) Sparr, bouldery subsurface	0-8	SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.5	1.5-3.5	June-Sept
	8-46	SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.5		
	46-58	SC, SC-SM, SM	A-2-4	0.6 - 2.0	4.5-6.5		
	58-80	SC, SC-SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	4.5-6.5		
(34) Tarrytown, bouldery subsurface	0-7	SM	A-2-4	0.6 - 2.0	6.6-8.4	1.0-2.0	July-Sept
	7-14	CH, CL, SC	A-4, A-6, A-7	0.6 - 2.0	6.6-8.4		
	14-50	CL, CL-ML, SC, SC-SM	A-4	0.1 - 0.2	7.4-9.0		
	50-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	7.4-9.0		
(40) Millhopper, bouldery subsurface	0-7	SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5	3.5->6.0	July-Oct
	7-45	SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5		
	45-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 2.0	4.5-6.0		
(42) Adamsville	0-8	SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.8	2.0-3.5	June-Nov
	8-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5		
(43) Basinger	0-6	SP	A-3	6.0 - 20.0	5.1-6.5	0.0-1.0	Jan-Feb, June-Dec
	6-15	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-6.5		
	15-30	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.6-7.3		
	30-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.6-7.3		
(46) Ft. Green, non-hydric	0-6	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.3	0.5-1.5	June-Sept
	6-28	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.3		
	28-38	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	5.6-7.8		
	38-58	SC	A-2-6, A-4, A-6, A-7-6	0.1 - 0.6	5.6-7.8		
	58-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	5.6-7.8		

Ft. Green, Hydric	0-6	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.3	0.0-0.5	June-Sept
	6-28	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-7.3		
	28-38	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	5.6-7.8		
	38-58	SC	A-2-6, A-4, A-6, A-7-6	0.1 - 0.6	5.6-7.8		
	58-80	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	5.6-7.8		
(51) Dumps/Pits	---	---	---	0.0 - 0.0	---	---	Jan-Dec
(53) Tavares, bouldery subsurface	0-7	SP, SP-SM	A-3	6.0 - 49.9	3.5-6.0	3.5-6.0	June-Dec
	7-80	SP, SP-SM	A-3	6.0 - 49.9	3.5-6.0		
(56) Wabasso	0-5	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-5.5	0.0-1.0	Jan, June-Dec
	5-12	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-7.3		
	12-28	SM	A-2-4	6.0 - 20.0	4.5-7.3		
	28-55	SC, SC-SM,SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	4.5-7.3		
	55-80	SC, SC-SM,SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.6	7.4-8.4		

Table 1 – Summary of Mapped Units: USDA Soil Survey - Sumter County, Florida

USDA Map Symbol and Soil Name	Depth (in)	Soil Classification		Permeability (in/hr)	pH	Seasonal High Water Table	
		USCS	AASHTO			Depth (feet)	Months
(62) Urban land	---	---	---	0.0 - 0.0	---	---	Jan-Dec
(65) Candler, bouldery subsurface	0-3	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0	---	Jan-Dec
	3-65	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0		
	65-80	SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-6.0		

(1) *AASHTO and USCS do not provide classification for weathered/unweathered bedrock.*

4.4 USGS Quadrangle Map

Topographic maps are reviewed to develop an understanding of previous land uses in the project corridor and to identify any areas that may show historical, natural and manmade features, which aid in determining potential environmental concerns.

The USGS 7.5-Minute "Wildwood, Florida" Quadrangle topographic map dated 1967 was reviewed as part of this study. A copy of the topographic map is provided in **Appendix E**.

Based on a review of the topographic map, the majority of the study area is shaded to indicate undeveloped, wooded or natural land, with areas of submerged woodland, marsh or swamp. Shady Brook is depicted to bisect the US 301 corridor, in a general east to west direction, north of the projects southern limit. Numerous ponds and lakes are apparent north and south of Coleman. US 301, CR 470, CR 468, the Turnpike and SR 44 are all depicted with their current alignments. The Seaboard Coastline railroad corridor is depicted to run generally parallel to the project corridor from CR 470 to south of Coleman city limits, where it crosses US 301 and continues northwards. Sumterville Cemetery is labeled at the intersection of US 301 and CR 470. A power line crossing US 301 is evident south of the Turnpike interchange. Two areas noted as Quarry are evident: east of the intersection of US 301 and CR 470; and east and west of US 301 as you travel north out of Coleman.

Numerous structures (presumed to be residential) are apparent along the project corridor, with concentrations in the vicinity of Coleman and north of the intersection of US 301 and SR 44. Other structures (presumed to be commercial/industrial) are depicted south of the intersection of US 301 and CR 470 and at the intersection of US 301 and SR 44. The natural ground surface elevations appear to be within a range of about +55 to +75 feet National Geodetic Vertical Datum of 1929 (NGVD29) along the project limits.

The presences of a railroad, a cemetery, and quarry or mined lands are indicators that potential contamination concerns may exist along the proposed project corridor.

5.0 Methodology

A CSER was conducted for the corridor within the existing and proposed ROW limits and extending outward approximately 300 feet from the centerline of the ROW. The purpose of the CSER is to evaluate the potential for environmental impacts associated with proposed construction within the project limits. The evaluation included the following tasks:

- Document review using Sumter County Property Appraiser's website;
- A regulatory review of governmental databases for permits and or violations associated with environmental issues;
- Obtaining and evaluating historical aerial photographs, topographic maps and soil surveys in an effort to determine potential contamination problem areas;
- Conducting site visits to verify information provided and to identify other potential concerns within the vicinity of the project;
- Determining the contamination potential and assigning a risk rank for each property within the proposed project limits.

5.1 Regulatory Review

An environmental database search using Environmental Data Management, Inc. (EDM) was conducted in February 2016 to identify sites, facilities or listings within close proximity of the project corridor containing documented or suspected petroleum contamination or other hazardous materials. The regulatory review of federal and state environmental records utilizes an integrated geographic information system database. The search was conducted as a preliminary screening tool to identify facilities that are registered with various county, state, and federal agencies.

In addition to the environmental database search report, provided by EDM, Tierra supplemented the regulatory records review with readily available information from various online sources, such as: Florida Department of Environmental Protections (FDEP) Map Direct Web Application, the FDEPs Electronic Document Management System (OCULUS), and Environmental Protection Agency (EPA) EnviroMapper for Envirofacts Multi-system Search. A complete list of all environmental record databases searched is included in the database search report, provided by EDM, in **Appendix F**.

The database search report provides geocoded and non-geocoded regulatory listings of interest that are identified within close proximity to the project corridor. All are reviewed for the potential of contamination to impact the project corridor. Each listing is located by address, facility ID number or field verified where possible. Generally, those identified to be more than 300 feet from the ROW are considered to be outside of the project limits and excluded from further investigation. Some sites may have more than one regulatory listing. The remaining listings are grouped by facility/site location (listings from multiple databases can be consolidated to individual property parcels) and are discussed in applicable sections of the Potential Contamination Sites Summary Table provided in **Appendix A**.

5.2 Supplemental Regulatory Information

In addition to the environmental database search report, Tierra supplemented the regulatory records review with readily available information from various online sources as listed below. Copies of useful documentation are included in **Appendix I**.

- FDEP Map Direct GIS Web Application
- FDEP OCULUS Document Management System
- FDEP Storage Tank/Contaminated Facility (STCF) search
- FDEP Hazardous Waste Facilities Search
- FDEP Solid Waste Facility Inventory
- EPA Envirofacts Multi-system Search
- Sumter County Government website & GIS

5.3 City Directories

City directories are a listing of businesses and residences in a given area listed either by address, phone number, or name similar to a standard telephone book. For studies of this type, the listing by address for previous years is generally utilized to identify past land uses and business operations within the study area. Identification of past land uses can aid in understanding potential concerns associated with petroleum storage tanks, automotive or marine, maintenance, service or repair, and dry-cleaning processes. These types of businesses would typically store and use petroleum products, chemical fluids, solvents and produce hazardous wastes as part of their daily operations.

The majority of the study area is located in a historically rural area, outside of major city limits. Therefore, a search of City Directory listings would not be expected to return additional historical results.

5.4 Aerial Photograph Review

Historical aerial photographs were reviewed as part of the Level 1 CSER to develop a history of the previous land uses along the project corridor and to identify any areas, which may have historical uses which pose potential environmental concerns.

Historical aerial photographs dated 1941, 1951, 1960, 1969, 1973, 1983, 1993, 1994, 1995, 1999, 2004, 2005, 2006, 2007, 2008, 2010, 2011, 2013, 2014 and 2016 were reviewed from the University of Florida (UF), FDOT Survey & Mapping, USGS, Sumter County Property Appraiser (SCPA), and Google Earth.

A summary of our review is depicted in the table below. Copies of select aerial photographs are presented in **Appendix G, Sheets G-1 to G-8 (Mainline Sites) and Sheets G-9 to G-16 (Pond Alternatives)**.

Table 2 – Summary of Aerial Photograph Review

Year	Comments
1941, 1951, 1960	The majority of land use along the US 301 corridor appears to be natural, wooded, agricultural or rural residential. With a concentration of developed land along the central portion within the city of Coleman and at the northern limits with SR 44 in Wildwood. US 301 and the railroad corridor are depicted with their current alignments.
1969, 1973, 1983, 1993, 1994, 1995	Most of the study area remains the same. CR 470, SR 44 and the Turnpike are all now apparent. Disturbed land surfaces in the quarry areas are depicted northeast of the project southern limit and northeast of the intersection of US 301 with CR 468 in Coleman. The SECO property at the southern limit of the project appears to be developed as does the land at the projects northern limit.
1999, 2004, 2005, 2006, 2007, 2008, 2010, 2011, 2013, 2014	No major changes in land use are noted. Although a continued increase in residential and commercial development of properties along US 301 in Coleman and Wildwood is evident over the years. Much of the study area remains as natural land or agricultural-pastureland.

5.5 Site Reconnaissance

Tierra conducted site visits between March and November 2016 to visually determine current site conditions, to evaluate each property along the project corridor for potential contamination and to field verify information found during the regulatory and historical documents review. Site access was often limited to off-site boundary review due to site accessibility (fences, gates, private property, etc.).

The site reconnaissance in conjunction with the review of historical aerial photography, soil maps and topographic maps, allows the site to be ranked as to the degree of environmental concerns as discussed in Section 6.0. The reconnaissance included a systematic inspection of each parcel adjoining the US 301 corridor looking for signs of potential contamination. This was achieved by first driving the mainline roadway several times in both directions to get generalized information on the study area, then walking specific parcels of interest fronting the ROW to gain specific information regarding the usage and condition of the parcel. Photographs of parcels were obtained during the site inspection and select images are included in **Appendix H**.

Some of the typical physical indicators for contamination include: UST/AST fill ports and vent pipes; oil/petroleum staining; drums; chemical containers; refuse; illicit dumping; solid waste; stressed vegetation; dry cleaning facilities; materials handling from adjacent businesses; petroleum dispensers; excavated areas; agricultural use areas; chemical mix/load areas; stormwater outfall areas; surface water indicators; and other property uses that may present environmental concerns.

5.6 Interviews/Correspondence

Communication with land owners, 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, dry-cleaning processes, and other industrial or agricultural operations that could affect the project.

6.0 Determination of Potential Risk

After gathering and reviewing all readily available public information and conducting site reconnaissance, contamination risk rankings were assigned to sites of potential concern. The rating system is divided into four categories of risk as defined by the FDOT in Chapter 22 of the PD&E Manual, dated 09/01/2016. These four degrees of risk are “No”, “Low”, “Medium” and “High”. This system expresses the degree of concern for potential contamination problems. Known problems may not necessarily present a high cause for concern if the regulatory agencies are aware of the situation and actions, where necessary, are either complete or are underway, and these actions will not have an adverse impact on the proposed project.

No Risk Site - A review of all available information finds there is nothing to indicate contamination would be a problem. It is possible that contaminants were handled on the property; however, all information (DEP reports, monitoring wells, water and soil samples, etc.) indicate that contamination problems should not be expected. An example of an operation that may receive this rating is a wholesale or retail outlet that handles hazardous materials in sealed containers that are never opened while at the facility, such as cans of spray paint at a "drug store."

Low Risk Site - The former or current operation has a hazardous waste generator identification (ID) number, or deals with hazardous materials; however, based on all available information, there is no reason to believe there would be any involvement with contamination in relation to this project. This is the lowest possible rating a gasoline station operating within current regulations can receive. This rating could also apply to a retail store that blends paint. Some Low sites, such as gas stations in compliance, should be reevaluated during the design phase.

Medium Risk Site - After a review of all available information, indications are found (reports, Notice of Violations, consent orders, etc.) that identify known soil and/or water contamination and that the problem does not need remediation, is being remediated (i.e., air stripping of the groundwater, etc.), or that continued monitoring is required. The complete details of remediation requirements are important to determine what the Department must do if the property were to be acquired. A recommendation should be made on each property falling into this category to its acceptability for use within the proposed project, what actions might be required if the property is acquired, and the possible alternatives if there is a need to avoid the property. This rating expresses the degree of concern for potential contamination problems. Known problems may not necessarily present a high cause for concern if the regulatory agencies are aware of the situation and corrective actions are either underway or complete. The actions may not have an adverse impact on the proposed project.

High Risk Site -After a review of all available information, there is a potential for contamination problems. Further assessment will be required after alignment selection to determine the actual presence and/or levels of contamination and the need for remedial action. A recommendation must be included for what further assessment is required. Conducting the actual Contamination Assessment is not expected to begin until the alignment is defined; however, circumstances may require additional screening assessments (i.e., collecting soil or water samples for laboratory analysis necessary to determine the presence and/or levels of contaminants) to begin earlier. Properties previously used as gasoline stations and which have not been evaluated or assessed would probably receive this rating.

7.0 Conclusions

The information presented in this report is based on Tierra's review of available information obtained from the EDM report, FDEP and EPA regulatory websites, the Sumter County Property Appraiser's website, USGS topographic map and historical aerial photographs.

The sites, business operations and/or facilities identified, to date, and the risk rankings given to them are preliminary. It should be understood that these risk rankings may change pending receipt of information which indicates a discharge occurred on-site or in nearby surrounding areas. Variables that may change the risk ranking include a facility's non-compliance to environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change, additional assessment of the facilities should be conducted.

7.1 Findings

For purposes of this report, all sites evaluated are briefly outlined below, as to their present or past land use practices, which may be considered to have potential contamination risk for the project corridor based on the findings of this study and are not discussed in more detail than presented in the Potential Contamination Sites Summary Tables for each location, respectively.

Historical Railroads

Historically, railroads used arsenic based pesticides/herbicides for vegetation and weed control along its corridors. Additionally, the use of petroleum based and creosote compounds were used to preserve railroad ties. These compounds have typically been identified in the surficial soils within railroad beds tested.

Agricultural Land

Agricultural lands, such as row crops and citrus groves, are typically associated with contamination from residual pesticides, herbicides, and heavy metals contaminants in the soil and/or groundwater. The potential for contamination is primarily in the vicinity of receiving, storage, mixing, washing and distribution areas, which over a prolonged period of usage can accumulate in soils and present an environmental concern.

Petroleum and Hazardous Materials

Facilities such as retail fuel stations and automotive or mechanical service/repair operations are commonly associated with potential contamination concerns from the storage and use of new and used petroleum based products (such as gasoline, diesel, lubricating oils and grease) and would typically generate hazardous waste from the storage of used automotive fluids (like transmission, power steering, radiator coolants and cleaning solvents), plus the storage for disposal of used filters or mechanical parts replaced during maintenance operations.

7.2 Potential Contamination Sites

7.2.1 Mainline Widening Site Rankings

Thirty-five (35) listings of concern (27 Geocoded, 8 Non-geocoded) were identified in the database search report within close proximity to the project corridor and all were reviewed for potential impacts to the corridor. Several of these listings were located more than 300 feet from the ROW and excluded from further investigation, or multiple listings for facility/sites were identified. Applicable information from the database search report, for those sites deemed to be a potential contamination concern to the project, are discussed in the Mainline Potential Contamination Sites Table presented in **Appendix A**. The database search report, provided by EDM, is included in **Appendix F**.

A total of forty-eight (48) sites/facilities/properties where identified based on the review of environmental record databases, historical research, site reconnaissance, and detailed file reviews completed by Tierra, which may present the potential for finding petroleum contamination or hazardous materials and therefore may impact the proposed improvements for this project. Of the forty-eight (48) mainline sites investigated, the following risk rankings have been applied: **nine (9) "High" ranking sites, fourteen (14) "Medium" ranking sites, thirteen (13) "Low" ranking sites, and twelve (12) sites ranked "No"** for potential contamination concerns.

7.2.1.1 Mainline Sites Ranked "No" or "Low"

These sites have been evaluated and determined not to have any potential environmental risk to the study area at this time or have potential to impact the study area, but based on select variables have been determined to have low risk to the corridor at this time

Site No. 1 – Sumterville Electric Corporation (SECO), Risk Ranked "Low"

This operational utility storage yard and fleet maintenance facility for the electricity provider is located to the south of the intersection of US 301 and CR 471 (south of the projects southern limit). Based on the information reviewed, current regulatory status and the distance to the project ROW the site has been ranked as "Low" for potential to impact the corridor.

Site No. 5 – Truck Spill, Risk Ranked "Low"

This Emergency Response Spill Site is located in the ROW to the west of the residence at 1237 US 301. Based on the information reviewed, the probable date of occurrence and reworking of soils/road-top in the area, this site is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 7 – Webber Warehouse, TDST LLC, Risk Ranked "Low"

This facility is located in the southwest corner of US 301 and CR 525 E. The property is zoned as light manufacturing and was observed with trucking/transport activities. Based on the information reviewed and current regulatory status, this site is given a risk ranking of "Low" potential contamination to impact the project corridor.

Site No. 10 – Wells of Salvation Church, Risk Ranked "No"

This mixed use (church and residential) property is located north of CR 525 E. adjoining US 301. Based on the information reviewed and current property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor

Site No. 12 – Antique Store, Risk Ranked "No"

This operational retail store is located in the southwest corner of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301. Based on the information reviewed and current property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 13 – D&C Mart & BBQ, Risk Ranked "No"

This operational convenience store is located in the northwest corner of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301. Based on the information reviewed and current property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor

Site No. 15 – Former Auto Sales/Bobby's Trucks, Risk Ranked "Low"

This former auto sales facility is located in the southeast corner of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301. Based on the information reviewed and past property use, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor

Site No. 16 – McDaniel Auto Sales & U-Haul, Risk Ranked "Low"

This auto sales and U-Haul rental facility is located east of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301 to the north. Based on the information reviewed and current property use, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 17 – Dollar General, Risk Ranked "No"

This new construction retail store is located east of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301 to the south. Based on the property's developed use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 18 – Methodist Church, Risk Ranked "No"

This church property is located in the southeast corner of the intersection of Warm Springs Avenue and South Church Street, adjoining US 301. Based on the property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 19 – Coleman City Hall, Risk Ranked "No"

This municipal property is located east of the intersection of Warm Springs Avenue and South Hubbs Street, adjoining US 301 to the south. Based on the property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 22 – Tolson Llamas, Risk Ranked "Low"

This residential property, observed with junk/storage and has the possibility of livestock, is located in the southeast corner at the intersection of Warm Springs Avenue and CR 523 (Stokes Street), adjoining US 301 to the south. Based on the information reviewed, this facility is given a risk ranking of "Low" for potential contamination to impact the corridor.

Site No. 23 – Trinity Baptist Church, Risk Ranked "No"

This church property is located south of the intersection of Warm Springs Avenue, Oak Street and CR 468. Based on the property use, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 24 – Anderson Property, Risk Ranked "Low"

This residential property with a warehouse/work shop is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the west. Based on the property use, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 27 – Revis Towing, Risk Ranked "Low"

This operational vehicle towing company is located in the southwest corner of the intersection of US 301and CR 521 (Central Avenue), adjoining the ROW. Based on the information reviewed and current property use, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 28 – Nash Fabrication & Plumbing, Risk Ranked "Low"

This site is located north of the intersection of US 301 and CR 521 (Central Avenue), adjoining the ROW to the west. Based on the information reviewed and current property use, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 29 – Undercover Motorsports, Risk Ranked "Low"

This site is located north of the intersection of US 301 and CR 521 (Central Avenue), west of the adjoining the Nash facility. Based on the information reviewed and its separation from the ROW, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 31 – Wildwood Auto Mart, Risk Ranked "No"

This retail store is located inside the "South Wildwood Industrial Park", southwest of the intersection of US 301 and NE 37th Place, adjoining the ROW. Based on the information reviewed, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 32 – NDI Office Furniture, Risk Ranked "No"

This retail store is located inside the "South Wildwood Industrial Park", southwest of the intersection of US 301 and NE 37th Place, adjoining the ROW. Based on the information reviewed, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 33 – VFP Composites, Risk Ranked "Low"

This site observed with a mechanical service area and welding activities is located inside the "South Wildwood Industrial Park", northwest of the intersection of US 301 and NE 37th Place, adjoining the ROW. Based on the information reviewed, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 34 – T&D Distribution, Risk Ranked "No"

This site is located inside the "South Wildwood Industrial Park", northwest of the intersection of US 301 and NE 37th Place, adjoining the ROW. Based on the information reviewed, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 35 – Down to Earth Landscaping, Risk Ranked "Low"

This commercial property is located approximately 800 feet north of the intersection of US 301 and NE 37th Place, adjoining the ROW. Based on the information reviewed, this facility is given a risk ranking of "Low" for potential contamination to impact the project corridor.

Site No. 36 – Wildwood Off Road Park, Risk Ranked "No"

This facility is located approximately 1,600 feet north of the intersection of US 301 and NE 37th Place. Based on the information reviewed and its separation from the ROW, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

Site No. 43 – Lift Station, Risk Ranked "Low"

This facility is located adjoining the west side of the ROW, approximately 1,200 feet south of the intersection at South Main Street (US 301) and West Gulf Atlantic Highway. Based on the information reviewed, this facility is given a risk ranking of "Low" for potential to impact the corridor.

Site No. 45 – Advance Auto Parts, Risk Ranked "No"

This retail store is located in the southeast corner of the intersection of South Main Street (US 301) and West Gulf Atlantic Highway. Based on the information reviewed, this facility is given a risk ranking of "No" for potential contamination to impact the project corridor.

7.2.1.2 Mainline Sites Ranked "Medium" or "High"

These sites have been evaluated and determined to have potential environmental risk to the study area. Indications were found that identify known soil and/or water contamination, which may impact the project corridor.

Site No. 2 – Shady Brook Golf & RV Resort, Risk Ranked "Medium"

This golf course residential community is located west of the intersection of US 301 and CR 470 (at the projects southern limit). Historically, golf courses have used arsenic based pesticides/herbicides for vegetation and weed control on its greens. Based on the historical land use in this locale and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential to impact the corridor.

Site No. 3 – Sumterville Cemetery, Risk Ranked "Medium"

This cemetery is located south of the intersection of US 301 and CR 470 (at the projects southern limit). When an embalmed body is buried and decays, the embalming fluid can seep into the ground and affect the surrounding soil and water ecosystems. Based on the historical land use in this locale and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential to impact the corridor.

Site No. 4 – Dawson's Auto, Former Service Station, Risk Ranked "Medium"

This currently vacant former service station, built in 1962, is located south of the intersection of US 301 and CR 470 (at the projects southern limit). Based on the lack of information available for review, this facility is given a risk ranking of "Medium" for potential contamination to impact the corridor.

Site No. 6 – Row-crops, Risk Ranked "High"

This area of agricultural land is located west of US 301 and south of CR 525 E. Row crops (like citrus groves) are typically associated with contamination from residual pesticides, herbicides, and heavy metals contaminants in the soil and/or groundwater. Based on this information, areas used as row crops and citrus groves are risk ranked "High" for potential contamination to impact the corridor.

Site No. 8 – Historical Railroad Crossing/Corridor, Risk Ranked "High"

The old railroad corridor crosses US 301 at the intersection with CR 525 E. This was known as the Coleman to West Palm Beach track in Sumter County. Historically, railroads used arsenic based pesticides/herbicides for vegetation and weed control along its corridors. Based on the information reviewed, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 9 – Morris Auto Sales, Risk Ranked "Medium"

This small auto sales facility, built in 1970, is located north of US 301 and CR 525 E. Located adjoining the ROW to the west. During site reconnaissance this property was observed as auto scrap/parts. Based on the property use and proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 11 – Former Service Station, Kathryn Childers, Risk Ranked "Medium"

This former service station is located south of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301. The facility previously maintained USTs that were installed in 1940 and closed in place in 1988. A discharge was reported in 1988. However, cleanup was not required. Based on the historical use of the property and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the corridor.

Site No. 14 – Shell-Coleman, Risk Ranked "High"

This is an operational retail fuel station and convenience store, located in the northeast corner of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301. A discharge of an unknown contaminant was reported in 1988 and required cleanup under the EDI program. A discharge of 15-gallons of unleaded gasoline was reported in 2013. The current cleanup work status is listed as inactive. Based on the current regulatory status and documented release in proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 20 – Messner's Salvage, Risk Ranked "Medium"

This residential parcel is located approximately 2,000 feet east of the intersection of Commercial Street and Warm Springs Avenue, adjoining US 301 to the south. It is currently used as an automobile salvage yard. Based on the historical use of the property and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the corridor.

Site No. 21 – Former Plant Nursery, Risk Ranked "Medium"

This property is located west of the intersection of Warm Springs Avenue and CR 523, adjoining US 301 to the south. It is zoned as improved agricultural land and previously operated as a plant nursery. During site reconnaissance it appeared to be vacant (closed/abandoned). Based on the historical use of the property and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the corridor.

Site No. 25 – Graham Trucking Lines, Inc., Risk Ranked "Medium"

This site is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the east. The parcel sits at the western limit of a former quarry area. The property is currently used as a construction materials staging yard and trucking company. Based on this information, this facility is given a risk ranking of "Medium" for potential contamination to impact the corridor.

Site No. 26 – Davis Garage, Risk Ranked "Medium"

This operational auto service/repair facility is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the west. Based on the historical use of the property and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 30 – BS Auto Salvage, Risk Ranked "Medium"

This active automobile salvage yard and waste tire collector facility is located approximately 900 feet north of the intersection of US 301 and CR 521 (Central Avenue), adjoining the ROW to the east. Based on the historical use of the property and its proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 37 – Jennings Parkway Exxon, Risk Ranked "High"

This active retail fuel station is located in the northeast corner of US 301 (S. Main Street) and US 91 (Turnpike), adjoining the ROW. The facility has previously maintained USTs that where installed in 1967 and 1988, then removed in 1988, 1995 and 2006. There are currently four unleaded gasoline USTs in service. Discharges were reported in 1988, 2002, and 2006. Cleanup is required and site assessment activities are ongoing. Based on the documented release and proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 38 – Sleep Inn & Woody's BBQ, Risk Ranked "Medium"

This hotel and restaurant property is located north of US 301 (S. Main Street) and US 91 (Turnpike), adjoining the ROW to the east. This historical UST location had a discharge reported in 2006. Cleanup was required and an SRCO was issued in 2009. Based on the current regulatory closure of the release/cleanup and proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 39 – Sunshine Food Mart, Risk Ranked "Medium"

This active retail fuel station is located in the northwest corner of US 301 (S. Main Street) and US 91 (Turnpike), adjoining the ROW. The facility has previously maintained USTs that were removed in 1987. The facility currently maintains one 22,000-gallon unleaded gasoline UST. A discharge was reported in 1988 and received NFA status in 1995. Based on the current regulatory closure of the release/cleanup and proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 40 – Cherokee Trading Post, Risk Ranked "High"

This active retail fuel station is located north of US 301 (S. Main Street) and US 91 (Turnpike), adjoining the ROW. County records indicate the onsite structure was built in 1968. The facility previously maintained USTs that were closed in place in 2009. Discharges were reported in 1988 and 1991. Cleanup work activities and site assessment is ongoing. Based on the documented release and proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 41 – Former Raceway/RaceTrac, Risk Ranked "High"

This closed retail fuel station is located in the southeast corner of US 301 (S. Main Street) and Clay Drain Road, adjoining the ROW. The facility previously maintained USTs that were removed in 2010. Discharges were reported in 1988, 1991, 1997, and 2008. A remediation system was observed onsite. Based on the documented release and proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 42 – Wildwood Auto Repair & Wrecker, Risk Ranked "Medium"

This site is an operational auto repair, wrecker service and waste tire collector. It is located in the northeast corner of US 301 (S. Main Street) and Clay Drain Road, adjoining the ROW. Based on this information and proximity to the ROW, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 44 – Zimmer Building, Risk Ranked "High"

This commercial property is located approximately 210 feet south of the intersection of South Main Street (US 301) and West Gulf Atlantic Highway. The general appearance and location of the Pat's Treasures store resembles a historical retail fuel station. The Zimmer Building had one 4,000-gallon tank that was removed in 1989. Based on the presumed historical use of the property as a fuel station, the lack of documentation available and its position in relation to the project corridor, this facility is given a risk ranking of "High" for potential contamination impact to the project corridor.

Site No. 46 – Shell-Circle K, Risk Ranked "Medium"

This active retail fuel station is located in the southwest corner of South Main Street (US 301) and West Gulf Atlantic Highway. The facility previously maintained USTs that were removed in 2007. One UST is in service. Based on the information reviewed, this facility is given a risk ranking of "Medium" for potential contamination to impact the project corridor.

Site No. 47 – Former BP-Macs, Risk Ranked "High"

This CVS Pharmacy is located in the northwest corner of South Main Street (US 301) and West Gulf Atlantic Highway. The former retail fuel facility had two discharges that were reported in 1987. Cleanup status is active and site assessment is ongoing. Based on the documented release and proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

Site No. 48 – Sonoco #2609, Risk Ranked "High"

This active retail fuel station is located in the northeast corner of South Main Street (US 301) and West Gulf Atlantic Highway. The facility previously maintained ASTs that were removed in 1975. There are four USTs in service. A discharge was reported in 1987 and cleanup was required. Remedial actions are ongoing at the facility. Based on the documented release and proximity to the ROW, this facility is given a risk ranking of "High" for potential contamination to impact the project corridor.

7.2.2 US 301 Realignment Alternatives Site Rankings

Ten (10) sites of potential contamination concern were identified along the Realignment Alternatives. Each site was risk ranked during the Level 1 CSER for the mainline and may impact each Realignment option differently. The matrix evaluation table for the alternatives is presented in Table 3 below. Their locations are presented on recent aerial photographs as **Sheet B-7.**

Table 3 – US 301 Realignment Alternatives Matrix Evaluation Risk Ranking Summary

	NO	LOW	MEDIUM	HIGH
Alternative A	3	2	3	2
Alternative B	2	2	5	1
Alternative C	2	2	4	2
Alternative B/C	2	5	2	1

Site No. 6 – Row-crops, Risk Ranked "High"
1988 N. US 301, Sumterville, FL 33585 and located throughout the study area

- This area of agricultural land is located west of US 301 and south of CR 525 E. Row crops (like citrus groves) are typically associated with contamination from residual pesticides, herbicides, and heavy metals contaminants in the soil and/or groundwater.

Site No. 7 – Webber Warehouse/TDST LLC, Risk Ranked "Low"
1935 CR 525 E., Sumterville, FL 33585

- This facility is located in the southwest corner of US 301 and CR 525 E. The property is zoned as light manufacturing and was observed with trucking/transport activities.

Site No. 8 – Historical Railroad Crossing/Corridor, Risk Ranked "High"
Bisects each Realignment Alternative at the western limits

- The old railroad corridor crosses US 301 at the intersection with CR 525 E. This was known as the Coleman to West Palm Beach track in Sumter County. Historically, railroads used arsenic based pesticides/herbicides for vegetation and weed control along its corridors.

Site No. 22 – Tolson Llamas, Risk Ranked "Low"
2962 CR 523, Coleman, FL 33521

- This residential property, observed with junk/storage and has the possibility of livestock, is located in the southeast corner at the intersection of Warm Springs Avenue and CR 523 (Stokes Street), adjoining US 301 to the south.

Site No. 23 – Trinity Baptist Church, Risk Ranked "No"
3305 E. CR 468, Wildwood, FL 34785

- This church property is located south of the intersection of Warm Springs Avenue, Oak Street and CR 468.

Site No. 24 – Anderson Property, Risk Ranked "Low"
3086 & 3118 N. US 301, Wildwood, FL 34785

- This residential property with a warehouse/work shop is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the west.

Site No. 25 – Graham Trucking Lines, Inc., Risk Ranked "Medium"
3145 & 3251 N. US 301, Wildwood, FL 34785

- This site is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the east. The parcel sits at the western limit of a former quarry area. The property is currently used as a construction materials staging yard and trucking company.

Site No. 26 – Davis Garage, Risk Ranked "Medium"
3260 N. US 301, Wildwood, FL 34785

- This operational auto service/repair facility is located north of the intersection of Warm Spring Avenue and CR 468, adjoining US 301 to the west.

Site No. 27 – Revis Towing, Risk Ranked "Low"
3475 CR 521, Wildwood, FL 34785

- This operational vehicle towing company is located in the southwest corner of the intersection of US 301and CR 521 (Central Avenue), adjoining the ROW.

Site No. 28 – Nash Fabrication & Plumbing, Risk Ranked "Low"
3488 & 3494 N. US 301, Wildwood, FL 34785

- This site is located north of the intersection of US 301 and CR 521 (Central Avenue), adjoining the ROW to the west.

The risk ranking for the potential of each site to impact each alternative is listed in **Table 3 – US 301 Realignment Alternatives Matrix Evaluation Risk Ranking Summary**.

Details for these 10 sites are discussed in the **Appendix A, Potential Contamination Sites Summary Table**.

7.2.3 Pond Alternatives Site Rankings

Based on revised files received in May 2017, Tierra completed a review of environmental record databases, historical research, site reconnaissance, and detailed file reviews. A total of seventy-five (75) Preliminary Pond Alternatives and twenty-two (22) associated Easements were investigated for sites that may present the potential for finding petroleum contamination or hazardous materials and therefore may impact the proposed improvements for this project.

Of the pond sites investigated, the following risk rankings have been applied: **four (4) "High" ranking pond sites, ten (10) "Medium" ranking pond sites, fifteen (15) "Low" ranking pond sites, and forty-six (46) pond sites ranked "No"** for potential contamination concerns. These are listed in **Table 4 – Preliminary Ponds Risk Ranking Summary**.

Table 4 – Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
		Mainline Ponds	
1A	1.27	NO	Historical Pastureland.
1B	1.02	NO	Historical Pastureland.
1C	1.59	HIGH	Located on the Shady Brook golf course property. Concerns regarding residual herbicides/pesticides and fertilizers.
2A	1.93	NO	Wooded.
2B	3.20	LOW	Residential and partially wooded.
2C + Easement	2.65 + 0.30	NO	Wooded.
3A	3.47	LOW	Residential and partially wooded.
3B + Easement	2.48 + 0.26	LOW	Wooded.
3C	2.33	NO	Wooded.
4A	2.21	LOW	Residential, pasture and partially wooded.
4B	2.16	MEDIUM	Residential, pasture and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the east adjoining former railroad corridor.
4C	2.19	LOW	Residential and wooded.
5A + Easement	5.58 + 0.25	MEDIUM	Residential and partially wooded. Similar footprint as Realignment Pond 19A, with different Easement. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining former railroad corridor.
5B	3.09	MEDIUM	Residence. Concerns regarding herbicides/pesticides and petroleum-based products on the east adjoining former railroad corridor.
5C	5.58	MEDIUM	Row crops and Pastureland.
FPC-1	0.56	NO	Historical Pastureland.
6A	2.30	NO	Historical Pastureland.
6B	2.29	NO	Historical Pastureland and partially wooded.
6C	2.01 + 0.54	NO	Historical Pastureland. Similar footprint as Realignment Pond 19C, with different Easement.
FPC-3	0.61	NO	Wooded.
7A	2.37	NO	Wooded.
7B	1.24	NO	Wooded.
7C	1.83	MEDIUM	Residential. South adjoining “Shade Tree” auto mechanic.
8A	1.43	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor and the east adjacent (presumed) historical fuel station. This pond site sits within the footprint of Pond 8D.
8B	1.16	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
8C	1.14	MEDIUM	Residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.

Table 4 – Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
8D	4.19	MEDIUM	Vacant, residential and partially wooded. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor and the east adjacent (presumed) historical fuel station. This pond site encompasses the footprint of Pond 8A.
9A + Easement	1.39 + 0.29	LOW	Residential property with possible automobile salvage yard.
9B + Easement	1.37 + 0.65	NO	Historical Pastureland.
9C + Easement	1.21 + 0.22	LOW	Coleman City Hall property.
10A + Easement	2.19 + 1.18	NO	Historical Pastureland. West adjoining Plant Nursery and storage.
10B	1.96	NO	Historical Pastureland. West adjoining Plant Nursery.
10C + Easement	2.25 + 1.04	NO	Historical Pastureland. North adjoining Plant Nursery.
11A	1.84	NO	Wooded.
11B	1.78	NO	Wooded.
11C + Easement	1.70 + 0.43	NO	Historical Pastureland and partially wooded
12A	1.73	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 23A.
12B + Easement	1.48 + 0.28	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 23B.
12C	1.44	HIGH	Davis Garage auto service/repair. Similar footprint to Pond 23C. Concerns regarding residual impacts from petroleum products and other automotive fluids.
13A + Easement	2.19 + 0.54	NO	Wooded.
13B + Easement	2.35 + 0.54	LOW	Existing pond. Adjoining former quarry.
13C	3.18	LOW	Historical Pastureland. Adjoining former quarry.
14A	2.20	LOW	Historical Pastureland.
14B	1.67	LOW	Pastureland and residence.
14C + Easement	2.10 + 0.30	NO	Wooded.
FPC-4	1.68	NO	Wooded.
15A	1.75	NO	Wooded. South adjoining power easement.
15B	1.60	NO	Wooded.
15C	1.61	NO	Wooded. South adjoining power easement.
FPC-5	5.17	NO	Wooded. South adjoining power easement.
FPC-6	0.56	NO	Historical Pastureland.
16A	1.27	NO	Historical Pastureland.
16B + Easement	1.72 + 0.15	NO	Wooded.
16C	1.48	NO	Historical Pastureland.
FPC-7	1.26	NO	Historical Pastureland.
17A	4.08	NO	Wooded.

Table 4 – Preliminary Ponds Risk Ranking Summary

Pond Name	Pond Size (acres)	Risk Ranking	Comments
17B + Easement	5.36 + 0.61	MEDIUM	Pastureland and partially wooded. The Easement passes by existing fuel stations.
17C + Easement	5.95 + 0.46	NO	Wooded.
			Realignment Ponds
19A + Easement-1 + Easement-2	7.17 + 0.25 + 0.51	HIGH	Residential and partially wooded. Similar footprint as Mainline Pond 5A, with different Easement. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
19B	5.26	NO	Pastureland with existing pond. Concerns regarding herbicides/pesticides and petroleum-based products on the west adjoining railroad corridor.
19C + Easement	5.33 + 0.27	NO	Historical Pastureland. Similar footprint as Mainline Pond 6C, with different Easement.
20A + Easement	1.93 + 0.28	NO	Historical Pastureland.
20B	1.93	NO	Historical Pastureland.
20C	1.88	NO	Historical Pastureland.
21A	3.40	NO	Historical Pastureland.
21B	3.42	NO	Historical Pastureland.
21C + Easement	3.68 + 0.28	NO	Historical Pastureland.
22A	2.77	NO	Historical Pastureland.
22B	3.18	NO	Wooded.
22C	2.91	NO	Historical Pastureland.
23A	2.36	LOW	Residential, Pastureland. ROW. Adjacent to former quarry area. Similar footprint to Pond 12A.
23A-1	1.28	NO	Wooded. ROW.
23A-2	2.30	NO	Wooded. ROW.
23B + Easement	1.57 + 0.23	LOW	Vacant, Residential, Pastureland. North adjoining former quarry. Similar footprint to Pond 12B.
23C	1.44	HIGH	Davis Garage auto service/repair. Similar footprint to Pond 12C. Concerns regarding residual impacts from petroleum products and other automotive fluids.
Notes: No named Pond 18, FPC-2 is removed, Easements 10B and 20B are removed			

8.0 Recommendations

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

- For the sites ranked "No" for potential contamination, no further action is recommended. This site have been evaluated and determined not to have any potential environmental risk to the study area at this time.
- For sites ranked "Low" for potential contamination, no further action is required at this time. These sites/facilities have potential to impact the study area, but based on select variables have been determined to have low risk to the corridor at this time. Variables that may change the risk ranking include a facility's non-compliance to environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change, additional assessment of the facilities will be conducted to determine if the low risk tanking is still appropriate.
- For those sites with a risk ranking of "Medium" or "High", Level 2 field screening should be conducted if it is determined during the project's design that its construction activities could be within their vicinity. These sites have been determined to have potential contaminants, which may impact the US 301 corridor. A soil and groundwater sampling plan should be developed for each site, if applicable. The sampling plan would provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical test to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells would be prepared. Prior to conducting any field screening the District Contamination Impact Coordinator (DCIC) should be notified.
- Regardless of the risk ranking, all ponds sites selected for final design will require Level 2 field screening. The field screening scope of work should include, at a minimum, soil borings to the proposed depth of the pond and soil sampling for total arsenic. Additional sample analyses may be required based on historical land use of the pond site and surrounding properties. The District Contamination Impact Coordinator should be consulted regarding the field screening scope of work for all final pond sites.

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 ROW and/or proceeding with roadway construction.

9.0 References

- Aerial photographs of Sumter County:
  - FDOT Survey & Mapping APLUS www.dot.state.fl.us/surveyingandmapping/
  - Google Earth www.google.com/earth/
  - Sumter County Property Appraiser (SCPA) http://www.sumterpa.com/
  - University of Florida, Map & Imagery Library http://web.uflib.ufl.edu/maps/
  - USGS EROS Center http://earthexplorer.usgs.gov/
- Database Search Report for the project corridor, Environmental Data management, Inc. (EDM)
- EPA, Envirofacts, Multi-system Database Search www.epa.gov/enviro/
- EPA, Final National Priorities List (NPL) www.epa.gov/region4/superfund/
- FDEP, Files for Hazardous Waste Facilities for Sumter County, Florida
- FDEP, Files for Solid Waste Disposal Facilities for Sumter County, Florida
- FDEP, Files for Storage Tank/Contaminated Facilities (STCF) for Sumter County, Florida
- FDEP, Map Direct http://ca.dep.state.fl.us/mapdirect/
- FDEP, OCULUS Document Management System http://depedms.dep.state.fl.us/Oculus/
- FDOT Chapter 22, PD&E Manual – dated September 1, 2016 (Archived)
- Sumter County Government website http://sumtercountyfl.gov/
- USDA, NRCS Soil Survey of Sumter County, Florida, Issued 1988
- USDA, NRCS Web Soil Survey 3.0 for Sumter County, Florida
- USGS, Topographic Maps http://nationalmap.gov/historical/
  - "Wildwood, Florida" Quadrangle dated 1967

10.0 Limitations

Site access was often limited to off-site boundary review due to site accessibility (fences, gates, private property, etc.). This report reflects information obtained in the field and from noted resources at the time this report was completed. Additional information may become available or site-specific conditions may have changed since the time this report was prepared and should be considered prior to acquiring right-of-way and/or proceeding with roadway construction.

There exists a possibility that conditions may exist within the project study area that could not be identified or were not reasonably identifiable from the information available at the time the study was conducted. Information from other sources was obtained for the evaluation of the project corridor and is believed to be accurate; however, Tierra does not warrant or guarantee the accuracy of any third party information.

The methodologies of this assessment generally follow accepted practices outlined in the FDOT PD&E Manual, Chapter 22 and are not intended to be used as contamination assessments, but rather to provide planners and design professionals with information regarding existing and potential environmental conditions that could affect the project corridor.