

CONTAMINATION SCREENING EVALUATION REPORT

(MAINLINE AND DRAINAGE SITES)

Florida Department of Transportation

District One

CR 887 (Old US 41) Project Development and Environment Study

From US 41 to Lee County Line and from Collier County Line to Bonita Beach Rd

Lee and Collier Counties, Florida

Financial Management Number: 435110-1-22-01 & 435347-1-22-01

ETDM Number: 14339

May 2025

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

Executive Summary

The Florida Department of Transportation, District 1 (FDOT) is conducting a Project Development & Environment (PD&E) study to consider the widening of CR 887 (Old US 41) up to four lanes from US 41 in Collier County to Bonita Beach Road in Lee County in order to address existing congestion and projected travel demand as a result of area-wide growth. The roadway project has been divided into two segments (Error! Reference source not found.) and is approximately 2.73 miles in length. Segment 1 (1.55 miles in length) extends from US 41 to the Lee County Line in the northwestern corner of unincorporated Collier County. Segment 2 (1.18 miles in length) extends from the Collier County Line to Bonita Beach Road within the City of Bonita Springs in southern Lee County. Additional right-of-way is anticipated for the mainline and drainage sites. This report has been revised based on FDOT comments received on April 18, 2025.

This Contamination Screening Evaluation Report (CSER) study was performed in accordance with Part 2, Chapter 20 of the FDOT's PD&E Manual. The purpose of this report is to present the findings of a Level I contamination screening for the proposed improvements; to identify, review, and evaluate known or potential contamination issues; provide risk ratings for properties, facilities, or sites that have the potential for contamination involvement with the proposed improvements; and to present recommendations for further evaluation when needed. For purposes of this report, the project study area includes the limits of the mainline, drainage sites and FDOT recommended search distances.

A total of thirty-five contamination sites were evaluated for this PD&E study. Based on the methodologies detailed herein, the following risk ratings were assigned to contamination sites identified along the project mainline:

Number of Mainline Sites per Risk Rating

County	High	Medium	Low	No	Total
Collier	1	5	3	7	16
Lee	0	6	11	2	19
Total	1	11	14	9	35

Additionally, the PD&E study evaluated five drainage sites for this project. The SMF 1A and SMF 2B locations are the preferred alternatives. The following table presents a summary of the risk ratings for all five drainage sites:

Drainage Site Risk Ratings

County	High	Medium	Low	No	Total
Collier	0	4	0	0	4
Lee	0	0	1	0	1
Total	0	4	1	0	5

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

- Additional information may become available or site-specific conditions may change from the time this report was prepared and should be considered prior to acquiring right-of-way (ROW) and/or proceeding with roadway construction. If the proposed improvements change, and/or new potential contamination sites have been constructed, this report should be revised and updated to reflect those changes.
- For the locations rated No or Low for contamination, no further action is required. These locations have been determined to have little or no contamination risk to the study area at this time.
- A total of sixteen locations (twelve contamination sites, and four drainage sites) were assigned risk ratings of High or Medium. Additional file review to monitor for future discharges and regulatory status is recommended for five of these sites: Map IDs 13, 14, 21, 30, and 31. Although rated Medium, Level II testing is not recommended for FPC 1, FPC 2, and FPC 3 since they are not preferred alternatives selected for final design. The remaining eight locations should be considered for Level II testing in consultation with the DCIC in the design phase.
- Level II testing may include soil borings, monitoring well installation, soil and groundwater sampling, laboratory testing, OVA screening, hazardous material surveys, and GPR surveys. The scope of Level II testing and any construction support will be dependent on final plans, dewatering requirements, and proximity of known or potential contamination impacts identified in this report.
- Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area.

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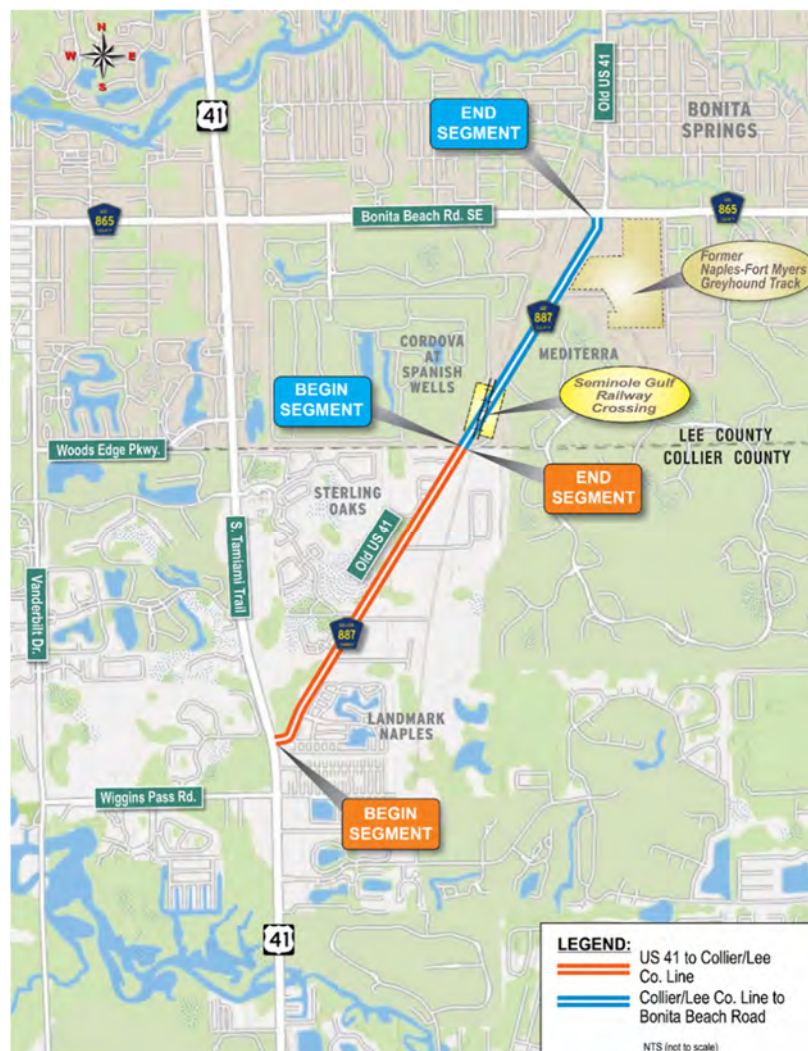
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1 Introduction

The Florida Department of Transportation, District 1 (FDOT) is conducting a Project Development & Environment (PD&E) study to consider the widening of CR 887 (Old US 41) up to four lanes from US 41 in Collier County to Bonita Beach Road in Lee County in order to address existing congestion and projected travel demand as a result of area-wide growth. The roadway project has been divided into two segments (**Figure 1-1**) and is approximately 2.73 miles in length. Segment 1 (1.55 miles in length) extends from US 41 to the Lee County Line in the northwestern corner of unincorporated Collier County. Segment 2 (1.18 miles in length) extends from the Collier County Line to Bonita Beach Road within the City of Bonita Springs in southern Lee County.

Figure 1-1: Project Location Map



2 Project Description

Within the project limits, the existing Old US 41 is classified as a two-lane, undivided major collector with a posted speed limit of 45 miles per hour. The roadway features two twelve-foot travel lanes with alternating left and right turn lanes throughout the length of the corridor as well as an open drainage system. An active rail line operated by Seminole Gulf Railway transects the project corridor at-grade. In general, the existing right-of-way (ROW) is 150 feet along Segment 1 and 105 feet along Segment 2. Although the roadway lacks bicycle and transit facilities, there are four non-continuous sidewalk sections along Segment 1 [three occur on the east side of the road and one occurs on the west side] and one section of path on the west side within Segment 2. Bicycle and pedestrian activity have been observed within the corridor.

The proposed improvement will expand the roadway to a four-lane divided roadway with 11-foot travel lanes. The Preferred Alternative would require the purchase of additional ROW includes a shared use path and bicycle lanes in both directions. There are no improvements planned for Old 41 north of the proposed new Quadrant Roadway, including the Old 41 and Bonita Beach Road intersection. The proposed new Quadrant Roadway connects Old 41 with Race Track Road (**Figure 2-1**) which then continues onto Bonita Beach Road for the rest of the project segment. The new Quadrant Roadway will be a 2-lane undivided road with 11-ft travel lanes, a 12-ft shared use path, an 8-ft sidewalk within a total of 70-ft ROW.

Figure 2-1: Proposed Quadrant Roadway Location Map

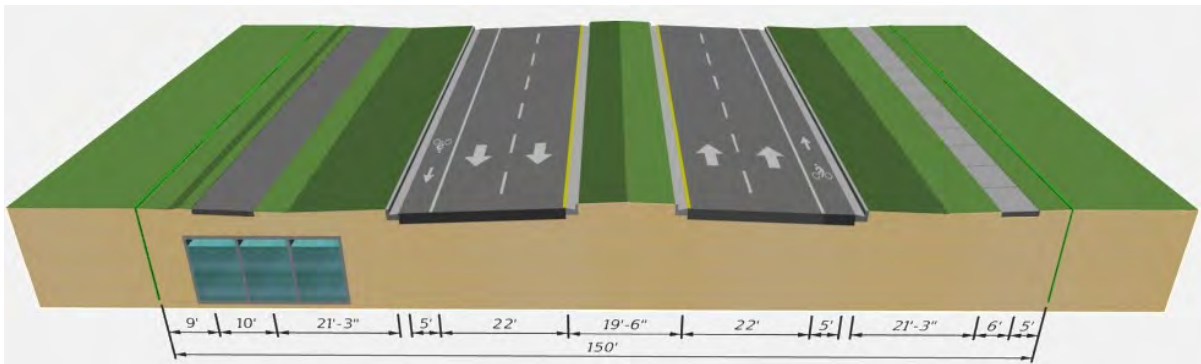


3 Project Alternatives

3.1 DESCRIPTION OF PREFERRED ALTERNATIVE

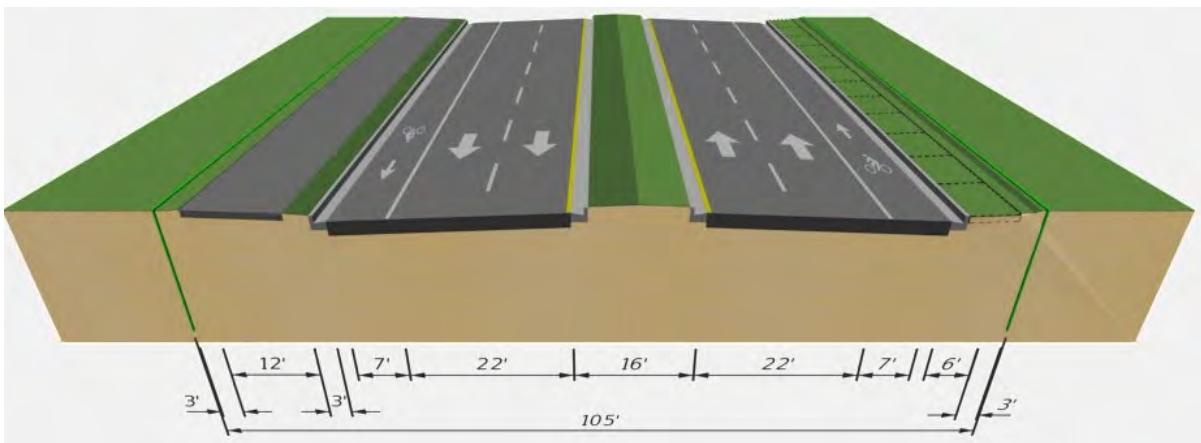
The Preferred Alternative includes widening Old 41 to a four-lane divided roadway with 11-foot travel lanes both northbound and southbound between US 41 and the proposed new Quadrant Roadway. The alternative includes a 5-ft bicycle lane in both directions, a 6-ft sidewalk and a 10-ft shared use path throughout Old 41 in the Collier County portion. See **Figure 3-1** below for the Preferred Alternative Typical Section in Collier County.

Figure 3-1: Preferred Alternative Collier County



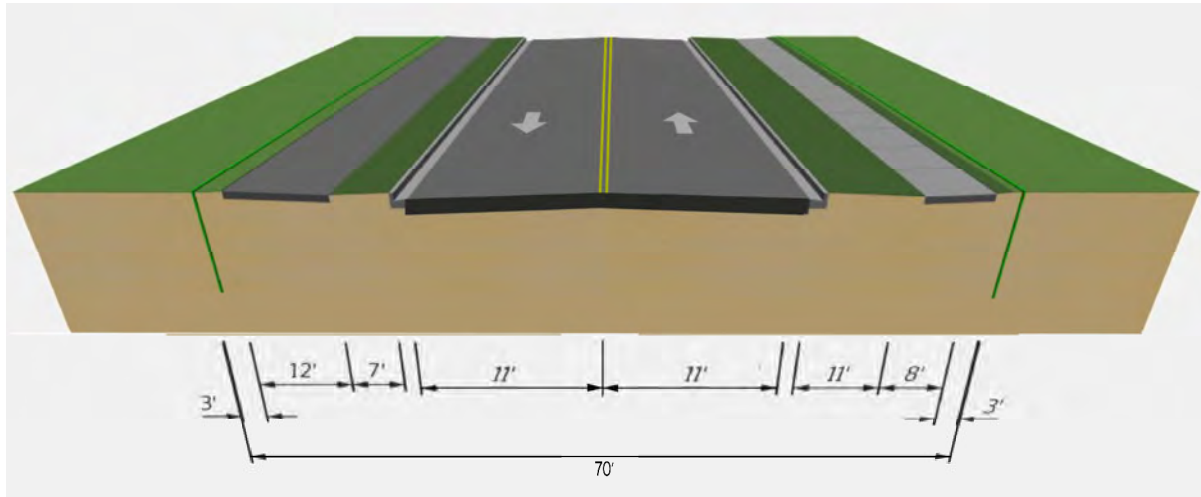
The Preferred Alternative includes a 7-ft bicycle lane in both directions and a 12-ft shared use path south of the new Quadrant Roadway in Bonita Springs (Lee County). There are no improvements planned for Old 41 north of the proposed new Quadrant Roadway, including the Old 41 and Bonita Beach Road intersection. See **Figure 3-2** below for the Preferred Alternative Typical Section in Lee County.

Figure 3-2: Preferred Alternative Lee County



The Preferred Alternative also includes a new Quadrant Roadway that will connect Old 41 with Race Track Road with 11-ft travel lanes, a 12-ft shared use path on the north/west side, and an 8-ft sidewalk on the south/east side within 70-ft of ROW. The design speed is 30 mph. See **Figure 3-3** below for the Preferred Alternative Typical Section for the new Quadrant Roadway.

Figure 3-3: Preferred Alternative new Quadrant Roadway



This new Quadrant Roadway will allow traffic traveling between the southern end of the study and Interstate 75 to bypass the intersection at Old 41 and Bonita Beach Road. The Preferred Alternative includes improvements on Bonita Beach Road east of Race Track Road. The intersection of Race Track Road/Bonita Beach Road would remain as a conventional traffic signal with an additional southbound receiving lane and westbound left turn lane. To accommodate the addition westbound left turn lane length the median opening at Bonita Beach Road/Pine Haven Way would be modified to a directional median opening allowing only westbound left turns and northbound left turns. Eastbound U-turns would no longer be permitted.

New traffic signals are proposed along Old 41 at Veterans Memorial Boulevard, Rail Head Boulevard, Via Palacio Avenue, Mediterra Drive, and the new Quadrant Roadway to balance safety, access management, and operational needs. Several intersections throughout the study corridor include pavement bulb outs to allow single unit trucks to safely make -turns.

The existing traffic signal at the US 41/Old 41 intersection would be modified into a Partial Median U-Turn (PMUT) intersection. The PMUT configuration prohibits left turns from northbound/southbound US 41 at Old 41 - these movements would be accomplished via U-turns at new signalized intersections located north/south of the main US 41/Old 41 intersection. Direct left turns from Old 41 onto SB US 41 would be allowed.

The proposed roadway typically stays within the existing ROW throughout the project area, with the exception of a few intersections, including the Seminole Gulf Railroad crossing and the new Quadrant

Roadway. Stormwater management and floodplain compensation sites will be located throughout the study area and will require additional ROW.

The Preferred Alternative provides for the City of Bonita Springs desired new Quadrant Roadway found in their planning documents. The Preferred Alternative will meet the purpose and need of this project by widening the roadway to accommodate future travel demand. The Preferred Alternative also creates the opportunity for complete streets with implementations of shared use paths, sidewalks, and bicycle lanes. **Appendix A** depicts the current concept plans for the Preferred Alternative and includes the locations of the stormwater management and floodplain compensation sites.

4 Methodology

A contamination screening was conducted to identify contamination issues from properties or operations located within the vicinity of the project. The screening was performed for the project limits, which is defined as existing and proposed right-of-way (ROW) necessary to accommodate the proposed project improvements and preferred drainage sites. The project limits and study area, which includes a 500-foot, 1,000 foot, and ½ mile search buffer for the mainline, and 500-foot for drainage sites as stated in the scope of services. These are illustrated along with the most recent aerial photograph provided by ArcGIS PRO 2024 in **Appendix A**. This evaluation consisted of the following tasks:

- Regulatory database searches were conducted by Environmental Data Management (EDM) on March 2nd and 3rd, 2025, to identify sites, facilities or listings within the study area containing documented or suspected petroleum contamination or other hazardous materials. These reports are provided in **Appendix B**. For the mainline ROW, EDM's reports and this evaluation utilize the search distances recommended in Chapter 20 of the FDOT PD&E Manual which are:
 - o 500 feet from the study limits for petroleum, drycleaners, and non-petroleum sites,
 - o 1,000 feet from the study limits for non-landfill solid waste sites (such as recycling facilities, transfer stations, and debris placement areas), and
 - o ½ mile from the study limits for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), National Priorities List (NPL) Superfund sites, or Landfill sites.

EDM's reports are used as a preliminary screening tool to identify facilities that are registered with various county, state, and federal agencies. The regulatory review of federal and state environmental records utilizes an integrated geographic information system database. The database report provides geocoded and non-geocoded regulatory listings of interest that are identified within the study area. Each listing is located by address, facility identification number and field verified where possible. All are reviewed for the potential of contamination to impact the project. The reviewed records include information compiled by the United States Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and other various reporting programs. A complete list of all regulatory record databases searched is included in EDM's reports provided in **Appendix B**. Additional regulatory information was obtained using the FDEP's Map Direct and OCULUS databases. Supplemental information is provided in **Appendix E**. The facilities identified in EDM's reports are discussed in **Section 8**.

- Aerial photographs were reviewed to develop a history of the previous land uses within the study area and to identify sites which may have historical uses that pose contamination concerns. Aerial photographs dated 1944, 1958, 1968, 1973, 1975, 1985, 1994, 2006, 2014, and 2024 were provided by Environmental Data Management, Inc. (EDM). Copies of these aerial photographs are presented in **Appendix C**. Additionally, aerial photographs dated 1994, 1995, 1999, 2004-2010, 2012-2014, 2016,

2017, and 2019-2024 were reviewed using the Google Earth database for instances where additional coverage, and/or better quality of photographs may have been required. A summary of our review is discussed in **Section 3.1**. Site specific details are provided, where appropriate, in **Section 8**.

- Topographic maps can be useful identifying contamination concerns such as railroads, mine lands, bulk storage tanks, and landfills/disturbed lands. Additionally, land use and water features, including elevation contours can be identified on topographic maps. The USGS 7.5-Minute “Bonita Springs, Florida” topographic maps dated 1958, 1972, 1987 and 1991 were provided by EDM, and were reviewed as part of this study. A summary of our review is discussed in **Section 3.2**. The topographic maps are provided in **Appendix D**. If instances were encountered where it was difficult to review the topographic map due to project lines being added, resolution, or other issues, then topographic maps were also reviewed using imagery available from the United States Geological Survey (USGS) website.
- Collier County and Lee County Property Appraiser database information was reviewed to identify owners of drainage sites, suspect contamination sites, and to fill potential data gaps where other resources may not have provided ample information regarding the site, or to determine addresses, parcel boundaries and other pertinent information.
- A site reconnaissance was performed on March 17, 2025 to identify new and/or undocumented contamination sites, and to verify locations of documented contamination sites. The site reconnaissance in conjunction with the desktop review allow the sites to be rated as to the degree of contamination concern. Some of the typical physical indicators for contamination concerns include: railroad tracks, fill ports and vent pipes associated with underground storage tanks (USTs), aboveground storage tanks (ASTs), oil/petroleum staining, drums, chemical containers, refuse, illicit dumping, solid waste, stressed vegetation, dry cleaning facilities, material handling from adjacent businesses, petroleum dispensers, excavated areas, agricultural use, chemical mix/load areas, stormwater outfall areas, surface water indicators, groundwater monitor wells, restricted area/contamination/hazardous material/petroleum pipeline signage, cattle dip vats (CDVs) and other property uses that may present contamination concerns. The reconnaissance included a systematic inspection of each parcel along the project corridor, and surrounding areas looking for signs of contamination. This was achieved by driving, where possible, the project, and walking the parcels within and surrounding the project (where accessible) to gain specific information regarding the usage and condition of each contamination site. Photographs of the contamination concerns were taken during the site inspection. Select images are presented in **Appendix F**.
- Risk ratings were assigned for each contamination site or drainage site after evaluating the findings of each of the previously mentioned methodologies. The rating system defined in the PD&E Manual is divided into four categories of risk which express the degree of concern for contamination problems. The four degrees of risk ratings are No, Low, Medium, and High and are defined as follows:

No Risk Site

A review of available information on the property and a review of the conceptual or design plans indicates there is no potential contamination impact to the project. It is possible that contaminants have been handled on the property. However, findings from the Level I evaluation indicate that contamination impacts are not expected.

Low Risk Site

A review of available information indicates that past or current activities on the property have an ongoing contamination issue; the site has a hazardous waste generator identification (ID) number, or the site stores, handles, or manufactures hazardous materials. However, based on the review of conceptual or design plans and/or findings from the Level I evaluation, it is not likely that there would be any contamination impacts to the project.

Medium Risk Site

After a review of conceptual or design plans and findings from a Level I evaluation, a potential contamination impact to the project has been identified. If there is insufficient information (such as regulatory records or site historical documents) to decide as to the potential for contamination impact, and there is reasonable suspicion that contamination may exist, the property should be rated at least as a Medium. Properties used historically as gasoline stations and which have not been evaluated or assessed by regulatory agencies, sites with abandoned in place underground petroleum storage tanks or currently operating gasoline stations should receive this rating.

High Risk Site

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

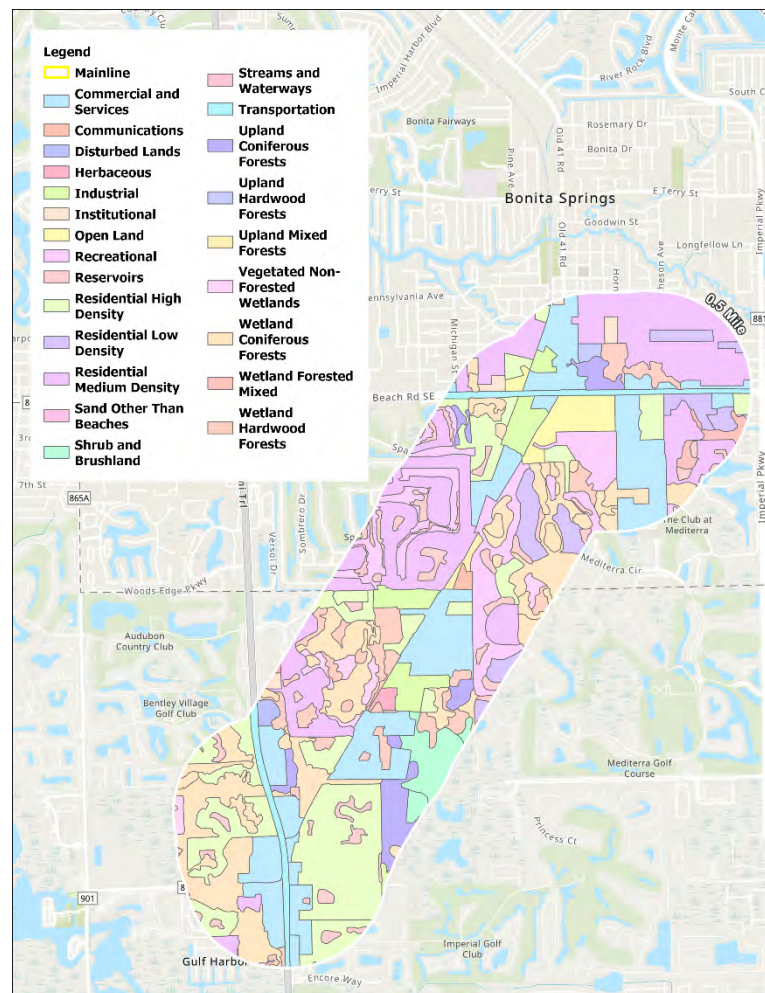
While not specifically discussed in Chapter 20 as a basis for Medium or High risk ratings, any site that is recognized by the FDEP as being “contaminated” due to the documented presence of unremediated impacts will be rated High or Medium because these sites will likely affect National Pollutant Discharge Elimination Systems (NPDES) dewatering efforts within 500 feet of the site. Even when it has been determined that a site with these factors does not have contamination impacts that extend into the City’s, County’s or FDOT’s right-of-way, these sites can still create a contamination-related impact to construction by requiring additional efforts related to permitting processes, effluent treatment, and discharge monitoring. These sites/properties eventually require final plan notes, or markings, to ensure the Contractor coordinates NPDES dewatering proximal to these sites through the Project Engineer, District Contamination Impact Coordination (DCIC) and Contamination and Remediation (CAR) Contractor.

5 Land Uses

Determination of previous land uses and occupancies is an important factor when evaluating the potential for contamination involvement. Developing a history of the project and surrounding areas can assist in determining the potential for releases or discharges of hazardous materials or petroleum products. To determine land uses for this project, a site reconnaissance, and interviews (**Section 8**) were performed along with a review of historical aerial photographs and topographic maps. These resources were supplemented using zoning information for Hillsborough County, as shown on **Figure 5-1**.

Land use within and adjacent to the study area was classified using zoning information for Collier and Lee Counties. Existing land uses within the study area are presented in **Figure 5-1**. While specific sites were not identified, some of the listed land uses have the potential for contamination issues. A description of land use for each contamination site is provided in **Section 8**.

Figure 5-1: Land Use Map



5.1 HISTORICAL AERIAL PHOTOGRAPH REVIEW

Aerial photographs dated 1944, 1958, 1968, 1973, 1975, 1985, 1994, 2006, 2014, and 2024 were provided by EDM. Aerial photographs dated 1994, 1995, 1999, 2004-2010, 2012-2014, 2016, 2017, and 2019-2024 were available on the Google Earth database. A summary of our review is discussed below. Copies of the historical aerial photographs are presented in **Appendix C**.

The 1944 aerial photograph depicts Old US 41, Bonita Beach Road, and a railroad track surrounded by rangeland, including low, wet areas, and sparse structures. More development was added between 1958 and 1975. At the southern project limit, US 41 was first depicted on the 1985 aerial photograph. More development was added west of US 41 at the southern project limit in 2007, and along the south side of Bonita Springs Road between 2019 and 2022.

Contamination concerns noted during the historical aerial photograph reviews include Map IDs 5 (substation), 18 (railroad track), 19 (golf course), 20 (golf course), and 26 (greyhound racetrack). Further details are provided in **Section 8**.

5.2 USGS TOPOGRAPHIC MAP REVIEW

Topographic maps are reviewed to develop an understanding of previous land uses in the project limits and to identify any areas that may show historical, natural, and man-made features, which aid in determining contamination concerns. The following information is provided based on a review of the USGS 7.5-Minute “Bonita Springs, Florida” topographic maps dated 1958, 1972, 1987 and 1991. Copies of the historical topographic maps are presented in **Appendix D**.

Old US 41 was depicted from 1958 to 1991. At the northern project limit, Bonita Beach Road was depicted as an unpaved road in 1958, and paved from 1972 to 1991. The northern area east of Old US 41 is depicted as open field/pasture, woods, a paved road leading to a racetrack. The southern area west of Old US 41 is depicted as open field/pasture and wooded swamp or marsh. Elevations range from 10 to 16 feet. Land surface generally slopes from the central area north towards Oak Creek, and south towards the Cocohatchee River.

Offsite, surrounding areas were depicted as woods, open fields/pasture, low, wet areas, and seven intersecting roads (mostly unpaved) in 1958. A dog racing track (greyhound) was depicted east of Old US 41 in the northern area from 1958 to 1991. Changes noted in on the 1972 topographic map includes two trailers parks, and sparse development. More development was depicted along the corridor in 1987 and 1991. A golf course was also depicted west of US 41 in 1987 and 1991.

Contamination concerns noted include: Map IDs 18 (railroad track), 19 (golf course), 20 (golf course) and 26 (greyhound racetrack). Further details are discussed in **Section 8**.

5.3 SITE RECONNAISSANCE

Site reconnaissance visits were conducted on March 17, 2025 to search for contamination concerns. The reconnaissance included an attempt to view each parcel along the project corridor and surrounding areas looking for signs of contamination. This was achieved by driving, where possible,

the proposed improvements, and walking the parcels within and surrounding the project corridor (where accessible) to gain specific information regarding the usage and condition of each site. Sites identified in regulatory records are also viewed to confirm provided information and to verify current site conditions. The site reconnaissance, in conjunction with the desktop review of regulatory sites, provides the necessary information for the assignment of risk ratings corresponding to the degree of contamination concern. Photographs of the regulated sites and any new contamination concerns were obtained during the site reconnaissance. Select images are presented in **Appendix F**.

During the site reconnaissance, Old US 41 was observed as a 2-lane and 3-lane north/south highway with multiple intersecting roads. Near the south end of the project, four turn lanes were noted.

Six and eight lanes were noted for the N. Tamiami Trail (US 41) segment at the south end of the project.

Offsite, surrounding land use was generally observed commercial, residential or undeveloped wooded land. Multiple existing manmade ponds and canals were observed adjoining and adjacent to the project corridor.

Select photographs are presented in **Appendix F**. A detailed description of field observations for each contamination site is provided in **Section 8**.

6 Hydrologic Features

6.1 *AQUIFERS OF FLORIDA*

In general, three hydrogeologic units exist in the project corridor vicinity: the Floridan, Intermediate, and Surficial Aquifer Systems. While the Floridan Aquifer System is present in Collier County, it contains non-potable water and is not considered important to this county. There are multiple subdivisions for each of these aquifer systems within Lee County, and each of these subdivisions have unique hydraulic properties. The aquifers with the highest use in Collier County are the Intermediate and Surficial Aquifer Systems, with the Surficial Aquifer being the primary source of public water supply. In Lee County, select aquifers including the Lower Hawthorne Aquifer, the Sandstone Aquifer, and the Water-Table Aquifer are in the highest use from all three hydrogeologic units.

The Surficial Aquifer system is a regional hydrostratigraphic unit that underlies nearly all of Florida, including Lee County and Collier County, and is divided into two units: the Water-Table and Lower Tamiami Aquifers which are separated by a leaky confining unit. The Water-Table Aquifer is present throughout Collier County and extends from near land surface to depths of up to 50 feet. The lower Tamiami Aquifer occupies limestones of the Tamiami as well as coarse siliciclastic materials in the upper portion of the Peace River Formation. The top of the aquifer is encountered between mean sea level (MSL) and approximately 100 feet below MSL, with a thickness ranging from approximately 75 to 200 feet. Both aquifers are dependent on local recharge in Lee County, via direct inflow of rainfall at the top and by vertical leakage to the low aquifer.

The Intermediate aquifer system is composed of dolosilt, clay, and limestone of the Peace River Formation. The intermediate aquifer contains the Sandstone Aquifer and the Mid-Hawthorne Aquifer. The Sandstone Aquifer is relatively thin and discontinuous while the mid-Hawthorn Aquifer underlies all of Collier County. The top of the Sandstone aquifer is encountered between 100 and 250 feet below MSL and is missing from the southern half of the county. The mid-Hawthorn aquifer is encountered at about 200 feet below MSL in the extreme northwestern corner of the county and dips to the east and southeast to over 400 feet below MSL with an average thickness of approximately 100 feet. In Lee County, the mid-Hawthorn Aquifer is divided into upper and lower zones. Within Lee County, the aquifers contained within the Intermediate Aquifer System are geologically complex and are generally misunderstood.

The Floridan aquifer system in Lee County consists of multiple subdivisions: the Boulder Zone, the Avon Park Aquifer, the Ocala Aquifer, the Lower Suwannee Aquifer, the Upper Suwannee Aquifer, and the Lower Hawthorn Aquifer. The base of the Floridan Aquifer System is the top of the Paleocene-aged Cedar Keys Formation, which occurs at depths ranging from approximately 2,800 to 3,200 feet below surface. A thick sequence of low hydraulic beds separates the Floridan Aquifer System from the Intermediate Aquifer System. In most cases, the confining bed thickness is between 200 feet and 400 feet, with essentially no water movement between the two systems.

Regionally, the groundwater flow direction is to the south or south-southwest. The Water-Table Aquifer of the Surficial Aquifer System groundwater flow direction is subject to influences from nearby canals, potable well fields, agricultural irrigation wells, swamp/marsh areas, and seasonal rainfall variability. Depth to shallow groundwater in the study area ranged from 3.87 to 5.65 feet below land surface as noted in reports found in the FDEP's OCULUS database.

6.2 HYDROLOGY – SITE RECONNAISSANCE

During the site reconnaissance, roadside ditches/swales were noted throughout the project corridor. Slope is generally from the slightly higher elevations in the central area to the north and south. Additionally, several low, wet areas were observed adjoining east and west of the project ROW.

6.3 HYDROLOGY – USGS 7.5 MINUTE TOPOGRAPHIC MAPS

Based on the topographic maps, land surface generally slopes from the central area north towards Oak Creek, and south towards the Cocohatchee River. Several wooded swamp or marsh areas were depicted along the east and west sides of Old US 41. A depression was depicted along the southern project limit.

6.4 SOILS

The United States Department of Agriculture (USDA) Soil Surveys for Hendry and Glades Counties (2024) indicate that there are multiple soil types that exist within the study area, which includes the project limits and search distances up to 500 feet from the ROWs. The dominant soil types, in addition to their map unit ID numbers, acreages, and percentages are provided in **Table 6-1**:

Table 6-1 Existing Soils (USDA)

Map Unit Symbol	Map Unit Name	Acres in Study Area	Percent of Study Area
Lee County Soils			
7	Matlacha gravelly fine sand Urban land complex, 0 to 2 percent slopes	3.2	2.7%
36	Immokalee sand-Urban land complex, 0 to 2 percent slopes	23.5	19.8%
49	Felda fine sand, frequently ponded, 0 to 1 percent slopes	0.0	0.0%
59	Urban land, 0 to 2 percent slopes	13.4	11.3%
64	Brynwood fine sand, wet-Urban land complex, 0 to 2 percent slopes	39.9	33.6%
105	Copeland fine sandy loam, ponded-Urban land complex, 0 to 1 percent slopes	10.3	8.7%
111	Felda fine sand, ponded-Urban land complex, 0 to 1 percent slopes	10.6	9.0%
124	Myakka fine sand, ponded Urban land complex, 0 to 1 percent slopes	3.0	2.5%
134	Satellite fine sand-Urban land complex, 0 to 2 percent slopes	14.6	12.3%
SUBTOTALS FOR SOIL SURVEY AREA (LEE)		118.6	100.0%
Collier County Soils			

SECTION 6 HYDROLOGIC FEATURES

Map Unit Symbol	Map Unit Name	Acres in Study Area	Percent of Study Area
32	Urban land, 0 to 2 percent slopes	14.9	6.7%
101	Basinger fine sand-Urban land complex, 0 to 2 percent slopes	5.3	2.4%
102	Cypress Lake fine sand-Urban land complex, 0 to 2 percent slopes	1.0	0.4%
103	Cypress Lake-Riviera-Copeland fine sands, frequently ponded-Urban land association, 0 to 1 percent slopes	24.1	10.8%
115	Holopaw-Basinger-Urban land complex, 0 to 2 percent slopes	0.1	0.0%
117	Immokalee fine sand-Urban land complex, 0 to 2 percent slopes	131.7	58.9%
118	Immokalee-Oldsmar, limestone substratum-Urban land complex, 0 to 2 percent slopes	19.0	8.5%
133	Satellite fine sand-Urban land complex, 0 to 2 percent slopes	27.7	12.4%
SUBTOTALS FOR SOIL SURVEY AREA (COLLIER)		223.6	100.0%

Brynwood fine sand – (Map Unit 64) is the dominant unit in Lee County, making up approximately 33.6 percent of the Lee County study area. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, is 2 to 20 inches to lithic bedrock. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. The seasonal zone of water saturation is at 6 inches during June, July, August, September, October.

Immokalee Fine sand – (Map Unit 117) is the dominant unit in Collier County, making up approximately 58.9 percent of the Collier County study area. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. The seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November.

7 Interviews

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

An email was submitted on April 1, 2025 to Mr. Michael Sherron, FDOT District Contamination Impact Coordinator (DCIC) to request contamination related reports/files associated with this project. No response has been received as of this writing.

An email was submitted on April 21, 2025 to Mr. Michael Sherron specifically requesting asbestos and Metals-Based Coatings (MBCs) report for bridge culvert Structure No. 030181. Mr. Sherron's response on April 23, 2025 states the FDOT has no records of asbestos or MBCs for this bridge culvert.

8 Project Impacts

Based on the methodologies performed, thirty-five contamination sites and five drainage sites were identified and evaluated herein. Specific details for each contamination site and drainage site are provided in Table **8-1** and **8-2**, respectively. The location of each contamination site and drainage site is illustrated in **Appendix A**. EDM’s regulatory database reports are available in **Appendix B**. Historical Aerial Photographs provided by EDM are available in **Appendix C**. Topographic Maps provided by EDM are in **Appendix D**. Supplemental files from the FDEP’s OCULUS and Map Direct databases are available in **Appendix E**. Select site photographs are available in **Appendix F**. It is important to note, US 41 is also known as US Highway 41, and Tamiami Trail. Old US 41 splits from US 41 at the south end of the project northeast to Bonita Beach Road.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
SEGMENT 1 (COLLIER COUNTY)								
1	Germain Lexus (Former Germain Lincoln Mercury) 13491 Tamiami Trail (former 13329 Tamiami Trail)	TANKS 9810582	Tiara Real Estate Co., LLC.	Parcel 460 feet southwest of south project limit	Petroleum, Hazardous Materials	No	None	During the site reconnaissance, this site was observed as Germain Lexus of Naples. This site has one former 1,000-gallon lube oil AST. No reported discharges were identified. A Closure Site Inspection report dated September 2008 (Appendix E) states the 1,000 gallon AST was removed from site and replaced with two 550-gallon ASTs (no registration files were identified). This site is assigned a risk rating of No given the separation distance, and the lack of a reported discharge.
2	Construction Site 13551 N. Tamiami Trail	Site Reconnaissance	13555 TTN, LLC	Parcel adjoining west	Petroleum	No	SMF 1A	Parking lot demolition activities were observed during the site reconnaissance 410 feet west of the US 41 ROW. Two petroleum ASTs were observed on pavement 500 feet southwest of the US 41 ROW. No regulatory files were identified. This site is assigned a risk rating of No given the separation distance, and the lack of a reported discharge.
3 (1)	Circle K #7356 13550 N. Tamiami Trail	LUST, TANKS, STCERC 8518920	RPF Family, LLC	Parcel adjoining east of N. Tamiami Trail Unresolved groundwater impacts 10 feet east of N. Tamiami Trail	Petroleum (VOCs and PAHs in groundwater; none in soil)	High	SMF 1A	During the site reconnaissance, this site was observed as an active Circle K gas station. This site has five registered petroleum storage tanks: two active USTs, and three former USTs. Three discharges were reported: - Discharge Date: November 22, 1988 – assessment in progress, - Discharge Date: January 18, 1993 – assessment in progress, and - Discharge Date: May 11, 2004 – rescinded since it was determined to have been previously reported. The Interim Assessment Report dated May 2023 (Appendix E) states Groundwater Cleanup Target Levels (GCTLs) exceedances were identified at two groundwater monitoring wells, the nearest located 10 feet east of N. Tamiami Trail ROW. No Soil Cleanup Target Level (SCTL) exceedances were identified. Groundwater flow was to the southeast, away from Tamiami Trail ROW. Depth to shallow groundwater ranged from 4.00 to 5.65 feet below land surface (bls) in March 2023. This site is assigned a risk rating of High given the open discharge, undefined groundwater plume, proximity to the ROW, and status as an active gas station. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction. If dewatering is required within 500 feet, this site will affect at least the NPDES permitting efforts.
4	US 41 over Dunruss Creek FDOT No. 030181	FDOT	FDOT	Within US 41 ROW	Asbestos Metals-Based Coatings	Medium	SMF 1A	The FDOT’s Bridge Information spreadsheet states this bridge culvert (FDOT No. 030181) was built in 1974 and is and owned by the FDOT. An email was submitted on April 21, 2025 to Mr. Michael Sherron specifically requesting asbestos and Metals-Based Coatings (MBCs) report for bridge culvert Structure No. 030181. Mr. Sherron’s response on April 23, 2025 states the FDOT has no records of asbestos or MBCs for this bridge culvert. Since no testing for asbestos or MBCs was found, this site is assigned a risk rating of Medium.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
5	Florida Power & Light Substation 14515 Old US 41	Aerial Photographs	Florida Power & Light Co.	Adjoining west	Petroleum- based Cooling Fluids, Lead, PCBs	Low	FPC 1	During the site reconnaissance, this site was observed as a Florida Power & Light (FP&L) electrical substation. Aerial photographs depict rangeland from 1944 to 1985, and woods from 1994 to 2017. The substation was first depicted in 2019. No regulatory files were found. Typically, petroleum-based cooling fluids, lead based coatings, and PCBs are used at utility substations. Although the parcel is located adjoining west, the nearest substation component is located over 110 feet west of the Old US 41 ROW.
6	Import Automotive 1020 Collier Center Way	Site Reconnaissance	Florida Car Doctors Inc.	Parcel 380 feet southeast	Petroleum, Solvents	No	FPC 1	This site is assigned a risk rating of Low given the separation distance, and the lack of a reported discharge.
7 (2)	Wicked Cool Air Conditioning (Former Gilman's Grading) 1101 Sun Century Road	TANKS 8518117	Mangrove Industrial, LLC. / Eugene Abramoff / Andrew Lambert Callis / Earthquake Holdings, LLC / Advantaria Trust, LLC.	Parcel 180 feet southeast Former AST was 310 feet southeast	Petroleum	No	None	Import Automotives, an auto repair shop with five service bays was observed 380 feet southeast of old US 41 Road ROW during our site reconnaissance. No discharges were reported.
								Given the separation distance and lack of a reported discharge this site is assigned a risk rating of No.
8	Garguilo, Inc. (Former Naples Tomato Growers) 15000 N. Old 41	LUST, TANKS 8518313	N T Gargiulo, LP	Adjoining southeast Former tank farm 660 feet southeast	Petroleum	Low	FPC 2 FPC 3	During the site reconnaissance, this site was observed as Wicked Cool Air Conditioning, an air conditioning contractor. This site has one registered former 1,000 gallon diesel AST which was removed in 1986. No discharges were reported. A sketch included in the correspondence dated September 8, 1986 (Appendix E) depicts the former AST near the northeastern portion of the property 310 feet southeast of the nearest Old US 41 Road ROW.
								Given the separation distance, this site is assigned a risk rating of No.
9	Match's Auto Body 1330 Rail Head Blvd Unit #6	Site Reconnaissance	NTG Limited Partnership	230 feet southeast	Petroleum	No	FPC 2 FPC 3	During the site reconnaissance, this site was observed as Garguilo, Inc., a fruit and vegetable packing house. This site has two former 900 gallon USTs (one diesel and one unleaded gasoline). One discharge reported in July 1990 (full date not given) was issued a No Further Action (NFA) on May 10, 1991. A figure provided in the tank notification form dated February 1988 and aerial photographs dated 1973 and 1985 depict the former tank farm/pump island 660 feet southeast of the ROW. Current contamination impacts were not identified.
								Given the separation distance, this site is assigned a risk rating of Low.
10 (4)	Kelly Roofing (Former American Equipment) 15200 N. Old US 41	LUST, TANKS 8945040	Rail Head, LLC	Parcel 245 feet southeast Former UST/ discharge 420 feet southeast	Petroleum	No	FPC 2 FPC 3	During the site reconnaissance, Match's Auto Body was observed with one service bay 230 feet southeast of Old US 41 Road ROW. No discharges were reported.
								Given the separation distance and lack of a reported discharge this site is assigned a risk rating of No.
11 (3)	Railhead Recycling (Former Reliable Disposal & Recycling) 1401 Rail Head Boulevard, Suite B	SOLID WASTE- NON-LANDFILL 105767	Railhead Properties, LLC	Parcel 320 feet east	Solid Waste	No	FPC 2 FPC 3	During the site reconnaissance, this site was observed as Kelly Roofing, a roofing contractor. At least two metal 55 gallon drums and one plastic 255 gallon AST (appeared empty) were observed 450 feet southeast of the nearest Old US 41 Road ROW. This site has three former USTs (sizes ranging from 550 to 4,000 gallons, contents not reported). One discharge dated September 14, 1989 was issued an NFA on July 2, 1996. A figure included in the Second Year Groundwater Monitoring Report completed in June 1996, depicts the discharge 420 feet southeast of the nearest Old US 41 Road ROW (Appendix E).
								Given the separation distance and regulatory status, this site is assigned a risk rating of No.
								During the site reconnaissance, this site was observed as Railhead Recycling (1401B Rail Head Blvd), a wastepaper/shredded paper recycling facility. This is an active Recovered Materials Processing Facility (RMPF). Regulatory files from 2019 to 2025 provided a history of certification/renewal with the department. No monitoring permits, compliance violations, or reported discharges were identified during our research. This facility was first depicted on the 1994 aerial photograph. No disturbed soil or evidence of landfill was observed during our aerial photograph review.
								Given the separation distance and lack of a reported discharge, this site is assigned a risk rating of No.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
12 (5)	Former Gulf Stream Lumber Co. 16000-16010 Old US 41	LUST, TANKS 9802542	Old 41 Warehouse, LLC SWF Development Group, LLC	Parcel adjoining southeast Groundwater plume 140 feet southeast	Petroleum, Wood Preservatives, Arsenic	Medium	None	During the site reconnaissance, this site was observed as a commercial/industrial property including two buildings, each with multiple tenants. Tenants noted are considered low or no risk. Although no hazardous materials, petroleum products or groundwater monitoring wells were noted, household cleaning supplies and small quantities of hazardous materials are considered typical and low risk.
								This site had one former 1,000 gallon leaded gasoline UST. One discharge reported on February 18, 1999 was issued a Conditional Site Rehabilitation Completion Order (SRCO) on October 10, 2014. The PARM and Conditional NFA report dated November 2012 (Appendix E) includes a figure which depicts GCTL petroleum exceedances (naphthalene and isoprophylbenzene) at two shallow groundwater monitoring wells 140 feet southeast of the nearest Old US 41 ROW. Groundwater flow maps dated August 23, 2012 depict a radial/variable flow direction onsite. Average depth to water generally ranged from 3.87 to 4.55 feet in August 2012. No SCTL exceedances were reported. Un-impacted wells are depicted between the contaminated wells and property boundaries. Aerial photographs depict three structures from 1968 to 2015. The current configuration with two 1-story structures was first depicted in 2016. Although the petroleum groundwater plume appears to be delineated, the potential for unreported discharges associated with wood preservatives (i.e. treated wood stockpiles) exists. Although this site does not appear on the FDEP's Contamination Locator Map, the presence of documented groundwater contamination will affect at least the NPDES permitting efforts if dewatering is required within 500 feet.
13	41 Home & Garden-South 16123 Old US 41 Road	Site Reconnaissance Aerial Photographs	Busk & Associates, Inc	Adjoining west	Pesticides, Herbicides	Low	None	Given the open discharge within 500 feet, and potential for unreported discharges and residual impacts associated with wood preservatives, this site is assigned a risk rating of Medium. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction. If dewatering is required within 500 feet, this site will affect at least the NPDES permitting efforts.
								During the site reconnaissance, this site was observed as 41 Home & Garden Center, an interior/exterior home décor and landscape architecture business. Aerial photographs depict woods from 1944 to 1994. This site was first depicted in 2006. No mix/load areas or greenhouses were observed from the ROW. No reported discharges or relevant regulatory files were identified.
14	All Roads Kenworth 16120 Old 41 Road	Site Reconnaissance Aerial Photographs	Affordable Secure Storage LLC	Adjoining east	Petroleum, Solvents	Medium	None	This site is assigned a risk rating of Low due to the lack of reported discharges.
								During the site reconnaissance, this site was observed as Kenworth, a truck sales and service facility. Service bays were observed 150 feet east of the ROW. No tanks or groundwater monitoring wells were noted. Typically, truck service facilities store and use petroleum products, solvents, and automotive fluids. Aerial photographs depict this site as rangeland in 1944, and cleared land in 1958. The structure was first depicted in 1968.
15	North Collier Collision 16210 N. Old US 41 Road	Site Reconnaissance Aerial Photographs	Walter McKee, LLC	Parcel adjoining southeast	Petroleum, Solvents, Paints	Medium	None	Given the this is an active auto repair shop adjoining east, this site is assigned a risk rating of Medium. Additional file review is recommended.
								During the site reconnaissance, this site was observed as North Collier Collision, an autobody repair shop with at least four hydraulic lifts and paint shop. Although the parcel is adjoining southeast of Old US 41 Road ROW, the nearest structure is 50 feet southeast. Approximately 15-20 waste tires, one metal 55 gallon drum (no signage) and several plastic five gallon buckets (presumably used oil) were observed at the southeast corner of the property 130 feet southeast of Old US 41 Road ROW. No petroleum storage tanks or groundwater monitoring wells were observed. No discharges were reported. Aerial photographs depict this site as rangeland in 1944 and 1958, with some clearings and trails in 1968. The structure was first depicted in 1973.
								Given the this is an active auto repair shop adjoining east, this site is assigned a risk rating of Medium. Additional file review is recommended.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
16 (6)	Ace Super Storage (Former Leisure Furniture & Vinyl Services) 16300 Old US 41 (Formerly 16990 N. Old US 41 Aka Old Highway 41 N.)	SEMSARCH HAZARDOUS WASTE FLD094948700	ACE Super Storage, LLC	Two parcels: one adjoining east, the other 330 feet east	Solvents, Lead	Medium	None	The address “16990 N. Old US 41” was not identified during the site reconnaissance or on the Collier County Property Appraiser’s (CCPA) database. Currently that address appears to be 16300 Old US 41 based on nearby addresses noted on the property appraiser’s database and during the site reconnaissance.
								According to information found on the CCPA database, this site consists of 2 noncontiguous parcels. The adjoining east 0.42 acre parcel is comprised of two buildings, and the 3.92 acre parcel (over 250 feet east of the ROW) is comprised of seven buildings. All nine structures are steel frame metal buildings built between 1980 and 1986.
								During the site reconnaissance, this site was observed as Ace Super Storage, a self-storage facility. Six plastic 55 gallon drums and five empty totes were observed 360 feet away from the nearest ROW with signage stating “roof cleaning, pressure washing and window washing.”
								EDM’s report identified this site in its USEPA Superfund Enterprise Management System Archived (SEMSARCH) site inventory list with a National Priority List (NPL) status listed as “NFRAP – site does not qualify for the NPL based on existing information.” EDM’s report has the location plotted 500 feet east of the ROW. The Contamination Assessment Report (CAR) dated May 19, 1989 (Appendix E) states solvent groundwater contamination was identified at this site. The report states 375 cubic feet of impacted soil was removed offsite in May 1986. Groundwater flow was reported to the northwest, towards the Old US 41 ROW. An email from a representative of the FDEP’s CERCLA Site Screening Section states this site was given a “No Further CERCLA Action” after the 1994 site inspection. A subsequent email correspondence dated July 10, 2015 (Appendix E) states lead exceeds the GCTL. It is important to note, the figure in the report does not appear to match conditions noted on aerial photographs for either parcel. Therefore, the precise location of this facility is uncertain. Although the precise location was unable to be determined, for this report the location is plotted on the parcel adjoining east of the ROW since the location may have been there. This site was not identified on the FDEP’s Map Direct database.
								Given the solvent and lead groundwater impacts and proximity to the ROW, this site is assigned a risk rating of Medium. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction.
SEGMENT 2 (LEE COUNTY)								
17 (7)	Super Towers, Inc. WAYJ FM (Former WSFP Studios) 9930 Channel 30 Drive (Formerly 28950 Old US 41)	TANKS 9400385	Super Towers, Inc	Parcel adjoining southeast Former UST area 420 feet southeast	Petroleum	No	None	During the site reconnaissance, this site was observed as Super Towers, Inc. One former 4,000 gallon unleaded gasoline UST was removed from this site. A Closure Assessment report completed in September 1993, states soil and groundwater concentrations were below CTLs. The nearest property boundary adjoins southeast of Old US 41 ROW; however, the former UST area was 420 feet southeast of the nearest Old US 41 ROW. A Lee County letter dated October 1993 states the closure assessment activities adequately met the Department’s closure assessment guidelines. No relevant subsequent files were identified.
18	Railroad	Site Reconnaissance Aerial Photographs Topographic Maps	Seminole Gulf Railway, LP	Within Old US 41 ROW	Petroleum, Herbicides, Pesticides, Arsenic	Medium	None	Given the separation distance and lack of an open discharge, this site is assigned a risk rating of No. During the site reconnaissance, this site was observed as a railroad track which intersects the central portion of the project. It is depicted on aerial photographs from 1944 to 2024, and topographic maps from 1958 to 1991. Railroad corridors are associated with herbicides, arsenic, creosote and petroleum contaminants. Given the location within the Old US 41 ROW and potential for residual impacts, this site is assigned a risk rating of Medium. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
19	The Club at Mediterra 15755 Corso Mediterra Cir.	Site Reconnaissance Aerial photographs	The Club at Mediterra, Inc. / The New Club at Mediterra, Inc	Adjoining east	Petroleum, Herbicides, Pesticides, Arsenic	Low	None	During the site reconnaissance, this site was observed as The Club at Mediterra, a golf course. Aerial photographs depicted woods, grassy pasture, and low wet areas from 1944 to 1994. The Golf Course was first depicted in 2006. Typically, pesticides and herbicides are used onsite to maintain the greens. The nearest green or fairway is located 30 feet east of the ROW. The maintenance facility is depicted over 500 feet from the ROW and is not a contamination concern. Given the separation distance, this site is assigned a risk rating of Low.
20	Spanish Wells Golf & Country Club 9801 Treasure Cay Lane	TANKS 8942649	Spanish Wells Community Association	Adjacent 110 feet west Tank 350 feet northwest	Petroleum, Herbicides, Pesticides, Arsenic	Low	None	This site was not accessed during the site reconnaissance since it is located within Cordova at Spanish Wells, a gated community. This site has one in-service 2,000 gallon diesel AST, and five former tanks (four USTs and one AST). The Closure Assessment report dated December 1996 states no soil or groundwater CTL exceedances were reported. No discharges were reported. The golf course was first depicted on aerial photographs in 1985. The maintenance facility is located over 300 feet west, and the nearest green or fairway is located over 450 feet west of the ROW.
21	Valip Auto Repair 28380 Old US 41 Road	Site Reconnaissance	A BEYS TR, Constitution Plaza	Adjoining northwest Service bay 200 feet northwest	Petroleum	Low	SMF 2B	Given the separation distance, this site is assigned a risk rating of Low. During the site reconnaissance, this site was observed as Valip Auto Repair with one service bay located at the rear of the building located 200 feet northwest of the ROW. No storage tanks or groundwater monitoring wells were observed. Although the parcel this facility is located on is adjoining northwest of Old US 41 Road ROW, the nearest structure is 100 feet away. No reported discharges or relevant regulatory files were identified. Aerial photographs depict woods from 1944 to 2004. This building is first depicted in 2005. This site is assigned a risk rating of Low due to the lack of reported discharges, separation distance to service bay, good housekeeping practices, relatively recent construction, and semi-pervious parking lot.
22 (11)	Independent Classic Cleaners (Formerly Gold Coast Custom Drycleaners) 28380 Old US 41 Road #6B	SOLID WASTE- NON-LANDFILL 9812614	Constitution Plaza/ Independent Classic Cleaners	Adjoining northwest	Petroleum, Drycleaning Solvents	Medium	SMF 2B	During the site reconnaissance, this site was observed as Independent Classic Cleaners, an active dry cleaning facility. Signage indicated all drycleaning work is done on premises. No solvent tanks or groundwater monitoring wells were observed outside the building. Solvent tanks are suspected inside this facility since it remains active with dry cleaning performed onsite. Aerial photographs depict rangeland and woods from 1944 to 2004. The building is first depicted in 2006. The FDEP’s STCM database lists one drycleaning petroleum AST (no size provided) as in service and one former AST (size not provided, contents listed as drycleaning misc./others) as removed from site. No reported discharges were reported. Regulatory files indicate this site was first registered as Gold Coast Custom Cleaners in March 2011. A Registration form completed in March 2011 (Appendix E), lists this site was formerly known as Gold Coast Custom Cleaners with hydrocarbon listed as solvents used/sold (exact hydrocarbon compounds were not listed). Subsequent registration forms listed the following solvents as in use/sold at this facility: perchloroethylene (PCE), and petroleum (as listed compounds include: DF2000, mineral spirits, Stoddard solvent) at this site. No information regarding tank sizes, status, or locations were identified. This site was not found listed on the FDEP’s Drycleaning Solvent Cleanup Program Priority Ranking List on March 25, 2025. Although no discharges were reported, this site is assigned a risk rating of Medium given the active status as a drycleaning facility and proximity to the ROW. Additional file review is recommended.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
23 (13)	Commercial Building (Former Causeway Lumber Co.) 28280-28292 Old US 41 Road	TANKS 8519469	Causeway Commerce Building Con	Parcel adjoining northwest	Petroleum, Wood Preservatives, Arsenic	Medium	SMF 2B	During the site reconnaissance, this site was observed as a commercial plaza with approximately four structures and multiple tenants. None of the current tenants are considered contamination concerns. Aerial photographs depict rangeland in 1944 and 1958. This site is first depicted in 1968. The former facility was no longer depicted and the site was undergoing reconstruction in 2019. The current configuration is first depicted in 2023.
								This site has a total of four registered petroleum storage tanks. EDM’s report states three tanks (2 ASTs and 1 UST) were closed-in-place and one was removed in 2009. However, FDEP’s STCM database states all four tanks were removed. A picture and sketch provided with the Storage Tank Notification form dated September 27, 1990 (Appendix E) depicts the UST location and dispenser pump located 280 feet west of the ROW. The former UST location was observed as Cubby Mermaid Brewery and a low wet area during the site reconnaissance. Since no figures or coordinates were provided, the locations of the three ASTs remain uncertain. The ASTs were not obvious on aerial photographs. Therefore, it is possible one or more ASTs were located proximal to the ROW. Given the lack of assessment/closure information, the tanks may have been removed without sufficient investigation of potential soil and/or groundwater impacts.
24 (14)	Lee County – Naples Dog Track Site 28191 Old US 41 Road	SOLID WASTE- NON-LANDFILL 98005	Bonita-Ft Myers Corp	Within proposed new Quadrant Roadway, and adjoining east of Old US 41	Solid Waste	Low	SMF 2B	This site is assigned a risk rating of Medium given the adjoining northwest location, likelihood of unreported discharges, and the lack of information regarding tanks and wood preservative operations. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction.
								During the site reconnaissance, this site was observed as a grassy field. This site was registered as a Disaster Debris Management Site (DDMS) from 2007 to 2025. DDMS sites are temporary staging areas for storm debris which includes construction and demolition, yard trash and mixed debris. No discharges or violations were reported. The FDEP confirmed the closure of this DDMS site in February 2025.
25	Maintenance Building 28341 Old US 41 Road	Site Reconnaissance Aerial photographs	Bonita-Ft. Myers Corp	Parcel is adjoining southeast Old US 41 Road Maintenance building & AST are 410 feet south of proposed Race Track Road ROW	Petroleum, Solvents	Low	SMF 2B	This site was observed as a metal warehouse/maintenance building. One 550-gallon “Lube Cube” AST was observed at the west end of the building, 410 feet south of the nearest new Quadrant Road Way ROW and over 700 feet east of Old US 41 ROW. No staining or groundwater monitoring wells were noted. At the east end of the buildings, two tractors and four gas powered golf carts were observed under a covered area. No regulatory files were found.
								According to information found on the Lee County Property Appraiser database, this is a one-story metal frame warehouse building constructed in 1988.
								This site is assigned a risk rating of Low given the separation distance and lack of a reported discharge.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
26 (12)	Naples – Fort Myers Kennel Club / Greyhound Dog Track Debris Staging Area 10601 Bonita Beach Road	LUST, TANKS, STCERC 8627259 SOLID WASTE 98187	Bonita – Ft. Meyers Corp	Parcel within proposed Race Track Road ROW Contamination plume 370 feet south of proposed Race Track Road ROW	Petroleum	Medium	None	According to information found on the LCPA database, this is a 75.39 acre parcel with three buildings: health/clubhouse built in 2020, medical office built in 1973, and a restaurant built in 2023.
								During the site reconnaissance, this site was observed as an abandoned greyhound racetrack, Compact Pavers, Inc., Bonita Springs Poker Room, Sports Challenge America, The Brass Tap and a construction storage area. The nearest contamination concern is a construction storage yard (including two “fuel cubes” 250-500 gallons each) located 320 feet south of the closest ROW.
								This site has a total of nine registered petroleum storage tanks. Three ASTs (500-gallons, 250-gallons, and 110-gallons) remain in-service, and six tanks were removed. A total of three discharges were reported: - Area A 320 feet south of proposed ROW - Discharge date November 8, 1988 – GCTL exceedance (PAHs) - Area B located over 1,500 feet south - Discharge date February 4, 1994 – open discharge - Area B located over 1,500 feet south - Discharge date July 28, 1994 – open discharge Figures included in the Quarter 1 Post Active Remediation Monitoring (PARM) report dated December 19, 2024 (Appendix E) depict one contaminated well with PAH GCTL exceedances located 370 feet south of the nearest proposed ROW. No SRCOs were found.
								Solid Waste 98187 – No regulatory files were identified for this DDMS listing during our research. Contamination impacts are not anticipated. DDMS sites are typically considered a low risk since petroleum products and hazardous wastes are not permitted.
								Given the open discharge within 500 feet, this site is assigned a Medium risk rating. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction. If dewatering is required within 500 feet, this site will affect at least the NPDES permitting efforts.
								During the site reconnaissance, this site was observed as Remove It Pros, a demolition company. Although one petroleum AST was observed it is not considered a contamination concern given the separation distance over 1,000 feet from the ROW.
27 (9/10)	Southwest Florida Recycling Center / Former Reliable Rolloffs & Southwest Florida Recycling Center 10940 Enterprise Avenue	SOLID WASTE 95288 (formerly SOLID WASTE 95468)	10928 and 10940 Enterprise Avenue	890 feet southeast of proposed Race Track Road ROW	Solid Waste	Low	None	The former recycling center operated as a transfer operation for Construction and Demolition (C&D) debris and yard trash from 2008 to 2011. One violation associated with hazardous waste was reported at this site. This facility received closure status in June 2012. No subsequent files were provided after the 2012 closure. The nearest property boundary this facility is located 890 feet southeast of the proposed Race Track Road ROW. Aerial photographs depict woods, grassy pasture, and low wet areas from 1944 to 1968. This site is first depicted in 1975. Landfill activity was not obvious.
								Given the separation distance, this site is assigned a risk rating of Low.
								During the site reconnaissance, this site was observed as R&W Distributors, Inc., a rebar fabrication and construction material supplier.
28 (8)	R&W Distributors (Former Green Heron Landscapes, Inc.) 10955 Enterprise Avenue	SOLID WASTE 98566	10947 and 10955 Enterprise Avenue	1,400 feet southeast of proposed Race Track Road ROW	Solid Waste	Low	None	EDM’s report identified this site as a former yard trash disposal facility. An FDEP Compliance Letter dated January 24, 2020, stated this facility has been inactivated. The former yard trash facility was 1,400 feet southeast of the nearest proposed Race Track Road ROW. Aerial photographs depict woods, grassy pasture, and low wet areas from 1944 to 1968. This site is first depicted in 1975. Landfill activity was not obvious.
								Given the separation distance, this site is assigned a risk rating of Low.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
29	Former Component Technology, Inc. 10926 K-Nine Drive #3B	TANKS 9100554	Nickerson Holdings, LLC	Parcel 220 feet southeast of proposed Race Track Road ROW Building 10926 is over 500 feet southeast	Petroleum	Low	None	This parcel includes nine structures. During the site reconnaissance multiple businesses were noted including Patriot Store All, JS Custom Cushions, and Patio Furniture Repair. No groundwater monitoring wells, petroleum products or hazardous materials were noted. The FDEP's STCM database lists one former 1,000 gallon diesel AST as removed. No discharges were reported. Contamination impacts are not anticipated given this site and former AST were located over 500 feet southeast of the ROW. Given the separation distance and lack of a reported discharge, this site is assigned a risk rating of Low.
30	Race Track Road Construction Site 28010 Performance Lane	Site Reconnaissance	Bonita Motor Condos, LLC	30 feet east of Race Track Road ROW	Petroleum, Hazardous Materials	Low	None	An active construction site was observed 30 feet east of the proposed Race Track Road ROW. Signage indicating the future development would be "Luxury Storage Garages" was observed during the site reconnaissance. Typically, construction sites use and store petroleum products and hazardous materials. No petroleum ASTs or hazardous materials were observed from the ROW. No regulatory files were found.
31 (15)	RaceTrac #584 10801 Furlong Street	TANKS 9814089	RaceTrac, Inc.	Adjoining southeast corner of Bonita Beach Road and Race Track Road ROW	Petroleum	Medium	None	This site is assigned a risk rating of Low due to the lack of reported discharges. During the site reconnaissance, this site was observed as an active RaceTrac gas station. This site has three in-service unleaded gasoline UST (sizes ranging from 15,000 to 20,000 gallons). No discharges were reported. Given the active status as a gasoline station and proximity to the ROWs, this site is assigned a risk rating of Medium. Additional file review should be performed since the potential for future discharges exist.
32	Lextech Automotive 10821 Bonita Beach Road	Site Reconnaissance	LXTL, LLC	Adjoining south of Bonita Beach Road	Petroleum	Medium	None	During the site reconnaissance, this site was observed as Lextech Automotive, an automotive repair shop. Seven hydraulic lifts was observed during the site reconnaissance. Although the parcel is adjoining south of Bonita Beach Road ROW, the structure is 60 feet south. No discharges were reported. This site was depicted as rangeland and woods from 1944 to 2008, and cleared land from 2008 to 2009. This structure was first depicted in the 2012, and the current configuration with paved parking was first depicted in 2017. Since this is an active auto repair shop adjoining the ROW, this site is assigned a risk rating of Medium. A file review should be performed since the potential for future discharges exist. During the site reconnaissance, this site was observed as a grassy and partially paved lot with no structures. No ASTs, groundwater monitoring wells or stained soils were noted.
33 (16)	Former Swift Oil Change 10880 Bonita Beach Road	TANKS 9802941	Lee County	30 feet northeast of the east project limit along Bonita Beach Road ROW	Petroleum	Low	None	This site has four registered petroleum ASTs: two 500 gallon lube oil and two 1,000 gallon lube/waste oil. The tank status for all four ASTs is listed as "E" on the tank registration form dated June 5, 2002. The meaning of "E" is the "AST was constructed as a mobile tank or enclosed in a building; no longer retains a regulated status." No closure or assessment reports were found. No discharges were reported. No tanks were noted during the site reconnaissance. This site was depicted as rangeland, woods and pasture from 1944 to 1992; one structure was depicted from 1993 to 2017; and a vacant grassy lot and paved parking lot was depicted from 2019 to 2024.
34 (17)	Former Circle K #7380 10998 Bonita Beach Road	LUST, TANKS 8518897	C. L. Hall, Trust	100 feet east of the east project limit	Petroleum	Low	None	Given the separation distance and lack of a reported discharge, this site is assigned a risk rating of Low. During the site reconnaissance, this site was observed as Florida Institute of Music, and I Love Dogs, a dog grooming salon. One discharge was reported on November 20, 1989. An SRCO was issued on November 3, 1994. Three unleaded gasoline USTs were installed between 1980 and 1986. All three were removed in 1990. Aerial photographs first depict this site in 1986. Given the separation distance, and regulatory status, this site is assigned a risk rating of Low.

Table 8-1 Risk Ratings for Contamination Sites								
Site Number/ (EDM Number)	Site Name & Address	Databases/ Facility ID/ Other Sources	Property Owner(s)	Distance from Old US 41 ROW	Contaminants of Concern	Risk Rating	Drainage Sites Affected	Comments
35	Former Groves	Aerial Photographs Topographic Maps	Second Gear CL BBR, LLC	250 feet east of east project limit	Herbicides, Pesticides	No	None	During the site reconnaissance, this site was observed as an open field with some trees. The former groves are depicted on aerial photographs from 1944 to 1986, and topographic maps from 1958 to 1972. No regulatory files were found. Given the separation distance and lack of a reported discharge, this site is assigned a risk rating of No.

Table 8-2 Risk Ratings for Drainage Sites			
Drainage Site Name	Address(es)	Contaminants of Concern	Risk Rating
SMF 1A	13800 Tamiami Trail North 1 Sunrise Boulevard (western portion) Parcel with no ID along east boundary	Petroleum	Medium
SMF 1A is a preferred alternative. This site includes three parcels, or portions thereof. During the site reconnaissance, this drainage site was observed as a commercial plaza with multiple tenants. None of the tenants are considered contamination concerns, except for a nail polish shop which is considered a low risk. The southeast parcel is comprised of grassy areas and a sidewalk. The east parcel is reportedly owned by Collier County and includes a paved RV/boat storage lot. No groundwater monitoring wells, petroleum products or hazardous materials were noted. Historical Aerial Photographs: Pasture/grassy fields were depicted from 1944 to 1973. Trails were depicted within the northeastern corner in 1985. The current configuration with a plaza was first depicted in 1994. Historical Topographic Maps: Open field/pasture was depicted from 1958 to 1991. Contamination Concerns: Onsite, no regulated sites were identified. Offsite, the following two contamination sites were identified: - Construction Site (Site 2) is an active construction site. Although the parcel is 180 feet west of SMF 1A, the construction site is located over 700 feet southwest. No discharges were reported. Given the separation distance, this site is considered a low risk. - Circle K #7356 (Site 3) is an active gas station with an open discharge located 300 feet south of SMF 1A. Although contamination impacts are not anticipated NPDES permitting may be affected. This site may affect NPDES permitting if subsurface work or dewatering is anticipated within 500 feet. - US 41 over Dunruss Creek, FDOT No. 030181 (Site 4) is a bridge culvert located 100 feet northwest of SMF 1A. Hazardous materials within this structure are not anticipated to impact SMF 1A. Given the open discharge within 500 feet (Site 2 Circle K #7356), this drainage site is assigned a risk rating of Medium. This site should be considered for Level II testing if proximal to subsurface excavations or dewatering during construction.			

Table 8-2 Risk Ratings for Drainage Sites				
Drainage Site Name	Address(es)	Contaminants of Concern	Risk Rating	Comments
FPC 1	1004 Collier Center Way 1016 Collier Center Way 1020 Collier Center Way 1030-1040 Collier Center Way	Petroleum, Solvents	Medium	According to information found on the CCPA database and site reconnaissance observations, this drainage site is comprised of ten parcels. The two western parcels (1004 and 1006 Collier Center Way) include North Collier Corporate Center I & II, each improved with a 2-story office building built in 2000 and 2001. The middle parcel is improved with Import Automotive (Site 6 located at 1020 Collier Center Way), a repair/body shop built in 1999. The seven eastern parcels (1030 and 1040 Collier Center Way) are improved with two warehouse/distribution buildings built in 2005. While multiple tenants were noted, Import Automotive (Site 5) and Gerber Collision are the only businesses considered contamination concerns. No groundwater monitoring wells were noted. Although not noted during the site reconnaissance, auto repair facilities typically include petroleum storage tanks, hazardous materials, and hydraulic lifts.
				Historical Aerial Photographs: Woods, grassy pasture, and low wet areas were depicted from 1944 to 1994, and clearing was depicted near the southern boundary in 1999. Three structures were depicted in the western area and the eastern area was cleared in 2004. The current configuration with five structures was first depicted in 2006.
				Historical Topographic Maps: Woods and open field/pasture were depicted from 1958 to 1991.
				Contamination Concerns Onsite: Two contamination concerns were noted: Import Automotive (Site 5) and Gerber Collision. Both are auto repair shops located in the central portion of FPC 1. While no regulatory files were found, these sites are considered contamination concerns since automotive repair shops typically store and use petroleum products and hazardous materials. Although no discharges were reported, given the location within the FPC 1 footprint and likelihood of unreported discharges, these sites are considered a contamination risk to FPC 1.
				Contamination Concerns Offsite: Florida Power & Light Substation (Site 5), a utility substation with no reported discharges is located 180 feet west of FPC 1. Given the separation distance and lack of a reported discharge this site is considered a low risk.
Given two auto repair shops are located within the footprint of FPC 1 and likelihood of unreported discharges, this drainage site is assigned a risk rating of Medium. This drainage site should be considered for Level II testing.				

Table 8-2 Risk Ratings for Drainage Sites				
Drainage Site Name	Address(es)	Contaminants of Concern	Risk Rating	Comments
FPC 2	1320-1340 Rail Head Blvd. 1360 Rail Head Blvd. 1400-1414 Rail Head Blvd.	Petroleum, Hazardous Materials, Herbicides, Arsenic	Medium	According to information found on the CCPA database and site reconnaissance observations, this drainage site is comprised of three parcels. The western parcel (1320, 1330 and 1340) includes three one-story, metal frame warehouse buildings built in 1988. Contamination concerns noted include: Big Al's Welding (1340), and Match's Autobody Shop (1330 Suite 7). Kelly Roofing (Site 10), roofing contractors is located within the central parcel and includes three metal frame buildings constructed in 1975 and 1977: one 2-story building with maintenance bays and offices; and two storage/maintenance buildings. The east parcel is comprised of two structures (described as "factory building" (1400-1414) constructed in 1998. Current uses include a plumber's office, education office and vacant suites. Contamination concerns were not noted at this building. Groundwater monitoring wells were not noted on any of these parcels. Offsite, adjoining east, a railroad track (Site 18) was noted.
				Historical Aerial Photographs: Woods and grassy pasture were depicted from 1944 to 1973. Kelly Roofing (Former American Equipment (Site 10)) was first depicted in 1985. Three structures were first depicted within the western portion in 1994. Two structures were first depicted in the eastern portion in 1999.
				Historical Topographic Maps: Open field/pasture was depicted from 1958 to 1991. Two structures were depicted within FPC 2 from 1987 to 1991.
				Contamination Concerns Onsite: Two contamination sites (Site 8 and Site 9) were identified within FPC 2: - Kelly Roofing (Former American Equipment (Site 10)), is an roofing contractor located within the FPC 2 footprint. At least two metal 55 gallon drums and one plastic 255 gallon AST (appeared empty) were observed near the central portion of FPC 2. This site had three former USTs. One discharge dated September 14, 1989 was issued an NFA on July 2, 1996. A figure included in the Second Year Groundwater Monitoring Report completed in June 1996, depicts the discharge near the central portion of FPC 2 (Appendix E). This site is a contamination concern since the potential for residual impacts, and unreported discharges remains. - Match's Autobody (Site 9), an autobody shop with no reported discharges is within the footprint of FPC 2. Although not observed during the site reconnaissance, automobile repair facilities typically use and store petroleum products and hazardous materials. This site is a contamination concern since the potential for unreported discharges within FPC 2.
				Contamination Concerns Offsite: Three contamination sites (Sites 8, 11 and 18) were identified nearby: - Garguilo, Inc. (Former Naples Tomato Growers (Site 8)) is located adjoining south of FPC 2. One petroleum discharge reported in July 1990 was issued an NFA May 10, 1991. The source UST was removed. No subsequent discharges were reported. The discharge area was located 250 feet south. Given the separation distance, this is a low risk. - Reliable Disposal & Recycling, Inc. (Site 11), is an RMPF wastepaper/shredded paper recycling facility located 60 feet north. No discharges were reported. Given the separation distance and lack of a reported discharge, this site is a low risk. - Railroad (Site 18) is an active railroad track located adjoining east of FPC 2. Aerial photographs first depict the railroad track in 1944. Contaminants typically associated with railroad corridors include herbicides, arsenic, creosote and petroleum. Given the adjoining east location this site is considered a contamination concern to FPC 2.
				Given the potential for unreported discharges and residual impacts associated with onsite businesses, and the adjoining east railroad corridor, this site is assigned a risk rating of Medium. Additional Level II testing should be considered given the requirement of subsurface excavations and dewatering during construction.

Table 8-2 Risk Ratings for Drainage Sites			
Drainage Site Name	Address(es)	Contaminants of Concern	Risk Rating
FPC 3	1401 Rail Head Blvd. 1301-1351 Rail Head Blvd. (easement, southern portion only)	Petroleum, Herbicides, Pesticides, Arsenic	Medium
During the site reconnaissance, this drainage site was observed Railhead Recycling (Site 11), an RMPF. Information found on the CCPA database states two metal frame structures were built in 1988. An existing pond is located onsite along the west boundary. The access easement was observed as a paved driveway, grassy and landscaped areas.			
Historical Aerial Photographs: Aerial photographs depict woods and open field/pasture from 1944 to 1985. The current structure was first depicted in 1994.			
Historical Topographic Maps: Topographic maps depict pasture/open field from 1958 to 1991.			
Contamination Concerns Onsite: Railhead Recycling (Former Reliable Disposal & Recycling, Inc. (Site 11)) is an RMPF located within the FPC 3 footprint. Regulatory files from 2019 to 2025 provided a history of certification/renewal with the department. No discharges were identified. This facility was first depicted on the 1994 aerial photograph. No disturbed soil or evidence of landfill was observed during our aerial photograph review.			
Contamination Concerns Offsite: - Garguilo, Inc. (Former Naples Tomato Growers (Site 8)) is located over 350 feet south. One petroleum discharge reported in July 1990 was issued an NFA May 10, 1991. The source UST was removed. No subsequent discharges were reported. The discharge area was located over 600 feet south. Given the separation distance, this is a low risk. - Kelly Roofing (Former American Equipment (Site 10)) is located 50 feet south. At least two metal 55 gallon drums and one plastic 255 gallon AST (appeared empty) were observed over 130 feet south of FPC 3. This site has three former USTs (sizes ranging from 550 to 4,000 gallons, contents not reported) located over 200 feet south. One discharge dated September 14, 1989 was issued an NFA on July 2, 1996. A figure included in the Second Year Groundwater Monitoring Report completed in June 1996, depicts the discharge at the former tank farm over 200 feet south. Given the separation distance, this site is a low risk. - Railroad (Site 18) is an active railroad corridor located adjoining east. Given the adjoining east location, this site is considered a contamination concern.			
Given the proximity to the railroad, this site is assigned a risk rating of Medium. Additional Level II testing should be considered given the requirement of subsurface excavations and dewatering during construction.			
SMF 2B	Portions of three parcels: 28191 Old US 41 28251 Old US 41 28341 Old US 41 And folio 10633938	NA	Low
SMF 2B is a preferred alternative. During the site reconnaissance, this drainage site was observed as a two-lane paved road and grassy fields. Two billboards were noted along the west boundary.			
Historical Aerial Photographs: Aerial photographs depict woods and trails in 1944, an unpaved road and partially cleared land in 1958, and a road and open fields in 1968, a new curved road was added south of the old road in 1975. An east/west oriented road and grassy areas were depicted from 1958 to 2024.			
Historical Topographic Maps: Topographic maps depict woods and a road from 1958 to 1972. A pasture/open field and a new road are depicted from 1987 to 1991.			
Contamination Concerns: No contamination concerns were noted onsite. Offsite, three contamination concerns were noted. - Commercial Building (Former Causeway Lumber Co. (Site 23)) is located 100 feet northwest. Given the separation distance, reported removal of petroleum storage tanks, and lack of a reported discharge, this site is considered a low risk. - Lee County – Naples Dog Track Site/Greyhound Dog Track Debris Staging Area (Site 24) is located 500 feet north. Given the separation distance and lack of contamination concerns, this site is a low risk. - Maintenance Building (Site 25) is located 200 feet southeast. No discharges were reported. No regulatory files were found. Given the separation distance and lack of a reported discharge, this site is a low risk.			
Given the lack of contamination concerns onsite, and the lack of a reported discharge within 500 feet, this drainage site is assigned a risk rating of Low.			

9 Conclusions and Recommendations

9.1 CONCLUSIONS

A total of thirty-five contamination sites were evaluated and assigned the following risk ratings.

Table 9-1 Summary of Risk Ratings – Mainline Sites

County	High	Medium	Low	No	Total
Collier	1	5	3	7	16
Lee	0	6	11	2	19
Total	1	11	14	9	35

A total of five drainage sites were evaluated and assigned the following risk ratings. Two drainage sites, SMF 1A and SMF 2, are preferred alternatives.

Table 9-2 Summary of Risk Ratings – Drainage Sites

County	High	Medium	Low	No	Total
Collier	0	4	0	0	4
Lee	0	0	1	0	1
Total	0	4	1	0	5

9.2 RECOMMENDATIONS

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

- Additional information may become available or site-specific conditions may change from the time this report was prepared and should be considered prior to acquiring right-of-way and/or proceeding with roadway construction. If the preferred alignment changes or preferred drainage site(s) are selected, and/or new potential contamination sites have been constructed, this report should be revised and updated to reflect those changes.
- For the locations rated No or Low for contamination, no further action is required. These locations have been determined to have little or no contamination risk to the study area at this time.
- A total of sixteen locations (twelve contamination sites, and four drainage sites) were assigned risk ratings of High or Medium. Additional file review to monitor for future discharges and regulatory status is recommended for five of these sites: Map IDs 13, 14, 21, 30, and 31. Although rated Medium, Level II testing is not recommended for FPC 1, FPC 2, and FPC 3 since they are not preferred alternatives selected for final design. The remaining eight locations should be considered for Level II testing in consultation with the DCIC in the design phase. Level II testing may include soil borings, monitoring well installation, soil and groundwater sampling, laboratory testing, OVA screening, and GPR surveys.

SECTION 9 CONCLUSIONS AND RECOMMENDATIONS

- Petroleum - Analytical testing for soil and groundwater samples at the petroleum contaminated sites (Map IDs 3, 25, and SMF 1A) may include Total Recoverable Petroleum Hydrocarbons (TRPHs) by the Florida PRO Method, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and methyl-tertiary-butyl-ether (MTBE) by EPA Method 8260, and Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270. OVA field screening is also recommended.
- Former Lumber Company - Analytical testing for the soil and groundwater samples at the groves and row crops sites (Map IDs 11 and 22) may include arsenic by EPA Method 6010, organochlorine pesticides by EPA Method 8081, organophosphorus pesticides by EPA Method 8141, chlorinated herbicides by EPA Method 8151, and Polychlorinated Biphenyls (PCBs) by EPA Method 8082.
- Railroad – Analytical testing for the soil and groundwater samples at the railroad corridor (Map ID 17) may include arsenic by EPA Method 6010, PAHs by EPA Method 8270, and herbicides by EPA Method 8151.
- Solvents and Metals – Analytical testing for soil and groundwater samples at this contaminated site (Map ID 15) may include TRPHs by the Florida PRO Method, Volatile Organic Compounds (VOCs) by EPA Method 8260, and PAHs by EPA Method 8270, and RCRA 4 metals (arsenic, cadmium, chromium and lead) by EPA Method 6010. OVA field screening is also recommended.
- Bridge Culvert FDOT No. 030181 (Map ID 4) – The FDOT District One DCIC was contacted and state the FDOT has no records of asbestos or MBC testing for this bridge culvert. Analytical testing for asbestos may include Polarized Light Microscopy (PLM), and MBCs (arsenic, cadmium, chromium, lead, and zinc) may include EPA Method 6010.
- Level II testing costs are estimated at \$2,000 to \$10,000 per site. If impacts are identified during Level II testing, Level III construction support activities such as source removal and/or dewatering may be required during construction and are estimated at \$50,000 to \$100,000 per site.
- Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the National Pollutant Discharge Elimination System (NPDES) Generic Permit for Stormwater Discharges from Large and Small Construction Activities. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area.

10 References

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