## **MEMORANDUM**

Florida Department of Transportation
District 2 Environmental Management Office

**Date:** March 5, 2025

**To:** Jared Sweat, PD&E Project Manager

**From:** Aja Stoppe, District Contamination Impact Coordinator

**Copies to:** File, Bryant Brantley, Kelsey Lucas, Darrell Locklear

Subject: FM No. 210447-5-32-01 PD&E SR 16 Widening, St Johns Co, FL

Supplemental Pond Contamination Screening Evaluation and Assessment:

Pond Site 5C Screening Evaluation & Pond Sites 4B and 4C Assessment Summary

A contamination screening evaluation of preferred Pond Site 5C and field assessments of Pond Sties 4B and 4C were conducted in support of pond site selections for the SR 16 PD&E study to widen from International Golf Parkway (IGP) to I-95 (SR 9) in St. Johns County, FL. The screening evaluation and assessments were supported by the information provided in the SR 16 PD&E Level 1 contamination document, *Contamination Screening Evaluation Report (CSER)*, State Road (SR) 16 from International Golf Parkway (IPG) to I-95 (SR 9), St. Johns County, Florida, FPID No 210447-5-32-01, dated 7/15/2024.

#### **Pond Site Results Summary:**

**Pond Site 5C** was not included in the pond sites screened for potential contamination impacts in the SR 16 Level 1 CSER (2024). A site reconnaissance of the proposed pond site and the information from the CSER was used to support the screening and evaluation of Pond Site 5C. A full discussion of the screening results is provided in **Section 1** of this technical memorandum. The results of the Pond 5C screening and evaluation determined the potential pond site had NO potential risk for contamination impacts to right of way acquisition or construction.

**Pond Sites 4B and 4C** were ranked as MEDIUM risk based on aerial photography observations of a wet depressional area that may have been filled-in during the 1990's (CSER, 2024). Concerns were raised over the potential use of unknown debris and contaminated materials to fill this area. Field observations of the potential pond sites and assessment of the soils within the depressional areas did not indicate the area was filled in with buried debris, imported soils, or contaminated materials. Expanded discussions of the assessments are provided in **Section 2** of this technical memorandum.

The results of the Pond Site 4B and 4C field observations and soil assessments determined there is <u>LOW</u> potential risk for contamination related impacts to right of way acquisition or construction at these locations.

#### **Section 1. Contamination Screening Evaluation Pond 5C**

Pond 5C is a long, linear pond, covering approximately 8.14 acres. The location of Pond 5C is shown in the project's draft Pond Siting Report Figure 1. Land Use (Jan 2025), see **Attachment 1**. The pond site is perpendicular to SR 16 and adjacent to the southern portion of Pond 5A. Pond 5A ranked was ranked as a No risk in the SR 16 CSER (2024).

A site reconnaissance of Pond 5C occurred on February 20, 2025. The pond site was vegetated with Flatwoods tree and shrub cover, intermixed forested uplands and wetlands. An unpaved road and constructed drainage ditch were also present within the length of the proposed pond site. The ditch was approximately 8-10 ft wide and wet throughout the pond area. Small piles of mounded soil were noted adjacent to a wider section of the ditch. No trash or debris was visible in the mounds. The mounds were likely created when this portion of the ditch was over excavated. See Pond 5C photos below.

Aerial photographs reviewed indicated that the site has been wooded, grassy, and/or cleared land since at least 1942. The pond site and the adjacent property to the north were cleared and possibly used as cattle pasture from 1993 to 2014. A drainage ditch first appeared within the Pond 5C parcel in the 1993 aerial. Trees and other vegetation reestablished in the proposed pond site as shown from the 2005 aerial to current observations. The 1942 to 2023 Aerials showing Drainage Basins 4 and 5 from the SR 16 CSER (2024) are provided in **Attachment 2**.

The site was not listed in the historical city directories reviewed and the area was not covered in Sanborn Fire Insurance Maps. The site was not identified in the environmental database report or on the FDEP Map Direct and OCULUS websites. No known discharges have been reported at the site.

No potential contaminated sites were identified within the vicinity of Proposed Pond Site 5C, it is ranked as a NO risk. Impacts to construction are not anticipated at this time.



**Pond 5C Photos:** dirt road, ditch and tree line visible looking E toward SR 16 (left), forested area at SE corner looking east (middle), from dirt road looking S at wide section of ditch and soil mounds (right).

#### Section 2. Proposed Pond Sites 4B and 4C Field Review Summary

Further evaluation of proposed Pond Sites 4B and 4C was necessary based on concerns described in the SR 16 Level 1 CSER (2024), which ranked both ponds as MEDIUM risk sites. The MEDIUM risk rankings were assigned based on observations in the historical aerials review showing notable landscape changes between 1980 and 1993 in a low-depressional area present within both 4B and 4C pond sites. The observed changes potentially indicated the depressional area was filled in with material of an unknown origin, i.e. trash, debris, contaminated soils. The pond sites and depressional area are shown on **Figure 1**.

A field site evaluation and soil assessment of the depressional area within proposed Pond Sites 4B and 4C was conducted on November 21, 2024. Observations of the ground's surface, vegetation, and surface soils were made. The surface soils in the depressional area were wet. The vegetation types indicated a high groundwater water table was a dominate hydrologic feature. Soil borings, advanced with a hand auger to approximately three feet below land surface (bls), encountered the groundwater table between 8 to 12 inches bls. The observed soils were dark, organic sandy soils over light yellowish-brown sand. See **Pond 4B and 4C photos** below. The soil boring locations are shown on **Figure 2.** 

No foreign material or indications of disturbed or contaminated soils were noted in the subsurface soils. The soil profiles observed were consistent with naturally occurring soil formation and were comparable to the local soils mapped in the Natural Resource Conservation Service (NRCS) St John County Soil Survey. The hydrologic changes observed at Ponds 4B and 4C in the historical aerials were likely related to changes in the drainage and stromewater control features along SR 16 and surrounding area. The depressional area did not appear to be filled with material from outside sources.

Based on the additional investigation, the Level 1 CSER (2024) risk rankings for Pond Sites 4B and 4C have been reduced from MEDIUM to LOW risk. No further assessment is recommended.



**Pond 4B and 4C photos**: Soil boring location #2 (left), organics in the near surface soil (middle), sandy subsurface soils (right).

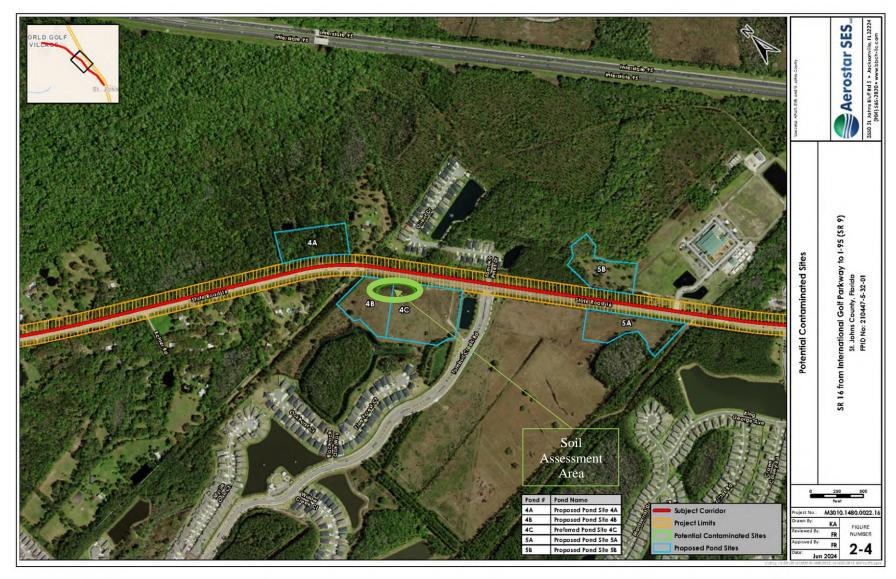


Figure 1- Location of low-lying area in SR 16 Proposed Ponds 4B and 4C

150 Soil Boring Location #1 Proposed Pond Site 4B 0-3 foot Depth Soil Boring Location #2 Proposed Pond Site 4C 0-3 foot Depth

Figure 2- Soil Boring Locations in SR 16 Proposed Ponds 4B and 4C

### **Attachment 1**

Pond 5C location as shown in the SR 16 draft Pond Siting Report
Figure 1. Land Use
Date of draft report is January 2025

# **Pond Siting Report**

### SR 16 Project Development and Environment (PD&E) Study

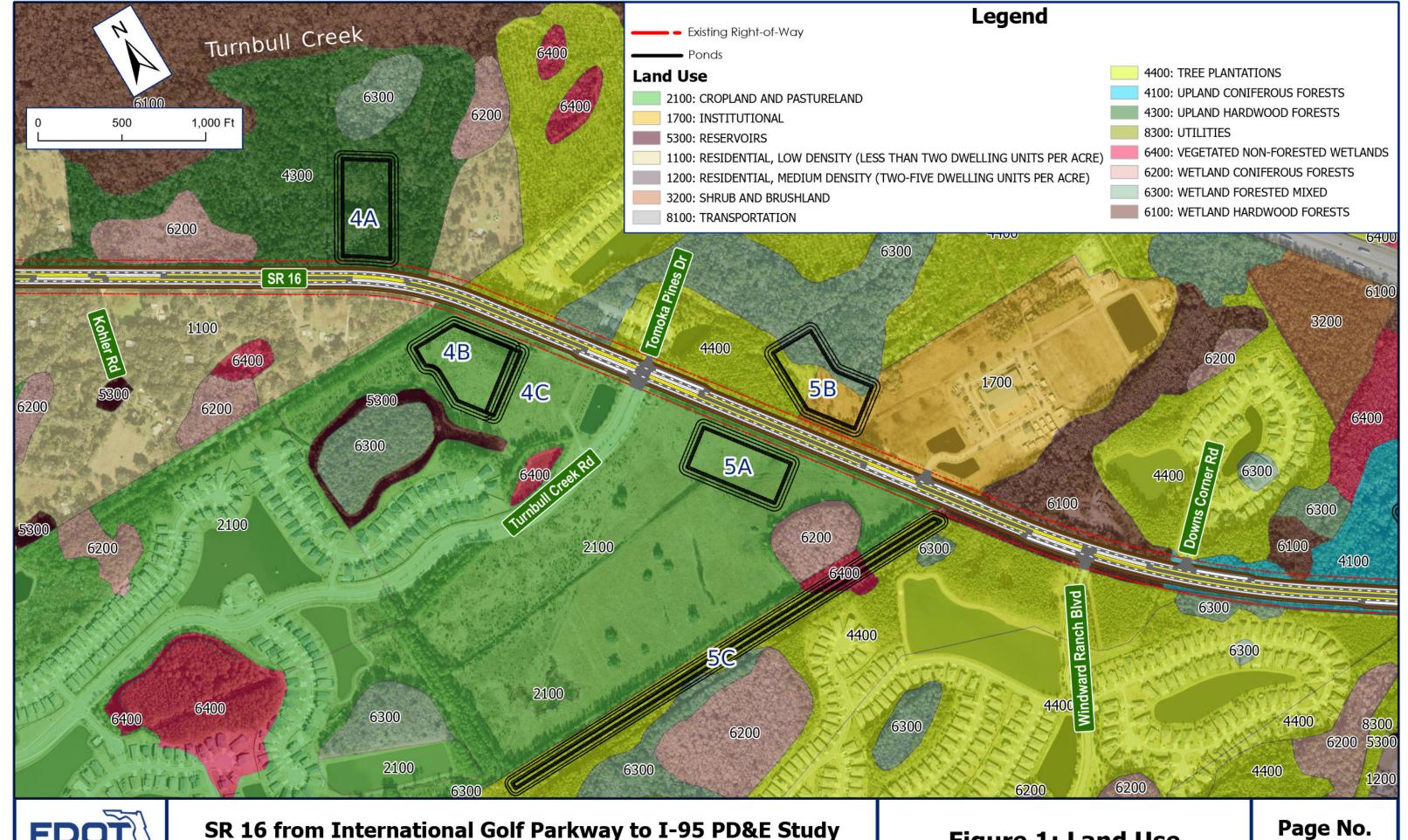
(from International Golf Parkway to I-95) St. Johns County, Florida

Financial Project ID (FPID) Number: 210447-5

Efficient Transportation Decision Making (ETDM) Number: 14535



January 2025



SR 16 from International Golf Parkway to I-95 PD&E Study FPID: 210447-5-32-01

Figure 1: Land Use

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### **Attachment 2**

Select SR 16 CSER (2024) Historical Aerials

Basins 4 and 5

### **CONTAMINATION SCREENING EVALUATION REPORT**

### State Road (SR) 16 from International Golf Parkway (IGP) to I-95 (SR 9) St. Johns County, Florida

Financial Project Identification (FPID) No: 210447-5-32-01

#### PREPARED FOR:

Florida Department of Transportation (FDOT), District 2 1109 South Marion Avenue Lake City, Florida 32025

and

RS&H 10748 Deerwood Park Blvd South Jacksonville, Florida 32256

#### PREPARED BY:

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ASL Project No.: M3010.1480.0022.16

July 15, 2024

Prepared by: Date: \_\_\_\_\_ July 15, 2024

Kevin Ashman, P.G.

Geologist

Reviewed by: \_ Date: July 15, 2024

Frank Redway

Senior Program Manager

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

# **APPENDIX B**

HISTORICAL REFERENCES DOCUMENTATION

