

PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation

District Five

Truck and Freight Alternative Site Analysis

Limits of Project: I-4 from Polk/Osceola County Line to I-95

Osceola, Orange, Seminole, and Volusia Counties, Florida

Financial Management Number: 447724-1-22-01

ETDM Number: N/A

Date: March 8, 2024

Draft

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.

Authorized Signature

Print/Type Name

Title

Address

Address

Seal

PROFESSIONAL ENGINEER CERTIFICATION

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Financial Project ID: 447724-1-22-01

Federal Aid Project Number: N/A

This preliminary engineering report contains engineering information that fulfills the purpose and need for the Truck and Freight Alternative Site Analysis Project Development & Environment Study for I-4 from Polk/Osceola County Line to I-95 in Osceola, Orange, Seminole, and Volusia Counties, Florida. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Vanasse Hangen Brustlin, Inc., and that I have prepared or approved the evaluation, findings, opinions, conclusions or technical advice for this project.

This item has been digitally signed and sealed by Kevin T. Freeman, PE on the date adjacent to the seal.

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LIST OF ACRONYMS

AADT	Annual Average Daily Traffic	EV	Electric Vehicle
AASHTO	American Association of State Highway and Transportation Officials	F.A.C.	Florida Administrative Code
ac-ft	Acre-foot	FDACS	Florida Department of Agriculture and Consumer Services
ADA	Americans with Disabilities Act	FDEP	Florida Department of Environmental Protection
AMC	Antecedent Moisture Condition	FDM	FDOT Design Manual
API	Application Programming Interface	FDOT	Florida Department of Transportation
AQTM	Air Quality Technical Memorandum	FEIS	Final Environmental Impact Statement
ATA	American Trucking Associations	FEMA	Federal Emergency Management Agency
AWSWE	Average Wet Seasonal Water Elevation	FHWA	Federal Highway Administration
BEBR	Bureau of Economic and Business Research	FIRM	Flood Insurance Rate Map
BFE	Base Flood Elevation	FLUCFCS	Florida Land Use, Cover and Forms Classification System
BMAP	Basin Management Action Plan	FNPS	Florida Native Plant Society
CAC	Community Advisory Committee	FPCA	Floodplain Compensation Area
CARS	Crash Analysis Reporting System	FPID	Financial Project Identification Number
CATV	Cable Television	FTE	Florida's Turnpike Enterprise
CCTV	Closed-Circuit Television	FTO	Florida Traffic Online
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	FWC	Florida Fish and Wildlife Conservation Commission
CFX	Central Florida Expressway Authority	FY	Fiscal Year
CR	County Road	GIS	Geographical Information Systems
CRAS	Cultural Resources Assessment Survey	HCM	Highway Capacity Manual
CSER	Contamination Screening Evaluation Report	HCS	Highway Capacity Software
CSRP	Conceptual Stage Relocation Plan	HHS	United States Department of Health and Human Services
DDI	Diverging Diamond Interchange	HOS	Highway Operations System
DMS	Dynamic Message Sign	HOV	High Occupancy Vehicle
DOJ	Department of Justice	HSG	Hydrologic Soil Group
EB	Eastbound	HSM	Highway Safety Manual
EBL	Eastbound Left	I-4	Interstate 4
EBR	Eastbound Right	I-4 BtU	I-4 Beyond the Ultimate
EFH	Essential Fish Habitat	I-75	Interstate 75
EPA	United States Environmental Protection Agency	I-95	Interstate 95
ERP	Environmental Resource Permit	ICA	Impact to Construction Assessment
ESA	Endangered Species Act	INSF	Insufficient Information
		ISATe	Enhanced Interchange Safety Analysis Tool
		ITS	Intelligent Transportation Systems

kW	Kilowatt	SBL	Southbound Left
LEP	Limited English Proficiency	SBR	Southbound Right
LHR	Location Hydraulic Report	SCE	Sociocultural Effects Evaluation
LOS	Level of Service	SDR	Sociocultural Data Report
L RTP	Long Range Transportation Plan	SFH	Suitable Foraging Habitat
MAC	Municipal Advisory Committee	SFWMD	South Florida Water Management District
MP	Milepost	SHS	State Highway System
mph	Miles Per Hour	SJRWMD	St Johns River Water Management District
MPO	Metropolitan Planning Organization	SPUI	Single Point Urban Interchange
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act	SR	State Road
MUTCD	Manual on Uniform Traffic Control Devices	SSA	Sole Source Aquifer
NB	Northbound	SSURGO	Soil Survey Geographic Database
NBL	Northbound Left	STIP	Statewide Transportation Improvement Program
NBR	Northbound Right	SW	Surface Water
NEVI	National Electric Vehicle Infrastructure	TAC	Technical Advisory Committee
NMFS	National Marine Fisheries Service	TCC	Technical Coordinating Committee
NPDES	National Pollutant Discharge Elimination System	TIITF	State of Florida Board of Trustees of the Internal Improvement Trust Fund
NRCS	Natural Resources Conservation Service	TIP	Transportation Improvement Program
NRE	Natural Resources Evaluation Technical Memorandum	TMDL	Total Maximum Daily Load
NRHP	National Register of Historic Places	TPAS	Truck Parking Availability System
NSTM	Noise Study Technical Memorandum	TPO	Transportation Planning Organization
NWI	National Wetlands Inventory	TSM&O	Transportation Systems Management and Operations
OFW	Outstanding Florida Water	UAO	Utility Agency/Owner
P3	Public Private Partnership	UAP	Utility Assessment Package
PD&E	Project Development & Environment	U.S.C.	United States Code
PER	Preliminary Engineering Report	USDA	United States Department of Agriculture
PIP	Public Involvement Plan	USFWS	United States Fish and Wildlife Service
PPE	Poinciana Parkway Extension	USGS	United States Geological Survey
PSR	Pond Siting Report	VE	Value Engineering
PTAR	Project Traffic Analysis Report	WBID	Waterbody Identification
PVC	Polyvinyl Chloride	WB	Westbound
R2C TPO	River to Sea Transportation Planning Organization	WBL	Westbound Left
ROD	Record of Decision	WBR	Westbound Right
ROW	Right-of-Way	WL	Wetland
RV	Recreational Vehicle	WQIE	Water Quality Impact Evaluation
SB	Southbound		

1. Project Summary

This Preliminary Engineering Report (PER) documents the site identification methodology and process, the alternatives analyses, the preferred site selection, and environmental and engineering studies prepared to evaluate the five preferred sites for the *Truck and Freight Alternative Site Analysis Project Development and Environment (PD&E) Study*.

1.1 Project Description

The Florida Department of Transportation (FDOT) is conducting the *Truck and Freight Alternative Site Analysis PD&E Study* to identify, evaluate, and recommend truck and freight parking sites along or near the Interstate 4 (I-4) corridor within Osceola, Orange, Seminole, and Volusia Counties that are viable for private and public operator use for rest stops. In 2018, FDOT conducted a statewide truck parking study to assess existing truck parking and future demand. The study found the I-4 corridor is the most critical corridor for truck parking needs in the state, specifically between the Osceola/Polk County Line and I-95. Based on the 2018 study, the existing average demand for the I-4 corridor within FDOT District 5 was 481 designated truck parking spaces (combined public and private) for rest stops. However, there are currently 36 truck-only parking spaces (combined public and private) for rest stops along the I-4 corridor within the study area.

The study limits extend from Osceola County north to Volusia County encompassing a 75-mile-long project study area and spanning approximately one mile from I-4 within the four counties. In heavily industrialized areas, the initial study area was expanded to approximately three to five miles from the I-4 corridor. An initial screening of the study area was conducted to identify alternatives that met the purpose and need for the project. The initial alternatives were further screened to identify viable alternatives that minimize environmental and community impacts.

As a result of the initial alternatives analysis conducted during the PD&E Study, seven viable truck parking sites within the four-county area were identified. The goal of the study was to identify at least one truck parking facility within each county to serve regional freight demand in Central Florida and balance the parking available throughout the I-4 corridor. The seven viable sites provide a total of approximately 1,094 truck parking spaces to accommodate existing and future needs. One viable site was identified in Osceola County (234 spaces) and Seminole County (132 spaces), two viable sites within Volusia County (total of 528 spaces), and three viable sites within Orange County (total of 200 spaces). All the sites are located within unincorporated areas except for the Volusia County sites with one located within the City of Port Orange and one located within the City of Daytona Beach.

As a result of the engineering and environmental analyses completed during this study and the comprehensive public engagement plan, five of the seven sites are being advanced for project development and are programmed for the final Design phase. These five preferred sites provide a total of approximately 987 truck parking spaces to accommodate existing and future needs. The Preferred

Alternative for the *Truck and Freight Alternative Site Analysis PD&E Study* includes the following five sites: Osceola County Site 1, Orange County Site 1, Seminole County Site 1B, Volusia County Site 1A (Eastbound), and Volusia County Site 1B (Westbound). A map of the study limits and the preferred sites is provided in **Figure 1-1**.

Preliminary concepts for each of the seven viable truck parking sites and the five preferred sites were developed to establish site boundaries and are provided in this PER. The study area for each site included the proposed Right-of-Way (ROW), adjacent land uses and the access roadways surrounding the site. All five preferred sites are located adjacent to existing roadways. The preliminary site concepts include parking layouts, site access, proposed sidewalks, stormwater management, restroom facilities, and landscaping/greenspace areas.

1.2 Purpose & Need

1.2.1 Purpose

The purpose of this PD&E Study is to identify, evaluate, and recommend viable candidate truck parking sites along or near the I-4 corridor in Osceola, Orange, Seminole, and Volusia Counties for public and/or private development. The purpose of this project is to provide needed truck parking facilities to serve regional freight parking demand within or near the I-4 corridor.

1.2.2 Need

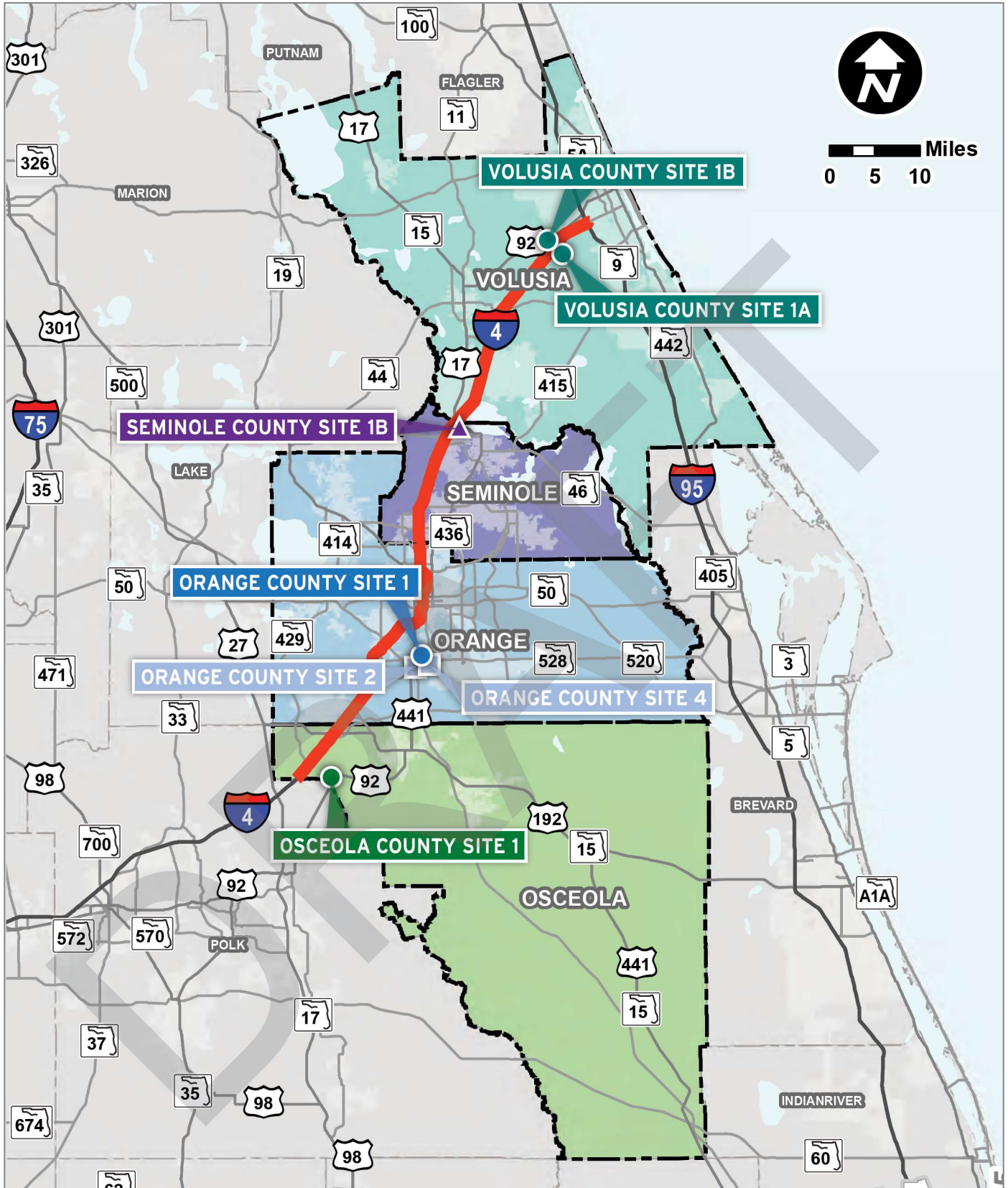
The need for the project is to address existing truck parking deficiencies and accommodate future truck parking demand to better serve freight mobility, improve safety, and address capacity needs. The primary goal of the PD&E Study is to develop and evaluate viable truck parking sites to meet the future 2040 (average) parking demand of 883 designed parking spaces. Additional truck parking capacity is being proposed to allow design flexibility for site design and to accommodate rapid freight growth in Central Florida.

Freight Mobility

The trucking industry is indispensable to the American economy and the quality of life for our communities and consumers that depend on delivered goods. Apart from many other roles and responsibilities, truck drivers are responsible for delivering raw materials to manufacturing facilities and finished products to retail and commercial sites. Businesses both big and small depend on truck drivers to safely transport their items across the nation, while maintaining efficient delivery times. According to Trucker Path survey (2018), 48% of truck drivers spend over an hour searching for a place to park. This equates to a \$5.1B loss in revenue annually, including wasted fuel, wages lost, maintenance, and associated crashes.

Safety

Truck parking is a national safety concern. In September 2022, FHWA hosted the National Coalition on Truck Parking to provide an update on studies and initiatives to advance safe truck parking. The FHWA 2022 Truck Parking Development Handbook lists the primary safety concerns arising from a lack of available designated truck parking spaces include tired truck drivers continuing to drive because of difficulty finding a place to park for rest and truck drivers choosing to park at unsafe locations, such as on the shoulder of the road, exit ramps, or vacant lots. The FHWA 2022 Truck Development Handbook states both of these scenarios endanger the truck driver and create hazards for drivers on the highway.








-  Project Limits
-  County Boundary
-  Seminole site (as part of the I-4 BtU)
-  Preferred Sites
-  Viable Sites



Figure 1-1
Preferred Freight Parking Sites
Preliminary Engineering Report

Capacity

The nationwide shortage of truck parking capacity continues to be a critical transportation industry focus. According to data published by the American Trucking Association (ATA) in 2022, there are about 3.5 million truck drivers nationwide and approximately 313,000 truck parking spaces; for every 11 drivers, there is one truck parking space. Truck parking needs have been ranked as a top critical issue in the trucking industry. In the most recent (2019) Jason's Law Truck Parking Survey and Comparative Assessment, the Federal Highway Administration (FHWA) noted that truck parking concerns are nationwide but most critical along key freight corridors and in metropolitan areas. Additionally, nationwide survey results showed that shortages exist at all times of day, week, and year, but mostly overnight and weekdays.

In 2018, FDOT conducted a statewide truck parking study to assess existing truck parking capacity and future needs. The study found the I-4 corridor is the most critical corridor for truck parking needs in the state, specifically between the Osceola/Polk County Line and I-95, which is the focus of this PD&E Study. The University of Florida Bureau of Economic and Business Research (BEBR) reports a 35.1% population growth in Florida from 2000-2020 and continued growth is expected.

Parking Demand

The parking demand is a function of both freight mobility and federal regulations governing hours of service for commercial vehicle operators. These regulations involve mandated maximum hours of service, maximum consecutive hours and days, and required regular minimum 30-minute breaks after eight cumulative hours. Without the appropriate freight parking facilities, drivers may be forced to spend unnecessary time searching for available parking, or they may be required to park in unsafe and/or improper locations.

The FDOT District Five Truck Parking Study (2019) determined the average freight parking demand (2016 existing condition) along I-4 within the District Five boundary was 481 designated truck parking spaces (combined public and private rest stops). In 2023, a review was conducted to identify available public and private truck parking facilities within the study area, including a five-mile radius from the I-4 corridor and excluding Florida's Turnpike service plazas that serve Turnpike freight demand. There are currently only 36 designated truck-only parking spaces (combined public and private) along the I-4 corridor within the study area inclusive of the Longwood Truck Parking facility on I-4 Eastbound in Seminole County, the I-4 Westbound Rest Area in Seminole County and a private retail location with truck parking capacity. There is a need for 445 additional truck parking spaces to serve existing demand within the study area.

As the number of people and the amount of goods continue to increase in Florida, freight traffic continues to be an essential part of our state's growth and economy. Based on the 2019 study, the average demand for truck parking spaces is anticipated to grow to 750 spaces by 2025 and 883 parking spaces by 2040 for the I-4 corridor within Osceola, Orange, Seminole and Volusia Counties. The projected demand is anticipated to intensify as the development of more distribution facilities like the Amazon Fulfillment Center in Volusia County, the Northport Industrial Park in Seminole County, the Infinity Park in Orange County, and JELD-WEN in Osceola County continue to be developed to better serve the region's population. In 2020, FDOT updated the Statewide Truck Parking Study which identified five statewide prioritized areas of concern including the I-4 corridor within Osceola, Orange, and Seminole Counties.

Osceola County Site Need

There are no truck or freight parking facilities maintained exclusively for public parking and non-retail public use in Osceola County along the I-4 corridor. Osceola County Site 1 will provide needed truck parking capacity of 234 designated truck-only spaces to serve the existing and future parking demand.

Orange County Site Need

There are no truck or freight parking facilities maintained exclusively for public parking and non-retail public use in Orange County which can serve the truck parking demand of I-4 through the county. Orange County Site 1 will provide needed truck parking capacity of 93 designated truck-only spaces to serve the existing and future parking demand.

Seminole County Site Need

There is one truck parking facility maintained exclusively for public parking and non-retail public use in Seminole County, providing the only 36 truck parking spaces for the I-4 corridor. Seminole County Site 1B will provide needed truck parking capacity of 132 designated truck-only public spaces to serve the existing and future parking demand.

Volusia County Site Need

There are no truck or freight parking facilities maintained exclusively for public parking and non-retail public use in Volusia County along the I-4 corridor. Volusia County Sites 1A and 1B will provide needed truck parking capacity of 275 and 253 designated truck-only public spaces respectively (528 spaces total) to serve the existing and future parking demand.

Project Status

The Design phase is underway for three of the five Preferred Alternative sites (Seminole County Site 1B, Volusia County Site 1A, and Volusia County Site 1B). Seminole County Site 1B is fully funded through the Construction phase. Volusia County Site 1A is funded through the ROW phase and Volusia County Site 1B is funded through the Design phase.

FDOT is identifying funding opportunities for future project development phases (Design, ROW, and Construction phases, as applicable) for four of the five Preferred Alternative sites (Osceola County Site 1, Orange County Site 1, Volusia County Site 1A, and Volusia County Site 1B). FDOT intends to program each site independently for design as funding is identified.

Public Private Partnerships (P3) opportunities are also being explored to potentially transfer some of the design and construction cost to a private developer while being able to expand some of the amenities that are provided at these sites. This will also potentially help reduce the operations and maintenance cost of the truck parking facilities.

Planning Consistency

Osceola County Site 1

As of March 2024, there is funding identified for the Design and ROW phases listed in the adopted with amended Five Year Work Program (2024-2028), the current Statewide Transportation Improvement Program (STIP) for Osceola County Site 1 (FPID: 446445-5), and MetroPlan Orlando's Transportation Improvement Program (TIP).

Orange County Site 1

As of March 2024, there is no funding identified for the future phases of Orange County Site 1 listed in the adopted with amended FDOT Five Year Work Program (2024-2028). FDOT coordination is ongoing to program the Design phase within the Five Year Work Program.

Seminole County Site 1B

A portion of Seminole County Site 1B was previously identified for stormwater management as part of the *I-4 Beyond the Ultimate (BtU) Segment 3* project (FPID: 242592-4). Therefore, Seminole County Site 1B is programmed for ROW as part of the *I-4 BtU Segment 3* project. As of March 2024, Seminole County Site 1B is also under Design and there is funding identified for the Construction phase (FPID: 446445-1). Funding for the Design, ROW, and Construction phases of Seminole County Site 1B is listed in the adopted with amended FDOT Five Year Work Program (2024-2028), the current STIP, and MetroPlan Orlando's Fiscal Year (FY) 2023/24 – 2027/28 TIP (adopted July 12, 2023).

Volusia County Site 1A

As of March 2024, the Design phase for Volusia County Site 1A is underway. Funding for Volusia County Site 1A (FPID: 446445-2) is identified for the Design and ROW phases listed in the adopted with amended FDOT Five Year Work Program (2024-2028), the current STIP, and River to Sea Transportation Planning Organization's (R2C TPO) TIP.

Volusia County Site 1B

As of March 2024, the Design phase for Volusia County Site 1B is underway. Funding for Volusia County Site 1B (FPID: 446445-4) is identified for the Design phase listed in the adopted with amended FDOT Five Year Work Program (2024-2028), the current STIP, and the R2C TPO's TIP.

1.3 Commitments

During stakeholder engagement and study evaluations, there were several project commitments and implementation measures related to design features, design activities and environmental commitments made as part of the study. The implementation measures are based on FDOT input on concept development and future project development whereas the commitments are based on external agency coordination. The Implementation measures and commitments are listed by site as each site will be programmed for future project development independently. For more details on the conceptual design for the Preferred Alternative, refer to Section 8.

Implementation Measures:

- All Sites
 - FDOT will continue coordination with local agencies during the Design phase for each site to obtain feedback on site design. This coordination will include landscaping and aesthetics.
 - FDOT will include restroom facilities on all proposed sites. The building design will include space for vending areas and security offices. The size and layout of buildings will be determined during the Design phase; however, a centralized restroom building is recommended for Osceola County Site 1, Volusia County Site 1A and Volusia County Site 1B as a result of the Value Engineering (VE) Study commitments.
 - FDOT will include fencing around all sites during the Design phase.
 - FDOT will include necessary conduit infrastructure in the site design to facilitate a combination of shore power (electrical outlets for truck parking to eliminate the need to idle on site) and Electric Vehicle (EV) charging stations for a minimum of 15% of the total truck parking spaces at each site. Of this total, a minimum of 10% of the total spaces will provide conduit infrastructure for future EV charging stations. P3 will be explored during the Design phase to identify companies to provide these services where possible.

- FDOT will coordinate Truck Parking Availability System (TPAS) implementation and informational monitors during Design phase.
- FDOT will include Closed-circuit Television (CCTV) for monitoring parking lots and 24-hour security for each site during future phases of project development.
- FDOT will include several other design features, such as site lighting, dumpster storage enclosures, pet areas, windshield wash, air compressor, and oversize truck parking and these will be further evaluated during the Design phase for each site.
- Osceola County Site 1
 - FDOT commits to handling the dumped materials within the sites appropriately prior to development of the site. This may include special handling of the materials.
 - FDOT plans to conduct additional groundwater and soil sampling for petroleum and pesticide use along the CSX Rail ROW corridor along the southeastern boundary, particularly near proposed stormwater facilities bordering the corridor.
 - Surveys for gopher tortoise burrows, as well as commensal species, will be conducted during the Design phase and permits to relocate tortoises and commensals as appropriate will be obtained from Florida Fish and Wildlife Conservation Commission (FWC).
 - Surveys for the Florida burrowing owl will be conducted in accordance with 68A-27.003(a), 68A-27.001(4), F.A.C. and the current FWC Florida Burrowing Owl Species Conservation and Permitting Guidelines during the Design phase. Coordination with FWC will take place as necessary to determine appropriate avoidance and minimization measures to apply during construction.
 - Surveys for the southeastern American kestrel will be conducted during the nesting season (May through August) in the Design phase. If determined nest areas are found and could be impacted by the project, FDOT will coordinate with FWC to determine appropriate avoidance and minimization measures to apply during construction.
 - FDOT will provide compensatory mitigation for wetland impacts resulting from the project design and construction per 373.4137, F.S. and 33 U.S.C. § 1344.
- Orange County Site 1
 - Surveys for gopher tortoise burrows, as well as commensal species, will be conducted during the Design phase and permits to relocate tortoises and commensals as appropriate will be obtained from FWC.
 - Surveys for the southeastern American kestrel will be conducted during the nesting season (May through August) in the Design phase. If determined nest areas are found and could be impacted by the project, FDOT will coordinate with FWC to determine appropriate avoidance and minimization measures to apply during construction.
 - FDOT will provide compensatory mitigation for wetland impacts resulting from the project design and construction per 373.4137, F.S. and 33 U.S.C. § 1344.
 - FDOT will develop a hydraulic floodplain model during the Design phase, to show that any uncompensated volume will not result in a significant rise in the Base Flood Elevation (BFE).
- Seminole County Site 1B
 - Surveys for gopher tortoise burrows, as well as commensal species, will be conducted during the Design phase and permits to relocate tortoises and commensals as appropriate will be obtained from FWC.
 - FDOT will provide compensatory mitigation for wetland impacts resulting from the project design and construction per 373.4137, F.S. and 33 U.S.C. § 1344.
- Volusia County Site 1A
 - Surveys for gopher tortoise burrows, as well as commensal species, will be conducted during the Design phase and permits to relocate tortoises and commensals as appropriate will be obtained from FWC.

- FDOT will provide compensatory mitigation for wetland impacts resulting from the project design and construction per 373.4137, F.S. and 33 U.S.C. § 1344.
- Volusia County Site 1B
 - Surveys for gopher tortoise burrows, as well as commensal species, will be conducted during the Design phase and permits to relocate tortoises and commensals as appropriate will be obtained from FWC.
 - FDOT will provide compensatory mitigation for wetland impacts resulting from the project design and construction per 373.4137, F.S. and 33 U.S.C. § 1344.

Commitments:

- All Sites
 - Based on local agency coordination, FDOT will include landscaping and pond buffers from adjacent properties and roadways to enhance aesthetics for all sites as feasible.
- Osceola County Site 1
 - FDOT will coordinate with Central Florida Expressway Authority (CFX) and Osceola County during the Design phase. As of March 2024, CFX is in the Design phase for the Poinciana Parkway Extension (PPE) which is on the west side of this site. Osceola County plans to build a pond on this site as part of the County Road (CR) 532 (Osceola Polk Line Road) widening. Joint use stormwater management with Osceola County will be coordinated in Design.
 - FDOT will include proposed pond and landscape buffer on the east side of site, as shown in the concept plans, to provide a buffer to properties to the east.
 - The most recent version of the *United States Fish and Wildlife Service (USFWS) Standard Protection Measures for the Eastern Indigo Snake* will be utilized during construction.
 - FDOT will provide mitigation for impacts to wood stork suitable foraging habitat (SFH) within the Service Area of the Service-approved wetland mitigation bank or wood stork conservation bank.
 - If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.
- Orange County Site 1
 - FDOT will coordinate with Florida's Turnpike Enterprise (FTE) for the Florida's Turnpike at Sand Lake Road Interchange as the FTE-proposed pond will need to be modified to accommodate the preferred truck parking site.
 - The most recent version of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* will be utilized during construction.
 - FDOT will provide mitigation for impacts to wood stork SFH within the Service Area of the Service-approved wetland mitigation bank or wood stork conservation bank.
 - If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.
- Seminole County Site 1B
 - FDOT will provide a landscaped berm along Orange Boulevard to provide a visual buffer from the truck parking site.
 - The most recent version of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* will be utilized during construction.
 - FDOT will provide mitigation for impacts to wood stork SFH within the Service Area of the Service-approved wetland mitigation bank or wood stork conservation bank.

- If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.
- FDOT will provide a tighter radius return and raised island on School Street to prevent trucks from exiting and traveling west as shown in the concept plans.
- FDOT will provide signage for trucks exiting the site to travel east on School Street to US 17/92. Also, FDOT will also provide signage for trucks to turn right at the eastbound approach to US 17/92 at School Street intersection so trucks can utilize the SR 46 interchange for access to I-4 until I-4 BtU is completed.
- Volusia County Site 1A
 - The most recent version of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* will be utilized during construction.
 - Lighting provided for the truck parking areas will be directed inward with shields to minimize light pollution into adjacent natural areas.
 - ROW acquisition will include a wildlife conservation area, as shown in the concept plans as the remaining area outside of the limits of construction but within the proposed ROW, to provide an enhanced natural buffer. This area will be placed under a conservation easement. The dimensions of the conservation area located outside the fenced truck parking will be coordinated further with regulatory agencies during the Design phase.
 - FDOT will require contractors to remove garbage daily from the construction site or use bear proof containers for securing of food and other debris from the project work area to prevent these items from becoming an attractant for the Florida black bear (*Ursus americanus floridanus*). Any interaction with nuisance bears will be reported to the FWC Wildlife Alert hotline 888-404-FWCC (3922).
 - FDOT will relocate the existing wildlife jump-out within the limits of the proposed truck parking site limits approximately 2,500 feet northeast, along the existing FDOT ROW, from the tie in from the proposed eastbound on-ramp. Additionally, the exclusionary fencing will be extended to accommodate the new jump-out location.
 - A survey for listed plant species, Rugeley's pawpaw, and leafless beaked orchid will be performed during the Design phase and coordination with Florida Department of Agriculture and Consumer Services (FDACS) and USFWS will occur if impacts to the species are anticipated.
 - If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to re-initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.
- Volusia County Site 1B
 - The most recent version of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* will be utilized during construction.
 - The FDOT will provide mitigation for impacts to wood stork SFH within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank.
 - Lighting provided for the truck parking areas will be directed inward with shields to minimize light pollution into adjacent natural areas.
 - ROW acquisition will include a wildlife corridor and a wildlife conservation area, as shown in the concept plans, that will maintain wildlife movement via the existing wildlife crossing on I-4 adjacent to the truck parking facility. This area will be placed under a conservation easement. Natural buffers around truck parking areas will be maintained to reduce potential light, vibration, and noise impacts to adjacent natural areas. The dimensions of the wildlife

corridor and conservation area located outside the fenced truck parking will be coordinated further with regulatory agencies during the Design and ROW phases.

- FDOT will require contractors to remove garbage daily from the construction site or use bear proof containers for securing of food and other debris from the project work area to prevent these items from becoming an attractant for the Florida black bear (*Ursus americanus floridanus*). Any interaction with nuisance bears will be reported to the FWC Wildlife Alert hotline 888-404-FWCC (3922).
- A survey for the State listed plant species, Hooded pitcher plant (*Sarracenia minor*) will be performed during the Design phase and coordination with FDACS will occur if impacts to the species are anticipated.
- If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area, FDOT commits to re-initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.

1.4 Alternatives Analysis Summary

As part of the PD&E Study, more than 77,000 parcels were examined for their potential viability as a freight parking site for trucks traveling along I-4 within Osceola, Orange, Seminole, and Volusia Counties. The methodology for identifying, analyzing, and refining potential sites is described in detail in Section 2.

Based on the methodology described in Section 2, 12 initial sites were identified for further review, analysis, and refinement. Out of those initial sites, seven were determined to be viable freight parking sites to meet the truck parking demand. Five of the seven viable sites are programmed for further project development providing at least one site within each county, including: Osceola County Site 1, Orange County Site 1, Seminole County Site 1B, Volusia County Site 1A (Eastbound), and Volusia County Site 1B (Westbound). Two of the seven viable sites, both located in Orange County (Orange County Site 2 and Orange County Site 4), are unfunded at this time and not included in the Preferred Alternative. More detail on the viable Orange County Sites is documented in this report. Further analysis and environmental documentation is anticipated for Orange County Site 2 and Site 4 if future project development is programmed. This report documents all seven viable sites and provides detailed analysis of the Preferred Alternative (five sites).

No-Build Alternative

The No-Build Alternative, carried as a viable option throughout the PD&E Study process, assumes no construction of a new truck parking site and no additional truck parking capacity along I-4 within the study area. No public truck parking facilities are programmed; therefore, none are included in the No-Build Alternative. The No-Build Alternative includes any programmed intersection improvements or roadway widening within the vicinity of the five proposed truck parking sites included in the Preferred Alternative. The results of the No-Build Alternative analysis are documented in this PER. The advantages of the No-Build Alternative include no additional ROW acquisition, no impacts to the environment from construction, no disruption of traffic during construction, and no project cost. The disadvantages of the No-Build Alternative involve not satisfying the purpose and need for the project: existing and future truck parking demand is not accommodated, safety for truck drivers is not improved, and freight mobility is not increased to support better movement of goods for the local communities.

1.5 Related Projects

There are several projects near the preferred truck parking sites that interface with the alternatives as discussed throughout the report. These related projects are illustrated in **Figure 1-2** and described in the following subsections.

1.5.1 Poinciana Parkway Extension

The PPE is a new four-lane expressway that extends Poinciana Parkway from its existing southern terminus at Ronald Reagan Parkway to I-4. The PPE is being developed in two separate projects; CFX is responsible for the *State Road (SR) 538 (Poinciana Parkway) Extension to County Road (CR) 532* project from Ronald Reagan Parkway to CR 532, and FTE is responsible for the PPE from *CR 532 to north of the I-4/SR 429 interchange*.

[CFX SR 538 \(Poinciana Parkway\) Extension to CR 532](#)

As of March 2024, the PPE from Ronald Reagan Parkway to CR 532 is in the Design phase (which is nearing completion). The segment includes planned interchanges at US 17/92 and at CR 532. A Diverging Diamond Interchange (DDI) will be constructed at US 17/92 and a diamond interchange will be constructed at CR 532. The preferred Osceola County freight parking site is located along CR 532 adjacent and east of the PPE. The CFX portion of the PPE is funded through construction, which is programmed in FY 2025 through FY 2027.

As part of the PPE segment, there are three proposed ponds located immediately east of the new expressway facility. One pond is located approximately 800 feet southeast of the proposed US 17/92 interchange and one pond is located in the northeast quadrant of the proposed US 17/92 interchange. The third retention pond along the PPE is located approximately 700 feet southeast of the CR 532 interchange and immediately west of the Osceola County Site 1.

The proposed PPE is a four-lane facility with two 12-foot lanes in each direction, 12-foot paved shoulders on each side of the pavement, and a 50-foot median. The northbound off-ramp at CR 532 is a two-lane facility that expands to two left turn lanes and one right turn lane as it approaches CR 532. The proposed Osceola County Site 1 entrance is immediately east of this off-ramp. The southbound on-ramp from CR 532 is a two-lane facility with 12-foot lanes.

[Poinciana Parkway Extension \(FPID No. 446581-1\)](#)

FTE is completing a PD&E Study to evaluate the PPE from CR 532 to north of the I-4/SR 429 interchange. The PD&E Study is considering a six-lane facility expandable to eight lanes, with improvements to the CR 532 interchange and a new interchange with I-4. The CR 532 interchange alternative includes a northbound on-ramp and southbound off-ramp. The Public Hearing was held in April 2023 and the PD&E Study was completed in December 2023. The Design and ROW phases are programmed for FY 2025 in the adopted with amended FDOT Five Year Work Program (2024-2028).

1.5.2 CR 532/Osceola Polk Line Road Capacity Improvements

In partnership with Osceola County, CFX conducted a study to evaluate proposed capacity improvements for CR 532 (Osceola Polk Line Road) from Lake Wilson Road to US 17/92 in conjunction with the planned PPE from its northern end at Ronald Reagan Parkway to CR 532. The study resulted in a recommendation for a three-mile capacity improvements project to improve roadway connections between the PPE and I-4 via

CR 532. The project also includes pedestrian, bicycle, drainage, and curb and gutter improvements. The Design phase was completed in June 2023 and Construction is programmed for FY 2025 to FY 2026. The preferred Osceola County Site 1 is located along CR 532 adjacent to this project.

1.5.3 Florida's Turnpike at Sand Lake Road Interchange (FPID No. 433663-1)

The FTE will construct a new interchange at Sand Lake Road and Florida's Turnpike. The interchange will provide a southbound off-ramp exiting onto Sand Lake Road. The southbound off-ramp will travel within the eastern boundary of the FTE-owned property between Florida's Turnpike, Sand Lake Road, and John Young Parkway and provide a signalized intersection with Sand Lake Road at the entrance to the Southpark Development approximately 800 feet west of the Florida's Turnpike. The remaining legs of the intersection will run directly adjacent to the Florida's Turnpike corridor and meet Sand Lake Road in a Single Point Urban Interchange (SPUI). The preferred Orange County Site 1 is adjacent to the off-ramp, accommodating freight vehicles from Florida's Turnpike and I-4 access to the site. There are two ponds proposed at this interchange, both are located within the Orange County Site 1 parcel. One pond is located between the Turnpike and southbound off-ramp. The other pond is located west of the southbound off-ramp. As of March 2024, the Design phase has been completed, and construction is programmed from FY 2024 to FY 2026, with letting scheduled for March 12, 2024.

1.5.4 I-4 Beyond the Ultimate Segment 3 (FPID No. 242592-4)

I-4 Beyond the Ultimate Background

The *I-4 PD&E Study – Section 2* from west of SR 528 to east of SR 472 was conducted by FDOT previously. A Final Environmental Impact Statement (FEIS) (August 2002) and Record of Decision (ROD) (December 2002) was approved to widen I-4 to provide six general use lanes and two High Occupancy Vehicle (HOV) lanes, for a total of eight lanes, from SR 435 (Kirkman Road) to SR 414 (Maitland Boulevard). An additional ROD was approved in 2005 which added the limits from SR 414 (Maitland Boulevard) to SR 434. Seminole County Site 1B is within the limits of the 2005 ROD.

Subsequently, FDOT conducted a re-evaluation of the *I-4 PD&E Study (I-4 BtU)*, to update and reevaluate the original *I-4 PD&E Study*. The I-4 BtU design changes include providing six general use lanes and four express lanes operating under a variable price toll plan for a total of ten lanes. Other design changes include stormwater management, access modifications, and interchange improvements. The I-4 BtU project is divided into five segments, with Segment 3 defined as I-4 from one mile east of SR 434 to east of US 17/92 at the Seminole-Volusia County line. This segment is within, and adjacent to, the preferred Seminole County Site 1B. The ROD for the I-4 BtU from SR 528 to east of SR 472 (Segments 2-4) was obtained in August 2017.

A Pond Siting Report (PSR) Addendum (July 2017) for *I-4 BtU Segment 3* was completed to amend the pond sites that are no longer viable options. The PSR Addendum proposed modifications to three stormwater facilities, a floodplain compensation site and added one stormwater pond, resulting in a 9.69-acre reduction in required ROW for stormwater management. The added pond, Pond 317D, is proposed on the southwest corner of the US 17/92 (Monroe Road) and Orange Boulevard intersection. This proposed pond site is located within the preferred Seminole County Site 1B.

The Seminole County Site 1B project includes nine parcels adjacent to I-4 BtU at the US 17/92 interchange and will impact the formerly proposed Pond 317D (not yet constructed). Seminole County Site 1B will be designed to accommodate stormwater management facilities for both I-4 BtU and the truck parking site. The potential environmental impacts associated with the entire truck parking site are documented in this report.

I-4 Beyond the Ultimate Segment 3 Proposed Improvements

I-4 BtU Segment 3 within the study area proposes a variety of improvements, such as construction of new tolled express lanes, interchange modifications, new auxiliary lanes, bridge replacements, and shifting roadway alignments. As part of the *I-4 BtU Segment 3* improvements, US 17/92 will be realigned and moved to the south, with a new bridge over I-4. Additionally, the I-4 bridges over Orange Boulevard and the SunRail tracks will be widened to accommodate two express lanes per direction. Orange Boulevard will be re-routed by crossing under US 17/92 and looping back into the east side of US 17/92 to School Street and will include a pond along the inside radius as shown in **Appendix C**. The intersection of US 17/92 and School Street/Orange Boulevard will be signalized. The I-4 BtU will have a pond in the location of the Circle K gas station at the corner of US 17/92 and Orange Boulevard.

The US 17/92 bridge over I-4 will begin approximately 600 feet north of the School Street intersection and be four lanes, divided by a 24-foot concrete traffic separator. The bridge overpasses I-4 and connects to the eastbound and westbound I-4 on- and off-ramps with traffic signals. The proposed Seminole County freight parking site is located on School Street, adjacent to the existing I-4 corridor and south of the interchange at US 17/92.

As of March 2024, Segment 3 is in the Design and ROW acquisition phases. Construction is not currently programmed.

1.6 Description of Preferred Alternative

The following sections summarize the seven viable sites, including the five preferred sites described in Section 1.1 and two viable sites recommended for future project development (Orange County Site 2 and Orange County Site 4). Details for the sites are provided in Section 8 of the report. **Figure 1-1** illustrates the site locations within the Central Florida region, and **Figure 1-3** through **Figure 1-9** illustrate the site locations and their surrounding area.

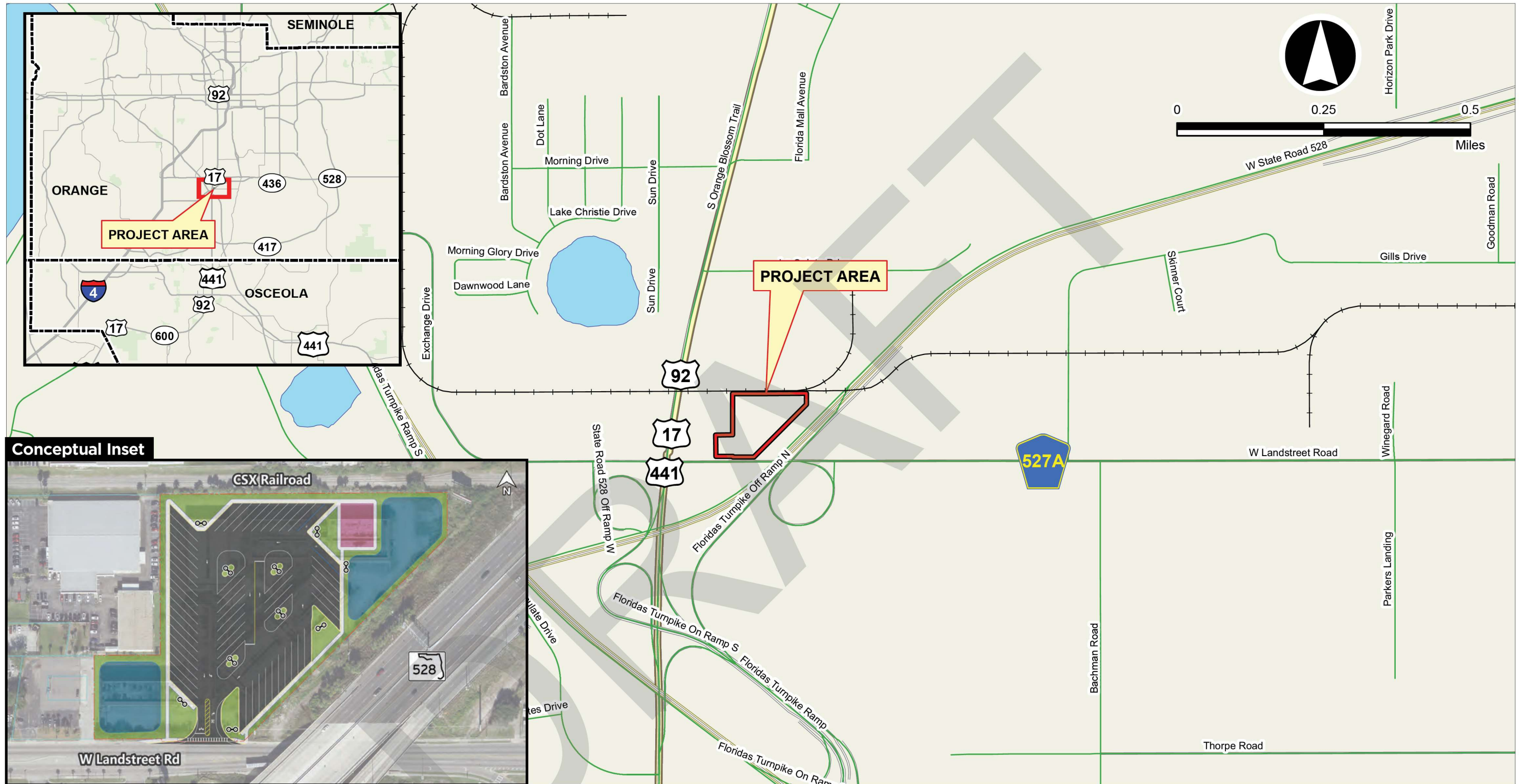
The site concept plans for the Preferred Alternative are included in **Appendix A**.

1.6.1 *Viable Sites Identified for Future Projects*

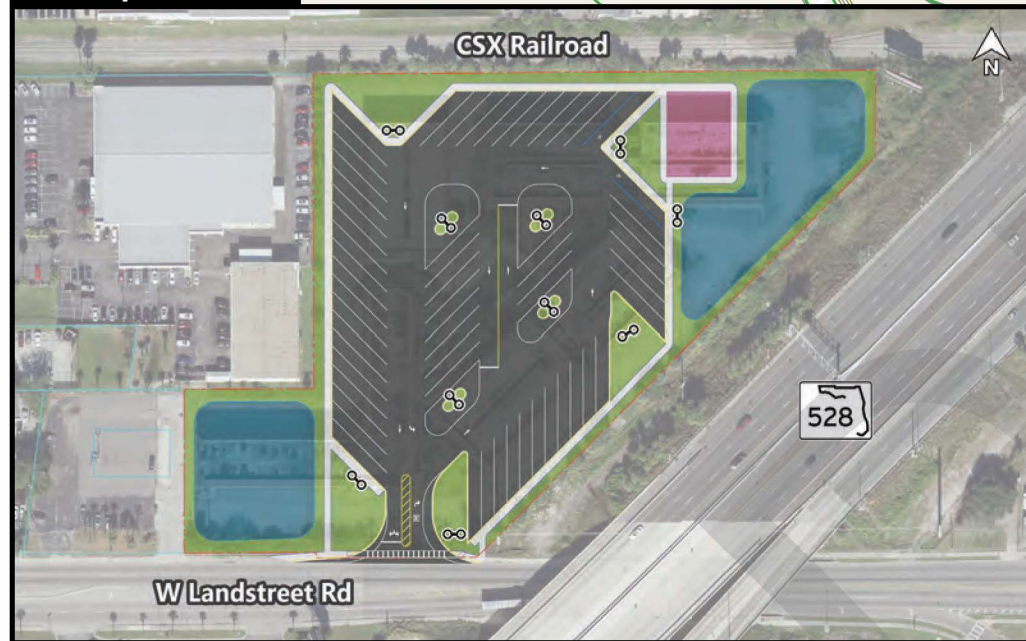
Two viable sites located in Orange County were identified for future project development. Further analysis and environmental documentation is recommended for the two sites if future project development is programmed. The following is a description of the two viable sites.

Orange County Site 2 – West Landstreet Road, Adjacent to SR 528

Orange County Site 2 (**Figure 1-3**) is located along West Landstreet Road approximately 5.5 miles east of I-4. The site is proposed in a heavy industrial area along West Landstreet Road in the northwest corner and adjacent to the SR 528 interchange. I-4 can be accessed via Florida’s Turnpike, approximately 0.25 miles from the site. Alternatively, I-4 can be accessed via West Landstreet Road, US 441, and Sand Lake Road. The Orange County Site 2 will supply 59 truck parking spaces and a restroom facility. An eight-foot sidewalk surrounding the truck parking site will be included to allow pedestrians to safely walk from their individual truck parking spot to the restroom facility and to provide connection from the site to the sidewalk along West Landstreet Road.



Conceptual Inset



LEGEND

- Site Boundary
- Parcels
- Streets
- Public Lands
- Railroads
- Waterbodies

CONCEPTUAL INSET LEGEND

- Pond
- Restroom Facility
- Sidewalk
- Proposed Right-of-Way
- Property Lines
- Lighting



Figure 1-3
Orange County Site 2
Project Location
 Preliminary Engineering Report

The viable site is anticipated to require approximately 6.8 acres of ROW, impacting one parcel. No relocations are anticipated for the viable site. Access to the site will be provided with a new stop-controlled driveway on West Landstreet Road. Modifications to the existing directional opening on West Landstreet Road in the vicinity of the viable truck parking site will be required to provide an eastbound left turn for site access.

The viable Orange County Site 2 will include two wet detention stormwater ponds, with a combined pond area of 1.44 acres.

Orange County Site 4 – West Landstreet Road, East of SR 528

Orange County Site 4 (**Figure 1-4**) is located along West Landstreet Road approximately 6.8 miles east of I-4. The site is proposed in a heavy industrial area along the north side of West Landstreet Road, approximately 1.2 miles east of SR 528 and west of Trussway Boulevard. I-4 can be accessed via Florida's Turnpike. Alternatively, I-4 can be accessed via West Landstreet Road, US 441, and Sand Lake Road. The Orange County Site 4 will supply 48 truck parking spaces. Due to the small size of the truck parking facility, no restroom facilities are assumed at this site. An eight-foot sidewalk surrounding the truck parking site will be included to allow pedestrians to safely walk from their individual truck parking spot to the existing five-foot sidewalk along West Landstreet Road.

The viable site is anticipated to require approximately 4.9 acres of ROW, impacting one parcel. One business relocation is anticipated for the viable site. Access to the site will be provided with a new stop-controlled driveway on West Landstreet Road, approximately 0.09 mile (450 feet) west of the Trussway Boulevard intersection. No access or median modifications on West Landstreet Road are proposed for the viable truck parking site.

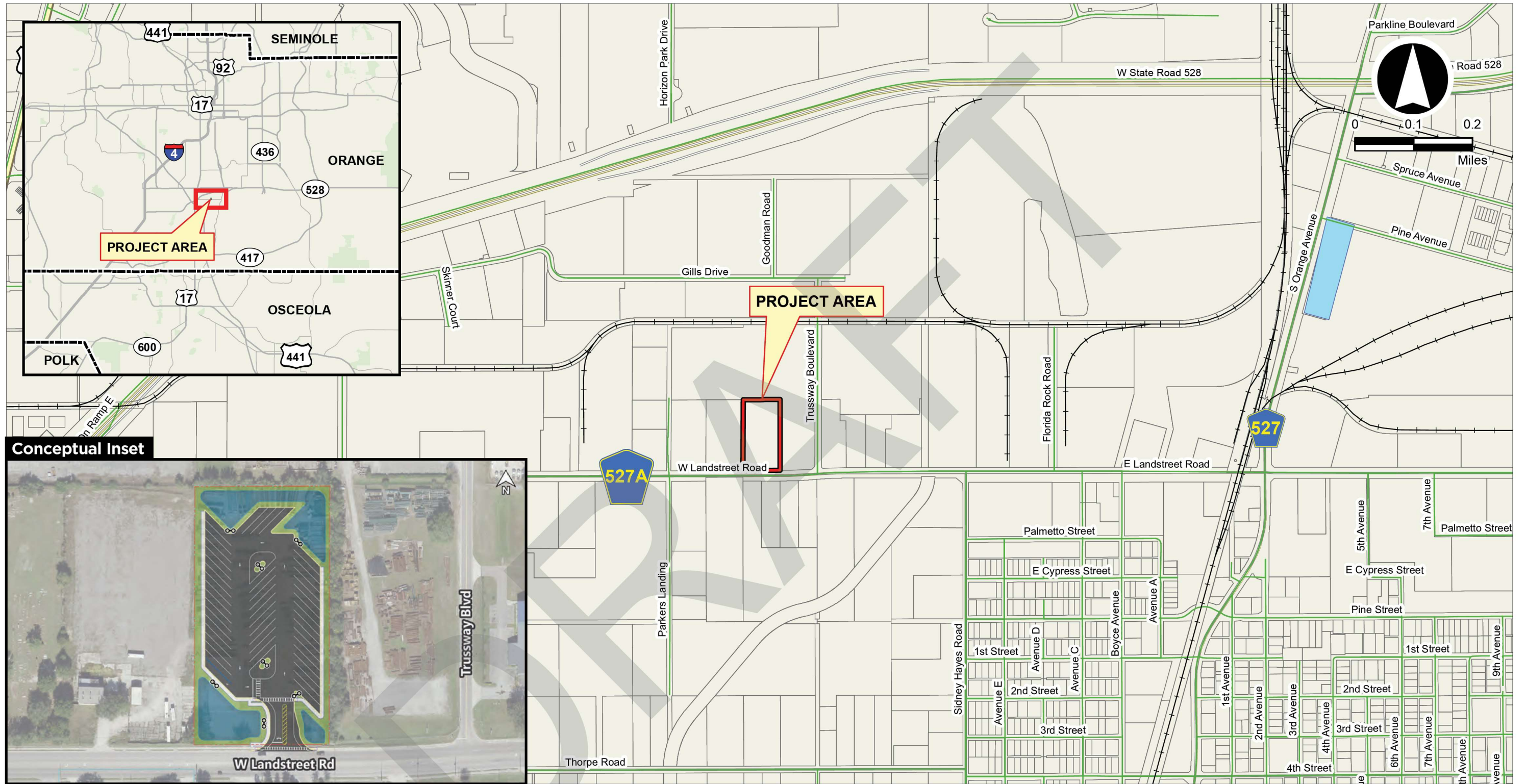
The viable Orange County Site 4 will include three wet detention stormwater ponds, with a combined pond area of 0.91 acres.

1.6.2 Preferred Sites

Osceola County Site 1 – CR 532 and Poinciana Parkway Extension

Osceola County Site 1 (**Figure 1-5**) is located approximately 3.87 miles east of the I-4 interchange with CR 532 along the south side of CR 532. The preferred site is immediately east of the planned PPE, which is in the Design phase as of March 2024, and located south of the planned CR 532 widening project, which completed the Design phase as of June 2023. The site is planned to be developed around a proposed pond for the PPE. This site would be bordered by the PPE, CR 532, and CSX Railroad, providing access to I-4 as well as other high freight corridors including the PPE, CR 532, and US 17/92. The Osceola County Site 1 will supply 234 truck parking spaces and restroom facilities. Eight-foot sidewalks around the truck parking site are proposed to allow pedestrians to safely walk from their individual truck parking spot to the restroom facilities and to provide connection from the site to the sidewalks along CR 532, to be installed during the widening project.

The preferred site is anticipated to require approximately 40.1 acres of ROW, impacting a total of 18 parcels. No relocations are anticipated for the preferred site. Access to the site will be located along CR 532, approximately 0.66 miles west of the intersection with US 17/92. A new signalized entrance on CR 532 is proposed for the site access, which will require a new median opening once the CR 532 widening is constructed. There is a gas easement located on the western side of the site. This easement will be maintained.

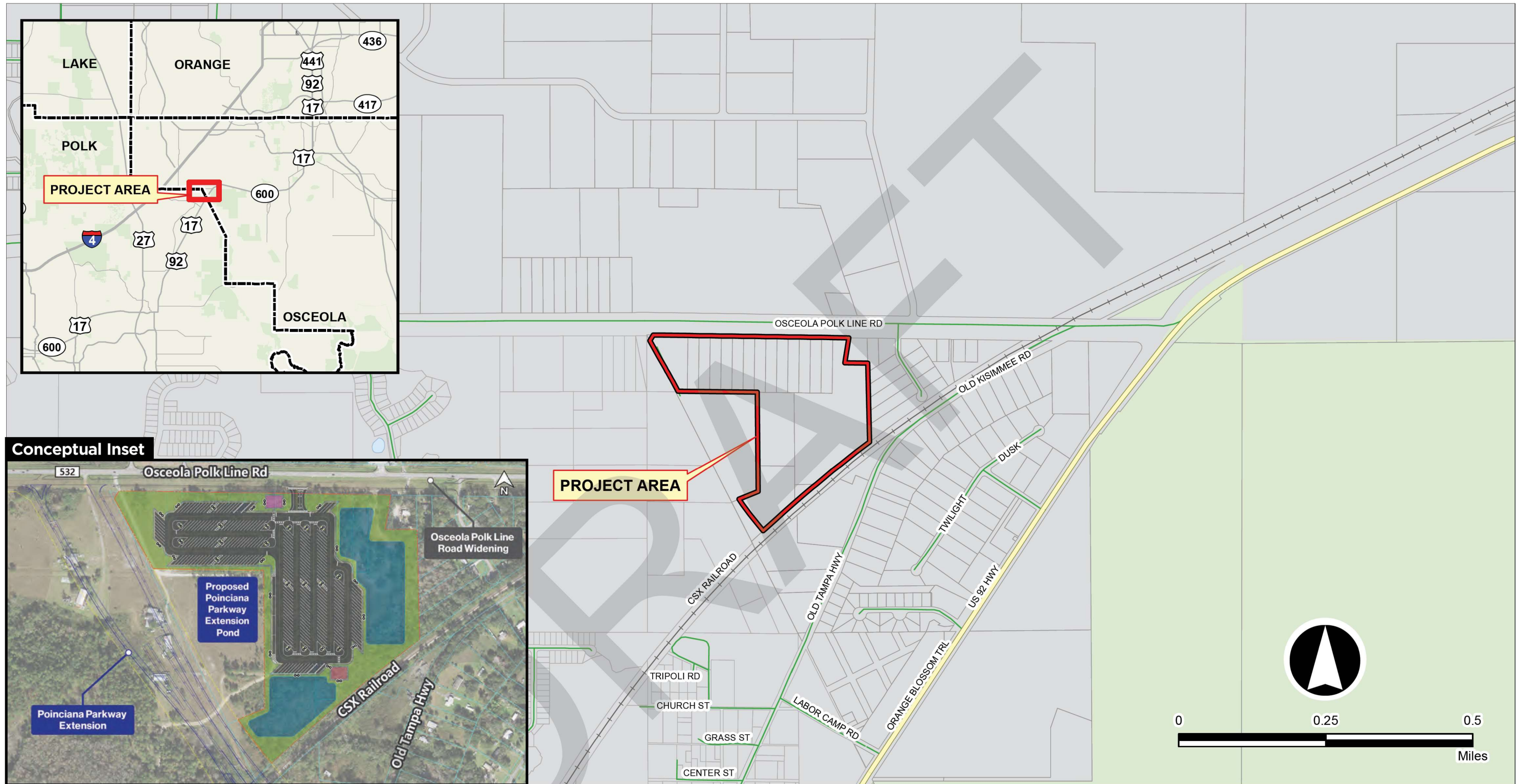


- LEGEND**
- Site Boundary
 - Streets
 - Railroads
 - Parcels
 - Public Lands
 - Waterbodies

- CONCEPTUAL INSET LEGEND**
- Pond
 - Sidewalk
 - Property Lines
 - Proposed Right-of-Way
 - Lighting



Figure 1-4
Project Location Map
Orange County Site 4
 Preliminary Engineering Report



- LEGEND**
- Site Boundary
 - Parcels
 - Streets
 - Railroads
 - Public Lands
 - Waterbodies

- CONCEPTUAL INSET LEGEND**
- Pond
 - Restroom Facility
 - Sidewalk
 - Property Lines
 - Proposed Right-of-Way
 - Poinciana Parkway Extension Proposed Right-of-Way
 - Lighting



Figure 1-5
Project Location Map
Osceola County Site 1
 Preliminary Engineering Report

The preferred Osceola County Site 1 will include two wet detention stormwater ponds, with a combined pond area of 11.38 acres. The CR 532 widening project adjacent to the site includes construction of a new wet detention stormwater pond on the preferred site. Since this pond will need to be removed to accommodate the preferred site, compensation has been provided for the lost pond volume.

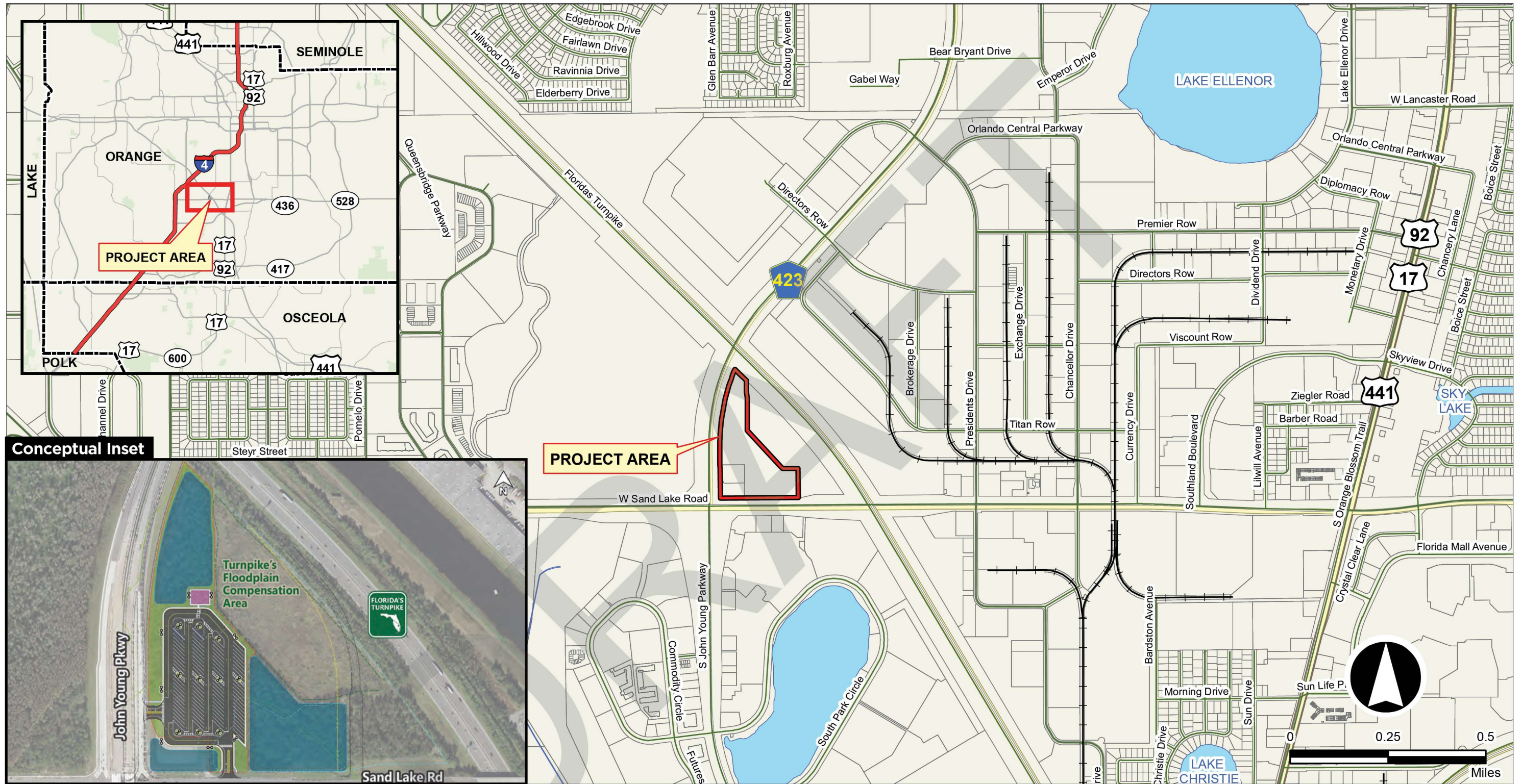
A VE Study was conducted in July 2023, which led to site recommendations, including a modified site layout for Osceola County Site 1. During the Design phase, FDOT will modify the site layout to centralize the restroom for Osceola County Site 1. Per the VE Study, this will minimize walking distance to the restroom, reduce the utility and maintenance costs, and centralize the security area.

Orange County Site 1 – Sand Lake Road at John Young Parkway

Orange County Site 1 (**Figure 1-6**) is located along Sand Lake Road approximately 2.90 miles east of I-4. The site is proposed on the northeast corner of Sand Lake Road and John Young Parkway immediately west, and adjacent to, Florida's Turnpike. As part of a separate project, Florida's Turnpike is adding a new interchange with Sand Lake Road, which will increase access to this truck parking site. Orange County Site 1 will supply 93 truck parking spaces and a restroom facility. An eight-foot sidewalk surrounding the truck parking site will be included to allow pedestrians to safely walk from their individual truck parking spot to the restroom facility and to provide connection from the site to the sidewalk along Sand Lake Road, to be installed during the Florida's Turnpike interchange project.

The preferred site area is approximately 16.3 acres and is anticipated to require approximately 14.6 acres of ROW, impacting a total of two parcels. A portion of the site is an existing pond jointly owned by FDOT and Orange County. No relocations are anticipated for the preferred site. Access to the site will be provided with two unsignalized driveways (right-in/right-out) on John Young Parkway and on Sand Lake Road. The new driveway on Sand Lake Road is located approximately 480 feet west of the proposed Turnpike off-ramp to Sand Lake Road. The second driveway connects to the John Young Parkway northbound off-ramp (frontage road) and is located approximately 440 feet north of the John Young Parkway and Sand Lake Road intersection. No access or median modifications are proposed on either Sand Lake Road or John Young Parkway to accommodate the preferred truck parking site. The preferred Orange County Site 1 will include two wet detention stormwater ponds, with a combined pond area of 5.01 acres. An existing wet detention pond in the southwest corner of the site currently serves as the stormwater management system for portions of John Young Parkway and Sand Lake Road. The existing pond will be removed with the construction of the preferred site; therefore, treatment and attenuation volumes must be replaced in kind, and the proposed stormwater ponds will serve as a joint-use stormwater management facility between the preferred site and John Young Parkway and Sand Lake Road.

The site is adjacent to the new proposed off-ramp from Florida's Turnpike to Sand Lake Road (FPID: 433633-1), due to be let in March 2024, which includes construction of stormwater treatment ponds which overlap the preferred Orange County Site 1. The 5.62-acre pond proposed for the Turnpike project was configured as part of the Preferred Alternative for Orange County Site 1 to optimize the number of truck parking spaces. As construction of the Turnpike pond is anticipated to begin in Spring 2024, the future pond modification will be verified in the Design phase for Orange County Site 1.



- LEGEND**
- Site Boundary
 - Streets
 - Railroads
 - Parcels
 - Public Lands
 - Waterbodies
 - Property Lines
 - Restroom Facility
 - Sidewalk
 - Lighting
 - Proposed Right-of-Way
 - Turnpike Proposed Right-of-Way
 - Wetlands

- CONCEPTUAL INSET LEGEND**
- Pond
 - Restroom Facility
 - Sidewalk
 - Lighting
 - Property Lines
 - Proposed Right-of-Way
 - Turnpike Proposed Right-of-Way
 - Wetlands



Figure 1-6
Project Location Map
Orange County Site 1
 Preliminary Engineering Report

Seminole County Site 1B – I-4 at US 17/92

Seminole County Site 1B (**Figure 1-7**) is located adjacent to eastbound I-4 and southeast of the I-4 and US 17/92 interchange in unincorporated Seminole County, immediately outside the Sanford city limits. In the existing condition, the site can access I-4 via US 17/92 (0.45 miles) and via SR 46 (1.85 miles). Additionally, there are planned I-4 BtU improvements at the I-4 and US 17/92 interchange, which will modify access to I-4 through a reconfigured ramp adjacent to the site. Following the I-4 BtU construction, the distance to I-4 via US 17/92 will be shortened to 0.25 miles. The preferred site will supply 132 truck parking spaces and a restroom facility. Five-foot sidewalks around the truck parking site are proposed to allow pedestrians to safely walk from their individual truck parking spot to the restroom facility. Additionally, an eight-foot sidewalk is proposed along School Street to provide a connection from the entrance of Seminole County Site 1B to the existing sidewalk that runs along the west side of US 17/92.

The preferred site is anticipated to require approximately 17.4 acres of ROW, impacting a total of seven parcels and requiring up to three relocations. A large, raised berm at the northeast corner of the site along Orange Boulevard is proposed to decrease the visibility of the site to nearby properties. Access to the site will be provided with a stop-controlled entrance on School Street. A median island on School Street just west of the site entrance is proposed to prevent trucks leaving the site from heading westbound on School Street and ultimately traveling on the narrower Elder Road. The median modification will still allow passenger vehicles to travel on School Street from US 17/92 to Elder Road.

The preferred Seminole County Site 1B will include two stormwater ponds (one wet detention and one dry retention), with a combined area of 3.73 acres. As of March 2024, Seminole County Site 1B is under Design as part of the Truck Parking Central Corridor – Seminole County Site (FPID 446445-1).

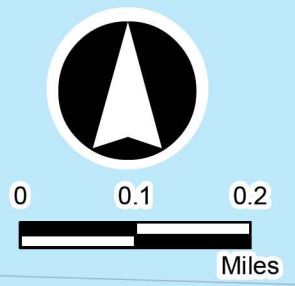
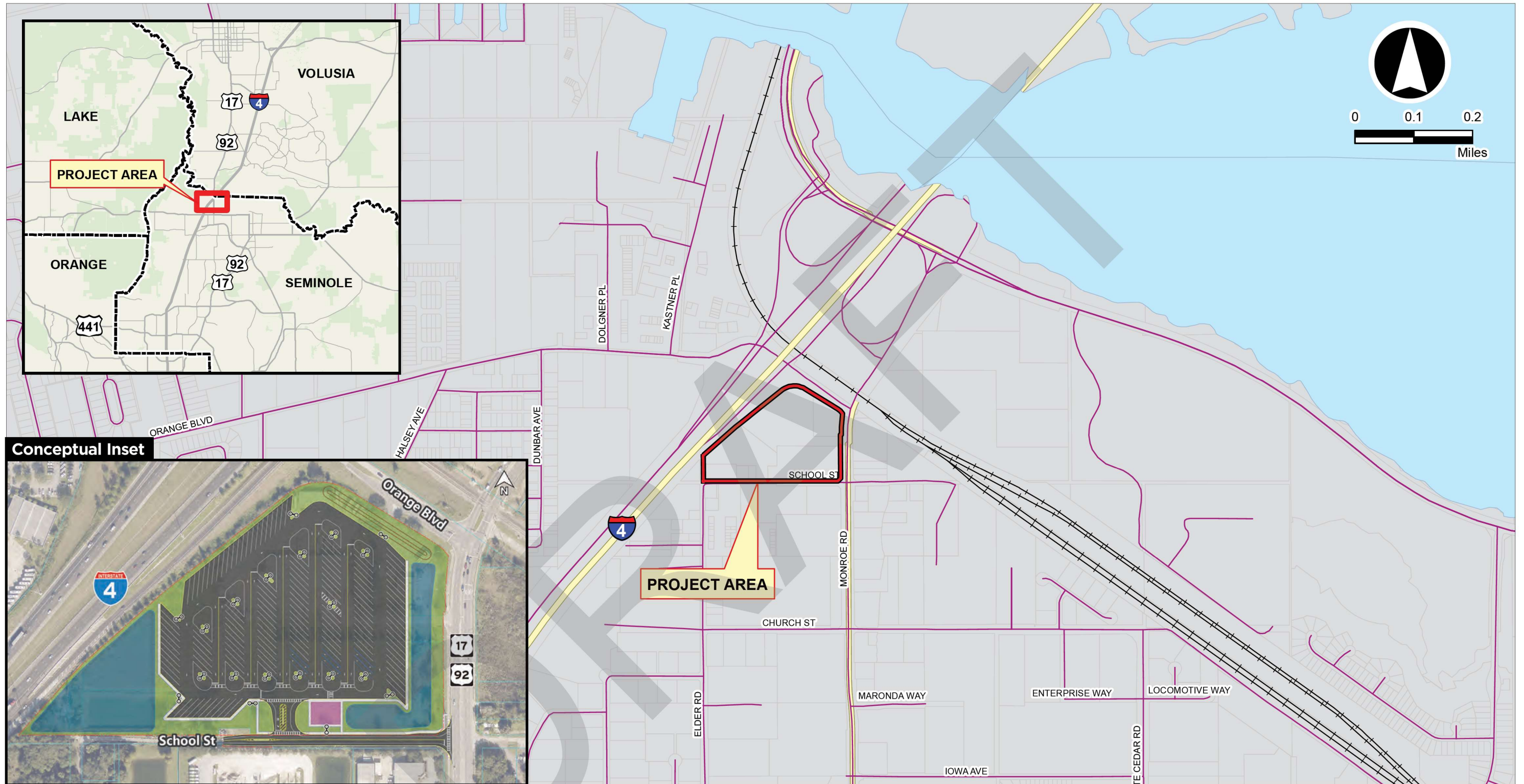
Volusia County Site 1A – I-4 Eastbound Direct Access, 4.5 miles west of I-95

Volusia County Site 1A (**Figure 1-8**) is located along I-4 Eastbound approximately 4.5 miles west of the I-95 interchange (approximate Milepost (MP) 23.112). The preferred site, located near the site of a former Volusia County rest area, will supply 275 truck parking spaces and restroom facilities. Eight-foot sidewalks will be provided around the preferred site to allow pedestrians to safely walk from their individual truck parking spot to the restroom facilities.

The preferred site is anticipated to require 73.3 acres of ROW, impacting two parcels both publicly owned by the City of Port Orange. Wildlife fencing and wildlife sensitive lighting will be provided around the preferred site due to the proximity of the existing wildlife crossing at MP 22.583. An on- and off-ramp will be provided on I-4 Eastbound for direct access to and from Volusia County Site 1A. No local road access will be provided to the sites.

The preferred Volusia County Site 1A will include one wet detention stormwater pond (approximately 7.15 acres) located along the southeast parcel line. The proposed ROW for the site includes a proposed conservation area outside the limits of construction and surrounding the fenced truck parking area to provide an enhanced natural buffer. The conservation area (31 acres) is east of the truck parking area and will remain as existing (undeveloped) with no site clearing. A conservation easement over the conservation area will be coordinated in the design and ROW phases for the project.

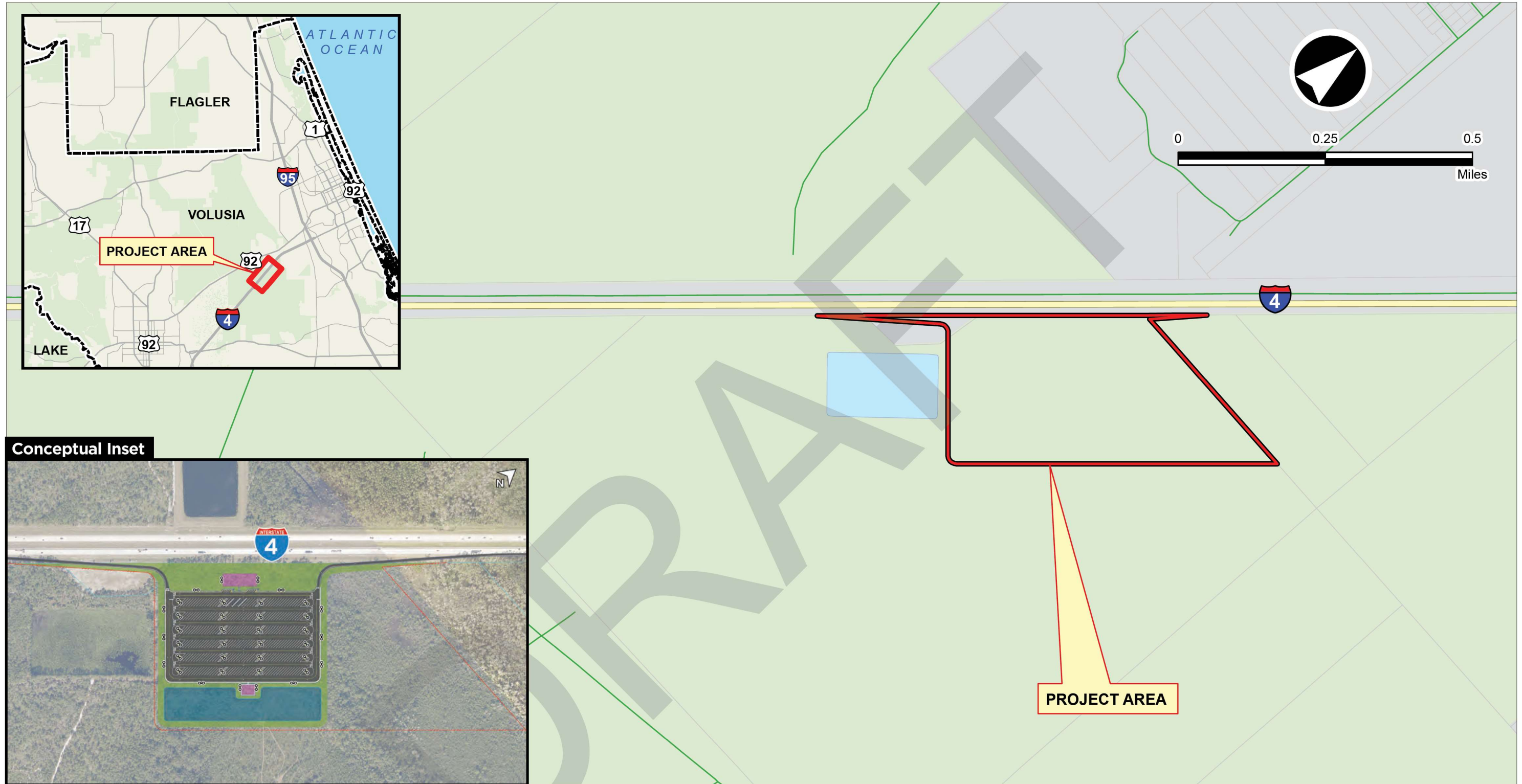
A VE Study was conducted in July 2023, which led to site recommendations, including a modified site layout for Volusia County Site 1A. During the Design phase (ongoing as of March 2024), FDOT will modify the site layout to centralize the restroom for Volusia County Site 1A. Per the VE Study, this will minimize walking distance to the restroom, reduce the utility and maintenance costs, and centralize the security area.



- LEGEND**
- Site Boundary
 - Streets
 - Railroads
 - Parcels
 - Public Lands
 - Waterbodies

- CONCEPTUAL INSET LEGEND**
- Pond
 - Restroom Facility
 - Sidewalk
 - Lighting
 - Property Lines
 - Proposed Right-of-Way
 - Raised Berm

FDOT **Figure 1-7**
Project Location Map
Seminole County Site 1B
 Preliminary Engineering Report



LEGEND

- Site Boundary
- Parcels
- Streets
- Public Lands
- Waterbodies

CONCEPTUAL INSET LEGEND

- Pond
- Restroom Facility
- Sidewalk
- Property Lines
- Proposed Right-of-Way
- Lighting



Figure 1-8
Project Location Map
Volusia County Site 1A
 Preliminary Engineering Report

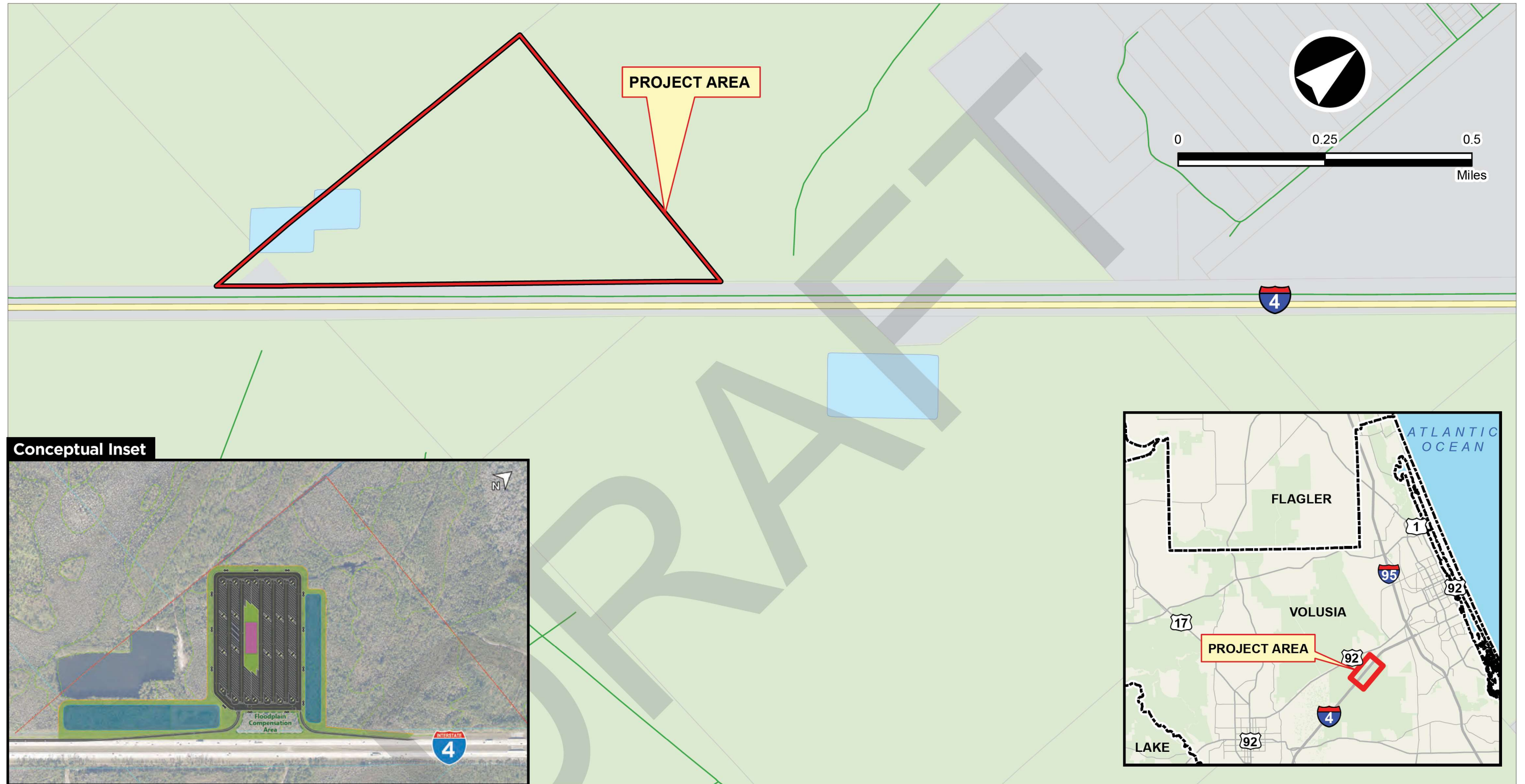
Volusia County Site 1B – I-4 Westbound Direct Access, 4.5 miles west of I-95

Volusia County Site 1B (**Figure 1-9**) is located along I-4 Westbound approximately 4.5 miles west of the I-95 interchange (approximate MP 22.161). The preferred site will supply 253 truck parking spaces and a centralized restroom facility. Eight-foot sidewalks will be provided around the preferred site to allow pedestrians to safely walk around the lot.

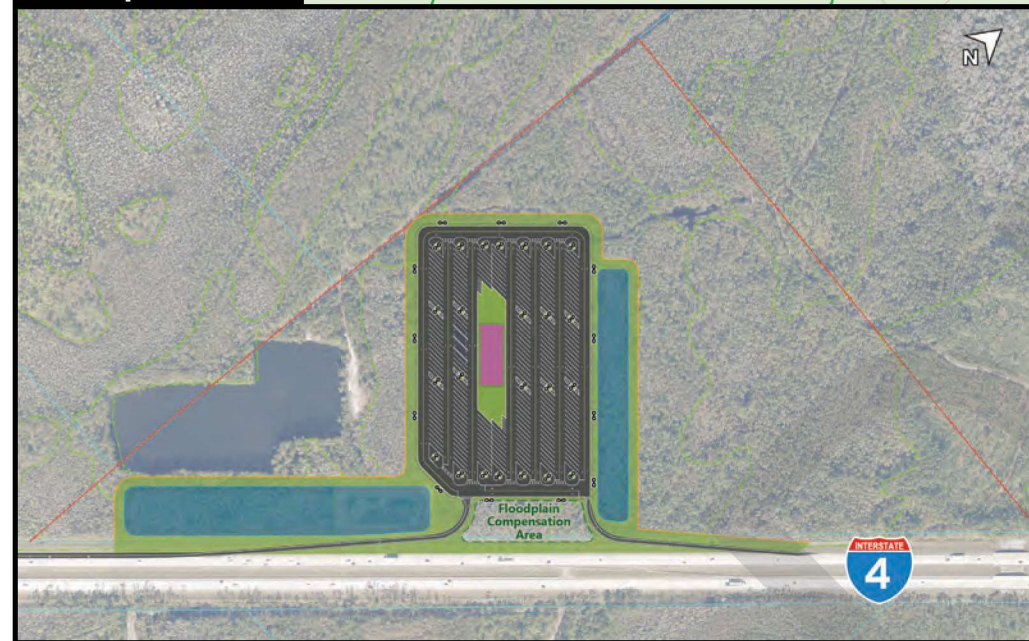
The preferred site is anticipated to require 116.8 acres of ROW, impacting one parcel publicly owned by the City of Daytona Beach. Wildlife fencing and wildlife sensitive lighting will be provided around the preferred site due to the proximity of the existing wildlife crossing at MP 21.523. An on-ramp and off-ramp will be provided on I-4 Westbound for direct access to and from Volusia County Site 1B. No local road access will be provided to the sites.

The preferred Volusia County Site 1B will include two wet detention stormwater ponds for a combined area of 10.17 acres. Pond 1 is located adjacent to, and east of, the truck parking site and is 3.45 acres. The second pond will involve modification of Pond I, which was originally constructed with the I-4 widening project (FPID: 408464-2). Pond I will be expanded from approximately 1.93 acres to 6.72 acres (4.79 acre increase). Volusia County Site 1B also will include a floodplain compensation area of 2.20 acres.

The proposed ROW for the site includes a conservation area and contiguous wildlife corridor outside the limits of construction and surrounding the fenced truck parking area to provide an enhanced natural buffer. The proposed wildlife corridor (36.5 acres) is east of Pond 1 and extends from the existing I-4 wildlife crossing to the western boundary of the site. The proposed conservation area adjacent to the wildlife corridor and surrounding the truck parking site is approximately 43.2 acres. The proposed conservation and wildlife corridor totals approximately 79.7 acres of the 116.8 acre site and will remain as existing (undeveloped) with no site clearing. A conservation easement over the conservation area and wildlife corridor will be coordinated in the Design and ROW phases for the project. The Design phase for Volusia County Site 1B is ongoing as of March 2024.



Conceptual Inset



LEGEND

- Site Boundary
- Streets
- Parcels
- Public Lands
- Waterbodies

CONCEPTUAL INSET LEGEND

- Pond
- Restroom Facility
- Sidewalk
- Lighting
- Property Lines
- Proposed Right-of-Way
- Wetlands



Figure 1-9
Project Location Map
Volusia County Site 1B
 Preliminary Engineering Report

1.7 List of Technical Documents

This report documents the existing conditions for the viable sites, summarizes the purpose and need for the project, provides an overview of the alternatives considered during the study, and details the Preferred Alternative and engineering aspects. The analysis of the preliminary engineering and environmental issues are documented in separate reports that have been prepared for this project and include the following:

Engineering Reports:

- Project Traffic Analysis Report (PTAR) - September 2022
- Conceptual Drainage Report - January 2024
- VE Study Report - October 2023

Osceola County Site 1

- Utilities Assessment Package (UAP) - October 2023

Orange County Site 1

- UAP - October 2023
- Location Hydraulics Technical Memorandum (LHR) - November 2023

Seminole County Site 1B

- UAP - October 2023

Volusia County Site 1A

- UAP - October 2023
- LHR - November 2023

Volusia County Site 1B

- UAP - October 2023
- LHR - November 2023

Environmental Reports:

- Air Quality Technical Memorandum (AQTM) - January 2024
- Noise Study Technical Memorandum (NSTM) - January 2024

Osceola County Site 1

- Contamination Screening Evaluation Report (CSER) - December 2023
- Cultural Resources Assessment Survey (CRAS) - February 2024
- Natural Resources Evaluation Technical Memorandum (NRE) - January 2024
- Type 2 Categorical Exclusion (Type 2 CE) - February 2024
- Sole Source Aquifer (SSA) Checklist - October 2023
- Water Quality Impact Evaluation (WQIE) Checklist - November 2023

Orange County Site 1

- CSER - December 2023
- CRAS - February 2024
- NRE - January 2024
- Type 2 CE - February 2024
- SSA Checklist - October 2023

- WQIE Checklist - November 2023

Seminole County Site 1B

- CSER Addendum - December 2023
- CRAS Addendum - February 2024
- NRE - October 2023
- Conceptual Stage Relocation Plan (CSRP) - January 2024
- Sociocultural Effects Evaluation (SCE) - January 2024
- Type 2 CE Reevaluation - February 2024

Volusia County Site 1A

- CSER - December 2023
- CRAS - February 2024
- NRE - January 2024
- Type 2 CE - February 2024
- SSA Checklist - October 2023
- WQIE Checklist - November 2023

Volusia County Site 1B

- CSER - December 2023
- CRAS - February 2024
- NRE - January 2024
- Type 2 CE - February 2024
- SSA Checklist - October 2023
- WQIE Checklist - November 2023

Public Involvement Reports

- Public Involvement Plan (PIP) - June 2022
- Comments and Coordination Report - February 2024

All of the reports listed here have been included in the project files for the individual truck parking sites as follows:

- Osceola County Site 1 (FPID: 446445-5-32-01)
- Orange County Site 1 (FPID: 446445-3-32-01)
- Seminole County Site 1B (FPID: 432100-1-22-01)
- Volusia County Site 1A (FPID: 446445-2-32-01)
- Volusia County Site 1B (FPID: 446445-4-32-01)

2

2. Methodology

This section summarizes the methodology utilized to determine viable freight parking sites along the I-4 corridor. The methodology was used to identify the potential sites evaluated during this PD&E Study (documented in Chapter 6). The methodology was developed after review of prior related planning studies and based on the previous District Five Truck Parking studies, as well as best practices and lessons learned derived from industry research and other freight parking sites within Florida.

2.1 Developing the Methodology

A methodology for identifying and evaluating potential sites was developed during this PD&E Study using existing research and documentation completed within the state. The following subsection summarizes each resource and the key content that contributed to the methodology development.

2.1.1 Previous District Five Freight Parking Studies

District Five Truck Parking Study – Phase 1 Final Report (2019)

The *District Five Truck Parking Study Phase 1 Report*, published in March 2019, involved significant stakeholder engagement with industry and planning partners to discuss truck parking demands and potential solutions. The national planning efforts, Florida planning efforts and existing truck parking inventory provided in the *Phase 1 Report* are briefly summarized below.

National Planning Efforts

The two national level efforts reviewed were the *Jason’s Law Truck Parking Survey (2015)* and the *American Transportation Research Institute (ATRI) Annual Survey*. Statewide freight parking efforts were reviewed for the following states: Virginia (2015), Minnesota (2010), Utah (2012), Wisconsin (2009), Colorado (2016), Kansas (2016), Michigan (2016), Pennsylvania (2007), New Jersey (2008), and British Columbia, Canada (2016). While the studies reviewed varied in their focus, all the studies recognized a need for truck parking. As such, there were four common methods explored for providing greater truck parking capacity and helping truck drivers locate available truck parking. First, most states evaluated ways of providing real-time information about parking availability to drivers. Second, variable message signs along the highway were the most frequently preferred means of providing this information, often in concert with other tools. Third, multiple states also looked at increasing truck parking capacity by using existing facilities, such as weigh stations and Park & Ride lots. Lastly, several states looked at providing financial incentives, like tax benefits or low-interest loans, to encourage the private sector to increase truck parking capacity.

Florida Planning Efforts

The *District Five Truck Parking Study Phase 1 Report* included a regional review of plans and policies. Within the document, eight completed planning efforts were studied, compared, and summarized to

provide local insights into truck parking needs and how other Florida metropolitan areas are addressing truck parking demand. The eight planning efforts reviewed are:

- Development of Truck Parking Facilities in Miami-Dade (Miami-Dade MPO, 2012)
- Statewide Commercial Motor Vehicle Parking Trends at Rest Areas (Florida International University, 2012)
- Central Florida Regional Freight and Goods Movement Study (MetroPlan Orlando, 2013)
- Districtwide Freight Truck Parking Inventory for District One (FDOT, 2017)
- District Four Truck Parking Supply and Demand Study (FDOT, 2017)
- Study for Turnpike Service Plazas and Tandem Truck Staging Lots
- Site Selection for I-4 Corridor Truck Service Plazas
- South Florida Truck Stop Analysis

The description of the studies, as documented in the Phase I report are as follows:

Three studies aimed to estimate the truck parking demand in their respective area. These studies included: *Development of Truck Parking Facilities in Miami-Dade*; *Statewide Commercial Motor Vehicle Parking Trends at Rest Areas*; and the *Study for Turnpike Service Plazas and Tandem Truck Staging Lots*. The studies observed the capacity of parking locations and reported truck counts and utilization. The FDOT rest area and weigh station study went on to develop Geographical Information Systems (GIS) and other software tools to complement the wireless vehicle detection system.

One study, *Development of Truck Parking Facilities in Miami-Dade*, focused on implementing truck parking throughout Miami-Dade County. Differing from the previous studies which focused on parking demand, this report analyzed, and estimated proposed parking sites and costs. In addition, the study included an action plan for developing truck parking in these locations.

Two studies, *Site Selection for I-4 Corridor Truck Service Plazas* and *South Florida Truck Stop Analysis*, focused on identifying truck parking locations that may support P3. The South Florida study incorporated interviews with truckers and operators, whereas the I-4 study did not; and was intended as a preliminary screening and review of vacant lands.

The *Central Florida Regional Freight and Goods Movement Study* focused on a comprehensive freight transportation inventory. The study did not account for Flagler or Marion Counties, nor did it address freight parking demand or associated needs.

The *Districtwide Freight Truck Parking Inventory for District One* investigated improved efficiency and safe freight movement in the region. Additionally, this study researched and identified current and planned freight parking facilities in District One. These efforts resulted in recommending utilization of the 1,320 available spaces within existing locations, collaborating with local agencies for potential expansion, and working with FDOT to explore utilization of unused state-owned sites.

The *District Four Truck Parking Supply and Demand Study* focused on truck parking supply and unmet demand. The study aimed to identify truck parking needs and how to address these needs to ensure the trucking industry has the necessary infrastructure to serve global hubs and domestic markets while complying with the driver hours of service regulations and the quality of life of communities.

For more information about truck parking and freight related studies conducted in Florida, as well as local noise ordinances and other details, see *Technical Report 1: Plans and Policies Review* that was completed as part of the *District Five Truck Parking Study Phase 1 Report*.

Existing Truck Parking Inventory

An inventory of existing truck parking was conducted for the *Phase 1 Report*, and sample truck parking demand observations were carried out at multiple locations. Once factors contributing to truck parking demand were identified and examined, the *District Five Truck Parking Study* developed a forecast of future truck parking demands. The study concluded with a discussion of truck parking needs, opportunities, and next steps. Several topics discussed in the *Phase 1 Report* were utilized in developing the methodology for the *Truck and Freight Alternative Site Analysis PD&E Study*. In particular, the Demand Estimation section, which discussed factors contributing to increased freight parking demand and included a review of freight intensive and truck trip generating land uses, was useful in identifying high-demand areas for freight parking.

As noted in Section 1.2, the *District Five Truck Parking Study's* examination of freight parking supply and demand along I-4, I-75, and I-95 illustrated the need for additional freight parking sites along I-4 to meet increasing demand through this vital Central Florida corridor.

District Five Truck Parking Study – Phase 2 Final Report (2021)

The *District Five Truck Parking Study Phase 2 Report*, published September 2021, developed a geospatial-based multi-criteria analysis to determine the most suitable areas for freight parking along I-4. The study included two tiers of analysis. The Tier 1 analysis was based on several key elements of land suitability, including:

- Proximity to I-4 interchanges,
- Freight destinations/clusters,
- Overutilized truck parking sites,
- Parcels suitable for truck parking,
- Adjacent land suitability,
- Potential for nearby crime, and
- Unauthorized truck parking hotspots.

The high-suitability candidate areas from Tier 1 were further evaluated in Tier 2 to assess how individual parcels or groups of parcels could be procured for development as a truck parking site.

2.1.2 Site Selection Guidance Technical Memorandum

The Site Selection Guidance Technical Memorandum was developed to inform the initial evaluation of parcels within the *Truck and Freight Alternative Site Analysis PD&E Study*. Based on a review of the 18 private freight parking locations that had been built and opened within the previous five years (2016 to 2021) in Florida, the technical memo identified key elements of the most recent freight parking sites. The review used environmental resource permitting documents from the relevant Water Management District to ascertain the following data:

- Permitting year,
- Land use designation,
- Zoning,
- Site acreage,
- Number of parking spaces,
- Land acquisition cost,
- Proximity to the nearest interstate exit, and
- Direct visibility to the nearest interstate/highway.

The prescribed site selection criteria included land use, zoning, site acreage, and proximity to I-4. The initial site selection criteria are described in more detail in Section 2.2.1.

The technical memo also included a review of zoning designations along I-4 that would allow for travel stops and similar uses. The list of accommodating zoning designations is provided in **Table 2-1**.

Table 2-1: Zoning Designations Along I-4 Which Allow Travel Stops

Municipality	Zoning Designation
Osceola County	CG – Commercial General CT – Commercial Tourist EC – Employment Commercial IR – Industrial Restricted
Orange County	I-1/I-5 – Industrial (low intensity industrial development) I-2/I-3 – Industrial (industrial development requiring locations near compatible neighbors, good transportation facilities and utilities) I-4 – Industrial (higher impact industrial development) C-3 – Wholesale Commercial
Lake Buena Vista (Reedy Creek Improvement District)	None
Orlando	AC-3 – Metropolitan Activity Center (conditional) IG – General Industrial
Eatonville	C-1 – Planned Commercial District (special exception use)
Seminole County	M-1A – Very Light Industrial M-1 – Industrial District M-2 – Impact-General Industrial
Altamonte Springs	I-L – Very Light Industrial
Longwood	None
Lake Mary	M-2A – Industrial District (conditional)
Sanford	No permitted zoning district officially listed. Similar land use, Major Equipment Rental is permitted in: RI-1 – Restricted Industrial MI-2 – Medium Industrial
Volusia County	B-5 – Heavy Commercial (special exception) B-6 – Highway Interchange Commercial (special exception) I-1 – Light Industrial I-2 – Heavy Industrial I-4 – Industrial Park
DeBary	I-1 – Light Industrial
Deltona	C-3 – Heavy Commercial (conditional) I – Industrial District
Orange City	I-1 – Light Industrial I-2 – Heavy Industrial
Lake Helen	None
DeLand	C-2 – General Commercial (special exception) M-1 – Industrial
Daytona Beach	BA – Business Automotive M-1 – Local Industry PD-G – Planned Development, General (subject to a PD Plan/Agreement) PD-RD – Planned Development, Redevelopment (subject to a PD Plan/Agreement)

2.2 Site Selection Methodology

This section describes the methodology for determining viable freight parking candidate sites. The analysis primarily consisted of two phases:

- Phase 1 – Primary Site Selection Criteria
- Phase 2 – Secondary Site Selection Criteria

The methodology and results of each phase are described in greater detail in the following subsections. The datasets used during the GIS analysis are detailed in **Appendix B**.

The freight parking candidate sites derived from this methodology are discussed in greater detail in Section 3.

2.2.1 Phase 1: Primary Site Selection Criteria

The methodology for identifying potential site candidates within the primary site selection criteria was developed using two tiers of analysis.

Tier 1 Analysis – Identify Candidate Parcels

Tier 1 utilized the primary site selection criteria established by the *Site Selection Guidance Technical Memorandum* to identify an initial set of qualifying parcels. **Table 2-2** identifies the primary site selection criteria derived from the *Site Selection Guidance Technical Memorandum*.

Table 2-2: Primary Site Selection Criteria – Tier 1

Criteria	Ideal Site
Land Use	Commercial, Industrial, Governmental (vacant or developed)
Zoning	Commercial or Industrial in accordance with Table 3-4
Site Area	8 – 20 acres
Proximity to I-4	Within 1 mile of an I-4 interchange
Access	Prime frontage, access, and visibility to intersecting arterial roadway

There were more than 77,000 parcels identified within one mile of an I-4 interchange. After filtering out all parcels that did not have a land use designation associated with either commercial, industrial, or governmental use, there were 586 parcels remaining. Individual parcels were not removed from consideration if they did not meet the minimum requirement of eight acres. This was intended to accommodate a cluster of smaller parcels that could be combined into a sufficiently large enough candidate parking site.

Additional consideration was given to public owned properties, industrial clusters, and access to connected major highways. In support of the primary selection criteria, local agency input was also used to help identify additional sites.

Tier 2 Analysis – Refinement of Candidate Parcels

Upon identifying potential candidate parcels that met the land use and distance requirements in Tier 1, an Esri ArcGIS Webmap was created for the study area that included a variety of environmental layers to be used in the Tier 2 analysis, including conservation lands, wetlands, threatened and endangered species habitats, and adjacent land uses. The 586 parcels that met the land use and distance requirements were exported as their own *Potential Parcels* shapefile and included in the webmap. The webmap allowed non-GIS reviewers to examine the parcel and environmental layers without needing to have technical

knowledge of GIS. Reviewers were given “write” access to the Potential Parcels layer within the webmap, allowing them to identify if parcels were truly candidate parcels. If a parcel or group of parcels had obvious fatal flaws, the reviewer could indicate the parcel was not a candidate. Additionally, if there was a question as to a parcel’s candidacy, the reviewer could mark that parcel for further review by others.

Some of the more common fatal flaws in that qualitative analysis included:

- Proximity to residential uses,
- Proximity to noise sensitive areas,
- Cost-prohibitive wetland impacts,
- Failure to meet the eight-acre minimum threshold for a cluster of parcels, and
- Significant conservation impacts that could not be offset.

Potential impacts to culturally relevant sites (e.g., cemeteries and historic sites) and public service facilities (e.g., fire, police, medical, post office) were also considered fatal flaws. Additionally, threatened and endangered species data was also reviewed, but typically the parcels’ proximity to the built environment limited the impact on habitats.

Based on the analysis described above, each parcel was ranked either “Remove” or “Further Review”. The study team then reviewed each parcel labelled as “Further Review” individually with FDOT Management and determined whether the sites should be kept or removed. Following the discussions with FDOT Management, only one site was kept; the Seminole County site.

Phase 1 Results

Based on the Tier 1 and Tier 2 analyses, one potential site in Seminole County was identified across the entire I-4 study area.

The potential sites did not include a location in Osceola County, Volusia County and the Primary Selection Criteria in Orange County did not allow the opportunity to address some of the County’s greatest areas of truck parking need. Consequently, the selection of viable freight parking sites based on the Primary Site Selection Criteria did not meet the Purpose and Need of this PD&E Study. For this reason, the land use component was expanded to include agricultural land uses adjacent to commercial or industrial future land use. Still, the sites resulting from the expanded criteria were deemed unfeasible upon further review.

The lack of sufficient alternative sites for further evaluation necessitated the expanded coverage conducted in Phase 2.

2.2.2 Phase 2: Secondary Site Selection Criteria

The *Secondary Site Selection Criteria Assessment* included additional consideration to public owned properties, industrial clusters, and access to connected major highways. In support of the primary selection criteria, local agency input was also used to help identify additional sites for review. The results of the *Secondary Site Selection Criteria Assessment* in Osceola, Orange, and Volusia County are summarized below.

Osceola County

In Osceola County, the *Proximity to I-4* criterion was expanded from one mile to three miles. This expanded coverage area produced a variety of additional candidate site options within Osceola County. However, many of these options were near residential/tourism land uses or within planned developments and had to be dismissed as viable candidates. Through coordination with local agency stakeholders, two potential candidate sites were identified for further evaluation along CR 532, near the Polk County border.

The sites are adjacent to the planned PPE, which would provide an additional connection to I-4 when constructed.

Orange County

In Orange County, the *Proximity to I-4* criterion was also expanded from one mile to three miles. However, due to compatibility issues, such as proximity to residential/tourism land uses or future planned development, the coverage area for potential freight parking sites in Orange County was also expanded to include other areas of major truck parking need within the County.

The major area of need is the industrial sector just west of the Orlando International Airport as part of the Phase 3 analysis. The industrial sector is generally bounded by John Young Parkway/Orange Blossom Trail (west), Sand Lake Road (north), Boggy Creek Road (east), and Central Florida Parkway (south).

While outside the three-mile distance to I-4, the industrial sector is adjacent to SR 528 and the Turnpike Mainline, two key freight corridors that provide connectivity between nearby I-4 and freight clusters to the east (SR 528) and to the north and south (Turnpike Mainline). The industrial sector is also a major freight destination. With appropriate wayfinding provided on I-4 approaching this area, drivers should be able to comfortably navigate to a freight parking site within the industrial sector.

Incorporating the industrial sector into the coverage area produced several potential candidate sites, seven of which were deemed viable through discussion with County and City staff. These are discussed in Section 3.

Volusia County

In Volusia County, the expanded coverage included government parcels along the I-4 corridor and not just near the interchanges. Two vacant parcels were found on either side of I-4 approximately 4.5 miles west of I-95. The parcel on the northwest (westbound) side of I-4 is owned by the City of Daytona Beach and the parcel on the southeast (eastbound) side of I-4 is owned by the City of Port Orange. The City of Daytona Beach has previously passed a resolution that does not allow truck parking locations within the city, however this site was considered far enough away from the city to be acceptable based on discussion with them. The City of Port Orange also agreed that the use of their parcel for truck parking would be acceptable. When combined, these two parcels were determined to constitute the only viable truck parking location in Volusia County.

2.2.3 Agency Input

Input regarding the project and potential site locations identified in Phases 1 and 2 was sought from the following stakeholder agencies along the study corridor.

- Seminole County (December 16, 2021)
- City of Sanford (December 16, 2021)
- City of Port Orange (January 5, 2022)
- Osceola County (January 14, 2022)
- City of Orlando (February 1, 2022)
- Orange County (February 4, 2022)
- The Florida's Turnpike (March 17, 2022)
- Central Florida Expressway Authority (March 18, 2022)
- Volusia County, City of Daytona Beach, and City of Port Orange (March 25, 2022)

2.3 Potential Sites Identified

Based on the methodology described above, twelve initial candidate sites were identified for further analysis in the *Truck and Freight Alternative Site Analysis PD&E Study*. These freight parking candidate sites are described in further detail in Section 6.3.2.

Osceola County:

- Osceola County Site 1 – CR 532 and PPE
- Osceola County Site 2 – CR 532 – Northside

Orange County:

- Orange County Site 1 – Sand Lake Road at John Young Parkway
- Orange County Site 2 – West Landstreet Road, Adjacent to SR 528
- Orange County Site 3 – West Landstreet Road, East of SR 528 - Southside
- Orange County Site 4 – West Landstreet Road, East of SR 528 - Northside
- Orange County Site 5 – Tradeport Drive, West of Central Port Drive - Southside
- Orange County Site 6 – Tradeport Drive, East of Central Port Drive - Southside
- Orange County Site 7 – Tradeport Drive, East of Ringhaver Drive - Northside

Seminole County:

- Seminole County Site 1 – I-4 at US 17/92

Volusia County:

- Volusia County Site 1A (Eastbound) – I-4 Eastbound Direct Access, 4.5 miles west of I-95
- Volusia County Site 1B (Westbound) – I-4 Westbound Direct Access, 4.5 miles west of I-95

After presenting the 12 initial sites to the public and obtaining feedback at a Public Information Meeting, additional desktop screening analysis was completed on the sites. As a result of the screening analysis and public/agency input, seven of the 12 initial sites were selected as viable sites. The key reasons for the selection of the viable sites, and the reasons for eliminating the non-viable sites from further consideration, are described below. Detailed descriptions of the seven viable sites, and evaluation matrices showing the reasons for their selection can be found in Section 6.3.3.

Osceola County

Osceola County Site 2 was eliminated from further consideration as the site configuration did not provide adequate truck parking capacity compared to Osceola Site 1. Osceola County Site 2 has a 50-foot Duke Energy Florida easement that has several large transmission poles in the middle of the site. To avoid impacting these transmission poles, the number of potential truck parking spots becomes greatly reduced. While both sites are approximately four miles away from I-4, Osceola County Site 1 is immediately east of the proposed PPE and will provide improved freight connectivity.

Orange County

Based on the screening analysis, Orange County Sites 3, 5, 6, and 7 were not selected as viable truck parking sites. Orange County Site 3 only allows for 26 total parking spots and is a substantial distance (6.77 miles) from I-4. Orange County Sites 5, 6, and 7 provide adequate parking capacity. However, the total estimated project cost of these sites is higher than other comparable sized truck parking sites. Additionally, these sites are between 11 and 12 miles away from I-4, which is significantly beyond the initial goal of selecting a site within one mile of I-4.

Orange County Sites 1, 2, and 4 were all identified as viable; all three provide adequate parking capacity for the estimated project cost of the sites and have low expected community and environmental impacts. Of these three sites, Sites 2 and 4 were not included in the Preferred Alternative due to lower cost benefit compared to Orange County Site 1. However, these sites are still viable for truck parking, and it is recommended that they be revisited in the future as parking demand increases or when funding becomes available.

Seminole County

After further evaluation, Seminole County Site 1 was split into two different configurations with the original Seminole County Site 1 becoming Seminole County Site 1A and a smaller configuration being Seminole County Site 1B. Seminole County Site 1A is a larger site and therefore, provides additional parking capacity. Seminole County Site 1B was selected as a viable site due to reduced project costs, residential impacts, and potential environmental impacts.

Volusia County

Two concepts for the Volusia County site were identified and analyzed. The sites are comprised of two parcels located approximately 4.5 miles west of I-95, Volusia County Site 1A is located on the south side of I-4 and can be accessed by eastbound traffic, and Volusia County Site 1B is located on the north side of I-4 and can be accessed by westbound traffic. Providing sites on both sides of I-4 at this location ensures that parking can be accessed by traffic in both directions without the need to construct a new bridge over I-4. The sites are recommended as viable due to direct I-4 access, regional freight connectivity, and they provide significant parking capacity (528 total spaces). The parcel with access to I-4 Eastbound provides 253 parking spaces, while the parcel with access to I-4 Westbound provides 275 parking spaces. The eastbound and westbound parcels would operate independently of one another, each with their own unique entrance and exit.

2.3.1 Preferred Sites

The viable sites were further analyzed and refined based on purpose and need, engineering feasibility, environmental effects, and economic feasibility. This detailed analysis (documented in Section 6.3.3) resulted in five preferred site locations for truck parking within Osceola, Orange, Seminole, and Volusia Counties.

The five preferred site locations are:

- Osceola County Site 1 – CR 532 and PPE
- Orange County Site 1 – Sand Lake Road at John Young Parkway
- Seminole County Site 1B – I-4 at US 17/92
- Volusia County Site 1A – I-4 Eastbound Direct Access, 4.5 miles west of I-95
- Volusia County Site 1B – I-4 Westbound Direct Access, 4.5 miles west of I-95

Detailed descriptions of the five preferred sites can be found in Section 8.