

SW 10TH ST. CONNECTOR

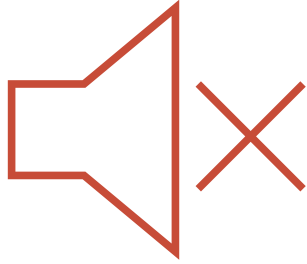
FDOT DISTRICT 4

INDUSTRY FORUM
August 8, 2022

Vanita Saini, PE
FDOT Project Manager



Ground Rules



Please mute the microphone.



Hold all questions until end of the presentation.



Please submit all questions in the MS Teams Chat.

Presentation Outline

- SW 10th Street Connector – Overall Program Summary
- SW 10th Street Connector / I-95 Interchange Project (436964-2)
 - Scope of Planned Improvements
- Procurement Process and Schedule
- DBE / SB Program
- Next Steps

Current Situation

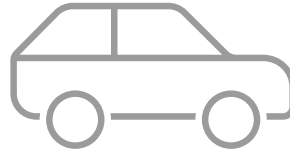
- Why SW 10th Street Connector?
 - Original design vs. today's use
 - Safety and mobility needs of local and regional users
 - Quality of life and accessibility impacts
 - Movement of goods and services impacted by current corridor



Vision



Safety, time, and quality of life are priority



Providing residents, commercial traffic, and the region the **safe, efficient, and reliable transportation option** that has been promised for decades



Complete the missing link in the region's limited access and highway network

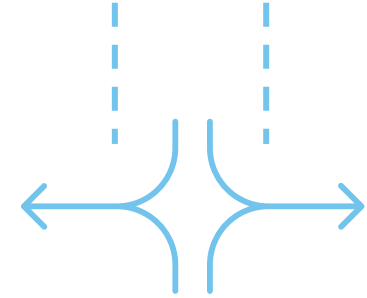
Innovations with our community in mind



Separate the major highway throughput traffic from the local residential and commercial / business traffic

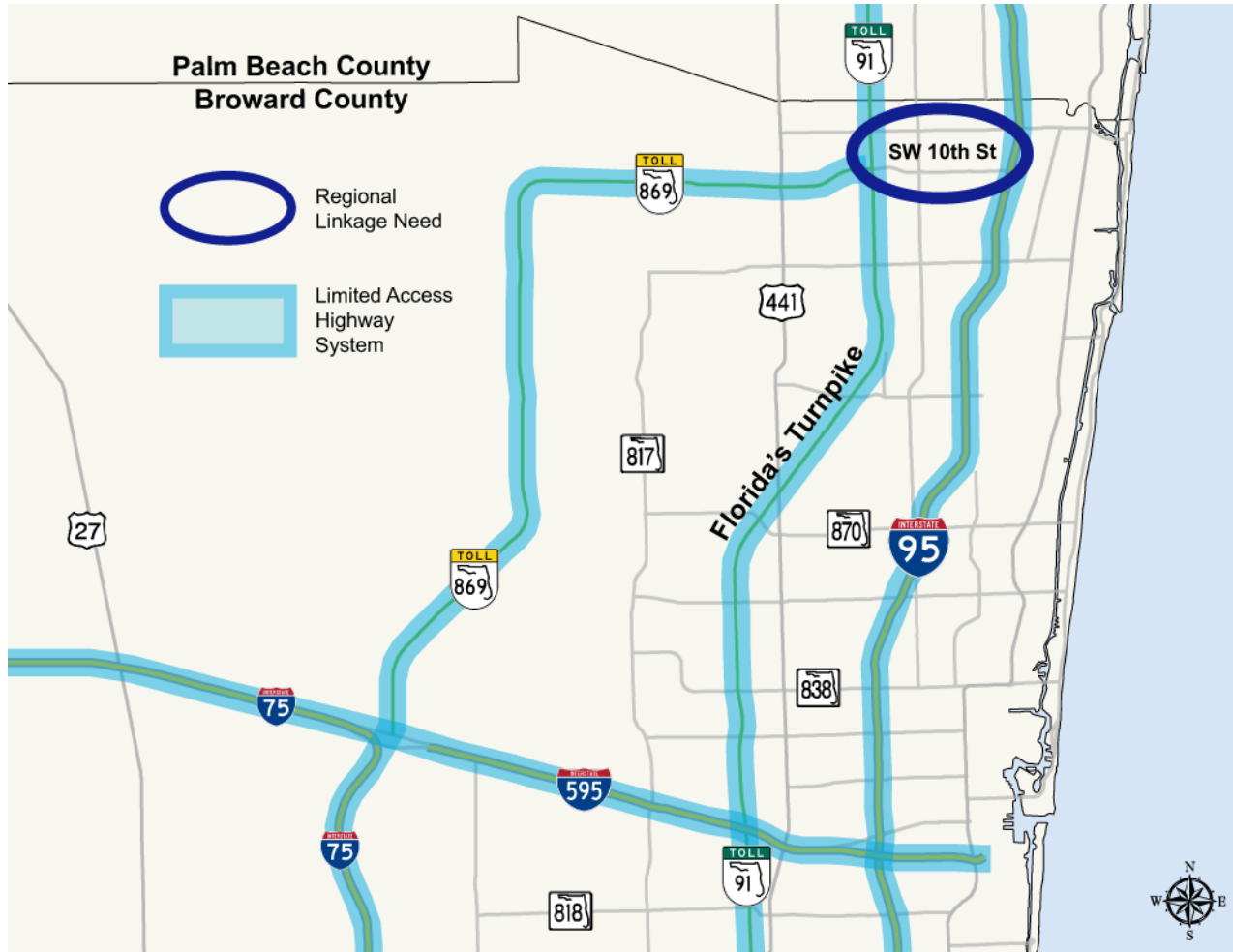


Allow freight and commuter traffic and other non-local traffic to bypass the residential areas

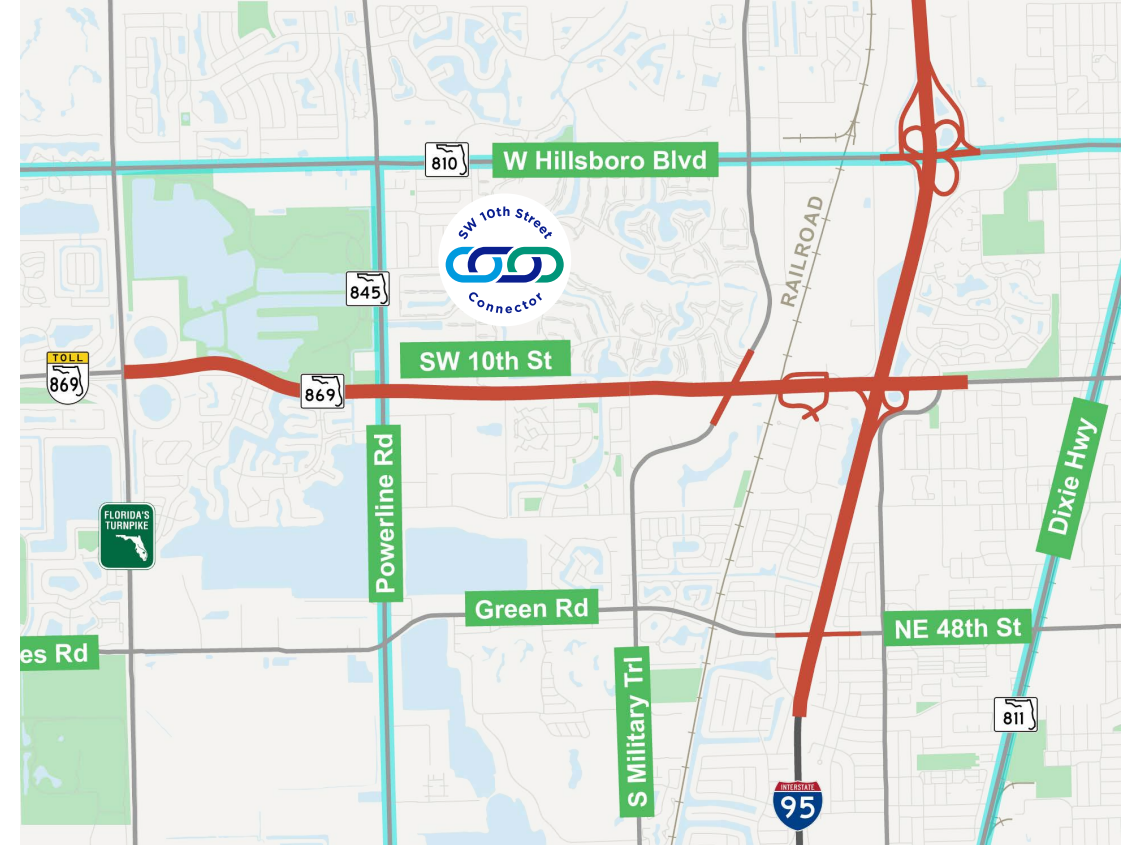


Innovatively improve several major cross-street arterial intersections

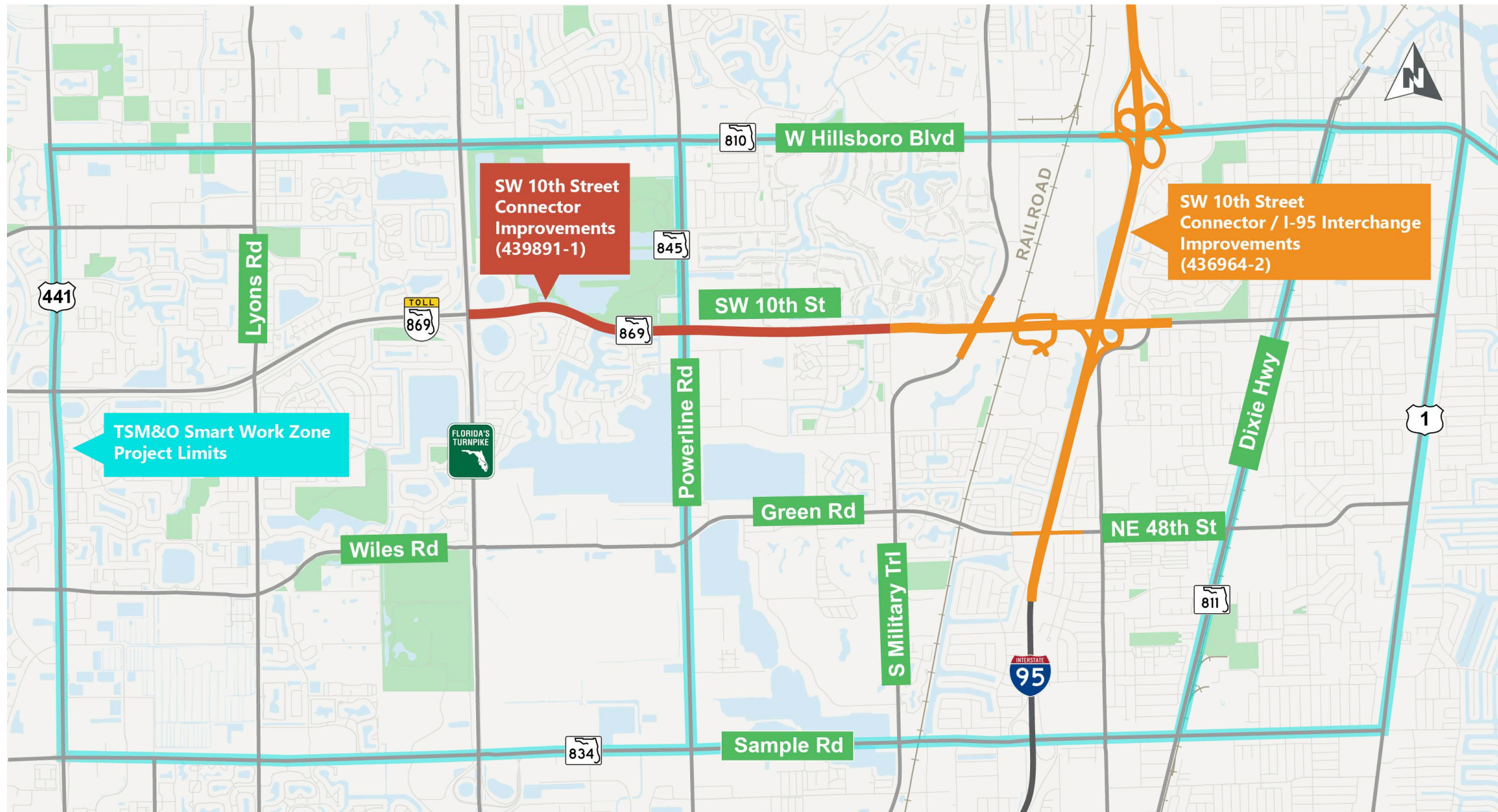
Regional



Combined Project Limits



Overall Program Summary

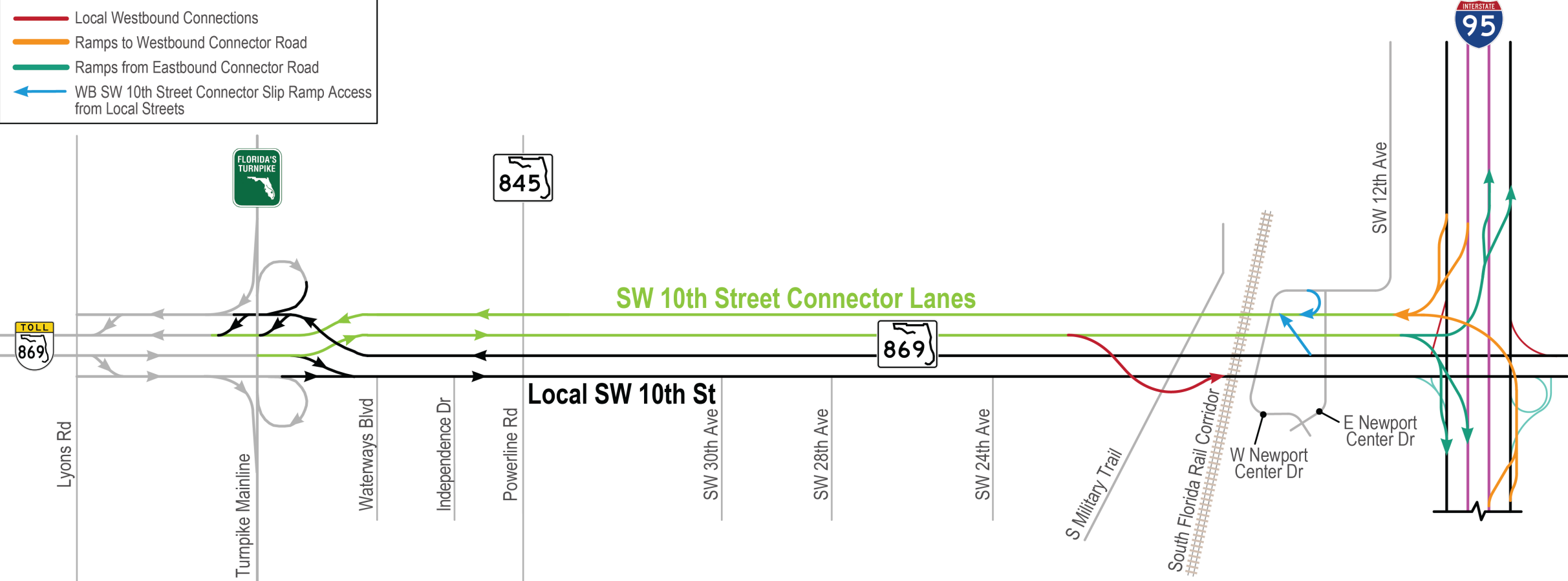


SW 10th Street Connector Project (436964-2 and 439891-1)

Legend

- Connector Lanes
- Local / General Use Lanes
- I-95 Managed Lanes
- Local Eastbound Connections
- Local Westbound Connections
- Ramps to Westbound Connector Road
- Ramps from Eastbound Connector Road
- WB SW 10th Street Connector Slip Ramp Access from Local Streets

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N.T.S.



A safer, more connected South Florida region.



- Noise barrier walls
- Aesthetic enhancements for retaining walls, noise barrier walls, bridge structures
- 12'-wide shared-use path in and around improved and landscaped green space

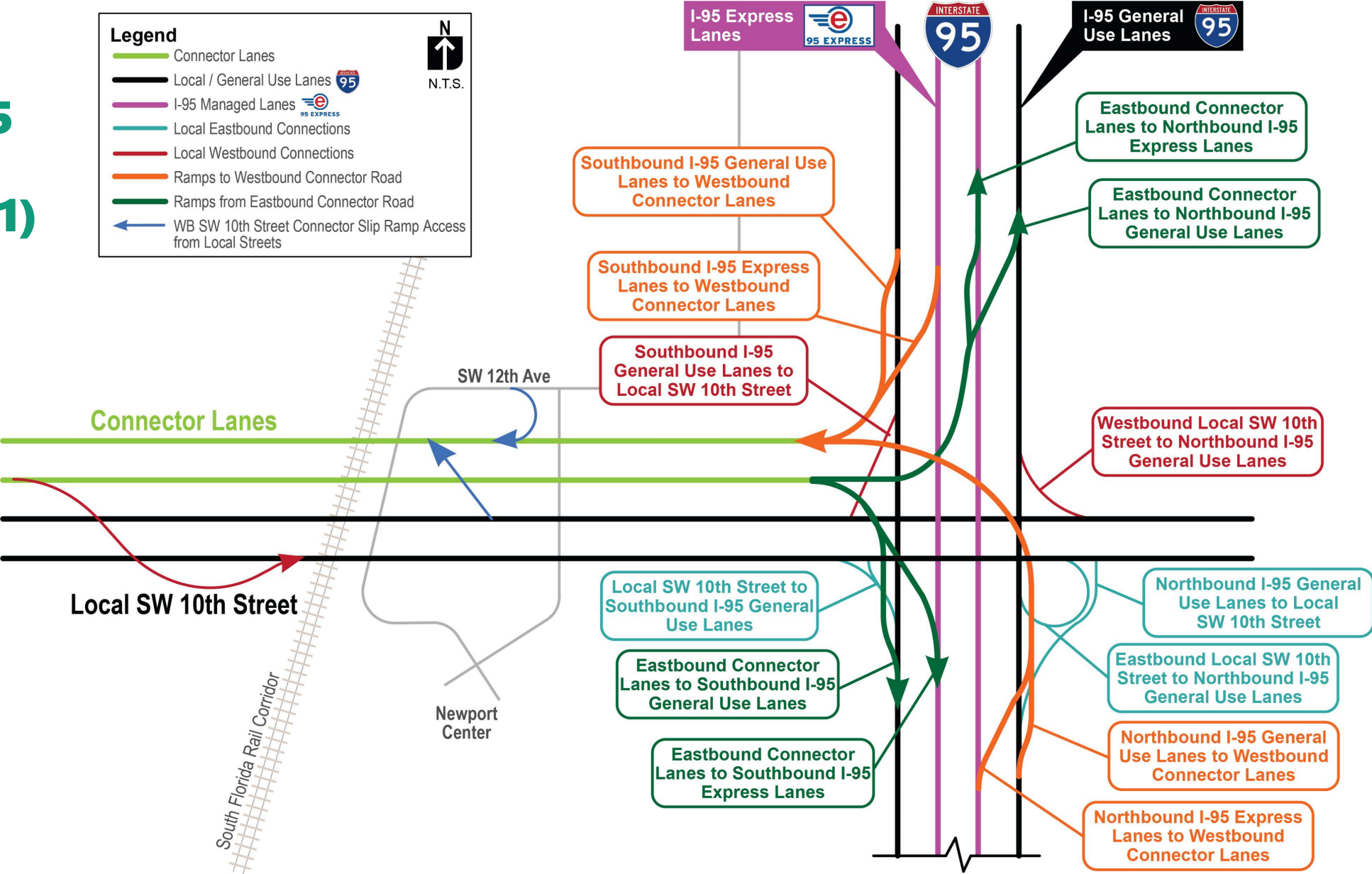
PROJECT OVERVIEW VIDEO LINK



Click on logos above to view the video.

Detailed Technical Overview (focus on I-95 / SW 10th Street Interchange)

SW 10th Street Connector / I-95 Interchange (436964-2-52-01)



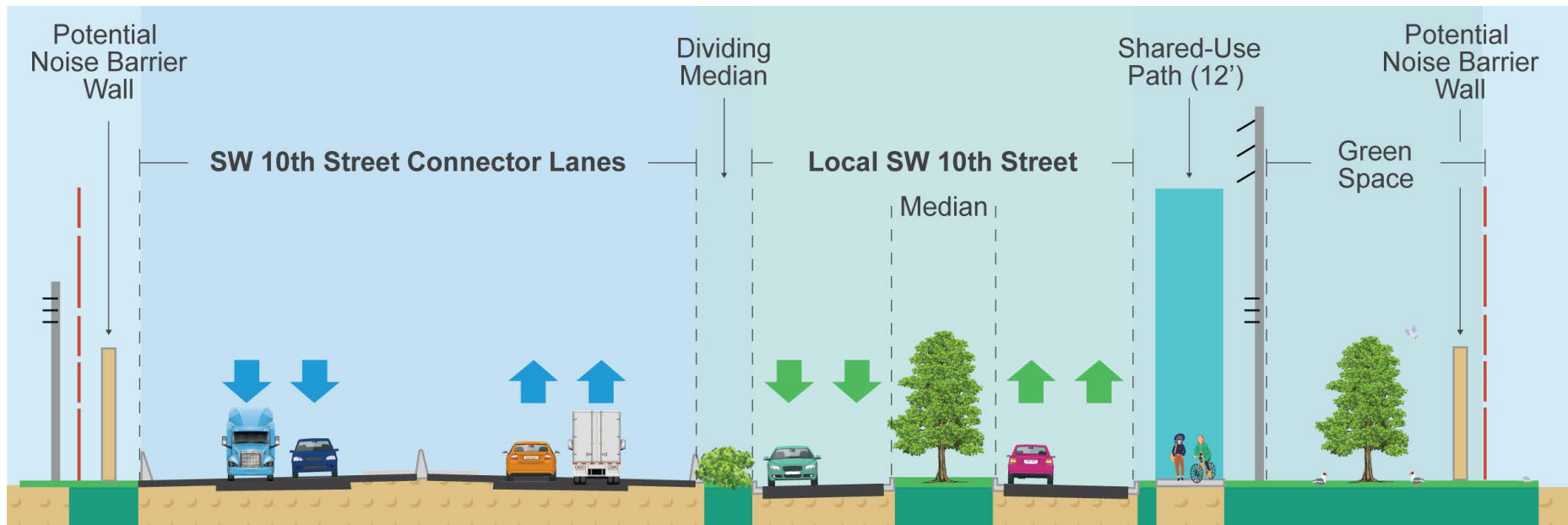
SW 10th Street Connector - Roadway

1 SW 10th Street Connector Lanes

- Regional Connection
- Higher Speed
 - (60 mph)
- Limited Access (No Tolls)
- Trucks Allowed

2 Local SW 10th Street

- Access for all Businesses and Residential Communities
- Lower Speed
 - (35 mph)
- Shared Use Path for Bicyclists and Pedestrians



SW 10th Street Connector / I-95 Interchange: Roadway

- Addition of a second NB and SB I-95 Express Lane between within project limits, completing Phase 3
- Military Trail bike lanes / sidewalk
- Newport Center and SW 12th Avenue rebuild
- Minor improvements to other cross-streets



Trees Shown At Maturity

Bridges and Structures



- New Bridges
 - 13 Steel (approx. 25,000 linear ft., 925,000 sq. ft.)
 - 2 Concrete Girder
- Bridge Replacements
 - 6 Concrete Girder
- Overall Bridge length / area (approx.)
 - Box Girder 18,900 linear ft., 756,100 sq. ft.
 - Steel Plate 5,730 linear ft., 212,000 sq. ft.
 - Florida I-Beam 5,500 linear ft., 335,000 sq. ft.

Bridges and Structures



- Retaining Walls (approx. 556,600 sq. ft.)
- Noise Barrier Walls
 - Ground Mounted 99,300 sq. ft.
 - Shoulder Mounted 6,100 linear ft.
- Extensive OH Sign and DMS Structures
 - 21-100 ft. OH sign - 23
 - 101 – 200 ft. OH sign - 14
 - DMS Structures (including Toll Amount/Lane Status) - 36

Structures Aesthetics

GRAPHIC ELEMENTS

It is critical that the SW 10th Street Connector showcase uniquely South Florida elements that are inspired by specific community details found within the corridor itself. Some of those elements, detailed below, will be found within the proposed corridor designs in this document.



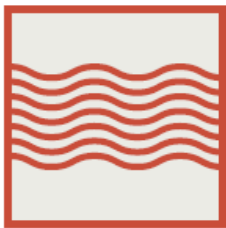
SAWGRASS TO SEAGRASS

Working inland from the breathtaking coastline of the Atlantic Ocean to the vast wetlands and marshes of western Broward.



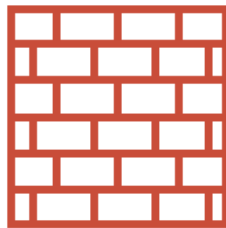
OCEAN WAVES

Inspired by the miles of beautiful Atlantic Ocean shoreline.



RIPPLE

Inspired by a combination of the Atlantic, and the aesthetics of the spanish tile adorned roofs of the SW 10th Street Corridor.



RUSTIC

Capturing the traditions, history and pioneer spirit of the Deerfield Beach community.

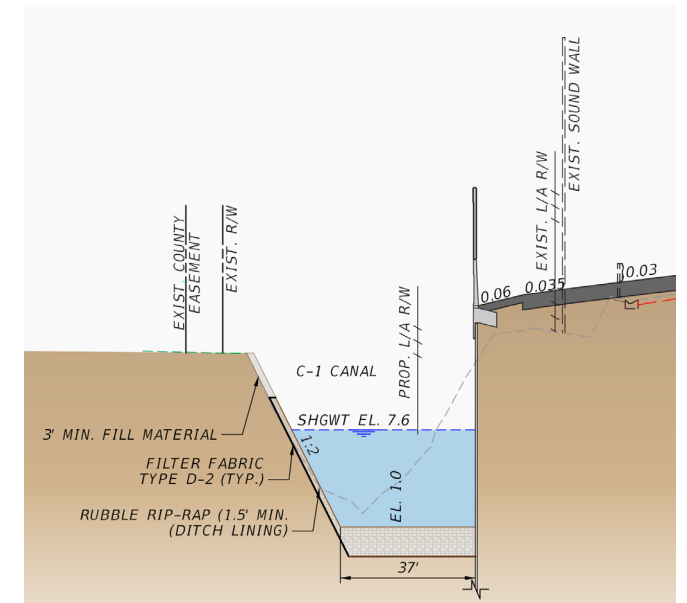
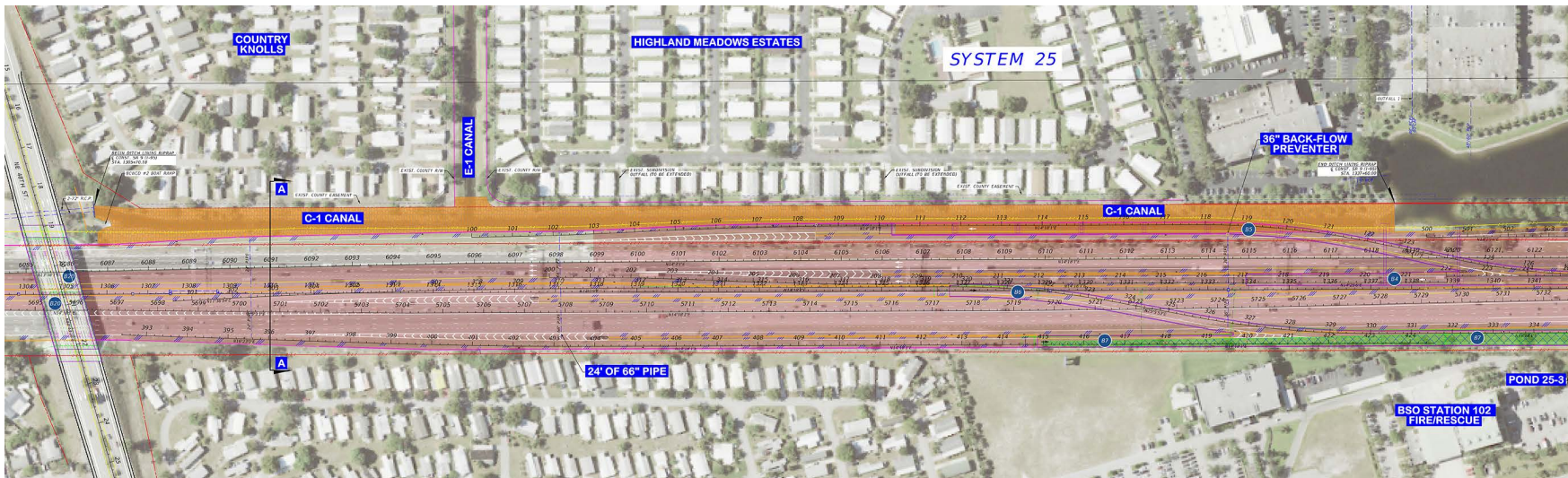
Prescriptive Design Elements

- Ground Mounted Noise Barrier Walls
- Retaining Walls
- Bridge Piers / Straddles
- Bridge Steel Girders

I-95 Drainage System

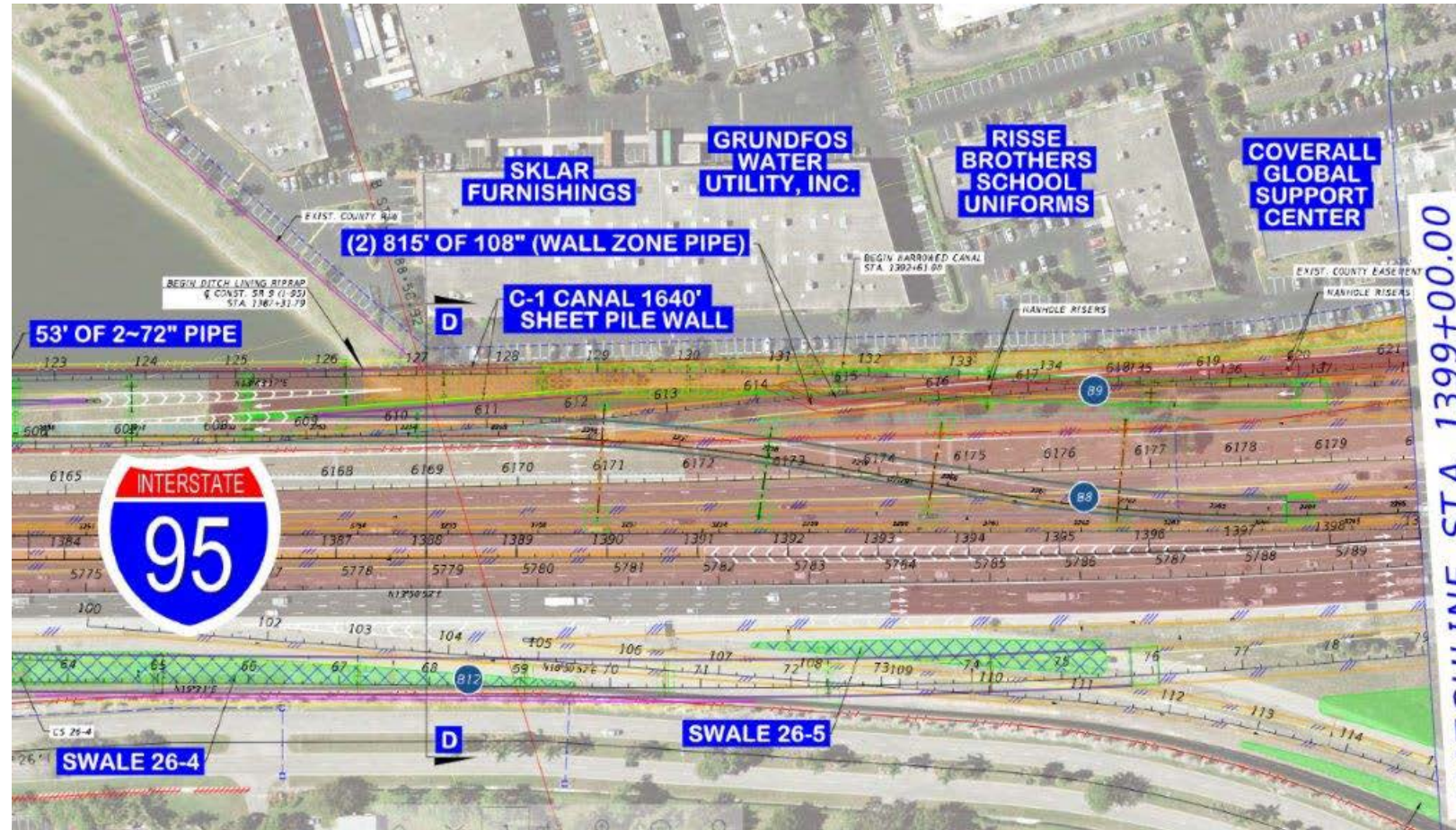
- **Stormwater Management Facilities**

- Linear Dry Ponds (swales)
- Dry and / or Wet Detention / Retention Ponds
- New or Modified Control Structures and Outfalls
- Accommodate Landscape Opportunity Areas for Post-Construction Stand-Alone Landscape Project(s)



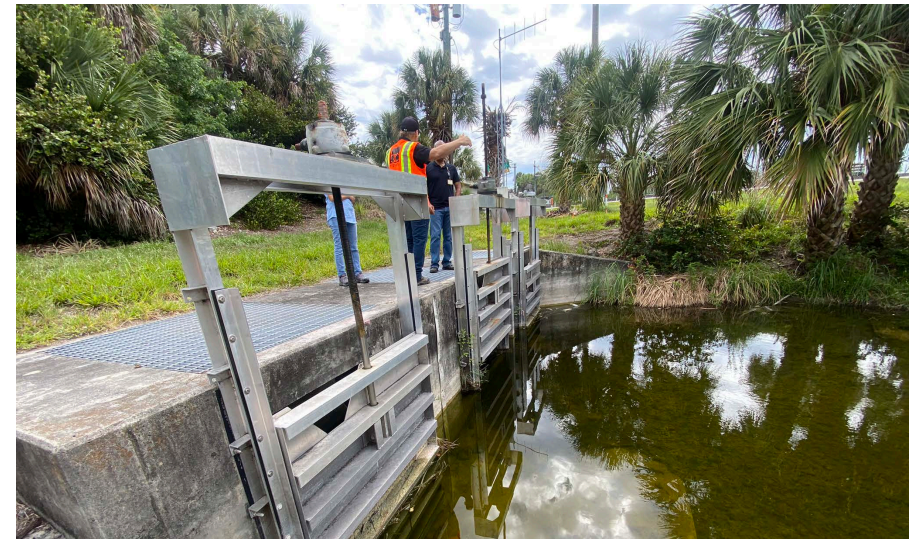
I-95 Drainage System

- 48" Pipe – 1,700+ linear ft. (Hillsboro Boulevard)
 - Steel (Jack & Bore) and Storm Drain
- RCP Culvert Extensions (I-95)
 - 42" – 85 linear ft.
 - 66" – 250 linear ft.
 - 72" – 150 linear ft.
- 108" wall zone pipes – 1,630 linear ft. (north of triangle Lake)

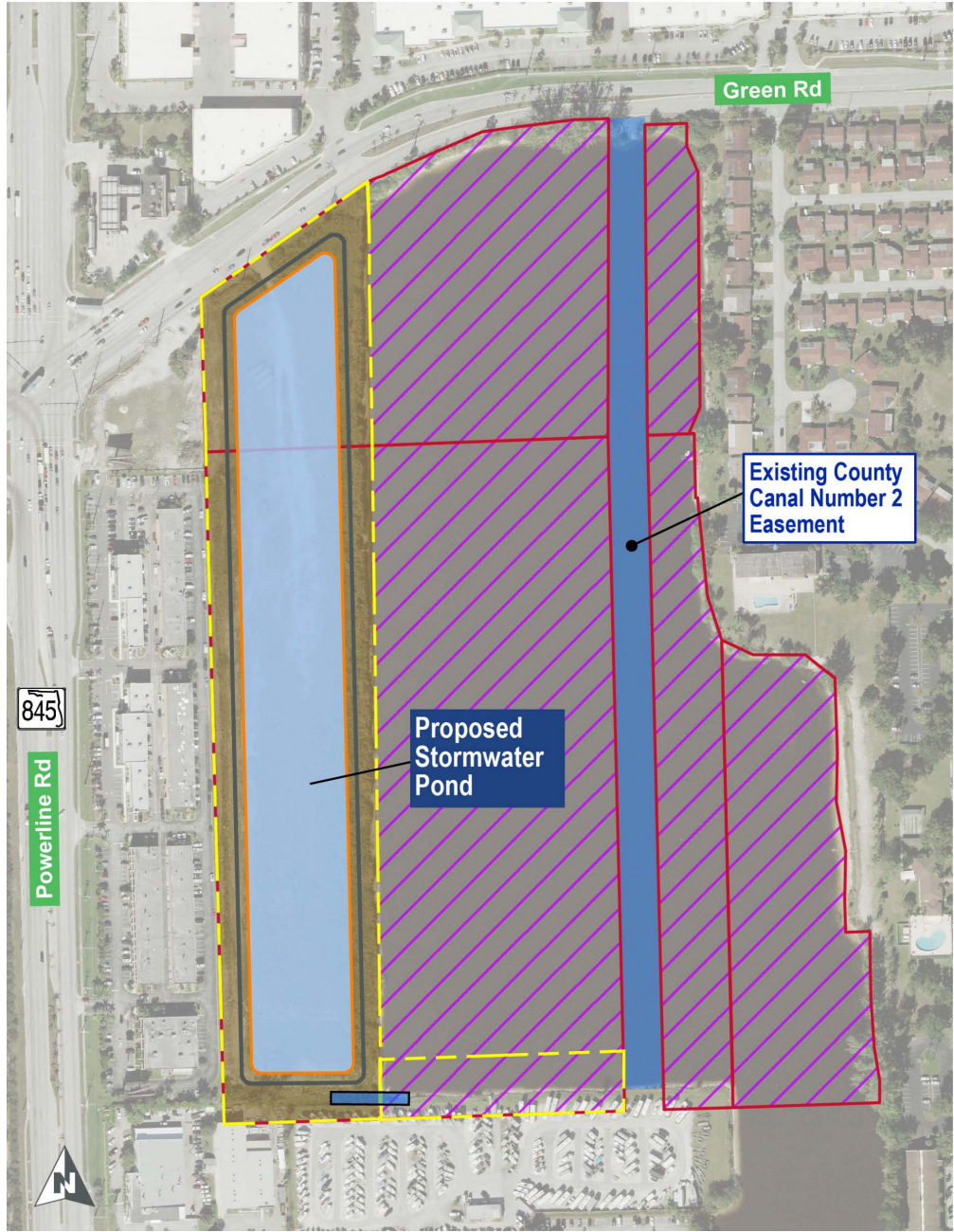
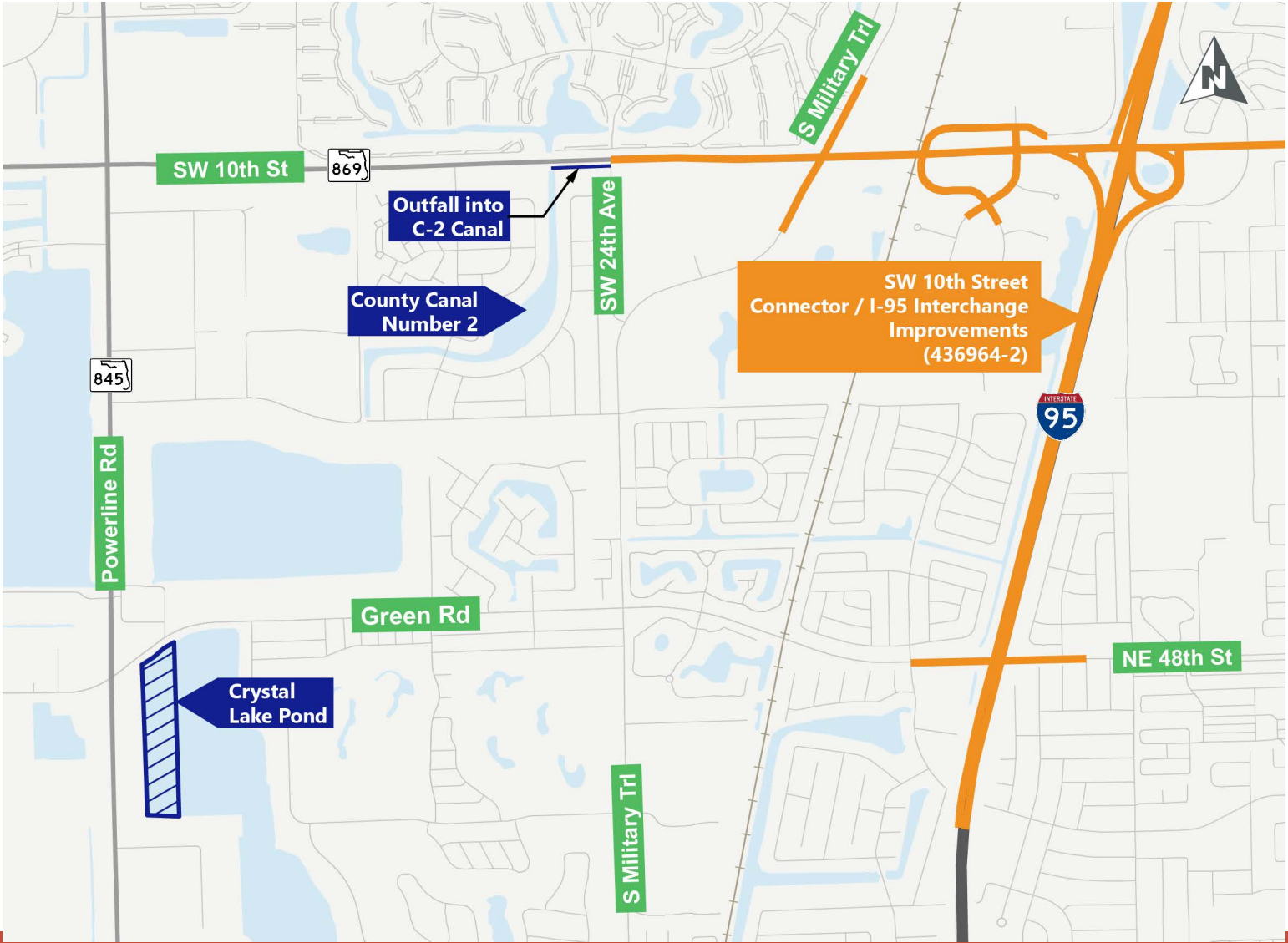


Other I-95 (BCWCD Canal 1) Basin Stormwater Management Features

- Proposed control structures – 11
- Covered C-1 Canal with sheet pile – 300 ft. (south of SW 10th Street)
- C-1 Canal sheet pile wall – 1,640 ft. (north of Triangle Lake)
- 16 dry swales – 15.35 acres (at bottom)
- 6 wet ponds – 24.87 acres (at SHWT)
- New S-2 and S-3 control structures
- Back-flow preventers – 36" and 72"



Crystal Lake Pond Site (County Canal 2 Basin)



Environmental Permits

- **BCWCD Canal 1 (east of SFRC):**

- SFWMD Conceptual ERP submittal August 2022
- FDEP 404 Permit submittal August 2022
- SW 12th Ave and Newport Center Conceptual
 - ERPs under development. City of D.B. as co-permittee
 - Contractor to obtain County Surface Water Management Licenses

- **BCWCD Canal 2 (west of SFRC):**

- SFWMD Conceptual ERP issued February 11, 2022
- FDEP 404 permit issued April 1, 2022
- Contractor to obtain Crystal Lake Broward County Surface Water Management License

Utility Relocation Master Plan

- **Utility Relocation Master Plan for City of Deerfield Beach Utilities (to be performed as Utility Work by Highway Contractor)**

- Approx. 3,000' 12" Force Main
- Approx. 3,500' 20" Force Main
- Approx. 9,000' 16" Potable Water Main
- Approx. 2,000' 16" Raw Water Main
- Approx. 2,000' 24" Raw Water Main
- Approx. 8,000' 12" Reclaimed Water
- Miscellaneous additional minor segments of Utility Relocations

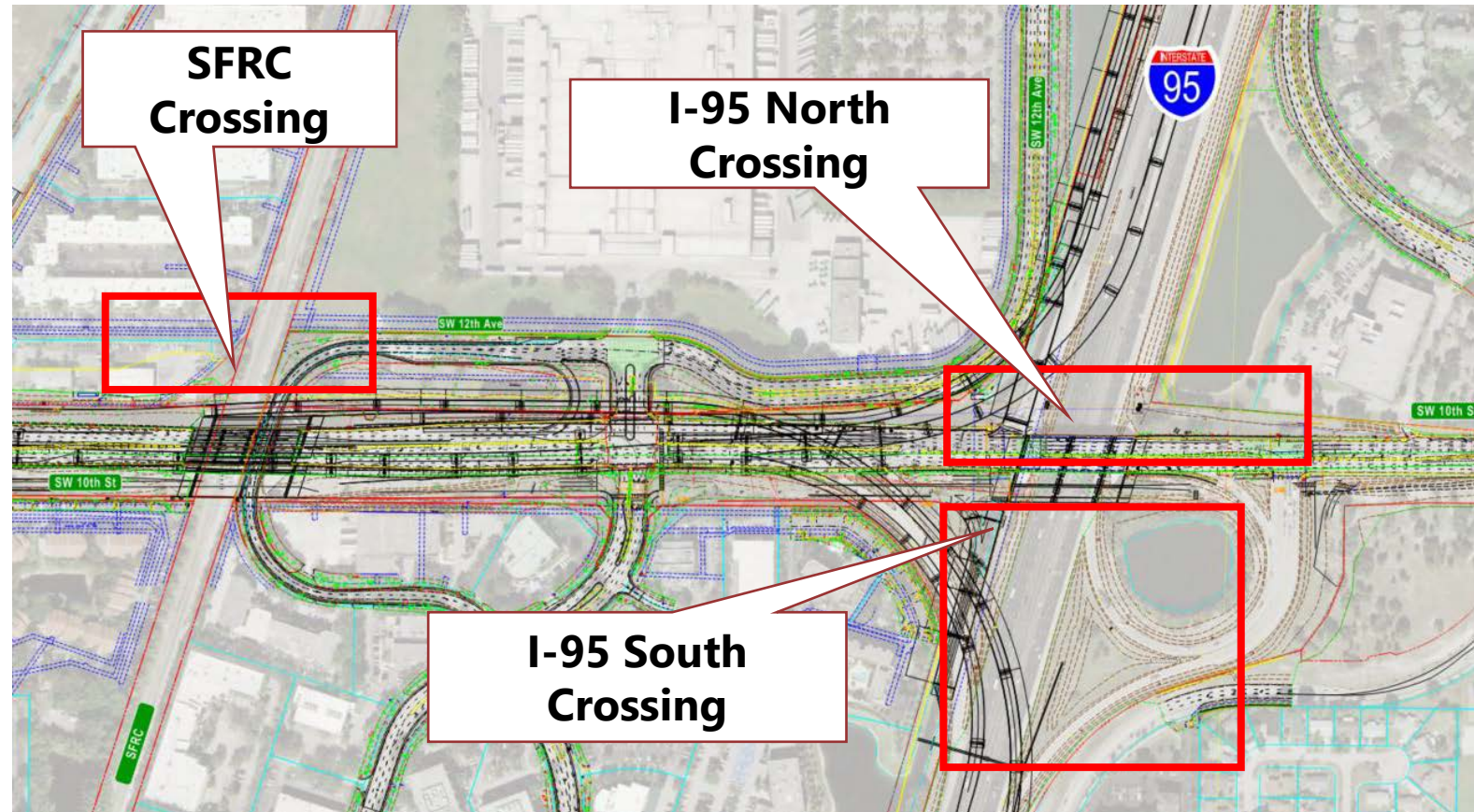
Utility Relocation Master Plan

- **Utility Relocation for additional Utilities (to be performed as Utility Work by Highway Contractor)**
 - Approx. 7,150' 2"-12" FPL PVC conduit
 - Approx. 2,000' 32" - 42" FPL Steel casing
 - Approx. 8,500' 2"-24" AT&T PVC conduit
 - Approx. 2,400' 16"-42" AT&T Steel casing
 - Approx. 4,000' 2" Sprint PVC conduit
 - Miscellaneous additional minor segments of Utility Relocations

Utility Master Plan

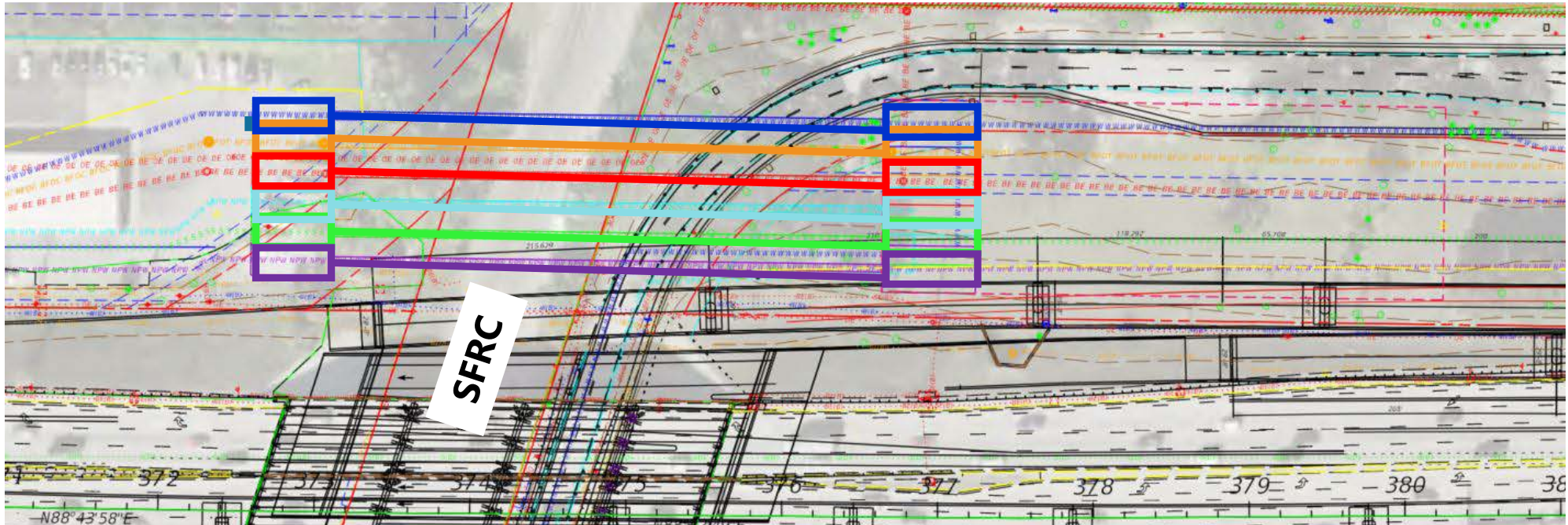
- **Trenchless Utility Casing Construction**

- **Railroad:** Six (6) separate installations, each approx. 300 ft. in length
- **I-95:** Two (2) separate installations – one approx. 750 ft. in length, and another approx. 400 ft. in length



Utility Master Plan

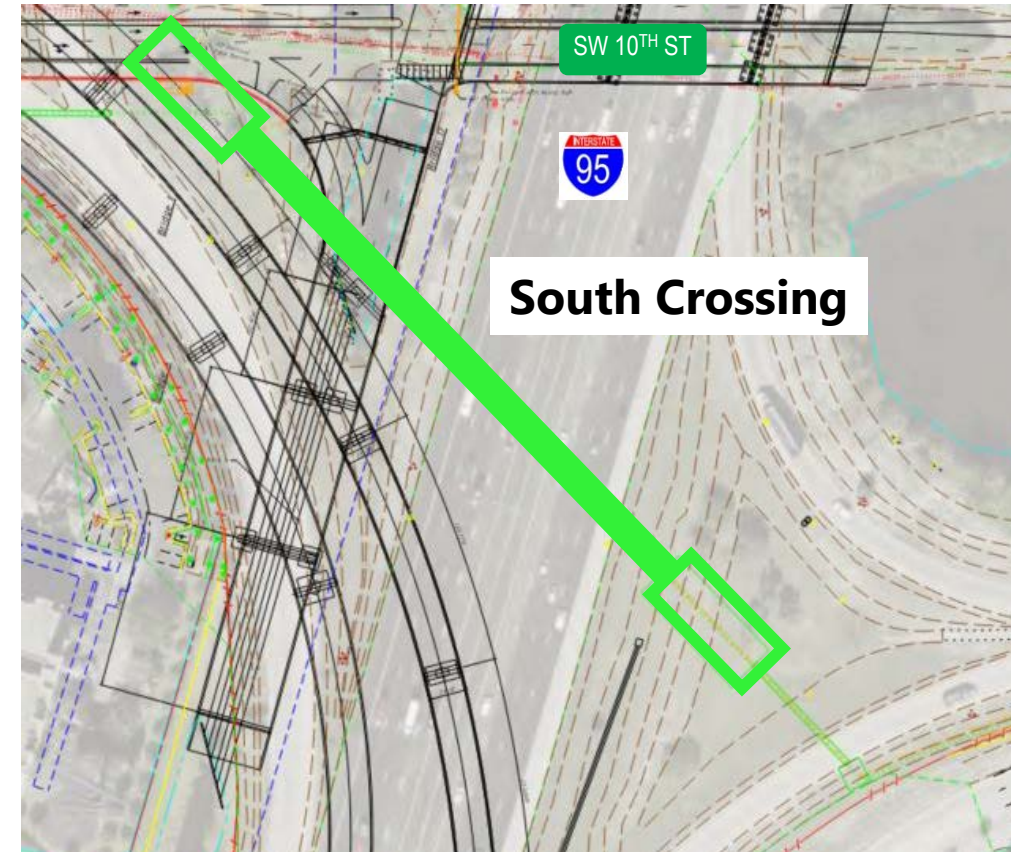
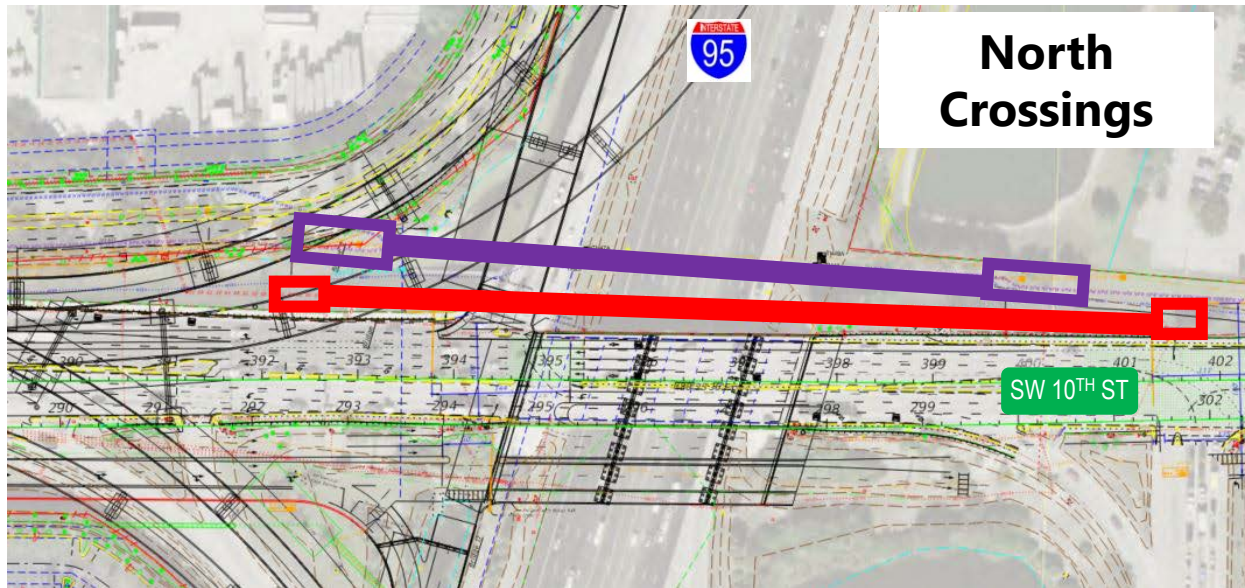
- **Trenchless Utility Casing Construction – SFRC Crossing (Track Switches)**
 - Six (6) separate installations each approximately 300 ft. in length
 - SFRTA restrictions on methodology and participation on risk mitigation plan



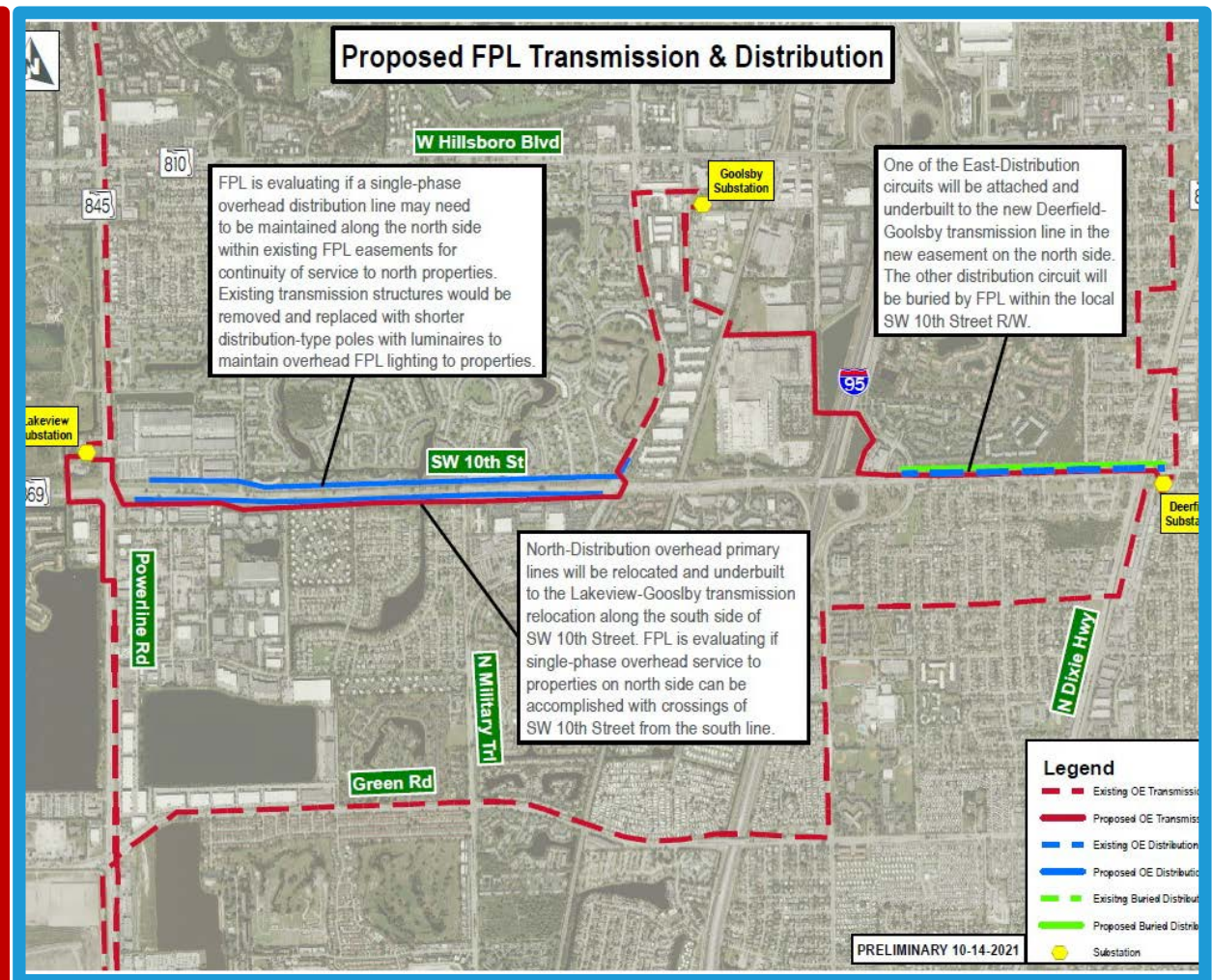
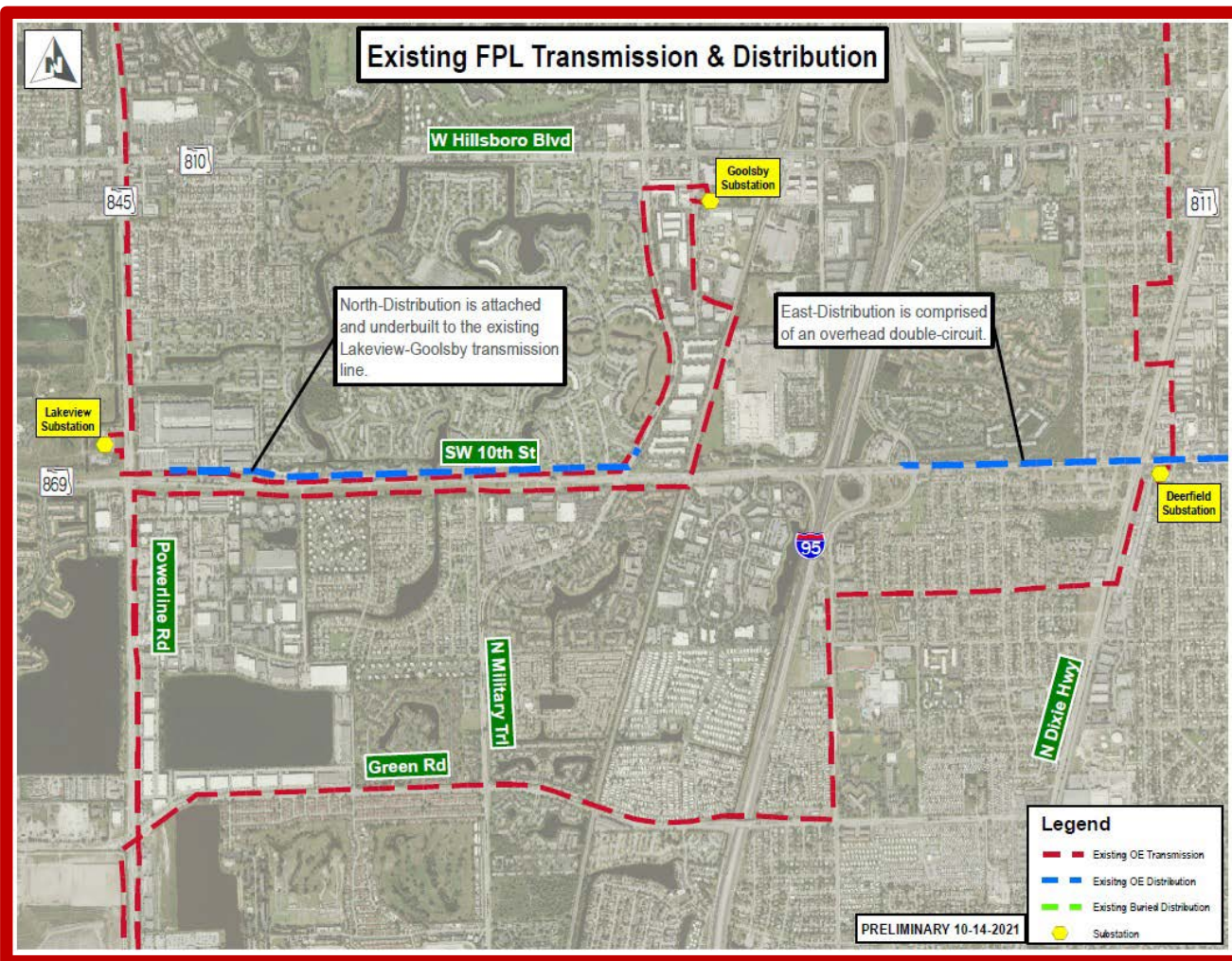
Utility Master Plan

- **Trenchless Utility Casing Construction – I-95**

- Two (2) separate installations – one approx. 750 ft. in length, and another approx. 400 ft. in length



FPL Transmission & Distribution Line Changes (pre-construction)



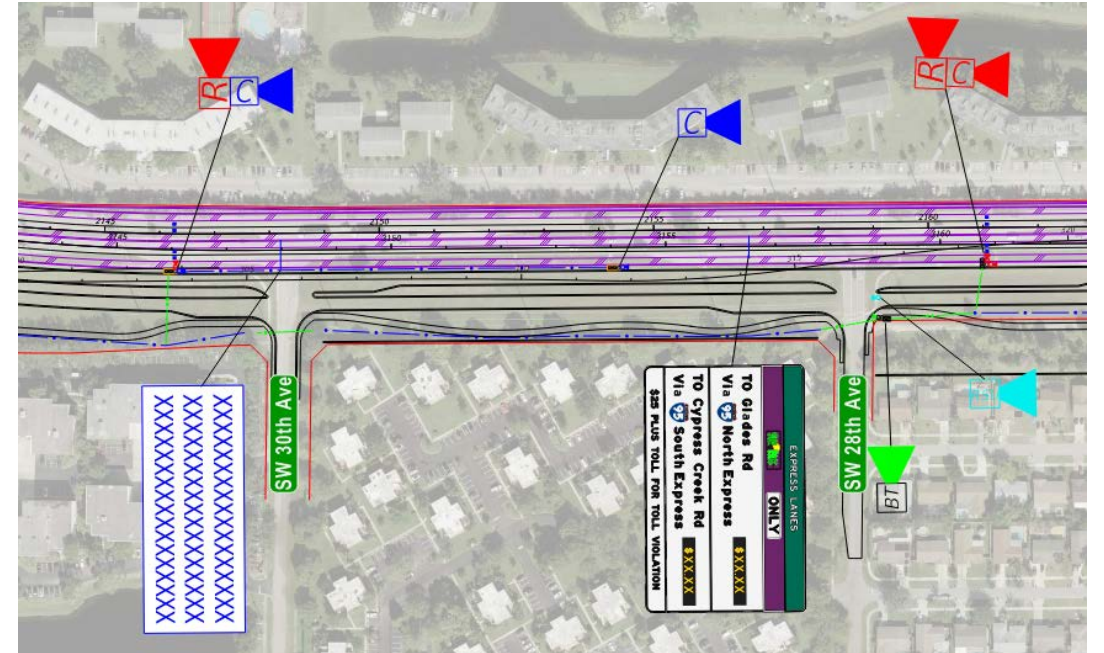
ITS

- ITS Maintenance of Communications (MOC) Plan
- Maintain and Upgrade Existing ITS Devices Throughout I-95 and SW 10th Street Connector Project Limits
- DMS Subsystem, Including Toll Amount and Lane Status DMS
 - 61 Total DMS Panels
- CCTV Camera Subsystem
 - 36 Cameras



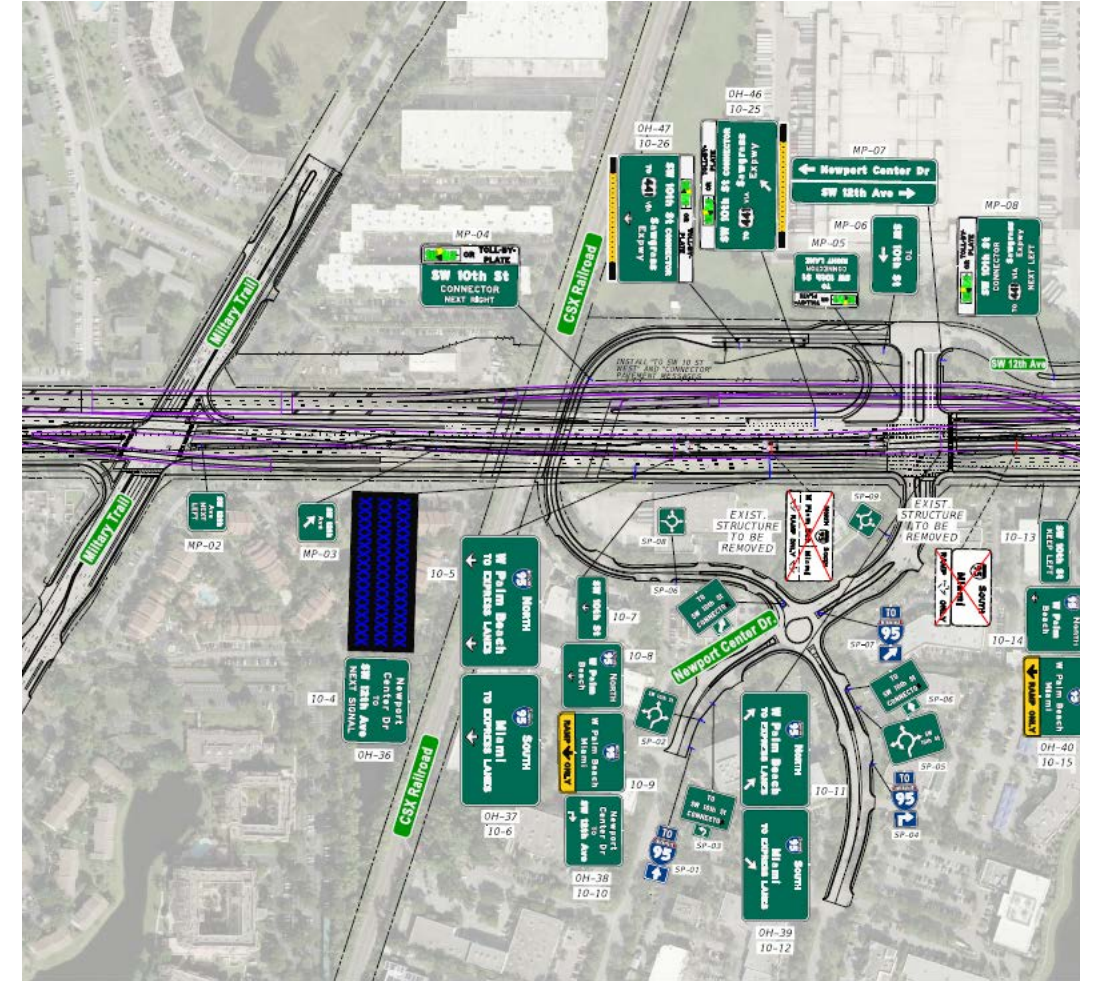
ITS

- MVDS Subsystem (Limited Access facilities)
 - MVDS Detectors – 41
 - Bluetooth Detectors – 20
- Power Distribution Subsystem (with generator backups)
- Roadside Units (RSU) – 30 (all three facilities)
- Communications Hub (at Intch.)
- Fiber (SW 10th Street and I-95)
 - 144 SMFOC – approx. 6-miles



Signing Master Plan

- I-95
- I-95 Express
- SW 10th Street Local Lanes
- SW 10th Street Connector Lanes
- Newport Center Drive / SW 12th Avenue



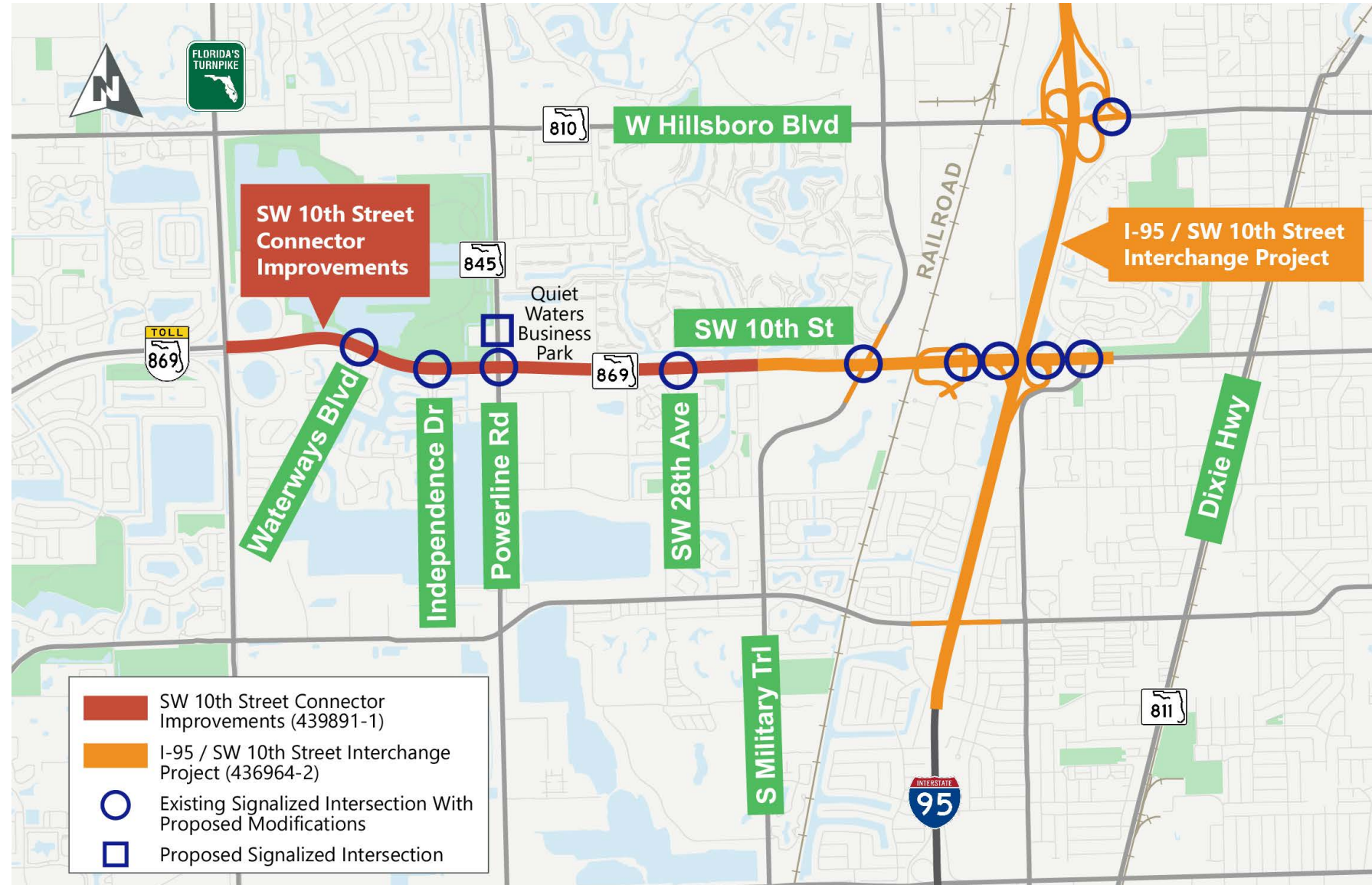
Signalization

439891-1 SW 10th Street Connector Project

- SW 10th Street / Waterways Boulevard
- SW 10th Street / Independence Drive
- SW 10th Street / Powerline Road
- Powerline Road / Quiet Waters Business Park Entrance
- SW 10th Street / SW 28th Avenue

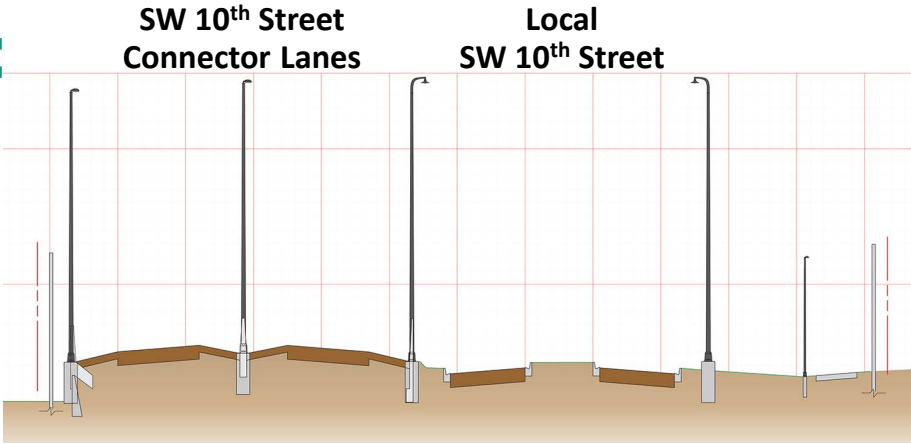
436964-2 I-95 / SW 10th Street Interchange Project

- SW 10th Street / Military Trail
- SW 10th Street / Newport Center Drive
- SW 10th Street / SB Ramps
- SW 10th Street / NB Ramps
- SW 10th Street / Natura Drive
- Hillsboro Boulevard / NB Ramp



Lighting – SW 10th Street

- SW 10th Street (connector lanes and local roadway) – consistent city fixtures of decorative poles from Hillsboro Boulevard
- Approx. 150 conventional lighting poles along SW 10th Street Connector Lanes and 160 decorative lighting poles along SW 10th Street Local Roadway

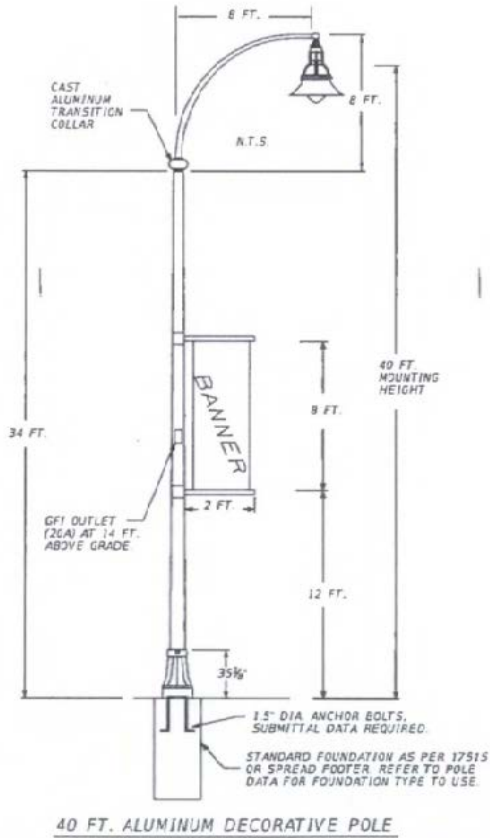


Connector pole facing south
Cross section view looking east

Table 231.2.3 Correlated Color Temperature (CCT)

Design Speed	Context	CCT
Arterials and Collectors		
≤ 35 mph	All	2700K ¹ or 3000K
≤ 50mph	All	3000K
≥ 55mph	C1 & C2	3000K
≥ 55mph	C3 ²	4000K
Limited Access Facilities		
All	All	3000K
Notes: 1. Consider use of 2700K per <i>FDM 231.2</i> 2. Higher number context classifications may apply		

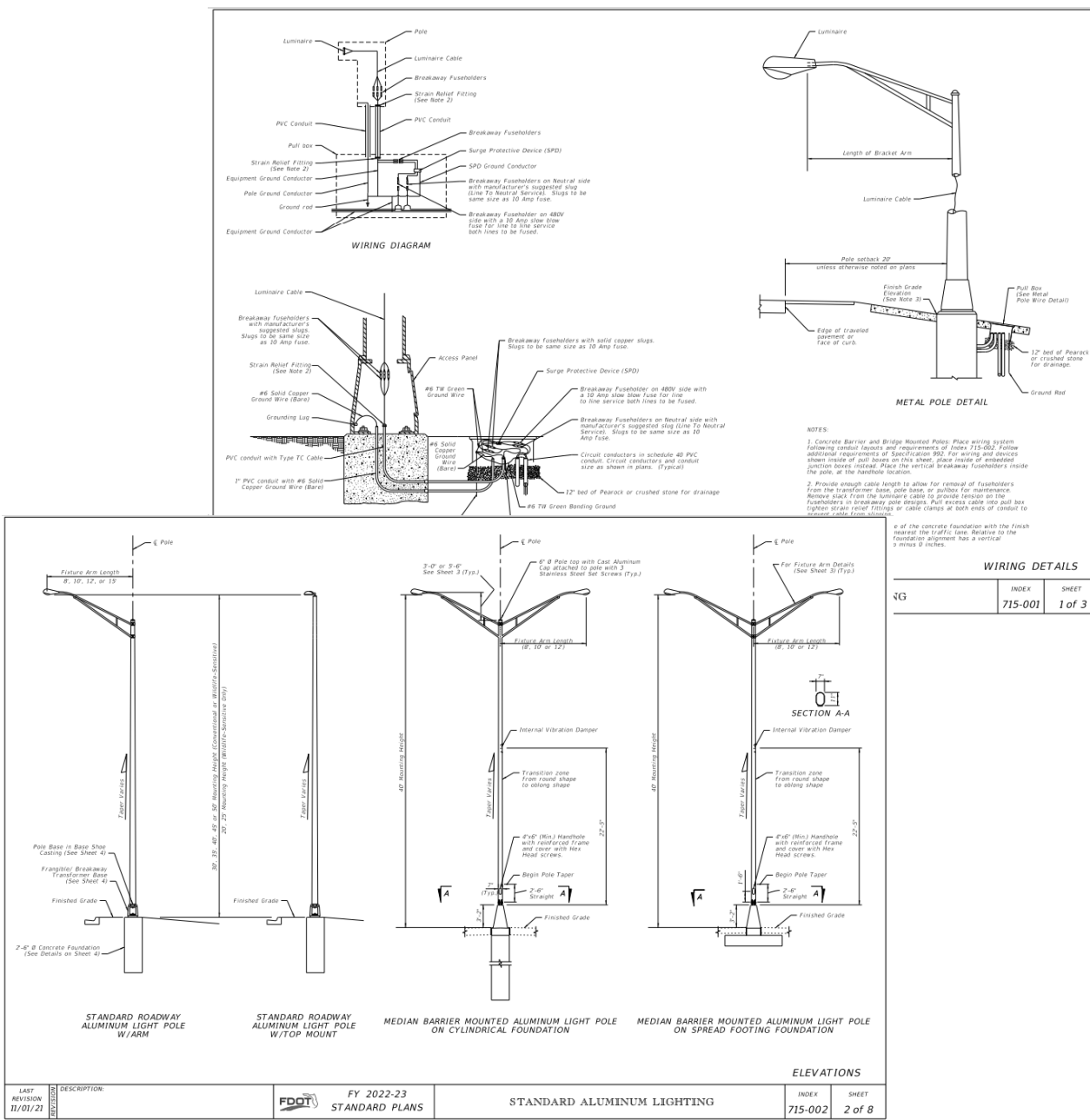
Hillsboro Blvd Decorative Lighting Details



CCT Requirement from Design Bulletin 22-02

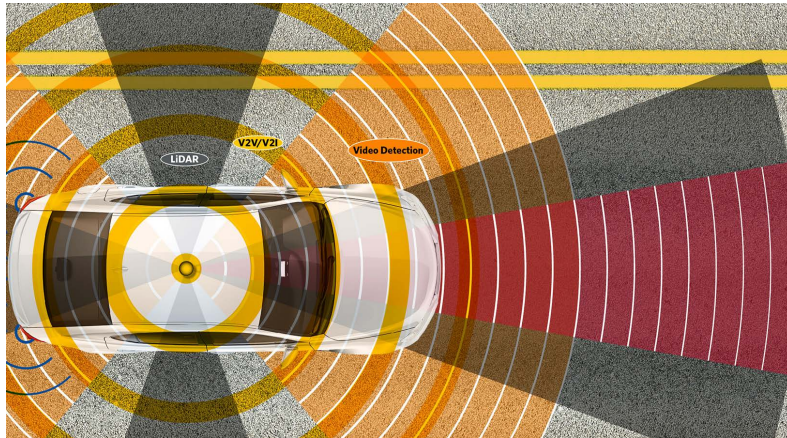
Lighting – I-95

- FDOT Standard LED fixtures on General Purpose (GP), Express Lanes (EL), and ramps / flyovers along I-95
- Approx. 250 conventional lighting poles
- Compatible with I-95 Express Phase 3 lighting



I-95 Interchange Temporary Smart Work Zone Systems

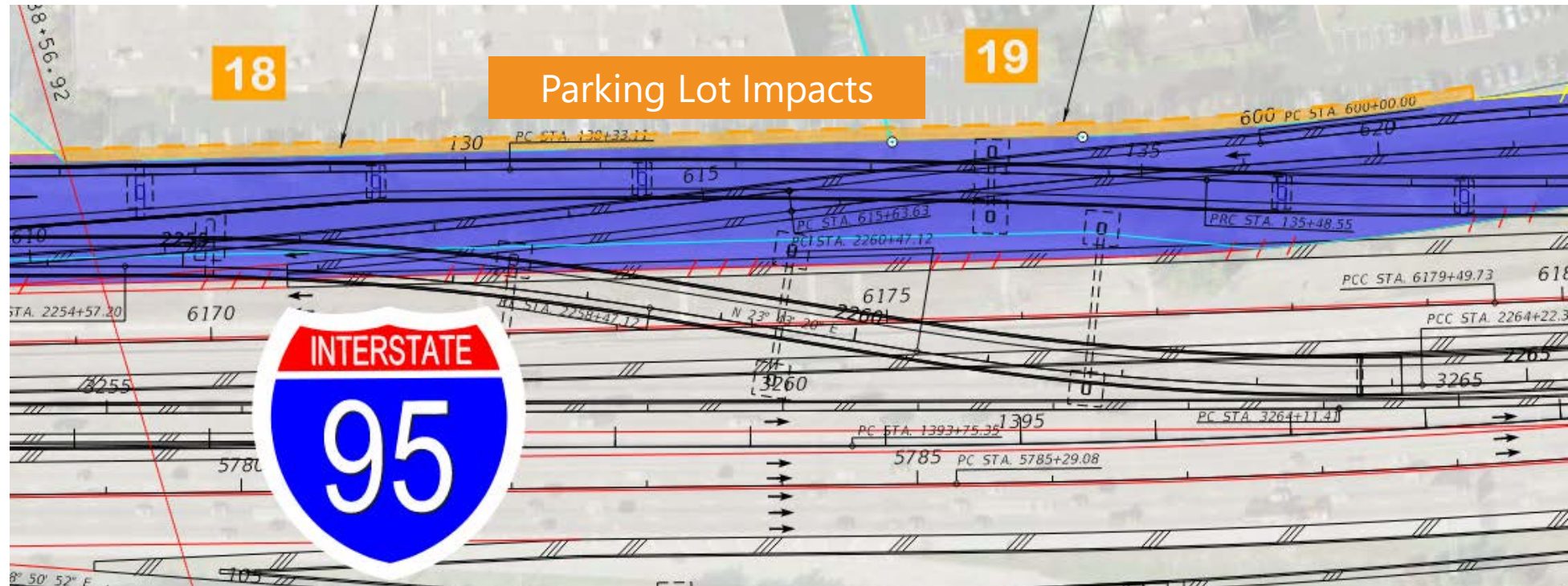
- Queue Warning System
- Travel Time Information System
- Dynamic Work Zone Boundary System



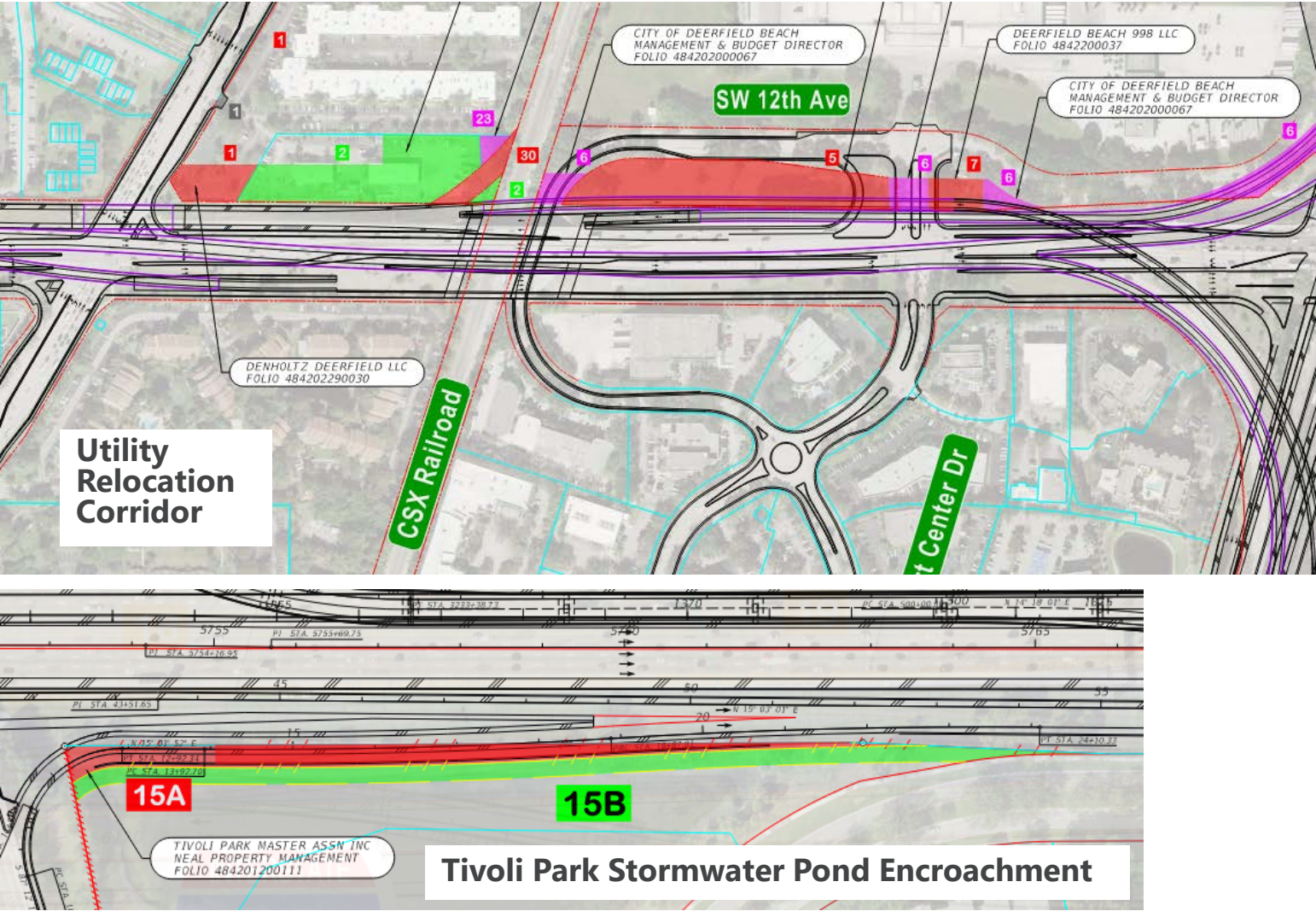
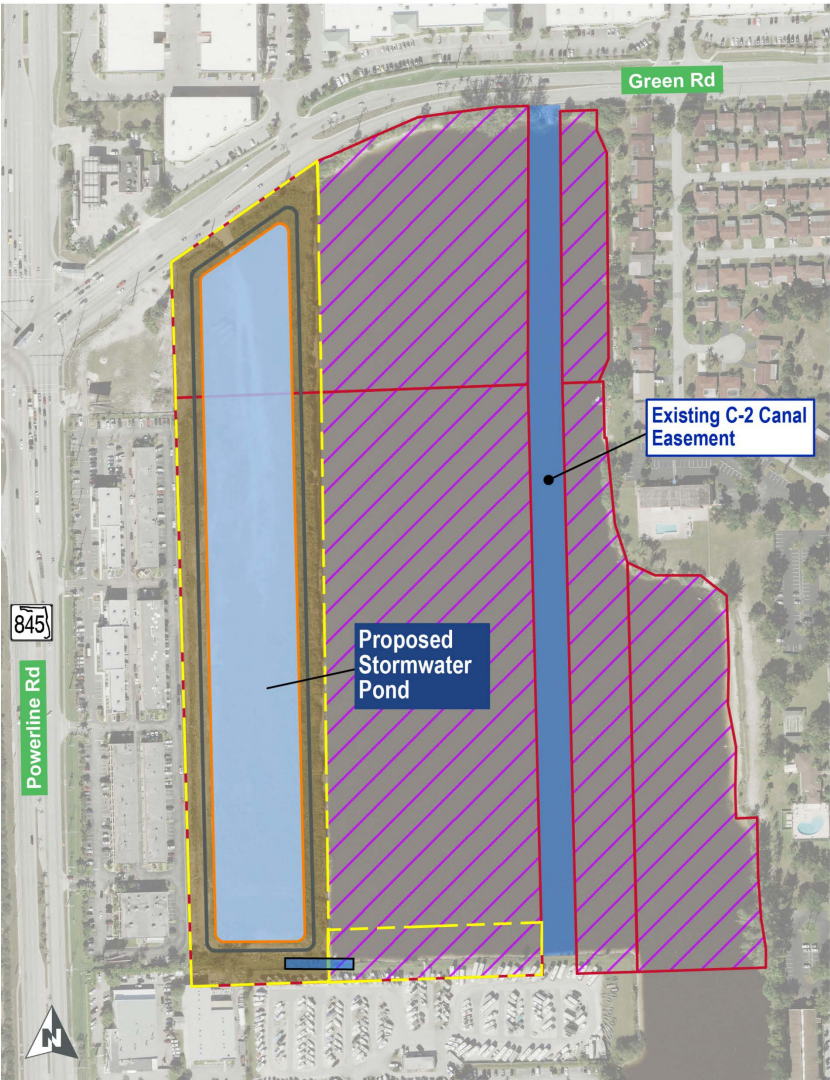
Right-of-Way Requirements

- Department Intent to Avoid / Minimize Construction Activities Outside the Existing Right of Way
 - Four (4) permanent parcel impacts
 - Six (6) temporary construction easements

- AF4
Quadrant
LLC, TCE's



Right-of-Way Requirements (436964-2)



Public Outreach

- **Recent and Ongoing Outreach Efforts:**
 - January 2022 Project Information Session
 - Information Posted on SW 10th Street Connector Website
 - Project One-on-One Contractor Meetings – August 9, 2022
 - Elected Official Briefings – Spring to Fall 2022
 - Structure Aesthetics Charette – Fall 2022
 - Public Meeting (combined with the SW 10th Street Connector Projects) – Fall 2022
- **DB Firm Responsible for Ongoing Support Role to FDOT PIO for Key Deliverables:**
 - Community Awareness Plan
 - Public Meetings / Workshops
 - Technical Assistance
- **Refer to RFP Public Involvement Section for Additional Details**



Contract Bonus Program for Prioritized Construction

- Early Completion Incentive/Disincentive
- No Excuse Bonus
- Prioritization and cost allocation under development

Next Steps for Project Implementation



DB Procurement Process

- Adjusted Score Design-Build
- Standard FDOT Two-Phase DB Approach
- Phase I – Expanded Letter of Interest
- Phase II – Technical Proposal
 - Alternative Technical Concept (ATC) Meetings
 - Risk Matrix Review Meetings
 - Page Turn Meeting
 - Question & Answer Session
- Bid Price Proposal
- Final Selection Formula (Adjusted Score)
 - Bid Price Proposal / Technical Score

Technical Review Committee (436964-2) – Subject to Change

- Deborah Ihsan
- July Jimenez
- Mark Moshier
- Anson Sonnett

FM# 436964-2 DB Procurement Schedule

Procurement Activity	Milestone Date
Planned Advertisement (with Draft RFP)	November 4, 2021
Advertisement	December 12, 2022
Expanded Letters of Interest Due	February 7, 2023
Shortlist Posting	February 15, 2023
Final RFP Provided to DB Firms	February 20, 2023
Technical Proposals Due	September 8, 2023
Bid Price Proposals Due	November 1, 2023
Anticipated Award Date	November 28, 2023
Anticipated Execution Date	December 13, 2023

FM# 436964-2 CEI Project Procurement Schedule

Procurement Activity	Milestone Date*
Advertisement	March 6, 2023
Advertisement Close	March 21, 2023
Longlist	April 5, 2023
Shortlist	April 10, 2023
Final Selection	May 15, 2023
Anticipated Execution Date	July 21, 2023

DBE SPECIALIZED DEVELOPMENT PROGRAM VIDEO LINK



**DBE Specialized
Development Program**
A focused approach to assisting prime
contractors



ARIEL
BUSINESS GROUP
Enterprise & Government Consulting

PRESENTED BY:

THOMAS HUGGINS III
FDOT SDP PROJECT DIRECTOR

TERRY WATSON
STATE DBE PROGRAM COORDINATOR

Click on logos above to view the video.

For more information before Advertisement:

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Ft. Lauderdale, Florida 33309

Phone: 954-777-4468

Toll Free: 866-336-8435, ext. 4468

Email: Vanita.Saini@dot.state.fl.us

Project Website: www.SW10Street.com

SW 10TH ST. CONNECTOR

FDOT DISTRICT 4

For more information after Advertisement:

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SW 10TH ST. CONNECTOR

FDOT DISTRICT 4



Questions?

SW 10TH ST. CONNECTOR

FDOT DISTRICT 4