

# **FDOT District Four Major Projects**

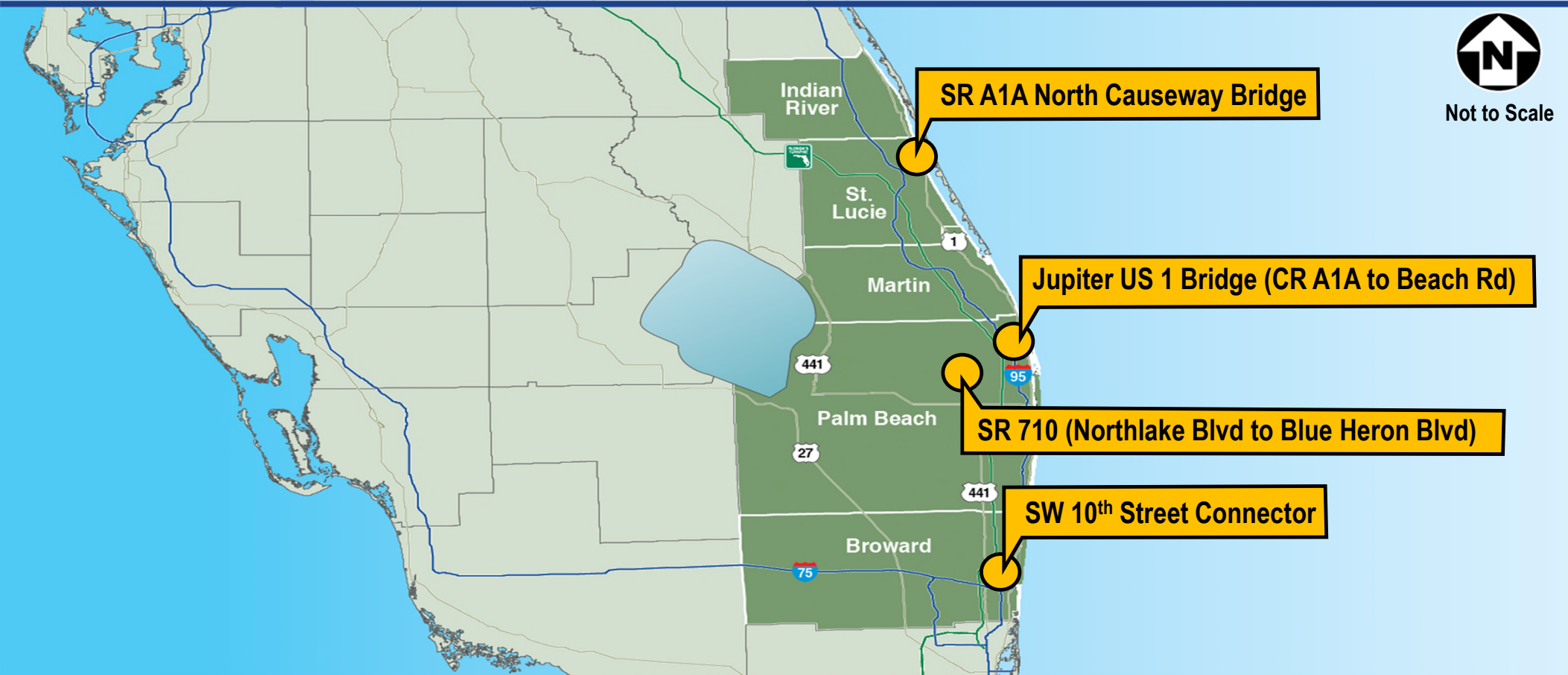
**Robert Bostian, PE  
District Consultant Project Management Engineer**

# **FDOT District Four Major Projects**

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- **US-1 Bascule Bridge Replacement, Jupiter Inlet**  
Palm Beach County – Bid Opening March 2021 – FM# 428400-2
- **SR-710 Beeline Hwy Reconstruction/Widening**  
Palm Beach County – Bid Opening July 2021 - FM# 419251-1
- **SR A1A North Causeway Bridge Replacement**  
St. Lucie County – Bid Opening Sept 2021 - FM# 429936-2
- **SW 10<sup>th</sup> Street & I-95 Direct Connector**  
Broward County – Bid Opening July 2022 – FM# 439891-1 & FM# 436964-2

# Project Locations



Project milestones reflected in the presentation are subject to change; they are based on current project schedules and funding.

# SR 5/US-1 Federal Highway Bridge

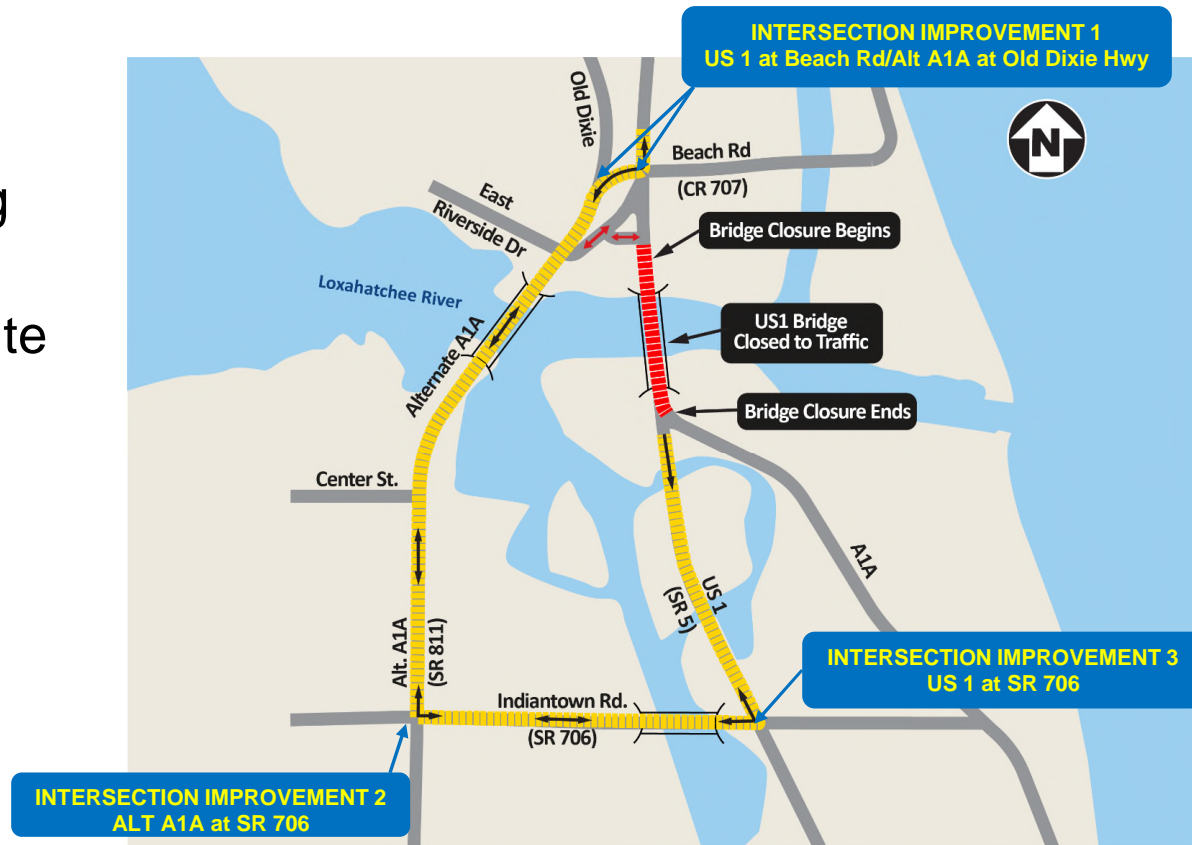
- Bridge Length – 915 ft
- Roadway Reconstruction – 2,470 ft
- Full closure with detour
- Intersection improvements and ITS along detour route
- Innovations included
  - ❑ Pre-detour work
  - ❑ Hybrid-phased construction – Commission half of new bridge during detour
  - ❑ Precast elements for bascule pier footing
  - ❑ Preassembly of bascule leaves
  - ❑ Simplified machinery and electrical installation

## Location Map

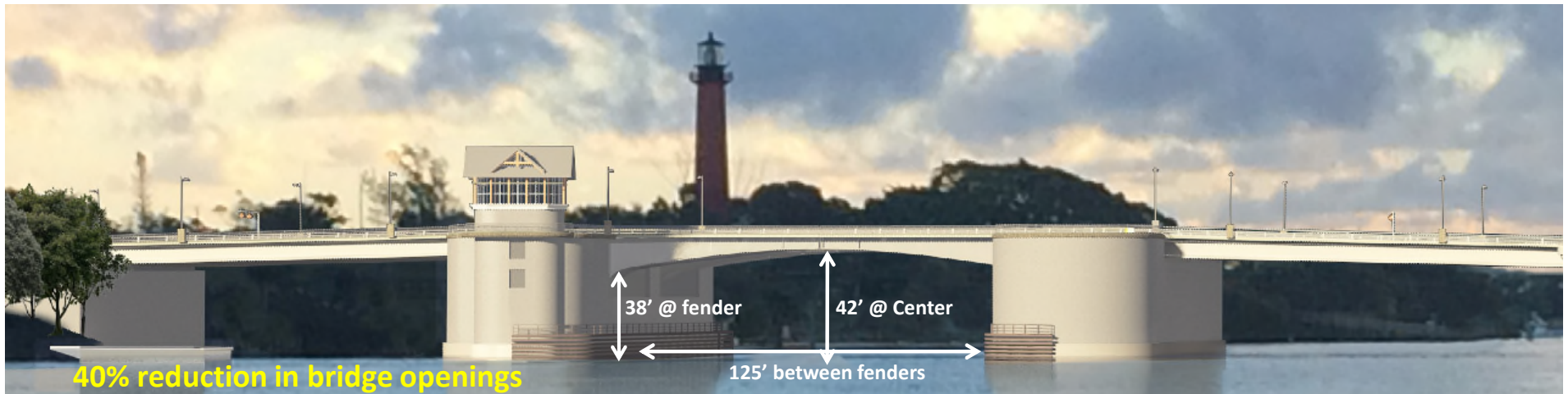


# SR 5/US-1 Federal Highway Bridge

- Intersection improvements along detour route
- Mitigate community impacts during detour
- New ITS features along detour route



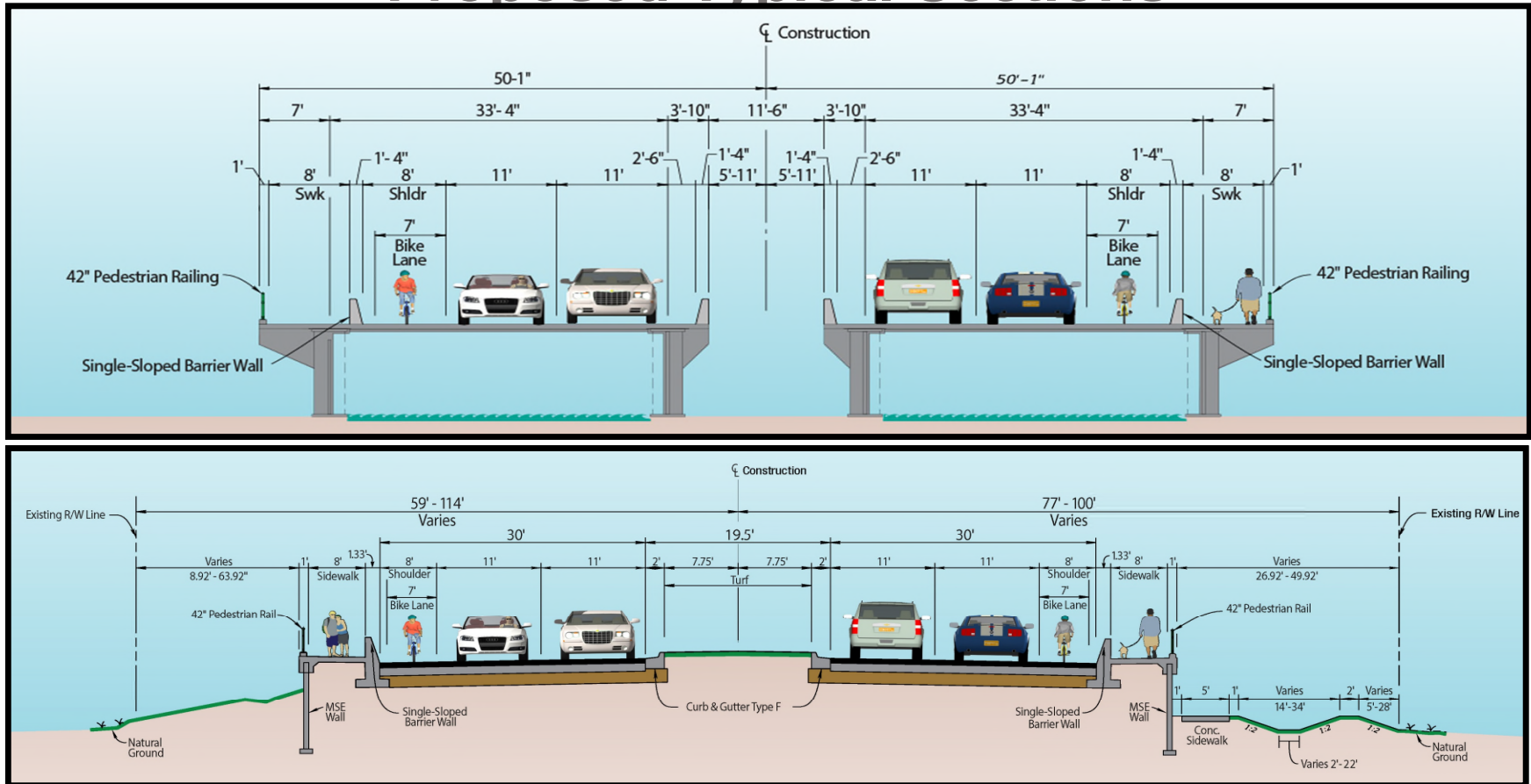
# SR 5/US-1 Federal Highway Bridge





# SR 5/US-1 Federal Highway Bridge

## Proposed Typical Sections



# SR 5/US-1 Federal Highway Bridge

## Twin Double Leaf Bascule Span





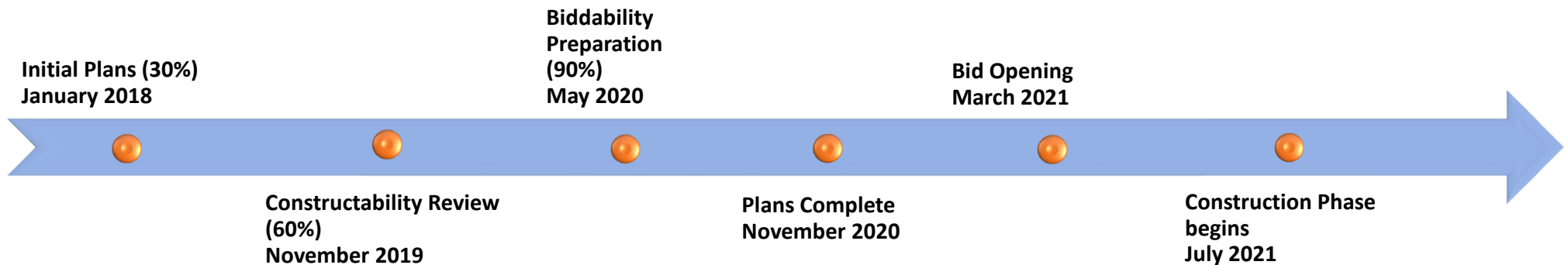
# SR 5/US-1 Federal Highway Bridge

## Twin Double Leaf Bascule Span



# SR 5/US-1 Federal Highway Bridge

## Project Status/Schedule

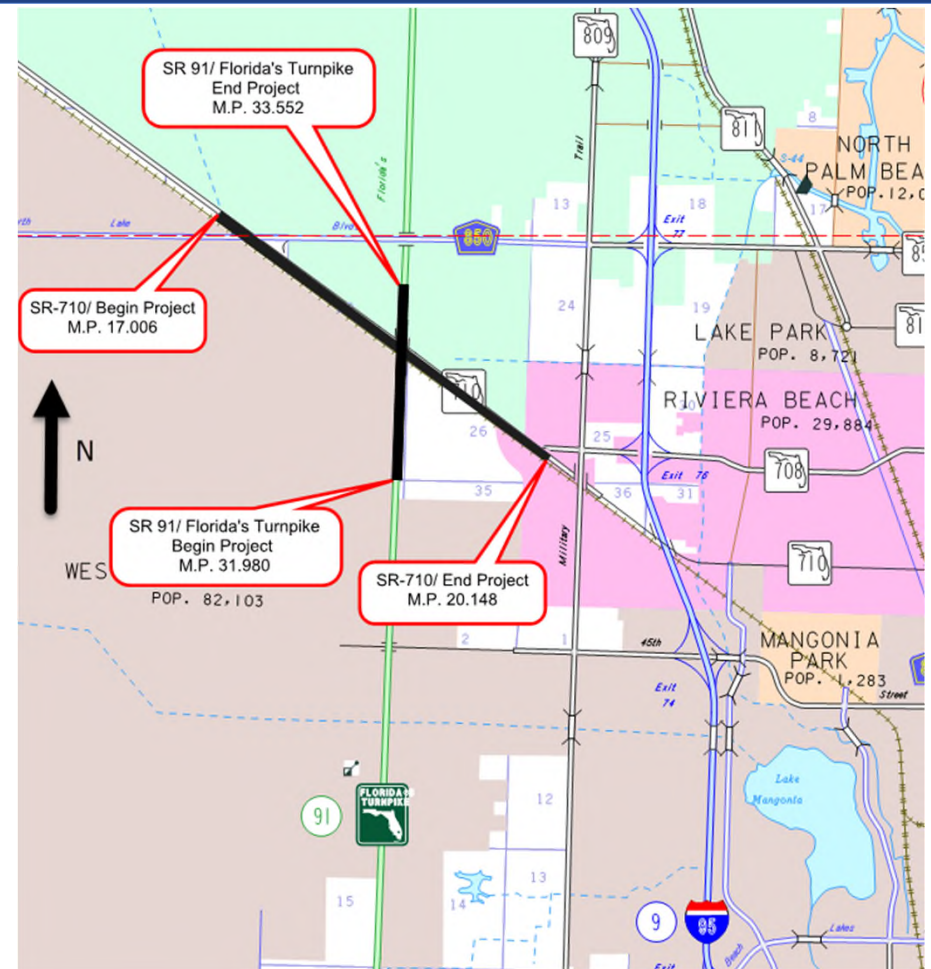


- Design-Bid-Build Project
- Current Estimate \$133 Million
- FDOT PM Bing Wang
- Project Website: <https://www.fdot.gov/projects/jupiterus1bridge/main>

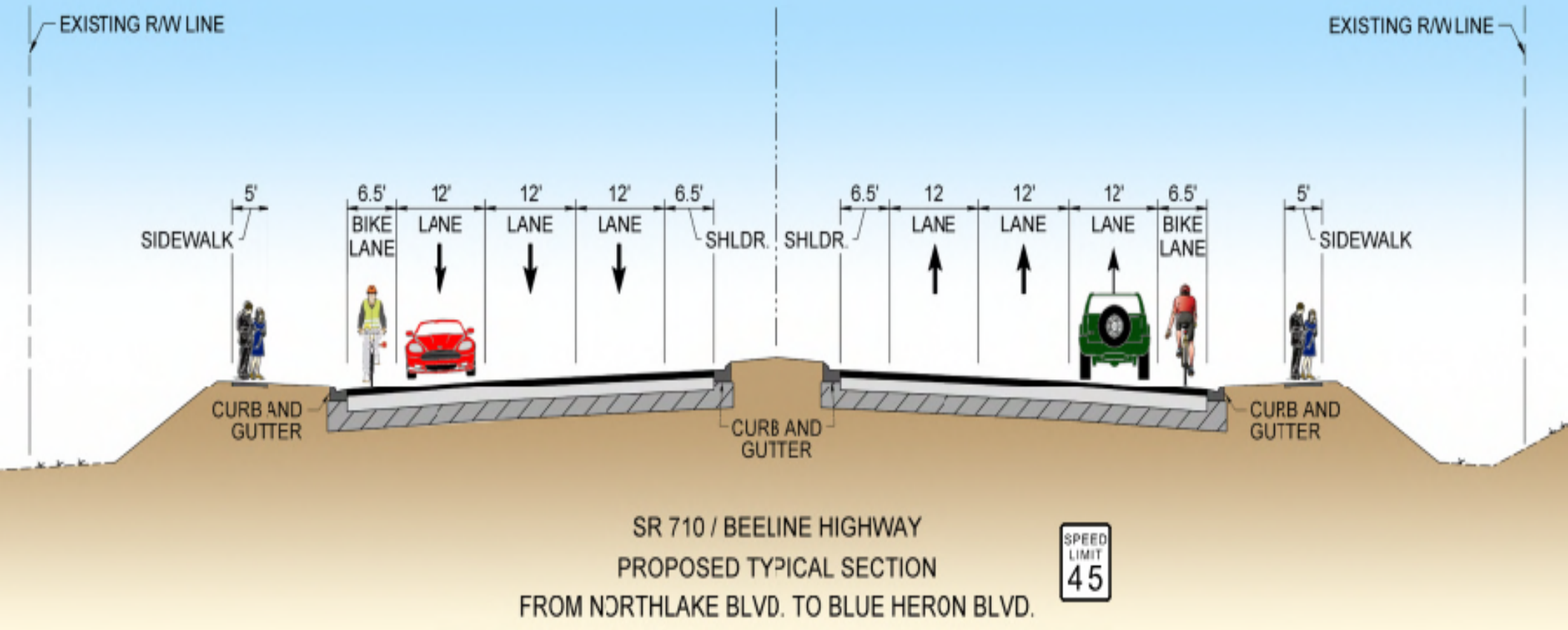
## Project Location Map

### SR 710 Beeline Highway Reconstruction / Widening

- SR 710 Roadway Reconstruction – 3.1 miles
- Northlake Blvd Roadway Reconstruction - 4000 ft.
- Turnpike Bridge Length – 320 ft.  
10 Lanes (180 ft. wide) Pre-Stress Concrete
- Lighting, Mast Arm Signalization, Closed Drainage System with Ponds, and Railroad Crossing



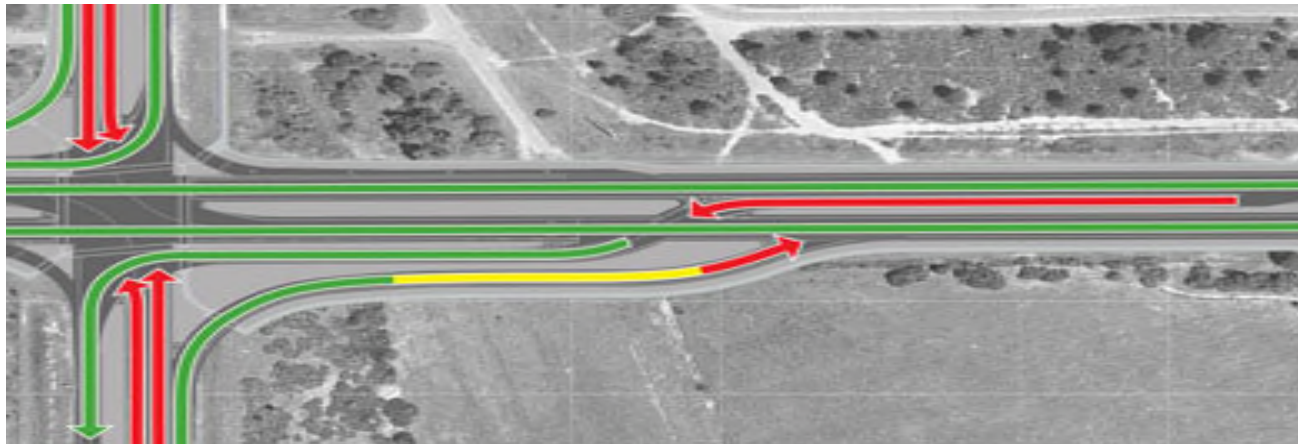
# SR 710 / Beeline Highway





# Partial Continuous Flow Intersection

- The partial continuous flow intersection will direct vehicles turning left from SR 710 / Beeline Highway to Northlake Blvd. away from the main intersection to relieve congestion
- U-turn movements introduced for left turn movements:
  - WBL from Northlake Blvd. to SB SR 710
  - SBL from SR 710 to EB Northlake Blvd.
- Innovative drainage design
- Reduces RW impacts

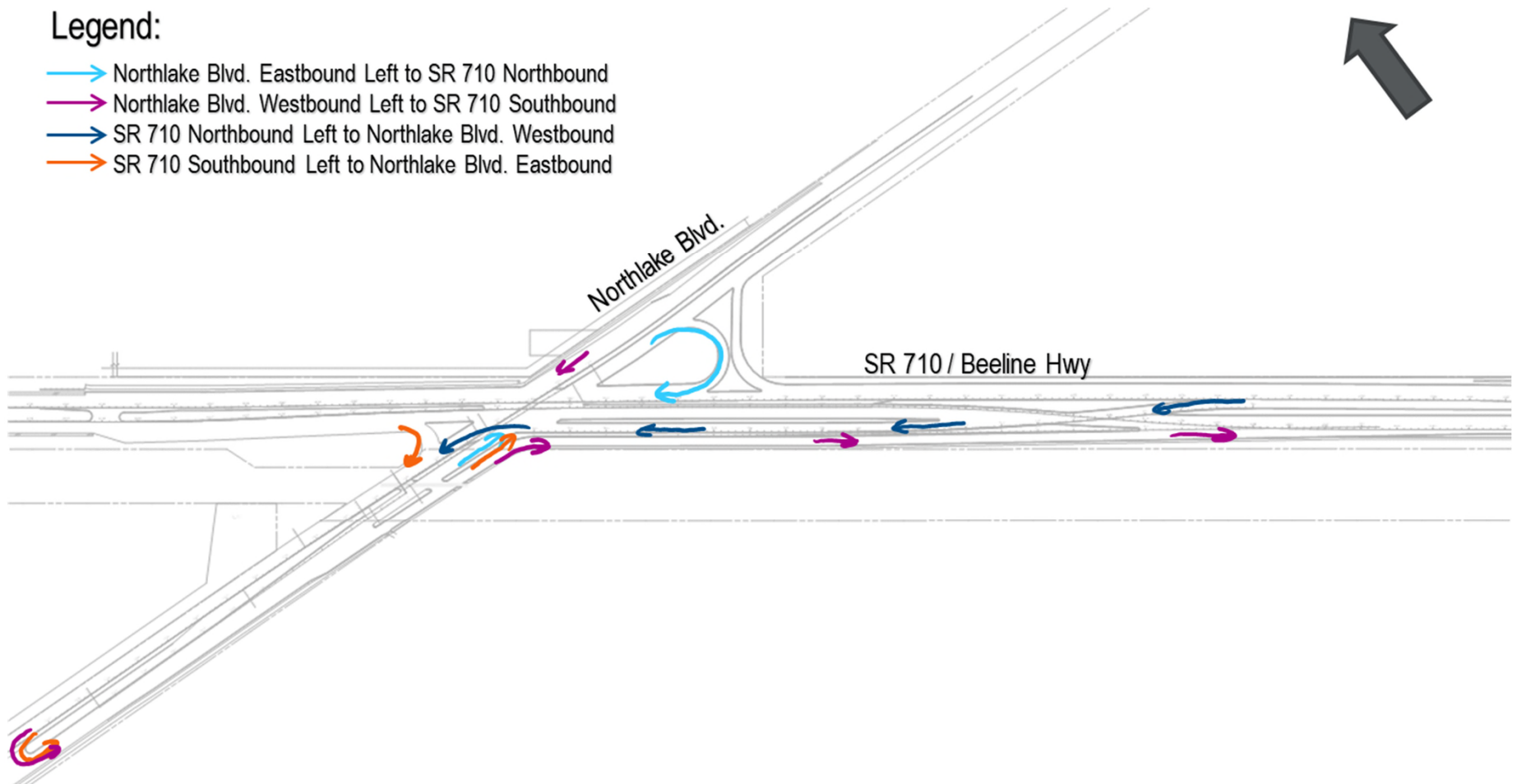




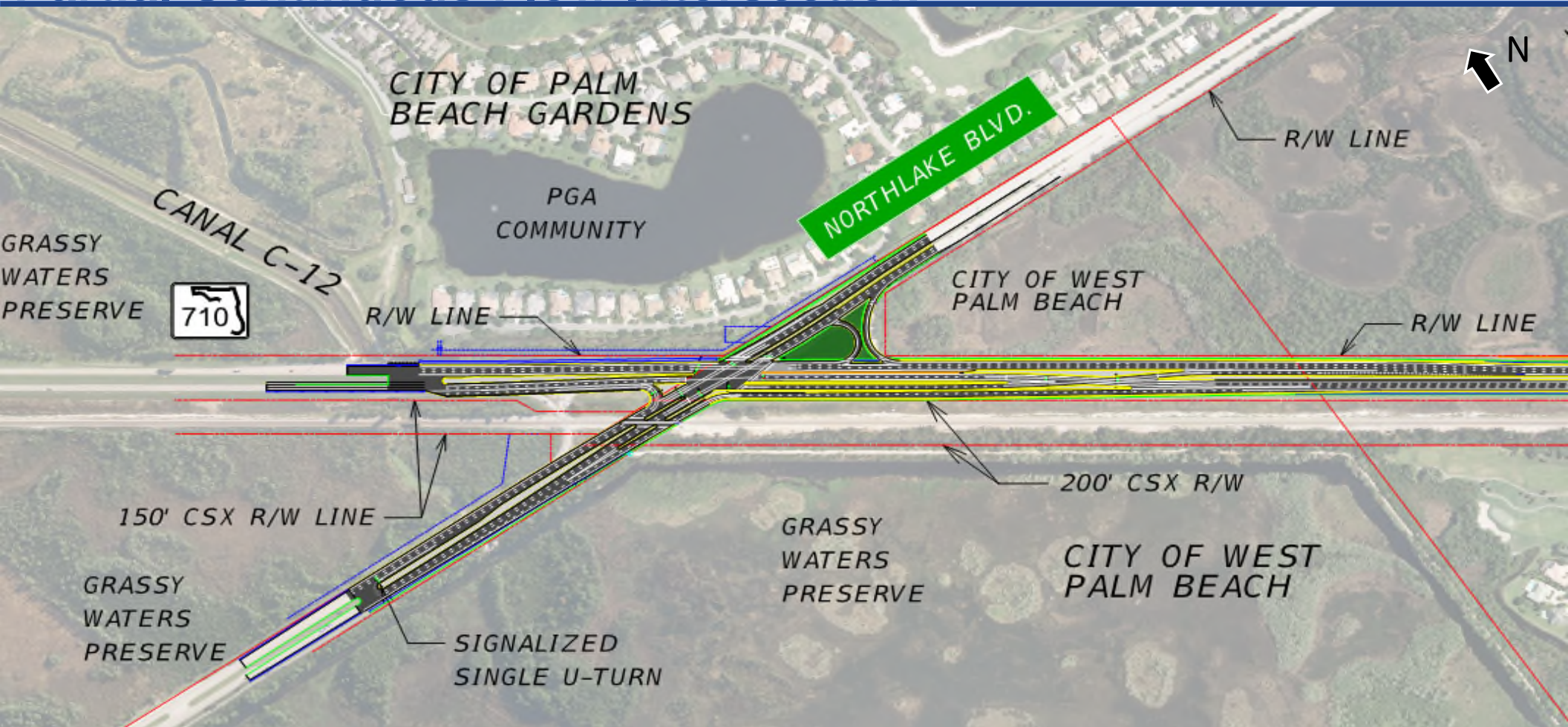
# Partial Continuous Flow Intersection

## Legend:

- Northlake Blvd. Eastbound Left to SR 710 Northbound
- Northlake Blvd. Westbound Left to SR 710 Southbound
- SR 710 Northbound Left to Northlake Blvd. Westbound
- SR 710 Southbound Left to Northlake Blvd. Eastbound



# Partial Continuous Flow Intersection



# SR 710 – Beeline Highway

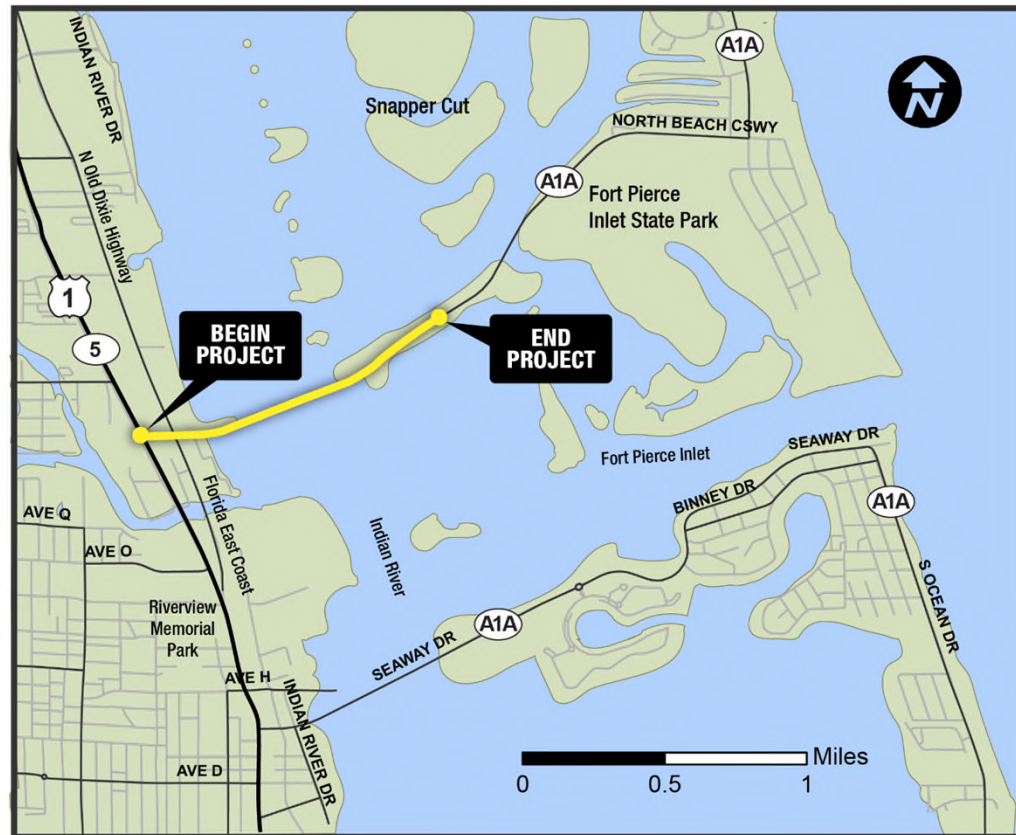
## Project Status/Schedule



- Design-Bid-Build Project
- Current Estimate \$107 Million
- FDOT PM Donovan Pessoa

# SR A1A North Bridge Over ICWW

## Location Map





# SR A1A North Bridge Over ICWW

## Channel Vertical Clearance



- Bridge Length – 4150 ft.
  - Replacement of structurally and functionally deficient Bridge.
  - 85 ft. Channel Clearance w/ 300 ft. Observation Deck



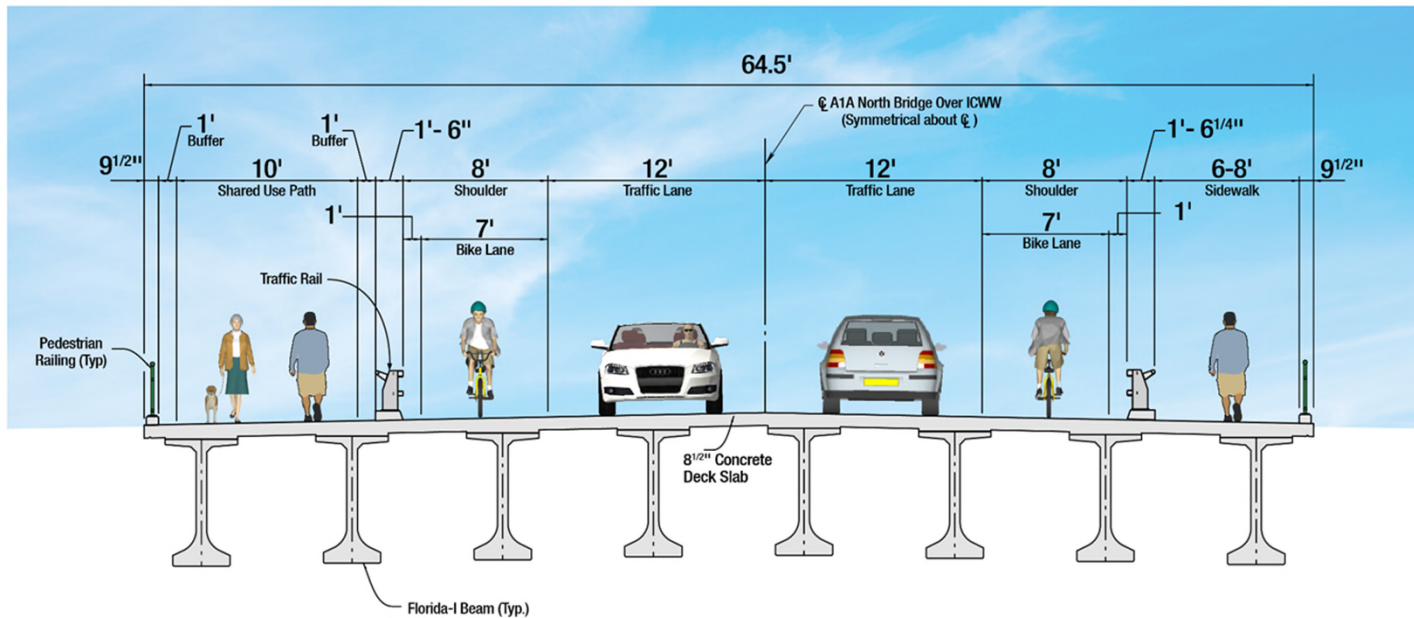
# SR A1A North Bridge Over ICWW



- Roadway Reconstruction
  - Juanita Ave Extension – 520 ft. – New Construction
  - Marina Access Rd. – 560 ft. – New Construction
  - Old Dixie Hwy – 2000 ft. – Reconstruction
  - Sunny Lane – 500 ft. – New Construction
  - Pedestrian Ramp for East Coast Greenway – 800 ft. – New Construction
- Lighting, Mast Arm Signalization, Drainage, and Railroad Crossing Gates

# SR A1A North Bridge Over ICWW

## Proposed Bridge Typical Section



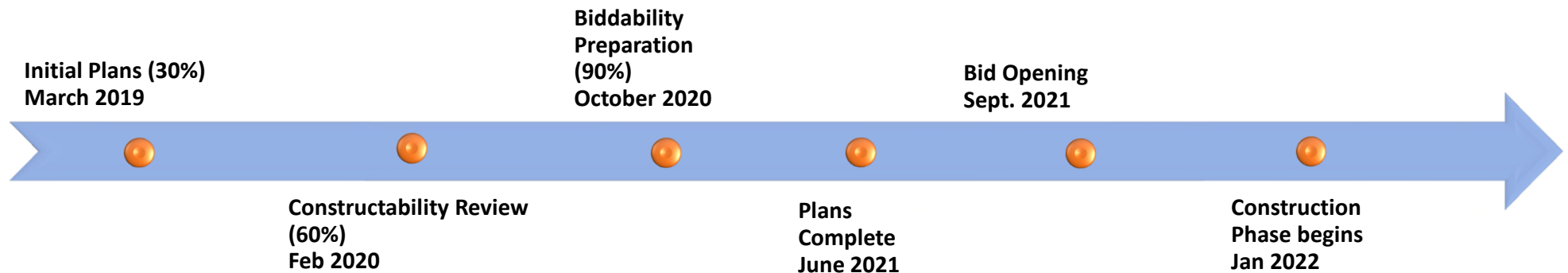


# SR A1A North Bridge Over ICWW



# SR A1A North Bridge

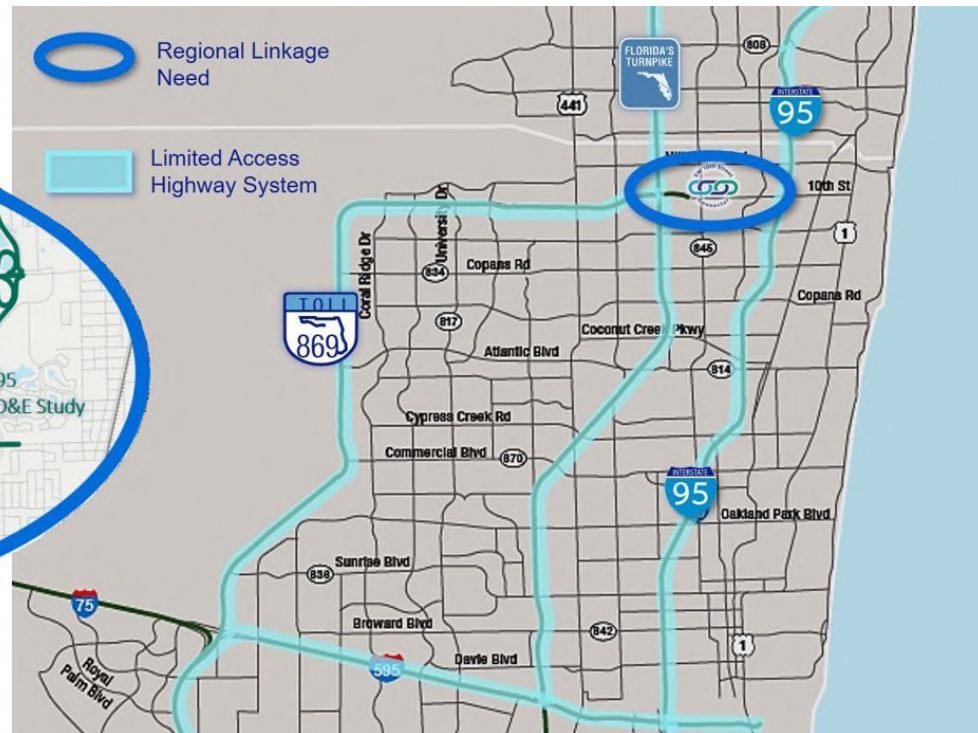
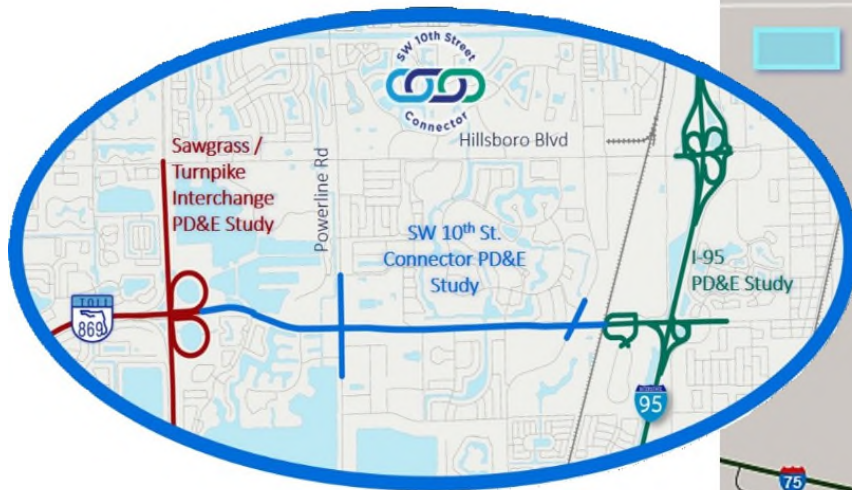
## Project Status/Schedule



- Design-Bid-Build Project
- Current Estimate \$76 Million
- FDOT PM Donovan Pessoa
- Website: [www.SRA1ANorthBridge.com](http://www.SRA1ANorthBridge.com)

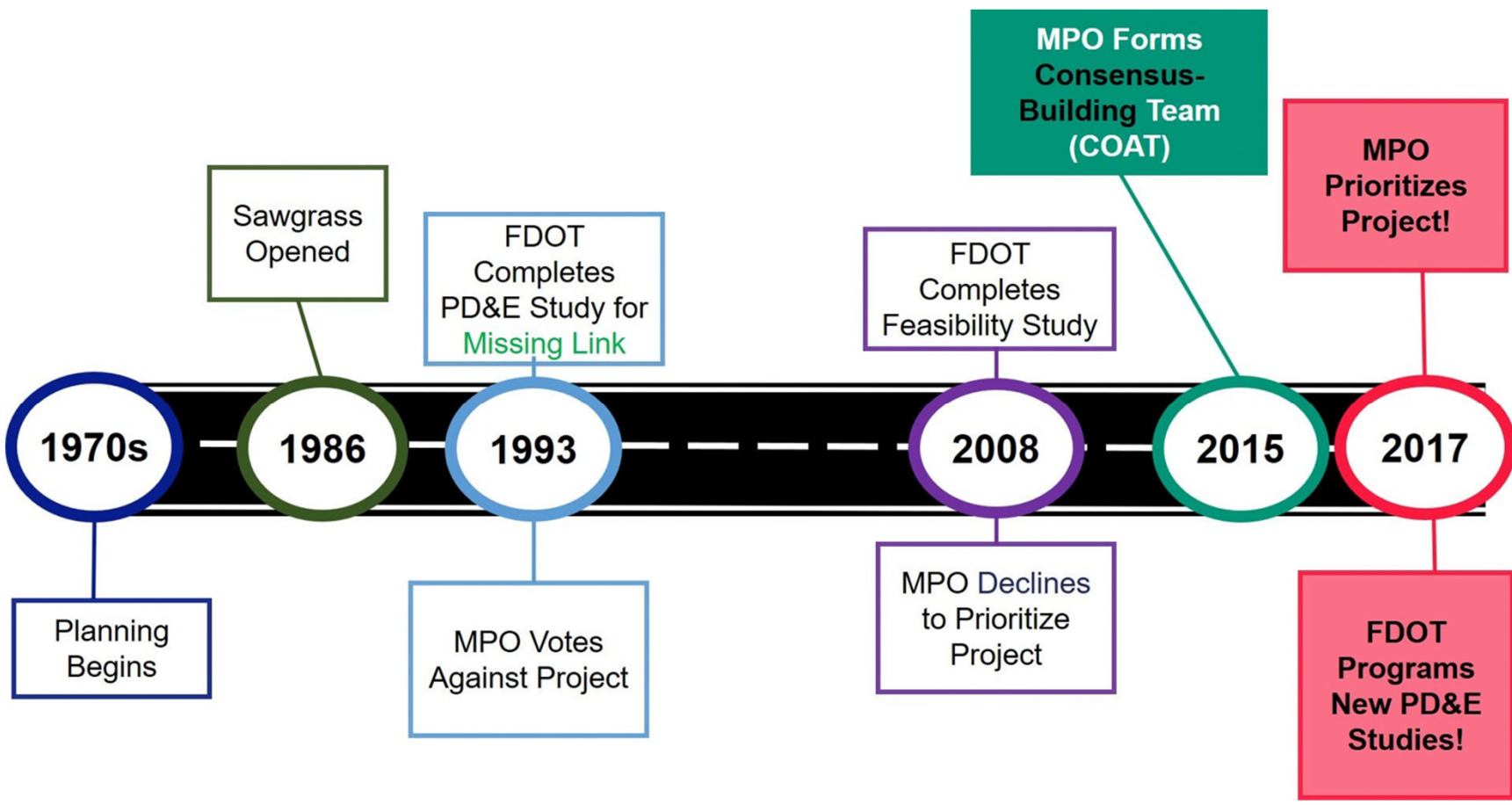
# SW 10th Street Connector

## Regional Importance - 3 Adjacent Studies



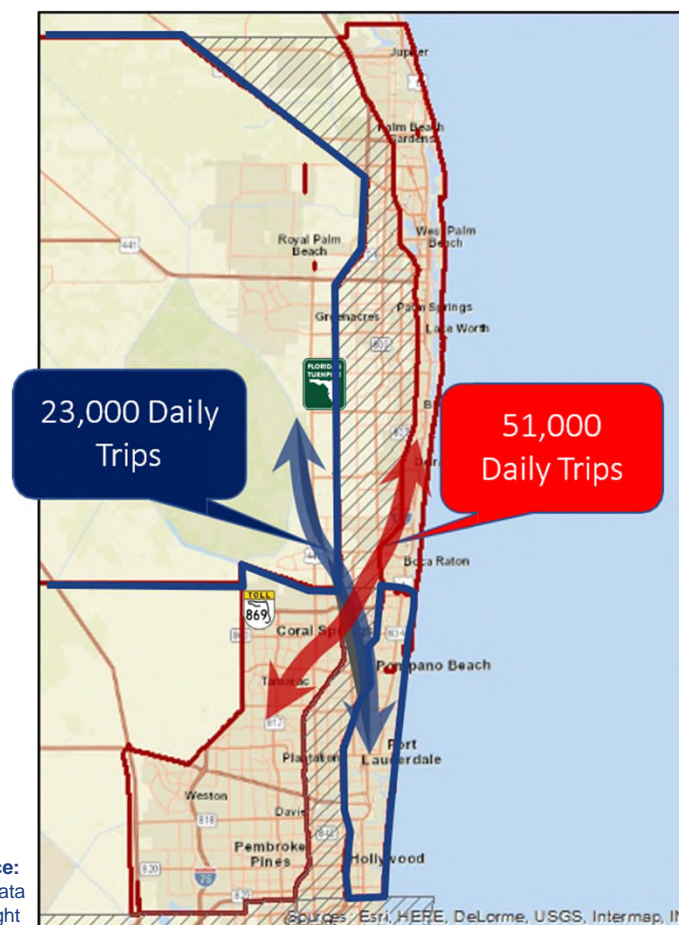


# SW 10<sup>th</sup> Street History

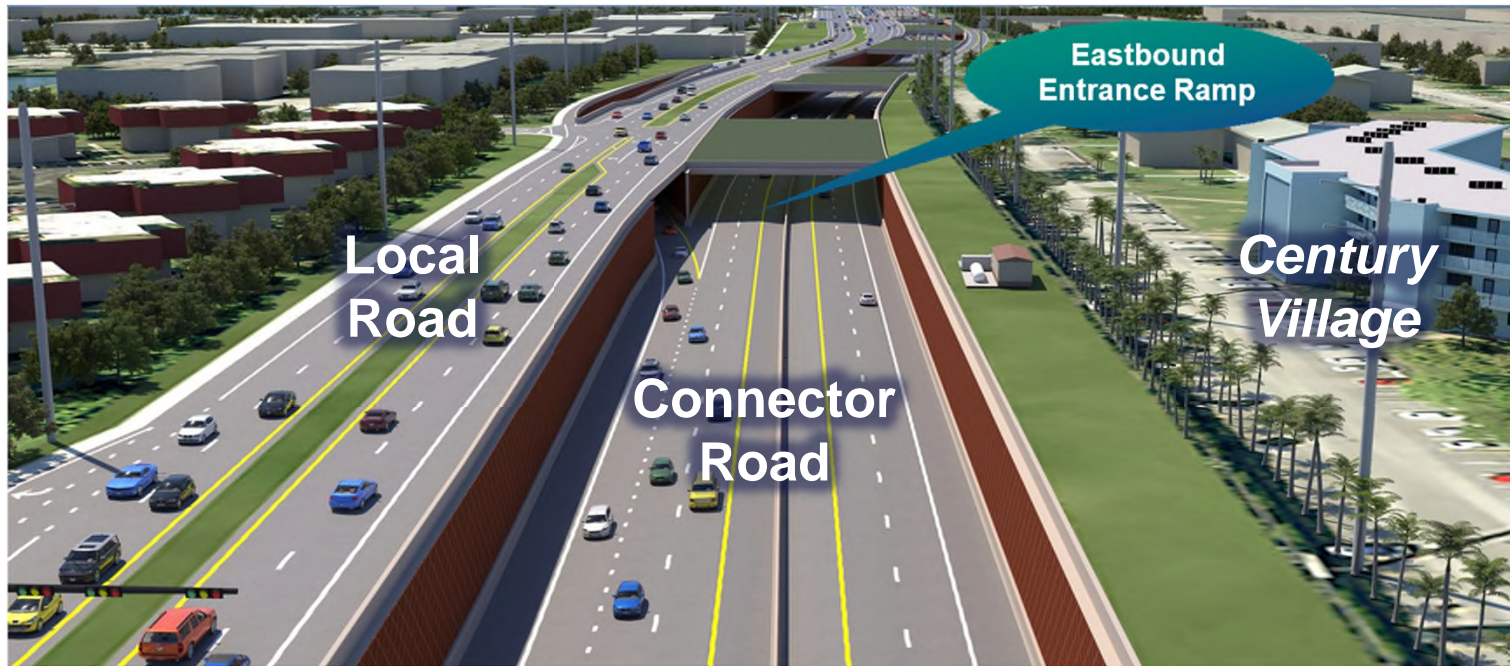


## System Linkage Need

- Regional Weekday Daily Trip Flows
  - Long distance trips
  - Broward, west of Turnpike to / from Palm Beach, east of I-95 – 51,000 daily trips
  - Palm Beach, west of Turnpike to / from Broward, east of I-95 – 23,000 daily trips



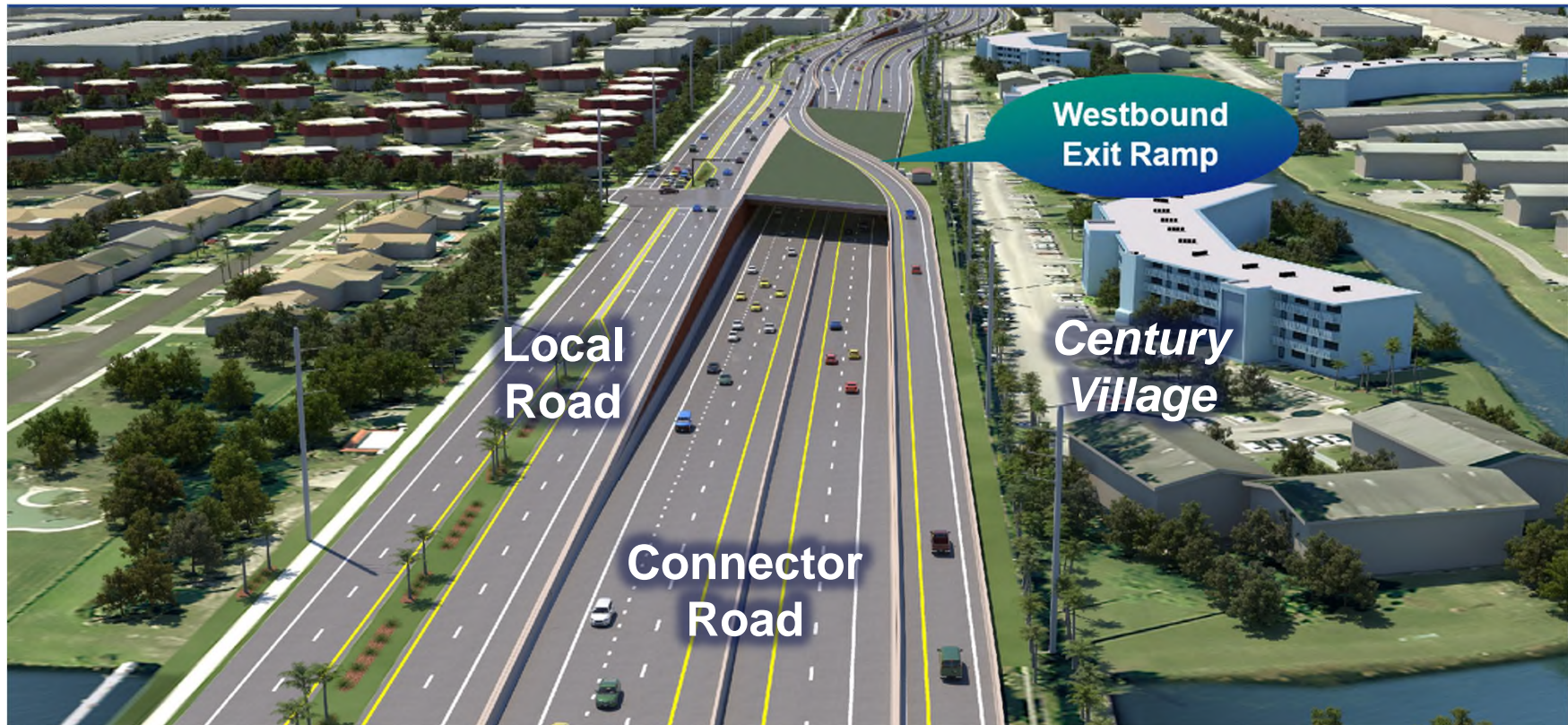
## Looking West on SW 10<sup>th</sup> Street – Full Depressed Option for Connector Road



- SW 10<sup>th</sup> Street – 2 Miles (3 Alternative)
  - New construction of 4 lane divided local roadway
  - New construction of 4 lane high speed connector road
  - Ingress/Egress ramps between SW 10<sup>th</sup> and connector road



## Looking West on SW 10<sup>th</sup> Street – Partial Depressed: Depressed Eastbound and Westbound Connector Road



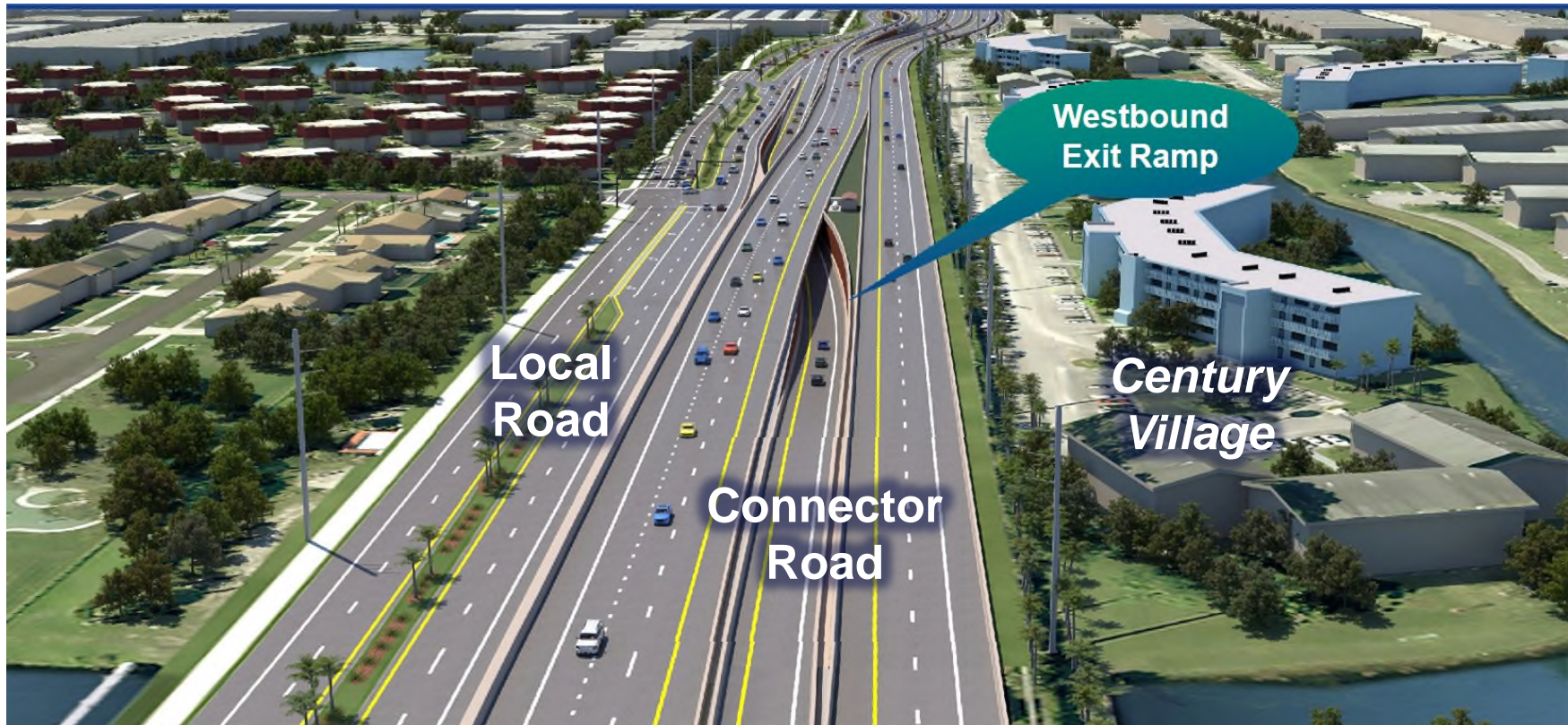


# Partial Depressed Alternative – Eastbound Connector Road Depressed

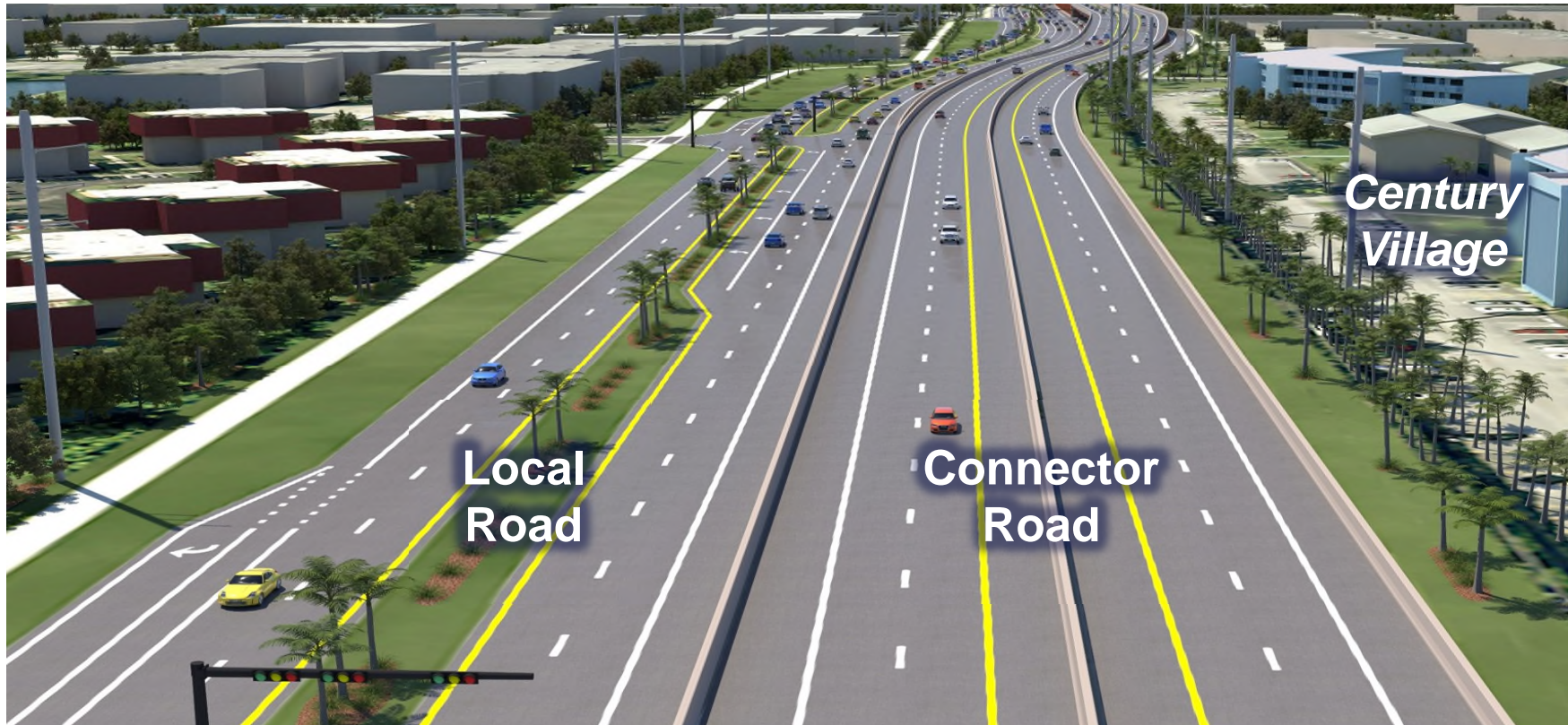




## Looking West on SW 10<sup>th</sup> Street – Partial Depressed: Depressed Westbound Exit Ramp

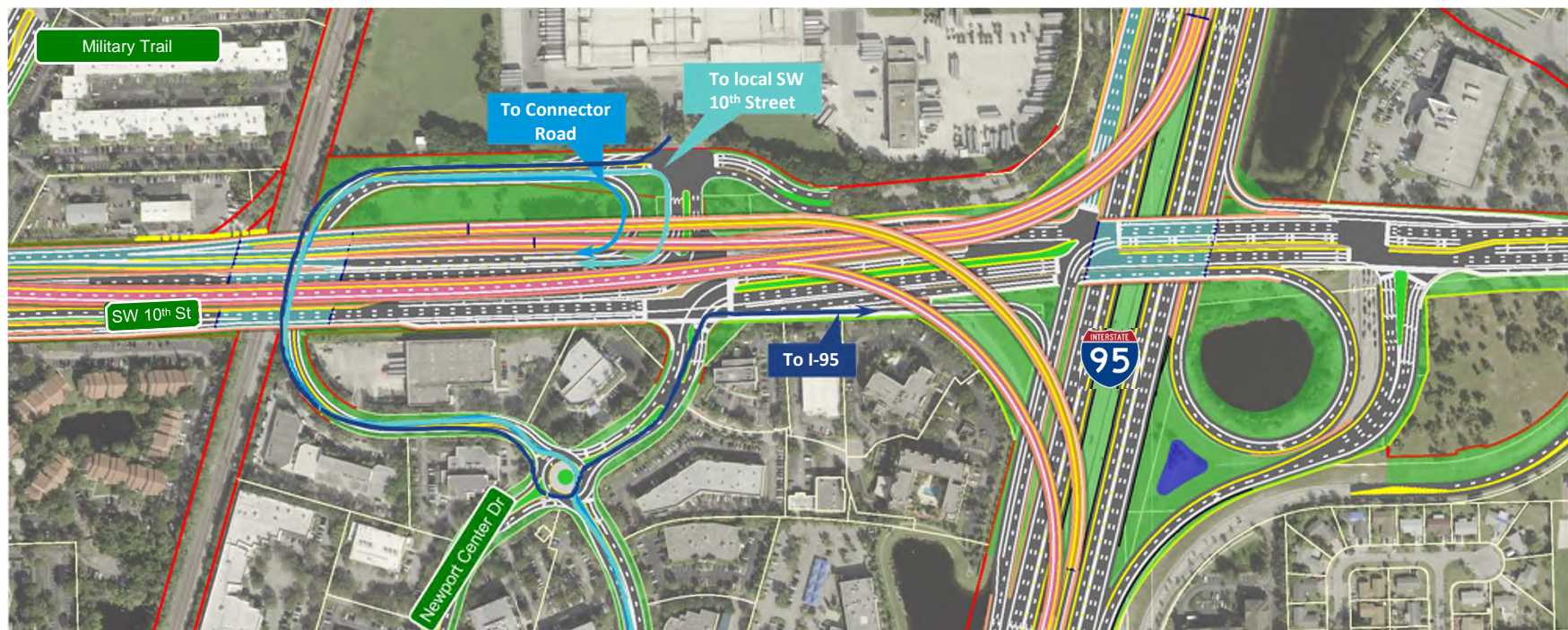


## Looking West on SW 10<sup>th</sup> Street – Non-Depressed / No Managed Lane Access Alternative





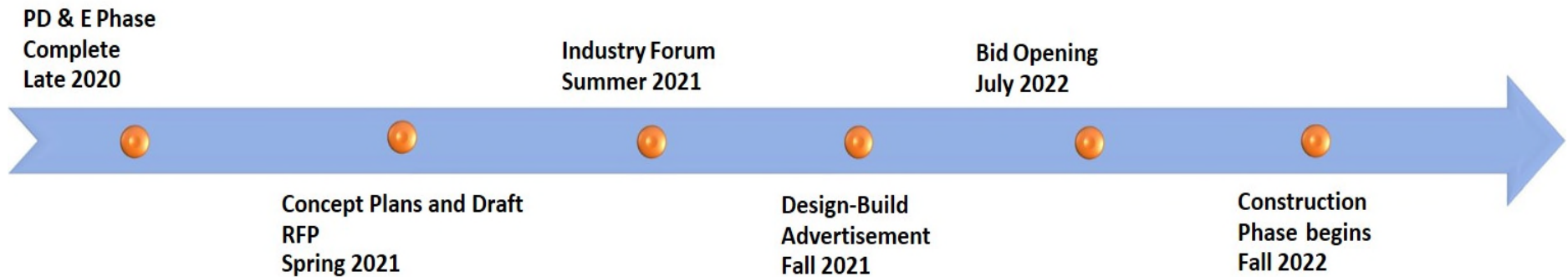
## I-95 and SW 10<sup>th</sup> Street



- Direct Connections to I-95
- Connector Road goes over Military Trail
- Widening to add an Express Lane in each direction and accommodate direct connections

# SW 10<sup>th</sup> Street Connector

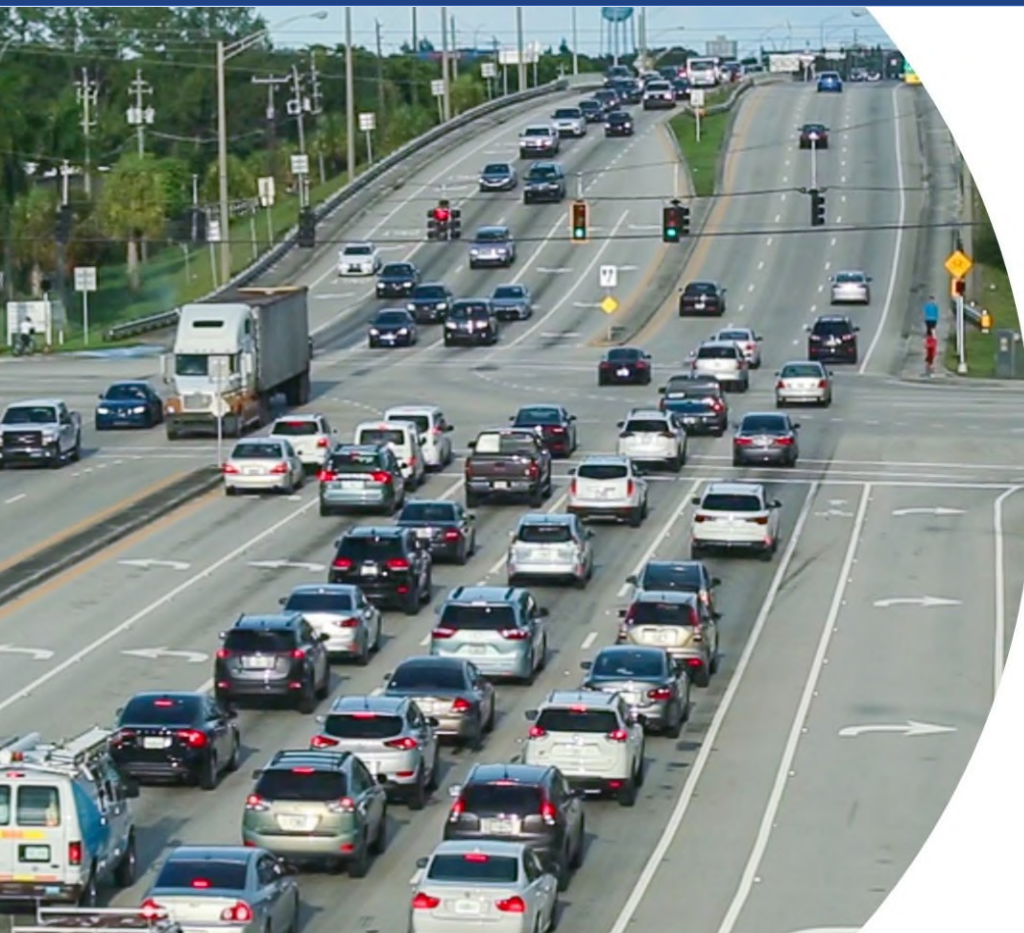
## Project Status / Schedule



- Design-Build Project
- Current Estimate \$600 Million - \$1 Billion
- FDOT PM Robert Bostian
- Website: [www.SW10Street.com](http://www.SW10Street.com)







**Thank You**

**Questions?**