



# CR 510 Project Development and Environment (PD&E) Study

From 58<sup>th</sup> Avenue to East of SR 5/US-1, Indian River County, Florida

Florida Department of Transportation

Financial Project ID: 441692-1-22-02

Efficient Transportation Decision Making (ETDM) Number: 14492

## Alternatives Public Workshop

Virtual – Tuesday, February 27, 2024

In-Person – Thursday, February 29, 2024

**THE PRESENTATION WILL BEGIN AT 6:00 PM**



# AGENDA



## AGENDA

- Project Team
- Meeting Format
- Rules of Engagement
- Transportation Development Process
- Project Location
- Adjacent Projects
- Purpose and Need
- Existing Conditions
- Alternatives Evaluation
- Railroad Coordination
- Environmental Analysis
- Public Involvement
- Project Schedule
- Questions and Answers



## PROJECT TEAM



**Maria Formoso, P.E.**  
Project Manager  
Florida Department of Transportation  
District 4



**Julieta Manso, P.E.**  
Consultant Project Manager  
Hanson Professional Services Inc.



**Lauren Hatchell**  
Public Involvement Coordinator  
Media Relations Group, LLC



# ELECTED OFFICIALS

## MEETING FORMAT

### Online



### Online:

Date: Tuesday, February 27, 2024

Time: 6:00 p.m.

### In-Person



### In-Person:

Date: Thursday, February 29, 2024

Time: 5:30 p.m.

Location: Indian River County – MPO Boardroom  
Administration Building B  
1800 27<sup>th</sup> Street  
Vero Beach, Florida 32960

## RULES OF ENGAGEMENT



This Alternative Public Workshop is being recorded.

If you experience technical difficulties, please call the help line at 786-352-4351 so a technical support team member may assist you.

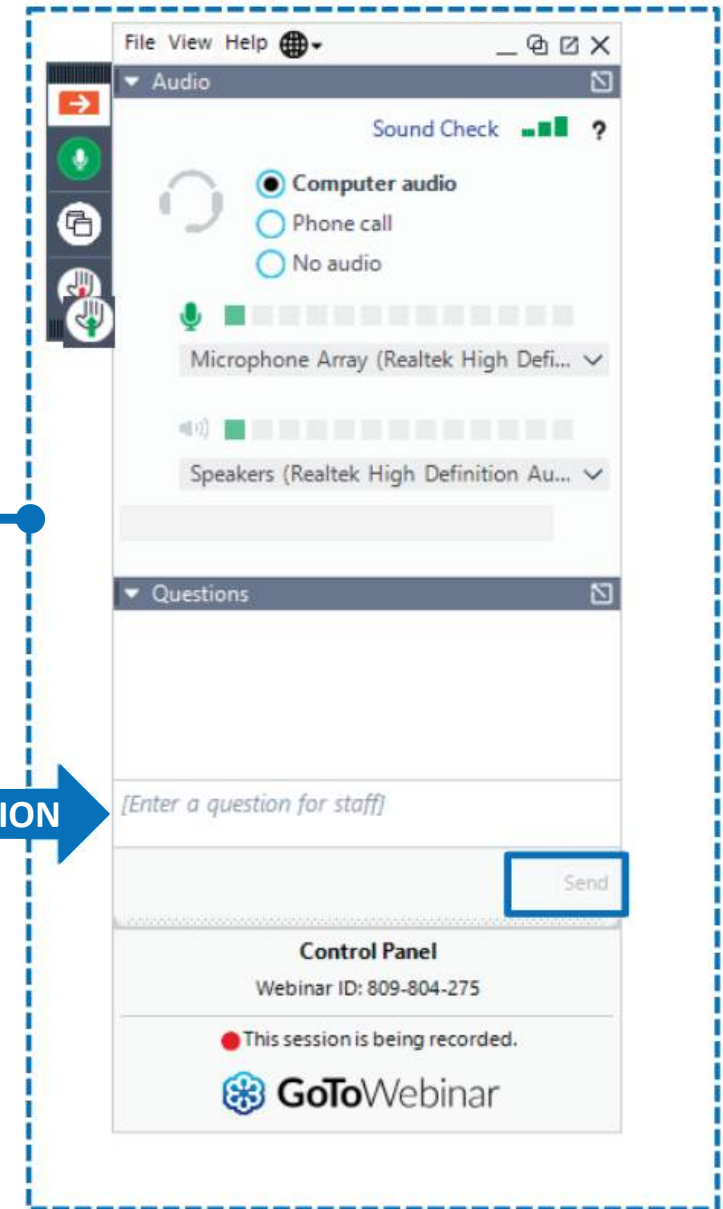


All attendees will remain muted throughout the meeting except during the Open Discussion.



At the end of the presentation attendees are also welcome to submit any questions/comments using the GoToWebinar Question Panel and a member of the team will respond during the question-and-answer portion. To request to speak, click the Raise Hand button on the Control Panel and unmute your microphone when your name is called.

## GO TO WEBINAR CONTROL PANEL



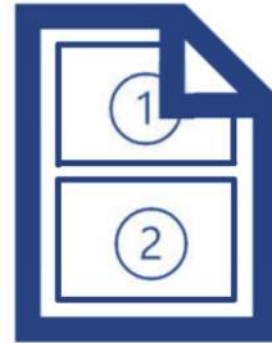


## DIAL-IN BY PHONE ATTENDEES

**Dial-in attendees are “listen only”**



If you requested or downloaded the presentation



**Paper copy of the presentation**



**Presenter will indicate slide number**

[www.fdot.gov/projects/cr510-58ave-us1](http://www.fdot.gov/projects/cr510-58ave-us1)

## TO REPORT TECHNICAL ISSUES



Type in the  
**Question box**  
on GoToWebinar  
Control Panel



**Send an email to:**  
[manny@graph-code.com](mailto:manny@graph-code.com)



**Call:**  
**786-352-4351**

## PUBLIC NOTICE



**Florida Administrative Register**



**Property owner/tenant letters**



**Email to project contacts list**



**Department/project webpage**



**Newspapers**



**Social media**

## NON-DISCRIMINATORY POLICY

### Title VI Compliance

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons wishing to express concerns relative to FDOT compliance with Title VI may do so by contacting:

#### Sharon Singh Hagyan

##### District Four Title VI Coordinator

3400 West Commercial Boulevard

Fort Lauderdale, FL 33309

(954) 777-4190

(866) 336-8435, Ext. 4190 (Toll Free)

Sharon.SinghHagyan@dot.state.fl.us

#### Stefan Kulakowski

##### Statewide Title VI Coordinator

605 Suwanee Street, MS 65

Tallahassee, FL 32399

(850) 414-4742

(866) 374-3368, Ext. 4742 (Toll Free)

Stefan.Kulakowski@dot.state.fl.us



## FEDERAL-STATE PARTNERSHIP

The environmental review, consultation and other actions required by applicable federal environmental laws for these projects are being, or have been, carried out by the 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.

**PRESENTATION WILL NOW BEGIN**

# TRANSPORTATION DEVELOPMENT PROCESS

**1** PLANNING

**2** PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

**3** DESIGN

**4** RIGHT OF WAY ACQUISITION (IF NEEDED)

**5** CONSTRUCTION

**6** MAINTENANCE

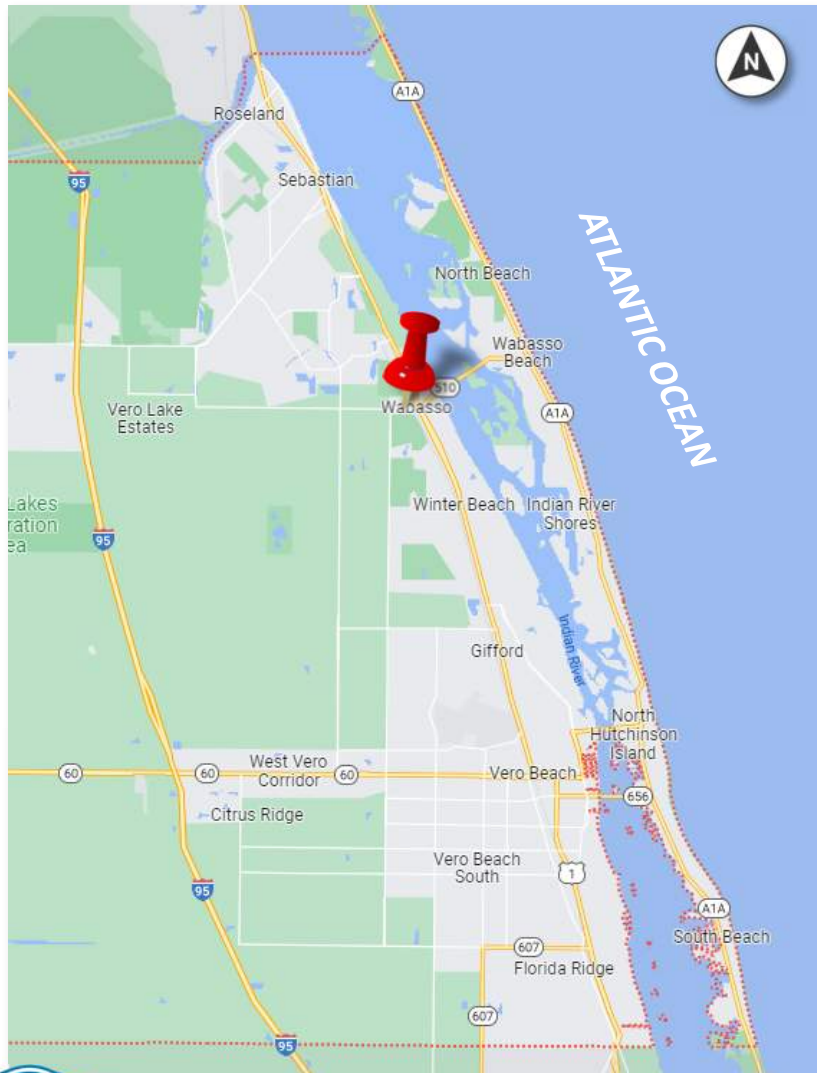
## Why it's done:

- Evaluate project feasibility and potential environmental impacts (natural, physical, social, cultural)
- Comply with federal and state environmental laws
- Required to secure federal regulatory approval

## What it involves:

- Conducting preliminary engineering
- Evaluating options to avoid, minimize or mitigate potential environmental impacts
- Coordinating with federal, state, and local agencies
- Engaging the public in project development
- Select a preferred alternative for Final Design

## PROJECT LOCATION









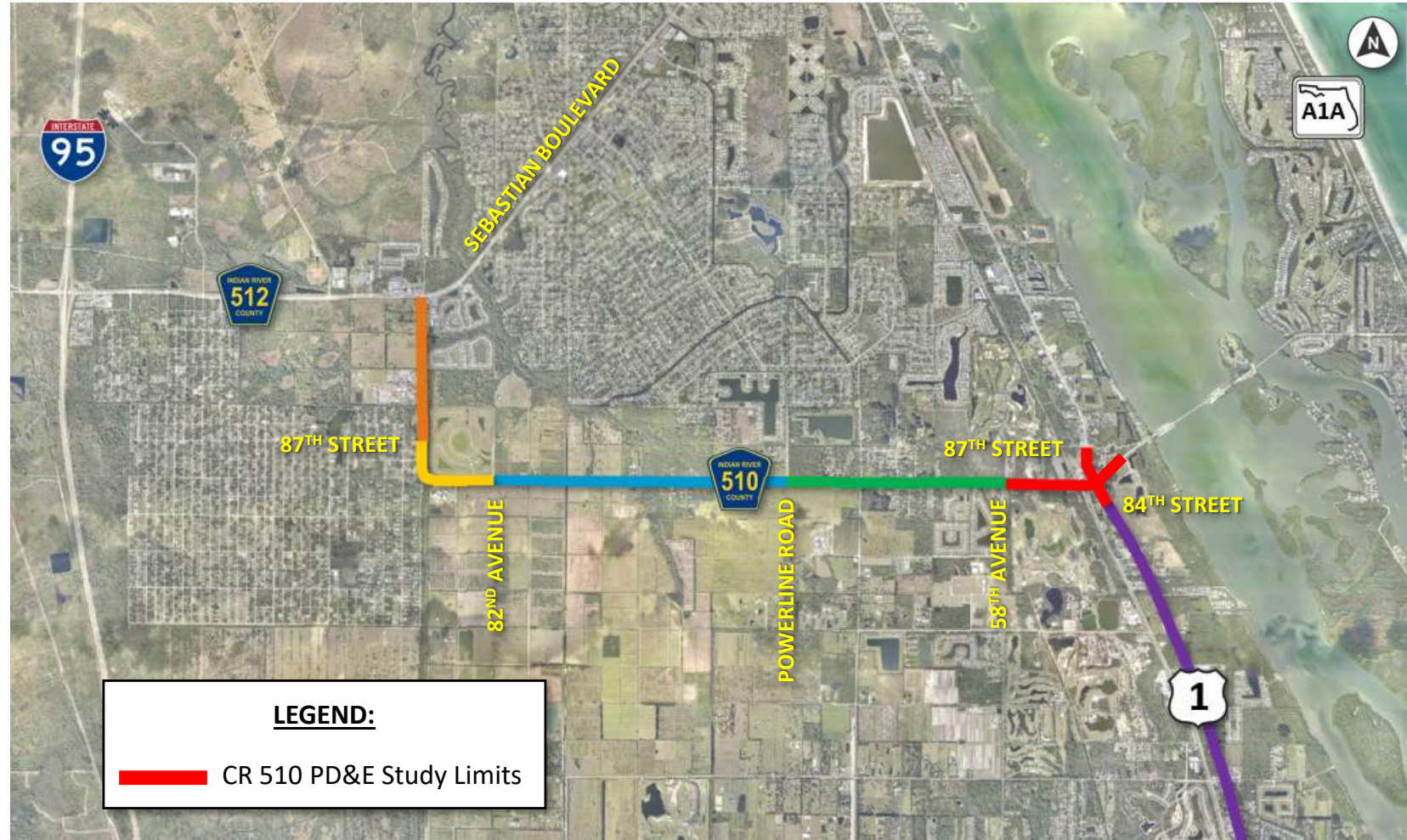
- *Project Limits: CR 510 from 58<sup>th</sup> Avenue to east of US-1 and along US-1 from 84<sup>th</sup> Street to 87<sup>th</sup> Street*
- *Northeastern Indian River County*
- *Unincorporated Indian River County*
- *Wabasso Community*





## ADJACENT PROJECTS

- 405606-2 – CR 510 PD&E Study   
From CR 512 to 58<sup>th</sup> Avenue  
*(Completed in April 2019)*
- 405606-5 – Segment 5   
From West of 82<sup>nd</sup> Avenue to Powerline Road  
*(Under Design – Awaiting Construction Funds)*
- 405606-6 – Segment 6   
From Powerline Road to 58<sup>th</sup> Avenue  
*(Under Design – Awaiting Construction Funds)*
- 405606-7 – Segment 7   
From CR 512 to 87<sup>th</sup> Street  
*(Under Design – Scheduled for construction FY 24/25)*
- 405606-8 – Segment 8   
From 87<sup>th</sup> Street to West of 82<sup>nd</sup> Avenue  
*(Under Design – Awaiting Construction Funds)*
- 431724-3 – SR 5/US-1   
From 69<sup>th</sup> Street to 84<sup>th</sup> Street  
*(Under Design – Awaiting Construction Funds)*



## PROJECT PURPOSE

- Improve capacity for local and regional travel, freight movement, and emergency evacuation.
- Reduce crashes and improve safety issues for vehicles, bicycles, and pedestrians.

## PROJECT NEED

- **Capacity:** Population growth and planned developments in the study area will increase traffic, creating more congestion and delays.
- **Transportation Demand:** Increase in traffic flow along this segment of CR 510. The CR 510 and US-1 intersection is one of the busiest in the County and has served nearby developments such as the Orchid Quay (formerly Bristol Bay).
- **Social Demand/Economic Development:** Additional residential developments are planned east and west of the project corridor.
- **Modal Relationship:** Improve the mobility for all users (bicyclists, pedestrians, freight, vehicles, and trains). The CR 510 corridor provides limited options for pedestrians and bicyclists. The need for bicycle lanes and sidewalks was identified in the Indian River County Bicycle and Pedestrian Master Plan 2015.
- **System Linkage:** Evacuation Route for the Region.

## PURPOSE & NEED



This project has been identified in the Indian River County MPO's Needs Projects List and Cost Feasible Plan



## EXISTING CONDITIONS

ROADWAY CHARACTERISTICS	
Number of Lanes	Two (One in each direction)
Lane width	12-ft
Posted Speed	40 MPH
Sidewalks	<ul style="list-style-type: none"> <li>• None between 58<sup>th</sup> Avenue and FEC Railway</li> <li>• 6-ft sidewalks between FEC Railway and US-1</li> </ul>
Bicycle Facilities	None
Existing Right-of-Way	Varies 80-ft to 130-ft



*CR 510 looking east*

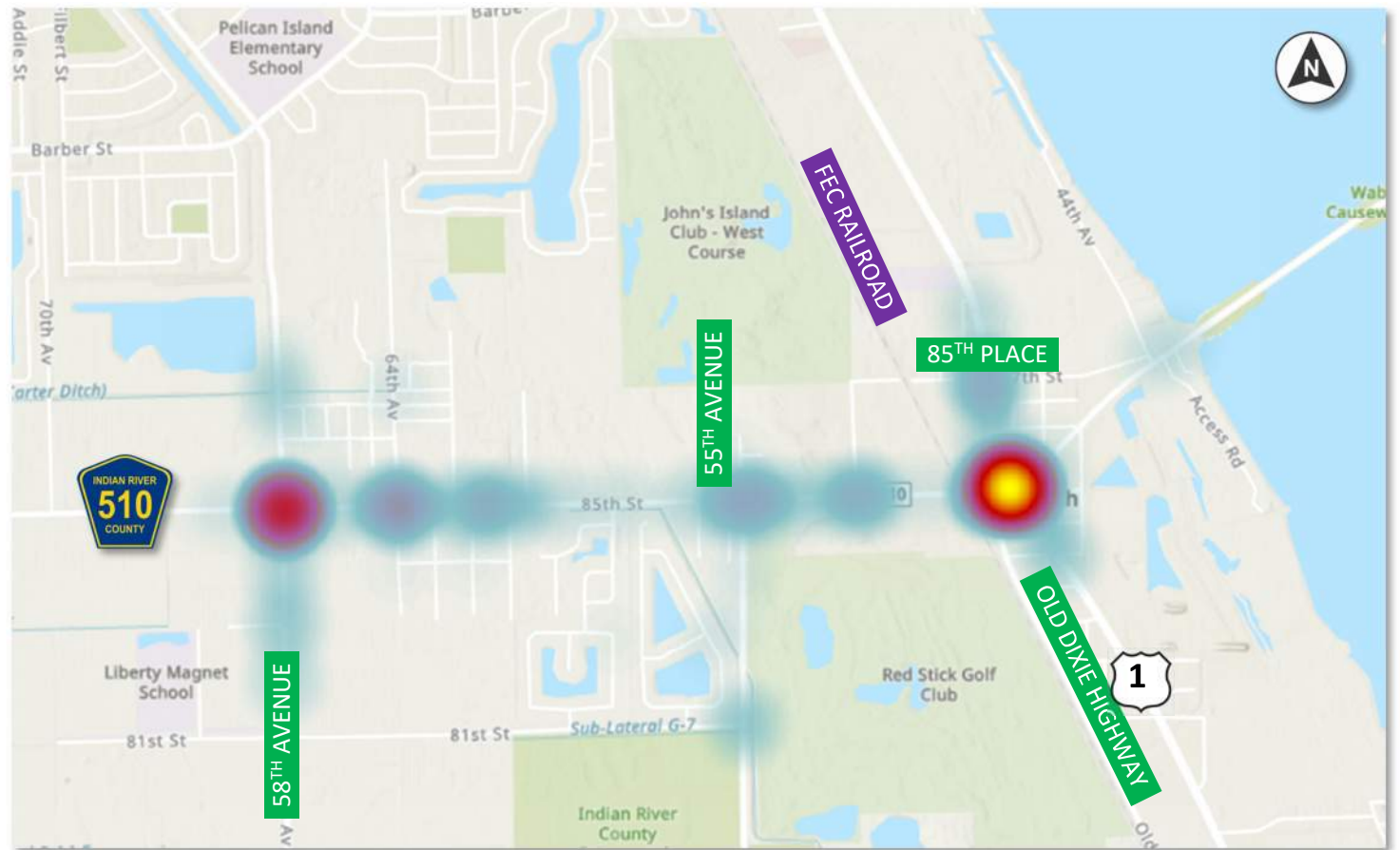
## EXISTING SAFETY CONDITIONS

Five years of crash data: 2019-2023

- 250 crashes in total
- 93 injuries (10 serious)
- 1 fatality
- 0 bicycle
- 0 pedestrian

Predominant Crash Type:

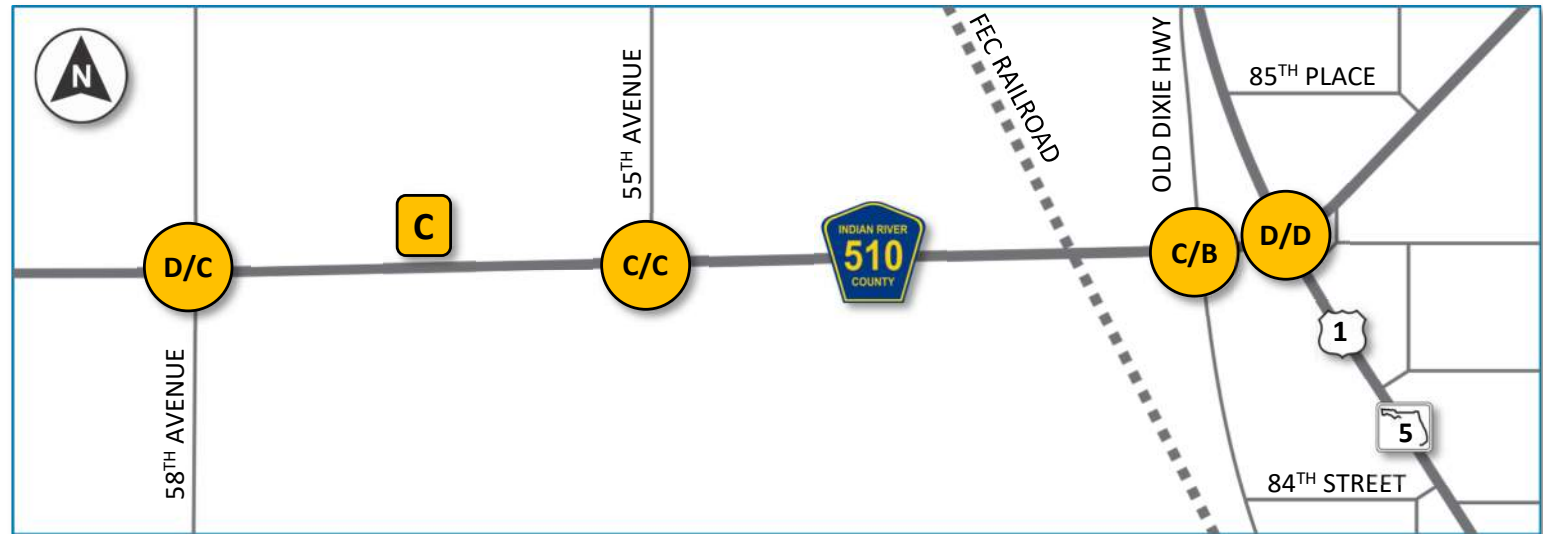
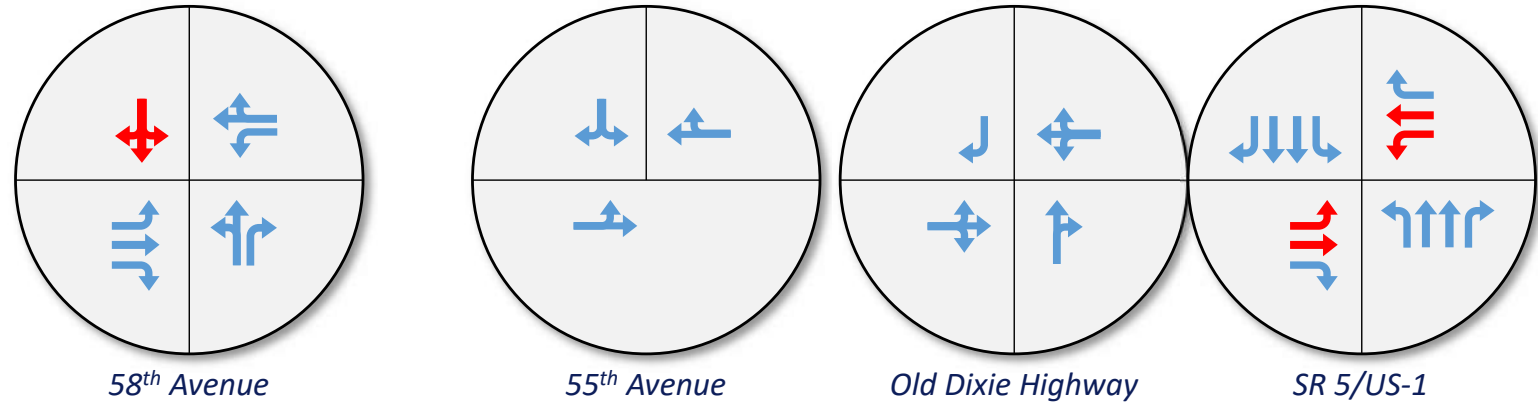
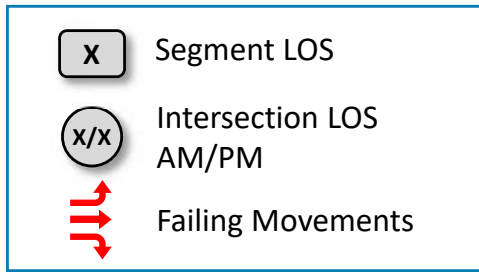
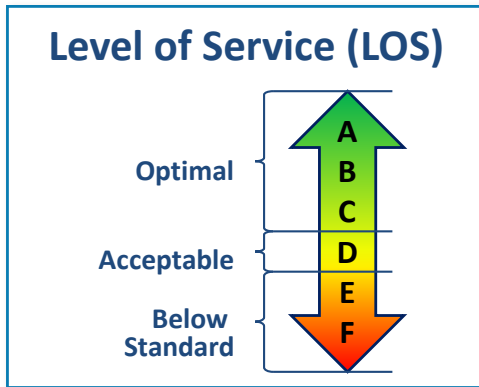
- Rear-end: 44%
- Left turn: 27%
- Side-swipe: 7%





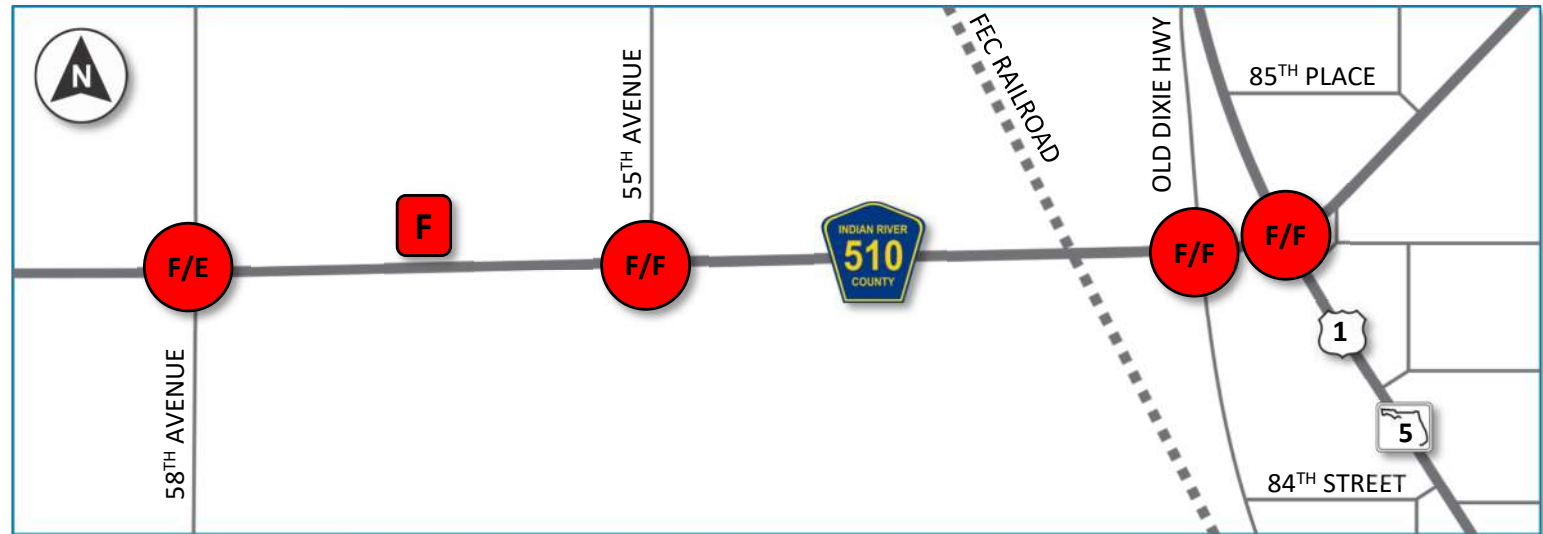
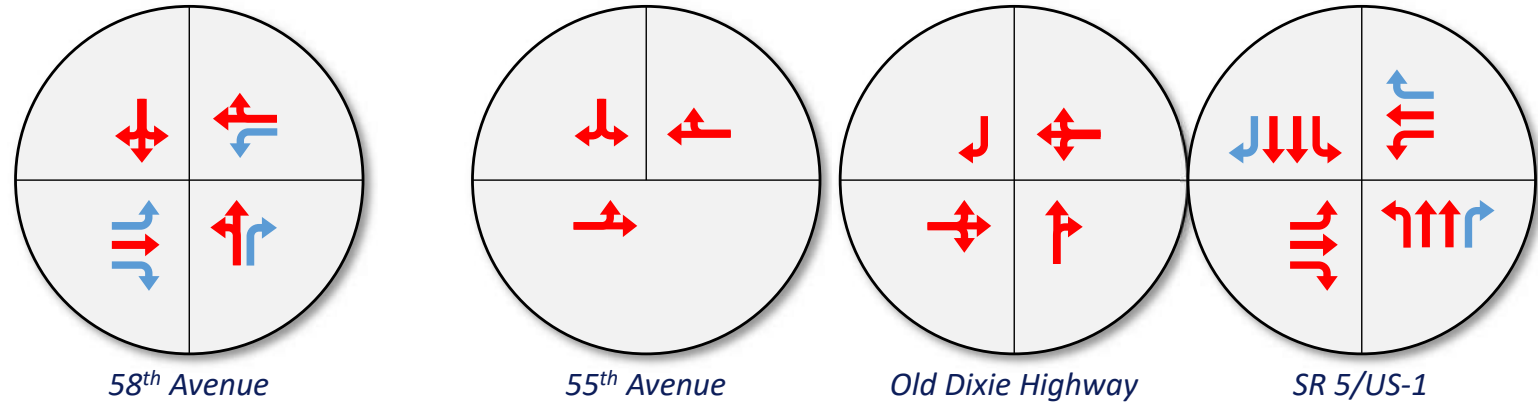
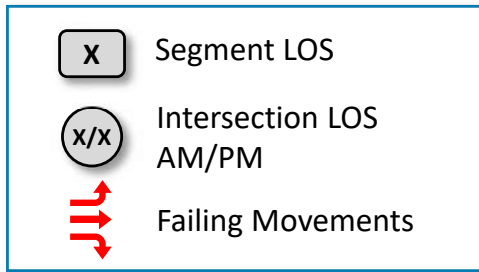
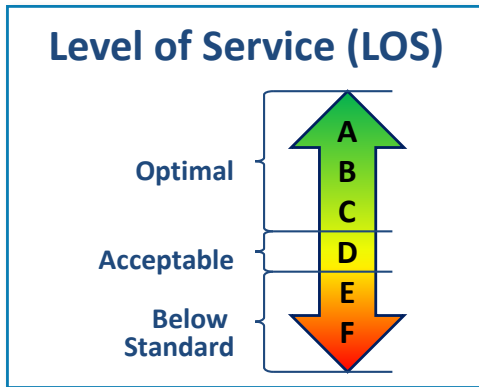
# TRAFFIC OPERATIONS – Existing Conditions

- Existing LOS C
- Average truck percentage 7% (observed high truck factors of 20%)



# TRAFFIC OPERATIONS – No-Build Conditions (Year 2045)

- Future No-Build LOS F – Year 2045
- Increase traffic due to projected population growth

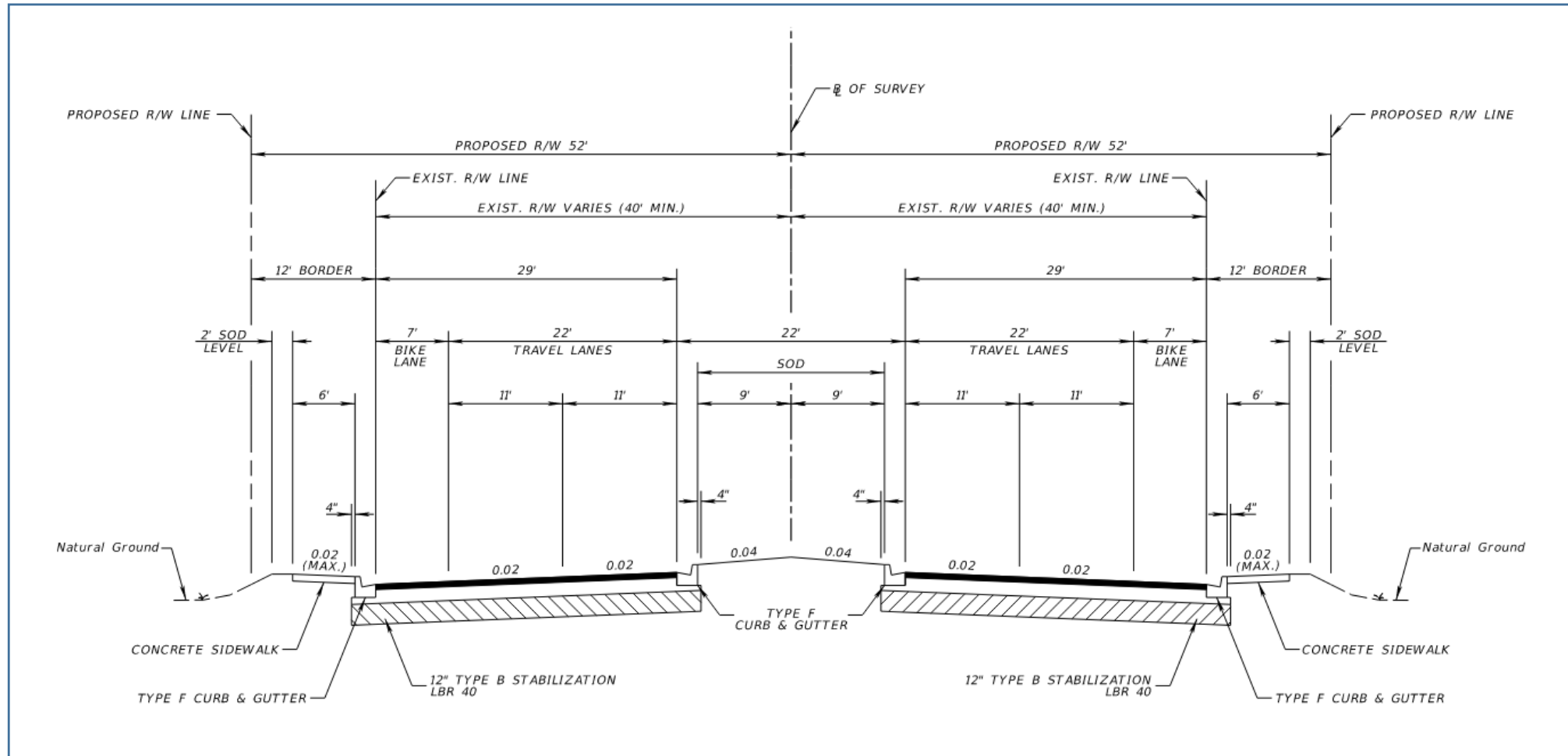


## ALTERNATIVES EVALUATION

- Typical Section Analysis
  - Widening CR 510 from two to four lanes
- Intersection Improvements
  - CR 510 at 58<sup>th</sup> Avenue
  - CR 510 at US-1
- FEC Railroad crossing Alternatives
  - At-grade widening
  - Partial grade separation over the FEC Railway
  - Full grade separation over the FEC Railway



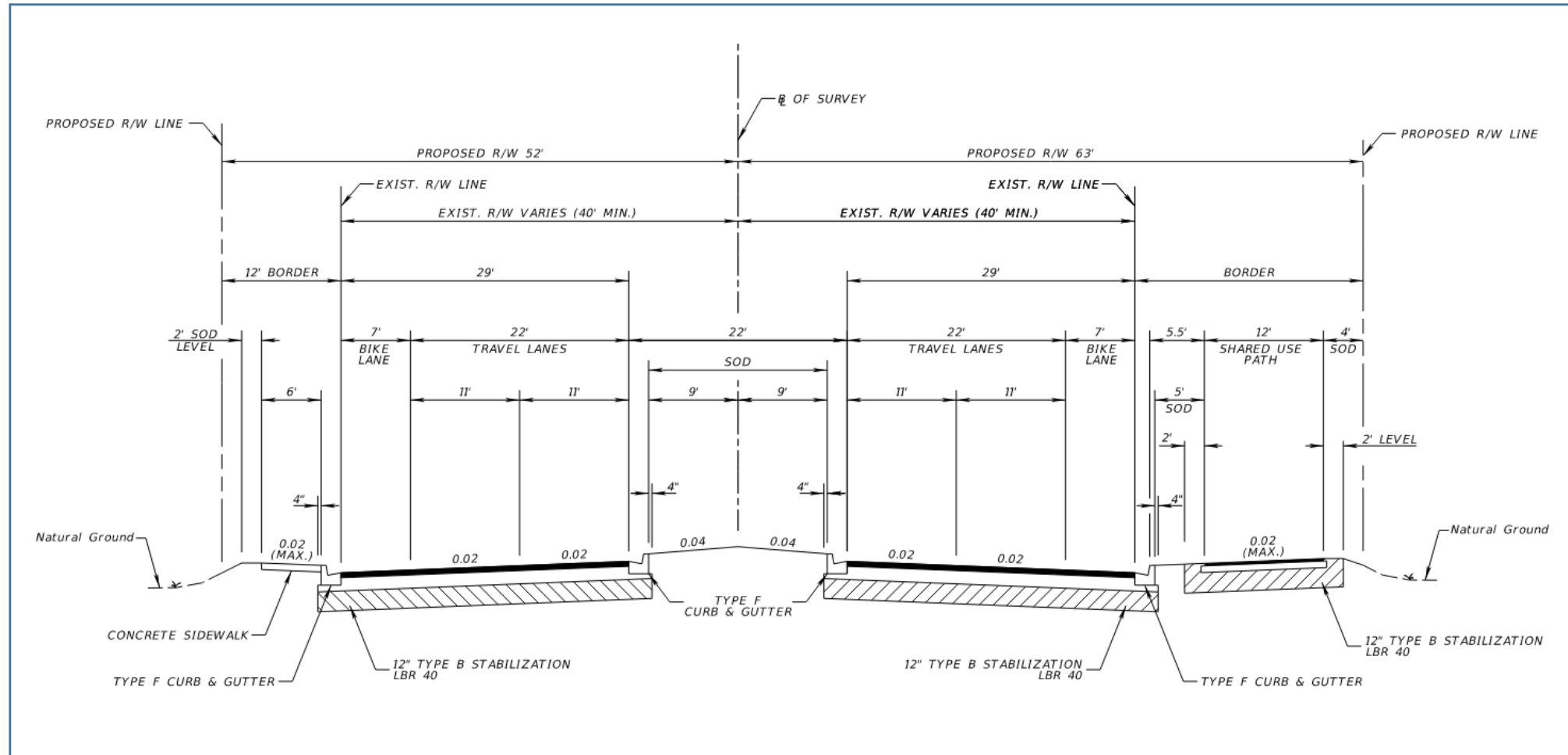
# TYPICAL SECTION ANALYSIS – Alternative A



**Typical Section Alternative A**  
(Proposed R/W 104-ft)



# TYPICAL SECTION ANALYSIS – Alternative B



**Typical Section Alternative B**  
(Proposed R/W 115-ft)

## TYPICAL SECTION ANALYSIS

### Evaluation Matrix

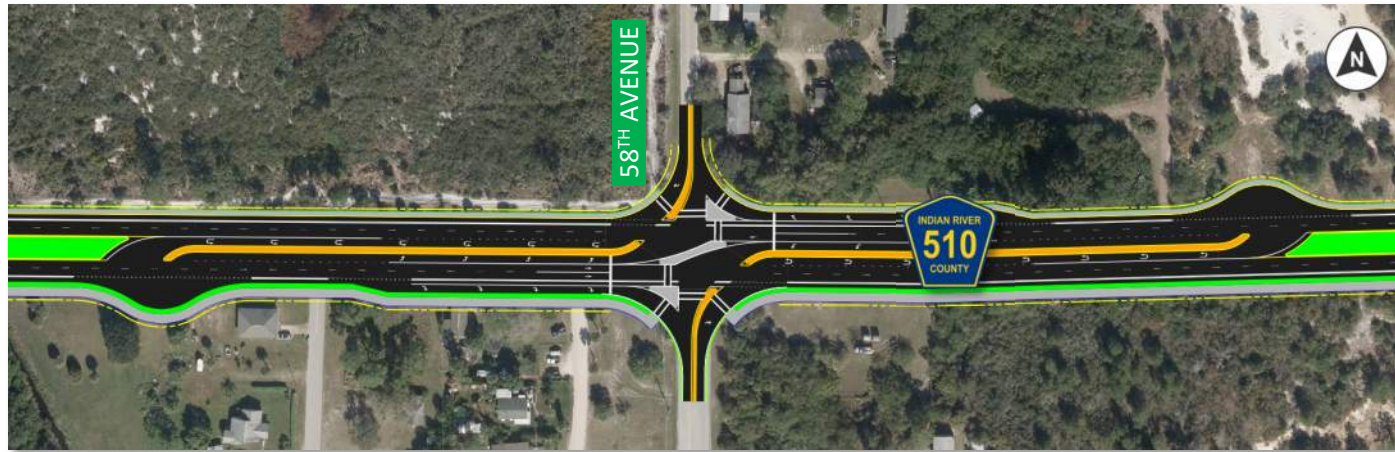
CRITERIA		Typical Section - Alternative A	Typical Section - Alternative B
ENGINEERING	TRAFFIC SERVICE	Divided 4-lane section improves traffic service with operating speeds of 40 MPH (Design) <span style="float:right">5</span>	Divided 4-lane section improves traffic service with operating speeds of 40 MPH (Design) <span style="float:right">5</span>
	SAFETY	Generally safe for vehicles, bicyclist's, and pedestrians. <span style="float:right">4</span>	Similar to previous alternative. Shared use path provides an off-road option for bicyclists to be separated from traffic. <span style="float:right">5</span>
	ACCESS ISSUES	Although divided median restricts/changes access, median openings are provided per access management criteria. <span style="float:right">4</span>	Similar to previous alternative. <span style="float:right">4</span>
	MULTIMODAL ISSUES	Section provides 7-foot buffered bike lanes and 6-foot sidewalks on both sides. <span style="float:right">4</span>	Section provides 7-foot buffered bike lanes on both sides, 6-foot sidewalk on north side and 12-foot shared use path on south side. <span style="float:right">5</span>
ENVIRONMENTAL	POTENTIAL WETLANDS AND WILDLIFE HABITAD IMPACTS	Smaller footprint, less potential for wetland and habitat impacts. <span style="float:right">5</span>	Larger footprint, more potential for wetland and habitat impacts. <span style="float:right">4</span>
	WATER QUALITY/DRAINAGE	Smaller area of impervious cover requires least amount of stormwater treatment. <span style="float:right">5</span>	Larger area of impervious cover requires largest amount of stormwater treatment. <span style="float:right">4</span>
	VISUAL/AESTHETIC IMPACTS	Smallest area for landscaping. <span style="float:right">4</span>	Largest area for landscaping. <span style="float:right">5</span>
SOCIO-ECONOMIC	HURRICANE EVACUATION/EMERGENCY	Additional capacity and bike lanes that can be used as shoulders for stopped/emergency vehicles facilitates emergency response and hurricane evacuation. <span style="float:right">5</span>	Similar to previous alternative. <span style="float:right">5</span>
	TRANSPORTATION PLANS COMPATIBILITY	Alternative features are compatible with adopted transportation plan. <span style="float:right">4</span>	Similar to previous alternative. Additionally, this alternative supports the IRC Bicycle and Pedestrian Master Plan. <span style="float:right">5</span>
	CONTROVERSY POTENTIAL	This alternative does not create controversy. <span style="float:right">3</span>	Alternative supported and requested by the community. <span style="float:right">5</span>
COST	CONSTRUCTION	Moderate cost due to roadway reconstruction. <span style="float:right">5</span>	Increased cost due to larger footprint. <span style="float:right">4</span>
	RIGHT-OF-WAY	Least amount of right-of-way required due to smallest footprint. <span style="float:right">5</span>	Largest amount of right-of-way required due to largest footprint. <span style="float:right">4</span>
<b>SCORE</b>		<b>53</b>	<b>55</b>

**SCORE CRITERIA:**  
 1 = Substantially Less Desirable  
 2 = Generally Less Desirable  
 3 = Neutral or No Effect  
 4 = Generally More Desirable  
 5 = Substantially More Desirable

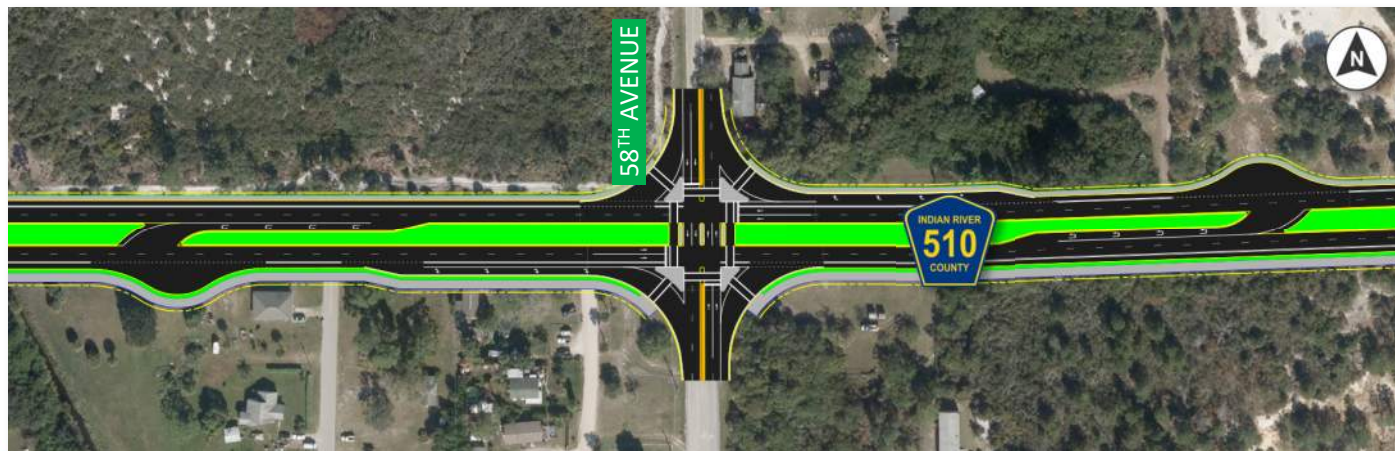


# Intersection Improvement Concepts – CR 510 at 58<sup>th</sup> Avenue

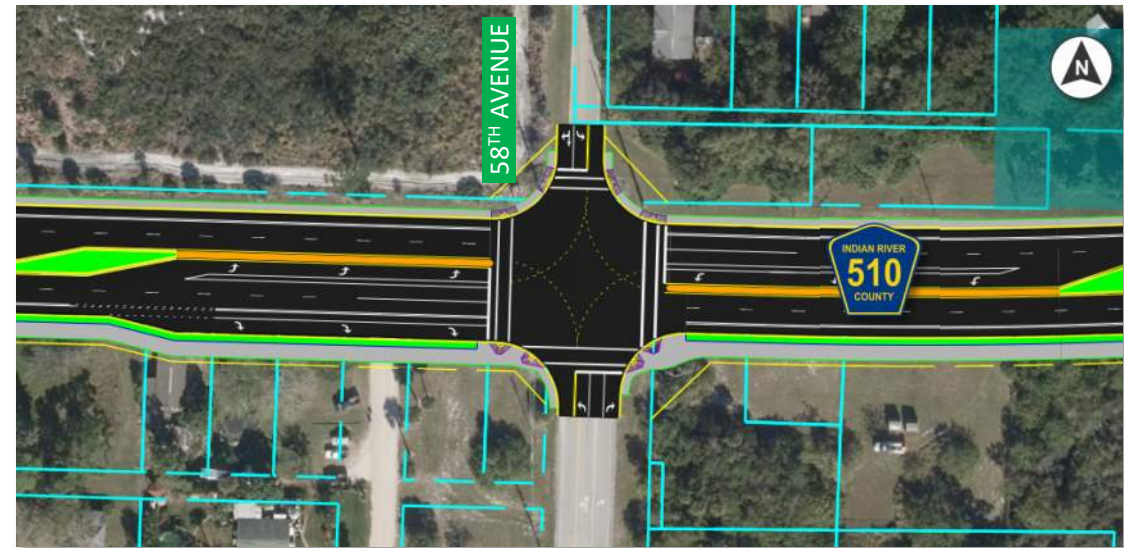
*Signalized Restricted Crossing U-Turn E-W (RCUT)*



*Signalized Median U-Turn E-W (MUT)*



*Conventional Traffic Signal*





## Intersection Improvement Evaluation Matrix

### CR 510 at 58<sup>th</sup> Avenue

**SCORE CRITERIA:**  
 1 = Substantially Less Desirable  
 2 = Generally Less Desirable  
 3 = Neutral or No Effect  
 4 = Generally More Desirable  
 5 = Substantially More Desirable

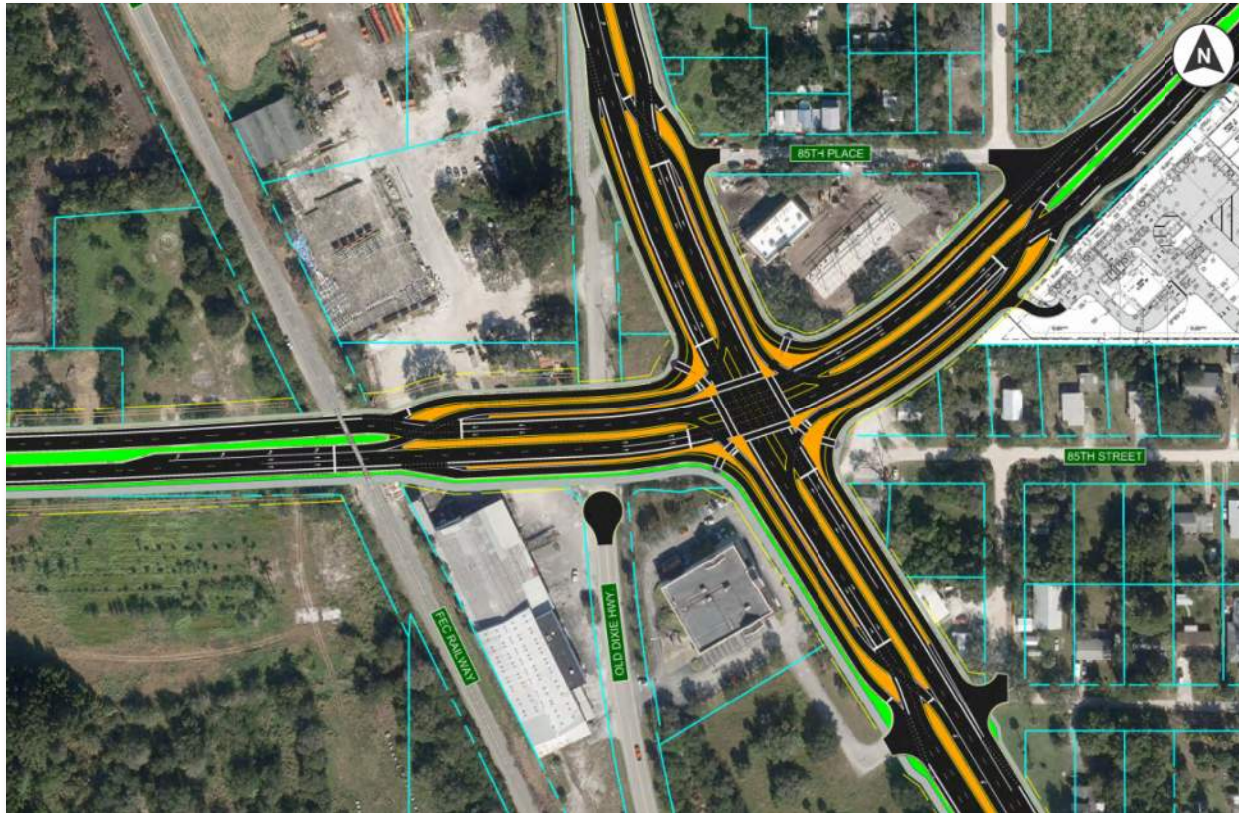
CRITERIA		RCUT	MUT	Traffic Signal
ENGINEERING	TRAFFIC SERVICE	Best traffic operations. <span style="float:right">5</span>	Better traffic operations than traditional traffic signal. <span style="float:right">4</span>	Provides adequate traffic operations. <span style="float:right">3</span>
	SAFETY	Less conflict points at the intersection will increase safety. <span style="float:right">4</span>	Less conflict points at the intersection will increase safety. <span style="float:right">4</span>	Provides more conflict points than the other two alternatives. <span style="float:right">3</span>
	ACCESS ISSUES	This alternative will required median U-turns to access 58th Avenue. <span style="float:right">2</span>	This alternative will required median U-turns to access 58th Avenue. <span style="float:right">2</span>	Provides direct access to 58th Avenue at the intersection. <span style="float:right">5</span>
ENVIRONMENTAL	POTENTIAL WETLANDS AND WILDLIFE HABITAD IMPACTS	This alternative creates impacts to the Scrub Jay Conservation Area. <span style="float:right">2</span>	This alternative creates impacts to the Scrub Jay Conservation Area. <span style="float:right">2</span>	This alternative avoids impacts to the Scrub Jay Conservation Area. <span style="float:right">5</span>
	WATER QUALITY/DRAINAGE	Larger area of impervious cover requires largest amount of stormwater treatment. <span style="float:right">2</span>	Larger area of impervious cover requires largest amount of stormwater treatment. <span style="float:right">2</span>	Smaller area of impervious cover requires least amount of stormwater treatment. <span style="float:right">4</span>
SOCIO-ECONOMIC	HURRICANE EVACUATION/ EMERGENCY RESPONSE	Restricted access to CR 510 provides less desirable conditions during emergency response. <span style="float:right">4</span>	Restricted access to CR 510 provides less desirable conditions during emergency response. <span style="float:right">4</span>	More direct access to CR 510 provides easiest access during emergency response. <span style="float:right">5</span>
	CONTROVERSY POTENTIAL	New intersection configuration will require education program. <span style="float:right">2</span>	New intersection configuration will require education program. <span style="float:right">2</span>	Conventional intersection will not create controversy. <span style="float:right">3</span>
COST	CONSTRUCTION	Increased cost due to larger footprint. <span style="float:right">4</span>	Increased cost due to larger footprint. <span style="float:right">4</span>	Moderate cost due to reconstruction. <span style="float:right">5</span>
	RIGHT-OF-WAY	Largest amount of right-of-way required due to largest footprint. <span style="float:right">4</span>	Largest amount of right-of-way required due to largest footprint. <span style="float:right">4</span>	Least amount of right-of-way required due to smallest footprint. <span style="float:right">5</span>
<b>SCORE</b>		<b>29</b>	<b>28</b>	<b>38</b>





# Intersection Improvements – CR 510 at US-1

*Displaced Left Turn (DLT)*



*Conventional Traffic Signal*





# Intersection Improvement Evaluation Matrix

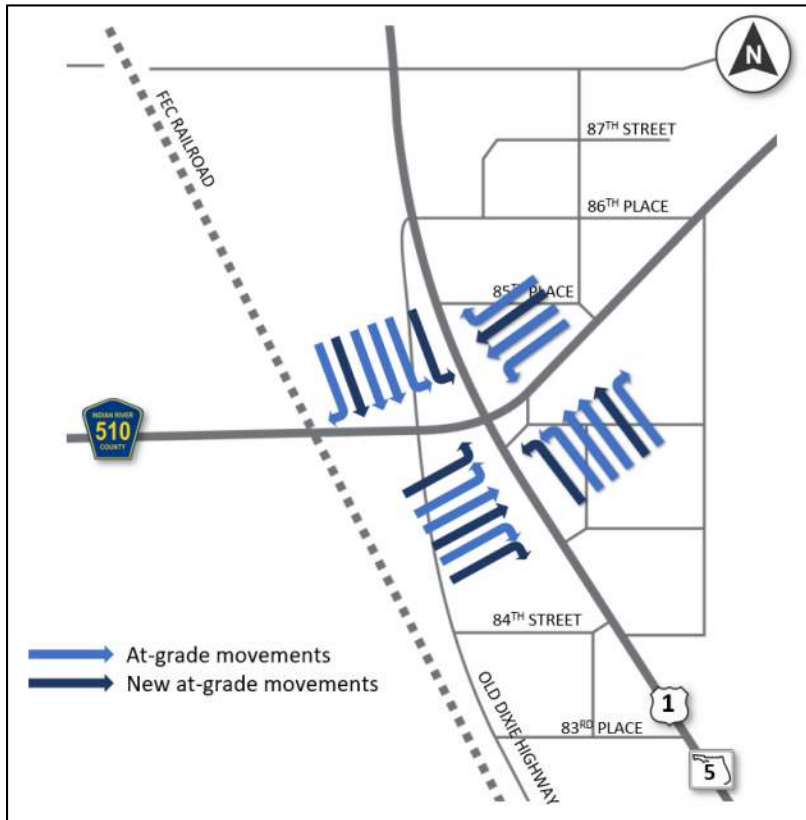
## CR 510 at US-1

**SCORE CRITERIA:**  
 1 = Substantially Less Desirable  
 2 = Generally Less Desirable  
 3 = Neutral or No Effect  
 4 = Generally More Desirable  
 5 = Substantially More Desirable

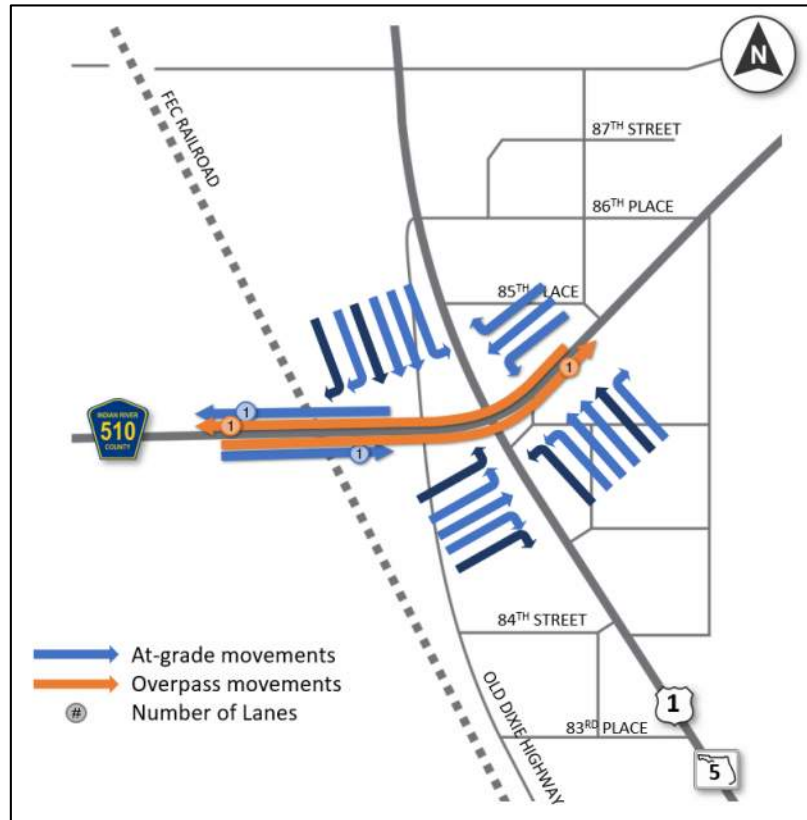
CRITERIA		DLT	Traffic Signal
ENGINEERING	TRAFFIC SERVICE	Best traffic operations. <span style="float:right">5</span>	Provides adequate traffic operations. <span style="float:right">3</span>
	SAFETY	Less conflict points at the intersection will increase safety. <span style="float:right">4</span>	Provides more conflict points than the other two alternatives. <span style="float:right">3</span>
	ACCESS ISSUES	This alternative will impact direct access to businesses at three quadrants within the intersection. <span style="float:right">2</span>	Provides direct access to all businesses within the intersection. <span style="float:right">5</span>
ENVIRONMENTAL	POTENTIAL WETLANDS AND WILDLIFE HABITAD IMPACTS	Minimal impacts <span style="float:right">3</span>	Minimal impacts <span style="float:right">3</span>
	WATER QUALITY/DRAINAGE	Larger area of impervious cover requires largest amount of stormwater treatment. <span style="float:right">2</span>	Smaller area of impervious cover requires less amount of stormwater treatment. <span style="float:right">3</span>
SOCIO-ECONOMIC	HURRICANE EVACUATION/ EMERGENCY RESPONSE	Provides adequate access during emergency response. <span style="float:right">3</span>	Provides adequate access during emergency response. <span style="float:right">3</span>
	CONTROVERSY POTENTIAL	New intersection configuration will require education program. <span style="float:right">2</span>	Conventional intersection will not create controversy. <span style="float:right">3</span>
COST	CONSTRUCTION	Increased cost due to larger footprint. <span style="float:right">4</span>	Moderate cost due to reconstruction. <span style="float:right">5</span>
	RIGHT-OF-WAY	Largest amount of right-of-way required due to largest footprint. <span style="float:right">4</span>	Least amount of right-of-way required due to smallest footprint. <span style="float:right">5</span>
<b>SCORE</b>		<b>29</b>	<b>33</b>

# Alternative at the FEC Railroad Crossing

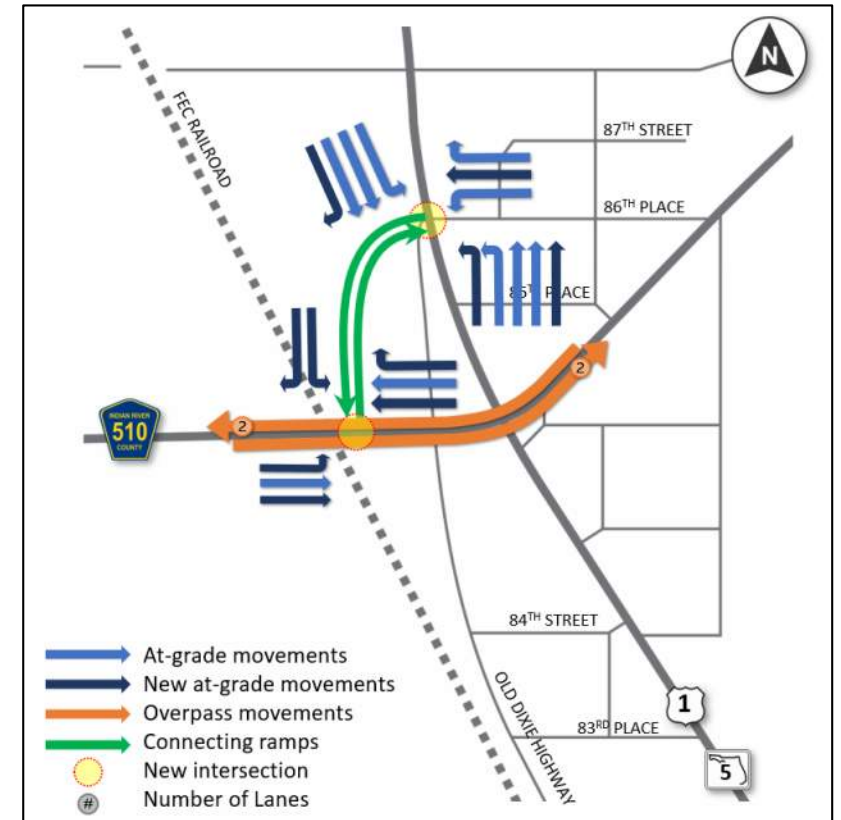
**Alternative 1**  
*At-Grade Widening*



**Alternative 2**  
*Partial Grade Separation over FEC*



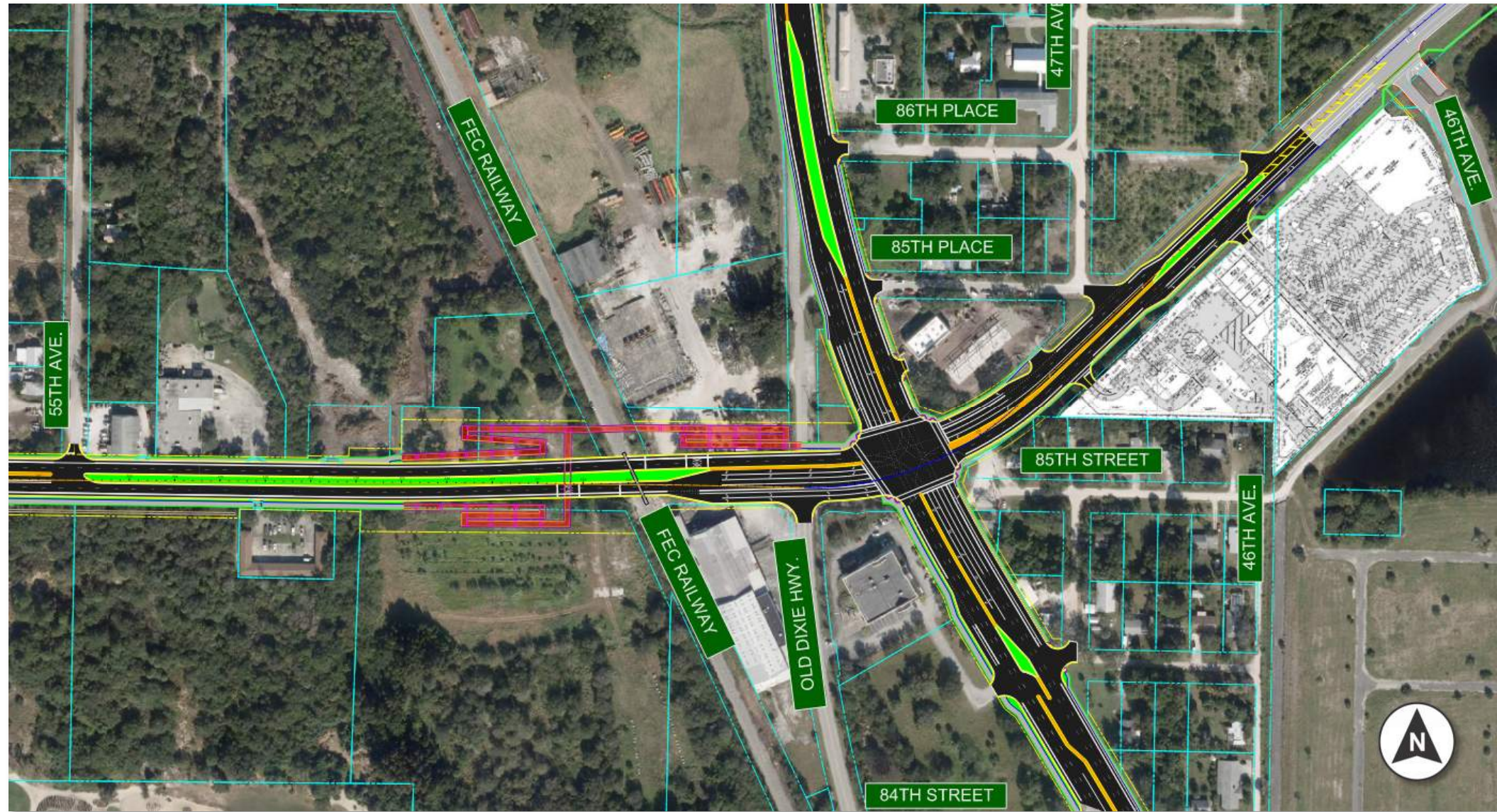
**Alternative 3**  
*Full Grade Separation over FEC*





# Alternative 1

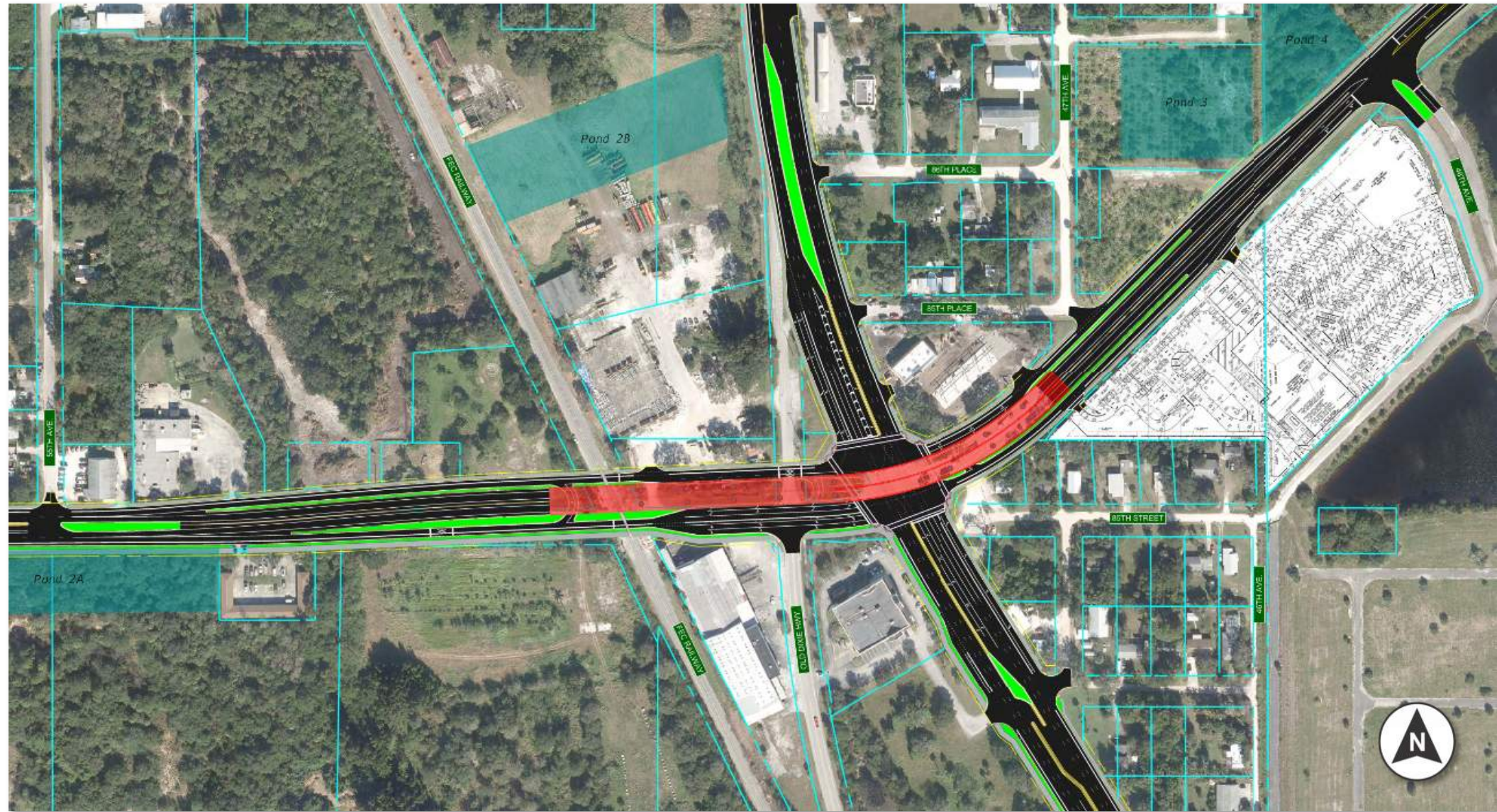
## At-Grade Widening





# Alternative 2

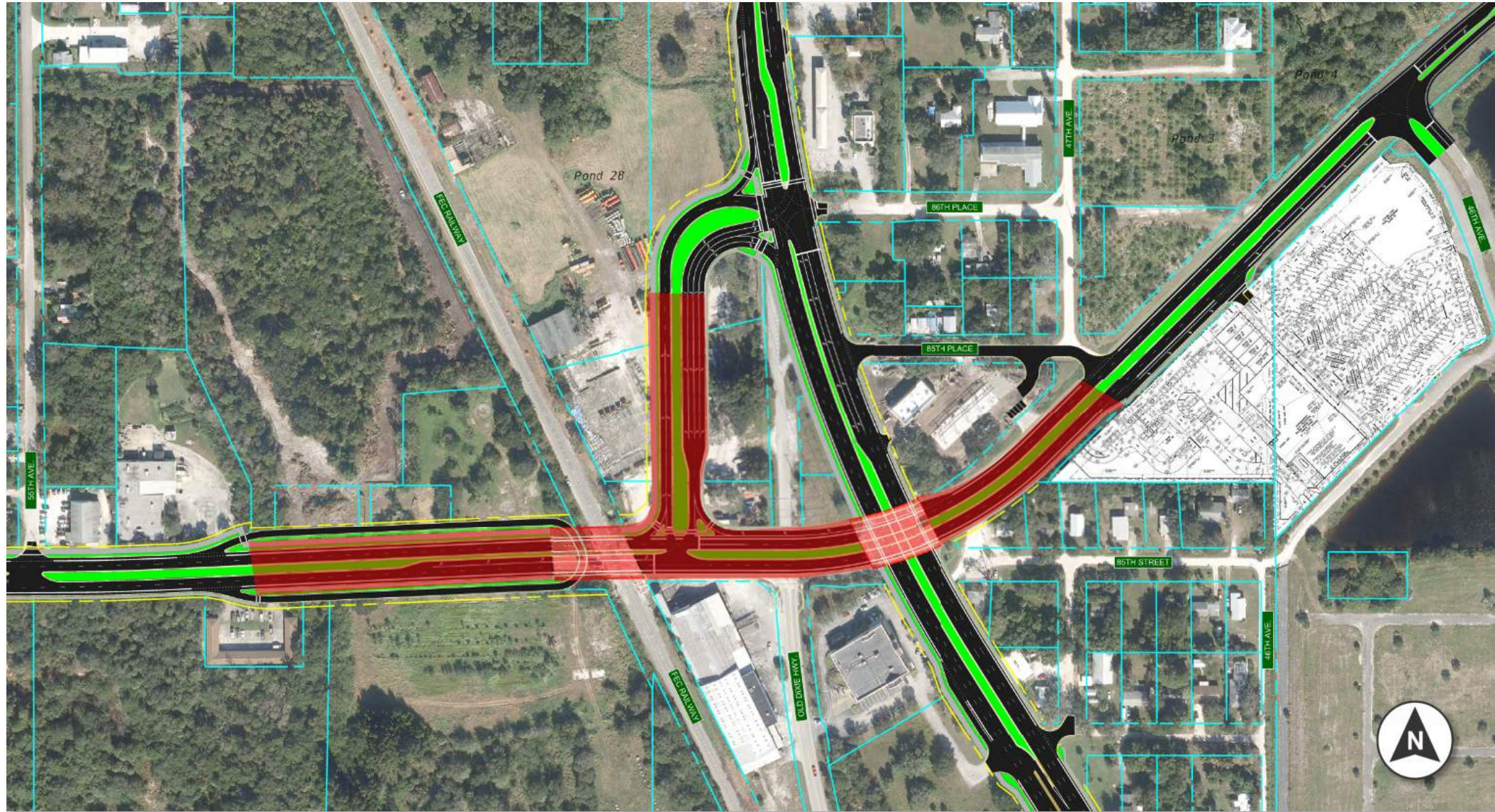
## Partial Grade Separation over FEC





## Alternative 3

### Full Grade Separation over FEC





## Alternatives at the FEC Railroad Crossing Evaluation Matrix

**SCORE CRITERIA:**  
 1 = Substantially Less Desirable  
 2 = Generally Less Desirable  
 3 = Neutral or No Effect  
 4 = Generally More Desirable  
 5 = Substantially More Desirable

CRITERIA		ALTERNATIVE 1 At-Grade Widening	ALTERNATIVE 2 Partial Grade Separation over FEC	ALTERNATIVE 3 Full Grade Separation over FEC
Purpose & Need	Capacity	Improves along CR 510 and at the US-1 intersection will improve capacity. <span style="float:right">4</span>	Improves along CR 510 and at the US-1 intersection will improve capacity. <span style="float:right">5</span>	Improves along CR 510 and at the US-1 intersection will improve capacity. This alternatives impacts additional intersection. <span style="float:right">4</span>
	Transportation Demand	Improvements will meet the transportation demand along CR 510 <span style="float:right">4</span>	Improvements will meet the transportation demand along CR 510 <span style="float:right">4</span>	Improvements will meet the transportation demand along CR 510 <span style="float:right">4</span>
	Social Demand/Economic Development	Maintains access to Bridge Marketplace development and other new developments <span style="float:right">5</span>	Maintains access to Bridge Marketplace development and other new developments <span style="float:right">5</span>	Provides access impacts at Bridge Marketplace development <span style="float:right">2</span>
	Modal Relationship	Provides sidewalks and bicycle lanes, providing connectivity to the US-1 SUP <span style="float:right">4</span>	Provides sidewalks and bicycle lanes, providing connectivity to the US-1 SUP <span style="float:right">4</span>	Provides sidewalks and bicycle lanes, providing connectivity to the US-1 SUP <span style="float:right">4</span>
	System Linkage	Improves evacuation. Improves connectivity with US-1. <span style="float:right">5</span>	Improves evacuation. Improves connectivity with US-1. <span style="float:right">5</span>	Improves evacuation. Modifies connecting access to US-1. <span style="float:right">4</span>
Engineering	Geometric Compliance to Design Criteria	This alternative could be implemented per FDM <span style="float:right">5</span>	This alternative could be implemented per FDM <span style="float:right">5</span>	In order to maintain access to local businesses this alternative will require design exceptions <span style="float:right">4</span>
	Access Management	Maintains existing driveway access points. Closes access to Old Dixie Highway. <span style="float:right">4</span>	Maintains existing driveway access points. Closes access to Old Dixie Highway. <span style="float:right">4</span>	Closes access to Old Dixie Highway. Closes 3 existing driveways: at Graves Brothers, packing house, 7-eleven. <span style="float:right">1</span>
	Multimodal Accommodations	This alternative provides sidewalks and bicycle lanes throughout the corridor <span style="float:right">4</span>	This alternative provides sidewalks and bicycle lanes throughout the corridor <span style="float:right">4</span>	This alternative provides sidewalks and bicycle lanes throughout the corridor <span style="float:right">4</span>
	Mobility	Improves mobility <span style="float:right">4</span>	Improves mobility <span style="float:right">5</span>	Improves mobility but modifies connection/ wayfinding at the CR 510 and US-1 intersection. <span style="float:right">1</span>
	Safety Impacts	Provides additional safety improvements along CR 510 and adds turn lanes improving the existing conditions <span style="float:right">3</span>	Provides additional safety improvements along CR 510 and removes through traffic from the US-1 intersection <span style="float:right">5</span>	Provides additional safety improvements along CR 510 and modifies the existing US-1 intersection creating a new T-intersection with CR 510 <span style="float:right">2</span>
	Utility Impacts	Minor <span style="float:right">3</span>	Moderate <span style="float:right">2</span>	Substantial <span style="float:right">1</span>
	Maintenance of Traffic	Least Complex TTCP <span style="float:right">4</span>	More Complex TTCP <span style="float:right">3</span>	Most Complex TTCP <span style="float:right">1</span>

(Table continues next slide)

## Alternatives at the FEC Railroad Crossing

## Evaluation Matrix

**SCORE CRITERIA:**  
 1 = Substantially Less Desirable  
 2 = Generally Less Desirable  
 3 = Neutral or No Effect  
 4 = Generally More Desirable  
 5 = Substantially More Desirable

CRITERIA		ALTERNATIVE 1 At-Grade Widening	ALTERNATIVE 2 Partial Grade Separation over FEC	ALTERNATIVE 3 Full Grade Separation over FEC
Social-Economic	Social & Neighborhood Impacts	Lower neighborhood impacts <span style="float:right">3</span>	Moderate neighborhood impacts <span style="float:right">2</span>	Greater neighborhood impacts <span style="float:right">1</span>
	Relocation Potential	This alternative could be implemented without relocations <span style="float:right">3</span>	This alternative could be refined to eliminate relocations <span style="float:right">2</span>	Connecting ramps will impact properties at the northwest quadrant of the CR 510 and US-1 <span style="float:right">1</span>
	Community Services Facilities	No impacts to any community service facilities <span style="float:right">3</span>	No impacts to any community service facilities <span style="float:right">3</span>	Access impacts to businesses at the US-1 intersection <span style="float:right">2</span>
	Public Comments	Preferable option <span style="float:right">5</span>	Publicly accepted <span style="float:right">4</span>	Least public support <span style="float:right">1</span>
Environmental	Water Quality and Quantity	Ponds required. Easiest to maintain existing stormwater conditions. <span style="float:right">5</span>	Ponds required. Easier to maintain existing offsite treatment but basins change due to proposed bridge. <span style="float:right">4</span>	Biggest ponds required. Basins and offsite flow routes change due to ramp and bridge. <span style="float:right">2</span>
	Wildlife and Habitat	Impacts to existing habitat will need to be mitigated <span style="float:right">2</span>	Impacts to existing habitat will need to be mitigated <span style="float:right">2</span>	Impacts to existing habitat will need to be mitigated <span style="float:right">2</span>
	Cultural/Historical/Archeological	Packing house potential historical resource. Alternative avoids impacts at this location. <span style="float:right">3</span>	Packing house potential historical resource. Alternative avoids impacts at this location. <span style="float:right">3</span>	Packing house potential historical resource. Alternative avoids impacts at this location. <span style="float:right">3</span>
	Noise Impacts	All travel lanes at-grade <span style="float:right">4</span>	Two elevated lanes <span style="float:right">3</span>	Four elevated lanes and additional ramps at 86th Place <span style="float:right">2</span>
	Contamination	Moderate risk <span style="float:right">2</span>	Moderate risk <span style="float:right">2</span>	Moderate risk <span style="float:right">2</span>
Other Considerations	Right-of-Way Impacts	This alternative will require additional R/W for the widening of CR 510 and the least amount of R/W at the US-1 intersection. <span style="float:right">3</span>	This alternative will require additional R/W for the widening of CR 510 and additional R/W at the US-1 intersection for the partial overpass. <span style="float:right">2</span>	This alternative will require additional R/W for the widening of CR 510 and a substantial amount of R/W at the US-1 intersection for the additional connecting ramps. <span style="float:right">1</span>
	Preliminary Construction Cost	Moderate Cost <span style="float:right">3</span>	High Cost <span style="float:right">2</span>	Highest Cost <span style="float:right">1</span>
	Constructability	Least Complex <span style="float:right">3</span>	More Complex <span style="float:right">2</span>	Most Complex <span style="float:right">1</span>
	MPO Support	Widens CR 510 from 2 to 4 lanes and provides improvements at the US-1 intersection <span style="float:right">4</span>	Widens CR 510 from 2 to 4 lanes and provides improvements at the US-1 intersection <span style="float:right">4</span>	Widens CR 510 from 2 to 4 lanes but provides higher impacts at the US-1 Intersection <span style="float:right">2</span>
	Compatible with FEC Railroad Requirements	Not compatible with FEC requirements to grade separate any CR 510 improvements <span style="float:right">1</span>	Maintaining two at-grade lanes will require the closure of another existing at grade railroad crossing <span style="float:right">4</span>	This alternative removes all at-grade railroad crossing conflict points <span style="float:right">5</span>
<b>SCORE</b>		<b>93</b>	<b>90</b>	<b>58</b>

# ENVIRONMENTAL ANALYSIS



- ### Social & Economic Effects
- Land Use Changes
  - Relocation Potential
  - Social
  - Farmlands
  - Aesthetic
  - Economic
  - Mobility

- ### Natural Resources
- Wetlands
  - Aquatic Preserves
  - Water Quality and Quantity
  - Wild and Scenic Rivers
  - Floodplains
  - Protected Species and Habitat
  - Essential Fish Habitat

- ### Cultural Resources
- Historic Sites/Districts
  - Archeological Sites
  - Recreation Areas
  - Section 4(f) Potential

- ### Physical Effects
- Traffic Noise
  - Air Quality
  - Contamination
  - Infrastructure



## Natural Resources

- 10 Wetlands along the corridor
- Mostly near CR 510 and the FEC Railroad



Existing wetlands along CR 510 west of US-1



Existing wetlands along CR 510 east of US-1





## Natural Resources

- 13 Gopher tortoise burrows. All but two between 58<sup>th</sup> Avenue and 55<sup>th</sup> Avenue
- Potential scrub-jay habitat along CR 510 between 58<sup>th</sup> Avenue and 55<sup>th</sup> Avenue. Scrub-jay survey will be conducted in the spring 2024



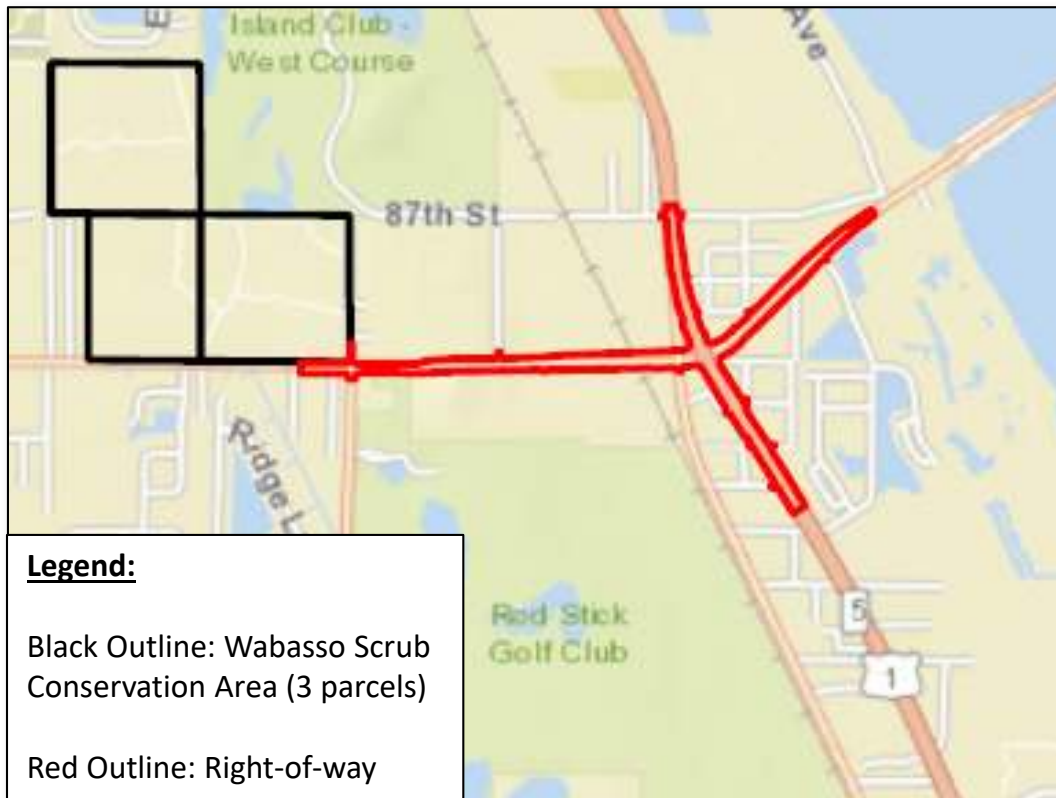
*Existing Gopher tortoise burrow along CR 510 at location #3*





## Section 4(f)

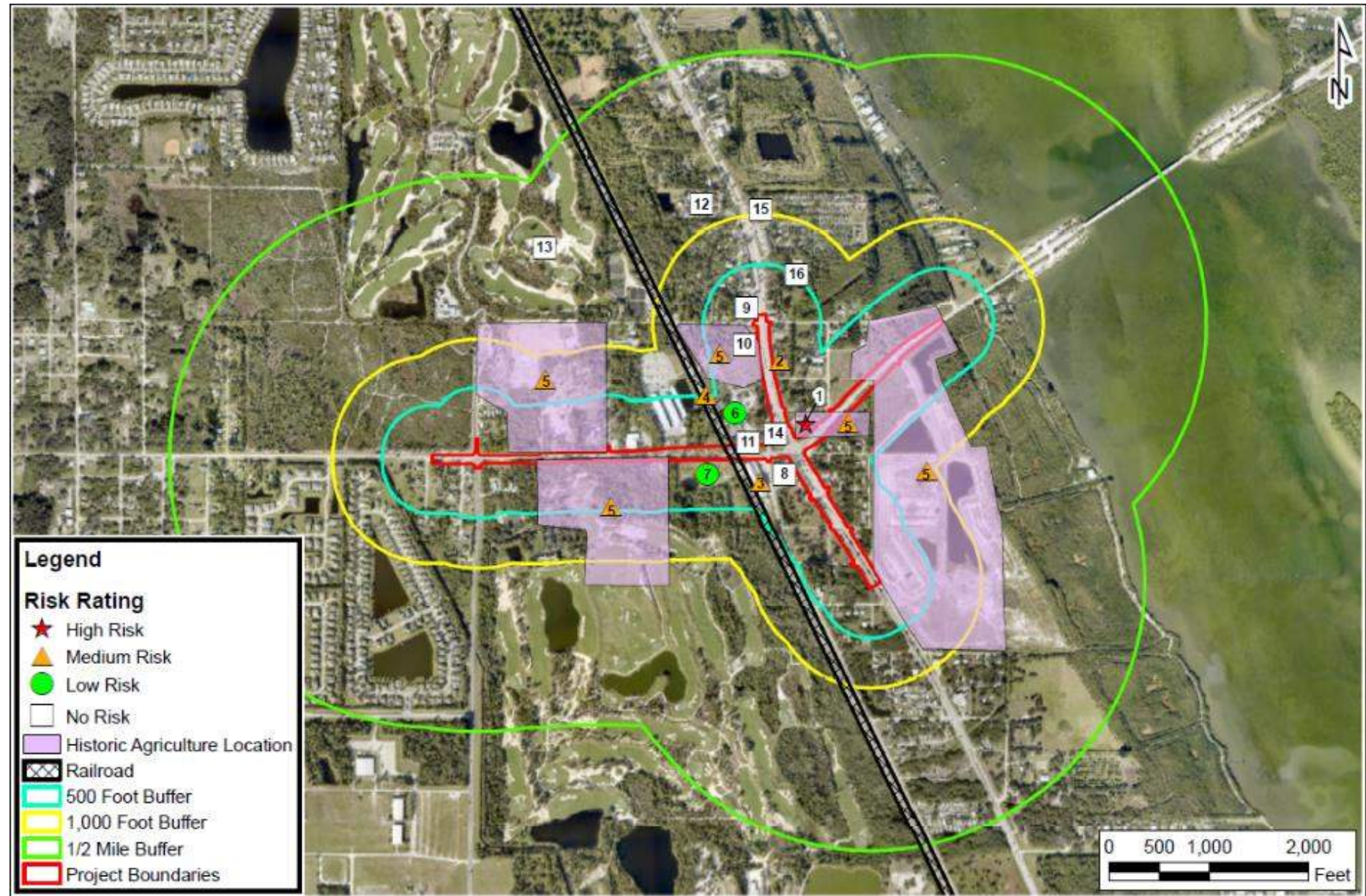
- Wabasso Scrub Conservation Area directly adjacent to project at NW corner or CR 510 & 58th Avenue





## Contamination

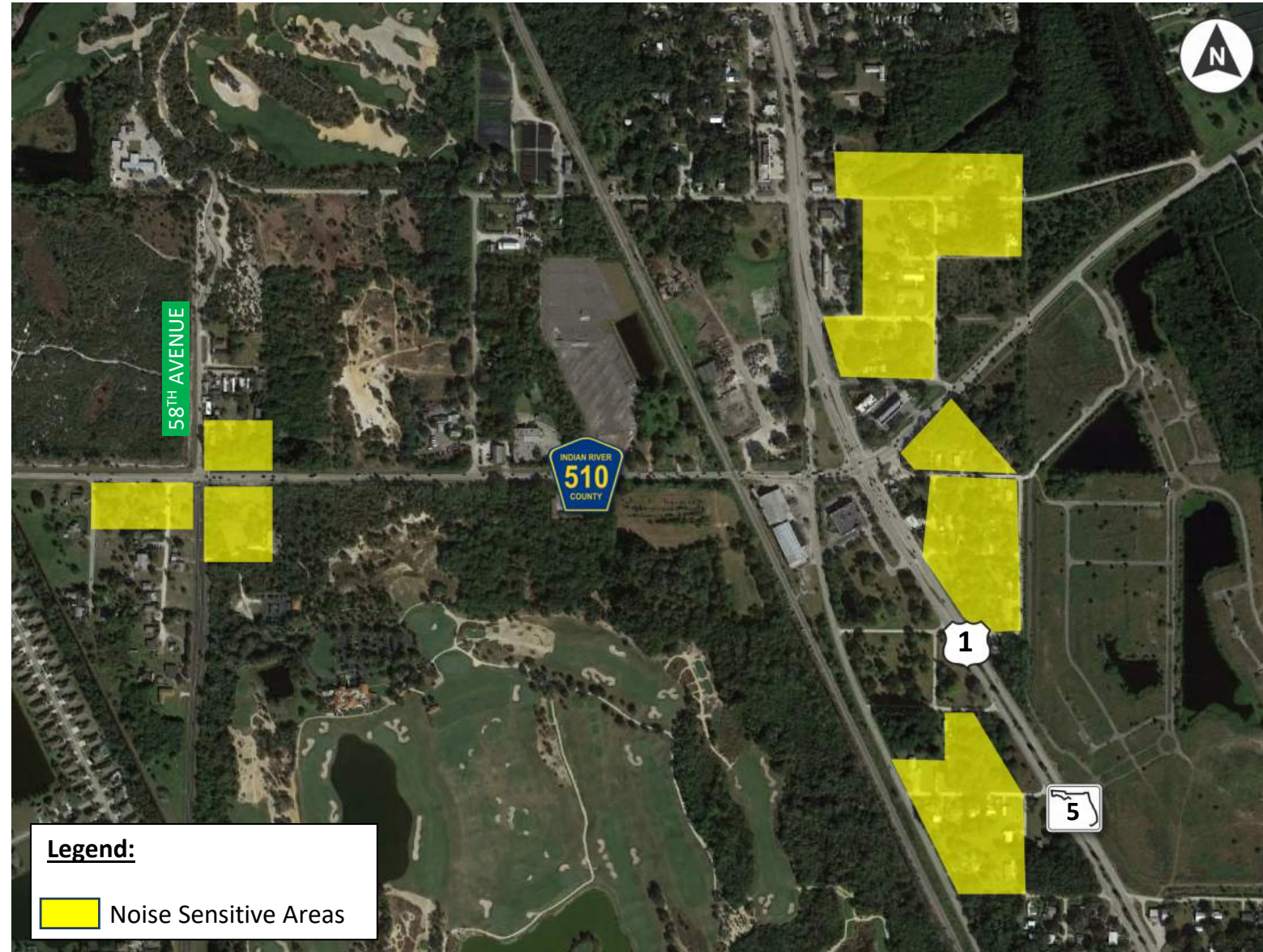
- 16 sites
  - 1 high risk
  - 4 medium risk
  - 2 low risk
  - 9 no risk





## Noise Analysis

- Most of the existing noise sensitive areas are located along the east side of US-1
- Existing noise levels were measured at three locations within the project limits during August 2023
- Ranged from 58.0 to 66.3 dB(A)
- FDOT’s Noise Abatement Criteria for homes is 66 dB(A).
- Noise abatement will be considered for all locations within the project limits where traffic noise levels are predicted to be greater than the FDOT’s NAC.





## Cultural Resources

- A Cultural Resource Assessment Survey (CRAS) is being completed
- 3 linear resources
  - FEC Railroad (8IR01497)
  - Old Dixie Highway (8IR01519)
  - US-1 (8IR01520)
- 1 newly recorded resource eligible for listing in the National Register of Historic Places (NRHP)
  - Graves Brother Packing House (8IR01920)





## PUBLIC INVOLVEMENT

- Public Meetings:
  - Public Kick-off Meeting:
    - *January 26, 2023 (Virtual)*
    - *January 31, 2023 (In-Person)*
  - Alternatives Public Workshop:
    - *February 27, 2024 (Virtual)*
    - *February 29, 2024 (In-Person)*
  - Public Hearing:
    - *Winter 2024 (Tentative)*
- Submit Comments to:
  - Maria Formoso, PE
  - E-mail: [maria.formoso@dot.state.fl.us](mailto:maria.formoso@dot.state.fl.us)
  - Project Website: <https://www.fdot.gov/projects/cr510-58ave-us1>

Public comments and questions are welcomed at any time throughout the study.

### Social Media

Facebook: MyFDOTSEFL  
 Instagram: myfdot\_sefl  
 X: @MyFDOT\_SEFL

GET INVOLVED!  
STAY INFORMED!



## PROJECT SCHEDULE

**Funding:**

- PD&E Study (Fiscal Year 2022)
- Design (Fiscal Year 2024)
- Right-of-Way (Fiscal Year 2026)
- Construction (Currently not funded)

TASK	2022					2023												2024																		
	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D							
Notice to Proceed	▶ Notice to Proceed																																			
Existing Conditions Analysis	█																																			
Public Kick-Off Meeting	◆ Public Kick-Off Meeting																																			
Development of Alternatives	█																																			
Engineering Analysis	█																																			
Environmental Analysis	█																																			
IRC – MPO Presentations	◆ IRC – MPO Presentations																																			
Alternatives Public Workshop	◆ Alternatives Public Workshop																																			
Select Preferred Alternative	◆ Select Preferred Alternative																																			
Draft Engineering Reports	█																																			
Draft Environmental Reports	█																																			
IRC – MPO Presentations	◆ IRC – MPO Presentations																																			
Public Hearing	◆ Public Hearing (Tentative)																																			
Final Engineering Reports	█																																			
Final Environmental Reports	█																																			
SWEPT Submittal – OEM Review	█																																			
Location and Design Concept Acceptance (LDCA)	◆ LDCA																																			



## SUBMITTING COMMENTS AND QUESTIONS TODAY



Ways to submit your comments:

1. Online using the GoToWebinar by typing your comment/question in the Question Box
2. Verbally by using the “Raise Hand” feature on your control panel to be unmuted
3. Online at project website
4. By phone or email to Project Manager
5. By U.S. mail to Project Manager

Project Website:

<https://www.fdot.gov/projects/cr510-58ave-us1>

Project Manager Contact Information:

Maria Formoso, P.E.  
 FDOT District Four  
 3400 West Commercial Boulevard  
 Fort Lauderdale, FL 33309

Email: [maria.Formoso@dot.state.fl.us](mailto:maria.Formoso@dot.state.fl.us)  
 Telephone: 954-777-4677  
 Toll-Free: 866-336-8435, Ext. 4677



## ABOUT YOUR COMMENTS AND QUESTIONS



All comments and questions are part of the **Public Record.**



Please submit your comments and questions



All registrants will receive a link to the **meeting recording.**

# Questions and Answers Session

## Thank You For Participating!

### Project Website:

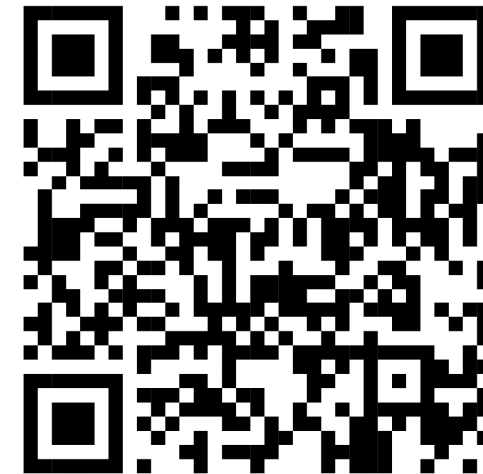
<https://www.fdot.gov/projects/cr510-58ave-us1>

### Project Manager Contact Information:

Maria Formoso, P.E.  
 FDOT District Four  
 3400 West Commercial Boulevard  
 Fort Lauderdale, FL 33309

Email: [maria.Formoso@dot.state.fl.us](mailto:maria.Formoso@dot.state.fl.us)  
 Telephone: 954-777-4677  
 Toll-Free: 866-336-8435, Ext. 4677

Please submit  
 comments or questions







**STAY @ THE SCENE**

## Railroad Safety Campaign

- DO**
- ◇ Stay behind the stop line or gate while waiting for the train to pass.
  - ◇ Wait for the gates to go up completely before crossing.
  - ◇ Look both ways to ensure there are no other trains coming.
  - ◇ Use sidewalks or other designated crossings.
  - ◇ Obey all signals and warning signs.
  - ◇ Report a problem or emergency by calling the number posted on the blue Emergency Notification Sign located at each railroad crossing.

- DON'T**
- ◇ Go around or under the gates when they are down.
  - ◇ Stop on the tracks.
  - ◇ Take shortcuts along or over the tracks – this is trespassing.
  - ◇ Talk on the phone, text or listen to your headphones when crossing the tracks.
  - ◇ Extend your arms, legs or any other body part past the gates or stop bar.
  - ◇ Cross the tracks when red lights are flashing.



**At the tracks, know when and where to cross.**

**LIVE  
TO TELL**





*Thank you  
for attending the  
Alternatives Workshop  
for the  
CR 510 PD&E Study*





## We are experiencing technical difficulties

Our team is actively working to fix the issue and hope to have this resolved soon.

Thank you for your patience.



## We are experiencing technical difficulties

This meeting will be postponed.  
Information will be posted on the project website:

<https://www.fdot.gov/projects/cr510-58ave-us1>

Thank you for your patience.

