

Project Development and Environment (PD&E) Study for SR 9/I-95 from 6th Avenue South to SR 704/Okeechobee Boulevard

Financial Project Identification Number: 444202-2-22-02

Efficient Transportation Decision Making (ETDM) Number: 14509



**Presentation to
Town of Cloud Lake
and Glen Ridge**

April 14, 2025

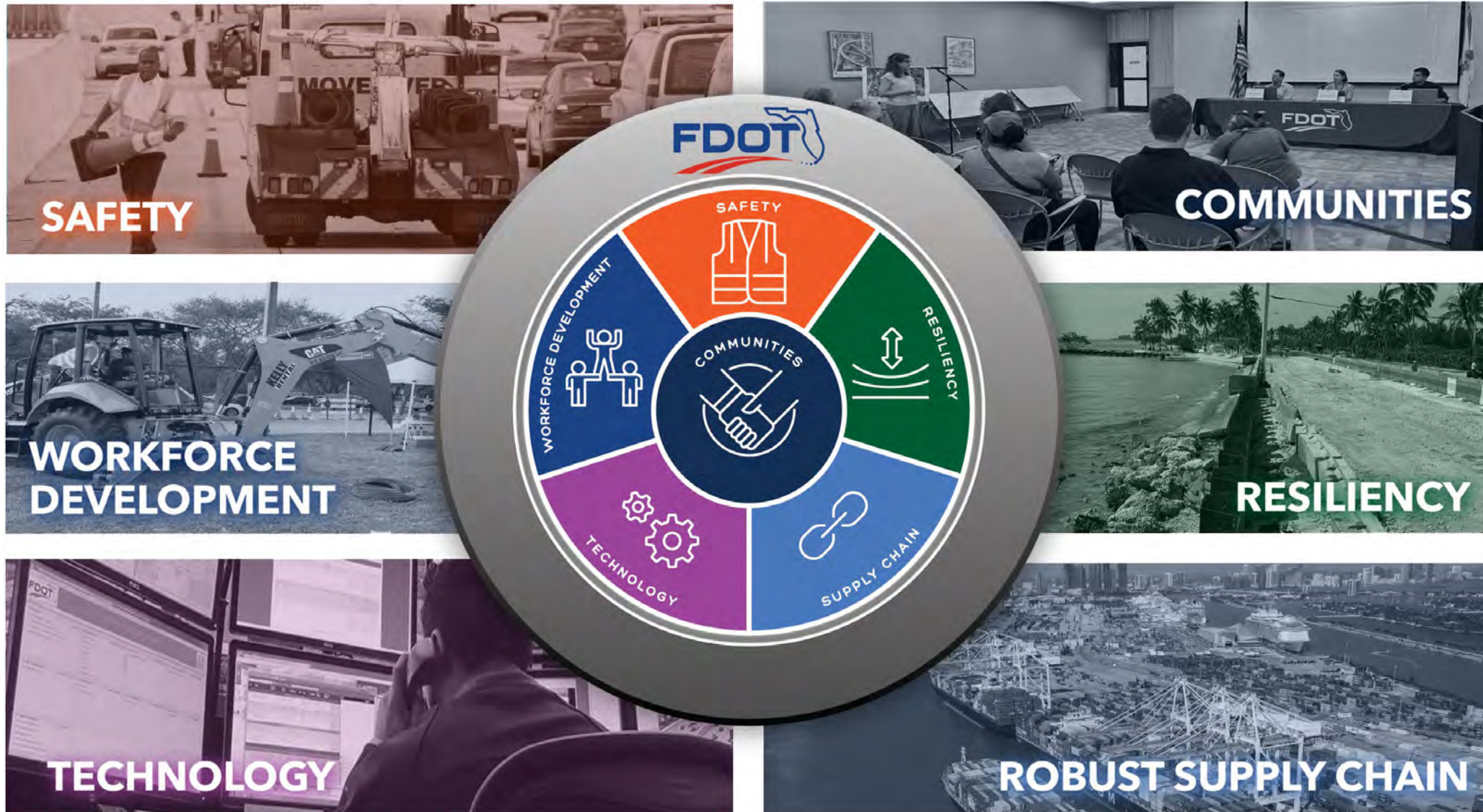


Agenda

- 1) Project History
- 2) Purpose and Need
- 3) Evaluation of Alternatives Under Consideration
- 4) Project Website and Contact Information
- 5) Next Steps

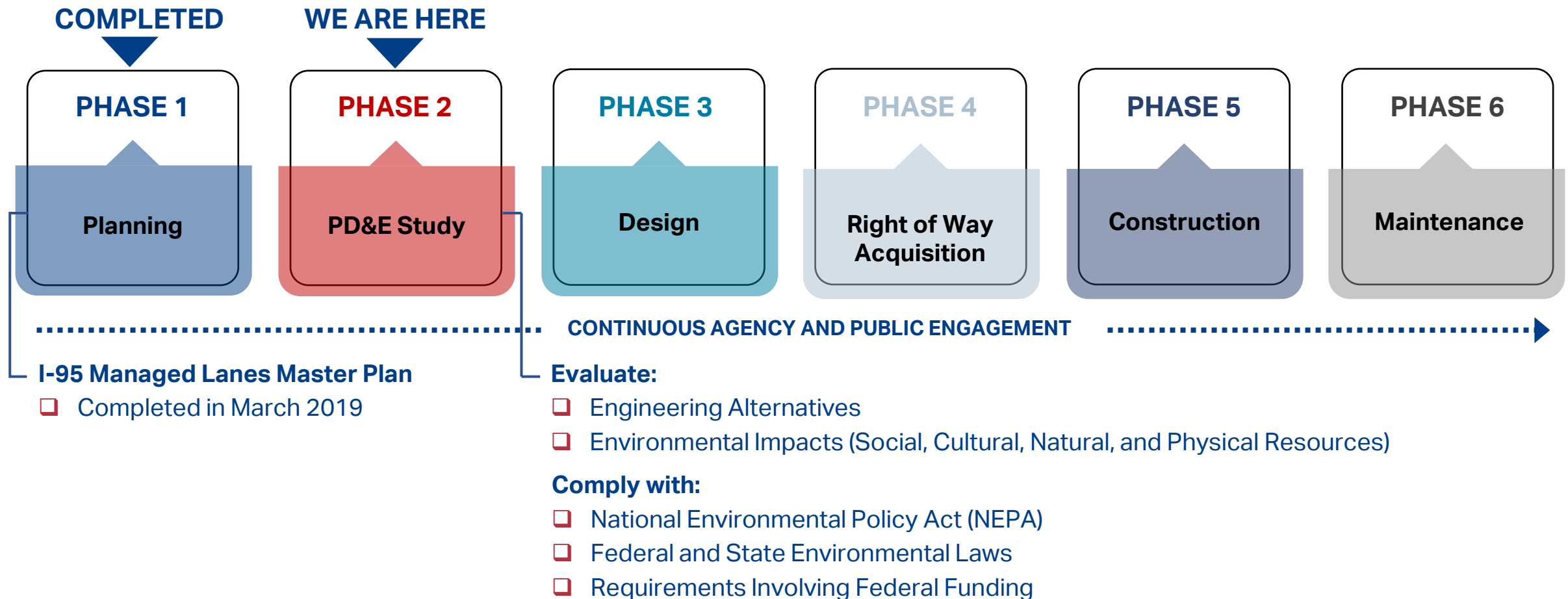


FDOT Compass





Transportation Development Process

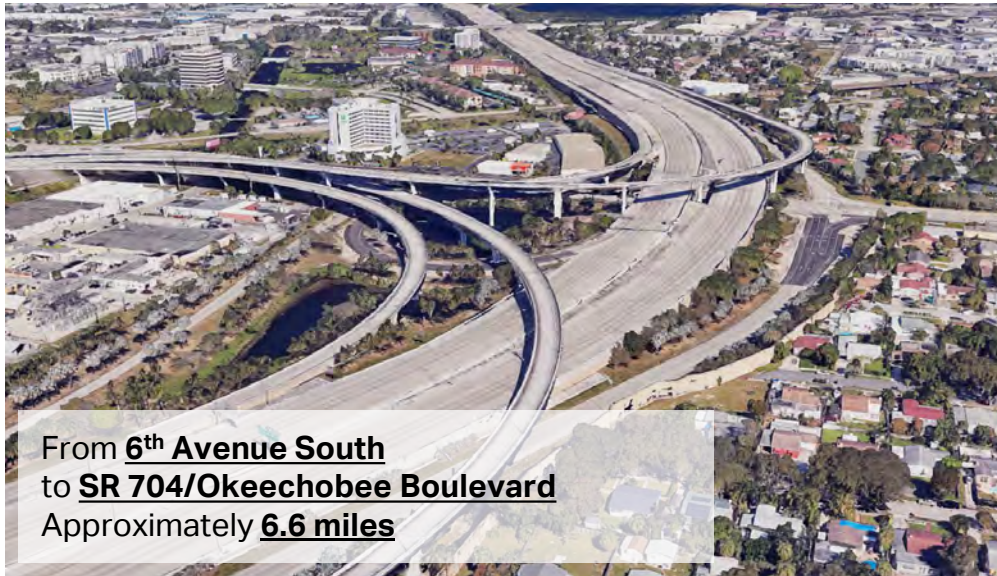




PD&E Study Process



Project Location



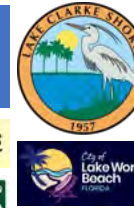
Adjacent Projects

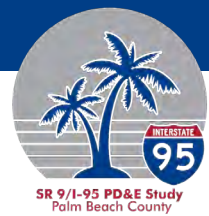
- FPID 444202-1-22-02**
PD&E Study from Linton Boulevard/CR 782 to 6th Avenue South




- West Palm Beach
- Glen Ridge
- Cloud Lake
- Lake Worth
- Lake Clarke Shores

- Urban Principal Arterial
- Minor Arterials
- South Florida Rail Corridor
- Interchanges to be evaluated
- Project Limits






Project History

 **Preliminary Engineering Report**

PRELIMINARY ENGINEERING REPORT
SR 9 / I-95 AT SR 80 / SOUTHERN BOULEVARD
PROJECT DEVELOPMENT & ENVIRONMENT STUDY
(SR 80 MP 19.1 to 20.4 and I-95 MP 24.3 to 25.3)


ETDM No.: 14183/ FAP No.: TBD
Financial Project ID: 435516-1-22-02
Palm Beach County



Prepared for:
FDOT District Four
3400 W. Commercial Blvd.
Ft. Lauderdale, FL 33309

September 2018

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 December 14, 2016 and executed by the Federal Highway Administration and FDOT.

 SR 9/I-95 at SR 80/Southern Boulevard Interchange: PM&E Study
FM #: 435516-1-22-02 / FAP #: TBD / Efficient Transportation Decision Making #: 14183

2018

2018

2019



**SR 80
Corridor
Action Plan**
From US-27 to I-95

STATE ROAD 80 CORRIDOR ACTION PLAN FINAL REPORT

FROM US-27/SR-25 TO I-95/SR-9, PALM BEACH COUNTY, FLORIDA
April 2018



MASTER PLAN REPORT

I-95 Managed Lanes Master Plan
From South of Linton Boulevard to Palm Beach/Martin County Line
Palm Beach County, Florida

Contract No.: C9065
Financial Management No.: 436576-1-22-01
FAP Project No.: Not Assigned

Prepared for:
Florida Department of Transportation
District 4
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

Prepared by:
AECOM Technical Services, Inc.
7650 Corporate Center Drive
Suite 400
Miami, Florida 33126

March 2019

What are Managed Lanes

- ❑ MLs are an innovative solution to congestion management
- ❑ Limited access to specific vehicle classes by a toll or vehicle volume
- ❑ MLs are an alternative to increase capacity
- ❑ The Department will prioritize this approach to deploy a transportation system that is:
 - Safe
 - Community centric
 - Accessible



Provide travel choices



Offer predictable travel times



Manage time congestion



Reduce fuel consumption



Decrease air pollution



Support transit usage

Project Background: I-95 Managed Lanes Master Plan

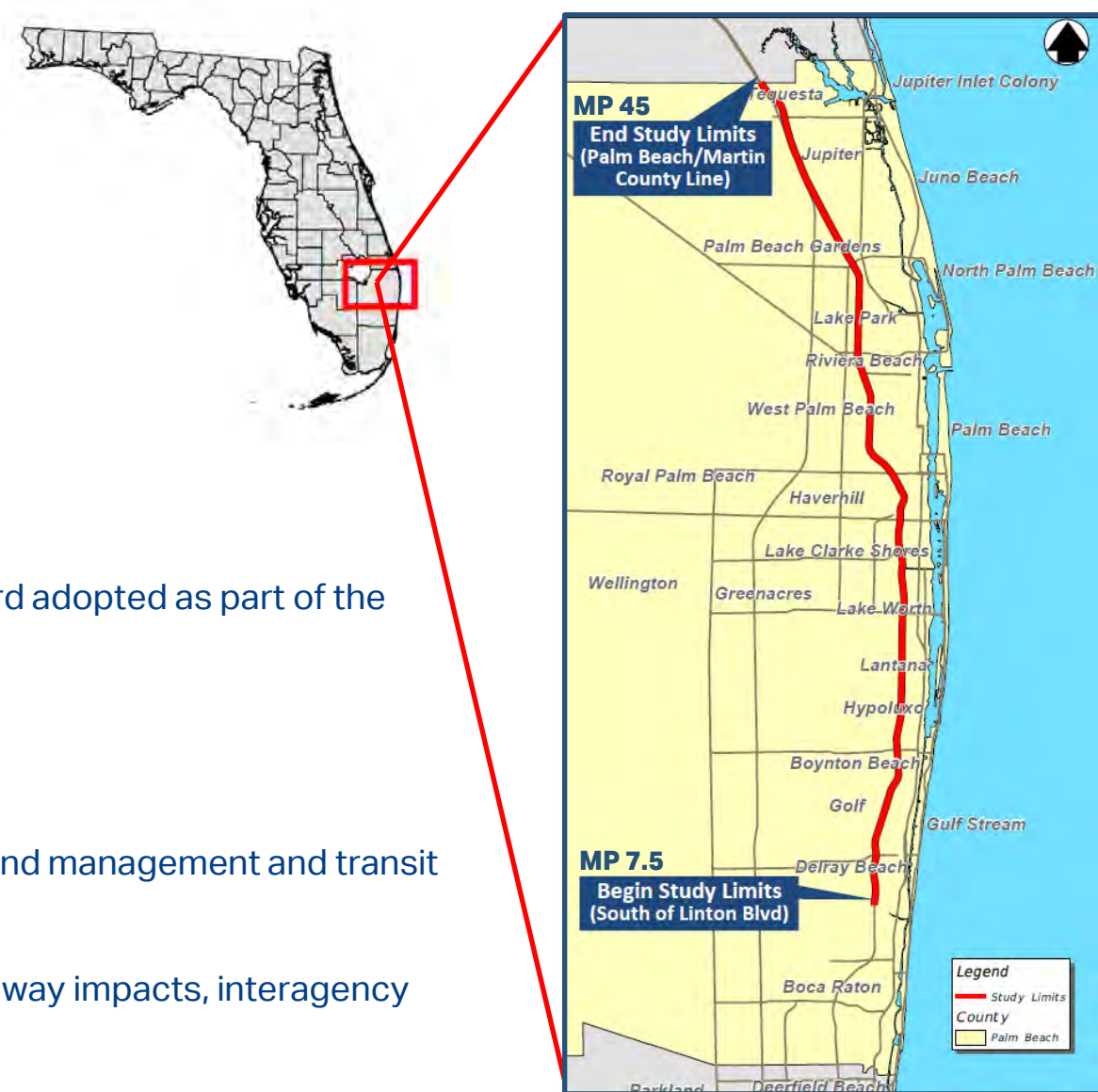
SOUTH OF LINTON BOULEVARD/CR 782 TO MARTIN COUNTY LINE

□ Purpose

- Identify long-term capacity needs along the I-95 mainline
- Develop managed lanes design concepts
- Address segments operating below Level of Service (LOS) standard adopted as part of the Strategic Intermodal System (SIS)

□ Study Objectives

- Identify and document traffic operational deficiencies
- Develop an ultimate capacity improvement plan using traffic demand management and transit techniques
- Compare design constraints, benefits, construction costs, right of way impacts, interagency coordination, and recommendations for further PD&E evaluation



Purpose and Need

Increase capacity by adding managed lanes in each direction on I-95 segment between 6th Avenue South and Okeechobee Boulevard and alleviate congestion in the Southern Boulevard interchange.

Additionally, it aims to find improvements to the issues that impact roadway traffic. These issues may include capacity, modal interrelationships, and safety.



**Increase
Capacity to
Meet Travel
Demand**



**Operational
and Safety
Needs**



**Modal
Interrelationships**

Engineering Analysis

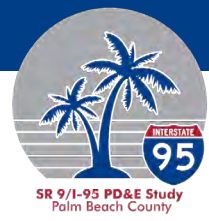
- ❑ Roadway Geometry
- ❑ Roadway Capacity
- ❑ Safety
- ❑ Traffic Operations
- ❑ Drainage
- ❑ Structures
- ❑ Right-of-Way Requirements
- ❑ Ingress and Egress Access Points
- ❑ Multimodal Considerations
- ❑ Cost



Environmental Analysis

- ☐ Socio-Cultural Evaluation
- ☐ Economic Assessment
- ☐ Land Uses (Existing/Future)
- ☐ Cultural Resources Assessment
- ☐ Recreational Resources
- ☐ Wetlands Evaluation
- ☐ Mobility
- ☐ Water Quality Assessment
- ☐ Wildlife and Habitat Assessment
- ☐ Noise Study
- ☐ Air Quality
- ☐ Contamination Screening Evaluation
- ☐ Permits Required





Alternatives Under Consideration

Project Alternatives	I-95 mainline		SR-80 Interchange		Belvedere Ramps		Comments
	1 Option	Cost in Millions	6 Options	Cost in Millions	2 Options	Cost in Millions	
No-Build Alternative	No-Build	\$ -	No-Build	\$ -	No-Build	\$ -	Does not meet Purpose and Need
Alternative 1	Option 1 (4 GUL + 2 ML)	\$ 403.44	Option 1 (2018 PD&E)	\$ 144.69	Interchangeable	N/A	Violation of Ultimate Flight Path (Alt #1 used for comparison only)
Alternative 2	Option 1 (4 GUL + 2 ML)	\$ 403.44	Interchangeable	N/A	Option 1* (Ramp to Mercer Ave)	\$ 1.03	Interchangeable with any mainline options
Alternative 3	Option 1 (4 GUL + 2 ML)	\$ 403.44	Interchangeable	N/A	Option 2* (Ramps split)	\$ 2.25	ROW required / Interchangeable with any mainline options
Alternative 4	Option 1 (4 GUL + 2 ML)	\$ 415.27	Option 2 (DDI - 2 DC Ramps)	\$ 177.21	Interchangeable	N/A	Provides 2 direct connect I-95 to/from SR-80 movements (3)
Alternative 4A	Option 1 (4 GUL + 2 ML)	\$ 415.27	Option 2 (DDI - 2 DC Ramps) (1)	\$ 178.21	Interchangeable	N/A	Provides 2 direct connect I-95 to/from SR-80 movements (3)
Alternative 5	Option 1 (4 GUL + 2 ML)	\$ 415.27	Option 3 (DDI - 2 DC Ramps at different levels)	\$ 179.14	Interchangeable	N/A	Provides 2 direct connect I-95 to/from SR-80 movements (3) / different levels
Alternative 6	Option 1 (4 GUL + 2 ML)	\$ 418.24	Option 4 (DDI - 4 DC Ramps)	\$ 210.26	Interchangeable	N/A	Violation of Ultimate Flight Path / provides 4 direct connect I-95 to/from SR-80 movements
Alternative 7	Option 1 (4 GUL + 2 ML)	\$ 418.23	Option 5 (DDI - 3 DC Ramps + Braided Ramp at STA 1451)	\$ 208.15	Interchangeable	N/A	Feasible alternative if north PBIA runway is not extended to the east (4)
Alternative 7A	Option 1 (4 GUL + 2 ML)	\$ 418.23	Option 5 (DDI - 3 DC Ramps + Braided Ramp at STA 1455)	\$ 208.15	Interchangeable	N/A	Feasible alternative with additional ROW required
Alternative 8	Option 1 (4 GUL + 2 ML)	\$ 417.05	Option 6 (DDI - 3 DC Ramps + at grade ML egress) (2)	\$ 190.70	Interchangeable	N/A	Feasible / provides 3 direct connect ramps I-95 to/from SR-80 + 1 at grade ML exit

(1) Alternative 4A - Proposed alternative design with Shared-Used Path along borders of DDI

(2) Alternative 8 - Proposed ML egress for SB I-95 in the Okeechobee Blvd interchange area

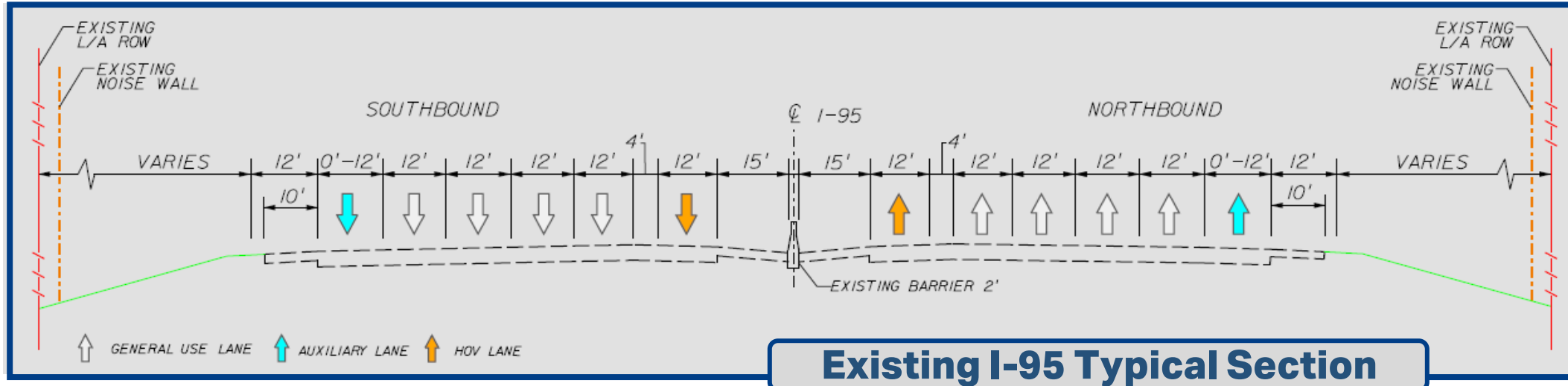
*Options 1 or 2 for the Belvedere can be selected as improvements to Alternatives 4, 4A, 5, 6, 7, 7A, or 8

(3) Alternatives 4 / 4A / 5 provide two direct connect movements: NB I-95 to WB SR-80; EB SR-80 to NB I-95

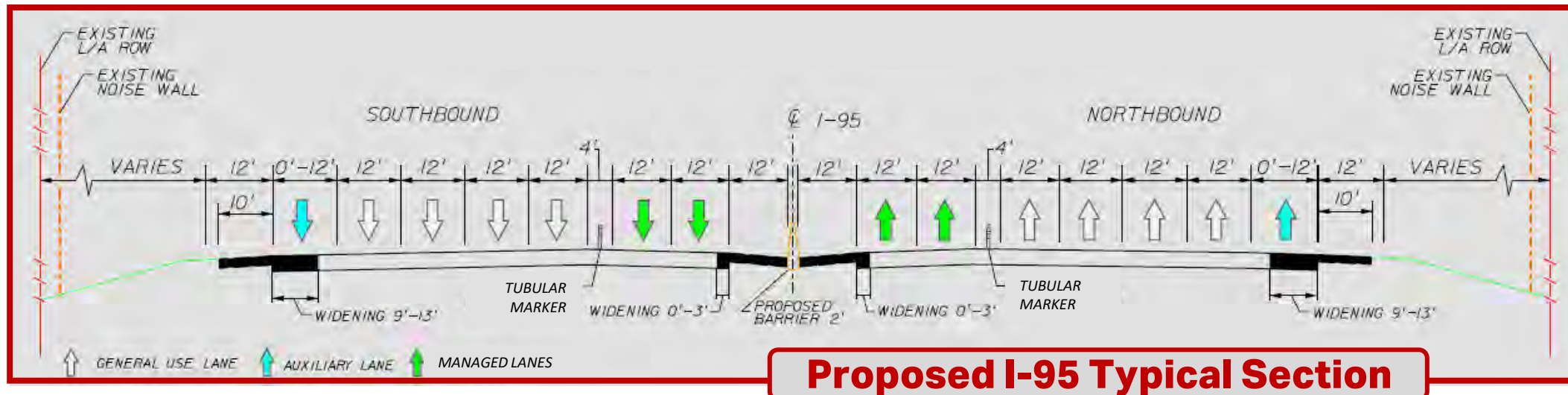
(4) Alternative 7 will be acceptable if north PBIA runway is not extended as part of the Airport Master Plan



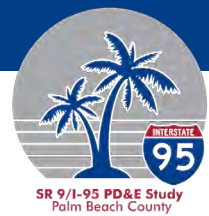
I-95: For all Build Alternatives (1 thru 8)



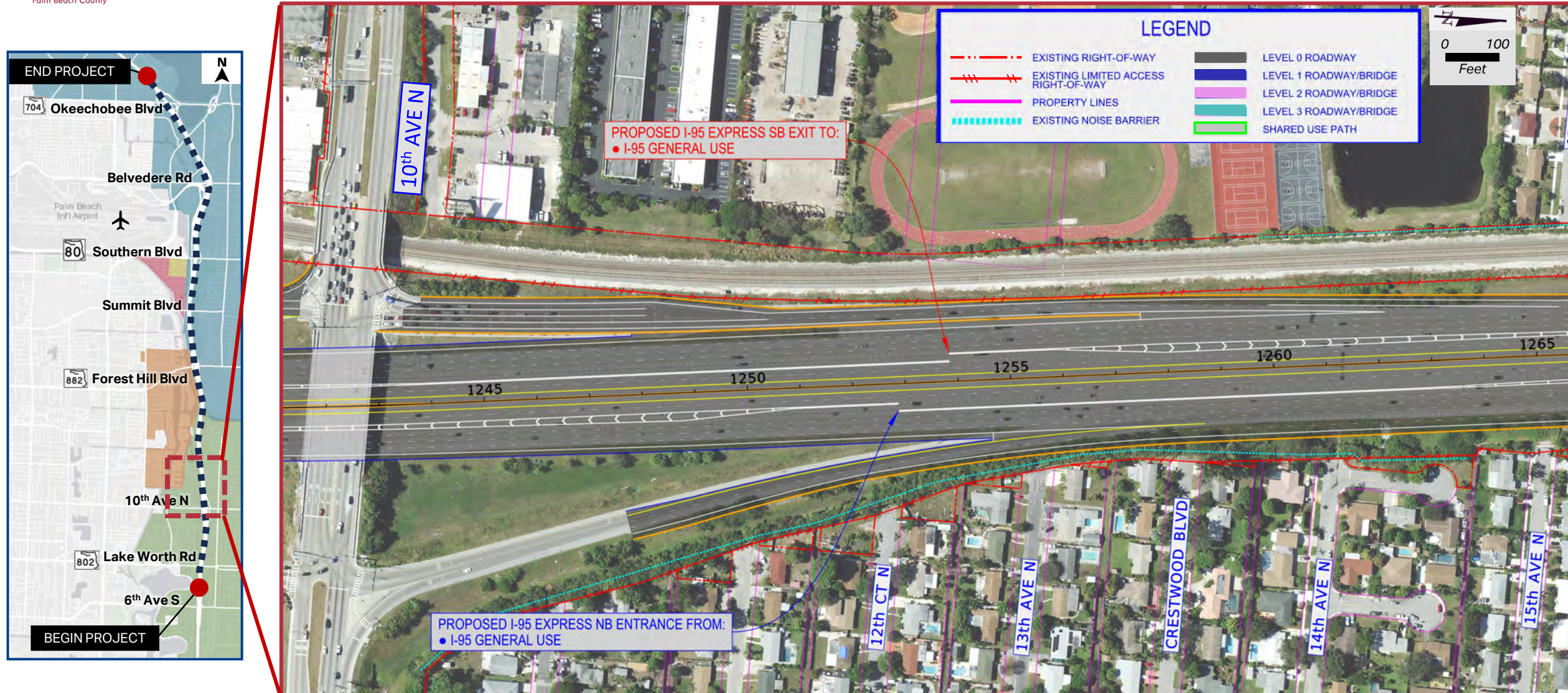
- 8 General Use Lanes, 12-foot-wide
- 2 High Occupancy Vehicle (HOV) Lanes, 12-foot-wide
- 4-foot-wide separation
- 65 mph posted speed limit
- SFRC/CSX Railway parallel to I-95 along west side
- 15-foot-wide inside shoulder



- 8 General Use Lanes, 12-foot-wide
- 4 Managed Lanes, 12-foot-wide
- 4-foot-wide separation
- 65 mph posted speed limit
- SFRC/CSX Railway parallel to I-95 along west side
- 12-foot-wide inside shoulder

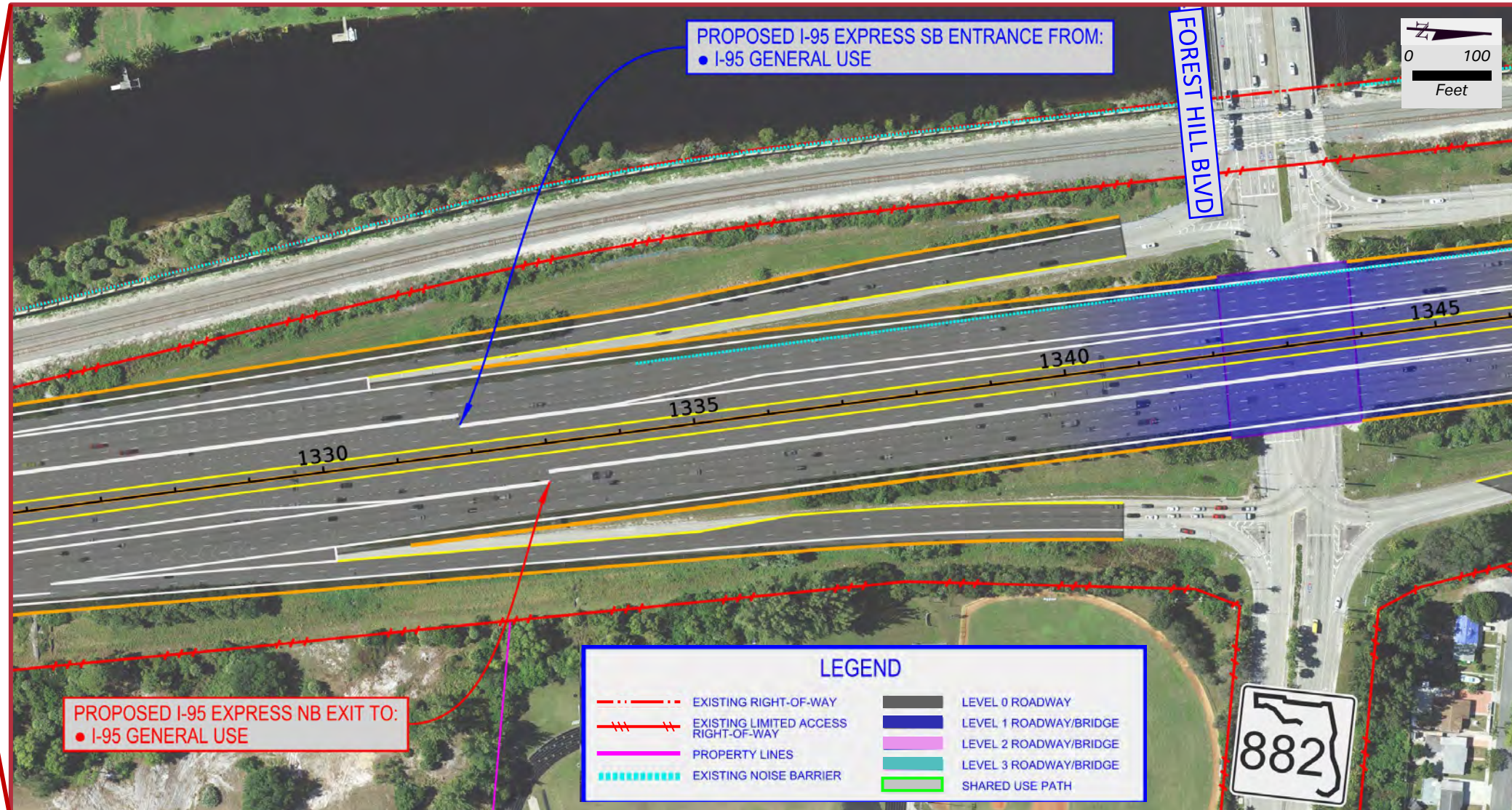
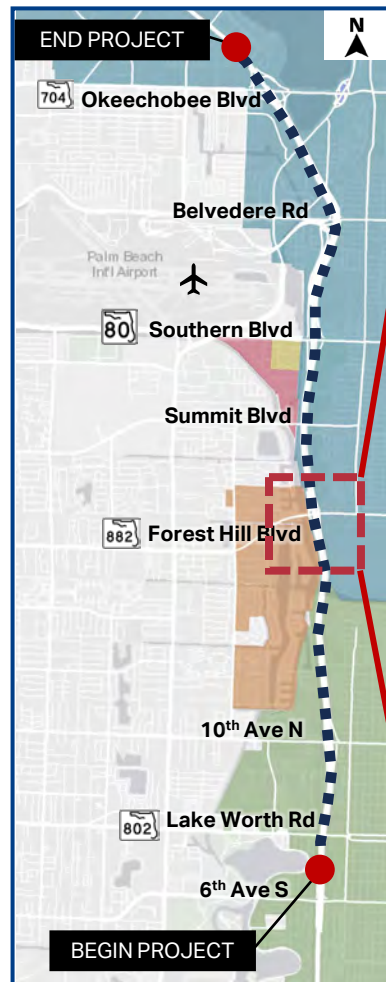


I-95 mainline with Access Points: For all Build Alternatives (1 thru 8)

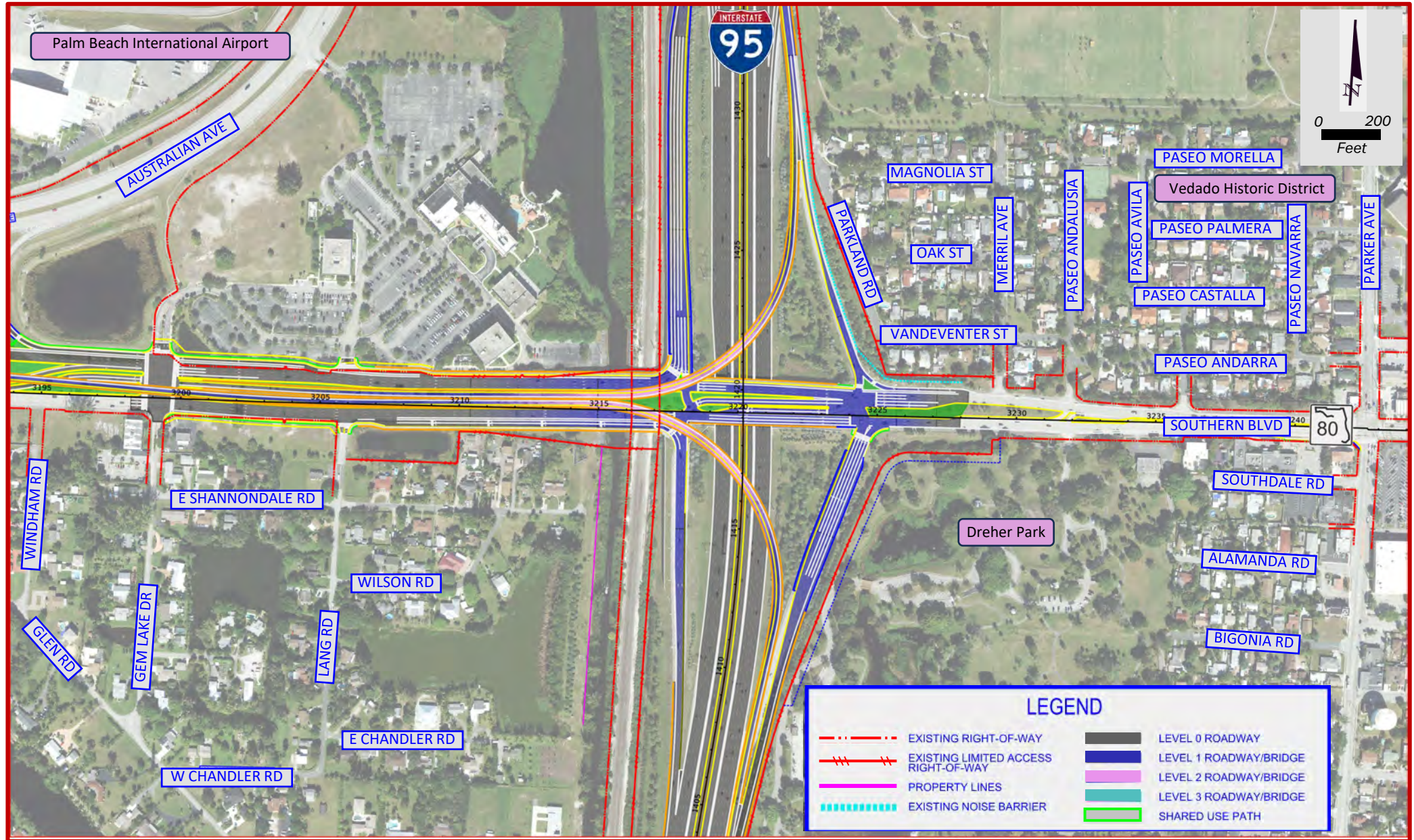




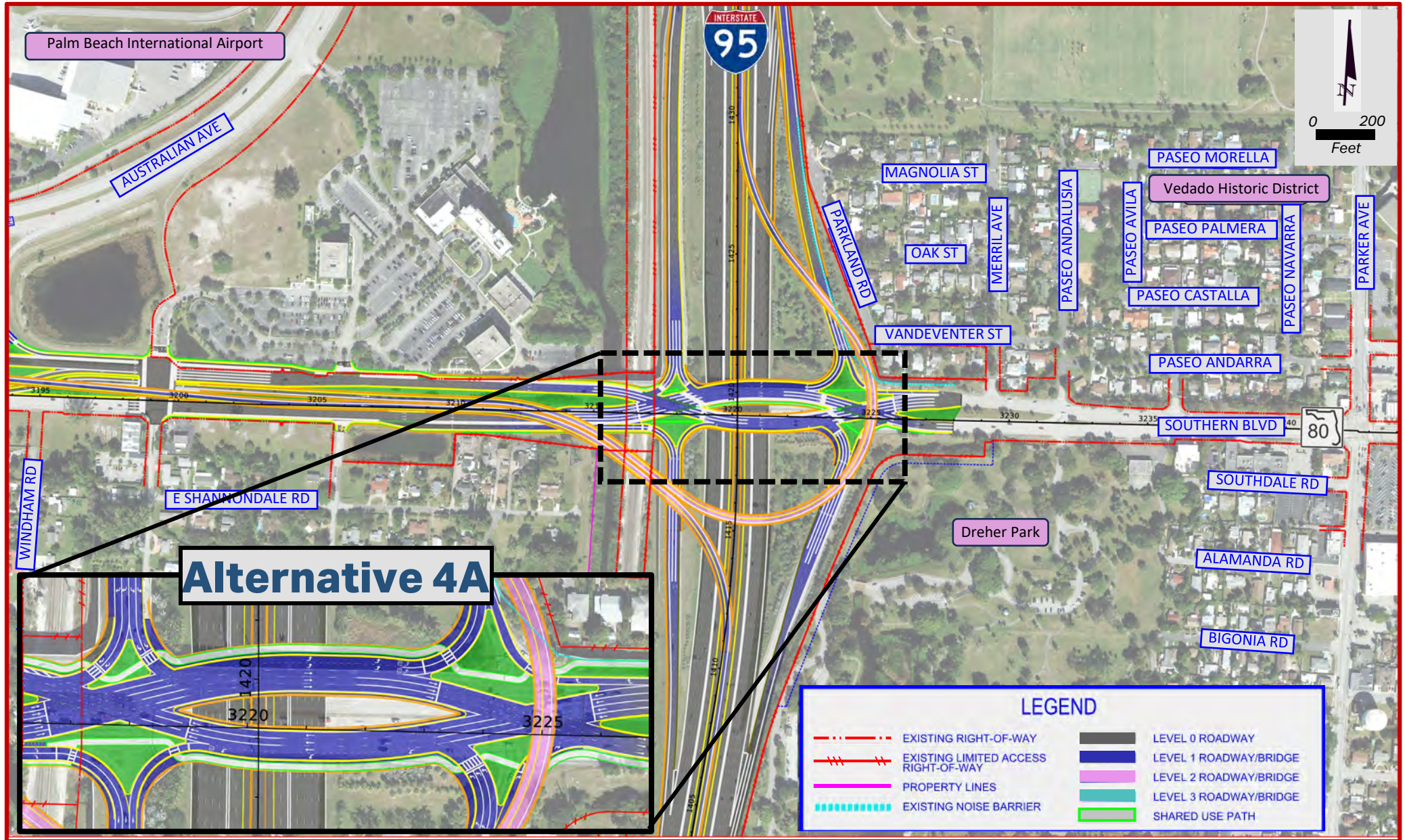
I-95 mainline with Access Points: For all Build Alternatives (1 thru 8)



SR-80 Interchange: Alternative 1

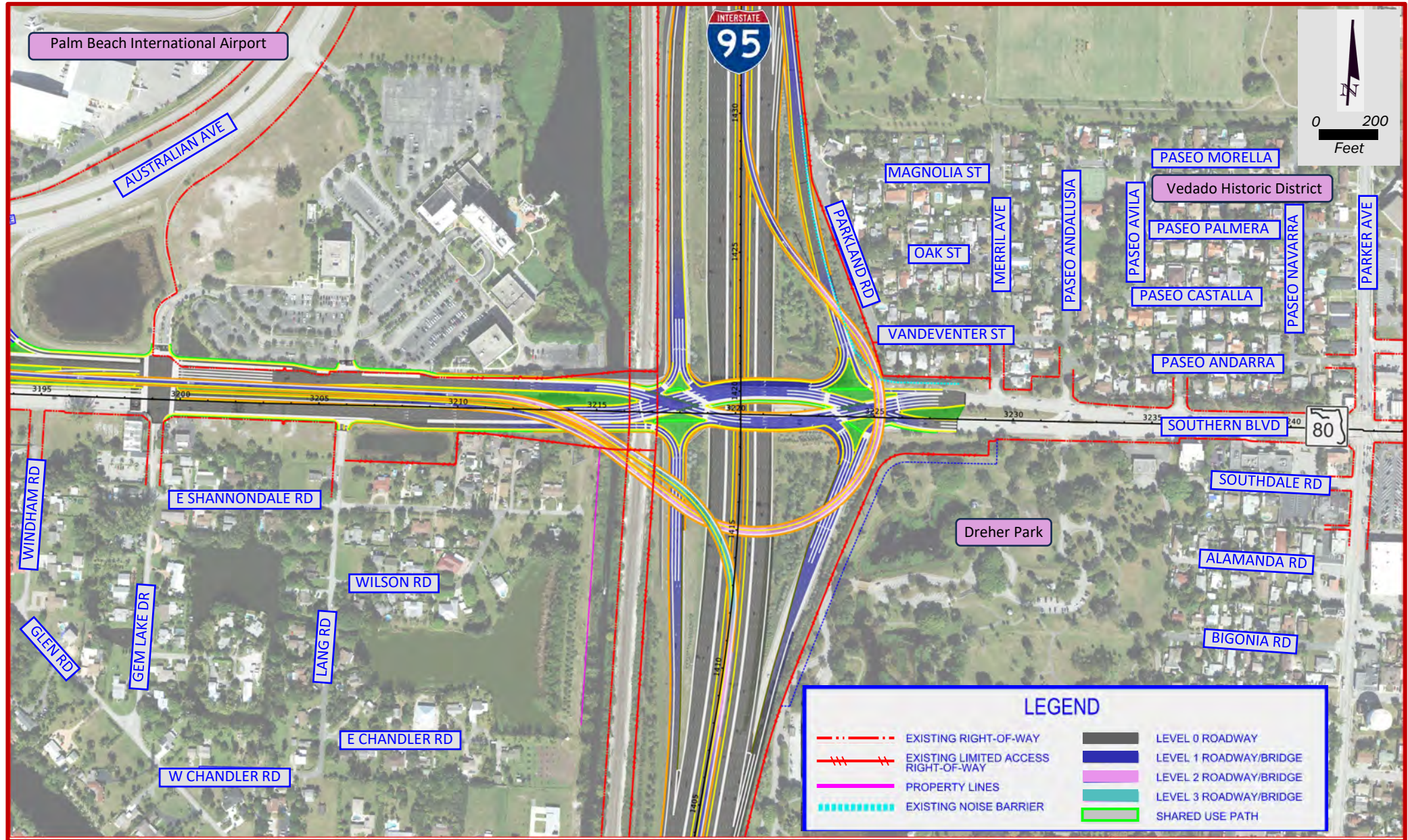


SR-80 Interchange: Alternative 4 and 4A

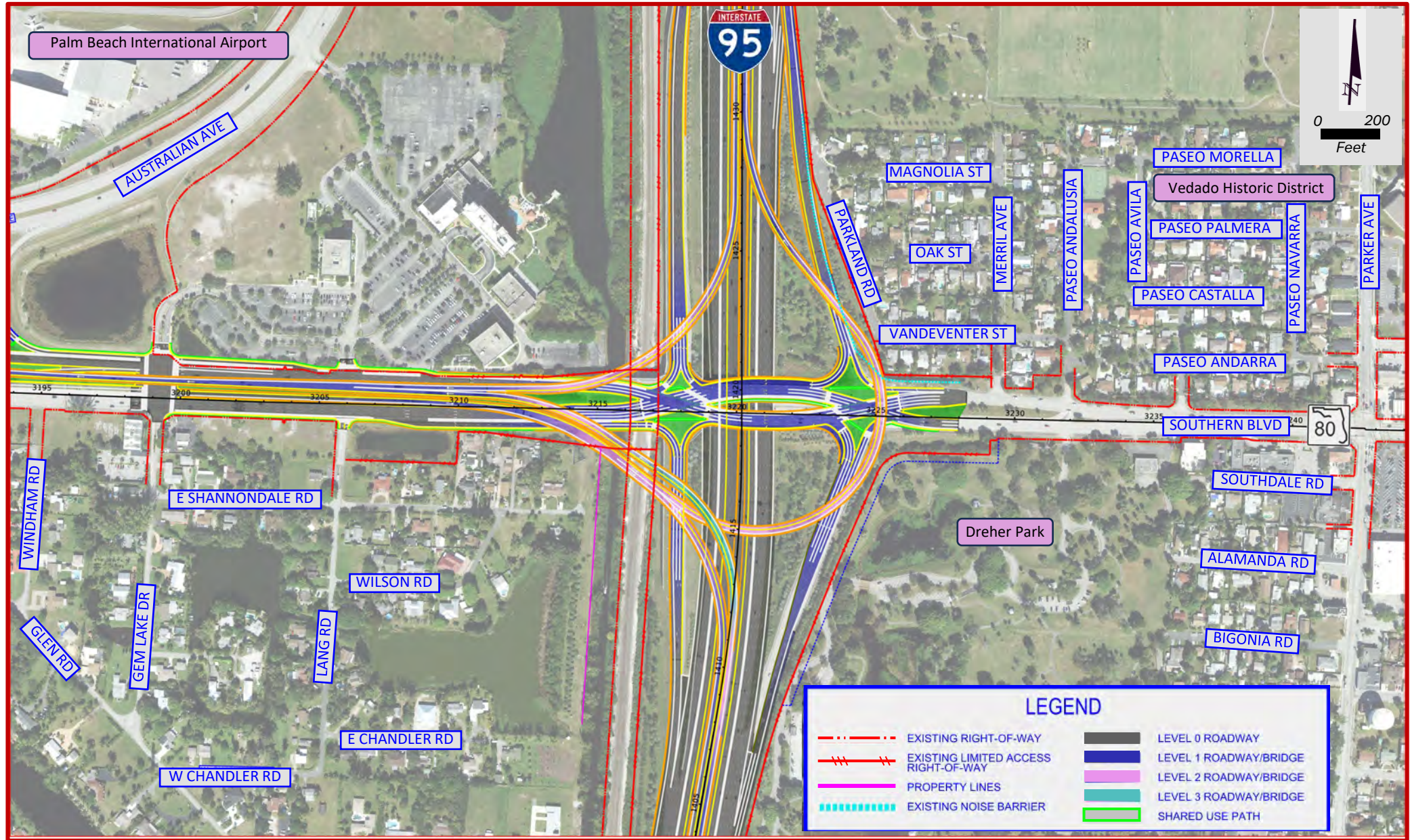




SR-80 Interchange: Alternative 5

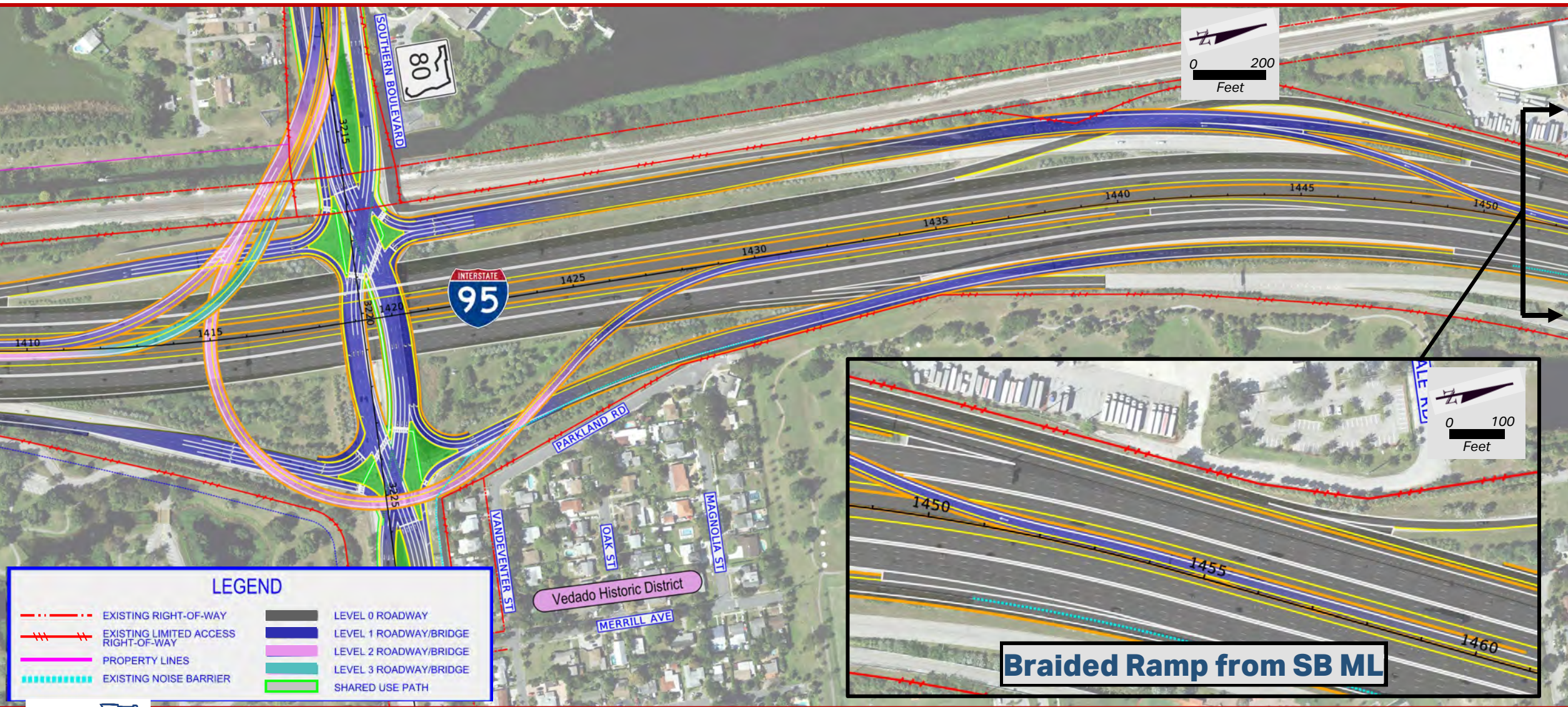


SR-80 Interchange: Alternative 6



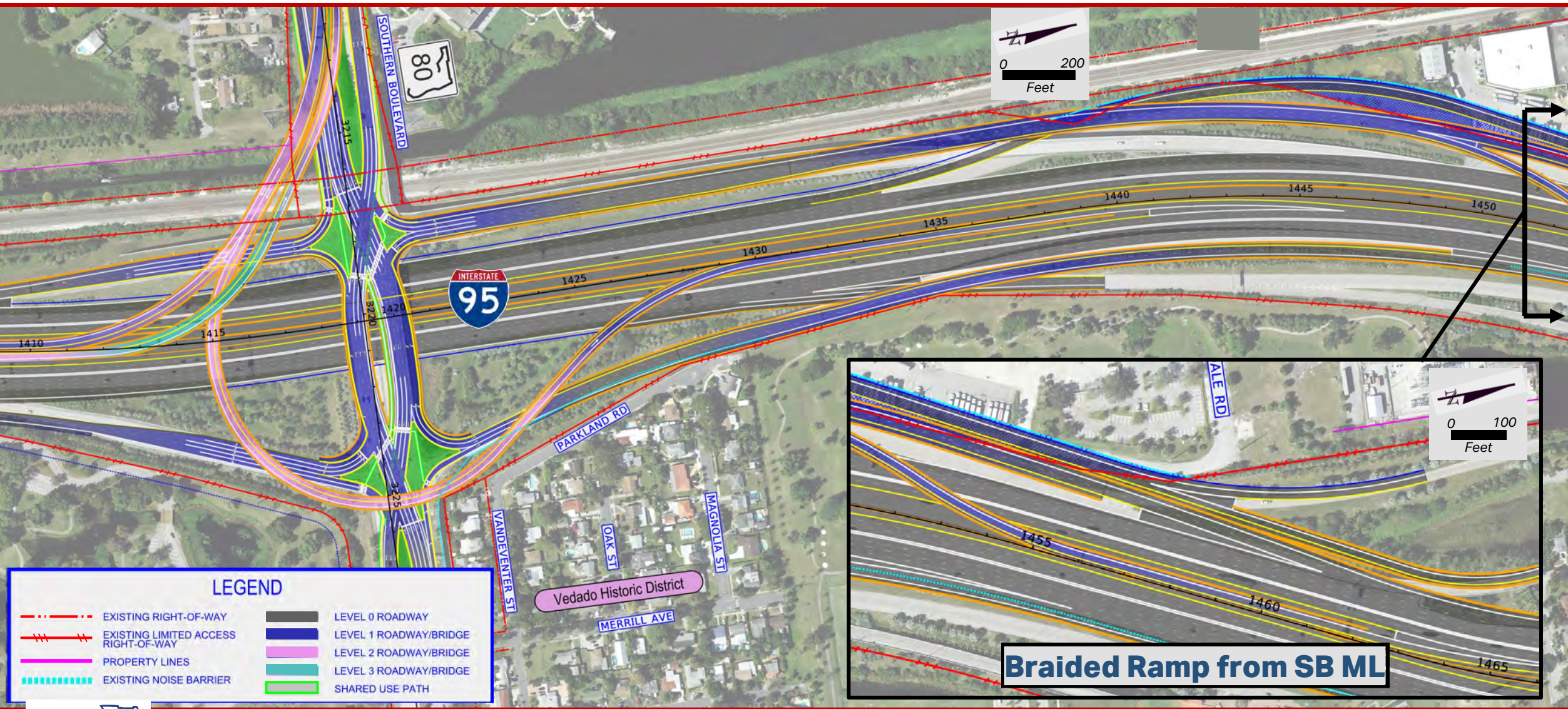


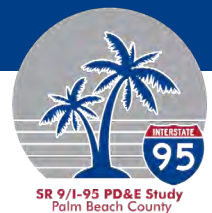
SR-80 Interchange : Alternative 7



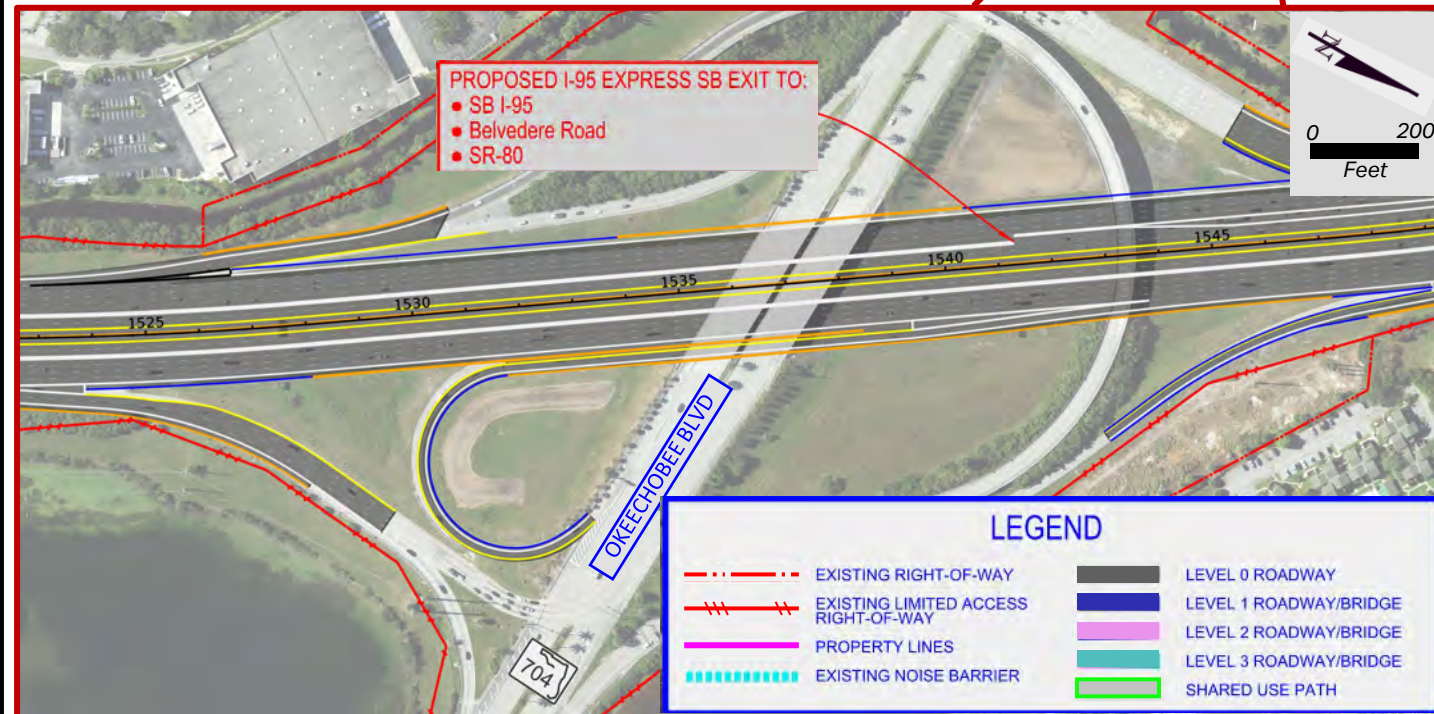
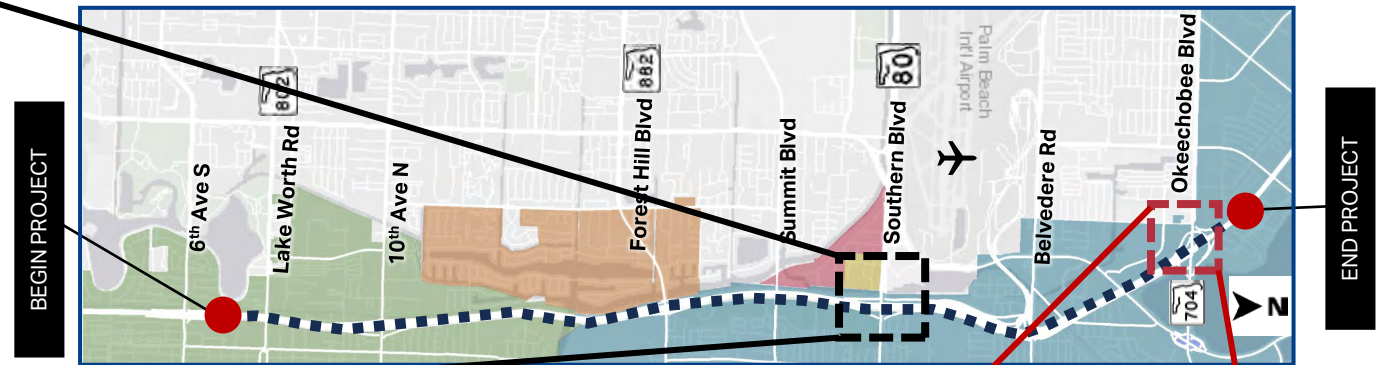
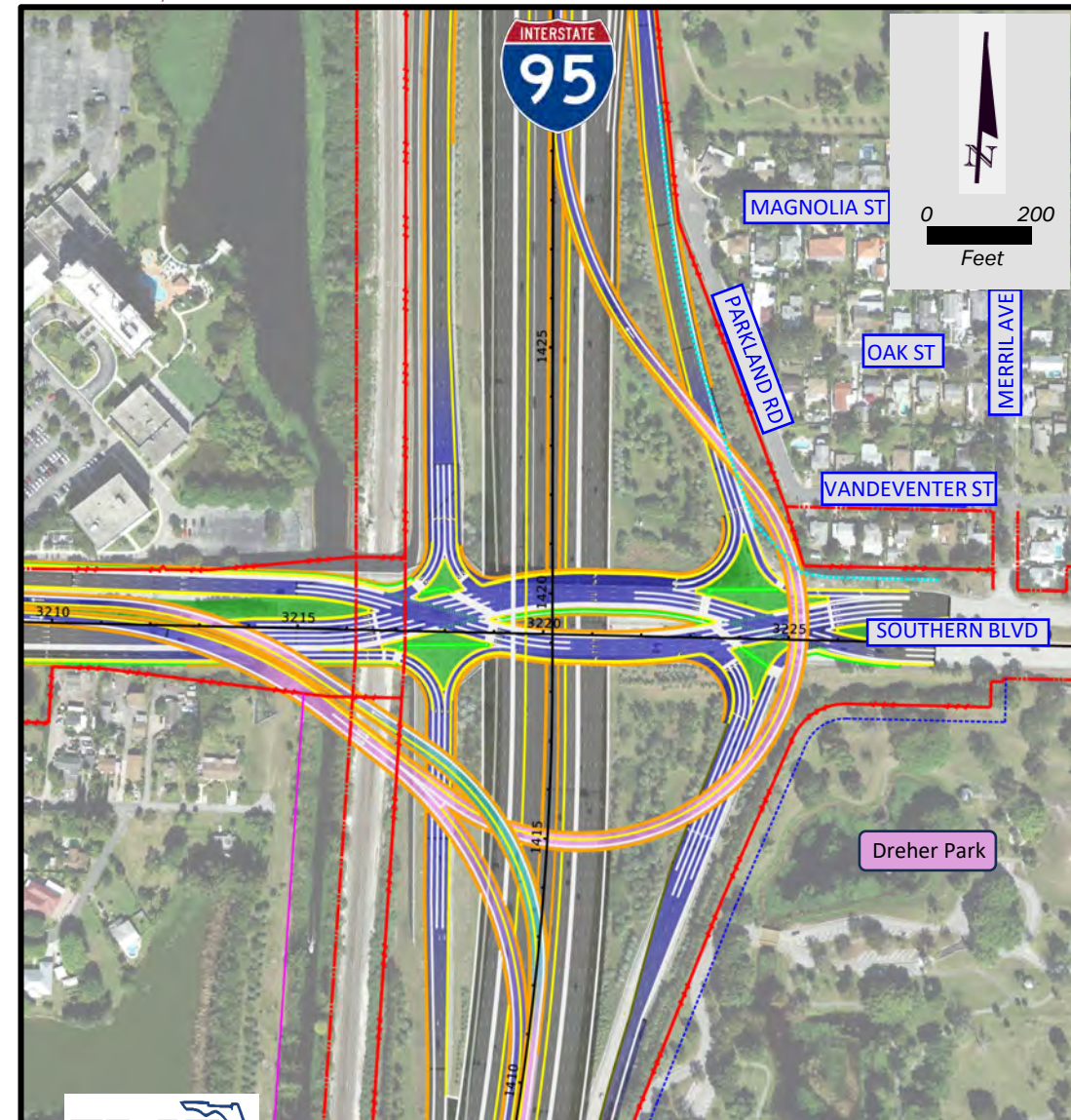


SR-80 Interchange : Alternative 7A

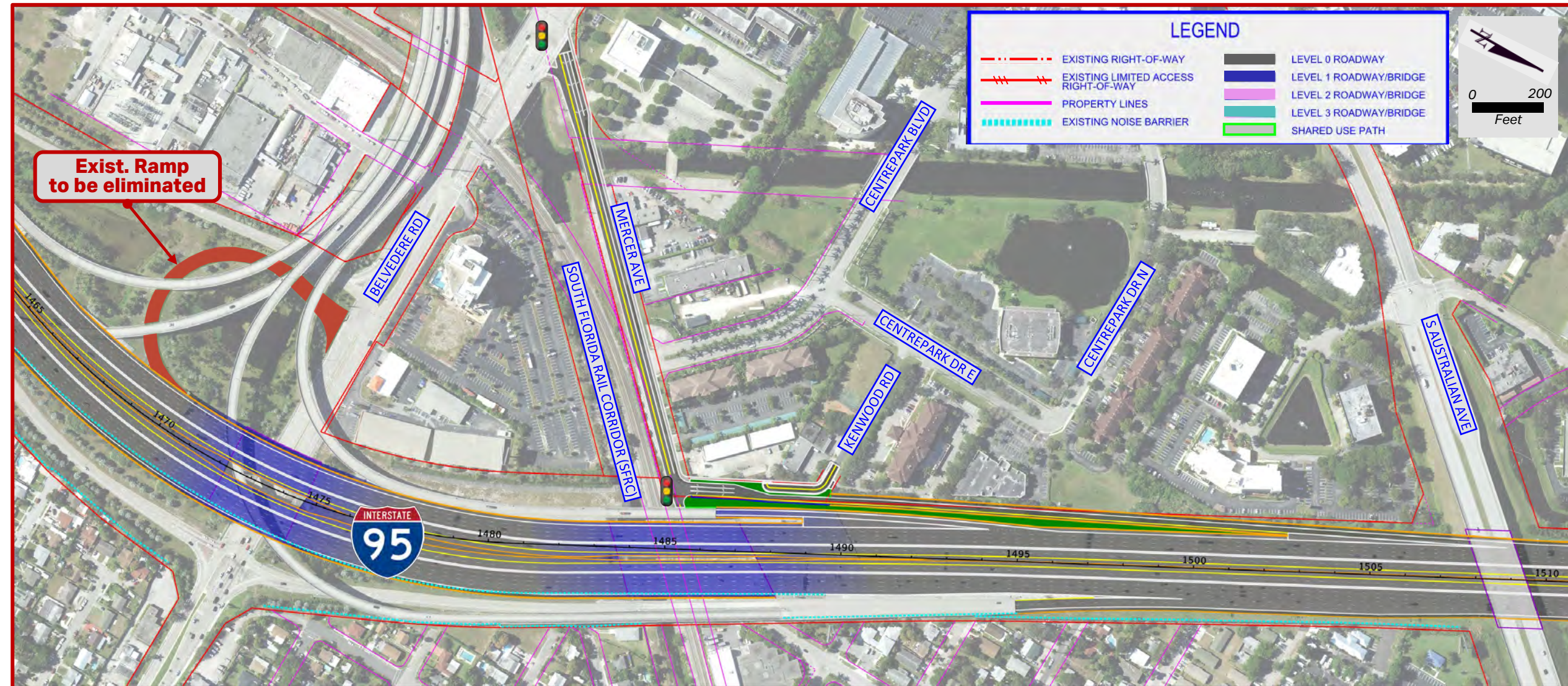




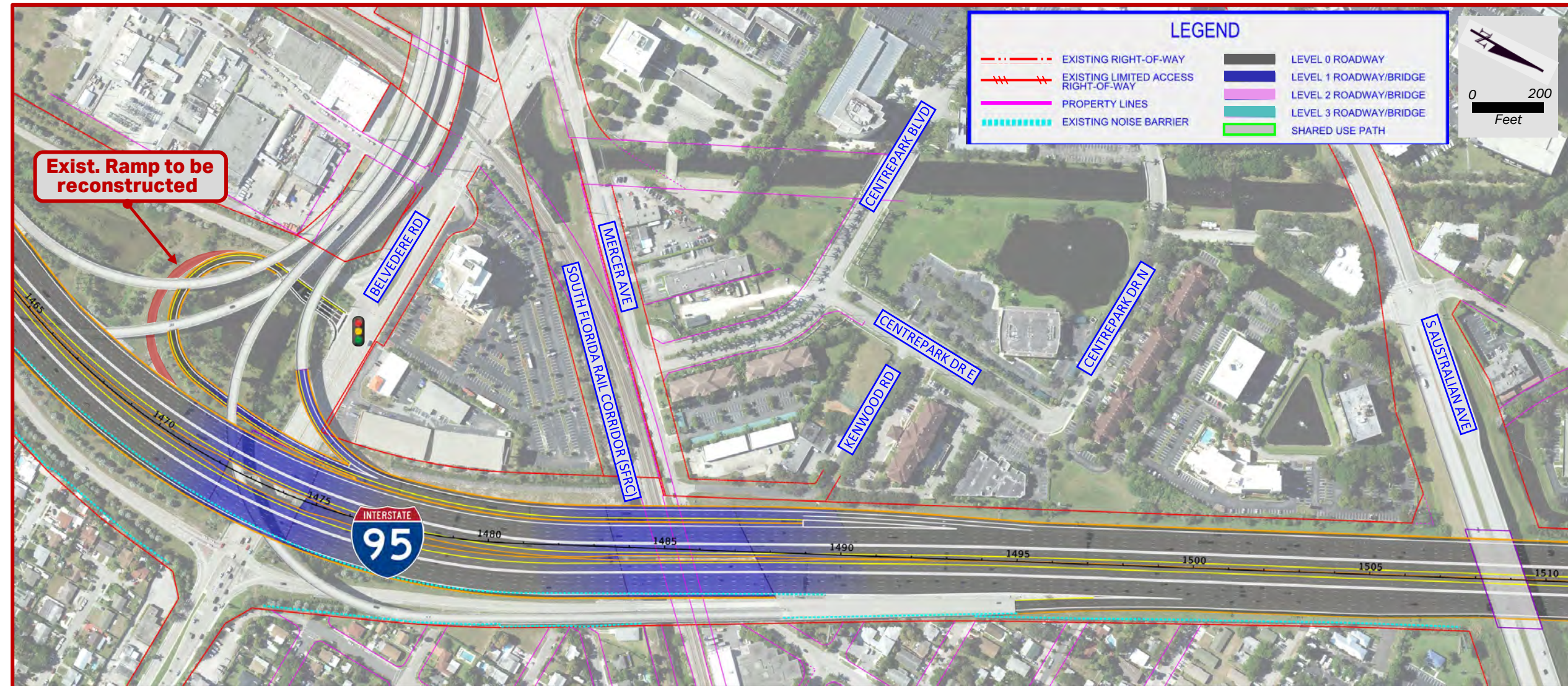
SR-80 Interchange : Alternative 8



Belvedere Ramps: Alternative 2



Belvedere Ramps: Alternative 3





I-95 mainline and SR-80 Interchange Evaluation Matrix

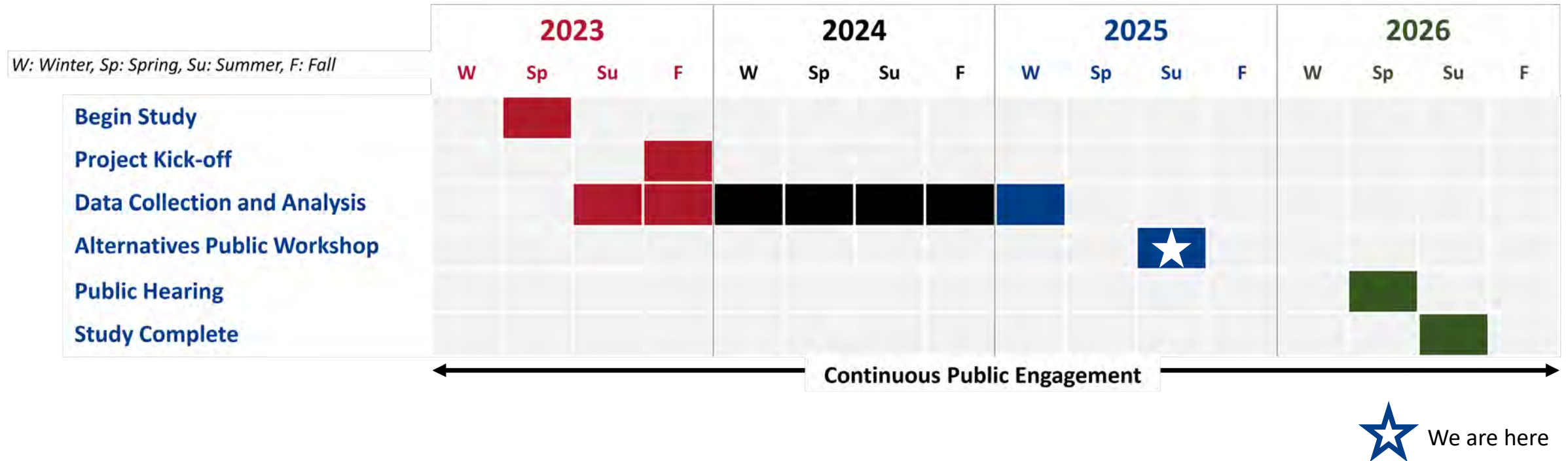
CRITERIA	NO-BUILD	ALTERNATIVE 1	ALTs 4 AND 4A	ALTERNATIVE 5	ALTERNATIVE 6	ALTERNATIVE 7	ALTERNATIVE 7A	ALTERNATIVE 8
Purpose and Need	✗ Not Met	✓ Met	✓ Met	✓ Met	✓ Met	✓ Met	✓ Met	✓ Met
I-95 Mainline Capacity	✗ Increased Congestion and Delay	✓ Added Capacity	✓ Added Capacity	✓ Added Capacity	✓ Added Capacity	✓ Added Capacity	✓ Added Capacity	✓ Added Capacity
Managed Lanes	✗ Does Not Add Travel Options	✓ Added Travel Options	✓ Added Travel Options	✓ Added Travel Options	✓ Added Travel Options	✓ Added Travel Options	✓ Added Travel Options	✓ Added Travel Options
Roadway Safety & Traffic Operations	✗ No Improvements	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced
Weaving Conflicts	✗ Weaving Remains	✗ Weaving at SR-80 Ramps	⚡ Weaving Minimized	⚡ Weaving Minimized	✓ Weaving Eliminated	✓ Weaving Eliminated	✓ Weaving Eliminated	⚡ Weaving Minimized
SR-80 Interchange	✗ No direct connections for Managed Lanes	✗ No direct connections for Managed Lanes	⚡ Two direct connections for Managed Lanes	⚡ Two direct connections for Managed Lanes	✓ All four direct connections for Managed Lanes	✓ Three direct connections + Braided Ramp	✓ Three direct connections + Braided Ramp	⚡ Three direct connections for Managed Lanes
ROW Impacts	✓ None	✗ Most Impacts	⚡ Some Impacts	⚡ Some Impacts	⚡ Some Impacts	⚡ Some Impacts	✗ Most Impacts	⚡ Some Impacts
Bridge Clearance	✗ Sub-standard	✓ Standard	✓ Standard	✓ Standard	✓ Standard	✓ Standard	✓ Standard	✓ Standard
Flight Path Clearance	✓ Met	✗ Not Met	✓ Met	✓ Met	✗ Not Met	✗ Not Met Met ✓	✓ Met	✓ Met
Archeological/Historic Resource Impacts	✓ None	✓ None	✓ None	✓ None	✓ None	✓ None	✓ None	✓ None
Natural Resources	✓ No Change	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts
Social and Economic	✓ No Change	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced	✓ Enhanced
Contamination	✓ No Change	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts	✓ Minimal Impacts
Section 4(f)	✓ No Change	✓ No Change	✓ No Change	✓ No Change	✓ No Change	✓ No Change	✓ No Change	✓ No Change
Noise Impacts	✓ No Change	✓ Minimal	✓ Minimal	✓ Minimal	✓ Minimal	✓ Minimal	✓ Minimal	✓ Minimal
Construction Cost (Not Including ROW Cost)	\$0.00	\$548.13 M	\$593.48 M	\$594.41 M	\$628.50 M	\$626.38 M	\$626.38 M	\$607.75 M



I-95 mainline at Belvedere Ramp Improvements Evaluation Matrix

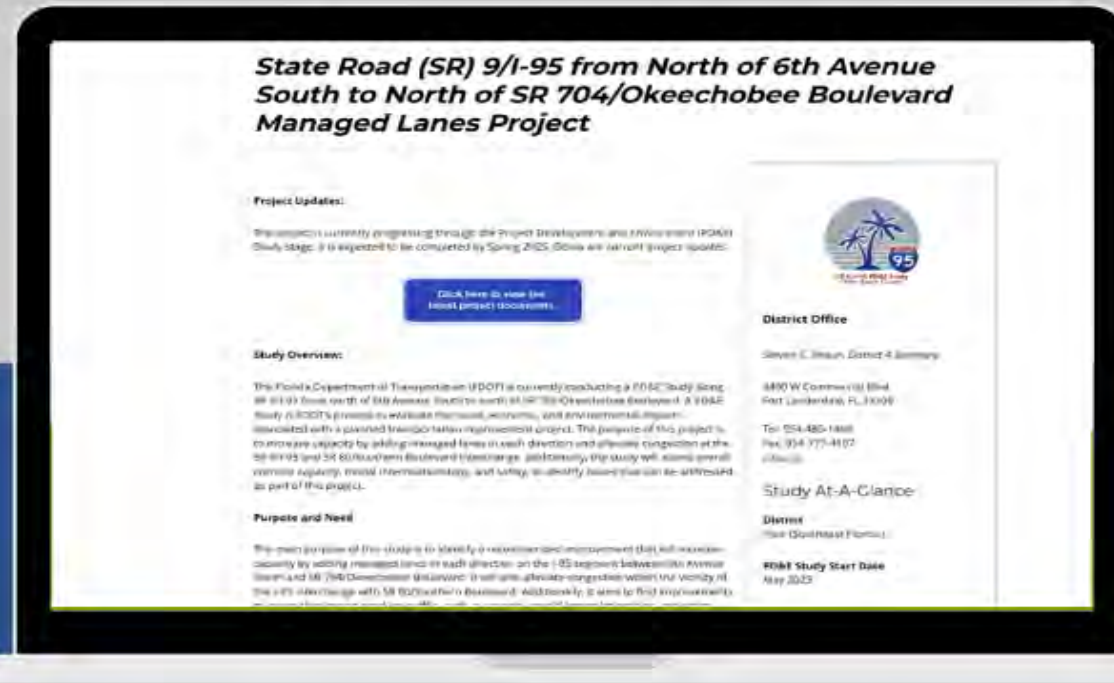
CRITERIA	NO-BUILD	ALTERNATIVE 2	ALTERNATIVE 3
Purpose and Need	✗ Not Met	✓ Met	✓ Met
I-95 Mainline Capacity	✗ Increased Congestion and Delay	✓ Added Capacity	✓ Added Capacity
Managed Lanes	✗ Does Not Add Travel Options	✓ Added Travel Options	✓ Added Travel Options
Roadway Safety & Traffic Operations	✗ No Improvements	✓ Improved	✓ Improved
Weaving Conflicts	✗ Weaving Remains	✓ Weaving Eliminated	✓ Weaving Eliminated
Belvedere Ramps	✗ Safety Not Improved	✓ Safety Enhanced	✓ Safety Enhanced
ROW Impacts	✓ None	✗ Most Impacts	✓ None
Archeological/Historic Resource Impacts	✓ None	✓ None	✓ None
Natural Resources	✓ No Change	✓ Minimal Impacts	✓ Minimal Impacts
Social and Economic	✓ No Change	✓ Enhanced	✓ Enhanced
Contamination	✓ No Change	✓ Minimal Impacts	✓ Minimal Impacts
Section 4(f)	✓ No Change in Use	✓ No Change in Use	✓ No Change in Use
Noise Impacts	✓ No Change	✓ Minimal	✓ Minimal
Construction Cost (Not Including ROW Cost)	\$0.00	\$1.03	\$2.25

Project Schedule



PLEASE VISIT THE PROJECT WEBSITE TO LEARN MORE
ABOUT THE STUDY AND TO PROVIDE FEEDBACK.

[HTTPS://TINYURL.COM/444202-2-195-PDE](https://tinyurl.com/444202-2-195-PDE)



WE ENCOURAGE YOU TO STAY INVOLVED THROUGHOUT THE
ENTIRE PROJECT.



Contact Information

Project Website:

<https://tinyurl.com/444202-2-I95-PDE>

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Project Manager

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Toll-Free: (866) 336-8435, Ext. 4468

Please Submit Comments or Questions Below:





Thank You

