



TYPE 2 CATEGORICAL EXCLUSION

PD&E STUDY

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange (MP 57)

and

SR-9/I-95 at Gateway Boulevard Interchange (MP 58)

Palm Beach County, Florida

Prepared for

Florida Department of Transportation - District Four

3400 West Commercial Boulevard

Ft. Lauderdale, Florida 33309-3421



Financial Management Number: 435804-1-22-01

Financial Management Number: 231932-1-22-01

ETDM Numbers: 14180 and 14181

July 2017

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3400 West Commercial Boulevard
Ft. Lauderdale, Florida 33309-3421



Prepared by:

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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.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

GENERAL INFORMATION

County: Palm Beach
 Project Name: PD&E STUDY SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and SR-9/I-95 at Gateway Boulevard Interchange

Project Limits: SR 804/Boynton Beach Boulevard Interchange and SR-9/I-95 at Gateway Boulevard Interchange

Financial Project Nos: 435804-1-22-01; 231932-1-22-01

Federal Aid Project No: N/A

ETDM Nos: 14180 and 14181

PROJECT PURPOSE AND NEED

- a. Purpose and Need: See Attachment 1, Section 2
- b. Proposed Improvements: The proposed action includes roadway, intersection and interstate ramp, and bicycle and pedestrian improvements. See Attachment 1, Section 3 for a more complete description.
- c. Project Planning Consistency: See the tables below from the Palm Beach County Long Range Transportation Plan (LRTP), Cost Feasible Plan (CFP), Transportation Improvement Program (TIP), and State Transportation Improvement Program (STIP)

SR 804/Boynton Beach Boulevard

Currently Adopted CFP-LRTP	COMMENTS				
PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	\$5,150,000	FY 2016-2020	STIP reports \$1,023,456 for PD&E year <2016 and 362,376 for 2017. STIP reports \$5,150,000 for PE >2020. Shown in LRTP in Year 2020-2040 Desires Plan SIS and Turnpike Projects. TIP FY 2017 – 2021 shows \$5,150,000 for preliminary engineering at year 2021.
R/W	N	N	\$0	FY >2020	
Construction	N	N	\$13,823,592	FY >2020	TIP FY 2017 – 2021 shows Future Years Cost at \$13,823,592 for preliminary engineering STIP reports \$113,823,592 for construction >2020.

Gateway Boulevard

Currently Adopted CFP-LRTP	COMMENTS				
PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	\$6,000,000	2020	TIP Includes \$50,000 railroad and utilities (RRU) TIP Reports prior year (2015) cost of \$1,010,000 for PD&E. STIP reports \$6,000,000 for PE and \$11,300,000 for RRU. STIP reports \$1,009,913 for PD&E year <2016
R/W	Y	Y	\$5,623,170	>2020	TIP and STIP report \$1,000,000 in FY>2019
Railroad & Utilities	Y	Y	\$50,000 \$11,250,000	2020 >2020	Current STIP shows railroad and utilities at \$50,000 for year 2020 and \$11,250,000 for years >2020. FY 2017-2021 TIP shows railroad and utilities at \$6,050,000 in year 2020 and future years cost \$46,471,808 and \$53,543,183 total for all years.
Construction	Y	Y	\$33,437,704	>2020	FY 2017-2021 TIP shows future years cost at 46,471,808. STIP reports \$33,437,704 for construction >2020 and \$57,747,164 total for all years.

CLASS OF ACTION

a. Class of Action:

Type 2 Categorical Exclusion

b. Other Actions:

Section 4(f) Evaluation

Section 106 Consultation

Endangered Species Biological Assessment

c. Public Involvement

1. A public hearing is scheduled for August 29, 2017 and a transcript will be appended following the public hearing. Approval of this determination constitutes location and design acceptance for this project.

d. Cooperating Agency: COE USCG FWS EPA NMFS NONE

REVIEWER'S SIGNATURES

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

FDOT Project Manager

Date

FDOT Environmental Administrator

Date

IMPACT EVALUATION

Impact Determination*

Topical Categories	Sig	NotSig	None	NoInv	Basis for Decision
A. SOCIAL & ECONOMIC					
1. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.1.1
2. Community Cohesion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.1.2
3. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.1.3
4. Community Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.1.4
5. Nondiscrimination Considerations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.1.5
6. Controversy Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.1.6
7. Scenic Highways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.1.7
8. Farmlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.1.8
B. CULTURAL					
1. Section 4(f)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.2.1
2. Historic Sites/Districts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.2.2
3. Archaeological Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.2.3
4. Recreation Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.2.4
C. NATURAL					
1. Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.3.1
2. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.2
3. Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.3.3
4. Outstanding FL Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.4
5. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.5
6. Floodplains	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.3.6
7. Coastal Zone Consistency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.7
8. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.8
9. Wildlife and Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.3.9
10. Essential Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.3.10
D. PHYSICAL					
1. Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.4.1
2. Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.4.2
3. Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.4.3
4. Contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.4.4
5. Aesthetic Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.4.5
6. Bicycles and Pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 4.4.6
7. Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 4.4.7
8. Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Section 4.4.8

*Impact Determination: Sig = Significant; NotSig = Not Significant; None = Issue present, no impact; NoInv = Issue absent, no involvement
Basis of Decision is documented in the referenced attachment(s)

E. PERMITS REQUIRED

SFWMD Environmental Resource Permit

Florida Department of Environmental Protection (FDEP) Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP)

Lake Worth Drainage District – EXEMPT from Permitting

F. COMMITMENTS AND RECOMMENDATIONS

1. To minimize the potential for any adverse impacts to wetlands and/or surface waters in the vicinity of the project areas, the FDOT will implement the following:
 - Dewatering will not occur adjacent to wetlands unless measures are implemented to avoid impact (i.e., draw-down) to these sensitive areas
2. No portion of South Florida Rail Corridor land is required for the proposed project improvements. It is anticipated that no structure will be located within the SFRC ROW but expansion of the aerial easement over the SFRC will be required.
3. It is recommended that a hazardous material survey be completed if construction activities will disturb existing infrastructure, equipment, or utilities that potentially contain asbestos PCBs, or paint with heavy metals.

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APPENDIX C	PUBLIC HEARING TRANSCRIPT (TO BE INCLUDED FOLLOWING THE PUBLIC HEARING)
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PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange

**LIST OF ACRONYMS**

AASHTO	American Association of State Highway and Transportation Officials
ACM	Asbestos-Containing Material
ACS	American Community Survey
AN	Advanced Notification
APE	Area of Potential Effect
B/C	Benefit Cost
CAAA	Clean Air Act Amendments
CD	Concept Development
CDA	Concept Design Alternative
CEQ	Council on Environmental Quality
CFA	Core Foraging Area
CFR	Code of Federal Regulations
CRA	Community Redevelopment Area
CRAS	Cultural Resource Assessment Survey
CSER	Contamination Screening Evaluation Report
dba	A-Weighted Decibel
DOA	Determination of Applicability
DOE	Degree of Effect
DOS	Department of State
DRI	Development of Regional Impact
EA	Environmental Assessment
EFH	Essential Fish Habitat
ERM	Environmental Resource Management
ESF	Emergency Support Functions
EST	Environmental Screening Tools
ETAT	Environmental Technical Advisory Team
ETDM	Efficient Transportation Decision Making
FDEO	Florida Department of Economic Opportunity
FDEP	Florida Department of Environmental Protection
FDHR	Florida Division of Historical Resources

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



FDOS	Florida Department of State
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FPPA	Farmland Protection Policy Act
FFWCC	Florida Fish and Wildlife Conservation Commission
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FLUCFCS	Florida Land Use Cover Forms Classification System
FMSF	Florida Master Site File
FS	Florida Statute
FY	Fiscal Year
GIS	Geographic Information System
HSIP	Highway Safety Improvement Plan
ITS	Intelligent Transportation Systems
LDCA	Location and Design Concept Acceptance
LEP	Limited English Proficiency
LOS	Level of Service
L RTP	Long Range Transportation Plan
MLOU	Methodology Letter of Understanding
MOT	Maintenance of Traffic
MPO	Palm Beach Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSA	Noise Study Area
NWI	National Wetland Inventory
PD&E	Project Development and Environment

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



PLEM	Planning and Environmental Management
ROW	Right-of-Way
SALR	Seaboard Airline Railroad
SERPM	Southeast Regional Planning Model
SFHA	Special Flood Hazard Area
SFRC	South Florida Rail Corridor
SFRTA	South Florida Regional Transportation Authority
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Officer
SHSP	Strategic Highway Safety Plan
SIS	Strategic Intermodal System
SIMR	System Interchange Modification Report
SPUI	Single Point Urban Interchange
SR	State Road
STIP	State Transportation Improvement Plan
TDM	Transportation Demand Model
TIP	Transportation Improvement Plan
TUDI	Tight Urban Diamond Interchange
TSM	Transportation System Management
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WER	Wetlands Evaluation Report

1. Project Summary

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for interchange improvements located SR-9/I-95 at SR 804/Boynton Beach Boulevard and SR-9/I-95 at Gateway Boulevard in Palm Beach County, Florida. The alternatives developed in this PD&E Study and the associated social, economic, and environmental analyses were evaluated according to the requirements of the National Environmental Policy Act (NEPA) and FDOT's PD&E Manual, Part 1, Chapter 5 (July 15, 2016) to receive Location and Design Acceptance (LDCA). The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

The federal Fixing America's Surface Transportation Act (FAST Act, 2015) serves as the current regulatory and funding framework for transportation planning. The Palm Beach Metropolitan Planning Organization (MPO) is the government organization that provides both long-range and short-term transportation planning for Palm Beach County. The Palm Beach MPO 2040 Long Range Transportation Plan (LRTP, October 2014), as amended, represents long-term transportation planning for Palm Beach County. Short-term planning is represented by the MPO's Transportation Improvement Program (TIP). The purpose of the LRTP is to identify the transportation needs of the community and establish priorities for funding those improvements in the TIP. The MPO priority projects are listed in the TIP Priority Projects FY 2017-2021 (June 2016).

FDOT lists planned projects with federal participation, including all MPO TIPs, in the State Transportation Improvement Program (STIP) which is submitted to and approved by the FHWA. The PD&E Study for the SR 804/Boynton Beach Boulevard Interchange and Gateway Boulevard Interchange is programmed for PD&E Study under the STIP (February 2017).

While the improvements at both interchanges are not included in the cost feasible component of the 2040 LRTP, one highway project in the vicinity of the interchanges is provided in the LRTP needs component. This project is for the Strategic Intermodal System (SIS) implementation of managed lanes on SR-9/I-95 from the Palm Beach County/Broward County Line to Indiantown Road. Projects near both interchanges are identified in the STIP and include:

- PD&E Studies for planned interchange improvements/future capacity for SR-9/I-95 at 10th Avenue (FM# 4127331), Woolbright Avenue (FM#4372791), and Hypoluxo Road (FM# 4132571)
- Preliminary engineering for planned interchange improvements at SR-9/I-95 and Northlake Boulevard (FM# 4358031) and at Southern Boulevard (FM #4355161)
- Right-of-way (ROW) acquisition is underway for SR-9/I-95 at Glades Road/SR 808 (FM#4124204), PGA Boulevard (FM#4132651), 6th Avenue South (FM#4369631), and Atlantic Avenue/SR 806 (FM# 4347221)
- Construction has begun at SR-9/I-95 at Linton Road (FM#4353841). Multiple studies to evaluate future capacity of the I-95 corridor are underway.

1.1 Description of Proposed Action

The project study area (study area) is in eastern Palm Beach County within the City of Boynton Beach between SR-9/I-95 Woolbright Road to the south and SR-9/I-95 at Hypoluxo Road to the north. The SR 804/Boynton Beach Boulevard interchange is located on SR-9/I-95 at milepost 57 between the Gateway Boulevard interchange (1.5 miles to the north) and the Woolbright Road interchange (1.0 mile to the south). At SR 804/Boynton Beach Boulevard, the project area extends from west of Industrial Avenue to east of Seacrest Boulevard. The SR 804/Boynton Beach Boulevard project length is 2.52 miles.

The Gateway Boulevard interchange is located on SR-9/I-95 at milepost 58 between the Hypoluxo Road interchange (1.5 miles to the north) and the SR 804/Boynton Beach Boulevard interchange (1.5 miles to the south). At Gateway Boulevard, the project area extends from west of High Ridge Road to east of Seacrest Boulevard. The Gateway Boulevard project length is 2.95 miles. A project location map is provided in **Figure 1**.

2. Purpose and Need for Action

The primary purpose of the proposed action is to enhance overall traffic operations at the existing interchanges of SR-9/I-95 at SR 804/Boynton Beach Boulevard and at Gateway Boulevard by providing improvements to achieve acceptable Levels of Service (LOS) in the future condition (2045 Design Year). The proposed action will support redevelopment efforts in the vicinity of the interchange, meeting the overall vision of the City of Boynton Beach. In addition, goals of the project include improving safety conditions and enhancing emergency evacuation and response times. The proposed action is anticipated to improve traffic operations at the study interchanges through implementation of operational and capacity improvements that will maintain and improve mobility, improve safety, and support existing and future development at the study interchanges.

2.1 Transportation Capacity

The study area was initially evaluated in the *I-95 (SR-9) Interchange at Boynton Beach Boulevard (SR-804) in Palm Beach County, Interchange Concept Development Report* (June 2014) and the *I-95 (SR-9) Interchange at Gateway Boulevard in Palm Beach County, Interchange Concept Development Report* (June 2014) [CD Reports].

Based upon the traffic operations analysis conducted for the study area interchanges and adjacent signalized intersections and documented in the CD Reports, the existing operational capacity and overall traffic operations (level of service) are deficient. These deficiencies are based on existing and future AM and PM peak hour traffic conditions for intersection delay and safety performance. Level of service (LOS) is a quality measure describing operational conditions of these facilities. LOS classifications are designated from LOS A to LOS F, with LOS A representing the best operating conditions and LOS F representing the worst. Operational conditions considered in an LOS classification include speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Existing and future AM and PM peak hour conditions for Boynton Beach and Gateway Boulevards are shown in **Tables 1 and 2**.

Table 1. SR 804/Boynton Beach Boulevard Existing and Future AM and PM Peak Hour Conditions

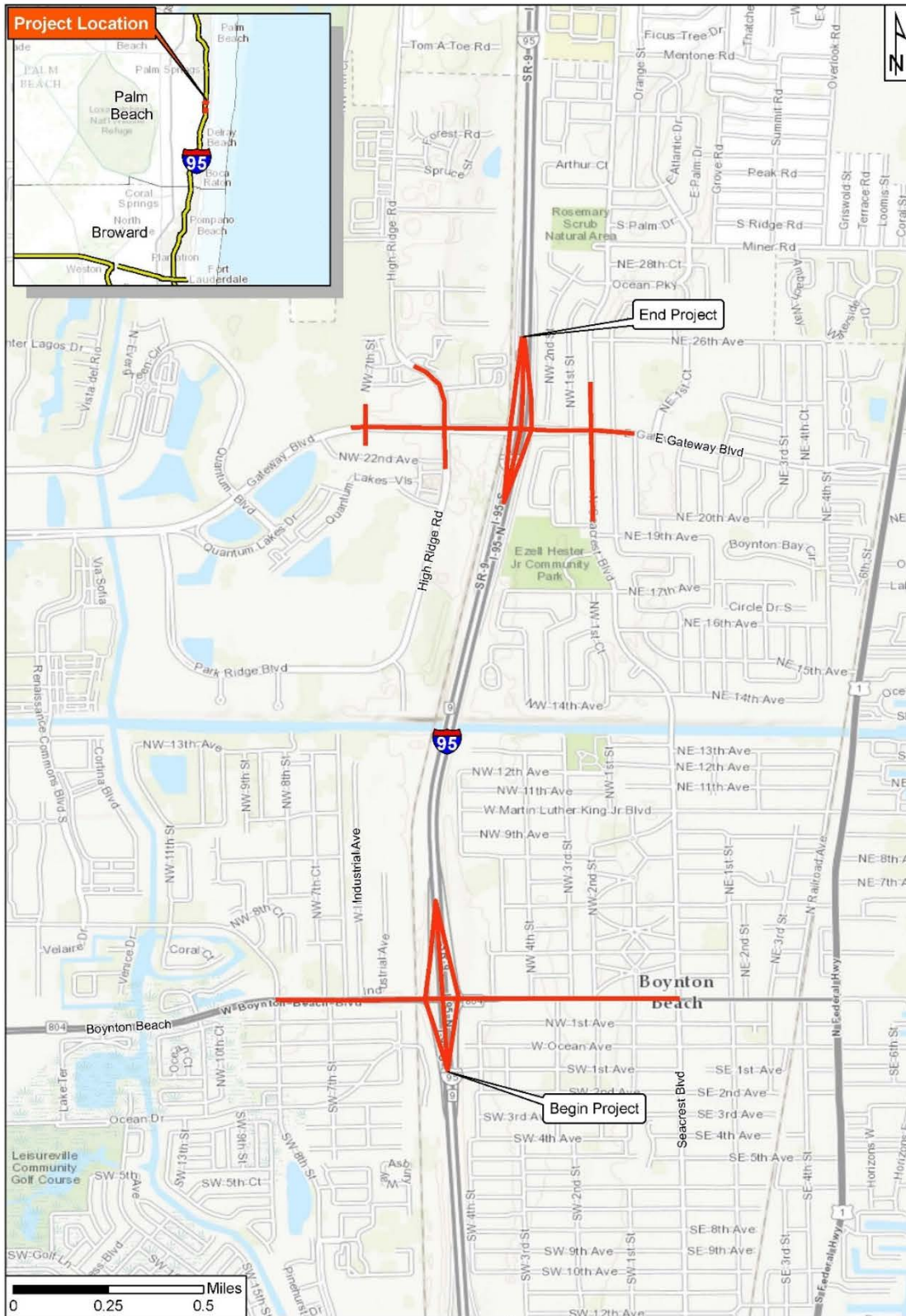
SR 804/Boynton Beach Boulevard with	Existing AM Conditions		Existing PM Conditions		Future AM Conditions		Future PM Conditions	
	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹
Industrial Avenue	B	12.5	C	24.9	C	26.7	E	58.4
SR-9/I-95 Southbound Ramps	E	68.4	B	19.5	F	138.2	D	43.1
SR-9/I-95 Northbound Ramps	C	31.9	D	44.4	F	130.0	F	144.5
Seacrest Boulevard	D	45.0	D	35.6	F	158.7	F	178.6

1. sec: Delay in seconds per vehicle

Source: *I-95 (SR-9) Interchange at Boynton Beach Boulevard in Palm Beach County, Interchange Concept Development Report* (June 2014)

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



PD&E Study
SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange
SR-9/I-95 at Gateway Blvd Interchange
FM Nos. 435804-1-22-01; 231932-1-22-01
ETDM Nos. 14180 and 14181



**PROJECT
LOCATION MAP**

**FIGURE
1**

Table 2. Gateway Boulevard Existing and Future AM and PM Peak Hour Conditions

Gateway Boulevard with	Existing AM Conditions		Existing PM Conditions		Future AM Conditions		Future PM Conditions	
	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹	Level of Service (LOS)	Delay (sec) ¹
High Ridge Road	F	111.4	D	40.9	F	275.2	F	84.7
SR-9/I-95 Southbound Ramps	F	255.7	F	158.0	F	146.8	F	251.1
SR-9/I-95 Northbound Ramps	D	37.5	E	60.4	F	102.2	F	166.9
Seacrest Boulevard	D	43.6	D	38.4	F	195.2	F	204.9

1. sec: Delay in seconds per vehicle

Source: I-95 (SR-9) Interchange at Gateway Boulevard in Palm Beach County, Interchange Concept Development Report (June 2014)

Although the intersections operate at LOS E or better under existing conditions scenarios at SR 804/Boynton Beach Boulevard many of the individual through and turning movements at the intersections (which include approaches to SR-9/I-95) operate at LOS F during future AM and PM peak periods. Under the existing conditions scenarios at Gateway Boulevard, all intersections operate at LOS E or better except at the Gateway Boulevard - High Ridge Road and SR-9/I-95 southbound ramp intersections. Without improvements, the intersections will continue to experience excessive delays and queue lengths, and will continue to operate below acceptable LOS standards and the interchange will have insufficient capacity to accommodate the projected travel demand.

2.1.1 Economic Development

The area surrounding the SR-9/I-95 at SR 804/Boynton Beach Boulevard interchange is urbanized containing a mixture of commercial, industrial, and residential land uses. According to the City of Boynton Beach Future Land Use Map, the SR- 9/I-95 at SR 804/Boynton Beach Boulevard interchange falls within the designated Community Redevelopment Area (CRA). The residential neighborhoods and business districts of this area are intended to be redeveloped by implementing compact, more intensive urban growth patterns that provide opportunities for more efficient use and development of infrastructure, land, and other resources and services. The area surrounding the SR-9/I-95 at Gateway Boulevard interchange is urbanized containing a mixture of residential and recreational land uses to the east and commercial, office, industrial, and residential activities to the west as part of the Quantum Park Development of Regional Impact (DRI). According to the City of Boynton Beach Future Land Use Map, the area will continue to support the noted land uses.

Population within the vicinity of the SR 804/Boynton Beach Boulevard interchange is anticipated to grow by approximately 10% from 2005 to 2035 primarily in the areas northeast and southwest of the interchange. Anticipated population growth within the vicinity of the Gateway Boulevard interchange is 46% with expected growth primarily east of Seacrest Boulevard and within the Quantum Park DRI. Employment in the vicinity of SR 804/Boynton Beach Boulevard is projected to increase approximately 147% from 2005 to 2035 primarily in the areas northeast, east, and southwest of the interchange. In the vicinity of Gateway Boulevard, employment is expected to increase by approximately 173% primarily in the areas west and southeast of the interchange. These projections are based on data derived from the enhanced Southeast Regional Planning Model (SERPM) version 6.5 Managed Lanes Model (upgraded

to include specific subarea improvements for the I-95 Interchange Master Plan). Improving the transportation infrastructure at the study area interchanges and adjacent intersections will support the redevelopment efforts in the vicinity of these interchanges and the overall vision of the City of Boynton Beach growth and economic development as identified in the Heart of Boynton Community Redevelopment Plan Update (April 2014).

2.1.2 Secondary Criteria

2.1.2.1 Safety

The 2040 LRTP continues the requirement that the MPO carry out a planning process that increases the safety and security of the transportation system for motorized and non-motorized users. The Moving Ahead for Progress in the 21st Century (MAP-21) Act also establishes national performance goals for federal highway programs including:

- Safety - to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- System Reliability – to improve the efficiency of the surface transportation system.

MAP-21 continued the Highway Safety Improvement Program (HSIP) as a core federal program. To receive funding under this Program, states were required to develop Strategic Highway Safety Plans (SHSP). The SHSP is a data-driven, four to five-year comprehensive plan that establishes statewide goals and objectives to reduce fatalities and serious injuries. In 2006, Florida completed development of a comprehensive SHSP. The overall goal of the SHSP is to reduce the number of fatalities in Florida to zero. Use of a systems approach in engineering is one of the objectives to be used in accomplishing this overall goal; to strike a balance between single unique locations and addressing the safety of the road network.

The CD Reports included a safety analysis of the study area. For the SR 804/Boynton Beach Boulevard interchange, crash data analyzed from 2010 – 2012 indicated 214 crashes occurred with 69% being rear-end type crashes. Predominant crash locations were along SR 804/Boynton Beach Boulevard at the SR-9/I-95 northbound on and off-ramps and the southbound off ramp. For the Gateway Boulevard interchange, crash data indicated 117 crashes occurred with 48% being rear-end type crashes. The segment of SR-9/I-95 in the vicinity of Gateway Boulevard is identified as a high crash segment having a higher crash rate compared with similar state roadways for the time period analyzed.

2.1.3 Emergency Evacuation and Response Times

SR-9/I-95 and SR 804/Boynton Beach Boulevard serve as part of the emergency evacuation route network designated by the Florida Division of Emergency Management and Palm Beach County. As designated evacuation facilities, these roadways are critical in facilitating traffic flows during emergency evacuation periods. SR 804/Boynton Beach Boulevard is a major east-west corridor in eastern Palm Beach County providing linkage between SR-9/I-95 and Florida's Turnpike. Both Boynton Beach and Gateway Boulevards connect to other major arterials and highways of the state evacuation route network.

3. Project Alternatives

NEPA project development must consider a range of alternatives that meet the purpose and need of the project while balancing engineering requirements, impacts, and benefits. Project alternatives include the No Build, Transportation Systems Management & Operations (TSM&O), and Build Alternatives.

FDOT is committed to the practicable avoidance and minimization of potential impacts to the social and natural environment when considering approval of proposed transportation projects. The study of alternatives and the associated environmental consequences were evaluated according to NEPA and FDOT's PD&E process. This study process allows for coordination during the alternatives development process and thorough consideration of alternatives developed.

3.1 Alternatives Analysis

3.1.1 No Build Alternative

NEPA requires that doing nothing to existing conditions be considered during the environmental review process. This alternative is designated as the No Build Alternative, signifying that no new improvements or construction would take place. Although this alternative does not meet the purpose and need for the project, it will be considered serving as a baseline for comparison against other alternatives. The No Build Alternative retains the existing roadway and interchange improvements and would not have any direct impacts to the physical, natural, and social environments, ROW, structures, or utilities.

3.1.2 Transportation System Management & Operations Alternative

The TSM&O Alternative includes implementation of non-capacity improvements to the existing transportation network that improve traffic flow, manage congestion, and maximize highway operations. Intelligent transportation systems (ITS), multimodal applications, adjusting signal phasing and timing, auxiliary lane additions, and higher land-use density strategies are TSM&O instruments used to maximize transportation infrastructure utilization. Such improvements are often less costly and require little to no ROW compared to physical expansion of the transportation network.

TSM&O improvements alone would not adequately accommodate the future year traffic volumes within the project's area of influence. The TSM&O Alternative alone is not considered a viable alternative, however, the build alternatives developed will incorporate viable TSM&O improvements.

3.1.3 Alternative Travel Modes

Multimodal facilities such as transit routes currently exist within the proposed project limits. The existing modes are incorporated into the build alternatives with current design standards. The Build Alternative for this project will include bicycle lanes and sidewalks that will connect to existing facilities to the east and west of the project limits. The transit routes within the study area will not be affected by the Build Alternative. Alternative travel modes are not anticipated to reduce the future demand near this interchange.

3.2 Alternatives Development

As part of the PD&E Study, several roadway improvement alternatives were considered for improving traffic operations and safety near the SR 804/Boynton Beach Boulevard and Gateway Boulevard interchanges. The interchanges were initially evaluated in Concept Development Reports completed by the FDOT through the I-95 Master Plan Project. The SR 9/I-95 Interchange at SR 804/Boynton Beach Boulevard, Palm Beach County, Interchange CD Report (2014) and SR 9/I-95 Interchange at Gateway Boulevard, Palm Beach County, Interchange CD Report (2014)

developed and evaluated conceptual design alternatives for geometric criteria, impacts on structures, drainage, signing, and utilities, adjoining side street connections, signalized intersections, and constructability.

The recommended improvements contained in the interchange CD Reports resulted in development of a Conceptual Design Alternative (CDA). The CDA has been retained and will be evaluated as a build alternative in this PD&E Study. A Tier 1 Alternatives Evaluation Technical Memorandum (March 2016) was prepared that identified preliminary alternatives that improved traffic operations and safety. In addition to the CDA, eight (8) conceptual alternatives were developed for SR 804/Boynton Beach Boulevard and three (3) for Gateway Boulevard interchanges. A preliminary screening of each alternative was completed with respect to the purpose and need for the project, traffic operations, traffic safety, constructability, cost, ROW, environmental, and socio-economic impacts.

Of the preliminary alternatives developed, the following build alternatives were retained for full evaluation for each interchange. All Build Alternatives will incorporate TSM&O improvements and will be developed further as the project progresses.

- Alternative 1 - CDA
- Alternative 2 - Streamlined CDA
- Alternative 3 - Single-point Urban Interchange (SPUI)

The Tier I Alternatives Evaluation Technical Memorandum and is on file at the FDOT District Four Planning and Environmental Management (PLEM) office.

3.3 Build Alternatives

3.3.1 SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange

Alternative 1 – CDA. This build alternative was retained from the CD Report previously prepared and discussed in Section 3.2. The development of this alternative considered practical design and evaluated traditional turn lane improvements for the existing Tight Urban Diamond Interchange (TUDI) configuration to optimize the benefit to cost (B/C) ratio without imperiling traffic operations and safety.

For this alternative, proposed improvements are described below and shown in **Figure 2**.

1. A new westbound right turn lane to Industrial Avenue
2. Dual left and triple right turn lanes in the southbound direction at the I-95 southbound ramp terminal intersection
3. Continuously flowing channelized eastbound single right turn lane and dual westbound left turn lanes that create three SR 9/I-95 southbound on-ramp lanes. The third lane on the SR 9/I-95 southbound on-ramp is merged south of the ramp terminal intersection from the right side to tie into the existing dual lane on-ramp
4. Dual left turn lanes in the eastbound and westbound along SR 804/Boynton Beach Boulevard
5. Triple left turn lanes and single channelized right turn lane in the northbound direction at the northbound I-95 ramp terminal intersection
6. Dual left turn lanes with extended queue lengths, single channelized right turn lane and additional through lane in the westbound direction along SR 804/Boynton Beach Boulevard east of the SR 9/I-95 bridge

7. Continuously flowing channelized westbound right turn lane and dual eastbound left turn lanes that create three SR 9/I-95 northbound on-ramp lanes. Two of the three lanes on this SR 9/I-95 northbound on-ramp are merged north of the ramp terminal intersection from the right to tie into the existing auxiliary lane between SR 804/Boynton Beach Boulevard and Gateway Boulevard
8. Increase right turn storage lane along eastbound SR 804/Boynton Beach Boulevard at the northbound SR 9/I-95 ramp terminal intersection.
9. New right turn storage lane in the eastbound direction at the SR 804/Boynton Beach Boulevard and Seacrest Boulevard intersection.

Alternative 1 also adds an additional westbound through lane between SR 9/I-95 southbound ramp terminal and Old Boynton Road/SW 8th Street. This additional westbound through lane is dropped near the intersection of SR 804/Boynton Beach Boulevard and Old Boynton Road/SW 8th Street as a westbound right turn lane.

Alternative 2 – Streamlined CDA. This build alternative enhances Alternative 1 and avoids reconstruction of the SR 804/Boynton Beach Boulevard bridges over the South Florida Rail Corridor (SFRC) railroad (Bridge Number 930289) and SR 9/I-95 (Bridge Number 930285). This alternative retains most of Alternative 1 proposed improvements, but proposes the below described enhancements shown in **Figure 3**.

1. A closed median opening between 7th Street and Old Boynton Road
2. Dual right turn lanes, a single left turn lane and a shared left/right lane in the southbound direction at the SR 9/I-95 southbound exit ramp terminal intersection
3. Continuously flowing channelized eastbound right turn lane and dual westbound left turn lanes that create three SR 9/I-95 southbound on-ramp lanes. The third lane on the SR 9/I-95 southbound on-ramp is merged south of the ramp terminal intersection from the left side to tie into the existing dual lane on-ramp
4. Triple left and dual channelized right turn lanes in the northbound direction at the I-95 northbound ramp terminal intersection
5. Eliminates the eastbound right turn lane at the SR 804/Boynton Beach Boulevard and Seacrest Boulevard intersection.

Alternative 2 eliminates the additional westbound through lane between SR 9/I-95 southbound ramp terminal and Old Boynton Road/SW 8th Street added by the Alternative 1.

Alternative 3 – SPUI. This build alternative proposes the construction of a new SPUI at the SR 9/I-95 and SR 804/Boynton Beach Boulevard Interchange. A SPUI configuration combines turning movements at the SR 9/I-95 northbound and southbound exit ramps to operate under a single traffic control device, resulting in a high capacity interchange. The following improvements are proposed for this alternative and are shown in **Figure 4**.

1. Convert existing dual ramp terminal signalized intersections into a single signalized intersection to serve both southbound and northbound ramp terminals. This Alternative will include:
 - All improvements considered along SR 804/Boynton Beach Boulevard and the SR 9/I-95 northbound and southbound ramps considered under Alternative 2 as described above

3.3.2 SR 9/I-95 at Gateway Boulevard Interchange

Alternative 1 – CDA. This Build Alternative was retained from the CD Report previously prepared and discussed in Section 3.2. The development of this alternative considered practical design and evaluated traditional turn lane

improvements for the existing TUDI configuration to optimize the B/C ratio without imperiling traffic operations and safety.

For this alternative, proposed improvements are described below and shown in **Figure 5**.

1. Dual left turn lanes, a single thru lane, and a single right turn lane in the northbound direction at the Gateway Boulevard and High Ridge Road intersection
2. Triple left turn lanes from southbound High Ridge Road to eastbound Gateway Boulevard
3. Dual left and right turn lanes in the southbound direction at the SR 9/I-95 southbound exit ramp terminal intersection
4. Dual right turn lanes from eastbound Gateway Boulevard to southbound SR 9/I-95
5. Triple left and single right turn lanes in the northbound direction at the SR 9/I-95 northbound exit ramp terminal intersection
6. Dual left turn lanes from northbound Seacrest Boulevard to westbound Gateway Boulevard
7. Single right turn lane from southbound Seacrest Boulevard to westbound Gateway Boulevard

Alternative 1 adds an additional through lane in the eastbound and westbound direction to create an eight-lane typical section along Gateway Boulevard within the project limits between Quantum Boulevard and NE 1st Way.

Alternative 2 – Streamlined CDA. This build alternative enhances Alternative 1 and retains most of Alternative 1 proposed improvements including the additional through lane in the eastbound and westbound direction along Gateway Boulevard between Quantum Boulevard and NE 1st Way. Most of the SR 9/I-95 northbound and southbound ramp termini turn lane improvements are retained from Alternative 1 with adjustments to the intersection turn lane improvements at High Ridge Road.

For this alternative, proposed modifications are described below and shown in **Figure 6**.

1. Dual left turn lanes from southbound High Ridge Road to eastbound Gateway Boulevard as opposed to triple left turn lanes in Alternative 1
2. A single right turn lane and shared thru/right turn lane from eastbound Gateway Boulevard to southbound SR 9/I-95
3. Triple left and dual right turn lanes in the northbound direction at the SR 9/I-95 northbound ramp terminal intersection

Alternative 3 – Single-point Urban Interchange (SPUI). This build alternative proposes the construction of a new SPUI at the SR 9/I-95 at Gateway Boulevard Interchange. A SPUI configuration combines turning movements at the SR 9/I-95 northbound and southbound exit ramps to operate under a single traffic control device, resulting in a high capacity interchange. The following improvements are proposed for this alternative and are shown in **Figure 7**.

1. Convert existing dual ramp terminal signalized intersections into a single signalized intersection to serve both southbound and northbound ramp terminals. This Alternative will include:
 - All improvements considered along Gateway Boulevard and the SR 9/I-95 northbound and southbound ramps under Alternative 2 as described above

3.4 Recommended Alternatives

Following the July 28, 2016 alternatives public workshop, a meeting was held with FDOT to discuss the comprehensive resources evaluation, transportation and traffic studies, costs, and involvement of the public, local and state officials, and select a recommended alternative for each interchange. The Recommended Alternative for the project areas was chosen by FDOT on January 26, 2017. **Alternative 2**, the Streamlined Concept Development Alternative, was chosen for the SR 804/Boynton Beach Boulevard Interchange and **Alternative 3**, Single Point Urban Interchange, was chosen for the Gateway Boulevard Interchange. The Recommended Alternatives are shown in **Appendices A and B**.

A Preliminary Engineering Report was completed for the PD&E Study in accordance with FDOT PD&E Manual, Part 2, Chapter 6, Engineering Analysis (August 25, 2016) and is on file with the FDOT District Four PLEM office.



PD&E Study
SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange
SR 9/I-95 at Gateway Boulevard Interchange
FPID Nos.: 435804-1-22-01; 231932-1-22-01
ETDM Nos.: 14180 and 14181



**SR 9/I-95 at
SR 804/Boynton Beach Boulevard Interchange
Alternative 1 - Conceptual Development Alternative (CDA)**

Figure 2

PD&E Study

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



PD&E Study
SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange
SR 9/I-95 at Gateway Boulevard Interchange
FPID Nos.: 435804-1-22-01; 231932-1-22-01
ETDM Nos.: 14180 and 14181



**SR 9/I-95 at
SR 804/Boynton Beach Boulevard Interchange
Alternative 2 - Streamlined CDA**

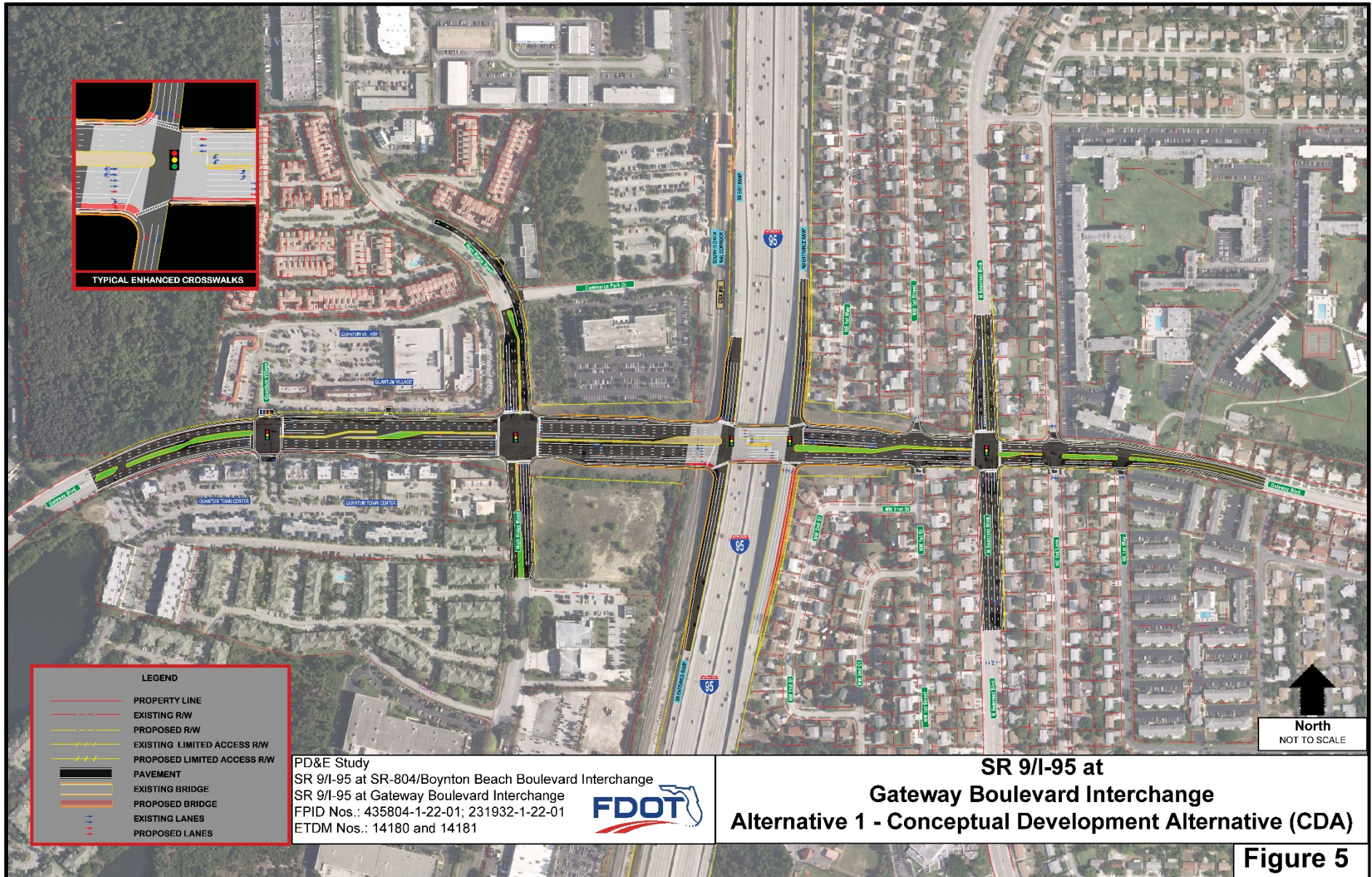
Figure 3



PD&E Study
SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange
SR 9/I-95 at Gateway Boulevard Interchange
FPID Nos.: 435804-1-22-01; 231932-1-22-01
ETDM Nos.: 14180 and 14181

**SR 9/I-95 at
SR 804/Boynton Beach Boulevard Interchange
Alternative 3 - SPUI**

Figure 4





PD&E Study

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



4. ENVIRONMENTAL IMPACT EVALUATION

This section provides the results of the analysis of the potential beneficial or adverse impacts of the project’s Recommended Alternative and No Build Alternative. The project is evaluated with respect to transportation, social, economic, cultural, physical, natural, and biological resources as part of the PD&E Study. Information used to conduct the evaluation includes detailed studies completed for this PD&E and comments received from Environmental Technical Advisory Team (ETAT) members through the Efficient Transportation Decision Making (ETDM) process. The ETDM Programming Screen Summary Report for SR 804/Boynton Beach Boulevard (#14180) was published on May 25, 2015 and Gateway Boulevard (#14181) on November 24, 2014. The ETDM Programming Screen Reports are on file with the District Four PLEM office and can be accessed online at <https://etdmpub.fl.a-etat.org/est/#>.

4.1 SOCIAL AND ECONOMIC

4.1.1 Land Use Changes

The SR-9/I-95 at SR 804/Boynton Beach Boulevard interchange is located within the City of Boynton Beach. The project area is partially located within the City’s CRA and is comprised primarily of transportation land use. The interchange and surrounding area is urbanized consisting of a mix of single and multifamily residential, commercial, office, light industrial, and public school land uses. According to the City of Boynton Beach Future Land Use Map (**Figure 8**) the project area remains urbanized with a mix of low and high density residential and local commercial uses.

The SR-9/I-95 at Gateway Boulevard interchange is located within the City of Boynton Beach. The project area is partially located within the City’s CRA and the Quantum DRI. The project area is comprised primarily of transportation land use. The interchange and surrounding area is urbanized consisting of a mix of single and multifamily residential, commercial, light industrial, and transit land uses. According to the City of Boynton Beach Future Land Use Map (**Figure 8**), the project area remains urbanized with a mix of low and high density residential and local commercial uses.

To further characterize the project areas, the existing land uses and cover types were identified with a 500-foot project buffer using South Florida Water Management District’s (SFWMD) 2011 land use Geographical Information Systems (GIS) data and Florida Land Use Cover Forms Classification System (FLUCFCS) codes (**Figure 9**). Analysis of this data indicates 97.4% of the project areas is classified as urban and built-up or transportation. Most of the existing land use is classified as residential and commercial and services land uses. Land use by classification, acreage, and percentage within the 500-foot project area buffers are presented in **Table 3**.

Table 3. Land Use and Cover Type – Boynton Beach and Gateway Boulevards

FLUCFCS	Description	Acres within 500-Foot Project Area Buffer	Percent
1210	Fixed Single Family Units	138	34
1330	Multiple Dwelling Units, Low Rise <Two stories or less>	37	9
1340	Multiple Dwelling Units, Low Rise <Three stories or more>	10	2
1390	High Density Under Construction	17	4
1400	Commercial and Services	97	24

FLUCFCS	Description	Acres within 500-Foot Project Area Buffer	Percent
1411	Shopping Centers (Plazas, Malls)	8	2
1550	Other Light Industrial	4	1
1710	Educational Facilities	15	4
1850	Parks and Zoos	6	1
4110	Pine Flatwoods	1	0
4240	Lelaleuca	6	1
4340	Hardwood – Conifer Mixed	4	1
5300	Reservoirs	1	0
8120	Railroads	7	2
8140	Roads and Highways	60	15
TOTAL		411	100%

Source: SFWMD 2011

The proposed improvements associated with the Recommended Alternative will require a minimal amount of additional ROW and are not anticipated to significantly affect the land use in the area. The character of the study area remains unchanged and will continue to support the existing and future land uses within the project and surrounding area maintaining the goals of the City of Boynton Beach Future Land Use Map, the CRA and Quantum DRI goals.

This project was reviewed by the appropriate agencies through the ETDM process and assigned a summary DOE of minimal for land use. The Florida Department of Economic Opportunity (FDEO) assigned the DOE as none, the FHWA as minimal, and FDOT District Four as minimal. The proposed improvements are compatible with the City of Boynton Beach Comprehensive Plan and supports the plan’s land use element. Effects on the area's character resulting from the project improvements are anticipated to be minor. The City of Boynton Beach does not have a Future Transportation Map. The FDOT will coordinate with the City of Boynton Beach to ensure that the project is included on the Future Transportation Map of the adopted Comprehensive Plan, and the Palm Beach MPO to ensure that funding is identified for future project phases in the TIP, LRTP, STIP and FDOT SIS Cost Feasible Plan.

4.1.2 Community Cohesion

The proposed improvements will reduce congestion and improve local and regional mobility. At SR 804/Boynton Beach Boulevard, improvements will accommodate expanding residential and commercial uses within the vicinity of the interchange including the goals of the Boynton Beach CRA, while supporting the vision of both Palm Beach County and the City of Boynton Beach.

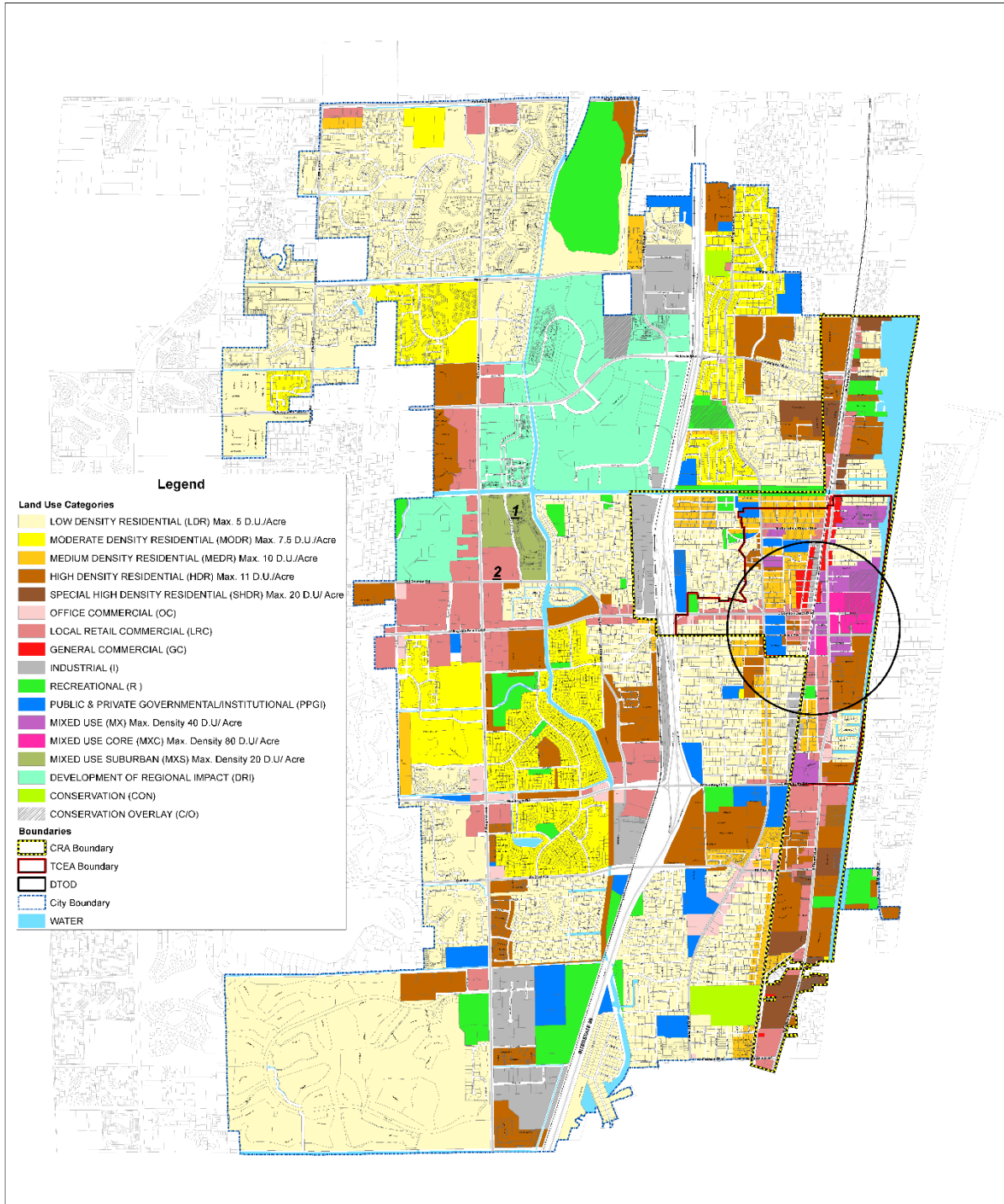
For Gateway Boulevard improvements will accommodate expanding residential and industrial activities within the vicinity of the interchange, including uses of the established Quantum DRI.

Enhancement to community connectivity is anticipated with the inclusion of improved bicycle and pedestrian facilities at both interchanges. It is expected that the Recommended Alternative will have some beneficial effect.

No adverse effects to community cohesion are anticipated from the proposed improvements.

With the No Build Alternative, overall impacts of the project on the social environment and community cohesion are anticipated to be minimal.

City of Boynton Beach Official Future Land Use Map



1. This property is restricted to a maximum of 5,120 high density residential units, 10,000 s.f. of office commercial use and 600,000 s.f. of local retail commercial use.
 2. This property is restricted to a maximum of 250,000 s.f. of local retail commercial use.

The information depicted on this map was correct as of date of last amendment and should be used for informational purposes only. More recent versions of the map may be available. Please do not make any decisions based on this information herein without consulting someone on the Planning and Zoning Staff.

October 20, 2015
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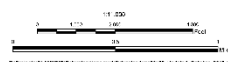
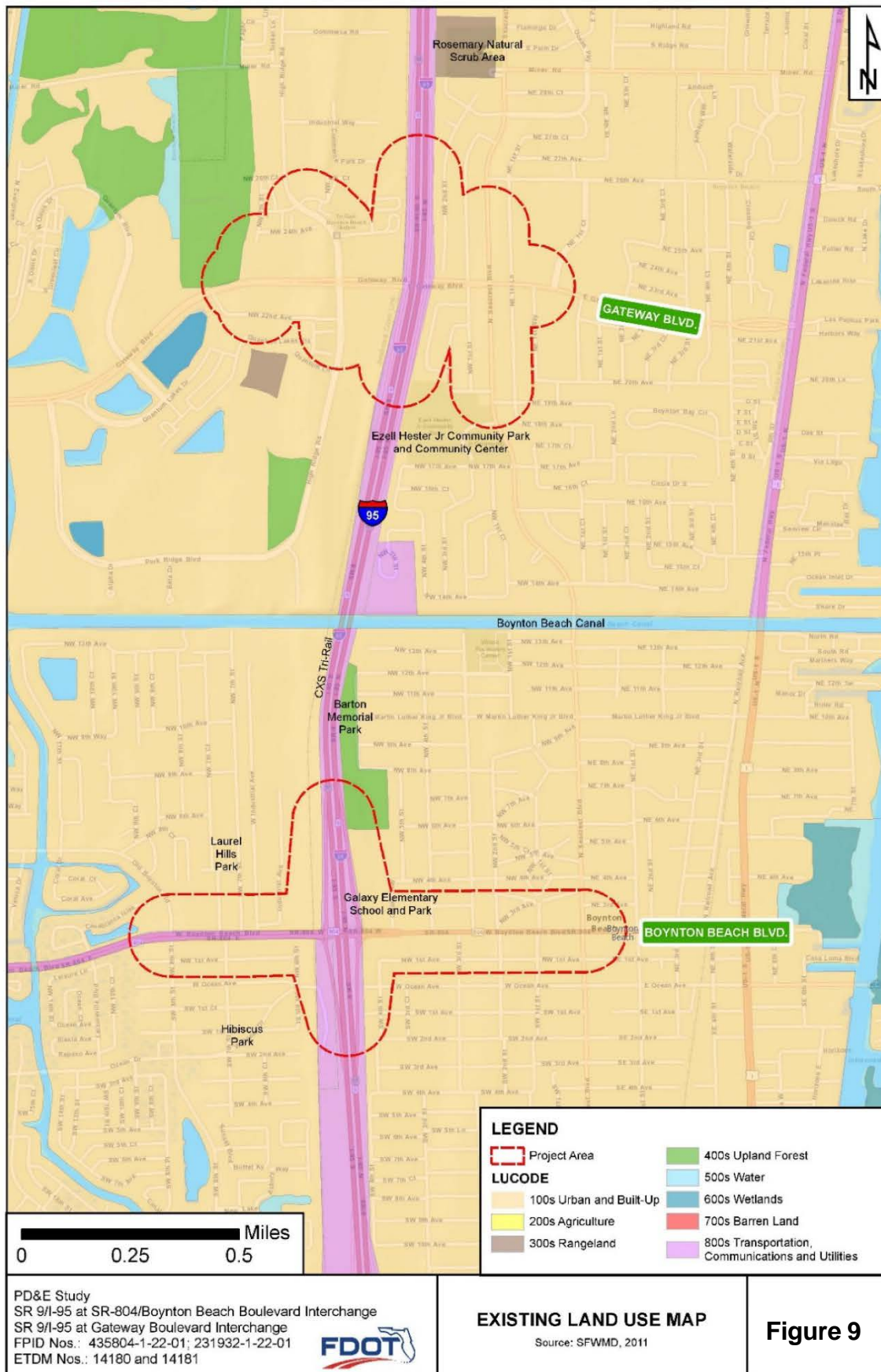


Figure 8

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



4.1.3 Relocation Potential

The proposed project is anticipated to require additional ROW at both interchanges. To minimize property impacts along SR 804/Boynton Beach Boulevard, improvements to the west of I-95 are located to the south side of the roadway. To the east of I-95, improvements are located on both the north and south sides of the roadway. Approximately 0.6 acres of ROW will be required for the Recommended Alternative. ROW acquisition along SR 804/Boynton Beach Boulevard is anticipated to impact one multi-family residential, 14 commercial and one school property. Of these 16 property impacts only 1 potential residential relocation is anticipated.

To minimize property impacts along Gateway Boulevard, improvements to the west of I-95 are located to the south side of the roadway. To the east of I-95, improvements are located on both the north and south sides of the roadway. Approximately 2 acres of ROW will be required for the Recommended Alternative. ROW acquisition is anticipated to impact 25 single family residential, 1 multi-family residential, and 7 commercial properties. Of these 33 properties, 5 residential and 1 commercial relocation is anticipated.

A Conceptual Stage Relocation Plan will be prepared by the FDOT if relocations are determined to be necessary. FDOT will carry out a ROW and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91- 646 as amended by Public Law 100-17).

4.1.4 Community Services

Community services located within the vicinity of the SR 804/Boynton Beach Boulevard interchange include two (2) parks (Barton Memorial Park and Galaxy Park), one school (Galaxy Elementary), two child care facilities, three government facilities (City of Boynton Beach City Hall/Police Station, Fire Station #1, and US Post Office), and four places of worship (First Baptist Church of Boynton Beach, First United Methodist Church, Southeastern Conference Association of Seventh-day Adventists, Boynton Memorial Chapel) within 500 ft. of the proposed interchange improvements.

At Gateway Boulevard, there is one community center and park (Ezell Hester Jr. Park), two government facilities (Children's Services of Palm Beach County and Fire Station #5), one family center, one senior community (Village Royale on the Green) one religious center (International Pentecostal City), and one rail station (Tri-Rail).

Based on the proposed improvements, no adverse impacts to community facilities and services are anticipated. There will be temporary impacts in the form of noise, dust, emissions, and traffic disruptions during construction, but traffic will be maintained in the project area. As noted in Section 4.1.2 Community Cohesion, many of the effects of the project are anticipated to be positive to the adjacent and surrounding communities. These improvements will facilitate access to the existing community services for the residents, commuters, and service providers.

4.1.5 Nondiscrimination Considerations

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (59 Federal Register 7629 1994), and FHWA Order 6640.23A, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, require federal agencies to determine whether a proposed action would have an adverse and disproportionately high impact on minority and/or low-income populations.

4.1.5.1 Population

Data from the 2015 American Community Survey (ACS) 5-Year Estimates were collected for the census tracts located within a 1,320-foot project area buffer. Census tract data within the buffer area was examined to identify the presence or absence of minority populations and to identify potential disproportionate impacts. Total and minority population data is presented in **Table 4**.

Table 4 Total and Minority Population

Geographic Area	Total Pop.	Not Latino or Hispanic							Hispanic or Latino of Any Race
		White	Black / African American	AIAN	Asian	NHPI	Other Race	Two or More Races	
Census Tract 5601	3230	1488	1270	0	87	27	318	40	1364
Census Tract 5701	2777	1023	1552	11	0	0	156	35	284
Census Tract 5702	5408	1025	4024	0	135	0	224	0	444
Census Tract 5808	4930	3616	723	13	458	0	62	58	529
Census Tract 6010	3486	1998	1291	0	17	0	71	109	695
Census Tract 6012	1982	1467	400	9	0	0	15	91	372
Census Tract 6100	2867	180	2492	0	56	0	115	24	221
Census Tract 6201	4019	1571	2346	0	67	0	6	29	504
TOTAL	28699	12368	14098	33	820	27	967	386	4413
TOTAL Percent	100	43	49.1	0.1	3	0.1	3.4	1.3	15.4

Source: U.S. Census Bureau, 2015 American Community Survey (ACS) 5-Year Estimates

The demographic information indicates a minority population greater than 49%. A total of 14,098 individuals comprise the minority population within the project buffer area. It should be noted that 4,413 persons within the project area buffer (15.4% of the total buffer population) identified as Hispanic.

4.1.5.2 Income and Poverty Status

The Census Tracts within the project area buffer represent the demographic area evaluated for low-income populations. The median household income and households below the poverty status were examined to identify the presence or absence of low-income populations and identify potential disproportionate impacts. The poverty level was determined based on the 2017 U.S. Department of Health and Human Services poverty threshold of \$24,600 for a family of four. **Table 5** presents the estimated number of households, median household income, and households below the poverty level within buffer area census tracts.

Neither the Recommended Alternative nor the No Build Alternative would have a disproportionate impact on low-income populations.

4.1.5.1 Limited English Proficiency

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (LEP) (2001), requires federal agencies to work to provide meaningful access to LEP applicants and beneficiaries. Data from 2015 American Community Survey 5-Year Estimates were reviewed for language spoken at home by ability to speak English for the

Table 5 Median Household Income and Poverty Status

Geographic Area	Total Households	Median Household Income (dollars)	Households Below Poverty	
			Number	Percent of Census Tract Total Households
Census Tract 5601	1139	40,692	220	2
Census Tract 5701	1459	27,581	539	4
Census Tract 5702	1906	36,639	659	5
Census Tract 5808	3130	56,854	409	3
Census Tract 6010	1695	42,200	417	3
Census Tract 6012	789	70,039	23	0.1
Census Tract 6100	999	24,433	443	4
Census Tract 6201	1318	32,869	425	3
TOTAL	12,435		3,135	33

Notes:

- (1) Geographic Area was determined to be the 2015 Census Tracts within the project area buffer.
- (2) Households below the poverty level were determined based on 2015 American Community Survey 5-Year Estimates and 2017 U.S. Department of Health and Human Services poverty threshold of \$24,600 for a family of four.

population 5 years and above within the project buffer. Approximately 6 percent of the population 5 years old and above speaks English “less than very well.” Demographic data indicates that approximately 14% of the population within the project area buffer speak a language other than English.

As part of the Public Involvement Plan (PIP) for the PD&E Study, English Proficiency (LEP) accommodations were made to ensure compliance with Title VI of the U.S. Civil Rights Act of 1964, and other related statutes. Informational materials, such as newsletters and fact sheets, were developed in bilingual format as well as advertisements of public meetings upon the Department’s request and approval. An effort was made to disseminate material to the community in accordance with the LEP guidelines as specified in Chapter 11 of the PD&E Manual (Dec 29, 2015) to ultimately encourage and retrieve feedback on the project.

The **No Build Alternative** would not have an impact on LEP populations within or adjacent to the Improvement Area.

It is anticipated that the proposed project will not have a disproportionally high and adverse effect on minority and low-income populations. It is anticipated that neither the **Recommended Alternative** nor **No Build Alternative** will raise environmental justice issues.

4.1.6 Controversy Potential

Public outreach activities were conducted for the PD&E Study. The public involvement program provided opportunities to present project related information and obtain comments from the public, government officials, agencies, and other interested parties. Although the proposed improvements result in property impacts, no controversial issues were identified. Two public meetings were conducted to present the alternatives and identified impacts to stakeholders. Through the public involvement process, it was demonstrated that efforts to avoid and minimize impacts were completed. Stakeholders living and working in or near the project area provided comments on the project alternatives presented. This information was taken into consideration as part of the recommended alternatives selection process.

A public hearing will be conducted for this project. The FDOT will continue to coordinate with all project stakeholders following completion of the PD&E Study and through the design process. A copy of the public hearing transcript will be included as an **Appendix C**.

4.1.7 Scenic Highways

There are no Scenic Highways/Byways reported within the project vicinity.

4.1.8 Farmlands

The U.S. Department of Agriculture (USDA), through the Natural Resources Conservation Service (NRCS), administers the Farmland Protection Policy Act 1983 Subtitle I of Title XV, Section 1539 – 1549 (FPPA). The purpose of the FPPA is to “minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses.” The NRCS defines prime farmland and soils as those that have the best combination of physical and chemical characteristics to economically produce high yields of agricultural crops when treated and managed according to acceptable farming practices.

To ensure compliance with the FPPA, agency coordination with the NRCS was completed through the ETDM review process and a degree of effect (DOE) of None has been assigned. NRCS determined that there are no Prime, Unique or Locally Important Farmland soils within a 500-foot project buffer. The project interchanges are also located within the Miami Urbanized Area. According to Part 2, Chapter 28 (July 14, 2016), Section 28.2.1(2) of the FDOT PD&E Manual, transportation projects situated entirely within urbanized areas with approved comprehensive land use maps and no adjacent present or future agricultural lands are excluded from coordination with the NRCS.

4.2 Cultural

The project was screened through ETDM Environmental Screening Tool for archaeological, historic, and Section 4(f) resources. A moderate DOE was assigned during the programming screen for the project. A Phase I Cultural Resource Assessment Survey (CRAS) was conducted for the project area (SEARCH, 2017). The purpose of the survey was to locate, identify, and bound any historic structures and potential districts within the project’s Area of Potential Effect (APE) and assess their potential for listing in the National Register of Historic Places (NRHP). The State Historic Preservation Office (SHPO) reviewed the CRAS and provided concurrence with the findings of the CRAS and specifically the eligibility of the Seaboard Air Line Railroad (SALR) and the Robert E. & Margaret Stogdill House on March 31, 2017 (**Appendix D**). A request for concurrence with the finding of no adverse effect was submitted to the SHPO July 14, 2017 (**Appendix D**).

A Section 4(f) Determination of Applicability (DOA) for the project area was completed and on file at the FDOT District Four PLEM office. The purpose of this Section 4(f) DOA is to apply Section 4(f) criteria to determine the applicability of seven identified resources located in proximity to the SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchange project areas and proposed improvements.

4.2.1 Section 4(f)

Through the ETDM Environmental Screening Tool, a moderate DOE was assigned. While Section 4(f) resources are in proximity to the project area, direct impacts to these resources are not anticipated and no mitigation would be needed.

Section 4(f) of the Department of Transportation Act of 1966 as amended established the requirement for avoidance of parks and recreational lands, wildlife and waterfowl refuges, and historic sites of national, state, or local significance. To determine applicability, Section 4(f) is applied to a property that represents a significant publicly owned park or recreation area, wildlife or waterfowl refuge, or historic property. The Section 4(f) DOA was completed in accordance with FDOT PD&E Manual Part 2, Chapter 13 (Sept 1, 2016).

In addition, the property must represent a Section 4(f) resource and the transportation undertaking must “use” land from that property within the meaning of Section 4(f). The term “use” is specific to Section 4(f) analyses and can mean the permanent incorporation of land into the proposed transportation facility; the temporary occupancy of land that results in adverse effects; or proximity impacts severe enough to impair the activities, features, or attributes that qualify the resource for protection. Feasible and prudent avoidance alternatives are those that avoid using any Section 4(f) property and do not cause other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property (FHWA 2012).

Table 6 lists and **Figure 10** shows the identified potential Section 4(f) Resources at SR 804/Boynton Beach Boulevard. **Table 7** lists and **Figure 11** shows the identified potential Section 4(f) Resources at Gateway Boulevard.

Table 6 List of Potential Section 4(f) Resources – SR 804/Boynton Beach Boulevard

Map ID ¹	Parcel Number	Resource Name	Location	Distance to Project Area	Owner/ Official with Jurisdiction	Size (Acres)	Access Change	Facility	Direct/ Indirect Impacts
1	08-43-45-21-00-000-7020	Galaxy Park	North of Galaxy Elementary east side of SR-9/I-95	700 feet north of Boynton Beach Blvd; 50 feet east of I-95	City of Boynton Beach	3.65	No	Neighborhood Park	None
2	08-43-45-28-15-074-0090	Seaboard Air Line Railroad	Parallel to and on the west side of SR-9/I-95	Adjacent to the west side of I-95; immediately north and south of Boynton Beach Blvd.	Florida State Historic Preservation Office	Varies - adjacent north and south	No	FDOT Railroad ROW	Indirect minor
3	08-43-45-29-01-001-0010	Robert E. & Margaret Stogdill House	206 NW 6 th Street (Near southwest quadrant of SR-9/I-95 and Boynton Beach Blvd)	100 feet south of Boynton Beach Blvd. and 175 feet west of I-95	Michael F. and Dulce A. MacAndrew	0.45	No	Residence	None
4	08-43-45-21-12-	Barton Memorial	North of Boynton	700 feet north of	City of Boynton	6.26	No	Special Use Park	None

Map ID ¹	Parcel Number	Resource Name	Location	Distance to Project Area	Owner/ Official with Jurisdiction	Size (Acres)	Access Change	Facility	Direct/ Indirect Impacts
	001-0121	Park	Beach Blvd on east side of SR-9/I-95	Boynton Beach Blvd; 50 feet east of I-95	Beach				

1. See Figure 10 for Map ID

Table 7 List of Potential Section 4(f) Resources – Gateway Boulevard

Map ID ¹	Parcel Number	Resource Name	Location	Distance to Project Area	Owner/ Official with Jurisdiction	Size (Acres)	Access Change	Facility	Direct/ Indirect Impacts
5	08-43-45-16-01-013-0010	Ezell Hester Jr. Park	South of Gateway Boulevard and east of SR-9/I-95	1,100 feet south of Gateway Blvd. and adjacent to east side of I-95	City of Boynton Beach	23.82	No	Park	None
6	08-43-45-16-00-000-3020	Seaboard Air Line Railroad	Parallel to and on the west side of SR-9/I-95	Adjacent to the west side of I-95; immediately north and south of Gateway Blvd.	Florida State Historic Preservation Office	North and south	No	Railroad ROW	Indirect minor
7	08-43-45-09-00-000-7080	Rosemary Scrub Natural Area	North of Gateway Boulevard and east of SR-9/ I-95	2,350 feet north of Gateway Blvd. and adjacent to east side of I-95	The Nature Conservancy	13.44	No	Preserve	None

1. See Figure 11 for Map ID

Seven resources have been identified in proximity to the SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchange project areas. For sites 1,3 - 5, and 7, no ROW acquisition will be required. The SHPO provided concurrence with the findings of the CRAS (February 2017) and specifically, the eligibility of the SALR and the Robert E. & Margaret Stogdill House, on March 31, 2017 (**Appendix D**). The FDOT concluded that Section 4(f) would not apply to the resources identified. The SHPO also stated the following: *SHPO/DHR wishes to postpone an effect finding until a case study can be completed. SHPO/DHR concurs with the eligibility determinations in this letter & document.* Therefore, an effect finding cannot be concluded at this time.

Access to all facilities will not be interrupted during construction related activities. No direct or constructive use of these five resources under Section 4(f) is anticipated.

4.2.2 Historic Sites/Districts

Through ETDM Environmental Screening Tool, a minimal DOE was assigned by the Florida Department of State (FDOS) for SR 804/Boynton Beach Boulevard and Gateway Boulevard.

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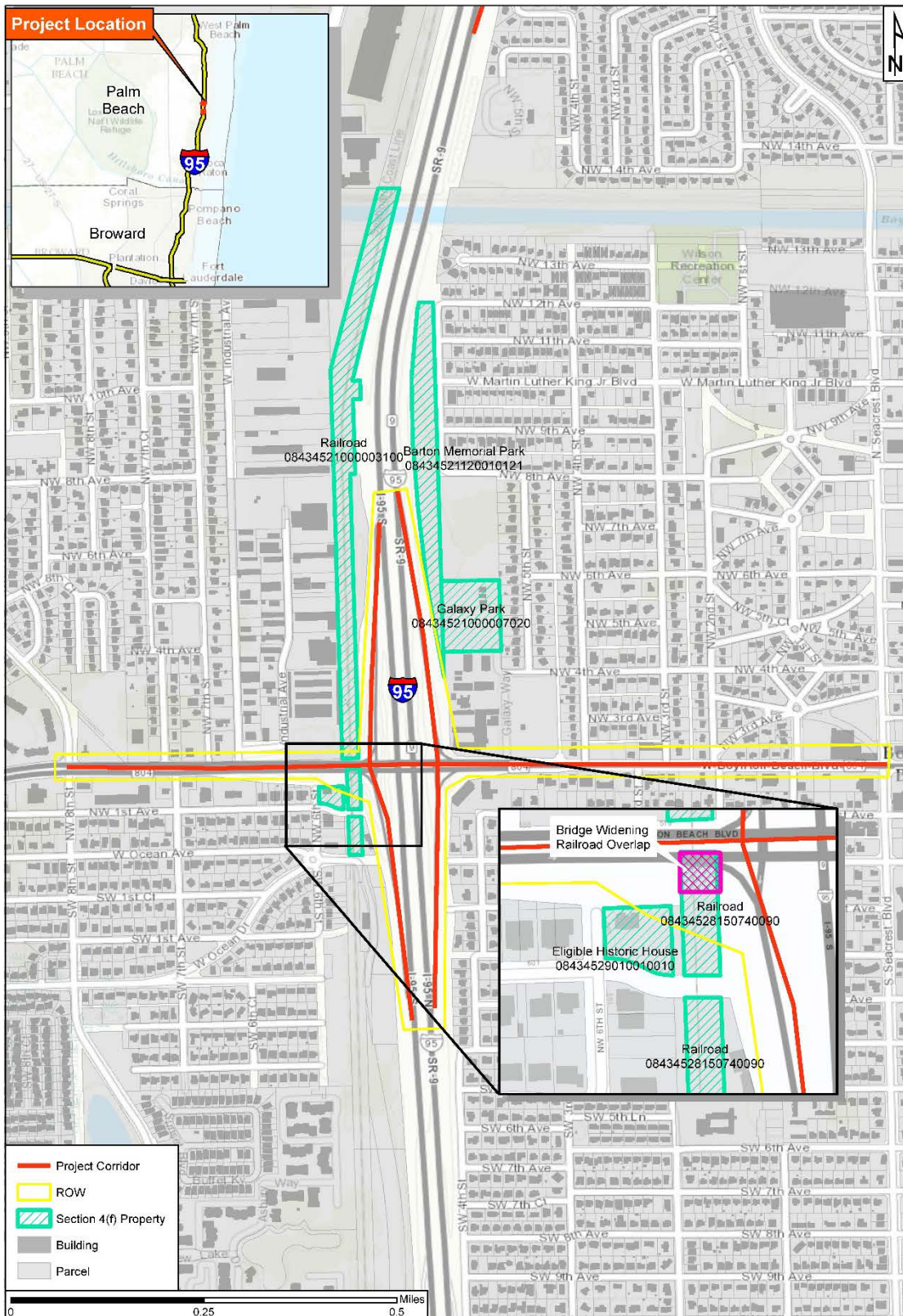
SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



In accordance with the procedures contained in 36 CFR Part 800, a CRAS, including background research and a field survey coordinated with the SHPO, was performed for the project, and is on file at the FDOT District Four PLEM office. The CRAS was conducted in support of the proposed improvements at SR 804/Boynton Beach Boulevard and Gateway Boulevard (SEARCH, 2017). The purpose of the survey was to locate, identify, and bound any historic structures and potential districts within the project's Area of Potential Effect (APE) and assess their potential for listing in the National Register of Historic Places (NRHP). The State Historic Preservation Office (SHPO) reviewed the CRAS and provided concurrence with the findings of the CRAS (February 2017) and specifically, the eligibility of the SALR and the Robert E. & Margaret Stogdill House, on March 31, 2017 (**Appendix D**). The FDOT concluded that Section 4(f) would not apply to the resources identified. The SHPO also stated the following: *SHPO/DHR wishes to postpone an effect finding until a case study can be completed. SHPO/DHR concurs with the eligibility determinations in this letter & document.* Therefore, an effect finding cannot be concluded at this time.

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



PD&E Study
SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange
SR-9/I-95 at Gateway Blvd Interchange
FM Nos. 435804-1-22-01; 231932-1-22-01
ETDM Nos. 14180 and 14181

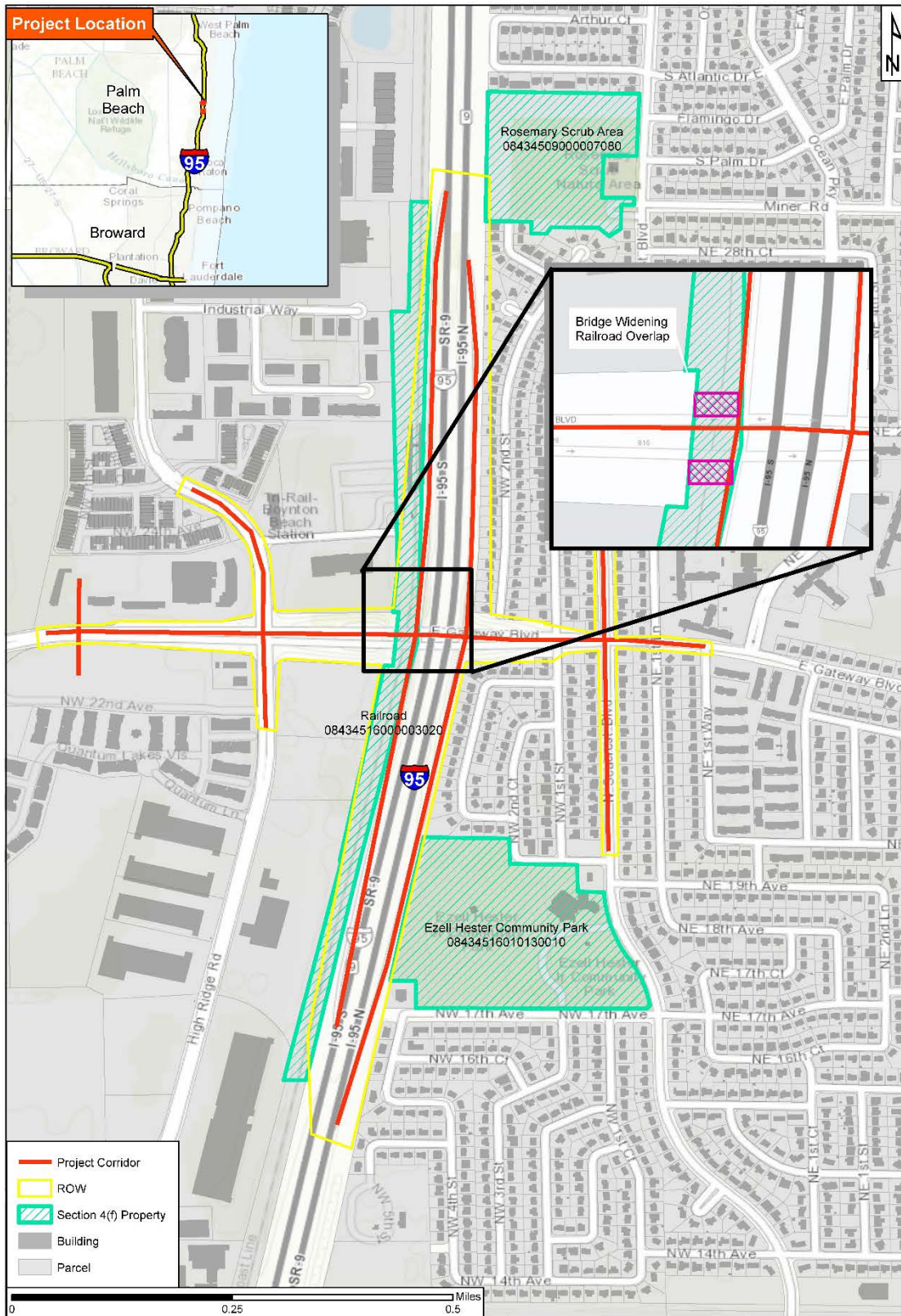


**BOYNTON BEACH
BLVD INTERCHANGE
SECTION 4(f)
PROPERTIES**

**FIGURE
10**

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



PD&E Study
SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange
SR-9/I-95 at Gateway Blvd Interchange
FM Nos. 435804-1-22-01; 231932-1-22-01
ETDM Nos. 14180 and 14181

**GATEWAY BLVD
INTERCHANGE
SECTION 4(f)
PROPERTIES**

**FIGURE
11**

4.2.3 Archaeological Sites

The archaeological research strategy was composed of background investigation, a historical document search, and field survey. The archaeological reconnaissance was conducted within the existing and proposed ROW.

Based on an examination of environmental variables (soil drainage, relative elevation, and access to marine resources), as well as the results of previously conducted surveys, the SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchanges APE was considered to have low potential for prehistoric archaeological sites. The APE contains disturbed urban soils and modern development. The APE was considered to have low potential for historic archaeological sites due to the level of disturbance within the ROW.

The SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchanges APE is located in a heavily developed area of Palm Beach County in the City of Boynton Beach. The two interchanges are located in urban areas dominated by commercial buildings, residential housing, and the I-95 corridor. Buried utilities throughout the APE prevented any subsurface testing within the existing ROW. Furthermore, extensive ground-moving activities associated with construction of the interstate corridor, overpasses, and on-/off-ramps have resulted in a heavily disturbed environment within the existing and proposed ROW. As a result, the SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchanges APE was pedestrian surveyed for indications of intact archaeological deposits and documented with digital photography.

No archaeological sites or archaeological occurrences were noted within the SR 804/Boynton Beach Boulevard and Gateway Boulevard Interchanges APE. Based on the heavily disturbed nature of the soils, there is no potential for intact archaeological sites to be located within the ROW. No further archaeological survey in support of the PD&E study is recommended.

4.2.4 Recreation Areas

Through the ETDM Environmental Screening Tool, a minimal DOE was assigned by the FDOT and FHWA for SR 804/Boynton Beach Boulevard and moderate for Gateway Boulevard.

At SR 804/Boynton Beach Boulevard, two resources are located within a 200-foot buffer, Barton Memorial Park and Galaxy Park. These resources are considered Section 4(f) resources and have been evaluated through a Section 4(f) DOA completed for the project (Section 4.2.1) and are not anticipated to be directly impacted by the project. Access to these features may be temporarily affected during project construction.

At Gateway Boulevard, two resources are located within a 200-foot buffer, Ezell Hester Jr. Park and Rosemary Scrub. These resources are considered Section 4(f) resources and have been evaluated through a Section 4(f) DOA completed for the project (Section 4.2.1).

Access to all facilities will not be interrupted during construction related activities. No direct or constructive use of these resources is anticipated.

4.3 Natural

4.3.1 Wetlands

Through the ETDM Environmental Screening Tool, a minimal DOE was assigned by the FDOT, FHWA, FDEP, and USACE and a moderate DOE by NMFS and USFWS. A Wetland Evaluation Report (WER) was completed in accordance with FDOT PD&E Manual, Part 2, Chapter 18, Wetlands and Other Surface Waters (August 22, 2016) and Executive Order 11990, Protection of Wetlands (1977). The WER was completed to document and present the findings of potential wetland involvement associated with proposed improvements at the SR-9/I-95 and SR 804/Boynton Beach Boulevard and Gateway Boulevard interchanges. The WER is on file at the FDOT District Four PLEM office.

Identification and assessment of wetlands and surface waters within and adjacent to the project area was completed. Study methodology included review of the ETAT comments, literature reviews, agency database searches, agency coordination, and GIS analyses. Field reviews were conducted in August 2015, April 2016, and January 2017. The GIS analysis utilized a 500-foot buffer for review of natural resources (**Figure 12**). Potential impacts associated with each of the alternatives were evaluated and quantified and are presented in **Table 8**.

Table 8 Potential Wetland Impacts

Evaluation Factor	No Build Alternative	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange				
Wetlands (Acres)	0	0	0	0
SR 9/I-95 at Gateway Boulevard Interchange				
Wetlands (Acres)	0	0	0	0

No wetlands exist within the project area and no impacts to surface waters are anticipated. Direct impacts to roadside swales and ditches are anticipated to be less than a half an acre. The roadside swales and ditches impacted were built in uplands, are less than a half an acre, and do not provide significant habitat for threatened and endangered species. Per the SFWMD Basis of Review, Section 10.2.2.1, these features classified as “other surface waters” normally would not require mitigation.

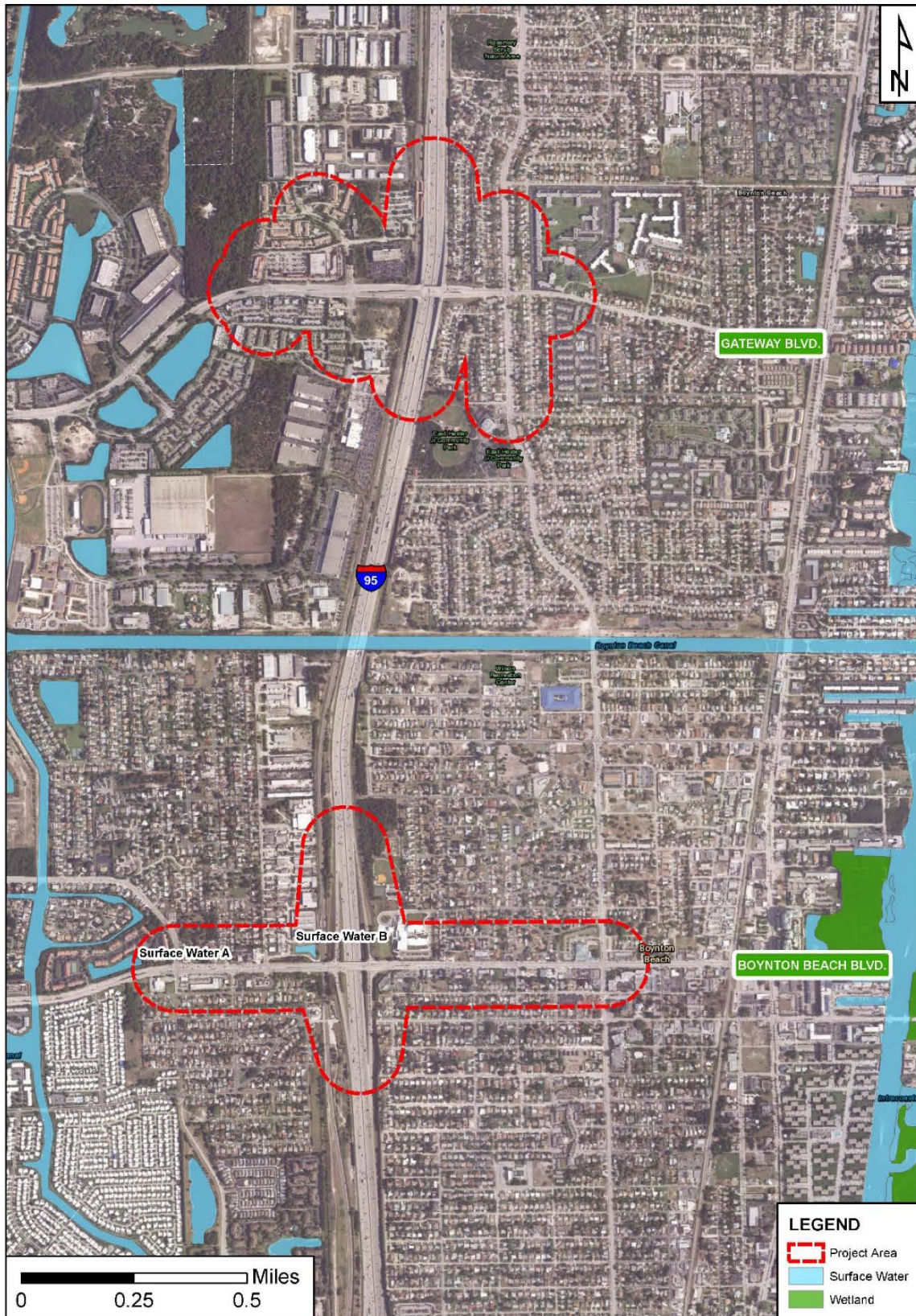
The project has been evaluated to assure the protection, preservation, and enhancement of the Nation's wetlands to the fullest extent practicable during the planning, construction, and operation of transportation facilities and projects. During the design phase, permits and other authorizations will be required from the USACE and SFWMD due to anticipated surface water impacts.

The following permits may be required:

- SFWMD Individual Environmental Resource Permit (ERP)
- FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP)

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
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PD&E Study
SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange
SR 9/I-95 at Gateway Boulevard Interchange
FPID Nos.: 435804-1-22-01, 231932-1-22-01
ETDM Nos.: 14180 and 14181



**WETLANDS AND OTHER
SURFACE WATERS
LOCATION MAP**
Source: NWI, 2014

Figure 12

4.3.2 Aquatic Preservers

There are no Aquatic Preserves located within the project vicinity.

4.3.3 Water Quality

Through the ETDM Environmental Screening Tool, a DOE of *none* was assigned by the FDEP and USEPA and a minimal DOE by FDOT, SFWMD and FHWA. Commenters noted the potential for water quality degradation due to increased storm water runoff and discharge into the drainage canals and Lake Worth Lagoon because of the project. Significant hydrological and water quality (e.g., chemical, physical, and biological properties) impacts are not expected to occur because the proposed improvements are to an existing roadway facility.

The SFWMD & LWDD regulate stormwater discharge and typically require an individual ERP for this project. The SFWMD has also been delegated the authority to regulate impacts to isolated wetlands and wetlands connected to waters of the State. LWDD has determined that the project improvements will be exempt from permitting.

The SFWMD requires that all projects meet State water quality standards, as set forth in Chapter 62-40, Florida Administrative Code (FAC) and the Basis of Review for ERP applications within SFWMD. A Water Quality Impact Evaluation (WQIE) was completed for the project in accordance with FDOT PD&E Manual Part 2, Chapter 20 (July 27, 2016) and to comply with the Clean Water Act and the Safe Drinking Water Act. The results of the WQIE indicate that the project will not result in significant impacts to water quality. Stormwater treatment facilities will be designed in accordance with applicable state and local regulations.

To meet SFWMD water quality criteria the requirements shall be met:

- Wet detention volume shall be provided for the first inch of runoff from the developed project, or the total runoff of 2.5-inches times the percentage of imperviousness, whichever is greater.
- Dry detention volumes shall be provided equal to 75% of the above amounts computed for wet detention.
- Dry retention volumes shall be provided equal to 50% of the above amounts computed for wet detention.

The additional impervious area required for the proposed improvements at the SR 804/Boynton Beach and Gateway Boulevard interchanges will be accommodated in the proposed stormwater management system. The proposed drainage basin divides will generally follow the existing drainage basin divides and the proposed drainage system will mimic the existing drainage pattern. The stormwater runoff flows will be captured in the proposed curb and gutter inlets which will convey the captured stormwater runoff into wet or dry retention or detention ponds. Since the proposed roadway improvements mainly consist of widening existing pavements, the existing profile grade will be generally maintained.

4.3.3.1 Stormwater Pond Site Evaluation

The proposed drainage basin divides will generally follow the existing drainage basin divides and the proposed drainage system will mimic the existing drainage pattern. The stormwater runoff flows will be captured in the proposed curb and gutter inlets which will convey the captured stormwater runoff into wet or dry retention or detention ponds. Since the proposed roadway improvements mainly consist of widening existing pavements, the existing profile grade will be generally maintained.

An evaluation of potential pond site locations was completed following the District Four Pond Siting Procedures. This included identification of pond site locations and screening through an evaluation matrix of 18 criteria.

The evaluation of potential pond site locations was completed following the District Four Pond Siting Procedures. This included identification of pond site locations and screening through an evaluation matrix of 18 criteria. The potential pond sites for SR 9/I-95 at Boynton Beach Boulevard are presented in **Table 10** and the results of the pond siting screening process are presented in **Tables 11** and **12**. The location of the alternative pond sites are shown in **Figures 8 - 10**. The potential pond sites for SR 9/I-95 at Gateway Boulevard are presented in **Table 13** and the results of the pond siting screening process are presented in **Table 14**. The location of the alternative pond sites is shown in **Figure 11**.

Pond site location recommendations are based on preliminary data calculations, reasonable engineering judgment, and assumptions along with the results of the pond screening analysis. Stormwater management sizing calculations are included in the Pond Siting Report. Pond sizes and locations may change during final design as more detailed information becomes available.

The results of the pond siting screening process for SR 9/I-95 at SR 804/Boynton Beach Boulevard and Gateway Boulevard are included in the Pond Siting Report completed for the project which is on file with the FDOT District Four PLEM office.

4.3.4 Outstanding FL Waters

There are no Outstanding Florida Waters reported within the project vicinity.

4.3.5 Wild and Scenic Rivers

There are no or wild or scenic rivers reported within the project vicinity.

4.3.6 Floodplains

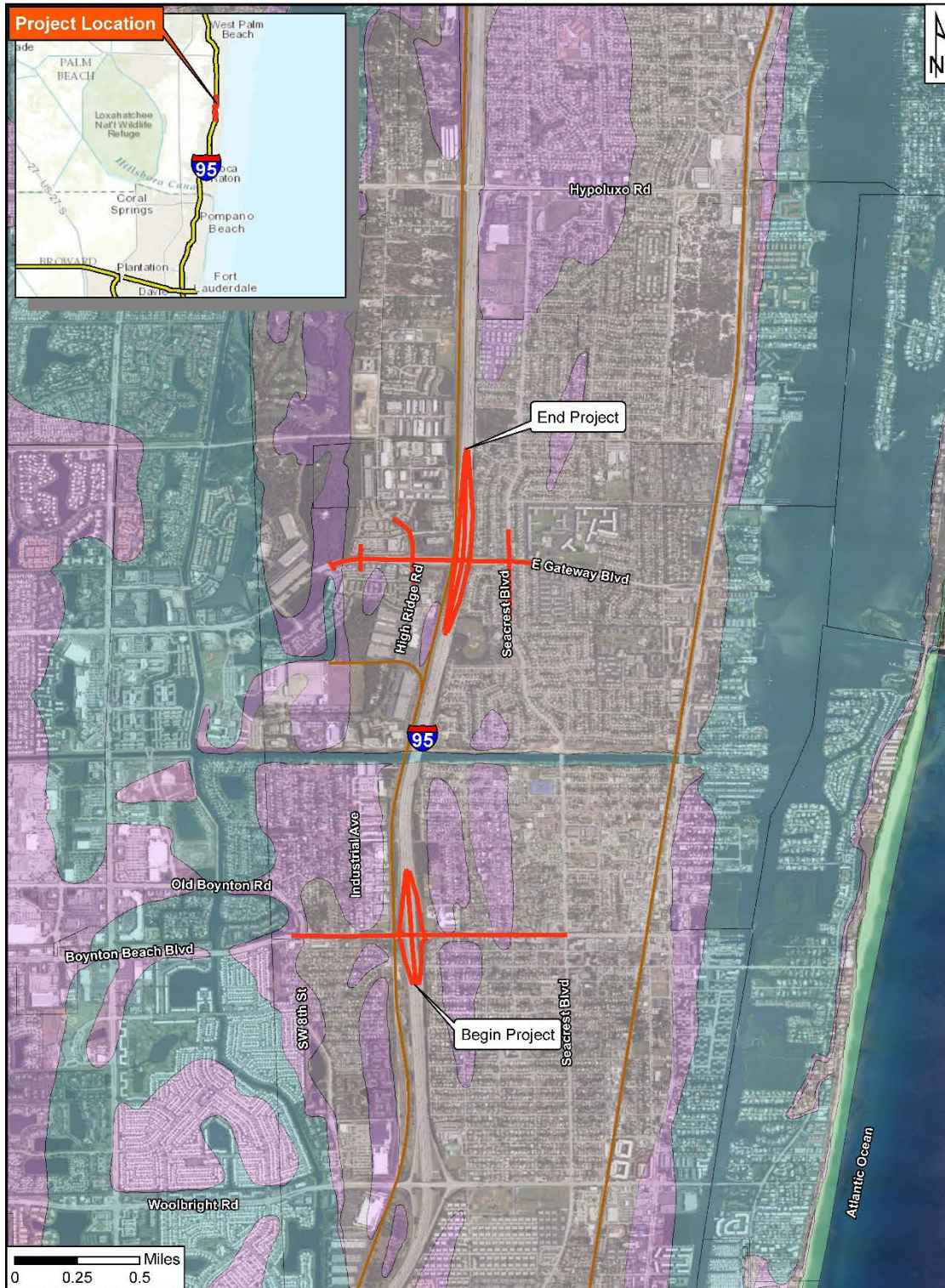
Flood hazard areas identified on the Flood Insurance Rate Map (FIRM) are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are Zone X, unshaded.

Review of the Federal Emergency Management Agency (FEMA) FIRM map numbers 1201960004C and 1201960003C, show the existing SR 9/I-95 at SR 804/Boynton Beach Boulevard and SR 9/I-95 at Gateway Boulevard interchanges passing through Zone X. Zone X encompasses areas of minimal flooding. The floodplain boundaries and associated information are shown in **Figure 13**. Proposed improvements will not encroach into any special flood zone hazard (100-yr floodplain) areas, thus potential impacts to the 100-year floodplain will not occur. The following statement has been modified to address the specific project related improvements:

This project does not involve work within the horizontal limits of the 100-year floodplain, no work is being performed below the 100-year flood elevation and, as a result, this project does not encroach upon the base floodplain.

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR 9/I-95 at Gateway Boulevard Interchange



		PD&E Study - SR 9/I-95 at SR 804/Boynton Beach Blvd interchange SR 9/I-95 at Gateway Blvd interchange Palm Beach County, FL FPID: 435804-1-22-01 231932-1-22-01		FEMA MAP Legend Study Area Flood Zone A VE AE X AO X500	
PROJECT MANAGER: ERIK VAN ZANDEN	CHECKED BY: HOA NGUYEN				
DRAWING BY: ARCADIS	DATE: 03.17.2017				
PROJECT NUMBER: WF900273	Figure 19				

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



Table 9 Pond Siting Evaluation Matrix – SR 9/I-95 at Boynton Beach Boulevard, West of I-95

Weight of Factor	Factor	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	
		1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10
1-10	Alternative Number	1		2		3		4		5		6		7		8		16		17		18		
	Brief Description of Alternative	Vacant Parcel east of Old Boynton Road		Wendy's Restaurant and adjacent single family home		Chevron Gas Station and adjacent single family home		Vacant industrial parcel between I-95 and railroad, north side of Boynton Beach Blvd.		Laurel Hills Park - City of Boynton Beach		3 single family homes and American Legion lot		Stor All Luxury RV & Boat Storage		Comcast		Vacant Residential		Warehouse / Distribution facility		Two vacant parcels east of Old Boynton Road		
	Parcel Number	843452000005010		8434520070000010 8434520070000042		8434520070000021 8434520070000032		8434521000007050		8434520080000160		8434529010010010 8434529010510060 8434529010510050 8434529010510040		8434528000003100 8434528000003040 8434528000003050 8434528000003070		84345200020020		8434520000000080		8434520000000080		8434520000005010 8434520000000080		
	Parcel Size (Acres)	3.14 (total) 1.40 (pond)		0.962		0.982		1.81		1.31		0.97		6.68 (total) 2.20 (pond)		2.41		0.8		4.66 (total) 1.20 (pond)		3.94 (total) 1.78 (pond)		
1	5	Zoning (Right of Way)	8	40	2	10	2	10	9	45	6	30	3	15	1	5	5	25	6	30	9	45	8	40
2	5	Land Use	9	45	3	15	3	15	9	45	6	30	3	15	1	5	5	25	6	30	9	45	9	45
3	10	Right of Way Costs	3	30	2	20	1	10	9	90	9	90	3	30	1	10	5	50	1	10	8	80	4	40
4	10	Drainage Considerations	7	70	8	80	8	80	5	50	5	50	8	80	9	90	5	50	7	70	8	80	7	70
5	2	Flood Zone FEMA	7	14	7	14	7	14	7	14	8	16	8	16	10	20	8	16	7	14	8	16	7	14
6	6	Contamination and Hazardous Materials	10	60	4	24	1	6	1	6	10	60	10	60	4	24	7	42	10	60	4	24	10	60
7	6	Utilities	10	60	10	60	10	60	4	24	5	30	10	60	4	24	6	36	8	48	10	60	9	54
8	6	Threatened and Endangered Species and Associated Costs	5	30	9	54	9	54	6	36	7	42	6	36	8	48	6	36	5	30	10	60	5	30
9	1	Noise	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	3	Wetlands and Protected Uplands and Associated Costs	10	30	10	30	10	30	10	30	10	30	10	30	10	30	10	30	10	6	10	30	10	30
11	6	Cultural Resources Involvement and Associated Costs	10	60	10	60	10	60	3	18	10	60	1	6	10	60	10	60	10	60	4	24	10	60
12	9	Section 4(f)	10	90	10	90	10	90	10	90	1	9	10	90	10	90	10	90	10	90	10	90	10	90
13	1	Public Wellfield (None identified - factor was not scored)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
14	8	Construction	6	48	4	32	3	24	2	16	1	8	5	40	5	40	2	16	2	16	8	64	4	32
15	9	Maintenance	8	72	4	36	4	36	2	18	4	36	7	63	6	54	5	45	2	18	7	63	5	45
16	6	Aesthetics	10	60	10	60	10	60	10	60	10	60	10	60	10	60	10	60	10	60	10	60	10	60
17	10	Public Opinion and Adjacent Residency Concerns	10	100	10	100	10	100	10	100	7	70	3	30	10	100	10	100	10	100	10	100	10	100
18	0	Other		0		0		0		0		0		0		0		0		0		0		0
		Comments																						
		Score	829		705		669		662		641		651		680		701		662		861		790	
		Ranking																						
		Factor scores are 1-10. 1 is least desirable, 10 is most desirable.																						



Table 10 Pond Siting Evaluation Matrix – SR 9/I-95 at Boynton Beach Boulevard, East of I-95

Weight of Factor	Factor	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	
1-10		1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	
	Alternative Number	9		10		11		12		13		14		15		
	Brief Description of Alternative	Office and 4 vacant residential lots		Office, Multifamily home, buffer, and 3 single family homes		2 Office buildings and 4 Single family homes		Vacant commercial lot, office building, and stores		Inn at Boynton Beach		3 single family homes and one vacant lot		3 single family homes and roadway R.O.W.		
	Parcel Number	8434528270000051 8434528110000071 8434528110000072 8434528110000081 8434528270000052		8434528110000110 8434528110000121 8434528100010062 8434528100010071 8434528100010031 8434528100010010 8434528110000100		88434528100020012 08434528100020050 08434528100020011 08434528100020190 08434528100020210 08434528100020230		8434520050000830 8434521150000871 8434521160001270		8434528150710010		8434528150720050 8434528150720011 8434528150720301 8434528150720012		8434528140630120 8434528140630150 8434528140630190		
	Parcel Size (Acres)	1.27		1.25		1.066		1.174		2.216		1.048		1.04		
1	5	Zoning (Right of Way)	7	35	4	20	4	20	3	15	2	10	6	30	6	30
2	5	Land Use	7	35	4	20	4	20	3	15	2	10	6	30	6	30
3	10	Right of Way Costs	7	70	3	30	2	20	2	20	1	10	6	60	7	70
4	10	Drainage Considerations	8	80	8	80	8	80	8	80	8	80	7	70	7	70
5	2	Flood Zone FEMA	8	16	8	16	10	20	8	16	8	16	10	20	10	20
6	6	Contamination and Hazardous Materials	7	42	7	42	7	42	1	6	10	60	10	60	10	60
7	6	Utilities	10	60	10	60	10	60	10	60	10	60	10	60	10	60
8	6	Threatened and Endangered Species and Associated Costs	8	48	9	54	9	54	8	48	8	48	8	48	9	54
9	1	Noise	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	3	Wetlands and Protected Uplands and Associated Costs	10	30	10	30	10	30	10	30	10	30	10	30	10	30
11	6	Cultural Resources Involvement and Associated Costs	10	60	10	60	10	60	10	60	10	60	10	60	10	60
12	9	Section 4(f)	10	90	10	90	10	90	10	90	20	180	10	90	10	90
13	1	Public Wellfield (None identified - factor was not scored)	10	10	10	10	10	10	10	10	10	10	10	10	10	10
14	8	Construction	7	56	7	56	6	48	9	72	3	24	5	40	5	40
15	9	Maintenenance	6	54	7	63	7	63	8	72	5	45		0	9	81
16	6	Aesthetics	10	60	10	60	10	60	10	60	10	60	10	60	10	60
17	10	Public Opinion and Adjacent Residency Concerns	10	100	3	30	3	30	10	100	10	100	3	30	3	30
18	0	Other		0		0		0		0		0		0		0
		Comments														
		Score	856		731		717		764		813		708		805	
		Ranking														
		Factor scores are 1-10. 1 is least desirable, 10 is most desirable.														

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



Figure 14. Preliminary Alternative Pond Sites – Boynton Beach Boulevard

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange

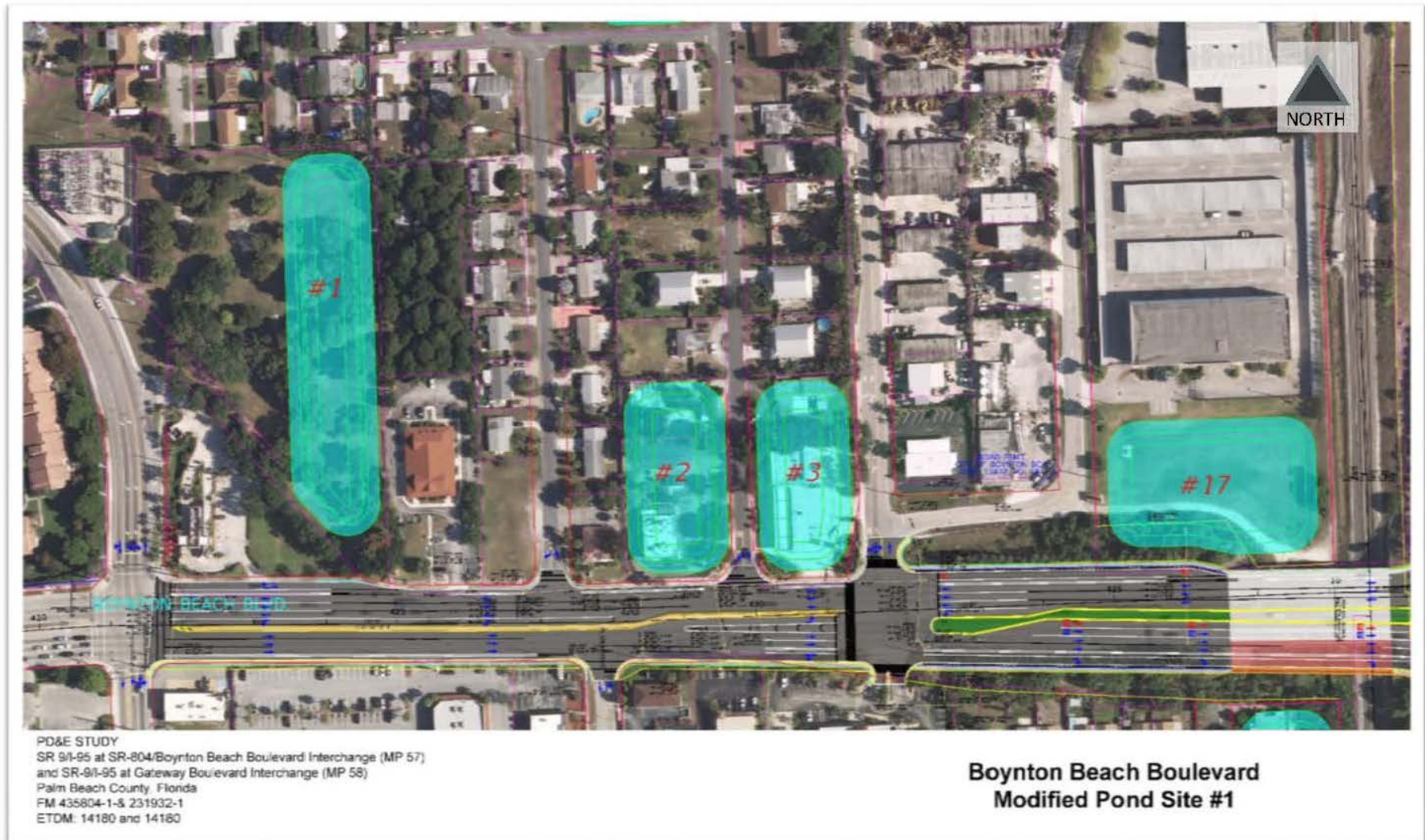


Figure 15. Modified Pond Site #1 - Boynton Beach Boulevard

PD&E Study

SR 9/1-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/1-95 at Gateway Boulevard Interchange



Figure 16. Modified Pond Site #18 - Boynton Beach Boulevard



Table 11. Pond Siting Evaluation Matrix, Proposed Drainage Basins – SR 9/I-95 at Gateway Boulevard, West and East of I-95

Weight of Factor	Factor	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	
1-10		1-10		1-10		1-10		1-10		1-10		1-10		1-10		1-10		
	Alternative Number	1		2		3		4		5		6		7		8		
	Brief Description of Alternative	Vacant wooded land west of Quantum Village		Mobil gas station & 7-11		Vacant city owned property		Various residential properties adjacent to NB exit ramp		Ezell Hester Park		Various residential parcels on south side of Gateway Blvd between NW 1st St. and Seacrest Blvd.		Village Royale on the Green		Tri-Rail Station		
	Parcel Number	8434517000001010		843451630000653		8343516340000820		08434516010210590 thru 08434516010210700		8434516010130010		08434516010270010 08434516010270020 08434516010270360 08434516010270040 08434516010270350 08434516010270050 08434516010270340 08434516010270060		8434515070260110		8434516320000900		
	Parcel Size (Acres)	23.268 (total) 1.00 (pond)		1.155		5.46 (total) 1.20 (pond)		2.19		23.818 (total) 1.80 (pond)		1.326		5.54 (total) 1.00 (pond)		9.09 (total) 1.30 (pond)		
1	5	Zoning (Right of Way)	7	35	1	5	9	45	9	45	10	50	2	10	1	5	10	50
2	5	Land Use	1	5	1	5	9	45	9	45	10	50	2	10	1	5	10	50
3	10	Right of Way Costs	7	70	1	10	6	60	8	80	10	100	2	20	1	10	10	100
4	10	Drainage Considerations	7	70	8	80	8	80	8	80	5	50	8	80	7	70	6	60
5	2	Flood Zone FEMA	10	20	8	16	10	20	10	20	10	20	10	20	10	20	10	20
6	6	Contamination and Hazardous Materials	10	60	4	24	8	48	10	60	10	60	10	60	10	60	10	60
7	6	Utilities	9	54	10	60	10	60	10	60	10	60	10	60	5	30	6	36
8	6	Threatened and Endangered Species and Associated Costs	5	30	9	54	5	30	9	54	7	42	9	54	9	54	6	36
9	1	Noise	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	3	Wetlands and Protected Uplands and Associated Costs	8	24	10	30	10	30	10	30	10	30	10	30	10	30	10	30
11	6	Cultural Resources Involvement and Associated Costs	10	60	10	60	3	18	10	60	10	60	10	60	10	60	10	60
12	9	Section 4(f)	10	90	10	90	10	90	10	90	1	9	10	90	10	90	10	90
13	1	Public Wellfield (None identified - factor was not scored)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
14	8	Construction	6	48	6	48	8	64	7	56	4	32	6	48	5	40	6	48
15	9	Maintenance	5	45	6	54	8	72	10	90	3	27	5	45	5	45	7	63
16	6	Aesthetics	10	60	10	60	10	60	9	54	10	60	9	54	10	60	10	60
17	10	Public Opinion and Adjacent Residency Concerns	10	100	10	100	10	100	1	10	8	80	1	10	6	60	10	100
18	0	Other		0		0		0		0		0		0		0		0
	Comments																	
	Score	791		716		842		854		750		671		659		883		
	Ranking																	
	Factor scores are 1-10. 1 is least desirable, 10 is most desirable.																	

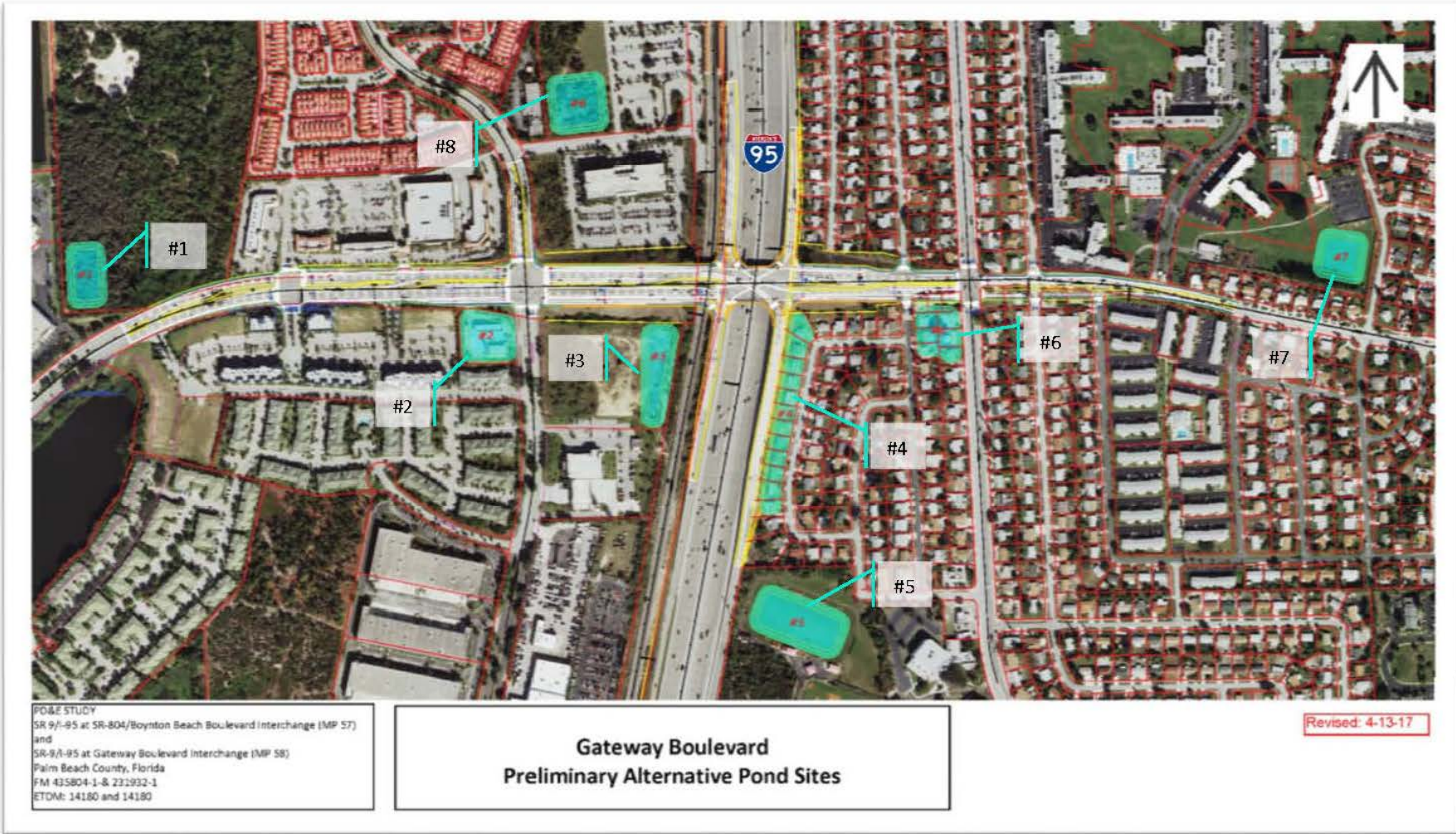


Figure 17. Preliminary Alternative Pond Sites – Gateway Boulevard

4.3.6.1 Recommended Pond Sites

Pond site location recommendations are based on preliminary data calculations, reasonable engineering judgment, and assumptions along with the results of the pond screening analysis. Pond sizes and locations may change during final design as more detailed information becomes available. The recommended pond site alternatives for SR 9/I-95 at Boynton Beach Boulevard are presented in **Table 12** and shown in **Figure 17**. The recommended pond site alternatives for SR 9/I-95 at Gateway Boulevard are presented in **Table 13**. Pre- versus post-development calculation results are presented in **Tables 17** and **18**.

Table 12. Summary of Recommended Pond Site Alternatives – Boynton Beach Boulevard

Basin	Pond Site Number	Pond Area (Acres)	Basin Area (Acres)	Required Dry Pre-Treatment (Acre-Feet)	Required Wet Detention (Acre-Feet)	Total Required PAV (Acre-Feet)	Provided Dry Pre-Treatment (Acre-Feet)	Provided Wet Detention (Acre-Feet)	Total Provided PAV (Acre-Feet)
1	17	1.44	7.94	0.75	0.00	0.75	0.79	0.00	0.79
2	9	1.00	3.37	0.37	0.00	0.37	0.69	0.00	0.69

Table 13. Summary of Recommended Pond Site Alternatives – Gateway Boulevard

Basin	Pond Site Number	Pond Area (Acres)	Basin Area (Acres)	Required Dry Pre-Treatment (Acre-Feet)	Required Wet Detention (Acre-Feet)	Total Required PAV (Acre-Feet)	Provided Dry Pre-Treatment (Acre-Feet)	Provided Wet Detention (Acre-Feet)	Total Provided PAV (Acre-Feet)
4	8	1.11	4.89	0.00	0.79	0.79	0.00	0.81	0.81
5	4	1.51	5.78	0.67	0.00	0.67	0.67	0.00	0.67



Figure 18. Recommended Pond Sites – Boynton Beach Boulevard

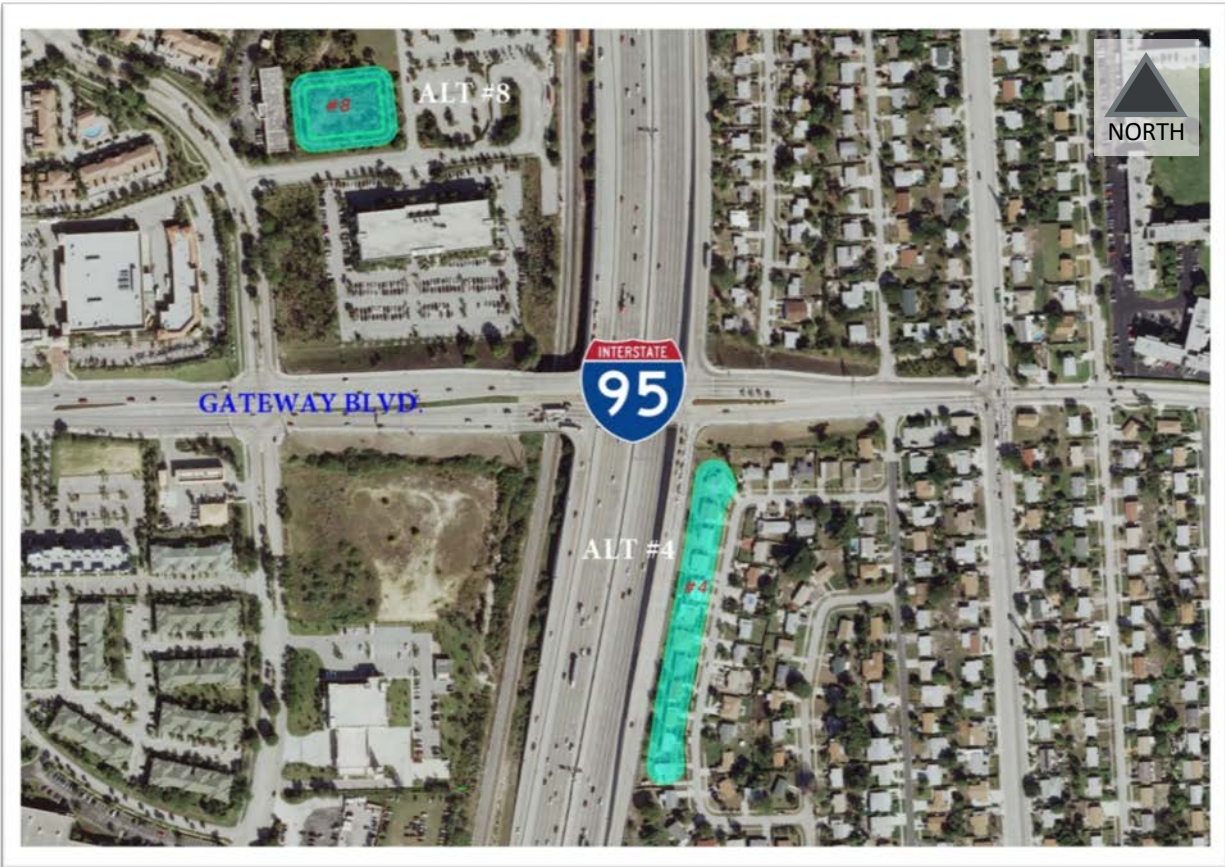


Figure 19. Recommended Pond Sites – Gateway Boulevard

4.3.7 Coastal Zone Consistency

The Florida Department of Economic Opportunity (FDEO) commented in the ETDM for the SR 804/Boynton Beach Boulevard Interchange and Gateway Boulevard Interchange that the project is not located within the Coastal High Hazard Area. A federal consistency determination indicates that the project is consistent with the Coastal Zone Management Program.

4.3.8 Coastal Barrier Resources

The project area is located approximately one mile west of the Intracoastal Waterway and 1.75 miles west of the Atlantic Ocean. The project is not located within an area considered to have coastal or marine resources and, therefore, is not involved with coastal barrier resources.

4.3.9 Wildlife and Habitat

Through the ETDM Environmental Screening Tool, the USFWS assigned a minimal DOE to the SR 804/Boynton Beach Boulevard and Gateway Boulevard project areas. The agency commented that the project area is located within the South Florida Ecosystem Management Area and USFWS Consultation Areas for the Florida scrub-jay, West Indian Manatee, and Atlantic Coast Plants. The FFWCC assigned a minimal DOE to both project areas (August 2014). FFWCC suggested that, although a significant amount of the project areas is urbanized, construction in the remaining natural scrub habitat adjacent to SR 9/I-95, north of Galaxy Elementary School, should be avoided.

An Endangered Species Biological Assessment (ESBA) was completed to document and present the findings of potential protected species and habitat impacts associated with proposed improvements at the SR804/Boynton Beach Boulevard and Gateway Boulevard interchanges. The ESBA was completed in compliance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.), 50 CFR Part 202 and in accordance with FDOT PD&E Manual, Part 2, Chapter 27, Protected Species and Habitat (August 26, 2016). The ESBA is on file at the FDOT District Four PLEM office.

According to the USFWS’s, Species by County Report, 19 listed species have the potential to occur within Palm Beach County. Of the 19 listed by the USFWS, 13 species are not expected to be present within the project areas due to lack of suitable habitat. The following species have a likelihood of occurrence ranging from low to moderate: Florida Scrub Jay; Wood Stork; West Indian Manatee; Eastern Indigo snake; American Alligator (*Alligator mississippiensis*); and the Gopher Tortoise (*Gopherus polyphemus*).

Table 14 summarizes listed wildlife species with the potential to occur within the vicinity of the project area based on the project locations and availability of suitable habitat.

There are no U.S. Fish and Wildlife Service designated critical habitats or National Marine Fisheries (NMFS) Essential Fish Habitat (EFH) within the project areas or potential pond sites. Within project areas, several undeveloped parcels and storm water ponds could be utilized by listed species. However, the undeveloped parcels represent low quality upland habitats are within highly developed areas.

No other indirect impacts to listed species are anticipated as part of his project. No cumulative impacts to the project areas or potential pond sites are anticipated due to the highly developed nature of the project area along I-95 in Palm Beach County

Table 14 Listed Wildlife Species and the Potential to Occur within the Project Area & Vicinity

Scientific Name	Common Name	Preferred Habitat	Federal Status	State Status	Likelihood of Occurrence
<i>Asmina tertamera</i>	Four-petal Pawpaw	Sand pine scrub	E	E	Low
<i>Polygala smalli</i>	Tiny Polygala	Scrub and Sandhill	E	E	Low
<i>Cladonia perdorata</i>	Florida Perforate Cladonia	Xeric White Sands in Sand Pine Scrub	E	E	Low

Notes: E = Endangered

Sources: Florida Department of Agriculture and Consumer Services, 2017

The project areas are within the USFWS Service Consultation Areas for Atlantic Coast Plants. **Table 15** summarizes the state and federally listed plant species with the potential to occur within, or within the vicinity of, the project areas, based on suitable habitat type. This list of plants was obtained from the 2017 FDACS “Florida’s Federally Listed Plant Species” list. The four-petal pawpaw (*Asimina tertamera*) requires sand pine scrub vegetation on old coastal dune (Austin and Tatje, 1979). The Florida perforate cladonia (*Cladonia perdorata*) requires sand pine scrub habitat characterized by xeric white sands (USFWS, 1999). The tiny polygala (*Polygala smalli*) requires pine rockland, scrub, sandhill high pine, or open coastal spoil habitat (Gann and Bradley, 1995).

Table 15 Listed Plant Species and the Potential to Occur within the Project Area & Vicinity

Scientific Name	Common Name	Status	Likelihood of Occurrence
Birds			
<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	FT	Low
<i>Mycteria Americana</i>	Wood Stork	FT	Moderate
<i>Athene cunicularia</i>	Burrowing Owl	SSC	Low
<i>Egretta caerulea</i>	Little Blue Heron	SSC	Moderate
<i>Egretta tricolor</i>	Tricolored Heron	SSC	Moderate
<i>Haliaeetus leucocephalus</i>	Bald Eagle	---	Low
Mammals			
<i>Trichechus manatus</i>	West Indian Manatee	FT	No Involvement
Reptiles			
<i>Drymarchon corais</i>	Eastern Indigo Snake	FT	Low
<i>Alligator mississippiens</i>	American Alligator	T	No Involvement
<i>Gopherus polyphemus</i>	Gopher Tortoise	ST	Moderate
<i>Pituophis melanoleucus</i>	Florida Pine Snake	SSC	Low

Legend: SSC = Species of Special Concern; ST = State-designated Threatened; FT = Federally-designated Threatened; T = Threatened; FE = Federally-designated Endangered; E = Endangered

Source: Florida Fish and Wildlife Conservation Commission. Florida's Endangered and Threatened Species. Official Lists, January 2016; U.S. Fish and Wildlife Service, County Listed Species

There are no designated critical habitats within the project area. The project area has minimal habitat available for use by listed species. Undisturbed habitats make up just 2.6 percent of the SR 804/Boynton Beach Boulevard and Gateway Boulevard interchanges. Proposed improvements associated with the build alternatives for the Gateway Boulevard and SR 804/Boynton Beach Boulevard interchange project areas would require a minimal amount of additional ROW. The majority of ROW being acquired for the build alternatives consists of urban, built land uses. The parcels that would require ROW acquisition do not provide suitable wildlife habitat.

4.3.10 Essential Fish Habitat

Through the ETDM Programming Screen, the National Marine Fisheries Service (NMFS) indicated proposed improvements located within the project area would not directly impact areas that support essential fish habitat (EFH), National Oceanic and Atmospheric Administration (NOAA) trust fishery resources, or wetland areas that support NOAA trust fishery resources. The NMFS concluded that this project will not require an EFH assessment, nor is further consultation with the NMFS necessary unless future modifications to the project could result in adverse impacts to EFH.

4.4 Physical

4.4.1 Noise

A traffic noise study was completed in accordance with the FDOT PD&E Manual, Part 2, Chapter 17, Highway Traffic Noise (July 27, 2016) and Title 23 Code of Federal Regulations (CFR) Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The primary objectives of the noise study were to document the methodology used to conduct the noise assessment, determine the existing site conditions including noise-sensitive land uses within the project study area, and assess the significance of traffic noise levels on noise-sensitive sites. The analyses were conducted for existing, No Build and Recommended Build Alternatives using FHWA Traffic Noise Model 2.5 (TNM 2.5). The evaluation of noise abatement measures for sites that approach or exceed the Noise Abatement Criteria (NAC) set forth by the FDOT and FHWA were also completed. was used for this evaluation. A Noise Study Report (NSR) was prepared for the project and is on file at the FDOT District Four PLEM office.

Noise, by definition, is unwanted sound that interferes with normal activities and would not be considered a resource, but rather a condition that potentially affects both the human and natural environment. Noise is perceived differently by every individual and is described in terms of loudness, frequency, and duration and is emitted from many sources, including airplanes, factories, railroads, power-generating plants, and highway vehicles). Highway noise, or traffic noise, is usually a composite of noises from engine exhausts, drive trains, and tire-roadway interaction.

The magnitude of noise is usually described by its sound pressure. Because the range of sound pressure varies greatly, a logarithmic scale is used to relate sound pressures to some common reference level, particularly the decibel. Sound pressures described in decibels are called sound pressure levels and are often defined in terms of frequency-weighted scales.

For a community noise impact assessment, the A-weighted scale is used almost exclusively in vehicle noise measurements because it places the most emphasis on the frequency characteristics that correspond to a human's subjective response to noise (1,000 to 6,000 Hertz). Sound levels measured using A-weighting are often expressed as A-weighted decibels (dBA).

4.4.1.1 Noise Analysis

Noise monitoring was conducted at seven locations to determine the existing sound levels in the study area and to validate the accuracy of the noise model in predicting traffic noise levels within the study area. Within the project study area, a total of 528 receivers representing 528 receptors were identified. The noise-sensitive sites identified in the immediate project area are primarily single-family dwelling units near the SR 804/Boynton Beach Boulevard interchange. A few multi-family dwelling units in the area of the Gateway Boulevard interchange were identified.

Traffic noise impacts occur when the predicted traffic sound levels equal or exceed the FHWA NAC or when the predicted traffic sound levels exceed existing levels by 10 dBA. When traffic noise impacts are predicted, the traffic noise analysis should also include an evaluation of noise abatement measures for reducing or eliminating noise impacts.

At SR 804/Boynton Beach Boulevard, 52 impacted receptors were reported for Existing Year (2015) condition and 53 impacted receptors in the No Build (2040) condition. For the Recommended Alternative (2040), 61 impacted receptors with an average noise level change of 1.18 dBA from the Existing Year (2015) condition were reported. This

noise level change is less than the perceived noticeable noise, indicating that the noise impacts of the Recommended Alternative are minimal.

At Gateway Boulevard, 48 impacted receptors were reported in the Existing Year (2015) condition and 58 impacted receptors in the No Build (2040) condition. For the Recommended Alternative (2040), 71 impacted receptors with an average noise level change of 1.3 dBA from the Existing Year (2015) condition were reported. This noise level change is less than the perceived noticeable noise, indicating that the noise impacts of the Recommended Alternative are minimal.

4.4.1.2 Noise Abatement

FHWA and FDOT require that noise-abatement measures be evaluated when noise levels of a proposed roadway project approach or exceed NAC. A noise barrier analysis was conducted for locations with impacted receivers and possess a feasible environment for a noise barrier. The following noise-sensitive sites were evaluated with TNM barrier analysis for the feasibility and reasonability of constructing a noise barrier:

- SR 9/I-95 Northbound from SR 804/Boynton Beach Boulevard to C. Stanley Weaver Canal
- SR 9/I-95 Northbound from C. Stanley Weaver Canal to Gateway Boulevard

The SR 9/I-95 northbound segment from SR 804/Boynton Beach Boulevard to C. Stanley Weaver Canal was reported to have 50 impacted receptors. Noise barrier heights of 22 feet, 20 feet, 18 feet, and 16 feet with a length of 3,493 feet were analyzed. The 22 feet barrier wall yielded the highest average noise reduction of 8.8 dBA among all the barrier wall heights analyzed. This scenario benefitted 27 receivers providing an average reduction greater than 5.0 dBA. The results indicate 28 benefitted receivers at a cost of \$82,335 per receptor. These results show it is neither feasible nor reasonable to construct a noise barrier in the project area.

The SR 9/I-95 northbound segment from C. Stanley Weaver Canal to Gateway Boulevard was reported to have 52 impacted receptors. Noise barrier heights of 22 feet, 20 feet, 18 feet, and 16 feet with a length of 3,241 feet were analyzed. The 22 feet barrier wall yielded the highest average noise reduction of 8.8 dBA among all the barrier wall heights analyzed. This scenario benefitted 18 receivers providing an average reduction greater than 5.0 dBA. The results indicate 18 benefitted receivers at a cost of \$118,837 per receptor. These results show it is neither feasible nor reasonable to construct a noise barrier in the project area.

The SR 9/I-95 northbound segment from Gateway Boulevard to the end project limit was reported to have 25 impacted receptors. The impacted receivers were reviewed in detail for noise abatement, however, it was determined that the impacts could not be mitigated based on factors that include, but are not limited to, the isolated nature of the impacted receivers and that the receivers did not meet the 7 dBA requirement that resulted in none of the measures being reasonable or feasible.

This NSR concludes that construction of noise abatement is neither feasible nor reasonable. Further analysis for noise abatement maybe required during the design phase of the project.

4.4.2 Air Quality

The Recommended Build and No Build Alternatives for the PD&E Study were screened for potential air quality impacts using FDOT's screening model (CO Florida 2012, Version 1.01) to produce estimates of one-hour and eight-hour CO at

default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the current one-and eight-hour National Ambient Air Quality Standards (NAAQS) for CO, 35 PPM and 9 PPM, respectively.

The roadway intersection selected for screening is typically the one with the worst-case combination of traffic volumes, low vehicular speeds, and closest receptors. The Preferred Build and No-Build scenarios for the Open Year (2020) and the Design Year (2040) were evaluated. Based on the traffic study completed for the project, the SR 804/Boynton Beach Boulevard at SR 9/I-95 southbound ramp terminal intersection was chosen for the SR-9/I-95 at SR 804/Boynton Beach Boulevard interchange project area for both Open Year (2020) and Design Year (2040) traffic conditions and the Gateway Boulevard at High Ridge Road and Gateway Boulevard at SR 9/I-95 southbound ramp terminal intersection were chosen for the Open Year (2020) and Design Year (2040) respectively for the SR-9/I-95 and Gateway Boulevard interchange project area. The Build and No-Build alternatives for this project assumed similar traffic demand and have identical traffic volume input information. The traffic data input used in the evaluation are provided in the Air Quality Technical Memorandum completed which for this PD&E Study.

The project “passes” the screening model by achieving CO levels well below the one- and eight-hour NAAQS CO standards. Results of the analysis indicate that the all intersections analyzed are below the one-and eight-hour NAAQS for CO. The outputs from the CO Florida 2012 screening models are provided in the Air Quality Technical Memorandum on file at the FDOT District Four PLEM office. Air quality impacts due to construction operations for the proposed highway improvement project are expected to be short-term, minor, and localized.

To date, no national standards have been established regarding GHGs, nor has United States EPA established criteria or thresholds for ambient GHG emissions pursuant to its authority to establish motor vehicle emission standards for CO₂ under the Clean Air Act. FHWA has concluded, based on the nature of GHG emissions and the exceedingly small potential GHG impacts of the proposed action that the GHG emissions from the proposed action will not result in “reasonably foreseeable significant adverse impacts on the human environment” (40 CFR 1502.22(b)). The GHG emission from the project Build Alternatives will be insignificant, and will not play a meaningful role in a determination of the environmentally preferable alternative or the selection of the Preferred Alternative. For these reasons, no GHG analysis has been performed for the alternatives proposed for this project.

The project is located in Palm Beach County, an area currently designated as being in attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project.

4.4.3 Construction

Short-term impacts associated with construction of the proposed improvements are anticipated including erosion of areas cleared for construction, temporary increases in noise levels, and fugitive dust from use of heavy construction equipment. Temporary impacts to traffic flow and travel patterns are anticipated during construction activities and would occur along existing roads and at intersections during construction activities.

Maintenance of traffic and the sequence of construction will be planned and scheduled to minimize local and through traffic delays. Utilization of maintenance of traffic flow practices including phasing, timing of construction activities, and signing would be implemented. Worker and motorist safety is paramount. Traffic control standards will be used to establish and maintain a safe work zone. Workers are required to meet LADOTD standards for worker visibility, and equipment driven on roadways must meet proper signage and licensing requirements.

The contractor will remove existing roadway improvements or structures in accordance with local and state regulations. The use of construction equipment within sensitive areas should be minimized and all construction materials used for this project should be removed as soon as the work schedule permits. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled according to applicable federal and state regulations for handling emergency discovery of hazardous materials. The contractor will take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction area.

By adopting the safety and coordination efforts described above, it is anticipated that the proposed improvements could be constructed with no adverse impacts to human health and safety or the environment. There are no construction impacts for the No Build Alternative.

4.4.4 Contamination

Through the ETDM review process, the FDEP, USEPA, and FHWA assigned the DOE as moderate reporting several potential contamination sites within a 500-foot project buffer. A Contamination Screening Evaluation Report (CSER) was completed in accordance with FDOT PD&E Manual Part 2, Chapter 22, Contamination Impacts (Sept 1, 2016). This report evaluated potential and existing contamination sources within the project area buffer. The CSER is on file at the FDOT District Four PLEM office.

Available records reported many sources associated with hazardous waste management, petroleum storage systems/spills, cleaning or dry-cleaning activities, and environmental contamination within a one-quarter mile radius of the project corridor. An evaluation of site characteristics for these sources and associated environmental information identified 71 sources. The risk rating distribution for these identified sites/facilities is presented in **Table 16**.

Based on these risk ratings, soil or groundwater contamination which can potentially impact worker health, the environment, construction schedule, and costs may be encountered during construction if potentially impacted sites are not addressed in the design phase.

Table 16 Summary of Potential Contamination Sources by Risk Rating

Risk Rating	Number of Sites		
	SR 804/Boynton Beach Boulevard Interchange	Gateway Boulevard Interchange	TOTAL
High	11	5	16
Medium	11	5	16
Low	20	12	32
No	6	1	7
TOTAL	48	23	71

Asbestos was banned in most friable building materials (spray-applied surfacing materials and thermal system insulation) in 1978, but the U.S. Occupational Safety and Health Administration deems spray-applied surfacing materials, thermal system insulation materials, and vinyl flooring materials as presumed asbestos-containing materials (ACM) if they are present in pre-1980 structures (29 Code of Federal Regulations, Subparts 1910.1001 and 1926.1101).

A hazardous materials survey or visual inspection of potential ACMs and metal based coatings were not included in the CSER. ACMs may have been used in building materials for construction of the SR 804/Boynton Beach Boulevard bridge structure crossing over the SFRC (Bridge # 930289) and crossing over SR 9/I-95 (Bridge # 930285). Both bridges were constructed in 1976.

It is recommended that a hazardous material survey be completed if construction activities will disturb existing infrastructure, equipment, or utilities that potentially contain asbestos PCBs, or paint with heavy metals.

4.4.5 Aesthetic Effects

Through the ETDM review process, FDOT District Four assigned a minimal DOE noting that the project is consistent with the City of Boynton Beach future land use designation and is expected to enhance access to the established CRA. The project and surrounding area is developed and urban in nature and aesthetic effects are anticipated to be minimal.

4.4.6 Bicycles and Pedestrians

The proposed typical section (**Appendices A, B**) for the SR 804/Boynton Beach and Gateway Boulevard Recommended Alternatives provide a 7-foot buffered bicycle lane will be provided in the east and west directions along with 6-foot sidewalks adjacent to the back of the curb. Bicycle and pedestrian facilities will have a beneficial impact on cyclists and pedestrians and are provided for in the proposed improvements.

4.4.7 Utilities and Railroads

Existing utilities within the project area are described in **Table 17** and include overhead power lines, underground fiber optic, cable, water distribution, sanitary and storm sewer, and gas distribution. It is anticipated based on location and depth, utility relocations may be required.

Table 17. Summary of Utilities

UTILITY DESCRIPTION	
Interchange Location	
SR 9/I-95 at SR 804/Boynton Beach Boulevard	SR 9/I-95 at Gateway Boulevard
American Traffic Solutions	American Traffic Solutions
MCI	MCI
FLA Public Utilities	FLA Public Utilities
FPL Fibernet, LLC	FPL Fibernet, LLC
Florida Power & Light	Florida Power & Light
AT&T	AT&T
Comcast Boca Delray	Comcast Boca Delray
Hotwire Communications	Hotwire Communications
City of Boynton Beach	City of Boynton Beach
Palm Beach County Traffic Operations	Palm Beach County Traffic Operations

PD&E Study

SR 9/I-95 at SR 804/Boynton Beach Boulevard Interchange and
SR-9/I-95 at Gateway Boulevard Interchange



UTILITY DESCRIPTION	
Interchange Location	
SR 9/I-95 at SR 804/Boynton Beach Boulevard	SR 9/I-95 at Gateway Boulevard
Florida Department of Transportation	Florida Department of Transportation
	Quantum Park Property Owner's Association

The FDOT is the owner of the SFRC. The South Florida Regional Transportation Authority (SFRTA) provides coordination and administration of proposed permits and occupancies by outside parties for the SFRC. The SFRTA is the contact for any upgrade/modification/demolition to existing overhead bridges crossing over or parallel to SFRC tracks.

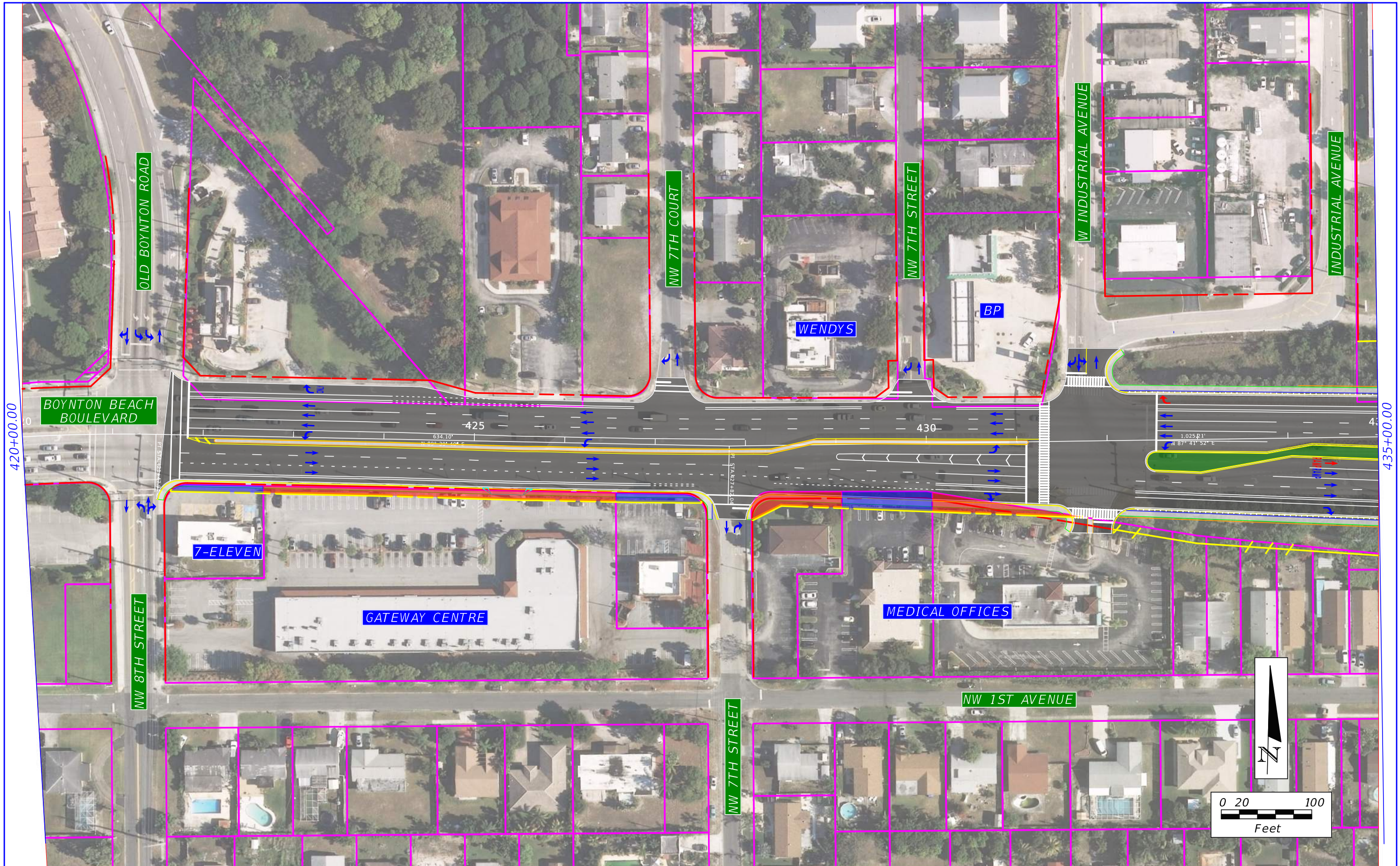
No portion of SFRC land is required for the proposed project improvements. It is anticipated that no structure will be located within the SFRC ROW but expansion of the aerial easement over the SFRC will be required. As part of the alternatives development and selection, the FDOT has made a commitment that the proposed interchange improvements will provide adequate clearance (horizontal and vertical) over the SFRC as part of the bridge widening.

4.4.8 Navigation

Through the ETDM review process, no navigable waterways are present within the project area. The USACE and U.S. Coast Guard identified no involvement with navigation.


Appendix A

Recommended Alternative & Typical Section Package
Boynton Beach Boulevard



420+00.00

435+00.00

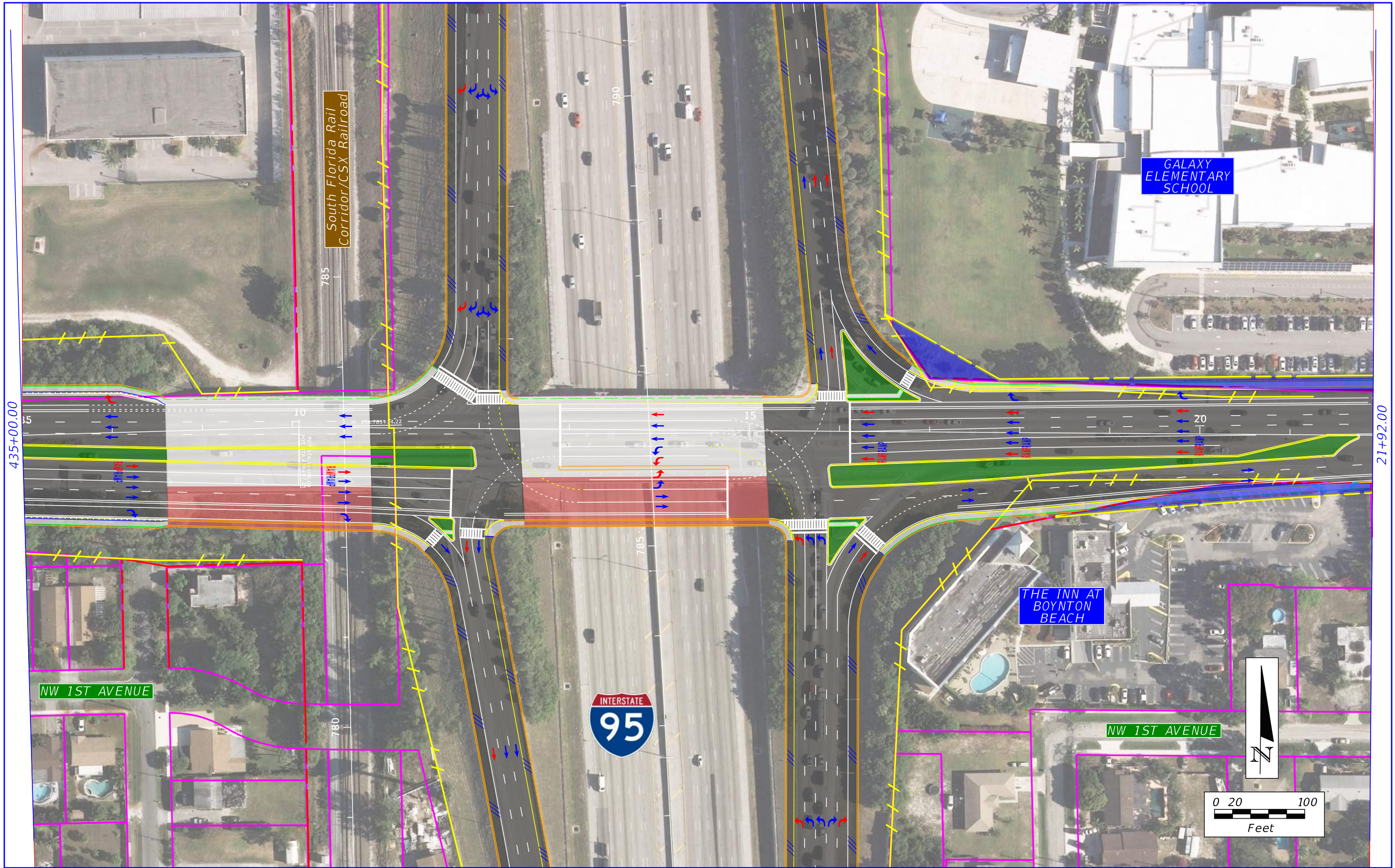

 PD&E Study
 SR 9/1-95 at SR-804/Boynton Beach Boulevard Interchange
 SR 9/1-95 at Gateway Boulevard Interchange
 FPID Nos.: 435804-1-22-01; 231932-1-22-01
 ETDM Nos.: 14180 and 14181

- EXISTING RW
- PROPOSED RW
- EXISTING LIMITED ACCESS RW
- PROPOSED LIMITED ACCESS RW

- █ PROPOSED PARCEL IMPACTS
- █ PROPERTY LINE


Alternative 2
Streamlined CDA

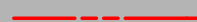



SHEET
 NO.
 1 OF 3






435+00.00

21+92.00

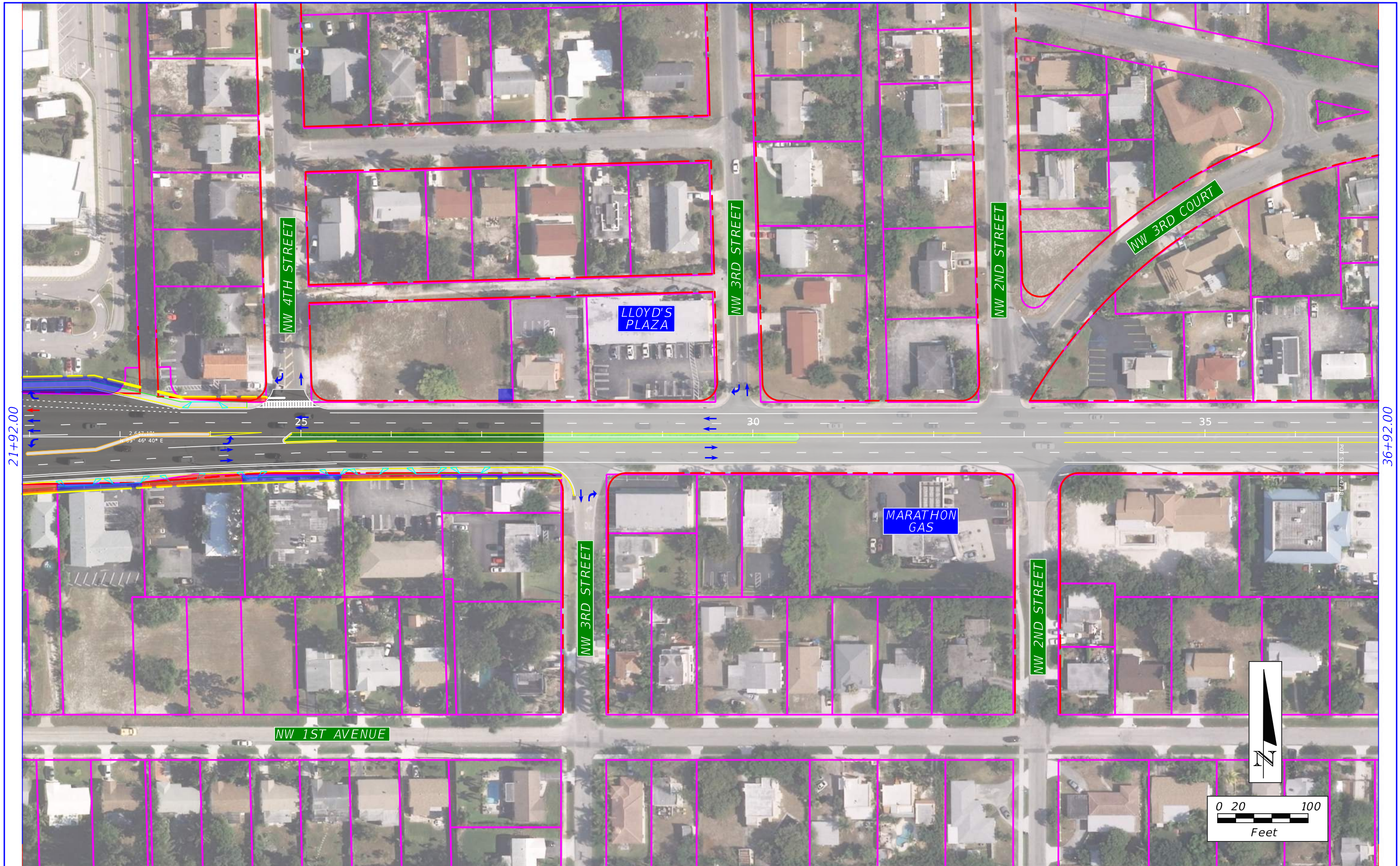

 PD&E Study
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange
 SR 9/I-95 at Gateway Boulevard Interchange
 FPID Nos.: 435804-1-22-01; 231932-1-22-01
 ETDM Nos.: 14180 and 14181

-  EXISTING R/W
-  PROPOSED R/W
-  EXISTING LIMITED ACCESS R/W
-  PROPOSED LIMITED ACCESS R/W

-  PROPOSED PARCEL IMPACTS
- 
-  PROPERTY LINE


Alternative 2
Streamlined CDA

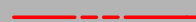



SHEET
 NO.
 2 OF 3





21+92.00

36+92.00


 PD&E Study
 SR 9/1-95 at SR-804/Boynton Beach Boulevard Interchange
 SR 9/1-95 at Gateway Boulevard Interchange
 FPID Nos.: 435804-1-22-01; 231932-1-22-01
 ETDM Nos.: 14180 and 14181

 EXISTING RW
 PROPOSED RW
 EXISTING LIMITED ACCESS RW
 PROPOSED LIMITED ACCESS RW

 PROPOSED PARCEL IMPACTS
 PROPERTY LINE

Alternative 2
Streamlined CDA

SHEET
 NO.
 3 OF 3

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION



TYPICAL SECTION PACKAGE

SR 804 (BOYNTON BEACH BLVD)

*FROM OLD BOYNTON ROAD (MP 7.822)
TO SEACREST BLVD. (MP 8.769)*

*PALM BEACH COUNTY
(93200000)*

FINANCIAL PROJECT ID: 435804-1-22-01

PREPARED BY:

*ARCADIS
1500 GATEWAY BOULEVARD, SUITE 200
BOYNTON BEACH, FL 33426
T: 1-561-697-7075
CERTIFICATE OF AUTHORIZATION: LB 7917 LB 7062*

DATED: APRIL 2017

SR 804 (BOYNTON BEACH BLVD)

FROM OLD BOYNTON ROAD (MP 7.822)
TO SEACREST BLVD. (MP 8.769)

FINANCIAL PROJECT ID: 435804-1-22-01
PALM BEACH COUNTY (93200000)



N.T.S.

END SFRC/CSX BRIDGE
STA. 10+79.34

END I-95 BRIDGE
STA. 15+16.33

END PROJECT
MP 8.709
STA. 42+90.10

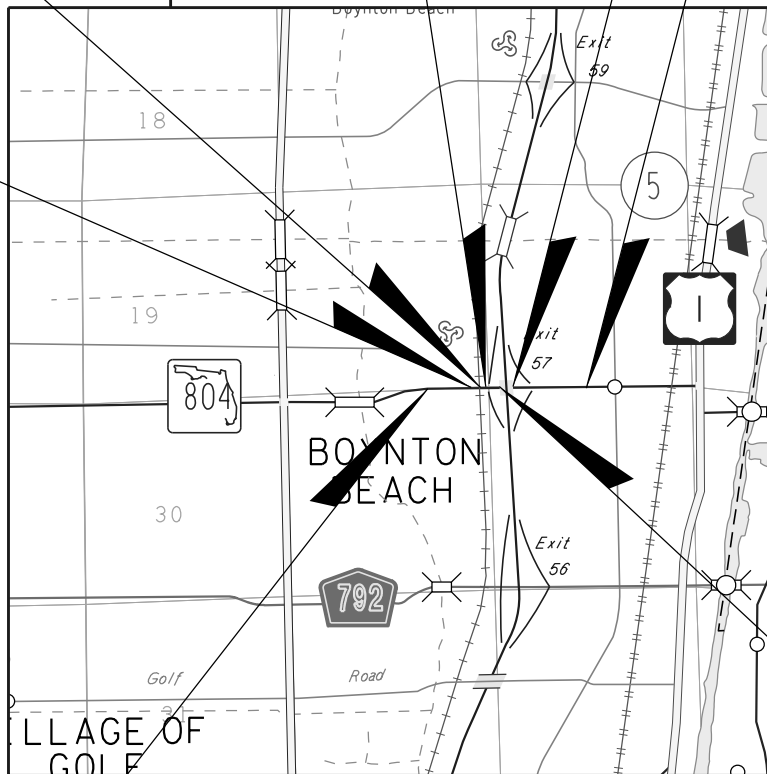
STATION EQ.
438+07.25 (BK) =
10+00.00 (AH)

R 42 E
R 43 E

BEGIN SFRC/CSX BRIDGE
STA. 436+59.63

T 45 S

T 45 S



BEGIN I-95 BRIDGE
STA. 12+44.59

BEGIN PROJECT
MP 7.822
STA. 421+56.37

R 42 E
R 43 E

PROJECT LOCATION MAP

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 COUNTY (SECTION) 93200000
PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROJECT CONTROLS

FUNCTIONAL CLASSIFICATION

- RURAL
 URBAN
- FREEWAY/EXPWY. MAJOR COLL.
 PRINCIPAL ART. (W. OF I-95) MINOR COLL.
 MINOR ART. (E. OF I-95) LOCAL

HIGHWAY SYSTEM

- Yes No
- NATIONAL HIGHWAY SYSTEM
 STRATEGIC INTERMODAL SYSTEM
 STATE HIGHWAY SYSTEM
 OFF STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- 1 - FREEWAY
 2 - RESTRICTIVE w/Service Roads
 3 - RESTRICTIVE w/660 ft. Connection Spacing
 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
 5 - RESTRICTIVE w/440 ft. Connection Spacing
 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
 7 - BOTH MEDIAN TYPES

SEE ADDITIONAL SHEETS

CRITERIA

- NEW CONSTRUCTION / RECONSTRUCTION
 RRR INTERSTATE / FREEWAY
 RRR NON-INTERSTATE / FREEWAY
 TDLC / NEW CONSTRUCTION / RECONSTRUCTION
 TDLC / RRR
 MANUAL OF UNIFORM MINIMUM STANDARDS
(FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

DESIGN SPEED APPROVALS

DISTRICT DESIGN ENGINEER DATE

DISTRICT TRAFFIC OPERATIONS ENGINEER DATE

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:
BORDER WIDTH

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:
930285 - SR 804 (BOYNTON BEACH BLVD.) OVER SR 9 (I-95)
930289 - SR 804 (BOYNTON BEACH BLVD.) OVER CSX RR
MAST ARM TRAFFIC SIGNALS AT EXIT AND ENTRANCE RAMP, W. INDUSTRIAL AVE. & OLD BOYNTON RD.

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

AMERICAN TRAFFIC SOLUTIONS	PALM BEACH COUNTY TRAFFIC OPERATIONS
CITY OF BOYNTON BEACH WATER & SEWER	AT&T DISTRIBUTION
FPC FIBERNET	COMCAST
FLORIDA POWER & LIGHT (FPL)	
FLORIDA PUBLIC UTILITIES	
MCI	

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:
UPCOMING PROJECT ON SR 9 (I-95) - ADDITION OF EXPRESS LANES

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 COUNTY (SECTION) 93200000
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

TRAFFIC TYPICAL SECTION 1

	YEAR	AADT
CURRENT	<u>2015</u>	<u>52,000</u>
OPENING	<u>2020</u>	<u>53,000</u>
DESIGN	<u>2040</u>	<u>59,000</u>

DISTRIBUTION

DESIGN SPEED	<u>45</u>	K	9.0%
POSTED SPEED	<u>40</u>	D	58.0%
		T 24	3.6%

TRAFFIC TYPICAL SECTION 2, 3, & 4

	YEAR	AADT
CURRENT	<u>2015</u>	<u>52,000</u>
OPENING	<u>2020</u>	<u>53,000</u>
DESIGN	<u>2040</u>	<u>59,000</u>

DISTRIBUTION

DESIGN SPEED	<u>45</u>	K	9.0%
POSTED SPEED	<u>35</u>	D	58.0%
		T 24	3.6%

TRAFFIC TYPICAL SECTION 5 & 6

	YEAR	AADT
CURRENT	<u>2015</u>	<u>34,000</u>
OPENING	<u>2020</u>	<u>36,000</u>
DESIGN	<u>2040</u>	<u>46,000</u>

DISTRIBUTION

DESIGN SPEED	<u>45</u>	K	9.0%
POSTED SPEED	<u>35</u>	D	53.6%
		T 24	3.9%

TRAFFIC I-95 SOUTHBOUND OFF RAMP

	YEAR	AADT
CURRENT	<u>2015</u>	<u>12,000</u>
OPENING	<u>2020</u>	<u>12,000</u>
DESIGN	<u>2040</u>	<u>14,000</u>

DISTRIBUTION

DESIGN SPEED	<u>30/50</u>	K	8.0%
POSTED SPEED	<u>30/50</u>	D	59.0%
		T 24	7.0%

TRAFFIC I-95 SOUTHBOUND ON RAMP

	YEAR	AADT
CURRENT	<u>2015</u>	<u>12,000</u>
OPENING	<u>2020</u>	<u>12,000</u>
DESIGN	<u>2040</u>	<u>14,000</u>

DISTRIBUTION

DESIGN SPEED	<u>30/50</u>	K	8.0%
POSTED SPEED	<u>30/50</u>	D	59.0%
		T 24	7.0%

TRAFFIC I-95 NORTHBOUND OFF RAMP

	YEAR	AADT
CURRENT	<u>2015</u>	<u>13,000</u>
OPENING	<u>2020</u>	<u>13,000</u>
DESIGN	<u>2040</u>	<u>15,000</u>

DISTRIBUTION

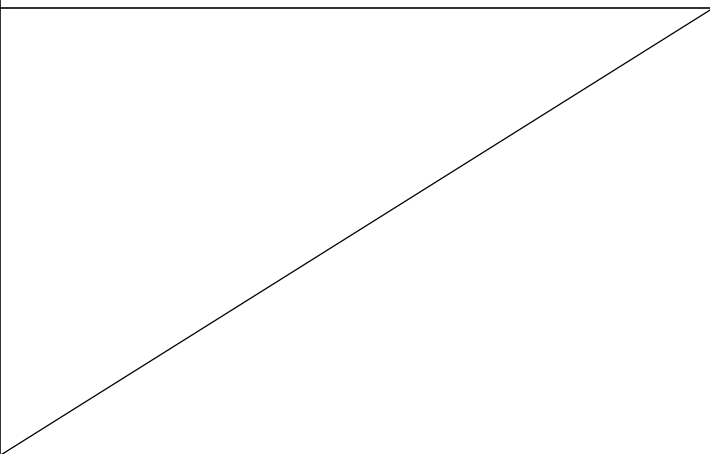
DESIGN SPEED	<u>30/50</u>	K	8.0%
POSTED SPEED	<u>30/50</u>	D	59.0%
		T 24	7.0%

TRAFFIC I-95 NORTHBOUND ON RAMP

	YEAR	AADT
CURRENT	<u>2015</u>	<u>14,000</u>
OPENING	<u>2020</u>	<u>15,000</u>
DESIGN	<u>2040</u>	<u>17,000</u>

DISTRIBUTION

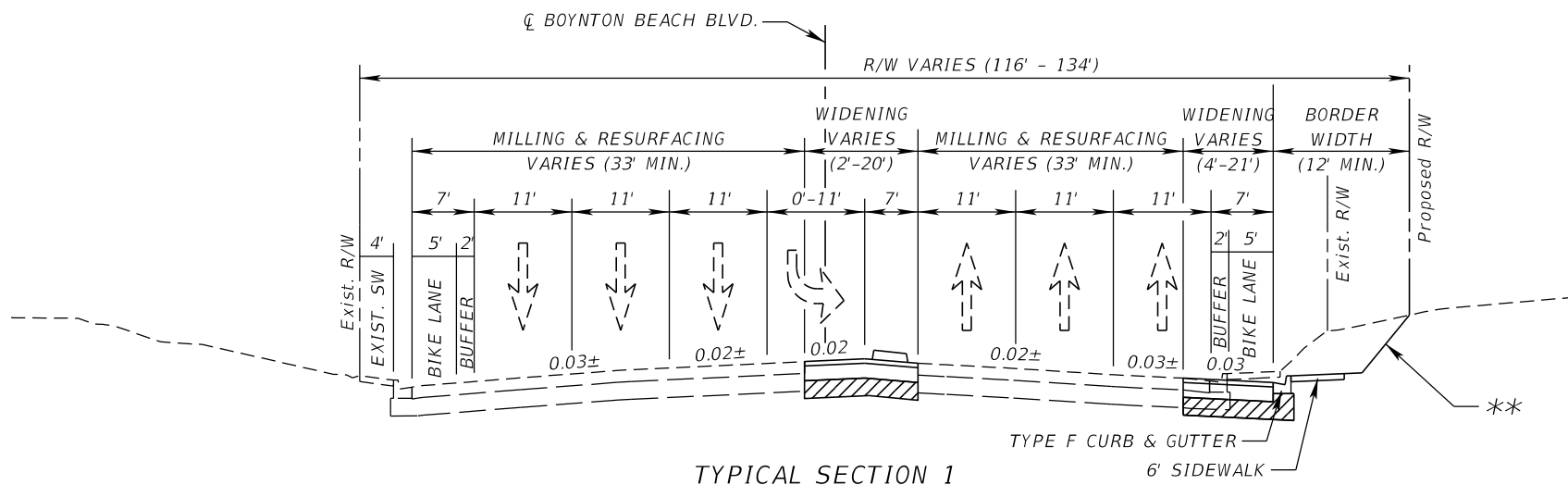
DESIGN SPEED	<u>30/50</u>	K	8.0%
POSTED SPEED	<u>30/50</u>	D	59.0%
		T 24	7.0%



PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION 1
BOYNTON BEACH BLVD
FROM MP 7.822 (OLD BOYNTON ROAD)
TO MP 7.915

DESIGN SPEED: 45 MPH

** 1:6 FOR FILLS TO 5'
 1:6 TO EDGE OF CLEAR ZONE &
 1:4 FOR FILLS 5' TO 10'
 1:6 TO EDGE OF CLEAR ZONE &
 1:3 FOR FILLS 10' TO 20'
 1:2 (WITH GUARDRAIL) FOR FILLS OVER 20'

APPROVED BY:

FDOT CONCURRENCE

RECOMMENDED BY

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

Steve Braun, P.E.
FDOT District Design Engineer

Date

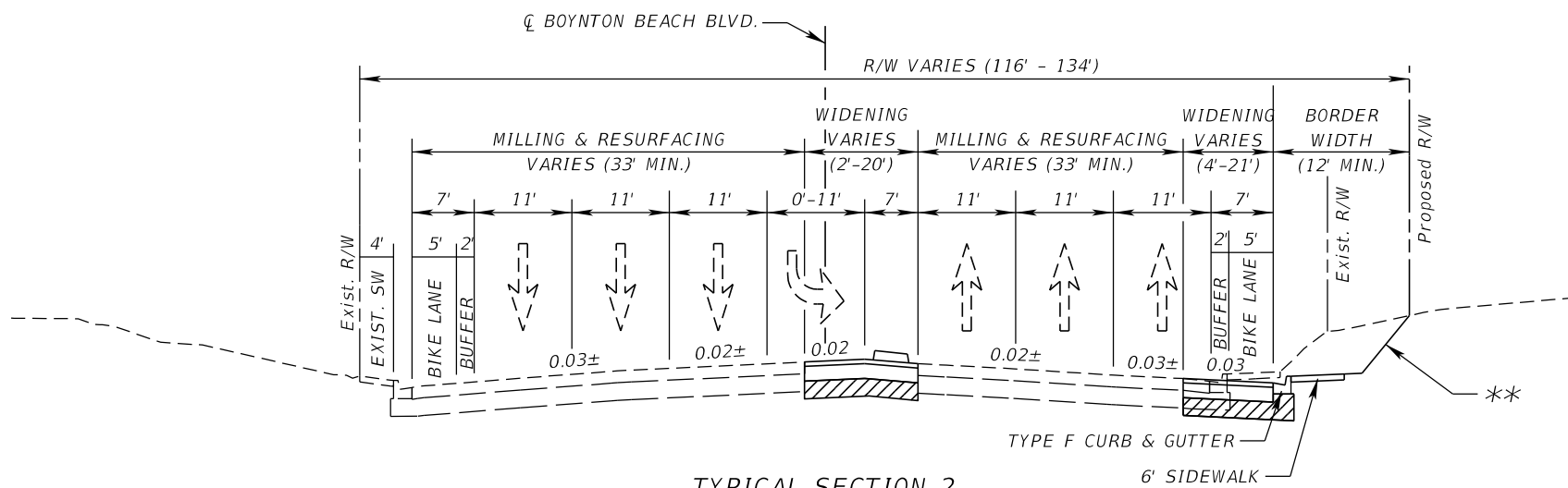
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION 2

BOYNTON BEACH BLVD FROM MP 7.915
TO MP 8.022 (W. INDUSTRIAL AVENUE)

DESIGN SPEED: 45 MPH

** 1:6 FOR FILLS TO 5'
 1:6 TO EDGE OF CLEAR ZONE &
 1:4 FOR FILLS 5' TO 10'
 1:6 TO EDGE OF CLEAR ZONE &
 1:3 FOR FILLS 10' TO 20'
 1:2 (WITH GUARDRAIL) FOR FILLS OVER 20'

APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

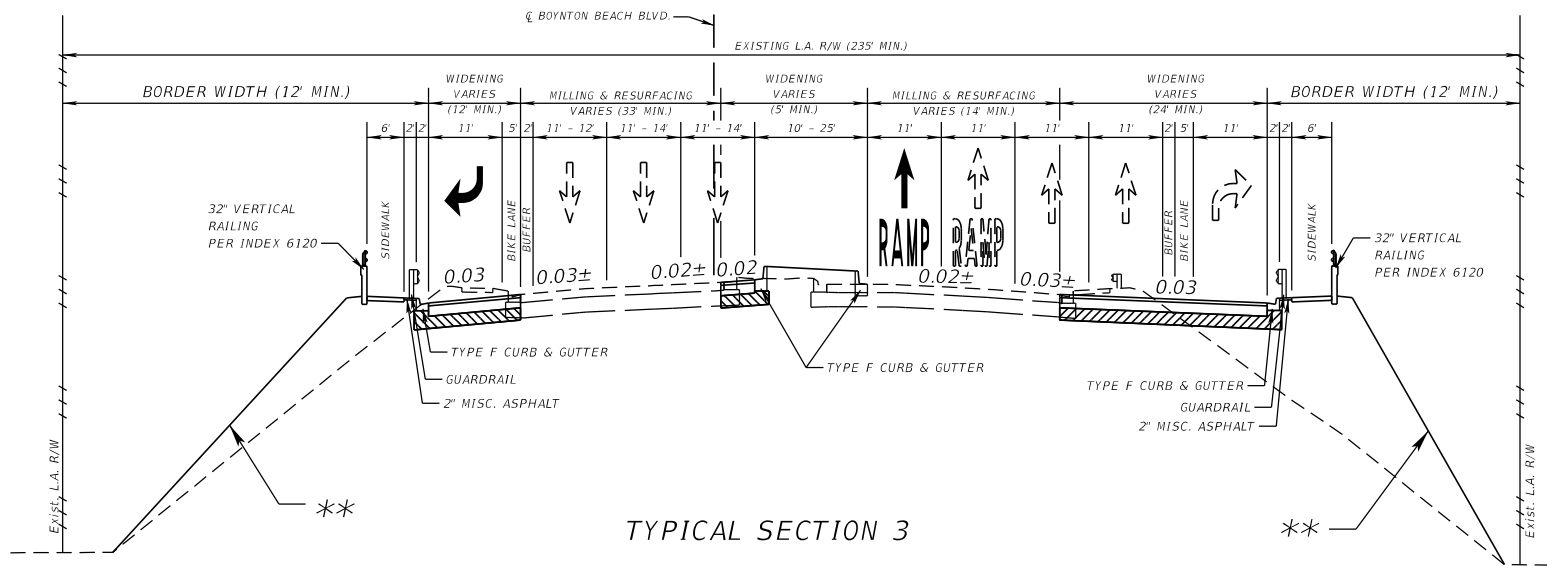
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

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 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION 3

BOYNTON BEACH BLVD
 FROM MP 8.022 (W. INDUSTRIAL AVENUE)
 TO MP 8.211 SR 9 (I-95)

DESIGN SPEED: 45 MPH

- ** 1:6 FOR FILLS TO 5'
- 1:6 TO EDGE OF CLEAR ZONE &
- 1:4 FOR FILLS 5' TO 10'
- 1:6 TO EDGE OF CLEAR ZONE &
- 1:3 FOR FILLS 10' TO 20'
- 1:2 (WITH GUARDRAIL) FOR FILLS OVER 20'

APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

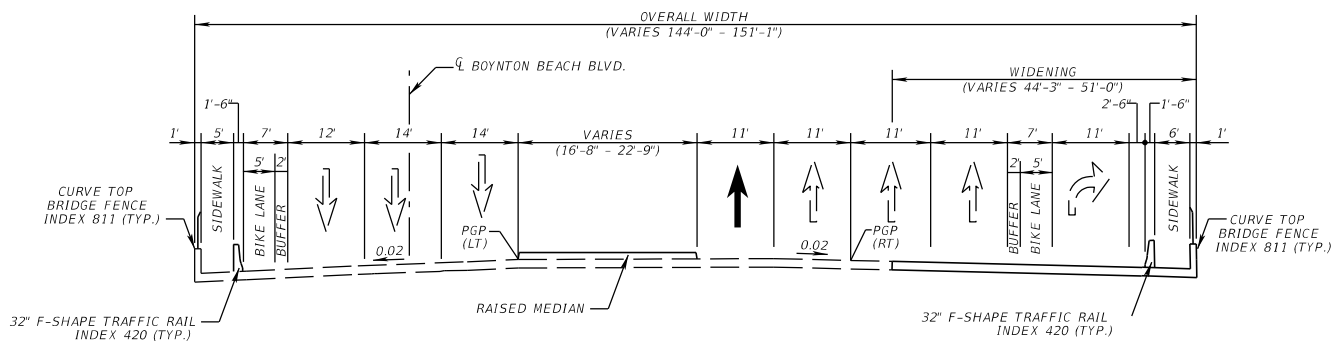
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 932200000 ROAD DESIGNATION SR 9/I-95 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED STRUCTURE TYPICAL SECTION



TYPICAL SECTION 4
BOYNTON BEACH BRIDGE OVER CSX
BRIDGE NO. 930289

FDOT CONCURRENCE

_____ Date
 RAMON A. OTERO, P.E.
 FDOT District Structures Design Engineer

APPROVED BY: ANTONIO M. GARCIA, P.E.

FDOT CONCURRENCE

RECOMMENDED BY

ANTONIO M. GARCIA, P.E.
 Signature and Date

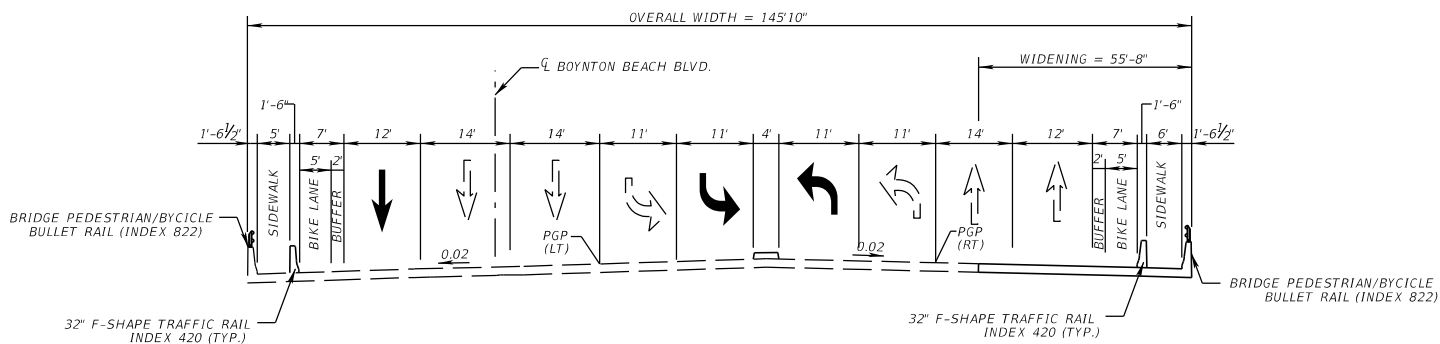
_____ Date
 STEVE BRAUN, P.E.
 FDOT District Design Engineer

_____ Date
 SCOTT PETERSON, P.E.
 FDOT District Project Development Manager

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 932200000 ROAD DESIGNATION SR 9/I-95 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED STRUCTURE TYPICAL SECTION



TYPICAL SECTION 5
 BOYNTON BEACH BRIDGE OVER I-95
 BRIDGE NO. 930285

FDOT CONCURRENCE

_____ Date
 RAMON A. OTERO, P.E.
 FDOT District Structures Design Engineer

APPROVED BY: ANTONIO M. GARCIA, P.E.

FDOT CONCURRENCE

RECOMMENDED BY

ANTONIO M. GARCIA, P.E.
 Signature and Date

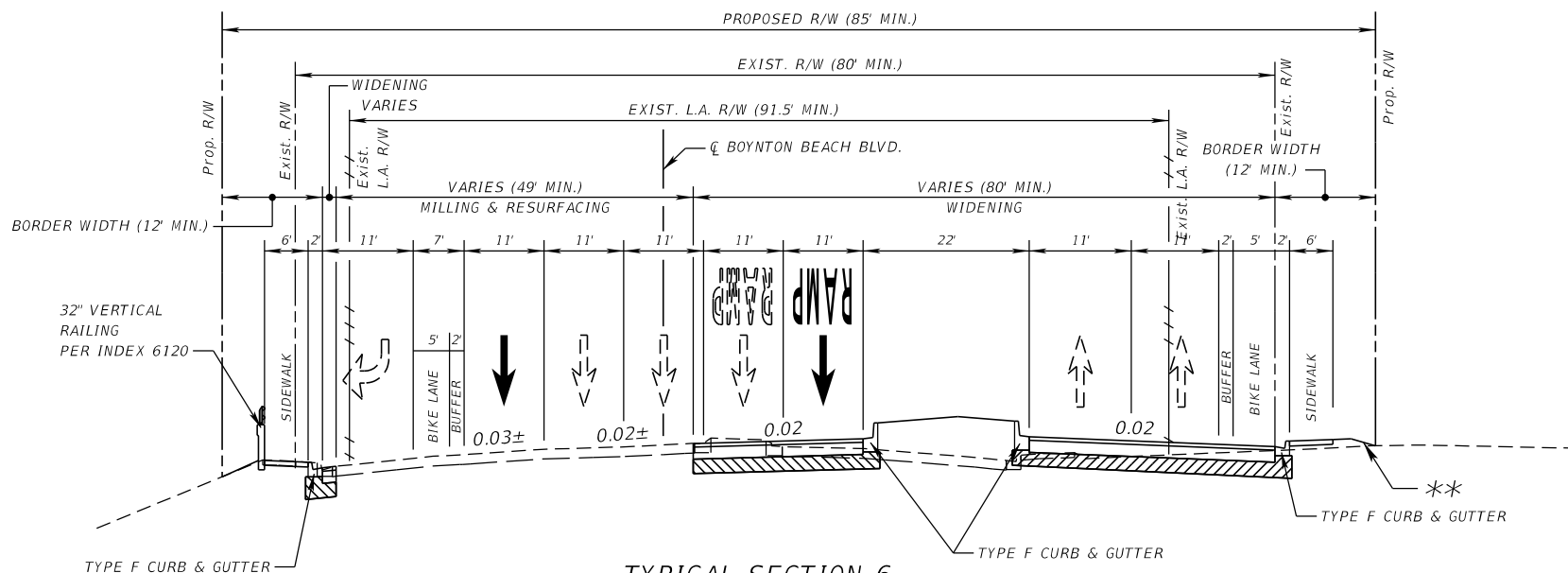
_____ Date
 STEVE BRAUN, P.E.
 FDOT District Design Engineer

_____ Date
 SCOTT PETERSON, P.E.
 FDOT District Project Development Manager

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION 6

BOYNTON BEACH BLVD.
 FROM MP 8.211 SR 9 (I-95)
 TO MP 8.769 (SEACREST BLVD.)

DESIGN SPEED: 45 MPH

** 1:6 FOR FILLS TO 5'
 1:6 TO EDGE OF CLEAR ZONE &
 1:4 FOR FILLS 5' TO 10'
 1:6 TO EDGE OF CLEAR ZONE &
 1:3 FOR FILLS 10' TO 20'
 1:2 (WITH GUARDRAIL) FOR FILLS OVER 20'

APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

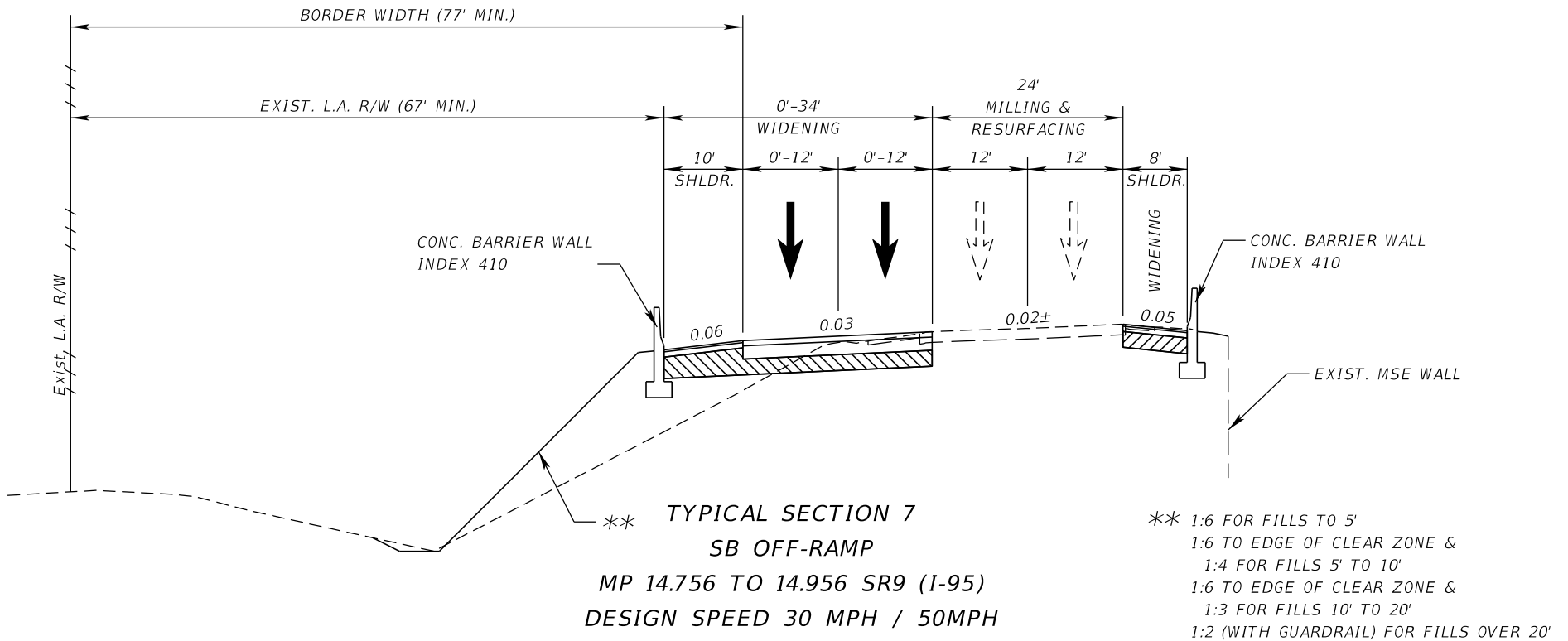
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

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 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

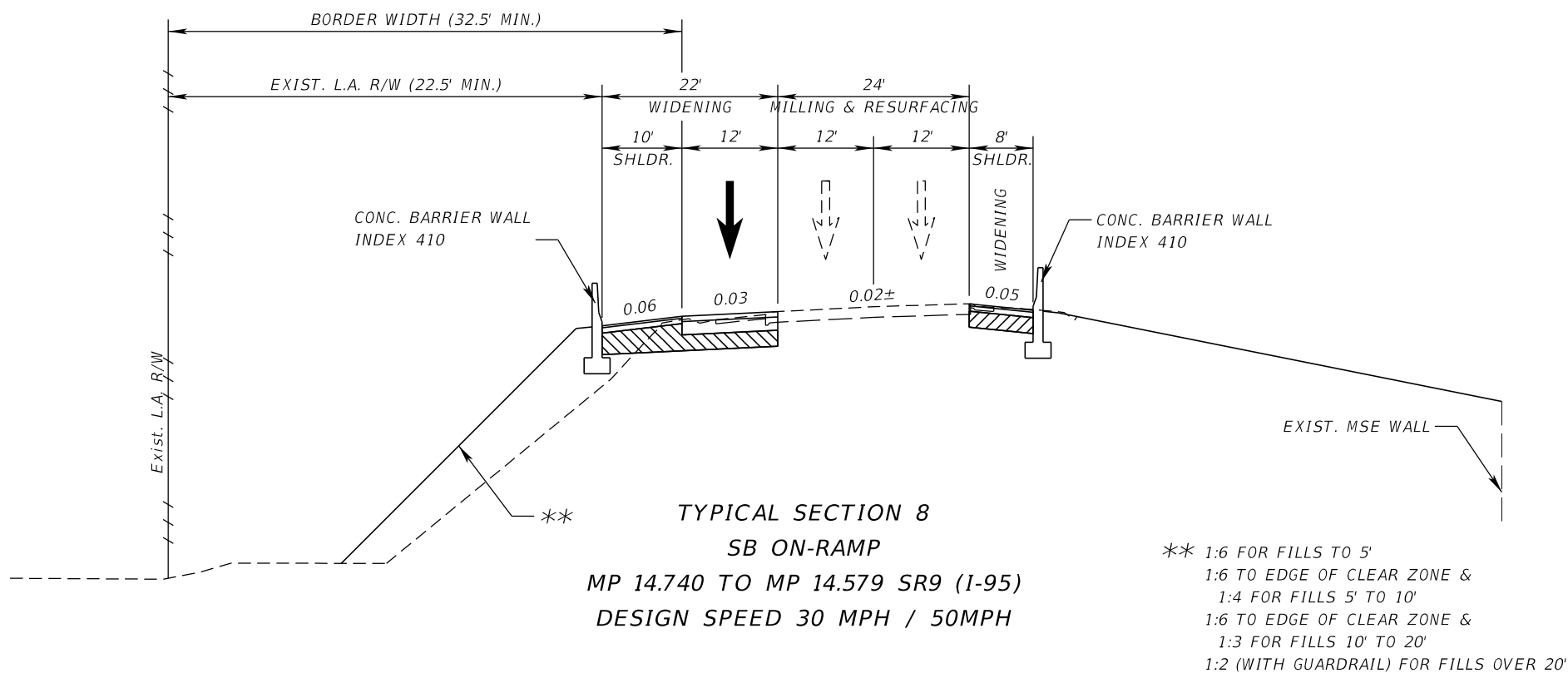
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

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 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

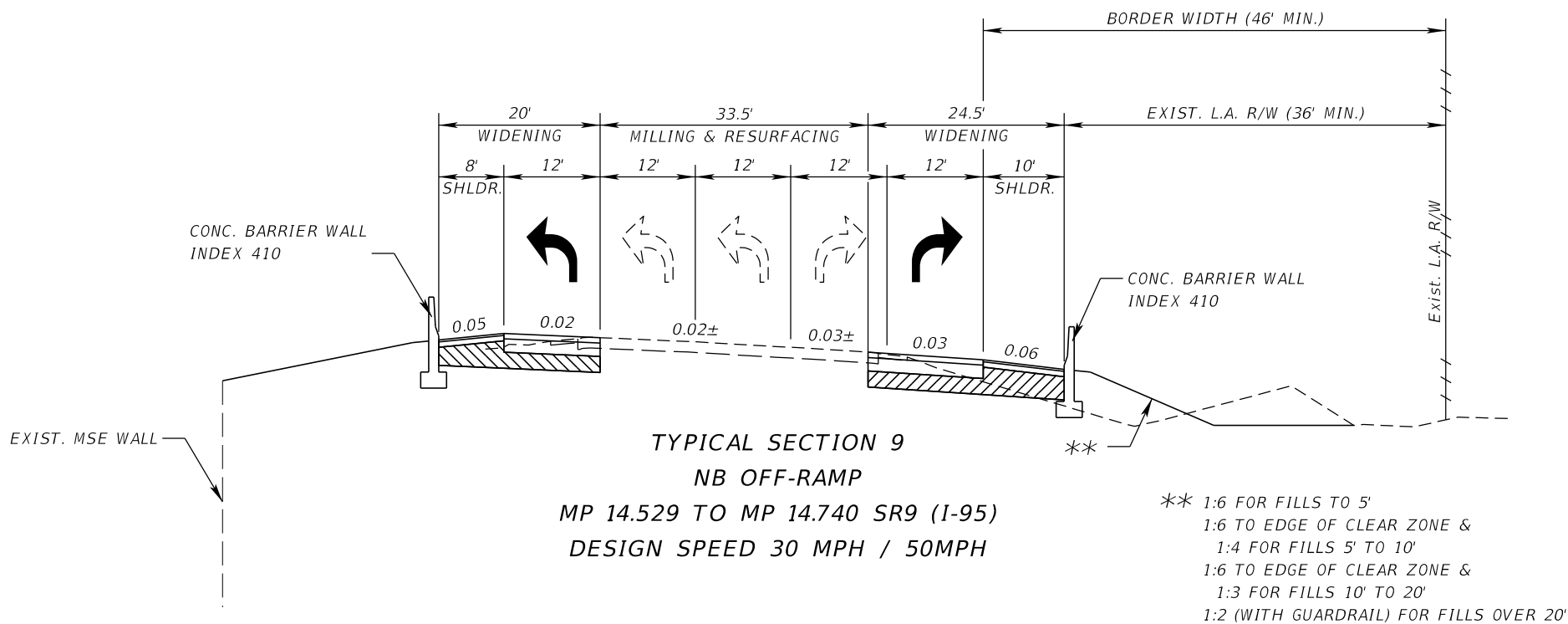
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

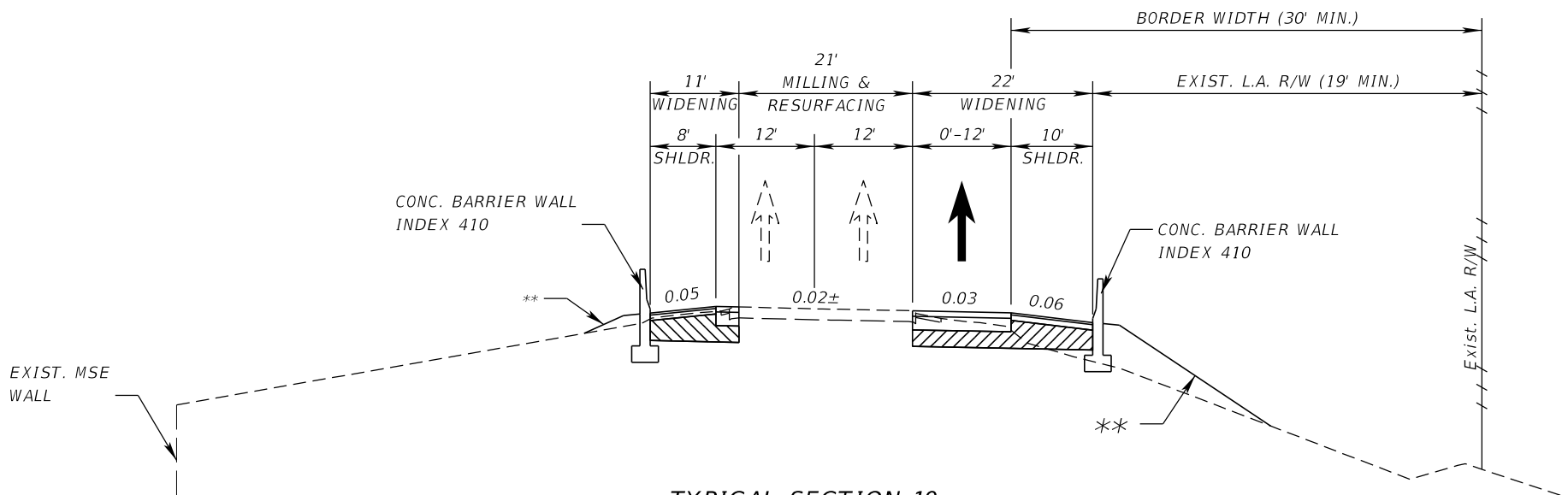
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 435804-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93200000 ROAD DESIGNATION SR 804 LIMITS/MILEPOST FROM MP 7.822 TO MP 8.769
 PROJECT DESCRIPTION SR 9 (I-95) AT SR 804 (BOYNTON BEACH BLVD) INTERCHANGE

PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION 10
NB ON-RAMP
MP 14.756 TO MP 15.023 SR9 (I-95)
DESIGN SPEED 30 MPH / 50MPH

** 1:6 FOR FILLS TO 5'
 1:6 TO EDGE OF CLEAR ZONE &
 1:4 FOR FILLS 5' TO 10'
 1:6 TO EDGE OF CLEAR ZONE &
 1:3 FOR FILLS 10' TO 20'
 1:2 (WITH GUARDRAIL) FOR FILLS OVER 20'

APPROVED BY:

Henry W. Deibel, P.E.
ENGINEER OF RECORD

Date

FDOT CONCURRENCE

Steve Braun, P.E.
FDOT District Design Engineer

Date

RECOMMENDED BY

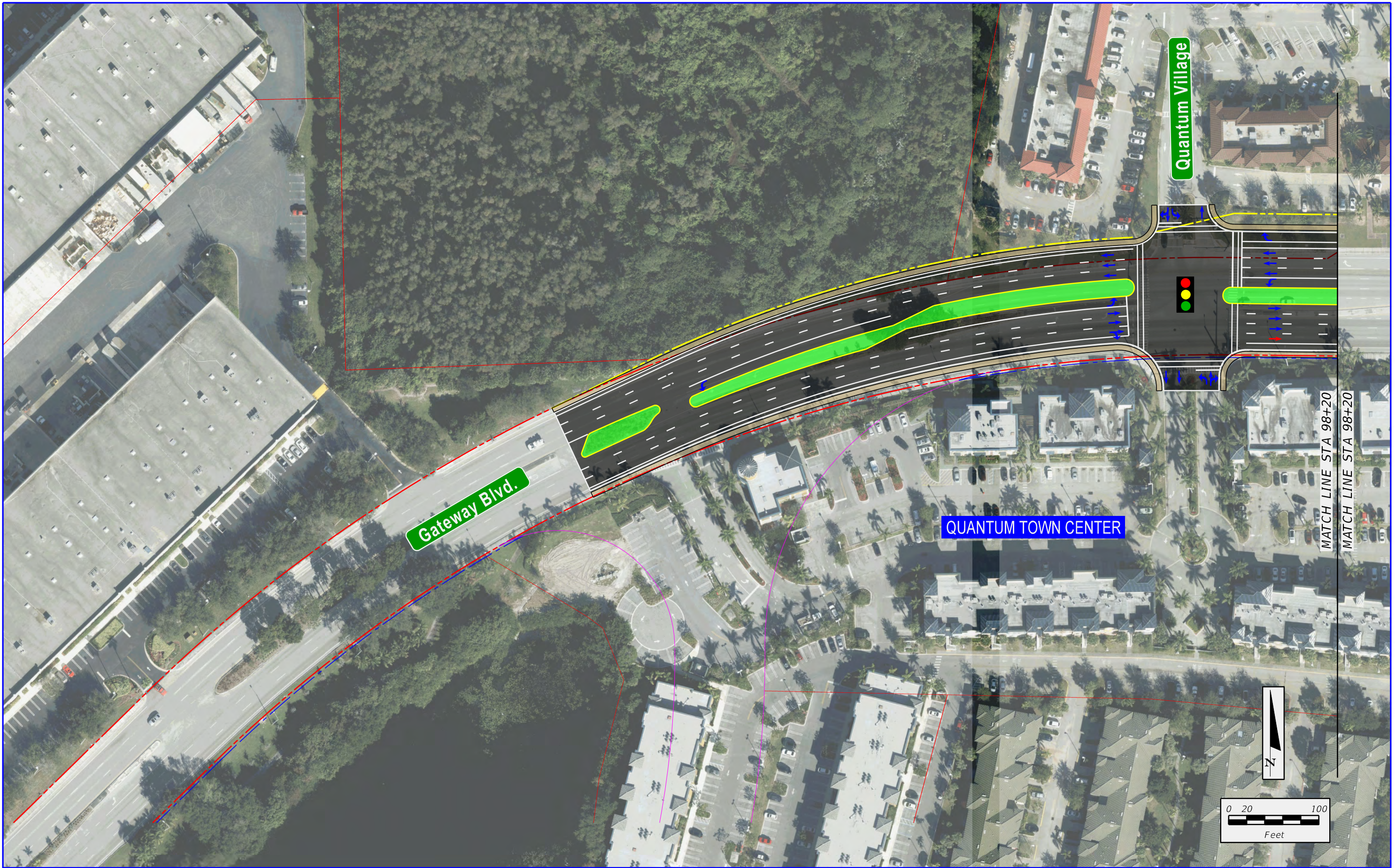
Scott Peterson, P.E.
FDOT District Project Development Manager

Date

Appendix B

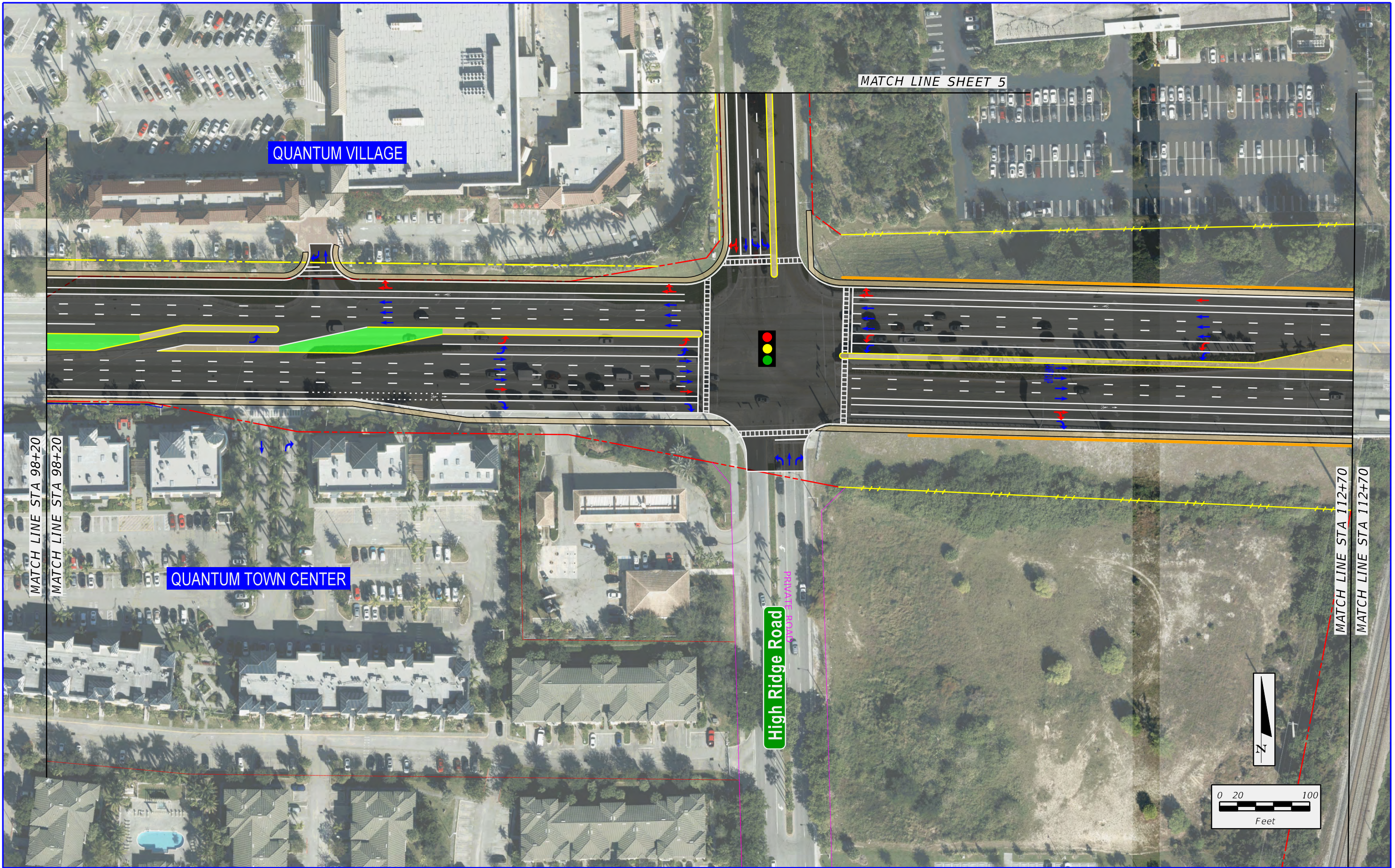
Recommended Alternative & Typical Section Package
Gateway Boulevard

9/16/2016 11:55:08 AM \\F:\file0\transportation\PN-95 Gateway 231932\2016emo4 - Reports - Engineering\PER\Figures and Tables\Planem203_Sheet1.dgn lucask



	<table border="1"> <tr> <td></td> <td>5</td> <td>6</td> <td></td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td></td> <td></td> <td>7</td> <td></td> </tr> </table>		5	6		1	2	3	4			7		EXISTING R/W PROPERTY LINE EXISTING L/A R/W PROPOSED R/W	PROPOSED L/A R/W BARRIER WALL GRASSED AREA CONC SIDEWALK /MEDIAN	EXISTING BRIDGE PROPOSED BRIDGE PROPOSED PAVEMENT	EXISTING LANE PROPOSED LANE	I-95 and Gateway Blvd. Interchange SPUI Best Fit	SHEET NO. 1
			5	6															
1	2	3	4																
		7																	

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	5	6	
1	2	3	4
		7	

- EXISTING R/W
- PROPERTY LINE
- EXISTING L/A R/W
- PROPOSED R/W

- PROPOSED L/A R/W
- BARRIER WALL
- GRASSED AREA
- CONC SIDEWALK /MEDIAN

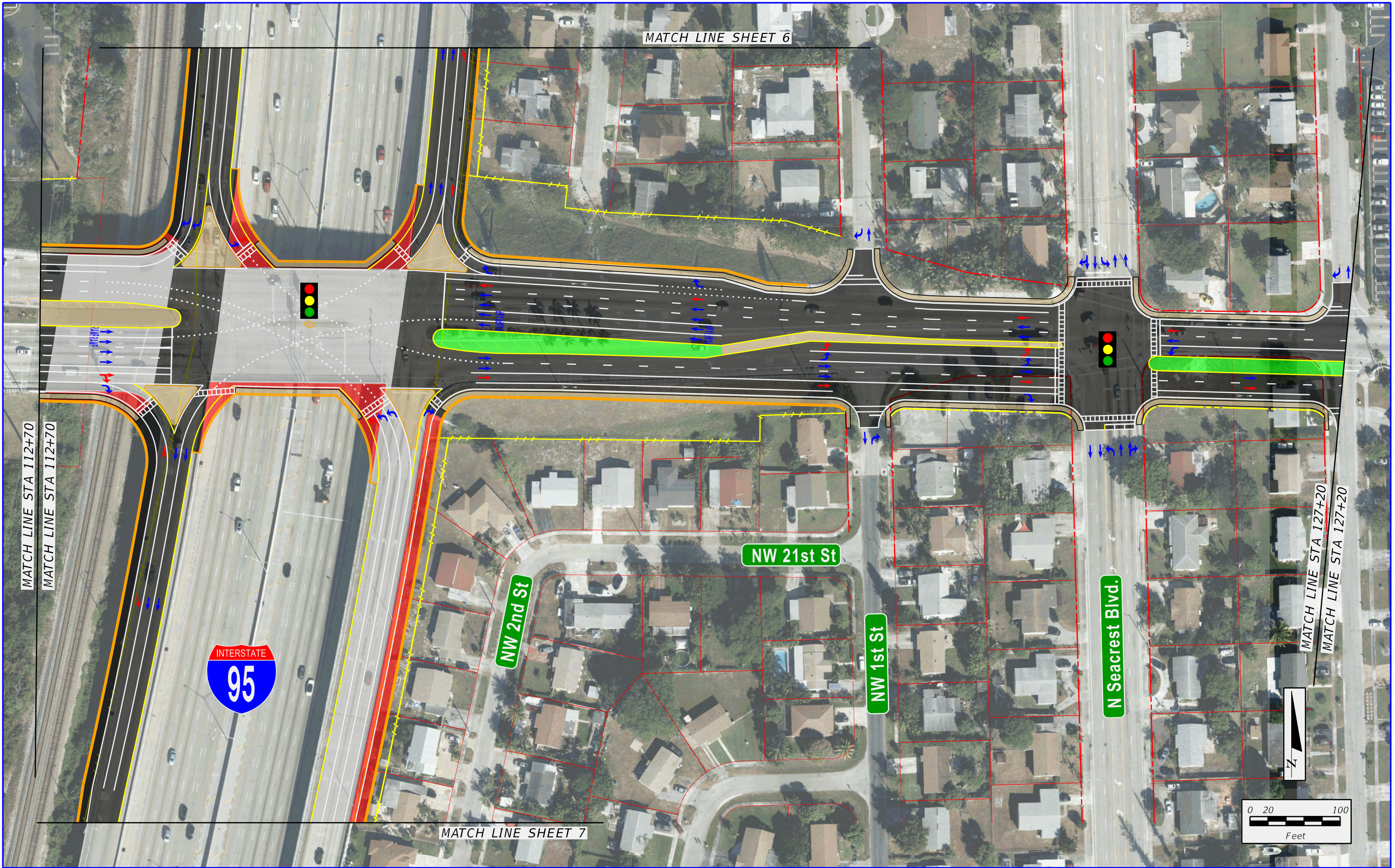
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED PAVEMENT

- EXISTING LANE
- PROPOSED LANE

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
2

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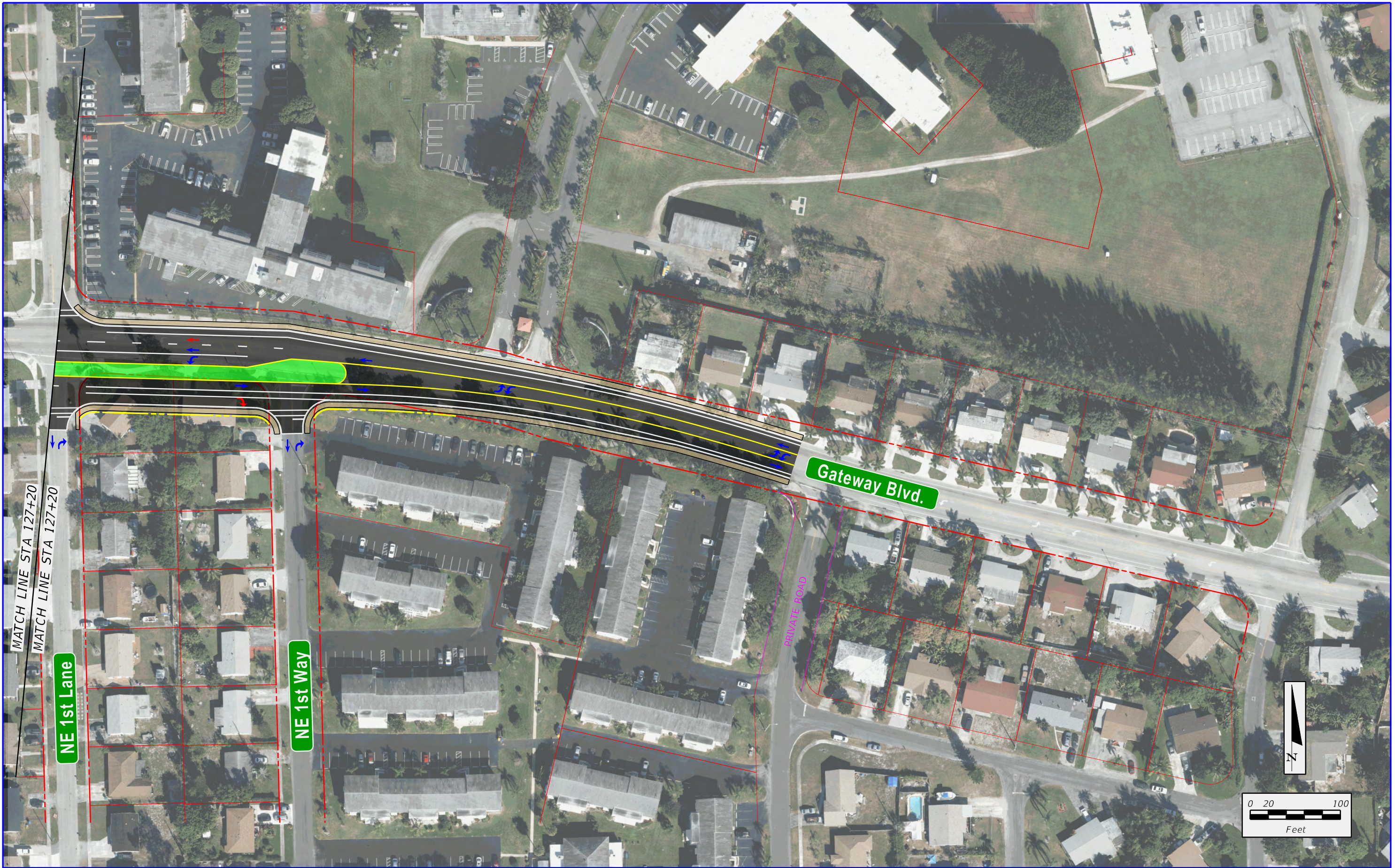
	5	6	
1	2	3	4
		7	

	EXISTING R/W		PROPOSED L/A R/W		EXISTING BRIDGE		EXISTING LANE
	PROPERTY LINE		BARRIER WALL		PROPOSED BRIDGE		PROPOSED LANE
	EXISTING L/A R/W		GRASSED AREA		PROPOSED PAVEMENT		
	PROPOSED R/W		CONC SIDEWALK /MEDIAN				

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
3

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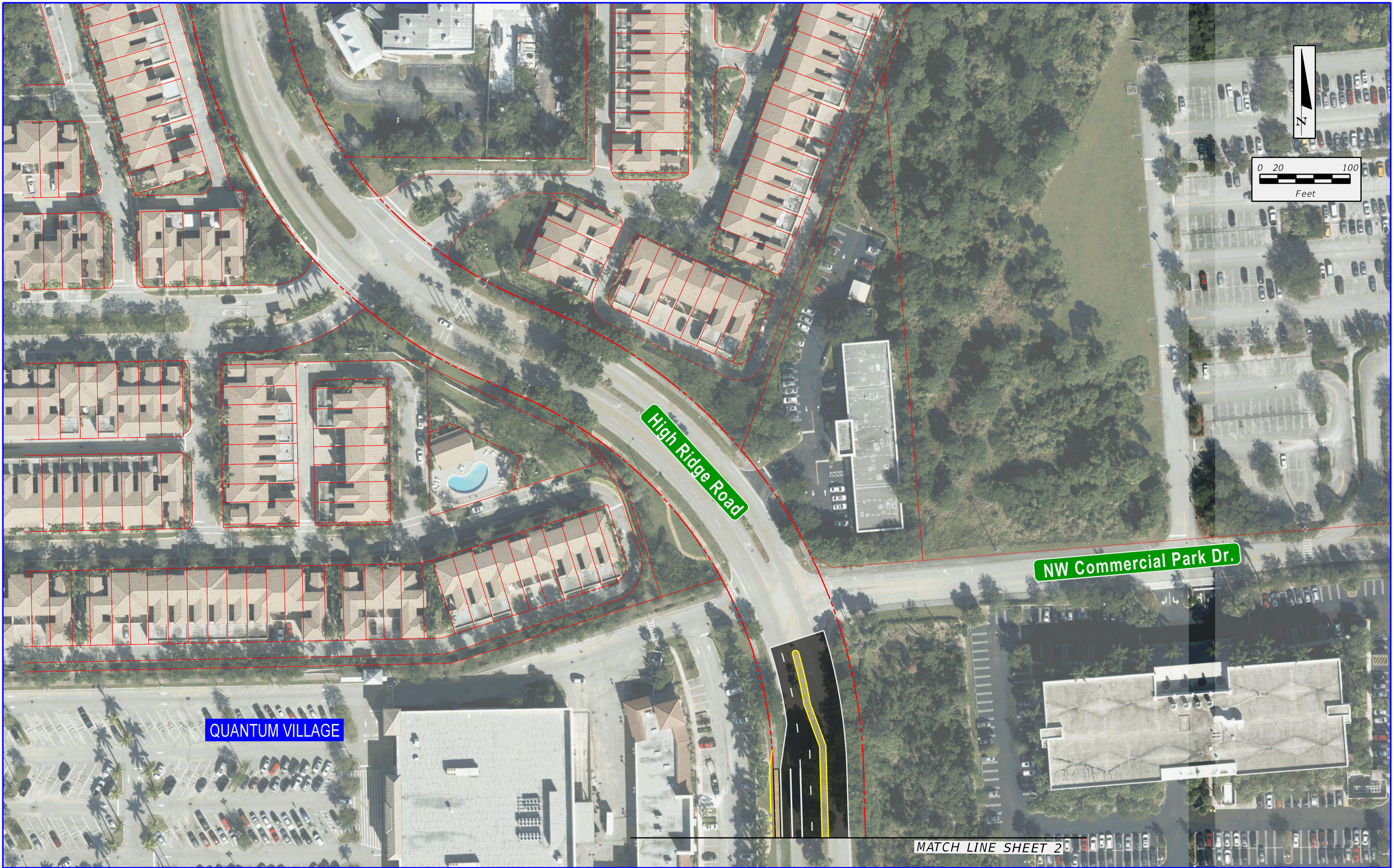
	5	6	
1	2	3	4
		7	

	EXISTING R/W		PROPOSED L/A R/W		EXISTING BRIDGE		EXISTING LANE
	PROPERTY LINE		BARRIER WALL		PROPOSED BRIDGE		PROPOSED LANE
	EXISTING L/A R/W		GRASSED AREA		PROPOSED PAVEMENT		
	PROPOSED R/W		CONC SIDEWALK /MEDIAN				

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
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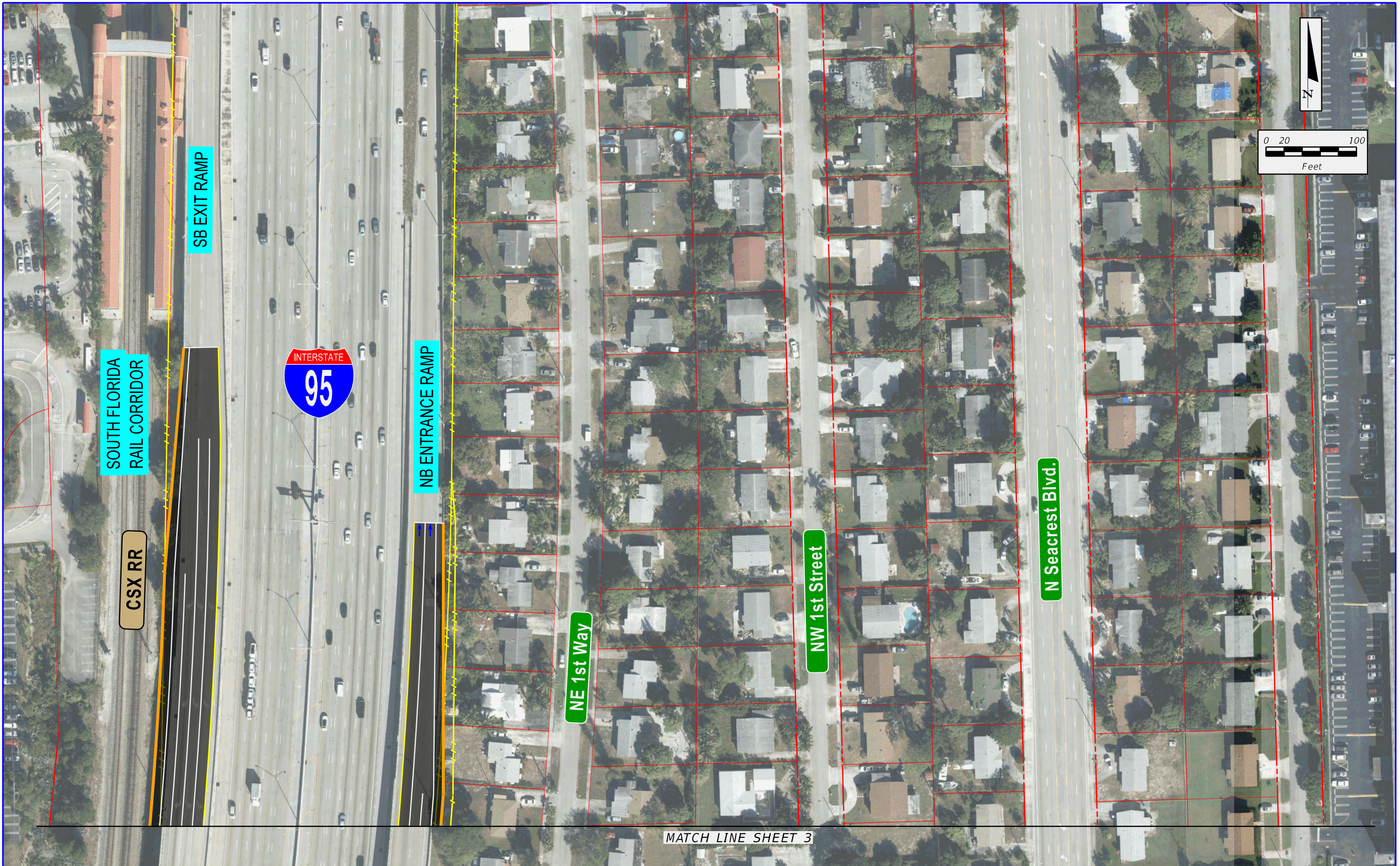
	5	6	
1	2	3	4
		7	

	EXISTING R/W		PROPOSED L/A R/W		EXISTING BRIDGE		EXISTING LANE
	PROPERTY LINE		BARRIER WALL		PROPOSED BRIDGE		PROPOSED LANE
	EXISTING L/A R/W		GRASSED AREA		PROPOSED PAVEMENT		
	PROPOSED R/W		CONC SIDEWALK /MEDIAN				

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
5

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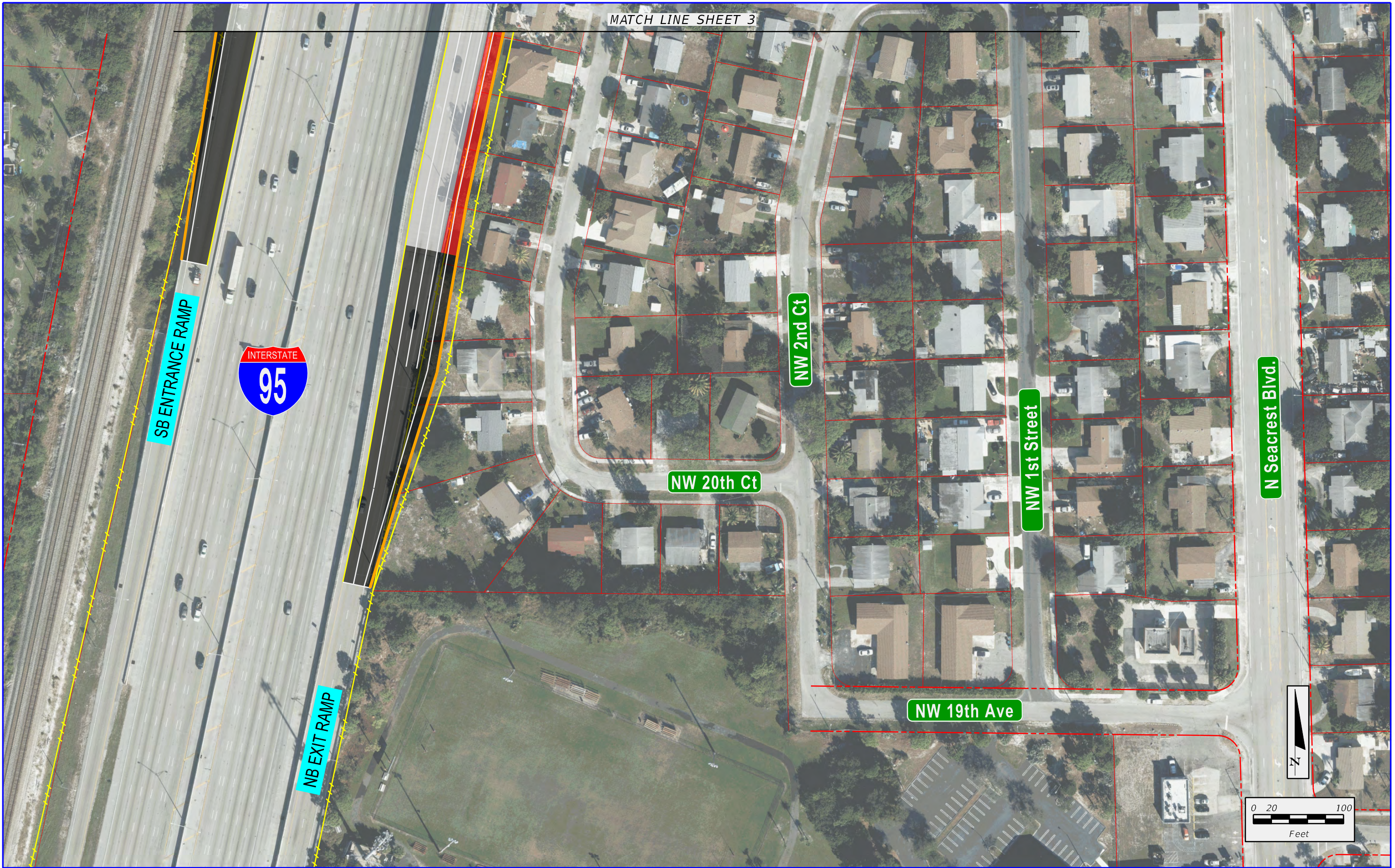


	5	6	
1	2	3	4
		7	

	EXISTING R/W		PROPOSED L/A R/W		EXISTING BRIDGE		EXISTING LANE
	PROPERTY LINE		BARRIER WALL		PROPOSED BRIDGE		PROPOSED LANE
	EXISTING L/A R/W		GRASSED AREA		PROPOSED PAVEMENT		
	PROPOSED R/W		CONC SIDEWALK /MEDIAN				

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
6



\$USERS\$
\$DATES\$
\$TIME\$
\$FILE\$



	5	6	
1	2	3	4
		7	

	EXISTING R/W		PROPOSED L/A R/W		EXISTING BRIDGE		EXISTING LANE
	PROPERTY LINE		BARRIER WALL		PROPOSED BRIDGE		PROPOSED LANE
	EXISTING L/A R/W		GRASSED AREA		PROPOSED PAVEMENT		
	PROPOSED R/W		CONC SIDEWALK /MEDIAN				

I-95 and Gateway Blvd. Interchange
SPUI Best Fit

SHEET NO.
7

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION



TYPICAL SECTION PACKAGE

GATEWAY BOULEVARD

FROM QUANTUM TOWN CENTER
TO SEACREST BLVD.

PALM BEACH COUNTY
(93220000)

FINANCIAL PROJECT ID: 231932-1-22-01

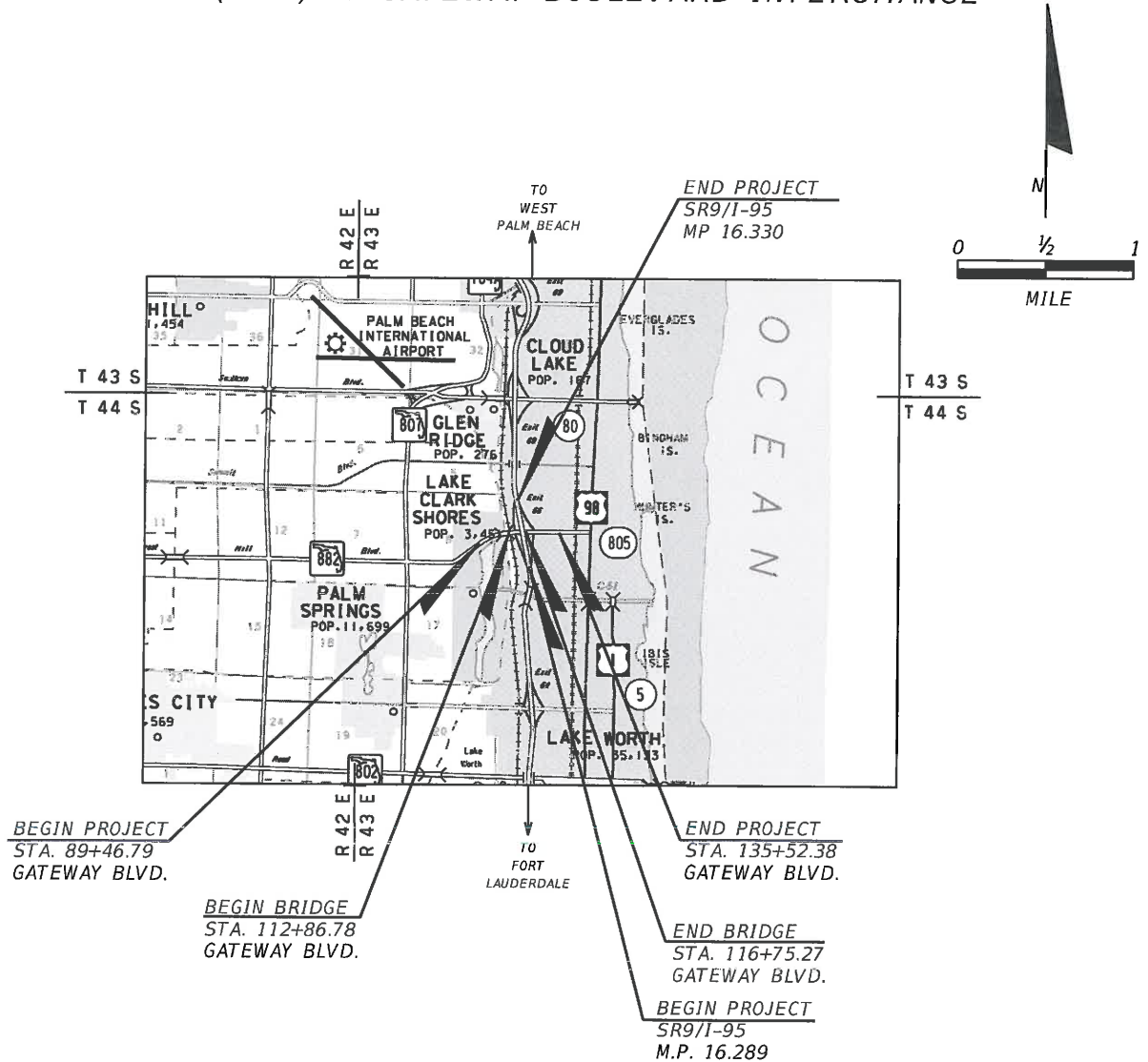
PREPARED BY:

RS&H, Inc.
3125 W. Commercial Blvd. - Suite 130
Fort Lauderdale, Florida 33309-3446
PHONE: 954-474-3005
FAX: 954-474-3006
FL Cert. No. EB0005620

DATED: JUNE 2017

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT IDS 231932-1-22-01
 PALM BEACH COUNTY (93220000)
 SR 9 (I-95) AT GATEWAY BOULEVARD INTERCHANGE



PREPARED FOR:

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 4
 3400 WEST COMMERCIAL BLVD
 FORT LAUDERDALE, FL 33309

PREPARED BY:

RS&H, Inc.
 3125 W. Commercial Blvd. - Suite 130
 Fort Lauderdale, Florida 33309-3446
 PHONE: 954-474-3005
 FAX: 954-474-3006
 EMAIL: Cassie.Piche@rsandh.com
 FL Cert. No. EB0005620

JUNE 2017

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 COUNTY (SECTION) 93220000
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY (WEST OF I-95)

PROJECT CONTROLS

FUNCTIONAL CLASSIFICATION

- () RURAL
 (X) URBAN
 () FREEWAY/EXPWY. () MAJOR COLL.
 () PRINCIPAL ART. () MINOR COLL.
 (X) MINOR ART. () LOCAL

HIGHWAY SYSTEM

- | | | |
|-----|-----|-----------------------------|
| Yes | No | |
| () | (X) | NATIONAL HIGHWAY SYSTEM |
| () | (X) | STRATEGIC INTERMODAL SYSTEM |
| () | (X) | STATE HIGHWAY SYSTEM |
| (X) | () | OFF STATE HIGHWAY SYSTEM |

ACCESS CLASSIFICATION

- () 1 - FREEWAY
 () 2 - RESTRICTIVE w/Service Roads
 (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
 () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
 () 5 - RESTRICTIVE w/440 ft. Connection Spacing
 () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
 () 7 - BOTH MEDIAN TYPES

TRAFFIC

	YEAR	AADT
CURRENT	<u>2015</u>	<u>49,000</u>
OPENING	<u>2020</u>	<u>50,000</u>
DESIGN	<u>2040</u>	<u>56,000</u>

DISTRIBUTION

DESIGN SPEED	<u>50 MPH</u>	K	9.0 %
POSTED SPEED	<u>45 MPH</u>	D	56.5 %
		T	24 5.1 %

DESIGN SPEED APPROVALS

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
 () RRR INTERSTATE / FREEWAY
 () RRR NON-INTERSTATE / FREEWAY
 () TDLC / NEW CONSTRUCTION / RECONSTRUCTION
 () TDLC / RRR
 (X) MANUAL OF UNIFORM MINIMUM STANDARDS
 (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

 DISTRICT DESIGN ENGINEER DATE

 Jeff R. Livergood, P.E., CITY OF BOYNTON BEACH
 DIRECTOR OF PUBLIC WORKS AND ENGINEERING DATE

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

- DESIGN VARIATIONS:
 1. BORDER WIDTH
 2. MEDIAN WIDTH

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

WIDENING OF BRIDGE 930433 - GATEWAY BLVD. OVER SR 9 (I-95)
 WIDENING OF BRIDGE 930434 - GATEWAY BLVD. OVER CSX RR
 MAJOR TRAFFIC SIGNALS AT EXIT AND ENTRANCE RAMP, HIGH RIDGE ROAD, QUANTUM CENTER, SEACREST BLVD.

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

- | | |
|---------------------------------------|--|
| • CITY OF BOYNTON BEACH WATER & SEWER | • PALM BEACH COUNTY TRAFFIC OPERATIONS |
| • FLORIDA POWER & LIGHT (FPL) | • AT&T DISTRIBUTION |
| • FLORIDA PUBLIC UTILITIES | • COMCAST |
| • HOTWIRE COMMUNICATIONS | • FPL DISTRIBUTION |
| • FPU GAS | • FPL PBC |

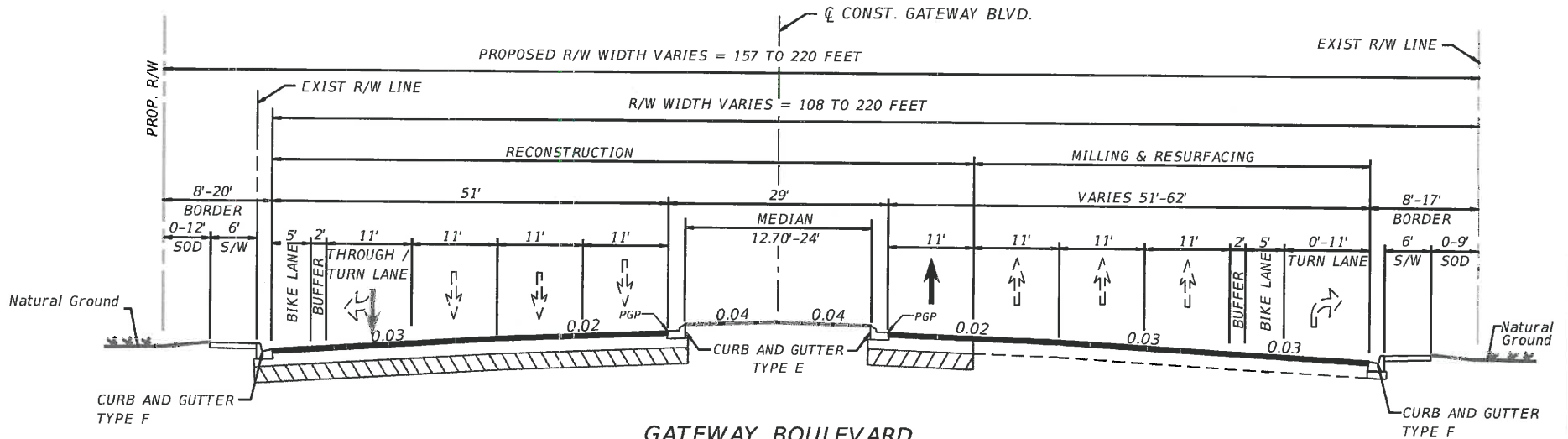
LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

UPCOMING PROJECT ON SR 9 (I-95) - POTENTIAL ADDITION OF EXPRESS LANES
 UPCOMING PROJECT ON HIGH RIDGE ROAD - WIDENING / RESURFACING
 EXISTING SFRC ADJACENT TO SB I-95 MAINLINE

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP. 16.289 TO MP. 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



APPROVED BY:

Cassandra Piché 12-17

Cassandra Piché, P.E.
 License No. 71405
 Engineer Of Record

Date

FDOT CONCURRENCE

Steve C. Braun, P.E.
 FDOT District Design Engineer

Date

CITY OF BOYNTON BEACH

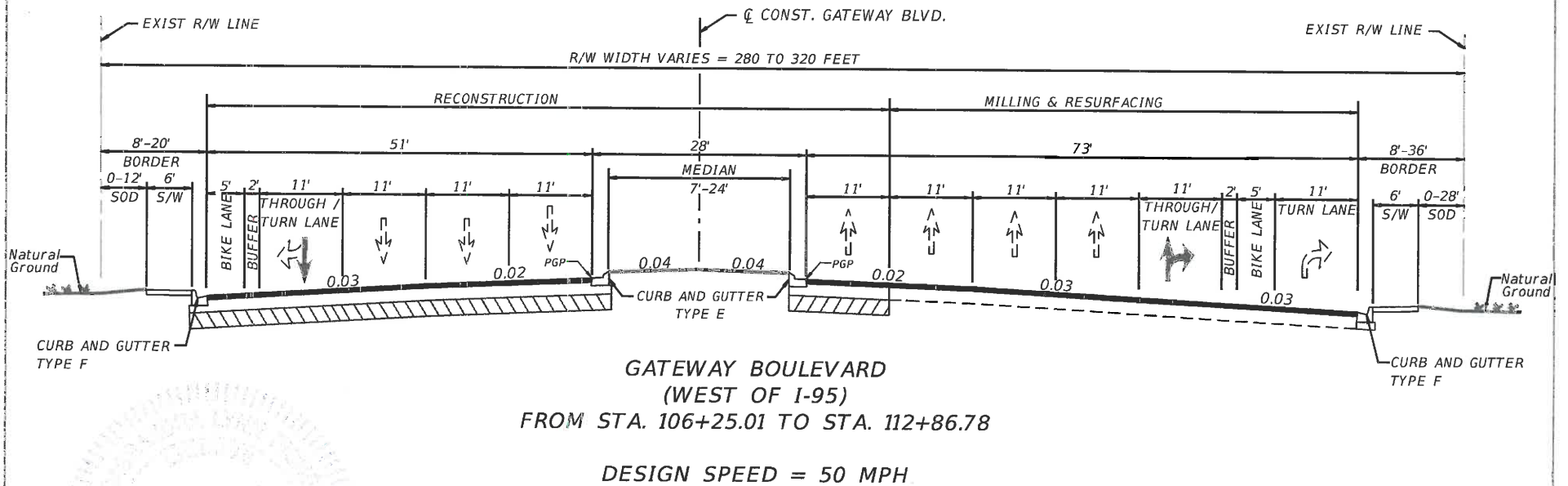
Jeff R. Livergood, P.E.
 Director Of Public Works and
 Engineering

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION

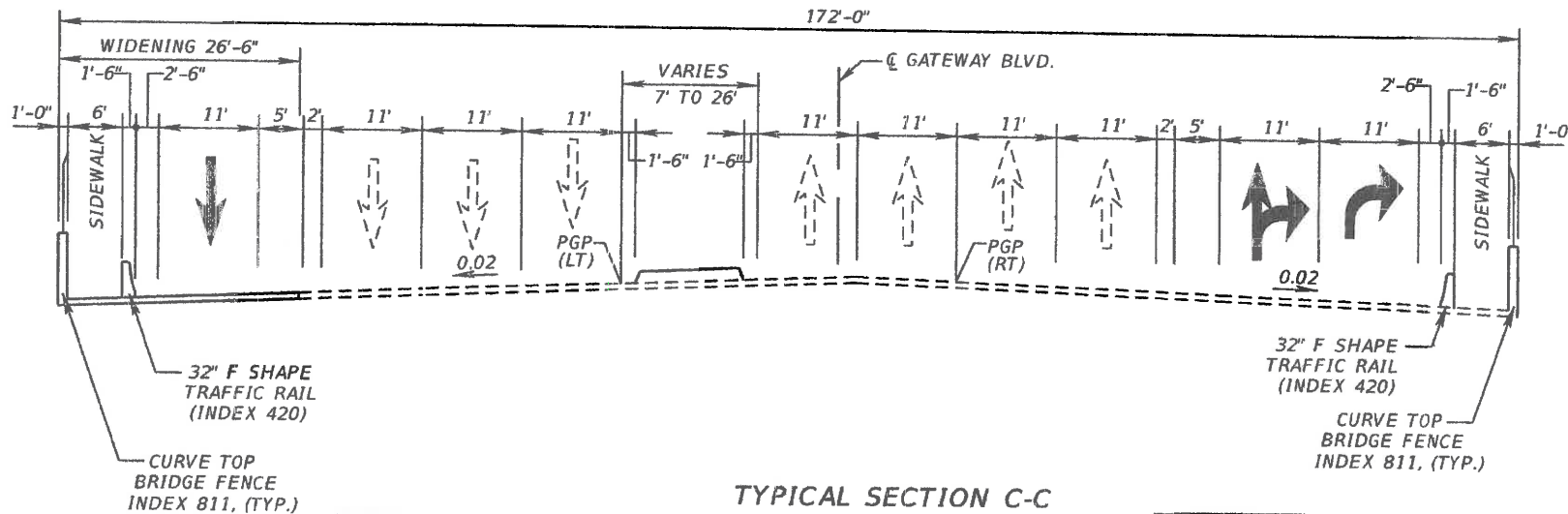


APPROVED BY: Cassandra Piché, P.E. License No.: 71405 Engineer Of Record	FDOT CONCURRENCE Steve C. Braun, P.E. FDOT District Design Engineer	CITY OF BOYNTON BEACH Jeff R. Livergood, P.E. Director Of Public Works and Engineering
Date <u>6.12.17</u>	Date _____	Date _____

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220 ROAD DESIGNATION SR 9/I-95 LIMITS/MILEPOST SR 9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION SR 9/I-95 @ GATEWAY BOULEVARD INTERCHANGE

PROPOSED STRUCTURE TYPICAL SECTION



FDOT CONCURRENCE
<p style="text-align: right;">Date _____</p> <p>RAMON A. OTERO, P.E. FDOT District Structures Design Engineer</p>
FHWA CONCURRENCE
<p style="text-align: right;">Date _____</p> <p>MARK E. CLASGENS, P.E. FHWA Transportation Engineer</p>

APPROVED BY: ANTONIO M. GARCIA, P.E.

 ANTONIO M. GARCIA, P.E.
 Signature

Date 8 June 2012

FDOT CONCURRENCE

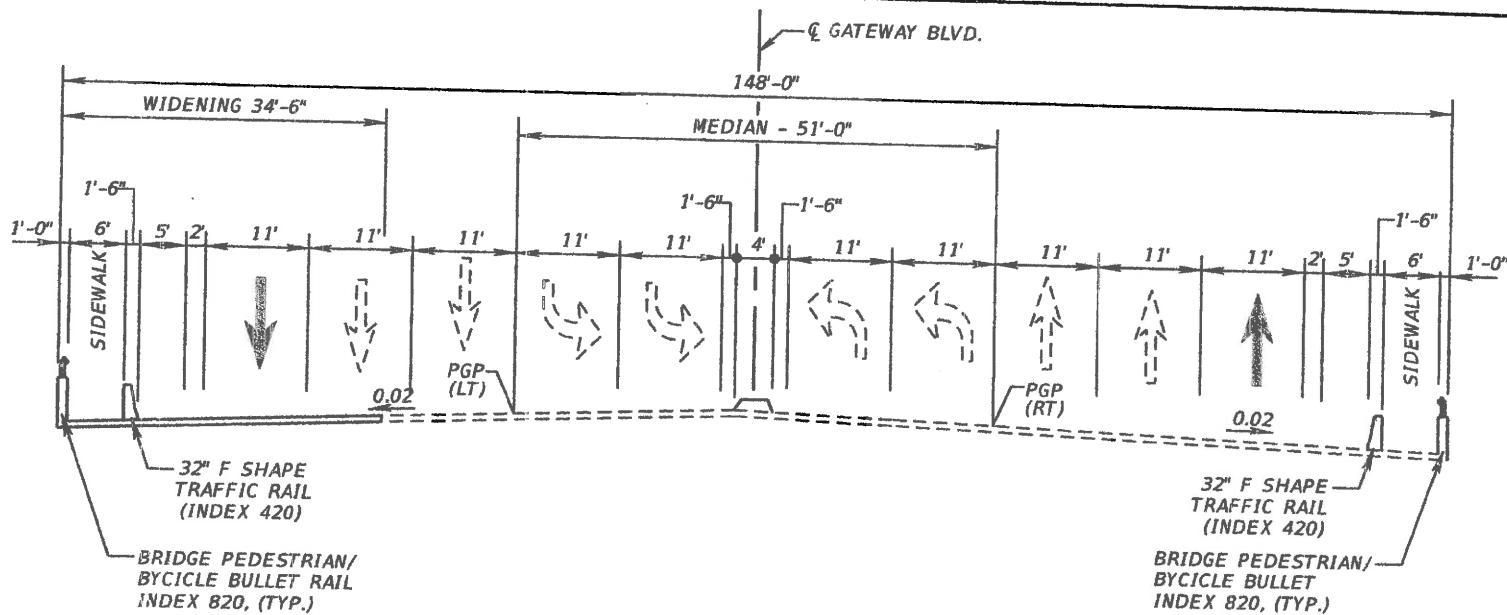
 STEVE BRAUN, P.E.
 FDOT District Design Engineer

Date _____

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220 ROAD DESIGNATION SR 9/I-95 LIMITS/MILEPOST SR 9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION SR 9/I-95 @ GATEWAY BOULEVARD INTERCHANGE

PROPOSED STRUCTURE TYPICAL SECTION



TYPICAL SECTION D-D
GATEWAY BLVD.
OVER I-95

FDOT CONCURRENCE
<div style="display: flex; justify-content: space-between;"> RAMON A. OTERO, P.E. _____ </div> <div style="display: flex; justify-content: space-between;"> FDOT District Structures Design Engineer Date </div>
FHWA CONCURRENCE
<div style="display: flex; justify-content: space-between;"> MARK E. CLASGENS, P.E. _____ </div> <div style="display: flex; justify-content: space-between;"> FHWA Transportation Engineer Date </div>

APPROVED BY: ANTONIO M. GARCIA, P.E.

 ANTONIO M. GARCIA, P.E. Date 8 June 2017
 Signature

FDOT CONCURRENCE

 STEVE BRAUN, P.E. Date
 FDOT District Design Engineer

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 COUNTY (SECTION) 93220000
 PROJECT DESCRIPTION SR 9 (I-95) AT GATEWAY BOULEVARD INTERCHANGE (EAST OF I-95)

PROJECT CONTROLS

<u>FUNCTIONAL CLASSIFICATION</u>	Yes	No	
<input type="checkbox"/> RURAL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NATIONAL HIGHWAY SYSTEM
<input checked="" type="checkbox"/> URBAN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	STRATEGIC INTERMODAL SYSTEM
<input type="checkbox"/> FREEWAY/EXPWY.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	STATE HIGHWAY SYSTEM
<input type="checkbox"/> PRINCIPAL ART.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OFF STATE HIGHWAY SYSTEM
<input type="checkbox"/> MINOR ART.	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> LOCAL			

<u>ACCESS CLASSIFICATION</u>	<u>TRAFFIC</u>		
<input type="checkbox"/> 1 - FREEWAY	YEAR	AADT	
<input type="checkbox"/> 2 - RESTRICTIVE w/Service Roads	CURRENT	2015	29,000
<input checked="" type="checkbox"/> 3 - RESTRICTIVE w/660 ft. Connection Spacing	OPENING	2020	30,000
<input type="checkbox"/> 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing	DESIGN	2040	35,000
<input type="checkbox"/> 5 - RESTRICTIVE w/440 ft. Connection Spacing	<u>DISTRIBUTION</u>		
<input type="checkbox"/> 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing	DESIGN SPEED	40 MPH	K 9.0 %
<input type="checkbox"/> 7 - BOTH MEDIAN TYPES	POSTED SPEED	30 MPH	D 60.3 %
			T 24 4.4 %

<u>CRITERIA</u>	
<input type="checkbox"/> NEW CONSTRUCTION / RECONSTRUCTION	
<input type="checkbox"/> RRR INTERSTATE / FREEWAY	
<input type="checkbox"/> RRR NON-INTERSTATE / FREEWAY	
<input type="checkbox"/> TDLC / NEW CONSTRUCTION / RECONSTRUCTION	DATE
<input type="checkbox"/> TDLC / RRR	
<input checked="" type="checkbox"/> MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)	DATE

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:
 DESIGN VARIATIONS:
 1. BORDER WIDTH

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:
 N/A

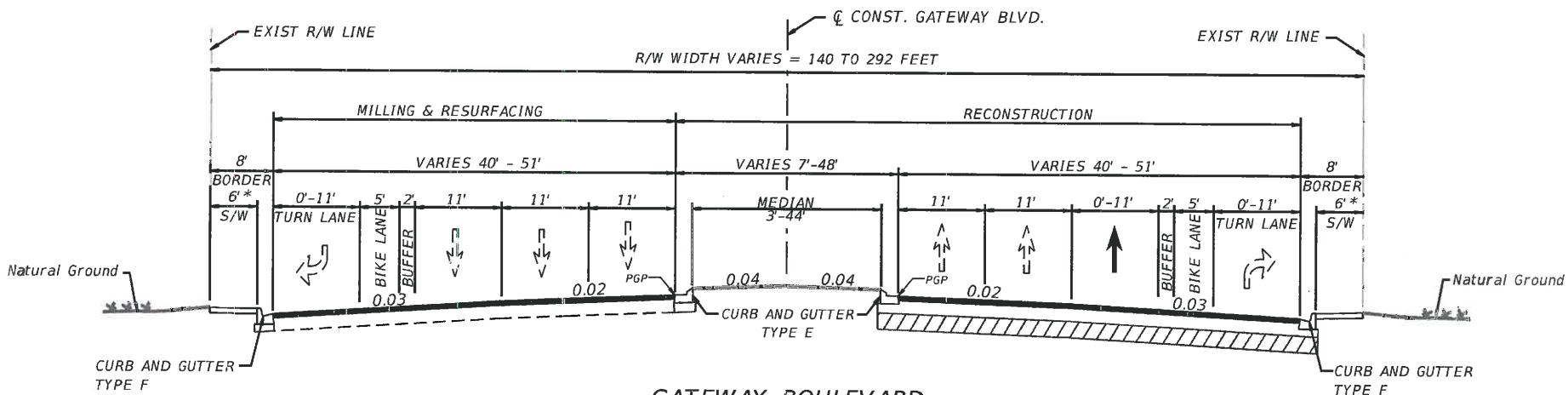
- LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:
- CITY OF BOYNTON BEACH WATER & SEWER
 - FLORIDA POWER & LIGHT (FPL)
 - FLORIDA PUBLIC UTILITIES
 - HOTWIRE COMMUNICATIONS
 - FPU GAS
 - PALM BEACH COUNTY TRAFFIC OPERATIONS
 - AT&T DISTRIBUTION
 - COMCAST
 - FPL DISTRIBUTION
 - FPL PBC

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



*Barrier walls will be required at the back of sidewalk from Sta. 116+62.42 to Sta. 121+20 LT and from Sta. 116+62.42 to Sta. 121+50 RT.

APPROVED BY:

STATE OF FLORIDA

Cassandra Pitts, P.E.
 License No. 11405
 Engineer

6.12.17

Date

FDOT CONCURRENCE

Steve C. Braun, P.E.
 FDOT District Design Engineer

Date

CITY OF BOYNTON BEACH

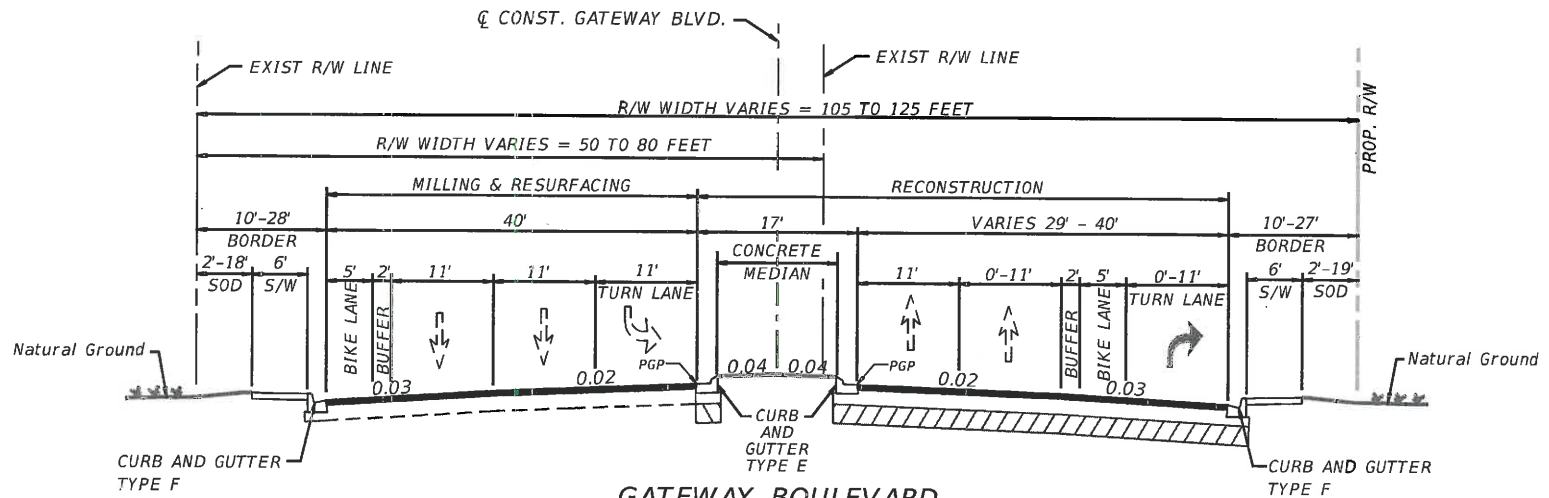
Jeff R. Livergood, P.E.
 Director of Public Works and Engineering

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



GATEWAY BOULEVARD
(EAST OF I-95)
FROM STA. 124+51.92 TO STA. 135+52.38

DESIGN SPEED = 40 MPH

APPROVED BY: Cassandra Piché, P.E. License No.: 71405 Engineer of Record	FDOT CONCURRENCE Steve C. Braun, P.E. FDOT District Design Engineer	CITY OF BOYNTON BEACH Jeff R. Livergood, P.E. Director of Public Works and Engineering
6.12.17 Date	 Date	 Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 COUNTY (SECTION) 93220000
 PROJECT DESCRIPTION SR 9 (I-95) AT GATEWAY BOULEVARD INTERCHANGE RAMP

PROJECT CONTROLS

<u>FUNCTIONAL CLASSIFICATION</u>		<u>HIGHWAY SYSTEM</u>
() RURAL		Yes No
(X) URBAN		(X) () NATIONAL HIGHWAY SYSTEM
(X) FREEWAY/EXPWY.	() MAJOR COLL.	(X) () STRATEGIC INTERMODAL SYSTEM
() PRINCIPAL ART.	() MINOR COLL.	(X) () STATE HIGHWAY SYSTEM
() MINOR ART.	() LOCAL	(X) OFF STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

SEE ADDITIONAL SHEET

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RRR INTERSTATE / FREEWAY
- () RRR NON-INTERSTATE / FREEWAY
- () TDLC / NEW CONSTRUCTION / RECONSTRUCTION
- () TDLC / RRR
- () MANUAL OF UNIFORM MINIMUM STANDARDS
(FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

DESIGN SPEED APPROVALS

DISTRICT DESIGN ENGINEER _____ DATE _____

DISTRICT TRAFFIC OPERATIONS ENGINEER _____ DATE _____

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

- DESIGN VARIATIONS:
 1. BORDER WIDTH

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

WIDENING OF BRIDGE 930433 - GATEWAY BLVD. OVER SR 9 (I-95)
 WIDENING OF BRIDGE 930434 - GATEWAY BLVD. OVER CSX RR
 MAST ARM TRAFFIC SIGNALS AT EXIT AND ENTRANCE RAMP.
 WIDENING OF NB I-95 EXIT RAMP STRUCTURE

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

- CITY OF BOYNTON BEACH WATER & SEWER
- FLORIDA POWER & LIGHT (FPL)
- FLORIDA PUBLIC UTILITIES
- HOTWIRE COMMUNICATIONS
- FPU GAS
- PALM BEACH COUNTY TRAFFIC OPERATIONS
- AT&T DISTRIBUTION
- COMCAST
- FPL DISTRIBUTION
- FPL PBC

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

UPCOMING PROJECT ON SR 9 (I-95) - POTENTIAL ADDITION OF EXPRESS LANES
 EXISTING SFRC ADJACENT TO SB I-95 MAINLINE

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01

COUNTY (SECTION) _____

93220000

PROJECT DESCRIPTION SR 9 (I-95) AT GATEWAY BOULEVARD INTERCHANGE

<u>TRAFFIC</u>		<u>TRAFFIC</u>	
I-95 NORTHBOUND ON RAMP		I-95 SOUTHBOUND ON RAMP	
YEAR	AADT	YEAR	AADT
CURRENT	<u>2015</u> <u>3,400</u>	CURRENT	<u>2015</u> <u>14,000</u>
OPENING	<u>2020</u> <u>3,500</u>	OPENING	<u>2020</u> <u>14,000</u>
DESIGN	<u>2040</u> <u>4,000</u>	DESIGN	<u>2040</u> <u>16,000</u>
<u>DISTRIBUTION</u>			
DESIGN SPEED	<u>30/50</u>	DESIGN SPEED	<u>30/50</u>
POSTED SPEED	<u>30/50</u>	POSTED SPEED	<u>30/50</u>
K	8.0%	K	8.0%
D	59.0%	D	59.0%
T 24	7.0%	T 24	7.0%

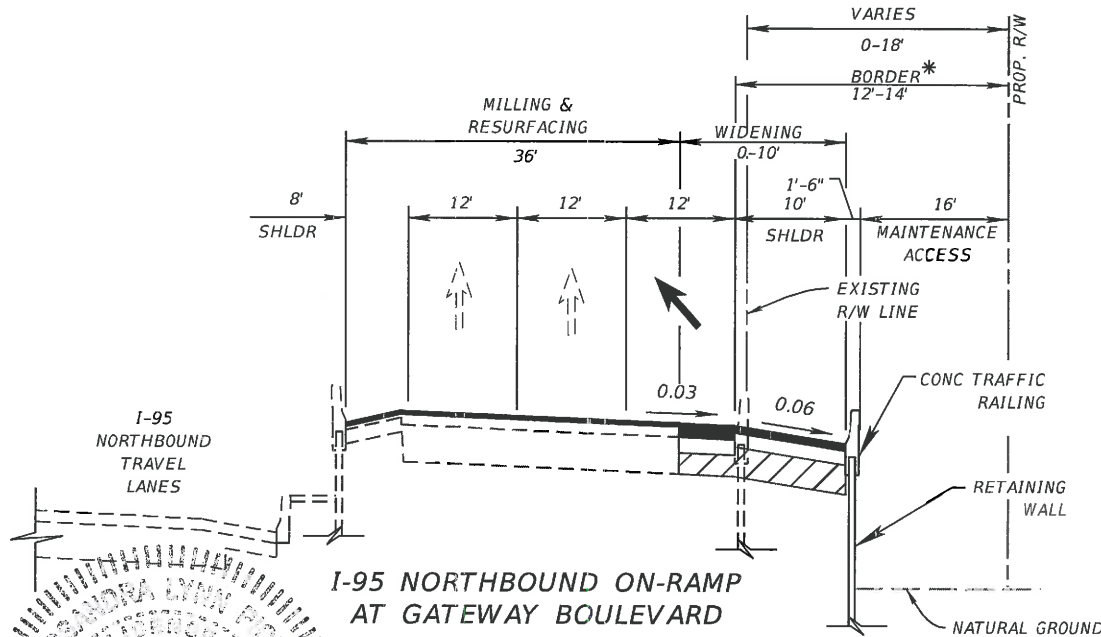
<u>TRAFFIC</u>		<u>TRAFFIC</u>	
I-95 SOUTHBOUND OFF RAMP		I-95 NORTHBOUND OFF RAMP	
YEAR	AADT	YEAR	AADT
CURRENT	<u>2015</u> <u>6,600</u>	CURRENT	<u>2015</u> <u>13,000</u>
OPENING	<u>2020</u> <u>6,800</u>	OPENING	<u>2020</u> <u>13,000</u>
DESIGN	<u>2040</u> <u>7,500</u>	DESIGN	<u>2040</u> <u>15,000</u>
<u>DISTRIBUTION</u>			
DESIGN SPEED	<u>30/50</u>	DESIGN SPEED	<u>30/50</u>
POSTED SPEED	<u>30/50</u>	POSTED SPEED	<u>30/50</u>
K	8.0%	K	9.0%
D	59.0%	D	59.0%
T 24	7.0%	T 24	7.0%

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PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



* REQUIRES BORDER WIDTH VARIATION

**I-95 NORTHBOUND ON-RAMP
AT GATEWAY BOULEVARD**

DESIGN SPEED = 30-50 MPH

APPROVED BY
Cassandra Piche
 Cassandra Piche, P.E.
 License No. 71405
 Engineer of Record
 Date 6.12.17

FDOT CONCURRENCE

Steve C. Braun, P.E.
 FDOT District Design Engineer

Date

FHWA CONCURRENCE

Mark E. Clasgens, P.E.
 FHWA Transportation Engineer

Date

FDOT CONCURRENCE

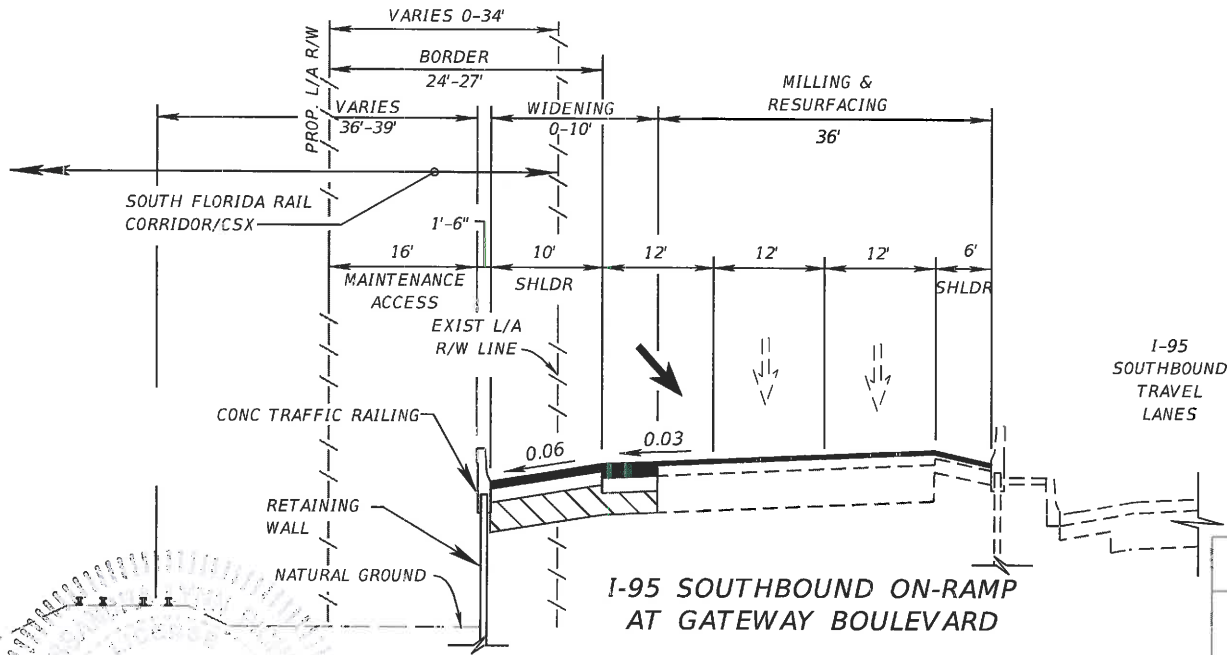
Scott Peterson, P.E.
 Project Development Engineer

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



**I-95 SOUTHBOUND ON-RAMP
 AT GATEWAY BOULEVARD**
DESIGN SPEED = 30-50 MPH

FHWA CONCURRENCE	
_____ Mark E. Clasgens, P.E. FHWA Transportation Engineer	_____ Date
FDOT CONCURRENCE	
_____ Steve C. Braun, P.E. FDOT District Design Engineer	_____ Date
FDOT CONCURRENCE	
_____ Scott Peterson, P.E. Project Development Engineer	_____ Date

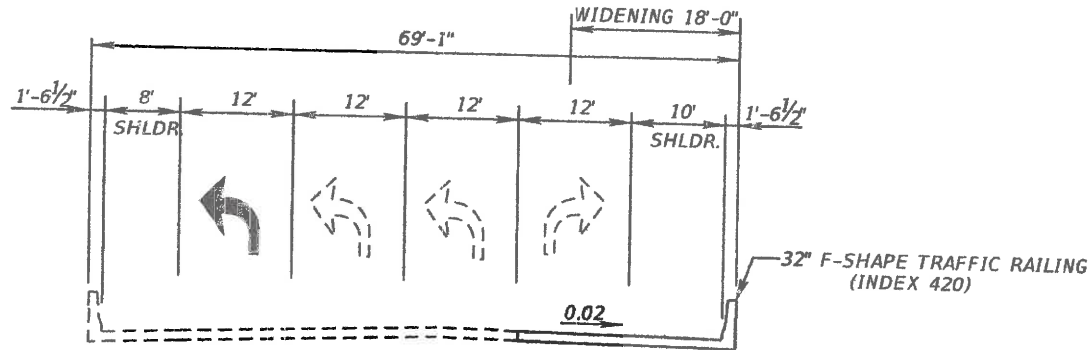
APPROVED BY: _____
Cassandra Piche 6.12.17

 Cassandra Piche, P.E.
 License No. 71405
 Engineer of Record

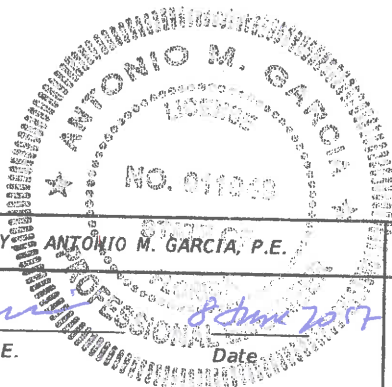
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220 ROAD DESIGNATION SR 9/I-95 LIMITS/MILEPOST SR 9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION SR 9/I-95 @ GATEWAY BOULEVARD INTERCHANGE

PROPOSED STRUCTURE TYPICAL SECTION



TYPICAL SECTION G-G
I-95 NB OFF RAMP AT
GATEWAY BLVD.



APPROVED BY ANTONIO M. GARCIA, P.E.

Antonio M. Garcia
 ANTONIO M. GARCIA, P.E.
 Signature

Date 8 June 2017

FDOT CONCURRENCE

Steve Braun
 STEVE BRAUN, P.E.
 FDOT District Design Engineer

Date

FDOT CONCURRENCE

Ramon A. Otero
 RAMON A. OTERO, P.E.
 FDOT District Structures Design Engineer

Date

FHWA CONCURRENCE

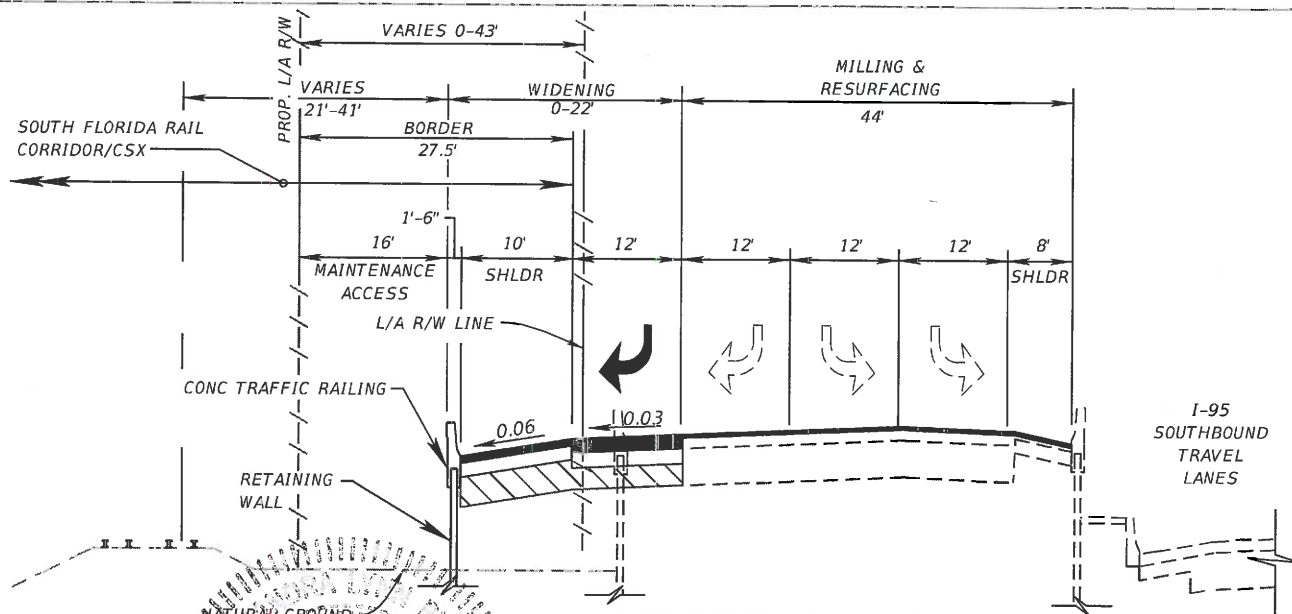
Mark E. Clagens
 MARK E. CLAGENS, P.E.
 FHWA Transportation Engineer

Date

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 231932-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME PALM BEACH
 SECTION NO. 93220000 ROAD DESIGNATION SR 9 (I-95) LIMITS/MILEPOST SR9 MP 16.289 TO MP 16.330
 PROJECT DESCRIPTION I-95 AT GATEWAY BOULEVARD INTERCHANGE PD&E STUDY

PROPOSED ROADWAY TYPICAL SECTION



**I-95 SOUTHBOUND OFF-RAMP
 AT GATEWAY BOULEVARD
 DESIGN SPEED = 30-50 MPH**

APPROVED BY: STATE OF

Cassandra Piché, P.E.
 License No.: 71405
 Engineer Of Record

FDOT CONCURRENCE

Steve C. Braun, P.E.
 FDOT District Design Engineer

Date

FHWA CONCURRENCE

Mark E. Clagens, P.E.
 FHWA Transportation Engineer

Date

FDOT CONCURRENCE

Scott Peterson, P.E.
 Project Development Engineer

Date

Appendix C

Public Hearing Transcript
(To be included following the Public
Hearing)

Appendix D

SHPO Concurrence Correspondence



Florida Department of Transportation

**RICK SCOTT
GOVERNOR**

3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

**MIKE DEW
SECRETARY**

July 14, 2017

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Ms. Ginny Jones, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Project Development and Environment (PD&E) Study
Boynton Beach Boulevard and Gateway Boulevard Interchanges along State Road (SR)
9/Interstate 95 (I-95)
Effects Finding for 8PB00177 and 8PB12917
Palm Beach County, Florida
Financial Management Nos.: 435804-1 and 231932-1

Dear Ms. Jones,

In March 2017, the Florida Department of Transportation (FDOT), District 4, submitted a report entitled *Cultural Resource Assessment Survey (CRAS) in Support of the Boynton Beach Boulevard (from West of Industrial Avenue to East of Seacrest Boulevard) and Gateway Boulevard (from West of High Ridge Road to East of Seacrest Boulevard) Interchange Improvements, Palm Beach County, Florida*. This survey was carried out by SEARCH on behalf of Arcadis, Inc. and the District. During the investigation, the project architectural historians documented 79 previously and newly recorded resources within the Area of Potential Effect (APE). Of the 79 recorded resources, two historic resources were recommended to remain eligible in the National Register of Historic Places (NRHP): the Robert E. & Margaret Stogdill House (8PB00177), located at 206 NW 6th Street, and a segment of the Seaboard Air Line Railroad (8PB12917). Resource 8PB00177 was previously recommended significant at the local level in 1996 by Research Atlantica, Inc.; however, the building was not evaluated by the Florida State Historic Preservation Officer (SHPO). The Seaboard Air Line Railroad (8PB12917) linear resource has previously been determined eligible for listing in the NRHP by the Florida SHPO.

*Section 106 Determination of Effects
Boynton Beach Blvd/Gateway Blvd @ I-95 PD&E
FM 435804.1/231932.1*

Based on the results of previous and the current surveys, this survey recommended Resource 8PB00177 and the portion of Resource 8PB12917 within the Boynton Beach Boulevard and Gateway Boulevard Interchanges APE as NRHP-eligible. As such, the report recommended the avoidance of Resources 8PB00177 and 8PB12917.

Upon reviewing the CRAS, the Division of Historical Resources (DHR) concurred with the eligibility determinations. However, the DHR requested that additional documentation be provided to consider and address any effects the project may have to Resources 8PB00177 and 8PB12917. This letter is intended to provide the requested information.

As illustrated in the attached roadway design exhibit for the Interstate 95 (I-95) and Boynton Beach Boulevard Interchange (**Figure 1**), improvements proposed in the vicinity of Resources 8PB00177 and 8PB12917 are limited to the expansion of existing turning lanes and ramps and the expansion of existing median areas. These improvements pose no significant alterations to the surrounding landscape or setting, as they consist of features that are similar in regards to design, materials, and function as those that currently exist. In addition, because the proposed improvements are confined to the existing right-of-way, the project will not encroach upon Resources 8PB00177 and 8PB12917 and will not compromise or diminish those features and characteristics that qualify Resources 8PB00177 and 8PB12917 as eligible for inclusion in the NRHP. Based on these observations, it is the opinion of the District that the project will have no adverse effect on Resources 8PB00177 and 8PB12917.

As illustrated in the attached roadway design exhibit for the I-95 and Gateway Beach Boulevard Interchange (**Figure 2**), improvements proposed in the vicinity of Resource 8PB12917 are limited to expansion of existing turning lanes, ramps, roadway, and bridges, and the expansion of existing median areas. These improvements pose no significant alterations to the surrounding landscape or setting, as they consist of features that are similar in regards to design, materials, and function as those that currently exist. In addition, because the project undertakings in the vicinity are confined to the existing right-of-way, the project will not encroach upon Resource 8PB12917, nor will it impede upon existing railway traffic and will not compromise or diminish those features and characteristics that qualify Resource 8PB12917 as eligible for inclusion in the NRHP. Based on these observations, it is the opinion of the District that the project will have no adverse effect on 8PB12917.

Section 106 Determination of Effects
Boynton Beach Blvd/Gateway Blvd @ I-95 PD&E
FM 435804.1/231932.1

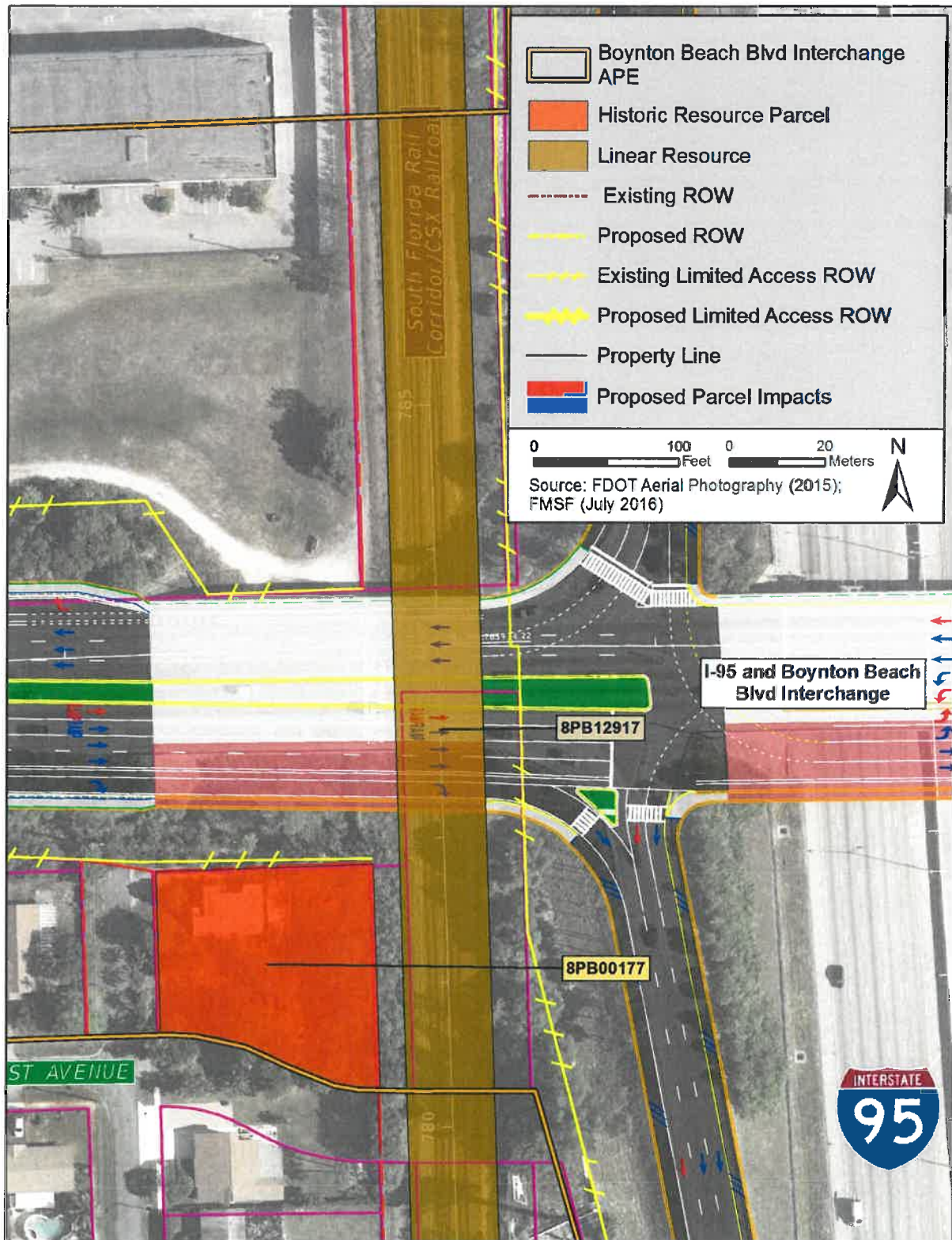


Figure 1. Proposed improvements in the vicinity of 8PB00177 and 8PB12917.

Section 106 Determination of Effects
 Boynton Beach Blvd/Gateway Blvd @ I-95 PD&E
 FM 435804.1/231932.1

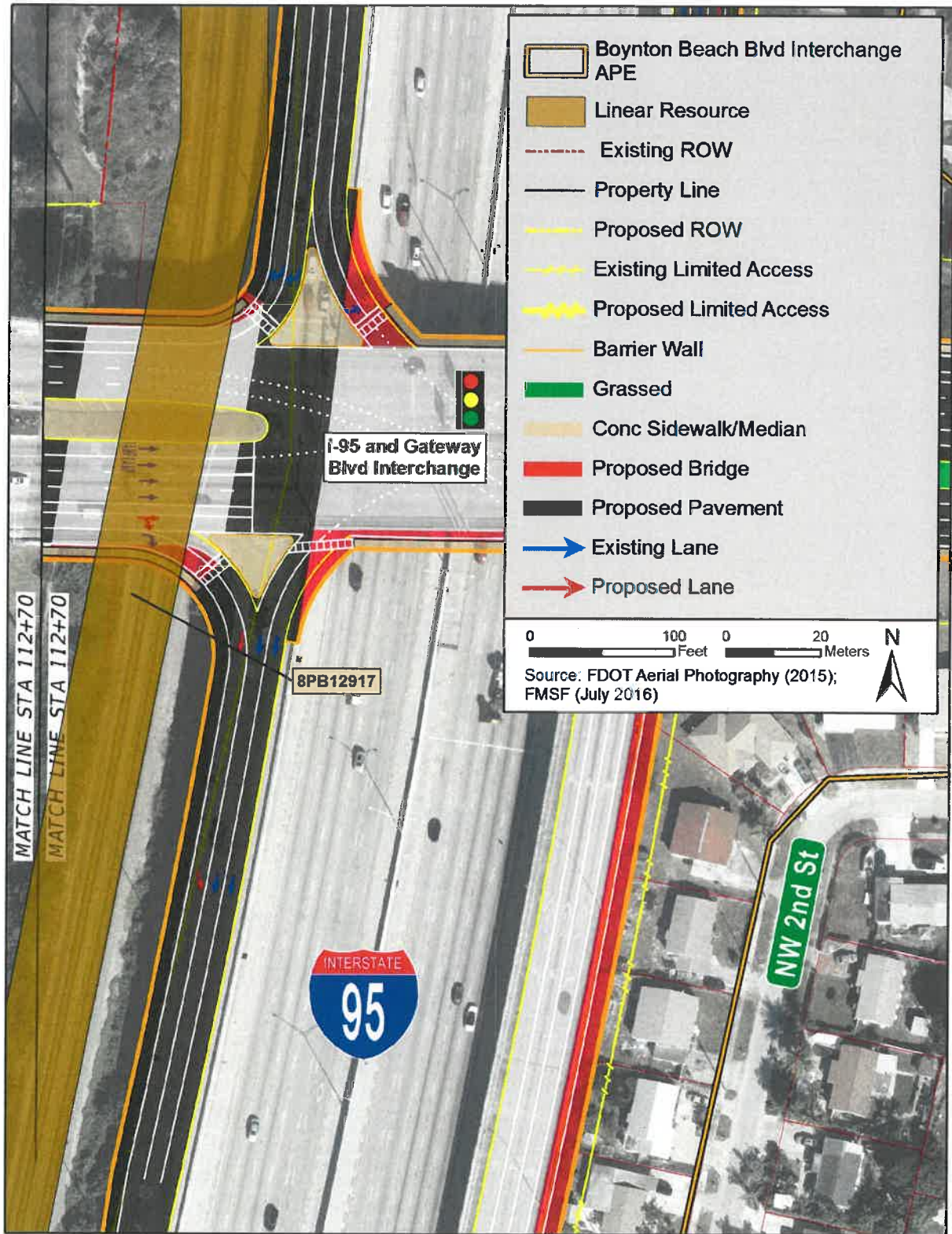


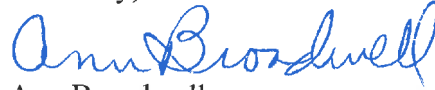
Figure 2. Proposed improvements in the vicinity of 8PB12917.

*Section 106 Determination of Effects
Boynton Beach Blvd/Gateway Blvd @ I-95 PD&E
FM 435804.1/231932.1*

I respectfully request your concurrence with the finding of no adverse effect.

If you have any questions or need further assistance, please contact Lynn Kelley, District Cultural Resources Coordinator, at 954-777-4334.

Sincerely,



Ann Broadwell
District Environmental Administrator

cc: file

The Florida State Historic Preservation Officer:

___ has reviewed the provided information and ___ concurs/ ___ does not concur with the findings and recommendations contained in this cover letter.

___ requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources.

/s/

For: Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

Date

DHR No.



Florida Department of Transportation

**RICK SCOTT
GOVERNOR**

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

**RACHEL D. CONE
INTERIM SECRETARY**

February 23, 2017

2017 FEB 24 10 12 59

Dr. Timothy Parsons, Director and
State Historic Preservation Officer
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32301

Subject: Request for Review
Cultural Resource Assessment Survey
Project Development and Environment (PD&E) Study
Boynton Beach Boulevard and Gateway Boulevard Interchanges along State Road (SR)
9/Interstate 95 (I-95)
Palm Beach County, Florida
Financial Management Nos.: 435804-1 and 231932-1

Attention: Ginny Jones

Dear Ms. Jones;

Enclosed please find one copy of the report titled *Cultural Resource Assessment Survey in Support of The Boynton Beach Boulevard (From West of Industrial Avenue to East of Seacrest Boulevard) and Gateway Boulevard (From West of High Ridge Road to East of Seacrest Boulevard) Interchange Improvements, Palm Beach County, Florida*. This report presents the findings of a CRAS conducted in support of the proposed improvements to the Boynton Beach Boulevard and Gateway Boulevard Interchanges along State Road (SR) 9/Interstate 95 (I-95) in Palm Beach County, Florida. The Florida Department of Transportation (FDOT), District 4, is proposing improvements to these two interchanges in order to improve the operational capacity and overall traffic operations. In accordance with the Section 106 Programmatic Agreement which was executed on March 15, 2016, this report is not being reviewed by FHWA.

The project Area of Potential Effect (APE) was defined to include the existing and proposed Boynton Beach Boulevard, Gateway Boulevard, and SR 9 right-of-way and was extended to the back or side property lines of parcels adjacent to the right-of-way for a distance of no more than 100 meters (330 feet) from the maximum right-of-way.

This CRAS was conducted in accordance with the requirements set forth in the National Historic Preservation Act of 1966, as amended, and Chapter 267, Florida Statutes (F.S.). The investigations were carried out in conformity with Part 2, Chapter 12 (Archaeological and Historical Resources) of FDOT's Project Development and Environment (PD&E) Manual, FDOT's Cultural Resources Manual, and the standards contained in the Florida Division of Historical Resources (FDHR) Cultural Resource Management Standards and Operations Manual (FDHR 2003). In addition, this survey meets the specifications set forth in Chapter 1A-46, Florida Administrative Code.

The archaeological reconnaissance survey included pedestrian survey within the project right-of-way to determine if the excavation of subsurface tests would be possible. Due to extensive urban development and the presence of buried electrical utilities within the Boynton Beach Boulevard and Gateway Boulevard Interchanges, no shovel testing was possible within the existing right-of-way. It is the opinion of the District that, based on the heavily disturbed nature of the soils, there is no potential for intact archaeological sites to be located within the right-of-way. No archaeological sites or occurrences have been identified and no further archaeological survey is recommended.

The architectural survey resulted in the identification and evaluation of 79 previously and newly recorded resources within the Boynton Beach Boulevard and Gateway Boulevard Interchanges APE. The Seaboard Air Line Railroad (8PB12917) linear resource group has previously been determined eligible for listing in the National Register of Historic Places (NRHP) by the Florida State Historic Preservation Officer (SHPO). The portion of the railroad within the Boynton Beach Boulevard and Gateway Boulevard Interchanges APE is recommended eligible as a contributing segment to the linear resource group. Resource 8PB00177 was previously recommended significant at the local level in 1996 by Research Atlantica, Inc.; however, the building was not evaluated by the SHPO. Based on the results of previous and the current survey, the District recommends Resource 8PB00177 as NRHP-eligible. One previously recorded resource, 8PB00493, is recommended ineligible by the District. The newly recorded resources include one resource group (8PB16399) and 75 buildings. No existing or potential historic districts were identified.

The District recommends avoidance of Resources 8PB00177 and 8PB12917, if possible. If avoidance is not possible, an effects evaluation will be prepared to assess project-related effects, if any, to these two NRHP-eligible resources.

* see SHPO note on page 3.

If there are any questions, please feel free to contact me at (954) 777-4324 or Lynn Kelley at (954) 777-4334.

Sincerely,



Ann Broadwell
Environmental Administrator
FDOT - District 4

Enclosures
cc. file

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Report complete and sufficient and concurs with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number 2015-2320.

SHPO Comments:

For Timothy A. Parsons Deputy SHPO
Timothy A. Parsons
State Historic Preservation Officer
Florida Division of Historical Resources

3/31/2017
Date

* SHPO/DHR wishes to postpone an effects finding until a case study can be completed.
SHPO/DHR concurs with the eligibility determinations in this letter & document.