

DRAFT

PRELIMINARY ENGINEERING REPORT

I-95 from I-295 to SR 202

Duval County

FPID 435577-1



October 18, 2021

Prepared by:

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Florida Department of Transportation, District 2

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 FHWA and FDOT.

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Florida Department of Transportation

District 2

I-95 Widening

Limits of Project: I-295 to SR 202/J. Turner Butler Blvd. (JTB)

Duval County, Florida

Financial Management Number: 435577-1

ETDM Number: 14278

Date:

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1 PROJECT SUMMARY

1.1 Project Description

Interstate 95 (I-95) is a north-south freeway beginning in Miami and extending to the U.S.-Canada border. I-95 connects many urban areas on the East Coast, such as South Florida, Jacksonville, Richmond, Washington, Baltimore, Philadelphia, New York, and Boston. In Florida, I-95 is a cornerstone of the Strategic Intermodal System (SIS), a network of highways, railways, waterways, and transportation hubs that serve much of Florida's passenger and freight traffic. Within the Northeast Florida metropolitan area, I-95 is a facility that provides access through the city of Jacksonville. Specifically, I-95 provides a major north-south traffic movement connecting the urban areas south of Jacksonville with Downtown and I-10, and also serves intercity travel.

This Project Development and Environment (PD&E) Study analyzes approximately 5.6 miles of I-95 in Duval County from just north of the I-95/I-295 interchange to just south of the interchange with SR 202/J. Turner Butler Boulevard (JTB). The area of study includes three existing interchanges at US 1/Philips Highway (Hwy.), SR 115/Southside Boulevard (Blvd.), and SR 152/Baymeadows Road (Rd.). **Figure 1-1** shows the location of the project.

The existing typical section varies throughout the corridor, but largely features a 40-foot grassed median, concrete pavement with three 12' general use lanes in each direction, and 10' shoulders on either side. The typical section will be enlarged by one lane in each direction with the proposed action, with auxiliary lanes in select locations.

Interchange improvements at the three component interchanges stated above are also planned with the proposed action. Furthermore, intersections will be enhanced along SR 115/Southside Blvd. and SR 152/Baymeadows Rd. Ponds will incidentally be required for stormwater management. The total construction cost of the project is estimated at \$133 million.



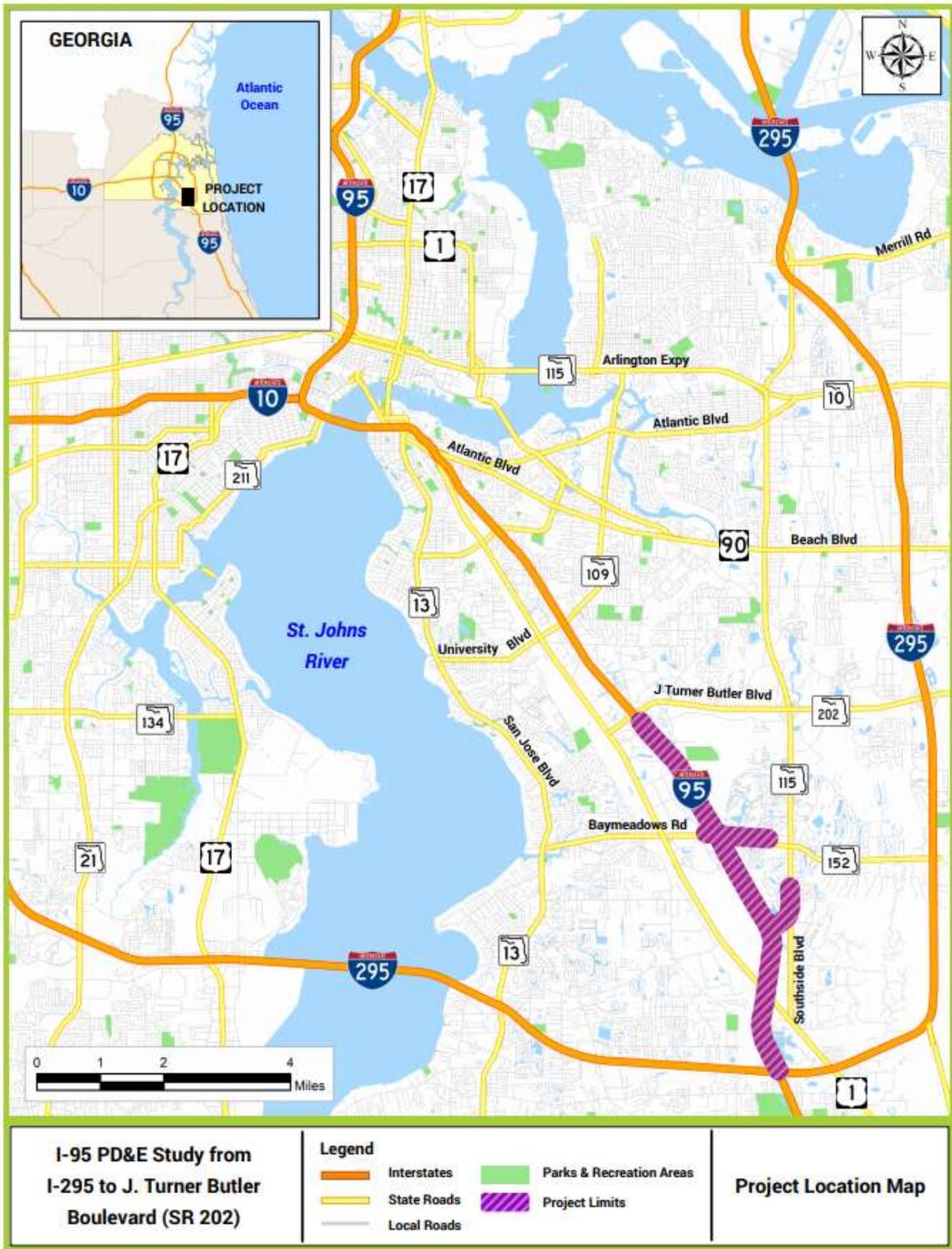


FIGURE 1-1 – PROJECT MAP



1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to expand operational capacity, improve traffic operations, accommodate future growth and development, and enhance safety.

1.2.2 Need

Roadway Capacity

This segment of I-95 between I-295 and SR 202/JTB currently experiences peak period congestion due to demand that exceeds capacity. According to the FDOT District 2 Level of Service (LOS) Report, I-95 operates at LOS D and LOS E.

By 2045, traffic on this segment of I-95 is projected to grow by nearly 20 percent, comparing 2019 data from Florida Traffic Online to projections from the Systems Interchange Modification Report (SIMR). Congestion is expected to build up such that it is present outside of the typical morning and afternoon peaks. The entire section of I-95 in these study limits is projected to operate at LOS F by 2045. Providing for an acceptable Level of Service (LOS D or better) will require adding lanes in each direction.

Modal Interrelationships

Outside of the project limits, I-95 connects with multiple SIS facilities, including Interstates 10 and 295. Besides being a means of access to Downtown Jacksonville, I-95 is a key element in linking the major ports, airports, and railways that handle passenger and freight traffic throughout the Northeast Florida region.

Buses would benefit from enhancements to I-95 and associated thoroughfares. Specifically, Jacksonville Transportation Authority (JTA) operates the St. Johns Express Select service on I-95, while Routes 23, 27, 28, and 50 serve Philips Hwy., Southside Blvd., and Baymeadows Rd.

Because I-95 is a limited access highway, bicycle and pedestrian facilities are not planned along the corridor. However, pedestrian upgrades are still needed on adjacent roadways in order to create new links at intersections and heighten visibility of crosswalks. No pedestrian routes will be deleted as a result of this project.

Safety

Since 2015, crashes have increased along the project corridor, as one can observe in **Table 1-1**. Rear-end crashes make up over half (53 percent) of all crashes. In addition, 45 percent of crashes occur during the morning and afternoon peak travel periods. It is anticipated that this upward trend will continue without any corrective action.



TABLE 1-1 – CRASH DATA (2013-2017)

YEAR	NUMBER OF CRASHES
2013	173
2014	133
2015	133
2016	151
2017	173
Total	763

Source: FDOT SSOGIS

The crash rate on I-95 between I-295 and SR 202 is calculated to be 0.765, well under the statewide average of 0.973 for urban interstates. However, the segment between US 1 and SR 115 and the segment between SR 152 and SR 202 are somewhat crash-prone. For these, there was at least one year where the observed crash rate was above the statewide average.

Social/Economic Demand

I-95 serves major north-south traffic movements through the Jacksonville urban area, connecting suburban areas south of Jacksonville to Downtown Jacksonville and office, commercial, and industrial areas situated along the I-95 corridor. Traffic demand on the interstate is directly related to population and employment changes. Duval County’s population is expected to increase by 29 percent by the year 2045, when compared to 2015. Employment growth is anticipated to be 43 percent over the same time period.

With population increasing, it is expected that traffic volumes will rise, as well. Thus, a long-term alternative is needed. Without any improvements, residents and workers will suffer through worsening congestion, leading to lost productivity and degradation in air quality, among other consequences.

Transportation Demand

I-95 is a designated highway on FDOT's SIS. It is vital that this heavily traveled roadway asset be upgraded to efficiently move vehicles. Besides the influences of demographic trends and work patterns, other factors will contribute to the previously-stated 20 percent traffic growth rate in the coming decades, such as new commercial developments that will generate added trips. A strong tourism sector in the state (131 million visitors in 2019 per Visit Florida) also evidences sustained demand on I-95. Furthermore, both I-95 and US 1 are designated evacuation routes.

The expansion of I-95 between I-295 and SR 202/JTB is included in FDOT’s Five-Year Work Program, dated July 2020 (FPID 435577-1). The project is also part of North Florida Transportation Planning Organization’s (North Florida TPO) FY 2020/21 – 2024/25 Transportation Improvement



Program (TIP), adopted in June 2020, and North Florida TPO's 2045 Long Range Transportation Plan (LRTP), dated February 2020.

1.3 Implementation Measures and Commitments

The below implementation measures and commitments are taken from the Natural Resources Evaluation (NRE) completed in November 2020 and the Noise Study Report (NSR) completed in February 2021.

Implementation Measures

- FDOT will conduct additional surveys for protected plants and wildlife within the project area as part of project permitting
- If state- or federally-listed plants or wildlife are identified within the project area, FDOT will coordinate with the appropriate agency
- Suitable habitat for gopher tortoises within the project study area will be formally surveyed within 90 days of construction, and any affected tortoises will be relocated in accordance with Florida Fish and Wildlife Conservation Commission (FWC) regulations
- FDOT will inspect all bridges and culverts within the project area for the presence of bats prior to construction

Commitments

- FDOT will implement the U.S. Fish and Wildlife Service (FWS) Standard Protection Measures for the Eastern indigo snake during project construction
- If bats are present, FDOT will implement SP 0070104-11 (Bats in Bridges) during project construction
- FDOT is committed to reasonable and feasible noise abatement measures. Noise barriers at Canopy at Belfort Park Apartments, Lakeside and Bay Club Apartment Homes, and Park Potenza Apartment Homes, identified in the NSR, are recommended for further consideration in project design (see **Appendix A** for approximate locations), subject to these conditions:
 - Final recommendations on the construction of abatement measures are determined during the project's design phase and through the public involvement process
 - Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement
 - Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion
 - Community input supporting types, heights, and locations of the noise barrier(s) is provided to the FDOT District Office
 - Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved
- If, during the project's design phase, any of the contingency conditions listed above cause abatement to no longer be considered reasonable or feasible for a given location(s), such



determination(s) will be made prior to requesting approval for construction advertisement. Commitments regarding the exact abatement measure locations, heights, and type (or approved alternatives) will be made during project re-evaluation.

1.4 Description of Preferred Alternative

I-95 will be widened by one lane in each direction between I-295 and SR 202/JTB. One auxiliary lane will also be added in both the northbound and southbound directions between SR 152/Baymeadows Rd. and SR 202/JTB.

Ramp expansions will be seen at all interchanges within the project limits. Exiting to I-295, southbound traffic will have a third lane to utilize for this maneuver.

On the arterials, SR 152/Baymeadows Rd. will be adjusted most significantly, creating a diverging diamond interchange (DDI) that moves traffic more efficiently. Changes will also be made to traffic movements at intersections between Baymeadows Way and Baymeadows Circle (Cir.) West. Improvements to SR 115/Southside Blvd. will address the current weaving issue for drivers originating from I-95 and destined for Belle Rive Blvd.

In order to control runoff arising from new paved surfaces, seven ponds will be excavated.

This conceptual design for both the widening of I-95 and changes along the arterial routes, including pond locations, can be seen in **Appendix A**.

2 EXISTING CONDITIONS

2.1 Roadway Conditions

This segment of I-95 is comprised of 9-inch-thick concrete (rigid) pavement, with the most recent replacement being completed in December 2015 (FPID 213217-5). Ratings (out of 10) from the 2021 Pavement Condition Survey range from 7.6 to 8.6 for cracking. For concrete pavement, these small openings usually arise due to temperature-induced expansion and contraction. The ratings are between 8.0 and 8.3 for ride, which refers to the degree of smoothness that road users experience. Rutting, which is depression of the driving surface along the normal tire paths, does not appear to be an issue, as expected for a rigid roadway. Based on this assessment, the existing pavement is serviceable and will not be replaced or rehabilitated as part of the upcoming widening project.

2.2 Structure Conditions

Table 2-1 below gives data regarding the existing bridges on I-95.



TABLE 2-1 – EXISTING STRUCTURES

BRIDGE #	DESCRIPTION	YEAR BUILT	LENGTH (FT)	# OF SPANS	SUPERSTRUCTURE	MIN. VERT. CLEARANCE (FT)	CONDITION	MAINTENANCE NEEDED
720215	I-95 SB over Florida East Coast (FEC) Railway	1966 (widened in 1997)	214	4	Concrete girders	23.66	N/A	Clean/reseal joints, regrout slope protection, repair cracked/settled portion of south abutment
720327	I-95 NB over FEC Railway	1966 (widened in 1997)	214	4	Concrete girders	22.60	N/A	Repair joint seal at north approach slab, regrout slope protection
720216	I-95 SB over US 1/Philips Hwy.	1966 (widened in 1997)	263	4	Concrete girders	15.78	N/A	Repair joint seal at north approach slab, reseal joints in south slope protection
720328	I-95 NB over US 1/Philips Hwy.	1966 (widened in 1997)	263	4	Concrete girders	17.64	N/A	Reseal joints
720634	SR 115/Southside Blvd. over I-95	1997	444	3	Steel girders	18.15	N/A	Reseal joint at north approach slab
720219	I-95 SB over SR 152/Baymeadows Rd.	1966 (widened in 1997)	209	4	Concrete girders	16.12	Functionally Obsolete	N/A
720329	I-95 NB over SR 152/Baymeadows Rd.	1966 (widened in 1997)	209	4	Concrete girders	15.32	Functionally Obsolete	N/A



2.3 Typical Sections

2.3.1 I-95 from I-295 to US 1/Philips Hwy.

I-95 is largely characterized by five lanes in each direction between the merge from I-295 eastbound and the loop exit ramp from I-95 northbound to US 1 northbound. Travel lanes and paved shoulders are 12' wide and 10' wide, respectively. The median is 40' wide. A typical section is provided in **Figure 2-1**.

2.3.2 I-95 from US 1/Philips Hwy. to SR 115/Southside Blvd.

Four travel lanes are provided in each direction of I-95 between the loop ramp exiting I-95 northbound at US 1 and the exit ramp to Southside Blvd. Travel lanes measure 12' in width, while paved shoulders measure 10' in width. A 40' median lies in the middle. A typical section is provided in **Figure 2-2**.

2.3.3 I-95 from SR 115/Southside Blvd. to SR 152/Baymeadows Rd.

North of SR 115, I-95 is largely a six-lane facility with 12' travel lanes and 10' paved shoulders. The median separating northbound and southbound traffic is 40' in width. A typical section is provided in **Figure 2-3**.

2.3.4 I-95 from SR 152/Baymeadows Rd. to SR 202/JTB

Similar to the section to the south, I-95 north of SR 152 is a six-lane facility with 12' travel lanes and 10' paved shoulders. The median width ranges from 40' to 112'. A typical section is provided in **Figure 2-4**.



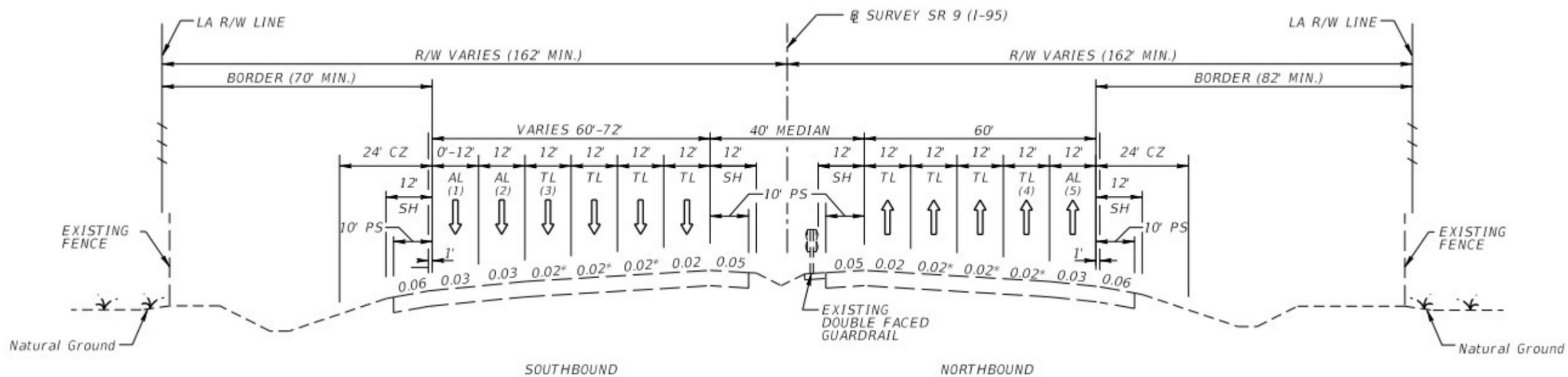


FIGURE 2-1 – I-295 TO US 1 EXISTING TYPICAL SECTION

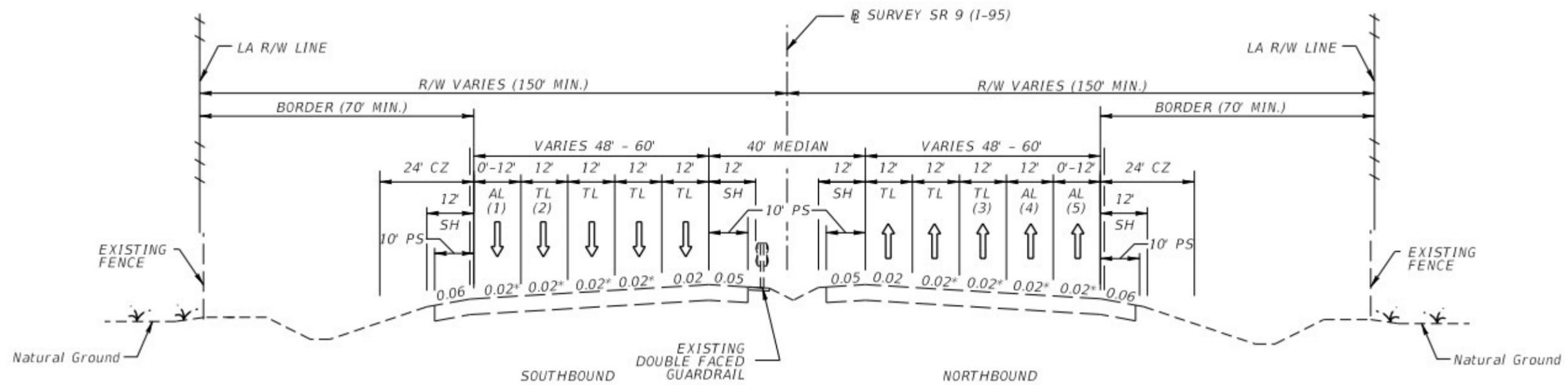


FIGURE 2-2 – US 1 TO SR 115 EXISTING TYPICAL SECTION

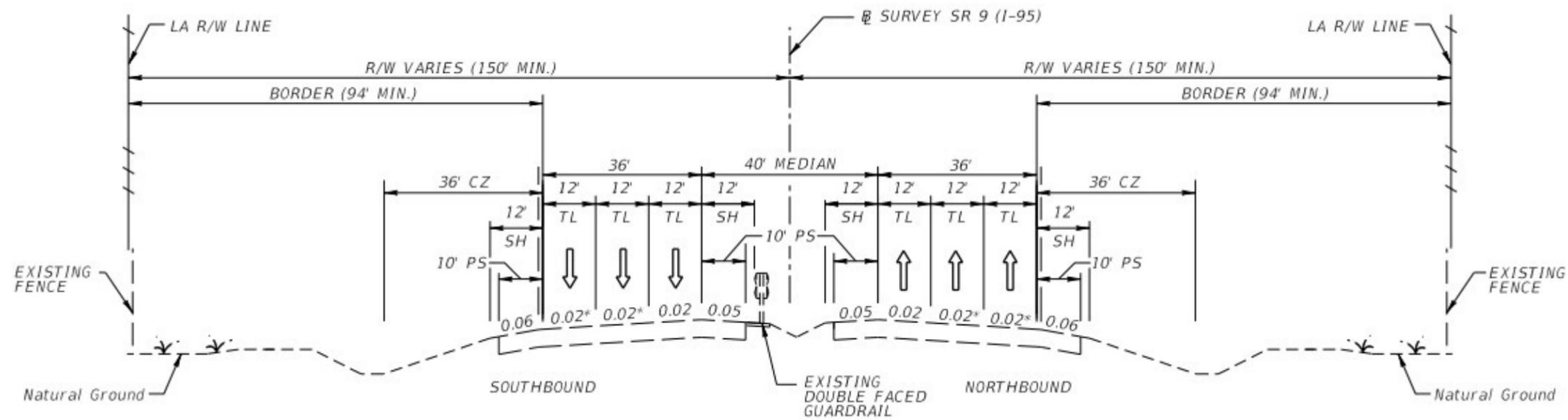


FIGURE 2-3 – SR 115 TO SR 152 EXISTING TYPICAL SECTION

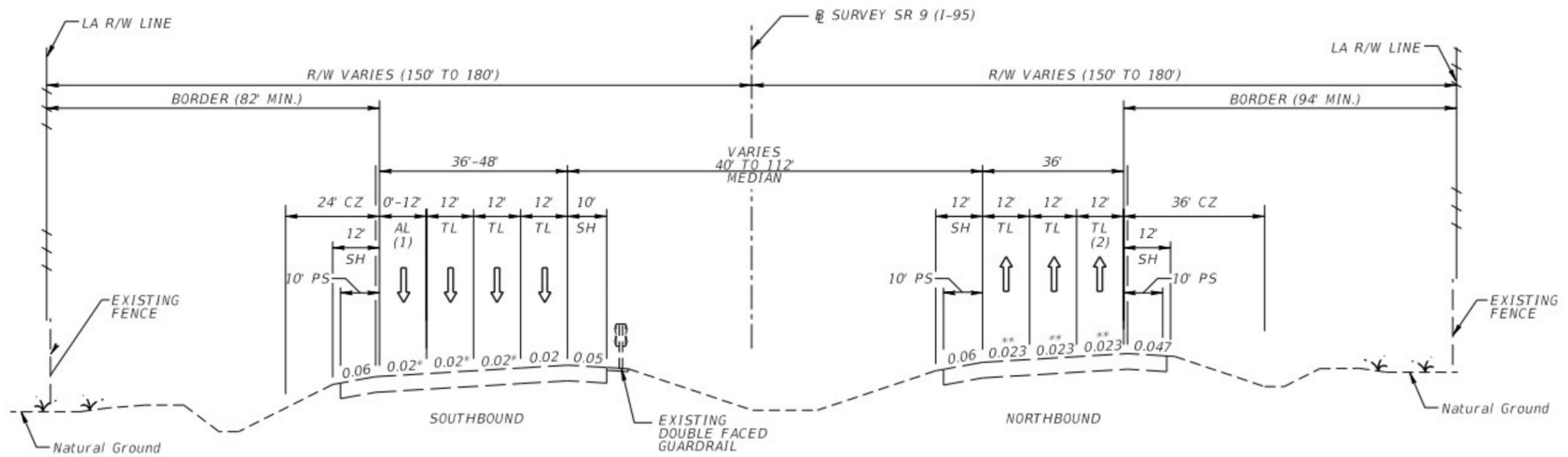


FIGURE 2-4 – SR 152 TO SR 202 EXISTING TYPICAL SECTION

2.4 Right of Way

Construction plans dating to the 2015 rehabilitation project show the minimum right of way width to be 300'. The maximum right of way width, on the other hand, is approximately 415', as measured using parcel line data available from the City of Jacksonville. This occurs in the area where Salisbury Rd. abuts the interstate. The roadway is generally centered within the right of way.

2.5 Horizontal and Vertical Alignment

2.5.1 Horizontal Alignment

The horizontal radius for each of the curves below in **Table 2-2** satisfies the criteria given in Table 210.8.2 of the 2020 FDOT Design Manual (FDM). Existing curve lengths are also appropriate in consideration of Table 211.7.1 in the same reference. Supplementary curve data presented in **Table 2-2** are degree of curve and deflection angle. While stopping sight distances are not commonly detailed in curve data, the curves have been found to not violate the values found in Table 211.10.1 of the FDM. These evaluations considered a design speed of 65 mph.

TABLE 2-2 – EXISTING HORIZONTAL CURVES

LOCATION	RADIUS (FT)	LENGTH (FT)	DEGREE OF CURVE	DEFLECTION ANGLE
Just N of I-295	5,729.58	3,279.45	1° 0' 0"	32° 47' 40"
At SR 115 ramps	2,864.79	1,913.33	2° 0' 0"	38° 16' 0"
S of SR 202	11,459.16	2,531.11	0° 30' 0"	12° 39' 20"

Source: Roadway Plan sheets from 2015 rehabilitation (213217-5)

2.5.2 Vertical Alignment

Table 2-3 below contains key data about the vertical curves on I-95, which are found at the bridge locations. Information has been ascertained through inspection of plan sheets from both the 1996 widening project (FPID 213269-1) and the original 1960s construction project, along with reference to the 1967 Roadway Design Manual. Unknown flat grades are assumed to be zero.



TABLE 2-3 – EXISTING VERTICAL CURVES

LOCATION	LENGTH ¹ (FT)	TYPE	IN/OUT GRADES ³	K VALUE
FEC RR/US 1	400	Sag	0, 3%	133
	1,600	Crest	3%, -3%	267
	400	Sag	-3%, 0	133
SR 115 ²	400	Sag	0.12%, 0.44%	1,250
SR 152	400	Sag	0, 2.65%	151
	1,500	Crest	2.65%, -3%	266
	600	Sag	-3%, 0	200

Notes: 1 – Approximate for sag curves
 2 – Southbound
 3 – Unknown, flat grades shown as 0

2.6 Roadway Classification

2.6.1 Functional Classification

Functional Classification refers to the type of service the roadway offers in the context of the larger network. This portion of I-95 is designated as an Urban Principal Arterial Interstate. While US 1 and SR 115 are both Urban Principal Arterials, SR 152 is classified as an Urban Minor Arterial.

2.6.2 Access Management

Because I-95 is a limited access facility, it falls under the category of Access Class 1. More specifically, between I-295 and SR 202, Area Type 2 (Table 1 of Rule 14-97.003, F.A.C.) best aligns with the urbanized nature of the road. The access management classification for US 1 is Class 5, meaning that medians are restrictive and major land use changes are not likely to occur. SR 115 is best described by Access Class 2, having connections to the facility tightly controlled and designed to move vehicles over long distances. Finally, SR 152 resembles US 1 in that it is designated by Access Class 5.

2.6.3 Context Classification

Context Classification is a system for categorizing roadways (except limited access) based on existing and future adjacent land uses, along with surrounding connectivity. Both US 1 and SR 152 are classified as C3C-Suburban Commercial, abutting mainly non-residential land uses with buildings that are spaced out from one another. SR 115, however, is of the C3R-Suburban Residential type, with mainly residential land uses bordering the roadway and more lengthy distances between intersections.

2.7 Design Speed and Posted Speed Limit

The posted speed limit is 65 mph for I-95 between I-295 and SR 202/JTB. However, the design speed is predominantly 50 mph, assuming adherence during initial design to AASHTO's (American



Association of State Highway and Transportation Officials) 1965 publication of *A Policy on Geometric Design of Rural Highways*. One location where the design speed is 60 mph is the southbound roadway in the vicinity of the SR 115 flyover ramp, a product of the re-alignment of that side of the interstate in the 1990s.

While it is customary for the posted speed limit on a newly built or widened roadway not to exceed the speed for which it was designed, it is also standard practice to conduct post-construction speed studies that may justify raising the posted speed limit. This explains the apparent incongruence in the posted and design speeds described above.

2.8 Land Use

Existing land use largely mirrors the plan for future land use (see **Appendix B**). One can observe a theme of Business Park, Community/General Commercial, Light Industrial, and Medium Density Residential uses abutting the study area. However, one notable difference stands out upon further inspection. While the land immediately west of I-95 between US 1 and SR 152 is marked Multi-Use in the future, it is predominantly undeveloped in the present day, and it is unlikely that these conservation lands will undergo development in the years ahead.

2.9 Traffic Characteristics

A map illustrating Annual Average Daily Traffic (AADT) is presented in **Appendix C**. The highest volumes occur in the segment between I-295 and US 1. Truck percentages are notably higher north of SR 115. **Appendix D** gives volumes during the morning and afternoon peak hours. Consistent with the impressive AADT between I-295 and US 1, the largest hourly quantity of traffic (bi-directional) occurs here during the PM peak hour, when 14,315 vehicles travel this section of I-95. **Appendix D** also contains turning movement counts at intersections in the vicinity of the project.

Counts for bicycles were not ascertained during the data collection process. However, paved shoulders will continue to be available for use on US 1 and SR 115; travel lanes and sidewalks will permit usage of bicycles on Baymeadows Rd. Similarly, while no count data was collected for pedestrians along the surface roads, all existing movements will be preserved.

As explained in Section 1.2.2, JTA operates four bus routes on the state roads surrounding I-95 that are within the scope of this project. Furthermore, one stop is situated on Philips Hwy. (Route 27) and there are seven along Baymeadows Rd. (Routes 28 and 50). However, none of these stops will be impacted by construction. One exception is the bus bay just north of the Southside Blvd./Belle Rive Blvd. intersection on the east side. While the stop is currently inactive, it will be preserved for future use.

2.10 Bicycle and Pedestrian Facilities

On SR 115, five-foot-wide sidewalks are found north of Belle Rive Blvd. towards the edge of either right of way line. Along the service road, a six-foot-wide sidewalk is available. At Baymeadows Rd., sidewalks parallel both directions of traffic, and are six feet in width. None of these facilities serve as routes for students walking to and from school.



As previously stated above, paved shoulders constitute bicycle facilities in both directions of both US 1 and SR 115. These are five feet wide in all instances, and are not components of any designated routes.

2.11 Crash Data

TABLE 2-4 – CRASH DATA (2013-2017)

YEAR	NUMBER OF CRASHES
2013	173
2014	133
2015	133
2016	151
2017	173
Total	763

Source: FDOT SSOGIS

Table 2-4 above summarizes crashes that occurred between 2013 and 2017. One can observe that an increasing trend in total crashes has emerged since 2015. Of the 763 crashes reported, 53 percent were rear-end collisions and 76 percent took place during daytime hours. The substantial proportion of rear-end incidents is indicative of congestion challenges, corroborating the proposed capacity improvements. Roughly one percent of crashes involved a fatality. On a positive note, the crash rate on I-95 between I-295 and SR 202 is calculated to be 0.765, well under the statewide average of 0.973 for urban interstates. However, the segment between US 1 and SR 115 and the segment between SR 152 and SR 202 are more crash-prone than the others, as each registers at least one year where the observed crash rate was above the statewide average.

Appendix E includes the I-295 to SR 202 corridor in a broader visual representation of where crashes have taken place on I-95. One can observe that crash activity is greater near the interchanges, but only marginally so.

2.12 Drainage

2.12.1 Existing Basins

Table 2-5 below lists the existing drainage basins for the project area.



TABLE 2-5 – EXISTING BASINS

TO/FROM STATIONS	AREA (ACRES)	RECEIVING WATER BODY
S of project – 807+80	44	Julington Creek
807+80 – 888+30	123	Julington Creek
888+30 – 920+20	22	Julington Creek
920+20 – 937+70	12	Julington Creek
937+70 – 958+00	45	Pottsburg Creek
958+00 – 1008+25	32	Pottsburg Creek
1008+25 – N of project	38	Pottsburg Creek

2.12.2 Existing Outfalls

Stormwater is collected via median ditches and outside swales. Outfalls and receiving water bodies are listed in **Table 2-6** below.

TABLE 2-6 – EXISTING OUTFALLS

APPROXIMATE LOCATION	RECEIVING WATER BODY
1,600' S of FEC Railway	Julington Creek
1,700' N of US 1	Julington Creek
500' N of ramp from SR 115 SB	Julington Creek
1,000' N of ramp from SR 115 SB	Julington Creek
3,000' S of SR 152	Julington Creek
4,600' S of SR 152	Julington Creek
1,500' N of SR 152	Floodway E of I-95
1.1 miles N of SR 152	Pottsburg Creek
4,000' S of SR 202	Pottsburg Creek

2.12.3 Hydroplaning

Some locations along mainline I-95 contain five lanes sloped in the same direction, and one area (I-95 southbound at the entrance from US 1 southbound) has six. Thus, conditions exist for water to potentially accumulate in outer lanes and lead to hydroplaning, whereby vehicle tires lose direct contact with the pavement surface.

Empirical data, however, does not indicate that there is an issue. For example, the segment between I-295 and US 1 might be expected to have a high number of hydroplaning-related crashes, given the number of lanes, but only 11 percent of wet-weather crashes took place here between 2013 and 2017. (Note that this segment covers roughly 16 percent of the length of I-95 being studied.) Regarding crash types, 40 percent are either of the rear-end or sideswipe variety, which is more telling about congestion than hydroplaning. Overall, 18 percent of all crashes between 2013 and 2017 were on wet roads.

With more lanes to be added, hydroplaning concerns will be addressed during the project's design phase.



2.13 Maintenance Issues

The asset maintenance contractor for this stretch of I-95 was contacted, and some recurring issues that were discovered include shoulder drop-offs, potholes, and dead trees. The shoulder and pavement issues will be solved with widening to the outside of the roadway and milling/resurfacing the existing pavement, while selective clearing and grubbing may eliminate some of the problematic landscaping.

Two other concerns that were identified are troubles with a 10' paved shoulder and the interior ditch at the southern limit of the corridor failing to percolate. These conditions, however, will remain. Shoulders of this width are acceptable per the FDM, and stormwater storage will be designed adequately.

2.14 Interchanges, Intersections, Signalization

2.14.1 Interchanges

I-95/Philips Hwy.

This partial cloverleaf interchange includes both directional ramps and loop ramps, as follows:

- I-95 NB to Philips Hwy.: a 200-foot-radius, one-lane loop ramp
- Philips Hwy. to I-95 NB: a 1,620-foot-long, one-lane, parallel-type entrance ramp
- I-95 SB to Philips Hwy.: an 830-foot-long, one-lane, taper-type exit ramp
- Philips Hwy. NB to I-95 SB: a one-lane loop ramp
- Philips Hwy. SB to I-95 SB: a 980-foot-long, one-lane, parallel-type entrance ramp

The signalized ramp terminal intersections on the urban arterial of Philips Hwy. are separated by 1,360 feet. See **Figure 2-5** for a visual of the I-95/Philips Hwy. interchange.

I-95/Southside Blvd.

The interchange of I-95 with Southside Blvd. is a partial interchange serving two movements:

- I-95 NB to Southside Blvd.: a 0.8-miles-long, two-lane, parallel-type exit ramp
- Southside Blvd. SB to I-95 SB: a 0.7-miles-long, two-lane, parallel-type entrance ramp

The intersections of Southside Blvd. with both Paradise Island Blvd. and Western Lake Drive (Dr.) are bypassed and not directly served from the interstate. Please refer to **Figure 2-6**.



I-95/Baymeadows Rd.

The intersection of I-95 with Baymeadows Rd. is a diamond interchange, having four ramps:

- I-95 NB to Baymeadows Rd.: an 870-foot-long, one-lane, taper-type exit ramp
- Baymeadows Rd. to I-95 NB: a 1,095-foot-long, one-lane, parallel-type entrance ramp
- I-95 SB to Baymeadows Rd.: an 870-foot-long, two-lane, parallel-type exit ramp
- Baymeadows Rd. to I-95 SB: a 1,110-foot-long, two-lane, parallel-type entrance ramp

The signalized ramp terminal intersections on the urban arterial of Baymeadows Rd. are 430 feet apart. **Figure 2-7** shows the layout of the interchange at I-95 and Baymeadows Rd.



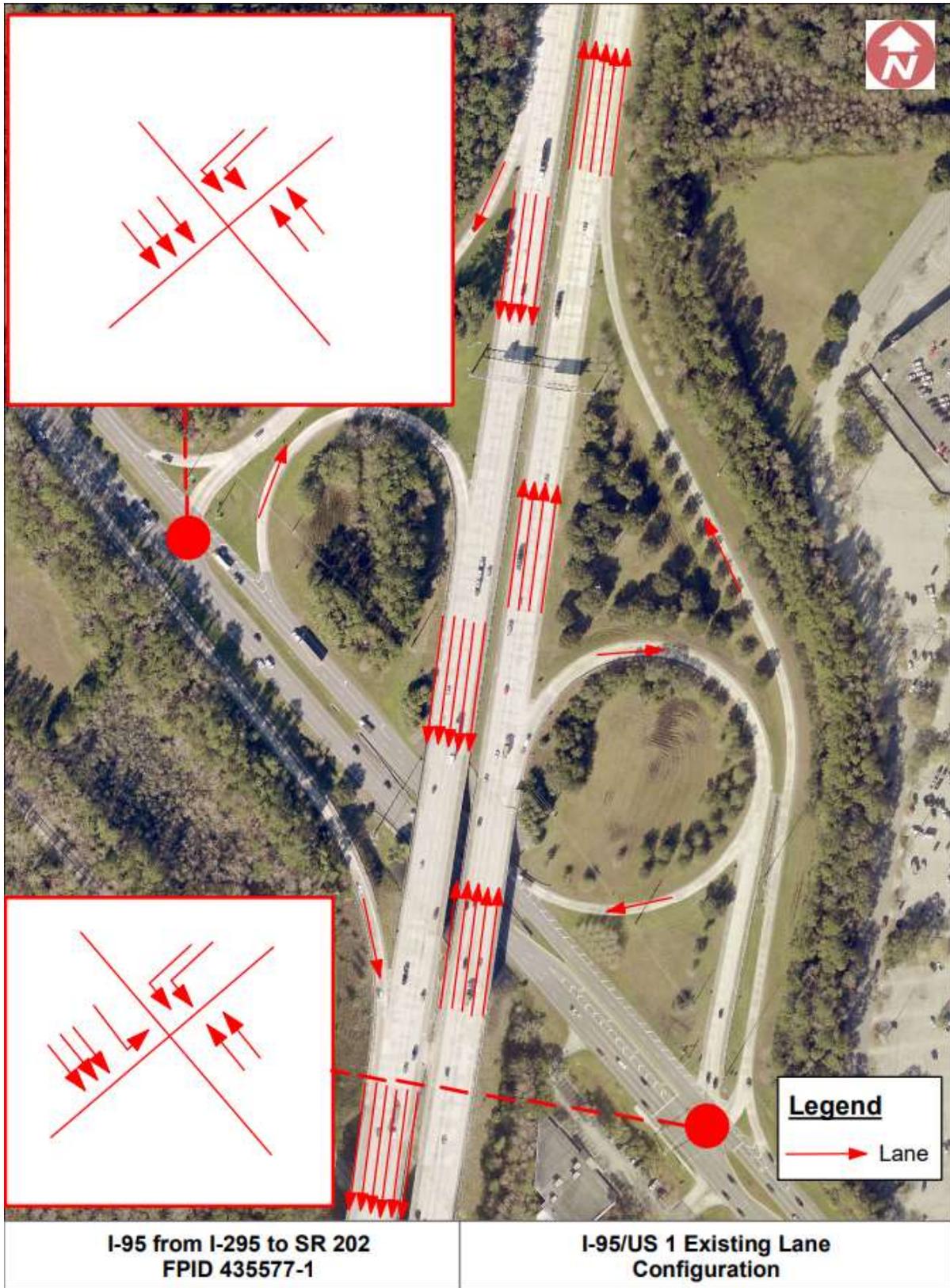


FIGURE 2-5 – EXISTING I-95/PHILIPS HWY. INTERCHANGE

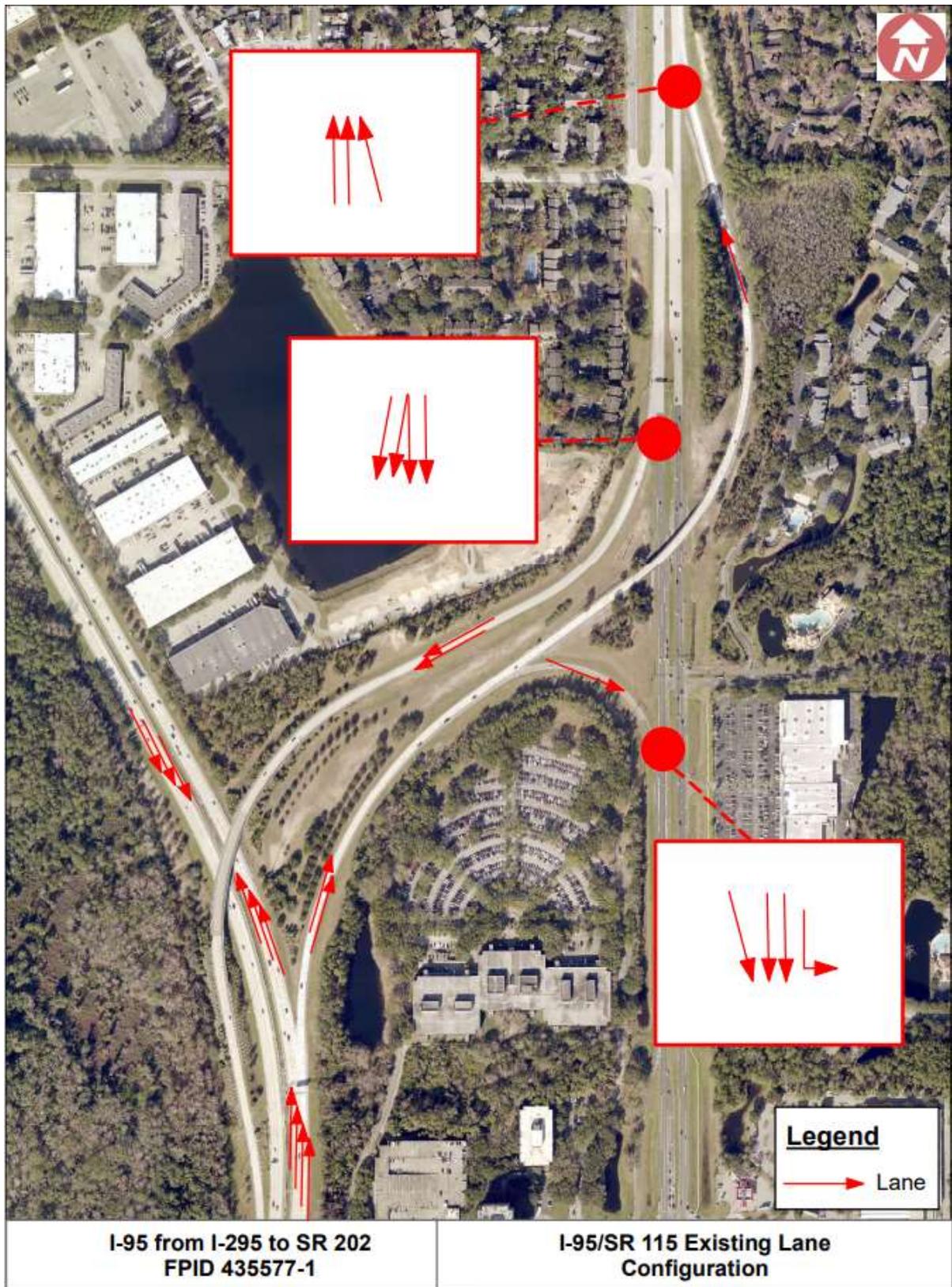


FIGURE 2-6 – EXISTING I-95/SOUTHSIDE BLVD. INTERCHANGE

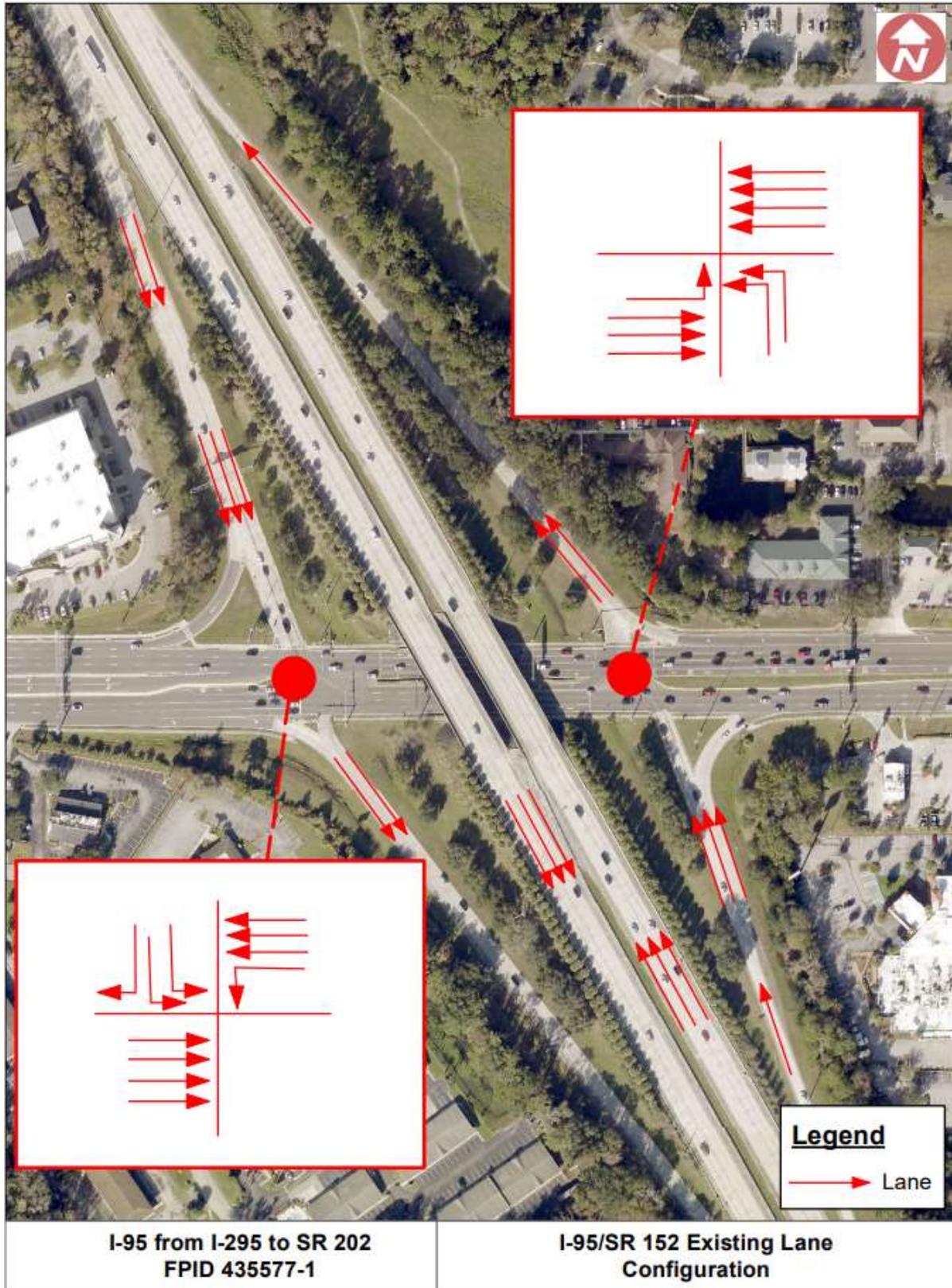


FIGURE 2-7 – EXISTING I-95/BAYMEADOWS RD. INTERCHANGE

2.14.2 Intersections

US 1/Philips Hwy.

Two intersections exist along US 1/Philips Hwy. within the project limits:

- I-95 NB ramps (signalized)
- I-95 SB ramps (signalized)

No pedestrian crosswalks exist at either of these intersections.

SR 115/Southside Blvd.

These roads intersect with SR 115/Southside Blvd. in the project area:

- Paradise Island Blvd. (signalized)
- Western Lake Dr.
- Belle Rive Blvd. (signalized)

Paradise Island Blvd. provides access for several multi-family residential complexes. Similarly, Western Lake Dr. serves residential areas, but also businesses fronting I-95 on Western Way. Belle Rive Blvd. leads to numerous residential communities both east and west of Southside Blvd.

Only at the Belle Rive Blvd. intersection system are pedestrian crosswalks present: one on the northern leg and one on the western leg (at the service road).

SR 152/Baymeadows Rd.

From west to east, the following nine intersections are within the area of study:

- Baymeadows Way (signalized, crosswalks on all legs)
- Prominence Parkway (Pkwy.) (signalized, crosswalk on S leg)
- I-95 SB ramps (signalized, crosswalks on N and S legs)
- I-95 NB ramps (signalized, crosswalks on N and S legs)
- Western Way (signalized, crosswalks on N, E, and S legs)
- Baymeadows Cir. West (crosswalk present)
- Baymeadows Cir. East/Princeton Square Blvd. West (signalized, crosswalks on N, E, and S legs)
- Princeton Square Blvd. East (crosswalk present)
- Old Baymeadows Rd. (signalized, crosswalks on all legs)

West of I-95, Baymeadows Way is primarily a collector road for businesses, while Prominence Pkwy. terminates in an office park. Western Way, east of I-95, is largely a means of access for a variety of industrial establishments to the south. Baymeadows Cir. W only connects to Baymeadows Rd. on the north, where it services many residences. Whether north or south of Baymeadows Rd., homes are the main origins/destinations for trips on Baymeadows Cir. E and Princeton Square Blvd. W. This trend



continues for Princeton Square Blvd. E. The easternmost intersection in the project area, Old Baymeadows Rd., supplements connectivity to Southside Blvd.

2.15 Utilities

Sunshine 811 ticket submittals identified 15 utility owners having facilities within the rights of way of I-95, Southside Blvd., and Baymeadows Rd., as shown below in **Table 2-7**. Twelve of these entities operate fiber networks.

TABLE 2-7 – EXISTING UTILITIES

UTILITY OWNER	TYPE(S)	CORRIDOR(S)	CONTACT(S)
AT&T	Communication lines, Fiber, Telephone	I-95, Southside, Baymeadows	Steve Hamer (813) 888-8300 x201 (Comm. lines, fiber); Dino Farruggio (561) 997-0240 (Telephone)
CenturyLink	Fiber	I-95, Southside, Baymeadows	(877) 366-8344 x2
Comcast Cable Communications	Cable Television	I-95, Southside, Baymeadows	Leonard Maxwell-Newbold (754) 221-1254
Crocker Partners	Irrigation	Baymeadows	Hillary Reed (904) 464-0900 x2406
Crown Castle NG	Fiber	I-95, Southside, Baymeadows	(888) 632-0931 x2
Hargray of Florida, Inc.	Fiber	I-95, Baymeadows	Jered Bearden (904) 264-3036
Hotwire Communications	Cable Television, Fiber, Telephone	I-95	Walter Davila (954) 699-0900
Jacksonville Electric Authority (JEA)	Electric, Fiber, Sewer, Water	I-95, Southside, Baymeadows	Kaled Saleh (904) 665-7622
MCI	Communication lines, Fiber	I-95, Southside, Baymeadows	(469) 886-4091
Quanta Telecommunication Services LLC	Fiber	I-95, Baymeadows	Russell Ribblett (678) 836-5610
Resurgence Infrastructure Group LLC	Fiber	I-95	Scott Drake (404) 932-4156
Sprint	Fiber	I-95	Jon Baker (352) 409-5095
TECO Peoples Gas	Gas	I-95, Southside, Baymeadows	Joan Domning (813) 275-3783
Traffic Control Devices, Inc.	Electric, Fiber	I-95, Baymeadows	David Nagessar (904) 693-9254
Uniti Fiber LLC	Fiber	I-95, Baymeadows	John Halley (251) 753-8695



2.16 Railroads

The FEC Railway previously mentioned is a single-track railroad that carries freight traffic only. The approximate width of the FEC right of way as it passes beneath I-95 is 100 feet.

2.17 Intelligent Transportation Systems (ITS)

2.17.1 Dynamic Message Signs (DMS)

There are three dynamic message signs on I-95 in the project limits. One is located on the northbound side approximately 0.5 miles north of the SR 115 ramps. Another is 0.9 miles south of SR 152, adjacent to the southbound lanes. A third is located 0.8 miles north of the SR 152 interchange for northbound drivers.

2.17.2 Closed Circuit Television (CCTV)

CCTV cameras are present at these locations along the I-95 corridor:

- I-95 south of US 1
- I-95 at US 1
- I-95 at SR 115
- I-95 approximately halfway between SR 115 and SR 152
- I-95 at SR 152
- I-95 north of SR 152
- I-95 south of SR 202

2.17.3 Vehicle Detection Systems

There are 19 detection systems installed along I-95 between I-295 and SR 202 that are used to collect information about vehicles using the roadway.

2.18 Lighting

High mast lighting is present at each of the interchanges. Conventional lighting, on the other hand, illuminates I-95 between US 1 and SR 202, and the arterials of SR 115 and SR 152, as well. Spacing between light poles is approximately 200 feet, except on SR 152, where it is roughly 350 feet.

2.19 Soils

Table 2-8 below lists the soil types that are underlying the project vicinity.



TABLE 2-8 – SOILS

SOIL TYPE	APPROX. % OF PROJECT AREA
Arents, nearly level	0.9%
Arents, sanitary landfill	1.6%
Boulogne fine sand, 0 to 2 percent slopes	2.1%
Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes	13.7%
Hurricane and Ridgewood soils, 0 to 5 percent slopes	6.2%
Leon fine sand, 0 to 2 percent slopes	21.0%
Lynn Haven fine sand, 0 to 2 percent slopes	3.3%
Mascotte fine sand, 0 to 2 percent slopes	0.2%
Ortega fine sand, 0 to 5 percent slopes	0.7%
Pamlico muck, depressional, 0 to 1 percent slopes	4.5%
Pamlico muck, 0 to 2 percent slopes, frequently flooded	0.9%
Pelham fine sand, 0 to 2 percent slopes	1.3%
Penney fine sand, 0 to 5 percent slopes	0.9%
Pits	0.0%
Pottsburg fine sand, high, 0 to 3 percent slopes	1.0%
Rutlege mucky fine sand, 0 to 2 percent slopes, frequently flooded	0.0%
Surrency loamy fine sand, depressional, 0 to 2 percent slopes	1.3%
Urban land	19.4%
Urban land-Leon-Boulogne complex, 0 to 2 percent slopes	8.7%
Urban land-Ortega-Kershaw complex, 0 to 8 percent slopes	0.2%
Urban land-Hurricane-Albany complex, 0 to 5 percent slopes	3.2%
Stockade fine sandy loam, depressional, 0 to 2 percent slopes	4.0%
Dorovan muck, depressional, 0 to 2 percent slopes	0.2%
Water	4.6%

2.20 Aesthetics

Few aesthetic features are present along I-95 and its crossroads through this corridor. However, prominent landscaping is found at the SR 152 interchange in the form of four linear runs of palm trees, one bordering I-95 in each quadrant.



2.21 Environmental Issues

2.21.1 Contamination

Based on the research conducted, parcels along the I-95 corridor from I-295 to SR 202 in Jacksonville have been developed for commercial and industrial use since at least 1959. There are 41 sites in the project vicinity that could present potential contamination impacts, with 26 of these being rated to have either *no* or a *low* risk. Eleven have a risk level of *medium* and four have a risk level of *high*. Please refer to Section 5.3.7 for additional details from the Level 1 Contamination Screening Evaluation Report (CSER) completed in December 2019 and the Contamination Screening Evaluation Technical Memorandum (for pond locations) completed in September 2020.

2.21.2 Noise

No noise barriers currently exist within the project limits. However, per the Noise Study Report, there are 33 noise-sensitive sites near this segment of I-95. Of these, nine are classified as Category B (residential). Ten of them fall under both Category C (various uses, exterior) and Category D (various uses, interior), while three locations are only applicable to Category D. Finally, 11 of the locations identified fit into Category E (offices, hotels, and restaurants).

2.21.3 Cultural Resources

In September 2020, a Cultural Resource Assessment Survey (CRAS) technical memorandum was completed for the I-95 right of way between I-295 and SR 202, the Baymeadows Rd. corridor, intersection modifications at Southside Blvd., and nine preferred pond locations. Three architectural resources were identified during the survey (Flat Ford Rd., US 1/Philips Hwy., and FEC Railroad). Of the three, only the FEC Railroad was considered eligible for the National Register of Historic Places. The other two are without requisite historic significance and architectural/engineering distinction. Based on the results of the study, the proposed undertaking will have no adverse effect on historic properties. The State Historic Preservation Officer (SHPO) concurred with these findings on September 23, 2020.

In addition, a publicly-owned recreational property is located adjacent to the project near the I-95/I-295 interchange, known as Losco Regional Park. The park was identified as a Section 4(f) resource. Opened in 2004, a playground, athletic fields, and hiking trails are among the amenities offered at this location.

2.21.4 Natural Resources

30.4 acres of wetlands exist within the project right of way. Roughly an acre of this is part of a St. Johns River Water Management District (SJRWMD) conservation easement behind several businesses on Western Way, established in 1999, where Pond DE-2 is proposed. See **Appendix F**. SJRWMD also owns the Freedom Commerce Center natural area just northwest of the I-95/US 1 interchange.



A search was conducted in the SJRWMD online database for Environmental Resource Permits issued to FDOT for other projects in the area with wetland impacts. No permits were found that fit these criteria; therefore, it is concluded that none of the wetlands in this project's footprint have been previously permitted.

3 TRAFFIC

3.1 Introduction

A SIMR was prepared to evaluate the traffic operations for the large-scale widening of I-95 between International Golf Pkwy. and Atlantic Blvd. Additionally, a 12-mile segment of I-295 was included in the SIMR's study area from west of San Jose Blvd. to east of US 1. While the SIMR covers a much larger region compared to that for this PD&E Study in order to capture the effect of the numerous widening projects along the I-95 corridor, the results presented in this report are pertinent to the limits of this PD&E Study, i.e. between I-295 and SR 202.

3.2 Travel Demand

The methodology used for travel demand forecasting and development of design hour traffic follows the 2019 FDOT Project Traffic Forecasting Handbook. The main basis for traffic projections is Version 2 of the adopted Northeast Regional Planning Model (NERPM) Activity-Based Model (ABM), which has a base year of 2010 and a cost feasible and horizon year of 2040.

Data sources for projecting traffic counts included the following:

- Field traffic counts (collected in March and April of 2019)
- StreetLight Data origin-destination data (AM/PM peaks for February-April 2019)
- Signal timing and phasing (City of Jacksonville)
- FDOT Transportation Data and Analytics Office
- Existing traffic data from Florida Traffic Online
- Existing traffic data from other recently completed studies
- Duval County land use data
- Existing plans, programs/projects lists
- Approved studies within the area (PD&E, Master Plans, Developments of Regional Impact)
- Crash data

Please refer to **Appendix G** for forecasted daily traffic volumes in Design Year 2045. These are given for both mainline I-95 and ramps. While the relative amount of vehicles for each highlighted portion of I-95 resembles the current situation, the busiest section (between I-295 and US 1) is actually projected to see the least growth, with an increase of only 16,400 vehicles. **Appendix H** offers further insight by displaying volumes during the busiest morning and afternoon hours. One can quickly observe



from these graphic the distinctive pattern of travelers heading towards Downtown Jacksonville in the morning (and the opposite in the afternoon), in keeping with the present condition.

3.3 Traffic Operations

3.3.1 Existing Conditions

The main objective of the existing conditions analysis was to establish the current operational characteristics of I-95 and the study interchanges. Speed data collected during field travel time runs was used to plot speed profiles for the morning and afternoon peak periods. These were used to calibrate the existing peak period models. The simulated speeds from VISSIM (microsimulation software) for the AM and PM peak periods were subsequently plotted to evaluate how well the models approximate existing operations. The speed profile figures can be found in the SIMR.

The speed profiles for the 2019 AM and PM peak periods present the average speeds from VISSIM for each of the eight hours (four in morning and four in afternoon) along with the travel time runs that started in each one-hour interval of the peak period. The speed profiles show that the final calibration parameters provide reasonable speed/congestion trends in both peak periods.

During the morning peak hours, congestion is shown in the simulation for the northbound direction in two locations. One of these is between I-295 and SR 115, where traffic enters I-95 from both I-295 and US 1. The other is between SR 152 and SR 202, which is the result of upstream influences at University Blvd. and Emerson St., north of the project area. There is no indication of congestion in the southbound direction during the AM peak period.

For the afternoon peak hours, the VISSIM model depicts little to no congestion in the northbound direction of I-95. However, southbound congestion is pronounced at the northern limit of this PD&E study area, just south of the SR 202 interchange.

3.3.2 No-Build Alternative

The No-Build Alternative provides a baseline for comparison to the Build Alternative. This alternative represents the existing physical and operational conditions, also taking into account all planned and programmed roadway improvements outside of this project over the course of the analysis period. The No-Build Alternative does not satisfy the purpose of this project, partially evidenced by the discussion that follows.

The peak period simulation results for the No-Build 2045 AM and PM peak hours can be found in **Appendix I**. In the morning, the most notable congestion is found in the northbound direction at the US 1 interchange. Between the exit from and entrance to I-95, the vehicle demand is 6,079 vehicles per hour, or vph. With one lane departing the interstate and traffic entering from US 1, simulated speeds drop to 19 mph. Between I-295 and SR 202 during this time period, for the northbound lanes, the simulated vph does not reach 90 percent of the vph in demand, which can be indicative of congestion on adjacent sections of I-95 or at the interchanges.



During the PM peak period, traffic is expected to move smoothly, with the lowest projected speed being 61 mph where traffic from SR 115 joins I-95 southbound. In contrast to what is observed in the morning, the southbound side is where simulated traffic volumes fall short of demand traffic volumes.



4 DESIGN CONTROLS AND CRITERIA

TABLE 4-1 – DESIGN CONTROLS AND CRITERIA (I-95 MAINLINE)

CONTROL	CRITERION		SOURCE
<i>General</i>			
SIS designation	SIS Highway Corridor		SIS System Map
Facility type	Urban		Straight Line Diagram
Design speed	65 mph		SIMR
Design vehicle	WB-62FL		Interstate
Stopping sight distance	730' (flat +/- 2%)		FDM Tbl. 211.10.1
<i>Horizontal</i>			
Curve length	975' (minimum) 1,950' (desirable)		FDM Tbl. 211.7.1
Deflection without curve (maximum)	0° 45' 00"		FDM 211.7.1
Degree of curve	W/ superelevation: ≤ 4° 15' 00" No superelevation: ≤ 0° 15' 00"		FDM Tbl. 210.9.1
<i>Vertical</i>			
Grade	Not to exceed +/- 3%		FDM Tbl. 211.9.1
Grade change without curve (maximum)	0.30%		FDM Tbl. 210.10.2
Curve length (minimum)	Sag: 800' Crest (open highway): 1,000' Crest (w/i interchanges): 1,800'		FDM Tbl. 211.9.3
K value (length/grade change)	Sag curve: 181 Crest curve: 401		FDM Tbl. 211.9.2
Clearance	Roadway over roadway: 16' Roadway over railroad: 23.5'		FDM Tbl. 260.6.1
<i>Cross Section</i>			
Lane width	12'		FDM 211.2
Shoulder width ^{GF}	<i>Median</i>	<i>Outside</i>	FDM Tbl. 211.4.1 (Roadway) FDM Fig. 260.1.1 (Bridge)
	Roadway: 12' Bridge: 10'	Roadway: 12' Bridge: 10'	
Median width	≥ 26' (with barrier) ≥ 64' (without barrier)		FDM Tbl. 211.3.1
Pavement slope (standard)	<i>Existing</i>	<i>Proposed</i>	FDM Tbl. 211.2.3 (Existing) FDM Fig. 211.2.1 (Proposed) FDM 211.4.2 (Proposed shoulders)
	Med.: 0.05 Lane: 0.02 – 0.03 Out.: 0.06	Med.: 0.05 Lane: 0.02 – 0.035 Out.: 0.06	
Superelevation	% of transition in tangent: 80 Length of transition: 1:190		FDM 210.9.1 (% in tangent) FDM Tbl. 210.9.3 (length)
Roadside slope	1:4 or flatter (foreslope)		FDM 215.2.2, FDM Fig. 215.2.2
Clear zone	36'		FDM Tbl. 215.2.1
Border width	N/A for reconstruction		FDM 211.6.1

Notes: G – Without shoulder gutter, F – Full (paved + unpaved)



TABLE 4-2 – DESIGN CONTROLS AND CRITERIA (RAMPS)

CONTROL	CRITERION		SOURCE
<i>General</i>			
Design speed	Loop, semi-direct, cloverleaf: 30-35 mph Long ramp, direct connection: 40-50 mph		FDM Tbl. 210.5.2
Stopping sight distance	Loop, semi-direct, cloverleaf: 200-250' (flat +/- 2%) Long ramp, direct connection: 305-425' (flat +/- 2%)		FDM Tbl. 211.10.2
<i>Horizontal</i>			
Curve length	Loop, semi-direct, cloverleaf: 400' (minimum), 450-525' (desirable) Long ramp, direct connection: 400-750' (minimum), 600-1,500' (desirable)		FDM Tbl. 211.7.1
Deflection without curve (maximum)	2° 00' 00" (design speed ≤ 40 mph)		FDM 211.7.1
Degree of curve	W/ superelevation: ≤ 20° 00' (design speed 30 mph) No superelevation: ≤ 7° 00' (design speed 30 mph)		FDM Tbl. 210.9.2
<i>Vertical</i>			
Grade (maximum)	Loop, semi-direct, cloverleaf: 7% Long ramp, direct connection: 6%		FDM Tbl. 211.9.1
Grade change without curve (maximum)	Loop, semi-direct, cloverleaf: 1% Long ramp, direct connection: 0.80%		FDM Tbl. 210.10.2
Curve length (minimum)	<i>Loop, semi-direct, cloverleaf</i>	<i>Long ramp, direct connection</i>	FDM Tbl. 211.9.2
	90'	120'	
K value (length/grade change)	<i>Loop, semi-direct, cloverleaf</i>	<i>Long ramp, direct connection</i>	FDM Tbl. 211.9.3
	Sag: 37 Crest: 31	Sag: 64 Crest: 70	
<i>Cross Section</i>			
Lane width (minimum)	1-lane: 15' 2-lane: 12'		FDM Tbl. 211.2.1
Shoulder width ^F (one lane)	<i>W/ shoulder gutter</i>	<i>W/o shoulder gutter</i>	FDM Tbl. 211.4.1
	Inside: 11.5' Outside: 11.5'	Inside: 6' Outside: 6'	
Shoulder width ^F (two lanes)	<i>W/ shoulder gutter</i>	<i>W/o shoulder gutter</i>	FDM Tbl. 211.4.1
	Inside: 13.5' Outside: 15.5'	Inside: 8' Outside: 12'	



Cross Section (continued)			
Pavement slope (standard)	Med.: 0.05 Lane: 0.02 Out.: 0.06		FDM 211.4.2 (shoulders) FDM Fig. 211.2.1 (lane)
Clear zone	<i>Loop, semi-direct, cloverleaf</i>	<i>Long ramp, direct connection</i>	FDM Tbl. 215.2.1
	1-lane: 10' 2-lane: 12'	1-lane: 10' 2-lane: 18'	

Note: Criteria also applicable to mainline not included, Criteria for ramp types based on design speed,
F – Full (paved + unpaved)

TABLE 4-3 – OTHER DESIGN CONTROLS AND CRITERIA

CONTROL	CRITERION		SOURCE
<i>Arterials/Collectors</i>			
Design speed	45 mph		FDM Tbl. 201.5.1
Access management/Spacing	Median openings: 660 – 2,640' Signals: 1,320 – 2,640' Connections: 440 – 1,320'		Florida Administrative Code (F.A.C.), Rule 14-97.003
Horizontal curve length	400' (minimum) 675' (desirable)		FDM Tbl. 210.8.1
Grade	Maximum: +/- 6% Minimum: +/- 0.30% (curbed)		FDM Tbl. 210.10.1 (Maximum) FDM 210.10.1.1 (Minimum)
Vertical curve length (minimum)	135'		FDM Tbl. 210.10.4
Lane width	11'		FDM Tbl. 210.2.1
Shoulder width ^{GF}	<i>Median</i>	<i>Outside</i>	FDM Tbl. 210.4.1
	3+ lanes: 10' 1-2 lanes: 8' Aux. lanes: 8'	3+ lanes: 10' 1-2 lanes: 10' Aux. lanes: 10'	
Median width	≥ 22' ≥ 19.5' (constrained R/W)		FDM Tbl. 210.3.1
Pavement slope (standard)	<i>Existing</i>	<i>Proposed</i>	FDM Tbl. 210.2.3 (Existing) FDM Fig. 210.2.1 (Proposed) FDM 210.4.1 (Proposed shoulders)
	Med.: 0.05 Lane: 0.02 – 0.05 Out.: 0.06	Med.: 0.05 – 0.06 Lane: 0.02 – 0.03 Out.: 0.06	
Clear zone	≥ 22' (travel lanes) ≥ 14' (auxiliary lanes)		FDM Tbl. 215.2.1
Border width	Curbed, 25-40 mph: 12' Curbed, 45 mph: 14' Flush shoulder, 25-45 mph: 33'		FDM Tbl. 210.7.1
<i>Diverging Diamond Interchange^D</i>			
Design speed (minimum)	25 mph		FDM 217.3.3
Design vehicle	WB-62FL		FDM 217.3.8
Crossover radius	250'		FDM Tbl. 217.3.1
			Note: no horizontal curve length restrictions (FDM 217.3.9)



<i>Diverging Diamond Interchange (continued)</i>		
Crossover angle	25 degrees (minimum) 40-45 degrees (desirable)	FDM 217.3.5
Crossover alignment (tangent between reverse curves)	50' (minimum) 75' (desirable)	FDM 217.3.3 FDM 217.3.9 (Fig. 217.3.2)
Crossover alignment (tangent at crossover intersection)	100' (minimum) (15' min. prior to stop bar, 10' min. beyond crossover)	FDM 217.3.9 (Fig. 217.3.3)
Eyebrow design	Provide physical obstruction to deter wrong-way movements	FDM 217.3.6 (See Fig. 217.3.1)
Minimum acceleration length (merging ramp junctions)	150' (then 300' taper)	FDM Fig. 217.3.4
Vertical alignment	Per requirements of FDM 210.10	FDM 217.4
Lane width	Through lane: no over-tracking into adjacent lanes, gutters, or shoulders At ramp terminal: 15' (one lane), 12' w/ striped gore separating (multiple lanes)	FDM 217.3.8
Pedestrian accommodations	Center pedestrian walkway (preferred) Outside pedestrian walkway (allowed)	FDM Fig. 217.6.1 FDM 217.6.1
Cut-through walkways (through raised medians/islands)	10' (minimum)	FDM 217.6.2
Crosswalks	Located to accommodate stopping sight distance per FDM 210.11.1 Uncontrolled: perpendicular to roadway Controlled: direct path or shortest crossing	FDM 217.6.3
Bicycle accommodations	N/A here due to R/W constraints → shared use path or driving lanes (see FDM 224)	FDM 217.7

Notes: Context Classification is C3-Suburban, D – Developmental criteria, G – Without shoulder gutter, F – Full (paved + unpaved)

5 ALTERNATIVES ANALYSIS

5.1 No-Build Alternative

The No-Build Alternative would maintain the present lane configuration on I-95 between I-295 and SR 202. Specifically, the northbound half of the highway would keep its five lanes south of US 1, its four lanes between US 1 and SR 115, and its three lanes as it proceeds towards SR 152 and SR 202. The three existing southbound travel lanes would continue south from SR 202 until picking up an extra lane at SR 115, and still another at US 1 before two depart at the I-295 junction.



Primary *advantages* that accompany the No-Build Alternative include the following:

- Savings to taxpayers
- Quieter roadway
- Less construction fatigue

Conversely, primary *disadvantages* that accompany the No-Build Alternative are as follows:

- Increasing travel times
- More frequent congestion-related crashes
- Slower evacuation period preceding storm events
- Economic toll of inefficient operations
- Air quality degradation due to more idling

While the No-Build Alternative will not be dismissed, it is not acceptable because it does not address the project's purpose and need.

5.2 Transportation Systems Management and Operations (TSM&O) Alternative

Transportation Systems Management and Operations (TSM&O) refers to the implementation of strategies in order to maximize the functionality of existing infrastructure. Some examples are priority signals for transit vehicles and traffic incident management. Many TSM&O solutions are within the scope of ITS. For an interstate such as I-95, ITS applications might include ramp signals, work zone traffic management, traveler information services, congestion pricing, and commercial vehicle operations. This is not an exhaustive list. Unfortunately, an alternative that relies solely on TSM&O practices will not be an adequate solution to solve the problems at hand for I-95 between I-295 and SR 202. However, various TSM&O methods will be incorporated into the Build Alternative to supplement the capacity enhancements.

5.3 Build Alternative

5.3.1 I-95

One general use lane will be added in both directions of I-95 between I-295 and SR 202. For the northbound direction, a deceleration lane will be inserted at the off-ramp to SR 152/Baymeadows Rd., and two lanes will now enter the interstate from SR 152. On the southbound side, the two lanes that currently enter from SR 202 will remain to SR 152, with the outermost exiting and the next lane in having the option to do so. Only one lane of traffic will enter from SR 152, whereas two lanes are currently accommodated. Finally, an auxiliary lane will run between SR 115/Southside Blvd. and US 1/Philips Hwy. **Appendix A** exhibits these alterations and those further from the mainline, which are discussed in the sections that follow.



5.3.2 Interchange Ramps

In terms of ramps, the southbound exit to US 1/Philips Hwy. will add a lane. An expansion of the southbound exit to I-295 will mean a dedicated lane for motorists en route to I-295 eastbound, fed by a lane that also continues south. At the interchange with US 1, the northbound off-ramp will be given another turn lane onto US 1 northbound. No capacity changes will take place at the ramps to and from SR 115. Continuing north to Baymeadows Rd., the northbound off-ramp will expand by one lane for the movement to go eastbound. The northbound on-ramp will have its capacity doubled from one lane to two. For the southbound side, the off-ramp will expand by one lane for the movement to head west on Baymeadows Rd.

5.3.3 Arterial Roadways

Philips Hwy.

Separating the northbound ramps will improve traffic flow because the two intersections will both operate in two phases, rather than the three seen with the current signal. Aside from this, another key element of the Build Alternative is to form the turn lane to the loop on-ramp from US 1. In the present configuration, this turn lane originates from the I-95 northbound off-ramp, which makes for a weave condition among ramp traffic.

Baymeadows Rd.

The most significant arterial adjustment will be Baymeadows Rd.'s conversion to a diverging diamond interchange, whereby eastbound and westbound traffic will cross over each other. At these intersections, lane widths will be 15 feet, but will narrow to 11.5 feet (eastbound) and 11 feet (westbound) beneath I-95. An exception to this is the outermost eastbound lane that will serve I-95 northbound, which will be 15' wide and routed between the existing bridge abutment and piers. A retaining wall and pier protection barrier will be constructed to enable this arrangement. While the current speed limit on this segment of Baymeadows Rd. is 45 mph, the DDI will be designed for a speed of 30 mph.

The diverging diamond interchange on Baymeadows Rd. will be engineered to be friendly to modes of transportation beyond automobiles, including bicycles and pedestrians. While there is no provision for bicycle lanes, bicyclists will have the option of traveling in the vehicular lanes or riding along the 10' sidewalk in the median. Pedestrians will be safer via separation from vehicles turning left onto and from I-95. Safety will improve for the motoring public, as well, due to a reduction in potential conflict points inherent with the diverging diamond design. From the standpoint of traffic flow, the setup will make for a more efficient interchange, as the signals only need to operate in two different phases instead of three.

For the through movement, the westbound lane that was added to serve vehicles destined for I-95 southbound will continue past the interchange. Regarding the eastbound side, capacity will be



enhanced east of Western Way. Existing key intersections to be impacted include Baymeadows Way, Prominence Pkwy., Western Way, and Baymeadows Cir. West.

Changes to these intersections are outlined in Section 5.3.4, but all have the intent of more efficiently processing traffic. At Baymeadows Way, this is accomplished by taking out one phase from the signal's cycle. Two phases, however, are removed at the Prominence Pkwy. intersection. East of I-95, at Western Way, three cycle phases will take the place of the four that exist today. Finally, the proposed signal at Baymeadows Cir. W will serve additional left turns from SR 152 eastbound.

Southside Blvd.

At Southside Blvd. and Paradise Island Blvd., a pair of left-turn lanes will be added to the end of the I-95 northbound off-ramp that provide better access to Western Lake Dr. and Belle Rive Blvd. Just north of the gore to I-95 southbound, a signalized U-turn will be inserted to service northbound users desiring to proceed to I-95 southbound or continue south on SR 115. At the intersection of SR 115 with Western Lake Dr., a traffic signal will be installed to process increased traffic resulting from the left turns being deleted at the intersection to the north (see below).

The intersection system of Southside Blvd. with Belle Rive Blvd. will be designed in two parts. First, the main intersection will see the elimination of left turns from Southside Blvd. northbound. Meanwhile, the Belle Rive Blvd. through movement will cease to exist, and traffic originating from the west will have two dedicated left-turn lanes and one to proceed right. At the secondary intersection at the service road, the signal here will be removed with the introduction of a partial roundabout to the south. Thus, not only will the two intersections be consolidated into a single traffic signal, but greater efficiencies will be realized with only three phases per cycle.

5.3.4 Access Management

FDOT's Access Management Guidebook defines access management as "the coordinated planning, regulation, and design of access between roadways and land development." The overall objective is to minimize conflict points. Some examples include a vehicle turning left across oncoming traffic lanes, or a pedestrian crossing a driveway. The sections that follow outline specific changes to access management that are proposed with this project.

I-95

As stated in Section 2.6.2, I-95 is classified as Access Class 1, being a limited access roadway. The standard interchange spacing for the corresponding Area Type (2) is two miles. I-295 and US 1 are only 1.3 miles apart, while US 1 and SR 115 are separated by 0.8 miles. The distance between the SR 115 and SR 152 interchanges is 1.9 miles. Finally, the SR 152-to-SR 202 spacing exceeds the standard, at 2.3 miles. Section 5.3.2 provides details about changes to the ramps connecting to/departing from I-95.



US 1/Philips Hwy.

- Signalized intersection added for traffic exiting I-95 northbound

SR 115/Southside Blvd.

PARADISE ISLAND BLVD.

- Two left-turn lanes added at end of I-95 off-ramp
- Two islands added in intersection
- U-turn eliminated from SR 115 southbound

I-95 SOUTHBOUND ON-RAMP

- Signalized intersection added for traffic to enter I-95 southbound from SR 115 northbound

WESTERN LAKE DR.

- Intersection signalized

BELLE RIVE BLVD.

- Left turn eliminated from SR 115 northbound
- Through movement eliminated for Belle Rive Blvd.
- Signal eliminated at SR 115 service road
- Island added in intersection

SR 152/Baymeadows Rd.

- Conversion to diverging diamond interchange (DDI)

BAYMEADOWS WAY

- Left turns eliminated from SR 152
- Through movement eliminated for Baymeadows Way

PROMINENCE PKWY.

- Left turn from SR 152 eastbound re-oriented to western (ABC) driveway
- Left turn eliminated from Prominence Pkwy.
- Western (ABC) driveway incorporated into signalized intersection
- Eastern (shared) driveway removed from signalized intersection and left turn eliminated

WESTERN WAY

- Left turn eliminated from SR 152 eastbound
- Through movement eliminated for Western Way
- Left turn eliminated from Western Way southbound



BAYMEADOWS CIR. W

- Intersection signalized
- Left turn eliminated from SR 152 westbound into SunTrust driveway
- Through movement eliminated for Baymeadows Cir. W/SunTrust driveway
- Left turn eliminated from SunTrust driveway

BAYMEADOWS CIR. W TO BAYMEADOWS CIR. E/PRINCETON SQUARE BLVD. W

- Median closed

5.3.5 Traffic Operations

The operational analysis used 2019 for the Existing Year, 2030 for the Opening Year, and 2045 for the Design Year. 2045 was selected as the Design Year because it is customary to not extrapolate more than five years beyond the latest year in an approved regional model. VISSIM microsimulation software was the principal tool utilized in the analysis.

In the AM peak hour in Design Year 2045, speeds in the northbound direction of I-95 are projected to vary between 53 mph and 66 mph. See **Appendix J** for a schematic showing various measures for the operational performance of the interstate. The lower speeds are in the segment between US 1 and SR 115, where weaving takes place as many I-95 drivers make their way to the SR 115 off-ramp and motorists enter the mainline traffic stream from US 1. Even so, the simulation shows that throughput of vehicles (Total Simulated Volume) is never less than 90 percent of the demand (Total Demand Volume). No issues exist, though, in the southbound direction, with speeds of at least 65 mph and up to 68 mph anticipated.

Regarding the PM peak hour, the schematic shows that northbound traffic will flow freely, with speeds between 65 mph and 67 mph. The heavier movement at this time of day is in the southbound direction. While speeds are expected to be as quick as 67 mph, sub-60 mph travel is forecast for the link between US 1 and I-295 due to the overall effect of traffic entering from US 1 and many users opting for the ramp to I-295. Nonetheless, the simulated volume of vehicles processed is consistently within 10 percent of the volume of vehicles attempting to traverse through the study segment.

Compared to the No-Build Alternative, the Build Alternative provides for faster average speeds in both the morning and afternoon peak travel periods. This holds true for both the northbound and southbound directions. While the difference is within 4 mph for I-95 southbound, and for I-95 northbound in the afternoon, average speeds are forecast to increase by a significant 31 mph in the Build Alternative scenario for northbound travelers in the morning. Thus, from a traffic operations perspective, the Build Alternative is a successful design.

5.3.6 Pedestrian Facilities

While modifications will occur at the Southside Blvd./Belle Rive Blvd. intersection to maintain existing connectivity, the true pedestrian upgrades for this project will be seen along Baymeadows Rd., as discussed below.



- Pedestrian access will be in median through diverging diamond interchange for safety
- Sidewalks will be widened to eight feet where right of way is available
- Crosswalk will be added to western leg of Prominence Pkwy. intersection
- Crosswalk will be marked at western Shell driveway (north side of road between I-95 and Western Way)
- Crosswalk will be marked at northern leg of Western Way intersection
- Crosswalk will be marked at Bank of America driveway (north side of road between Western Way and Baymeadows Cir. W)
- Crosswalk will be added to eastern leg of Baymeadows Cir. W intersection
- Crosswalk will be marked at northern leg of Baymeadows Cir. W intersection

5.3.7 Environmental Impacts of Build Alternative

Contamination

Please refer to **Table 5-1** for potential contamination impacts (from CSER and technical memorandum introduced in Section 2.21.1). Level 2 assessment of the soil and groundwater may be required at *medium* and *high* rated sites as the pond alternatives and drainage plans are developed. Please note that these recommendations are based on the evaluation of these parcels' potential impacts to the proposed improvements to the I-95 corridor from I-295 to SR 202. If drainage features including ponds, piping, and structures; utilities; or other subsurface construction will be added along the corridor or on adjacent roadways, the site rankings should be re-evaluated based on the updated construction information.



TABLE 5-1 – POTENTIALLY CONTAMINATED SITES

SITE (#)	LOCATION	CONCERN(S)	RATING	IMPACT(S)
FEC Railroad (2B)	S/W of US 1	Arsenic, petroleum hydrocarbons	Medium	Excavation for bridge widenings
Little Harbour Plaza (2C)	SE quadrant of I-95/US 1	Petroleum hydrocarbons, lead	Medium	No nearby subsurface work
Republic Services (4G)	E of I-95 b/w SR 115 and SR 152	Halogenated and non-halogenated solvents, used oil	Medium	Excavation of Pond D-E2
TMM (former Southern Bell/Western Electric) (4I)	E of I-95 b/w SR 115 and SR 152	Petroleum hydrocarbons, trichloroethylene	Medium	No nearby subsurface work
Fire Station #44 (4J)	SE of I-95/SR 152	Petroleum hydrocarbons	Medium	No nearby subsurface work
Shell #1070 (5B)	SW quadrant of I-95/SR 152	Petroleum hydrocarbons, lead	Medium	Drainage improvements
GATE #132 (5C)	SE quadrant of I-95/SR 152	Petroleum hydrocarbons	High (ACTIVE REMEDIATION)	Drainage improvements
Empty lot (former Shell #3011) (5D)	SE quadrant of I-95/SR 152	Petroleum hydrocarbons, used oil	Medium	Drainage improvements
Shell-First Coast Energy #1084 (5E)	NE quadrant of I-95/SR 152	Petroleum hydrocarbons, used oil	Medium	Drainage improvements
Shell-First Coast Energy #1071 (5F)	NE quadrant of I-95/SR 152	Petroleum hydrocarbons	Medium	Drainage improvements
Adamec Harley-Davidson (former Shell-First Coast Energy #2002) (5G)	NW quadrant of I-95/SR 152	Petroleum hydrocarbons, used oil, solvents, corrosives	Medium	Drainage improvements (pipe/structures and ditches)
Cypress Plaza Properties (6E)	W of I-95 b/w SR 152 and SR 202	Debris, metals, asbestos, pesticides & herbicides, petroleum hydrocarbons	High (BURIED WASTE STILL PRESENT)	Lateral ditch excavation
Florida Cycle Supply Corporation, Electromate, Pure Powersports, Filing Source, Plant Life Farms (6G)	E of I-95 b/w SR 152 and SR 202	Heavy metals, petroleum hydrocarbons, solid waste debris, chlorinated solvents, pesticides	High	Flow direction is away from project
Allstate Electrical Contractors (6H)	E of I-95 b/w SR 152 and SR 202	Petroleum hydrocarbons	Medium	Lateral ditch excavation
Dog Wood Park and surrounding area (former Salisbury Road dump) (6I)	E of I-95 b/w SR 152 and SR 202	Heavy metals, petroleum hydrocarbons, solid waste debris, chlorinated solvents	High	No nearby subsurface work

Noise and Air Quality

Two hundred fifty-one (251) receptor sites (discrete/representative locations for noise-sensitive sites) were evaluated within the project area. The receptors were assigned to 202 residences, 17 institutional areas (two with a recreational basketball court, three with an outdoor picnic area, five with interior use, and seven with a recreational playground), 14 office buildings with an outdoor picnic area, five places of worship (three with exterior use and two with interior use), three medical facilities, three hotels, and four restaurants with an outdoor dining area. Additionally, there was one receptor each for a pool, a picnic area, and a dog park.

Design Year 2045 traffic noise levels for the Build Alternative will approach, meet, or exceed the Federal Highway Administration's (FHWA) Noise Abatement Criteria (NAC) at 99 residences within six residential areas (i.e., NAC B) and at eight special land uses (i.e., NACs C and E). The six impacted residential communities include four residences within Bentley Green Apartments, 30 residences within Canopy at Belfort Park Apartments, one residence within Portiva Apartments, 25 residences within Lakeside Apartment Homes, 21 residences within Bay Club Apartment Homes, and 18 residences within Park Potenza Apartment Homes. The eight impacted special land use sites include outdoor use areas associated with the Bright Horizons School, Jacksonville School of Autism, Southpoint Community Church, Concourse Business Park, Baymeadows Islamic Center, Jacksonville Operations Center, and JP Morgan Chase South and North Buildings. In accordance with FHWA and FDOT policies, the feasibility and reasonableness of noise barriers were considered for these impacted noise-sensitive sites.

Noise barriers were not considered a feasible noise abatement measure at the one impacted residence at Portiva Apartments because the impacted site represents an isolated residence. For a noise barrier to be considered an acoustically feasible abatement measure, it must benefit at least two impacted receptor sites.

Noise barriers were evaluated for the impacted residences associated with Bentley Green Apartments, Canopy at Belfort Park Apartments, Lakeside and Bay Club Apartment Homes (Common Noise Environment), Park Potenza Apartment Homes, and the eight special land use sites that approach, meet, or exceed the NAC.

Based on the noise analyses performed to date, there appear to be no apparent solutions available to mitigate the noise impacts at 14 residences including four associated with Bentley Green Apartments, one associated with Portiva Apartments, seven associated with Lakeside and Bay Club Apartment Homes, and two associated with Park Potenza Apartment Homes. The same can be said for the eight special land use areas previously mentioned. Therefore, the traffic noise impacts to these noise-sensitive sites are an unavoidable consequence of the project.

Noise barriers are recommended for further evaluation in the design phase at the following locations: Canopy at Belfort Park Apartments, Lakeside and Bay Club Apartment Homes, and Park Potenza Apartment Homes. The locations of the recommended noise barriers are depicted in **Appendix A**. The Canopy at Belfort Park Apartments wall would be roughly 1,190 feet in length and reduce noise by at least 5 decibels [dB(A)] for 44 residences. Three separate runs of wall would shield the Lakeside and Bay Club Apartment Homes, reducing noise by at least 5 dB(A) for 76 residences. Finally, a barrier 700 feet in length at Park Potenza Apartment Homes has the potential to decrease traffic noise at 34 residences by at least 5 dB(A).



This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS). The project is expected to improve the LOS and reduce delay and congestion on all facilities within the study area. Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

Cultural Resources

SEARCH has concluded that the widening of I-95 between I-295 and SR 202, with ancillary improvements, will not negatively impact the cultural resources that are present in the area. Please see **Appendix K** for the letter of concurrence from SHPO.

Regarding Losco Regional Park, no part of it will be acquired. Furthermore, the project will not prevent park access, will not create any temporary occupancy of the resource, and will not utilize any portion of the resource for the project. Additionally, the project will not cause any meaningful proximity impacts to the park property. Thus, there will be “No Use” within the meaning of Section 4(f) to Losco Regional Park. In summary, no Section 4(f) resource will be impacted by the proposed improvements.

Natural Resources

WETLANDS

As identified in Section 2.21.4, the acreage of wetlands in the project area is 30.4 acres. However, the extent of actual impacts is approximately 18.8 acres. At this time, it is assumed that the higher quantity of wetlands (30.4 acres) may be permanently impacted, and that all impacts would require mitigation. Impacts will be incurred to wetlands in SJRWMD Basins 4 and 5. Basin 4 is located north of Baymeadows Rd., while Basin 5 is located south. Please refer to the NRE (under separate cover) for a map. It is estimated that 3.97 mitigation credits will be required for impacts to wetlands in Basin 4, and 15.44 credits will be required for impacts to wetlands in Basin 5. The total number of credits is 19.41 to match the functional value of the wetlands being impacted, determined in the NRE through the Uniform Mitigation Assessment Methodology, or UMAM.

Wetland impact acreages and mitigation requirements are subject to change and will be finalized during the permitting process. FDOT will provide appropriate mitigation to satisfy final mitigation needs. A number of existing stormwater ponds and ditches (both considered surface waters) occur within the project study area. At this time, it is assumed that impacts to these surface waters will not require mitigation. Thus, no significant impacts to wetlands and surface waters are anticipated. Please refer to the NRE for further information.

PROTECTED AND ENDANGERED SPECIES

A total of 34 species that are federally-listed, candidates for federal listing, and/or state-listed were determined to have no probability of occurrence in the project study area and will not be affected by the project.



Four state-listed animal species (pine snake, tricolored heron, roseate spoonbill, and Southeastern American kestrel) were determined to have a low probability of occurrence in the project study area. The state-listed gopher tortoise also has a low probability of occurrence. One state-listed wading bird (little blue heron) was determined to have a moderate probability of occurrence. No adverse effects are anticipated for any of these species.

The federally-listed Eastern indigo snake was determined to have a low probability of occurrence in the project study area. The wood stork was determined to have a moderate probability of occurrence. Any loss of foraging habitat will be offset by providing wetland mitigation that provides suitable foraging habitat for the wood stork. The project may affect, but is not likely to adversely affect, these federally-listed species. Agency coordination was not necessary because Effect Determination Keys were used.

Continued agency coordination will occur during permitting to address final determination of impacts, implementation of protection measures, and mitigation, if necessary. The project will not impact essential fish habitat (EFH); therefore, no EFH mitigation will be required. Please refer to the NRE for further information.

PROTECTED PLANTS

A total of 39 state-listed plant species were determined to have a low probability of occurrence in the project study area, and four were determined to have a moderate probability of occurrence. No adverse effects are anticipated for these species. Please refer to the NRE for further information.

FLOODPLAINS

Much of the area being studied lies within FEMA (Federal Emergency Management Agency) Zone X, which represents areas outside of the 100-year floodplain. Isolated instances of Zone A (areas within the 100-year floodplain) occur south of Baymeadows Rd. near Baymeadows Way and on both sides of I-95 near the project's northern terminus. Finally, Zone AE areas (within the 100-year floodplain and having an established base flood elevation) are primarily prevalent surrounding Julington Creek and Pottsburg Creek, along with Sweetwater Creek. While these are regulated floodways, construction activities are not expected to impact them, and a No-Rise Certification will not be needed. While four encroachments have been preliminarily identified, floodplain compensation will ultimately be addressed during the project's permitting phase for any impacts that do arise.

The proposed improvements will cause only minimal increases in flood elevations. There will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Thus, floodplain encroachment here is not significant. Please refer to the Location Hydraulics Report for additional information.

WATER RESOURCES

A Water Quality Impact Evaluation (WQIE) was conducted in compliance with the Clean Water Act and the Safe Drinking Water Act. Water quality impacts will be avoided with the implementation of erosion and sediment control measures including, but not limited to, silt fence and turbidity barriers that shall be installed and maintained prior to and during construction, as needed. These measures will



be shown on the Stormwater Pollution Prevention Plan (SWPPP) and the Erosion and Sediment Control Plan, as approved between SJRWMD and FDOT.

Social Factors

The minority population in the project area stands at 30.94%, while low-income households make up 10.35% of the total in the project area (corresponding percentages for Duval County are 37.93% and 14.19%). The widening of I-95 is not anticipated to adversely affect these individuals. Neither should elderly and disabled persons be disenfranchised by the planned improvements. Given that construction will take place on existing corridors, no community access will be severed. Thus, impacts to society should be negligible.

5.4 Safety

Methodology from AASHTO’S Highway Safety Manual (HSM) was used to compare predicted crashes for both the No-Build Alternative and the Build Alternative. Four individual interstate segments were analyzed in this predictive safety analysis, along with the two interchanges (excluding SR 115, see below) within the project limits.

The Enhanced Interchange Safety Analysis Tool (ISATe) was used to apply the HSM predictive methodologies for this investigation. ISATe is a spreadsheet-based tool that streamlines use of Safety Performance Functions (SPFs) and Crash Modification Factors (CMFs) from the 2014 HSM Supplement publication. SPFs are equations that generate expected annual crash frequencies based on various inputs (e.g. traffic volume, roadway length, etc.) and base conditions (e.g. shoulder width, presence/absence of a traffic barrier, etc.). CMFs, in turn, are applied as adjustments when actual roadway characteristics differ from the base scenario.

Table 5-2 below presents the results of the analysis for I-95, broken down by segment. The section between I-295 and US 1 shows a slight 2 percent decrease in yearly crashes, and the remaining links should all see more notable reductions in crashes. More specifically, the decline between US 1 and SR 115 is 17 percent and it is 10 percent between SR 115 and SR 152. The largest decrease is in the northernmost section between SR 152 and SR 202, where annual crashes should drop by 24 percent. These results are all compatible with less future traffic congestion that the Build Alternative will bring.

TABLE 5-2 – ANNUAL EXPECTED CRASHES BY SEGMENT

SEGMENT	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE
I-295 to US 1	20.1	19.7
US 1 to SR 115	28.3	23.6
SR 115 to SR 152	63.4	57.0
SR 152 to SR 202	63.9	48.3

Note: Above figures represent averages through Design Year



In consideration of the interchanges along I-95, crash predictions at these locations are provided below in **Table 5-3**. A minimal 3 percent increase is anticipated at the interchange of I-95 with US 1, due to the additional intersection necessitated by the separation of the northbound ramps. However, a 37 percent fall is projected at the I-95/SR 152 interchange, derived from the CMF for converting a standard diamond interchange to the diverging diamond type.

A formal crash analysis was not undertaken for the ramp connections between I-95 and SR 115/Southside Blvd. because the projected traffic volumes in the Design Year associated with the added movements are low. Less than 1,000 vehicles per day are forecast to utilize the new ramp at the Paradise Island Blvd. intersection, while the figure for the planned U-turn option onto I-95 southbound is just under 5,000 vehicles per day. While there is a CMF that estimates a 25 percent uptick in crashes at the Paradise Island Blvd. intersection (52 crashes at this location between 2013 and 2017), an overall safety benefit is expected for the Southside Blvd. corridor. For instance, the aforementioned ramp insertion should lessen incidents caused by weaving that currently takes place to the north.

TABLE 5-3 – ANNUAL EXPECTED CRASHES BY INTERCHANGE

INTERCHANGE	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE
I-95/US 1	35.0	35.9
I-95/SR 152	43.3	27.4

Notes: Above figures represent averages through Design Year, Interchanges at I-295 and SR 202 not included above because outside of project limits

Thus, from a safety perspective, the Build Alternative outperforms the No-Build Alternative.

5.5 Alternatives Evaluation

5.5.1 Alternatives Evaluation Matrix

Table 5-4 below summarizes the differences between the No-Build and Build Alternatives.

TABLE 5-4 – ALTERNATIVES EVALUATION MATRIX

ITEM	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE	
<i>Cost</i>			
Design	\$0	\$13,306,000	
Right of Way	\$0	\$94,000 (one parcel)	
Construction	\$0	\$133,055,000 ^E	
CEI	\$0	\$15,967,000	
<i>Operations/Safety</i>			
Level of Service (LOS) ^D	F ^L	<i>Southbound</i> ^S	<i>Northbound</i> ^S
		AM: B, C PM: C, D	AM: C, D PM: B, C
Annual expected crashes ^{MT}	176	150	
<i>Environment</i>			
<i>Social/Economic</i> ^B			
Relocations	0	0	
Places of worship impacted	0	3	
Cemeteries impacted	0	0	
Schools impacted	0	4	
Hospitals impacted	0	0	
<i>Cultural</i> ^B			
Historic sites impacted	0	0	
Archaeological sites impacted	0	0	
Recreational/Protected areas impacted	0	1	
<i>Natural</i>			
Wetland/Surface water impacts	0 acres	30.4 acres	
<i>Physical</i>			
Contaminated sites potentially impacted (medium or high risk)	0	15	
Noise-sensitive locations potentially impacted	0	33	

Notes: B – Within 500' buffer, D – In Design Year 2045, E – See Appendix L for Long Range Estimate (LRE), L – From Methodology Letter of Understanding (MLOU), M – Mainline, S – From SIMR, T – Through Design Year 2045

5.5.2 Recommendations

Based on the overall analysis for the study area, the Build Alternative is the Preferred Alternative. The traffic operational and safety analysis results were considered to select the Build



Alternative. Specifically, the SIMR states that average speeds in the Design Year on I-95 between International Golf Pkwy. and Atlantic Blvd. will be at least 66 mph, suggesting that users in the I-295 to SR 202 segment will reach their destinations faster. In fact, the Level of Service should be as high as B and no worse than D, as seen in Table 5-4, which compares favorably to the LOS F designation expected for the No-Build Alternative. From a safety standpoint, expansion of I-95 should succeed in yielding a safer corridor, with 150 yearly crashes predicted, representing a respectable 15 percent decline from the No-Build counterpart.

The Build Alternative will augment capacity on I-95 and represents a critical step in terms of growth preparation. It is evident, then, that the Build Alternative satisfactorily addresses each of the project's purposes, given in Section 1.2.1, and lends further support to it being carried forward to the next stage of project delivery.

6 PUBLIC INVOLVEMENT

Stakeholders were first introduced to this project in August 2016 through FDOT's Efficient Transportation Decision Making (ETDM) process. No public comments were submitted during this stage.

Another key point in outreach was the FDOT District 2 Work Program public hearing that took place in October 2019. The Department did not receive any comments from the public at this hearing.

A Public Involvement Plan (PIP) was prepared for this project to identify stakeholders and describe outreach strategies to garner their input. Groups and individuals outlined in the PIP include agencies at the federal, state, and regional levels; Native American tribes; local officials; and community facilities, such as educational institutions. One means of reaching these people, and many more, will be a website featuring interactive visuals that showcase the proposed improvements, and exhibits will be available for download, as well. Coordination with FDOT's Public Information Office may also take place to use the Department's social media platforms to advance project awareness.

A crucial element of public involvement efforts will be a hybrid in-person/virtual public hearing scheduled to be held in Fall 2021 at FDOT'S Urban Office in Jacksonville. The public will have the opportunity to learn more about the proposed action and offer their input. Project documents will be made available prior to the hearing at the Urban Office and Southeast Regional Library.



7 PREFERRED ALTERNATIVE

7.1 Horizontal and Vertical Geometry

7.1.1 Horizontal Geometry

Existing tangents and curves will not be altered due to the widening of I-95. Please refer to **Appendix A** for the concept plans. In other words, the points of curvature and points of tangency labeled will remain valid.

7.1.2 Vertical Geometry

Similarly, expanding the interstate will not affect the vertical alignment.

7.2 Typical Sections

Mainline typical sections are provided on the pages that follow (**Figures 7-1 through 7-4**). All other typical sections are provided in **Appendix M**. Fifteen typical sections are shown in the appendix to illustrate bridge widenings over the FEC Railway, US 1, and SR 152; segments of I-95 that feature a center concrete barrier wall; US 1's loop ramps and corridor; the ramp to SR 115 and two areas along that roadway; and five distinct locations along the varying SR 152 thoroughfare.



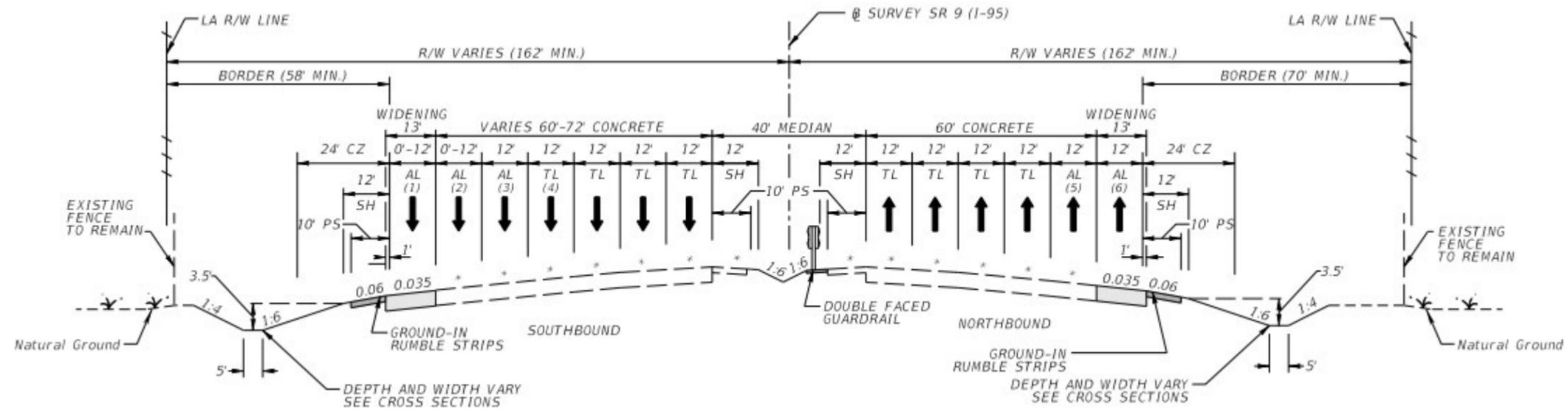


FIGURE 7-1 – I-295 TO US 1 TYPICAL SECTION

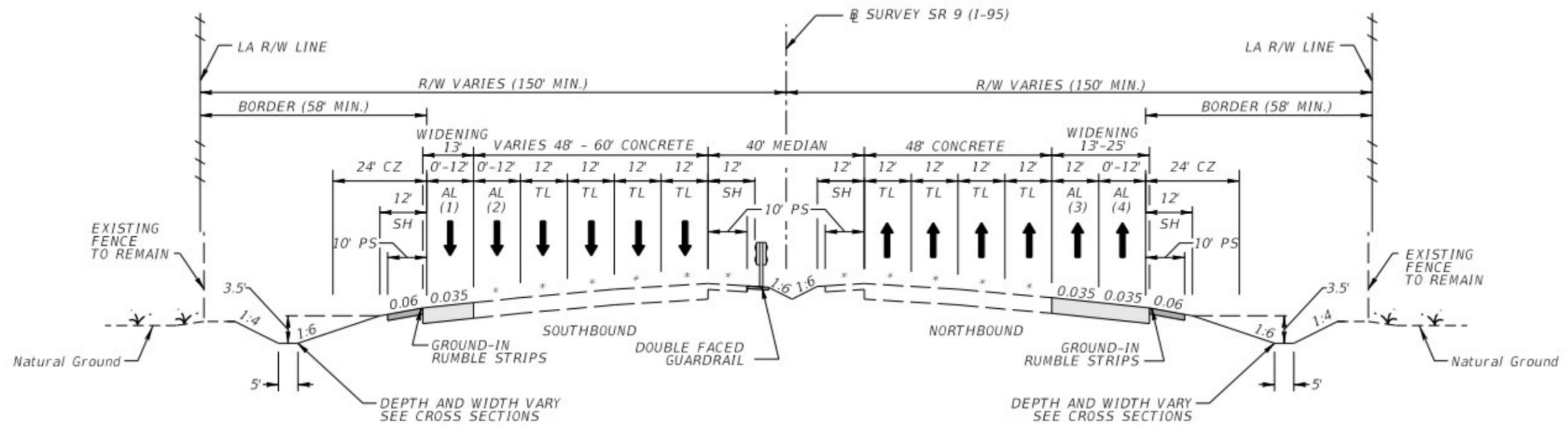


FIGURE 7-2 – US 1 TO SR 115 TYPICAL SECTION

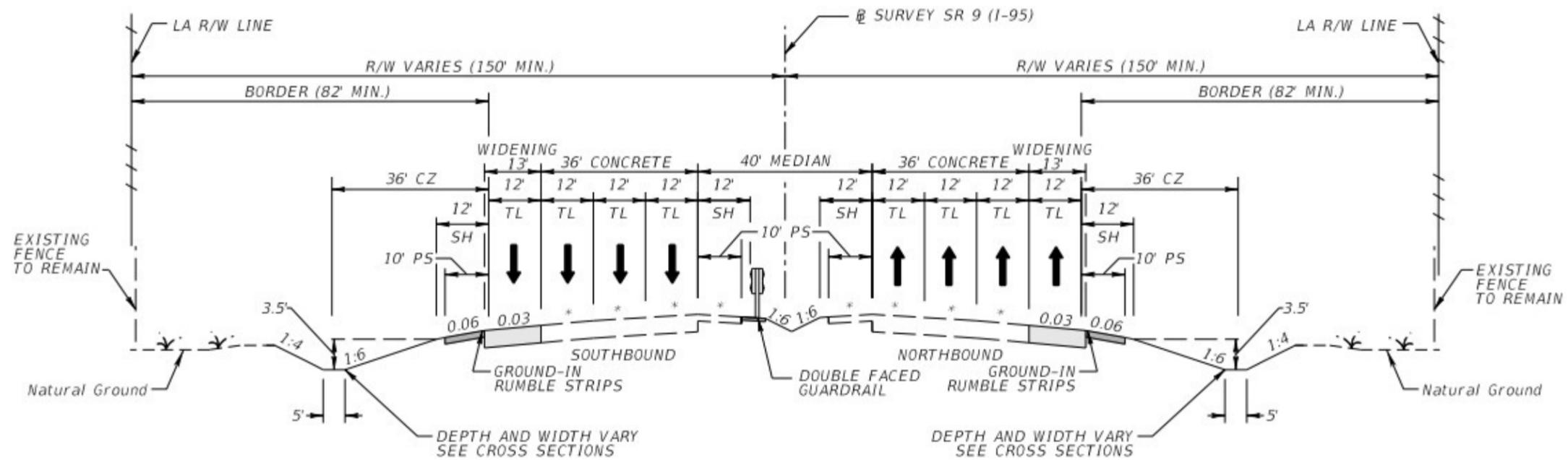


FIGURE 7-3 – SR 115 TO SR 152 TYPICAL SECTION

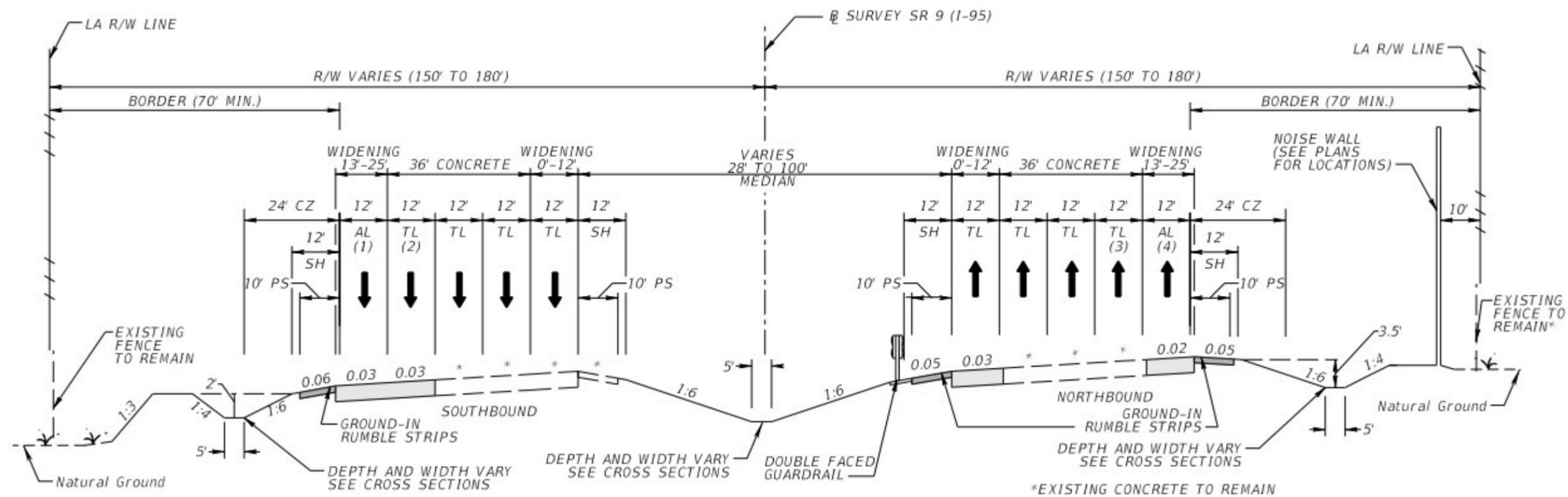


FIGURE 7-4 – SR 152 TO SR 202 TYPICAL SECTION

7.3 Preliminary Drainage

7.3.1 Pond Siting Methodology

A preliminary pond siting study was completed and documented in the Pond Siting Report (PSR), dated March 2021. The proposed stormwater management facilities will meet all SJRWMD and FDOT criteria. The SJRWMD 25-year, 24-hour storm event was used to establish the attenuation criteria for the proposed ponds. For the purposes of pond sizing estimates, the required treatment volume was taken as 2.5 inches over the net additional impervious area. A total of seven new wet detention ponds will be constructed to meet requirements for attenuation and water quality. The following sections offer further details regarding these ponds.

7.3.2 Pond B-1

Pond B-1 will serve Basin B. It is approximately 3.1 acres in size and is situated east of the on-ramp from I-295 eastbound. Owned by FDOT, the space is currently vacant.

7.3.3 Ponds C-1A through C-1E

Five ponds will be required for Basin C, and they are all sited at the I-95/US 1 interchange (refer again to **Appendix A**). Pond C-1A has an area of 2.1 acres and would be constructed immediately southeast of the new NB off-ramp. Pond C-1B would be found within the infield of the new loop ramp, measuring 3.5 acres in size. Just to the north is the proposed Pond C-1C, which covers 2 acres. To the west of I-95, 2.5-acre Pond C-1D fits into that side's loop ramp, while Pond C-1E comes in at only 1 acre, north of the loop ramp. No right of way acquisition will be needed for stormwater management in Basin C.

7.3.4 Pond D-E2

Pond D-E2 was chosen as the preferred site for Basins D and E. It is roughly a quarter mile east of mainline I-95, east of an existing FDOT pond, which is, in turn, east of Suddath Relocation Systems of Jacksonville. This property would need to be acquired from SJRWMD's easement for the 2.5-acre pond.

7.4 Structures

7.4.1 Vertical Clearance

Florida-I 36 (FIB 36") beams will be utilized for all bridge widenings, which are shallower than the existing AASHTO Type III and IV beams by 9" and 18", respectively. What this means is that vertical clearances will not be reduced. These values will be provided, when available, in subsequent sections.



7.4.2 Bridges over FEC Railway

The southbound bridge will be widened 16 feet to the outside, which will allow for another lane and expansion of the outside shoulder. Vertical clearance here has not been determined, but it is greater than the clearance for its sister bridge, which is addressed below.

The northbound bridge will gain 16 feet of width, with 12 feet being for a new lane and four feet being for the outside shoulder. Vertical clearance will remain at 22'-9", which is approximately the existing condition.

7.4.3 Bridges over US 1/Philips Hwy.

On the southbound side, widening 16 feet on the outside will permit a sixth lane and a 10-foot outside shoulder. Vertical clearance will not drop below the 15'-7" that exists.

Sixteen feet of widening to the outside on the northbound side achieves the same gains in the form of another 12-foot lane and a larger shoulder. The vertical clearance here will stay at 17'-7 ³/₄".

7.4.4 SR 115/Southside Blvd. Bridge over I-95

While the minimum vertical clearance presently measures at 17'-5" and occurs on the northbound side beneath the median pier cap, the planned improvements to I-95 are expected to shift the location of the minimum vertical clearance to the southbound side under the other pier cap, where the quantity will decrease to 17'-3".

7.4.5 Bridges over SR 152/Baymeadows Rd.

The southbound bridge will be widened to the outside by 12 feet in order to achieve another travel lane on I-95. The existing minimum vertical clearance will not be altered from 16'-1/2". Because this is less than the current standard of 16.5' for new bridges, the bridge will remain Functionally Obsolete.

It is important to note that a Functionally Obsolete designation is no indication of a safety issue. It simply means that one or more bridge characteristics do not meet the latest design criteria. Such characteristics could include lane width, shoulder width, or barrier height, for example. In the case of the southbound bridge over Baymeadows Rd., however, the clearance does eclipse the minimum required for modification of an existing bridge.

In a very similar fashion, 12 feet of outside widening in the northbound direction will create space for a fourth lane; the minimum vertical clearance here will stand at 15'-4". This structure, too, will still be Functionally Obsolete, but concerns are few, as trailer heights are limited to 13.5'. Moreover, an alternate route is available via US 1, SR 202, and SR 115 that offers more favorable vertical clearances (just below 16' at the bridge that carries the I-95 mainline over SR 202).



7.4.6 Structure Life

Although the six bridges slated to be widened as part of this project were originally constructed in the 1960s, complete replacement is not under consideration. None are Structurally Deficient, and neither is it economically advantageous to replace them at this time. Additionally, such work would be superfluous to the project's main goal of widening I-95.

7.5 Temporary Traffic Control (TTC)/Maintenance of Traffic (MOT)

7.5.1 General

A Temporary Traffic Control Plan (TTCP) will be devised during the design phase of this project. Nonetheless, several guiding principles are already known that will be followed in facilitating successful construction of all improvements. Lane closures will only be scheduled during off-peak times to minimize disruption to motorists. Also, Index 102 of the FDOT Standard Plans and Section 102 of the FDOT Standard Specifications for Road and Bridge Construction will be adhered to for the safety of workers and roadway users alike. Regarding dissemination of information to the traveling public, FDOT's Public Information Office will ensure timely and accurate notices of operations affecting traffic patterns.

The following sections describe how construction will be phased at each of the work locations throughout the project.

7.5.2 I-95

Widening will primarily be to the outside from I-295 to SR 152/Baymeadows Rd. Using standard plans for temporary traffic control, this construction activity can be accomplished placing temporary pavement on the inside shoulders for cross slope correction and allowing a partial lane shift towards the median to accommodate the installation of temporary barrier wall on the outside. Then, there will be removal of the existing outside concrete shoulders for widening and reconstruction of the additional lane and shoulder.

From SR 152/Baymeadows Rd. to south of SR 202/JTB, the widening remains to the outside in the southbound direction, but is to both the inside and outside for the northbound direction. To optimize construction phasing, the widening to the outside will be accomplished first in the northbound direction. Once widening to the outside is complete, traffic will be shifted outward using the new travel lane and temporary barrier wall will be installed allowing removal of the inside concrete shoulder for widening and reconstruction.

Interchange ramp connections to I-95 will be maintained using temporary pavement as required. See the following interchange discussions for more information.



7.5.3 US 1/Philips Hwy.

All ramps within the US 1/Philips Hwy. interchange with I-95 will be reconstructed. While it is anticipated that all movements can be maintained during construction, there are different means and methods available. The overall concept is discussed below, but will be detailed in final design.

Phase I – Maintaining existing ramp movements, construct I-95 southbound exit to US 1 and I-95 northbound entrance from US 1 on new alignment. Open traffic to newly constructed I-95 southbound exit, using existing signal at US 1.

Phase II – Using standard plans for traffic control, construct US 1 access management modifications and construct new signalized connections to US 1 for I-95 northbound exit loop ramp and I-95 northbound entrance ramp. Construct temporary pavement connection to existing loop ramp.

Phase III – Open traffic to newly constructed I-95 northbound entrance ramp using new signal connection at US 1. Align existing northbound exit loop ramp traffic to newly constructed signal connection via the temporary asphalt connection. Construct remainder of I-95 northbound loop ramp exit on new alignment. Construct US 1 northbound loop to I-95 southbound maintaining traffic on existing loop ramp as feasible. Coordinate short-duration loop ramp closure and detour traffic. Multiple detour routes are available, depending on origin of travel. The most feasible detour routes are as follows:

- Traffic originating south of the I-295 interchange on US 1: Utilizing temporary signage and variable message boards, divert US 1 northbound traffic to I-95 southbound via the I-295 interchange located 1.5 miles south of the US 1 and I-95 interchange. Traffic would travel west on I-295 to the I-295 interchange with I-95 and continue on to their destinations from this point.
- Traffic originating between I-295 and I-95 on US 1: Utilizing temporary signage and variable message boards, divert US 1 traffic to I-95 northbound and detour traffic to exit at the next interchange with SR 152/Baymeadows Rd. and use this interchange to enter I-95 southbound.

Phase IV – Detour US 1 southbound traffic to the I-295 and US 1 interchange and close the US 1 southbound entrance ramp to I-95 southbound to reconstruct the ramp.

7.5.4 SR 115/Southside Blvd.

Using standard plans for temporary traffic control, most of the construction activities along SR 115 can be accomplished. Temporary and permanent traffic operation changes will be required for the intersection modifications at Paradise Island Blvd. and Belle Rive Blvd. Conceptual traffic control is detailed next.



The intersection at Paradise Island Blvd. will be converted from a full opening to a directional opening with the addition of the new intersection leg to receive the new ramp connection from I-95. When the southbound U-turn movement ceases to exist, an alternative is to use Timberlin Park Blvd.

As the northbound left turns at Belle Rive Blvd. will be removed in the permanent condition, the installation and operation of the Western Lake Dr. intersection will need to be completed prior to removal of these turn lanes at Belle Rive Blvd. to maintain access to the Belle Rive neighborhood via the connecting service road. The proposed mast arms for the new (Belle Rive) intersection will be located to allow maintenance of the existing mast arm signal operation. The service road U-turn and temporary diversion of northbound traffic on the west side of SR 115, along with the new northbound slip ramp to SR 115 southbound, can be constructed maintaining existing traffic patterns using standard plans for temporary traffic control until the new configuration is complete.

7.5.5 SR 152/Baymeadows Rd.

While converting a tight diamond interchange to a diverging diamond interchange (DDI) is a significant change in traffic operations, standard temporary traffic control techniques will be used to accomplish the geometric changes since the crossovers will be built using standard cross slopes similar to the existing conditions. Therefore, necessary widening and resurfacing activities will take place while maintaining traffic in existing traffic patterns to set the footprint for the DDI and other SR 152 access management improvements. Proposed traffic signals will be located to maintain existing traffic patterns until the change in traffic operation is made. Advance notification will be made prior to shifting traffic into the DDI format.

Like the US 1 interchange reconstruction, maintaining ramp traffic will be accomplished through a combination of using standard plans for temporary traffic control, temporary pavement, and detours as required to make final ramp connections. A brief discussion for each ramp movement follows.

SR 152 to I-95 southbound ramp: The ramp will be reconstructed by maintaining traffic on the existing alignment with a temporary connection to the new ramp gore at I-95. A temporary connection for SR 152 westbound left turns will allow access to the new ramp, allowing the slip ramp for the DDI configuration to be constructed.

I-95 northbound to SR 152 exit ramp: A temporary connection at I-95 will allow reconstruction of the I-95 exit gore as needed. Most of the ramp will be widened or reconstructed while maintaining traffic in its existing configuration. Moving traffic to newly constructed portions of the ramp will permit replacement in areas where the existing and proposed pavement overlaps.

SR 152 to I-95 northbound entrance ramp. The ramp will be reconstructed and widened by maintaining traffic on the existing alignment with a temporary connection to the new gore with I-95. A temporary connection for SR 152 eastbound left turns will allow access to the new ramp, allowing the slip ramp for the DDI configuration to be constructed.

I-95 southbound to SR 152: A temporary connection at I-95 will allow reconstruction of the I-95 exit gore as needed. The remainder of the ramp will be widened/reconstructed via traffic shifts onto temporary pavement.



Should any temporary ramp closures be required, feasible detour routes are available due to the proximity of adjacent interchanges. US 1 is located 2.7 miles to the south and SR 202 is located 2 miles to the north. Depending on direction along SR 152 and desired destination, either US 1 or SR 115 can be used as the north-south connection between these two interchanges.

7.6 ITS

ITS plans have not yet been developed. Engineering for this design will take place in a later project phase. It is possible that more DMS, CCTV cameras, and vehicle detection systems will be installed in addition to those that exist on this corridor (see Section 2.17), supported by various power and communication systems. These ITS components will be briefly explained below.

DMS

DMS provide information to motorists such as notices of incidents ahead, emergency notifications, and estimated travel times.

CCTV

Surveillance cameras along a facility capture the entire roadway and are used to help detect, monitor, and manage any traffic incidents.

Vehicle Detection Systems

Vehicle detection systems identify the presence of vehicles and interpret this to produce data such as speeds and volumes.

Staff at the North Florida Regional Transportation Management Center (NFRTMC) manage the intake and distribution of information conveyed via these systems.

7.7 Utilities/Railroads

Coordination with utility owners will occur during the design phase. Various facilities along Baymeadows Rd. and Southside Blvd. could require relocation due to the planned construction (see Table 2-7). While direct impacts to the FEC Railway are not expected, involvement in the form of aerial easements and railroad flaggers will take place. These details will be orchestrated during the design phase.



7.8 Design Variations/Exceptions

7.8.1 Matrix of Design Variations/Exceptions

Table 7-1 below expresses in a matrix format the Design Variations and Design Exceptions needed for the widening of I-95 between I-295 and SR 202.



TABLE 7-1 – DESIGN VARIATIONS/EXCEPTIONS

	CLEAR ZONE	DESIGN SPEED	SUPERELEVATION	STOPPING SIGHT DISTANCE/K VALUES	VERTICAL ALIGNMENT	VERTICAL CLEARANCE	CROSS SLOPE
I-95 (THROUGHOUT)							DV: 0.015 in existing outside lane (should be 0.03 per FDM)
I-295			(Up to US 1) DV: 1.8% (should be 3.3% per FDM)				
FEC RR				DE/DV: I-95 sag curves K values = 133 (should be 181 per FDM, 157 per AASHTO); I-95 crest curve K value = 267 (should be 401 per FDM)	DV: I-95 sag curve lengths = 400' (should be 800' per FDM); I-95 crest curve length = 1,600' (should be 1,800' per FDM)	DE: 22'-9" (should be 23'-6" per FDM, 23' per AASHTO)	
US 1		DV: 25 mph for loop ramps (should be 30 mph per FDM)	(Up to SR 152) DV: 3.7% for NB (should be 6.2% per FDM), 5.5% for SB (should be 8.7% per FDM)			DV: 15'-7" (should be 16' per FDM)	
SR 115					DV: I-95 sag curve length = 400' (should be 800' per FDM)		
SR 152	Potential DV: clear zone = 10' in SE & NW quadrants (should be 12' per FDM)		(Up to SR 202) DV: 2.0% for NB (should be 2.5% per FDM)	DE/DV: I-95 sag curve #1 K value = 151 (should be 181 per FDM, 157 per AASHTO); I-95 crest curve K value = 266 (should be 401 per FDM)	DV: I-95 sag curve lengths = 400' & 600' (should be 800' per FDM); I-95 crest curve length = 1,500' (should be 1,800' per FDM)	DV: 15'-4" (should be 16' per FDM)	

7.8.2 Clear Zone

A Design Variation may be needed (if barrier not used) due to space constraints in expanding capacity for right turns at both ramp terminals. Lane departures within these curve radii should be less likely, and low anticipated speeds should allow time for any necessary recovery.

7.8.3 Design Speed

Design Variations are warranted at US 1 because space is limited to integrate the geometry associated with ramps having a design speed of 30 mph.

7.8.4 Superelevation

Design Variations will be required because superelevation can only be corrected on concrete pavement via roadway reconstruction, which is outside of this project's scope to widen I-95.

7.8.5 Stopping Sight Distance/K Values

FEC RR/US 1

Design Exceptions and a Design Variation are necessary because the K values for the vertical curves are not sufficient to provide adequate stopping sight distance. Adjustment of vertical alignment, however, is beyond the scope of this widening job.

SR 152

A Design Exception and a Design Variation are needed here because the K values for the vertical curves will not permit enough stopping sight distance. Correcting these curves, however, is beyond the scope of this widening job.

7.8.6 Vertical Alignment

FEC RR/US 1

Design Variations will be needed for these curves because the original vertical alignment will remain. This project is a widening project, rather than one intended to reconstruct I-95.

SR 115

A Design Variation will be required for this curve because the original vertical alignment will not be changed. This is a widening project; reconstruction of the interstate is outside of the scope.



SR 152

Design Variations will be needed for these curves because the original vertical alignment will remain. This project is a widening project, rather than one intended to reconstruct I-95.

7.8.7 Vertical Clearance

FEC RR

This Design Exception is needed for the northbound bridge because the existing vertical clearance will not be changed. Correcting this issue would require replacing the structure, which is outside of this project's scope. The need for a Design Exception at the southbound bridge has not been determined.

US 1

A Design Variation is required for the southbound bridge because the existing vertical clearance will not be changed. Resolving this issue would require replacing the structure, which is outside of the scope.

SR 152

This Design Variation is needed for the northbound bridge because of the existing vertical clearance to remain. Correcting this deficiency would mean replacing the bridge, which is outside of the project scope.

7.8.8 Cross Slope

A Design Variation will be necessary for the third lane in either direction in the proposed eight-lane sections. This can only be corrected on concrete pavement via roadway reconstruction, which is outside of this project's scope to widen I-95.

7.8.9 Access Management

While it does not prompt a Design Variation or a Design Exception, adding a new signal at the intersection of Baymeadows Rd. and Baymeadows Cir. W will leave only 320 feet and 690 feet to the adjacent signals west and east, respectively. Per Rule 14-97.003 of the Florida Administrative Code (F.A.C.), spacing should be 1,320 feet. However, this signal is necessary to accommodate improvements at the Western Way intersection.



7.9 Value Engineering (VE) Study

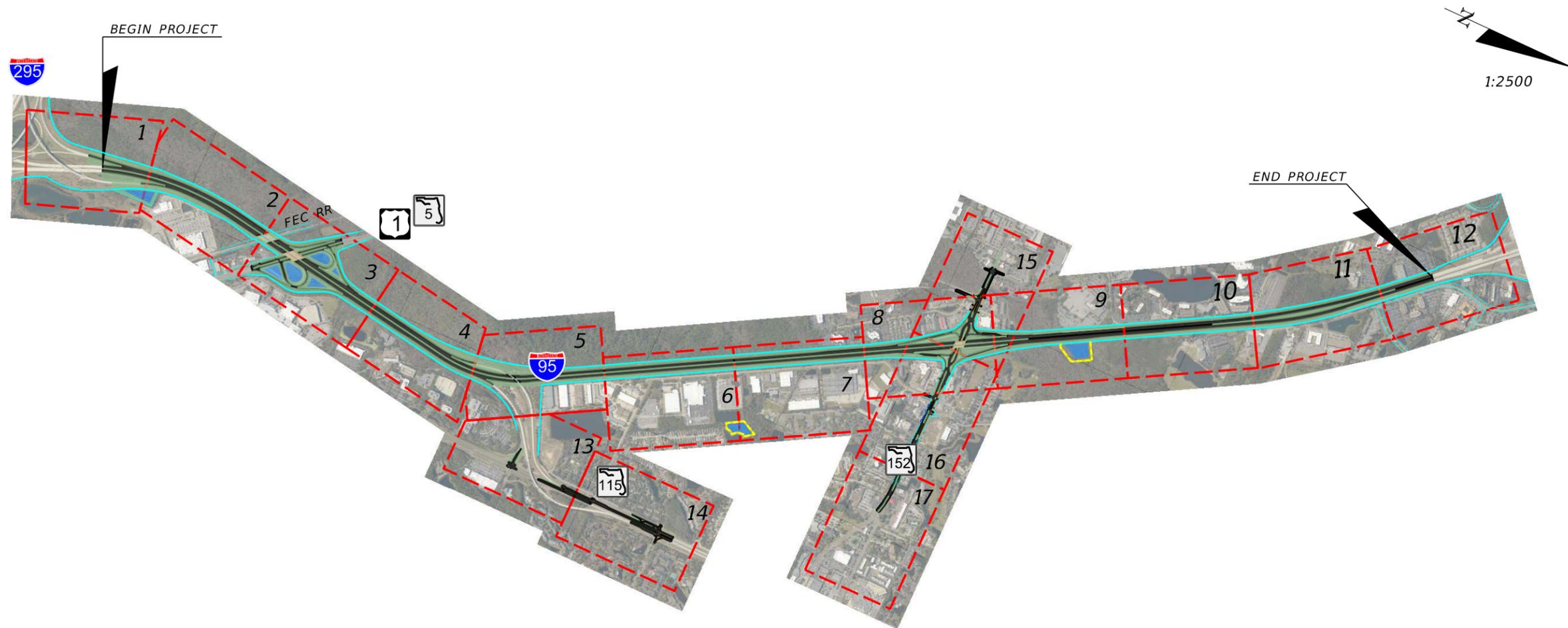
A VE Study took place February 22-26, 2021. The purpose of the study was to develop concept recommendations to increase the Build Alternative’s value related to improvements, constructability, and maintenance of traffic, while still meeting the project’s purpose. The VE team proposed sixteen ideas for consideration. A summary is provided below in **Table 7-2**.

TABLE 7-2 – RECOMMENDATIONS FROM VE STUDY

NUMBER	DESCRIPTION	POTENTIAL COST SAVINGS	MANAGEMENT ACTION
1	Provide a two-lane southbound exit ramp to US 1	(\$128,000)	Approved
3	Eliminate the drainage to the inside and slope all lanes to the outside	\$798,000	Not accepted
8	Provide vegetative planting in a protected I-95 median	(\$211,000)	Not accepted
11	Check the pier protection for the Southside southbound flyover pier and the horizontal setback distance	(\$76,000)	Not accepted
12	Provide 3:1 minimum slopes for the ponds in the infields	\$0	Approved
16	Add Type F curb on Baymeadows DDI and US 1 interchange ramps one-third of the distance up the ramp with lower design speeds	(\$485,000)	Approved
20	Close the driveway at the Shell station that is closest to the intersection	(\$5,000)	Not accepted
21	Eliminate the driveway at Harley-Davidson	(\$10,000)	Not accepted
22	On the east side of the interchange make the drive on the north an in-only and on the south side of Baymeadows Rd. close the first driveway closest to I-95	(\$8,000)	Not accepted
23	Provide wider sidewalks along the Baymeadows corridor	(\$215,000)	Approved
30	Extend the median at Western Lake Dr. to prohibit U-turns	(\$8,000)	Approved
31	At the U-turn enlarge the bulb-out	(\$20,000)	Approved
34	At the Belle Rive Blvd. “jug handle” turnaround move eastbound to southbound right turn “U-turn slip lane” south	(\$40,000)	Not accepted
34a	Move the Belle Rive Blvd. eastbound to southbound U-turn south	\$0	Approved
42	Add I-95 refuge areas between Baymeadows Rd. and SR 202	(\$352,000)	Not accepted
44	Don’t install fencing around ponds within the limited access	\$329,000	Approved

APPENDICES

APPENDIX A – Concept Plans



INDEX OF DRAWINGS

SHEET NUMBER	SHEET DESCRIPTION
1 - 12	BUILD ALTERNATIVE CONCEPT PLAN (I-95)
13 - 14	BUILD ALTERNATIVE CONCEPT PLAN (SR 115)
15 - 17	BUILD ALTERNATIVE CONCEPT PLAN (SR 152)

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I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

--- SHEET BOUNDARY
XX SHEET NUMBER

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET
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I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (R/W)
- - - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
1

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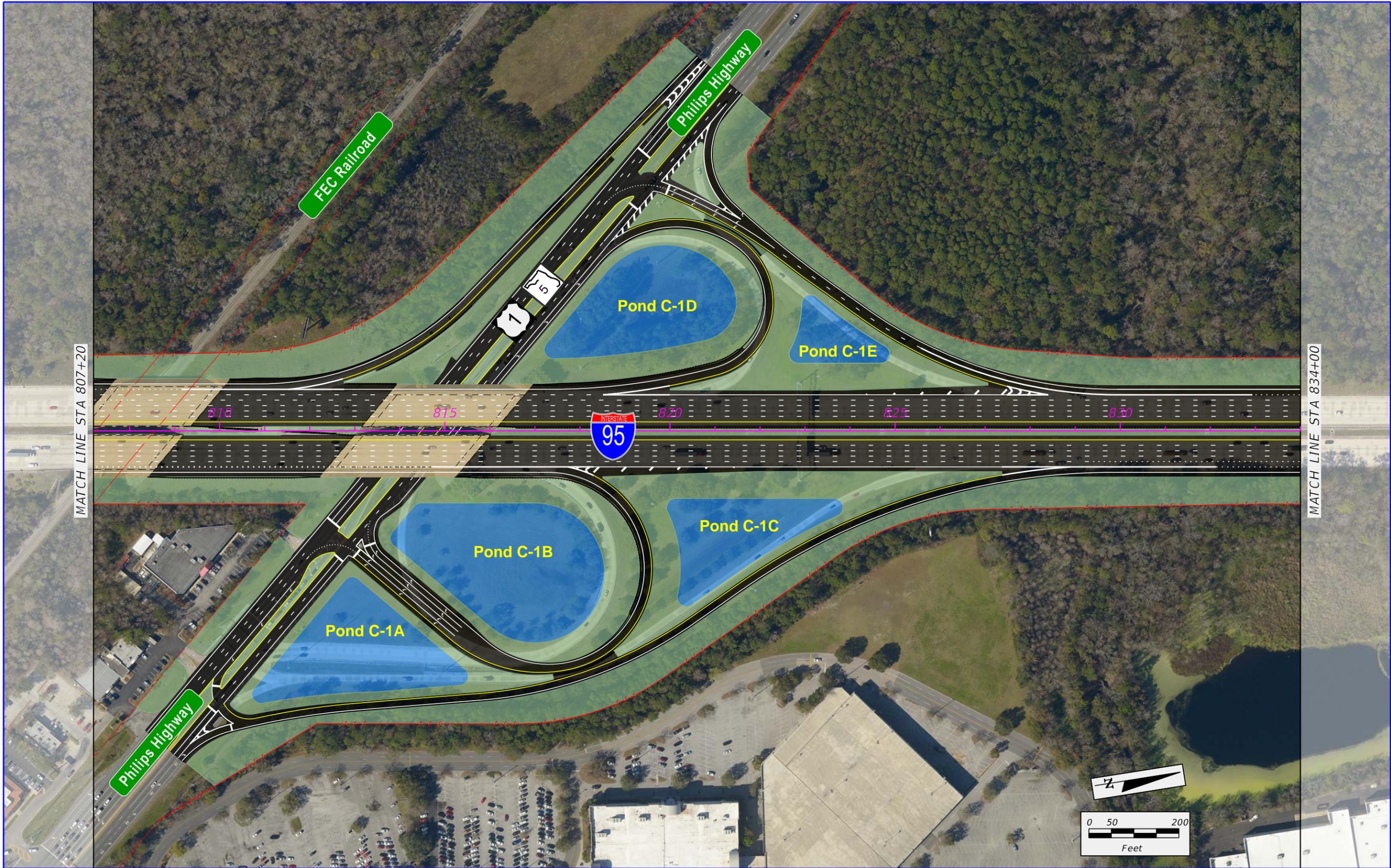


MATCH LINE STA 807+20

MATCH LINE STA 780+40

	I-95 (SR9) from I-295 to SR 202 (JTB) PRELIMINARY ENGINEERING REPORT	EXISTING RIGHT-OF-WAY (R/W)	PRELIMINARY POND SITES	BUILD ALTERNATIVE CONCEPT PLAN	SHEET NO.
		EXISTING LIMITED ACCESS R/W			2
		PROPOSED RIGHT-OF-WAY			
		RECOMMENDED NOISE WALL			

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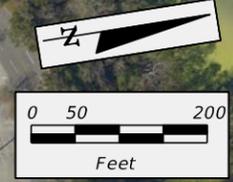
I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

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- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

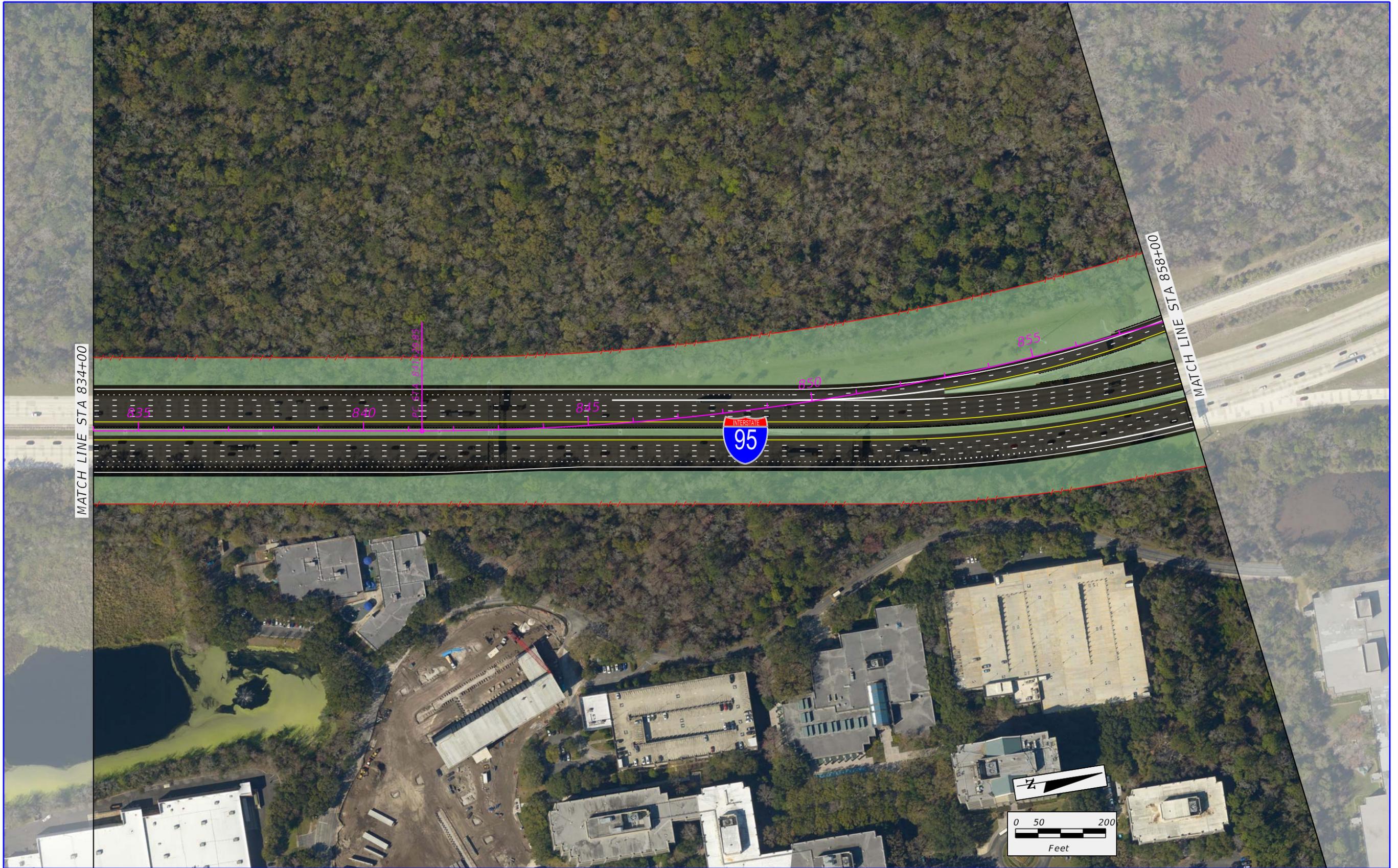
PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
3



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I-95 (SR9) from I-295 to SR 202 (JTB)
 PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE CONCEPT PLAN

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4

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I-95 (SR9) from I-295 to SR 202 (JTJ)
PRELIMINARY ENGINEERING REPORT

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- - - EXISTING LIMITED ACCESS R/W
- - - PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE CONCEPT PLAN

SHEET NO.
5

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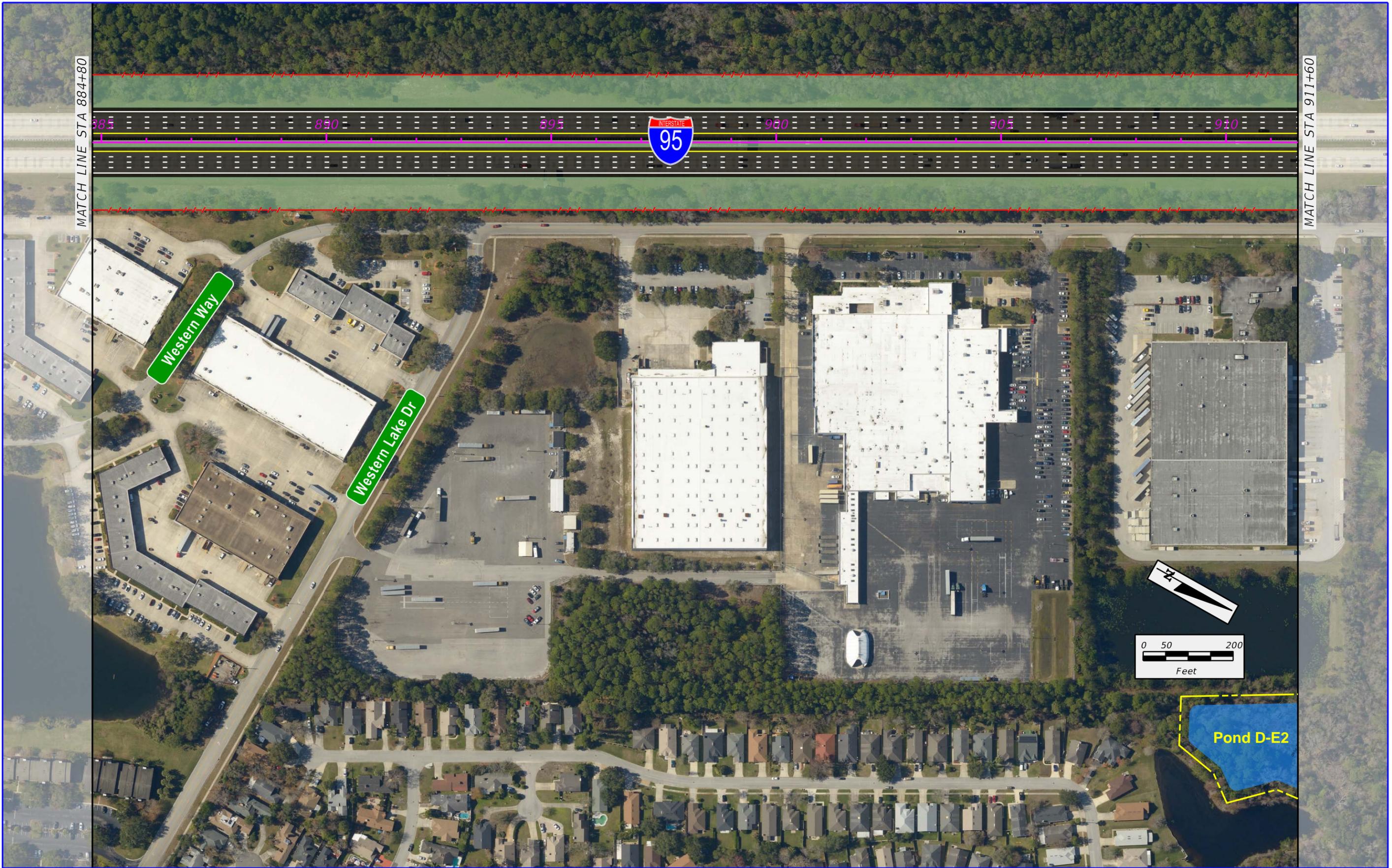
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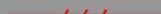
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MATCH LINE STA 884+80

MATCH LINE STA 911+60



I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

-  EXISTING RIGHT-OF-WAY (RW)
-  EXISTING LIMITED ACCESS R/W
-  PROPOSED RIGHT-OF-WAY
-  RECOMMENDED NOISE WALL

 PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
6

MATCH LINE STA 911+60

MATCH LINE STA 938+40

915

920

925

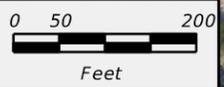
930

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Western Way

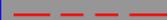
Pond D-E2



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I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

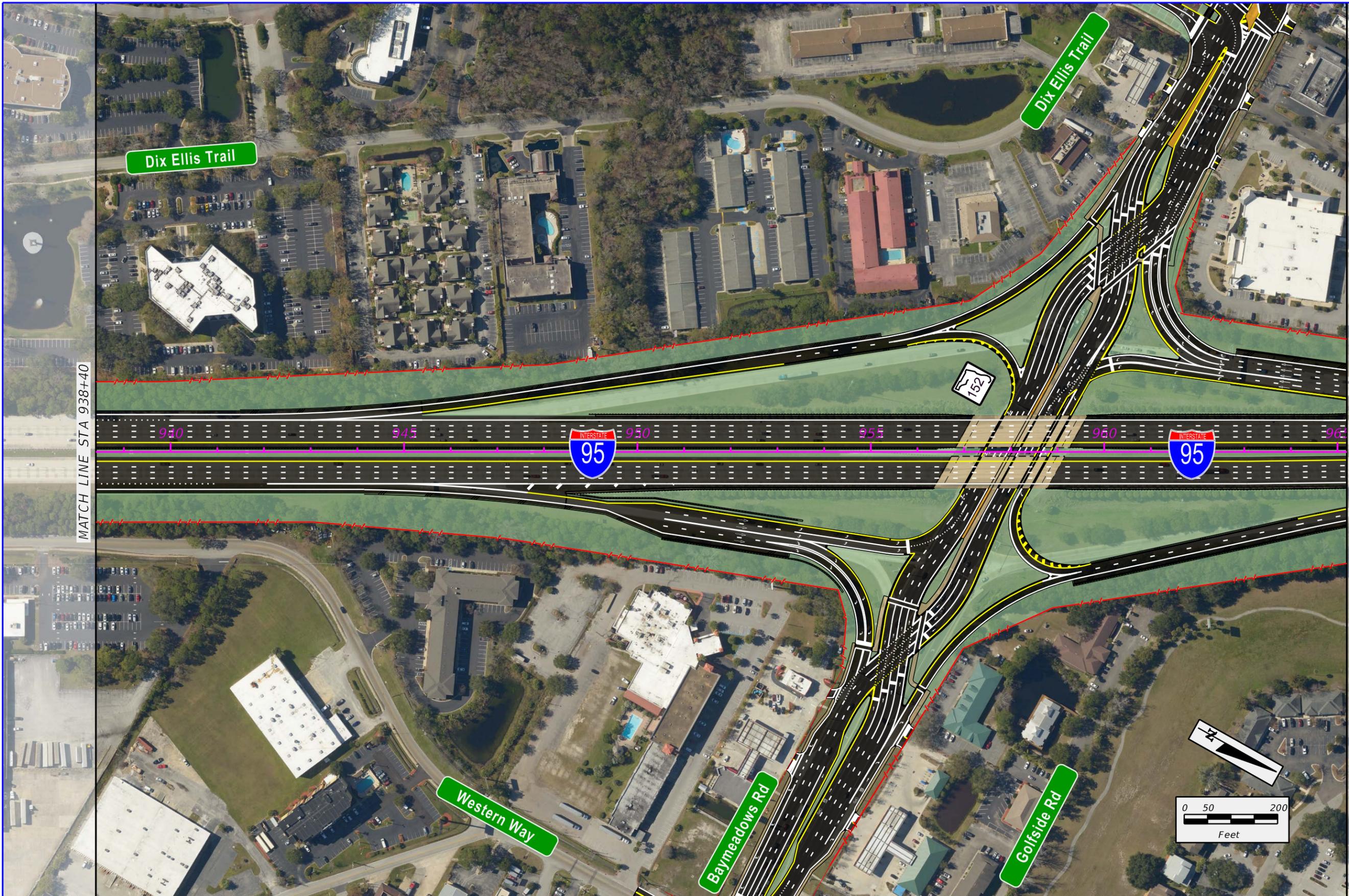
-  EXISTING RIGHT-OF-WAY (RW)
-  EXISTING LIMITED ACCESS R/W
-  PROPOSED RIGHT-OF-WAY
-  RECOMMENDED NOISE WALL

 PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
7

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MATCH LINE STA 938+40

MATCH LINE STA 965+20



I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (RW)
- - - EXISTING LIMITED ACCESS RW
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
8

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I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE CONCEPT PLAN

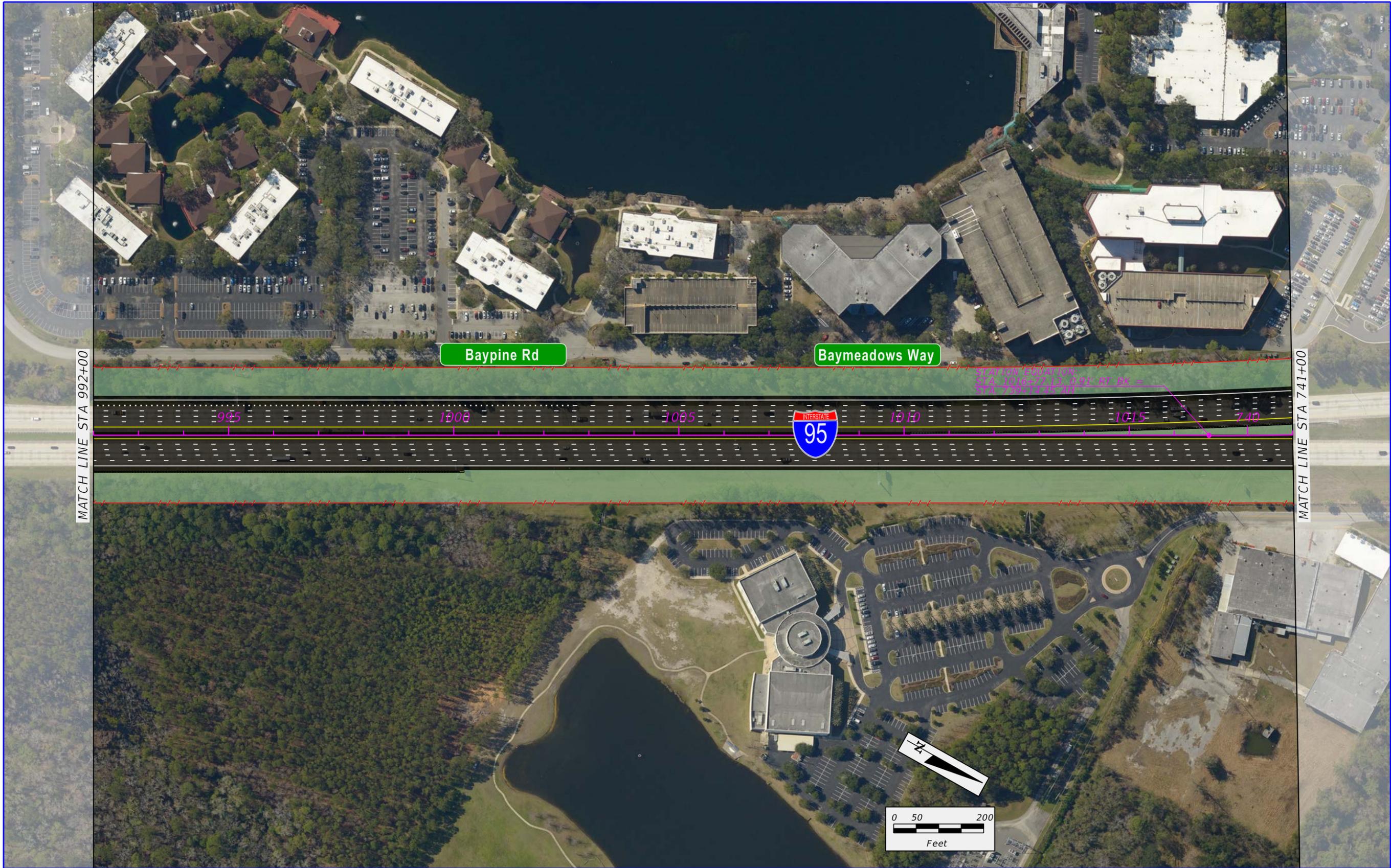
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5/5/2021

KPRICE



MATCH LINE STA 992+00

MATCH LINE STA 741+00



I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

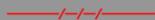
BUILD ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
10

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I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

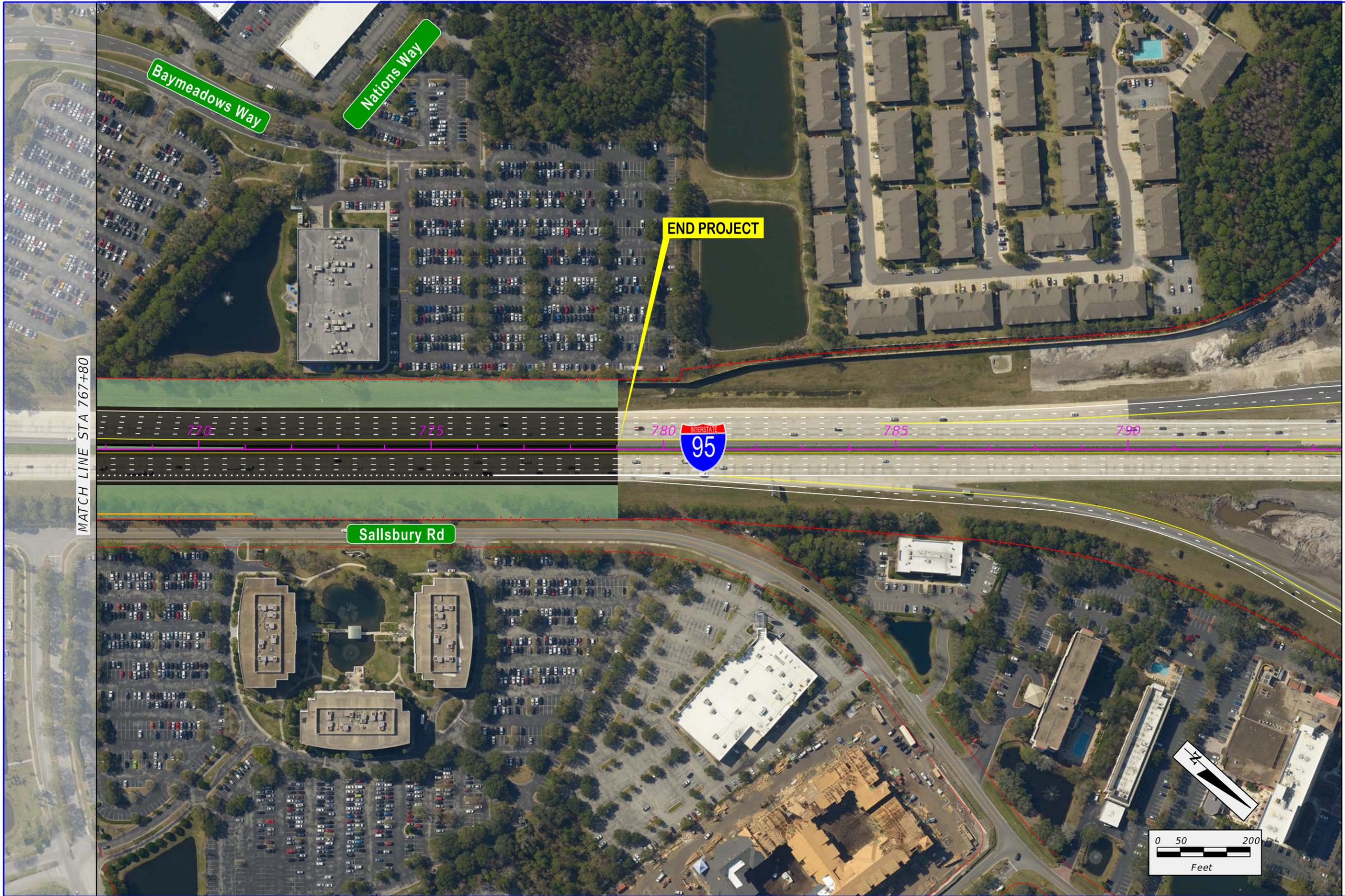
-  EXISTING RIGHT-OF-WAY (R/W)
-  EXISTING LIMITED ACCESS R/W
-  PROPOSED RIGHT-OF-WAY
-  RECOMMENDED NOISE WALL

 PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
11

KPRICE 5/5/2021 12:57:56 PM PW:\4140\10055550\6.0_CAD_BIM\6.2_Work_In_Progress\4355712201\emo\pde_Plans\PLA\EM112.dgn



MATCH LINE STA 767+80



I-95 (SR9) from I-295 to SR 202 (JTB)
 PRELIMINARY ENGINEERING REPORT

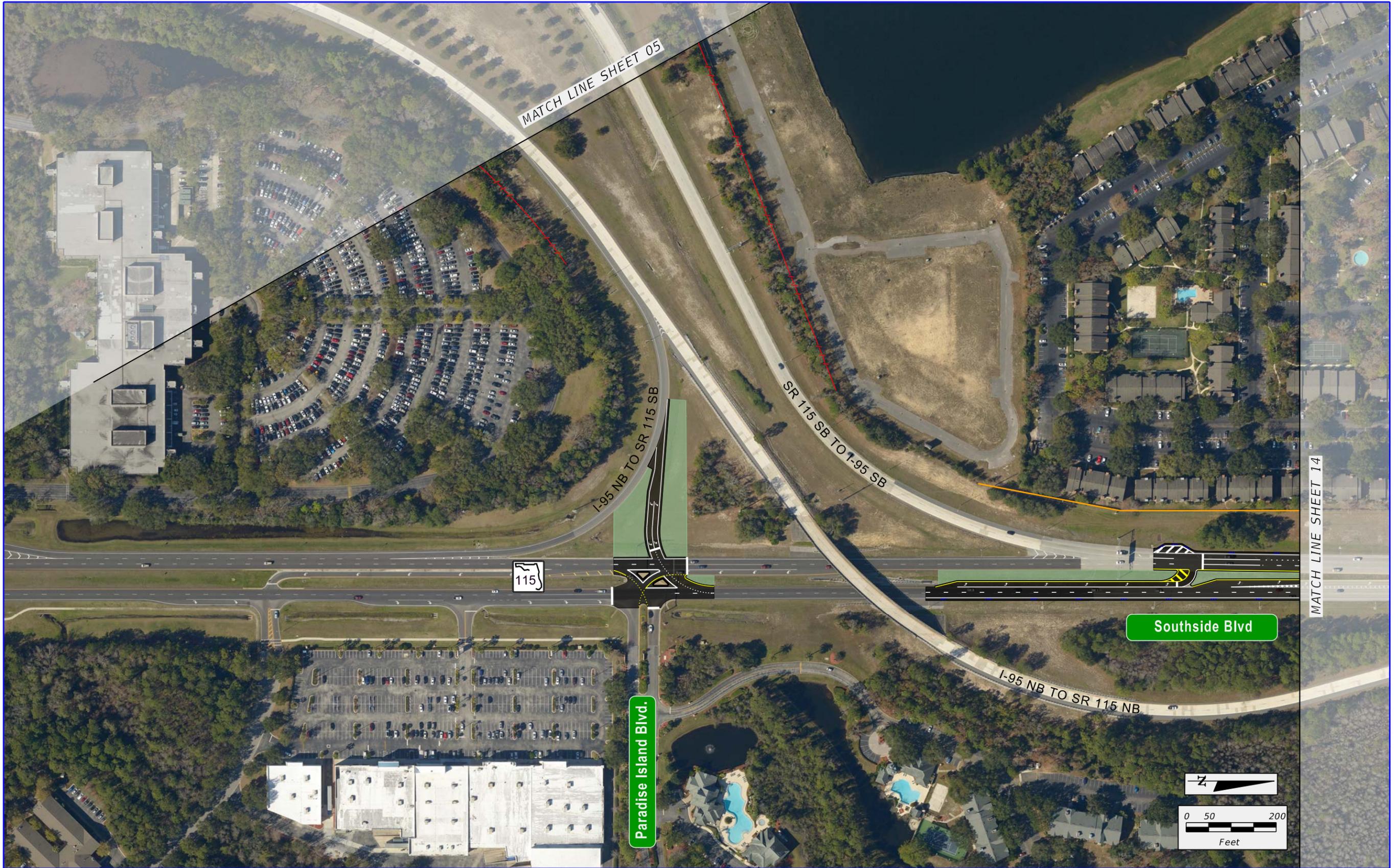
- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
12

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I-95 (SR9) from I-295 to SR 202 (JTB)
 PRELIMINARY ENGINEERING REPORT

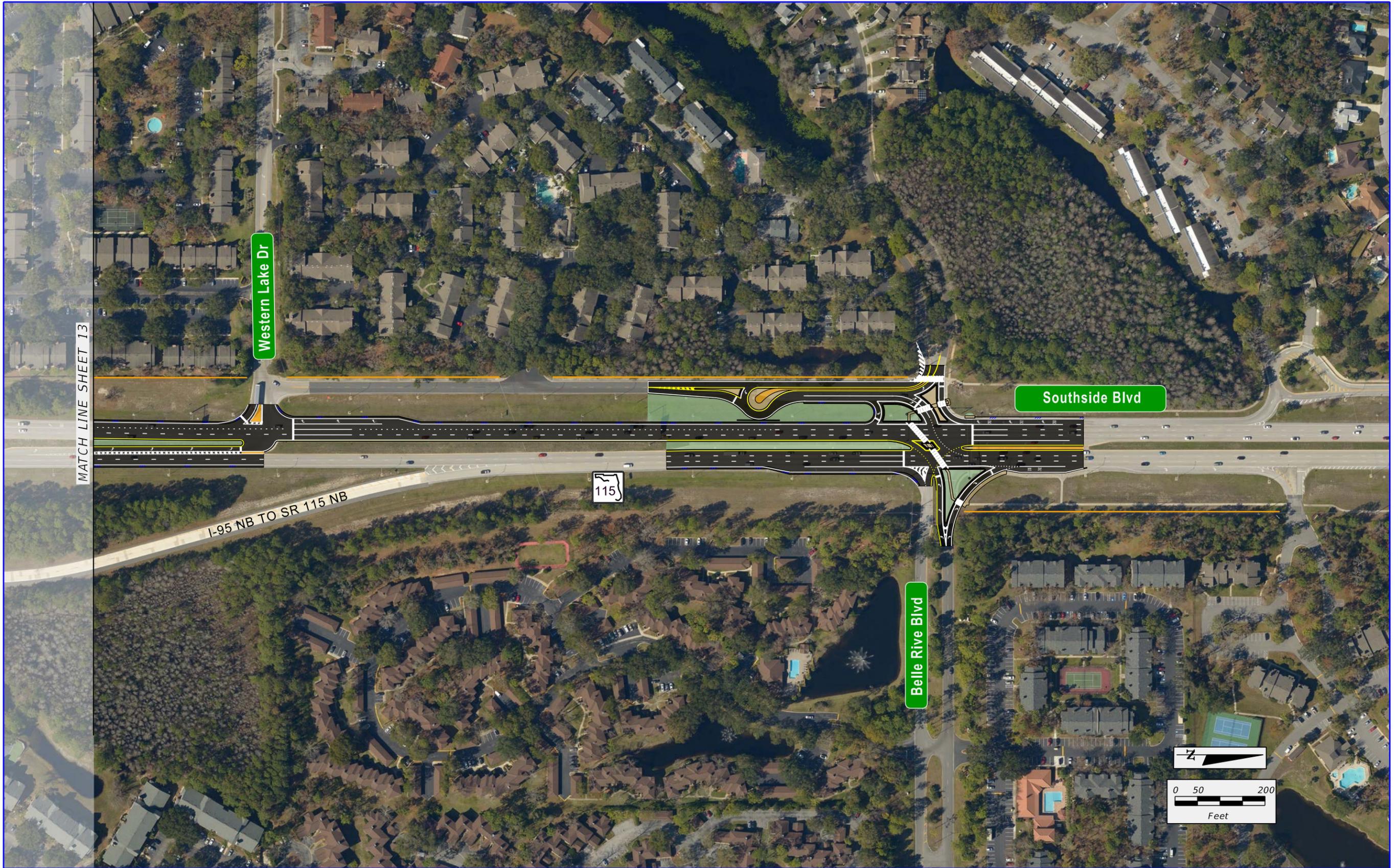
- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

BUILD ALTERNATIVE CONCEPT PLAN

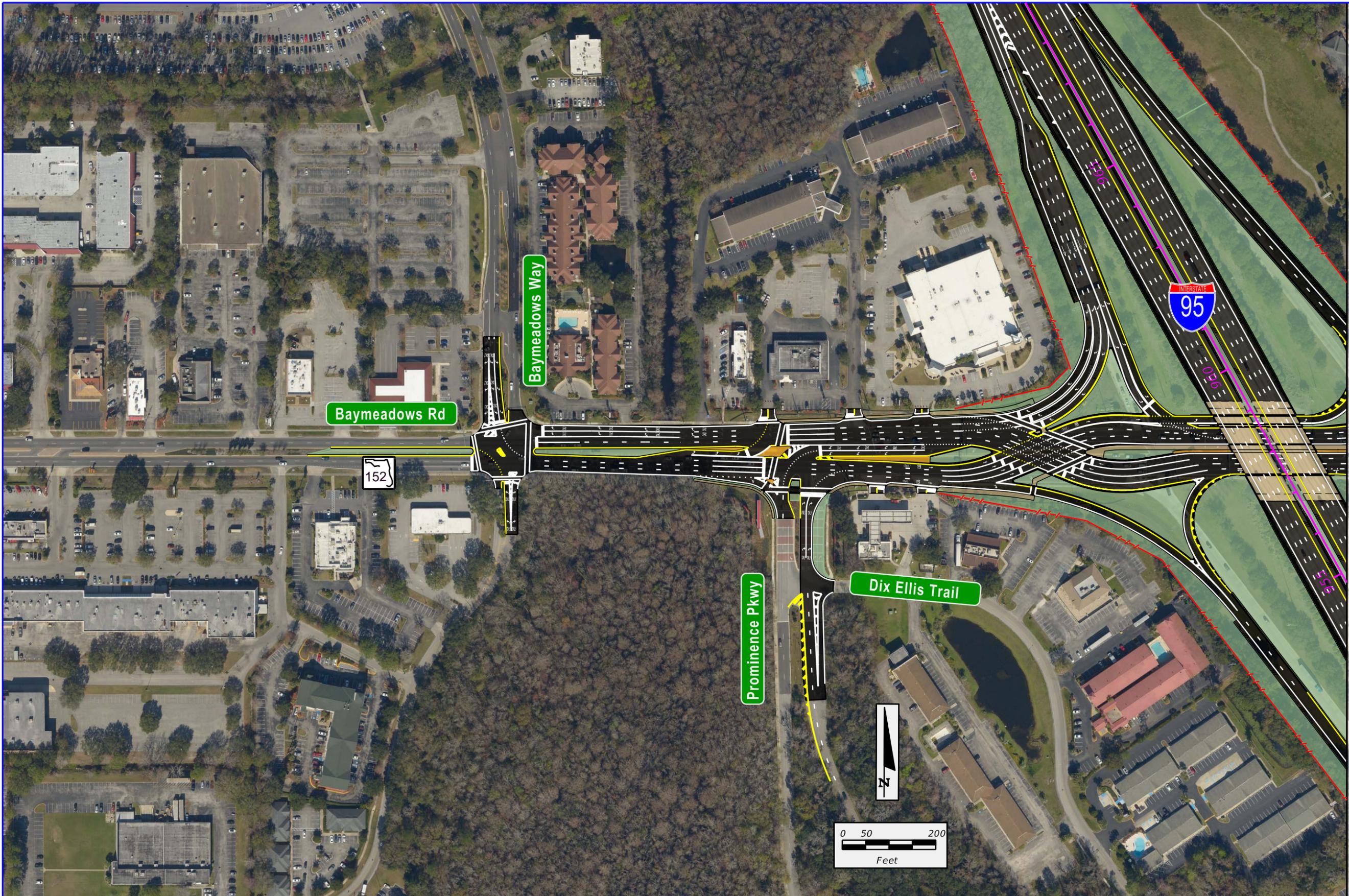
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	I-95 (SR9) from I-295 to SR 202 (JTJ) PRELIMINARY ENGINEERING REPORT	<ul style="list-style-type: none"> --- EXISTING RIGHT-OF-WAY (R/W) - - - EXISTING LIMITED ACCESS R/W --- PROPOSED RIGHT-OF-WAY --- RECOMMENDED NOISE WALL 	 PRELIMINARY POND SITES	BUILD ALTERNATIVE CONCEPT PLAN	SHEET NO. 14
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8/31/2021
KPRICE



I-95 (SR9) from I-295 to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (RW)
- - - EXISTING LIMITED ACCESS R/W
- - - PROPOSED RIGHT-OF-WAY
- - - RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

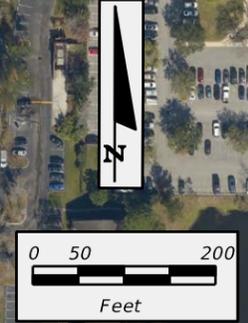
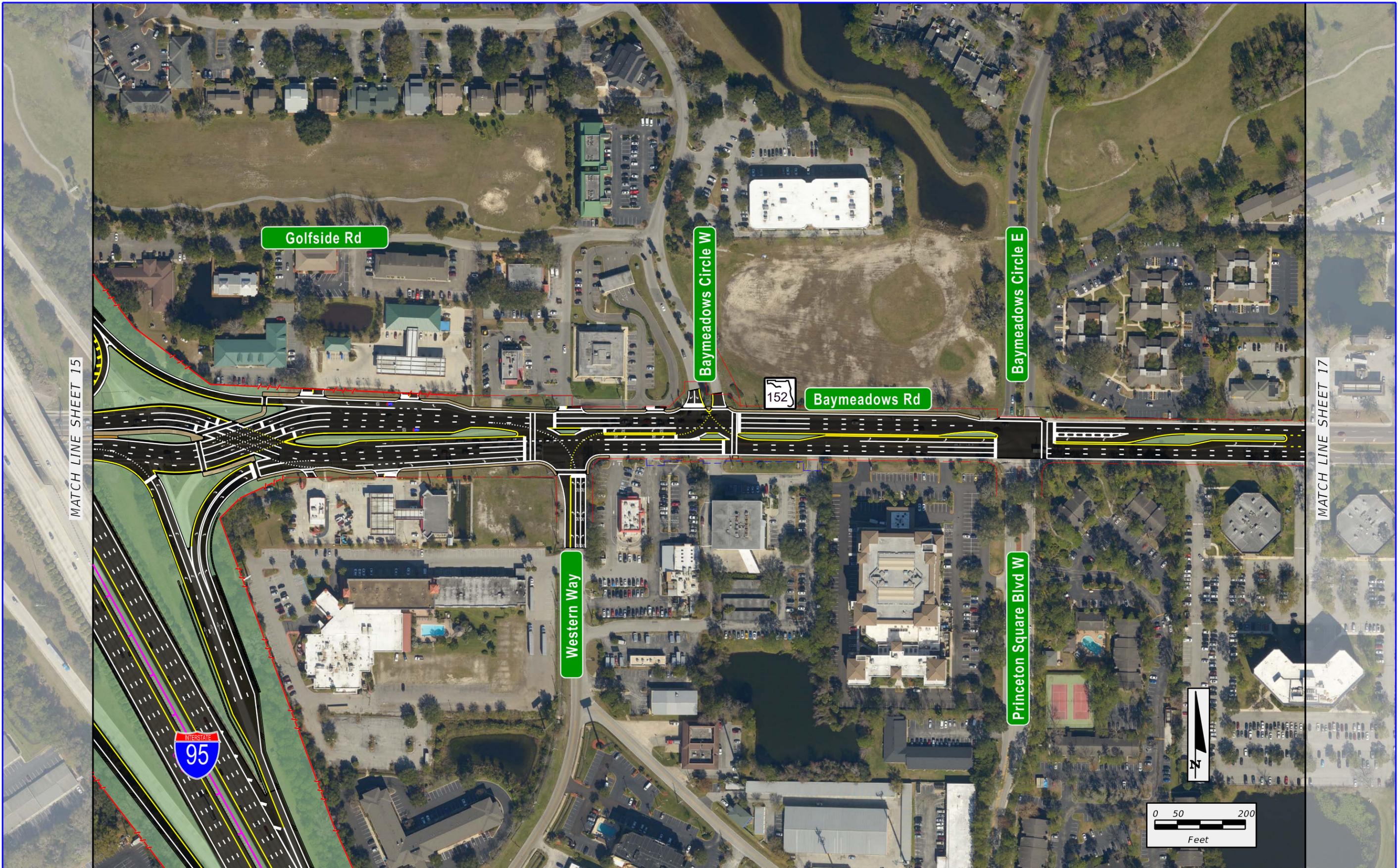
BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
15

SUSERS
SDATES
STIMES
SFILES

MATCH LINE SHEET 15

MATCH LINE SHEET 17



I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

- EXISTING RIGHT-OF-WAY (R/W)
- - - EXISTING LIMITED ACCESS R/W
- PROPOSED RIGHT-OF-WAY
- RECOMMENDED NOISE WALL

PRELIMINARY POND SITES

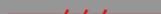
BUILD ALTERNATIVE
CONCEPT PLAN

SHEET NO.
16

SUSERS
SDATES
STIMES
SFILES



I-95 (SR9) from I-295
to SR 202 (JTB)
PRELIMINARY ENGINEERING REPORT

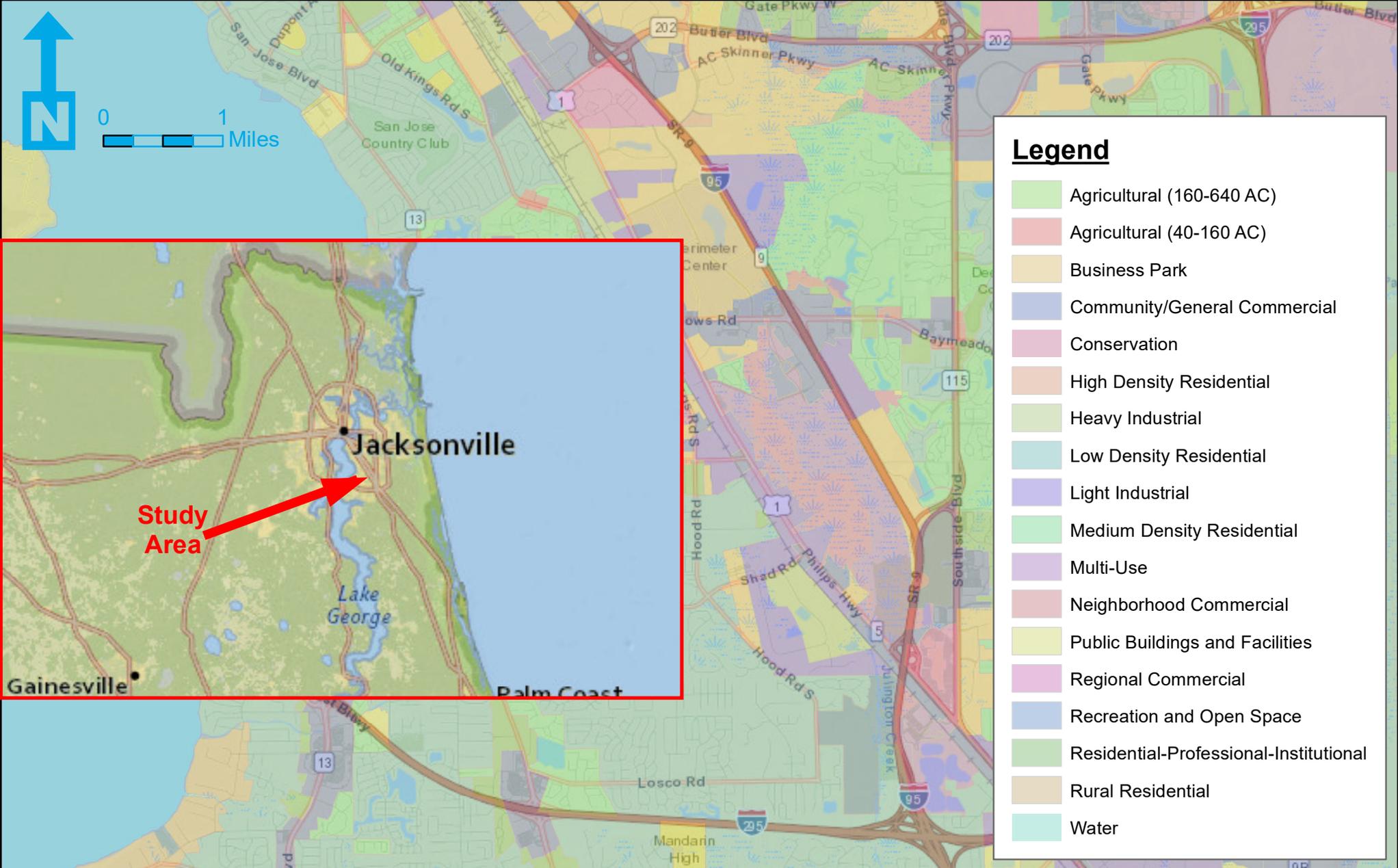
-  EXISTING RIGHT-OF-WAY (R/W)
-  EXISTING LIMITED ACCESS R/W
-  PROPOSED RIGHT-OF-WAY
-  RECOMMENDED NOISE WALL

 PRELIMINARY POND SITES

BUILD ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
17

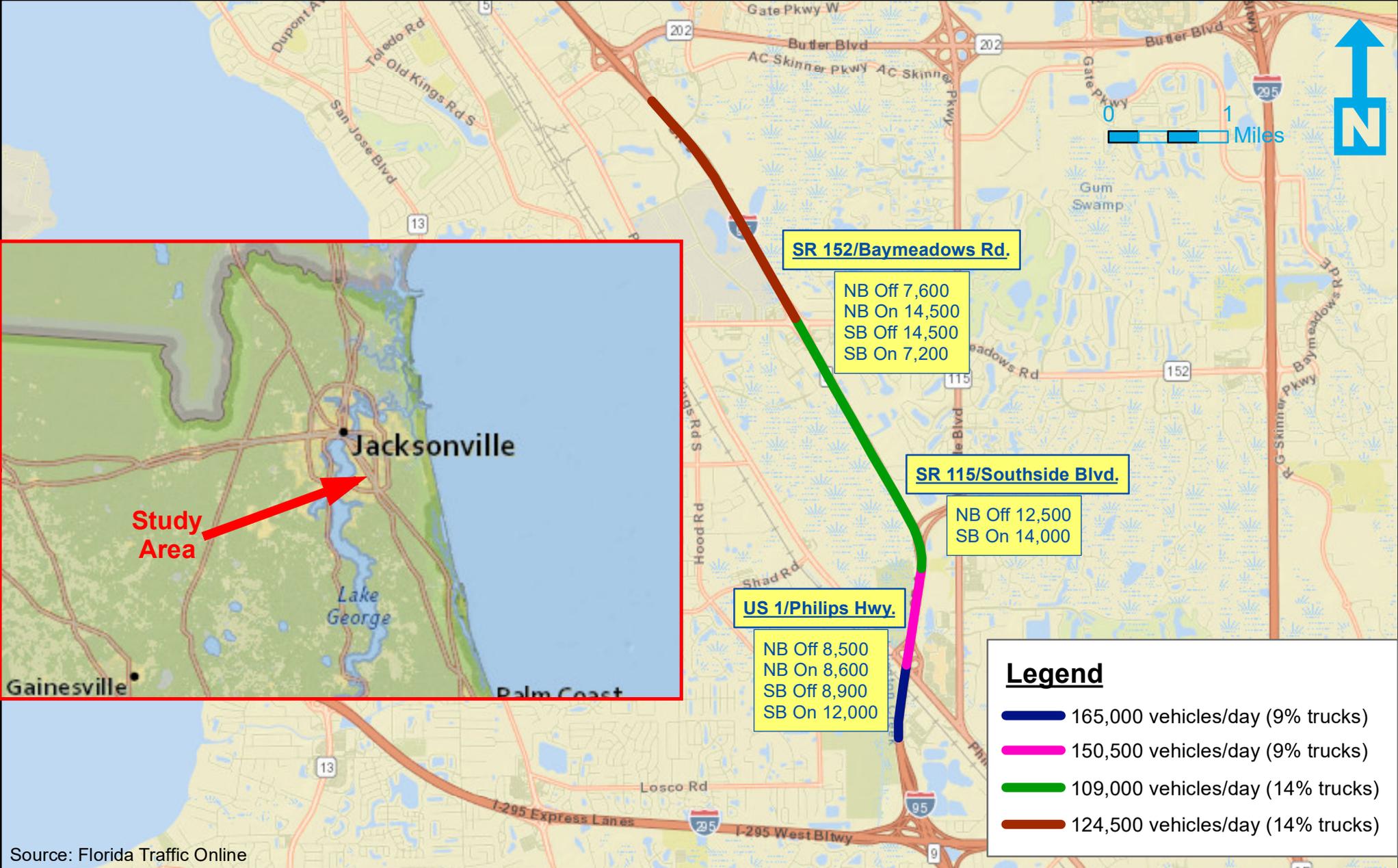
APPENDIX B – Future Land Use



**I-95 from I-295 to SR 202
FPID 435577-1**

Future Land Use

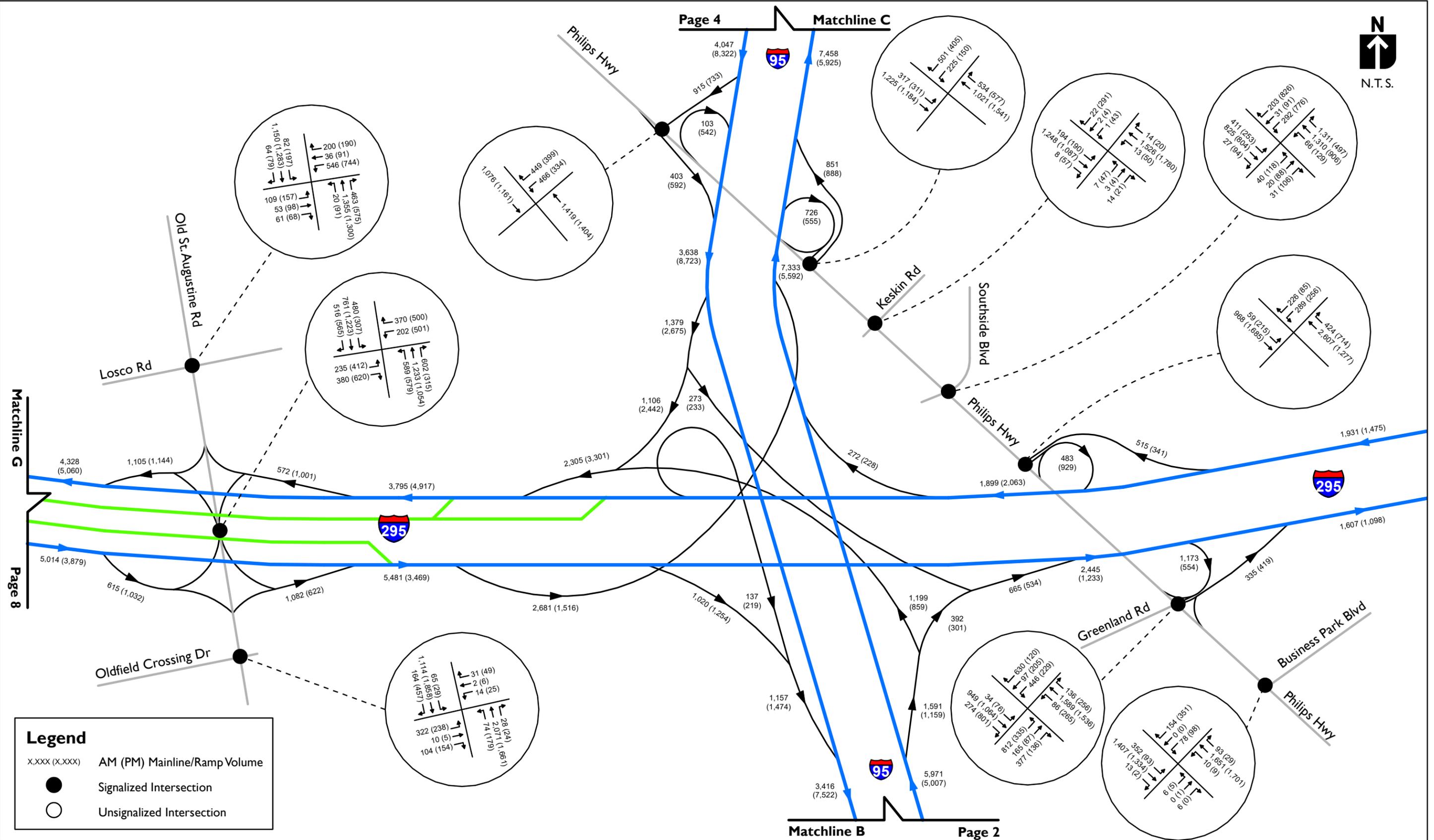
APPENDIX C – 2019 AADT

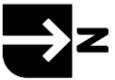


**I-95 from I-295 to SR 202
FPID 435577-1**

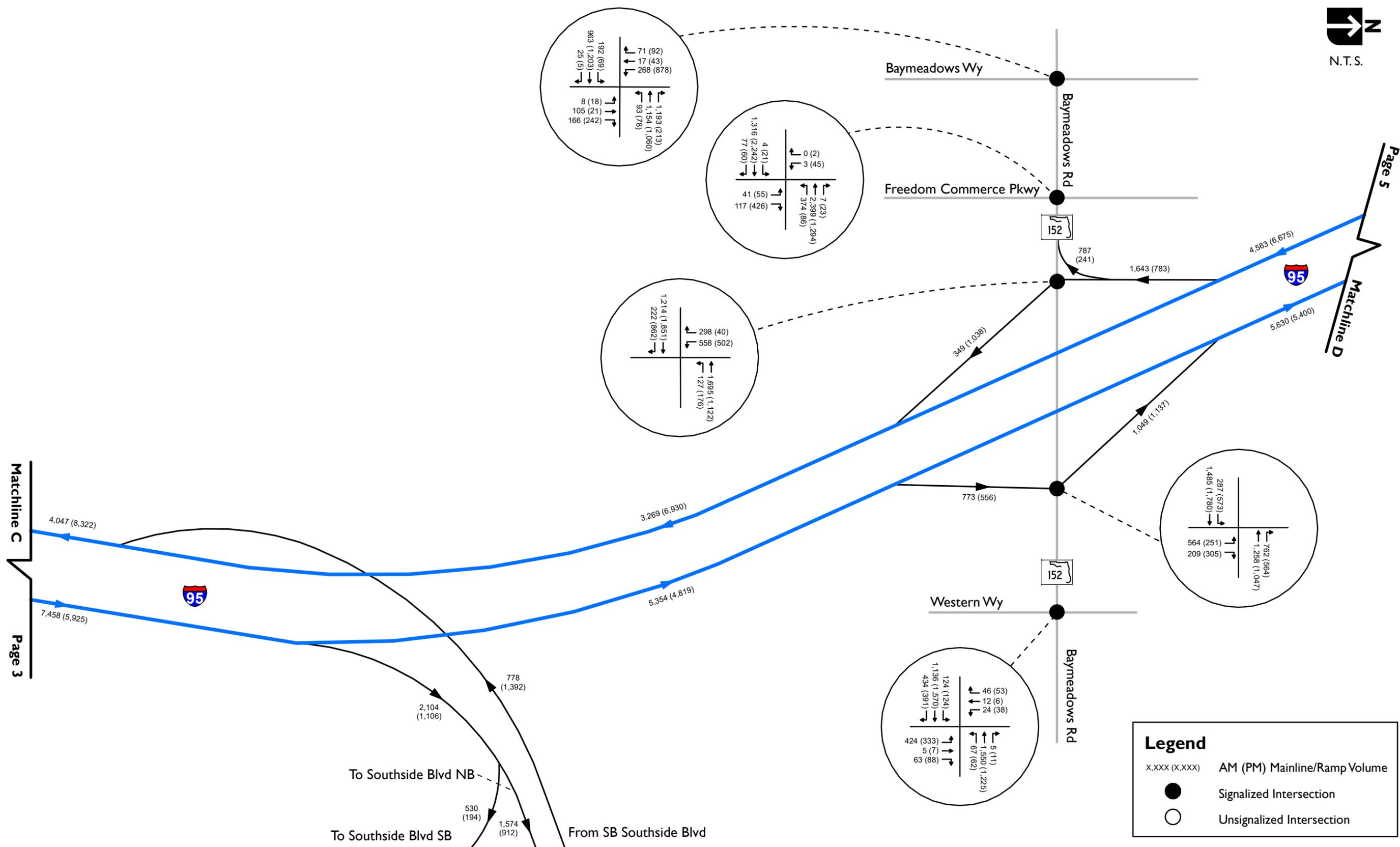
Annual Average Daily Traffic (AADT), 2019

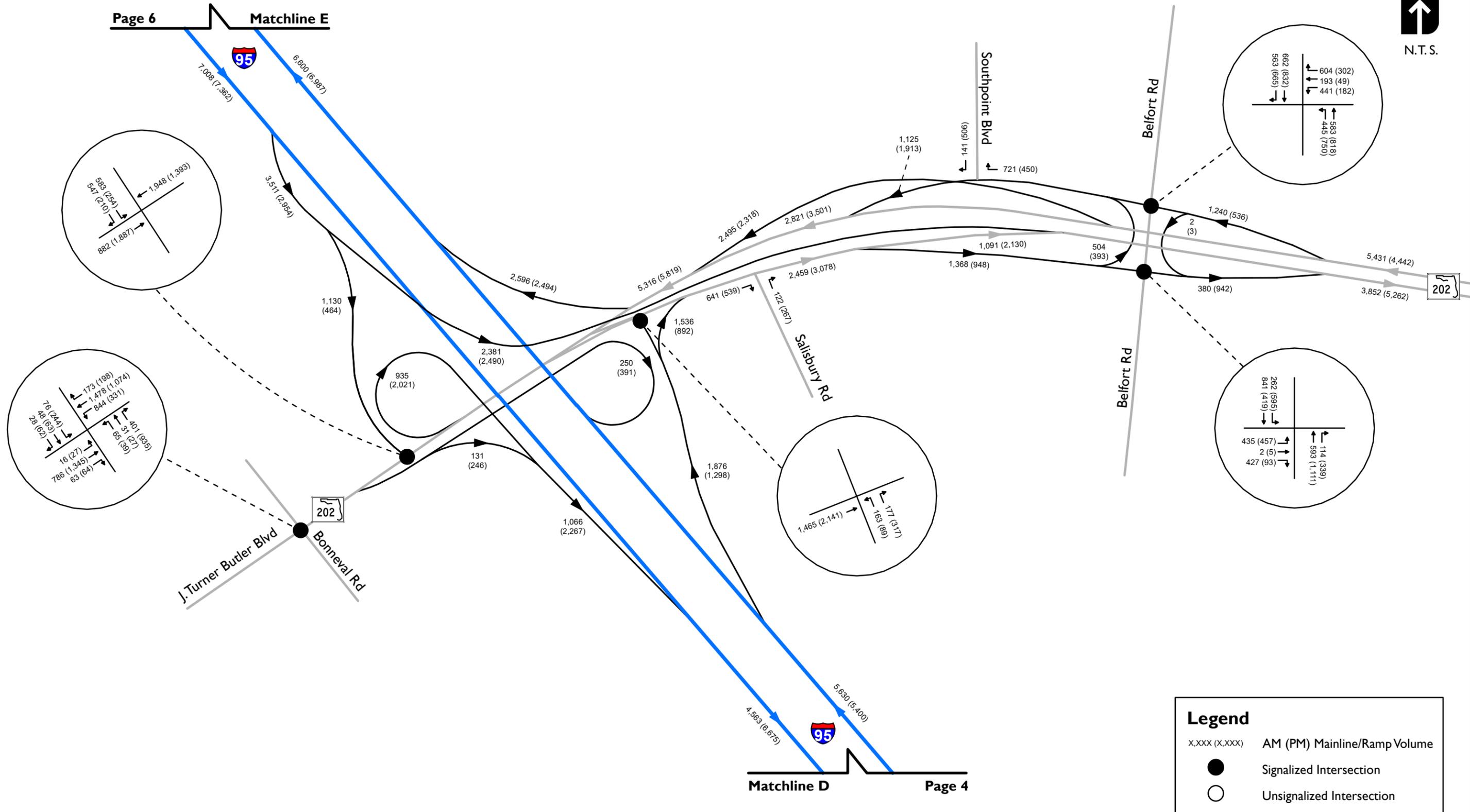
APPENDIX D – 2019 Peak Hour Volumes



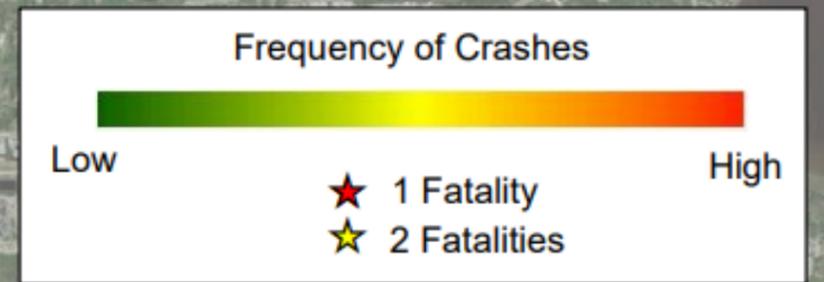
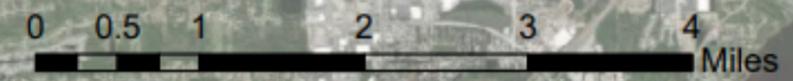


N.T.S.





APPENDIX E – Heat Map of Crashes



Matchline A

Page 1

APPENDIX F – Conservation Easements



LEGEND

- Approximate Project Area
- SJRWMD Regulatory Conservation Easements (April 2019)

SJRWMD Conservation Easement (6.86 ac.±)
 Duval County OR Book 7844, Page 1033
 Recorded 5/5/99

**Pond
 D-E2**

SJRWMD Conservation Easement (694.78 ac.±)
 Duval County OR Book 16575, Page 1204
 Dated 8/6/13, Recorded 10/23/13
 SJRWMD Permit No. 127636-2

SJRWMD Conservation Easement (10.76 ac.±)
 Duval County OR Book 14347, Page 2259
 Recorded 10/15/07
 SJRWMD Permit No. 4-031-91736-2

NOTE: Conservation easement locations are approximate and are derived solely from SJRWMD GIS data.

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



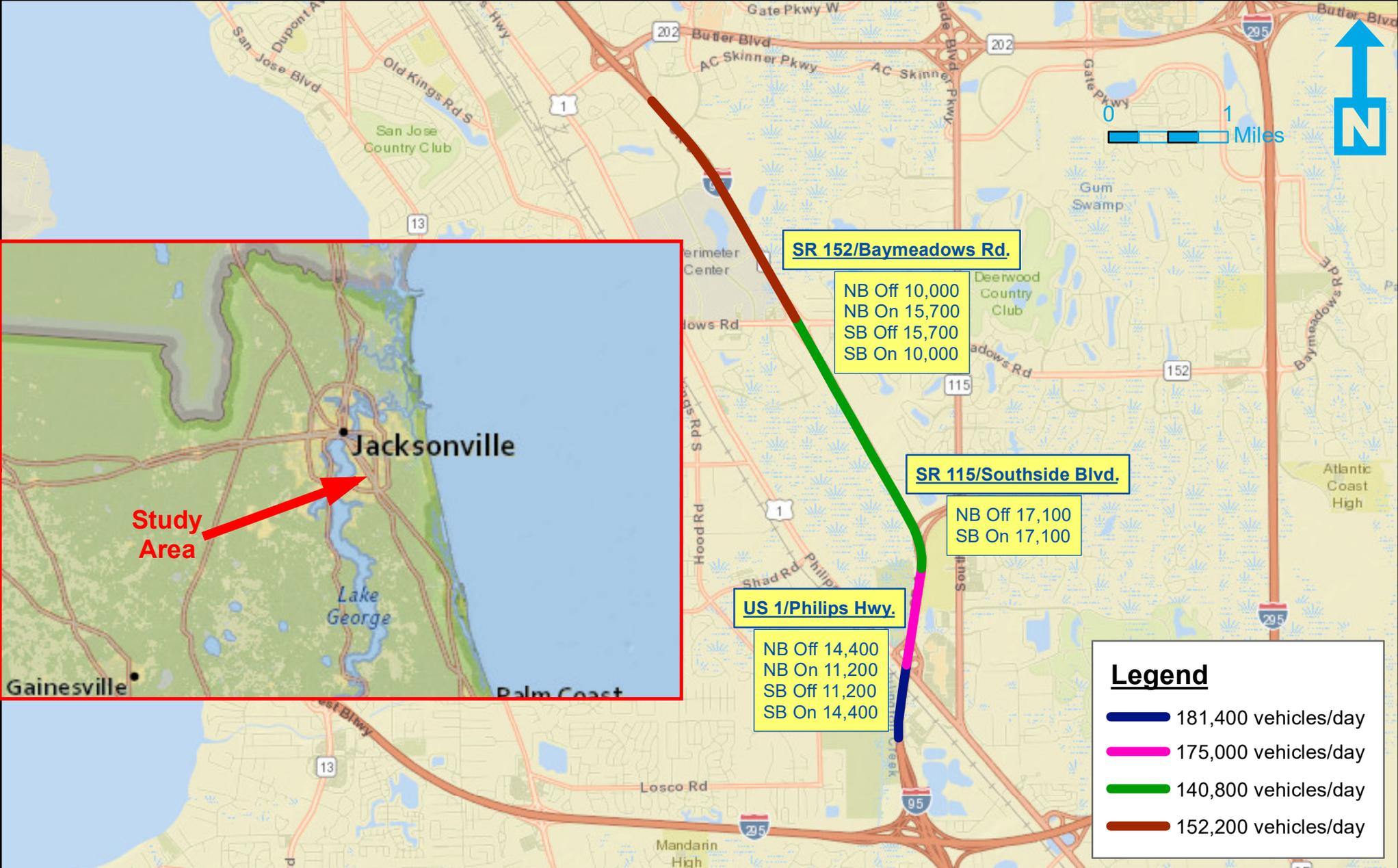
By: NEE

**I-95 From I-295 to SR 202 (Butler)
 FIN 435577-1
 Conservation Easements Estimated to be
 Within or Adjacent to the Project Study Area**

Project No.:	20103
Exhibit No.:	4
Date:	7-13-20
Rev. Date:	



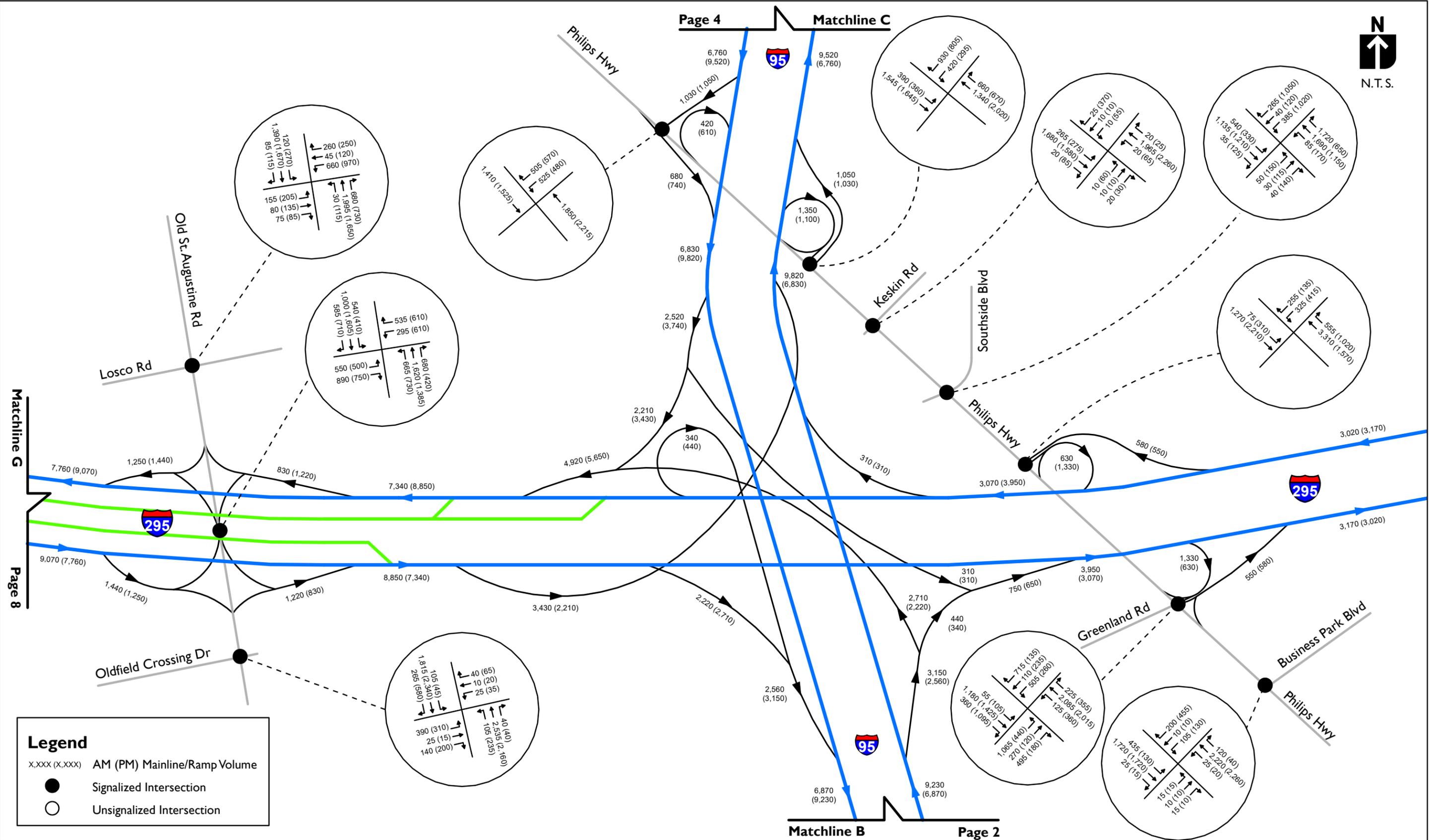
APPENDIX G – 2045 AADT

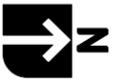


**I-95 from I-295 to SR 202
FPID 435577-1**

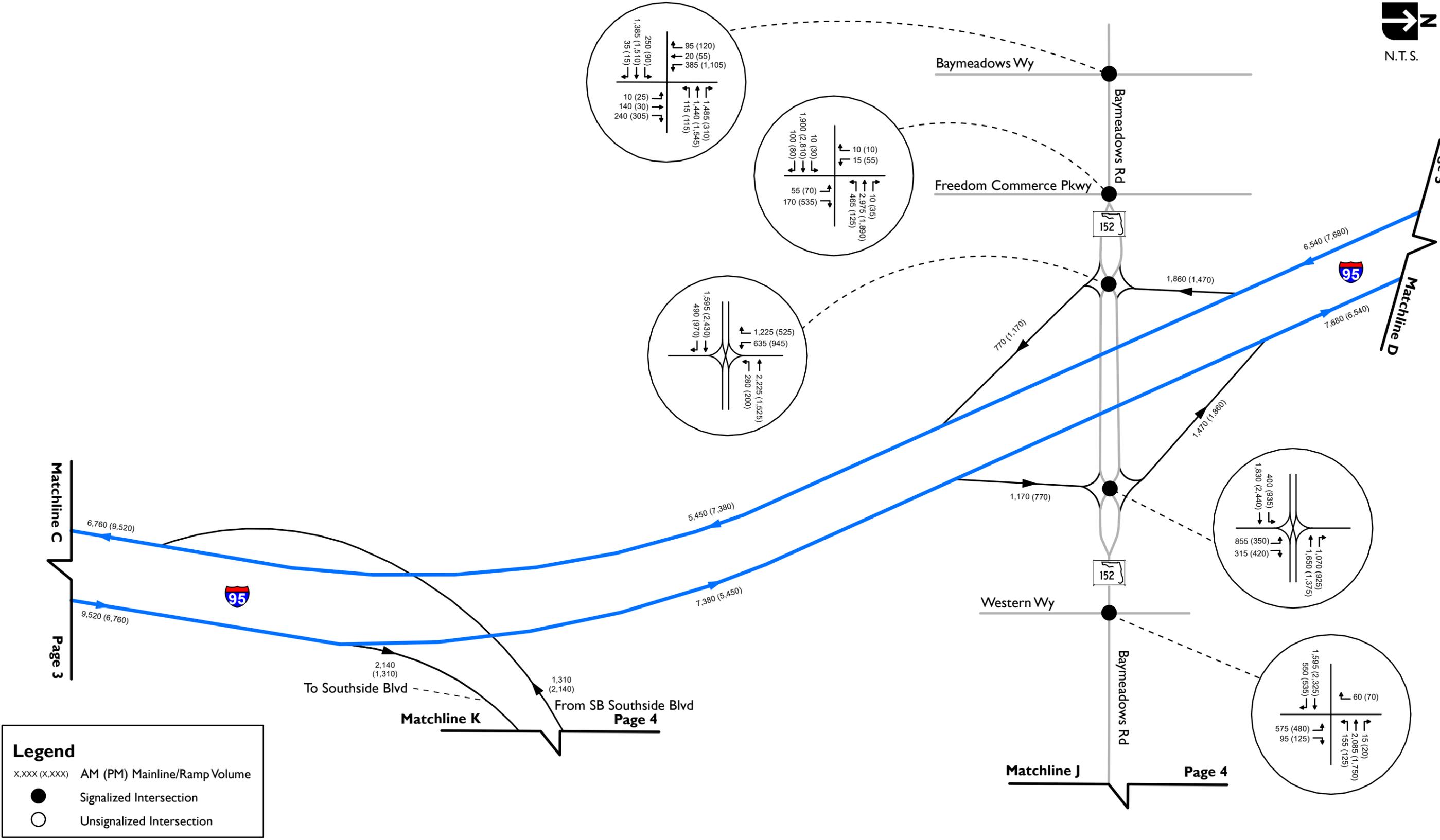
Annual Average Daily Traffic (AADT), 2045

APPENDIX H – 2045 Peak Hour Volumes

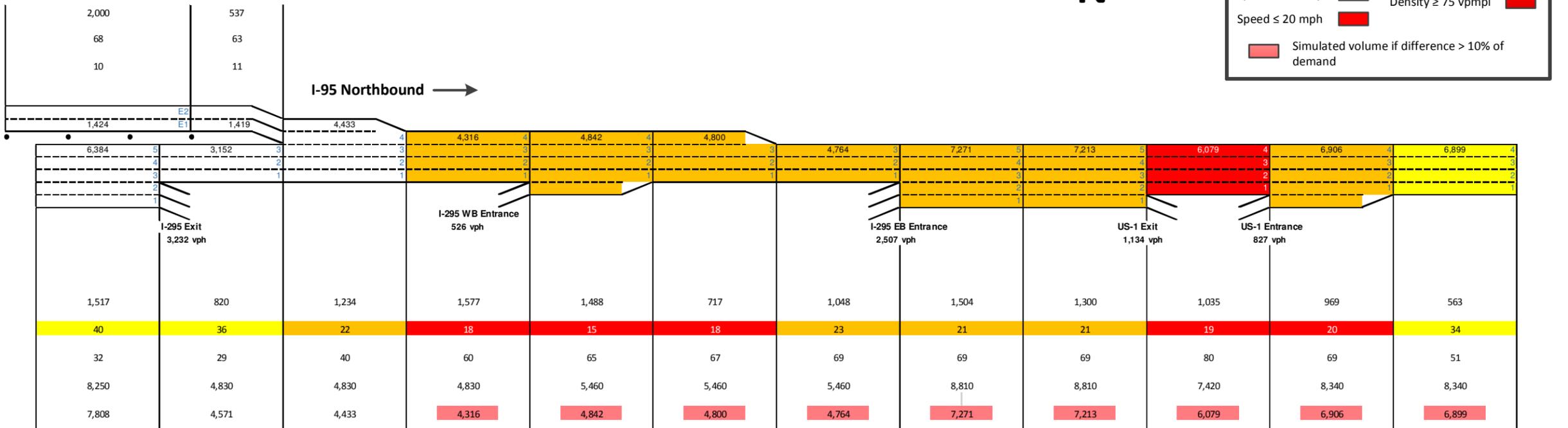
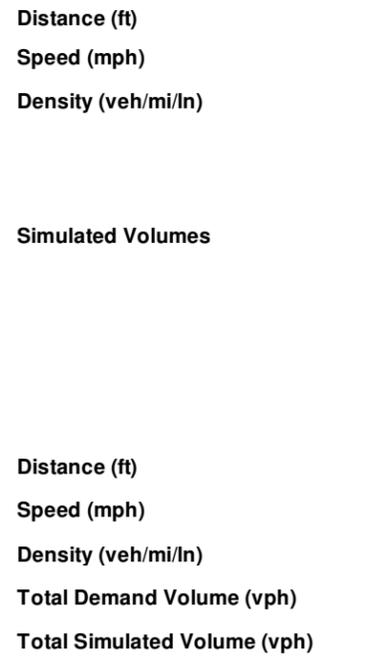
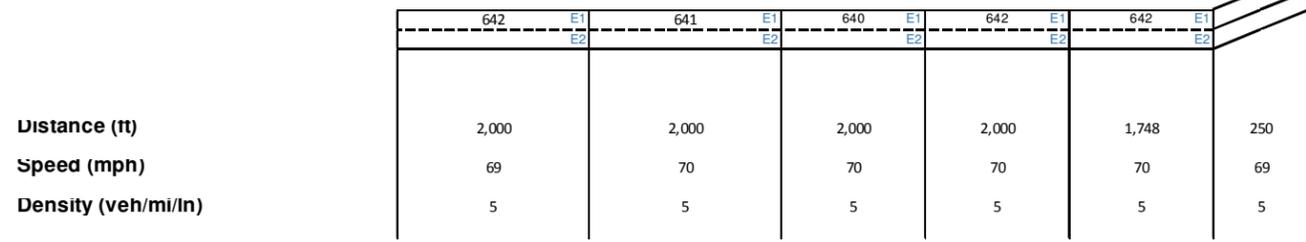
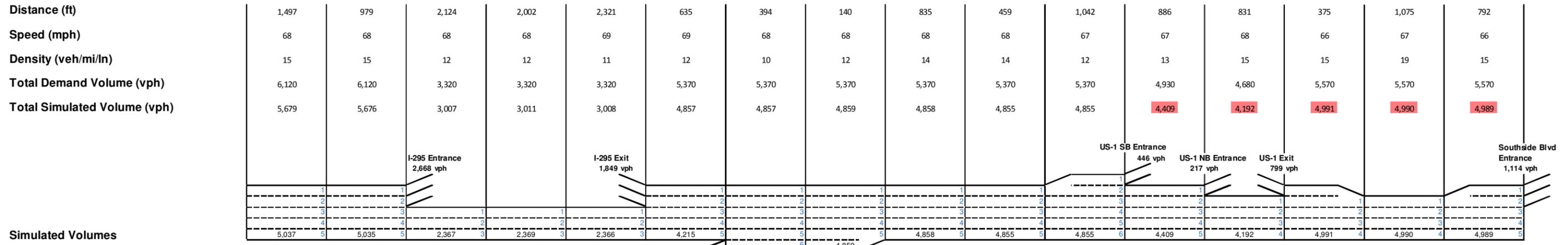




N.T.S.



APPENDIX I – No-Build Alternative Lane
Schematic

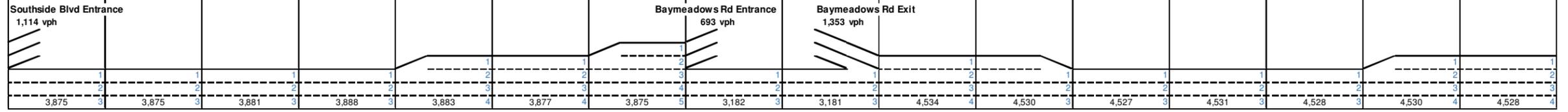


Legend

- Speed > 45 mph [White Box]
- Speed 30-45 mph [Light Yellow Box]
- Speed 20-30 mph [Yellow Box]
- Speed ≤ 20 mph [Red Box]
- Density 45-55 vpmpl [Light Yellow Box]
- Density 55-75 vpmpl [Yellow Box]
- Density ≥ 75 vpmpl [Red Box]
- Simulated volume if difference > 10% of demand [Red Box]



Distance (ft)	1,067	1,650	1,989	1,993	1,270	645	853	1,326	1,336	1,452	432	862	1,981	1,987	914	775
Speed (mph)	66	66	66	66	65	66	67	67	67	67	65	65	65	65	65	65
Density (veh/mi/ln)	20	20	20	20	15	15	12	16	16	17	17	23	23	23	17	17
Total Demand Volume (vph)	4,430	4,430	4,430	4,430	4,430	4,430	4,430	3,700	3,700	5,280	5,280	5,280	5,280	5,280	5,280	5,280
Total Simulated Volume (vph)	3,875	3,875	3,881	3,888	3,883	3,877	3,875	3,182	3,181	4,534	4,530	4,527	4,531	4,528	4,530	4,528



← I-95 Southbound



Legend

- Speed > 45 mph [White box]
- Speed 30-45 mph [Light Yellow box]
- Speed 20-30 mph [Yellow box]
- Speed ≤ 20 mph [Red box]
- Density 45-55 vpmpl [Light Yellow box]
- Density 55-75 vpmpl [Yellow box]
- Density ≥ 75 vpmpl [Red box]
- Simulated volume if difference > 10% of demand [Red box]

I-95 Northbound →

Simulated Volumes	6,897	5,238	5,196	5,120	5,073	5,002	4,244	4,184	5,366	5,353	5,281	5,225
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Southside Blvd Exit 1,659 vph

Baymeadows Rd Exit 758 vph

Baymeadows Rd Entrance 1,182 vph

Distance (ft): 1,658, 2,004, 2,008, 2,003, 1,197, 1,502, 1,278, 1,268, 856, 656, 2,000, 1,998

Speed (mph): 57, 63, 61, 55, 48, 43, 32, 25, 21, 29, 29, 26

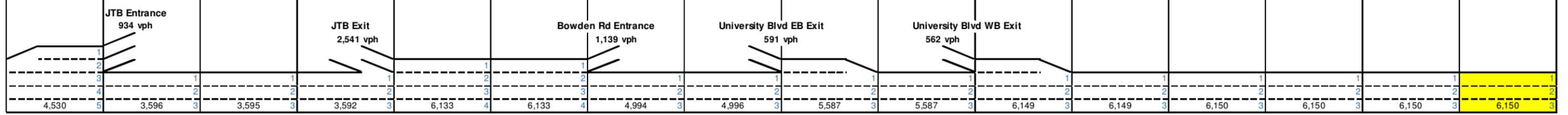
Density (veh/mi/ln): 30, 28, 28, 31, 35, 39, 44, 56, 64, 62, 61, 67

Total Demand Volume (vph): 8,340, 6,290, 6,290, 6,290, 6,290, 6,290, 5,390, 5,390, 6,840, 6,840, 6,840, 6,840

Total Simulated Volume (vph): 6,897, 5,238, 5,196, 5,120, 5,073, 5,002, 4,244, 4,184, 5,366, 5,353, 5,281, 5,225



Distance (ft)	774	1,288	1,999	1,994	1,586	1,546	843	1,986	712	432	649	852	631	1,994	2,000	880
Speed (mph)	66	67	67	67	65	65	64	66	64	65	65	63	62	59	58	44
Density (veh/mi/ln)	14	18	18	18	24	24	26	25	22	29	24	33	33	35	35	47
Total Demand Volume (vph)	5,280	3,920	3,920	3,920	6,700	6,700	5,460	5,460	6,100	6,100	6,710	6,710	6,710	6,710	6,710	6,710
Total Simulated Volume (vph)	4,530	3,596	3,595	3,592	6,133	6,133	4,994	4,996	5,587	5,587	6,149	6,149	6,150	6,150	6,150	6,150



← I-95 Southbound

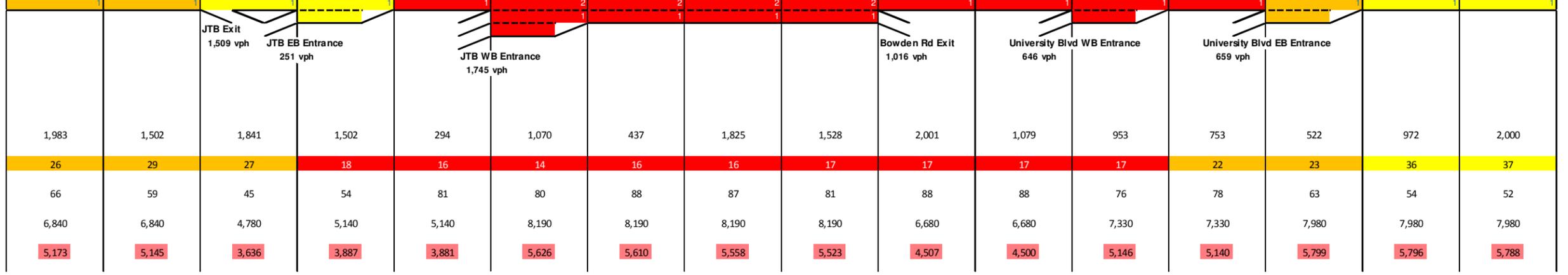


Legend

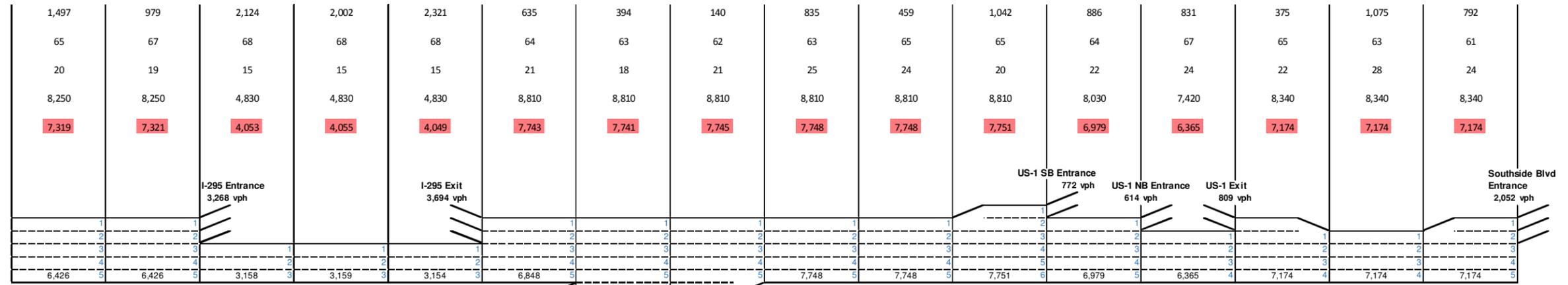
- Speed > 45 mph [White box]
- Speed 30-45 mph [Light Yellow box]
- Speed 20-30 mph [Orange box]
- Speed ≤ 20 mph [Red box]
- Density 45-55 vpmpl [Light Yellow box]
- Density 55-75 vpmpl [Orange box]
- Density ≥ 75 vpmpl [Red box]
- Simulated volume if difference > 10% of demand [Pink box]

I-95 Northbound →

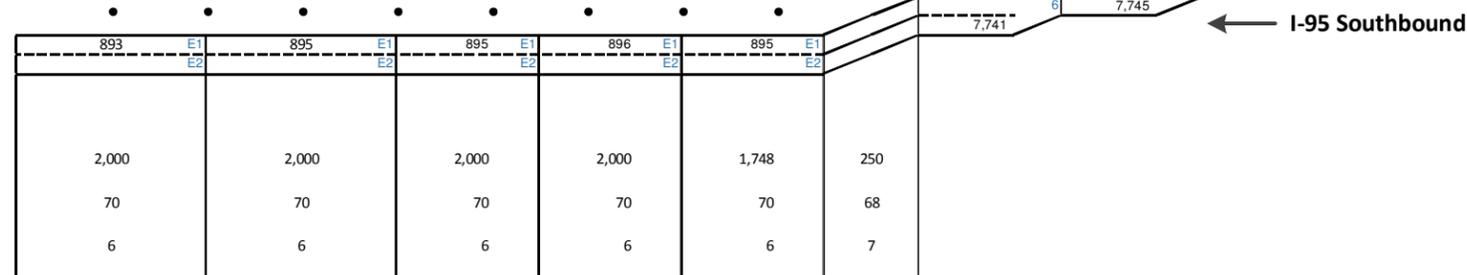
Simulated Volumes	5,173	5,145	3,636	3,887	3,881	5,626	5,610	5,558	5,523	4,507	4,500	5,146	5,140	5,799	5,796	5,788
Distance (ft)	1,983	1,502	1,841	1,502	294	1,070	437	1,825	1,528	2,001	1,079	953	753	522	972	2,000
Speed (mph)	26	29	27	18	16	14	16	16	17	17	17	17	22	23	36	37
Density (veh/mi/ln)	66	59	45	54	81	80	88	87	81	88	88	76	78	63	54	52
Total Demand Volume (vph)	6,840	6,840	4,780	5,140	5,140	8,190	8,190	8,190	8,190	6,680	6,680	7,330	7,330	7,980	7,980	7,980
Total Simulated Volume (vph)	5,173	5,145	3,636	3,887	3,881	5,626	5,610	5,558	5,523	4,507	4,500	5,146	5,140	5,799	5,796	5,788



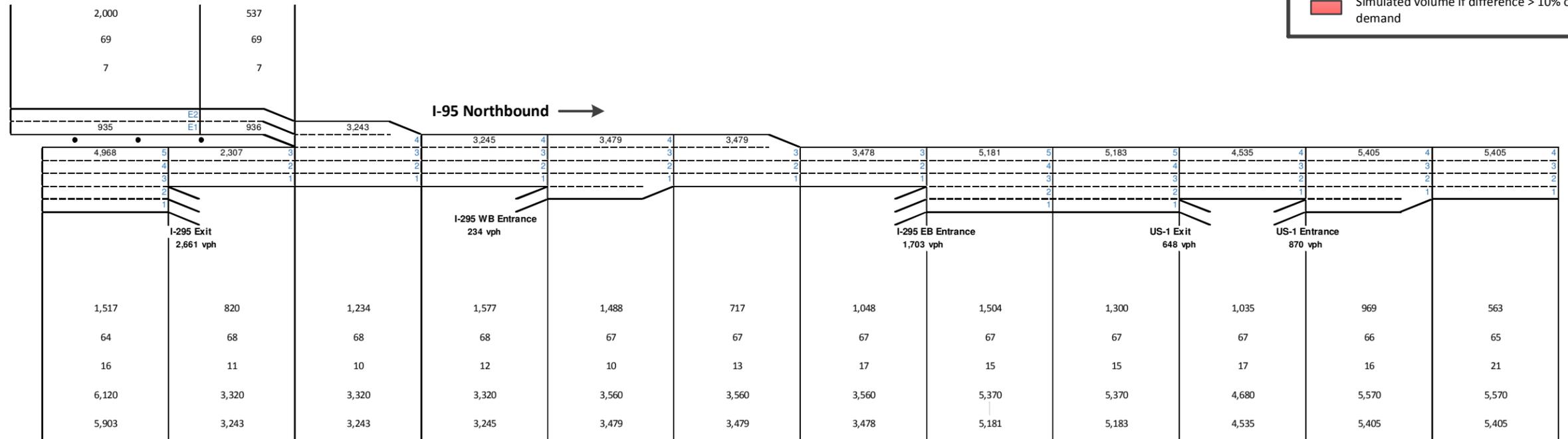
Distance (ft)
 Speed (mph)
 Density (veh/mi/ln)
 Total Demand Volume (vph)
 Total Simulated Volume (vph)



Simulated Volumes



Distance (ft)
 Speed (mph)
 Density (veh/mi/ln)

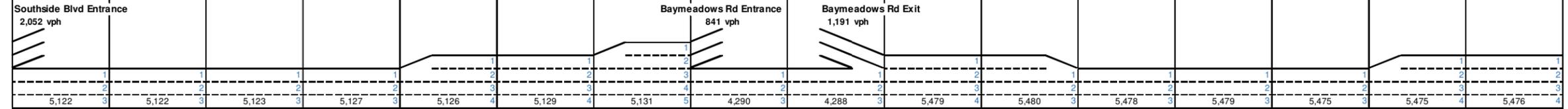


Legend

- Speed > 45 mph
- Speed 30-45 mph
- Speed 20-30 mph
- Speed ≤ 20 mph
- Density 45-55 vpmpl
- Density 55-75 vpmpl
- Density ≥ 75 vpmpl
- Simulated volume if difference > 10% of demand



Distance (ft)	1,067	1,650	1,989	1,993	1,270	645	853	1,326	1,336	1,452	432	862	1,981	1,987	914	775
Speed (mph)	65	65	64	64	63	65	66	66	66	66	64	64	64	64	62	62
Density (veh/mi/ln)	26	26	27	27	20	20	16	22	22	21	21	29	29	29	22	22
Total Demand Volume (vph)	6,290	6,290	6,290	6,290	6,290	6,290	6,290	5,390	5,390	6,840	6,840	6,840	6,840	6,840	6,840	6,840
Total Simulated Volume (vph)	5,122	5,122	5,123	5,127	5,126	5,129	5,131	4,290	4,288	5,479	5,480	5,478	5,479	5,475	5,475	5,476



← I-95 Southbound

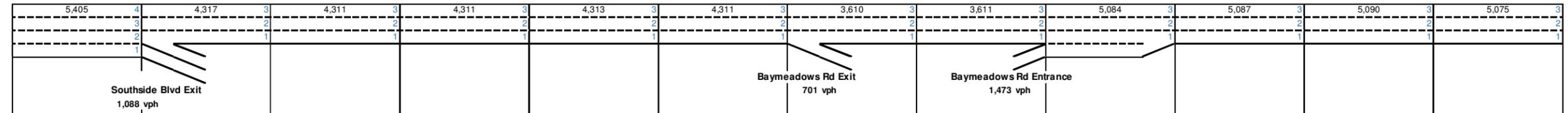


Legend

- Speed > 45 mph
- Speed 30-45 mph
- Speed 20-30 mph
- Speed ≤ 20 mph
- Density 45-55 vpmpl
- Density 55-75 vpmpl
- Density ≥ 75 vpmpl
- Simulated volume if difference > 10% of demand

Simulated Volumes	5,405	4,317	4,311	4,311	4,313	4,311	3,610	3,611	5,084	5,087	5,090	5,075
Distance (ft)	1,658	2,004	2,008	2,003	1,197	1,502	1,278	1,268	856	656	2,000	1,998
Speed (mph)	65	66	66	65	65	65	66	65	55	54	57	56
Density (veh/mi/ln)	21	22	22	22	22	22	18	19	23	31	30	30
Total Demand Volume (vph)	5,570	4,430	4,430	4,430	4,430	4,430	3,700	3,700	5,280	5,280	5,280	5,280
Total Simulated Volume (vph)	5,405	4,317	4,311	4,311	4,313	4,311	3,610	3,611	5,084	5,087	5,090	5,075

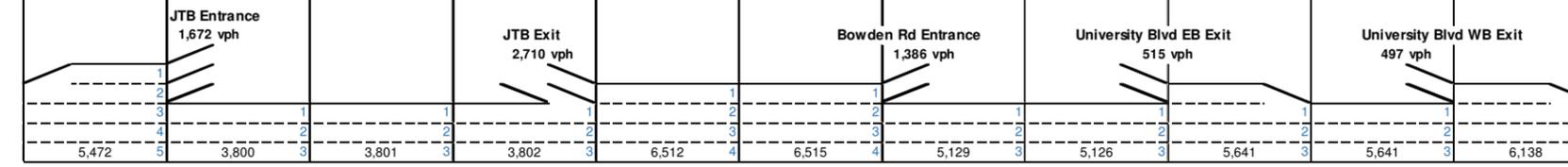
I-95 Northbound →



Distance (ft)	1,658	2,004	2,008	2,003	1,197	1,502	1,278	1,268	856	656	2,000	1,998
Speed (mph)	65	66	66	65	65	65	66	65	55	54	57	56
Density (veh/mi/ln)	21	22	22	22	22	22	18	19	23	31	30	30
Total Demand Volume (vph)	5,570	4,430	4,430	4,430	4,430	4,430	3,700	3,700	5,280	5,280	5,280	5,280
Total Simulated Volume (vph)	5,405	4,317	4,311	4,311	4,313	4,311	3,610	3,611	5,084	5,087	5,090	5,075



Distance (ft)	774	1,288	1,999	1,994	1,586	1,546	843	1,986	712	432	649	852	631	1,994	2,000	880
Speed (mph)	65	66	67	67	64	65	64	65	64	65	65	64	62	61	59	44
Density (veh/mi/ln)	17	19	19	19	25	25	27	26	22	29	24	32	33	34	35	47
Total Demand Volume (vph)	6,840	4,780	4,780	4,780	8,190	8,190	6,680	6,680	7,330	7,330	7,980	7,980	7,980	7,980	7,980	7,980
Total Simulated Volume (vph)	5,472	3,800	3,801	3,802	6,512	6,515	5,129	5,126	5,641	5,641	6,138	6,140	6,141	6,138	6,139	6,141
Simulated Volumes	5,472	3,800	3,801	3,802	6,512	6,515	5,129	5,126	5,641	5,641	6,138	6,140	6,141	6,138	6,139	6,141



← I-95 Southbound



I-95 Northbound →

Legend

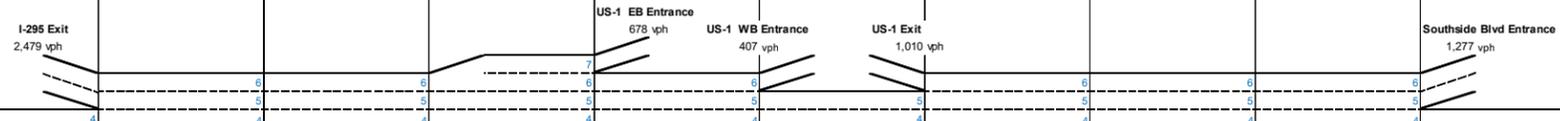
- Speed > 45 mph: White box
- Speed 30-45 mph: Light yellow box
- Speed 20-30 mph: Yellow box
- Speed ≤ 20 mph: Red box
- Density 45-55 vpmp: Light yellow box
- Density 55-75 vpmp: Yellow box
- Density ≥ 75 vpmp: Red box
- Simulated volume if difference > 10% of demand: Red box

Simulated Volumes	5,060	5,042	3,724	3,981	3,970	5,860	5,836	5,766	5,712	4,646	4,621	5,204	5,202	5,799	5,796	5,788
Distance (ft)	1,983	1,502	1,841	1,502	294	1,070	437	1,825	1,528	2,001	1,079	953	753	522	972	2,000
Speed (mph)	55	53	40	28	23	18	20	20	20	19	18	18	23	23	35	38
Density (veh/mi/ln)	31	32	31	36	58	65	73	72	71	82	86	72	75	63	55	51
Total Demand Volume (vph)	5,280	5,280	3,920	4,210	4,210	6,700	6,700	6,700	6,700	5,460	5,460	6,070	6,070	6,710	6,710	6,710
Total Simulated Volume (vph)	5,060	5,042	3,724	3,981	3,970	5,860	5,836	5,766	5,712	4,646	4,621	5,204	5,202	5,799	5,796	5,788



APPENDIX J – Build Alternative Lane Schematic

Distance (ft)	1,796	1,181	1,085	1,193	683	1,050	653	738	670	745	2,001	2,000	2,000	1,141	641
Speed (mph)	68	68	67	66	67	68	68	68	66	66	66	66	66	66	66
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1
Density (veh/mi/ln)	16	16	17	15	15	17	16	16	17	20	20	20	20	20	20
Level of Service (LOS)	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
Total Demand Volume (vph)	4,310	6,830	6,830	6,830	6,150	5,730	6,760	6,760	6,760	5,450	5,450	5,450	5,450	5,450	5,450
Total Simulated Volume (vph)	4,246	6,725	6,724	6,727	6,049	5,642	6,652	6,651	6,654	5,377	5,376	5,378	5,379	5,385	5,380



Simulated Volumes (vph)	4,246	6,725	6,724	6,727	6,049	5,642	6,652	6,651	6,654	5,377	5,376	5,378	5,379	5,385	5,380
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← I-95 Southbound



Legend

- Speed > 45 mph
- Speed 30-45 mph
- Speed 20-30 mph
- Speed ≤ 20 mph
- Density 45-55 vpmpl
- Density 55-75 vpmpl
- Density ≥ 75 vpmpl
- Simulated volume if difference > 10% of demand

I-95 Northbound →

Simulated Volumes (vph)	6,020	6,331	6,330	6,331	9,579	9,573	8,250	9,298	9,300	9,300	7,221	7,215	7,217	7,215	7,213
Distance (ft)	888	1,506	587	1,245	1,378	1,441	1,147	746	686	1,637	1,788	2,000	2,000	1,241	761
Speed (mph)	66	65	65	66	64	64	62	58	53	59	65	65	64	65	66
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.3	+/- 0.8	+/- 1.7	+/- 2	+/- 1.1	+/- 0.2	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1
Density (veh/mi/ln)	23	24	19	24	25	25	27	27	29	32	28	28	28	28	27
Level of Service (LOS)	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D
Total Demand Volume (vph)	6,080	6,390	6,390	6,390	9,820	9,820	8,470	9,520	9,520	9,520	7,380	7,380	7,380	7,380	7,380
Total Simulated Volume (vph)	6,020	6,331	6,330	6,331	9,579	9,573	8,250	9,298	9,300	9,300	7,221	7,215	7,217	7,215	7,213



*The average deviation represents the variability between the 10 iterations.



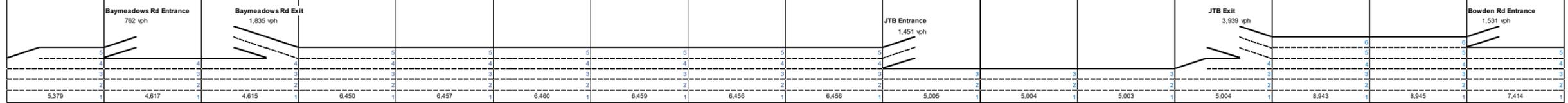
I-95 from International Golf Parkway to Atlantic Boulevard
SIMR

I-95 – Design Year 2045 – Modified Build Alternative – AM Peak Hour Lane Schematic

Figure 7-27

Page 6 of 12

Distance (ft)	819	917	1,852	1,564	1,942	2,000	1,997	1,026	674	686	1,516	1,893	1,281	1,265	1,314	1,337
Speed (mph)	67	67	67	65	66	67	67	67	66	65	65	65	64	64	61	62
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.3	+/- 0.3	+/- 0.6	+/- 0.5
Density (veh/mi/ln)	16	17	17	20	20	19	19	19	20	26	26	26	20	23	24	24
Level of Service (LOS)	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C
Total Demand Volume (vph)	5,450	4,680	4,680	6,540	6,540	6,540	6,540	6,540	6,540	5,060	5,060	5,060	5,060	9,030	9,030	7,440
Total Simulated Volume (vph)	5,379	4,617	4,615	6,450	6,457	6,460	6,459	6,456	6,456	5,005	5,004	5,003	5,004	8,943	8,945	7,414



← I-95 Southbound



Legend

- Speed > 45 mph
- Speed 30-45 mph
- Speed 20-30 mph
- Speed ≤ 20 mph
- Density 45-55 vpmpl
- Density 55-75 vpmpl
- Density ≥ 75 vpmpl
- Simulated volume if difference > 10% of demand

I-95 Northbound →

Simulated Volumes (vph)	7,214	6,059	6,060	7,500	7,493	7,496	7,501	7,494	7,500	5,039	5,477	5,478	8,939	8,935	8,937	8,937
Distance (ft)	760	1,537	1,142	933	704	1,802	2,000	1,447	1,873	1,963	1,572	380	1,241	911	615	1,529
Speed (mph)	66	66	66	65	66	66	66	65	64	67	65	66	66	66	64	65
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.3	+/- 0.2
Density (veh/mi/ln)	22	23	23	19	23	23	23	23	23	19	17	21	19	23	23	23
Level of Service (LOS)	C	C	C	C	C	C	C	C	C	C	B	C	C	C	C	C
Total Demand Volume (vph)	7,380	6,210	6,210	7,680	7,680	7,680	7,680	7,680	7,680	5,120	5,580	5,580	9,100	9,100	9,100	9,100
Total Simulated Volume (vph)	7,214	6,059	6,060	7,500	7,493	7,496	7,501	7,494	7,500	5,039	5,477	5,478	8,939	8,935	8,937	8,937

*The average deviation represents the variability between the 10 iterations.



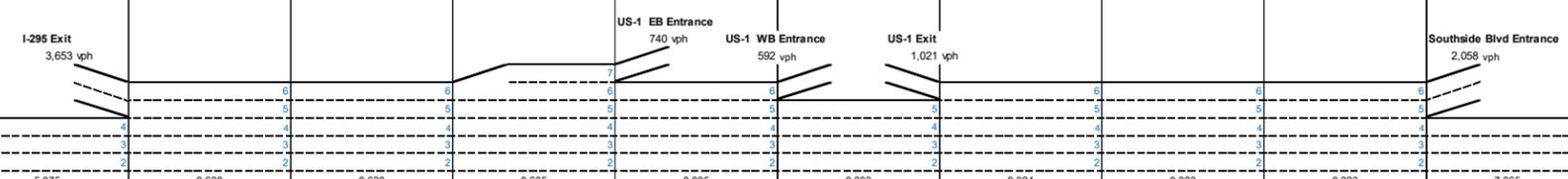
I-95 from International Golf Parkway to Atlantic Boulevard
SIMR

I-95 – Design Year 2045 – Modified Build Alternative – AM Peak Hour
Lane Schematic

Figure 7-27

Page 7 of 12

Distance (ft)	1,796	1,181	1,085	1,193	683	1,050	653	738	670	745	2,001	2,000	2,000	1,141	641
Speed (mph)	67	65	59	62	65	67	66	64	62	65	65	64	64	63	62
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.2	+/- 1.1	+/- 1	+/- 0.2	+/- 0.2	+/- 0.3	+/- 0.3	+/- 0.5	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.1	+/- 0.3	+/- 0.4
Density (veh/mi/ln)	22	25	27	22	23	25	24	24	25	28	28	28	28	29	29
Level of Service (LOS)	C	C	D	C	C	C	C	C	C	D	D	D	D	D	D
Total Demand Volume (vph)	6,080	9,820	9,820	9,820	9,080	8,470	9,520	9,520	9,520	7,380	7,380	7,380	7,380	7,380	7,380
Total Simulated Volume (vph)	5,975	9,628	9,630	9,635	8,895	8,303	9,324	9,323	9,323	7,265	7,263	7,261	7,268	7,271	7,274



← I-95 Southbound

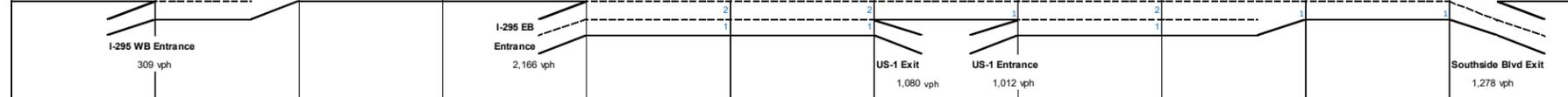


I-95 Northbound →

Legend

- Speed > 45 mph [White Box]
- Speed 30-45 mph [Light Yellow Box]
- Speed 20-30 mph [Yellow Box]
- Speed ≤ 20 mph [Red Box]
- Density 45-55 vpmpl [Light Green Box]
- Density 55-75 vpmpl [Orange Box]
- Density ≥ 75 vpmpl [Dark Red Box]
- Simulated volume if difference > 10% of demand [Pink Box]

Simulated Volumes (vph)	4,211	4,520	4,519	4,517	6,683	6,681	5,601	6,613	6,612	6,607	5,329	5,335	5,332	5,329	5,325
Distance (ft)	888	1,506	587	1,245	1,378	1,441	1,147	746	686	1,637	1,788	2,000	2,000	1,241	761
Speed (mph)	67	67	67	67	67	66	67	66	65	66	67	66	66	66	67
Average Deviation for Speed (mph)*	+/- 0	+/- 0	+/- 0.1	+/- 0	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1
Density (veh/mi/ln)	16	17	13	17	17	17	17	17	17	20	20	20	20	20	20
Level of Service (LOS)	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
Total Demand Volume (vph)	4,310	4,620	4,620	4,620	6,830	6,830	5,730	6,760	6,760	6,760	5,450	5,450	5,450	5,450	5,450
Total Simulated Volume (vph)	4,211	4,520	4,519	4,517	6,683	6,681	5,601	6,613	6,612	6,607	5,329	5,335	5,332	5,329	5,325



*The average deviation represents the variability between the 10 iterations.



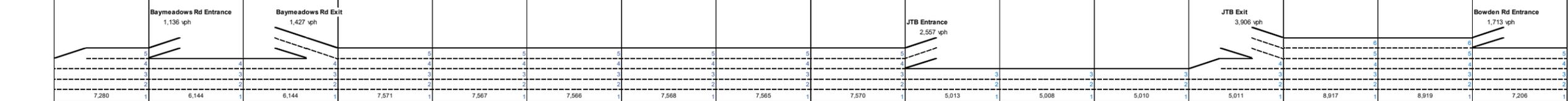
I-95 from International Golf Parkway to Atlantic Boulevard
SIMR

I-95 – Design Year 2045 – Modified Build Alternative – PM Peak Hour
Lane Schematic

Figure 7-28

Page 6 of 12

Distance (ft)	819	917	1,852	1,564	1,942	2,000	1,997	1,026	674	686	1,516	1,893	1,281	1,265	1,314	1,337
Speed (mph)	65	66	66	63	65	66	66	66	66	65	65	65	64	64	62	63
Average Deviation for Speed (mph)*	+/- 0.2	+/- 0.1	+/- 0.2	+/- 0.4	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.2	+/- 0.2	+/- 0.5	+/- 1	+/- 0.4
Density (veh/mi/ln)	22	23	23	24	23	23	23	23	23	26	26	26	20	23	24	23
Level of Service (LOS)	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Total Demand Volume (vph)	7,380	6,210	6,210	7,680	7,680	7,680	7,680	7,680	7,680	5,120	5,120	5,120	5,120	9,100	9,100	7,280
Total Simulated Volume (vph)	7,280	6,144	6,144	7,571	7,567	7,566	7,568	7,565	7,570	5,013	5,008	5,010	5,011	8,917	8,919	7,206



← I-95 Southbound

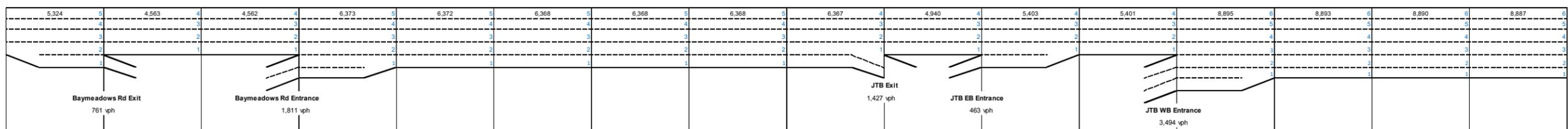


Legend

- Speed > 45 mph
- Speed 30-45 mph
- Speed 20-30 mph
- Speed ≤ 20 mph
- Density 45-55 vpmpl
- Density 55-75 vpmpl
- Density ≥ 75 vpmpl
- Simulated volume if difference > 10% of demand

I-95 Northbound →

Simulated Volumes (vph)	5,324	4,563	4,562	6,373	6,372	6,368	6,368	6,368	6,367	4,940	5,403	5,401	8,895	8,893	8,890	8,887
Distance (ft)	760	1,537	1,142	933	704	1,802	2,000	1,447	1,873	1,963	1,572	380	1,241	911	615	1,529
Speed (mph)	67	67	67	65	67	67	67	66	66	67	65	66	66	66	65	65
Average Deviation for Speed (mph)*	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1
Density (veh/mi/ln)	16	17	17	16	19	19	19	19	19	18	17	20	19	22	23	23
Level of Service (LOS)	B	B	B	B	C	C	C	C	C	B	B	C	C	C	C	C
Total Demand Volume (vph)	5,450	4,680	4,680	6,540	6,540	6,540	6,540	6,540	6,540	5,060	5,520	5,520	9,030	9,030	9,030	9,030
Total Simulated Volume (vph)	5,324	4,563	4,562	6,373	6,372	6,368	6,368	6,368	6,367	4,940	5,403	5,401	8,895	8,893	8,890	8,887



*The average deviation represents the variability between the 10 iterations.



I-95 from International Golf Parkway to Atlantic Boulevard
SIMR

I-95 – Design Year 2045 – Modified Build Alternative – PM Peak Hour
Lane Schematic

Figure 7-28

Page 7 of 12

APPENDIX K – SHPO Concurrence Letter



Florida Department of Transportation

RON DESANTIS
GOVERNOR

1109 South Marion Avenue
Lake City, Florida 32025-5874

KEVIN J. THIBAUT, P.E.
SECRETARY

August 28, 2020

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: Lindsay Rothrock, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
I-95 Widening from I-295 to SR 202
Duval County, Florida
Financial Management No.: 435577-1

Dear Dr. Parsons,

Enclosed please find one copy of the report titled *Technical Memorandum: Cultural Resource Assessment Survey for the I-95 (SR 9) Widening from I-295 (SR 9A) to SR 202 (J. T. Butler Boulevard), Duval County, Florida*. This report presents the findings of a cultural resource assessment survey (CRAS) conducted in support of the proposed widening of Interstate 95 (I-95) (State Road [SR] 9) from I-295 (SR 9A) to SR 202 (J. T. Butler Boulevard) in Duval County, Florida. The Florida Department of Transportation (FDOT), District 2, is proposing to add lanes and reconstruct Interstate 95 (I-95) (State Road [SR] 9) from I-295 (SR 9A) to SR 202 (J. T. Butler Boulevard) in Duval County, Florida. The project also includes the construction of nine retention ponds and intersection modifications at Southside Boulevard and Belle Rive Boulevard, along with minor interchange improvements at I-95 and Baymeadows Road. With the exception of the nine proposed ponds, all improvements will be constructed within the existing right-of-way. This project is federally funded for construction in 2025.

The Area of Potential Effects (APE) was developed to consider any visual, audible, and atmospheric effects that the project may have on historic properties. For this project, the APE for the corridor improvements was defined to include the existing I-95 right-of-way from I-295 to SR 202, the Baymeadows Road right-of-way where improvements are proposed, and the Southside Boulevard and Belle River Boulevard intersection; the APE for the proposed offsite ponds includes the proposed pond footprints plus a 100-foot (30.5-meter) buffer. The majority of the project is composed of the existing right-of-way along I-95, the heavily developed Baymeadows Road, and the Southside Boulevard and Belle River Boulevard intersection, which

offer little to no potential for the identification of intact cultural deposits. Therefore, the archaeological survey was conducted within the proposed footprint of each pond. The architectural history survey included the entire APE.

This CRAS was conducted in accordance with the requirements set forth in Section 106 of the National Historic Preservation Act of 1966, as amended, found in 36 CFR Part 800 (Protection of Historic Properties). The study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code and Section 267.12, Florida Statutes, Chapter 1A-32. All work was performed in accordance with Part 2, Chapter 8 of FDOT's Project Development & Environment (PD&E) Manual (revised July 2020), FDOT's Cultural Resources Management Handbook, and the standards stipulated in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42). This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act of 1966, as amended, and the Archeological and Historic Preservation Act of 1979, as amended.

The archaeological survey included the excavation of 16 shovel tests within the archaeological APE, all of which were negative for cultural material. No artifacts were recovered, and no archaeological sites or occurrences were identified. No further archaeological survey is recommended.

The architectural survey resulted in the identification and evaluation of three previously recorded resources within the I-95 from I-295 to SR 202 Corridor and Ponds APE, which are Flat Ford Road (8DU15970), the Florida East Coast (FEC) Railroad (8DU17719), and US 1/Philips Highway (8DU18995). Based on the results of the current survey, it is the opinion of SEARCH that the portion of the FEC Railroad (8DU17719) within the APE is significant under National Register of Historic Places (NRHP) Criterion A for Transportation and Commerce and under Criterion B for association with Henry Morrison Flagler. As such, the FEC Railroad (8DU17719) retains its historic integrity and is recommended to remain eligible for listing in the NRHP as a contributing element to the overall 8DU17719 resource group. The remaining resources (8DU15970 and 8DU18995) lack the necessary historic significance and architectural/engineering distinction for listing in the NRHP and are recommended ineligible, either individually or as contributing resources to an existing or potential historic district within the I-95 from I-295 to SR 202 Corridor and Ponds APE.

No work is proposed within the 8DU17719 railway or right-of-way. Work proposed adjacent to and elevated above 8DU17719 includes the construction of additional lanes and reconstruction of I-95 from I-295 to SR 202 and the installation of retention ponds. With the exception of the nine proposed ponds, all improvements will be constructed within the existing I-95 right-of-way. The portion of 8DU17719 within the current APE is situated below I-95, which is elevated above it. The construction of additional lanes or reconstruction of existing lanes is proposed beyond the

Dr. Parsons, SHPO
FM # 435577-1
August 28, 2020
Page 3

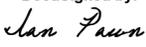
viewshed and boundaries of 8DU17719, and no construction activities are proposed within the right-of-way of 8DU17719. Additionally, the closest proposed ponds are a collection of ponds to the north, which include Ponds C-1, C-2, and C-4. However, those are approximately 0.15 miles (0.24 kilometers) to the north of 8DU17719 and beyond the viewshed of the resource. No historic fabric associated with 8DU17719 will be compromised by any of the proposed activities. Furthermore, the impact of any viewshed concerns is diminished by existing concrete bridge support walls for I-95, which block the view of the 8DU17719 to closest ponds and to the north and south of the proposed work. It is the opinion of SEARCH that the proposed improvements will pose no adverse effect to the FEC Railroad corridor (8DU17719).

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no adverse effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Ian Pawn at (386) 961-7886.

Sincerely,

DocuSigned by:

D23D48BCDF514AD...

Stephen Browning
District Planning and Environmental Manager

cc: Terri Newman, Environmental Administrator, FDOT
Ian Pawn, Cultural Resources Coordinator, FDOT
Matt Marino, State Cultural Resource Specialist, OEM
Roy Jackson, State Cultural and Recreational Resources Coordinator, OEM

Dr. Parsons, SHPO

FM # 435577-1

August 28, 2020

Page 4

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and concurs / does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 2020-0054-B. Or, the SHPO finds the attached document contains _____ insufficient information.

In accordance with the Programmatic Agreement among the FHWA, ACHP, FDHR, SHPO, and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FHWA will proceed with a *de minimis* Section 4(f) finding at its discretion for the use of land from the historic property.

SHPO Comments:

Jason Aldridge DSHPO

Timothy A. Parsons, PhD, Director, and
State Historic Preservation Officer
Florida Division of Historical Resources

September 23, 2020

Date

APPENDIX L – Long Range Estimates (LRE)

I-295 TO SR 152

Date: 8/3/2021 2:26:55 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 435577-2-52-01

Letting Date: 05/2025

Description: I-95 Widening from N. of I-295 to N of SR 152. Includes US 1 interchange, 152 interchange, and SR 152 modifications Baymeadows Way to Old Baymeadows Road. (KMP, HDR 5-22-20)

District: 02 County: 72 DUVAL

Market Area: 05 Units: English

Contract Class: 9 Lump Sum Project: N

Design/Build: N Project Length: 3.806 MI

Project Manager: Darrell Locklear

Version 4-P Project Grand Total**\$100,573,017.96**

Description: 6-24-21 updated ponds (removed Pond E, modified Pond D to larger pond D-E2, removed fencing around ponds). 6-15-2021. HDR KPrice update per Concept changes: 2 lane exit SB at US 1, curb and gutter on ramps, Baymeadows Road intersection changes and DDI refinement with new retaining wall at bridge abutment.

Sequence: 1 WDR - Widen/Resurface, Divided, Rural

Net Length: 3.807 MI
20,100 LF

Description: I-95 Widening from N. of I-295 to N. of SR 152. One lane widening each direction (outside).
Approximate Station 771+00 to 972+00.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	3.807
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	46.15 AC	\$30,560.65	\$1,410,374.00
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	72,661.25 CY	\$20.00	\$1,453,225.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	44,667.00 SY	\$31.54	\$1,408,797.18

Comment: Removal of existing outside concrete shoulders (2-10 foot shoulders estimated)

Earthwork Component Total

\$4,272,396.18

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	13.00 / 13.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	0
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	111,666.13 SY	\$5.00	\$558,330.65
285-701	OPTIONAL BASE,BASE GROUP 01	59,540.38 SY	\$18.80	\$1,119,359.14
350-3-7	PLAIN CEMENT CONC PAVT, 9"	58,066.39 SY	\$93.85	\$5,449,530.70

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01 Comment: Additional pavement for aux lanes extensions/additions. Estimated at 6100 LF additional 12 foot lane.	8,133.00 SY	\$18.80	\$152,900.40
339-1	MISCELLANEOUS ASPHALT PAVEMENT Comment: for median guardrail replacement, 3.5' wide	700.60 TN	\$275.69	\$193,148.41
350-3-7	PLAIN CEMENT CONC PAVT, 9" Comment: Additional pavement for aux lanes extensions/additions. Estimated at 6100 LF additional 12 foot lane.	8,133.00 SY	\$93.85	\$763,282.05
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: For outside widening	40,200.00 LF	\$32.47	\$1,305,294.00
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE Comment: Replacement of median guardrail for new height	18,016.00 LF	\$35.62	\$641,729.92
536-73	GUARDRAIL REMOVAL Comment: Outside guardrail removal (for widening) and removal for upgrade of median guardrail to new height.	25,068.00 LF	\$4.27	\$107,040.36
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	8.00 EA	\$999.89	\$7,999.12
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12" Comment: Measured in cadd	1.84 LF	\$3.26	\$6.00
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18" Comment: Measured in cadd	335.00 LF	\$4.06	\$1,360.10

711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" Comment: Measured in cadd	8.79 GM	\$4,903.41	\$43,100.97
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6" Comment: Measured in cadd	28.52 GM	\$1,664.38	\$47,468.12
711-15-133	THERMOPLASTIC, STD-OP, WHITE, SKIP, 12" Comment: Measured in cadd	2.55 GM	\$2,926.28	\$7,462.01
711-15-201	THERMOPLASTIC, STD- OP, YELLOW, SOLID, 6" Comment: Measured in cadd	8.96 GM	\$5,006.63	\$44,859.40

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	2,570.00 EA	\$5.87	\$15,085.90

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	1,190.00
Noise Barrier Wall Begin Height	22.00
Noise Barrier Wall End Height	22.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	275.28 TN	\$275.69	\$75,891.94
534-72-101	SOUND/NOISE BARRIER-INC FOUNDATION, PERM	26,180.00 SF	\$30.20	\$790,636.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	8,198.50 LF	\$20.62	\$169,053.07
536-8-13	APPROACH TRANS CONN TO RIGID BA, F&I, 3	16.00 EA	\$2,673.61	\$42,777.76
536-85-24	GUARDRAIL END TREATMENT- PARA APP TERM	6.00 EA	\$2,791.53	\$16,749.18

Roadway Component Total

\$11,553,065.20

SHOULDER COMPONENT**User Input Data**

Description	Value
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Existing Total Outside Shoulder Width L/R	10.00 / 10.00
New Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Existing Paved Outside Shoulder Width L/R	10.00 / 10.00
New Paved Outside Shoulder Width L/R	9.00 / 9.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	41,673.80	SY	\$28.35	\$1,181,452.23
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	4,421.98	TN	\$123.33	\$545,362.79
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	7.61	GM	\$23,176.55	\$176,373.55
570-1-1	PERFORMANCE TURF	11,925.94	SY	\$1.85	\$22,062.99

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-6	SHOULDER GUTTER- CONCRETE	6,089.00	LF	\$26.40	\$160,749.60
	Comment: Assume similar locations as existing, reconstructed due to outside widening.				

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	46,229.78	LF	\$2.00	\$92,459.56
104-11	FLOATING TURBIDITY BARRIER	380.68	LF	\$10.13	\$3,856.29
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	380.68	LF	\$4.86	\$1,850.10
104-15	SOIL TRACKING PREVENTION DEVICE	4.00	EA	\$3,151.91	\$12,607.64
104-18	INLET PROTECTION SYSTEM	50.00	EA	\$91.28	\$4,564.00
107-1	LITTER REMOVAL	27.68	AC	\$64.29	\$1,779.55
107-2	MOWING	27.68	AC	\$110.69	\$3,063.90

Shoulder Component Total

\$2,206,182.20

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	68.52	CY	\$1,999.12	\$136,979.70
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	3,048.00	LF	\$100.65	\$306,781.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	304.00	LF	\$165.00	\$50,160.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	24.00	EA	\$2,015.62	\$48,374.88
570-1-1	PERFORMANCE TURF	2,679.99	SY	\$1.85	\$4,957.98

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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425-1-701	INLETS, GUTTER, TYPE S, <10'	20.00 EA	\$4,747.66	\$94,953.20
	Comment: For new shoulder gutter, 300' spacing assumed.			
430-175-130	PIPE CULV, OPT MATL, ROUND, 30"S/CD	120.00 LF	\$193.76	\$23,251.20
	Comment: cross drain extensions, 2-30", 3-30" extended 12' each end.			
430-982-133	MITERED END SECT, OPTIONAL RD, 30" CD	10.00 EA	\$2,643.06	\$26,430.60
	Comment: For cross drain extensions, 2-30" and 3-30" extended both sides.			

Box Culvert 1

Description	Value
Size	Trip. 10 x 6
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	94.44 CY	\$1,250.00	\$118,050.00
415-1-1	REINF STEEL- ROADWAY	13,512.00 LB	\$1.06	\$14,322.72

Box Culvert 2

Description	Value
Size	8 x 5
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	39.52 CY	\$1,250.00	\$49,400.00
415-1-1	REINF STEEL- ROADWAY	4,126.80 LB	\$1.06	\$4,374.41

Box Culvert 3

Description	Value
Size	10 x 4
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	43.08 CY	\$1,250.00	\$53,850.00
415-1-1	REINF STEEL- ROADWAY	5,127.60 LB	\$1.06	\$5,435.26

Box Culvert 4

Description	Value
Size	6 x 4
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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400-4-1	CONC CLASS IV, CULVERTS	29.56 CY	\$1,250.00	\$36,950.00
415-1-1	REINF STEEL- ROADWAY	3,912.40 LB	\$1.06	\$4,147.14

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	1
Depth	11.30
Description	Pond B (3.6 acre at 15.7 total depth (2.7' design depth + 12 feet permanent pool + 1 foot freeboard), adjusted depth for 5 ac size)

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$30,560.65	\$152,803.25
120-1	REGULAR EXCAVATION	91,153.33 CY	\$20.44	\$1,863,174.07
400-2-2	CONC CLASS II, ENDWALLS	30.00 CY	\$1,999.12	\$59,973.60
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$4,967.36	\$4,967.36
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$7,509.00	\$15,018.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$220.00	\$12,320.00
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$342.73	\$137,092.00
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$1.85	\$44,770.00

Retention Basin 2

Description	Value
Size	2 AC
Multiplier	5
Depth	17.21
Description	Pond C (5 ponds total, US 1 interchange area). (11.1 acres total at 15.5 depth (2.5' design depth + 12 feet permanent pool + 1 foot freeboard), adjusted depth for 2 ac size*5 ponds)

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$30,560.65	\$305,606.50
120-1	REGULAR EXCAVATION	277,654.65 CY	\$20.44	\$5,675,261.05
425-1-541	INLETS, DT BOT, TYPE D, <10'	5.00 EA	\$4,967.36	\$24,836.80
425-2-71	MANHOLES, J-7, <10'	5.00 EA	\$7,509.00	\$37,545.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	280.00 LF	\$220.00	\$61,600.00
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,000.00 LF	\$342.73	\$342,730.00
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$1.85	\$89,540.00

Retention Basin 3

Description	Value
Size	2.5 AC
Multiplier	1

Depth 6.00
 Description Pond D-E2 (2.5 acre at 17 total depth (4' design depth + 12 feet permanent pool + 1 foot freeboard))

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50 AC	\$30,560.65	\$76,401.62
120-1	REGULAR EXCAVATION	24,200.00 CY	\$20.44	\$494,648.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00 EA	\$5,887.54	\$5,887.54
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$7,509.00	\$7,509.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$220.00	\$12,320.00
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$342.73	\$68,546.00
570-1-1	PERFORMANCE TURF	12,100.00 SY	\$1.85	\$22,385.00
Drainage Component Total				\$10,493,353.09

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	11.00 AS	\$385.00	\$4,235.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00 AS	\$1,326.57	\$10,612.56
700-1-60	SINGLE POST SIGN, REMOVE	19.00 AS	\$18.04	\$342.76
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$5,541.28	\$5,541.28
700-2-50	MULTI- POST SIGN, RELOCATE	1.00 AS	\$5,606.98	\$5,606.98

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-203	SIGN PANEL, F&I OM, 21-30 SF	15.00 EA	\$1,303.91	\$19,558.65
700-3-207	SIGN PANEL, F&I OM, 201-300 SF	12.00 EA	\$7,489.75	\$89,877.00
700-3-211	SIGN PANEL, F&I OM, 601 SF AND GREATER	9.00 EA	\$16,141.90	\$145,277.10
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT	6.00 EA	\$82,000.00	\$492,000.00
700-4-126	OH STATIC SIGN STR, F&I, S 101-150 FT	3.00 EA	\$177,119.23	\$531,357.69
700-4-128	OH STATIC SIGN STR, F&I, S 201 FT AND GR	4.00 EA	\$250,000.00	\$1,000,000.00
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	6.00 EA	\$4,070.58	\$24,423.48
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN	7.00 EA	\$9,168.09	\$64,176.63
700-9-137	WALK-IN DYN MESS SIGN, F&I, FULL, 201-	4.00 EA	\$132,000.00	\$528,000.00
700-10-115	DMS SUPPORT STRUCTURE, SPAN, 51-100 FT	4.00 EA	\$77,106.19	\$308,424.76
700-10-600	DMS SUPPORT STRUCTURE, REMOVE	2.00 EA	\$6,814.05	\$13,628.10

Signing Component Total

\$3,243,061.99

SIGNALIZATIONS COMPONENT**Traffic Monitoring 1**

Description	Value
Lanes	6
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	250.00 LF	\$7.99	\$1,997.50
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00 EA	\$691.64	\$8,299.68
660-2-101	LOOP ASSEMBLY- F&I, TYPE A	12.00 AS	\$943.33	\$11,319.96
695-1-1	TMS VEH SNSR-NON-WEIGHT, F&I,	12.00 EA	\$1,399.51	\$16,794.12
695-7-132	TMS CABINET, F&I , TYP 3 PEDESTAL	1.00 EA	\$3,425.06	\$3,425.06
Signalizations Component Total				\$41,836.32

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT**Description of Work****X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH Comment: new trunk line for project length, plus extra for drops to equipment opposite side.	25,000.00 LF	\$7.99	\$199,750.00
633-1-114	FIBER OPTIC CABLE,F&I, OVH,97-144 Comment: new trunk line for project length, plus extra for drops to equipment opposite side.	25,000.00 LF	\$3.72	\$93,000.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" Comment: 500' spacing	50.00 EA	\$691.64	\$34,582.00
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: along fiber	25.00 EA	\$1,323.02	\$33,075.50
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" OR 36" Comment: at devices	28.00 EA	\$2,833.63	\$79,341.64
639-1-111	ELECTRICAL POWER SRV,F&I,OH,M,FURNISHED Comment: 3 power service locations assumed	3.00 AS	\$2,407.35	\$7,222.05
641-3-169	CONCRETE CCTV POLE, FUR & INS W/LOW Comment: 2 between I-295 and US 1, 2 between US 1 and Southside connector, 4 between Southside Connector and Baymeadows	8.00 EA	\$27,154.41	\$217,235.28
641-3-800	CONCRETE CCTV POLE, REMOVE	4.00 EA	\$5,694.76	\$22,779.04
660-3-11	VEHICLE DETECTION SYSTEM-MICRO,F&I, CAB	16.00 EA	\$4,198.26	\$67,172.16
660-3-12		16.00 EA	\$8,628.35	\$138,053.60

	VEHICLE DETECTION SYSTEM- MICRO,F&I, ABO			
682-1-133	ITS CCTV CAMERA, F&I, DOME ENCL-NP.	8.00 EA	\$7,098.00	\$56,784.00

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
ITS_EXTRA	ITS INCIDENTALS	1.00 LS	\$250,000.00	\$250,000.00
	Comment: FOR ITEMS NOT COVERED AT THIS TIME			

Intelligent Traffic System (ITS) Component Total \$1,198,995.27

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	142

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	28,400.00 LF	\$7.99	\$226,916.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	142.00 EA	\$691.64	\$98,212.88
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	85,200.00 LF	\$1.92	\$163,584.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	142.00 EA	\$6,300.00	\$894,600.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	142.00 EA	\$622.00	\$88,324.00
	Subcomponent Total			\$1,471,636.88

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND	142.00 EA	\$405.84	\$57,629.28

Lighting Component Total \$1,529,266.16

BRIDGES COMPONENT

Bridge 720327

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	214.00
Width (LF)	20.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720327
Removal of Existing Structures area	856.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$217.94
Basic Bridge Cost	\$898,800.00

Description NB I-95 OVER RR. WIDEN FOR ADDITIONAL LANE AND
INCREASE IN OUTSIDE SHOULDER WIDTH.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	856.00 SF	\$75.45	\$64,585.20
400-2-10	CONC CLASS II, APPROACH SLABS	44.44 CY	\$575.59	\$25,579.22
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00 LB	\$1.08	\$8,399.16
Bridge 720327 Total				\$997,363.58

Bridge 720216

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	263.00
Width (LF)	20.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720216
Removal of Existing Structures area	1,052.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$216.46
Basic Bridge Cost	\$1,104,600.00
Description	SB I-95 OVER US 1. WIDENING FOR ADDITIONAL LANE AND UPGRADE OF OUTSIDE SHOULDER WIDTH.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	1,052.00 SF	\$75.45	\$79,373.40
400-2-10	CONC CLASS II, APPROACH SLABS	44.44 CY	\$575.59	\$25,579.22
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00 LB	\$1.08	\$8,399.16
Bridge 720216 Total				\$1,217,951.78

Bridge 720328

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	263.00
Width (LF)	20.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720328
Removal of Existing Structures area	1,052.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$216.46
Basic Bridge Cost	\$1,104,600.00
Description	NB I-95 OVER US 1. WIDEN FOR ADDITIONAL LANE AND INCREASE IN OUTSIDE SHOULDER WIDTH.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	1,052.00 SF	\$75.45	\$79,373.40
400-2-10	CONC CLASS II, APPROACH SLABS	44.44 CY	\$575.59	\$25,579.22
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00 LB	\$1.08	\$8,399.16
Bridge 720328 Total				\$1,217,951.78

Bridge 720219

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	209.00
Width (LF)	16.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720219
Removal of Existing Structures area	836.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$218.13
Basic Bridge Cost	\$702,240.00
Description	I-95 SB OVER SR 152. WIDEN FOR ADDITIONAL LANE.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	836.00 SF	\$75.45	\$63,076.20
400-2-10	CONC CLASS II, APPROACH SLABS	35.56 CY	\$575.59	\$20,467.98
415-1-9	REINF STEEL- APPROACH SLABS	6,223.00 LB	\$1.08	\$6,720.84
Bridge 720219 Total				\$792,505.02

Bridge 720329

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	209.00
Width (LF)	16.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720329
Removal of Existing Structures area	836.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$218.13
Basic Bridge Cost	\$702,240.00
Description	NB I-95 OVER SR 152. WIDEN FOR ADDITIONAL LANE.

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	836.00 SF	\$75.45	\$63,076.20
400-2-10	CONC CLASS II, APPROACH SLABS	35.56 CY	\$575.59	\$20,467.98
415-1-9	REINF STEEL- APPROACH SLABS	6,223.00 LB	\$1.08	\$6,720.84
Bridge 720329 Total				\$792,505.02

Bridge 720215

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	214.00
Width (LF)	20.00
Type	Overpass Widening
Cost Factor	1.50
Structure No.	720215
Removal of Existing Structures area	856.00
Default Cost per SF	\$140.00
Factored Cost per SF	\$210.00
Final Cost per SF	\$217.94
Basic Bridge Cost	\$898,800.00
Description	SB I-95 OVER RR. WIDEN FOR ADDITIONAL LANE AND INCREASE IN OUTSIDE SHOULDER WIDTH.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	856.00	SF	\$75.45	\$64,585.20
400-2-10	CONC CLASS II, APPROACH SLABS	44.44	CY	\$575.59	\$25,579.22
415-1-9	REINF STEEL- APPROACH SLABS	7,777.00	LB	\$1.08	\$8,399.16
Bridge 720215 Total					\$997,363.58
Bridges Component Total					\$6,015,640.76

Sequence 1 Total	\$40,553,797.17
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Sequence: 2NUR - New Construction, Undivided, Rural**Net Length:** 1.600 MI
8,448 LF**Description:** US 1 interchange, all new ramps. Sequence length is number of lane miles. Using single lane with shoulders as means for estimating. Ponds accounted for in Sequence 1.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	42.75 / 42.75
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.600
Top of Structural Course For Begin Section	108.00
Top of Structural Course For End Section	108.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	16.58	AC	\$30,560.65	\$506,695.58
120-6	EMBANKMENT	103,685.12	CY	\$18.00	\$1,866,332.16

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	13,683.00	SY	\$31.54	\$431,561.82
	Comment: Removal of existing concrete interchange ramps. Measured in cadd by creating shape over aerial image.				

Earthwork Component Total \$2,804,589.56**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	0.00 / 20.00
Structural Spread Rate	0
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	22,528.00	SY	\$5.00	\$112,640.00
285-701	OPTIONAL BASE,BASE GROUP 01	19,083.09	SY	\$18.80	\$358,762.09
350-3-7	PLAIN CEMENT CONC PAVT, 9"	18,773.33	SY	\$93.85	\$1,761,877.02

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	98.00	SY	\$35.00	\$3,430.00
	Comment: WIDENING ON US 1				
327-70-6		18,368.00	SY	\$3.11	\$57,124.48

	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH			
	Comment: US 1 WITHIN LIMITS OF INTERCHANGE			
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	13.50 TN	\$124.09	\$1,675.22
	Comment: WIDENING ON US 1 (ESTIMATED 2.5")			
337-7-83	ASPH CONC FC, TRAFFIC C, FC- 12.5, PG 76-22	1,523.40 TN	\$130.23	\$198,392.38
	Comment: RESURFACING AND WIDENING ON US 1 (1.5")			
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	6,539.00 LF	\$32.47	\$212,321.33
	Comment: outside edge of each ramp.			
520-6	SHOULDER GUTTER- CONCRETE	1,490.00 LF	\$26.40	\$39,336.00
	Comment: Estimated along loop ramps and NB on ramp.			
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	600.00 LF	\$205.00	\$123,000.00
	Comment: 300' assumed between each loop ramp and outer ramp.			
536-8-112	GUARDRA CONN TO RIGID BA, F&I, N APPR 3	3.00 EA	\$2,950.00	\$8,850.00
536-73	GUARDRAIL REMOVAL	2,838.00 LF	\$4.27	\$12,118.26
536-85-20	GUARDRAIL END TREAT- TRAILING ANCHORAGE	2.00 EA	\$999.89	\$1,999.78
711-11-103	THERMOPLASTIC, STD, WHITE, SOLID, 12"	0.14 GM	\$12,392.58	\$1,734.96
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	346.00 LF	\$4.06	\$1,404.76
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	237.00 LF	\$5.40	\$1,279.80
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	0.06 GM	\$2,579.86	\$154.79
711-11-180	THERMOPLASTIC, STD, WHITE, YIELD LINE	15.00 LF	\$8.36	\$125.40
711-14-170	THERMOPLASTIC, PREFORMED, WHITE, ARROW	34.00 EA	\$103.68	\$3,525.12
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	2.50 GM	\$4,903.41	\$12,258.52
711-15-102	THERMOPLASTIC, STD-OP, WHITE, SOLID, 8"	0.22 GM	\$8,435.68	\$1,855.85
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.86 GM	\$1,664.38	\$1,431.37
711-15-201	THERMOPLASTIC, STD- OP, YELLOW, SOLID, 6"	1.79 GM	\$5,006.63	\$8,961.87

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	0

Peripherals Subcomponent

Description	Value
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Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	64.33 TN	\$275.69	\$17,735.14
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,920.00 LF	\$20.62	\$39,590.40
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	1.00 EA	\$2,791.53	\$2,791.53
544-2-1	CRASH CUSHION, TL-2, NARROW	2.00 EA	\$21,418.00	\$42,836.00
Roadway Component Total				\$3,027,212.08

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 4.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 0.08
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips $\frac{1}{2}$ No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	384.85 SY	\$28.35	\$10,910.50
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	8.26 TN	\$123.33	\$1,018.71
570-1-1	PERFORMANCE TURF	1,877.33 SY	\$1.85	\$3,473.06

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	8,344.00 LF	\$47.12	\$393,169.28
Comment: Along ramps				

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	21,964.80 LF	\$2.00	\$43,929.60
104-11	FLOATING TURBIDITY BARRIER	400.00 LF	\$10.13	\$4,052.00
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	400.00 LF	\$4.86	\$1,944.00
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$3,151.91	\$6,303.82
107-1	LITTER REMOVAL	19.39 AC	\$64.29	\$1,246.58

107-2	MOWING	19.39 AC	\$110.69	\$2,146.28
Shoulder Component Total				\$468,193.83

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	27.00 CY	\$1,999.12	\$53,976.24
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	1,600.00 LF	\$100.65	\$161,040.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	256.00 LF	\$165.00	\$42,240.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00 EA	\$2,015.62	\$12,093.72
570-1-1	PERFORMANCE TURF	1,056.00 SY	\$1.85	\$1,953.60

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-701	INLETS, GUTTER, TYPE S, <10'	6.00 EA	\$4,747.66	\$28,485.96
425-1-781	INLETS, MED BARRIER, TYPE 1,<=10'	4.00 EA	\$6,110.00	\$24,440.00

Drainage Component Total				\$324,229.52
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SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00 AS	\$385.00	\$4,620.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-60	SINGLE POST SIGN, REMOVE	8.00 AS	\$18.04	\$144.32

Signing Component Total				\$4,764.32
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SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	New intersection with NB off ramp. Illuminated signs used.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$691.64	\$5,533.12

639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	9.00 AS	\$952.47	\$8,572.23
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00 EA	\$321.17	\$2,569.36
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	4.00 AS	\$682.45	\$2,729.80
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00 EA	\$4,422.74	\$17,690.96

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-21-13	STEEL MAST ARM ASSEMBLY, F&I, 60'- 50'	2.00 EA	\$56,233.56	\$112,467.12
660-2-102	LOOP ASSEMBLY, F&I, TYPE B Comment: 2 sets approaching NB and SB	10.00 AS	\$643.48	\$6,434.80

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	NB on ramp, new intersection. Illuminated signs used.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00 EA	\$691.64	\$2,766.56
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	6.00 AS	\$952.47	\$5,714.82
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	3.00 EA	\$321.17	\$963.51
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	1.00 AS	\$682.45	\$682.45
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	2.00 EA	\$4,422.74	\$8,845.48

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-21-3	STEEL MAST ARM ASSEMBLY, F&I, 40'	2.00 EA	\$33,322.37	\$66,644.74
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	3.00 EA	\$7,362.63	\$22,087.89
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00 AS	\$643.48	\$2,573.92

Comment: 2 sets NB approach**Signalizations Component Total** \$359,059.14**LIGHTING COMPONENT****High Mast Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				2	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	\$7.99	\$7,990.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	\$691.64	\$2,766.56
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	1,000.00	LF	\$1.34	\$1,340.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	\$1.92	\$5,760.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$16,013.73	\$16,013.73
715-19-13	HIGH MAST LIGHT POLE, F&I, 120'	2.00	EA	\$65,001.22	\$130,002.44
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	2.00	EA	\$381.25	\$762.50
Subcomponent Total					\$164,635.23
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-19-60	HIGH MAST LIGHT POLE, REM POLE & FOUND	2.00	EA	\$9,875.37	\$19,750.74
Lighting Component Total					\$184,385.97

Sequence 2 Total \$7,172,434.42

Sequence: 3 WDU - Widen/Resurface, Divided, Urban**Net Length:** 1.035 MI
5,465 LF**Description:** DDI Interchange SR 152 and Baymeadows Road modifications Baymeadows Way to Old Baymeadows Way). Concrete ramp widening included. Asphalt reconstruction through slip ramps at termini.**Special Conditions:** Cadd used primarily for quantities.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	25.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.035
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	6.27	AC	\$30,560.65	\$191,615.28
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	20,507.17	CY	\$20.00	\$410,143.40

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	16,091.00	SY	\$31.54	\$507,510.14
	Comment: REMOVAL OF EXISTING MEDIAN CURB, OUTSIDE CURB, TRAFFIC SEPARATORS, CONCRETE DRIVEWAYS, SIDEWALK AND CONCRETE RAMPS				

Earthwork Component Total

\$1,109,268.82

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	44.80 / 44.80
Structural Spread Rate	165
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	17.03 / 17.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	23,796.17 SY	\$5.00	\$118,980.85
285-709	OPTIONAL BASE,BASE GROUP 09	21,063.77 SY	\$35.00	\$737,231.95
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	54,405.12 SY	\$2.97	\$161,583.21
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	3,409.40 TN	\$124.09	\$423,072.45
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	4,488.42 TN	\$124.09	\$556,968.04
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	4,488.42 TN	\$130.23	\$584,526.94
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,704.70 TN	\$130.23	\$222,003.08

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01 Comment: base for concrete widening	6,775.00 SY	\$18.80	\$127,370.00
350-3-7	PLAIN CEMENT CONC PAVT, 9" Comment: ramp concrete widening	6,775.00 SY	\$93.85	\$635,833.75
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: for concrete ramp widening	3,410.00 LF	\$32.47	\$110,722.70
711-11-103	THERMOPLASTIC, STD, WHITE, SOLID, 12" Comment: measured in cadd	0.33 GM	\$12,392.58	\$4,089.55
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12" Comment: Measured in cadd	4,179.00 LF	\$3.26	\$13,623.54
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18" Comment: measured in cadd	496.00 LF	\$4.06	\$2,013.76
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24" Comment: Measured in cadd	1,239.00 LF	\$5.40	\$6,690.60
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6" Comment: Measured in cadd	0.53 GM	\$2,579.86	\$1,367.33
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE Comment: Measured in cadd	37.00 EA	\$115.44	\$4,271.28
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW Comment: Measured in cadd	154.00 EA	\$80.84	\$12,449.36
711-11-180	THERMOPLASTIC, STD, WHITE, YIELD LINE	24.00 LF	\$8.36	\$200.64
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18" Comment: measured in cadd	380.00 LF	\$4.11	\$1,561.80
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.16 GM	\$2,533.91	\$405.43

	Comment: Measured in cadd			
711-14-660	THERMOPLASTIC, PREFORMED, MULTI, ROUTE S	5.00 EA	\$2,362.81	\$11,814.05
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	5.45 GM	\$4,616.21	\$25,158.34
	Comment: Measured in cadd			
711-16-102	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 8"	0.55 GM	\$9,364.66	\$5,150.56
	Comment: Measured in cadd			
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	3.33 GM	\$1,405.86	\$4,681.51
	Comment: Measured in cadd			
711-16-133	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 12"	0.05 GM	\$3,940.66	\$197.03
	Comment: Measured in cadd			
711-16-201	THERMOPLASTIC, STD-OTH, YELLOW, SOLID, 6"	2.86 GM	\$4,928.94	\$14,096.77
	Comment: Measured in cadd			
711-16-202	THERMOPLASTIC, STD-OT, YELLOW, SOLID, 8"	0.20 GM	\$7,247.59	\$1,449.52
	Comment: measured in cadd			
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.09 GM	\$1,367.28	\$123.06
	Comment: Measured in cadd			

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	699.00 EA	\$5.87	\$4,103.13

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total \$3,791,740.23

SHOULDER COMPONENT

User Input Data

Description	Value
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Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	7.25 / 7.22
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 4.97
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	6,053.78 SY	\$5.40	\$32,690.41

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06 Comment: asphalt shoulders adjacent to concrete ramp widening	4,756.50 SY	\$28.35	\$134,846.78
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B Comment: asphalt shoulders adjacent to concrete ramp widening (2")	523.20 TN	\$123.33	\$64,526.26
520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: Cadd quantity.	7,949.00 LF	\$47.12	\$374,556.88
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT Comment: wall in front of retaining wall, EB Baymeadows to NB 95 ramp.	245.00 LF	\$295.56	\$72,412.20
521-72-44	SHLDR CONC BARRIER, 44" PIER PROTECTION Comment: median and outside each direction under I-95 overpass, 200 lf each run x 4	800.00 LF	\$266.07	\$212,856.00
521-72-56	SHLDR CONC BARRIER,56" PIER PROT Comment: 5 runs of 245 feet	1,225.00 LF	\$499.00	\$611,275.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" Comment: Cadd quantity	3,445.00 SY	\$62.11	\$213,968.95

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,929.60 LF	\$2.00	\$21,859.20
104-11	FLOATING TURBIDITY BARRIER	103.50 LF	\$10.13	\$1,048.46
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	103.50 LF	\$4.86	\$503.01
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$3,151.91	\$6,303.82
104-18	INLET PROTECTION SYSTEM	48.00 EA	\$91.28	\$4,381.44
107-1	LITTER REMOVAL	9.03 AC	\$64.29	\$580.54
107-2	MOWING	9.03 AC	\$110.69	\$999.53
Shoulder Component Total				\$1,752,808.48

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	36.00
Performance Turf Width	0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-41	TRAF SEP CONC-TYPE IV, 4' WIDE Comment: cadd quantity	253.00 LF	\$55.98	\$14,162.94
570-1-2	PERFORMANCE TURF, SOD Comment: cadd quantity	2,890.20 SY	\$5.40	\$15,607.08

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CURB AND GUTTER, TYPE E Comment: cadd quantity	9,562.00 LF	\$37.62	\$359,722.44
520-70	TRAFFIC SEPARATOR, VARIABLE WIDTH Comment: Cadd quantity	566.00 SY	\$82.97	\$46,961.02

Median Component Total				\$436,453.48
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DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	912.00 LF	\$118.34	\$107,926.08

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-311	INLETS, CURB, TYPE P-1, <10' Comment: connect to existing inlets, converted to MH to use existing trunk	27.00 EA	\$5,949.20	\$160,628.40
425-2-43	MANHOLES, P-7, PARTIAL Comment: Convert existing inlets to MH	19.00 EA	\$3,194.69	\$60,699.11

Box Culvert 1

Description	Value
Size	10 x 5
Length	175.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	198.55 CY	\$1,250.00	\$248,187.50
415-1-1	REINF STEEL- ROADWAY	23,957.50 LB	\$1.06	\$25,394.95
Drainage Component Total				\$602,836.04

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	53.00 AS	\$385.00	\$20,405.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00 AS	\$1,326.57	\$7,959.42
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	\$205.80	\$205.80
700-1-60	SINGLE POST SIGN, REMOVE	48.00 AS	\$18.04	\$865.92
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	5.00 AS	\$5,541.28	\$27,706.40
700-2-50	MULTI- POST SIGN, RELOCATE	8.00 AS	\$5,606.98	\$44,855.84
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	\$690.30	\$1,380.60

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-206	SIGN PANEL, F&I OM, 101-200 SF	2.00 EA	\$4,719.78	\$9,439.56
700-3-207	SIGN PANEL, F&I OM, 201-300 SF	4.00 EA	\$7,489.75	\$29,959.00
700-3-209	SIGN PANEL, F&I OM, 401-500 SF	1.00 EA	\$13,918.94	\$13,918.94
700-3-210	SIGN PANEL, F&I OM, 501-600 SF	1.00 EA	\$20,683.84	\$20,683.84
700-3-211	SIGN PANEL, F&I OM, 601 SF AND GREATER	2.00 EA	\$16,141.90	\$32,283.80
700-4-114	OH STATIC SIGN STR, F&I, C 41-50 FT Comment: within DDI for entrance lanes to go onto ramps	2.00 EA	\$82,000.00	\$164,000.00
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT Comment: off ramps	2.00 EA	\$134,344.52	\$268,689.04
700-4-127	OH STATIC SIGN STR, F&I, S 151-200 FT Comment: on SR 152	2.00 EA	\$239,763.31	\$479,526.62
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN Comment: 2 on SR 152, 1 on SB off ramp	3.00 EA	\$9,168.09	\$27,504.27
Signing Component Total				\$1,149,384.05

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at Prominence Parkway. Modifying signals. Illuminated signs.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00 EA	\$691.64	\$6,916.40

639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00 LF	\$4.72	\$566.40
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	\$1,174.36	\$1,174.36
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00 EA	\$1,333.69	\$8,002.14
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	16.00 AS	\$952.47	\$15,239.52
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00 AS	\$594.45	\$1,188.90
653-1-12	PEDESTRIAN SIGNAL, F&I LED COUNT, 2 WAYS	4.00 AS	\$1,201.63	\$4,806.52
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	11.00 EA	\$321.17	\$3,532.87
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	7.00 AS	\$682.45	\$4,777.15
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	\$235.37	\$1,882.96
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00 EA	\$4,026.36	\$16,105.44

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-21-15	STEEL MAST ARM ASSEMBLY, F&I, 70'	1.00 EA	\$46,105.22	\$46,105.22
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	3.00 EA	\$52,223.60	\$156,670.80
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	2.00 EA	\$7,362.63	\$14,725.26
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	16.00 AS	\$643.48	\$10,295.68

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at I-95 SB ramp (west side of DDI). New signals, illuminated signs.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$691.64	\$5,533.12
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	\$1,174.36	\$1,174.36
646-1-11		4.00 EA	\$1,333.69	\$5,334.76

	ALUMINUM SIGNALS POLE, PEDESTAL			
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	13.00 AS	\$952.47	\$12,382.11
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00 AS	\$594.45	\$2,377.80
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	7.00 EA	\$321.17	\$2,248.19
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	5.00 AS	\$682.45	\$3,412.25
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00 EA	\$235.37	\$941.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	2.00 EA	\$4,422.74	\$8,845.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00 EA	\$4,026.36	\$8,052.72

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-21-3	STEEL MAST ARM ASSEMBLY, F&I, 40'	1.00 EA	\$33,322.37	\$33,322.37
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	3.00 EA	\$52,223.60	\$156,670.80
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	2.00 EA	\$7,362.63	\$14,725.26
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	16.00 AS	\$643.48	\$10,295.68

Signalization 3

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at I-95 NB ramps (east side of DDI). Neww signals, illuminated signs.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$691.64	\$5,533.12
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	\$1,174.36	\$1,174.36
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00 EA	\$1,333.69	\$8,002.14
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	11.00 AS	\$952.47	\$10,477.17
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00 AS	\$594.45	\$3,566.70

660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	5.00 EA	\$321.17	\$1,605.85
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	1.00 AS	\$682.45	\$682.45
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00 EA	\$235.37	\$941.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	2.00 EA	\$4,422.74	\$8,845.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00 EA	\$4,026.36	\$8,052.72

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-21-3	STEEL MAST ARM ASSEMBLY, F&I, 40'	1.00 EA	\$33,322.37	\$33,322.37
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	2.00 EA	\$52,223.60	\$104,447.20
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	2.00 EA	\$7,362.63	\$14,725.26
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	16.00 AS	\$643.48	\$10,295.68

Signalization 4

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at Western Way. Intersection modification. New mast arms NW, NE, SE. New Signal Cabinet. Illuminated signs.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$691.64	\$5,533.12
639-1-112	ELECTRICAL POWER SRV, F&I, OH, M, PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00 EA	\$1,333.69	\$5,334.76
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	11.00 AS	\$952.47	\$10,477.17
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00 AS	\$594.45	\$3,566.70
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	5.00 EA	\$321.17	\$1,605.85
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	1.00 AS	\$682.45	\$682.45
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00 EA	\$235.37	\$941.48
670-5-111		1.00 AS	\$27,408.58	\$27,408.58

	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT			
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	3.00 EA	\$4,026.36	\$12,079.08

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	2.00 EA	\$245.30	\$490.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	1.00 EA	\$41,718.61	\$41,718.61
649-21-25	STEEL MAST ARM ASSEMBLY, F&I, 78'-60'	1.00 EA	\$56,692.35	\$56,692.35
653-1-60	PEDESTRIAN SIGNAL, REMOVE	2.00 AS	\$64.73	\$129.46
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	16.00 AS	\$643.48	\$10,295.68

Signalization 5

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at Baymeadows Circle West. New intersection. Illuminated signs.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00 LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00 LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00 EA	\$691.64	\$4,149.84
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	\$1,174.36	\$1,174.36
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	5.00 EA	\$1,333.69	\$6,668.45
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	10.00 AS	\$952.47	\$9,524.70
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00 AS	\$594.45	\$2,377.80
653-1-12	PEDESTRIAN SIGNAL, F&I LED COUNT, 2 WAYS	1.00 AS	\$1,201.63	\$1,201.63
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	5.00 EA	\$321.17	\$1,605.85
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	1.00 AS	\$682.45	\$682.45
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	5.00 EA	\$235.37	\$1,176.85
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	3.00 EA	\$4,026.36	\$12,079.08

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
649-21-3	STEEL MAST ARM ASSEMBLY, F&I, 40'	1.00	EA	\$33,322.37	\$33,322.37
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	2.00	EA	\$41,718.61	\$83,437.22
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	14.00	AS	\$643.48	\$9,008.72

Signalization 6

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	SR 152 at Princeton Square Blvd. Signal modifications. New mast arm SE, NW quadrant. Replace pedestrian signals with countdown.

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	\$691.64	\$4,149.84
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$1,333.69	\$5,334.76
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	7.00	AS	\$952.47	\$6,667.29
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	\$594.45	\$1,188.90
653-1-12	PEDESTRIAN SIGNAL, F&I LED COUNT, 2 WAYS	2.00	AS	\$1,201.63	\$2,403.26
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	6.00	EA	\$321.17	\$1,927.02
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	2.00	AS	\$682.45	\$1,364.90
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	6.00	EA	\$235.37	\$1,412.22
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$27,408.58	\$27,408.58
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	2.00	EA	\$183.81	\$367.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	2.00	EA	\$41,718.61	\$83,437.22
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	2.00	EA	\$7,362.63	\$14,725.26
653-1-60	PEDESTRIAN SIGNAL, REMOVE	6.00	AS	\$64.73	\$388.38
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	10.00	AS	\$643.48	\$6,434.80

Signalization 7

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	Baymeadows Way Signal modification.

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	\$7.99	\$5,992.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	\$21.41	\$5,352.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	\$691.64	\$5,533.12
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$4.72	\$283.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00 EA	\$1,174.36	\$1,174.36
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	7.00 EA	\$1,333.69	\$9,335.83
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	1.00 EA	\$41,718.61	\$41,718.61
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	2.00 AS	\$952.47	\$1,904.94
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	\$594.45	\$4,755.60
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	9.00 EA	\$321.17	\$2,890.53
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	7.00 AS	\$682.45	\$4,777.15
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	7.00 EA	\$235.37	\$1,647.59
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	1.00 EA	\$1,778.86	\$1,778.86
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	1.00 EA	\$183.81	\$183.81

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	1.00 EA	\$7,362.63	\$7,362.63
650-1-60	VEH TRAF SIGNAL, REMOVE- POLES TO REMAIN	2.00 AS	\$112.46	\$224.92
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	8.00 AS	\$643.48	\$5,147.84

Signalizations Component Total \$1,625,480.71

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value		
Spacing	MIN		
Pay Items			
Pay item	Description	Quantity Unit	Extended Amount

			Unit Price	
630-2-11	CONDUIT, F& I, OPEN TRENCH	5,464.80 LF	\$7.99	\$43,663.75
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,084.68 LF	\$21.41	\$23,223.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	37.00 EA	\$691.64	\$25,590.68
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	19,958.94 LF	\$1.92	\$38,321.16
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	37.00 EA	\$5,665.93	\$209,639.41
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	37.00 EA	\$622.00	\$23,014.00
	Subcomponent Total			\$363,452.01

High Mast Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	500.00	LF	\$7.99	\$3,995.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	\$691.64	\$1,383.28
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	500.00	LF	\$1.34	\$670.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,500.00	LF	\$1.92	\$2,880.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$16,013.73	\$16,013.73
715-19-13	HIGH MAST LIGHT POLE, F&I, 120'	1.00	EA	\$65,001.22	\$65,001.22
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	1.00	EA	\$381.25	\$381.25
	Subcomponent Total				\$90,324.48

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-19-60	HIGH MAST LIGHT POLE, REM POLE & FOUND	1.00	EA	\$9,875.37	\$9,875.37
	Lighting Component Total				\$463,651.85

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	245.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12		2,450.00	SF	\$61.76	\$151,312.00

RET WALL SYSTEM, PERM, EX
BARRIER

Retaining Walls Component Total

\$151,312.00

Sequence 3 Total

\$11,082,935.66

Sequence: 4 WDU - Widen/Resurface, Divided, Urban**Net Length:** 0.706 MI
3,727 LF**Description:** SR 115 Southside improvements (new ramp connection from I-95, Turn lane for Western Lake Drive, Belle Rive Blvd intersection)**Special** cadd quantities assisted**Conditions:****EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	15.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.706
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.57	AC	\$30,560.65	\$78,540.87
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	12,127.39	CY	\$20.00	\$242,547.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	678.00	SY	\$31.54	\$21,384.12
	Comment: Curb and sidewalk, misc. locations				

Earthwork Component Total \$342,472.79**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	45.00 / 45.00
Structural Spread Rate	0
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	4.02 / 3.12
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,093.77	SY	\$5.00	\$25,468.85

285-709	OPTIONAL BASE,BASE GROUP 09	3,230.20 SY	\$35.00	\$113,057.00
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	37,271.52 SY	\$3.11	\$115,914.43
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	406.57 TN	\$124.09	\$50,451.27
337-7-83	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	3,074.90 TN	\$130.23	\$400,444.23
337-7-83	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	243.94 TN	\$130.23	\$31,768.31

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12" Comment: Measured in cadd	501.00 LF	\$3.26	\$1,633.26
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18" Comment: Measured in cadd	712.00 LF	\$4.06	\$2,890.72
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24" Comment: Measured in cadd	368.00 LF	\$5.40	\$1,987.20
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6" Comment: Measured in cadd	0.08 GM	\$2,579.86	\$206.39
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE Comment: Measured in cadd	7.00 EA	\$115.44	\$808.08
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW Comment: Measured in cadd	41.00 EA	\$80.84	\$3,314.44
711-11-180	THERMOPLASTIC, STD, WHITE, YIELD LINE Comment: Measured in cadd	54.00 LF	\$8.36	\$451.44
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18" Comment: Measured in cadd	93.00 LF	\$4.11	\$382.23
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24" Comment: Measured in cadd	870.00 LF	\$17.36	\$15,103.20
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" Comment: Measured in cadd	2.69 GM	\$4,616.21	\$12,417.60
711-16-102	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 8" Comment: Measured in cadd	0.40 GM	\$9,364.66	\$3,745.86
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6" Comment: Measured in cadd	1.83 GM	\$1,405.86	\$2,572.72
711-16-201	THERMOPLASTIC, STD- OTH,YELLOW, SOLID, 6" Comment: Measured in cadd	1.82 GM	\$4,928.94	\$8,970.67
711-16-202	THERMOPLASTIC, STD-OT, YELLOW, SOLID, 8" Comment: measured in cadd	0.02 GM	\$7,247.59	\$144.95

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	476.00	EA	\$5.87	\$2,794.12

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	3,110.00
Noise Barrier Wall Begin Height	22.00
Noise Barrier Wall End Height	22.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	95.00	LF	\$295.56	\$28,078.20
534-72-101	SOUND/NOISE BARRIER-INC FOUNDATION, PERM	68,420.00	SF	\$30.20	\$2,066,284.00
544-2-1	CRASH CUSHION, TL-2, NARROW	1.00	EA	\$21,418.00	\$21,418.00
Roadway Component Total					\$2,910,307.17

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	7.25 / 7.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,141.28	SY	\$5.40	\$22,362.91

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	4,347.00	LF	\$45.05	\$195,832.35
520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: Measured in cadd.	719.00	LF	\$47.12	\$33,879.28
	Comment: Measured in cadd.				

522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	767.00 SY	\$75.73	\$58,084.91
	Comment: Measured in cadd			
570-1-2	PERFORMANCE TURF, SOD	9,051.00 SY	\$5.40	\$48,875.40
	Comment: Additional sod impacted.			

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,454.30 LF	\$2.00	\$14,908.60
104-11	FLOATING TURBIDITY BARRIER	70.59 LF	\$10.13	\$715.08
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	70.59 LF	\$4.86	\$343.07
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,151.91	\$3,151.91
104-18	INLET PROTECTION SYSTEM	33.00 EA	\$91.28	\$3,012.24
107-1	LITTER REMOVAL	6.16 AC	\$64.29	\$396.03
107-2	MOWING	6.16 AC	\$110.69	\$681.85
Shoulder Component Total				\$382,243.63

DRAINAGE COMPONENT**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-321	INLETS, CURB, TYPE P-2, <10'	2.00 EA	\$6,997.90	\$13,995.80
	Comment: East side of Belle Rive, one on Belle Rive, one on new slip ramp			
425-2-43	MANHOLES, P-7, PARTIAL	1.00 EA	\$3,194.69	\$3,194.69
	Comment: East side of Belle Rive, convert inlet to MH			
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	64.00 LF	\$127.41	\$8,154.24
	Comment: East side of Belle Rive, connect new inlets to MH (old inlet)			
Drainage Component Total				\$25,344.73

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	16.00 AS	\$385.00	\$6,160.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	\$1,326.57	\$2,653.14
700-1-50	SINGLE POST SIGN, RELOCATE	2.00 AS	\$205.80	\$411.60
700-1-60	SINGLE POST SIGN, REMOVE	16.00 AS	\$18.04	\$288.64
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$5,541.28	\$11,082.56
700-2-60	MULTI- POST SIGN, REMOVE	2.00 AS	\$690.30	\$1,380.60
Signing Component Total				\$21,976.54

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	Existing Signal at Paradise Island, add mast arm for new ramp connection. Assume existing mast arms remain (single and double), new controller.

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$7.99	\$6,392.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$21.41	\$4,282.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	1.00	EA	\$691.64	\$691.64
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$4.72	\$283.20
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	4.00	AS	\$952.47	\$3,809.88
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	5.00	EA	\$321.17	\$1,605.85
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	3.00	AS	\$682.45	\$2,047.35
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$27,408.58	\$27,408.58
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	2.00	EA	\$183.81	\$367.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
649-21-8	STEEL MAST ARM ASSEMBLY, F&I, 50'- 40' Comment: NE REPLACEMENT	1.00	EA	\$57,954.50	\$57,954.50
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE Comment: NE REMOVAL	1.00	EA	\$7,362.63	\$7,362.63
660-2-102	LOOP ASSEMBLY, F&I, TYPE B Comment: SB SR 115	4.00	AS	\$643.48	\$2,573.92

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	New signal to serve NB SR 115 to ramp to SB I-95 and Western Lake Drive, NB thru has signal heads (green arrows continuous green) with no loops, only NB left and SB stop. Quantities for two signals

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00 LF	\$7.99	\$12,784.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	400.00 LF	\$21.41	\$8,564.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00 PI	\$5,491.32	\$10,982.64
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00 EA	\$691.64	\$2,766.56
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00 AS	\$2,534.09	\$5,068.18
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00 LF	\$4.72	\$566.40
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	14.00 AS	\$952.47	\$13,334.58
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	11.00 EA	\$321.17	\$3,532.87
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	3.00 AS	\$682.45	\$2,047.35
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00 AS	\$27,408.58	\$54,817.16
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	\$183.81	\$735.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
649-21-15	STEEL MAST ARM ASSEMBLY, F&I, 70'	4.00	EA	\$46,105.22	\$184,420.88
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	20.00	AS	\$643.48	\$12,869.60

Signalization 3

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	Belle Rive Blvd, new configuration

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	\$7.99	\$5,593.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	\$21.41	\$6,423.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$5,491.32	\$5,491.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	\$691.64	\$15,216.08
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$2,534.09	\$2,534.09
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$4.72	\$283.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	\$1,174.36	\$1,174.36
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	5.00	EA	\$1,333.69	\$6,668.45
649-21-15	STEEL MAST ARM ASSEMBLY, F&I, 70'	1.00	EA	\$46,105.22	\$46,105.22
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	11.00	AS	\$952.47	\$10,477.17
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	AS	\$594.45	\$2,377.80
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	\$321.17	\$2,569.36
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	4.00	AS	\$682.45	\$2,729.80

665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	6.00 EA	\$235.37	\$1,412.22
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$27,408.58	\$27,408.58
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	3.00 EA	\$183.81	\$551.43

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
649-21-20	STEEL MAST ARM ASSEMBLY, F&I, 70-70	1.00	EA	\$74,824.18	\$74,824.18
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	6.00	EA	\$7,362.63	\$44,175.78
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	12.00	AS	\$643.48	\$7,721.76

Signalizations Component Total \$699,030.84

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description	Value				
Spacing	MIN				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,727.15	LF	\$7.99	\$29,779.93
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	739.78	LF	\$21.41	\$15,838.69
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00	EA	\$691.64	\$7,608.04
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	13,612.58	LF	\$1.92	\$26,136.15
715-4-13	LIGHT POLE COMPLETE, F&I- STD, 40'	11.00	EA	\$5,665.93	\$62,325.23
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00	EA	\$622.00	\$6,842.00
Subcomponent Total					\$148,530.04

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND	5.00	EA	\$405.84	\$2,029.20

Lighting Component Total \$150,559.24

Sequence 4 Total \$4,531,934.94

Sequence: 5 MIS - Miscellaneous Construction**Net Length:** 3.807 MI
20,100 LF**Description:** Concrete rehabilitation of existing pavement**Special** Estimated at 15%**Conditions:**

ROADWAY COMPONENT**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
350-3-7	PLAIN CEMENT CONC PAVT, 9" Comment: Beginning of project existing 8 lanes, end is 6 lanes. For estimating, used 7 lanes average over length (20100*84/9 *.15 = 28140)	28,140.00 SY	\$93.85	\$2,640,939.00
352-70	GRINDING CONCRETE PAVT Comment: Beginning of project existing 8 lanes, end is 6 lanes. For estimating, used 7 lanes average over length (20100*84/9 *.15 = 28140). Grind new slabs only, existing pavement too thin to grind all.	28,140.00 SY	\$6.14	\$172,779.60
Roadway Component Total				\$2,813,718.60
Sequence 5 Total				\$2,813,718.60

Date: 8/3/2021 2:26:57 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 435577-2-52-01**Letting Date:** 05/2025**Description:** I-95 Widening from N. of I-295 to N of SR 152. Includes US 1 interchange, 152 interchange, and SR 152 modifications Baymeadows Way to Old Baymeadows Road. (KMP, HDR 5-22-20)**District:** 02 **County:** 72 DUVAL**Market Area:** 05 **Units:** English**Contract Class:** 9 **Lump Sum Project:** N**Design/Build:** N **Project Length:** 3.806 MI**Project Manager:** Darrell Locklear**Version 4-P Project Grand Total****\$100,573,017.96****Description:** 6-24-21 updated ponds (removed Pond E, modified Pond D to larger pond D-E2, removed fencing around ponds). 6-15-2021. HDR KPrice update per Concept changes: 2 lane exit SB at US 1, curb and gutter on ramps, Baymeadows Road intersection changes and DDI refinement with new retaining wall at bridge abutment.

Project Sequences Subtotal **\$66,154,820.79**

102-1	Maintenance of Traffic	15.00 %	\$9,923,223.12
101-1	Mobilization	10.00 %	\$7,607,804.39

Project Sequences Total **\$83,685,848.30**

Project Unknowns	20.00 %	\$16,737,169.66
Design/Build	0.00 %	\$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

Project Non-Bid Subtotal **\$150,000.00****Version 4-P Project Grand Total** **\$100,573,017.96**

SR 152 TO SR 202

Date: 8/3/2021 12:04:12 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 446153-1-52-01

Letting Date: 12/2022

Description: I-95 Widening from Baymeadows Road to south of SR 202.

District: 02 County: 72 DUVAL

Market Area: 05 Units: English

Contract Class: 9 Lump Sum Project: N

Design/Build: Y Project Length: 1.500 MI

Project Manager: Will Lyons

Version 2-P Project Grand Total**\$32,661,515.46**

Description: vc07/20/21 2/12/21 6/24/21 HDR Update at beginning of Design 1-20-2021 K. Price, HDR Engineering. Adjusted sequence lengths, increased earthwork and guardrail, decreased pond size, reduced concrete thickness to match existing 9", added traffic monitoring site, added sequence for concrete rehab estimated about 10% of existing pavement to remain.

Sequence: 1 WDR - Widen/Resurface, Divided, Rural**Net Length:** 1.023 MI
5,400 LF**Description:** I-95 widening existing 40' median. Widen one lane to median, 2 outside, 3 lanes total. Median barrier wall. Approximate Sta.690+60 to 734+60, 769+00 to 779+00.**Special Conditions:** Concrete pavement with asphalt shoulders.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	114.00 / 114.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.020
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	28.27 AC	\$38,444.73	\$1,086,832.52
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	51,853.35 CY	\$18.00	\$933,360.30

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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110-4-10	REMOVAL OF EXIST CONC Comment: Removal of concrete shoulders (3x10'each). One inside shoulder to remain and be widened.	18,000.00 SY	\$34.43	\$619,740.00
120-1	REGULAR EXCAVATION Comment: Partial removal of existing ditch berm (for relocated ditch), assume 33 sf cross sectional area per side for length of sequence.	13,200.00 CY	\$15.00	\$198,000.00
120-6	EMBANKMENT Comment: Ditch berm, outside, assume 38 sf cross sectional area per side for length of sequence.	15,200.00 CY	\$18.00	\$273,600.00
Earthwork Component Total				\$3,111,532.82

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	25.00 / 13.00
Widened Inside Pavement Width L/R	0.00 / 12.00
Widened Structural Spread Rate	0
Widened Friction Course Spread Rate	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	52,800.00 SY	\$6.00	\$316,800.00
285-701	OPTIONAL BASE,BASE GROUP 01	26,922.72 SY	\$18.80	\$506,147.14
350-3-7	PLAIN CEMENT CONC PAVT, 9"	26,400.00 SY	\$85.22	\$2,249,808.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: For outside widening	10,800.00 LF	\$24.00	\$259,200.00
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	1,227.00 LF	\$35.28	\$43,288.56
536-73	GUARDRAIL REMOVAL	8,433.00 LF	\$4.27	\$36,008.91
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	2.00 EA	\$1,233.68	\$2,467.36
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6" Comment: Additional skip lines required for 10-lane section not accounted for in default (only goes up to 6 lane section)	4.09 GM	\$2,298.32	\$9,400.13

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
399-1	MISCELLANEOUS ASPHALT PAVEMENT Comment: For double sided guardrail not being automatically calculated under peripherals.	40.97 TN	\$333.74	\$13,673.33

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	690.00 EA	\$8.87	\$6,120.30
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.05 GM	\$4,818.95	\$9,878.85
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	4.09 GM	\$2,298.32	\$9,400.13
711-16-201	THERMOPLASTIC, STD- OTH, YELLOW, SOLID, 6"	2.05 GM	\$4,727.86	\$9,692.11

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	135.53 TN	\$333.74	\$45,231.78
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	4,046.00 LF	\$21.06	\$85,208.76
536-8-13	APPROACH TRANS CONN TO RIGID BA, F&I, 3	4.00 EA	\$2,740.95	\$10,963.80
536-85-24	GUARDRAIL END TREATMENT- PARA APP TERM	2.00 EA	\$2,791.53	\$5,583.06

Roadway Component Total

\$3,618,872.22

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	9.00 / 9.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	11,195.70 SY	\$28.35	\$317,398.09
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,187.97 TN	\$150.26	\$178,504.37
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.05 GM	\$4,542.75	\$9,312.64
570-1-1	PERFORMANCE TURF	3,599.90 SY	\$1.85	\$6,659.82

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	12,419.67 LF	\$2.15	\$26,702.29
104-11	FLOATING TURBIDITY BARRIER	102.27 LF	\$9.61	\$982.81
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	102.27 LF	\$4.60	\$470.44
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$3,077.22	\$6,154.44
107-1	LITTER REMOVAL	7.44 AC	\$55.08	\$409.80
107-2	MOWING	7.44 AC	\$89.05	\$662.53
Shoulder Component Total				\$547,257.24

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	40.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 14.00
New Paved Median Shoulder Width L/R	12.00 / 14.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips \bar{y}_i 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	15,995.57 SY	\$28.35	\$453,474.41
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,715.95 TN	\$150.26	\$257,838.65
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	5,007.00 LF	\$180.14	\$901,960.98
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.00 GM	\$4,542.75	\$9,085.50
Median Component Total				\$1,622,359.54

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	3,568.00 LF	\$143.49	\$511,972.32

430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	1,192.00 LF	\$159.68	\$190,338.56
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X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-521	INLETS, DT BOT, TYPE C, <10'	2.00 EA	\$5,900.00	\$11,800.00
425-1-791	INLETS, MED BARRIER, TYPE 2, J BOT, <=10'	20.00 EA	\$5,713.57	\$114,271.40
	Comment: assume 250 foot spacing			
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	32.00 LF	\$127.13	\$4,068.16
	Comment: pipe extension, one end			
430-175-224	PIPE CULV, OPT MATL, OTHER, 24"S/CD	56.00 LF	\$154.97	\$8,678.32
	Comment: cross drain extension, 2 ends			
430-982-125	MITERED END SECT, OPTIONAL RD, 18" CD	1.00 EA	\$1,969.80	\$1,969.80
430-982-129	MITERED END SECT, OPTIONAL RD, 24" CD	2.00 EA	\$1,872.09	\$3,744.18

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	1
Depth	6.00
Description	Pond F-G (5 ac at 6 foot average dept)

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$38,444.73	\$192,223.65
120-1	REGULAR EXCAVATION	48,400.00 CY	\$15.00	\$726,000.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$6,500.00	\$6,500.00
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,681.56	\$13,363.12
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$325.00	\$18,200.00
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$275.00	\$110,000.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$24.26	\$45,123.60
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	2.00 EA	\$2,473.66	\$4,947.32
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$1.85	\$44,770.00
Drainage Component Total				\$2,007,970.43

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	\$380.99	\$1,142.97
700-1-60	SINGLE POST SIGN, REMOVE	3.00 AS	\$21.83	\$65.49
700-2-50	MULTI- POST SIGN, RELOCATE	2.00 AS	\$5,606.98	\$11,213.96

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-3-203	SIGN PANEL, F&I OM, 21-30 SF Comment: Exit number panels on OH signs (3 SB, 1 NB)	4.00	EA	\$1,303.91	\$5,215.64
700-3-207	SIGN PANEL, F&I OM, 201-300 SF Comment: Sign panel on new OH Cantilever sign (1 SB, 1NB)	2.00	EA	\$7,736.21	\$15,472.42
700-3-211	SIGN PANEL, F&I OM, 601 SF AND GREATER Comment: Sign Panel on new trusses (SB direction)	2.00	EA	\$17,207.28	\$34,414.56
700-4-113	OH STATIC SIGN STR, F&I, C 31-40 FT Comment: 1 NB, 1 SB	2.00	EA	\$65,000.00	\$130,000.00
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT Comment: 2 SB	2.00	EA	\$144,563.61	\$289,127.22
700-4-610	OH STATIC SIGN STR, REMOVE, CANT Comment: 1 NB, 1 SB	2.00	EA	\$4,070.58	\$8,141.16
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN Comment: SB	2.00	EA	\$9,168.09	\$18,336.18
Signing Component Total					\$513,129.60

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	44				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	8,800.00	LF	\$8.93	\$78,584.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	\$761.02	\$33,484.88
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	26,400.00	LF	\$2.00	\$52,800.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	44.00	EA	\$6,167.76	\$271,381.44
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	44.00	EA	\$622.00	\$27,368.00
Subcomponent Total					\$463,618.32
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND Comment: Remove existing lights and foundations.	44.00	EA	\$405.84	\$17,856.96
Lighting Component Total					\$481,475.28

Sequence 1 Total \$11,902,597.13

Sequence: 2 WDR - Widen/Resurface, Divided, Rural**Net Length:** 0.652 MI
3,440 LF**Description:** I-95 widening existing median wider than 40'. Widen one lane to median each direction, one lane to outside each direction. Approximate Sta. 734+60 to 769+00**Special Conditions:** Concrete pavement with asphalt shoulders.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	129.00 / 129.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.650
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.39	AC	\$38,444.73	\$783,888.04
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	51,312.21	CY	\$18.00	\$923,619.78

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC Comment: Removal of concrete shoulders (4x10'each).	15,289.00	SY	\$34.43	\$526,400.27
120-1	REGULAR EXCAVATION Comment: Partial removal of existing ditch berm (for relocated ditch), assume 33 sf cross sectional area per side for length of sequence.	8,409.00	CY	\$15.00	\$126,135.00
120-6	EMBANKMENT Comment: Ditch berm, outside, assume 38 sf cross sectional area per side for length of sequence.	9,683.00	CY	\$18.00	\$174,294.00

Earthwork Component Total \$2,534,337.09**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	220

Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	13.00 / 13.00
Widened Inside Pavement Width L/R	12.00 / 12.00
Widened Structural Spread Rate	0
Widened Friction Course Spread Rate	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	37,456.91	SY	\$6.00	\$224,741.46
285-701	OPTIONAL BASE,BASE GROUP 01	19,615.19	SY	\$18.80	\$368,765.57
350-3-7	PLAIN CEMENT CONC PAVT, 9"	19,110.67	SY	\$85.22	\$1,628,611.30

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: For outside widening	6,880.00	LF	\$24.00	\$165,120.00
536-73	GUARDRAIL REMOVAL Comment: Median guardrail removal	1,455.00	LF	\$4.27	\$6,212.85
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6" Comment: For additional lanes not automatically calculated since section limited to 6 lanes instead of 10 lanes required.	2.61	GM	\$2,298.32	\$5,998.62

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	440.00	EA	\$8.87	\$3,902.80
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.30	GM	\$4,818.95	\$6,264.64
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.61	GM	\$2,298.32	\$5,998.62
711-16-201	THERMOPLASTIC, STD- OTH,YELLOW, SOLID, 6"	1.30	GM	\$4,727.86	\$6,146.22

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	75.50	TN	\$333.74	\$25,197.37
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	2,265.00	LF	\$35.28	\$79,909.20
Roadway Component Total					\$2,526,868.65

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	9.00 / 9.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	O
Rumble Strips $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	7,132.10	SY	\$28.35	\$202,195.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	756.78	TN	\$150.26	\$113,713.76
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.30	GM	\$4,542.75	\$5,905.58
570-1-1	PERFORMANCE TURF	2,293.28	SY	\$1.85	\$4,242.57

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,911.82	LF	\$2.15	\$17,010.41
104-11	FLOATING TURBIDITY BARRIER	65.15	LF	\$9.61	\$626.09
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	65.15	LF	\$4.60	\$299.69
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,077.22	\$3,077.22
107-1	LITTER REMOVAL	4.74	AC	\$55.08	\$261.08
107-2	MOWING	4.74	AC	\$89.05	\$422.10
Shoulder Component Total					\$347,753.54

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	76.00
Performance Turf Width	20.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	10.00 / 10.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00

Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	7,896.53 SY	\$28.35	\$223,866.63
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	840.87 TN	\$150.26	\$126,349.13
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00 GM	\$4,542.75	\$4,542.75
570-1-1	PERFORMANCE TURF	7,644.27 SY	\$1.85	\$14,141.90
Median Component Total				\$368,900.41

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	528.00 LF	\$143.49	\$75,762.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00 LF	\$159.68	\$8,942.08
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	27.00 EA	\$2,015.62	\$54,421.74
570-1-1	PERFORMANCE TURF	458.66 SY	\$1.85	\$848.52

Box Culvert 1

Description	Value
Size	7 x 4
Length	12.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	22.80 CY	\$1,700.00	\$38,760.00
415-1-1	REINF STEEL- ROADWAY	2,229.60 LB	\$1.10	\$2,452.56
Drainage Component Total				\$181,187.62

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$380.99	\$761.98
700-1-60	SINGLE POST SIGN, REMOVE	2.00 AS	\$21.83	\$43.66
700-2-50	MULTI- POST SIGN, RELOCATE	2.00 AS	\$5,606.98	\$11,213.96

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-3-203	SIGN PANEL, F&I OM, 21-30 SF Comment: Exit number panels on OH signs (2 SB, 1 NB)	3.00 EA	\$1,303.91	\$3,911.73
700-3-207	SIGN PANEL, F&I OM, 201-300 SF	3.00 EA	\$7,736.21	\$23,208.63

700-4-113	Comment: Sign panel on new Cantilever (2 SB, 1 NB) OH STATIC SIGN STR, F&I, C 31-40 FT	3.00 EA	\$65,000.00	\$195,000.00
700-4-610	Comment: 2 SB and 1 NB OH STATIC SIGN STR, REMOVE, CANT Comment: 2 SB and 1 NB	3.00 EA	\$4,070.58	\$12,211.74
Signing Component Total				\$246,351.70

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description		Value			
Multiplier (Number of Poles)		38			
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,600.00	LF	\$8.93	\$67,868.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	38.00	EA	\$761.02	\$28,918.76
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	22,800.00	LF	\$2.00	\$45,600.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	38.00	EA	\$6,167.76	\$234,374.88
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	38.00	EA	\$622.00	\$23,636.00
Subcomponent Total					\$400,397.64
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND Comment: Remove existing lights and foundations.	38.00	EA	\$405.84	\$15,421.92
Lighting Component Total					\$415,819.56
Sequence 2 Total					\$6,621,218.57

Sequence: 3 MIS - Miscellaneous Construction**Net Length:** 1.500 MI
7,920 LF**Description:** ITS replacement along Project. Includes 1 traffic monitoring site.**SIGNING COMPONENT****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-9-137	WALK-IN DYN MESS SIGN,F&I, FULL,201-	2.00	EA	\$132,000.00	\$264,000.00
700-10-123	DMS SUPPORT STRUCTURE, CANT, 31-40 FT	2.00	EA	\$74,370.35	\$148,740.70
700-10-600	DMS SUPPORT STRUCTURE, REMOVE	2.00	EA	\$7,003.63	\$14,007.26
Signing Component Total					\$426,747.96

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT**Description of Work****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH Comment: new fiber trunk line	7,920.00	LF	\$8.93	\$70,725.60
633-1-124	FIBER OPTIC CABLE, F&I, UG,97-144 Comment: Establish new fiber trunk line	7,920.00	LF	\$3.50	\$27,720.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" Comment: assume 500' spacing for entire length	16.00	EA	\$761.02	\$12,176.32
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: Along fiber	8.00	EA	\$1,363.82	\$10,910.56
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" OR 36" Comment: At devices	8.00	EA	\$3,049.01	\$24,392.08
639-1-111	ELECTRICAL POWER SRV,F&I,OH,M,FURNISHED	1.00	AS	\$3,088.80	\$3,088.80
641-3-169	CONCRETE CCTV POLE, FUR & INS W/LOW Comment: 2 cameras assumed, 1 at each end	2.00	EA	\$3,000.00	\$6,000.00
641-3-800	CONCRETE CCTV POLE, REMOVE	2.00	EA	\$5,694.76	\$11,389.52
660-3-11	VEHICLE DETECTION SYSTEM-MICRO,F&I, CAB Comment: 4 assumed, 2 each side at each end.	4.00	EA	\$4,803.27	\$19,213.08
660-3-12	VEHICLE DETECTION SYSTEM-MICRO,F&I, ABO Comment: 4 assumed, 2 each side at each end.	4.00	EA	\$8,460.88	\$33,843.52
682-1-133	ITS CCTV CAMERA, F&I, DOME ENCL-NP. Comment: 2 cameras assumed, 1 at each end	2.00	EA	\$6,620.00	\$13,240.00

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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ITS_XTRA	ITS INCIDENTALS	1.00 LS	\$100,000.00	\$100,000.00
Intelligent Traffic System (ITS) Component Total				\$332,699.48
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Sequence 3 Total				\$759,447.44
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Sequence: 4 MIS - Miscellaneous Construction

Net Length: 1.500 MI
7,920 LF

Description: Existing Concrete Slab Rehab (estimated at 10% of existing area to remain)

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$34.43	\$215,738.38
350-3-7	PLAIN CEMENT CONC PAVT, 9" Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$85.22	\$533,988.52
352-70	GRINDING CONCRETE PAVT Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$8.00	\$50,128.00

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total \$799,854.90

Sequence 4 Total \$799,854.90

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FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 446153-1-52-01**Letting Date:** 12/2022**Description:** I-95 Widening from Baymeadows Road to south of SR 202.**District:** 02**County:** 72 DUVAL**Market Area:** 05**Units:** English**Contract Class:** 9 Lump Sum Project: N**Design/Build:** Y**Project Length:** 1.500 MI**Project Manager:** Will Lyons**Version 2-P Project Grand Total****\$32,661,515.46**

Description: vc07/20/21 2/12/21 6/24/21 HDR Update at beginning of Design 1-20-2021 K. Price, HDR Engineering. Adjusted sequence lengths, increased earthwork and guardrail, decreased pond size, reduced concrete thickness to match existing 9", added traffic monitoring site, added sequence for concrete rehab estimated about 10% of existing pavement to remain.

Project Sequences Subtotal		\$20,083,118.04
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102-1	Maintenance of Traffic	12.00 %	\$2,409,974.16
101-1	Mobilization	10.00 %	\$2,249,309.22

Project Sequences Total		\$24,742,401.42
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Project Unknowns	20.00 %	\$4,948,480.28
Design/Build	9.50 %	\$2,820,633.76

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

Project Non-Bid Subtotal		\$150,000.00
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Version 2-P Project Grand Total		\$32,661,515.46
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Date: 8/3/2021 12:04:12 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 446153-1-52-01

Letting Date: 12/2022

Description: I-95 Widening from Baymeadows Road to south of SR 202.

District: 02 County: 72 DUVAL

Market Area: 05 Units: English

Contract Class: 9 Lump Sum Project: N

Design/Build: Y Project Length: 1.500 MI

Project Manager: Will Lyons

Version 2-P Project Grand Total**\$32,661,515.46**

Description: vc07/20/21 2/12/21 6/24/21 HDR Update at beginning of Design 1-20-2021 K. Price, HDR Engineering. Adjusted sequence lengths, increased earthwork and guardrail, decreased pond size, reduced concrete thickness to match existing 9", added traffic monitoring site, added sequence for concrete rehab estimated about 10% of existing pavement to remain.

Sequence: 1 WDR - Widen/Resurface, Divided, Rural**Net Length:** 1.023 MI
5,400 LF

Description: I-95 widening existing 40' median. Widen one lane to median, 2 outside, 3 lanes total. Median barrier wall. Approximate Sta.690+60 to 734+60, 769+00 to 779+00.

Special Conditions: Concrete pavement with asphalt shoulders.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	114.00 / 114.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.020
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	28.27	AC	\$38,444.73	\$1,086,832.52
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	51,853.35	CY	\$18.00	\$933,360.30

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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110-4-10	REMOVAL OF EXIST CONC Comment: Removal of concrete shoulders (3x10'each). One inside shoulder to remain and be widened.	18,000.00 SY	\$34.43	\$619,740.00
120-1	REGULAR EXCAVATION Comment: Partial removal of existing ditch berm (for relocated ditch), assume 33 sf cross sectional area per side for length of sequence.	13,200.00 CY	\$15.00	\$198,000.00
120-6	EMBANKMENT Comment: Ditch berm, outside, assume 38 sf cross sectional area per side for length of sequence.	15,200.00 CY	\$18.00	\$273,600.00
Earthwork Component Total				\$3,111,532.82

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	25.00 / 13.00
Widened Inside Pavement Width L/R	0.00 / 12.00
Widened Structural Spread Rate	0
Widened Friction Course Spread Rate	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	52,800.00 SY	\$6.00	\$316,800.00
285-701	OPTIONAL BASE,BASE GROUP 01	26,922.72 SY	\$18.80	\$506,147.14
350-3-7	PLAIN CEMENT CONC PAVT, 9"	26,400.00 SY	\$85.22	\$2,249,808.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: For outside widening	10,800.00 LF	\$24.00	\$259,200.00
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	1,227.00 LF	\$35.28	\$43,288.56
536-73	GUARDRAIL REMOVAL	8,433.00 LF	\$4.27	\$36,008.91
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	2.00 EA	\$1,233.68	\$2,467.36
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6" Comment: Additional skip lines required for 10-lane section not accounted for in default (only goes up to 6 lane section)	4.09 GM	\$2,298.32	\$9,400.13

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
399-1	MISCELLANEOUS ASPHALT PAVEMENT Comment: For double sided guardrail not being automatically calculated under peripherals.	40.97 TN	\$333.74	\$13,673.33

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	690.00 EA	\$8.87	\$6,120.30
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.05 GM	\$4,818.95	\$9,878.85
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	4.09 GM	\$2,298.32	\$9,400.13
711-16-201	THERMOPLASTIC, STD- OTH, YELLOW, SOLID, 6"	2.05 GM	\$4,727.86	\$9,692.11

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	135.53 TN	\$333.74	\$45,231.78
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	4,046.00 LF	\$21.06	\$85,208.76
536-8-13	APPROACH TRANS CONN TO RIGID BA, F&I, 3	4.00 EA	\$2,740.95	\$10,963.80
536-85-24	GUARDRAIL END TREATMENT- PARA APP TERM	2.00 EA	\$2,791.53	\$5,583.06

Roadway Component Total

\$3,618,872.22

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	9.00 / 9.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	11,195.70 SY	\$28.35	\$317,398.09
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,187.97 TN	\$150.26	\$178,504.37
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.05 GM	\$4,542.75	\$9,312.64
570-1-1	PERFORMANCE TURF	3,599.90 SY	\$1.85	\$6,659.82

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	12,419.67 LF	\$2.15	\$26,702.29
104-11	FLOATING TURBIDITY BARRIER	102.27 LF	\$9.61	\$982.81
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	102.27 LF	\$4.60	\$470.44
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$3,077.22	\$6,154.44
107-1	LITTER REMOVAL	7.44 AC	\$55.08	\$409.80
107-2	MOWING	7.44 AC	\$89.05	\$662.53
Shoulder Component Total				\$547,257.24

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	40.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 14.00
New Paved Median Shoulder Width L/R	12.00 / 14.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips \bar{y}_i 1/2 No. of Sides	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	15,995.57 SY	\$28.35	\$453,474.41
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,715.95 TN	\$150.26	\$257,838.65
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	5,007.00 LF	\$180.14	\$901,960.98
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.00 GM	\$4,542.75	\$9,085.50
Median Component Total				\$1,622,359.54

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	3,568.00 LF	\$143.49	\$511,972.32

430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	1,192.00 LF	\$159.68	\$190,338.56
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X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-521	INLETS, DT BOT, TYPE C, <10'	2.00 EA	\$5,900.00	\$11,800.00
425-1-791	INLETS, MED BARRIER, TYPE 2, J BOT,<=10'	20.00 EA	\$5,713.57	\$114,271.40
	Comment: assume 250 foot spacing			
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	32.00 LF	\$127.13	\$4,068.16
	Comment: pipe extension, one end			
430-175-224	PIPE CULV, OPT MATL, OTHER, 24"S/CD	56.00 LF	\$154.97	\$8,678.32
	Comment: cross drain extension, 2 ends			
430-982-125	MITERED END SECT, OPTIONAL RD, 18" CD	1.00 EA	\$1,969.80	\$1,969.80
430-982-129	MITERED END SECT, OPTIONAL RD, 24" CD	2.00 EA	\$1,872.09	\$3,744.18

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	1
Depth	6.00
Description	Pond F-G (5 ac at 6 foot average dept)

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$38,444.73	\$192,223.65
120-1	REGULAR EXCAVATION	48,400.00 CY	\$15.00	\$726,000.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$6,500.00	\$6,500.00
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,681.56	\$13,363.12
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$325.00	\$18,200.00
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$275.00	\$110,000.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$24.26	\$45,123.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00 EA	\$2,473.66	\$4,947.32
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$1.85	\$44,770.00
Drainage Component Total				\$2,007,970.43

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	\$380.99	\$1,142.97
700-1-60	SINGLE POST SIGN, REMOVE	3.00 AS	\$21.83	\$65.49
700-2-50	MULTI- POST SIGN, RELOCATE	2.00 AS	\$5,606.98	\$11,213.96

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-3-203	SIGN PANEL, F&I OM, 21-30 SF Comment: Exit number panels on OH signs (3 SB, 1 NB)	4.00	EA	\$1,303.91	\$5,215.64
700-3-207	SIGN PANEL, F&I OM, 201-300 SF Comment: Sign panel on new OH Cantilever sign (1 SB, 1NB)	2.00	EA	\$7,736.21	\$15,472.42
700-3-211	SIGN PANEL, F&I OM, 601 SF AND GREATER Comment: Sign Panel on new trusses (SB direction)	2.00	EA	\$17,207.28	\$34,414.56
700-4-113	OH STATIC SIGN STR, F&I, C 31-40 FT Comment: 1 NB, 1 SB	2.00	EA	\$65,000.00	\$130,000.00
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT Comment: 2 SB	2.00	EA	\$144,563.61	\$289,127.22
700-4-610	OH STATIC SIGN STR, REMOVE, CANT Comment: 1 NB, 1 SB	2.00	EA	\$4,070.58	\$8,141.16
700-4-620	OH STATIC SIGN STR, REMOVE, SPAN Comment: SB	2.00	EA	\$9,168.09	\$18,336.18
Signing Component Total					\$513,129.60

LIGHTING COMPONENT**Rural Lighting Subcomponent**

Description	Value				
Multiplier (Number of Poles)	44				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	8,800.00	LF	\$8.93	\$78,584.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	\$761.02	\$33,484.88
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	26,400.00	LF	\$2.00	\$52,800.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	44.00	EA	\$6,167.76	\$271,381.44
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	44.00	EA	\$622.00	\$27,368.00
Subcomponent Total					\$463,618.32
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND Comment: Remove existing lights and foundations.	44.00	EA	\$405.84	\$17,856.96
Lighting Component Total					\$481,475.28

Sequence 1 Total \$11,902,597.13

Sequence: 2 WDR - Widen/Resurface, Divided, Rural**Net Length:** 0.652 MI
3,440 LF**Description:** I-95 widening existing median wider than 40'. Widen one lane to median each direction, one lane to outside each direction. Approximate Sta. 734+60 to 769+00**Special Conditions:** Concrete pavement with asphalt shoulders.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	129.00 / 129.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.650
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.39	AC	\$38,444.73	\$783,888.04
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	51,312.21	CY	\$18.00	\$923,619.78

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC Comment: Removal of concrete shoulders (4x10'each).	15,289.00	SY	\$34.43	\$526,400.27
120-1	REGULAR EXCAVATION Comment: Partial removal of existing ditch berm (for relocated ditch), assume 33 sf cross sectional area per side for length of sequence.	8,409.00	CY	\$15.00	\$126,135.00
120-6	EMBANKMENT Comment: Ditch berm, outside, assume 38 sf cross sectional area per side for length of sequence.	9,683.00	CY	\$18.00	\$174,294.00

Earthwork Component Total \$2,534,337.09**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	220

Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	13.00 / 13.00
Widened Inside Pavement Width L/R	12.00 / 12.00
Widened Structural Spread Rate	0
Widened Friction Course Spread Rate	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	37,456.91	SY	\$6.00	\$224,741.46
285-701	OPTIONAL BASE,BASE GROUP 01	19,615.19	SY	\$18.80	\$368,765.57
350-3-7	PLAIN CEMENT CONC PAVT, 9"	19,110.67	SY	\$85.22	\$1,628,611.30

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD Comment: For outside widening	6,880.00	LF	\$24.00	\$165,120.00
536-73	GUARDRAIL REMOVAL Comment: Median guardrail removal	1,455.00	LF	\$4.27	\$6,212.85
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6" Comment: For additional lanes not automatically calculated since section limited to 6 lanes instead of 10 lanes required.	2.61	GM	\$2,298.32	\$5,998.62

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	440.00	EA	\$8.87	\$3,902.80
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	1.30	GM	\$4,818.95	\$6,264.64
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.61	GM	\$2,298.32	\$5,998.62
711-16-201	THERMOPLASTIC, STD- OTH,YELLOW, SOLID, 6"	1.30	GM	\$4,727.86	\$6,146.22

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	75.50	TN	\$333.74	\$25,197.37
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	2,265.00	LF	\$35.28	\$79,909.20
Roadway Component Total					\$2,526,868.65

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	9.00 / 9.00
Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	7,132.10	SY	\$28.35	\$202,195.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	756.78	TN	\$150.26	\$113,713.76
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.30	GM	\$4,542.75	\$5,905.58
570-1-1	PERFORMANCE TURF	2,293.28	SY	\$1.85	\$4,242.57

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,911.82	LF	\$2.15	\$17,010.41
104-11	FLOATING TURBIDITY BARRIER	65.15	LF	\$9.61	\$626.09
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	65.15	LF	\$4.60	\$299.69
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,077.22	\$3,077.22
107-1	LITTER REMOVAL	4.74	AC	\$55.08	\$261.08
107-2	MOWING	4.74	AC	\$89.05	\$422.10
Shoulder Component Total					\$347,753.54

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	76.00
Performance Turf Width	20.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	10.00 / 10.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00

Structural Spread Rate	220
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips $\frac{1}{2}$ No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	7,896.53	SY	\$28.35	\$223,866.63
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	840.87	TN	\$150.26	\$126,349.13
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	\$4,542.75	\$4,542.75
570-1-1	PERFORMANCE TURF	7,644.27	SY	\$1.85	\$14,141.90
Median Component Total					\$368,900.41

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	528.00	LF	\$143.49	\$75,762.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00	LF	\$159.68	\$8,942.08
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	27.00	EA	\$2,015.62	\$54,421.74
570-1-1	PERFORMANCE TURF	458.66	SY	\$1.85	\$848.52

Box Culvert 1

Description	Value
Size	7 x 4
Length	12.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	22.80	CY	\$1,700.00	\$38,760.00
415-1-1	REINF STEEL- ROADWAY	2,229.60	LB	\$1.10	\$2,452.56
Drainage Component Total					\$181,187.62

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$380.99	\$761.98
700-1-60	SINGLE POST SIGN, REMOVE	2.00	AS	\$21.83	\$43.66
700-2-50	MULTI- POST SIGN, RELOCATE	2.00	AS	\$5,606.98	\$11,213.96

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-3-203	SIGN PANEL, F&I OM, 21-30 SF Comment: Exit number panels on OH signs (2 SB, 1 NB)	3.00	EA	\$1,303.91	\$3,911.73
700-3-207	SIGN PANEL, F&I OM, 201-300 SF	3.00	EA	\$7,736.21	\$23,208.63

700-4-113	Comment: Sign panel on new Cantilever (2 SB, 1 NB) OH STATIC SIGN STR, F&I, C 31-40 FT	3.00 EA	\$65,000.00	\$195,000.00
700-4-610	Comment: 2 SB and 1 NB OH STATIC SIGN STR, REMOVE, CANT Comment: 2 SB and 1 NB	3.00 EA	\$4,070.58	\$12,211.74
Signing Component Total				\$246,351.70

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description		Value			
Multiplier (Number of Poles)		38			
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,600.00	LF	\$8.93	\$67,868.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	38.00	EA	\$761.02	\$28,918.76
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	22,800.00	LF	\$2.00	\$45,600.00
715-4-14	LIGHT POLE COMPLETE, F&I- STD, 45'	38.00	EA	\$6,167.76	\$234,374.88
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	38.00	EA	\$622.00	\$23,636.00
Subcomponent Total					\$400,397.64
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-4-70	LIGHT POLE COMPLETE, REMOVE POLE/FOUND Comment: Remove existing lights and foundations.	38.00	EA	\$405.84	\$15,421.92
Lighting Component Total					\$415,819.56
Sequence 2 Total					\$6,621,218.57

Sequence: 3 MIS - Miscellaneous Construction**Net Length:** 1.500 MI
7,920 LF**Description:** ITS replacement along Project. Includes 1 traffic monitoring site.**SIGNING COMPONENT****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-9-137	WALK-IN DYN MESS SIGN,F&I, FULL,201-	2.00	EA	\$132,000.00	\$264,000.00
700-10-123	DMS SUPPORT STRUCTURE, CANT, 31-40 FT	2.00	EA	\$74,370.35	\$148,740.70
700-10-600	DMS SUPPORT STRUCTURE, REMOVE	2.00	EA	\$7,003.63	\$14,007.26
Signing Component Total					\$426,747.96

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT**Description of Work****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH Comment: new fiber trunk line	7,920.00	LF	\$8.93	\$70,725.60
633-1-124	FIBER OPTIC CABLE, F&I, UG,97-144 Comment: Establish new fiber trunk line	7,920.00	LF	\$3.50	\$27,720.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" Comment: assume 500' spacing for entire length	16.00	EA	\$761.02	\$12,176.32
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" Comment: Along fiber	8.00	EA	\$1,363.82	\$10,910.56
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" OR 36" Comment: At devices	8.00	EA	\$3,049.01	\$24,392.08
639-1-111	ELECTRICAL POWER SRV,F&I,OH,M,FURNISHED	1.00	AS	\$3,088.80	\$3,088.80
641-3-169	CONCRETE CCTV POLE, FUR & INS W/LOW Comment: 2 cameras assumed, 1 at each end	2.00	EA	\$3,000.00	\$6,000.00
641-3-800	CONCRETE CCTV POLE, REMOVE	2.00	EA	\$5,694.76	\$11,389.52
660-3-11	VEHICLE DETECTION SYSTEM-MICRO,F&I, CAB Comment: 4 assumed, 2 each side at each end.	4.00	EA	\$4,803.27	\$19,213.08
660-3-12	VEHICLE DETECTION SYSTEM-MICRO,F&I, ABO Comment: 4 assumed, 2 each side at each end.	4.00	EA	\$8,460.88	\$33,843.52
682-1-133	ITS CCTV CAMERA, F&I, DOME ENCL-NP. Comment: 2 cameras assumed, 1 at each end	2.00	EA	\$6,620.00	\$13,240.00

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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ITS_XTRA	ITS INCIDENTALS	1.00 LS	\$100,000.00	\$100,000.00
Intelligent Traffic System (ITS) Component Total				\$332,699.48
<hr/>				
Sequence 3 Total				\$759,447.44
<hr/>				

Sequence: 4 MIS - Miscellaneous Construction

Net Length: 1.500 MI
7,920 LF

Description: Existing Concrete Slab Rehab (estimated at 10% of existing area to remain)

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$34.43	\$215,738.38
350-3-7	PLAIN CEMENT CONC PAVT, 9" Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$85.22	\$533,988.52
352-70	GRINDING CONCRETE PAVT Comment: Remaining concrete not previously rehabilitated = 62664 SY, assume 10% requires rehab with this project	6,266.00 SY	\$8.00	\$50,128.00

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total \$799,854.90

Sequence 4 Total \$799,854.90

Date: 8/3/2021 12:04:13 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 446153-1-52-01**Letting Date:** 12/2022**Description:** I-95 Widening from Baymeadows Road to south of SR 202.**District:** 02**County:** 72 DUVAL**Market Area:** 05**Units:** English**Contract Class:** 9 Lump Sum Project: N**Design/Build:** Y**Project Length:** 1.500 MI**Project Manager:** Will Lyons**Version 2-P Project Grand Total****\$32,661,515.46**

Description: vc07/20/21 2/12/21 6/24/21 HDR Update at beginning of Design 1-20-2021 K. Price, HDR Engineering. Adjusted sequence lengths, increased earthwork and guardrail, decreased pond size, reduced concrete thickness to match existing 9", added traffic monitoring site, added sequence for concrete rehab estimated about 10% of existing pavement to remain.

Project Sequences Subtotal		\$20,083,118.04
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102-1	Maintenance of Traffic	12.00 %	\$2,409,974.16
101-1	Mobilization	10.00 %	\$2,249,309.22

Project Sequences Total		\$24,742,401.42
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Project Unknowns	20.00 %	\$4,948,480.28
Design/Build	9.50 %	\$2,820,633.76

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

Project Non-Bid Subtotal		\$150,000.00
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Version 2-P Project Grand Total		\$32,661,515.46
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APPENDIX M – Build Alternative Typical Sections

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

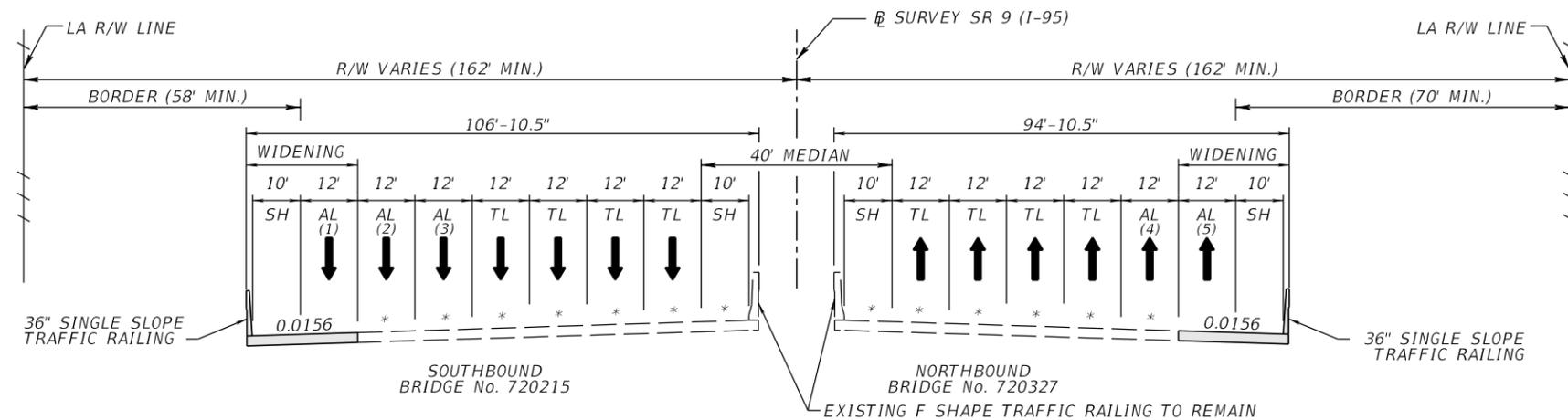
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - BORDER WIDTH

TYPICAL SECTION No. 2



SR 9 (I-95)
OVER FEC RAILROAD
STA. 806+92.31 TO STA. 809+06.81

LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANE
- SH: SHOULDER

LANE NOTES

- (1) ENTRANCE FROM SR 5 / US 1 / PHILIPS HIGHWAY SOUTHBOUND
- (2) EXIT TO SR 9A / I-295 (FROM SR 5 / US 1 / PHILIPS HIGHWAY NB)
- (3) EXIT TO SR 9A / I-295 (SR 115 / SOUTHSIDE BOULEVARD)
- (4) EXIT TO SR 115 / SOUTHSIDE BOULEVARD (FROM SR 9A / I-295)
- (5) EXIT TO SR 5 / US 1 / PHILIPS HIGHWAY (FROM SR 9A / I-295)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 133,000
 ESTIMATED OPENING YEAR = 2025 AADT = 144,200
 ESTIMATED DESIGN YEAR = 2045 AADT = 181,400
 K = 8.5% D = 55% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	3

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

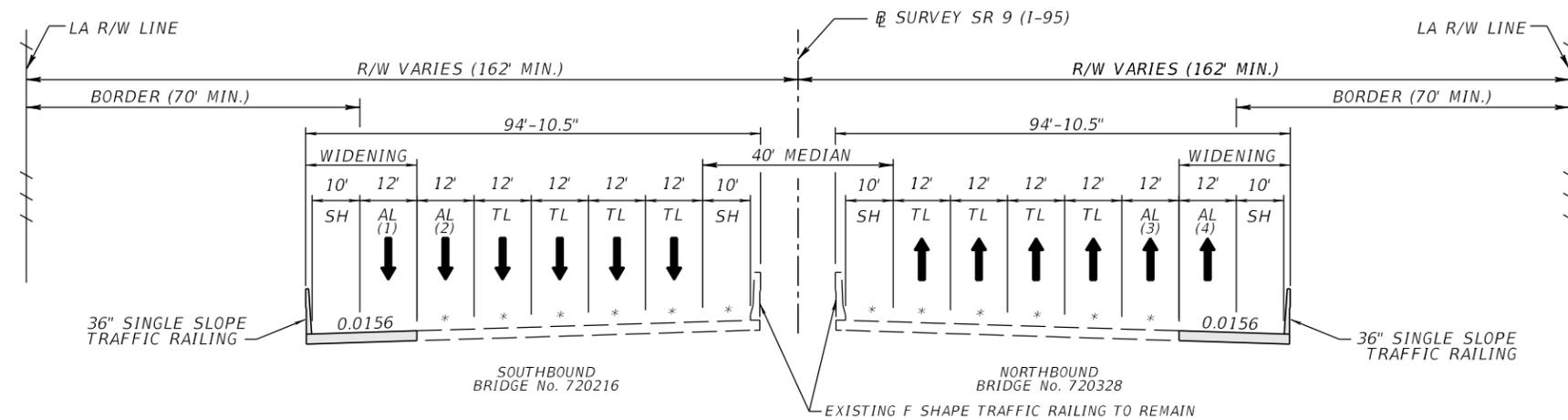
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - BORDER WIDTH

TYPICAL SECTION No. 3



LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANE
- SH: SHOULDER

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 133,000
 ESTIMATED OPENING YEAR = 2025 AADT = 144,200
 ESTIMATED DESIGN YEAR = 2045 AADT = 181,400
 K = 8.5% D = 55% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 65 MPH

SR 9 (I-95)
 OVER SR 5 / US 1 / PHILIPS HIGHWAY
 STA. 813+26.63 TO STA. 815+89.13

LANE NOTES

- (1) ENTRANCE FROM SR 5 / US 1 / PHILIPS HIGHWAY NORTHBOUND
- (2) EXIT TO SR 9A / I-295 (FROM SR 115 / SOUTHSIDE BOULEVARD)
- (3) EXIT TO SR 115 / SOUTHSIDE BOULEVARD (FROM SR 9A / I-295)
- (4) EXIT TO SR 5 / US 1 / PHILIPS HIGHWAY (FROM SR 9A / I-295)

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	4

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

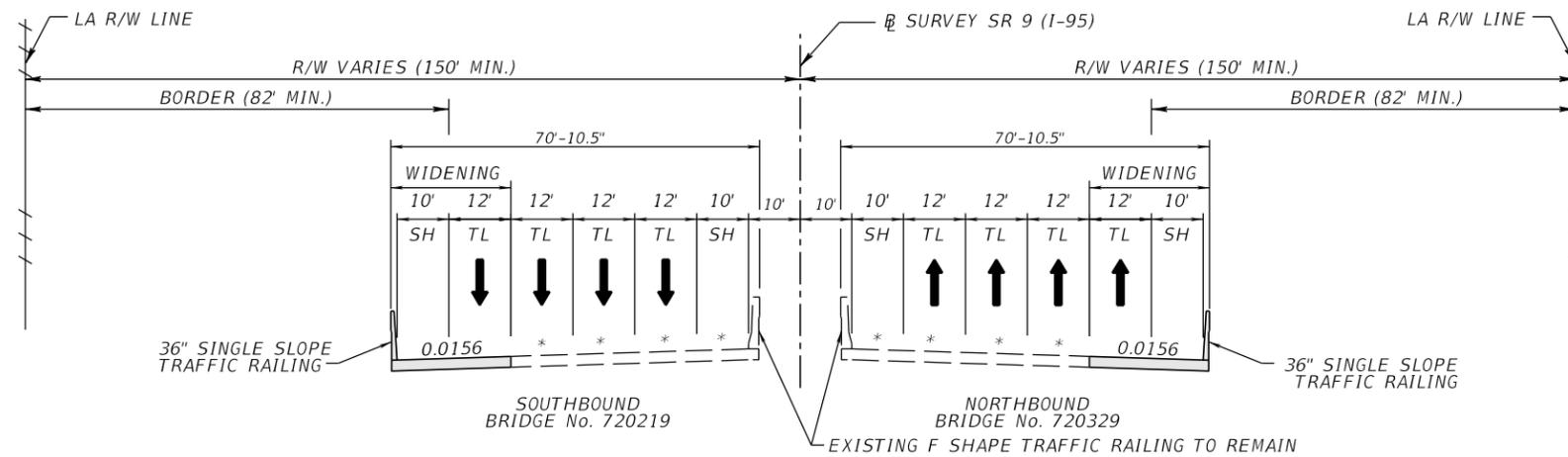
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - BORDER WIDTH

TYPICAL SECTION No. 6



SR 9 (I-95)
OVER SR 152 (BAYMEADOWS ROAD)

STA. 956+93.55 TO STA. 959+02.55

LEGEND:

- TL: TRAVEL LANE
- SH: SHOULDER

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 104,000
 ESTIMATED OPENING YEAR = 2025 AADT = 112,400
 ESTIMATED DESIGN YEAR = 2045 AADT = 140,800
 K = 8.5% D = 55% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	7

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

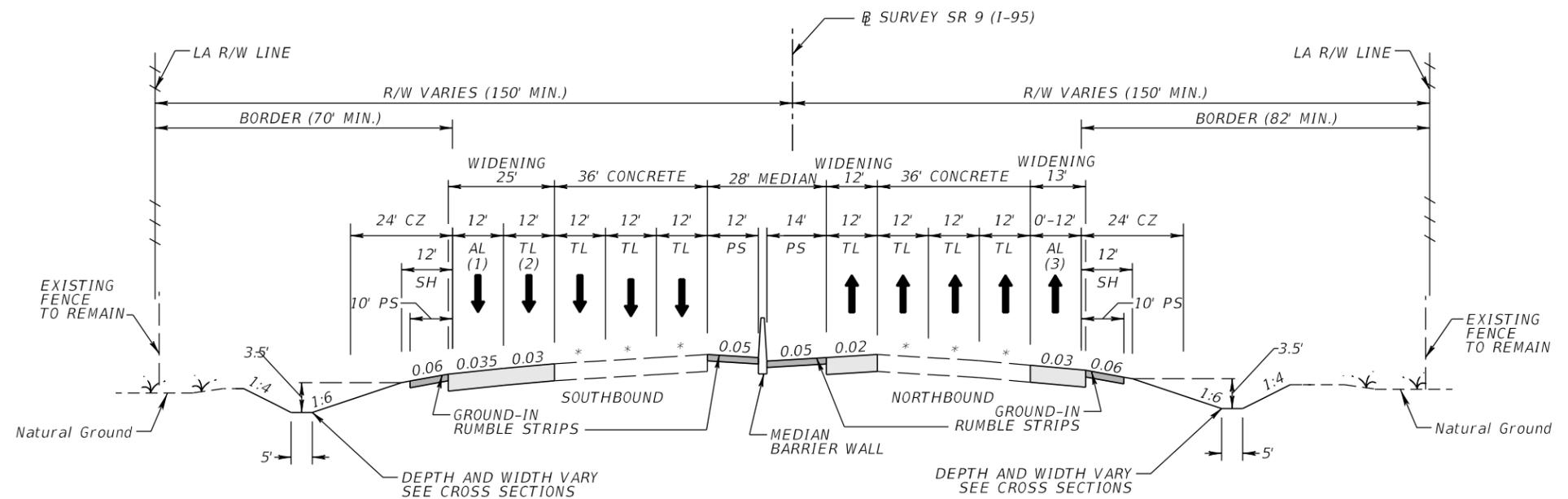
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - BORDER WIDTH

TYPICAL SECTION No. 7



LEGEND:
 TL: TRAVEL LANE
 AL: AUXILIARY LANE
 SH: SHOULDER
 PS: PAVED SHOULDER
 CZ: CLEAR ZONE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 118,400
 ESTIMATED OPENING YEAR = 2025 AADT = 126,200
 ESTIMATED DESIGN YEAR = 2045 AADT = 152,200
 K = 8.5% D = 55% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 65 MPH

SR 9 (I-95)
 NORTH OF SR 152 (BAYMEADOWS ROAD)
 STA. 959+02.55 TO STA. 1014+00.00

*EXISTING CONCRETE TO REMAIN

LANE NOTES
 (1) EXIT TO SR 152 (BAYMEADOWS ROAD)
 (2) OPTIONAL EXIT TO SR 152 (BAYMEADOWS ROAD)
 (3) ENTRANCE FROM SR 152 (BAYMEADOWS ROAD)

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	8

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

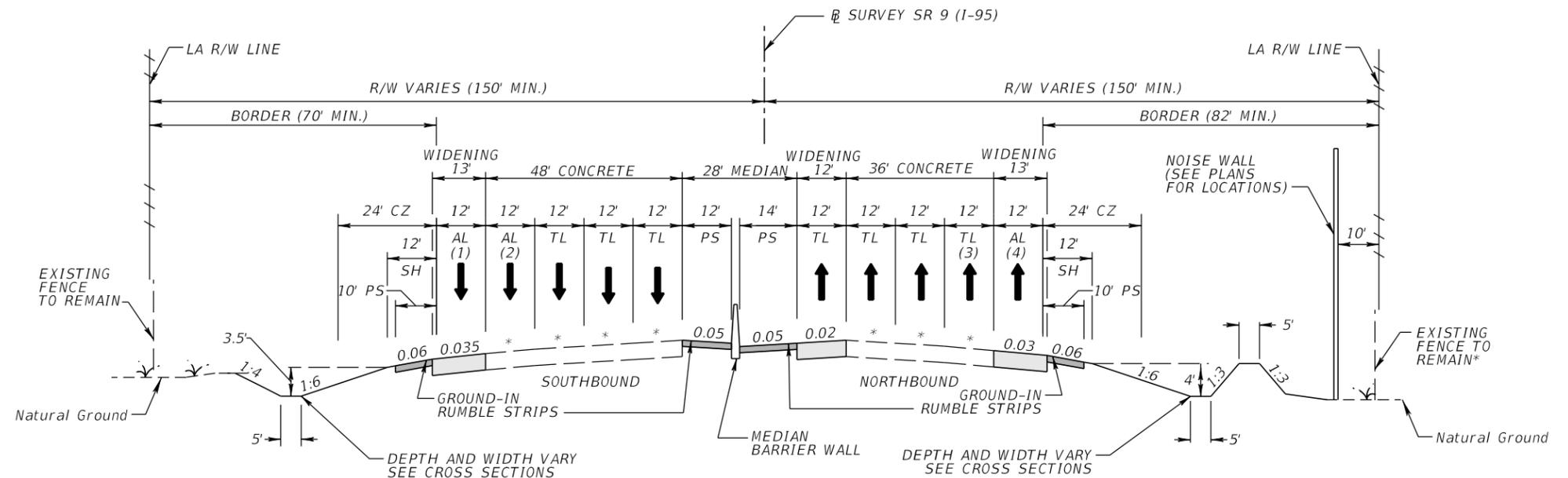
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - BORDER WIDTH

TYPICAL SECTION No. 9



SR 9 (I-95)
SOUTH OF SR 202 (J.T. BUTLER BLVD)
STA. 764+45.56 TO STA. 779+00.00

*EXISTING CONCRETE PAVEMENT TO REMAIN

- LANE NOTES
- (1) ENTRANCE FROM SR 202 (J.T. BUTLER BLVD)
 - (2) ENTRANCE FROM SR 202 (J.T. BUTLER BLVD)
 - (3) OPTIONAL EXIT TO SR 202 (J.T. BUTLER BLVD).
 - (4) EXIT TO SR 202 (J.T. BUTLER BLVD)

* REMOVE FENCE IN AREAS OF NOISE WALL

LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANE
- SH: SHOULDER
- PS: PAVED SHOULDER
- CZ: CLEAR ZONE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 118,400
 ESTIMATED OPENING YEAR = 2025 AADT = 126,200
 ESTIMATED DESIGN YEAR = 2045 AADT = 152,200
 K = 8.5% D = 55% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 65 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	10

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () 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

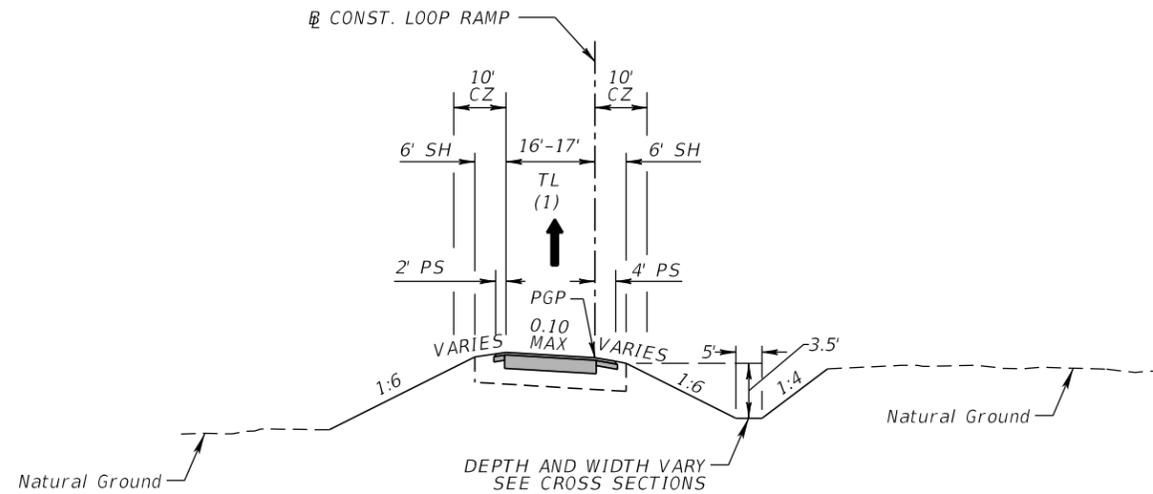
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION - DESIGN SPEED

TYPICAL SECTION No. 10



LEGEND:

- TL: TRAVEL LANE
- PGP: PROFILE GRADE POINT
- SH: SHOULDER
- PS: PAVED SHOULDER
- CZ: CLEAR ZONE

**TRAFFIC DATA
SR-9 SB ON-RAMP FROM SR 5 NB**

CURRENT YEAR = 2019 AADT = 4,400
 ESTIMATED OPENING YEAR = 2025 AADT = 4,700
 ESTIMATED DESIGN YEAR = 2045 AADT = 5,500
 K = 8.5% D = 100% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 25 MPH

**TRAFFIC DATA
SR 9 NB OFF-RAMP TO SR 5**

CURRENT YEAR = 2019 AADT = 9,500
 ESTIMATED OPENING YEAR = 2025 AADT = 10,700
 ESTIMATED DESIGN YEAR = 2045 AADT = 14,400
 K = 8.5% D = 100% T = 12% (24 HOUR)
 DESIGN HOUR T = 6%
 DESIGN SPEED = 25 MPH

SR 9 (I-95) LOOP RAMPS
AT SR 5 (US 1 / PHILIPS HIGHWAY)

LANE NOTES

- (1) LOOP RAMP FROM SR 5 (US 1 / PHILIPS HIGHWAY) NORTHBOUND TO SR 9 (I-95) SOUTHBOUND, LANE WIDTH = 17'
- LOOP RAMP FROM SR 9 (I-95) NORTHBOUND TO SR 5 (US 1 / PHILIPS HIGHWAY), LANE WIDTH = 16'

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	11

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

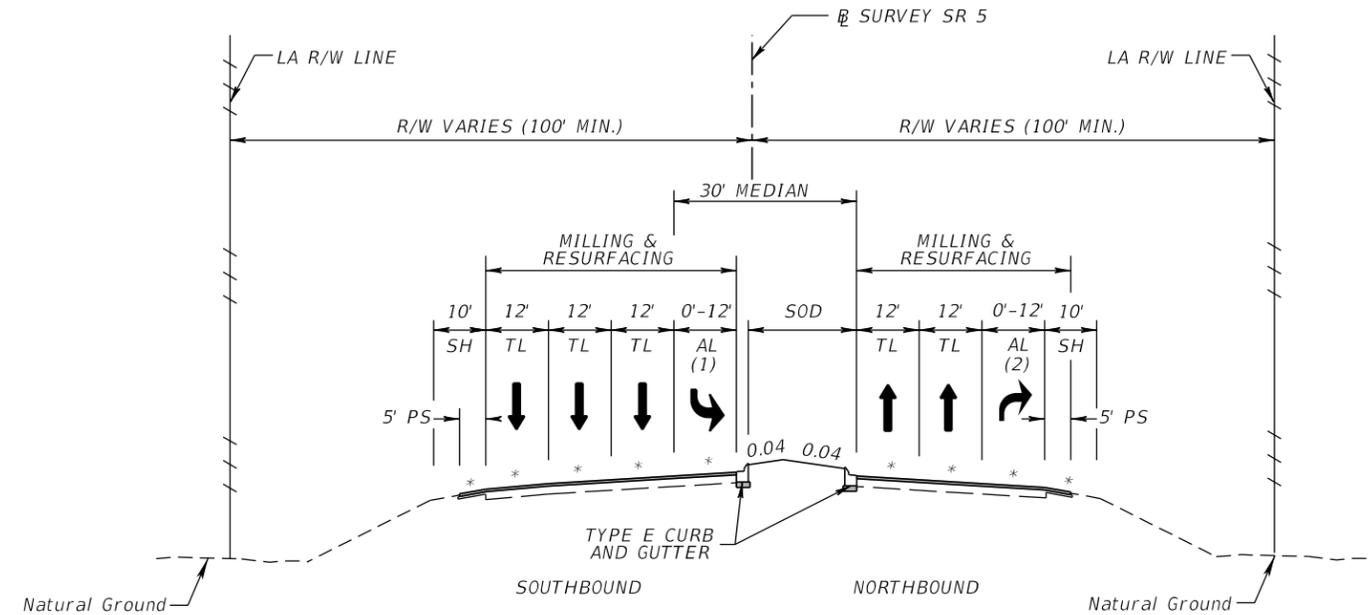
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 11



SR 5 (US1 / PHILIPS HIGHWAY)
AT I-95 INTERCHANGE
BETWEEN INTERCHANGE RAMPS
M.P. 7.130 TO M.P. 7.418

*MATCH EXISTING CROSS SLOPE

LANE NOTES
(1) ENTRANCE TO SR 9 (I-95) NORTHBOUND
(2) ENTRANCE TO SR 9 (I-95) SOUTHBOUND (LOOP RAMP)

LEGEND:

- TL: TRAVEL LANE
- SH: SHOULDER
- PS: PAVED SHOULDER

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 38,100
ESTIMATED OPENING YEAR = 2025 AADT = 41,800
ESTIMATED DESIGN YEAR = 2045 AADT = 54,100
K = 8.5% D = 56% T = 2% (24 HOUR)
DESIGN HOUR T = 1%
DESIGN SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	12

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

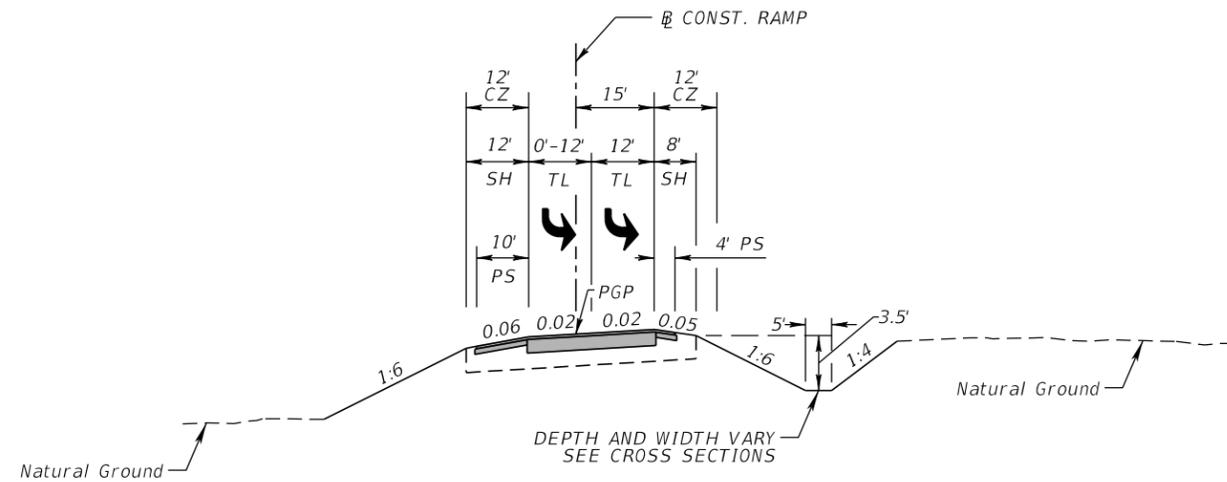
- (X) 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 12



SR 9 (I-95) NORTHBOUND RAMP
TO SR 115 (SOUTHSIDE BLVD) NORTHBOUND*

*THIS IS AN ALTERNATIVE RAMP CONNECTION TO SR 115 (SOUTHSIDE BLVD) NORTHBOUND THAT DEVELOPS FROM THE RAMP SERVING SR 115 (SOUTHSIDE BLVD) SOUTHBOUND.

THIS ALTERNATIVE CONNECTION ALLOWS ACCESS TO WESTERN LAKE DRIVE, WHILE THE PRIMARY RAMP TO SR 115 (SOUTHSIDE BLVD) NORTHBOUND SERVES FROM BELLE RIVE BOULEVARD NORTHWARD.

LEGEND:

- TL: TRAVEL LANE
- PGP: PROFILE GRADE POINT
- SH: SHOULDER
- PS: PAVED SHOULDER
- CZ: CLEAR ZONE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = N/A
 ESTIMATED OPENING YEAR = 2025 AADT = 500
 ESTIMATED DESIGN YEAR = 2045 AADT = 600
 K = 8.5% D = 100% T = 2% (24 HOUR)
 DESIGN HOUR T = 1%
 DESIGN SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	13

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- (X) C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

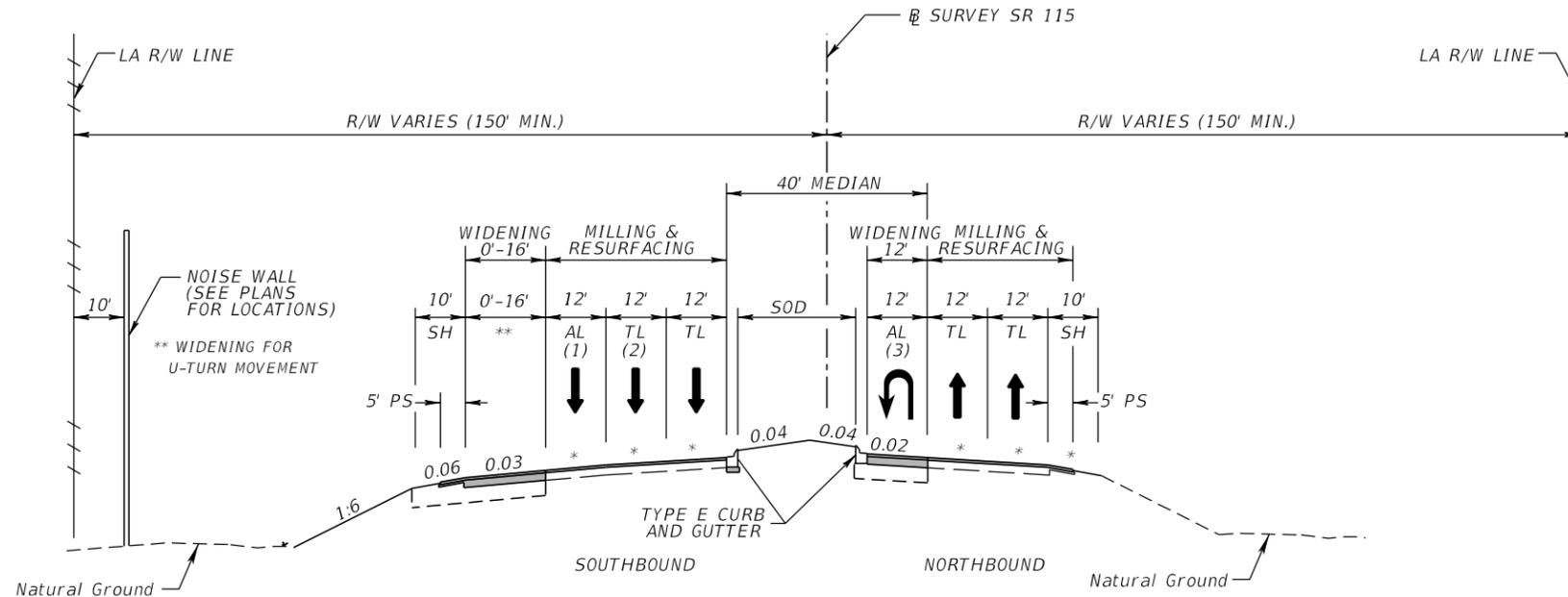
- () 1 - FREEWAY
- (X) 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 13



LEGEND:

- TL: TRAVEL LANE
- SH: SHOULDER
- PS: PAVED SHOULDER
- CZ: CLEAR ZONE

SR 115 (SOUTHSIDE BOULEVARD)
AT I-95 INTERCHANGE
BETWEEN PARADISE ISLAND BOULEVARD
AND WESTERN LAKE DRIVE
M.P. 1.533 TO M.P. 1.884

*MATCH EXISTING CROSS SLOPE

LANE NOTES

- (1) EXIT TO SR 9 (I-95) SOUTHBOUND
- (2) OPTIONAL EXIT TO SR 9 (I-95) SOUTHBOUND
- (3) U-TURN TO EXIT TO SR 9 (I-95) SOUTHBOUND

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 45 MPH

TRAFFIC DATA
NOT AVAILBLE
AT THIS TIME

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	14

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- (X) C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

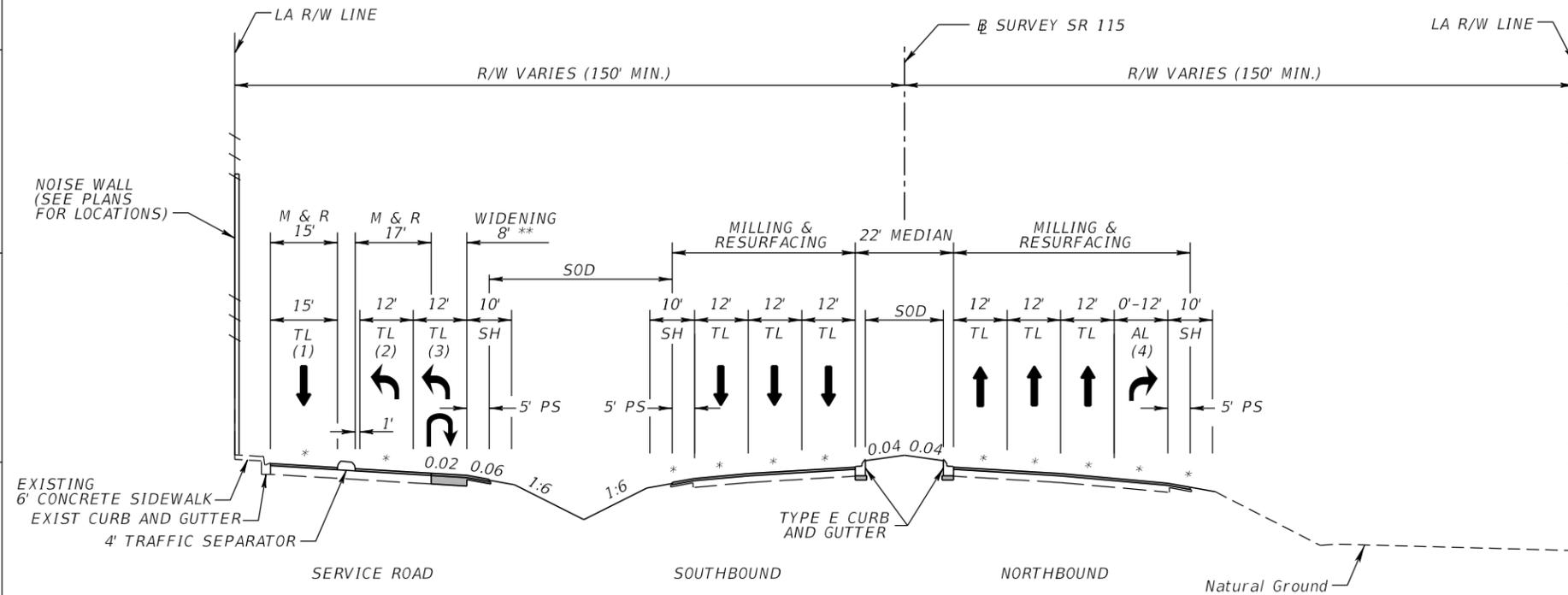
- () 1 - FREEWAY
- (X) 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 14



**ADDITIONAL WIDENING REQUIRED FOR SOUTHBOUND SERVICE ROAD U-TURN TO ACCESS SR 115 (SOUTHSIDE BLVD) AT BELLE RIVE BLVD VIA NORTHBOUND SERVICE ROAD LANES

SR 115 (SOUTHSIDE BOULEVARD) AT BELLE RIVE BOULEVARD

SOUTH OF INTERSECTION M.P. 1.953 TO M.P. 2.165

*MATCH EXISTING CROSS SLOPE

LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANES
- SH: SHOULDER
- PS: PAVED SHOULDER
- M & R: MILLING AND RESURFACING

LANE NOTES

- (1) SOUTHBOUND SERVICE ROAD LANE TO WESTERN LAKE DRIVE OR U-TURN TO NORTH SERVICE ROAD LANE TO SR 115 (SOUTHSIDE BLVD) NORTHBOUND VIA LEFT TURN AT BELLE RIVE BLVD INTERSECTION.
- (2) NORTHBOUND SERVICE ROAD LANE TO BELLE RIVE BOULEVARD WESTBOUND OR SR 115 (SOUTHBOWN BOULEVARD) NORTHBOUND VIA LEFT TURN AT BELLE RIVE BLVD INTERSECTION.
- (3) NORTHBOUND SERVICE ROAD LANE TO SR 115 (SOUTHSIDE BLVD) SOUTHBOUND VIA U-TURN OR TO SR 115 (SOUTHSIDE BLVD) NORTHBOUND VIA LEFT TURN AT BELLE RIVE BLVD INTERSECTION.
- (4) RIGHT TURN LANE TO BELLE RIVE BLVD EASTBOUND.

TRAFFIC DATA

CURRENT YEAR = AADT =
 ESTIMATED OPENING YEAR = AADT =
 ESTIMATED DESIGN YEAR = AADT =
 K = % D = % T = % (24 HOUR)
 DESIGN HOUR T = %
 DESIGN SPEED = 45 MPH

TRAFFIC DATA NOT AVAILBLE AT THIS TIME

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	15

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- (X) C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

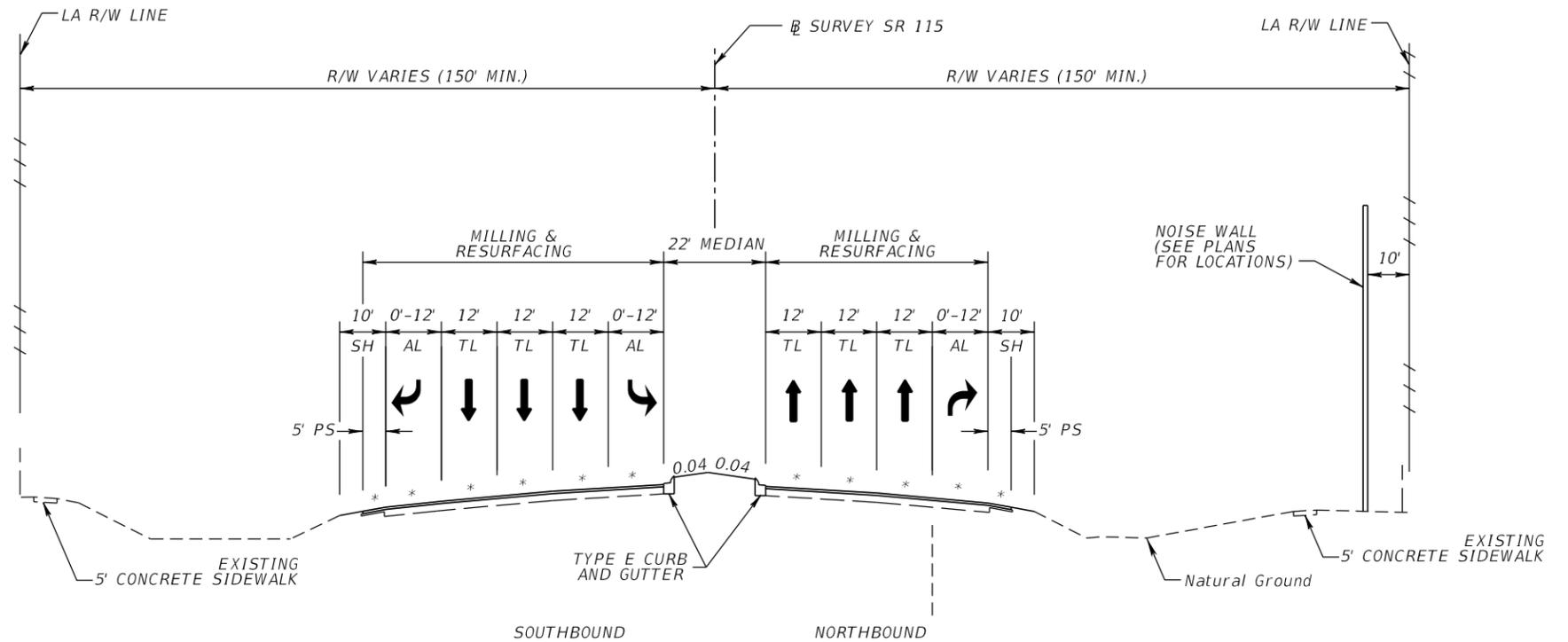
- () 1 - FREEWAY
- (X) 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

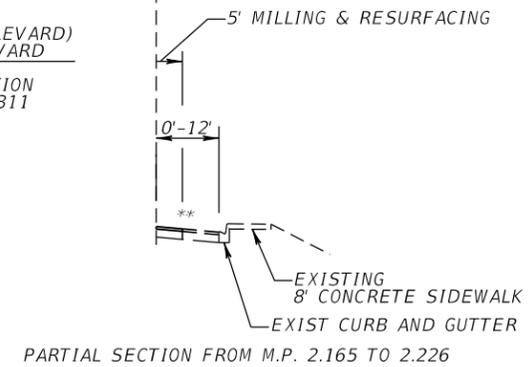
- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 15



SR 115 (SOUTHSIDE BOULEVARD)
AT BELLE RIVE BOULEVARD
NORTH OF INTERSECTION
M.P. 2.165 TO M.P. 2.311



LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANES
- SH: SHOULDER
- PS: PAVED SHOULDER
- M & R: MILLING AND RESURFACING

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 45 MPH

TRAFFIC DATA
NOT AVAILBLE
AT THIS TIME

NOT TO SCALE

*MATCH EXISTING CROSS SLOPE
**BULB OUT, PREVIOUS BUS STOP LOCATION,
INCLUDES 0'-7' OF CONCRETE PAVEMENT

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	16

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) 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
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

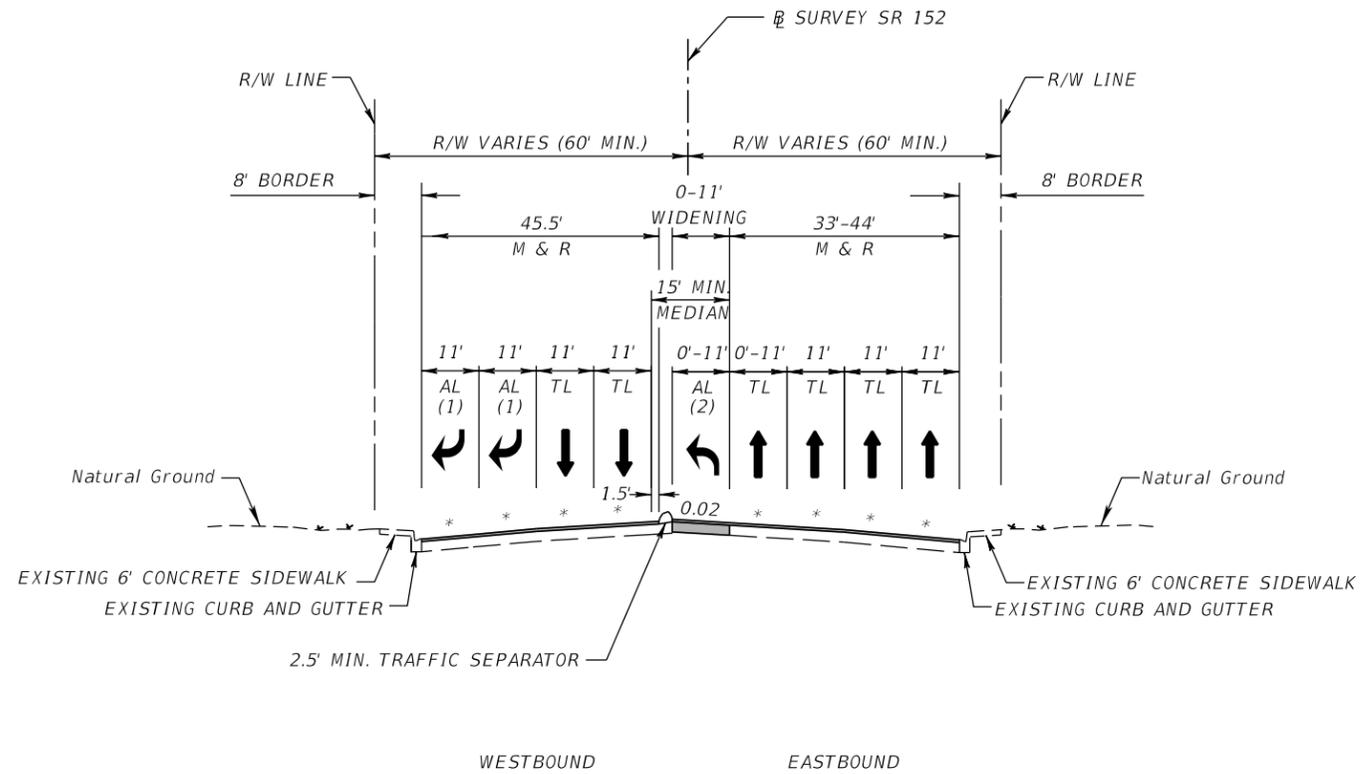
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

8' MINIMUM BORDER WIDTH FOR EXISTING FACILITY TO BE MAINTAINED, NO DESIGN VARIATION REQUIRED.

TYPICAL SECTION No. 16



LEGEND:
 TL: TRAVEL LANE
 AL: AUXILIARY LANE
 M&R: MILLING AND RESURFACING

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 48,000
 ESTIMATED OPENING YEAR = 2025 AADT = 49,700
 ESTIMATED DESIGN YEAR = 2045 AADT = 55,300
 K = 8.5% D = 56% T = 2% (24 HOUR)
 DESIGN HOUR T = 1%
 DESIGN SPEED = 30 MPH

SR 152 (BAYMEADOWS ROAD)
 BAYMEADOWS WAY TO PROMINENCE PARKWAY
 M.P. 2.469 TO M.P. 2.577

*MATCH EXISTING CROSS SLOPE

LANE NOTES
 (1) SR 152 (BAYMEADOWS ROAD) WESTBOUND TO BAYMEADOWS WAY
 (2) SR 152 (BAYMEADOWS ROAD) EASTBOUND TO BUSINESSES (SHOWN)
 SR 152 (BAYMEADOWS ROAD) WESTBOUND TO BAYMEADOWS WAY (NOT SHOWN)

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	17

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

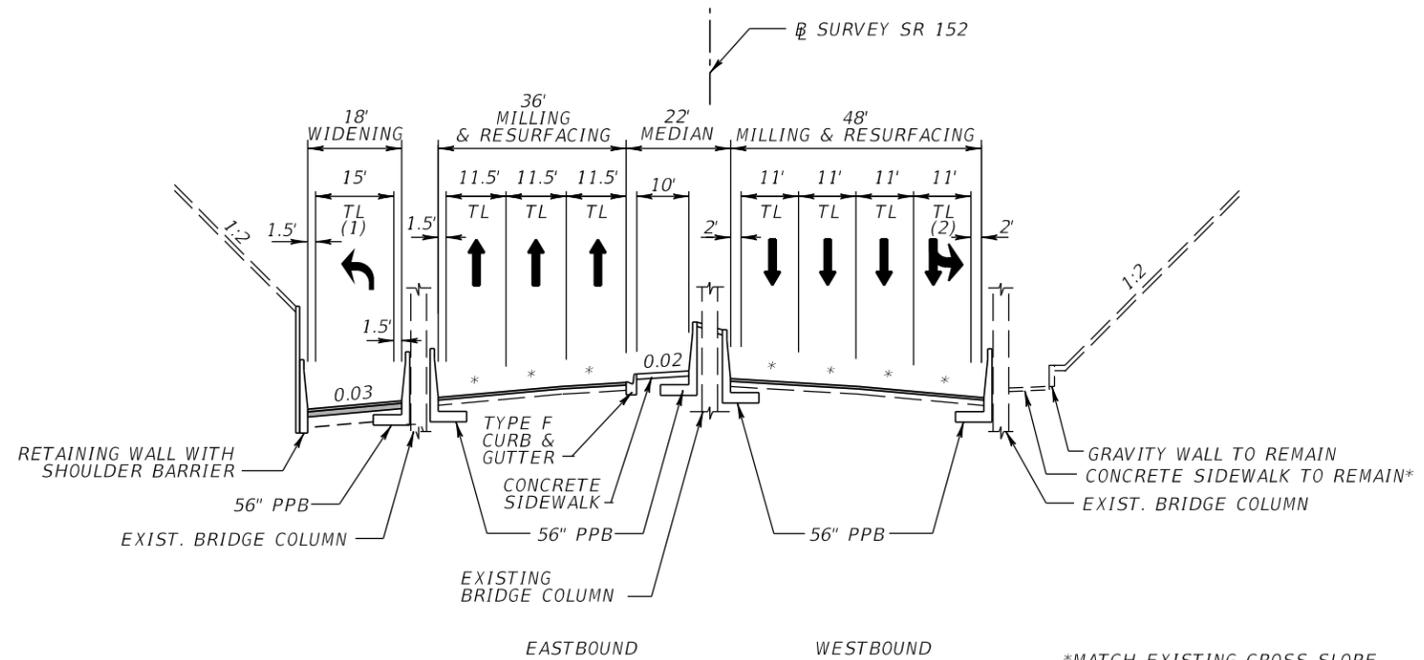
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 17



LEGEND:
 TL: TRAVEL LANE
 PPB: PIER PROTECTION BARRIER

EASTBOUND WESTBOUND
 SR 152 (BAYMEADOWS ROAD)
 AT SR 9 (I-95) OVERPASS
 DIVERGING DIAMOND INTERCHANGE
 (PROMINENCE PARKWAY TO WESTERN WAY)
 M.P. 2.577 TO M.P. 3.011

*MATCH EXISTING CROSS SLOPE

LANE NOTES
 (1) SR 152 (BAYMEADOWS ROAD) EASTBOUND TO SR 9 (I-95) NORTHBOUND
 (2) OPTION LANE: SR 152 (BAYMEADOWS ROAD) WESTBOUND OR TO SR 9 (I-95) SOUTHBOUND

THROUGH DIVERGING DIAMOND INTERCHANGE CROSS OVER, ALL LANES ARE 15' WIDE. LANES TRANSITION TO 11' AND 11.5' TO PASS UNDER THE I-95 OVERPASS.

* SIDEWALK APPROACH WILL BE REMOVED, SIDEWALK AND GRAVITY WALL TO REMAIN WITHIN LIMITS OF OVERPASS.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 48,000
 ESTIMATED OPENING YEAR = 2025 AADT = 49,700
 ESTIMATED DESIGN YEAR = 2045 AADT = 55,300
 K = 8.5% D = 56% T = 2% (24 HOUR)
 DESIGN HOUR T = 1%
 DESIGN SPEED = 30 MPH

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	18

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

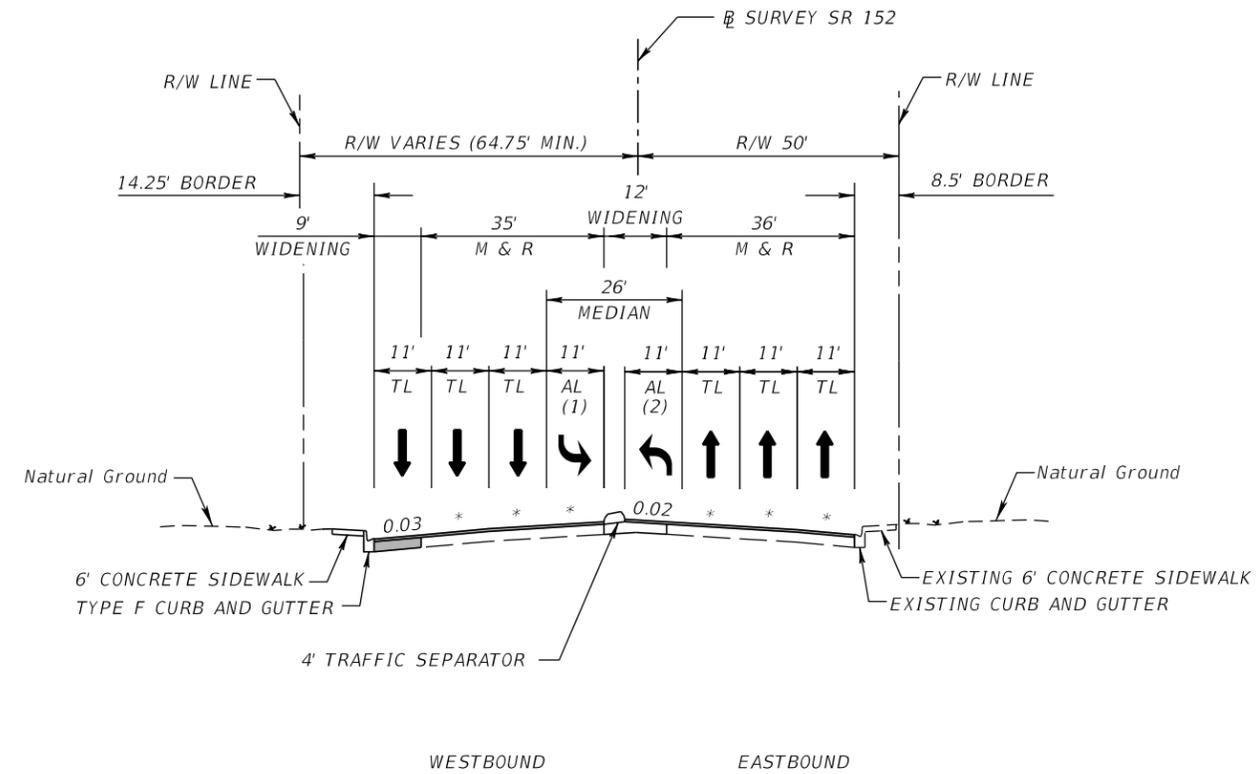
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 18



LEGEND:
 TL: TRAVEL LANE
 AL: AUXILIARY LANE
 M&R: MILLING AND RESURFACING

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 48,500
 ESTIMATED OPENING YEAR = 2025 AADT = 50,300
 ESTIMATED DESIGN YEAR = 2045 AADT = 56,300
 K = 8.5% D = 56% T = 2% (24 HOUR)
 DESIGN HOUR T = 1%
 DESIGN SPEED = 45 MPH

NOT TO SCALE

*MATCH EXISTING CROSS SLOPE

LANE NOTES
 (1) SR 152 (BAYMEADOWS ROAD) WESTBOUND TO WESTERN WAY.
 (2) SR 152 (BAYMEADOWS ROAD) EASTBOUND TO BAYMEADOWS CIRCLE WEST.

FINANCIAL PROJECT ID	SHEET NO.
435577-1-22-01	19

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) 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
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

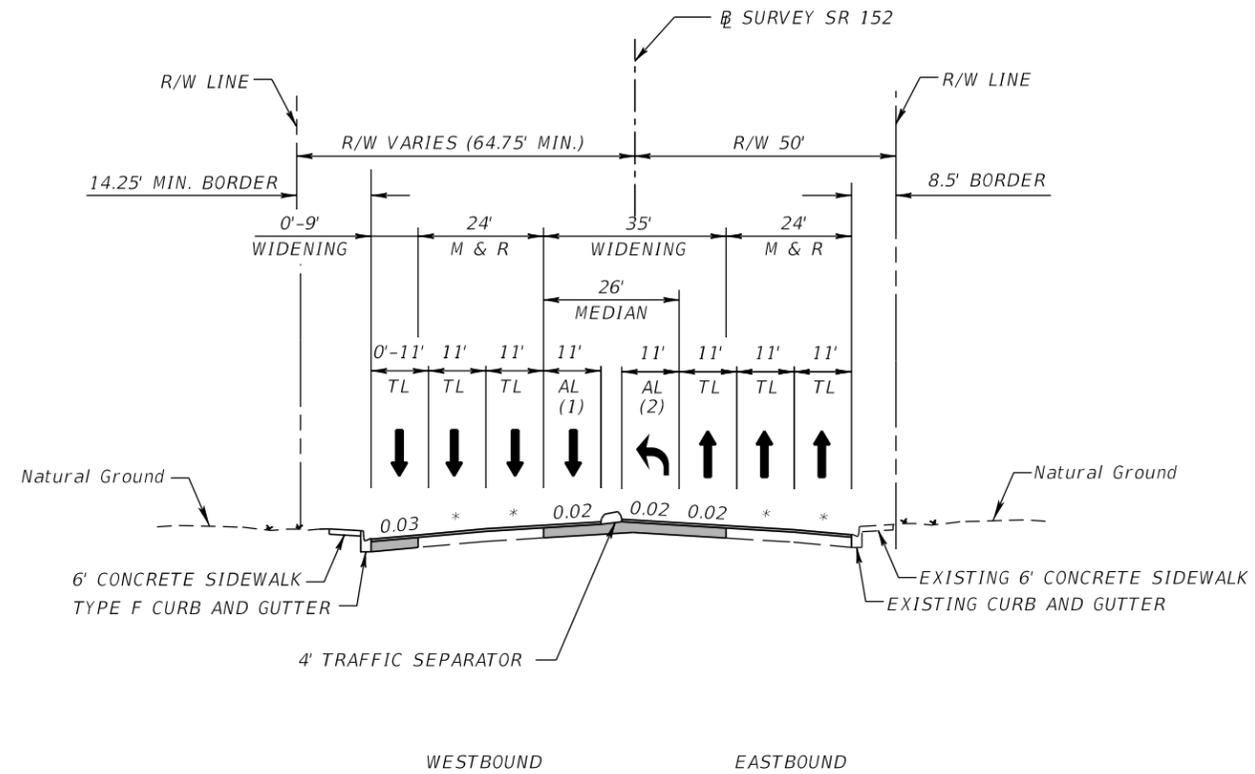
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

8' MINIMUM BORDER WIDTH FOR EXISTING FACILITY TO BE MAINTAINED, NO DESIGN VARIATION REQUIRED.

TYPICAL SECTION No. 19



SR 152 (BAYMEADOWS ROAD)
BAYMEADOWS CIRCLE WEST TO
BAYMEADOWS CIRCLE EAST
M.P. 3.068 TO M.P. 3.189

*MATCH EXISTING CROSS SLOPE

LANE NOTES

- (1) SR 152 (BAYMEADOWS ROAD) WESTBOUND EXTENDED LEFT TURN TO WESTERN WAY.
- (2) SR 152 (BAYMEADOWS ROAD) EASTBOUND LEFT TURN TO BAYMEADOWS CIRCLE EAST OR U-TURN.

LEGEND:

- TL: TRAVEL LANE
- AL: AUXILIARY LANE
- M&R: MILLING AND RESURFACING

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 48,500
ESTIMATED OPENING YEAR = 2025 AADT = 50,300
ESTIMATED DESIGN YEAR = 2045 AADT = 56,300
K = 8.5% D = 56% T = 2% (24 HOUR)
DESIGN HOUR T = 1%
DESIGN SPEED = 45 MPH

NOT TO SCALE

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL (X) C3C : SUBURBAN COMM.
- () C2 : RURAL () C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) 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
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

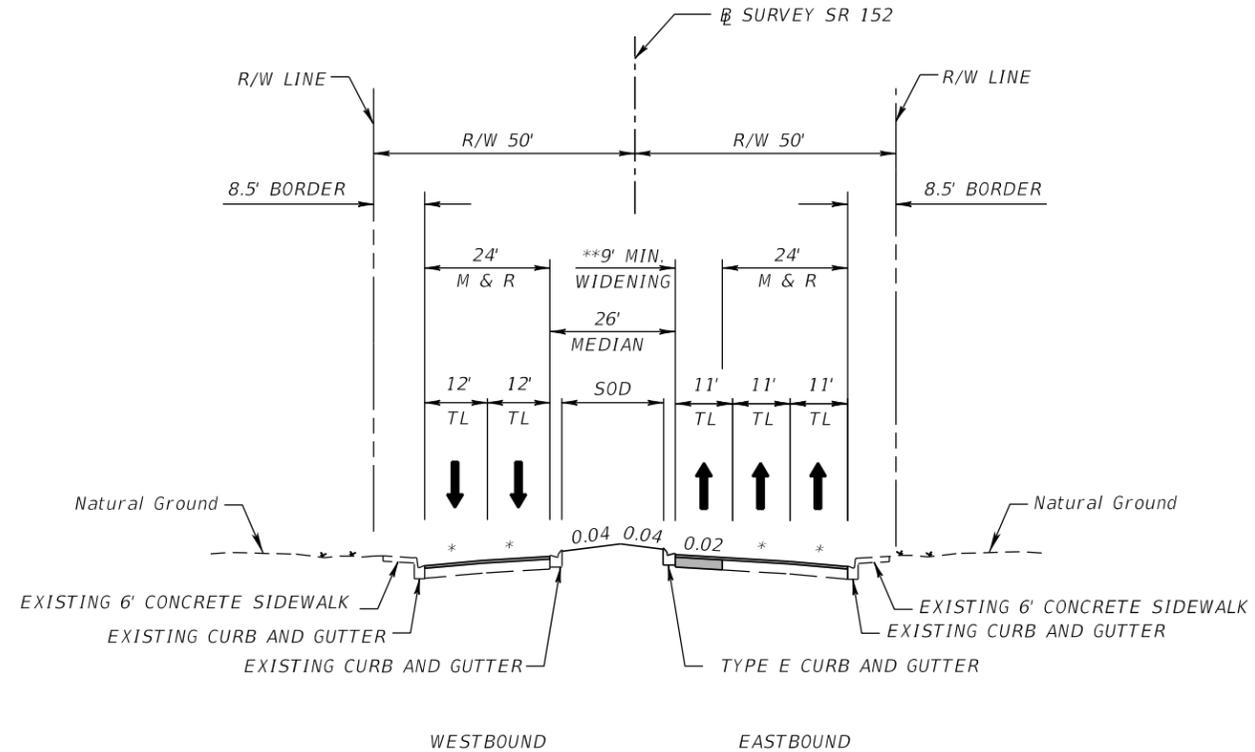
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

8' MINIMUM BORDER WIDTH FOR EXISTING FACILITY TO BE MAINTAINED, NO DESIGN VARIATION REQUIRED.

TYPICAL SECTION No. 20



LEGEND:
 TL: TRAVEL LANE
 M&R: MILLING AND RESURFACING

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 48,500
 ESTIMATED OPENING YEAR = 2025 AADT = 50,300
 ESTIMATED DESIGN YEAR = 2045 AADT = 56,300
 K = 8.5% D = 56% T = 2% (24 HOUR)
 DESIGN HOUR T = 1%
 DESIGN SPEED = 45 MPH

NOT TO SCALE

*MATCH EXISTING CROSS SLOPE
 ** MEDIAN LEFT TURN LANES NOT SHOWN

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