Design Variation for Lane Width

SR 35 Resurfacing in Hardee County
BEGIN MP 11.160 – END MP 11.753
BEGIN MP 0.000 – END MP 3.445 (NB)
BEGIN MP 0.017-END MP 3.539 (SB)

Financial Project ID: 446205-1-52-01

Hardee County (06010)

Prepared For:

Florida Department of Transportation
District One
801 N. Broadway Ave.
Bartow, FL 33830

Recommended by:

This item has been digitally signed and sealed by Cody Bayer, P.E. on the date adjacent to the seal.

Signature must be verified on any electronic copies.

Cody Bayer
2025.07.07 20:29:26-04'00'

CODY BAYER
LICENSE
No 90812
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DRMP, Inc.
941 Lake Baldwin Lane
Orlando, FL 32814
Cody Bayer, State of Florida P.E. No. 90812

Table of Contents

Sections:

Tables:

Appendices:

1. PROJECT DESCRIPTION:

The intent of this project is to rehabilitate the existing asphalt pavement by milling and resurfacing SR 35 from N. of SR 64 (MP 11.160 NB / MP 11.179 SB) to S. of Bell St. (MP 3.445 NB / MP 0.017 SB). The typical section diverges to one-way pairs beginning north of the RV Park Entrance (MP 11.753). The MP limits for the NB one-way pair is MP 0.000 (RV Park Entrance) to MP 3.445 (S. of Bell St.). The MP limits for the SB one-way pair is MP 0.017 (S. of Bell St.) to MP 3.539 (RV Park Entrance). Additionally, the project includes concrete sidewalk construction to fill in gaps. This project is in Hardee County. See Appendix 1 for the Project Location Map and Appendix 2 for the Typical Section Package.

SR 35 is classified as a principal arterial and is a Strategic Intermodal System (SIS) facility. The typical section and project controls vary within the project limits and are shown below.

MP 11.160 to MP 11.753 (NB) & MP 11.179 to MP 11.753 (SB):

- 4-lane divided curb & gutter (type F on both inside and outside) typical section (2 lanes in each direction)
- 11-foot travel lanes
- 4-foot outside paved shoulder
- 8-foot existing sidewalks on outside
- C3C suburban commercial context classification
- 45 mph design speed
- 55 mph posted speed
- 55 mph target speed

MP 0.000 to MP 0.364 (NB One-Way Pair):

- 2-lane curb & gutter (type F on both inside and outside) typical section
- 12-foot travel lanes
- 4-foot outside paved shoulder
- 8-foot existing sidewalk on outside
- C3C suburban commercial context classification
- 55 mph design speed
- 55 mph posted speed
- 55 mph target speed

MP 0.364 to MP 1.233 (NB One-Way Pair):

- 3-lane flush shoulder typical section
- 12-foot travel lanes
- 12-foot outside shoulder (5-foot paved)
- 10-foot inside shoulder (4-foot paved)
- 8-foot proposed sidewalk on outside
- C3C suburban commercial context classification
- 55 mph design speed
- 55 mph posted speed
- 55 mph target speed

MP 1.233 to MP 3.300 (NB One-Way Pair):

- 3-lane curb & gutter (type F on both inside and outside) typical section
- 12-foot inside, 11-foot middle and outside travel lanes
- 7-foot outside paved shoulder
- 5-foot existing sidewalk on inside and outside
- C3C suburban commercial context classification (MP 1.233 to MP 1.986)
- C2T rural town context classification (MP 1.986 to MP 3.300)
- 45 mph design speed (MP 1.233 to MP 2.610 & MP 2.970 to MP 3.300)
- 40 mph design speed (MP 2.610 to MP 2.970)
- 45 mph posted speed (MP 1.233 to MP 2.610 & MP 3.027 to MP 3.300)
- 35 mph posted speed (MP 2.610 to MP 3.027)
- 45 mph target speed (MP 1.233 to MP 2.610 & MP 3.027 to MP 3.300)
- 40 mph target speed (MP 2.610 to MP 3.027)

MP 3.300 to MP 3.445 (NB One-Way Pair):

- 2-lane curb & gutter (type F on both inside and outside) typical section
- 12-foot inside and 11-foot outside travel lanes
- 6-foot outside paved shoulder
- 5-foot existing sidewalk on outside
- C2T rural town context classification
- 45 mph design speed
- 45 mph posted speed
- 45 mph target speed

MP 0.017 to MP 2.170 (SB One-Way Pair):

- 3-lane curb & gutter (type F on both inside and outside) typical section
- 12-foot inside, 11-foot middle and outside travel lanes
- 7-foot outside paved shoulder
- 4-foot inside paved shoulder (MP 0.010 to MP 1.450)
- 3-foot inside paved shoulder (MP 1.450 to MP 2.170)
- 5-foot existing sidewalk on inside and outside
- C2T rural town context classification (MP 0.010 to MP 1.450)
- C3C suburban commercial context classification (MP 1.450 to MP 2.170)
- 45 mph design speed
- 45 mph posted speed (MP 0.010 to MP 0.452 & MP 0.903 to MP 2.170)
- 35 mph posted speed (MP 0.452 to MP 0.903)
- 45 mph target speed (MP 0.010 to MP 0.452 & MP 0.903 to MP 2.170)
- 35 mph target speed (MP 0.452 to MP 0.903)

MP 2.170 to MP 3.310 (SB One-Way Pair):

- 3-lane flush shoulder typical section
- 12-foot travel lanes
- 12-foot outside shoulder (5-foot paved)
- 10-foot inside shoulder (4-foot paved)
- 8-foot proposed sidewalk on outside
- C3C suburban commercial context classification
- 55 mph design speed
- 55 mph posted speed

- 55 mph target speed

MP 3.310 to MP 3.539 (SB One-Way Pair):

- 2-lane curb & gutter (type F on both inside and outside) typical section
- 12-foot travel lanes
- 4-foot outside paved shoulder
- 8-foot existing sidewalk on outside
- C3C suburban commercial context classification
- 55 mph design speed
- 55 mph posted speed
- 55 mph target speed

The limits of this design variation are from MP 11.160 (1091+38.92) NB / MP 11.179 (510+75.62) SB to MP 11.753 (1122+70.00 NB / 541+07.43 SB).

There are no associated existing or future limitations due to legal or public commitments known for this project.

2. PROJECT SCHEDULE AND LIFESPAN:

Production Date: July 10, 2026
Letting Date: October 28, 2026

This design variation will be a permanent condition. At this time, no future work is planned or programmed within the variation limits that would address this condition.

3. DESCRIPTION OF THE DESIGN VARIATION:

Lane Widths were determined from topographical survey and the approved Typical Section Package. The lane widths were evaluated for compliance with A Policy on Geometric Design of Highways and Streets (AASHTO, 2018) and FDOT design criteria (FDM, 2025). See Table 3.1 for design criteria and deficiencies. During the analysis, crash history was reviewed to determine if any crashes could be attributed to noncompliant lane width. See Section 5a for the results of the crash analysis. The design speed is 45 mph and the posted / target speed limits are 55 mph within the limits of this design variation. Per FDM 201.5.3, when the Posted Speed is greater than the Design Speed, a Design Variation should be processed for the design element that does not meet the criteria for the higher Posted Speed. The existing lane width is 11 feet. The required travel lane width is 12 feet, set by the FDM (Table 210.2.1) for a CSC Suburban Commercial Context Classification with a design speed of 55 mph. Per AASHTO design criteria (pg. 7-39), the required travel lane width is 11 feet for a rural arterial and 10 feet for an urban arterial. The limits of noncompliant lane widths are shown in the following tables are based on the design survey.

Table 3.1 – Travel Lane Width Deficiencies

Direction of Travel	MP	Station Limits			Distance of Station Limits	Design Criteria Required Lane Width Posted Speed (55 MPH)	Existing Lane Width	Proposed Design Lane Width
		Station	to	Station	Feet	FDOT		
NB	11.160 to 11.753	1091+38.92		1122+70.00	3131	12	11	11
SB	11.179 to 11.753	510+75.62		541+07.43	3032	12	11	11

According to the FHWA Mitigation Strategies, speed is the primary concern when evaluating lane widths. Sideswipe (same direction) crashes, reduced free-flow speeds and large vehicles off-tracking into adjacent lanes are potential adverse impacts to safety operations for lane widths. The crash data was evaluated within the station limits shown in Table 3.1. It was verified that no crashes were attributable to lane width deficiencies. See Appendix 2 for the typical section package, Appendix 3 for the area of deficiency plan sheets, and Appendix 4 for the photos of the deficiency areas.

4. ALTERNATIVE DESIGNS CONSIDERED:

The first alternative considered, and the proposed design, is to allow the lane widths identified in Table 3.1 to remain in place. The main objective of the project is to extend the life of the existing asphalt pavement. The proposed design provides a balance between pavement improvements and vehicular traffic operation while maintaining the safety of the traveling public.

The second alternative considered is to address the noncompliant lane width by re-striping. The existing typical section consists of a 4-foot width from the EOTW to the outside lip of gutter. This 4-foot width could be reduced to 2-feet with re-striping to allow for 12-foot travel lanes. However, it is not preferred as the 4-foot width is already deficient (6.5-foot required). Additionally, there are designated bicycle lanes to the north and south, where the current 4-foot width to lip of gutter provides consistency. The proposed existing condition to remain (11-foot travel lanes) provides the optimal combination of lane and curb offset widths to optimize safety and operations by distributing the available cross-sectional width.

The third alternative considered is to address the noncompliant lane width by widening the travel lanes. Due to the variation design limits also being noncompliant for the offset from the EOTW to the lip of the gutter required for a 55 mph curbed roadway, the roadway would require widening 5 feet to the adjacent inside lane and widening 3.5 feet to the outside lane, as well as reconstruction of the median/outside curb and closed drainage system. Costs for the corrections are shown in Section 6 below and detailed in Appendix 7.

5. IMPACTS OF THE DESIGN VARIATION:

5a. Safety Performance: Historical crash data for the project area was obtained from Signal Four Analytics for a six-year period from 2019 to 2024. The data collected includes crash frequency, type, severity, lighting conditions (day versus night), and pavement surface conditions(wet versus dry). A total of 16 crashes over the six-year period were reported within the design variation limits. Potential adverse impacts to safety operations due to noncompliant lane widths include sideswipes and lane departure crashes. All crashes along the corridor that occurred within the limits of the noncompliant lane width were reviewed. This review revealed four crashes identified as sideswipes and three as lane departures. Based on the evaluation of the available crash data, lane width was determined not to be a contributing cause of the crashes. Three sideswipe crashes (ID 80806692, ID 246323275 and ID 80806895) were due to a driver failing to see another driver in the blindspot. Two sideswipe crashes (ID 26499554 and ID 24229514) were due to improper passing. One lane departure crash (ID 80806817) was due to hydroplaning. Another lane departure crash (ID 89612221) was caused by the driver losing control of the vehicle due to an obstruction striking the eye from the opened window. Therefore, no long- or short-term adverse impacts are anticipated on safety if the existing lane widths are maintained. A summary of the Crash Data reviewed is in Appendix 8.

5b. Operational Performance: Since the noncompliant lane width is an existing condition, no long—or short-term adverse impacts are anticipated on operations, Level of Service, capacity, or adjacent roadway sections for the areas identified in the Design Variation, which is expected to be in place through the project's design life. See Appendix 6 for a traffic data report, including design year AADT and 24-hour truck volume.

5c. Right-of-way: No impacts to right-of-way would be anticipated for maintaining or correcting the existing condition.

5d. Community: Since the noncompliant lane widths are an existing condition, no adverse community impacts are expected if the existing lane widths are maintained. However, if the improvements to correct the noncompliant lane width are implemented, the additional work will increase the cost and extend the construction duration of the project. This will ultimately result in additional disturbance to the users of the facility.

5e. Environment: Since noncompliant lane widths are an existing condition, no adverse environmental impacts are expected to maintain the existing condition.

5f. Usability by all modes of transportation: Since the noncompliant lane width is an existing condition, no adverse impacts to any modes of transportation are expected to maintain it.

6. COSTS:

Correction of the lane widths would require widening one foot to each travel lane, 5 feet to the median, and 3.5 feet to the outside to meet the offset from the EOTW to the gutter lip. This could be accomplished by widening, with an estimated cost of $3,015,708.83. See details of the cost estimate in Appendix 7.
A Benefit/Cost (B/C) analysis for the improvements to correct lane width would result in a B/C ratio of 0 (zero) since no crashes were attributed to the noncompliant lane width in the most recent 6-year crash history.

7. MITIGATION MEASURES:

As outlined in FDM Section 122.5.2.3, several applicable mitigation strategies have been considered:

- Improve the ability to recover if the driver leaves the lane with offset from EOTW to lip of gutter.
- Utilize the existing 4-foot paved shoulder and place pavement markings for a 12-foot lane width. This strategy may provide a lane width that meets the criteria; however, due to the speed limit, it does not improve the ability to recover if the driver leaves the lane due to the offset distance from the edge traveled way to the gutter lip of the curb.

To mitigate the noncompliant lane widths, the optimal combination of lane widths and offsets to lip of gutter is proposed to optimize safety and operations by distributing the available cross-sectional width is proposed.

8. SUMMARY AND CONCLUSIONS:

The project's main objective is to extend the life of the existing pavement through milling and resurfacing the existing travel lanes and shoulders. Where feasible, additional safety-related improvements will also be provided along the corridor. The proposed design provides a balance between pavement improvements and vehicular traffic operation while maintaining the safety of the traveling public.

Correcting the travel lane width to meet FDOT criteria would increase the construction cost and impact construction duration and schedule. Furthermore, the traveling public would be impacted by the extended construction duration. As there are no documented crashes with lane width as the contributing cause, no benefit may be gained from implementing the improvements. Therefore, the B/C ratio for correction of the lane
width was determined to be zero.

No quantifiable benefit regarding safety, operational performance, or Level of Service can be derived from implementing any of the improvements discussed in this report. Furthermore,

maintaining the current travel lane width will eliminate any negative impacts related to community considerations, budget, or schedule. Therefore, the approval of this Design Variation is requested for the travel lane width identified in Section 3 of this document to remain.

Appendix 1

Project Location Map

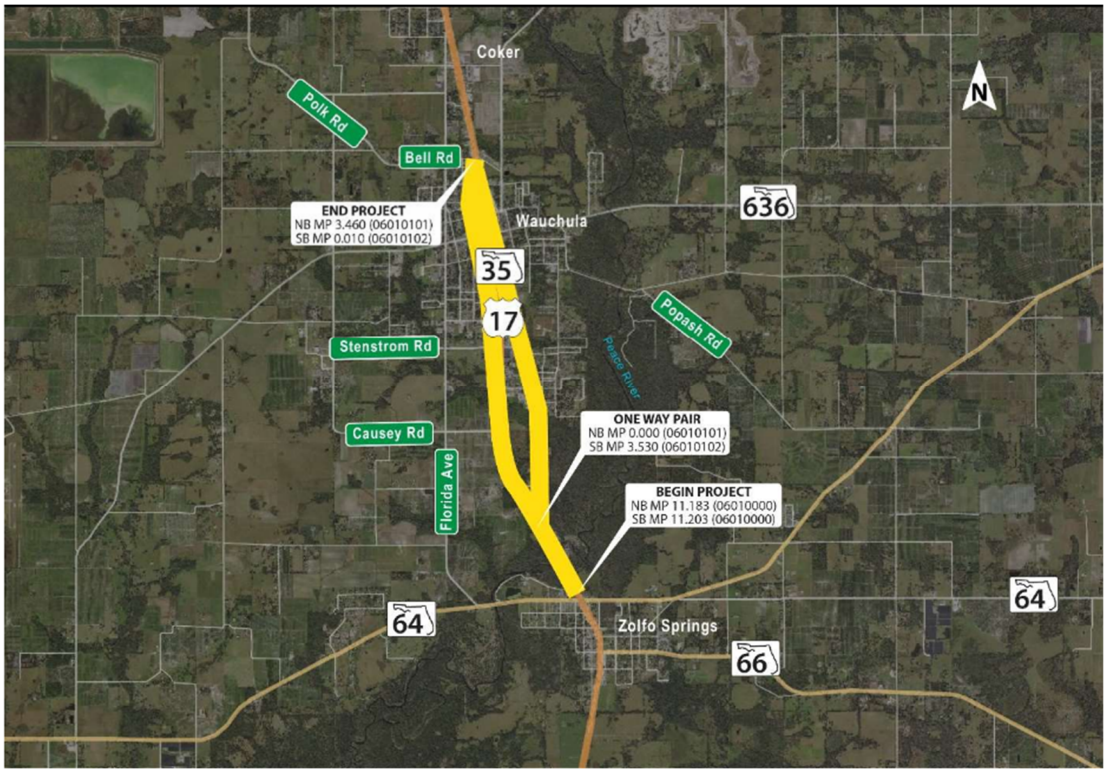
Project Location Map

Financial Project Id: 446205-1-52-01

Hardee County (06010)

State Road No. 35

From North of SR 64 to Bell Street



Appendix 2

Typical Section Package

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 446205-1-52-01

HARDEE COUNTY (06010101 / 06010102)

STATE ROAD NO. 35 (US 17)

RESURFACING OF SR 35 (US 17) FROM N OF SR 64 TO BELL STREET

FDOT DISTRICT DESIGN ENGINEER

Kevin Ingle
Digitally signed by Kevin Ingle
DN: C=US, E=kevin.ingle@dot.state.fl.us, O=FLORIDA DEPARTMENT OF TRANSPORTATION, CN=Kevin Ingle
Date: 2022.09.22 15:47:29-04'00'

CONCURRING WITH:
TYPICAL SECTION ELEMENTS
TARGET SPEED
DESIGN & POSTED SPEEDS

FDOT DISTRICT TRAFFIC OPERATIONS ENGINEER

Mark Mathes
Date: 2022.09.22 16:25:29 -04'00'

CONCURRING WITH:
TARGET SPEED
DESIGN & POSTED SPEEDS

FDOT DISTRICT INTERMODAL SYSTEMS DEVELOPMENT MANAGER

Nicole E Mills
CN = Nicole E Mills C = US
O = FLORIDA DEPARTMENT OF TRANSPORTATION
2022.09.22 13:09:02 -04'00'

CONCURRING WITH:
CONTEXT CLASSIFICATION
TARGET SPEED

FDOT DISTRICT STRUCTURES DESIGN ENGINEER

Andra G Diggs II
2022.09.08 10:37:55-04'00'

CONCURRING WITH:
TYPICAL SECTION ELEMENTS

FHWA TRANSPORTATION ENGINEER

CONCURRING WITH:
TYPICAL SECTION ELEMENTS

LOCAL TRANSPORTATION ENGINEER

CONCURRING WITH:
TYPICAL SECTION ELEMENTS

NOT USED

CONCURRING WITH:

NOT USED

CONCURRING WITH:

PROJECT LOCATION URL:	https://tinyurl.com/3rbdew4z
PROJECT DESCRIPTION:	RESURFACING
PROJECT LIMITS:	(06010000) BEGIN MP 11.183 NB / 11.203 SB - END MP 11.753 (06010101) BEGIN MP 0.000 - END MP 3.450 (06010102) BEGIN MP 0.010 - END MP 3.530
SECTION EQUATION	(06010000) MP 11.753 = (06010101) MP 0.000 = (06010102) MP 3.530 & (06010101) MP 0.000 = (06010102) MP 3.530 & (06010101) MP 3.450 = (06010102) MP 0.000
EXCEPTIONS:	NONE
BRIDGE LIMITS:	(06010101) (060057) MP 0.993 TO MP 1.017 (06010000) (060053) MP 11.429 TO MP 11.502 (060052) MP 11.426 TO MP 11.499
BRIDGE CULVERT LIMITS:	(060058) MP 2.271 TO MP 2.278
RAILROAD CROSSING:	NONE

APPROVED BY:

MELISSA M. SLATER
LICENSE
No 72156
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Melissa Slater
Melissa Slater
2022.09.19 09:53:25 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

FLORIDA DEPARTMENT OF TRANSPORTATION
801 N. BROADWAY AVE.
BARTOW, FL 33830-3809
CERTIFICATE OF AUTHORIZATION: NA
MELISSA M. SLATER, P.E. NO. 72156

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

TYPICAL SECTION PACKAGE

SHEET NO.
1

9/7/2022 7:56:30 AM

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
(X)	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

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

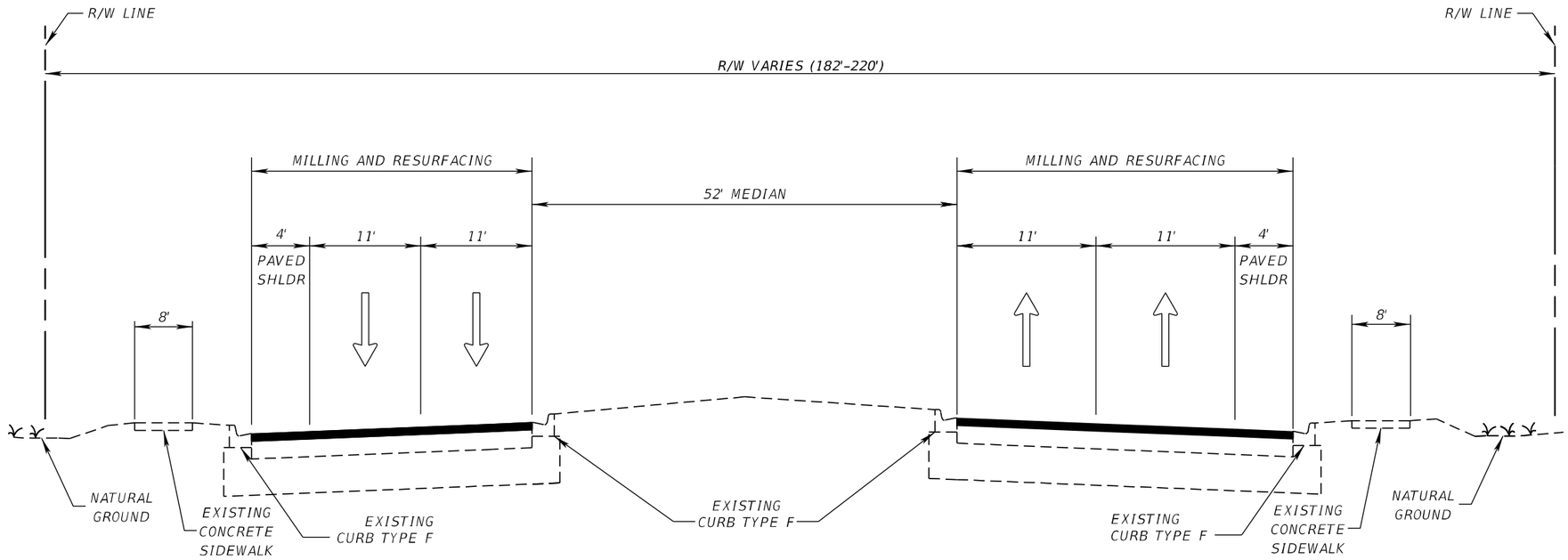
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SHOULDER WIDTH/OFFSET TO TYPE F CURB

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 01

Note: Per coordination with FDOT PM Scott McCall and the D1 Planning Studio, this context classification has been updated from C2 Rural to C3C Suburban Commercial.



SR 35 (US 17)
06010000
MP 11.183 NB / 11.203 SB TO MP 11.456 (BEGIN BRIDGE)
MP 11.531 (END BRIDGE) TO MP 11.753

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	2

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

ACCESS CLASSIFICATION

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

CRITERIA

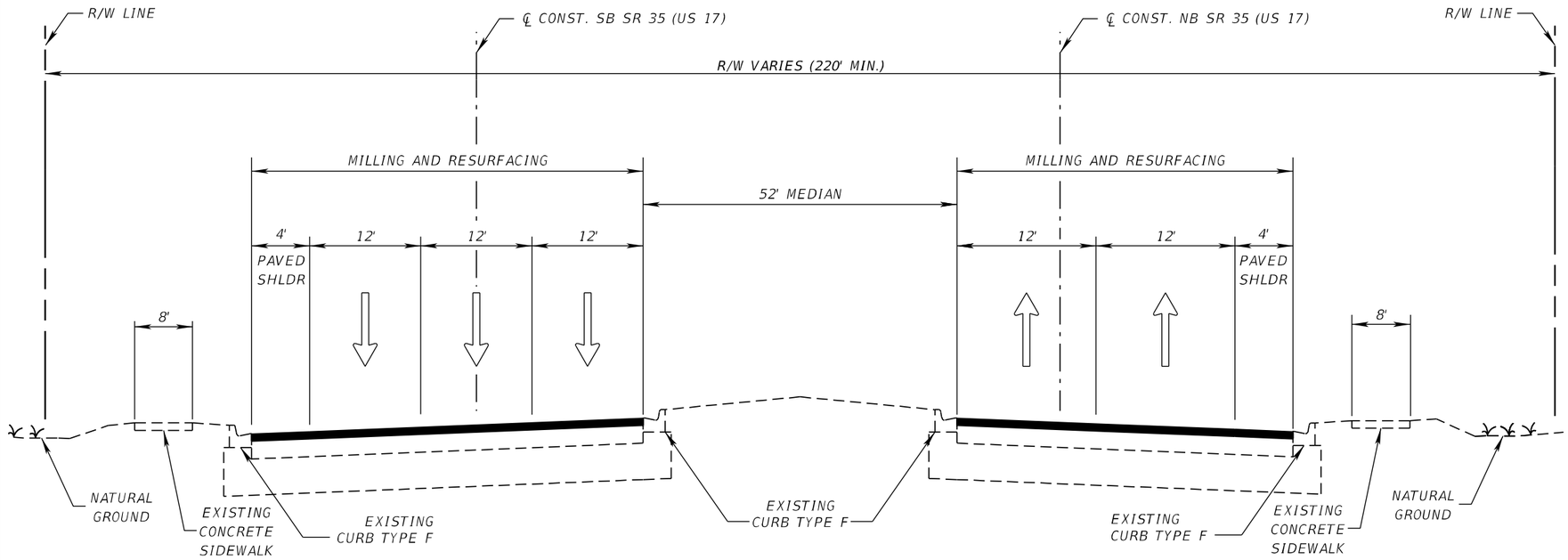
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SHOULDER WIDTH/OFFSET TO TYPE F CURB

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 02



SR 35 (US 17)
06010101: NB
MP 0.000 TO MP 0.361
06010102: SB
MP 3.310 TO MP 3.530

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	3

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

9/7/2022 7:56:31 AM

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

ACCESS CLASSIFICATION

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

CRITERIA

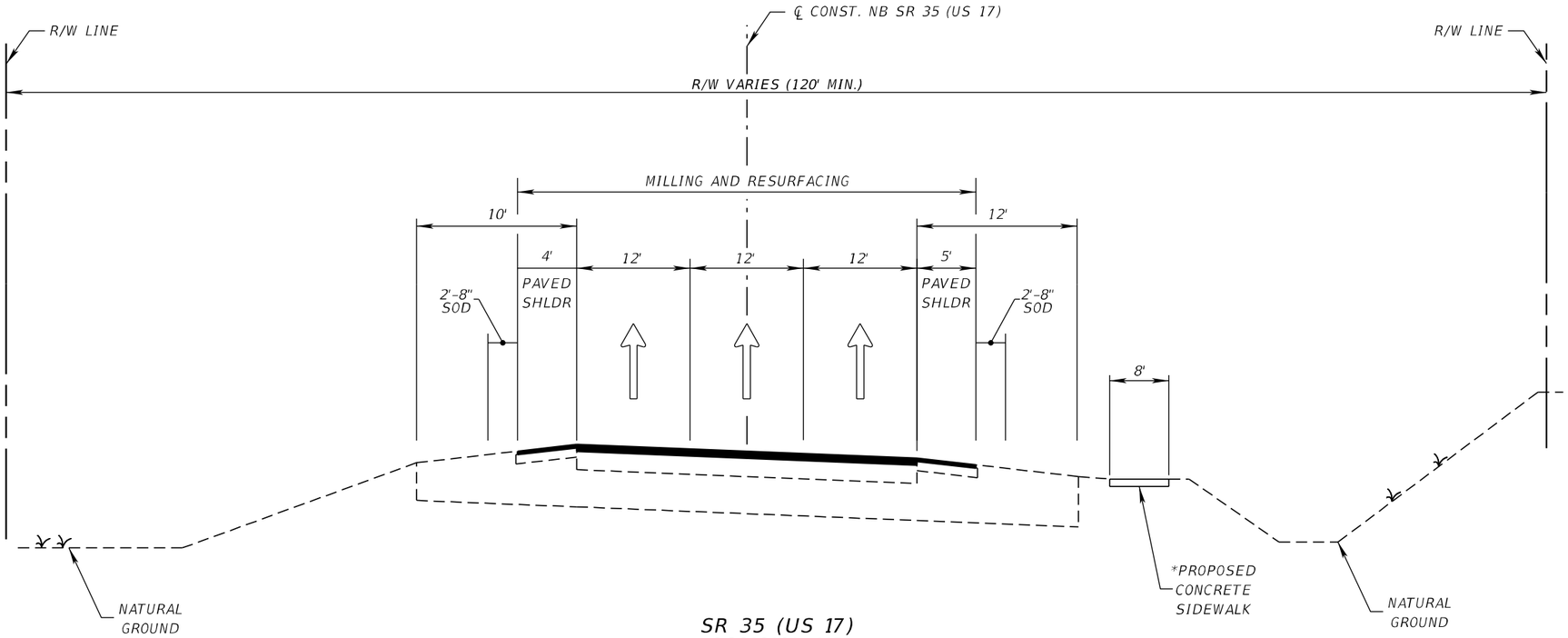
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
NONE

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 03



SR 35 (US 17)
06010101: NB
MP 0.361 TO MP 0.993 (BEGIN BRIDGE)
MP 1.017 (END BRIDGE) TO MP 1.233

*SIDEWALK WILL NOT BE CONSTRUCTED AT THIS TIME FOR THE BRIDGE OR THE GUARDRAIL BRIDGE APPROACH

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	4

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM. (MP 1.233 TO MP 1.986)
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
(X)	C2T : RURAL TOWN (MP 1.986 TO MP 3.300)	( )	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

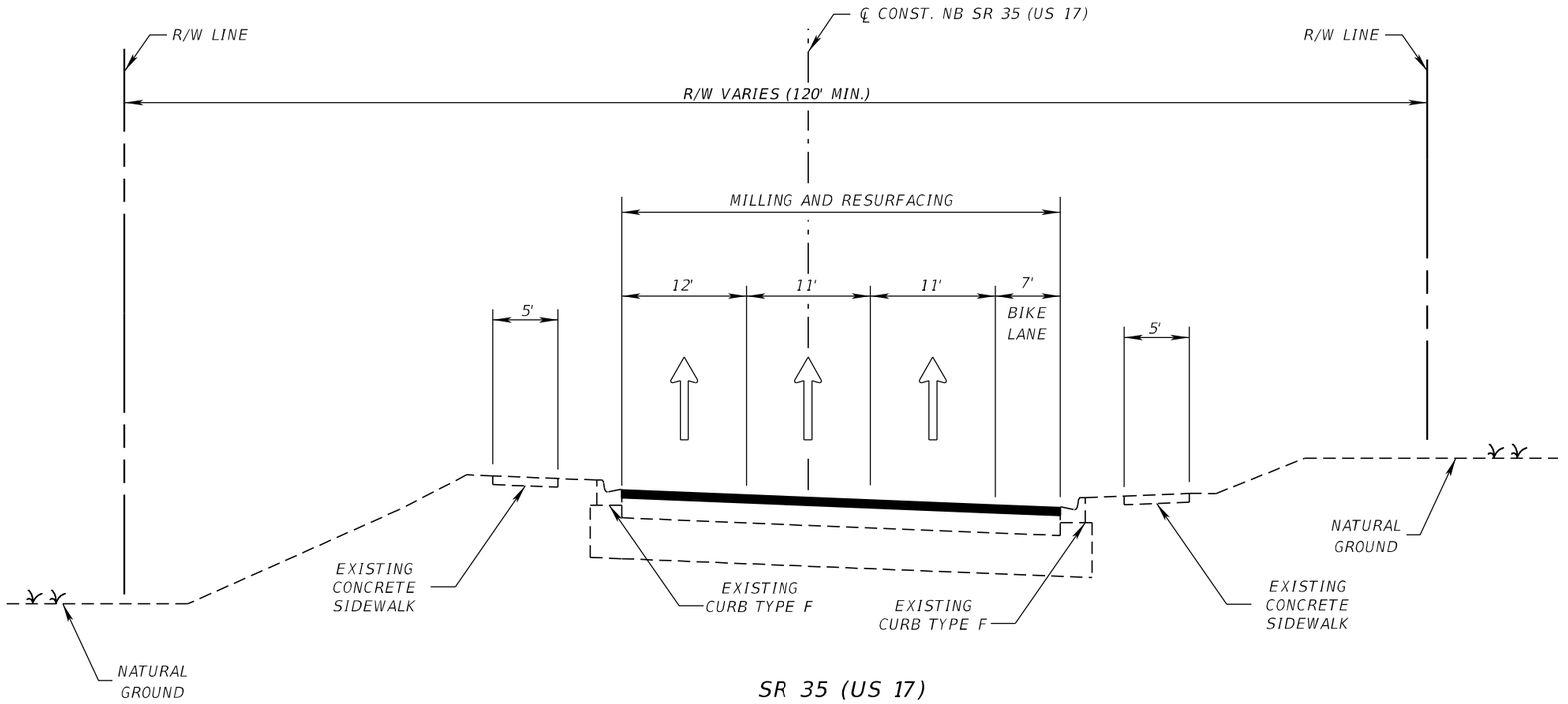
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SIS MINIMUM 40 MPH FOR C2T

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 04



SR 35 (US 17)
06010101: NB
MP 1.233 TO MP 2.610
MP 2.970 TO MP 3.300

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH (MP 1.233 TO MP 2.610)
35 MPH (MP 2.970 TO MP 3.027)
45 MPH (MP 3.027 TO MP 3.300)
TARGET SPEED = 45 MPH (MP 1.233 TO MP 2.610)
40 MPH (MP 2.970 TO MP 3.027)
45 MPH (MP 3.027 TO MP 3.300)

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	5

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
(X)	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

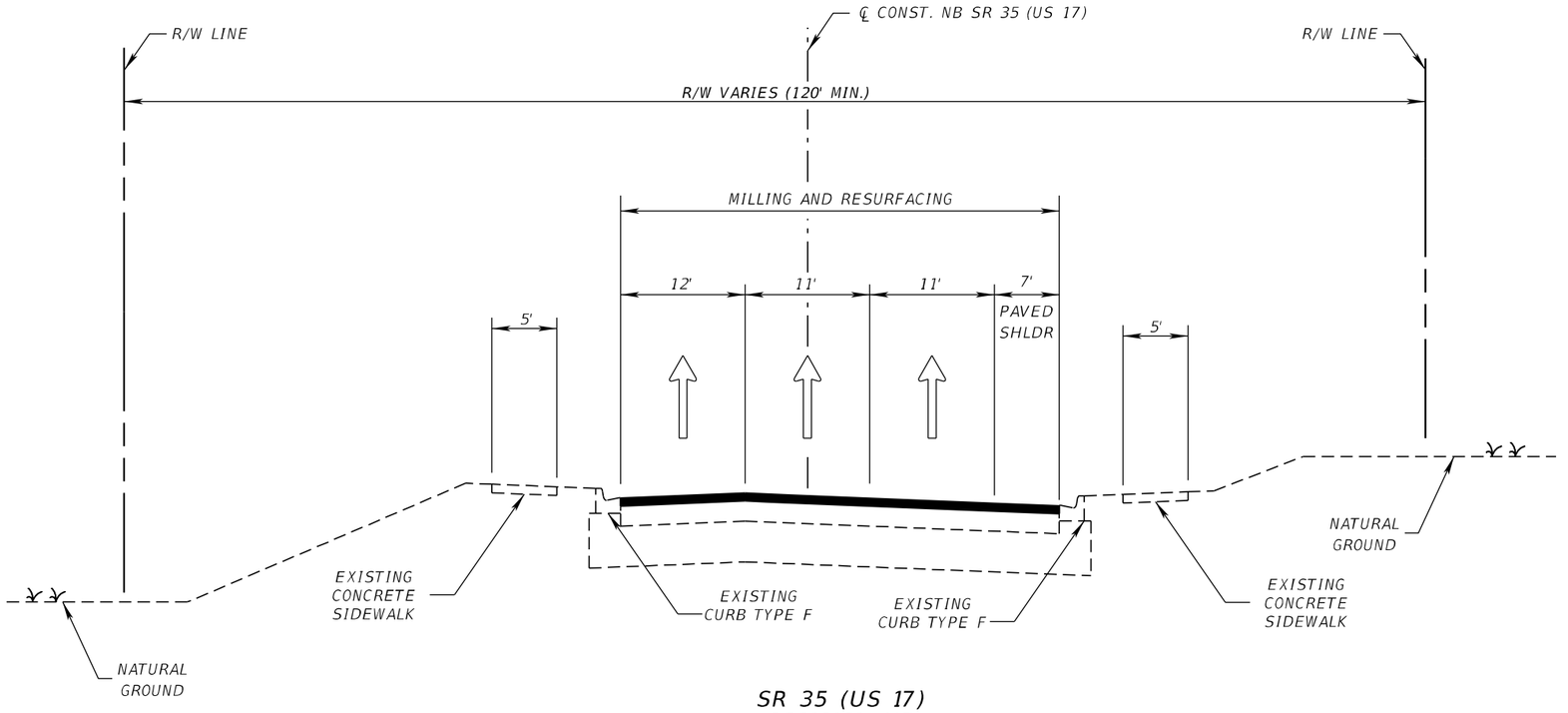
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SIS MINIMUM 40 MPH FOR C2T

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 05



SR 35 (US 17)
06010101: NB
MP 2.610 TO MP 2.970

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 40 MPH
POSTED SPEED = 35 MPH
TARGET SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	6

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
(X)	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

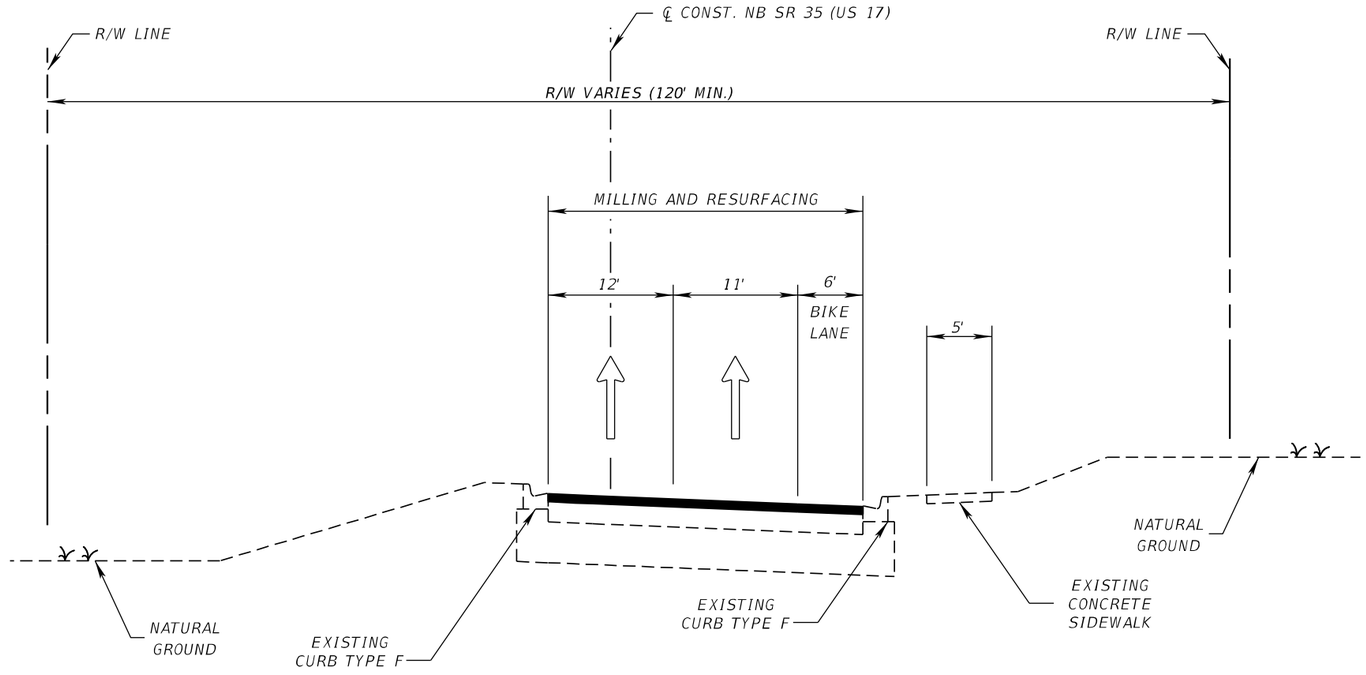
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SIS MINIMUM 40 MPH FOR C2T

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 06



SR 35 (US 17)
06010101: NB
MP 3.300 TO MP 3.450

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	7

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
(X)	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
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

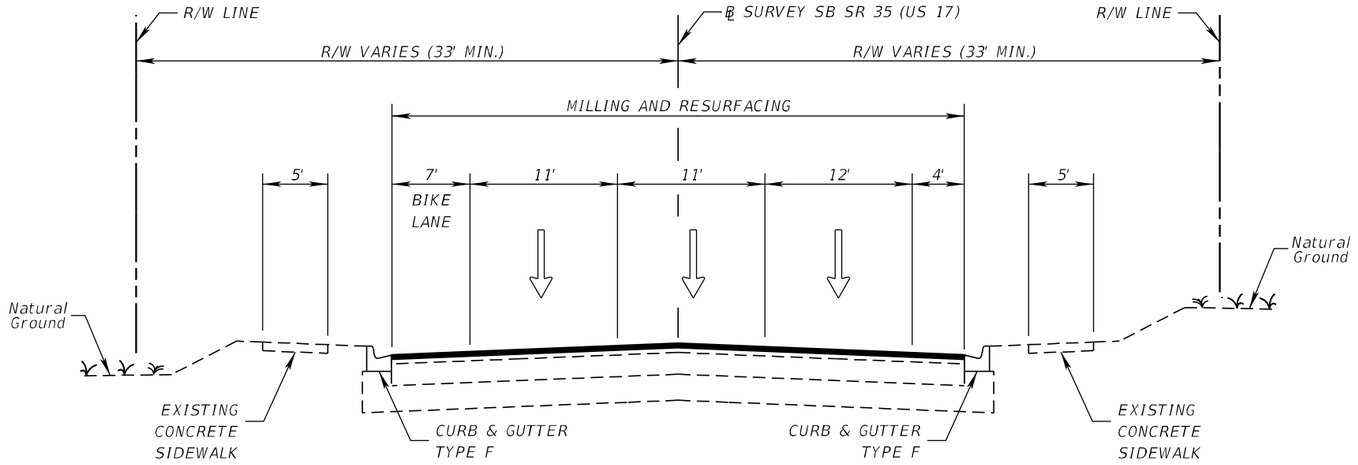
( )	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
SIS MINIMUM 40 MPH FOR C2T

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 07



SR 35 (US 17)
06010102: SB
MP 0.010 TO MP 1.450

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH (MP 0.010 TO MP 0.452)
35 MPH (MP 0.452 TO MP 0.903)
45 MPH (MP 0.903 TO MP 1.450)
TARGET SPEED = 45 MPH (MP 0.010 TO MP 0.452)
40 MPH (MP 0.452 TO MP 0.903)
45 MPH (MP 0.903 TO MP 1.450)

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	8

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

ACCESS CLASSIFICATION

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

CRITERIA

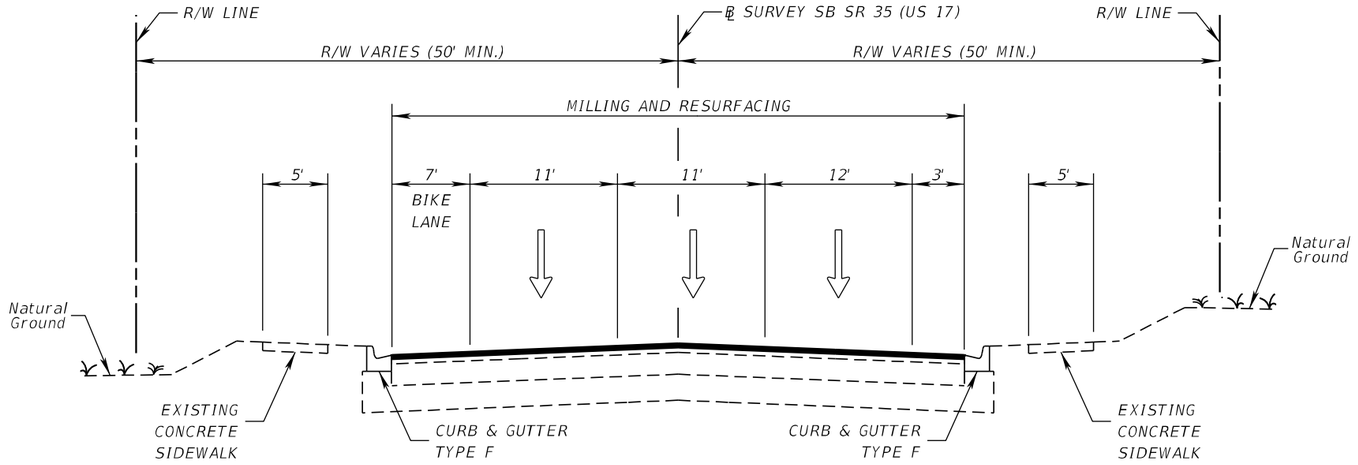
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
NONE

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 08



SR 35 (US 17)
06010102: SB
MP 1.450 TO MP 2.170

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	9

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

ACCESS CLASSIFICATION

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

CRITERIA

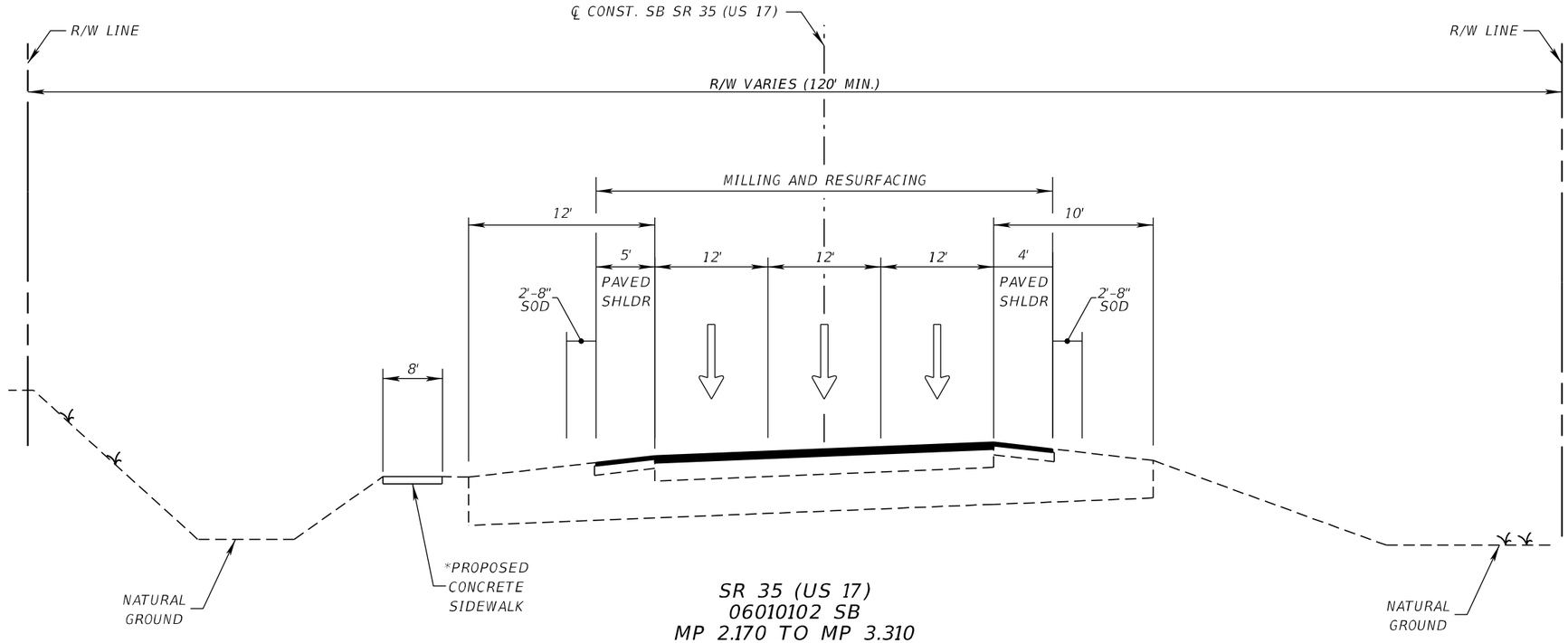
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
NONE

DESIGN EXCEPTIONS:
NONE

TYPICAL SECTION No. 09



SR 35 (US 17)
06010102 SB
MP 2.170 TO MP 3.310

BRIDGE CULVERT (060058)
MP 2.271 TO MP 2.278

*SIDEWALK WILL NOT BE CONSTRUCTED AT THIS TIME FOR THE BRIDGE OR THE GUARDRAIL BRIDGE APPROACH

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	10

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
(X)	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

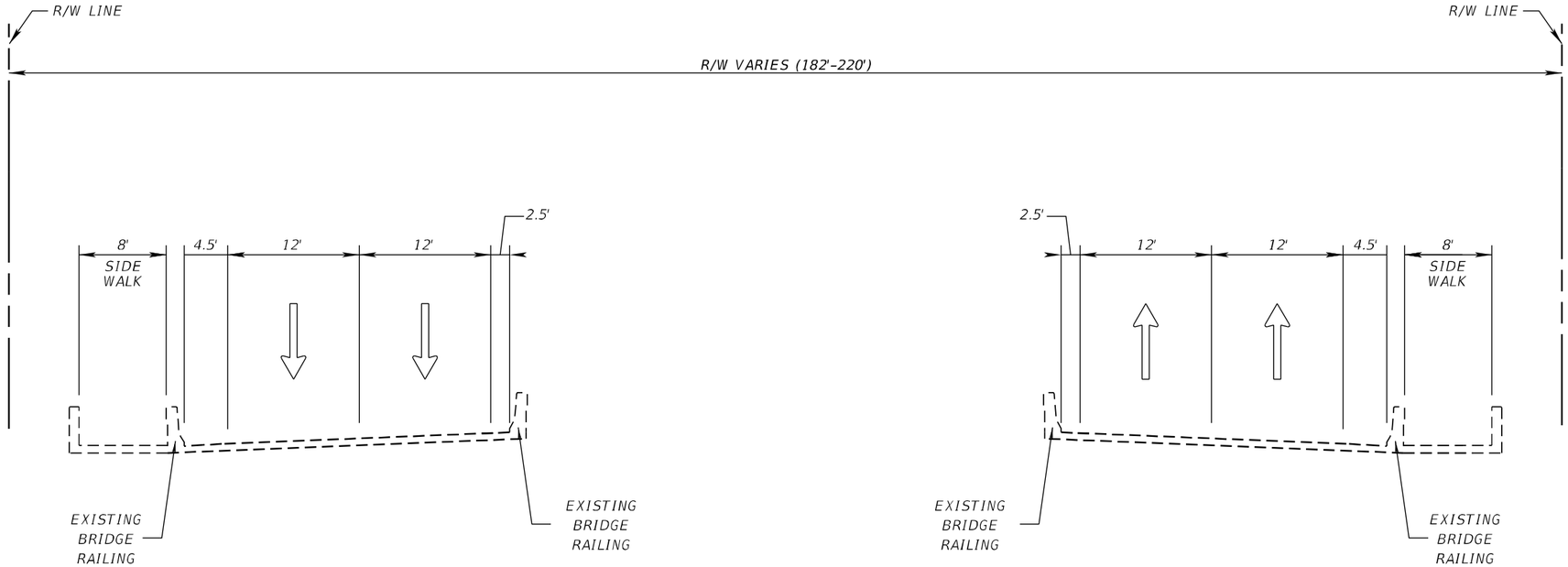
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
NONE

DESIGN EXCEPTIONS:
NONE

BRIDGE SECTION No. 01



BRIDGE SECTION
SR 35 (US 17) NB 06010000
BRIDGE NO. 060053
MP 11.429 SB TO MP 11.502 SB
NO. 060052
MP 11.426 NB TO MP 11.499 NB

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	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
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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

CRITERIA

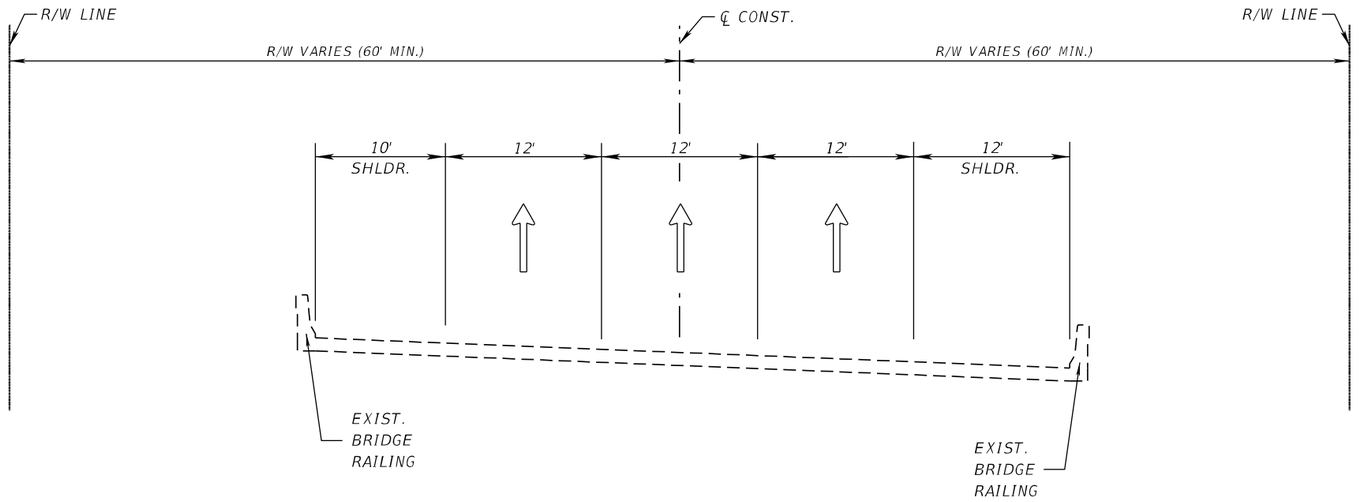
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATIONS:
NONE

DESIGN EXCEPTIONS:
NONE

BRIDGE SECTION No. 02



BRIDGE SECTION
SR 35 (US 17) NB 06010101
BRIDGE NO. 060057
MP 0.993 NB TO MP 1.017 NB

NOT TO SCALE

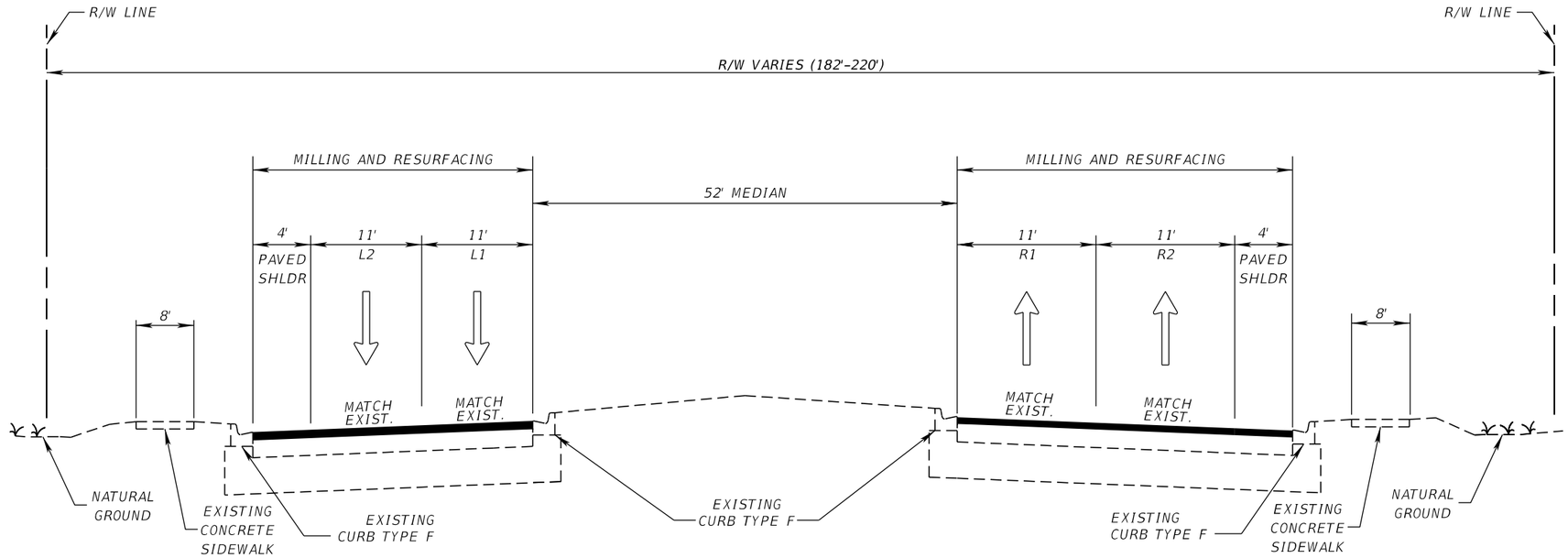
TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
446205-1-52-01	12

Appendix 3

Area of Deficiency Typical Section & Plan Sheets



TYPICAL SECTION NO. 1
SR 35
STA. 1091+38.92 TO STA. 1105+34.09 (NB)
STA. 510+75.62 TO STA. 523+97.87 (SB)
STA. 1109+17.71 TO STA. 1122+70.00 (NB)
STA. 527+82.51 TO STA. 541+07.43 (SB)

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 13000
ESTIMATED OPENING YEAR = 2024 AADT = 14400
ESTIMATED DESIGN YEAR = 2044 AADT = 19300
K = 9.0% D = 99.9% T = 12.2% (24 HOUR)
DESIGN HOUR T = 6.1%
DESIGN SPEED = 45 MPH
CONTEXT CLASSIFICATION = C3C

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

26

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

TYPICAL SECTIONS (1)

SHEET NO.

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

Begin limits for Design Variation
Travel Lanes 11 feet
Sta. 510+75.62 (SB) MP 11.203

Begin limits for Design Variation
Travel Lanes 11 feet
Sta. 1091+38.92 (NB) MP 11.183

45 mph Design Speed
55 mph Posted Speed
55 mph Target Speed

PIONEER PARK

MARATHON GAS

SR 64

R/W LINE

℄ SURVEY SR 35 SB

509 510 511 512 513 514

N28°05'06"W

SR 35 (US 17) SB

SAWCUT, MATCH EXIST.

℄ SURVEY SR 35 NB

1090 1091 1092 1093 1094 1095 1096

N27°11'56"W

SR 35 (US 17) NB

MATCHLINE STA. 1096+50.00

+18.70
34.79' RT.

+19.76
67.44' RT.

R/W LINE

R/W LINE

0 10 50
Feet

KEY MAP

LEGEND

PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

27

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

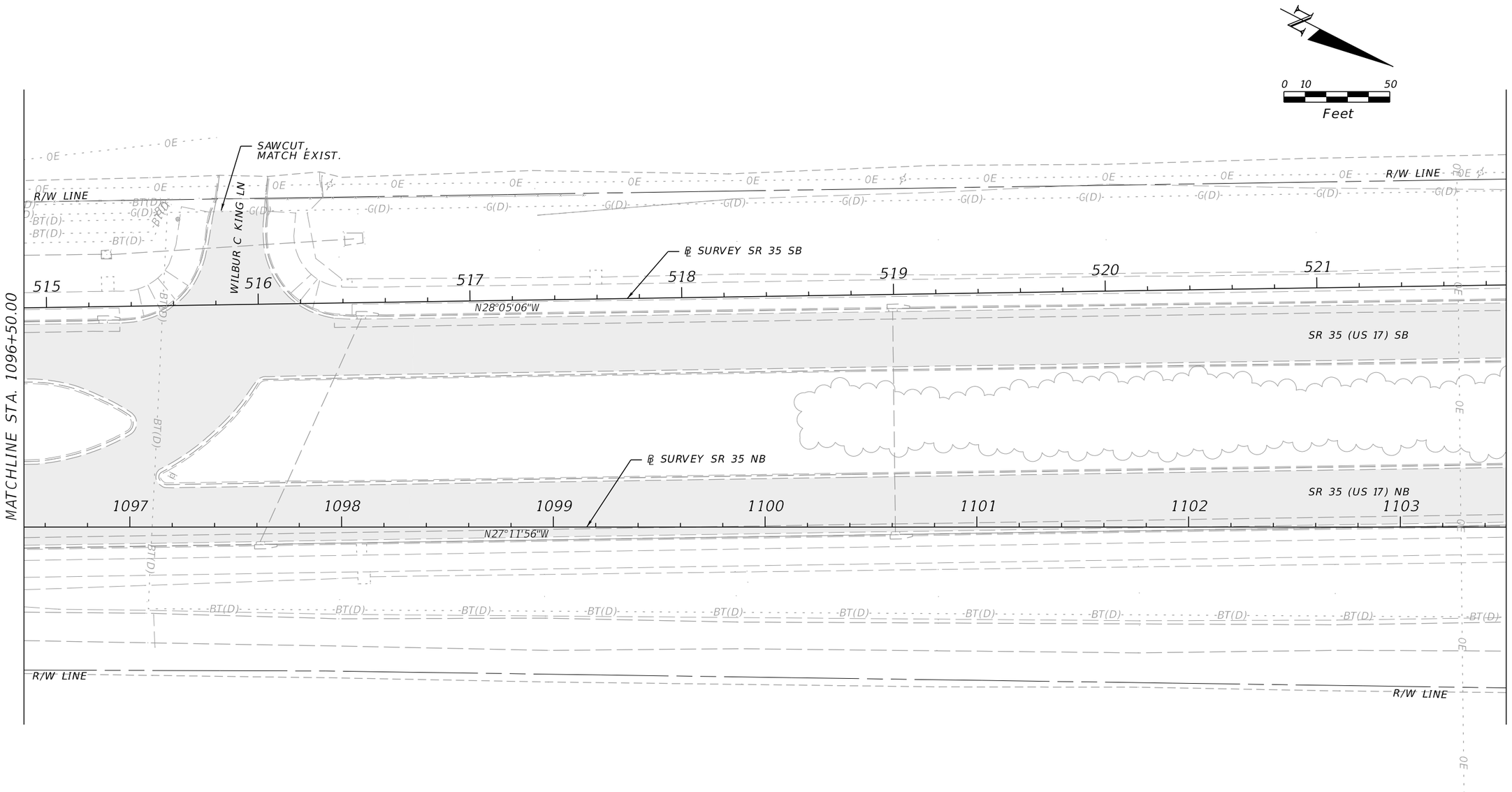
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

ROADWAY PLAN (1)

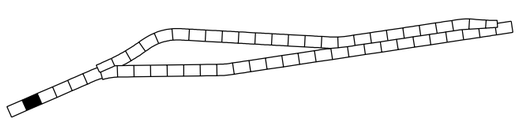
SHEET NO.

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

c:\pw_working\drmp01\d0103394\PLANRD01.dgn : SR 35 - PLAN 1 [SHEET]
Sarah.Rendell 1/21/2025 4:22:18 PM



KEY MAP



LEGEND

PAVEMENT MILLING & RESURFACING

DETECTABLE WARNING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

28

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

ROADWAY PLAN (2)

SHEET NO.

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

c:\pw_working\drmp01\d0103394\PLANRD01.dgn : SR 35 - PLAN 2 [SHEET]
Sarah.Rendell 1/21/2025 4:22:20 PM

Begin Bridge
Roadway Travel Lanes 11 feet
Sta. 523+97.87 (SB) MP 11.460

End Bridge
Roadway Travel Lanes 11 feet
Sta. 527+82.51 (SB) MP 11.531

PEACE RIVER

N

0 10 50
Feet

R/W LINE

℄ SURVEY SR 35 SB

522 523 524 525 526 527 528

N28°05'06"W

SR 35 (US 17) SB

BR. NO. 060053

SAWCUT, MATCH EXIST.

SAWCUT, MATCH EXIST.

MATCHLINE STA. 1103+50.00

MATCHLINE STA. 1110+50.00

SAWCUT, MATCH EXIST.

SR 35 (US 17) NB

BR. NO. 060052

℄ SURVEY SR 35 NB

1104 1105 1106 1107 1108 1109 1110

N27°11'56"W

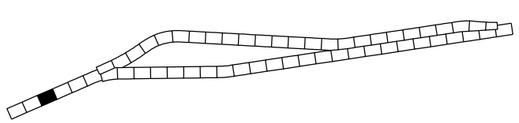
Begin Bridge
Roadway Travel Lanes 11 feet
Sta. 1105+34.09 (NB) MP 11.456

+88.88
59.90' RT.

+59.93
76.11' RT.

End Bridge
Roadway Travel Lanes 11 feet
Sta. 1109+17.71 (NB) MP 11.529

KEY MAP



LEGEND

PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

29

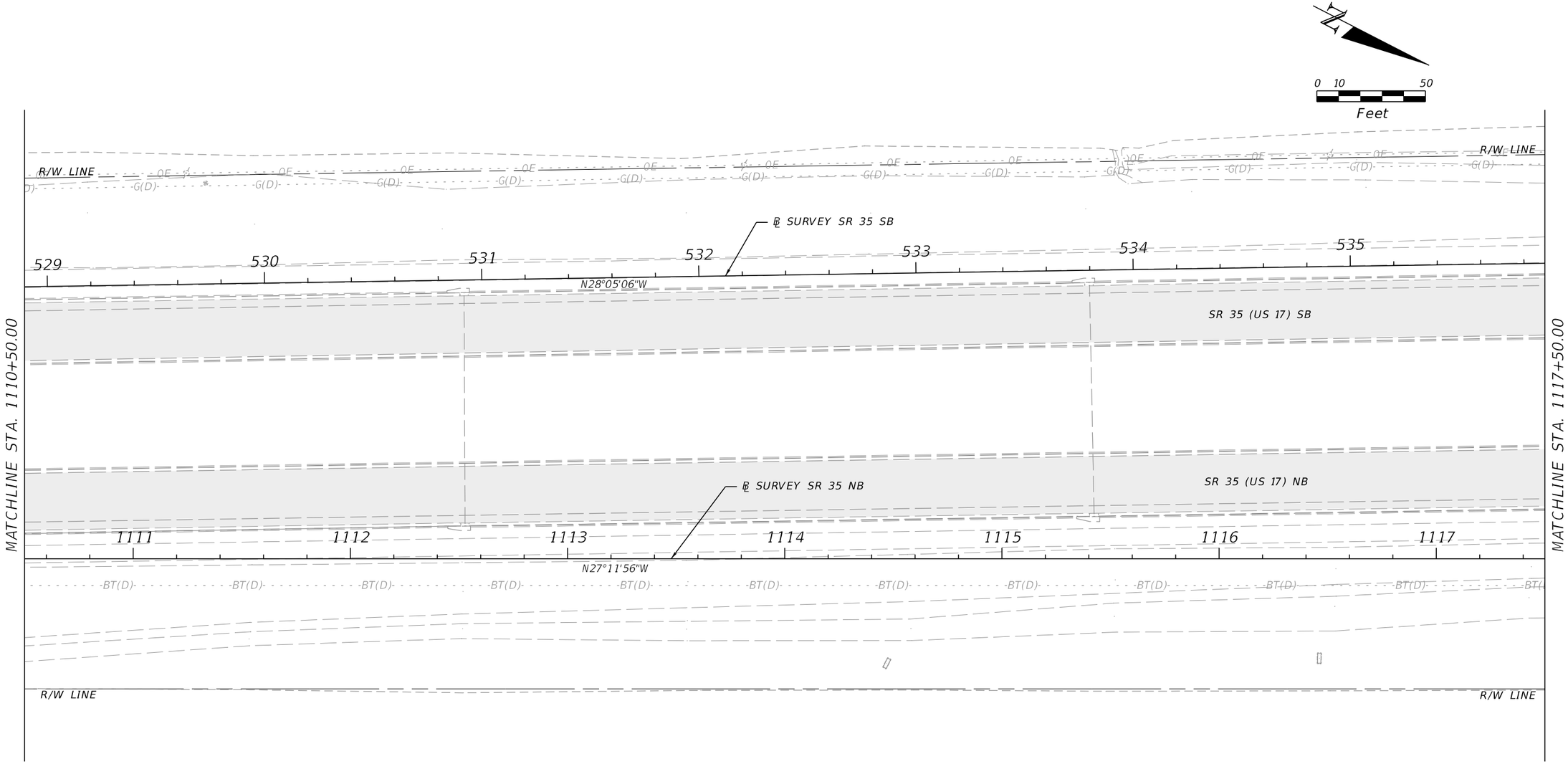
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

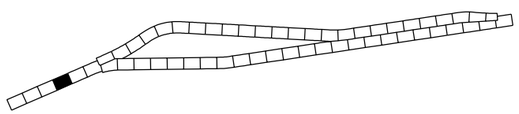
ROADWAY PLAN (3)

SHEET NO.

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



KEY MAP



LEGEND

PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

30

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

ROADWAY PLAN (4)

SHEET NO.

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

c:\pw_working\drmp01\d0103394\PLANRD01.dgn : SR 35 - PLAN 4 [SHEET]
Sarah.Rendell 1/21/2025 4:22:23 PM

R/W LINE

+79.06
188.05' LT.

R/W LINE

+39.33
192.08' LT.

End limits for Design Variation
Travel Lanes 11 feet
Sta. 541+07.43(SB) MP 11.753

N

0 10 50
Feet

R/W LINE

536 537 538 539 540 541 542

N28°05'06"W

℄ SURVEY SR 35 SB

SR 35 (US 17) SB

SR 35 (US 17) NB

℄ SURVEY SR 35 NB

MATCHLINE STA. 1117+50.00

1118 1119 1120 1121 1122 1123 1124

N27°11'56"W

MATCHLINE STA. 1124+50.00

R/W LINE

R/W LINE

End limits for Design Variation
Travel Lanes 11 feet
Sta. 1122+70.00 (NB) MP 11.753

THOUSAND TRAILS PEACE RIVER CAMPGROUND

KEY MAP

LEGEND

PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

CODY BAYER, P.E.
LICENSE NUMBER: 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

31

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

ROADWAY PLAN (5)

SHEET NO.

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

c:\pw_working\drmp01\d0103394\PLANRD01.dgn : SR 35 - PLAN 5 [SHEET]
Sarah.Rendell 1/21/2025 4:22:24 PM

Appendix 4

Area of Deficiency Pictures

Sta. 1089+00 , Looking North

Sta. 539+50.00, Looking South

Appendix 5

Traffic Data Report

FDOT

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBALT, P.E.
SECRETARY

MEMORANDUM

Date: September 18, 2019
To: Evan Agillon EXT 2261

From: Brittany Healy, Traffic Analyst/RCI Coordinator
Subject: Financial Project No: 446205-1-52-01
Roadway ID: 06010102 SB one-way pair
Project Name: SR 35
County: Hardee
Type of Work: Resurfacing
From MP: 0.000 – 3.539

Per your request, the attached traffic data forecasts are provided for the above roadway. These estimates were taken from trends calculated from traffic counts provided by FDOT.

K =	9.0 %
D =	99.9 %
24 Hour T =	12.2 %
Design Hour T =	6.1 %
2018 AADT =	13000
Functional Class =	Urban Prin Arterial Other

The attached 18-KIP Equivalent Single Axle Loading Accumulations are based on the above information, and have been prepared in accordance with the Central Offices memo of December 1, 2000, reflecting the current Equivalency Factors.

As requested, we have included the 24-hour traffic count for site 065005 & 065004.

Please feel free to contact Brittany Healy at extension 2753 if you have any questions.

District One – Traffic Operations
801 North Broadway Avenue * Post Office Box 1249 * Bartow, FL 33831-1249
(863) 519-2553 * (863) 534-0915 (Fax) * MS 1-8
www.dot.state.fl.us

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

FIN #: 446205-1-52-01
COUNTY: Hardee
ROADWAYID: 06010102
PROJECT DESCRIPTION: Paving RESURFACING

LOCATION #: 2

LOCATION DESCRIPTION: SR 35 (MP: 0 - 3.539)

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: A

Linear Growth Rate X %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2018	13000
Opening Year	2024	N/A
Mid-Design Year	2034	N/A
Design Year	2044	19300

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%): 100%
Lanes in One Direction: 3

T24 values

Existing to Opening Year	12.20%
Opening to Mid-Year	12.20%
Mid-Year to Design-Year	12.20%

2000 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	____	1.600	____
URBAN FREEWAY:	0.900	____	1.270	____
RURAL HIGHWAY:	0.960	____	1.350	____
URBAN HIGHWAY:	0.890	X	1.220	____
OTHER (Enter Factor and X):		____		____

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated December 1, 2000.

Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Brittany Healy	Traffic Analyst Consultant	ATKINS
	Name	Title	Org. Unit or Firm
	Signature	9/18/19 Date	
Reviewed by:	Kyle Purvis	District Statistics Administrator	FDOT
	Name	Title	Org. Unit or Firm
	Signature	9-18-19 Date	

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION 2

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2018 to 2044*

SECTION #: 06010102 **COUNTY:** Hardee **FIN #:** 446205-1-52-01

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK Paving RESURFACING A

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2018	13000	341	0	1	12.20%	0.661	0.890
2019	13200	346	0	1	12.20%	0.660	0.890
2020	13400	350	0	1	12.20%	0.658	0.890
2021	13700	357	0	1	12.20%	0.657	0.890
2022	13900	362	0	1	12.20%	0.655	0.890
2023	14200	368	0	1	12.20%	0.654	0.890
2024	14400	373	373	1	12.20%	0.652	0.890
2025	14600	377	750	1	12.20%	0.651	0.890
2026	14900	384	1134	1	12.20%	0.650	0.890
2027	15100	389	1523	1	12.20%	0.649	0.890
2028	15400	395	1918	1	12.20%	0.647	0.890
2029	15600	400	2318	1	12.20%	0.646	0.890
2030	15900	406	2724	1	12.20%	0.644	0.890
2031	16100	411	3135	1	12.20%	0.643	0.890
2032	16300	415	3550	1	12.20%	0.642	0.890
2033	16600	422	3972	1	12.20%	0.641	0.890
2034	16800	426	4398	1	12.20%	0.640	0.890
2035	17100	433	4831	1	12.20%	0.638	0.890
2036	17300	437	5268	1	12.20%	0.637	0.890
2037	17600	444	5712	1	12.20%	0.636	0.890
2038	17800	448	6160	1	12.20%	0.635	0.890
2039	18000	453	6613	1	12.20%	0.634	0.890
2040	18300	459	7072	1	12.20%	0.633	0.890
2041	18500	464	7536	1	12.20%	0.632	0.890
2042	18800	470	8006	1	12.20%	0.630	0.890
2043	19000	475	8481	1	12.20%	0.630	0.890
2044	19300	481	8962	1	12.20%	0.628	0.890

SB one-way pair

Opening to Mid-Design Year ESAL Accumulation (1000s): 4025

Opening to Design Year ESAL Accumulation (1000s): 8589

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Brittany Healy — Name; Traffic Analyst Consultant — Title; ATKINS — Org. Unit or Firm

Signature; 9/18/19 — Date

Reviewed by: Kyle Purvis — Name; District Statistics Administrator — Title; FDOT — Org. Unit or Firm

Signature; 9-18-19 — Date

County: 06
Station: 5005
Description: SR 35/US 17 SB, NORTH OF SR 636/MAIN ST WAUCHULA
Start Date: 08/09/2017
Start Time: 1100

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	20	24	9	24	77
0100	28	24	17	9	78
0200	24	12	16	16	68
0300	15	14	26	11	66
0400	24	24	16	36	100
0500	47	44	71	105	267
0600	93	105	107	150	455
0700	170	188	194	256	808
0800	185	186	154	163	688
0900	149	143	162	173	627
1000	152	153	160	157	622
1100	176	191	212	189	768
1200	181	226	159	204	770
1300	193	186	180	158	717
1400	180	155	211	171	717
1500	165	202	203	222	792
1600	221	208	233	171	833
1700	240	191	205	155	791
1800	163	147	160	149	619
1900	142	140	131	132	545
2000	124	89	108	103	424
2100	87	63	71	63	284
2200	71	35	47	42	195
2300	34	21	18	25	98
24-Hour Totals:					11409

Peak Volume Information

	Hour	Volume
A.M.	715	823
P.M.	1545	884
Daily	1545	884

Truck Percentage 10.00 NaN 10.00

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	29	7182	3057	19	355	77	4	174	473	16	8	3	12	0	0	1141	11409

Generated by SPS 5.0.48P

County: 06
Station: 5004
Description: SR 35/US 17 SB, SOUTH OF SR 636/MAIN ST WAUCHULA
Start Date: 08/09/2017
Start Time: 1100

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	27	24	13	33	97
0100	35	30	20	18	103
0200	39	18	22	29	108
0300	22	20	32	21	95
0400	45	39	24	42	150
0500	55	69	97	111	332
0600	102	124	154	142	522
0700	171	178	194	238	781
0800	181	192	157	172	702
0900	160	130	168	166	624
1000	161	155	167	191	674
1100	207	188	203	208	806
1200	185	237	164	210	796
1300	205	194	188	171	758
1400	193	175	232	187	787
1500	173	210	201	229	813
1600	224	202	238	177	841
1700	236	180	221	170	807
1800	172	173	165	149	659
1900	165	140	144	123	572
2000	136	98	107	126	467
2100	96	73	71	60	300
2200	67	42	42	47	198
2300	47	20	14	26	107
24-Hour Totals:					12099

Peak Volume Information

	Hour	Volume
A.M.	730	805
P.M.	1545	893
Daily	1545	893

Generated by SPS 5.0.48P

County: 06
Station: 5005
Description: SR 35/US 17 SB, NORTH OF SR 636/MAIN ST WAUCHULA
Start Date: 08/07/2018
Start Time: 1400

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	21	14	12	11	58
0100	19	15	22	20	76
0200	11	12	22	8	53
0300	6	22	8	6	42
0400	27	28	28	22	105
0500	51	64	58	84	257
0600	64	89	81	128	362
0700	136	124	124	165	549
0800	132	134	146	143	555
0900	116	165	157	142	580
1000	162	136	183	198	679
1100	198	208	202	199	807
1200	234	226	192	206	858
1300	187	183	177	168	715
1400	178	217	176	189	760
1500	189	169	183	175	716
1600	185	211	217	163	776
1700	239	222	186	145	792
1800	175	160	153	130	618
1900	129	130	105	103	467
2000	100	105	91	84	380
2100	100	58	62	56	276
2200	58	59	39	38	194
2300	19	26	21	21	87
24-Hour Totals:					10762

Peak Volume Information

	Hour	Volume
A.M.	845	581
P.M.	1200	858
Daily	1130	861

Truck Percentage 12.47 NaN 12.47

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	110	6192	3118	14	393	146	4	215	516	31	6	5	12	0	0	1342	10762

Generated by SPS 5.0.48P

Appendix 6

Costs for the Corrections

ESTIMATE OF CONSTRUCTION COST
FOR
WIDENING FOR 12' LANES

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	
CLEARING/GRUBBING						
110-1-1	CLEARING AND GRUBBING	AC	3.1	$ 36,808.38	$ 114,105.98	
110-4	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	10259	$ 41.58	$ 426,569.22	
	CLEARING/GRUBBING & EARTHWORK SUBTOTAL				$ 540,675.20	
ROADWAY						
120-1	REGULAR EXCAVATION	CY	3397	11.87	$ 40,322.39	
120-6	EMBANKMENT	CY	599	20.9	$ 12,519.10	
160-4	TYPE B STABILIZATION	SY	11678	$ 7.27	$ 84,899.06	
285-711	OPTION BASE GROUP 11	SY	7267	$ 66.20	$ 481,075.40	
334-1-53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG 76-22	TN	799.4	$ 164.57	$ 131,557.26	
337-7-83	ASPH. CONC. FRICTION COURSE, TRF C, FC 12.5, PG 76-22	TN	599.5	$ 174.12	$ 104,384.94	
520-1-7	CONCRETE CURB & GUTTER, TYPE E	LF	15389	$ 49.21	$ 757,292.69	
522-1	CONCRETE SIDEWALK, 4" THICK	SY	6840	$ 76.98	$ 526,543.20	
522-2	CONCRETE SIDEWALK, 6" THICK	SY	205	$ 109.90	$ 22,529.50	
570-1-1	PERFORMANCE TURF	SY	5985	$ 1.17	$ 7,002.45	
	ROADWAY SUBTOTAL				$ 2,168,125.99	
425-1-351	INLETS, CURB, TYPE P-5, <10'	EA	16	$ 13,878.60	$ 222,057.60	
425-1-361	INLETS, CURB, TYPE P-6, <10'	EA	4	$ 10,815.75	$ 43,263.00	
425-2-43	MANHOLES, P-7, PARTIAL	EA	1	$ 5,531.55	$ 5,531.55	
430-175-118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" S/CD	LF	388.5	$ 173.79	$ 67,517.42	
430-175-124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24" S/CD	LF	24	$ 166.01	$ 3,984.24	
430-175-142	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 42" S/CD	LF	9	$ 290.10	$ 2,610.90	
	DRAINAGE SUBTOTAL				$ 344,964.71	
	PROJECT SUBTOTAL				$ 2,513,090.69	
PROJECT TOTAL			**SUBTOTAL**		$ 2,513,090.69	
			MOBILIZATION (10%)		$ 251,309.07	
			MOT (10%)		$ 251,309.07	
			TOTAL INCREASE IN COST		$ 3,015,708.83	

Note: Unit Costs sourced from Historical Item Averages Statewide 6 Months (Updated 1/27/25)

Appendix 7

Crash Data

Non- Attributable sidewipe crashes within limits of design variation

Other crashes within the limits of design variation

CRASH NUMBER	MILE POST	CRASH DATE	SITE LOCATION	LIGHT CONDITION	WEATHER CONDITION	MANNER OF COLLISION	NUMBER OF FATALITIES
24229284	11.445	8/25/2021	Not at Intersection	Dark - Not Lighted	Clear		0
24229548	11.194	7/29/2022	Not at Intersection	Dark - Lighted	Clear		0
89612221	11.571	4/24/2023	Not at Intersection	Daylight	Clear	Other	0
80807034	11.487	7/5/2023	Not at Intersection	Daylight	Rain	Front to Rear	0
80806692	11.447	6/24/2020	Not at Intersection	Daylight	Clear	Other	0
26499525	11.288	6/12/2024	Not at Intersection	Daylight	Rain	Front to Rear	0
80806595	11.297	2/7/2020	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806895	11.218	12/5/2022	Not at Intersection	Dark - Lighted	Clear	Sideswipe, Same Direction	0
24229514	11.206	5/25/2022	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26323275	3.467	5/3/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26499554	11.189	8/12/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
80806835	11.191	9/18/2022	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806936	11.198	2/11/2023	Not at Intersection	Daylight	Clear	Front to Rear	0
80806433	11.181	7/25/2019	Not at Intersection	Daylight	Rain	Front to Rear	0
80806452	11.177	8/26/2019	Not at Intersection	Dark - Lighted	Clear	Front to Rear	0
80806817	11.542	8/18/2022	Not at Intersection	Daylight	Rain		0
26400249	11.712	9/16/2024	Not at Intersection	Dawn	Clear	Other	0