

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
RAILROAD REIMBURSEMENT AGREEMENT
GRADE CROSSING TRAFFIC CONTROL DEVICES – COUNTY

725-090-27c
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FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
452084-1-57-01	46TH AVENUE NORTH	PINELLAS	15000-4090	D723 007 B

THIS AGREEMENT, made and entered into this 3 day of August 2023, by and between the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, hereinafter called the DEPARTMENT, and CSX TRANSPORTATION INC., a corporation organized and existing under the laws of VIRGINIA, with its principal place of business in the City of JACKSONVILLE, County of DUVAL,
State of FLORIDA, hereinafter called the COMPANY; and PINELLAS, County, a political subdivision of the State of Florida, acting by and through its Board of County Commissioners, hereinafter called the COUNTY.

WITNESSETH:

WHEREAS, the DEPARTMENT is constructing, reconstructing or otherwise changing a portion of the Public Road System, designated by the Financial Project ID 452084-1-57-01, on 46th Avenue North, which crosses at grade the right of way and tracks of the COMPANY'S Milepost 894.46, FDOT/AAR Crossing Number 626693F, at or near St. Petersburg, as shown on DEPARTMENT'S Plan Sheet No. 1-2, attached hereto as a part hereof; and

NOW, THEREFORE, in consideration of the mutual undertakings as herein set forth, the parties hereto agree as follows:

1. The COMPANY shall furnish the necessary materials and install Automatic Grade Crossing Signals Type II Class III which includes Cantilever, Flashing Lights and Gates at said location on an actual cost basis, and in accordance with (1) the attached detailed statement of the work, plans, and specifications; and (2) the Standard Plans Index 509-070 and 711-001, and the FDOT Design Manual (FDM), as amended by the Freight and Multimodal Operations Bulletin 21.01, dated February 12, 2021, which is attached hereto and by reference made a part hereof.
2. After installation of said signals is completed, fifty (50%) percent of the expense thereof in maintaining the same shall be borne by the COUNTY and fifty (50%) percent shall be borne by the COMPANY, as enumerated by the Schedule of Annual Cost of Automatic Highway Grade Crossing Devices attached hereto and by this reference made a part hereof and subject to future revision.
3. After said signals have been installed and found to be in satisfactory working order by the parties hereto, the same shall be immediately put into service, operated and maintained by the COMPANY so long as said COMPANY or its successors or assigns shall operate the said signals at said grade crossing; or until it is agreed between the parties hereto that the signals are no longer necessary or until the said crossing is abandoned; or legal requirements occur which shall cease operation of signals thereat. The COMPANY agrees that any future relocation or adjustment of said signals shall be performed by the COMPANY, but at the expense of the party initiating such relocation. Upon relocation the maintenance responsibilities shall be in accordance with the provisions of this agreement. It is further agreed that the cost of maintaining any additional or replacement signal equipment at the same location will be shared as provided under Paragraph 2. above.

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4. Unless otherwise agreed upon herein, the COUNTY agrees to ensure that at the crossing the advancewarning signs and railroad crossing pavement markings will conform to the U.S. Department of Transportation Manual on Uniform Traffic Control Devices within 30 days of notification that the railroad signal improvements have been completed and that such signs and pavement markings will be continually maintained at an acceptable level.

5. The COMPANY hereby agrees to install and/or adjust the necessary parts of its facilities along said road in accordance with the provisions set forth in the:

- ☐ (a) DEPARTMENT Procedure No. 725-080-002 Appendix D.4, and Rule 14.57.011 "Public Railroad-Highway Grade Crossing Costs", Florida Administrative Code.
- ☒ (b) Federal Highway Administration Federal-Aid Policy Guide, 23 C.F.R. Subchapter G, Part 646, Subpart B, and 23 C.F.R., Subchapter B, Part 140, Subpart I,

and any supplements thereto or revisions thereof, which, by reference hereto, are made a part hereof. The COMPANY further agrees to do all of such work, with its own forces or by a contractor paid under a contract let by the COMPANY, all under the supervision and approval of the DEPARTMENT and the Federal Highway Administration, when applicable.

6. The DEPARTMENT hereby agrees to reimburse the COMPANY for all costs incurred by it in the installation and/or adjustment of said facilities, in accordance with the provisions of Procedure No. 725-080-002 Appendix D-4 "Billing Requirements," and any supplements thereto or revisions thereof. It is understood and agreed by and between the parties hereto that preliminary engineering costs not incorporated within this agreement shall not be subject to payment by the DEPARTMENT.

7. Attached hereto, and by this reference made a part hereof, are plans and specifications of the work to be performed by the COMPANY pursuant to the terms hereof, and an itemized estimate of the cost thereof in the amount of \$424,440.00. All work performed by the COMPANY pursuant hereto, shall be performed according to these plans and specifications as approved by the DEPARTMENT and the Federal Highway Administration if federal aid participating; and all subsequent plan changes shall likewise be approved by the DEPARTMENT and the Federal Highway Administration, when applicable.

8. All labor, services, materials, and equipment furnished by the COMPANY in carrying out the work to be performed hereunder shall be billed by the COMPANY direct to the DEPARTMENT. Separate records as to the costs of contract bid items and force account items performed for the COMPANY shall also be furnished by the COMPANY to the DEPARTMENT.

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9. The COMPANY has determined that the method to be used in developing the relocation or installation cost shall be as specified for the method checked and described hereafter:

- ☒ (a) Actual and related indirect costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
- ☐ (b) Actual related indirect costs accumulated in accordance with an established accounting procedure developed by the COMPANY and approved by the DEPARTMENT.
- ☐ (c) An agreed lump sum \$, as supported by a detail analysis of estimated cost attached hereto. (NOTE: This method is not applicable where the estimated cost of the proposed adjustment exceeds \$100,000.)

10. The installation and/or adjustment of the COMPANY'S facility as planned ☐ will ☒ will not involve additional work over and above the minimum reimbursable requirements of the DEPARTMENT. (If upgrading and/or nonreimbursable work is involved at the option of the COMPANY, then credit against the cost of the project is required and will be governed by the method checked and described hereafter):

- ☐ (a) _____% will be applied to the final billing of work actually accomplished to determine required credit for (betterment) and/or (expired service life) and/or (nonreimbursable segments).
- ☐ (b) All work involving nonreimbursable segments will be performed by special COMPANY work or job order number apart and separate from the reimbursable portion of the work; such work or job order number to be _____. The COMPANY further agrees to clearly identify such additional work areas in the COMPANY'S plans and estimates for the total work covered by this Agreement.
- ☐ (c) \$_____ credited for ☐ betterment ☐ expired service life
☐ nonreimbursable segments in accord with Article 9.(c) hereinabove.

11. It is specifically agreed by and between the DEPARTMENT and the COMPANY that the DEPARTMENT shall receive fair and adequate credit for any salvage which shall accrue to the COMPANY as a result of the above installation and/or adjustment work.

12. It is further agreed that the cost of all improvements made during this adjustment work shall be borne by the COMPANY, subject only to the DEPARTMENT bearing such portion of this cost as represents the cost of adjustment of previously existing facility, less salvage credit as set forth in the immediately preceding paragraph.

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13. Upon completion of the work the COMPANY shall, within one hundred eighty (180) days, furnish the DEPARTMENT with two (2) copies of its final and complete billing of all costs incurred in connection with the work performed hereunder, such statement to follow as closely as possible the order of the items contained in the estimate attached hereto. The totals for labor, overhead, travel expense, transportation, equipment, material and supplies, handling costs and other services shall be shown in such a manner as will permit ready comparison with the approved plans and estimates. Materials shall be itemized where they represent major components of cost in the relocation following the pattern set out in the approved estimate as closely as is possible. Salvage credits from recovered and replaced permanent and recovered temporary materials shall be reported in said bills in relative position with the charge for the replacement or the original charge for temporary use.

The final billing shall show the description and site of the Project; the date on which the first work was performed, or, if preliminary engineering or right-of-way items are involved, the date on which the earliest item of billed expense was incurred; the date on which the last work was performed or the last item of billed expense was incurred; and the location where the records and accounts billed can be audited. Adequate reference shall be made in the billing to the COMPANY'S records, accounts and other relevant documents. All cost records and accounts shall be subject to audit by a representative of the DEPARTMENT. Upon receipt of invoices, prepared in accordance with the provisions of the above indicated Reimbursement Policy, the DEPARTMENT agrees to reimburse the COMPANY in the amount of such actual costs as approved by the DEPARTMENT'S auditor.

14. Payment shall be made only after receipt and approval of goods and services unless advance payments are authorized by the DEPARTMENT's Comptroller under Section 334.044(29), F.S., or by the Department of Financial Services under Section 215.422(14), Florida Statutes (F.S.).

15. In accordance with Section 287.058, Florida Statutes, the following provisions are in this Agreement: If this Contract involves units of deliverables, then such units must be received and accepted in writing by the Contract Manager prior to payments. Bills for fees or other compensation for services or expenses shall be submitted in detail sufficient for a proper preaudit and postaudit thereof.

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16. Bills for travel expenses specifically authorized in this agreement shall be submitted and paid in accordance with DEPARTMENT Rule 14-57.011 "Public Railroad-Highway Grade Crossing Costs" and the Federal Highway Administration Federal-Aid Policy Guide, Subchapter B, Part 140, Subpart I "Reimbursement for Railroad Work."

17. In accordance with Section 215.422, Florida Statutes, the following provisions are in this Agreement: Contractors providing goods and services to the Department should be aware of the following time frames. Upon receipt, the Department has five (5) working days to inspect and approve the goods and services, unless the Agreement specifies otherwise. The Department has 20 days to deliver a request for payment (voucher) to the Department of Financial Services. The 20 days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved.

If a payment is not available within 40 days, a separate interest penalty at a rate as established pursuant to Section 215.422(3)(b), Florida Statutes, will be due and payable, in addition to the invoice amount, to the Contractor. Interest penalties of less than one (1) dollar will not be enforced unless the Contractor requests payment. Invoices which have to be returned to a Contractor because of Contractor preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department.

A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for contractors/vendors who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516 or by calling the Division of Consumer Services at 1-877-693-5236.

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18. In the event this contract is for services in excess of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00) and a term for a period of more than one year, the provisions of Section 339.135(6)(a), Florida Statutes, are hereby incorporated:

The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the Comptroller of the Department that such funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year.

19. In accordance with Section 287.133 (2)(a), Florida Statutes, the following provisions are included in this Agreement:

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s.287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.

20. In accordance with Section 287.134(2)(a), Florida Statutes, the following provisions are included in this Agreement:

An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

21. In accordance with Section 287.0582, Florida Statutes, the following provision is included in this Agreement:

The Department's obligation to pay under this contract is contingent upon an annual appropriation by the Florida Legislature.

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22. The COMPANY shall:

1. utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of all new employees hired by the COMPANY during the term of the contract; and

2. expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

3. use steel and iron manufactured in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work but are not applicable to steel and iron items that the COMPANY uses but does not incorporate into the finished work. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual cost). Submit each such certification to the Engineer prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Engineer's written approval prior to incorporating the material into the project; and

4. comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964, the regulations of the U.S. Department of Transportation issued thereunder, and the assurance by the COMPANY pursuant thereto. The COMPANY shall include the attached Title VI / Nondiscrimination Assurance in all contracts with consultants and contractors performing work on the Project that ensure compliance with Title VI of the Civil Rights Act of 1964, 49 C.F.R. Part 21, and related statutes and regulations.

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23. It is understood and agreed by the parties to this Agreement that if any part, term, or provision of this Agreement is held illegal by the courts or in conflict with any law of the State of Florida, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

24. Any questions or matters arising under this Agreement as to validity, construction, enforcement, performance, or otherwise, shall be determined in accordance with the laws of the State of Florida. Venue for any action arising out of or in any way related to this Agreement shall lie exclusively in a state court of appropriate jurisdiction in Leon County, Florida.

25. The parties agree to bear their own attorney's fees and costs with respect to this Agreement.

26. The parties agree that this Agreement is binding on the parties, their heirs-at-law, and their assigns and successors in interest is evidenced by their signatures and lawful executions below.

27. A modification or waiver of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers, the day and year first above written.


STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

BY: _____
(TITLE: Justin Hall, Director of Transportation Development)

COMPANY: CSX TRANSPORTATION INC

BY:  _____ Tony C Bellamy
Sr Director Design & Construction
(TITLE: _____)

PINELLAS COUNTY , FLORIDA

BY: 
(TITLE: County Administrator)

Legal Review

BY: _____
Attorney - DOT Date

Approved as to Funds Available

BY: Robin M Naitove, CPA 3/21/2023
Comptroller - DOT Date

Approved as to FAPG

Requirements BY: Mark Chapin 3/17/2023
FHWA Date

APPROVED AS TO FORM

By: Joseph Morrissey
Office of the County Attorney

ESTIMATE SUBJECT TO REVISION AFTER: 8/23/2023**DOT NO.:** 626693F**CITY:** St. Petersburg**COUNTY:** Pinellas**STATE:** FL**DESCRIPTION:** 46th Avenue North - Installation of (2) cantilever / gate combo units, meter service, 6x6 house and train detection.**ZONE:** Florida**SUB-DIV:** Clearwater**MILE POST:** ARE 894.46**AGENCY PROJECT NUMBER:** Pinellas County, Florida Board of County Commissioners**PRELIMINARY ENGINEERING:**

212	Contracted & Administrative Engineering Services	\$	9,000
	Subtotal	\$	9,000

CONSTRUCTION ENGINEERING/INSPECTION:

212	Contracted & Administrative Engineering Services	\$	6,500
	Subtotal	\$	6,500

FLAGGING SERVICE: (Contract Labor)

70	Labor (Conductor-Flagman)	\$	-
50	Labor (Foreman/Inspector)	\$	-
70	Additive (Transportation Department)	\$	-
50	Additive (Engineering Department)	\$	-
	Subtotal	\$	-

SIGNAL & COMMUNICATIONS WORK: \$ 310,992**TRACK WORK:** \$ -**PROJECT SUBTOTAL:** \$ 326,492

900	<u>CONTINGENCIES:</u>	30.00%	\$	97,948
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PROJECT TOTAL: ***** \$ 424,440**CURRENT AUTHORIZED BUDGET:** ***** \$ -**TOTAL SUPPLEMENT REQUESTED:** ***** \$ **424,440****DIVISION OF COST:**

Agency	100.00%	\$	424,440
Railroad	0.00%	\$	-

NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces.

This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for CSXT work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work

Office of Chief Engineer Public Projects--Jacksonville, Florida

Estimated prepared by: C Powell

Approved by: **KSW** CSXT Public Project Group

DATE: 08/23/22 REVISED:

DATE: 09/26/22

3/17/2023

Florida Department of Transportation
Federal Authorization Management System

**Notice of Approved
Authorization**

From Federal highway Administration
to Participate in Project Costs Incurred
After the Effective Date of Authorization
Noted Below

Federal Aid Project Number: **D723 007 B**

State Project Number: **452084 1 57 01**

This Notice of Approved Authorization is issued with the stipulation that the Florida Department of Transportation agrees to comply with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) The regulations issued pursuant thereto and (3) the policies and procedures promulgated by the Federal Highway Administration relative to the above designates project. The Florida Department of Transportation also agrees to comply with the applicable provisions set forth in CFR Part 630, Subpart C.

Project Location: **46TH AVENUE NORTH AT RAILROAD NGCN:626693F RRMP:ARE 894.46;RAIL SAFETY
PROJECT;CONSTRUCTION**

Classification of phase of work
to be under agreement
Highway planning & Research
Preliminary Engineering
Right-of-Way
Construction
X Other

Effective Date
of authorization

3/17/2023

Dist.	Appr.	FAIN	Urban/ With	Total Cost	Federal Share	Federal Funds Under Agreement	Advanced Construction
07	YS40	693JJ22330000YS40FLD723007		436,961.00	100.0%	424,440.00	0.00

Department of Transportation

Available funds certified by:
Approval recommended by:
Approved and Authorized by:

JEFFERY W. BAILEY
LEROY RASBERRY
FORNICHER NIXSON

Date: **2/27/2023**
Date: **3/10/2023**
Date: **3/10/2023**

Federal Highway Administration

Approval Recommended by:
Approved and Authorized by:
Agreement Approved by:

Mark Chapin
Mark Chapin
Pamela Angelo

Date: **3/17/2023**
Date: **3/17/2023**
Date: **3/17/2023**

State remarks:

**INITIAL AUTHORIZATION FOR RAIL SAFETY PROJECT; DESIGN WAS STATE FUNDED; (+)
\$424,440 (FAC/NOMINAL RATES) = (YS40/100%) SOFT MATCH AMT = \$0**

Division remarks:

federal share 100% mcc 3/13/23

This Notice of Authorization is not the official FHWA Approved project Agreement for the project designated above. The official Project Agreement must be printed from FHWA's Fiscal Management Information System (FMIS). The District Federal Aid Coordinator may obtain the Project Agreement at: <https://fhwaapps.fhwa.dot.gov/>

To: David.Grillo@dot.state.fl.us

FLORIDA DEPARTMENT OF TRANSPORTATION FUNDS APPROVAL

ASV73

3/21/2023

CONTRACT INFORMATION

Contract:	ASV73
Contract Type:	AC - RR CROSSING-PE/INSTAL (RR-XING/PE)
Method of Procurement:	R - RAILROAD/UTILITIES AGREEMENT
Vendor Name:	CSX TRANSPORTATION, INC.
Vendor ID:	F546000720022
Beginning Date of This Agreement:	03/01/2023
Ending Date of This Agreement:	12/31/2050
Contract Total/Budgetary Ceiling:	
Description:	Full Signal Safety Upgrade, Lights, Gates, Cantilever, Signal

FUNDS APPROVAL INFORMATION

FUNDS APPROVED/REVIEWED FOR ROBIN M. NAITOVE, CPA, COMPTROLLER ON 3/21/2023

Action:	Task Work Order
Reviewed or Approved:	APPROVED
Organization Code:	55072020727
Expansion Option:	AA
Object Code:	563000
Amount:	\$424,440.00
Financial Project:	45208415701
Work Activity (FCT):	127
CFDA:	
Fiscal Year:	2023
Budget Entity:	55100100
Category/Category Year:	088808/23
Amendment ID:	W001
Sequence:	00
User Assigned ID:	TRIPAR
Enc Line (6s)/Status:	0001/04

Total Amount: \$424,440.00

**CSX TRANSPORTATION – GOVERNMENT BILLING DEPT
NEW PROJECT FORM**

To ensure compliance with Federal requirements, please provide the following information so that CSXT may accurately and appropriately setup and handle the necessary accounting associated with the proposed project.

452084-1 - 46th Avenue North

*1) Is the project Federally Funded?	Yes
*2) Funding Source: If the project is funded by multiple sources please provide the approximate anticipated percentage of the total project cost to be paid by each source.	Federal Highway Administration (FHWA) If multiple or other please describe here: RHH - Rail Highway Crossings - Hazard - Federal Funds
*3) Project Requirements	<input checked="" type="checkbox"/> Procurement Restrictions (e.g. Buy America(n), Buy State, US Steel) <input type="checkbox"/> Procurement Restrictions Waiver <input type="checkbox"/> Suspended / Debarred <input type="checkbox"/> Davis-Bacon Act <input type="checkbox"/> E-Verify <input type="checkbox"/> Other, please describe here <input type="text"/>

*4) Single Audit Type: Please advise if the project is subject to single audit requirements by completing the appropriate box below (complete only one box).

Not Applicable <input checked="" type="checkbox"/> CSX is not subject to the Single Audit. Note: This audit is not related to the project specific audit performed by your agency.	Federal Audit <input type="checkbox"/> Please Specify <input type="checkbox"/> OMB Circular A-133 <input type="checkbox"/> Uniform Guidance Single Audit Status ¹ ² : <input type="checkbox"/> Vendor (CFDA # Not Required) <input type="checkbox"/> Recipient (CFDA # <input type="text"/>) <input type="checkbox"/> Sub-Recipient (CFDA # <input type="text"/>)	Florida Single Audit <input type="checkbox"/> (Florida Statute 215.97) CSFA # ³ <input type="text"/>
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Recipient. The Federal Sub-Recipient and Vendor Determination Checklist is enclosed for reference.

² **CFDA Number:** If CSX is subject to the Federal Single Audit, please provide the Catalog of Federal Domestic Assistance (CFDA) number.

³ **CSFA Number:** If CSX is subject to the Florida Single Audit, please provide the Catalog of State Financial Assistance (CSFA) number.

*Please Note: Per 2 CFR 200.425(a), CSXT can recover Federal Audit costs directly through this project.
For Audit related questions, contact GBCompliance@csx.com.

5) Agency Bill To Information

*Name:	Florida Department of Transportation	Federal Award #:	N/A
*Legal Address (1):	11201 N McKinley Drive MS 7-501, Tampa, Florida 33612	Date of Award:	N/A
*Phone:	813-975-6407		
*Email	kenneth.madden@dot.state.fl.us		

Signature of Applicant
Please sign, print (optional), and e-mail this form to the authorized CSX representative

Signature of Applicant:		Date:	
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FEDERAL SUBRECIPIENT AND VENDOR DETERMINATION CHECKLIST
Reference 29CFR99.210 and OMB Circular A-133.210

Subrecipient and Vendor Determinations

- (a) General: An auditee may be a recipient, a subrecipient, and a vendor. Federal awards expended as a recipient or a subrecipient would be subject to audit under this part. The payments received for goods or services provided as a vendor would not be considered Federal awards. The guidance in paragraphs (b) and (c) of this section should be considered in determining whether payments rendered to CSX constitute a Federal award or a payment for goods and services.

SUBRECIPIENT

- (b) Federal Award: Characteristics indicative of a Federal award received by a subrecipient are when the organization:

1. Determines who is eligible to receive what Federal financial assistance
2. Has its performance measured against whether the objectives of the Federal program are met
3. Has responsibility for programmatic decision-making
4. Has responsibility for adherence to applicable Federal program compliance requirements
5. Uses the Federal funds to carry out a program of the organization as compared to providing goods or services for a program of the pass-through entity

VENDOR

- (c) Payment for goods and services:

1. Provides the goods and services within normal business operation
2. Provides similar goods or services to many different purchasers
3. Operates in a competitive environment
4. Provides goods or services that are ancillary to the operation of the Federal program
5. Is not subject to compliance requirements of the Federal program

- (d) Use of judgment in making determination: There may be unusual circumstances or exceptions to the listed characteristics. In making the determination of whether a subrecipient or vendor relationship exists, the substance of the relationship is more important than the form of the agreement. It is not expected that all of the characteristics will be present and judgment should be used in determining whether an entity is a subrecipient or vendor.

Source: <http://www.whitehouse.gov/sites/default/files/omb/circulars/a133/a133.pdf> (§ 210 Subrecipient and vendor determinations)

Crossing No: 626693F		Roadway: 46TH AVE N		RR Street:		District: 7 County: Pinellas			
PUBLIC	HWY	At Grade	Commercial	City: St Petersburg	Near City	Open - Track Active			
Rank 2018:	1680	SR No.:		RR Company:	CSX	Date: 12/19/2022			
Rank 2017:	1690	CR No.:		Division Name:	Jacksonville	Team Members:			
Rank 2016:		US No.:		Subdivision Name:	CLEARWATER	David Grillo - FDOT D7			
		Latitude:	27.813800	Branch Name:	ARE 372	Jeffrey Horning - FDOT D7			
		Longitude:	-82.680000	RR Milepost:	894.46	Scott Willis - CSX			
Field Review Comments:						Kelli Phillips - FDOT CO			
City wants to let a sidewalk project at the same time as this one						Bryan Shelamadne - FDOT CO			
Team Recommendations: Full Upgrade: 2 Gates, 2 Cantilevers, 2 Flashing Lights LED, Cabinet, Cable									
Train Detection									
Highway Speed:		30	<input type="checkbox"/>	Train Speed Range:		10-10	<input type="checkbox"/>		
Crossing Angle:		30-59 DEG	<input type="checkbox"/>	Max Time Table Speed:		10	<input type="checkbox"/>		
AADT:		6000 (2020)	<input type="checkbox"/>	Day Thru/Switch:		/	<input type="checkbox"/>		
Percent Trucks:		6 (2020)	<input type="checkbox"/>	Night Thru/Switch:		/	<input type="checkbox"/>		
School Buses:		9 (2021)	<input type="checkbox"/>	Train Service: Freight			<input type="checkbox"/>		
Street Types:		Two-Way Street	<input type="checkbox"/>	Passenger Count/Day:		0	<input type="checkbox"/>		
Thru Lanes:		2	<input type="checkbox"/>	Train Count Date:		03/31/2011	<input type="checkbox"/>		
Aux Lanes:		0	<input type="checkbox"/>	Main Tracks:		1	<input type="checkbox"/>		
Hazmat Route?		YES	<input type="checkbox"/>	Other Tracks:			<input type="checkbox"/>		
Emergency Services Route?		YES	<input type="checkbox"/>				<input type="checkbox"/>		
Emergency Notification Signs:		YES	<input type="checkbox"/>	Train Signals?		NO	<input type="checkbox"/>		
Crossbuck(4x4 post):		0	<input type="checkbox"/>	Train Signal Proximity:		NO	<input type="checkbox"/>		
Crossbuck Sign:		4	<input type="checkbox"/>	Train Detection:		Motion Detection	<input type="checkbox"/>		
Stop Sign:		0	<input type="checkbox"/>	Event Recorder?		N	<input type="checkbox"/>		
Yield Sign:		0	<input type="checkbox"/>	Number of Bells:		2	<input type="checkbox"/>		
Low Ground Clearance Signs:		0	<input type="checkbox"/>	Post Mounted Flashing Lights:		1	<input type="checkbox"/>		
Exempt Signs:			<input type="checkbox"/>	Backlights, Incandescent			<input type="checkbox"/>		
Trespass Signs:		NO	<input type="checkbox"/>	Roadway Gate Count:		0	<input type="checkbox"/>		
W10-1	1	R10-6a	0	W8-1	0	Pedestrian Gate Count:	0		
W10-2	0	R11-2	0	W10-8	0	Gates:			
W10-3	0	R15-2P	0	W10-9	0	Cantilevered Flashing Over Traffic:	2		
W10-4	0	R15-6	0	W10-9P	0	Incandescent			
W10-11	0	R15-6a	0	W10-11a	0	Cantilevered Flashing Not Over Traffic:	0		
W10-12	0	R15-7	0	W10-11b	0	Intersecting Roadway?	YES		
R3-1a	0	R15-7a	0	W10-13P	0	Signalized?	NO		
R3-2a	0	R15-8	0	W10-14P	0	Interconnection:	Not Interconnected		
R8-8	0	Pvt Crossing	0	W10-14aP	0	Traffic Signals Controlling?			
R8-9	0	Look Out	0	W10-15P	0	Preemption:			
R8-10	0	R8-8 w/Beacon	0	Slow	0	Does traffic queue across the tracks?	NO		
R8-10a	0	W3-1		W10-1w/Beacon	0	Traffic Pre-Signals?	NO		
R10-6	0	W3-3		LED Signs	0	8" Count:	0		
Surface Installment Date:				<input type="checkbox"/>	12" Count:			9	
Surface Type:				ASPHALT AND TIMBER	<input type="checkbox"/>	LED Count:			0
Pvmt Mrk:					<input type="checkbox"/>	Install - Upgrade:			-- 01/01/1980
Surface Condition:				EXCELLENT	<input type="checkbox"/>	Maintenance Responsibility:			COUNTY
Approach:				A = Smooth	<input type="checkbox"/>	Roadway Paved:			YES
Vehicle Reaction:				A = No reaction	<input type="checkbox"/>	Tracks run down street?			NO
Driver Reaction:				A = No reaction	<input type="checkbox"/>	Sidewalks on Crossing Approach?			NO
Rail/Pad Movement:				A = Smooth	<input type="checkbox"/>	Sidewalks Thru Crossing?			N/A
Incident History:					<input type="checkbox"/>	Crossing illuminated?			NO
					<input type="checkbox"/>	Commerical Power?			YES
					<input type="checkbox"/>	Alternative Power?			NO

46th Avenue N Location Map



46th Avenue N – Existing Crossing



COUNTY RESOLUTION
GRADE CROSSING TRAFFIC CONTROL DEVICES AND FUTURE RESPONSIBILITY

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
452084-1-57-01	46TH AVENUE NORTH	PINELLAS	15000-4090	D723 007 B

A RESOLUTION AUTHORIZING EXECUTION OF A RAILROAD REIMBURSEMENT AGREEMENT FOR THE INSTALLATION OF GRADE CROSSING TRAFFIC CONTROL DEVICES, AND FUTURE MAINTENANCE AND ADJUSTMENT OF SAID DEVICES; PROVIDING FOR THE EXPENDITURE OF FUNDS; AND PROVIDING WHEN THIS RESOLUTION SHALL TAKE EFFECT.

RESOLUTION NO. _____

ON MOTION OF Commissioner _____, seconded by Commissioner _____, the following RESOLUTION was adopted:

WHEREAS, the State of Florida Department of Transportation is constructing, reconstructing or otherwise changing a portion of the Public Road System, on 46th Avenue North, which shall call for the installation and maintenance of railroad grade crossing traffic control devices for railroad grade crossing over or near said highway; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSION OF PINELLAS COUNTY, FLORIDA;

That Pinellas County enter into a RAILROAD REIMBURSEMENT AGREEMENT with the State of Florida Department of Transportation and the CSX Transportation Company for the installation and maintenance of certain grade crossing traffic control devices designated as Financial Project Number 452084-1-57-01 on 46th Avenue North, which crosses the right of way and tracks of the Company at FDOT/AAR Crossing No. 626693F located near St. Petersburg, Florida; and

That the County assume it's share of the costs for future maintenance and adjustment of said grade crossing traffic control devices as designated in the RAILROAD REIMBURSEMENT AGREEMENT; and

That the Chairman and Clerk of the Board of Commissioners be authorized to enter into such agreements with the State of Florida Department of Transportation and the CSX Transportation Company as herein described; and

That this RESOLUTION shall take effect immediately upon adoption.

INTRODUCED AND PASSED by the Board of County Commissioners of Pinellas County, Florida, in regular session this _____, day of _____, ____.

Chairman of the Board of County Commissioners

ATTEST: _____ (SEAL)
 Clerk of the Board of County Commissioners

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES
ANNUAL MAINTENANCE COSTS

725-090-41
RAIL
06/21

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
452084-1-57-01	46 TH AVENUE NORTH	PINELLAS	15000-4090	D723 007 B

COMPANY NAME: CSX TRANSPORTATION INC.

A. FDOT/AAR XING NO.: 626693F RR MILE POST TIE: ARE 894.46

B. TYPE SIGNALS PROPOSED: TYPE II CLASS: III DOT INDEX: 509-070-1

**SCHEDULE OF ANNUAL COST OF AUTOMATIC
HIGHWAY GRADE CROSSING TRAFFIC CONTROL DEVICES**

Annual Maintenance Cost Exclusive of Installation

<u>CLASS</u>	<u>DESCRIPTION</u>	<u>COST*</u>
I	2-Quadrant Flashing Lights with One Track	\$2,608.00
II	2-Quadrant Flashing Lights with Multiple Tracks	\$3,451.00
III	2-Quadrant Flashing Lights and Gates with One Track	\$3,934.00
IV	2-Quadrant Flashing Lights and Gates with Multiple Tracks	\$4,940.00
V	3 or 4-Quadrant Flashing Lights and Gates with One Track	\$7,777.00
VI	3 or 4-Quadrant Flashing Lights and Gates with Multiple Tracks	\$9,759.00

AUTHORITY: FLORIDA ADMINISTRATIVE RULE 14-57.011
Public Railroad-Highway Grade Crossing Costs

EFFECTIVE DATE: July 22, 1982

GENERAL AUTHORITY: 334.044, F.S.

SPECIFIC LAW IMPLEMENTED: 335.141, F.S.

*This schedule will become effective July 1, 2021 and will be reviewed every 5 years and revised as appropriate based on the Consumer Price Index for all Urban Consumers published by the U.S. Department of Labor.



Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAUT, P.E.
SECRETARY

OFFICE OF DESIGN BULLETIN 21-02

TRAFFIC ENGINEERING AND OPERATIONS BULLETIN 21-01

FREIGHT AND MULTIMODAL OPERATIONS BULLETIN 21-01

DATE: February 12, 2021

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Construction Engineers, District Structures Design Engineers, District Maintenance Engineers, District Consultant Project Management Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers, District Materials Engineers, District Specifications Engineers, District Estimates Engineers, District Rail Administrators and Coordinators, District Safety Engineers, District Modal Administrators, District Intermodal Systems Development Administrators

FROM: Tim Lattner, P.E., Director, Office of Design

DocuSigned by:

Tim Lattner

C7704ED8972C440...

Trey Tillander, P.E., Director, Traffic Engineering and Operations Office

DocuSigned by:

Trey Tillander

D749973004EE41F...

Rickey Fitzgerald, Manager, Freight and Multimodal Operations

DocuSigned by:

Rickey Fitzgerald

389FEA9308F5496...

COPIES: Courtney Drummond, Brad Thoburn, Will Watts, Dan Hurtado, Rudy Powell, Michael Shepard, Stefanie Maxwell, Scott Arnold, Paul Hiers, Vern Danforth, Daniel Strickland, Robert Robertson, Lora Hollingsworth, Gevin McDaniel, Kevin Burgess (FHWA), Chad Thompson (FHWA), Bren George (FHWA)

SUBJECT: **Railroad At-Grade Crossings: Signing and Pavement Markings**

This Bulletin introduces revisions to the **FDOT Design Manual (FDM)** and the **FDOT Standard Plans for Road and Bridge Construction (Standard Plans)** to further enhance safety at highway-railroad at-grade crossings.

REQUIREMENTS

1. Delete **FDM 220.2.1.1** and replace it with Attachment 'A'.
2. **Standard Plans, Index 509-070 (Railroad Grade Crossing Traffic Control Devices)** has been updated to remove signing and pavement marking details and is released as an **Interim Revision (IR509-070-1)** to the **FY 2020-21 Standard Plans**. See Attachment 'B'. An **Interim Revision**

Office of Design Bulletin 21-02
Traffic Engineering and Operations Bulletin 21-01
Freight and Multimodal Operations Bulletin 21-01
Railroad At-Grade Crossings: Signing and Pavement Markings
Page 2 of 2

will also replace the original version of the Index published on October 30, 2020 with the ***FY 2021-22 Standard Plans***.

3. ***Standard Plans, Index 711-001 (Pavement Markings)*** has been updated to include a ‘*Railroad Dynamic Envelope (RDE) Pavement Marking Detail*’ and ‘*Railroad Crossing Pavement Message*’ details. This update is released as an ***Interim Revision (IR711-001-I)*** to the ***FY 2020-21 Standard Plans***. See Attachment ‘C’. An ***Interim Revision*** will also replace the original version of the Index published on October 30, 2020 with the ***FY 2021-22 Standard Plans***.

IMPLEMENTATION

These requirements are effective immediately for all projects where the Railroad Dynamic Envelope Safety Countermeasures (per Traffic Engineering and Operations Bulletin 20-01, Roadway Design Bulletin 20-02, Program Management Bulletin 20-01, Construction Bulletin 20-02, and Freight and Multimodal Operations Bulletin 20-01) have not been installed. For projects where Railroad Dynamic Envelope Safety Countermeasures have already been installed, this new criteria may be used if the District determines that it will enhance the safety of the railroad crossing.

CONTACT

Gevin McDaniel, P.E.
Roadway Design Criteria Administrator
gevin.mcdaniel@dot.state.fl.us

TL/TT/RF/gjm

Attachment 'A'

220.2.1.1 Signing and Pavement Markings

Exhibits 220-1 through **220-4** provide typical signing and pavement markings for Active Grade Crossings. Refer to the [MUTCD](#) for definitions and signing and pavement markings at Passive Grade Crossings.

Do not place turning movement lane-use pavement markings on the upstream approach between the railroad crossing pavement message and the tracks.

Where intersections occur between the W10-1 sign shown in **Exhibits 220-1** through **220-4** and the tracks, place an additional W10-1 sign between the intersection and the railroad gate.

Include Railroad Dynamic Envelope (RDE) pavement markings at Active and Passive Grade Crossings on:

- State Roads,
- State-owned rails, and
- State-owned property.

Any Variations to not install an RDE are to be approved by the Chief Engineer.

The determination of slightly or significantly skewed is at the discretion of the EOR.

Detail RDE pavement markings in the Plans in accordance with **Standard Plans, Index 711-001** and the details shown in **Exhibits 220-1** through **220-4**. Ensure the details in the plans include the following:

- (1) Orient RDE pavement markings:
 - (a) In the direction of the travel lanes at all approaches upstream of the crossing (i.e., transverse to the travel lanes).
 - i. For slightly skewed railroads extend the RDE markings transverse across all lanes, as shown in **Exhibits 220-2** and **220-3**.
 - ii. For significantly skewed railroads, step the RDE markings transverse across each lane, as shown in **Exhibit 220-4**.
 - (b) Along the railroad (i.e., parallel to the railroad tracks) for areas between tracks and downstream of the crossing.

- (c) To maximize the visibility of the RDE pattern for both the upstream and downstream sides of the track. Locate markings in a manner to ensure the “X” pattern is identifiable to the motorists and bicyclists and centered in the lanes to the extent practicable.
- (2) Place RDE markings through the foul area as shown in **Exhibits 220-3** and **220-4**. If the railroad owner will not allow the RDE markings through the foul area, or the substrate material will not provide an appropriate bonding surface for the markings, keep the RDE markings outside of the railroad’s foul area as shown in **Exhibits 220-1** and **220-2**.
- (3) Replace all skip lane lines with solid lines for the following distance: From stop bar to stop bar of each approach, then upstream and downstream for a Distance “A” plus 15 feet. For Distance “A”, see table in **Exhibit 220-1**.
- (4) Continue solid longitudinal edge line, lane line, and centerline markings through the RDE pattern, maintaining a 9-inch clear space between the RDE pattern and the longitudinal lane lines or gore areas.
- (5) Refurbish all existing longitudinal lane lines, edge lines, and centerlines to remain in-place for the following minimum distance: From stop bar to stop bar of each approach, then upstream and downstream for a Distance “A” plus 15 feet. For Distance “A”, see table in **Exhibit 220-1**.
- (6) Place RPMs at 10’ maximum on center for the following distance: From stop bar to stop bar of each approach excluding the foul area, then upstream and downstream for a Distance “A” plus 15 feet. For Distance “A”, see table in **Exhibit 220-1**.
- (7) For conditions where multiple tracks are configured non-parallel to each other, maintain the typical RDE pattern and fill the gap between the tracks, as necessary.
- (8) RDE markings must not interfere with any pedestrian crosswalk.

Consider the following additional provisions for Active and Passive Grade Crossings:

- For significantly skewed angles, corridor highway lighting for the following minimum distance: From stop bar to stop bar of each approach, then upstream and downstream for a Distance “A” plus 15 feet. For Distance “A”, see table in **Exhibit 220-1**.
- For significantly skewed angles, curves, and intersections directly adjacent to crossings, consider using additional channelization techniques for the roadway alignment. Some channelization techniques include Internally Illuminated RPMs

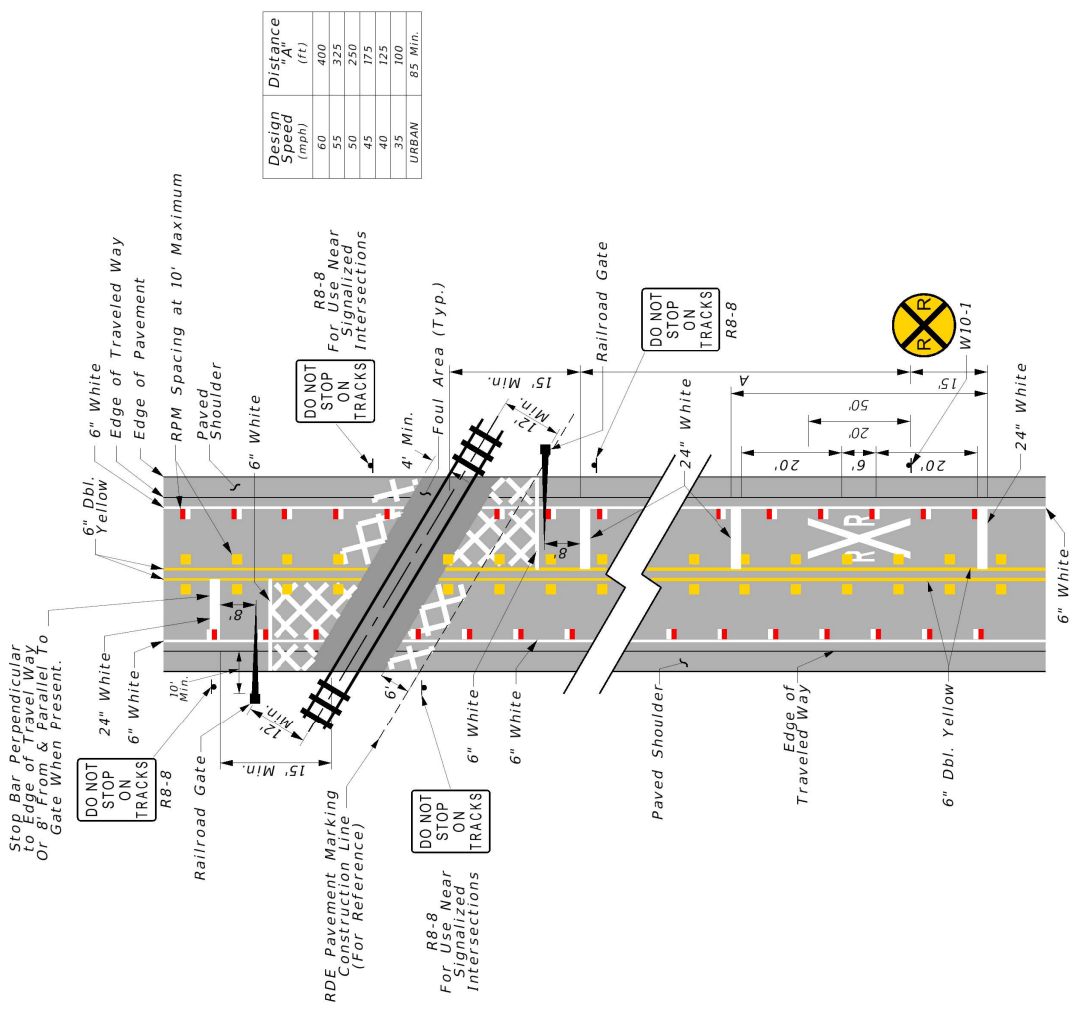
and Tubular Markers. When crest vertical curves impede the visibility of RPMs, Tubular Markers should be used. Consider excluding downstream RDE pattern when traffic queuing is not expected.

- Consider the use of through lane-use arrows. For turn lanes, a route shield may be used in conjunction with the through lane-use arrow.
- Remove all existing traffic control signs and pavement markings (e.g., turning signs and turning arrow lane-use pavement markings) from the upstream approach that may lead to driver confusion on the correct turning point for downstream turning movements.

For pavement marking material selection, see **FDM 230**.

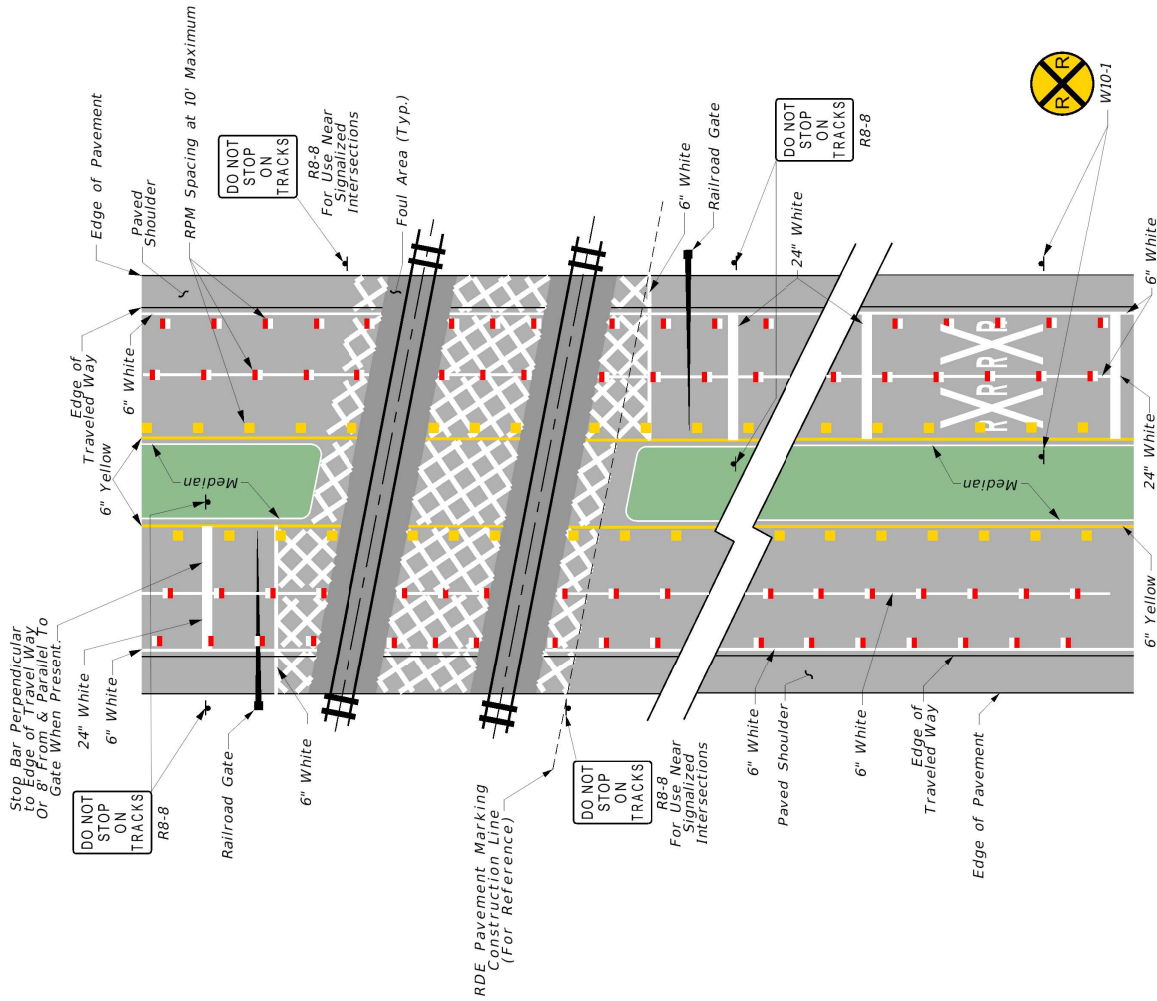
For side roads with Active and Passive Grade Crossings within 100 feet of the edge of traveled way, include W10-2, W10-3 or W10-4 signs on the mainline state road in accordance with the [MUTCD](#).

RAILROAD CROSSING AT TWO-LANE ROADWAY



NOT TO SCALE

RAILROAD CROSSING AT MULTILANE ROADWAY

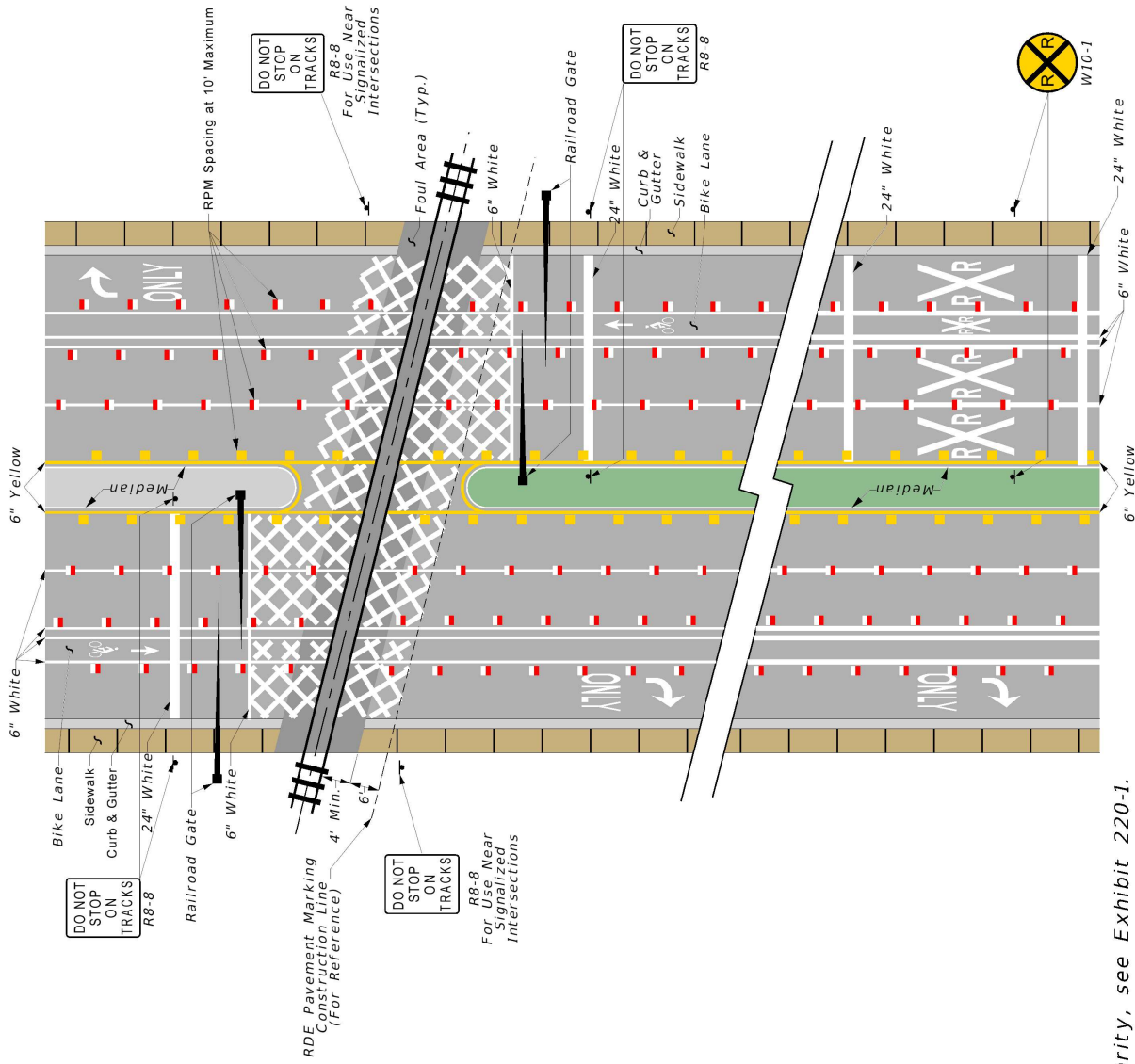


Dimensions not shown for clarity, see Exhibit 220-1.

NOT TO SCALE

EXHIBIT 220-2
02/05/2021

RAILROAD CROSSING AT URBAN MULTILANE ROADWAY WITH TURN LANE

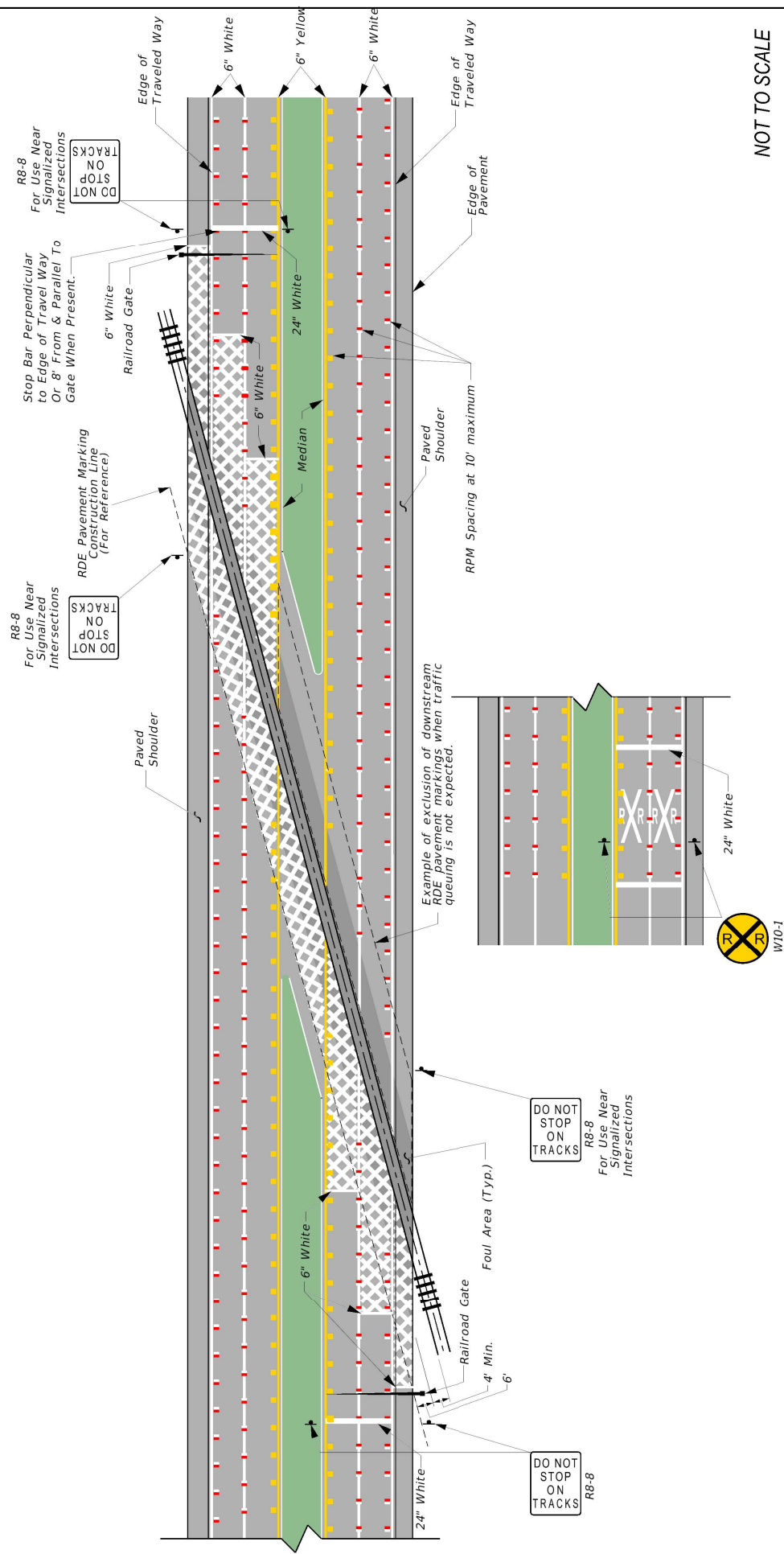


NOT TO SCALE

EXHIBIT 220-3
02/05/2021

Dimensions not shown for clarity, see Exhibit 220-1.

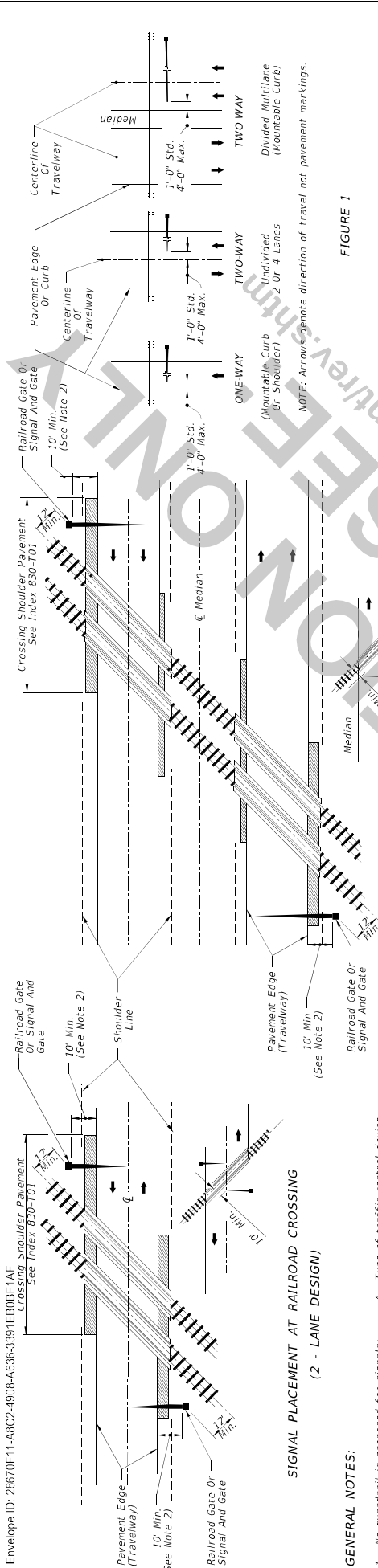
RAILROAD CROSSING WITH SIGNIFICANT SKEW TO THE ROADWAY



NOT TO SCALE

Dimensions not shown for clarity, see Exhibit 220-1.

Attachment 'B'



SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 - LANE DESIGN)

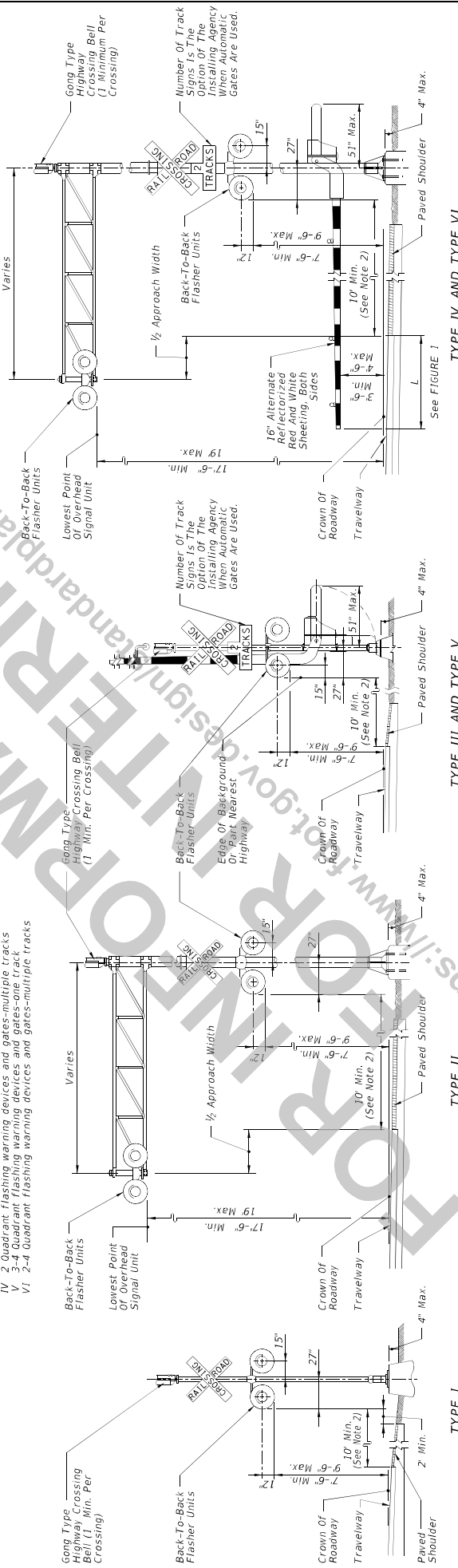
GENERAL NOTES:

1. No guardrail is proposed for signals; however, some form of impact attenuation device may be specified for certain locations.
2. Advance flasher to be installed when and if called for in Plans or Specifications.
3. Top of foundation shall be no higher than 4" above finished shoulder grade.
4. Type of traffic control device:
 - I Flashing warning devices
 - II Flashing warning devices with cantilever
 - III Flashing warning devices with gate
 - V Gate
5. Class of traffic control devices (Not Shown)
 - I 2 Quadrant flashing warning devices-one track
 - II 2 Quadrant flashing warning devices and gates-one track
 - III 2 Quadrant flashing warning devices and gates-multiple tracks
 - IV 2 Quadrant flashing warning devices and gates-multiple tracks
 - V 2 Quadrant flashing warning devices and gates-multiple tracks
 - VI 2-4 Quadrant flashing warning devices and gates-multiple tracks

FIGURE 1

NOTE:
1. Two separate foundations may be required (one for signals, one for gate), depending on type of equipment used.
2. When 10' is deemed impractical the control device can be located as close as 2' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.

SIGNAL PLACEMENT AT RAILROAD CROSSING
(4 - LANE DESIGN)



TYPE I

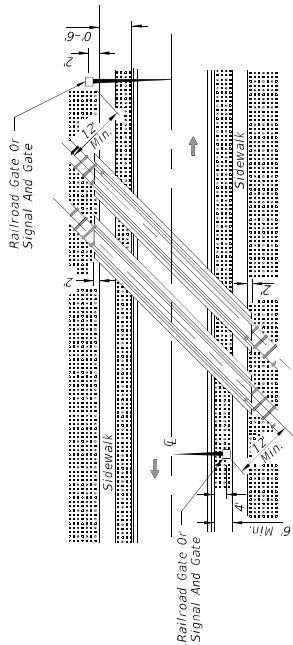
TYPE II

TYPE III AND TYPE V

TYPE IV AND TYPE VI

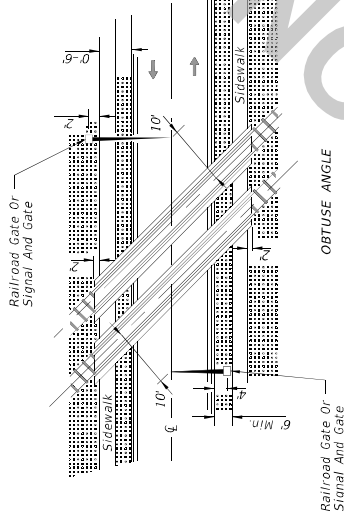
TRAFFIC CONTROL DEVICES FOR FLUSH SHOULDER ROADWAY

LAST REVISION	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
02/05/21	Deleted railroad signage and pavement marking details.			509-070-1	1 of 3



ACUTE ANGLE (AND RIGHT ANGLE)

SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 LANES, CURB & GUTTER)

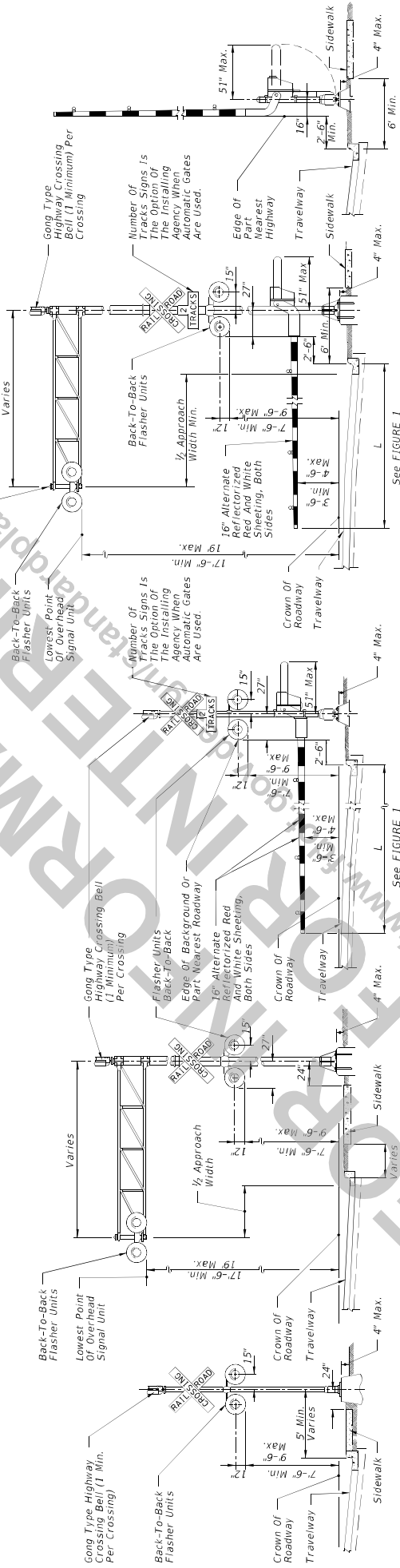


OBTUSE ANGLE

SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 LANES, CURB & GUTTER)

- NOTES:
1. The location of flashing warning devices and stop lines shall be established based on future (or present) installation of gate with appropriate track clearances.
 2. Where plans call for railroad traffic control devices to be installed in curved medians, the minimum median width shall be 12'-6".
 3. Location of railroad traffic control device is based on the distance available between face of curb & sidewalk, 0' to 6' - Locate device outside sidewalk. Over 6' - Locate device between face of curb and sidewalk.
 4. Stop line to be perpendicular to edge of roadway, approx. 15' from nearest rail, or 8' from and parallel to gate when present.
 5. When a cantilevered arm flashing warning device is used, the device shall be located 7' from the lowest point of the overhead Signal Unit.

As A Minimum, Position One Flasher Unit Over Lane Separation Lines (More Than One Flasher Unit If There Are More Than 2 Approach Lanes).



TYPE I

TYPE II

TYPE III

TYPE IV

TYPE V

TRAFFIC CONTROL DEVICES FOR CURBED ROADWAY

LAST REVISION	DESCRIPTION:
02/05/21	Deleted railroad signage and pavement marking details.

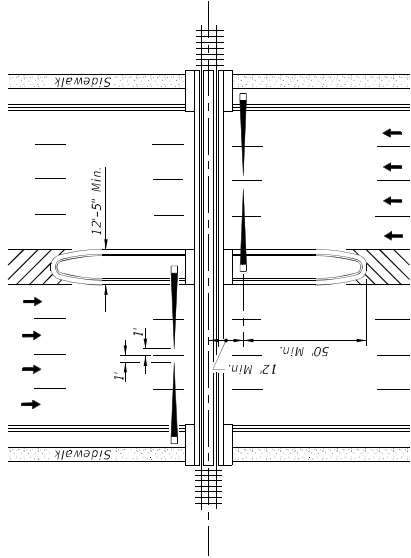


FY 2020-21
STANDARD PLANS

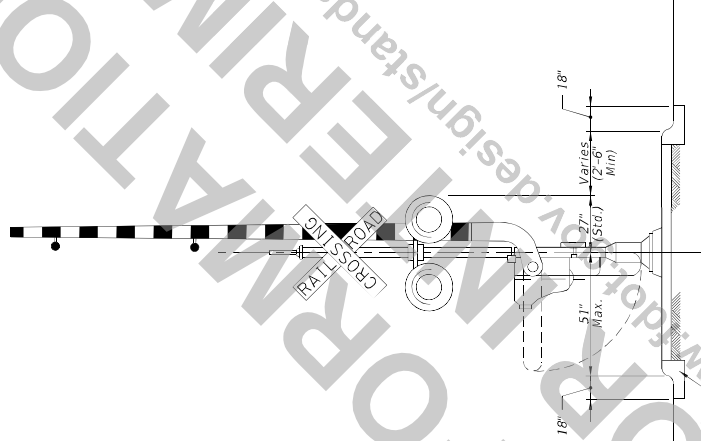
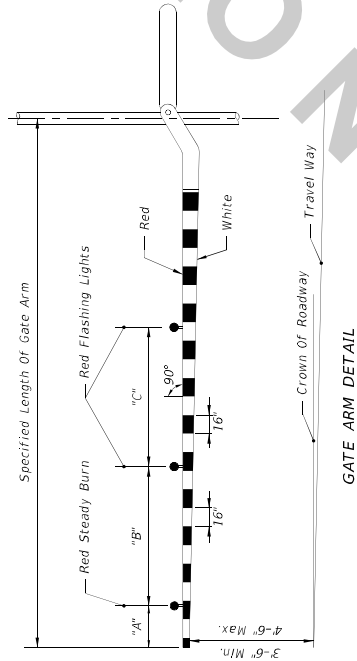
RAILROAD GRADE CROSSING
TRAFFIC CONTROL DEVICES

INDEX
509-070-1

SHEET
2 of 3



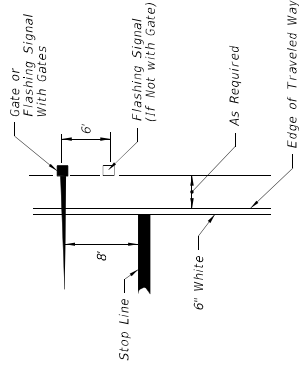
PLAN



MEDIAN SECTION AT SIGNAL GATES

RAILROAD GATE ARM LIGHT SPACING			
Specified Length Of Gate Arm	Dimension "A"	Dimension "B"	Dimension "C"
14 Ft.	6"	36"	5'
15 Ft.	18"	36"	5'
16-17 Ft.	24"	36"	5'
18-19 Ft.	28"	41"	5'
20-23 Ft.	28"	4'	5'
24-28 Ft.	28"	5'	5'
29-31 Ft.	36"	6'	6'
32-34 Ft.	36"	7'	7'
35-37 Ft.	36"	9'	9'
38 And Over	36"	10'	10'

NOTE:
For additional information see the "Manual On Uniform Traffic Control Devices", Part 8: The "Traffic Control Handbook", Part VIII: and AASHTO "A Policy On Geometric Design Of Streets And Highways".



RELATIVE LOCATION OF CROSSING TRAFFIC CONTROL DEVICES

LAST REVISION
02/05/21

DESCRIPTION:
Added Relative Location of Crossing Traffic Control Devices details.



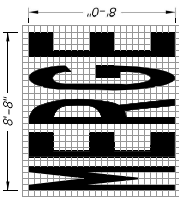
FY 2020-21
STANDARD PLANS

RAILROAD GRADE CROSSING
TRAFFIC CONTROL DEVICES

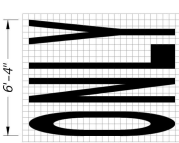
INDEX
509-070-1

SHEET
3 of 3

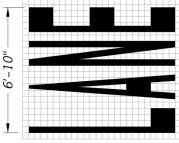
Attachment 'C'



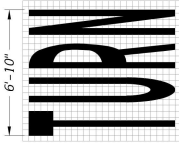
34 S.F.



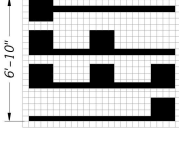
22 S.F.



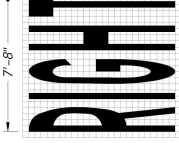
23 S.F.



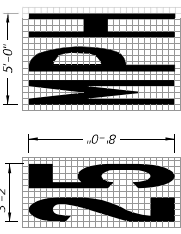
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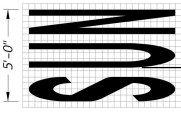
20 S.F.



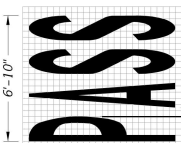
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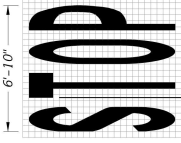
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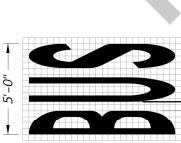
20 S.F.



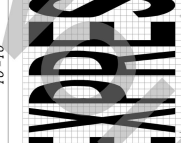
23 S.F.



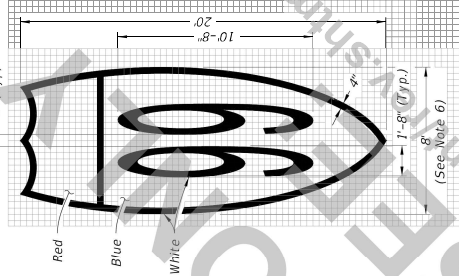
22 S.F.



20 S.F.

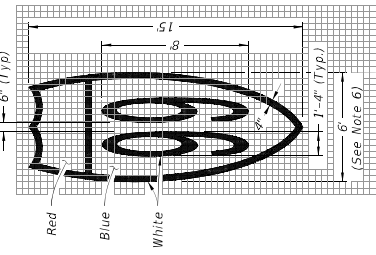


43 S.F.



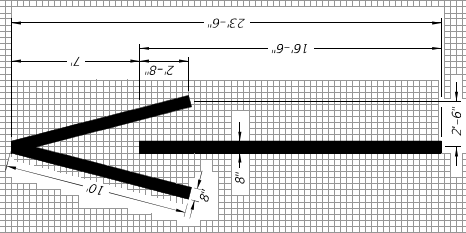
Route Shield for Limited Access Roadway
Added Railroad
Route Shield Shown U.S. and
State Route Shield Similar

128 S.F.

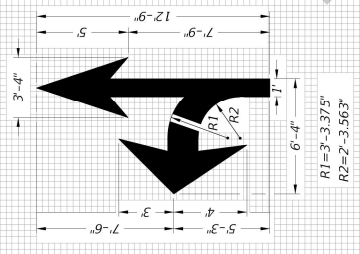


Route Shield for Arterials and Major Roadways
Added Railroad
Route Shield Shown U.S. and
State Route Shield Similar

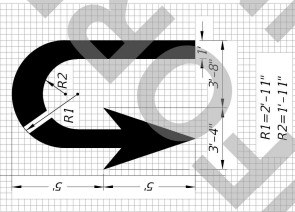
72 S.F.



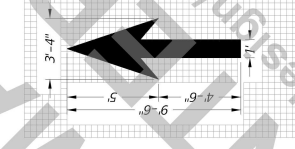
Wrong-Way Arrow
24 S.F.



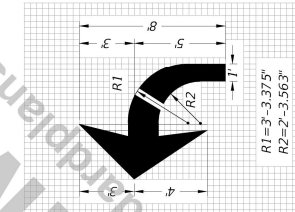
Turn and Through Lane-Use Arrow
29 S.F.



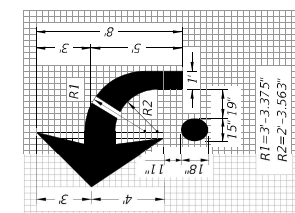
U Turn Lane-Use Arrow
27 S.F.



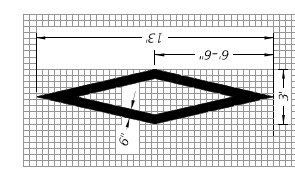
Through Lane-Use Arrow
12 S.F.



Turn Lane-Use Arrow
(Left Turn Shown - Right Turn Similar)
17 S.F.



Roundabout Approach Arrow
19 S.F.



Preferential Lane Symbol
11 S.F.

NOTES FOR PAVEMENT MESSAGES:

- When an arrow or another pavement message is used with a pavement message, maintain a minimum distance of 5' between the two messages. See the Pavement Message Spacing Table for "S" value.
- Place all pavement messages 25' back from the stop line.
- Dimensions are within 1" ±.
- All grids are 4" x 4".
- All pavement messages must be white except route shields.
- Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE SPACING TABLE	
Posted Speed (mph)	Distance "S" (feet)
≤ 25	40
30 - 35	56
40 - 45	72
≥ 50	88

PAVEMENT MESSAGE AND ARROW DETAILS

GENERAL NOTE:

- See Index 509-070 for pavement markings at railroad crossings.

DESCRIPTION:
Added railroad pavement marking details.

FDOT

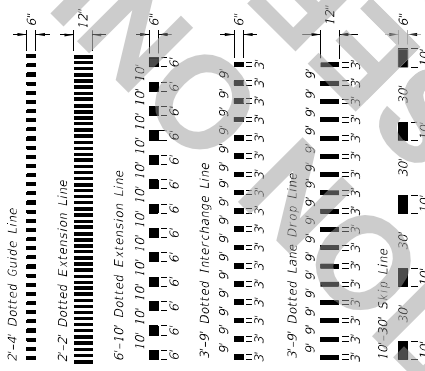
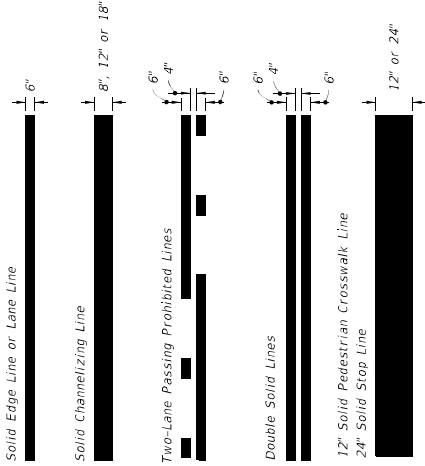
FY 2020-21
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LAST REVISION
02/05/21

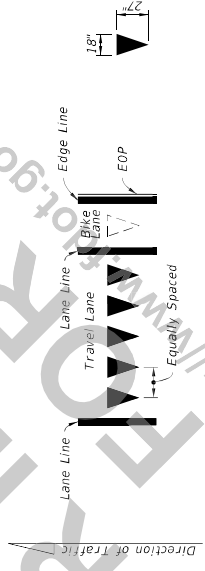


PAVEMENT MARKING LINES



DOTTED LINE WITH ALTERNATING SHADOW MARKINGS

(3'-9' Dotted Line Shown, Other Dotted Lines Similar)



Yield Lines consist of five - 18" X 27" white triangles which face traffic. Equally spaced triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.

YIELD LINES

LAST REVISION	DESCRIPTION
02/05/21	Added railroad pavement marking details.

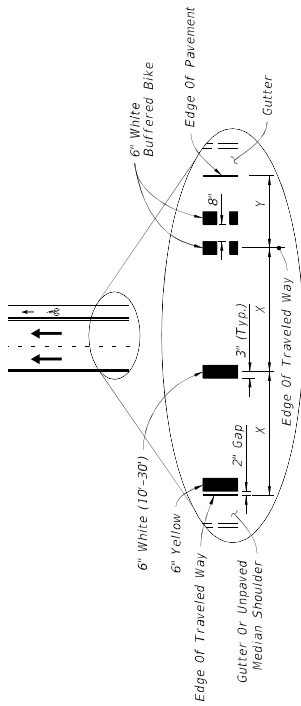


FY 2020-21
STANDARD PLANS

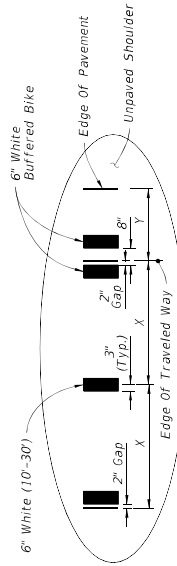
PAVEMENT MARKINGS

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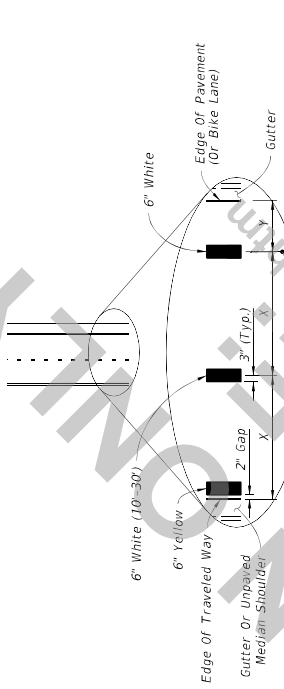
CURB AND GUTTER



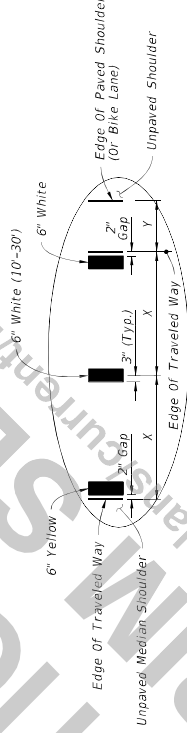
FLUSH SHOULDER

X = LANE WIDTH (FT.)
Y = BUFFERED BIKE LANE WIDTH (FT.)

STRIPING FOR BUFFERED BIKE LANE



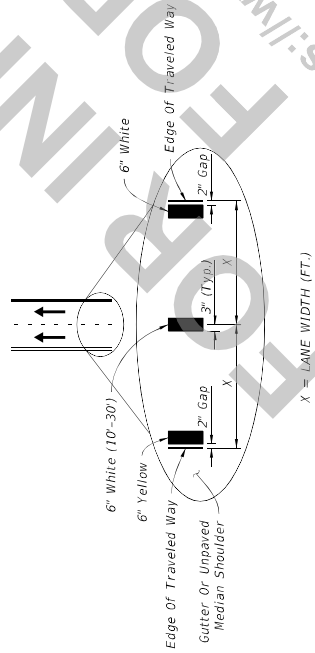
CURB AND GUTTER



FLUSH SHOULDER

X = LANE WIDTH (FT.)
Y = PAVED SHOULDER / BIKE LANE

STRIPING WITH SHOULDER OR NON-BUFFERED BIKE LANE

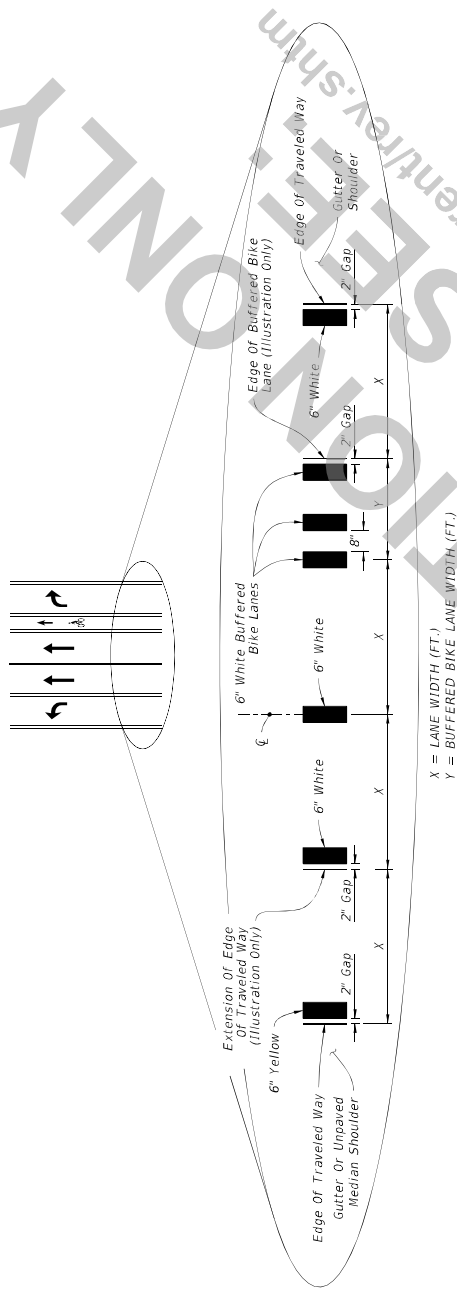


STRIPING WITH NO SHOULDER OR BIKE LANE

NOTES:

1. Lane widths (X) may not be same for each lane in the section.
2. For placement of RPMs, see Index 706-001.

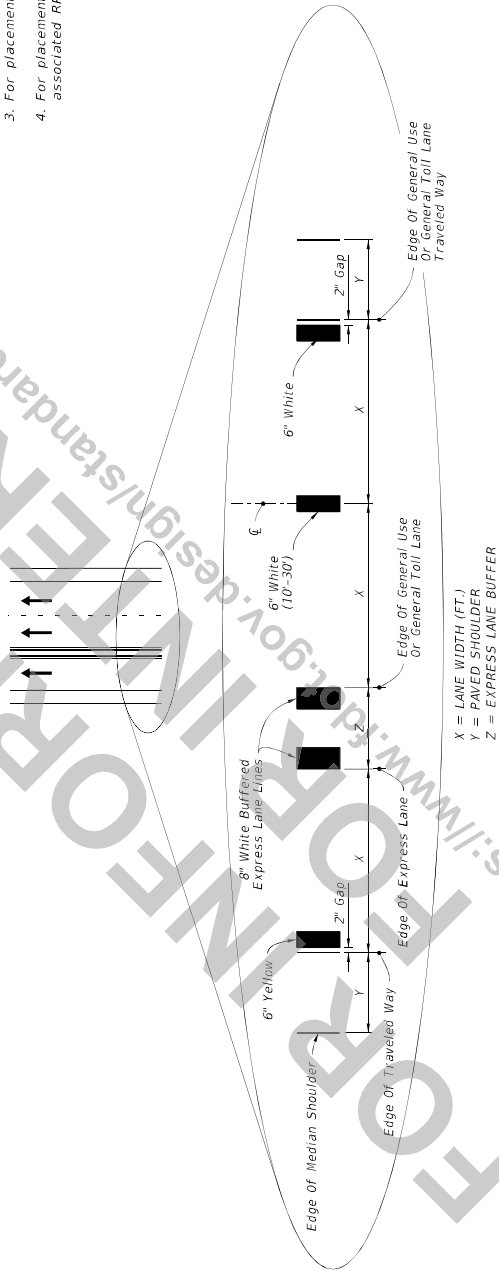
LAST REVISION		DESCRIPTION:		FDOT		FY 2020-21		STANDARD PLANS		PAVEMENT MARKINGS		INDEX		SHEET	
02/05/21		Added railroad pavement marking details.										711-001-1		3 of 14	



INTERSECTION APPROACH STRIPING WITH TURN LANES AND BUFFERED BIKE LANE KEY HOLE

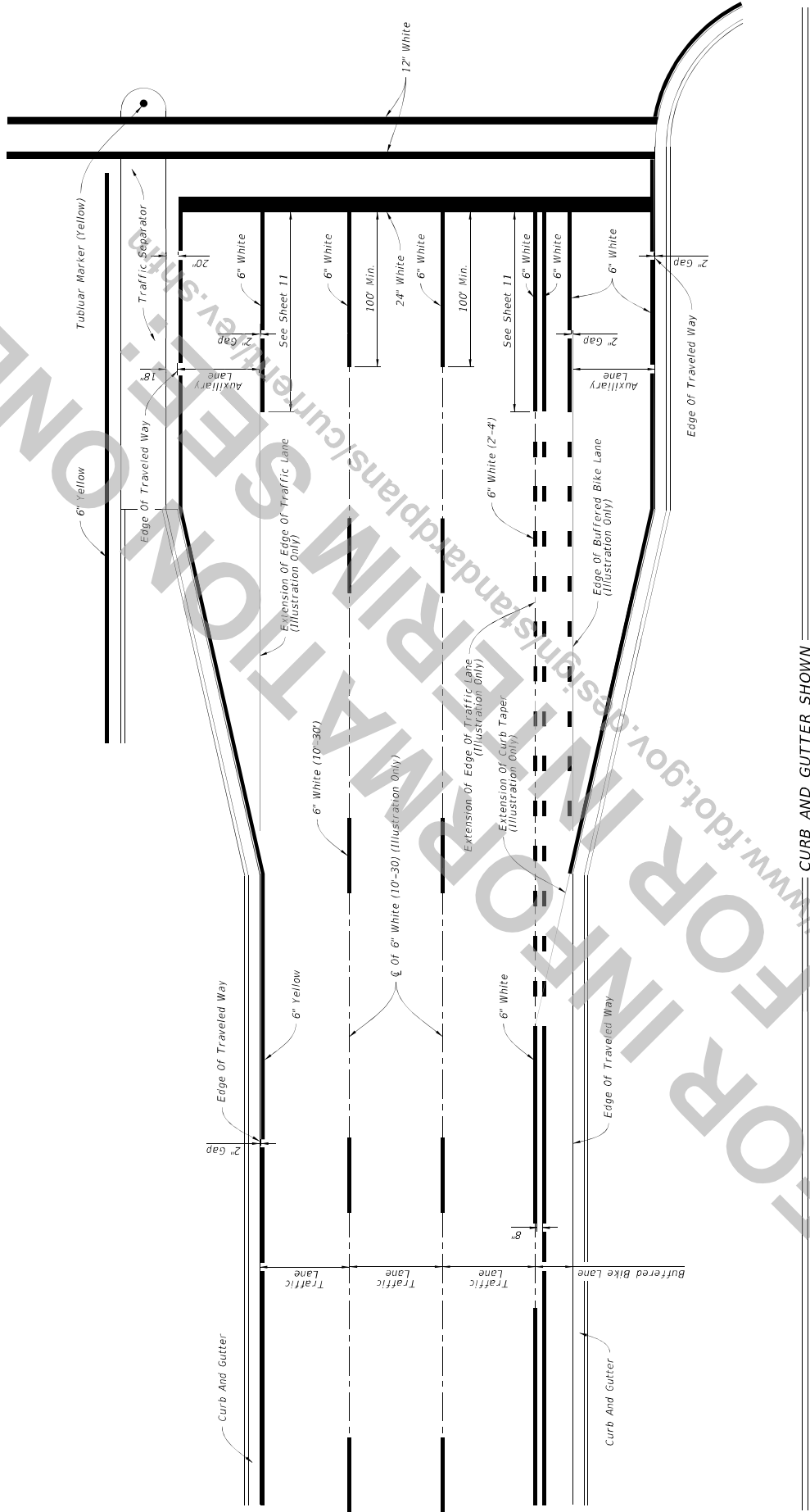
NOTES:

1. Lane widths (X) may not be same for each lane in the section.
3. For placement of RPMs, see Index 706-001.
4. For placement of Express Lane markers and associated RPMs, see the Plans.



BUFFERED EXPRESS LANE STRIPING

LAST REVISION		DESCRIPTION:		PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS	
02/05/21		Added railroad pavement marking details.		PAVEMENT MARKINGS	
FDOT		FY 2020-21 STANDARD PLANS		INDEX	
				711-001-1	
				SHEET	
				4 of 14	

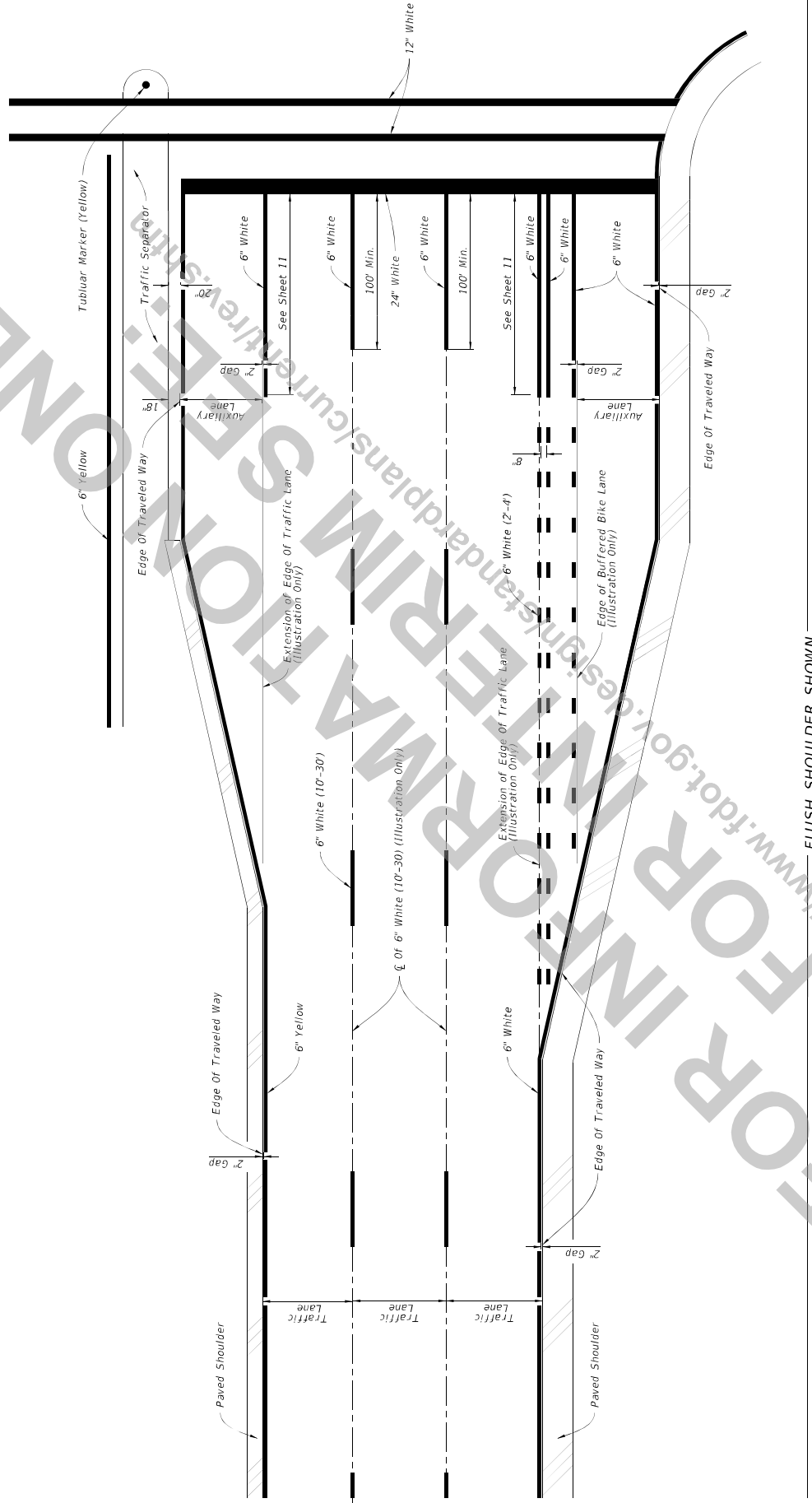


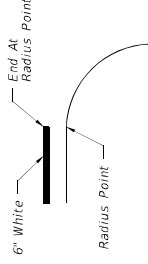
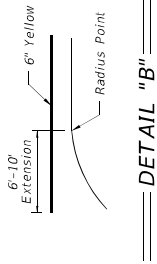
12/06/21 PM

2/5/2021

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

LAST REVISION	DESCRIPTION: Added railroad pavement marking details.	FDOT FY 2020-21 STANDARD PLANS	PAVEMENT MARKINGS		SHEET 5 of 14
			INDEX	71I-001-1	






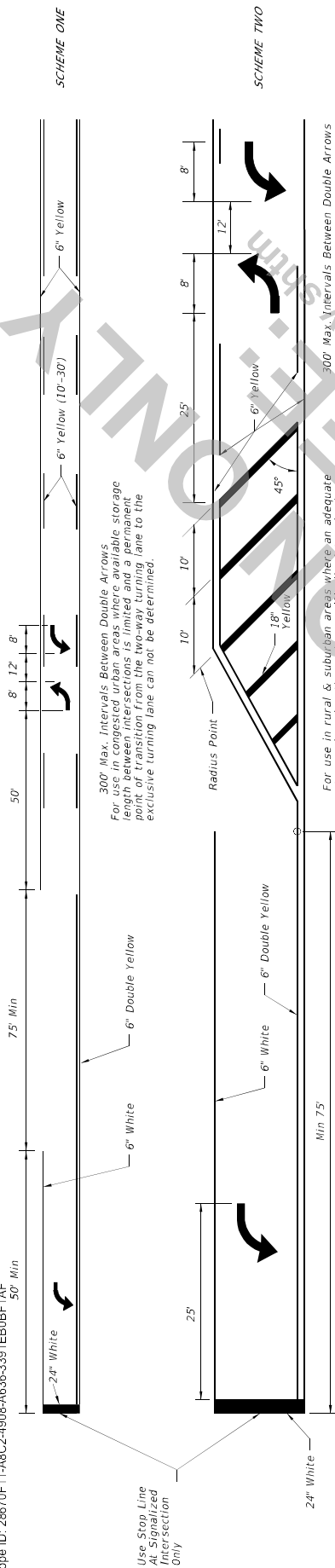
DETAIL "C"



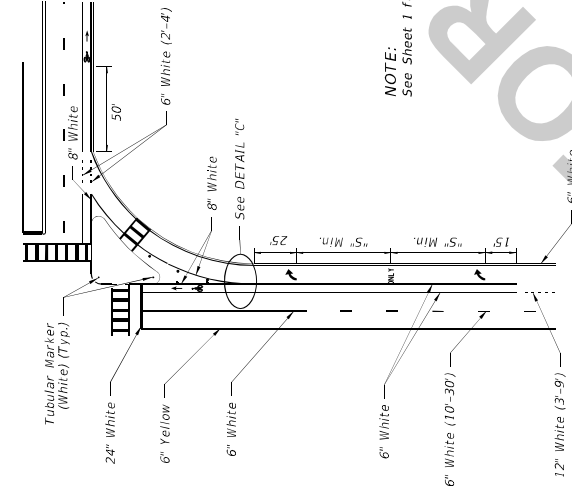
2. Options for grassed medians:
 - A. Option 1: Tubular Marker (Yellow). Attach Tubular Marker according to manufacturer's instructions. Non-Paired Surface (Yellow) and Paired Surface (Yellow) are available. The entire suitable surface is paved. Install Non-Paved Surface Foundation flush with the surrounding ground surface.
 - B. Option 2: Delineator Post. Use yellow retro-reflective sheeting on both sides of the delineator. Install the post so that the top is 4'-0" above the grade at the edge of the pavement.
3. Extend double yellow centerlines 100' back from intersection on all approaches or 50' for unmarked cross roads.

PAVEMENT MARKINGS FOR INTERSECTIONS WITH MAJOR AND MINOR ROADS

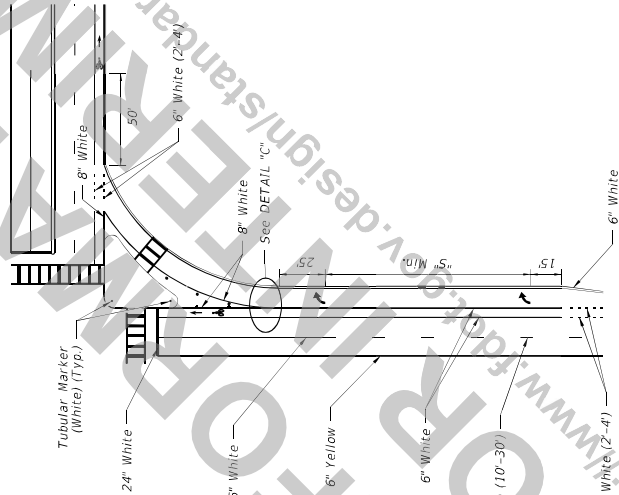
LAST REVISION 02/05/21	DESCRIPTION: Added railroad pavement marking details.	 FY 2020-21 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
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TWO WAY LEFT TURN LANE
(With Single Lane Left Turn Channelization)

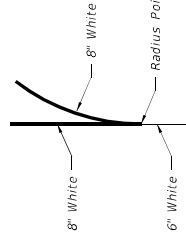


NOTE:
See Sheet 1 for "S" value.

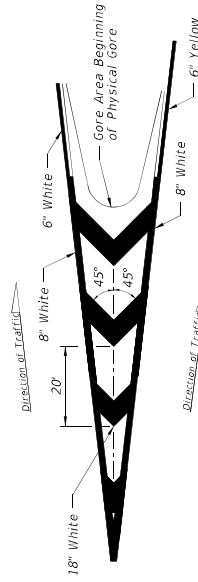


RIGHT TURN LANE DROP AND ISLAND DETAILS
LEFT TURN LANE DROP IS MIRROR IMAGE

RIGHT TURN LANE AND ISLAND DETAILS



DETAIL "C"



TRAFFIC CHANNELIZATION AT GORE

NOTE:
See Sheet 1 for "S" value.

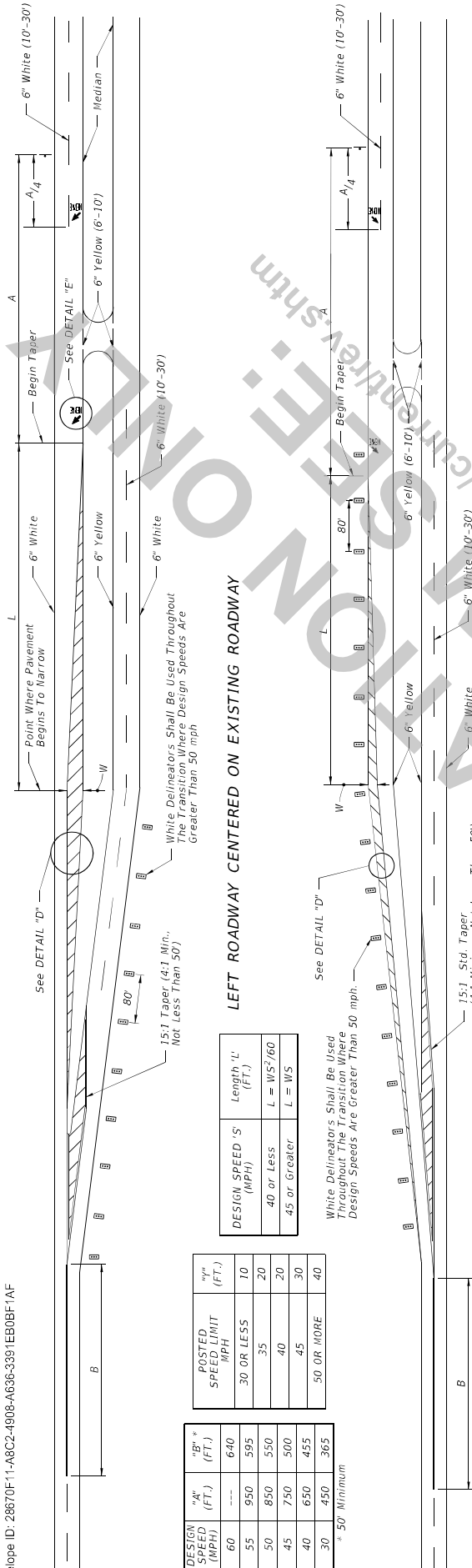
DESCRIPTION:
Added railroad pavement marking details.

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LEFT ROADWAY CENTERED ON EXISTING ROADWAY

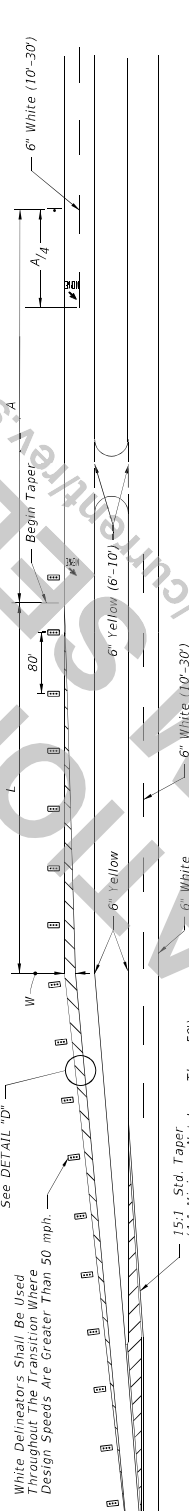
DESIGN SPEED (MPH)	"A" (FT.)	"B" (FT.)	POSTED SPEED LIMIT (MPH)	"W" (FT.)
60	---	640	30 OR LESS	10
55	950	595	35	20
50	850	550	40	20
45	750	500	45	30
40	650	455	50 OR MORE	40

50 Minimum

DESIGN SPEED "S" (MPH)	Length "L" (FT.)
45 or Greater	$L = WS$
40 or Less	$L = WS^2/60$

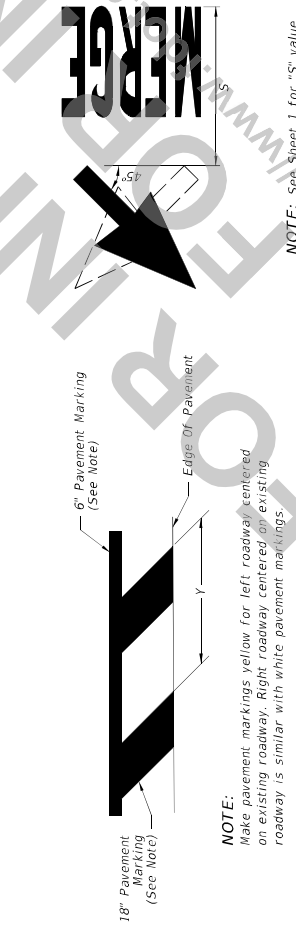
White Delineators Shall Be Used Throughout The Transition Where Design Speeds Are Greater Than 50 mph.

See DETAIL "D"



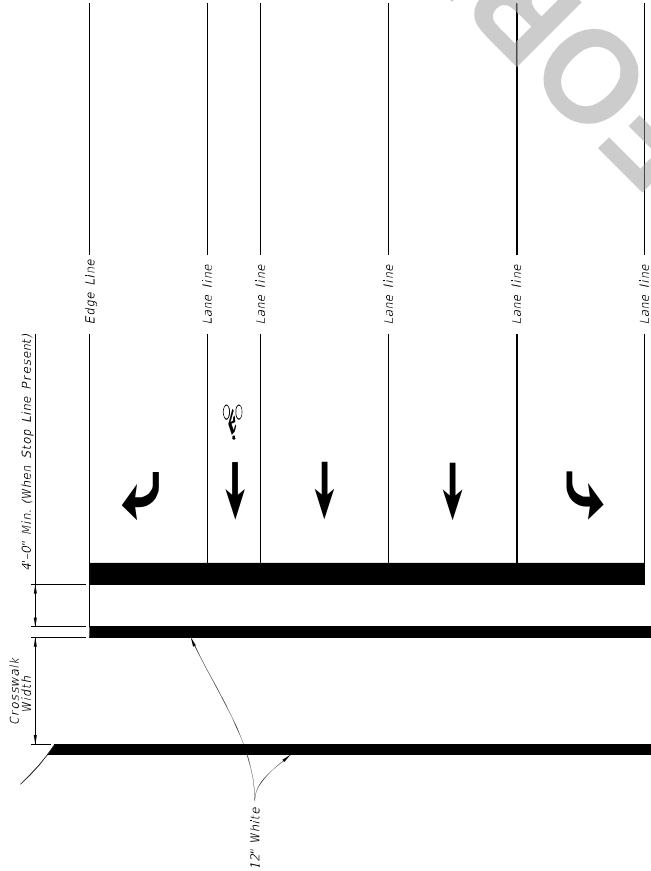
RIGHT ROADWAY CENTERED ON EXISTING ROADWAY

SCHEMES FOR TRANSITION - 2 LANE / 4 LANE ROADWAY

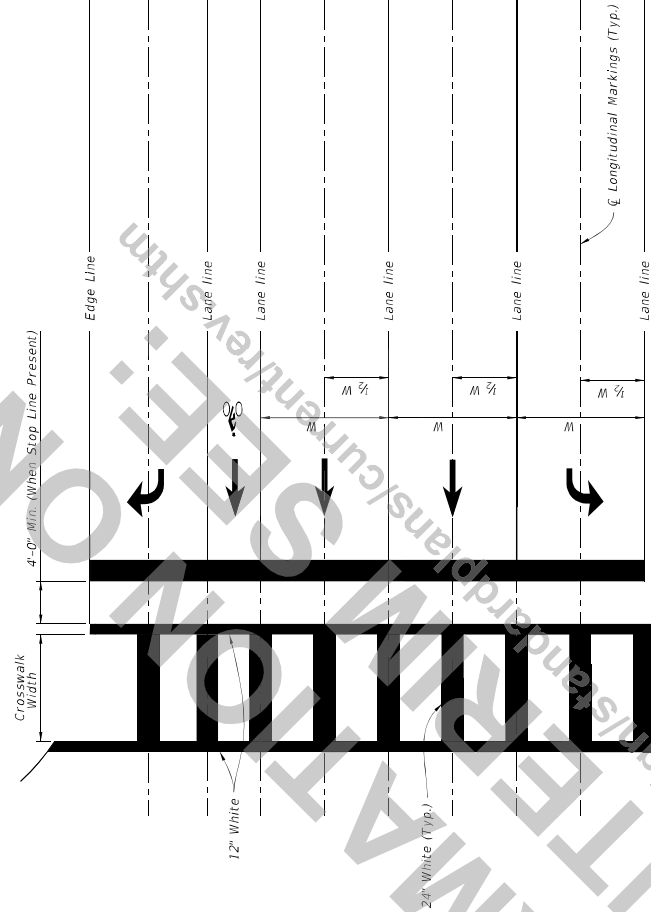


NOTE: Make pavement markings yellow for left roadway centered on existing roadway. Right roadway centered on existing roadway is similar with white pavement markings.

DETAIL "D" MARKINGS FOR TRAFFIC SEPARATION



STANDARD CROSSWALK DETAILS



SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
3. Refer to Index 522-002 when Curb Ramps are present.

LAST
REVISION
02/05/21

DESCRIPTION:
Added railroad pavement marking details.

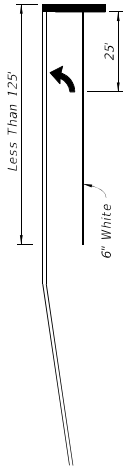


FY 2020-21
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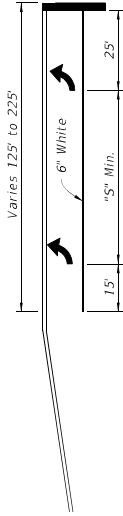
PAVEMENT MARKINGS

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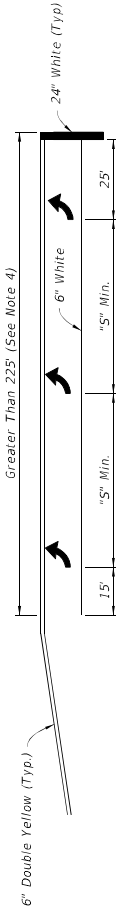
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1 ARROW



2 ARROW



3 ARROW

SINGLE LEFT TURNS

6" Pavement Marking
(See Note 2)



24" White (Typ)

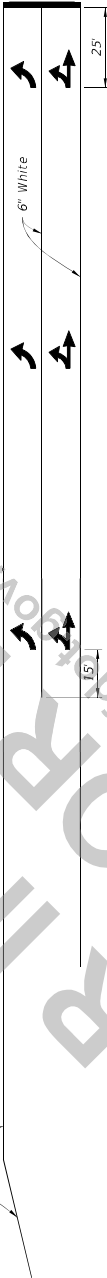
12" White ONLY

6" White

24" White (Typ)

Through Lane Becomes Exclusive Left Turn

6" Pavement Marking
(See Note 2)



Through Lane Becomes Optional Left Turn

DOUBLE LEFT TURNS

NOTES:

1. This Index also applies to right turn lanes.
2. Make pavement marking yellow for left-turn lanes and white for right-turn lanes.
3. See Sheet 1 for "S" value.
4. Space arrows evenly between the first and last arrow with a minimum spacing of "S" between arrows.
5. For turn lanes greater than 225' in length, use a minimum of three arrows. Use additional arrows in accordance with the Plans or as directed by the Engineer. Space arrows evenly throughout the available length with a minimum spacing of "S" between arrows.

LAST REVISION
02/05/21

DESCRIPTION:
Added railroad pavement marking details.



FY 2020-21
STANDARD PLANS

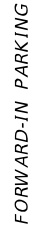
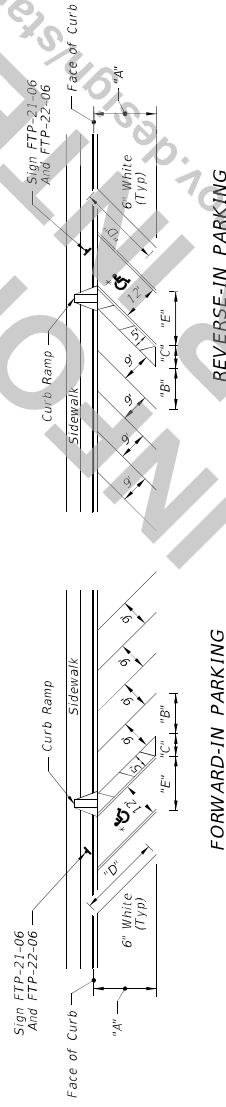
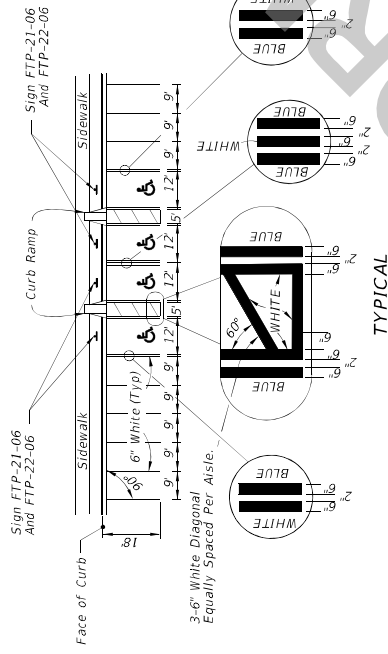
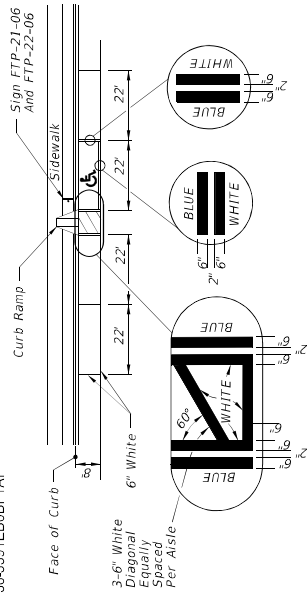
PAVEMENT MARKINGS

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TURN LANE MARKINGS

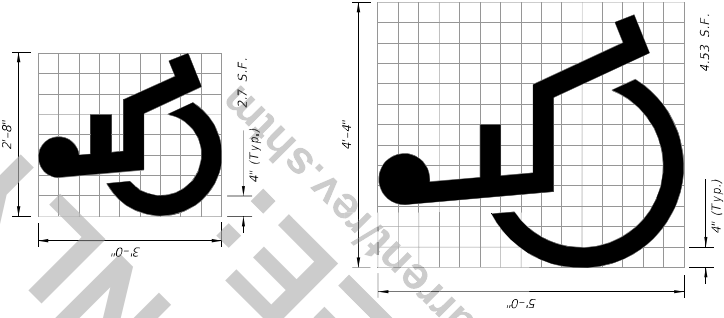
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DIMENSIONS				
$\angle \theta$	"A"	"B"	"C"	"D"
45°	$17'-0"$	$12'-9"$	$7'-0"$	$24'-0"$
				$17'-0"$

PAVEMENT MARKING FOR PARKING



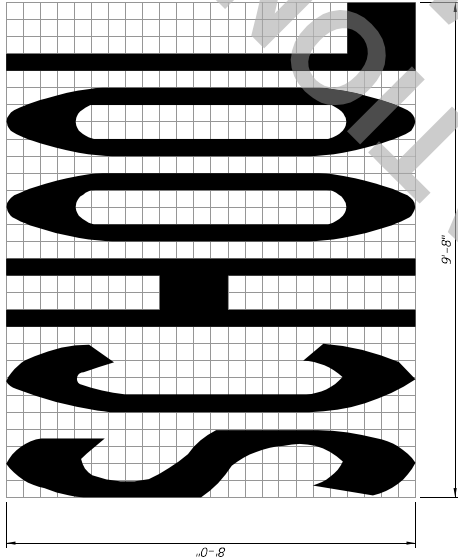
(See Note 6)

= UNIVERSAL SYMBOL OF ACCESSIBILITY

NOTES:

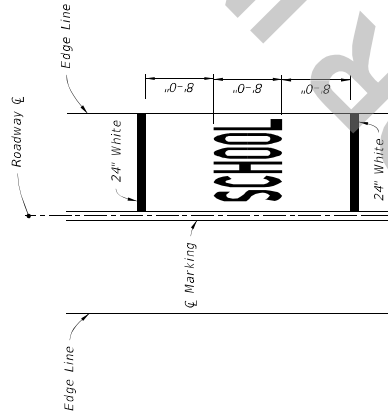
1. Dimensions are to the centerline of markings.
2. An Access Aisle is required for each accessible space when angle parking is used.
3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to Plans.
4. Tint blue pavement markings to match color 15180 of Federal Standards 959a.
5. Mount FTP-22-06 sign below the FTP-21-06 sign.
6. Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.

33 S.F.



SCHOOL PAVEMENT MARKING

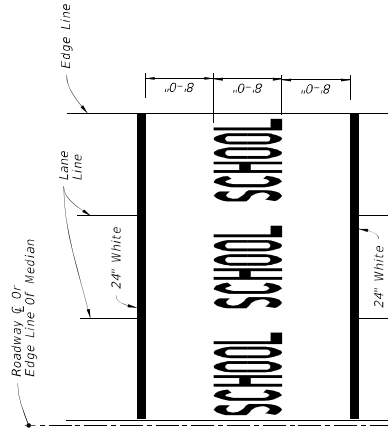
- NOTES:**
1. All grids are 4" x 4".
 2. Pavement Marking Should Not Extend Into Opposing Lane.
 3. Center School Pavement Marking in Lane.



SINGLE-LANE APPROACH



TWO-LANE APPROACH

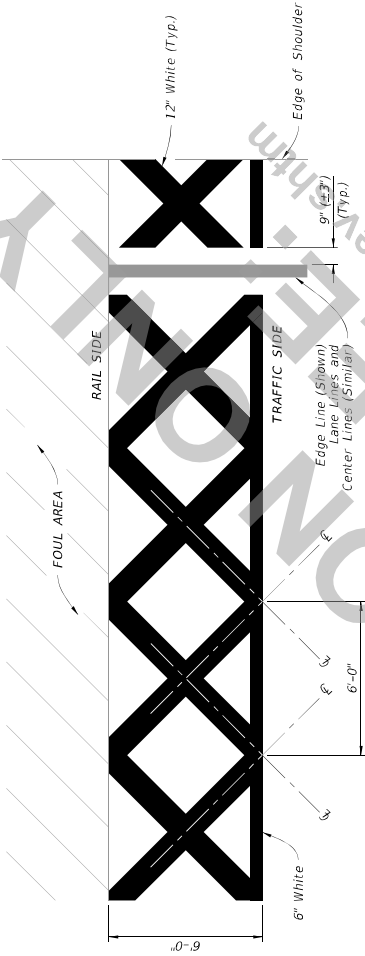


MULTI-LANE APPROACH
(Three or More)

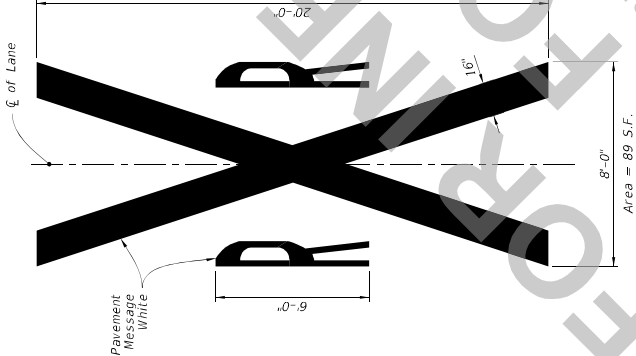
MARKINGS FOR SCHOOL ZONES

LAST REVISION 02/05/21	DESCRIPTION: Added railroad pavement marking details.	FDOT	FY 2020-21 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001-1	SHEET 13 of 14

NOTE:
Orient Railroad Dynamic Envelope Marking as shown in the Plans.



RAILROAD DYNAMIC ENVELOPE (RDE) PAVEMENT MARKING DETAIL



RAILROAD CROSSING PAVEMENT MESSAGE

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02/05/21	Added railroad pavement marking details.			711-001-1	14 of 14