# **Origination Form**

# Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	521-509
Date:	4/29/2025	Sheet Number(s):	Sheet 4
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	TRAFFIC RAILING/NOISE WALL (8'-0") - BRIDGE

### Summary of the changes:

Sheet 4: Added a grout plug option as an alternate detail.

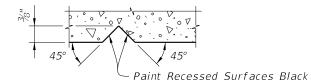
# Commentary/Background:

Contractors wanted a more constructible and economical option that would still perform the intended function of preventing water to flow out between the open joints.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

### Implementation

["FY-Standard Plans (Next Release)"]

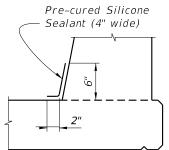


SECTION THRU RECESSED "V" GROOVE TO FORM INSCRIBED LETTERS AND FIGURES

#### INTERMEDIATE JOINT SEAL NOTES:

- 1. At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
- 2. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.
- 3. The cost of the Pre-cured Silicone Sealant shall be included in the Contract Unit Price for the Traffic Railing.

DESCRIPTION:



4. As an alternative option, a mortar plug may be used to seal the joint as shown in the mortar plug detail and in accordance with

#### DETAIL "B" - SECTION AT INTERMEDIATE OPEN JOINT Option |

ESTIMATED TRAFFIC				
RAILING/NOISE WALL QUANTITIES				
ITEM	UNIT	QUANTITY		
Concrete (Railing)	CY/LF	0.107		
Concrete (Noise Wall)	CY/LF	0.136		
Reinforcing Steel (Typical)	LB/LF	69.36		
Additional Reinf. @ Open Joint	LB	226.85		

(The above quantities are based on the bridge mounted typical section, 2% deck cross slope and railing on low side of deck.)

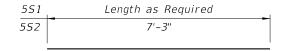
2026-27

#### REINFORCING STEEL BENDING DIAGRAMS BILL OF REINFORCING STEEL MARK SIZE LENGTH R 1 5 5'-2" R2 5 5'-2½" R3 5 4'-10" 5 S1 As Regd 52 5 7'-3" V 5 6'-61/2"

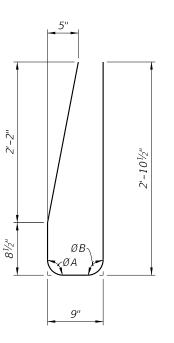
1	5R3 5R3
2'-5"	5'-2"
6"	
BAR 5R1	BAR 5R2 & BAR 5R3

(Field Cut and Bend for Railing End Transition)

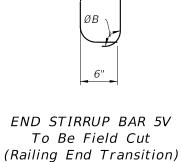
BRIDGE		LOW G	UTTER	HIGH C	GUTTER	
	CRO	OSS-SLOPE	ØA	ØB	ØA	ØB
	E ED	0% to 2%	90°	90°	90°	90°
	BRIDGE 10UNTEL	2% to 6%	93°	87°	87°	93°
	B) M0	6% to 10%	96°	84°	84°	96°



BARS 5S1 & 5S2



STIRRUP BAR 5V



### REINFORCING STEEL NOTES:

- 1. All bar dimensions in the bending diagrams are out to out.
- 2. All reinforcing steel at the open joints shall have a 2" minimum cover.
- 3. Bars 5R shall be one continuous or lap spliced bar. No mechanical couplers are permitted.
- 4. Bars 5S1 may be continuous or spliced at the construction joints. Lap splices for Bars 5R2 and 5S1 shall be a minimum of 2'-2".
- 5. The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of deformed wire meeting the requirements of Specification Section 931.

CROSS REFERENCE: For locations of Detail "B", see Sheet 1.

REVISION

FDOT

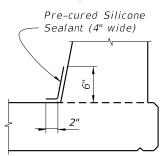
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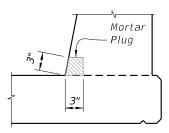
SHEET 4 of 5

#### INTERMEDIATE JOINT SEAL NOTES:

- 1. At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
- 2. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.
- 3. The cost of the Pre-cured Silicone Sealant shall be included in the Contract Unit Price for the Traffic Railing.
- 4. As an alternative option, a mortar plug may be used to seal the joint as shown in the mortar plug detail and in accordance with Specification Section 400.

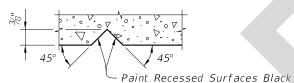


OPTION I



OPTION II (Alternative Mortar Plug at Open Joint)

DETAIL "B"



SECTION THRU RECESSED "V" GROOVE TO FORM INSCRIBED LETTERS AND FIGURES

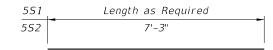
ESTIMATED TRAFFIC RAILING/NOISE WALL QUANTITIES				
ITEM	UNIT	QUANTITY		
Concrete (Railing)	CY/LF	0.107		
Concrete (Noise Wall)	CY/LF	0.136		
Reinforcing Steel (Typical)	LB/LF	69.36		
Additional Reinf. @ Open Joint	LB	226.85		

(The above quantities are based on the bridge mounted typical section, 2% deck cross slope and railing on low side of deck.)

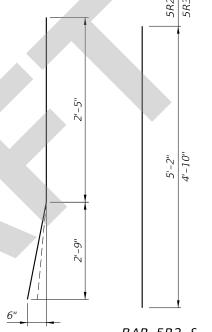
### REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL				
MARK	SIZE	LENGTH		
R1	5	5'-2"		
R2	5	5'-2 <sup>1</sup> / <sub>2</sub> "		
R3	5	4'-10"		
51	5	As Reqd.		
52	5	7'-3"		
V	5	6'-6 <sup>1</sup> / <sub>2</sub> "		

BRIDGE CROSS-SLOPE		LOW G	UTTER	HIGH C	GUTTER
		ØA	ØB	ØA	ØB
BRIDGE MOUNTED	0% to 2%	90°	90°	90°	90°
	2% to 6%	93°	87°	87°	93°
	6% to 10%	96°	84°	84°	96°

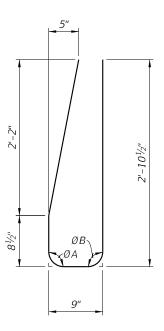


BARS 5S1 & 5S2





(Field Cut and Bend for Railing End Transition)



STIRRUP BAR 5V

END STIRRUP BAR 5V
To Be Field Cut
(Railing End Transition)

REINFORCING STEEL NOTES:

- 1. All bar dimensions in the bending diagrams are out to out.
- 2. All reinforcing steel at the open joints shall have a 2" minimum cover.
- 3. Bars 5R shall be one continuous or lap spliced bar. No mechanical couplers are permitted.
- 4. Bars 551 may be continuous or spliced at the construction joints. Lap splices for Bars 5R2 and 5S1 shall be a minimum of 2'-2".
- 5. The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of deformed wire meeting the requirements of Specification Section 931.

CROSS REFERENCE: For locations of Detail "B", see Sheet 1.

LAST REVISION 11/01/25

FDOT

FY 2026-27 STANDARD PLANS