

Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	521-428
Date:	4/29/2025	Sheet Number(s):	Sheet 4
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	TRAFFIC RAILING - (42" SINGLE-SLOPE)

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)"]

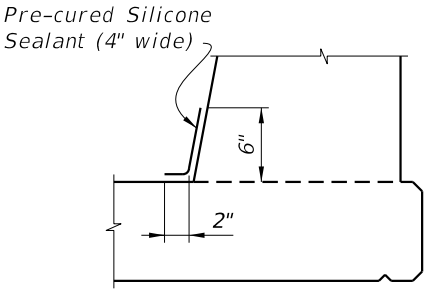
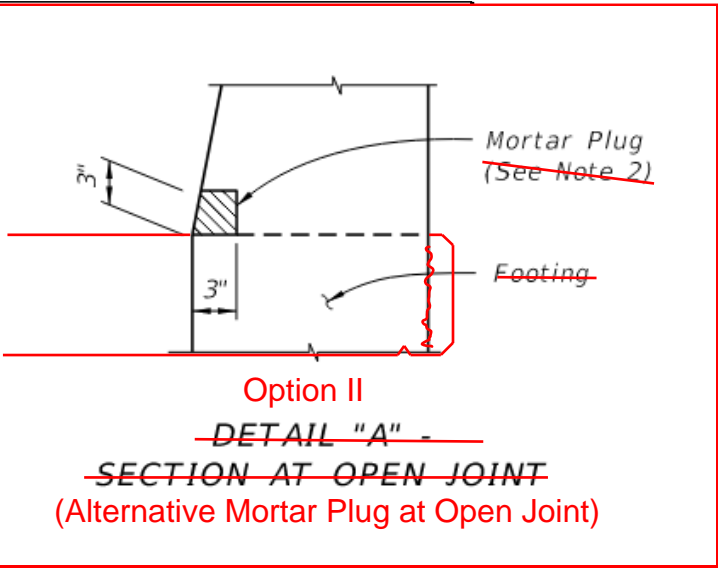
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CONVENTIONAL REINFORCING STEEL BENDING DIAGRAM

BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
P	5	7'-0"
S1	6	As Reqd.
S2	5	As Reqd.
T1 & T2	6	10'-0"
V	5	5'-9"

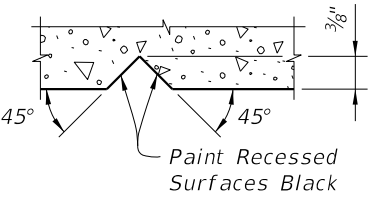
ROADWAY CROSS-SLOPE	LOW GUTTER
0% to 2%	101°
2% to 6%	98°
6% to 10%	95°

∅A and ∅B shall be 90° if Contractor desires to place Railing perpendicular to roadway.



~~DETAIL "C" - SECTION AT INTERMEDIATE OPEN JOINT~~
Option I

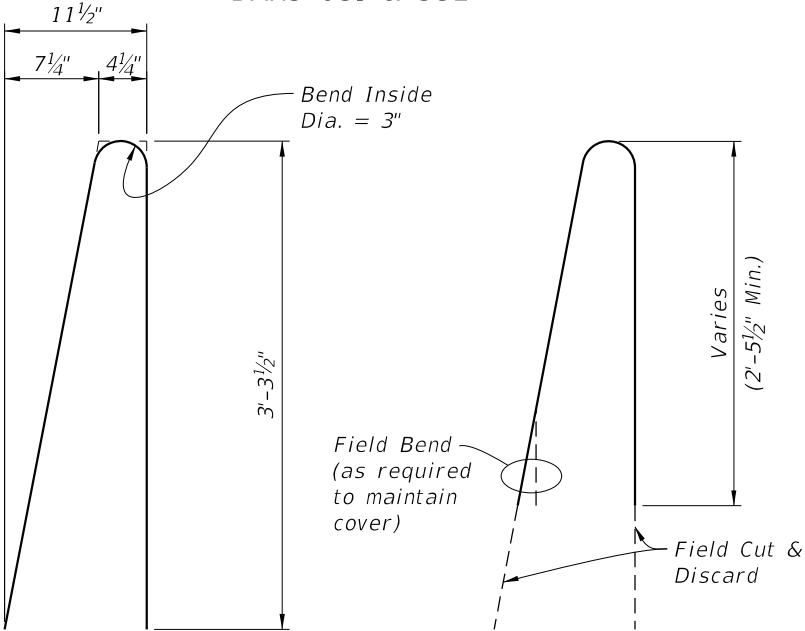
- INTERMEDIATE JOINT SEAL NOTES:
- At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
 - Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface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



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

Length as Required

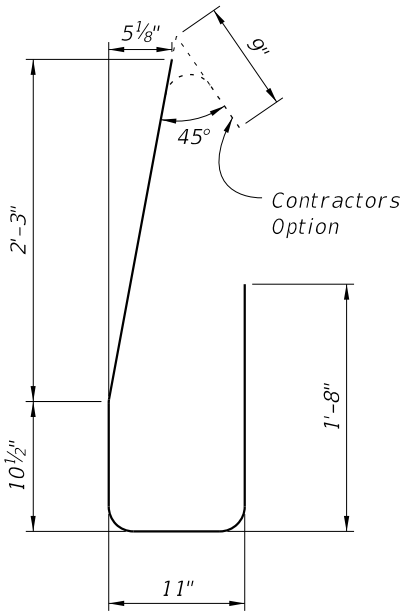
BARS 6S1 & 5S2



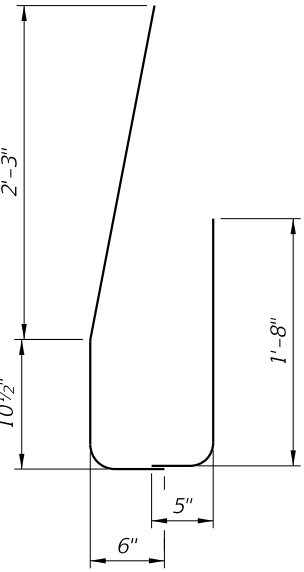
STIRRUP BAR 5P

TRANSITION STIRRUP BAR 5P
To Be Field Cut (10 of each required per Railing End Transition)

TRANSITION BARS 6T1 & 6T2
(2~Bars 6T1 & 3~Bars 6T2 required per Railing End Transition)



STIRRUP BAR 5V



END STIRRUP BAR 5V
To Be Field Cut and Lapped

REINFORCING STEEL NOTES:

- All bar dimensions in the bending diagrams are out to out.
- All reinforcing steel at the open joints shall have a 2" minimum cover.
- Bars 6S1 may be continuous or spliced at the construction joints. Lap splices for Bars 6S1 and 5S2 shall be a minimum of 3'-0" and 2'-2", respectively.
- The Contractor may utilize deformed WWR when approved by the Engineer. WWR must meet the requirements of Specification Section 931.

ESTIMATED TRAFFIC RAILING QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete	CY/LF	0.143
Reinforcing Steel	LB/LF	39.34

Note:
The estimated railing quantities are based on a 2% deck cross slope; railing on low side of deck.

2026-27



FY ~~2025-26~~
STANDARD PLANS

TRAFFIC RAILING - (42" SINGLE-SLOPE)

INDEX
521-428

SHEET
4 of 4

LAST REVISION
11/01/24
11/01/25

DESCRIPTION:

CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
P	5	7'-0"
S1	6	As Req'd.
S2	5	As Req'd.
T1 & T2	6	10'-0"
V	5	5'-9"

ROADWAY CROSS-SLOPE	LOW GUTTER	HIGH GUTTER
	ØB	ØB
0% to 2%	101°	101°
2% to 6%	98°	104°
6% to 10%	95°	107°

ØA and ØB shall be 90° if Contractor elects to place Railing perpendicular to the Deck.

BARS 6S1 & 5S2

STIRRUP BAR 5P

TRANSITION STIRRUP BAR 5P
To Be Field Cut (10 of each required
per Railing End Transition)

TRANSITION BARS 6T1 & 6T2
(2~Bars 6T1 & 3~Bars 6T2 required
per Railing End Transition)

STIRRUP BAR 5V

END STIRRUP BAR 5V
To Be Field Cut
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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 6S1 may be continuous or spliced at the construction joints. Lap splices for Bars 6S1 and 5S2 shall be a minimum of 3'-0" and 2'-2", respectively.
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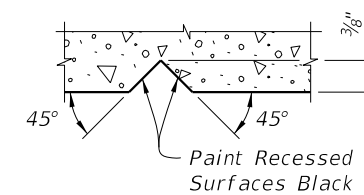
Pre-cured Silicone Sealant (4" wide)

6"

2"

A cross-sectional diagram showing a concrete wall with a horizontal crack. A hatched rectangular area, labeled 'Mortar Plug', is embedded into the wall. The plug is 3 inches wide and 3 inches high. A dashed line indicates the original surface of the wall. The label 'Mortar Plug' has an arrow pointing to the hatched area.

DETAIL "C"



ESTIMATED TRAFFIC RAILING QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete	CY/LF	0.143
Reinforcing Steel	LB/LF	39.34

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