Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	**Index Number:**	521-426
Date:	4/30/2025	**Sheet Number(s):**	4
E-mail:	Joshua.Turley@dot.state.fl.us	**Index Title:**	TRAFFIC RAILING - (MEDIAN 36" SINGLE-SLOPE)

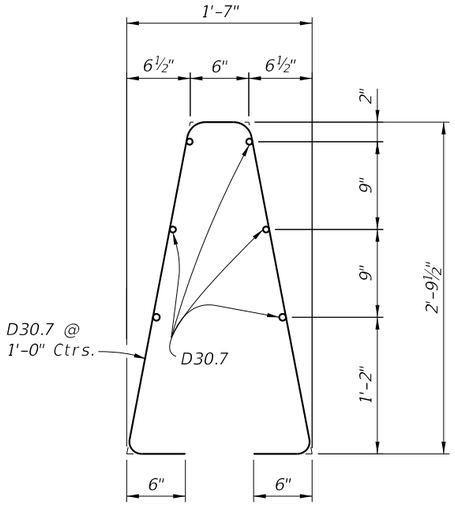
Summary of the changes:
Sheet 4: Added a grout plug option as an alternate detail.

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.

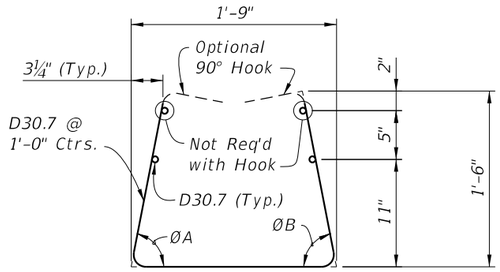
Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

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

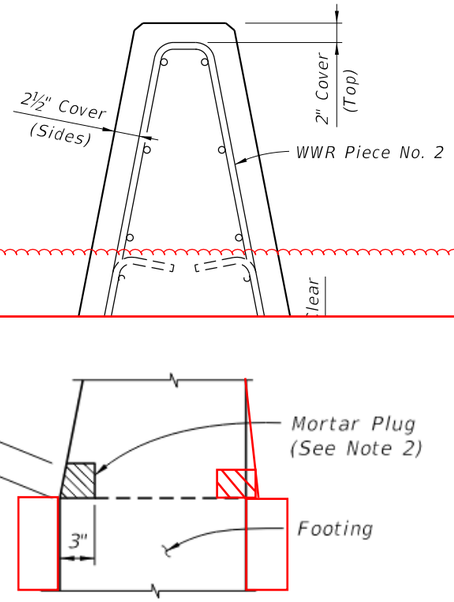
ALTERNATE REINFORCING STEEL (WWR) DETAILS



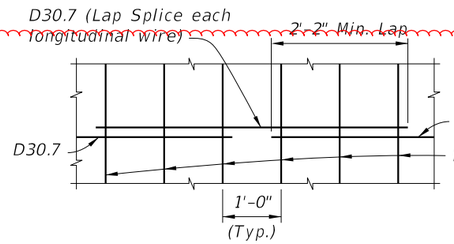
WWR Piece No. 2



WWR Piece No. 1



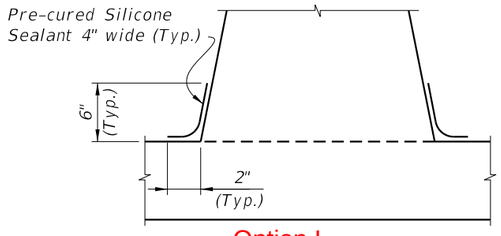
Option II
DETAIL "A" -
~~SECTION AT OPEN JOINT~~
(Alternative Mortar Plug at Open Joint)



SPLICE DETAIL
(Between WWR Sections)

WELDED WIRE REINFORCEMENT NOTES:

1. At the option of the Contractor deformed Welded Wire
   5S and 5W. WWR must meet the requirements of Spec
2. WWR at Railing End Transition shall be field bent inw
   of Piece 1 shall be cut to allow overlap.
3. Place WWR panels so as to minimize the end overhang
   Overhangs greater than 6" are not permitted.



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

INTERMEDIATE JOINT SEAL NOTES:

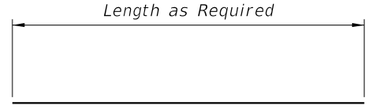
1. At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
2. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding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

CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

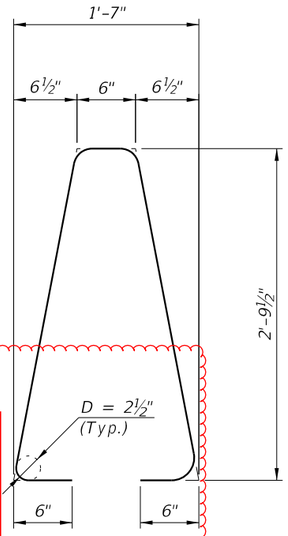
ROADWAY CROSS-SLOPE	ON SLOPE		AT CROWN	
	ØA	ØB	ØA	ØB
0% to 2%	79°	79°	79°	79°
>2% to 6%	81°	77°	79°	79°
>6% to 10%	84°	74°	79°	79°

ØA and ØB shall be 79° if Contractor elects to place railing perpendicular to the deck, and approach slabs.

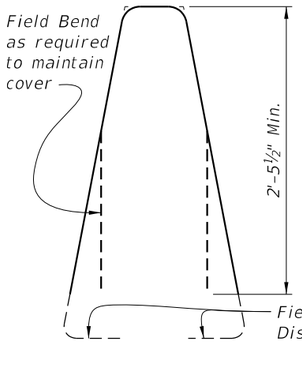
BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
R	5	7'-2"
S	5	As Reqd.
W	5	5'-10"



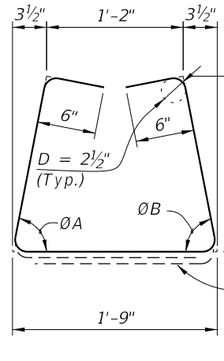
BAR 5S



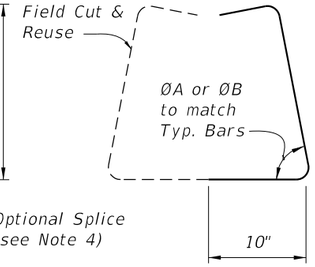
STIRRUP BAR 5R



TRANSITION STIRRUP BAR 5R
(5 required per Railing
End Transition)



STIRRUP BAR 5W



TRANSITION STIRRUP BAR 5W
To Be Field Cut
(10 required per 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 5S may be continuous or spliced at the construction joints. Bar splices for Bars 5S shall be a minimum of 2'-2".
4. At the Contractor's option, Bars 5W may be fabricated as a two piece bar with a 1'-2" lap splice of the bottom legs.

ESTIMATED TRAFFIC RAILING QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete	CY/LF	0.157
Reinforcing Steel	LB/LF	23.99

(The above quantities are based on a crowned roadway, with a 2% cross slope)

10/17/2024 10:30:08 AM

LAST REVISION	REVISION	DESCRIPTION:
~~01/01/18~~ 11/01/25		

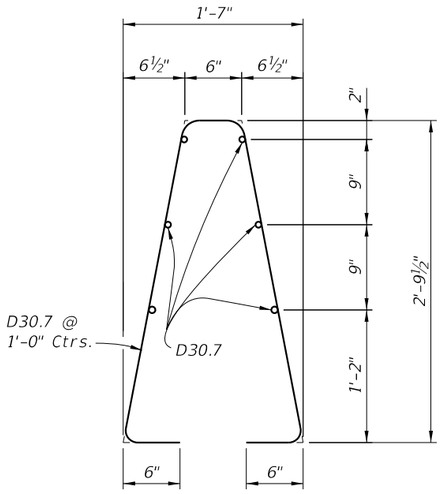
FDOT FY ~~2025-26~~ 2026-27 STANDARD PLANS

TRAFFIC RAILING - (MEDIAN 36" SINGLE-SLOPE)

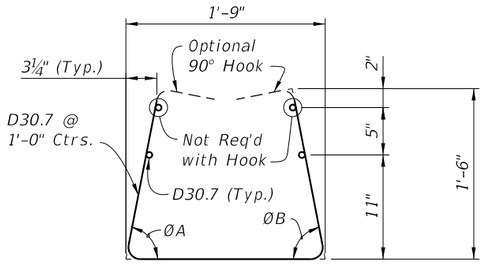
INDEX 521-426

SHEET 4 of 4

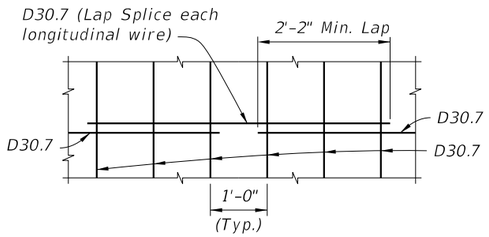
ALTERNATE REINFORCING STEEL (WWR) DETAILS



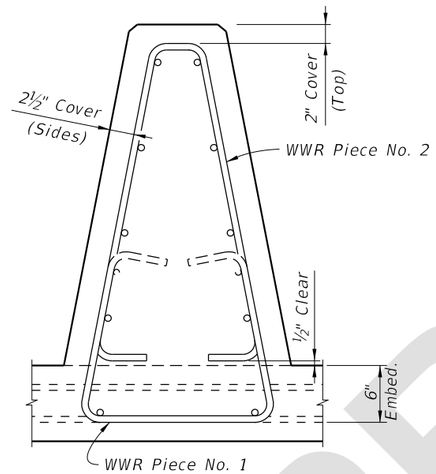
WWR Piece No. 2



WWR Piece No. 1



SPLICE DETAIL
(Between WWR Sections)



SECTION A-A

WELDED WIRE REINFORCEMENT NOTES:

1. At the option of the Contractor deformed Welded Wire Reinforcement (WWR) may be utilized in lieu of all Bars 5R, 5S and 5W. WWR must meet the requirements of Specification Section 931.
2. WWR at Railing End Transition shall be field bent inward as required (Pieces 1 & 2) to maintain cover. The bottom of Piece 1 shall be cut to allow overlap.
3. Place WWR panels so as to minimize the end overhang of longitudinal wires at Railing Ends and Open Joints. Overhangs greater than 6" are not permitted.

CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

ROADWAY CROSS-SLOPE	ON SLOPE		AT CROWN	
	ØA	ØB	ØA	ØB
0% to 2%	79°	79°	79°	79°
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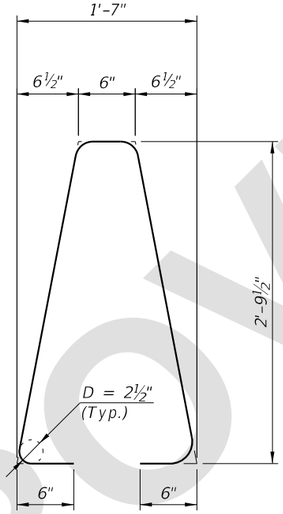
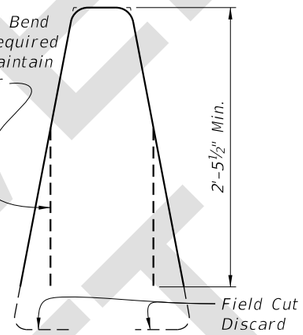
ØA and ØB shall be 79° if Contractor elects to place railing perpendicular to the deck, and approach slabs.

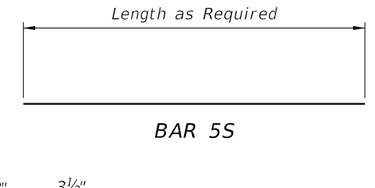
BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
R	5	7'-2"
S	5	As Reqd.
W	5	5'-10"



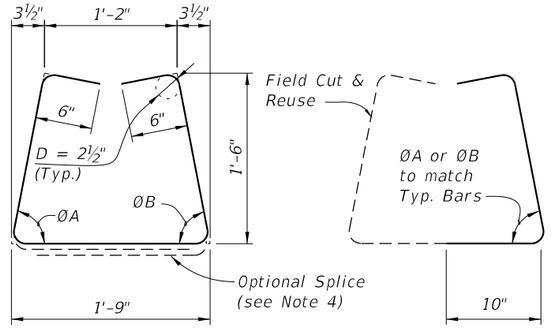
STIRRUP BAR 5R



TRANSITION STIRRUP BAR 5R
(5 required per Railing
End Transition)



BAR 5S



STIRRUP BAR 5W

TRANSITION STIRRUP BAR 5W
To Be Field Cut
(10 required per 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.
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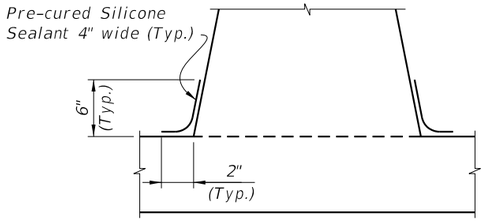
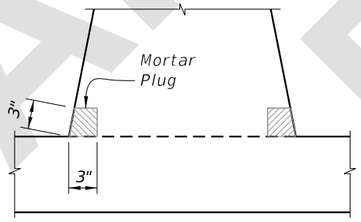
4. At the Contractor's option, Bars 5W may be fabricated as a two piece bar with a 1'-2" lap splice of the bottom legs.



OPTION I



OPTION II
(Alternative Mortar Plug at Open Joint)

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. Include the cost of the Pre-cured Silicone Sealant 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.

ESTIMATED TRAFFIC RAILING QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete	CY/LF	0.157
Reinforcing Steel	LB/LF	23.99

(The above quantities are based on a crowned roadway, with a 2% cross slope)

DETAIL "C"

5/23/2025 12:24:26 PM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/25			FDOT	FY 2026-27 STANDARD PLANS	TRAFFIC RAILING - (MEDIAN 36" SINGLE-SLOPE)	INDEX 521-426 / SHEET 4 of 4