
ORINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: March 24, 2023

Originator: Joshua Turley

Phone: (850) 414-4475

Email: joshua.turley@dot.state.fl.us

Standard Plans:

Index Number: 521-510

Sheet Number (s): 1 and 4 of 5

Index Title: CONCRETE BARRIER/NOISE WALL (8'-0")

Summary of the changes:

Sheet 1: Deleted section cut lines A-A.

Sheet 4: Corrected reinforcing steel estimated quantities.

Commentary / Background:

The estimate for reinforcing steel was slightly off for the CIP version. We updated the estimate.

Other Affected Offices / Documents: (Provide name of person contacted)

- | Yes | No | |
|-------------------------------------|-------------------------------------|-----------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Standard Specifications – 521-723 |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

Origination Package Includes: (Submit package to Rick Jenkins)

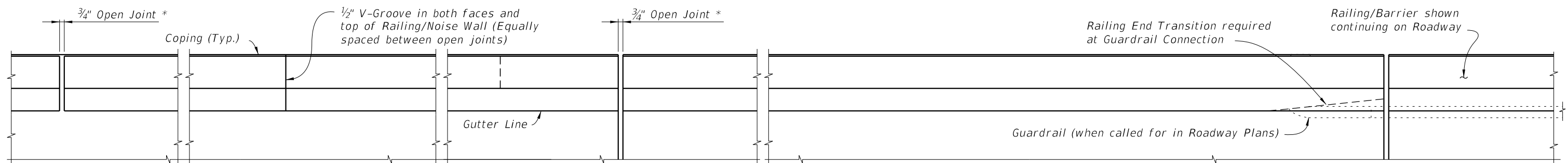
- | Yes | N/A | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Revised or Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Support Documents |

Implementation:

- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

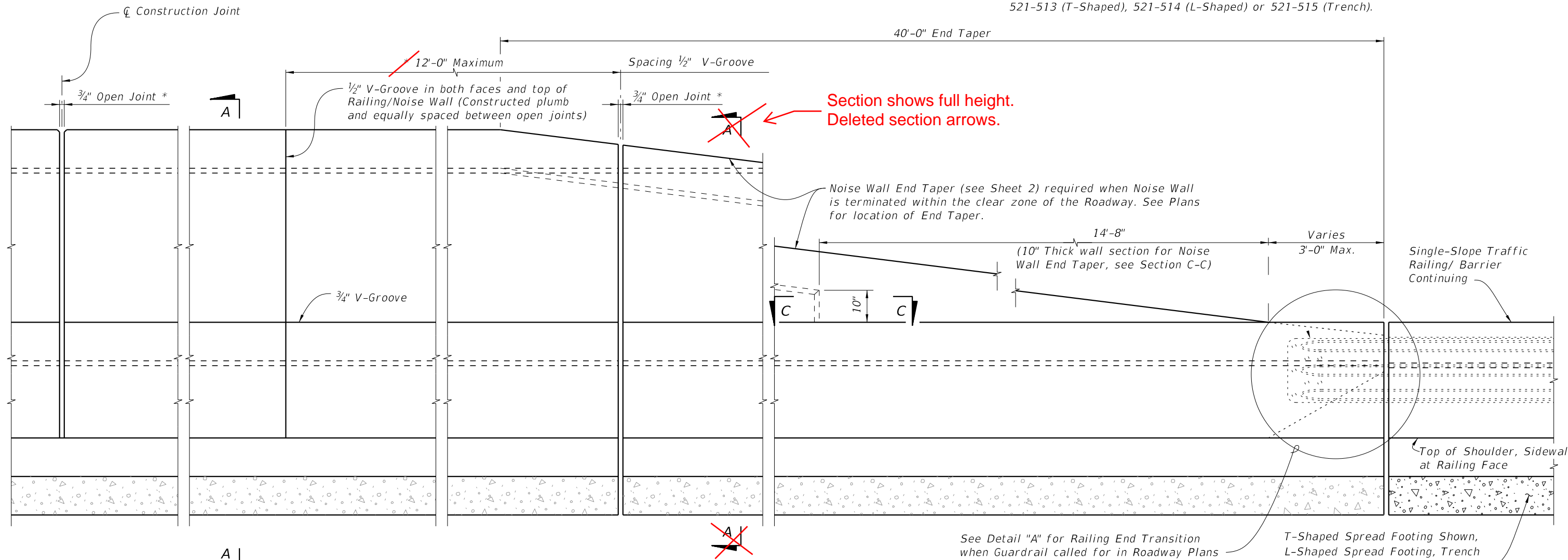
Contact the Roadway Design Office for assistance in completing this form

Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us



* Construct 3/4" Open Joints plumb at Construction Joints in Junction Slabs or Footings.

CROSS REFERENCE:
 For Section A-A see Sheet 3.
 For Section C-C and Detail "A" see Sheet 5.
 For Wall mounted Barrier/Noise Wall Details see Index 521-512.
 For Footing mounted Barrier/Noise Wall Details see Index 521-513 (T-Shaped), 521-514 (L-Shaped) or 521-515 (Trench).



NOTES:

1. Work this Index with Indexes 521-512 through 521-515.
2. The Concrete Barrier/Noise Wall and joints shall be constructed plumb.
3. Concrete:
 - A. Class II for slightly aggressive environments.
 - B. Class IV for moderately or extremely aggressive environments.
4. Provide 3/4" Open Joints spaced between 30 feet minimum to 90 feet maximum. Align Open Joints with construction joints in the Junction Slab or Footing. Provide additional reinforcing (see Sheet 2) at each open joint.
5. Install Barrier Delineators 2'-4" above the riding surface in accordance with Specification Section 705. Match the Barrier Delineators color (White or Yellow) to the near edgeline.
6. Slip forming of the barrier portion is permitted.
 - A. Stem walls may be widened, at no additional cost, to accommodate slip forming.

(INSIDE FACE OF CONCRETE BARRIER/NOISE WALL WITH T-SHAPED FOOTING SHOWN, Other footings similar, Reinforcing steel not shown for clarity)

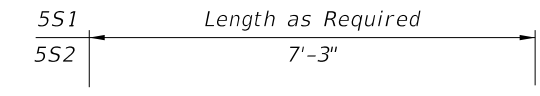
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LAST REVISION	DESCRIPTION:		FY 2023-24 STANDARD PLANS	CONCRETE BARRIER/NOISE WALL (8'-0")	INDEX	SHEET
11/01/19	11/01/23				521-510	1 of 5

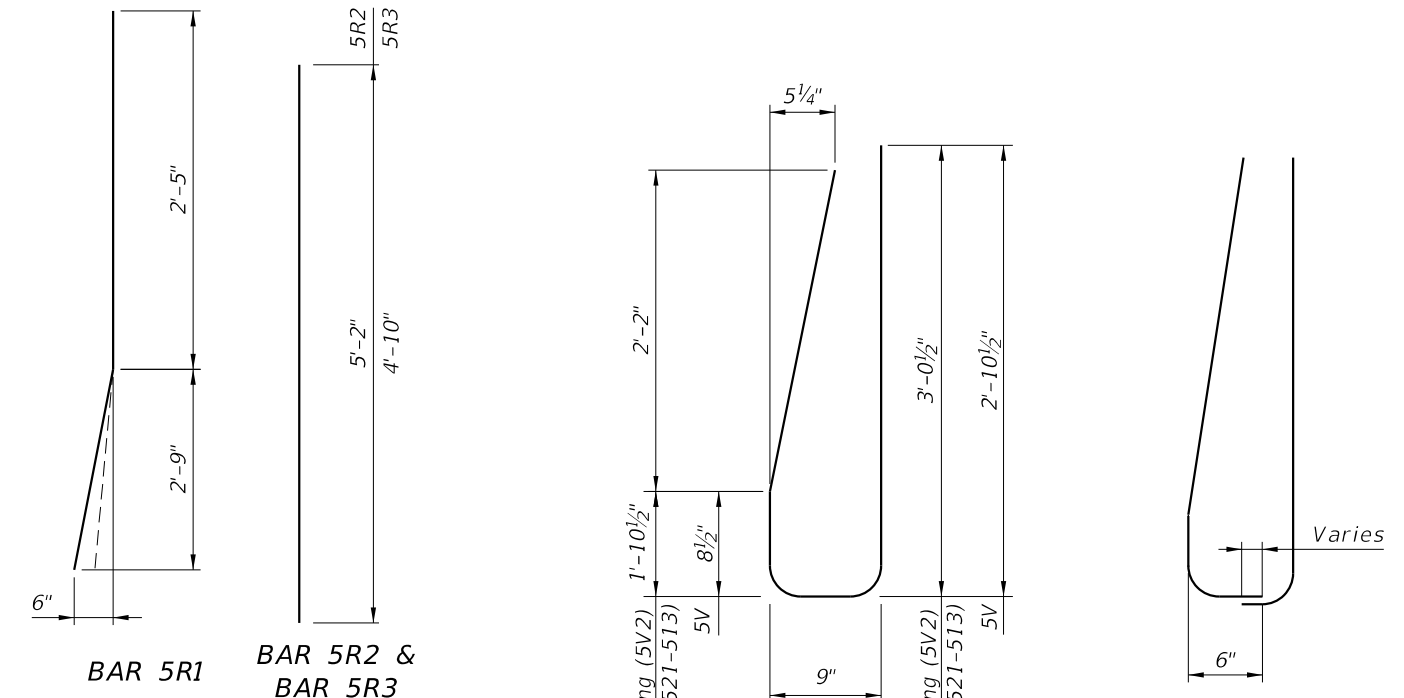
REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

MARK	SIZE	LENGTH
R1	5	5'-2"
R2	5	5'-2½"
R3	5	4'-10"
S1	5	As Req'd.
S2	5	7'-3"
V (Wall)	5	6'-6½"
V (T-Footing)	5	7'-8½"



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 5S1 may be continuous or spliced at the construction joints. Lap splices for Bars 5R, 5S1 and 5W 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.
6. See Index 521-514 and 521-515 for L-shaped and Trench footing vertical reinforcing.

CROSS REFERENCE:
See Index 521-512 for Junction Slab Details and Indexes 521-513 thru 521-515 for additional footing details.

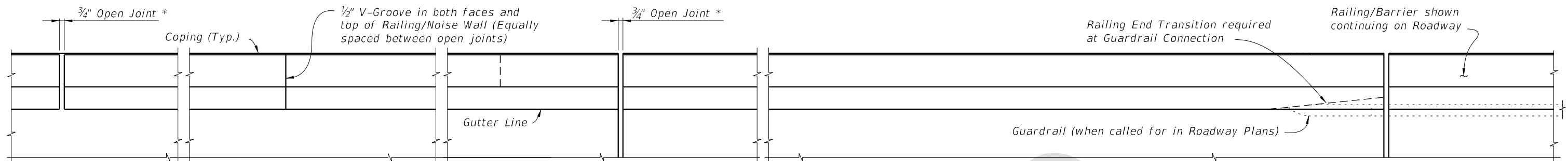
ESTIMATED TRAFFIC RAILING/NOISE WALL QUANTITIES

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

CHANGED TO:
81.55
241.58

(The above quantities are based on the Concrete Barrier/ Noise wall typical section, (excluding junction slab or footing)

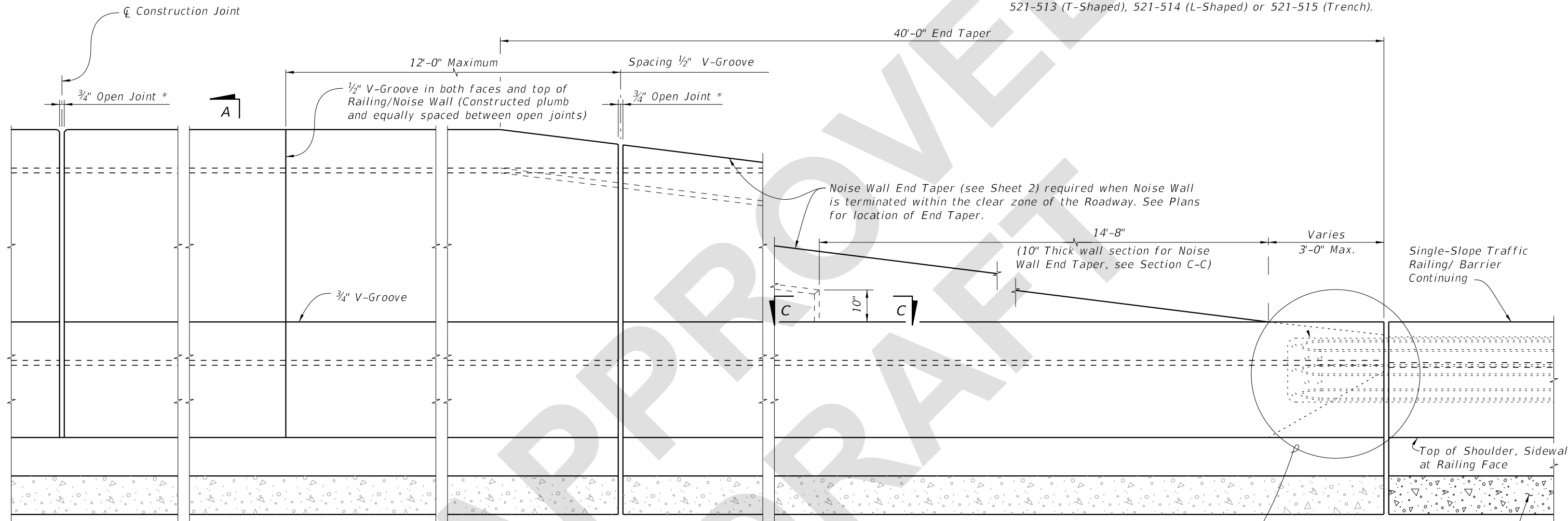
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* Construct 3/4" Open Joints plumb at Construction Joints in Junction Slabs or Footings.

PLAN
(Reinforcing Steel not shown for clarity)

CROSS REFERENCE:
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 For Section C-C and Detail "A" see Sheet 5.
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ELEVATION

(INSIDE FACE OF CONCRETE BARRIER/NOISE WALL WITH T-SHAPED FOOTING SHOWN, Other footings similar, Reinforcing steel not shown for clarity)

- NOTES:**
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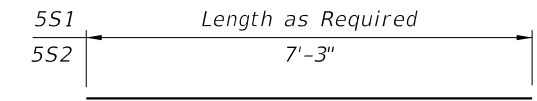
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LAST REVISION 11/01/23	REVISION	DESCRIPTION:		FY 2024-25 STANDARD PLANS	CONCRETE BARRIER/NOISE WALL (8'-0")	INDEX 521-510	SHEET 1 of 5
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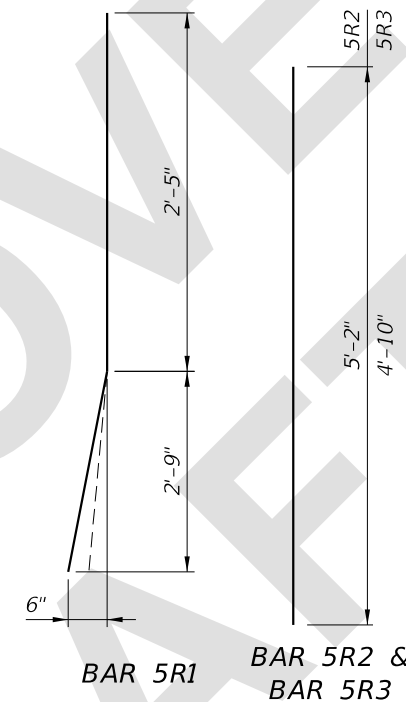
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BILL OF REINFORCING STEEL

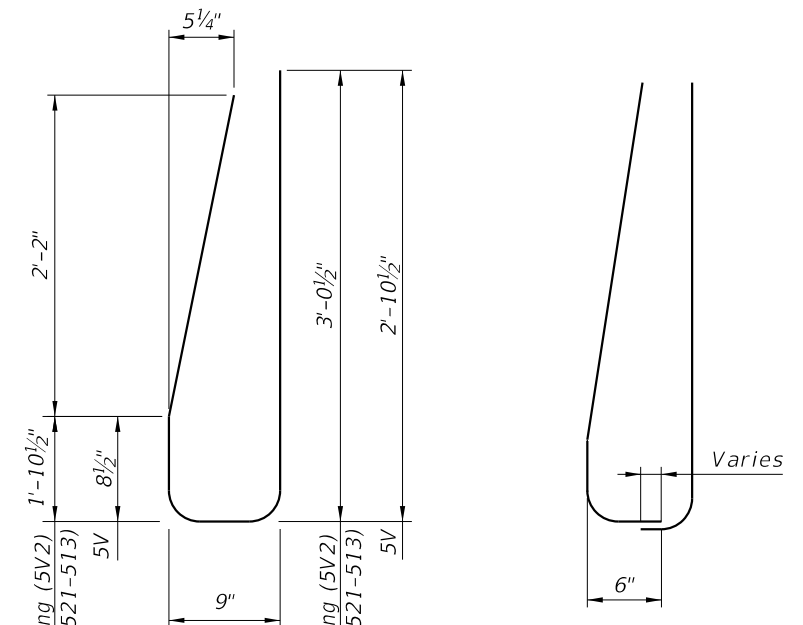
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LAST REVISION 11/01/23	DESCRIPTION:
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FY 2024-25
STANDARD PLANS

CONCRETE BARRIER/NOISE WALL (8'-0")

INDEX 521-510	SHEET 4 of 5
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