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## ORIGINATION FORM

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Proposed Revisions to a Standard Plans Index  
(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: March 2, 2020

Originator: Cheryl Hudson

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**Standard Plans:**

Index Number: 521-422

Sheet Number (s): 1

Index Title: Traffic Railing - (42" Vertical Shape)

**Summary of the changes:**

Numbered and reorganized Notes; Deleted MASH note.

**Commentary / Background:**

MASH crash criteria met is in the SPI (not a construction note). Numbered notes to make them consistent with other Indexes.

**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 type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications –   |
| <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:**

(Email or hand deliver package to Rick Jenkins)

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

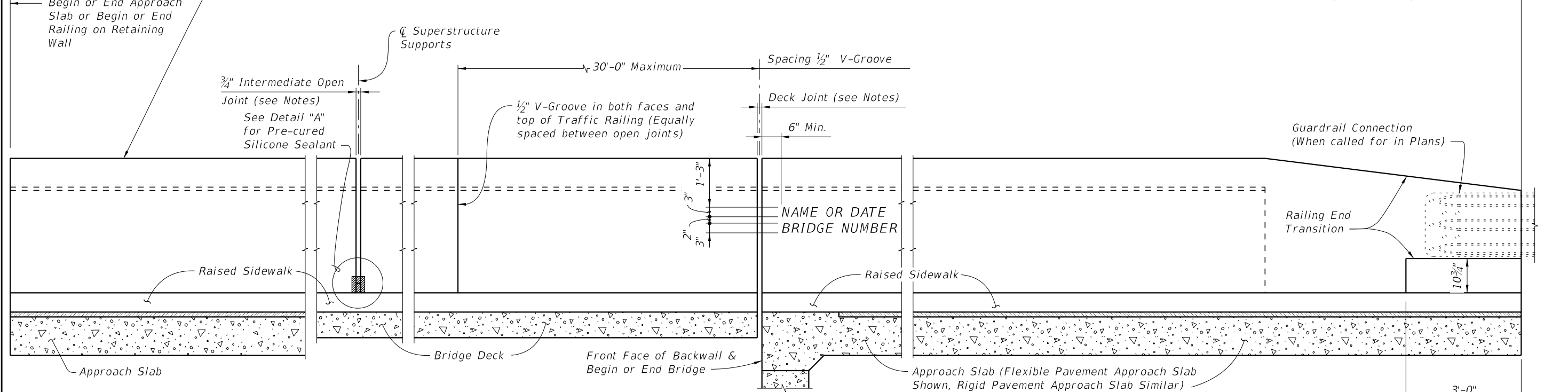
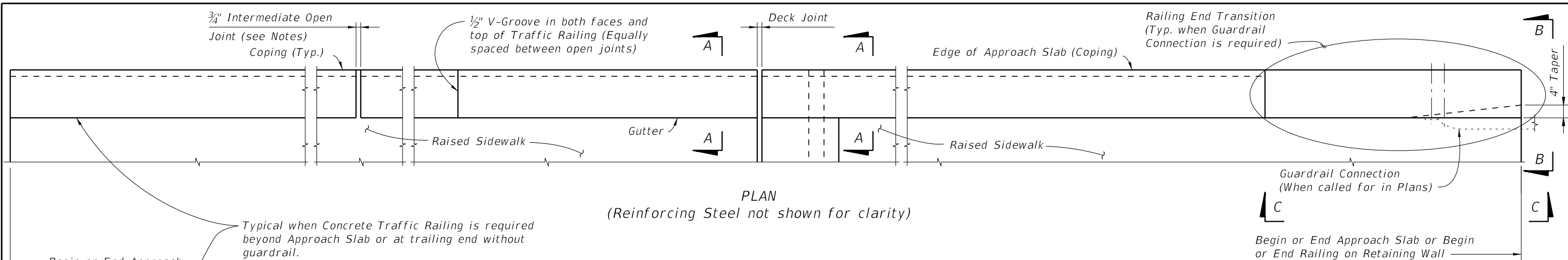
**Implementation:**

- Design Bulletin (Interim)
- DCE Memo
- Program Mgmt. Bulletin
- FY-Standard Plans (Next Release)

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Contact the Roadway Design Office for assistance in completing this form

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**ELEVATION OF INSIDE FACE OF RAILING**  
(Reinforcing Steel not shown for clarity)

**CROSS REFERENCE:**  
For Section A-A, View B-B and View C-C, see Sheet 2.  
For Detail "A" see Sheet 3.

**TRAFFIC RAILING NOTES**

~~This railing has been structurally evaluated to be equivalent or greater in strength to other safety shape railings which have been crash tested to NCHRP Report 350 TL-4 and MASH TL-4 Criteria.~~

**CONCRETE AND REINFORCING STEEL :** See Structures Plans, General Notes.  
**GUARDRAIL :** For Guardrail Connection details, see Index 536-001.  
**RAILINGS ON RETAINING WALLS :** If the Traffic Railing is to be provided on a retaining wall, the railing section will be the same as shown on Sheet 2 Section A-A. All other details such as the End Transition, Guardrail Connection, the maximum spacing of the  $\frac{3}{4}$ " open joints and  $\frac{1}{2}$ " V-Groove shall apply.  
**BARRIER DELINEATORS :** Install Barrier Delineators on top of the Traffic Railing 2" from the face on the traffic side in accordance with Specification Section 705. Match the Barrier Delineator to the color (white or yellow) of the near edgeline.  
**V-GROOVES :** Construct  $\frac{1}{2}$ " V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between  $\frac{3}{4}$ " Open Joints and/or Deck Joints and at V-Groove locations on Retaining Wall footings.  
**END TRANSITIONS:** When guardrail approaches are shown in the Plans, provide the Railing End Transition as shown.

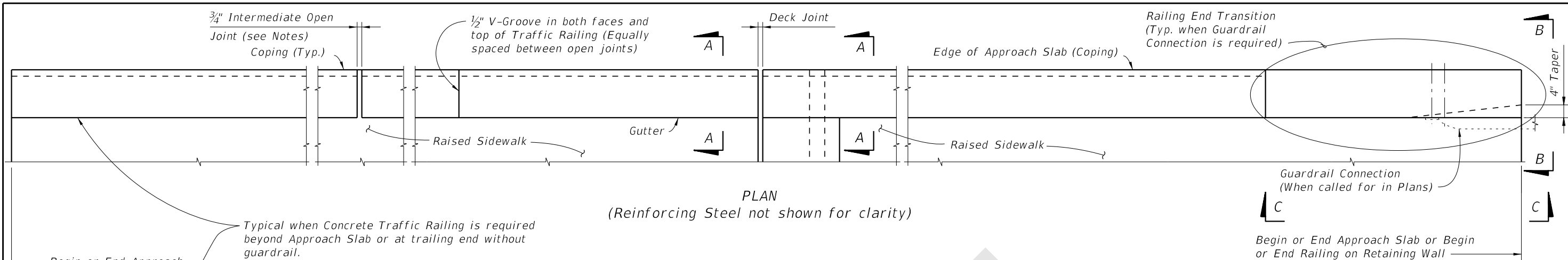
**NAME, DATE, AND BRIDGE NUMBER :** The Name and Bridge Number shall be placed on the Traffic Railing so as to be seen on the driver's right side when approaching the bridge. The Date shall be placed on the driver's left side when approaching the bridge. The Name shall be as shown in the General Notes in the Structures Plans. The Date shall be the year the bridge is completed. For a widening when the existing railing is removed, use both the existing date and the year of the widening. Black plastic letters and figures 3" in height may be used, as approved by the Engineer, in lieu of the letters and figures formed by  $\frac{3}{8}$ " V-Grooves. V-Grooves shall be formed by preformed letters and figures.

**JOINTS :** See Plans, Superstructure, Approach Slab and Retaining Walls Sheets for actual dimensions and joint orientation. Provide open Railing Joints at Deck Expansion Joint locations matching the dimensions of the Deck Joint. For treatment of Railings on skewed bridges see Index 521-427.

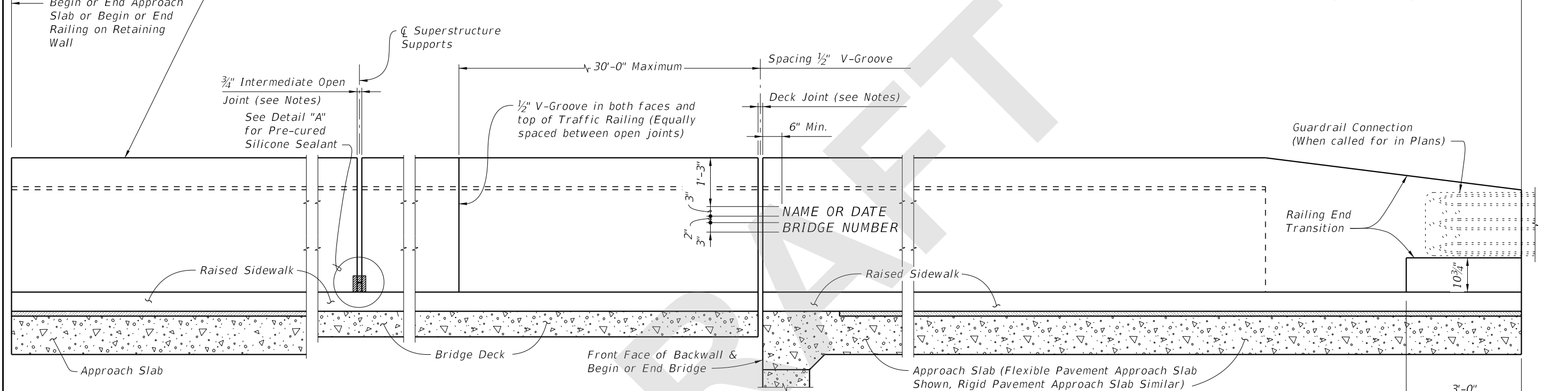
Provide  $\frac{3}{4}$ " Intermediate Open Joints at :  
 (1) - Superstructure supports where slab is continuous.  
 (2) - Ends of approach slabs when adjacent to retaining walls and at expansion joints on retaining wall junction slabs.

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LAST REVISION 11/01/18	REVISION	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	<b>TRAFFIC RAILING - (42" VERTICAL SHAPE)</b>	INDEX 521-422	SHEET 1 of 3
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PLAN  
(Reinforcing Steel not shown for clarity)




ELEVATION OF INSIDE FACE OF RAILING  
(Reinforcing Steel not shown for clarity)

CROSS REFERENCE:  
For Section A-A, View B-B and View C-C, see Sheet 2.  
For Detail "A" see Sheet 3.

TRAFFIC RAILING NOTES

1. Materials: See Structures Plans, General Notes
2. Guardrail Connection Details: See Index 534-001
3. Traffic Railings may be constructed perpendicular to the sidewalk surface.  
If an adjoining railing is constructed plumb, transition the end of the Traffic Railing from perpendicular to plumb over a minimum distance of 20'-0". The cost of all modifications will be at the Contractor's expense.
4. Name, Date & Bridge Number: Place the Name and Bridge Number on the Traffic Railing on the driver's right side when approaching the bridge. Place the Date on the driver's left side when approaching the bridge. Use the Name as shown in the General Notes of the Structures Plans. The Date is the year the bridge is completed. For a widening when the existing railing is removed, use both the date on the removed rail and the year of the widening. Form letters and figures with 3/8" V-Grooves using preformed letters and figures. Black plastic letters and figures 3" tall may be used, if approved by the Engineer.
5. Open Joints: See the Superstructure Plans, Approach Slab and Retaining Wall Sheets for Deck Joint dimensions and orientation. Provide Open Railing Joints matching the dimensions of the Deck Joint at Deck Expansion Joint locations.  
A. For treatment of railings on skewed bridges see Sheet 3.
6. Open Joints: Provide 3/4" Open Joints at:  
A. Superstructure supports where the slab is continuous.  
B. At ends of approach slabs when adjacent to retaining walls and at expansion joints on retaining wall junction slabs.
7. V-Grooves: Construct 1/2" V-Grooves plumb. Space V-Grooves equally between 3/4" Open Joints and/or Deck Joints and the at V-Groove locations on the Retaining Wall footing/junction slabs.
8. Barrier Delineators: Install Barrier Delineators on top of the Traffic Railing 2" from the face of the traffic side in accordance with Specification Section 705. Match the Barrier Delineator to the color (white or yellow) of the near edgeline.
9. Traffic Railing Transitions:  
A. Transition to guardrail: see Detail "A" and View B-B.  
B. Transition to 38" Concrete Barriers: see Detail "B" and View C-C. Work these details with Index 521-610.
10. See Superstructure Plans for drainage slot locations and size (when required)
11. For embedded conduit and junction boxes see Index 630-010. For Traffic Railings with Pedestrian/Bicycle Bullet Railings see Index 515-021 and 515-022 for Notes, Details and post spacing.

SDATES

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	TRAFFIC RAILING - (42" VERTICAL SHAPE)	INDEX 521-422	SHEET 1 of 3
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