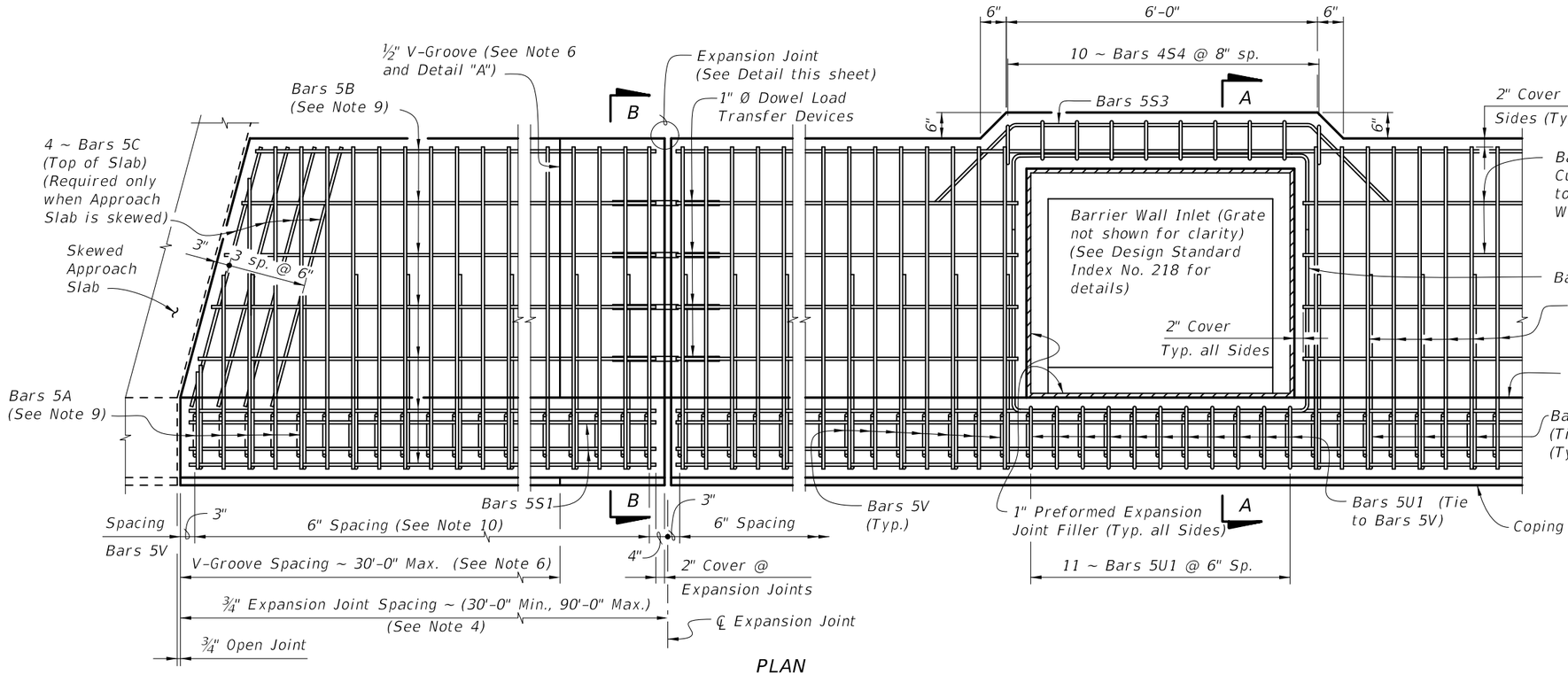
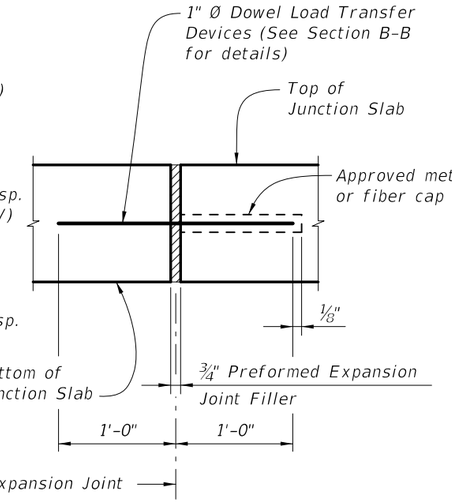


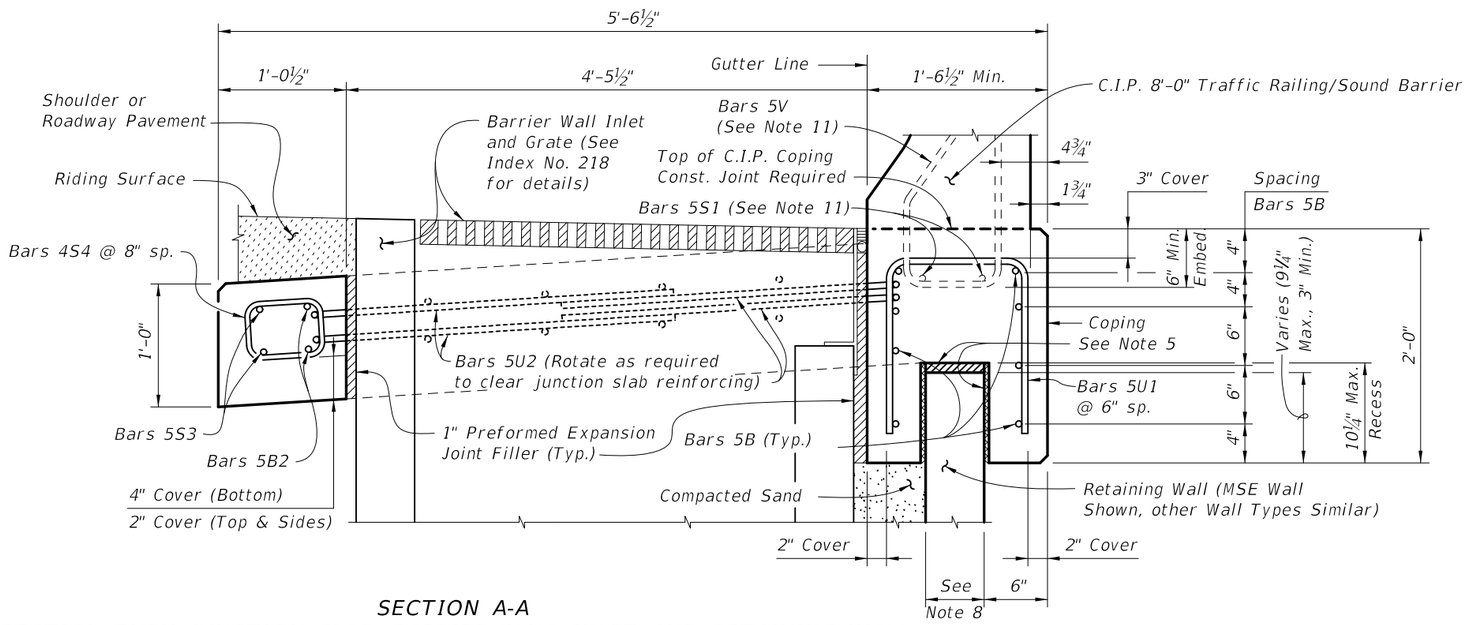
PLAN

JUNCTION SLAB ADJACENT TO SKEWED APPROACH SLAB AND WITH BARRIER WALL INLET



EXPANSION JOINT DETAIL

(Junction Slab expansion joints are required at ¾" open joints in Traffic Railing Railing/Sound Barrier)



SECTION A-A

SECTION THRU JUNCTION SLAB, BARRIER WALL INLET AND RETAINING WALL

NOTES

1. CONSTRUCTION REQUIREMENTS: Construct the Junction Slab level transversely and expansion joints plumb; do not construct the junction slab perpendicular to the roadway surface. Slip forming is not permitted.
2. CONCRETE: Use Class II concrete for slightly aggressive environments. Use Class IV concrete for moderately or extremely aggressive environments. Concrete will be in accordance with Specification Section 346.
3. REINFORCING STEEL: Provide Grade 60 reinforcing steel in accordance with Specification Section 931. Dowel Load Transfer Devices will be ASTM A 36 smooth round bar and hot-dip galvanized in accordance with Specification Section 962. Install Dowel Load Transfer Devices in accordance with Specification Section 350.
4. EXPANSION JOINTS: Construct ¾" Expansion Joints plumb and perpendicular or radial to Gutter Line. Provide at 90'-0" maximum intervals as shown.
5. Provide Preformed Expansion Joint Filler (1" thick) on top and Expanded Polystyrene (½" thick) on sides.
6. V-GROOVES: Construct ½" V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between ¾" Expansion Joints and/or Begin or End Junction Slab. V-Groove locations are to coincide with V-Groove locations in the Railing/Sound Barrier.
7. FILL REQUIREMENTS: Shoulder or Roadway Pavement or Fill is required on top of the junction slab for its entire length on the traffic side of the Railing/Sound Barrier. See Section B-B for details.
8. Actual location & width vary depending on type of Retaining Wall used.
9. Field cut Bars 5A and 5B as required to maintain minimum cover for skewed Approach Slab.
10. Spacing shown is along the Gutter Line.
11. See Index No. 5210 for Bars 5V and 5S1.
12. Work this Index with the following:
    Index No. 5210 – Traffic Railing/Sound Barrier (8'-0").

CROSS REFERENCE:

For Section B-B and Detail "A", see Sheet 2.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/11	SJN	Changed Junction Slab details.			

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

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TRAFFIC RAILING/SOUND BARRIER (8'-0") JUNCTION SLAB

Interim Date 01/01/11

Sheet No. 1 of 2

Index No. 5212

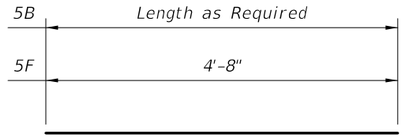
REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

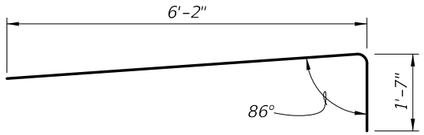
MARK	SIZE	LENGTH
A	5	7'-9"
B	5	AS REQ'D.
L	5	4'-5"
S3	5	10'-0"
S4	4	3'-1"
U1	5	4'-1"
U2	5	12'-10"
DOWEL	1" Ø Smooth Bar	2'-0"

REINFORCING STEEL NOTES:

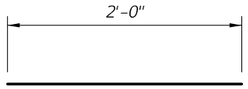
1. All bar dimensions in the bending diagrams are out to out.
2. All reinforcing steel at the open joints will have a 2" minimum cover.
3. Lap splices for Bars 5B will be a minimum of 2'-0".
4. The Contractor may use Welded Wire Reinforcement when approved by the Engineer. Welded Wire Reinforcement will conform to ASTM A 497.



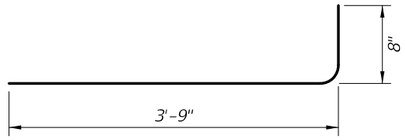
BARS 5B & 5F



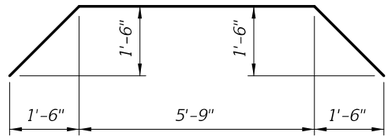
BAR 5A



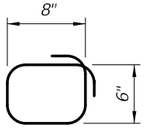
1" Ø DOWEL



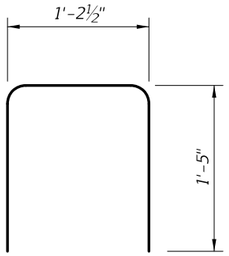
BAR 5L



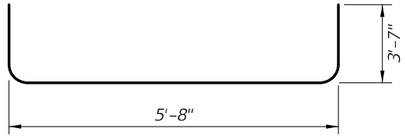
BAR 5S3



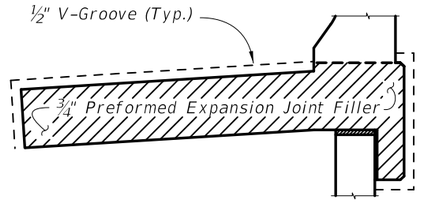
BAR 4S4



BAR 5U1

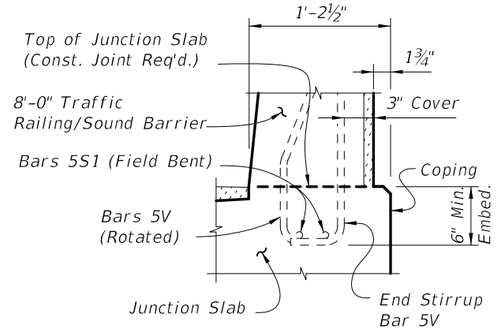


BAR 5U2



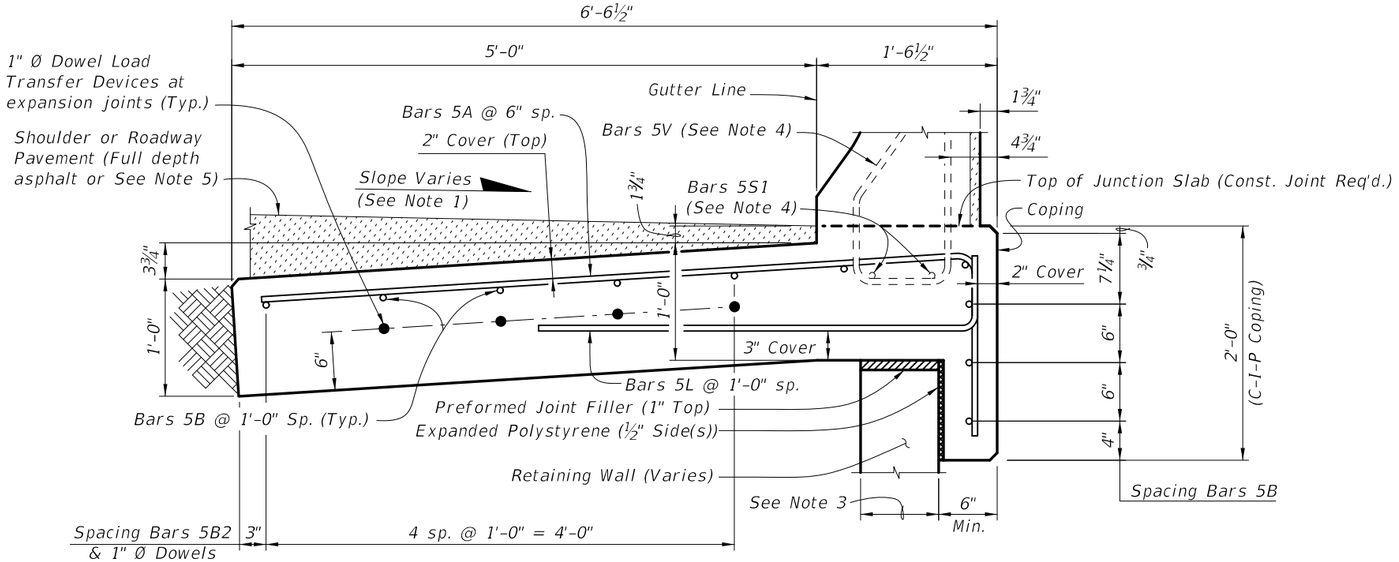
DETAIL "A"

(Showing Locations of ½" V-Grooves and ¾" Preformed Expansion Joint Filler)



PARTIAL END VIEW OF RAILING END TRANSITION FOR GUARDRAIL ATTACHMENT (Showing Bars 5V and Bars 5S1)

NOTE: See Index No. 5210, Detail "A" for details.



SECTION B-B
TYPICAL SECTION THRU JUNCTION SLAB AND RETAINING WALL

ESTIMATED JUNCTION SLAB QUANTITIES

ITEM	UNIT	QUANTITY
Concrete (Junction Slab)	CY/FT.	0.264
Reinforcing Steel (Typical)	LB/FT.	30.39
Additional Reinf. @ Expansion Joint	LB.	21.36

(The above concrete quantities are based on a superelevation of 6.25%.)

NOTES:

1. Match Cross Slope of Travel Lane or Shoulder.
2. The 3¾" dimension corresponds to a superelevation of 6.25%. For superelevations exceeding 6.25%, increase this dimension as required to match roadway superelevation.
3. Actual width varies depending on type of Retaining Wall used.
4. See Index No. 5210 for Bars 5V and 5S1.
5. For Rigid Pavement (Concrete), Junction Slab may be thickened to match finished grade.

CROSS REFERENCE:
For location of Section B-B, see Sheet 1.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/11	SJN	Changed Junction Slab Detail.			

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TRAFFIC RAILING/SOUND BARRIER (8'-0") JUNCTION SLAB

Interim Date 01/01/11

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