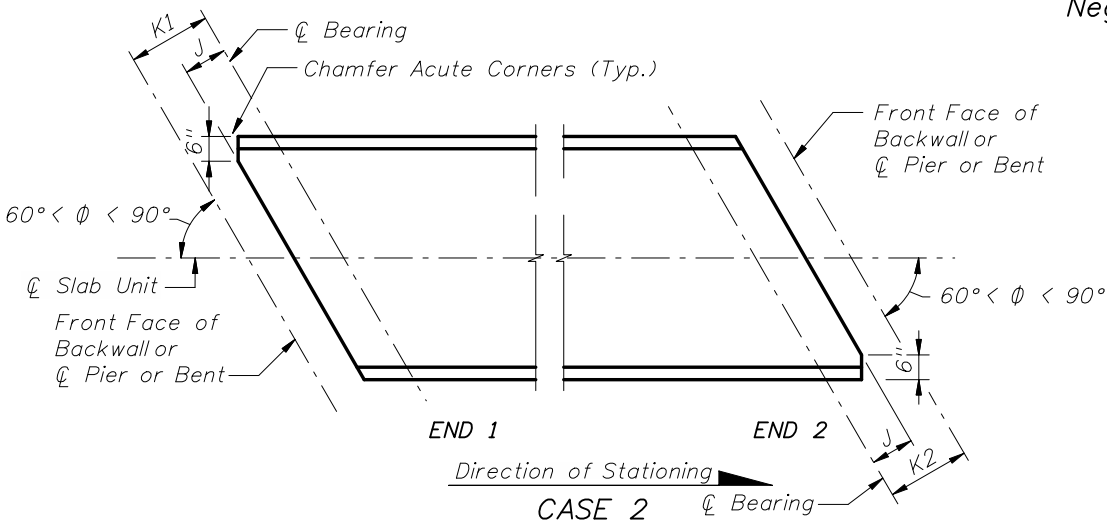
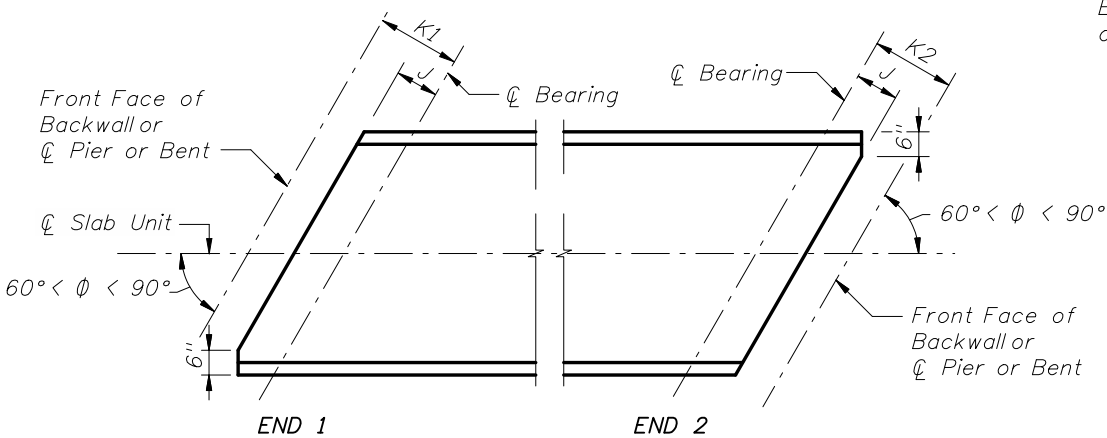


END 1 Direction of Stationing END 2
CASE 1

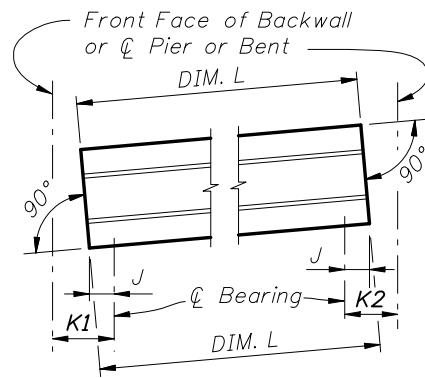


END 1 Direction of Stationing END 2
CASE 2

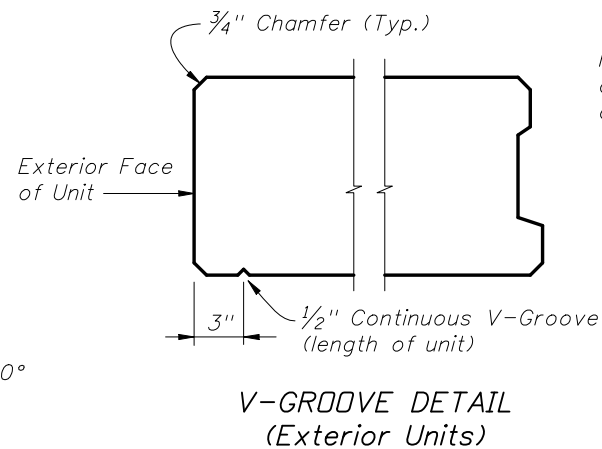


END 1 Direction of Stationing END 2
CASE 3

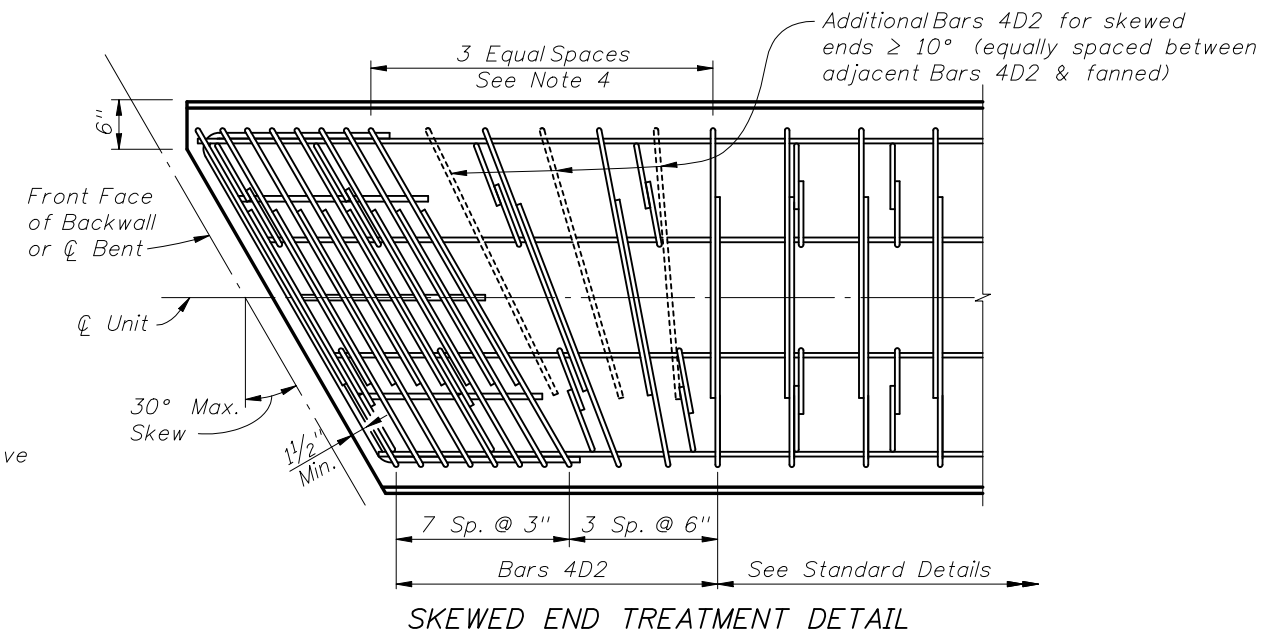
SCHEMATIC PLAN VIEWS AT SLAB ENDS



SCHEMATIC SIDE ELEVATION OF SLAB UNITS
(Positive Grade shown, Negative Grade or Horizontal Grade similar)



V-GROOVE DETAIL (Exterior Units)



SKewed END TREATMENT DETAIL

GENERAL NOTES

- All bar dimensions are out-to-out.
- Strands N shall be ASTM A416, Grade 250 or 270, 3/8" ϕ or larger, stressed to 10,000 lbs. each.
- Unless otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
- For slab units with skewed end conditions, the end reinforcement, defined as Bars 4D2 and Y within the limits of the first 2'-0", shall be placed parallel to the skewed ends of the slab unit. The next three - Bars 4D2 & 4K shall be fanned to perpendicular to the longitudinal axis of the slab unit. Provide additional Bars 4D2 for end skews $\geq 10^\circ$. (See "SKEWED END TREATMENT DETAIL")
- Bars 4D1, 4D2 & 4K shall be placed and tied to Strands N and a fully bonded strand in the bottom row. (See "STRAND PATTERNS")
- At the option of the Contractor deformed welded wire reinforcement (ASTM A497) may be used in lieu of Bars 4D and 4K. Submit details to the Engineer for approval.
- For referenced Dimensions, Angles and Case Numbers see Table of Variables in Structures Plans.
- Top surface of the slab units shall be raked transversely to provide a roughened surface with 1/4" amplitude. For proper bonding of the deck overlay, clean the top surface of the Prestressed Slab Units and thoroughly soak with potable water for a minimum of 4 hrs. then remove all excess surface water immediately prior to placement of the overlay.
- Cut strands 1" beyond the face of the slab unit.
- Use the same thickness of slab units within each span.
- Provide reinforced concrete keeper blocks on the low side of Prestressed Slab Units (PSU) when the cross slope or grade exceeds 3%.

INSTRUCTIONS TO DESIGNER:

To limit Bursting Forces the maximum prestress force at the slab unit ends from fully bonded strands must be limited to the following:

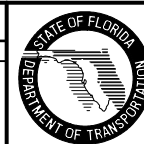
Slab Unit Type	Max. Bonded Prestress Force	Index No.	Last Revision Date
12" or 15" X 48"	1110 Kips	20354 & 20364	01/01/09
12" or 15" X 60"	1310 Kips	20355 & 20365	01/01/09

No losses shall be applied when calculating the Bonded Prestress Force. The reinforcing in the ends of the beams must not be modified without the approval of the State Structures Design Engineer.

Avoid placing slab units within the limits of superelevation transitions because the cross slope for individual and adjacent slab units must be constant from begin span to end span. Slight superelevation transitions may be accommodated by increasing the slab overlay thickness across the width of the span.

REVISIONS

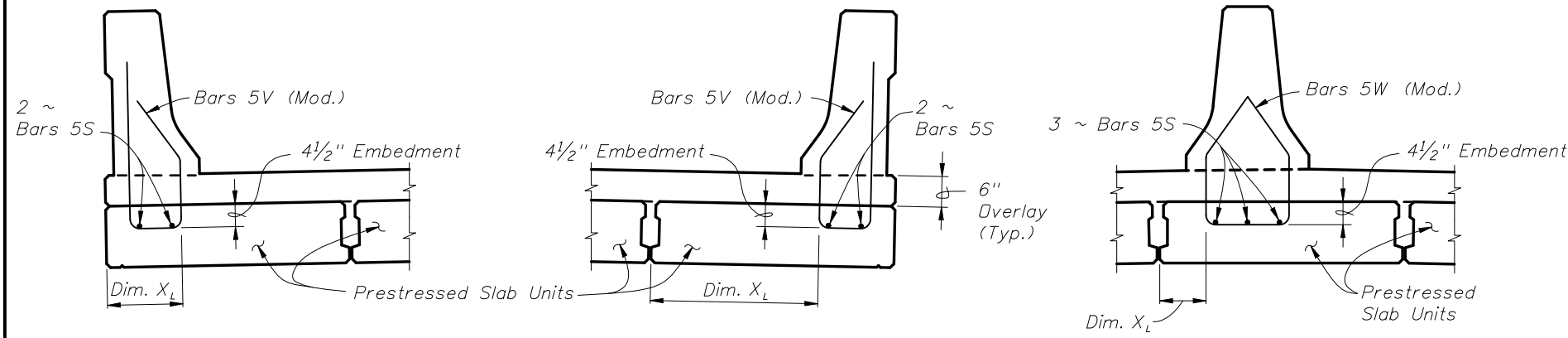
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/09	TJB	New Design Standard			



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PRESTRESSED SLAB UNITS
DETAILS AND NOTES

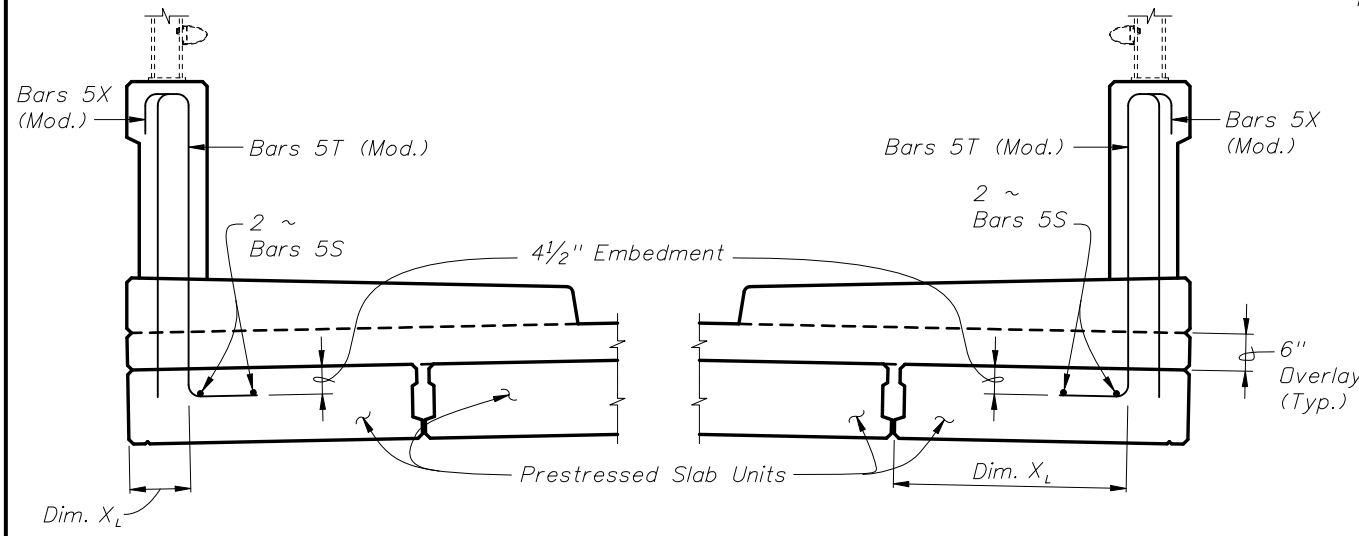
Interim Date	Sheet No.
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20350	



CASE "LEFT"
F SHAPE TRAFFIC RAILING (LOOKING AHEAD STATION)
(Index No. 420 - 32" F Shape shown)
(Index No. 425 - 42" F Shape similar)

CASE "RIGHT"
TRAFFIC RAILING (MEDIAN 32" F SHAPE)
(Index No. 421)

(Railing on Exterior Units shown, Railing on Interior Units similar)



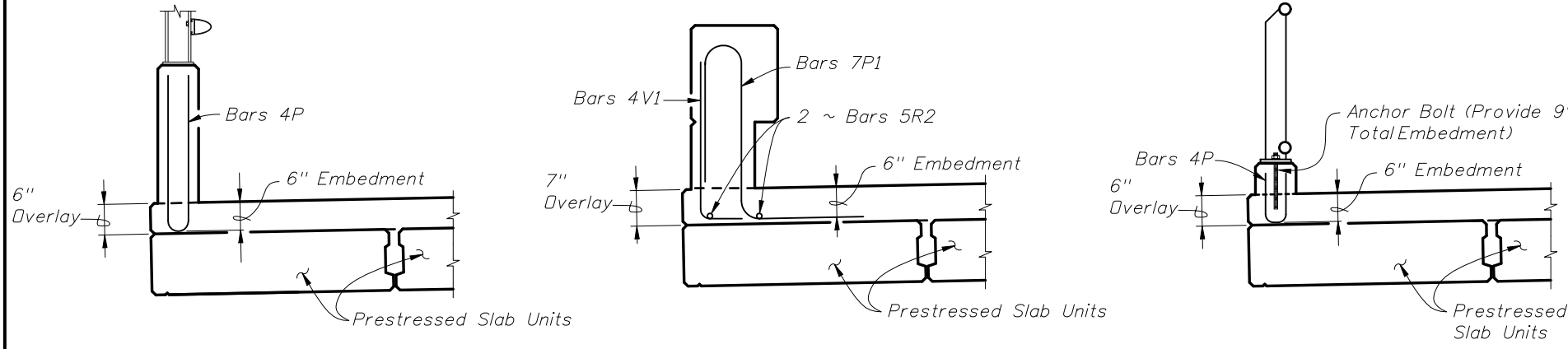
CASE "LEFT" CASE "RIGHT"
VERTICAL SHAPE TRAFFIC RAILING (LOOKING AHEAD STATION)
(Index No. 423 - 32" Vertical Shape shown)
(Index No. 422 - 42" Vertical Shape similar)

NOTES:
Work this sheet with the Prestressed Slab Unit - Table of Variables and Prestressed Slab Unit - Traffic Railing Reinforcement Layout Table (if required) in the Structures Plans.

Contractor should notify the Precaster how the Traffic Railing bars are to be placed either vertical (plumb) or perpendicular to the cross slope to allow proper placement of the modified railing bars.

Modified Bars 5T & 5X for Index Nos. 422 & 423 shall be place vertical (plumb) to the cross slope.

On skewed Prestressed Slab Units place the bottom leg of vertical railing bars parallel to transverse slab reinforcement bars at unit ends.

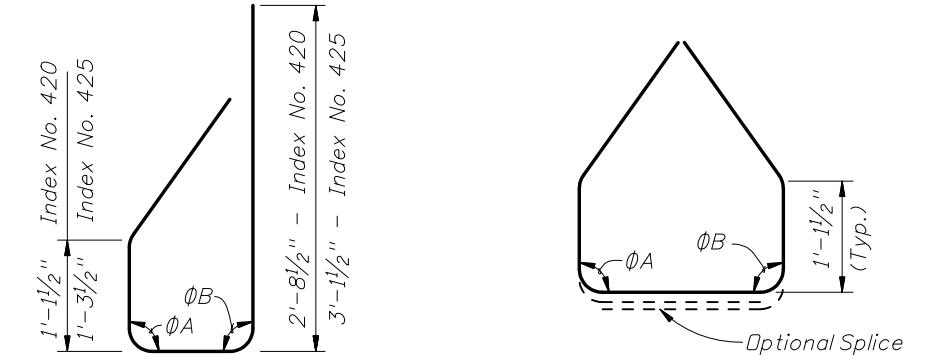


PEDESTRIAN/BICYCLE RAILING DETAIL
(Index No. 820)

TRAFFIC RAILING - (CORRAL SHAPE)
(Index No. 424)

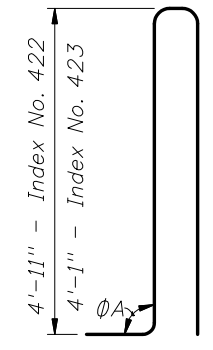
BRIDGE PEDESTRIAN/BICYCLE PICKET RAILING
(Index Nos. 851 & 861)

RAILING REINFORCING MODIFIED BAR LAYOUT

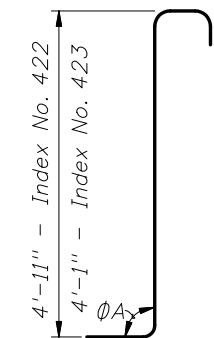


STIRRUP
BAR 5V (MOD.)
INDEX NOS. 420 OR 425

STIRRUP
BAR 5W (MOD.)
INDEX NO. 421



STIRRUP
BAR 5T (MOD.)
INDEX NOS. 422 OR 423

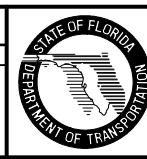


STIRRUP
BAR 5X (MOD.)
INDEX NOS. 422 OR 423

REINFORCING STEEL NOTES:

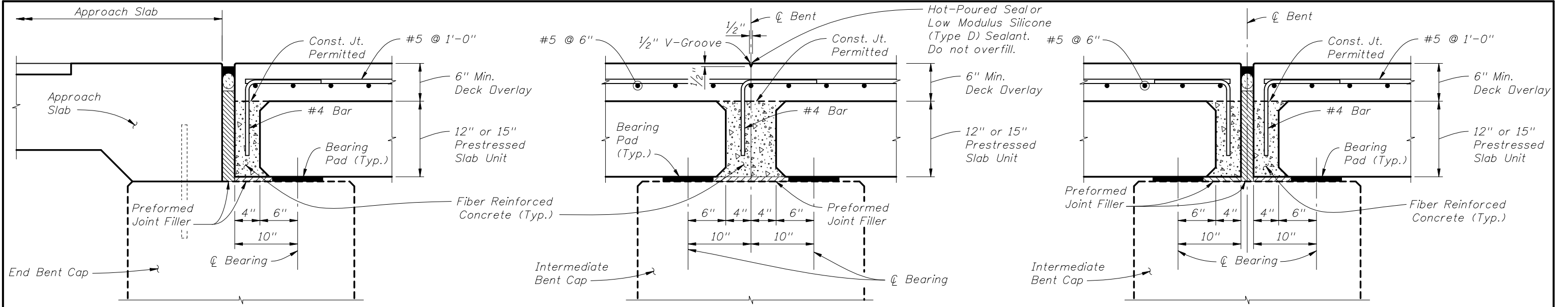
1. Bar dimensions shown are out to out.
2. For the other dimensions and angles ϕA and ϕB see the referenced Index.
3. Adjust the dimension shown for Bars 5V, 5T, 5W, 5X, 4V & 7P as required when the 6" Min. Overlay is thickened to accommodate superelevation transition.
4. The 4'-11" (Index No. 422), 4'-1" (Index No. 423) vertical dimension shown for Bars 5T and 5X is based on a 6" thick deck overlay with a 6" thick x 6' wide raised sidewalk on low side of the deck with a 2% deck cross slope and a counter 2% raised sidewalk cross slope. If the raised sidewalk thickness, width, or cross slope vary from the above amounts, adjust this dimension accordingly to achieve a 4 1/2" embedment ($\pm 1/2$ ") into the slab units. See Structures Plans, Superstructure and Approach Slab Sheets.
5. All reinforcing steel at the open joints shall have a 2" minimum cover.
6. Bars 5S may be continuous or spliced at the mid point of the slab unit. Bar splices for Bars 5S shall be a minimum of 2'-0".
7. Welded Wire Reinforcement is not permitted for Bars 5W (Mod.) on precast slab units.
8. Strands N may be used in lieu of Bar 5S or 5R to anchor stirrup Bars 5T, 5V, 5W & 5X within 2" of the 90° corner bend.

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DATE	BY	DESCRIPTION	
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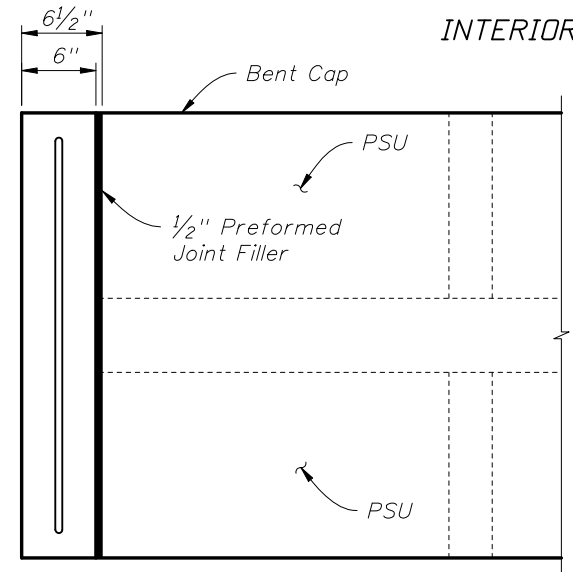
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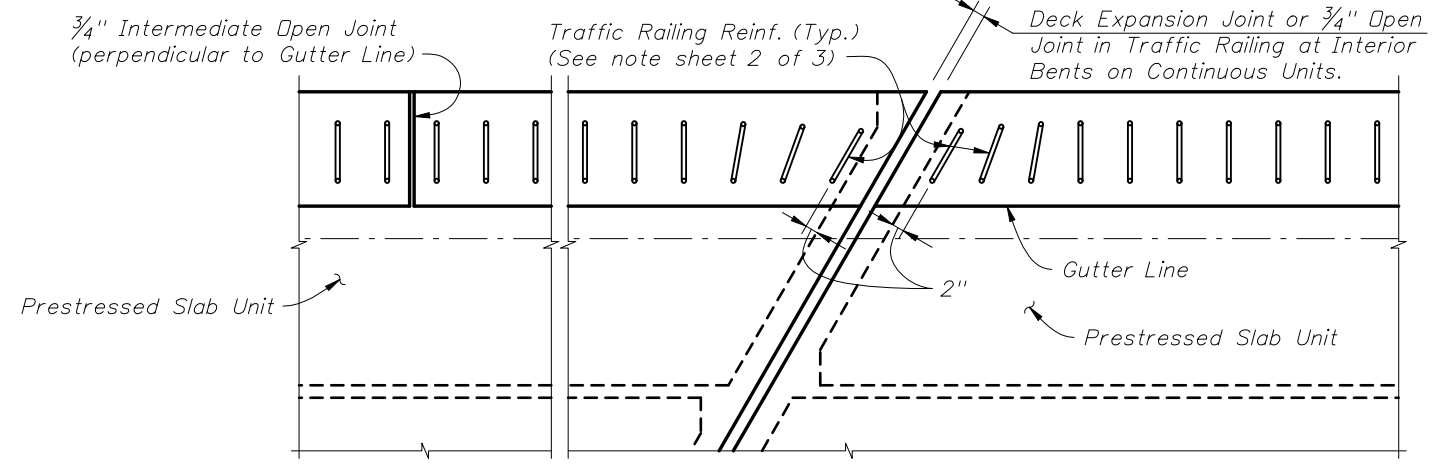
JOINT DETAIL AT BEGIN/END BRIDGE

JOINT DETAIL AT INTERIOR BENTS ON CONTINUOUS UNITS

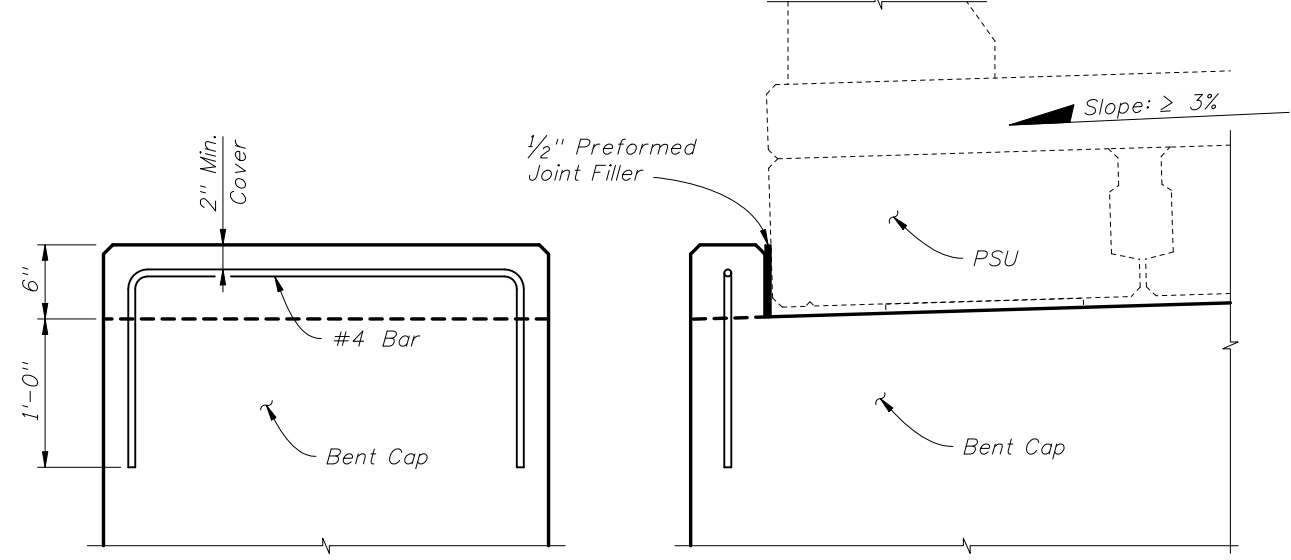
JOINT DETAIL AT EXPANSION INTERIOR BENTS



PARTIAL PLAN



PARTIAL PLAN VIEW OF DECK SHOWING EXPANSION JOINT TREATMENT ON SKEWED BRIDGE (INTERMEDIATE JOINT IS SIMILAR)

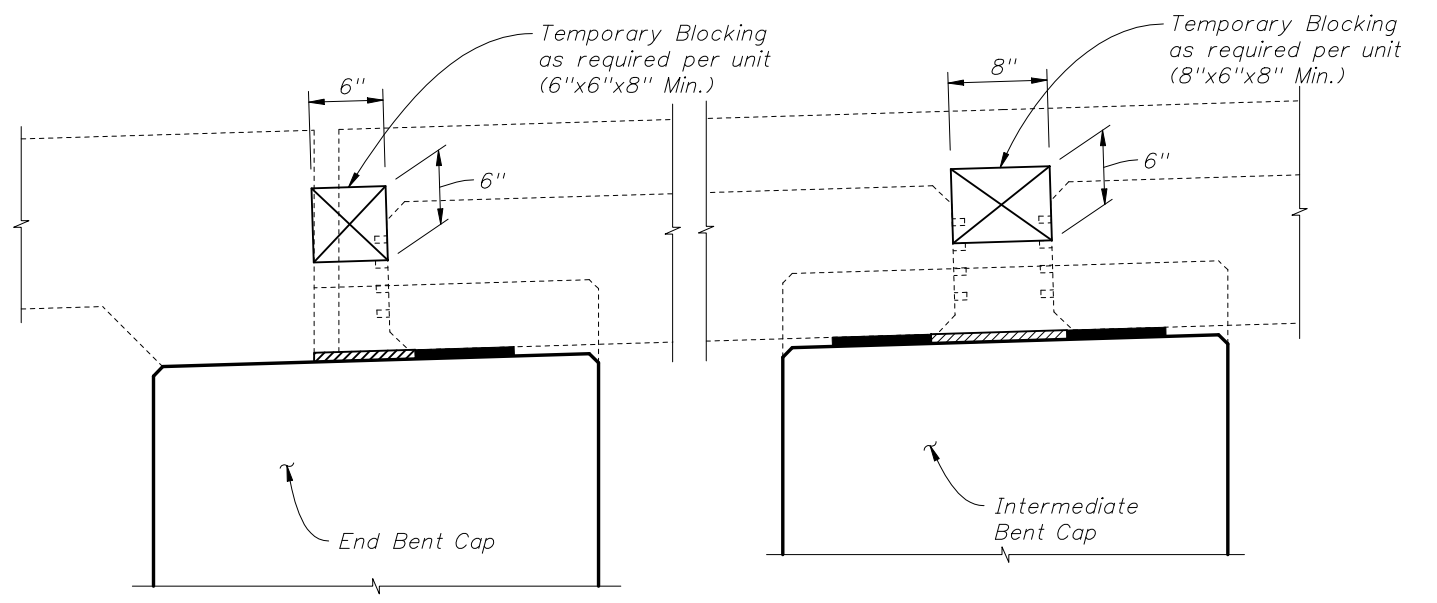


END VIEW

PARTIAL ELEVATION

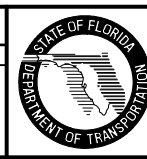
KEEPER BLOCK DETAILS

Use keeper blocks on low end of bent caps when cross slope is $\geq 3\%$.



TEMPORARY BLOCKING

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/09	TJB	New Design Standard.			



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