GENERAL NOTES:

This Standard is only applicable to the current FDOT inventory of temporary bridge components which are manufactured in accordance with Acrow Series 300, Double Wide design.

Work this Standard with Index Nos. 21610, 21620, 21630 and 21640.

STRUCTURAL STEEL:
Steel Plates and Rolled Sections shall be ASTM A709 Grade 36.
Pipe piles shall be ASTM A252 Grade 2, Fy = 35 ksi.

BOLTS, LAG SCREWS AND THREADED BOLT STOCK:
Furnish high strength bolts in accordance with ASTM F3125 Grade A325 Type 1. Furnish Threaded Stock in accordance with ASTM A36. Furnish Lag Screws in accordance with ASTM A307. Furnish steel washers and nuts compatible with Bolts, Threaded Stock and Lag Screws.

TIMBER AND LAGGING:
Timber and Lagging shall be No. 1 Southern Yellow Pine.

BACKWALL BENT PILES:
Timber Piles:
10' Minimum Embedment into compacted backfill or into soil having a blow count greater than 6 (N>6).
Ultimate Capacity greater than 18 tons.
Splices are not allowed on any timber piles.

H-Piles:
12' Minimum Embedment into compacted backfill or into soil having a blow count greater than 6 (N>6).
Ultimate Capacity greater than 18 tons.

Shims admissible between backwall pile and cap.
Test piles are not required for backwall piles.

EXPANSION BEARINGS:
Inspect the PTFE (Teflon) layer and stainless steel plate prior to installation.
Do not use bearings that have a severely damaged or unbonded PTFE layer.
Clean PTFE of all grit and grime prior to installation.
Clean Stainless steel plate of all grit and grime prior to installation and finish to a smooth buffed surface.

DISTRIBUTING BEAMS:
Longitudinal stops restraining the distributing beams may be lengthened or shortened to center the distributing beam bearing on the cap beam.
The longitudinal stops are to bear on the distributing beam end frame.

EXPANSION JOINT SETTINGS:
Install the expansion joint considering the total continuous bridge length, location of fixed bearings and ambient temperature at the time of installation, assume a 1" expansion joint opening at 70 degrees F.

STORAGE FACILITY:
Contact
FDOT Statewide Aluminum Shop
2590 Camp Rd.
Oviedo, Fl.
407-977-6520
For shipping weights and dimensions of Temporary Bridge elements.

SHIPPING WEIGHTS AND DIMENSIONS:

Decking Sizes:

Type	Length	Width	Weight (lbs.)
Curb	5'	6'-9"	800
Curb	10'	6'-9"	1420
Curb	15'	6'-9"	2200
Curb	20'	6'-9"	2800
NonCurb	5'	5'-3"	650
NonCurb	10'	5'-3"	1000
NonCurb	15'	5'-3"	1600
NonCurb	20'	5'-3"	2100

Shipping weights and dimensions of other bridge components can be referenced in "Acrow Panel Bridging, Series 300, Technical Handbook".

TRAFFIC RAILING NOTES:
See Index 400 for component details, geometric layouts and associated notes not fully detailed herein.

CONCRETE: Concrete for Transition Blocks shall be Class II (Bridge Deck).

THRIE-BEAM PANEL: Steel Thrie-Beam Elements shall meet the requirements of AASHTO M180, Type II (Zinc coated).

BOLTS, NUTS AND WASHERS: Bolts, nuts and round washers shall be in accordance with AASHTO M180. Plate Washers shall be in accordance with ASTM A36 or ASTM A709 Grade 36. Do not drill Temporary Bridge components to attach Guardrail. Guardrail Bolts shall be placed between Truss members as shown in Index 21640.

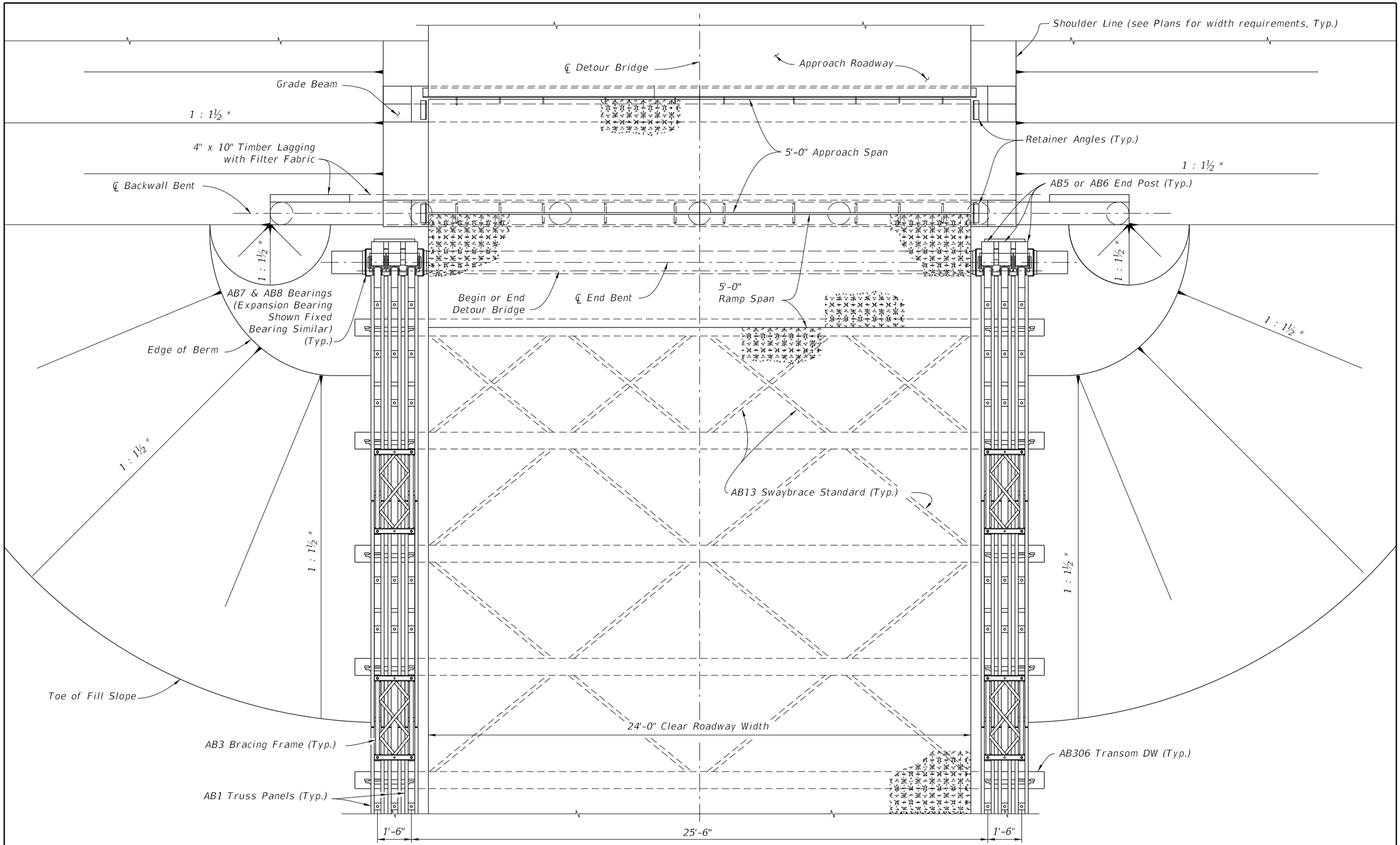
COATINGS: All Nuts, Bolts, Anchors, Washers and Backer Plates shall be hot-dip galvanized in accordance with the Specifications.

WOOD BLOCKS: All wood blocks, including required wedge shaped blocks shall be Pressure Treated Lumber in accordance with Specifications Section 955. Bolt holes in blocks to be centered (±1/4").

PAYMENT:
Temporary Detour Bridge is to be paid for under Contract Unit Price for Special Detour. If a temporary bridge system other than that shown herein is used, the Contractor is responsible for renting or purchasing their own system. Payment for Temporary Guardrail work and Transition Block will be made under Pay Item Temporary Guardrail, LF.

Furnish and install Bridge Thrie-Beam Panels and all associated hardware as shown. Payment will be made with the Temporary Detour Bridge under the Pay Item Special Detour, LS. Turn over Bridge Thrie-Beam Panels and all associated hardware to the Department with the Detour Bridge components per Specifications Section 102-6.

10/26/2016 9:09:10 AM

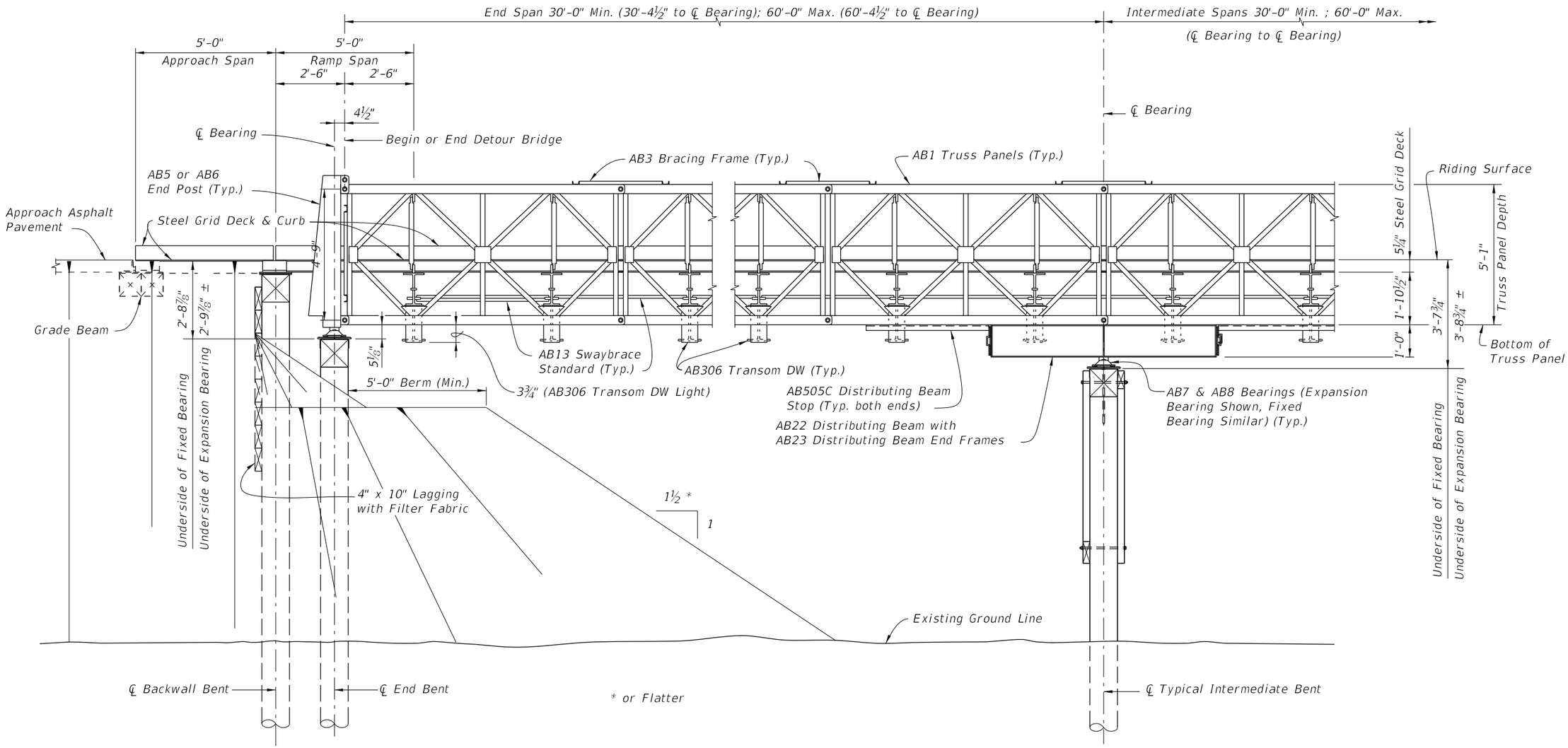


TYPICAL PLAN VIEW OF DETOUR BRIDGE
(TIMBER PILES SHOWN, STEEL H PILES AND STEEL PIPE PILES SIMILAR)
(Thrie-Beam Panel not shown for clarity, See Index 21640)

* or Flatter

10/26/2016 9:09:13 AM

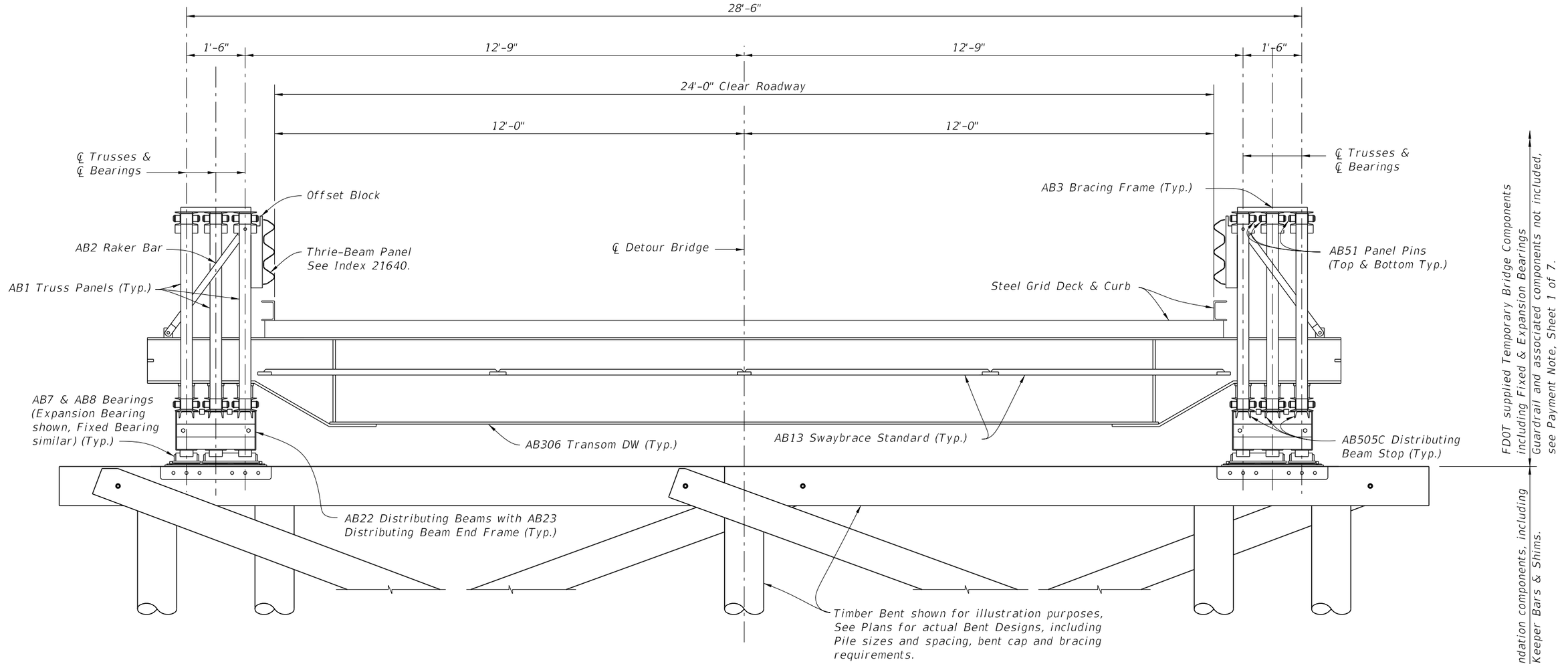
LAST REVISION	REVISION	DESCRIPTION:				
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	INDEX NO. 21600	SHEET NO. 2 of 7



ELEVATION VIEW
(TIMBER PILES SHOWN, STEEL H PILES AND STEEL PIPE PILES SIMILAR)
(Thrie-Beam Panel not shown for clarity, See Index 21640)

10/26/2016 9:09:19 AM

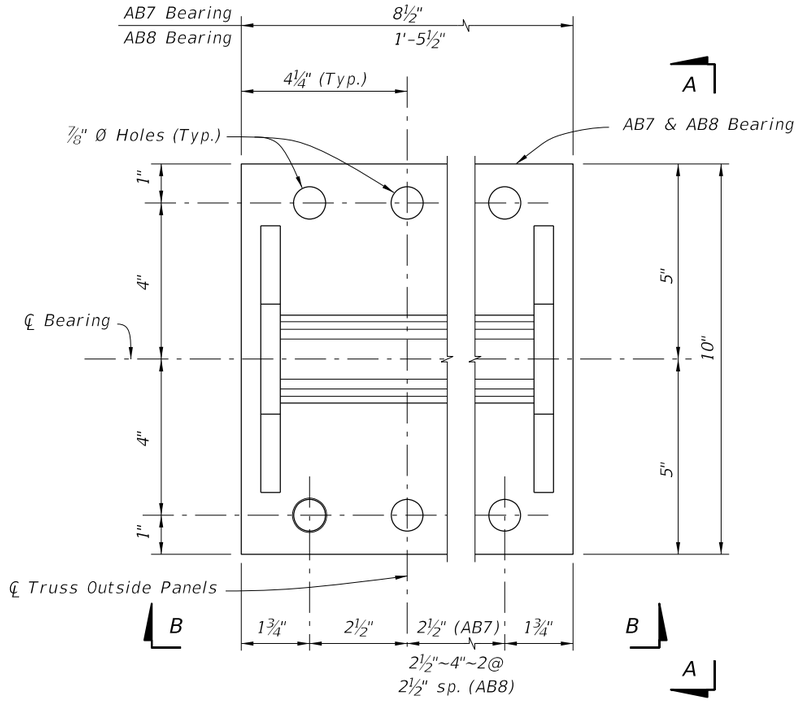
LAST REVISION	REVISION	DESCRIPTION:				
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	INDEX NO. 21600	SHEET NO. 3 of 7



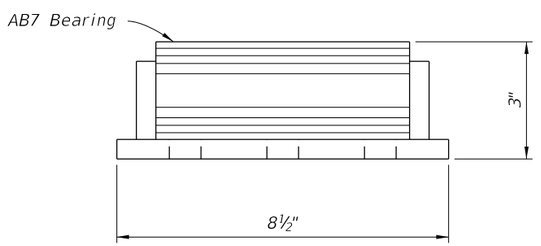
TYPICAL SECTION THRU DETOUR BRIDGE AT INTERIOR BENTS (TYPICAL SECTION AT END BENTS SIMILAR WITHOUT DISTRIBUTING BEAMS)
(TIMBER PILES SHOWN, STEEL H PILES AND STEEL PIPE PILES SIMILAR)

10/26/2016 9:09:21 AM

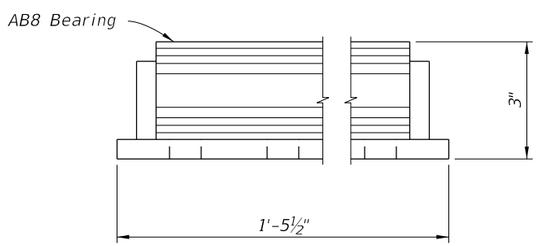
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	21600	4 of 7



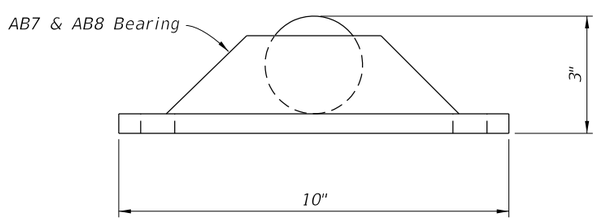
PLAN VIEW



VIEW B-B

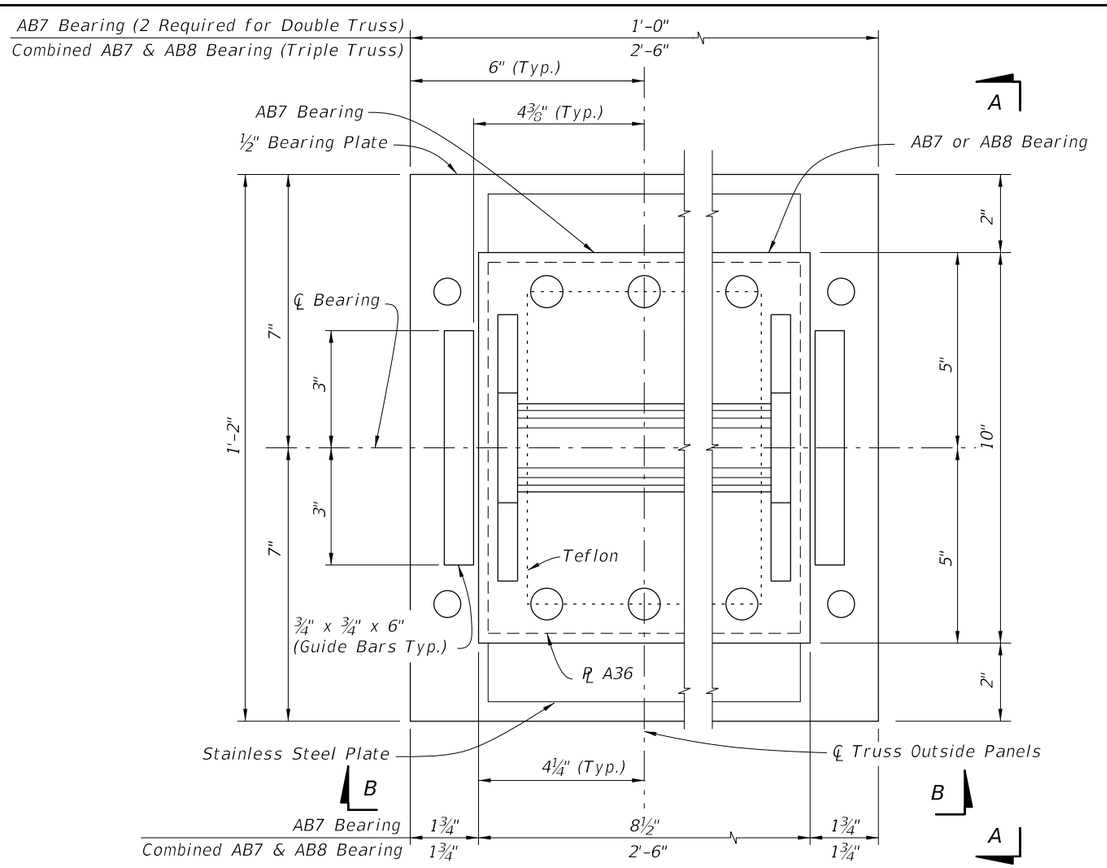


VIEW B-B

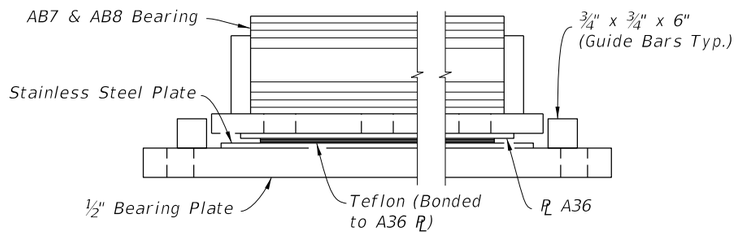


VIEW A-A

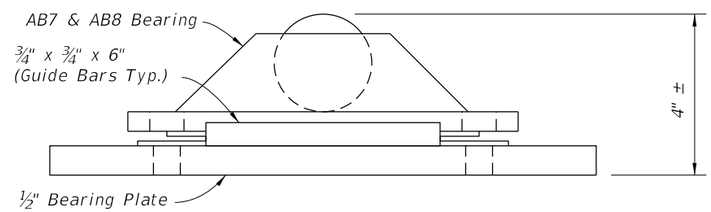
DETAILS FOR FDOT SUPPLIED FIXED BEARINGS



PLAN VIEW



VIEW B-B

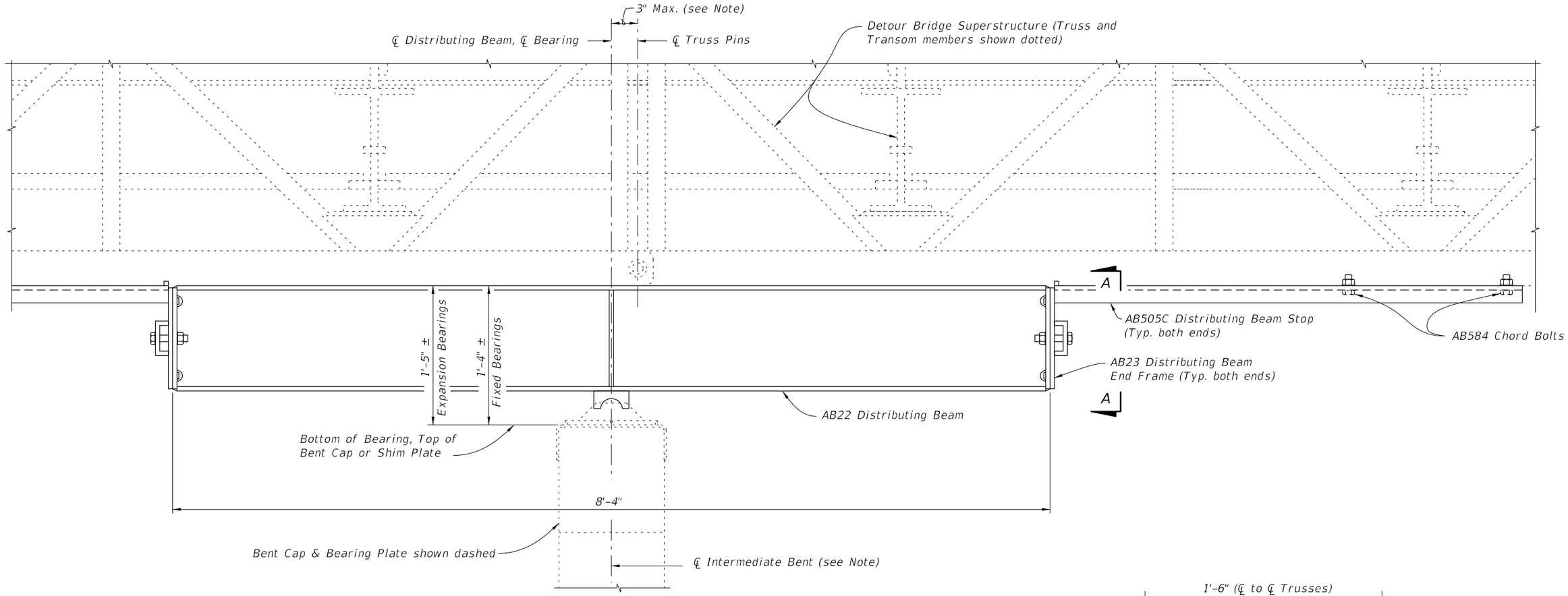


VIEW A-A

DETAILS FOR FDOT SUPPLIED EXPANSION BEARINGS

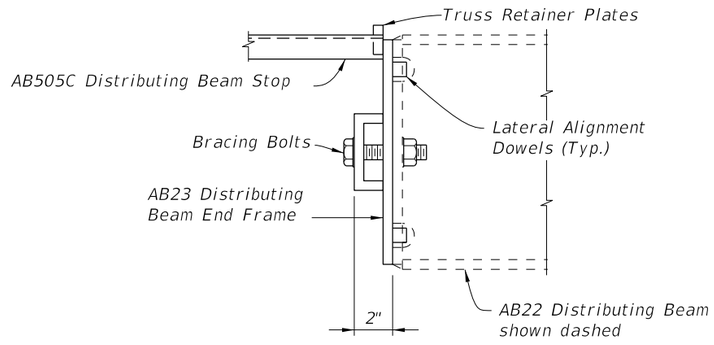
10/26/2016 9:09:24 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	21600	5 of 7

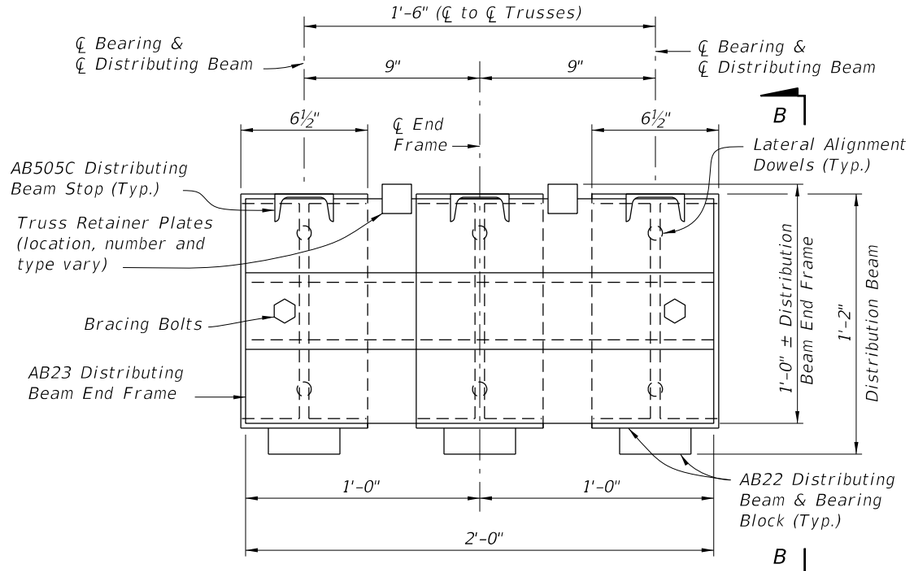


ELEVATION VIEW OF DISTRIBUTING BEAM
(FIXED BEARING SHOWN, EXPANSION BEARING SIMILAR)
(Timber Intermediate Bent shown, Steel Intermediate Bents similar)

Note:
℄ Bearing may be shifted from ℄ Truss Pins as shown, ℄ Intermediate Bent may be shifted from ℄ Bearing an additional 3" to allow for pile placement tolerances.



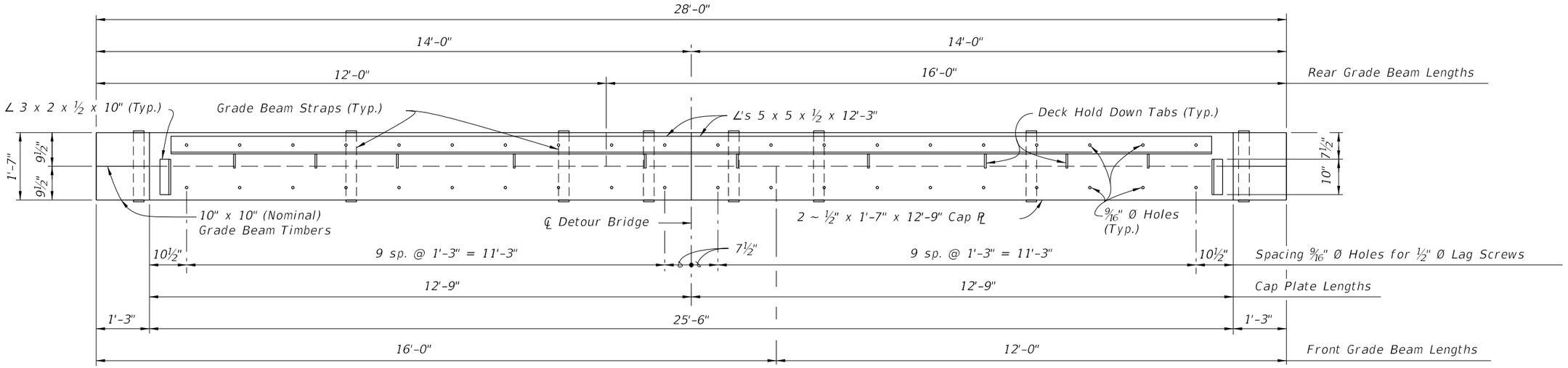
VIEW B-B



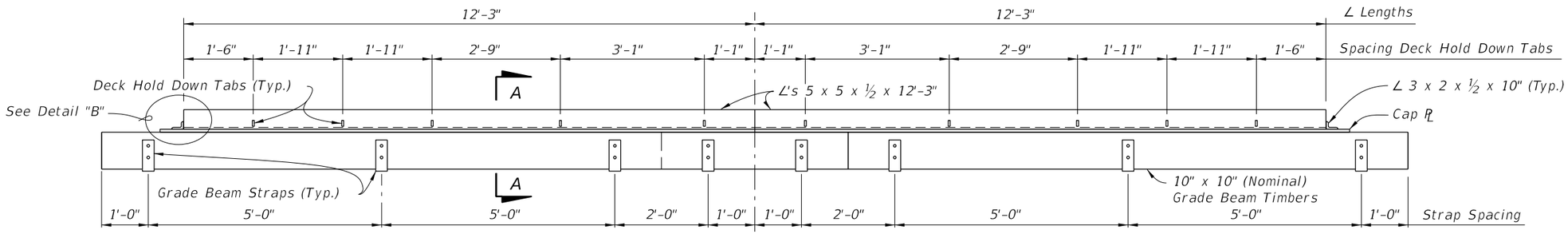
END VIEW A-A
DISTRIBUTING BEAM END FRAME DETAIL

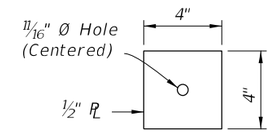
10/26/2016 9:09:27 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	21600	6 of 7



PLAN VIEW

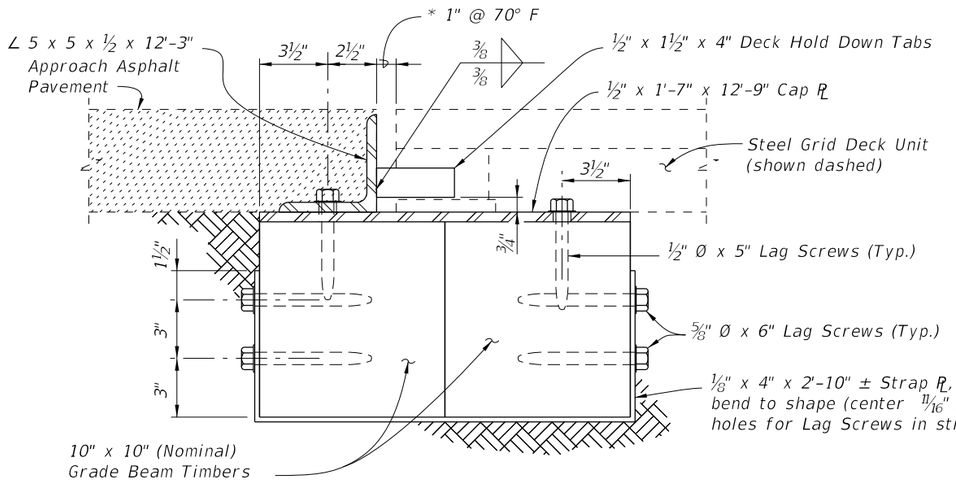




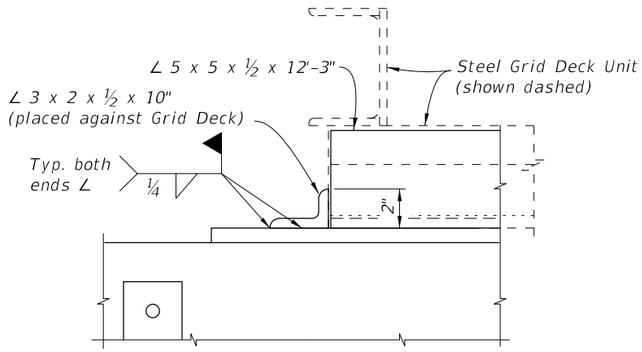
ELEVATION VIEW

ANCHOR PLATE DETAIL

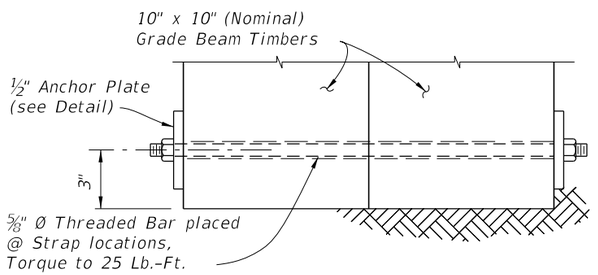
* See General Notes for setting widths other than 70° F.



SECTION A-A



DETAIL "B"

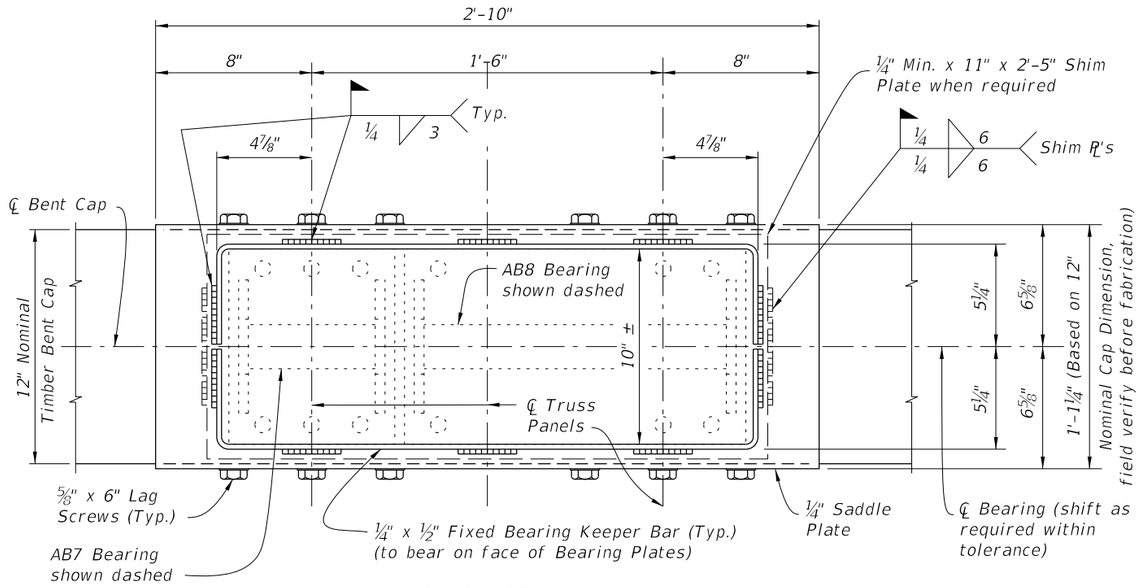


OPTIONAL THROUGH BOLT DETAIL
(MAY BE USED IN LIEU OF STRAPS)

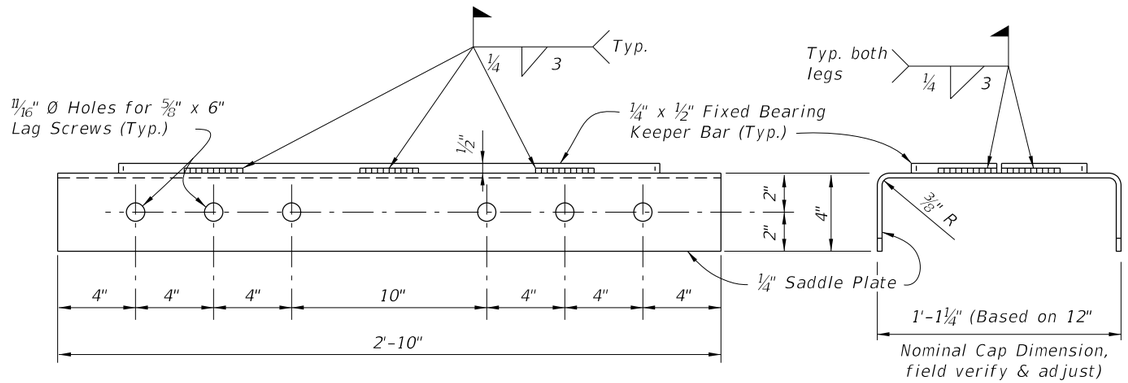
GRADE BEAM DETAILS

10/26/2016 9:09:29 AM

LAST REVISION	REVISION	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE GENERAL NOTES AND DETAILS	INDEX NO.	SHEET NO.
07/01/06					21600	7 of 7

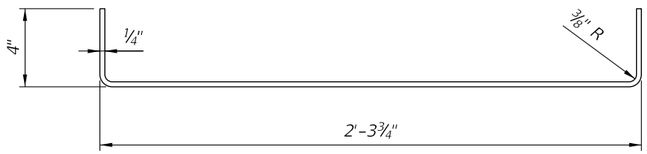


PLAN VIEW



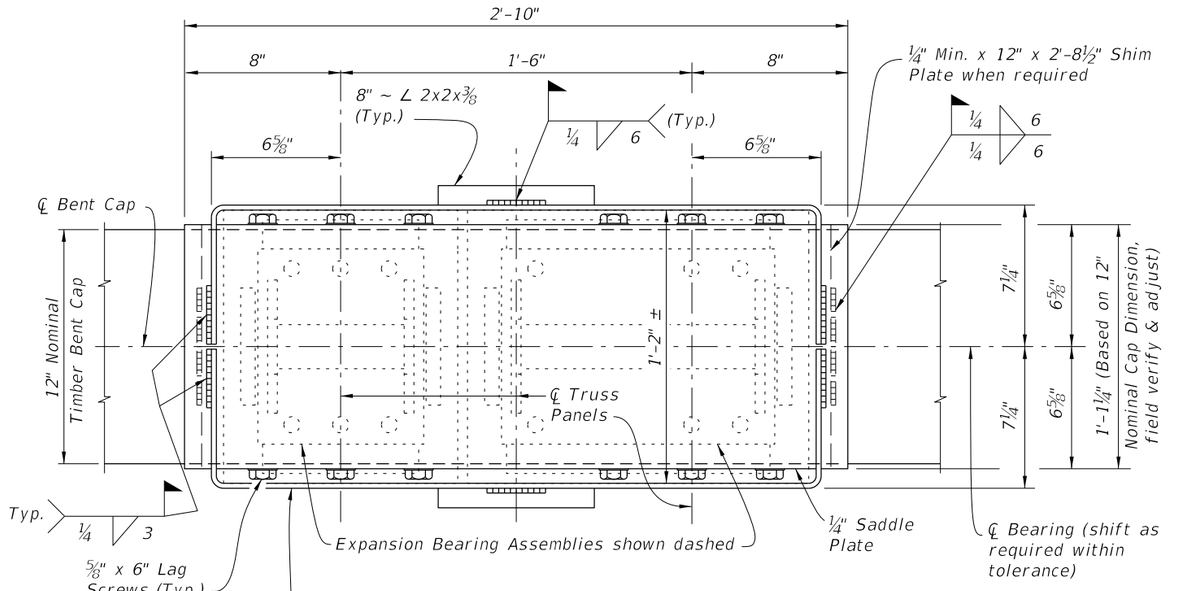
ELEVATION VIEW OF SADDLE PLATE

END VIEW

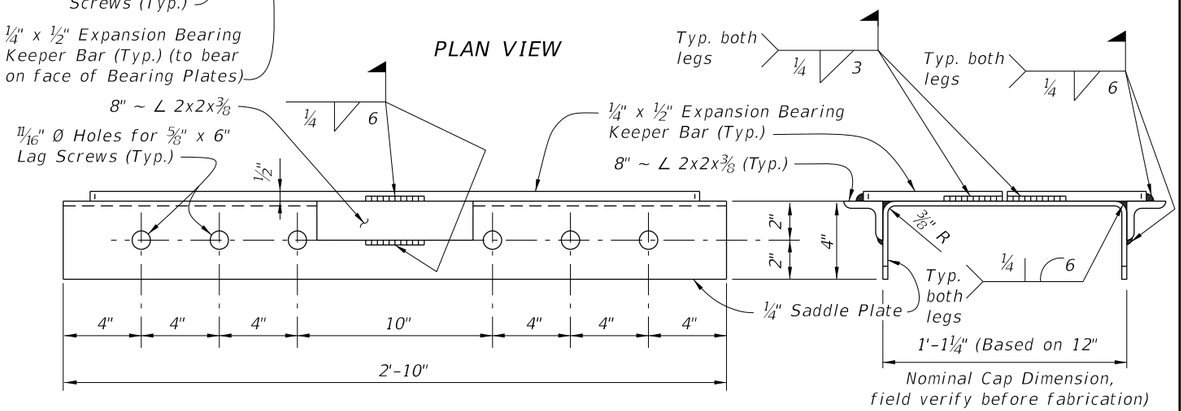


FIXED BEARING KEEPER BAR DETAIL

FIXED BEARING DETAILS

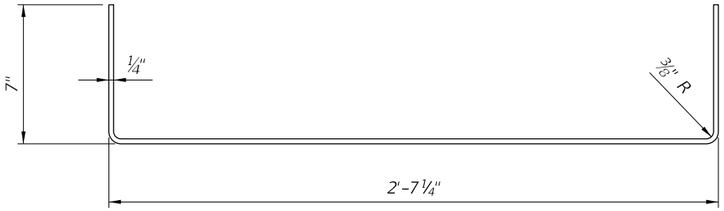


PLAN VIEW



ELEVATION VIEW OF SADDLE PLATE

END VIEW

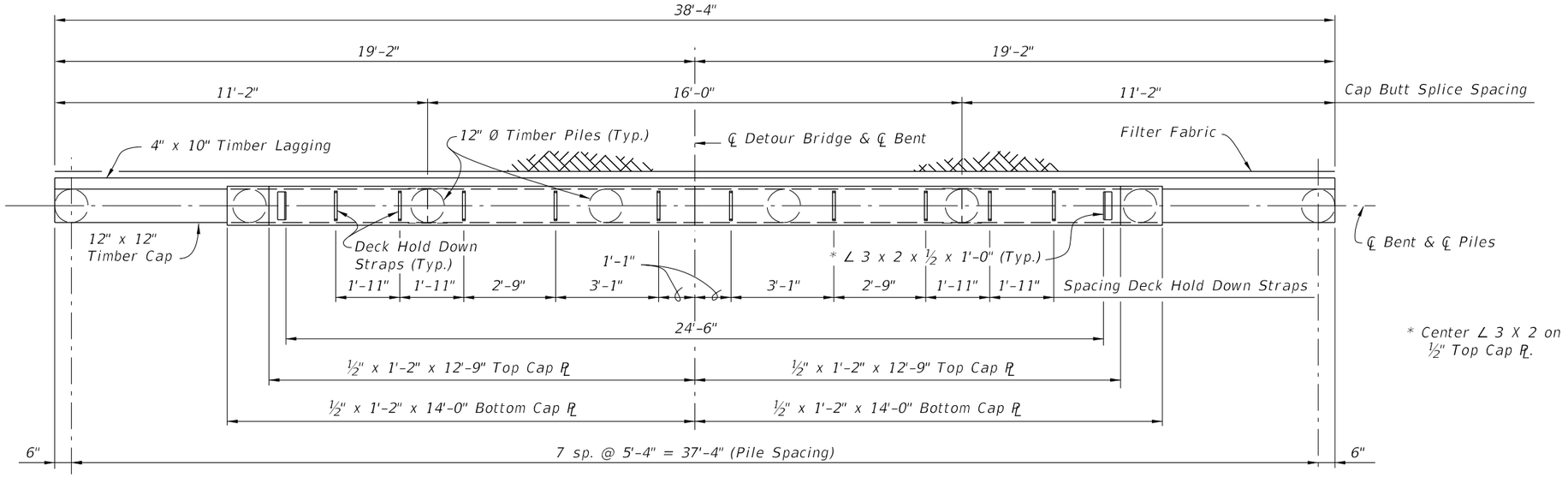


EXPANSION BEARING KEEPER BAR DETAIL

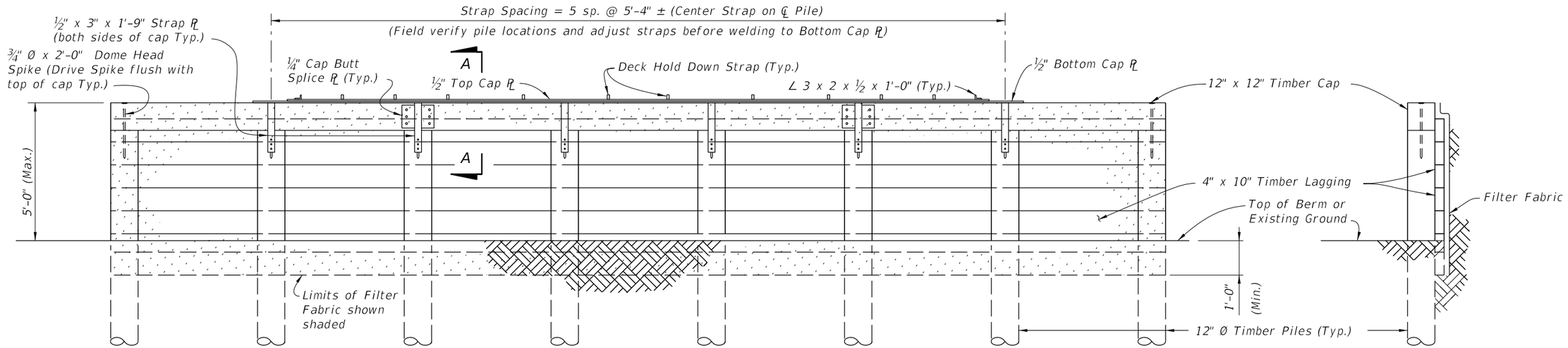
EXPANSION BEARING DETAILS

10/26/2016 9:09:52 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS TIMBER PILE FOUNDATIONS	21610	1 of 3



PLAN VIEW



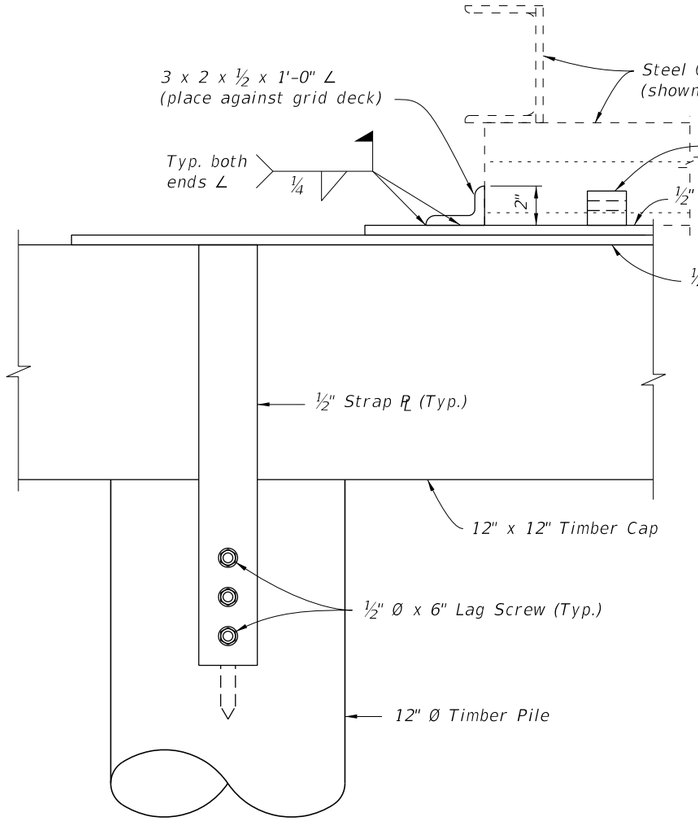
ELEVATION VIEW

END VIEW

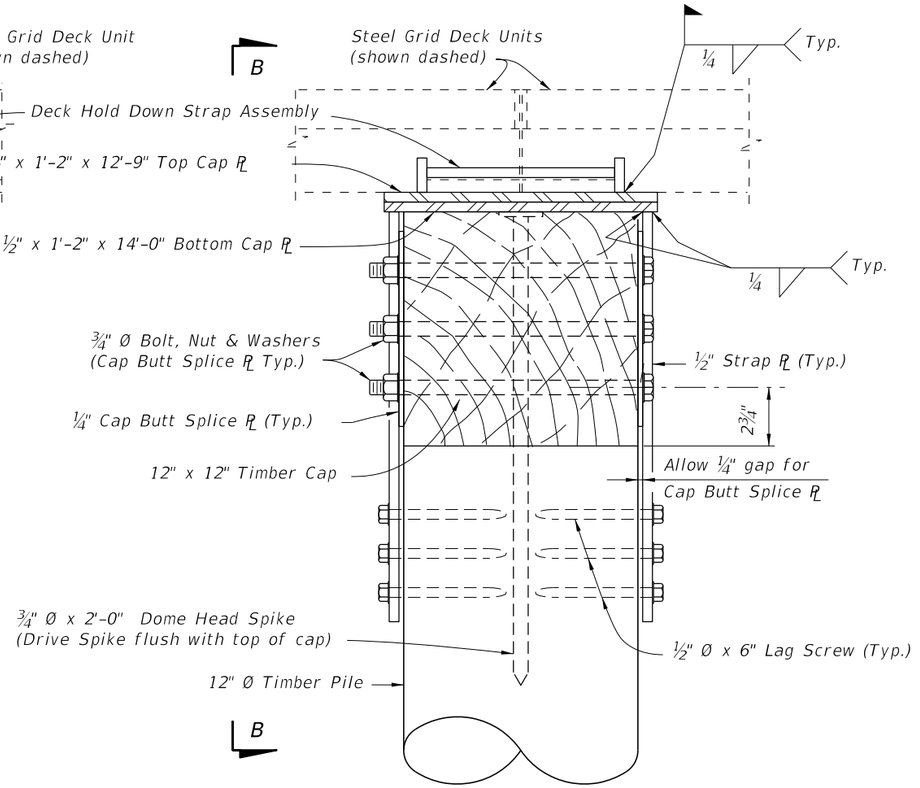
BACKWALL BENT DETAILS

10/26/2016 9:09:54 AM

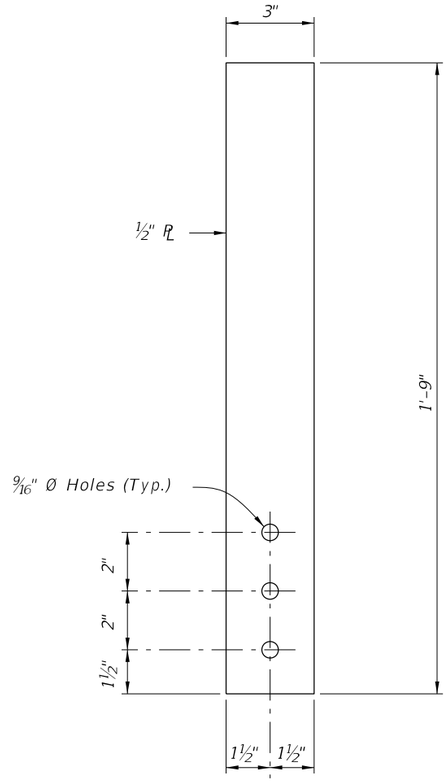
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/06			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS TIMBER PILE FOUNDATIONS	21610	2 of 3



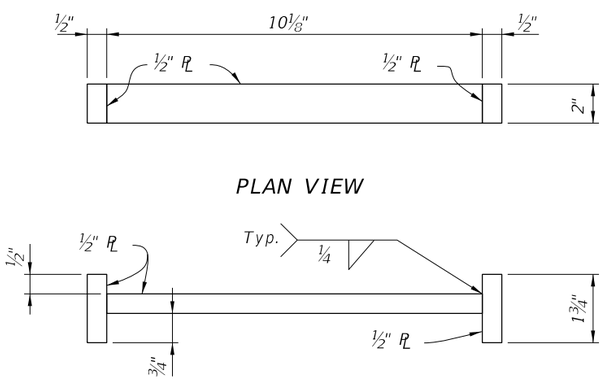
VIEW B-B
(SHOWING END OF CAP PLATES)



SECTION A-A



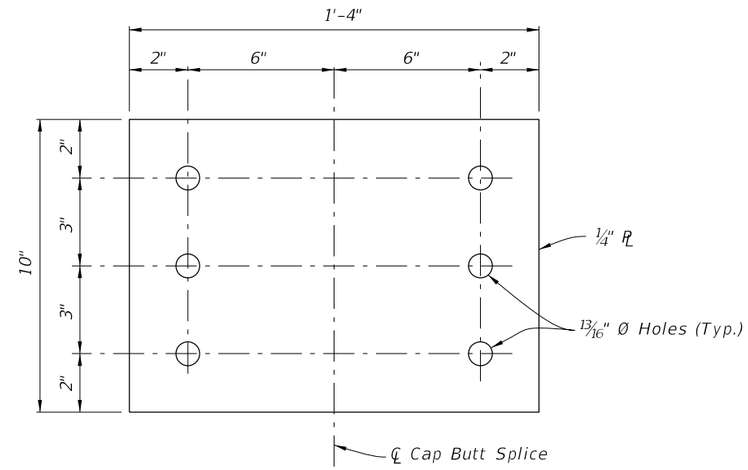
STRAP PLATE DETAIL



PLAN VIEW

ELEVATION VIEW

HOLD DOWN STRAP ASSEMBLY DETAIL

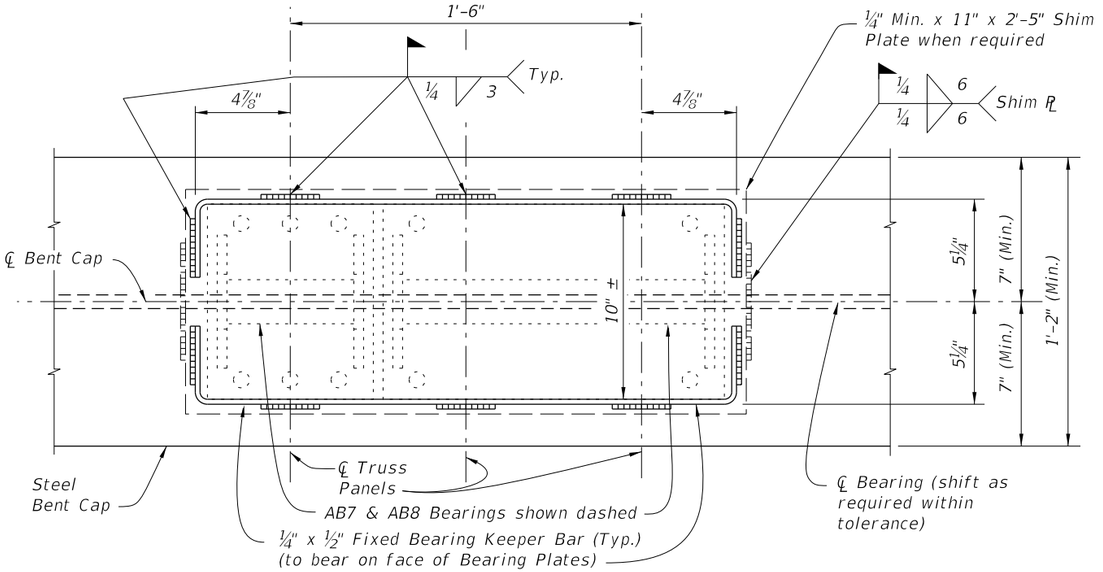


CAP BUTT SPLICE PLATE DETAIL

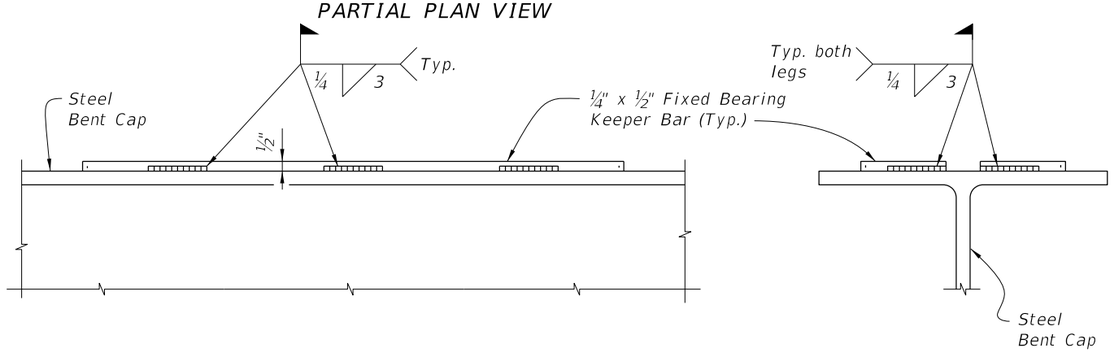
BACKWALL BENT DETAILS

10/26/2016 9:09:57 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS TIMBER PILE FOUNDATIONS	INDEX NO.	SHEET NO.
07/01/06					21610	3 of 3

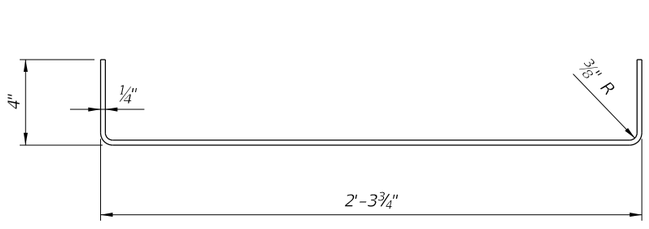


PARTIAL PLAN VIEW



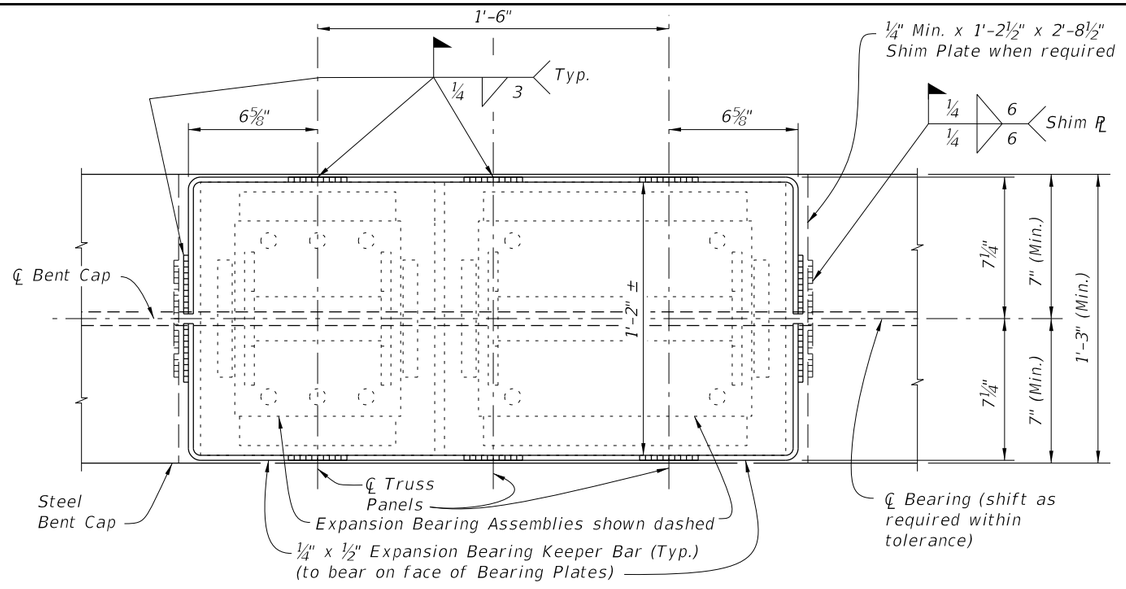
PARTIAL ELEVATION VIEW

END VIEW

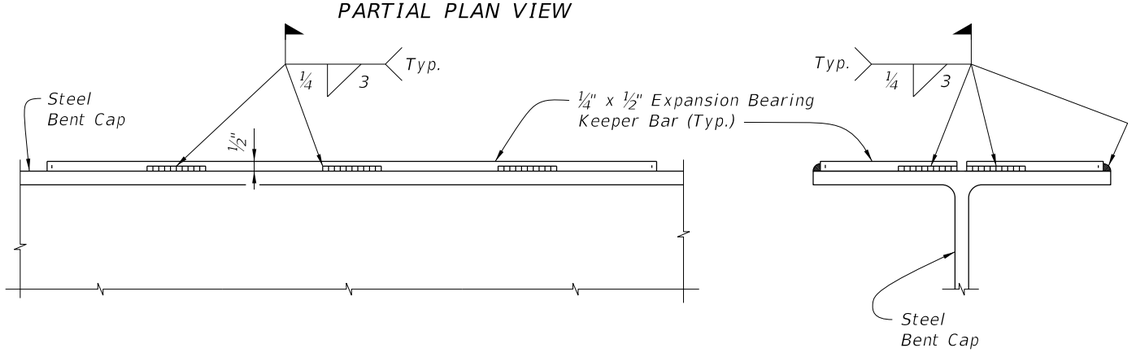


FIXED BEARING KEEPER BAR DETAIL

FIXED BEARING DETAILS

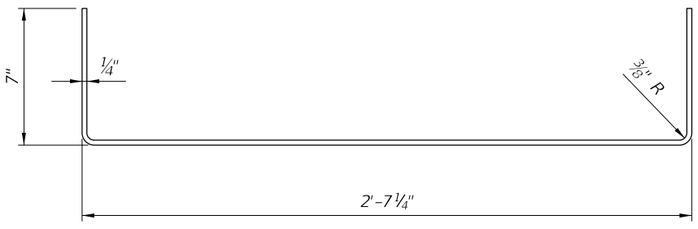


PARTIAL PLAN VIEW



PARTIAL ELEVATION VIEW

END VIEW

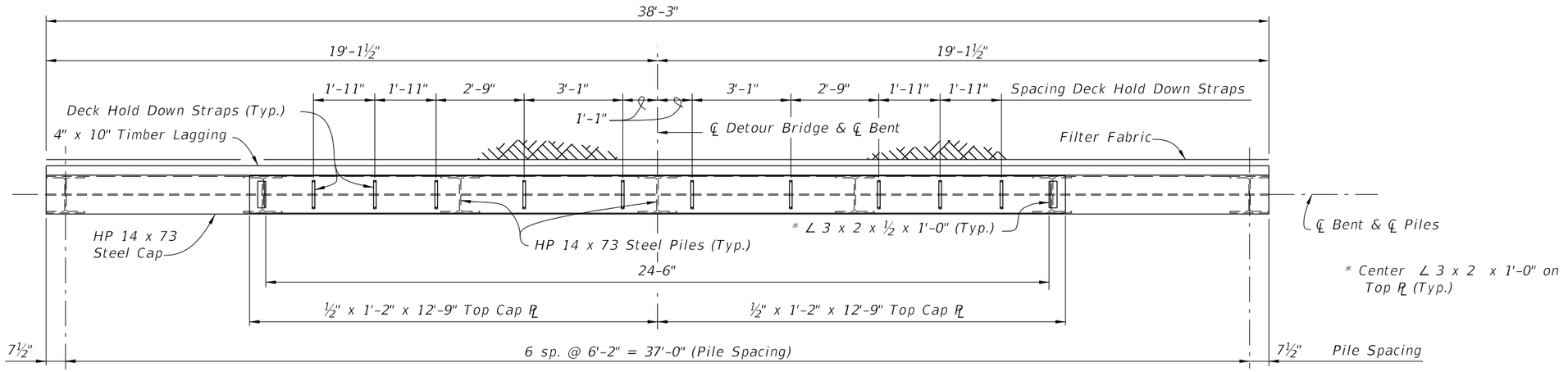


EXPANSION BEARING KEEPER BAR DETAIL

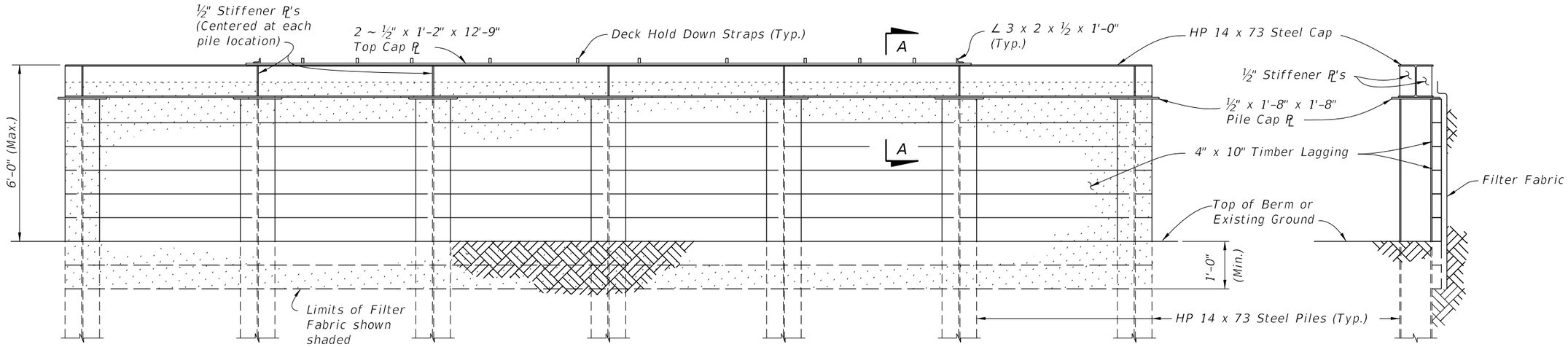
EXPANSION BEARING DETAILS

10/26/2016 9:10:25 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS STEEL H PILE FOUNDATIONS	21620	1 of 2

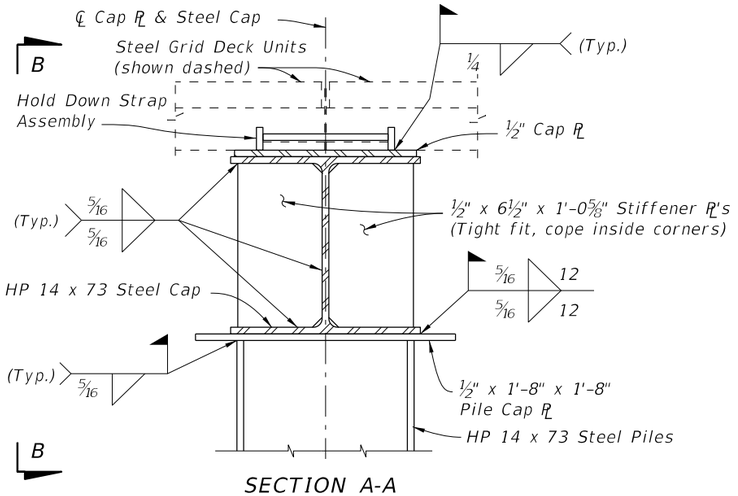


PLAN VIEW

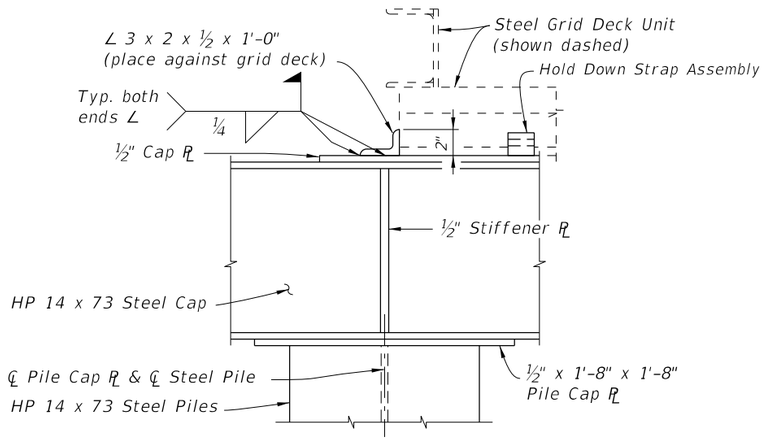


ELEVATION VIEW

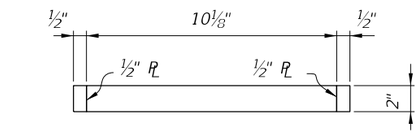
END VIEW



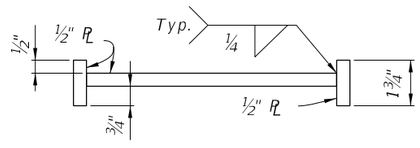
SECTION A-A
(LAGGING NOT SHOWN FOR CLARITY)



VIEW B-B



PLAN VIEW

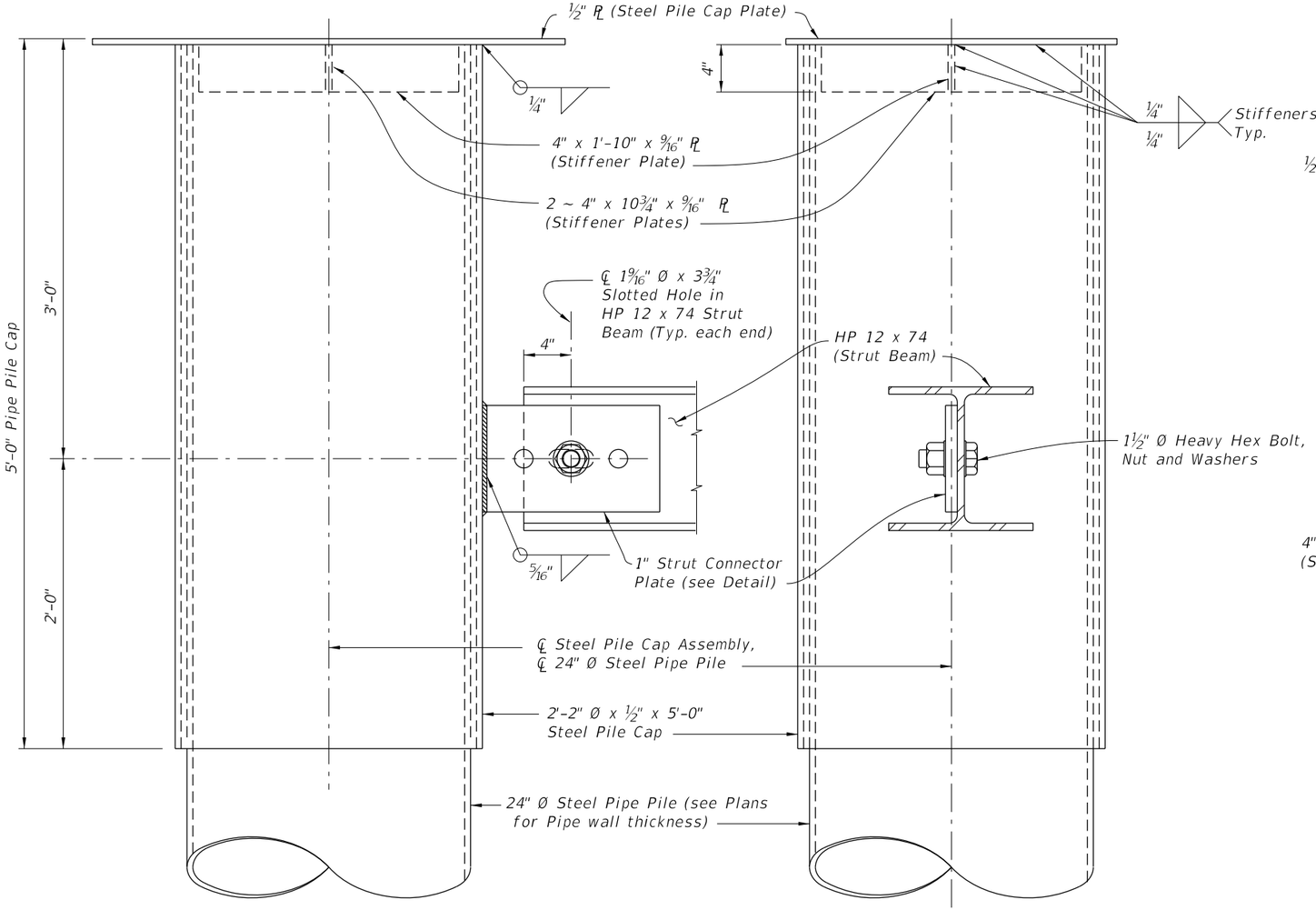


ELEVATION VIEW
HOLD DOWN STRAP ASSEMBLY DETAIL

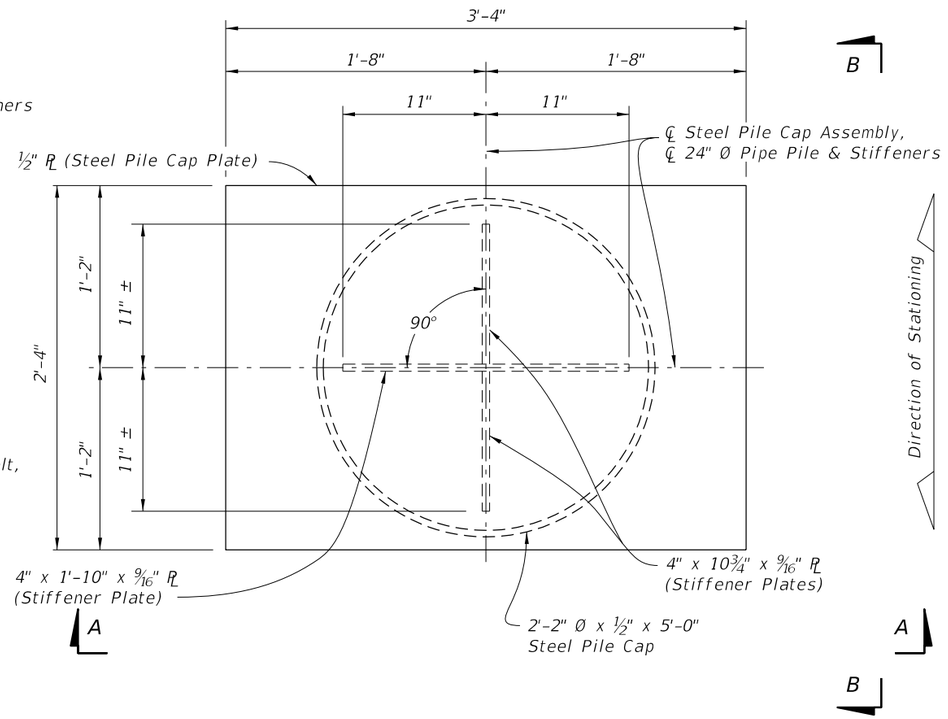
BACKWALL BENT DETAILS

10/26/2016 9:10:27 AM

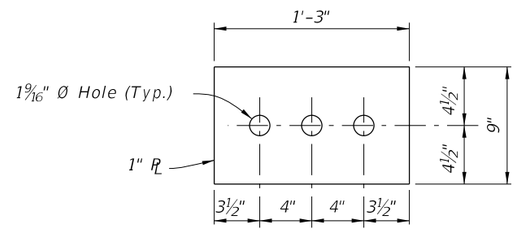
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/06			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS STEEL H PILE FOUNDATIONS	21620	2 of 2



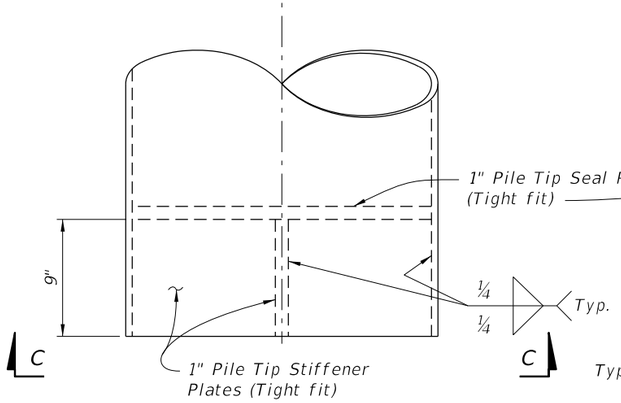
PARTIAL VIEW A-A



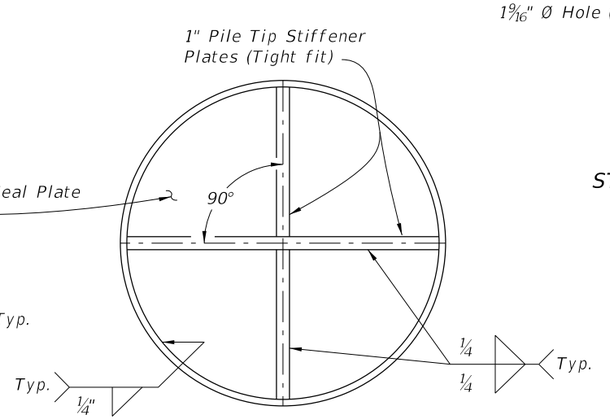
PLAN VIEW STEEL PILE CAP ASSEMBLY
(Bearing Plates and Bearing Keeper Bars not show for clarity)



STRUT CONNECTOR PLATE DETAIL



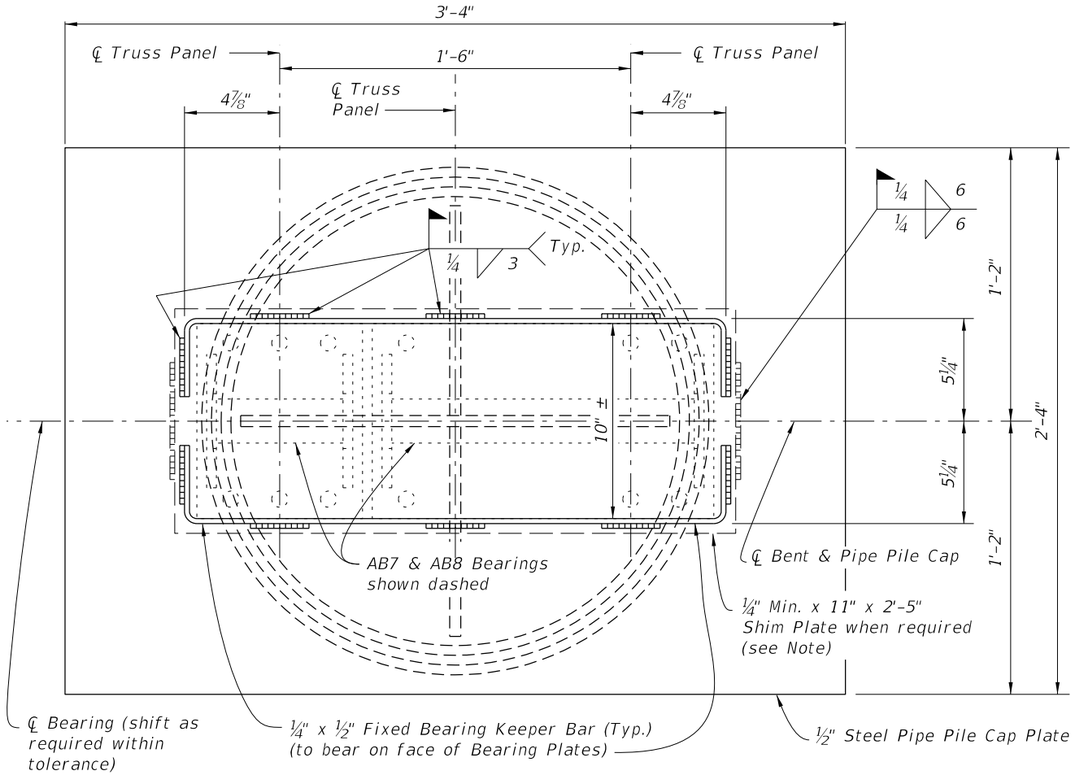
VIEW B-B



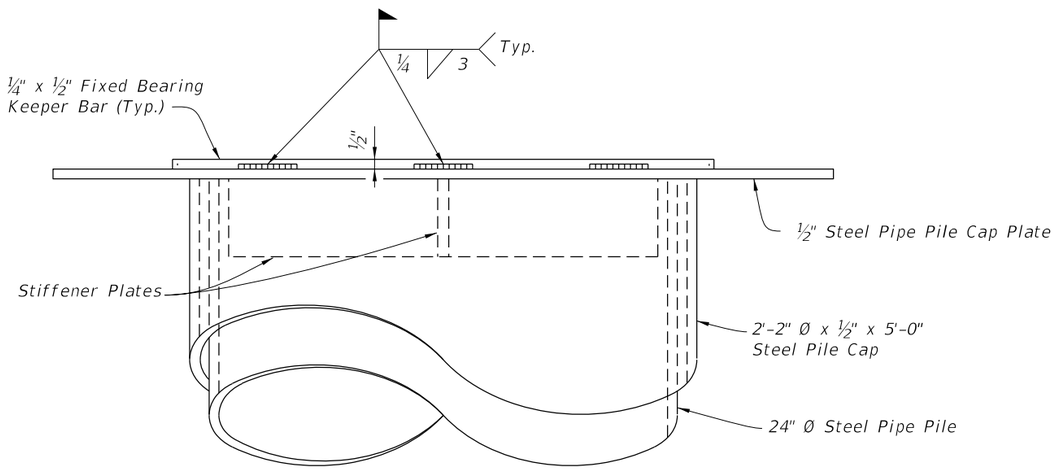
VIEW C-C
PILE TIP DETAIL

10/26/2016 9:11:06 AM

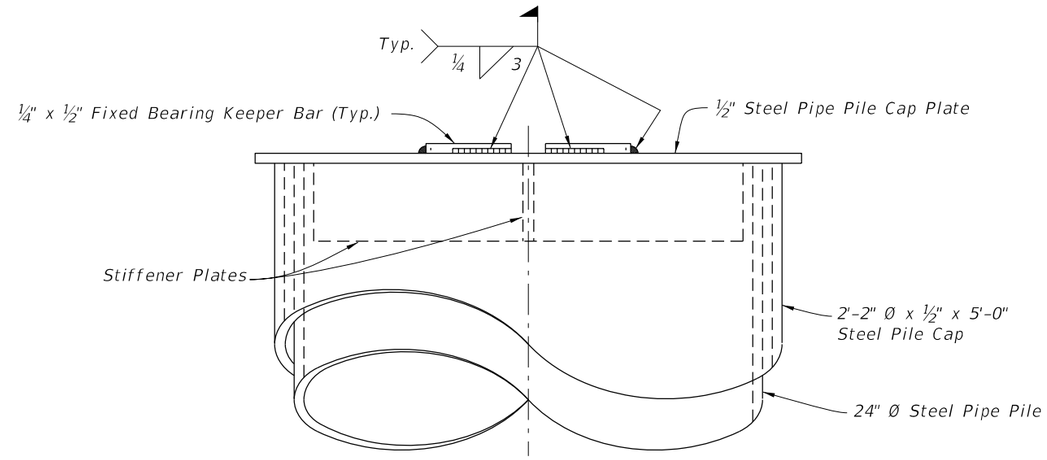
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS STEEL PIPE PILE FOUNDATIONS	21630	1 of 3



PARTIAL PLAN VIEW

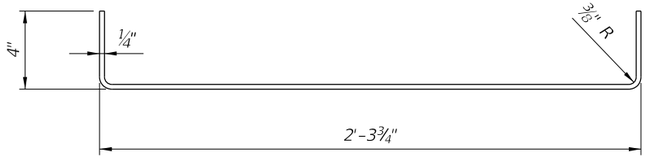


PARTIAL ELEVATION VIEW



END VIEW

Note:
Use Shim Plates as required to provide equal bearing seat elevations across the bent. Vary thickness of Shim Plate across the pile cap plate to provide a level bearing area in the transverse direction.

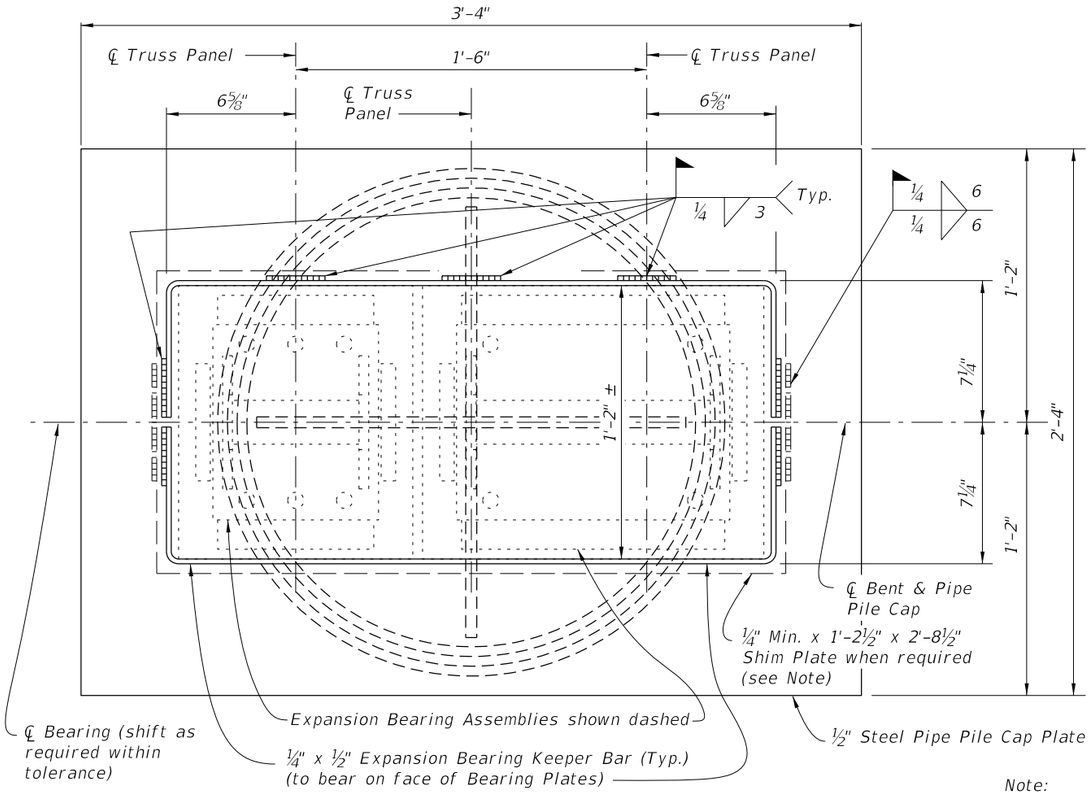


FIXED BEARING KEEPER BAR DETAIL

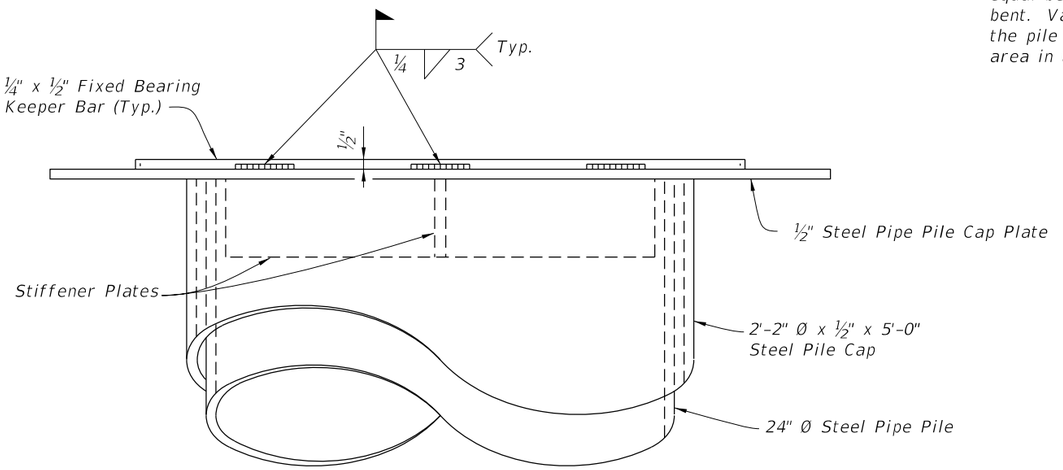
FIXED BEARING DETAILS

10/26/2016 9:11:09 AM

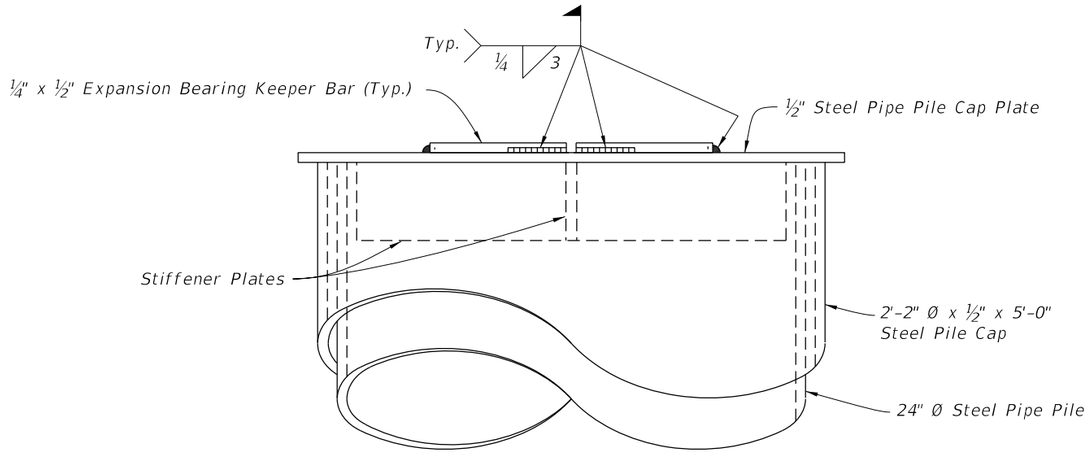
LAST REVISION	REVISION	DESCRIPTION:				
01/01/16			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS STEEL PIPE PILE FOUNDATIONS	INDEX NO. 21630	SHEET NO. 2 of 3



PARTIAL PLAN VIEW

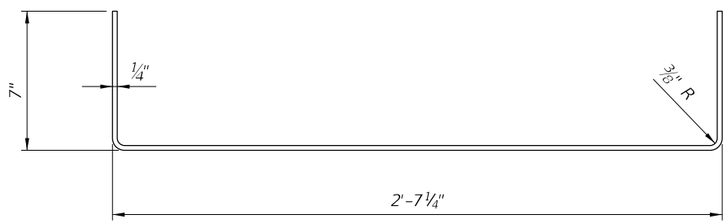


PARTIAL ELEVATION VIEW



END VIEW

Note:
Use Shim Plates as required to provide equal bearing seat elevations across the bent. Vary thickness of Shim Plate across the pile cap plate to provide a level bearing area in the transverse direction.

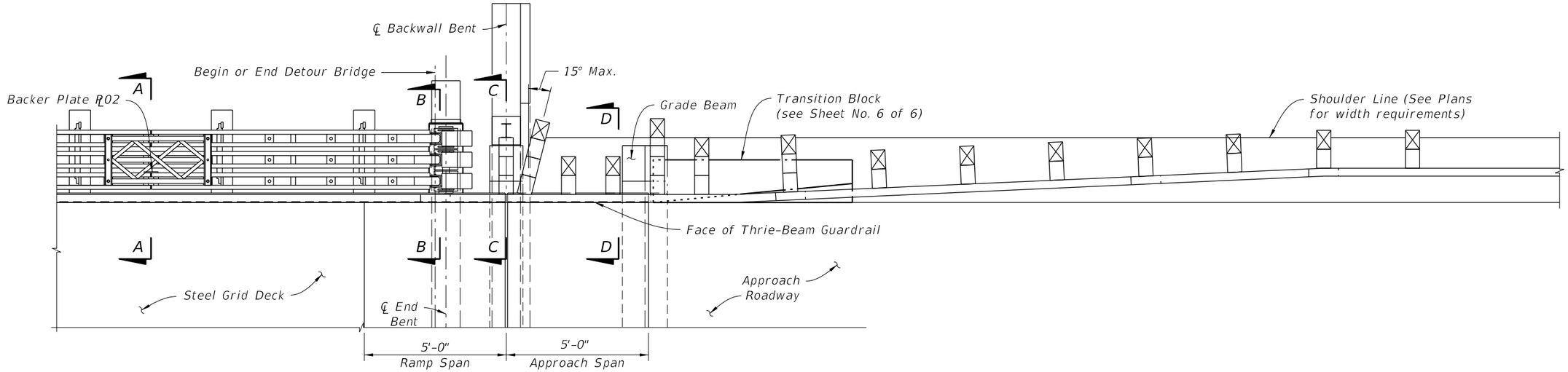


EXPANSION BEARING KEEPER BAR DETAIL

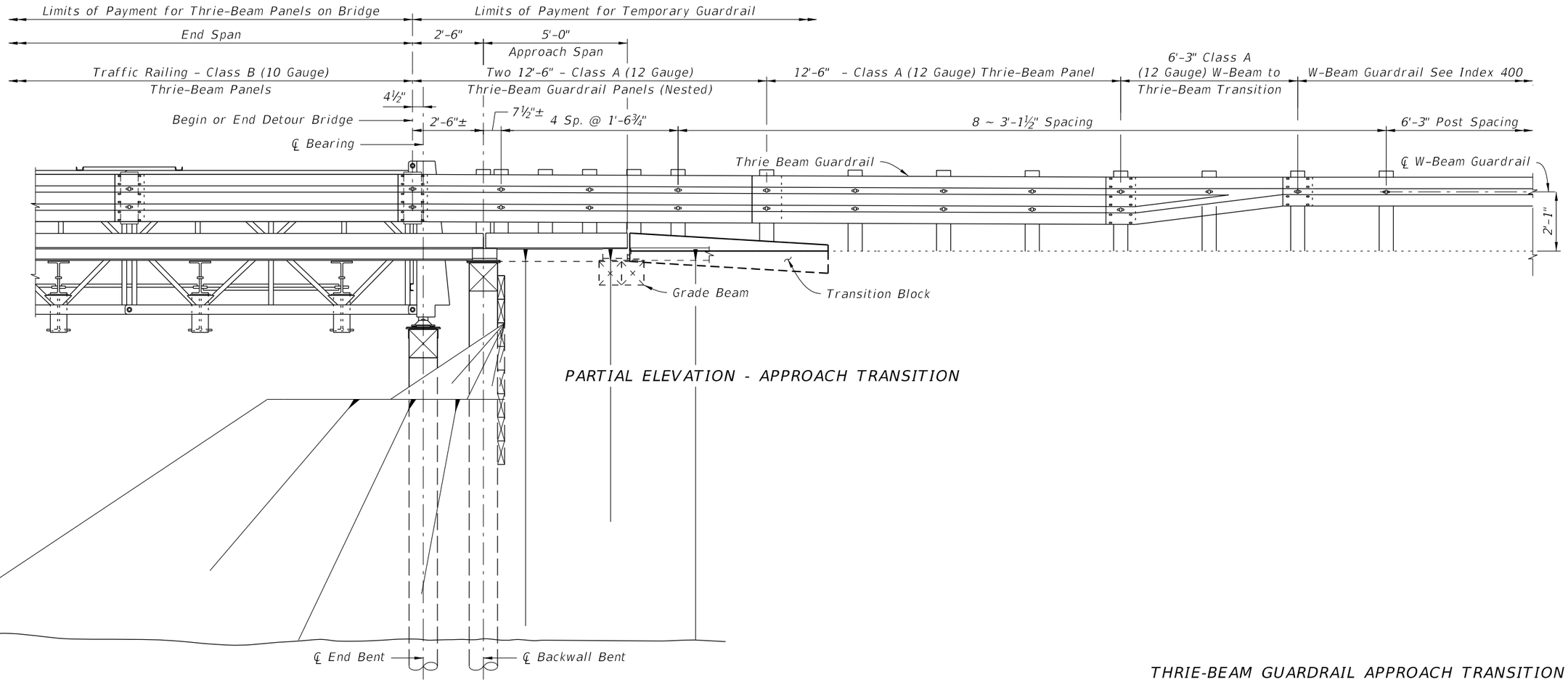
10/26/2016 9:11:11 AM

ABUTMENT AND INTERMEDIATE EXPANSION BEARING DETAILS

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE DETAILS STEEL PIPE PILE FOUNDATIONS	21630	3 of 3



PARTIAL PLAN - APPROACH TRANSITION

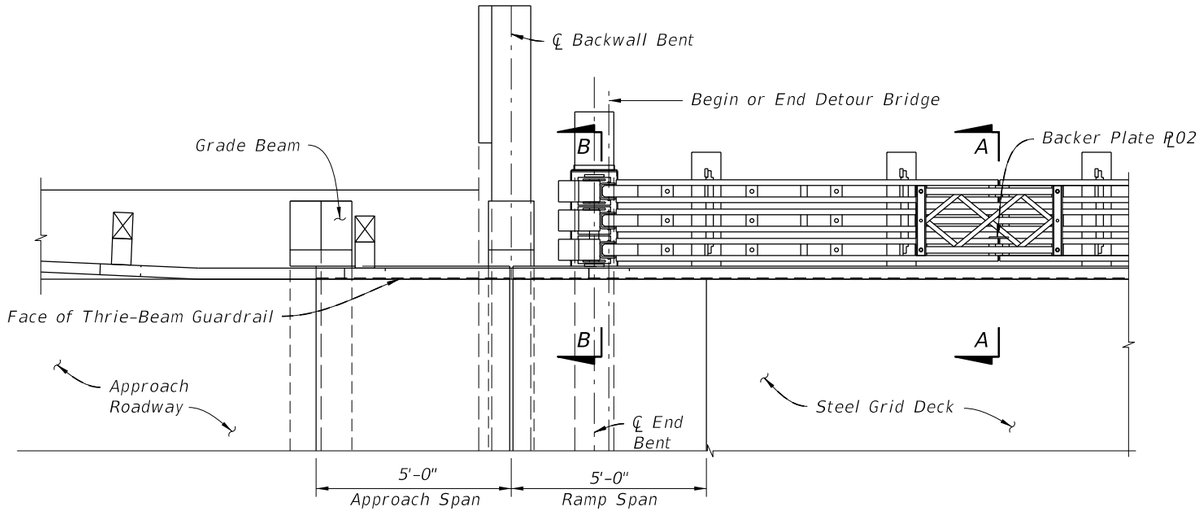


PARTIAL ELEVATION - APPROACH TRANSITION

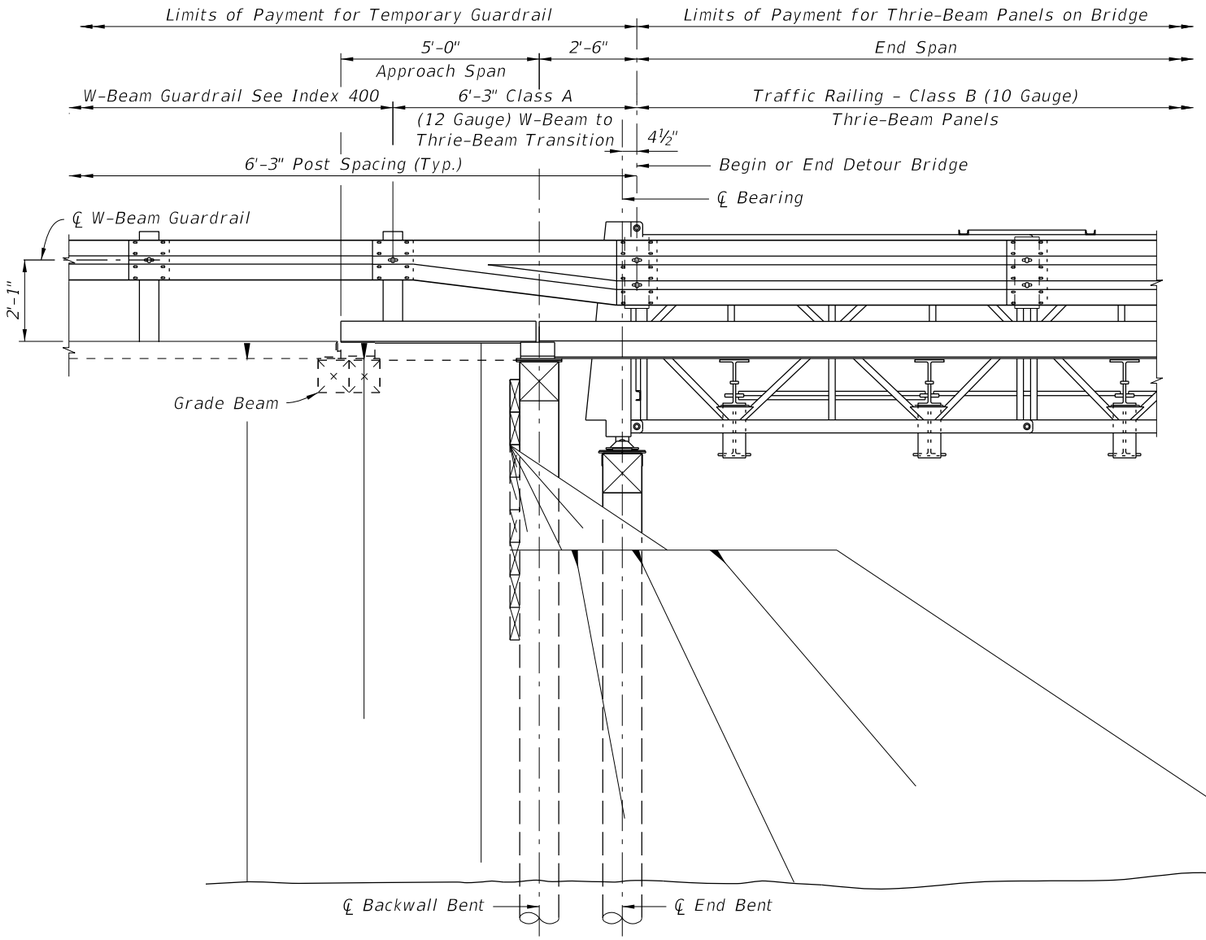
THRIE-BEAM GUARDRAIL APPROACH TRANSITION

10/26/2016 9:15:30 AM

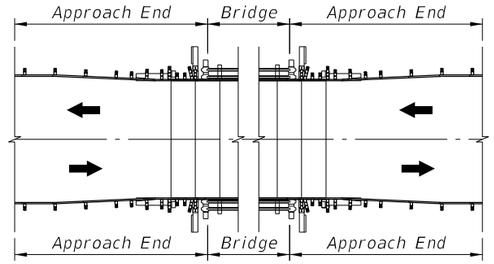
LAST REVISION	REVISION	DESCRIPTION:				
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	INDEX NO. 21640	SHEET NO. 1 of 6



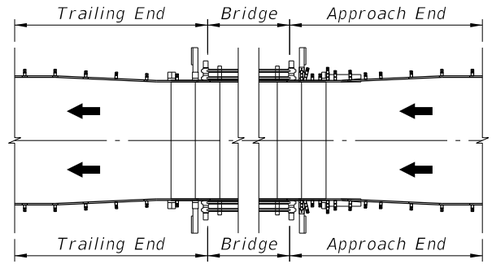
PARTIAL PLAN - TRAILING END



PARTIAL ELEVATION - TRAILING END



TWO-WAY TRAFFIC



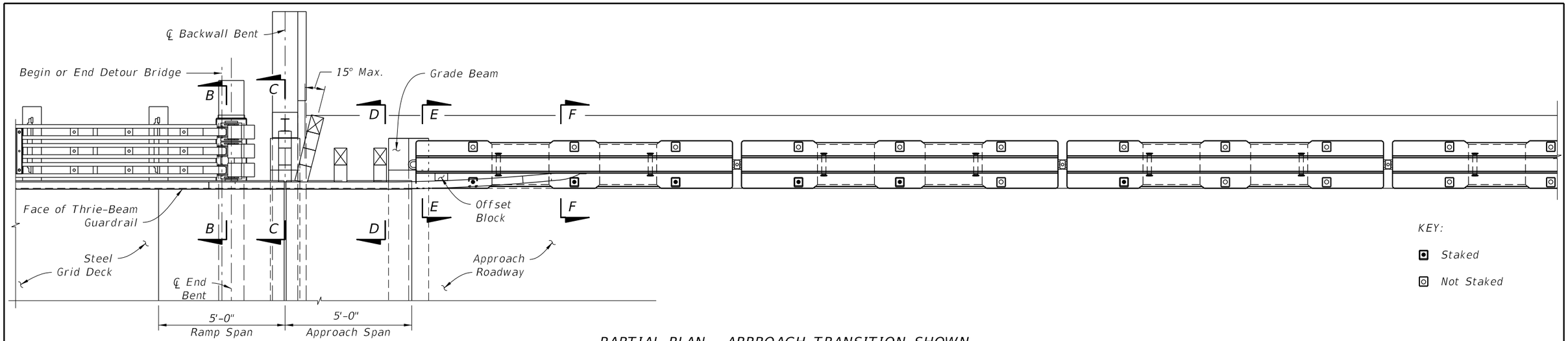
ONE-WAY TRAFFIC

END TRANSITION APPLICATION DETAILS

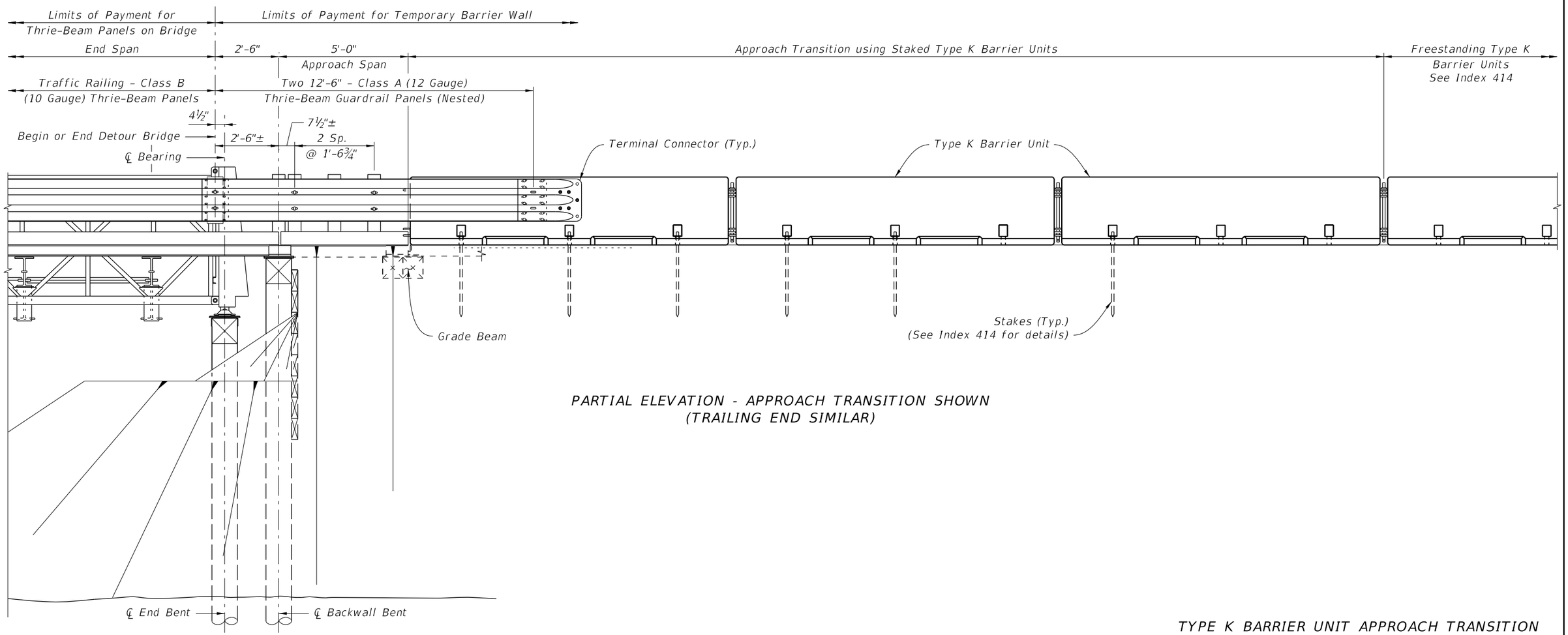
THRIE-BEAM GUARDRAIL TRAILING END TRANSITION

10/26/2016 9:15:33 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	21640	2 of 6



PARTIAL PLAN - APPROACH TRANSITION SHOWN
(TRAILING END SIMILAR)

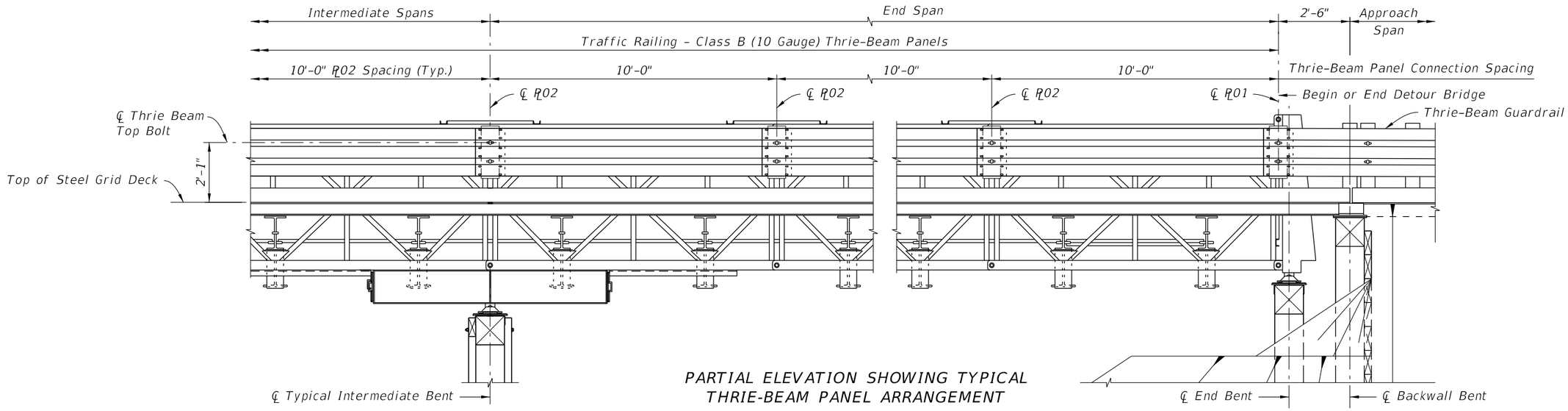


PARTIAL ELEVATION - APPROACH TRANSITION SHOWN
(TRAILING END SIMILAR)

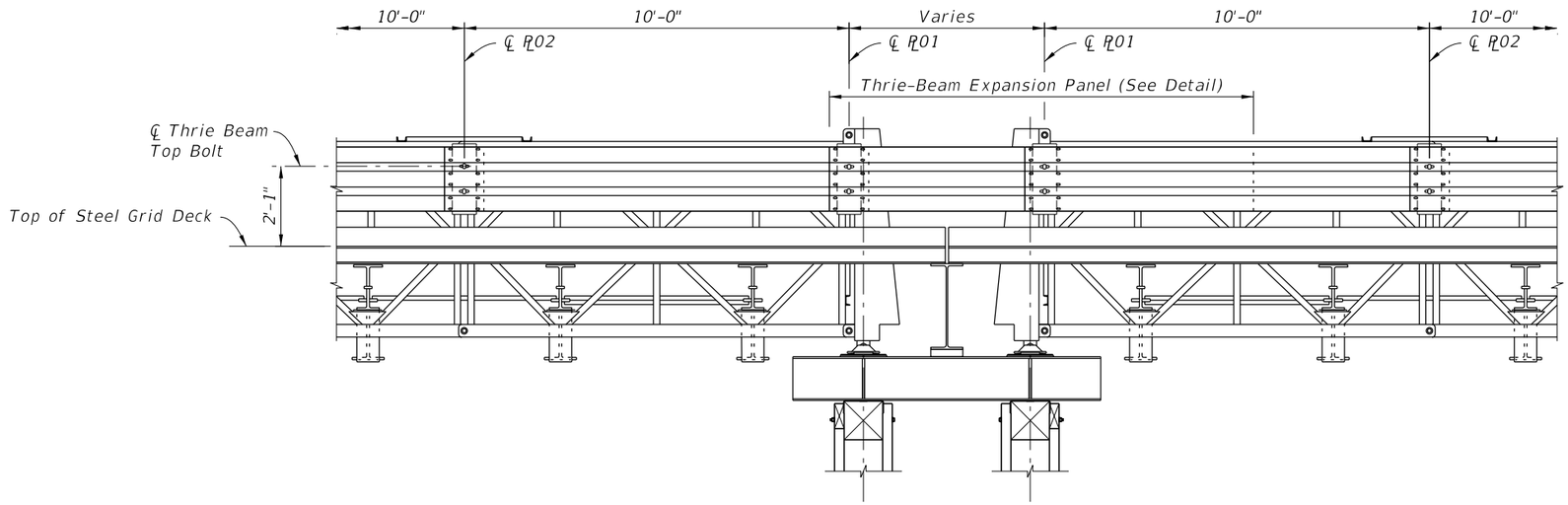
TYPE K BARRIER UNIT APPROACH TRANSITION

10/26/2016 9:15:35 AM

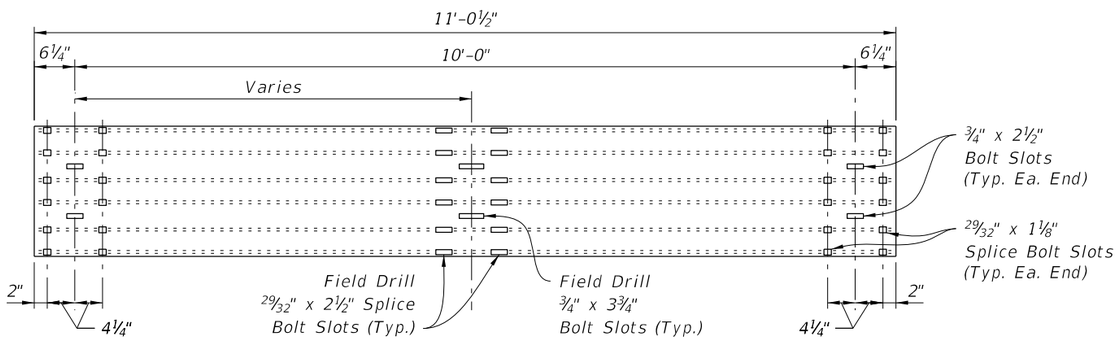
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	INDEX NO.	SHEET NO.
07/01/15					21640	3 of 6



PARTIAL ELEVATION SHOWING TYPICAL THRIE-BEAM PANEL ARRANGEMENT



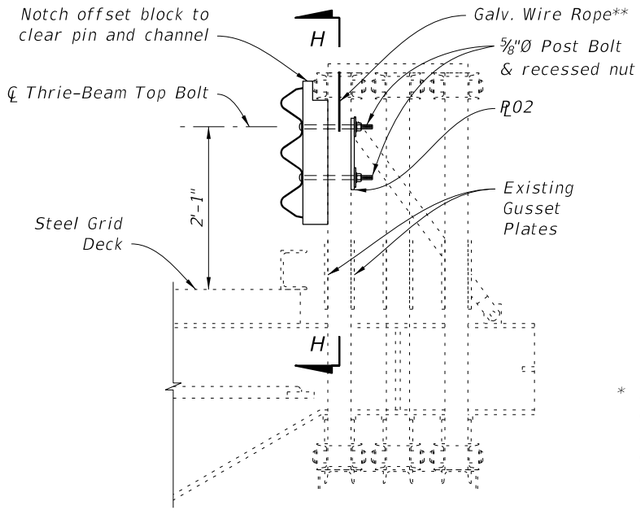
PARTIAL ELEVATION SHOWING THRIE-BEAM PANELS AT EXPANSION JOINT



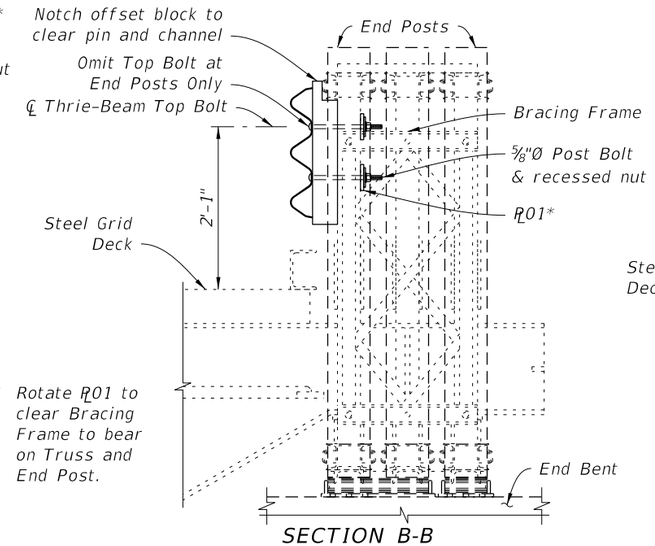
THRIE-BEAM EXPANSION PANEL DETAIL

10/26/2016 9:15:40 AM

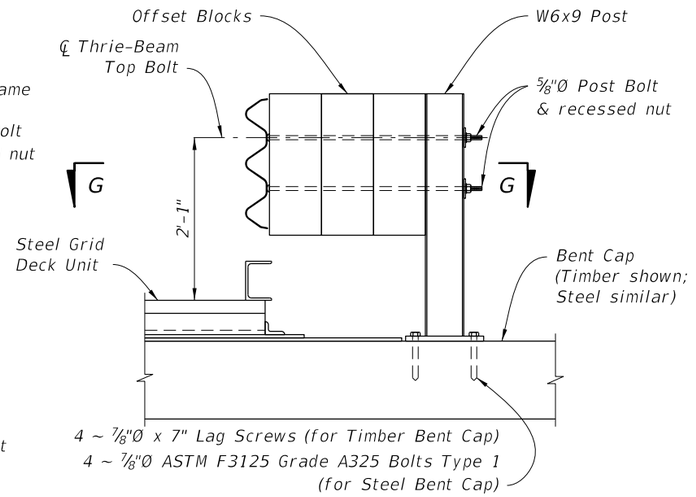
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	21640	4 of 6



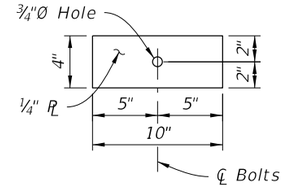
SECTION A-A



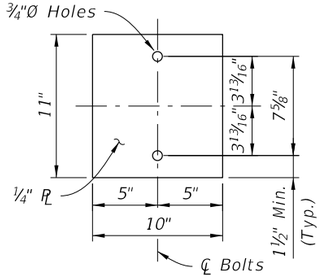
SECTION B-B



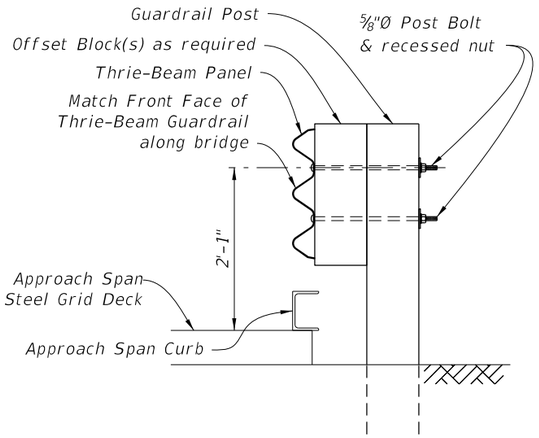
SECTION C-C



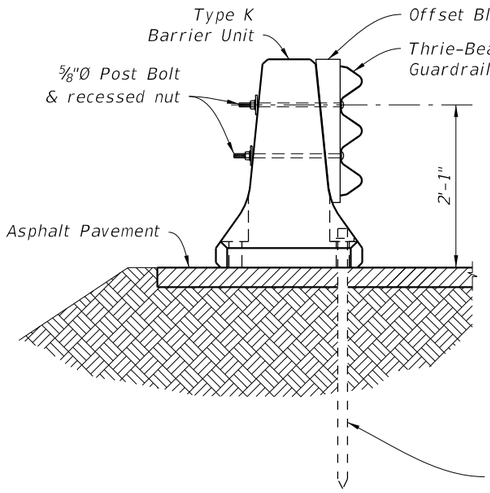
BACKER PLATE PL01 DETAIL



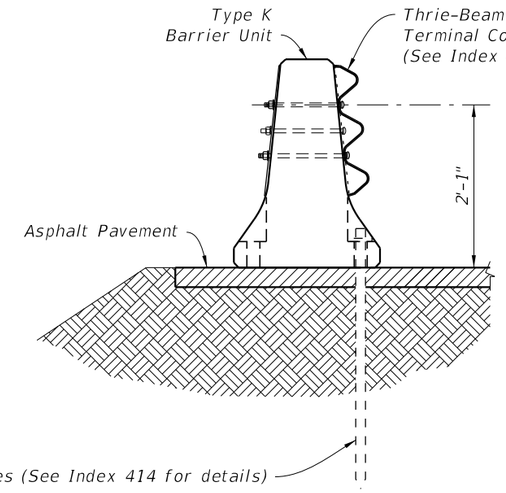
BACKER PLATE PL02 DETAIL



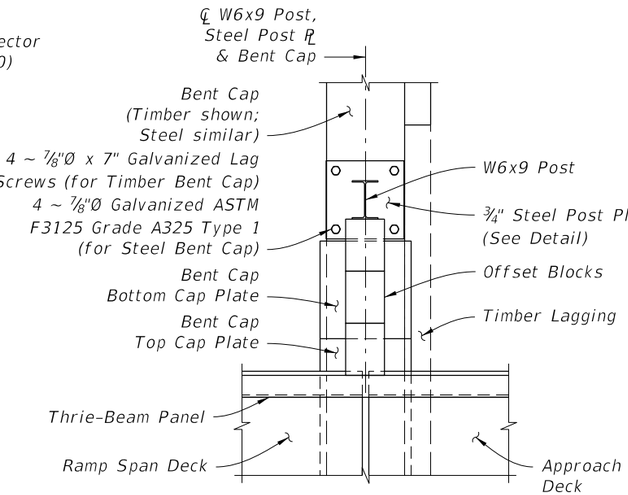
SECTION D-D



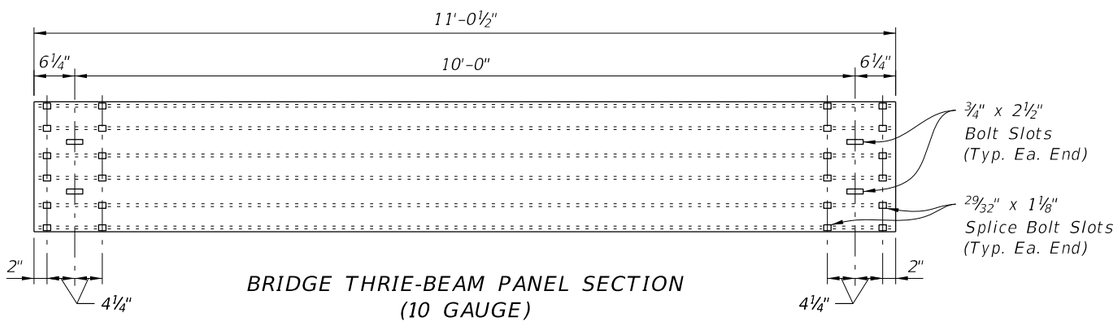
SECTION E-E



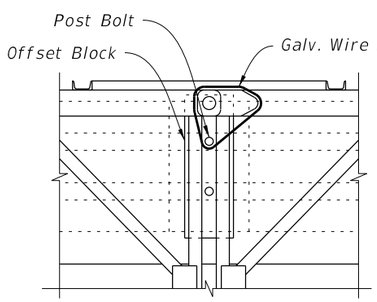
SECTION F-F



VIEW G-G
(Adjacent Post and Offset Blocks not shown for clarity)

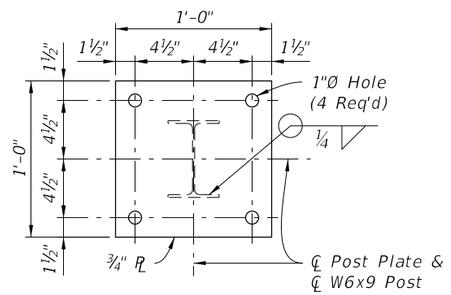


BRIDGE THRIE-BEAM PANEL SECTION
(10 GAUGE)



SECTION H-H

** As directed by the Engineer in order to limit vibration induced vertical displacement of the Thrie-Beam Panels, provide Contractor supplied, one time use, commercially available 3/16"Ø (Min.) Galvanized Wire Rope w/ Ferrules (or other approved wire type) positioned and tensioned as required to secure the Panels.

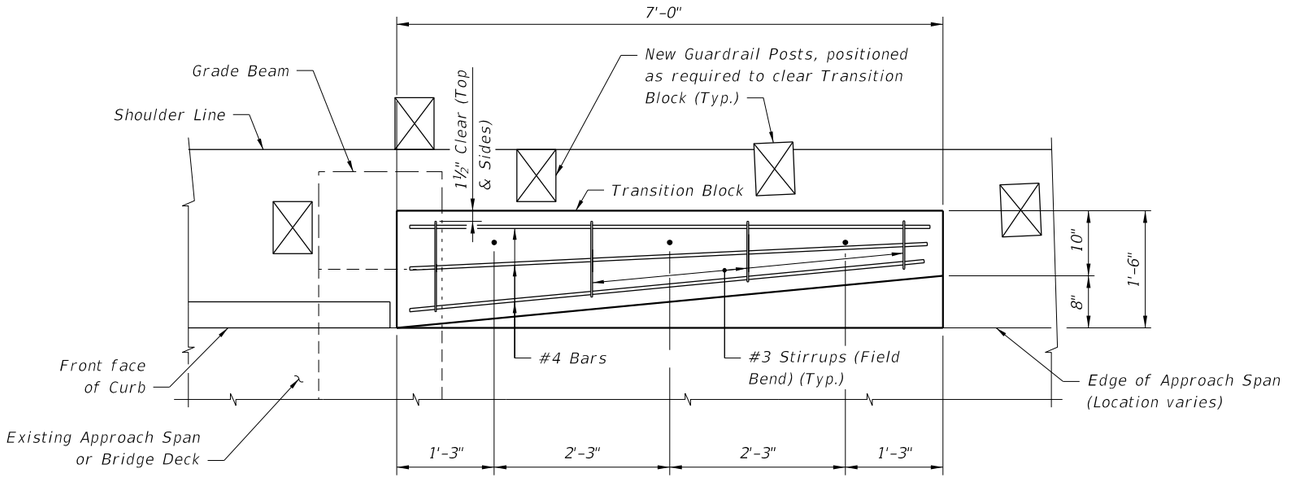


STEEL POST PLATE DETAIL

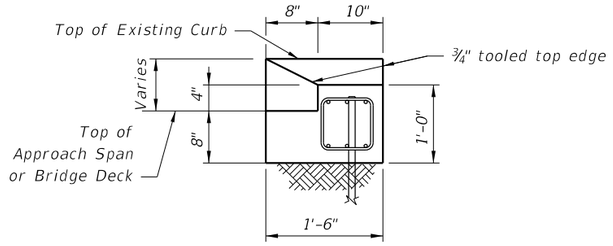
SECTIONS AND DETAILS

10/26/2016 9:15:43 AM

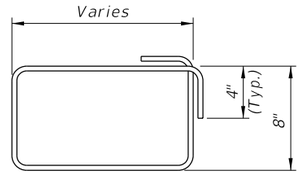
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
11/01/16			FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	21640	5 of 6



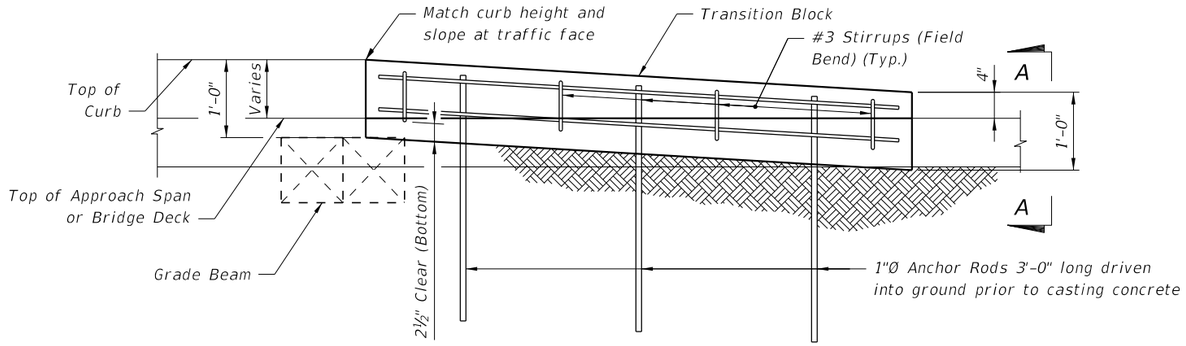
PLAN VIEW OF TRANSITION BLOCK
(GUARDRAIL NOT SHOWN FOR CLARITY)



END VIEW A-A



#3 STIRRUP (FIELD BEND)



ELEVATION OF TRANSITION BLOCK
(GUARDRAIL AND POSTS NOT
SHOWN FOR CLARITY)

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete Class NS	CY	0.4
Reinforcing Steel	LB	61
Guardrail (Reset)	LF	12.5

NOTES:

REINFORCING STEEL: Reinforcing steel shall be ASTM A615, Grade 60.

ANCHOR RODS: Steel Anchor Rods shall be ASTM A36, ASTM A709 Grade 36 or ASTM A615 Grade 60 hot-dip galvanized in accordance with Specification Section 962.

10/26/2016 9:15:48 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	TEMPORARY DETOUR BRIDGE THRIE-BEAM GUARDRAIL	INDEX NO.	SHEET NO.
07/01/13					21640	6 of 6