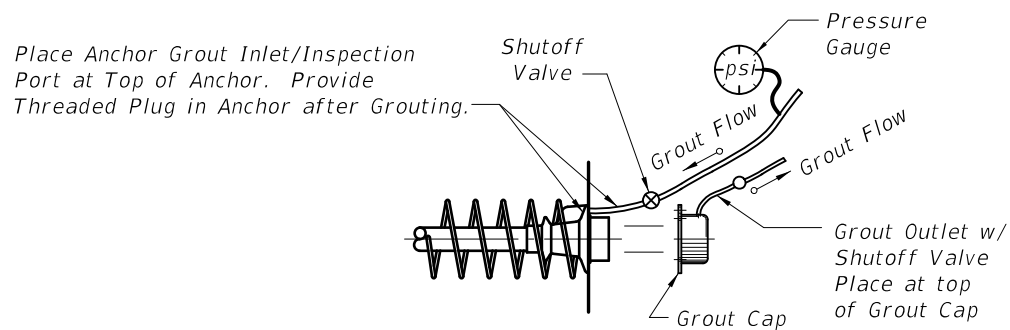
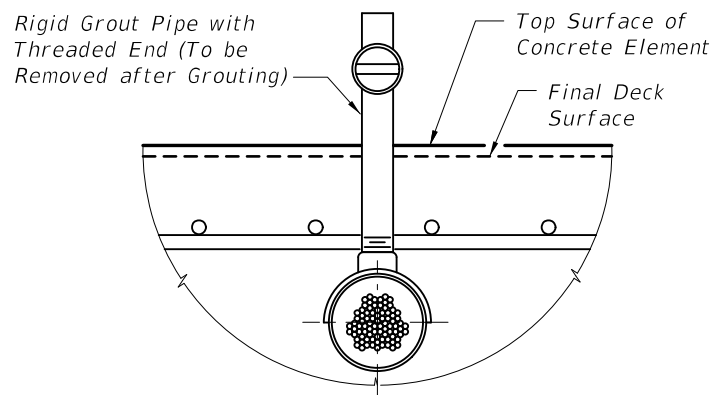


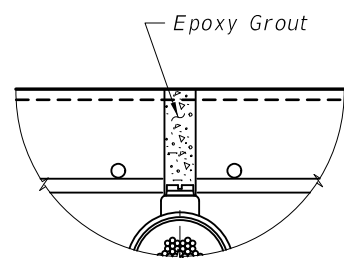
**DETAIL A - FACE INSPECTED ANCHOR WITH GROUT OUTLET**



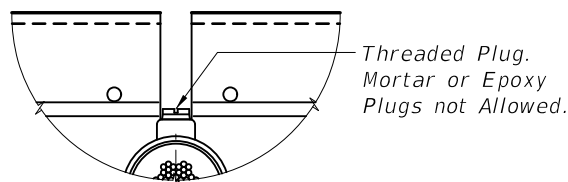
**FACE INSPECTED ANCHOR WITH GROUT INLET**



**1 GROUT OUTLET CONNECTION TO TENDON**



**3 FILLING POCKET**

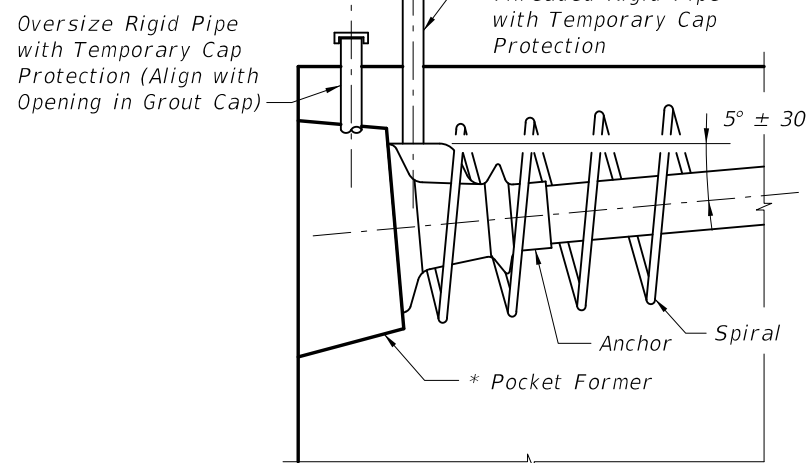


**2 POCKET PREPARATION**

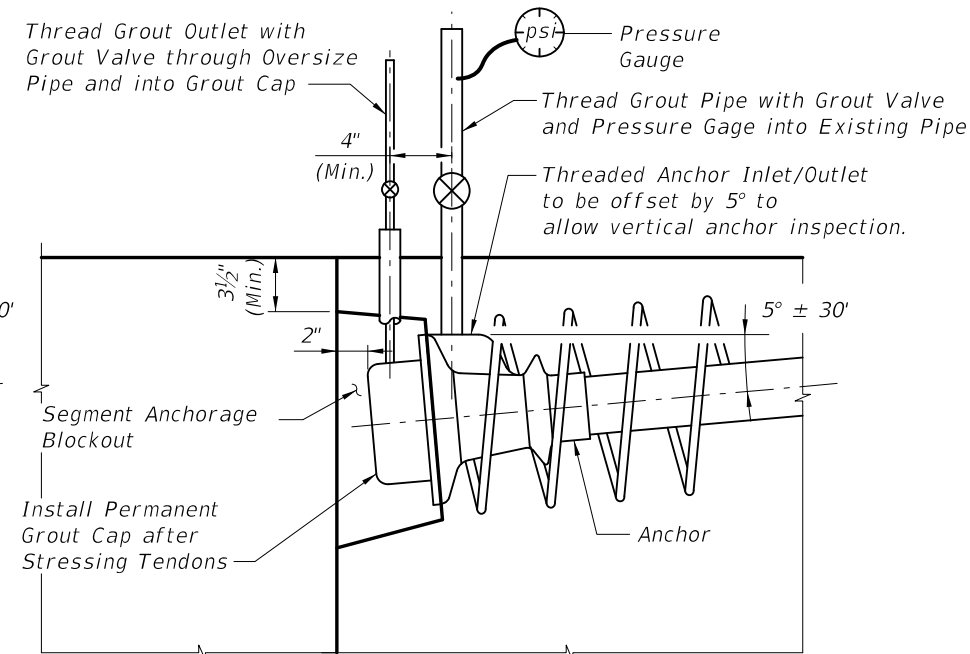
**PROCEDURE**

1. Remove Rigid Grout Pipe.
2. Inspect Tendon for Voids as Necessary.
3. Vacuum Grout as Required and Allow Grout to Cure. Remove Pipe used for Vacuum Grouting.
4. Clean Threads and Rethread as Required.
5. Install Threaded Plug into Outlet to Form a Tight Fit.
6. Over-Ream Hole (1/4" Ø Over-Ream) Clean and Roughen Sides.
7. Fill Pocket with Epoxy Grout.

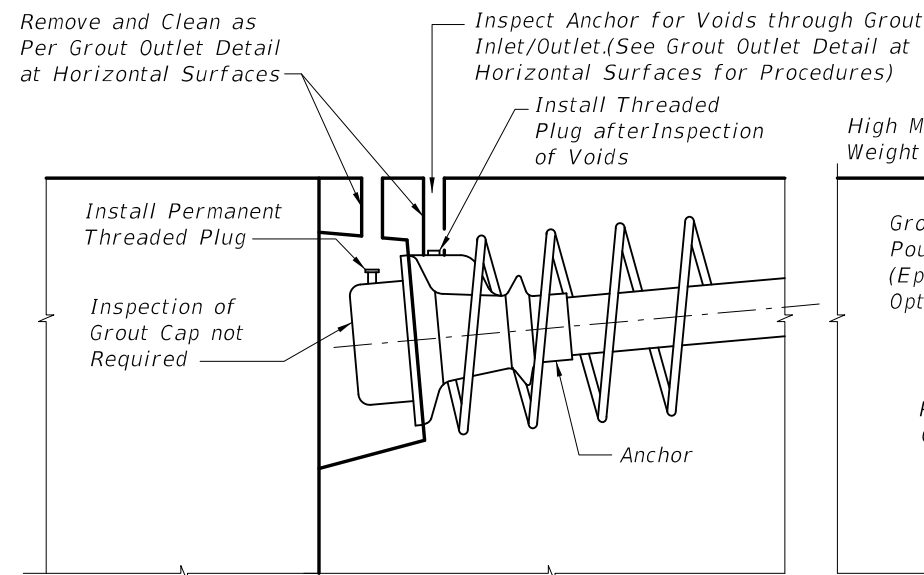
**GROUT OUTLET DETAIL AT HORIZONTAL SURFACES**



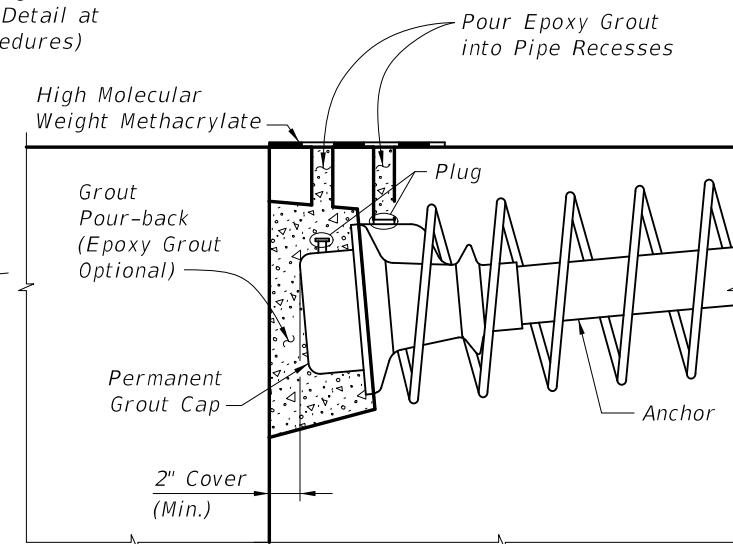
**1 INSTALLATION & SHIPPING**



**2 GROUTING**



**3 INSPECTION**



**4 PROTECTION**

**NOTES**

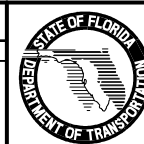
1. Holes used for the Inspection and Grout Inlets/Outlets may be Formed using Tapered Pipes or Mandrels.

**TOP INSPECTED ANCHOR WITH GROUT INLET INSTALLATION, GROUTING, INSPECTION & PROTECTION**

- \* Round Pocket Former - Gravity Fed Placement of Grout Acceptable
- Modified Square Pocket Former - Gravity Fed Placement of Grout Acceptable
- Square Pocket Former - Vacuum Grouting Required

**REVISIONS**

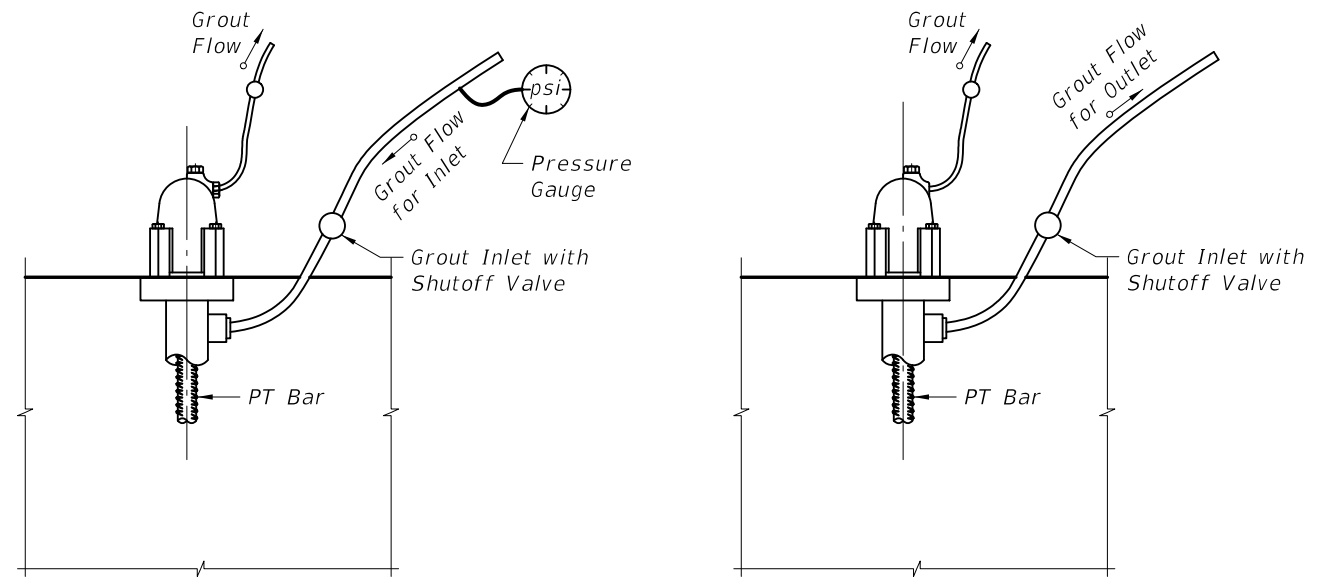
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/11	CEB	Revised Top Inspected Anchor with Grout Inlet details.			



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**POST-TENSIONING ANCHORAGE AND GROUTING DETAILS**

Interim Date: 01/01/11  
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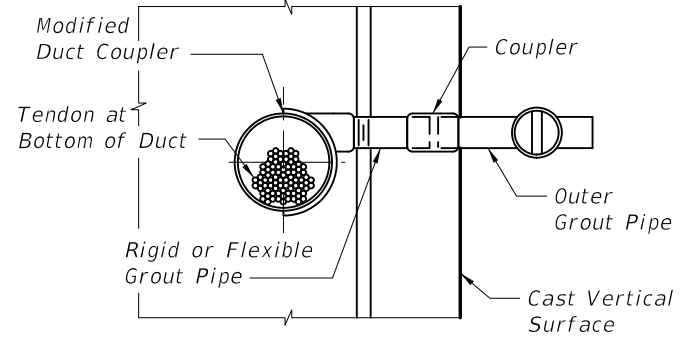


INLET END

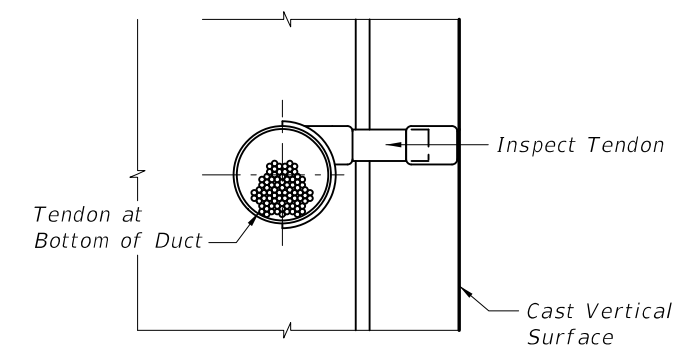
OUTLET END

GROUT INLET AND OUTLET DETAILS FOR PT BARS

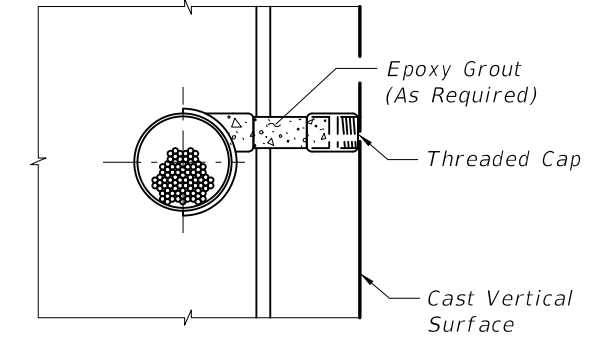
**NOTE:**  
Anchor or Nut to allow for Flow of Grout into Cap.



① GROUT OUTLET CONNECTION TO TENDON



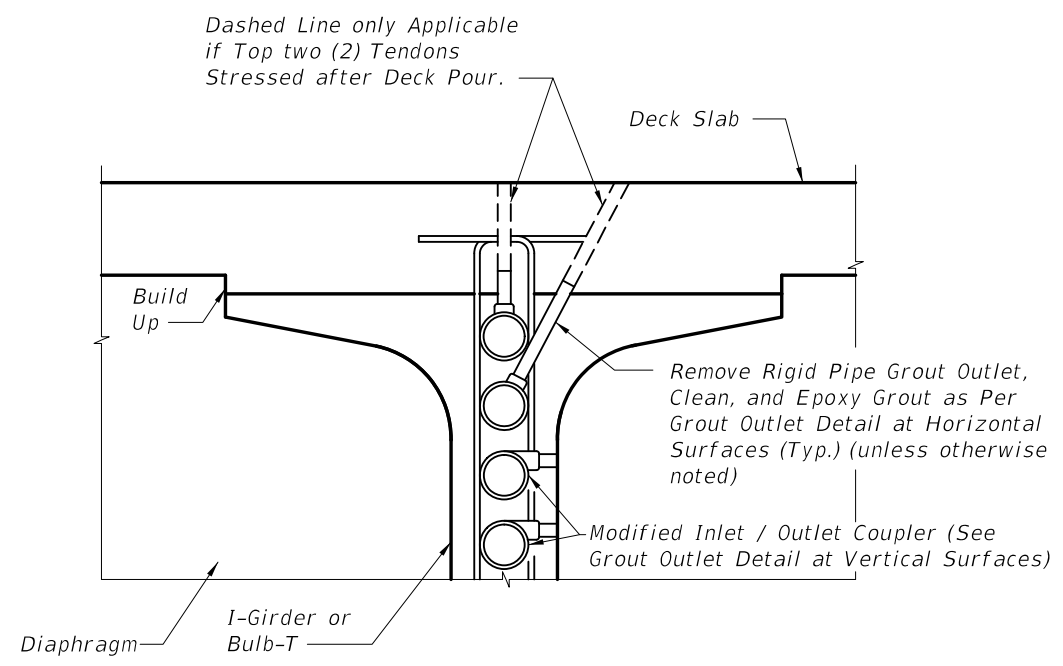
② POCKET PREPARATION



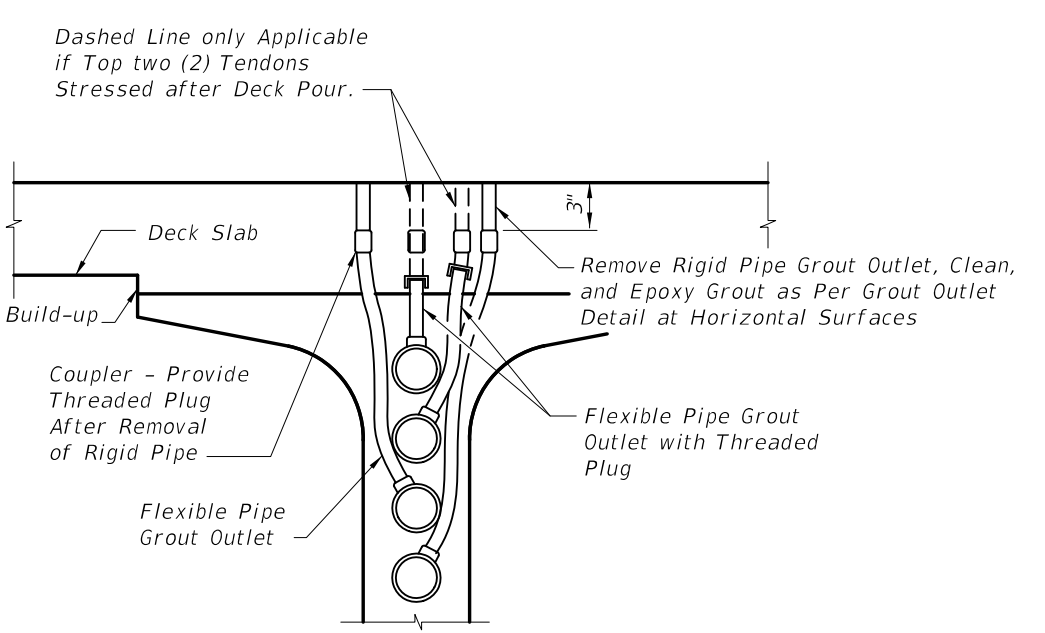
③ FILLING POCKET

- PROCEDURE**
1. Remove Rigid Grout Pipe. or Drill Grout in Flexible Pipe.
  2. Inspect Tendon for Voids as Necessary.
  3. Vacuum Grout as Required and Allow Grout to Cure for 24 hr. (min.). Remove Pipe used for Vacuum Grouting.
  4. Plug Recess with Threaded Cap on Inside Surfaces of Box Sections and Inside (nonfascia) Surfaces of I-Girders. For all other Surfaces, Plug Recess with both Threaded Cap and Epoxy Grout.

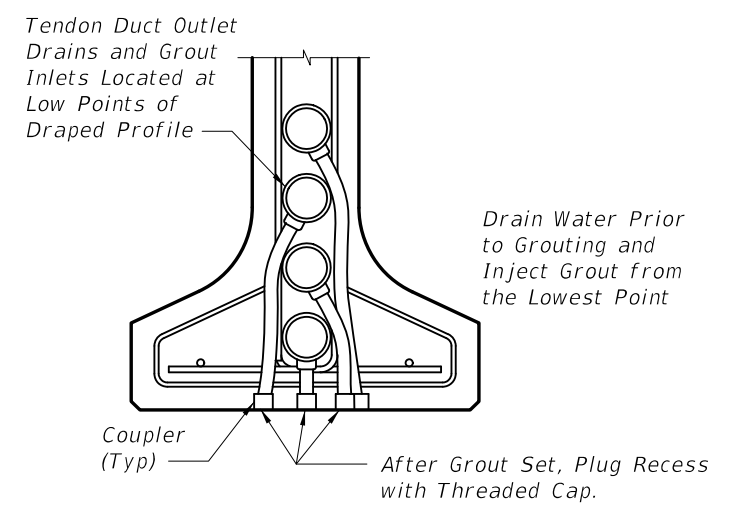
GROUT OUTLET DETAIL AT VERTICAL SURFACES



HIGH POINT INSPECTION LOCATION AT GROUT OUTLET



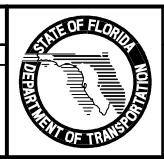
TENDONS AT 3' TO 6' FROM HIGH POINTS (GROUT OUTLET)



TENDONS AT LOW POINTS (GROUT INLET / DRAIN)

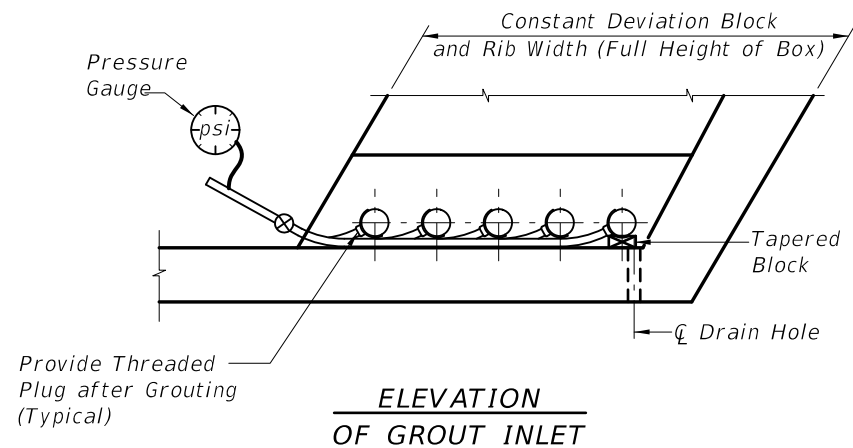
GROUT INLET AND OUTLET DETAILS FOR I-GIRDERS/BULB-T'S  
Details for C.I.P. Boxes with Internal Tendons Similar. Web Reinforcing not Shown for Clarity.

REVISIONS			
DATE	BY	DESCRIPTION	
01/01/11	JVH	Added Grout Outlet to PT Bar Inlet Detail & revised PT Bar Grouting Details.	

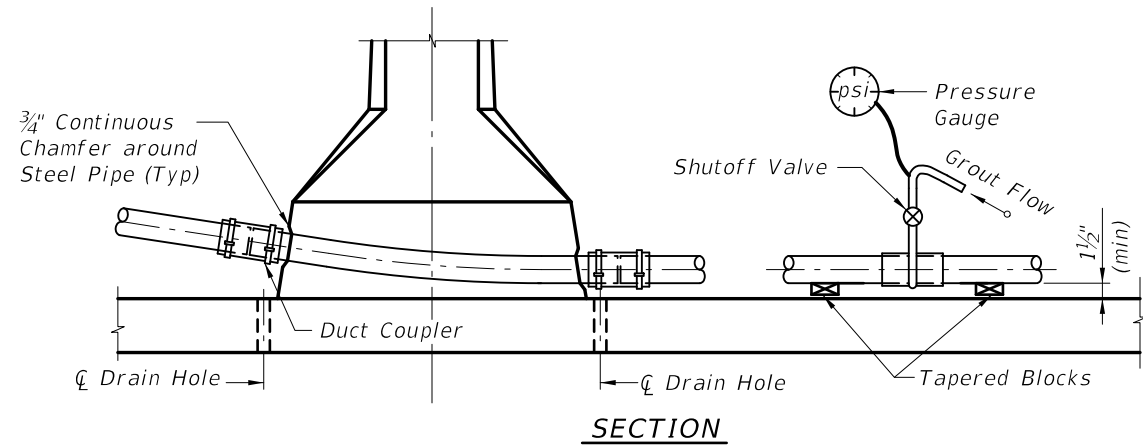


2010 Interim Design Standard  
**POST-TENSIONING ANCHORAGE AND GROUTING DETAILS**

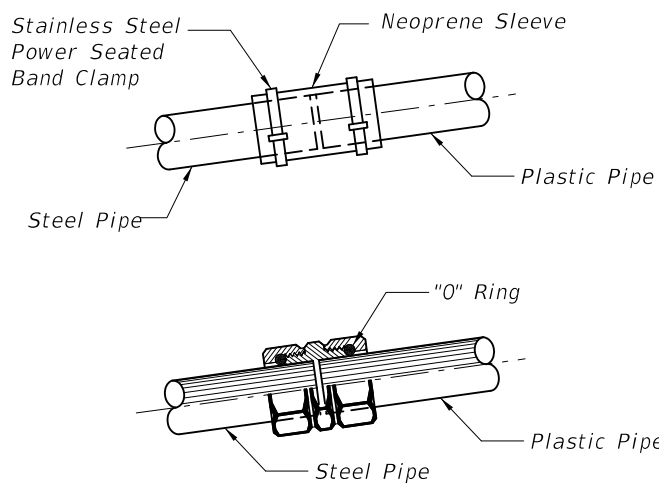
Interim Date 01/01/11	Sheet No. 2 of 3
Index No. <b>21803</b>	



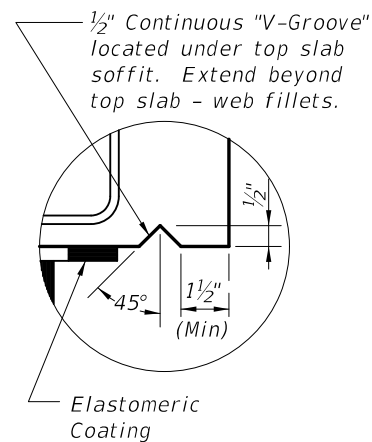
NOTES:  
Place Tapered Blocks Under Each Tendon to be Grouted to Raise Duct off Tendon Strands. Center Strands within Duct before Grouting. Blocks Shall be Removed after Grout has Set. Blocks Shall not Damage or Permanently Deform Duct.



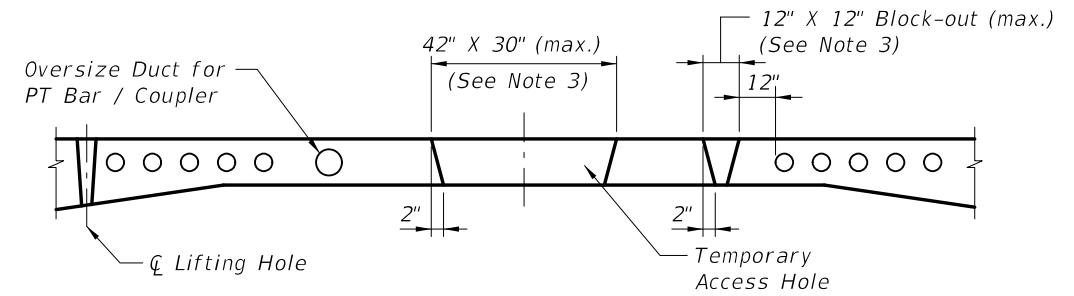
GROUTING FOR SPAN BY SPAN CONSTRUCTION



DUCT COUPLER DETAIL



DETAIL OF DRIP LEDGE AT ABUTMENTS AND EXPANSION JOINTS FOR SEGMENTAL AND CAST-IN-PLACE BOX CONSTRUCTION



TEMPORARY ACCESS HOLES

Notes: Temporary Access Holes

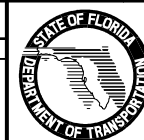
1. Temporary access holes to facilitate access for erection, jacking and grouting operations inside the box during construction are allowed. The access holes shall be limited to a maximum size of 42" wide x 30" long and shall be limited to (1) per span.
2. Slab block-outs for temporary / permanent longitudinal post-tensioning bars are not allowed. Temporary / permanent PT bars in the top slab shall be placed in oversized ducts in the slab to accommodate both the bar and coupler.
3. In lieu of (1) 42" x 30" temporary access hole, a maximum of 2 top slab blockouts (12" x 12" (max.)) between the webs is allowed for construction per span. Block-outs shall be a minimum of 12" from the nearest duct or anchor and shall be located as to prevent direct drip onto bottom slab anchors.

Notes: Repair of Temporary Access Holes, Block-outs, and Lifting Holes

1. Form all large blockouts with tapered sides.
2. Immediately before casting the concrete, mechanically clean the mating concrete surfaces to remove any laitance and to expose small aggregate.
3. Repair all holes and blockouts with Magnesium Ammonium Phosphate Concrete within 24 hours of cleaning concrete.
4. After completion of the deck grooving, coat the repaired and surrounding concrete surfaces with High Molecular Weight Methacrylate.
5. Alternately, epoxy grout may be used to repair holes. High Molecular Weight Methacrylate is not required with epoxy grout.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/11	CEB	Added title "Grouting for Span by Span Construction".			



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POST-TENSIONING ANCHORAGE AND GROUTING DETAILS

Interim Date 01/01/11 Sheet No. 3 of 3

Index No. 21803