

NOTES

A. DESIGN SPECIFICATIONS:

1. AASHTO LRFD Specifications for Highway Bridges.
2. FDOT Structures Manual (Current Edition).
3. Florida Department of Transportation's Plans Preparation Manual, Volume I (Current Edition).

B. DESIGN CRITERIA:

The Precast Sound Barriers are pre-designed and based on the criteria in the Structures Manual, Volume I.

C. CONCRETE AND GROUT:

1. Concrete Class and Compressive Strength:
 - a. Cast-in-Place Collars: Class IV ($f'c = 5500$ psi)
 - b. Precast Panels, Collars and Post Caps: Class IV ($f'c = 5500$ psi)
 - c. Posts: Class IV ($f'c = 5500$ psi)
2. Grout for Auger Cast Piling:
 - a. Maximum Working Compressive Strength = 2200 psi
 - b. Minimum 28 Day Strength = 5500 psi
3. Minimum Compressive Strength for Form Removal and Handling of Posts and Panels:
 - a. 2,500 psi for horizontally cast post and panels.
 - b. 2,000 psi for vertically cast panels or when tilt-up form tables are used for horizontally cast panels.

D. REINFORCING STEEL:

1. In addition to the requirements of Specification Section 415, tie post and pile stirrups at the following locations as a minimum:
 - a. Post Stirrups - Tie at all four corner bars and at every third interior bar intersection.
 - b. Pile Stirrups - Tie to the main vertical reinforcing at alternate intersections for circular configurations and for rectangular configurations at the four corners and at every third interior bar intersection.

E. SURFACE FINISHES:

1. See SOUND BARRIER DATA TABLES in the Plans for project requirements.

F. PILING:

Construct Auger Cast Piling in accordance with the Plans and Specification Section 455.

G. UTILITIES:

Field verify the locations of all overhead and underground utilities shown in the Wall Control Drawings.

H. NEOPRENE PADS AND RESILIENT PADS:

1. Neoprene Pads for Panel Bearing Points Between the Stacked Panels:

The Neoprene pads for the panel bearing points shall be Plain Pads, Grade 50 durometer hardness in accordance with Specifications Sections 932-2.1.
2. Neoprene Pads for Collar Bearing Points:

Neoprene Pads shall be Fiber Reinforced Pads, with a durometer hardness between Grade 50 and Grade 80, in accordance with Specification Section 932-2.1. Plain Pads may be substituted for Fiber Reinforced Pads when sufficient bearing area is available on the concrete collar, as follows:

 - a. 10' post spacing: 4" x 4" x 1/2" Plain Pads, Grade 50 durometer hardness.
 - b. 20' post spacing and < 18' wall height: 4" x 4" x 1/2" Plain Pads, Grade 50 durometer hardness.
 - c. 20' post spacing and ≥ 18' wall height: 4" x 5" x 1/2" Plain Pads, Grade 50 durometer hardness.

I. CASTING TOLERANCES:

1. Overall Height & Width: +/- 1/4"
2. Thickness: +/- 1/4"
3. Plane of side mold: +/- 1/16"
4. Openings: +/- 1/2"
5. Out of Square: 1/8" per 6 ft., but not more than 3/8" total along any side
6. Warping: 1/16" per foot distance to nearest corner
7. Bowing: 1/240 panel dimension
8. Surface Smoothness for Type "A" (Smooth) Surface Texture Option: +/- 1/16" along a 10 ft. straightedge.

J. SOUND BARRIER WALL NOTES:

1. Distance between piles shall be a maximum of 20 ft. from centerline to centerline. This Index allows for either 10 or 20 ft. post spacing. The typical panel system depicted is based on 20 ft. post spacing.
2. Walls greater than 12 ft. in height shall consist of 2 or 3 stacked panels (upper and lower), each less than 12 ft. in height. The height of the upper panel shall be a minimum 8 ft. or greater as necessary to accommodate any graphics (if applicable). The lower panel(s) shall be a minimum of 4 ft. in height. Walls equal to or less than 12 ft. in height shall consist of either a single panel or 2 stacked panels with the upper panel sized to accommodate graphics (if applicable).
3. Horizontal panel joints shall be located outside of the graphics (if applicable). Horizontal panel joints shall be held at a constant elevation for a given wall, where possible.
4. Posts shall be "H" type cross-section with panels installed from above.
5. Shimming of wall panels above the pile collar, beneath the bearing pads is permitted up to a maximum of 1 1/2" height. Shims must be either stainless steel (Type 304 or 316) or engineered polymer (copolymer or multipolymer) plastic. Plastic shims must have a minimum compressive strength of 8,000 psi without any fractures. Stacking of shims is permitted as follows:
 - a. For shimming height of 1" or less, provide up to 4 ~ 1/4" shims;
 - b. For shimming heights greater than 1", use a minimum 3/4" thick single shim and up to 3 ~ 1/4" shims. Stacked shim plates must be bonded together with a compatible epoxy adhesive.

K. COST SAVINGS INITIATIVE PROPOSAL (CSIP) OR CONTRACTOR REDESIGN:

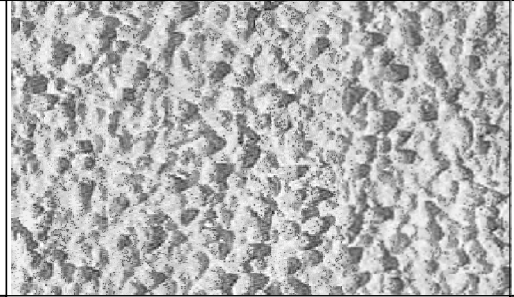
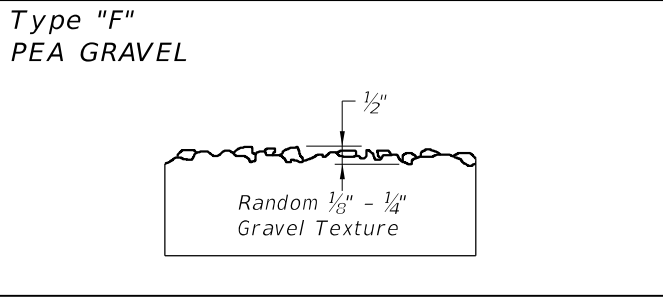
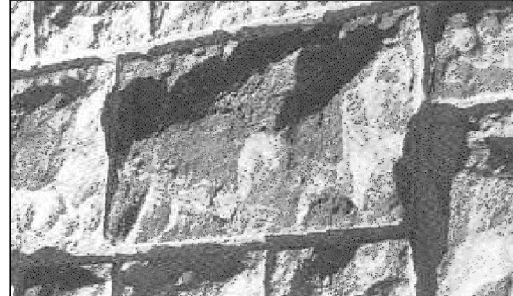
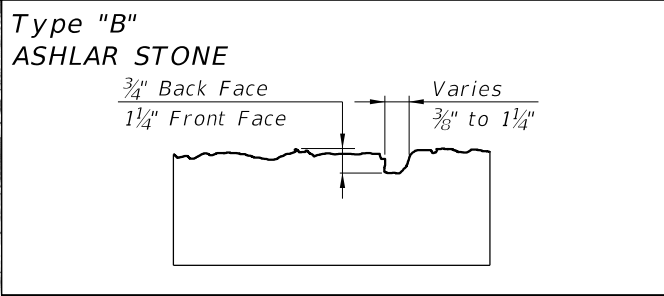
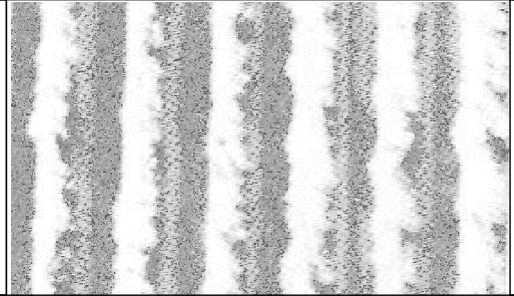
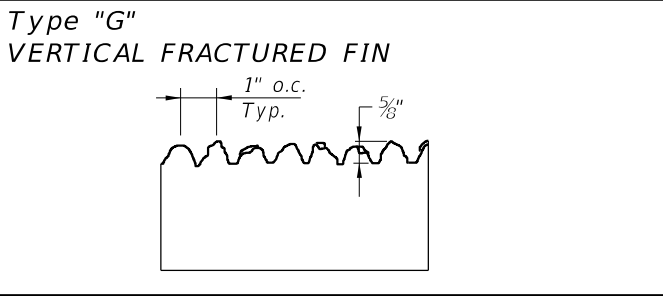
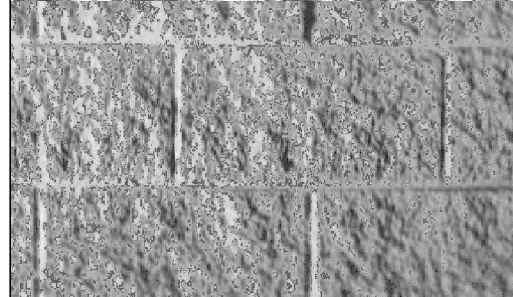
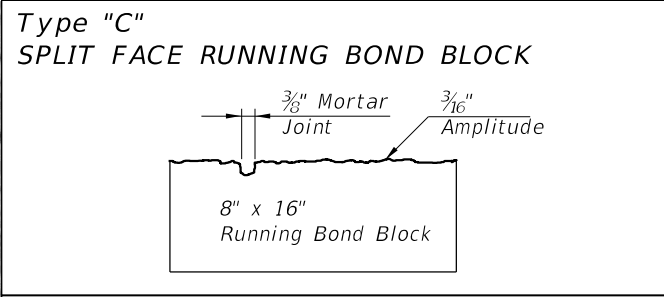
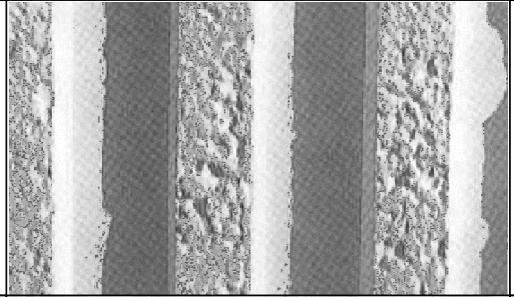
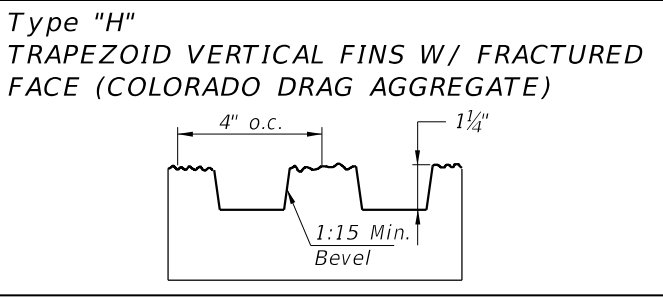
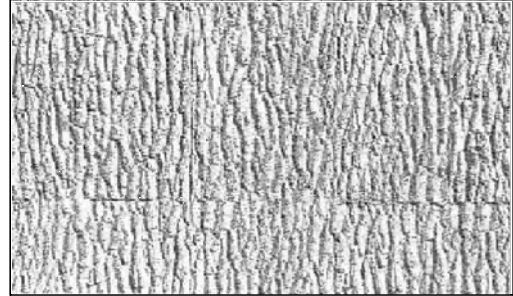
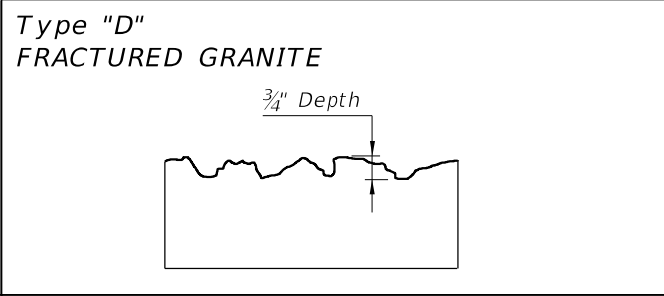
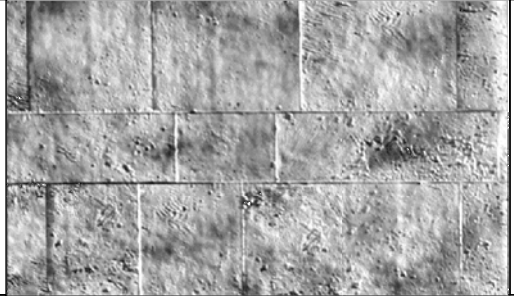
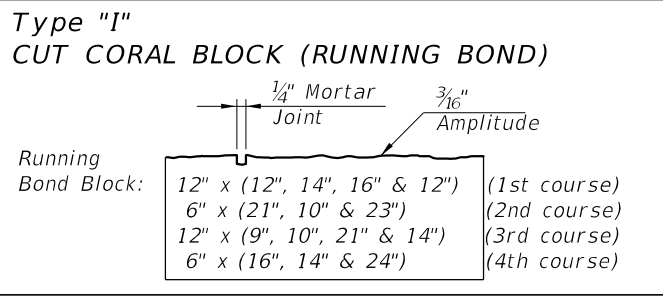
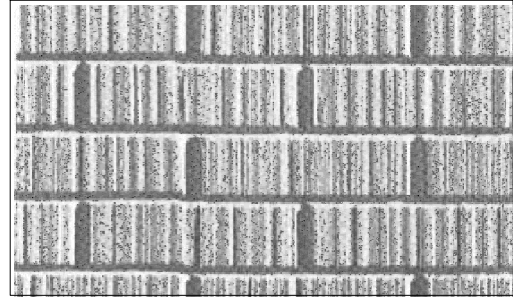
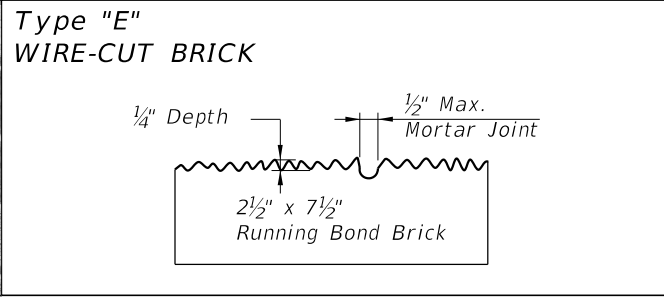
1. In no case will CSIP or Contractor Redesigns be allowed for concrete sound barriers.

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GENERAL NOTES

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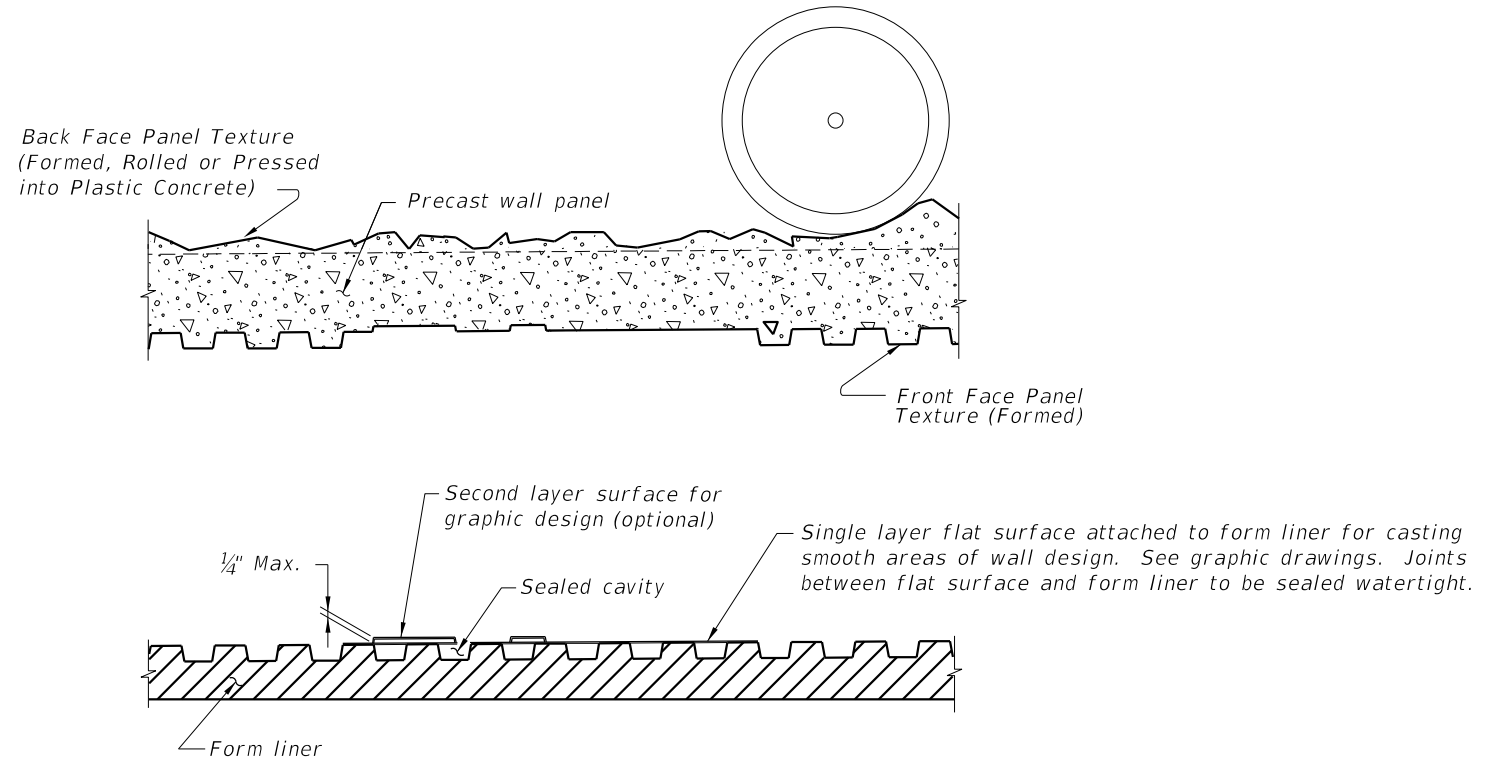
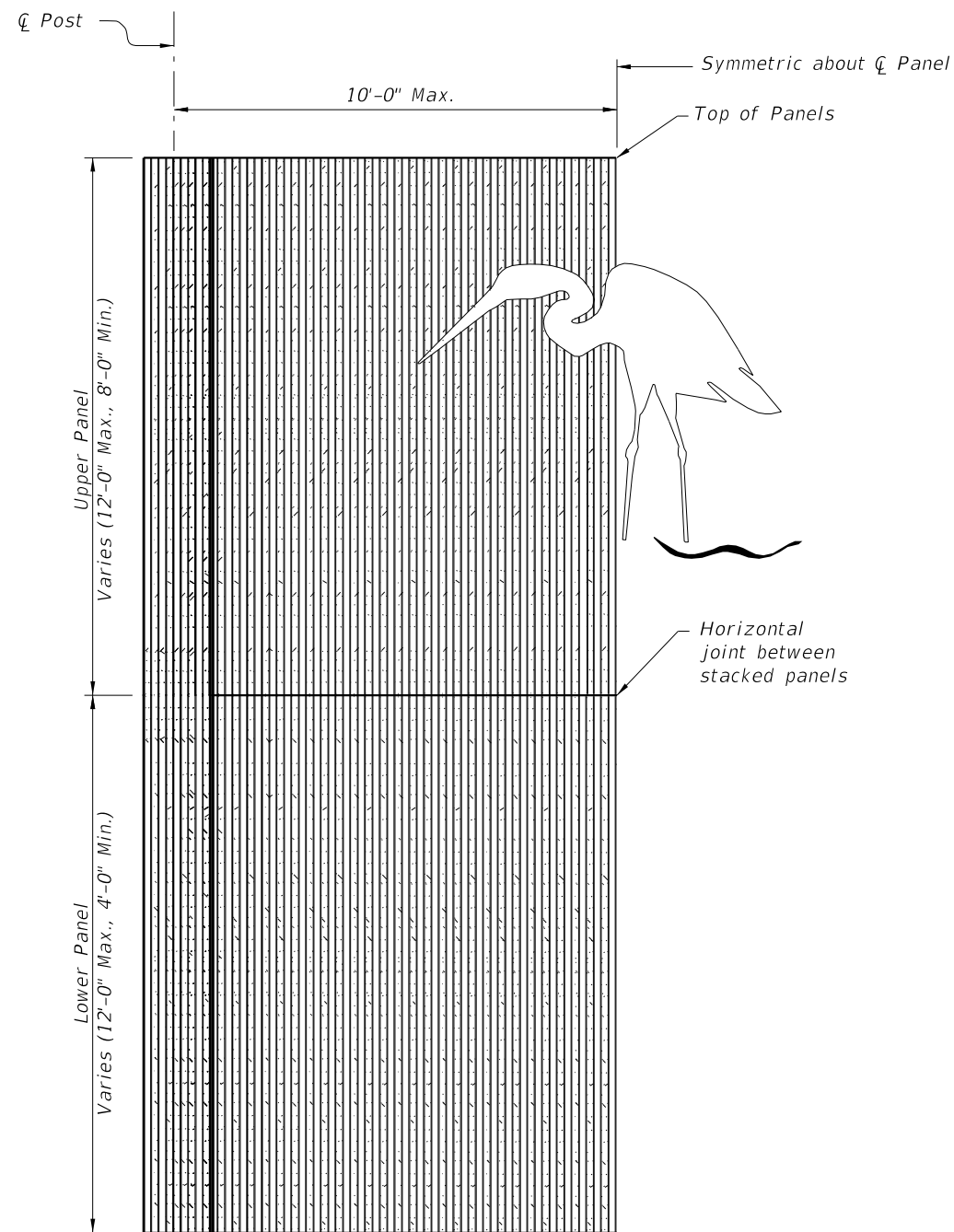
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	<p>Type "A" SMOOTH</p>		<p>Type "F" PEA GRAVEL</p> 								
	<p>Type "B" ASHLAR STONE</p> 		<p>Type "G" VERTICAL FRACTURED FIN</p> 								
	<p>Type "C" SPLIT FACE RUNNING BOND BLOCK</p> 		<p>Type "H" TRAPEZOID VERTICAL FINNS W/ FRACTURED FACE (COLORADO DRAG AGGREGATE)</p> 								
	<p>Type "D" FRACTURED GRANITE</p> 		<p>Type "I" CUT CORAL BLOCK (RUNNING BOND)</p>  <p>Running Bond Block:</p> <table border="1" data-bbox="2175 1249 2641 1370"> <tr> <td>12" x (12", 14", 16" & 12")</td> <td>(1st course)</td> </tr> <tr> <td>6" x (21", 10" & 23")</td> <td>(2nd course)</td> </tr> <tr> <td>12" x (9", 10", 21" & 14")</td> <td>(3rd course)</td> </tr> <tr> <td>6" x (16", 14" & 24")</td> <td>(4th course)</td> </tr> </table>	12" x (12", 14", 16" & 12")	(1st course)	6" x (21", 10" & 23")	(2nd course)	12" x (9", 10", 21" & 14")	(3rd course)	6" x (16", 14" & 24")	(4th course)
12" x (12", 14", 16" & 12")	(1st course)										
6" x (21", 10" & 23")	(2nd course)										
12" x (9", 10", 21" & 14")	(3rd course)										
6" x (16", 14" & 24")	(4th course)										
	<p>Type "E" WIRE-CUT BRICK</p> 	<p>NOTES:</p> <ol style="list-style-type: none"> Surfaces shall be formed, rolled, or pressed using form liners in accordance with the Plans and Specifications (Class 3 Surface Finish). See Sound Barrier Data Tables for project aesthetic requirements. 									

TEXTURE OPTIONS

<p>LAST REVISION 01/01/12</p>	<p>DESCRIPTION:</p>	 <p>FDOT DESIGN STANDARDS FY 2012/2013</p>	<p>PRECAST SOUND BARRIERS</p>	<p>INDEX NO. 5200</p>	<p>SHEET NO. 2</p>
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TYPICAL FORMING DETAIL
 (Front Face Panel Texture Type "H" shown)
 (Back Face Panel Texture Type "D" shown)

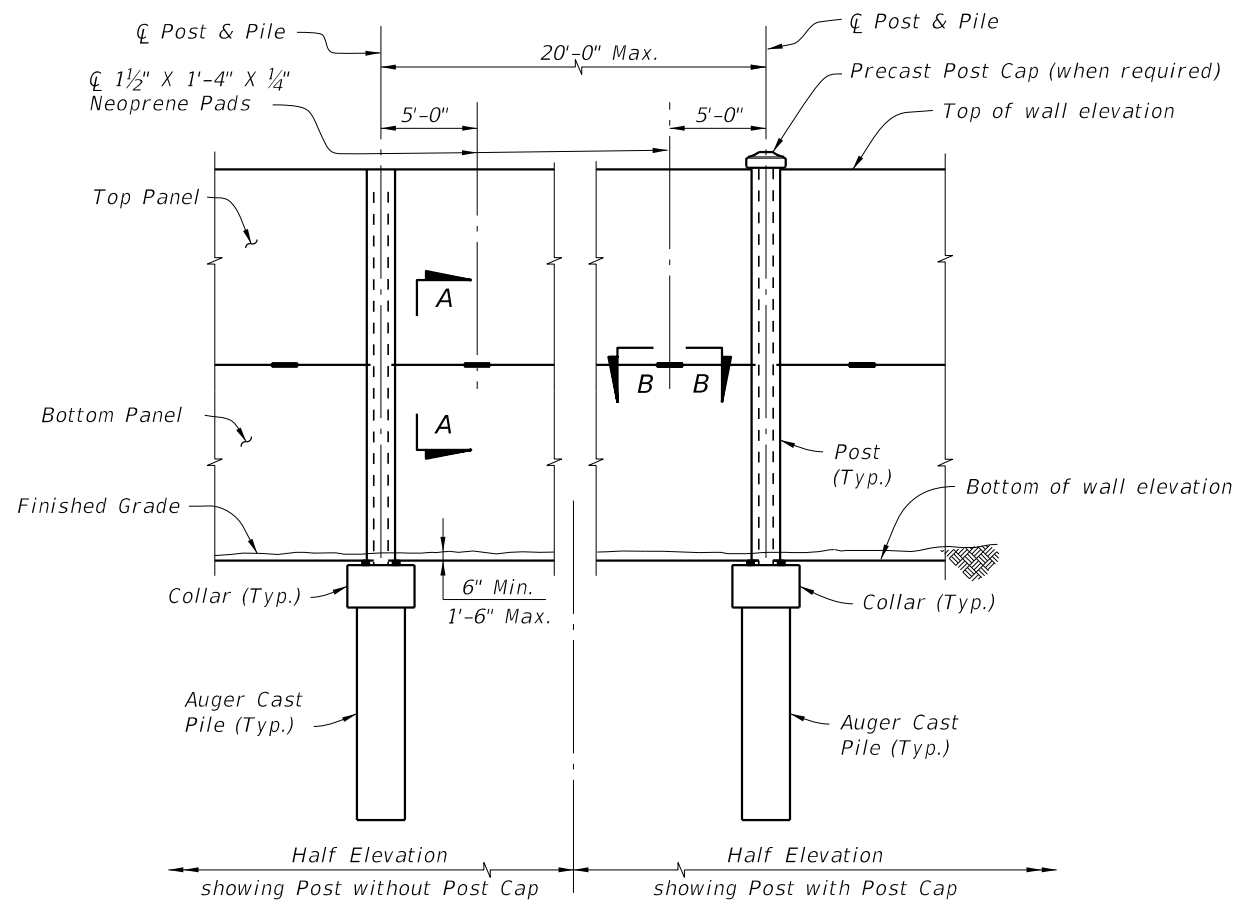
- NOTES:
- Contractor shall submit specific form liner samples for approval by the Engineer.
 - Textures and graphics shown are for demonstration purposes only. See Sound Barrier Data Tables for project specific texture and graphic requirements.

HALF ELEVATION
 (Front Face Panel Texture Type "H" and Front Face Post Texture Type "H" Shown.)
 (Graphic Type SE-2 Shown.)
 (Two stacked panels shown, 3 stacked panels similar)

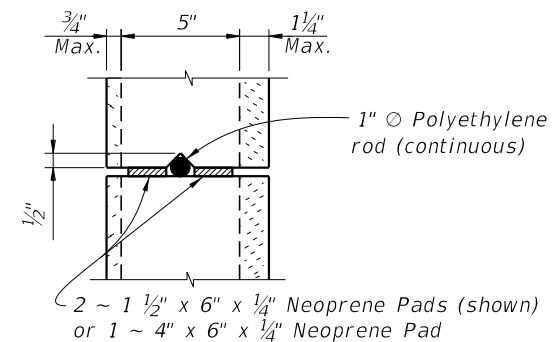
GRAPHICS & TEXTURE DETAILS

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01/01/12						5200	3

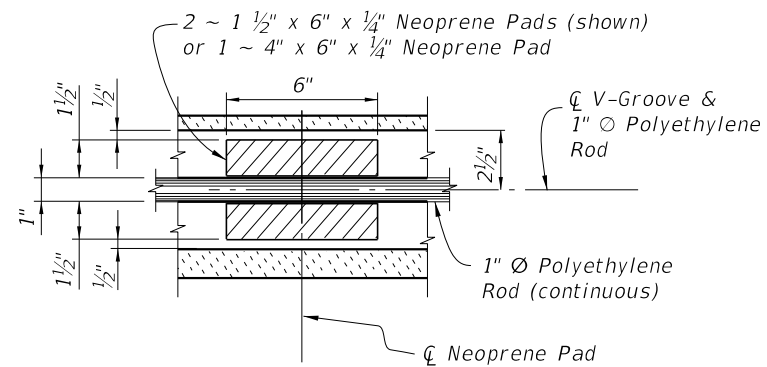
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TYPICAL ELEVATION



SECTION A-A

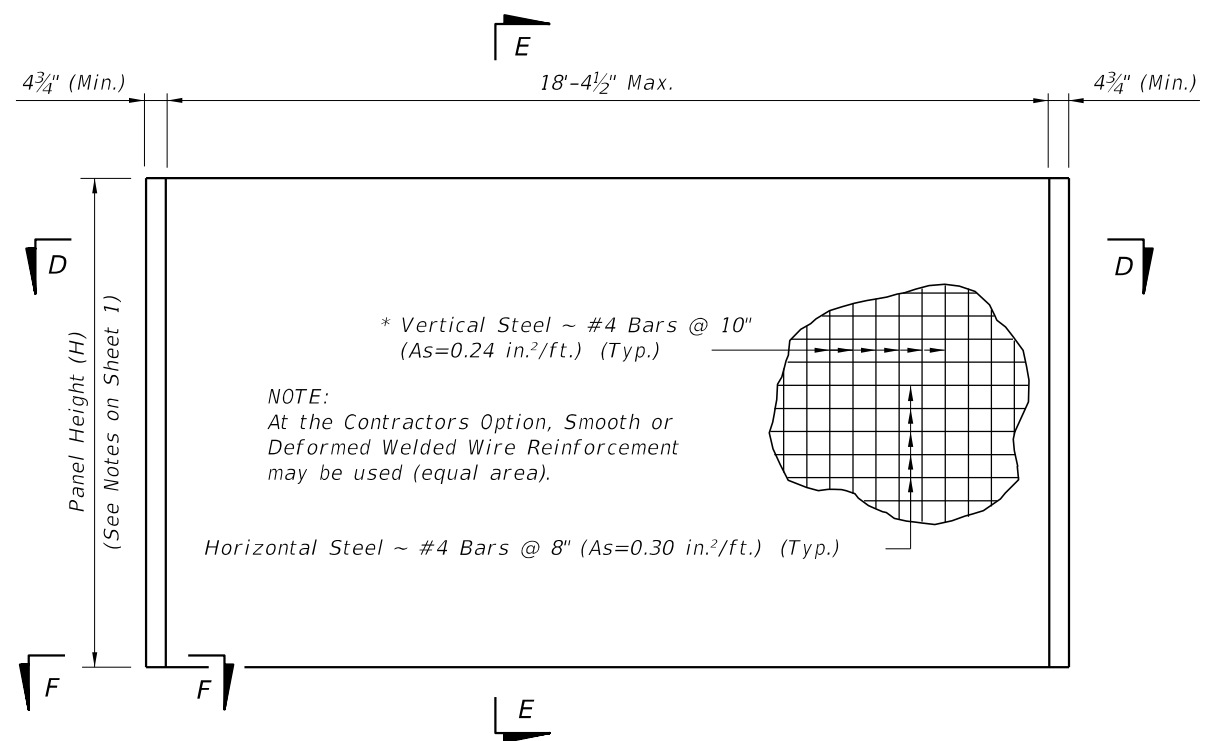


SECTION B-B

TYPICAL DETAILS

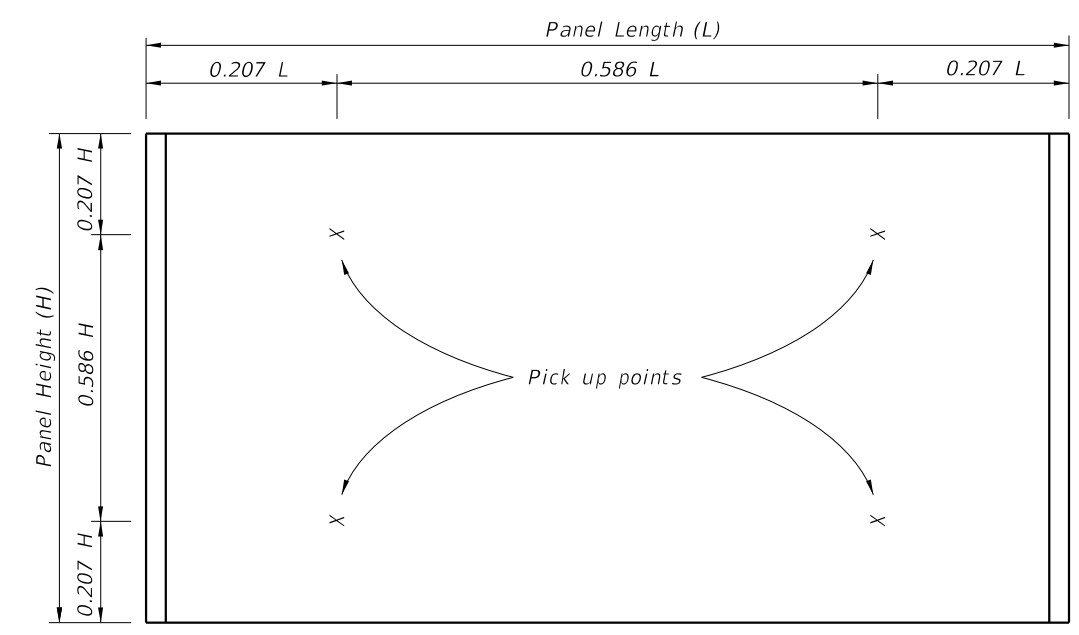
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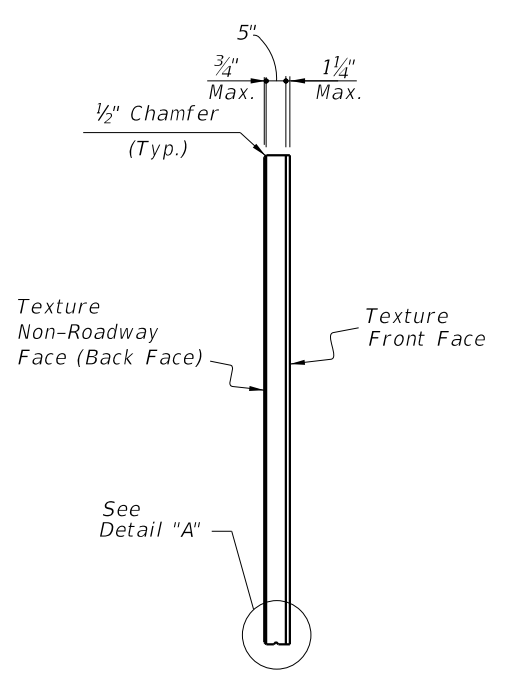


TYPICAL PANEL ELEVATION

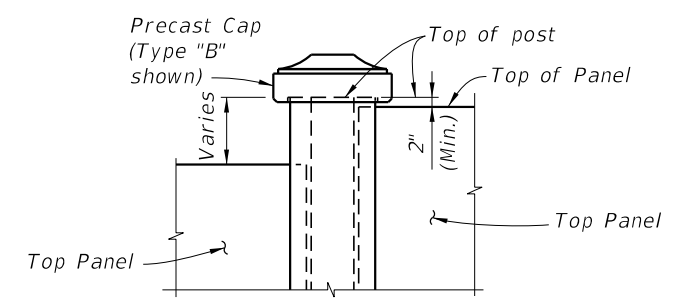
* In lieu of utilizing the pick up points below, panels may be cast vertically or cast horizontally then tilted upright using tilt-tables prior to lifting from form. In this case, the vertical steel may be reduced to #4 Bars @ 1'-3" (As=0.15 in.²/ft.).



REQUIRED PICK UP POINTS FOR PANELS
(Panels shall be rotated about long axis only)

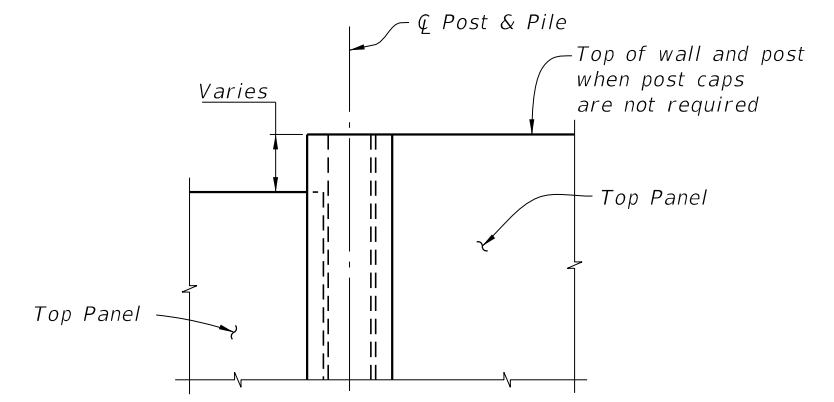


SECTION E-E

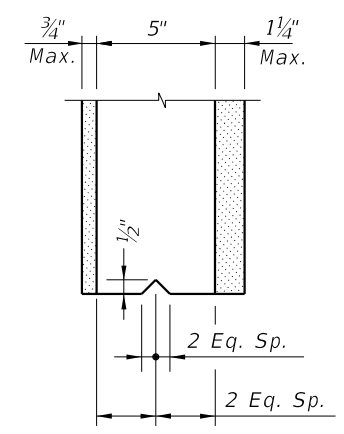


PRECAST POST CAP DETAIL

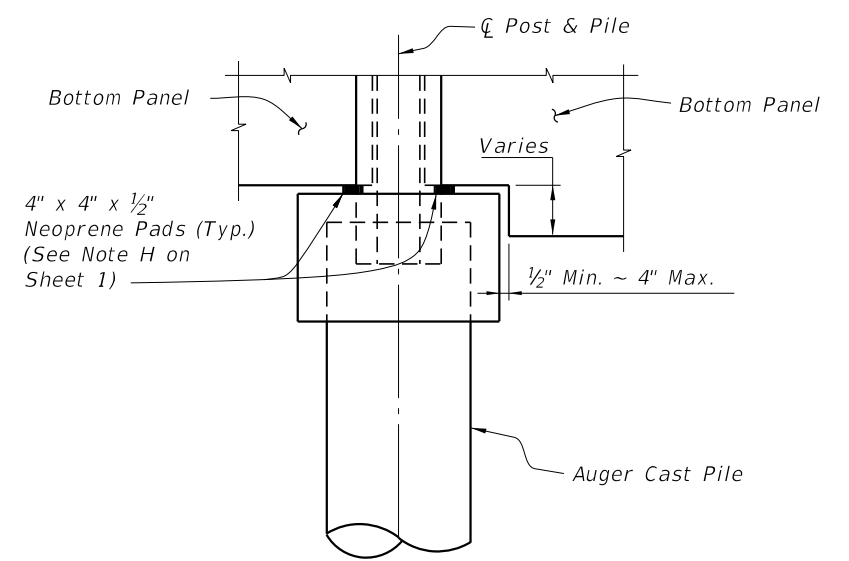
NOTE: See plans for Post Cap requirements. See Sheet 13 for Post Cap details.



ELEVATION STEP AT TOP OF WALL



DETAIL "A"

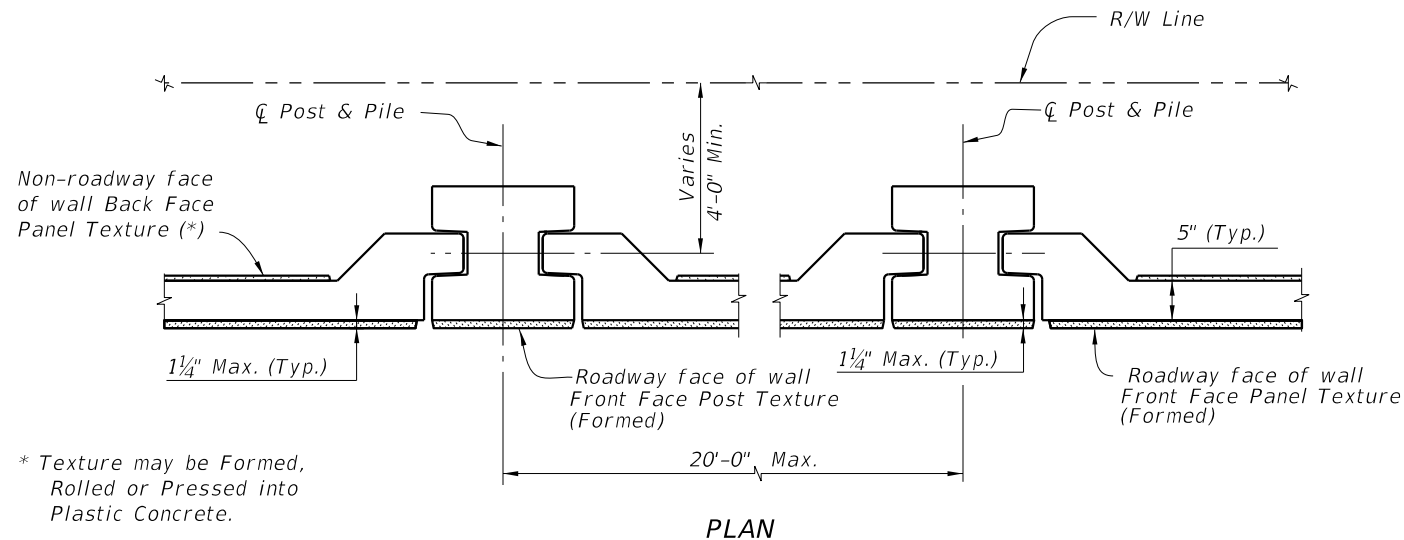


ELEVATION STEP AT BOTTOM OF WALL

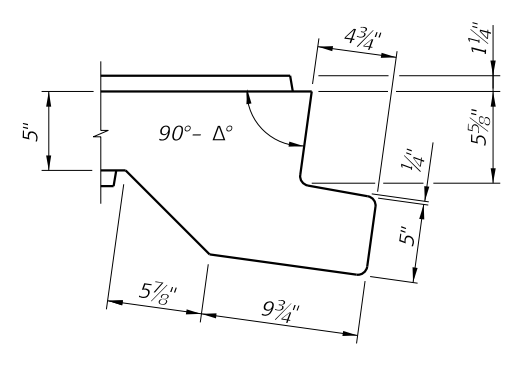
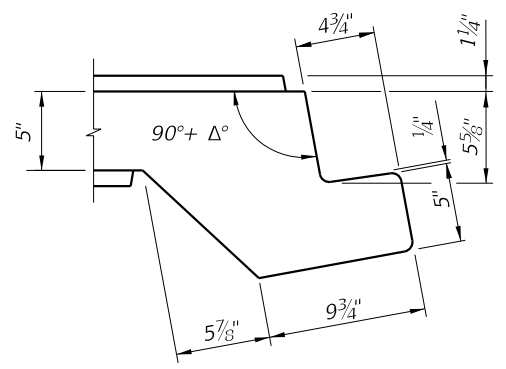
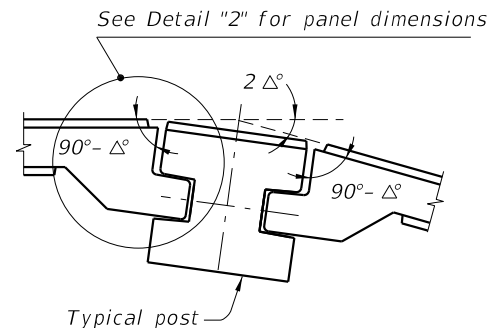
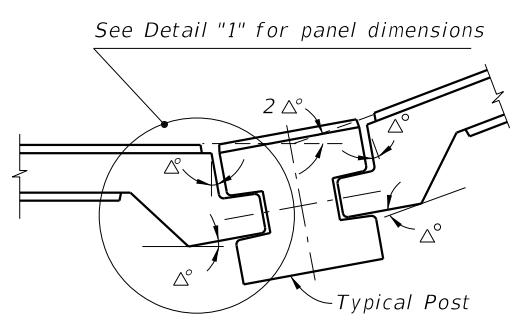
TYPICAL PANEL DETAILS

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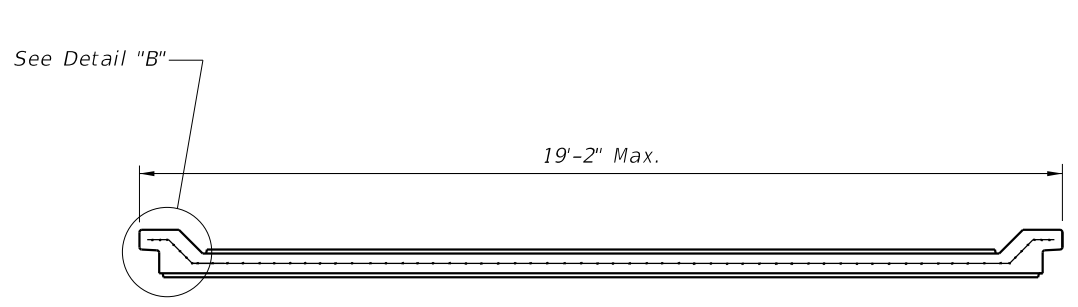


* Texture may be Formed, Rolled or Pressed into Plastic Concrete.

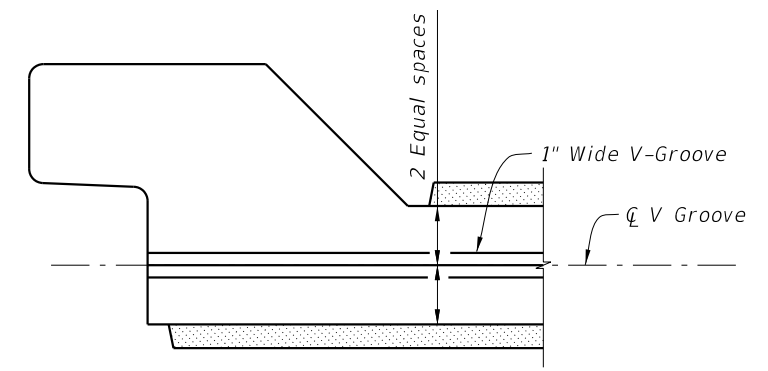


PIVOTING POINT DETAILS

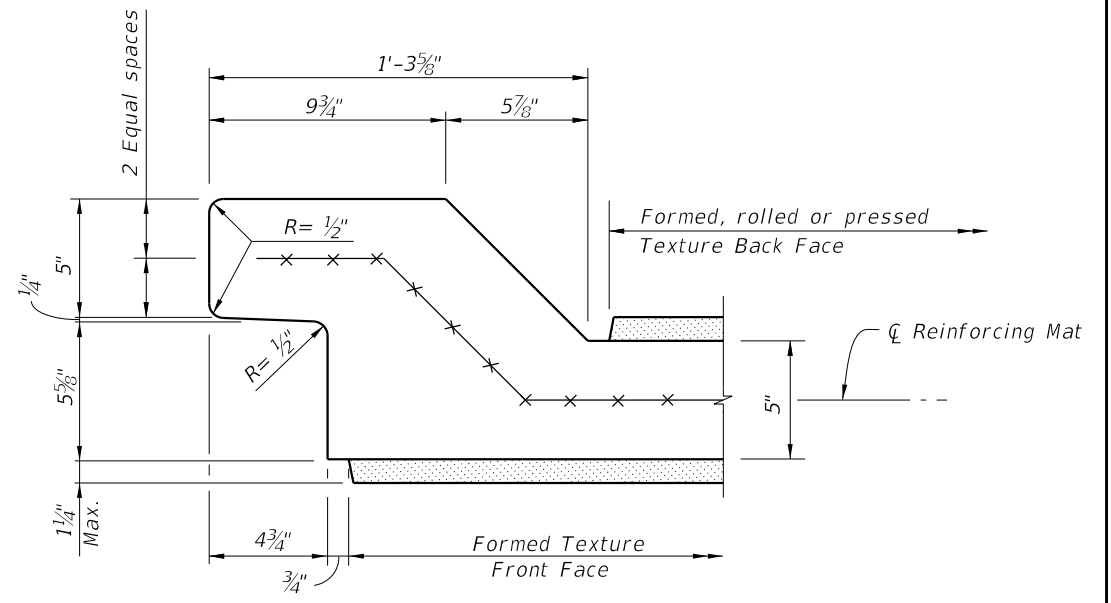
NOTE: The shop drawings shall include specific pivoting point details of panel ends at locations where the deflection angle (2Δ) between panels exceeds 7°.



SECTION D-D



SECTION F-F

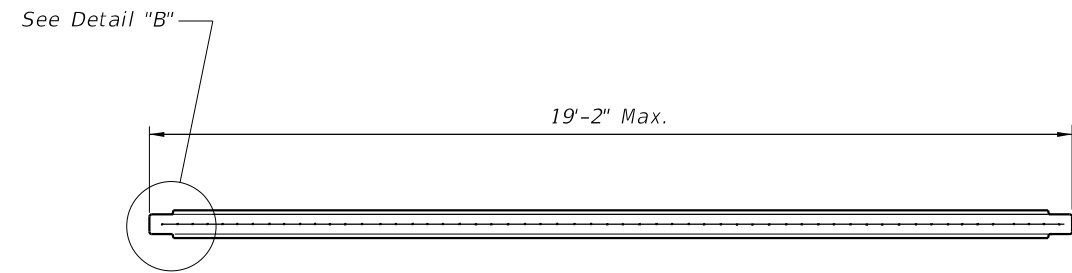
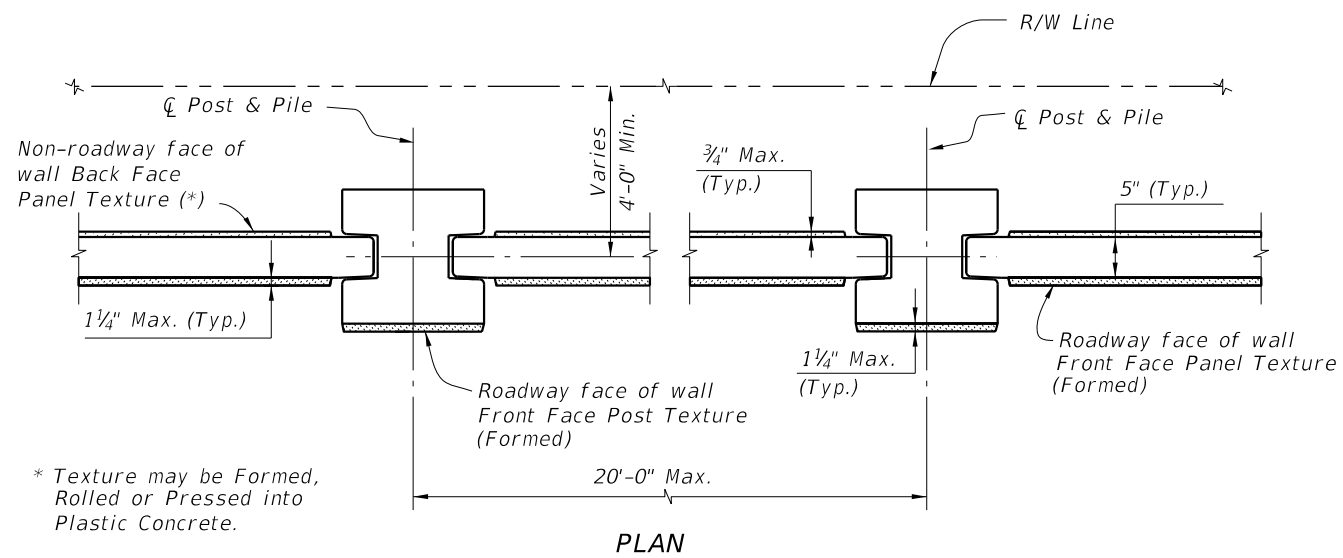


DETAIL "B" (Typical both ends)

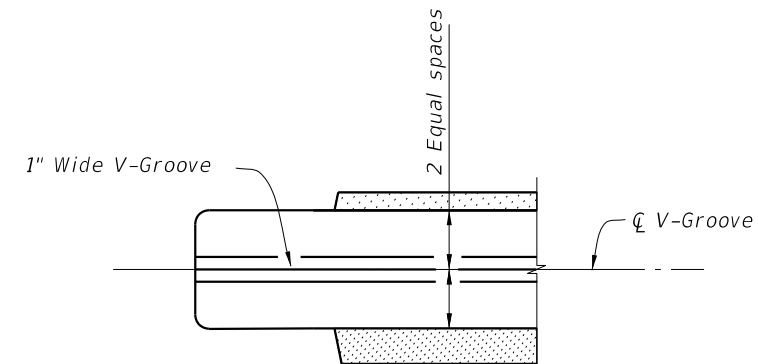
FLUSH PANEL END DETAILS

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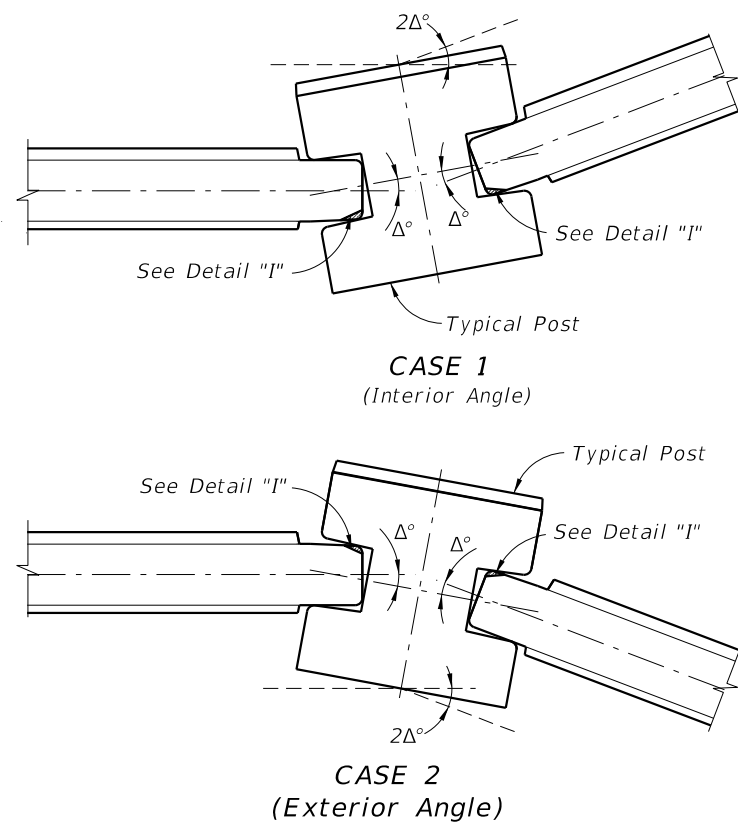
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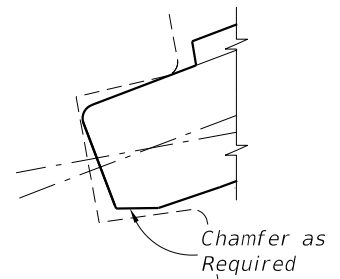
SECTION D-D



SECTION F-F

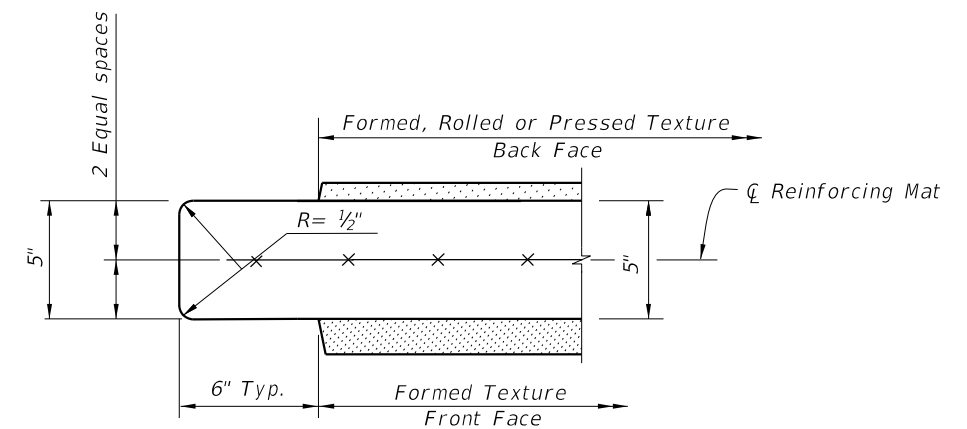


PIVOTING POINT DETAILS




DETAIL "I"
(Back Face Chamfer Shown
Front Face Chamfer Similar)

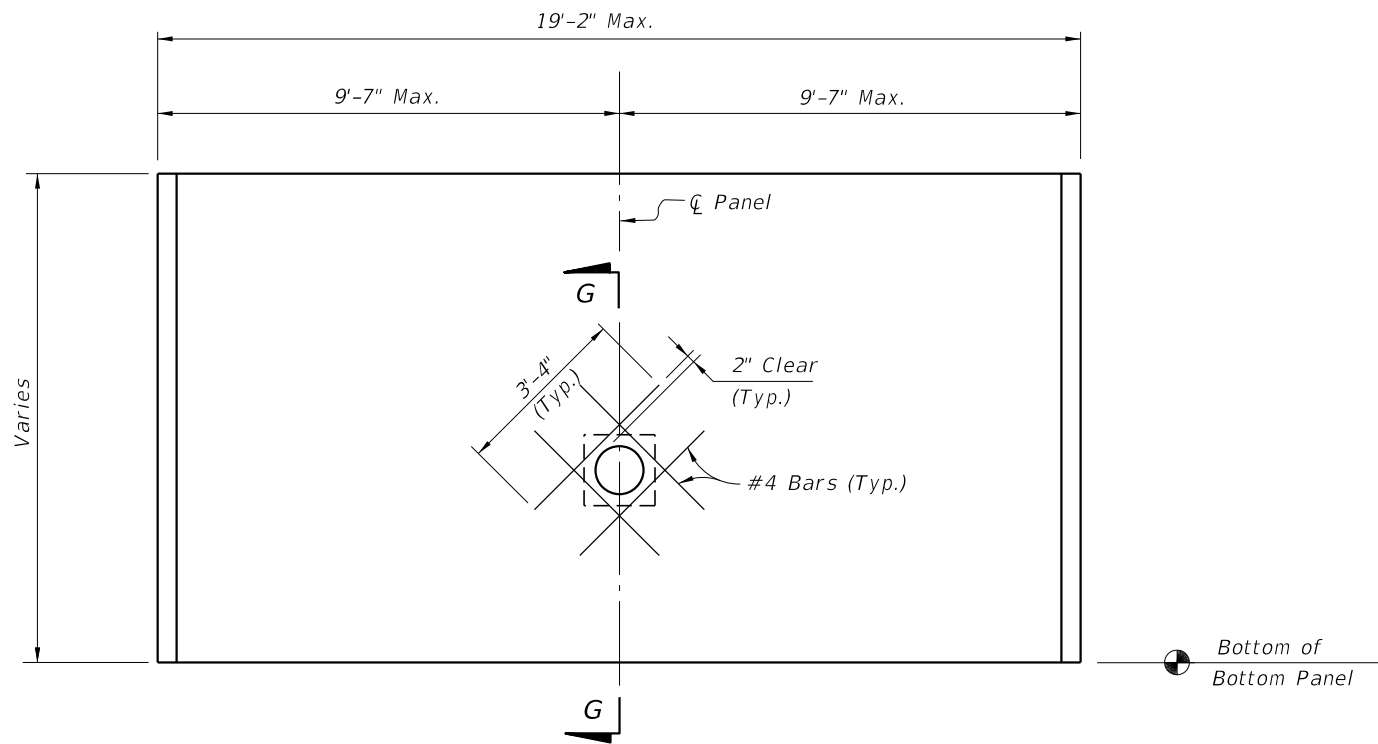
NOTE:
The shop drawings shall include specific pivoting point details of panel ends at locations where the deflection angle ($2\Delta^\circ$) between panels exceeds 20° .



DETAIL "B"
(Typical both ends)

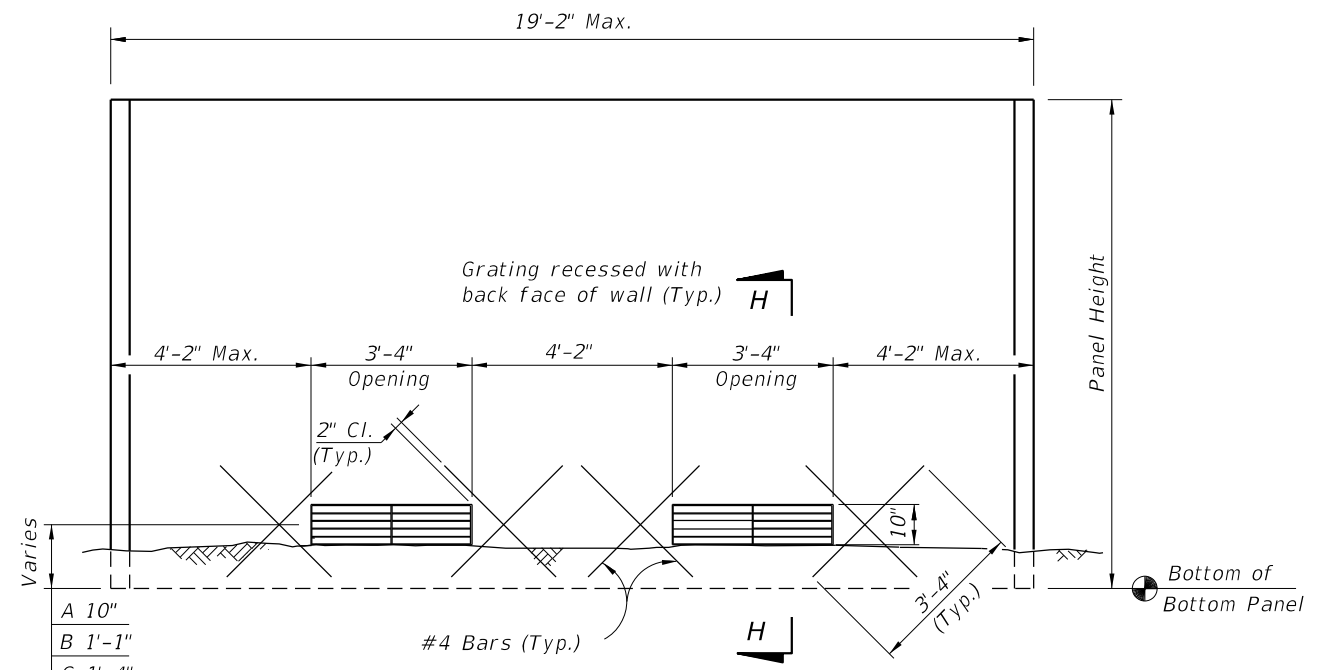
RECESSED PANEL END DETAILS

LAST REVISION 01/01/11	DESCRIPTION:	 FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO. 5200	SHEET NO. 7
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FIRE HOSE ACCESS HOLE TYPICAL DETAIL
 (Front Face of Wall Shown)
 (Flush Panel Option Shown)
 Recessed Panel Option Similar)

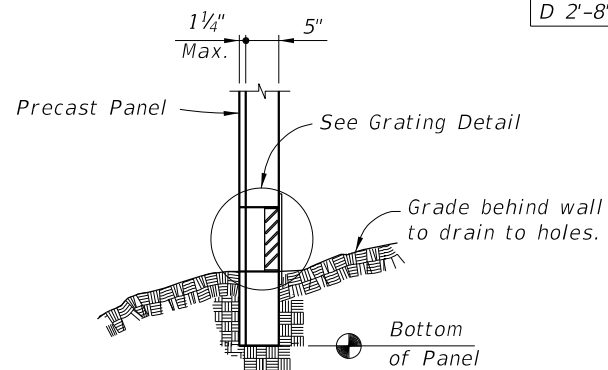
NOTE: Fire Hose Access Point to be located at or near fire hydrants



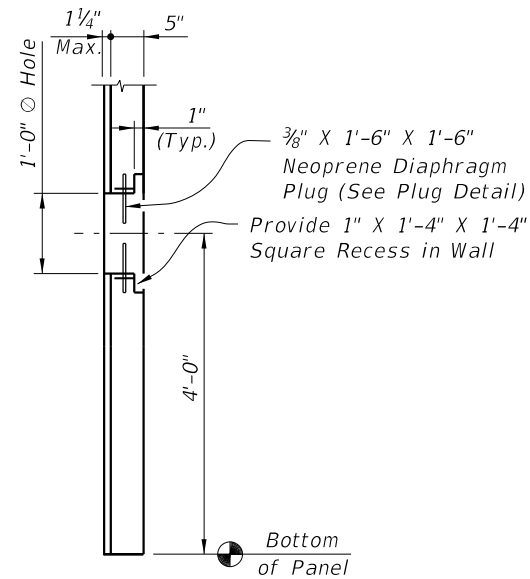
DRAINAGE HOLES TYPES A, B, C & D
 (Front Face of Wall Shown)
 (Flush Panel Option Shown)
 Recessed Panel Option Similar)

NOTE: Hole Types A, B, C and D refer to distance from bottom of panel to center of opening. See Wall Control Drawings.

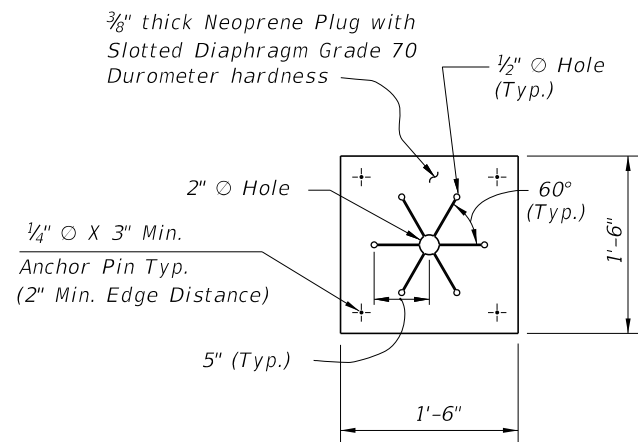
A	10"
B	1'-1"
C	1'-4"
D	2'-8"



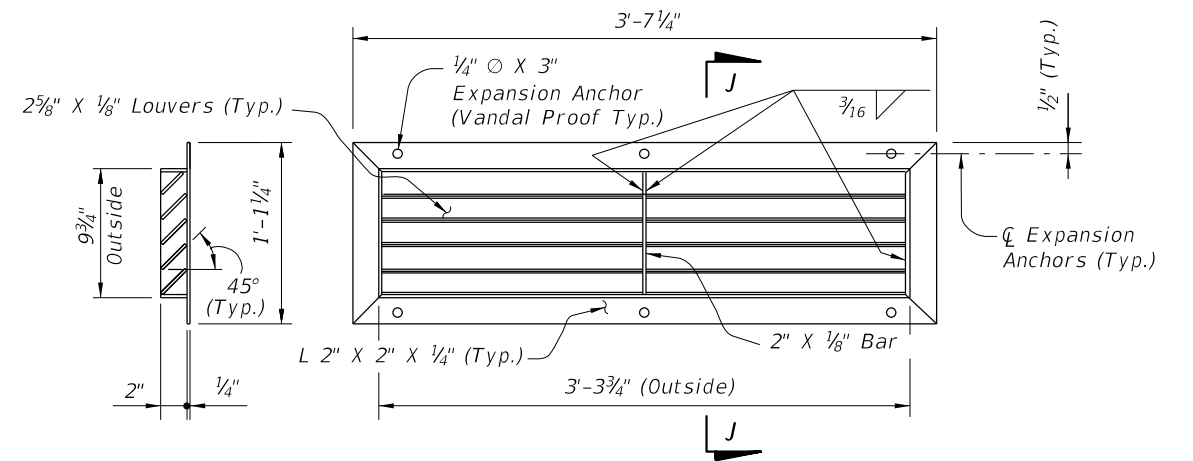
SECTION H-H
 (Flush Panel Option Shown)
 Recessed Panel Option Similar)



SECTION G-G
 (Flush Panel Option Shown)
 Recessed Panel Option Similar)



PLUG DETAIL



SECTION J-J GRATING DETAIL

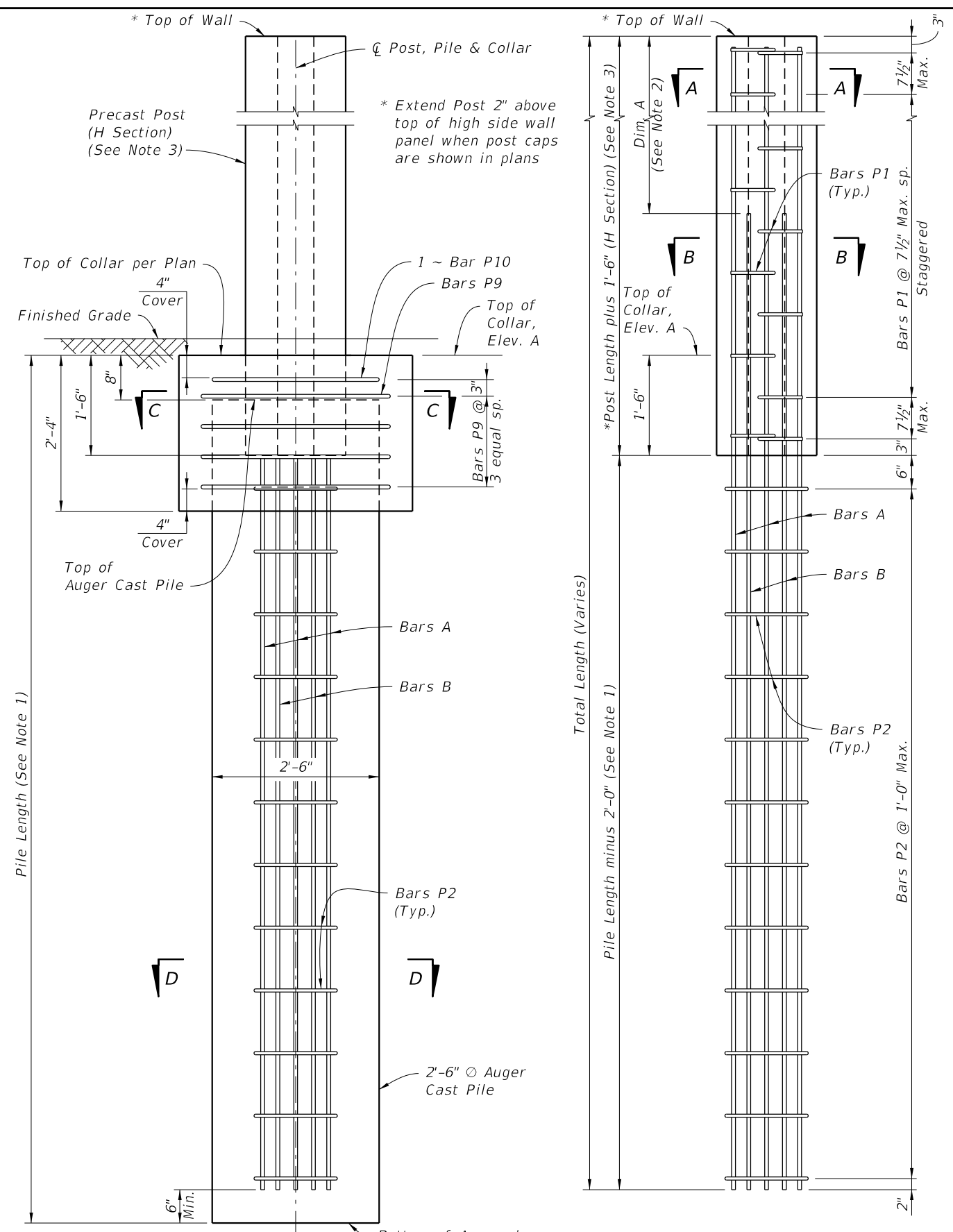
NOTES:
 Grating shall be ASTM A 36 steel and shall be hot dip galvanized after assembly in accordance with ASTM Specification A 123.
 Expansion anchors shall be in accordance with ASTM A 307 (Galvanized).
 Welding shall be in accordance with the current edition of the ANSI/AWS D1.1 Welding Code.

FIRE HOSE ACCESS HOLE & DRAINAGE DETAILS

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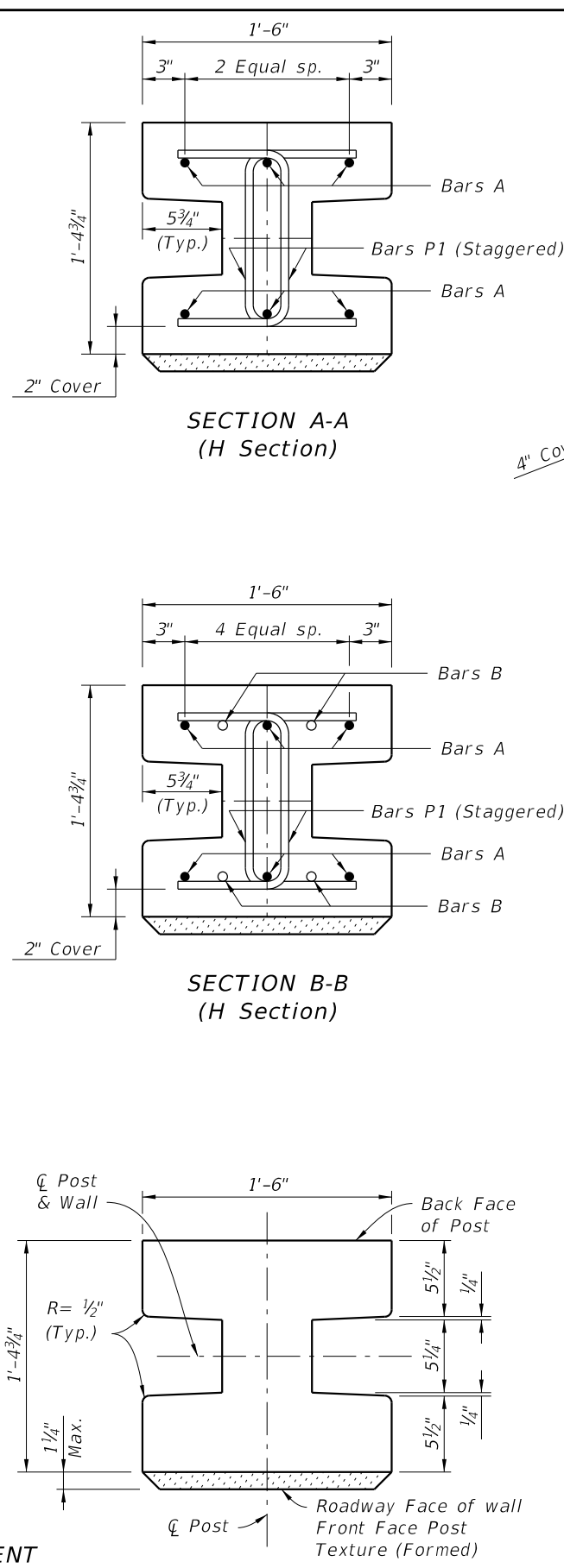
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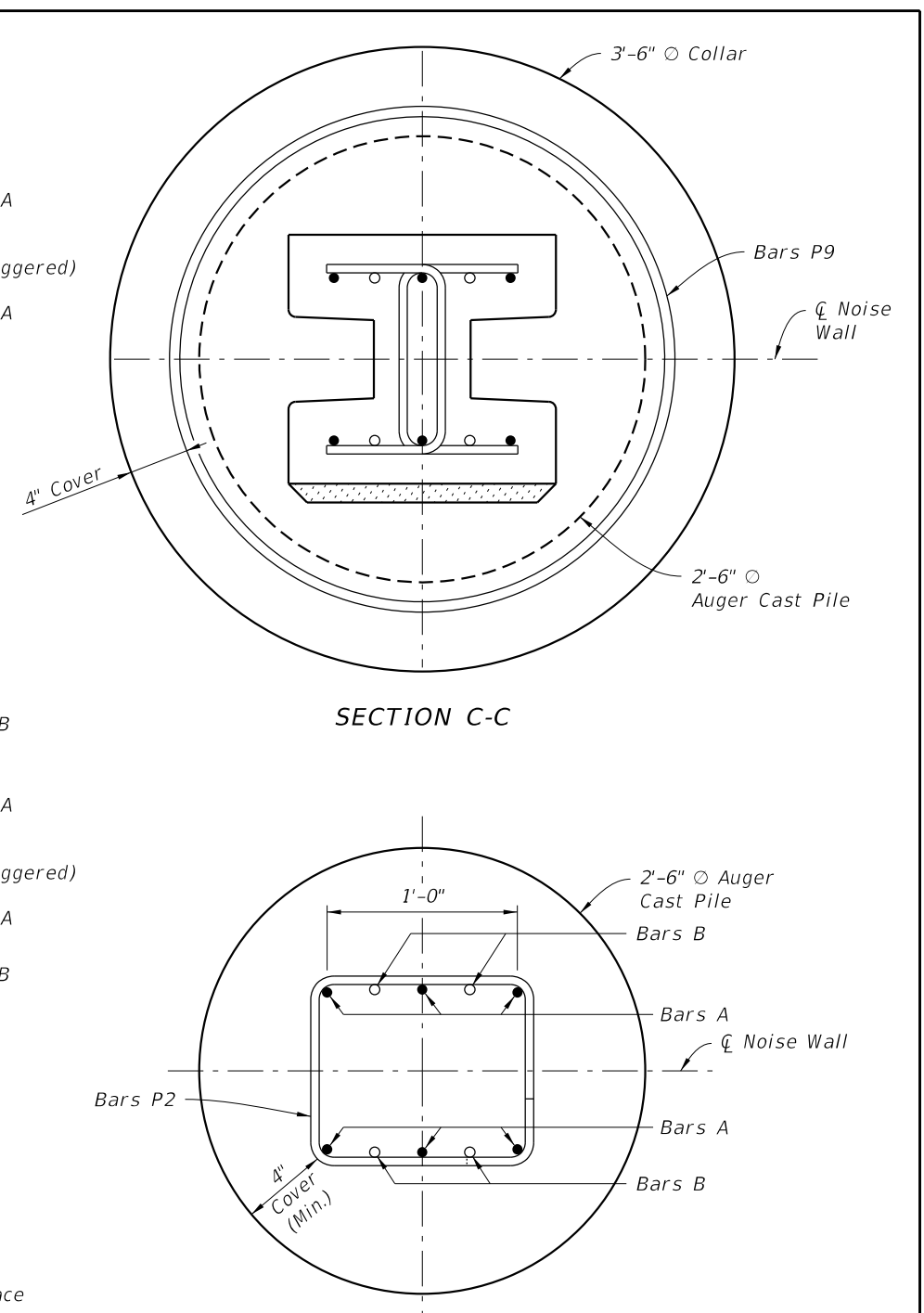


POST IN AUGERED HOLE
 (Standard 'H' Post Shown, 45° & 90° Corner Posts Similar)

GROUND MOUNTED POST REINFORCEMENT
 (Prior to placement in augered hole)




TYPICAL POST SECTION
 (H Section)



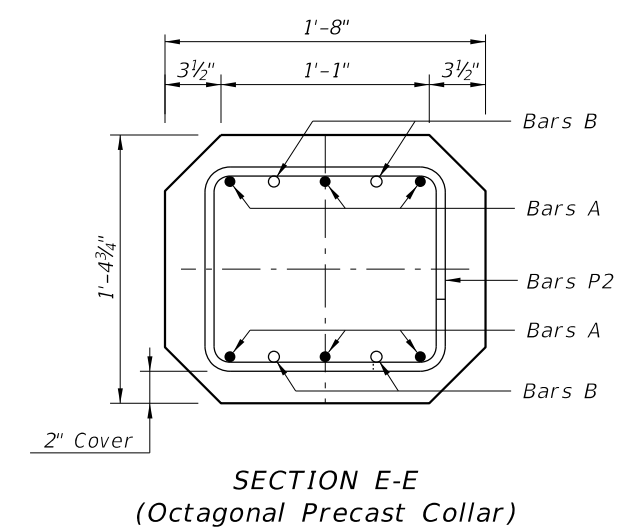
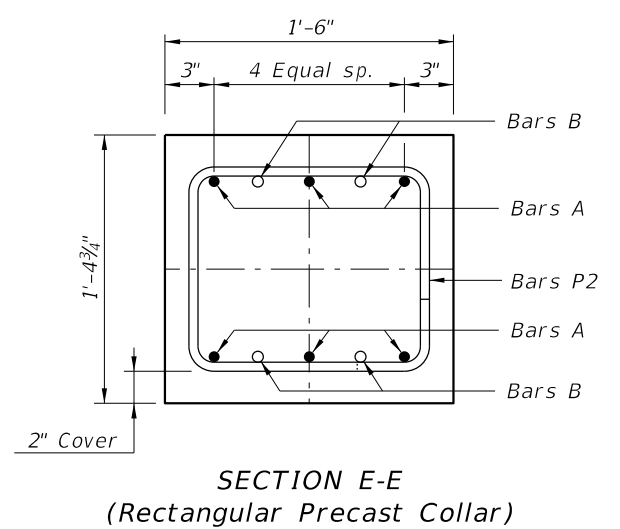
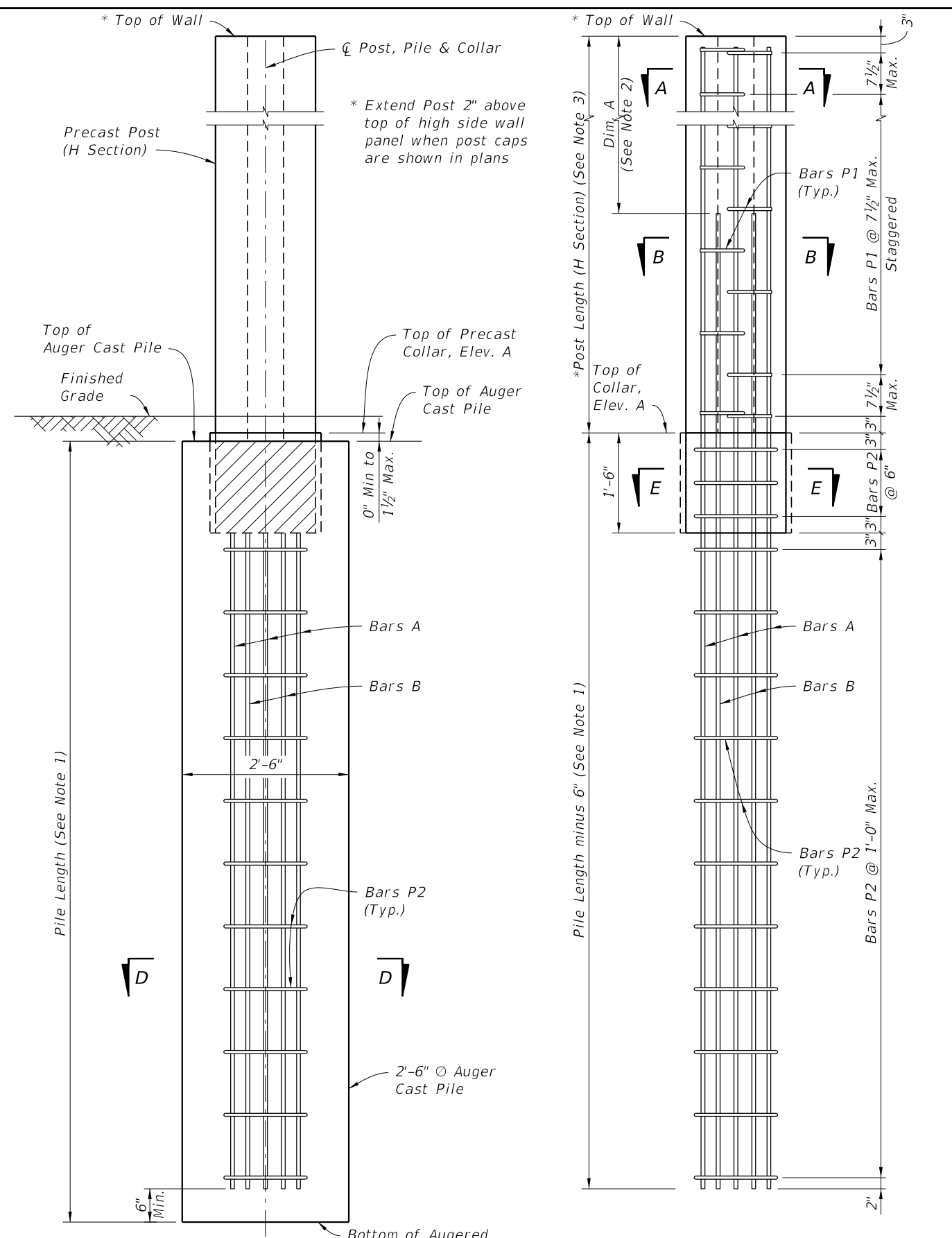
SECTION D-D

- NOTES:**
1. For Table of Reinforcing Steel Sizes and Post & Pile Lengths, see Sheet Nos. 15 & 16.
 2. For Dim. A, see Sheet Nos. 15 & 16.
 3. For Precast Collar Option, see Sheet No. 10.

PILE & POST REINFORCING STEEL (CAST-IN-PLACE COLLAR OPTION)

LAST REVISION	REVISION	DESCRIPTION:		FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO.	SHEET NO.
01/01/12						5200	9

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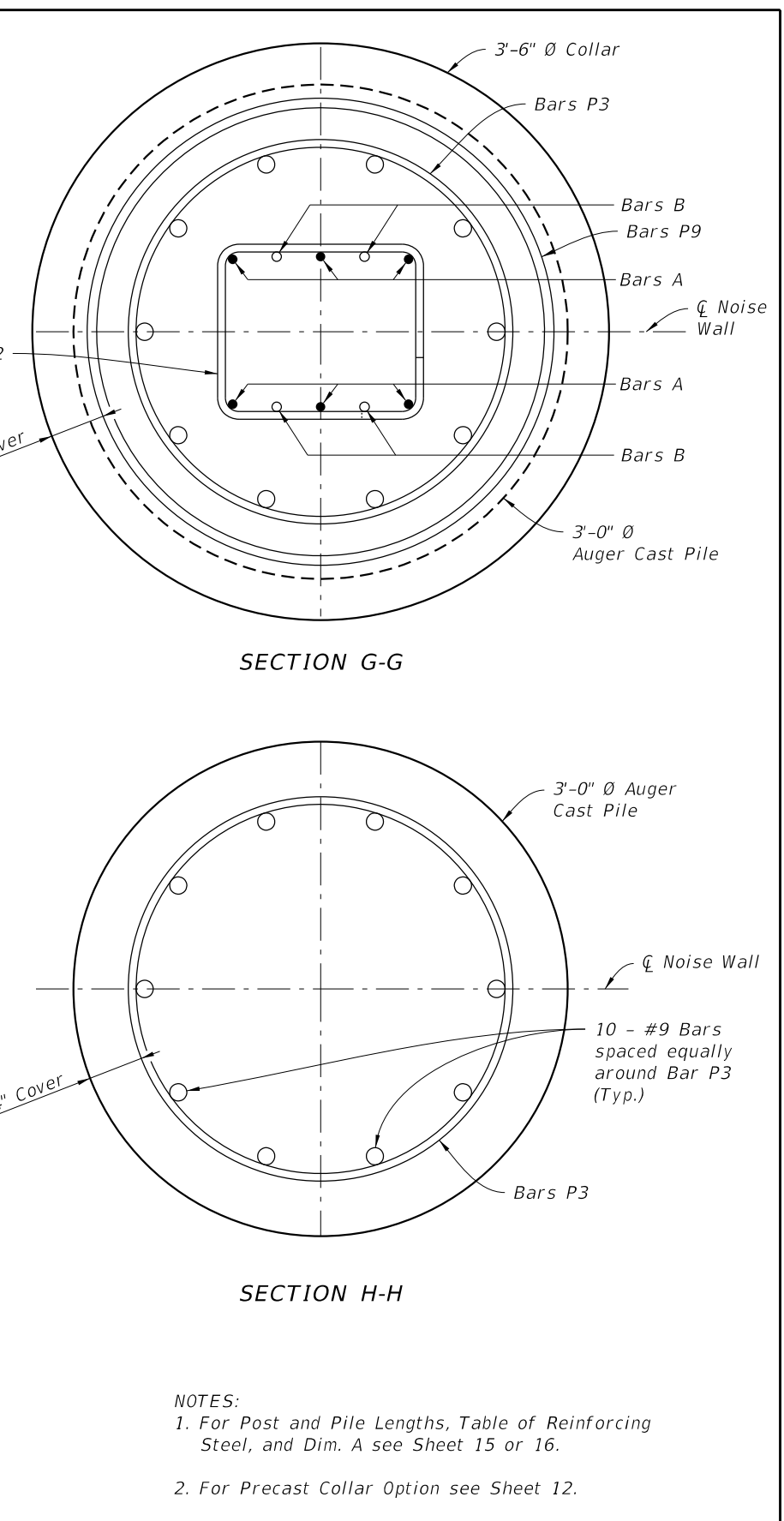
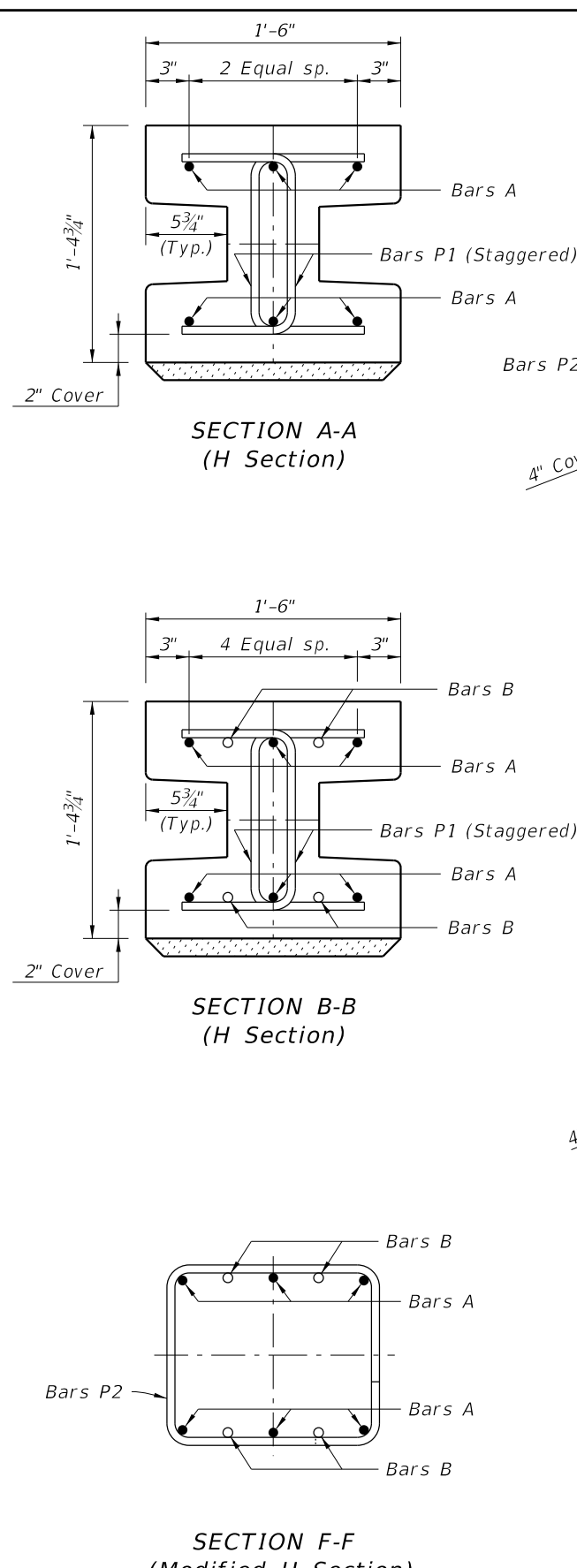
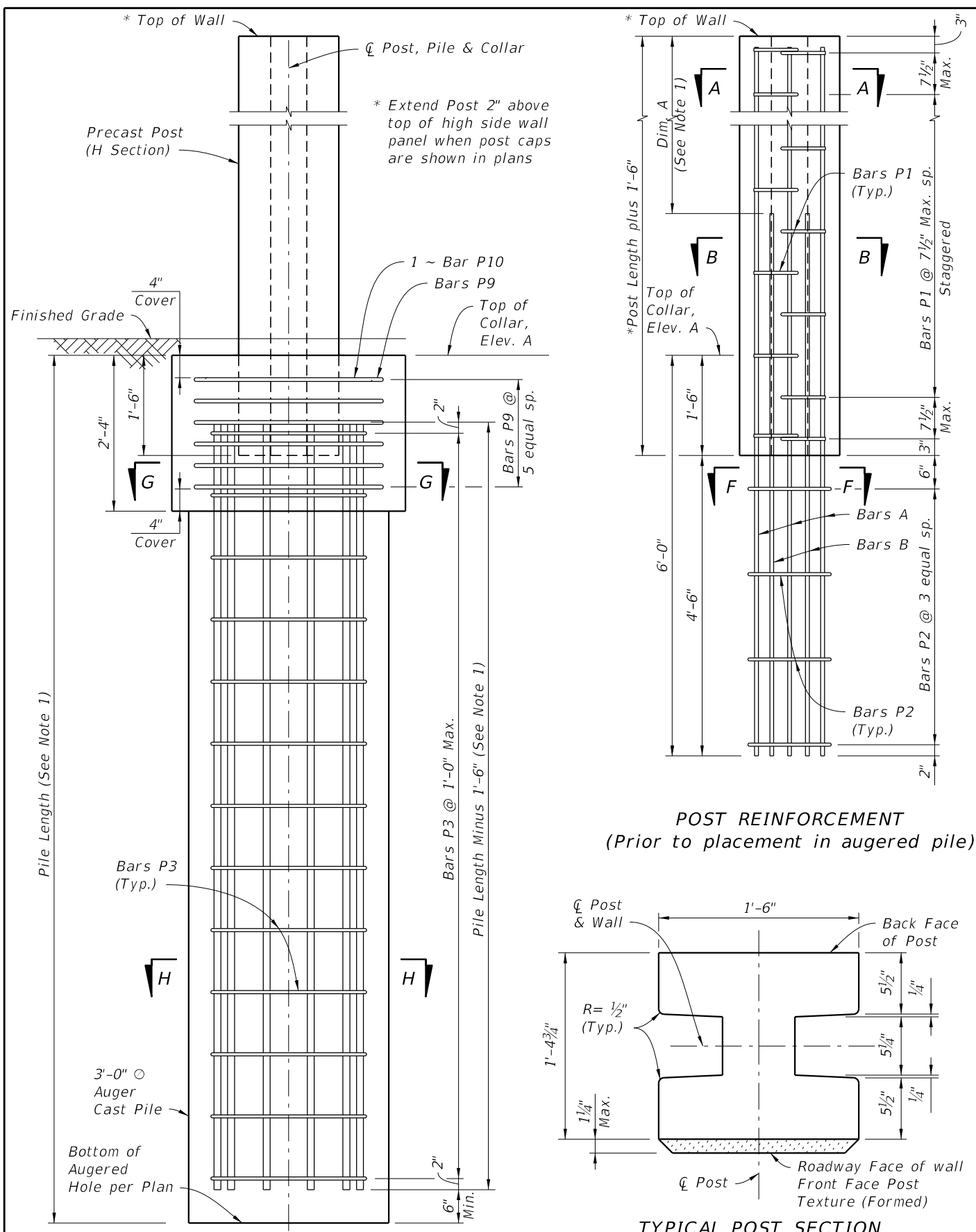
- NOTES:
1. For Table of Reinforcing Steel Sizes and Post & Pile Lengths, see Sheet Nos. 15 & 16.
 2. For Dim A, see Sheet Nos. 15 & 16.
 3. For Sections A-A, B-B & D-D see Sheet No. 9.

GROUND MOUNTED POST REINFORCEMENT
 (Prior to placement in augered hole)
PRECAST COLLAR IN AUGER CAST PILE
 (Standard 'H' Post Shown, 45° & 90° Corner Posts Similar)

PILE & POST REINFORCING STEEL (PRECAST COLLAR OPTION)

LAST REVISION	REVISION	DESCRIPTION:	 FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO. 5200	SHEET NO. 10
01/01/12						

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NOTES:
 1. For Post and Pile Lengths, Table of Reinforcing Steel, and Dim. A see Sheet 15 or 16.
 2. For Precast Collar Option see Sheet 12.

POST IN AUGERED HOLE
 (Post reinforcing steel not shown for clarity)
 (Standard 'H' Post Shown, 45° & 90° Corner Posts Similar)

TYPICAL POST SECTION
 (H Section)

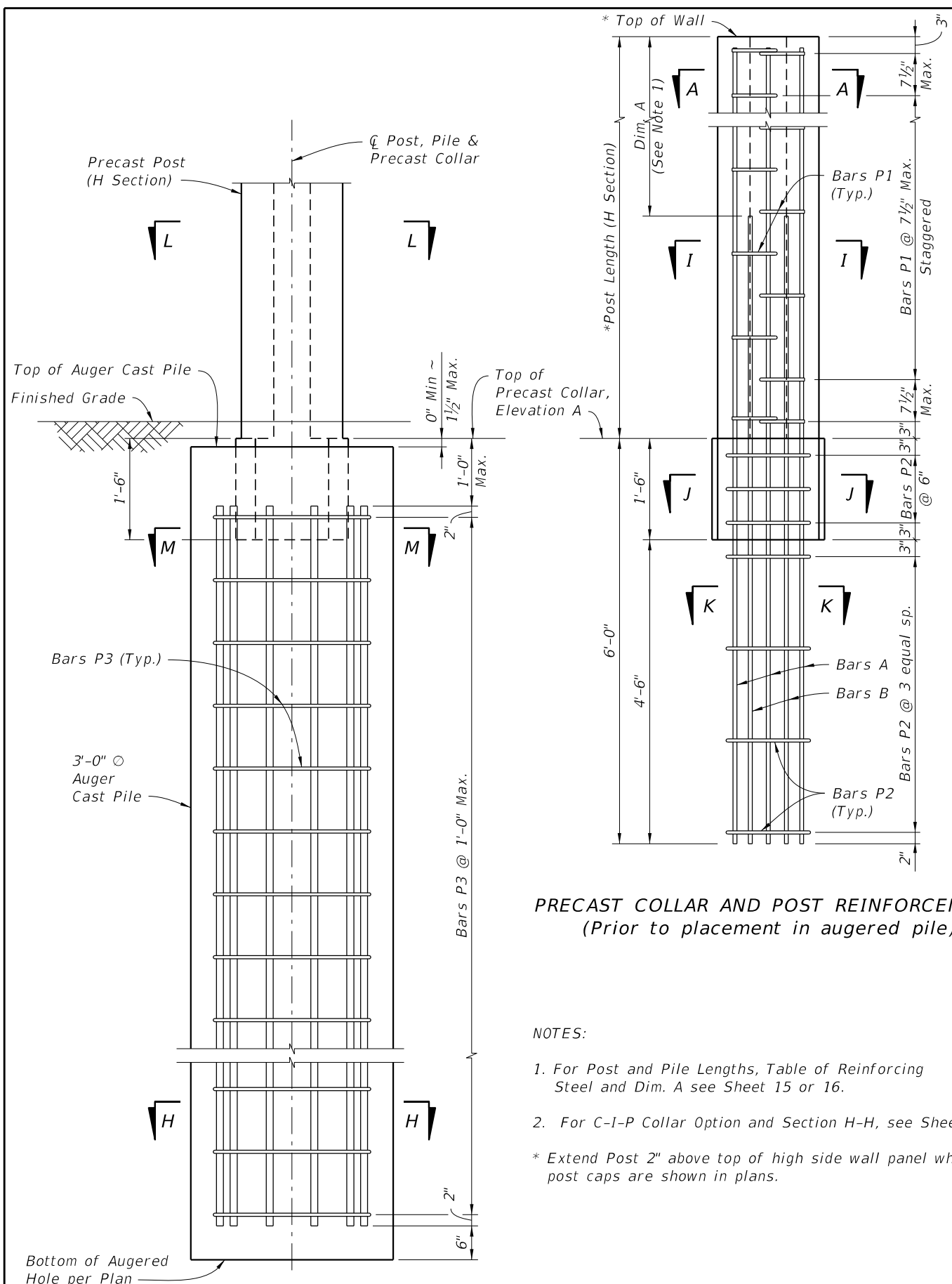
SECTION F-F
 (Modified H Section)

SECTION H-H

C-I-P COLLAR FOR PILE/POST CONNECTION: LOW CLEARANCE OPTION

LAST REVISION	REVISION	DESCRIPTION:	 FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO.	SHEET NO.
01/01/12					5200	11

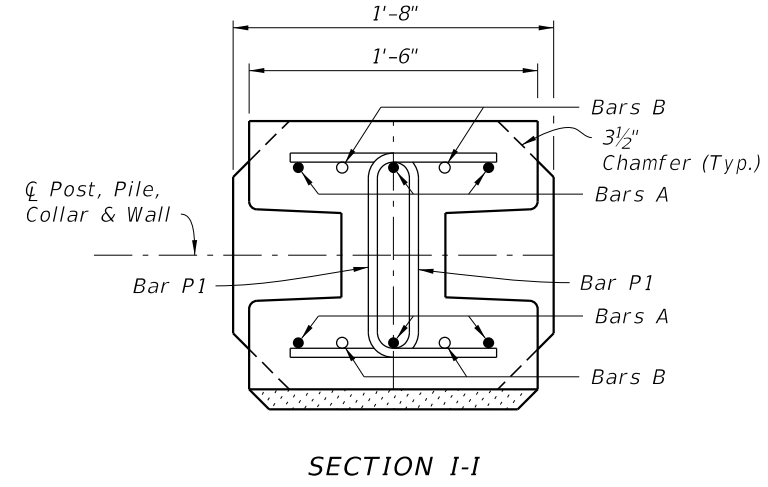
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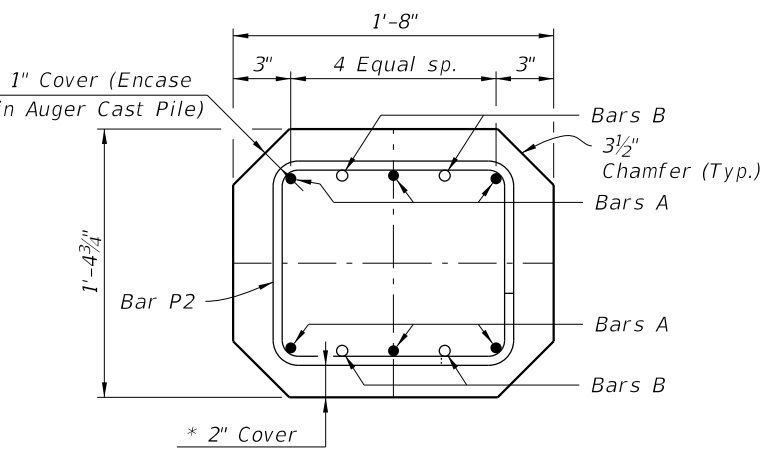
PRECAST COLLAR IN AUGER CAST PILE
(Collar and Post reinforcing steel not shown)

PRECAST COLLAR AND POST REINFORCEMENT
(Prior to placement in augered pile)

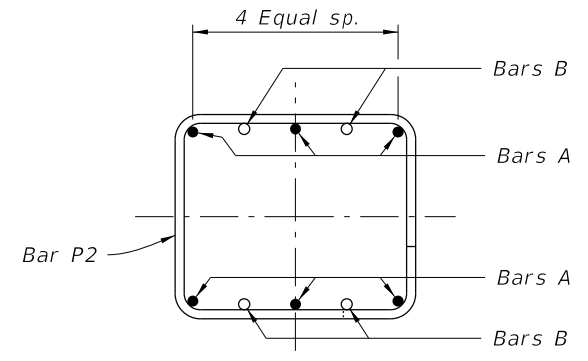
- NOTES:**
1. For Post and Pile Lengths, Table of Reinforcing Steel and Dim. A see Sheet 15 or 16.
 2. For C-I-P Collar Option and Section H-H, see Sheet 11.
- * Extend Post 2" above top of high side wall panel when post caps are shown in plans.



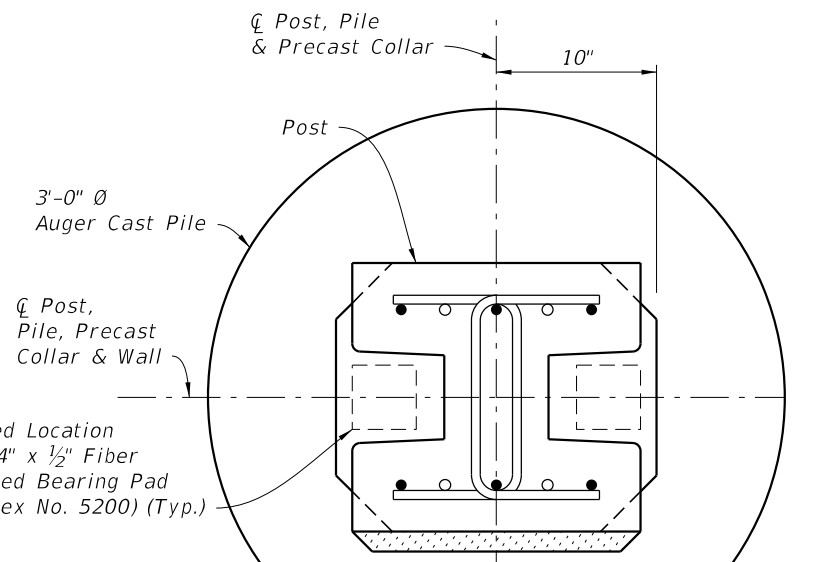
SECTION I-I



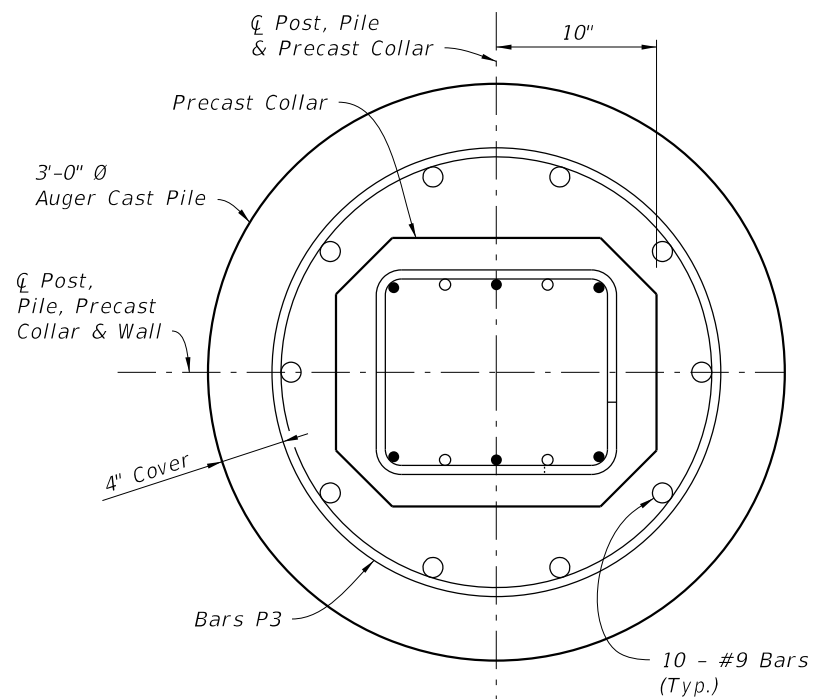
SECTION J-J



SECTION K-K




SECTION L-L

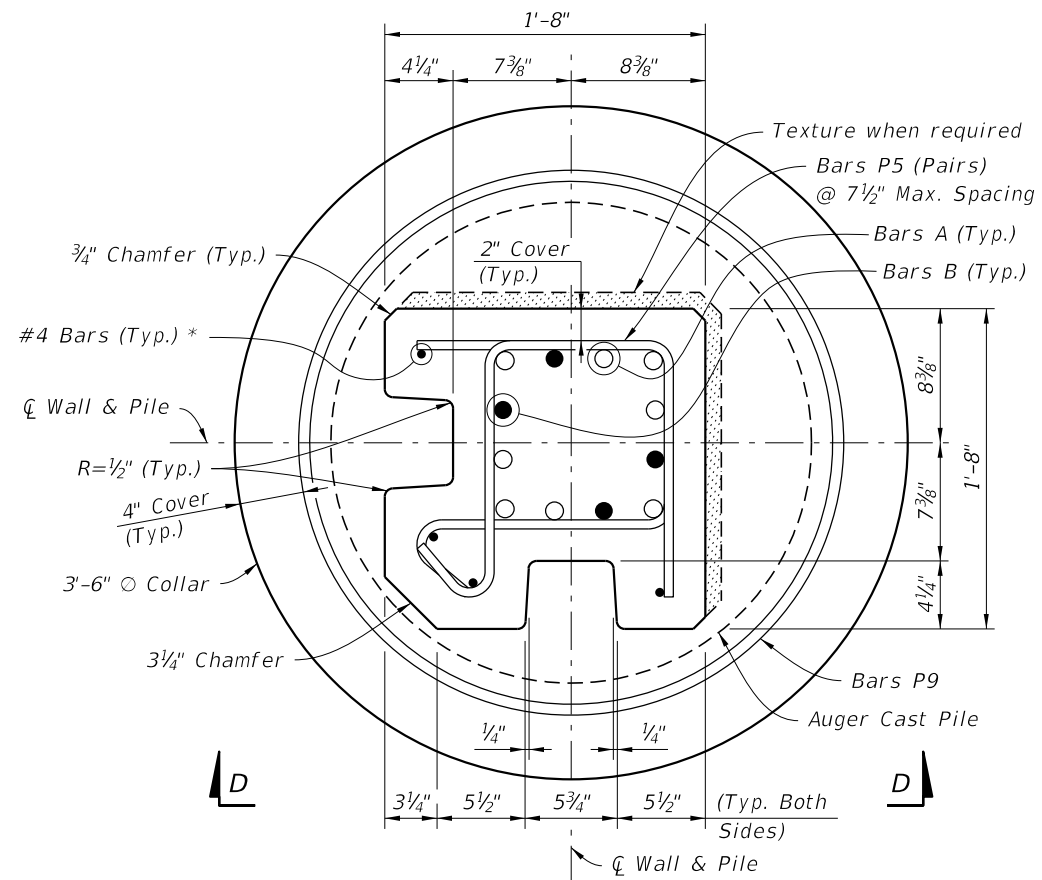


SECTION M-M

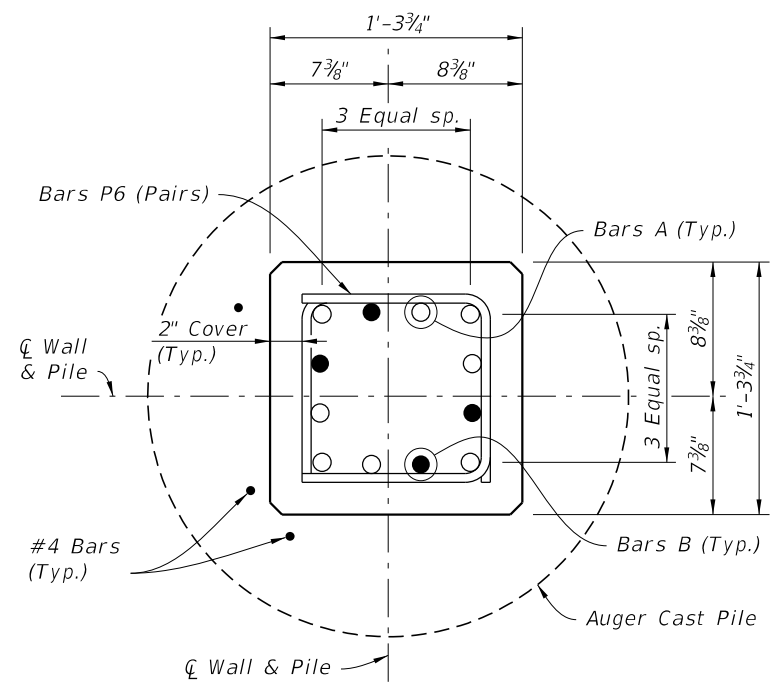
PRECAST COLLAR FOR PILE/POST CONNECTION: LOW CLEARANCE OPTION

LAST REVISION	DESCRIPTION:	 FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO.	SHEET NO.
01/01/12	REVISION			5200	12

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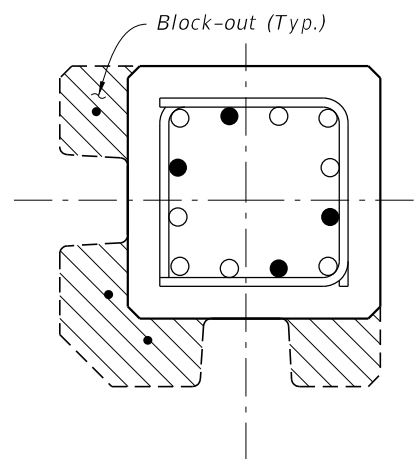


SECTION A-A
TYPICAL SECTION ABOVE PILE

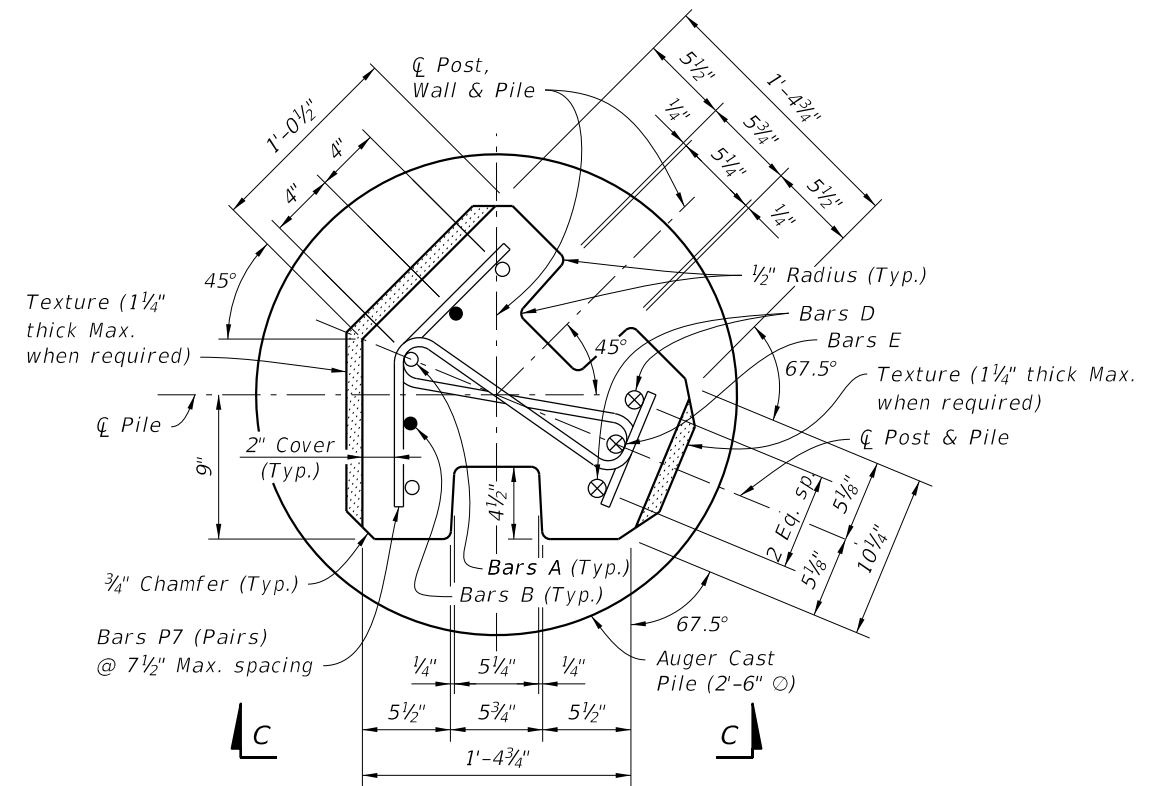


SECTION B-B
(Modified Base Section)

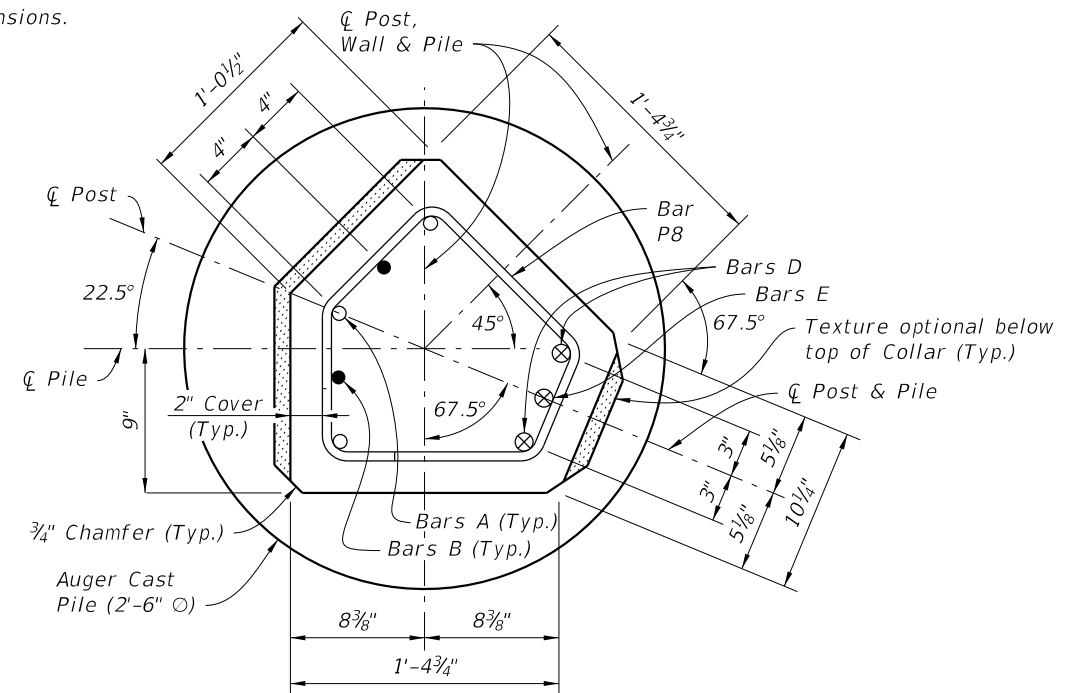
90° CORNER POST



SECTION C-C
(Showing 1'-0" Block-out)



SECTION A-A
TYPICAL SECTION ABOVE PILE



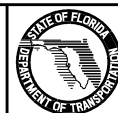
SECTION B-B
PRECAST COLLAR SECTION

45° CORNER POST

- NOTES:**
1. Use 3'-6" CIP Collar for all 90° corner posts, Bars P10 not required for 90° corner pile collar.
 2. For Post & Pile Lengths, see Sheet Nos. 15 & 16.
 3. For Table of Reinforcing Steel, see Sheet Nos. 15 & 16.
 4. Reduce standard panel length or adjust post spacing by 3/2" at each 90° Corner Post to accommodate the Special Post dimensions.

SPECIAL CORNER POSTS

LAST REVISION	DESCRIPTION:
01/01/12	

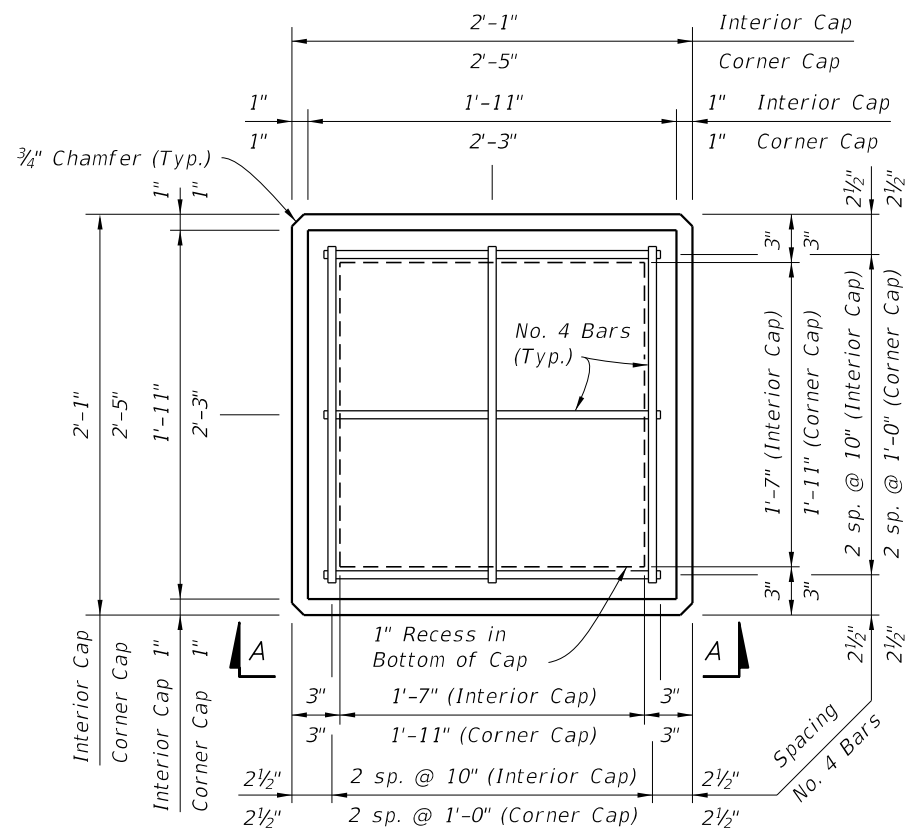


FDOT DESIGN STANDARDS
FY 2012/2013

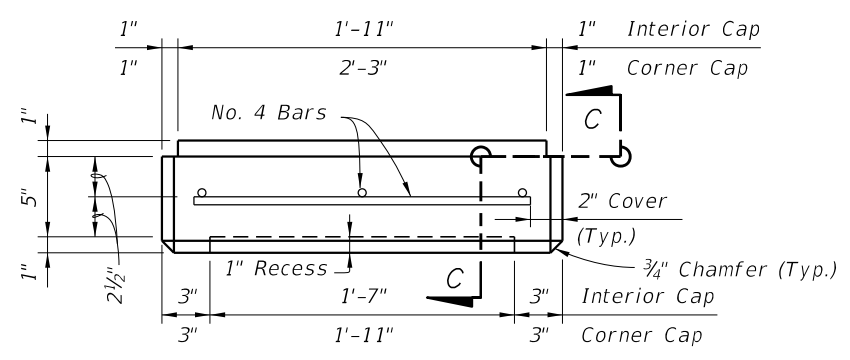
PRECAST SOUND BARRIERS

INDEX NO.	SHEET NO.
5200	13

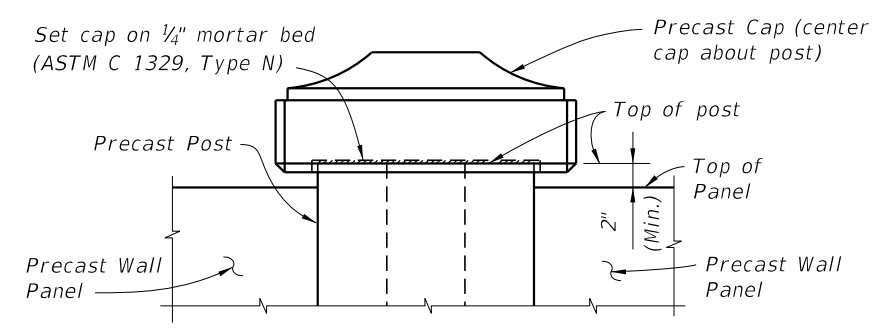
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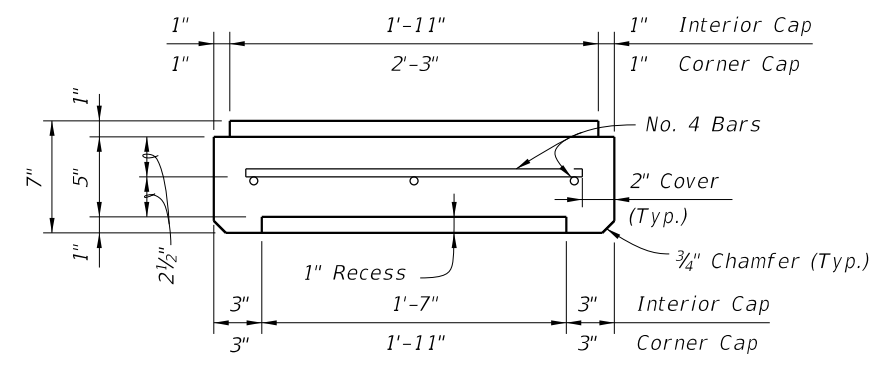
PLAN VIEW
 (Type "A" Cap Shown, Type "B" & "C" Caps Similar)



VIEW A-A SHOWN, VIEW B-B SIMILAR
 (Type "A" Cap Shown, Type "B" & "C" Caps Similar)

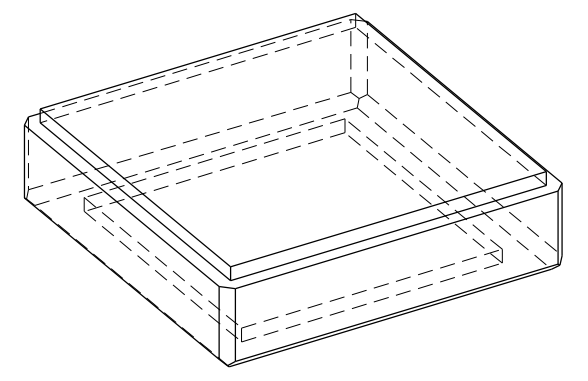


CAP PLACEMENT DETAIL
 (Type "B" Cap Shown, Type "A" & "C" Caps Similar)

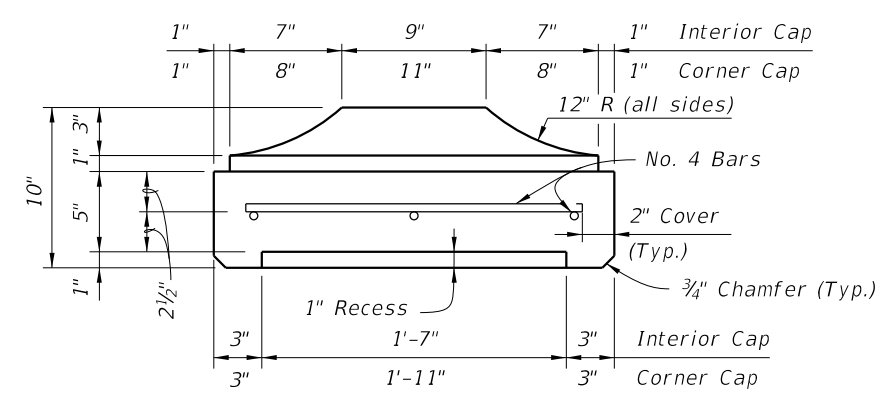


SECTION C-C

TYPE "A" CAP DETAILS

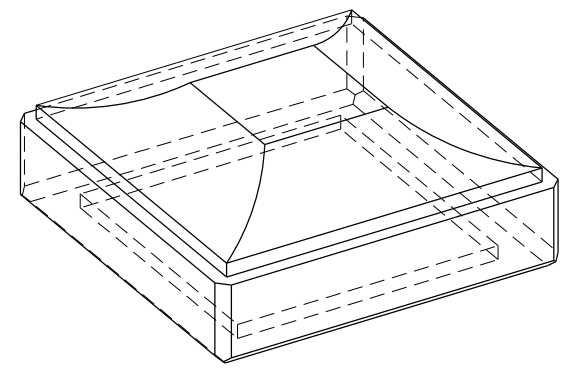


PICTORIAL VIEW

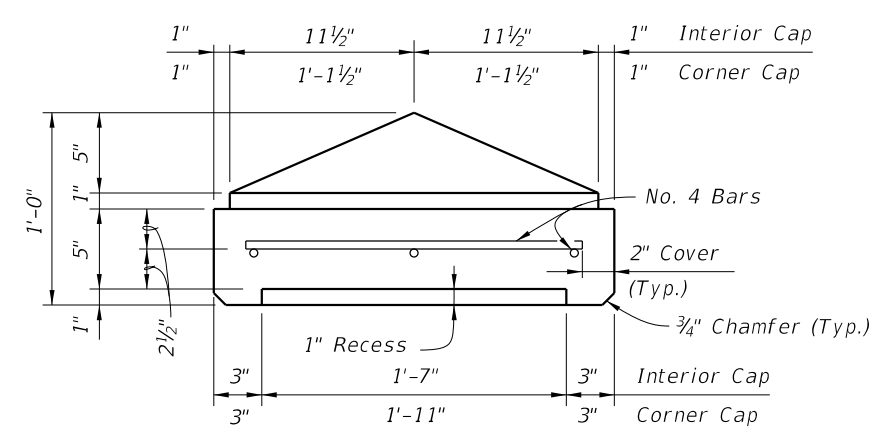


SECTION C-C

TYPE "B" CAP DETAILS

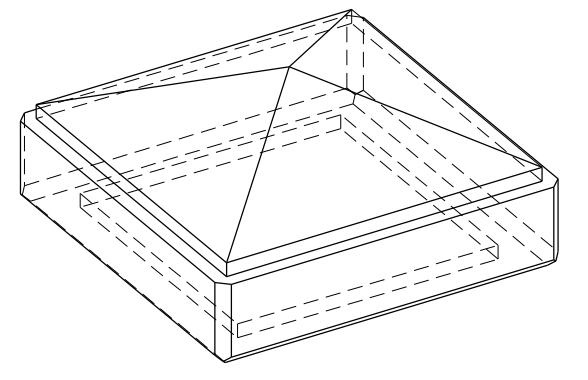


PICTORIAL VIEW



SECTION C-C

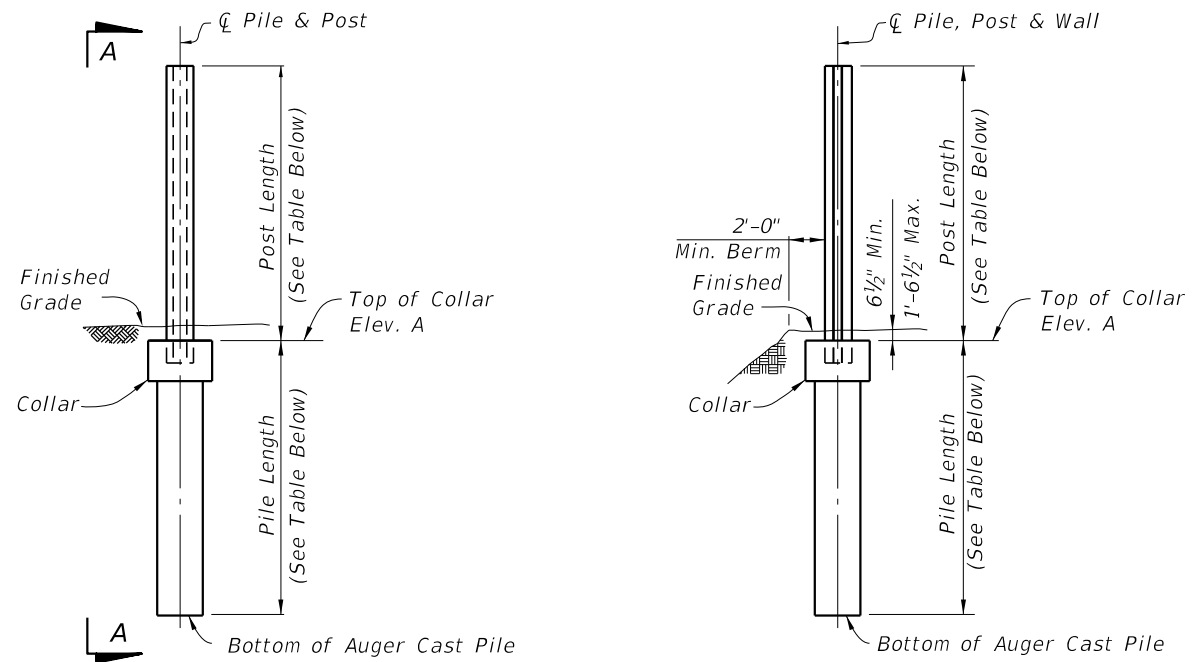
TYPE "C" CAP DETAILS



PICTORIAL VIEW

PRECAST POST CAPITAL

LAST REVISION	DESCRIPTION:	 FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO.	SHEET NO.
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PILE/POST ELEVATION

VIEW A-A

NOTES:

Bars P1, P2, P3, P5, P6 P7 & P8 are #4 bars.

Bars P5 & P6 are only used in 90° Corner Posts.

Bars P7, P8, D & E are only used in 45° Corner Posts.

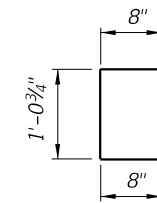
Bars P9 & P10 are used in the C-I-P Collar Options, and are #5 bars.

For Bar Designations, see Sheet Nos. 9 - 12.

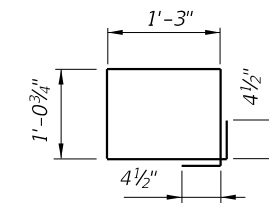
BAR BENDING DETAILS

All bar dimensions in bending diagrams are out-to-out. All bars not shown in the bending diagrams are straight.

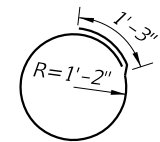
POST & PILE (#4 Bars)



BAR P1
Bar Length = 2'-5"

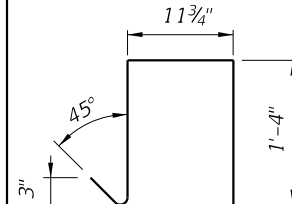


BAR P2
Bar Length = 5'-5"

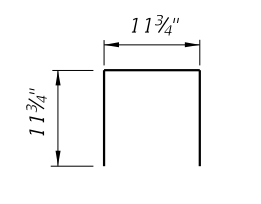


BAR P3
Bar Length = 8'-7"

90° CORNER POST & PILE (#4 Bars)

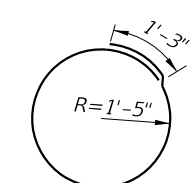


BAR P5
Bar Length = 4'-0"

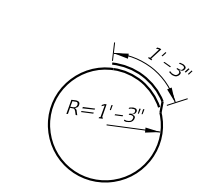


BAR P6
Bar Length = 2'-11 1/4"

CAST-IN-PLACE COLLAR (#5 Bars)

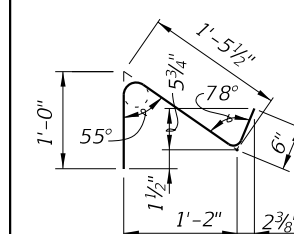


BAR P9
Bar Length = 10'-2"

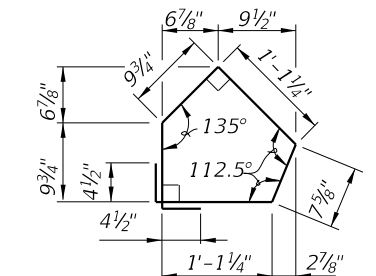


BAR P10
Bar Length = 9'-2"

45° CORNER POST & PILE (#4 Bars)



BAR P7 (POST)
Bar Length = 2'-8"



BAR P8 (PILE)
Bar Length = 5'-0 1/4"

TABLE 1 - WIND SPEED = 110 MPH

POST AND PILE DIMENSIONS			TABLE OF REINFORCING STEEL																			
WALL TYPE	POST LENGTH WITHOUT CAP	POST LENGTH WITH CAP	PILE LENGTH								PILE/POST REINFORCING											
			N = 10 to 40 Med. Dense Granular Soil				N = 4 to 9 Loose Granular Soil				10'-0" POST SPACING					20'-0" POST SPACING						
			10'-0" POST SPACING		20'-0" POST SPACING		10'-0" POST SPACING		20'-0" POST SPACING		BARS A	BARS B	BARS D	BARS E	BARS A	BARS B	BARS D	BARS E				
			30" O	36" O	30" O	36" O	30" O	36" O	30" O	36" O	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'
A1	12'-0 1/2"	12'-2 1/2"	10	10	14	13	11	10	14	13	#4	#4	11'-5"	#4	#4	11'-5"	#4	#4	8'-5"	#5	#5	9'-2"
B1	13'-0 1/2"	13'-2 1/2"	11	10	14	13	11	10	15	14	#4	#4	12'-5"	#4	#4	11'-5"	#5	#5	11'-2"	#5	#5	9'-2"
C1	14'-0 1/2"	14'-2 1/2"	11	10	15	14	12	11	15	14	#4	#4	13'-5"	#4	#4	11'-5"	#5	#5	11'-2"	#6	#6	10'-9"
D1	15'-0 1/2"	15'-2 1/2"	12	11	16	14	12	11	16	15	#4	#4	13'-5"	#4	#4	11'-5"	#5	#5	11'-2"	#6	#6	10'-9"
E1	16'-0 1/2"	16'-2 1/2"	12	11	16	15	13	12	17	15	#4	#4	13'-5"	#5	#5	14'-2"	#6	#6	12'-9"	#7	#7	12'-4"
F1	17'-0 1/2"	17'-2 1/2"	13	12	17	15	13	12	17	16	#4	#4	13'-5"	#5	#5	14'-2"	#6	#6	12'-9"	#7	#7	12'-4"
G1	18'-0 1/2"	18'-2 1/2"	13	12	17	16	13	13	18	17	#5	#5	16'-2"	#5	#5	14'-2"	#6	#6	12'-9"	#8	#8	13'-10"
H1	19'-0 1/2"	19'-2 1/2"	13	13	18	17	14	13	18	17	#5	#5	16'-2"	#6	#6	15'-9"	#7	#7	14'-4"	#8	#8	13'-10"
I1	20'-0 1/2"	20'-2 1/2"	14	13	18	17	14	13	19	18	#5	#5	16'-2"	#6	#6	15'-9"	#7	#7	14'-4"	#8	#8	13'-10"
J1	21'-0 1/2"	21'-2 1/2"	14	13	19	17	15	14	19	18	#5	#5	16'-2"	#6	#6	15'-9"	#7	#7	14'-4"	#9	#9	15'-4"
K1	22'-0 1/2"	22'-2 1/2"	15	14	19	18	15	14	20	19	#6	#6	18'-9"	#7	#7	18'-4"	#8	#8	15'-10"	#9	#9	15'-4"

PILE DEPTH & REINFORCING SUMMARY

LAST REVISION 01/01/12	DESCRIPTION:		FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO. 5200	SHEET NO. 15
REVISION						

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TABLE 2 - WIND SPEED = 130 MPH

POST AND PILE DIMENSIONS											TABLE OF REINFORCING STEEL											
WALL TYPE	POST LENGTH WITHOUT CAP	POST LENGTH WITH CAP	PILE LENGTH								PILE/POST REINFORCING											
			N = 10 to 40 Med. Dense Granular Soil				N = 4 to 9 Loose Granular Soil				10'-0" POST SPACING					20'-0" POST SPACING						
			10'-0" POST SPACING		20'-0" POST SPACING		10'-0" POST SPACING		20'-0" POST SPACING		BARS A	BARS B		BARS D	BARS E		BARS A	BARS B		BARS D	BARS E	
			30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE
A2	12'-0 1/2"	12'-2 1/2"	12	11	16	15	12	11	16	15	#4	#4	11'-5"	#4	#4	9'-5"	#5	#5	9'-2"	#6	#6	8'-9"
B2	13'-0 1/2"	13'-2 1/2"	12	12	16	15	13	12	17	16	#4	#4	11'-5"	#5	#5	12'-2"	#5	#5	9'-2"	#6	#6	8'-9"
C2	14'-0 1/2"	14'-2 1/2"	13	12	17	16	13	12	18	16	#4	#4	11'-5"	#5	#5	12'-2"	#6	#6	10'-9"	#7	#7	10'-4"
D2	15'-0 1/2"	15'-2 1/2"	13	13	18	16	14	13	18	17	#4	#4	11'-5"	#5	#5	12'-2"	#6	#6	10'-9"	#7	#7	10'-4"
E2	16'-0 1/2"	16'-2 1/2"	14	13	19	17	14	13	19	18	#5	#5	13'-2"	#6	#6	13'-9"	#7	#7	12'-4"	#8	#8	11'-10"
F2	17'-0 1/2"	17'-2 1/2"	14	13	19	18	15	14	20	18	#5	#5	13'-2"	#6	#6	13'-9"	#7	#7	12'-4"	#8	#8	11'-10"
G2	18'-0 1/2"	18'-2 1/2"	15	14	20	18	15	14	20	19	#5	#5	13'-2"	#6	#6	13'-9"	#8	#8	13'-10"	#9	#9	12'-4"
H2	19'-0 1/2"	19'-2 1/2"	15	14	20	19	16	15	21	20	#6	#6	15'-9"	#7	#7	15'-4"	#8	#8	13'-10"	#9	#10	11'-7"
I2	20'-0 1/2"	20'-2 1/2"	16	15	21	19	16	15	22	20	#6	#6	15'-9"	#7	#7	15'-4"	#8	#8	12'-10"	#10	#10	13'-7"
J2	21'-0 1/2"	21'-2 1/2"	16	15	22	20	17	16	22	21	#6	#6	15'-9"	#7	#7	15'-4"	#9	#9	14'-4"	#10	#11	12'-10"
K2	22'-0 1/2"	22'-2 1/2"	17	16	22	21	17	16	23	21	#7	#7	17'-4"	#8	#8	16'-10"	#9	#9	14'-4"	#11	#11	13'-10"

TABLE 3 - WIND SPEED = 150 MPH

POST AND PILE DIMENSIONS											TABLE OF REINFORCING STEEL											
WALL TYPE	POST LENGTH WITHOUT CAP	POST LENGTH WITH CAP	PILE LENGTH								PILE/POST REINFORCING											
			N = 10 to 40 Med. Dense Granular Soil				N = 4 to 9 Loose Granular Soil				10'-0" POST SPACING					20'-0" POST SPACING						
			10'-0" POST SPACING		20'-0" POST SPACING		10'-0" POST SPACING		20'-0" POST SPACING		BARS A	BARS B		BARS D	BARS E		BARS A	BARS B		BARS D	BARS E	
			30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	30" ○	36" ○	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE
A3	12'-0 1/2"	12'-2 1/2"	13	12	18	16	14	13	18	17	#4	#4	9'-5"	#5	#5	10'-2"	#6	#6	8'-9"	#6	#7	7'-4"
B3	13'-0 1/2"	13'-2 1/2"	14	13	19	17	14	13	19	18	#4	#4	9'-5"	#5	#5	10'-2"	#6	#6	8'-9"	#7	#7	8'-4"
C3	14'-0 1/2"	14'-2 1/2"	14	13	19	18	15	14	20	19	#5	#5	11'-2"	#6	#6	11'-9"	#7	#7	10'-4"	#8	#8	9'-10"
D3	15'-0 1/2"	15'-2 1/2"	15	14	20	19	16	14	21	19	#5	#5	11'-2"	#6	#6	11'-9"	#7	#7	10'-4"	#8	#9	9'-4"
E3	16'-0 1/2"	16'-2 1/2"	16	14	21	19	16	15	22	20	#5	#5	11'-2"	#6	#6	11'-9"	#8	#8	10'-10"	#9	#9	10'-4"
F3	17'-0 1/2"	17'-2 1/2"	16	15	22	20	17	16	22	21	#6	#6	13'-9"	#7	#7	13'-4"	#8	#8	10'-10"	#9	#10	9'-7"
G3	18'-0 1/2"	18'-2 1/2"	17	16	22	21	17	16	23	21	#6	#6	12'-9"	#7	#7	13'-4"	#9	#9	12'-4"	#10	#10	11'-7"
H3	19'-0 1/2"	19'-2 1/2"	17	16	23	21	18	17	24	22	#6	#6	12'-9"	#8	#8	14'-10"	#9	#9	12'-4"	#11	#11	11'-9"
I3	20'-0 1/2"	20'-2 1/2"	18	17	24	22	18	17	25	23	#7	#7	15'-4"	#8	#8	14'-10"	#9	#10	11'-7"	#11	#14	10'-0"
J3	21'-0 1/2"	21'-2 1/2"	18	17	24	23	19	18	25	23	#7	#7	15'-4"	#9	#9	16'-4"	-	-	-	-	-	-
K3	22'-0 1/2"	22'-2 1/2"	19	17	25	23	19	18	26	24	#8	#8	16'-10"	#9	#9	16'-4"	-	-	-	-	-	-

PILE DEPTH & REINFORCING SUMMARY

LAST REVISION 01/01/12	DESCRIPTION:		FDOT DESIGN STANDARDS FY 2012/2013	PRECAST SOUND BARRIERS	INDEX NO. 5200	SHEET NO. 16
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