# *NOTES*

- 1. Work this Index with the Noise Wall Data Tables, and Wall Control Drawings in the Plans.
  - A. Prestressed concrete posts with equivalent strength resistance may be substituted for conventionally reinforced precast posts shown in this index when approved as part of a Producer's Quality Control Plan.
  - B. Producer shop drawings for prestressed concrete post designs must be approved by the State Structures Design Office prior to inclusion in the Quality Control Plan.
- 2. Construct Noise Walls in accordance with the requirements of Specification Section 534, and Augers Cast Piles in accordance with Specification Section 455.
- 3. Field verify the location of all overhead and underground services shown in the Wall Control Drawings.
- 4. Wall Height is the nominal height of the walls above finished grade. The Wall Embedment Depth for design is 1'-0". The actual embedment depth may vary plus or minus 6" along the length of the wall.
- 5. Post Spacing in this Index are nominal, and are measured from centerline to centerline of the auger cast piles. Actual post spacing may vary as shown in the Wall Control Drawings.
- 6. Panels:
  - A. The sum of the individual stacked panel heights is the Wall Height plus 1'-0" (embedment depth).
  - B. Where special graphics are required, locate the horizontal panel joints outside of the graphics. Where possible, hold horizontal panel joints at a constant elevation.
  - C. Side Installed Panels are only permitted when reduced overhead clearance between posts prohibits installing panels from the top.
    - 1. For Flush Face panels, install panel into posts from the roadway (front face) of the wall. Recessed panels may be installed from the back face of the wall.
    - 2. After panels are installed and centered between posts, grout between both panel ends and the adjoining posts (see Sheets 4 and 5 for details).
  - D. Individual panel heights should be between 6'-0" and 12'-0" tall. The minimum panel height is 4'-0" and may be used where overhead clearance is limited, or where graphic panels are required on shorter walls.
- 7. Concrete And Grout:
  - A. Concrete Class and Compressive Strength for:
    - 1. Precast Panels, Posts, and Post Caps: Class IV
    - 2. Cast-In-Place Collars: Class IV
  - B. Minimum Compressive Strength for form removal and handling of posts and panels:
    - 1. 2,500 psi for horizontally cast post and panels
    - 2,000 psi for vertically cast panels or when tilt-up tables are used for horizontally cast panels.
  - C. Grout for Auger Cast Piles:
    - 1. Maximum Working Compressive Strength = 2,000 psi
    - 2. Minimum 28 day strength = 5,000 psi
- 8. Reinforcing Steel:
  - A. In addition to the requirements of Specification Section 415, tie post and pile stirrups at the following locations as a minimum:
    - 1. Post Stirrups Tie at all four corner bars and at every third interior bar intersection.
    - 2. Pile Stirrups Tie to the main vertical reinforcing at alternate intersections for circular configurations and at the four corners and at every third interior bar intersection for rectangular configurations.
  - B. Provide 2" concrete cover unless noted otherwise.
- 9. Casting Tolerances for precast panels and posts:
  - A. Overall Height and Width:  $+/-\frac{1}{4}$ "
  - B. Thickness:  $+/-\frac{1}{4}$ "
  - C. Plane of side mold: +/- 1/16"
  - D. Openings: +/- ½"

DESCRIPTION:

- E. Out of Square: 1/8" per 6 ft., but not more than 3/8"total along any side
- F. Warping: 1/16" per foot distance to nearest corner
- G. Bowing: 1/240 panel dimension
- H. Surface Smoothness for Type "A" Smooth Surface Texture Option: +/- 1/16"

10. Provide Plain or Fiber Reinforced Bearing Pads meeting the requirements of Specification Section 932 for Ancillary Structures.

2. Plain Pads may be substituted for Fiber Reinforced Pads when

sufficient bearing area is available on the concrete collar for the

b. 20' Post Spacing and Wall Height < 17 feet: 4"x 4"x \frac{1}{2}"

c. 20' Post Spacing and Wall Height ≥ 17 feet: 4"x 5"x ½"

B. At panel bearing points between stacked panels, use Plain or Fiber Reinforced

1. 4"x 4"x ½" Fiber Reinforced Pads;

a. 10' Post Spacing:  $4''x \ 4''x \ \frac{1}{2}''$ 

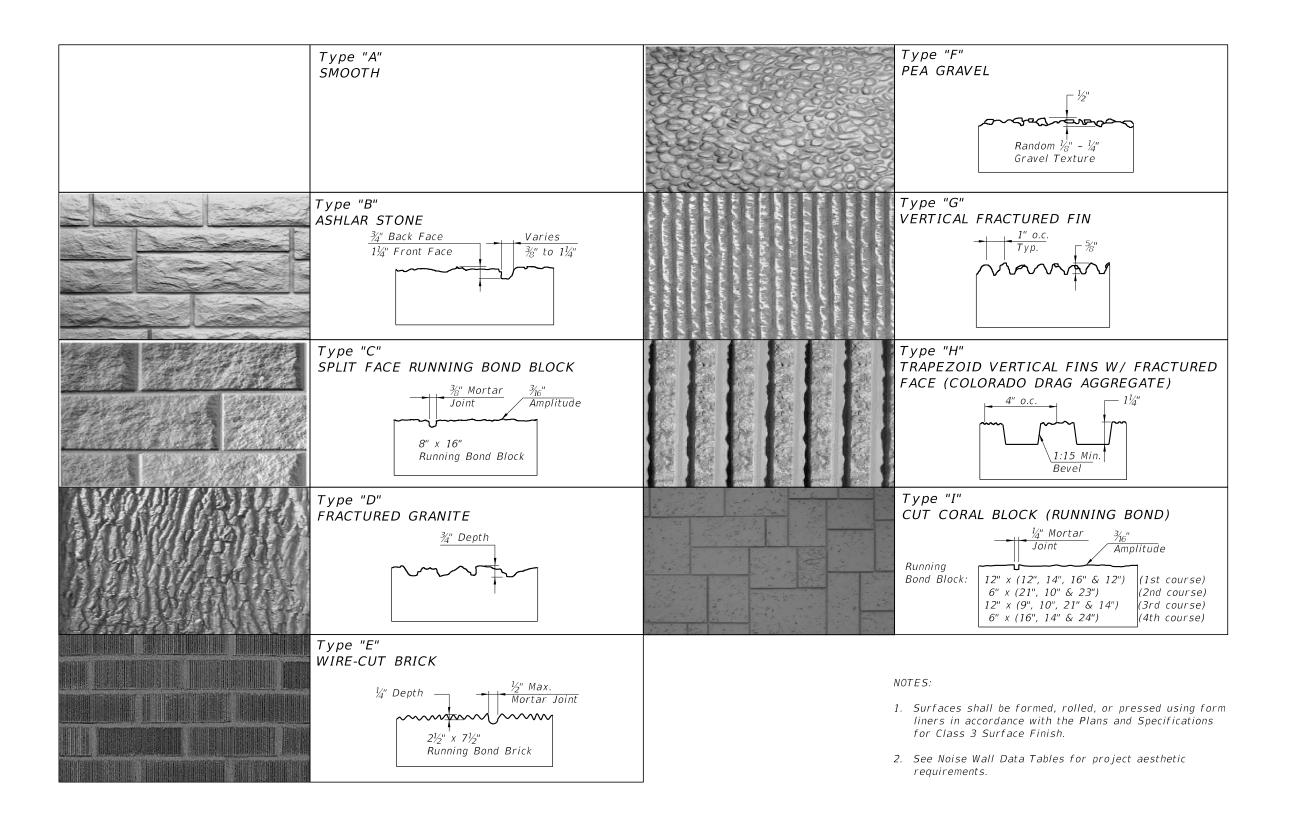
A. For Collar Bearing Points provide:

Bearing Pads.

INDEX SHEET

GENERAL NOTES

10/25/2017



TEXTURE OPTIONS

REVISION 07/01/13

DESCRIPTION:

FDOT

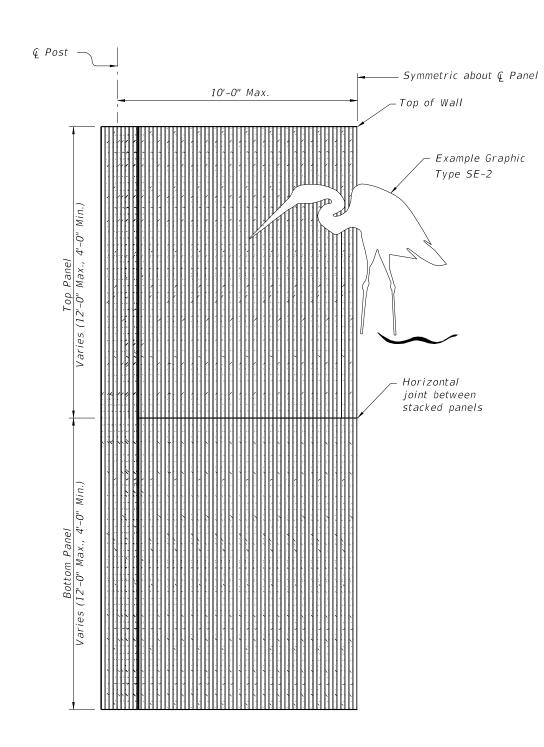
FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

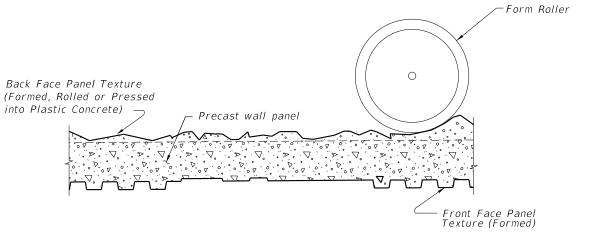
INDEX 534-200

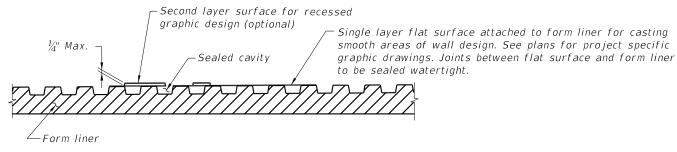
2 of 16

SHEET



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





TYPICAL FORMING DETAIL (Front Face Panel Texture Type "H" shown) (Back Face Panel Texture Type "D" shown) (Post Forming Details Similar)

### NOTES:

- 1. Submit specific form liner samples for approval by the Engineer.
- 2. Textures and graphics shown are for demonstration purposes only. See Noise Wall Data Tables in the plans for project specific texture and graphic requirements.

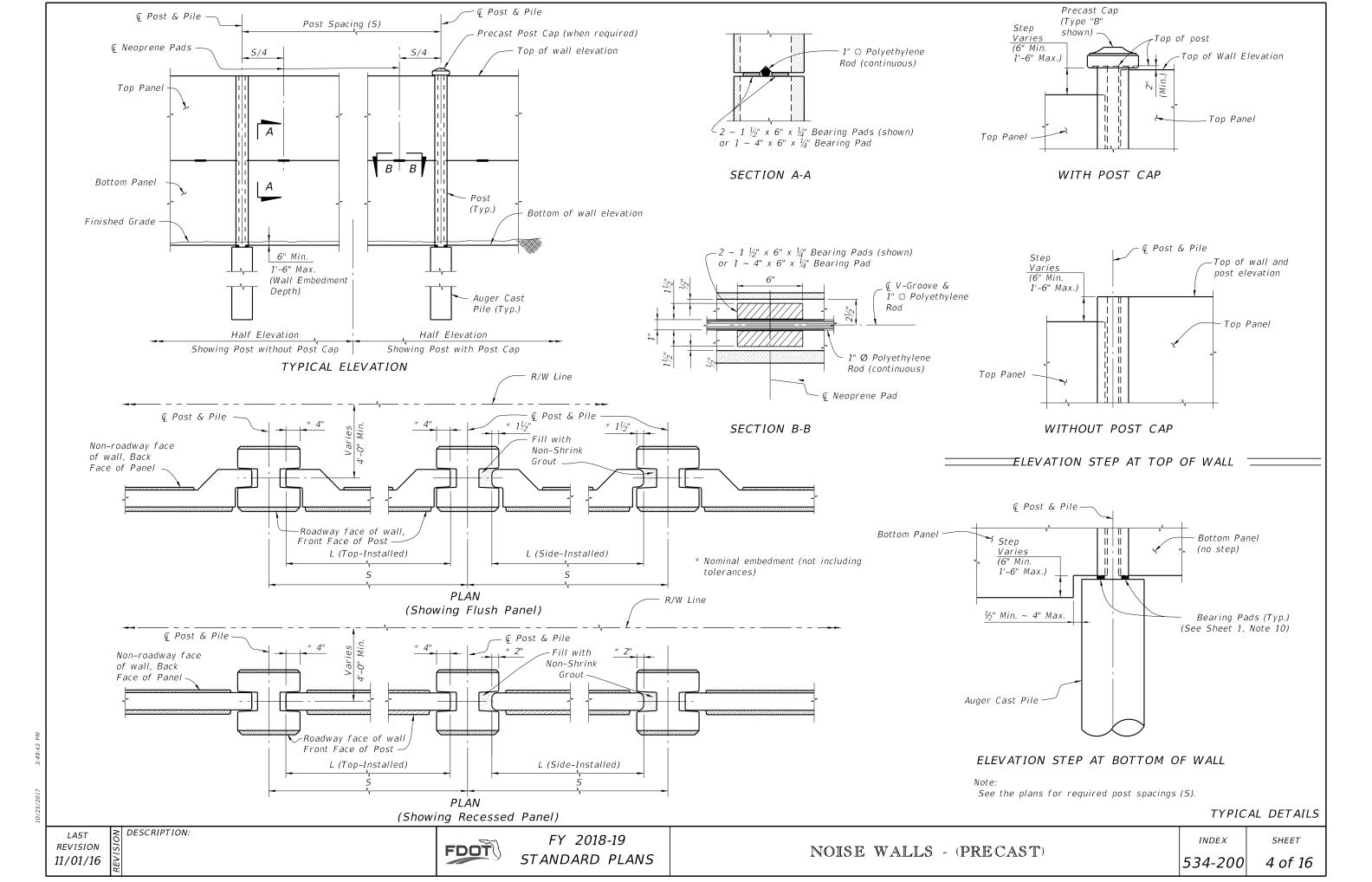
GRAPHICS & TEXTURE DETAILS

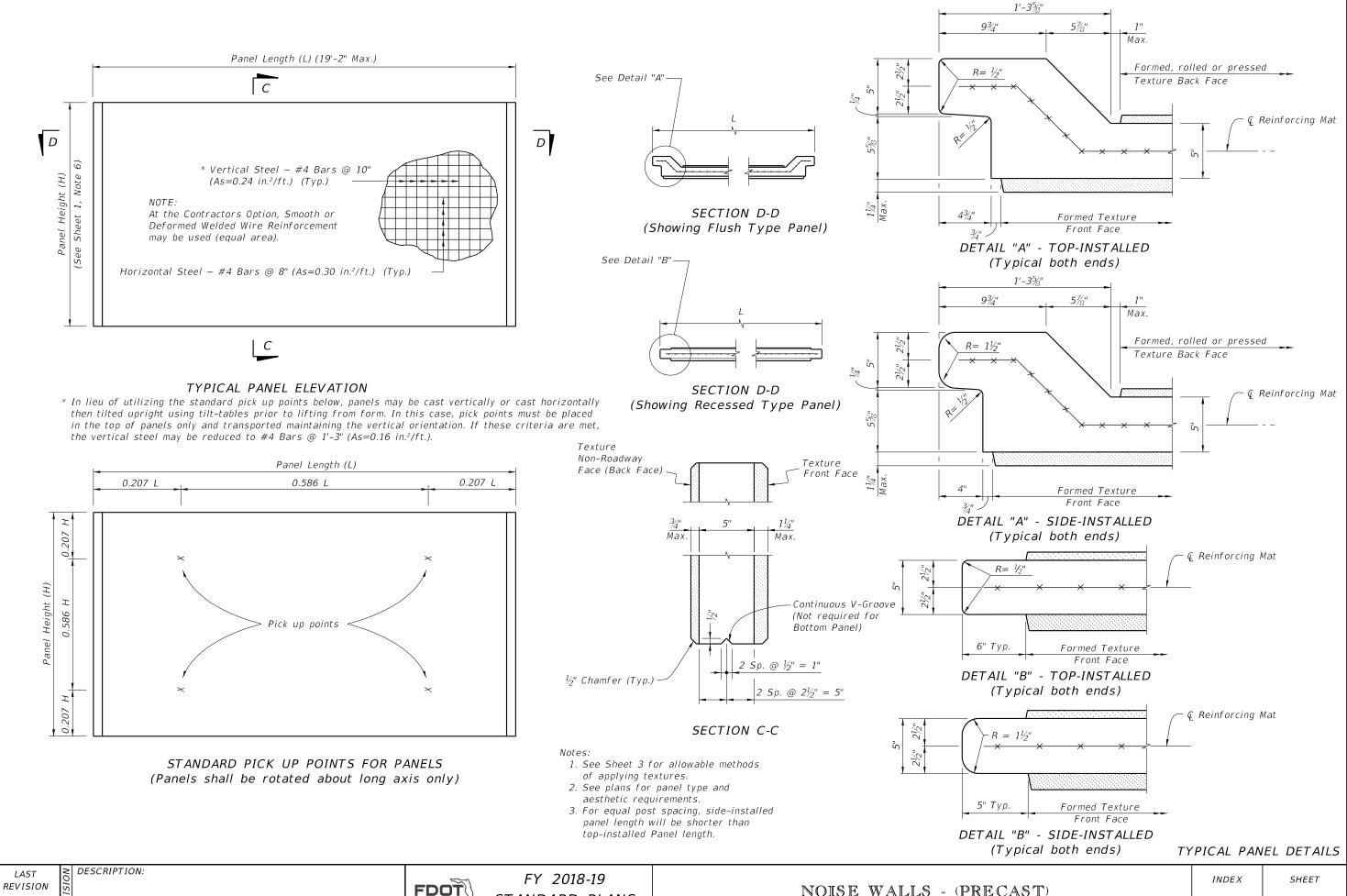
REVISION 07/01/14

DESCRIPTION:

FY 2018-19 STANDARD PLANS

SHEET





07/01/15

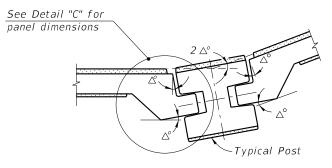
FDOT

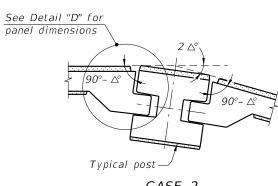
STANDARD PLANS

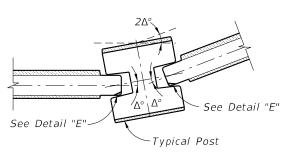
NOISE WALLS - (PRECAST)

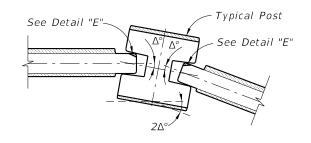
534-200

5 of 16





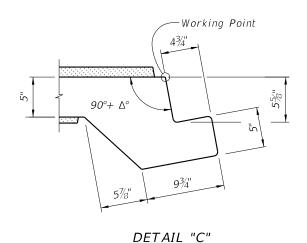


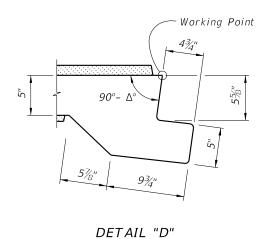


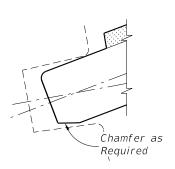
CASE 1 (Interior Angle)

CASE 2 (Exterior Angle)

CASE 1 CASE 2 (Exterior Angle) (Interior Angle)







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

The shop drawings shall include specific pivoting details of panel ends at locations where the deflection angle (2 $\Delta$ °) between panels exceeds 7°.

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

PIVOTING DETAILS -(Flush Type Panel)

- PIVOTING DETAILS -(Recessed Type Panel)

TYPICAL PANEL DETAILS

REVISION 07/01/13

DESCRIPTION:

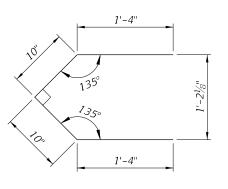
FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

INDEX 534-200

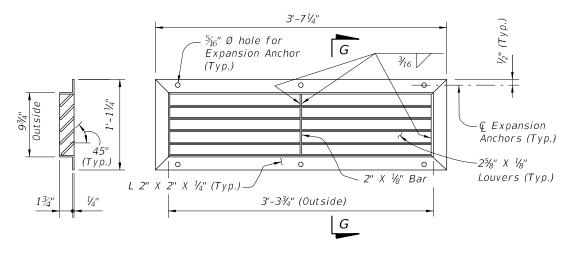
SHEET 6 of 16

DRAINAGE HOLES TYPES A, B, C & D (Front Face of Wall Shown) (Two Holes Shown, One Hole Similar)



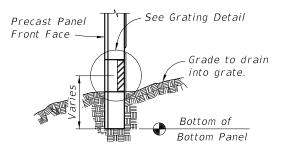
BAR A2 (Pair) Bar Length = 4'-4''

🗆 BAR BENDING DETAILS (#3 Bars) 💳



SECTION G-G





SECTION F-F

## GRATING NOTES:

- 1. Grating shall be ASTM A36 steel welded in accordance with the current edition of ANSI/AWS D1.1 Steel Welding Code. Hot-dip galvanize grate after fabrication in accordance with Specification
- 2. Expansion Anchors: Use  $\frac{1}{4}$ " Ø x 2" min. corrosion resistant (zinc/aluminum alloy or stainless steel) expansion anchors to connect grates to panels.
- 3. Blockout textured concrete surface for a strip 2" wide around drainage hole to enable secure attachment of the drainage grate.

DRAINAGE HOLE DETAILS

**REVISION** 11/01/17

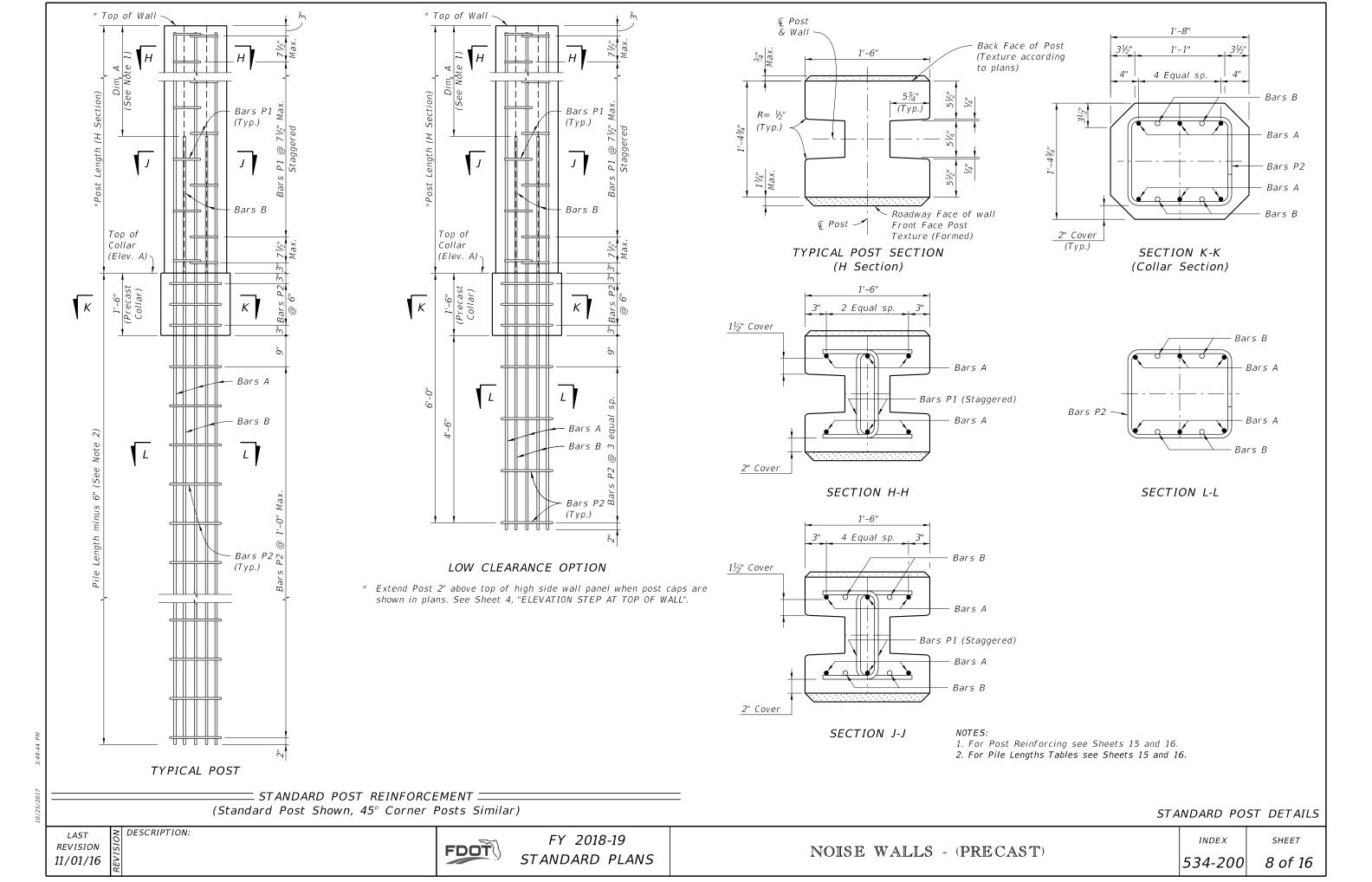
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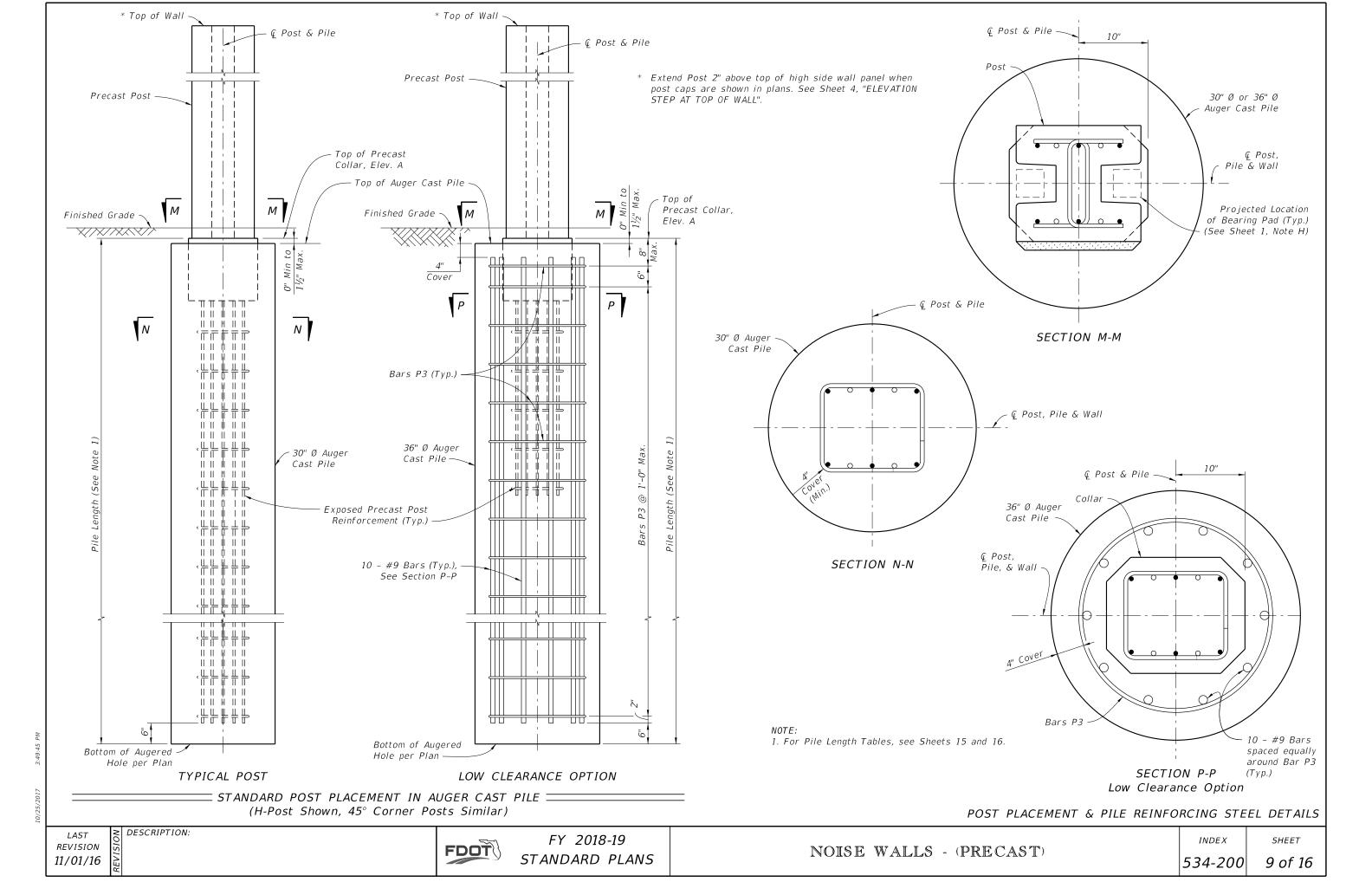
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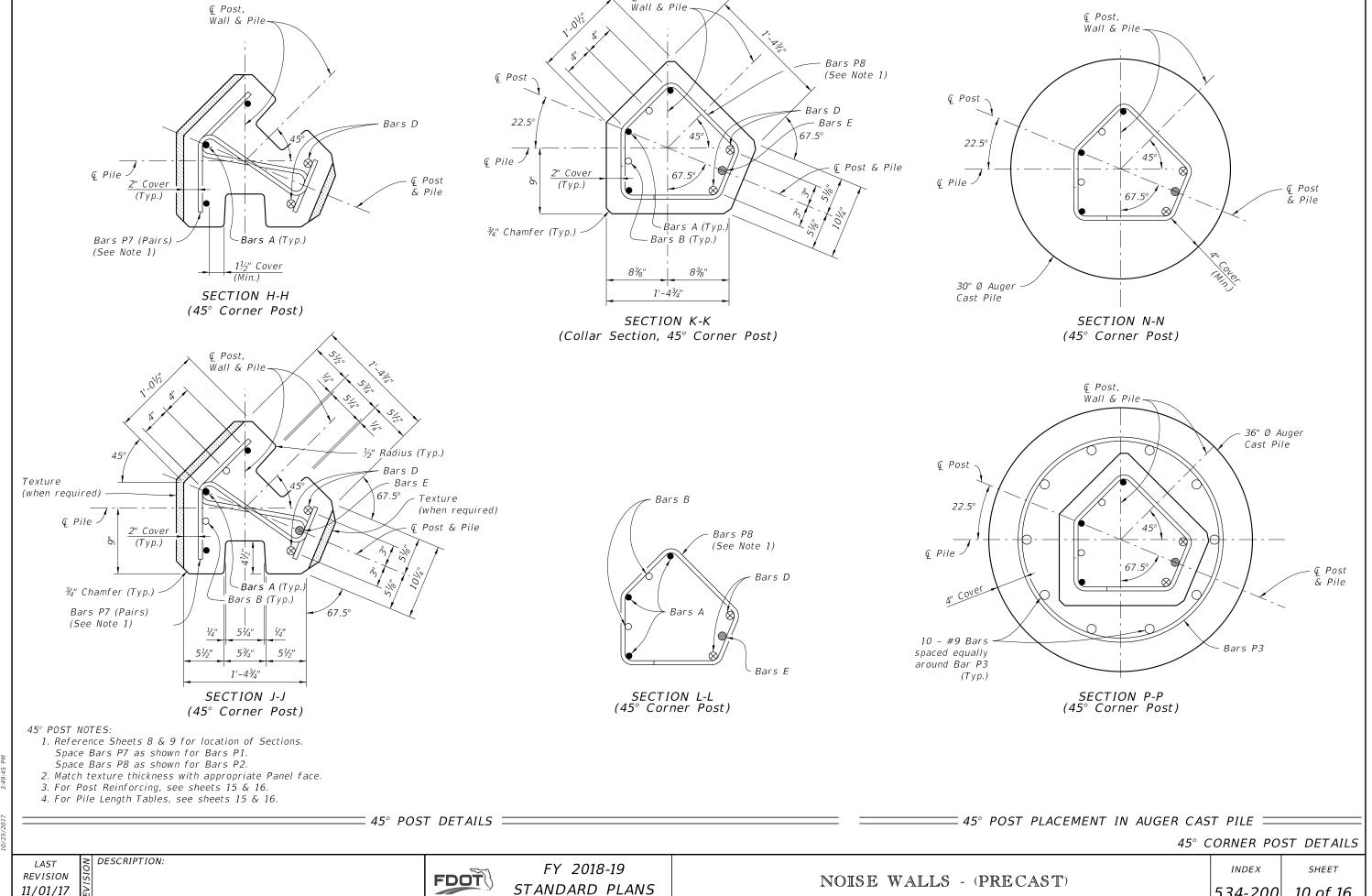
FY 2018-19 STANDARD PLANS

INDEX SHEET 534-200

7 of 16



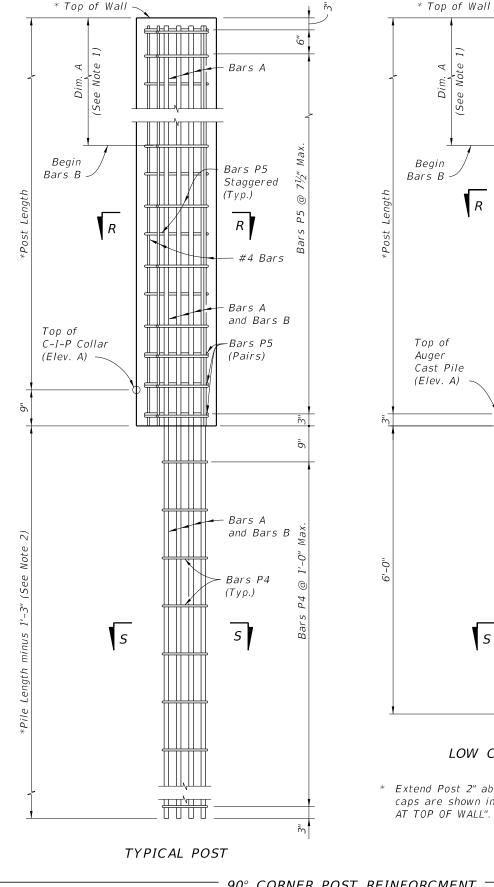


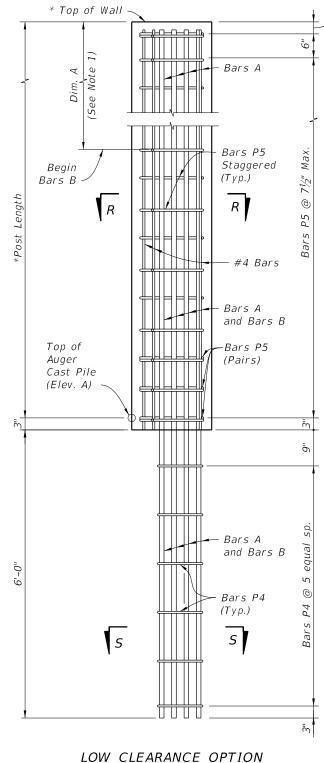


|534-200| 10 of 16

€ Post,

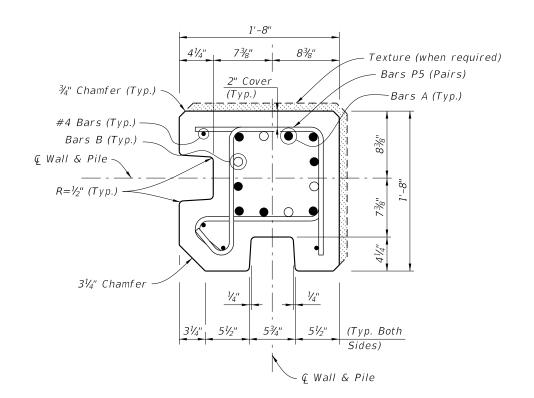
11/01/17



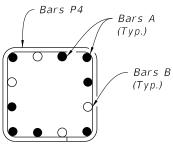


\* Extend Post 2" above top of high side wall panel when post caps are shown in plans. See Sheet 4, "ELEVATION STEP

 $\equiv$  90 $^{\circ}$  CORNER POST REINFORCMENT  $\equiv$ (Post Surface Features Not Shown For Clarity)



# SECTION R-R



SECTION S-S

### 90° CORNER POST NOTES:

- 1. For Post Reinforcing, see Sheets 15 and 16.
- 2. For Pile Length Tables, see Sheets 15 and 16.
- 3. Reduce typical panel length or adjust pile spacing at each 90° Corner Post.
- 4. Match texture thickness with appropriate Panel face.

90° CORNER POST DETAILS

**REVISION** 11/01/16

DESCRIPTION:

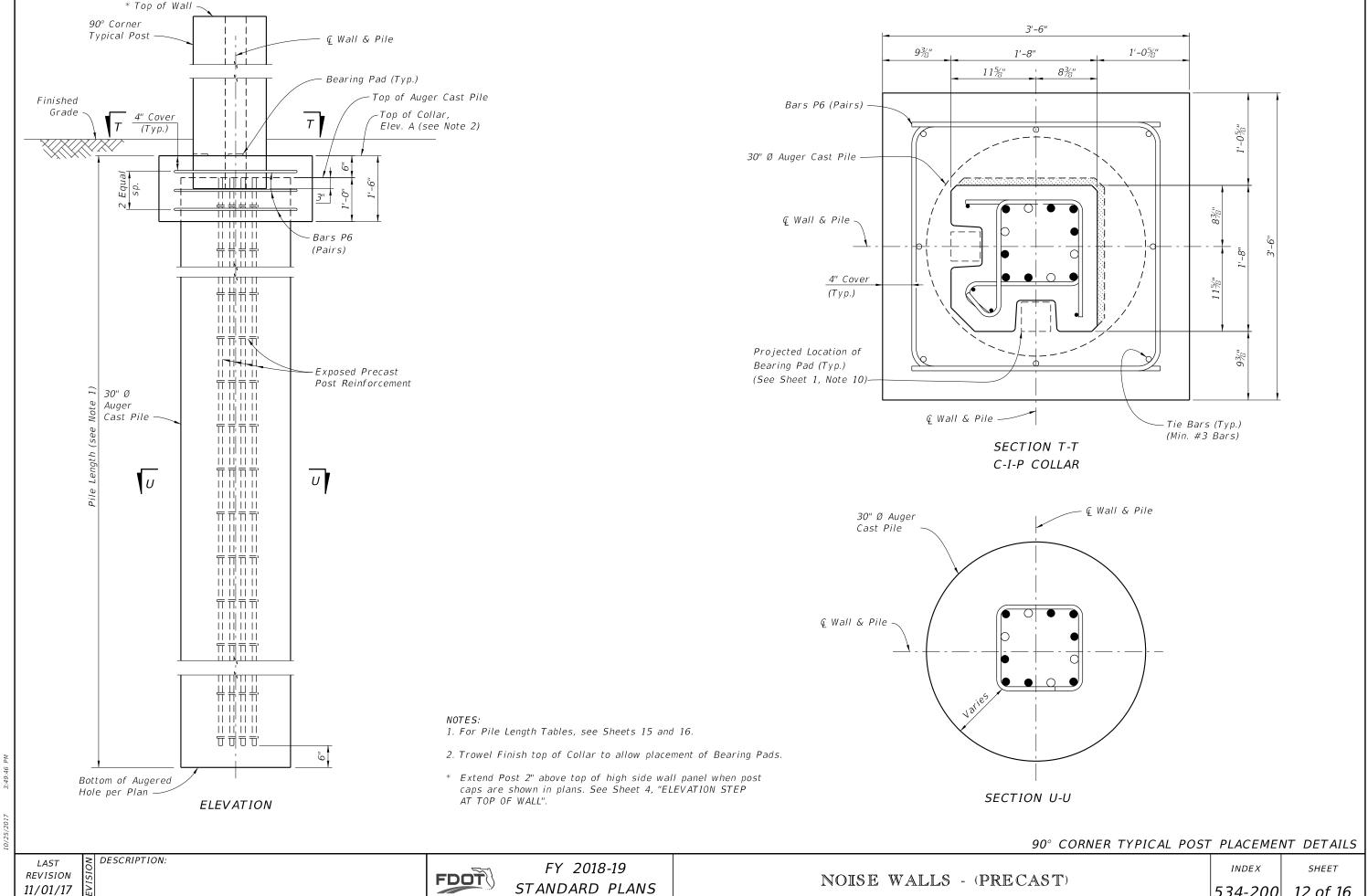
FDOT

FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

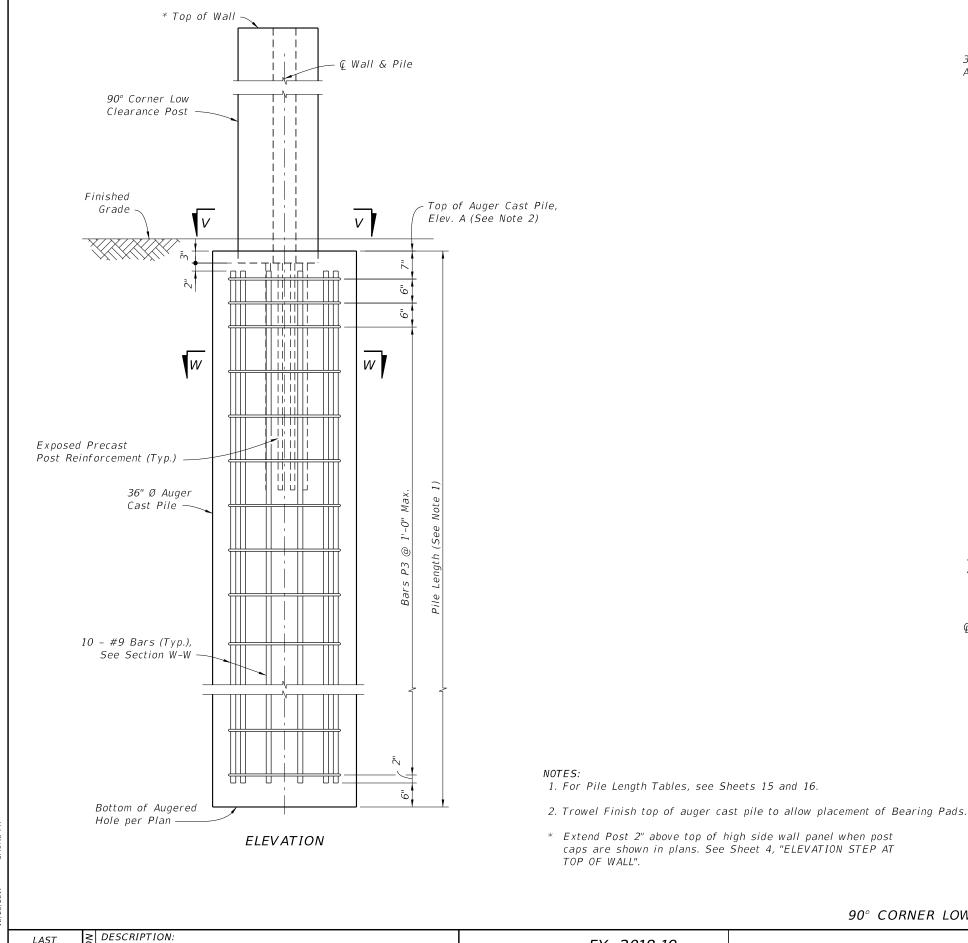
INDEX SHEET

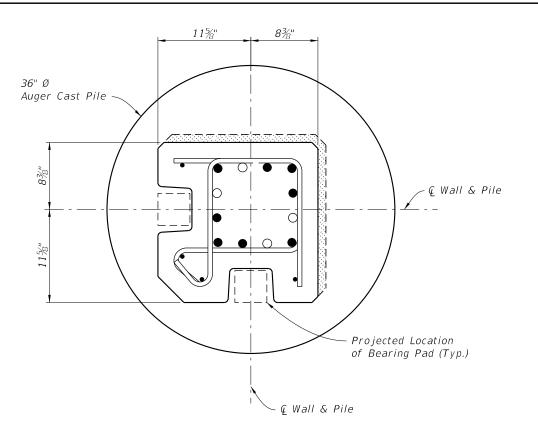
534-200 11 of 16



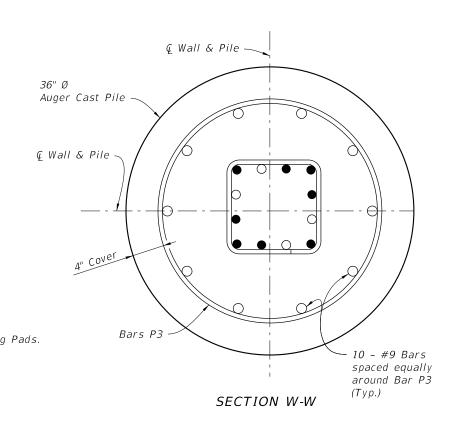
STANDARD PLANS

|534-200| 12 of 16





SECTION V-V



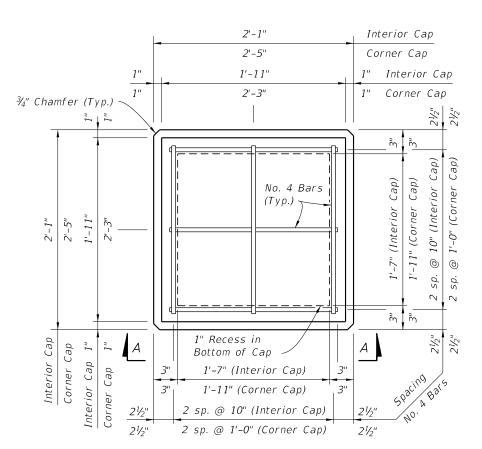
90° CORNER LOW CLEARANCE POST PLACEMENT & PILE REINFORCING STEEL DETAILS

FDOT

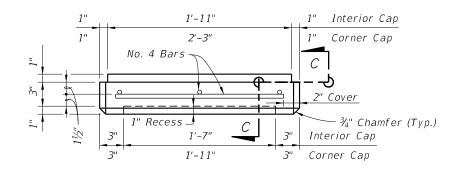
FY 2018-19 STANDARD PLANS

INDEX

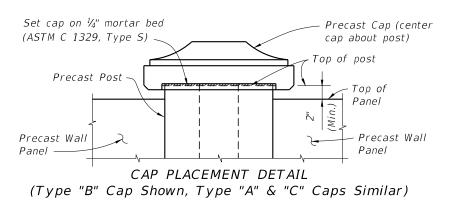
SHEET |534-200| 13 of 16

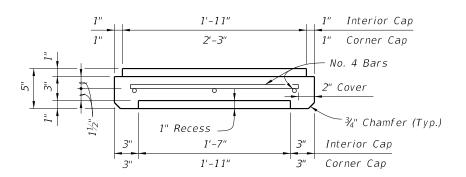


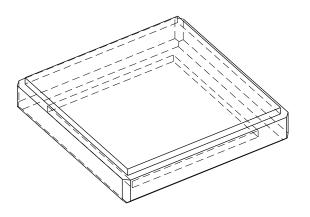
PLAN VIEW (Type "A" Cap Shown, Type "B" & "C" Caps Similar)



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



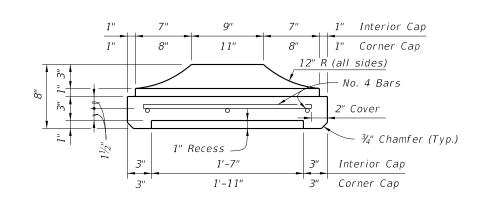


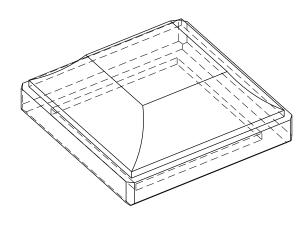


SECTION C-C

PICTORIAL VIEW

= TYPE "A" CAP DETAILS =

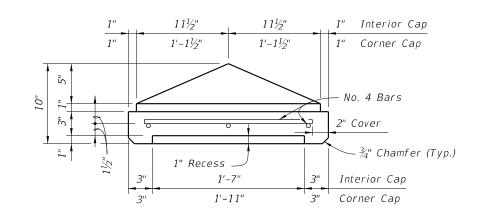


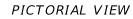


SECTION C-C

PICTORIAL VIEW

TYPE "B" CAP DETAILS =





SECTION C-C

= TYPE "C" CAP DETAILS ==

PRECAST POST CAPITAL

REVISION 07/01/14

DESCRIPTION:

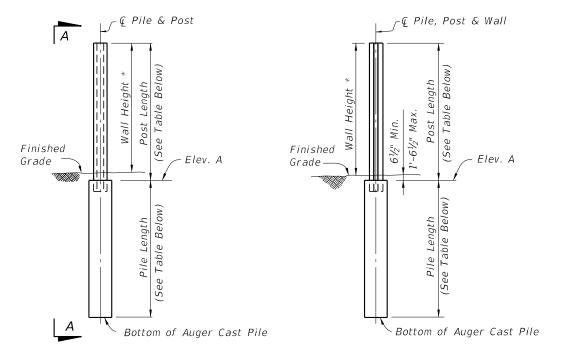
FDOT

FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

INDEX SHEET

|534-200| 14 of 16



\* See Sheet 1, Note 4.

VIEW A-A

PILE/POST ELEVATION

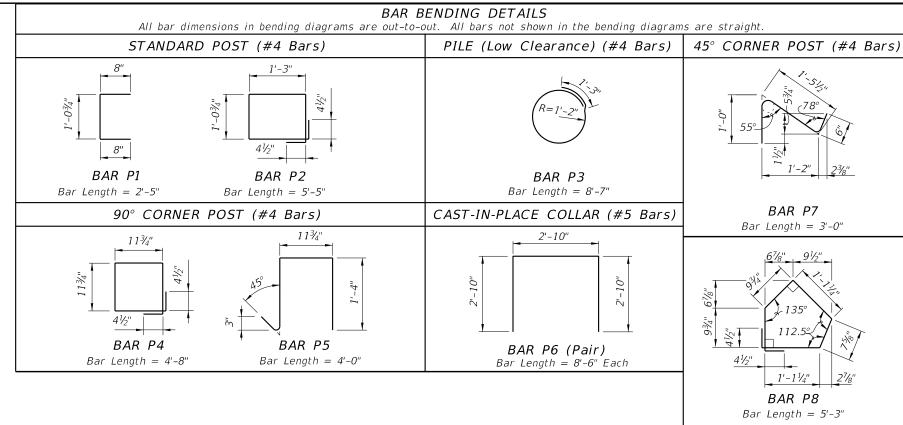


	TABLE 1A - TABLE OF POST REINFORCING STEEL														TABLE 1B - PILE LENGTHS (Feet) - WIND SPEED = 130 MPH																
NOMINAL WALL HEIGHT (Feet)	POST LENGTHS WIND SPEED = 130 MPH												10'-0" POST SPACING 20'-0" POST SPACING																		
	WITHOUT CAP	WITH CAP		10'-0" POST SPACING								'-0" SPACING			NOMINAL WALL	H-POSTS			CORNER POSTS				H-P0STS					CORNER	R POSTS	POSTS	
			BARS A	BARS BARS A B		BARS D	BARS E		BARS A	BA	BARS BAF B D		BARS E		HEIGHT (Feet)	SOIL 1		S0IL 2		501	'L 1	501	'L 2	501	!L 1	S0IL 2		SOIL 1		501L 2	
			SIZE SIZE DIM	SIZE	SIZE	DIM 'A'	SIZE SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'		<i>30</i> " ⊘	<i>36</i> " ⊘	30" ⊘	<i>36</i> " ⊘	<i>30</i> " ⊘	36" ⊘	<i>30</i> " ⊘	<i>36</i> " ⊘										
12	13'-0½"	13'-21/2"	#4	#4	7'-11"	#4	#4	9'-11"	#5	#5	9'-8"	#6	#6	9'-4"	12	11	10	10	10	11	10	10	10	15	14	13	12	14	13	13	12
13	14'-0 <sup>1</sup> / <sub>2</sub> "	14'-21/2"	#4	#4	10'-11"	#4	#4	10'-11"	#5	#5	9'-8"	#6	#6	9'-4"	13	12	11	10	10	11	10	10	10	15	14	13	13	15	14	13	12
14	15'-0 <sup>1</sup> / <sub>2</sub> "	15'-2 <sup>1</sup> / <sub>2</sub> "	#4	#4	10'-11"	#5	#5	11'-8"	#6	#6	11'-4"	#7	#7	10'-8"	14	12	11	11	10	12	11	10	10	16	15	14	13	15	14	14	13
15	16'-0 <sup>1</sup> / <sub>2</sub> "	16'-2 <sup>1</sup> / <sub>2</sub> "	#4	#4	10'-11"	#5	#5	12'-8"	#6	#6	11'-4"	#7	#7	10'-8"	15	12	12	11	10	12	11	11	10	16	15	15	13	16	15	14	13
16	17'-0 <sup>1</sup> / <sub>2</sub> "	17'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	13'-8"	#5	#5	12'-8"	#6	#6	11'-4"	#7	#7	10'-8"	16	13	12	11	11	12	12	11	10	17	16	15	14	16	15	15	14
17	18'-0½"	18'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	14'-8"	#5	#5	12'-8"	#7	#7	12'-8"	#7	#8	10'-0"	17	13	12	12	11	13	12	11	11	18	16	16	14	17	16	15	14
18	19'-0 <sup>1</sup> / <sub>2</sub> ''	19'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	14'-8"	#6	#6	14'-4"	#7	#7	12'-8"	#8	#8	12'-0"	18	14	13	12	11	13	12	12	11	18	17	16	15	18	16	15	14
19	20'-0 <sup>1</sup> / <sub>2</sub> "	20'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	14'-8"	#6	#6	14'-4"	#7	#8	12'-0"	#8	#9	11'-3"	19	14	13	12	12	14	13	12	11	19	17	16	15	18	17	16	15
20	21'-0½"	21'-2½"	#6	#6	16'-4"	#6	#6	14'-4"	#8	#7	14'-8"	#9	#8	14'-0"	20	14	13	13	12	14	13	12	12	19	18	17	16	19	17	16	15
21	22'-0½"	22'-2 <sup>1</sup> / <sub>2</sub> "	#6	#6	16'-4"	#6	#6	14'-4"	#8	#8	14'-0"	#9	#10	12'-4"	21	15	14	13	12	14	13	13	12	20	18	17	16	19	18	17	16
22	23'-01/2"	23'-2 <sup>1</sup> / <sub>2</sub> "	#6	#6	16'-4"	#7	#7	16'-8"	#8	#9	13'-3"	#10	#9	15'-3"	22	15	14	14	13	15	14	13	12	20	19	18	17	20	18	17	16

# TABLE NOTE:

- 1. Bars D and Bars E are for 45° Corner Posts only.
- 2. See Contract Plans for project wind speed.
- 3. Soil 1 = Loose Granular Soil, N = 4 to 9.
  - Soil 2 = Medium Dense Granular Soil, N = 10 to 40.

PILE DEPTH & REINFORCING SUMMARY

REVISION 11/01/16

DESCRIPTION:

FDOT

FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

INDEX SHEET |534-200| 15 of 16

	TABLE 3A - TABLE OF POST REINFORCING STEEL															TABLE 3B - PILE LENGTHS (Feet) - WIND SPEED = 170 MPH															
NOMINAL WALL HEIGHT (Feet)	POST LI	ENGTHS	WIND SPEED = 170 MPH												10'-0" POST SPACING 20'-0" POST SPACING																
	WITHOUT CAP		10'-0" POST SPACING							20'-0" POST SPACING							H-P(	)STS			CORNE	R POSTS			H-P(	)STS		CORNER		R POSTS	
		WITH CAP	BARS A	BARS B		BARS D	BARS E		BARS A	BA	BARS BARS B D		BARS E		HEIGHT (Feet)	SOIL 1		50.	S0IL 2		SOIL 1		L 2	SOIL 1		50IL 2		SOIL 1		50IL 2	
			SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'		<i>30</i> " ⊘	<i>36</i> " ⊘	30" ⊘	<i>36</i> " ⊘	<i>30</i> " ⊘	<i>36</i> " ⊘	<i>30</i> " ∅	36" ⊘	<i>30</i> " ⊘	<i>36</i> " ⊘	<i>30</i> " ⊘	<i>36</i> " ⊘	30" ⊘	<i>36</i> " ⊘	<i>30</i> " ⊘	<i>36</i> " ⊘
12	13'-0 <sup>1</sup> / <sub>2</sub> "	13'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	9'-8"	#5	#5	8'-8"	#6	#6	8'-4"	#7	#7	7'-8"	12	14	13	12	11	13	12	12	11	18	17	16	15	18	16	16	15
13	14'-0½"	14'-2 <sup>1</sup> / <sub>2</sub> "	#5	#5	10'-8"	#6	#6	10'-4"	#7	#7	8'-8"	#8	#7	8'-8"	13	14	13	13	12	14	13	12	11	19	18	17	16	19	17	16	15
14	15'-0½"	15'-2½"	#5	#5	10'-8"	#6	#6	10'-4"	#7	#7	8'-8"	#8	#8	8'-0"	14	15	14	13	12	14	13	13	12	20	18	18	16	19	18	17	16
15	16'-0 <sup>1</sup> / <sub>2</sub> "	16'-2½''	#6	#6	12'-4"	#6	#6	10'-4"	#8	#7	10'-8"	#9	#8	10'-0"	15	15	14	14	13	15	14	13	12	21	19	18	17	20	18	18	16
16	17'-0½"	17'-2½"	#6	#6	12'-4"	#7	#7	11'-8"	#8	#8	10'-0"	#9	#10	8'-4"	16	16	15	14	13	15	14	14	13	21	20	19	17	21	19	18	17
17	18'-0 <sup>1</sup> / <sub>2</sub> "	18'-2 <sup>1</sup> / <sub>2</sub> ''	#6	#6	12'-4"	#7	#7	11'-8"	#9	#8	12'-0"	#10	#9	10'-3"	17	16	15	15	14	16	15	14	13	22	20	19	18	21	20	19	17
18	19'-0 <sup>1</sup> / <sub>2</sub> "	19'-2 <sup>1</sup> / <sub>2</sub> "	#7	#7	13'-8"	#7	#8	11'-0"	#9	#10	10'-4"	#10	#11	8'-5"	18	17	16	15	14	16	15	15	14	23	21	20	19	22	20	19	18
19	20'-0 <sup>1</sup> / <sub>2</sub> "	20'-2 <sup>1</sup> / <sub>2</sub> ''	#7	#7	13'-8"	#8	#7	13'-8"	#10	#10	11'-4"	#11	#11	10'-5"	19	17	16	15	14	17	16	15	14	23	22	21	19	23	21	20	18
20	21'-0 <sup>1</sup> / <sub>2</sub> "	21'-2 <sup>1</sup> / <sub>2</sub> "	#7	#7	13'-8"	#8	#8	13'-0"	#10	#11	10'-5"	#11	#14	7'-0"	20	18	17	16	15	17	16	15	14	24	22	21	20	23	21	20	19
21	22'-0 <sup>1</sup> / <sub>2</sub> "	22'-2 <sup>1</sup> / <sub>2</sub> "	#7	#8	13'-0"	#9	#8	15'-0"	#11	#10	13'-4"	#14	#11	12'-5"	21	18	17	16	15	18	17	16	15	25	23	22	20	24	22	21	19
22	23'-0 <sup>1</sup> / <sub>2</sub> "	23'-21/2"	#8	#7	16'-8"	#9	#9	14'-3"	#11	#11	12'-5"	#14	#14	9'-0"	22	19	18	17	16	18	17	16	15	25	23	22	21	24	23	22	20

#### TABLE NOTE:

- 1. Bars D and Bars E are for 45° Corner Posts only.
- 2. See Contract Plans for project wind speed.
- 3. Soil 1 = Loose Granular Soil, N = 4 to 9;

DESCRIPTION:

Soil 2 = Medium Dense Granular Soil, N = 10 to 40.

PILE DEPTH & REINFORCING SUMMARY

**REVISION** 11/01/16

**FDOT** 

FY 2018-19 STANDARD PLANS

NOISE WALLS - (PRECAST)

SHEET INDEX |534-200| 16 of 16