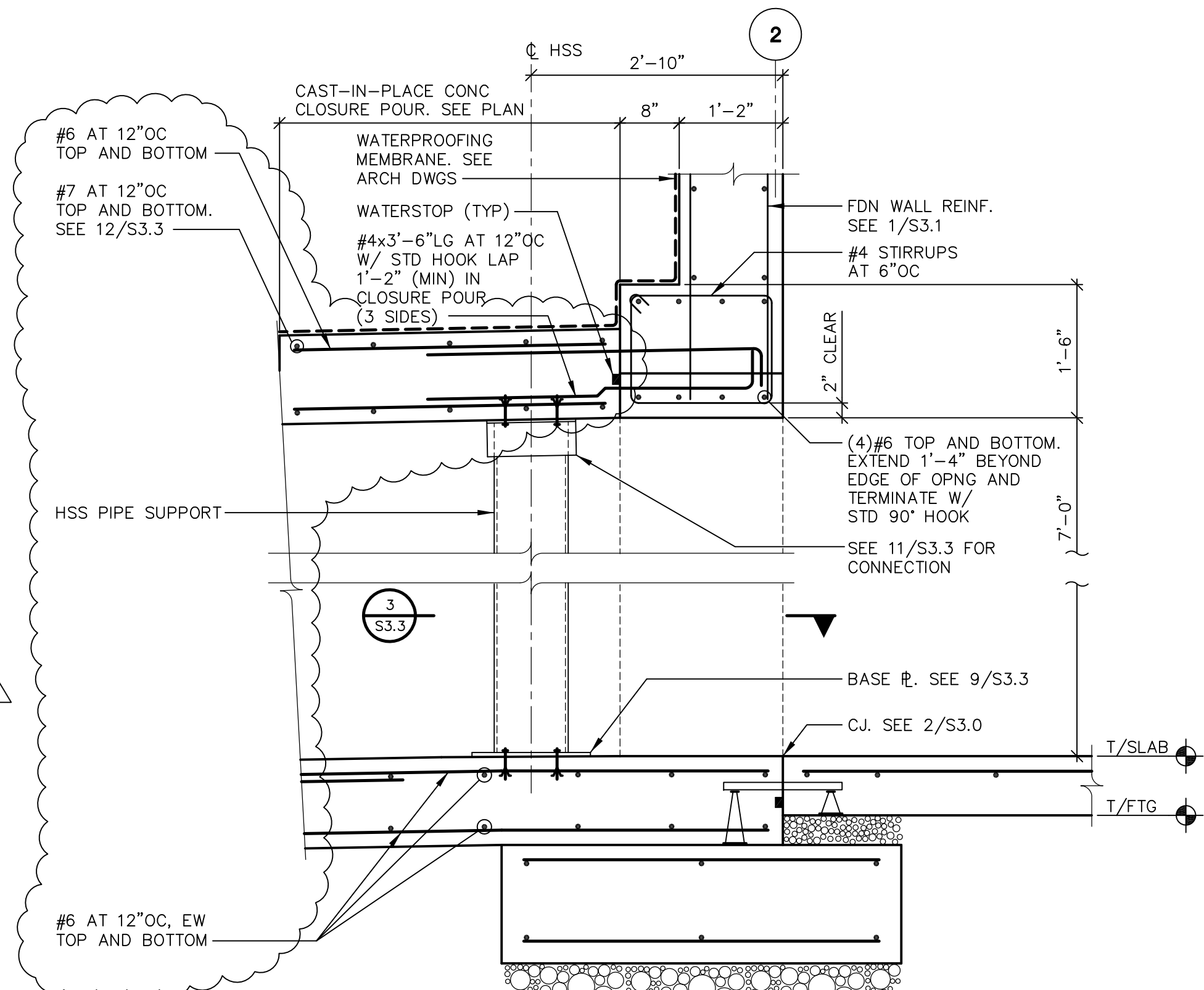
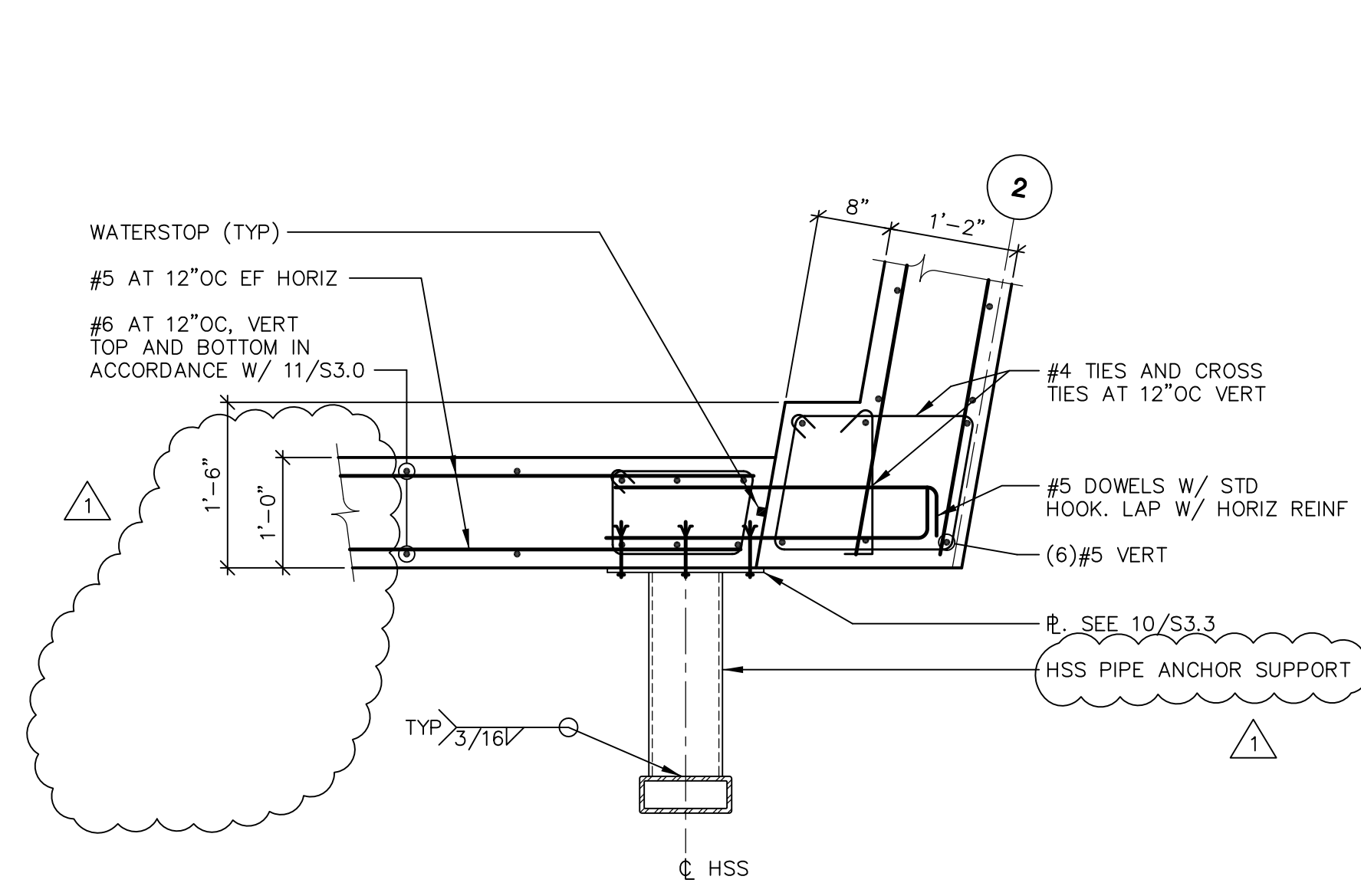


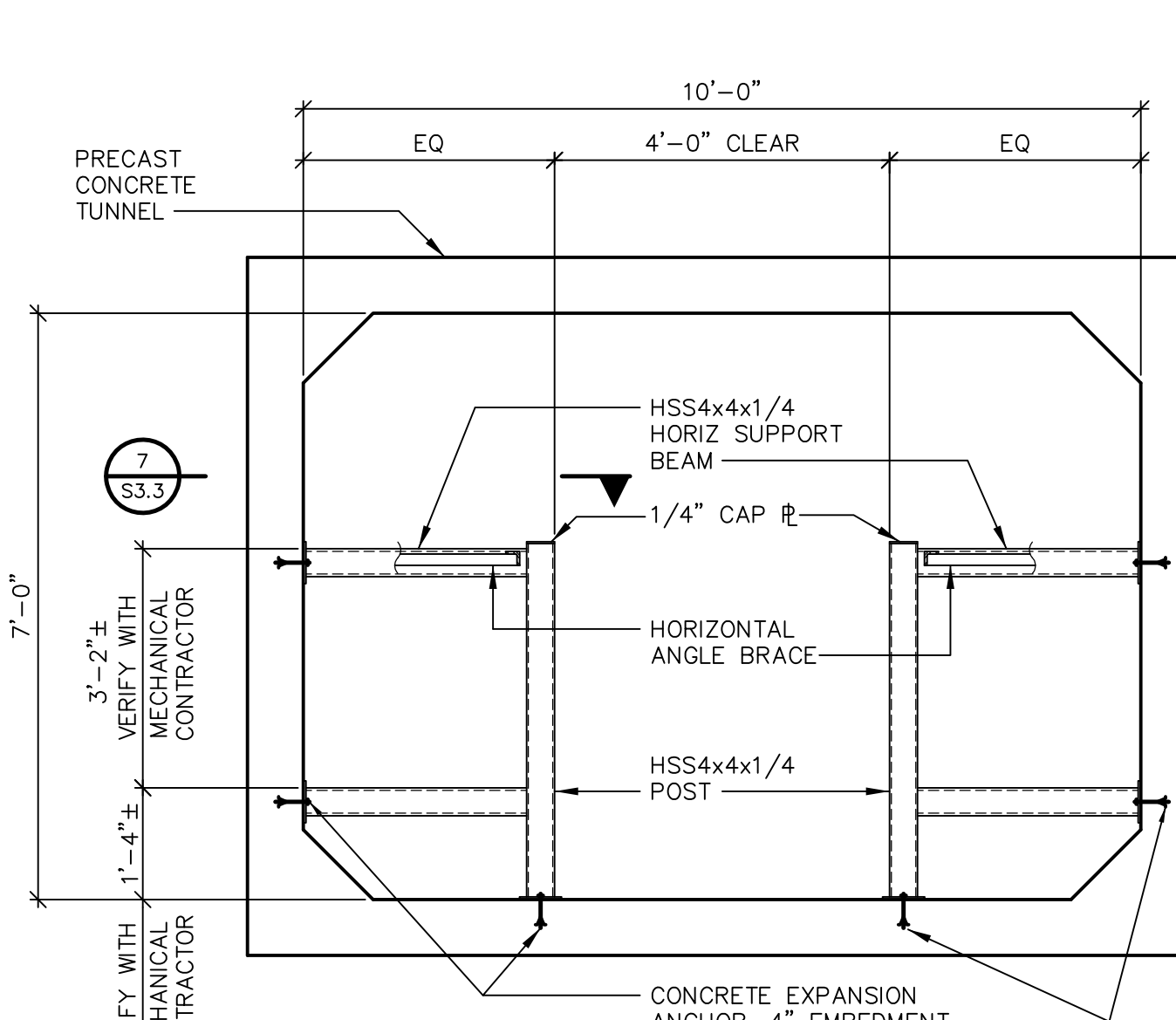
1 SECTION AT BUILDING FOUNDATION WALL
S3.3 SCALE: 3/8" = 1'-0"



2 SECTION AT TUNNEL
S3.3 SCALE: 3/4" = 1'-0"

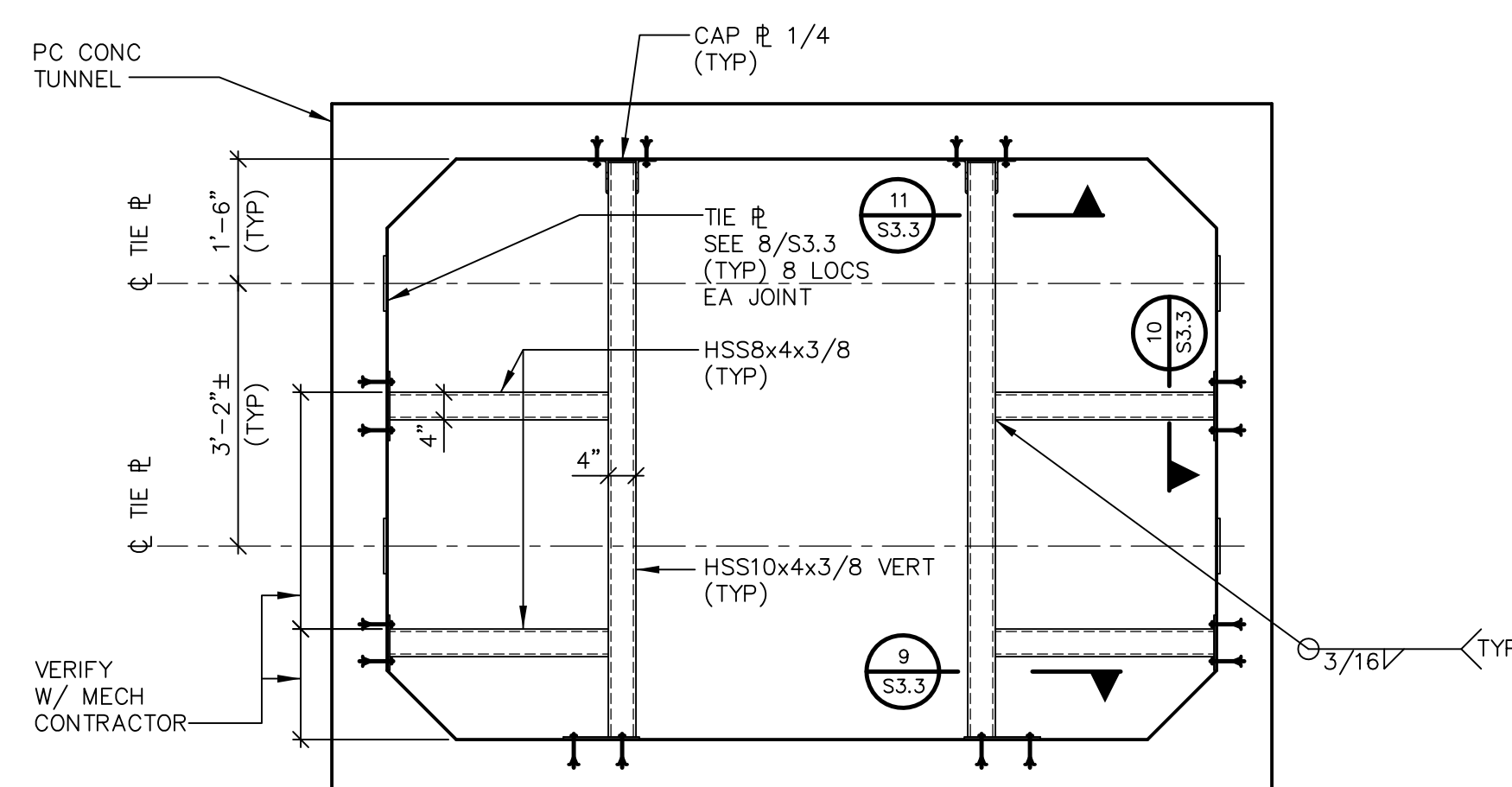


3 SECTION - JAMB OF OPENING
S3.3 SCALE: 3/4" = 1'-0"



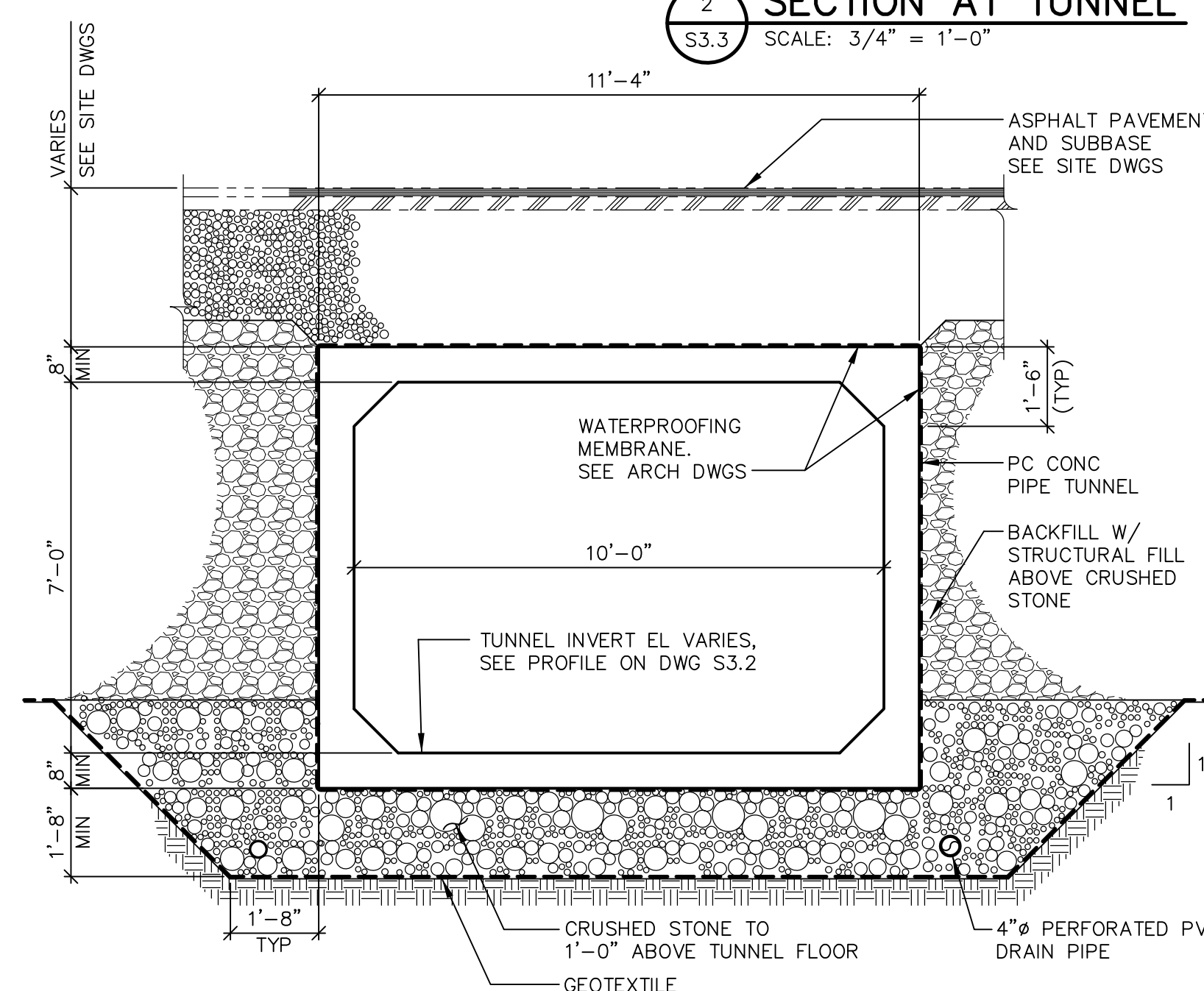
4 SECTION - PIPE SUPPORT
S3.3 SCALE: 1/2" = 1'-0"

- NOTE:
- THIS SECTION APPLIES TO PIPE SUPPORT AND PIPE GUIDE LOCATIONS. SEE 4A/S3.3 FOR PIPE SUPPORT DETAILS AT PIPE ANCHOR LOCATIONS. PIPES SHALL BE SUPPORTED AT 12'-0" (MAX).
 - MAINTAIN MINIMUM 1'-0" FROM SUPPORT LOCATION TO JOINT BETWEEN PRECAST UNITS.
 - SEE 4A/S3.3 AND 6/S3.3 FOR ADDITIONAL INFORMATION.



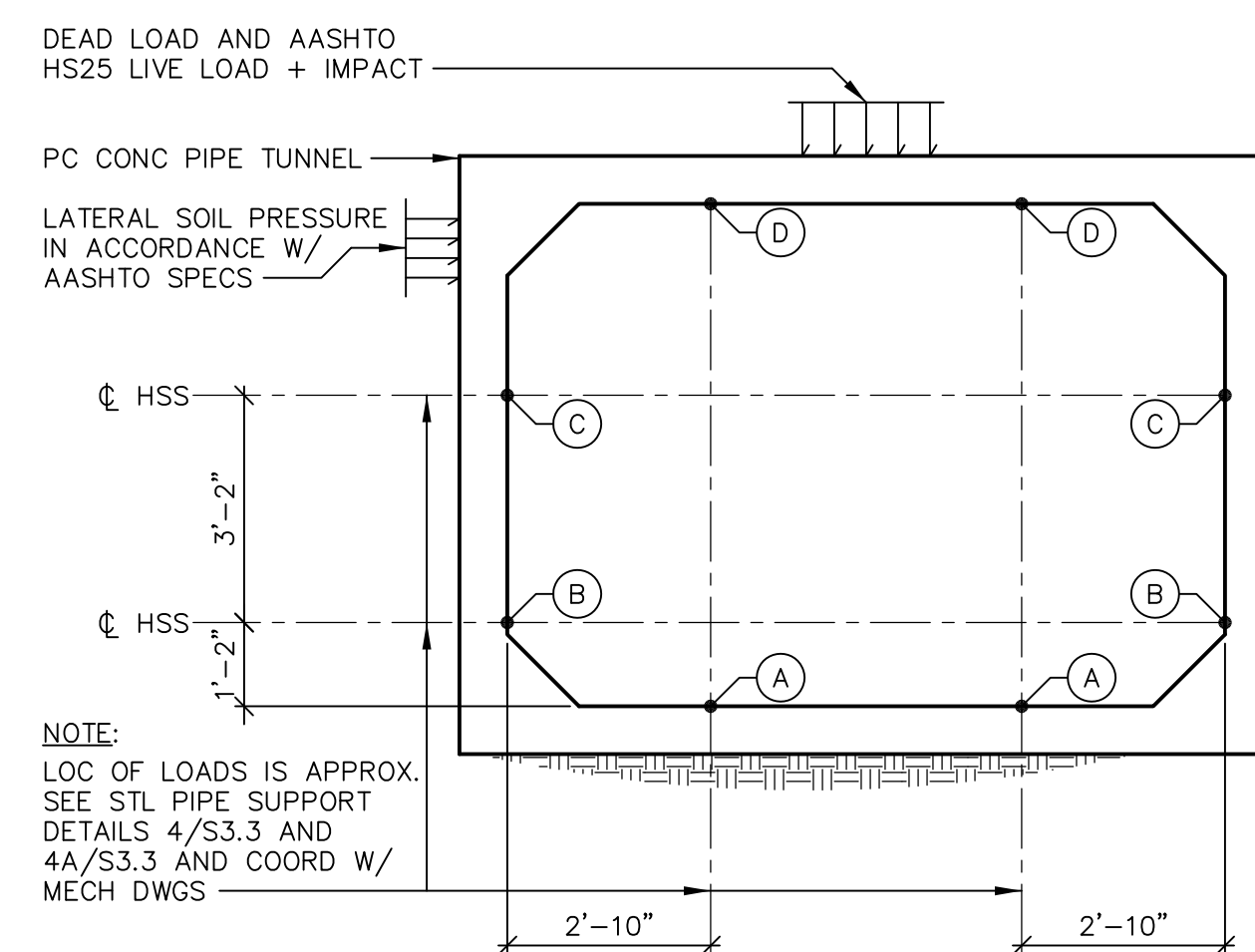
4A SECTION - PIPE SUPPORT AT ANCHOR LOCATIONS
S3.3 SCALE: 1/2" = 1'-0"

- PIPE SUPPORT NOTES:
- PIPE SUPPORT FRAMING INCLUDING ALL STEEL COMPONENTS AND FASTENERS SHALL BE HOT-DIP GALVANIZED.
 - CONCRETE EXPANSION ANCHORS SHALL BE HOT-DIP GALVANIZED.
 - REPAIR GALVANIZING AT FIELD WELDED AND DAMAGED AREAS USING ZINC-RICH COLD GALVANIZING PAINT.
 - COORDINATE PIPE LOCATIONS AND DIMENSIONS AND PIPE SUPPORT AND ANCHOR LOCATIONS, DIMENSIONS, CLEARANCES AND ATTACHMENTS WITH MECHANICAL DRAWING AND MECHANICAL CONTRACTOR. NOTIFY STRUCTURAL ENGINEER OF DISCREPANCIES OR CONFLICTS.



5 SECTION
S3.3 SCALE: 3/8" = 1'-0"

- NOTE:
- SEE 8/S3.3 FOR JOINT DETAIL BETWEEN TUNNEL SECTIONS.



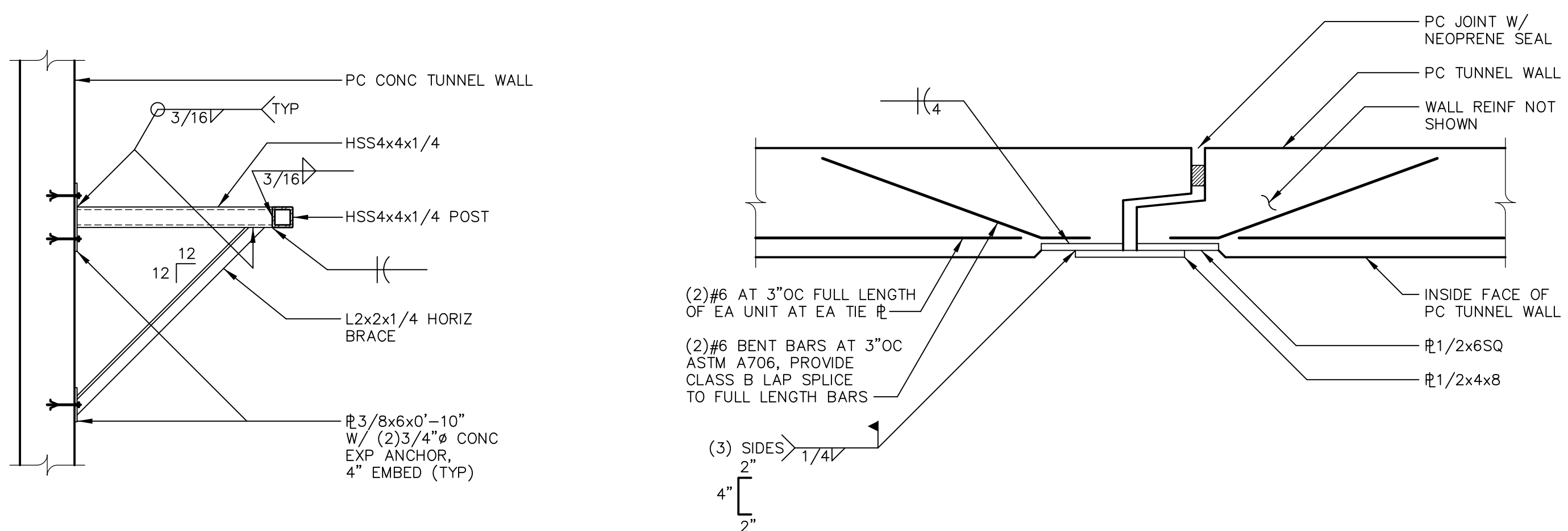
6 PIPE TUNNEL SCHEMATIC DIAGRAM
S3.3 NOT TO SCALE

LOAD DESIGNATION	PIPE SUPPORT LOCATIONS			PIPE ANCHOR LOCATIONS		
	VERTICAL	LONGITUDINAL	TRANSVERSE	VERTICAL	LONGITUDINAL	TRANSVERSE
(A)	3,000 POUNDS	500 POUNDS	400 POUNDS	2,800 POUNDS	26,000 POUNDS	9,000 POUNDS
(B)	1,500 POUNDS	500 POUNDS	800 POUNDS	1,400 POUNDS	26,000 POUNDS	9,000 POUNDS
(C)	1,500 POUNDS	500 POUNDS	800 POUNDS	1,400 POUNDS	26,000 POUNDS	9,000 POUNDS
(D)	-	500 POUNDS	400 POUNDS	-	26,000 POUNDS	9,000 POUNDS

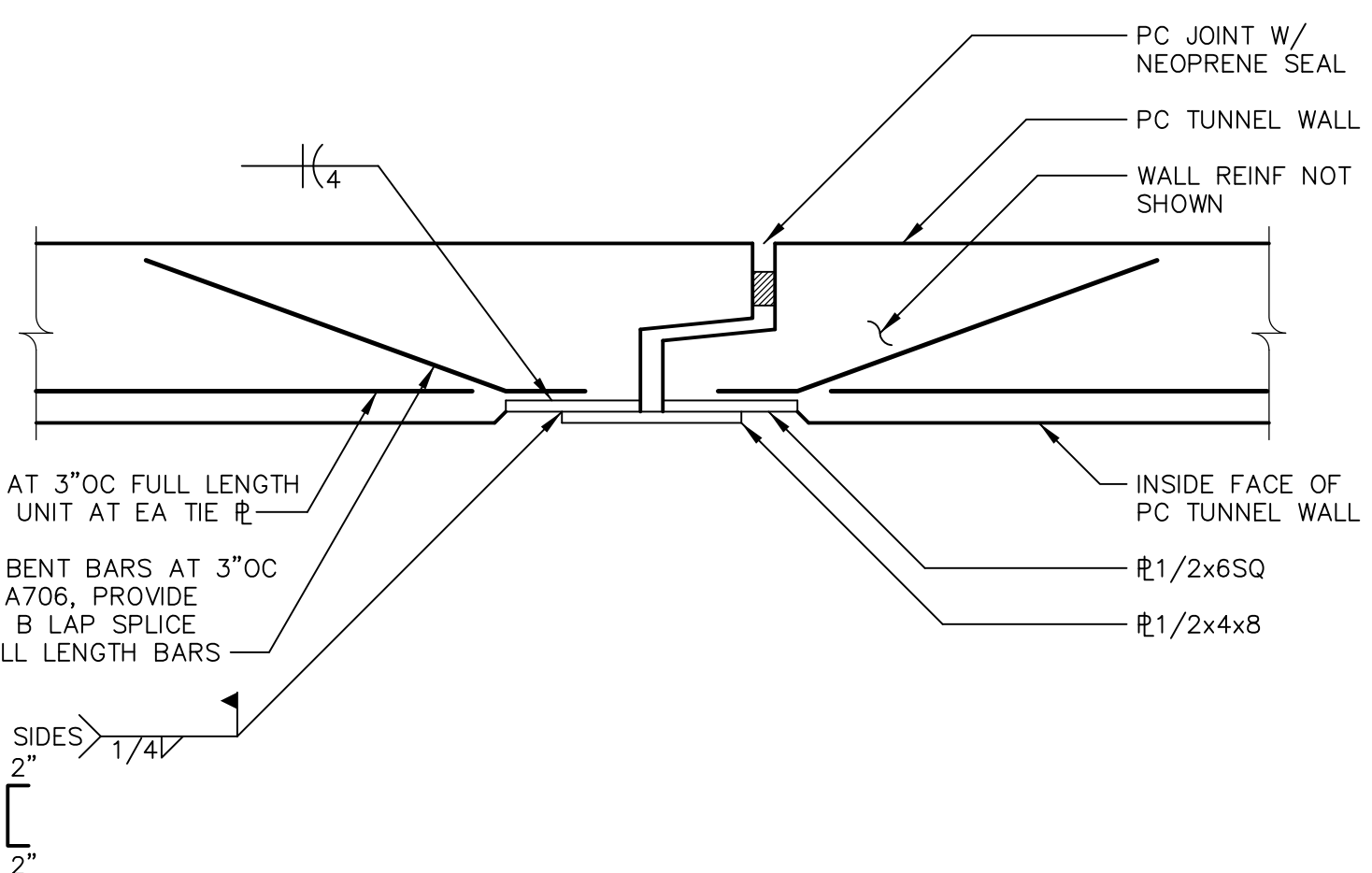
- NOTES:
- LONGITUDINAL LOAD DIRECTION IS PARALLEL TO CENTERLINE OF TUNNEL.
 - TRANSVERSE LOAD DIRECTION IS PERPENDICULAR TO CENTERLINE OF TUNNEL.
 - LOADS SHOWN ARE UN-FACTORED SERVICE LOADS.
 - PIPE SUPPORT LOADS BASED ON MAXIMUM 12-FOOT SPACING CENTER TO CENTER OF SUPPORTS. COORDINATE SUPPORT LOCATIONS WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR.
 - PIPE ANCHOR LOADS BASED ON LOAD INFORMATION SHOWN ON MECHANICAL DRAWINGS. NOTIFY STRUCTURAL ENGINEER IF LOADS DIFFER FROM THAT SHOWN ON MECHANICAL DRAWINGS. COORDINATE ANCHOR LOCATIONS WITH MECHANICAL CONTRACTOR AND ACCEPTED PIPING SUBMITTAL DRAWINGS.

PRECAST PIPE TUNNEL NOTES:

- SEE 6/S3.3 AND PIPE TUNNEL LOAD SCHEDULE FOR REQUIRED DESIGN LOADING. COMPLY WITH ACI 318 AND AASHTO SPECS.
- JOINTS: EACH SECTION SHALL HAVE A MALE AND FEMALE END WITH NOT LESS THAN 4" OF CONCRETE OVERLAP. EACH SECTION SHALL HAVE ONE PREPLACED 1" SQUARE NEOPRENE GASKET CEMENTED TO JOINT SURFACE. SEE 8/S3.3.
- AT PRECAST UNITS AT PIPE ANCHOR LOCATIONS AND AT PRECAST UNITS AT EACH END OF TUNNEL, PROVIDE MINIMUM #4 AT 12" OC LONGITUDINAL BARS IN EACH WALL, FLOOR AND CEILING.
- SUBMIT SHOP DRAWINGS SHOWING DIMENSIONS OF EACH UNIT AND REINFORCEMENT SIZE AND LOCATION. DRAWINGS SHALL BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND ACCOMPANIED BY DESIGN CALCULATIONS.
- MATERIAL PROPERTIES:
STEEL REINFORCEMENT - ASTM A615, GRADE 60
CONCRETE MINIMUM COMPRESSIVE STRENGTH - 5000 PSI AT 28 DAYS

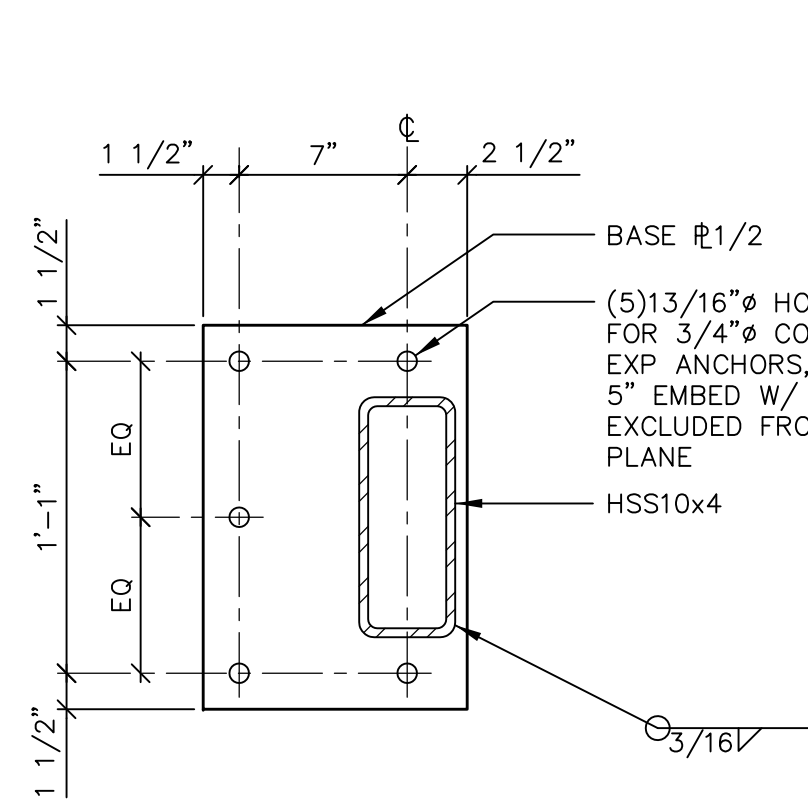


7 PLAN DETAIL
S3.3 SCALE: 3/4" = 1'-0"

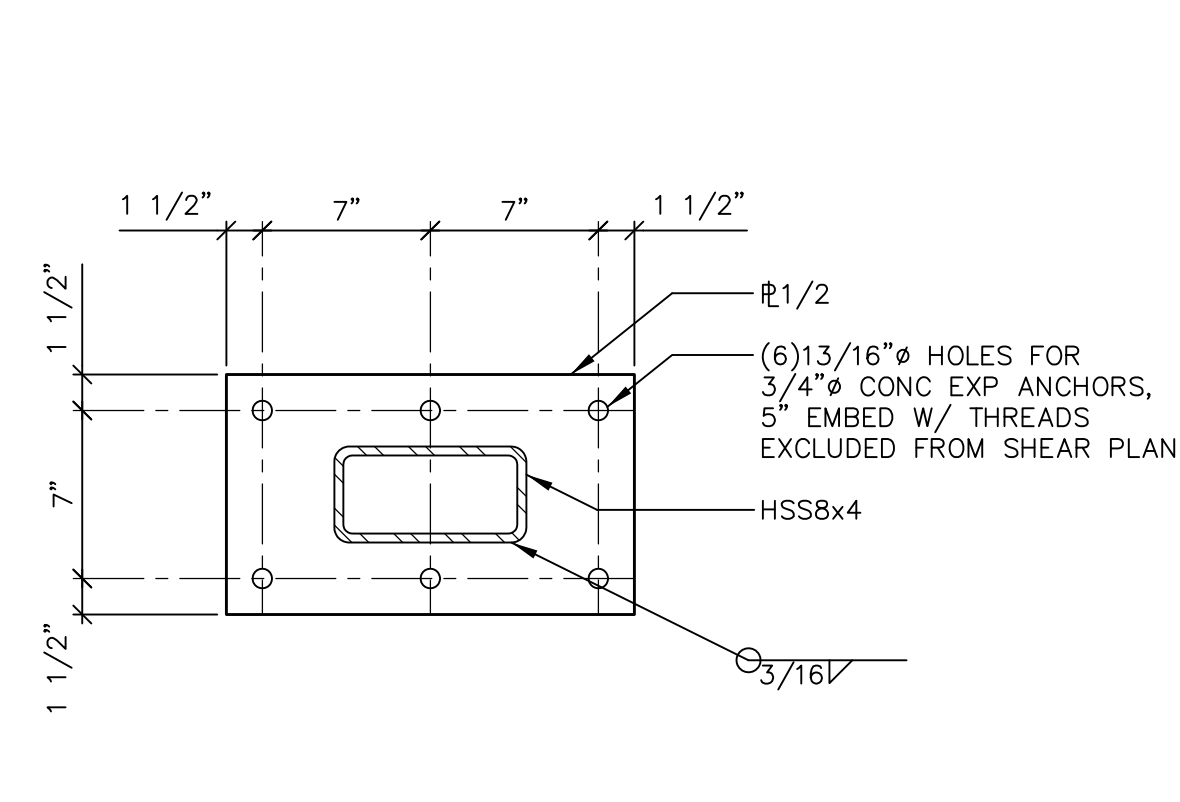


8 DETAIL - TIE PLATE AT PRE-CAST WALLS
S3.3 SCALE: 1 1/2" = 1'-0"

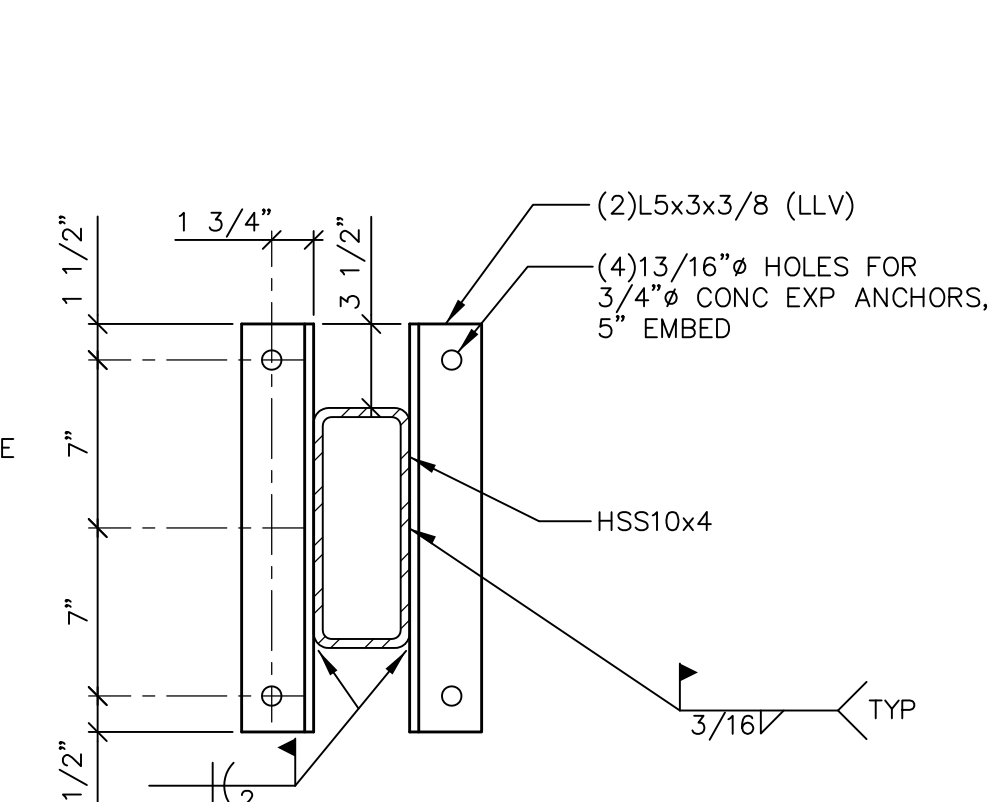
- NOTES:
- PROVIDE 8 EMBEDDED PLATES FOR FIELD INSTALLED TIE PLATES. AT EACH END OF EACH UNIT EXCEPT AT PRECAST JOINT ADJACENT TO CAST-IN-PLACE CLOSURE POUR, SEE 4A/S3.3 FOR LOCATIONS.
 - UN-FACTORED DESIGN AXIAL LOAD = 26 k.



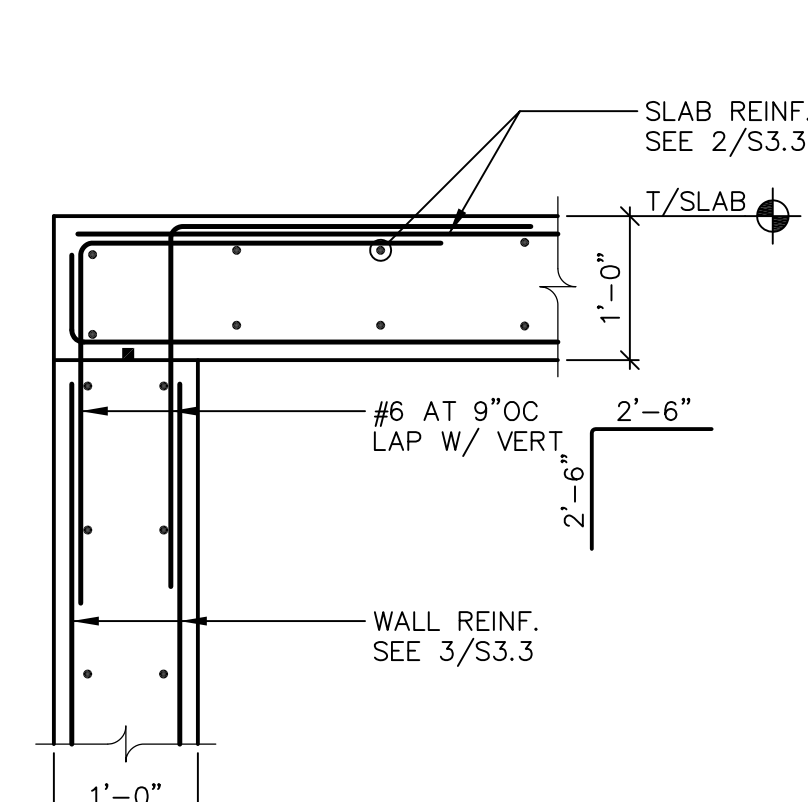
9 DETAIL
S3.3 SCALE: 1 1/2" = 1'-0"



10 DETAIL
S3.3 SCALE: 1 1/2" = 1'-0"



11 DETAIL
S3.3 SCALE: 1 1/2" = 1'-0"



12 TOP OF WALL DETAIL
S3.3 SCALE: 3/4" = 1'-0"

FINAL DESIGN (100%)
FULLY SPRINKLERED

CONSULTANTS: FRIEDMAN FISHER ASSOCIATES, P.C. CONSULTING ENGINEERS 22 Aviation Road, Albany, New York 12205 TEL (518) 456-7040 FAX (518) 456-7043 mail@friedmanfisher.com RYAN-BIGGS ASSOCIATES, P.C. 251 Wilkes Road Gillon Park, NY 12205 TEL (518) 456-7040 FAX (518) 456-7043 mail@ryanbiggs.com EBERLIN AND EBERLIN, P.C. 247 ROUTE 100 SUITE 1003 SOMERS NEW YORK 10589 CONSULTING ENGINEERS, PLANNERS, LANDSCAPE ARCHITECTS 914.232.9431 PHONE 914.232.9827 FAX		ARCHITECT/ENGINEERS: Hyman Hayes ASSOCIATES 6 WEMBLEY COURT, ALBANY, NEW YORK 12205 (518) 452-3470 HHA Proj. 10046		Drawing Title FOUNDATION SECTIONS AND DETAILS Approved Project Director	Project Title NEW EMERGENCY DEPARTMENT Stratton VA Medical Center Location Albany, New York Date JUNE 13, 2012 Checked AED Drawn S.J.W.	Project Number VA 528-809 Building Number 95 Drawing Number S3.3 Dwg. 21 of 115	Office of Construction and Facilities Management
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