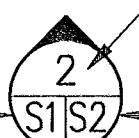

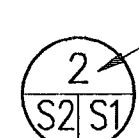


**GENERAL NOTES:**

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF  $f'_c=4,000$  PSI AT 28 DAYS AND SHALL HAVE A MINIMUM DENSITY OF 145 PCF.
- ALL REINFORCING BARS SHALL CONFORM TO THE SPECIFICATION FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A615, GRADE 60.
- CONCRETE AGGREGATE SHALL HAVE A MAXIMUM SIZE OF  $\frac{3}{4}$  INCH.
- ALL REINFORCING BARS SHALL BE CONTINUOUS IN ANY ONE DIRECTION EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS.
- NO WELDING OF REINFORCING BARS SHALL BE PERMITTED UNLESS INDICATED ON DRAWINGS.
- ALL STRUCTURAL STEEL, METAL DOORS, EQUIPMENT, ETC. SHALL BE CONNECTED TO GROUND BUSES WITH #2 COPPER GROUND CABLE.
- STRUCTURAL STEEL SHAPES, PLATES AND BARS SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL STEEL, ASTM DESIGNATION A36.
- METAL ROOFING AND SIDING SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL SHEET STEEL, ASTM A446.
- BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE SPECIFICATION FOR LOW CARBON STEEL THREADED STANDARD FASTENERS, ASTM DESIGNATION A307, GRADE A AND HIGH STRENGTH BOLTS FOR STRUCTURAL STEEL JOINTS, ASTM DESIGNATION A325. ALL BOLTS SHALL HAVE THREADS EXCLUDED FROM THE SHEAR PLANE.
- UNLESS NOTED ON DRAWINGS, SPLICE LENGTH OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AC1 318 (LATEST EDITION) FOR CLASS B SPLICES.
- FOR FILLET WELD SIZES NOT SHOWN ON DRAWINGS, PROVIDE MINIMUM SIZE FILLET WELDS IN ACCORDANCE WITH WELDING CODE AWS D1.1, LATEST EDITION.
- UNLESS SHOWN OTHERWISE, ALL REINFORCING BAR HOOKS SHALL BE STANDARD HOOKS IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AC1 318, LATEST EDITION.
- HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED EXCEPT AS SHOWN ON DRAWINGS S-4, S-5, S-6, S-7, S-8, S-9, S-11, S-12, S-13, S-14 & S-15.
- ALL TOPSOIL, ORGANIC MATERIAL AND OTHER UNSUITABLE MATERIALS BENEATH MAGAZINE STRUCTURE SHALL BE REMOVED TO SUITABLE BEARING STRATUM AND REPLACED WITH STRUCTURAL FILL TO THE REQUIRED ELEVATION.
- ALL STRUCTURAL FILL SHALL CONFORM TO ASTM C 33, SIZE 57 & SHALL BE COMPACTED IN ACCORDANCE WITH ASTM D 1557. THE TOP 12 INCHES OF STRUCTURAL FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES & EACH LIFT COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY. BENEATH THE TOP 12 INCHES, STRUCTURAL FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES & EACH LIFT COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY.
- EQUIPMENT WEIGHING MORE THAN 3000 LBS SHALL NOT BE USED ON THE STRUCTURE ROOF NOR WITHIN TEN (10) FEET FROM THE EDGE OF THE FOUNDATIONS.
- TAKEN ON THIS SHEET NO.  WALL SECT./ ELEV. MARK SHOWN ON THIS SHEET NO.  BLDG. SECT.  DETAIL

**SOIL DATA**

**MAGAZINE:**

- A. ALLOWABLE SOIL BEARING PRESSURE = 4,000 PSF
- B. ALLOWABLE DYNAMIC RESPONSE FACTOR (SOIL BEARING) = 2.5
- C. ALLOWABLE LATERAL SOIL PRESSURE COEFFICIENT
  - a) MAGAZINE WALLS = 0.5
  - b) WING WALLS = 0.3
- D. ALLOWABLE COEFFICIENT OF FRICTION (CONCRETE ON SOIL) = 0.50
- E. MODULUS OF SUBGRADE REACTION = 150 PCI - 250 PCI

**DESIGN LOADS**

**STATIC LOADS:**

- A. ROOF DEAD LOAD (1 1/2 FT. EARTH FILL + 6 IN. (GRAVEL)) = 200 PSF
- B. FLOOR LOADS
  - a) UNIFORM STORAGE LIVE LOAD = 2000 PSF
  - b) FORKLIFT WHEEL LOAD:
    - BASED ON DREXEL MODEL NO. SL-88-ESS = 8000 LB MAX LOAD
    - MAXIMUM WHEEL LOAD = 26,000 LBS
    - WHEEL CONTACT AREA = 65 SQ. IN.
- C. PLATFORM AND RAMP LIVE LOAD = 1000 PSF
- D. ROOF LIVE LOAD = 100 PSF

**SEISMIC LOADS:**

ADEQUATE FOR SEISMIC LOADS INDUCED BY EARTHQUAKE MOTIONS UP TO ZONE 4.

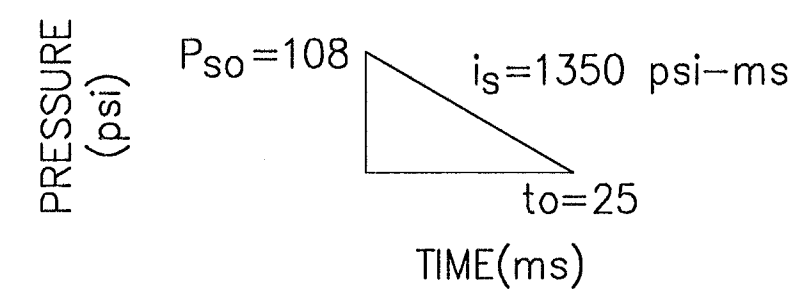
**WIND LOADS:**

NAVFAC DM-2.02, 132 MPH PEAK VELOCITY

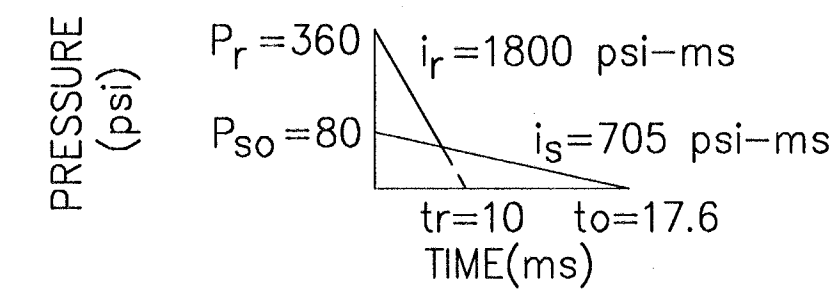
**BLAST LOADS:**

NAVSEA OP 5  
BASED ON INTERMAGAZINE SEPARATION DISTANCES FOR A QUANTITY (W) OF H.E. EQUAL TO 350,000 LBS AS FOLLOWS:

- A. ROOF: DONOR MAGAZINE LOCATED AT  $2W \frac{1}{3}$  TO THE REAR OF THE ACCEPTOR MAGAZINE.
- B. HEADWALL: DONOR MAGAZINE LOCATED AT  $2W \frac{1}{3}$  TO THE FRONT OF THE ACCEPTOR MAGAZINE.



ROOF LOADING



HEAD WALL LOADING

**STANDARD DRAWING NOTE:**  
THIS DRAWING SET, NAVFAC DRAWINGS 6448589 THRU 6448621, WAS APPROVED AS THE STANDARD 7-BAR EARTH COVERED MAGAZINE DESIGN FOR THE TYPE F BOX MAGAZINE 27 MAY 1997.


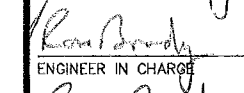
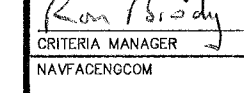
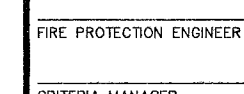
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

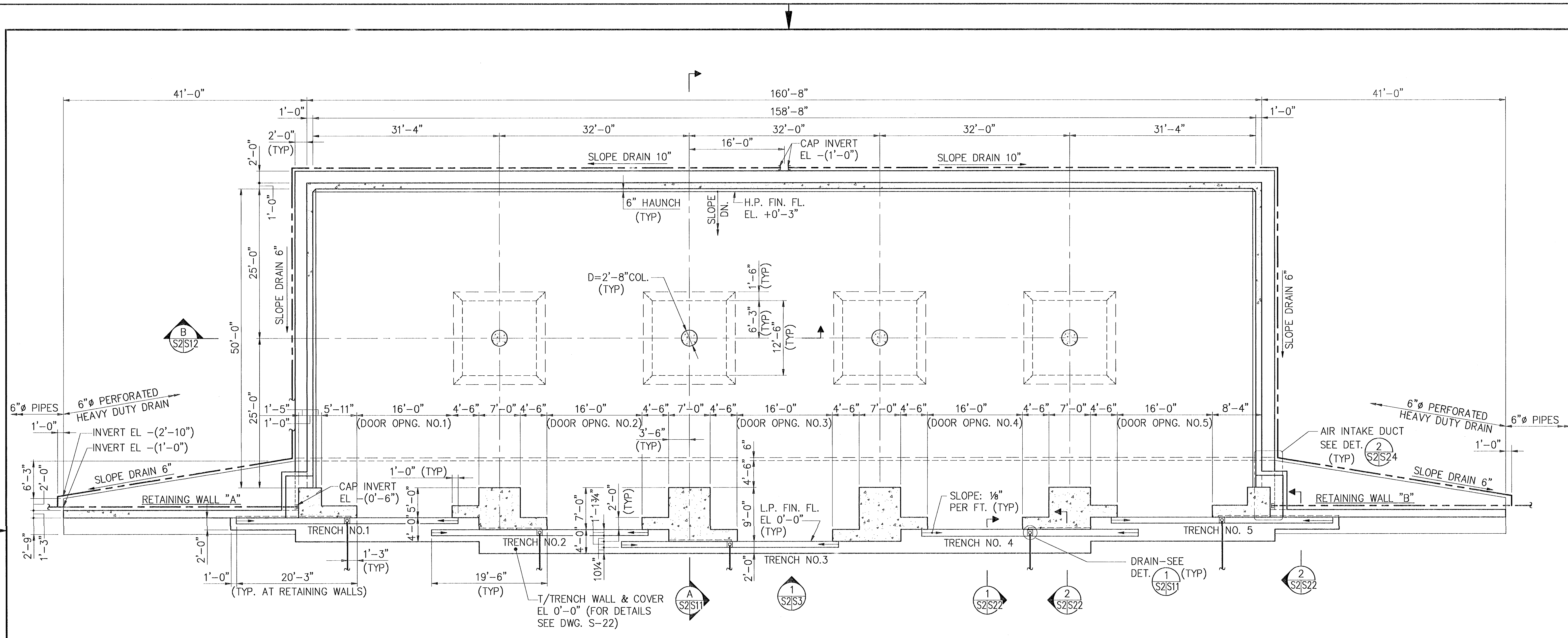
**DEFLECTION CRITERIA**

**MAXIMUM SUPPORT ROTATIONS OR DUCTILITY RATIO:**

- A. ROOF SLAB = 8°
- B. HEAD WALL = 6°
- C. HEADER BEAM = 2°
- D. PILASTERS  $X_M/X_E$  = 3.0
- E. BLAST DOORS = 12°

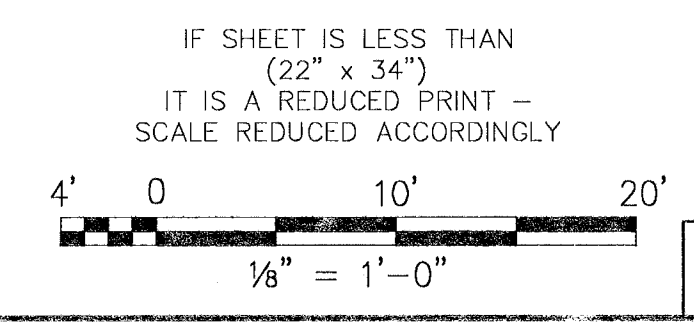
SATISFACTORY TO: \_\_\_\_\_ DATE: \_\_\_\_\_

SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 86 MORRISON ST., NEW YORK, NY 10014		DEPARTMENT OF THE NAVY		WASHINGTON, D.C. 20350		
PRINCIPAL ENGINEER:  DATE: 27/5/97 ENGINEER IN CHARGE:  CRITERIA MANAGER:  NAVFAC/COM:  DIVISION DIRECTOR		NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> GENERAL NOTES (W/O PLATFORM)				
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	6,448,589		<b>S-1</b>	
CRITERIA MANAGER	DATE	SCALE	CONTRACT NO	SHEET 1		OF 33
APPROVED	DATE	CATEGORY CODE	SPEC NO			
FOR COMMANDER NAVFAC/COM						

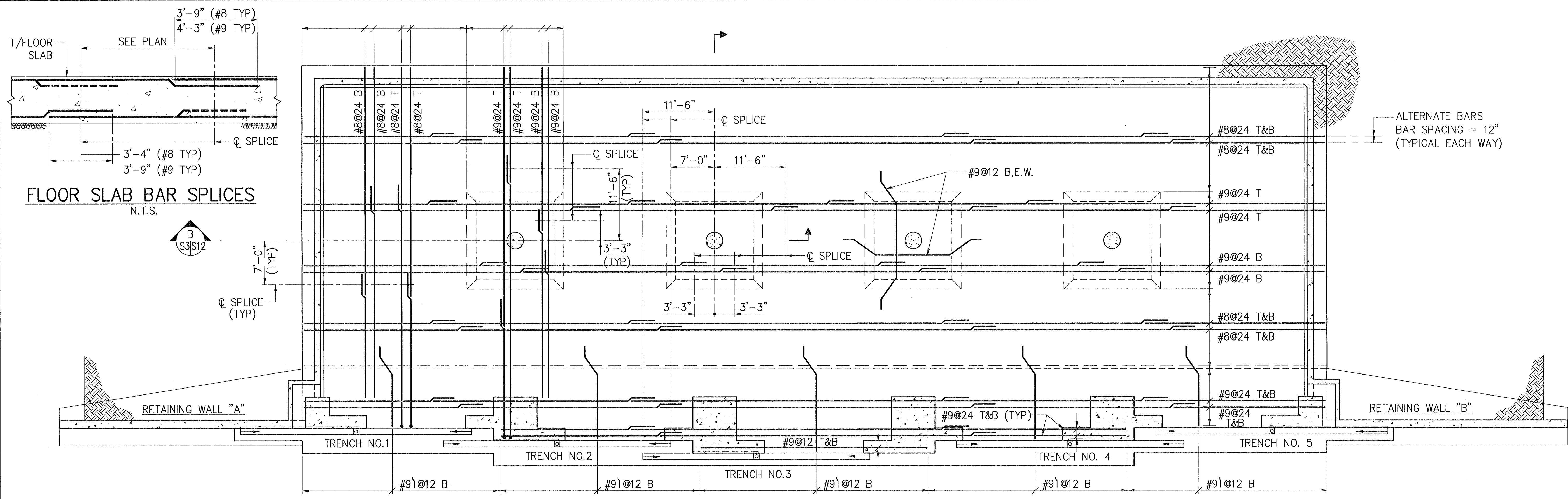


- NOTES:**
- DATUM ELEVATION 0'-0" TAKEN AS TOP OF TRENCH WALL AND TOP OF TRENCH COVER. FOR ACTUAL ELEVATION SEE CIVIL DRAWINGS.
  - FOR CONTINUATION OF BUILDING DRAINS SEE CIVIL DRAWINGS.

**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

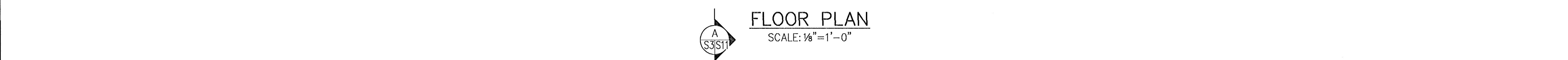


SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 95 HUDSON ST., NEW YORK, NY 10014		DEPARTMENT OF THE NAVY		WASHINGTON, D.C. 20350		
PRINCIPAL ENGINEER: <i>[Signature]</i> ENGINEER IN CHARGE: <i>[Signature]</i> CRITERIA MANAGER: <i>[Signature]</i> NAVFACENCOM DIVISION DIRECTOR: <i>[Signature]</i>		NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> FLOOR PLAN (W/O PLATFORM)		DATE: 27/5/97 DRAWING NUMBER: 6,448,590 SHEET: 2 OF 33		
FIRE PROTECTION ENGINEER: _____ DATE: _____ CRITERIA MANAGER: _____ DATE: _____ APPROVED: _____ DATE: _____ TITLE: _____ DATE: _____	SIZE: D CODE: 80091 SCALE: AS NOTED CATEGORY CODE: _____	NAVFAC DRAWING NUMBER: 6,448,590 CONTRACT NO: _____ SPEC NO: _____	<b>S-2</b>			



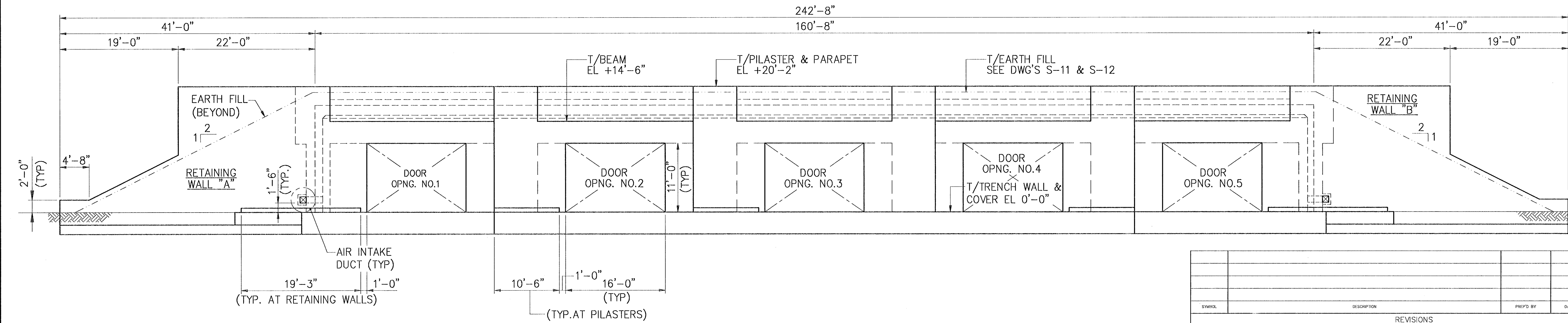
**FLOOR SLAB BAR SPLICES**  
N.T.S.

B  
S3/S12



**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

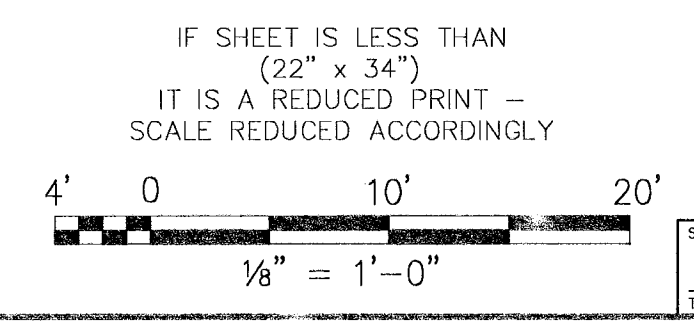
A  
S3/S11



**ELEVATION**  
SCALE: 1/8" = 1'-0"

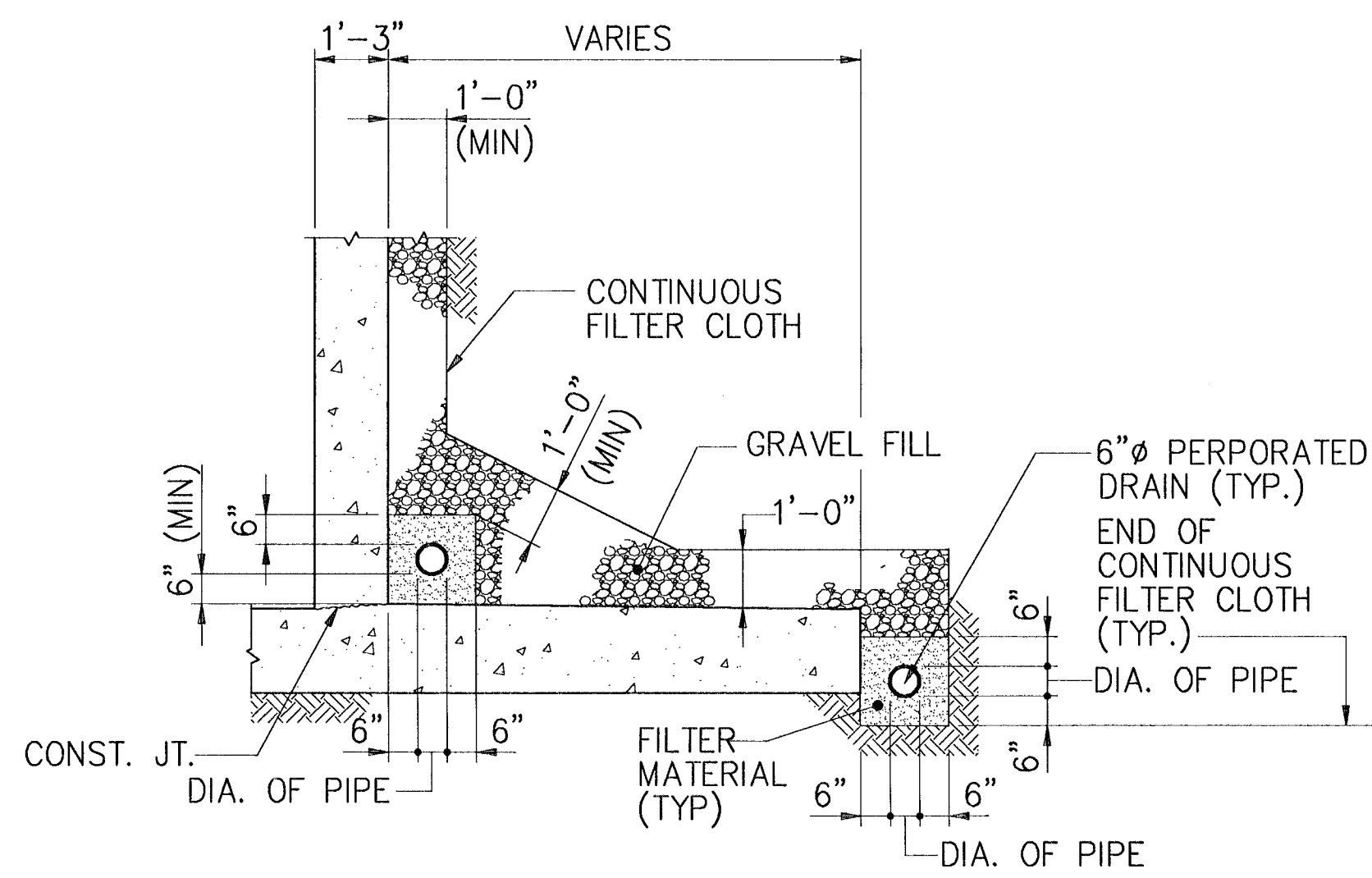
1  
S2/S3

- NOTES:
- FOR "RETAINING WALL ELEVATION" SEE DWG. S-4.
  - FOR ADDITIONAL REINFORCING AT DOOR TRENCHES SEE DWG'S S-14 & S-15.
  - FOR STAGGERED SPLICES: BAR SPLICE INDICATED THUS ALTERNATE BAR SPLICE INDICATED THUS SEE SECTION "FLOOR SLAB BAR SPLICES" THIS SHEET.

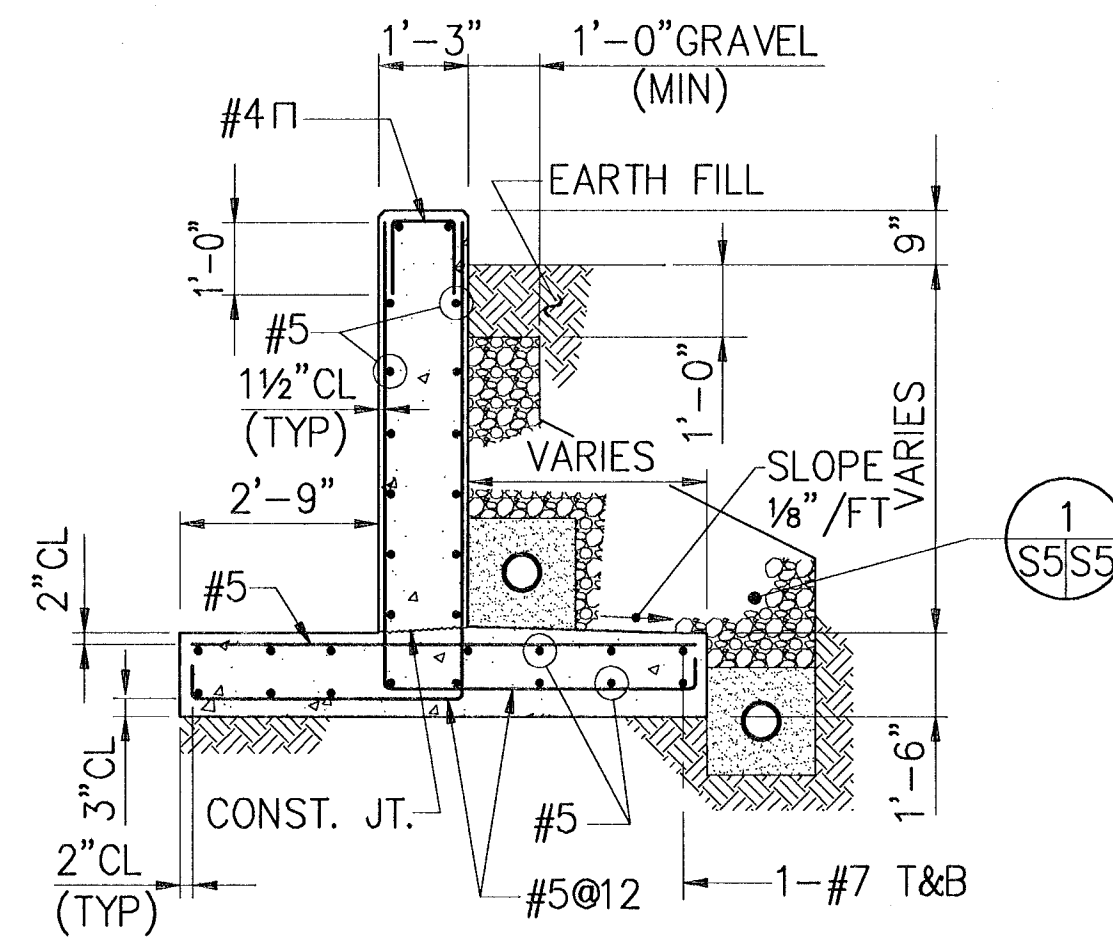


SYMBOL		DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS					
<b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 98 MADISON ST., NEW YORK, NY 10014 DATE: 27/5/97 ENGINEER IN CHARGE: <i>R. Brody</i> BRANCH MANAGER: <i>R. Brody</i> CRITERIA MANAGER: <i>R. Brody</i> DIVISION DIRECTOR: <i>A. Grayson</i>					
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> FLOOR PLAN & HEADWALL ELEVATION (W/O PLATFORM)			WASHINGTON, D.C. 20350 CONTRACT NO. 6,448,591 SHEET 3 OF 33		
SIZE	CODE IDENT NO.	NAVAC DRAWING NUMBER	<b>S-3</b>		
D	80091	6,448,591	SCALE: 1/8" = 1'-0" CONTRACT NO. CATEGORY CODE SPEC NO.		

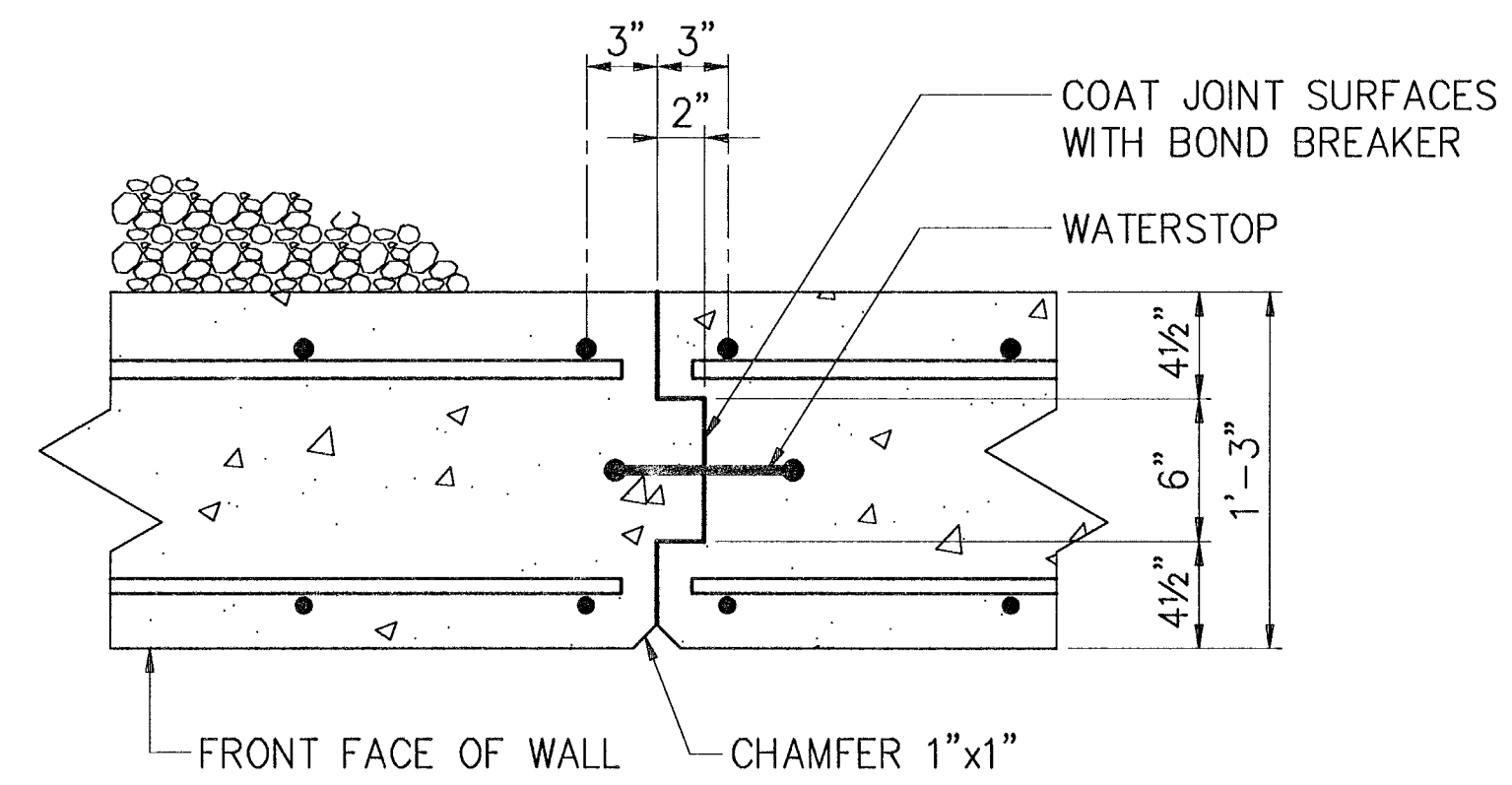




**DETAIL** 1  
 SCALE: 3/8" = 1'-0" S5 S4 S5  
 (TYPICAL 6"Ø PERFORATED DRAIN)

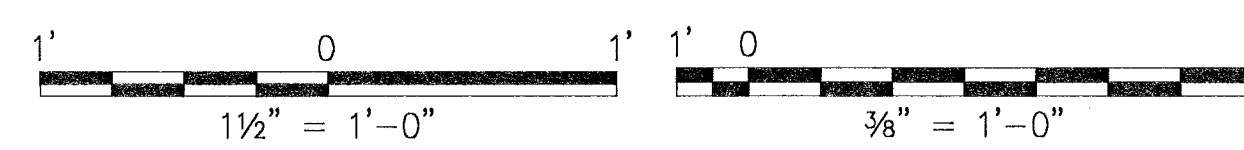


**SECTION** 3  
 SCALE: 3/8" = 1'-0" S4 S5



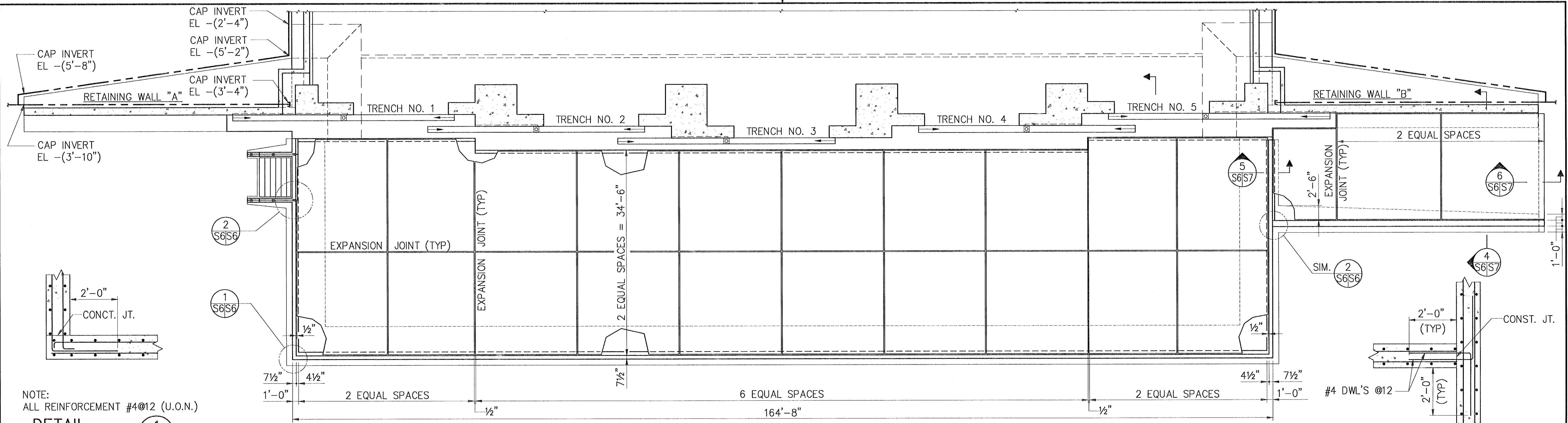
**SECTION** 4  
 SCALE: 1 1/2" = 1'-0" S4 S5

NOTE: FOR ALTERNATE EARTH FILL DRAINAGE SYSTEM SEE DWG. S-13.



IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
<b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 99 MORTON ST., NEW YORK, NY 10014 DATE: 27/5/97 ENGINEER IN CHARGE: <i>R. Brady</i> BRANCH MANAGER: <i>R. Brady</i> CRITERIA MANAGER: <i>R. Brady</i> DIVISION DIRECTOR: <i>R. Brady</i>				
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350 <b>NAVAL FACILITIES ENGINEERING COMMAND</b> STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> RETAINING WALL SECTIONS (W/O PLATFORM)				
FIRE PROTECTION ENGINEER	DATE	SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER
CRITERIA MANAGER	DATE	D	80091	6,448,593
APPROVED	DATE	SCALE	AS NOTED	CONTRACT NO
TITLE	DATE	CATEGORY CODE	FOR COMMANDER NAVFACENCOM	SPEC NO
				<b>S-5</b>
				SHEET 5 OF 33



NOTE:  
ALL REINFORCEMENT #4@12 (U.O.N.)

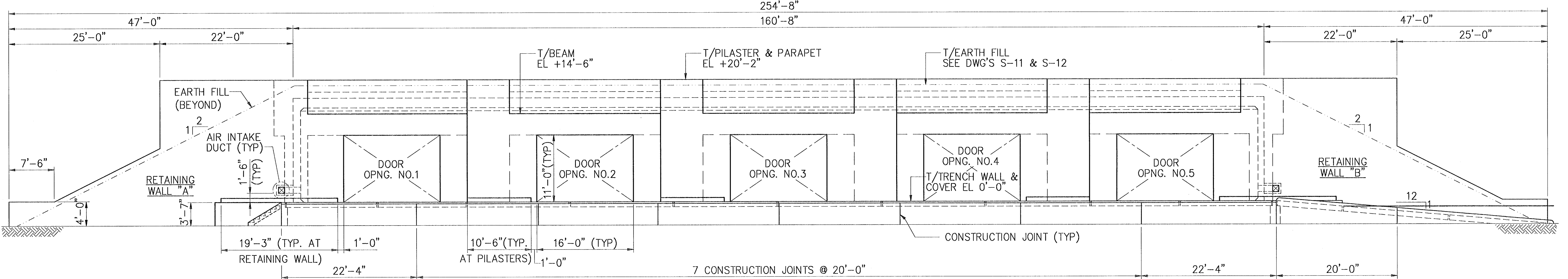
**DETAIL 1**  
SCALE: 1/2" = 1'-0"

**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

NOTES:  
1. PROVIDE CONSTRUCTION JOINT MID-WAY ALONG THE LENGTH OF SIDE PLATFORM RETAINING WALLS. SEE DETAIL THIS DRAWING.  
2. FOR MAGAZINE FLOOR PLAN SEE DRAWING S-2.

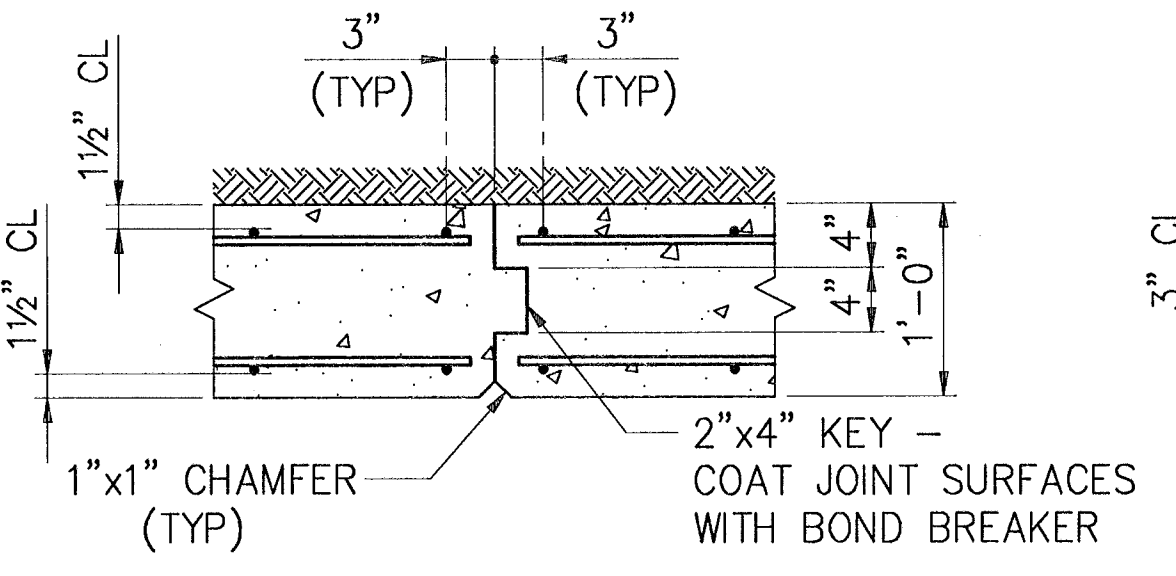
NOTE:  
ALL REINFORCEMENT #4@12 (U.O.N.)

**DETAIL 2**  
SCALE: 1/2" = 1'-0"

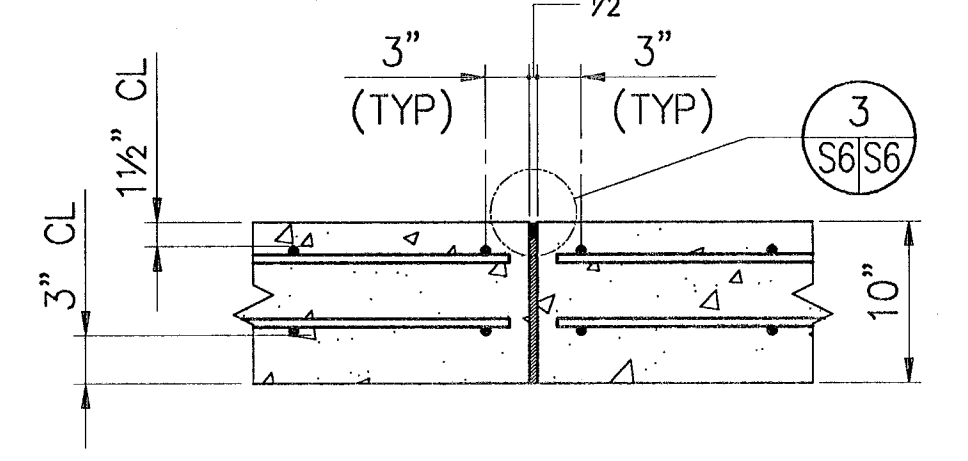


**ELEVATION 1**  
SCALE: 1/8" = 1'-0"

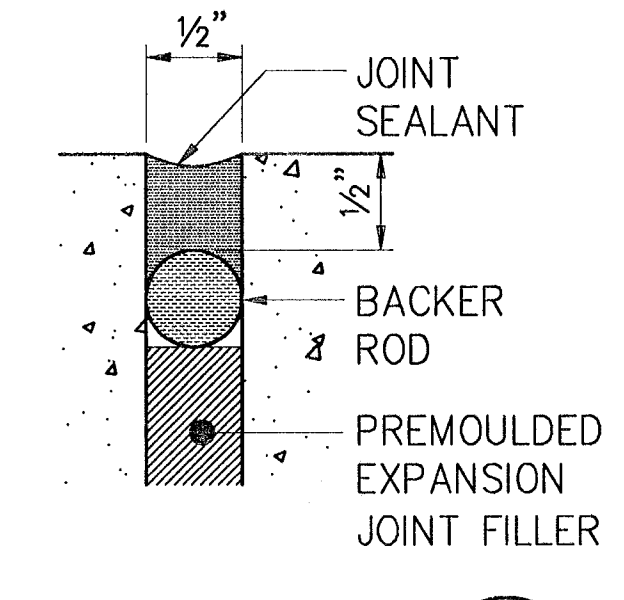
NOTES:  
1. FOR "RETAINING WALL ELEVATION" SEE DWG. S-8.  
2. STAIR RAILING NOT SHOWN FOR CLARITY.  
3. FOR ELECTRICAL BONDING CONSTRUCTION AND EXPANSION JOINTS, SEE DWG. E-4.



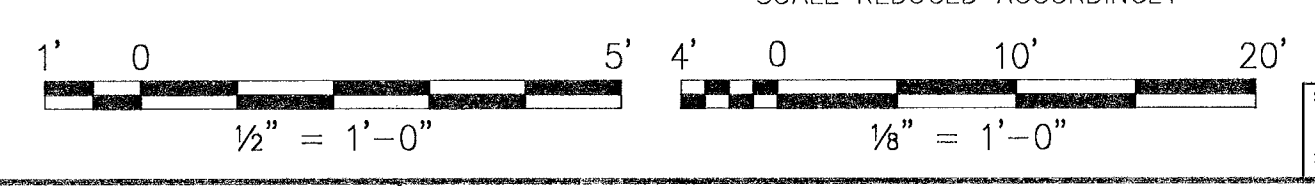
**CONSTRUCTION JOINT IN PLATFORM RETAINING WALL**  
N.T.S.



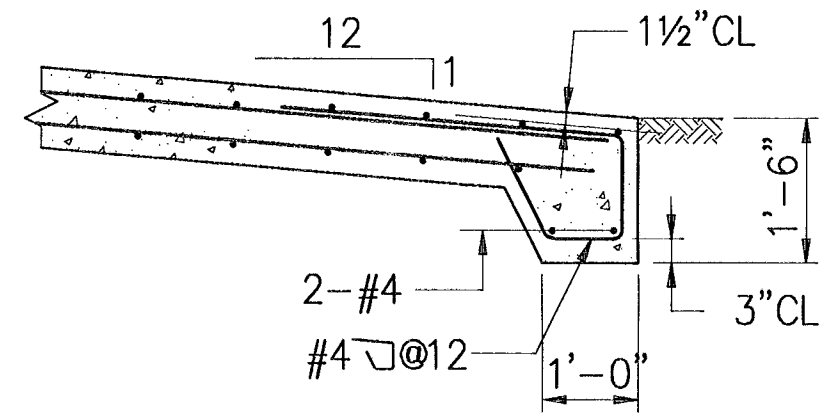
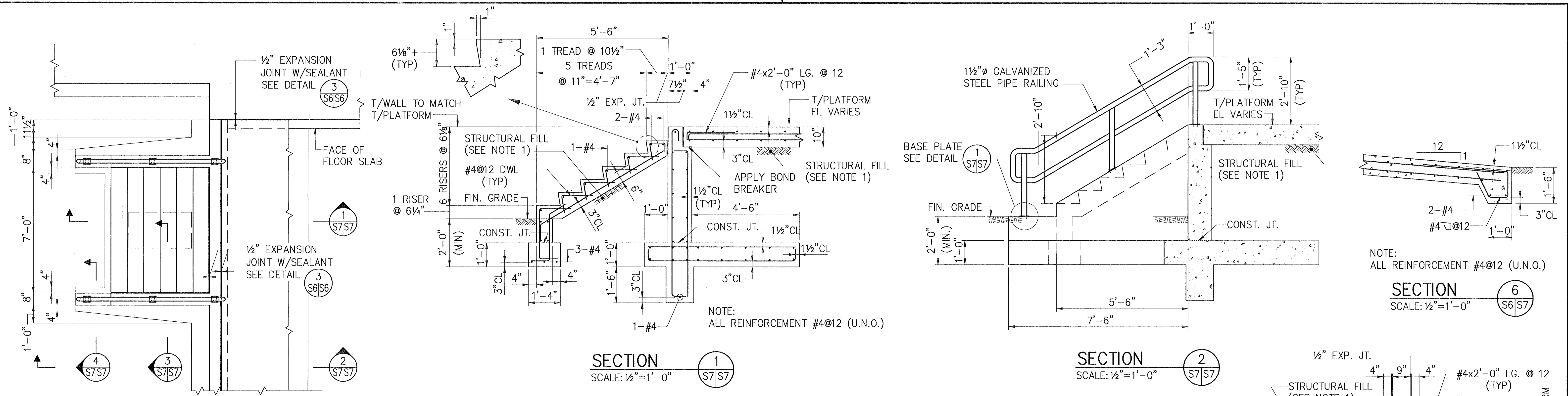
**EXPANSION JOINT IN PLATFORM SLAB-ON-GRADE**  
N.T.S.



**DETAIL 3**  
N.T.S.

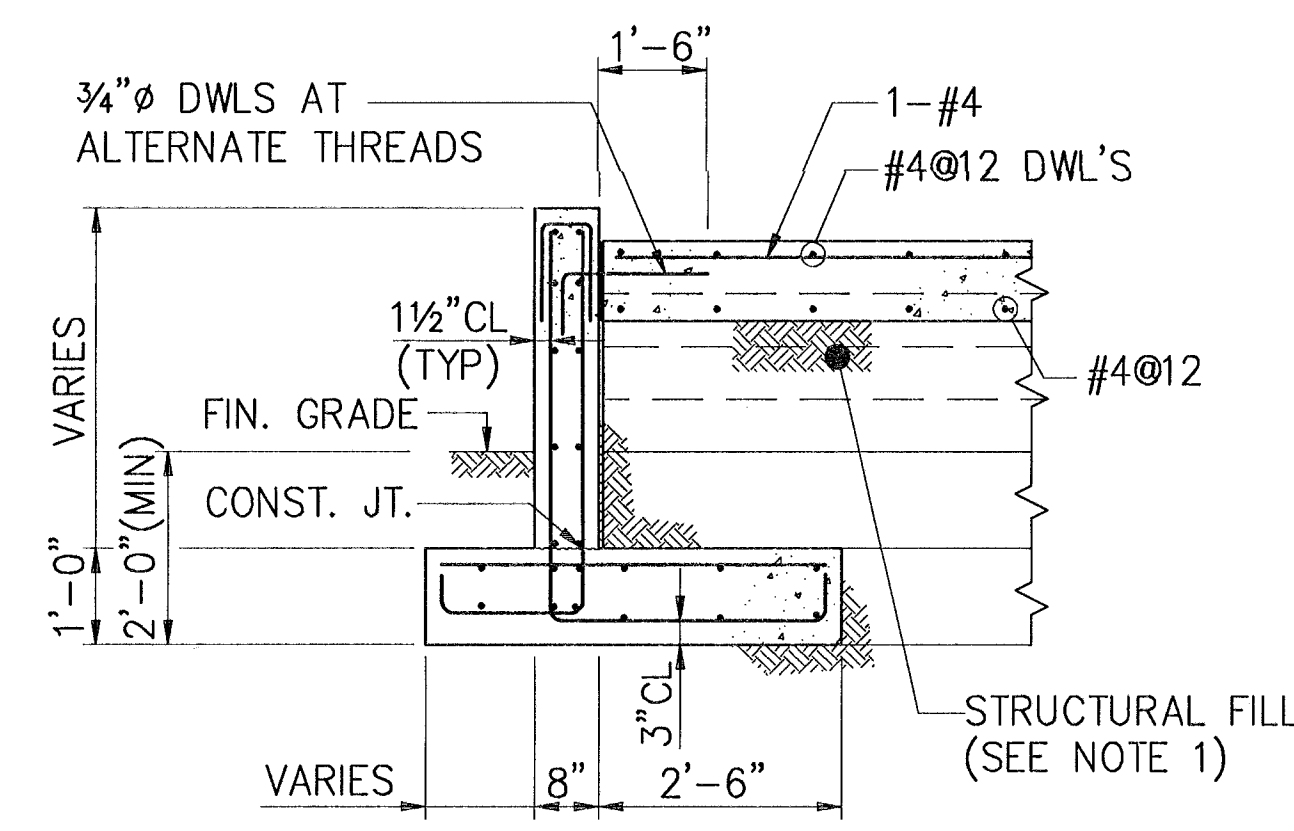


SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
<b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 85 Madison St., New York, NY 10014 DATE: 27/5/97				
DEPARTMENT OF THE NAVY <b>NAVAL FACILITIES ENGINEERING COMMAND</b> STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> FLOOR PLAN & HEADWALL ELEVATION (W/PLATFORM)				
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	<b>S-6</b>	
D	80091	6,448,594		
SCALE	AS NOTED	CONTRACT NO	SHEET 6 OF 33	
CATEGORY CODE		SPEC NO		

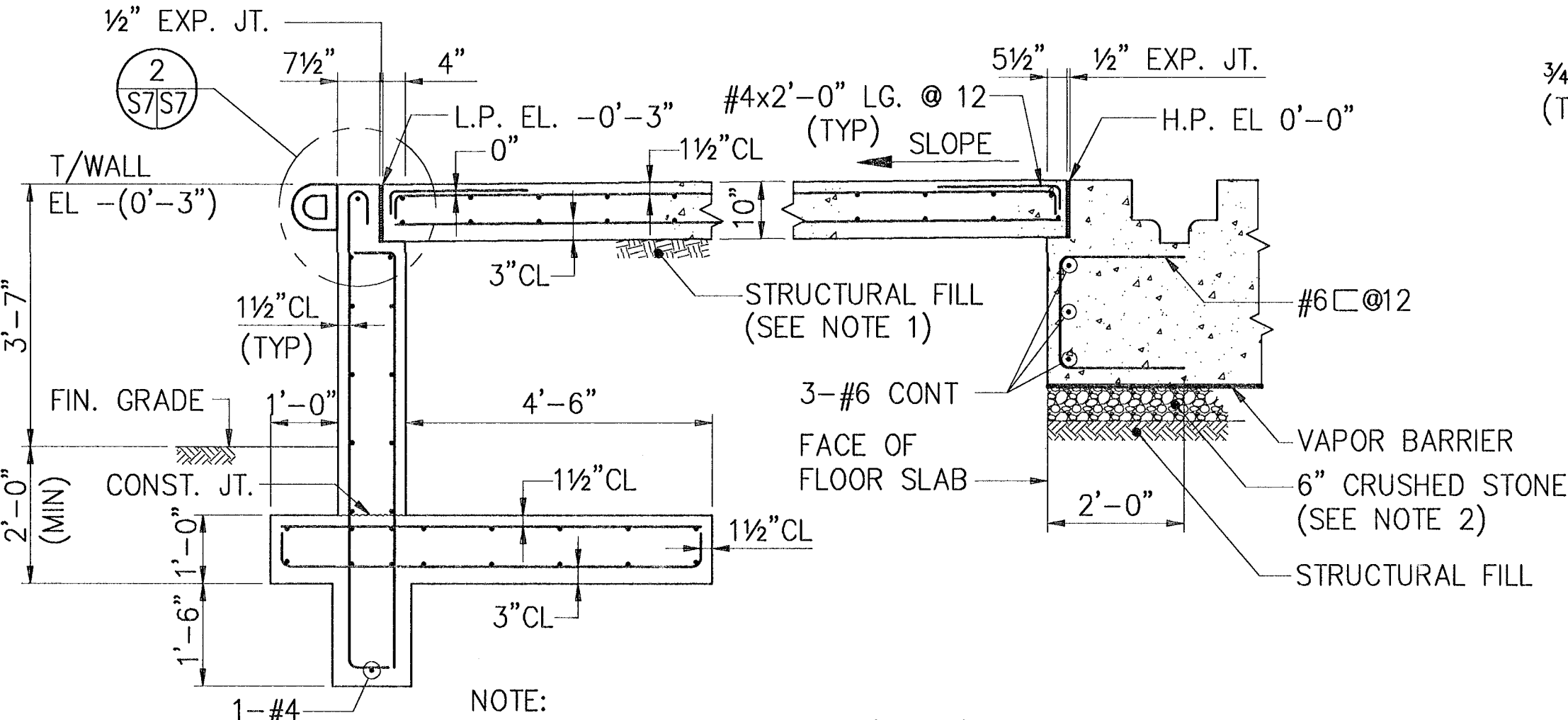


NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)

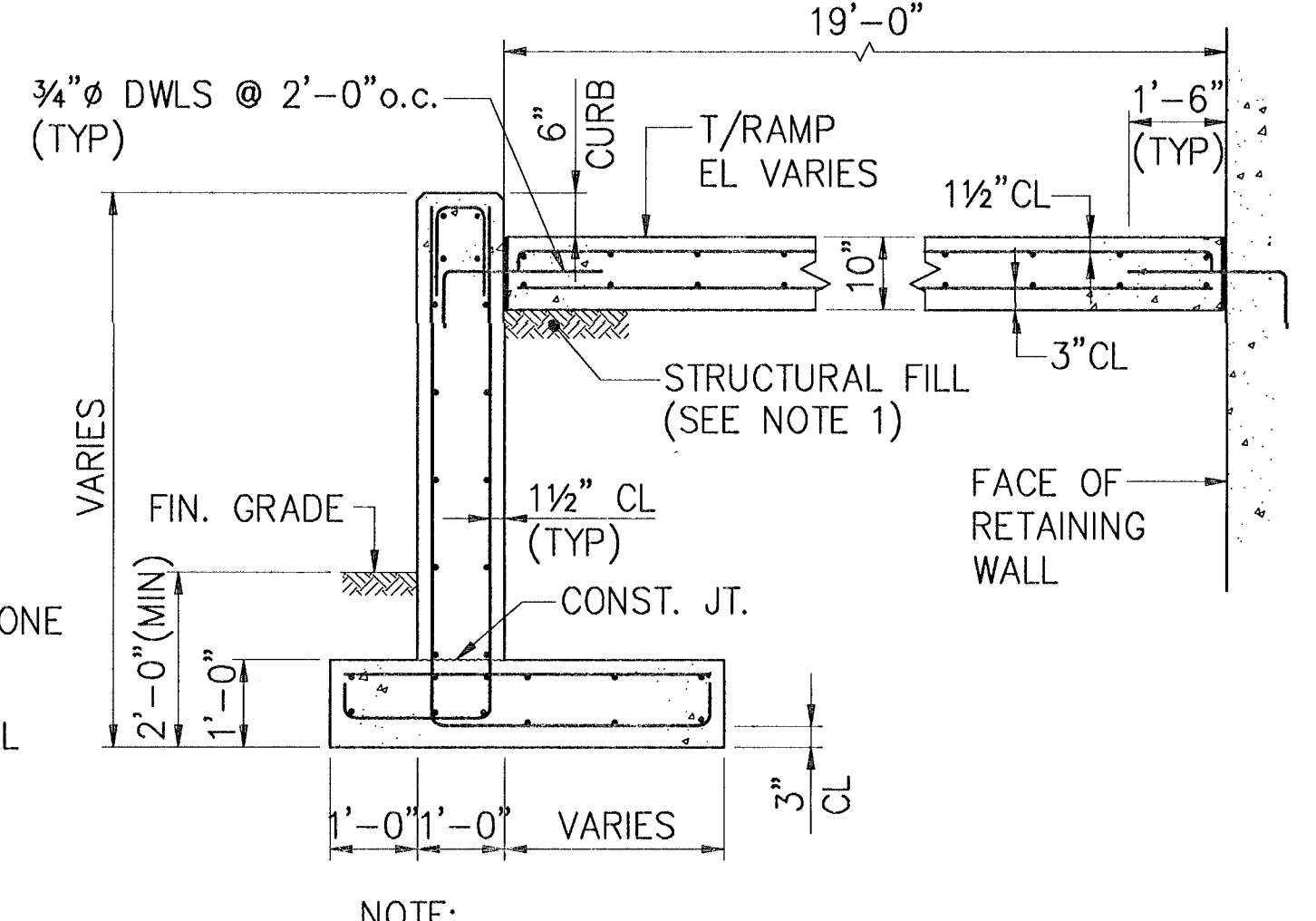
**PARTIAL PLAN-STAIR**  
SCALE: 3/8" = 1'-0"



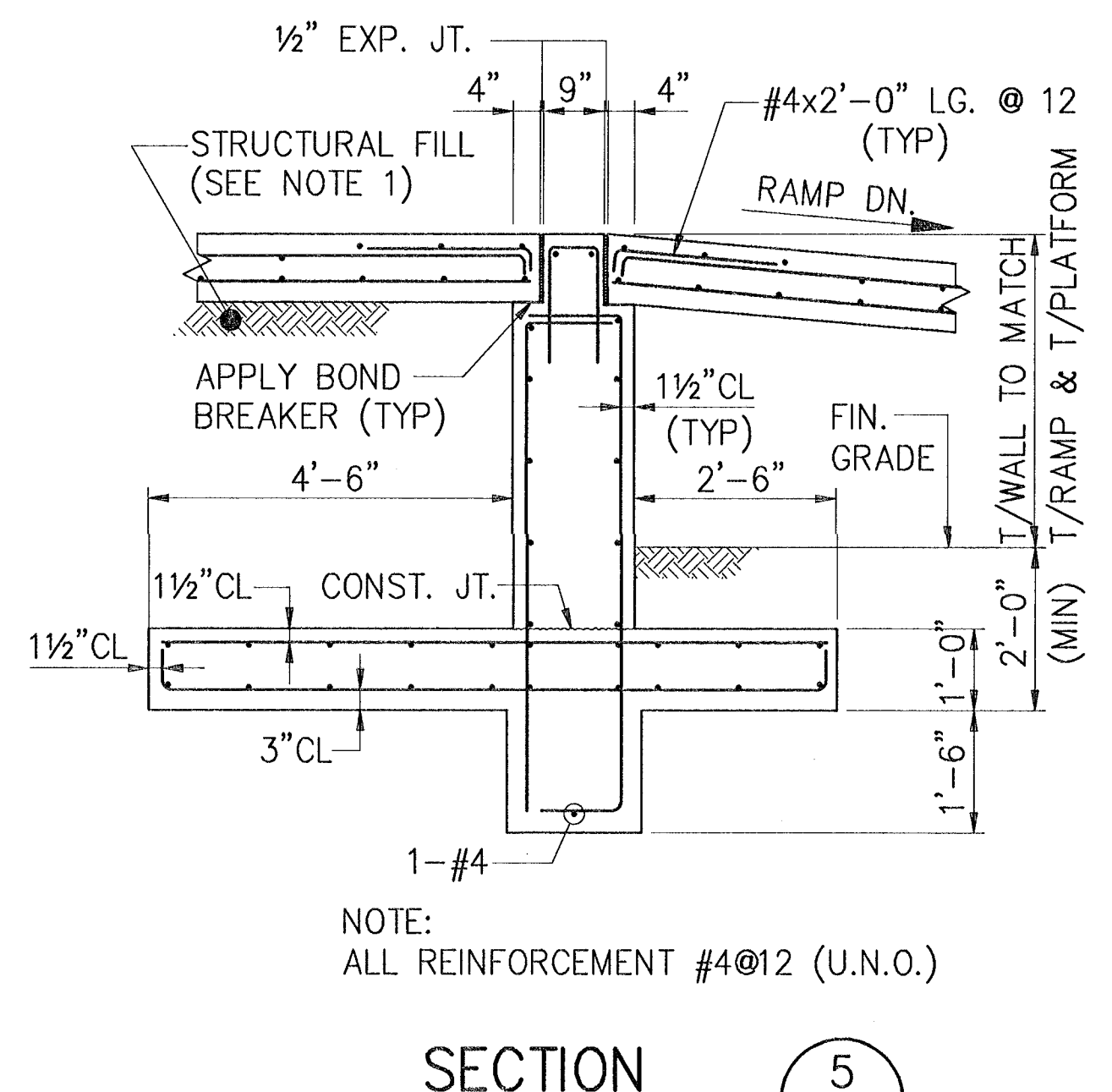
NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)



NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)

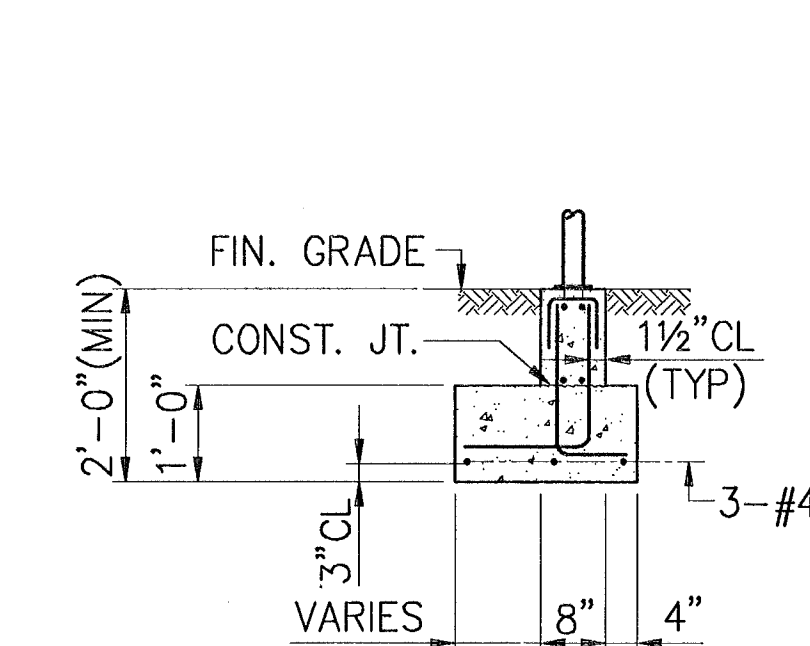


NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)

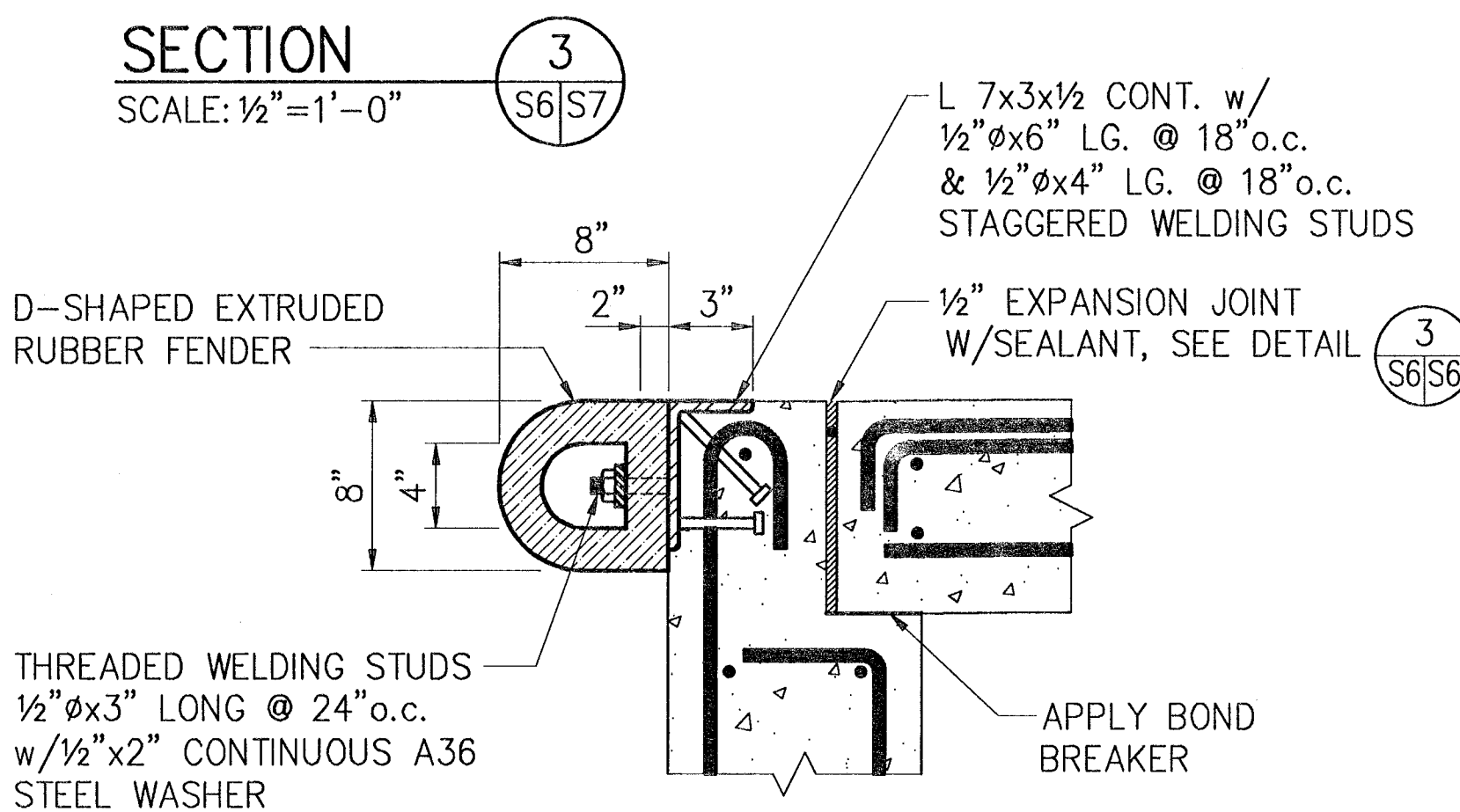
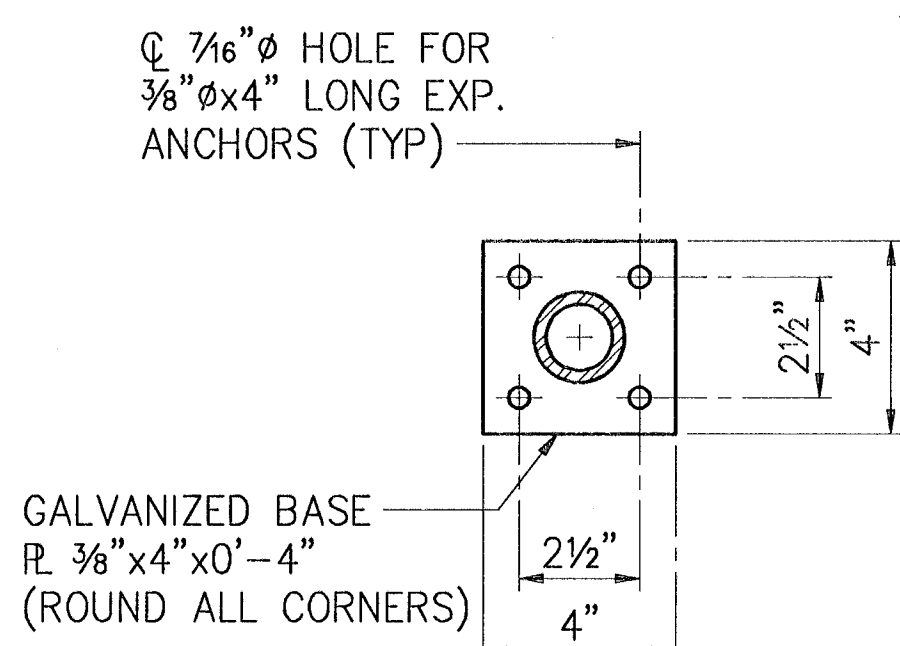


NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)

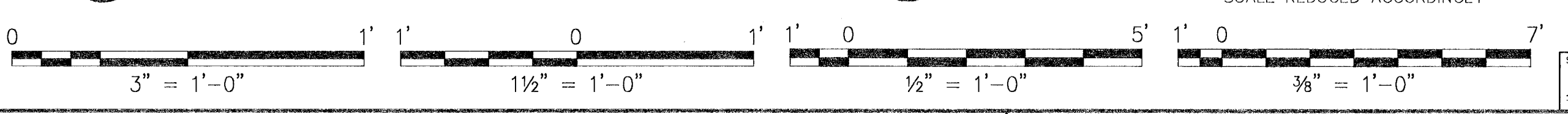
- NOTES:
1. PROVIDE 6" CRUSHED STONE UNDER SLAB IF LESS THAN 2'-0" (MIN.) OF STRUCTURAL FILL IS PROVIDED.
  2. DELETE CRUSHED STONE WHEN A MINIMUM OF 2'-0" OF STRUCTURAL FILL IS PROVIDED.



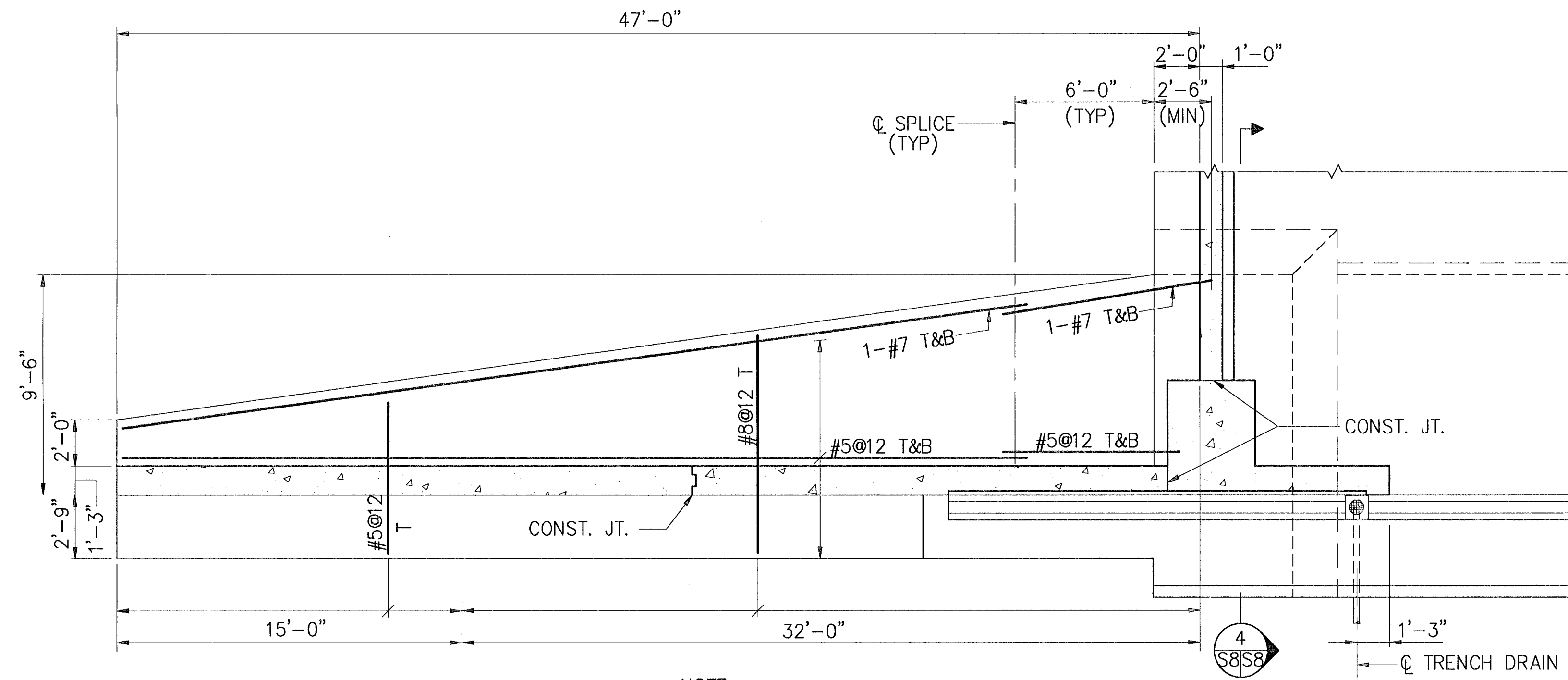
NOTE:  
ALL REINFORCEMENT #4@12 (U.N.O.)



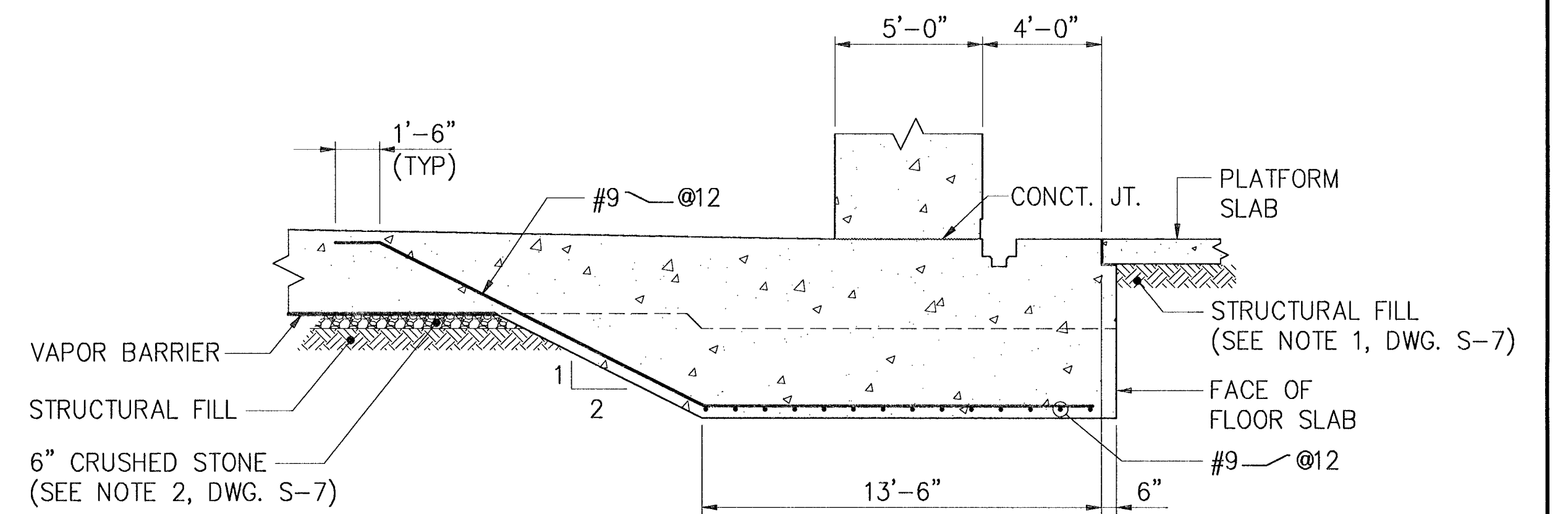
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT -- SCALE REDUCED ACCORDINGLY



SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 96 WASHINGTON ST., NEW YORK, NY 10014						
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> PLATFORM - SECTIONS & DETAILS						
DATE	27/5/97	DATE		DATE		DATE
ENGINEER IN CHARGE	R. Brady	BRANCH MANAGER	R. Brady	CRITERIA MANAGER	R. Brady	DIVISION DIRECTOR
SIZE	D	CODE IDENT NO	80091	NAVAEC DRAWING NUMBER	6,448,595	<b>S-7</b>
SCALE	AS NOTED	CONTRACT NO		SHEET	7	OF 33
SATISFACTORY TO		DATE		CATEGORY CODE		

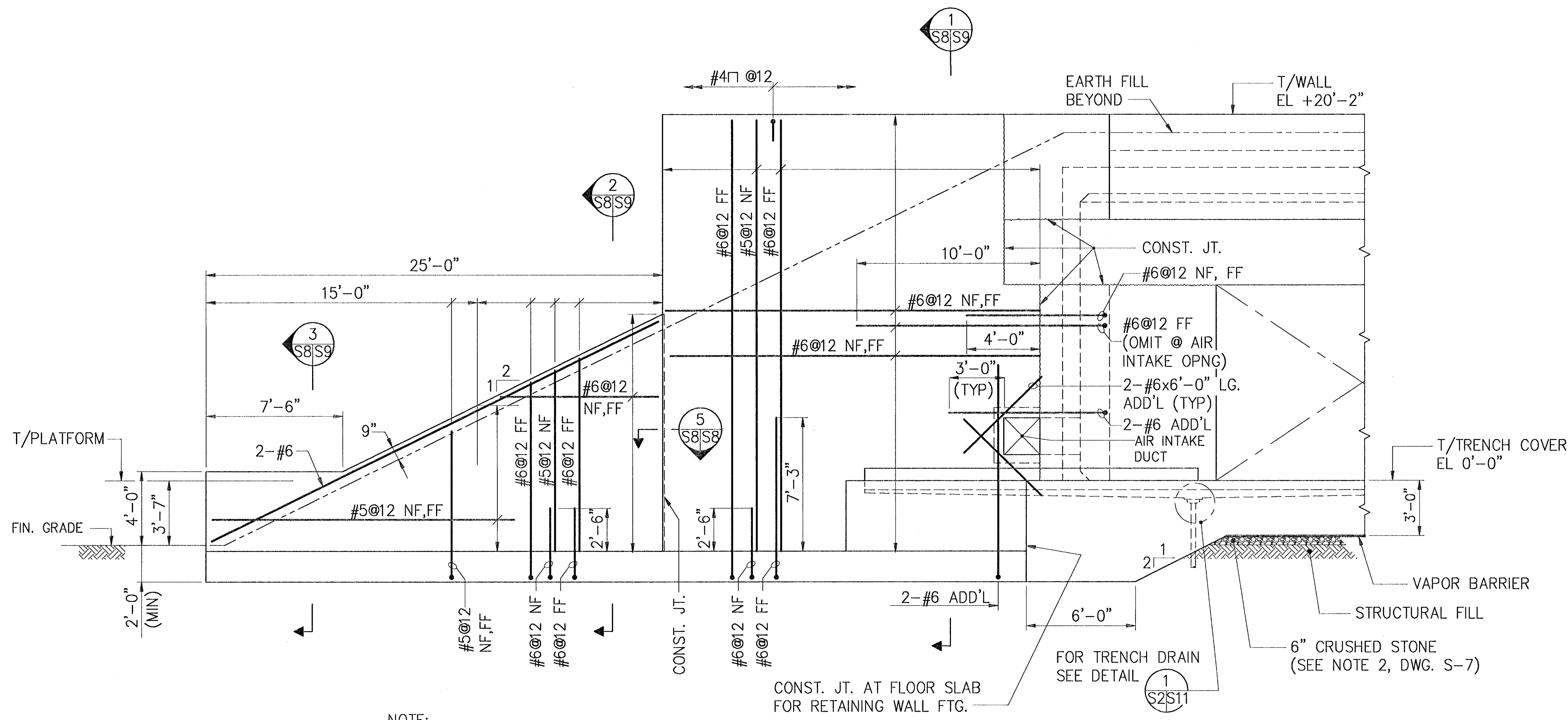


NOTE:  
PLATFORM OMITTED FOR CLARITY.  
**FOUNDATION PLAN**  
(RETAINING WALL "A" AS SHOWN)  
(RETAINING WALL "B" OPP. HAND)  
SCALE: 1/4"=1'-0"

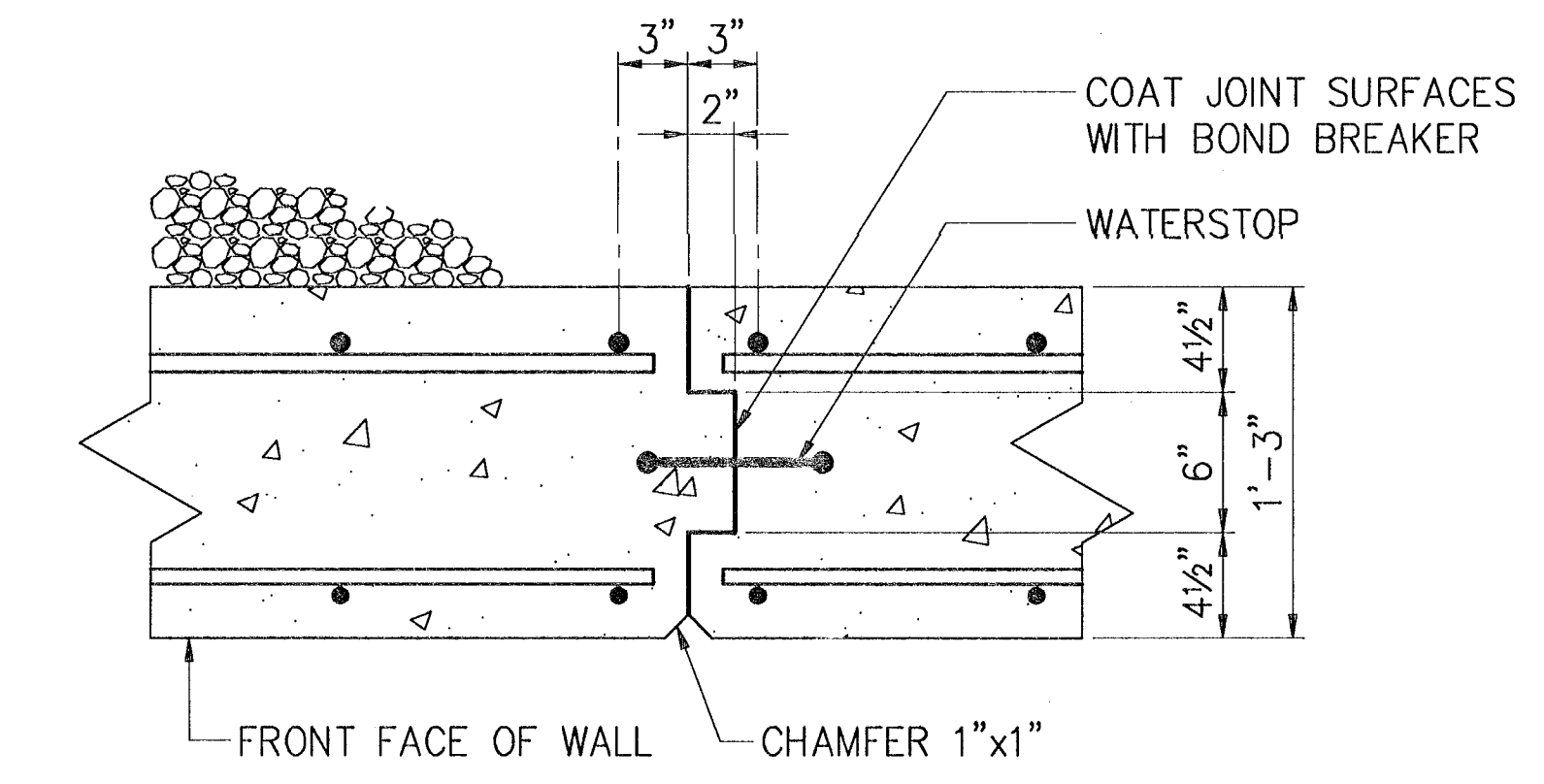
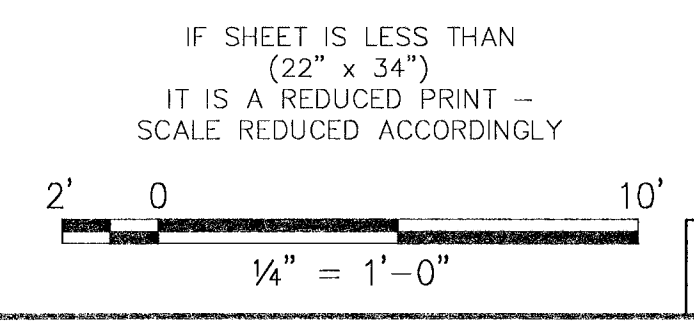


NOTE:  
FOR REINFORCEMENT NOT SHOWN  
SEE DWGS S-7 & S-11.

**SECTION 4**  
SCALE: 1/4"=1'-0"



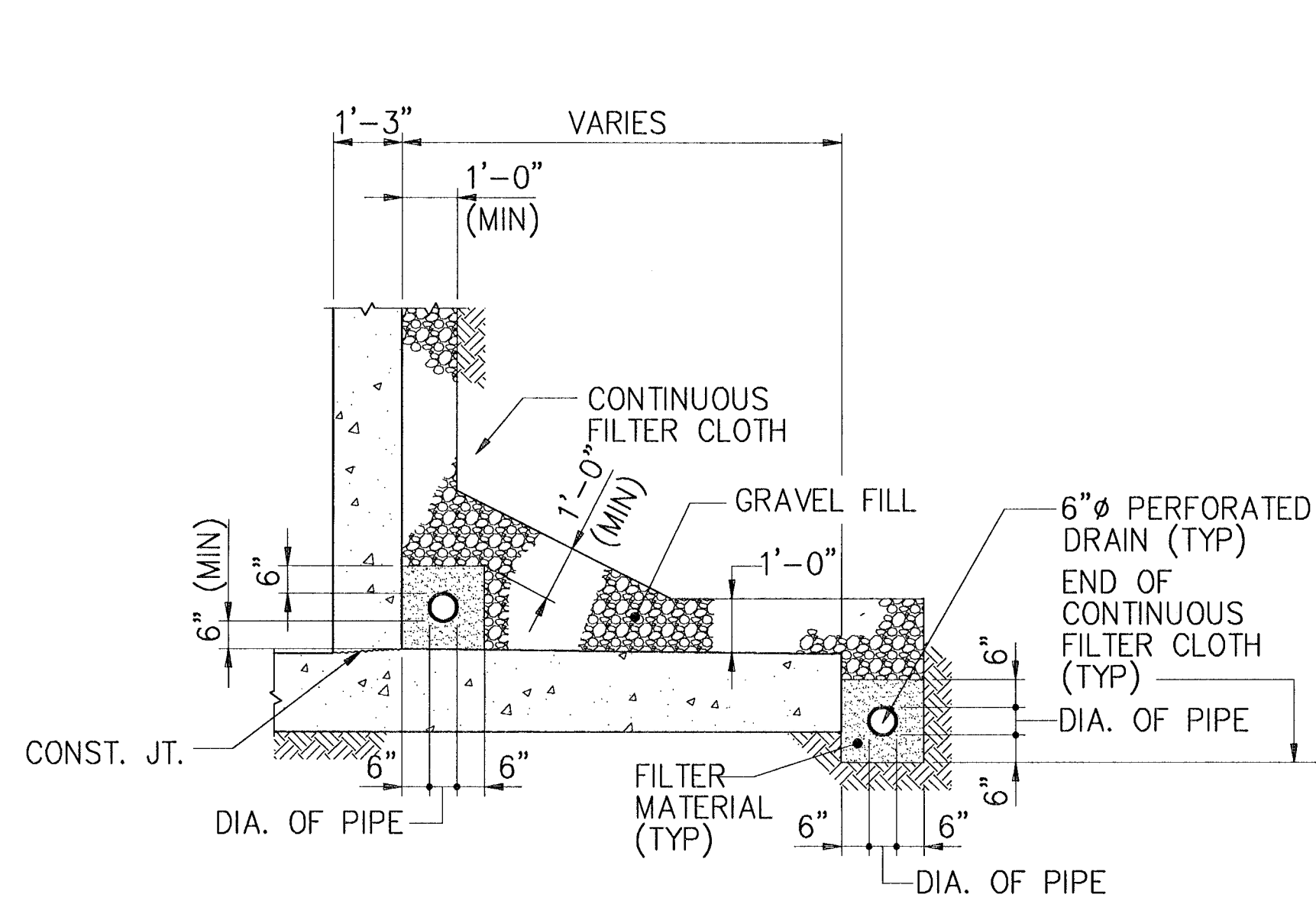
NOTE:  
PLATFORM OMITTED FOR CLARITY.  
**ELEVATION - RETAINING WALL "A"**  
(RETAINING WALL "B" OPP. HAND)  
SCALE: 1/4"=1'-0"



**SECTION 5**  
SCALE: 1/2"=1'-0"

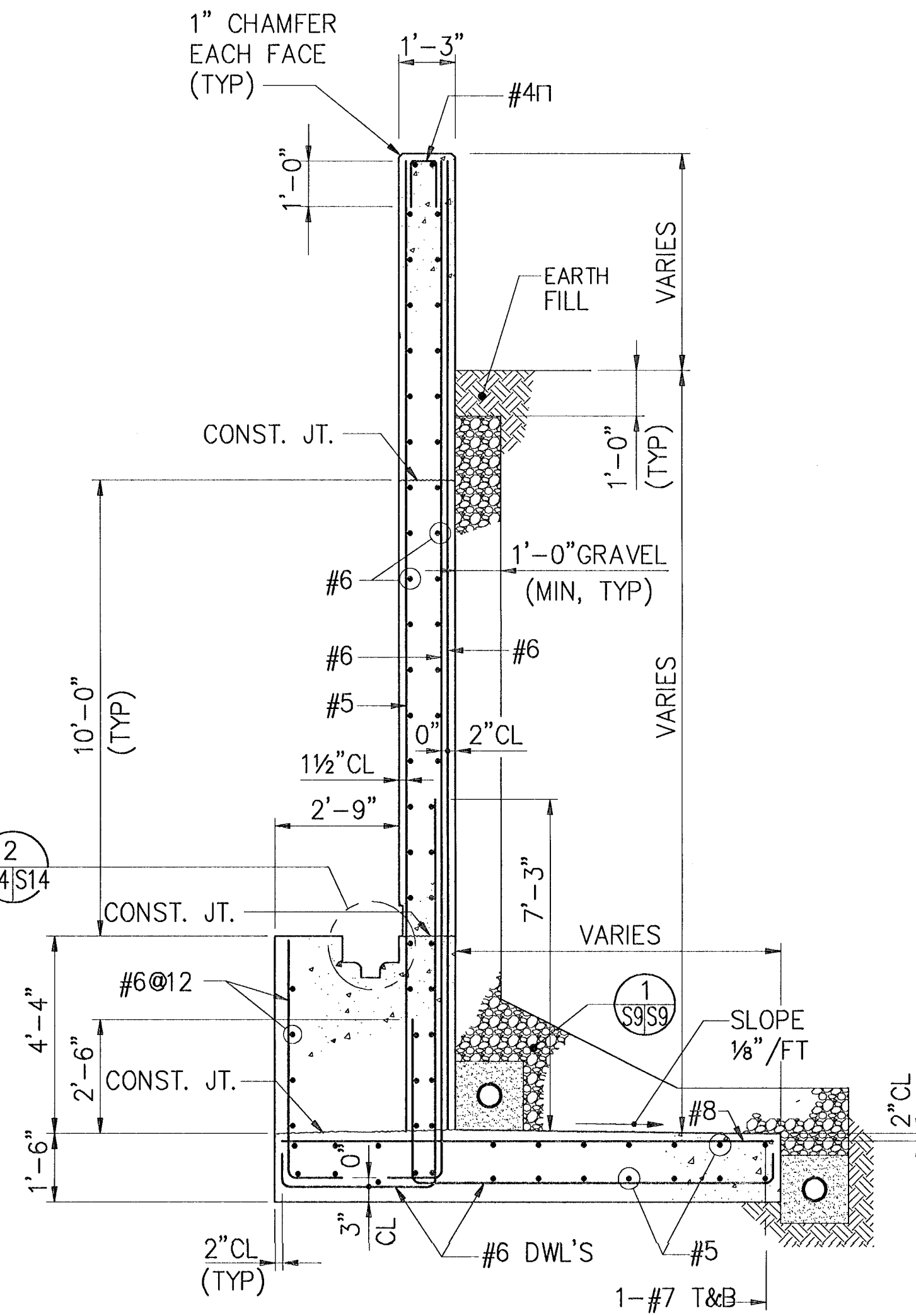
SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014 DATE: 27/5/97						
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350 NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> RETAINING WALL ELEVATION & SECTIONS (W/PLATFORM)						
SIZE	CODE BENT NO	NAVFAC DRAWING NUMBER	6,448,596		<b>S-8</b>	
SCALE	AS NOTED	CONTRACT NO			SHEET 8 OF 33	
CATEGORY CODE		SPEC NO				



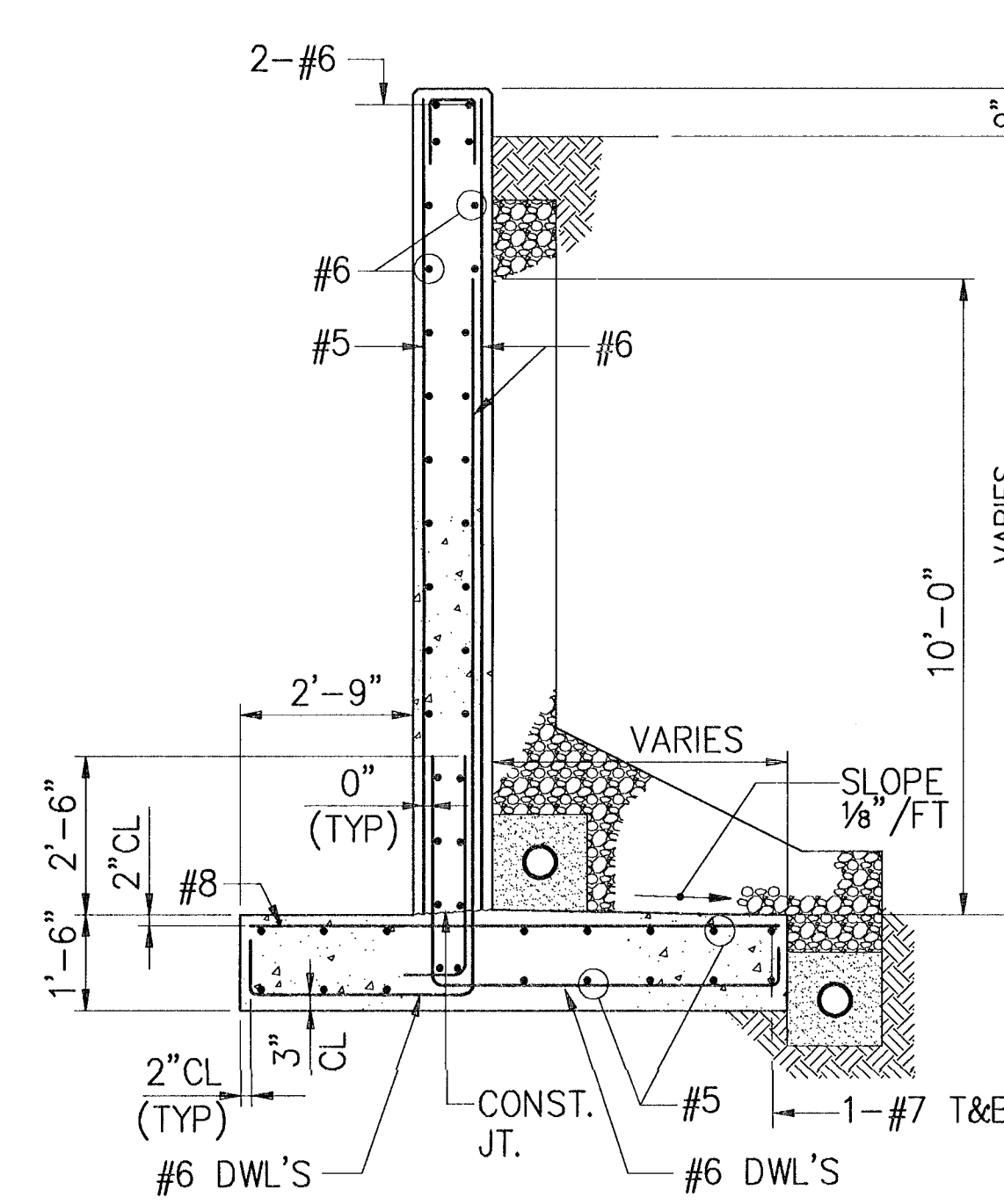


**DETAIL 1**  
SCALE: 3/8" = 1'-0"  
(TYPICAL 6"Ø PERFORATED DRAIN)

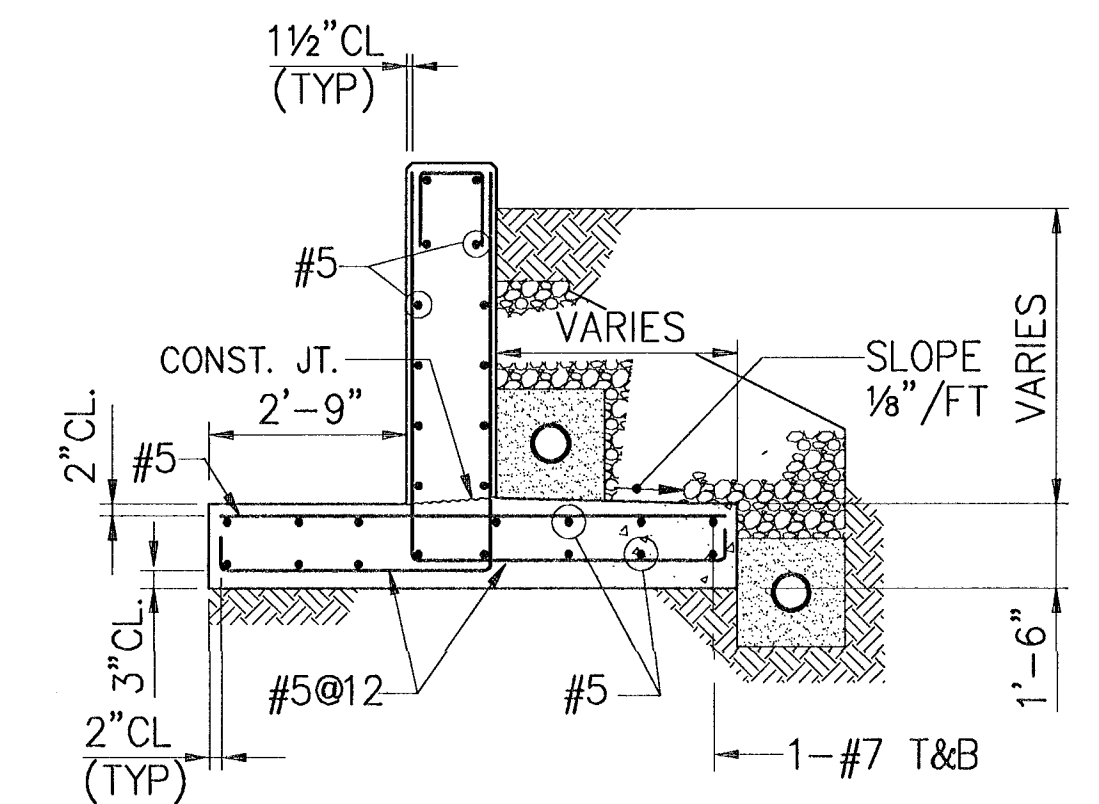
**SECTION 2**  
SCALE: 1/4" = 1'-0"  
DOOR TRENCH-FOR REINF. SEE SECT. (TYP)



**SECTION 1**  
SCALE: 3/8" = 1'-0"



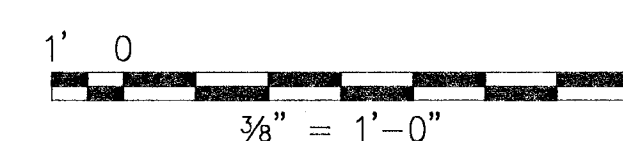
**SECTION 2**  
SCALE: 3/8" = 1'-0"  
NOTE: FOR INFORMATION NOT SHOWN SEE SECTION 1



**SECTION 3**  
SCALE: 3/8" = 1'-0"  
NOTE: FOR INFORMATION NOT SHOWN SEE SECTION 1

NOTE: FOR ALTERNATE EARTH FILL DRAINAGE SYSTEM SEE DWG. S-13.

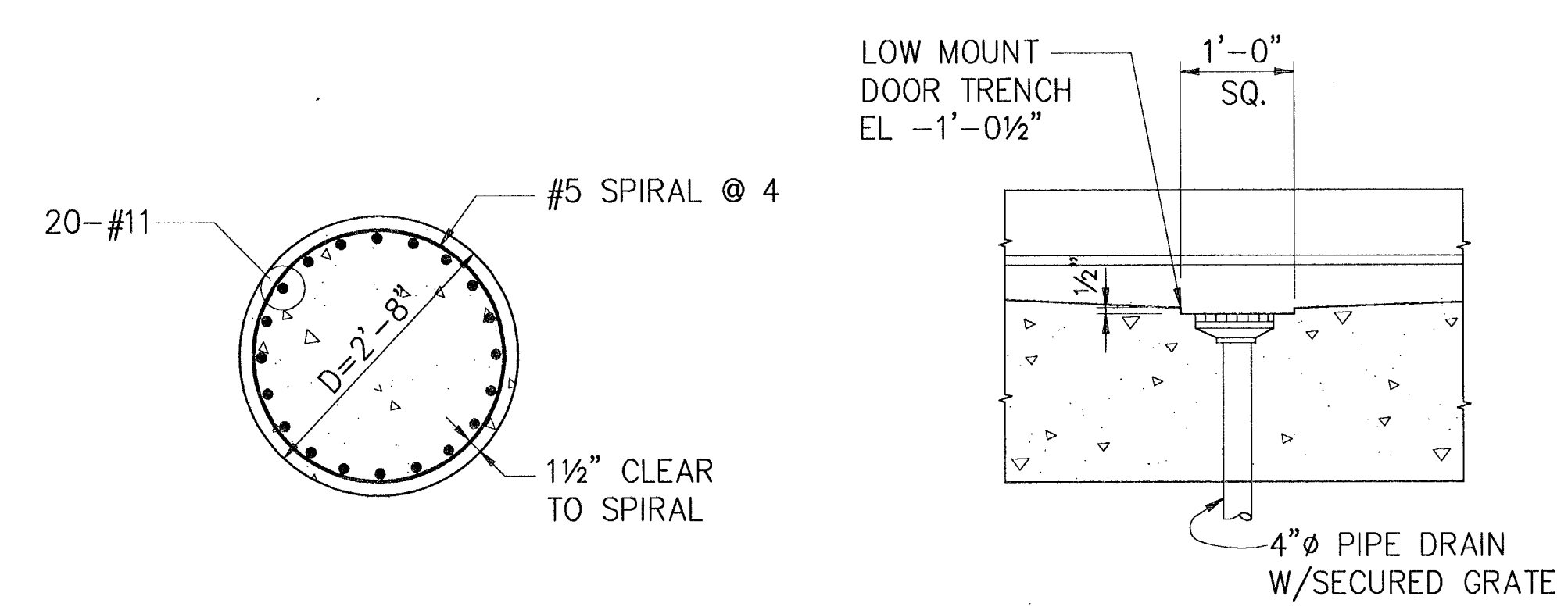
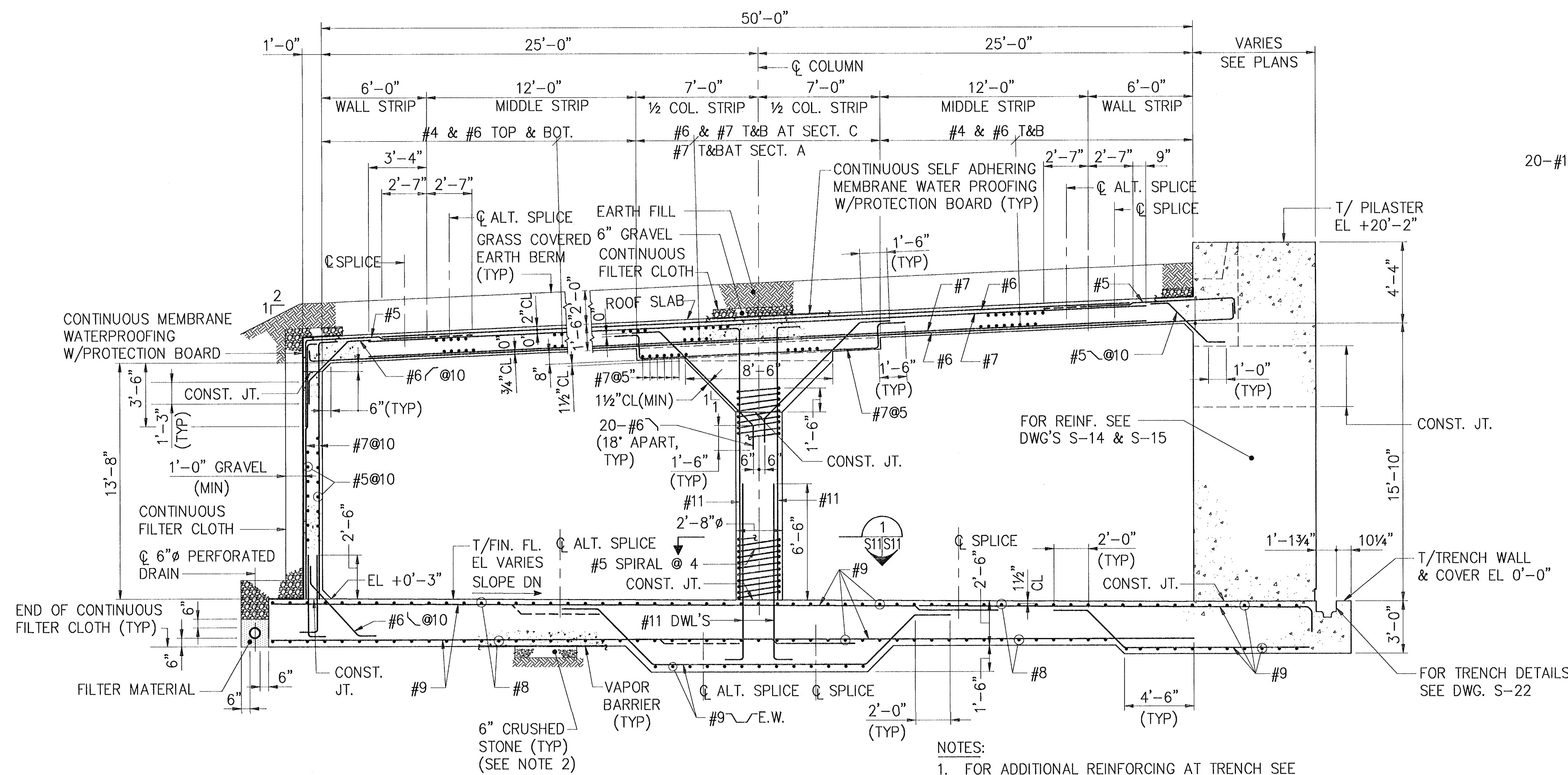
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY



SATISFACTORY TO: \_\_\_\_\_ DATE: \_\_\_\_\_

SYMBOL	DESCRIPTION	PRO'D BY	DATE	APPROVED
REVISIONS				
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014				
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350				
NAVAL FACILITIES ENGINEERING COMMAND				
STANDARD DRAWING				
STANDARD BOX MAGAZINE TYPE 'F'				
RETAINING WALL SECTIONS (W/PLATFORM)				
DESIGNED BY	DATE	SCALE	CONTRACT NO.	SHEET 9 OF 33
PROJECT MANAGER	DATE	SCALE	CONTRACT NO.	
ENGINEER IN CHARGE	DATE	SCALE	CONTRACT NO.	
CHECKED BY	DATE	SCALE	CONTRACT NO.	
APPROVED	DATE	SCALE	CONTRACT NO.	



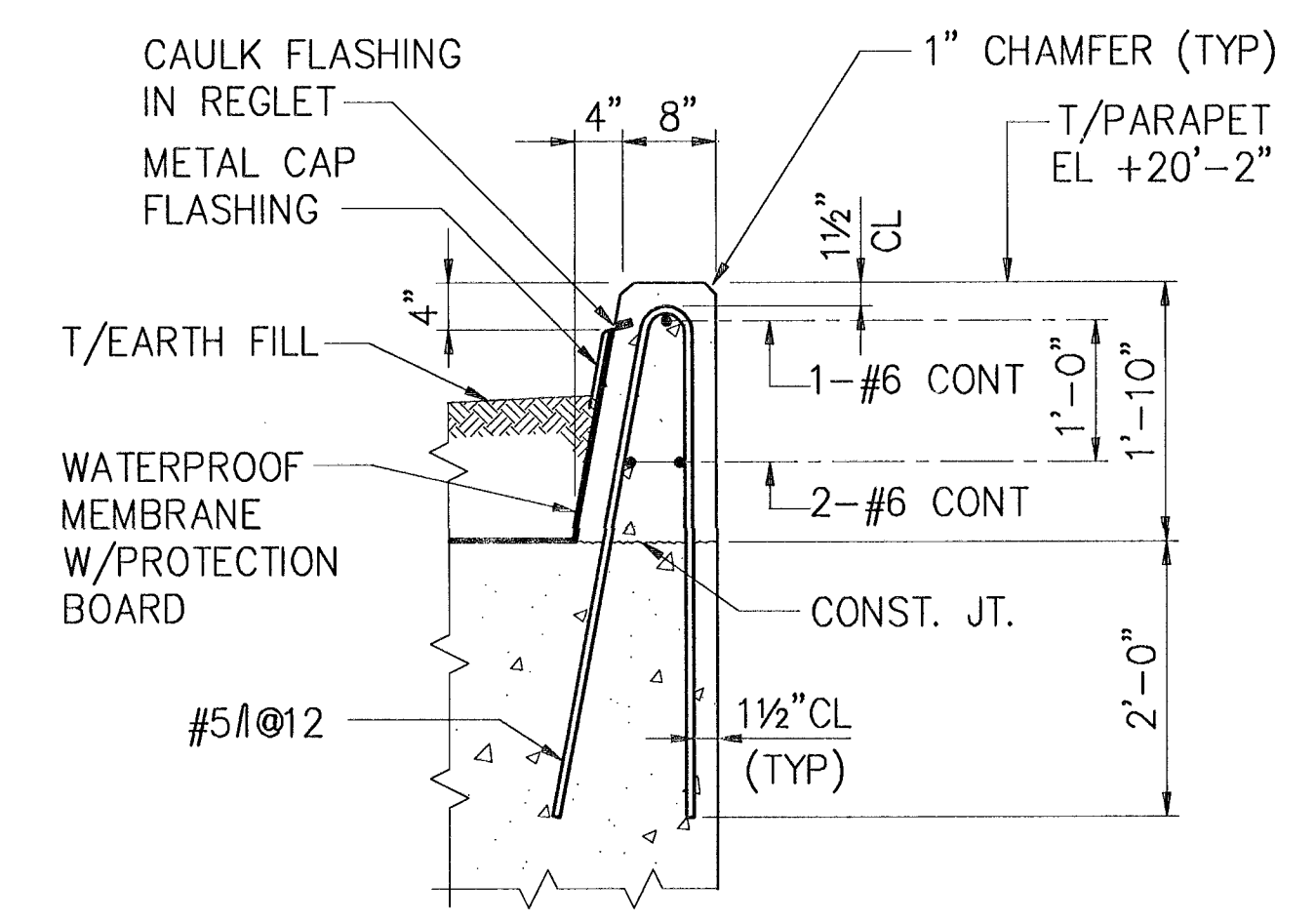


SECTION 1  
SCALE: 3/4" = 1'-0" S12 S11 S11

DETAIL 1  
SCALE: 3/4" = 1'-0" S2 S11

SECTION A & C  
SCALE: 1/4" = 1'-0" S3, S10  
(COLUMN STRIP)

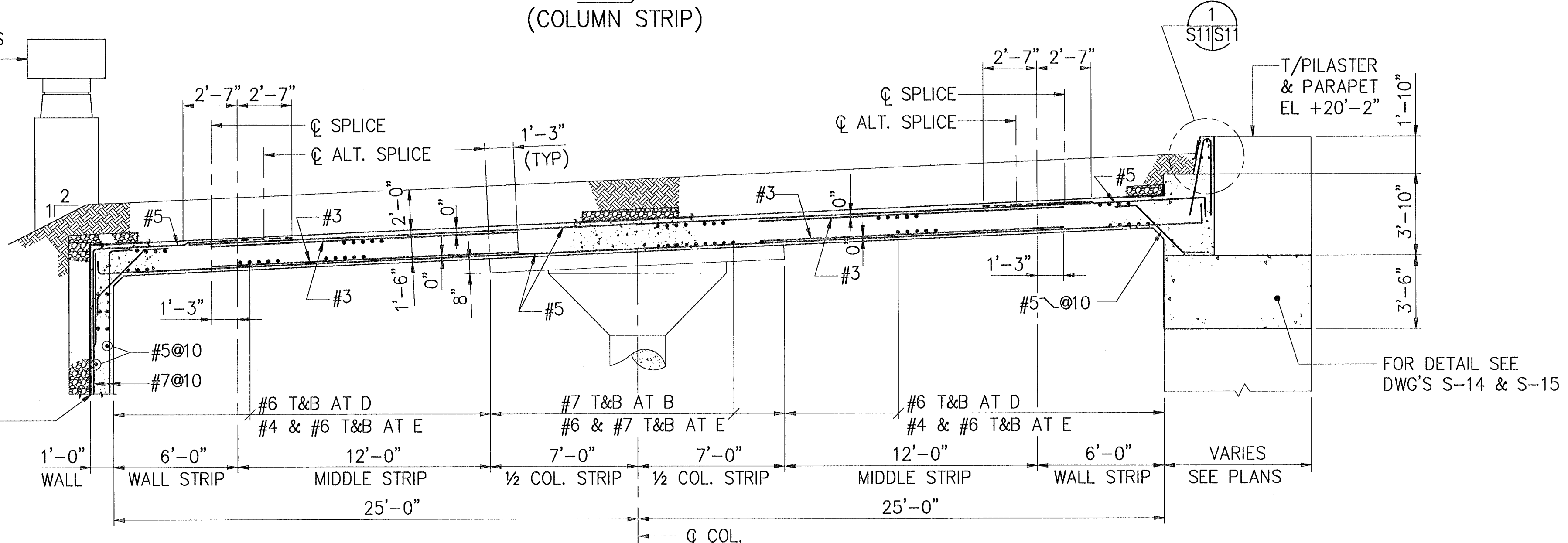
- NOTES:
1. FOR ADDITIONAL REINFORCING AT TRENCH SEE DWG'S S-14 & S-15.
  2. DELETE CRUSHED STONE WHEN A MINIMUM OF 2'-0" OF STRUCTURAL FILL IS PROVIDED.



DETAIL 1  
SCALE: 3/4" = 1'-0" S11 S11

NOTE: FOR ALTERNATE EARTH FILL DRAINAGE SYSTEM SEE DWG. S-13.

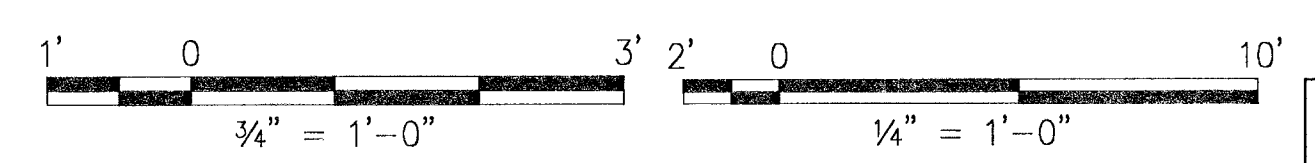
VENTILATOR FOR DETAILS  
SEE DWG. S-23



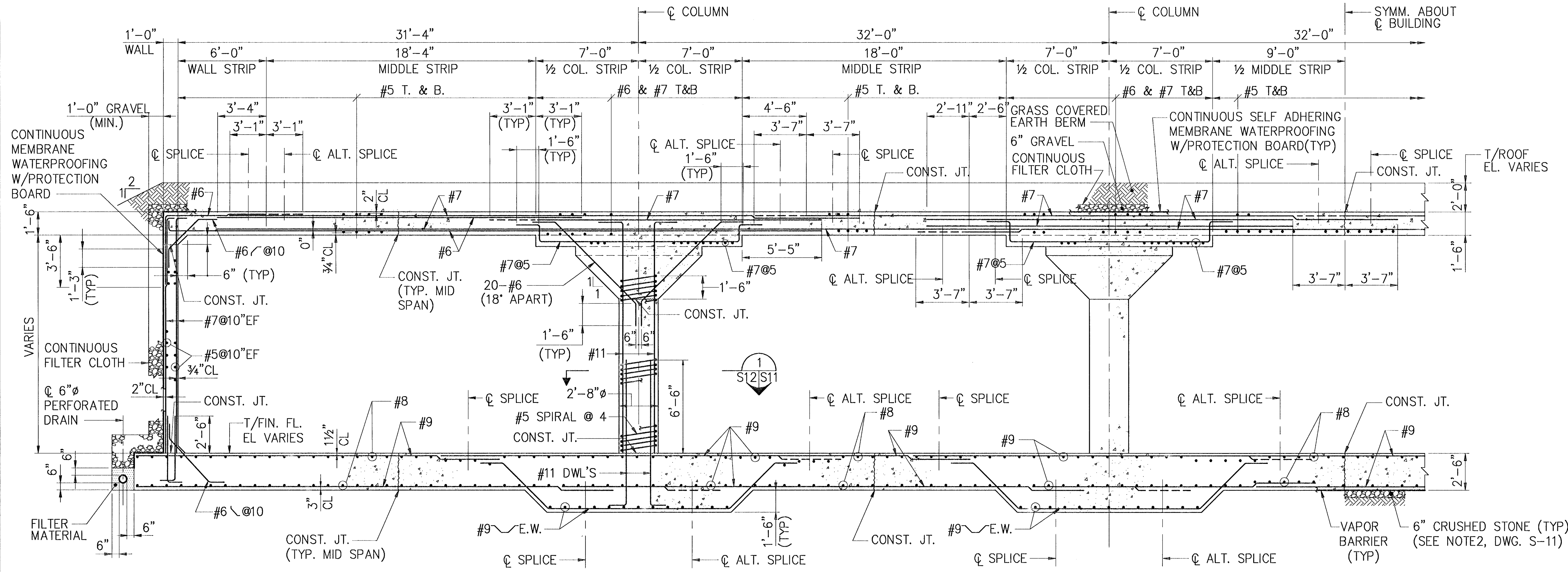
SECTION D & E  
SCALE: 1/4" = 1'-0" S10 S11  
(TYPICAL FOR WALL & MIDDLE STRIPS)

- NOTES:
1. FOR ROOF INFORMATION NOT SHOWN SEE SECTIONS A & C THIS DRAWING.
  2. FOR FLOOR SLAB REINFORCEMENT SEE DWG. S-3.

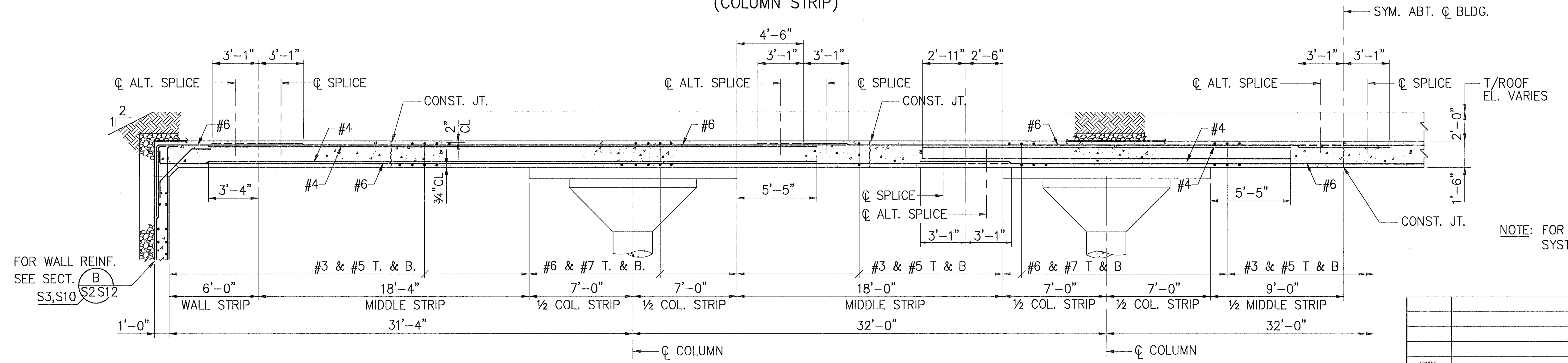
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY



SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014						
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING STANDARD BOX MAGAZINE TYPE 'F' TRANSVERSE MAGAZINE SECTION						
ENGINEER IN CHARGE <i>Ron Brady</i>	BRANCH MANAGER <i>R. Brady</i>	DATE 27/5/97	NAVFAC DRAWING NUMBER 6,448,599	SHEET 11		OF 33
CRITERIA MANAGER <i>R. Brady</i>	DIVISION DIRECTOR <i>R. Hayden</i>	DATE	CONTRACT NO.	SHEET 11		OF 33
DATE	DATE	SCALE AS NOTED	CATEGORY CODE	SHEET 11		OF 33
DATE	DATE	SCALE	CATEGORY CODE	SHEET 11		OF 33

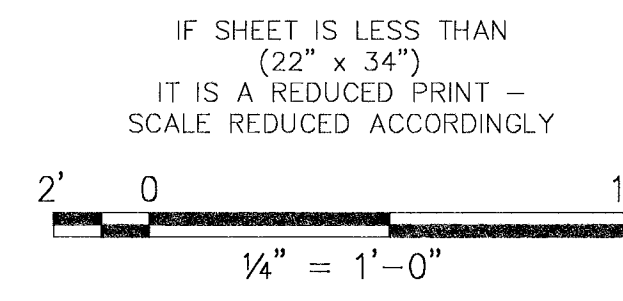


**SECTION B**  
 SCALE: 1/4" = 1'-0"  
 S3,S10  
 (COLUMN STRIP)



**SECTION F**  
 SCALE: 1/4" = 1'-0"  
 S10,S12  
 (TYPICAL FOR WALL & MIDDLE STRIPS)

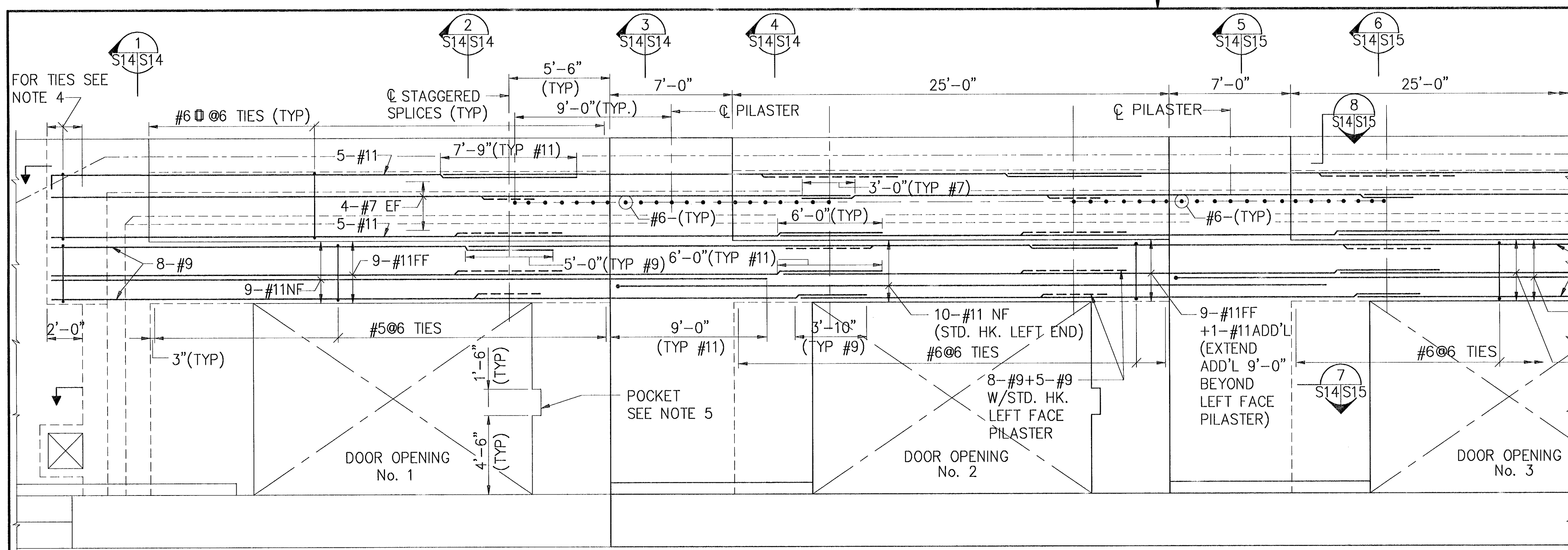
- NOTES:**
1. FOR ROOF INFORMATION NOT SHOWN SEE SECTION B THIS DRAWING.
  2. FOR FLOOR SLAB REINF. SEE DRAWING S-3.



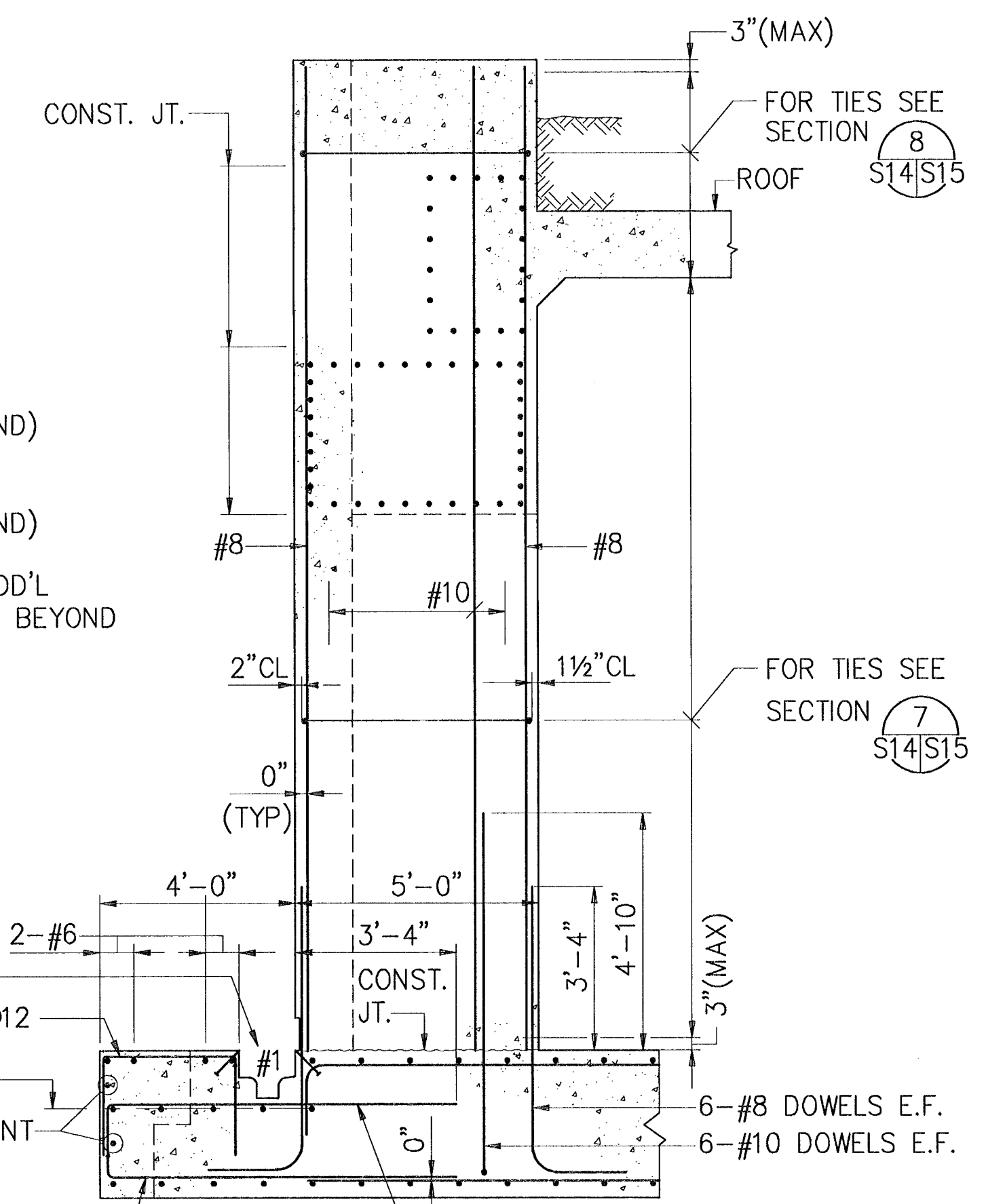
NOTE: FOR ALTERNATE EARTH FILL DRAINAGE SYSTEM SEE DWG. S-13.

SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
AMMANN & WHITNEY CONSULTING ENGINEERS 88 MORTON ST., NEW YORK, NY 10014 DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350				
NAVAL FACILITIES ENGINEERING COMMAND				
STANDARD DRAWING				
<b>STANDARD BOX MAGAZINE TYPE 'F'</b>				
LONGITUDINAL MAGAZINE SECTION				
ENGINEER IN CHARGE <i>R. Brody</i>	BRANCH MANAGER <i>R. Brody</i>	DATE 27/5/97	SIZE D	CODE IDENT NO. 80091
CITERIA MANAGER <i>R. Brody</i>	DIVISION DIRECTOR <i>M. Spayd</i>	DATE	SCALE AS NOTED	NAVAC DRAWING NUMBER 6,448,600
FIRE PROTECTION ENGINEER	DATE	DATE	CATEGORY CODE	CONTRACT NO.
CITERIA MANAGER	DATE	DATE		SHEET 12
APPROVED	DATE	DATE		OF 33
FOR COMMANDER NAVFACENCOM				

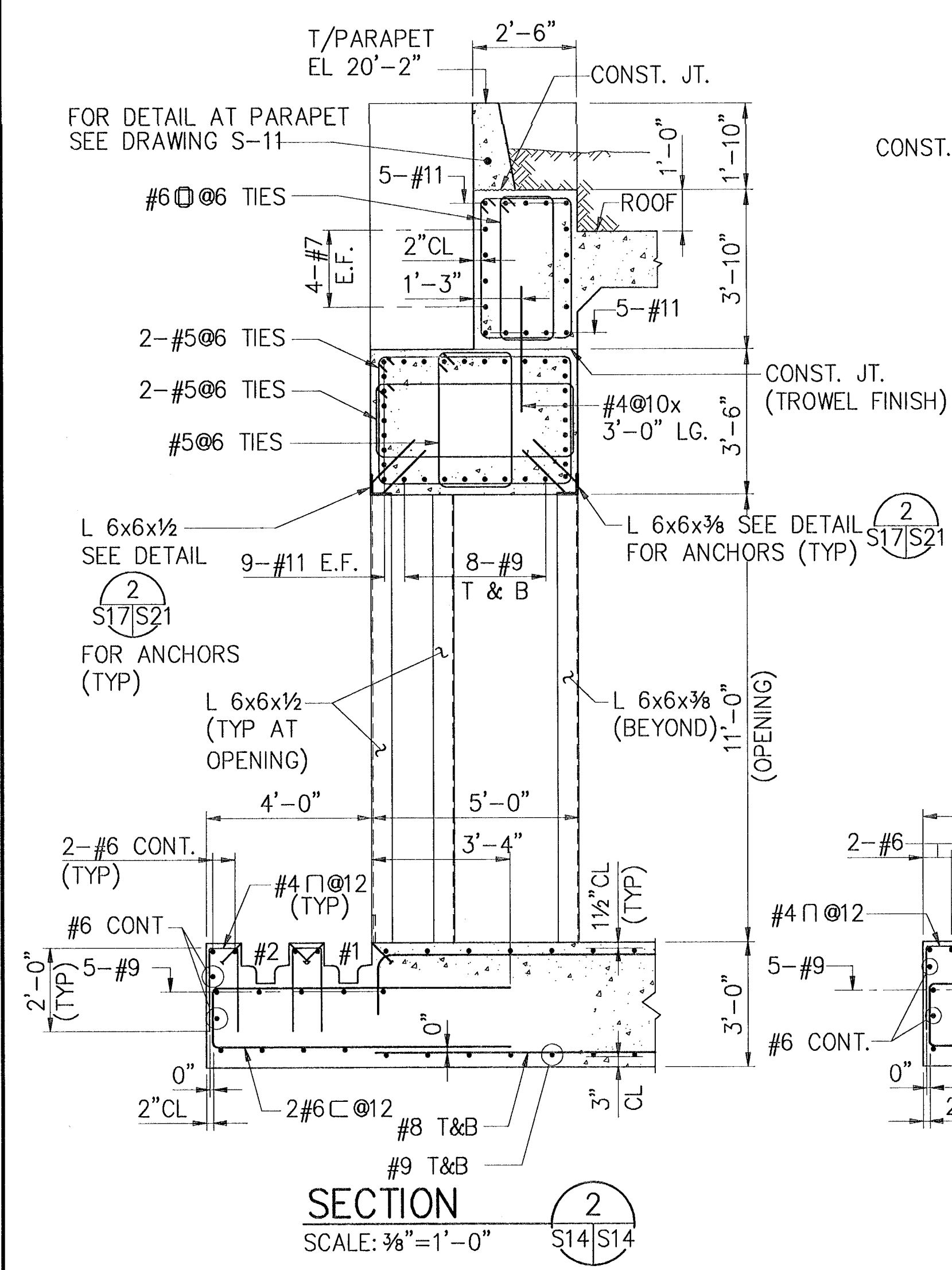




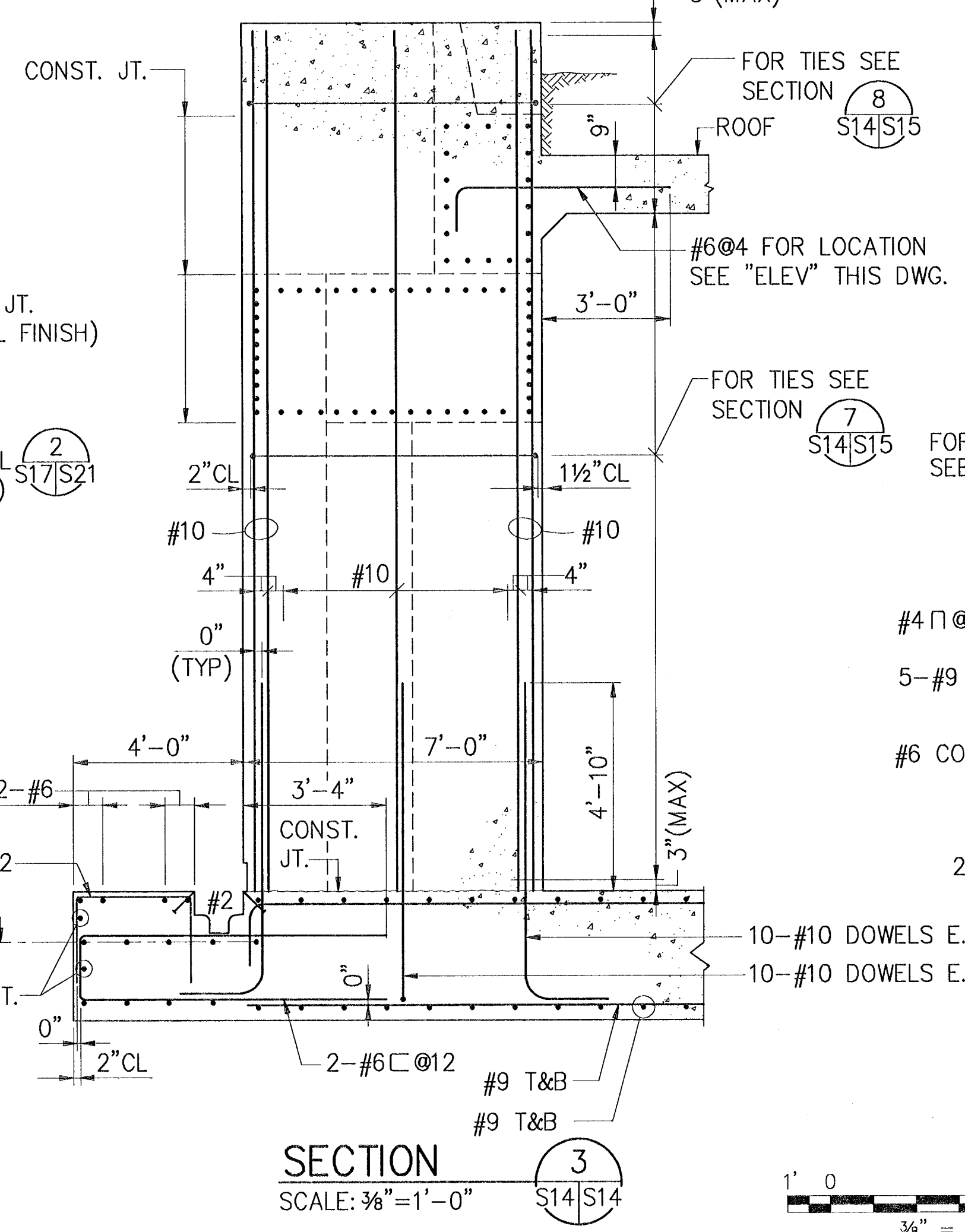
13-#9+8-#9 ADD'L (W/STD. HK. EACH END)  
 12-#11 NF. (W/STD. HK. EACH END)  
 10-#11 FF.+2-#11 ADD'L (EXTEND ADD'L 9'-0" BEYOND LEFT FACE PILASTER)



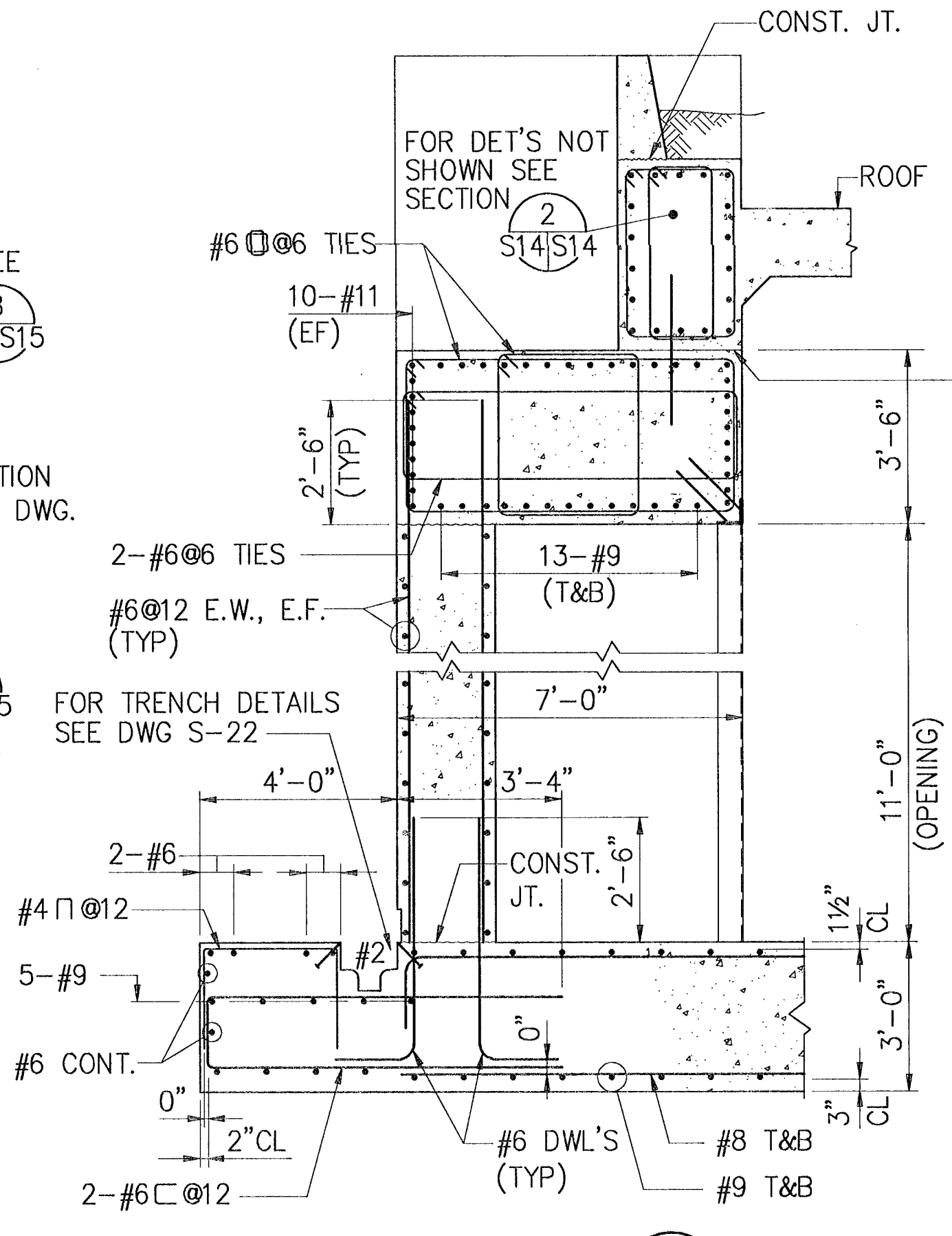
SECTION 1 AS SHOWN 2 OPP. HAND  
 SCALE: 1/4" = 1'-0"



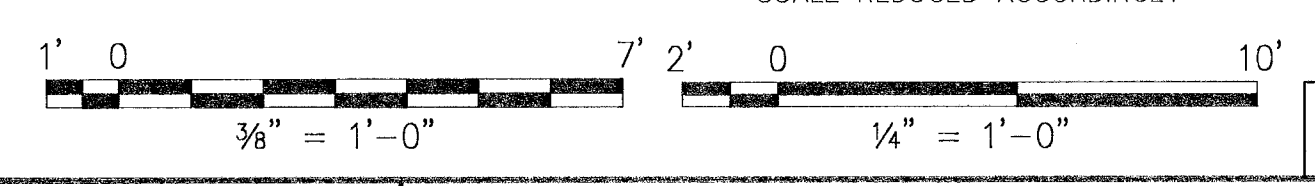
SECTION 2  
 SCALE: 3/8" = 1'-0"



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



SECTION 4  
 SCALE: 3/8" = 1'-0"

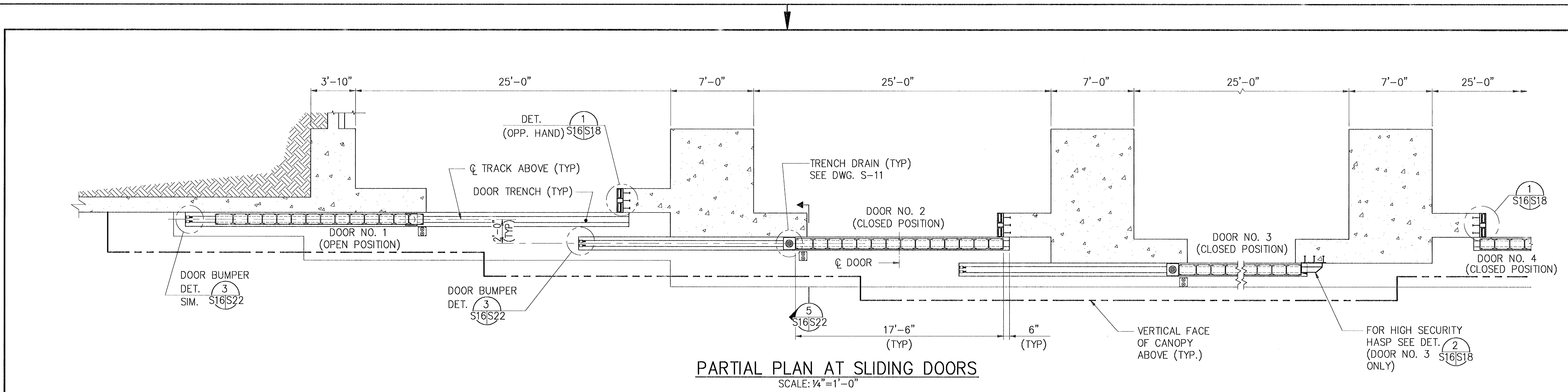


NOTES:

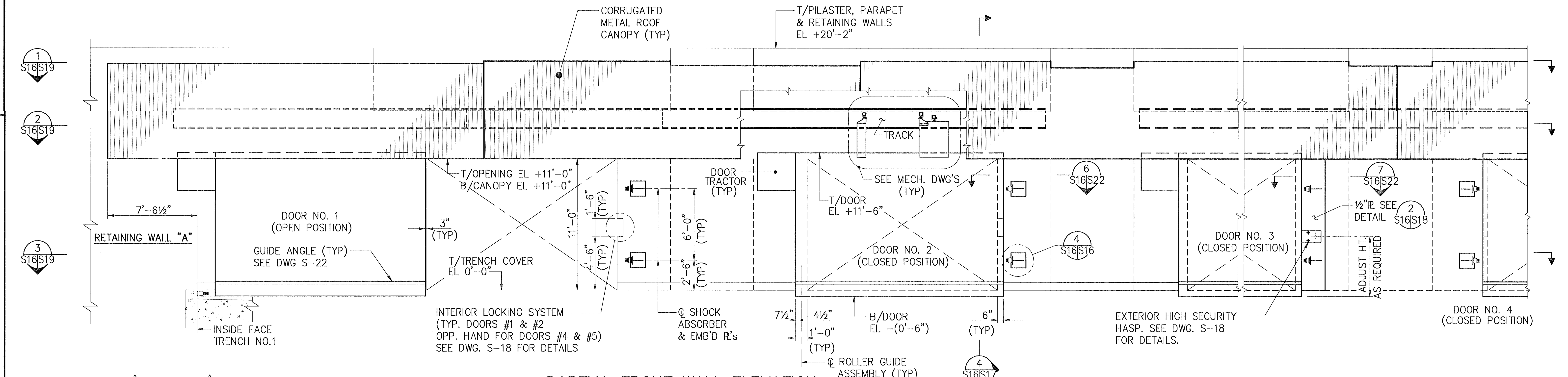
- FOR RETAINING WALL REINFORCEMENT SEE RETAINING WALL ELEVATION AND SECTION DRAWINGS.
- FOR STAGGERED SPLICES: BAR SPLICE INDICATED THUS ALTERNATE BAR SPLICE INDICATED THUS
- ALL PILASTERS SHALL BE PLUMB, ALLOWABLE DEVIATION FROM THE VERTICAL SHALL NOT EXCEED 1/4" PER 10'-0" VERTICAL HEIGHT.
- PROVIDE TIES SAME AS SECTION 2
- INTERRUPT EXTERIOR WALL REINFORCEMENT AT POCKET WITH STANDARD HOOK. PROVIDE ADDITIONAL BARS TO MATCH THE INTERRUPTED BARS.

SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
AMMANN & WHITNEY CONSULTING ENGINEERS 95 MORTON ST., NEW YORK, NY 10014 DATE: 27/5/97				
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350 NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING STANDARD BOX MAGAZINE TYPE 'F' HEADWALL ELEVATION & SECTIONS				
ENGINEER IN CHARGE R. Brody	BRANCH MANAGER R. Brody			
CITERIA MANAGER R. Brody	DIVISION DIRECTOR D. Grayson			
FIRE PROTECTION ENGINEER	DATE	SIZE D	CODE BENT NO. 80091	NAVFAC DRAWING NUMBER 6,448,602
CITERIA MANAGER	DATE	SCALE AS NOTED	CONTRACT NO.	SHEET 14 OF 33
APPROVED	DATE	SPEC NO.		
FOR COMMANDER NAVFACENCOM				



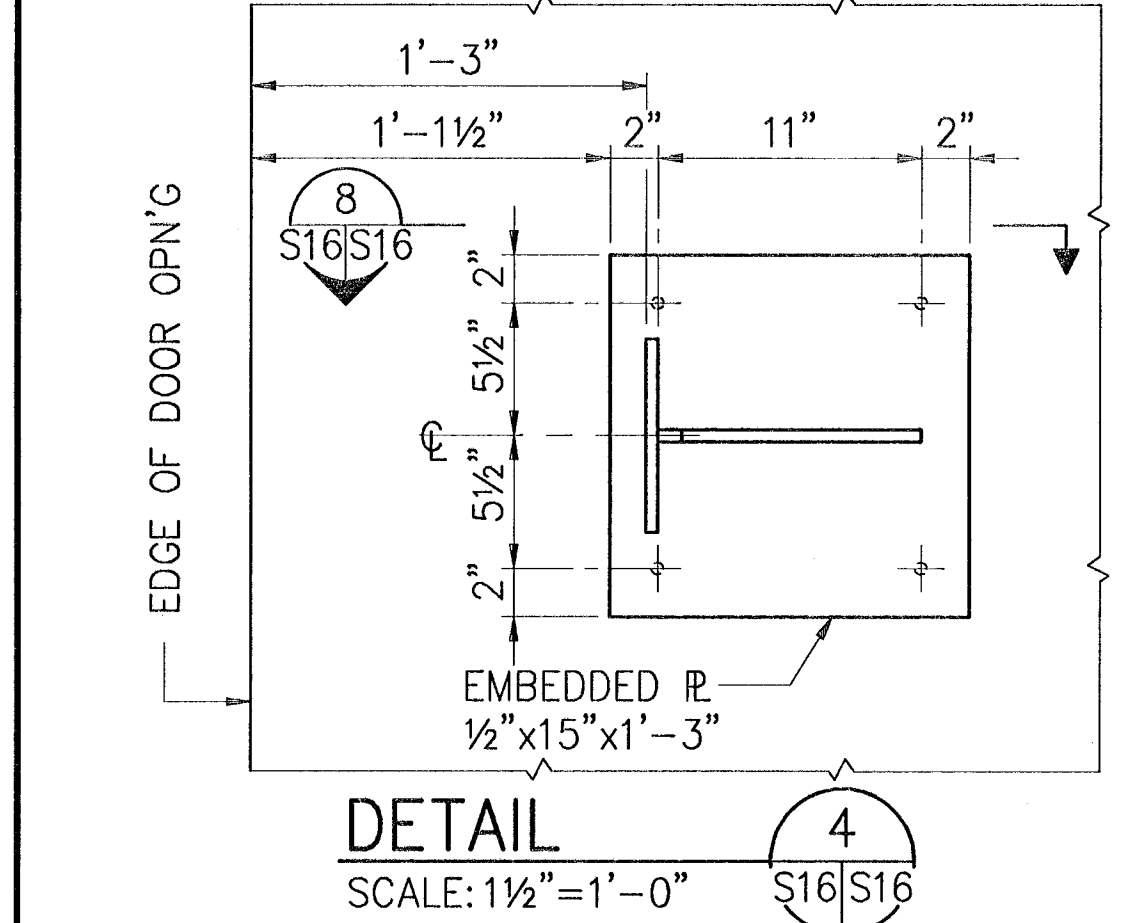


**PARTIAL PLAN AT SLIDING DOORS**  
SCALE: 1/4" = 1'-0"

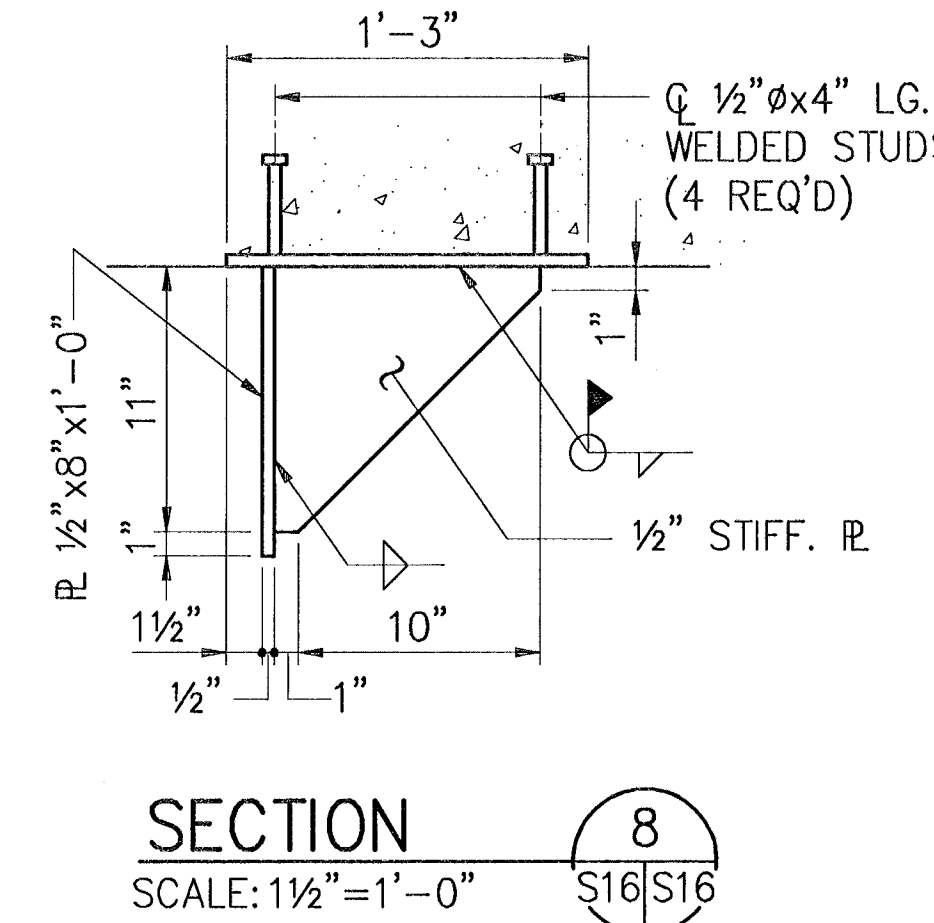


**PARTIAL FRONT WALL ELEVATION**  
SCALE: 1/4" = 1'-0"

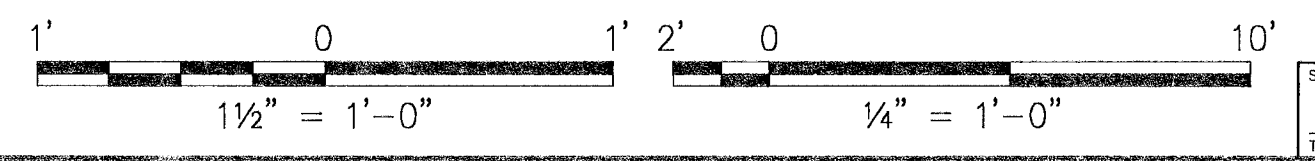
- NOTES:**
1. DOOR #4 AND DOOR #5 ARE OPPOSITE HAND. SEE DWG. S-2 FOR ORIENTATION.
  2. ANGLES AROUND OPENINGS OMITTED FOR CLARITY.
  3. FOR DOOR DETAILS SEE DWG. S-17.
  4. FOR DOOR TRACTOR ASSEMBLY SEE DWG'S M-1, M-2 AND M-3.
  5. FOR DOOR SHOCK ABSORBERS OPERATING REQUIREMENTS SEE DWG. S-22.
  5. FOR BRUSH WEATHERSTRIP AROUND DOOR OPENING SEE DETAIL 2 AND SECTION 5.



**DETAIL 4**  
SCALE: 1 1/2" = 1'-0"

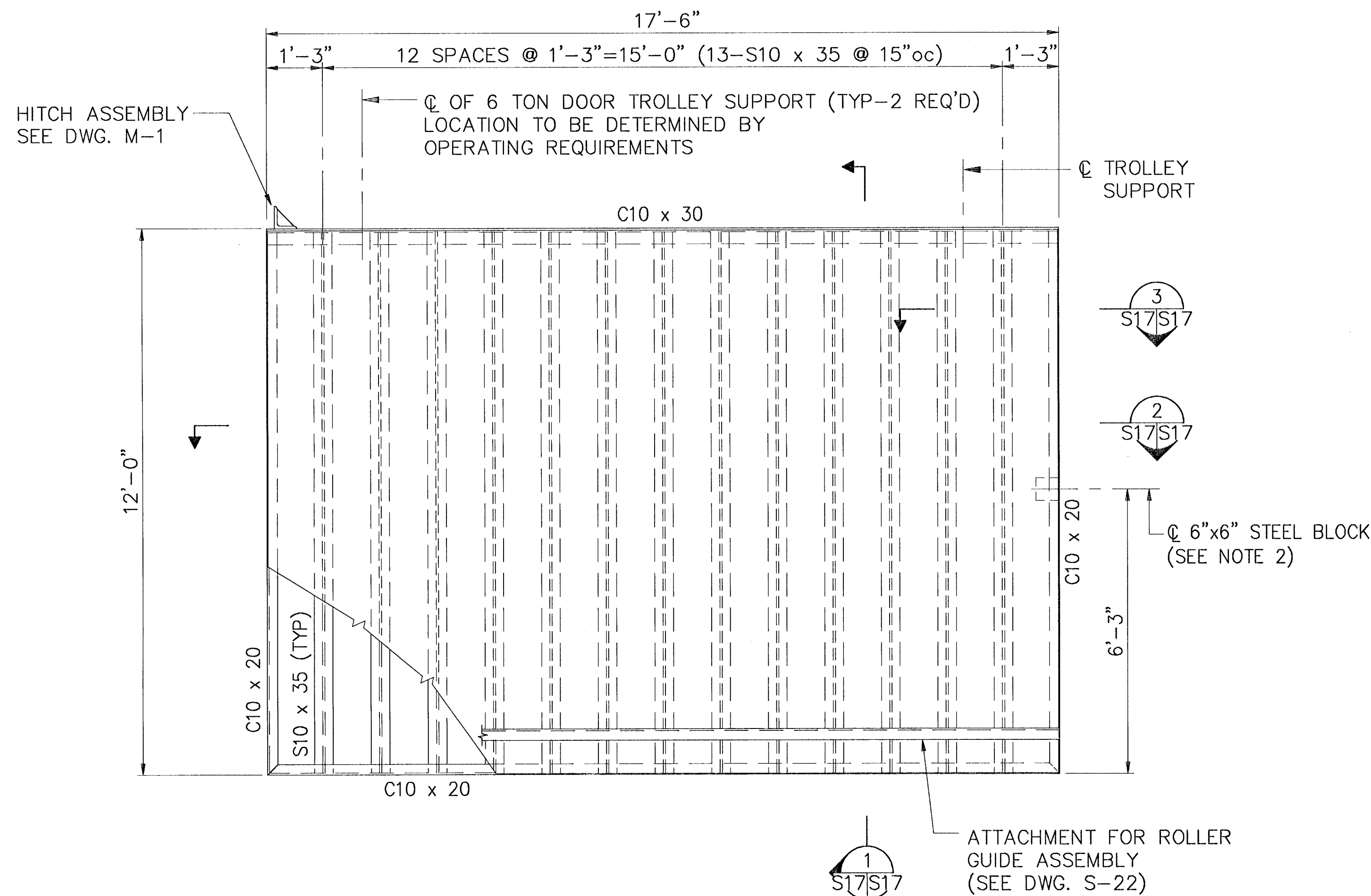


**SECTION 8**  
SCALE: 1 1/2" = 1'-0"

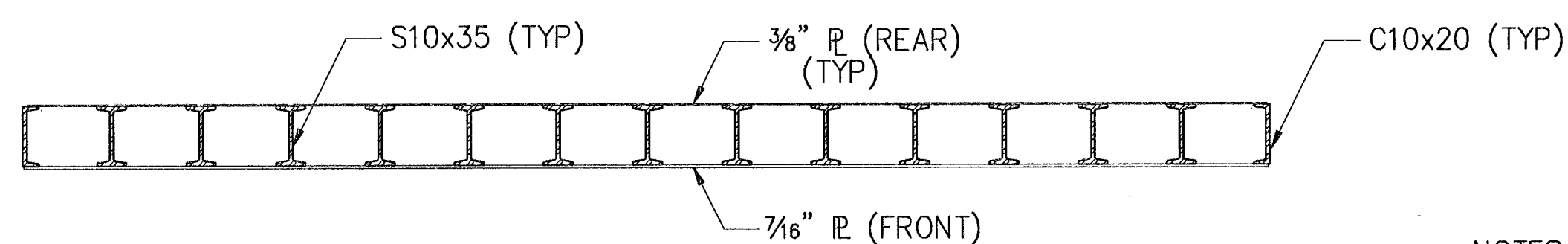


SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 86 WESTON ST., NEW YORK, NY 10014						
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> SLIDING DOOR - PLAN & ELEVATION						
ENGINEER IN CHARGE	DATE	SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	SHEET 16 OF 33	
CRITERIA MANAGER	DATE	D	80091	6,448,604	S-16	
APPROVED	DATE	SCALE	AS NOTED	CONTRACT NO.	SPEC NO.	
FOR COMMANDER NAVFAC/COMCOM		CATEGORY CODE		DATE		

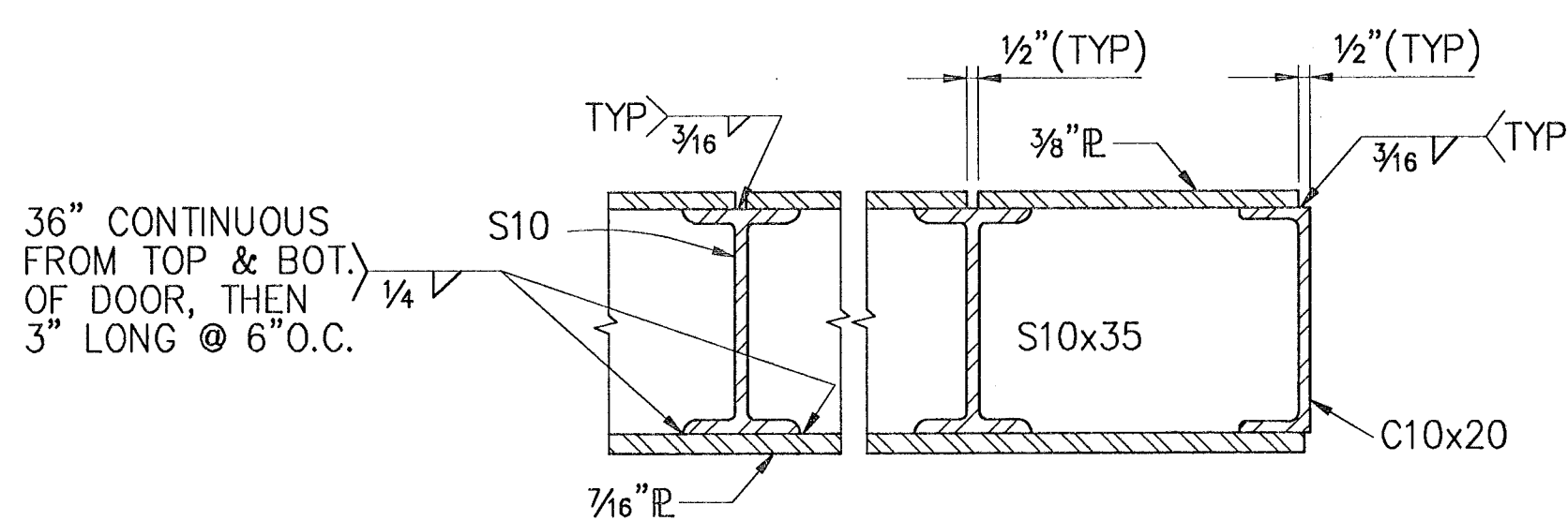




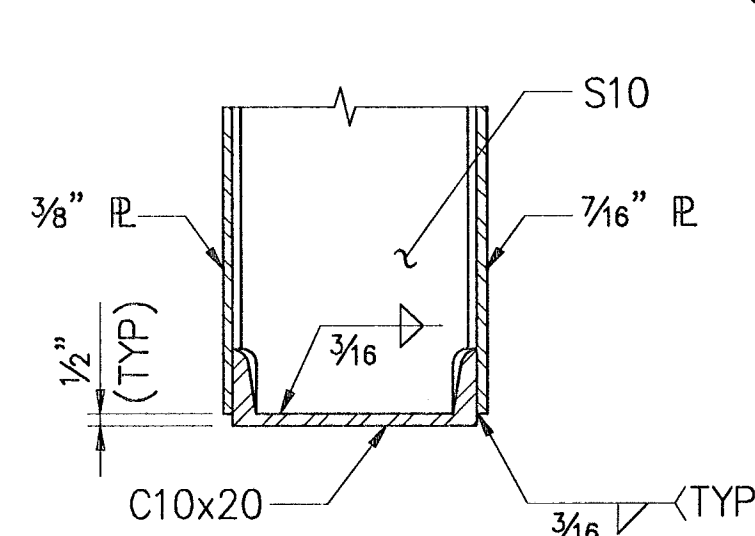
**FRONT ELEVATION OF SLIDING DOOR**  
SCALE: 1/2"=1'-0"



**SECTION 2**  
SCALE: 1/2"=1'-0"



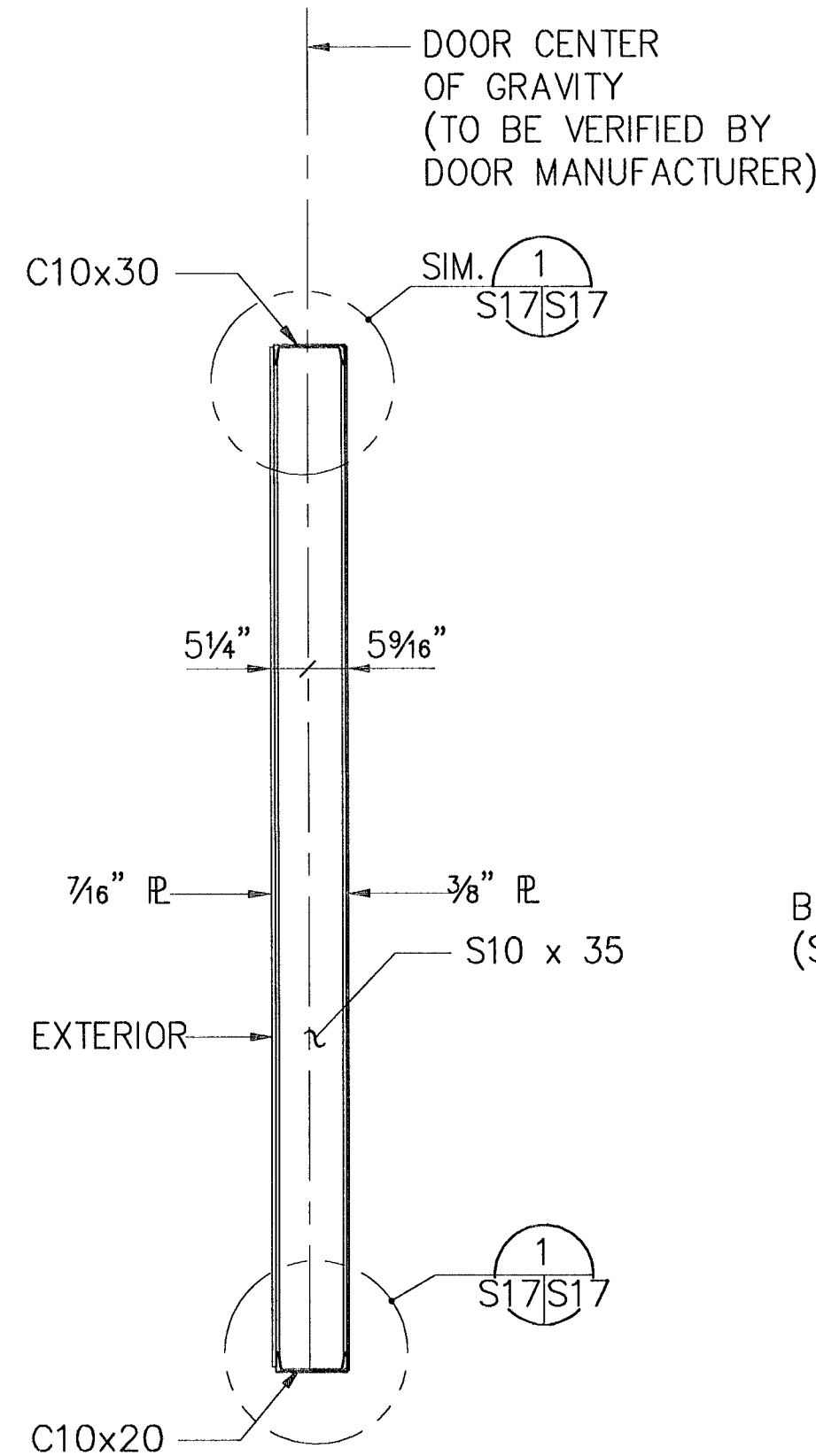
**SECTION 3**  
SCALE: 1 1/2"=1'-0"



**DETAIL 1**  
SCALE: 1 1/2"=1'-0"

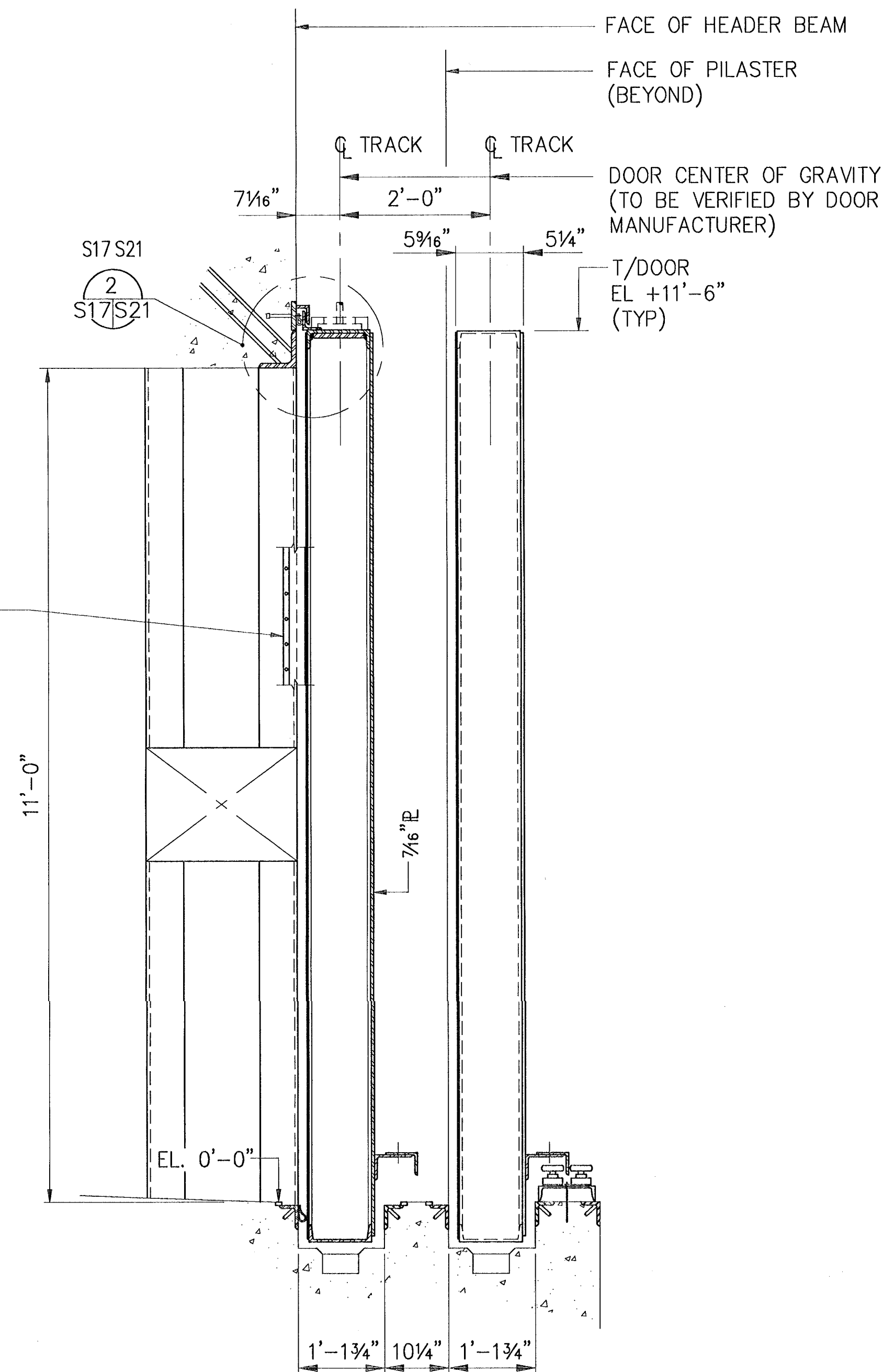
**NOTES:**

- DOOR NO'S 1, 2 AND 3 AS SHOWN. DOOR NO'S 4 AND 5 OPPOSITE HAND.
- PROVIDE 6"x6"x10" STEEL BLOCK AT LEADING EDGE OF DOOR NO'S 1, 2, 4 AND 5 FOR INTERNAL LOCK ASSEMBLY. SEE DETAIL 1.

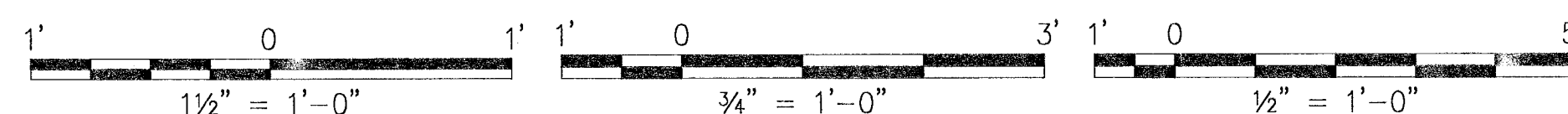


**SECTION 1**  
SCALE: 1/2"=1'-0"

BRUSH WEATHERSTRIP (SEE DWG. S-21)



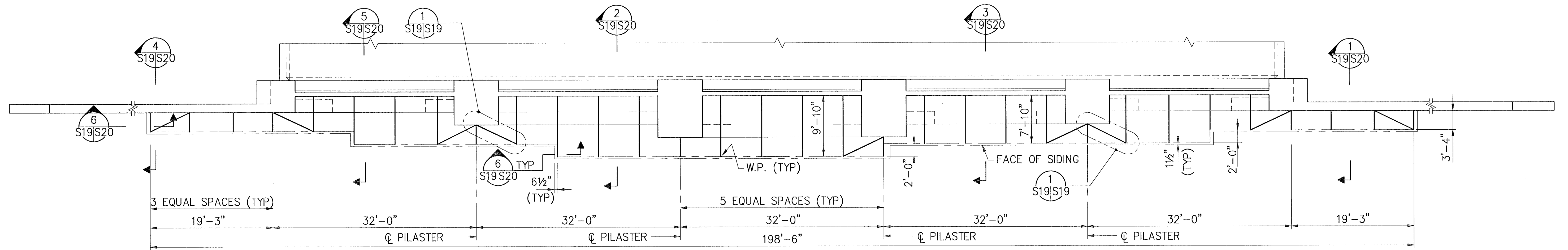
**SECTION 4**  
SCALE: 3/4"=1'-0"



IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

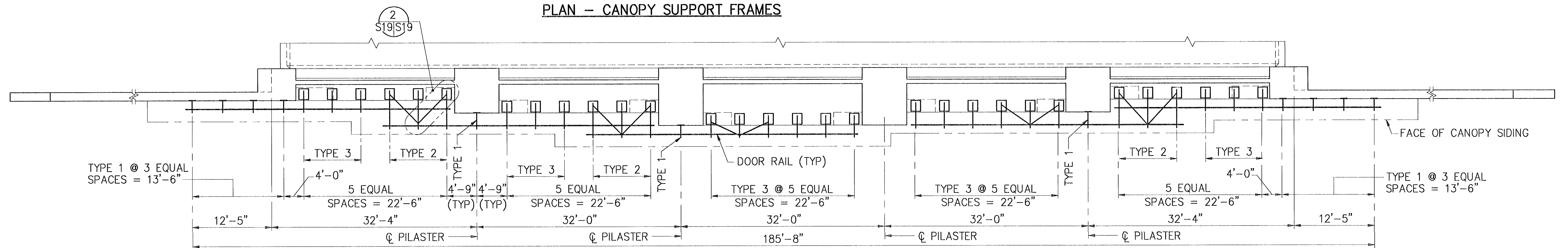
SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
<p><b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 96 MORTON ST., NEW YORK, NY 10014</p> <p>PRINCIPAL ENGINEER: <i>R. B. Brady</i> DATE: 27/5/97</p> <p>ENGINEER IN CHARGE: <i>R. B. Brady</i> BRANCH MANAGER: <i>R. B. Brady</i></p> <p>DETERIA MANAGER: <i>R. B. Brady</i> DIVISION DIRECTOR: <i>R. B. Brady</i></p> <p>NAVAFACENCOM</p>						
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350						
NAVAL FACILITIES ENGINEERING COMMAND						
STANDARD DRAWING						
<b>STANDARD BOX MAGAZINE TYPE 'F'</b>						
SLIDING DOOR - ELEVATION, SECTIONS & DETAILS						
FIRE PROTECTION ENGINEER	DATE	SIZE	CODE IDENT NO	NAVAFAC DRAWING NUMBER	6,448,605	
CRITERIA MANAGER	DATE	D	80091	S-17		
APPROVED	DATE	SCALE	AS NOTED	CONTRACT NO	SHEET 17 OF 33	
FOR COMMANDER NAVAFACENCOM						





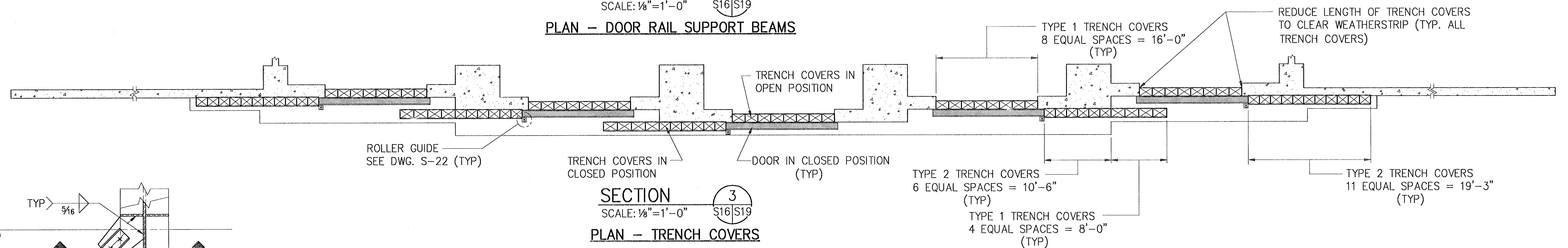
SECTION 1  
SCALE: 1/8" = 1'-0" S16/S19

PLAN - CANOPY SUPPORT FRAMES



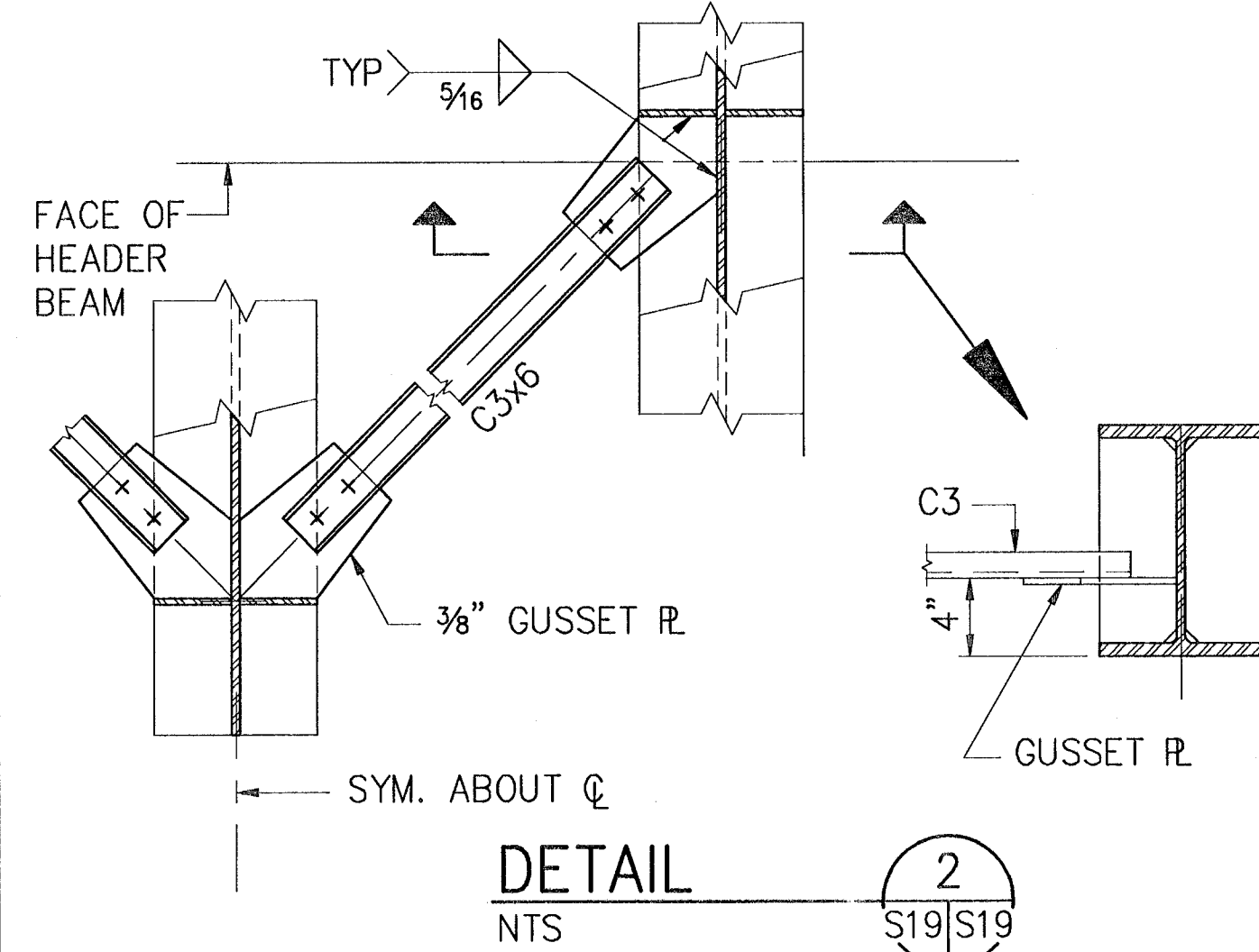
SECTION 2  
SCALE: 1/8" = 1'-0" S16/S19

PLAN - DOOR RAIL SUPPORT BEAMS

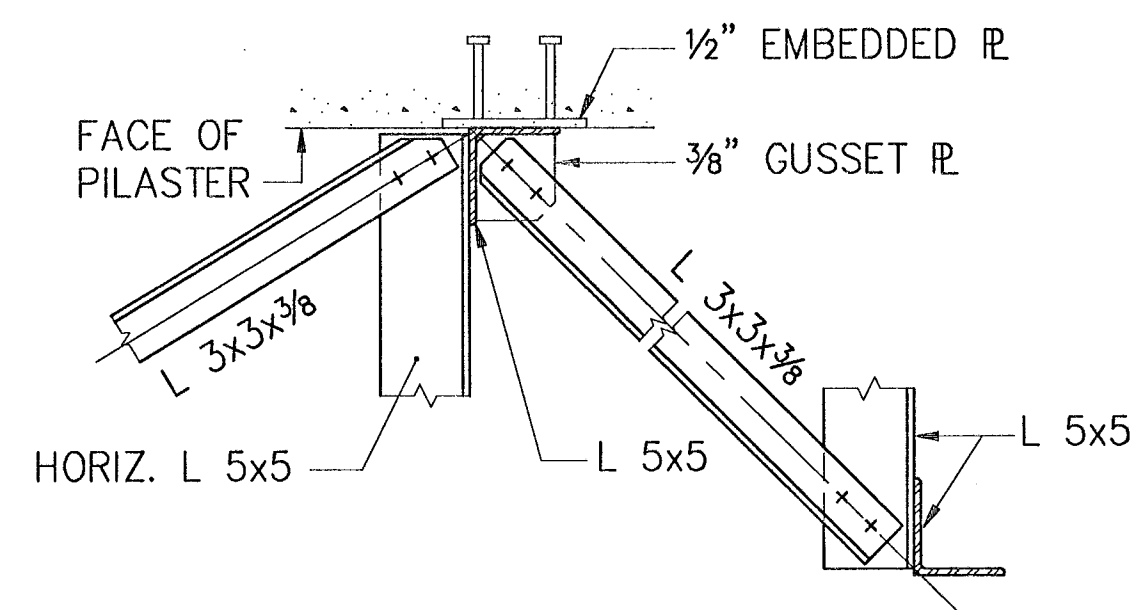


SECTION 3  
SCALE: 1/8" = 1'-0" S16/S19

PLAN - TRENCH COVERS

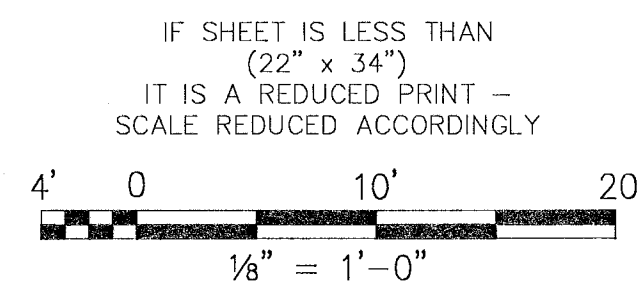


DETAIL 2  
NTS S19/S19



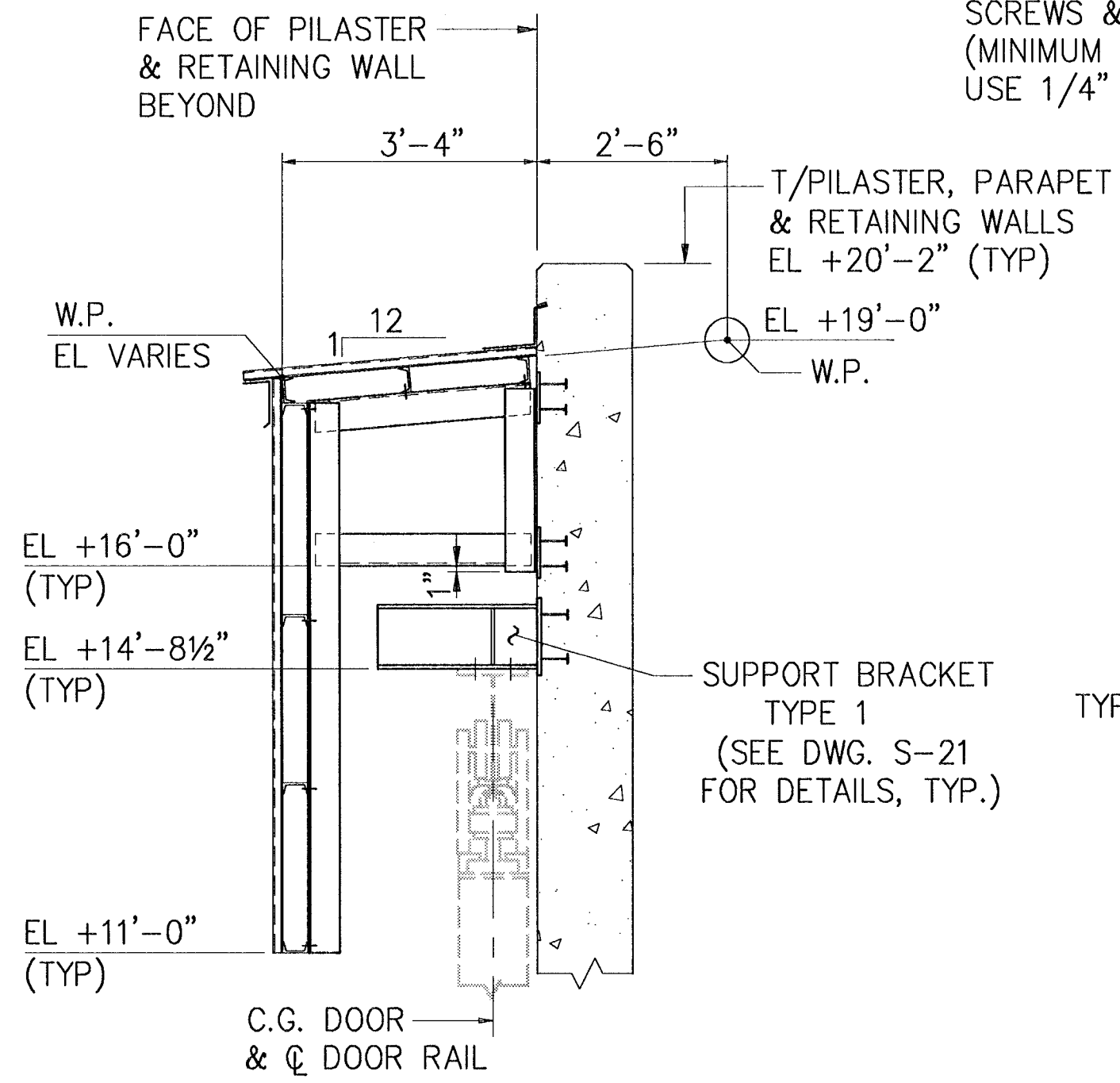
DETAIL 1  
NTS S19/S19

- NOTES:
1. FOR CANOPY SUPPORT FRAMES SEE DWG. S-20.
  2. FOR DOOR RAIL SUPPORT BEAMS SEE DWG. S-21.
  3. FOR TRENCH COVER AND ROLLER GUIDE SEE DWG. S-22.

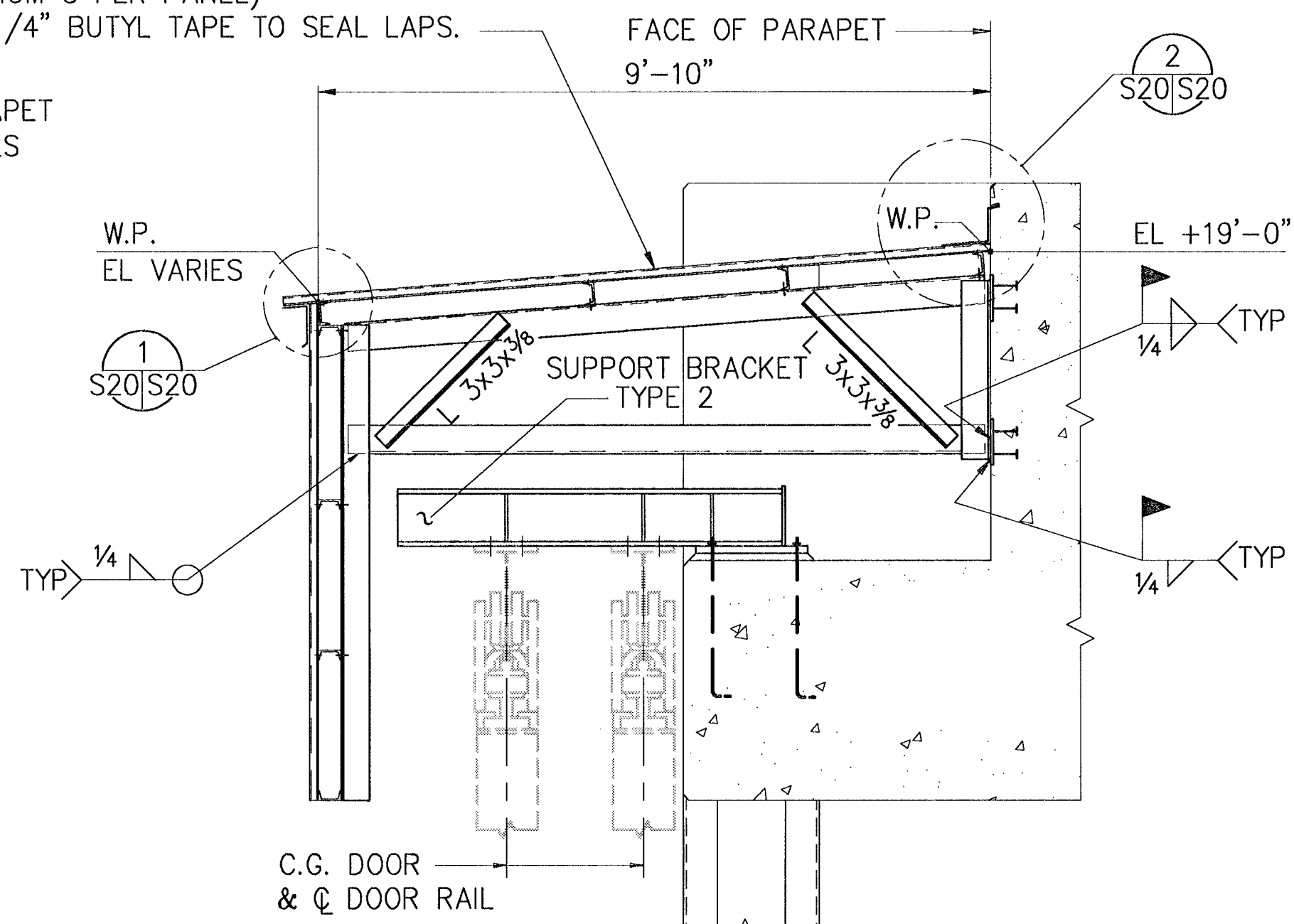


SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014						
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND WASHINGTON, D.C. 20350						
STANDARD DRAWING STANDARD BOX MAGAZINE TYPE 'F' PLANS - CANOPY, RAIL SUPPORTS, TRENCH COVERS						
ENGINEER IN CHARGE R. Brady	DATE 27/5/97	BRANCH MANAGER R. Brady	CRITERIA MANAGER R. Brady	NAVAVC DRAWING NUMBER 6,448,607	SHEET 19 OF 33	
FIRE PROTECTION ENGINEER	DATE	SCALE AS NOTED	CONTRACT NO.	SPEC NO.		
CATEGORY CODE	DATE	SHEET		DATE		

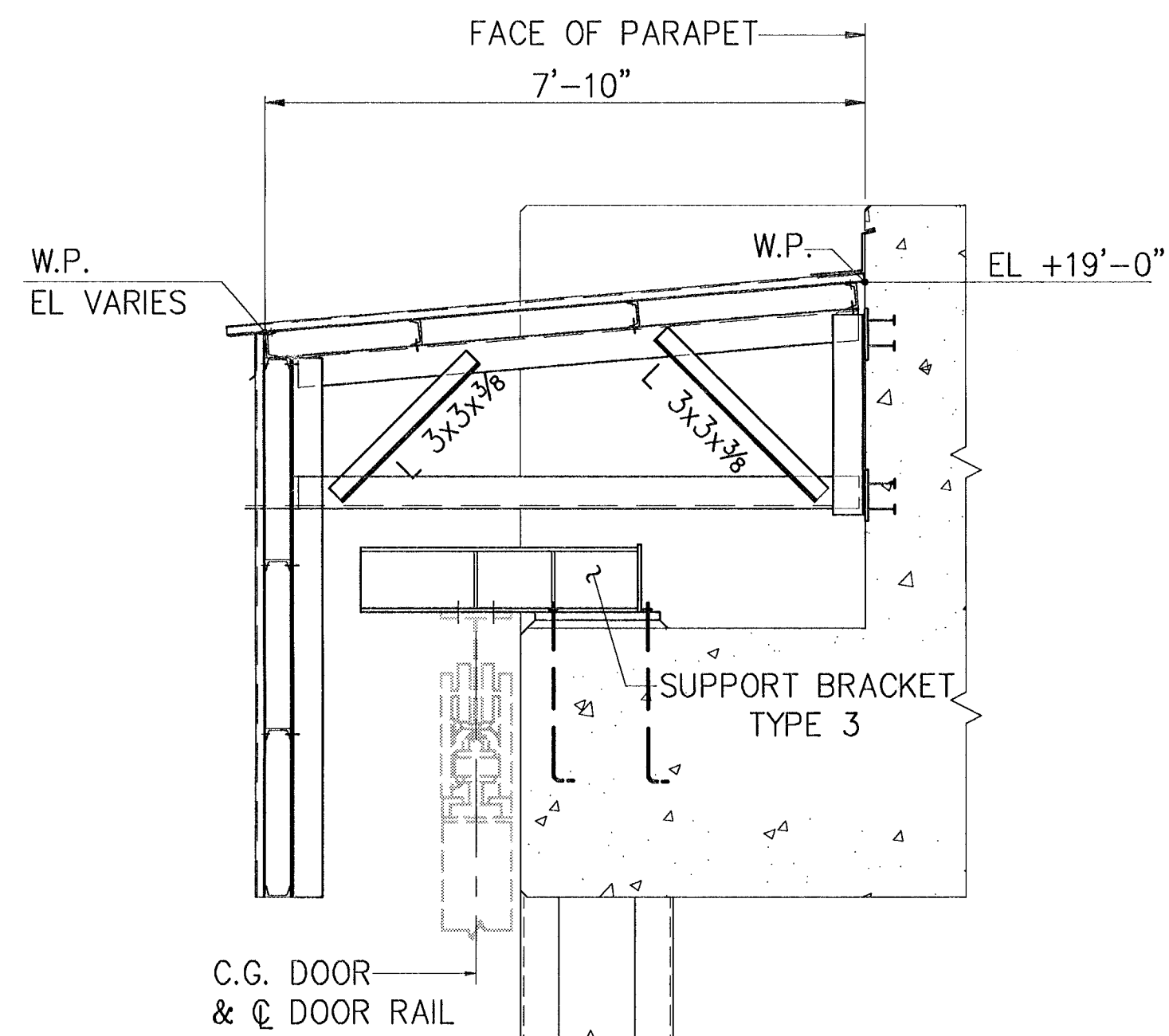
18 GAGE x 1 1/2" DEEP FACTORY FINISHED HI-RIB METAL ROOFING & SIDING. FASTEN TO L's WITH #14 STAINLESS STEEL SCREWS & WASHERS AT EACH VALLEY (MINIMUM 5 PER PANEL) USE 1/4" BUTYL TAPE TO SEAL LAPS.



SECTION 1  
SCALE: 1/2" = 1'-0" S19/S20

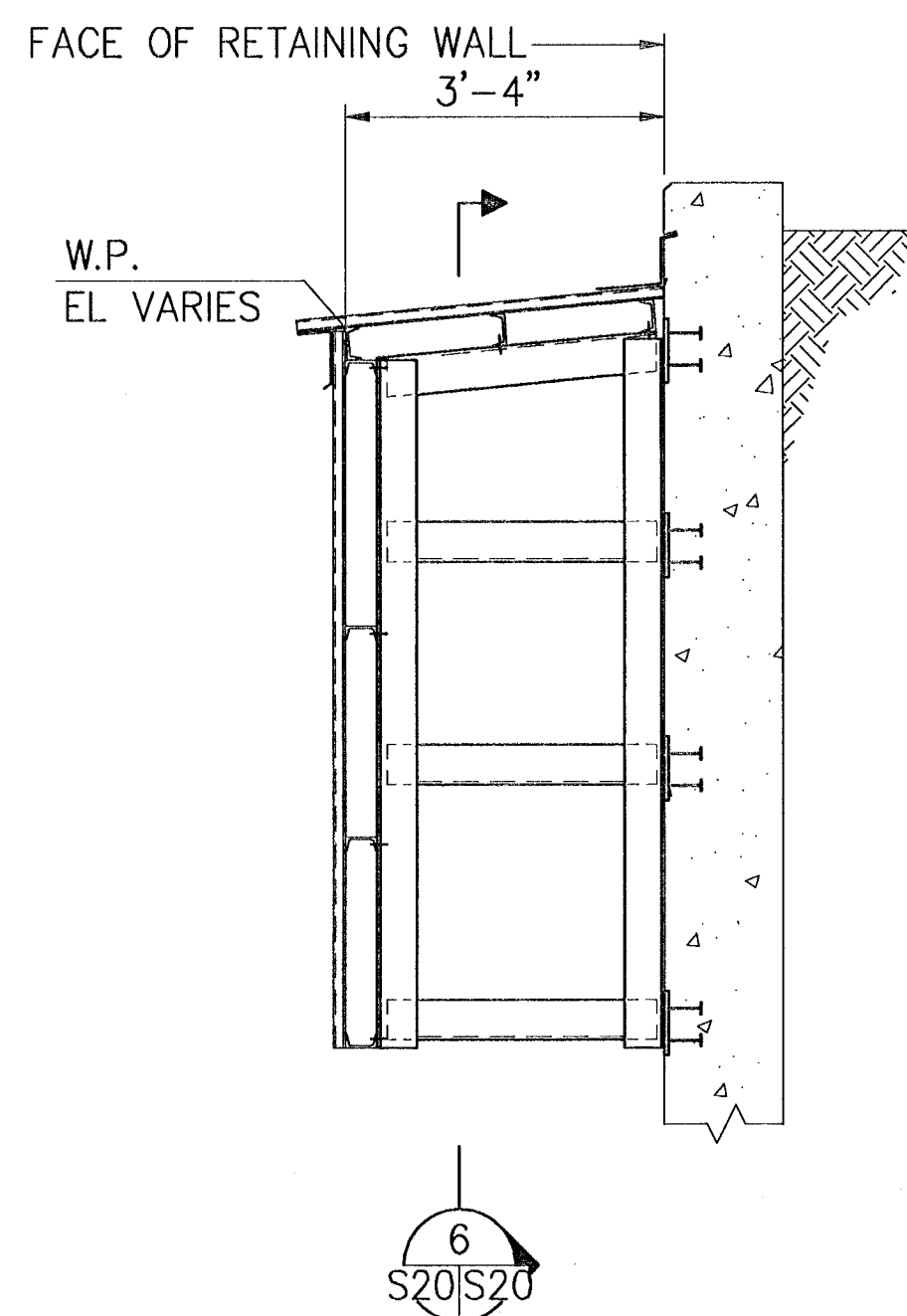


SECTION 2  
SCALE: 1/2" = 1'-0" S19/S20

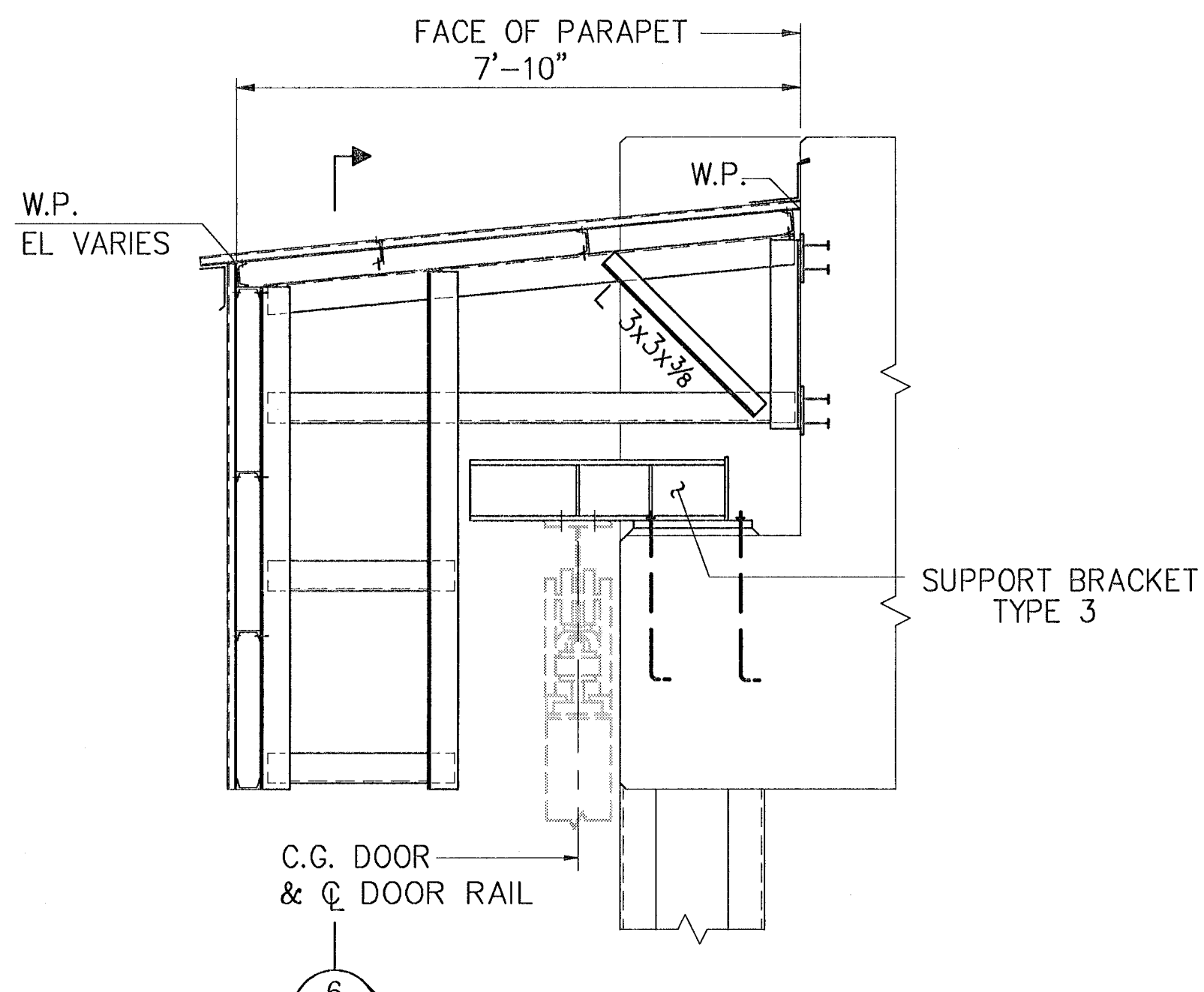


SECTION 3  
SCALE: 1/2" = 1'-0" S19/S20

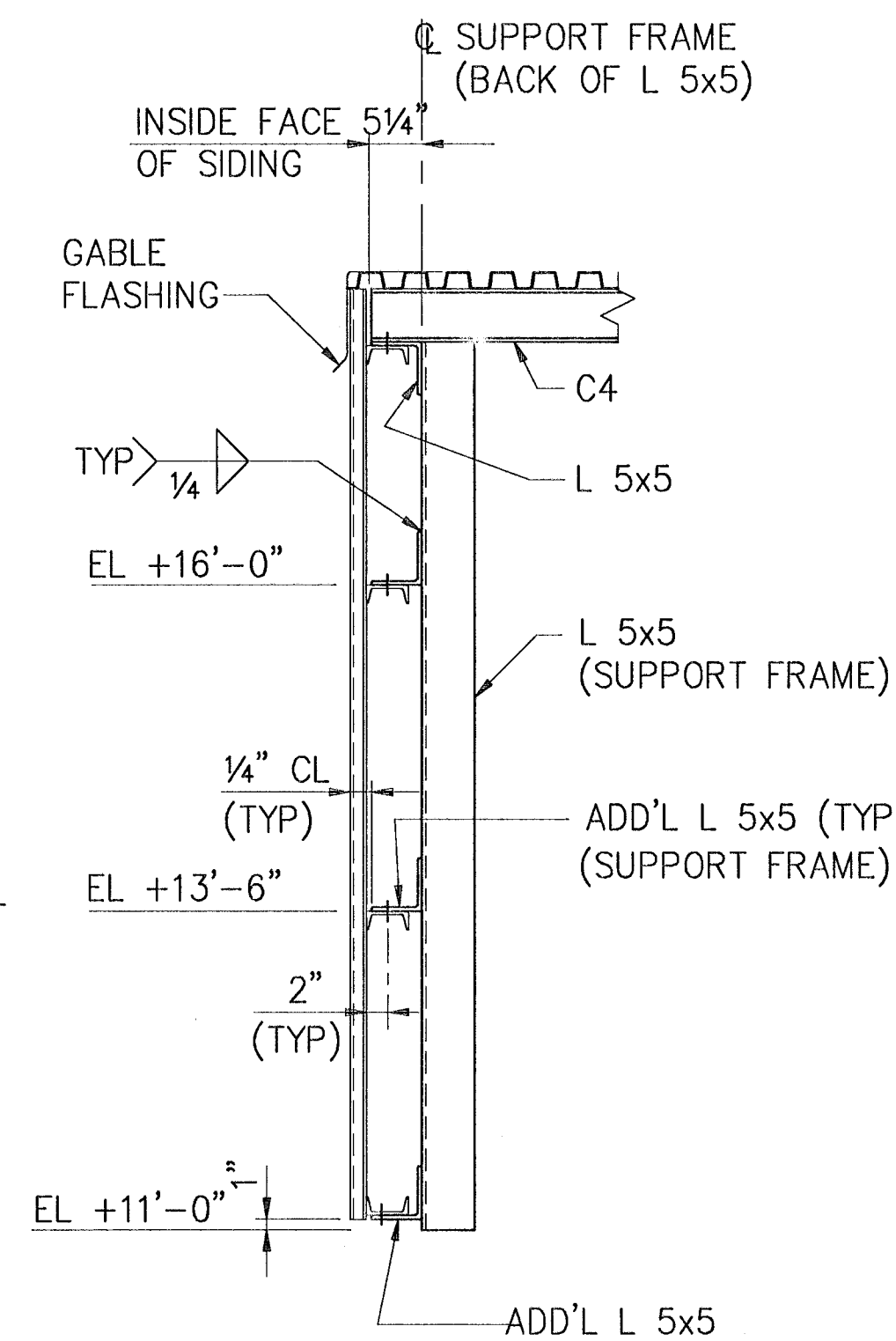
- NOTES:
1. ALL ANGLES TO BE 5x5x3/8 UNLESS NOTED OTHERWISE.
  2. ALL PURLINS AND GIRTS TO BE C4x7.25, FASTENED TO ANGLES WITH TWO 3/8" A325 BOLTS (TYP).
  3. FOR SUPPORT BRACKET DETAILS, SEE DWG. S-21.



SECTION 4  
SCALE: 1/2" = 1'-0" S19/S20

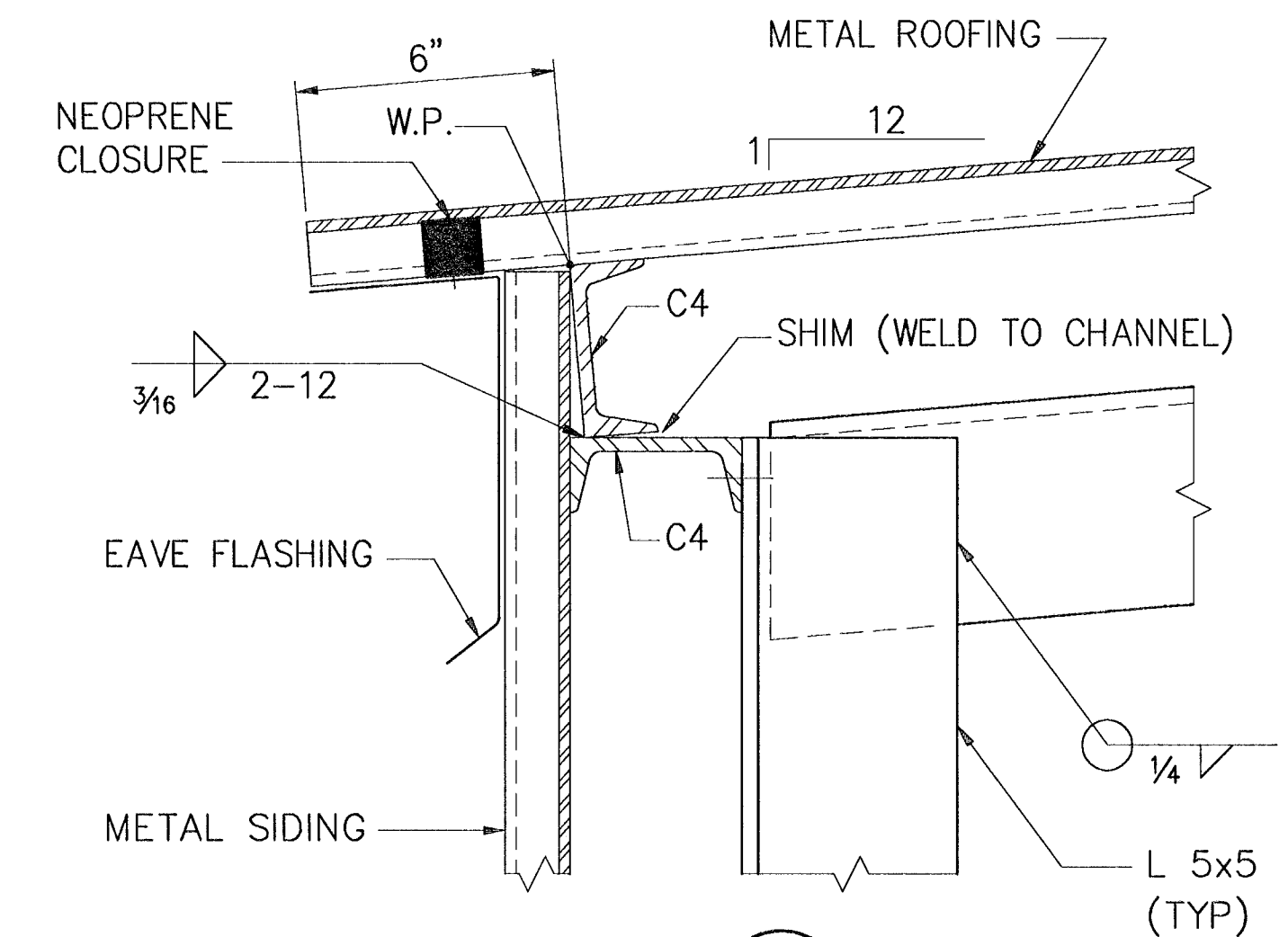
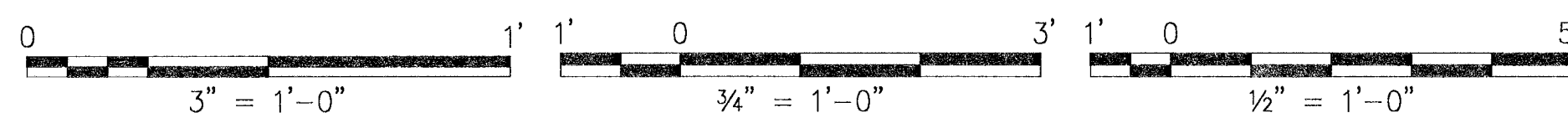


SECTION 5  
SCALE: 1/2" = 1'-0" S19/S20

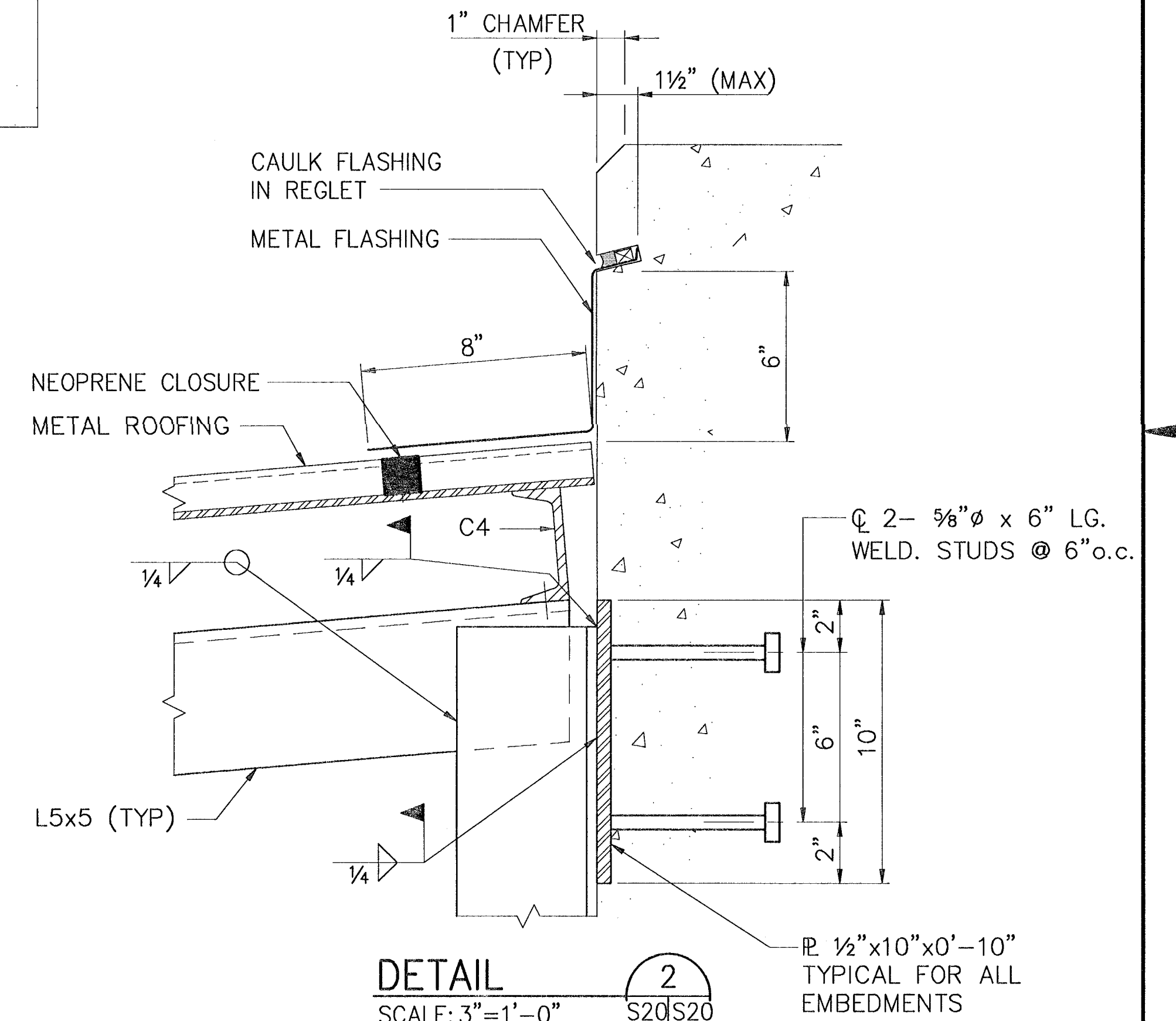


SECTION 6  
SCALE: 3/4" = 1'-0" S20/S19/S20

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

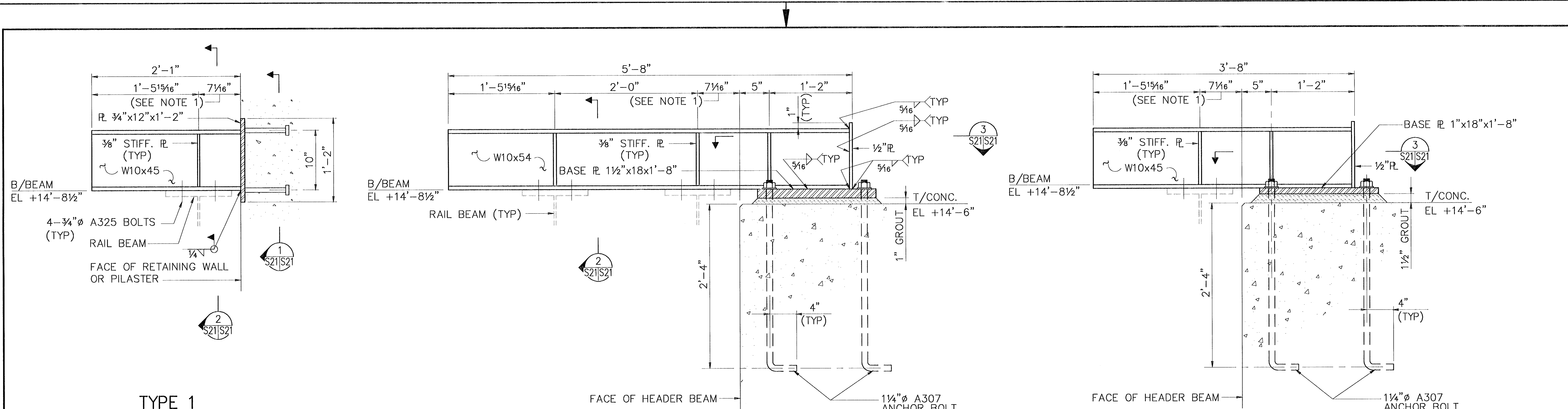


DETAIL 1  
SCALE: 3" = 1'-0" S20/S20



DETAIL 2  
SCALE: 3" = 1'-0" S20/S20

SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
<p>AMMANN &amp; WHITNEY CONSULTING ENGINEERS 88 MORTON ST., NEW YORK, NY 10014</p> <p>27/5/97</p> <p>NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING STANDARD BOX MAGAZINE TYPE 'F' CANOPY DETAILS</p>						
SIZE	CODE IDENT NO	NAVAC DRAWING NUMBER	6,448,608		S-20	
D	80091					
SCALE	AS NOTED	CONTRACT NO			SHEET 20 OF 33	
CATEGORY CODE		SPEC NO				



**TYPE 1**

NOTE 1: LOCATION OF RAIL BEAM TO BE VERIFIED BY DOOR MANUF.

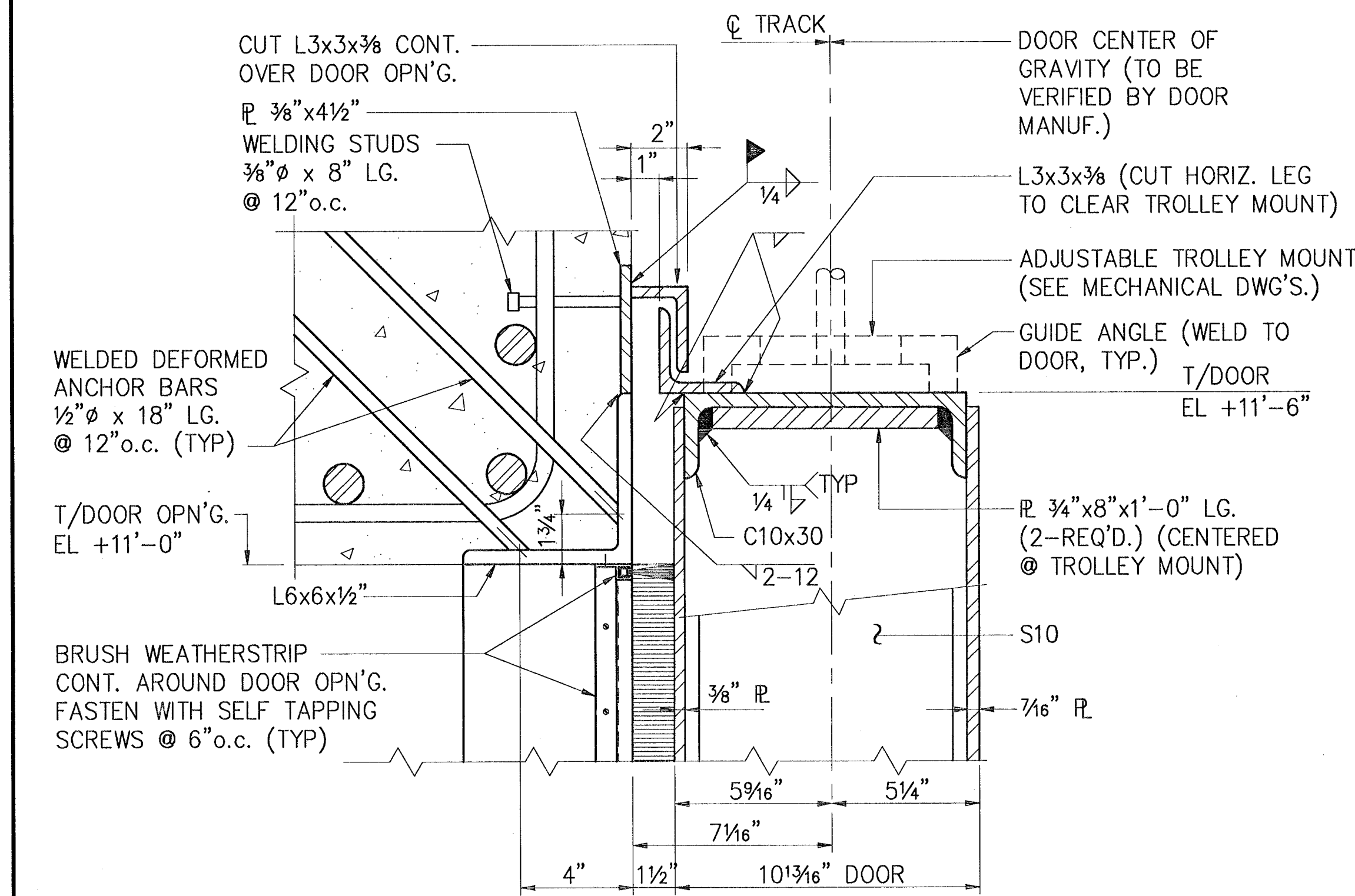
**TYPE 2**

**DOOR RAIL SUPPORT BEAM DETAILS**

SCALE: 1 1/2" = 1'-0"

**TYPE 3**

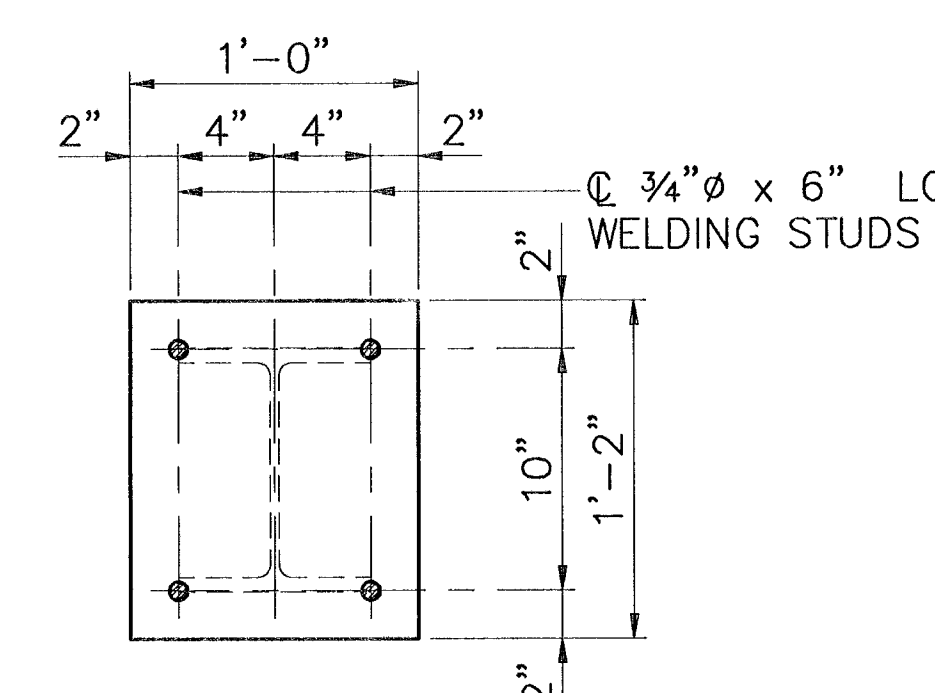
NOTE: FOR DETAILS NOT SHOWN SEE TYPE 2 SUPPORT BEAM.



**DETAIL**

SCALE: 3" = 1'-0"

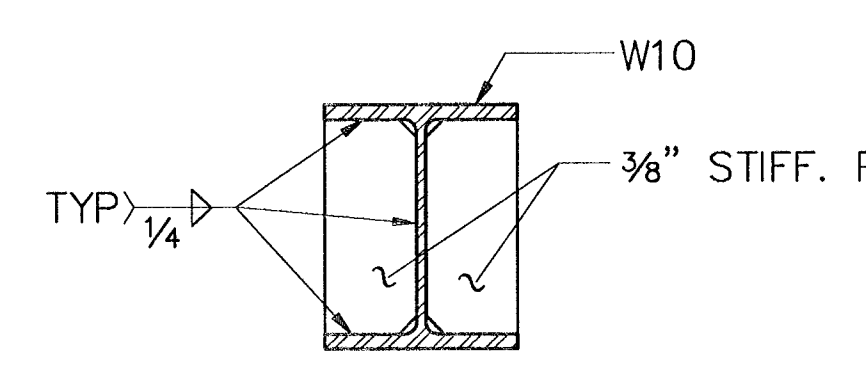
S17/S21



**SECTION 1**

SCALE: 1 1/2" = 1'-0"

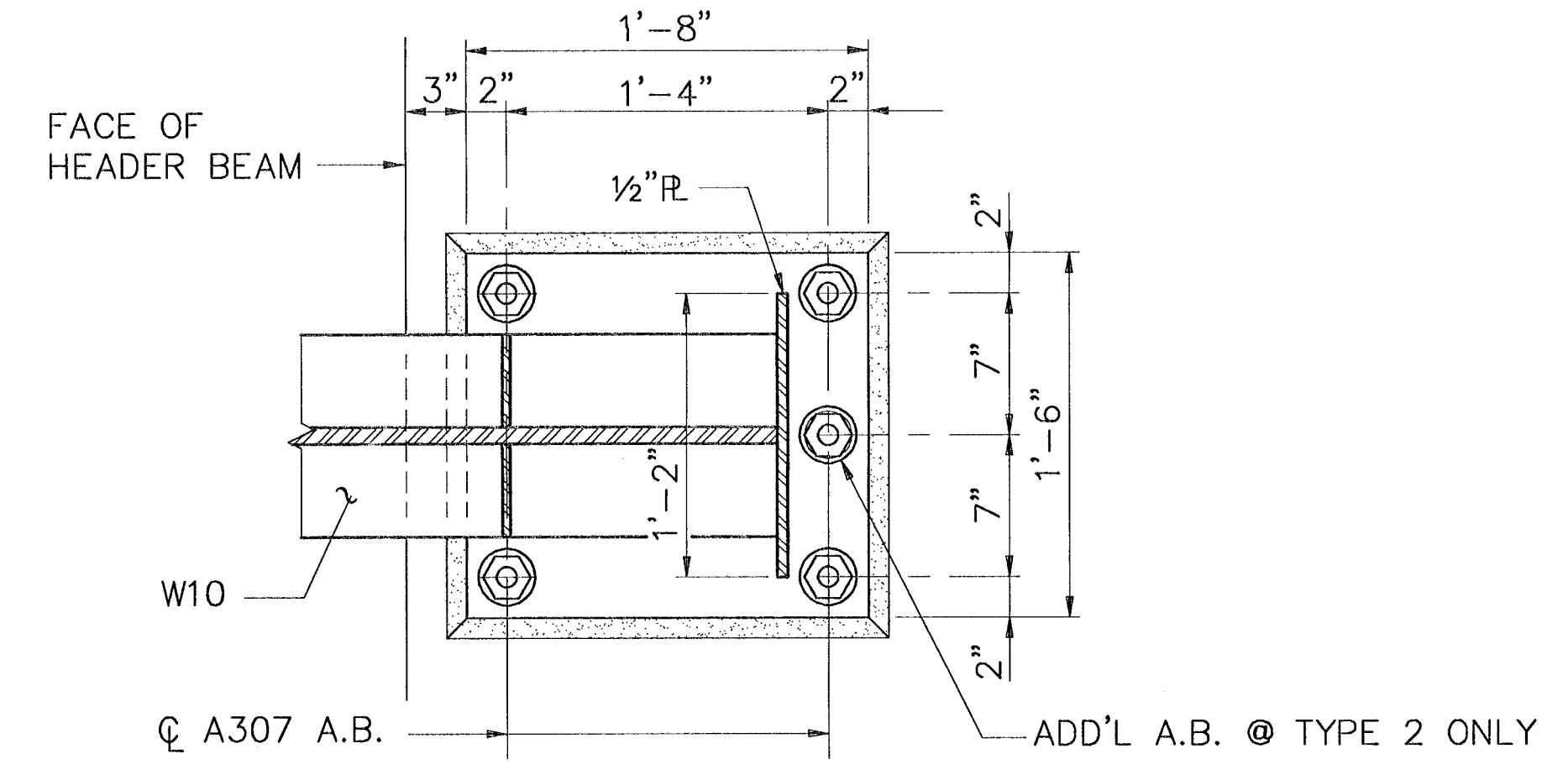
S21/S21



**SECTION 2**

SCALE: 1 1/2" = 1'-0"

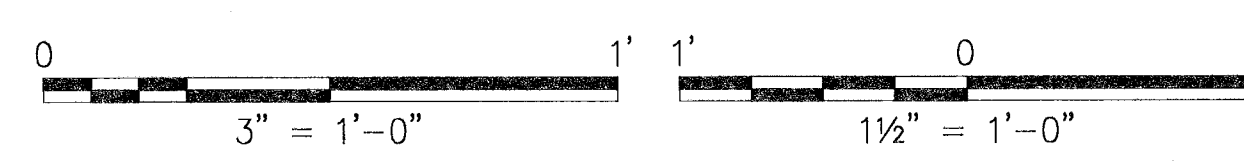
S21/S21



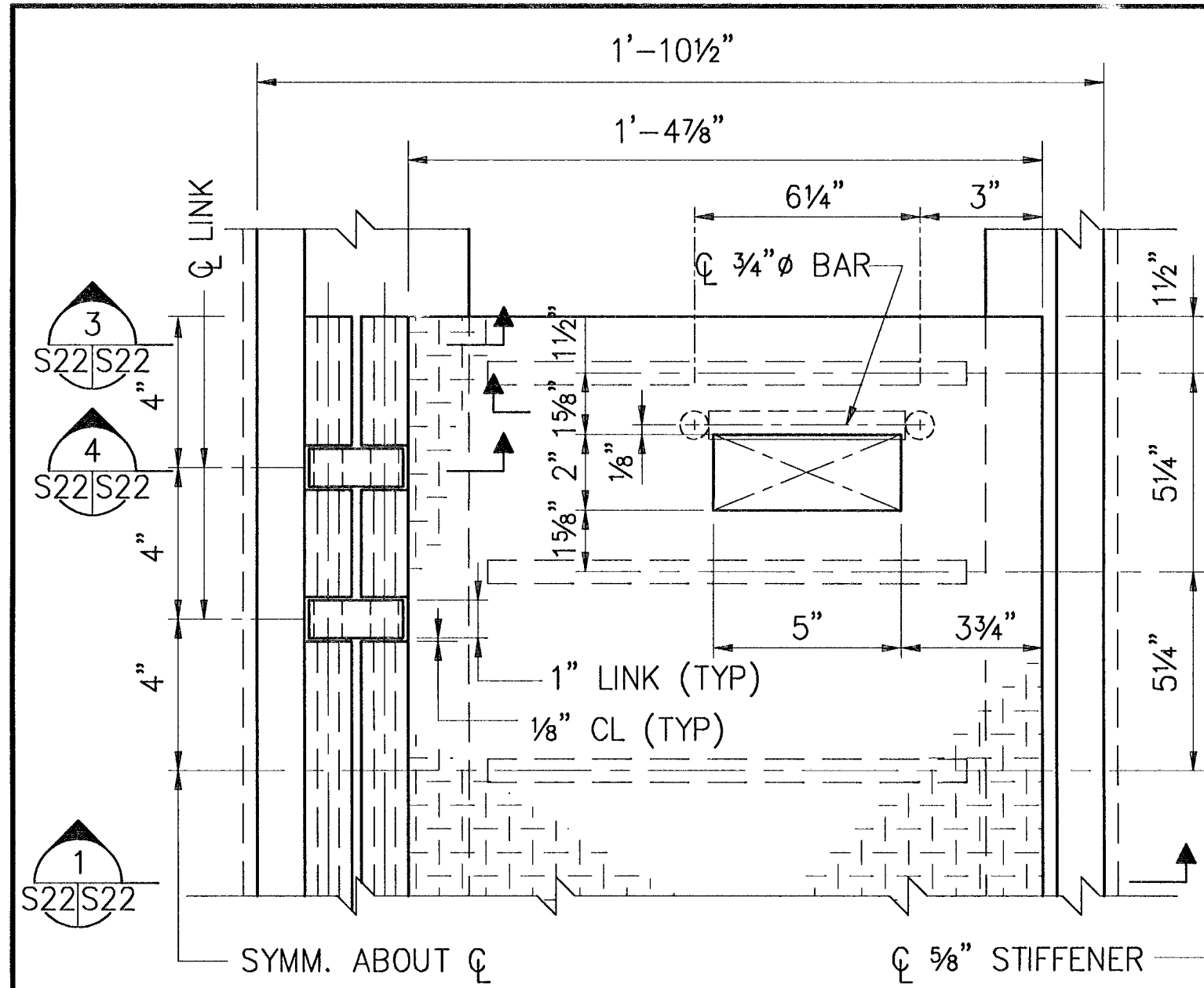
**SECTION 3**

SCALE: 1 1/2" = 1'-0"

S21/S21



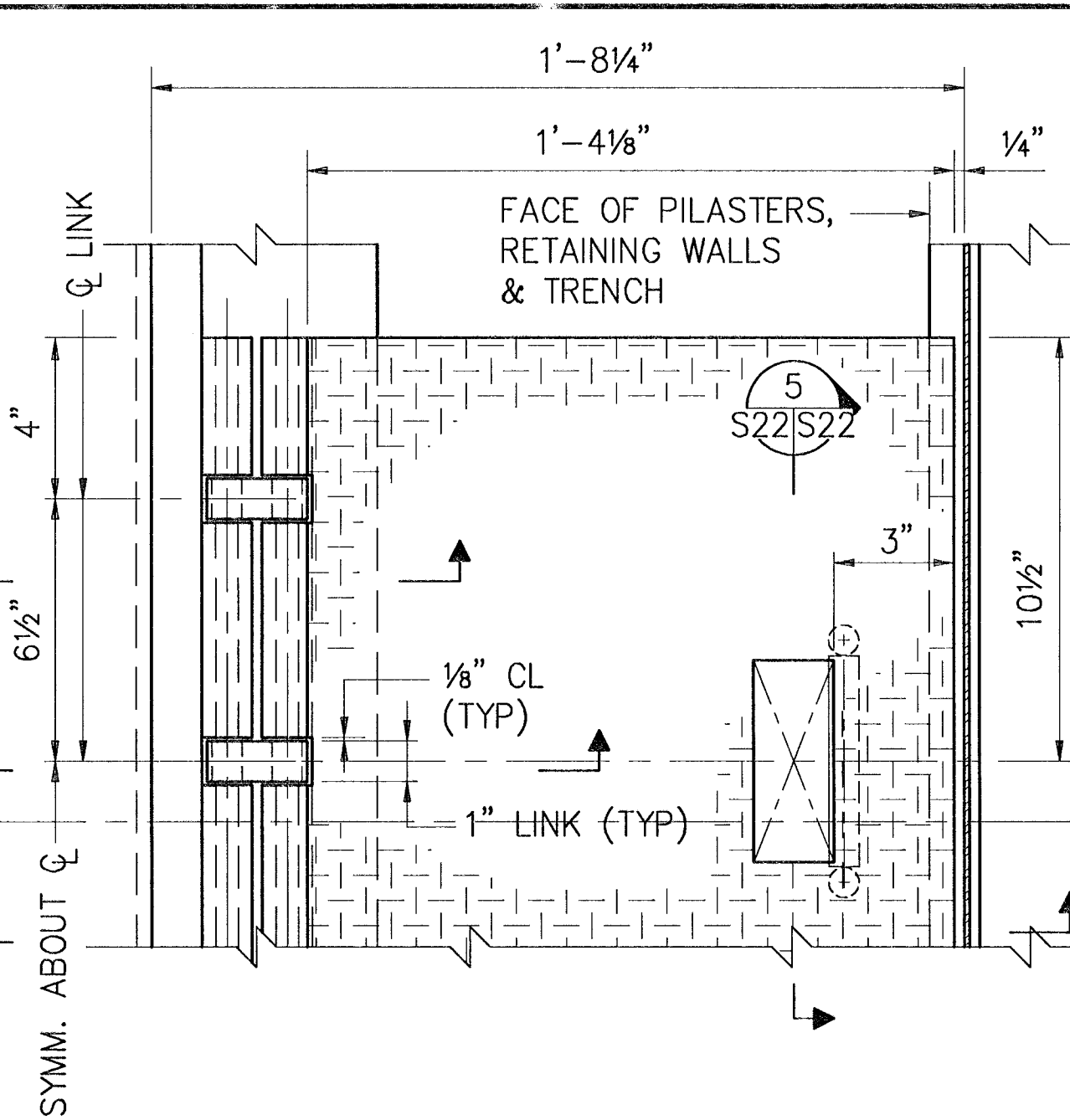
SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
<p><b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b>            96 WOODEN ST., NEW YORK, NY 10014            DATE: 27/5/97            ENGINEER IN CHARGE: Ron Brady            BRANCH MANAGER: R. Brady            CRITERIA MANAGER: R. Brady            NAVFACENGINCOM</p>						
<p>DEPARTMENT OF THE NAVY            WASHINGTON, D.C. 20350  <b>NAVAL FACILITIES ENGINEERING COMMAND</b>            STANDARD DRAWING  <b>STANDARD BOX MAGAZINE TYPE 'F'</b>            RAIL SUPPORT BEAM DETAILS</p>						
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	6,448,609		<b>S-21</b>	
D	80091	CONTRACT NO		SHEET 21 OF 33		
SCALE	AS NOTED	SPEC NO				
FOR COMMANDER NAVFACENGINCOM	DATE	CATEGORY CODE				



**PARTIAL PLAN**

SCALE: 3"=1'-0"

(TYPE 1 DOOR TRENCH COVER PLATE)



**PARTIAL PLAN**

SCALE: 3"=1'-0"

(TYPE 2 DOOR TRENCH COVER PLATE)

L6x4x3/8 CONT., FIELD DETERMINE HEIGHT OF L TO FIT ROLLER ASSY.

3/4" A307 BOLTS @ 2'-0" o.c. (NUTS WELDED UNDERSIDE)

L 5x5x3/8 CONT.

HEAVY DUTY ROLLER GUIDE (3" x 1 7/8") ± WHEELS W/ 1/2" AXLE (MIN)

HAT SECTION 1.5x3.0x12 GA. (OR EQUIV. 3/16" BENT PL)

C9x13.4x8" LG.

5/8" x 4" LONG EXPANSION BOLTS (2 REQ'D)

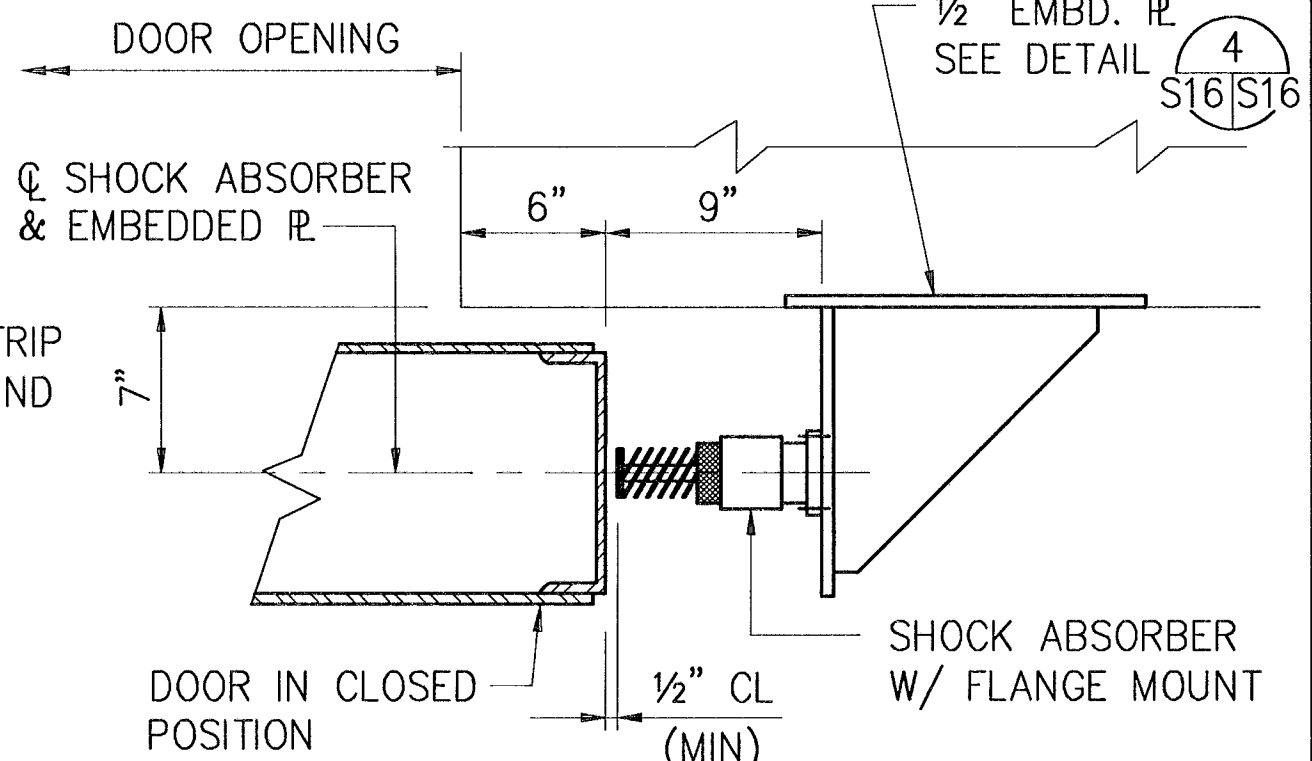
1" (MAX) BETWEEN BOTTOM OF DOOR & CONCRETE SHOULDER

PROVIDE L4x3 1/2 x 1/2 x 1'-0" LEVEL WITH PLATFORM SURFACE AT ROLLER GUIDE ASSEMBLY

**SECTION 5**

SCALE: 3"=1'-0"

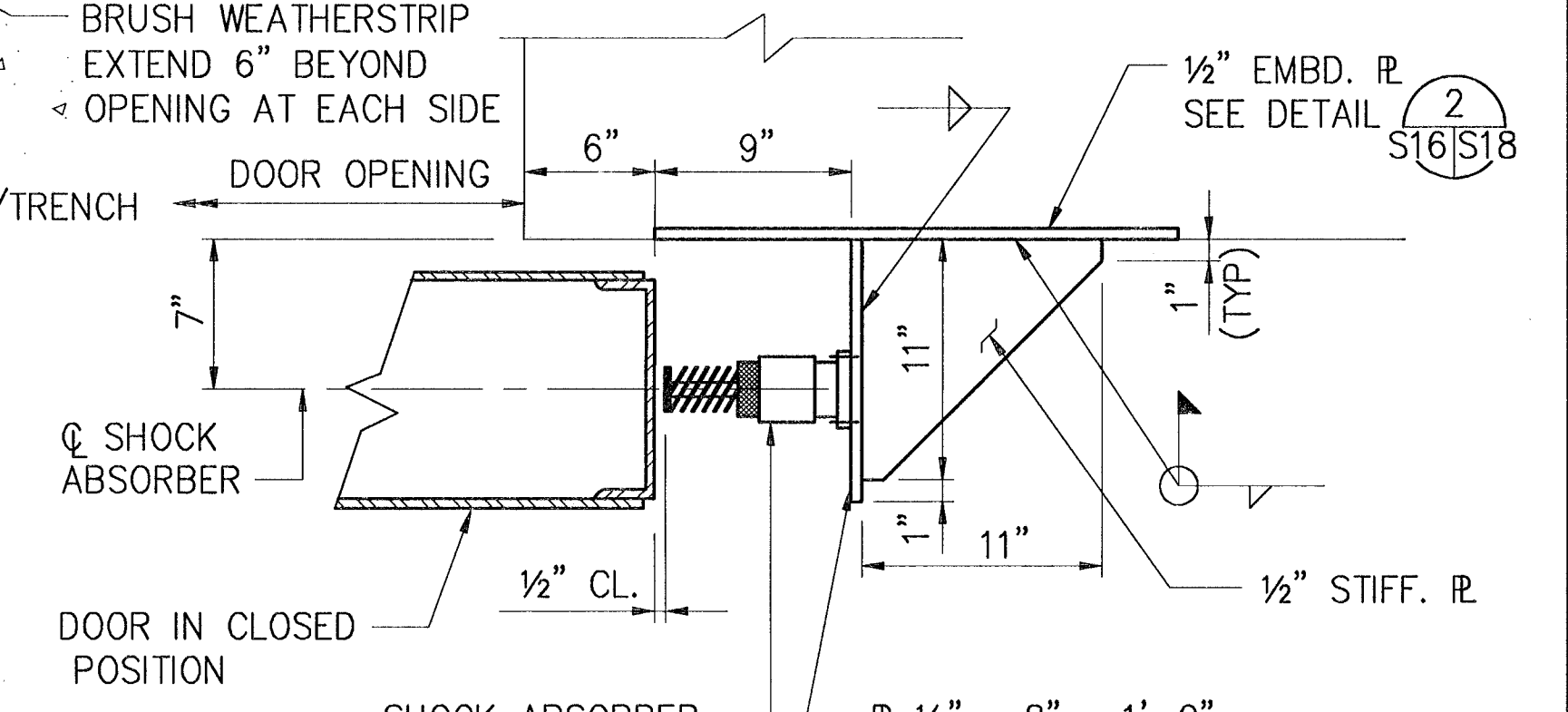
ROLLER GUIDE ASSEMBLY



**SECTION 6**

SCALE: 1 1/2"=1'-0"

SECTION 6



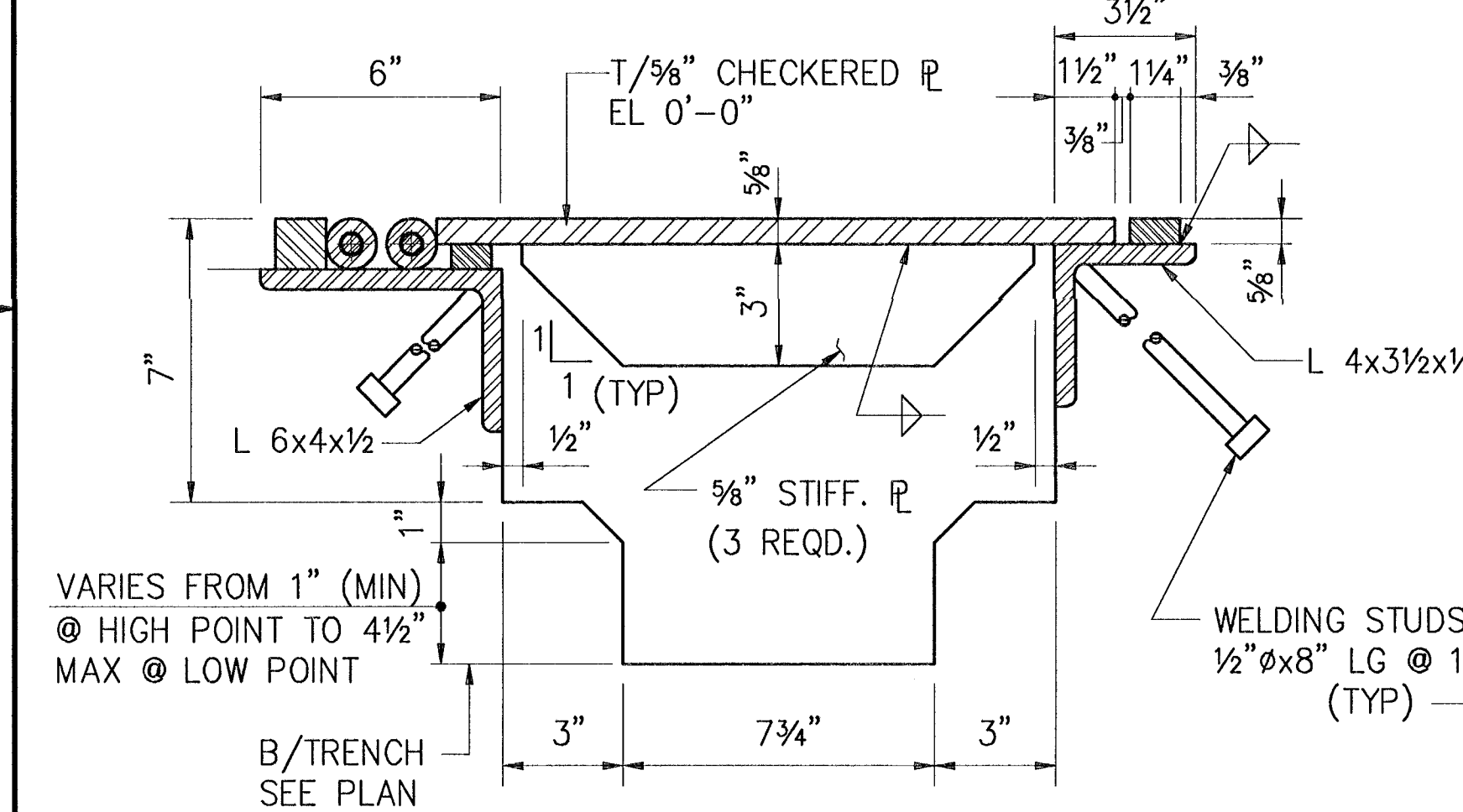
**SECTION 7**

SCALE: 1 1/2"=1'-0"

SECTION 7

**DOOR SHOCK ABSORBERS—OPERATING REQUIREMENTS**

1. MAXIMUM DOOR SPEED 12 FT/MIN OPENING/CLOSING.
2. DOOR CLOSING SHOCK ABSORBER:
  - AT PILASTER - QUANTITY = 2
  - STOPPING DISTANCE = 1 INCH
  - MAXIMUM FORCE PER SHOCK ABSORBER = 10,000 LBS
  - DUTY CYCLE = 10 DEFLECTIONS/HOUR
3. DOOR OPENING SHOCK ABSORBER:
  - AT TRENCH - QUANTITY = 2
  - STOPPING DISTANCE = 2 INCHES
  - MAXIMUM FORCE PER SHOCK ABSORBER = 5,000 LBS
  - DUTY CYCLE = 10 DEFLECTIONS/HOUR

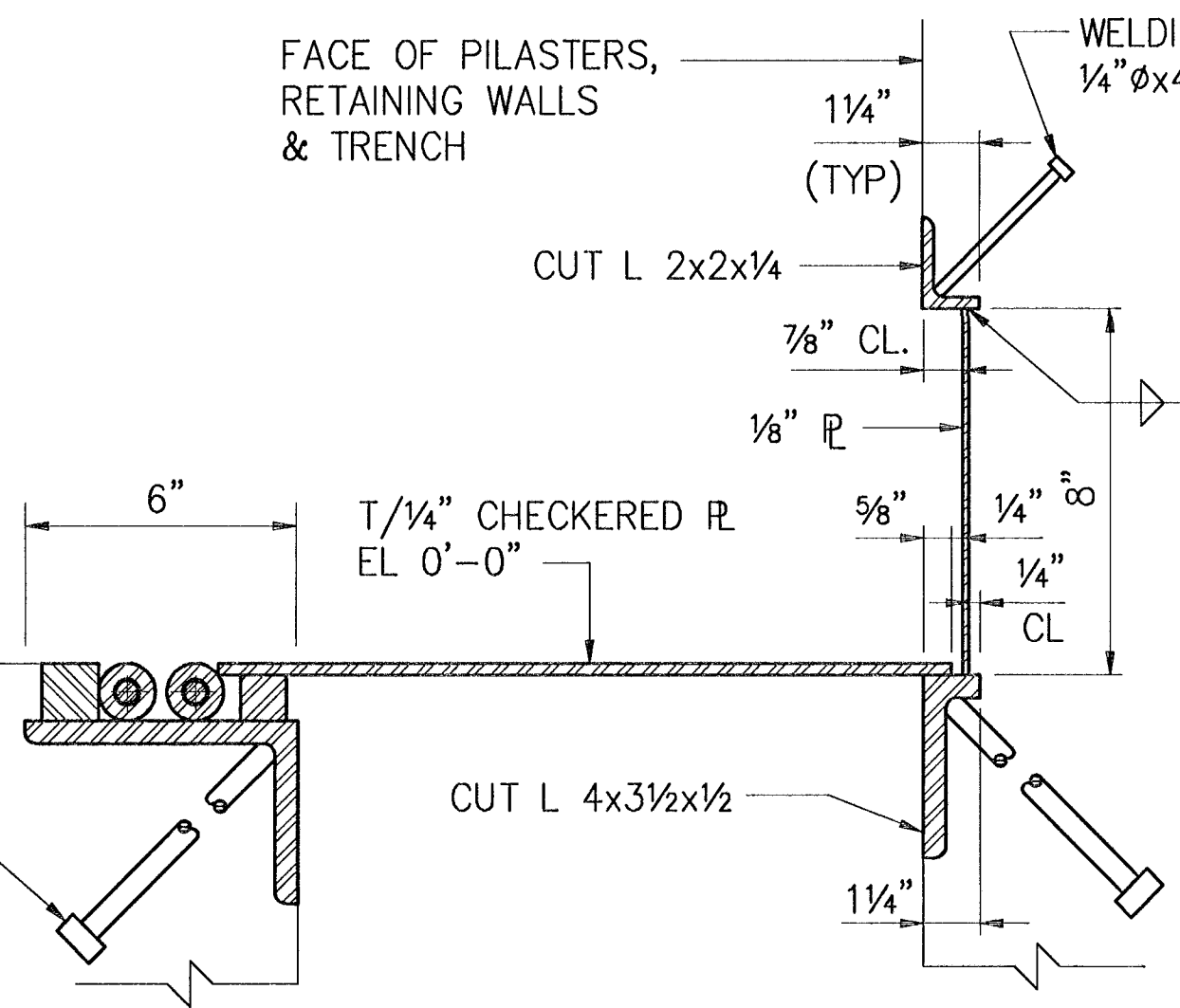


**SECTION 1**

SCALE: 3"=1'-0"

SECTION 1

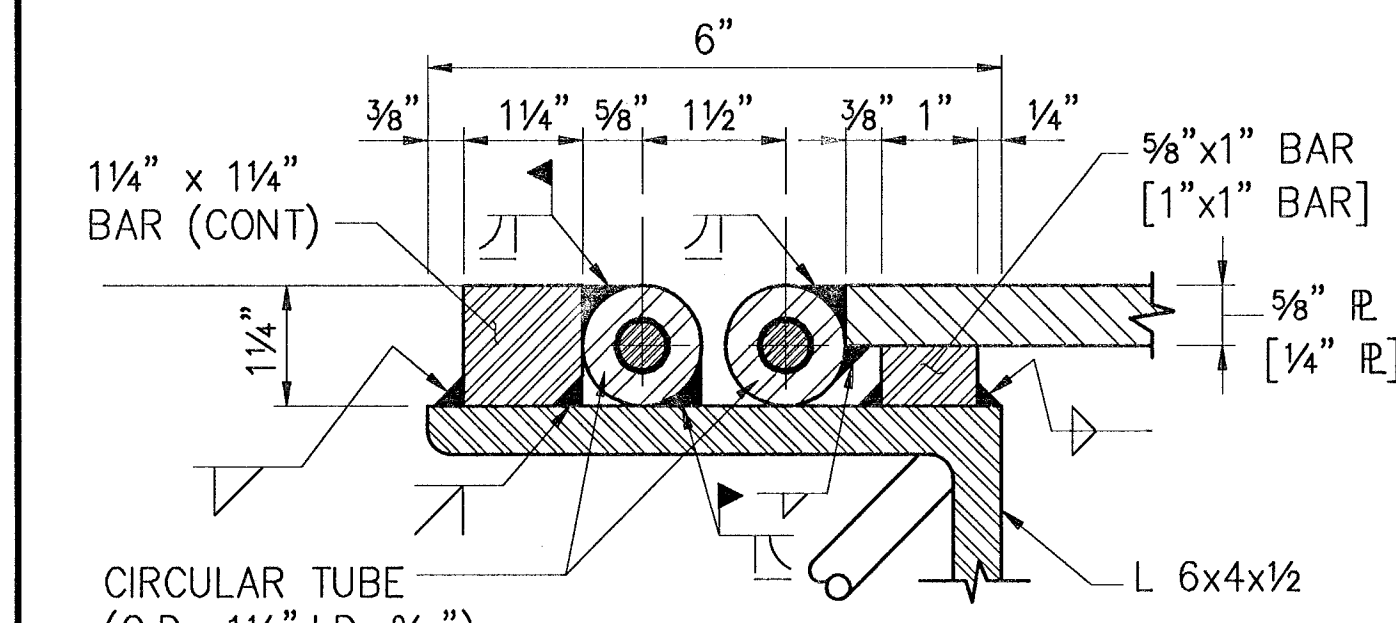
- NOTES:
1. TRENCH COVER PLATES SHALL HAVE A MINIMUM  $f_y = 50$  KSI.
  2. TRENCH COVER PLATES AND ATTACHMENTS INCLUDING HINGES AND PINS SHALL BE GALVANIZED.



**SECTION 2**

SCALE: 3"=1'-0"

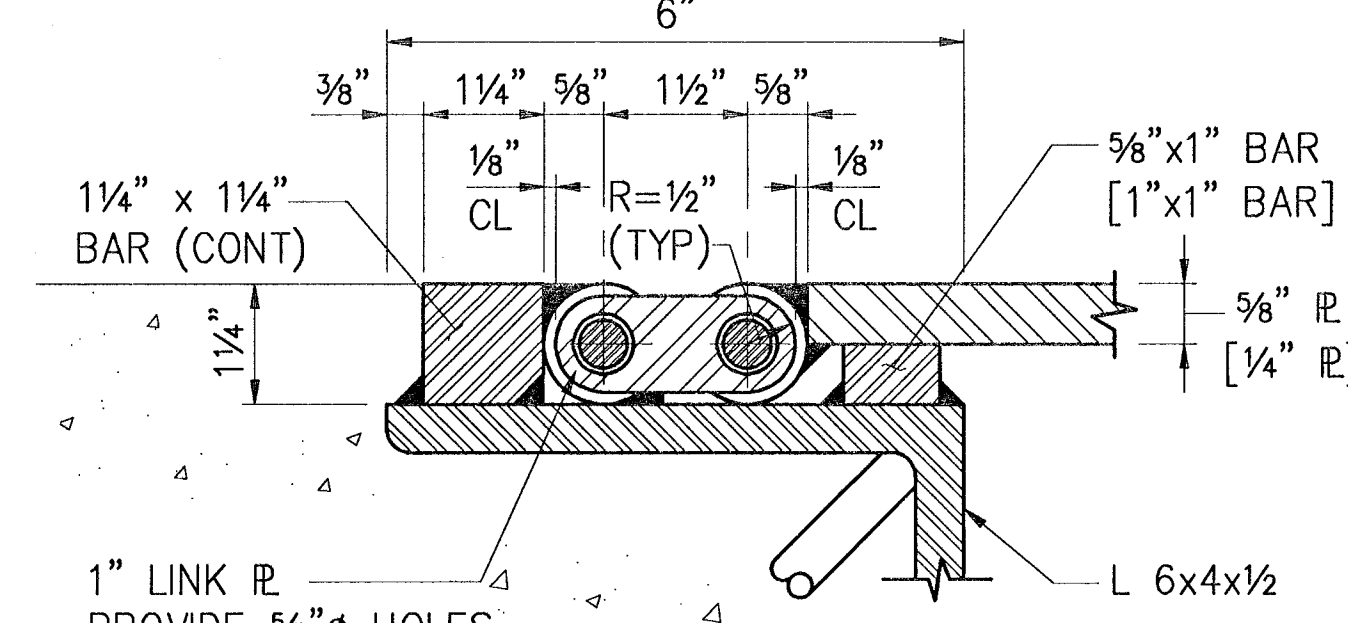
SECTION 2



**SECTION 3**

SCALE: HALF SIZE

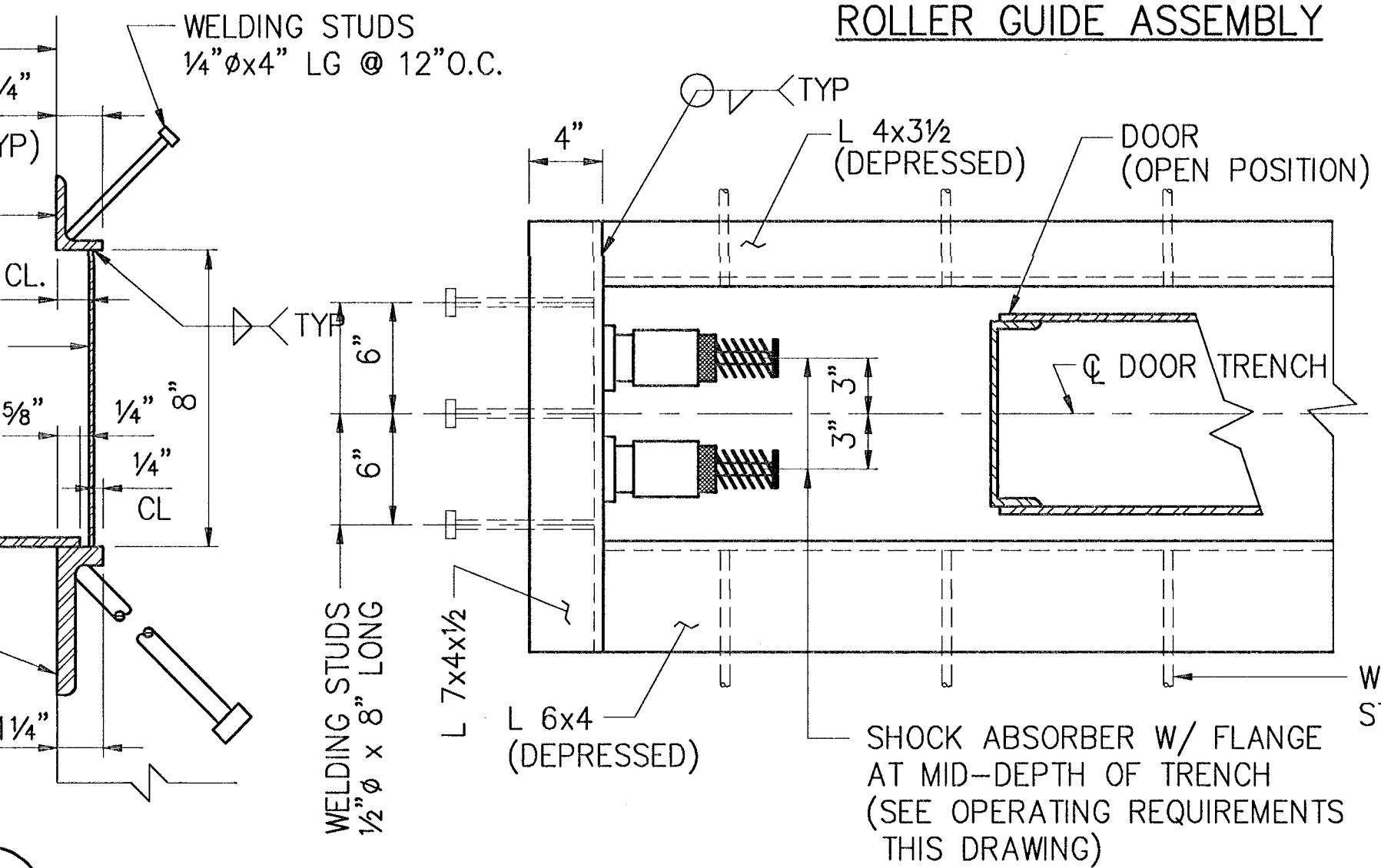
SECTION 3



**SECTION 4**

SCALE: HALF SIZE

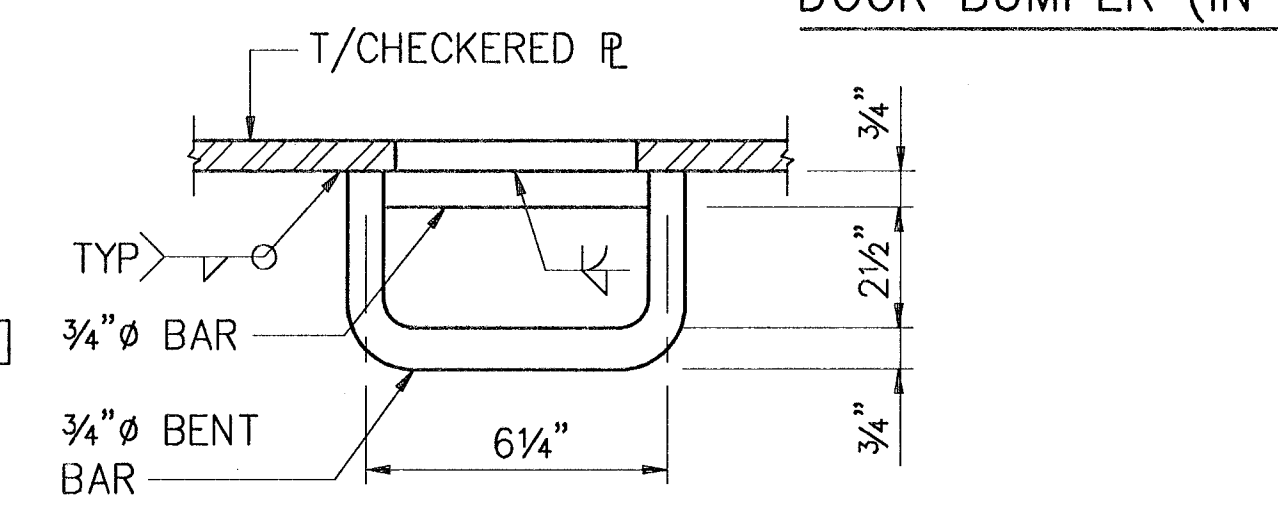
SECTION 4



**DETAIL 3**

SCALE: 1 1/2"=1'-0"

DETAIL 3

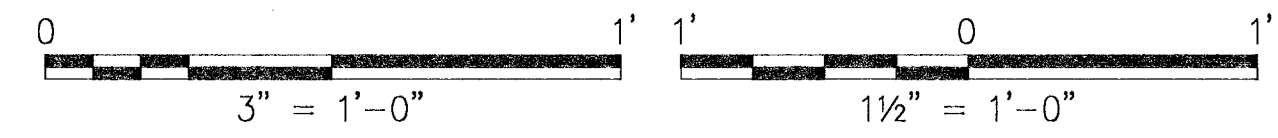


**SECTION 5**

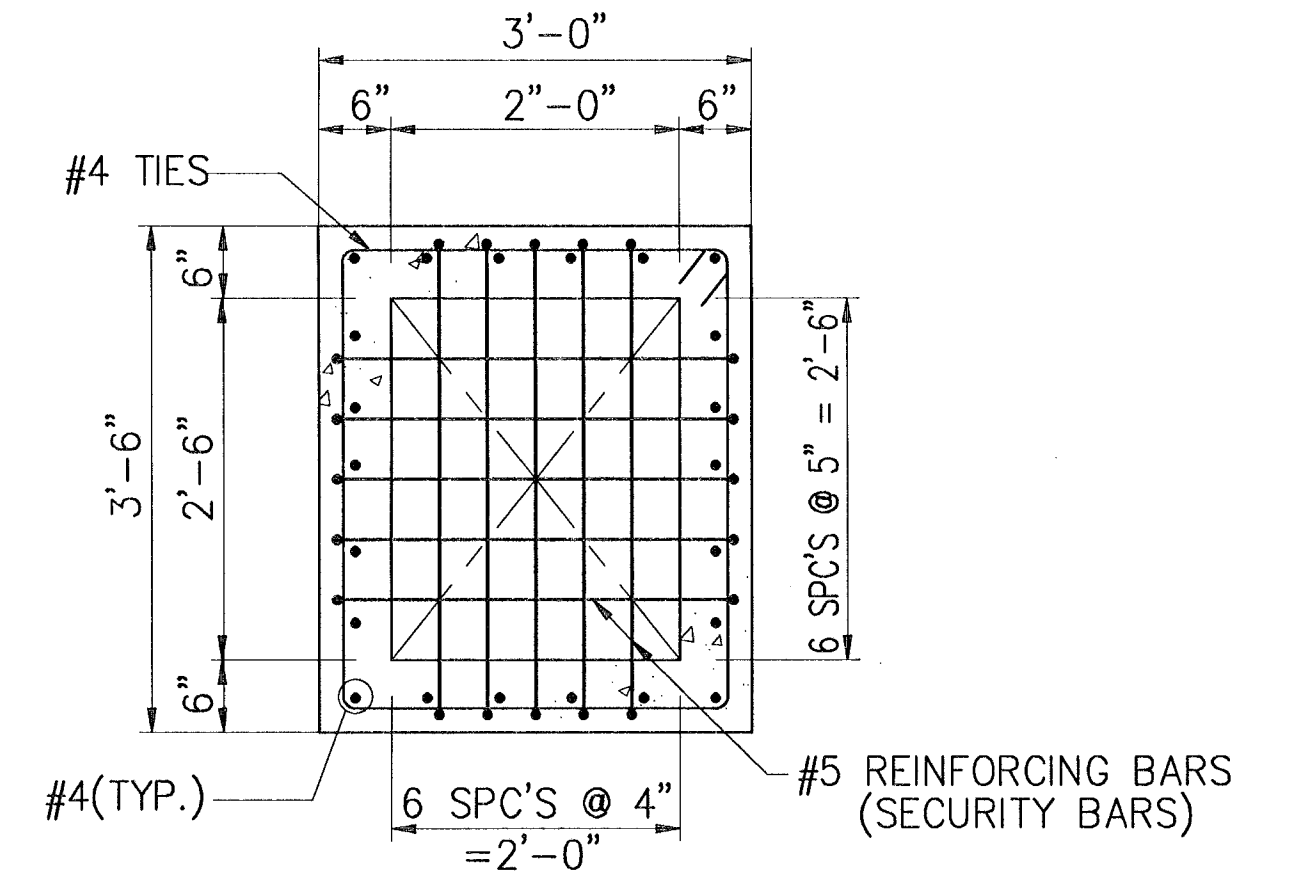
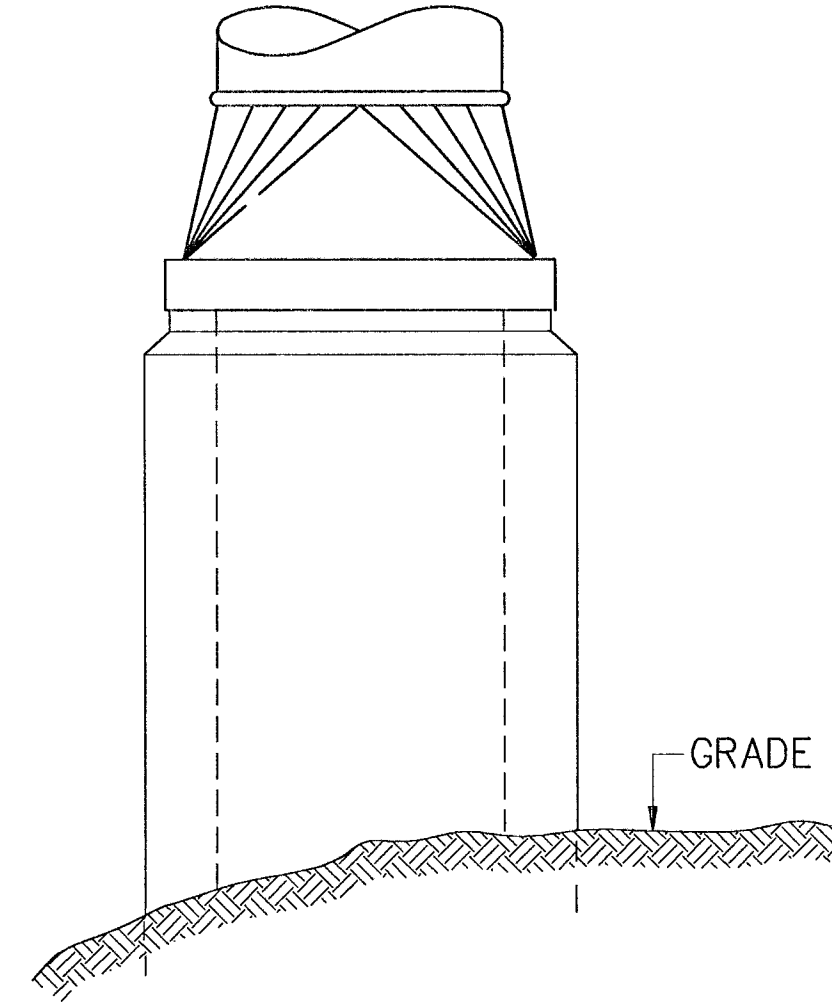
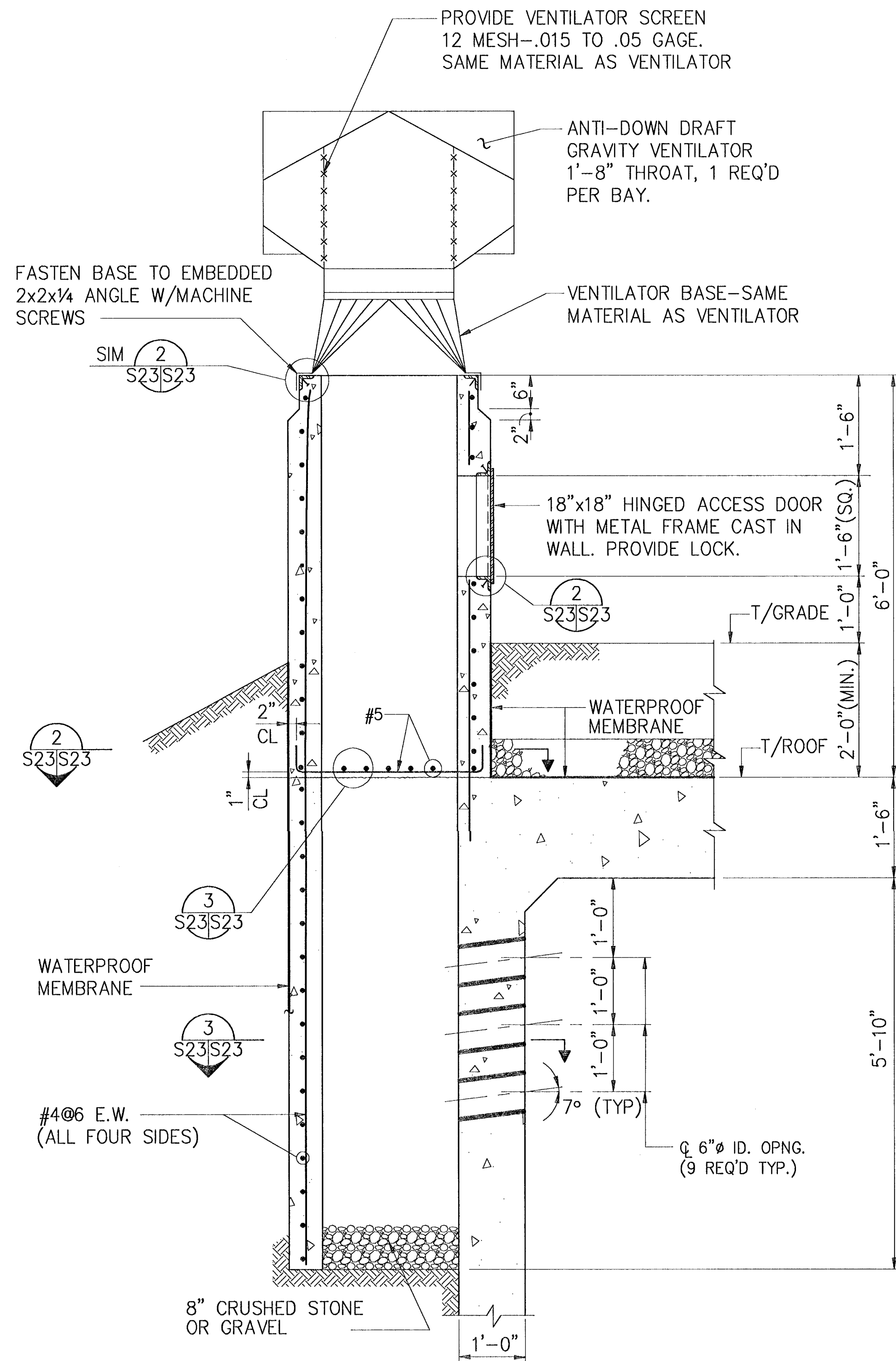
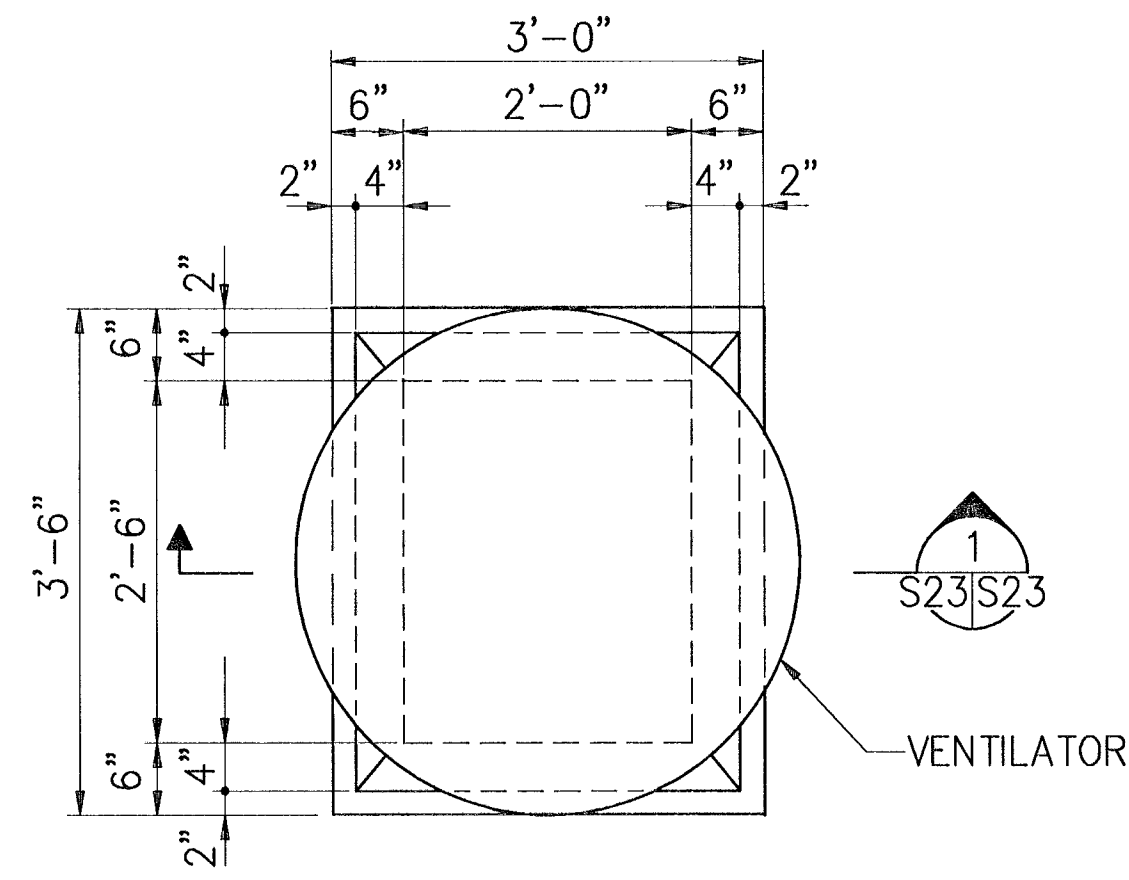
SCALE: 3"=1'-0"

SECTION 5

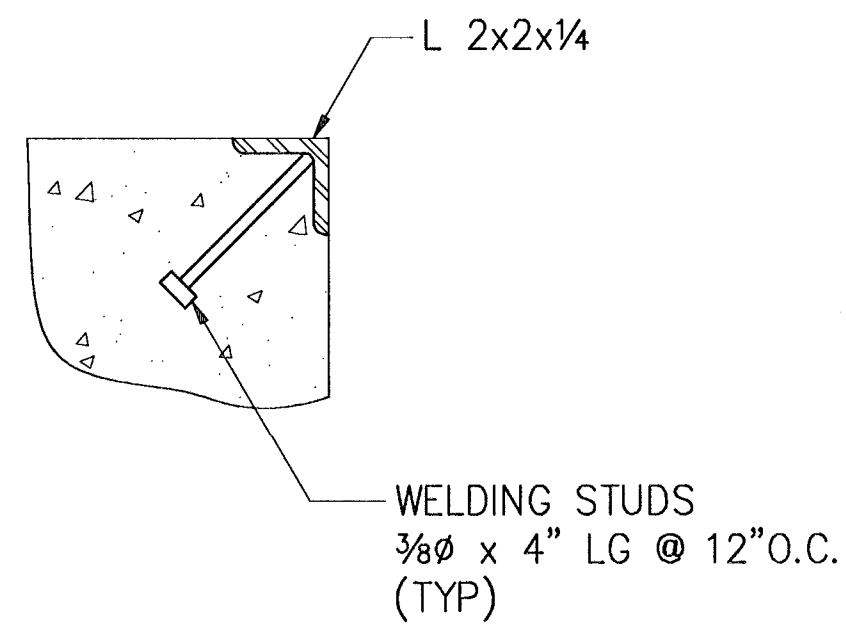
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY



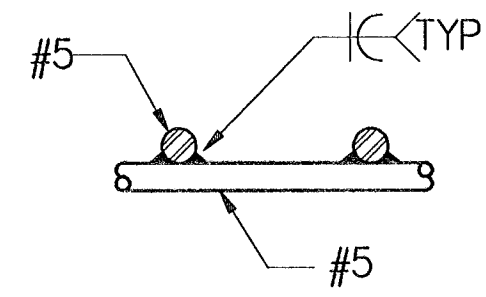
SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
AMMANN & WHITNEY CONSULTING ENGINEERS				
DEPARTMENT OF THE NAVY				
WASHINGTON, D.C. 20350				
NAVAL FACILITIES ENGINEERING COMMAND				
STANDARD DRAWING				
<b>STANDARD BOX MAGAZINE TYPE 'F'</b>				
TRENCH COVERS, BUMPERS, DOOR GUIDES -- DETAILS				
FIRE PROTECTION ENGINEER	DATE	SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER
CRITERIA MANAGER	DATE	D	80091	6,448,610
APPROVED	DATE	SCALE	AS NOTED	CONTRACT NO
FOR COMMANDER NAFAECENCOM	DATE	CATEGORY CODE		SPIC NO
				<b>S-22</b>
				SHEET 22 OF 33



**DETAIL 1**  
SCALE: 3/4"=1'-0"  
S10/S23



**DETAIL 2**  
SCALE: 3"=1'-0"  
S23/S23



**DETAIL 3**  
N.T.S.  
S23/S23

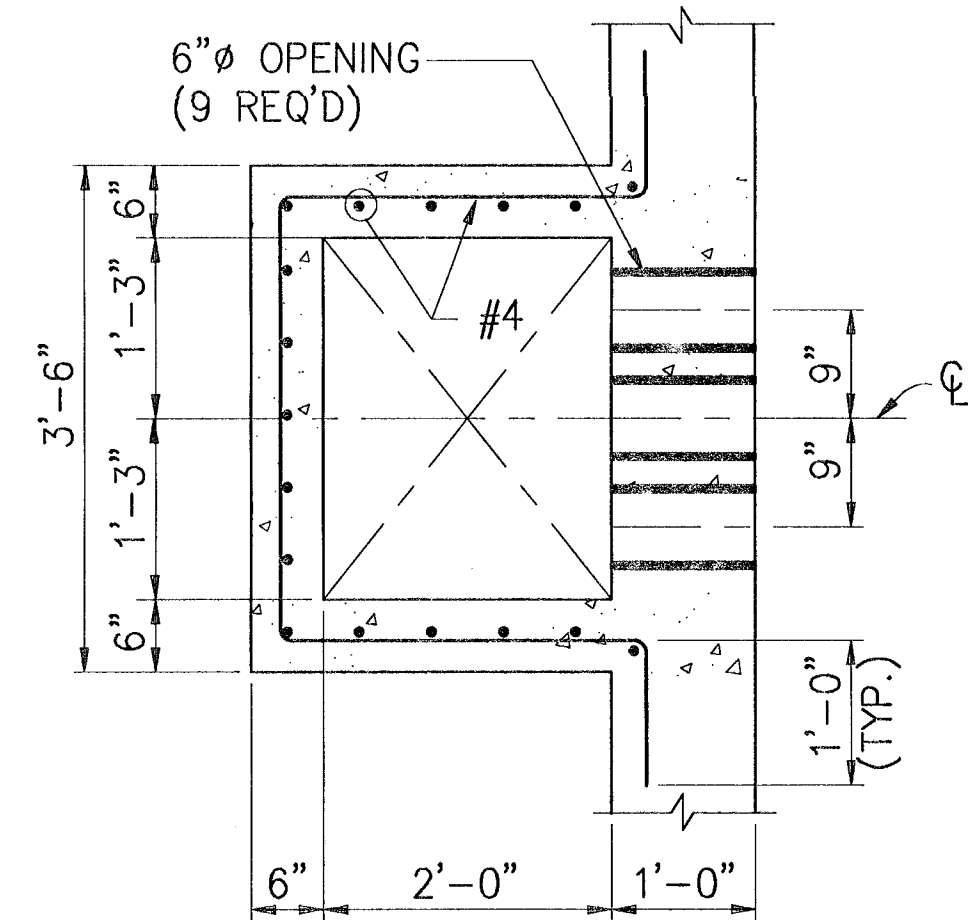
- NOTES:**
1. VENTILATOR SHALL BE DESIGNED BY THE CONTRACTOR FOR A SUSTAINED WIND SPEED OF 132 M.P.H.
  2. REFER TO DRAWING E-5 FOR LIGHTNING ROD LOCATION ON VENTILATOR.
  3. ALL MOVING PARTS SHALL BE NON-SPARKING TYPE.
  4. GRAVITY VENTILATOR SHALL BE INTRINSICALLY SAFE.

**SECTION 1**  
SCALE: 3/4"=1'-0"  
S23/S23

**DETAILS OF VENTILATOR SHAFT**

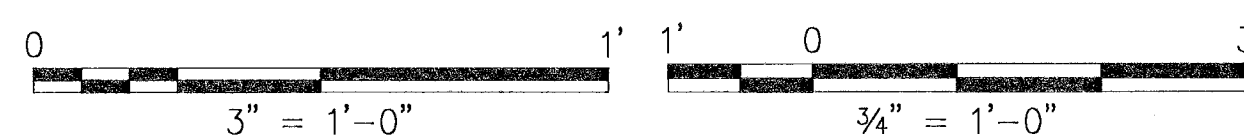
**ELEVATION 1**  
SCALE: 3/4"=1'-0"  
S23/S23

**SECTION 2**  
SCALE: 3/4"=1'-0"  
S23/S23



**SECTION 3**  
SCALE: 3/4"=1'-0"  
S23/S23

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

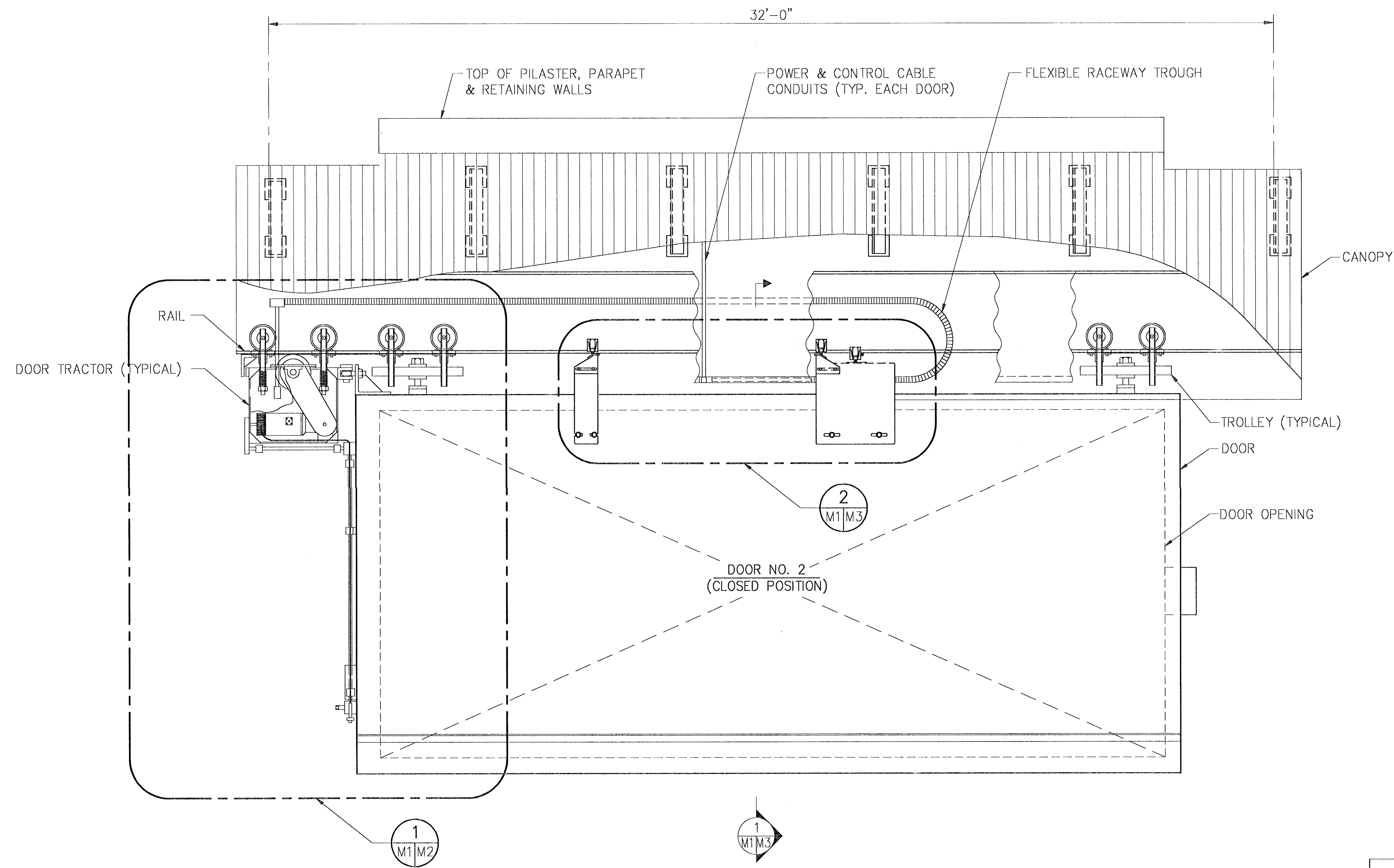


SATISFACTORY TO: \_\_\_\_\_ DATE: \_\_\_\_\_

SYMBOL	DESCRIPTION	PROFD BY	DATE	APPROVED
REVISIONS				
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MERRIMAN ST., NEW YORK, NY 10014				
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350				
NAVAL FACILITIES ENGINEERING COMMAND				
STANDARD DRAWING				
STANDARD BOX MAGAZINE TYPE 'F'				
VENTILATOR DETAILS				
FIRE PROTECTION ENGINEER	DATE	SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER
CRITERIA MANAGER	DATE	D	80091	6,448,611
APPROVED	DATE	SCALE	AS NOTED	CONTRACT NO
FOR COMMANDER NAVFACENCOM	DATE	CATEGORY CODE		SPEC NO
				<b>S-23</b>
				SHEET 23 OF 33





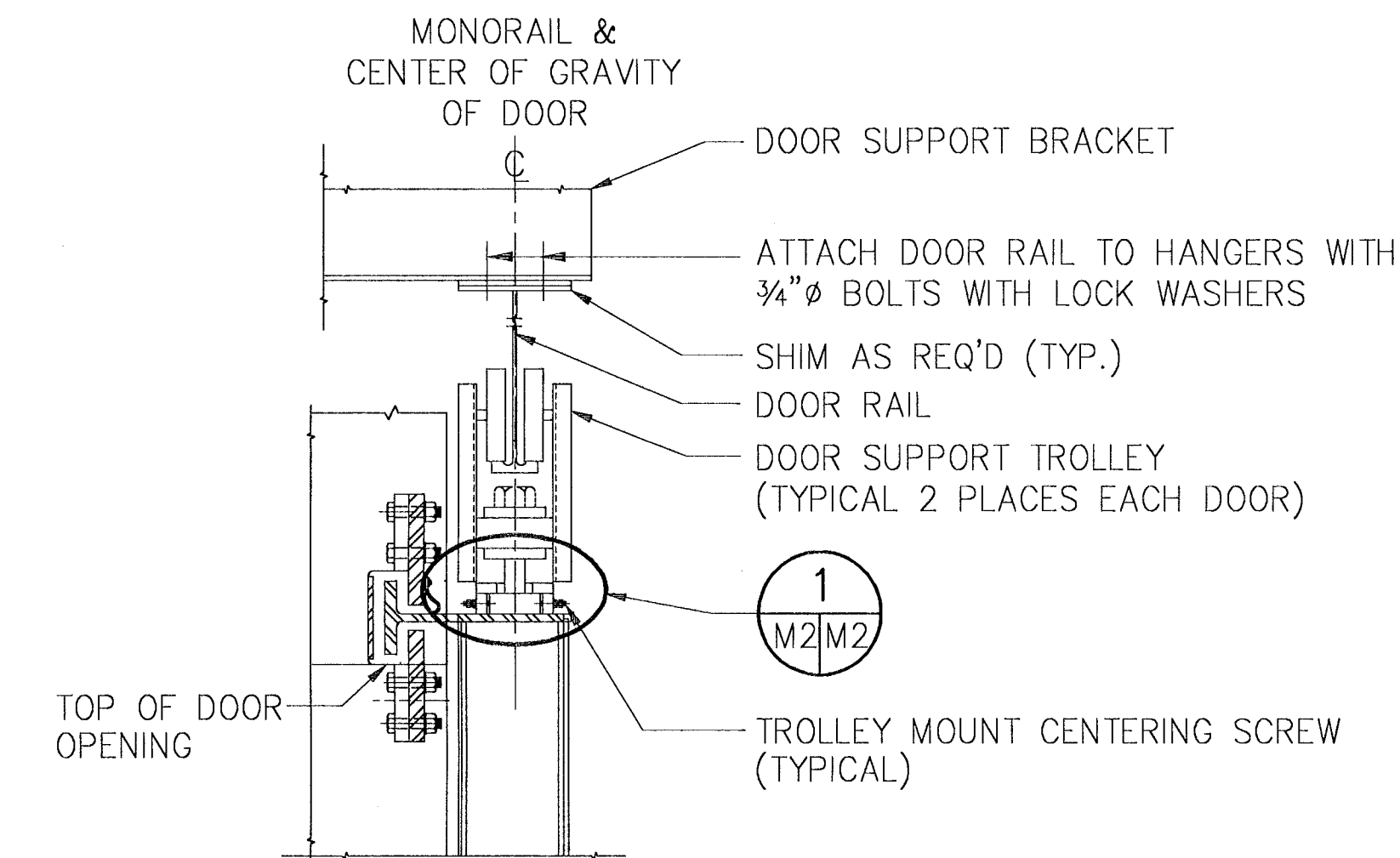
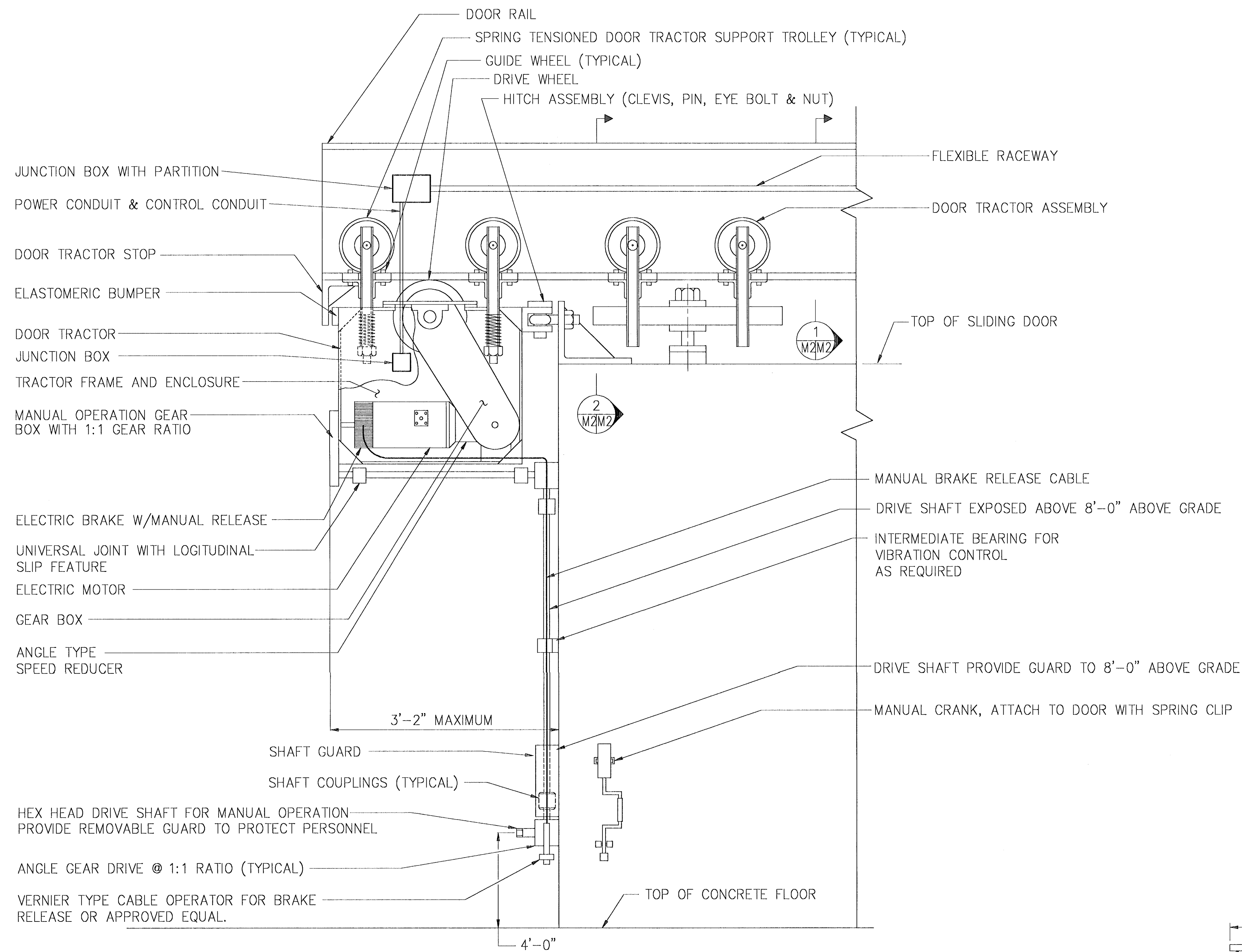


**FRONT ELEVATION OF SLIDING DOOR**

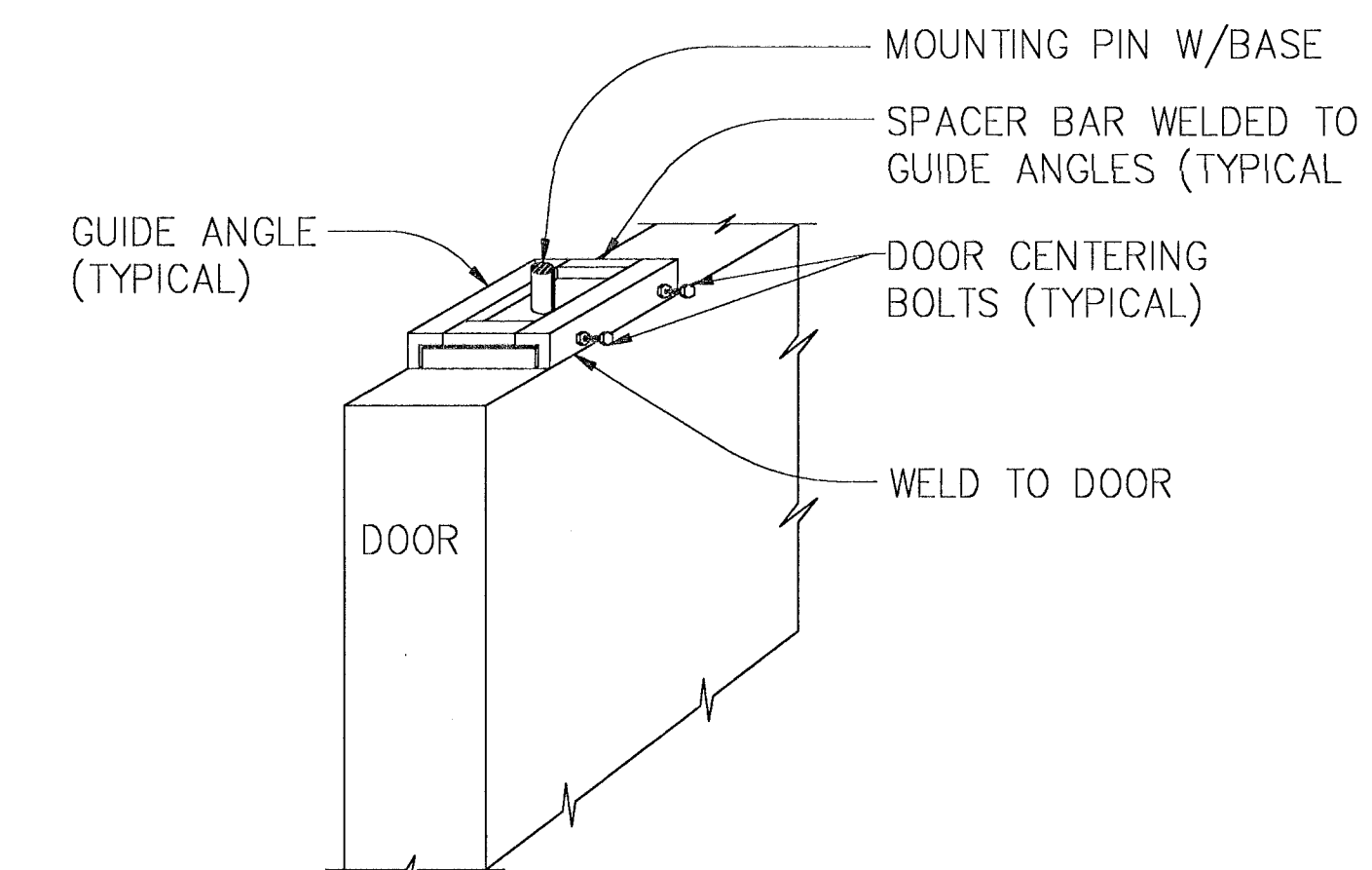
SCALE: NTS

IF SHEET IS LESS THAN  
(22" x 34")  
IT IS A REDUCED PRINT --  
SCALE REDUCED ACCORDINGLY

SYMBOL		DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS					
<p><b>AMMANN &amp; WHITNEY</b> CONSULTING ENGINEERS 99 MORTON ST., NEW YORK, NY 10014</p> <p>DATE: 27/5/97</p> <p>PRINCIPAL PARTNER: <i>[Signature]</i></p> <p>ENGINEER IN CHARGE: <i>[Signature]</i> BRANCH MANAGER: <i>[Signature]</i></p> <p>CRITERIA MANAGER: <i>[Signature]</i> DIVISION DIRECTOR: <i>[Signature]</i></p> <p>NAVFACENSGOM</p>					
<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> ELEVATION OF SLIDING DOOR OPERATOR</p>			<p>WASHINGTON, D.C. 20350</p>		
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	<p>6,448,613</p>		
D	80091	<p>M-1</p>			
SCALE	CONTRACT NO		<p>SHEET 25</p>		
1/8" = 1'-0"	SPEC NO		<p>OF 33</p>		
SATISFACTORY TO		FOR COMMANDER NAVFACENSGOM			
TITLE		DATE			

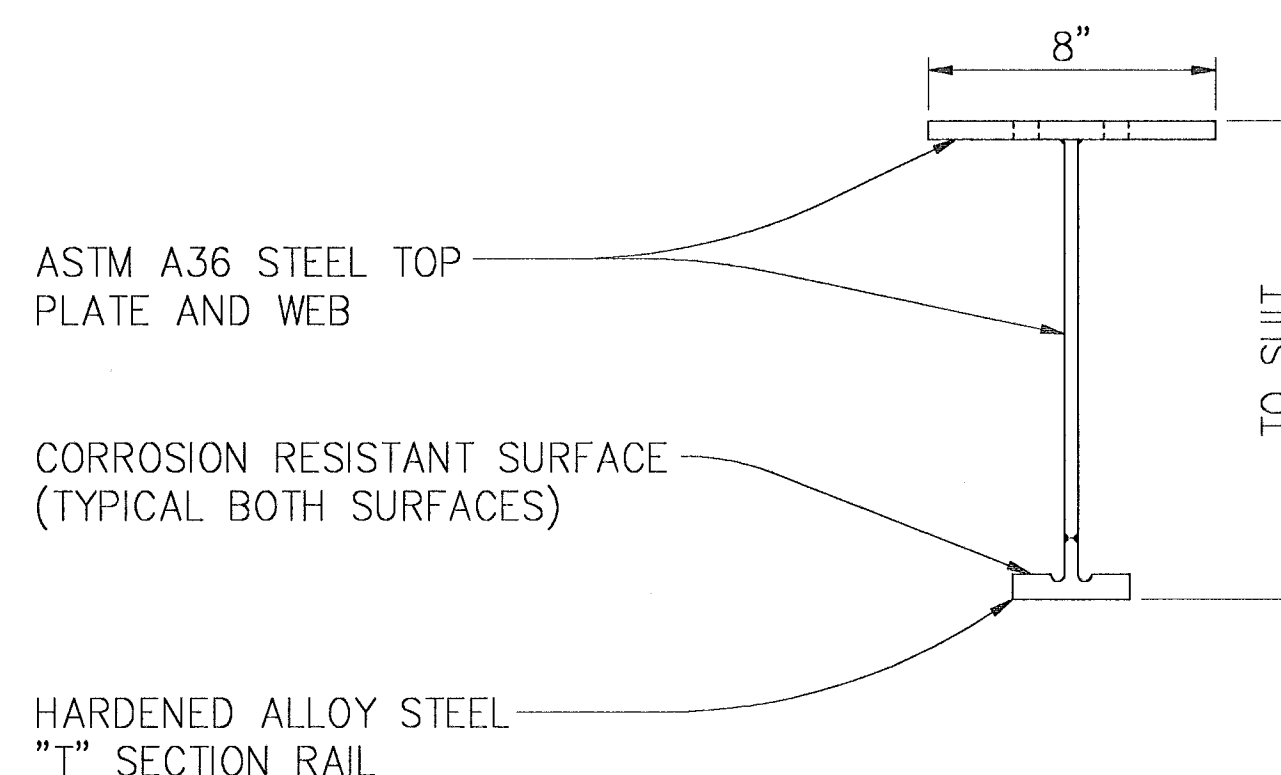


SECTION 2  
SCALE: NTS



DETAIL 1  
SCALE: NTS

DETAIL 1  
SCALE: NTS

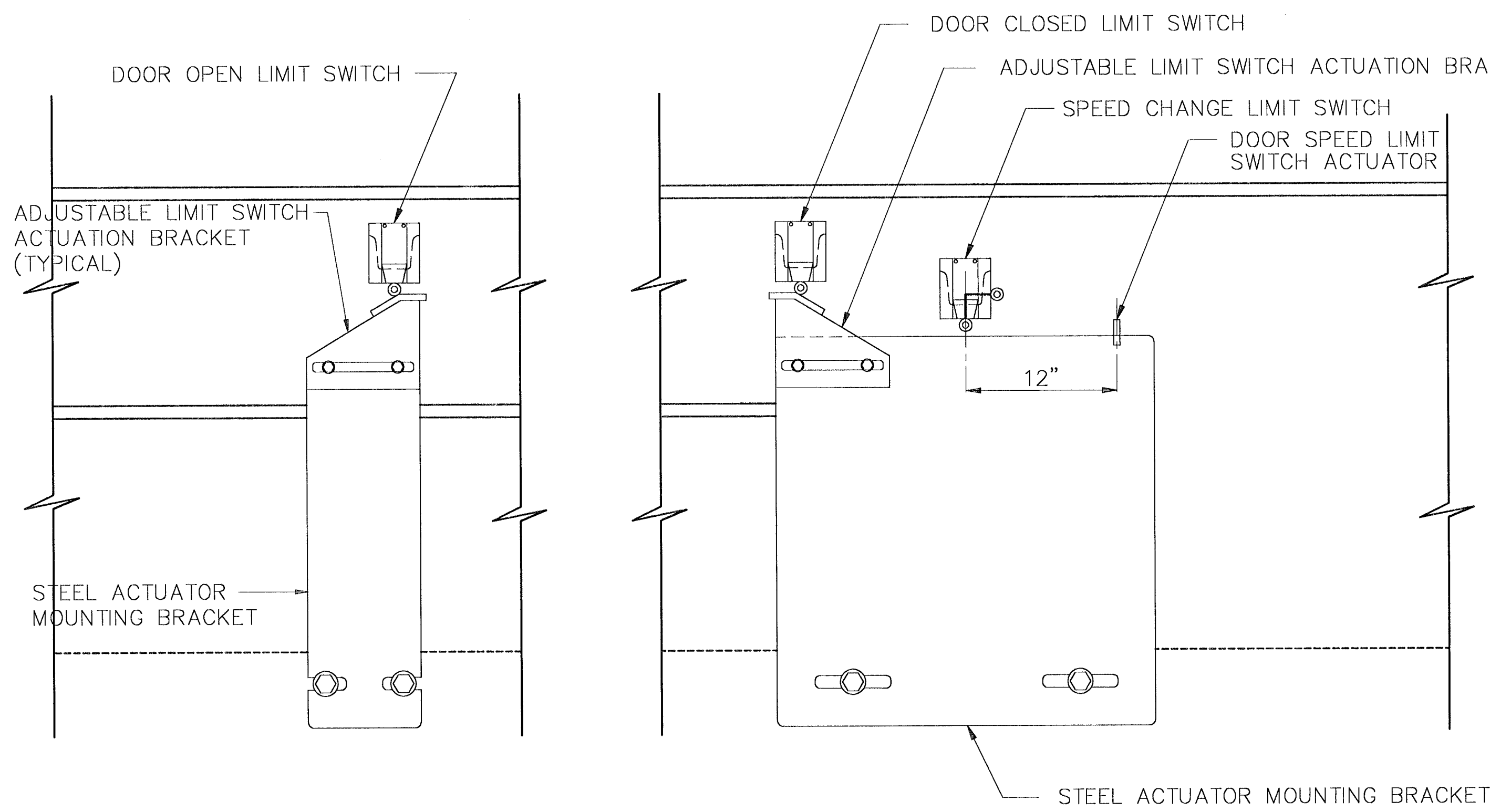


SECTION 1  
SCALE: NTS

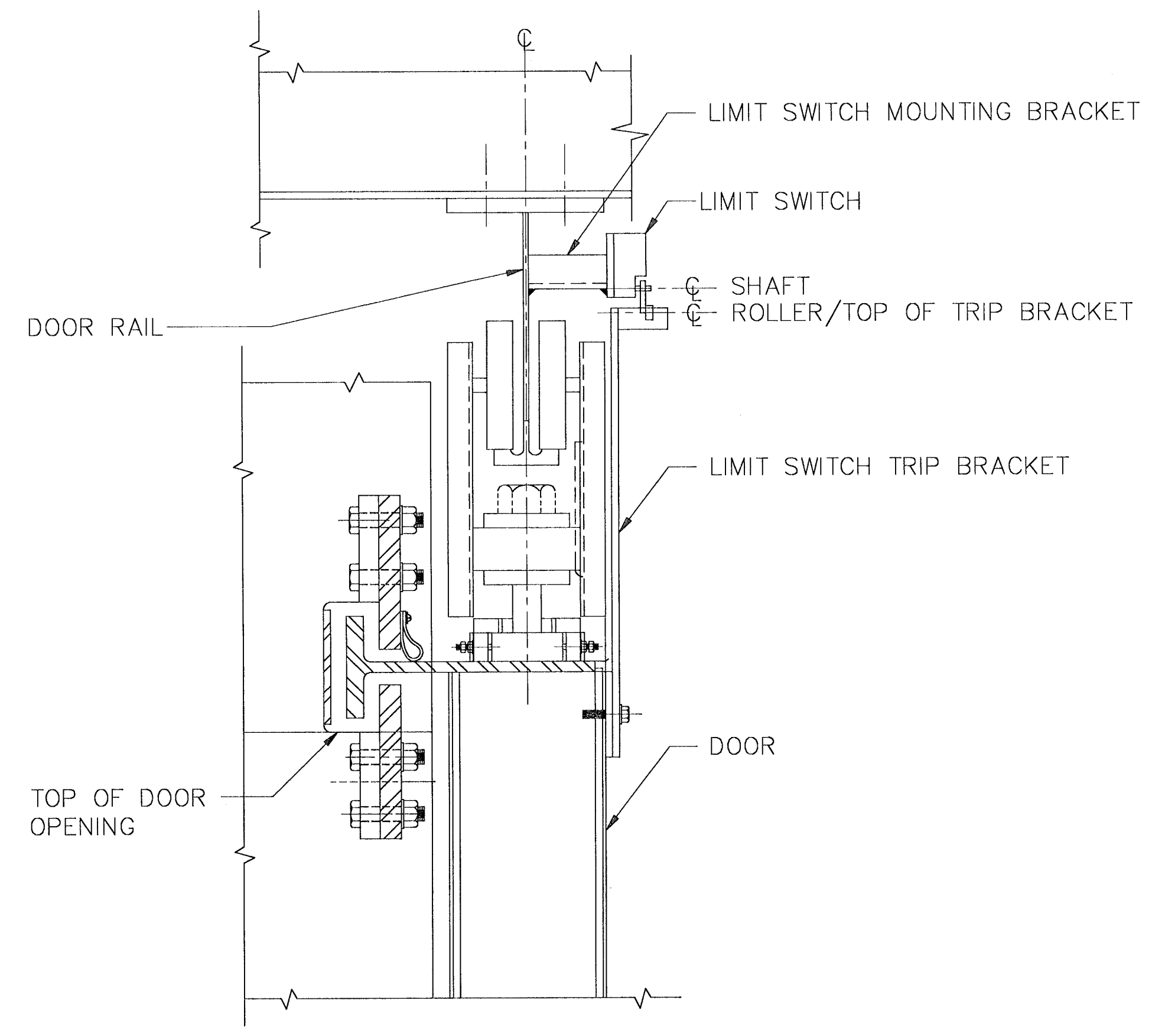
IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT -- SCALE REDUCED ACCORDINGLY

- NOTES:
1. USE DOOR CENTERING BOLTS TO POSITION THE TROLLEY PIN & BASE FOR A BALANCED DOOR.
  2. WELD TROLLEY MOUNTING BASE TO GUIDE ANGLES AND SPACER BARS AFTER BALANCING DOOR.
  3. CONTRACTOR MAY SUBMIT ALTERNATE TROLLEYS & MOUNTS FOR APPROVAL.

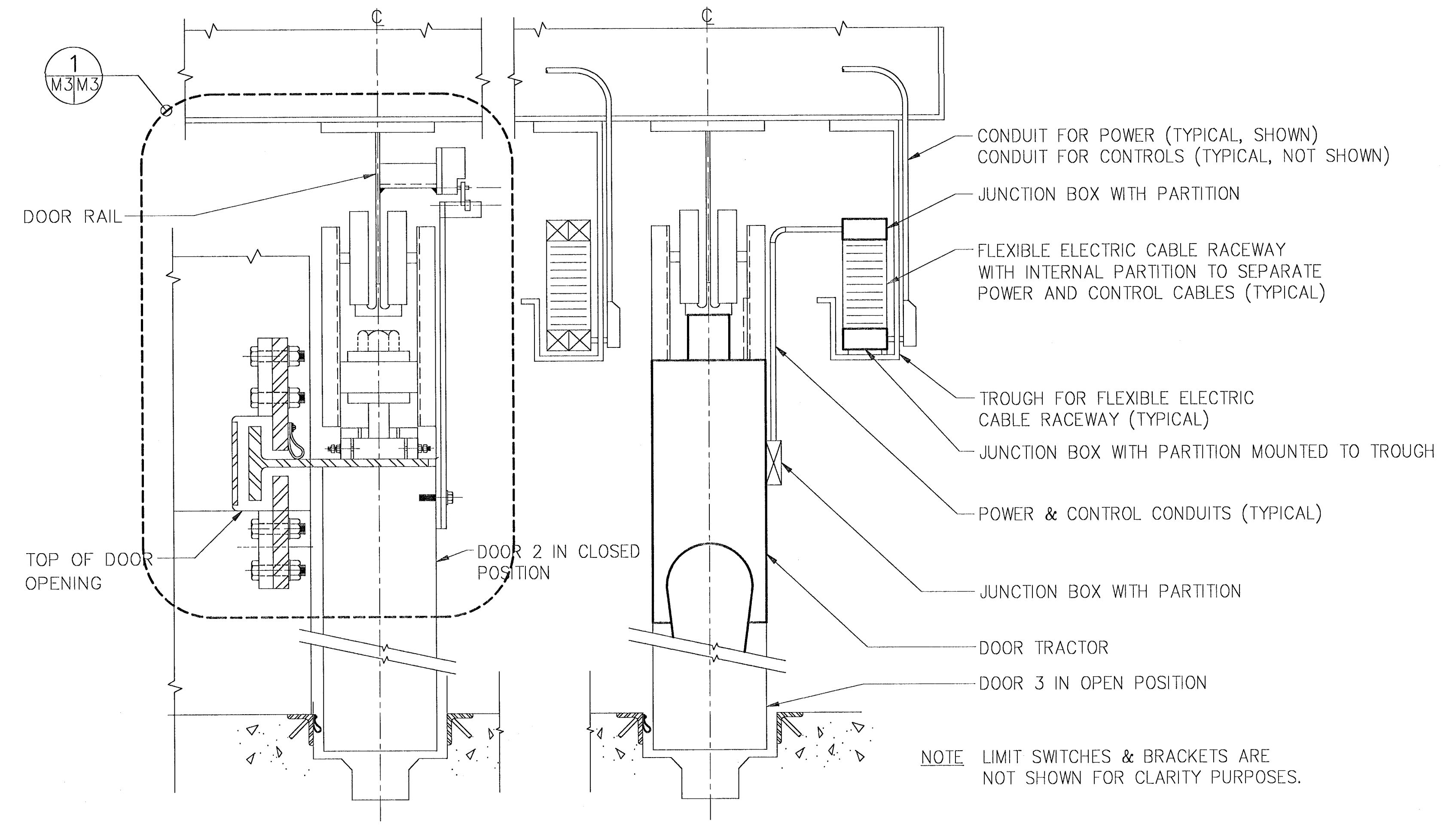
SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
<b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 98 WILSON ST., NEW YORK, NY 10014 DATE: 27/5/97 PRINCIPAL ENGINEER: <i>R. B. Brady</i> ENGINEER IN CHARGE: <i>R. B. Brady</i> CRITERIA MANAGER: <i>R. B. Brady</i> NAVFACENCOM: <i>R. B. Brady</i>				
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350				
NAVAL FACILITIES ENGINEERING COMMAND				
STANDARD DRAWING				
<b>STANDARD BOX MAGAZINE TYPE 'F'</b>				
SLIDING DOOR TRACTOR AND DOOR MOUNTING DETAILS				
FIRE PROTECTION ENGINEER	DATE	SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER
CRITERIA MANAGER	DATE	D	80091	6,448,614
APPROVED	DATE	SCALE	1/8" = 1'-0"	CONTRACT NO
TITLE	DATE	CATEGORY CODE	FOR COMMANDER NAVFACENCOM	SPEC NO
				SHEET 26 OF 33



**DETAIL**  
SCALE: NTS  
②  
M1/M3



**DETAIL**  
SCALE: NTS  
①  
M3/M3



**SECTION**  
SCALE: NTS  
①  
M1/M3

IF SHEET IS LESS THAN  
(22" x 34")  
IT IS A REDUCED PRINT -  
SCALE REDUCED ACCORDINGLY

SYMBOL		DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS					
<p><b>AMMANN &amp; WHITNEY</b> CONSULTING ENGINEERS 95 MADISON ST., NEW YORK, NY 10014</p> <p>DATE: 27/5/97</p> <p>PRINCIPAL ENGINEER: <i>[Signature]</i></p> <p>ENGINEER IN CHARGE: <i>[Signature]</i> BRANCH MANAGER: <i>[Signature]</i></p> <p>CRITERIA MANAGER: <i>[Signature]</i> DIVISION DIRECTOR: <i>[Signature]</i></p> <p>NAVFACENGINCOM</p>					
<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> SLIDING DOOR POWER AND CONTROL EQUIPMENT DETAILS</p>			<p>WASHINGTON, D.C. 20350</p>		
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	M-3		
D	80091	6,448,615			
SCALE	CONTRACT NO	SHEET	27		
1/8" = 1'-0"		OF	33		
CATEGORY CODE	SPEC NO				

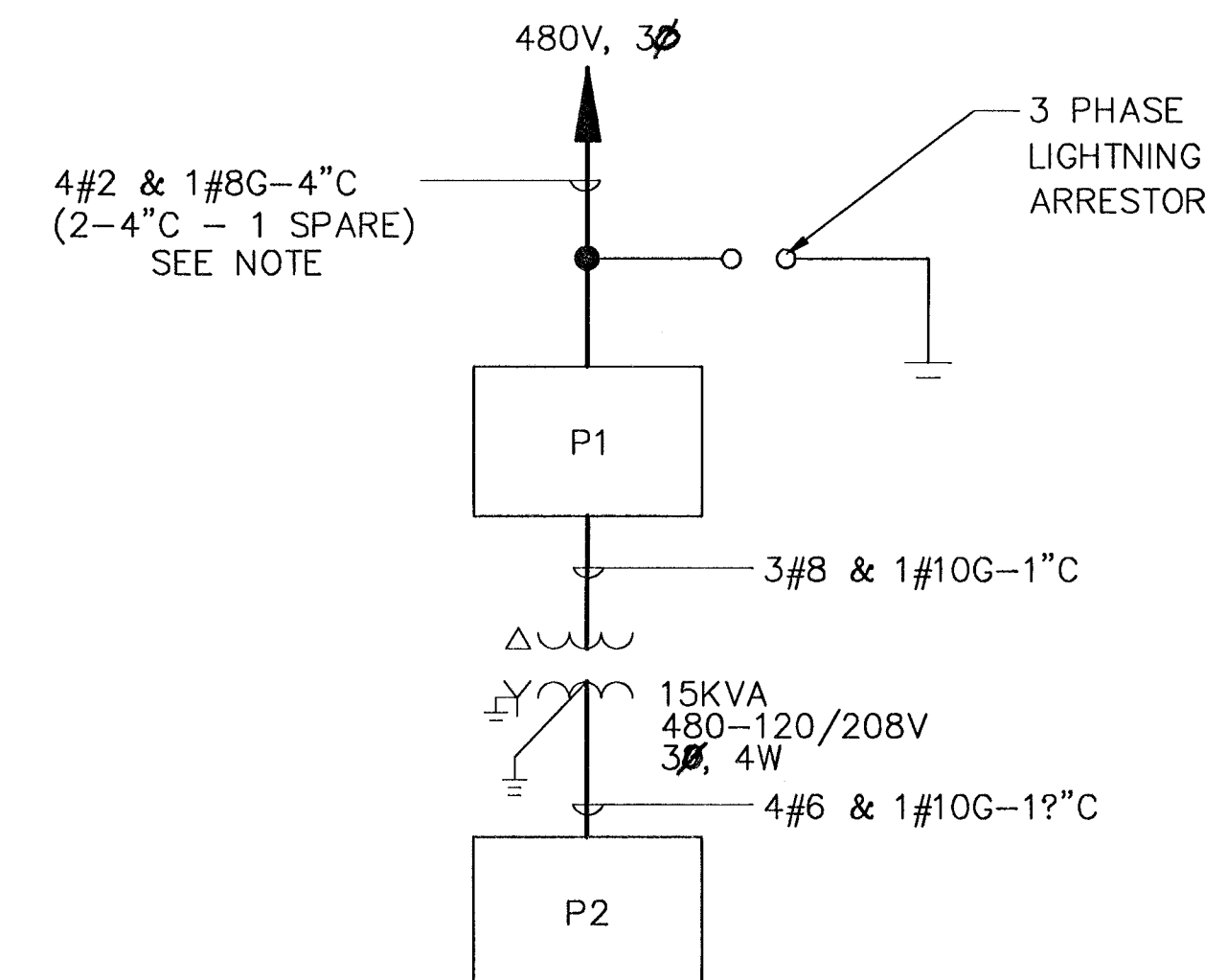
## ELECTRICAL LEGEND AND ABBREVIATIONS

### ELECTRICAL LEGEND:

<p><b>A</b> 100W FLUORESCENT LIGHT FIXTURE FOR HAZADOUS LOCATIONS (SURFACE MOUNTED)</p> <p><b>←○B</b> 250W HPS OUTDOOR LIGHT FIXTURE (WALL MOUNTED FLOODLIGHT)</p> <p><b>⊖</b> 20A, 125V, 2P, 3W GROUNDING TYPE DUPLEX RECEPTACLE MTD 1'-6" AFF</p> <p><b>☐</b> MAIN TELEPHONE ID, FA TERMINAL CABINET IN A NEMA 4X ENCLOSURE</p> <p><b>☐</b> 277/480V, 3φ, 4W POWER PANEL IN A NEMA 4X ENCLOSURE</p> <p><b>☐</b> 120/208V, 3φ, 4W LIGHTING PANEL IN A NEMA 4X ENCLOSURE</p> <p><b>T</b> 15KVA, 480-120/208V, 3φ, 4W STEP DOWN TRANSFORMER IN A NEMA 4X ENCLOSURE</p> <p><b>---</b> EXPOSED GALVANIZED RIGID STEEL CONDUIT-3/4"C MINIMUM. HASH MARKS INDICATE # OF WIRES. LONG HASH INDICATES NEUTRAL. #12 AWG WIRE MINIMUM.</p> <p><b>----</b> BURIED IN EARTH OR CONCEALED IN CONCRETE - GALVANIZED RIGID STEEL CONDUIT (3/4"C MINIMUM)</p> <p><b>→</b> HOMERUN TO PANEL (3/4"C MINIMUM)</p> <p><b>S</b> 20A,125V 1P LIGHT SWITCH FOR HAZADOUS LOCATION MTD. 3'-6" AFF.</p> <p><b>M</b> DOOR OPERATOR TYPE AND LOCATION AS REQUIRED BY DOOR MANUFACTURER</p> <p><b>☐</b> 600V, 30A, 3P SAFETY DISCONNECT SWITCH</p> <p><b>● EXP</b> DOOR CONTROL PUSHBUTTON STATION FOR HAZADOUS LOCATION MTD +4'-0"</p> <p><b>●</b> DOOR CONTROL PUSHBUTTON STATION-NEMA 4X ENCLOSURE MTD 4'-0"</p> <p><b>L</b> LIMIT SWITCH, TYPE AND LOCATION AS REQUIRED BY DOOR MANUFACTURER</p> <p><b>▽</b> SURFACE MOUNTED TELEPHONE OUTLET BOX WITH GASKETED COVER MTD. 1'-6" AFF.</p> <p><b>▭</b> COPPER GROUND BUS - 3" WIDE X 3'-0" LONG X 1/2" DEEP</p> <p><b>⊙</b> JUNCTION BOX.</p> <p><b>⊗</b> COPPER AIR TERMINAL 5/8" X 24" LONG</p> <p><b>⊙</b> COPPER WELD SECTIONAL GROUND ROD 3/4" DIAMETER X 10'x0" LONG.</p> <p><b>●</b> EXOTHERMIC WELD</p> <p><b>---</b> BARE COPPER GROUND CABLE #2/0 AWG</p> <p><b>Ⓞ</b> GROUND REEL-SPRING DRIVEN AUTOMATIC RETRIEVAL WITH 50' 1/C #2AWG COPPER CABLE</p>	<p><b>AFF</b> ABOVE FINISHED FLOOR</p> <p><b>AFG</b> ABOVE FINISHED GRADE</p> <p><b>AWG</b> AMERICAN WIRE GAGE</p> <p><b>AF</b> AMP FRAME OR AMP FUSE</p> <p><b>AT</b> AMP TRIP</p> <p><b>ATS</b> AUTOMATIC TRANSFER SWITCH</p> <p><b>AMP OR A(S)</b> AMPERE(S)</p> <p><b>AS</b> AMP SWITCH</p> <p><b>APPROX</b> APPROXIMATELY</p> <p><b>BLDG.</b> BUILDING</p> <p><b>C.B.</b> CIRCUIT BREAKER</p> <p><b>C</b> CONDUIT</p> <p><b>CKT OR CIR.</b> CIRCUIT</p> <p><b>COMM</b> COMMUNICATION</p> <p><b>Ⓞ</b> CENTERLINE</p> <p><b>D</b> DEEP</p> <p><b>DIST.</b> DISTRIBUTION</p> <p><b>DWG.</b> DRAWING</p> <p><b>E</b> EMERGENCY</p> <p><b>EC</b> EMPTY CONDUIT</p> <p><b>ELECT.</b> ELECTRICAL</p> <p><b>EMERG.</b> EMERGENCY</p> <p><b>EWC</b> ELECTRIC WATER COOLER</p> <p><b>E &amp; S</b> EYE WASH &amp; SHOWER</p> <p><b>EXH</b> EXHAUST</p> <p><b>EXIST.</b> EXISTING</p> <p><b>EXP</b> EXPLOSION-PROOF FOR HAZADOUS LOCATION</p> <p><b>FACP</b> FIRE ALARM CONTROL PANEL</p> <p><b>FDR(S)</b> FEEDER(S)</p> <p><b>FLUOR.</b> FLUORESCENT</p> <p><b>F.A.</b> FIRE ALARM</p> <p><b>GFP</b> GROUND FAULT PROTECTION</p> <p><b>GRS</b> GALVANIZED RIGID STEEL</p> <p><b>GFI</b> GROUND FAULT INTERRUPTER</p> <p><b>HOA</b> HAND-OFF-AUTOMATIC</p> <p><b>HT.</b> HEIGHT</p> <p><b>HZ</b> HERTZ</p> <p><b>HID</b> HIGH INTENSITY DISCHARGE</p> <p><b>H.P.S.</b> HIGH PRESSURE SODIUM</p> <p><b>H</b> HIGH</p> <p><b>HP</b> HORSEPOWER</p> <p><b>ID</b> INTRUSION DETECTION</p> <p><b>INCAND.</b> INCANDESCENT</p> <p><b>JB</b> JUNCTION BOX</p> <p><b>KW</b> KILOWATT</p> <p><b>KWH</b> KILOWATT-HOUR</p> <p><b>KV</b> KILOVOLT</p> <p><b>KVA</b> KILOVOLT AMPERE</p> <p><b>LTC.</b> LIGHTING</p> <p><b>LP</b> LIGHTING PANEL</p>
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### ABBREVIATIONS:

<p><b>MAX</b> MAXIMUM</p> <p><b>MECH.</b> MECHANICAL</p> <p><b>MCB</b> MAIN CIRCUIT BREAKER</p> <p><b>MCC</b> MOTOR CONTROL CENTER</p> <p><b>MTD</b> MOUNTED</p> <p><b>MG OR M/G</b> MOTOR/GENERATOR SET</p> <p><b>MIN</b> MINIMUM</p> <p><b>MTG</b> MOUNTING</p> <p><b>NEC</b> NATIONAL ELECTRICAL CODE</p> <p><b>N</b> NORMAL</p> <p><b>NON-AUTO</b> NON-AUTOMATIC</p> <p><b>NF</b> NON-FUSED</p> <p><b>NC OR N.C.</b> NORMALLY CLOSED</p> <p><b>NO OR N.O.</b> NORMALLY OPEN</p> <p><b>NIC</b> NOT IN CONTRACT</p> <p><b>N.T.S.</b> NOT TO SCALE</p> <p><b>O.C.</b> ON CENTER</p> <p><b>PNL</b> PANEL</p> <p><b>?</b> PHASE OR DIAMETER</p> <p><b>PLATF.</b> PLATFORM</p> <p><b>P</b> POLE</p> <p><b>PVC</b> POLY VINYL CHLORIDE</p> <p><b>PWR</b> POWER</p> <p><b>PP</b> POWER PANEL</p> <p><b>PB</b> PULLBOX</p> <p><b>QTY.</b> QUANTITY</p> <p><b>RMS</b> ROOT MEAN SQUARED</p> <p><b>RP</b> RECEPTACLE PANEL</p> <p><b>R.C.</b> REMOTE CONTROL</p> <p><b>S.C.</b> SHORT CIRCUIT</p> <p><b>SUBSTA.</b> SUBSTATION</p> <p><b>SW.</b> SWITCH</p> <p><b>SWBD</b> SWITCHBOARD</p> <p><b>SWGR</b> SWITCHGEAR</p> <p><b>SYM</b> SYMMETRICAL</p> <p><b>TRANSF.</b> TRANSFORMER</p> <p><b>TEL</b> TELEPHONE</p> <p><b>TYP.</b> TYPICAL</p> <p><b>UL</b> UNDERWRITERS LABORATORY</p> <p><b>UON</b> UNLESS OTHERWISE NOTED</p> <p><b>VENT</b> VENTILATION</p> <p><b>V</b> VOLT</p> <p><b>WM</b> WATTMISER</p> <p><b>WTR</b> WATER</p> <p><b>WTR HTR</b> WATER HEATER</p> <p><b>WP</b> WEATHERPROOF</p> <p><b>W</b> WATT, WIRE OR WIDE</p>
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**SINGLE LINE DIAGRAM**

N.T.S.

NOTE-A/E TO VERIFY INCOMING POWER VOLTAGE AND CABLE SIZES. VOLTAGE DROP CALCULATIONS SHALL BE PERFORMED BASED ON SITE ADAPTED LENGTH OF CABLE RUN.

**LIGHTING FIXTURE SCHEDULE**

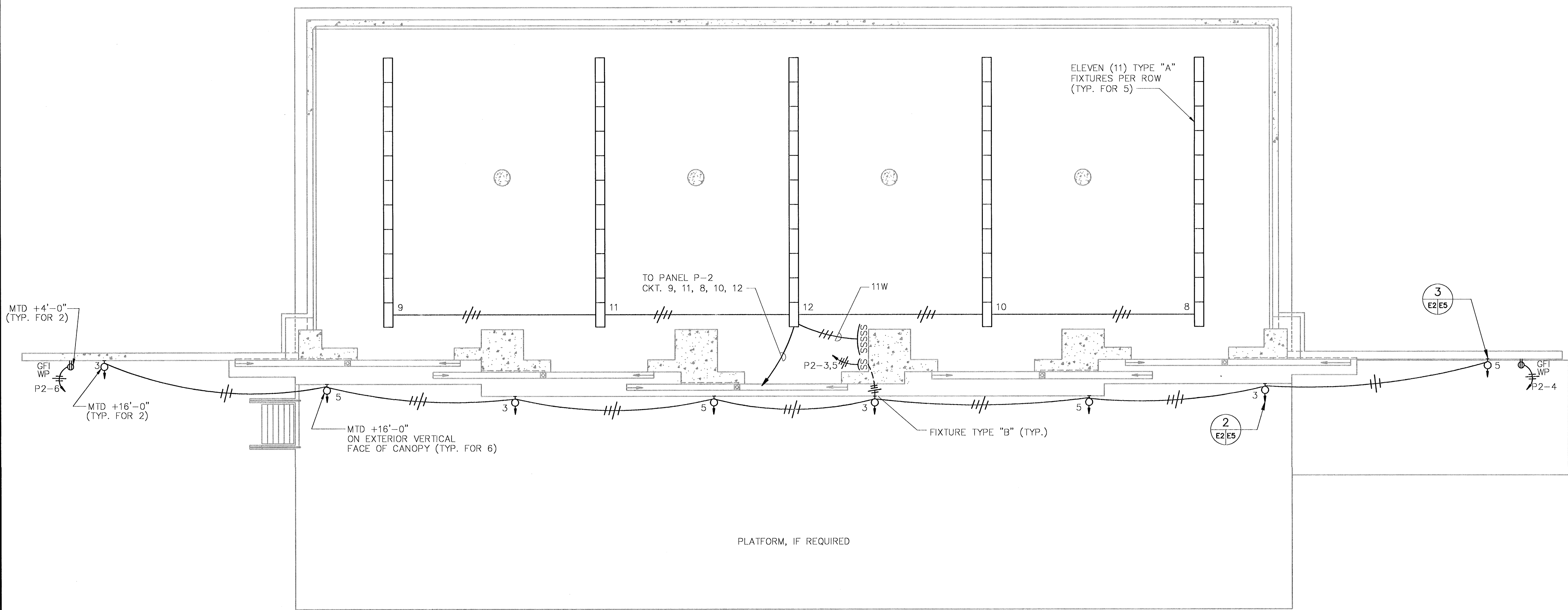
FIXTURE SYMBOL	LAMP DATA				MTG.	REMARKS
	TYPE	QUANTITY	WATTS	VOLTAGE		
<b>A</b>	FLUORESCENT	AS REQUIRED	100	120	SURFACE	REFER TO DRAWING E-5
<b>←○B</b>	HIGH PRESSURE SODIUM	AS REQUIRED	250	120	WALL SURFACE	REFER TO DRAWING E-5

### GENERAL NOTES:

- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- ALL INTERIOR ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE N.E.C. NFPA 70 REQUIREMENTS FOR HAZADOUS LOCATIONS. EXACT TYPE OF CLASSIFICATION SHALL BE DETERMINED FOR EACH SITE.
- PROVIDE SEAL FITTINGS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- FOR DOOR CONTROLS SEE PERFORMANCE SPECIFICATIONS.
- THE EXACT LOCATION AND TYPE OF DOOR OPERATOR, CONTROL STATION AND LIMIT SWITCHES SHALL BE ACCORDANCE WITH DOOR MANUFACTURERS REQUIREMENTS & DRAWINGS M-1, M-2 & M-3.
- ALL ARCHITECT/ENGINEERS USING THESE DRAWINGS AS STANDARDS SHALL INCLUDE THE INTERRUPTING CURRENTS OF ALL ELECTRICAL ITEMS ON THEIR DRAWINGS.

IF SHEET IS LESS THAN (22" x 34") IT IS A REDUCED PRINT - SCALE REDUCED ACCORDINGLY

<p>AMMANN &amp; WHITNEY CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014</p> <p>PRINCIPAL ENGINEER: <i>[Signature]</i> DATE: 27/5/97          ENGINEER IN CHARGE: <i>[Signature]</i>          CRITERIA MANAGER: <i>[Signature]</i>          NAVAFACENCOM DIVISION DIRECTOR: <i>[Signature]</i></p> <p>FIRE PROTECTION ENGINEER: _____ DATE: _____          CRITERIA MANAGER: _____ DATE: _____          APPROVED: _____ DATE: _____</p> <p>SATISFACTORY TO: _____ DATE: _____          TITLE: _____</p>	<p style="text-align: right;">WASHINGTON, D.C. 20350</p> <p style="text-align: center;">REVISIONS</p> <p style="text-align: center;">DEPARTMENT OF THE NAVY</p> <p style="text-align: center;">NAVAL FACILITIES ENGINEERING COMMAND</p> <p style="text-align: center;">STANDARD DRAWING</p> <p style="text-align: center;"><b>STANDARD BOX MAGAZINE TYPE 'F'</b></p> <p style="text-align: center;">LEGEND, NOTES, ABBREVIATIONS, SINGLE LINE DIAGRAM</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>SIZE: <b>D</b></td> <td>CODE (DDRI) NO: <b>80091</b></td> <td>NAVAEC DRAWING NUMBER: <b>6,448,616</b></td> <td rowspan="2" style="text-align: center; vertical-align: middle;"><b>E-1</b></td> </tr> <tr> <td>SCALE: <b>AS NOTED</b></td> <td>CONTRACT NO:</td> <td>SHEET <b>2B</b> OF <b>3.3</b></td> </tr> </table>	SIZE: <b>D</b>	CODE (DDRI) NO: <b>80091</b>	NAVAEC DRAWING NUMBER: <b>6,448,616</b>	<b>E-1</b>	SCALE: <b>AS NOTED</b>	CONTRACT NO:	SHEET <b>2B</b> OF <b>3.3</b>
SIZE: <b>D</b>	CODE (DDRI) NO: <b>80091</b>	NAVAEC DRAWING NUMBER: <b>6,448,616</b>	<b>E-1</b>					
SCALE: <b>AS NOTED</b>	CONTRACT NO:	SHEET <b>2B</b> OF <b>3.3</b>						



**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

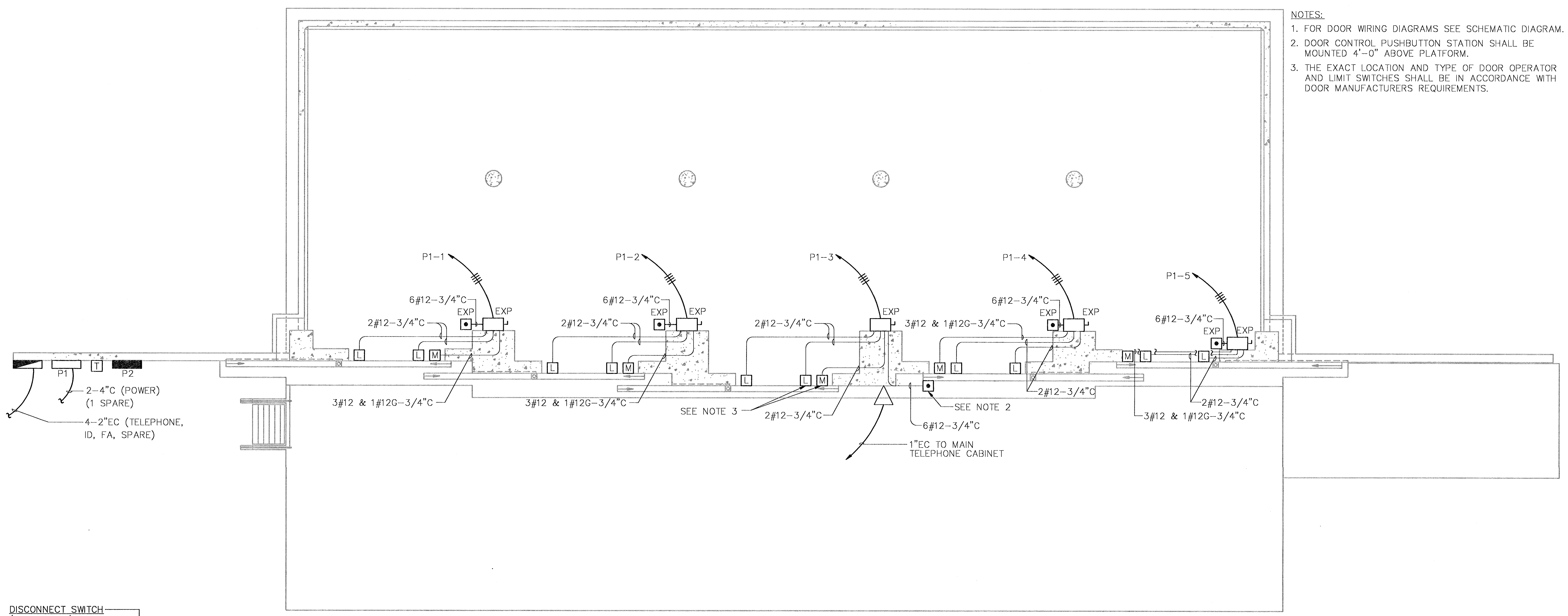
NOTE:  
ALL INTERIOR ELECTRICAL EQUIPMENT AND SYSTEMS  
SHALL BE FOR HAZADOUS LOCATIONS.

IF SHEET IS LESS THAN  
(22" x 34")  
IT IS A REDUCED PRINT -  
SCALE REDUCED ACCORDINGLY

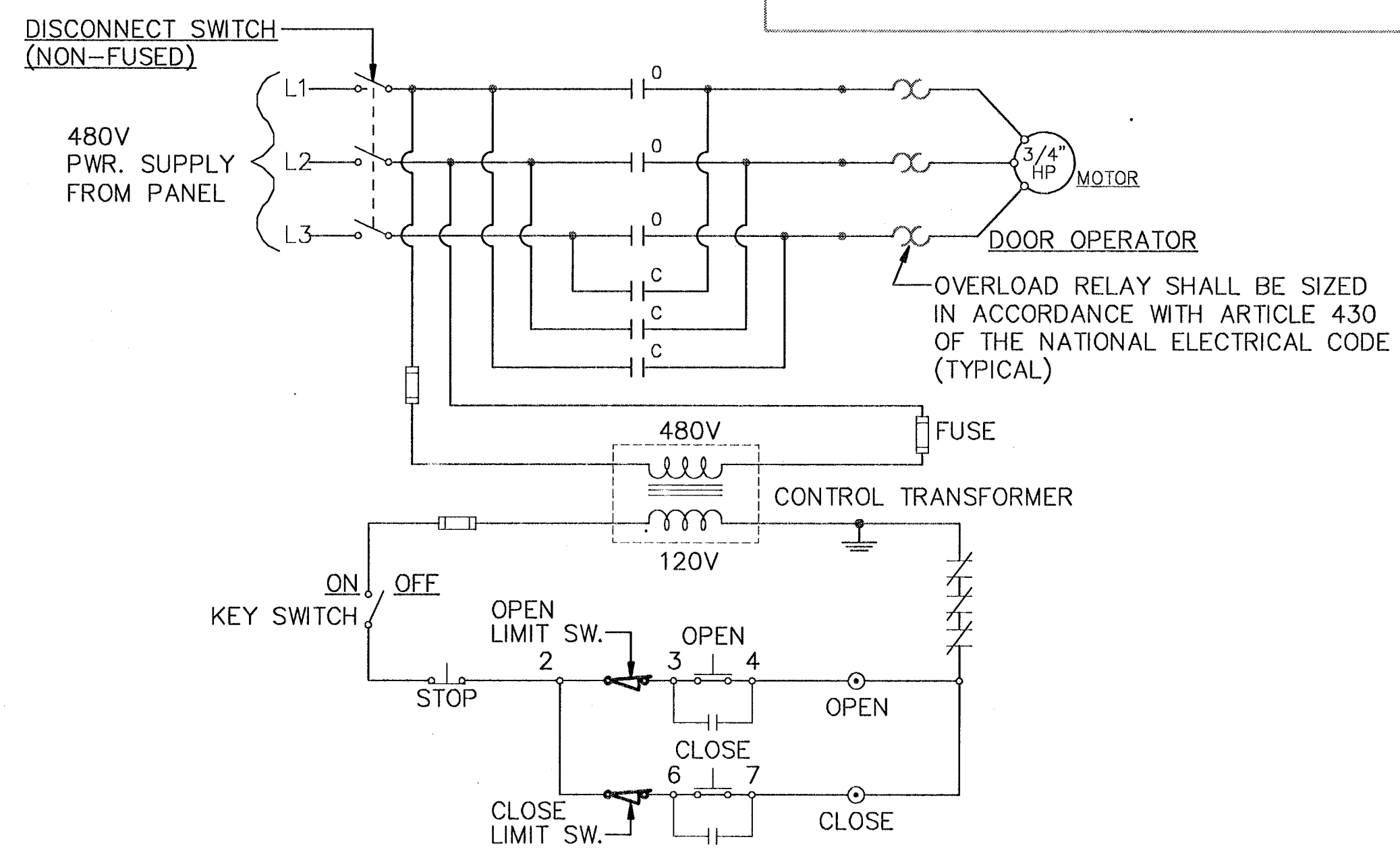
4' 0 10' 20'  
1/8" = 1'-0"

SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
<p><b>AMMANN &amp; WHITNEY</b> CONSULTING ENGINEERS 98 MORTON ST., NEW YORK, NY 10014</p> <p>DATE: 27/5/97</p> <p>ENGINEER IN CHARGE: <i>R. Brady</i> (CRITERIA MANAGER) DIVISION DIRECTOR: <i>R. Gray</i></p> <p>NAVAFACENCOM</p>						
<p>DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350</p> <p>NAVAL FACILITIES ENGINEERING COMMAND</p> <p>STANDARD DRAWING</p> <p><b>STANDARD BOX MAGAZINE TYPE 'F'</b></p> <p>LIGHTING AND RECEPTACLES PLAN</p>						
SIZE	CODE IDENT NO	NAVAFAC DRAWING NUMBER			<b>E-2</b>	
D	80091	6,448,617			SHEET 29 OF 33	
SCALE AS NOTED		CONTRACT NO				
CATEGORY CODE		SPEC NO				

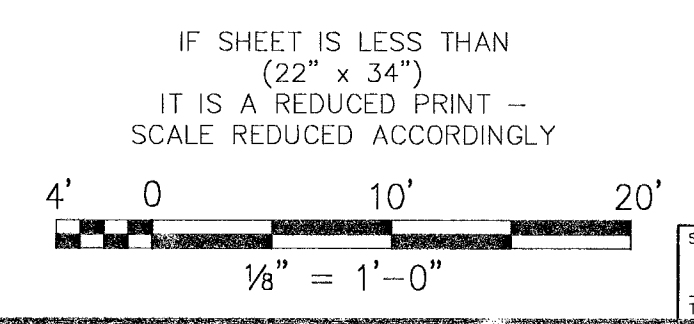
- NOTES:
1. FOR DOOR WIRING DIAGRAMS SEE SCHEMATIC DIAGRAM.
  2. DOOR CONTROL PUSHBUTTON STATION SHALL BE MOUNTED 4'-0" ABOVE PLATFORM.
  3. THE EXACT LOCATION AND TYPE OF DOOR OPERATOR AND LIMIT SWITCHES SHALL BE IN ACCORDANCE WITH DOOR MANUFACTURERS REQUIREMENTS.



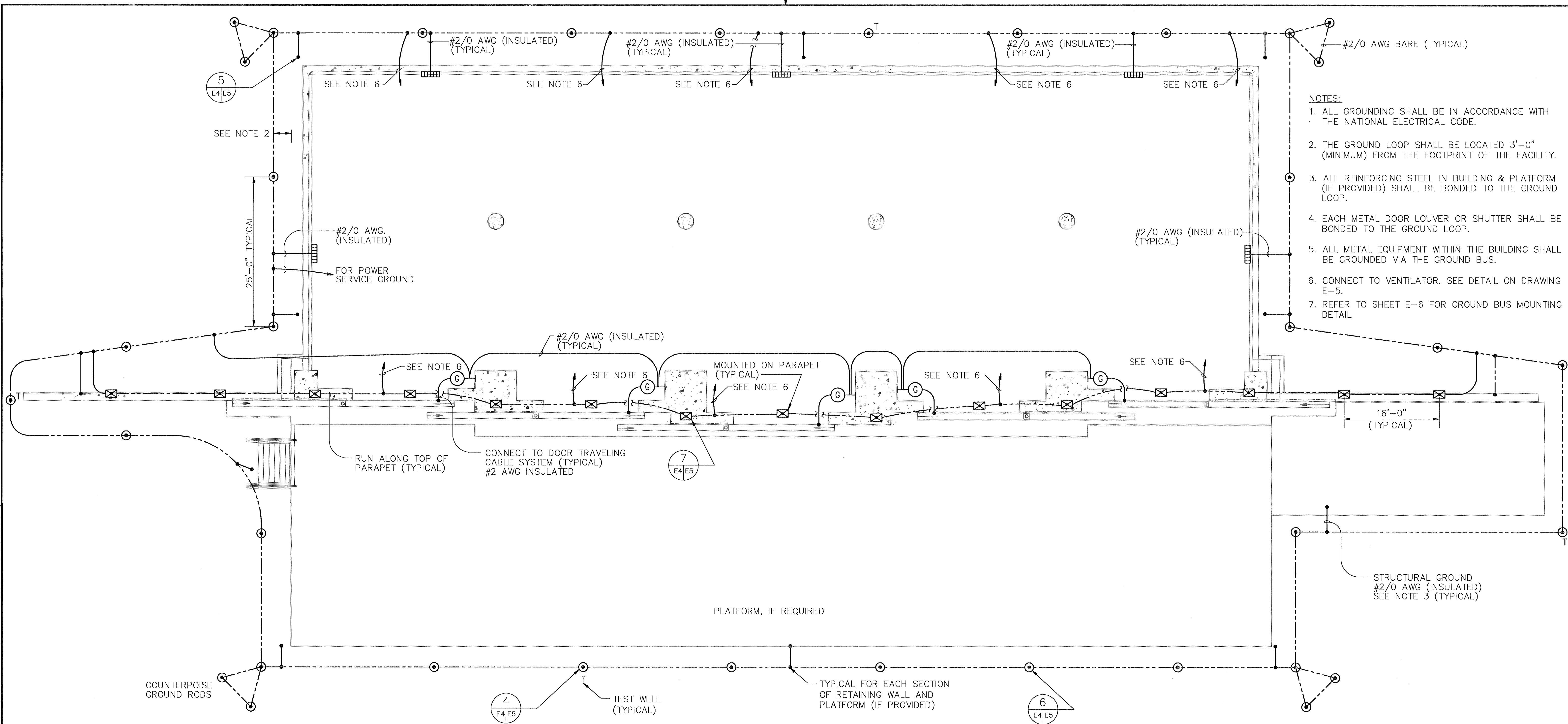
**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**SLIDING DOOR SCHEMATIC DIAGRAM**  
ACTUAL INSTALLATION SHALL BE SITE ADAPTED AND COORDINATED WITH MANUFACTURER AND SHOP DRAWINGS.

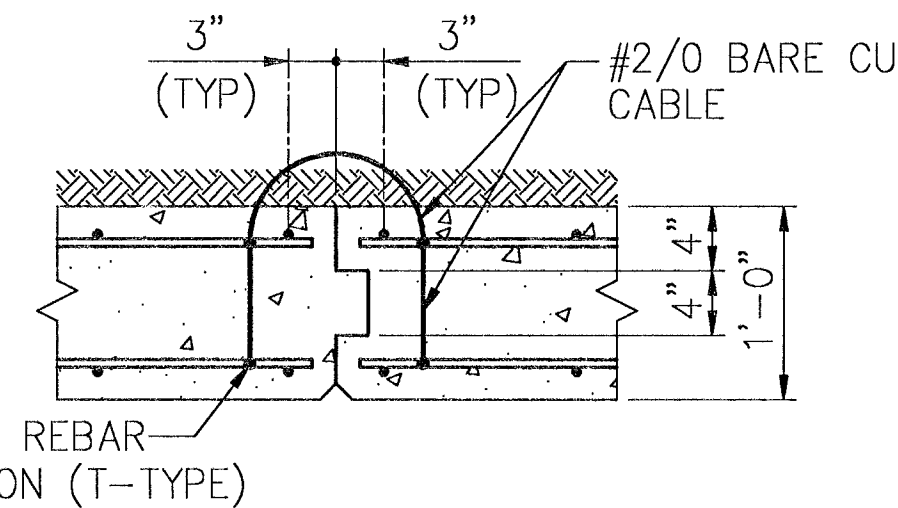


SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 88 MADISON ST., NEW YORK, NY 10014		DEPARTMENT OF THE NAVY		WASHINGTON, D.C. 20350		
ENGINEER IN CHARGE: <i>[Signature]</i>		DATE: 27/5/97		NAVAL FACILITIES ENGINEERING COMMAND		
CRITERIA MANAGER: <i>[Signature]</i>		DIVISION MANAGER: <i>[Signature]</i>		STANDARD DRAWING		
NAVAECINCOM		DATE		STANDARD BOX MAGAZINE TYPE 'F'		
FIRE PROTECTION ENGINEER		DATE		POWER AND AUXILIARY SYSTEM PLAN		
APPROVED: <i>[Signature]</i>		DATE		SIZE: D	CODE: 80091	NAVFAC DRAWING NUMBER: 6,448,618
TITLE		DATE		SCALE: AS NOTED	CONTRACT NO.	SHEET 30 OF 33
FOR COMMANDER NAFAECINCOM		DATE		CATEGORY CODE	SPEC NO.	E-3

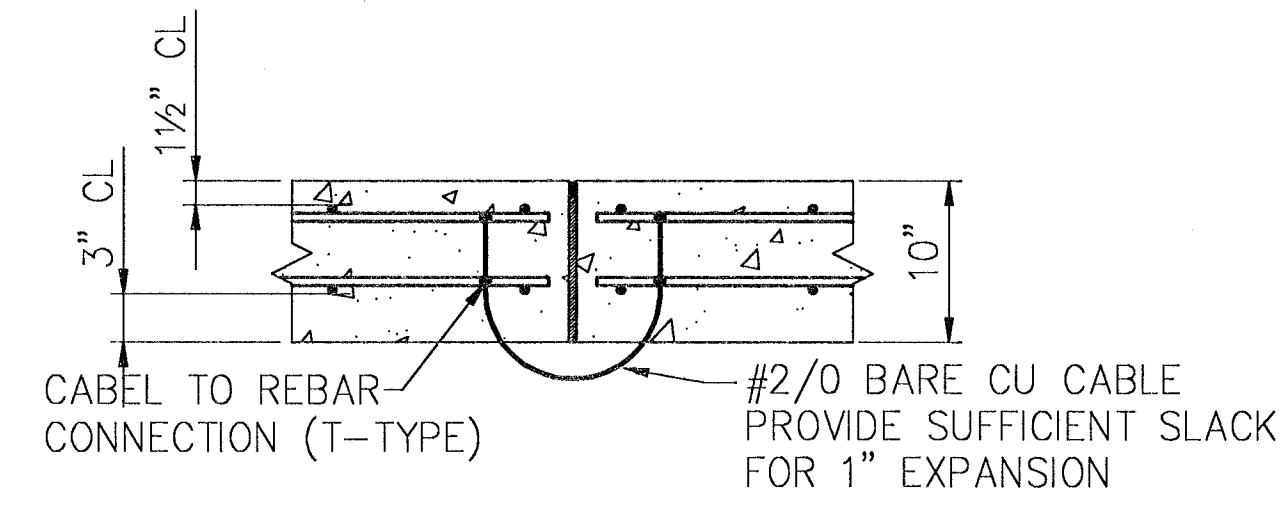


- NOTES:**
1. ALL GROUNDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
  2. THE GROUND LOOP SHALL BE LOCATED 3'-0" (MINIMUM) FROM THE FOOTPRINT OF THE FACILITY.
  3. ALL REINFORCING STEEL IN BUILDING & PLATFORM (IF PROVIDED) SHALL BE BONDED TO THE GROUND LOOP.
  4. EACH METAL DOOR LOUVER OR SHUTTER SHALL BE BONDED TO THE GROUND LOOP.
  5. ALL METAL EQUIPMENT WITHIN THE BUILDING SHALL BE GROUNDED VIA THE GROUND BUS.
  6. CONNECT TO VENTILATOR. SEE DETAIL ON DRAWING E-5.
  7. REFER TO SHEET E-6 FOR GROUND BUS MOUNTING DETAIL

**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

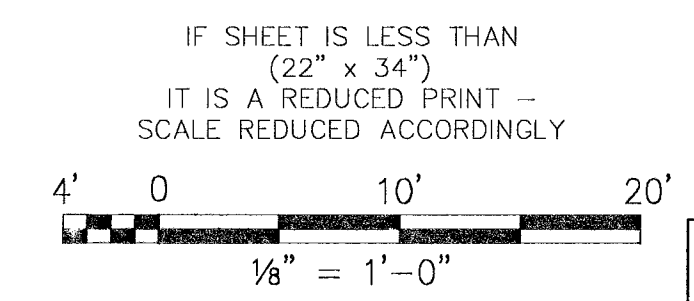


**TYPICAL AT EACH CONSTRUCTION JOINT IN PLATFORM RETAINING WALL**  
N.T.S.



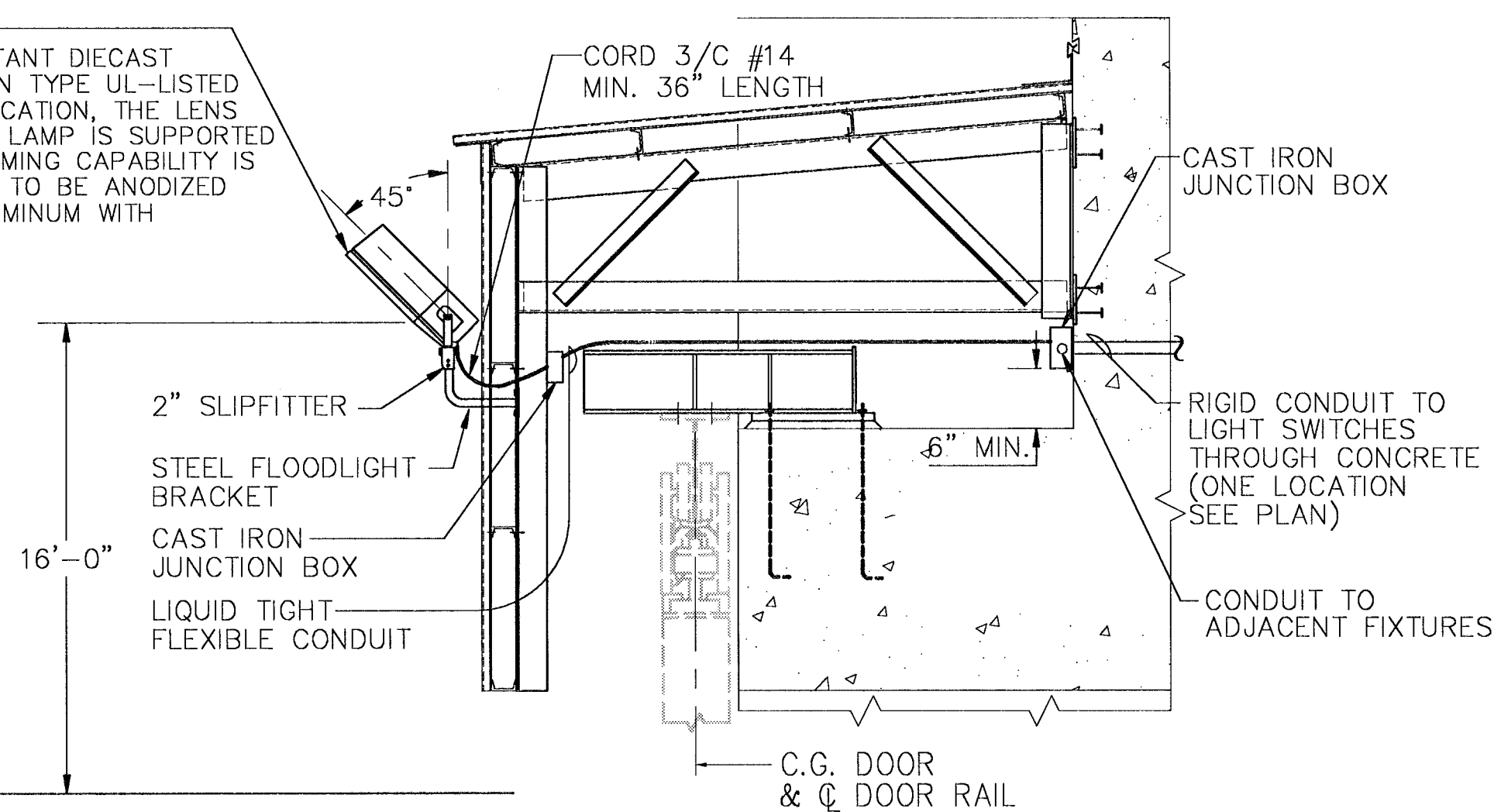
**TYPICAL AT EACH EXPANSION JOINT IN PLATFORM SLAB-ON-GRADE**  
N.T.S.

EACH PLATFORM (WHERE PROVIDED) PANEL ALONG EXTERIOR BLDG WALL SHALL BE BONDED TO PANEL (10) ALONG PLATFORM EDGE. ADJACENT EDGE PANELS SHALL BE BONDED AND EVERY SECOND PANEL (10 TOTAL) SHALL BE BONDED TO GROUND LOOP. ADJACENT RETAINING WALL SECTION SHALL BE BONDED ACROSS CONSTRUCTION JOINT AND EVERY SECOND PANEL SHALL BE BONDED TO GROUND LOOP.



SYMBOL	DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS				
<b>AMMANN &amp; WHITNEY CONSULTING ENGINEERS</b> 96 MADISON ST., NEW YORK, NY 10014 DATE: 27/5/97 ENGINEER IN CHARGE: <i>R. Brody</i> DIVISION DIRECTOR: <i>R. Brody</i> BRANDS MANAGER: <i>M. Mansour</i> DIVISION DIRECTOR: <i>A. Jayachandran</i>				
<b>DEPARTMENT OF THE NAVY</b> <b>NAVAL FACILITIES ENGINEERING COMMAND</b> STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> LIGHTNING PROTECTION AND GROUNDING PLAN				
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	<b>E-4</b> SHEET 31 OF 33	
D	80091	6,448,619		
SCALE	AS NOTED	CONTRACT NO		
CATEGORY CODE		SPEC NO		

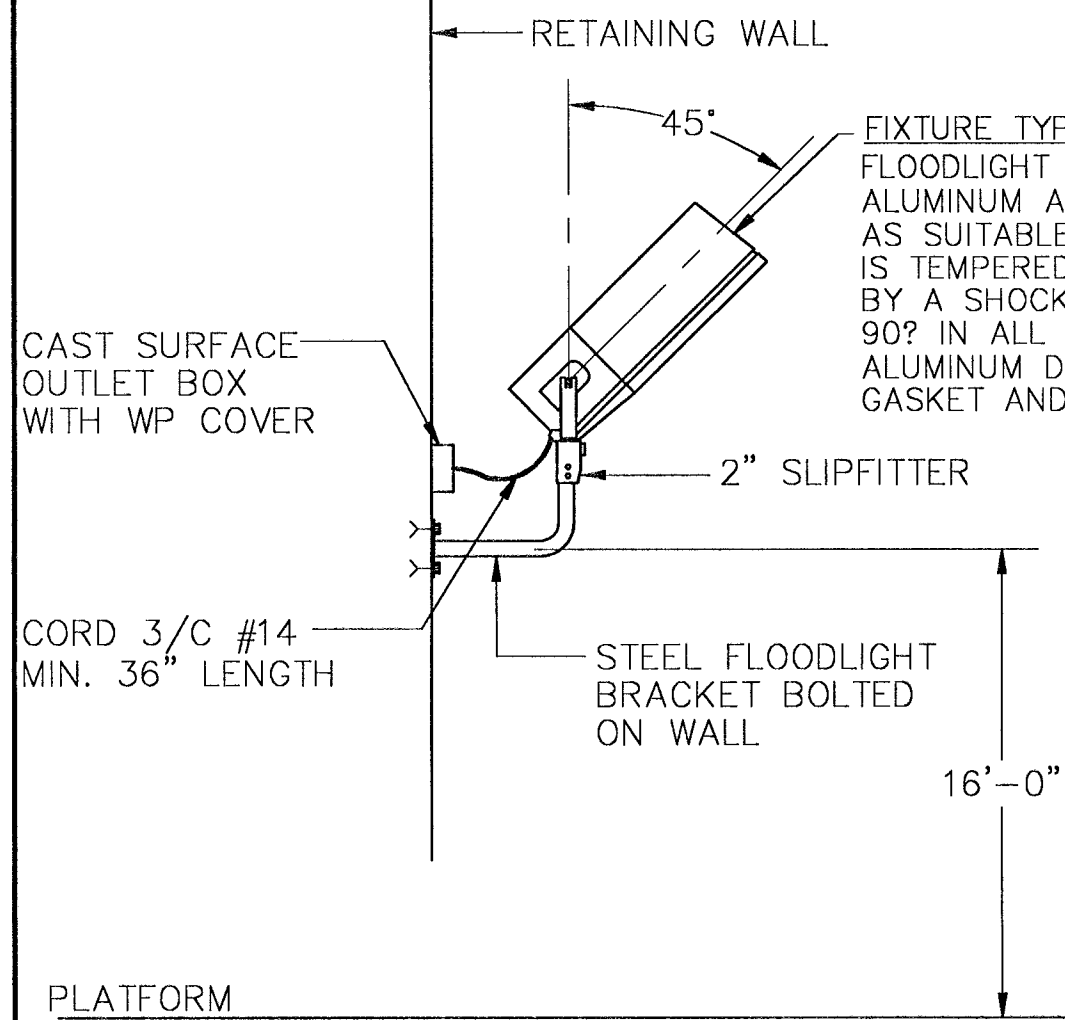
**FIXTURE TYPE "B"**  
 FLOODLIGHT IN A CORROSION RESISTANT DIECAST ALUMINUM ALLOY HOUSING TRUNNION TYPE UL-LISTED AS SUITABLE FOR OUTDOOR WET LOCATION, THE LENS IS TEMPERED GLASS SEALED & THE LAMP IS SUPPORTED BY A SHOCK RESISTANT HOLDER. AIMING CAPABILITY IS 90° IN ALL DIRECTIONS. REFLECTOR TO BE ANODIZED ALUMINUM DOOR TO BE HINGED ALUMINUM WITH GASKET AND CAPTIVE SCREWS.



EXTERIOR FLOODLIGHT DETAIL

DETAIL 2  
 SCALE: N.T.S. E2/E5

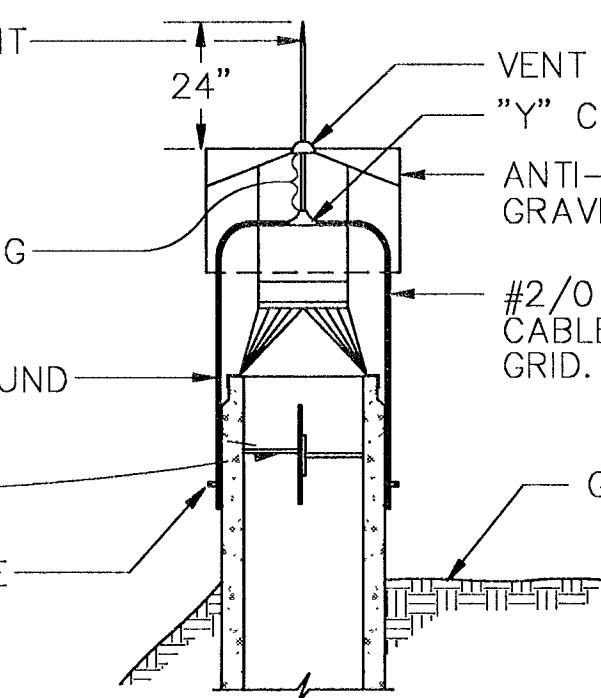
**FIXTURE TYPE "B"**  
 FLOODLIGHT IN A CORROSION RESISTANT DIECAST ALUMINUM ALLOY HOUSING TRUNNION TYPE UL-LISTED AS SUITABLE FOR OUTDOOR WET LOCATION, THE LENS IS TEMPERED GLASS SEALED & THE LAMP IS SUPPORTED BY A SHOCK RESISTANT HOLDER. AIMING CAPABILITY IS 90° IN ALL DIRECTIONS. REFLECTOR TO BE ANODIZED ALUMINUM DOOR TO BE HINGED ALUMINUM WITH GASKET AND CAPTIVE SCREWS.



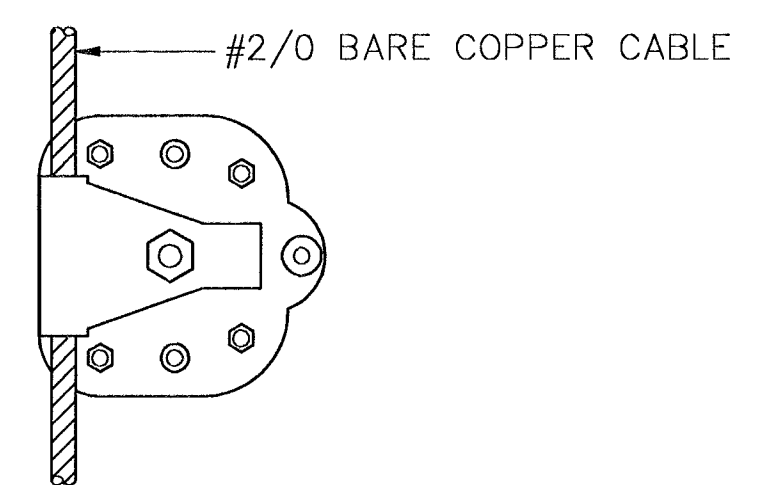
EXTERIOR FLOODLIGHT DETAIL

DETAIL 3  
 SCALE: N.T.S. E2/E5

VENTILATOR COPPER POINT ASSEMBLY ?x56" NICKEL TIPPED SOLID POINT WITH VENT CONE AND "Y" CONNECTOR  
 VENT CONE  
 "Y" CONNECTOR  
 ANTI-DOWN DRAFT GRAVITY VENTILATOR  
 LENGTH VARIES DEPENDING UPON VENTILATOR MANUFACTURER  
 #2/0 BARE COPPER GROUND CABLE TO MAIN GROUND GRID. (TYPICAL)  
 DAMPER  
 GRADE  
 BRONZE TWO HOLE CABLE FASTENER (TYPICAL)

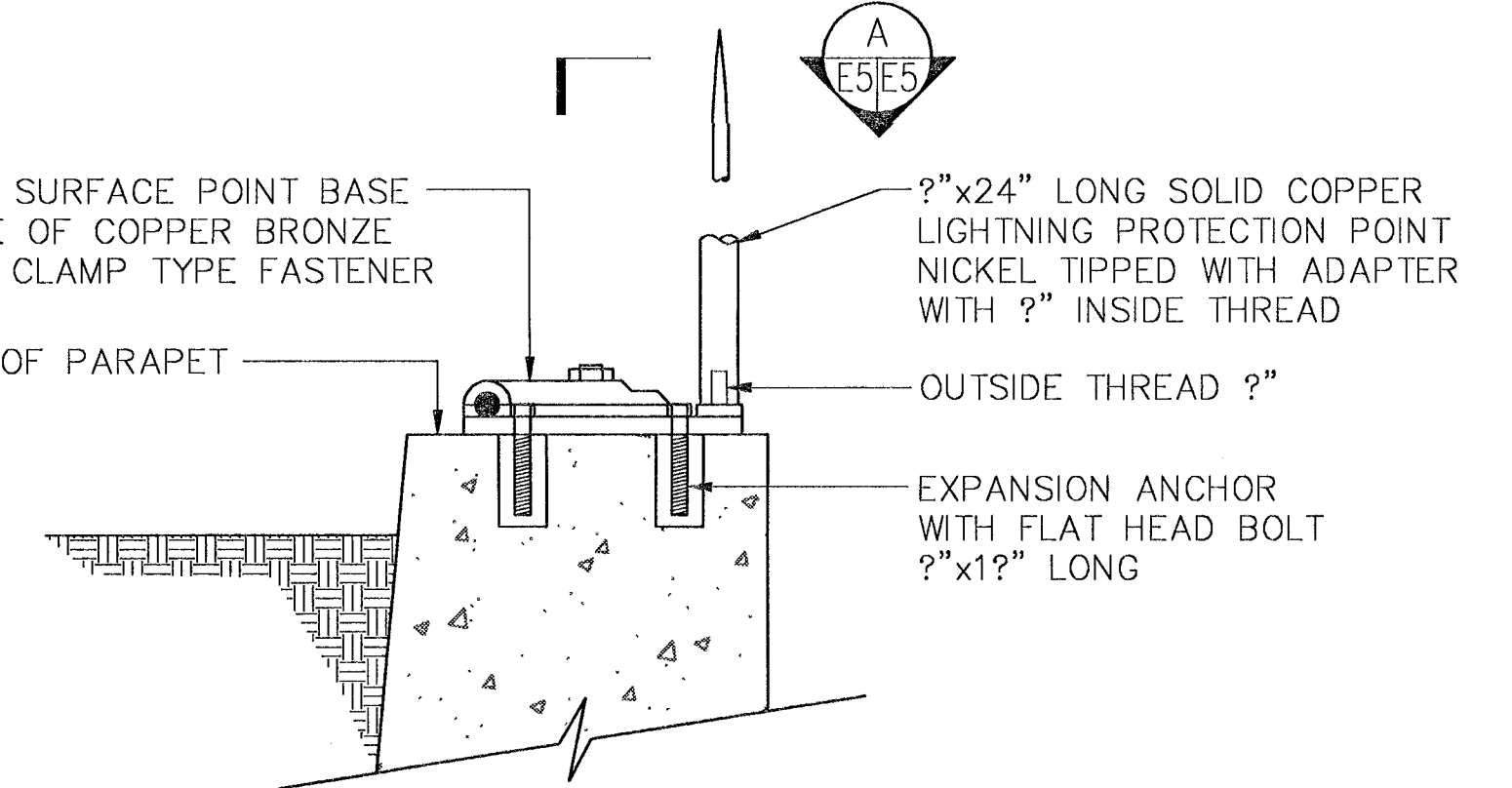


TYPICAL VENTILATOR DETAIL  
 N.T.S.



SECTION A  
 SCALE: N.T.S. E5/E5

FLAT SURFACE POINT BASE MADE OF COPPER BRONZE WITH CLAMP TYPE FASTENER  
 TOP OF PARAPET  
 EXPANSION ANCHOR WITH FLAT HEAD BOLT ?"x1?" LONG  
 ?"x24" LONG SOLID COPPER LIGHTNING PROTECTION POINT NICKEL TIPPED WITH ADAPTER WITH ?" INSIDE THREAD  
 OUTSIDE THREAD ?"



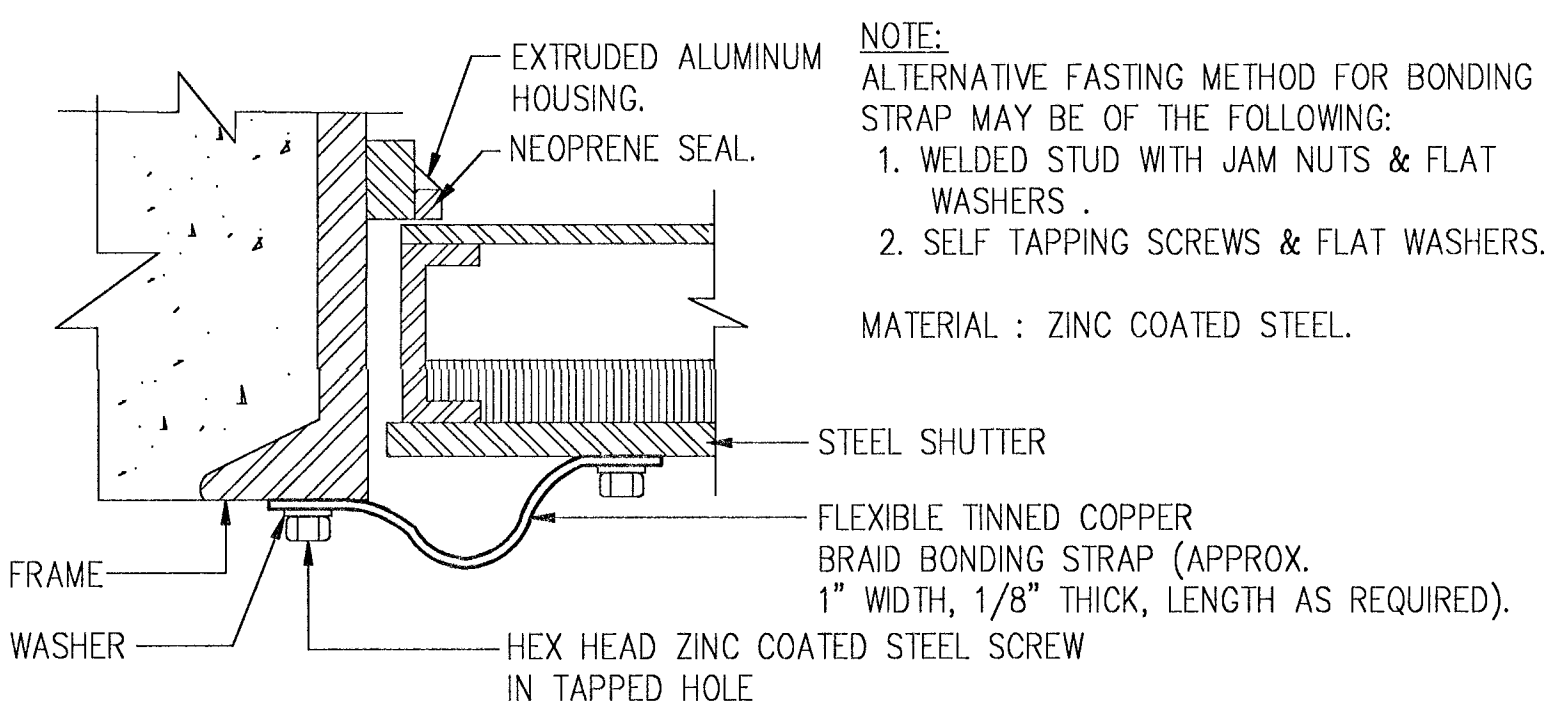
DETAIL 7  
 SCALE: N.T.S. E4/E5

- NOTES:**
- LUMINARE SHALL MEET UL844 OR FACTORY MUTUAL STANDARD FOR HAZARDOUS LOCATIONS.
  - LUMINARE SHALL HAVE
    - LOW TEMPERATURE BALLASTS, 34 WATT LAMPS AND 120V OPERATING VOLTAGE.
    - TWO HEAVY DUTY IMPACT RESISTANT GLASS LAMP TUBES.
    - FACTORY WIRED, ASSEMBLED AND SEALED.
    - STAINLESS STEEL WIRE GUARD.
    - HIGH STRENGTH COPPER FREE ALUMINIUM ALLOY CASTING.
    - EXTRUDED ALUMINUM REFLECTOR WITH WHITE ACRYLIC FINISH.

INTERIOR LIGHTING FIXTURE TYPE "A"

DETAIL 1  
 SCALE: N.T.S. E2/E5

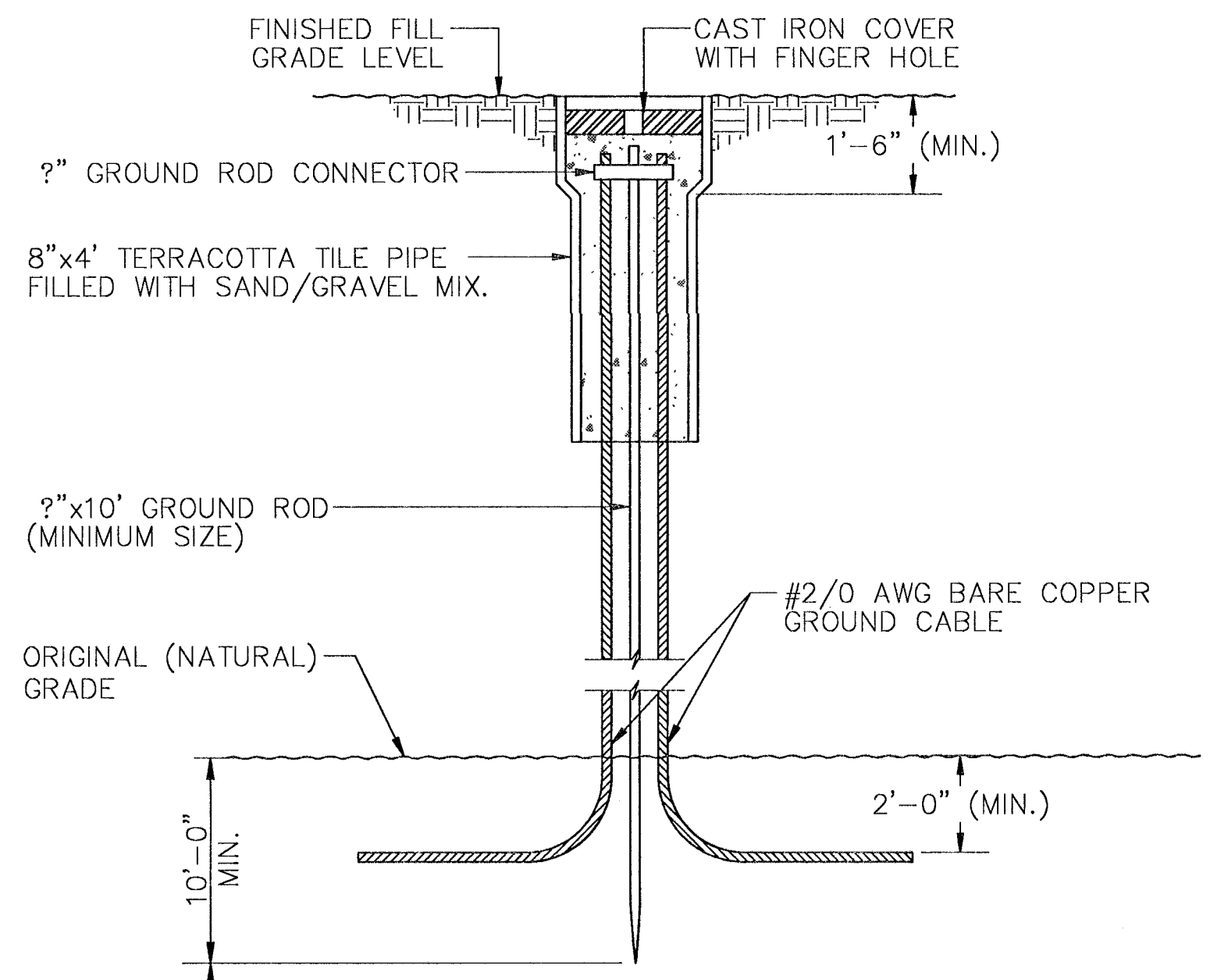
**NOTE:**  
 ALTERNATIVE FASTING METHOD FOR BONDING STRAP MAY BE OF THE FOLLOWING:  
 1. WELDED STUD WITH JAM NUTS & FLAT WASHERS.  
 2. SELF TAPPING SCREWS & FLAT WASHERS.  
 MATERIAL: ZINC COATED STEEL.



METHOD FOR BONDING SHUTTER TO FRAME

N.T.S.

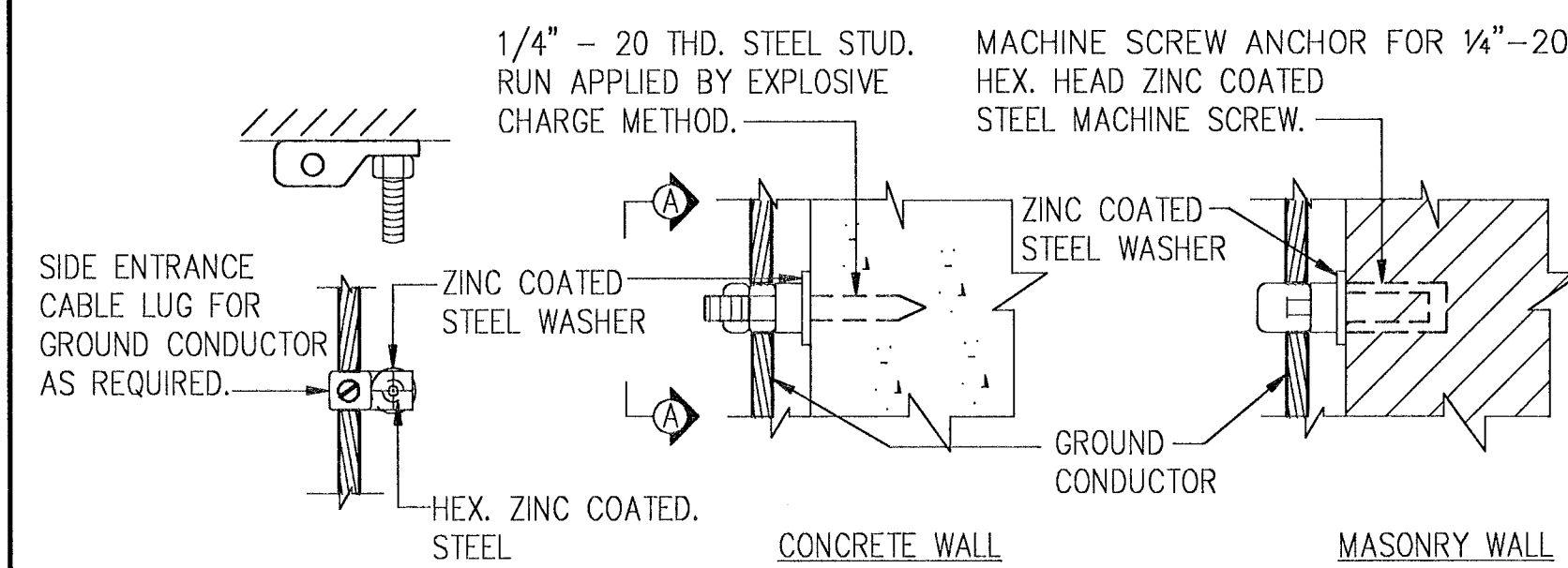
FINISHED FILL GRADE LEVEL  
 CAST IRON COVER WITH FINGER HOLE  
 ?" GROUND ROD CONNECTOR  
 8"x4" TERRACOTTA TILE PIPE FILLED WITH SAND/GRAVEL MIX.  
 ?"x10' GROUND ROD (MINIMUM SIZE)  
 ORIGINAL (NATURAL) GRADE  
 #2/0 AWG BARE COPPER GROUND CABLE  
 1'-6" (MIN.)  
 2'-0" (MIN.)  
 10'-0" MIN.



GROUND ROD INSTALLATION IN EARTH FILL

DETAIL 6  
 SCALE: N.T.S. E4/E5

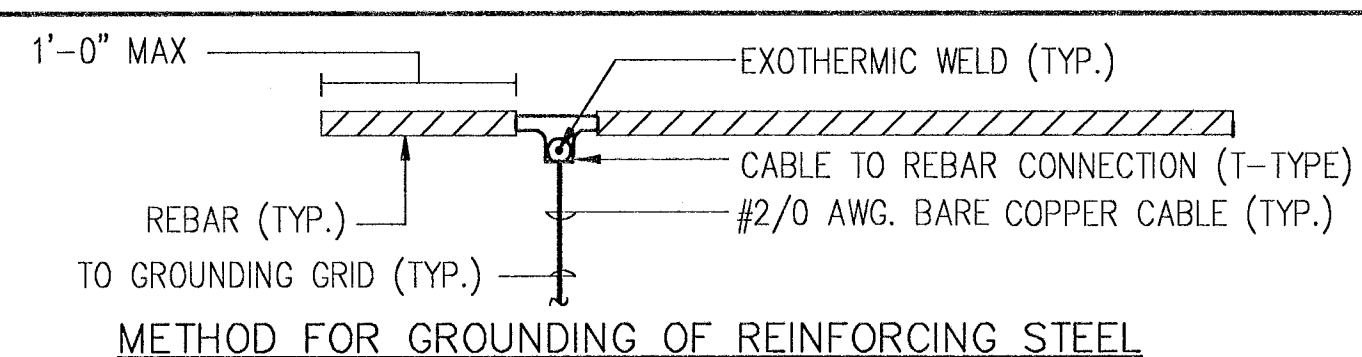
1/4" - 20 THD. STEEL STUD. RUN APPLIED BY EXPLOSIVE CHARGE METHOD.  
 MACHINE SCREW ANCHOR FOR 1/4"-20 HEX. HEAD ZINC COATED STEEL MACHINE SCREW.  
 ZINC COATED STEEL WASHER  
 ZINC COATED STEEL WASHER  
 SIDE ENTRANCE CABLE LUG FOR GROUND CONDUCTOR AS REQUIRED.  
 HEX. ZINC COATED STEEL  
 CONCRETE WALL  
 MASONRY WALL  
 GROUND CONDUCTOR



METHOD FOR SUPPORTING GROUND CONDUCTORS ON WALLS

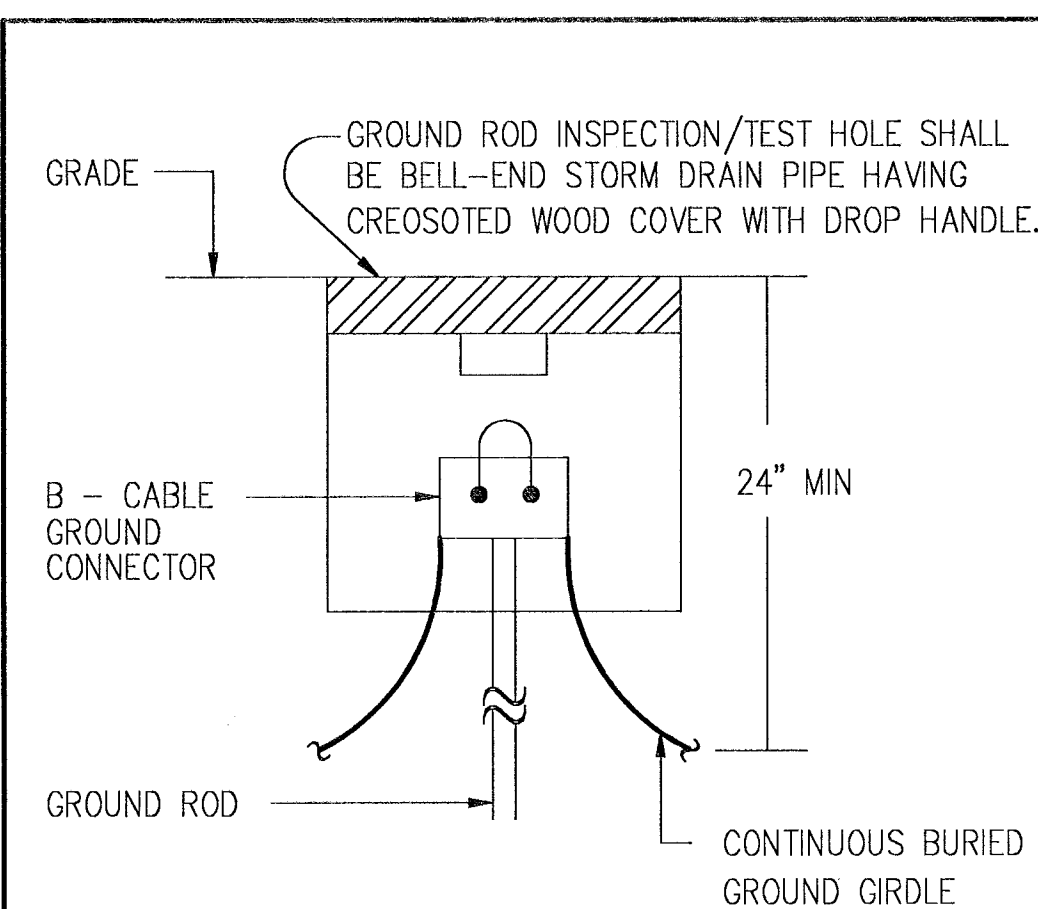
N.T.S.

1'-0" MAX  
 EXOTHERMIC WELD (TYP.)  
 CABLE TO REBAR CONNECTION (T-TYPE)  
 REBAR (TYP.)  
 TO GROUNDING GRID (TYP.)  
 #2/0 AWG. BARE COPPER CABLE (TYP.)



METHOD FOR GROUNDING OF REINFORCING STEEL

DETAIL 5  
 SCALE: N.T.S. E4/E5



TYPICAL TEST WELL

DETAIL 4  
 SCALE: N.T.S. E4/E5

SYMBOL		DESCRIPTION		PREP'D BY	DATE	APPROVED
REVISIONS						
AMMANN & WHITNEY CONSULTING ENGINEERS 96 MURPHY ST., NEW YORK, NY 10014 DATE: 27/5/97 ENGINEER IN CHARGE: R. Brody DIVISION DIRECTOR: A. Graydon CRITERIA MANAGER: M. M... NAVFACDINCOM						
DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350 NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> ELECTRICAL DETAILS						
SIZE	CODE IDENT NO	NAVFAC DRAWING NUMBER	E-5			
D	80091	6,448,620				
SCALE	AS NOTED	CONTRACT NO	SHEET 32 OF 33			
CATEGORY CODE	SPEC NO					

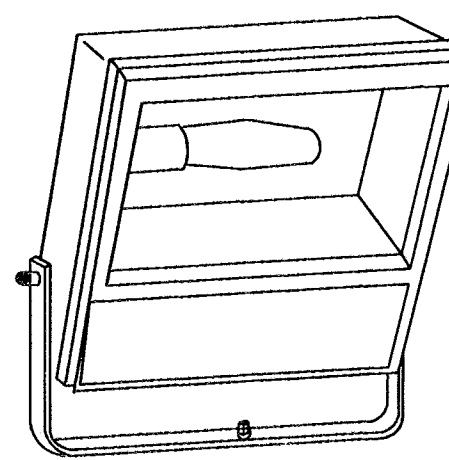


PROVIDE 90A, MCB.

**POWER PANEL P1 SCHEDULE**

277/480\_VOLT\_3\_PHASE\_4\_WIRE SN. 100\_A.BUS AND \_\_\_\_GND. BUS  
LUG LOCATION \_\_\_\_CABINET \_\_\_\_MIN. S.C. \_\_\_\_A.SYM.

CIR. NO.	DESCRIPTION OF LOAD	AMPS	KW.	H.P.	CIRCUIT BREAKER			REMARKS
					FRAME SIZE	TRIP SIZE	POLES	
1	DOOR #1	4.8		3	100	20	3	
2	DOOR #2	4.8		3	100	20	3	
3	DOOR #3	4.8		3	100	20	3	
4	DOOR #4	4.8		3	100	20	3	
5	DOOR #5	4.8		3	100	20	3	
6	15 KVA XFMR.	18.1	15		100	25	3	
7	SPARE				100	20	3	
8	SPARE				100	20	3	
9	SPARE				100	20	3	
10	SPARE				100	20	3	

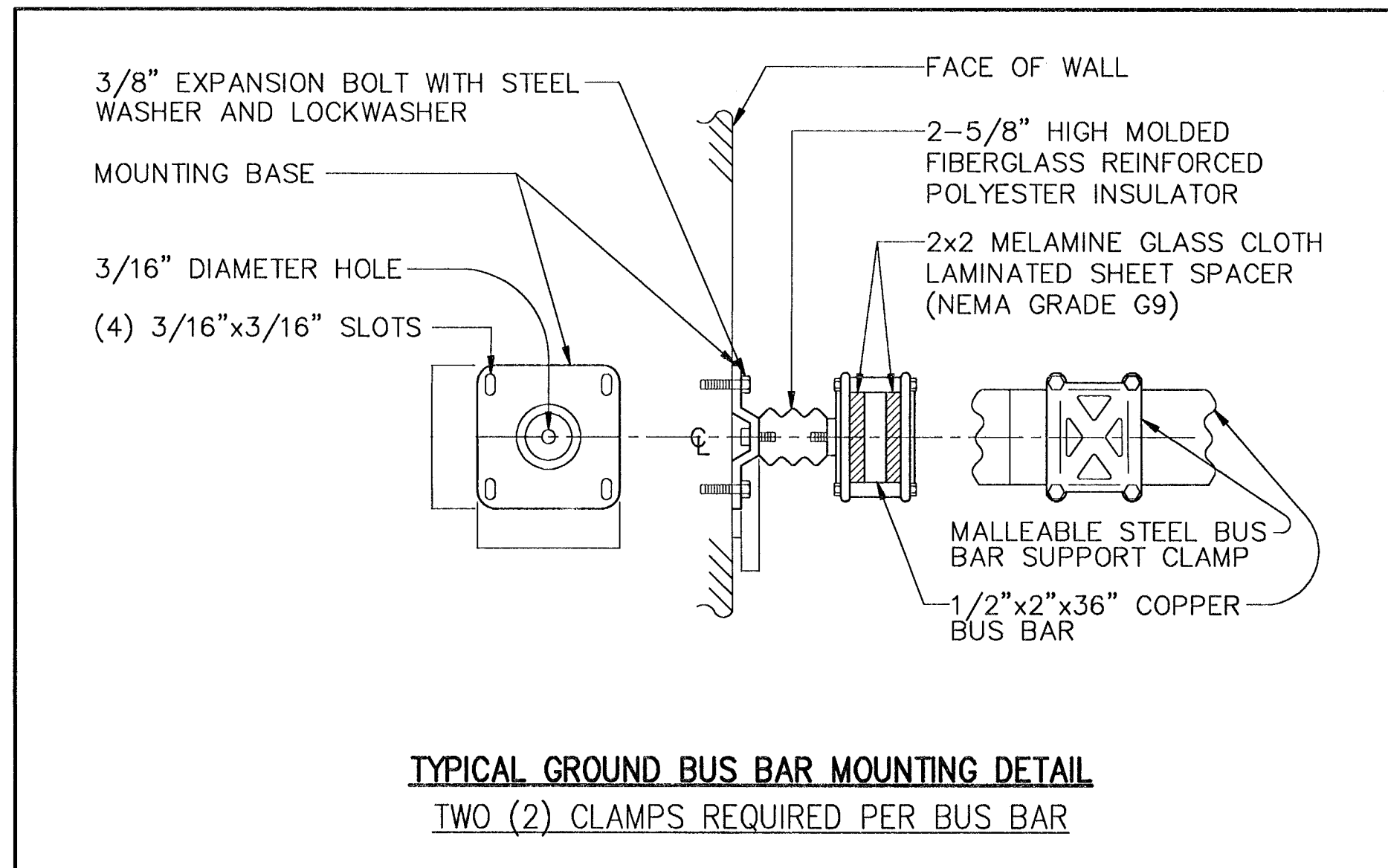


NOTE:  
NEMA BEAM SPREAD CONFIGURATION SHALL BE AS SPECIFIED AND SHALL BE IN ACCORDANCE WITH I.E.S. DEFINITIONS.

**LUMINAIRE REQUIREMENTS**

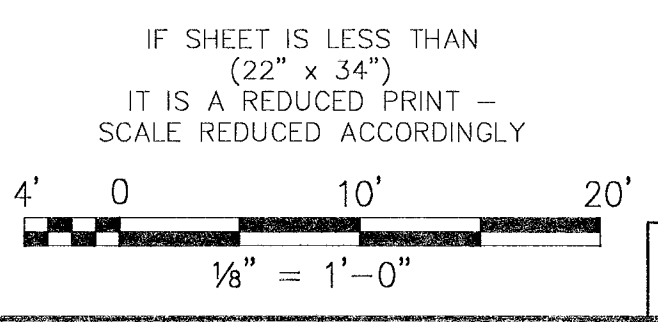
- HOUSING - DIE CAST ALUMINUM.
- REFLECTOR - ANODIZED OR ALZAK ALUMINUM.
- DOOR - HINGED ALUMINUM, WITH GASKET AND CAPTIVE SCREWS.
- INTEGRAL MULTI-TAP BALLAST.
- STAINLESS STEEL OR NONCORROSIVE HARDWARE.
- PORCELAIN SOCKET.
- MINIMUM 36" 3/C #14 "SO" CORD.
- UL "WET LABEL"

**FIXTURE TYPE "B"  
FLOODLIGHT DETAIL**



LIGHTING PANEL NO. P2 120/208 v. 3φ 4 W + GRD \_\_\_\_A. SYM.I.C.  
MAINS 100 AMP. MAINBREAKER 100 AMP.

LOCATION OR DESCRIPTION	LOAD IN WATTS	CKT BKR AMP	CKT NO.	CKT NO.	CKT BKR AMP	LOAD IN WATTS	LOCATION OR DESCRIPTION
SPARE		20	1	2	20		SPARE
EXT. LIGHTING	1200	20	3	4	20	200	EXT. RECEPTS.
EXT. LIGHTING	1200	20	5	6	20	200	EXT. RECEPTS.
SPARE		20	7	8	20	1100	INT. LIGHTING
INT. LIGHTING	1100	20	9	10	20	1100	INT. LIGHTING
INT. LIGHTING	1100	20	11	12	20	1100	INT. LIGHTING



SYMBOL		DESCRIPTION	PREP'D BY	DATE	APPROVED
REVISIONS					
<b>AMMANN &amp; WHITNEY</b> CONSULTING ENGINEERS 96 MORTON ST., NEW YORK, NY 10014 DATE: 27/5/97 PRINCIPAL ENGINEER: <i>R. Brady</i> ENGINEER IN CHARGE: <i>R. Brady</i> DIVISION MANAGER: <i>A. G. G. G.</i>		DEPARTMENT OF THE NAVY WASHINGTON, D.C. 20350 NAVAL FACILITIES ENGINEERING COMMAND STANDARD DRAWING <b>STANDARD BOX MAGAZINE TYPE 'F'</b> PANEL SCHEDULES & DETAIL			
FIRE PROTECTION ENGINEER CRITERIA MANAGER APPROVED FOR COMMANDER NAVFACENCOM	DATE DATE DATE	SIZE: <b>D</b> CODE BENT NO: <b>80091</b> SCALE: <b>AS NOTED</b> CATEGORY CODE	NAVFAC DRAWING NUMBER: <b>6,448,621</b> CONTRACT NO. SPEC NO.	<b>E-6</b> SHEET 33 OF 33	