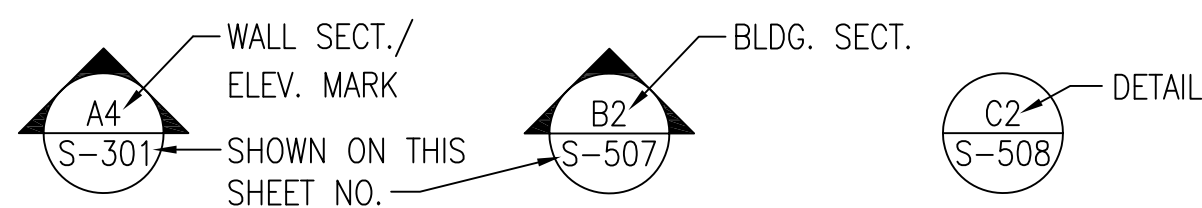


GENERAL NOTES

MATERIALS AND CONSTRUCTION

- 1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'c = 4,000 psi AT 28 DAYS.
2. ALL REINFORCING BARS SHALL CONFORM TO THE SPECIFICATION FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM A615, GRADE 60
3. CONCRETE AGGREGATE SHALL HAVE A MAXIMUM SIZE OF 1 INCH.
4. ALL REINFORCING BARS SHALL BE CONTINUOUS IN ANY ONE DIRECTION EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS. PROVIDE CLEAR COVER IF NOT SHOWN PER ACI 318 RECOMMENDATIONS.
5. EXCEPT AS NOTED, ALL CONCRETE CONSTRUCTION AND DETAILING SHALL CONFORM TO THE LATEST STANDARDS OF THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315), AND BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).
6. EXCEPT FOR WELDED WIRE FABRIC, NO WELDING OF REINFORCING BARS SHALL BE PERMITTED UNLESS INDICATED ON DRAWINGS.
7. STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE STANDARD SPECIFICATION FOR STRUCTURAL STEEL SHAPES, ASTM A-992.
8. ALL STRUCTURAL STEEL PLATES AND BARS SHALL CONFORM TO THE STANDARD SPECIFICATION FOR CARBON STRUCTURAL STEEL ASTM A36.
9. METAL ROOFING AND SIDING SHALL CONFORM TO THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL MEMBERS BY THE AMERICAN IRON AND STEEL INSTITUTE (AIS), LATEST EDITION.
10. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), LATEST EDITION.
11. WELDING FOR STRUCTURAL STEEL SHALL CONFORM TO THE STRUCTURAL WELDING CODE, AWS D1.1, LATEST EDITION.
12. BOLTS, NUTS, AND WASHERS SHALL CONFORM TO THE STANDARD SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, ASTM A307, GRADE A, AND HIGH STRENGTH BOLTS FOR STRUCTURAL STEEL JOINTS, ASTM A325. ALL BOLTS SHALL HAVE THREADS EXCLUDED FROM THE SHEAR PLANE.
13. ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE COATING AND PAINTING SPECIFICATIONS.
14. TOP 12 INCHES OF SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM STANDARD D1557
15. UNLESS NOTED ON DRAWINGS, SPLICE LENGTH OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 (LATEST EDITION) FOR CLASS B SPLICES.
16. FOR FILLET WELD SIZES NOT SHOWN ON DRAWINGS, PROVIDE MINIMUM SIZE FILLET WELDS IN ACCORDANCE WITH WELDING CODE AWS D1.1, LATEST EDITION.
17. UNLESS SHOWN OTHERWISE, ALL REINFORCING BAR HOOKS SHALL BE STANDARD HOOKS IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 318, LATEST EDITION.



ELECTRICAL BONDING & GROUNDING

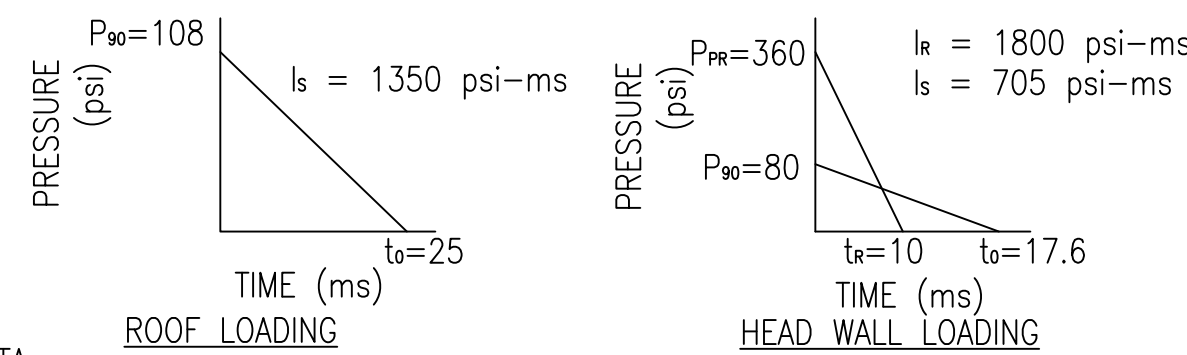
- 1. ALL STEEL DOORS AND FRAMES SHALL BE ELECTRICALLY BONDED TO THE MAGAZINE REINFORCING CAGE.
2. ALL STRUCTURAL AND MISCELLANEOUS ITEMS EMBEDDED IN CONCRETE SHALL BE ELECTRICALLY BONDED TO THE REINFORCING CAGE BY WIRE TIES.
3. THE REINFORCING CAGE SHALL BE MADE ELECTRICALLY CONTINUOUS BY WIRE TIES AT A MINIMUM OF 4'-0" ON CENTERS IN ANY DIRECTION.
4. ALL WALL AND CONSTRUCTION JOINTS SHALL BE ELECTRICALLY BONDED. SEE THE ELECTRICAL DRAWINGS FOR DETAILS.

DESIGN LOADS

- 1. STATIC LOADS:
A. ROOF DEAD LOAD (1 1/2 FT. EARTH FILL +6" 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. ROOF LIVE LOAD = 100 PSF
2. SEISMIC DESIGN DATA:
A. OCCUPANCY CATEGORY ----- III
B. IMPORTANCE FACTOR ----- 1.25
C. SEISMIC DESIGN CATEGORY ----- "D"
D. SITE SEISMICITY ----- Ss = 1.95g
S1 = 0.75g
E. SITE CLASS ----- "D"
3. WIND DESIGN DATA:
A. DESIGN WIND SPEED ----- 132 MPH
B. EXPOSURE ----- "C"
C. OCCUPANCY CATEGORY ----- III
D. IMPORTANCE FACTOR ----- 1.15
4. BLAST LOADS:

ORIGINAL BLAST DESIGN BASED ON INTERMAGAZINE SEPARATION DISTANCES FOR NET EQUIVALENT WEIGHT EXPLOSIVE EQUAL TO 350,000 LBS (W) AS FOLLOWS:

- A. ROOF DESIGN: DONOR MAGAZINE AT 141' (2 X W^1/2) TO THE REAR OF THE ACCEPTOR MAGAZINE
B. HEADWALL DESIGN: DONOR MAGAZINE AT 141' (2 X W^1/2) TO THE FRONT OF THE ACCEPTOR MAGAZINE.



DESIGN SOIL DATA

- A. DESIGN SOIL BEARING PRESSURE - 4,000 PSF
B. DESIGN DYNAMIC RESPONSE FACTOR (SOIL BEARING) - 2.5
C. DESIGN LATERAL SOIL PRESSURE COEF. :
1. MAGAZINE WALLS - 0.5
2. WING WALLS - 0.3
D. DESIGN COEF. OF FRICTION (CONC. ON SOIL) - 0.50
e. MODULUS OF SUBGRADE REACTION - 150 PCI TO 250 PCI

DEFLECTION CRITERIA

MAXIMUM SUPPORT ROTATIONS OR DUCTILITY RATIO:

- A. ROOF SLAB = 8 degrees
B. HEAD WALL = 6 degrees
C. HEADER BEAM = 2 degrees
D. PILASTERS XW/XE = 3.0
E. BLAST DOORS = 12 degrees

NOTES TO DESIGNER - REMOVE THESE NOTES WHEN PREPARING CONSTRUCTION DRAWINGS FOR SITE ADAPTATION OF THIS DESIGN

- 1. FOUNDATIONS SHALL BE REVISED TO REFLECT SPECIFIC SITE SOIL CONDITIONS.
2. THE FLOOR SLAB AND TRENCH COVER MUST BE REDESIGNED IF WHEEL LOADING WILL BE SIGNIFICANTLY HIGHER THAN THE DESIGN LOADING. MUST BE VERIFIED AT LOCATIONS UTILIZING A SIDE LOADING LIFT TRUCK.
3. DESIGN CONSIDERATIONS (TO BE COORDINATED WITH CONTRACTING OFFICER):
A.) HIGH SECURITY LOCKING DEVICE - STANDARD OR ILD (INTERNAL LOCKING DEVICE).
B.) LOADING PLATFORM OR CONCRETE PAD.
C.) HEAT TRACING REQUIREMENT (SEE NOTES TO DESIGNER ON SHEET E-001 & E-801).
D.) HAZARDOUS ELECTRICAL EQUIPMENT REQUIREMENT (SEE NOTES TO DESIGNER ON SHEET E-001).
4. SHEETS S-513 & S-513(ALT) IDENTIFY DIFFERENT LOCKING SYSTEMS. THE EOR SHALL VERIFY THE CORRECT LOCKING SYSTEM REQUIRED AND REMOVE THE REDUNDANT SHEET FROM THE CONSTRUCTION CONTRACT DOCUMENTS FOR THE SYSTEM NOT USED (COORDINATE WITH CONTRACTING OFFICER).
5. PROVIDE COATING AND PAINTING SPECIFICATIONS AS PART OF THE CONSTRUCTION CONTRACT DOCUMENTS THAT REQUIRES THE FOLLOWING FOR THE STEEL SLIDING DOORS:
A. ALL DUST, DIRT, OIL, GREASE, WELD FLUX RESIDUE, LOOSE DIRT & OTHER FOREIGN MATTER THAT MAY INHIBIT COATING BOND TO STRUCTURAL STEEL SHALL BE REMOVED IN THE SHOP IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL (SSPC), SPG.
B. EXCEPT FOR CONTACT SURFACES OF MOVING PARTS, ALL EXPOSED SURFACES OF STRUCTURAL STEEL SHALL RECEIVE 1.5 MIL (DRY) COAT OF ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645. UNEXPOSED SURFACES SHALL RECEIVE 1.0 MIL (DRY) COAT OF ASPHALT VARNISH CONFORMING TO FEDERAL SPECIFICATION TT-V-51. ALL PRIMER COATING SHALL BE PERFORMED IN THE SHOP.
C. ALL EXPOSED SURFACES OF STRUCTURAL STEEL SHALL RECEIVE TWO FIELD COATS OF COATING WITH A MINIMUM THICKNESS OF 4.0 MIL (DRY) CONFORMING TO FEDERAL SPECIFICATION TT-P-102 OR TT-P-37.

DEPARTMENT OF DEFENSE EXPLOSIVE SAFETY BOARD (DDESB) APPROVAL NOTES

- 1. THIS STANDARD WAS APPROVED ORIGINALLY BY THE DDESB FOR CONSTRUCTION AS A 7-BAR STRUCTURE FOR EXPLOSIVE WEIGHTS UP TO 350,000 POUNDS OF (NEW) HAZARD DIVISION (HD) 1.1 MATERIAL. SUBSEQUENTLY THE STANDARD WAS APPROVED FOR EXPLOSIVE WEIGHTS UP TO 500,000 POUNDS (NEW), AS PER DDESB-PD MEMORANDUM OF 2 FEB 2006, SUBJ: ANALYSIS OF NAVY BOX MAGAZINE C, D, E, AND F FOR POTENTIAL INCREASE IN MAXIMUM-RATED NET EXPLOSIVES WEIGHT CAPACITY.
2. ANY DEVIATION FROM THE STANDARD APPROVED DRAWINGS, EXCEPT FOR FOUNDATION MODIFICATIONS, WITHOUT THE WRITTEN APPROVAL FROM THE DEPARTMENT OF DEFENSE EXPLOSIVE SAFETY BOARD (DDESB) MAY REQUIRE THE MAGAZINE TO BE CONSIDERED AN UNDEFINED MAGAZINE AND MAY SEVERELY RESTRICT THE ALLOWABLE STORAGE CAPACITY.

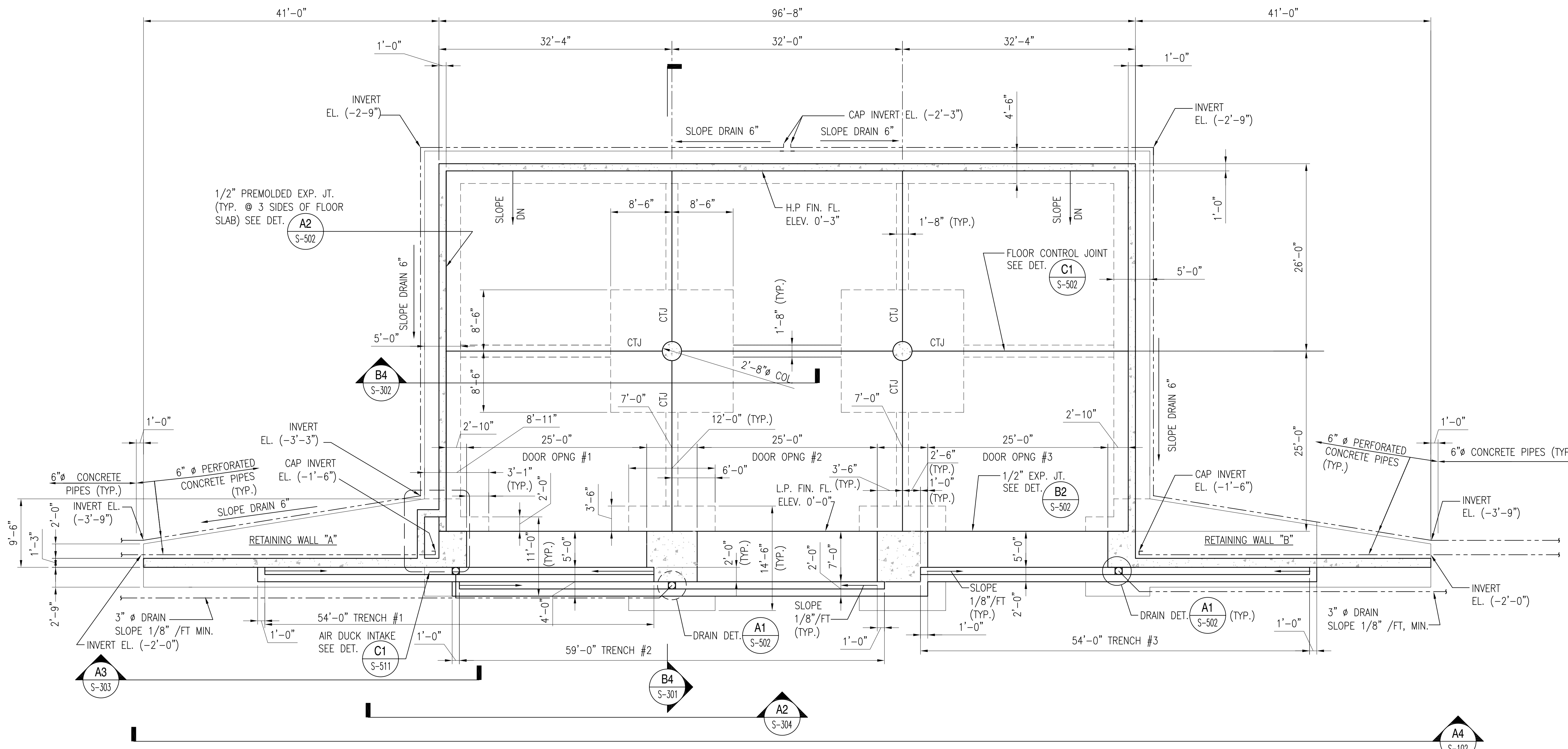
THESE STANDARD DRAWINGS ARE BASED ON THE FOLLOWING ORIGINAL STANDARD DRAWINGS:
DESIGN BY: AMMANN & WHITNEY, CONSULTING ENGINEERS
PROJECT TITLE: BOX MAGAZINE TYPE C
DRAWING NUMBER: 1404430 - 1404444
DATE: 5 NOVEMBER, 1985
NUMBER OF SHEETS: 15

THIS STANDARD DESIGN DRAWINGS DATED 15 DECEMBER 2010; NO. 14004689 - 14004720 AND NO. 14005091 - 14005122, UPDATE AND SUPERSEDE THE AMMANN & WHITNEY DESIGN; DRAWING NO. 1404430 - 1404444.

THE STRUCTURAL DESIGN IN THESE UPDATED STANDARD DRAWINGS DOES NOT SUBSTANTIALLY DEVIATE FROM THE ORIGINAL STANDARD. SOME ASPECTS OF THE ELECTRICAL DESIGN HAVE BEEN MODIFIED FROM THE ORIGINAL STANDARD.

Vertical sidebar containing project information, logos (NAVFAC), and drawing details. Includes fields for APPROVED, FOR COMMANDER NAVFAC, DES, DR, CHK, GC, NAVFAC MANAGER, REVIEWED BY, and drawing number 14004689 SHEET 1 OF 31 S-001.

REVDATE: FILE NAME: \\nasar\k1634\NAVFAC\RYKT_16AA\NAVFAC\RYKT_16AA\CISE\Magazines\Box C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLYING LAYOUT NAME: S-101 PLOTTED: Tuesday, December 14, 2010 - 3:37pm



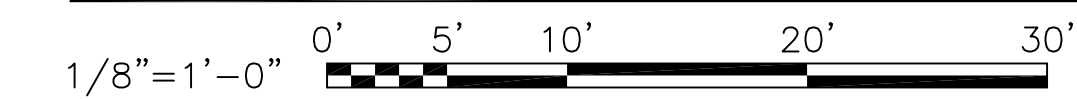
FOUNDATION / SLAB PLAN

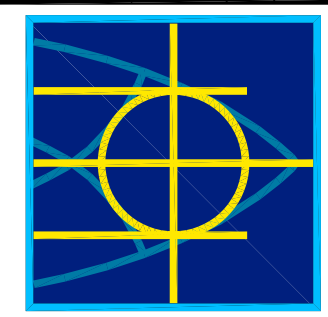
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PLAN NOTES

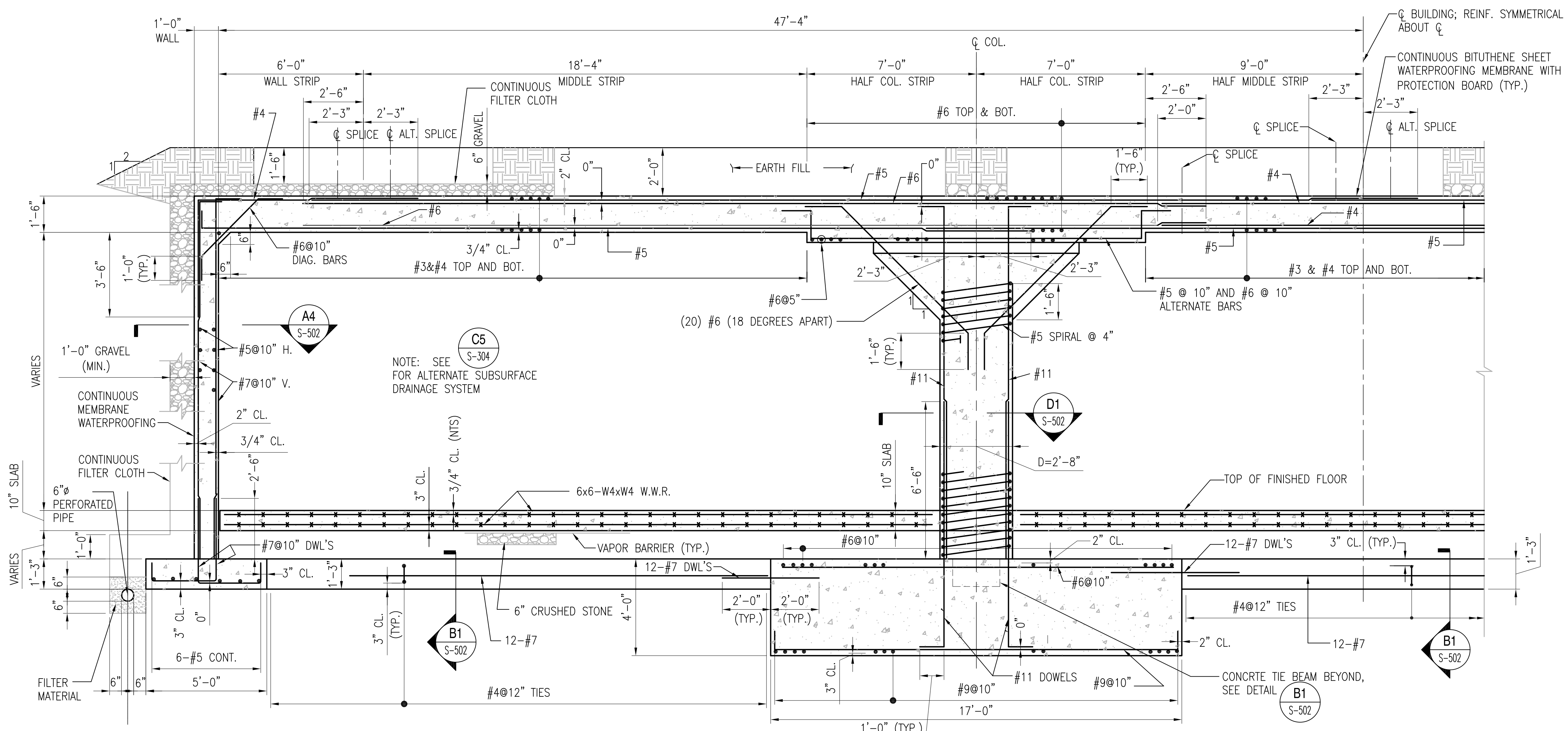
1. ALL REINFORCING SHALL BE SPACED AT 10" ON CENTER UNLESS NOTED OTHERWISE
2. GROUND COVER SHALL BE DETERMINED BY GENERAL SITE FILL MATERIAL AND CLIMATIC CONDITIONS. (GROUND COVER MUST BE MAINTAINED AT MAXIMUM 6" HEIGHT.)
3. IF THE DEPTH OF FOOTINGS (SIDEWALLS, BACKWALL, COLUMNS, PILASTERS & GRADE BEAMS) HAVE TO BE INCREASED EITHER BECAUSE OF THE DEPTH OF FROST OR TO OBTAIN SUITABLE SOIL BEARING CAPACITY AS SPECIFIED, THE VOLUME OF SOIL BETWEEN THE DEPTH OF THE FOOTING SHOWN ON THE DRAWING AND THE DEPTH REQUIRED SHALL BE REPLACED WITH CONCRETE. RETAINING WALLS WHOSE FOOTING DEPTHS MUST BE INCREASED FOR FROST SHALL BE REDESIGNED. IF THE SOIL BEARING CAPACITY IS LESS THAN THAT SPECIFIED THEN THE RETAINING WALL FOOTINGS MUST BE REDESIGNED .
4. PLACE SLAB IN CHECKERBOARD PATTERN.

GRAPHIC SCALE:

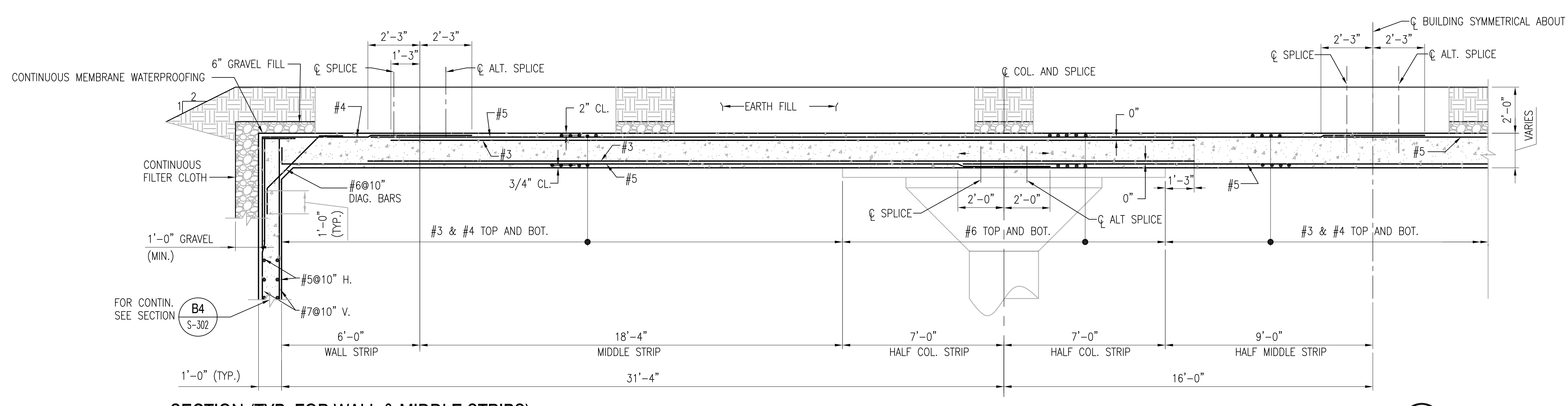


 NAVFAC	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 5%;">DATE</th> <th style="width: 5%;">APPR.</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <th style="width: 5%;">SYM.</th> <th style="width: 5%;">DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <th style="width: 5%;">SEAL</th> <th style="width: 5%;">SAT-TO</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td colspan="2"> <small>FOR COMMANDER NAVFAC:</small> DES: DR: CHK: GC: <small>NAVFAC MANAGER:</small> REVIEWED BY: </td> </tr> </table>	DATE	APPR.			SYM.	DESCRIPTION			SEAL	SAT-TO			<small>FOR COMMANDER NAVFAC:</small> DES: DR: CHK: GC: <small>NAVFAC MANAGER:</small> REVIEWED BY:	
DATE	APPR.														
SYM.	DESCRIPTION														
SEAL	SAT-TO														
<small>FOR COMMANDER NAVFAC:</small> DES: DR: CHK: GC: <small>NAVFAC MANAGER:</small> REVIEWED BY:															
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFAC/ANT															
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM															
FLOOR PLAN															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">CODE ID. NO. 80091</td> <td style="width: 50%;">SIZE D</td> </tr> <tr> <td colspan="2">SCALE: AS NOTED</td> </tr> <tr> <td colspan="2">SPEC. NO.</td> </tr> <tr> <td colspan="2">CONSTR. CONTR. NO.</td> </tr> <tr> <td colspan="2">NAVFAC DRAWING NO. 14004690</td> </tr> <tr> <td colspan="2">SHEET 2 OF 31</td> </tr> <tr> <td colspan="2" style="text-align: center;"> S-101 </td> </tr> </table>		CODE ID. NO. 80091	SIZE D	SCALE: AS NOTED		SPEC. NO.		CONSTR. CONTR. NO.		NAVFAC DRAWING NO. 14004690		SHEET 2 OF 31		S-101	
CODE ID. NO. 80091	SIZE D														
SCALE: AS NOTED															
SPEC. NO.															
CONSTR. CONTR. NO.															
NAVFAC DRAWING NO. 14004690															
SHEET 2 OF 31															
S-101															

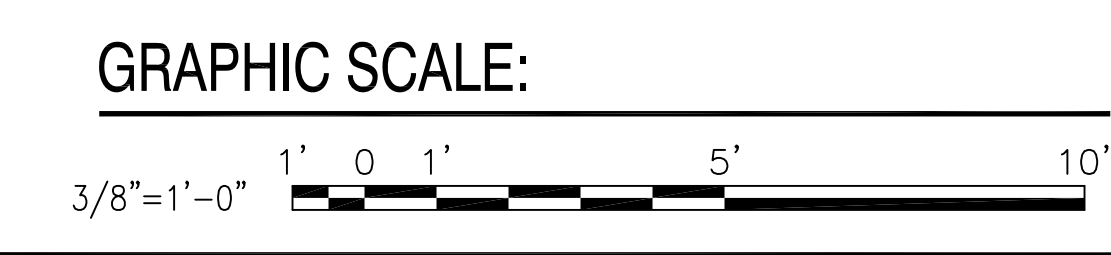
REVDATE: FILE NAME: \\nasar\k434\NAVFAC_YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-302 PLOTTED: Tuesday, December 14, 2010 - 3:39pm

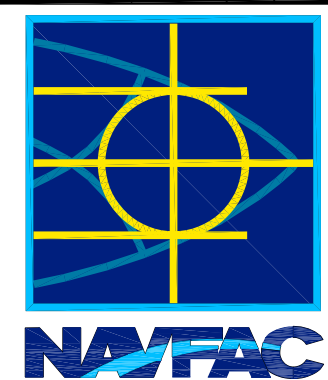


SECTION (TYP. FOR COLUMN STRIP)
SCALE: 3/8" = 1'-0"



SECTION (TYP. FOR WALL & MIDDLE STRIPS)
SCALE: 3/8" = 1'-0"



DATE	APPR.
DESCRIPTION	
SYM.	
	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	
SECTIONS AND DETAILS	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004693	
SHEET 5 OF 31	
S-302	
DRAWING REVISION: 15 JANUARY 2008	

1

2

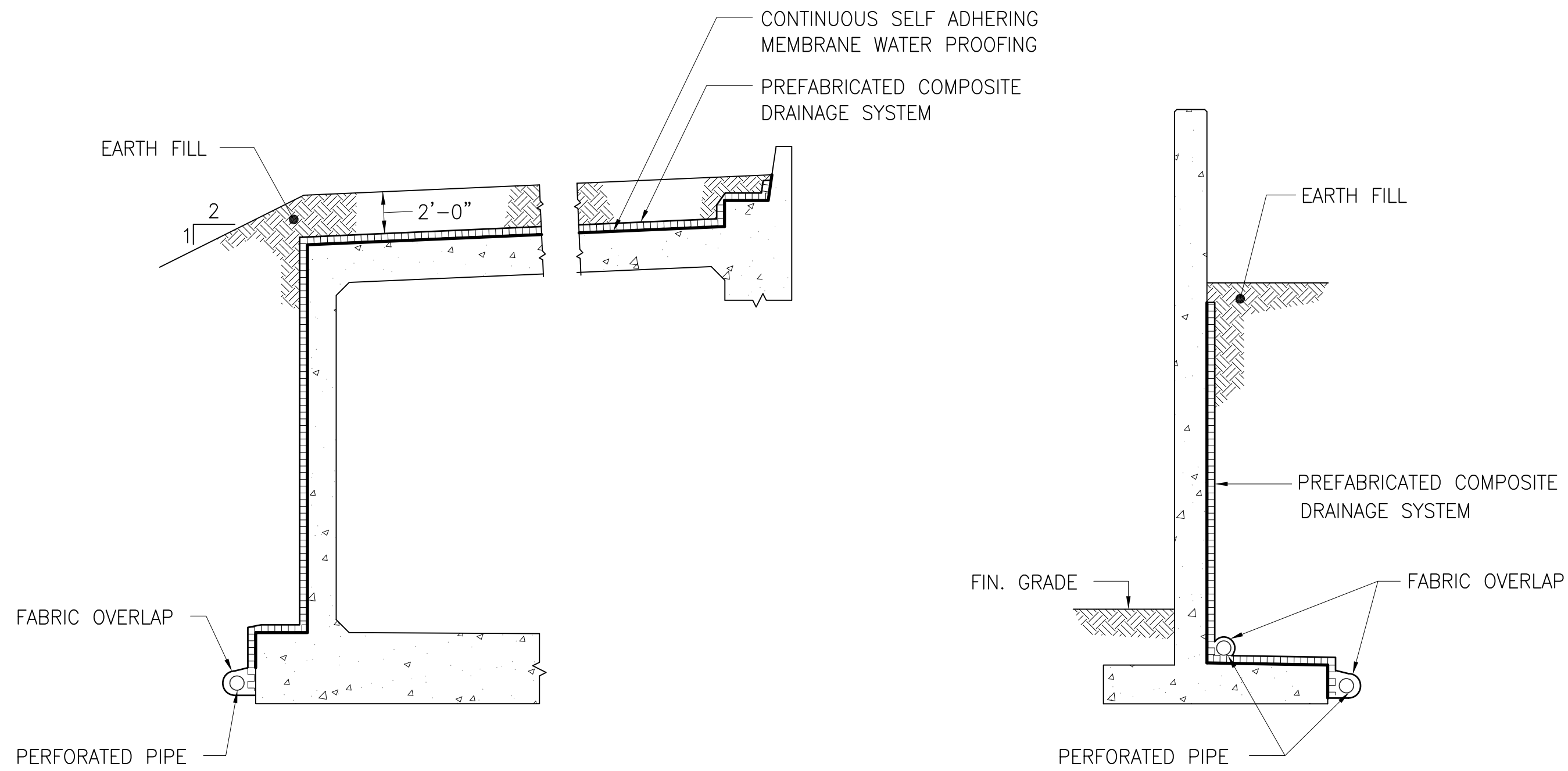
3

4

5

SUBSURFACE DRAINAGE SYSTEM NOTES
 IN LIEU OF SUBSURFACE DRAINAGE SYSTEM (GRANULAR FILL, FILTER FABRIC, PERFORATED DRAIN) AND THE PROTECTION BOARD FOR THE CONTINUOUS MEMBRANE WATERPROOFING INDICATED, THE CONTRACTOR MAY PROVIDE THE OPTIONAL SUBDRAINAGE SYSTEM CONSISTING OF PERFORATED DRAIN AND GRANULAR FILL, WATERPROOFING MEMBRANE, PREFABRICATED DRAINAGE BOARD OR MAT, AND FILTER FABRIC. PROTECTION BOARD IS ACCEPTABLE OVER THE WATERPROOFING MEMBRANE IF REQUIRED BY THE MEMBRANE MANUFACTURER AT THE MAGAZINE WALLS AND TOP OR/AND AT THE RETAINING WALLS FOR THE MAGAZINE AS DETAILED BELOW. THE LOCATION, GRADES, AND MATERIALS SHOWN FOR DOWNSLOPE PIPING (DRAINAGE AND FILTER FABRIC/FILL MATERIAL) INTO WHICH THE PREFABRICATED DRAINAGE SYSTEM CONNECTS SHALL NOT VARY FROM THAT INDICATED. THE OPTIONAL PREFABRICATED DRAINAGE SYSTEMS LISTED BELOW ARE ACCEPTABLE FOR USE. A COMPLETE SET OF SHOP DRAWINGS, ALONG WITH THE MANUFACTURER'S PRODUCT LITERATURE, THICKNESS CALCULATIONS, AND INSTALLATION INSTRUCTIONS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL:

GEOFAB	BY	MERCANTILE DEVELOPMENT INC.
ENKADRAIN	BY	AMERICAN ENKA CO.
STRIPDRAIN	BY	ARMCO CONSTRUCTION PRODUCTS
MIRADRAIN	BY	MIRAFI INC.
GEOTECH	BY	GEOTECH SYSTEM CORP.



BUILDING ROOF AND WALLS

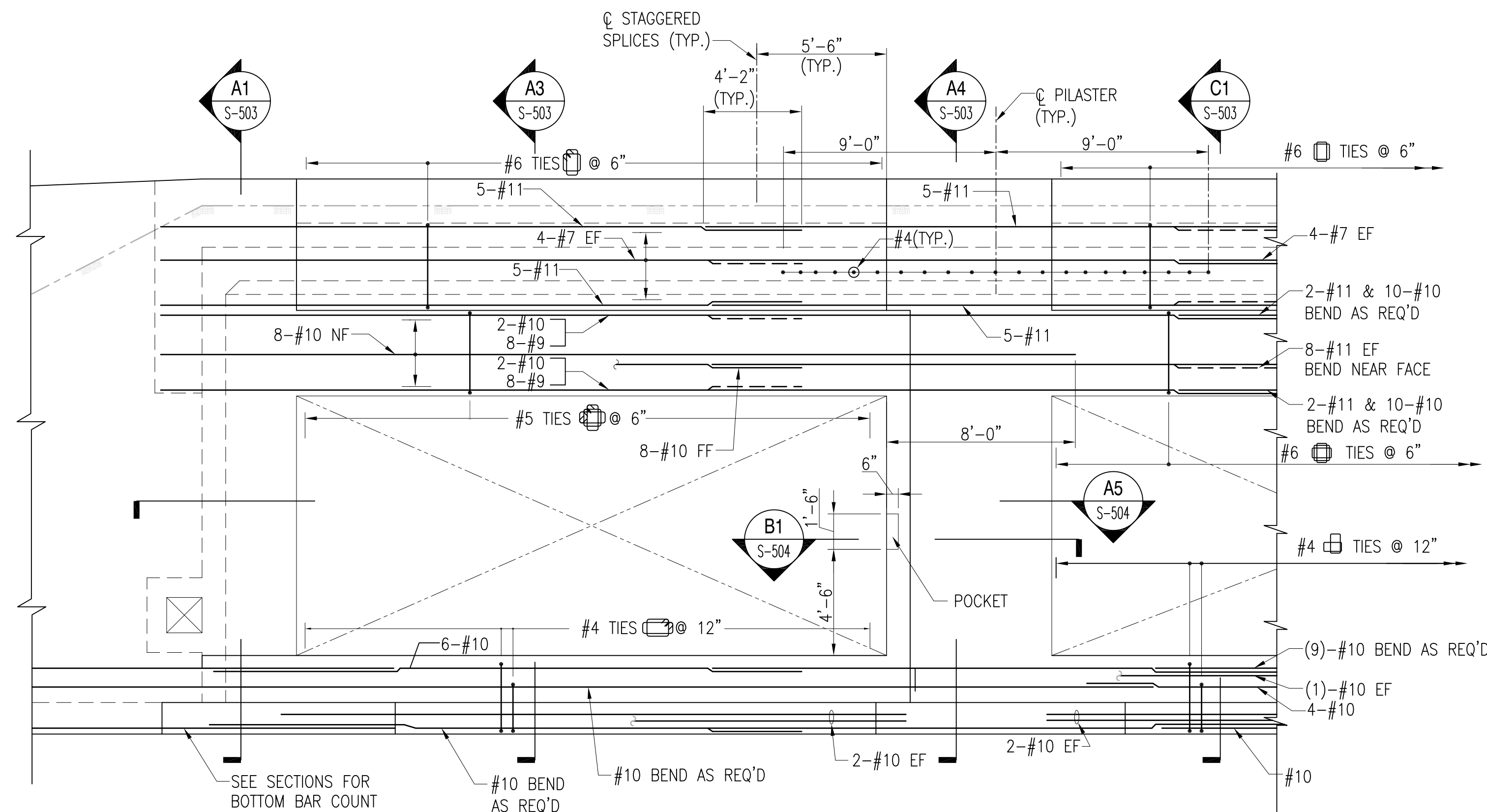
RETAINING WALLS

ALTERNATE SUBSURFACE DRAINAGE SYSTEM

N.T.S.

S-301, S-302, S-501

C5



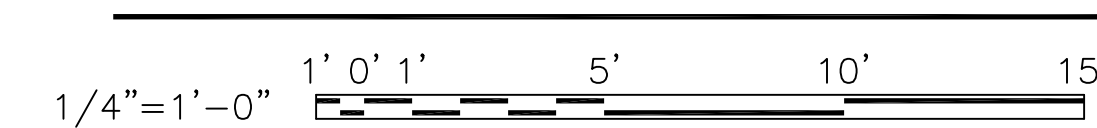
PARTIAL ELEVATION AT SLIDING DOORS

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

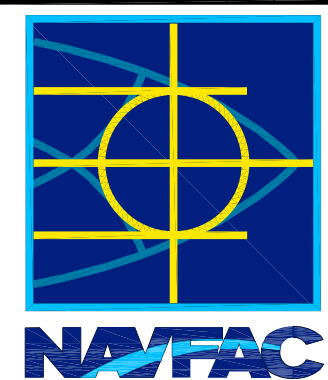
S-101, S-102, S-503

A2

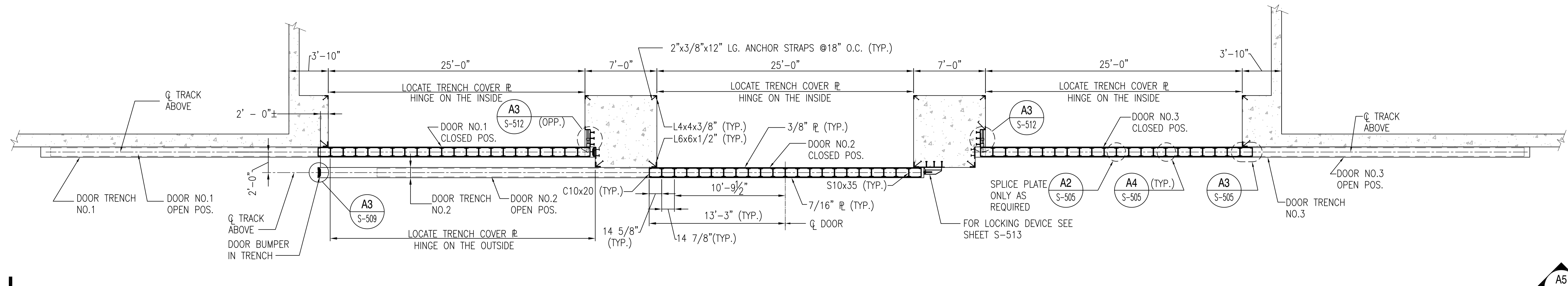
GRAPHIC SCALE:



REVDATE: FILE NAME: \\naafac\k534\NAFAC_YRKT_16AA\NAFAC_YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-304 PLOTTED: Tuesday, December 14, 2010 - 3:40pm

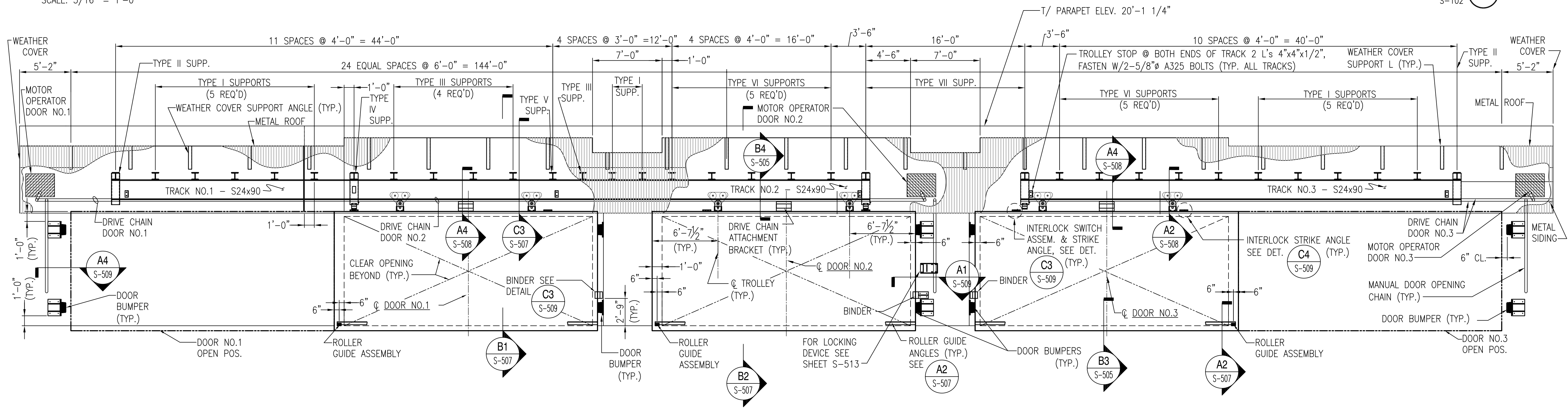
DATE	APPR
SYMBOL	DESCRIPTION
	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM PARTIAL ELEVATION	
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND	NAVAL STATION - NORFOLK, VIRGINIA
NAVFACANT	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004695	
SHEET 7 OF 31	
S-304	
DRAWING REVISION: 15 JANUARY 2008	

REVDATE: FILE NAME: \\nasamrk434\NAVFAC\YRKT_16AA\NAVFAC\YRKT_16AA\CAD\CADD\Drawings\Box C\BOX C WITHOUT PLATFORM COMPL\dwg LAYOUT NAME: S-305 PLOTTED: Tuesday, December 14, 2010 - 3:40pm



PARTIAL PLAN AT SLIDING DOORS

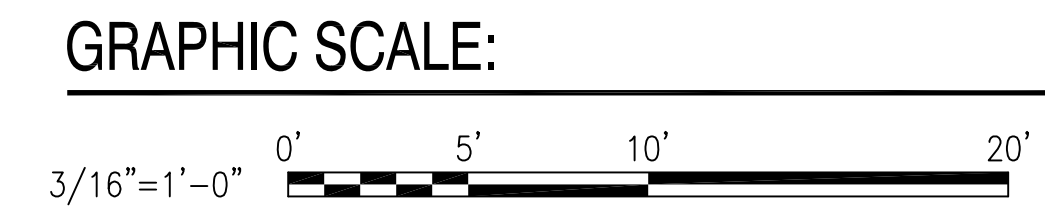
SCALE: 3/16" = 1'-0"

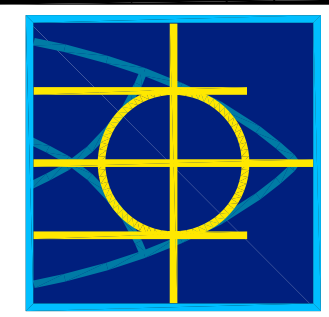


PARTIAL ELEVATION AT SLIDING DOORS

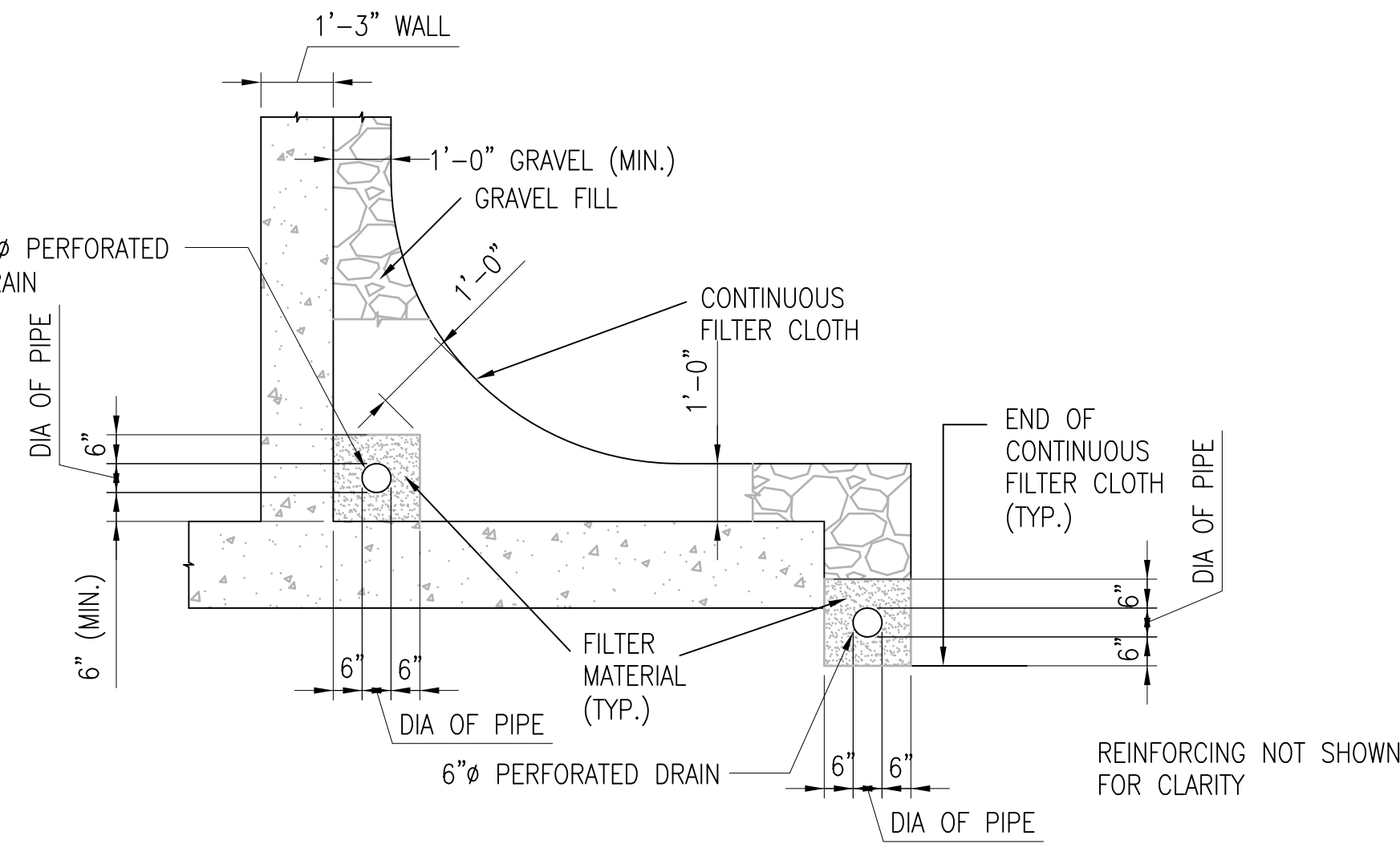
SCALE: 3/16" = 1'-0"

- NOTES:
1. EMBEDDED PLATES AND ANGLES TO SUPPORT DOOR MOTOR OPERATORS SHALL BE PROVIDED BY THE MOTOR SUPPLIER.
 2. SEE COATING SPECIFICATIONS FOR PAINTING REQUIREMENTS.
 3. SEE S-506 FOR TYPES I THROUGH VIII DOOR MONORAIL SUPPORT BRACKET DETAILS.
 4. DOORS 1 AND 3 CONTAIN INTERIOR LOCK MECHANISM SEE S-512 FOR INTERIOR LOCK MECHANISM DETAILS.
 5. SEE S-513 FOR STANDARD HIGH SECURITY HASP DETAILS AND S-513 (ALT.) FOR OPTIONAL HIGH SECURITY HASP INTERNAL LOCKING DEVICE (ILD) FOR DOOR 2.

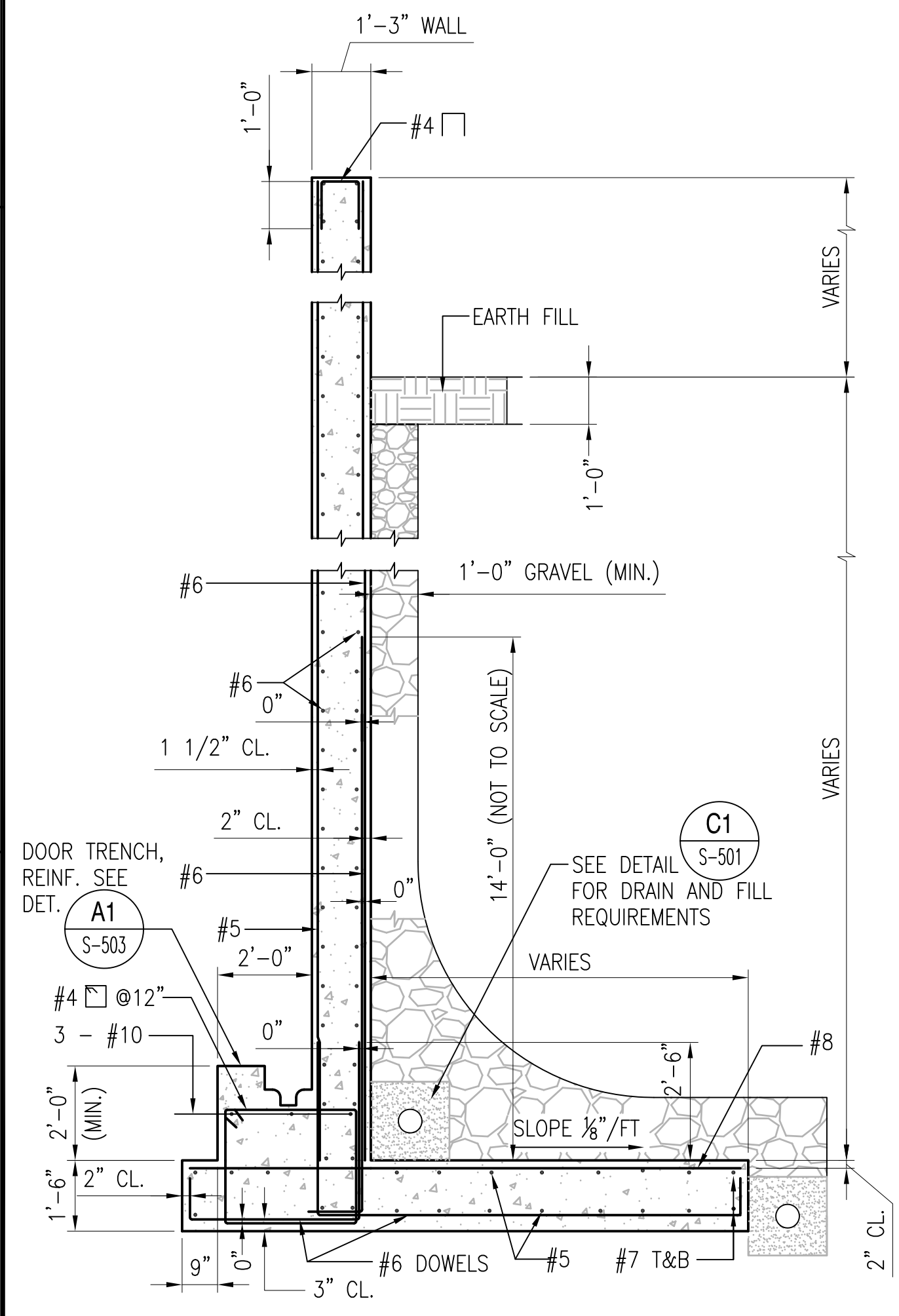


 <p>NAVFAC</p>	<p>DATE</p> <p>DESCRIPTION</p> <p>SYM</p> <p>APPR</p>
<p>APPROVED</p> <p>FOR COMMANDER NAVFAC</p> <p>DES: DR</p> <p>CHK: GC</p> <p>NAVFAC MANAGER</p> <p>REVIEWED BY</p>	
<p>DEPARTMENT OF THE NAVY</p> <p>NAVAL FACILITIES ENGINEERING COMMAND</p> <p>NAVAL STATION - NORFOLK, VIRGINIA</p> <p>NAVFAC/ANT</p>	
<p>TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM</p> <p>PARTIAL PLAN AND ELEVATION</p>	
<p>CODE ID. NO. 80091 SIZE D</p> <p>SCALE: AS NOTED</p> <p>SPEC. NO.</p> <p>CONSTR. CONTR. NO.</p> <p>NAVFAC DRAWING NO. 14004696</p> <p>SHEET 8 OF 31</p> <p>S-305</p> <p><small>DRAWING REVISION: 15 JANUARY 2008</small></p>	

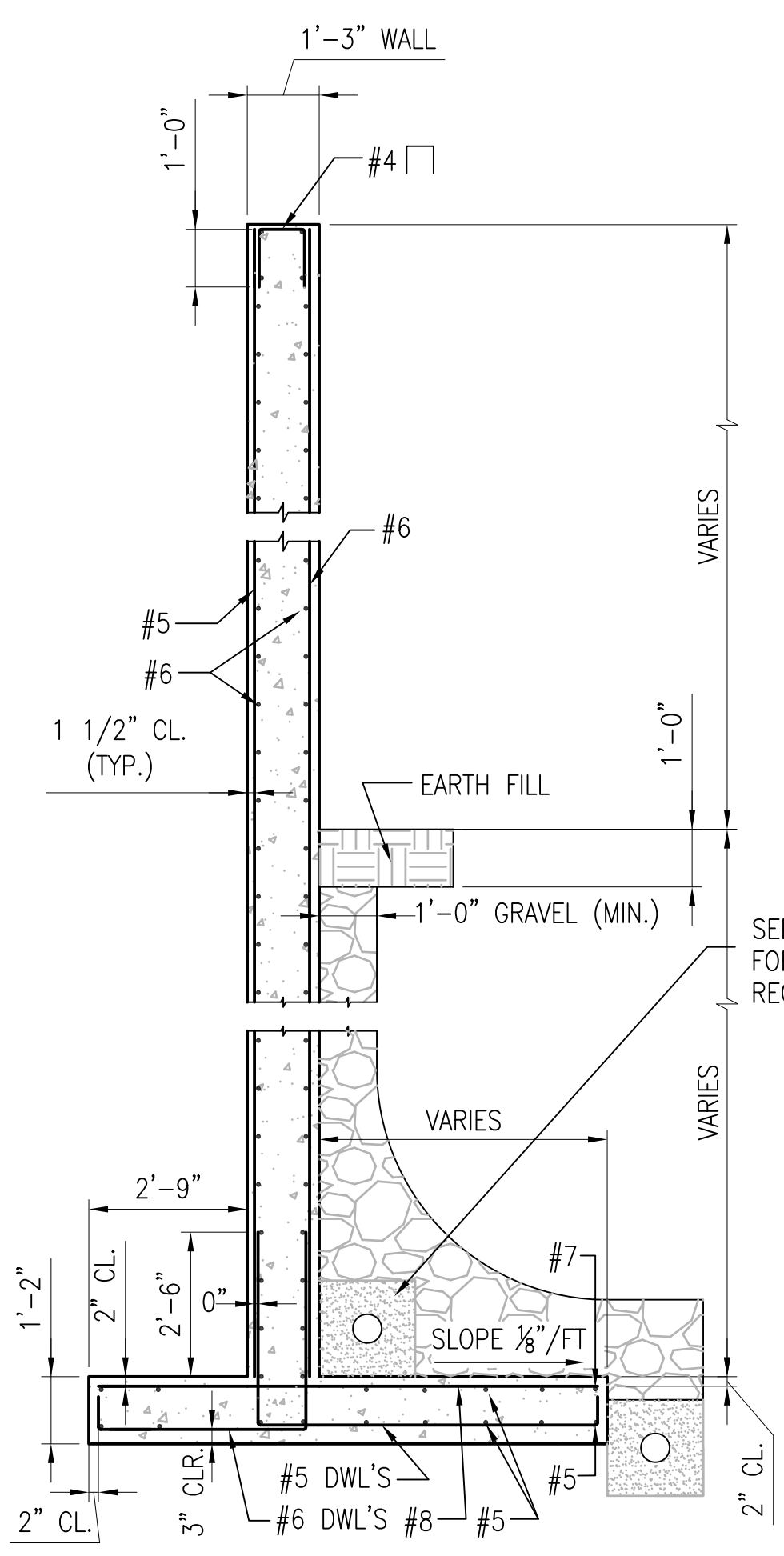
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SECTION - TYP. 6"Ø PERF. DRAIN
SCALE: 3/8" = 1'-0" **C1**
S-501



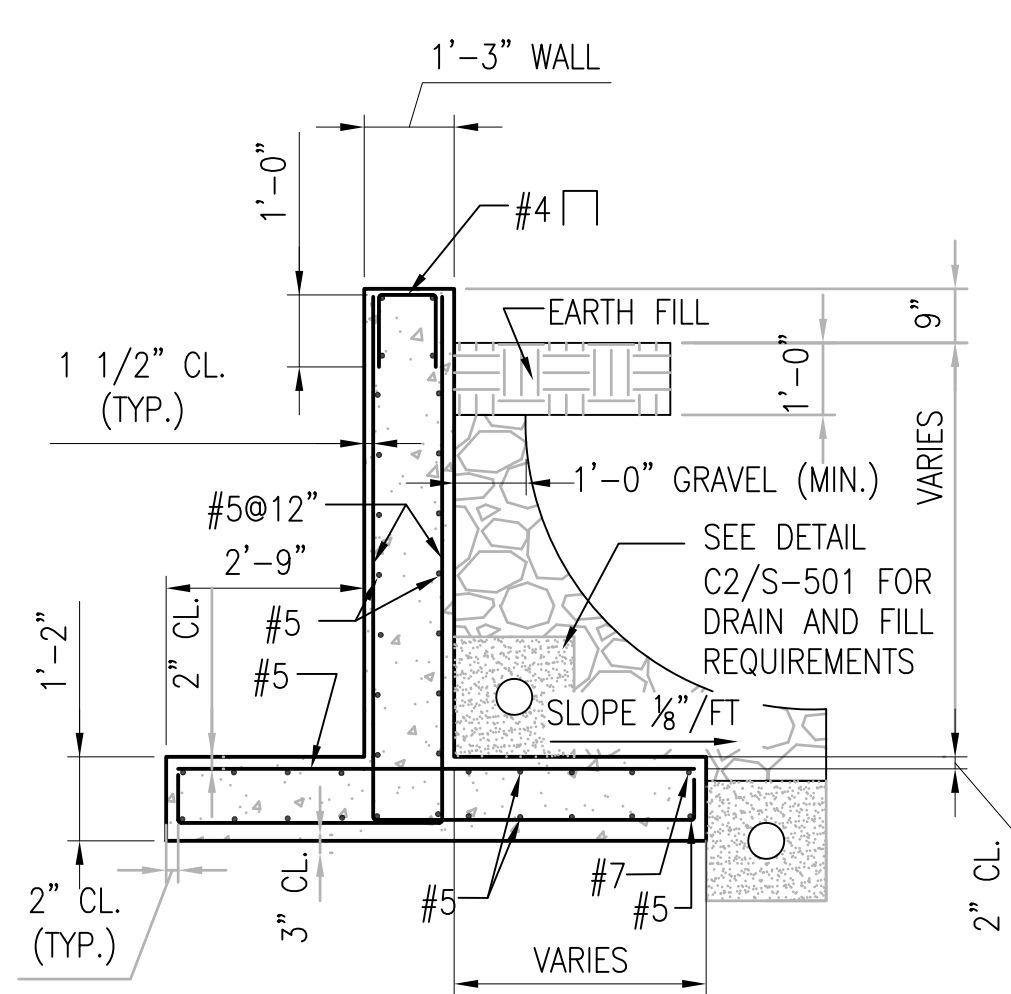
SECTION A1
SCALE: 3/8" = 1'-0" S-102, S-303



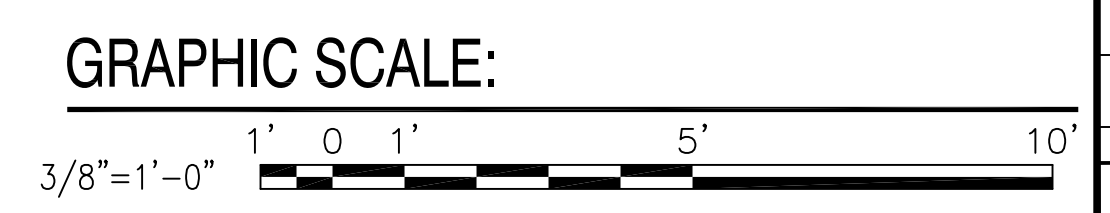
SECTION A3
SCALE: 3/8" = 1'-0" S-102, S-303

C5
S-304
NOTE: SEE FOR ALTERNATE SUBSURFACE DRAINAGE SYSTEM

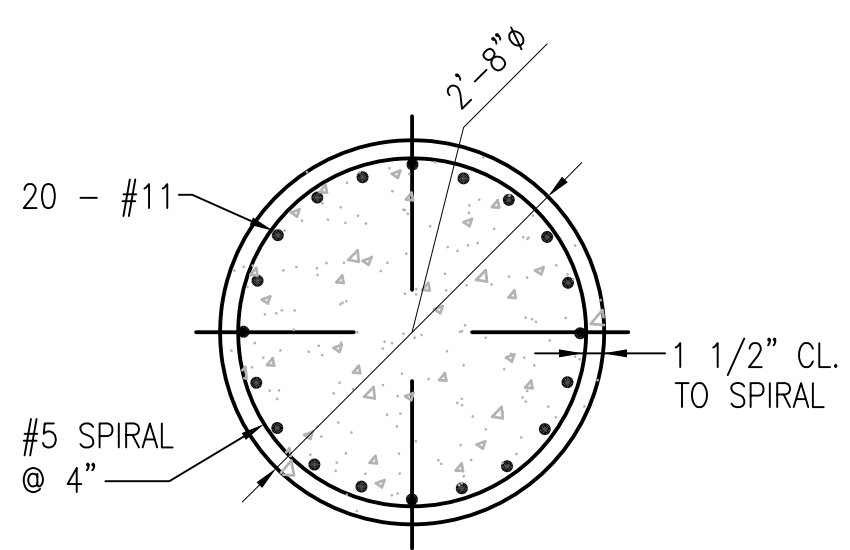
C1
S-501
SEE DETAIL FOR DRAIN AND FILL REQUIREMENTS



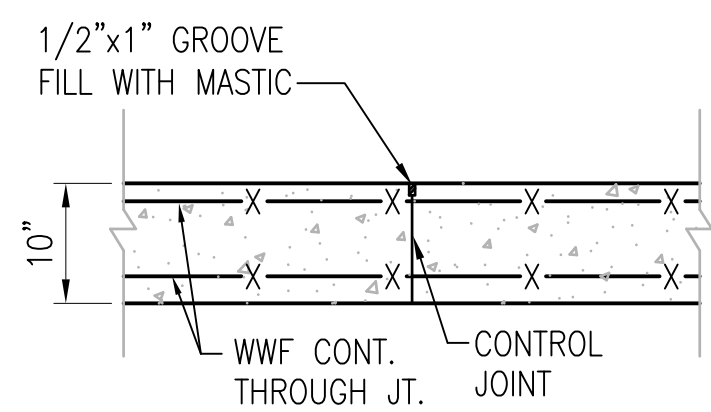
SECTION A4
SCALE: 3/8" = 1'-0" S-102, S-303



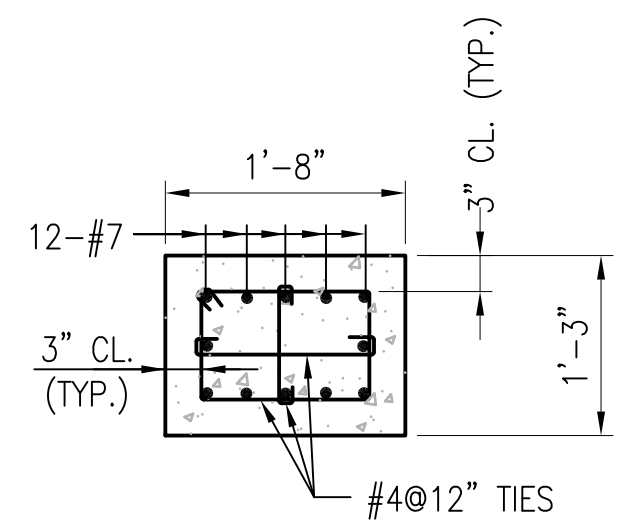
	DATE
	APPR.
	DESCRIPTION
	SYM
SEAL	
A/E LOGO	
SAT-TO	
APPROVED	
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM RETAINING WALL DETAILS	
CODE ID. NO. 80091 SIZE D	
SCALE: AS NOTED	
SPEC. NO. CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004697	
SHEET 9 OF 31	
S-501	
<small>DRAWING REVISION: 15 JANUARY 2008</small>	



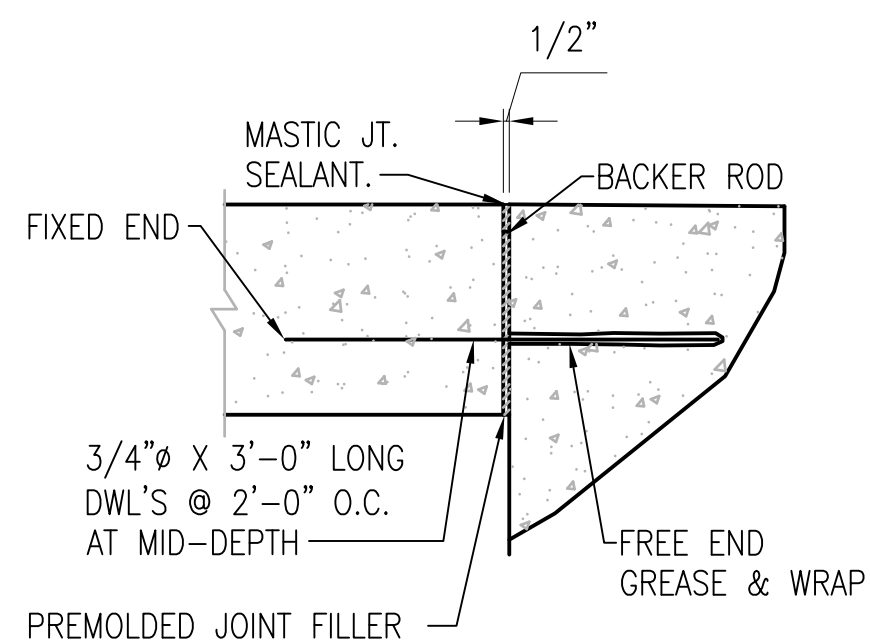
SECTION
SCALE: 3/4" = 1'-0" S-301, S-302 **D1**



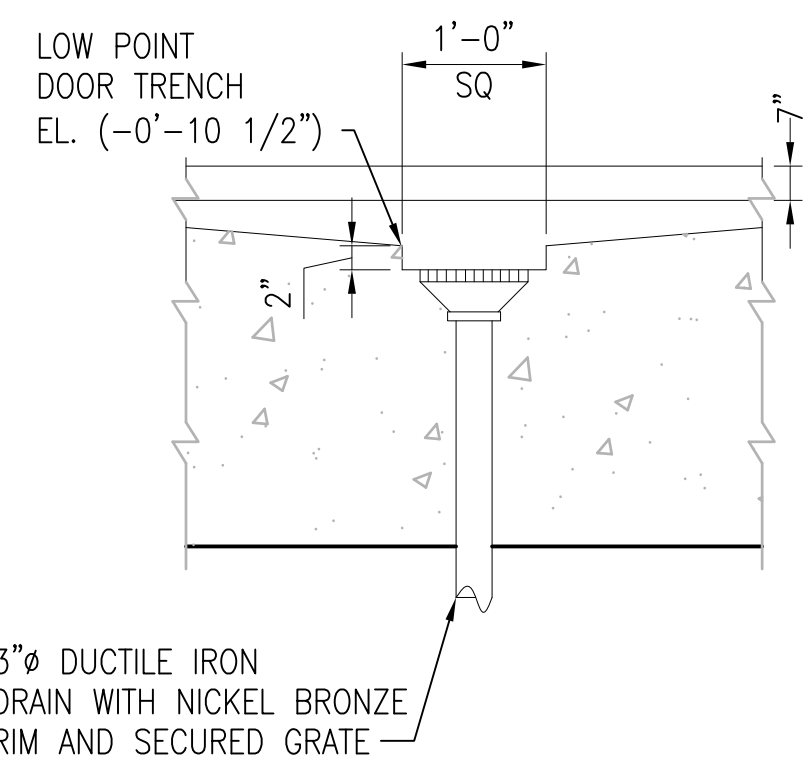
DETAIL
SCALE: 3/4" = 1'-0" S-101 **C1**



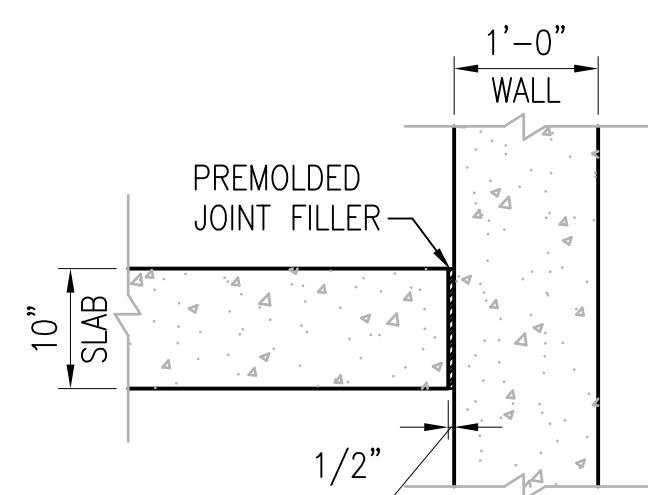
SECTION - CONCRETE TIE BEAM
SCALE: 3/4" = 1'-0" S-301, S-302 **B1**



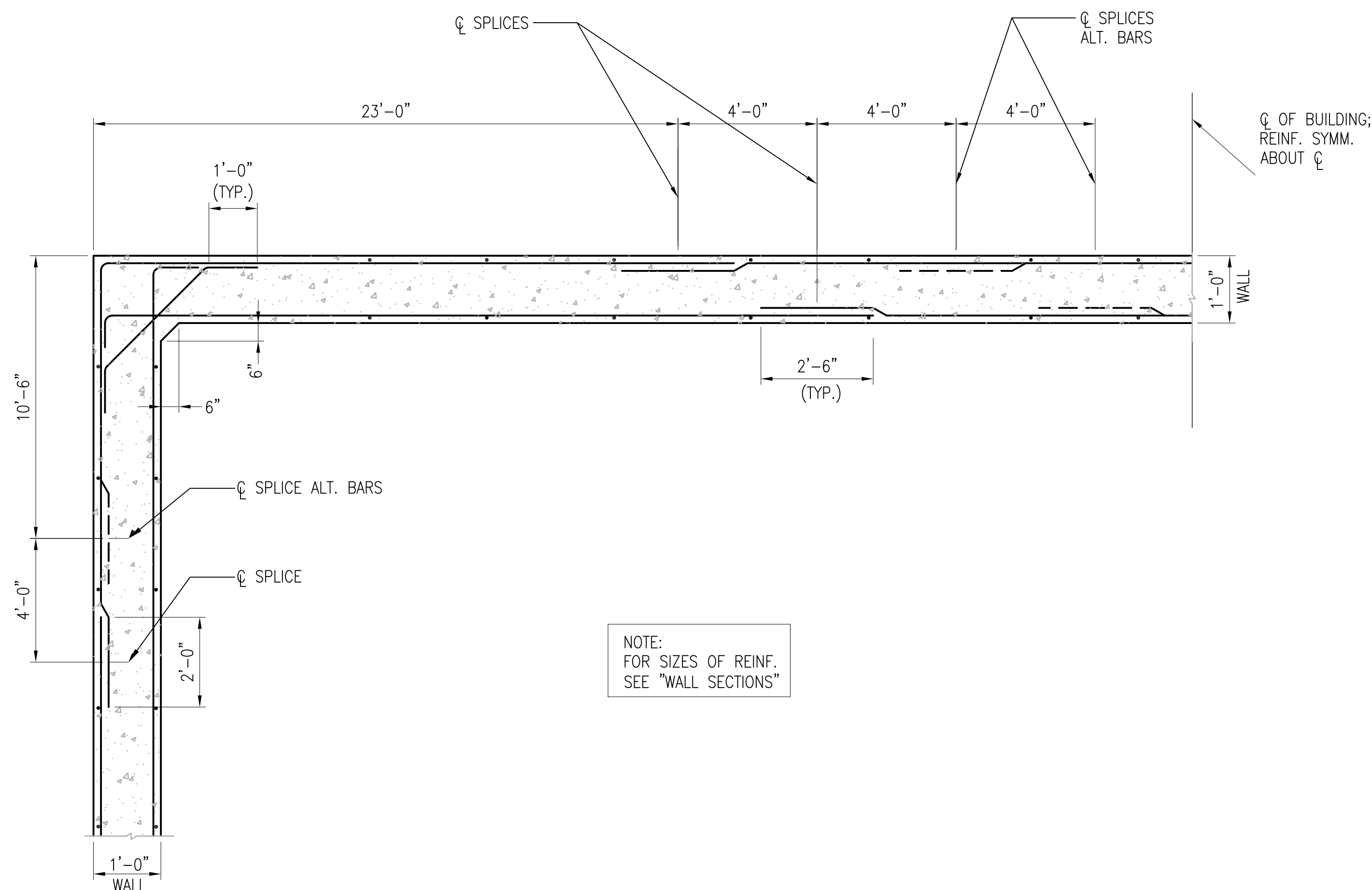
DETAIL
SCALE: 3/4" = 1'-0" S-101 **B2**



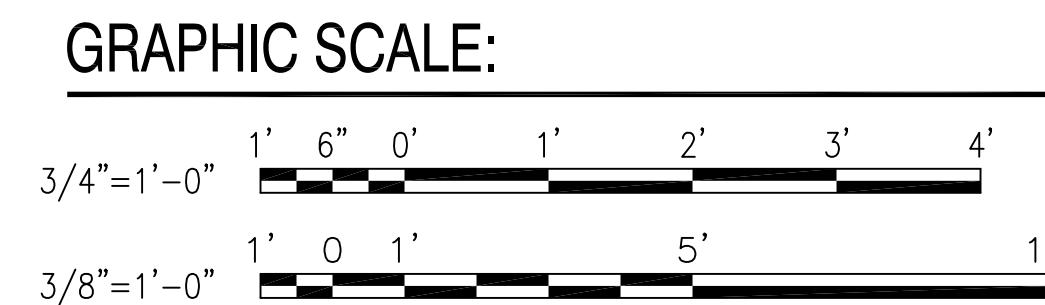
DETAIL
SCALE: 3/4" = 1'-0" S-101 **A1**



DETAIL
SCALE: 3/4" = 1'-0" S-101, S-301 **A2**



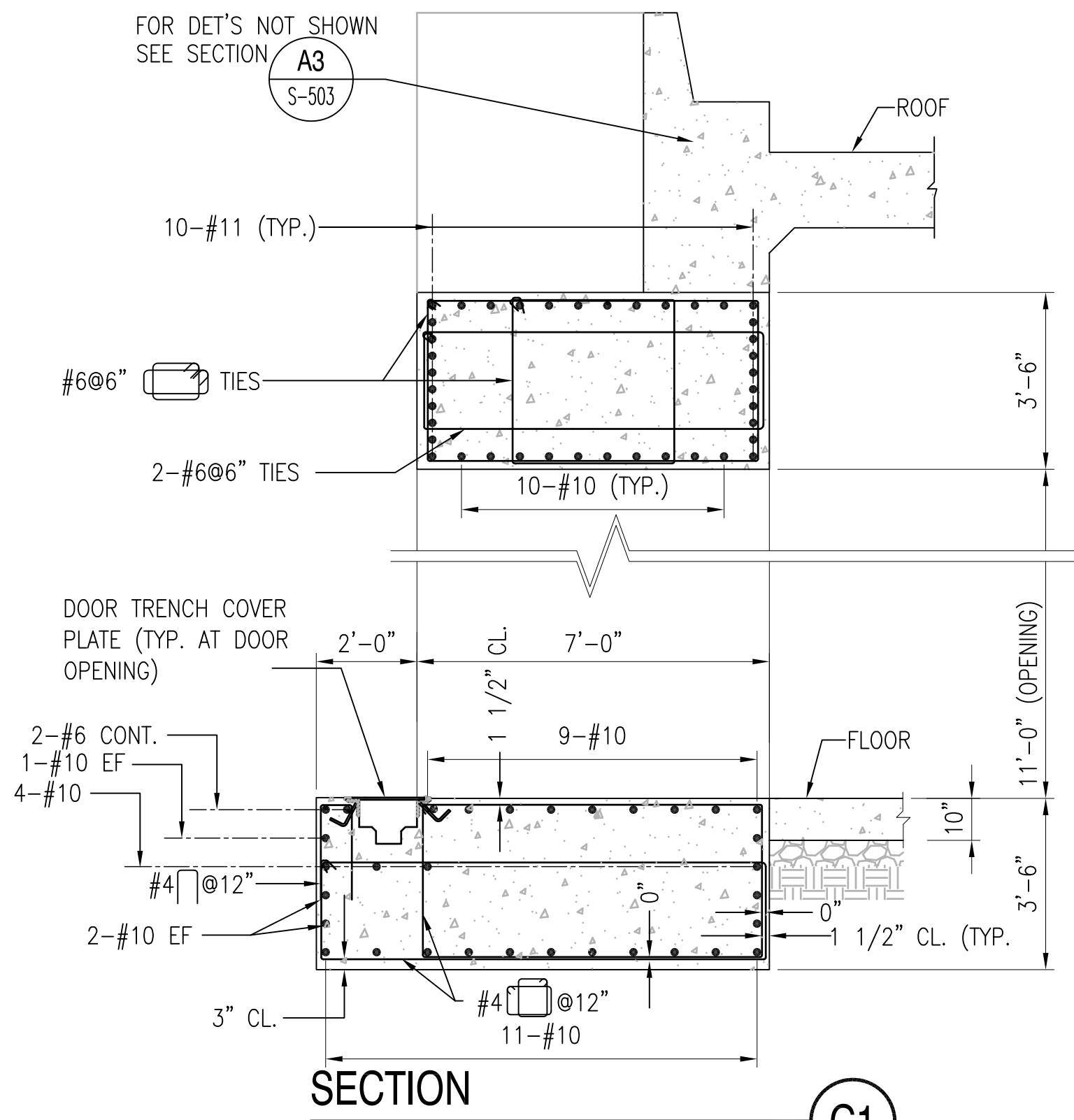
WALL SECTION
SCALE: 3/8" = 1'-0" (REQUIRED SPLICES OF HORIZONTAL REINFORCEMENT) S-301, S-302 **A4**



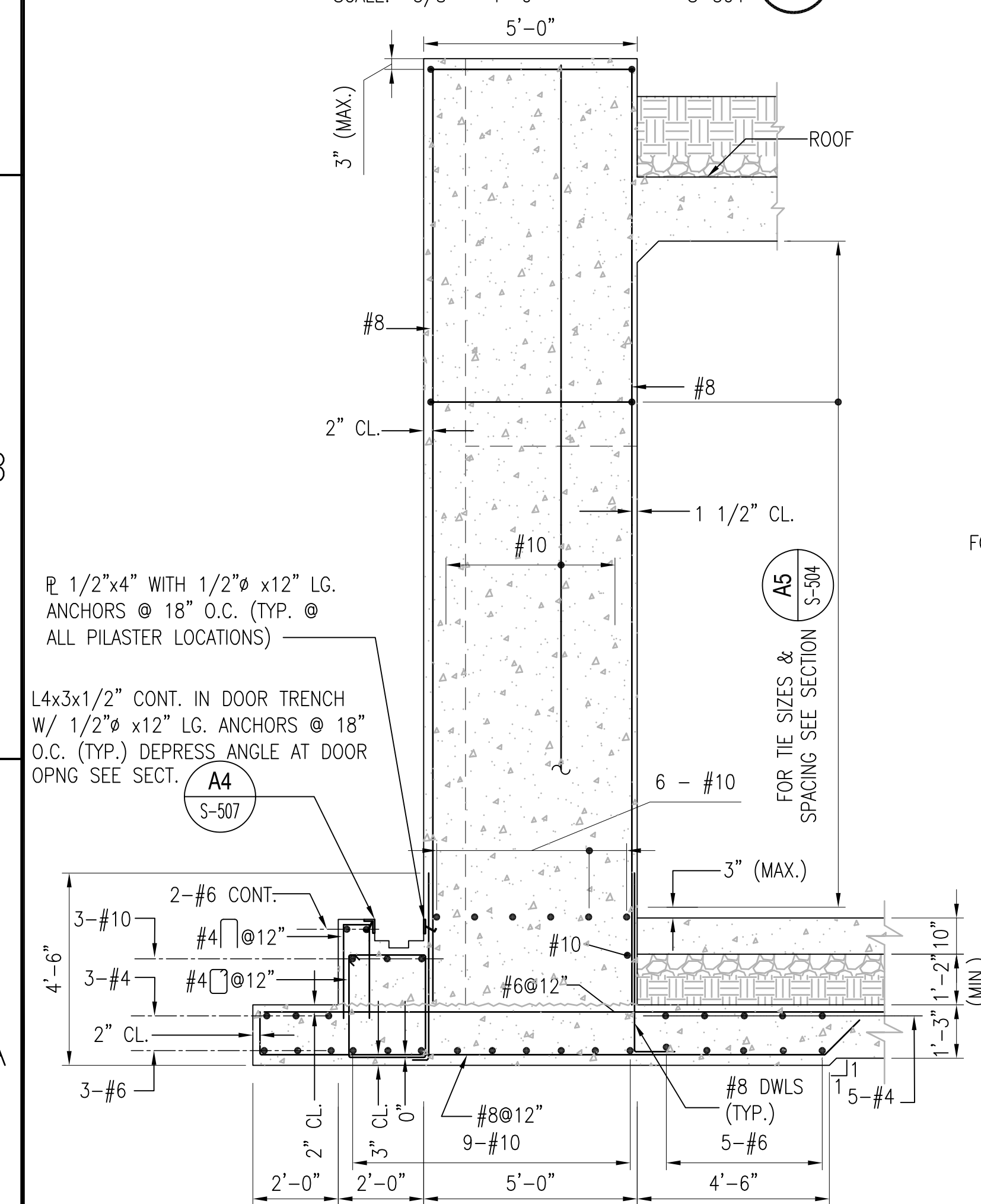
DATE	APPR.
DESCRIPTION	
SYM	
SEAL	
A/E LOGO	
APPROVED	SAT-TO
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM SECTIONS AND DETAILS	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004698	
SHEET 10 OF 31	
S-502	
DRAWING REVISION: 15 JANUARY 2008	

REVDATE: FILE NAME: \\nasamr\k454\NAVFAC\YRKT_16AA\NAVFAC\YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-502 PLOTTED: Tuesday, December 14, 2010 - 3:41pm

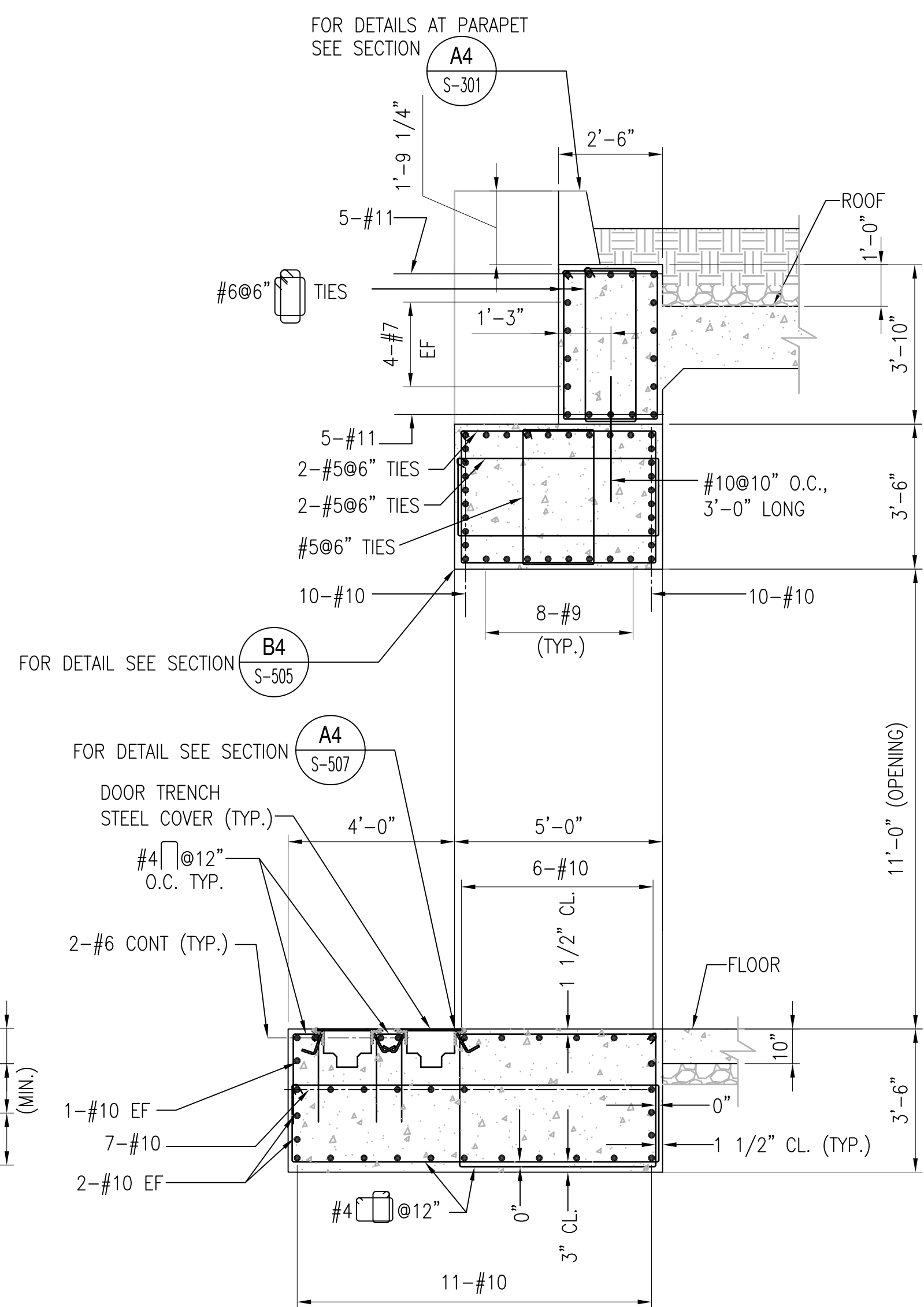
REVDATE: FILE NAME: \\nasar\k1634\NAVFAC\YRKT_16AA\NAVFAC\YRKT_16AA\CISE\Magazines\08\Box_MAGAZINES - Updated 2010\BOX_C_FINALS\Final Drawings Box C BOX_C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-503 PLOTTED: Tuesday, December 14, 2010 - 3:42pm



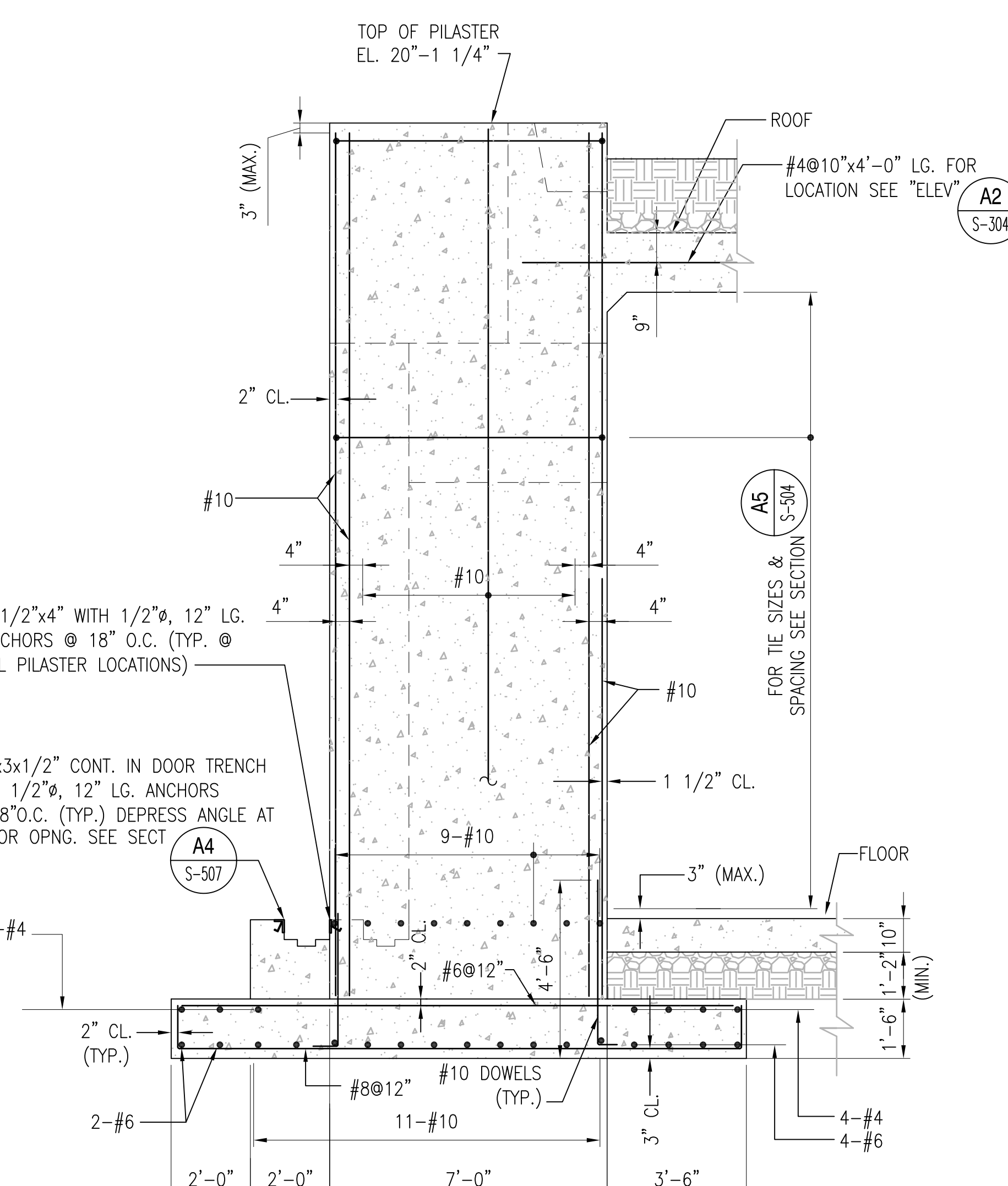
SECTION
SCALE: 3/8" = 1'-0"
S-304 (C1)



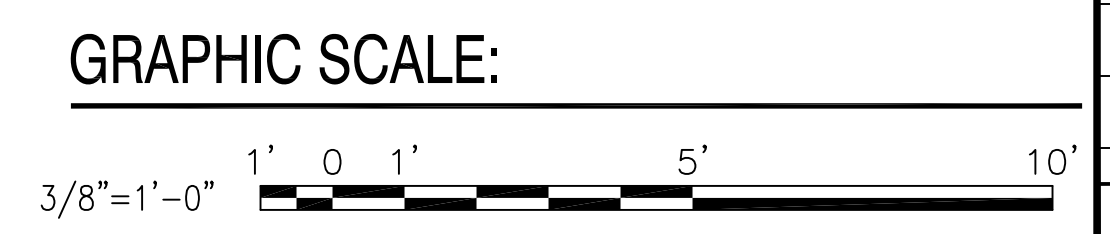
SECTION
SCALE: 3/8" = 1'-0"
S-304, S-501 (A1)



SECTION
SCALE: 3/8" = 1'-0"
S-304, S-503 (A3)

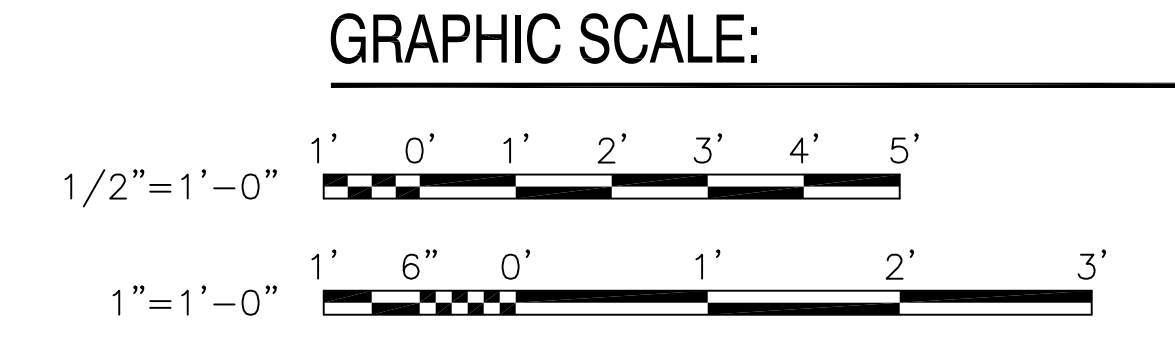
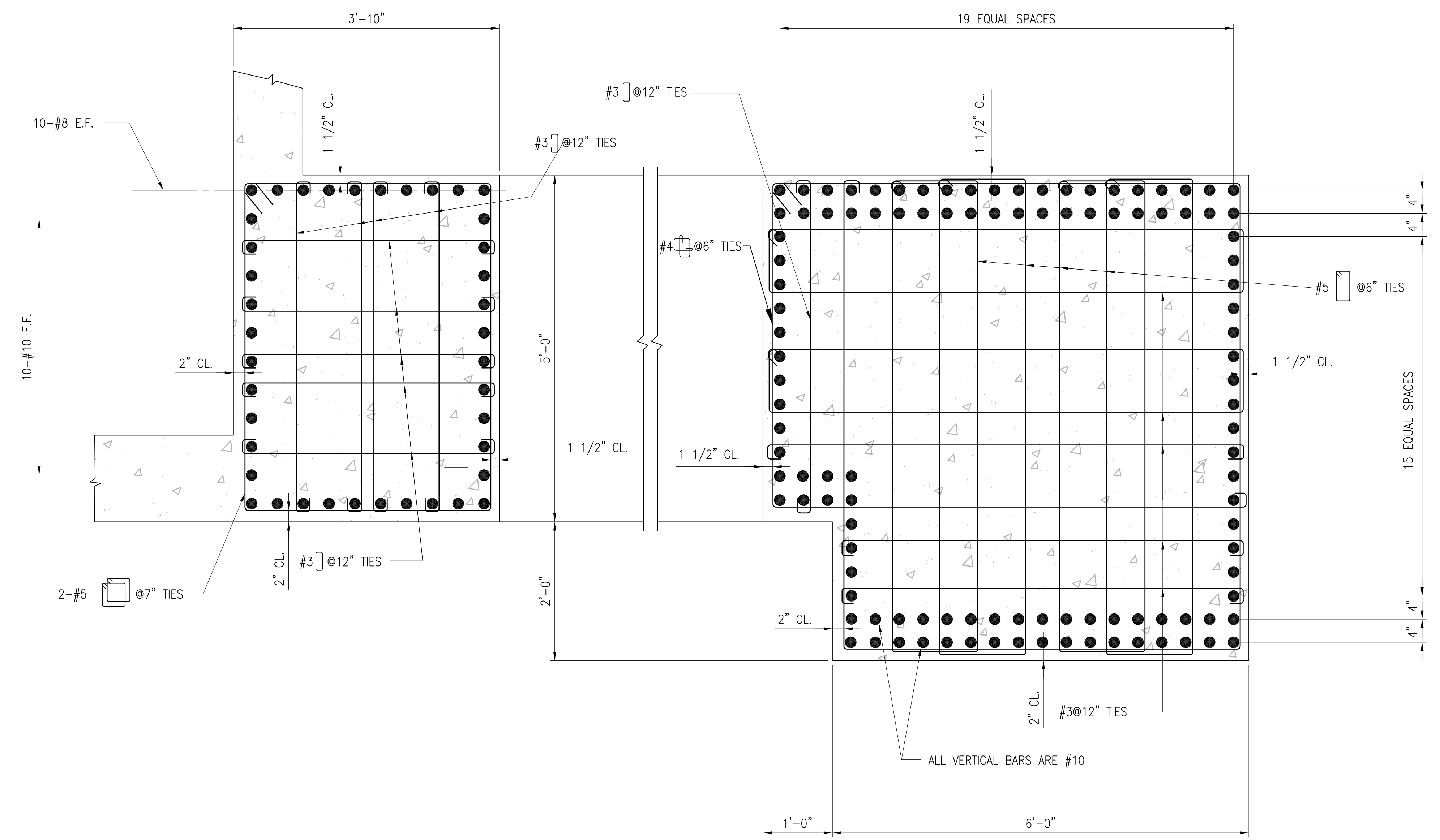
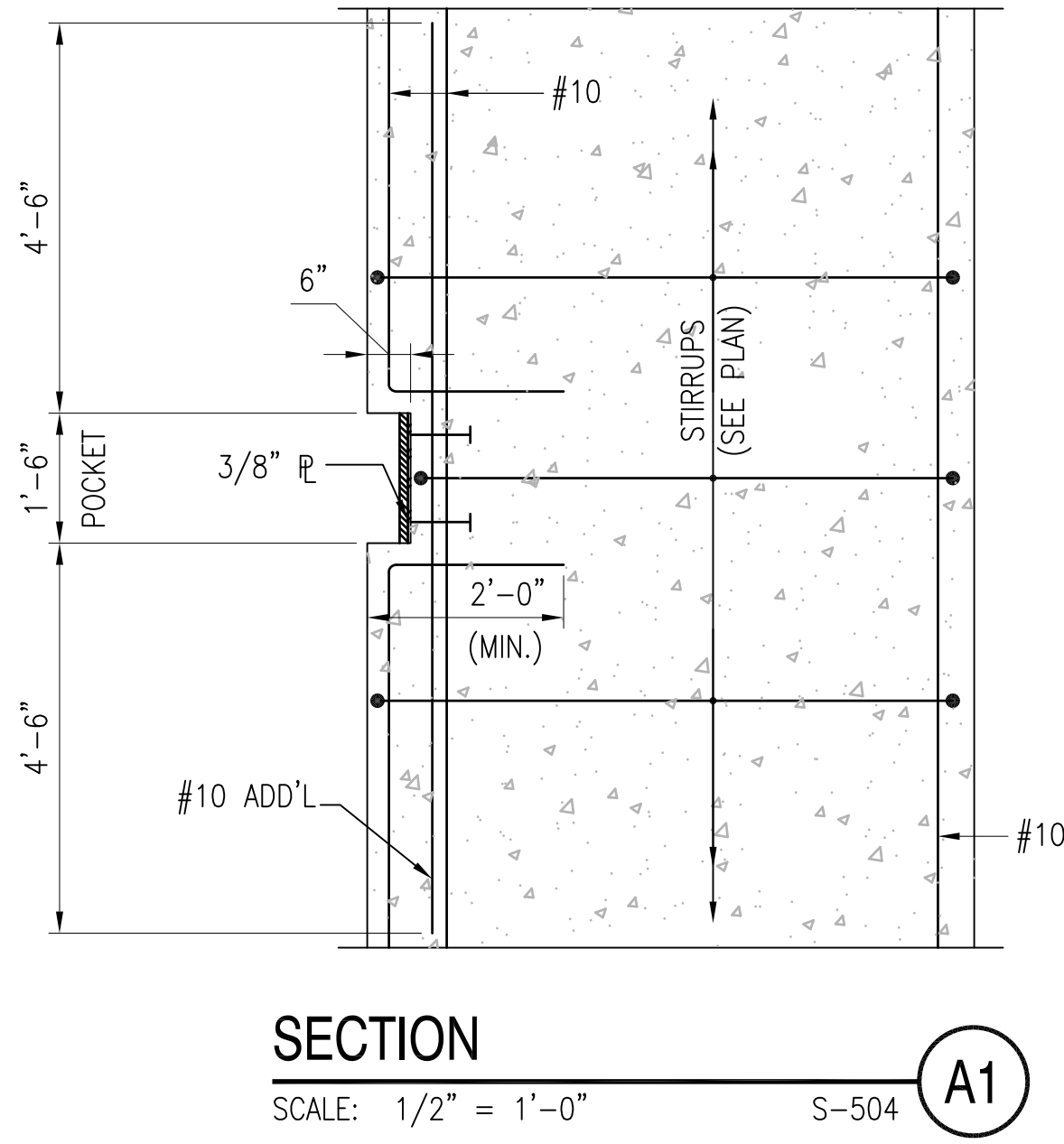
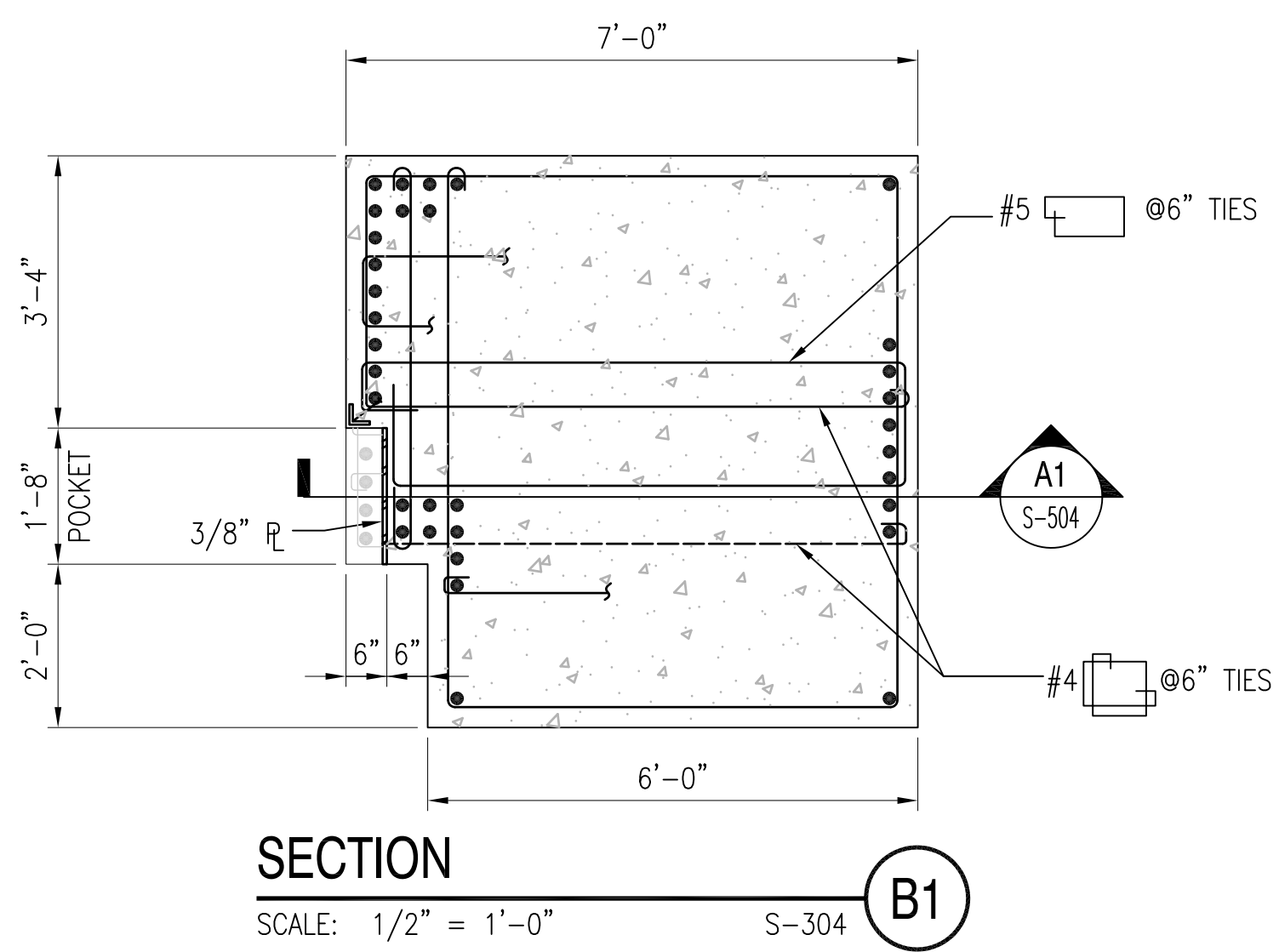


SECTION
SCALE: 3/8" = 1'-0"
S-301, S-304 (A4)



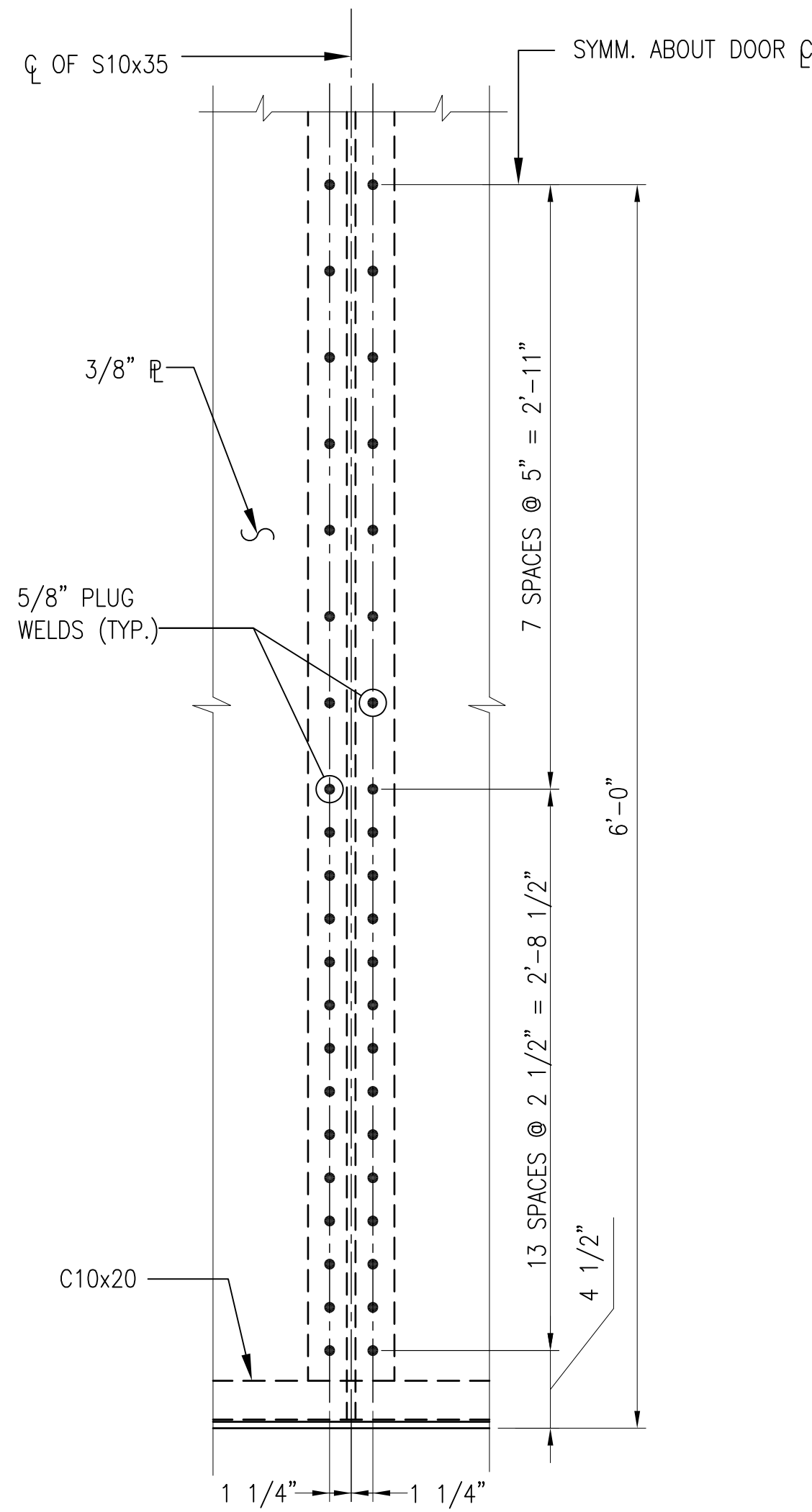
	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	SECTIONS AND DETAILS
FOR COMMANDER NAVFAC DES: DR CHK: GC NAVFAC MANAGER REVIEWED BY:	CODE ID. NO. 80091 SCALE: AS NOTED SPEC. NO. CONSTR. CONTR. NO. NAVFAC DRAWING NO. 14004699 SHEET 11 OF 31 S-503
APPROVED:	DATE:
FOR DETAIL SEE SECTION A4 S-301	FOR DETAIL SEE SECTION A5 S-304
FOR DETAIL SEE SECTION B4 S-505	FOR TIE SIZES & SPACING SEE SECTION S-304
FOR DETAIL SEE SECTION A4 S-507	FOR TIE SIZES & SPACING SEE SECTION S-504
FOR DET'S NOT SHOWN SEE SECTION A3 S-503	FOR DETAILS AT PARAPET SEE SECTION A4 S-301
FOR DET'S NOT SHOWN SEE SECTION A3 S-503	FOR TIE SIZES & SPACING SEE SECTION S-504

REVDATE: FILE NAME: \\nasan\k434\NAVFAC\YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLWg LAYOUT NAME: S-304 PLOTTED: Tuesday, December 14, 2010 - 3:42pm

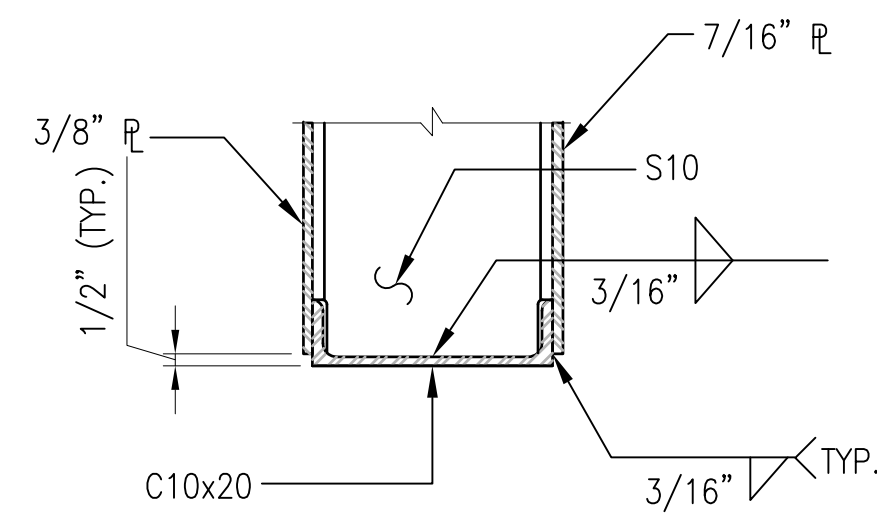


DATE	APPR.
SYMBOL	DESCRIPTION
SEAL	
A/E LOGO	
APPROVED	SAT-TO
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	
SECTIONS AND DETAILS	
CODE ID. NO. 80091	SIZE D
SCALE:	AS NOTED
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	14004700
SHEET	12 OF 31
S-504	
DRAWFORM REVISION: 15 JANUARY 2008	

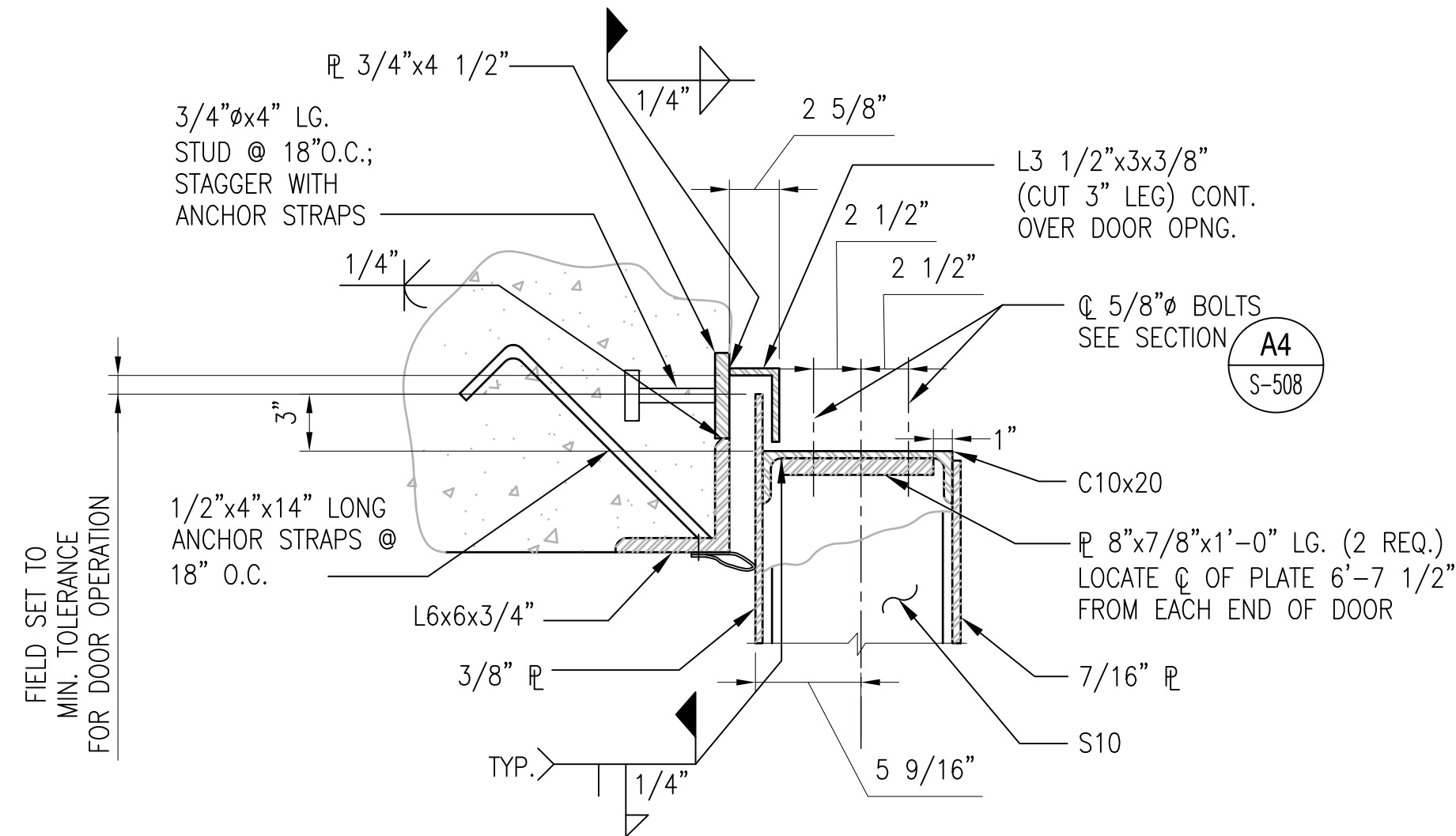
REVDATE: FILE NAME: \\nastran\k434\NAVFAC\RYKT_16AA\NAVFAC\RYKT_16AA\CISE\Magazines\Box MAGAZINES - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLWdg LAYOUT NAME: S-505 PLOTTED: Tuesday, December 14, 2010 - 3:43pm



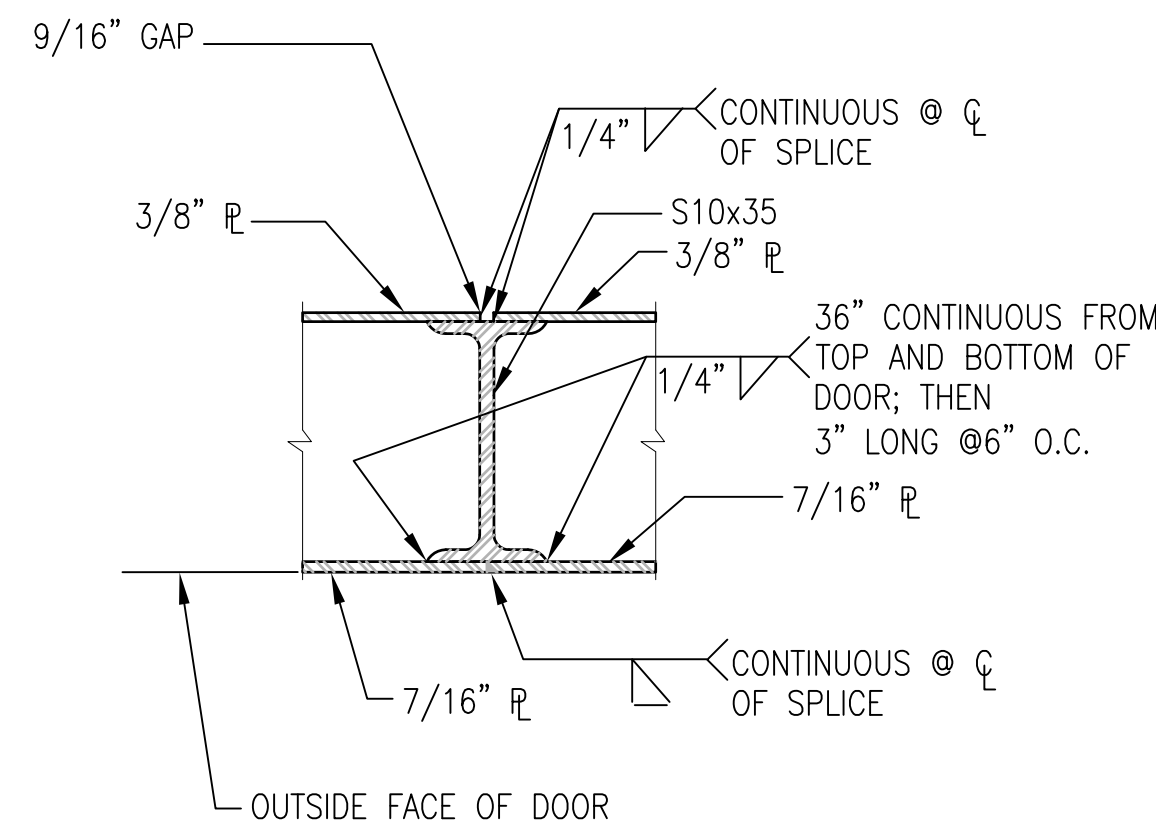
ELEVATION
1 1/2"=1'-0" S-505 **B1**



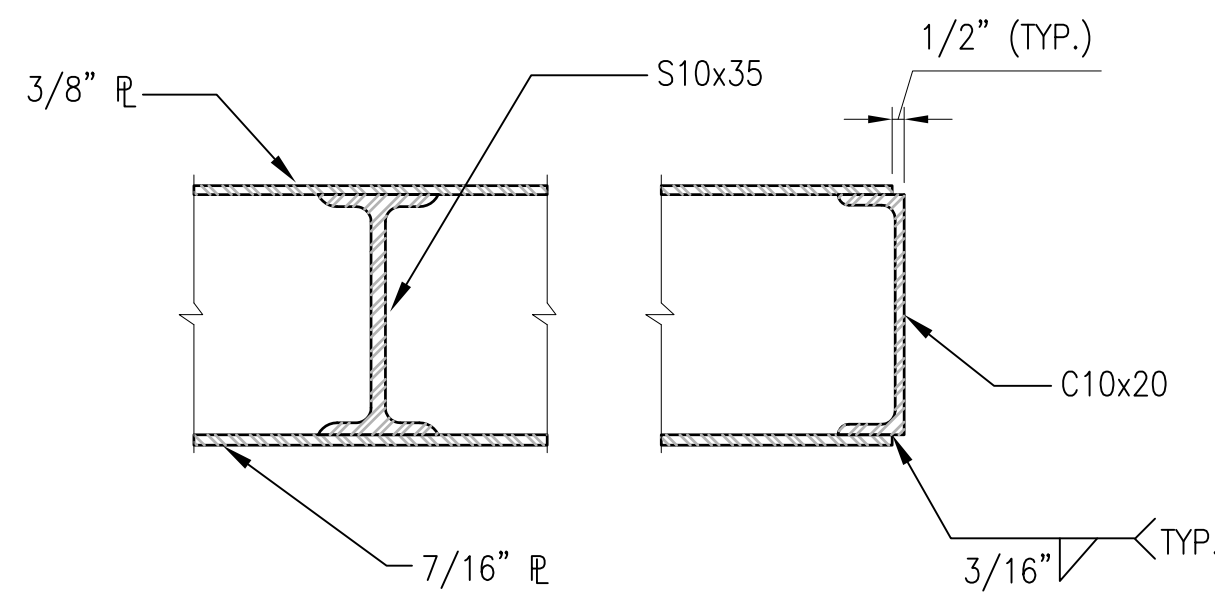
TYP. DOOR SECTION
1 1/2"=1'-0" S-305 **B3**



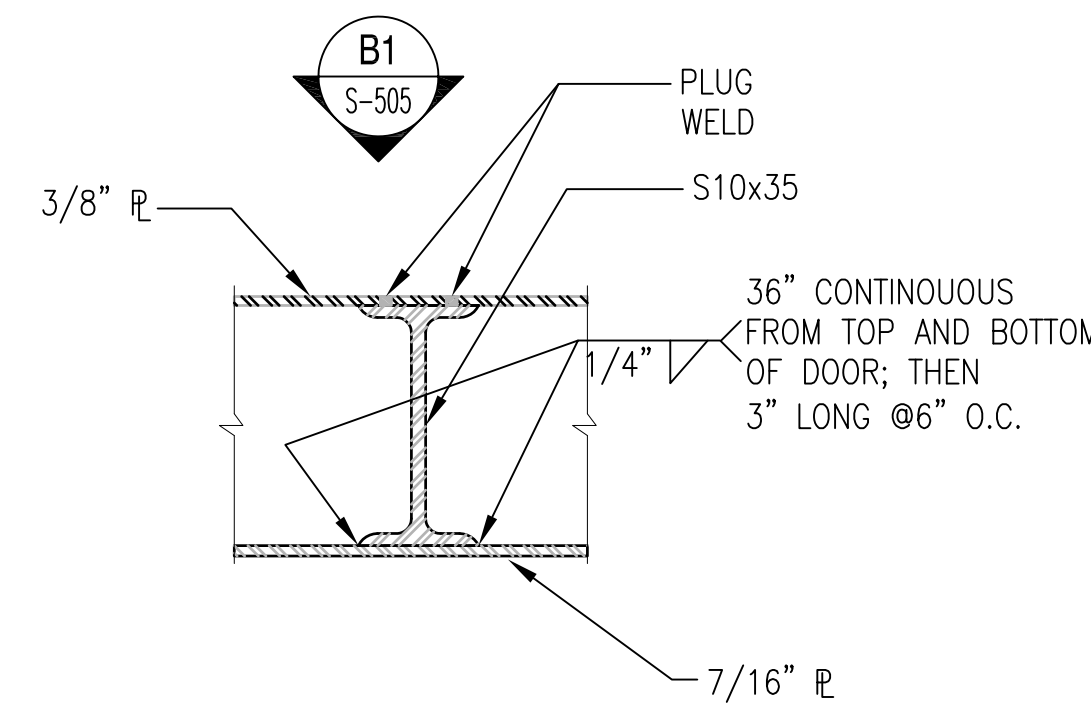
TYP. DOOR SECTION
1 1/2"=1'-0" S-305, S-503, S-507 **B4**



COVER PLATE SPLICE DETAIL
1 1/2"=1'-0" S-305 **A2**

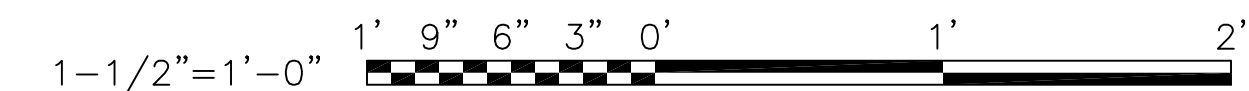


TYP. DOOR DETAIL
1 1/2"=1'-0" S-305 **A3**



TYP. DOOR DETAIL
1 1/2"=1'-0" S-305 **A4**

GRAPHIC SCALE:



APPROVED	SAT-TO
FOR COMMANDER NAVFAC	DR
DES	GC
CHK	
NAVFAC MANAGER	
REVIEWED BY	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION - NORFOLK, VIRGINIA
NAVFAC

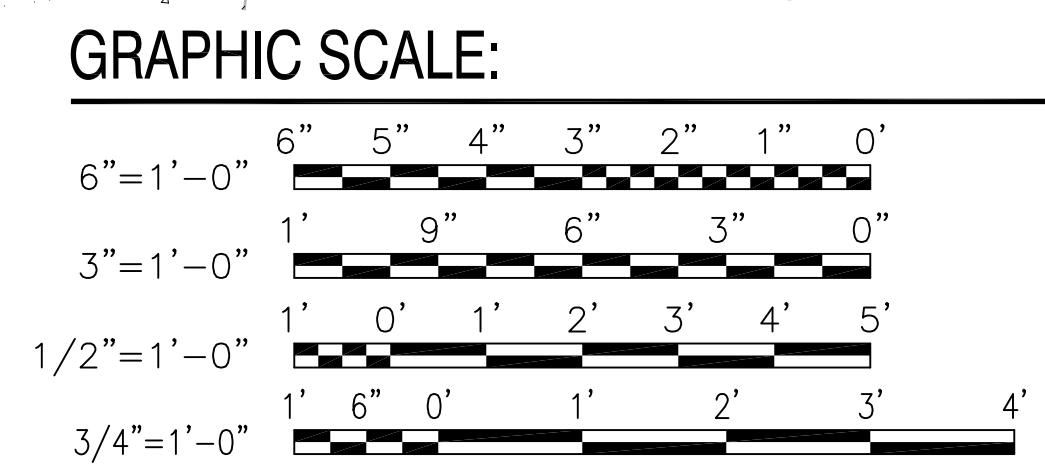
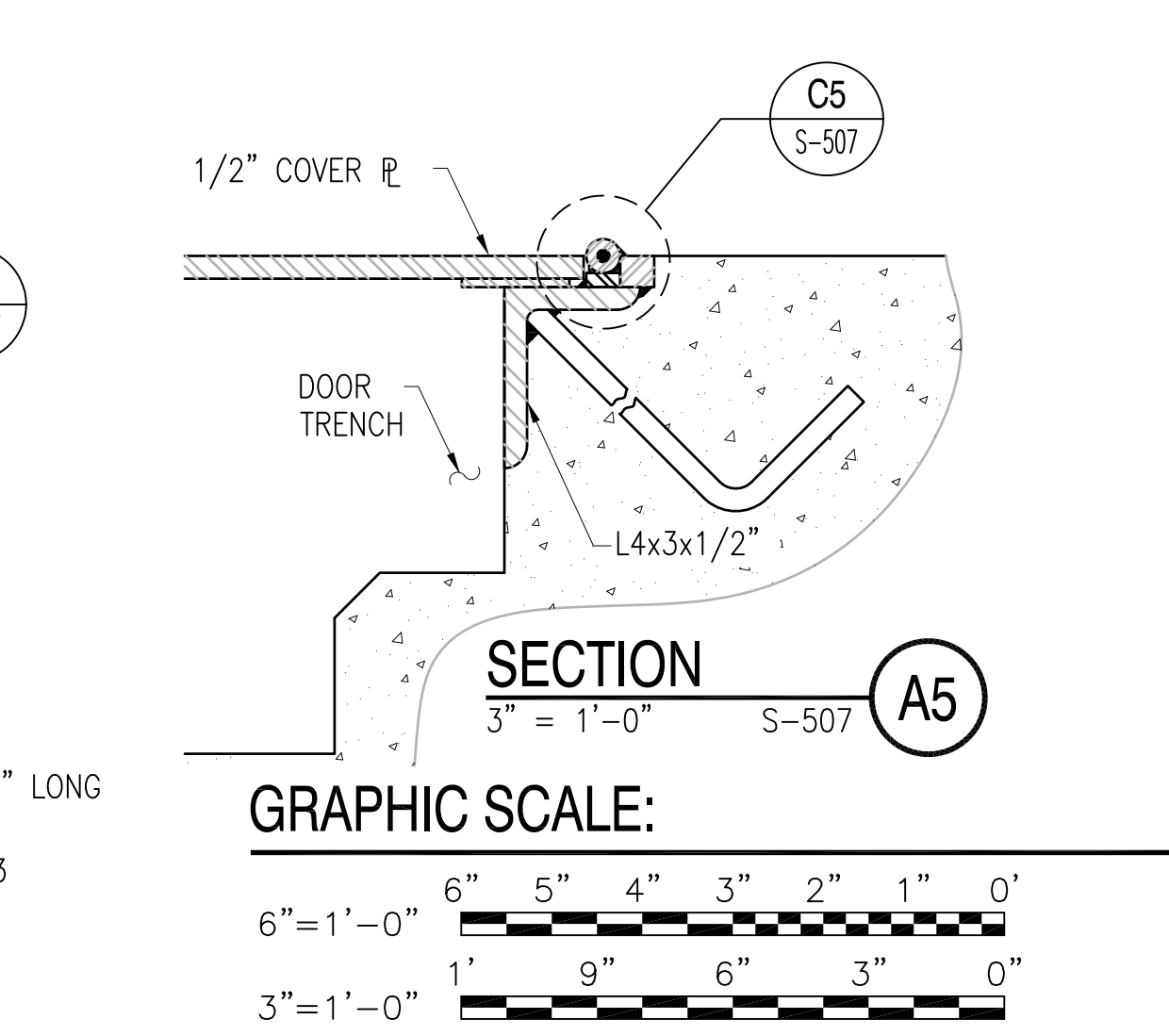
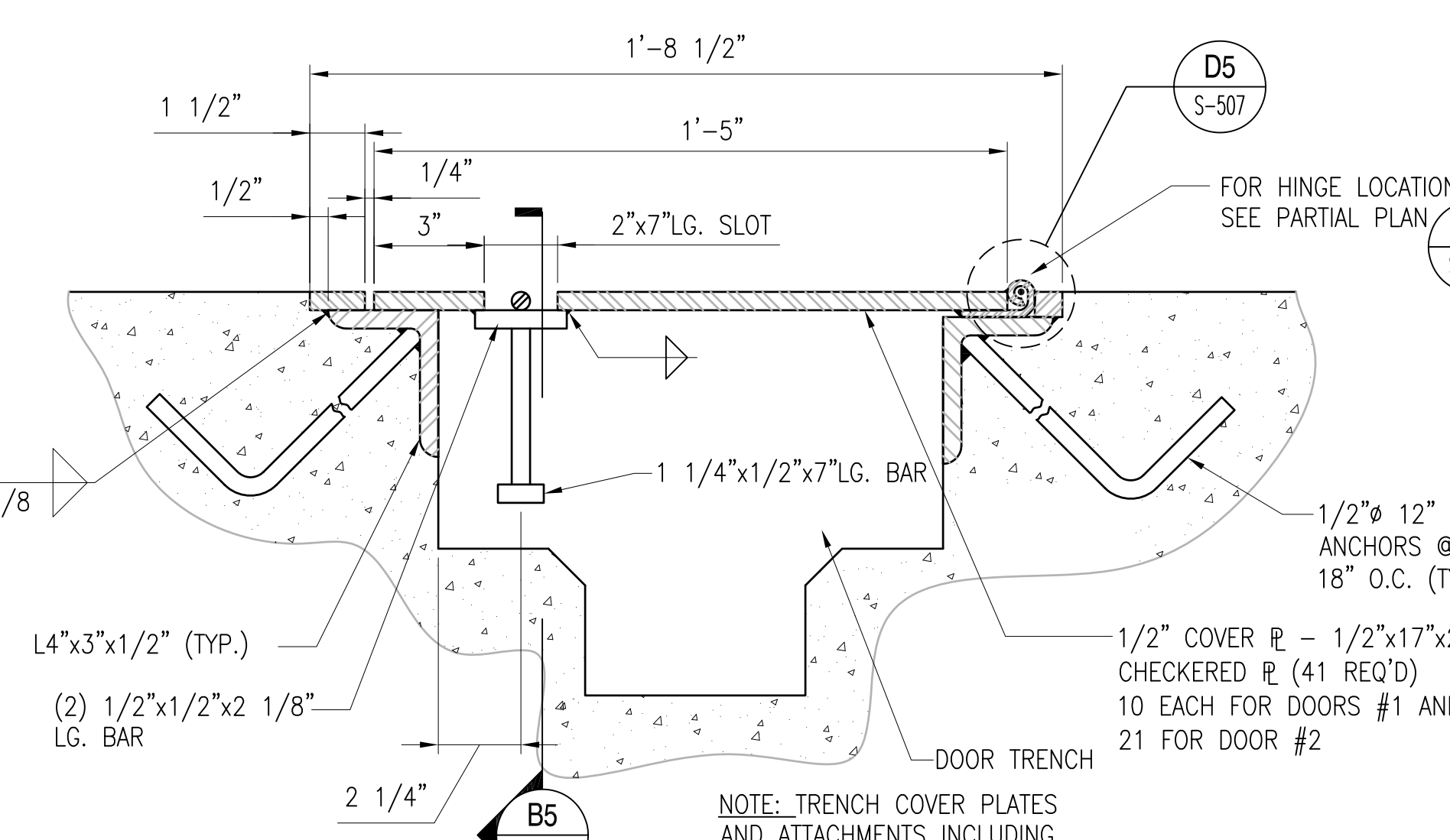
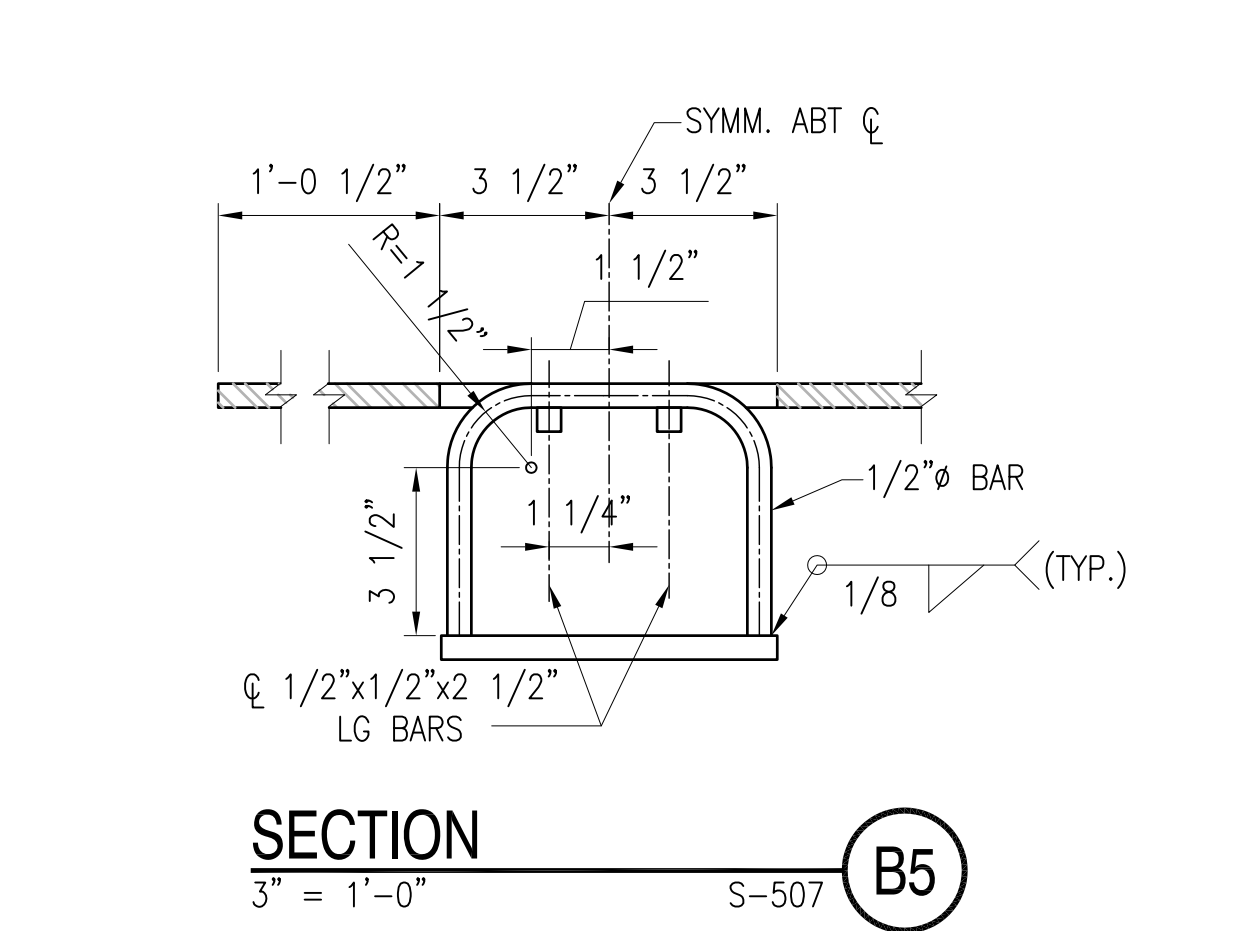
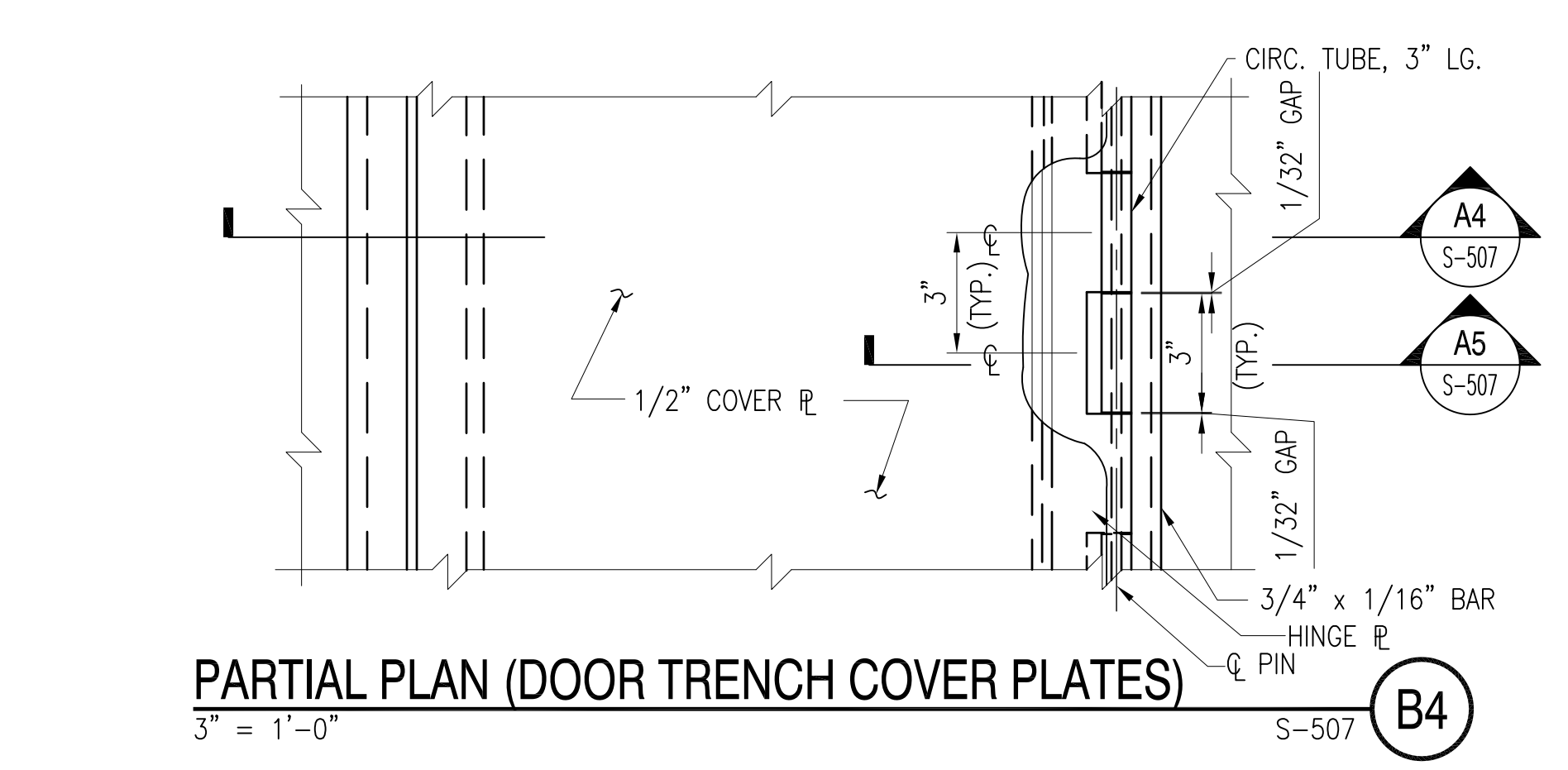
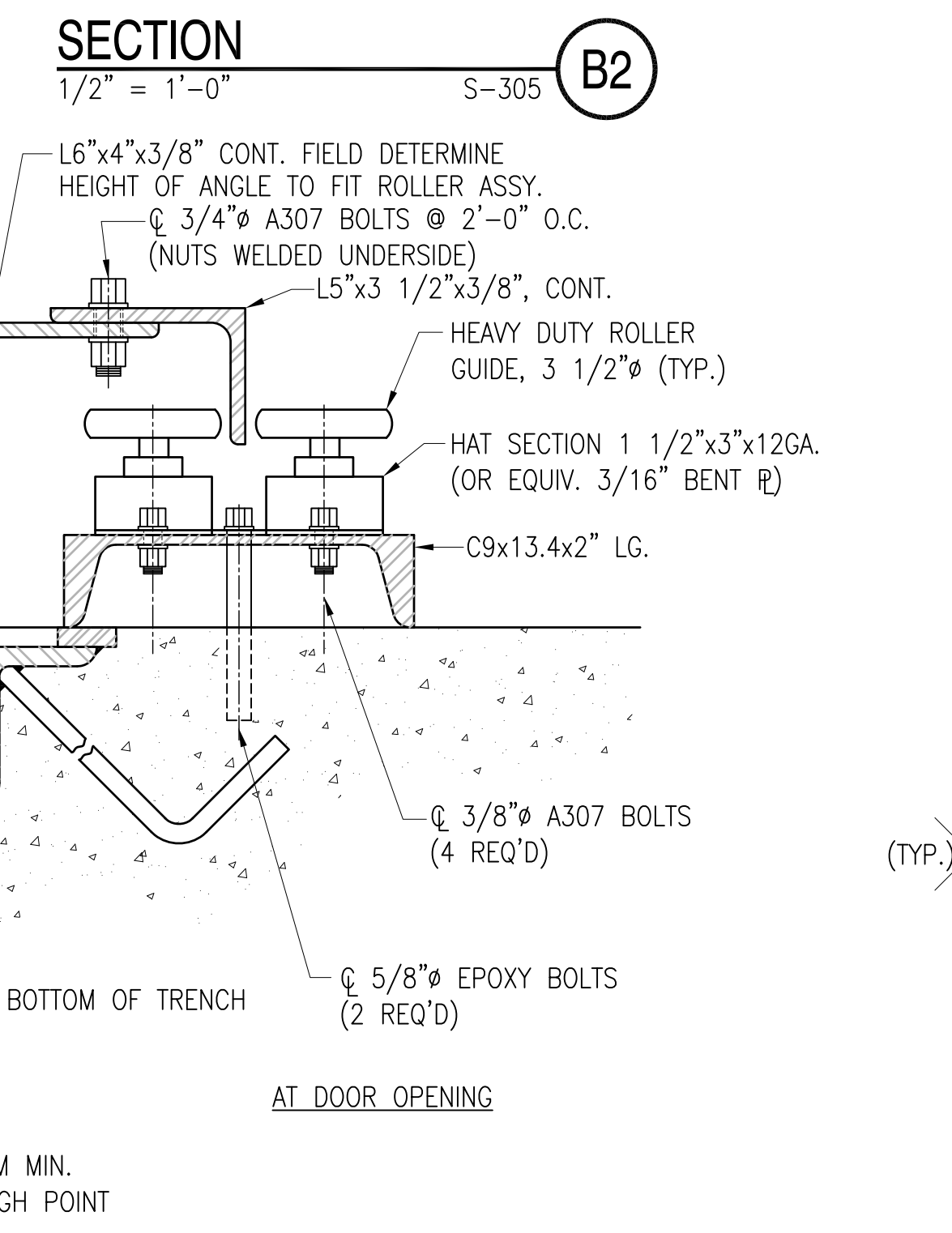
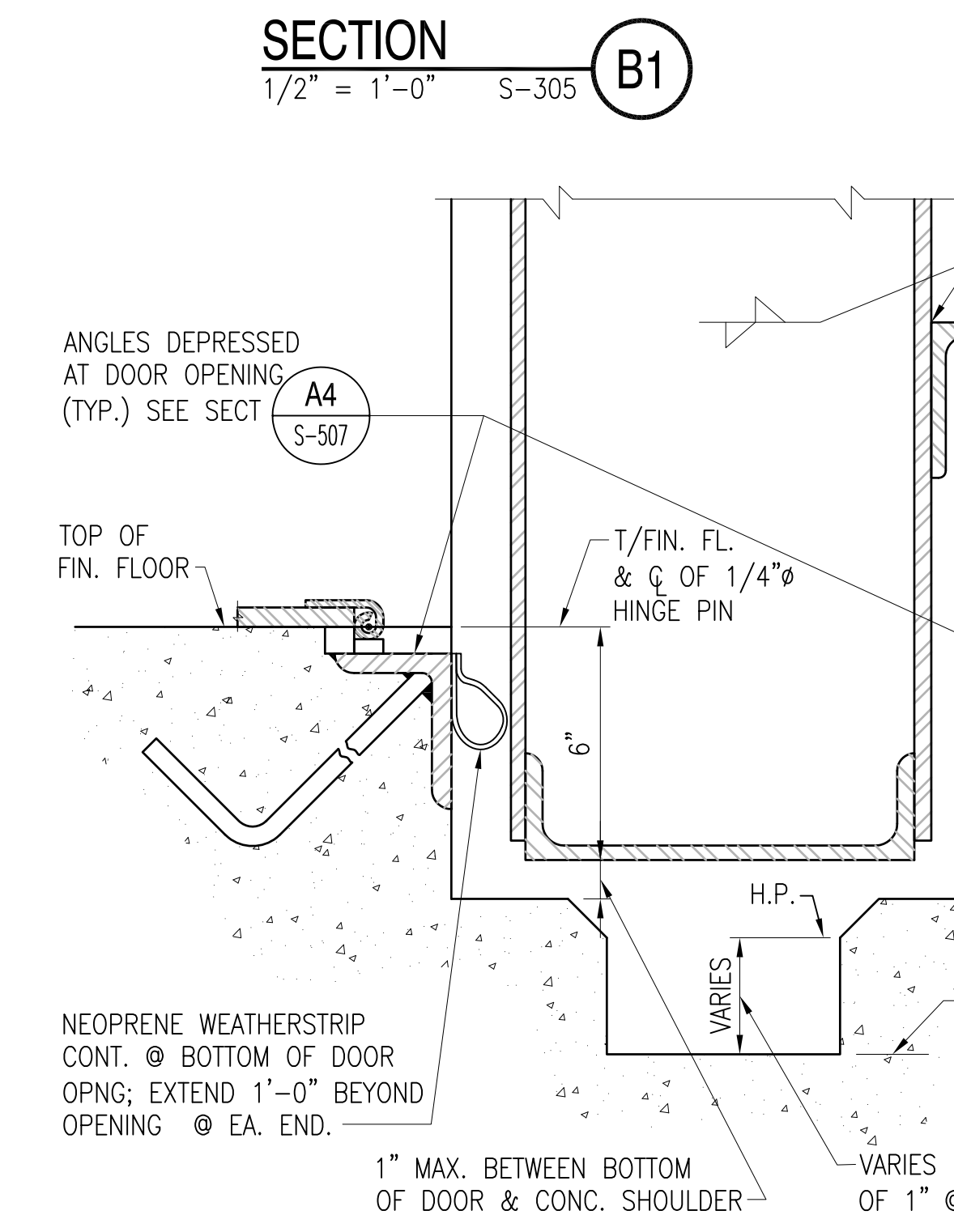
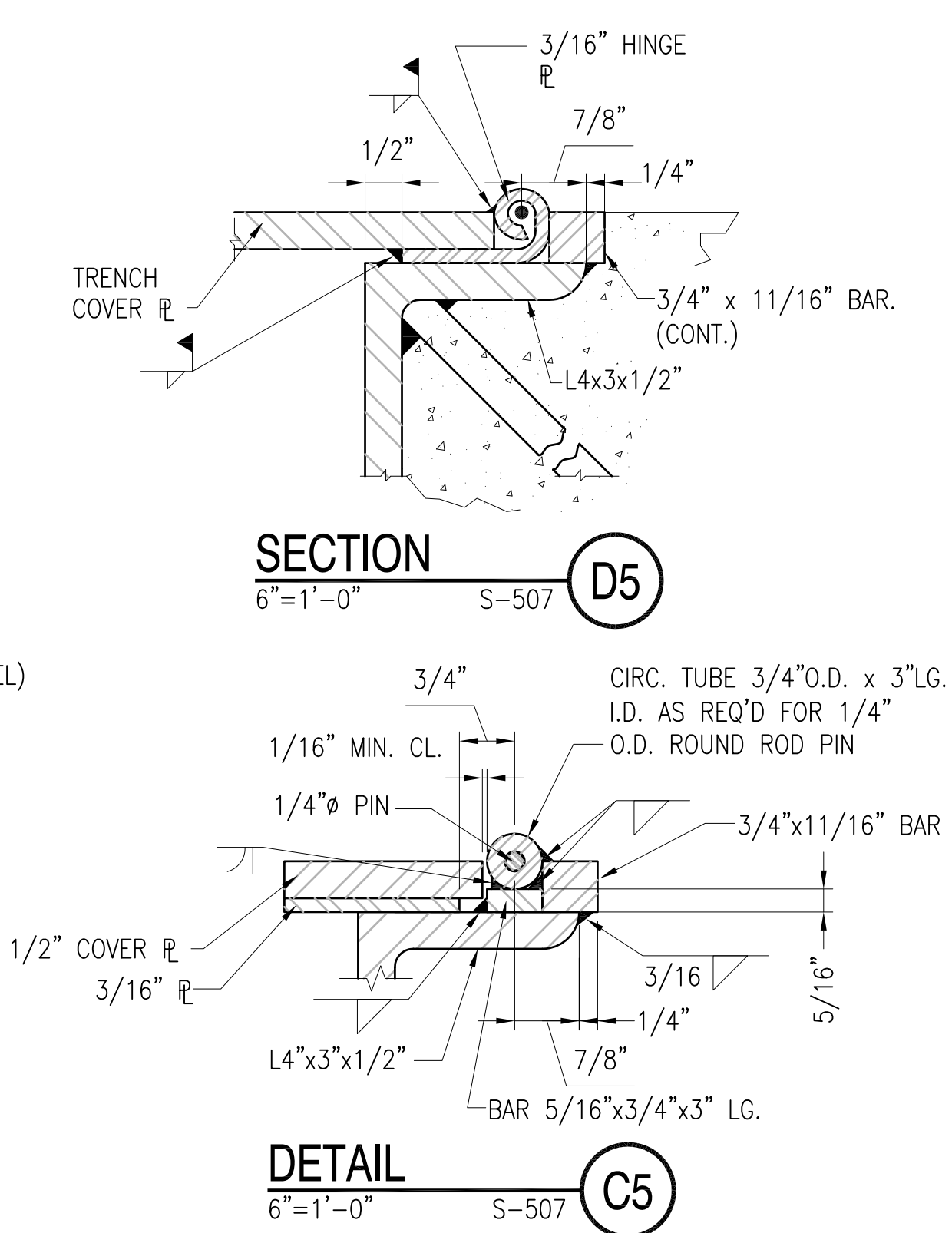
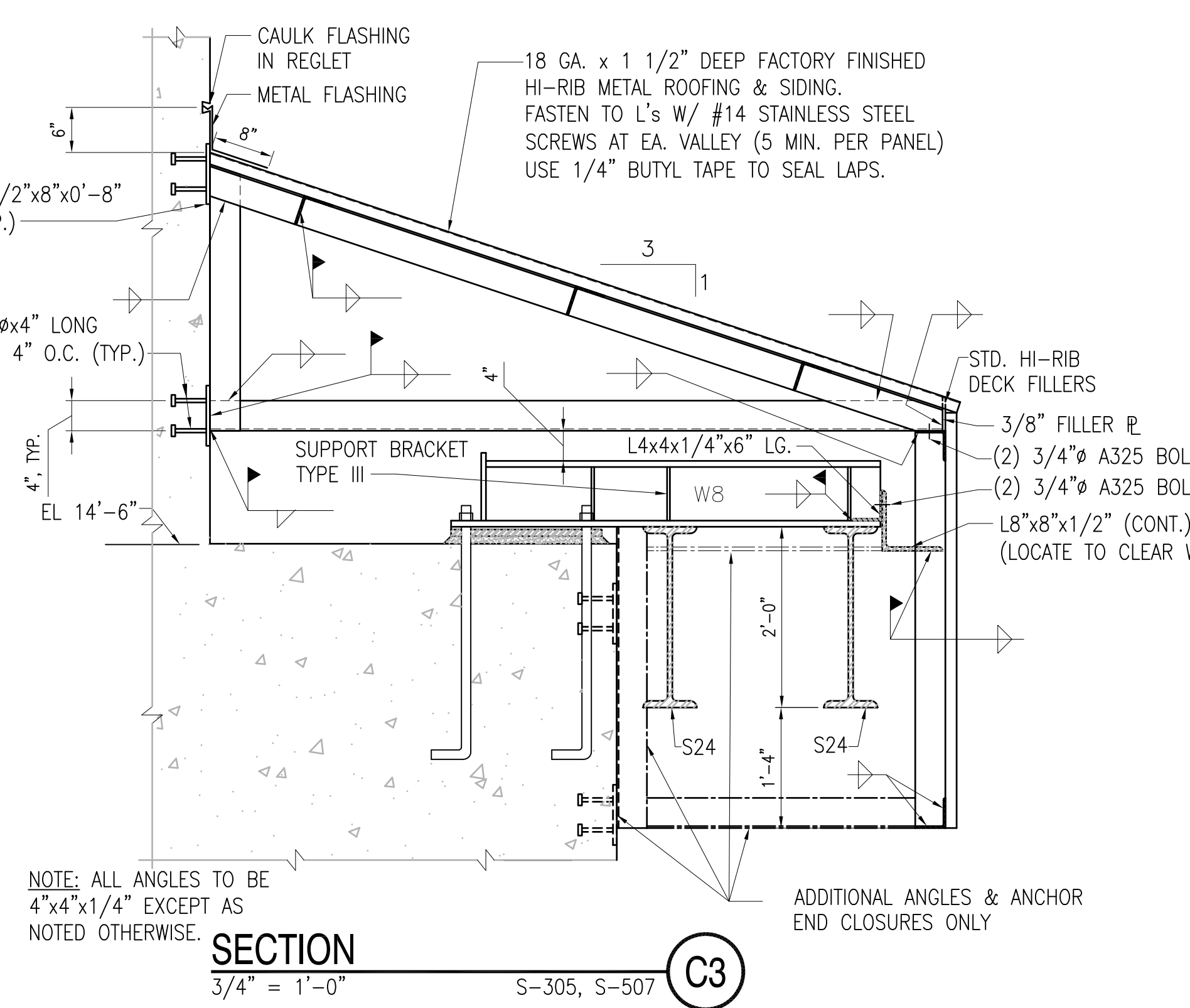
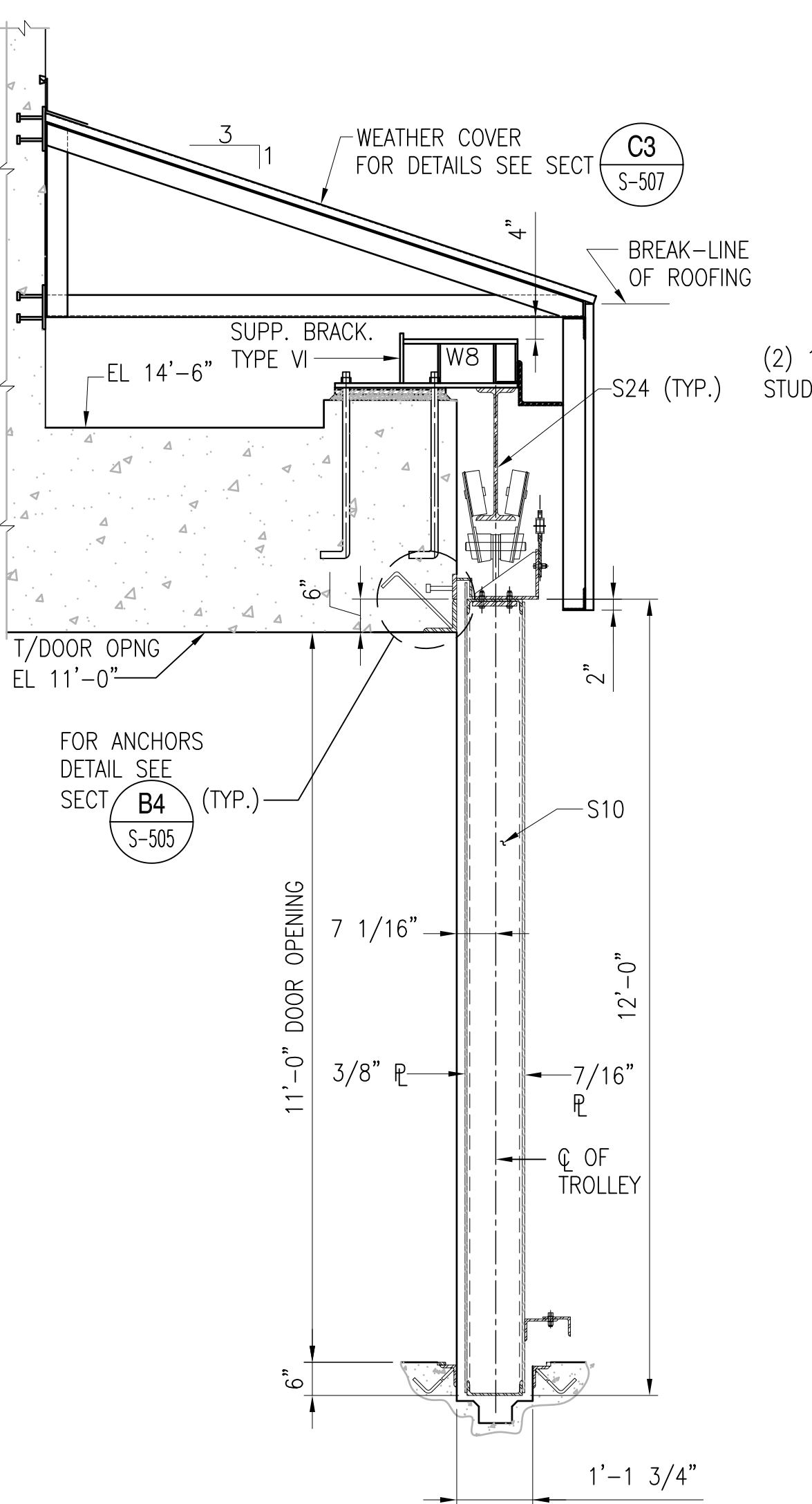
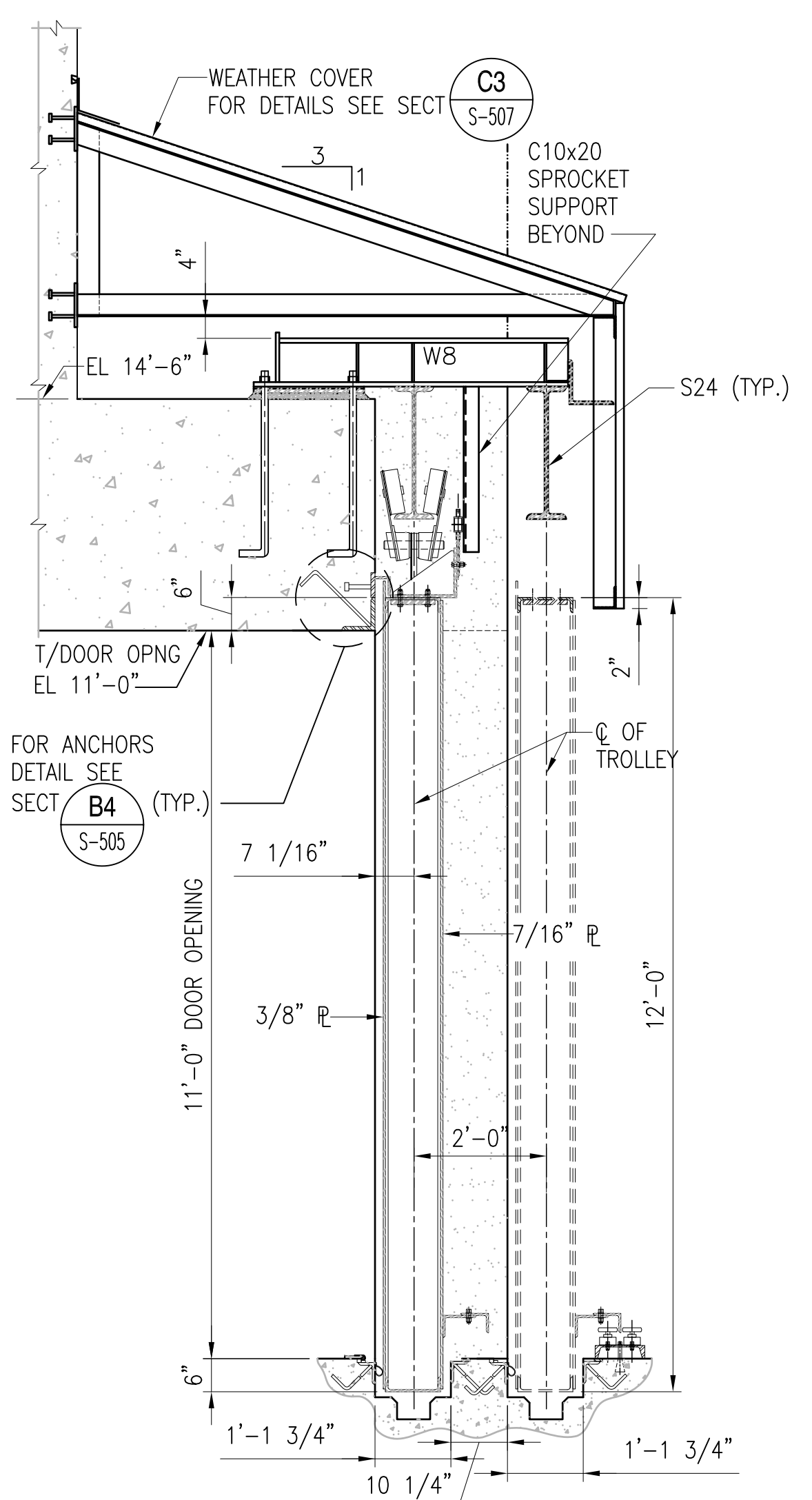
**TYPE C BOX MAGAZINE
WITHOUT LOADING PLATFORM**

DOOR SECTIONS AND DETAILS

CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004701	
SHEET 13 OF 31	
S-505	

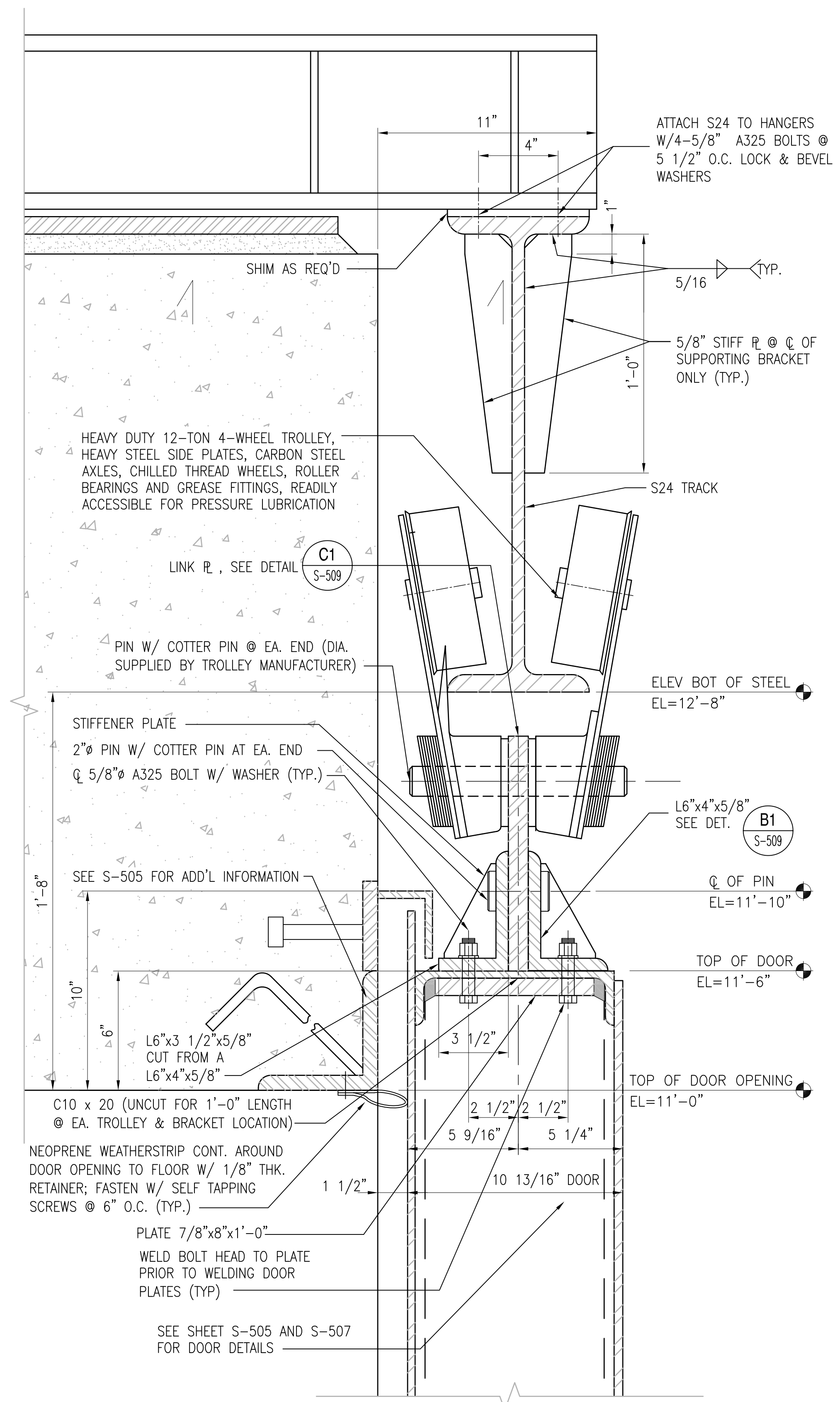
DRAWING REVISION: 15 JANUARY 2008

REVDATE: FILE NAME: \\nasar\k534\NAVFAC\YRKT_166A\NAVFAC\YRKT_166A\CISE\Magazines\Box MAGAZINES - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLING LAYOUT NAME: S-507 PLOTTED: Tuesday, December 14, 2010 - 3:43pm

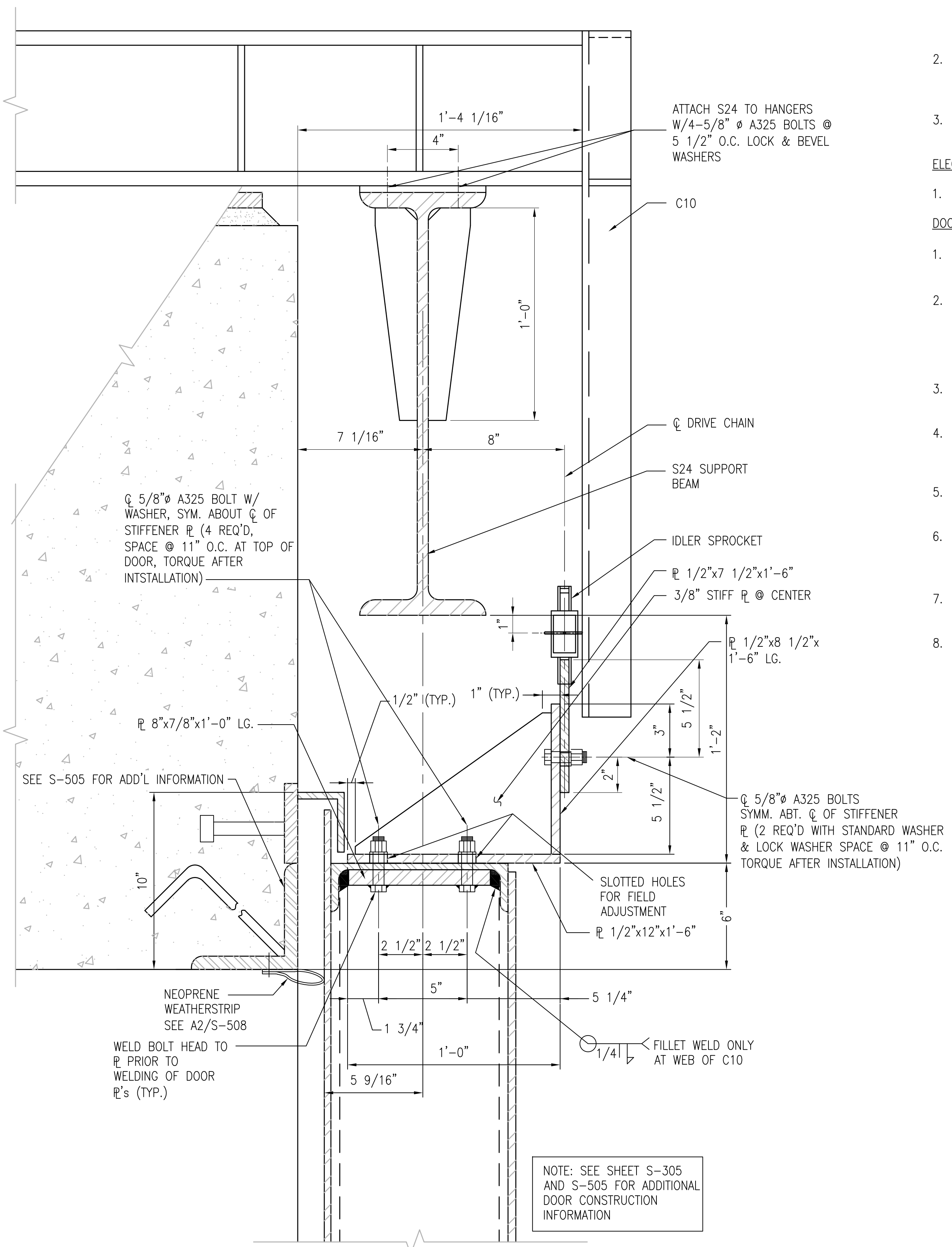


DATE	APPR.
SYMBOL	DESCRIPTION
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	
TRENCH SECTIONS AND DETAILS	
APPROVED	SAT-TO
FOR COMMANDER NAVFAC	
DESIGNER	DR
CHECKER	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004703	
SHEET 15 OF 31	
S-507	
DRAWING REVISION: 15 JANUARY 2008	

REVDATE: FILE NAME: \\naacm\k434\NAVFAC_YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box MAGAZINES - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLAWG LAYOUT NAME: S-508 PLOTTED: Tuesday, December 14, 2010 - 3:44pm

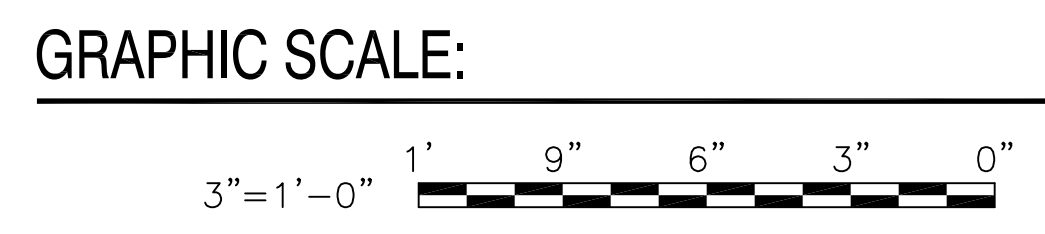


SECTION - TROLLEY ASSEMBLY
SCALE: 3" = 1'-0"
S-305 (A2)



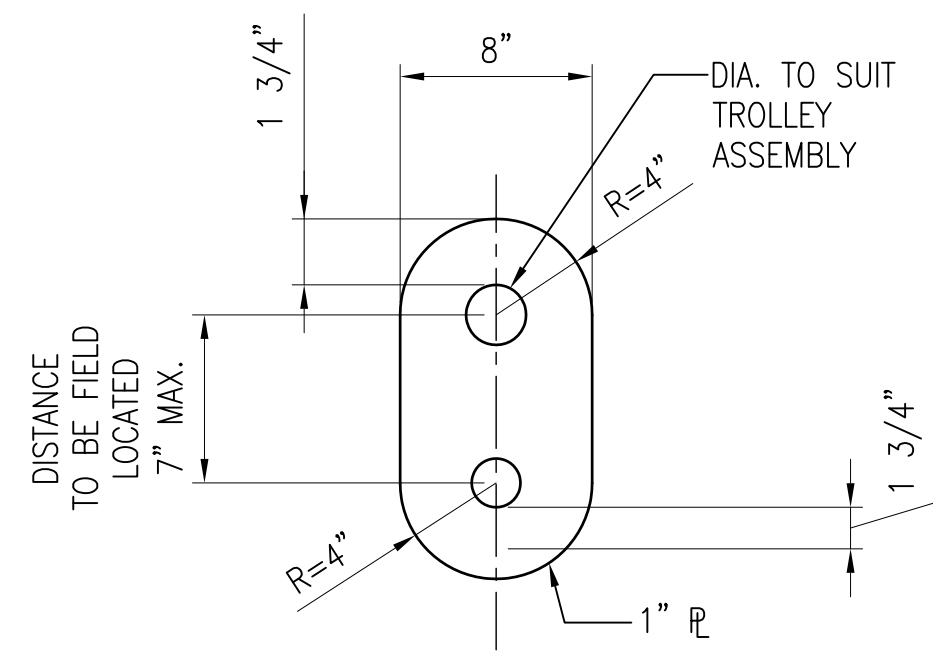
SECTION - DRIVE CHAIN ATTACHMENT BRACKET
SCALE: 3" = 1'-0"
S-305, S-505 (A4)

- NOTES:**
- DOOR REQUIREMENTS**
- DOOR & HARDWARE SHALL BE SHOP ASSEMBLED TO INSURE PROPER CONTACT, CLEARANCES, ALIGNMENT & ENGAGEMENT OF THE DOORS & SMOOTH OPERATION OF LOCKING & DRIVE MECHANISMS. THIS ASSEMBLY WILL BE AT NO ADDITIONAL COST TO THE GOVERNMENT.
 - ALL WEATHER STRIPPING SHALL BE CLOTH INSERTED NEOPRENE, ONE-EIGHTH INCH (1/8") THICK & CONFORMING TO THE FEDERAL SPECIFICATION HH-P-151.
 - ALL PINS, BEARINGS, GEARS, SPROCKETS, SHAFTS & SHEAVES SHALL BE DESIGNED FOR A DOOR LIFE OF 5,000 HOURS OF OPERATION.
- ELECTRICAL REQUIREMENTS**
- SEE ELECTRICAL DRAWINGS FOR ELECTRICAL REQUIREMENTS
- DOOR OPERATOR REQUIREMENTS**
- DESIGN REQUIREMENTS - (A) OUTDOOR OPERATION, (B) 80PSF WIND LOAD, (C) 15 FPM VELOCITY FOR OPENING AND CLOSING DOORS.
 - GEARS, SHAFTS AND SPROCKETS - ALL GEARS IN SPEED REDUCTION UNIT SHALL BE MACHINED TYPE. GEARS AND SHAFTS SHALL BE MOUNTED WITH LONG-LIFE BEARINGS, ENCLOSED IN OIL TIGHT HOUSING AND OPERATED AT ALL TIMES IN AN OIL BATH. ALL SPROCKETS SHALL BE STEEL PLATES.
 - CASTINGS - SHEAVES & OTHER CASTINGS SHALL BE CLOSE GRAINED ALLOYED GRAY CAST IRON.
 - ROLLER CHAINS - ALL ROLLER CHAINS SHALL BE HEAVY DUTY, HIGH STRENGTH, PRECISION ASSEMBLED AND DESIGNED FOR A SAFETY FACTOR OF 5.
 - MOTOR - THE MOTOR SHALL OPERATE NORMALLY AT NO MORE THAN 75 PERCENT OF RATED CAPACITY.
 - LIMIT SWITCHES - TYPE: MECHANICALLY ACTUATED. LIMIT SWITCH SHALL STOP THE DOOR AT END OF TRAVEL (OPEN AND CLOSED POSITIONS)
 - PUSH BUTTON STATION - PUSH BUTTON UNIT SHALL BE A CONSTANT PRESSURE, HEAVY DUTY WEATHER PROOF CONTROL STATION.
 - EMERGENCY OPERATION - PROVIDE A CHAIN-GEAR MECHANISM FOR MANUAL OPERATION OF THE DOOR IN THE EVENT OF ELECTRICAL FAILURE, A MOTOR DISCONNECT, USING A MECHANICAL DEVICE, SHALL BE PROVIDED FOR EMERGENCY OPERATION.

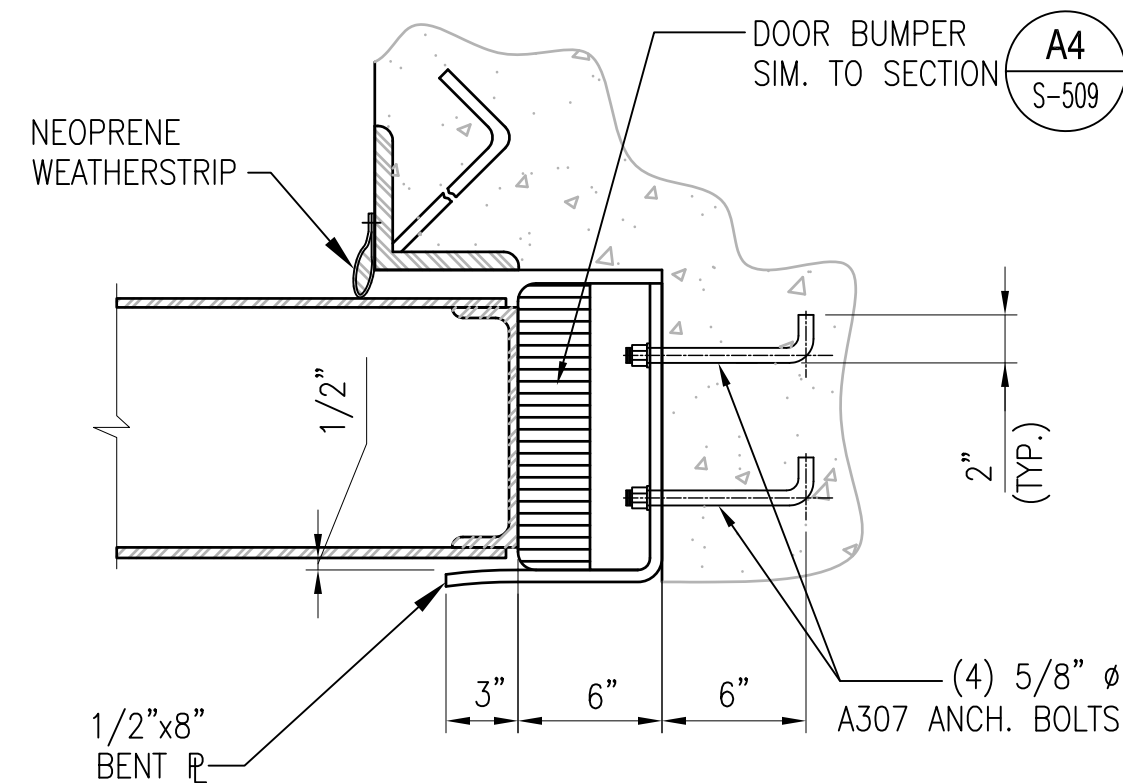


	APPROVED: _____ FOR COMMANDER NAVFAC DES: _____ DR: _____ CHK: _____ GC: _____ NAVFAC MANAGER REVIEWED BY: _____
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM DOOR DETAILS AND SECTIONS
CODE ID. NO. 80091 SIZE D SCALE: AS NOTED	SPEC. NO. _____ CONSTR. CONTR. NO. _____ NAVFAC DRAWING NO. 14004704 SHEET 16 OF 31 S-508
DRAWING REVISION: 15 JANUARY 2008	

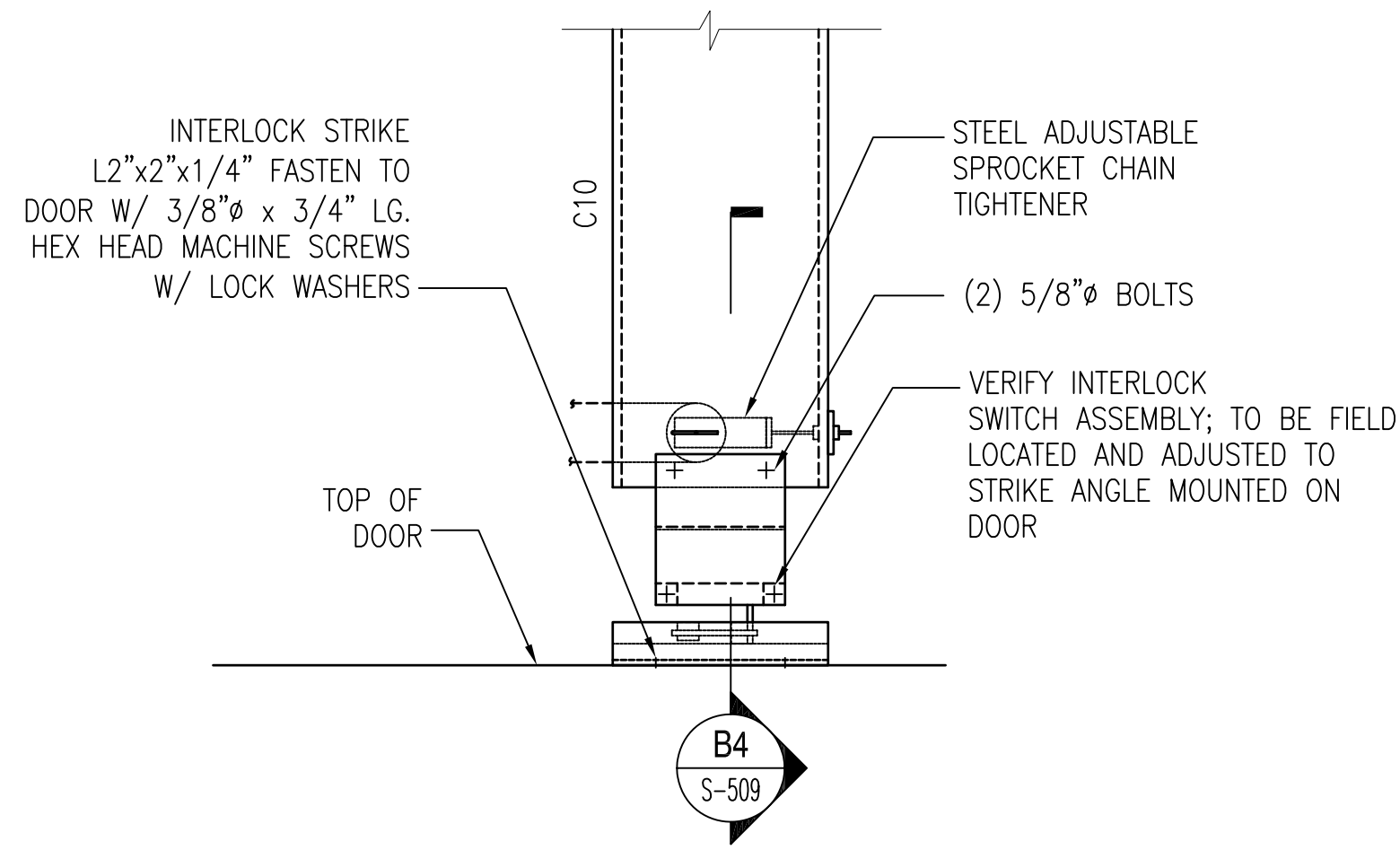
REVDATE: FILE NAME: \\nastrm\k1634\NAVFAC\YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPLWdg - Updated: 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLWdg LAYOUT NAME: S-509 PLOTTED: Tuesday, December 14, 2010 - 3:44pm



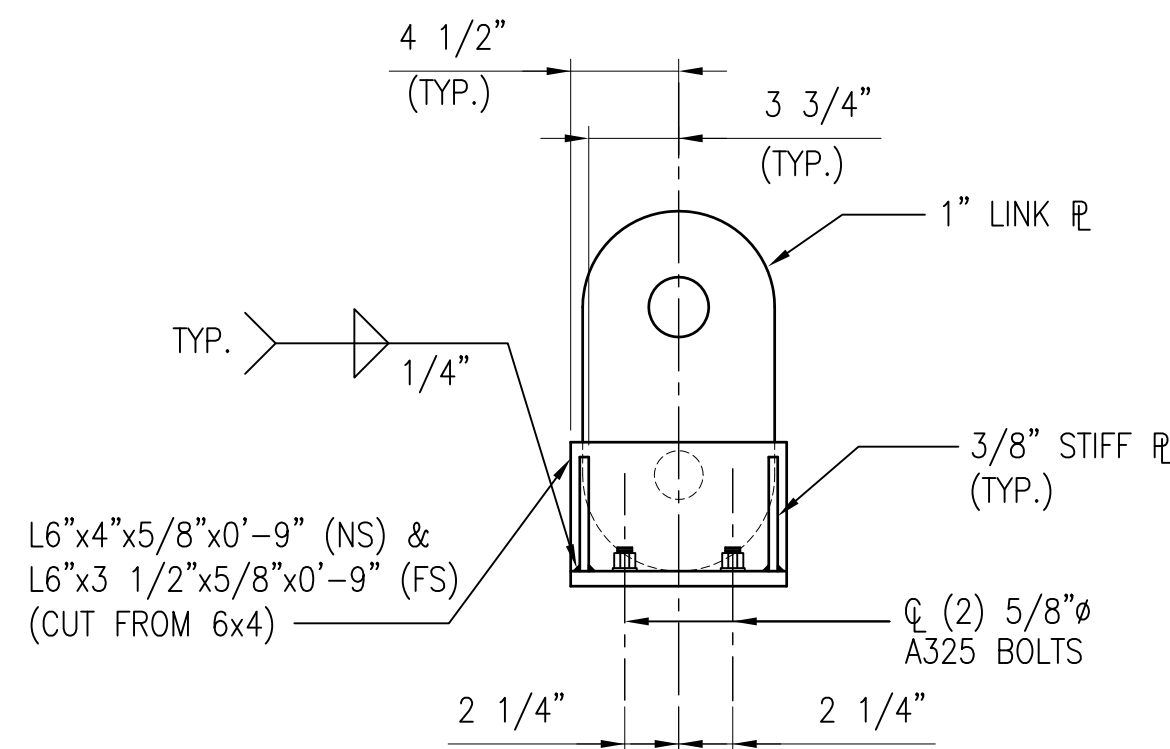
LINK PLATE DETAIL
SCALE: 1 1/2" = 1'-0"
S-508 C1



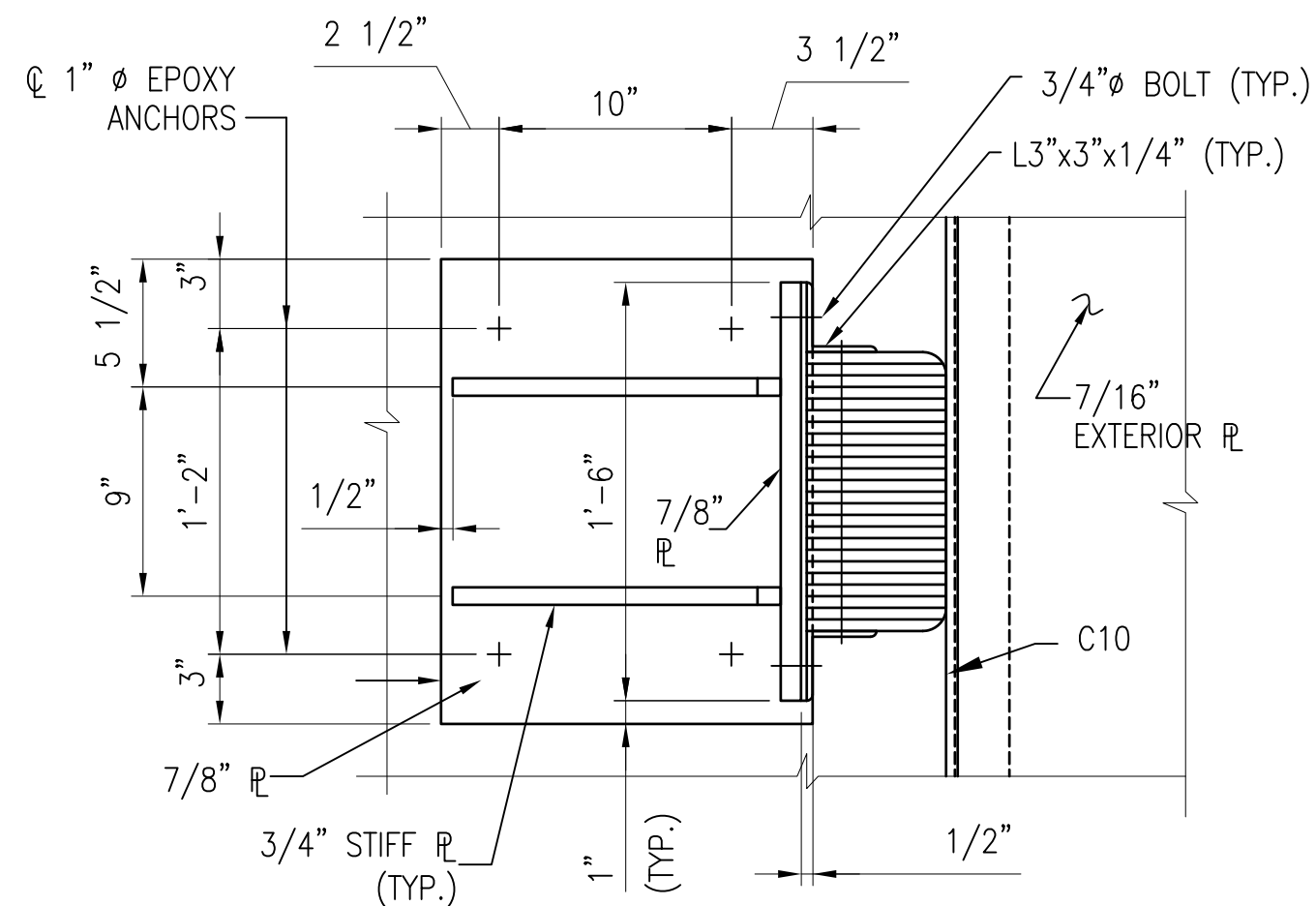
DOOR BINDER DETAIL
SCALE: 1 1/2" = 1'-0"
S-305 C3



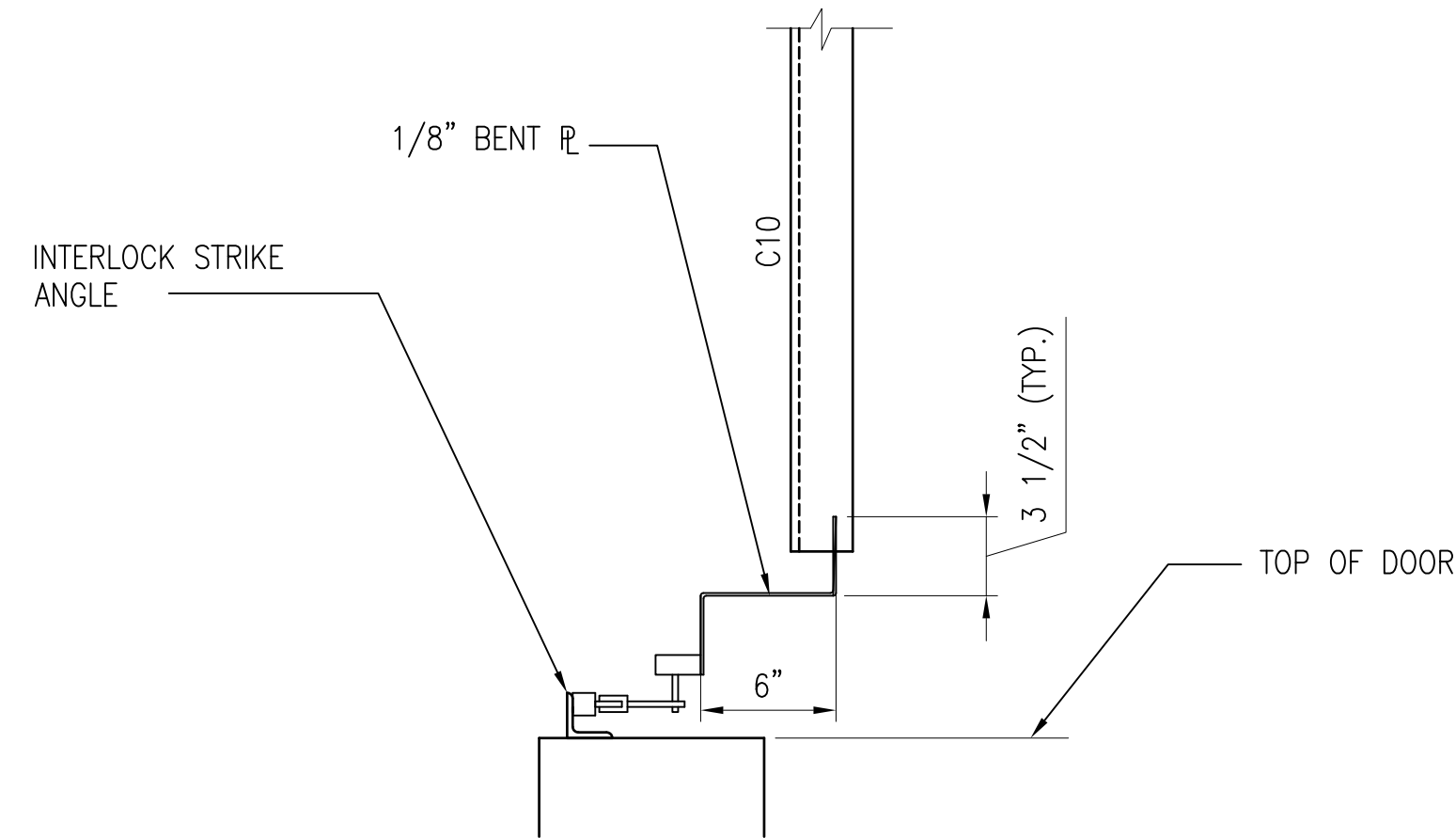
DOOR INTERLOCK DETAIL
SCALE: 1 1/2" = 1'-0"
S-305 C4



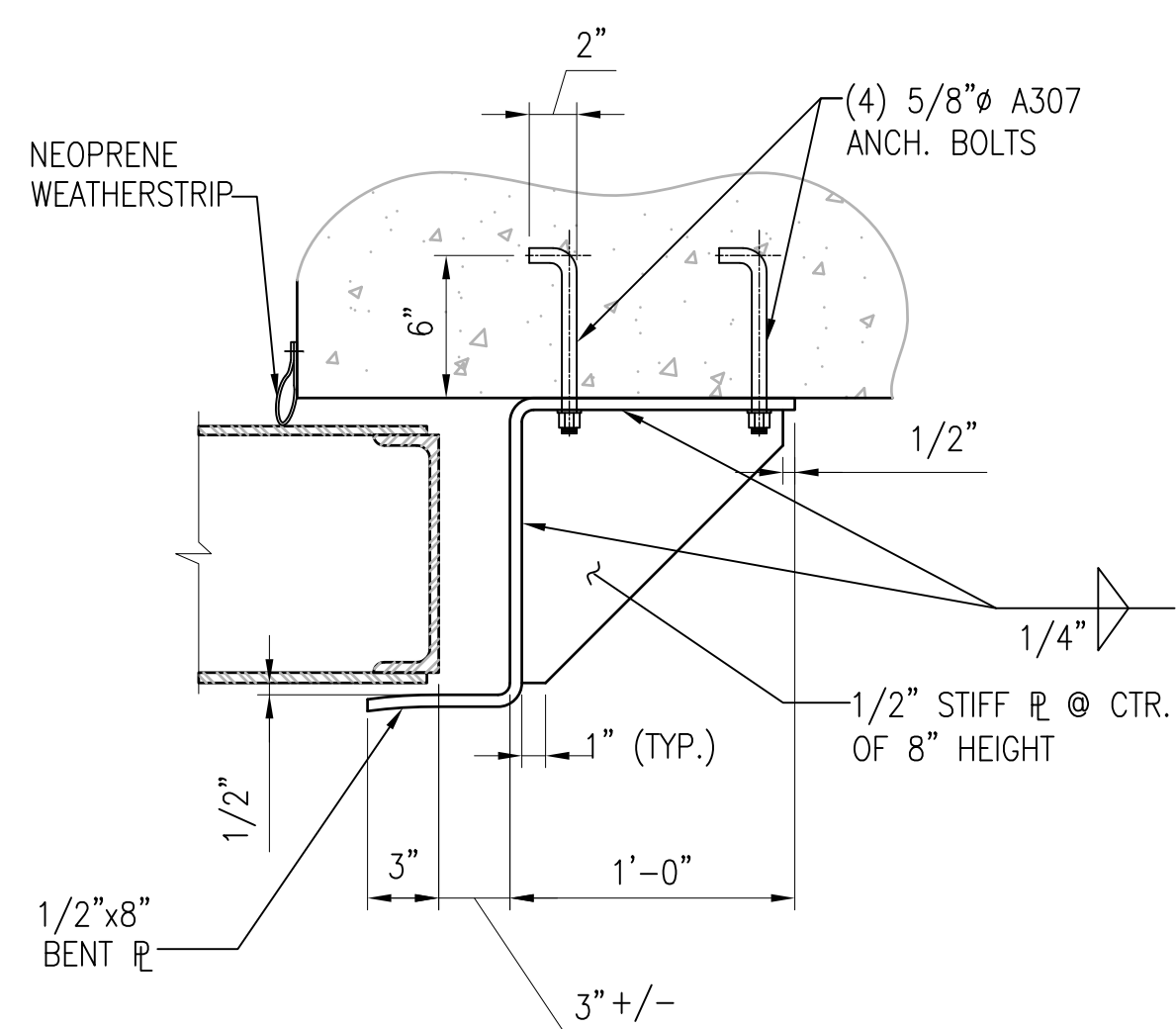
DETAIL
SCALE: 1 1/2" = 1'-0"
S-508 B1



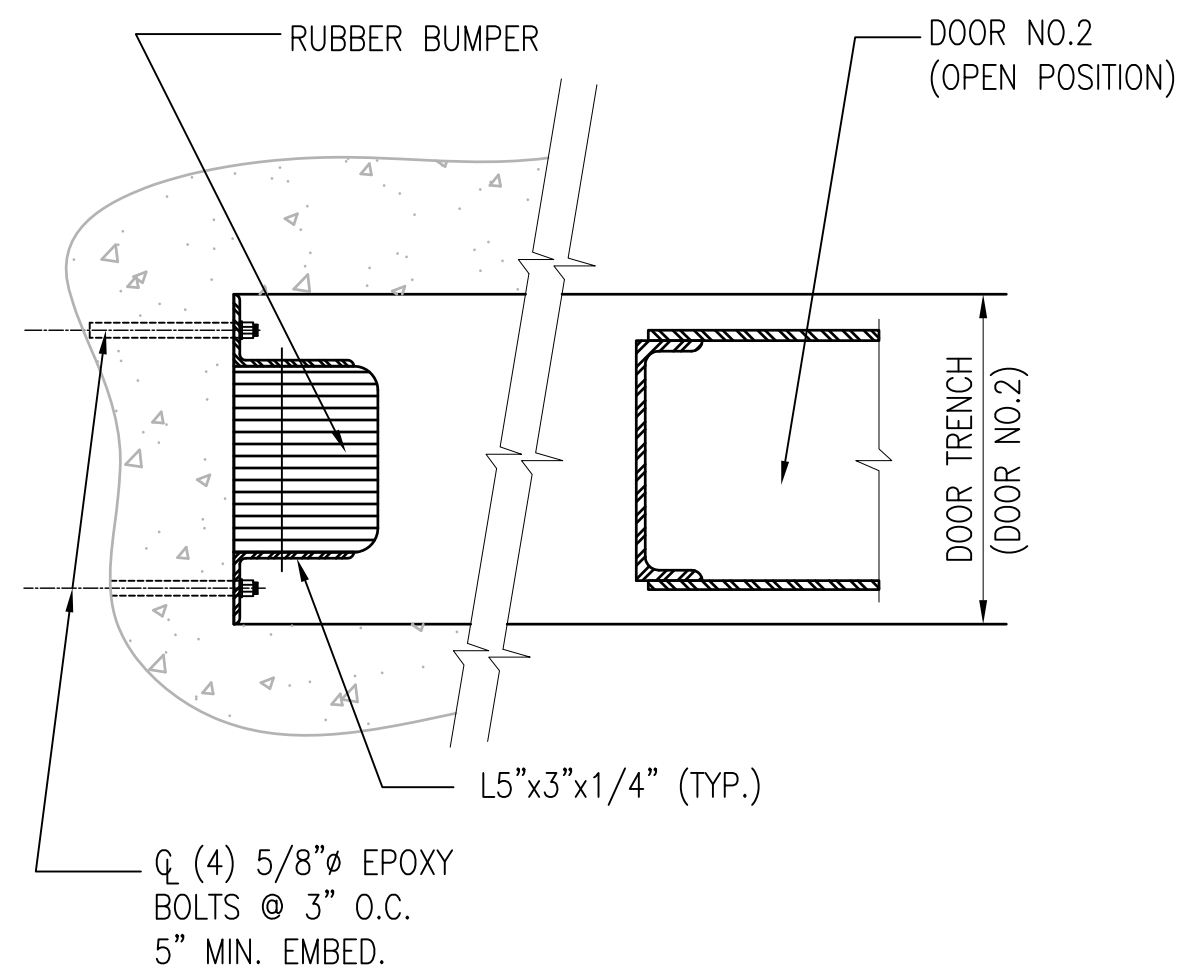
DOOR BUMPER SECTION
SCALE: 1 1/2" = 1'-0"
S-509 B3



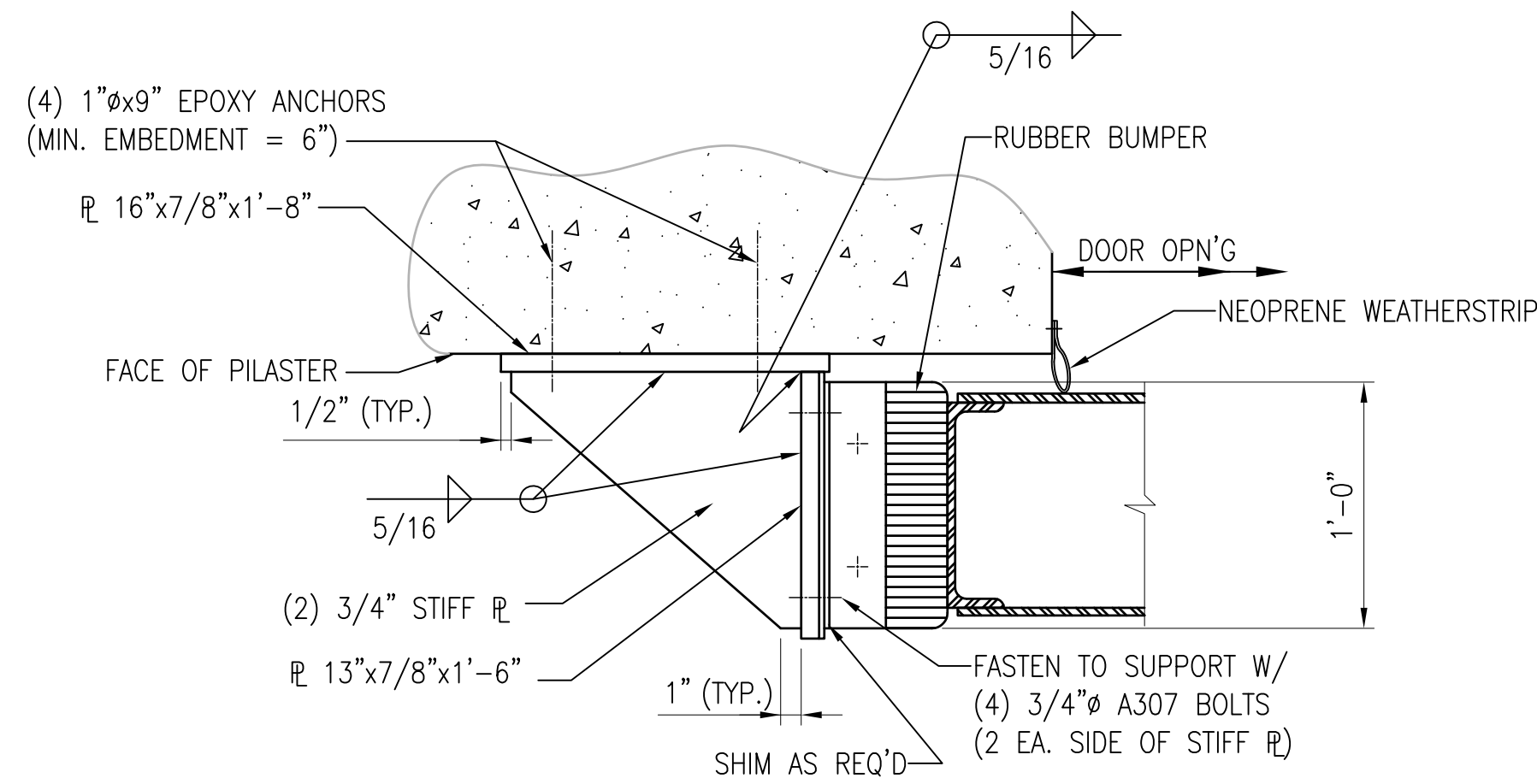
SECTION
SCALE: 1 1/2" = 1'-0"
S-509 B4



DOOR BINDER DETAIL
SCALE: 1 1/2" = 1'-0"
S-305 A1

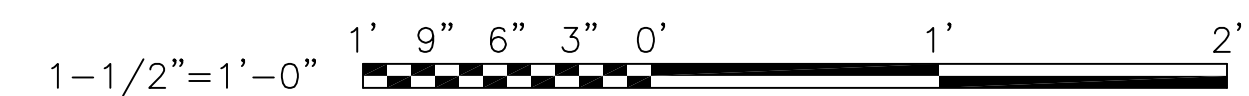


DOOR BUMPER IN TRENCH DETAIL
SCALE: 1 1/2" = 1'-0"
S-305 A3



DOOR BUMPER SECTION
SCALE: 1 1/2" = 1'-0"
S-305, S-509 A4

GRAPHIC SCALE:



APPROVED	SAT-TO
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION - NORFOLK, VIRGINIA
NAVFACANT

TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM
DOOR DETAILS AND SECTIONS

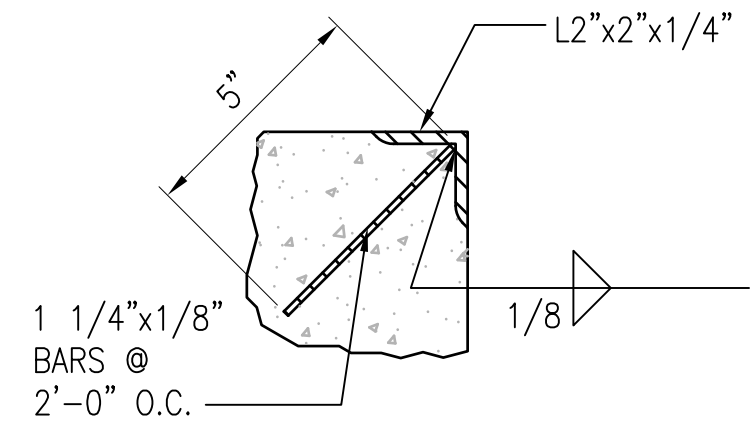
CODE ID. NO. 80091 SIZE D
SCALE: AS NOTED

SPEC. NO.
CONSTR. CONTR. NO.

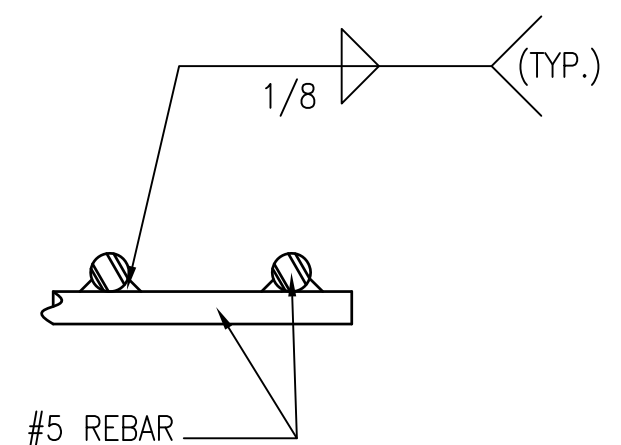
NAVFAC DRAWING NO. 14004705
SHEET 17 OF 31
S-509

DRAWING REVISION: 15 JANUARY 2008

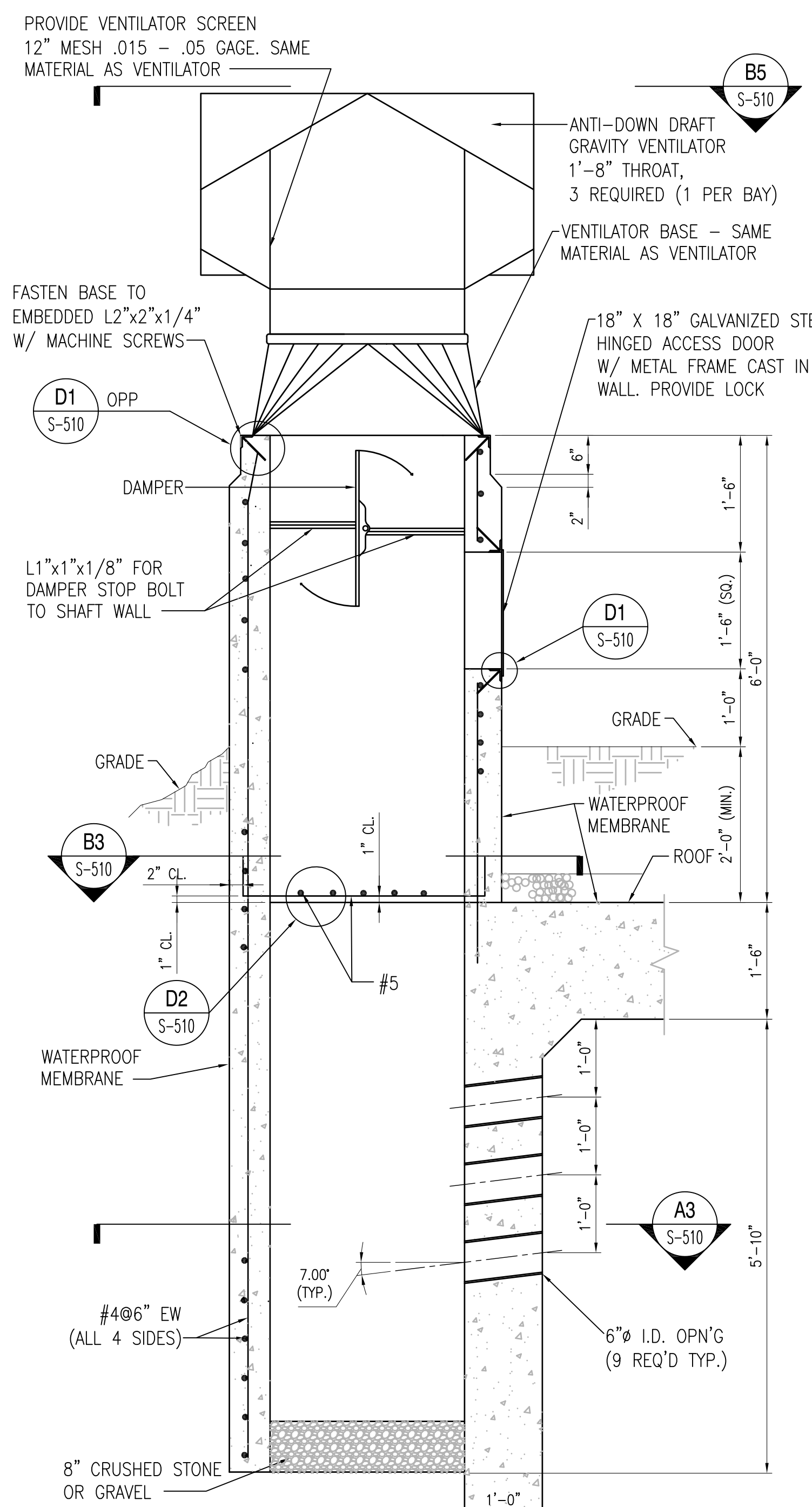
REVDATE: FILE NAME: \\nasar\k434\NAVFAC\YRKT_16AA\NAVFAC\YRKT_16AA\CISE\Magazines\Box MASZINES - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPLWdg LAYOUT NAME: S-510 PLOTTED: Tuesday, December 14, 2010 - 3:45pm



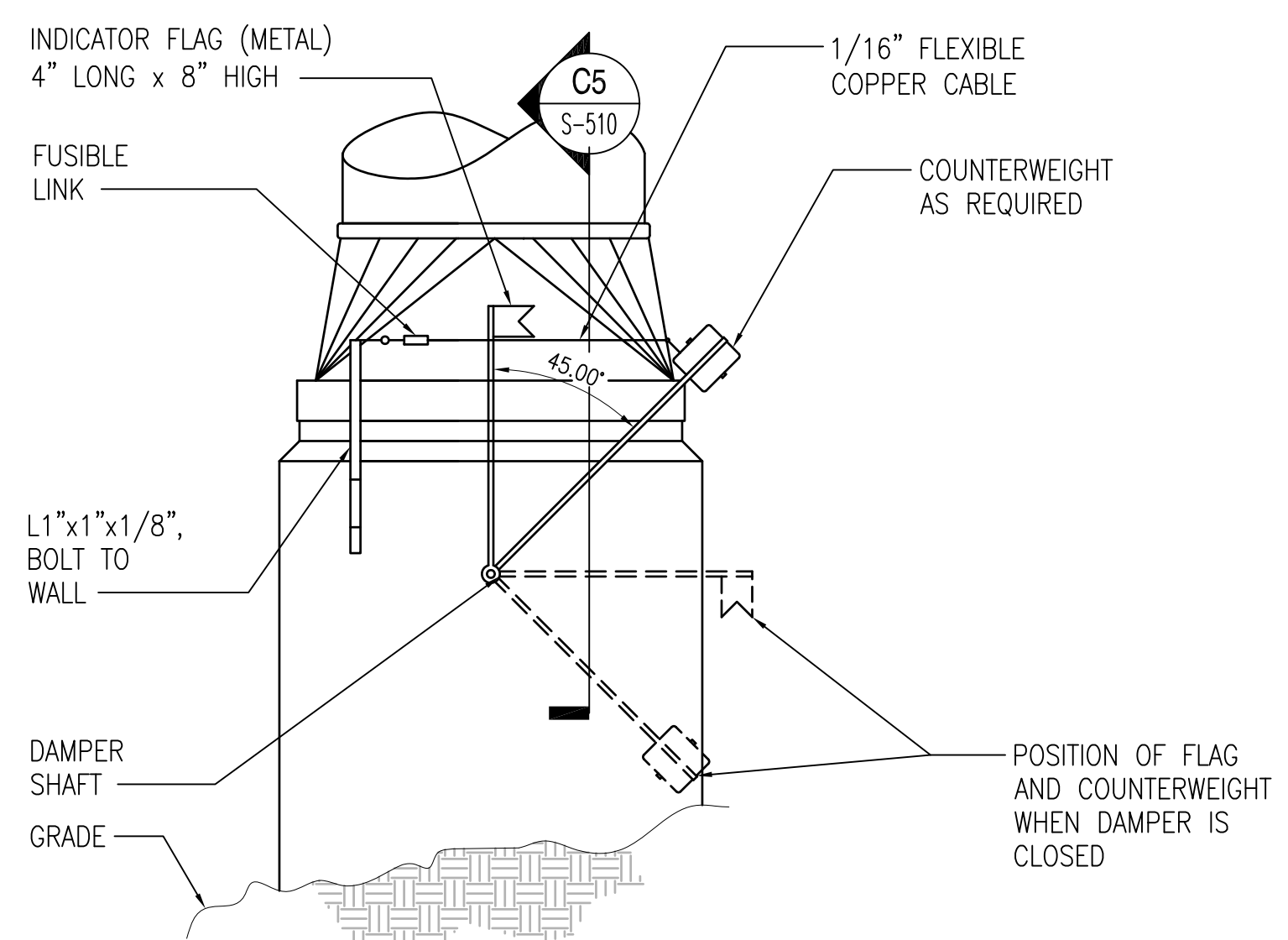
DETAIL
SCALE: 3" = 1'-0" S-510 **D1**



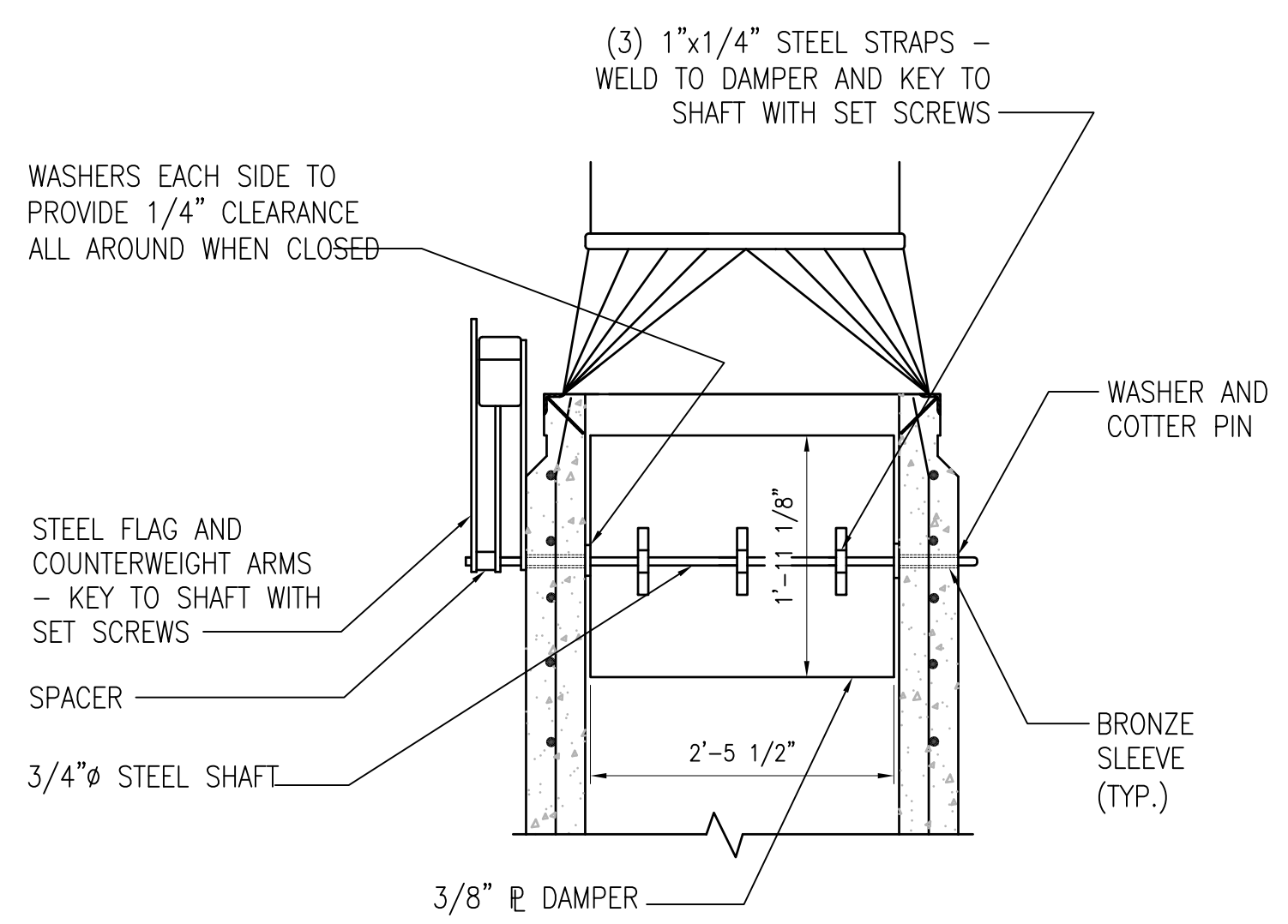
DETAIL
SCALE: 3" = 1'-0" S-510 **D2**



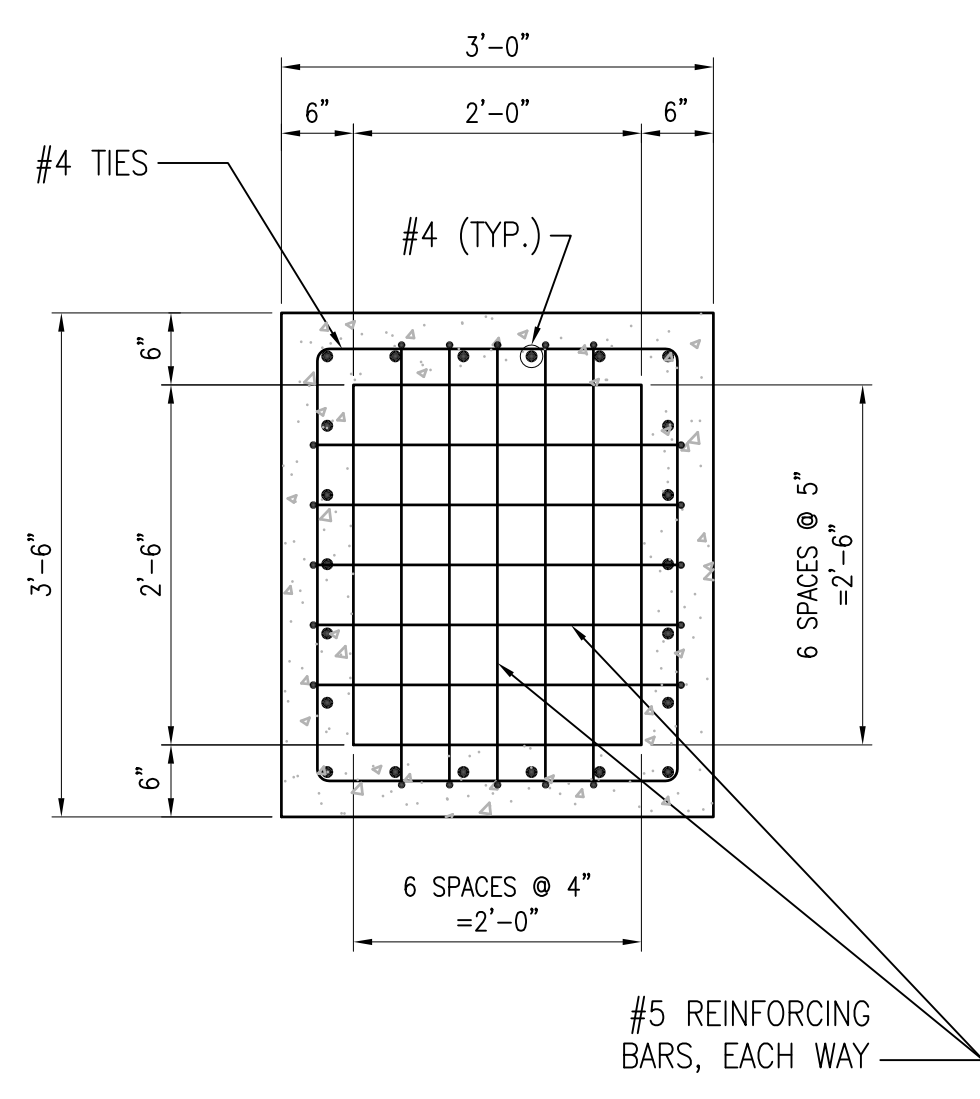
VENTILATOR SECTION
SCALE: 3/4" = 1'-0" S-102, S-510 **A1**



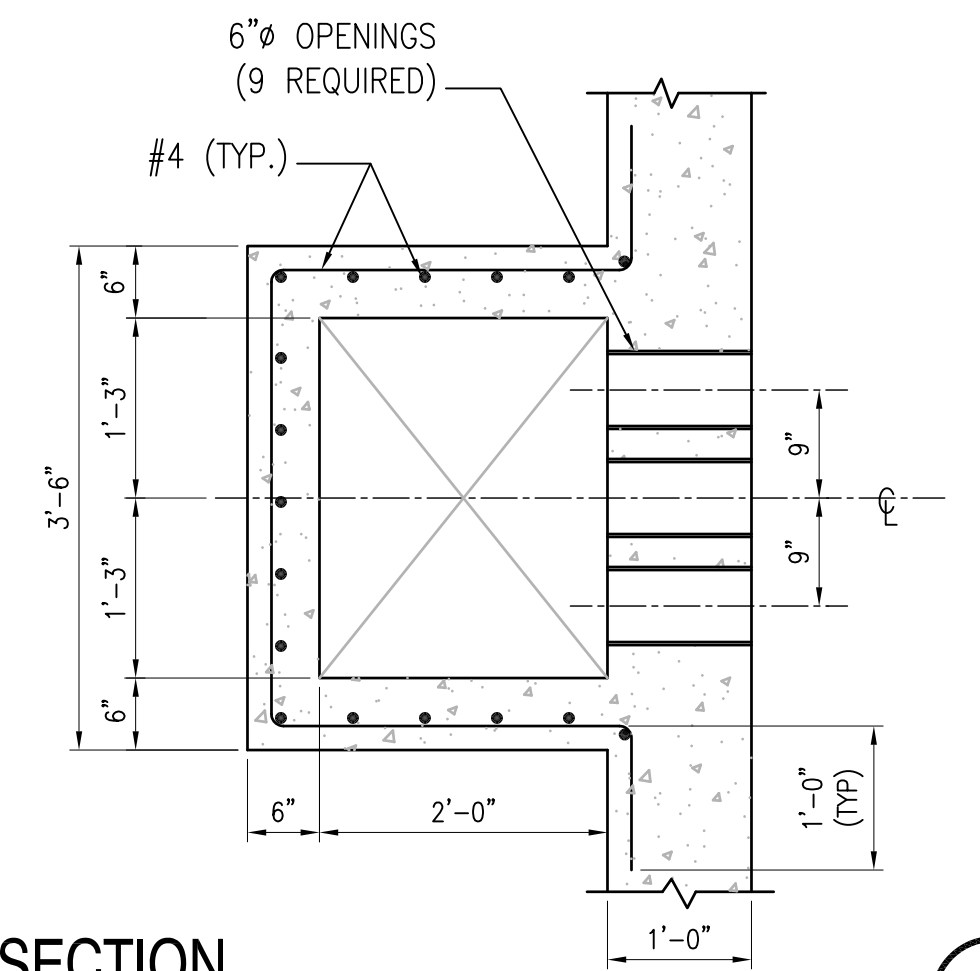
ELEVATION
SCALE: 3/4" = 1'-0" S-510 **C3**



SECTION
SCALE: 3/4" = 1'-0" S-510 **C5**

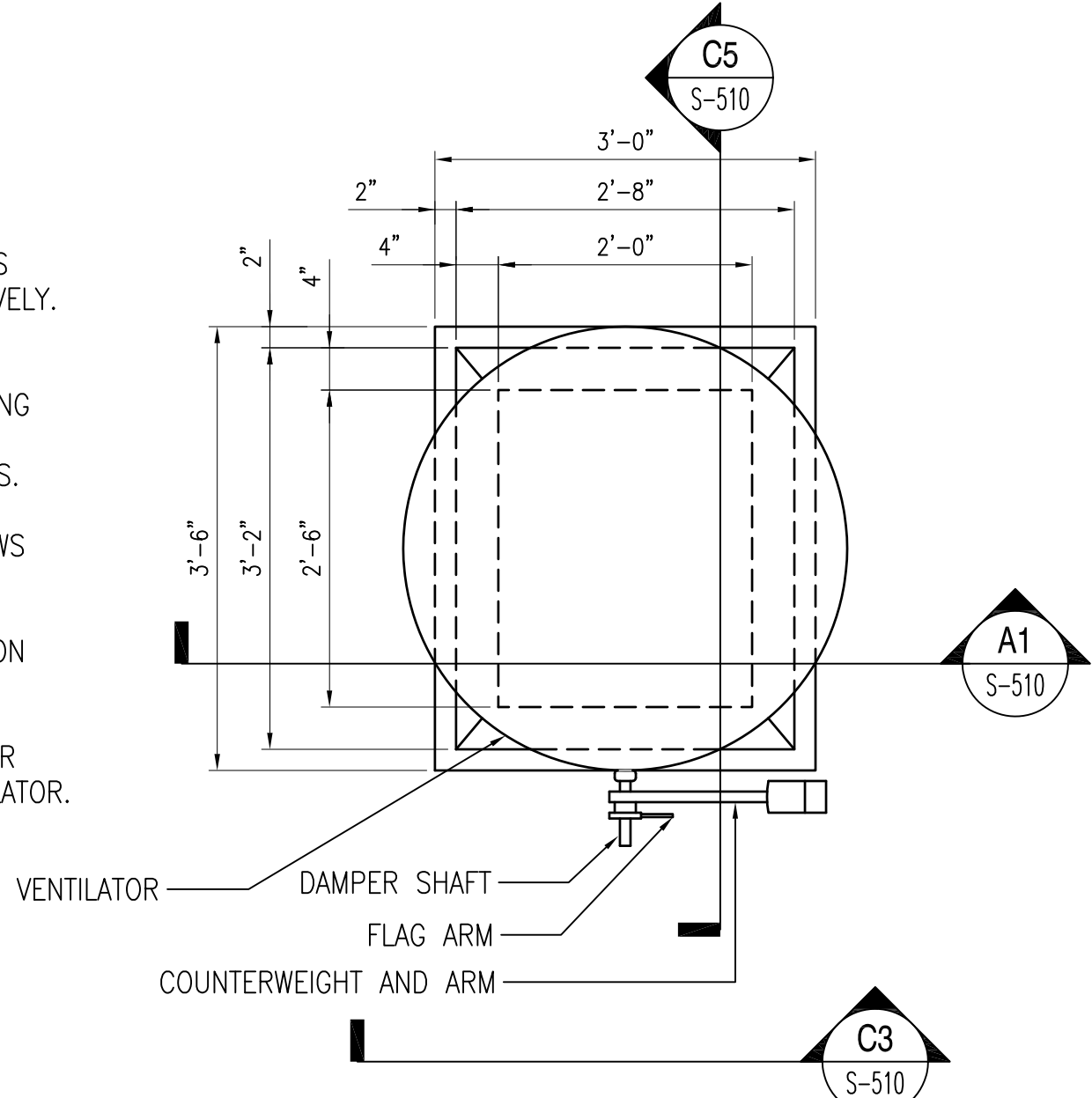


SECTION
SCALE: 3/4" = 1'-0" S-510 **B3**



SECTION
SCALE: 3/4" = 1'-0" S-510 **A3**

- NOTES:**
1. ALL DAMPER AND SHAFT ASSEMBLIES SHALL OPERATE FREELY AND POSITIVELY.
 2. FUSIBLE LINKS SHALL HAVE MELTING POINT OF 160' TO 165' F. BREAKING STRENGTH SHALL BE SUITABLE FOR LOADS IMPOSED BY COUNTERWEIGHTS.
 3. ALL SET SCREWS & MACHINE SCREWS SHALL BE BRASS.
 4. DESIGN FOR VENTILATOR IS BASED ON STEADY WIND SPEED OF 85 MPH.
 5. REFER TO ELECTRICAL DRAWINGS FOR LIGHTNING ROD LOCATION ON VENTILATOR.



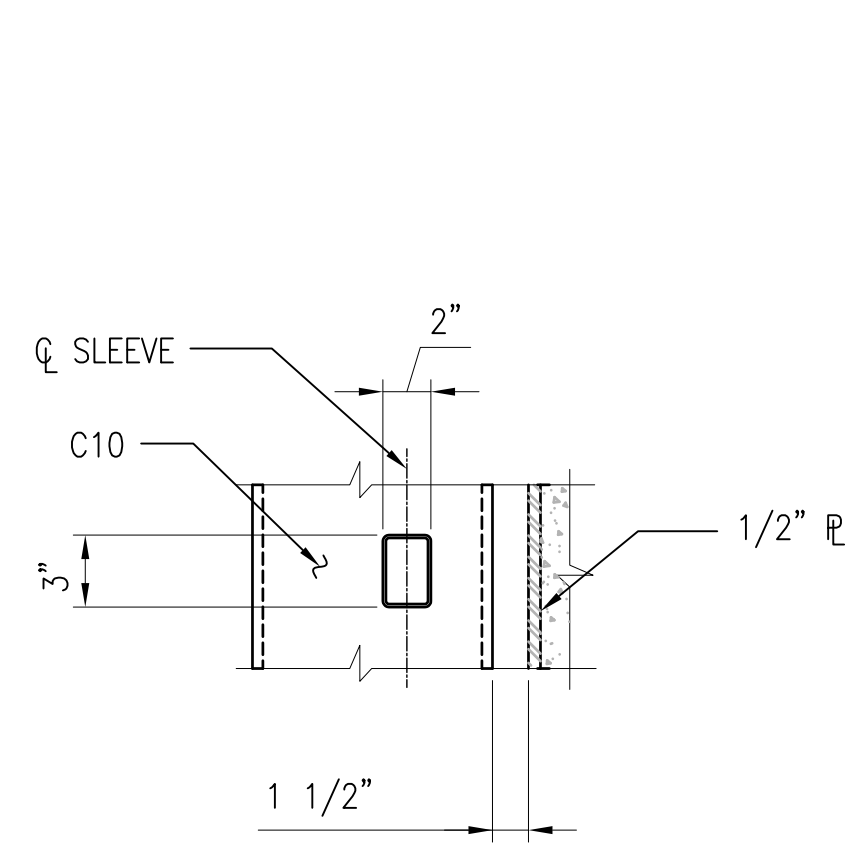
DETAIL
SCALE: 3/4" = 1'-0" S-510 **B5**

GRAPHIC SCALE:

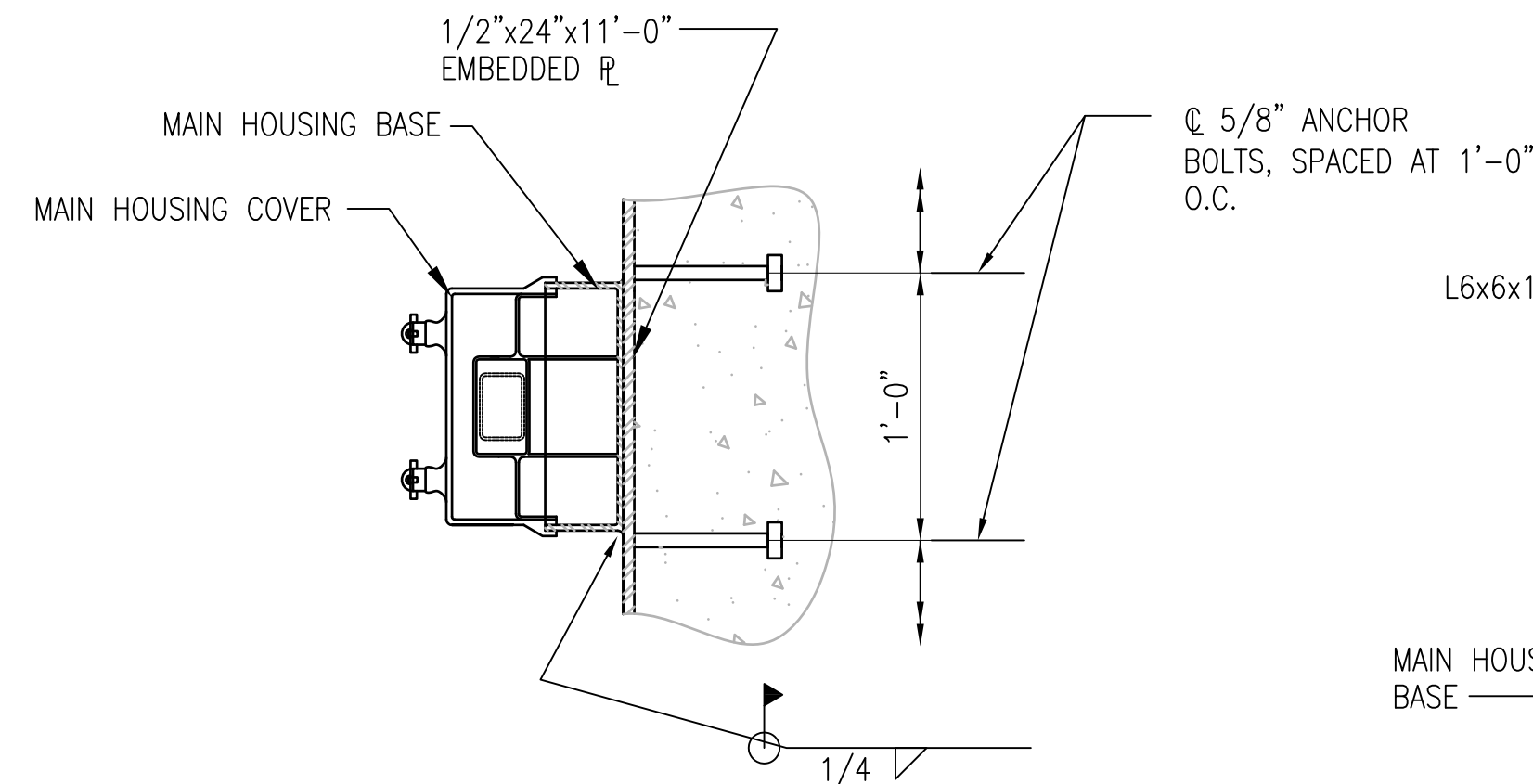


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DATE									
APPR.									
DESCRIPTION									
SYM									
<p>FOR COMMANDER NAVFAC</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>DES</td><td>DR</td></tr> <tr><td>CHK</td><td>GC</td></tr> <tr><td>NAVFAC MANAGER</td><td> </td></tr> <tr><td>REVIEWED BY</td><td> </td></tr> </table>		DES	DR	CHK	GC	NAVFAC MANAGER		REVIEWED BY	
DES	DR								
CHK	GC								
NAVFAC MANAGER									
REVIEWED BY									
<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT</p>									
<p>TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM</p>									
<p>VENTILATOR DETAILS</p>									
<p>CODE ID. NO. 80091 SIZE D</p> <p>SCALE: AS NOTED</p> <p>SPEC. NO.</p> <p>CONSTR. CONTR. NO.</p> <p>NAVFAC DRAWING NO. 14004706</p> <p>SHEET 18 OF 31</p> <p>S-510</p> <p style="font-size: small;">DRAWING REVISION: 15 JANUARY 2008</p>									

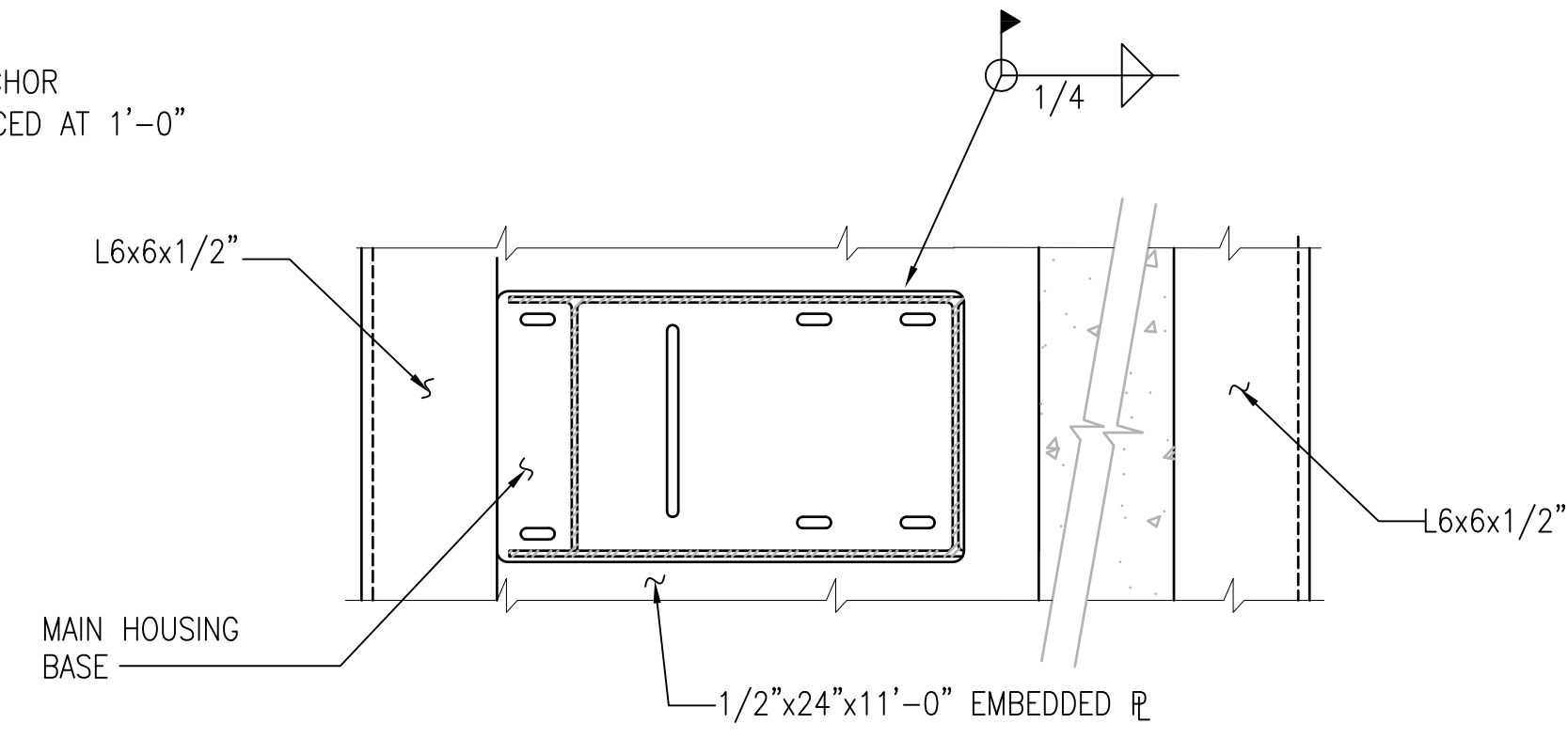
REVDATE: FILE NAME: \\napec\k634\NAVFAC_YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\@Box_MAGAZINES - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-513 PLOTTED: Tuesday, December 14, 2010 - 3:47pm



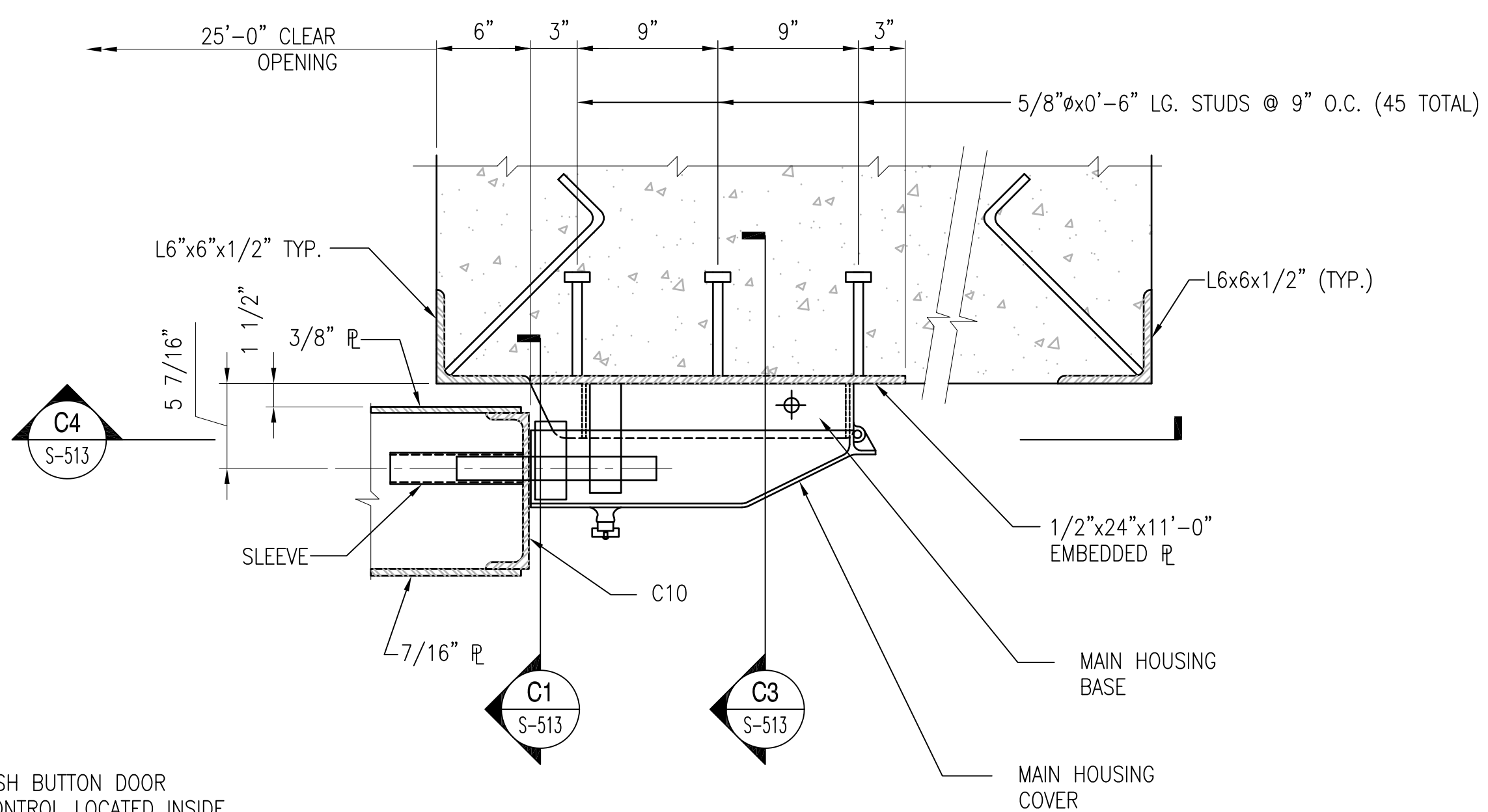
SECTION C1
1 1/2"=1'-0" S-513



SECTION C3
1 1/2"=1'-0" S-513



SECTION C4
1 1/2"=1'-0" S-513



NOTE: PUSH BUTTON DOOR MOTOR CONTROL LOCATED INSIDE THE HASP, SEE NAPEC DWG. No. 53711-5532340

NOTE: HIGH SECURITY HASP ON DOOR NO.2 SHALL BE NAPEC 1332 UNIVERSAL HASP, GOV'T FURNISHED AND SHALL BE INSTALLED IN ACCORDANCE WITH NAVAMPROENGCEN PUBLICATION "STANDARD PLANS FOR HIGH SECURITY HASPS AND INTRUDER DETECTION SYSTEMS ASHORE" INSTALLATION PROCEDURE FOR THE HASP SHALL FOLLOW STEPS 1 THRU 8 LISTED ON NAPEC STANDARD DWG. 1446.

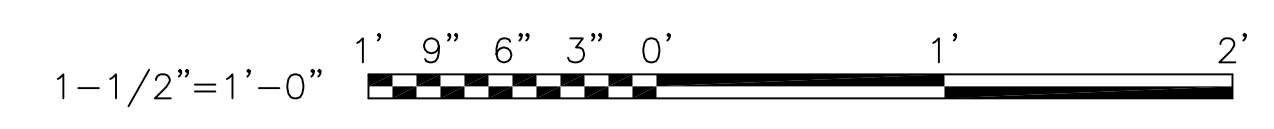
NOTES TO DESIGNER - REMOVE THESE NOTES WHEN PREPARING CONSTRUCTION DRAWINGS FOR SITE ADAPTATION OF THIS DESIGN



- SHEETS S-513 & S-513(ALT) IDENTIFY DIFFERENT LOCKING SYSTEMS. THE EOR SHALL VERIFY THE CORRECT LOCKING SYSTEM REQUIRED AND REMOVE THE REDUNDANT SHEET FROM THE CONSTRUCTION CONTRACT DOCUMENTS FOR THE SYSTEM NOT USED (COORDINATE WITH CONTRACTING OFFICER).

DETAIL - HIGH SECURITY HASP (NAPEC 1332)
1 1/2"=1'-0"

S-305 **A4**

GRAPHIC SCALE:

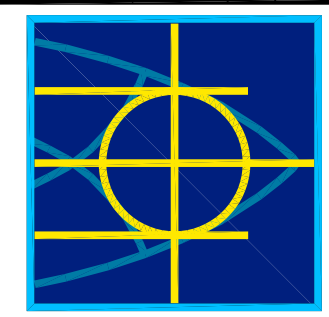



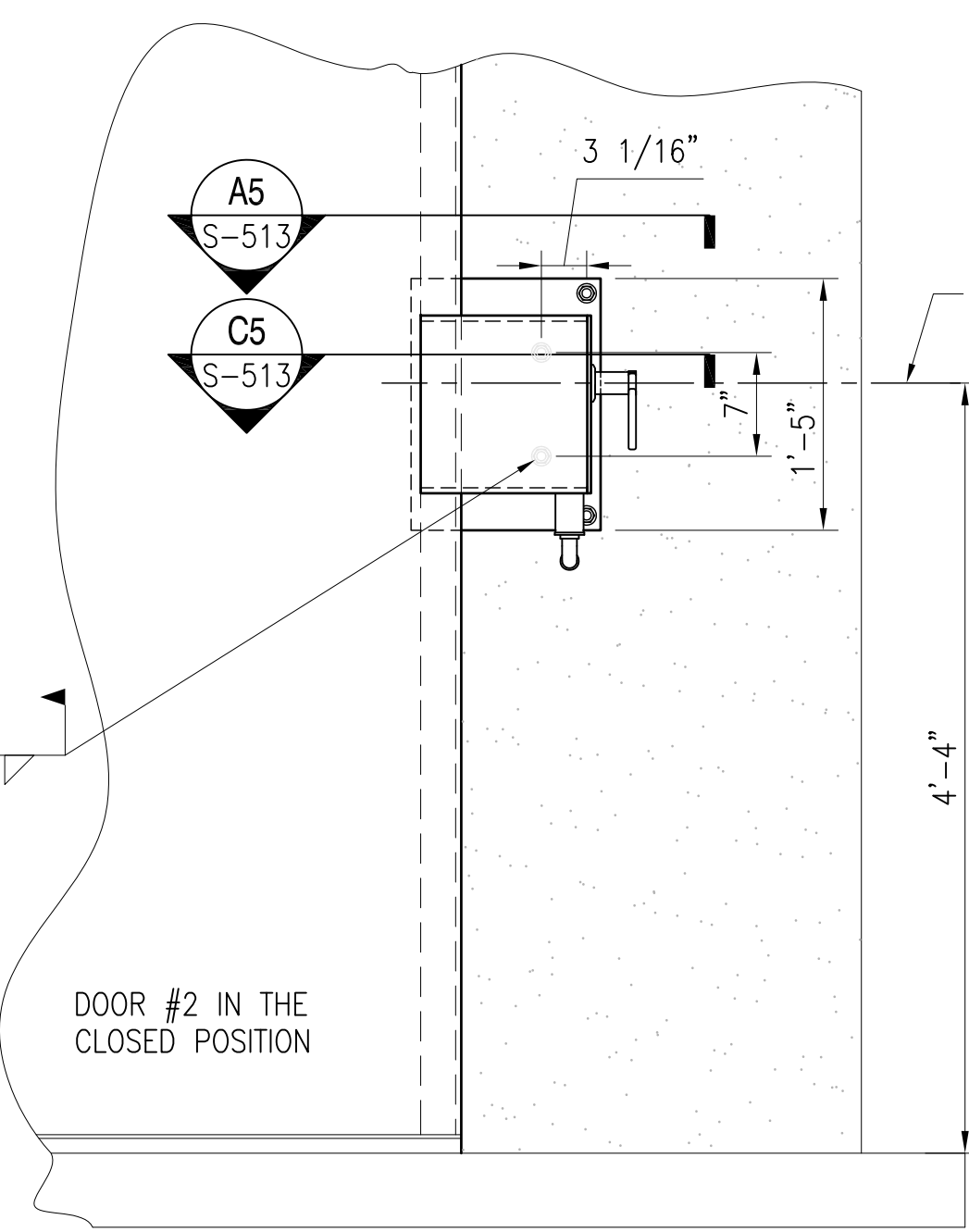
DATE	APPR.
DESCRIPTION	
SYM	
	
	
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM STANDARD HIGH SECURITY HASP DETAILS	
CODE ID. NO. 80091	SIZE D
SCALE:	AS NOTED
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	14004709
SHEET	21 OF 31
S-513	
DRAWING REVISION: 15 JANUARY 2008	

REVDATE: FILE NAME: \\nasar\k434\NAVFAC_YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: S-513(ALT) PLOTTED: Tuesday, December 14, 2010 - 4:21pm

1 2 3 4 5

D
C
B
A

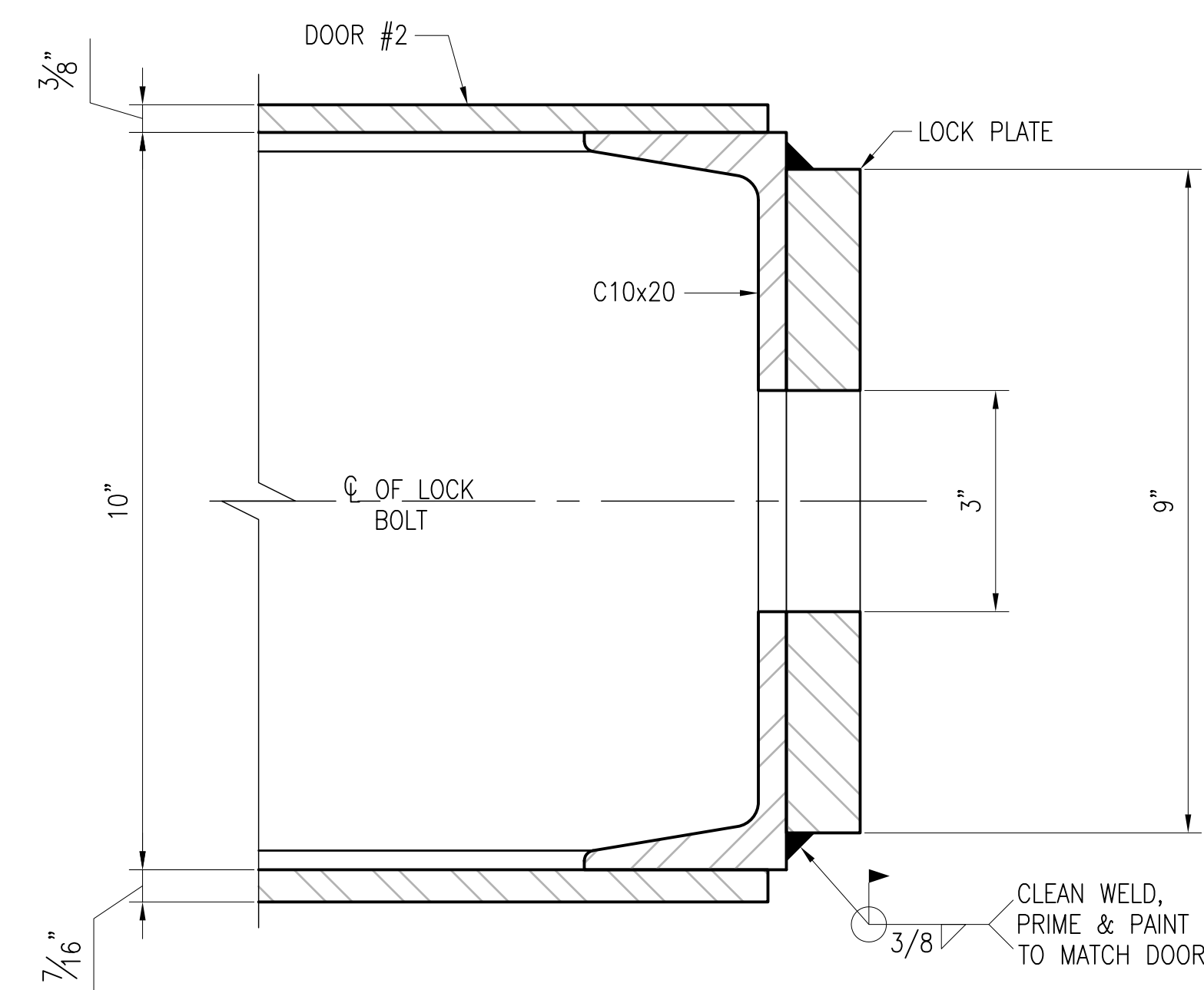
DATE	APPR.
DESCRIPTION	
SYM	
	
	
SAT-TO	
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	
OPTIONAL HIGH SECURITY HASP - ILD DETAILS	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004710	
SHEET 21 OF 31	
S-513(ALT)	
DRAWING REVISION: 15 JANUARY 2008	



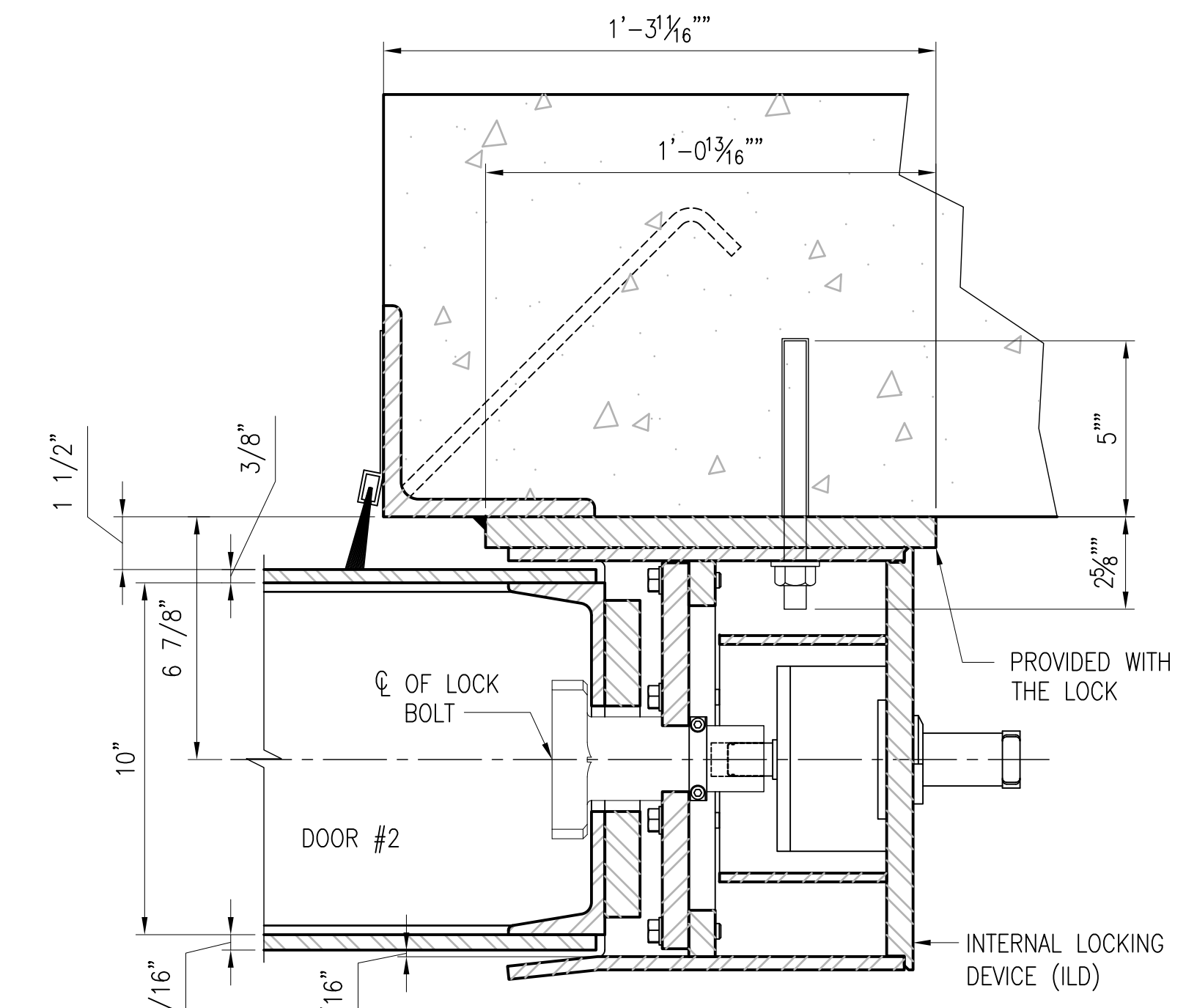
NOTE: SEE MANUFACTURERS INSTALLATION DATA FOR ADDITIONAL INFORMATION

DOOR IN THE CLOSED POSITION

INTERNAL LOCKING DEVICE (ILD) IS A U.S. GOVERNMENT DESIGNED AND PATENTED LOCKING SYSTEM. THE ILD-10" SLIDING DOOR UNIT AND KEYS SHALL BE PURCHASED BY A GOVERNMENT APPROVED ILD MANUFACTURER WITH COORDINATION OF NAVAL FACILITIES ENGINEERING SERVICE CENTER (NAVFAC ESC) SECURITY ENGINEERING DIVISION. CONTACT CAN BE MADE BY CALLING 1-800-290-7607 OR VISITING [HTTPS://PORTAL.NAVFAC.NAVY.MIL/GO/LOCKS](https://portal.navy.mil/go/locks).



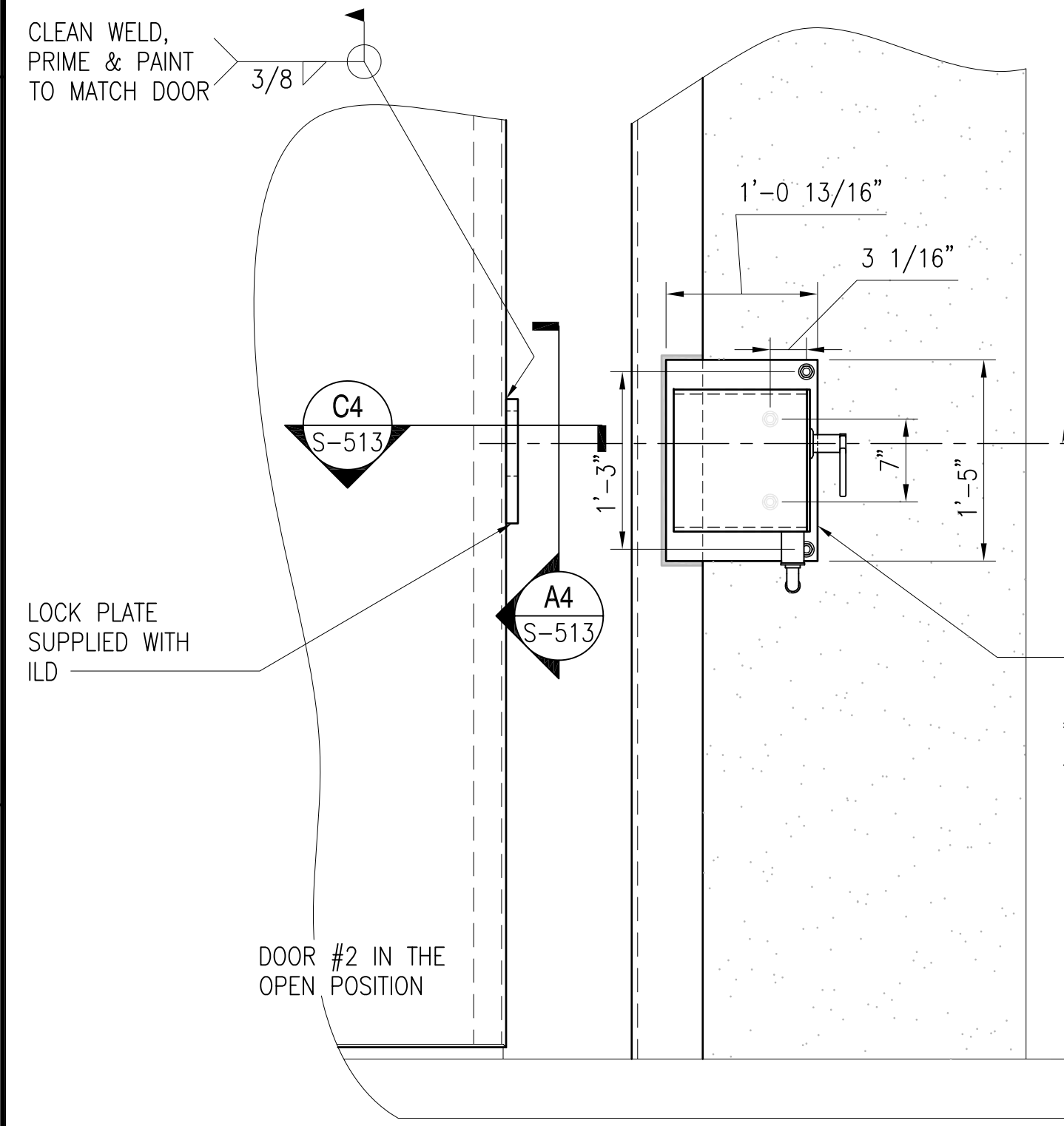
SECTION SCALE: 6" = 1'-0" S-513 C4



SECTION AT LOCKING ASSEMBLY CLOSED SCALE: 3" = 1'-0" S-513 C5

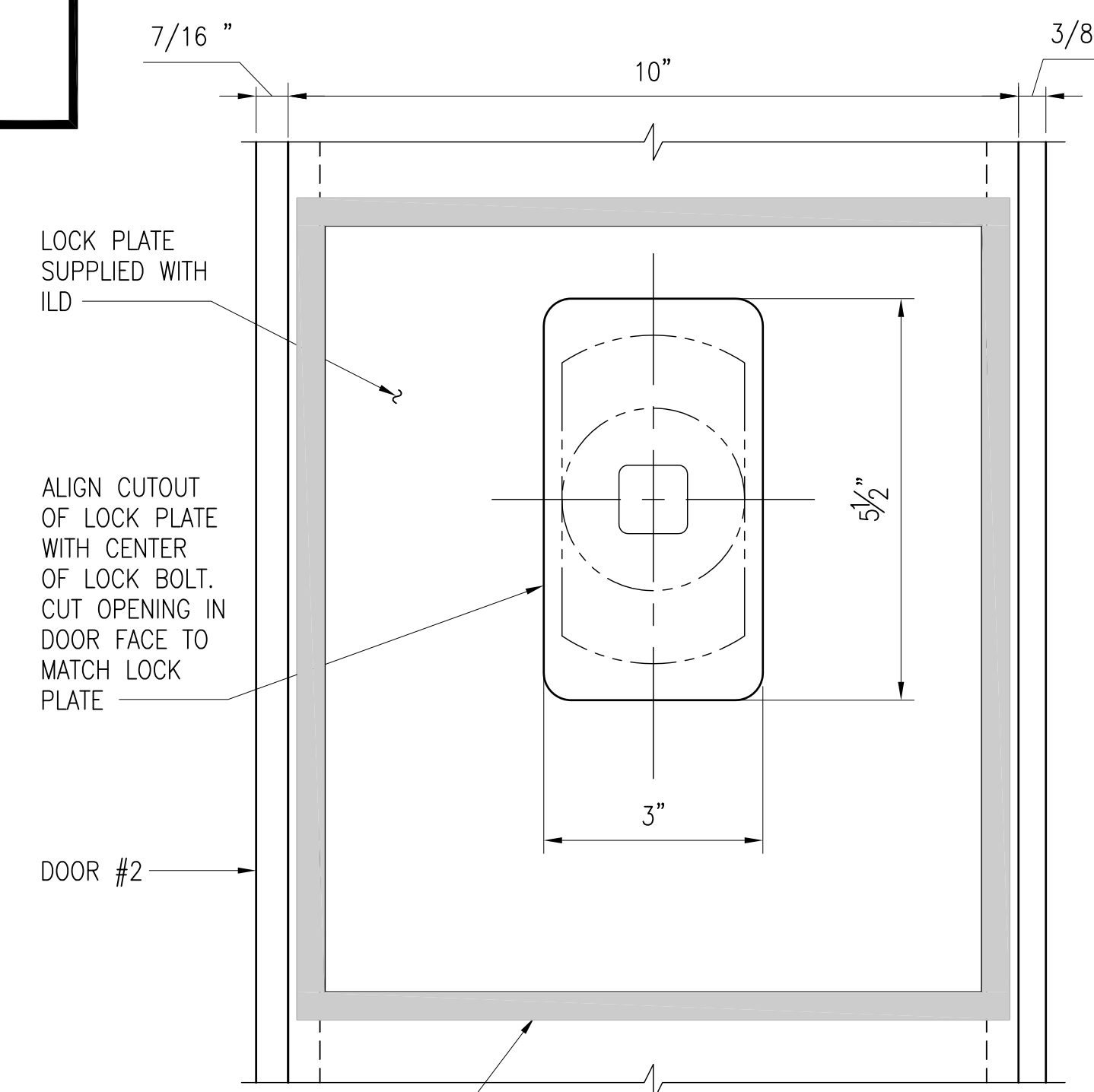
NOTES TO DESIGNER - REMOVE THESE NOTES WHEN PREPARING CONSTRUCTION DRAWINGS FOR SITE ADAPTATION OF THIS DESIGN

- SHEETS S-513 & S-513(ALT) IDENTIFY DIFFERENT LOCKING SYSTEMS. THE EOR SHALL VERIFY THE CORRECT LOCKING SYSTEM REQUIRED AND REMOVE THE REDUNDANT SHEET FROM THE CONSTRUCTION CONTRACT DOCUMENTS FOR THE SYSTEM NOT USED (COORDINATE WITH CONTRACTING OFFICER).

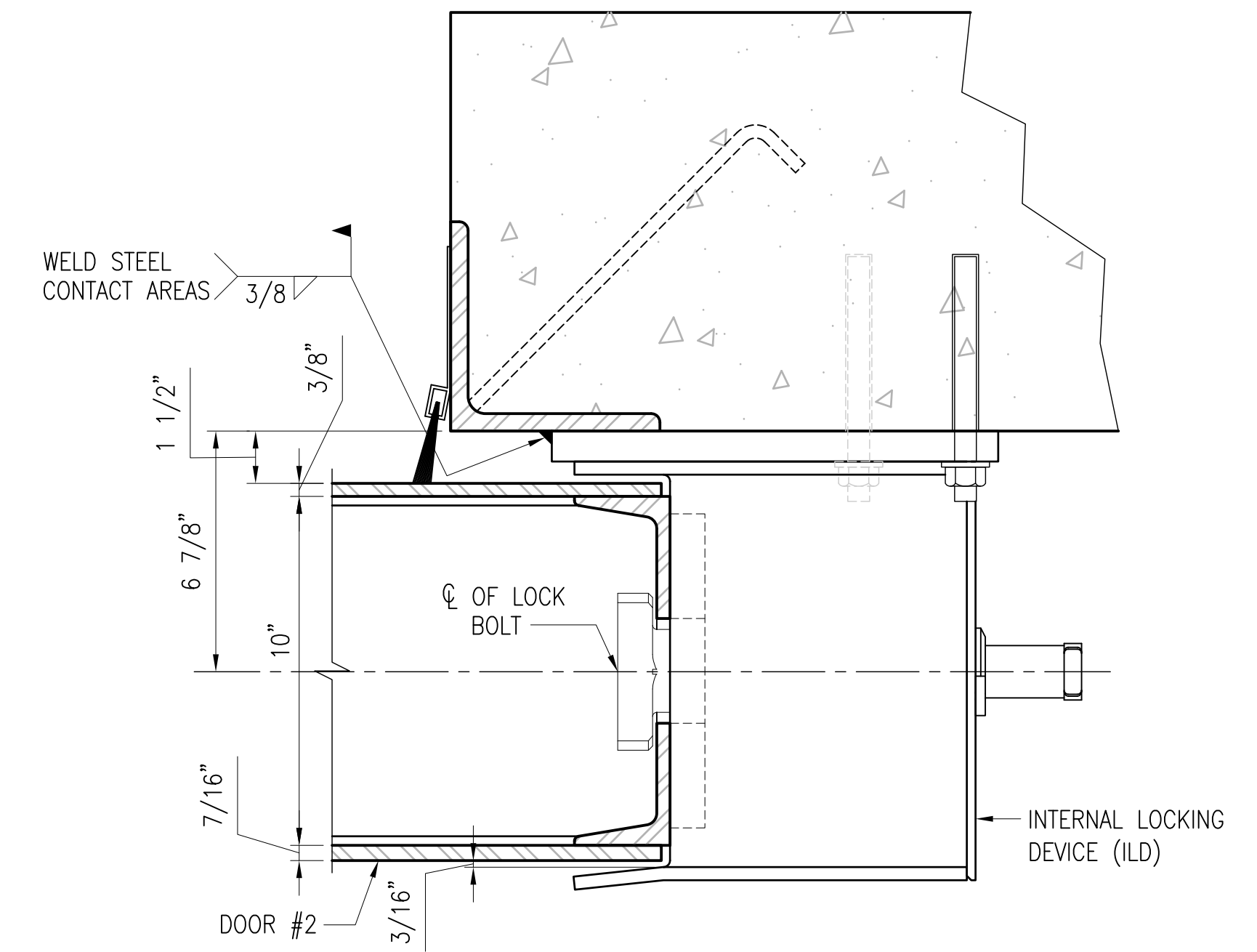


NOTE: SEE MANUFACTURERS INSTALLATION DATA FOR ADDITIONAL INFORMATION

DOOR IN THE OPEN POSITION



SECTION SCALE: 6" = 1'-0" S-513 A4



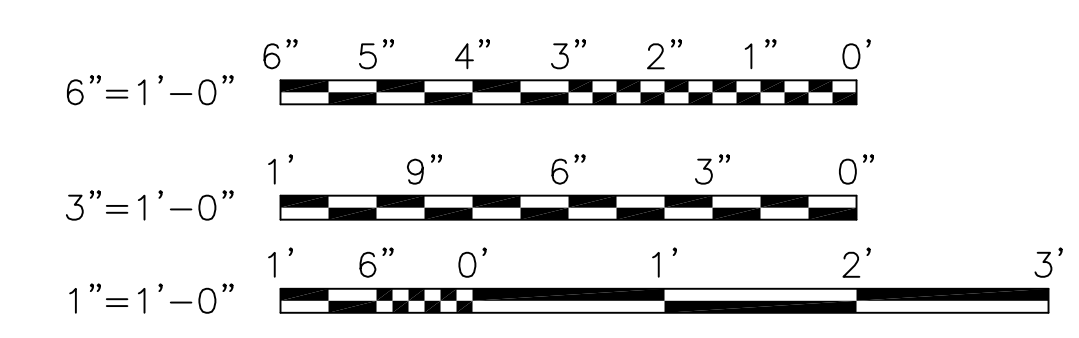
SECTION ABOVE LOCKING ASSEMBLY SCALE: 3" = 1'-0" S-513 A5

ELEVATION - HIGH SECURITY HASP - DOOR #2

SCALE: 1" = 1'-0"

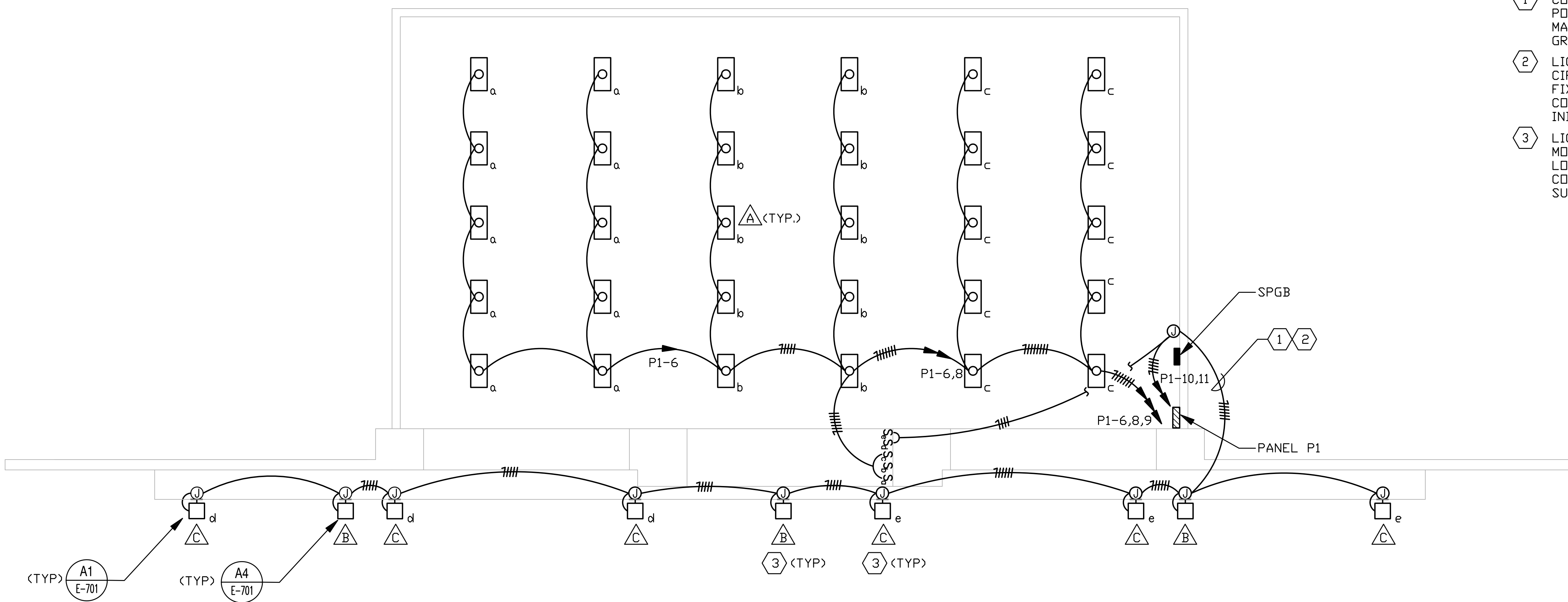
S-305 A1

GRAPHIC SCALE:



1 2 3 4 5

REVDATE: FILE NAME: \\nasar\k34\NAVFAC\RYKT_16AA\NAVFAC\RYKT_16AA\03E\Magazines\Box C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: E-101 PLOTTED: Tuesday, December 14, 2010 - 4:21pm



NOTES

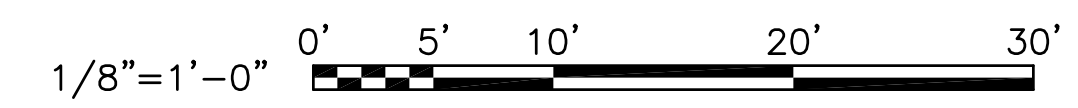
- 1 CONDUIT MUST ENTER VIA WALL NEAR SINGLE POINT GROUND BAR. AT POINT OF ENTRY INTO THE MAGAZINE, BOND CONDUIT TO SINGLE POINT GROUND BAR WITH #2/0 BARE CU.
- 2 LIGHTING TYPE "B" FIXTURES SHALL BE FED FROM CIRCUIT P1-10. LIGHTING FIXTURE TYPE "C" FIXTURES SHALL BE FED FROM CIRCUIT P1-11 AND CONTROLLED BY LIGHT SWITCHES "d" AND "e" AS INDICATED.
- 3 LIGHTING TYPE "B" AND "C" FIXTURES SHALL BE MOUNTED TO THE STRUCTURAL SUPPORT ANGLES LOCATED ON THE FRONT OF THE CANOPY. COORDINATE EXACT LOCATION OF STRUCTURAL SUPPORT ANGLES WITH THE STRUCTURAL DRAWINGS.

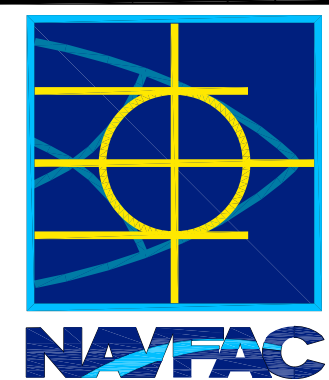

LIGHTING FIXTURE SCHEDULE					
FIXTURE SYMBOL	SKETCH NO. & TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
△	DETAIL "A" SEE SHEET E-701	4-F32/T8	120	SURFACE CEILING MOUNT	1
△	NL-57, TYPE B SEE SHEET E-701	50W METAL HALIDE	120	WALL MOUNTED 14' AFG	2, 3, 4
△	XL-3 SEE SHEET E-701	75W METAL HALIDE	120	WALL MOUNTED 14' AFG	5

LIGHTING FIXTURE SCHEDULE NOTES

- 1. PROVIDE WITH LOW TEMP BALLAST.
- 2. PROVIDE WITH INTEGRAL PHOTOCELL CONTROL.
- 3. PROVIDE FULL CUT-OFF LUMINAIRE WITH FIXTURE.
- 4. SECURITY LIGHTING.
- 5. FLOOD LIGHTING.

GRAPHIC SCALE



	DATE														
	APPRO														
	DESCRIPTION														
	SYM														
															
															
SAT-TO															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">FOR COMMANDER NAVFAC</td> </tr> <tr> <td style="width: 50%;">DES</td> <td style="width: 50%;">DR</td> </tr> <tr> <td>CHK</td> <td>GC</td> </tr> <tr> <td colspan="2">NAVFAC MANAGER</td> </tr> <tr> <td colspan="2">REVIEWED BY</td> </tr> </table>		FOR COMMANDER NAVFAC		DES	DR	CHK	GC	NAVFAC MANAGER		REVIEWED BY					
FOR COMMANDER NAVFAC															
DES	DR														
CHK	GC														
NAVFAC MANAGER															
REVIEWED BY															
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT															
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM LIGHTING PLAN															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>CODE ID. NO. 80091</td> <td>SIZE D</td> </tr> <tr> <td colspan="2">SCALE: AS NOTED</td> </tr> <tr> <td colspan="2">SPEC. NO.</td> </tr> <tr> <td colspan="2">CONSTR. CONTR. NO.</td> </tr> <tr> <td colspan="2">NAVFAC DRAWING NO. 14004712</td> </tr> <tr> <td colspan="2">SHEET 23 OF 31</td> </tr> <tr> <td colspan="2" style="text-align: center;">E-101</td> </tr> </table>		CODE ID. NO. 80091	SIZE D	SCALE: AS NOTED		SPEC. NO.		CONSTR. CONTR. NO.		NAVFAC DRAWING NO. 14004712		SHEET 23 OF 31		E-101	
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SPEC. NO.															
CONSTR. CONTR. NO.															
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SHEET 23 OF 31															
E-101															
DRAWING REVISION: 15 JANUARY 2008															

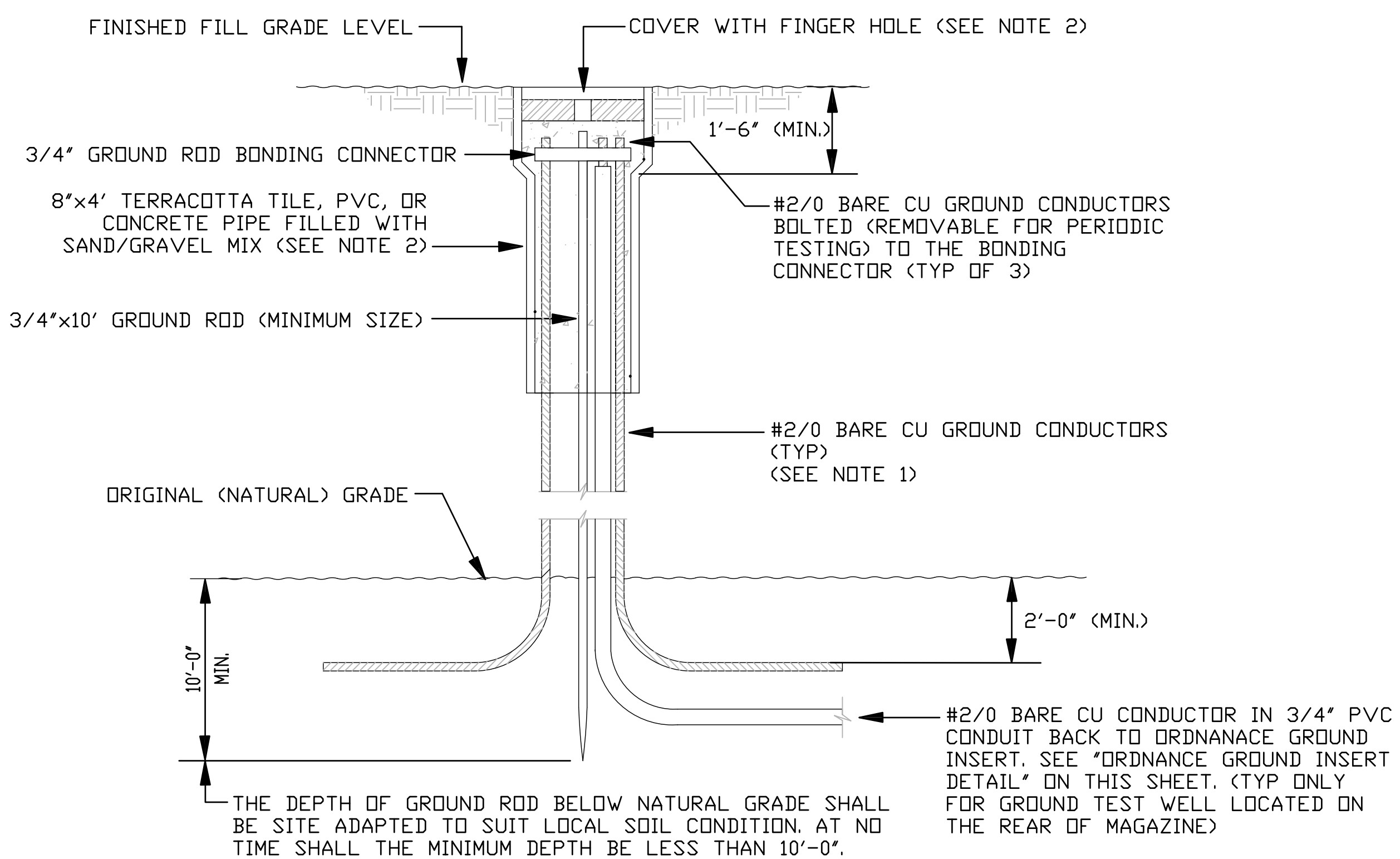
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2

3

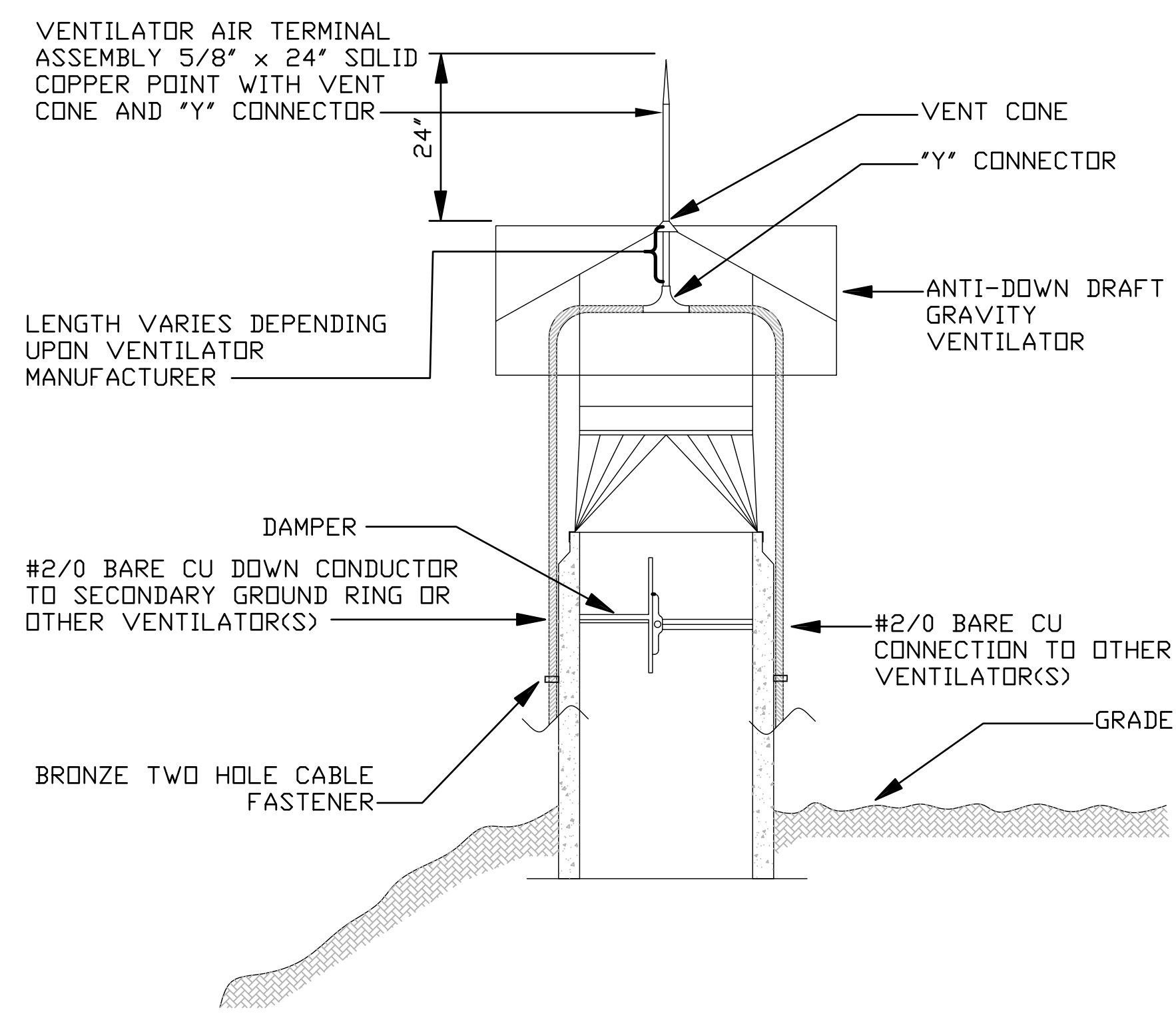
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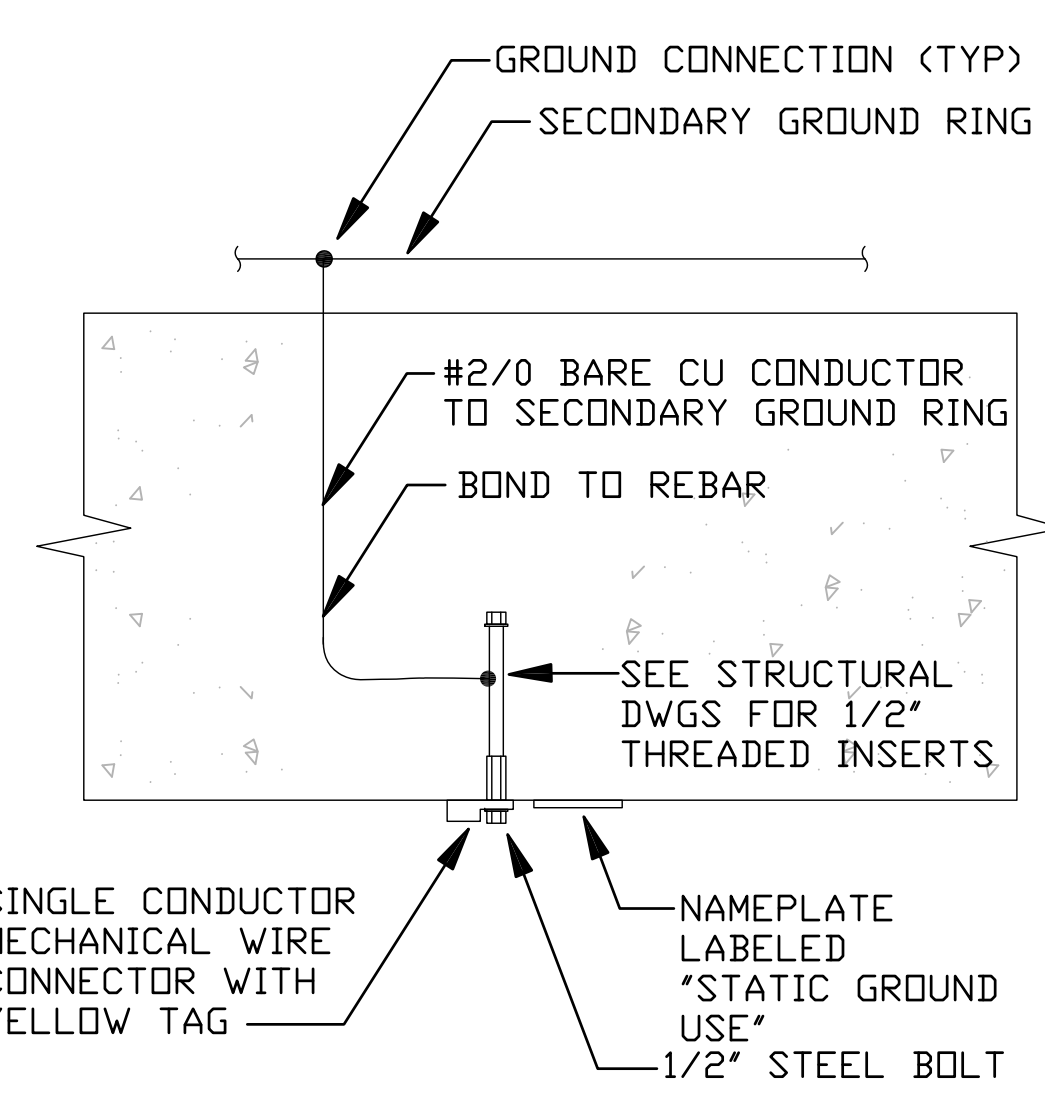


**GROUND TEST WELL
INSTALLATION IN EARTH FILL** (C1)
N.T.S. E-103

NOTE 1: MAINTAIN THE GROUND CONDUCTORS ISOLATED FROM THE GROUND ROD UNTIL THE BOND CONNECTION AT THE TOP.
NOTE 2: PROVIDE 'TRAFFIC RATED' TEST WELL AND COVER FOR PAVED AREAS.

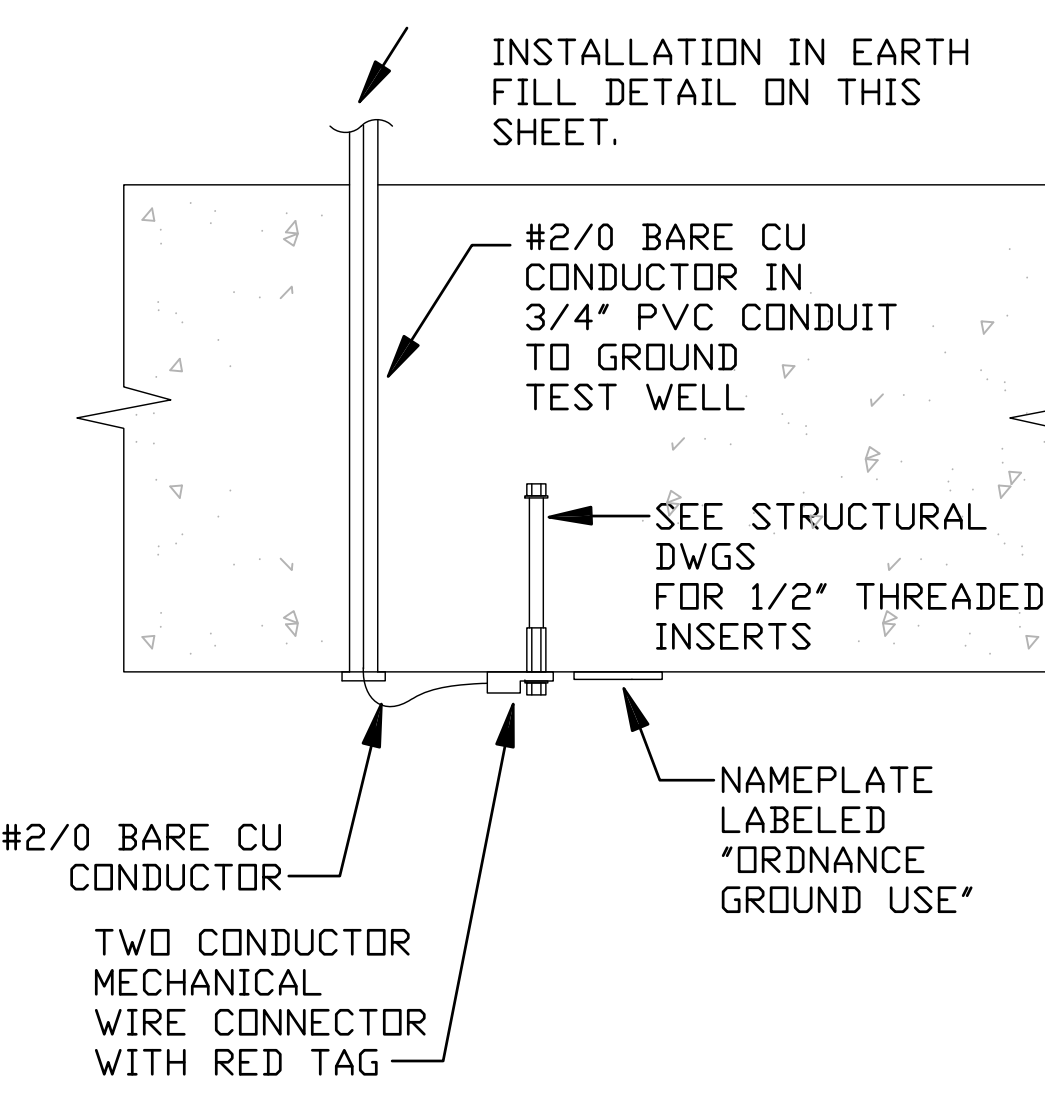


TYPICAL VENTILATOR DETAIL (A1)
N.T.S. E-103



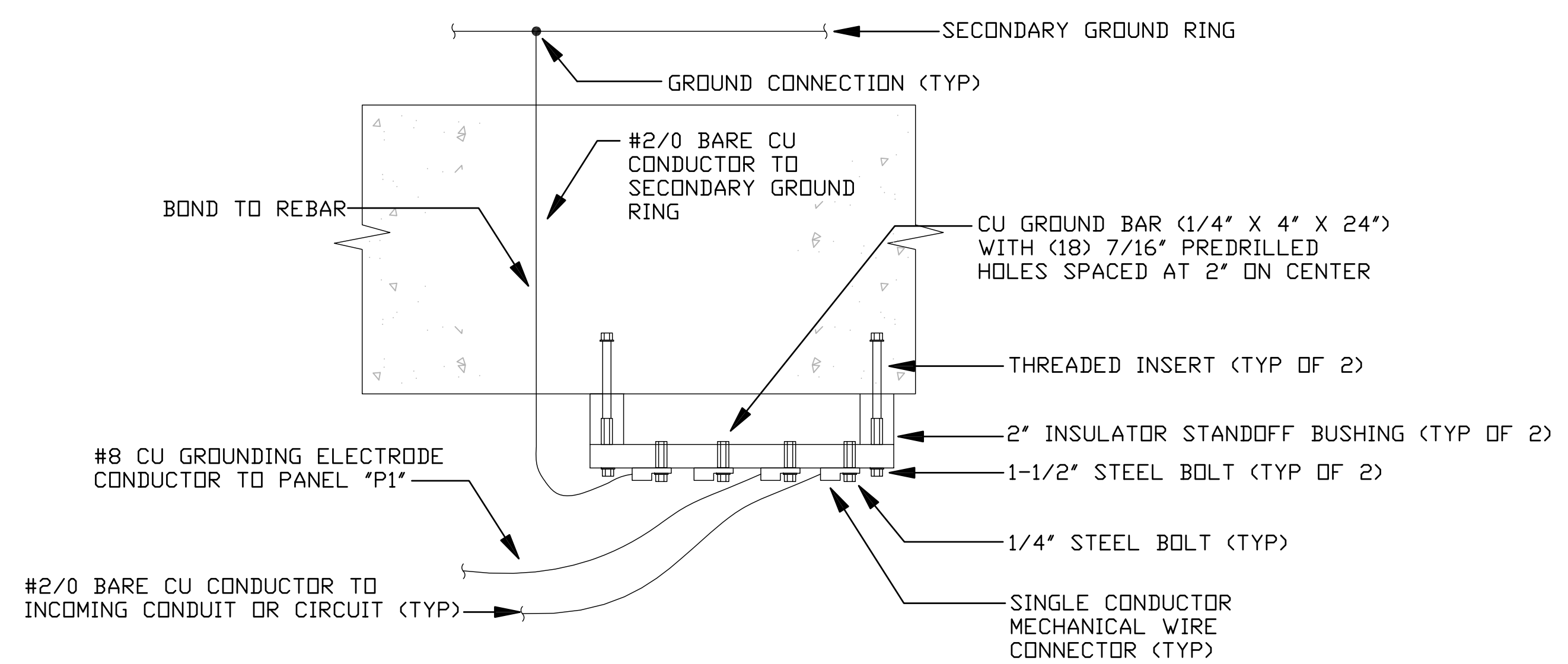
STATIC GROUND INSERT DETAIL (A3)
N.T.S. E-103

STATIC GROUND INSERT DETAIL NOTES:
1. PROVIDE A REMOVABLE YELLOW MELAMINE PLASTIC TAG THAT ATTACHES TO THE STATIC GROUND INSERT. THE TAG SHALL INCLUDE THE FOLLOWING INFORMATION:
*NOT IN SERVICE. NO MAINTENANCE REQUIRED.
INSTALLATION MEETS STATIC/FACILITY GROUND REQUIREMENT PER NAVSEA OP-5. ACTIVITY SHALL PERFORM TESTING PER NAVSEA OP-5 AND ENACT MAINTENANCE SCHEDULE WHEN THE STATIC/FACILITY GROUND INSERT IS PLACED IN SERVICE.
RETAIN THIS TAG TO REATTACH WHEN REMOVED FROM SERVICE."

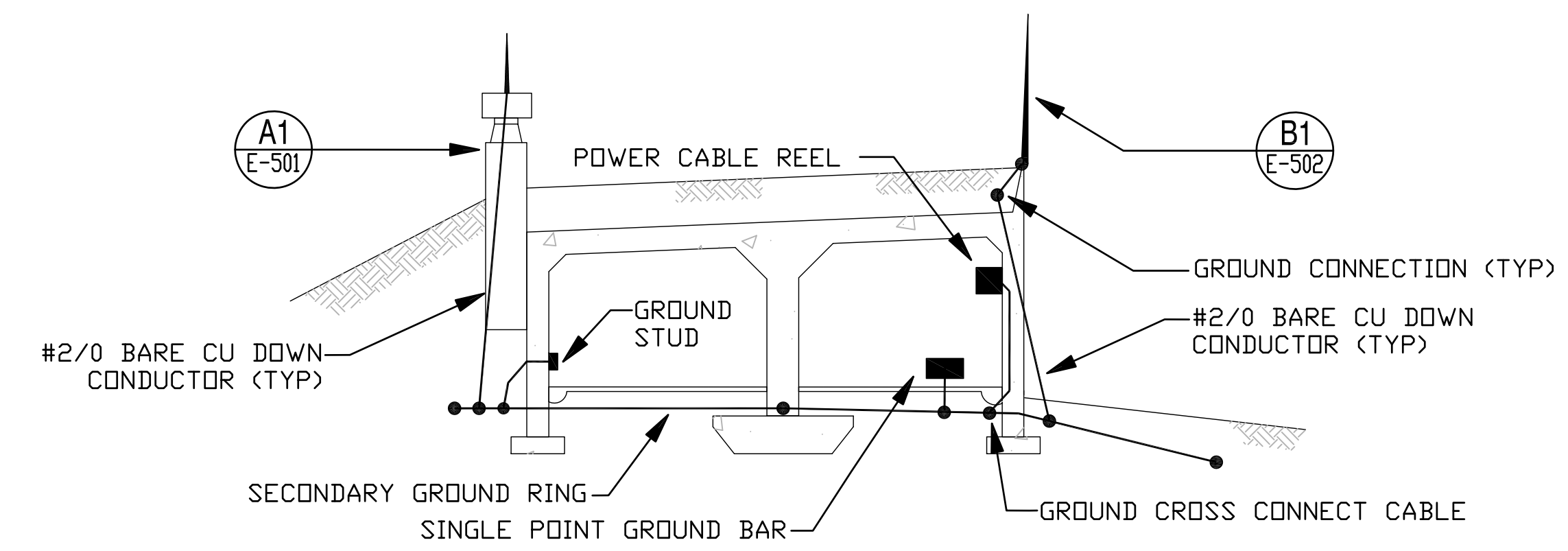


ORDNANCE GROUND INSERT DETAIL (A5)
N.T.S. E-103

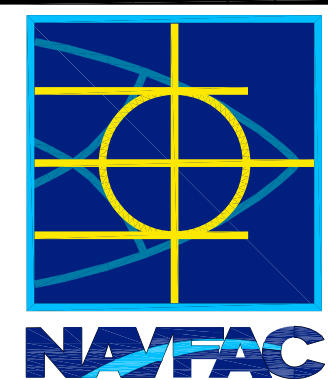
ORDNANCE GROUND INSERT DETAIL NOTES:
1. PROVIDE A REMOVABLE RED MELAMINE PLASTIC TAG THAT ATTACHES TO THE ORDNANCE GROUND INSERT. THE TAG SHALL INCLUDE THE FOLLOWING INFORMATION:
*NOT IN SERVICE. NO MAINTENANCE REQUIRED.
INSTALLATION MEETS ORDNANCE GROUND REQUIREMENT PER NAVSEA OP-5. ACTIVITY SHALL PERFORM TESTING PER NAVSEA OP-5 AND ENACT MAINTENANCE SCHEDULE WHEN THE ORDNANCE GROUND INSERT IS PLACED IN SERVICE.
RETAIN THIS TAG TO REATTACH WHEN REMOVED FROM SERVICE."
2. MAINTAIN THREADED INSERT ISOLATION. DO NOT ALLOW THE THREADED INSERT TO TOUCH REBAR OR OTHER METALLIC OBJECTS IN THE WALL.



SINGLE POINT GROUND BAR DETAIL (D4)
N.T.S. E-103

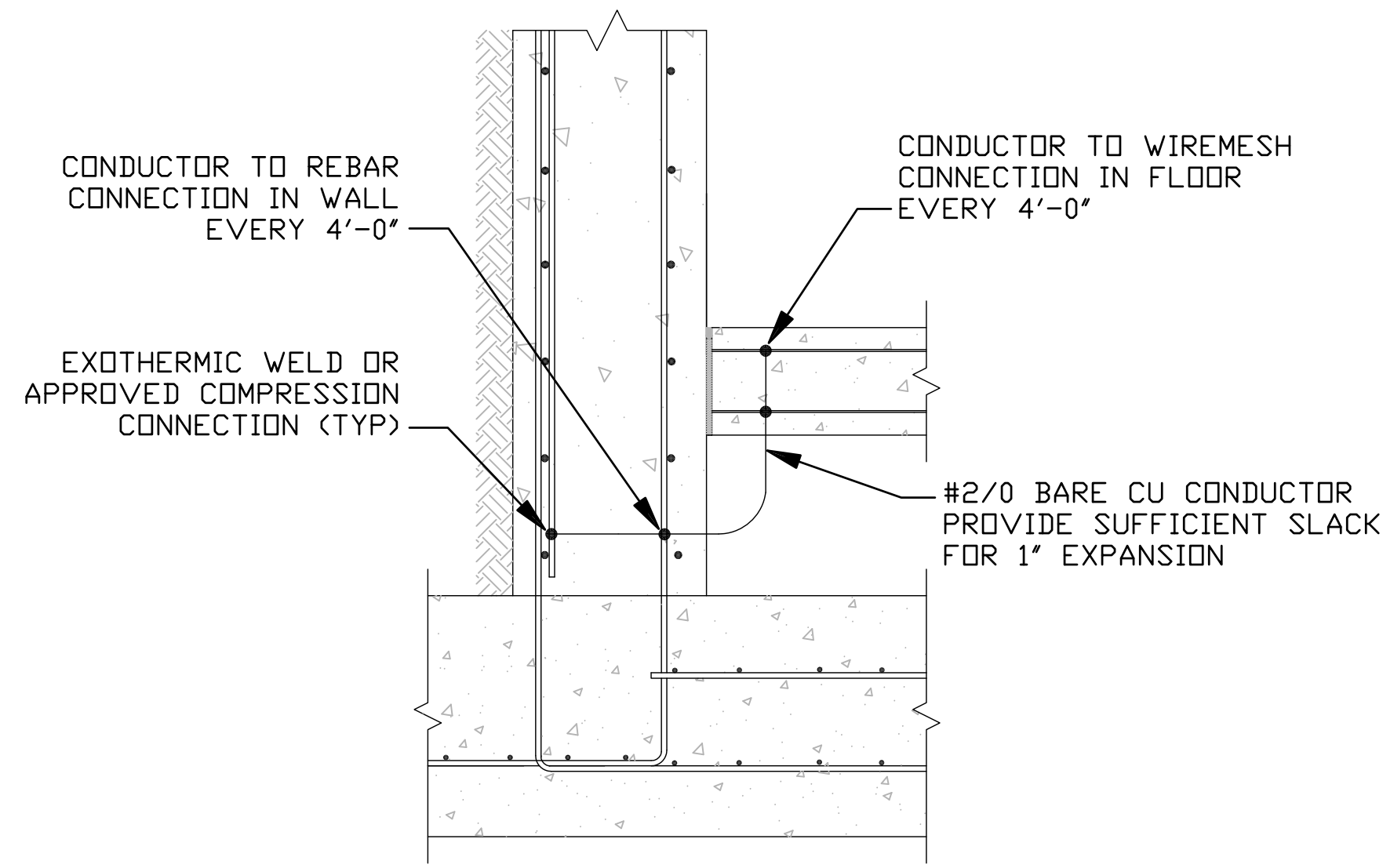


GROUNDING SECTION DETAIL (C4)
N.T.S. E-103

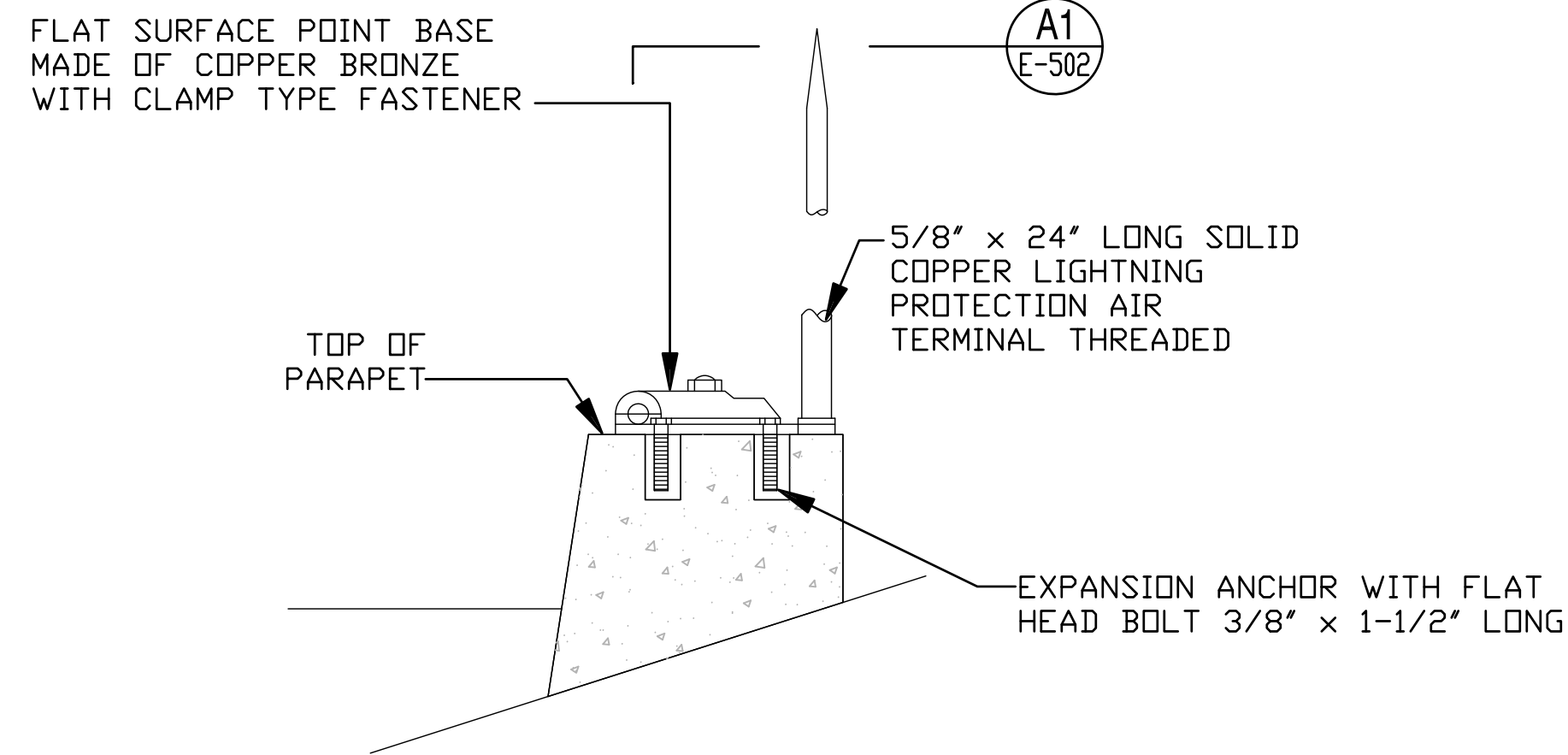
DATE	APPR.
SYN	DESCRIPTION
	
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM	
DETAILS	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION - NORFOLK, VIRGINIA NAVFACANT	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004715	
SHEET 26 OF 31	
E-501	
DRAWING REVISION: 15 JANUARY 2008	

REVDATE: FILE NAME: \\nasamrkt634\NAVFAC\YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\Box C BOX C WITHOUT PLATFORM COMPLWdg LAYOUT NAME: E-501 PLOTTED: Tuesday, December 14, 2010 - 4:23pm

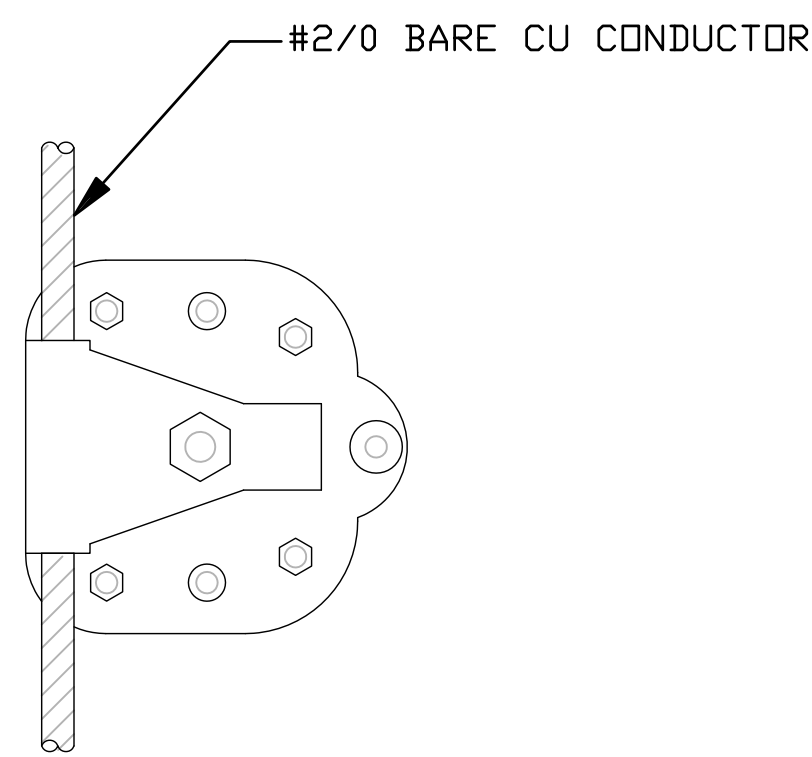
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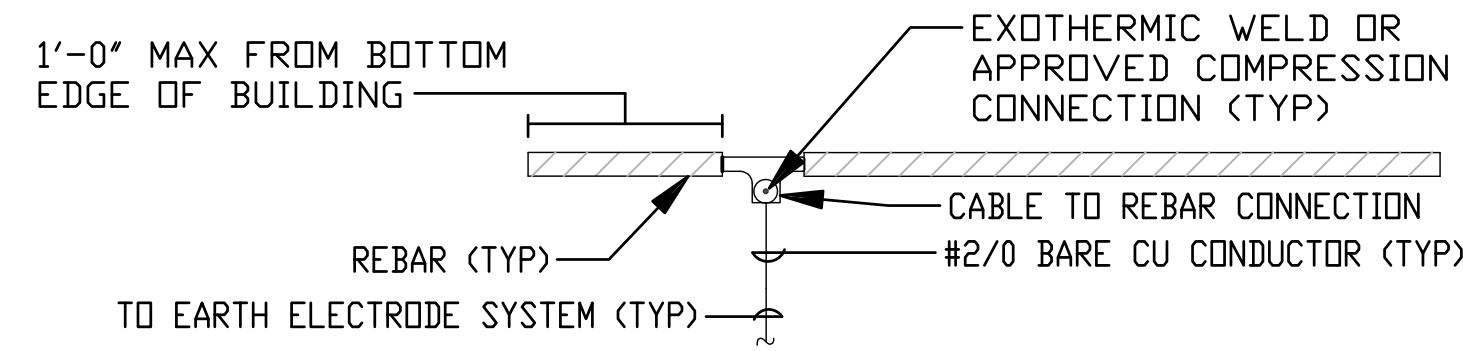
FLOOR TO WALL CONNECTION (D1)
N.T.S. E-103



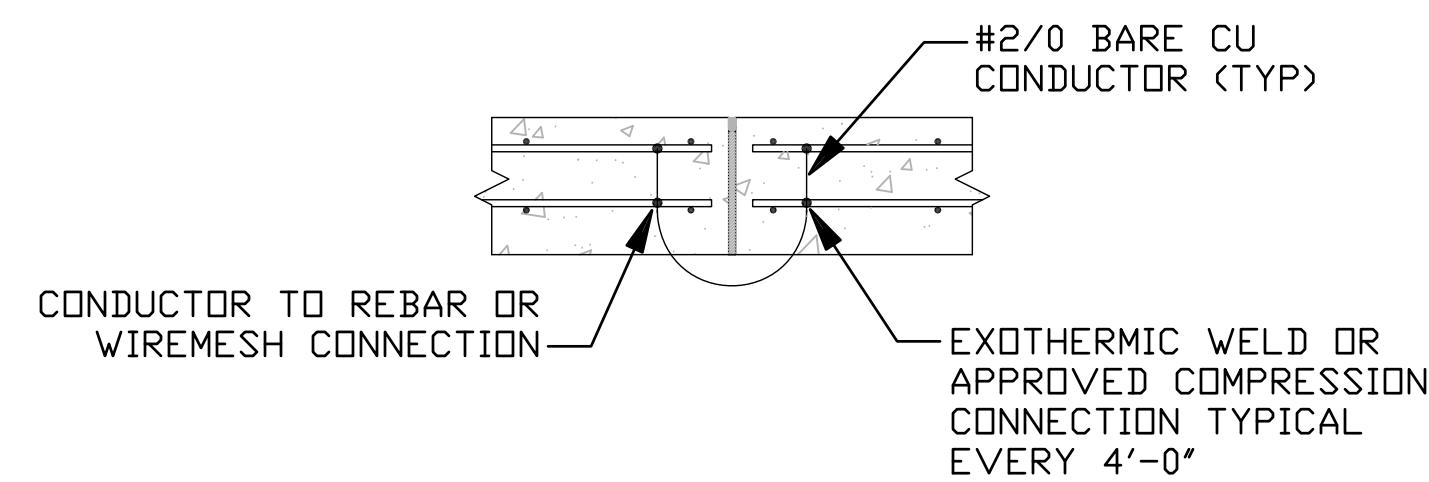
MOUNTING DETAIL (B1)
N.T.S. E-103



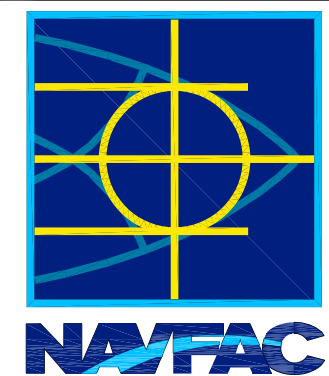
CABLE CONNECTION DETAIL (A1)
N.T.S. E-502



GROUNDING REINFORCING STEEL (C4)
N.T.S. E-103



TYPICAL BOND CONNECTION AT EACH CONSTRUCTION JOINT (A4)
N.T.S. E-103



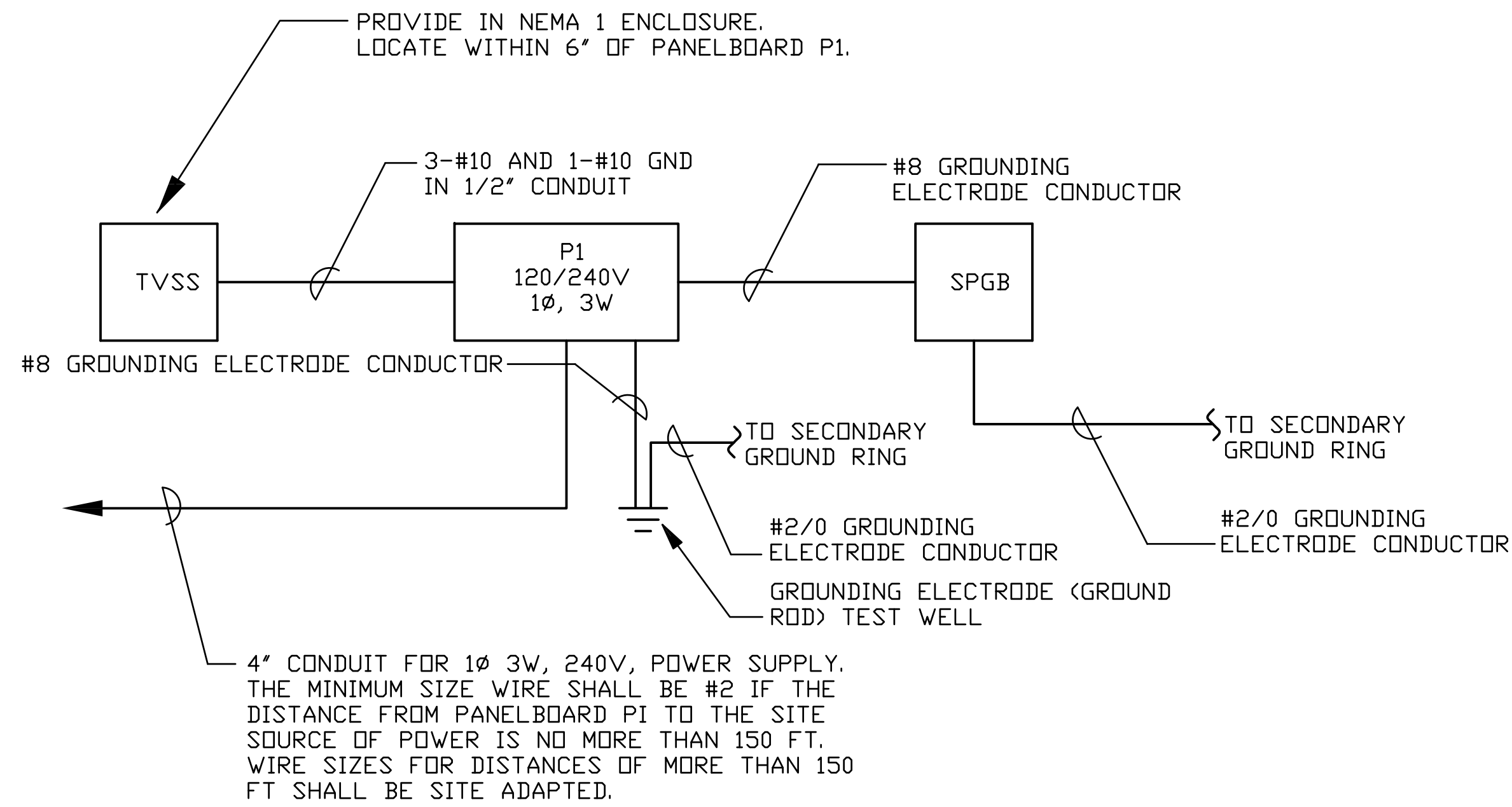
APPROVED	SAT-TO
FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION - NORFOLK, VIRGINIA
NAVFAC
TYPE C BOX MAGAZINE WITHOUT LOADING PLATFORM
DETAILS

CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004716	
SHEET 27 OF 31	
E-502	

DRAWING REVISION: 15 JANUARY 2008

REVDATE: FILE NAME: \\nasanmk634\NAVFAC_YRKT_16AA\NAVFAC_YRKT_16AA\CISE\Magazines\08Box_Magazines\08Box_Magazines - Updated 2010\BOX C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: E-601 PLOTTED: Tuesday, December 14, 2010 - 4:24pm



POWER RISER DIAGRAM

PANELBOARD "P1" SCHEDULE													
100A, 120/240 V., 1 PHASE, 3 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT													
LOAD SERVED	LOAD (AMPS)		BKR. TRIP	WIRE SIZE	CKT. NO.	PHASE		CKT. NO.	WIRE SIZE	BKR. TRIP	LOAD (AMPS)		LOAD SERVED
	A	B				A	B				A	B	
DOOR #1	3		20	12	1	~	~	2	12	20	3		DOOR #2
		3				~	~					3	
DOOR #3	3		20	12	5	~	~	6	12	20	11		MAGAZINE LIGHTING
		3				~	~	8	12	20	11		MAGAZINE LIGHTING
MAGAZINE LIGHTING	11		20	12	9	~	~	10	12	20	4		SECURITY LIGHTING
FLOOD LIGHTING		9	20	12	11	~	~	12	12	20		1	RECEPTACLES
RECEPTACLES	1		20	12	13	~	~	14	12	20	10		DOOR #2 HEAT TRACING *
* DOOR #1 HEAT TRACING		10	20	12	15	~	~	16	12	20	10		DOOR #3 HEAT TRACING *
* DRAIN PIPE HEAT TRACING	8		20	12	17	~	~	18	12	20	8		DRAIN PIPE HEAT TRACING *
* DRAIN PIPE HEAT TRACING		8	20	12	19	~	~	20	12	20			SPARE
TVSS	0		30	10	21	~	~	22		20			SPARE
SPARE			20		23	~	~	24		20			SPARE
TOTAL	26	33									36	25	TOTAL
TOTAL CONNECTED AMPS A: 62 B: 58													

NOTES

1. PROVIDE POWER FROM A DEDICATED SINGLE PHASE TRANSFORMER RATED FOR 120/240V SECONDARY.
2. PROVIDE LIGHTNING ARRESTERS IN THE SINGLE PHASE TRANSFORMER.
3. THE DOOR AND DRAIN PIPE HEAT TRACING CIRCUITS ONLY APPLY IF HEAT TRACING IS INSTALLED. SEE SHEET E-801.
4. ASTERISK INDICATES THAT THE BREAKERS ARE SPARE IF HEAT TRACING IS NOT PROVIDED.



APPROVED: _____
FOR COMMANDER NAVFAC

DES: _____ DR: _____
CHK: _____ GC: _____

NAVFAC MANAGER

REVIEWED BY: _____

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION - NORFOLK, VIRGINIA
NAVFACANT

**TYPE C BOX MAGAZINE
WITHOUT LOADING PLATFORM**

POWER RISER DIAGRAM AND PANELBOARD SCHEDULE

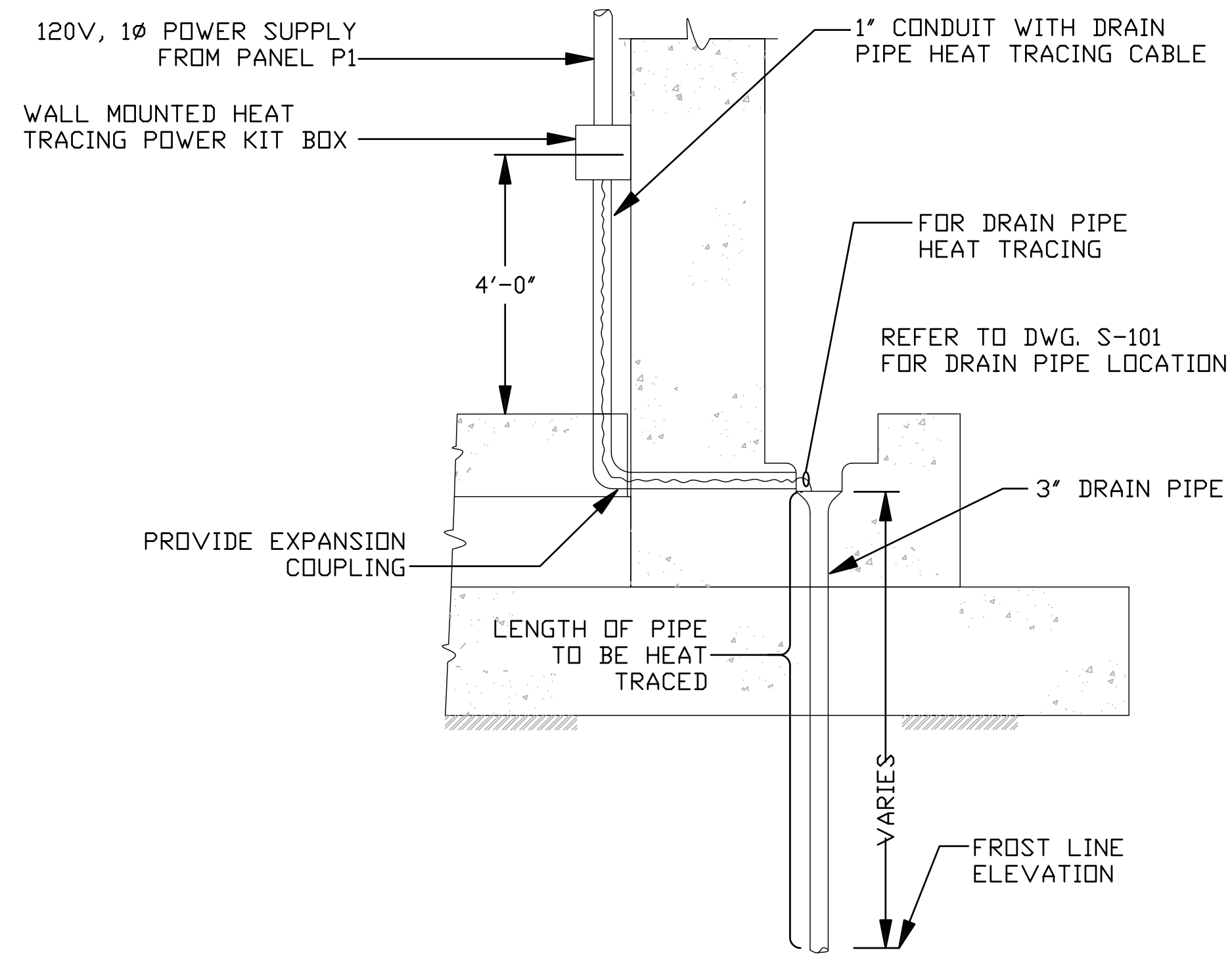
CODE ID. NO. 80091 SIZE D
SCALE: **AS NOTED**

SPEC. NO. _____
CONSTR. CONTR. NO. _____

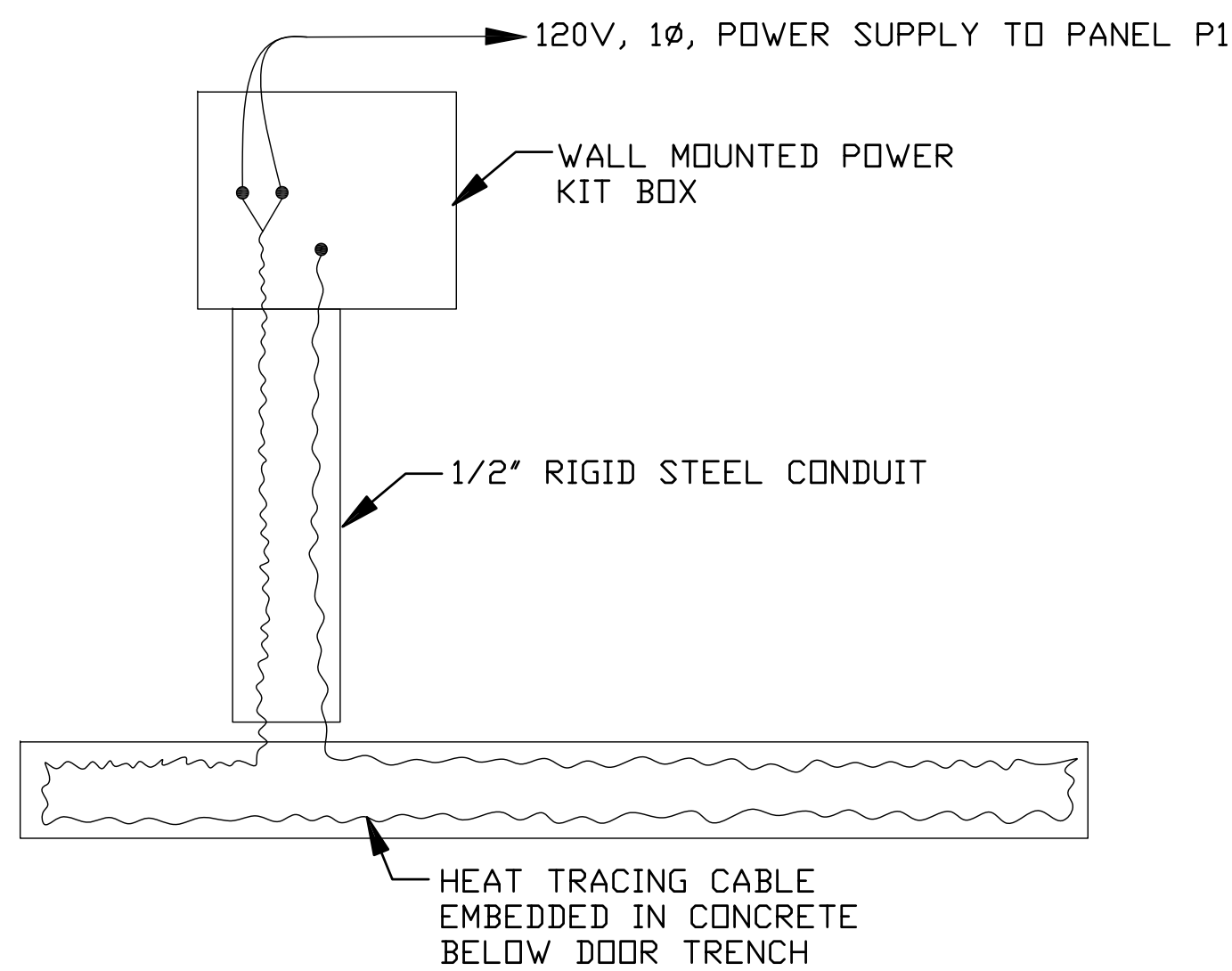
NAVFAC DRAWING NO. **14004717**
SHEET **28** OF **31**
E-601

DRAWING REVISION: 15 JANUARY 2008

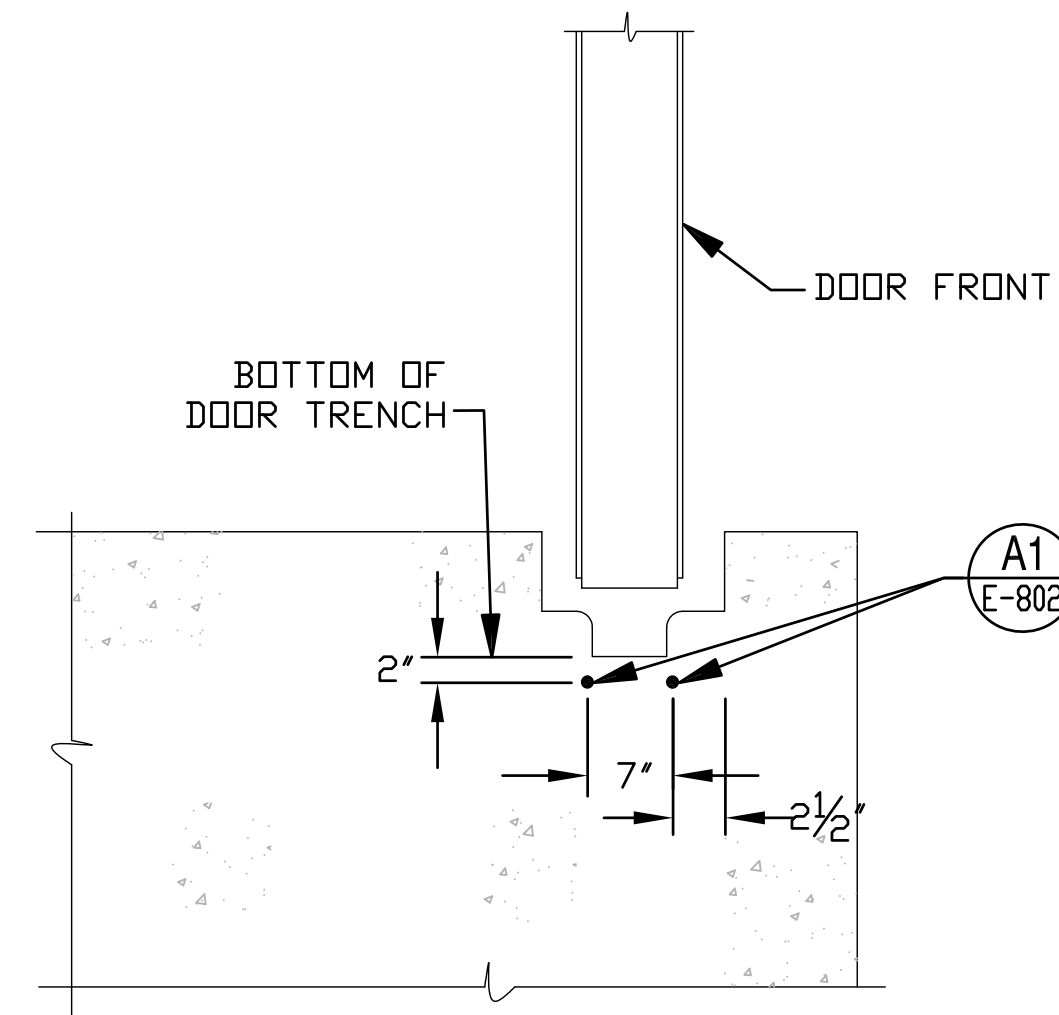
REVDATE: FILE NAME: \\nasam\k454\NAVFAC\YRKT_16AA\NAVFAC\YRKT_16AA\CISE\Magazines\Box C FINALS\Final Drawings Box C BOX C WITHOUT PLATFORM COMPL.dwg LAYOUT NAME: E-802 PLOTTED: Tuesday, December 14, 2010 - 4:25pm



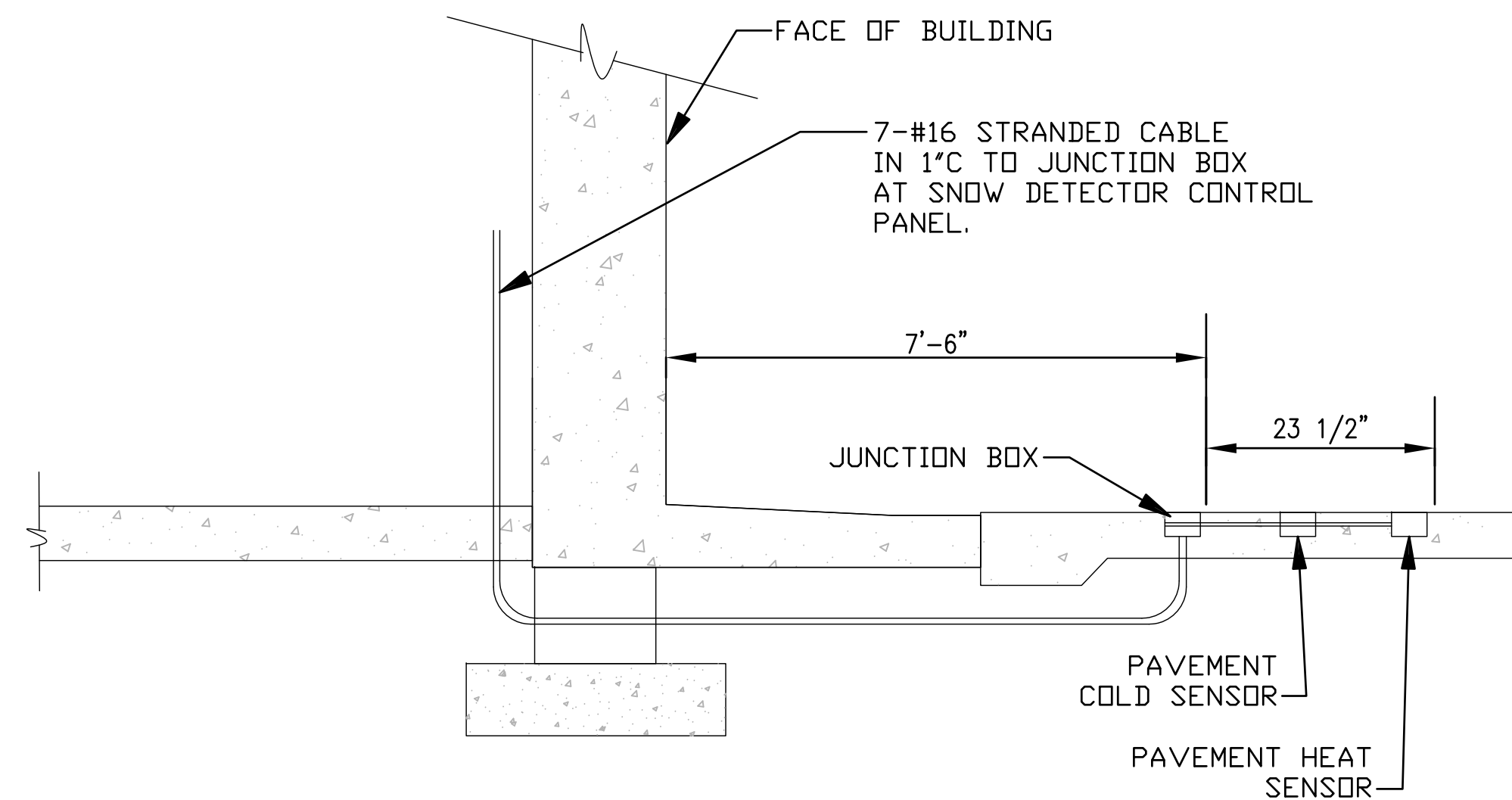
DRAIN PIPE HEAT TRACING DETAIL (C1)
N.T.S. E-801



TYPICAL DOOR TRENCH HEAT TRACING WIRING DIAGRAM (A1)
N.T.S. E-802



HEAT TRACING CABLE DETAIL (C4)
N.T.S. E-801



SNOW DETECTOR LOCATION DETAIL (A4)
N.T.S. E-801



FOR COMMANDER NAVFAC	
DES	DR
CHK	GC
NAVFAC MANAGER	
REVIEWED BY	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION - NORFOLK, VIRGINIA
NAVFAC
TYPE C BOX MAGAZINE
WITHOUT LOADING PLATFORM
HEAT TRACE DETAILS

CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
SPEC. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 14004720	
SHEET 31	OF 31
E-802	

DRAWING REVISION: 15 JANUARY 2008