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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

MISSOURI DEPARTMENT  
OF CORRECTIONS

ABATE AND REPLACE  
PIPING VARIOUS

MOBERLY CORRECTIONAL  
CENTER (I-3)  
5201 S. MORLEY STREET  
MOBERLY, MO

PROJECT # C1601-01  
SITE # 2305  
FACILITY # 27250/27265

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
ISSUE DATE: 11/06/2017

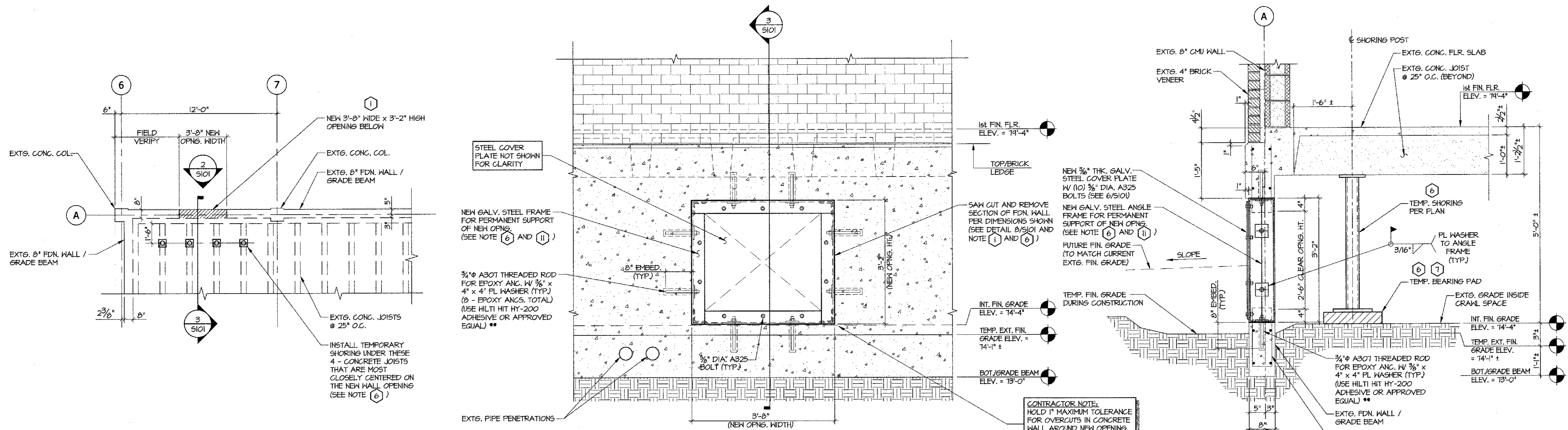
CAD DWG FILE: S101  
DRAWN BY: TDT  
CHECKED BY: TDT  
DESIGNED BY: TDT

SHEET TITLE:  
STEEL FRAME FOR  
NEW OPENINGS IN  
EXTG. FDN. WALL

SHEET NUMBER:

S-101

7 OF 30 SHEETS



1 PARTIAL FIRST FLOOR FRAMING PLAN (ADMIN. BLDG.)

S101 SCALE: 1/4" = 1'-0"

2 FDN. WALL ELEVATION VIEW AT NEW OPENING

S101 SCALE: 3/4" = 1'-0"

3 FDN. WALL SECTION VIEW AT NEW OPENING

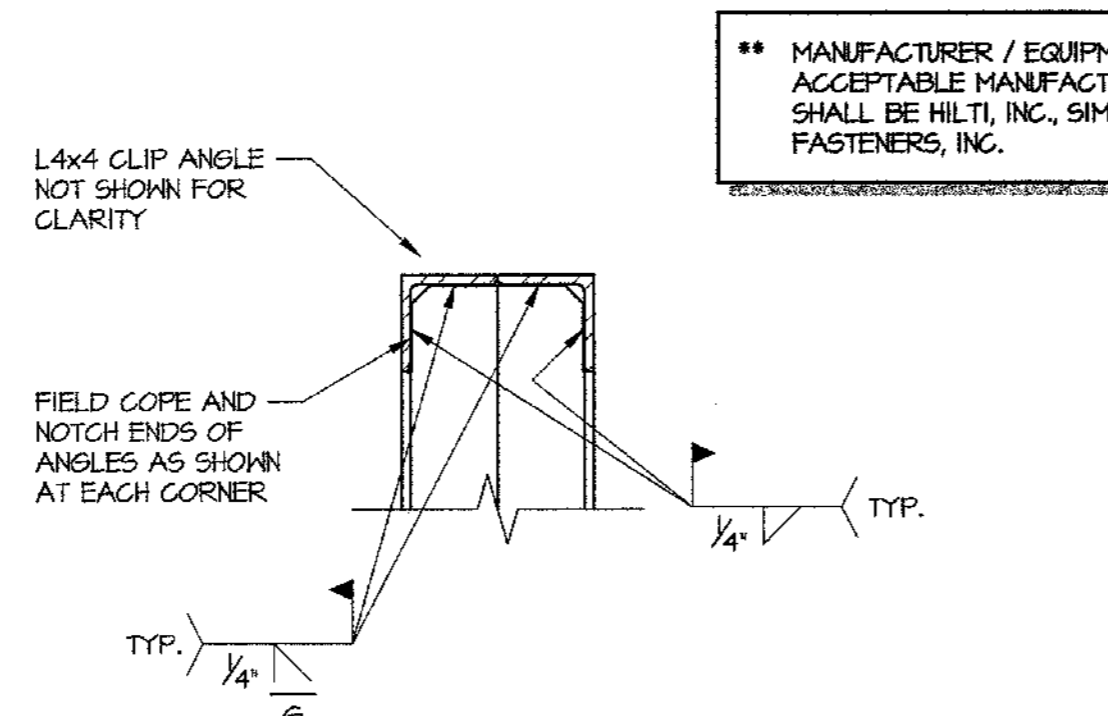
S101 SCALE: 3/4" = 1'-0"

GENERAL NOTES:

- FIELD VERIFY EXACT LOCATION OF NEW FOUNDATION WALL OPENING.
- GENERAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION.
- SEE SHEET S-102 AND H-101 FOR ADDITIONAL INFORMATION REGARDING OTHER NEW OPENING LOCATIONS.
- MATERIAL SPECIFICATIONS:
 

4.1. ANGLES & PLATES	ASTM A36
4.2. THREADED RODS	ASTM A307
4.3. THRU BOLTS	ASTM A325
4.4. HARDENED FLAT WASHERS	ASTM F436-1
4.5. HEX NUTS	ASTM 563-C
4.6. WELDS	ETOXX
4.7. STEEL FINISH	HOT-DIP GALVANIZED
4.8. TOUCHUP FINISH	COLD-GALV. PAINT (ASTM A780) (AT ALL FIELD WELDS, CUTS, ETC.) GALVANIZED OR ZINC-COATED
4.9. FASTENER FINISH	HILTI HIT HY-200 (OR APPROVED EQUAL AS NOTED **)
4.10. EPOXY	
- DESIGN REFERENCES USED:
 

5.1. BUILDING CODE:	IBC2015 & ASCE/SEI 7-10
5.2. STRUCTURAL STEEL:	AISC 14th EDITION
- TEMPORARY SHORING SHALL BE INSTALLED PRIOR TO SAWCUTTING THE FINAL ACCESS HOLE IN THE EXISTING FOUNDATION WALL. TEMPORARY SHORING AND BRACING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ADJUSTABLE POST SHORES RATED FOR A MINIMUM OF 15 KIPS EACH SHALL BE USED AT EACH LOCATION INDICATED ON THIS PLAN. ALL ADJUSTABLE POST SHORES SHALL BE IN GOOD WORKING CONDITION AND SHALL BE PROVIDED BY A REPUTABLE SHORING EQUIPMENT SUPPLIER. ALSO PROVIDE TEMPORARY BEARING PADS UNDER EACH POST SHORE CONSISTING OF CONCRETE FOOTINGS OR LARGE STEEL BASE PLATES AS REQUIRED TO ADEQUATELY DISTRIBUTE THE CONCENTRATED POST LOADS TO PREVENT SOIL BEARING FAILURE.
- USE AN ALLOWABLE GROSS SOIL BEARING PRESSURE OF 1500 PSF MINIMUM FOR SIZING OF BEARING PADS. A GREATER BEARING PRESSURE MAY BE USED IF TESTED AND APPROVED BY A LICENSED GEOTECHNICAL ENGINEER. THE SHORING EQUIPMENT SUPPLIER'S ENGINEER IS RESPONSIBLE FOR THE STRUCTURAL DESIGN, TYPE, AND SIZE OF BEARING PADS. THE SHORING ENGINEER SHALL BE A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI. SUBMIT DESIGN AND INSTALLATION PROCESS FOR APPROVAL.
- FOLLOW ALL MANUFACTURER'S INSTRUCTIONS FOR USE OF ADJUSTABLE POST SHORES. THOROUGHLY INSPECT ALL POST SHORES PRIOR TO USE TO ENSURE THEY ARE IN GOOD CONDITION AND FREE FROM CRACKS, DENTS, BENDS, CORROSION OR OTHER DAMAGE. DAMAGED EQUIPMENT SHALL NOT BE USED FOR SHORING. INSTALL ALL SHORES VERTICALLY PLUMB IN BOTH DIRECTIONS WITHIN TOLERANCE AS DIRECTED BY THE MANUFACTURER.
- AVOID ADDITION OF ANY UNUSUAL OR HEAVY LIVE LOADING ON ALL FLOORS AND ROOFS ABOVE AND ADJACENT TO THE SHORING AREA WHILE SHORING, DEMOLITION, AND RECONSTRUCTION IS IN PROGRESS.
- AVOID IMPACT LOADS OR EXCESSIVE VIBRATION OF THE STRUCTURE WHILE SHORING, DEMOLITION, AND RECONSTRUCTION IS IN PROGRESS.
- AFTER NEW WALL OPENING HAS BEEN CUT, CAREFULLY MEASURE THE OPENING AND CUT STEEL ANGLE OR HSS9x3 FRAME TO FIT TIGHTLY ALL-AROUND.
- THE STRUCTURE SHOWN ON THESE DOCUMENTS IS NOT STABLE UNTIL ALL CONNECTIONS, FRAMING, AND PERMANENT BRACINGS ARE COMPLETE. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE.
- ALL STEEL FRAME WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER WITH A MINIMUM OF 5 YEARS EXPERIENCE.



7 TYP. FRAME CORNER CONNECTION DETAIL

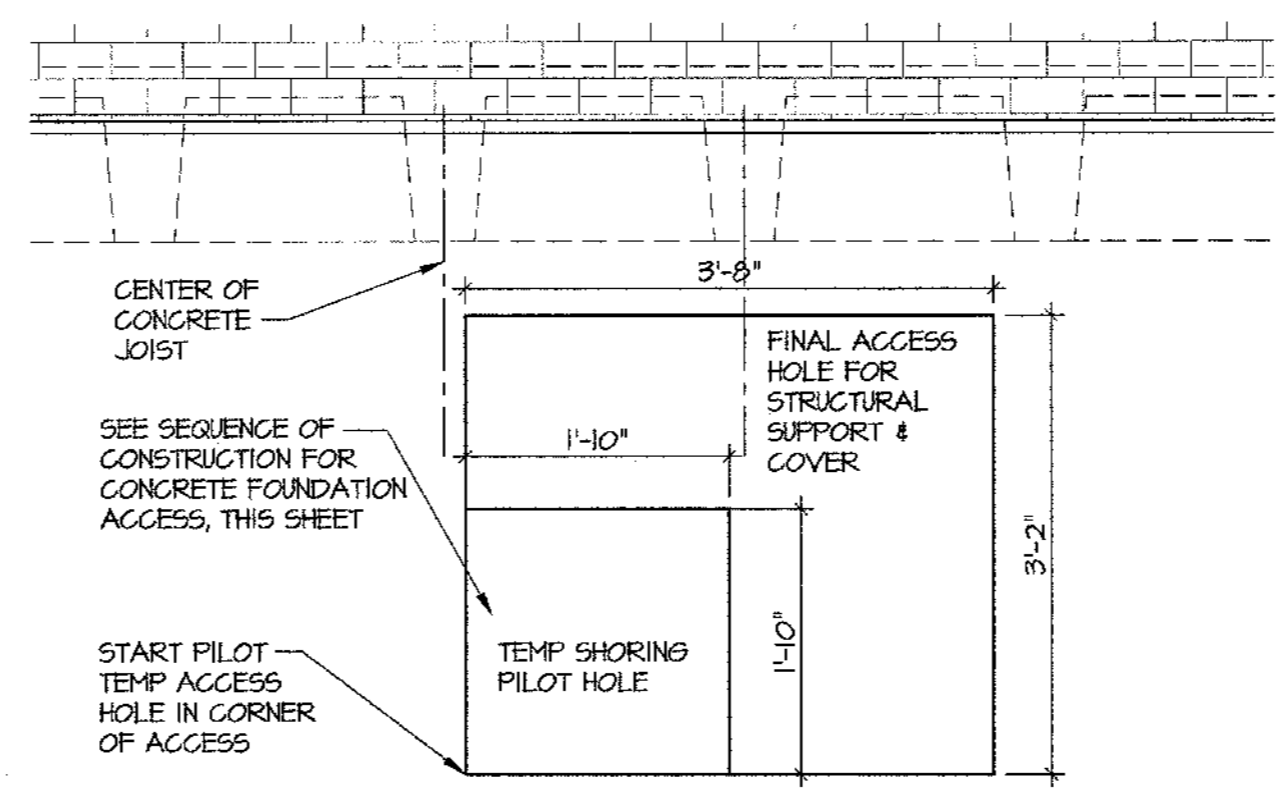
S101 SCALE: 1/2" = 1'-0"

\*\* MANUFACTURER / EQUIPMENT LISTED SHALL BE 'BASIS-OF-DESIGN'. ACCEPTABLE MANUFACTURERS FOR POST-INSTALLED ANCHORS SHALL BE HILTI, INC., SIMPSON STRONG-TIE CO., INC., OR POWERS FASTENERS, INC.

SEE SHEET H-101 FOR NEW OPENING LOCATIONS WHERE THE SECTIONS ON THIS SHEET APPLY.

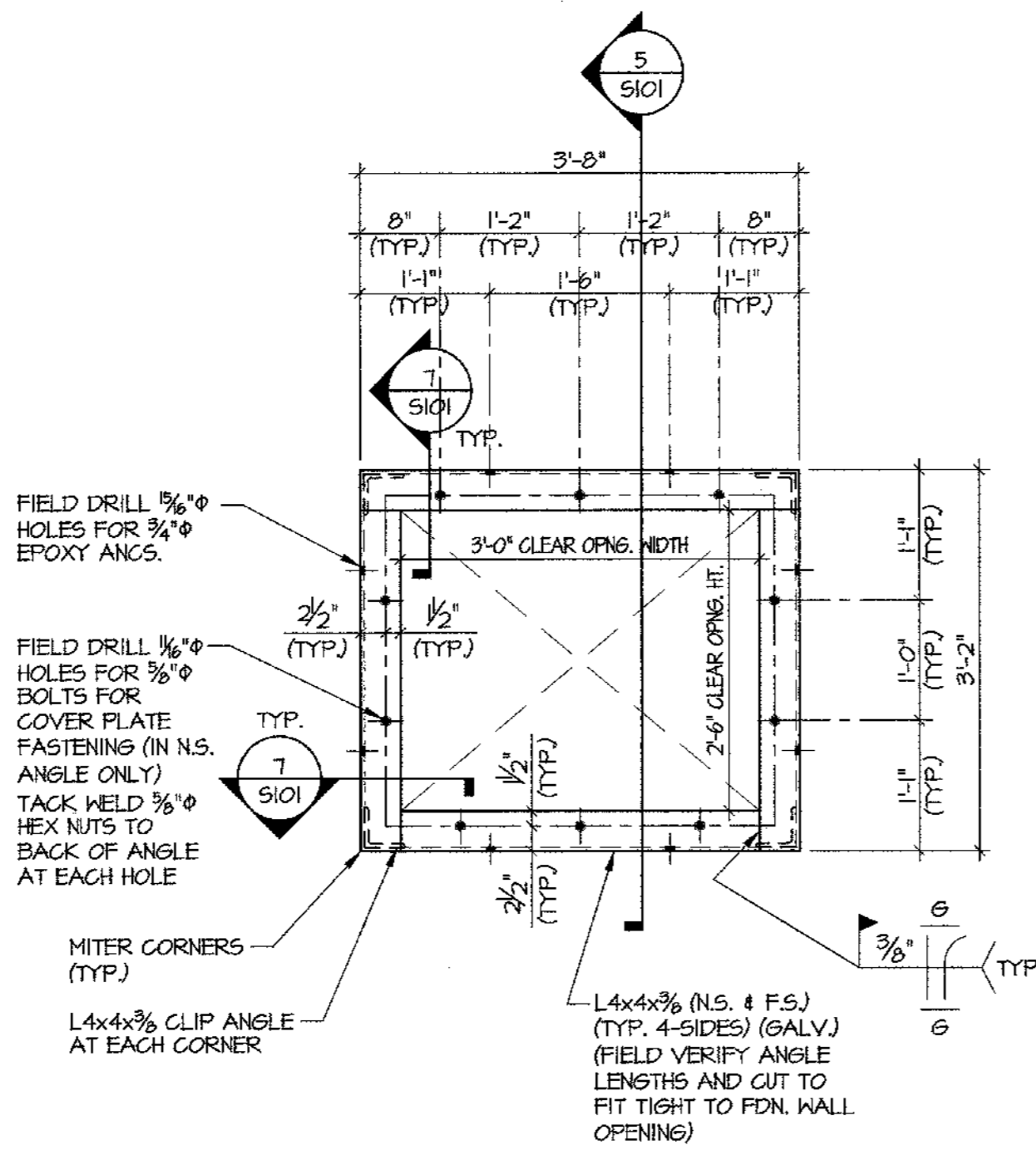
CONCRETE FOUNDATION ACCESS SEQUENCE OF CONSTRUCTION:

- FIELD VERIFY AND COORDINATE EXACT LOCATION OF TEMPORARY SHORING PILOT HOLE WITH CONCRETE JOIST ABOVE AND LOCATION OF NEW PIPING AS INDICATED ON MECHANICAL PLAN M-203.
- LOCATE PILOT ACCESS HOLE BETWEEN CONCRETE JOISTS LOCATIONS SUCH THAT THE CENTER OF EXISTING JOISTS ARE NOT LOCATED ABOVE THE PILOT HOLE CUTOUT. PILOT HOLE SHALL BE CUT IN BOTTOM CORNER OF PLANNED CUTOUT OF CRAWLSPACE ACCESS.
- PROVIDE "TEMPORARY REMOVABLE COVER" OF 1/8" STEEL PLATE SECURED TO CONCRETE DURING CONSTRUCTION UNTIL FULL CRAWLSPACE ACCESS IS COMPLETED. (NOTE THAT A "PERMANENT COVER PLATE" SHALL BE INSTALLED AFTER CONSTRUCTION IS COMPLETE AND SHALL BE 3/16" THICK AS NOTED ON 3/5101 & 6/5101.)
- VERIFY THAT ABATEMENT CONTRACTOR HAS ABATED AREA OF CRAWLSPACE LARGE ENOUGH FOR CONTRACTOR TO PERFORM WORK IN CRAWLSPACE AREA.
- CONTRACTOR SHALL PROVIDE TEMPORARY SHORING UNDER CONCRETE JOISTS AS INDICATED ON PLANS USING PILOT ACCESS HOLE FOR MATERIAL AND PERSONNEL USE.
- ONCE SHORING IS IN PLACE, CONTRACTOR SHALL CUT REMAINDER OF ACCESS HOLE AND SHALL INSTALL STRUCTURAL SUPPORT AS INDICATED ON PLANS.
- THIS ACCESS SHALL BE USED TO AID IN REMOVAL OF ASBESTOS.



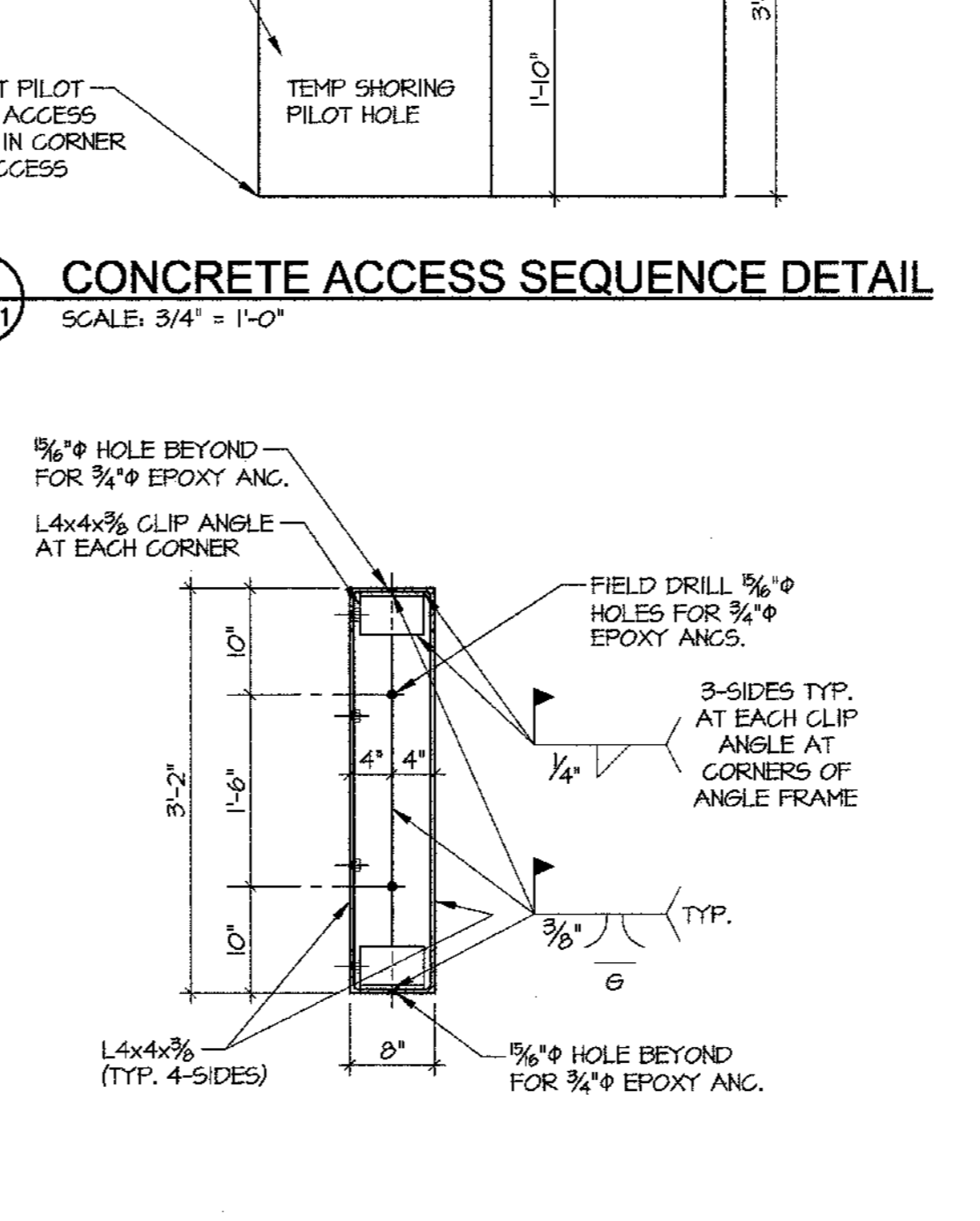
8 CONCRETE ACCESS SEQUENCE DETAIL

S101 SCALE: 3/4" = 1'-0"



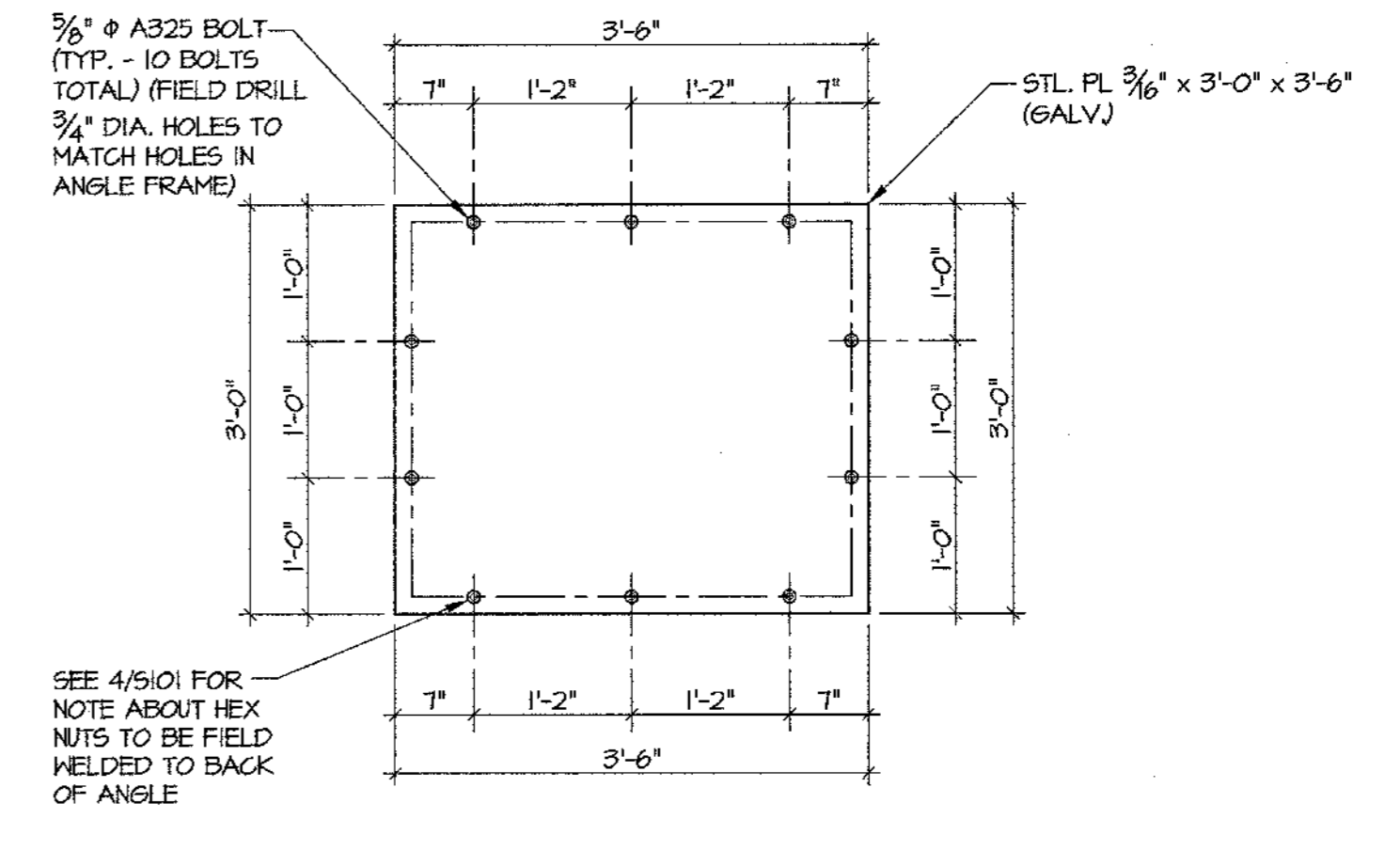
4 NEW STEEL FRAME DETAIL

S101 SCALE: 3/4" = 1'-0"



5 NEW STEEL FRAME SECTION

S101 SCALE: 3/4" = 1'-0"



6 NEW STEEL COVER PLATE DETAIL

S101 SCALE: 3/4" = 1'-0"