

**GENERAL NOTES**

- ALL WORK SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY CHAPTER 16 OF THE REVISED ORDINANCES OF KAUAI COUNTY.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS.
- THE GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY UNLESS OTHERWISE SHOWN.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW BY THE ENGINEER.
- ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF THE JOB AND NOTIFY ALL DISCREPANCIES TO THE ARCHITECT.
- ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
- DURING THE CONSTRUCTION PERIOD THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING AND THE PROTECTION OF ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY STANDARDS. ANY DEVIATION MUST BE APPROVED BY OSHA.
- THE CONTRACTOR SHALL NOTIFY ENGINEERING, INC. (PH. 808-536-1692) TWO (2) WORKING DAYS PRIOR TO BEGINNING ANY WORK WHICH WILL CONCEAL STRUCTURAL ELEMENT SUCH AS POURING CONCRETE (CONCEALING REINFORCING) OR SHEATHING WALLS (CONCEALING HOLD DOWN ANCHORS).

**FOUNDATION**

- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED EARTH OR STRUCTURALLY PREPARED FILL.
- COMPACT THE BOTTOM OF ALL FOOTING EXCAVATIONS TO 95% COMPACTION AS DETERMINED BY ASTM D1557. REMOVE ANY SOFT POCKETS OR EXPANSIVE CLAYEY SOILS ENCOUNTERED AND BACKFILL WITH SELECT, GRANULAR MATERIAL COMPACTED TO 95% AS DETERMINED BY ASTM D1557.
- ALL FOOTINGS SHALL BE BOTTOMED A MINIMUM OF 24" BELOW THE LOWEST ADJACENT GRADE AND A MINIMUM HORIZONTAL DISTANCE OF 5 FEET SHALL BE MAINTAINED BETWEEN THE BOTTOM EDGE OF FOOTING AND THE SLOPE.
- ALL WATER, MUD AND DEBRIS SHALL BE REMOVED FROM THE BOTTOM OF FOOTING EXCAVATIONS PRIOR TO THE PLACEMENT OF CONCRETE.

**REINFORCED CONCRETE**

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318-14.
- ALL CONCRETE SHALL BE NORMAL WEIGHT (150 PCF) WITH AGGREGATES CONFORMING TO ASTM C-33. UNLESS OTHERWISE NOTED, THE COMPRESSIVE STRENGTHS OF CONCRETE AT 28 DAYS AND MAXIMUM AGGREGATE SIZES SHALL BE AS FOLLOWS:

FOOTING & SLAB ON GRADE TOPPING	STRENGTH	AGGREGATE SIZE
	2500 PSI	3/4"
	3000 PSI	3/4"

- MAXIMUM WATER-CEMENT RATIO SHALL NOT EXCEED 0.55.
- ALL REINFORCING STEEL EXCEPT TIES AND STIRRUPS SHALL CONFORM TO ASTM A615 GRADE 60. TIES, STIRRUPS AND REBARS TO BE WELDED SHALL BE ASTM A615 GRADE 40.
- UNLESS OTHERWISE NOTED, SPLICES, LAPS, DOWEL EXTENSIONS AND EMBEDMENTS SHALL BE 48 BAR DIAMETERS BUT NOT LESS THAN 24" MINIMUM.
- ALL REINFORCING BARS MARKED CONTINUOUS (CONT.) ON THE PLANS SHALL BE LAPPED 48 BAR DIAMETERS MINIMUM, BUT NOT LESS THAN 2'-0".
- STAGGER ALL SPLICES WHERE POSSIBLE.
- ALL WELDING OF REINFORCING SHALL CONFORM TO 'STRUCTURAL WELDING CODE - REINFORCING STEEL' (AWS D1.4).
- REBARS SHALL BE SUPPORTED, BENT AND PLACED AS PER 'MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES' ACI 315 (LATEST).
- MINIMUM COVER IN INCHES FOR REBARS FOR CAST-IN-PLACE CONCRETE:

CONCRETE CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:	
5" AND SMALLER	1-1/2"
6" AND LARGER	2"

CONCRETE NOT EXPOSED TO EARTH OR WEATHER:	
SLABS, WALLS, AND JOISTS	3/4"
BEAMS AND COLUMNS	1-1/2"

- WELDED WIRE FABRIC SHALL BE GALVANIZED AND CONFORM TO ASTM A-185.
- UNLESS OTHERWISE SHOWN LAP OUTERMOST CROSS WIRES OF EACH SHEET OF WELDED WIRE FABRIC ONE SPACING OF CROSS WIRES PLUS 2" MINIMUM.
- AT TIME CONCRETE IS PLACED, REINFORCING SHALL BE FREE FROM MUD, OIL, LAITANCE OR OTHER COATINGS ADVERSELY AFFECTING BOND CAPACITY.
- REINFORCEMENT, ANCHOR BOLTS, SIMPSON CONNECTORS, DOUELS AND ALL OTHER EMBEDDED ITEMS SHALL BE POSITIVELY SECURED BEFORE POURING.

**CONCRETE MASONRY - CMU**

- CONCRETE BLOCK SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI.
- MORTAR SHALL BE OF TYPE 'M' WITH ONE OF THE FOLLOWING, PREPARED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S:
  - 2 SACKS PORTLAND CEMENT
  - 1 7-POUND BAG 'EASY SPRED' BY AMERICAN COLLOID CO.
  - 8 CUBIC FEET MORTAR AGGREGATE
- 1 SACK PORTLAND CEMENT
- 3 OUNCES 'MRF' BY GIBCO
- 2-3/4 CUBIC FEET MORTAR AGGREGATE
- GROUT, CONFORMING TO ASTM C476-83, MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. MIX: 1 PART CEMENT, 3 PARTS SAND, 2 PARTS PEA GRAVEL, TO BE OF FLUID CONSISTENCY (9" MINIMUM SLUMP).
- THE THICKNESS OF GROUT BETWEEN BLOCK UNITS AND REINFORCING STEEL SHALL BE NOT LESS THAN 1/2" BETWEEN PARALLEL REINFORCING BARS, NOT LESS THAN 3/4".
- IF WORK IS STOPPED ONE (1) HOUR OR LONGER, PROVIDE HORIZONTAL CONSTRUCTION JOINTS BY STOPPING THE GROUT 1-1/2" BELOW THE TOP OF THE BLOCK.
- ALL CELLS SHALL BE GROUTED SOLID. GROUT IN LIFTS NOT TO EXCEED 5'-0".
- GROUT SHALL BE VIBRATED 3 TO 5 MINUTES AFTER POUR.
- UNLESS NOTED OTHERWISE ALL WALLS SHALL BE CONSTRUCTED IN CONVENTIONAL RUNNING BOND.

**REINFORCING FOR CONCRETE MASONRY**

- ALL REINFORCING STEEL BARS (EXCEPT STIRRUPS AND TIES) SHALL CONFORM TO ASTM A615 GRADE 60. STIRRUPS AND TIES SHALL CONFORM TO ASTM A615 GRADE 40.
- UNLESS OTHERWISE NOTED, SPLICES, LAPS, DOWEL EXTENSIONS AND EMBEDMENTS SHALL BE 48 BAR DIAMETERS, BUT NOT LESS THAN 2'-0".
- AT ALL LINTELS, EXTEND HORIZONTAL BOTTOM REINFORCING 24" BEYOND OPENINGS. PROVIDE 2 - #5 BOTTOM BARS MINIMUM IN ALL LINTELS.
- WHEREVER POSSIBLE, BOND BEAMS OF INTERSECTING WALLS SHALL BE CONSTRUCTED AT THE SAME ELEVATION. WHERE BOND BEAMS OF INTERSECTING WALLS DO NOT MATCH, BOND BEAM REINFORCING SHALL BE EMBEDDED INTO THE INTERSECTING WALL A MINIMUM OF 48 BAR DIAMETERS AND GROUTED.

**STRUCTURAL STEEL**

- ALL STRUCTURAL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. STEEL PIPES AND STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B. CHANNELS, ANGLES, PLATES, BARS AND MISCELLANEOUS STEEL SHAPES SHALL CONFORM TO ASTM A-36. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- ALL BOLTS SHALL CONFORM TO ASTM A307.
- WELDING: ALL WELDING IS TO COMPLY WITH AWS. SPECIFICATIONS AND IS TO BE DONE BY CERTIFIED WELDERS. ALL WELDING IS TO BE DONE BY ELECTRIC ARC PROCESS AND SHALL BE PERFORMED WITH APPROVED ELECTRODES AS REQUIRED BY I.B.C. WELDS ARE DESIGNED AT FULL STRESS AND MUST BE DONE IN THE SHOP OF A LICENSED FABRICATOR.
- ALL WELDS NOT SHOWN SHALL BE FULL PENETRATION WELDS CAPABLE OF DEVELOPING THE FULL STRENGTH OF THE CONNECTING MEMBERS.
- THE CONTRACTOR SHALL DETAIL ALL MEMBERS AND CONNECTIONS NOT SHOWN AND SHALL SUBMIT THEM TO THE ENGINEER FOR REVIEW AND APPROVAL. COST OF THESE MEMBERS AND CONNECTIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
- HOT DIP GALVANIZE ALL STRUCTURAL STEEL SHAPES, PLATES, BOLTS AND ACCESSORIES.

**COLD-FORMED METAL FRAMING:**

- MEMBER REFERENCES: ALL MEMBERS NOTED ON THE DRAWINGS ARE DESIGNATED BY 2004 AISI STANDARD FOR COLD FORMED STEEL FRAMING - GENERAL PROVISIONS. ALL COLD-FORMED MEMBERS FOR THIS PROJECT SHALL CONFORM TO THE AISI 'SPECIFICATION FOR THE DESIGN OF COLD-FORMED STRUCTURAL MEMBERS', 1996 EDITION.
- ALL MEMBERS SHALL MEET THE MINIMUM REQUIREMENTS OF ASTM A653 STRUCTURAL QUALITY SHEET STEEL. MEMBERS 54 MILS AND THICKER SHALL BE GRADE 50 KSI. MEMBERS LESS THAN 54 MILS THICK SHALL BE GRADE 33 KSI.
- ALL MEMBERS SHALL HAVE A MINIMUM PROTECTIVE COATING EQUAL TO G60 GALVANIZED FINISH.
- ALL SCREWED FASTENERS SHALL BE STANDARD THREADED, SELF DRILLING FASTENERS. USE APPROPRIATE THREADS AND HEADS FOR THEIR INTENDED USE. UNLESS NOTED OTHERWISE, ALL SCREWS NOTED ON DRAWINGS MAY BE NO. 8, NO. 10 OR NO. 12 IN GENERAL USE NO. 12 SCREWS FOR THICK GAUGE MATERIAL.
- WELDED CONNECTIONS: ALL WELDED CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE 'STRUCTURAL WELDING CODE - SHEET STEEL' (ANSI/AWS D13.89) AS PUBLISHED BY THE AMERICAN WELDING SOCIETY. ALL WELDS SHALL BE DONE BY CERTIFIED WELDERS AND SHALL BE SHOP WELDS. WELDERS SHALL BE QUALIFIED FOR EACH TYPE OF WELD USED ON THE PROJECT. PAINT ALL WELDS WITH A ZINC RICH PRIMER AFTER MAKING WELD.
- CONTRACTOR SHALL NOT ENLARGE NOR MODIFY PREPUNCHED HOLES. NO OTHER HOLES ARE ALLOWED IN JOIST UNLESS SPECIFICALLY APPROVED BY THE ENGINEER. EDGE OF PREPUNCHED HOLES SHALL BE A MINIMUM OF 8 INCHES AWAY FROM SUPPORT.

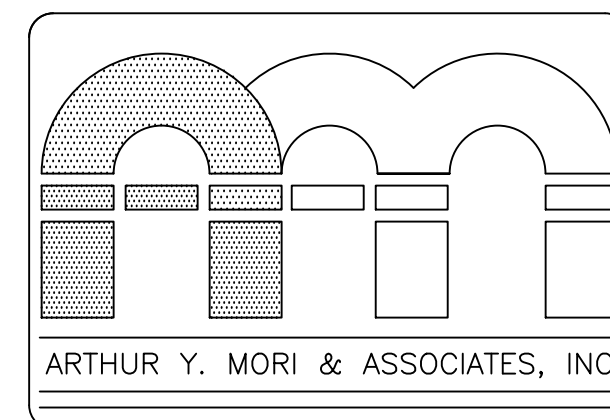
- STUDS SHALL BE OF SIZE AND GAUGE AS NOTED ON PLANS AND SPACED 16" o.c. MAXIMUM. STUDS SHALL BE INSTALLED PLUMB AND SQUARE. STUDS SHALL BE CUT FLUSH TO TOP AND BOTTOM TRACKS AND SHALL BE SECURELY FASTENED TO TOP AND BOTTOM TRACKS WITH A SCREW AT EACH FLANGE. METAL STUDS SHALL BE PRE-PUNCHED TO ACCOMMODATE UTILITY LINES. NO OTHER HOLES ARE ALLOWED IN STUD UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.

**DESIGN CRITERIA**

1. CODES: 2018 INTERNATIONAL BUILDING CODE		
RISK CATEGORY IV		
2. FOUNDATION DESIGN CRITERIA		
ALLOWABLE BEARING CAPACITY	4000 PSF	
PASSIVE RESISTANCE	300 PCF	
COEFFICIENT OF FRICTION	0.4	
3. LATERAL FORCES		
SEISMIC		
MAPPED SPECTRAL RESPONSE	0.208	
S <sub>s</sub>	0.06	
S <sub>1</sub>	D	
SITE CLASS	125	
SEISMIC IMPORTANCE FACTOR I	0.222	
S <sub>ds</sub>	0.096	
S <sub>d1</sub>	C	
SEISMIC DESIGN CATEGORY		
WIND		
EFFECTIVE WIND SPEED (3 SECOND GUST)	115 MPH	
WIND EXPOSURE	C	
K <sub>z</sub> : TOPOGRAPHIC FACTOR	1.0	
K <sub>d</sub> DIRECTIONALITY FACTOR	0.75	
4. LIVE LOADS		
ROOF	20 PSF	

**SPECIAL INSPECTION**

- SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE CONTRACTOR FOR THE ITEMS IDENTIFIED IN THIS SECTION AND IN OTHER AREAS OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS, UNLESS WAIVED BY THE BUILDING OFFICIAL (SEE 2018 IBC, CHAPTER 17).
- THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTOR(S) TO BE USED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL.
- DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
  - THE SPECIAL INSPECTOR SHALL REVIEW ALL WORK LISTED BELOW FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AND THE 2018 IBC.
  - THE SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO THE ENGINEER OF RECORD, CONTRACTOR, CONTRACTING OFFICER, AND BUILDING OFFICIAL ON A WEEKLY BASIS, OR MORE FREQUENTLY AS REQUIRED BY THE BUILDING OFFICIAL. ALL ITEMS NOT IN COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, TO THE CONTRACTING OFFICER AND THE BUILDING OFFICIAL.
  - ONCE CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE CONTRACTING OFFICER AND BUILDING OFFICIAL STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AS WELL AS THE APPLICABLE WORKMANSHIP PROVISIONS OF THE 2018 IBC.
- DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR:
  - THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE CONTRACTING OFFICER AND THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK. IN ACCORDANCE WITH IBC 1704.4, THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED WITHIN THIS 'STATEMENT OF SPECIAL INSPECTIONS'.
  - THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER AND THE RESPONSIBLE SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST TWO WORKING DAYS (48 HOURS MINIMUM) BEFORE SUCH INSPECTION IS REQUIRED. NOTIFICATION SHALL INCLUDE WHERE AND WHAT ITEMS NEED TO BE INSPECTED. CONTRACTOR SHALL PROVIDE ACCESS FOR THE INSPECTOR INCLUDING SCAFFOLDING, LADDERS, MANLIFTS, FALL PROTECTION, SAFETY HARNESS ETC. REQUIRED BY THE INSPECTOR. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE STATE AND PAY FOR RE-INSPECTION. WORK SHALL NOT PROCEED UNTIL INSPECTION HAS BEEN COMPLETED TO THE SATISFACTION OF THE INSPECTOR. NO TIME EXTENSION WILL BE GRANTED FOR THE SPECIAL INSPECTION AND CORRECTION OF DEFECTIVE WORK.
  - ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED BY THE SPECIAL INSPECTOR.
- ITEMS REQUIRING SPECIAL INSPECTIONS
  - REINFORCING STEEL (2018 IBC TABLE 1705.3 - PERIODIC)
  - STRUCTURAL STEEL FIELD WELDING
  - CONCRETE MASONRY (TMS 402- LEVEL B QUALITY ASSURANCE)
- SPECIAL INSPECTIONS DO NOT RELIEVE THE GENERAL CONTRACTOR OF HIS OR HER RESPONSIBILITIES TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND TO BE RESPONSIBLE FOR THE SAFETY OF THE JOBSITE. THE REQUIRED VERIFICATION OF EACH TYPE OF INSPECTION IS NOTED IN ITEM 1 ABOVE.



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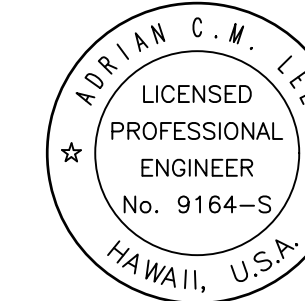
**EMERGENCY DEPARTMENT RENOVATION**

Kauai Veterans Memorial Hospital  
4643 Waimea Canyon Drive  
Waimea, Kauai HI 96796

TWK: 1-2-006: 005

GENERAL NOTES

SHEET TITLE



LICENSE EXPIRES: 4/30/24  
This work was prepared by me or under my supervision and construction of this project will be under my observation (observation of construction as defined in Section 16-115 of the Hawaii Administrative Rules, Department of Commerce and Consumer Affairs, entitled Professional Engineers, Architects and Surveyors of the State of Hawaii).

Adrian Lee  
SIGNATURE

NO.	REVISION
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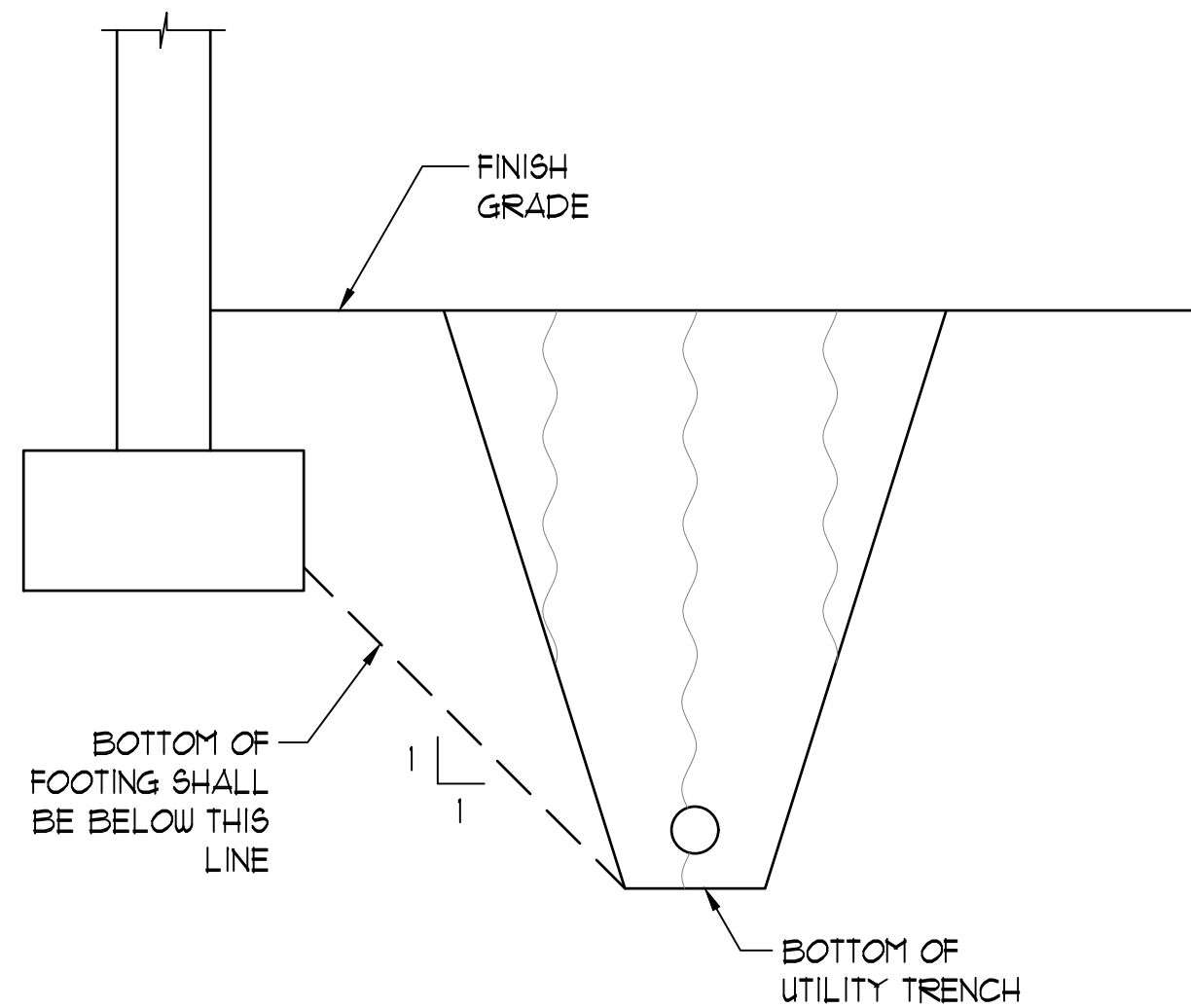
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SHEET  
**S1.1**

DATE January 24, 2024

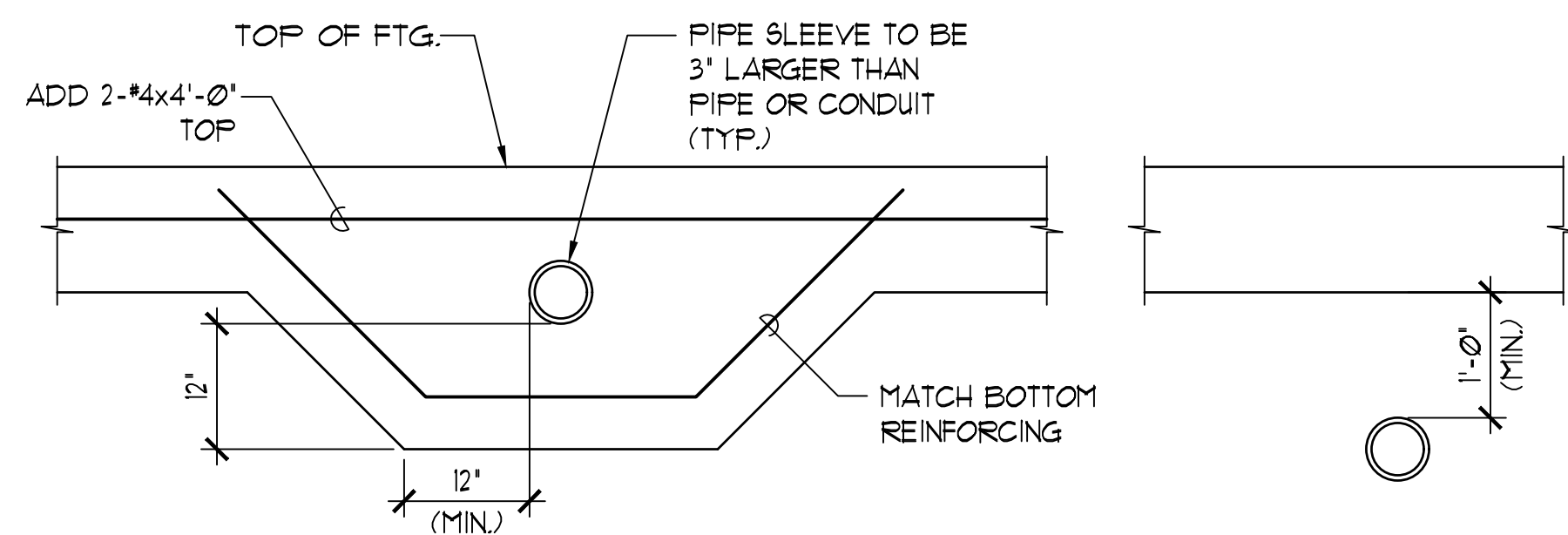
18 OF 54 SHTS

1"=1'-0"  
GRAPHIC SCALES



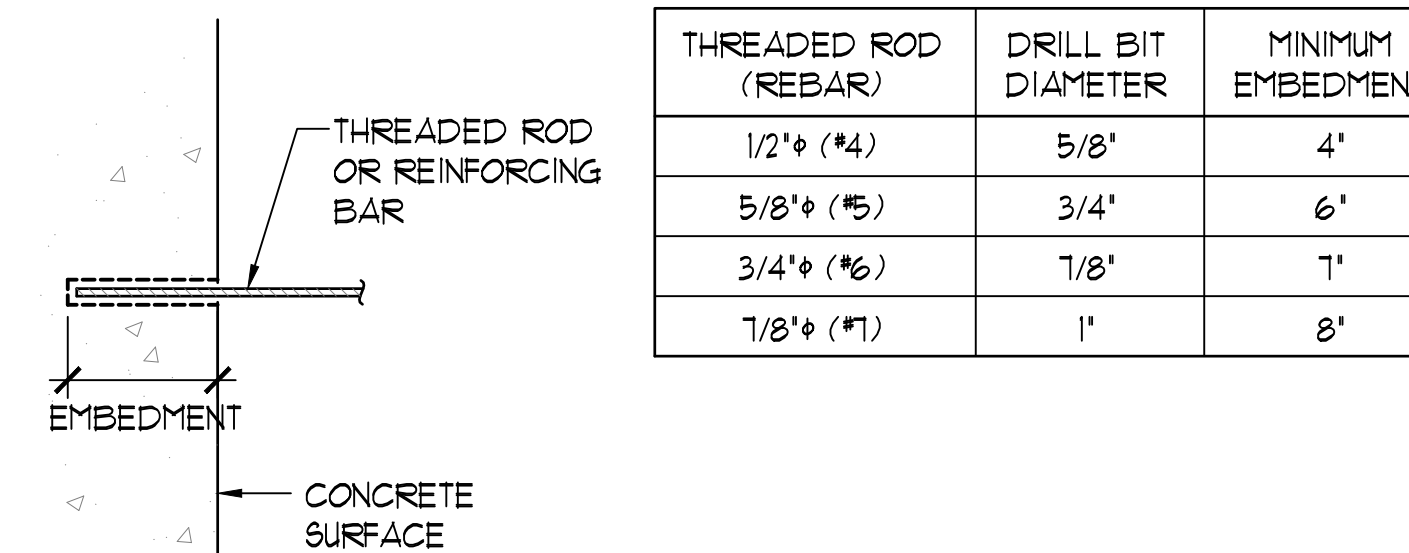
**FOOTING ADJACENT TO UTILITY TRENCH**  
NO SCALE

A  
S12



**TYPICAL PIPES & CONDUITS AT FOOTING DETAIL**  
SC: 3/4" = 1'-0"

B  
S12

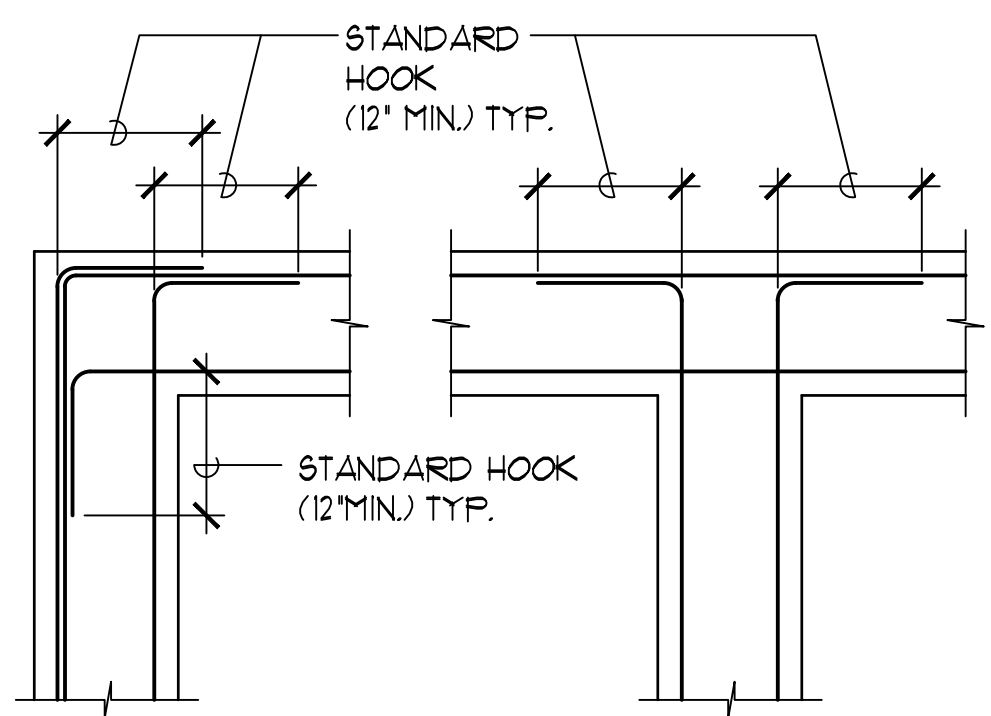


- NOTES:**
- PRE APPROVAL FOR SIMPSON STRONG TIE SET-XP EPOXY TIE ADHESIVE. ALL SUBSTITUTION REQUEST SHALL BE SUBMITTED WITH CURRENT ICC-ESR REPORT TO ENGINEER FOR REVIEW AND APPROVAL.
  - ALL THREAD ROD SHALL BE CARBON STEEL CONFORMING TO ASTM F1554, GRADE 36 HOT DIP GALVANIZED. REINFORCING BAR SHALL BE ASTM A615 GRADE 60.
  - PRE DRILL HOLE WITH DRILL BIT COMPLYING WITH ANSI B212.15-1934.
  - CLEAN HOLE WITH OIL FREE COMPRESSED AIR (80 PSI MINIMUM) AND NYLON BRUSH.
  - FILL HOLE HALF TO TWO THIRDS FULL WITH ADHESIVE STARTING FROM BOTTOM, THEN INSERT ANCHOR TO BOTTOM OF HOLE AND TWIST CLOCKWISE TO ENSURE ADHESIVE COVERS THE ANCHOR SURFACE. ADHESIVE MUST BE LEVEL WITH CONCRETE SURFACE AFTER INSERTION OF ANCHOR.
  - ANCHOR INSTALLATION REQUIRES SPECIAL INSPECTION. CONTRACTOR SHALL USE SIMPSON ARC (ADHESIVE RETAINING CAP) AS NEEDED FOR HORIZONTAL AND OVERHEAD APPLICATIONS.
  - PROVIDE STANDARD WASHER UNDER NUT UNLESS NOTED OTHERWISE.

THREADING ROD (REBAR)	DRILL BIT DIAMETER	MINIMUM EMBEDMENT
1/2" (#4)	5/8"	4"
5/8" (#5)	3/4"	6"
3/4" (#6)	7/8"	7"
7/8" (#7)	1"	8"

**EPOXY ANCHOR DETAIL**  
NO SCALE

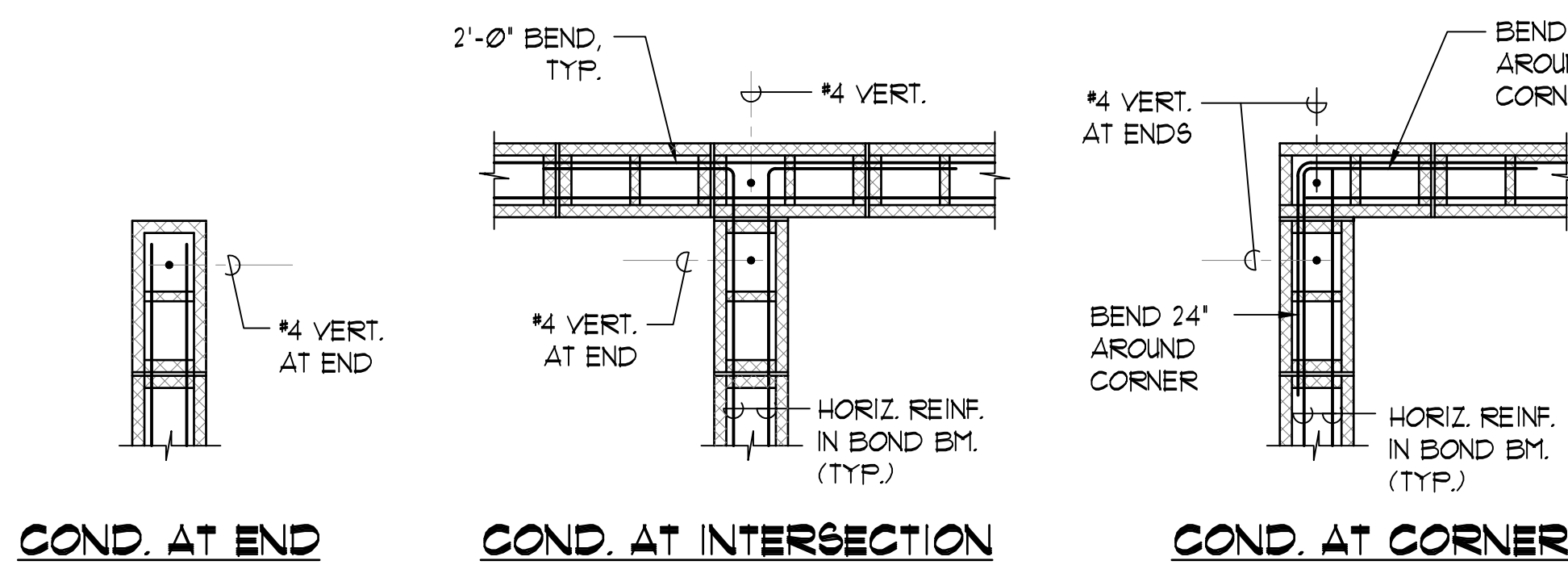
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**COND. AT CORNER**    **COND. AT INTERSECTION**

**TYP. REINFORCING PLAN FOR CONC. FOOTINGS**  
NOT TO SCALE

D  
S12

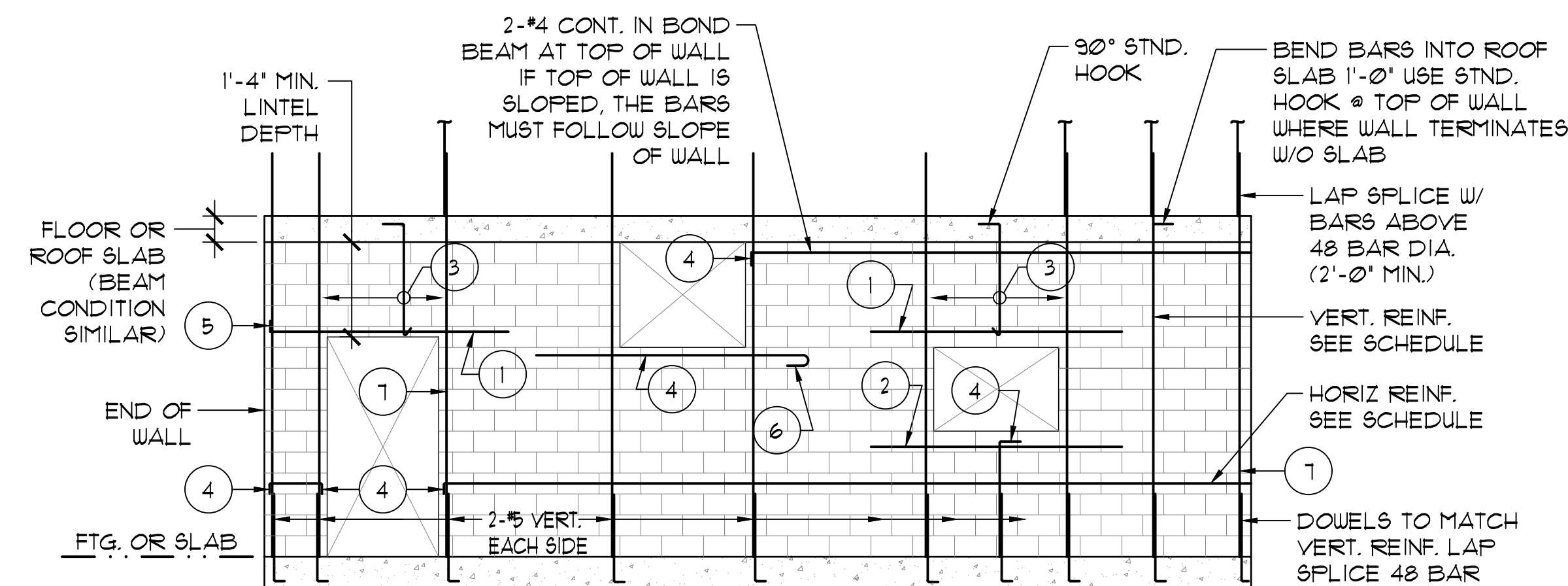


**COND. AT END**    **COND. AT INTERSECTION**    **COND. AT CORNER**

**AT EXISTING WALL**    **AT EXISTING WALL**

**TYP. CMU WALL HORIZ. REINFORCING DETAIL**  
SC: 3/4" = 1'-0"

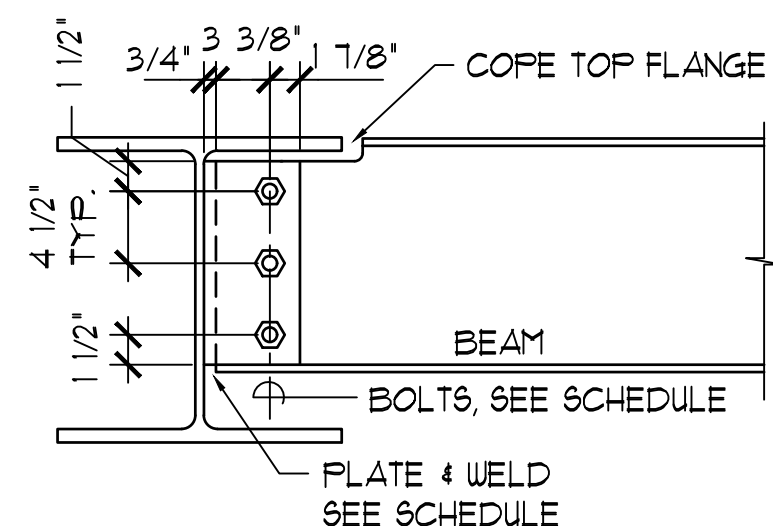
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S12



- NOTES:**
- LINTEL REINFORCING  
2-#5 FOR OPENINGS UP TO 4'-0"  
2-#6 FOR OPENINGS UP TO 6'-8"  
EXTEND BARS 48 BAR DIA. (2'-0" MIN.) FAST OPENINGS
  - ADDED BARS AT SILL  
2-#4 FOR OPENINGS UP TO 4'-0"  
2-#5 FOR OPENINGS UP TO 6'-8"  
2-#6 FOR OPENINGS UP TO 13'-0"  
EXTEND BARS 48 BAR DIA. (2'-0" MIN.) FAST OPENINGS
  - #3@2'o.c. IN LINTELS OVER WINDOW AND DOOR OPENINGS WHERE LINTELS ARE DEEPER THAN 32". #4@16" VERT. BARS W/ HOOKS @ END MAYBE SUBSTITUTED FOR #3@8"
  - STND. HOOK TYP. ALL BARS @ BOUNDARIES OF WALL.
  - WHERE EXTENSION NOT POSSIBLE, EXTEND BARS AS FAR AS POSSIBLE AND PROVIDE STND. HOOK.
  - TYPICAL LAP SPLICES 48 BAR DIA. (2'-0")
  - ADDED REBAR AT ENDS OF SHEAR WALLS. SEE SCHEDULE.

**TYPICAL CMU WALL ELEVATION**  
SC: 1/4" = 1'-0"

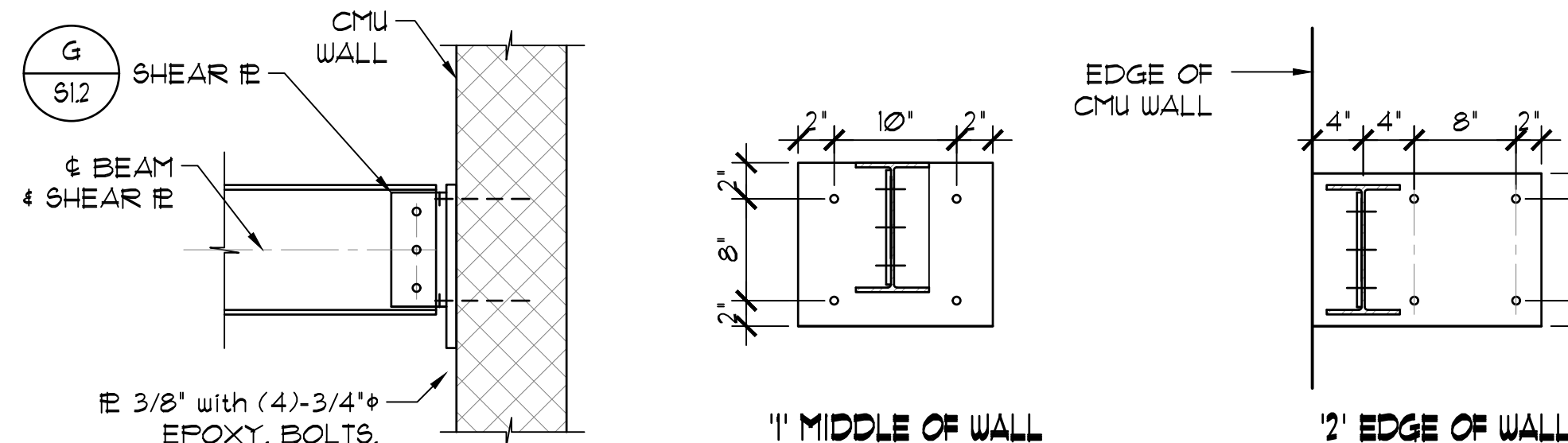
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BEAM	A307 BOLTS	MINIMUM PLATE HEIGHT X THICKNESS	WELD TO SUPPORT
W8x, W10x	2- 5/8"	6"x3/8"	1/4 FILLET EACH SIDE
W16x	3- 3/4"	9"x3/8"	1/4 FILLET EACH SIDE

**TYPICAL BEAM CONNECTION AND SCHEDULE**  
SC: 1" = 1'-0"

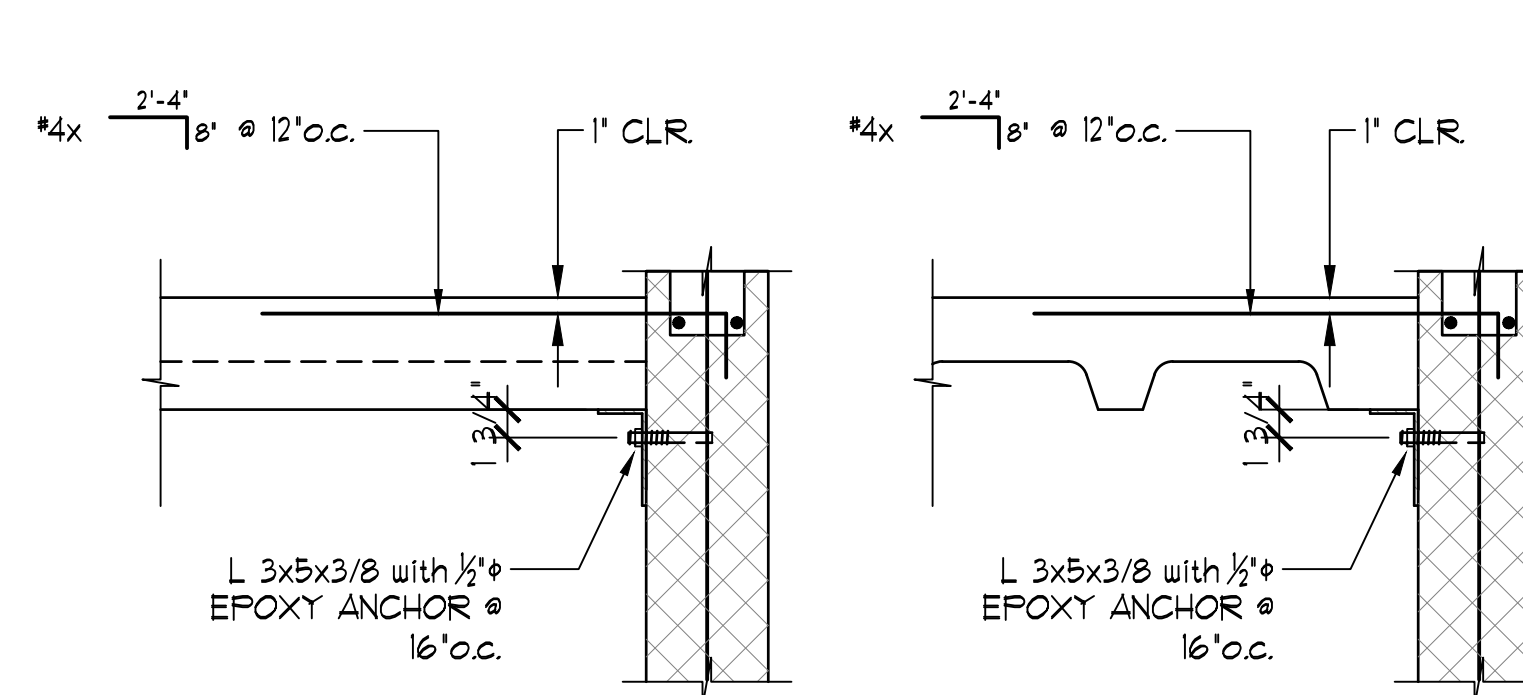
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S12



- W16 TO CMU WALL**
- NOTES:**
- HIGH STRENGTH BOLTS AT EMBEDDED SHEAR PLATES TO BE TIGHTENED ONLY TO THE SNUG-TIGHT CONDITION, U.O.N.
  - SHIFT PLATE VERTICALLY AT CMU WALL TO ALIGN BOLT ROW IN MIDDLE OF BLOCK COURSE.
  - BEAMS SUPPORTING VIBRATION LOADS TO HAVE BOLT THREADS SPOILED AFTER INSTALLATION.
  - FOR BOLTS, SHEAR PLATES, AND SHEAR PLATE WELDS SEE TYPICAL CONNECTION DETAIL.
  - SPECIAL INSPECTION IS REQUIRED ON ALL FIELD WELDS AND ANCHOR BOLTS.
  - MINIMUM DISTANCE OF ANCHOR BOLTS TO ANY CONCRETE EDGE = 4".

**STEEL BEAM TO CMU CONNECTION DETAIL**  
SC: 1" = 1'-0"

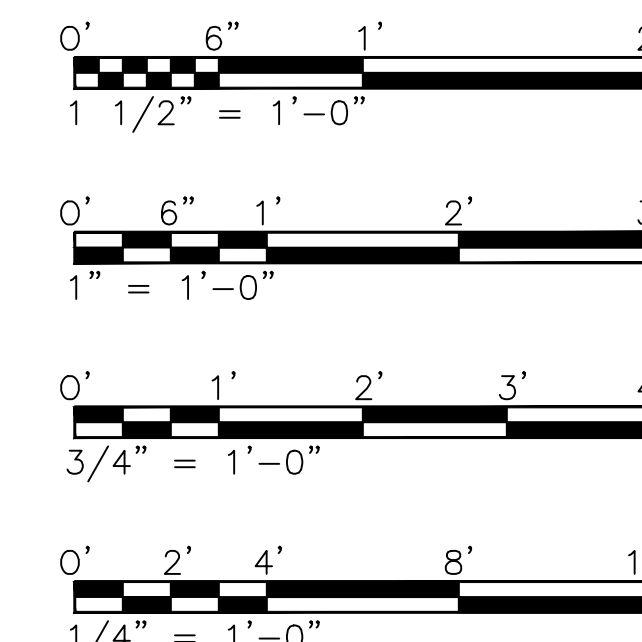
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S12



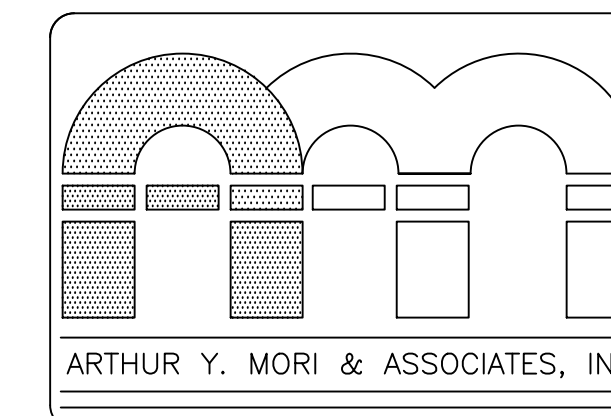
**'3' LEDGER PERPENDICULAR TO DECK STRENGTH DIRECTION**    **'4' LEDGER PARALLEL TO DECK STRENGTH DIRECTION**

**STEEL LEDGER**  
SC: 1" = 1'-0"

I  
S12



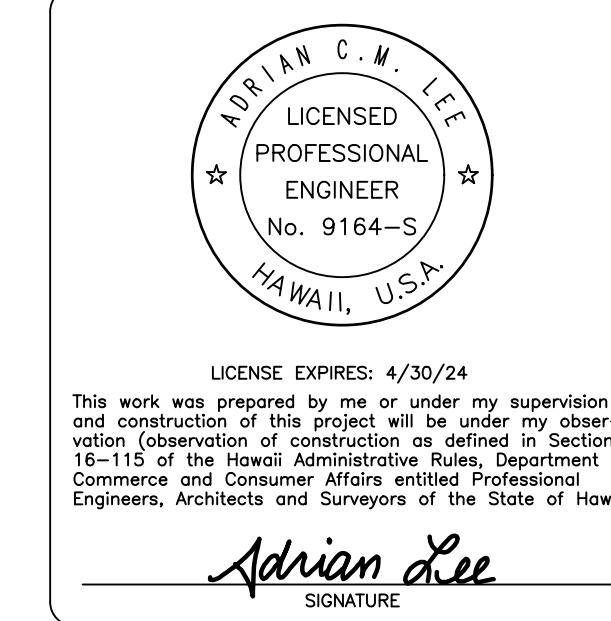
**GRAPHIC SCALES**  
0' 2' 4' 8' 12' 1/4" = 1'-0"



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**EMERGENCY DEPARTMENT RENOVATION**  
Kauai Veterans Memorial Hospital  
4643 Waimea Canyon Drive  
Waimea, Kauai HI 96796

TWK 1-2-006-005



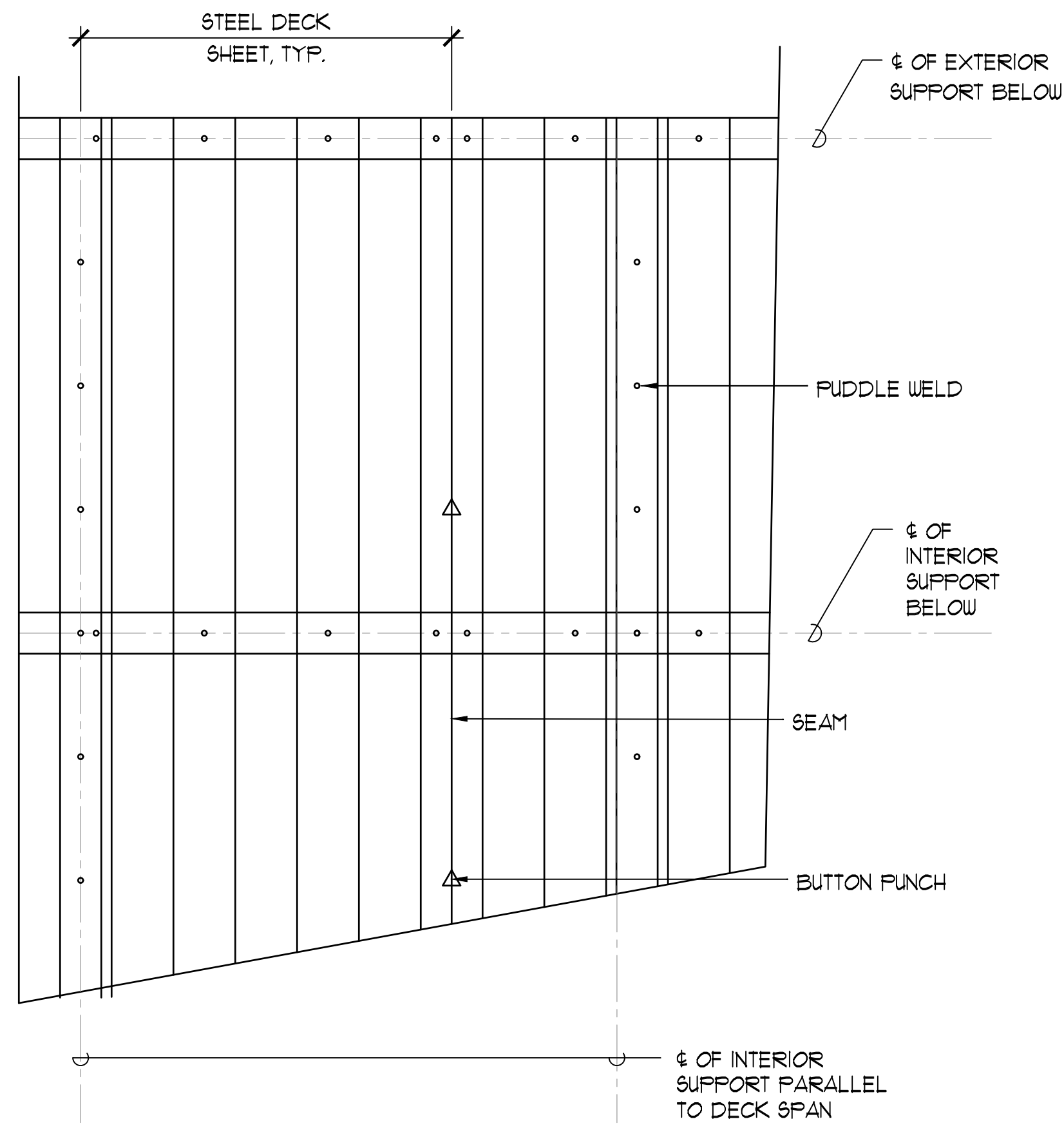
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JOB NO. \_\_\_\_\_

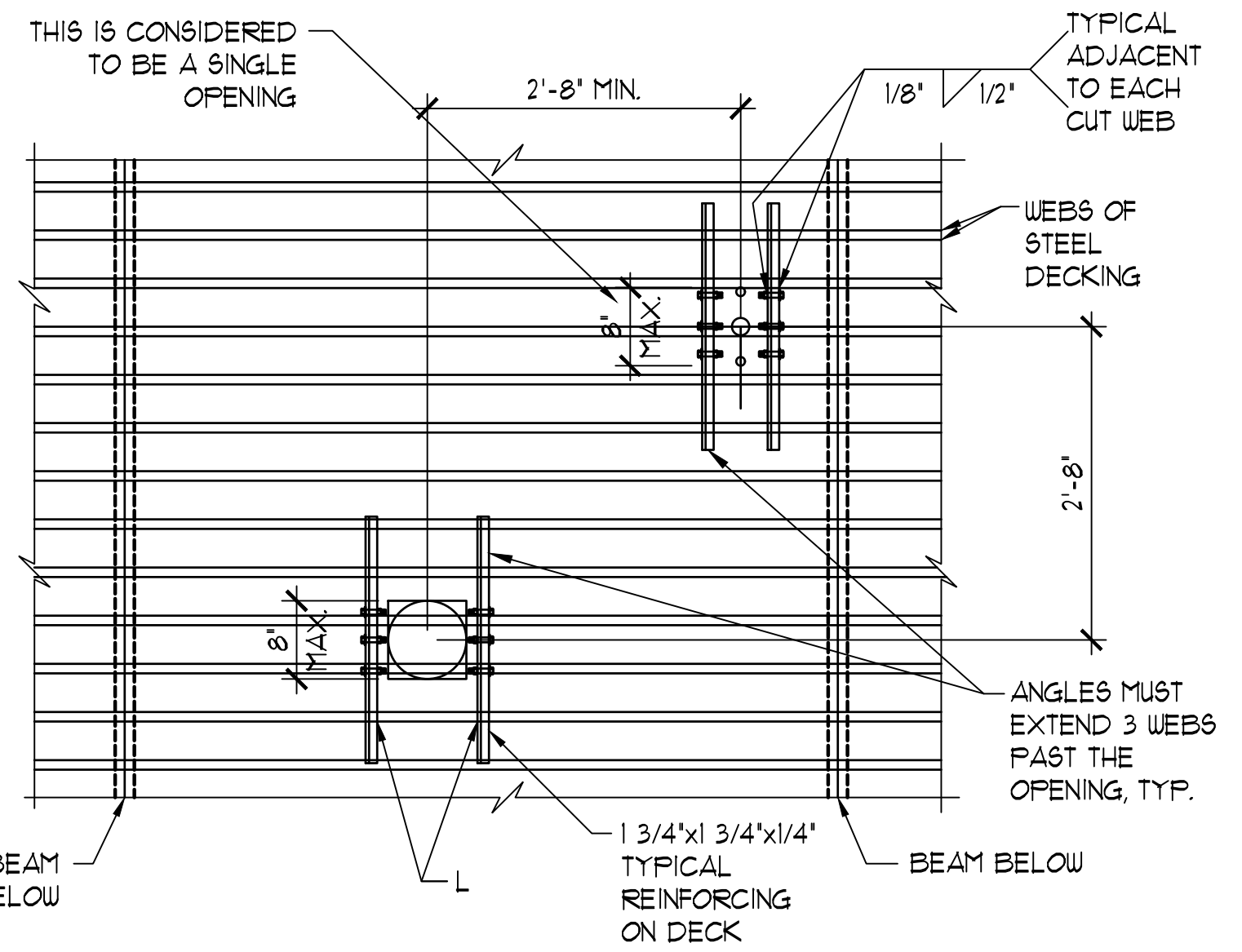
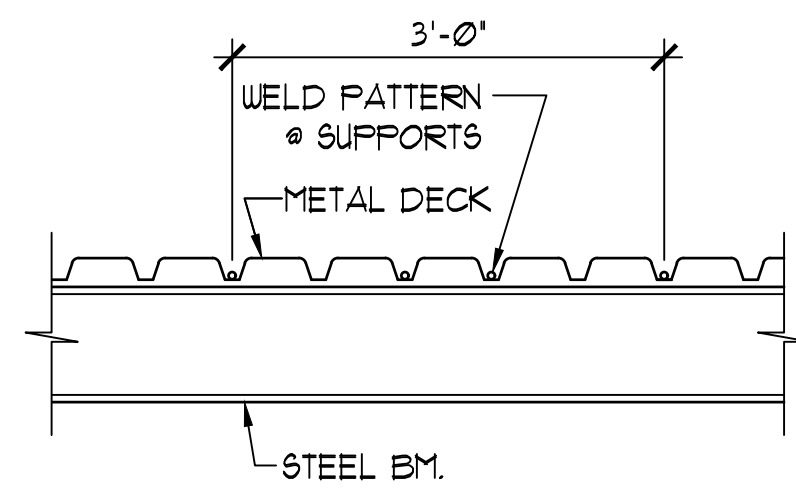
SHEET **S1.2** DATE January 24, 2024

19 OF 54 SHTS





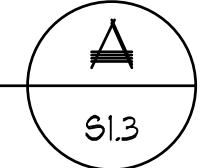
- NOTES:
1. METAL FLOOR DECK SHALL BE 20 GAUGE VERCO W3 FORMLOK FLOOR DECK OR EQUIVALENT WITH THE FOLLOWING MINIMUM SECTION PROPERTIES:  $I = 0.286 \text{ in}^4$  AND  $S = 0.534 \text{ in}^3$ .
  2. METAL DECK SHALL BE ATTACHED TO SUPPORT WITH A MINIMUM OF FOUR 1/2" EFFECTIVE DIAMETER PUDDLE WELDS PER SHEET (ONE WELD AT EACH VALLEY).
  3. AT SUPPORTS PARALLEL TO DECK SPAN, PROVIDE 1/2" PUDDLE WELDS @ 12" o.c. MINIMUM.
  4. SEAM ATTACHMENT SHALL BE BUTTON PUNCH @ 24" o.c. MINIMUM.
  5. PERIODIC INSPECTION BY A SPECIAL INSPECTOR IS REQUIRED FOR WELDING OF DECK AND STUDS.
  6. THE EFFECTIVE AREA OF A 3/4" PLUG WELD SHALL NOT BE LESS THAN 1/2".
  7. DECK SHALL BEAR 2" MINIMUM ON SUPPORTS.



- NOTES:
1. PRIOR TO CONCRETE POUR, SMALL OPENINGS SHOULD BE BLOCKED OUT AND FORMLOK LEFT INTACT. HOLES LESS THAN 6" IN DIAMETER AND CUTTING NO MORE THAN 1 WEB NEED NO REINFORCING. AFTER THE CONCRETE HAS CURED, THE BLOCKOUT CAN BE REMOVE AND THE METAL DECK IN THE AREA OF THE HOLE REMOVED.
  2. DO NOT CUT MORE THAN 3 ADJACENT WEBS.
  3. ANGLES SHALL BE PLACED ON TOP OF DECK.
  4. ALL HOLES THAT DO NOT MEET THESE CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR REVIEW AND APPROVAL.

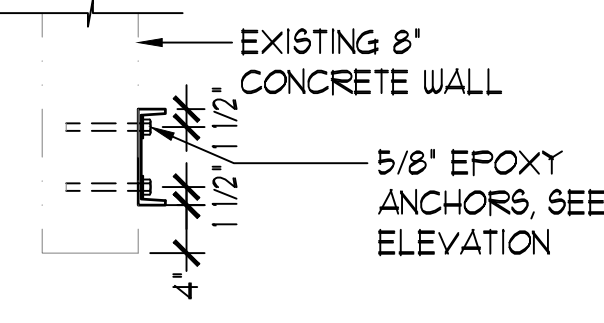
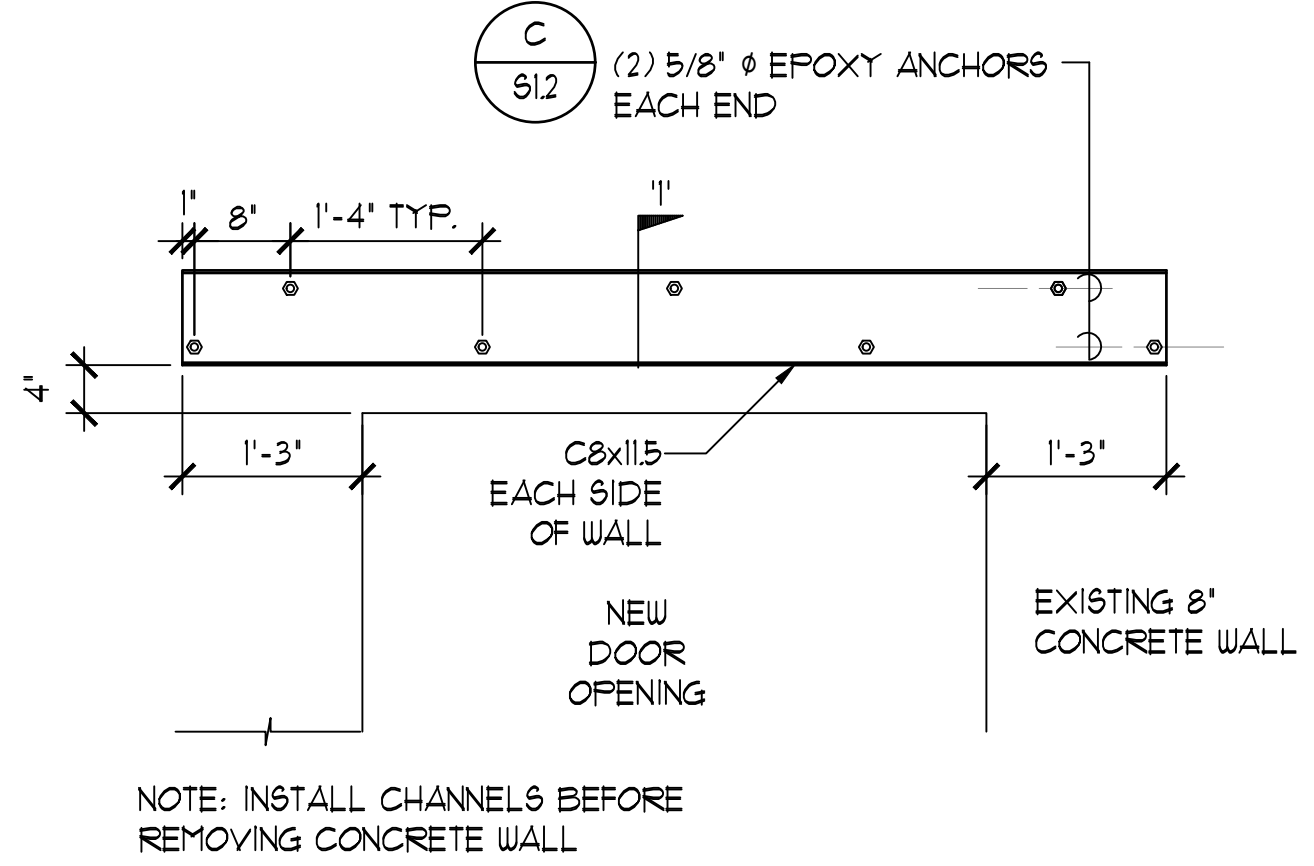
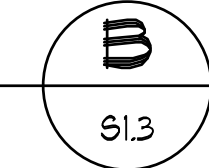
**METAL ROOF AND COMPOSITE FLOOR DECK**

SC: 3/4"=1'-0"



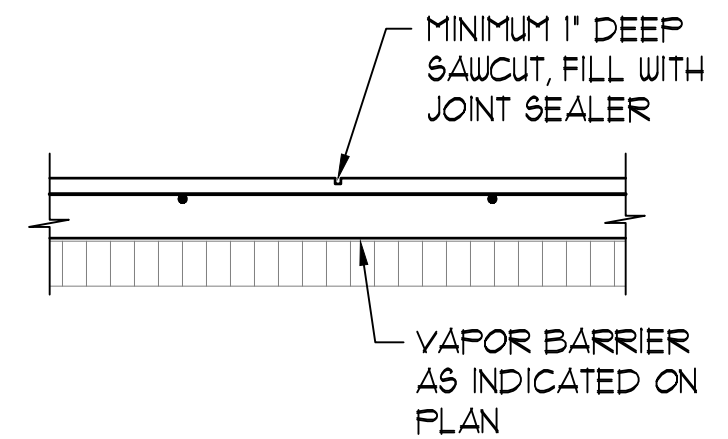
**METAL FLOOR DECK PENETRATION DETAILS**

NOT TO SCALE



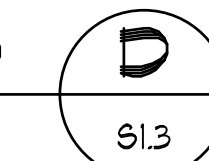
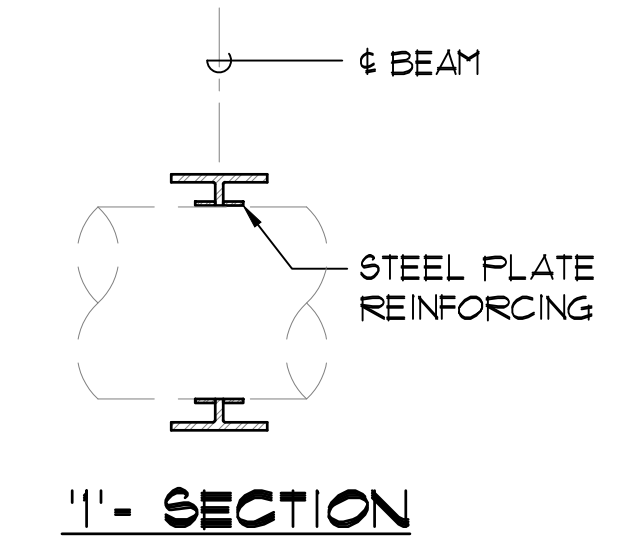
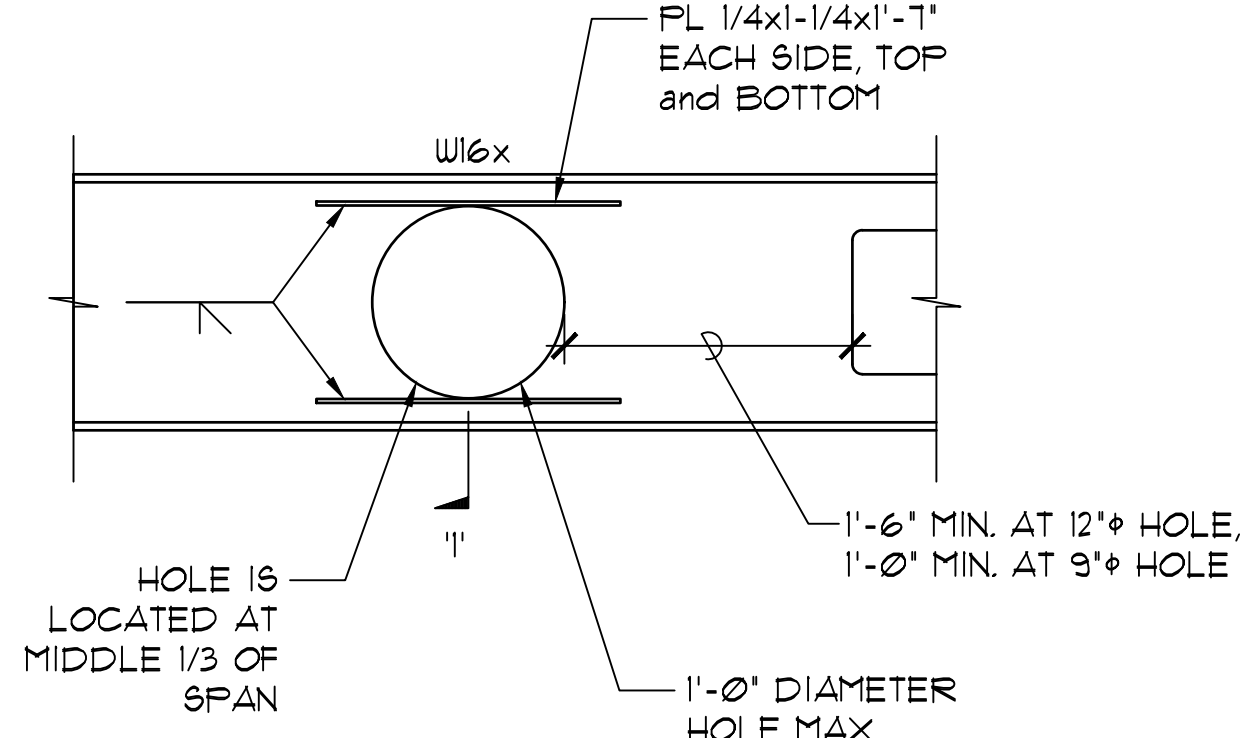
**1'-1" DETAIL**

SC: 3/4"=1'-0"



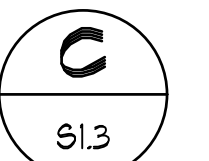
- NOTES:
1. SAW CUT SHALL BE DONE AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO AVOID EXCESSIVE RAVELING, BUT NOT MORE THAN 8 HOURS AFTER FINISHING.

**SAWED CONTROL JOINT**



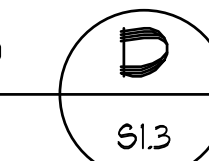
**CHANNEL HEADER @ DOOR**

SC: 3/4"=1'-0"



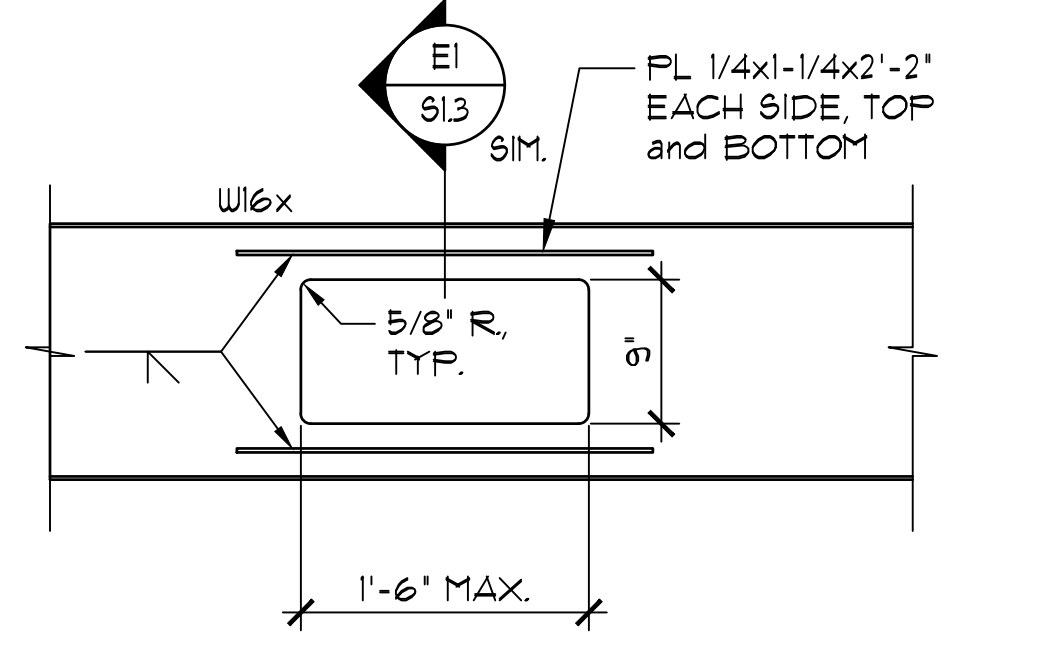
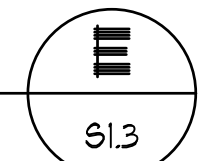
**CONTROL JOINT DETAILS (C.J.)**

SC: 3/4"=1'-0"



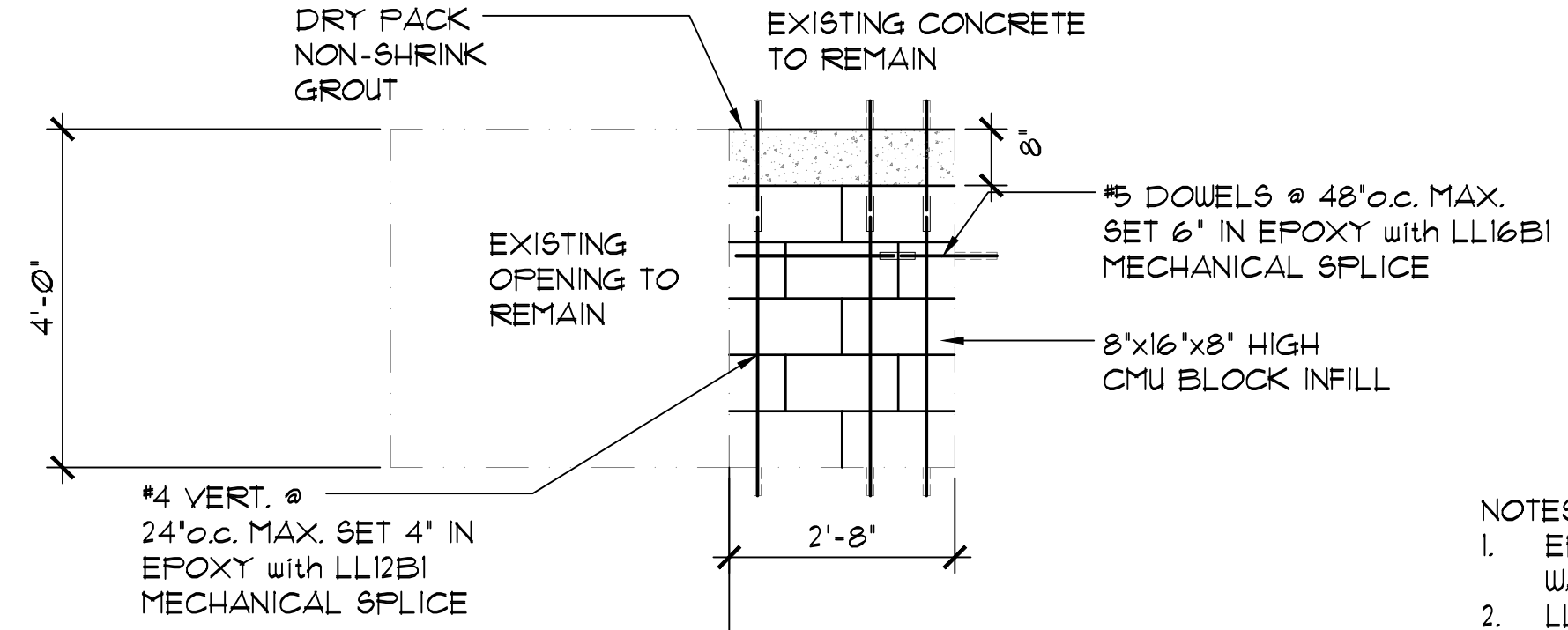
**HOLE IN W16x STEEL BEAM**

SC: 1"=1'-0"



**1'-6" x 9" HOLE IN W16x STEEL BEAM**

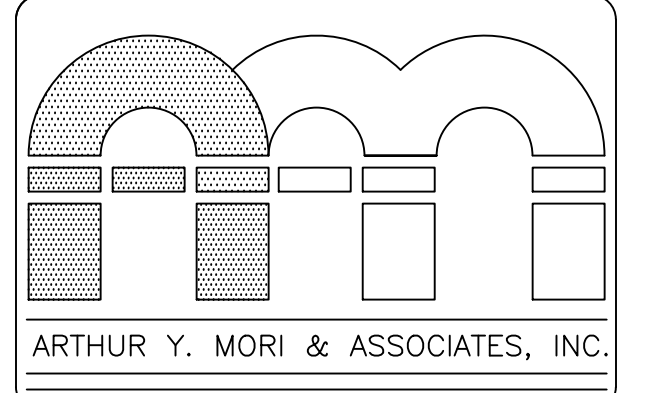
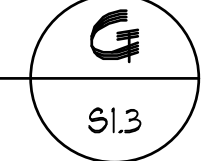
SC: 1"=1'-0"



- NOTES:
1. EPOXY ANCHORS TO BE SET INTO SOLID GROUT WALLS. FILL EMPTY CELLS WITH SOLID GROUT.
  2. LL12BI AND LL16BI ARE LENTON LOCK MECHANICAL REBAR SPLICE CONNECTORS.

**PARTIAL EXTERIOR WALL ELEVATION**

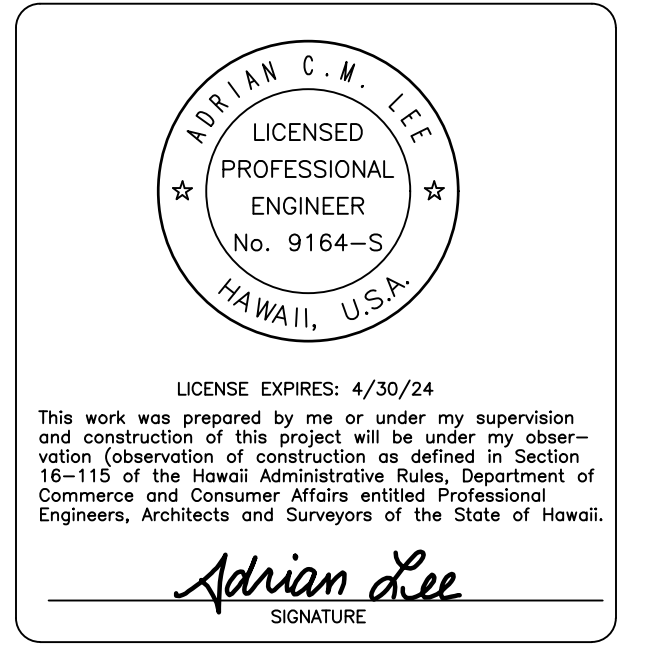
SC: 1/2"=1'-0"



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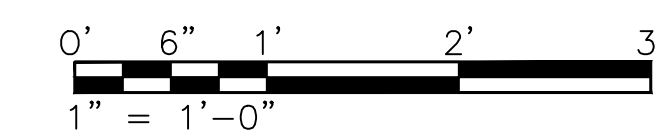
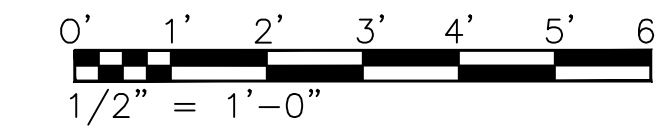
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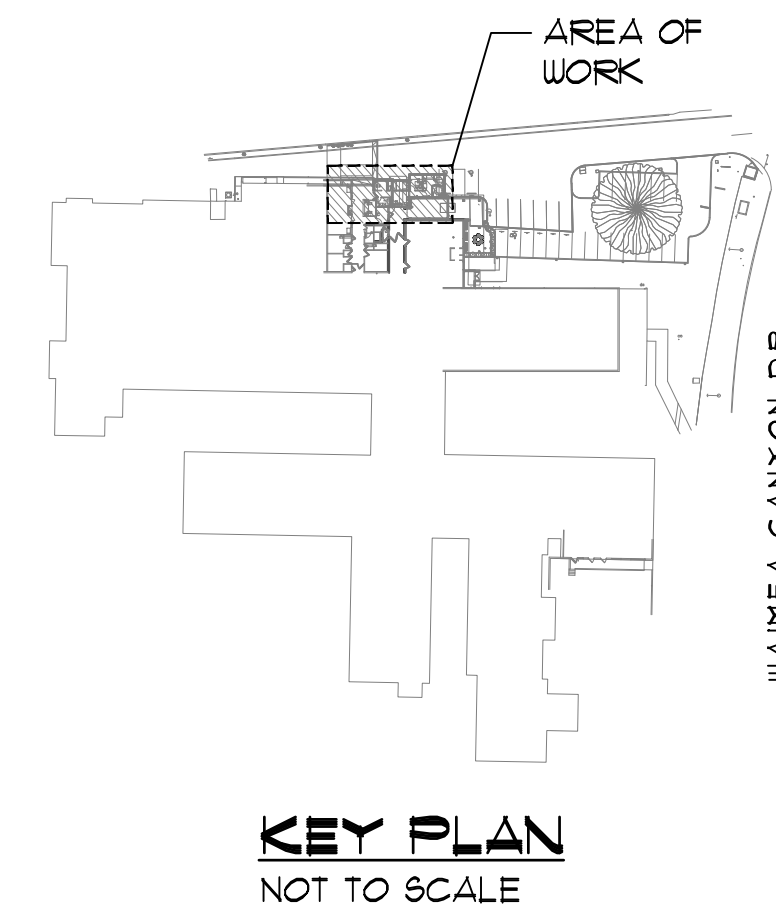
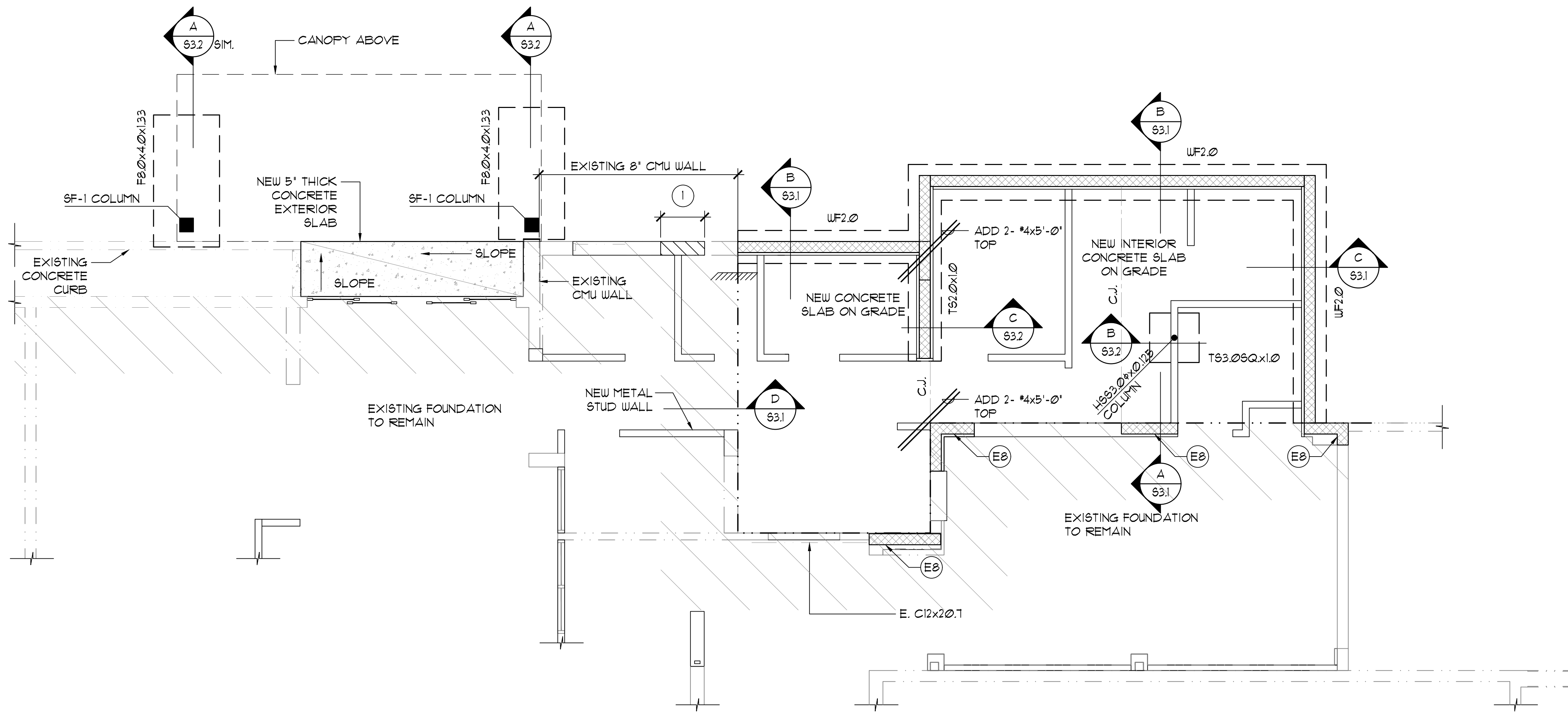
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SHEET **S1.3** DATE January 24, 2024  
20 OF 54 SHETS

GRAPHIC SCALES



**FOUNDATION NOTES:**

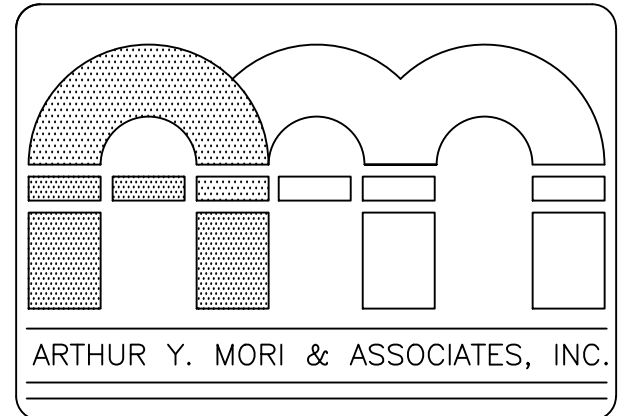
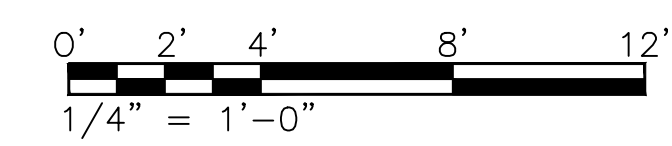
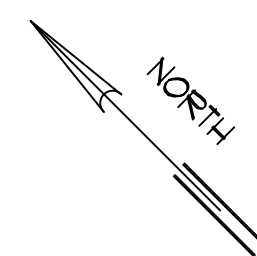
1. NEW INTERIOR SLABS ON GRADE ARE 5' THICK CONCRETE with #4 @24'o.c. EACH WAY over VAPOR BARRIER, 4' 3B FINE.
2. EXTERIOR SLABS ARE SAME AS INTERIOR SLABS BUT OMIT VAPOR BARRIER.
3. INTERIOR NEW METAL STUD WALLS ARE 3625162-33 @ 16'o.c.

**LEGEND:**

- ① NEW 8" CMU INFILL AT WINDOW. SEE DETAIL G/S13.
- ▨ INDICATES NEW 8" CMU WALL.
- ⊖ EXISTING 8" CMU WALL TO REMAIN.
- C.J. INDICATES SLAB CONTROL JOINT. SEE DETAIL D/S13.

**FOUNDATION PLAN**

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



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TWK: 1-2-006: 035

FOUNDATION PLAN

ADRIAN C.M. LEE  
LICENSED PROFESSIONAL ENGINEER  
No. 9164-S  
HAWAII, U.S.A.

LICENSE EXPIRES: 4/30/24

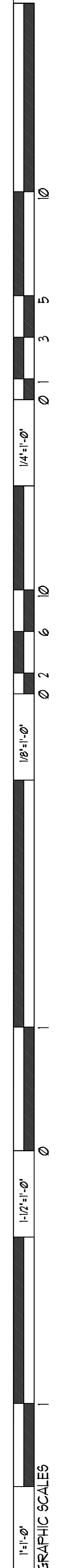
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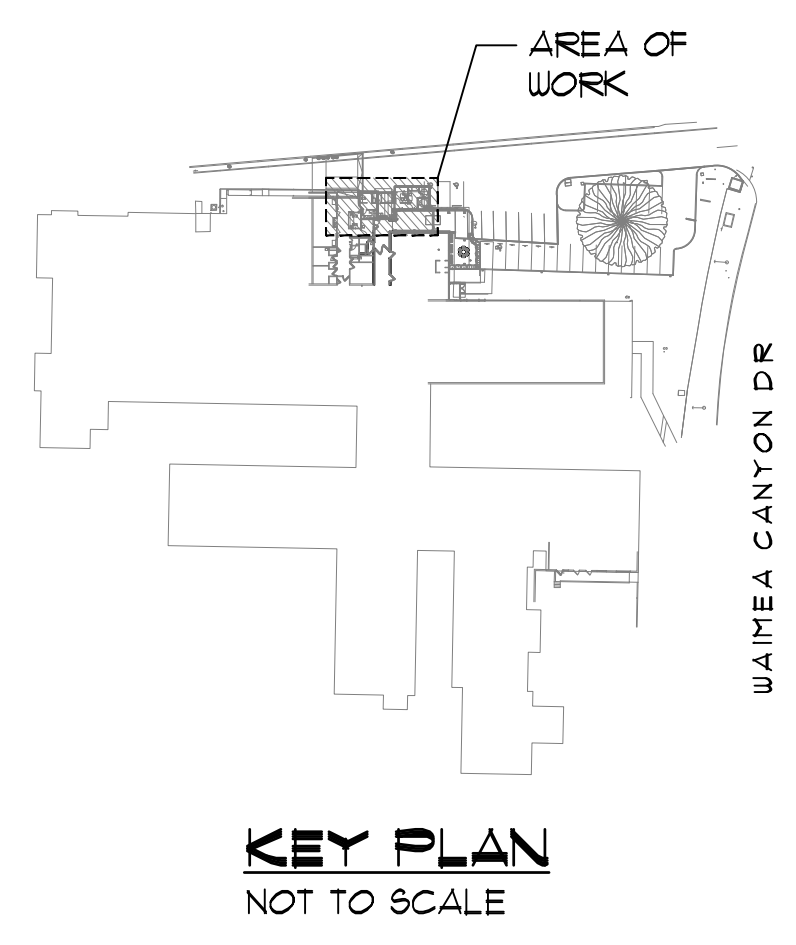
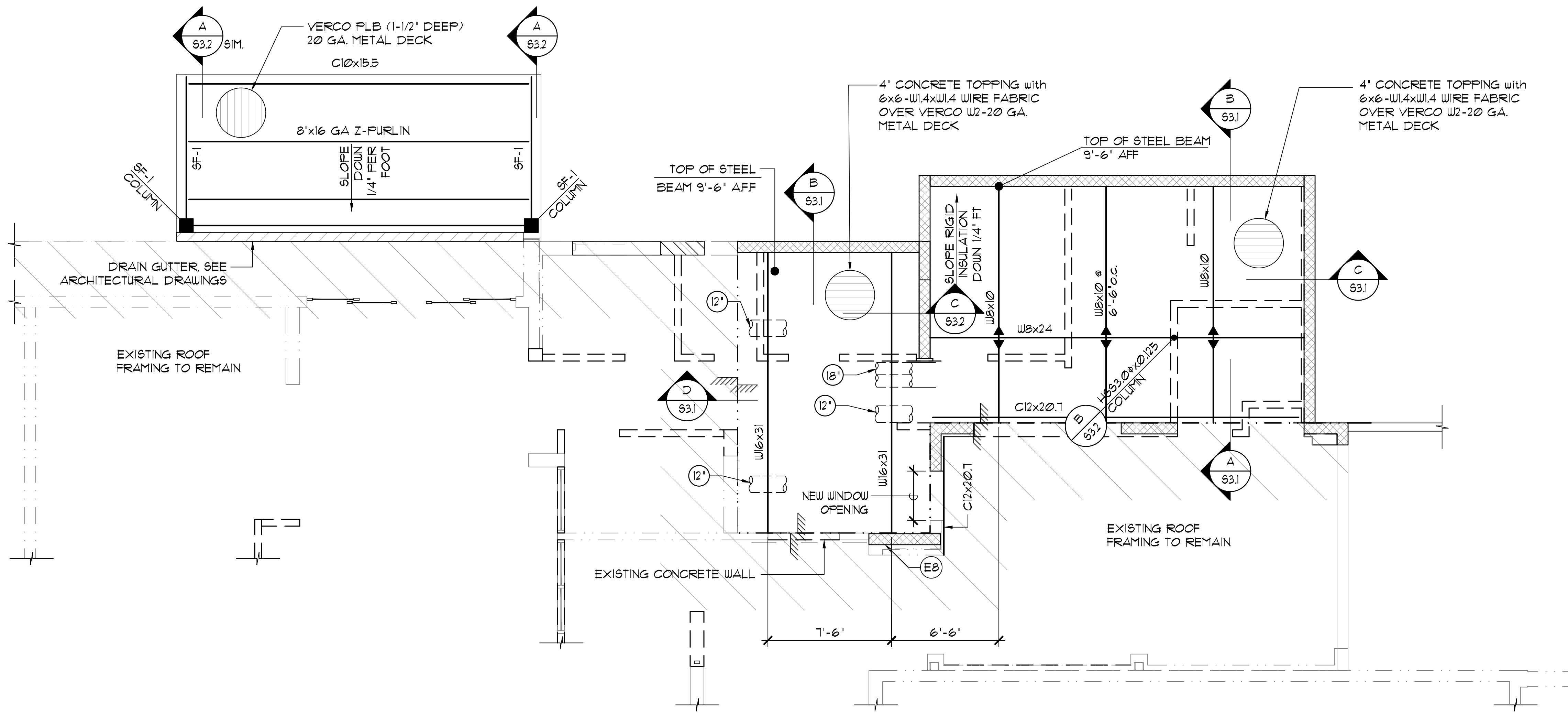
*Adrian Lee*  
SIGNATURE

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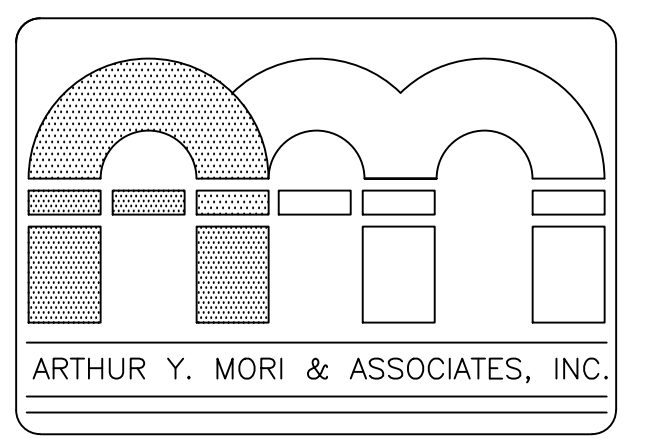
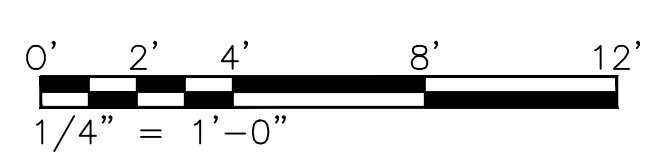
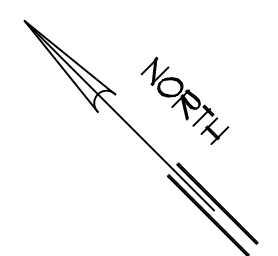
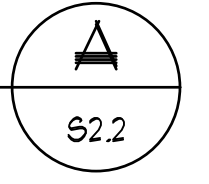
SHEET **S2.1** DATE January 24, 2024  
21 OF 54 SHTS





- ROOF FRAMING NOTES:**
1. NEW BUILDING ROOF FRAMING IS LEVEL, ROOF SLOPE CREATED WITH RIGID INSULATION.
  2. CANOPY ROOF IS SLOPED.
  3. INDICATES MOMENT CONNECTION.
  4. INDICATES 12\"/>
  5. INDICATES 18\"/>

**ROOF FRAMING PLAN**  
 SC: 1/4\"/>



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ROOF FRAMING PLAN

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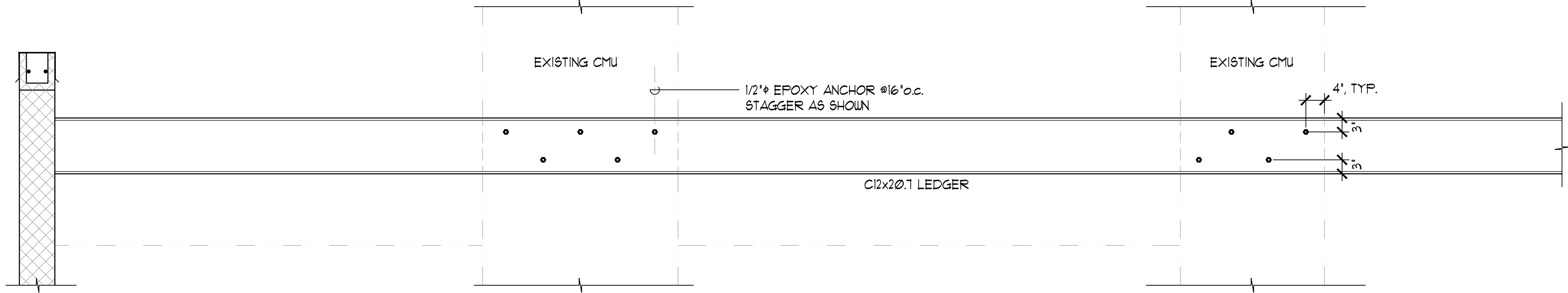
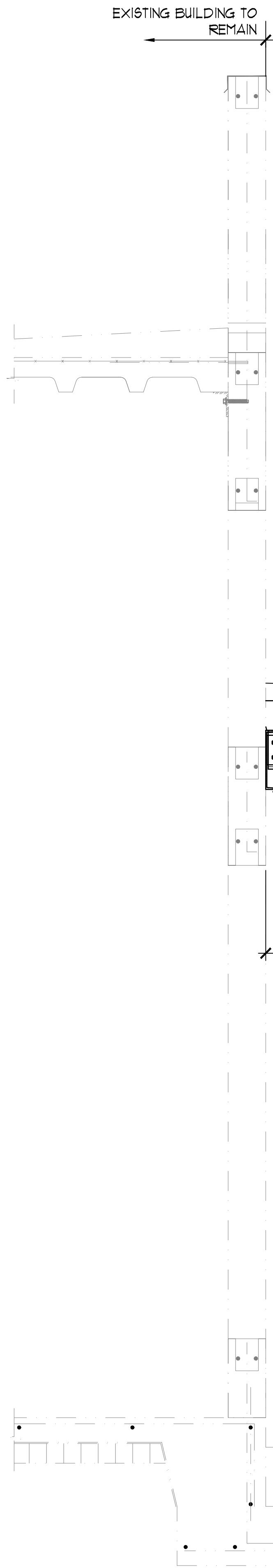
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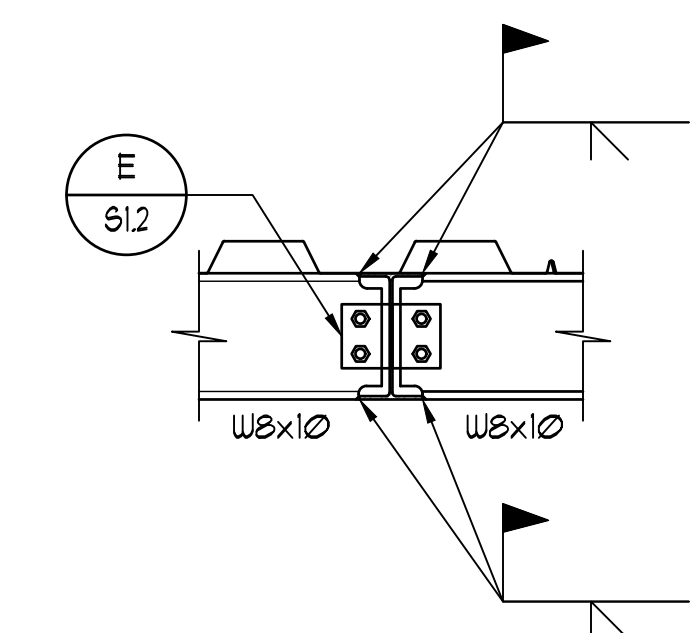
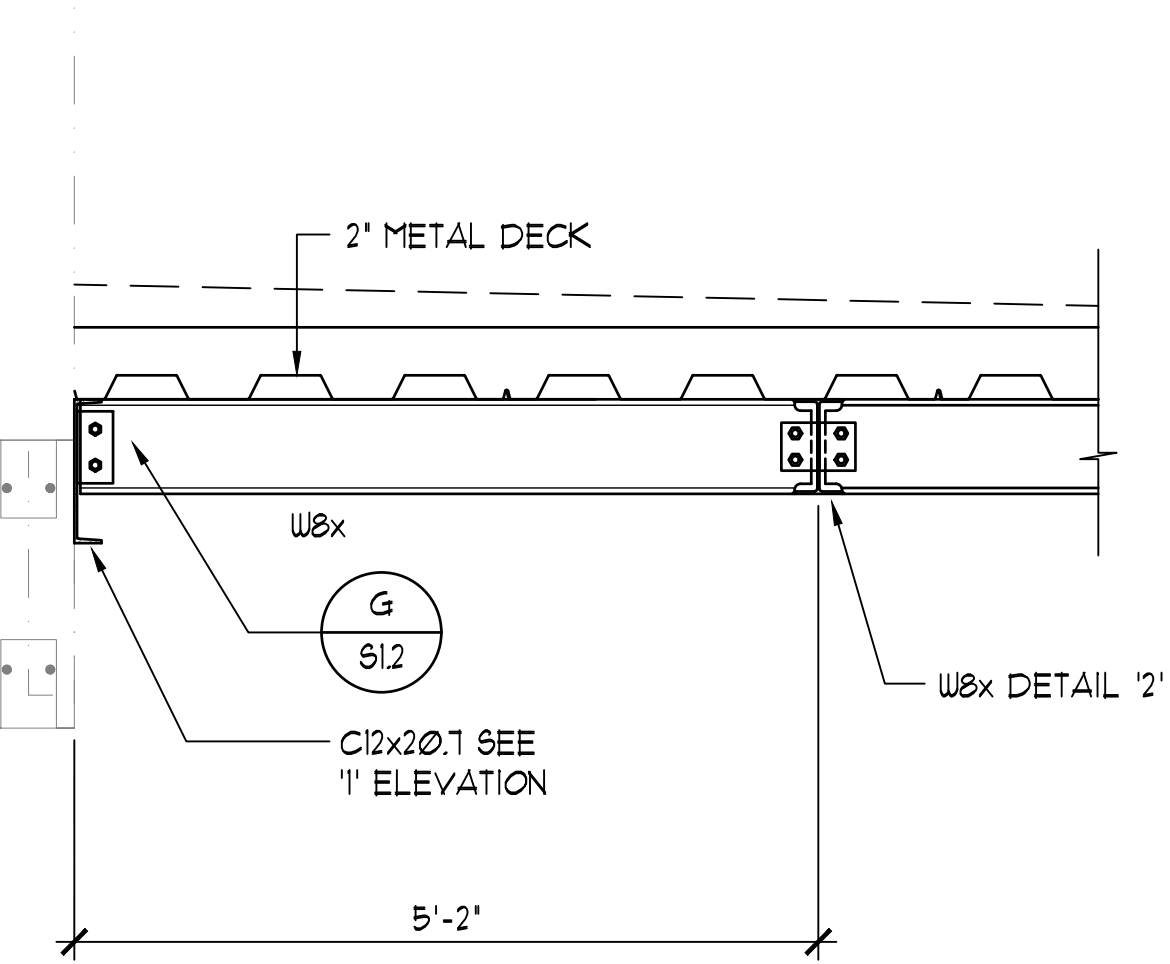
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SHEET **S2.2** DATE January 24, 2024  
 22 OF 54 SHTS

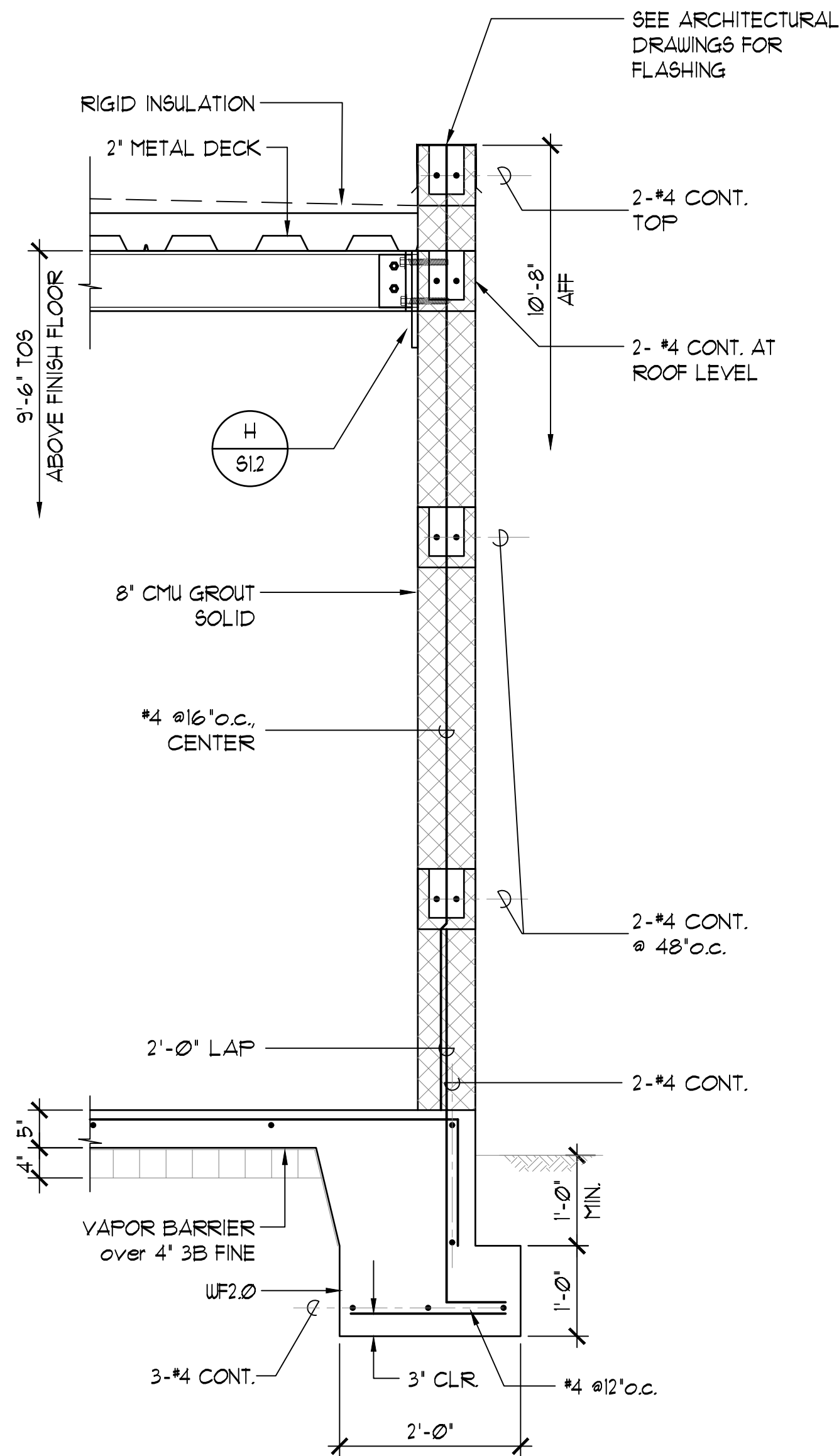
1/4\"/>



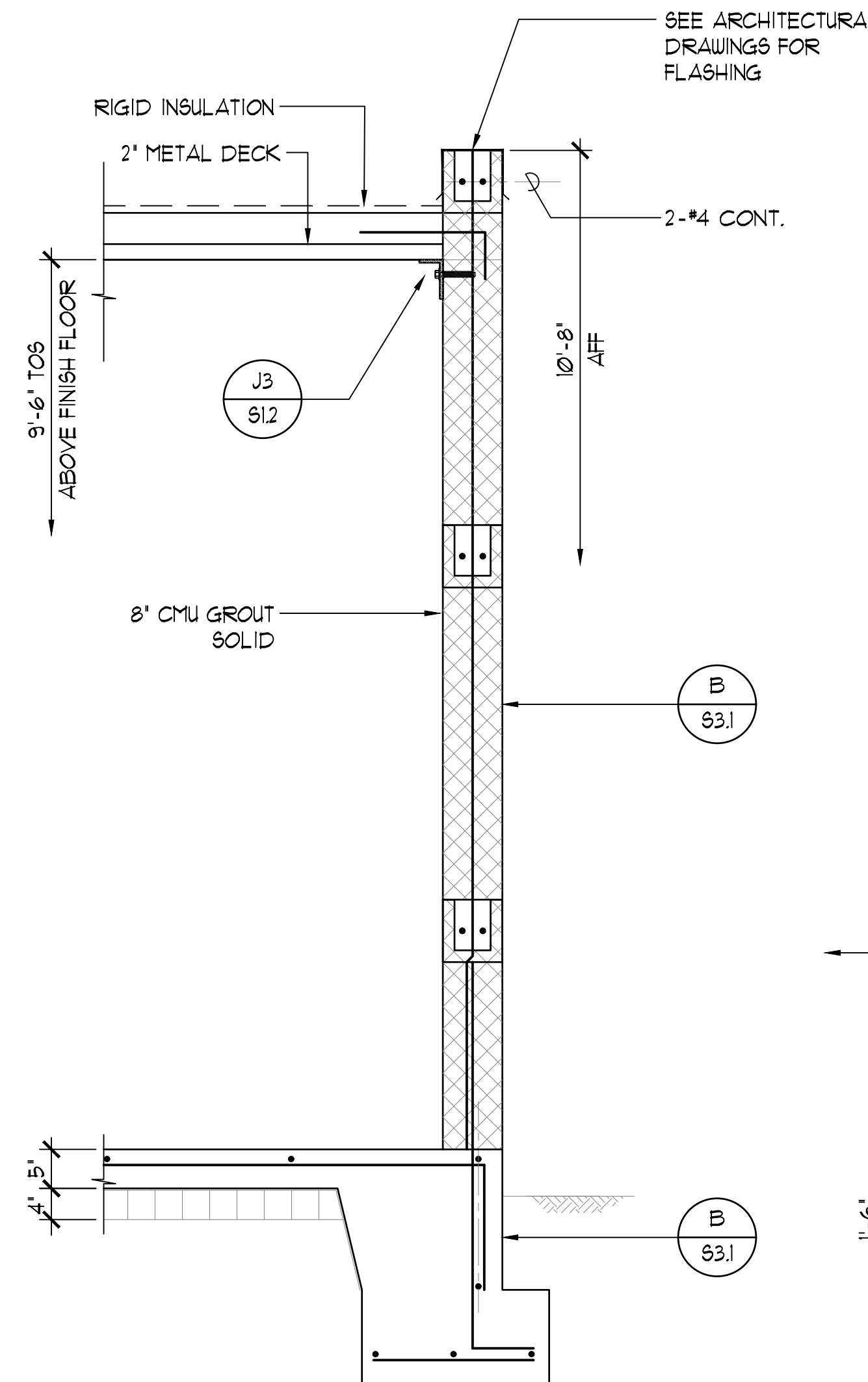
1'- C12x20.7 ELEVATION



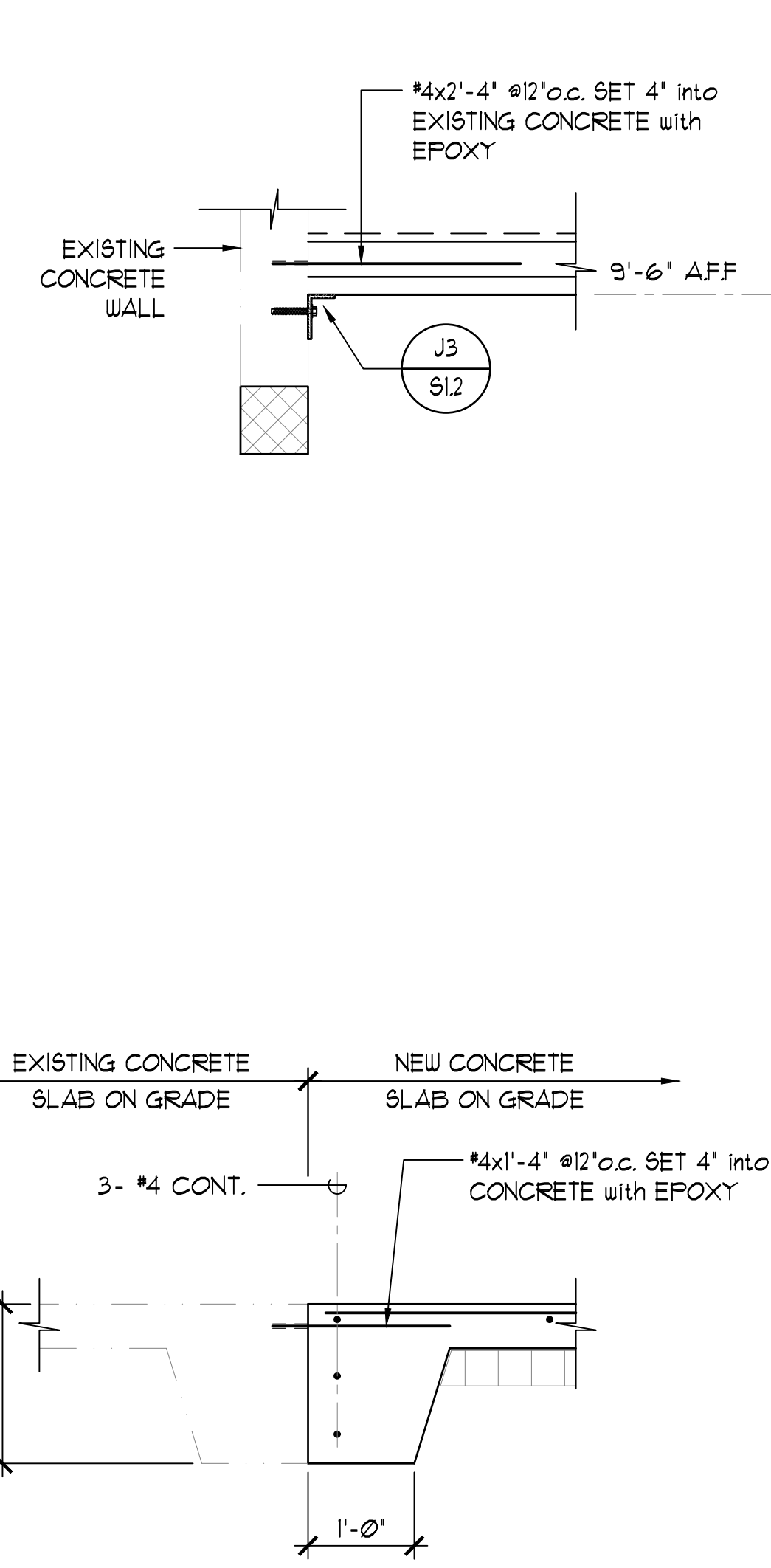
2'- MOMENT CONNECTION  
SC: 1'-1'-0"



SECTION THRU ROOF  
SC: 3/4'-1'-0"

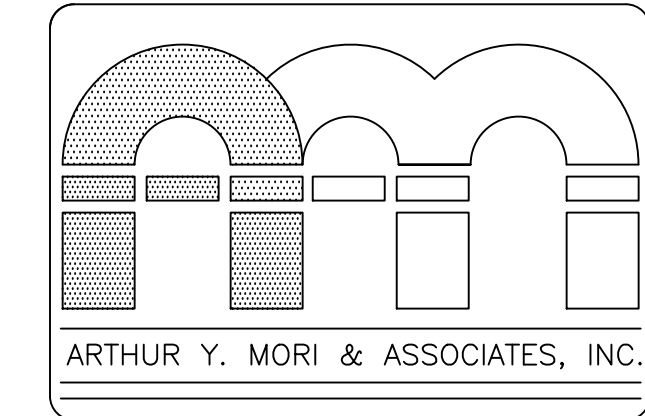
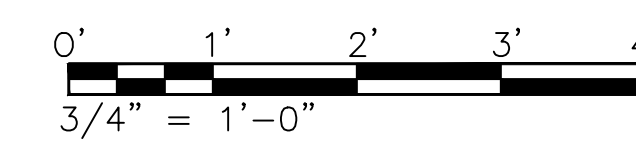
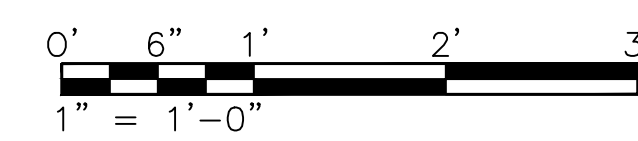


SECTION THRU ROOF  
SC: 3/4'-1'-0"



SECTION THRU ROOF  
SC: 3/4'-1'-0"

SECTION AT EXISTING BUILDING  
SC: 3/4'-1'-0"



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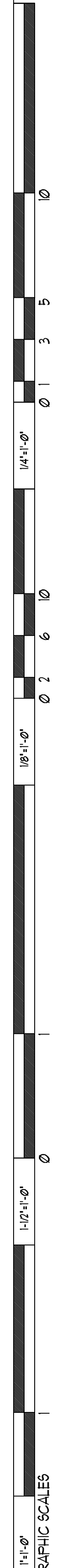
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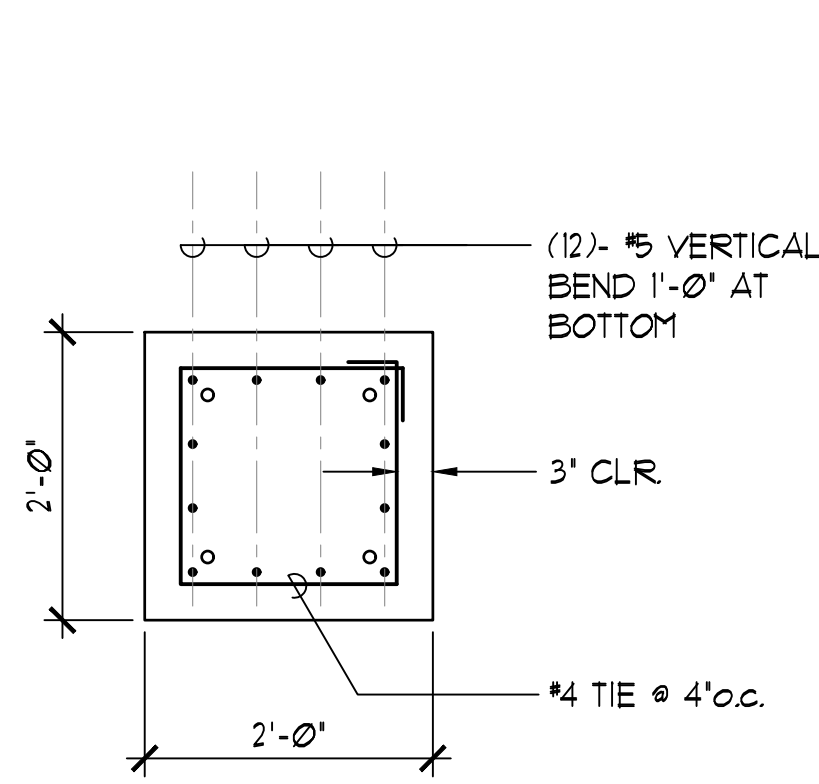
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SIGNATURE

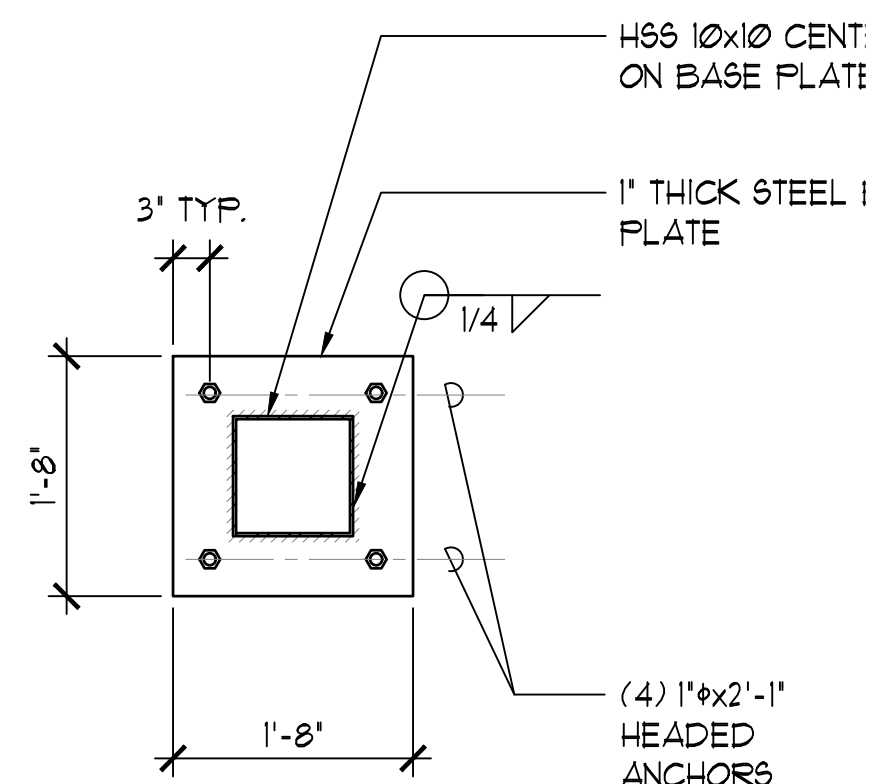
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SHEET **S3.1** DATE January 24, 2024  
23 OF 54 SHTS

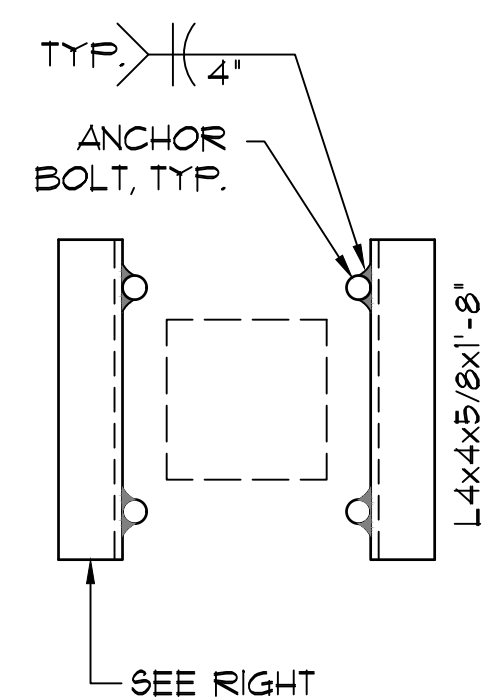




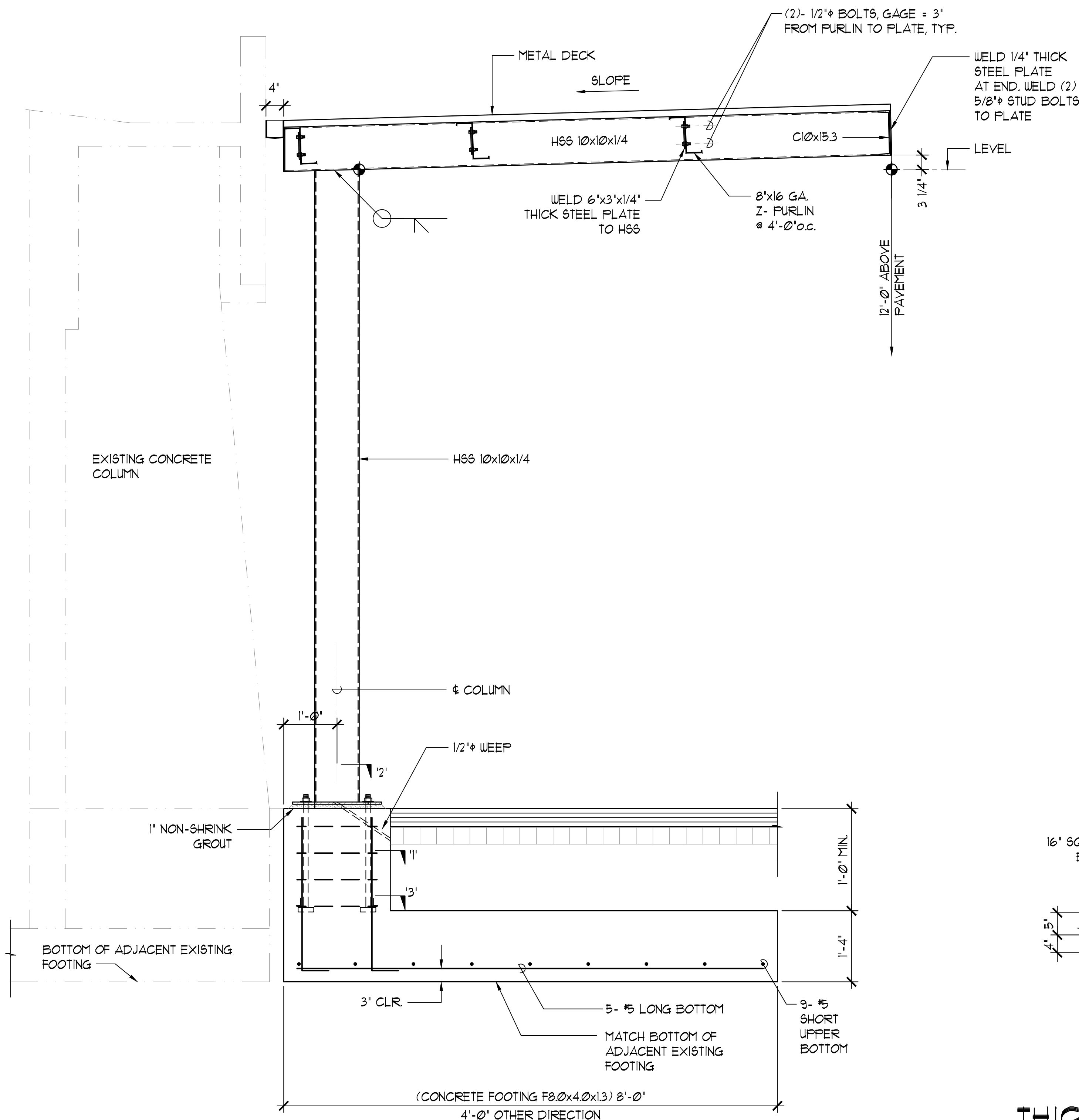
**1' PLAN CONCRETE CONCRETE PEDESTAL**  
SC: 3/4"=1'-0"



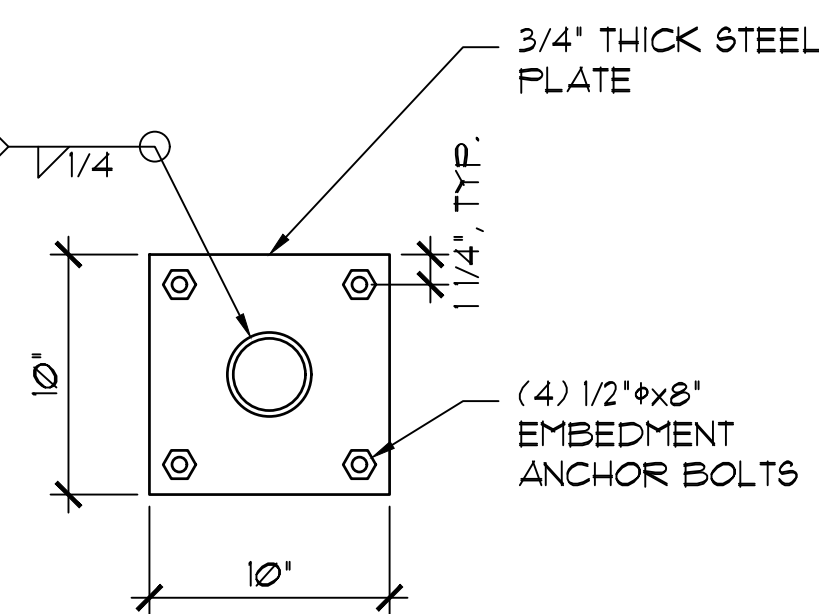
**2' PLAN BASE PLATE**  
SC: 3/4"=1'-0"



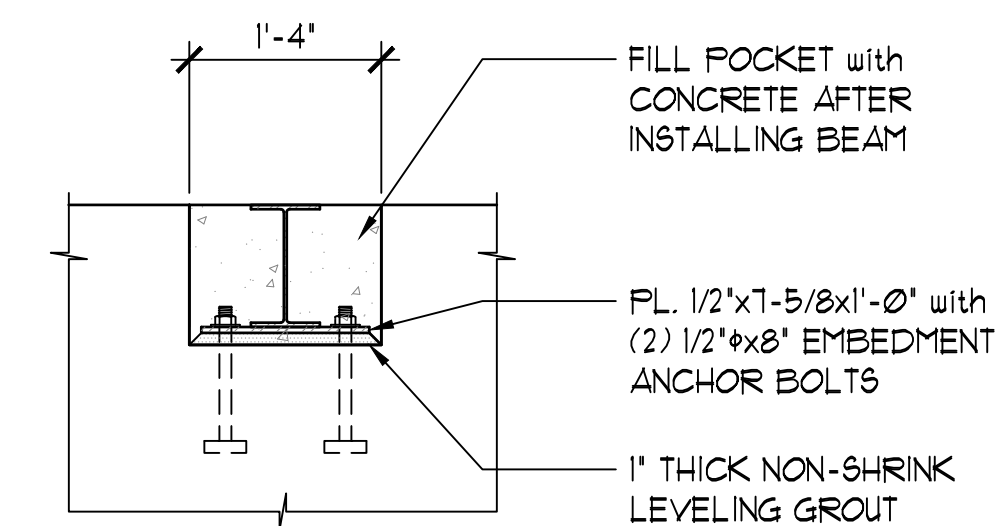
**3'- PLAN- BOTTOM ANGLES**  
SC: 1"=1'-0"



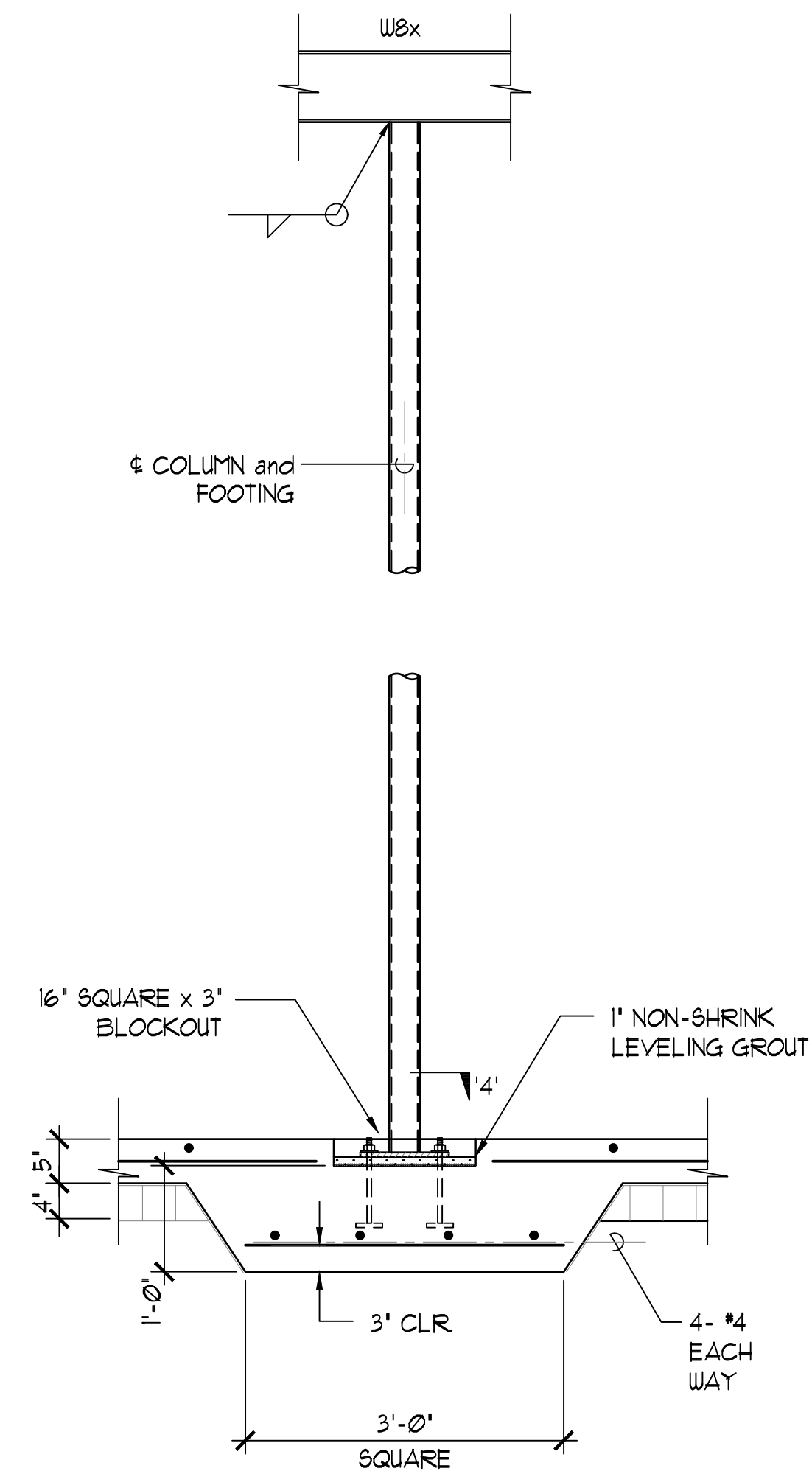
**CANOPY FRAMING SF-1 SECTION**  
SC: 3/4"=1'-0"



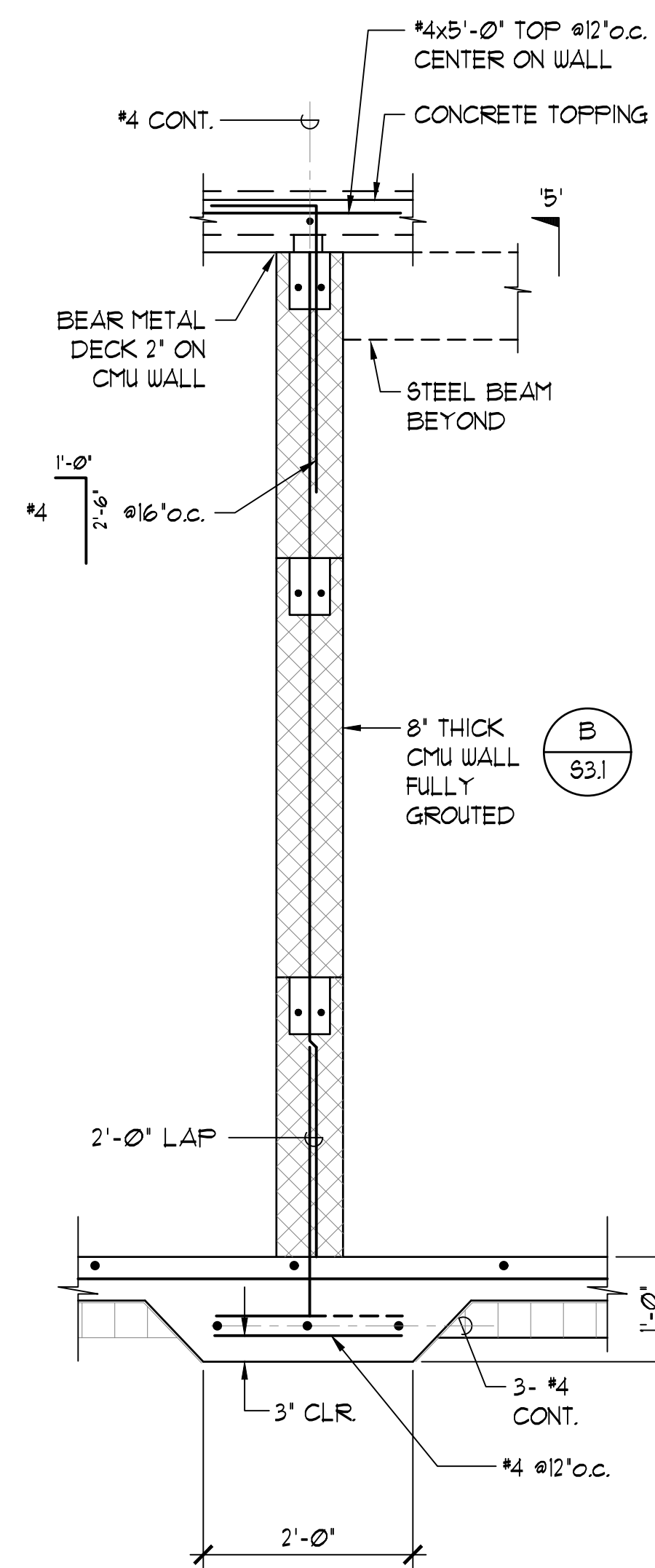
**4'- PLAN BASE PLATE**  
SC: 1-1/2"=1'-0"



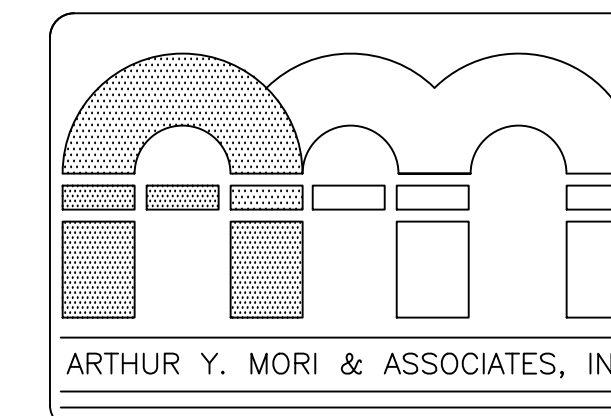
**5'- BEAM POCKET**  
SC: 3/4"=1'-0"



**THICKENED SLAB (TS 3.06R.x1.0)**  
SC: 3/4"=1'-0"



**WALL FOOTING (TS 2.0.x1.0)**  
SC: 3/4"=1'-0"

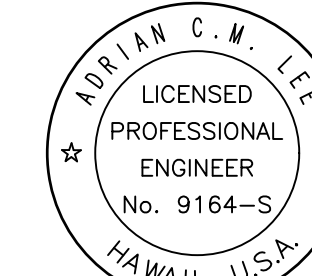


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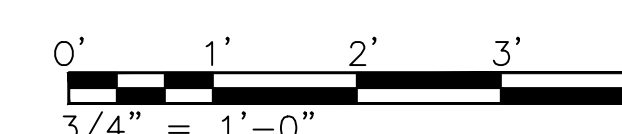
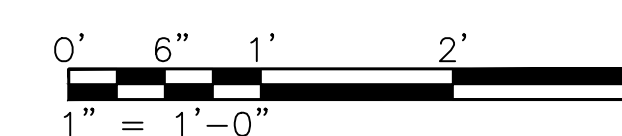
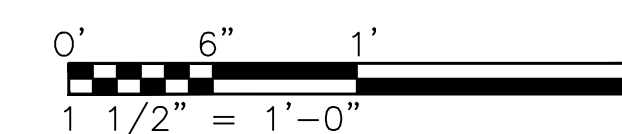
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SIGNATURE

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GRAPHIC SCALES