GENERAL NOTES

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

GENERAL NOTES
100SN001-1

1. INTERPRETATION OF DRAWINGS & SPECIFICATIONS
   A. WHERE SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT, THEY ARE ARRANGED IN SEVERAL SECTIONS, BUT SUCH SEPARATION SHALL NOT BE CONSIDERED AS THE LIMITS OF THE WORK REQUIRED OF ANY SEPARATE TRADE. THE TERMS AND CONDITIONS OF SUCH LIMITATIONS ARE WHOLLY BETWEEN THE CONTRACTOR AND HIS SUBCONTRACTORS.
   B. IN GENERAL, THE WORKING DETAILS WILL INDICATE DIMENSIONS, POSITION AND KIND OF CONSTRUCTION, AND THE SPECIFICATIONS, QUALITIES AND METHODS. ANY WORK INDICATED ON THE WORKING DETAILS AND NOT MENTIONED IN THE SPECIFICATIONS, OR VICE VERSA, SHALL BE FURNISHED AS THOUGH FULLY SET FORTH IN BOTH. WORK NOT PARTICULARLY DETAILED, MARKED OR SPECIFIED, SHALL BE IDENTICAL OR SIMILAR TO LIKE CASES OF CONSTRUCTION THAT ARE DETAILED, MARKED OR SPECIFIED. IF CONFLICTS OCCUR ON DRAWINGS AND/OR SPECIFICATIONS, THE MOST EXPENSIVE MATERIALS OR METHODS WILL PREVAIL.
   C. SHOULD AN ERROR APPEAR IN THE WORKING DETAILS OR SPECIFICATIONS OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AT ONCE AND IN WRITING. IF THE CONTRACTOR PROCEEDS WITH THE WORK SO AFFECTED WITHOUT HAVING GIVEN SUCH WRITTEN NOTICE AND WITHOUT RECEIVING THE NECESSARY APPROVAL, DECISION OR INSTRUCTIONS IN WRITING FROM THE OWNER, THEN HE SHALL HAVE NO VALID CLAIM AGAINST THE OWNER, FOR THE COST OF SO PROCEEDING AND SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT. NO VERBAL APPROVAL, DECISION, OR INSTRUCTION SHALL BE VALID OR BE THE BASIS FOR ANY CLAIM AGAINST THE OWNER, ITS OFFICERS, EMPLOYEES OR AGENTS. THE FOREGOING INCLUDES TYPICAL ERRORS IN THE SPECIFICATIONS OR NOTATIONAL ERRORS IN THE WORKING DETAILS WHERE THE INTERPRETATION IS DOUBTFUL OR WHERE THE ERROR IS SUFFICIENTLY APPARENT AS TO PLACE A REASONABLY PRUDENT CONTRACTOR ON NOTICE THAT, SHOULD HE ELECT TO PROCEED, HE IS DOING SO AT HIS OWN RISK.
2. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS.
3. SHOP DRAWING NOTE:
   A. WHEN NOT ADDRESSED BY DIVISION 1 OF THE SPECIFICATIONS, PAPER FORMAT STRUCTURAL SHOP DRAWINGS SHALL BE SUBMITTED IN THE FORM OF THREE COPIES MINIMUM OF EACH SHEET. WHERE SUBMITTALS ARE ELECTRONIC, FORMAT SHALL BE PDF.
   B. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE STRUCTURAL ENGINEER THAT HE UNDERSTANDS THE DESIGN CONCEPT BY INDICATING WHICH MATERIAL HE INTENDS TO FURNISH AND INSTALL, AND BY DETAILING THE FABRICATION AND INSTALLATION METHODS HE INTENDS TO USE ON A STAND ALONE SET OF DOCUMENTS. DUPLICATION OF DESIGN DOCUMENTS FOR THE PURPOSE OF SHOP DRAWINGS IS NOT ACCEPTABLE.
   C. PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER. SHOP DRAWING SUBMITTALS SHALL INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, STRUCTURAL STEEL, REINFORCING STEEL, & GLUE-LAMINATED BEAMS.
   D. PRIOR TO SUBMISSION THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SHALL STAMP SUBMITTALS AS BEING "REVIEWED FOR CONFORMANCE".
   E. SHOP DRAWING SUBMITTALS PROCESSED BY THE STRUCTURAL ENGINEER ARE NOT CHANGE ORDERS.
   F. ANY DETAIL ON THE SHOP DRAWINGS THAT DEVIATES FROM THE CONTRACT DOCUMENTS SHALL CLEARLY BE MARKED WITH THE NOTE "THIS IS A CHANGE".
   G. SHOP DRAWINGS OR CALCULATIONS SUBMITTED FOR REVIEW THAT REQUIRE RESUBMITTAL FOR RE-REVIEW SHALL BE BILLED HOURLY FOR SUCH TIME TO THE GENERAL CONTRACTOR. RE-REVIEW WILL NOT PROCEED WITHOUT WRITTEN APPROVAL FROM THE GENERAL CONTRACTOR FOR ADDITIONAL ENGINEERING REVIEW SERVICES.
4. SAFETY NOTE:
   A. IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS, AS THEY APPLY TO THIS PROJECT, OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA LATEST EDITION, AND ALL OSHA REQUIREMENTS.
   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED. SHORING INDICATIONS (LOCATION, DIRECTION, DURATION, ETC.) ARE ONLY SHOWN ON THE STRUCTURAL DRWGS WHEN REQUIRED TO IMPLEMENT THE DESIGN INTENT OF THE FINAL WORK PRODUCT. DETERMINATION WHETHER SHORING IS REQUIRED FOR TEMPORARY OR INTERMEDIATE CONDITIONS DURING CONSTRUCTION IS WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR.
   C. THE OWNER AND THE STRUCTURAL ENGINEER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
5. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER WHERE A CONFLICT OR DISCREPANCY OCCURS BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER PORTION OF THE CONTRACT DOCUMENTS OR EXISTING FIELD CONDITIONS. SUCH NOTIFICATION SHALL BE GIVEN IN DUE TIME SO AS NOT TO AFFECT THE CONSTRUCTION SCHEDULE. IN CASE OF A CONFLICT BETWEEN STRUCTURAL DRAWINGS AND SPECIFICATIONS THE MORE RESTRICTIVE CONDITION SHALL TAKE PRECEDENCE UNLESS WRITTEN APPROVAL HAS BEEN GIVEN FOR THE LEAST RESTRICTIVE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PRIOR TO COMMENCING ANY WORK.
6. WHEN CONSTRUCTION ATTACHES TO OR IS WITHIN AN EXISTING BUILDING, A COMPLETE SET OF DRAWINGS OF THE EXISTING BUILDING SHALL BE KEPT ON THE JOB SITE. CONTRACTOR TO OBTAIN THESE DRAWINGS FROM THE OWNER (IF THEY ARE AVAILABLE).
7. CONTRACTOR SHALL PROVIDE AN ALLOWANCE EQUAL TO 2% OF THE BID FOR STRUCTURAL STEEL, MISC. IRON AND REINFORCING STEEL TO BE USED AT THE DISCRETION OF THE STRUCTURAL ENGINEER. UNUSED AMOUNT TO REVERT TO THE OWNER UPON COMPLETION OF THE JOB.
8. ANY SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE OR DETAILS SHALL BE REVIEWED BY THE ARCHITECT AND STRUCTURAL ENGINEER. SUCH REVIEW WILL BE BILLED ON A TIME AND MATERIALS BASIS TO THE GENERAL CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.
9. DO NOT SCALE DRAWINGS. CONTACT THE ARCHITECT OR STRUCTURAL ENGINEER FOR ANY DIMENSIONS NOT SHOWN.
10. THESE DRAWINGS ARE NOT COMPLETE UNTIL REVIEWED AND ACCEPTED BY LOCAL BUILDING OFFICIALS AND THE OWNER AND SIGNED BY THE STRUCTURAL ENGINEER.

ABBREVIATIONS
100SN003-1

AB	ANCHOR BOLT	LONG	LONGITUDINAL
(A)	"MEMBER" ABOVE	LS	LAG SCREW
ABV	ABOVE	LWC	LIGHTWEIGHT CONCRETE
ADD'L	ADDITIONAL	LWIC	LIGHTWEIGHT INSULATING CONCRETE
AHU	AIR HANDLING UNIT	MAX	MAXIMUM
ALT	ALTERNATE	MB	MACHINE BOLT
APPROX	APPROXIMATE	MECH'L	MECHANICAL
ARCH'L	ARCHITECTURAL	MFR	MANUFACTURER
(B)	"MEMBER" BELOW	MI	MALLEABLE IRON
BLKG	BLOCKING	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BLW	BELOW	MTL	METAL
BM	BEAM	MK	MARK
BMS	BEAMS	(N)	NEW
B.O.	BOTTOM OF	NIC	NOT IN CONTRACT
BOF	BOTTOM OF FOOTING	NS	NEAR SIDE
BOTT	BOTTOM	NTS	NOT TO SCALE
BRCG	BRACING	NWC	NORMAL WEIGHT CONCRETE
BRG	BEARING	O/	OVER
BTWN	BETWEEN	OH	OPPOSITE HAND
CC	CENTER TO CENTER	OPNG	OPENING
CG	CENTER OF GRAVITY	OSB	ORIENTED STRAND BOARD
CJ	CONSTRUCTION JOINT	PC	PIECE
CL	CENTERLINE	PERP	PERPENDICULAR
CLR	CLEAR	PJP	PARTIAL JOINT PENETRATION
CMU	CONCRETE MASONRY UNIT	PL	PLATE
COL	COLUMN	PT	PRESSURE TREATED
COORD	COORDINATE	REINF	REINFORCING OR REINFORCEMENT
CONC	CONCRETE	REQ'D	REQUIRED
CONN	CONNECTION	REV	REVISION
COND	CONDITION	RWD	REDWOOD
CONT	CONTINUOUS	SC	SLIP CRITICAL
CONTR	CONTRACTOR	SCH	SCHEDULE
CJP	COMPLETE JOINT PENETRATION	SDS	SELF-DRILLING SCREW
CSK	COUNTERSINK	SHTG	SHEATHING
DBL	DOUBLE	SIM	SIMILAR
DF	DOUGLAS FIR	SEOR	STRUCTURAL ENGINEER OF RECORD
DL	DEAD LOAD	SJ	SLAB CONTROL JOINT
DWG	DRAWING	SMS	SHEET METAL SCREW
(E)	EXISTING	SOG	SLAB-ON-GRADE
EA	EACH	SP	STRUCTURAL PANEL (OR) SHOT PINS
EF	EACH FACE OR EDGE FASTENER	SQ	SQUARE
EJ	EXPANSION JOINT	STD	STANDARD
ELEV	ELEVATION	STFNR	STIFFENER
EN	EDGE NAILING	STGRD	STAGGERED
EOS	EDGE OF SLAB	STL	STEEL
EQ	EQUAL	STR	STRUCTURAL
EW	EACH WAY	SW	SHEAR WALL
FB	FACE OF BLOCK(OR BRICK) OR FLAT BAR	TBD	TO BE DETERMINED
FC	FACE OF CONCRETE OR FRAMING CLIP (SIMPSON A35 UNO)	T&B	TOP & BOTTOM
		T&G	TONGUE & GROOVE
FDN	FOUNDATION	THRD	THREADED
FF	FINISH FLOOR	TN	TOE NAIL
FRMG	FRAMING	T.O.	TOP OF
FS	FACE OF STUD OR FAR SIDE	TOC	TOP OF CONCRETE (SLAB UNO)
FT	FIRE TREATED	TOF	TOP OF FOOTING OR TOP OF FRAMING
FTG	FOOTING	TOS	TOP OF STEEL
GA	GAUGE OR GAGE	TOW	TOP OF WALL
GALV	GALVANIZED	TRANS	TRANSVERSE
GLB	GLUED LAMINATED BEAM	TYP	TYPICAL
GR	GRADE	UNO	UNLESS NOTED OTHERWISE
GYP	GYPSUM	VERT	VERTICAL
HDG	HOT DIPPED GALVANIZED	VIF	VERIFY IN FIELD
HD	HOLDOWN	W/	WITH
HDR	HEADER	W/O	WITHOUT
HGR	HANGER	WF	WIDE FLANGE
HORIZ	HORIZONTAL	WP	WORK POINT
HSB	HIGH STRENGTH BOLT	WS	WOOD SCREW
HSS	HOLLOW STRUCTURAL SECTION	WWF	WELDED WIRE FABRIC
HT	HEIGHT	XS	EXTRA STRONG
INFO	INFORMATION	XXS	DOUBLE EXTRA STRONG
JH	JOIST HANGER	@	AT
K	KIPS (1000 LBS)	Ø	ROUND OR DIAMETER
LBS	POUNDS	&	AND
LL	LIVE LOAD	#	NUMBER OR POUNDS
LLH	LONG LEG HORIZONTAL	±	PLUS OR MINUS
LLV	LONG LEG VERTICAL		
LOC	LOCATION		

DESIGN CRITERIA
100SN002-1

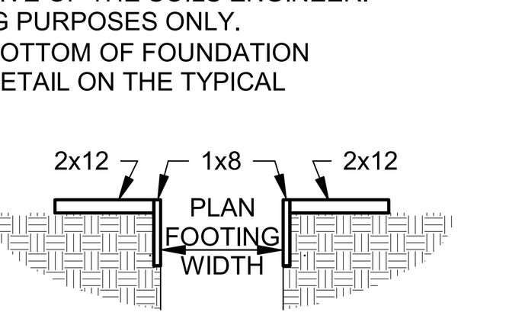
1. CODES AND STANDARDS
   - 2016 CALIFORNIA BUILDING CODE (CBC)
   - ASCE 7-10
   - ACI 318-14
   - AISC 360-10, 341-10, 358-10
   - AISI S100-12, S200-12, S213-07/S1-09 (2012)
   - TMS 402-13/ACI 530-13/ASCE 5-13
   - TMS 602-13/ACI 530.1-13/ASCE 6-13
   - 2015 NDS, 2015 SDPWS
2. VERTICAL LOADS
   - ROOF LIVE LOAD = 20 PSF
   - GROUND SNOW LOAD = 20 PSF
   - LIVE LOADS ARE REDUCED WHERE PERMITTED BY CODE.
3. SOILS VALUES:
   - ALLOWABLE SOILS PRESSURE BASED ON MINIMUM FOOTING SIZE
     a. DL 4000 PSF
     b. DL + LL 4000 PSF
   A. DL + LL + SEISMIC 5333 PSF
   - FOOTING (PAD)
     - MINIMUM DEPTH = 18"
     - MINIMUM WIDTH = 24"

LATERAL LOADS
SEISMIC:
- SITE CLASS C C_S = .1383
- S_S = 0.461; S_{DS} = 0.369
- S_1 = 0.227; S_{D1} = 0.238
- R = 4; I_E = 1.0
- Ω_O = 2.5; C_D = 4
- I_P = 1.0 TYPICAL
- I_P = 1.5 PER ASCE 7-10 SECT 13.1.3
- RISK CATEGORY: II
- SEISMIC DESIGN CATEGORY: D
- SEISMIC BASE SHEAR
  - = 43.2 KIPS (NS DIR.)
  - = 43.2 KIPS (EW DIR.)
- SEISMIC FORCE RESISTING SYSTEM: INT. CONC PRECAST SHEAR WALL (TILT UP)
- ANALYSIS PROCEDURE: ELF

WIND:
- V_{ULT} = 110 MPH ; V_{ASD} = 66 MPH
- RISK CATEGORY: II
- EXPOSURE CATEGORY: C
- GC_{PI} = ±0.18

FOUNDATIONS
200SN001-1

1. ALL FOUNDATION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS REPORT # E13310.007 BY YOUNGDAHL CONSULTING GROUP DATED AUGUST 18, 2016.
2. FOUNDATIONS SHALL BEAR ON WEATHERED BEDROCK. SEE NOTES AND DETAILS ON SHEET MO-S-0.3.
3. ALL FILLING, BACKFILLING AND COMPACTION SHALL BE DONE UNDER THE OBSERVATION OF A REPRESENTATIVE OF THE SOILS ENGINEER AND MUST BE COMPACTED TO THE MINIMUM DENSITY SPECIFIED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE SOILS REPORT.
4. BUILDING PAD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE SOILS REPORT. THE EXTENT AND DEPTH OF OVEREXCAVATION AND PLACEMENT OF ENGINEERED FILL SHALL AT A MINIMUM BE AS SHOWN ON THE PLANS. FINAL DEPTH AND EXTENT OF EXCAVATION AND FILL SHALL BE DETERMINED AT TIME OF CONSTRUCTION BY A REPRESENTATIVE OF THE SOILS ENGINEER. FOUNDATION DEPTHS INDICATED ON PLANS ARE FOR ESTIMATING PURPOSES ONLY.
5. BOTTOMS OF ALL FOUNDATIONS SHALL BE LEVEL. CHANGES IN BOTTOM OF FOUNDATION ELEVATION SHALL BE MADE ACCORDING TO STEPPED FOOTING DETAIL ON THE TYPICAL DETAIL SHEET.
6. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE EXCAVATIONS ARE STABLE (AS DETERMINED BY A REPRESENTATIVE OF THE SOILS ENGINEER). OTHERWISE, FOUNDATIONS SHALL BE FULLY FORMED. USE MINIMUM PLANKING SHOWN TO PROTECT AGAINST SLOUGHING, AS REQUIRED. PLANKING DOES NOT REPLACE FORMWORK REQUIRED TO STABILIZE EXCAVATION.



7. THE SURFACE OF ALL HORIZONTAL CONSTRUCTION JOINTS SHALL BE CLEANED & ROUGHENED BY EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN MORTAR MATRIX.
8. NOTIFY THE STRUCTURAL ENGINEER 48 HOURS BEFORE CASTING FOUNDATIONS.
9. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
   A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED AND;
   C. THE FOUNDATION EXCAVATION DEPTH AND MATERIAL ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY; AND FORMING COMPLY WITH THE SOILS REPORT AND APPROVED PLAN.

CONCRETE
300SN001-1

1. STRUCTURAL CONCRETE SHALL ATTAIN 28 DAY COMPRESSIVE STRENGTH AS REQUIRED IN NOTE # 28. MAXIMUM SLUMP SHALL NOT EXCEED 4 INCHES.
2. CONCRETE MIX DESIGNS SHALL BE PREPARED BY A REGISTERED CIVIL ENGINEER, REVIEWED BY OWNER'S TESTING LABORATORY AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.
3. CEMENTITIOUS MATERIALS:
   CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR V.
   FLY ASH SHALL CONFORM TO ASTM C-618. MAX. QUANTITY OF FLY ASH SHALL BE AS GIVEN IN SPECS.
4. CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33 FOR NORMAL WEIGHT CONCRETE AND ASTM C-330 FOR LIGHTWEIGHT CONCRETE.
5. NON-SHRINK GROUT OR DRYPACK SHALL CONSIST OF A PREMIXED NONMETALLIC FORMULA.
6. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 FOR #3 AND LARGER, EXCEPT REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A-706. CONTRACTOR SHALL SUBMIT REBAR MILL CERTIFICATES.
7. ALL PREHEATING AND WELDING OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH AWS D1.4 LATEST EDITION AND SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED LABORATORY. CONTRACTOR SHALL FURNISH WPS FOR ALL REBAR WELDING TO THE LABORATORY.
8. REINFORCING STEEL SHALL BE FABRICATED ACCORDING TO "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION".
9. WIRE FABRIC SHALL CONFORM TO ASTM A-185.
10. DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF BARS LISTED AND DENOTE CLEAR COVERAGE. NON-PRESTRESSED, CAST-IN-PLACE CONCRETE COVERAGE SHALL BE AS FOLLOWS, UNO:
    - CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS)--- 3"
    - CONCRETE EXPOSED TO GROUND OR WEATHER BUT PLACED IN FORMS:
      - #5 AND SMALLER---------------------------- 1-1/2"
      - #6 AND LARGER----------------------------- 2"
    - BEAMS & COLUMNS (TIES)------------------------ 1-1/2"
    - BEAMS & COLUMNS (MAIN REINFORCING)---------------- 2"
    - CAST-IN-PLACE WALLS (EXTERIOR FACE & SOIL SIDE)--------- SEE ABOVE
    - CAST-IN-PLACE WALLS (INTERIOR FACE-#11 & SMALLER)------- 3/4"
    - TILT-UP WALLS------------------------------- SEE DETAILS
    - SLABS (ON FORMS)---------------------------- 3/4"
    - SLABS (ON GROUND)------------------- 2" CLEAR FROM TOP UNO
11. SPLICES IN CONTINUOUS REINFORCEMENT SHALL BE LAPPED UNO, SEE SCHEDULE THIS SHEET. SPLICES IN ADJACENT BARS SHALL BE GREATER THAN 5'-0" APART. SPLICE CONTINUOUS BARS IN SOIL-BEARING GRADE BEAMS, STRUCTURAL SLABS ON GRADE AND MAT FOUNDATIONS AS FOLLOWS UNO: TOP BARS AT CENTERLINE OF SUPPORT; BOTTOM BARS AT MID-SPAN. SPLICE CONTINUOUS BARS IN ELEVATED SLABS AND BEAMS, ETC. AS FOLLOWS UNO: TOP BARS AT MID-SPAN; BOTTOM BARS AT CENTERLINE OF SUPPORT. ALL BARS SIZE #14 AND LARGER SHALL BE CONTINUOUS FOR FULL LENGTH SHOWN OR SPLICED WITH MECHANICAL COUPLERS AS NOTED IN DETAILS. SPLICES IN WWF SHALL BE 1-1/2 MESHES WIDE.
12. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL NOT BE LESS THAN THE LARGER OF BAR DIAMETER, 1", OR 33% GREATER THAN THE MAXIMUM AGGREGATE SIZE (NOMINAL), WHICHEVER IS GREATEST. THIS REQUIREMENT ALSO APPLIES TO THE CLEAR SPACING BETWEEN DIFFERENT LAYERS OF PARALLEL BARS AND TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP SPLICE AND ADJACENT SPLICES OR BARS.
13. ALL HOOKS SHALL BE STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED. AT WALLS, PROVIDE HOOKS AT ENDS OF ALL REINFORCING AT ENDS, CORNERS AND INTERSECTIONS, UNO.
14. CONSTRUCTION JOINTS SHALL BE MADE ROUGH AND ALL LAITANCE REMOVED FROM THE SURFACE. CONCRETE MAY BE ROUGHENED BY CHIPPING THE ENTIRE SURFACE, SAND BLASTING, OR RAKING THE SURFACE TO PROVIDE 1/4" DEEP DEFORMATIONS.
15. REMOVE ALL DEBRIS FROM FORMS BEFORE CASTING ANY CONCRETE.
16. REINFORCING, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC. TO BE EMBEDDED IN CONCRETE SHALL BE SECURELY POSITIONED BEFORE PLACING CONCRETE.
17. ANCHOR BOLTS (AB'S) CAST IN CONCRETE OR MASONRY FOR WALL SILL AND LEDGER\APPLICATIONS SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM A307, UNO. REFER TO "WOOD" NOTES FOR ADDITIONAL REQUIREMENTS FOR BOLTS IN CONTACT WITH PRESSURE TREATED OR FIRE RETARDANT MATERIAL. REFER TO 'STRUCTURAL STEEL' NOTE FOR REQUIREMENTS FOR ANCHOR RODS (AR'S) CAST IN CONCRETE FOR COLUMN BASE PLATE AND STEEL EMBED APPLICATIONS.
18. WALLS SHALL BE CAST IN HORIZONTAL LAYERS OF 2'-0" MAXIMUM DEPTH.
19. CONCRETE IN WALLS, PIERS OR COLUMNS SHALL SET AT LEAST 2 HOURS BEFORE PLACING CONCRETE IN BEAMS, SPANDRELS, OR SLABS SUPPORTED THEREON.
20. HORIZONTAL WALL BARS IN MULTI-CURTAIN CAST IN PLACE WALLS SHALL BE STAGGERED.
21. DOWEL ALL VERTICAL REINFORCING IN WALLS AND COLUMNS FROM FOUNDATION WITH SAME SIZE BAR.
22. CONSOLIDATE CONCRETE PLACED IN FORMS BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT AND PROCEDURES FOR CONSOLIDATION OF CONCRETE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF ACI 309 TO SUIT THE TYPE OF CONCRETE AND PROJECT CONDITIONS. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES HOPPERS AND CHUTES OR TRUNKS OF VARIABLE LENGTHS SHALL BE USED SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 6 FEET.
23. NO WOOD SPREADERS ALLOWED. NO WOOD STAKES ALLOWED IN AREAS TO BE CONCRETED.
24. ADDITIONAL REINFORCING IN PRECAST OR TILT-UP PANELS REQUIRED FOR LIFTING STRESSES SHALL BE SUPPLIED BY CONTRACTOR.
25. PROVIDE #5 X 4'-0" DIAGONAL REINFORCING AT TOP AND BOTTOM OF SLAB AT ALL RE-ENTRANT CORNERS TYPICAL. THIS APPLIES TO SLAB ON GRADE, CONCRETE OVER METAL DECK, AND ELEVATED STRUCTURAL SLAB CONDITIONS.
26. ALL SAW CUTTING SHALL BE DONE AFTER INITIAL SET HAS OCCURRED TO AVOID TEARING OR DAMAGE BY THE SAW BLADE, BUT BEFORE INITIAL SHRINKAGE HAS OCCURRED.
27. NOTIFY STRUCTURAL ENGINEER A MINIMUM OF 48 HOURS BEFORE PLACING ANY CONCRETE.
28. CONCRETE STRENGTHS & MIX PROPERTIES:

	ITEM	F'C @ 28 DAYS	MAX AGGR. SIZE	WEIGHT	MAX W/CM* RATIO
A.	FOUNDATIONS, ELEVATOR PITS	3000 PSI	1-1/2"	NW	0.58
B.	SLAB ON GRADE	3500 PSI	1"	NW	0.45
C.	TILT UP WALLS	4000 PSI	3/4"	NW	0.50

SITE AND MISCELLANEOUS - SEE CIVIL OR ARCH'L DRAWINGS

* W/CM = WATER : CEMENTITIOUS MATERIAL RATIO

WINDOW SYSTEM DESIGN CRITERIA
100SN010-1

CBC ULTIMATE WIND SPEED - 110 MPH EXPOSURE CATEGORY C.

1. ALL MULLIONS AND THEIR CONNECTIONS SHALL BE DESIGNED TO SPAN BETWEEN STRUCTURAL SUPPORTS AS SHOWN ON DRAWINGS. VERIFY CEILING HEIGHTS WITH ARCHITECTURAL DRAWINGS.
2. ALL MULLIONS AND THEIR CONNECTIONS SHALL ALLOW FOR A RELATIVE MOVEMENT BETWEEN STORIES OF NOT LESS THAN 1/4" DUE TO SEISMIC LOADS.
3. SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS SIGNED BY A REGISTERED CALIFORNIA CIVIL ENGINEER PRIOR TO FABRICATION.
4. DETAILS PROVIDED IN THESE DRAWINGS ARE FOR REFERENCE ONLY. WINDOW SYSTEM MANUFACTURER SHALL DESIGN AND SUPPLY ALL CONNECTION MATERIALS (INCLUDING EMBEDDED ITEMS, DIAGONAL BRACING ANGLES, BRACKETS, OUTRIGGERS, ETC.) AS REQUIRED FOR THE SUPPORT OF THE WINDOW SYSTEM. EMBEDDED ITEMS SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

REINFORCEMENT LAP SPLICE SCHEDULE
300SN002-1

ACI 318 CBC/IBC

(ALL LENGTHS SHOWN ARE IN INCHES.)

FC' = 3000 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	19	37	47	56	81	93	105	118	131
	OTHER	15	29	36	43	63	72	81	91	101

FC' = 3500 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	18	35	43	52	75	86	97	109	121
	OTHER	14	27	33	40	58	66	75	84	93

FC' = 4000 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	17	32	40	48	70	80	91	102	113
	OTHER	13	25	31	37	54	62	70	79	87

FC' = 5000 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	15	29	36	43	63	72	81	91	101
	OTHER	12	22	28	33	49	55	63	70	78

NOTES:
1. SCHEDULE APPLIES TO NORMAL WEIGHT CONCRETE WITH UNCOATED, GRADE 60 REINFORCING STEEL FOR #4 BARS AND LARGER (VALUES FOR #3 BARS BASED ON GRADE 40).
2. TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT LOCATED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE.
3. WHEN LIGHTWEIGHT CONCRETE IS USED, MULTIPLY LAP LENGTHS BY 1.30.
4. WHERE CLEAR SPACING OF BARS BEING SPLICED IS LESS THAN 2 BAR DIA. OR WHERE CLEAR COVER OF BARS BEING SPLICED IS LESS THAN 1 BAR DIA., MULTIPLY LAP LENGTHS BY 1.50, UNO.
5. WHERE NOTES #3 AND #4 OCCUR, MULTIPLY LAP LENGTHS BY 2.00, UNO.
6. WHERE CLASS A LAP SPLICE IS NOTED IN DETAIL, DIVIDE LENGTHS ABOVE BY 1.30.

STRUCTURAL STEEL
500SN001-1

1. FABRICATION, ERECTION AND MATERIALS SHALL CONFORM WITH THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, THE AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, AND THE CALIFORNIA BUILDING CODE, LATEST EDITIONS UNO IN THE DESIGN CRITERIA NOTES.
2. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM WITH ASTM A992. ALL OTHER STRUCTURAL STEEL ROLLED SHAPES (CHANNELS, ANGLES, ETC) AND PLATES SHALL CONFORM WITH ASTM A36, UNO.
3. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPES E OR S, GRADE B.
4. ALL HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B.
5. ALL STRUCTURAL STEEL SHALL RECEIVE A MINIMUM OF ONE SHOP COAT OF RED PRIMER PAINT. DO NOT PAINT AREAS TO BE FIELD WELDED, FIREPROOFED, GALVANIZED, TO RECEIVE SLIP-CRITICAL HIGH STRENGTH BOLTS, OR TO BE EMBEDDED IN CONCRETE. PROVIDE ADDITIONAL PAINTING AS NOTED IN THE SPECIFICATIONS.
6. ALL STRUCTURAL STEEL SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND SHALL BE LEFT IN PLACE UNTIL OTHER MEANS ARE PROVIDED TO ADEQUATELY BRACE THE STRUCTURE. CONTRACTOR RESPONSIBLE FOR REVIEWING ALL BASE PLATE AND SUPPORT CONDITIONS DURING ERECTION AND BRACING AS REQUIRED. SEE AISC AND OSHA REQUIREMENTS.
7. PLACE NON-SHRINK GROUT UNDER ALL BASE PLATES BEFORE ADDING VERTICAL LOAD.
8. STRUCTURAL STEEL BELOW GRADE SHALL HAVE 3 INCHES MINIMUM OF CONCRETE COVER.
9. BOLTED CONNECTIONS:
   A. BOLTED CONNECTIONS SHALL CONSIST OF UNFINISHED BOLTS CONFORMING TO ASTM A307 UNO. WHERE HIGH STRENGTH BOLTS ARE INDICATED, BOLTS CONFORMING TO ASTM A325 OR ASTM A490 AS SPECIFIED SHALL BE PROVIDED. ANCHOR RODS CAST IN CONCRETE OR MASONRY SHALL BE HEADED BOLTS WITH CUT THREAD, FULL DIAMETER BODY STYLE CONFORMING TO ASTM F1554 GR. 36, 55 (WELDABLE PER S1 SUPPLEMENTARY REQUIREMENTS), OR 105 AS INDICATED ON DRAWINGS. IN LIEU OF HEADED ANCHOR BOLTS, THREADED ROD CONFORMING TO THE ABOVE SPECIFICATION MAY BE USED WITH A SINGLE NUT WELDED TO THE ROD OR DOUBLE NUTS TIGHTENED TO PREVENT ROTATION. ANCHOR ROD PROJECTION ABOVE TOP OF FOUNDATION SHALL BE AS NOTED ON THE DRAWINGS.
   B. BOLTED CONNECTIONS SHALL HAVE WASHERS CONFORMING TO ASTM F436 UNO. WASHERS MAY BE OMITTED AT SNUG-TIGHTENED AND SLIP-CRITICAL CONNECTIONS, EXCEPT WHERE REQUIRED BY THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS, LATEST EDITION.
   C. BASE PLATES SHALL HAVE NUTS AND WASHERS AT TOP AND BOTTOM OF PLATE. WASHERS FOR BASE PLATES SHALL BE A36 SQUARE OR CIRCULAR PLATE UNLESS ASTM F844 WASHERS ARE PERMITTED. SEE BASE PLATE DETAILS FOR PLATE SIZE AND PERMISSIBLE WASHER TYPE.
10. ADDITIONAL REQUIREMENTS FOR "SLIP-CRITICAL" BOLTED CONNECTIONS:
    A. "SLIP-CRITICAL" CONNECTIONS (A325SC DESIGN VALUES WITH SPECIAL INSPECTION) ARE REQUIRED AT ALL BRACED FRAME CONNECTIONS, AT ALL CONNECTIONS ALONG CHORD LINES AND DRAG LINES (AS NOTED ON PLANS), AND UNO, AT ALL BOLTS IN OVERSIZED OR SLOTTED HOLES.
    B. THE SPECIAL INSPECTOR MUST BE PRESENT DURING INSTALLATION AND TIGHTENING OPERATION OF "SLIP-CRITICAL" CONNECTIONS.
11. PROVIDE 3/4" DIAMETER STITCH BOLTS AND RING FILLS, SPACED AT NOT MORE THAN 2'-0" ON CENTER FOR ALL DOUBLE ANGLE MEMBERS UNO.
12. AT WOOD TO STEEL PARALLEL CONTACT, BOLT WITH 1/2" DIAMETER BOLTS AT MAXIMUM 24"CC.
13. HOLES FOR UNFINISHED BOLTS SHALL BE OF THE SAME NOMINAL DIAMETER OF THE BOLT PLUS 1/16". USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE.
14. WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS IN ACCORDANCE WITH AMERICAN WELDING SOCIETY STANDARDS, USING ONLY CERTIFIED WELDERS. ALL GROOVE WELDS SHALL HAVE COMPLETE PENETRATION UNLESS NOTED OTHERWISE. ALL EXPOSED WELDS SHALL BE GROUND SMOOTH. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE, E70 SERIES MINIMUM.
15. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTHS REQUIRED.
16. MINIMUM FILLET WELDS: 3/16" @ T < 1/2"
    1/4" @ T < 3/4"
    5/16" @ T > 3/4"
17. WELDING PROCEDURE SPECIFICATIONS (WPS) FOR SHOP AND FIELD PREQUALIFIED WELD JOINTS AND WELD JOINTS QUALIFIED BY TEST SHALL BE PREPARED FOR REVIEW PRIOR TO FABRICATION. ALL WELDING PROCEDURE ITEMS SUCH AS BASE METALS, WELDING PROCESSES, FILLER METALS AND JOINT DETAILS THAT MEET THE REQUIREMENTS OF AWS D1.1 SECTION 3 SHALL BE CONSIDERED AS PREQUALIFIED. ANY CHANGE OR SUBSTITUTION THAT IS BEYOND THE RANGE OR TOLERANCE OR REQUIREMENTS FOR PREQUALIFICATION SHALL BE QUALIFIED BY TEST PER AWS D1.1 SECTION 4 PART B. QUALIFICATION TESTING IS REQUIRED FOR PARTIAL PENETRATION AND COMPLETE PENETRATION WELDS.
18. FOR NONDESTRUCTIVE TESTING OF WELDED CONNECTIONS EXCLUDING PRIMARY MEMBERS OF MOMENT RESISTING FRAMES:
    A. WELDED CONNECTIONS SHALL BE TESTED BY NONDESTRUCTIVE METHODS FOR COMPLIANCE WITH AISC N5.5, AND JOB SPECIFICATIONS. ULTRASONIC TESTING SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E164 AND ASME SECTION V. RADIOGRAPHY SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E94 AND E99, AND ASME SECTION V. THIS TESTING SHALL BE PART OF THE SPECIAL INSPECTION REQUIREMENTS OF CBC SECTION 1705 PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AS FOLLOWS:
       1. BASE METAL THICKER THAN 1-1/2 INCH WHEN SUBJECT TO THROUGH THICKNESS WELD SHRINKAGE STRAINS.
       2. ALL COMPLETE JOINT PENETRATION GROOVE OR BUTT WELDS.
       3. ALL PARTIAL JOINT PENETRATION GROOVE WELDS WHEN USED IN COLUMN SPLICES.
    B. ANY MATERIAL DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF DEFECT RATING IN ACCORDANCE WITH THE (LARGER REFLECTOR) CRITERIA OF AISC N5.5.

METAL DECK NOTES
530SN001-1

1. PROVIDE METAL DECKING OF TYPE AND GAUGE AS SHOWN ON PLANS.
2. METAL FLOOR DECK SHALL BE COMPOSITE TYPE, CONFORMING TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION.
3. METAL ROOF DECK SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION.
4. PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE METAL DECKING, SHOWING DECK GAUGE, SIZE AND LAYOUT AS WELL AS CLOSURE CONDITIONS, WELDS TO SUPPORTS AND SIDE LAP DETAILS.
5. CONNECTION AND WELDING OF DECKING TO STRUCTURAL SUPPORTS AND DECK SIDE SEAMS SHALL BE AS SPECIFIED IN THE STRUCTURAL DRAWINGS. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE, E60 SERIES MINIMUM.
6. ALL REINFORCED OPENINGS IN METAL DECK SHALL BE INSTALLED BY METAL DECK SUBCONTRACTOR.
7. AT METAL DECKS TO RECEIVE CONCRETE, ABSOLUTELY NO CONDUIT OR PIPING OF ANY TYPE IS TO BE PLACED HORIZONTALLY WITHIN THE DEPTH OF THE CONCRETE ABOVE THE METAL DECK.
8. AT METAL DECK WITHOUT CONCRETE FILL THE FOLLOWING MAY BE ATTACHED WITHOUT SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER: ACOUSTICAL TILE AND GYPSUM BOARD CEILINGS ONLY; NO PIPING, DUCTING OR CONDUIT. MAXIMUM CEILING WEIGHT - 3.5 PSF. MAXIMUM WIRE HANGER LOAD = 60#.
9. WHERE SUSPENSION OR HANGER WIRES ARE REQUIRED BY OTHERS, VERIFY AND COORDINATE LOCATIONS, PATTERNS, SPACINGS, ETC. WITH THE APPROPRIATE TRADE. DRILL OR PUNCH HOLES AT BOTTOM OF DECK FLUTES OF SUFFICIENT SIZE TO PASS SUPPORT WIRES. WIRE SUPPORTS SHALL BE LOOPED AND SECURED WITH A MINIMUM OF THREE (3) TIGHT TURNS AROUND A MINIMUM 1-1/2" X 12" LONG FURRING CHANNEL OR NO. 3 X 12" LONG REINFORCING BAR CENTERED ABOVE THE HOLE AND LAID IN THE DECK FLUTES.

COLD FORMED METAL FRAMING
540SN001-1

1. GALVANIZED SHEET STEEL SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 43 MILS (18 GA) AND THINNER AND ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 54 MILS (16 GA) AND THICKER. HOT-ROLLED CARBON SHEET AND STRIP STEEL USED IN THE FABRICATION OF COLD-FORMED MEMBERS SHALL CONFORM TO ASTM A1011 WITH A RUST INHIBITIVE COATING.
2. METAL STUDS AND JOISTS SHALL BE OF SIZE AND THICKNESS SHOWN ON DRAWINGS WITH THE MINIMUM EFFECTIVE SECTION PROPERTIES SHOWN IN THE TABLE(S).
3. MINIMUM THICKNESS SHOWN IN TABLE FOR THE THICKNESS SPECIFIED REPRESENTS 95% OF DESIGN THICKNESS PER 2007 AISI-NAS W/ S2-2010 SUPPLEMENT.
4. METAL FRAMING SHALL BE PER ICC-ES NO. 3064P. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AGENCY APPROVAL FOR ANY SUBSTITUTIONS.
5. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE-SHEET STEEL". WELDERS SHALL BE AWS CERTIFIED. WELDING RODS: E60XX SERIES. ALL FIELD WELDING SHALL HAVE SPECIAL INSPECTION.
6. TYPICAL METAL TRACK SHALL BE SAME GAUGE AS STUDS WHICH IT SUPPORTS, UNPUNCHED, WITH A FLANGE WIDTH OF 1 1/4 INCHES AND A DEPTH EQUAL TO THE NOMINAL STUD PLUS 2 TIMES THE TRACK THICKNESS PLUS THE RADIUS. NESTED TRACKS SHALL BE FABRICATED TO FILL THE OUTSIDE OF A TYPICAL METAL TRACK. DEEP LEG TRACKS SHALL HAVE A MINIMUM FLANGE WIDTH OF 2 INCHES. USE SLOTTED SLIP TRACKS WHERE SPECIFIED. SEE SECTIONS AND TYPICAL METAL STUD DETAILS.
7. METAL STUDS SHALL NOT HAVE PUNCH-OUTS CLOSER THAN 10" FROM THE END OF THE STUD OR AT INTERMEDIATE LATERAL BEARING POINTS OF STUDS. METAL STUDS WHICH ARE PART OF BUILT-UP HEADER SECTIONS SHALL BE UNPUNCHED FULL LENGTH.

POWDER ACTUATED FASTENERS (SHOT PINS)
100SN016-1

1. THESE NOTES GOVERN ALL CONDITIONS CALLED OUT ON THE PLANS AS 'SHOT PINS' UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL SHOT PINS SHALL BE X-U UNIVERSAL KNURLED SHANK FASTENERS WITH SHANK DIAMETER OF 0.157" AS MANUFACTURED BY HILTI INCORPORATED IN ACCORDANCE WITH ICC ESR-2269 AND THE CURRENT EDITION OF THE HILTI 'PRODUCT TECHNICAL GUIDE.'
3. ALL SHOT PINS SHALL INCLUDE STANDARD HILTI STEEL WASHERS.
4. SHOT PINS DRIVEN INTO STEEL BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL STEEL ELEMENTS OF 1/2" AND MINIMUM FASTENER SPACING SHALL BE 1". LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE THRU STEEL MEMBER U.N.O. AT 3/4" THICK STEEL, PENETRATION NEED NOT EXCEED 1/2".
5. SHOT PINS DRIVEN INTO CONCRETE BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL CONCRETE ELEMENTS OF 3" AND MINIMUM FASTENER SPACING SHALL BE 4". PINS SHALL HAVE 1 1/4" PENETRATION U.N.O. MINIMUM CONCRETE THICKNESS SHALL BE 3 TIMES THE PENETRATION DEPTH. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING SHOT PINS.
6. SHOT PINS DRIVEN INTO 3 1/4" MINIMUM LIGHT WEIGHT CONCRETE FILL OVER 3"X 20 GA MINIMUM METAL DECK MAY BE INSTALLED FROM THE TOP OR FROM THE BOTTOM IN EITHER THE HIGH OR LOW FLUTE. PINS INSTALLED FROM THE TOP SHALL BE SPACED AS NOTED ABOVE FOR TYPICAL CONCRETE ELEMENTS. PINS INSTALLED FROM THE BOTTOM IN THE HIGH FLUTES SHALL BE INSTALLED WITHIN 1" OF FLUTE CENTER. PINS INSTALLED FROM THE BOTTOM IN THE LOW FLUTES SHALL BE INSTALLED WITHIN 1" OF THE FLUTE CENTER AND SHALL BE NO CLOSER THAN 1 1/8" TO THE EDGE OF THE LOW FLUTE. PINS INSTALLED FROM THE BOTTOM SHALL BE SPACED NO CLOSER THAN 5 1/2" PARALLEL TO THE FLUTES. PINS SHALL HAVE 1" PENETRATION INTO CONCRETE U.N.O. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING SHOT PINS.
7. SHOT PINS MAY BE DRIVEN INTO 8" NOMINAL MINIMUM THICKNESS FULLY GROUTED NORMAL-WEIGHT CMU WITH TYPE S MORTAR AND MINIMUM F'M = 1500 PSI AT TIME OF INSTALLATION. SHOT PINS MAY BE INSTALLED INTO THE FACE SHELLS, HORIZONTAL MORTAR JOINTS OR VERTICALLY CENTERED IN THE TOP OF GROUTED CELLS. SHOT PINS SHALL NOT BE INSTALLED IN VERTICAL MORTAR JOINTS OR WITHIN 1" OF VERTICAL MORTAR JOINTS. NO MORE THAN ONE SHOT PIN MAY OCCUR IN AN INDIVIDUAL MASONRY UNIT CELL AND MUST BE INSTALLED A MINIMUM OF 4" FROM THE EDGE OF THE WALL. SHOT PINS IN MORTAR JOINTS MUST BE A MINIMUM OF 8" FROM THE END OF THE WALL AND SHALL HAVE A MINIMUM SPACING OF 8".
8. SHOT PIN INSTALLERS SHALL BE CERTIFIED BY HILTI AND HAVE A CURRENT HILTI ISSUED OPERATORS LICENSE. SHOT PIN INSTALLATION SHALL MEET ALL OSHA REQUIREMENTS.

HOLLOW CONCRETE UNIT MASONRY (BLOCK)
410SN001-1

1. ALL MASONRY SHALL BE MANUFACTURED AND PLACED IN ACCORDANCE WITH TMS 402, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", AND TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES".
2. MASONRY UNITS AND COMPONENTS THAT ARE DAMAGED ARE NOT TO BE INSTALLED IN THIS PROJECT. REINFORCEMENTS AND ACCESSORIES ARE NOT TO BE STORED ON THE GROUND AND ARE TO BE PROTECTED FROM PERMANENT DISTORTIONS.
3. WHEN THE AMBIENT AIR TEMPERATURE IS BELOW 40°F, THE COLD WEATHER PROCEDURES FROM TMS 602, ARTICLE 1.8C ARE TO BE IMPLEMENTED. WHEN THE AMBIENT AIR TEMPERATURE IS ABOVE 90°F, THE HOT WEATHER PROCEDURES FROM TMS 602, ARTICLE 1.8D ARE TO BE IMPLEMENTED.
4. CONCRETE BLOCK UNITS SHALL CONFORM TO ASTM C90 . F'M = 2000 PSI. F'M SHALL BE VERIFIED IN ACCORDANCE WITH TMS 602, ARTICLE 1.4 B.2. CONCRETE BLOCK UNITS SHALL BE MEDIUM WEIGHT. ALL MASONRY CONSTRUCTION IS TO BE GROUTED SOLID.
5. MORTAR SHALL BE TYPE S PER ASTM C270.
6. GROUT SHALL BE PROPORTIONED TO ATTAIN A 28 DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED F'M VALUE NOTED ABOVE. NOT MORE THAN 5% OF THE PEA GRAVEL SHALL PASS THE NO. 8 SIEVE AND 100% SHALL PASS THE 3/8" SIEVE. WHEN REQUIRED, GROUT STRENGTH SHALL BE VERIFIED IN ACCORDANCE WITH ASTM C1019.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 FOR #4 AND LARGER, GRADE 40 FOR #3 AND SMALLER. REINFORCING STEEL THAT IS TO BE WELDED SHALL CONFORM TO ASTM A706. CONTRACTOR SHALL SUBMIT REBAR MILL CERTIFICATES.
8. VERTICAL REINFORCING SHALL BE AS NOTED IN DETAILS, UNO. LOCATE BARS AT ALL CORNERS, WALL ENDS, INTERSECTIONS, JAMBS AND AT EACH SIDE OF A WALL JOINT. LOCATE BARS OR ADD ADDITIONAL BARS DIRECTLY UNDER FRAMING MEMBERS SUCH AS BEAMS, JOISTS, GIRDERS, AND TRUSSES WHERE CENTER TO CENTER SPACING OF FRAMING MEMBERS EXCEED 48" CC. DOWELS WITH STANDARD 90° HOOKS INTO THE FOUNDATION SHALL MATCH AND LAP VERTICAL REINFORCING, TYPICAL, UNLESS NOTED OTHERWISE.
9. HORIZONTAL REINFORCING SHALL BE AS NOTED ON DETAILS, LOCATED AT THE CENTER OF THE MASONRY WALL, UNO. LOCATE TWO (2) #5 HORIZONTAL BARS AT ALL ELEVATED FRAMING ASSEMBLIES, SUCH AS ROOFS, FLOORS, AND STAIRS. ALSO, LOCATE TWO #5 HORIZONTAL BARS AT TOPS OF PARAPETS, TOPS OF FREE-STANDING WALLS, AT THE BOTTOM OF ALL WALLS, AND ALIGNED WITH THE SLAB-ON-GRADE. PLACE A #5 BAR AT EACH FACE OF THE MASONRY WALL ABOVE AND BELOW ALL WALL OPENINGS, UNO. EXTEND THESE BARS A MINIMUM OF A LAP LENGTH PAST THE EDGE OF THE OPENING. WHERE EXTENSION CAN NOT BE ACHIEVED, BEND BARS UP OR DOWN FOR A DISTANCE EQUAL TO THE SPECIFIED LAP LENGTH.
10. PLACE ALL HORIZONTAL BARS IN BOND BEAM UNITS. WHEN 2 BARS ARE USED, STAGGER LAPS MINIMUM OF 5'-0".
11. MINIMUM REBAR CLEARANCE TO FACE SHELL IS ONE BAR DIAMETER OR 1/2", WHICHEVER IS GREATER. WHERE WALLS ARE EXPOSED TO EARTH OR WEATHER, A MINIMUM COVER FOR THE REINFORCING BARS OF 2" SHALL BE MAINTAINED.
12. BEFORE BLOCK IS PLACED ON CONCRETE, THOROUGHLY CLEAN CONCRETE OF ALL LAITANCE AND ALL LOOSE MATERIAL. ROUGHEN AS IN A CONCRETE CONSTRUCTION JOINT.
13. CONCRETE BLOCK MASONRY SHALL BE BUILT TO PRESERVE THE UNOBSTRUCTED VERTICAL CONTINUITY OF THE CELLS. ALL HEAD AND END JOINTS SHALL BE SOLIDLY FILLED WITH MORTAR FOR A DISTANCE IN FROM THE FACE OF THE WALL OR UNIT NOT LESS THAN THE THICKNESS OF THE LONGITUDINAL FACE SHELLS. BOND SHALL BE PROVIDED BY LAPPING SUCCESSIVE COURSES OR BY EQUIVALENT MECHANICAL ANCHORAGE.
14. VERTICAL CELLS SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR UNOBSTRUCTED CONTINUOUS VERTICAL CELL.
15. GROUT PLACEMENT SHALL CONFORM TO TMS 602 SECTION 3.5.
16. CLEAN OUT OPENINGS SHALL BE PROVIDED AT THE BOTTOMS OF ALL CELLS TO BE FILLED AT EACH LIFT OR POUR OF GROUT WHERE SUCH LIFT OR POUR OF GROUT IS IN EXCESS OF 5'-4" IN HEIGHT, IN ACCORDANCE WITH TMS 602 SECTION 3.2F. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM INSIDE OF SUCH CELLS. THE CLEAN OUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE GROUTING. MECHANICALLY VIBRATE ALL GROUT POURS.
17. REINFORCEMENT IS TO BE SUPPORTED IN PLACE TO PREVENT DISPLACEMENTCAUSED BY PLACEMENT OF GROUT AND MORTAR OR BY CONSTRUCTION LOADS.
18. THOROUGHLY CLEAN ALL CELLS AND BOND BEAMS OF MORTAR BEFORE GROUTING.
19. ALL CELLS SHALL BE FILLED SOLIDLY WITH GROUT. ALL GROUTING SHALL BE DONE UNDER THE OBSERVATION OF A QUALIFIED INSPECTOR. REFER TO SPECIAL STRUCTURAL INSPECTION SECTION OF THESE NOTES FOR FREQUENCY OF GROUTING INSPECTION.
20. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS, OR KEYS, SHALL BE FORMED BY STOPPING THE POUR OF GROUT 1-1/2" BELOW THE TOP OF THE UPPERMOST UNIT.
21. EVERY VERTICAL BAR IN WALLS SHALL BE LAPPED PER THE TABLE BELOW WITH A DOWEL OF THE SAME SIZE EXTENDING FROM THE FOUNDATION. CARRY EACH DOWEL TO WITHIN 3" OF THE BOTTOM OF THE FOUNDATION AND TERMINATE WITH 90 DEGREE HOOK. DOWELS SHALL BE STRAIGHT AND PLUMB.
22. ALL EMBEDDED ITEMS (BOLTS, STRAPS, ETC.) SHALL BE SECURED IN PLACE PRIOR TO GROUTING. CUT A HOLE IN THE FACE SHELL TO ATTAIN A MINIMUM OF 1/2" GROUT ALL AROUND EMBEDDED ITEMS AT THE FACE SHELL. WITHIN THE CELL OF THE UNIT, PROVIDE A MINIMUM OF 8" OF GROUT AROUND EMBEDDED ITEMS. AT HORIZONTAL ANCHOR INSTALLATIONS, MAINTAIN A MINIMUM CLEAR DISTANCE OF 1/2" BETWEEN END OF ANCHOR AND FACE SHELL OF UNIT.
23. SINGLE CONDUITS (3/4" MAX) MAY BE PLACED IN VERTICAL CELLS NOT CONTAINING VERTICAL. REBAR. NO HORIZONTAL CONDUITS ALLOWED IN WALL CONSTRUCTION.
24. ANCHOR BOLTS CAST IN MASONRY SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM F1554 GRADE 36, OR ASTM A307 GRADE A, UNO. BENT BAR ANCHOR BOLTS ARE NOT PERMITTED.
25. USE OPEN END BLOCK FOR ALL CONSTRUCTION NOT LAID IN RUNNING BOND.
26. ALL REBAR SHALL BE LAP SPLICED AND DEVELOPED AS FOLLOWS (UNO). WHERE EPOXY COATED REBAR IS USED, MULTIPLY LAP LENGTHS BY 1.5. BARS LARGER THAN #8 ARE TO BE LAPPED WITH MECHANICAL SPLICES THAT DEVELOP AT LEAST 125 PERCENT OF THE YIELD STRENGTH OF THE BAR.

CMU SPLICE & DEVELOPMENT LENGTHS (F'M = 2000 PSI)

BAR SIZE	FY (KSI)	γ	6" CMU CENTER	6" CMU E.F.	8" CMU CENTER	8" CMU E.F.	10" CMU CENTER	10" CMU E.F.	12" CMU CENTER	12" CMU E.F.
#3	40	1.0	14"	-	14"	14"	14"	14"	14"	14"
#4	60	1.0	18"	-	18"	22"	18"	22"	18"	22"
#5	60	1.0	28"	-	22"	35"	22"	35"	22"	35"
#6	60	1.3	53"	-	38"	54"	38"	54"	38"	54"
#7	60	1.3	-	-	52"	-	52"	63"	52"	63"
#8	60	1.5	-	-	-	-	72"	-	72"	72"

DRILLED-IN ANCHORS
305SN001-1

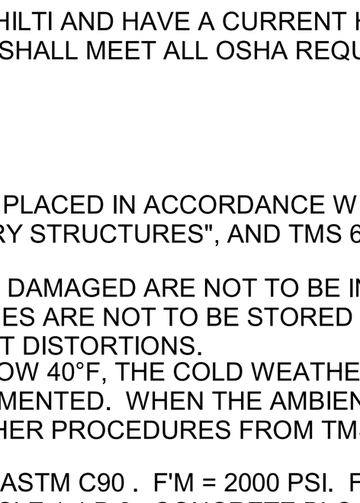
1. FOR CONCRETE CONSTRUCTION, EPOXY ANCHORS SHALL BE HILTI HIT-HY 200 PER ESR-3187, HILTI HIT-RE500-SD PER ESR-2322, SIMPSON SET-XP PER ESR-2508, OR POWERS PURE 110 PER ESR-3298 FOR THR'D ROD & REBAR. EXPANSION ANCHORS SHALL BE HILTI KB-TZ PER ESR-1917, SIMPSON STRONG-BOLT 2 PER ESR-3037, OR POWERS POWER-STUD+ SD2 PER ESR-2502. SCREW ANCHORS SHALL BE HILTI KWIK HUS-EZ (KH-EZ) PER ESR-3027, SIMPSON TITEN HD PER ESR-2713, OR POWERS WEDGEBOLT+ PER ESR-2526.
2. FOR MASONRY CONSTRUCTION, EPOXY ANCHORS SHALL BE HILTI HIT-HY 70 PER ESR-2682, SIMPSON SET PER ESR-1772, OR POWERS T308+ PER ESR-3149 FOR THRD'D ROD & REBAR. EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT 3 (KB3) PER ESR-1385, SIMPSON WEDGE-ALL PER ESR-1396, OR POWERS POWER-STUD+ PER ESR-2966. SCREW ANCHORS SHALL BE HILTI KWIK HUS-EZ (KH-EZ) PER ESR-3056, SIMPSON TITEN HD PER ESR-1056, OR POWERS WEDGEBOLT+ PER ESR-1678.
3. ANCHOR TYPE, SIZE & EMBEDMENT SHALL BE INDICATED IN DRAWINGS. POST-INSTALLED ANCHORS FOR REPAIR SHALL BE EVALUATED ON A CASE BY CASE BASIS. NOTIFY STRUCTURAL ENGINEER FOR REPAIRS.
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC REPORT.
5. UNLESS NOTED OTHERWISE ANCHORS HAVE BEEN DESIGNED FOR SPECIAL INSPECTION. PROVIDE SPECIAL INSPECTION AS INDICATED IN THE ICC REPORT.
6. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING CONCRETE OR MASONRY, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING EXISTING REINFORCING BARS. DO NOT INSTALL ANCHORS IN PRESTRESSED CONCRETE ELEMENTS.
7. ANCHORS INSTALLED FROM THE BOTTOM INTO METAL DECK WITH CONCRETE SHALL BE INSTALLED IN THE CENTER OF THE LOW FLUTE OF THE DECKING UNLESS NOTED OTHERWISE IN ICC REPORT. THE DECKING SHALL HAVE A MINIMUM THICKNESS OF 20 GAUGE. THE MINIMUM THICKNESS OF THE CONCRETE ABOVE THE HIGH FLUTE OF THE METAL DECK SHALL BE AS INDICATED IN THE ICC REPORT. SEE ICC REPORT FOR ADDITIONAL REQUIREMENTS, INCLUDING MINIMUM DIMENSIONS FOR FLUTE WIDTH AND DEPTH.
8. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT THE TIME OF ANCHOR INSTALLATION PER ACI 318, APPENDIX D.
9. INSTALLER CERTIFICATION AND INSPECTION IS REQUIRED FOR HORIZONTAL AND UPWARDLY INCLINED ADHESIVE ANCHORS SUBJECTED TO SUSTAINED TENSION LOADING IN ACCORDANCE WITH ACI 318, APPENDIX D.
10. THE INSPECTION OF THE ANCHORS SHALL BE DONE BY A QUALIFIED INSPECTION AGENCY AND A REPORT OF THE INSPECTION RESULTS SHALL BE SUBMITTED TO THE GOVERNING AGENCY AND ARCHITECT/STRUCTURAL ENGINEER.

DEFERRED APPROVALS
100SN007-1

1. THE FOLLOWING ITEMS REQUIRE DEFERRED APPROVAL FROM THE ENFORCEMENT AGENCY:
   A. WINDOW WALL/STORE FRONT SYSTEMS
   B. FIRE SPRINKLER SUPPORT
   C. EQUIPMENT STRUCTURAL ANCHORAGE
2. THE DESIGN OF THE ABOVE ITEMS IS BY THE CONTRACTOR/MANUFACTURER. CONTRACTOR/MANUFACTURER MUST PREPARE ALL NECESSARY CALCULATIONS AND DRAWINGS PER THE CALIFORNIA BUILDING CODE UNDER THE SUPERVISION OF A CIVIL ENGINEER, REGISTERED IN CALIFORNIA, AND SHALL OBTAIN ALL NECESSARY PLAN CHECK APPROVALS FROM THE ENFORCEMENT AGENCY.
3. INSTALLATION OF THE ABOVE ITEMS SHALL NOT BE STARTED UNTIL DETAILED PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN REVIEWED BY THE ARCHITECT OR STRUCTURAL ENGINEER OF RECORD, AND APPROVED BY THE ENFORCEMENT AGENCY.

COLD FORMED METAL FRAMING SECTION PROPERTIES - SSMA C STUDS & JOISTS - S162 SECTIONS [2,3]
540SN002-1

GAUGE/MIL	20/33		18/43		16/54		14/68		S STUDS & JOISTS
DESIGNATION	S162-33		S162-43		S162-54		S162-68		
MIN THICKNESS	0.0329		0.0428		0.0538		0.0677		
DEPTH "D"	Ix	Sx	Ix	Sx	Ix	Sx	Ix	Sx	
2 1/2"	0.235	0.180	0.302	0.240	0.370	0.284	0.450	0.357	
3 5/8"	0.551	0.268	0.710	0.372	0.873	0.444	1.069	0.574	
4"	0.692	0.299	0.892	0.417	1.098	0.498	1.346	0.648	
6"	1.793	0.577	2.316	0.767	2.860	0.916	3.525	1.164	
8"	3.384	0.710	4.500	1.019	5.600	1.229	7.070	1.663	
10"	-	-	7.523	1.302	9.391	1.572	11.978	2.154	
12"	-	-	-	-	14.298	1.914	18.390	2.645	



1. FOR COMPLETE SECTION DESIGNATIONS IN ACCORDANCE WITH SSMA STANDARDS, ADD MEMBER DEPTH TO FRONT OF INDICATED DESIGNATION. EXAMPLE: FOR 3 5/8" MEMBER WITH GAUGE/MIL OF 18/43, THE FULL DESIGNATION IS 362S162-43.
2. SECTION PROPERTIES SHOWN ARE EFFECTIVE PROPERTIES CONFORMING TO AISI A7.2 PER SSMA STANDARDS FOR MATERIAL STRENGTH NOTED BELOW.
3. PROVIDE 33 KSI MIN MATERIAL FOR 18/43 & LIGHTER SECTIONS, PROVIDE 50 KSI MATERIAL FOR 16/54 & HEAVIER SECTIONS.

STRUCTURAL SHEET INDEX

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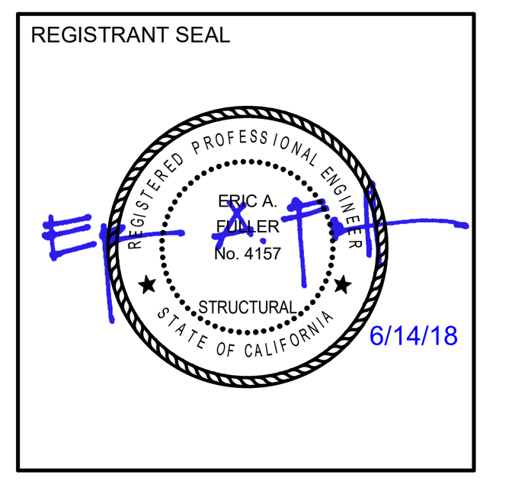
REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY MORGUE
200 INDUSTRIAL DRIVE DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
MO-S-0.1

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STRUCTURAL SPECIAL INSPECTIONS AND TESTING

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND TESTING
110SN001-1

1. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED BY A TESTING AND INSPECTION AGENCY, EMPLOYED BY THE OWNER (OR OWNER'S AUTHORIZED AGENT), AND APPROVED BY THE BUILDING OFFICIAL TO PROVIDE SPECIAL INSPECTIONS AND TESTING FOR THE PARTICULAR TYPE OF CONSTRUCTION.
2. TABLES OF SPECIAL INSPECTIONS AND TESTING ARE DERIVED FROM THE STRUCTURAL PROVISIONS OF THE CBC AND REFERENCED STANDARDS AND ARE FOR REFERENCE ONLY. THE INCLUDED TABLES ARE PROVIDED FOR THE CONVENIENCE OF THE OWNER, TESTING AGENCY AND CONTRACTOR IN DEVELOPING THE SCOPE OF WORK FOR REQUIRED TESTING AND INSPECTION OF STRUCTURAL MATERIALS AND COMPONENTS. FINAL DEFINITION OF THIS SCOPE OF WORK IS TO BE DETERMINED BY THE TESTING AGENCY AND THE OWNER (OR OWNER'S AUTHORIZED AGENT).
3. FREQUENCY OF SPECIAL INSPECTIONS AND TESTING SHALL BE, AT A MINIMUM, AS NOTED FOR THE INDIVIDUAL ELEMENTS WITHIN THE TABLES BELOW. THE CONTRACTOR SHALL COORDINATE TIMING OF SPECIAL INSPECTIONS AND TESTING WITH THE SPECIAL INSPECTION AND TESTING AGENCY,
4. PRIOR TO THE START OF CONSTRUCTION, THE TESTING AND INSPECTION AGENCY SHALL PROVIDE DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION, IN ACCORDANCE WITH CBC SECTION 1704.2.1.
5. THE TESTING AND INSPECTION AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER OF RECORD AND THE CONTRACTOR, PER CBC SECTION 1704.2.4. THE REPORTS SHALL INDICATE WHETHER WORK INSPECTED OR TESTED CONFORMED TO THE APPROVED CONSTRUCTION DOCUMENTS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER OF RECORD.
6. SPECIAL INSPECTION AND TESTING RECORDS SHALL BE RETAINED BY THE CONTRACTOR ON SITE UNTIL COMPLETION OF CONSTRUCTION.
7. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT TO THE BUILDING OFFICIAL ACKNOWLEDGING RESPONSIBILITY FOR CONSTRUCTION OF THE MAIN LATERAL-FORCE RESISTING SYSTEM PRIOR TO COMMENCEMENT OF THAT WORK AS REQUIRED BY CBC SECTION 1704.4.
8. THE OWNER OR THE OWNER'S AUTHORIZED AGENT SHALL SUBMIT TO THE BUILDING OFFICIAL, A FINAL REPORT DOCUMENTING SPECIAL INSPECTIONS AND TESTS PER CBC SECTION 1704.2.4, AND REPORTS AND CERTIFICATES PER CBC SECTION 1704.5.
9. ALL SOILS AND FOUNDATION EXCAVATION INSPECTIONS SHALL BE BY THE GEOTECHNICAL ENGINEER OF RECORD, OR A GEOTECHNICAL FIRM HIRED BY THE OWNER PER CBC SECTION 1705.6.
10. SPECIAL INSPECTION IS REQUIRED FOR ALL SHOP FABRICATED MEMBERS OR ASSEMBLIES UNLESS WAIVED PER THE EXCEPTIONS IN CBC SECTION 1704.2.5.
11. DEFINITIONS:
    A. CONTINUOUS - SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS CONTINUOUSLY PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
    B. PERIODIC - SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
    C. QUALITY ASSURANCE (QA) - MONITORING AND INSPECTION TASKS PERFORMED BY AN AGENCY OR FIRM OTHER THAN THE FABRICATOR OR ERECTOR TO ENSURE THAT THE MATERIAL PROVIDED AND WORK PERFORMED BY THE FABRICATOR AND ERECTOR MEET THE REQUIREMENTS OF THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. QUALITY ASSURANCE INCLUDES THOSE TASKS DESIGNATED 'SPECIAL INSPECTION' BY THE APPLICABLE CODE.
    D. QUALITY CONTROL (QC) - CONTROLS AND INSPECTIONS IMPLEMENTED BY THE FABRICATOR OR ERECTOR, AS APPLICABLE, TO ENSURE THAT THE MATERIAL PROVIDED AND WORK PERFORMED MEET THE REQUIREMENTS OF THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS.
    E. OBSERVE (O) - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
    F. PERFORM (P) - PERFORM THOSE TASKS PRIOR TO FINAL ACCEPTANCE FOR EACH ITEM OR ELEMENT.
    G. DOCUMENT (D) - THE INSPECTOR SHALL PREPARE REPORTS INDICATING THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE REPORT NEED NOT PROVIDE DETAILED MEASUREMENTS FOR JOINT FIT-UP, WPS SETTINGS, COMPLETED WELDS, OR OTHER INDIVIDUAL ITEMS LISTED IN THE TABLES. FOR SHOP FABRICATION, THE REPORT SHALL INDICATE THE PIECE MARK OF THE PIECE INSPECTED. FOR FIELD WORK, THE REPORT SHALL INDICATE THE REFERENCE GRID LINES AND FLOOR OR ELEVATION INSPECTED. WORK NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND WHETHER THE NONCOMPLIANCE HAS BEEN SATISFACTORILY REPAIRED SHALL BE NOTED IN THE INSPECTION REPORT.
12. SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED DURING CONSTRUCTION ON THE WORK SHOWN IN THE CONSTRUCTION DOCUMENTS AS REQUIRED BY CBC CHAPTER 17, THE TABLES LISTED BELOW, AND THE JURISDICTION'S SPECIAL INSPECTION AND TESTING FORM. IF DISCREPANCIES ARE NOTED, CONTACT THE SEOR. ALL EXCEPTIONS INCLUDED IN CBC CHAPTER 17 ARE PERMITTED TO BE USED.
    - SOILS
    - CONCRETE CONSTRUCTION
    - MASONRY CONSTRUCTION - LEVEL C
    - STEEL CONSTRUCTION - WELDING INSPECTION
    - STEEL CONSTRUCTION - WELDING TESTING
    - STEEL CONSTRUCTION - BOLTING
    - COLD-FORMED STEEL DECK

    LFRS (SEE NOTE #13)
    - STRUCTURAL STEEL LFRS - WELDING INSPECTIONS
    - STRUCTURAL STEEL LFRS - WELDING TESTING
    - STRUCTURAL STEEL LFRS BOLTING
13. SPECIAL INSPECTIONS AND TESTING ARE REQUIRED FOR THE LATERAL FORCE-RESISTING SYSTEM (LFRS) AND SHALL BE PROVIDED FOR ALL COMPONENTS AND CONNECTIONS ASSOCIATED WITH THE DESCRIPTION BELOW. SPECIAL INSPECTIONS AND TESTING FOR THE LFRS SHALL BE PER THE LFRS TABLES ABOVE, AND ARE IN ADDITION TO ALL OTHER REQUIRED INSPECTIONS AND TESTING. IF NO LFRS TABLES ARE INCLUDED, INSPECTIONS AND TESTING FOR THE LFRS ITEMS NOTED SHALL BE PER THE TYPICAL MATERIAL TABLES.

    LFRS DESCRIPTION:
    - METAL DECK ROOF
    - CONCRETE TILT-UP WALLS AND STEEL LEDGERS
    - WF BEAMS WITH CONNECTIONS INDICATED AS: ●
    - CONCRETE WALL FOUNDATIONS

SOILS - REQUIRED SPECIAL INSPECTIONS AND TESTS
CBC TABLE 1705.6
110SN201-1

TYPE	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

STRUCTURAL STEEL LFRS - WELDING - REQUIRED TESTING
AISC 341 - SECTION J6.2 NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINTS
110SN513

ALL REQUIREMENTS OF THE 'STEEL CONSTRUCTION - WELDING - REQUIRED TESTING' TABLE SHALL APPLY IN ADDITION TO THE TESTING NOTED BELOW.

A) K-AREA NDT
WHERE WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, THE WEB SHALL BE TESTED FOR CRACKS USING MAGNETIC PARTICLE TESTING (MT). THE MT INSPECTION AREA SHALL INCLUDE THE K-AREA BASE METAL WITHIN 3" OF THE WELD. THE MT SHALL BE PERFORMED NO SOONER THAN 48 HOURS FOLLOWING COMPLETION OF THE WELDING.

B) CJP GROOVE WELD NDT
ULTRASONIC TESTING (UT) SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS IN MATERIALS 5/16" THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16" THICK IS NOT REQUIRED. WELD DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1m TABLE 6.2. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS. THE RATE OF UT AND MT IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH SECTIONS J6.2G AND J6.2H, RESPECTIVELY.

C) BASE METAL NDT FOR LAMELLAR TEARING AND LAMINATIONS
AFTER JOINT COMPLETION, BASE METAL THICKER THAN 1 1/2" LOADED IN TENSION IN THE THROUGH-THICKNESS DIRECTION IN TEE AND CORNER JOINTS, WHERE THE CONNECTED MATERIAL IS GREATER THAN 3/4" AND CONTAINS CJP GROOVE WELDS, SHALL BE ULTRASONICALLY TESTED FOR DISCONTINUITIES BEHIND AND ADJACENT TO THE FUSION LINE OF SUCH WELDS. ANY BASE METAL DISCONTINUITIES FOUND WITHIN T/4 OF THE STEEL SURFACE SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1m TABLE 6.2, WHERE 'T' IS THE THICKNESS OF THE PART SUBJECTED TO THE THROUGH-THICKNESS STRAIN.

D) BEAM COPE AND ACCESS HOLE NDT
AT WELDED SPLICES AND CONNECTIONS, THERMALLY CUT SURFACES OF BEAM COPES AND ACCESS HOLES SHALL BE TESTED USING MAGNETIC PARTICLE TESTING OR PENETRANT TESTING, WHEN THE FLANGE THICKNESS EXCEEDS 1 1/2" FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS EXCEEDS 1 1/2" FOR BUILT-UP SHAPES.

E) REDUCED BEAM SECTION REPAIR NDT
MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON ANY WELD AND ADJACENT AREA OF THE REDUCED BEAM SECTION (RBS) CUT SURFACE THAT HAS BEEN REPAIRED BY WELDING, OR ON THE BASE METAL OF THE RBS CUT SURFACE IF A SHARP NOTCH HAS BEEN REMOVED BY GRINDING.

F) WELD TAB REMOVAL SITES
AT THE END OF WELDS WHERE WELD TABS HAVE BEEN REMOVED, MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON THE SAME BEAM-TO-COLUMN JOINTS RECEIVING UT AS REQUIRED UNDER SECTION J6.2B. THE RATE OF MT IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH SECTION J6.2H. MT OF CONTINUITY PLATE WELD TABS REMOVAL SITES IS NOT REQUIRED.

G) REDUCTION OF PERCENTAGE OF ULTRASONIC TESTING
THE REDUCTION OF PERCENTAGE OF UT IS PERMITTED TO BE REDUCED, IN ACCORDANCE WITH THE 'STEEL CONSTRUCTION - WELDING - REQUIRED TESTING' TABLE ITEM (E).

H) REDUCTION OF PERCENTAGE OF MAGNETIC PARTICLE TESTING
THE AMOUNT OF MT ON CJP GROOVE WELDS IS PERMITTED TO BE REDUCED IF APPROVED BY THE ENGINEER OF RECORD AND THE AUTHORITY HAVING JURISDICTION, PER AISC 341 SECTION J6.2H.

CONCRETE CONSTRUCTION - REQUIRED SPECIAL INSPECTIONS AND TESTS
CBC TABLE 1705.3
110SN301-1

TYPE	CONTINUOUS	PERIODIC	REFERENCED STANDARD[A]
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3
2. REINFORCING BAR WELDING:			AWS D.14 ACI 318: 26.5.4
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	-	X	
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"	-	X	
C. INSPECT ALL OTHER WELDS	X	-	
3. INSPECT ANCHORS CAST IN CONCRETE.	X	-	ACI 318: 17.8.2
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.[B]			ACI 318: 17.8.2.4, 17.8.2
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	-	
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	-	X	
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	-	X	ACI 318: 26.4.5
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.5.3
9. INSPECT PRESTRESSED CONCRETE FOR:			ACI 318: 26.10
A. APPLICATION OF PRESTRESSING FORCES	-	X	
B. GROUTING OF BONDED PRESTRESSING TENDONS.	-	X	
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: CH. 26.9
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.10.2
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11

A. WHERE APPLICABLE, SEE ALSO SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.

B. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO COMMENCEMENT OF THE WORK.

MASONRY CONSTRUCTION - LEVEL C - REQUIRED SPECIAL INSPECTIONS AND TESTS
TMS402 TABLE 3.1.3
110SN403-1

MINIMUM TESTS:
1. VERIFICATION OF F'_M AND F'_{AAC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4 B PRIOR TO CONSTRUCTION AND FOR EVERY 5000 SQ. FT. (465 SQ. M) DURING CONSTRUCTION
2. VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT, AS DELIVERED TO THE PROJECT SITE
3. VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5 B.1.B.3 FOR SELF-CONSOLIDATING GROUT

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY		REFERENCE FOR CRITERIA	
	CONTINUOUS	PERIODIC	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	-	X		Art 1.5
2. VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE				
a. PROPORTIONS OF SITE-MIXED MORTAR, GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	-	X		Art 2.1, 2.6 A, 2.6 B, 2.6 C, 2.4 G 1.b
b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES	-	X	Sec. 6.1	Art 2.4, 3.4
c. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS	-	X		Art 3.3 B
d. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES	X	-	Sec. 6.1, 6.2.1, 6.2.6, 6.2.7	Art 3.2 E, 3.4, 3.6 A
e. GROUT SPACE PRIOR TO GROUTING	X	-		Art 3.2 D, 3.2F
f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	X			Art 3.5, 3.6 C
g. SIZE AND LOCATION OF STRUCTURAL ELEMENTS	-	X		Art 3.3 F
h. TYPE, SIZE, AND LOCATION OF ANCHORS INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION (INCLUDES POST-INSTALLED ANCHORS)	X		Sec. 1.2.1 (e), 6.1.4.3, 6.2.1 ICC/IAPMO REPORT (POST-INSTALLED ANCHORS)	
i. WELDING OF REINFORCEMENT	X	-	Sec. 8.1.6.7.2, 9.3.3.4 (c), 11.3.3.4 (b)	
j. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C))		X		Art 1.8 C, 1.8 D
k. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			Art 3.6 B
l. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X			Art 3.3 B9, 3.3 F.1.b
m. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X			Art 2.1 C.1
3. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	X			Art 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4, B.2.c.3, 1.4, b.3, 1.4 B.4

STEEL CONSTRUCTION - WELDING - REQUIRED SPECIAL INSPECTIONS
AISC360 TABLE N5.4
110SN501-1

INSPECTION TASKS PRIOR TO WELDING	QC	QA
WELDING PROCEDURE SPECIFICATIONS (WPSS) AVAILABLE	P	P
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P
MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O
WELDER IDENTIFICATION SYSTEM[1]	O	O
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	O	O
CONFIGURATION AND FINISH OF ACCESS HOLES	O	O
FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	O	O
CHECK WELDING EQUIPMENT	O	-
INSPECTION TASKS DURING WELDING	**QC**	**QA**
USE OF QUALIFIED WELDERS	O	O
CONTROL AND HANDLING OF WELDED CONSUMABLES • PACKAGING • EXPOSURE CONTROL	O	O
NO WELDING OVER CRACKED TACK WELDS	O	O
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	O	O
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH)	O	O
WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	O	O
INSPECTION TASKS AFTER WELDING	**QC**	**QA**
WELDS CLEANED	O	O
SIZE, LENGTH AND LOCATION OF WELDS	P	P
WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD/BASE-METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	P	P
ARC STRIKES	P	P
K-AREA[2]	P	P
BACKING REMOVED AND WELD TABS REMOVED (IF DESIRED)	P	P
REPAIR ACTIVITIES	P	P
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	P

[1] THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW- STRESS TYPE.

[2] WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75MM) OF THE WELD.

COLD-FORMED STEEL DECK - REQUIRED SPECIAL INSPECTIONS AND TESTS
CBC SECTION 1705.2.2/SDI QA/QC STANDARD TABLES 1.1-1.8
110SN505

INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT	QC	QA
A. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	P	P
B. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	P	P
INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT	**QC**	**QA**
A. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	P	P
B. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	N/A	P
C. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	P	P
INSPECTION OR EXECUTION TASKS PRIOR TO WELDING	**QC**	**QA**
A. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	O	O
B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	O	O
C. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O
D. CHECK WELDING EQUIPMENT	O	O
INSPECTION OR EXECUTION TASKS DURING WELDING	**QC**	**QA**
A. USE OF QUALIFIED WELDERS	O	O
B. CONTROL AND HANDLING OF WELDING CONSUMABLES	O	O
C. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	O	O
D. WPS FOLLOWED	O	O
INSPECTION OR EXECUTION TASKS AFTER WELDING	**QC**	**QA**
A. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS	P	P
B. WELDS MEET VISUAL ACCEPTANCE CRITERIA	P	P
C. VERIFY REPAIR ACTIVITIES	P	P
D. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	P	P
INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING	**QC**	**QA**
A. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	O	O
B. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	O	O
C. PROPER STORAGE FOR MECHANICAL FASTENERS	O	O
INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING	**QC**	**QA**
A. FASTENERS ARE POSITIONED AS REQUIRED	O	O
B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	O	O
INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING	**QC**	**QA**
A. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS	P	P
B. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	P	P
C. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS	P	P
D. VERIFY REPAIR ACTIVITIES	P	P
E. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS	P	P

STEEL CONSTRUCTION - BOLTING - REQUIRED SPECIAL INSPECTIONS
AISC360 TABLE N5.6
110SN503-1

INSPECTION TASKS PRIOR TO BOLTING	QC	QA
MANUFACTURER CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANE)	O	O
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	O	O
INSPECTION TASKS DURING BOLTING	**QC**	**QA**
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	O
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	O
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O
INSPECTION TASKS AFTER BOLTING	**QC**	**QA**
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P

STEEL CONSTRUCTION - WELDING - REQUIRED TESTING
AISC 360 - SECTION N5.5 NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINTS
110SN502

A) PROCEDURES
ULTRASONIC TESTING (UT), MAGNETIC PARTICLE TESTING (MT), PENETRANT TESTING (PT) AND RADIOGRAPHIC TESTING (RT), WHERE REQUIRED, SHALL BE PERFORMED BY QA IN ACCORDANCE WITH AWS D1.1/D1.1m. ACCEPTANCE CRITERIA SHALL BE IN ACCORDANCE WITH AWS D1.1/D1.1m FOR STATICALLY LOADED STRUCTURES, UNLESS OTHERWISE DESIGNATED IN THE DESIGN DRAWINGS OR PROJECT SPECIFICATIONS.

B) CJP GROOVE WELD NDT
FOR STRUCTURES IN RISK CATEGORY III OR IV, UT SHALL BE PERFORMED BY QA ON ALL CJP GROOVE WELDS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN BUTT, T- AND CORNER JOINTS, IN MATERIALS 5/16" THICK OR GREATER. FOR STRUCTURES IN RISK CATEGORY II, UT SHALL BE PERFORMED BY QA ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING, IN MATERIALS 5/16" THICK OR GREATER.

C) ACCESS HOLE NDT
THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TESTED BY QA USING MT OR PT, WHEN THE FLANGE THICKNESS EXCEEDS 2" FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS EXCEEDS 2" FOR BUILT-UP SHAPES. ANY CRACK SHALL BE DEEMED UNACCEPTABLE REGARDLESS OF SIZE OR LOCATION.

D) WELDED JOINTS SUBJECTED TO FATIGUE
WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHIC OR ULTRASONIC INSPECTION SHALL BE TESTED BY QA AS PRESCRIBED. REDUCTION IN THE RATE OF UT IS PROHIBITED.

E) REDUCTION OF RATE OF ULTRASONIC TESTING
THE RATE OF UT IS PERMITTED TO BE REDUCED IF APPROVED BY THE EOR AND THE AHJ, PER AISC 360, SECTION N5.5E.

F) INCREASE IN RATE OF ULTRASONIC TESTING
FOR STRUCTURES IN RISK CATEGORY II, WHERE THE INITIAL RATE FOR UT IS 10%, THE NDT RATE FOR AN INDIVIDUAL WELDER OR WELDING OPERATOR SHALL BE INCREASED TO 100% SHOULD THE REJECT RATE, THE NUMBER OF WELDS CONTAINING UNACCEPTABLE DEFECTS DIVIDED BY THE NUMBER OF WELDS COMPLETED, EXCEEDS 5% OF THE WELDS TESTED FOR THE WELDER OR WELDING OPERATOR. SEE AISC 360, SECTION N5.5F FOR ADDITIONAL INFORMATION.

G) DOCUMENTATION
ALL NDT PERFORMED SHALL BE DOCUMENTED. FOR SHOP FABRICATION, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION IN THE PIECE. FOR FIELD WORK, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY LOCATION IN THE STRUCTURE, PIECE MARK, AND LOCATION IN THE PIECE. WHEN A WELD IS REJECTED ON THE BASIS OF NDT, THE NDT RECORD SHALL INDICATE THE LOCATION OF THE DEFECT AND THE BASIS OF REJECTION.

STRUCTURAL STEEL LFRS BOLTING - REQUIRED SPECIAL INSPECTIONS
AISC341 TABLE J7-1, J7-2, J7-3
110SN514-1

INSPECTION TASKS PRIOR TO BOLTING	QC TASK	QC DOC	QA TASK	QA DOC
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL	O	-	0	-
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	-	O	-
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	-	O	-
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	D	P	D
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	O	-	O	-
INSPECTION TASKS DURING BOLTING	**QC TASK**	**QC DOC**	**QA TASK**	**QA DOC**
FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	-	O	-
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	-	O	-
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	-	O	-
BOLTS ARE PRETENSIONED PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	-	O	-
INSPECTION TASKS AFTER BOLTING	**QC TASK**	**QC DOC**	**QA TASK**	**QA DOC**
DOCUMENT ACCEPTED OR REJECTED CONNECTIONS	P	D	P	D

STRUCTURAL STEEL LFRS - WELDING - REQUIRED SPECIAL INSPECTIONS
AISC341 TABLE J6-1, J6-2, J6-3
110SN512-1

VISUAL INSPECTION TASKS PRIOR TO WELDING	QC TASK	QC DOC	QA TASK	QA DOC
MATERIAL IDENTIFICATION (TYPE/GRADE)	O	-	0	-
WELDER IDENTIFICATION SYSTEM	O	-	O	-
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	P/O**	-	O	-
CONFIGURATION AND FINISH OF ACCESS HOLES	O	-	O	-
FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	P/O**	-	O	-
VISUAL INSPECTION TASKS DURING WELDING	**QC TASK**	**QC DOC**	**QA TASK**	**QA DOC**
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH) • INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED	O	-	O	-
USE OF QUALIFIED WELDERS	O	-	O	-
CONTROL AND HANDLING OF WELDED CONSUMABLES • PACKAGING • EXPOSURE CONTROL	O	-	O	-
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	O	-	O	-
WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	O	-	O	-
NO WELDING OVER CRACKED TACKS	O	-	O	-
VISUAL INSPECTION TASKS AFTER WELDING	**QC TASK**	**QC DOC**	**QA TASK**	**QA DOC**
WELDS CLEANED	O	-	O	-
SIZE, LENGTH AND LOCATION OF WELDS	P	-	P	-
WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD/BASE-METAL FUSION • CRATER CROSS SECTION • WELD PROFILES AND SIZE • UNDERCUT • POROSITY	P	D	P	D
PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS (IF REQ'D)	P	D	P	D
BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLET WELDS ADDED (IF REQUIRED)	P	D	P	D
REPAIR ACTIVITIES	P	-	P	D

** FOLLOWING PERFORMANCE OF THIS INSPECTION TASK FOR TEN WELDS TO BE MADE BY A GIVEN WELDER, WITH THE WELDER DEMONSTRATING UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF SKILLS AND TOOLS TO VERIFY THESE ITEMS, THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THAT THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THAT THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED.

C/S BROWARD builders

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6/14/18

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DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
STRUCTURAL SPECIAL INSPECTIONS & TESTING

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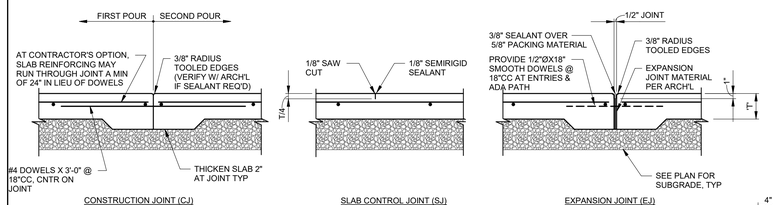
Los Angeles . Silicon Valley

SHEET NUMBER:
MO-S-0.2

TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

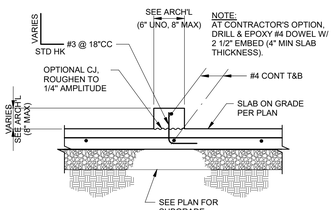


CONSTRUCTION JOINT (CJ) | SLAB CONTROL JOINT (SJ) | EXPANSION JOINT (EJ)

NOTE:
1. CONSTRUCTION JOINTS AND CONTROL JOINTS SHALL DIVIDE SLAB INTO AREAS NOT EXCEEDING 225 SQ FT WITHOUT REENTRANT CORNERS AND WITH LENGTH TO WIDTH RATIOS NOT EXCEEDING 1 1/2 TO 1. JOINT SPACING SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION.
2. CONTRACTOR SHALL SUBMIT LAYOUT PLAN SHOWING PROPOSED CONTROL AND CONSTRUCTION JOINT LOCATIONS TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW & APPROVAL.
3. SEMIRIGID SEALANT TO BE EUCLID EUCO #700 OR EQUAL.

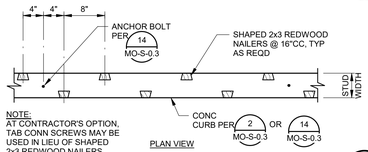
SLAB ON GRADE JOINTS 1 MO-S-0.3

3105D001-12



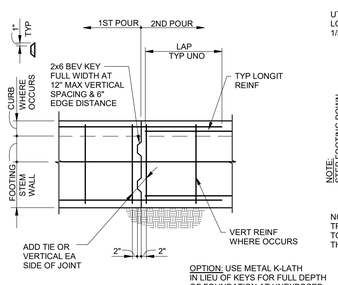
CURB AT SLAB ON GRADE 2 MO-S-0.3

3105D006-12



NAILERS IN CONCRETE CURB 3 MO-S-0.3

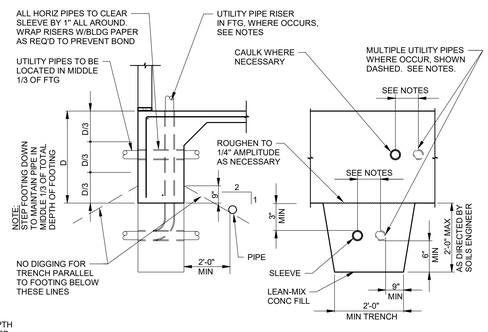
3105D009-12



OPTION: USE METAL K-LATH IN LIEU OF KEYS FOR FULL DEPTH OF FOUNDATION AT UNEXPOSED FOUNDATIONS ONLY.

TYPICAL FOUNDATION CONSTRUCTION JOINT 4 MO-S-0.3

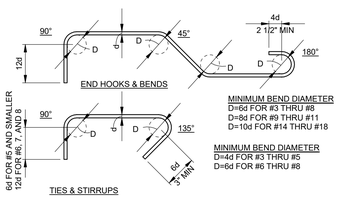
2005D012-24



CONCRETE FOOTINGS AT UTILITY PIPES 5 MO-S-0.3

3005D003-32

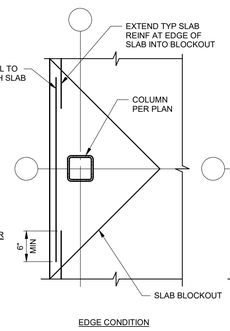
NOTES:
1. REINFORCING SHALL NOT BE INTERRUPTED, CUT OR DISPLACED BY PLACEMENT OF UTILITY PIPE.
2. LEAN MIX CONCRETE FILL TO BE PLACED BEFORE FTG IS CAST (MONO-POUR FTG CONC OPTIONAL). MAKE SAME WIDTH AS FTG AND FULL WIDTH OF PIPE TRENCH.
3. STEP FTG IF PIPE OCCURS IN LOWER THIRD OF ORIGINAL FOOTING DEPTH.
4. NO PIPES SHALL BE PLACED BELOW SPREAD FTGS OR WITHIN 2 TO 1 BEARING ZONE AROUND SPREAD FOOTING.
5. IF PIPE IS IN PLACE PRIOR TO CASTING CONCRETE, WRAP PIPE W/ 1" STYROFOAM INSULATION IN LIEU OF SLEEVE.
6. UTILITY PIPES ARE NOT ALLOWED PARALLEL IN FOOTING.
7. MULTIPLE UTILITY PIPES (TWO OR MORE) MAY BE INSTALLED AS SHOWN @ LEFT, PROVIDED THEY ARE SPACED A MINIMUM OF 4 PIPE/CONDUIT DIAMETERS ON CENTER WITH A MINIMUM OF 3" OF CONCRETE BETWEEN. PIPE DIAMETER INDICATED IS THE ROUGH HOLE SIZE THRU FOOTING.
8. UTILITY PIPES RISERS MAY OCCUR IN CONTINUOUS WALL FOOTINGS PROVIDED THEY ARE NO LARGER THAN (FOOTING WIDTH/6) AND OCCUR W/IN THE MIDDLE 1/2 OF THE FOOTING WIDTH. MULTIPLE RISERS MAY OCCUR IF SPACED AS NOTED @ LEFT.
9. UTILITY PIPES PERPENDICULAR TO FOOTINGS AND MORE THAN 2'-0" BELOW BOTTOM OF FOOTINGS DO NOT REQUIRE LEAN-MIX CONCRETE ENCASEMENT SUBJECT TO ACCEPTANCE OF THE SOILS ENGINEER.
10. CONDITIONS NOT CONFORMING TO THE PARAMETERS NOTED ABOVE SHALL BE REVIEWED ON A CASE-BY-CASE BASIS.

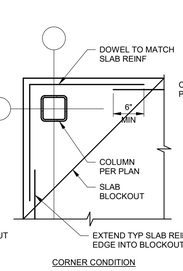


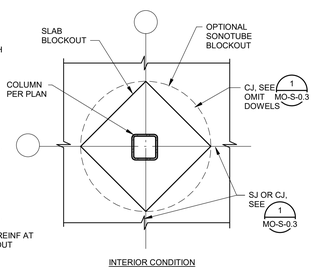
NOTE: ALL HOOKS SHALL BE 90° OR 180° STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED.

STANDARD REBAR HOOKS AND BENDS 6 MO-S-0.3

3005D001-12



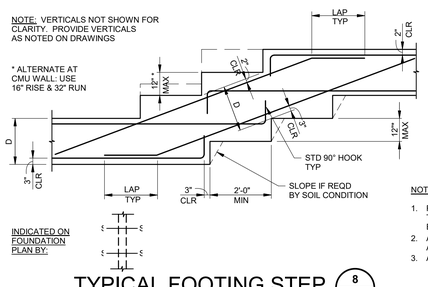




NOTE:
1. SLAB BLOCKOUT SHALL NOT EXTEND BEYOND FOOTING.
2. AT EXPOSED CONCRETE CONDITIONS, COORDINATE BLOCKOUT SHAPE AND SIZE W/ ARCH'L DWGS.

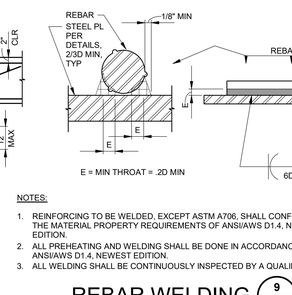
SLAB BLOCKOUT 7 MO-S-0.3

3105D002-12



TYPICAL FOOTING STEP 8 MO-S-0.3

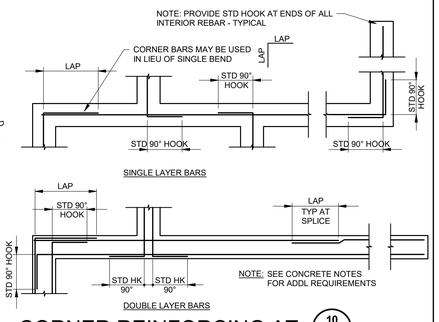
2005D016-32



NOTES:
1. REINFORCING TO BE WELDED, EXCEPT ASTM A706, SHALL CONFORM TO THE MATERIAL PROPERTY REQUIREMENTS OF ANSI/AWS D1.4, NEWEST EDITION.
2. ALL PREHEATING AND WELDING SHALL BE DONE IN ACCORDANCE WITH ANSI/AWS D1.4, NEWEST EDITION.
3. ALL WELDING SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED LABORATORY.

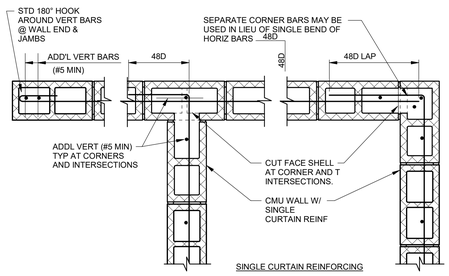
REBAR WELDING 9 MO-S-0.3

3005D002-32



CORNER REINFORCING AT CONCRETE FTGS 10 MO-S-0.3

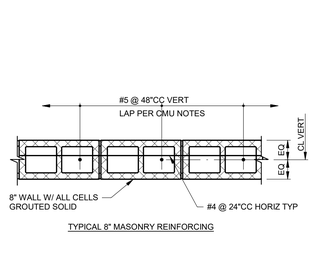
3005D011-32



NOTES:
1. CMU UNITS SHALL BE PLACED IN COMMON BOND U.N.O.
2. LAP ALL VERTICAL BARS WITH MATCHING DOWELS AT FOOTINGS.
3. FOR TYPICAL REINFORCING, SEE 17 MO-S-0.3

TYPICAL BLOCK WALL REINFORCING AT CORNERS AND INTERSECTIONS 16 MO-S-0.3

4115D007-12

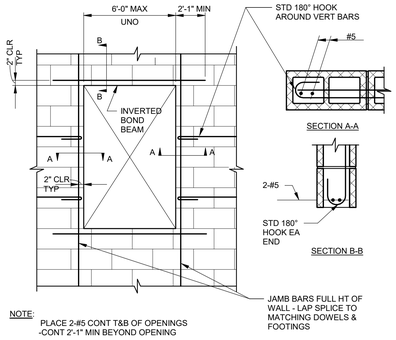


TYPICAL 8" MASONRY REINFORCING

NOTE:
PROVIDE DOWELS @ FOOTINGS TO MATCH VERTICAL BARS IN SIZE AND LOCATION - LAP SPLICE WITH VERTICAL BARS PER CMU NOTES.

TYPICAL BLOCK WALL REINFORCING 17 MO-S-0.3

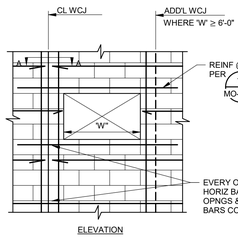
4115D003-12

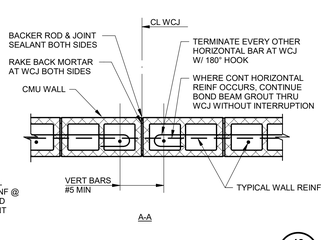


NOTE: PLACE 2-#5 CONT T&B OF OPENINGS -CONT 2'-1" MIIN BEYOND OPENING

OPENING REINFORCING AT CMU WALL OPENING 18 MO-S-0.3

4115D001-12

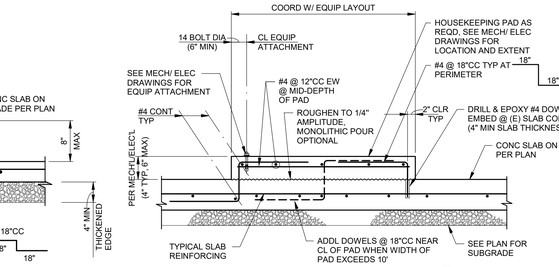




TYPICAL CMU WALL CONTROL JOINT (WCJ) - TYPE 1 19 MO-S-0.3

4115D009

NOTES:
1. LOCATIONS OF WALL JOINTS ARE SHOWN ON PLANS. WCJ INDICATES A WALL CONTROL JOINT.
2. MAXIMUM SPACING OF WALL JOINTS IS THE LESSER OF 25'-0" OR 1.5 TIMES THE WALL HEIGHT. LOCATE JOINTS AT 1/2 THE MAXIMUM SPACING FROM CORNERS AND AT T INTERSECTIONS. WALL JOINTS SHALL BE FULL HEIGHT, UNO.
3. CONTROL JOINTS SHALL OCCUR ON ONE SIDE OF OPENING FOR THOSE THAT ARE LESS THAN OR EQUAL TO 6'-0" WIDE. CONTROL JOINTS SHALL OCCUR ON BOTH SIDES OF OPENING FOR THOSE THAT ARE GREATER THAN 6'-0" WIDE.
4. WALL JOINTS SHALL OCCUR AT CHANGES IN WALL HEIGHT OR THICKNESS. ONE JOINT IS REQUIRED AT ONE SIDE OF PILASTERS.
5. EVERY OTHER HORIZONTAL BAR, CHORD BARS AND GROUT AT THESE LOCATIONS SHALL BE CONTINUOUS THROUGH WALL JOINTS.
6. THE CONTRACTOR SHALL COORDINATE LOCATION OF WALL JOINTS WITH JOINTS IN FINISH MATERIAL AND OPENINGS IN WALL. SUBMIT PLANS OF FINAL JOINT LOCATIONS FOR REVIEW BY ARCHITECT/ENGINEER.

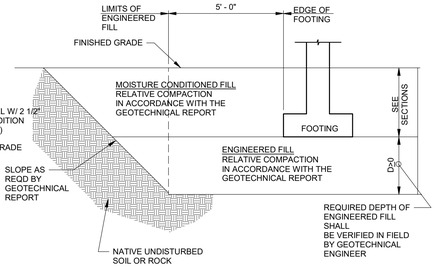


STEP IN SLAB 11 MO-S-0.3

3105D003-12

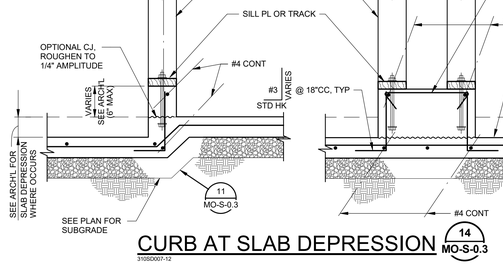
HOUSEKEEPING PAD AT SLAB ON GRADE 12 MO-S-0.3

3105D005



ENGINEERED FILL SECTION 13 MO-S-0.3

2005D001-32

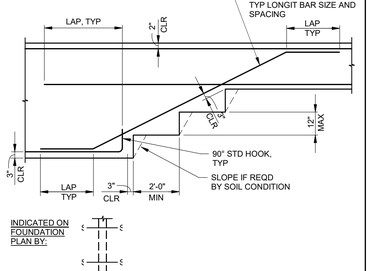


NOTE:
AT CONTRACTOR'S OPTION, DRILL & EPOXY #4 DOWEL W/ 2 1/2" EMBED (4" MIN SLAB THICKNESS).

NOTE: VERTICAL BARS NOT SHOWN FOR CLARITY. PROVIDE AS NOTED ON DRAWINGS.

CURB AT SLAB DEPRESSION 14 MO-S-0.3

3105D007-12



FOOTING STEP @ DEEPENED CONVENTIONAL FOOTING 15 MO-S-0.3

2005D019

C/S BROWARD builders

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REGISTRANT SEAL

EL DORADO PUBLIC SAFETY FACILITY
MORGUE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
TYPICAL DETAILS

SHEET NUMBER:
MO-S-0.3

Buchler & Buchler
Structural Engineers, Inc.
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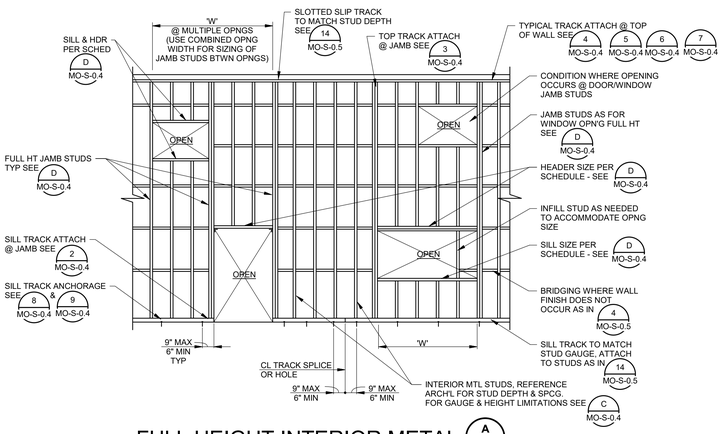
Los Angeles · Silicon Valley

6/14/2018 4:54:07 PM C:\revit\2017-044100_MO Morgue_R17_Central_RyanM.rvt

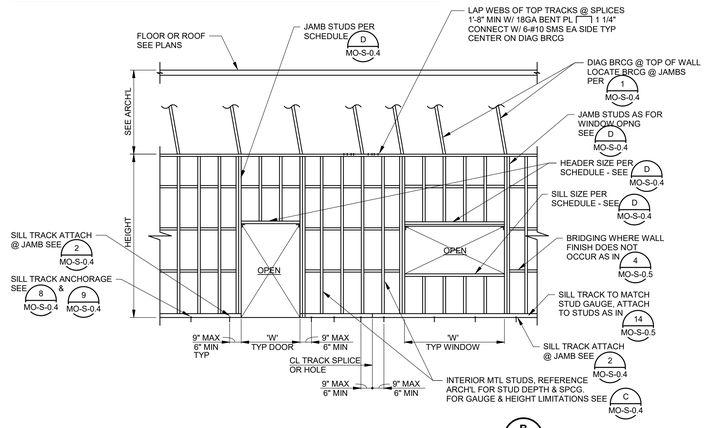
TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



FULL HEIGHT INTERIOR METAL STUD WALL ELEVATION A MO-S-0.4

5425D011-48



PARTIAL HEIGHT INTERIOR METAL STUD WALL ELEVATION B MO-S-0.4

5425D012-48

INTERIOR METAL STUD PARTITIONS

C MO-S-0.4

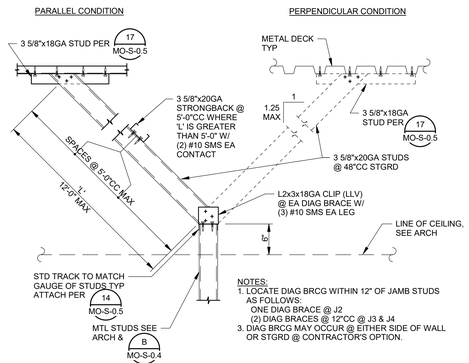
5425D033-1

MAXIMUM HEIGHT FOR METAL STUDS WITH
SDS = 0.75, IP = 1.0
DEFLECTION LIMIT L/120 - NON BEARING WITH CABINET OR EQUIPMENT

16"CC SPACING

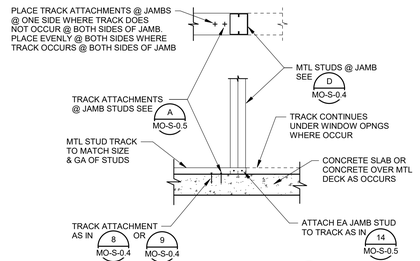
DEPTH	GAGE	DESIGNATION [3]	HEIGHT
3 5/8"	20	362S162-33	17'-1"
3 5/8"	18	362S162-43	18'-6"
3 5/8"	16	362S162-54	20'-10"
3 5/8"	14	362S162-68	22'-7"
4"	20	400S162-33	18'-10"
4"	18	400S162-43	20'-11"
4"	16	400S162-54	22'-7"
4"	14	400S162-68	24'-7"
6"	20	600S162-33	25'-7"
6"	18	600S162-43	28'-8"
6"	16	600S162-54	32'-8"
6"	14	600S162-68	35'-10"
8"	20	800S162-33	29'-2"
8"	18	800S162-43	36'-11"
8"	16	800S162-54	42'-1"
8"	14	800S162-68	46'-10"

1. STUDS SHALL BE DEPTH AS INDICATED ON ARCH'L DRAWINGS AND GAUGE AS DETERMINED BY HEIGHT OF WALL AND THE SCHEDULE ABOVE.
2. SEE ELEVATIONS A MO-S-0.4 & B MO-S-0.4 FOR TYPICAL WALL FRAMING CONDITIONS.
3. DESIGNATION CONFORMS TO STEEL STUD MANUFACTURERS ASSOCIATION STANDARDS.
4. FOR WALL SUPPORTED CABINET INSTALLATION SEE 16 MO-S-0.5
5. THE MAX HTS NOTED IN THIS TABLE ARE BASED UPON THE USE OF SEISMIC COMPONENT LOAD Fp OR A LIVE LOAD OF 5PSF, WHICHEVER GOVERNS.



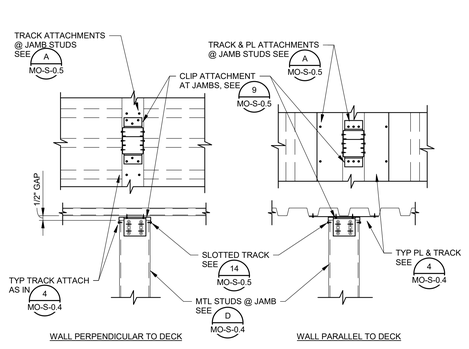
TYPICAL PARTIAL HEIGHT PARTITION WALL BRACING 1 MO-S-0.4

5425D001



JAMB STUDS @ SILL TRACK 2 MO-S-0.4

5425D002-12



JAMB STUDS @ TOP TRACK 3 MO-S-0.4

5425D003-12

INTERIOR WALL OPENING FRAMING SCHEDULE

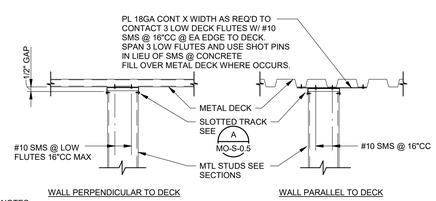
D MO-S-0.4

5425D014-1

DEFLECTION LIMIT = L/120

"W" WIDTH MAX [15]	JAMBS	HEADER	SILL	HC4-8 SCREW SPCG	
				3-5/8" & 4" WALLS	6" & 8" WALLS
4'-0"	J1 [1,2,3]	H2	S1		
8'-0"	J2	H4	S1 [9]		
12'-0"	J3	HC4-8 [4,5,12]	S2	8"CC	4"CC
16'-0"	J4	HC4-8 [6,7,8,12]	S4 [10]	8"CC	4"CC

1. USE J2 MINIMUM AT DOOR OPENINGS
2. USE J2 AT 4'-0" MAX OPNGS IN 20GA WALLS
3. USE J2 AT 4'-0" MAX OPNGS IN 8"X18GA WALLS
4. H4-6 MAY BE USED AT 12'-0" MAX OPNGS IN 16GA AND 14GA WALLS W/ THE EXCEPTION OF 8" WALLS
5. USE 18GA MIN. HEADERS AT 12'-0" MAX OPNGS IN 8" WALLS
6. USE 16GA MIN. HEADERS AT 16'-0" MAX OPNGS IN 3-5/8" & 4" WALLS
7. USE 14GA MIN. HEADERS AT 16'-0" MAX OPNGS IN 6" & 8" WALLS UNO
8. USE HC4-10 HEADERS AT 16'-0" MAX OPNGS IN 8"x14GA WALLS
9. USE S2 SILLS AT 8'-0" MAX OPNGS IN 3-5/8x20GA, 4"x20GA, AND 6"x20GA WALLS.
10. S2 MAY BE USED AT 16'-0" MAX OPNGS IN 16GA AND 14GA WALLS W/ THE EXCEPTION OF 3-5/8" WALLS
11. SEE SHEET MO-S-0.5 FOR JAMB, HEADER, AND SILL DETAILS
12. "H4-8" INDICATES HEADER TYPE AND DEPTH OF VERTICAL STUD ELEMENTS INSIDE HEADER. "HC4-8" INDICATES COMPOSITE HEADER W/ ADD'L SCREW REQUIREMENTS - SEE SCHEDULE & 3 MO-S-0.5
13. FOR CONNECTION @ BASE OF WALL AT JAMBS SEE 2 MO-S-0.4
14. FOR CONNECTION @ TOP OF WALL AT JAMBS SEE 3 MO-S-0.4
15. 'W' WIDTH IS THE MAX WIDTH OF A SINGLE OPENING OR THE COMBINED WIDTH OF SIDE BY SIDE OPENINGS THAT SHARE A SINGLE JAMB STUD CONFIGURATION.

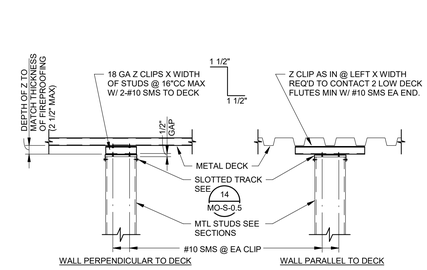


NOTES:

1. WHERE CONCRETE OVER METAL DECK OCCURS:
   A. WHERE WALL IS PERPENDICULAR TO DECK, ATTACH TRACK TO DECK W/ 1 SHOT PIN W/ STEEL WASHER @ 24"CC MAX IN LIEU OF SMS.
   B. WHERE WALL IS PARALLEL TO DECK, & WALL CL IS WITHIN 1-1/2" OF CL OF LOW DECK FLUTE, TOP TRACK MAY BE ATTACHED DIRECTLY TO DECK AS IN PERPENDICULAR COND & CONTIN PL MAY BE OMITTED.
2. SEE SHOT PIN NOTES FOR SPACING, EDGE DISTANCE & PLACEMENT REQUIREMENTS. AT SMS MAINTAIN 1.5 X DIAMETER MIN SPACING & EDGE DISTANCE.
3. FOR COND @ JAMB STUDS SEE 3 MO-S-0.4

SLIP TRACK TO METAL DECK W/O FIREPROOFING 4 MO-S-0.4

5425D004-12

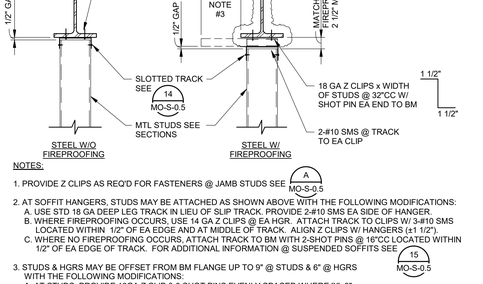


NOTES:

1. WHERE CONC FILL OCCURS OVER METAL DECK, USE SHOT PINS IN LIEU OF SMS.
2. PROVIDE Z CLIPS AS REQ'D FOR FASTENERS @ JAMB STUDS, SEE A MO-S-0.5

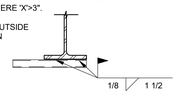
SLIP TRACK TO METAL DECK W/ FIREPROOFING 5 MO-S-0.4

5425D005-12



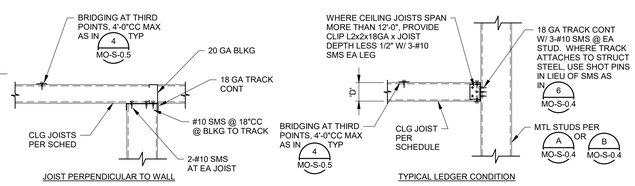
NOTES:

1. PROVIDE Z CLIPS AS REQ'D FOR FASTENERS @ JAMB STUDS SEE A MO-S-0.5
2. AT SOFFIT HANGERS, STUDS MAY BE ATTACHED AS SHOWN ABOVE WITH THE FOLLOWING MODIFICATIONS:
   A. USE STD 18 GA DEEP LEG TRACK IN LIEU OF SLIP TRACK. PROVIDE 2-#10 SMS EA SIDE OF HANGER.
   B. WHERE FIREPROOFING OCCURS, USE 14 GA Z CLIPS @ EA HGR. ATTACH TRACK TO CLIPS W/ 3-#10 SMS LOCATED WITHIN 1/2" OF EA EDGE AND AT MIDDLE OF TRACK. ALIGN Z CLIPS W/ HANGERS (±1 1/2").
   C. WHERE NO FIREPROOFING OCCURS, ATTACH TRACK TO BM WITH 2-SHOT PINS @ 16"CC LOCATED WITHIN 1/2" OF EA EDGE OF TRACK. FOR ADDITIONAL INFORMATION @ SUSPENDED SOFFITS SEE 15 MO-S-0.5
3. STUDS & HGRS MAY BE OFFSET FROM BM FLANGE UP TO 9" @ STUDS & 6" @ HGRS WITH THE FOLLOWING MODIFICATIONS:
   A. AT STUDS, PROVIDE 16GA Z CLIP & 3 SHOT PINS EVENLY SPACED WHERE 'X'>3".
   B. AT HANGERS, WELD CLIP TO BEAM AS SHOWN, WHERE 'X'>3".
4. NOTIFY THE SEOR PRIOR TO ATTACHING TO MOMENT FRAME BEAMS OUTSIDE OF THE PROTECTED ZONE. NO ATTACHMENTS SHALL BE MADE WITHIN PROTECTED ZONES OF MOMENT FRAME BEAMS.



SLIP TRACK TO STEEL BEAM 6 MO-S-0.4

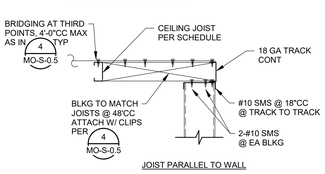
5425D006-12



CEILING JOIST SCHEDULE

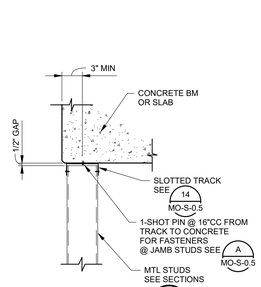
NON-ACCESSIBLE SPAN	ACCESSIBLE SPAN	CEILING JOIST
10'-0" MAX	5'-0" MAX	2 1/2" X 18 GA @ 16"CC
14'-0" MAX	8'-0" MAX	3 5/8" X 18 GA @ 16"CC
19'-0" MAX	10'-0" MAX	6" X 20 GA @ 16"CC
20'-0" MAX	12'-0" MAX	6" X 18 GA @ 16"CC
22'-0" MAX	16'-0" MAX	6" X 16 GA @ 16"CC

1. ALL STUDS & JOISTS ARE 'S' TYPE.
2. WHERE CLG JOISTS ARE SUPPORTED FROM SOFFIT HGRS AS IN & CLG JOISTS OCCUR @ BOTH SIDES OF HGRS, JOIST SPANS SHALL NOT EXCEED 8'-0". PROVIDE ADD'L LINES OF HGRS AS REQ'D. 15 MO-S-0.5



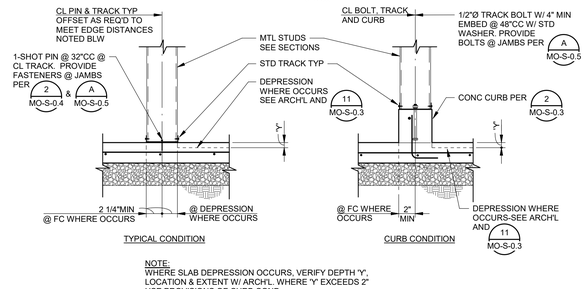
TYPICAL FRAMED CEILING DETAILS 10 MO-S-0.4

5425D010-12



SLIP TRACK TO CONCRETE 7 MO-S-0.4

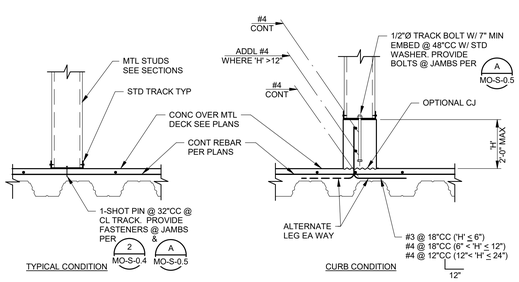
5425D007-12



NOTE:
WHERE SLAB DEPRESSION OCCURS, VERIFY DEPTH 'Y', LOCATION & EXTENT W/ ARCH'L. WHERE 'Y' EXCEEDS 2" USE PROVISIONS OF CURB COND.

SILL TRACK TO SLAB 8 MO-S-0.4

5425D008-12



SILL TRACK TO CONCRETE OVER METAL DECK 9 MO-S-0.4

5425D009-12

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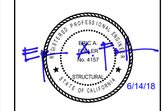
REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY
MORGUE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
INTERIOR METAL STUD TYPICAL DETAILS

SHEET NUMBER:
MO-S-0.4

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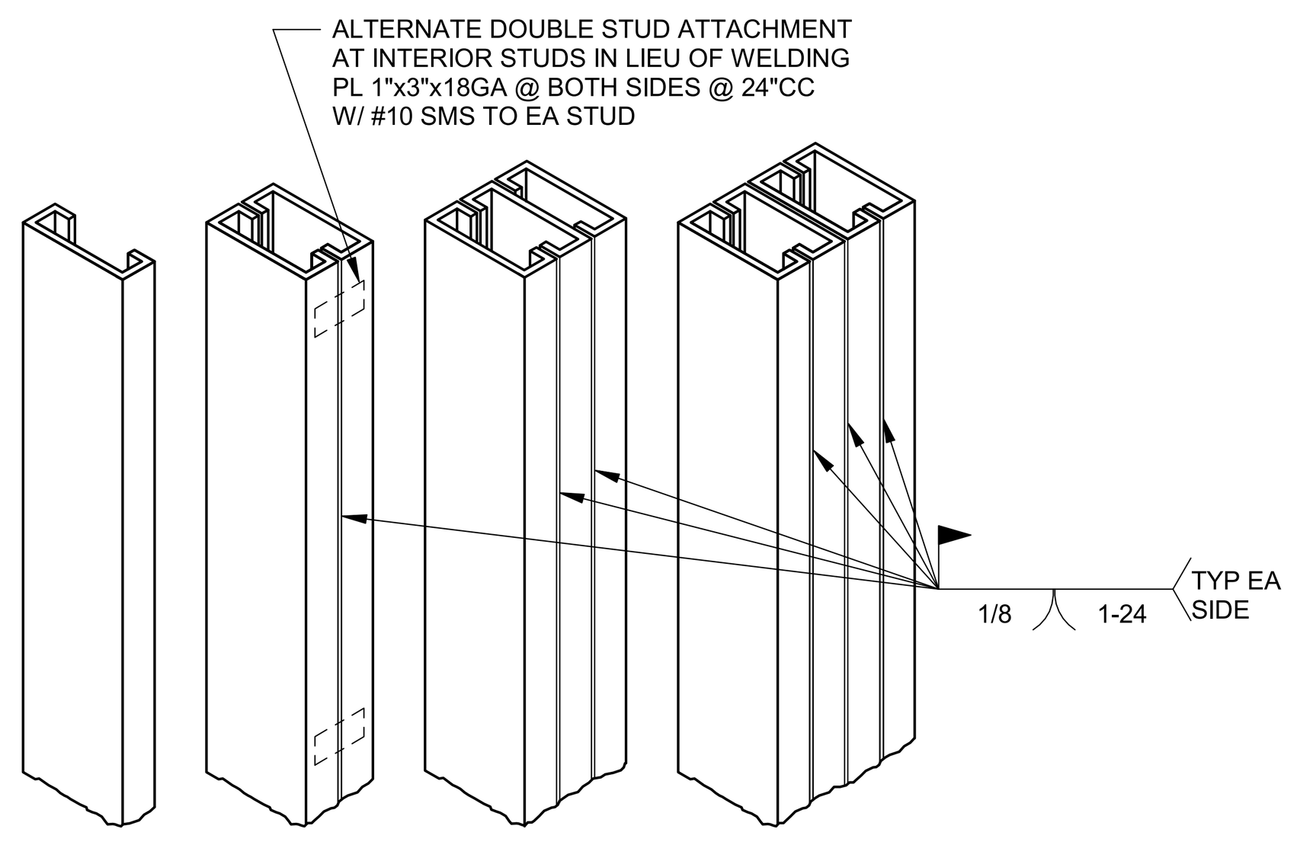
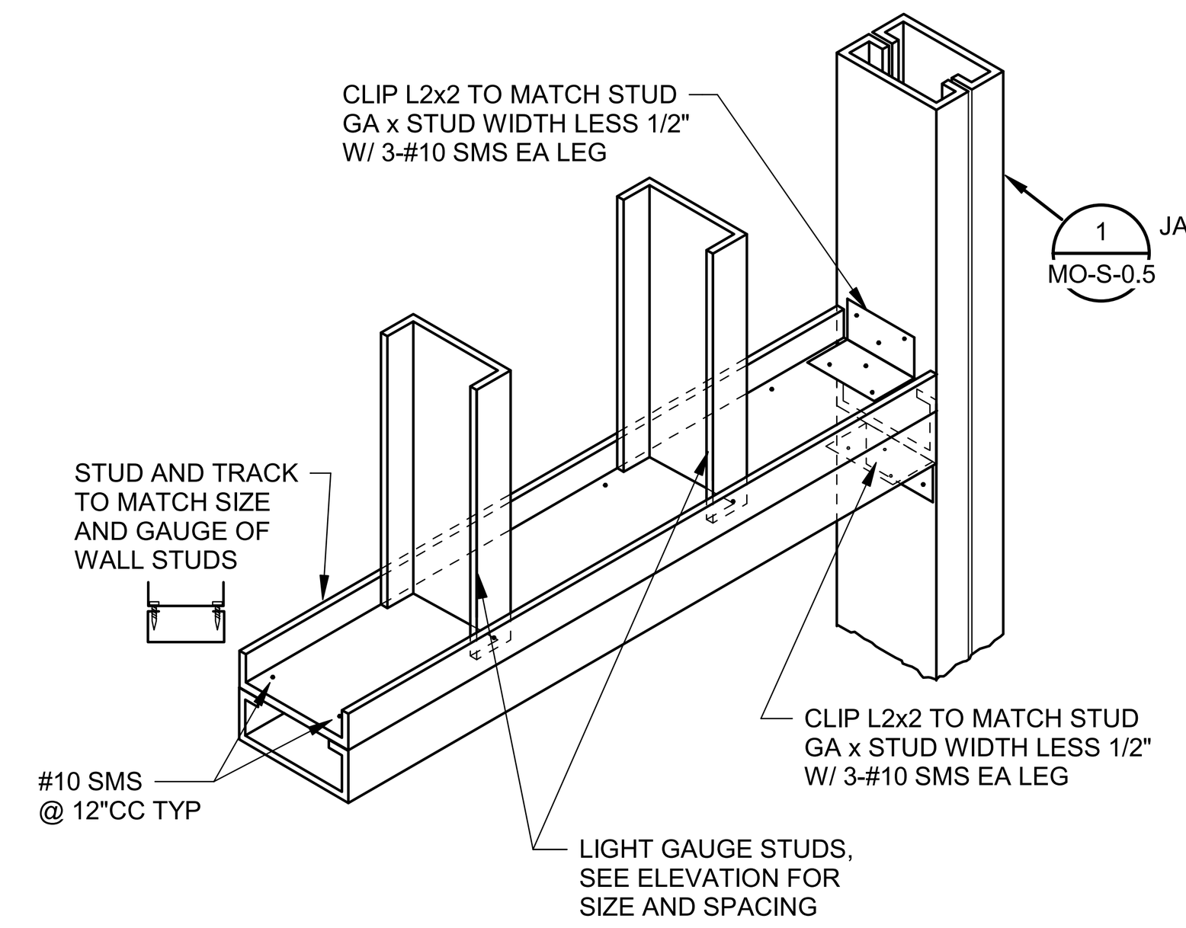
TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



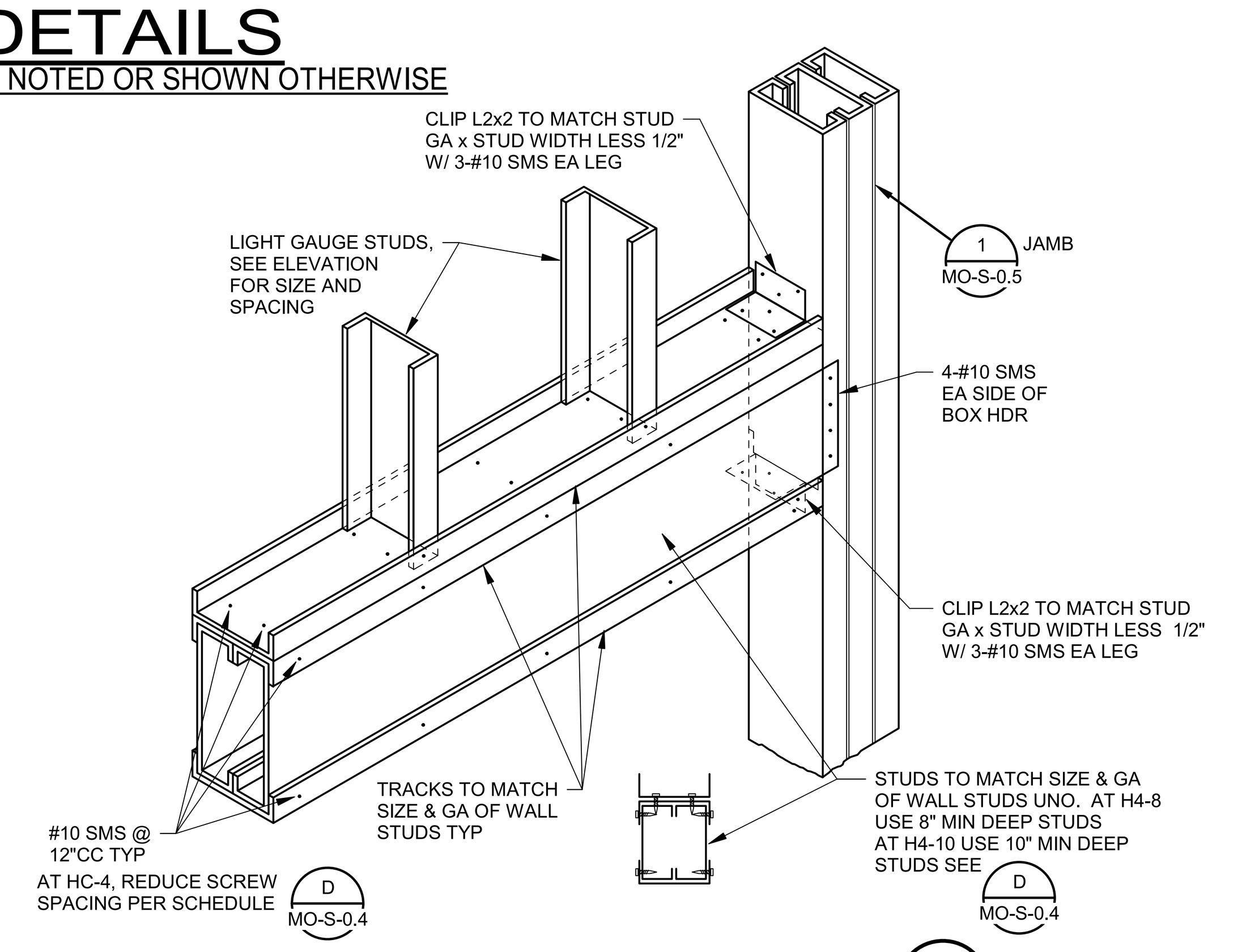
JAMB DETAIL 1 MO-S-0.5

540SD001-12



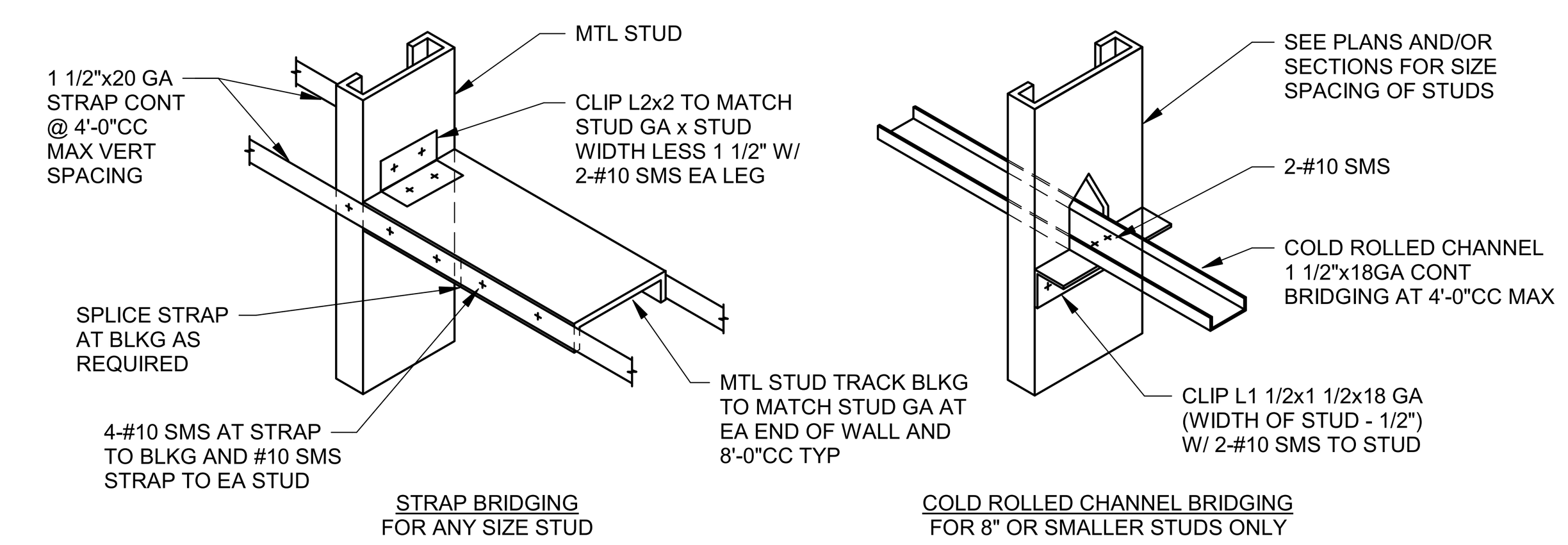
H2 HEADER DETAIL 2 MO-S-0.5

540SD002-12



H4/HC-4 HEADER DETAIL 3 MO-S-0.5

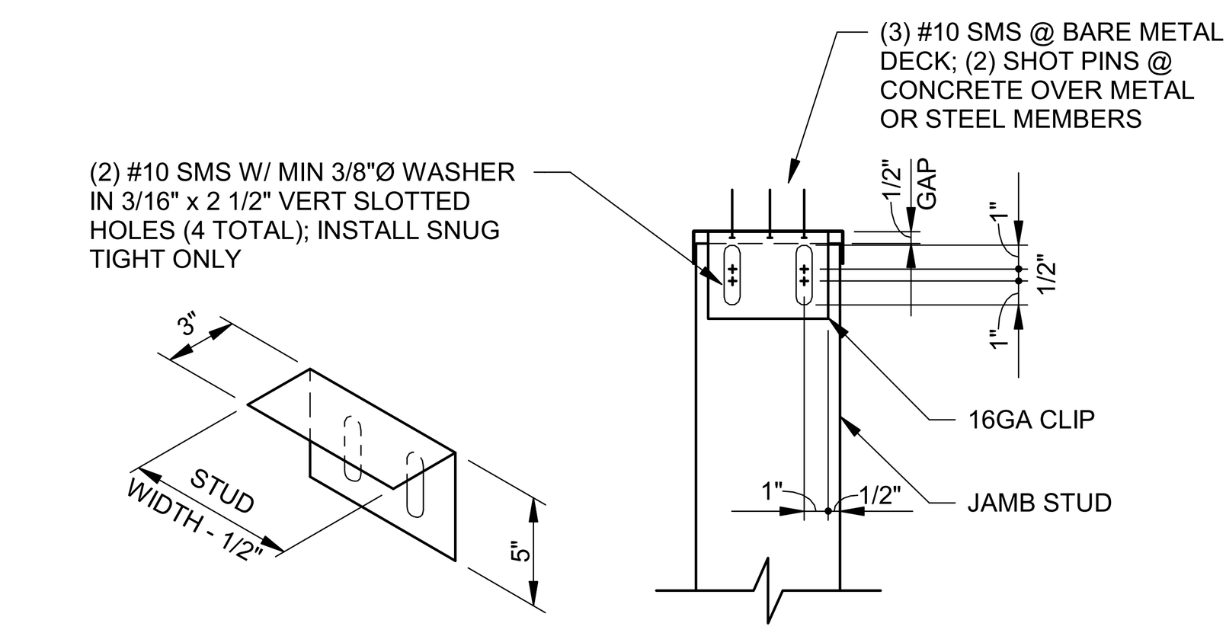
540SD003-12



NOTE:
1. BRIDGING FOR 8" AND SMALLER STUDS MAY BE CONSTRUCTED OF COLD ROLLED CHANNEL OR STRAPS AT CONTRACTOR'S OPTION UNLESS NOTED OTHERWISE.
2. WHERE FULL HEIGHT SHEATHING OR GYP BOARD OCCURS ON BOTH SIDES OF METAL STUD FRAMING, THE BRIDGING MAY BE OMITTED.
3. AT COND WHERE STRAP BRIDGING IS USED & WHERE WALL SHEATHING OR GYP BOARD OCCURS ON ONE SIDE OF WALL ONLY, STRAP MAY BE OMITTED ON SIDE OF WALL WHERE SHEATHING OR GYP OCCURS.

TYPICAL STUD BRIDGING 4 MO-S-0.5

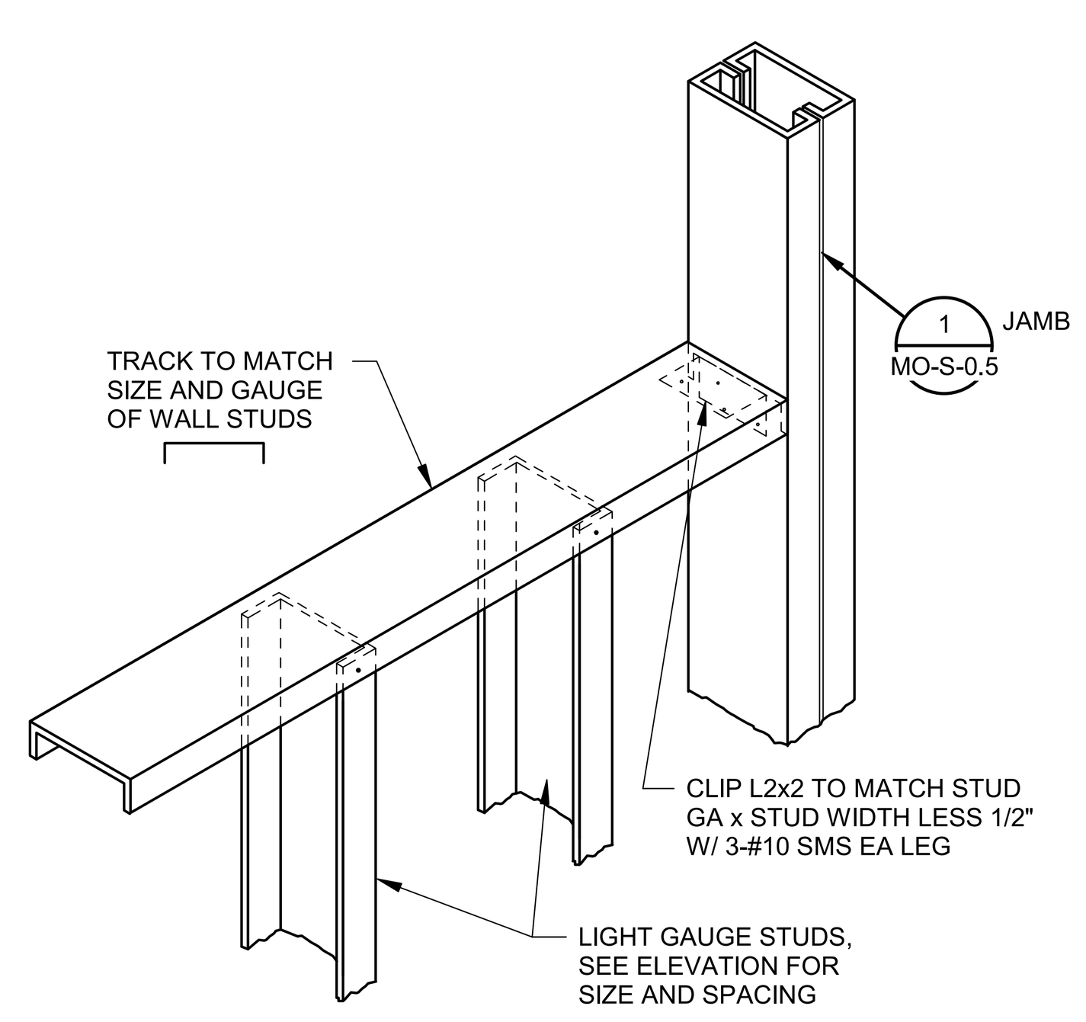
540SD004-12



NOTES:
1. PROVIDE CLIP AT ALL EXTERIOR WALL JAMB STUDS AT SLOTTED TRACKS. PROVIDE CLIP AT ALL INTERIOR WALL DEFLECTION TRACKS WHERE OPENING WIDTH IS GREATER THAN 8'-0" WIDE.
2. CLIP TO OCCUR ONE SIDE OF J2 JAMBS, BOTH SIDES OF J3 & J4 JAMBS.

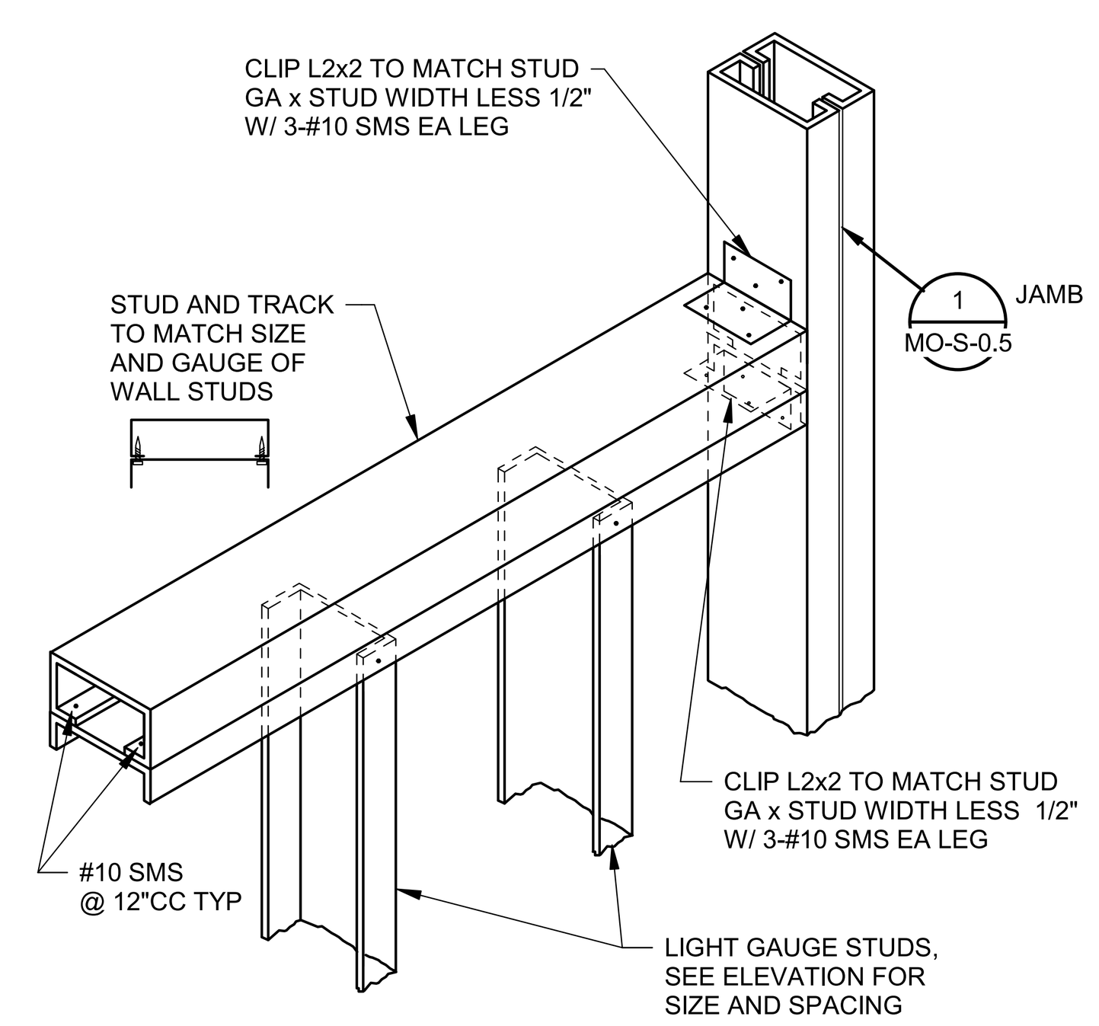
JAMB STUD CLIP ATTACHMENT AT SLIP TRACK 9 MO-S-0.5

542SD049



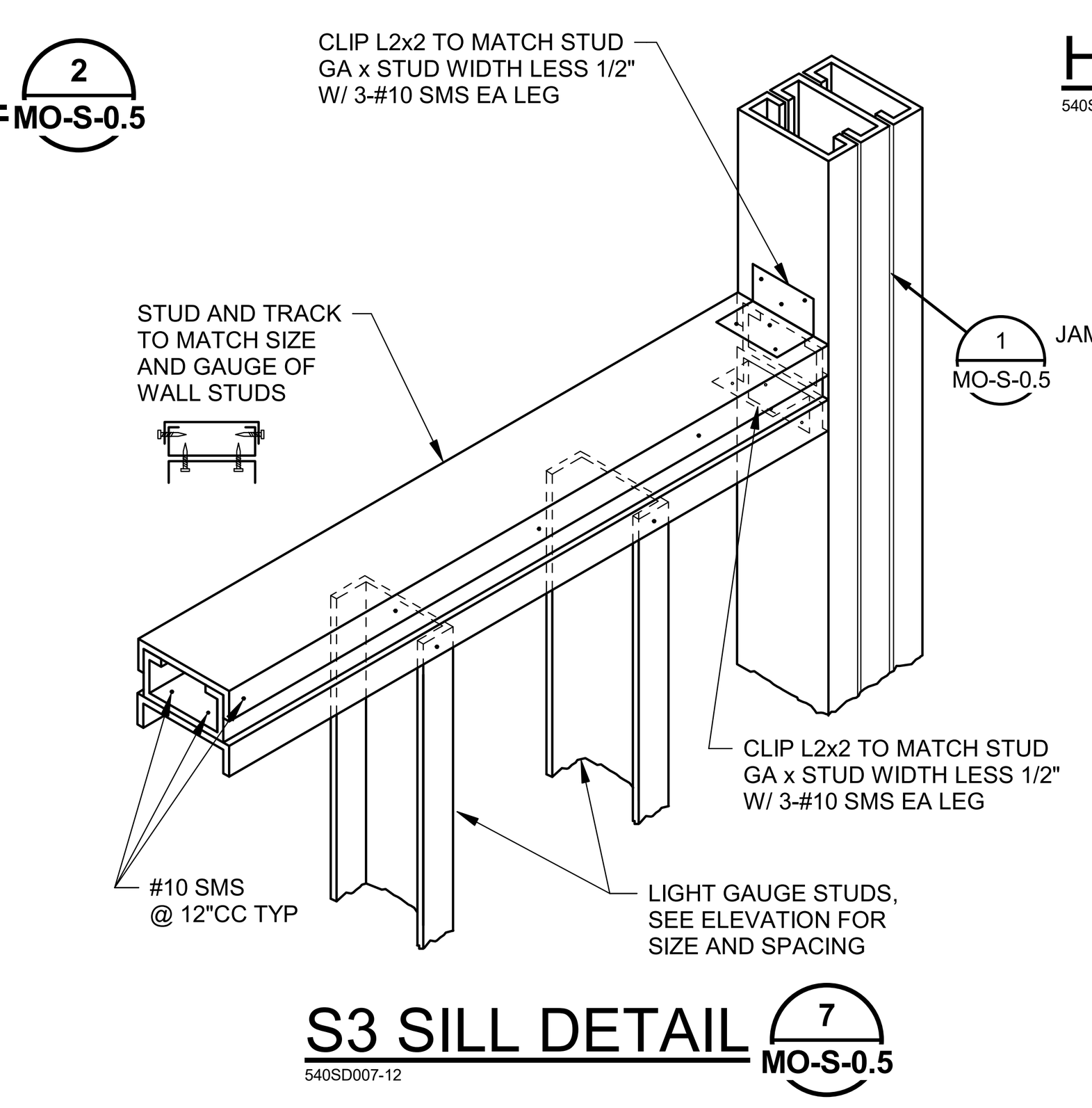
S1 SILL DETAIL 5 MO-S-0.5

540SD005-12



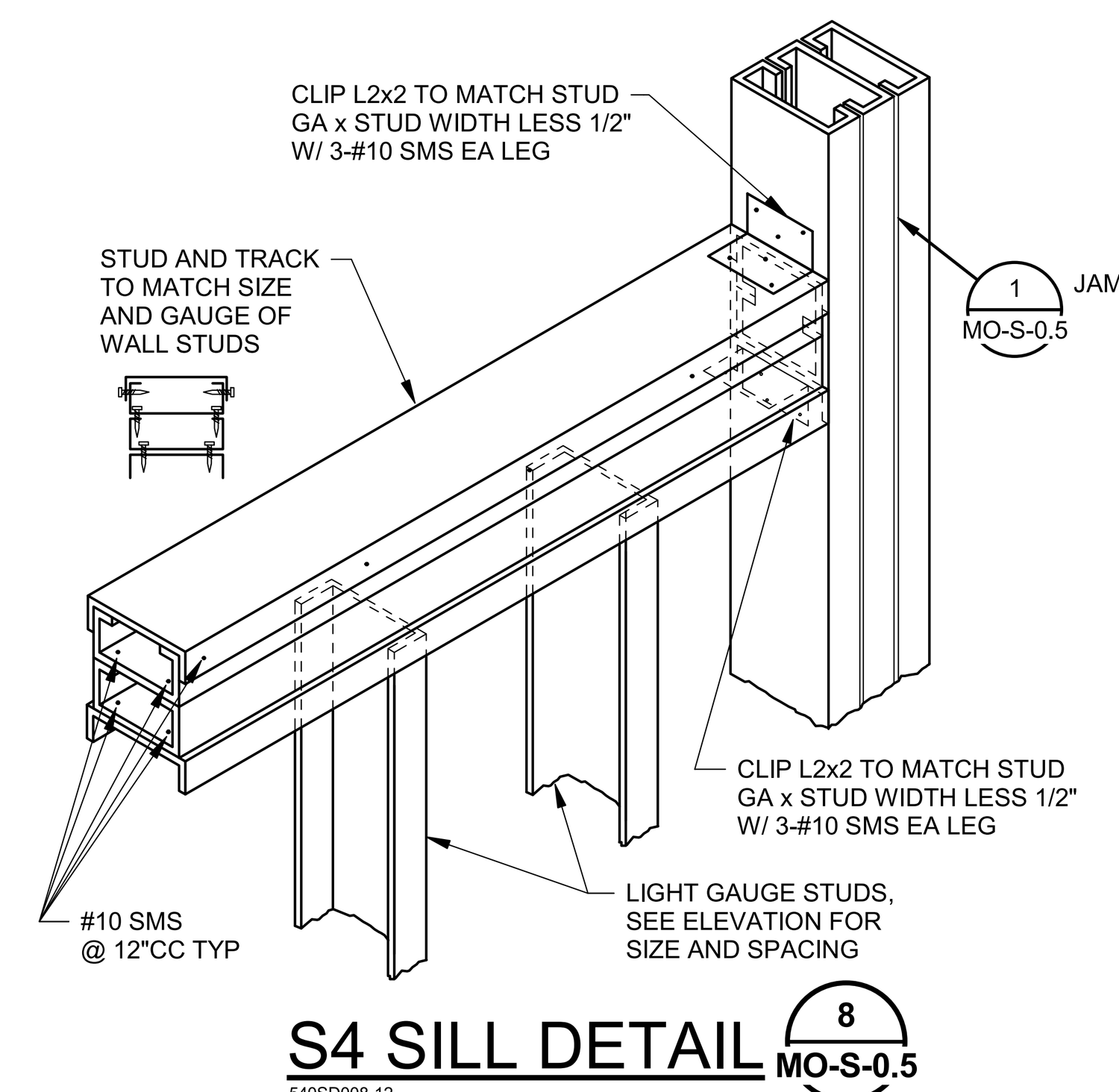
S2 SILL DETAIL 6 MO-S-0.5

540SD006-12



S3 SILL DETAIL 7 MO-S-0.5

540SD007-12



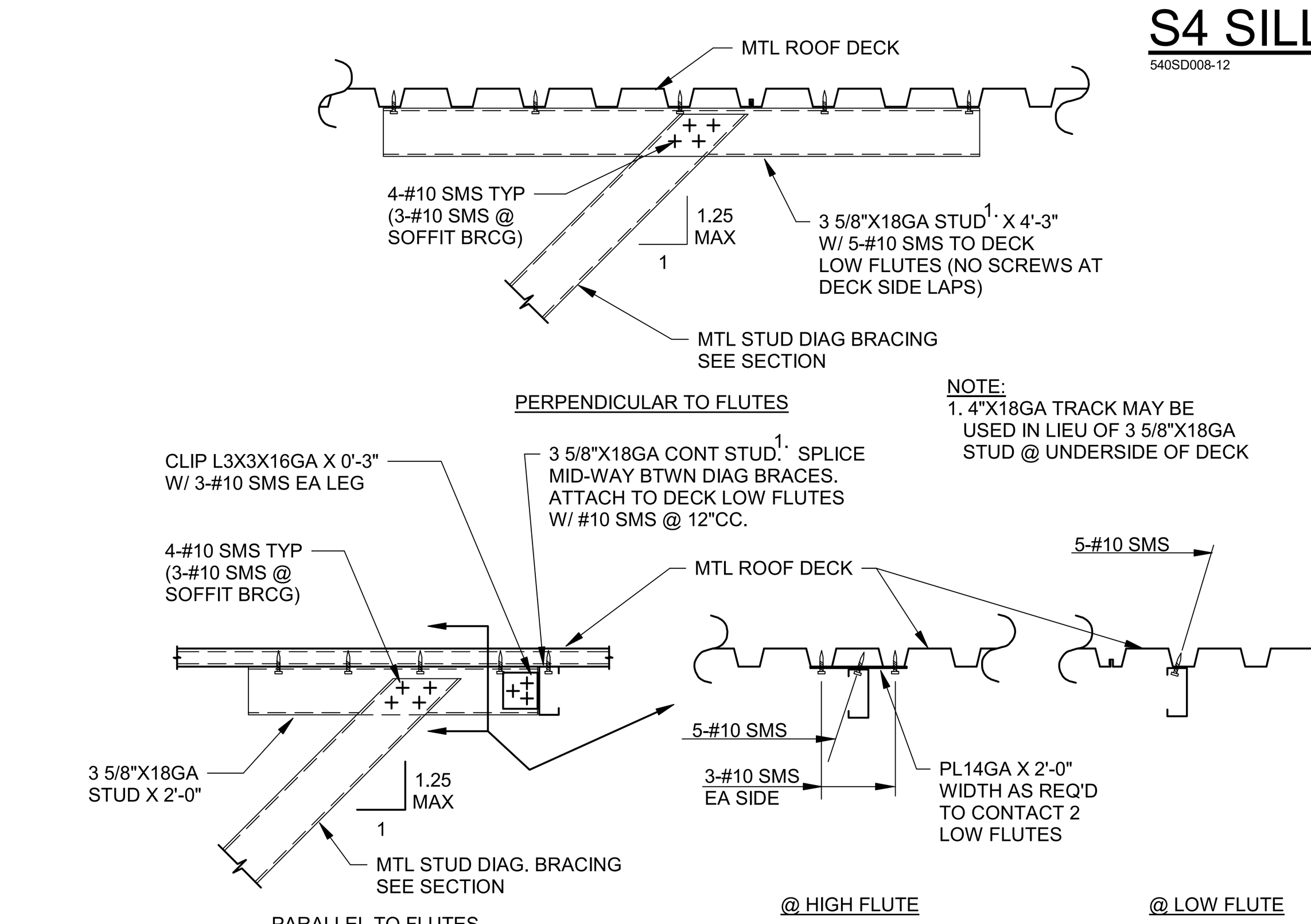
S4 SILL DETAIL 8 MO-S-0.5

540SD008-12

540SD017-1

A MO-S-0.5	TRACK ATTACHMENT @ JAMB STUDS		
JAMB TYPE	TRACK ATTACHMENT METHOD[1,2]		
	SHOT PIN	SMS	1/2"Ø BOLTS
J1	1	1	1
J2	2	2	1
J3	3	3	1
J4	4	4	2

NOTES:
1. SCHEDULE INDICATES TRACK ATTACHMENTS REQUIRED WHERE JAMB STUDS OCCUR. SEE TYPICAL SILL AND TOP TRACK ATTACHMENT DETAILS FOR BASIC ATTACHMENT METHODS (I.E. SHOT PINS, SMS, BOLTS ETC...) & CONDITIONS BEYOND JAMB STUDS.
2. LOCATE ALL REQUIRED ATTACHMENTS AS CLOSE TO JAMB STUDS AS POSSIBLE. MAINTAIN ALL FASTENER SPACING AND EDGE DISTANCE REQUIREMENTS. AT SHOT PINS, SEE TYPICAL NOTES, @ SMS MAINTAIN 1.5XDIAMETER MIN EDGE DISTANCE & SPCG. AT BOLTS SPACE NO CLOSER THAN 12 DIAMETERS AND NO MORE THAN 9" FROM END OF TRACK.

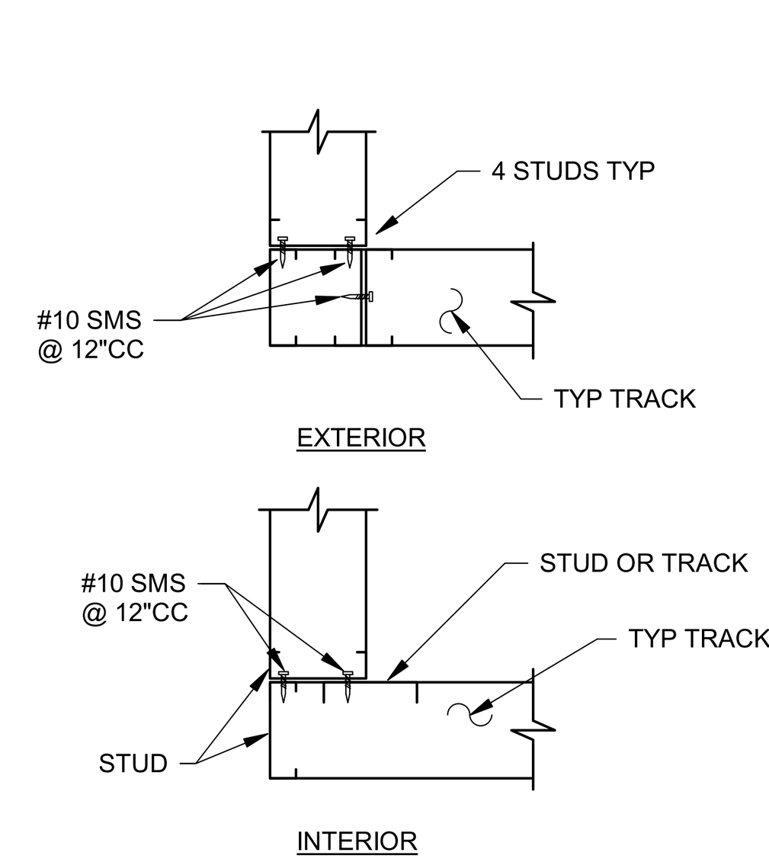


NOTE:
1. 4"X18GA TRACK MAY BE USED IN LIEU OF 3 5/8"X18GA STUD @ UNDERSIDE OF DECK

DETAIL 17 MO-S-0.5

542SD031-12

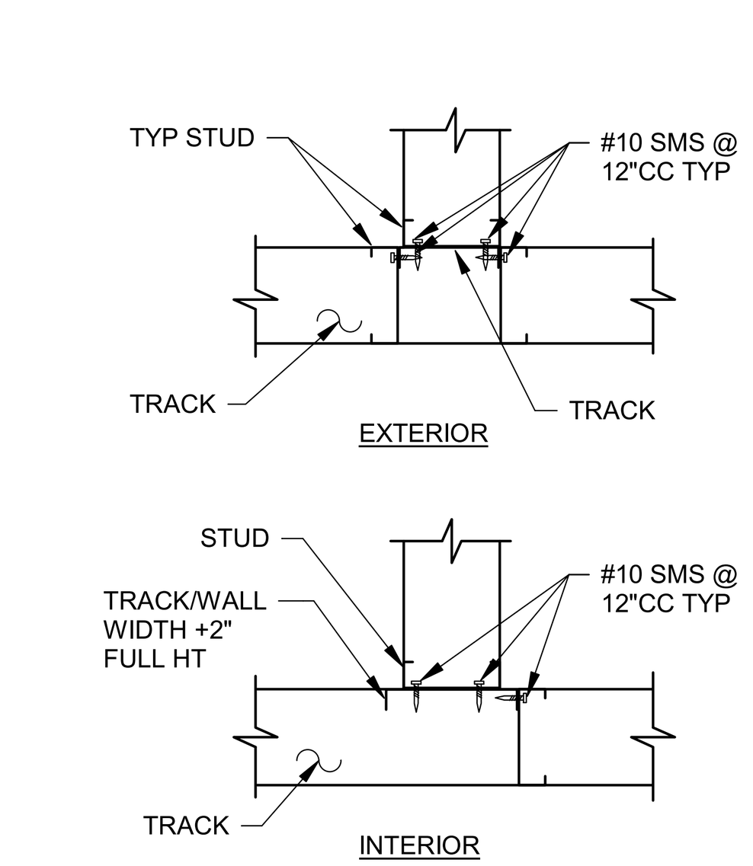
METAL STUD DIAG BRACING CONNECTIONS @ BARE METAL ROOF DECK CONDITIONS



NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES

TYPICAL WALL CORNER 10 MO-S-0.5

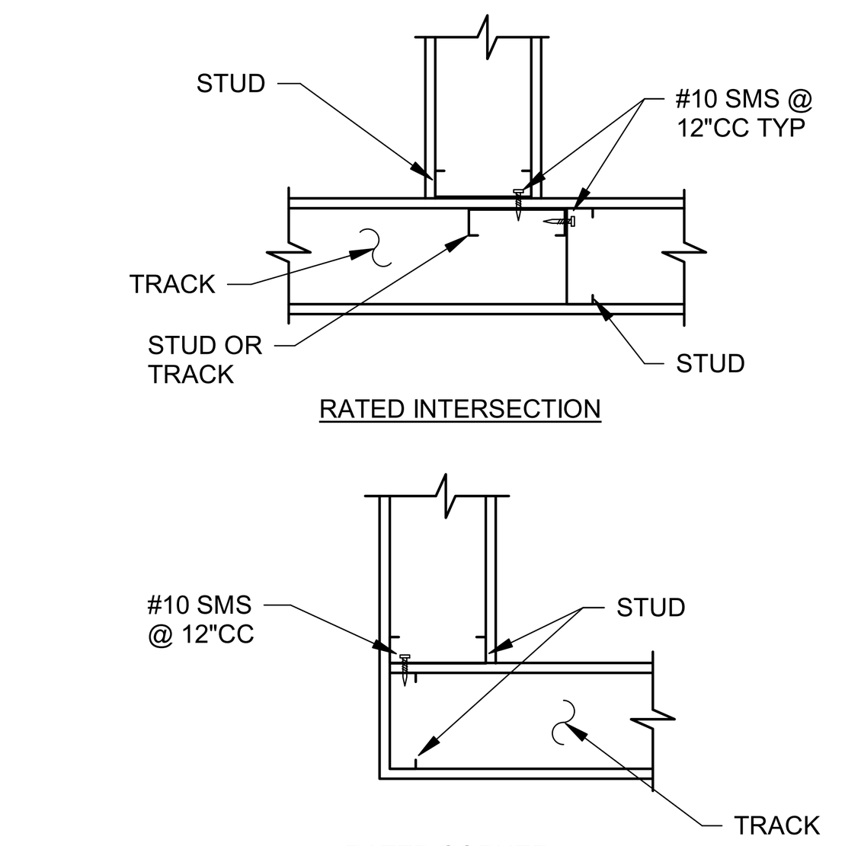
540SD010-12



NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES

TYPICAL TEE INTERSECTION 11 MO-S-0.5

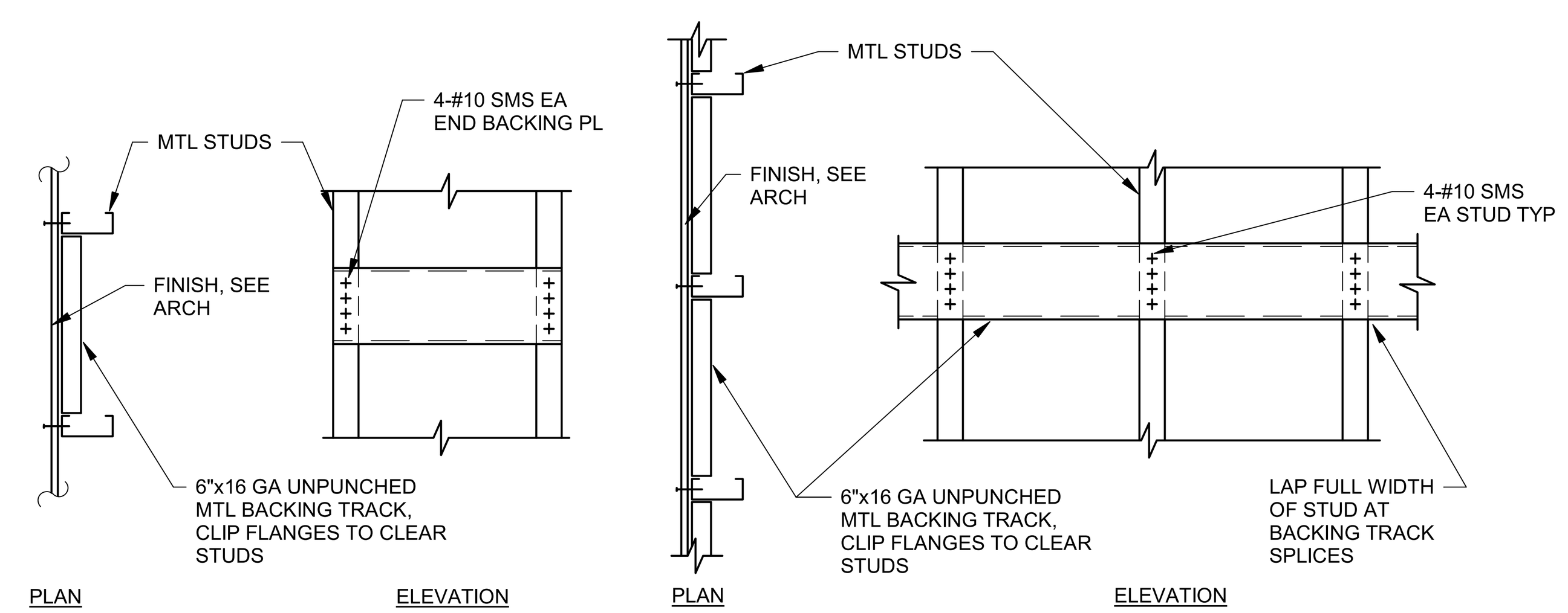
540SD011-12



NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES SEE ARCH'L DRAWINGS FOR WALL FINISH CONSTRUCTION

TYPICAL FIRE-RATED WALL CORNER 12 MO-S-0.5

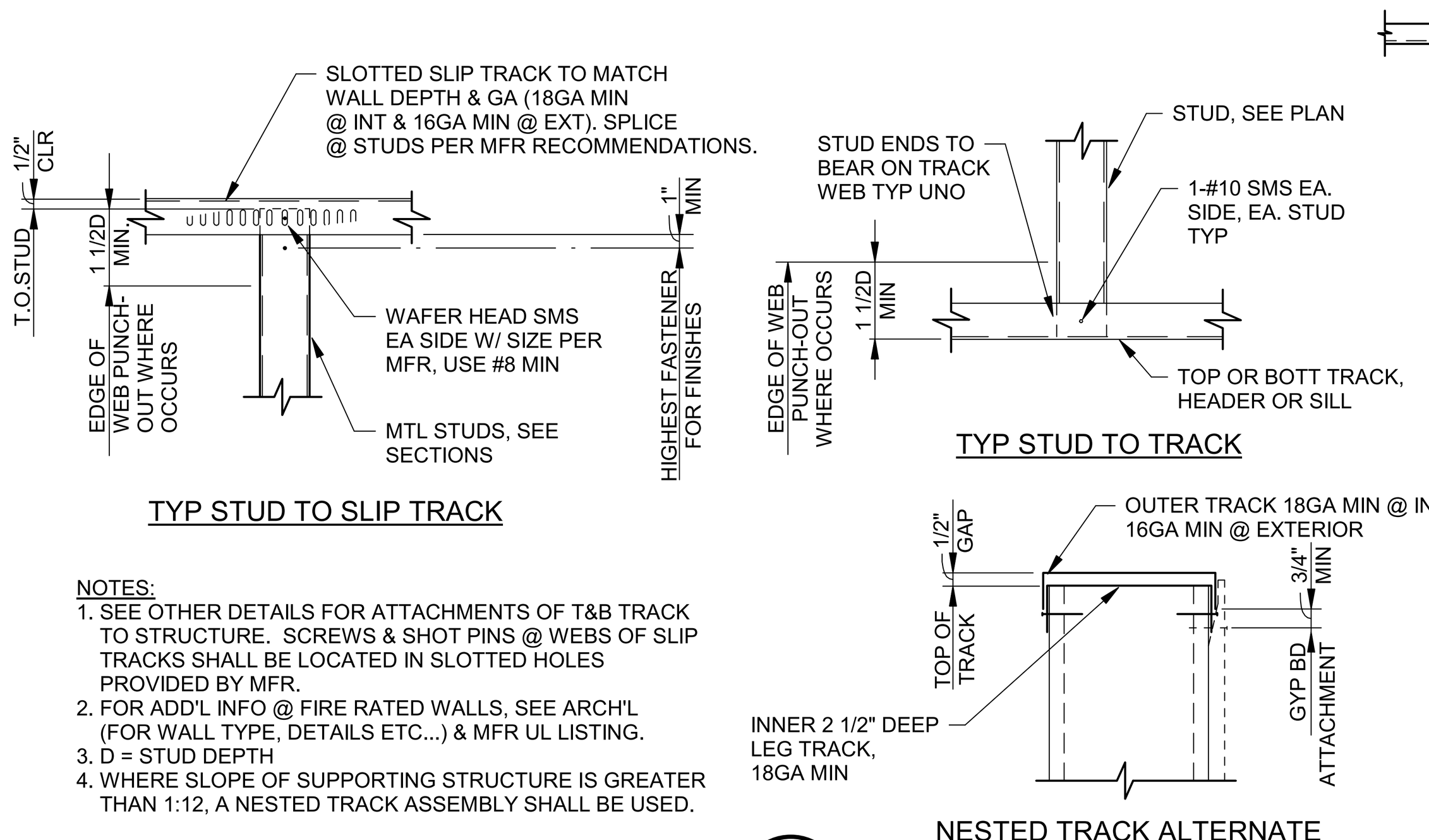
540SD012-12



NOTE: IN LIEU OF TRACK, A 6"x16GA FLAT STRAP MAY BE USED TO SUPPORT LOADS UP TO 20 LBS/FT W A MAX. CONCENTRATED LOAD OF 50 LBS. STRAP SHALL BE CONT OVER 3 STUDS MIN. ATTACH AS NOTED ABOVE.

TYPICAL BACKING DETAIL 13 MO-S-0.5

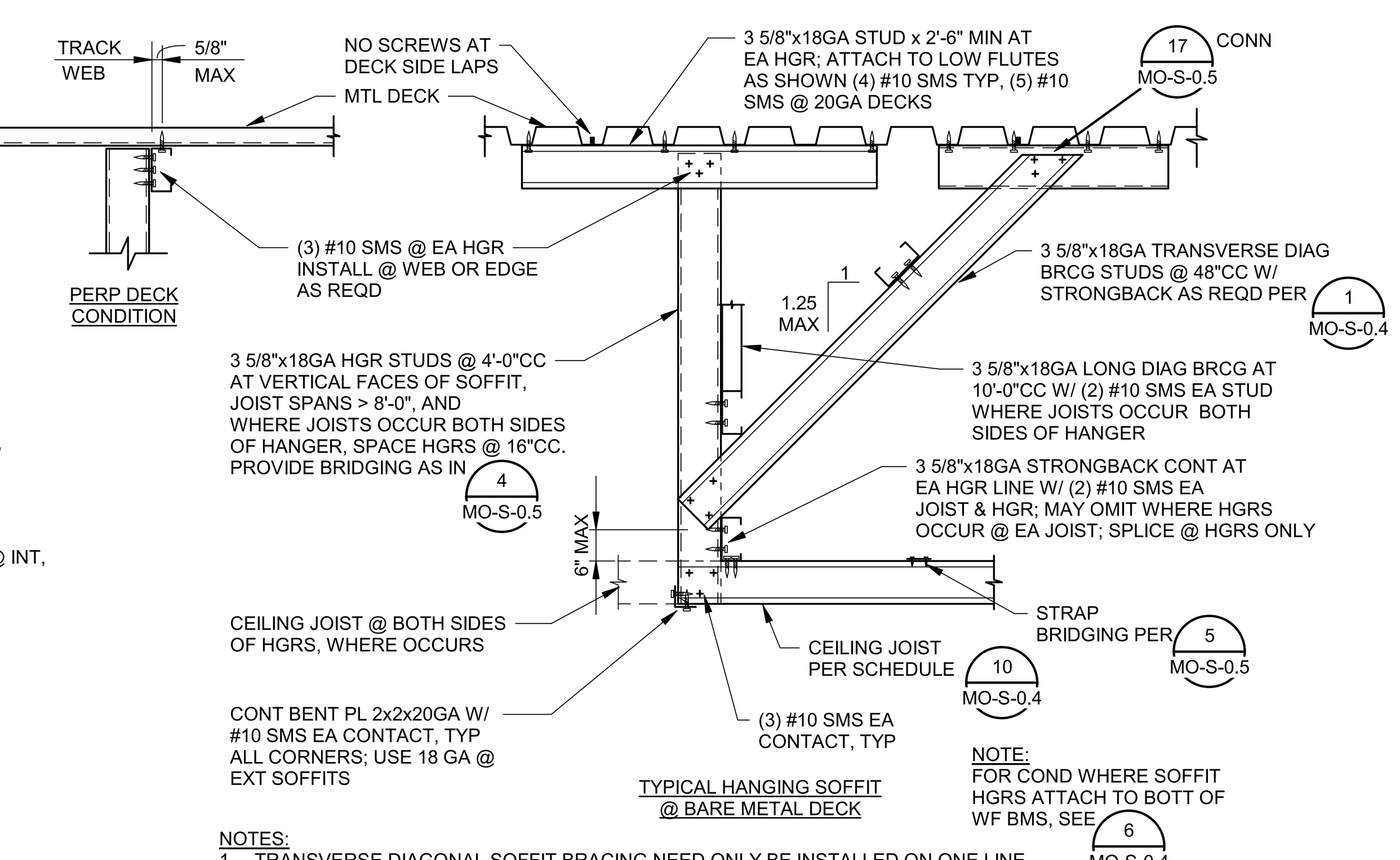
540SD013-12



NOTES:
1. SEE OTHER DETAILS FOR ATTACHMENTS OF T&B TRACK TO STRUCTURE. SCREWS & SHOT PINS @ WEBS OF SLIP TRACKS SHALL BE LOCATED IN SLOTTED HOLES PROVIDED BY MFR.
2. FOR ADD'L INFO @ FIRE RATED WALLS, SEE ARCH'L (FOR WALL TYPE, DETAILS ETC...) & MFR UL LISTING.
3. D = STUD DEPTH
4. WHERE SLOPE OF SUPPORTING STRUCTURE IS GREATER THAN 1:12, A NESTED TRACK ASSEMBLY SHALL BE USED.

TYPICAL STUD TO TRACK CONNECTION 14 MO-S-0.5

540SD014-12

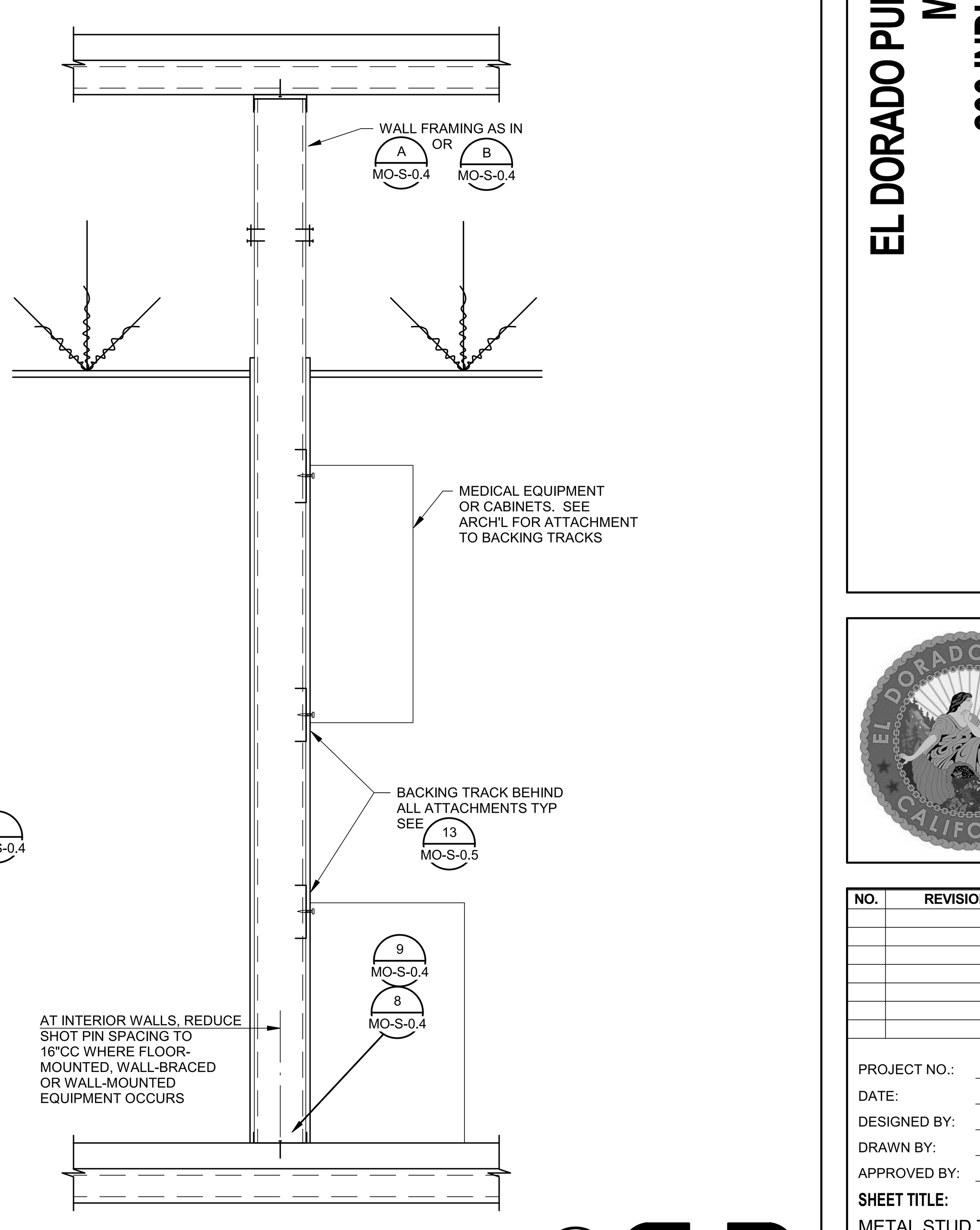


NOTE: FOR COND WHERE SOFFIT HGRS ATTACH TO BOTT OF WF BMS, SEE 6 MO-S-0.4

NOTES:
1. TRANSVERSE DIAGONAL SOFFIT BRACING NEED ONLY BE INSTALLED ON ONE LINE OF HGR STUDS WHERE SOFFITS ARE LESS THAN 10'-0" IN WIDTH.
2. FRAME OPENINGS IN VERTICAL FACE OF SOFFITS AS IN B MO-S-0.4 & D MO-S-0.4 MAXIMUM OPENING WIDTH = 4'-0"

TYPICAL FRAMED SOFFIT 15 MO-S-0.5

540SD015



TYPICAL BACKING DETAILS 16 MO-S-0.5

540SD016-12

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6/14/18

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EL DORADO COUNTY CALIFORNIA

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
METAL STUD TYPICAL DETAILS

SHEET NUMBER:
MO-S-0.5

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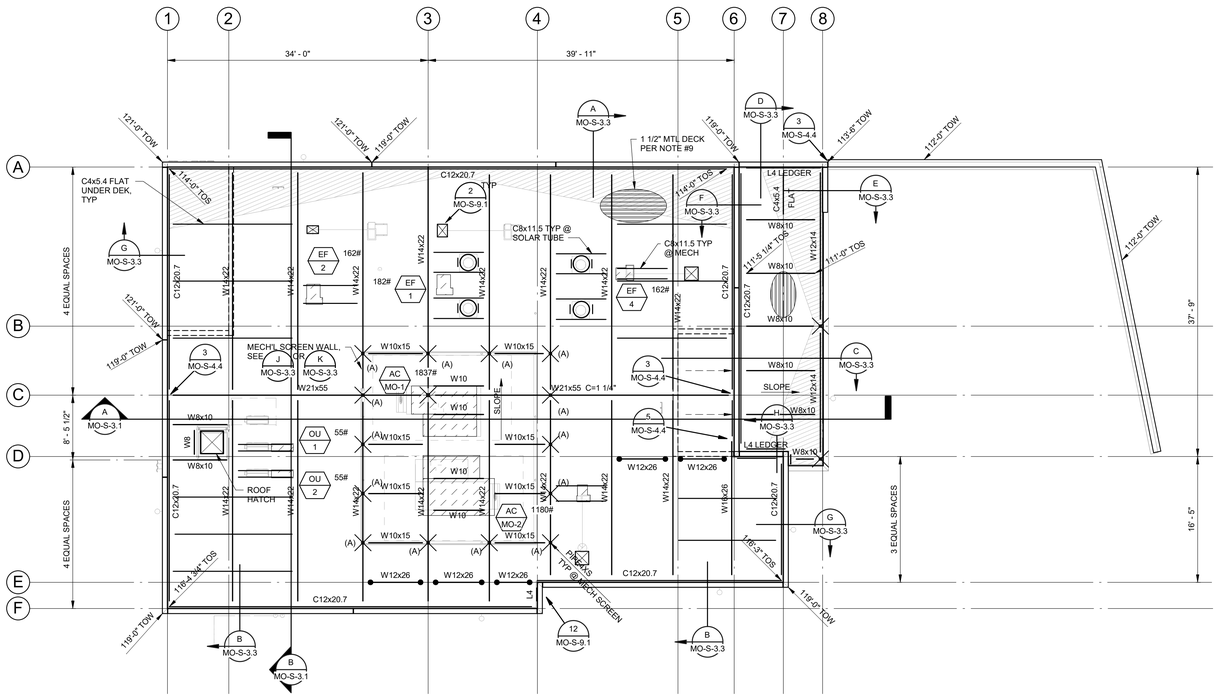
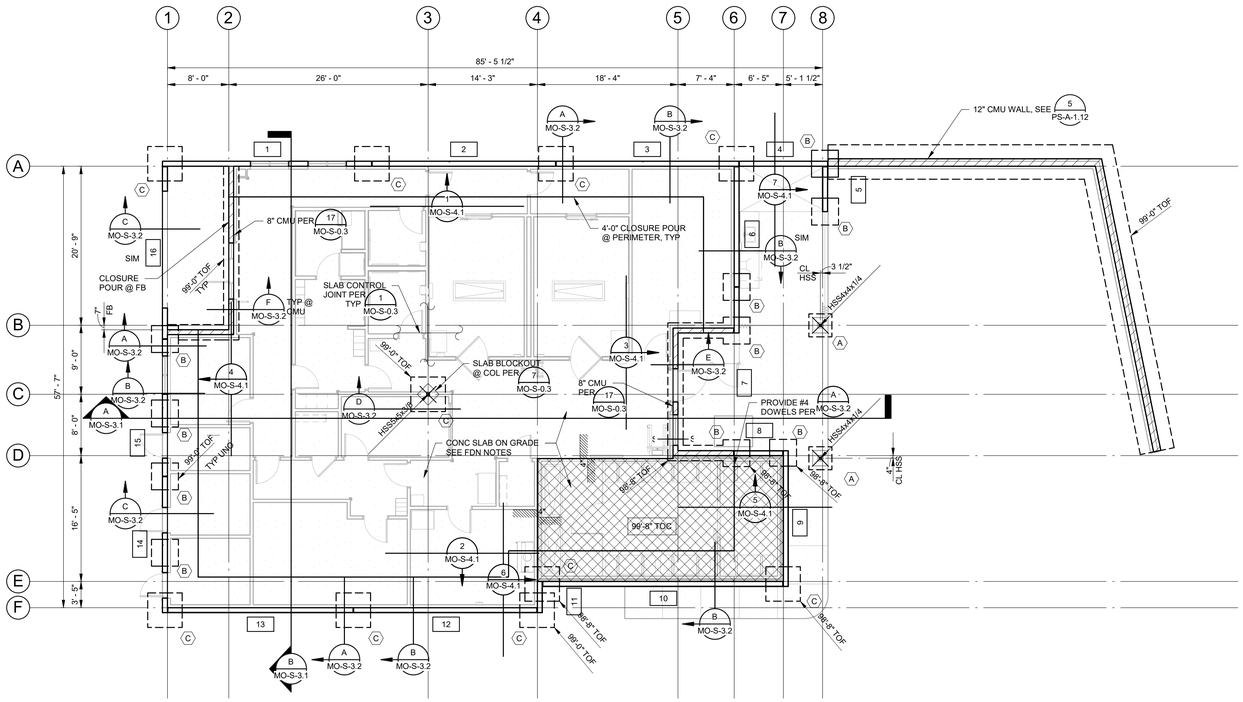


ROOF FRAMING PLAN — 1/8" = 1'-0"



FOUNDATION PLAN — 1/8" = 1'-0"

TOC = 100'-0" TYP UNO
TOF = 99'-0" TYP UNO

FOUNDATION PLAN NOTES:

1. SITE PREPARATION AND BUILDING PAD CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH SOILS REPORT # E13310.007.BY YOUNGDAHL CONSULTING GROUP DATED AUGUST 18, 2016. BOTTOM OF FOOTING EXCAVATIONS SHALL BE REVIEWED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL. FOUNDATIONS SHALL BEAR ON WEATHERED BEDROCK PER THE REQUIREMENTS OF THE SOILS REPORT.
2. VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.
3. DIMENSIONS SHOWN ARE TO CL OF COLUMN OR INSIDE FACE OF CONC WALL, UNO.
4. SLAB ON GRADE SHALL BE 5" THICK CONCRETE W/ #4 @ 18"CC EW AT MID-DEPTH. CONCRETE SHALL BE INSTALLED OVER 4" CLEAN CRUSHED ROCK OVER 15 MIL VAPOR RETARDER. TOP OF CONCRETE SLAB IS +100'-0" UNO. DATUM ELEVATION = +1781.70'
5. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL GRIDS.
6. PROVIDE 3" MIN. CONCRETE COVER AT STRUCTURAL STEEL AND ANCHOR BOLTS BELOW GRADE TYP.
7. PROVIDE SLAB ON GRADE CONTROL JOINTS (SJ) AS INDICATED PER TYP @ ALL INTERIOR SLABS. CONSTRUCTION JOINTS (CJ) MAY REPLACE CONTROL JOINTS AS REQUIRED. (1 / MO-S-0.3)
8. SEE SHEETS MO-S-0.1 THRU MO-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE APPLICABLE TO ALL DRAWINGS UNO.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE SLAB CONTROL JOINTS WITH ANY ARCHITECTURALLY EXPOSED SLAB AREAS OR THE LOCATION OF TILE CRACK CONTROL JOINTS. VERIFY SPECIAL CONDITION CONTROL JOINTS WITH ARCH'L DRAWINGS.
10. CONTRACTOR TO COORDINATE EXACT DIMENSIONS AND LOCATIONS OF THICKENED SLABS, HOUSEKEEPING PADS , ETC. WITH ALL OTHER DISCIPLINES' DWG'S AS WELL AS WITH THE EQUIPMENT PROVIDED PRIOR TO COMMENCING WORK.
11. SEE ARCH'L & CIVIL DRAWINGS FOR ALL EXTERIOR CURBS, FLATWORK, PLANTERS, RAMPS, ETC.
12. CONTINUE ALL REINFORCING IN CONTINUOUS FOOTINGS THROUGH SPREAD FOOTINGS, TYP, UNO.
13. (MK) INDICATES REFERENCE TO FOOTING SCHEDULE, SEE (A / MO-S-2.1)
    (MK T&B) INDICATES THAT ADDITIONAL TOP REINFORCING AS NOTED IN SCHEDULE SHALL BE PLACED @ 2" CLR OF TOP OF FOOTING.
14. INDICATES CONCRETE CURB. FOR CURBS BELOW NON-STRUCTURAL WALLS, SEE (2 / MO-S-0.3) & (14 / MO-S-0.3) VERIFY EXACT EXTENT W/ ARCH'L DWGS.
15. INDICATES SLOPED AND/OR DEPRESSED SLAB. DEPRESS BUILDING PAD AND PROVIDE FULL SLAB AND BASE THICKNESS. WHERE DEPRESSION IS GREATER THAN 2" AND ADJACENT TO BUILDING FOUNDATION ELEMENT IT MAY BE NECESSARY TO STEP FOOTING IN ORDER TO MAINTAIN MINIMUM FOOTING EMBEDMENT PER SECTIONS. CONTRACTOR TO COORDINATE IN FIELD. SEE ALSO (11 / MO-S-0.3)
16. ALL DEPRESSIONS, SLOPES, CURBS, ETC. ARE SHOWN FOR REFERENCE ONLY. FOR EXACT DEPTHS, SLOPES, EXTENTS, ETC, SEE OTHER DISCIPLINES' DRAWINGS.
17. TEMPORARY LOADS APPLIED DURING CONSTRUCTION HAVE NOT BEEN CONSIDERED IN SLAB ON GRADE DESIGN.
18. 99'-0" TOF INDICATES TOP OF FOOTING ELEVATION WITH RESPECT TO REFERENCE TOP OF CONCRETE (+100'-0") THE BOTTOM OF ALL FOOTINGS SHALL BE AT LEAST 18" BELOW ADJACENT MINIMUM PREPARED BUILDING PAD ELEVATION (ON ALL SIDES), TYP UNO AND AS SHOWN ON SECTIONS.
19. INDICATES SLAB STEP PER (11 / MO-S-0.3)
20. INDICATES FOOTING STEP PER (8 / MO-S-0.3) STEP LOCATIONS ARE DIAGRAMMATIC ONLY. CONTRACTOR TO COORDINATE IN FIELD. INTENT IS THAT NO TOP OF FTG IS WITHIN 12" OF EXTERIOR FINISH GRADE.
21. 99'-8" INDICATES TOP OF CONCRETE SLAB ELEVATION RELATIVE TO REFERENCE T.O. CONCRETE +100'-0".
22. HSS6x6x1/2 INDICATES HSS COLUMN & SIZE. FOR BASE PLATE, SEE (11 / MO-S-0.1) TYP UNO.
23. INDICATES CONCRETE TILT-UP WALL PANEL, TYP UNO. SEE ELEVATIONS FOR ADD'L INFO.
24. 1 INDICATES CONCRETE TILT-UP WALL NUMBER. SEE ELEVATIONS ON SHEETS MO-S-4.1 THRU MO-S-4.2.
25. INDICATES 8" CMU WALL. FOR REINFORCING, SEE (17 / MO-S-0.3) CONDUITS IN CMU TO BE PER CMU NOTES.
    INDICATES 12" CMU WALL.
26. WCJ INDICATES WALL CONTROL JOINT PER (19 / MO-S-0.3)
27. FOUNDATIONS ARE DESIGNED BASED ON BEARING PRESSURE FOR WEATHERED BEDROCK. COORDINATE WITH GEOTECHNICAL ENGINEER IN FIELD FOR APPLICABILITY OF THESE PARAMETERS. NOTIFY SEOR IF DIFFERENT.

ROOF FRAMING PLAN NOTES:

1. VERIFY ALL BUILDING DIMENSIONS AND ELEVATIONS W/ ARCH'L DRAWINGS. NOTIFY THE ARCHITECT IMMEDIATELY IF THERE ARE ANY CONFLICTS W/ DIMENSIONS SHOWN.
2. DIMENSIONS SHOWN ARE TO CL OF COLUMN OR FACE OF CONC WALL, UNO.
3. SEE SHEETS MO-S-0.1 THRU MO-S-0.5 FOR GENERAL NOTES & TYPICAL DETAILS WHICH ARE APPLICABLE TO ALL DRAWINGS UNO.
5. INDICATES ROOF OPENING. LOCATE OPENING PER AMEP DRAWINGS. FOR SUPPORT, SEE (2 / MO-S-9.2)
6. SEE SHEET MO-S-9.2 FOR TYPICAL METAL DECK DETAILS.
7. +15'-0" TOS INDICATES ELEVATION OF TOP OF STEEL FRAMING AND BOTTOM OF METAL DECK.
   +12'-0" TOW INDICATES ELEVATION OF TOP OF WALL.
8. INDICATES BARE METAL DECK. ORIENTATION AS SHOWN ON PLAN. PROVIDE DECK FASTENING TO ALL BEAMS PER (A / MO-S-9.2) & (B / MO-S-9.2)
9. METAL DECK SHALL BE 1 1/2"x18GA 'B' GALV METAL DECK.
10. W14x22 C=1" INDICATES BEAM SIZE AND UPWARD CAMBER (WHERE NO CAMBER IS SPECIFIED, FABRICATE WITH NATURAL MILL CAMBER UP).
11. W10 DENOTES W10x15 TYP, UNO.
    W12 DENOTES W12x16 TYP, UNO.
    W14 DENOTES W14x22 TYP, UNO.
    C12 DENOTES C12x20.7 TYP, UNO.
    L4 DENOTES L4x4x1/4 TYP, UNO.
12. ALL BEAMS SHALL BE EQUALLY SPACED BETWEEN DIMENSIONED COLUMNS, GRIDS, OR BEAMS WHERE OCCURS, TYP UNO.
13. FOR TYPICAL BEAM TO BEAM CONNECTION, SEE (1 / MO-S-9.1) OR (2 / MO-S-9.1) UNO.
14. FOR TYPICAL BEAM TO COLUMN CONNECTION, SEE (3 / MO-S-9.1).
15. INDICATES SINGLE ROW 'SLIP-CRITICAL' BOLTED CONNECTION PER (7 / MS-S-9.1).
16. INDICATES HSS COLUMN BELOW (UNO). SIZE INDICATED @ BASE LEVEL OF COLUMN ONLY.
    INDICATES PIPE COLUMN. SIZE INDICATED @ PLAN.
17. CONTRACTOR TO COORDINATE EXACT LOCATION OF FRAMING MEMBERS SUPPORTING MECHANICAL UNITS & SIMILAR ITEMS NOT DIMENSIONED ON PLAN.
18. INDICATES MECHANICAL UNIT. ALL BLOCKING BEAMS SHALL BE W10x12 UNO AND SHALL BE LOCATED DIRECTLY BELOW UNIT EDGES AND/OR CURBS, SEE MECHANICAL UNIT SCHEDULE FOR WEIGHTS AND ATTACHMENT OF UNIT/CURBS TO STRUCTURE. (AHU 1A)
19. ALL VISUALLY EXPOSED STEEL SHALL MEET 'ARCHITECTURALLY EXPOSED STRUCTURAL STEEL' REQUIREMENTS. SEE ARCH'L DWGS AND SPECS.
20. INDICATES SOLID GROUTED CONC MASONRY WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
21. INDICATES CONCRETE WALL. SEE FOUNDATION PLAN FOR ADD'L INFO.
22. INDICATES SOLID GROUTED CONC MASONRY WALL BELOW.
23. INDICATE SOLID GROUTED CONC MASONRY WALL BELOW. SEE FOUNDATION PLAN FOR ADD'L INFO.
24. SEE ARCH'L DWGS FOR LOCATION OF ALL SLAB EDGES AT ROOF PERIMETER AND AROUND OPENINGS. WHERE NOT SHOWN OR INDICATED OTHERWISE ON STRUCTURAL OR ARCH'L DWGS, BEAMS ADJACENT TO SLAB EDGES SHALL BE 8" FROM CL OF BEAM TO EDGE OF SLAB.
25. CONTRACTOR SHALL SUBMIT AN EDGE OF SLAB PLAN TO ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW. SUBMITTAL SHALL BE DIMENSIONED AND LOCATED RELATIVE TO STRUCTURAL GRIDS.
26. VERIFY ALL ROOF OPENINGS, LOCATIONS & DIMENSIONS WITH ARCH'L DWGS PRIOR TO FABRICATION AND DETAINING. ALL ROOF OPENINGS SHALL BE REINFORCED AS SHOWN ON TYPICAL METAL DECK SHEET MO-S-9.2. ADD'L WF BLKG MAY BE REQ'D @ ROOF OPENINGS AS SHOWN ON PLAN OR WHERE OPENINGS EXCEED PROVISIONS OF TYPICAL DETAILS.

(A / MO-S-2.1) FOOTING SCHEDULE

Mk	WIDTH	LENGTH	DEPTH	REINFORCING
A	3'-0"	3'-0"	1'-6"	(4) #5 EW BOTT
B	3'-6"	3'-6"	1'-6"	(5) #5 EW BOTT
C	4'-6"	4'-6"	1'-6"	(6) #5 EW BOTT

NOTES:

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6/14/18

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NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
FOUNDATION AND ROOF FRAMING PLAN

SHEET NUMBER:
MO-S-2.1

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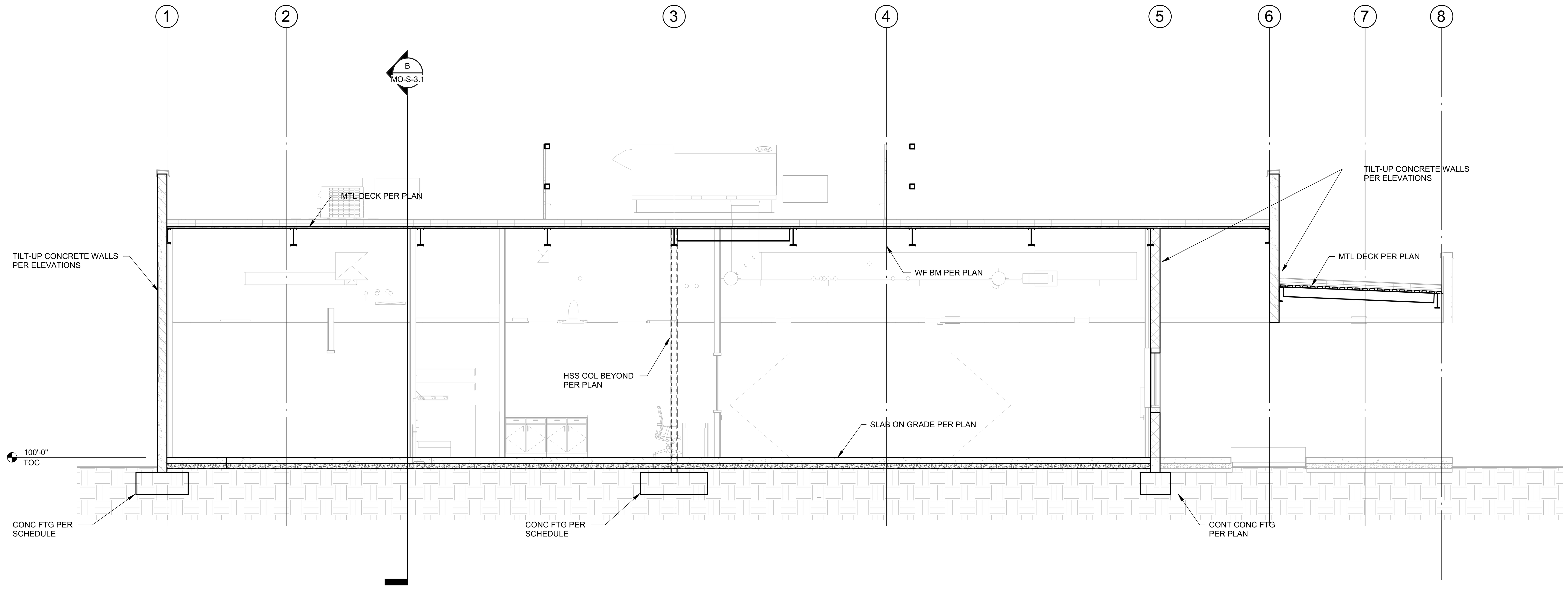
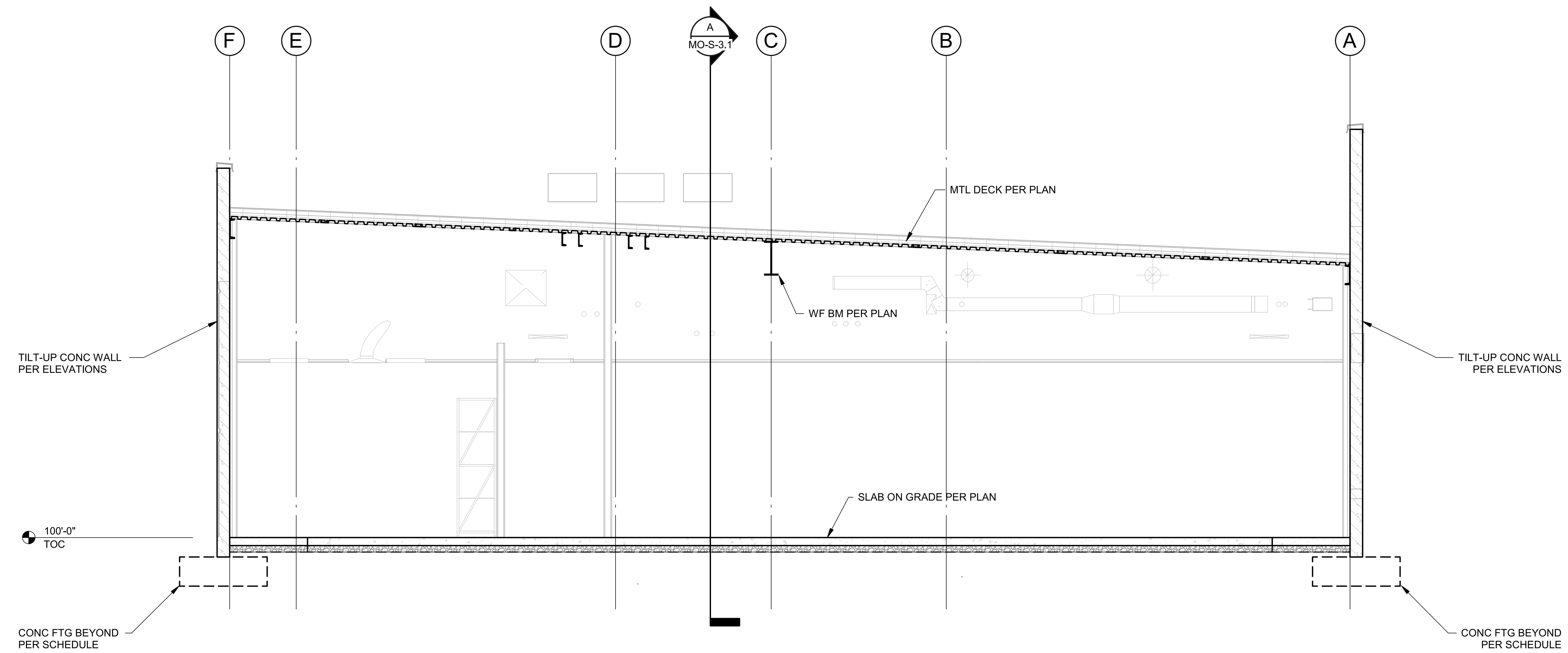


SECTION A MO-S-3.1 — 1/4" = 1'-0"



SECTION B MO-S-3.1 — 1/4" = 1'-0"

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EL DORADO COUNTY CALIFORNIA

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APPROVED BY:

SHEET TITLE:
BUILDING SECTIONS

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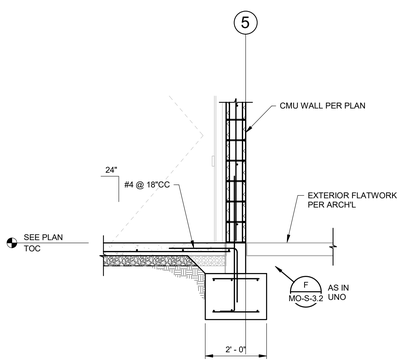
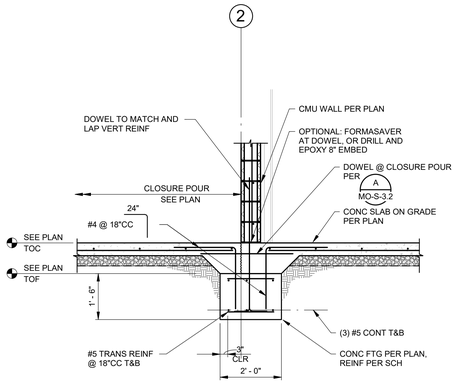
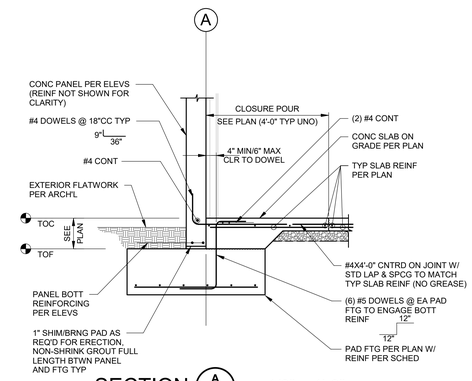
SHEET NUMBER:
MO-S-3.1



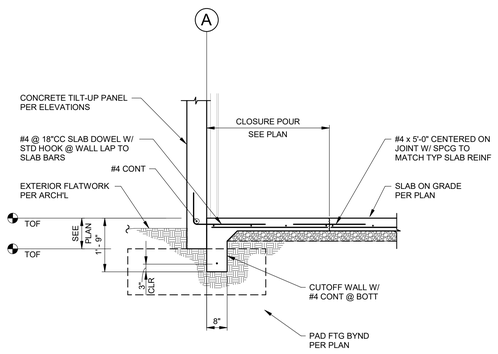
SECTION 5/MO-S-3.2 — 1/2" = 1'-0"



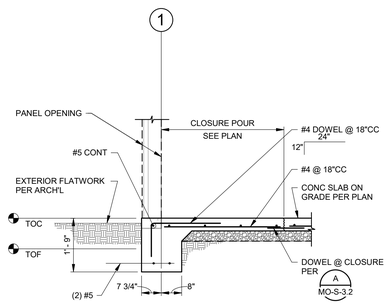
SECTION 2/MO-S-3.2 — 1/2" = 1'-0"



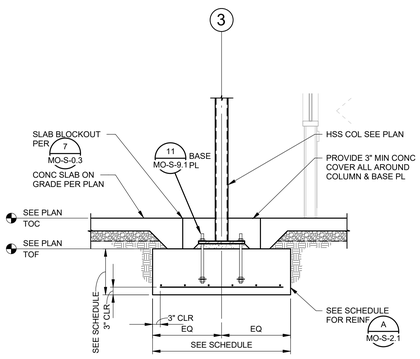
SECTION A/MO-S-3.2 — 1/2" = 1'-0"



SECTION B/MO-S-3.2 — 1/2" = 1'-0"



SECTION C/MO-S-3.2 — 1/2" = 1'-0"



SECTION D/MO-S-3.2 — 1/2" = 1'-0"

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SHEET TITLE:
SECTIONS

SHEET NUMBER:
MO-S-3.2

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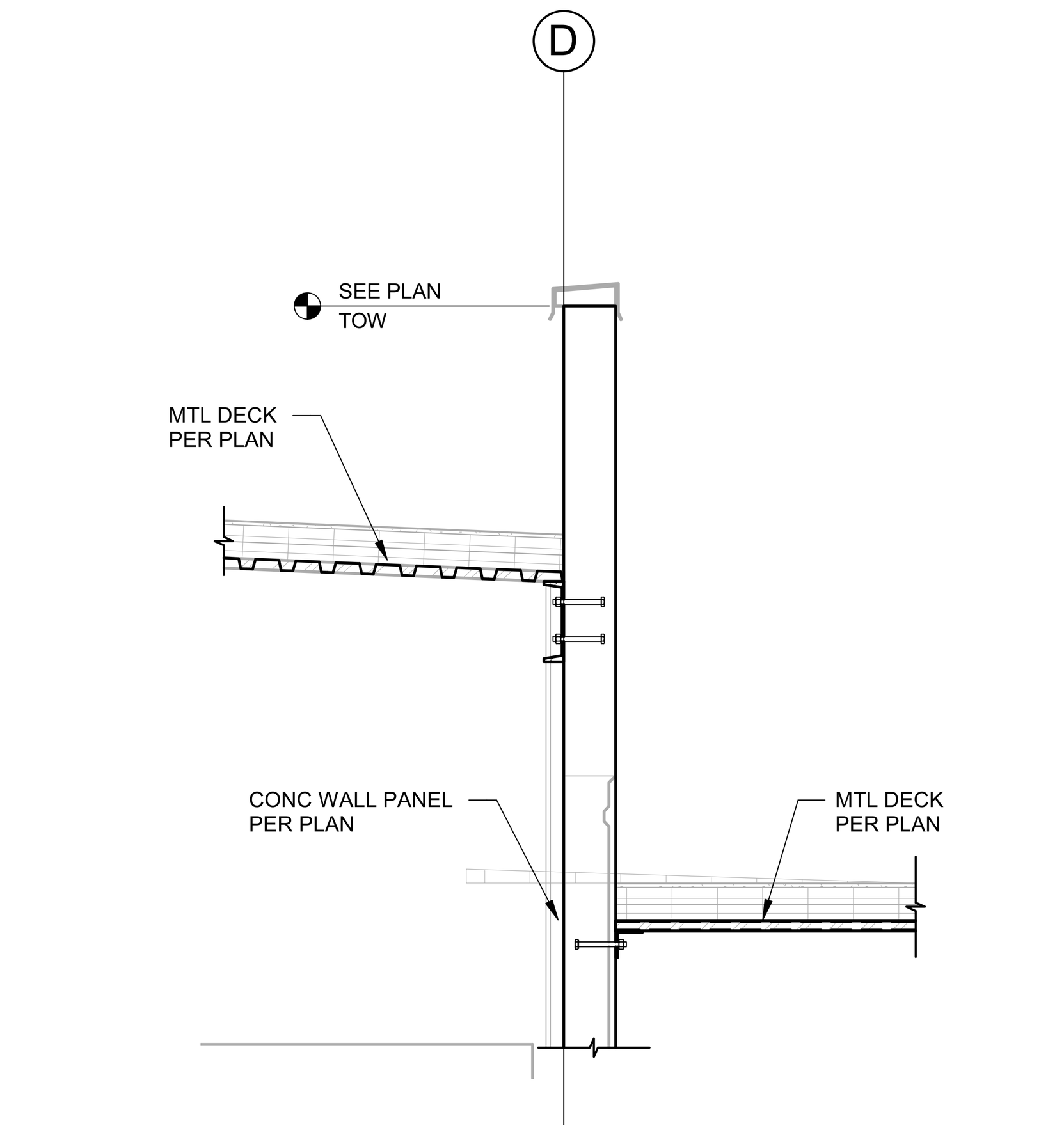
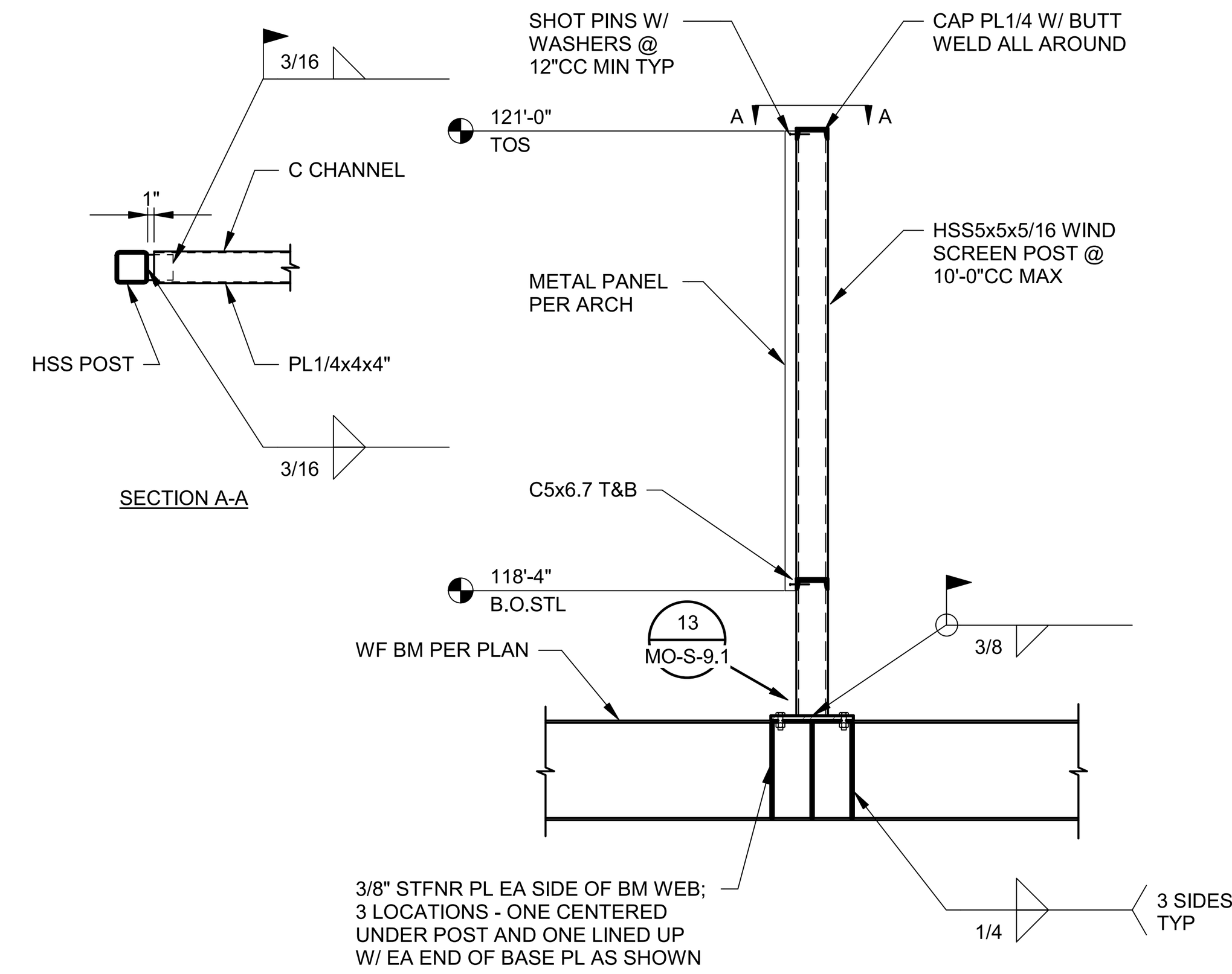
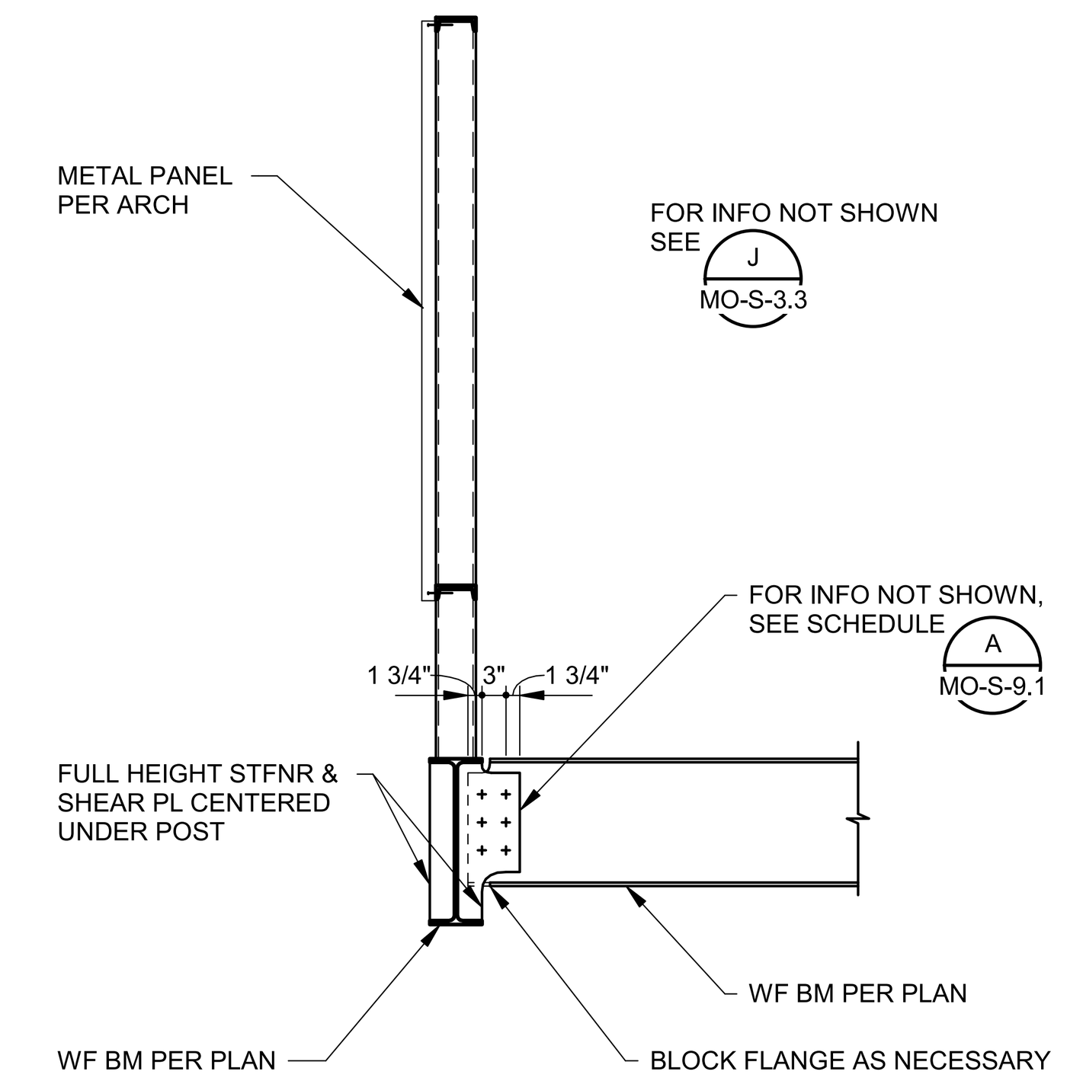


SECTION H MO-S-3.3 — 1/2" = 1'-0"

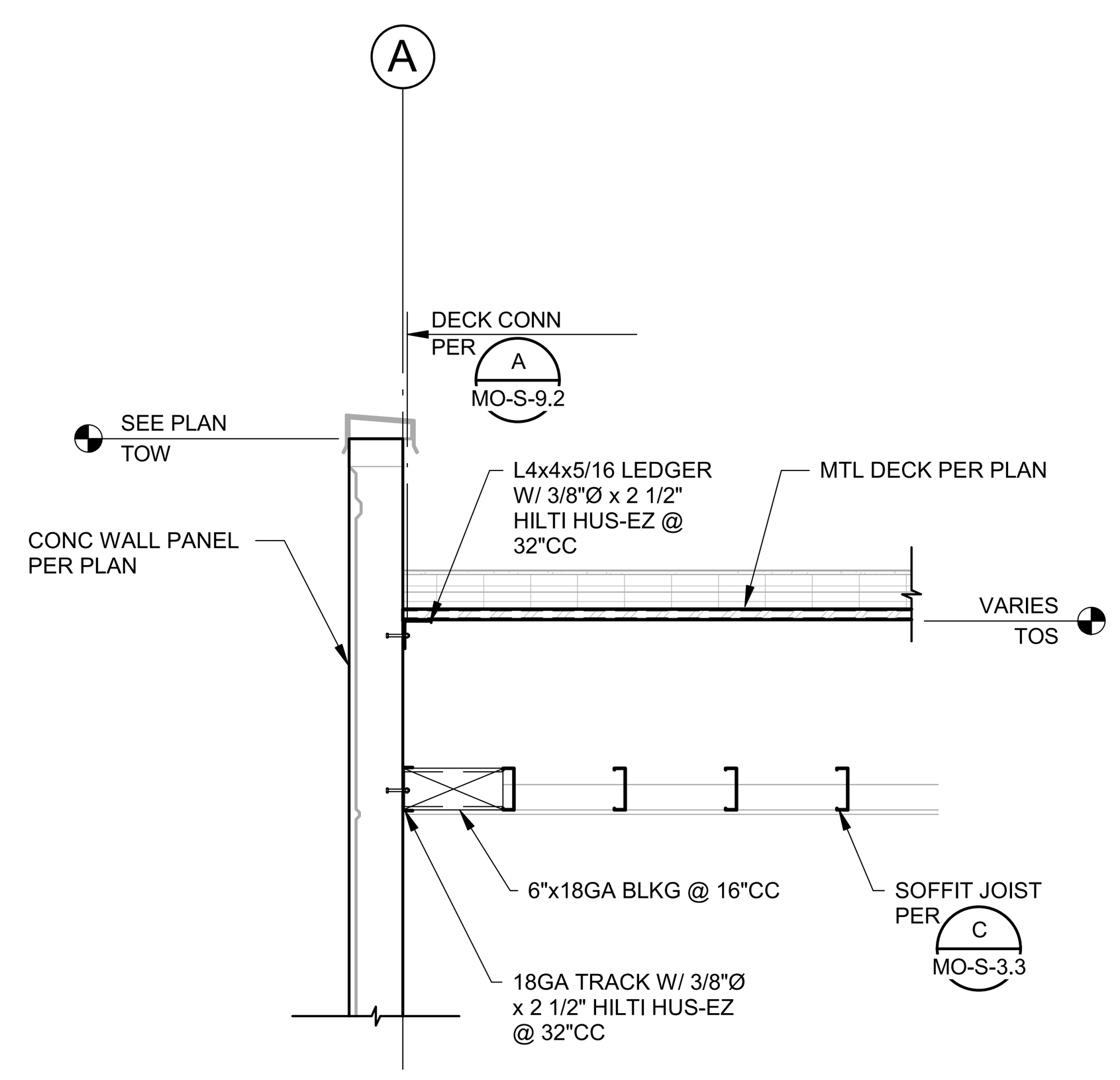


NOTES:
1. METAL DECK NOT SHOWN FOR CLARITY.

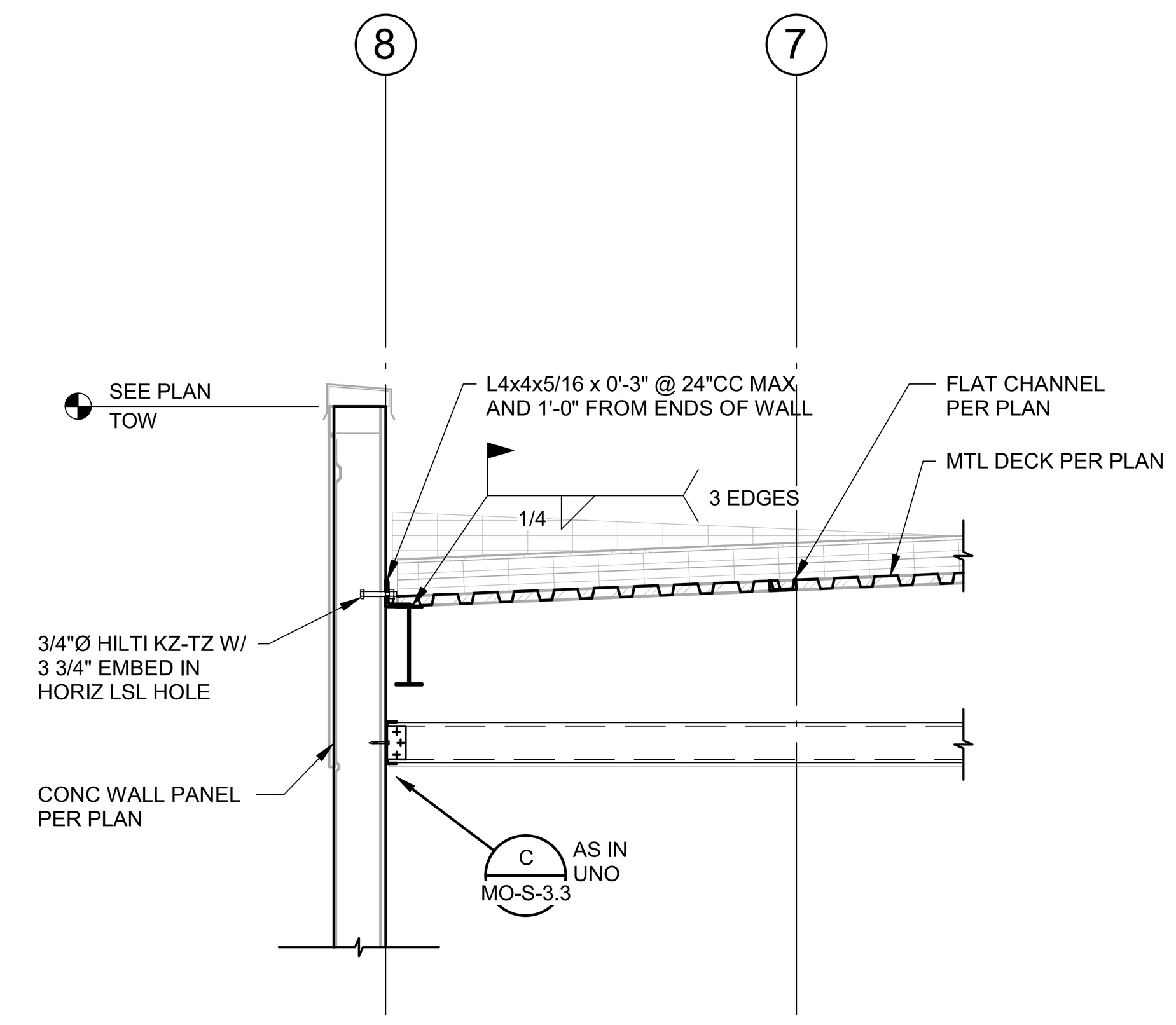
SECTION J MO-S-3.3 — 1/2" = 1'-0"



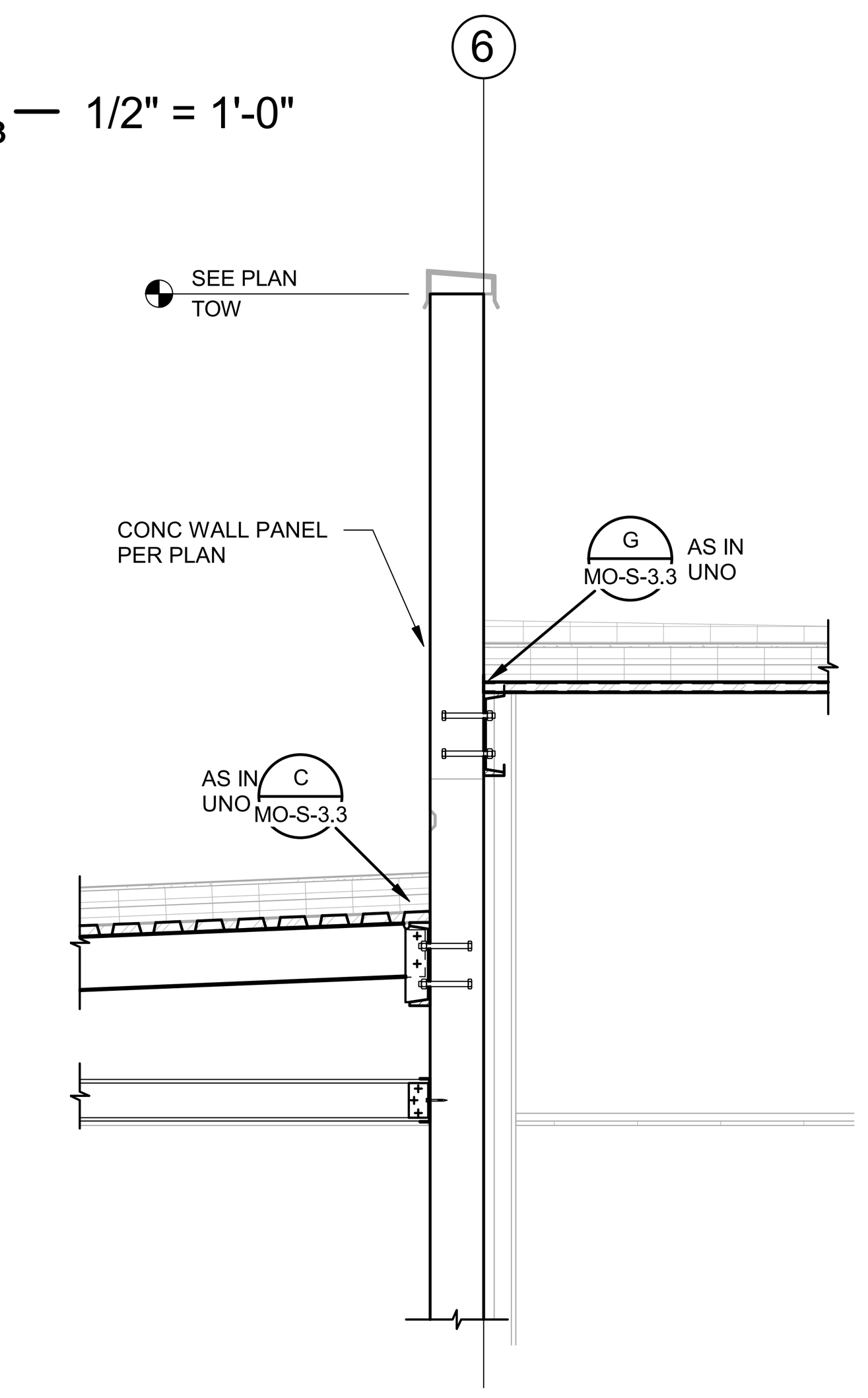
SECTION K MO-S-3.3 — 1/2" = 1'-0"



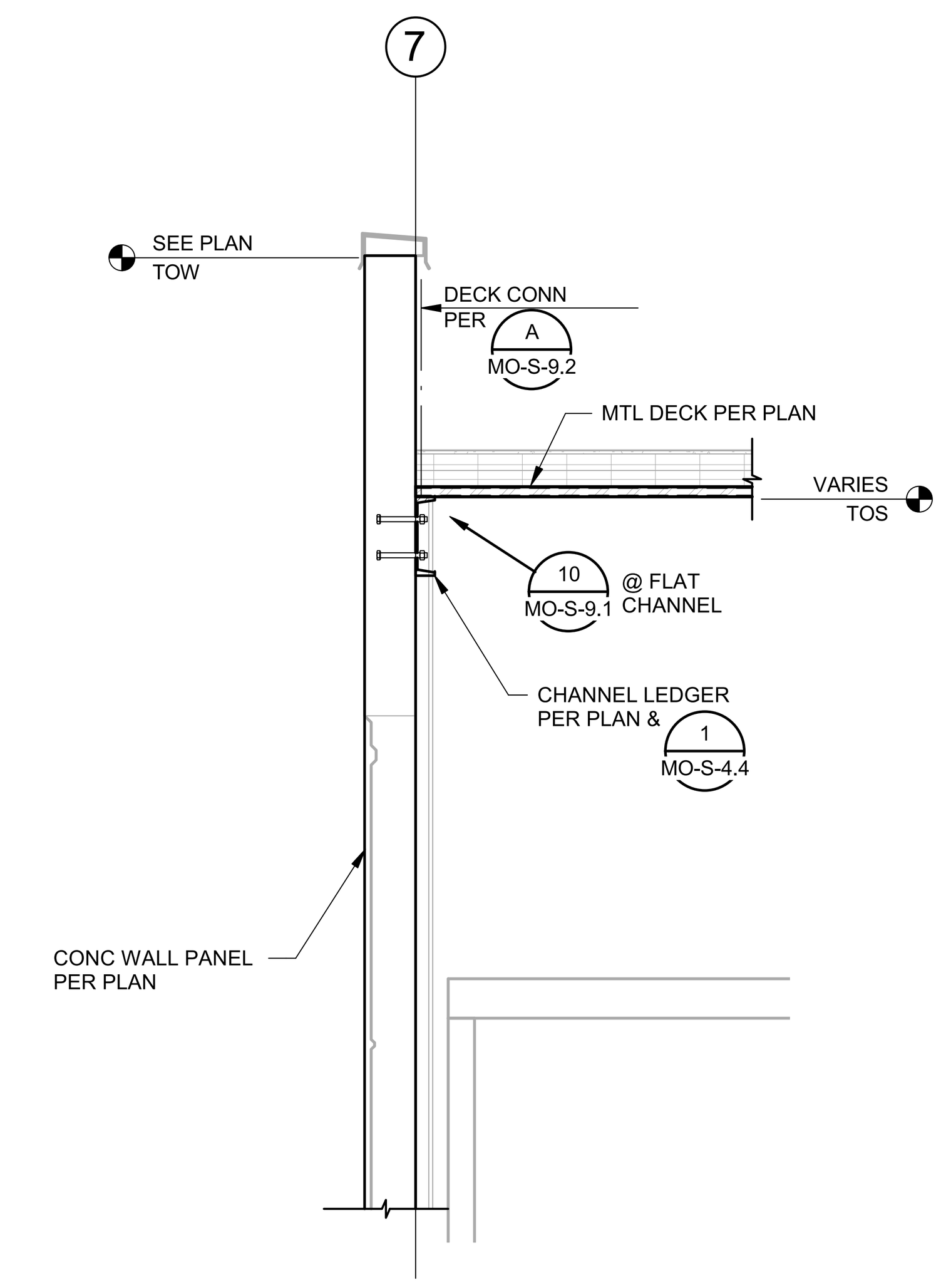
SECTION D MO-S-3.3 — 1/2" = 1'-0"



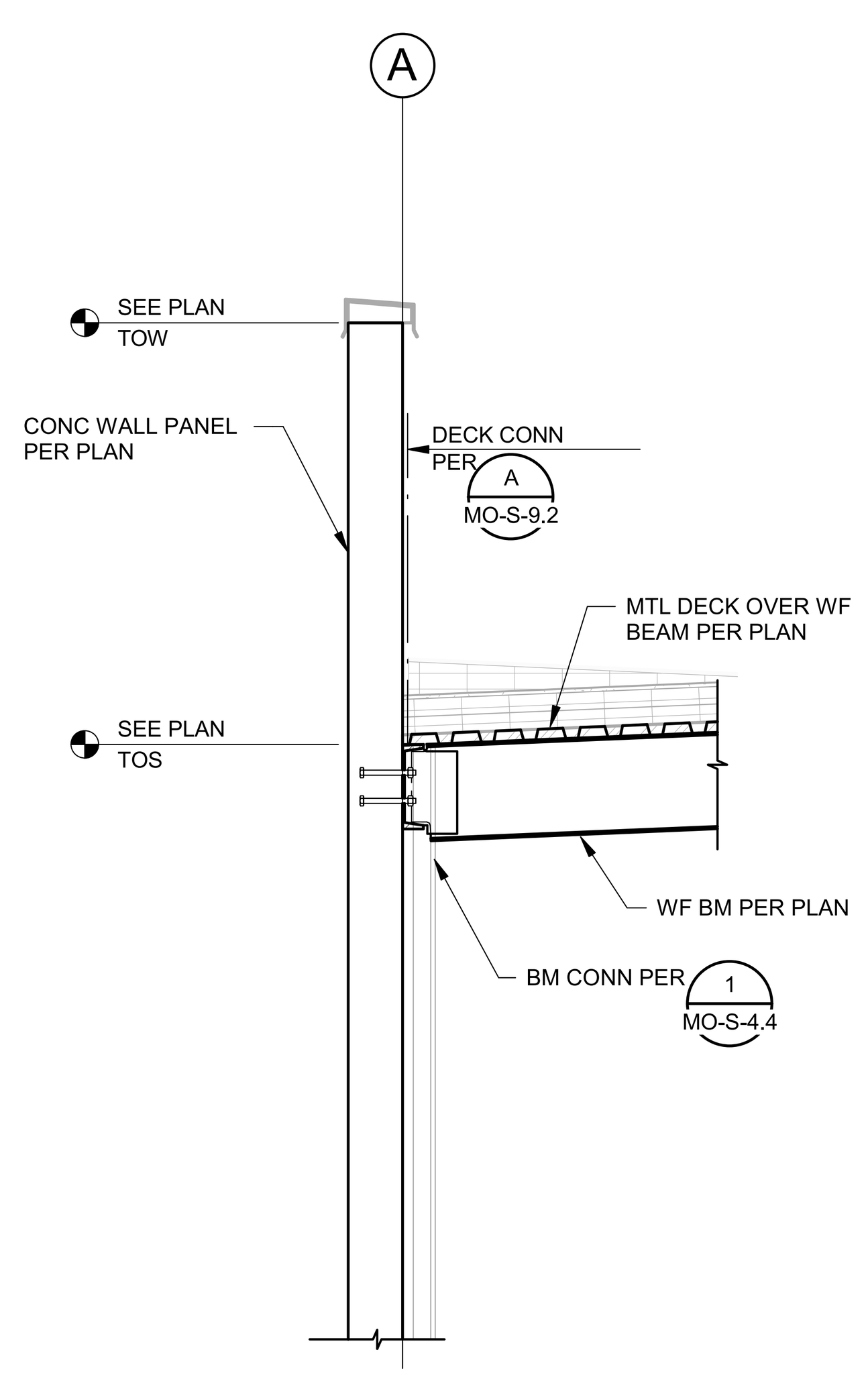
SECTION E MO-S-3.3 — 1/2" = 1'-0"



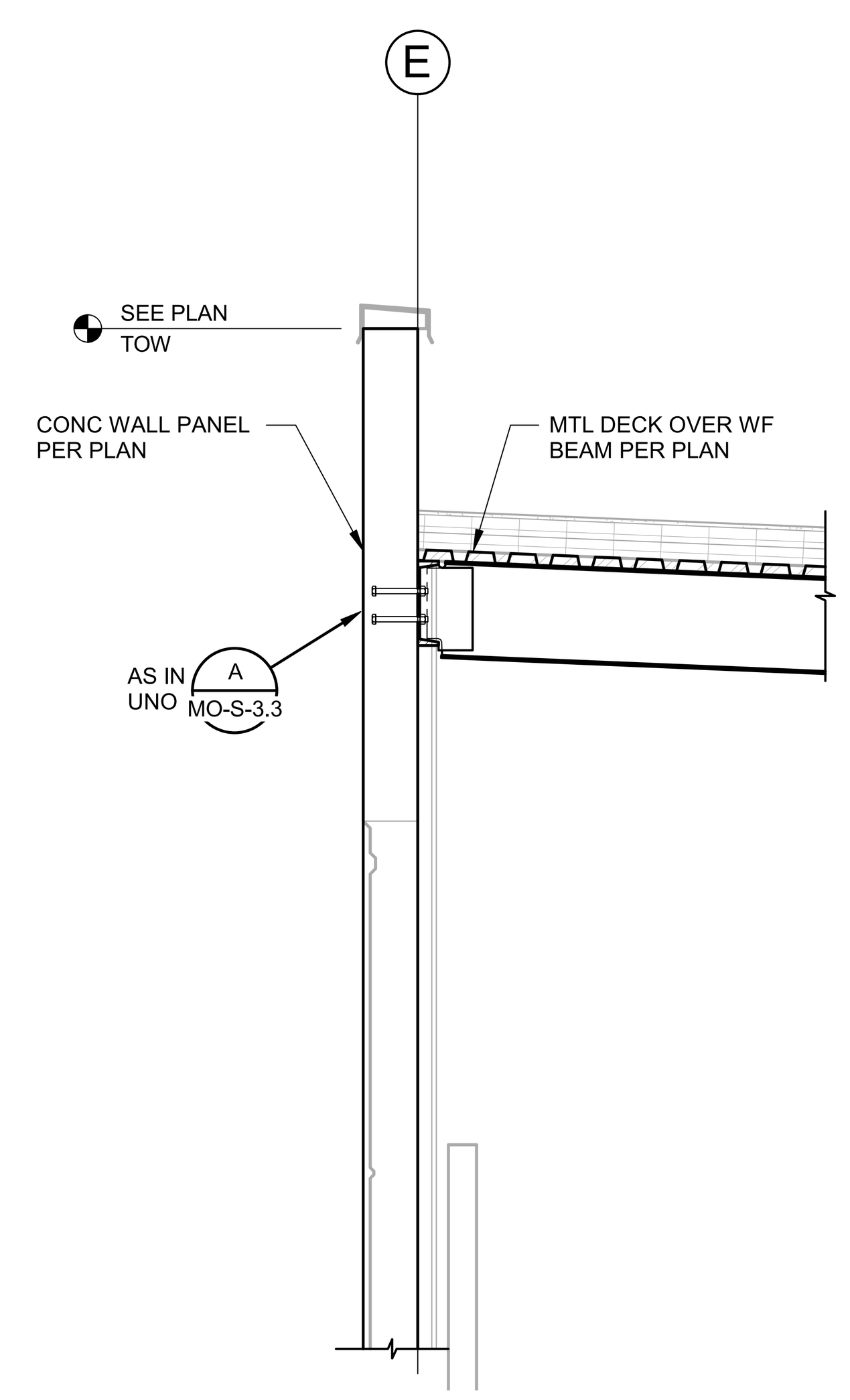
SECTION F MO-S-3.3 — 1/2" = 1'-0"



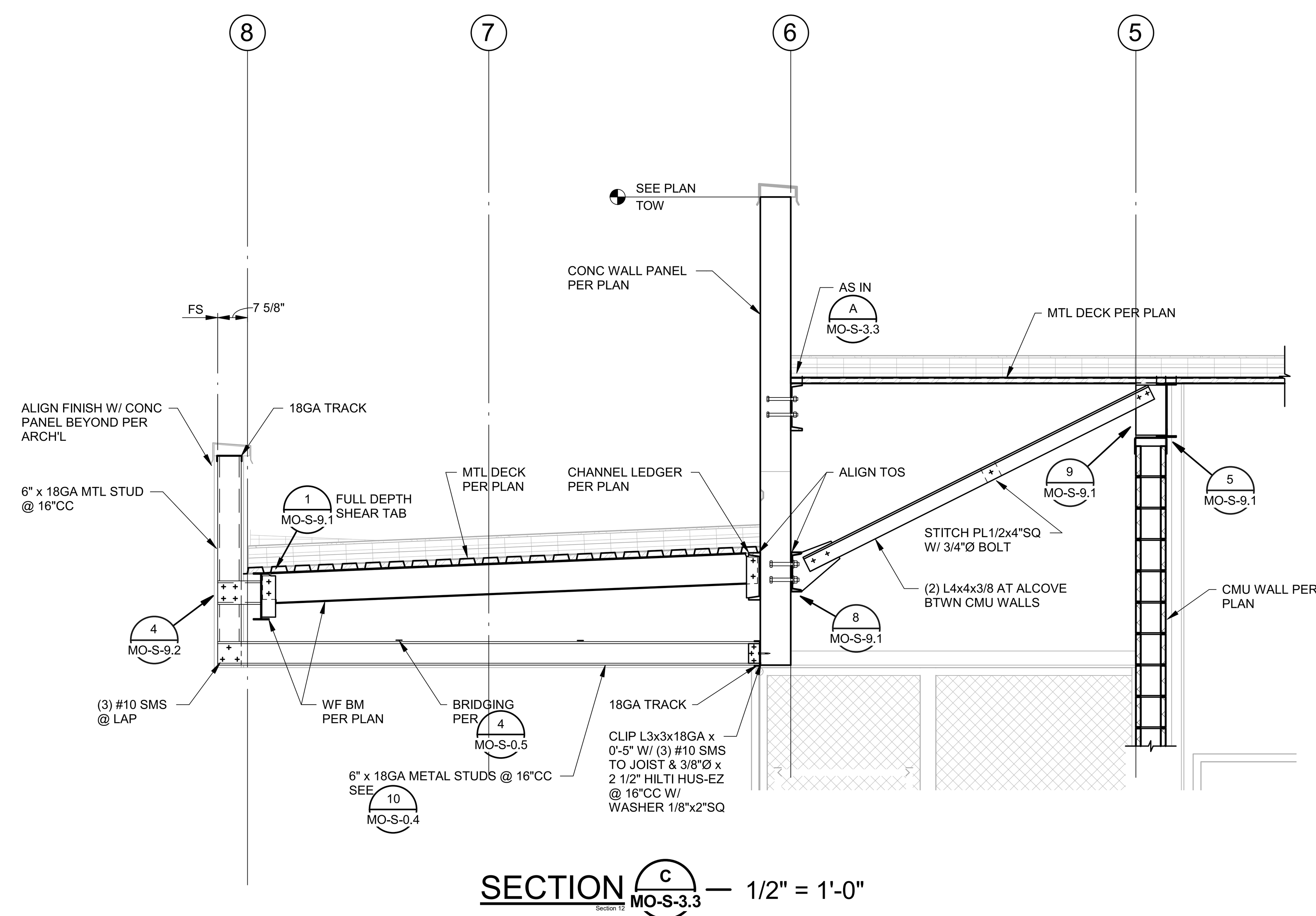
SECTION G MO-S-3.3 — 1/2" = 1'-0"



SECTION A MO-S-3.3 — 1/2" = 1'-0"



SECTION B MO-S-3.3 — 1/2" = 1'-0"



SECTION C MO-S-3.3 — 1/2" = 1'-0"

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DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:
SHEET TITLE:
SECTIONS

SHEET NUMBER:
MO-S-3.3

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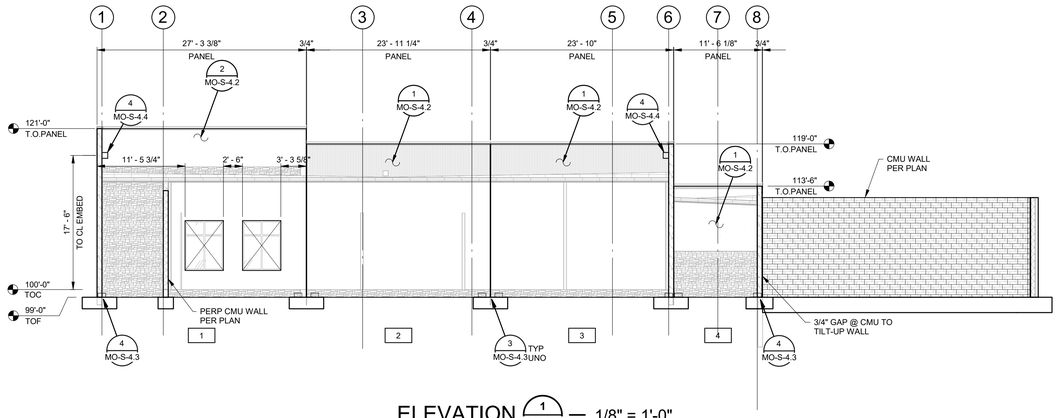
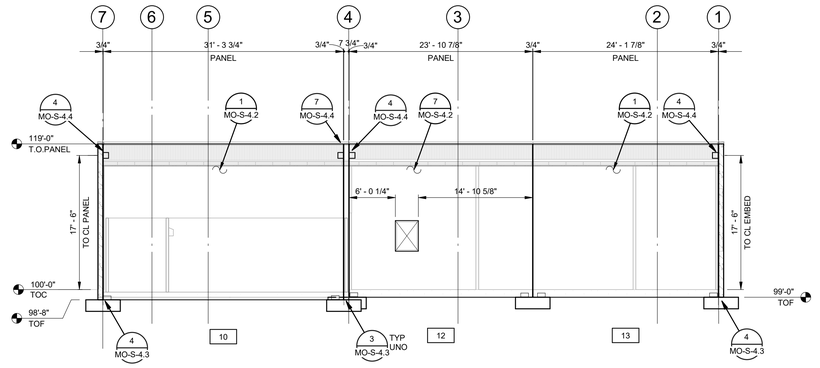
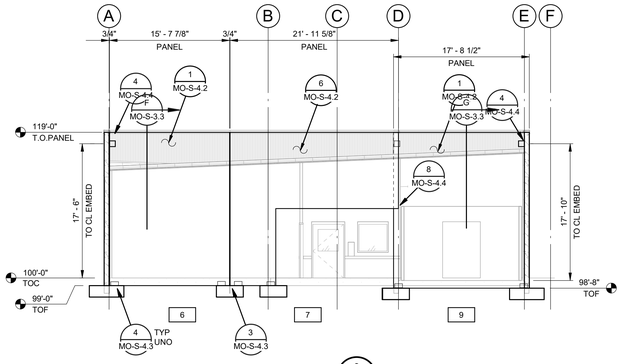
6/14/2018 4:54:27 PM



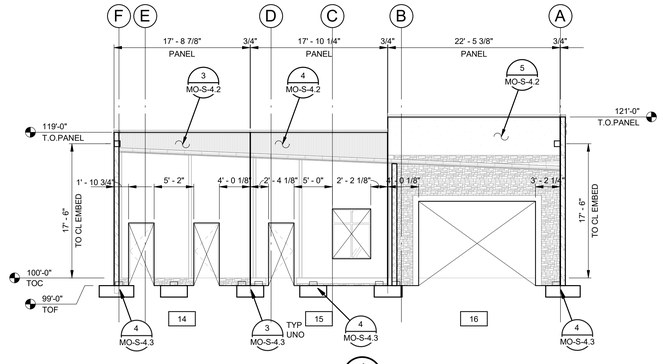
ELEVATION 1 / MO-S-4.1 — 1/8" = 1'-0"
GRID A



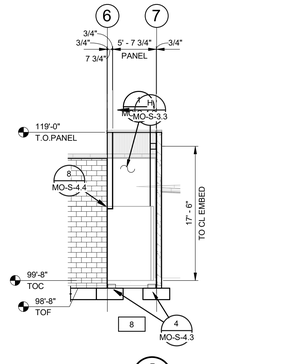
ELEVATION 2 / MO-S-4.1 — 1/8" = 1'-0"
GRID E & F



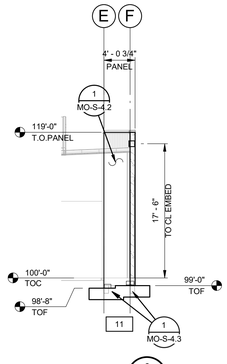
ELEVATION 3 / MO-S-4.1 — 1/8" = 1'-0"
GRID 6 & 7



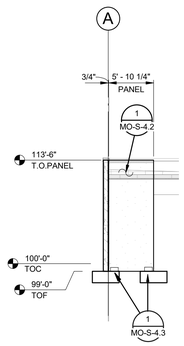
ELEVATION 4 / MO-S-4.1 — 1/8" = 1'-0"
GRID 1



ELEVATION 5 / MO-S-4.1 — 1/8" = 1'-0"
GRID D



ELEVATION 6 / MO-S-4.1 — 1/8" = 1'-0"
GRID 4



ELEVATION 7 / MO-S-4.1 — 1/8" = 1'-0"
GRID 8

DIMENSIONS SHOWN ON THIS SHEET ARE MINIMUM REQUIRED STRUCTURAL DIMENSIONS. SEE ARCH'L FOR ALL DIMENSIONS. NOTIFY DESIGN TEAM IF THERE IS A CONFLICT.

C/S BROWARD builders

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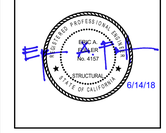
REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY
MORGUE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: MP
APPROVED BY:

SHEET TITLE:
WALL ELEVATIONS

SHEET NUMBER:
MO-S-4.1

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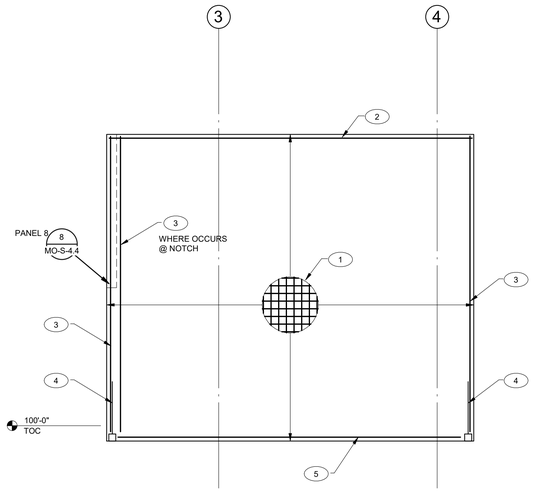
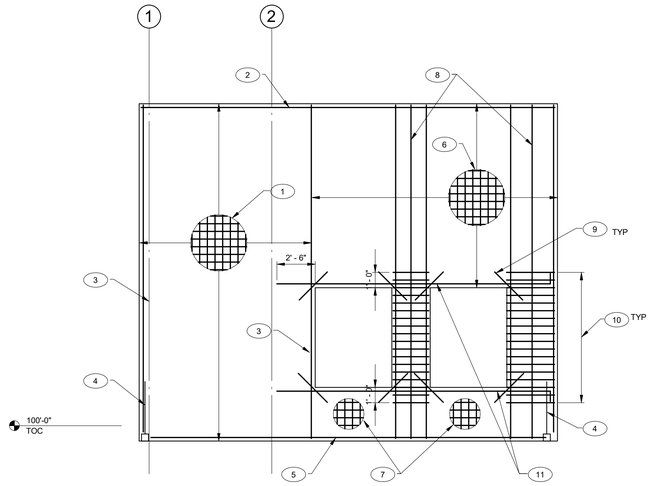
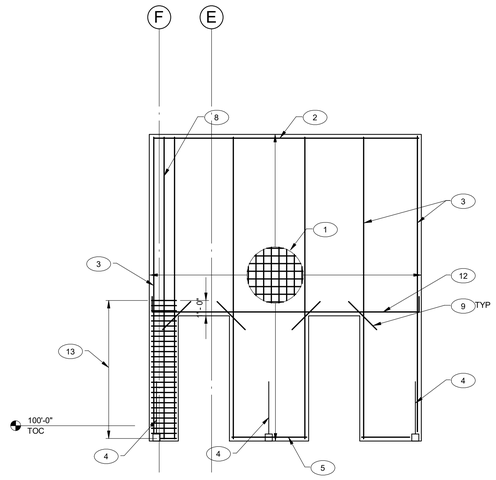


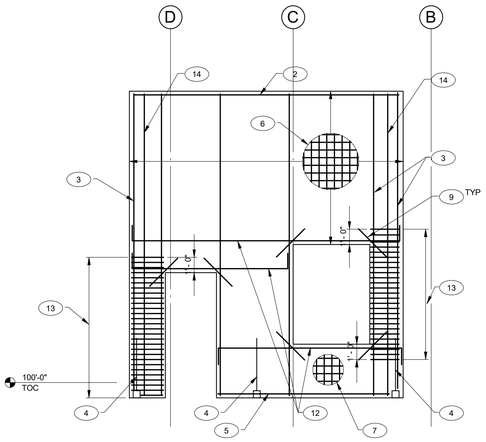
ELEVATION 1 MO-S-4.2 — 1/4" = 1'-0"



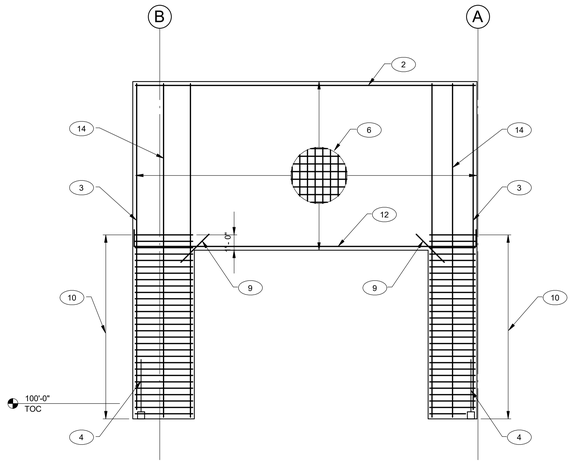
ELEVATION 2 MO-S-4.2 — 1/4" = 1'-0"



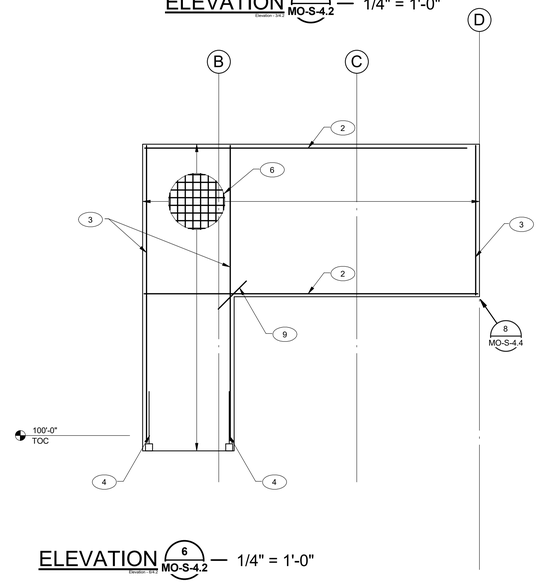
ELEVATION 3 MO-S-4.2 — 1/4" = 1'-0"



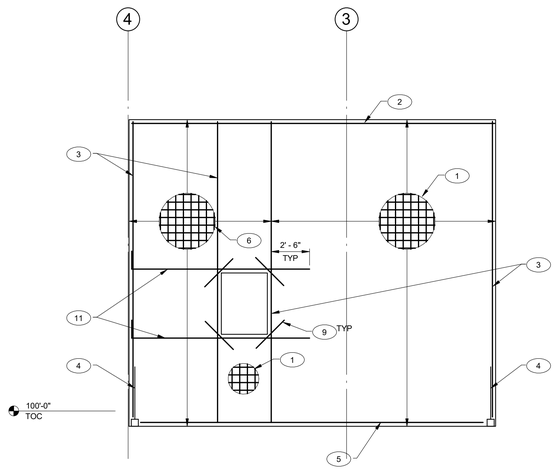
ELEVATION 4 MO-S-4.2 — 1/4" = 1'-0"



ELEVATION 5 MO-S-4.2 — 1/4" = 1'-0"



ELEVATION 6 MO-S-4.2 — 1/4" = 1'-0"



ELEVATION 7 MO-S-4.2 — 1/4" = 1'-0"

WALL ELEVATION KEY NOTES:

1. #5 @ 8"CC VERT @ CL OF WALL & #5 @ 18"CC HORIZ
2. (2) #5 HORIZ CONT
3. (2) #5 JAMB BARS @ ENDS OF WALL (AND) ADJACENT TO OPENINGS
4. HOLDOWN EMBED AND REINF PER WALL ELEVATION
5. #5 HORIZ EF CONT W/ STD 90° HOOKS EACH END
6. #5 @ 8"CC VERT @ CL OF WALL & #5 @ 12"CC HORIZ
7. #5 @ 6"CC VERT @ CL OF WALL & #5 @ 10"CC HORIZ
8. (2) #5 VERTS EF IN LIEU OF TYP VERTS. 18"CC NET MAX
9. #4 x 4'-0" LONG DIAGONALS EF, TYP @ OPENINGS
10. #4 CLOSED HOOP TIES @ 6"CC PER 8/MO-S-4.3
11. (2) #5 CONT CONT W/ STD 90° HOOKS (ONE) END
12. (2) #5 CONT W/ STD 90° HOOKS EA END
13. #4 CLOSED HOOP TIES @ 4"CC PER 8/MO-S-4.3
14. (3) #5 VERTS EF IN LIEU OF TYP VERTS. 18"CC NET MAX

TILT-UP CONCRETE PANELS

3228N001-1

1. SEE ARCHITECTURAL DRAWINGS FOR ALL PANEL FINISHES, REVEALS, CHAMFERS, JOINT SEALANTS AND SURFACE TREATMENTS. REVEALS TO BE 1 1/4" DEEP MAXIMUM.
2. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF ALL OPENINGS.
3. GENERAL CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY SHORING AND BRACING OF TILT-UP CONCRETE WALL PANELS UNTIL ALL DIAPHRAGMS (ROOFS & FLOORS) ARE PERMANENTLY CONNECTED.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO SHOW PANEL SIZE, OPENINGS AND REVEALS. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUACY OF PANEL FOR LIFTING STRESSES. ADDITIONAL REINFORCING OR STRONG BACKS SHALL BE DESIGNED AND PROVIDED BY CONTRACTOR.
5. ALL PANEL ELEVATIONS ARE VIEWED FROM THE INSIDE OF THE BUILDING TYPICAL, UNO.
6. STRUCTURAL CONCRETE FOR ALL TILT-UP PANELS SHALL TEST 4000 PSI MINIMUM AT 28 DAYS.
7. PANELS SHALL BE 7 3/4" THICK TOTAL WITH A MINIMUM 6 1/2" NET STRUCTURAL THICKNESS.
8. [1] INDICATES PANEL IDENTIFICATION MARK. SEE PLAN AND OVERALL ELEVATION.
9. SEE C/MO-S-3.2 FOR SLAB CONDITION AT OPENINGS.

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REGISTRANT SEAL

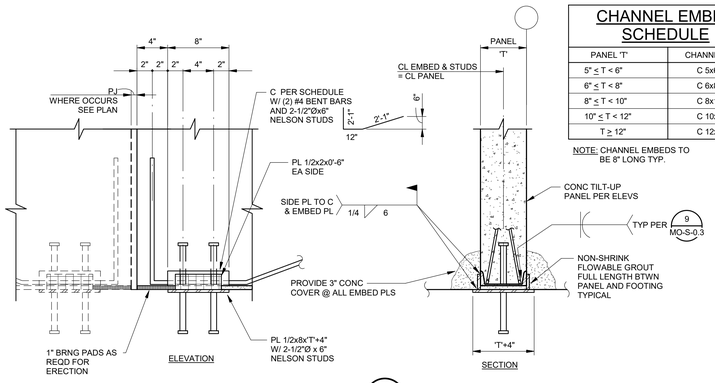
EL DORADO PUBLIC SAFETY FACILITY
MORGUE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
PANEL ELEVATIONS

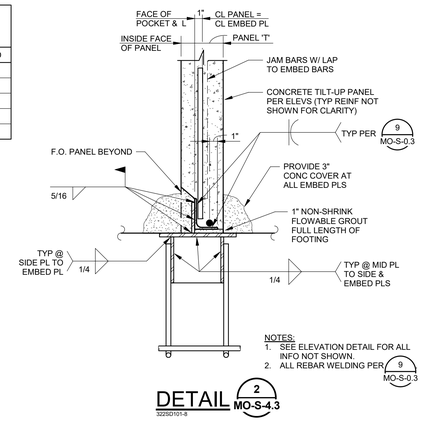
SHEET NUMBER:
MO-S-4.2



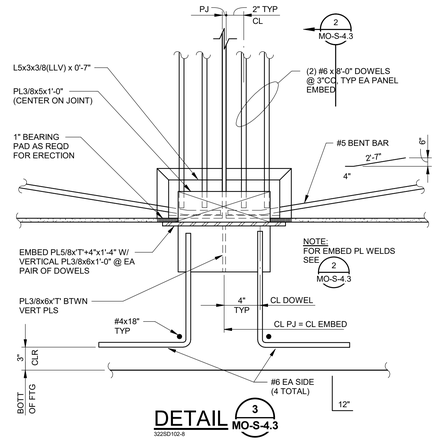
DETAIL 1 MO-S-4.3
3225D100-8

CHANNEL EMBED SCHEDULE	
PANEL "T"	CHANNEL EMBED
5" ≤ T < 6"	C 5x6.7
6" ≤ T < 8"	C 6x8.2
8" ≤ T < 10"	C 8x11.5
10" ≤ T < 12"	C 10x15.3
T ≥ 12"	C 12x20.7

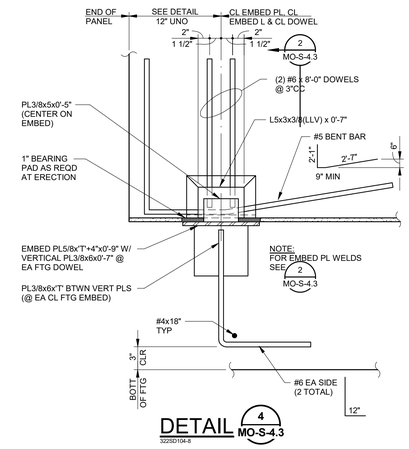
NOTE: CHANNEL EMBEDS TO BE 8" LONG TYP.



DETAIL 2 MO-S-4.3
3225D101-8

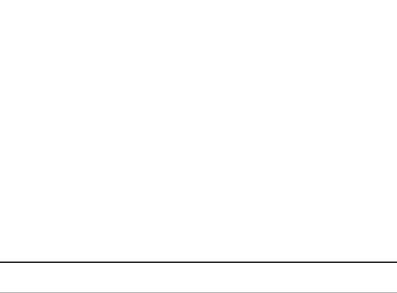


DETAIL 3 MO-S-4.3
3225D102-8



DETAIL 4 MO-S-4.3
3225D104-8

DETAIL 5 MO-S-4.3
3225D110-8



DETAIL 6 MO-S-4.3
3225D112-8

TYPICAL BAR PLACEMENT @ MID-DEPTH OF PANEL-PLAN VIEW

DETAIL 7 MO-S-4.3
3225D010-12

PANEL W/ REINFORCING @ EACH FACE

NOTE: PIER REINFORCING TIES ARE REQUIRED AT ALL SECTIONS OF WALL WHOSE HORIZ LENGTH TO THICKNESS RATIO IS BTWN 2.5 & 6. PIER REINFORCING TIES ARE ALSO REQUIRED AT ALL SECTIONS OF WALL LABELED AS "PIER" ON PLAN OR ELEVATION.

PIER DETAIL 8 MO-S-4.3
3225D012-12

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APPROVED BY:

SHEET TITLE:
PANEL DETAILS

SHEET NUMBER:
MO-S-4.3

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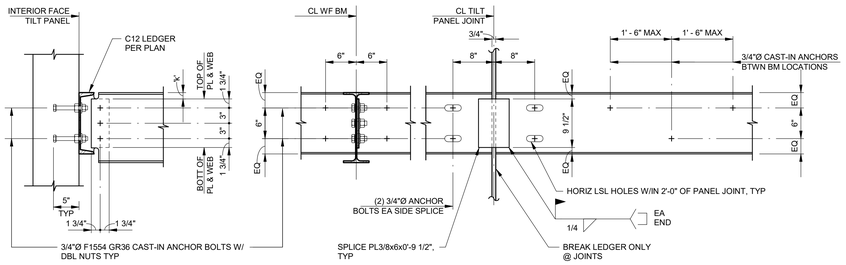
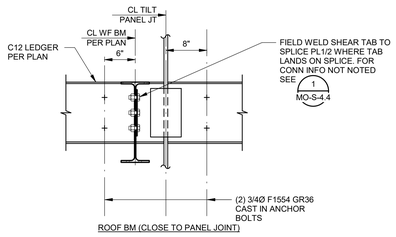
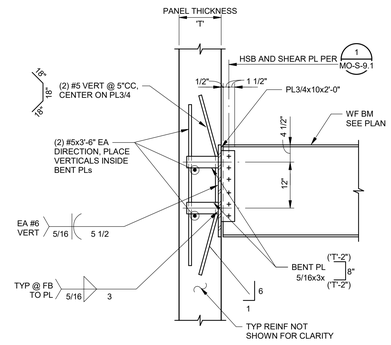


NOTES:
1. LEDGERS SHALL BE CONTINUOUS BETWEEN PANEL JOINTS WITH SPLICE PLATE AS SHOWN ABOVE.
2. USE LEDGERS AS TEMPLATES TO SET ANCHOR BOLTS IN TILT PANELS
3. FOR CONNECTION INFORMATION NOT NOTED, SEE A MO-S-9.1
4. FOR CONNECTION OCCURRING CLOSE TO PANEL JOINT, SEE 2 MO-S-4.4

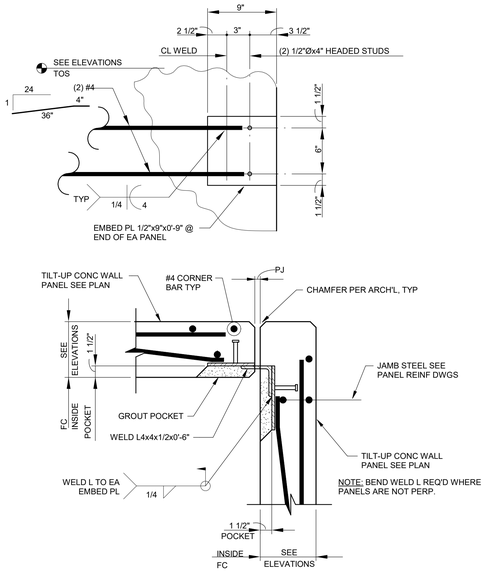
LEDGER @ ROOF 1 MO-S-4.4 — 1" = 1'-0"



DETAIL 2 MO-S-4.4 — 1" = 1'-0"



DETAIL 3 — 1" = 1'-0"



DETAIL 4 MO-S-4.4 — 1 1/2" = 1'-0"

DETAIL 5 — 1" = 1'-0"

DETAIL 6 — 1" = 1'-0"

DETAIL 7 — 1" = 1'-0"

DETAIL 8 — 1" = 1'-0"

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REGISTRANT SEAL

EL DORADO PUBLIC SAFETY FACILITY
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200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

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DATE: 06-18-2018
DESIGNED BY: Designer
DRAWN BY: Author
APPROVED BY:

SHEET TITLE:
DETAILS

SHEET NUMBER:
MO-S-4.4

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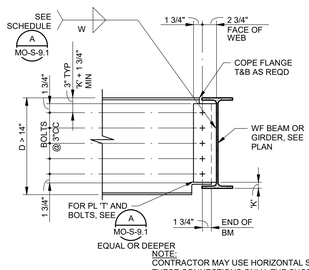
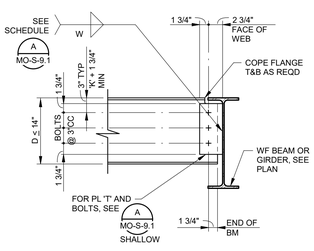
CONNECTION SCHEDULE

A MO-S-9.1 — 51350001-1

BEAM SIZE	NO. & DIA. A325-N BOLTS	SHR PL "T"	w
C8 & C10	2 - 7/8"Ø	1/4"	3/16
W8 & W10	2 - 7/8"Ø	1/4"	3/16
W12, W14, I12	3 - 7/8"Ø	1/4"	3/16
W16	4 - 7/8"Ø	3/8"	5/16
W18	5 - 7/8"Ø	3/8"	5/16
W21	5 - 1"Ø	1/2"	3/8
W24	6 - 1"Ø	1/2"	3/8
W27	7 - 1"Ø	1/2"	3/8
W30	8 - 1"Ø	1/2"	3/8
W33	9 - 1"Ø [2]	1/2"	3/8
W36	10 - 1"Ø [2]	1/2"	3/8
W40	11 - 1"Ø [2]	1/2"	7/16

1. THIS SCHEDULE APPLIES TO NON-FRAME CONNECTIONS, TYPICAL.
2. SHEAR E WITH HORIZONTAL SHORT-SLOTTED HOLES.

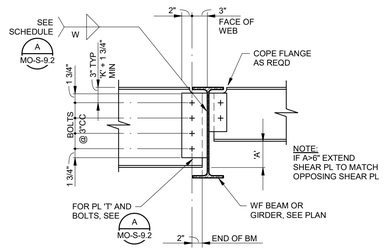




NOTE:
CONTRACTOR MAY USE HORIZONTAL SHORT SLOTTED HOLES FOR THESE CONNECTIONS ONLY. THE SHORT SLOTTED HOLES SHALL BE IN THE SHEAR PL WITH HARDENED WASHERS PROVIDED OVER THE SLOTS. TYPE 'N' BEARING CONNECTIONS SHALL BE USED.

DETAIL 1 MO-S-9.1

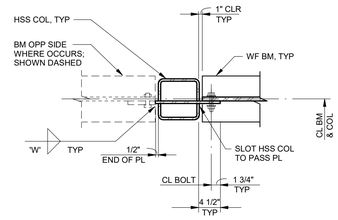
51302D002-12
BEAM TO BEAM ONE SIDE



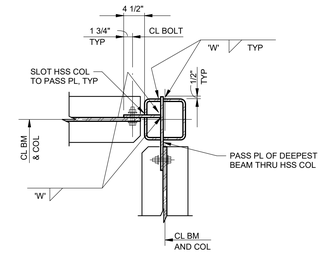
NOTE: CONTRACTOR MAY USE HORIZONTAL SHORT SLOTTED HOLES FOR THESE CONNECTIONS ONLY. THE SHORT SLOTTED HOLES SHALL BE IN THE SHEAR PL WITH HARDENED WASHERS PROVIDED OVER THE SLOTS. TYPE 'N' BEARING CONNECTIONS SHALL BE USED UNO ON THE DRAWINGS.

DETAIL 2 MO-S-9.1

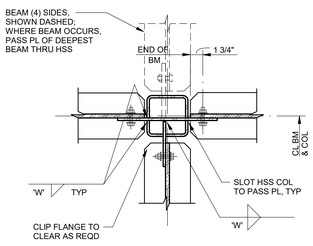
51302D002-12
BEAM TO BEAM TWO SIDES



BEAM ONE OR TWO OPPOSITE SIDES

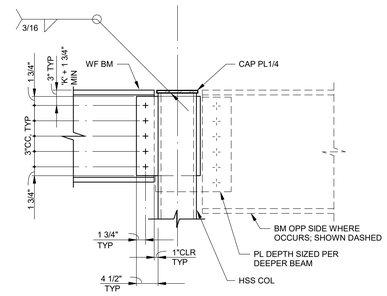


BEAM TWO SIDES

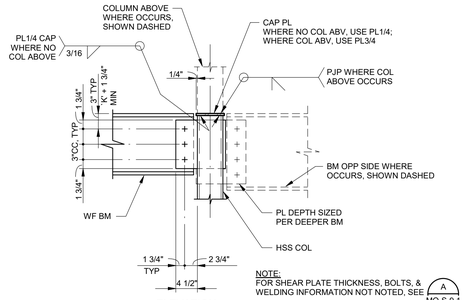


BEAM THREE OR FOUR SIDES

NOTE:
FOR SHEAR PLATE THICKNESS, BOLTS, & WELDING INFORMATION NOT NOTED, SEE A MO-S-9.1



ELEVATION

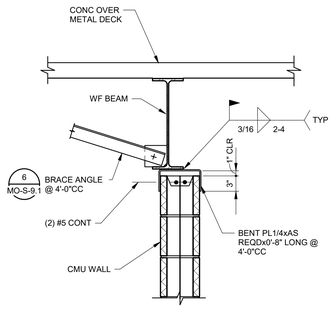


NOTE:
FOR SHEAR PLATE THICKNESS, BOLTS, & WELDING INFORMATION NOT NOTED, SEE A MO-S-9.1

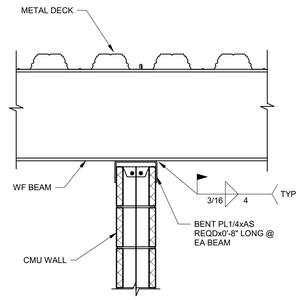
ELEVATION

DETAIL 4 MO-S-9.1

51350012



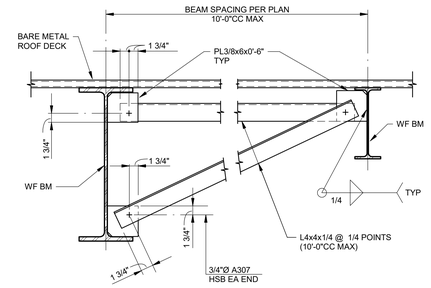
BEAM PARALLEL TO WALL



BEAM PERPENDICULAR TO WALL

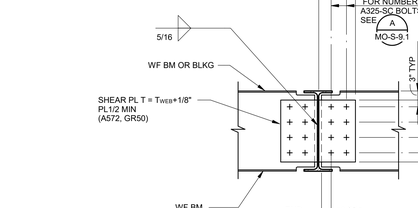
NON-BEARING CMU PARTITION 5 MO-S-9.1

41650202



DETAIL 6 MO-S-9.1

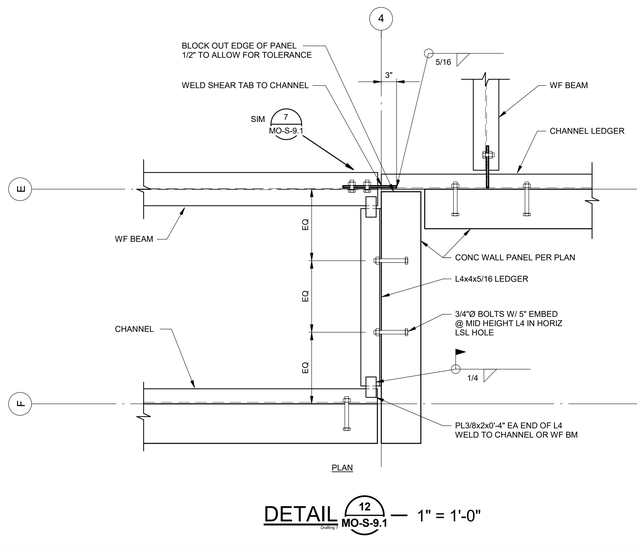
51350D011



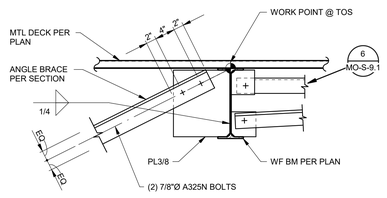
NOTE: SIMILAR CONDITION AT SINGLE ROW SC SEISMIC CONNECTION WHERE INDICATED ON PLAN BY ●

DETAIL 7 MO-S-9.1

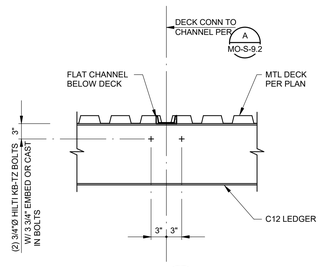
51350D013
SEISMIC TIE @ WF BM



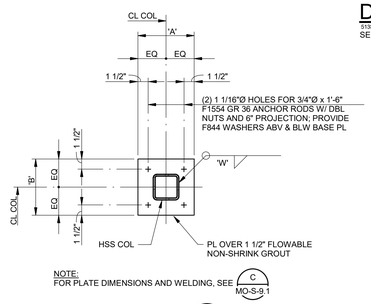
DETAIL 8 MO-S-9.1 — 1" = 1'-0"



DETAIL 9 MO-S-9.1 — 1" = 1'-0"



DETAIL 10 MO-S-9.1 — 1" = 1'-0"



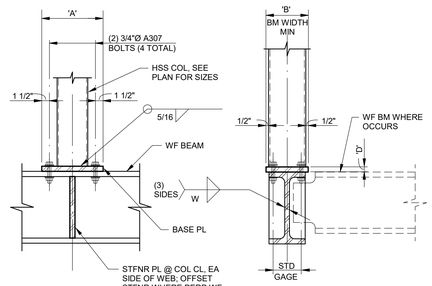
NOTE:
FOR PLATE DIMENSIONS AND WELDING, SEE C MO-S-9.1

DETAIL 11 MO-S-9.1

51050002

PLAN

DETAIL 12 MO-S-9.1 — 1" = 1'-0"



NOTES:
1. FOR PLATE DIMENSIONS & WELDING INFORMATION NOT NOTED, SEE B MO-S-9.1

DETAIL 13 MO-S-9.1

HSS ABOVE TO TRANSFER BEAM BELOW
51250D019

5125D021

B MO-S-9.1 CONNECTION SCHEDULE

HSS COLUMN SIZE	STFNR PL THICKNESS[1] 'T'	'W'	BASE OR CAP PL PER DETAIL			
			'A'	'B'[2]	'C'	THICKNESS 'D'
3x3	1/4	3/16	11"	4"	7 1/2"	1/2
4x4	1/4	1/4	12"	5"	8 1/2"	5/8
5x5	3/8	1/4	13"	6"	9 1/2"	3/4
6x6	3/8	1/4	14"	7"	10 1/2"	3/4
7x7	1/2	1/4	15"	8"	11 1/2"	3/4
8x8	3/4	5/16	15"	9"	12 1/2"	7/8
10x10	3/4	5/16	16"	11"	14 1/2"	1

NOTES:
1. USE PL 'T' FOR LARGEST HSS COLUMN AT CONNECTION
2. 'B' INDICATES THE MINIMUM WIDTH. USE THE GREATER WIDTH OF THE BEAM FLANGE OR THE MINIMUM INDICATED.
3. FOR ADDITIONAL REQUIREMENTS WHERE BEAM FRAMES INTO COLUMN AT WEB STFNR PL, SEE 4 MO-S-9.1 13 MO-S-9.1

C MO-S-9.1 BASE PLATE SCHEDULE

51050001

COLUMN SIZE	BASE PLATE DIMENSIONS						
	'T'	'A'	'B'	'C'	'D'	'E'	CAPACITY
3x3	5/8	9	0'-9"	3 1/2"	2"	7"	-
4x4	5/8	10	0'-10"	5"	2 1/2"	7 1/2"	-
5x5	1	11	0'-11"	5 1/2"	3"	8"	-
6x6	1	12	1'-0"	7"	3 1/2"	8 1/2"	-
7x7	1 1/4	13	1'-1"	8"	4"	9"	-
8x8	1 1/4	14	1'-2"	9"	4 1/2"	9 1/2"	-
10x10	1 1/2	16	1'-4"	11"	5 1/2"	10 1/2"	-
12x12	1 1/2	18	1'-6"	13"	6 1/2"	11 1/2"	-

NOTES:
1. WELD 'W' SHALL BE 1/4 AT BASE PLATES 3/4 AND LESS, 5/16 AT BASE PLATES GREATER THAN 3/4.

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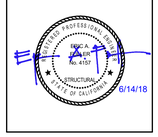
REGISTRANT SEAL



EL DORADO PUBLIC SAFETY FACILITY
MORGUE
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

PROJECT NO.: 2017.033
DATE: 06-18-2018
DESIGNED BY: RJM
DRAWN BY: PVB
APPROVED BY:

SHEET TITLE:
STEEL DETAILS

SHEET NUMBER:
MO-S-9.1

Buehler & Buehler Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
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Los Angeles · Silicon Valley

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530SD001

(A / MO-S-9.2) DECK FASTENING SCHEDULE

DECK TYPE	DEPTH & GAUGE	PERPENDICULAR SUPPORTS	PARALLEL SUPPORTS	SIDE LAPS	DIAPHRAGM SHEAR CAPACITY
DGB-36 ROOF DECK	1 1/2" x 18GA	(4) SP PER SHEET (TYP ALL SUPPORTS)	SP @ 12" CC	DG @ 48"CC	0.691 KLF (ASD) (9'-0" MAX SPAN)

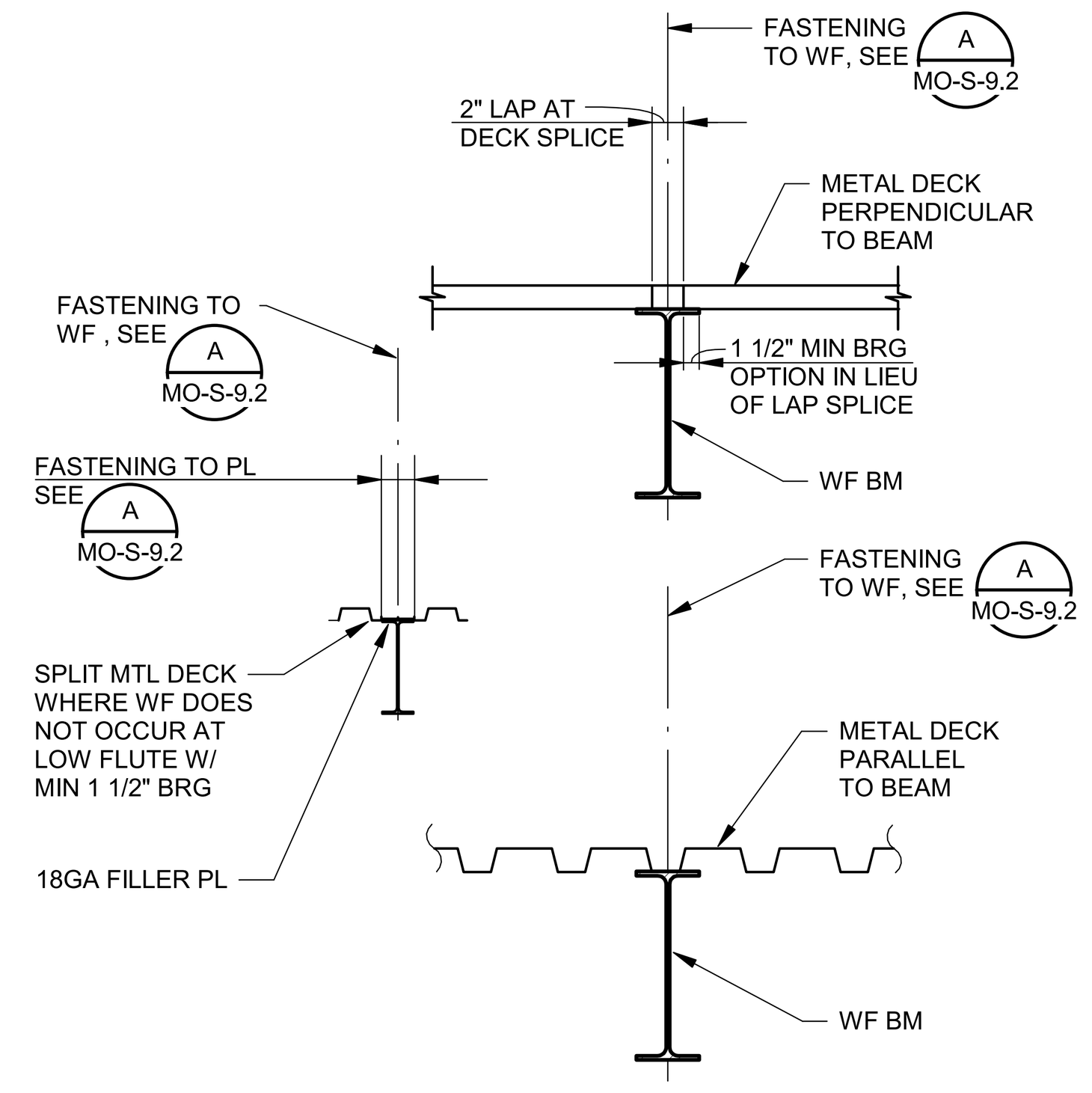
NOTES:

1. DG - DELTA GRIP SIDE SEAM ATTACHMENT;SP = SHOT PINS (HILTI X-ENP-19)
2. METAL DECK SHALL BE ASC OR APPROVED EQUAL, OF TYPE AND GAUGE SHOWN ON PLANS AND FASTENED AS SHOWN ABOVE.
3. SEE B / MO-S-9.2 FOR TYPICAL FASTENER PATTERNS
4. FOR METAL DECK FASTENING AT STRUCT STEEL SUPPORTS, SEE 1 / MO-S-9.2
5. ALL METAL DECK SHALL HAVE TWO SPANS MINIMUM.
6. PROVIDE SHORING AS REQUIRED AT ALL DECKS PER MFR RECOMMENDATIONS.

530SD002

(B / MO-S-9.2) METAL DECK WELD PATTERNS

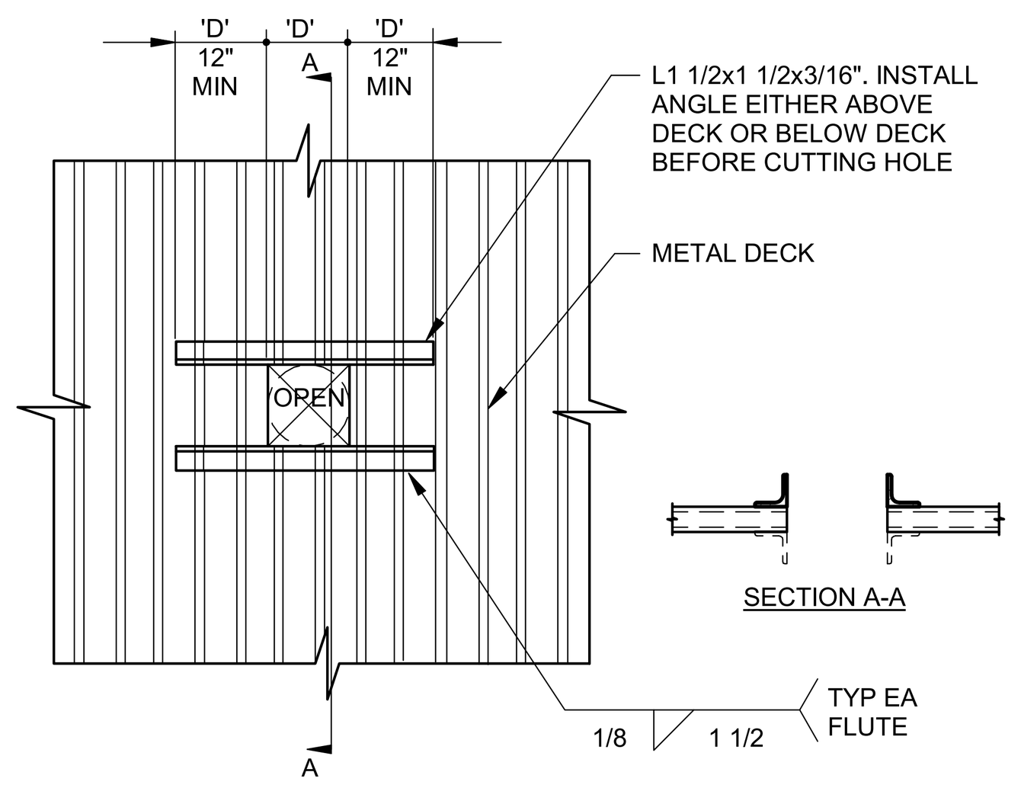
DECK TYPE	PROFILE	NO. 15/16"Ø PW PER SHEET
TYPE DGB-36	36"	4 SP



NOTES:

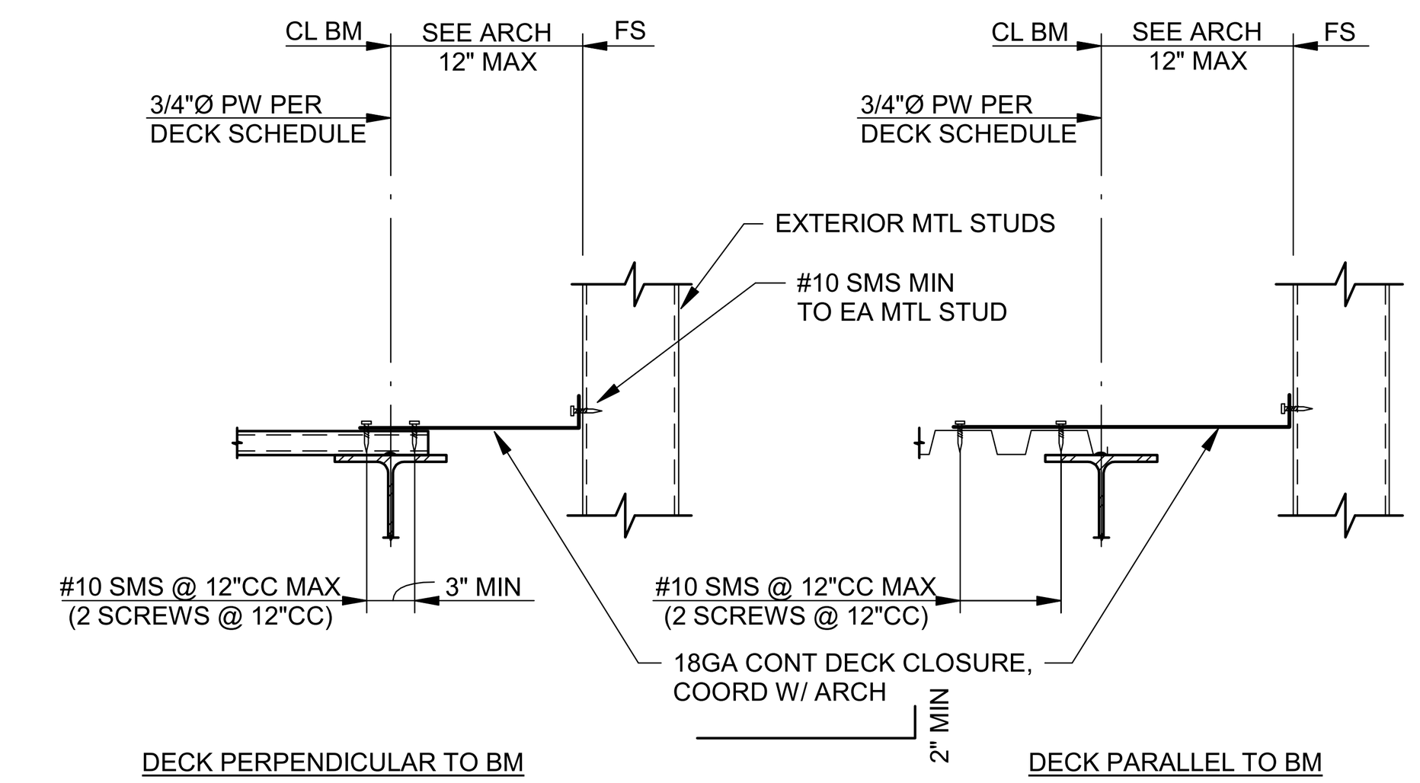
1. PROVIDE (2) ROWS OF PW AT ALL DRAG LINES, SHOWN ON PLAN AS BEAMS W/ SPECIAL END CONNECTIONS (∘, ∘∘, ◇, ◇◇, ▷)

DETAIL 1 / MO-S-9.2
530SD003
METAL DECK W/O CONC TO WF BEAMS

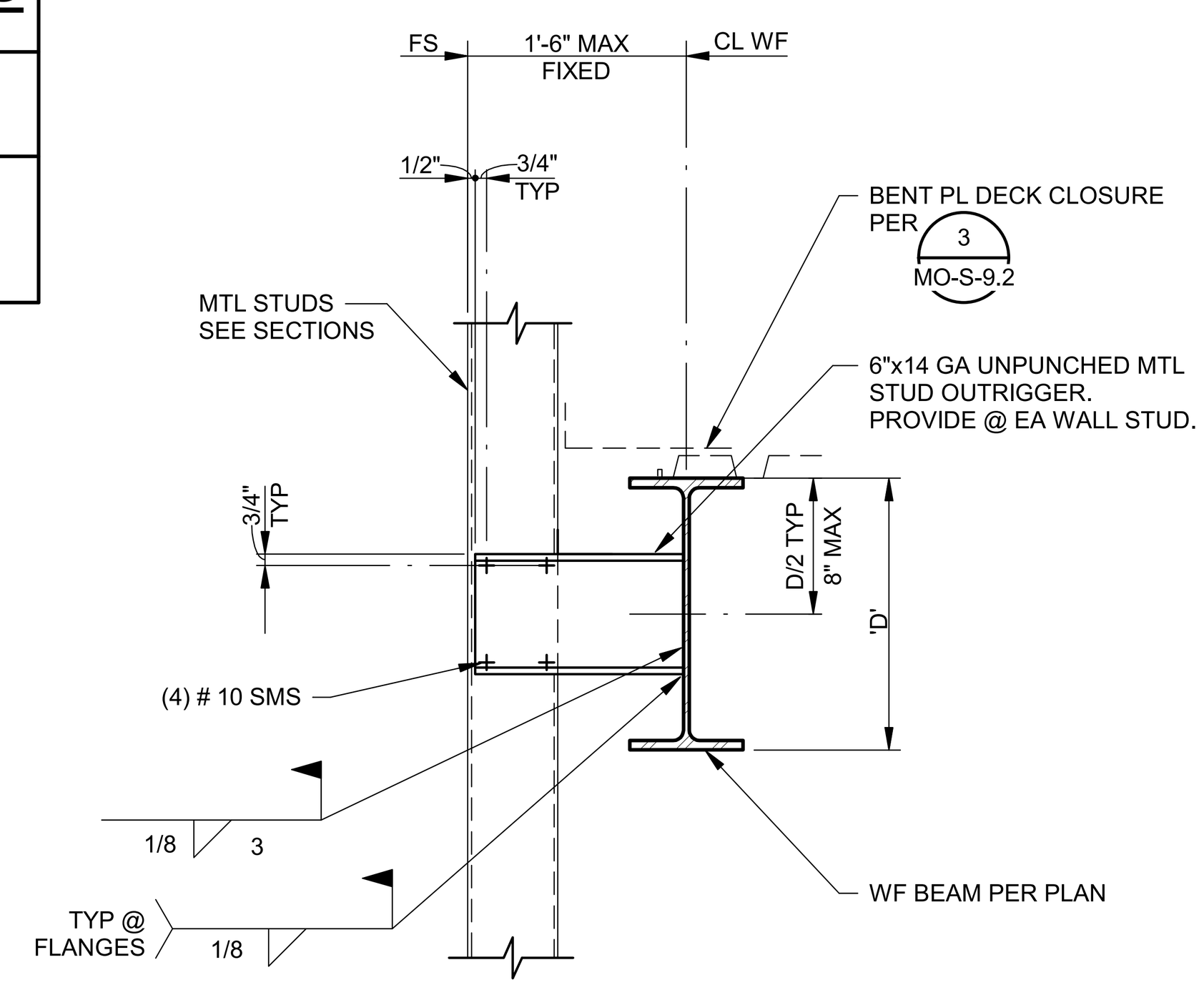


NOTE: APPLIES AT HOLES FROM 6" TO 24" WIDE IN METAL DECK WITHOUT CONCRETE

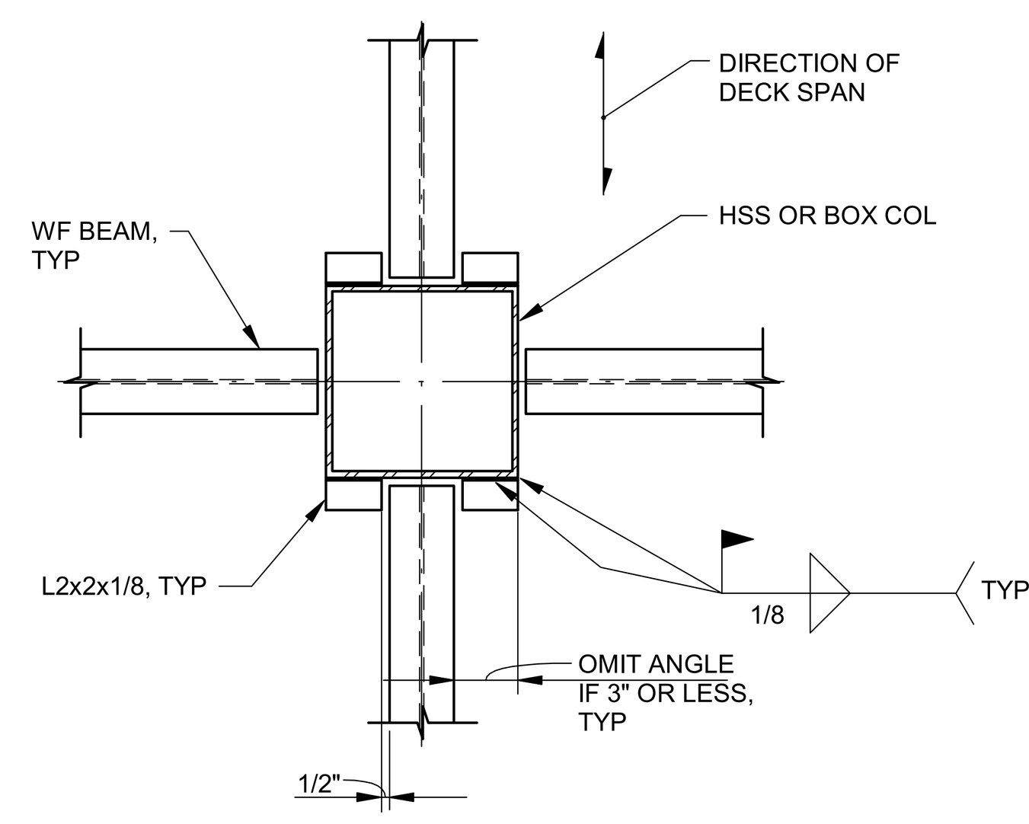
DETAIL 2 / MO-S-9.2
531SD003-12



DETAIL 3 / MO-S-9.2
TYPICAL EDGE AT DECK W/O CONC FILL
541SD007



DETAIL 4 / MO-S-9.2
541SD003-12



DETAIL 5 / MO-S-9.2
530SD006

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REGISTERED PROFESSIONAL ENGINEER
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STRUCTURAL
STATE OF CALIFORNIA
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6/14/18

EL DORADO PUBLIC SAFETY FACILITY
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SHEET NUMBER:
MO-S-9.2