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

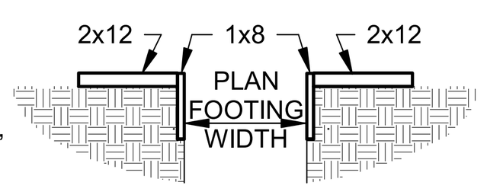
DESIGN CRITERIA
100SN002-1

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
   MEZZ LIVE LOAD = 50 PSF
   CORRIDORS = 100 PSF
   LIVE LOADS ARE REDUCED WHERE PERMITTED BY CODE.
3. SOILS VALUES
   ALLOWABLE SOILS PRESSURE
   a. DL 2000 PSF
   b. DL + LL 2000 PSF
   A. DL + LL + SEISMIC 2666 PSF
   FOOTING
   MINIMUM DEPTH = 18"
   MINIMUM WIDTH = 24"

LATERAL LOADS
SEISMIC:
SITE CLASS C C_S = BY MBM
S_S = 0.461; S_{DS} = 0.368
S_1 = 0.227; S_{D1} = 0.238
R = BY MBM ; I_E = 1.0
Ω_O = BY MBM; C_D = BY MBM
I_P = 1.0 TYPICAL
I_P = 1.5 PER ASCE 7-10 SECT 13.1.3
RISK CATEGORY: II
SEISMIC DESIGN CATEGORY: BY MBM
SEISMIC BASE SHEAR
= BY MBM KIPS (NS DIR.)
= BY MBM KIPS (EW DIR.)
SEISMIC FORCE RESISTING SYSTEM:
BY MBM
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 GROUPDATED AUGUST 18, 2016.
2. FOUNDATIONS SHALL BEAR ON ENGINEERED FILL. SEE NOTES AND DETAILS ON SHEET EV-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	3000 PSI	1-1/2"	NW	0.58
B.	SLAB ON GRADE AND ELEVATED CONC SLAB	3500 PSI	1"	NW	0.45

SITE AND MISCELLANEOUS - SEE CIVIL OR ARCH'L DRAWINGS

* W/CM = WATER : CEMENTITIOUS MATERIAL RATIO

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

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.

DEFERRED APPROVALS
100SN007-1

1. THE FOLLOWING ITEMS REQUIRE DEFERRED APPROVAL FROM THE ENFORCEMENT AGENCY:
   A. FIRE SPRINKLER SUPPORT
   B. EQUIPMENT STRUCTURAL ANCHORAGE
   C. PREFABRICATED METAL BUILDING
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.

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. INTERMEDIATE HORIZONTAL REINFORCING SHALL BE AS NOTED IN 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 ONE #5 HORIZONTAL BAR 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"

TYPICAL PREFABRICATED METAL BUILDING NOTES
500SN002-1

1. DESIGN AND FABRICATION SHALL CONFORM TO THE 2010 CALIFORNIA BUILDING CODE (CBC), AND THE LATEST EDITIONS OF AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL BUILDINGS", AND AISC "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
2. METAL BUILDING MANUFACTURER (MBM) SHALL BE IAS AC472 ACCREDITED.
3. DRAWINGS, CALCULATIONS AND ENGINEERING DATA ON STRUCTURAL SECTIONS FOR ALL COMPONENTS SHALL BE SUBMITTED TO THE ARCHITECT AND/OR STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SEE SPECIFICATIONS SECTION 13-34-19 FOR LOADING INFORMATION.
4. DRAWINGS AND CALCULATIONS SHALL BE SIGNED BY A CIVIL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. THE MBM'S ENGINEER IS THE ENGINEER OF RECORD (EOR) FOR THE SUPERSTRUCTURE, I.E. ALL BUILDING ELEMENTS ABOVE THE SLAB ON GRADE.
5. THE MBM SHALL PROVIDE PLAN DRAWING SHOWING COLUMN LOCATIONS AND ANCHOR BOLT LOCATIONS PRIOR TO FABRICATION. ANCHOR BOLT SIZES, NUMBERS, AND LOCATIONS ARE TO BE DESIGNED AND DETAILED BY THE MBM. THE MBM SHALL FURNISH REQUIRED ANCHOR BOLTS AND SETTING TEMPLATES.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND MBM COLUMN LAYOUT PRIOR TO FOUNDATION CONSTRUCTION.
7. ALL HARDWARE REQUIRED FOR CONNECTING BUILDING COMPONENTS SHALL BE DESIGNED, DETAILED AND PROVIDED BY THE MBM.
8. CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AS REQUIRED.
9. THE MBM SHALL ACCOUNT FOR THE WEIGHT OF ALL MECHANICAL EQUIPMENT IN THE DESIGN OF ALL BUILDING COMPONENTS WHICH SUPPORT SUCH UNITS.
10. THE MBM IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL ROOF AND WALL PENETRATIONS
11. FOUNDATION DESIGN IS BASED ON PRELIMINARY EVALUATION OF METAL BUILDING REACTIONS. FINAL BUILDING REACTIONS ARE TO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR VALIDATION OF FOUNDATIONS PRIOR TO CONSTRUCTION.

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.

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.

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
REGISTERED PROFESSIONAL ENGINEER
ERIC A. FULLER
No. 4157
STRUCTURAL
STATE OF CALIFORNIA
6/14/18

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

EL DORADO COUNTY CALIFORNIA

NO.	REVISION	DATE

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

SHEET TITLE:
GENERAL NOTES

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SHEET NUMBER:
EV-S-0.1

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
13. FOR SPECIAL INSPECTIONS AND TESTING OF PRE-ENGINEERED METAL BUILDING, SEE DOCUMENTATION OF BUILDING SUPPLIER.

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

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.

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

C/S BROWARD builders

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REGISTRANT SEAL

REGISTERED PROFESSIONAL ENGINEER
ERIC A. FULLER
No. 4157
STRUCTURAL
STATE OF CALIFORNIA

[illegible]
6/14/18

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

EL DORADO COUNTY
CALIFORNIA

NO.	REVISION	DATE

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

SHEET TITLE:
STRUCTURAL SPECIAL INSPECTIONS & TESTING

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Structural Engineers, Inc.
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Sacramento . Phoenix . San Francisco
Los Angeles . Silicon Valley

SHEET NUMBER:
EV-S-0.2

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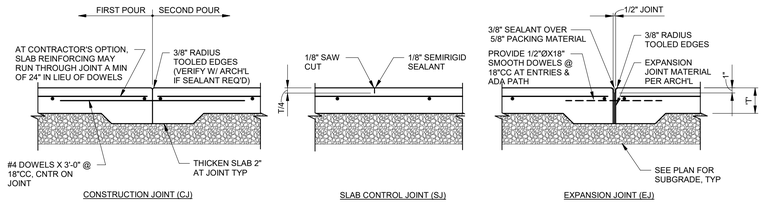
TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

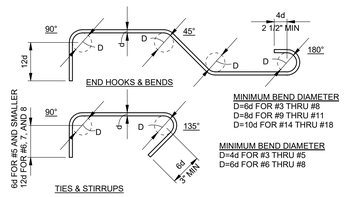


CONSTRUCTION JOINT (CJ) | SLAB CONTROL JOINT (SJ) | EXPANSION JOINT (EJ)

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 EV-S-0.3)

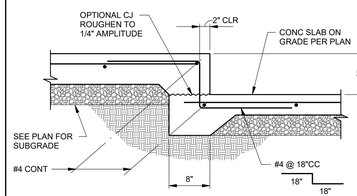
310SD001-12



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

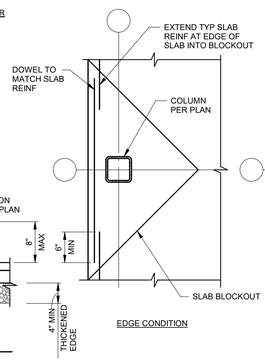
STANDARD REBAR HOOKS AND BENDS (6 EV-S-0.3)

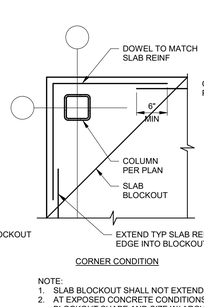
300SD001-12

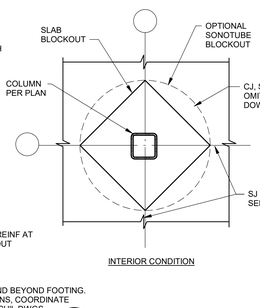


STEP IN SLAB (11 EV-S-0.3)

310SD003-12



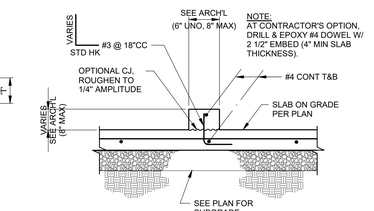




NOTE:
1. SLAB BLOCKOUT SHALL NOT EXTEND BEYOND FOOTING.
2. AT EXPOSED CONCRETE CONDITIONS, COORDINATE BLOCKOUT SHAPE AND SIZE W/ ARCH'L DWGS.

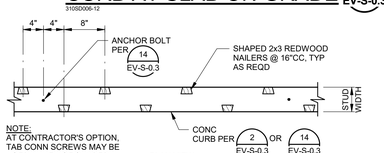
SLAB BLOCKOUT (7 EV-S-0.3)

310SD002-12



CURB AT SLAB ON GRADE (2 EV-S-0.3)

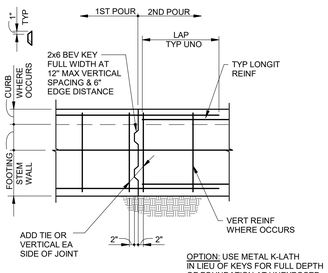
310SD006-12



NOTE: AT CONTRACTOR'S OPTION, TAB CONN SCREWS MAY BE USED IN LIEU OF SHAPED 2x3 REDWOOD NAILERS.

NAILERS IN CONCRETE CURB (3 EV-S-0.3)

310SD009-12

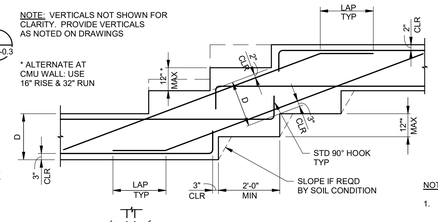


OPTION: USE METAL K-LATH IN LIEU OF KEYS FOR FULL DEPTH OF FOUNDATION AT UNEXPOSED FOUNDATIONS ONLY.

TYPICAL FOUNDATION CONSTRUCTION JOINT (4 EV-S-0.3)

200SD010-24

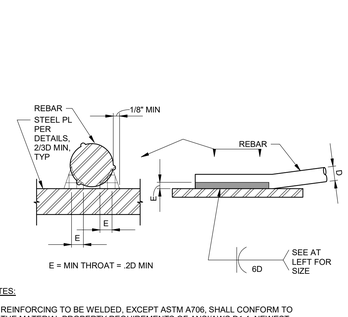
NOTE: VERTICALS NOT SHOWN FOR CLARITY. PROVIDE VERTICALS AS NOTED ON DRAWINGS



INDICATED ON FOUNDATION PLAN BY:

TYPICAL FOOTING STEP (8 EV-S-0.3)

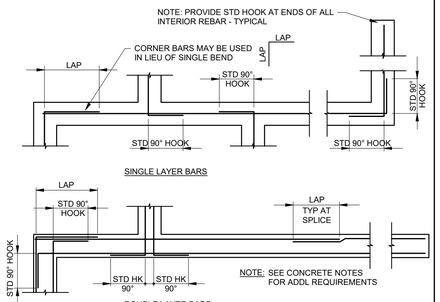
200SD016-32



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 EV-S-0.3)

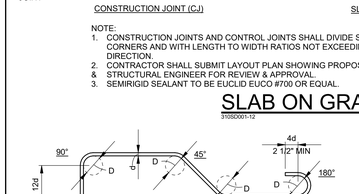
300SD002-32



NOTE: SEE CONCRETE NOTES FOR ADDL REQUIREMENTS

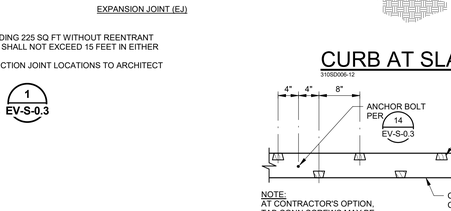
CORNER REINFORCING AT CONCRETE FTGS (10 EV-S-0.3)

200SD011-32



HOUSEKEEPING PAD AT SLAB ON GRADE (12 EV-S-0.3)

310SD005

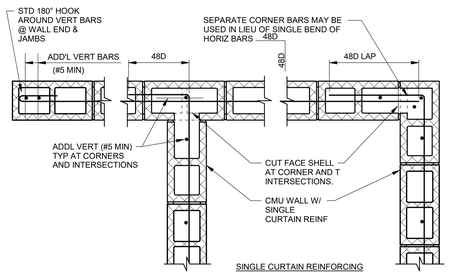


ENGINEERED FILL SECTION (13 EV-S-0.3)

200SD001-32

CURB AT SLAB DEPRESSION (14 EV-S-0.3)

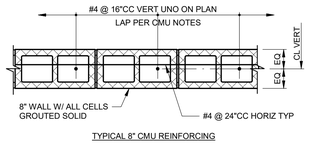
310SD007



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 EV-S-0.3

TYPICAL BLOCK WALL REINFORCING AT CORNERS AND INTERSECTIONS (16 EV-S-0.3)

411SD007-12

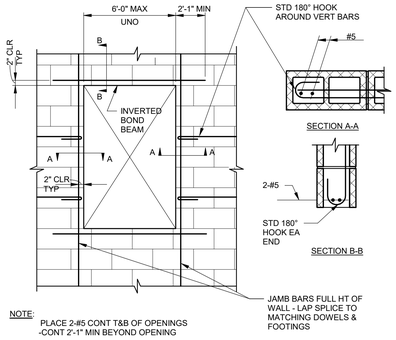


TYPICAL 8" CMU REINFORCING

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

TYPICAL CMU WALL REINFORCING (17 EV-S-0.3)

411SD003

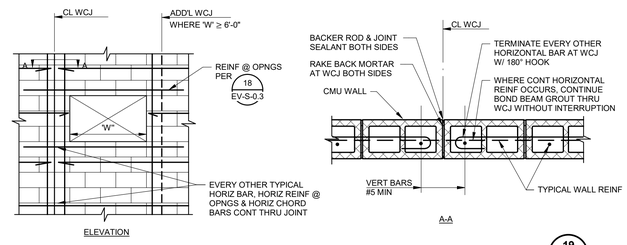


NOTE: PLACE 2-#5 CONT T&B OF OPENINGS -CONT 2'-1" MIN BEYOND OPENING

OPENING REINFORCING AT CMU WALL OPENING (18 EV-S-0.3)

411SD001-12

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.



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

411SD009

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REGISTRANT SEAL

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

NO.	REVISION	DATE

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

SHEET TITLE:
TYPICAL DETAILS

SHEET NUMBER:
EV-S-0.3

18-0936 C 3 of 8

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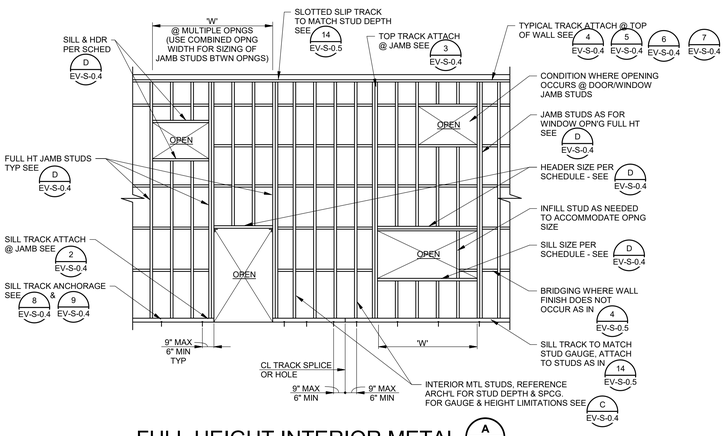
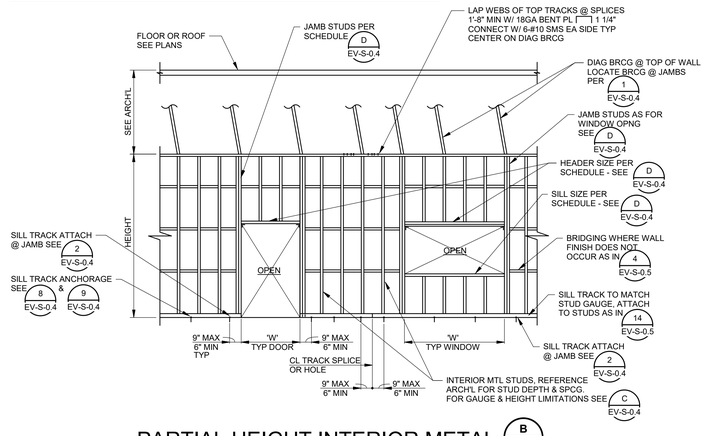
TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



FULL HEIGHT INTERIOR METAL STUD WALL ELEVATION — A EV-S-0.4

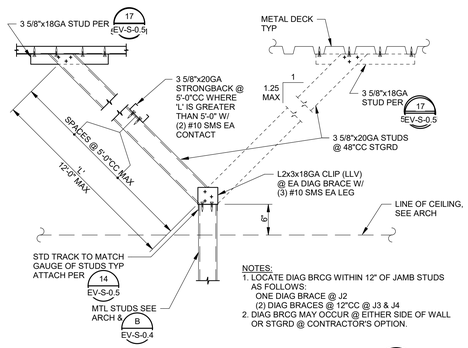
5425D011-48



PARTIAL HEIGHT INTERIOR METAL STUD WALL ELEVATION — B EV-S-0.4

5425D012-48

PARALLEL CONDITION

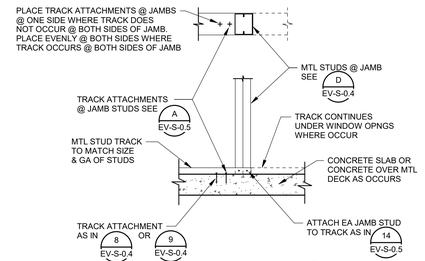


PERPENDICULAR CONDITION

NOTES:
1. LOCATE DIAG BRCG WITHIN 12" OF JAMB STUDS AS FOLLOWS:
   ONE DIAG BRACE @ J2
   (2) DIAG BRACES @ 12"CC @ J3 & J4
2. DIAG BRCG MAY OCCUR @ EITHER SIDE OF WALL OR STGRD @ CONTRACTOR'S OPTION.

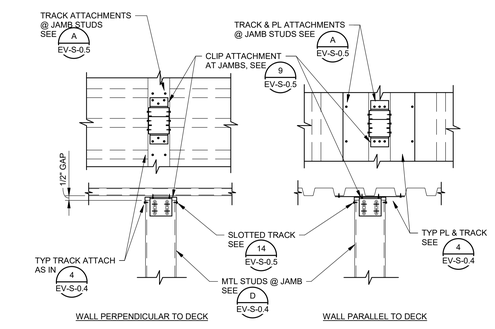
TYPICAL PARTIAL HEIGHT PARTITION WALL BRACING — 1 EV-S-0.4

5425D001



JAMB STUDS @ SILL TRACK — 2 EV-S-0.4

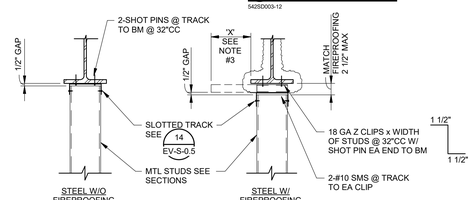
5425D002-12



WALL PERPENDICULAR TO DECK — WALL PARALLEL TO DECK

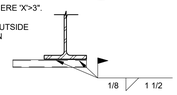
JAMB STUDS @ TOP TRACK — 3 EV-S-0.4

5425D003-12



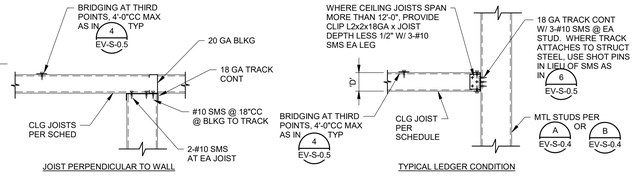
STEEL W/O FIREPROOFING — STEEL W/ FIREPROOFING

NOTES:
1. PROVIDE Z CLIPS AS REQ'D FOR FASTENERS @ JAMB STUDS SEE A EV-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 EV-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 EV-S-0.4

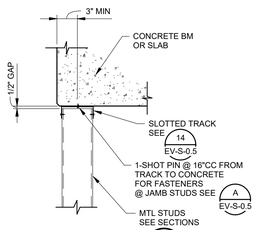
5425D006-12



JOIST PERPENDICULAR TO WALL — TYPICAL LEDGER CONDITION

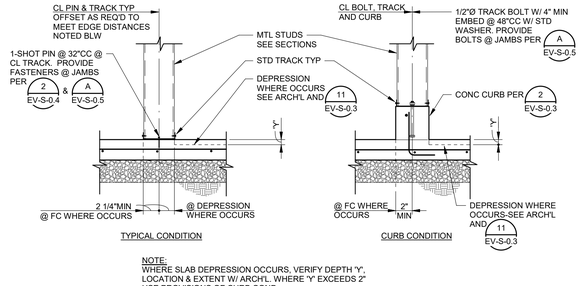
SLIP TRACK TO METAL DECK W/O FIREPROOFING — 4 EV-S-0.4

5425D004-12



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

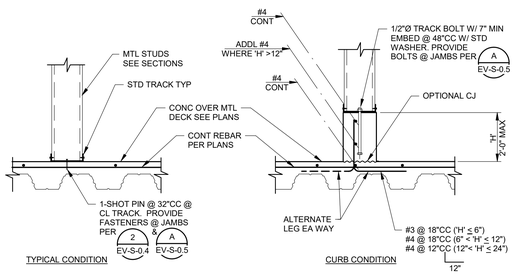
5425D005-12



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 EV-S-0.4

5425D008-12



TYPICAL CONDITION — CURB CONDITION

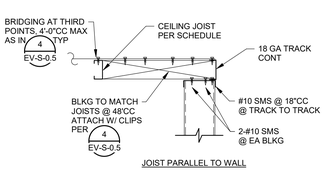
SILL TRACK TO CONCRETE OVER METAL DECK — 9 EV-S-0.4

5425D009-12

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 EV-S-0.5



JOIST PARALLEL TO WALL

TYPICAL FRAMED CEILING DETAILS — 10 EV-S-0.4

5425D010-12

INTERIOR METAL STUD PARTITIONS — C EV-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 EV-S-0.4 & B EV-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 EV-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.

5425D014-1

INTERIOR WALL OPENING FRAMING SCHEDULE — D EV-S-0.4

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 EV-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 EV-S-0.5
13. FOR CONNECTION @ BASE OF WALL AT JAMBS SEE 4 EV-S-0.4
14. FOR CONNECTION @ TOP OF WALL AT JAMBS SEE 3 EV-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.

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REGISTRANT SEAL

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DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

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

SHEET TITLE:
INTERIOR METAL STUD TYPICAL DETAILS

SHEET NUMBER:
EV-S-0.4

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18-0936 C 4 of 8

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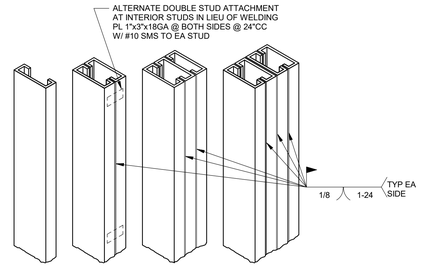
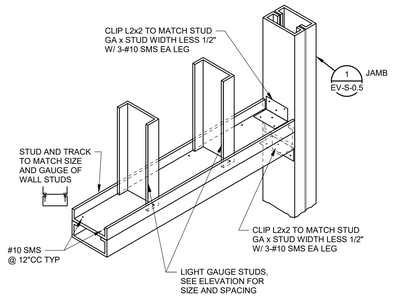
TYPICAL DETAILS

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



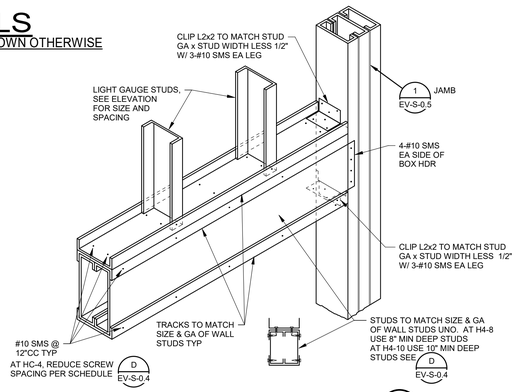
JAMB DETAIL 1 EV-S-0.5

5405D001-12



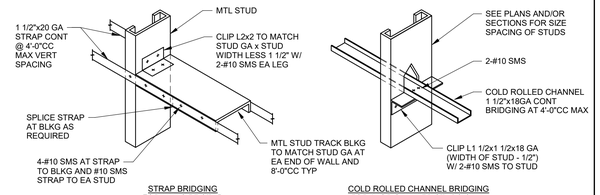
H2 HEADER DETAIL 2 EV-S-0.5

5405D002-12



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

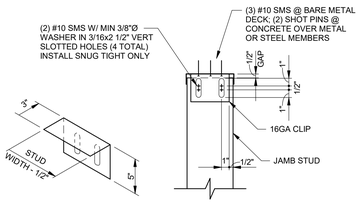
5405D003-12



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 EV-S-0.5

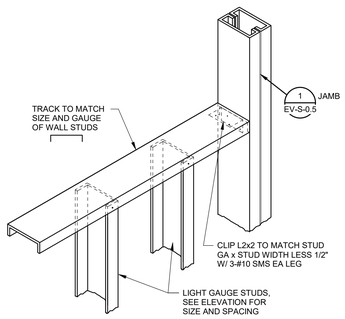
5405D004-12



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.

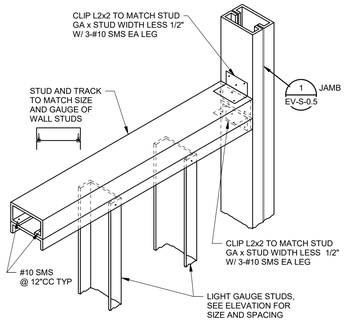
JAMB STUD CLIP ATTACHMENT AT SLIP TRACK 9 EV-S-0.5

5425D049



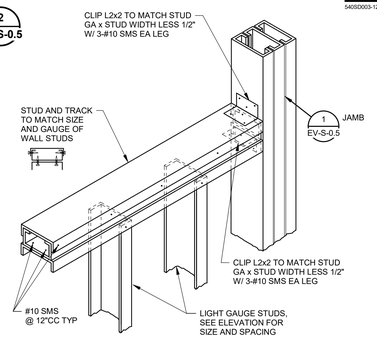
S1 SILL DETAIL 5 EV-S-0.5

5405D005-12



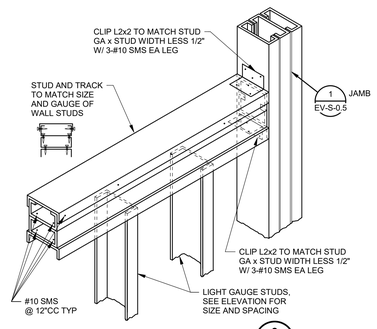
S2 SILL DETAIL 6 EV-S-0.5

5405D006-12



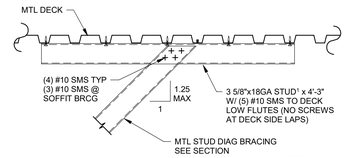
S3 SILL DETAIL 7 EV-S-0.5

5405D007-12



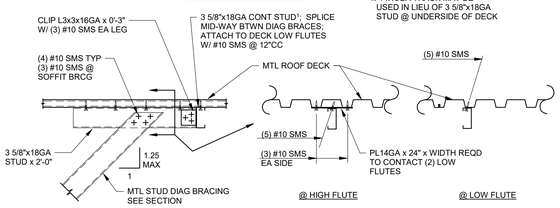
S4 SILL DETAIL 8 EV-S-0.5

5405D008-12



PERPENDICULAR TO FLUTES

NOTE:
1. 4"x18GA TRACK MAY BE USED IN LIEU OF 3 5/8"x18GA STUD @ UNDERSIDE OF DECK



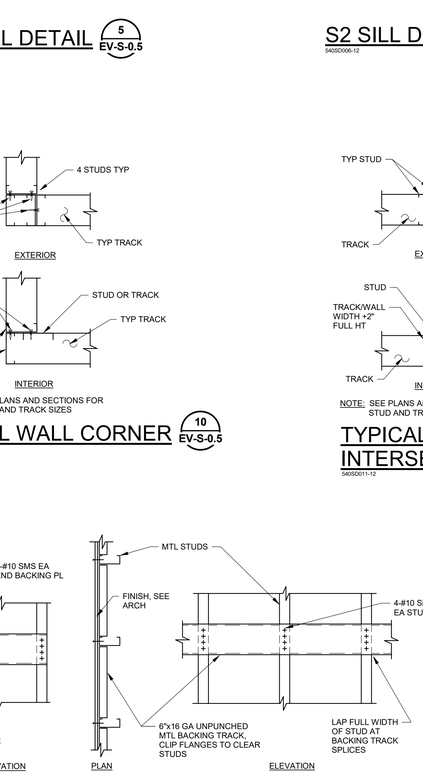
@ HIGH FLUTE @ LOW FLUTE

PARALLEL TO FLUTES

DETAIL 17 EV-S-0.5

5405D001

METAL STUD DIAG BRACING CONNECTIONS @ BARE METAL ROOF DECK CONDITIONS



SINGLE BAY CONDITION CONTINUOUS CONDITION

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.

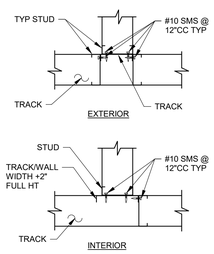
TYPICAL BACKING DETAIL 13 EV-S-0.5

5405D013-12

NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES

TYPICAL WALL CORNER 10 EV-S-0.5

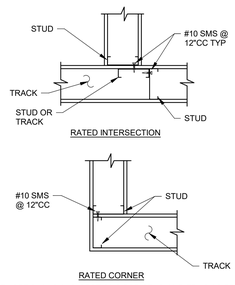
5405D010-12



NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES

TYPICAL TEE INTERSECTION 11 EV-S-0.5

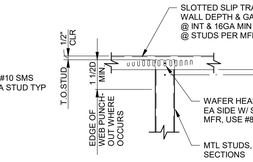
5405D011-12



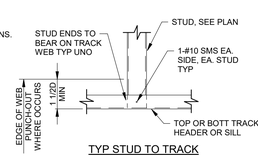
NOTE: SEE PLANS AND SECTIONS FOR STUD AND TRACK SIZES SEE ARCH'L DRAWINGS FOR WALL FINISH CONSTRUCTION

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

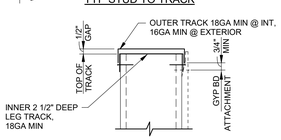
5405D012-12



TYP STUD TO SLIP TRACK



TYP STUD TO TRACK

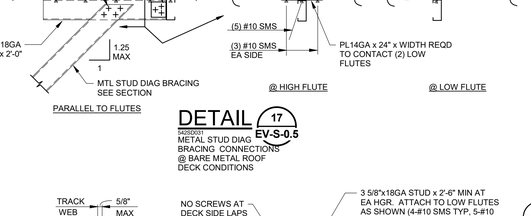


NESTED TRACK ALTERNATE

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 EV-S-0.5

5405D014-12

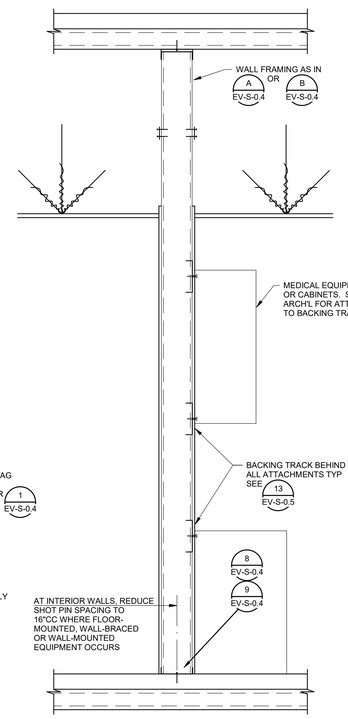


NOTE: FOR COND WHERE SOFFIT HGRS ATTACH TO BOTT OF WF BMS, SEE
6 EV-S-0.4

TYPICAL FRAMED SOFFIT 15 EV-S-0.5

5405D015-12

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 EV-S-0.4 D EV-S-0.4 MAXIMUM OPENING WIDTH = 4'-0"



TYPICAL BACKING DETAILS 16 EV-S-0.5

5405D016-12

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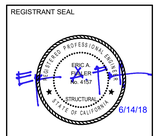

EL DORADO COUNTY PUBLIC SAFETY FACILITY
EVIDENCE BUILDING
200 INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

NO.	REVISION	DATE

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

SHEET TITLE:
METAL STUD TYPICAL DETAILS

SHEET NUMBER:
EV-S-0.5

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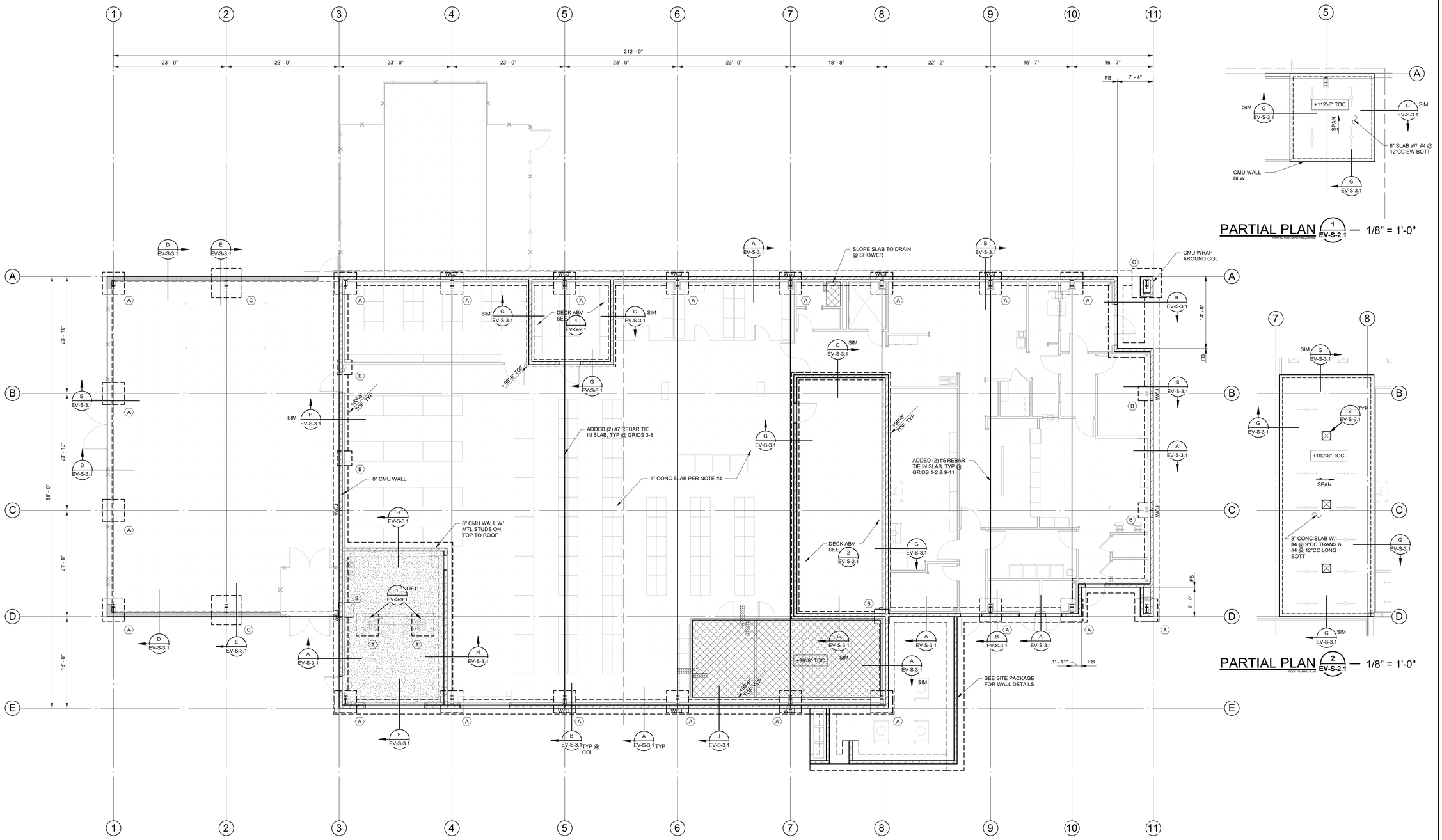
TRACK ATTACHMENT @ JAMB STUDS A EV-S-0.5

5405D017-1

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.



PARTIAL PLAN 1/EV-S-2.1 — 1/8" = 1'-0"

PARTIAL PLAN 2/EV-S-2.1 — 1/8" = 1'-0"

FOUNDATION PLAN — 1/8" = 1'-0"

TOC = +100'-0", UNO
TOF = +98'-8", 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 ENGINEERED FILL 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 FACE OF BLOCK 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 = +1781.50'
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 1/EV-S-0.3 @ ALL INTERIOR SLABS. CONSTRUCTION JOINTS (CJ) MAY REPLACE CONTROL JOINTS AS REQUIRED.
8. SEE SHEETS EV-S-01 THRU EV-S-05 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/EV-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/EV-S-0.3 & 14/EV-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/EV-S-0.3
16. INDICATES 6" CONCRETE SLAB ON GRADE 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 = +1781.50'
17. ALL DEPRESSIONS, SLOPES, CURBS, ETC. ARE SHOWN FOR REFERENCE ONLY. FOR EXACT DEPTHS, SLOPES, EXTENTS, ETC, SEE OTHER DISCIPLINES' DRAWINGS.
18. -98'-8" TOF — INDICATES TOP OF FOOTING ELEVATION WITH RESPECT TO REFERENCE TOP OF CONCRETE (+100'-0") THE BOTTOM OF ALL FOOTINGS SHALL BE AT LEAST 24" BELOW ADJACENT MINIMUM PREPARED BUILDING PAD ELEVATION (ON ALL SIDES), TYP UNO AND AS SHOWN ON SECTIONS.
19. INDICATES SLAB STEP PER 11/EV-S-0.3
20. INDICATES EDGE OF MOISTURE CONDITIONED NATIVE SOIL OR ENGINEERED FILL AROUND ENTIRE FOUNDATION FOOTPRINT. PREPARE PER RECOMMENDATIONS OF SOILS REPORT.
21. +99'-8" — INDICATES TOP OF CONCRETE SLAB ELEVATION RELATIVE TO REFERENCE T.O. CONCRETE +100'-0".
22. INDICATES 8" CMU WALL. FOR REINFORCING, SEE 17/EV-S-0.3 . CONDUITS IN CMU TO BE PER CMU NOTES.
23. WCJ — INDICATES WALL CONTROL JOINT PER 19/EV-S-0.3

FOOTING SCHEDULE

A/EV-S-2.1

Mk	WIDTH	LENGTH	DEPTH	REINFORCING
A	4'-6"	4'-6"	1'-6""	(5)-#4 EW T&B
B	3'-0"	3'-0"	1'-6"	(4) #4 EW BOTT
C	6'-0"	6'-0"	1'-6"	(6) #5 EW T&B

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6/14/18

EL DORADO COUNTY PUBLIC SAFETY FACILITY
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200 INDUSTRIAL DRIVE
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APPROVED BY:

SHEET TITLE:
FOUNDATION PLAN

SHEET NUMBER:
EV-S-2.1

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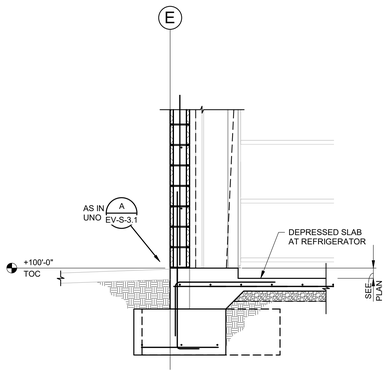
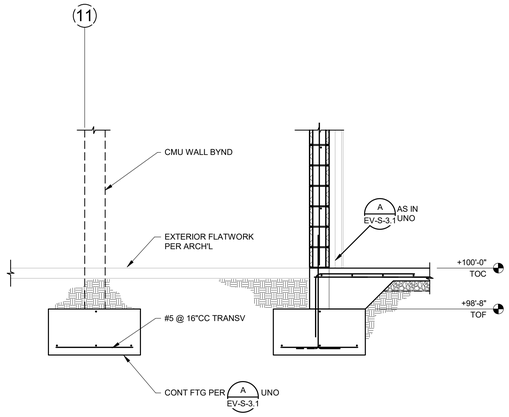
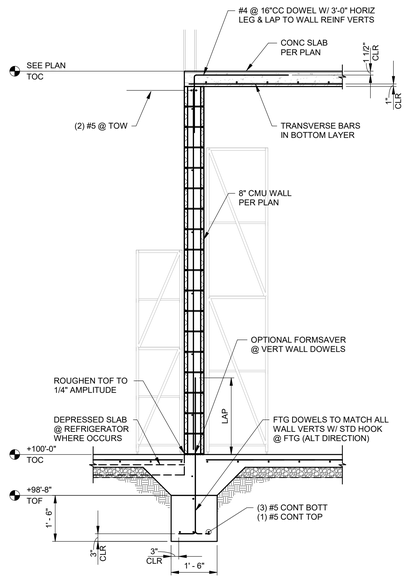


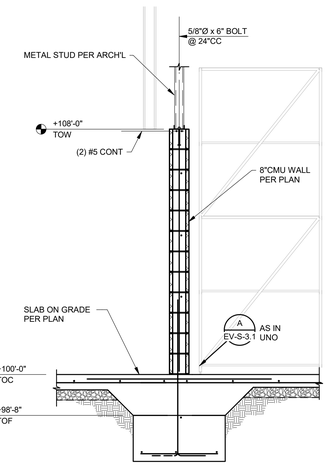
SECTION J EV-S-3.1 — 1/2" = 1'-0"



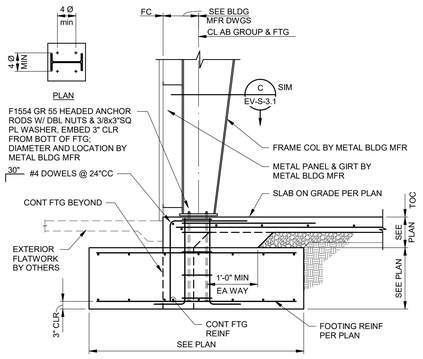
SECTION K EV-S-3.1 — 1/2" = 1'-0"



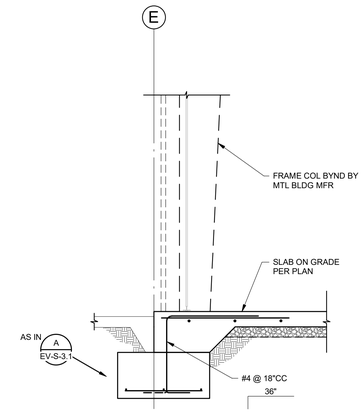
SECTION G EV-S-3.1 — 1/2" = 1'-0"



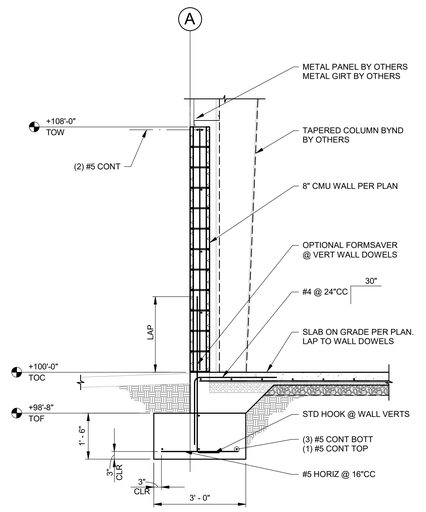
SECTION H EV-S-3.1 — 1/2" = 1'-0"



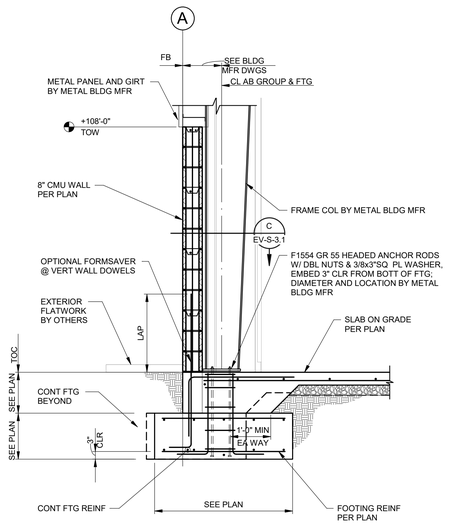
EDGE FRAME COLUMN E EV-S-3.1
2805D002



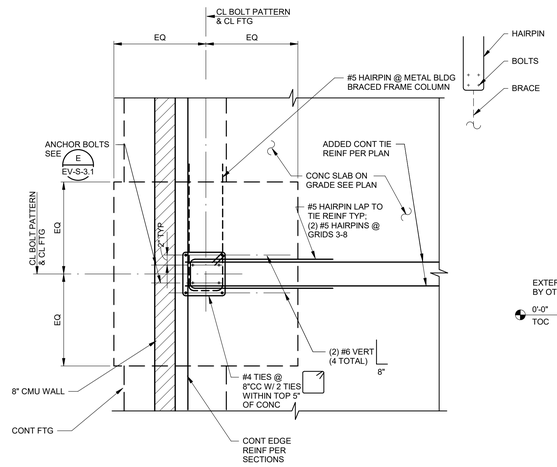
SECTION F EV-S-3.1 — 1/2" = 1'-0"



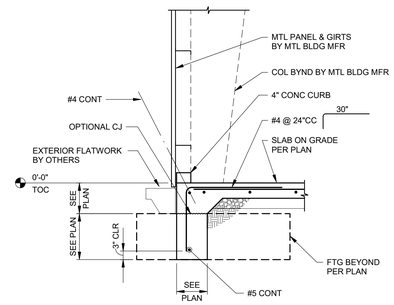
SECTION A EV-S-3.1 — 1/2" = 1'-0"



SECTION B EV-S-3.1 — 1/2" = 1'-0"



EDGE FRAME COLUMN PLAN C EV-S-3.1
2805D003



SLAB EDGE SECTION D EV-S-3.1
2805D001

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SECTIONS

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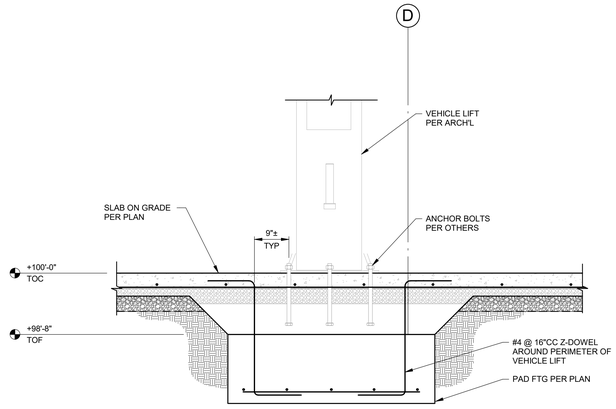
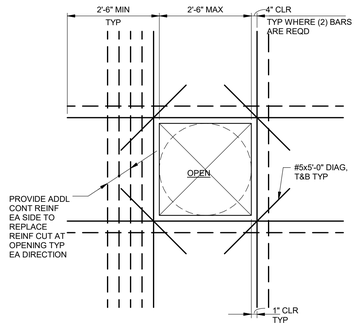


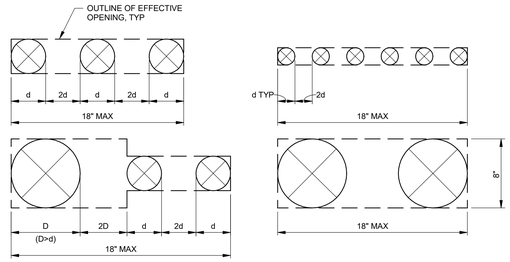
DETAIL 1 EV-S-9.1 — 3/4" = 1'-0"



NOTES:
1. ALL OPENINGS WITH A DIMENSION OF 12" OR GREATER SHALL BE TRIMMED AS SHOWN.
2. THIS REINF IS IN ADDITION TO ANY REINF INDICATED ON THE PLANS.
3. FOR MULTIPLE OPENINGS REINF SEE 3 EV-S-9.1

ADDITIONAL REINFORCING	
MAX DIMENSION	TRIM
< 12"	#4 EA SIDE
12" TO 18"	#5 EA SIDE
18" TO 2'-6"	#5 T&B EA SIDE

DETAIL 2 EV-S-9.1
TYPICAL SLAB OPENING
33000003



NOTES:
1. TYPICAL SLAB REINFORCING SHALL RUN BETWEEN INDIVIDUAL OPENINGS.
2. PLACE ADDITIONAL #5 TOP AND BOTTOM AROUND EFFECTIVE OPENING EXTENDING 2'-0" MIN PAST OPENING. DIAGONAL BARS ARE NOT REQD.
3. WHERE EFFECTIVE LENGTH OF OPENING EXCEEDS 18", REINFORCE PER 2 EV-S-9.1
4. MINIMUM SPACING TO NEXT EFFECTIVE OPENING, EDGE, SLAB OPENING TO BE NO LESS THAN 5'-0".
5. 'D' = ACTUAL SLAB PENETRATION SIZE THRU FLOOR.
6. '2D' SPACING NOTED IS BASED ON THE LARGEST PENETRATION SIZE WITHIN THE EFFECTIVE OPENING.

DETAIL 3 EV-S-9.1
MULTIPLE SLAB OPENINGS
33000004

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