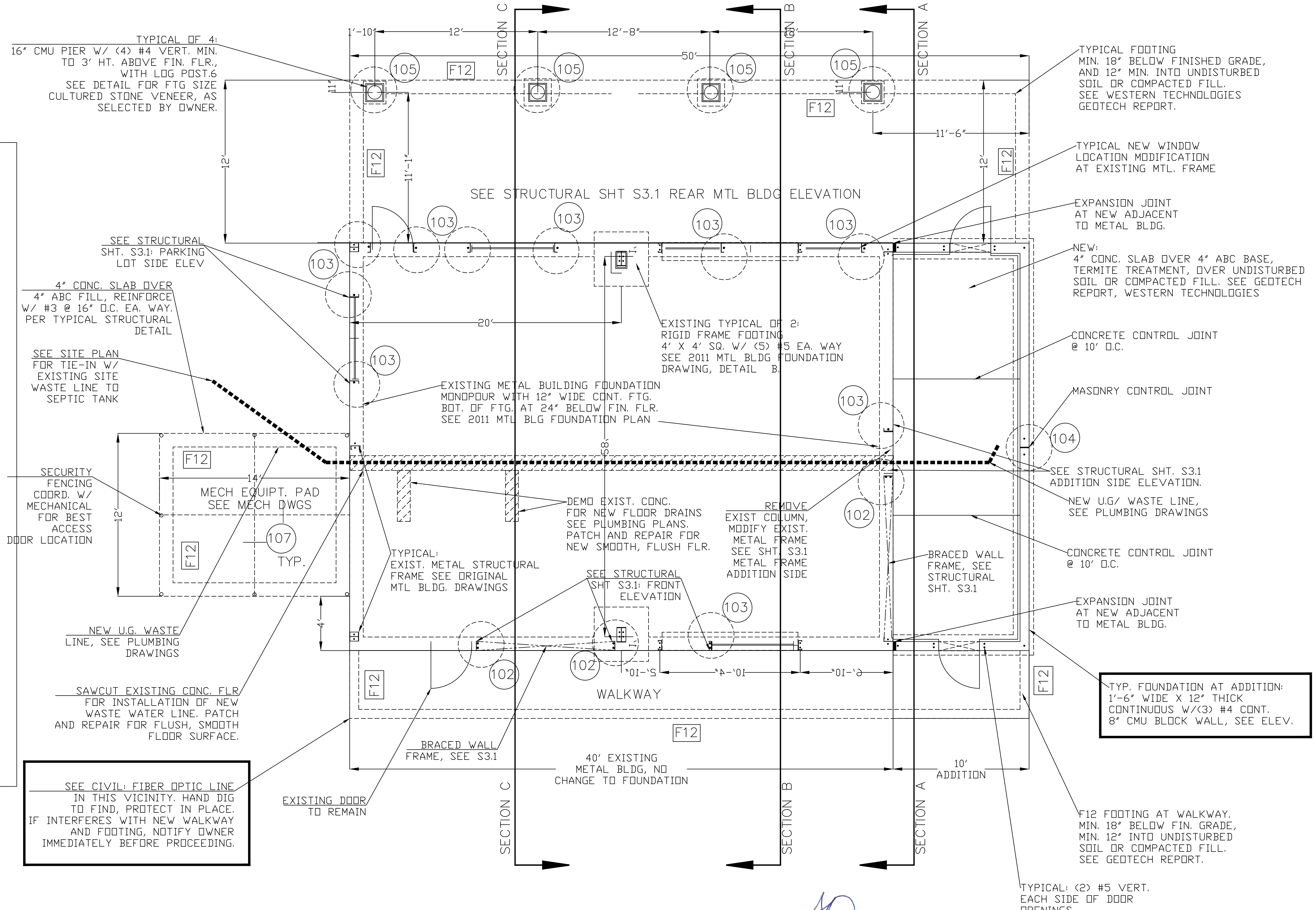


FOUNDATION SCHEDULE

SPREAD FOOTINGS

	SIZE	THK	REBAR
F1	20" X 20"	10"	(2) #4 EA. WAY
F2	24" X 24"	10"	(2) #4 EA. WAY

CONTINUOUS WALL FOOTINGS

F12	12" WIDE CONT.	(2) #4 CONTINUOUS
F16	16" WIDE CONT.	(2) #4 CONTINUOUS
F24	24" WIDE CONT.	(3) #4 CONTINUOUS

NOTES:
ALL FOOTINGS A MINIMUM OF 18" BELOW FINISHED GRADE
AND A MINIMUM 12" INTO UNDISTURBED SOIL OR COMPACTED FILL
SEE WESTERN TECHNOLOGIES GEOTECHNICAL RPT 2122JP123

STEP FOOTINGS AS REQUIRED WITH GRADE.
MIN. 3" CLEAR BETWEEN REBAR AND EARTH
INSTALL UFER, SEE ELECTRICAL ENGINEERING DRAWINGS
PT PLATE ANCHOR BOLTS: 1/2" DIA. X 10", MIN. 7" EMBEDMENT
MAX. 6' O.C., MIN. (2) PER PLATE, MAX 12" FROM BREAKS IN PLATE

CMU WALLS TO 10 HEIGHT
8" CMU W/ #4 VERT AND HORIZ. AT 4' O.C., GROUTED SOLID
BOND BEAMS AT 4', 8' AND TOP OF WALL
SPLIT FACED BLOCK TO 3' A.F.F. , SEE ELEVATIONS

PIERS:
16" SQ. COL. BLOCK, CULTURED STONE VENEER, SEE TECH SPEC
MIN. (2) #4 VERT., GROUTED SOLID

EPOXY SET: LOG POST TO PIER
SIMPSON PBV10KT: 5/8" DIA. X 16" ALL THREAD-ROD

SEE WESTERN TECHNOLOGIES GEOTECHNICAL EVALUATION RPT DATED 8/16/2022, REVIEW ALL REQUIREMENTS

COMPACTION TESTING REQUIREMENTS AT FOUNDATION AND BUILDING AREA FOR MIN. 2000 PSI SOIL BEARING CAPACITY PER GEOTECH REPORT TABLE 6.3 .
PROVIDE TESTING AND PROOF OF, PRIOR TO POUR INSPECTION

VAPOR RETARDERS OR BARRIER REQUIRED FOR ALL SLAB ON GRADE ENCLOSED BUILDING AREAS

SEE GEOTECH EVALUATION REPORT DATED 8/16/2022
WESTERN TECHNOLOGIES JOB NO. 2122JP123
PROPOSED FOOTING DEPTH OF 2' MIN. FOR ALL FTGS
FIELD TESTING, PRIOR TO POUR, TO CONFIRM 2.5 PSF

VAPOR RETARDER OR BARRIER REQUIRED AT ALL INTERIOR CONCRETE SLAB LOCATIONS.

C8 X 2 1/2" X 16 GA. STL COLUMN W/3/8" X 6 1/2" X 4" STL. PLATE AND (2) 1/2" DIA. BOLT, EPOXY SET 4" O.C.

C8 X 2 1/2" X 16 GA. STL COLUMN W/1/4" X 4" X 4" ANGLE PLATE AND (1) 1/2" DIA. BOLT.

Registered Professional Engineer (Civil)
CERTIFICATE NO. 50573
ADAM P. BRONNENKANT
Date Signed 11/2/22
ARIZONA U.S.A.
EXP 3/31/2025
DRAWINGS SEALED FOR STRUCTURAL ONLY

FOUNDATION PLAN

SCALE: 1/4" = 1' – 0"

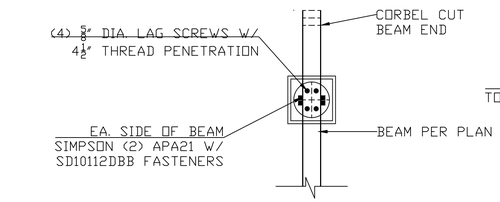
VERIFY ALL NEW DOOR AND WINDOW R.O. ROUGH OPENING REQUIREMENTS, COORDINATE WITH NEW WOOD FRAMED WALLS AND NEW METAL FRAMING FOR OPENING ALIGNMENT.

CARYN J. PAIGE, ARCHITECT
CANYON COUNTRY DESIGN INC.
YOUNG, AZ

RUSSELL GULCH LANDFILL
OFFICES/SCALEHOUSE

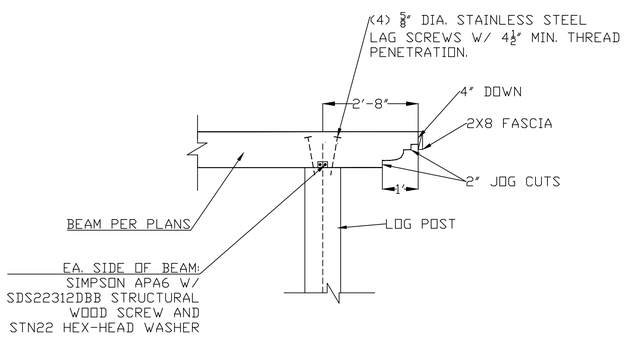
REGISTERED ARCHITECT
CERTIFICATE NO. 28521
CARYN J. PAIGE
Date Signed
ARIZONA, U.S.A.
Expires 12/31/24

A5



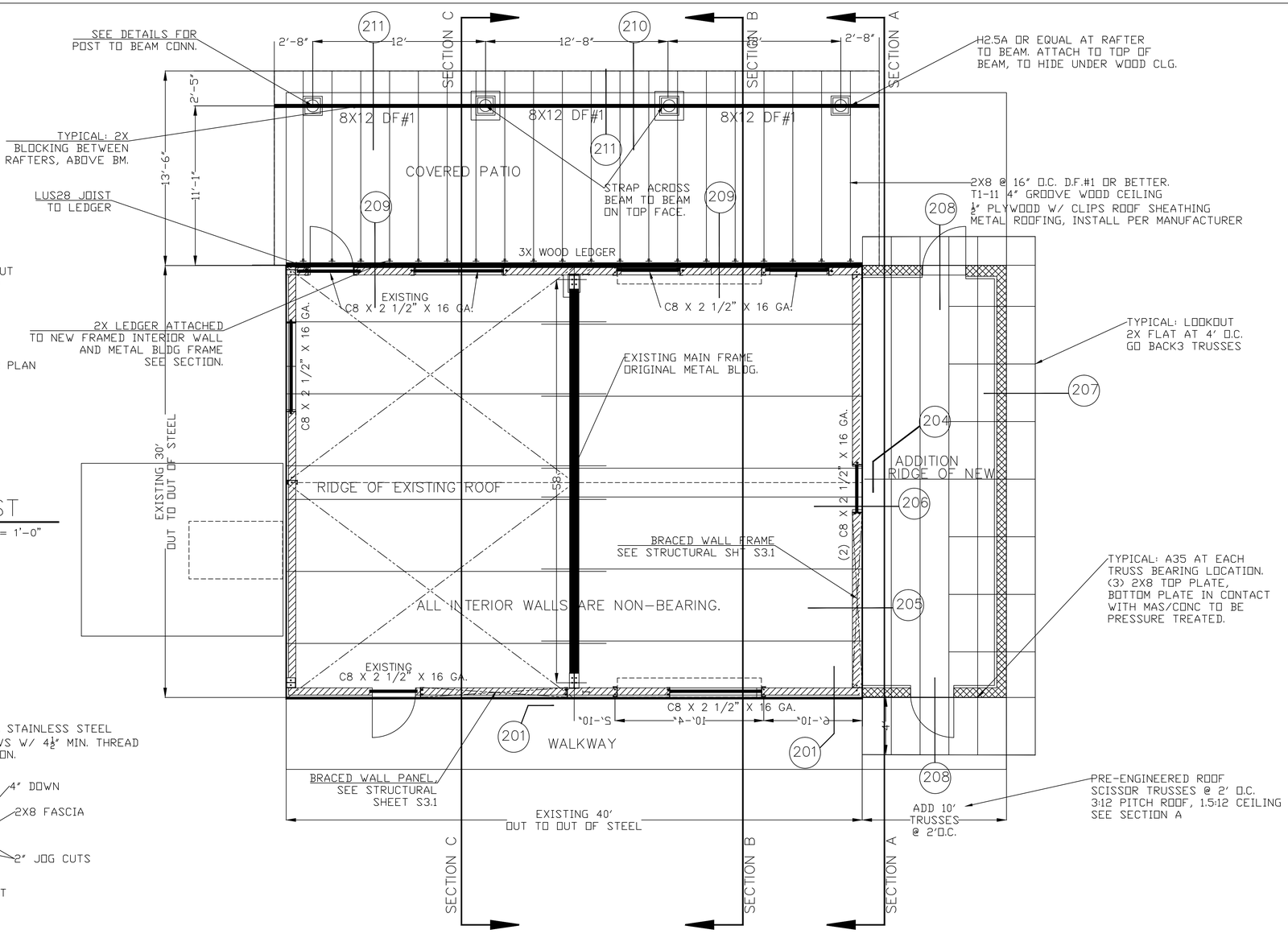
PLAN VIEW: BM TO LOG POST

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



PORCH BM CORBEL END CUT

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



ROOF FRAMING PLAN

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

Registered Professional Engineer
CERTIFICATE NO.
50573
ADAM P.
BRONNENKANT
11/2/22
Date Signed
ARIZONA U.S.A.

EXP 3/31/2025

DRAWINGS SEALED
FOR STRUCTURAL
ONLY

CARYN J. PAIGE, ARCHITECT
CANYON COUNTRY DESIGN INC.
YOUNG, AZ

RUSSELL GULCH LANDFILL
OFFICES/SCALEHOUSE

REGISTERED ARCHITECT
CERTIFICATE NO.
28521
CARYN J.
PAIGE
Signed
ARIZONA U.S.A.
Expires 12/31/24

A6

GENERAL STRUCTURAL NOTES

APPLY UNLESS NOTED OTHERWISE

BUILDING CODE:

2003 EDITION OF THE INTERNATIONAL BUILDING CODE, WITH CITY OF GLOBE AMENDMENTS.

LOADS:

ROOFS:

ROOF LIVE LOAD = 20 PSF (REDUCIBLE).
ROOF COLLATERAL LOAD FOR PRE-ENGINEERED METAL BUILDINGS = 5 PSF.

LATERAL:

WIND:

WIND SPEED = 90 MPH, EXPOSURE C.
INTERNAL PRESSURE COEF. = +/- 0.18
COMPONENT AND CLADDING WIND PRESSURE BY ZONE (IN PSF)

1	2	3	4	5
11.4	17	11	21	24

SEISMIC:

SOIL SITE CLASS C.
SHORT PERIOD SPECTRAL ACCELERATION Ss = .3. Sds = .28
ONE SECOND SPECTRAL ACCELERATION S1 = . Sd1 = .128
RISK CATEGORY = II
R = 6.5 OMEGA = 3 Cd = 4
V = CsW = .08W
BASE SHEAR = 2.32 K
EQUIVALENT LATERAL FORCE PROCEDURE

FOR DEFLECTION/CAMBER CRITERIA OF STRUCTURAL MEMBERS ENGINEERED BY OTHERS, SEE SPECIFIC MEMBER'S SECTION BELOW.

FOUNDATIONS:

SOIL REPORT BYWESTERN TECHNOLOGIES; JOB NO.2122JP123. SPREAD FOOTINGS SHALL BEAR ON FIRMCONTROLLED COMPACTED FILL 18" MINIMUM BELOW ADJACENT FINISHED GRADE, PAD GRADE OR EXISTING GRADE AS STATED IN SOILS REPORT. FINISHED GRADE OR PAD GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. DESIGN SOIL BEARING VALUE = 1500 PSF. REFER TO SOILS REPORT FOR ADDITIONAL INFORMATION PRIOR TO COMMENCEMENT OF EARTHWORK. SOILS ENGINEER SHALL INSPECT FOUNDATION EXCAVATIONS PRIOR TO PLACEMENT OF CONCRETE.

CONCRETE:

MINIMUM 28 DAY STRENGTH 3,000 PSI EXCEPT AS FOLLOWS:

FOUNDATIONS (DESIGN BASED ON 2,500 PSI)--------------------- 3,000 PSI
SLABS ON GRADE --- 3,000 PSI
MOISTURE SENSITIVE SLAB ON GRADE ------------ 4,500 PSI (W/C = 0.50 MAX)

GENERAL:

ALL CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED UNLESS NOTED OTHERWISE. FOR CONCRETE WITHOUT PLASTICIZER, MAXIMUM SLUMP 4 1/2" AT POINT OF PLACEMENT U.N.O. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL.

FOR REINFORCING INFORMATION, SEE REINFORCING SECTION OF G.S.N., PLANS, SCHEDULES AND DETAILS.

UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE EMBEDMENT OF CONDUITS, PIPES, SLEEVES, ETC. OF ANY MATERIAL SHALL NOT BE PERMITTED WITHIN ANY CONCRETE STRUCTURAL ELEMENT (IE: COLUMNS, BEAMS, ELEVATED SLABS, ETC.) OR STRUCTURAL CONCRETE TOPPINGS WITHOUT THE EXPRESSED APPROVAL OF THE STRUCTURAL ENGINEER.

FLY ASH - IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS, SHALL BE LIMITED TO 18% OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED. NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE.

SLABS ON GRADE:

MAXIMUM SLUMP WITHOUT PLASTICIZER AT POINT OF PLACEMENT SHALL BE 3 INCHES. MIX DESIGN SHALL HAVE A MINIMUM OF 540 LBS/CUBIC YARD OF CEMENT OR GREATER TO ACHIEVE THE REQUIRED DESIGN STRENGTH, OR AS REQUIRED TO MEET WATER TO CEMENT RATIO (W/C) SHOWN ABOVE. MIX DESIGNS SHALL TAKE CARE TO PROVIDE THE LARGEST POSSIBLE SIZE OF COURSE AGGREGATE WHILE MAINTAINING CONCRETE WORKABILITY. NOMINAL MAXIMUM AGGREGATE SIZE SHALL NOT BE LESS THAN 3/4 INCH NOR MORE THAN 1/3 THE DEPTH OF THE SLAB.

CONCRETE SHALL BE MIXED, PLACED, FINISHED AND CURED PER LATEST EDITION OF ACI 302.1 FOR THE APPROPRIATE FLOOR CLASS TYPE PER TABLE 1.1 AND SECTION 7. CURING COMPOUND SHALL BE COMPATIBLE WITH ARCHITECTURAL FLOOR FINISH.

SLABS ON GRADE SHALL BE VIBRATED ONLY AT TRENCHES, FLOOR DUCTS, TURNDOWNS, ETC. CAST CLOSURE POUR AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. UNLESS APPROVED OTHERWISE IN WRITING BY THE ARCHITECT, ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY CONTROL JOINTS (KEYED OR SAW CUT) PER TYPICAL DETAILS, AS SHOWN ON THE FOUNDATION PLAN, SUCH THAT THE ENCLOSED AREA DOES NOT EXCEED 150 SQUARE FEET. KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING, ALL OTHER JOINTS MAY BE SAW CUT. JOINTS SHALL BE FILLED OR SEALED AS SPECIFIED IN ARCHITECTURAL SPECIFICATIONS.

MASONRY:

GENERAL:

HOLLOW CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, MEDIUM WEIGHT, GRADE N, F'm = 2,000 PSI, RUNNING BOND, MORTAR TYPE S, 2,000 PSI. GROUT 2,000 PSI. MECHANICALLY VIBRATE GROUT IMMEDIATELY AFTER POURING AND AGAIN 5 TO 10 MINUTES LATER. PROVIDE CLEANOUTS IF GROUT LIFT EXCEEDS 5'-0" IN BLOCK WALLS. MAXIMUM GROUT LIFT SHALL BE 6'-0". WHEN APPROVED BY THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL, GROUT LIFTS MAY BE GREATER THAN 6'-0" IF IT CAN BE DEMONSTRATED BY CONTRACTOR THAT THE GROUT SPACES CAN BE PROPERLY FILLED. FILL CELLS SOLIDLY WITH GROUT IN LIFTS AND STOP POURS 1 1/2" BELOW THE TOP OF A COURSE TO FORM A KEY AT POUR POINTS. UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUNS OF WALL EXCEEDS 24'-0". CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 24" OF CONCENTRATED POINTS OF BEARING OR JAMBS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID.

VERTICAL REINFORCING:

1 #5 IN CENTER OF GROUT AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT INTERVALS NOT TO EXCEED 48" O.C. UNLESS NOTED OTHERWISE. TIE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE BY A.A. WIRE PRODUCTS COMPANY. DOWEL VERTICAL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH VERTICAL REINFORCING.

HORIZONTAL REINFORCING:

2 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ELEVATED FRAMING ASSEMBLIES. 1 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPETS AND FREESTANDING WALLS. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. TO MAINTAIN BOND BEAM CONTINUITY, INSTALL BENT BARS PER TYPICAL DETAILS TO MATCH HORIZONTAL BOND BEAM REINFORCING AT CORNERS AND INTERSECTIONS. STANDARD WEIGHT (NO. 9 GAGE WIRE) DUR-O-WAL OR DUR-O-WIRE (OR EQUIVALENT) LADDER TYPE JOINT REINFORCEMENT AT 16" O.C.

LAP SPLICES:

LAP SPLICES FOR VERTICAL AND HORIZONTAL REINFORCING SHALL BE PER TYPICAL DETAIL. DO NOT SPLICE WITHIN 8'-0" OF CONTROL JOINTS. LAP HORIZONTAL LADDER TYPE JOINT REINFORCING 12" MINIMUM.

FOR ADDITIONAL REINFORCING INFORMATION, SEE REINFORCING SECTION OF G.S.N., PLANS, SCHEDULES AND DETAILS.

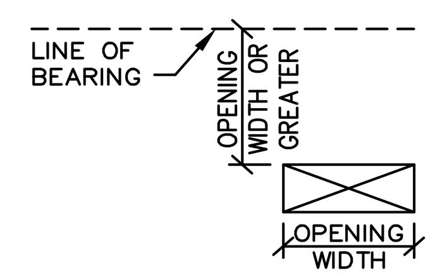
VENEER TIES:

TYPICAL VENEER ATTACHMENT TO MASONRY WALLS SHALL CONSIST OF GALVANIZED STEEL D/A 515 ANCHORAGE SYSTEM MANUFACTURED BY DUR-O-WALL, INC. ANCHORS CONSIST OF A 3/16" DOUBLE WIRE PINTLE UNIT EXTENDING 3" INTO VENEER AND 5 3/4" INTO MASONRY WALL AT 16" O.C. EACH WAY. INSTALL PER MANUFACTURER'S SPECIFICATIONS. ALTERNATE ATTACHMENT SYSTEM MAY BE SUBMITTED BY CONTRACTOR TO ARCHITECT/ENGINEER FOR APPROVAL AND SHALL CONFORM TO THE APPLICABLE CHAPTER OF THE BUILDING CODE.

MISCELLANEOUS LINTELS:

UNLESS NOTED OTHERWISE OR SHOWN, PROVIDE THE FOLLOWING LINTELS IN 8" MASONRY WALLS. USE THESE LINTEL ANGLES FOR OPENINGS REQUIRED BY OTHER DISCIPLINES (MECHANICAL, ELECTRICAL, PLUMBING, ETC.). PROVIDE MINIMUM 5" BEARING OF ANGLES ON JAMBS. SEE SKETCH BELOW WHERE THESE LINTEL ANGLES MAY BE USED. (NOTE: WHERE THE REQUIREMENTS OF THIS SKETCH ARE NOT POSSIBLE, NOTIFY THE STRUCTURAL ENGINEER PRIOR TO START OF MASONRY CONSTRUCTION.)

OPENING WIDTH	LINTEL ANGLES
0'-0" TO 3'-4"	2 - 3 1/2" X 2 1/2" X 1/4" (SLV) OR POWERS PS8-8"
3'-5" TO 4'-8"	2 - 3 1/2" X 3" X 1/4" (SLV) OR POWERS PS8-8"
4'-9" TO 6'-0"	2 - 3 1/2" X 3 1/2" X 1/4" OR POWERS PS8-12"
6'-1" OR GREATER	NOTIFY STRUCTURAL ENGINEER



THESE LINTELS, OR THE OPENING THEY SPAN, SHALL NOT BE PLACED SO AS TO INTERFERE WITH THE REQUIREMENTS OF OTHER STRUCTURAL ELEMENTS (I.E. BOND BEAMS, LINTELS, CONTROL JOINTS, CONCENTRATED POINTS OF BEARING, ETC.) WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

SOLID GROUT SHALL BE PROVIDED BETWEEN WEBS AND MASONRY FACE SHELLS FOR FULL LENGTH OF ALL STEEL LINTELS. MORTAR MAY BE USED FOR GROUT FOR THIS PURPOSE ONLY. FACE UNITS, SOAPS, ROMANS, ETC., SHALL BE LAID WITH FULL HEAD AND BED JOINTS.

FOR ADDITIONAL INFORMATION AT OPENINGS IN MASONRY WALLS, SEE TYPICAL DETAILS.

"POWERS" LINTELS SHALL BE AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC., AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND CITY OF PHOENIX LPST 95-0021 PRODUCT APPROVAL STANDARD. EQUIVALENT LINTELS MANUFACTURED BY GA-PO STEEL OR KACHINA STEEL SHALL BE DEEMED APPROVED EQUALS. OPTIONAL MANUFACTURED STEEL LINTELS SHALL BE SUBMITTED FOR APPROVAL.

REINFORCING:

ALL REINFORCING PER CRSI SPECIFICATIONS AND HANDBOOK. ASTM A615 (Fy = 60 KSI / GRADE 60) DEFORMED BARS FOR ALL BARS #4 AND LARGER. ASTM A615 (Fy = 40 KSI / GRADE 40) DEFORMED BARS FOR ALL BARS #3 AND SMALLER. WHERE SHOWN ON DRAWINGS ALL GRADE 60 REINFORCING TO BE WELDED SHALL BE ASTM A706. WELDED WIRE FABRIC PER ASTM A185, WIRE PER ASTM A82. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGES AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ------------------- 3"
EXPOSED TO EARTH OR WEATHER
#5 AND SMALLER ------------------------------------- 1 1/2"
FLAT SLAB -- 3/4"
ALL OTHER PER LATEST EDITION OF ACI 318

ALL REINFORCING SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES. SUPPORT OF FOUNDATION REINFORCING MUST PROVIDE ISOLATION FROM MOISTURE/CORROSION BY USE OF A PLASTIC OR CONCRETE CHAIR. DUCT-TAPE COVERED REINFORCING IS NOT AN ACCEPTABLE CHAIR.

ALL DIMENSIONS REFERENCED IN DRAWINGS AS "CLEAR" SHALL BE FROM FACE OF STRUCTURE TO EDGE OF REINFORCING, AND SHALL NOT BE LESS THAN STATED, NOR GREATER THAN "CLEAR" DIMENSION PLUS 3/8". ALL OTHERS SHALL BE PLUS OR MINUS 1/4" TYPICAL UNLESS NOTED OTHERWISE.

FIELD BENDING OR STRAIGHTENING OF DEFORMED BARS SHALL BE LIMITED TO #5 BARS AND SMALLER AND SHALL BE FIELD BENT OR STRAIGHTENED ONLY ONCE. ANY BEND SHALL BE LIMITED TO 90 DEGREES. IF FIELD BENDING OR STRAIGHTENING OF #6 BARS OR LARGER IS REQUIRED, OR IF A SECOND BEND IS REQUIRED FOR #5 BARS AND SMALLER, HEAT SHALL BE APPLIED FOR BENDING OR STRAIGHTENING. CONTRACTOR SHALL SUBMIT PROCEDURE FOR APPLYING HEAT TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BENDING OR STRAIGHTENING BARS.

LAP SPLICES IN CONCRETE:

ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. DOWEL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90-DEGREE HOOKS UNLESS NOTED OTHERWISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. ONLY WHEN SPECIFICALLY NOTED ON DRAWINGS MAY CONCRETE COLUMN DOWEL EMBEDMENT BE A STANDARD COMPRESSION DOWEL WITH EMBEDMENT LENGTH ACCORDING TO THE LATEST EDITION OF THE ACI 318.

LAP SPLICES, UNLESS NOTED OTHERWISE, SHALL BE CLASS "B" TENSION LAP SPLICES PER LATEST EDITION OF ACI 318. STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH. ONLY WHEN SPECIFICALLY NOTED ON DRAWINGS MAY LAP SPLICES IN CONCRETE COLUMNS BE STANDARD COMPRESSION LAP SPLICES.

LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES.

STRUCTURAL STEEL:

ALL CONSTRUCTION PER LATEST AISC HANDBOOK. ALL MISCELLANEOUS STEEL UNLESS NOTED OTHERWISE SHALL BE ASTM A36 (Fy = 36 KSI).

ALL STRUCTURAL ROLLED STEEL MEMBERS WITH Fy GREATER THAN 36 KSI ARE TO BE IDENTIFIED WITH AN ASTM SPECIFICATION MARK OR TAG PER IBC SEC. 2203.1.

UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE ASTM A307. ALL EXPANSIVE ANCHORAGE FOR CONCRETE INSTALLATION ONLY SHALL BE HILTI KWIK BOLT TZ (ESR 1917) OR APPROVED EQUIVALENT. ALL EXPANSIVE ANCHORAGE FOR MASONRY INSTALLATION ONLY SHALL BE PER SIMPSON "WEDGE-ALL" ANCHOR (ICC-ES ESR 1396) OR APPROVED EQUIVALENT. ALL EPOXY ANCHORAGE FOR CONCRETE SHALL BE PER SIMPSON "SET XP" SYSTEM WITH DUAL SIDE BY SIDE CARTRIDGES (ESR 2508) OR HILTI HIT-HY 200 (ESR 3187) OR APPROVED EQUIVALENT. ALL EPOXY ANCHORAGE FOR MASONRY SHALL BE PER SIMPSON "SET" SYSTEM WITH DUAL SIDE BY SIDE CARTRIDGES (IAPMO UES ER-265) OR APPROVED EQUIVALENT. ALL REFERENCE TO HEADED STUDS SHALL BE "TRW/NELSON" HIGH STRENGTH HEADED STUDS OR APPROVED EQUIVALENT. AT CONTRACTOR'S OPTION HEADED STUDS PER ABOVE MAY BE SUBSTITUTED FOR CONVENTIONAL ANCHORS AND MACHINE BOLTS (REVERSE SUBSTITUTION NOT ALLOWABLE). ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT SHORT SLOTTED HOLES USING SNUG TIGHT INSTALLATION UNLESS NOTED OTHERWISE.

WELDING:

UNLESS NOTED OTHERWISE, ALL WELDS PER LATEST EDITION OF THE AWS STANDARDS. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TESTING AGENCY. ALL WELDING DONE BY E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE E90 SERIES. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS; THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT THEIR DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW.

HIGH STRENGTH HEADED STUDS SHALL BE AUTOMATIC WELDED CONFORMING TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING". CONFORMANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL QUALITY CONTROL TESTING PROVISIONS OF THE AFOREMENTIONED PUBLICATIONS

COLD FORMED STRUCTURAL STEEL FRAMING:

GENERAL:

ALL COLD FORMED STEEL COMPONENTS INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE PER LGSI. COMPONENTS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" BY THE AISI AND ICC ER ESR NO. 3064P OR APPROVED EQUIVALENT. STEEL FOR COLD FORMED MEMBERS SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI FOR 43 MIL THICKNESS AND LESS, AND MINIMUM YIELD STRENGTH OF 55 KSI FOR 54 MIL THICKNESS AND GREATER. STEEL FOR BRIDGING SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. STEEL SHALL BE GALVANIZED AT LOCATIONS EXPOSED TO WEATHER AND WHEREVER NOTED.

WHERE WELDING IS SHOWN ON DRAWINGS IT SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK. DO NOT NOTCH FLANGES OF MEMBERS WITHOUT EXPRESSED APPROVAL OF THE ENGINEER OF RECORD.

COLDFORM TRACKS AND LEDGERS BOLTED TO OTHER MATERIALS SHALL BE INSTALLED WITH MINIMUM 1/4" X 3" X 3" PLATE WASHERS.

SCREWED COLD FORMED TO COLD FORMED CONNECTIONS (I.E.: 97 MIL TO 97 MIL MAX) SHALL BE HEX HEAD "GRABBER" SELF-DRILLING SCREWS PER ICC ER-5280, OR ICC APPROVED EQUIVALENT. SCREW SIZE SHALL BE #10 X 3/4" MINIMUM AND MUST PROTRUDE THROUGH AND BEYOND THE CONNECTED STEEL MEMBERS A MINIMUM OF THREE FULL THREADS. SCREWS SHALL BE INSTALLED WITH A MINIMUM EDGE AND END DISTANCE OF THREE SCREW DIAMETERS.

MIL THICKNESS / GAGE NUMBER REFERENCE:

27 MIL ------ 22 GA   54 MIL ------ 16 GA
33 MIL ------ 20 GA   68 MIL ------ 14 GA
43 MIL ------ 18 GA   97 MIL ------ 12 GA

WALLS:

STRUCTURAL STEEL STUD WALLS SHOWN ON PLAN SHALL BE INSTALLED PER STUD/SPACING AS NOTED BELOW, AND BOTTOM TRACKS SHALL BE INSTALLED WITH 1/2" DIA ANCHOR BOLTS AT 2'-8" O.C. TYPICAL U.N.O. ATTACHMENT OF STUDS TO TRACKS PER TYPICAL DETAILS U.N.O. ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. UNLESS NOTED OTHERWISE, INSTALL DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS AND ISOLATED BEARING POINTS OF FRAMING MEMBERS ABOVE. BRIDGING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION WITH THE FOLLOWING MINIMUM REQUIREMENTS:

FOR WALLS WITH NO AXIAL LOAD, INSTALL BRIDGING AT MID-HEIGHT FOR WALLS LESS THAN OR EQUAL TO 10'-0" HIGH, AND 5'-0" O.C. MAXIMUM FOR WALLS GREATER THAN 10'-0" HIGH. FOR AXIAL LOAD BEARING WALLS, INSTALL BRIDGING PER TYPICAL DETAILS. IN ADDITION, BRIDGING SHALL BE INSTALLED AT ROOF LINES AND ELSEWHERE AS NOTED ON THE DRAWINGS. SOLID BLOCKING SHALL BE INSTALLED IN LIEU OF BRIDGING WHERE NOTED ON THE DRAWINGS. FOR NON-BEARING PARTITIONS AND SOFFITS, SEE ARCHITECTURAL DRAWINGS.

SSMA NON-STRUCTURAL/NON-BEARING INTERIOR STEEL STUDS AND TRACKS SHALL BE AS FOLLOWS - TYPICAL U.N.O.: (DESIGN BASIS = 5 PSF INTERIOR LOAD, DEFLECTION LIMIT = L/240).

MAX WALL HEIGHT	STUD SIZE-MILS	STUD SPACING	TRACK SIZE-MILS
0'-0" TO 12'-8"	362S125-27	24" O.C	362T125-27
12'-9" TO 14'-6"	362S125-27	16" O.C.	362T125-27
14'-7" TO 19'-6"	600S125-27	24" O.C.	600T125-27
19'-7" TO 22'-4"	600S125-27	16" O.C.	600T125-27
22'-5" TO 28'-8"	600S162-33	12" O.C.	600T162-33

28'-9" AND GREATER - NOTIFY STRUCTURAL ENGINEER
FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.

WOOD:

GENERAL:

WOOD FRAMING MEMBER SHALL NOT BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. ALL NAILING NOT NOTED SHALL BE PER TYPICAL DETAIL. ALL BOLTING SHALL BE PER STEEL SECTION. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT ICC APPROVAL. WHERE "TYPE" OF CONNECTOR IS INDICATED ON THE DRAWINGS, THE CONNECTOR AND ATTACHMENT SHALL BE PER THE MAXIMUM MODEL NUMBER BASED ON THE SIZE OF THE MEMBERS CONNECTED.
IN STUD WALLS, UNLESS NOTED OTHERWISE, INSTALL DOUBLE BEARING STUDS AND ONE FULL HEIGHT STUD AT ALL JAMBS, CORNERS, INTERSECTION AND AT ISOLATED BEARING POINTS OF FRAMING MEMBERS ABOVE. EVERY OTHER STUD OF WOOD FRAME BEARING WALL SHALL HAVE A SIMPSON H3 ANCHOR TOP AND BOTTOM, EXCEPT AT THOSE WALLS WHERE PLYWOOD SHEATHING IS NAILED DIRECTLY TO THE TOP AND BOTTOM PLATES. PROVIDE 2X SOLID BLOCKING AT MID-HEIGHT OF BEARING STUD WALLS.

PROVIDE 2" SOLID BLOCKING AT SUPPORTS OF ALL JOISTS. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS.

DO NOT SUSPEND ANY SPRINKLERS, PIPING, CEILINGS OR ANY OTHER ITEMS FROM 2X JOISTS IN PANELIZED ROOF SYSTEM.

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WWPA OR THE WCLIB. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE MINIMUM PROPERTIES WHICH MEET OR EXCEED THE FOLLOWING WOOD TYPES:

WOOD TYPE
2 X 6 OR LARGER --- D.F. #2
BEAMS
WIDTH 4" OR LESS -- D.F. #1
WIDTH GREATER
THAN 4" --- D.F. #1
LEDGERS AND
TOP PLATES -- D.F. #2
POSTS
4 X 4 OR LARGER -- D.F. SELECT STRUCTURAL

ALL LUMBER LARGER THAN 6 X 6 IN NOMINAL SIZE SHALL BE DRIED BEFORE BEING UTILIZED TO A MAXIMUM MOISTURE CONTENT OF 10% AND SHALL BE COATED WITH A SUITABLE WEATHER SEALANT WHEN UTILIZED IN A WAY IN WHICH IT IS PERMANENTLY EXPOSED TO WEATHER TO PREVENT CHECKING OVER TIME.

PREFABRICATED WOOD TRUSS FRAMING MEMBERS:

FRAMING MEMBERS SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOAD AND SUPERIMPOSED DEAD LOADS STATED IN THE GENERAL STRUCTURAL NOTES OR AS LOCATED ON PLANS. BRIDGING SIZE AND SPACING BY FABRICATOR UNLESS NOTED OTHERWISE. ALL CONNECTORS SHALL HAVE CURRENT ICC APPROVAL. FRAMING MEMBERS SHALL BE AGENCY STAMPED AND CONFORM TO THE GOVERNING CODE AND ANSI/TPI 1-1995. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ERECTION DRAWINGS AND DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SAID SUBMITTAL, IN ADDITION TO LOADS SPECIFIED IN THE G.S.N. AND PLANS, SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

A. DEFLECTION/CAMBER: ROOFS WITH PLASTER OR GYPBOARD CEILINGS TOTAL LOAD MAXIMUM = L/240, LIVE LOAD MAXIMUM = L/360. FABRICATOR SHALL DESIGN MEMBERS FOR PONDING WHERE ROOF SLOPES ARE LESS THAN 1/4" PER FOOT. FRAMING MEMBERS SHALL BE CAMBERED FOR 1.5 TIMES THE DEAD LOAD DEFLECTION.

B. TOP CHORD MEMBER WOOD SPECIES SHALL HAVE A SPECIFIC GRAVITY OF 0.49 OR GREATER.

C. MULTIPLE FRAMING MEMBERS SHALL BE FASTENED TOGETHER TO ALLOW TRANSFER OF SHEAR AND TENSION FORCES (MINIMUM 200 PLF) AT PLYWOOD SHEATHING JOINTS AND TO PREVENT CROSS GRAIN BENDING OF TOP CHORDS. ATTACHMENT SHALL BE A CONTINUOUS 20 GAGE METAL PLATE OR OTHER APPROVED MEANS. METHOD OF ATTACHMENT SHALL BE INDICATED ON SHOP DRAWINGS FOR REVIEW.

D. SHALL SHOW ANY SPECIAL DETAILS REQUIRED AT BEARING POINTS.

VERIFY SIZE, WEIGHT AND LOCATION OF SUPPORTED EQUIPMENT WITH ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, SPRINKLER AND THEIR RELATED DRAWINGS. ADDITIONAL FRAMING MEMBERS SHALL BE SUPPLIED AS REQUIRED TO SUPPORT EQUIPMENT.

FABRICATOR SHALL HAVE ICC APPROVAL OR BE APPROVED ACCORDING TO THE BUILDING JURISDICTION.

PLYWOOD:

ALL PLYWOOD SHALL BE APA "CDX" RATED SHEATHING OR BETTER AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY UP PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. (ON ROOFS WHERE PLYWOOD IS LAYED UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD). STAGGER JOINTS. ALL NAILING, COMMON NAILS. WHERE SCREWS ARE INDICATED FOR WOOD TO WOOD ATTACHMENTS, USE WOOD SCREWS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATIO AND SHALL BE ATTACHED AS FOLLOWS UNLESS NOTED OTHERWISE:

USE	THICKNESS	SPAN/INDEX RATIO	EDGE ATTACHMENT	INTERMEDIATE ATTACHMENT
ROOF	1/2"	32/16	8d AT 6" O.C.	8d AT 12" O.C.

ALTERNATE:

APA PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFING CONTRACTOR. WHERE ROOF IS TO BE GUARANTEED, IT MAY NOT BE USED WITHOUT PRIOR APPROVAL FROM ROOF SYSTEM MANUFACTURER. RATED SHEATHING SHALL COMPLY WITH ICC-ES ESR-2586, AND SHALL HAVE A SPAN RATING AND SHEAR VALUES EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN 1/32") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SHOP DRAWINGS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON CONTRACTOR'S REVIEW.

VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.

MANUFACTURER OR FABRICATOR SHALL CLOUD ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY.

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

DEFERRED SUBMITTALS:

SHOP DRAWING SUBMITTALS REQUIRED BY THESE GENERAL STRUCTURAL NOTES WHICH CONTAIN DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER OTHER THAN THE ENGINEER OF RECORD, SHALL BE SUBMITTED DURING CONSTRUCTION TO THE CITY FIELD INSPECTOR FOR REVIEW. THE DOCUMENTS WILL FIRST BE REVIEWED BY THE ENGINEER OF RECORD AND DETERMINED TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN. THESE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. PLANS AND SPECIFICATIONS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE PLANNING AND DEVELOPMENT DEPARTMENT AFTER BEING REVIEWED FOR CONFORMANCE WITH THE BUILDING OR STRUCTURE DESIGN BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL PROVIDE NOTATION ON ALL DEFERREED DOCUMENTS THAT ACKNOWLEDGES REVIEW OF SUCH DOCUMENTS. A SEPARATE PERMIT FOR THE INSTALLATION OF A DEFERRED ITEM SHALL NOT BE REQUIRED UNLESS SPECIFIED IN THIS CODE. IN ALL CASES, DEFERRED SUBMITATL DOCUMENTS SHALL BEAR A STAMP OR NOTE FROM THE ENGINEER AND ARCHITECT OF RECORD INDICATING THAT THEY HAVE REVIEWED THE DOCUMENTS FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING PRIOR TO SUBMITTING THEM TO THE BUILDING INSPECTOR OR THE PLAN REVIEWER. THE FOLLOWING ITEMS SHALL BE SUBMITTED PER THIS SECTION:

PREFABRICATED WOOD TRUSSES

GENERAL NOTES:

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE BUILDING STRUCTURE SHALL NOT BE CONSIDERED LATERALLY STABLE OR ABLE TO RESIST WIND OR SEISMIC FORCES UNTIL THE ENTIRE BUILDING IS COMPLETE OR WRITTEN DOCUMENTATION IS PROVIDED BY THE ENGINEER OF RECORD. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

AT EXISTING CONDITIONS, CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS AND CONDITIONS OF THE EXISTING STRUCTURE PRIOR TO BEGINNING ANY PERTINENT WORK. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

SPECIAL INSPECTION - STRUCTURAL ONLY:

SPECIAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. "SPECIAL STRUCTURAL INSPECTION" SHALL NOT RELIEVE THE OWNER OR THEIR AGENT FROM REQUESTING THE BUILDING JURISDICTION INSPECTIONS REQUIRED BY SECTION 110 OF THE INTERNATIONAL BUILDING CODE. AN ENGINEER REGISTERED IN THE STATE OF, AND FAMILIAR WITH THE DESIGN INTENT OF THE PROJECT IS REQUIRED FOR OVERSIGHT OF THE SPECIAL INSPECTION PROGRAM. A COPY OF ALL REPORTS FROM THE ENGINEER OVERSEEING THE SPECIAL INSPECTION PROGRAM SHALL BE SENT TO THE ENGINEER OF RECORD FOR FINAL REVIEW. GEOTECHNICAL ENGINEERS, CIVIL ENGINEERS THAT DO NOT PRACTICE STRUCTURAL ENGINEERING AND THIRD PARTIES WITHOUT ANY STRUCTURAL DESIGN COMPETENCE ARE NOT ACCEPTABLE FOR OVERSIGHT OF THE SPECIAL INSPECTION PROGRAM. ANY PARTY WHOM IS NOT THE ENGINEER OF RECORD THAT WISHES TO OVERSEE THE SPECIAL STRUCTURAL INSPECTION PROGRAM MUST SUBMIT TO THE ENGINEER OF RECORD A RESUME PROVING WITHOUT REASONABLE DOUBT THAT THE PARTY HAS STRUCTURAL COMPETENCY TO MEET THE STANDARD OF CARE AS A DESIGN PROFESSIONAL. THE E.O.R. RESERVES THE RIGHT TO DENY ANY ENGINEER OR THRD PARTY THAT DOES NOT MEET THE STANDARD OF CARE AS A STRUCTURAL ENGINEER WITH DESIGN COMPETENCY. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 FOR THE FOLLOWING:

1. CONCRETE:
A. DURING THE TAKING OF TEST SPECIMENS.
B. CONTINUOUS INSPECTION DURING THE PLACEMENT OF ALL REINFORCED CONCRETE, UNLESS NOTED OTHERWISE.
C. NO INSPECTION IS REQUIRED FOR PLACEMENT OF SLAB ON GRADE CONCRETE. INSPECTION OF SLAB ON GRADE REINFORCING IS REQUIRED PER SECTION 3 BELOW.
D. NO INSPECTION IS REQUIRED FOR THE PLACEMENT OF FOUNDATION CONCRETE. INSPECTION OF FOUNDATION REINFORCING IS REQUIRED PER SECTION 3 BELOW.

2. REINFORCING STEEL: INSPECTION OF IN-PLACE REINFORCING FOR CONFORMANCE PRIOR TO THE CLOSING OF FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE FOR THE FOLLOWING:
A. REINFORCING FOR ALL CONCRETE REQUIRED TO HAVE INSPECTION NOTED ABOVE.
B. REINFORCING FOR CONCRETE FOUNDATIONS.
C. REINFORCING FOR SLABS ON GRADE.

3. EXPANSION, EPOXY, AND ADHESIVE ANCHORS: DURING THE PLACEMENT OF ALL ANCHORS SHOWN ON STRUCTURAL DRAWINGS. ADDITIONAL INSPECTIONS REQUIRED FOR REPAIR DETAILS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
A. INSPECTION OF HOLE DIAMETER AND DEPTH.
B. INSPECTION OF HOLE CLEANING WITH WIRE BRUSH AND COMPRESSED AIR.
C. INSPECTION OF ANCHOR INSTALLATION USING SPECIFIED PRODUCT AND MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.

4. WELDING:
A. VISUAL INSPECTION OF ALL FIELD WELDS.
B. NON-DESTRUCTIVE TESTING OF ALL COMPLETE PENETRATION WELDS BY AN AWS CERTIFIED INDEPENDENT TESTING LABORATORY AT THE CONTRACTORS EXPENSE.
C. VERIFICATION OF VALID WELDER'S CERTIFICATES.
D. ALL STRUCTURAL STEEL FABRICATORS SHALL EMPLOY AN AWS CERTIFIED INDEPENDENT TESTING LAB TO PROVIDE SHOP WELD INSPECTIONS PER CODE. INSPECTION REPORTS SHALL BE SUBMITTED TO ENGINEER OF RECORD PRIOR TO STEEL INSTALLATION. EXCEPTION: NO SHOP INSPECTION IS REQUIRED IF THE FABRICATOR IS ON THE CITY OF PHOENIX APPROVED STEEL FABRICATOR LIST.

5. STRUCTURAL MASONRY:
A. DURING PREPARATION OF PRISMS.
B. INSPECTION OF IN-PLACE REINFORCING FOR CONFORMANCE PRIOR TO THE DELIVERY OF GROUT TO THE JOBSITE.
C. CONTINUOUS INSPECTION DURING PLACEMENT OF GROUT.
D. CLEANOUTS PRIOR TO CLOSING.
E. NO INSPECTION IS REQUIRED FOR MASONRY SITE WALLS 8'-0" TALL OR LESS UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:

A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.
B. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS, AND ALL DEVIATIONS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE WORK. ALL REQUESTS FOR DEVIATIONS SHALL BE INITIATED BY THE CONTRACTOR VIA WRITTEN REQUEST FOR INFORMATION (RFI).
C. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE ENGINEER OR ARCHITECT OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
D. CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED BY IN-PLACE LADDERS, SCAFFOLDS, LIFTS AND/OR OTHER EQUIPMENT OPERATED BY THE CONTRACTOR'S PERSONNEL AS REQUIRED FOR SAFE OBSERVATION. INSPECTOR IS NOT RESPONSIBLE OR AUTHORIZED TO OPERATE CONTRACTOR'S EQUIPMENT.
E. UPON COMPLETION OF THE ASSIGNED WORK THE ENGINEER OR ARCHITECT SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

FOR ADDITIONAL INFORMATION ON SPECIAL STRUCTURAL INSPECTIONS, CONTACT STRUCTURAL ENGINEER PRIOR TO START OF CONSTRUCTION.

ABBREVIATIONS

A.B.C.	AGGREGATE BASE COURSE
A/C	AIR CONDITIONER
A.F.F.	ABOVE FINISHED FLOOR
ALT.	ALTERNATE
A.B.	ANCHOR BOLT
@	AT (MEASUREMENT)
B.F.F	BELOW FINISHED FLOOR
B.O.B.	BOTTOM OF BEAM
B.O.D.	BOTTOM OF DECK
B.O.F.	BOTTOM OF FOOTING
BRG	BEARING
C.I.P.	CAST IN PLACE
C.L.	CENTERLINE
C.L.B.	CENTERLINE OF BEAM
C.L.C.	CENTERLINE OF COLUMN
C.L.F.	CENTERLINE OF FOOTING
C.L.W.	CENTERLINE OF WALL
CLR	CLEAR
CONC	CONCRETE
CONC C.J.	CONCRETE CONTROL JOINT
C.M.U.	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
D.L.	DEAD LOAD
⌀ OR DIA.	DIAMETER
DN	DOWN
DWG(S)	DRAWING(S)
E.O.S.	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EXP. BOLT	EXPANSION BOLT
EXP. JT (E.J.)	EXPANSION JOINT
E.W.	EACH WAY
F.F.	FINISHED FLOOR
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STEEL
F.O.W.	FACE OF WALL
GA	GAGE
GALV	GALVANIZED
G.S.N.	GENERAL STRUCTURAL NOTES
GLB (GLULAM)	GLUED-LAMINATED BEAM
I.F.W.	INSIDE FACE OF WALL
HORIZ	HORIZONTAL
K(KIP)	1000 POUNDS
L.L.	LIVE LOAD
LBS (#)	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MFR('S)	MANUFACTURER('S)
MAS C.J.	MASONRY CONTROL JOINT
MECH'L	MECHANICAL
N/A	NOT APPLICABLE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.F.W.	OUTSIDE FACE OF WALL
OPP	OPPOSITE
P.C.	PRECAST CONCRETE
P.J.	PANEL JOINT
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REINF	REINFORCING
SLH	SHORT LEG HORIZONTAL
SLV	SHORT LEG VERTICAL
SIM	SIMILAR
SQ.	SQUARE
STD	STANDARD
T.L.	TOTAL LOAD
T.O.B.	TOP OF BEAM
T.O.D.	TOP OF DECK
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PLATE
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W.W.F.	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT

CARYN J. PAIGE, ARCHITECT
CANYON COUNTRY DESIGN INC.
YOUNG, AZ

RUSSELL GULCH LANDFILL
MTL BLDG MODIFICATIONS

Registered Professional Engineer (Civil) CERTIFICATE NO. 50573 ADAM P. BRONNENKANT Date Signed 11/2/22 ARIZONA U.S.A.
EXP 3/31/2025

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Drawn by: TSB Checked by: APB
Job No. 22-196 L.W.O. 11/02/22

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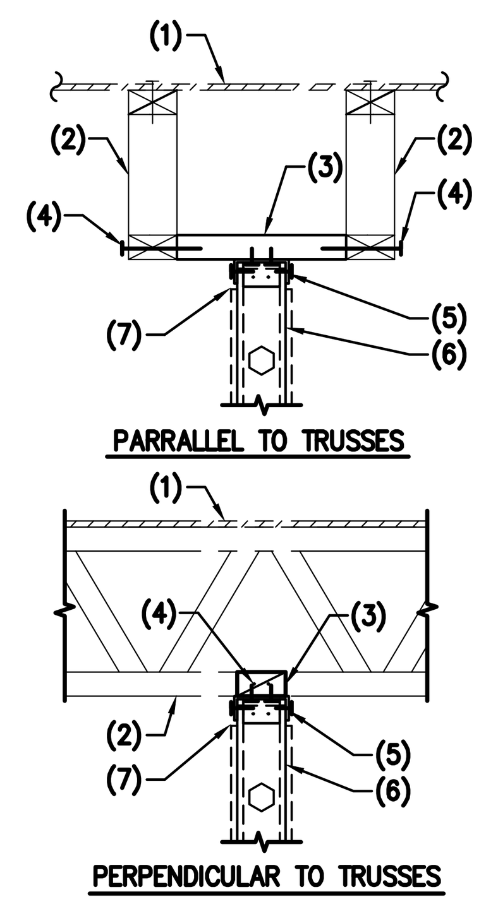
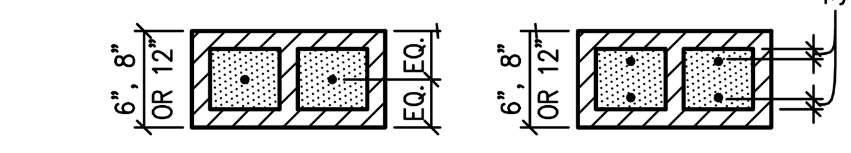


NOTES:

1. (E) PLYWOOD SHEATHING.
2. (E) TRUSSES.
3. 2x FLAT AT 48" O.C.
4. (2) #12 SCREWS – PRE-DRILL HOLES
5. VERTI TRACK (VTD) BY "THE STEEL NETWORK, INC." – ATTACHMENT PER MFR. OR TOP TRACK PER G.S.N.
6. STEEL STUD WALL PER ARCH'L, G.S.N. AND TYPICAL DETAILS
7. DO NOT ATTACH SHEATHING TO CLIPS.

19 NONBEARING STUD WALL BRACE
NO SCALE

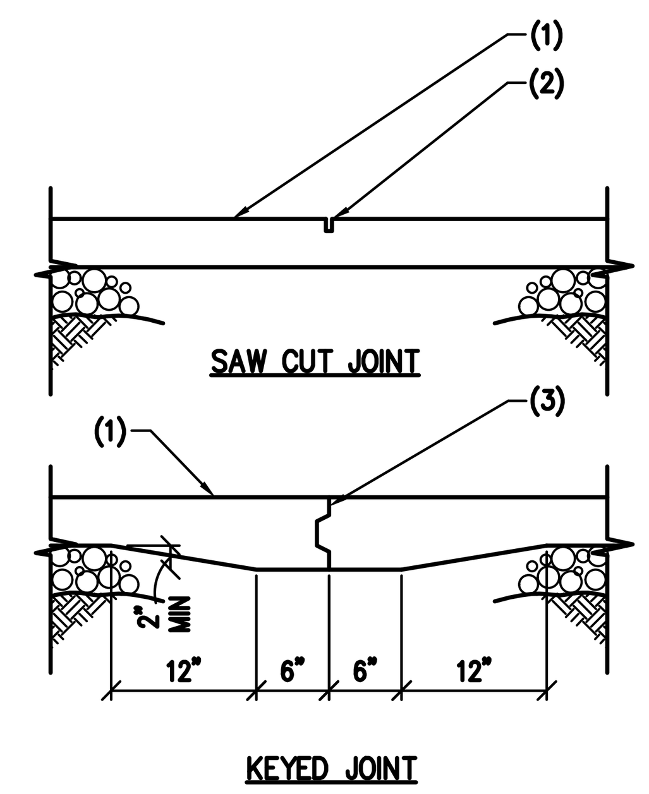
REBAR SIZE (METRIC)	REBAR GRADE	MASONRY LAP SPLICE LENGTH				
		STEEL AT CENTER OF WALL			STEEL AT FACE OF WALL (& BOND BEAMS)	
		6" WALL	8" WALL	12" WALL	8" WALL	12" WALL
#4 (13)	60	17"	17"	17"	21"	21"
#4 (13)	60	26"	26"	26"	32"	32"
#5 (16)	60	40"	32"	32"	50"	50"
#6 (19)	60	N/A	58"	58"	100"	100"
#7 (22)	60	N/A	80"	80"	N/A	135"
#8 (25)	60	N/A	N/A	115"	N/A	189"



NOTES:

1. LAPS APPLY TO BOTH VERTICAL AND HORIZONTAL REINFORCING.
2. PROVIDE BENT BARS TO MATCH HORIZONTAL BOND BEAM REINFORCING, AT CORNERS AND WALL INTERSECTION TO MAINTAIN BOND BEAM CONTINUITY.
3. DO NOT SPLICE HORIZONTAL BARS WITHIN 8'-0" OF CONTROL JOINTS.
4. FOR LADDER TYPE HORIZONTAL REINFORCING, SEE G.S.N.
5. LAP LENGTHS HAVE BEEN CALCULATED FOR BOTH WORKING STRESS AND ULTIMATE STRENGTH DESIGN. WORST CASE VALUES HAVE BEEN USED.

12 WORKING STRESS OR ULTIMATE STRENGTH MASONRY LAP SPICES FOR REINFORCING STEEL – I.B.C.
16–124 NO SCALE



DETAIL NOTES:

1. CONCRETE SLAB ON GRADE.
2. SAWCUT – 1/8" WIDE X 1/4 SLAB THICKNESS IN DEPTH – CUT SHALL BE MADE SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT SO SOON AS TO CAUSE SPALLING OF THE CONCRETE WHILE SAWING. WORK MUST BE ACCOMPLISHED WITHIN 12 HOURS OF CONCRETE PLACEMENT.
3. CONTINUOUS KEY SEE TYP KEY IN CONCRETE DETAIL

NOTE:
KEYED JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING PLACEMENT UNLESS SPECIFICALLY NOTED ON THE PLANS. "TOOL WET JOINT", "ZIP STRIP", ETC. SHALL MATCH SAWCUT REQUIREMENTS.

08 CONTROL JOINTS IN CONCRETE SLAB ON GRADE
19–003 NO SCALE

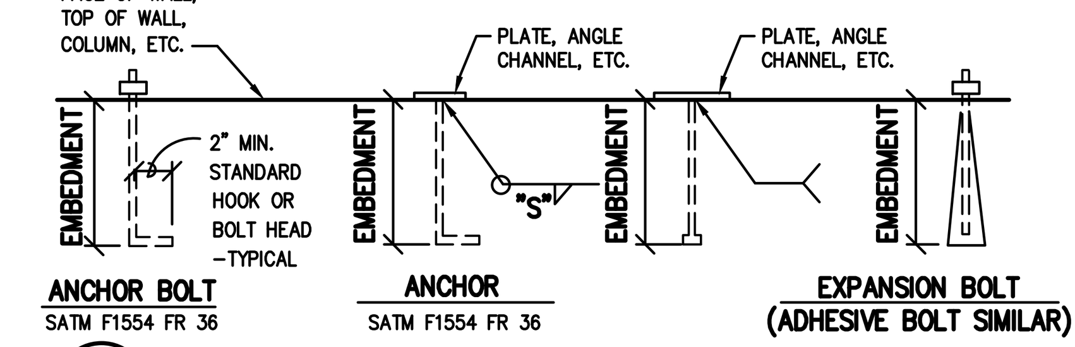
CONNECTION (COMMON NAILS ONLY)	NAILING
JOIST TO SILL OR GIRDER, TOENAIL	3 – 8d
BRIDGING TO JOIST, TOENAIL EACH END	2 – 8d
SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANEL	16d AT 16" O.C. 3–16d PER 16"
TOP PLATE TO STUD, END NAIL	2 – 16d
STUD TO SOLE PLATE	4 – 8d, TOENAIL OR 2 – 16d, END NAIL
DOUBLED STUDS, FACE NAIL	16d AT 24" O.C.
DOUBLED TOP PLATES, FACE NAIL DOUBLED TOP PLATES, LAP SPLICE	16d AT 16" O.C. 8 – 16d
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3 – 8d
RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
TOP PLATE, LAPS AND INTERSECTIONS, FACE NAIL	2 – 16d
CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	3 – 8d
CONTINUOUS HEADER TO STUDS, TOENAIL	4 – 8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3 – 16d
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3 – 16d
RAFTER TO PLATE, TOENAIL	3 – 8d
BUILT-UP CORNER STUDS	16d AT 24" O.C.
BUILT-UP GIRDER AND BEAMS	20d AT 32" O.C. TOP AND BOTTOM AND STAGGERED 2–20d EACH END AND SPLICES

04 NAILING SCHEDULE – U.N.O. INTERNATIONAL BUILDING CODE
16–124 NO SCALE

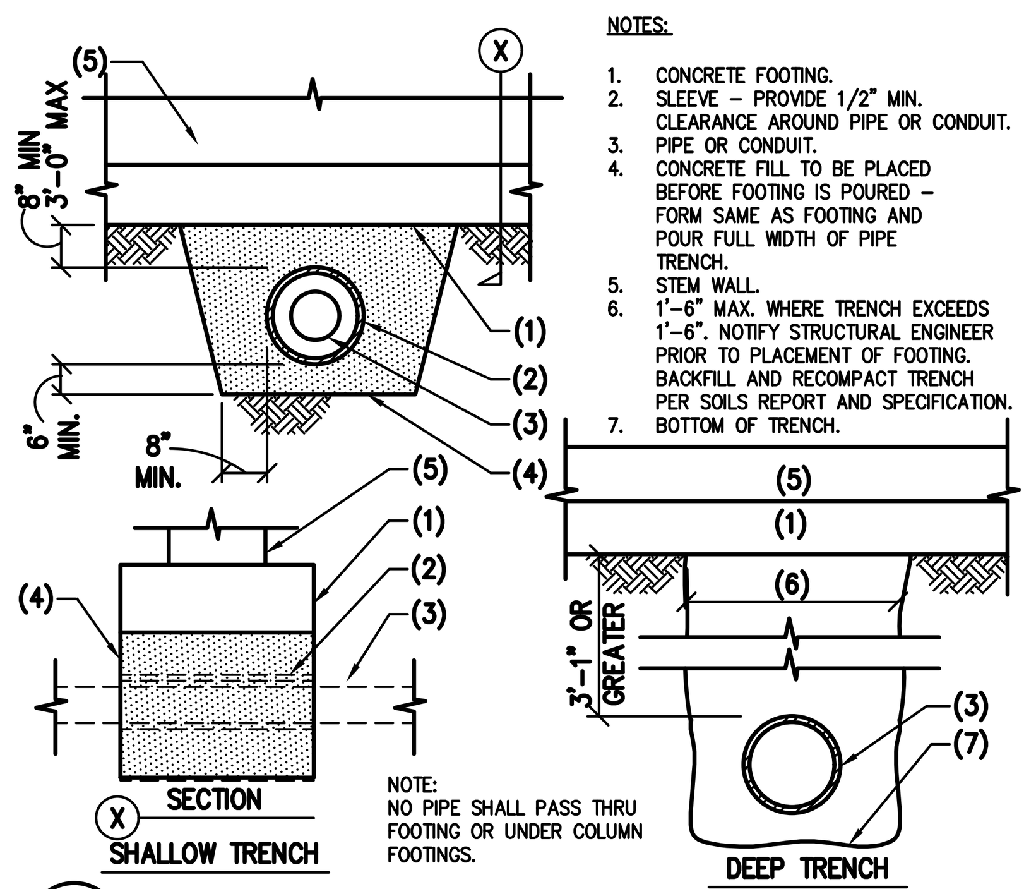
BOLT DIAMETER	VERT BOLT EMBEDMENT LENGTH	HORIZ BOLT EMBEDMENT LENGTH	HEADED STUD FILLET WELD SIZE, "S".
1/2"	6"	4"	1/4"
5/8"	6"	4"	5/16"
3/4"	7"	5"	5/16"
7/8"	8"	6"	5/16"
1"	9"	7"	3/8"
1 1/8"	10"	8"	–––––
1 1/4"	11"	9"	–––––

NOTES:

1. PROVIDE ANCHORS, ANCHOR BOLTS AND EXPANSION BOLTS PER THIS SCHEDULE UNLESS NOTED ON PLANS OR DETAILS.
2. EXPANSION OR ADHESIVE BOLTS USED IN MASONRY SHALL HAVE I.C.B.O. APPROVAL IN MASONRY.
3. AT "ANCHORS" USE 3/16" FILLET WELD("S").
4. THICKNESS OF DRYPACK DOES NOT APPLY TOWARDS EMBEDMENT.
5. BOLT/PLATE EDGE CLEARANCES PER THE FOLLOWING – TYP U.N.O.
   - 3/4" DIA. OR LESS – 1 1/4"
   - 7/8" DIA. ––––––– 1 1/2"
   - 1" DIA. ––––––––– 1 3/4"
   - 1 1/8" DIA. –––––– 2"
   - 1 1/4" DIA. –––––– 2 1/4"
   - OVER 1 1/4" DIA. –– 1.75xDIA.



01 TYPICAL ANCHOR, ANCHOR BOLT, AND EXPANSION BOLT SCHEDULE AND BOLT/PLATE EDGE CLEARANCES
16–124 NO SCALE

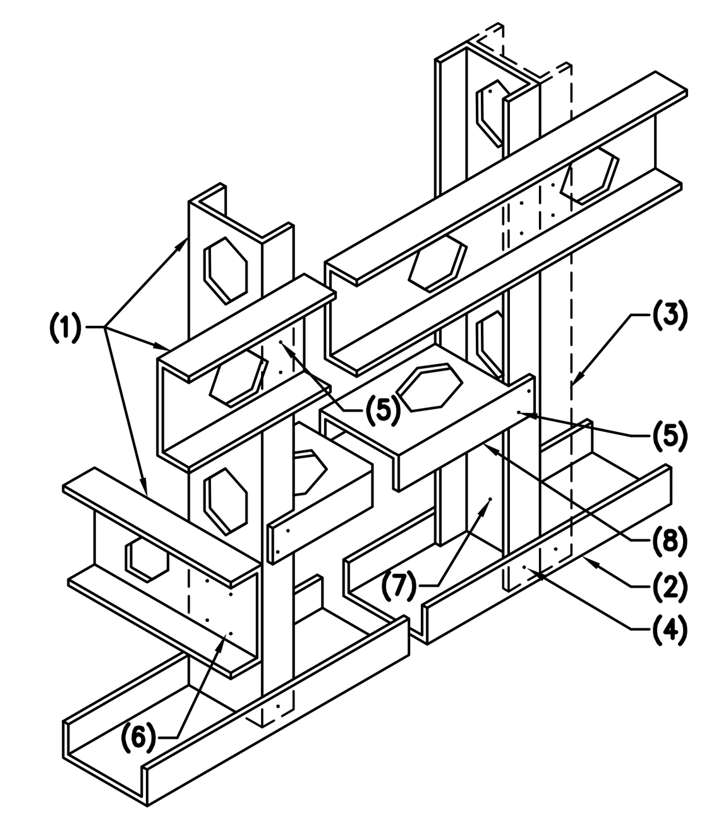


NOTES:

1. CONCRETE FOOTING.
2. SLEEVE – PROVIDE 1/2" MIN. CLEARANCE AROUND PIPE OR CONDUIT.
3. PIPE OR CONDUIT.
4. CONCRETE FILL TO BE PLACED BEFORE FOOTING IS POURED – FORM SAME AS FOOTING AND POUR FULL WIDTH OF PIPE TRENCH.
5. STEM WALL.
6. 1'-6" MAX. WHERE TRENCH EXCEEDS 1'-6". NOTIFY STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF FOOTING. BACKFILL AND RECOMPACT TRENCH PER SOILS REPORT AND SPECIFICATION.
7. BOTTOM OF TRENCH.

NOTE:
NO PIPE SHALL PASS THRU FOOTING OR UNDER COLUMN FOOTINGS.

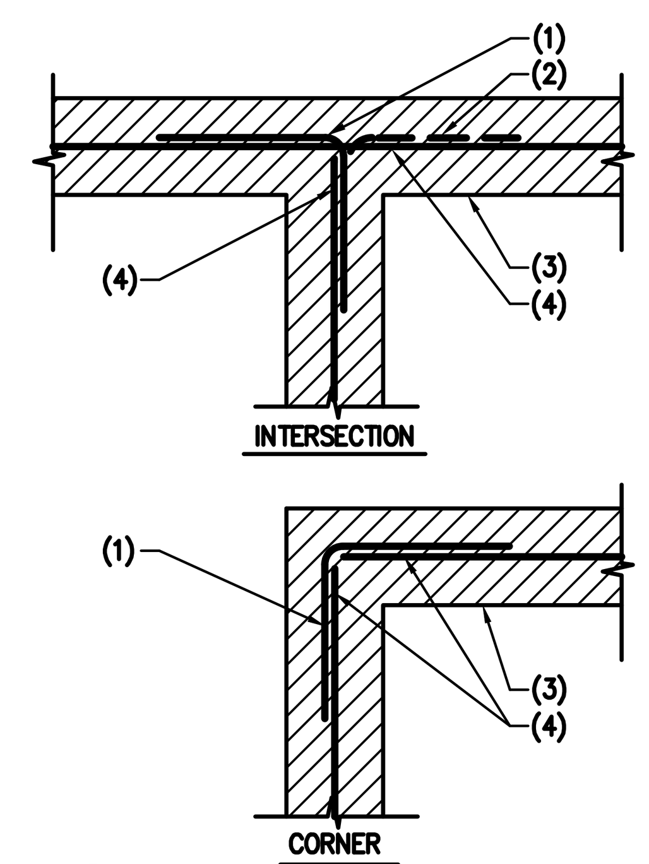
17 PIPE PASSING UNDER REINFORCED SLAB OR CONCRETE FOOTING
15–125 NO SCALE



NOTES:

1. STEEL STUD.
2. UNPUNCHED STEEL STUD TRACK – ATTACHMENT REQUIRED 1/2" DIA. EXPANSION BOLTS AT 48" O.C. (2 MINIMUM) OR 3/8" X 3/4" LONG POWDER DRIVEN PINS AT 12" O.C. FASTENER SHALL HAVE I.C.B.O. REPORT FOR SAME INSTALLATION.
3. DOUBLE STUD WHERE SHOWN ON PLAN AND DETAILS.
4. #10 X 3/4" LONG SHEET METAL SCREWS EACH SIDE.
5. 2 #10 X 3/4" LONG SHEET METAL SCREWS.
6. 4 #10 X 3/4" LONG SHEET METAL SCREWS.
7. #10 X 3/4" LONG SHEET METAL SCREWS AT 12" O.C. AT DOUBLE STUDS.
8. STUD BLOCKING. INSTALL AT MID HEIGHT OF WALL AT AXIAL LOAD BEARING WALLS.

13 TYPICAL STEEL STUD WALL – SCREW CONNECTION
17–071 NO SCALE



NOTES:

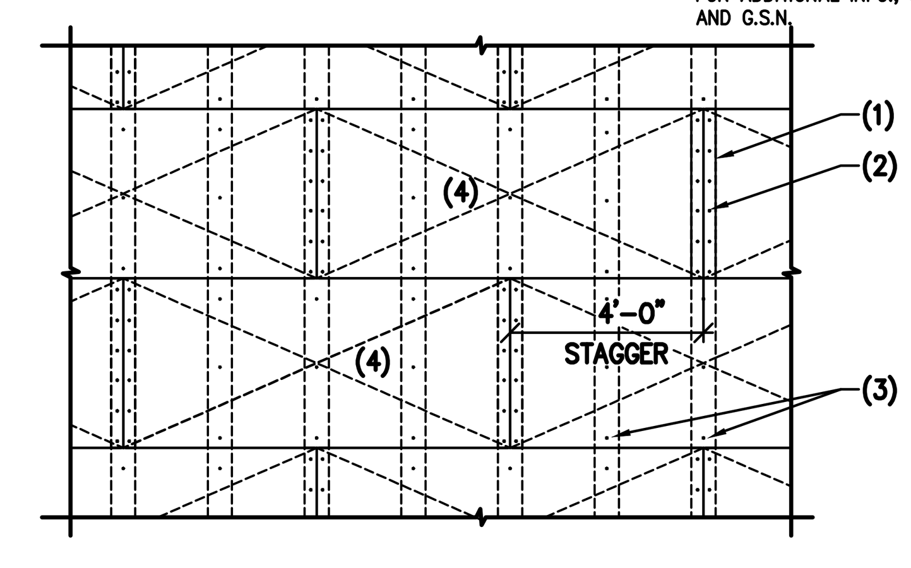
1. CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCING. LAP PER G.S.N. (24" MINIMUM).
2. ALTERNATE BEND.
3. MASONRY WALL.
4. BOND BEAM PER PLANS AND/OR DETAILS.

09 PLAN – MASONRY BOND BEAM AT INTERSECTING WALLS
17–071 NO SCALE

NOTES:

1. FRAMING MEMBER AT PANEL EDGE.
2. EDGE ATTACHMENT.
3. INTERMEDIATE ATTACHMENT, TYPICAL EXCEPT AT EDGES.
4. PLYWOOD SHEATHING PANEL – PERPENDICULAR TO FRAMING MEMBERS.

NOTE:
16" O.C. SUPPORT SPACING SIMILAR. FOR ADDITIONAL INFO., SEE PLAN AND G.S.N.

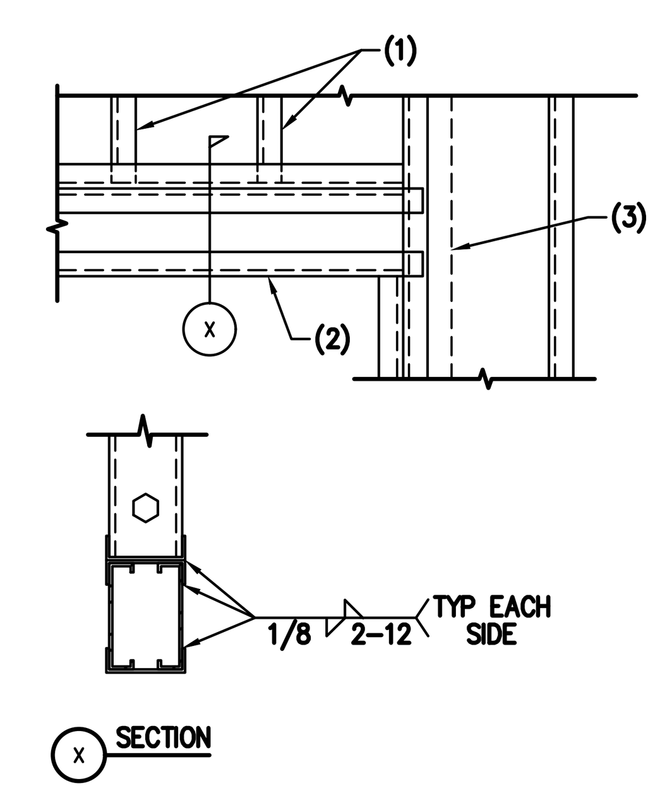


05 TYPICAL PLYWOOD SHEATHING LAYOUT – 24" O.C. SUPPORTS
16–124 NO SCALE

	CLASS B TENSION SPLICE LENGTHS						COMP. BARS	
CONC PSI	f'c = 3,000 PSI		f'c = 4,000 PSI		f'c = 5,000 PSI		f'c = ≦ 3,000	
SIZE (METRIC) / BAR LOCATION	REGULAR	TOP	REGULAR	TOP	REGULAR	TOP	STD LAP	ENCLOSED W/ SPIRAL TIES
#3 (10)	24"	31"	19"	24"	17"	22"	12"	12"
#4 (13)	32"	41"	25"	32"	22"	29"	15"	12"
#5 (16)	39"	51"	31"	40"	28"	36"	19"	14"
#6 (19)	47"	61"	37"	48"	33"	43"	23"	17"
#7 (22)	69"	89"	54"	70"	49"	63"	26"	20"
#8 (25)	78"	102"	62"	80"	55"	72"	30"	23"
#9 (29)	88"	115"	70"	91"	63"	81"	34"	25"
#10 (32)	99"	129"	79"	102"	70"	91"	38"	28"
#11 (36)	110"	143"	87"	113"	78"	101"	42"	31"

NOTES:
1. TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
2. LAP SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES PER LATEST EDITION OF ACI 318 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS OR SCHEDULES.
3. CONTACT STRUCTURAL ENGINEER IF CLEAR SPACING OF REINFORCEMENT IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS (≤2db), OR IF CLEAR COVER IS LESS THAN THE BAR DIAMETER (db).
4. THIS TABLE IS BASED ON NORMAL WEIGHT CONCRETE.
5. FOR ADDITIONAL INFORMATION, SEE G.S.N., PLANS, SCHEDULES AND DETAILS.

02 LAP SCHEDULE FOR REINFORCING STEEL
16–124 NO SCALE

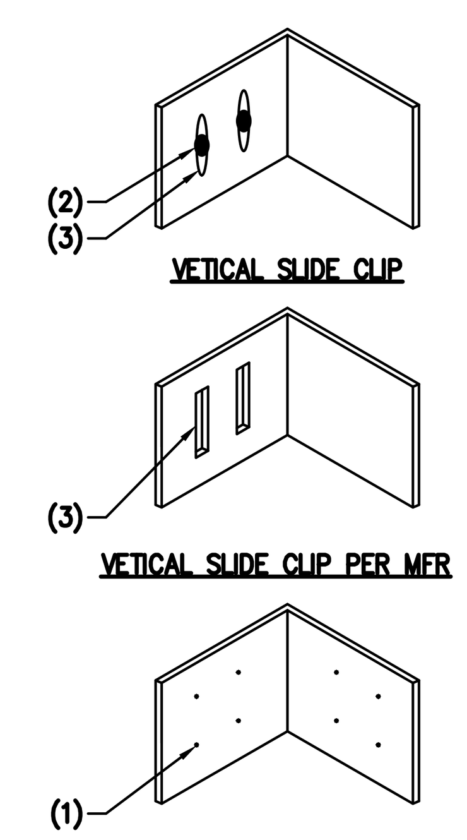


NOTES:

1. STEEL STUDS.
2. CONTINUOUS TRACK.
3. CONTINUOUS MULTIPLE JAMB STUDS. FOR NUMBER OF JAMB STUDS, SEE DETAIL 26.

NOTE:
FOR OPENING LARGER THAN SHOWN – SEE FRAMING PLAN.

18 LINTEL IN STRUCTURAL STEEL WALL
15–116 NO SCALE

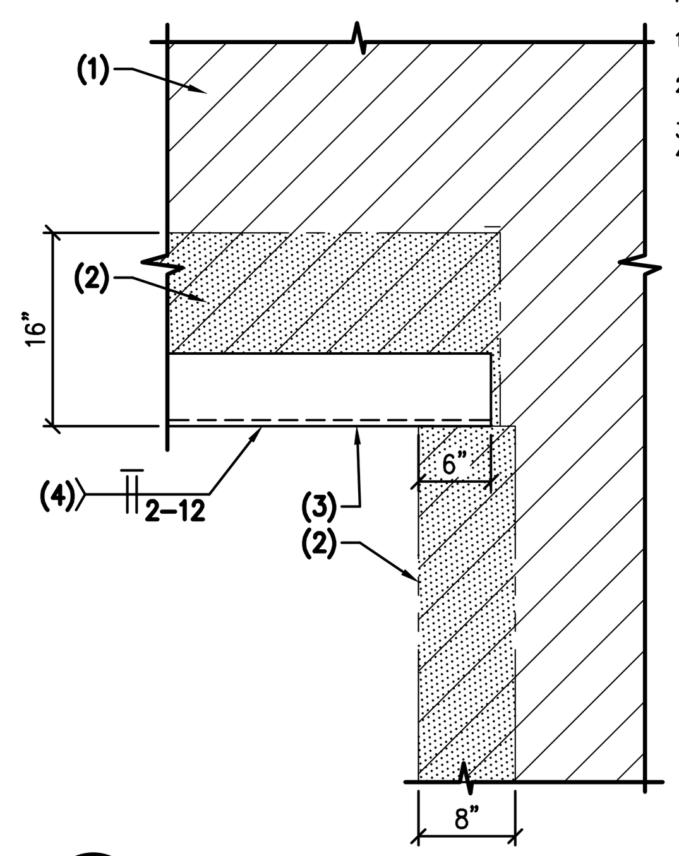


NOTES:

1. 4–#10 SCREWS.
2. 1/4" DIA. THRU BOLT.
3. 1 1/2" LONG SLOTTED HOLE

NOTE:
ALL CLIPS SHALL BE 14 GAGE MIN x 3"x3"x0'-3" LONG MIN.

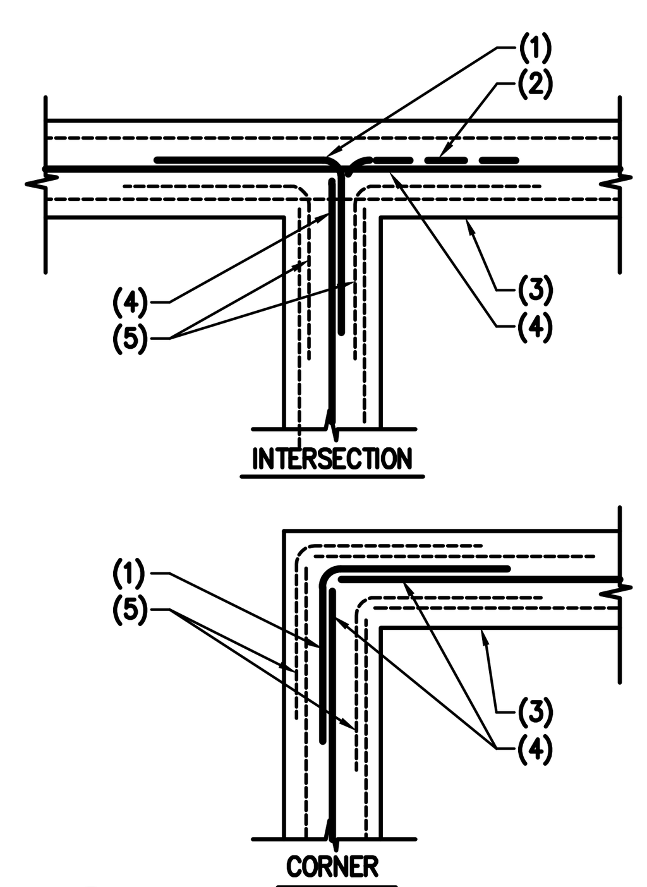
14 TYPICAL STEEL STUD CLIP
17–071 NO SCALE



NOTES:

1. MASONRY WALL – EXISTING AS OCCURS
2. SOLID GROUT WHERE SHOWN.
3. STEEL LINTEL.
4. STEEL ANGLE TO STEEL ANGLE.

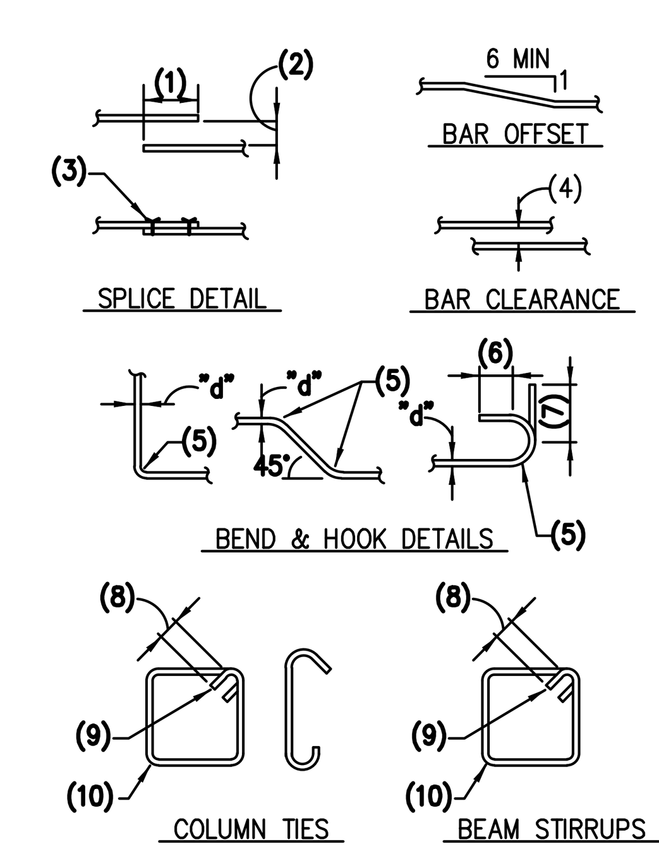
10 TYPICAL ANGLE LINTEL AT MASONRY WALL
16–124 NO SCALE



NOTES:

1. CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCING. LAP PER G.S.N. (24" MINIMUM).
2. ALTERNATE BEND.
3. CONCRETE STEM WALL OR FOOTING.
4. REINFORCING PER PLANS AND/OR DETAILS.
5. CORNER BARS AT MULTIPLE REINFORCING.

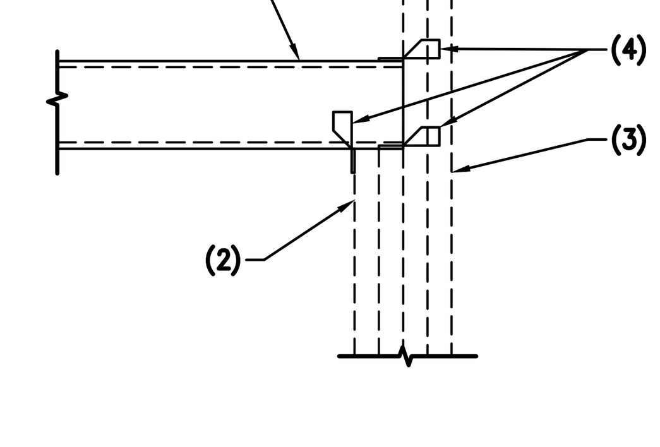
06 PLAN – CORNER REINFORCING IN CONCRETE FOOTING, STEM OR WALL
105–01 NO SCALE



NOTES:

1. LAP – SEE G.S.N.
2. MAXIMUM 1/5 LAP BUT NOT MORE THAN 6".
3. WIRE TIES.
4. 1d (1" MINIMUM).
5. RADIUS=3d FOR BARS NOT OVER #8; 4d FOR #9, #10 AND #11 BARS; 5d FOR #14 AND #18 BARS. 5d FOR ALL GRADE 40 BARS WITH 180 DEGREE HOOK.
6. 4d (4" MINIMUM).
7. 12d (90 DEGREE HOOK).
8. 6d (4" MINIMUM).
9. 135 DEGREE BEND.
10. BEND AROUND 1 1/2" PIN FOR #3 BARS. BEND AROUND 2" PIN FOR #4 BARS. BEND AROUND 2 1/2" PIN FOR #5 BARS.

03 TYPICAL CONCRETE REINFORCING BAR DETAILS
16–124 NO SCALE

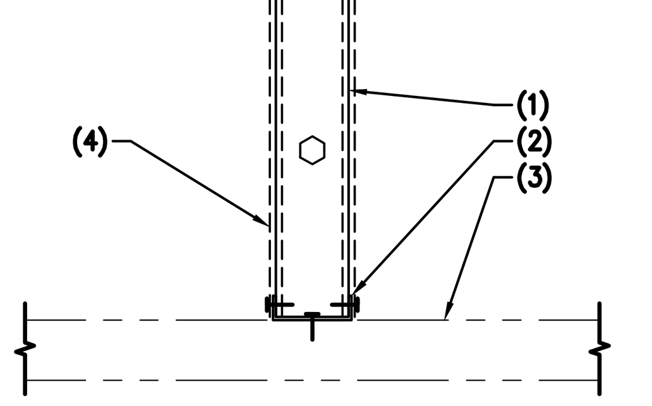


NOTES:

1. LINTEL PER DETAIL 18.
2. BEARING STUDS.
3. CONTINUOUS STUDS, FULL HEIGHT. SCHEDULE.
4. SIMPSON H2.5A WHERE SHOWN. SUBSTITUTE SCREWS FOR NAILS.

MAX WIDTH OF OPENING	NUMBER OF BEARING STUDS	NUMBER OF CONTINUOUS STUDS
0'-0" – 4'-0"	1	1
4'-1" – 8'-0"	2	2
8'-1" – 10'-0"	3	2

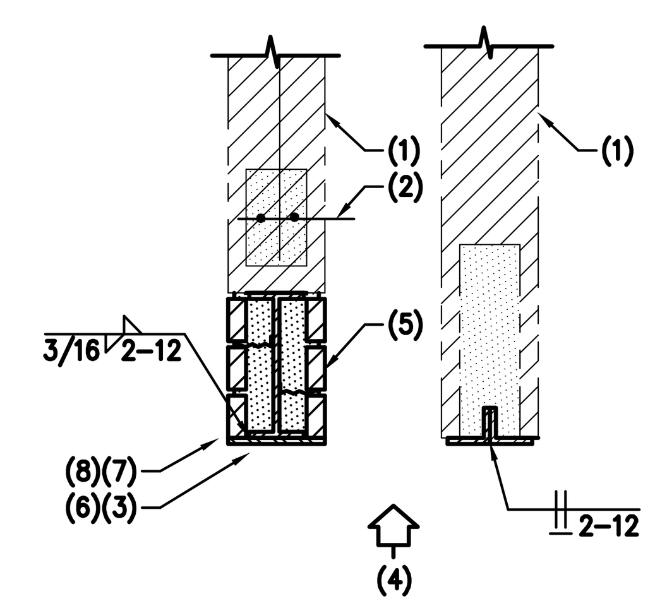
19 TYPICAL JAMB FRAMING IN STEEL STUD WALL
14–092A NO SCALE



NOTES:

1. STEEL STUD WALL.
2. BOTTOM TRACK TO MATCH STUD GAUGE AND THICKNESS WITH ATTACHMENT PER SCHEDULE.
3. EXISTING CONCRTE SLAB ON GRADE.
4. SHEATHING MATERIAL AND ATTACHMENT AS OCCURS.

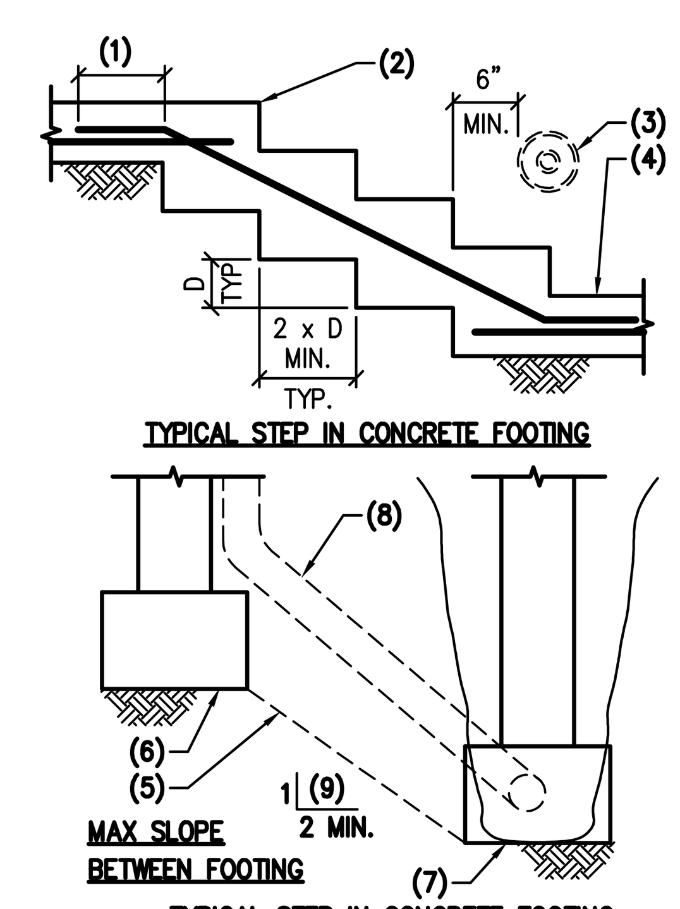
15 BRACED STEEL STUD CURTIAN WALL AT EXISTING CONCRETE SLAB
17–071 NO SCALE



NOTES:

1. EXISTING MASONRY WALL.
2. EXISTING MASONRY BOND BEAM.
3. CONTINUOUS 1/4" X 7 1/2" STEEL PLATE. FOR 12" WALLS, SEE BELOW. FOR 12" WALLS: PROVIDE 3/8"x11 1/2" STEEL PLATE.
4. WHEN SPAN EXCEEDS 6'-8", SHORE LINTEL DURING INSTALLATION.
5. USE VENEER TIES AT 16" O.C. EACH SIDE OF BEAM. TACK WELD TIES TO WEB OF BEAM.
6. EXTEND BOTTOM PLATE TO END OF BEAM.
7. 5" MINIMUM BEARING EACH END UNLESS NOTED OTHERWISE. INSTALL ON FRESH MORTAR BED.
8. WELD ALL LINTEL STEEL CONTINUOUS FOR LENGTH OF BEARING EACH END.

11 STEEL ANGLE LINTEL AT EXISTING MASONRY WALL
16–124 NO SCALE



NOTES:

1. LAP PER G.S.N. (24" MIN.) – TYPICAL.
2. TOP OF WALL FOOTING.
3. PIPE THRU STEM WALL AS OCCURS – SEE TYPICAL DETAIL.
4. RETURN TO FOOTING THICKNESS AS SHOWN ON PLAN.
5. MAXIMUM SLOPE BETWEEN BOTTOM OF FOOTINGS SHALL BE PER SKETCH. STEP FOOTINGS AS REQUIRED – SEE TYPICAL DETAIL.
6. BOTTOM OF CONCRETE FOOTING.
7. BOTTOM OF ADJACENT FOOTING OR TRENCH. WHERE LOW TRENCH ONLY IS LOWER THAN SHOWN. SEE DETAIL xxx.
8. PIPE ADJACENT TO STEM WALL TO NOT INTERFERE WITH FOOTING.
9. TYPICAL UNLESS NOTED OTHERWISE IN SOIL REPORT.

NOTE:
0 = 2'-0" MAXIMUM
FOR ADDITIONAL INFORMATION, SEE PLANS AND DETAILS.

07 TYPICAL STEP IN CONCRETE FOOTING MAXIMUM SLOPE BETWEEN ADJACENT FOOTING OR TRENCH
19–003 NO SCALE

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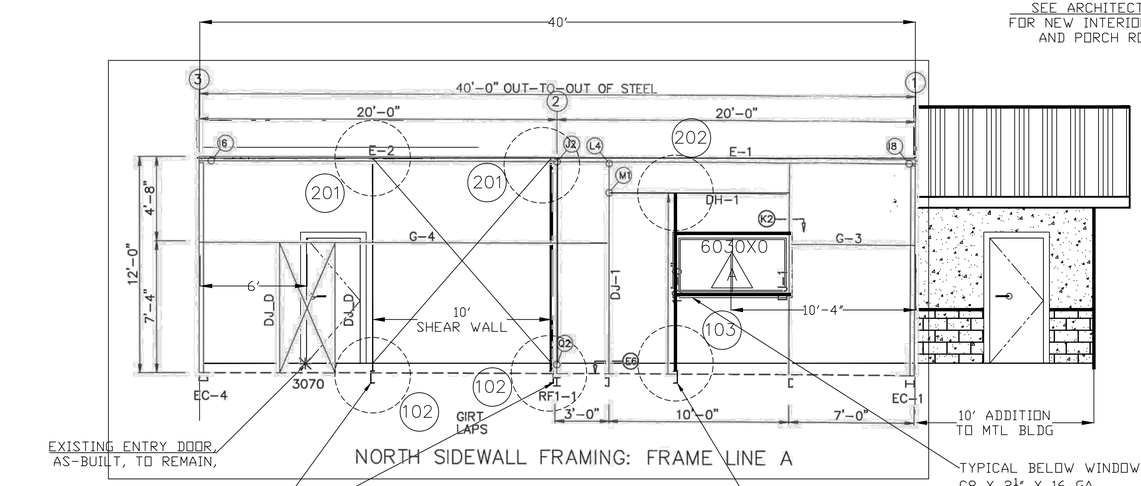
Job No. 22-196 L.W.O. 11/02/22

CARYN J. PAIGE, ARCHITECT
CANYON COUNTRY DESIGN INC.
YOUNG, AZ

RUSSELL GULCH LANDFILL
MTL BLDG MODIFICATIONS

Registered Professional Engineer (Civil)
CERTIFICATE NO. 50573
ADAM P. BRONNENKANT
Date Signed 11/2/22
ARIZONA U.S.A.
EXP 3/31/2025

TYPICAL DETAILS
S1.1



EXISTING ENTRY DOOR, AS-BUILT, TO REMAIN.

NORTH SIDEWALL FRAMING: FRAME LINE A

ADD: C8 X 2½" X 16 GA. STL COL W/ ⅜" X 6½" X 4" STL PLATE W/ (2) ½" DIA. BOLTS, EPOXY SET AT 4' O.C.

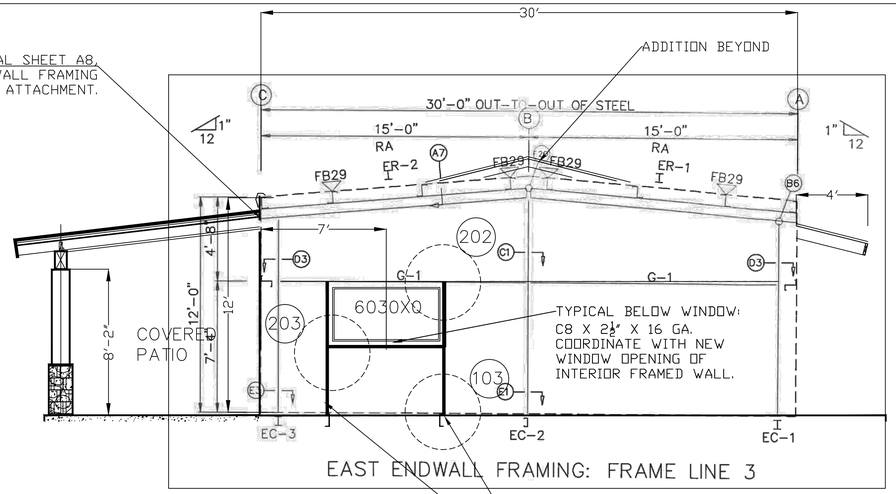
TYPICAL BELOW WINDOW: C8 X 2½" X 16 GA. COORDINATE LOCATION WITH NEW WINDOW OPENING OF NEW INTERIOR WALL.

ADD: C8 X 2½" X 16 GA. STL. COL. W/ ¼" X 4" X 4" STL PLATE W/ (1) ⅝" DIA. BOLT, EPOXY SET, INTO EXIST. TURNDOWN FOOTING. (4) ¼" DIA. SELF-TAPPING SCREWS AT STEEL COLUMN.

METAL FRAME (FRONT)

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

SEE ARCHITECTURAL SHEET A8, FOR NEW INTERIOR WALL FRAMING AND PORCH ROOF ATTACHMENT.



TYPICAL BELOW WINDOW: C8 X 2½" X 16 GA. COORDINATE WITH NEW WINDOW OPENING OF INTERIOR FRAMED WALL.

EAST ENDWALL FRAMING: FRAME LINE 3

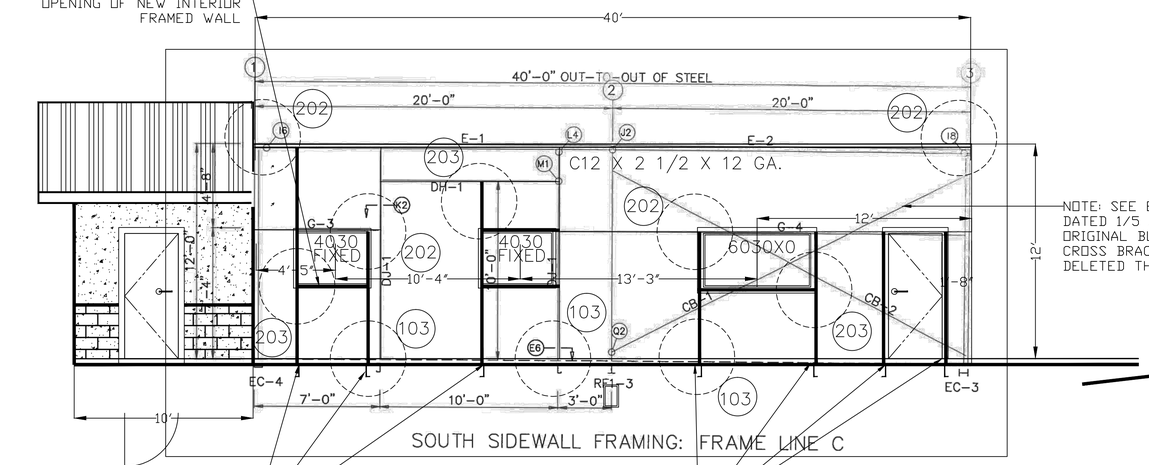
ADD: C8 X 2½" X 16 GA. STL. COL. W/ ¼" X 4" X 4" STL PLATE W/ (1) ⅝" DIA. BOLT EPOXY SET, INTO EXIST. TURNDOWN FTG. (4) ¼" DIA. SELF-TAPPING SCREWS AT STEEL COLUMN

MTL. FRAME (@ PARKING)

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

VERIFY ALL NEW DOOR AND WINDOWS: MANUFACTURER'S R.O. REQUIREMENTS AND COORDINATE WITH NEW WOOD FRAMED INTERIOR WALLS OPENING LOCATIONS. PROVIDE MANUFACTURER'S APPROVED AND/OR COMPATIBLE TRIM AROUND OPENINGS FOR WEATHERPROOF WEATHERTIGHT SEAL OF EXTERIOR.

TYPICAL: BELOW WINDOW AND ABOVE IF NO EXISTING GIRT. C8 X 2½" X 16 GA. COORDINATE WITH NEW WINDOW OPENING OF NEW INTERIOR FRAMED WALL



NOTE: SEE ENG. LTR DATED 1/5 /12 W/ ORIGINAL BLDG DWGS. CROSS BRACING DELETED THIS WALL.

SOUTH SIDEWALL FRAMING: FRAME LINE C

ADD: C8 X 2½" X 16 GA. STL COL W/ ½" X 4" X 4" STL PLATE W/ (1) ½" DIA. BOLTS, EPOXY SET

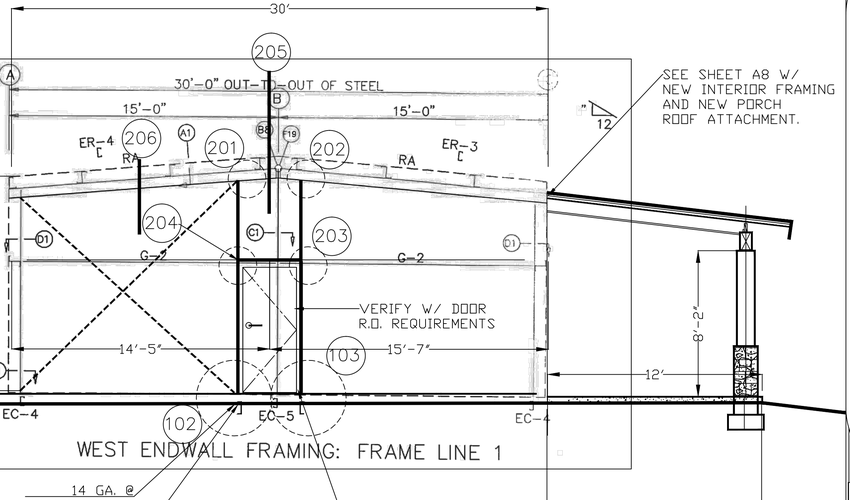
ADD: C8 X 2½" X 16 GA. STL COL W/ ½" X 4" X 4" STL PLATE W/ (1) ½" DIA. BOLTS, EPOXY SET

METAL FRAME (REAR)

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

EXP 3/31/2025

DRAWINGS SEALED FOR STRUCTURAL ONLY



SEE SHEET A8 W/ NEW INTERIOR FRAMING AND NEW PORCH ROOF ATTACHMENT.

14 GA. @ THIS LOCATION ONLY

ADD: C8 X 2½" X 14 GA. STL COL W/ ⅜" X 6½" X 4" STL PLATE W/ (2) ½" DIA. BOLTS, EPOXY SET AT 4' O.C.

C8 X 2½" X 16 GA. STL. COL. W/ ¼" X 4" X 4" STL ANGLE W/ (1) ⅝" DIA. EPOXY BOLT INTO EXIST TURNDOWN FTG. (4) ¼" DIA. SELF-TAPPING AT STEEL COL.

ADDITION 12' PATIO

MTL. FRAME (@ ADDITION)

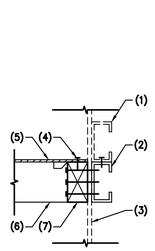
SCALE: 1/4" = 1' - 0"

CARYN J. PAIGE, ARCHITECT
CANYON COUNTRY DESIGN INC.
YOUNG, AZ

RUSSELL GULCH LANDFILL
MTL BLDG MODIFICATIONS

REGISTERED ARCHITECT
CERTIFICATE NO.
28521
CARYN J.
PAIGE
Date Signed
ARIZONA, U.S.A.
Expires 12/31/24

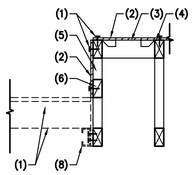
S3.1



NOTES:

1. EXISTING EAVE BEAM.
2. C12x2-1/2x12 GA STEEL HEADER BEAM WITH #12 SELF TAPPING SCREWS TO EXISTING EAVE BEAM AT 6" O.C.
3. EXISTING METAL EIFS.
4. EDGE NAILING.
5. PLYWOOD SHEATHING.
6. WOOD JOIST WITH SIMPSON LU AND H2.5A
7. 3x WOOD LEDGER TO MATCH JOIST DEPTH WITH (3) #12 SCREWS AT 16" O.C. MAX.

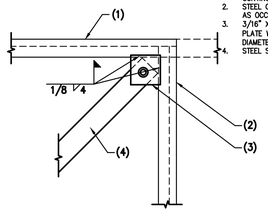
209 **WOOD FRAMING AT (E) METAL BLGD**
22-067 NO SCALE



NOTES:

1. EDGE NAILING.
2. PLYWOOD SHEATHING.
3. 2x4 AT 24" O.C. WITH H2.5A EACH END.
4. PREFAB WOOD TRUSS.
5. PREFAB WOOD GABLE TRUSS.
6. 6x BLOCKING.
7. EXISTING METAL DECK AND PURLIN.
8. EXISTING EDGE BEAM WITH #12 SCREWS AT 6" O.C. TO TRUSS BOTTOM CHORD.

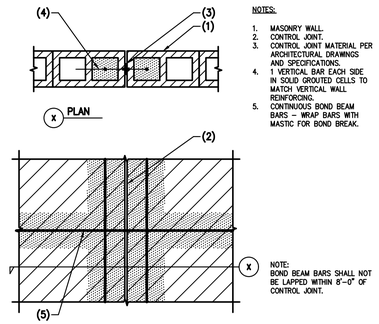
205 **PREFAB WOOD TRUSS AT METAL BLDG**
NO SCALE



NOTES:

1. STEEL BEAM OR WIND GIRT, EXISTING AS OCCURS, AND CONTINUOUS AS OCCURS.
2. STEEL COLUMN, EXISTING AS OCCURS.
3. 3/16" X 5" X 5" STEEL PLATE WITH (1) 3/4" DIAMETER BOLT.
4. STEEL STRAP.

201 **STEEL BRACE AT STEEL BEAM-COLUMN**
NO SCALE

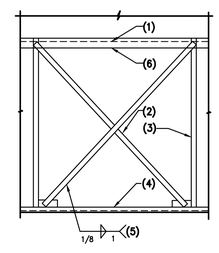


NOTES:

1. MASONRY WALL.
2. CONTROL JOINT.
3. CONTROL JOINT MATERIAL PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
4. 1 VERTICAL BAR EACH SIDE IN SOLID GROUTED CELLS TO MATCH VERTICAL WALL REINFORCING.
5. CONTINUOUS BOND BEAM BARS – WRAP BARS WITH MASTIC FOR BOND BREAK.

NOTE:
BOND BEAM BARS SHALL NOT BE LAPPED WITHIN 8'-0" OF CONTROL JOINT.

104 **CONTROL JOINT IN MASONRY WALL**
15-125 NO SCALE



NOTES:

1. CONTINUOUS BLOCKING AT ROOF AND FLOOR LINE.
2. 2" X 20 GAGE CROSS BRACING.
3. DOUBLE STUDS AT BRACE – TYPICAL.
4. CONTINUOUS BOTTOM TRACK.
5. WELD X-BRACING TO STUD – TYPICAL.
6. TOP GIRT OR BEAM.

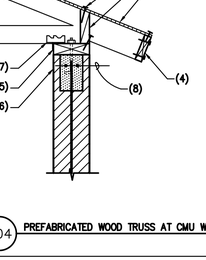
NOTE:
FLOOR SLAB AND FOUNDATION NOT SHOWN FOR CLARITY. SEE DETAILS 102 AND 201 FOR MORE INFORMATION.

101 **WOOD STUD WALL AT EXISTING FOOTING**
16-117 NO SCALE

NOTES:

1. WOOD BEAM.
2. WOOD POST.
3. (2) 1" DIA. LAG BOLTS EACH BEAM AT 2-1/2" O.C.

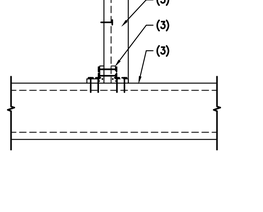
210 **WOOD BEAM AT WOOD POST**
22-067 NO SCALE



NOTES:

1. EDGE NAILING.
2. PLYWOOD SHEATHING.
3. 2x4 AT 24" O.C. WITH H2.5A EACH END.
4. PREFAB WOOD TRUSS.
5. PREFAB WOOD GABLE TRUSS.
6. 6x BLOCKING.
7. EXISTING METAL DECK AND PURLIN.
8. EXISTING EDGE BEAM WITH #12 SCREWS AT 6" O.C. TO TRUSS BOTTOM CHORD.

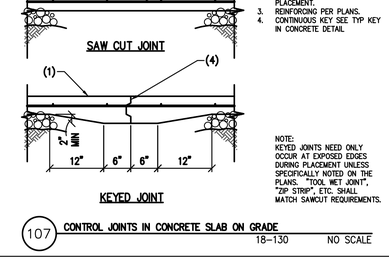
206 **PREFAB WOOD TRUSS AT METAL BLDG**
NO SCALE



NOTES:

1. STEEL BEAM OR WIND GIRT, EXISTING AS OCCURS, AND CONTINUOUS AS OCCURS.
2. STEEL COLUMN, EXISTING AS OCCURS.
3. L4"x4"x3/16" WITH (4) 1/4" DIAMETER SELF-TAPPING SCREWS.

202 **STEEL BRACE AT STEEL BEAM-COLUMN**
NO SCALE



NOTES:

1. WOOD POST PIER PLANS.
2. PBV10PC POST BASE WITH POST INSTALLED ANCHOR PER GSN AND TYPICAL DETAILS.
3. (3) #4 IN TOP 6".
4. CMU PIER WITH VERTICALS PER PLANS AND #4 TIES AT 8" O.C. VERTICALLY.
5. VERTICAL DOWELS TO MATCH AND LAP VERTICAL REINFORCING.
6. CONCRETE SLAB OR FINISHED GRADE AS OCCURS.
7. 12" THICK CONCRETE FOOTING WITH #5 AT 12" O.C. WACH WAY-BOTTOM.
8. VENEER PER ARCHITECTURAL.

NOTE:SEE DETAIL 106 FOR CMU PIER PLAN.

105 **WOOD POST AT CMU PIER**
16-137 NO SCALE

NOTES:

1. STEEL COLUMN.
2. 1/4" STEEL PLATE.
3. 1/4" STEEL PLATE WITH BEAM ATTACHMENT PER PLANS.
4. STEEL BASEPLATE AND FOUNDATION ATTACHMENT PER PLANS.
5. CONCRETE FOUNDATION.
6. 2" X 10" GA STEEL STRAP WITH 3/4" DIAMETER BOLT.

102 **BRACE AT STEEL COLUMN**
NO SCALE

NOTES:

1. PLYWOOD SHEATHING.
2. WOOD BEAM.
3. WOOD JOIST WITH (2) 1/2" DIA. LAG SCREWS WITH 3" THREAD PENETRATION AT 45 DEGREE ANGLE.
4. 2x FACIA WITH 2-16d AT EACH JOIST. FOR OVERHANG SEE ARCH'L.

211 **WOOD JOIST AT WOOD BEAM**
21-004 NO SCALE

NOTES:

1. EDGE NAILING WHERE SHOWN.
2. 2X BLOCKING WITH 3-10d PER BLOCK.
3. PLYWOOD SHEATHING.
4. 3X CONTINUOUS FASCIA WITH 3-16d AT EACH OUTRIGGER.
5. 2X6 OUTRIGGERS AT 24" O.C. WITH SIMPSONS H2.5 TRUSS – ALTERNATE SIDE.
6. PREFAB WOOD TRUSS.
7. CMU WALL.
8. SIMPSON A34 AT 24" O.C.
9. 2X4 WOOD BRACE AT 24" O.C. WITH SIMPSON H2.5A EACH END.
10. 3X WOOD TOP PLAT WITH 1/2" DIA. A.B. AT 32" O.C. (MIN. 2 PER PLATE).
11. 2X BLOCKING.
12. (2) #5 IN 8" DEEP CONT. GROUTED BOND BEAM.

207 **WOOD JOIST OUTTRIGGER DETAIL**
16-137 NO SCALE

NOTES:

1. STEEL BEAM OR WIND GIRT, EXISTING AS OCCURS, AND CONTINUOUS AS OCCURS.
2. STEEL COLUMN, EXISTING AS OCCURS.
3. L4"x4"x3/16" WITH (4) 1/4" DIAMETER SELF-TAPPING SCREWS.

203 **STEEL BRACE AT STEEL BEAM-COLUMN**
NO SCALE

NOTES:

1. CMU PIER.
2. VERTICAL REINF. PER PLANS.
3. #4 HORIZONTAL TIES.

106 **PLAN – CMU PIER**
NO SCALE

NOTES:

1. STEEL COLUMN.
2. STEEL BASEPLATE AND FOUNDATION ATTACHMENT PER PLANS.
3. CONCRETE FOUNDATION.

103 **BRACE AT STEEL COLUMN**
NO SCALE

NOTES:

1. EDGE NAILING.
2. 2X BLOCKING WITH 3-16d PER BLOCK.
3. PLYWOOD SHEATHING.
4. 2X FASCIA WITH 2-16d AT EACH TRUSS. FOR OVERHANG, SEE ARCH'L.
5. 3x WOOD TOP PLATE WITH 1/2"ø ANCHOR BOLTS AT 32" O.C. (MIN. 2 PER PLATE).
6. CMU WALL WITH REINFORCING PER PLANS.
7. PREFAB WOOD TRUSS WITH SIMPSON A35 WITH 3-WAY BEND EACH SIDE AT EACH TRUSS.
8. (2) #5 IN 8" DEEP CONTINUOUS.

204 **PREFABRICATED WOOD TRUSS AT CMU WALL**
14-123 NO SCALE

NOTES:

1. EXISTING STEEL COLUMN.
2. STEEL HEADER PER PLANS AND TYPICAL DETAILS.
3. L4"x4"x3/16" EACH SIDE WITH (4) 1/4" DIAMETER SELF-TAPPING SCREWS EACH LEG.

204 **STEEL BRACE AT STEEL BEAM-COLUMN**
NO SCALE

DETAIL NOTES:

1. CONCRETE SLAB ON GRADE.
2. SAWCUT – 1/8" WIDE X 1/4 SLAB THICKNESS IN DEPTH – CUT SHALL BE MADE SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT SO SOON AS TO CAUSE SPALLING OF THE CONCRETE WHILE SAWING. WORK MUST BE ACCOMPLISHED WITHIN 12 HOURS OF CONCRETE PLACEMENT.
3. REINFORING PER PLANS.
4. CONTINUOUS KEY SEE TYP KEY IN CONCRETE DETAIL

NOTE:
KEYED JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING PLACEMENT UNLESS SPECIFICALLY NOTED ON THE PLANS. "TOOL WET JOINT", "ZIP STRIP", ETC. SHALL MATCH SAWCUT REQUIREMENTS.

107 **CONTROL JOINTS IN CONCRETE SLAB ON GRADE**
18-130 NO SCALE

RUSSELL GULCH LANDFILL MTL BLDG MODIFICATIONS

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ARIZONA U.S.A.
EXP 3/31/2025

FOUNDATION DETAILS

S4.1