SECTION 1 - GENERAL NOTES

I. DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STRUCTURAL ENGINEERS WET STAMP IS AFFIXED TO DRAWINGS.
II. ANY DISCREPANCIES IN THE DRAWINGS, NOTES AND SPECIFICATIONS, SHALL BE REPORTED TO ENGINEER/ARCHITECT FOR CLARIFICATION. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, AND TOP OF CONC. PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION.
III. THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING DURING CONSTRUCTION.
IV. CONTRACTOR TO SUBMIT A REQUEST TO ENGINEER & ARCHITECT FOR ANY SUBSTITUTION OF MATERIALS OR PRODUCTS SPECIFIED ON THE DRAWINGS
V. STRUCTURAL DESIGN PER 2012 INTERNATIONAL BUILDING CODE (IBC).
VI. ALL CONSTRUCTION TO CONFORM TO 2012 IBC.
VII. THE FOLLOWING NOTES APPLY UNLESS SHOWN OTHERWISE.
VIII. THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR THE USE IN THE CONSTRUCTION OF A PROPOSED BUILDING TO WHICH THESE NOTES ARE ATTACHED. THE DRAWINGS SHALL NOT BE USED IN WHOLE OR IN PART, FOR FABRICATION OR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
IX. THE OWNER SHALL NOTIFY ENGINEER IF ANY UNIQUE SOILS CONDITIONS EXIST ON SITE WHICH MAY BE DETECTED DURING CONSTRUCTION. THESE INCLUDE BUT SHALL NOT BE LIMITED TO:
1. SATURATED SOIL AT FOOTING SUBGRADE
2. GROUNDWATER
3. UNDOCUMENTED FILL
4. CLAY SOIL WITH SWELL OR COLLAPSE POTENTIAL
5. FILL BEING PLACED BELOW FOOTINGS

EPIC ENGINEERING CANNOT BE HELD RESPONSIBLE FOR SOIL CONDITIONS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO WORK PROCEEDING. IT IS THE RESPONSIBILITY OF THE OWNER TO HIRE A GEO-TECHNICAL ENGINEER IF NEEDED. THE DESIGN OF THE FOUNDATION SYSTEM SHALL BE BASED ON THE ALLOWABLE SOIL BEARING PRESSURES ALLOWED IN TABLE 1804.2 OF THE 2012 IBC
THE CONTRACTOR SHALL VISUALLY INSPECT THE SITE PRIOR TO WORK PROCEEDING AND SHALL NOTIFY ENGINEER IF ANY UNIQUE SOIL CONDITIONS EXIST THAT COULD AFFECT THE PERFORMANCE OF THE FOUNDATION SYSTEM PRIOR TO ANY WORK PROCEEDING.

SECTION 2 - CONCRETE

I. GENERAL REQUIREMENTS
STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI. CONCRETE FOR SLABS ON GRADE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AND A MAXIMUM WATER/CEMENT RATIO OF 0.5 MINIMUM CEMENT CONTENT SHALL BE 5 SACK/CU. YD. MAXIMUM AGGREGATE SHALL BE 3/4", INCLUDE 4% TO 6% AIR ENTRAINMENT WITH SLUMP NOT TO EXCEED 4".

II. CAST IN PLACE CONCRETE

A. FORM WORK:
CONCRETE FORM WORK TO BE OF ADEQUATE SIZE AND STRENGTH, PROPERLY BRACED TO PREVENT SAGGING OR BULGING. PROTECT ALL CONCRETE FROM FREEZING TEMPERATURES, REFER TO DRAWING FOR DIMENSIONS OF CONCRETE MEMBERS AND SIZE AND LOCATION OF ALL REINFORCEMENT.

B. FOOTINGS:
NO FOOTING SHALL BE PLACED ON DISTURBED (OR FROZEN) SOIL (IF DISTURBED, COMPACT SOIL IN 6" LIFTS TO 95% OR MAXIMUM DRY DENSITY PER ASTM D1557). FOOTINGS SHALL BE STEPPED DOWN ONE (1) VERTICALLY TO ONE AND ONE HALF (1 1/2) HORIZONTALLY, UNLESS BULK HEADED & STOPPED VERTICALLY.

C. FOUNDATION WALLS:
REINFORCE PER DRAWINGS. DO NOT BACKFILL WALLS UNTIL MAIN FLOOR IS FRAMED, THE SUBFLOOR INSTALLED, SHEATHED and CONCRETE HAS CURED A MINIMUM OF 7 DAYS. SEE SPECIAL PROVISIONS FOR COLD WEATHER CONCRETE BELOW. USE HAND OPERATED COMPACTION EQUIPMENT ADJACENT TO NEWLY PLACED CONCRETE BASEMENT WALLS.

D. CONCRETE PADS AND THICKENED SLABS:
REFER TO DRAWINGS AS TO SIZE AND REINFORCEMENT.

E. CONCRETE SLABS:
REFER TO DRAWINGS AS TO SIZE AND REINFORCEMENT.

F. FIREPLACE FOOTINGS AND CMU WALLS:
REFER TO DRAWINGS FOR SIZE AND REINFORCEMENT.

G. REINFORCEMENT BARS:
REINFORCEMENT SHALL BE PER ASTM A615, GRADE 60 FOR #5 BARS AND LARGER, GRADE 40 FOR #3 AND #4 BARS. ALL REBAR LAPPED 30 TIMES DIAMETER, REBAR AT FOOTINGS TO HAVE 3" CLEAR COVER OF CONCRETE (U.N.O. ON DRAWINGS).PROVIDE CORNER BARS WITH 18" LEGS AT THE CORNERS OF ALL WALLS AND FOOTINGS, SIZE AND PLACEMENT TO MATCH HORIZONTAL REINFORCEMENT.

H. COLD-WEATHER CONCRETING:
CONTRACTOR SHALL SUBMIT TO ENGINEER FOR REVIEW THE PROPOSED MEASURES TO SATISFY PLACEMENT & CURING OF CONCRETE DURING COLD WEATHER. FOR OPTIMUM STRENGTH GAIN. IT IS RECOMMENDED TO CONSIDER A BLEND OF TYPE I AND TYPE II CEMENT WITH A 6 BAG MIX, LOW SAND TO AGGREGATE RATIO, BATCHED TO A 1" SLUMP WITH SUPER PLASTICIZER ADDED FOR 4"-5" SLUMP WORKABILITY, 1%-2% NON-CHLORINE ACCELERATOR & CONCRETE MAINTAINED AT 50° MINIMUM FOR 7 DAYS. AVOID MORE THAN 25° TEMPERATURE CHANGE PER DAY WHEN HEATING IS TERMINATED.

i. ANCHOR BOLTS AND HOLDOWN:
ANCHOR BOLTS TO BE ASTM A307, 5/8"Ø x10" EMBEDDED IN FOUNDATION WALLS @ 32" O.C. (MAX) U.N.O. (SEE FOUNDATION PLAN FOR REQUIREMENTS AT SHEAR WALLS). BOLTS TO BE WITHIN 1'-0" OF SILL PLATES ENDS (COORDINATE WITH GENERAL CONTRACTOR). MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE.
1. ALL POSTS SUPPORTED BY ISOLATED FOOTINGS TO HAVE POST ANCHORS UNLESS SPACED IN STUD WALLS.
2. REFER TO DRAWINGS FOR HOLDOWN REQUIREMENTS. INSTALL REQUIRED EMBEDDED ITEMS PER MANUFACTURER'S CATALOG TO ENGAGE HOLDOWN

j. CONSTRUCTION AND CRACK CONTROL JOINTS:
ALL SURFACES OF CONSTRUCTION JOINTS SHALL BE CLEANED TO REMOVE DUST, CHIPS AND OTHER FOREIGN MATERIAL PRIOR TO PLACING ADJACENT CONCRETE. CRACK CONTROL JOINTS IN SLABS SHALL HAVE A MAXIMUM SPACING OF 15'-0" IN BOTH DIRECTIONS. THE CONTRACTOR SHALL SUBMIT THE DETAILS AND PROPOSED LOCATIONS OF CONSTRUCTION JOINTS AND CRACK CONTROL JOINTS FOR REVIEW BEFORE STARTING CONSTRUCTION.

k. VAPOR BARRIER:
VAPOR BARRIER TO BE 6 MIL POLYETHYLENE SHEET PLACED ON UNDISTURBED SOIL. VAPOR BARRIER UNDER SLAB ON GRADE, PLACED ON COMPACTED GRAVEL WITH 3/4" TO 1-1/2" OF DAMP SAND BETWEEN POLYETHYLENE VAPOR BARRIER AND CONCRETE.

M. EMBEDDED HOLDOWNS:
EMBEDDED ITEMS FOR HD TYPE HOLDOWN TO BE ASTM A307 HEX HEADED BOLT IN THE DIAMETER AS SPECIFIED BY THE MANUFACTURER FOR THE HD. ALL BOLTS TO HAVE 3" MIN. CONCRETE SIDE COVER EMBEDMENT DEPTHS ARE 15" FOR BOLTS UP TO AND INCLUDING 3/4" DIA., 24" DEPTH FOR BOLTS OVER 3/4" U.N.O. TYPICAL REINFORCEMENT TO PASS UNINTERRUPTED ALONGSIDE HOLD DOWN AS APPLICABLE. COUPLER NUTS MAY BE USED TO EXTEND THE HOLD DOWN ANCHOR THROUGH THE FLOOR PLATE TO THE SHEAR WALL CHORD.

N. EPOXY ANCHORS:
ANCHORING ADHESIVE SHALL BE A TWO-COMPONENT HIGH-SOLIDS, EPOXY SYSTEM SUPPLIED IN MANUFACTURER'S STANDARD CARTRIDGE AND DISPENSED THROUGH A STATIC-MIXING NOZZLE SUPPLIED BY THE MANUFACTURER. THE ADHESIVE ANCHOR SHALL HAVE BEEN TESTED AND QUALIFIED FOR PERFORMANCE IN UN-CRACKED CONCRETE PER ICC-ES AC308. ADHESIVE SHALL BE SET-XP EPOXY-TIE ADHESIVE FROM SIMPSON STRONG-TIE, PLEASANTON, CA. ANCHORS SHALL BE INSTALLED PER SIMPSON STRONG-TIE INSTRUCTIONS FOR SET-XP EPOXY-TIE ADHESIVE.
NOTE: THE USE OF EPOXY ANCHORS REQUIRES SPECIAL INSPECTION OF INSTALLATION PER CURRENT ICO REPORT, CONTRACTOR TO PROVIDE SPECIAL INSPECTION REPORTS TO ENGINEER, BUILDING OFFICIAL & ARCHITECT.

SECTION 3 - FRAMING LUMBER

I. SAWN STRUCTURAL LUMBER
A. SAWN LUMBER SHALL BE DOUGLAS FIR-LARCH (DF-L) NO.2 OR BETTER FOR ALL 2 INCH AND 4 INCH NOMINAL LUMBER AND DF-L NO.2 OR BETTER FOR 6 INCH NOMINAL AND LARGER STRUCTURAL MEMBERS (U.N.O.).
B. WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE SHALL BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE. PROVIDE MILD STEEL PLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING ON WOOD.
C. ALL FRAMING DETAILS SHALL BE IN ACCORDANCE WITH CHAPTER 23 OF THE 2012 IBC, UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL FRAMING NAILING SHALL CONFORM TO TABLE 2304.9.1 OF THE IBC UNLESS OTHERWISE SHOWN. PROVIDE STEEL STRAPS AT PIPES IN STUD WALLS AS REQUIRED BY IBC CHAPTER 23. PLUMBING AND ELECTRICAL RUNS IN STUD WALLS SHALL CONFORM TO CHAPTER 23. BOLTS SHALL BE STANDARD MACHINE BOLTS (A307). ALL NAILS SHALL BE COMMON WIRE OR GALVANIZED BOX NAILS. IF PNEUMATIC NAILERS ARE TO BE USED, CONTRACTOR MUST SUBMIT A SCHEDULE OF NAILS DESIRED AS SUBSTITUTION TO THE ARCHITECT OR ENGINEER FOR REVIEW. A CHANGE IN THE NUMBER OF NAILS OR A CLOSER NAIL SPACING MAY BE REQUIRED.
D. METAL HANGERS AND CONNECTORS SHALL BE FULLY NAILED OR BOLTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. METAL HANGERS OR CONNECTORS SHOWN ON THE DRAWINGS SHALL BE MANUFACTURED BY SIMPSON COMPANY. METAL HANGERS OR CONNECTORS BY OTHER MANUFACTURES MAY BE CONSIDERED WHERE LOAD CAPACITY AND DIMENSIONS ARE EQUAL OR BETTER ALL SUBSTITUTIONS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW.
E. PROVIDE SOLID BLOCKING BELOW ALL BEARING WALLS. PROVIDE SOLID VERTICAL BLOCKING IN FLOOR SPACE TO MATCH STUD BUNDLE OR SOLID COLUMN ABOVE AND BELOW VERTICAL BLOCKING AT WOOD I-JOISTS SHALL BE 1/16" LONGER THAN JOIST IS DEEP. MINIMUM POST TO BE TWO 2x STUDS BEARING AT EACH END OF HEADER U.N.O. FOR BEAMS FRAMING PERPENDICULAR TO BEARING WALLS PROVIDE FULL WIDTH BEAM POCKET WITH FILLER AS REQUIRED AND MIN 2 STUD BOTH SIDES. STITCH STUD BUNDLES TOGETHER WITH 16d COMMON @ 18" O.C. MAXIMUM (U.N.O.) WHERE FLOOR BEAMS ARE FRAMED FLUSH WITHIN FLOOR AND TOP FLANGE HANGERS ARE SPECIFIED, BEAMS ARE TO BE BLOCKED UP TO JOIST HEIGHT WITH FULL WIDTH DF-L SPACER AS REQUIRED.
F. FIRE BLOCK STUD SPACED AT SOFFITS, FLOOR AND CEILING JOIST LINES, AT 10' VERTICALLY AND HORIZONTALLY, AND AT OPENINGS BETWEEN ATTIC SPACES FOR FACTORY BUILT CHIMNEYS, AND AT OTHER LOCATIONS NOT SPECIFICALLY MENTIONED WHICH COULD AFFORD PASSAGE FOR FLAMES.
G. ALL FASTENERS INSTALLED IN PRESEVATIVE TREATED WOOD SHALL MEET THE REQUIREMENTS OF IBC

II. STRUCTURAL GLUED-LAMINATED TIMBER
ALL GLUED-LAMINATED TIMBER SHALL BE COMBINATION 24FV4 FOR SIMPLY SUPPORTED BEAMS, COMBINATION 24F-V8 FOR BEAMS CONTINUOUS OVER SUPPORTS, AND COMBINATION 12 FOR COLUMNS (U.N.O.) FABRICATION TO BE IN ACCORDANCE WITH AITC 117. PROVIDE WET-USE ADHESIVES. MAXIMUM MOISTURE CONTENT SHALL BE 15% PROVIDE MILD STEEL PLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING ON WOOD. WOOD BEARING ON OR WITHIN 1" OF MASONRY OR CONCRETE SHALL BE TREATED WITH AN APPROVED PRESERVATIVE, SEAL END GRAIN OF ALL EXTERIOR EXPOSED BEAMS INCLUDING NON-LOAD BEARING ARCHITECTURAL BEAMS.

III. MANUFACTURED JOIST
MANUFACTURED JOISTS SIZE AND SPACING HAVE BEEN DETERMINED PER THE MANUFACTURES STANDARDS. SUBSTITUTION OF PRODUCTS BY OTHER MANUFACTURERS REQUIRES APPROVAL OF ENGINEER OF RECORD. JOIST SHALL BE ERECTED, INSTALLED, AND BRACED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

IV. LAMINATED VENEER LUMBER (LVL)
PRODUCTS SPECIFIED HEREIN AS LVL AND PSL SHALL CONFORM TO THE PERFORMANCE CRITERIA OF LVL AND PSL PRODUCTS AS MANUFACTURED BY TRUSS JOIST AS MICRO-LAM AND PARALLAM. SUBSTITUTES ARE ACCEPTABLE PROVIDED THEY HAVE THE SAME STRUCTURAL VALUES. ANY SUBSTITUTIONS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW.

V. WOOD SHEATHING
A. ALL WOOD SHEATHING SHALL BE APA RATED EXPOSURE 1 PLYWOOD OR OSB WITH THICKNESS, VENEER GRADES AND SPAN RATING AS NOTED HEREIN OR ON DRAWINGS
1. ROOF SHEATHING
5/8" WITH MINIMUM (40/20) SPAN RATING.
2. WARMBOARD "S"
3. EXTERIOR WALL AND SHEAR WALL SHEATHING
7/16" WITH MINIMUM (24") SPAN RATING.
B. ROOF AND FLOOR SHEATHING TO BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND END JOINTS STAGGERED 4'-0" O.C. INSTALL ROOF SHEATHING WITH 1/8" SPACE AT ALL PANEL EDGES. NAIL ROOF SHEATHING WITH 8d @ 6" O.C. AT SUPPORTED PANEL AND 12" O.C. AT INTERMEDIATE FRAMING. FLOOR SHEATHING WITH 10d @ 6" O.C. AT SUPPORTED PANEL EDGES AND 10" O.C. FIELD, U.N.O. HOLES ARE NOT PERMITTED IN DIAPHRAGMS UNLESS REVIEWED BY ENGINEER. NAIL EXTERIOR WALL SHEATHING WITH 8d @ 6" O.C. EDGES AND 12" O.C. FIELD U.N.O. IN SHEAR WALL SCHEDULE, OFFSET VERTICAL JOINTS 4'-0" O.C. INSTALL WITH 1/8" GAP AT BUTT ENDS.

VI. WOOD SHEAR WALLS
A. NO.14 GAGE STAPLES WITH MINIMUM 7/16 OD CROWN AND 1-3/8" LENGTH MAY BE USED ONE FOR ONE IN LIEU OF 8d NAILS. WHERE SUBSTITUTING FOR 10d NAILS USE 3 STAPLES FOR EACH 2 NAILS.
B. WHERE PLYWOOD PANELS ARE APPLIED TO BOTH SIDES OF SHEAR WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBERS SHALL BE 3" (NOMINAL) WIDE AND NAILS ON EACH SIDE SHALL BE STAGGERED
C. ALLOWABLE SHEAR VALUES IN SHEAR WALL TABLE ARE FOR DOUGLAS FIR FRAMING MEMBERS (GROUP II). NO SUBSTITUTION OF LESSER GROUPS WILL BE ALLOWED. FASTENERS EXPOSED TO WEATHER SHALL BE ZINC COATED BY HOT DIP GALVANIZING, MECHANICALLY DEPOSITED, OR ELECTRO-DEPOSITED.

SECTION 4 - STRUCTURAL STEEL AND MISCELLANEOUS METALS

I. ALL STRUCTURAL STEEL SHALL COMPLY WITH THE PREFERRED ASTM MATERIAL SPECIFICATION FOR VARIOUS SHAPES PER TABLES 2-3 AND 2-4 OF AISC'S STEEL CONSTRUCTION MANUAL (THIRTEENTH EDITION)
II. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", & AISC 341 FOR FABRICATION OF LATERAL ELEMENTS. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE OWNER'S REPRESENTATIVES REVIEW BEFORE COMMENCING FABRICATION. SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS. ALL WELDING SHALL BE DONE BY "STRUCTURAL WELDING CODE", AWS D1.1 ALL FIELD WELDING TO BE ACCOMPLISHED BY AWS CERTIFIED WELDERS.
III. ALL STEEL ANCHORS, TIES AND OTHER MEMBERS TO BE EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED, ALL MACHINE BOLTS SHALL BE ASTM A307 U.N.O. (SEE CONNECTION SCHEDULE FOR A325 BOLTS) AND SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF LOCKING NUTS. ALL NUTS, BOLTS, WASHERS AND MISC. STEEL EXPOSED TO WEATHER SHALL BE GALVANIZED.
IV. WELDED HEADED STUDS (WHS)+ TYPICAL WELD OF WHS TO STEEL SHALL BE FILLET WELD ALL AROUND SIZE EQUAL TO ONE-HALF THE DIAMETER OF THE STUD.

SECTION 8 - SUBSTITUTIONS

SUBSTITUTION FOR ANY SPECIFIED STRUCTURAL COMPONENT MUST BE REQUESTED IN WRITING BY THE CONTRACTOR. THE ENGINEER WILL REVIEW THE REQUESTED ALTERNATIVE & RESPOND IN WRITING. ADDITIONAL SUPERVISION OR SPECIAL INSPECTION MAY BR REQUIRED FOR THE REQUESTED SUBSTITUTION.

SECTION 9 - JOB SAFETY

THE ENGINEER HAS NOT BEEN RETAINED NOR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM HIS WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE HIM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, SUPPLIERS OR THEIR EMPLOYEES, OR FOR ACCESS, VISIT, USE WORK, OR OCCUPANCY BY ANY PERSON.

SECTION 10 – SHOTCRETE

I. AGGREGATE:
COARSE AGGREGATE, IF USED, SHALL NOT EXCEED ¾ INCH
II. REINFORCEMENT:
A. WHEN NO.5 OR SMALLER BARS ARE USED, THERE SHALL BE A MINIMUM CLEARANCE BETWEEN PARALLEL REINFORCEMENT BARS OF 2 ½ INCHES, WHEN BARS LARGER THAN NO.5 ARE PERMITTED, THERE SHALL BE A MINIMUM CLEARANCE BETWEEN PARALLEL BARS EQUAL TO SIX DIAMETERS OF THE BARS USED. WHEN TWO CURTAINS OF STEEL ARE PROVIDED, THE CURTAIN NEARER THE NOZZLE SHALL HAVE MINIMUM SPACING EQUAL TO 12 BAR DIAMETERS AND THE REMAINING CURTAINS SHALL HAVE A MINIMUM SPACING OF SIX BAR DIAMETERS.
B. LAP SPLICES OF REINFORCING BARS SHALL UTILIZE THE NONCONTACT LAP SPLICE METHOD WITH A MINIMUM CLEARANCE OF 2 INCHES BETWEEN BARS. THE USE OF CONTACT LAP SPLICES ARE NECESSARY FOR SUPPORT OF THE REINFORCING IS PERMITTED WHEN *APPROVED* BY THE *BUILDING OFFICIAL*, BASED ON SATISFACTORY PRECONSTRUCTION TESTS THAT SHOW THAT ADEQUATE ENCASEMENT OF THE BARS WILL BE ACHIEVED, AND PROVIDED THAT THE SPLICE IS ORIENTED SO THAT A PLANE THROUGH THE CENTER OF THE SPLICED BARS IS PERPENDICULAR TO THE SURFACE OF THE SHOTCRETE.
III. PRECONSTRUCTION TESTS:
WHEN REQUIRED BY THE BUILDING OFFICIAL, A TEST PANEL SHALL BE SHOT, CURED, CORED OR SAWN, EXAMINED AND TESTED PRIOR TO COMMENCEMENT OF THE PROJECT. THE SAMPLE PANEL SHALL BE REPRESENTATIVE OF THE PROJECT AND SIMULATE JOB CONDITIONS AS CLOSELY AS POSSIBLE. THE PANEL THICKNESS AND REINFORCING SHALL REPRODUCE THE THICKEST AND MOST CONGESTED AREA SPECIFIED IN THE STRUCTURAL DESIGN. IT SHALL BE SHOT AT THE SAME ANGLE, USING THE SAME NOZZLEMAN AND WITH THE SAME CONCRETE MIX DESIGN THAT WILL BE USED ON THE PROJECT. THE EQUIPMENT USED IN PRECONSTRUCTION TESTING SHALL BE THE SAME EQUIPMENT USED IN THE WORK REQUIRING SUCH TESTING, UNLESS SUBSTITUTE EQUIPMENT IS APPROVED BY THE BUILDING OFFICIAL.
IV. REBOUND:
ANY REBOUND OR ACCUMULATED LOOSE AGGREGATE SHALL BE REMOVED FROM THE SURFACES TO BE COVERED PRIOR TO PLACING THE INITIAL OR ANY SUCCEEDING LAYERS OF SHOTCRETE. REBOUND SHALL NOT BE USED AS AGGREGATE.
V. JOINTS:
EXCEPT WHERE PERMITTED IN SECTION 1910 OF 2012 IBC, UNFINISHED WORK SHALL NOT BE ALLOWED TO STAND FOR MORE THAN 30 MINUTES UNLESS EDGES ARE SLOPED TO A THIN EDGE. FOR STRUCTURAL ELEMENTS THAT WILL BE UNDER COMPRESSION AND FOR CONSTRUCTION JOINTS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS, SQUARE JOINTS ARE PERMITTED, BEFORE PLACING ADDITIONAL MATERIAL ADJACENT TO PREVIOUSLY APPLIED WORK, SLOPING AND SQUARE EDGES SHALL BE CLEANED AND WETTED.
VI. DAMAGE:
IN-PLACE SHOTCRETE THAT EXHIBITS SAGS, SLOUGHS, SEGREGATION, HONEYCOMBING, SAND POCKETS OR OTHER OBVIOUS DEFECTS SHALL BE REMOVED AND REPLACED. SHOTCRETE ABOVE SAGS AND SLOUGHS SHALL BE REMOVED AND WHILE STILL PLASTIC.
VII. CURING:
A. INITIAL CURING:
SHOTCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR 24 HOURS AFTER SHOTCRETING IS COMPLETE OR SHALL BE SEALED WITH AN APPROVED CURING COMPOUND.
B. FINAL CURING:
FINAL CURING SHALL CONTINUE FOR SEVEN DAYS AFTER SHOTCRETING, OR FOR THREE DAYS IF HIGH EARLY STRENGTH CEMENT IS USED, OR UNTIL THE SPECIFIED STRENGTH IS OBTAINED, FINAL CURING SHALL CONSIST OF THE INITIAL CURING PROCESS OR THE SHOTCRETE SHALL BE COVERED WITH AN APPROVED MOISTURE RETAINING COVER.
C. NATURAL CURING:
NATURAL CURING SHALL NOT BE USED IN LIEU OF THAT SPECIFIED IN SECTION 1910 OF THE 2012 IBC UNLESS THE RELATIVE HUMIDITY REMAINS AT OR ABOVE 85 PERCENT, AND IS AUTHORIZED BY THE REGISTERED DESIGN PROFESSIONAL AND APPROVED BY THE BUILDING OFFICIAL.

CONSTRUCTION NOTES

Governing Code	2012 IBC/IRC
Occupancy Category	II
Importance Factor:	1
Soil Properties:	
Site Class	B
Soil Bearing Pressure	5000 psf
Seismic Design:	
Ss	0.825
S1	0.274
Sds	0.550
Sd1	0.183
Seismic Design Category	D
R	4.5/6.5
Wind Design:	
Basic Wind Speed	115 mph
Exposure	C
Loading:	
Ground Snow Load	281 psf
Roof Snow Load	175 psf
Reduced Roof Snow Load	175 psf
Roof Dead Load	65 psf
Floor Live Load	40 psf
Floor Dead Load	12 psf

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1
2	3-31-16	Revision 2

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH
PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — 4867710 — ADAM J. HUSS — 4-1-16 — STATE OF UTAH

SCALES
1" = 1'-0"
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE PLOT. IF NOT, ADJUST.

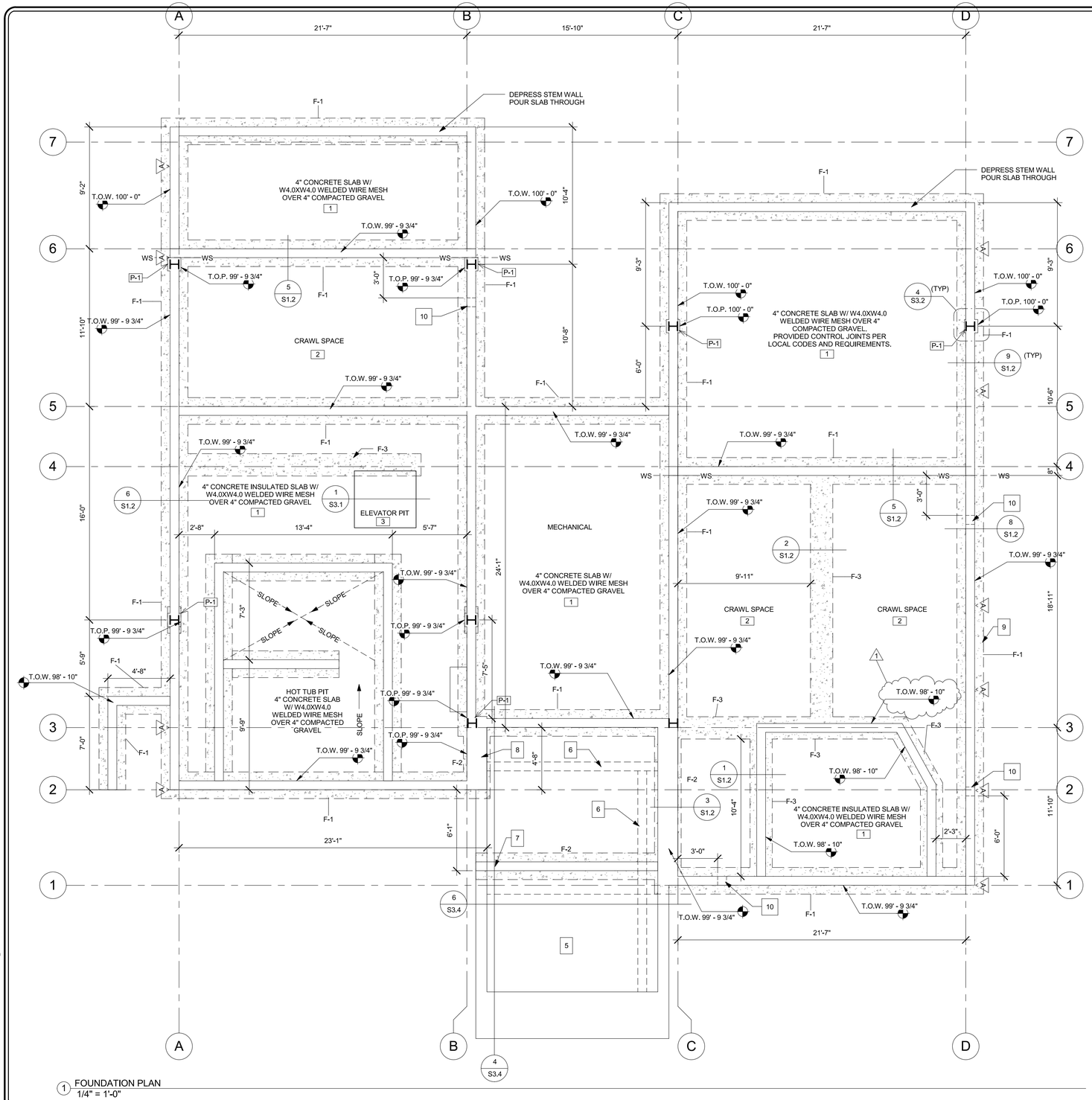
PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
GENERAL NOTES

PLAN SET: PERMIT
SHEET S0.1

C:\Users\ahuss\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_COLAYBURN.rvt



1 FOUNDATION PLAN
1/4" = 1'-0"

STRUCTURAL FOUNDATION SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	REINFORCEMENT
F-1	24"	CONT.	12"	(3) #4 BAR CONT.
F-2	36"	CONT.	14"	(4) #5 BAR CONT.
F-3	20"	CONT.	10"	(2) #4 BAR CONT.

FOUNDATION WALL SCHEDULE

HEIGHT	THICKNESS	VERT. REINFORCEMENT	HORIZ. REINFORCEMENT
≤4'	8"	#4 @ 32" O.C.	4 - #4 BARS
≤6'	8"	#4 @ 24" O.C.	5 - #4 BARS
≤8'	8"	#4 @ 24" O.C.	6 - #4 BARS
≤9'	8"	#4 @ 16" O.C.	7 - #4 BARS
≤12'	10"	#5 @ 16" O.C.	9 - #5 BARS

*12' FOUNDATION WALL REQUIRES F-2 FOOTING

PIER SCHEDULE

MARK	WIDTH	LENGTH	REINFORCEMENT
P-1	12"	12"	W/ (8) #4 VERT. BARS & #3 RINGS @ 10" O.C. W/ (3) IN TOP 5"

HOLD DOWN AND STRAP SCHEDULE

MARK	HOLD DOWN	TYPE	Allow. LOAD
A	Simpson STHD10	Embedded Hold down	2940 lbs
B	Simpson MSTC28	Strap Tie	1155 lbs

LEGEND

MARK	COMMENTS
WS	WALL STEP
FS	FOOTING STEP

KEY NOTES

MARK	COMMENTS
1	PLACE 6 MIL VAPOR BARRIER BELOW SLAB
2	PLACE 6 MIL VAPOR BARRIER OVER SOIL, LAP ALL EDGES 6"
3	REFER TO ARCHITECTURALS FOR LOCATION
4	6" SLAB W/ #4 @ 12" O.C. E.W.
5	10" THICK POOL FLOOR - SEE SECTION.
6	POOL WALL, SEE SECTION.
7	WALL TO BE PLACED BELOW POOL SLAB - SEE SECTION
8	18" THICK WALL - SEE SECTION. WALL WIDTH REDUCES TO 10" AT CANTILEVERED PORTION
9	FRENCH DRAIN @ PERIMETER . REFER TO ARCHITECTURAL DRAWINGS
10	CRAWL SPACE VENT PER ARCHITECTURAL SHEETS

NOTE: FOOTINGS ARE REQUIRED TO BEAR DIRECTLY ON BEDROCK. CONTRACTOR SHALL STEP FOOTINGS AS FIELD CONDITIONS AND DEPTH OF BEDROCK REQUIRES.

REFER TO GEO TECH REPORT

5/8" ANCHOR BOLTS @ 24" O.C. W/ 7" MINIMUM EMBEDMENT DEPTH AND 3" X 3" X 0.229" PLATE WASHERS ON ALL ANCHOR BOLTS.
(2) ANCHOR BOLTS MIN. PER SHEAR WALL.

REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS

CONSTRUCTION NOTES

FOUNDATION NOTES:
1. ALLOWABLE SOIL PRESSURE USED IN DESIGN = 5000 PSF.
2. DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL BRACING FLOOR IS IN PLACE OR ADEQUATE SHORING IS INSTALLED.
3. ALL FOUNDATION WALLS ARE 8" THICK UNLESS NOTED OTHERWISE ON PLAN. REFER TO CONCRETE NOTES AND PLANS FOR WALL REINFORCEMENT, TYPE AND SIZE OF ATTACH. ANCHORS REQUIRED.

CONCRETE NOTES:
1. PERFORM ALL CONCRETE WORK IN ACCORDANCE WITH ACI 301-05.
2. ALL CONCRETE SHALL BE STONE AGGREGATE AND HAVE A MIN COMPRESSIVE STRENGTH OF 3000 PSI TYPICAL. 4000 PSI AT SLABS ON GRADE, WITHIN 28 DAYS AFTER 2,500 PSI COMPRESSIVE STRENGTH (FC) WAS ASSUMED IN THE CALCULATIONS. PLACING.
3. ALL METAL REINFORCEMENT SHALL CONFORM TO A.S.T.M. A615 AND SUPPLEMENT (S1), GRADE 60, WITH A MIN YIELD STRENGTH OF 60 KSI.
4. ALL REINFORCING BARS SHALL BE DETAILED, BOLSTERED AND SUPPORTED IN ACCORDANCE WITH ACI 315, 318, AND PUBLICATION SP-66.
5. ALL REINFORCEMENT BARS SHALL BE SECURELY ANCHORED TO THE FORMS AND SPACED FROM THEM AS FOLLOWS: (A) FOR CONCRETE NOT EXPOSED DIRECTLY TO THE GROUND OR WEATHER, 3/4" IN SLABS, JOISTS AND WALLS; 1-1/2" IN PIERS, COLUMNS, BEAMS, AND GIRDERS. (B) FOR CONCRETE EXPOSED TO THE GROUND OR WEATHER, 2" IN WALLS, PIERS AND COLUMNS; 3" ABOVE BOTTOM OF FOOTINGS.
6. ALL SPLICES IN CONT REINFORCING BARS SHALL LAP 30 BAR DIA'S. ALL SUCH SPLICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS SHOWN OTHERWISE.
7. PROVIDE 1/4" MIN AMPLITUDE ROUGHENED JOINT IN TOP OF ALL FOOTINGS.
8. LARGE AREAS OF SLAB ON GRADE SHALL BE PLACED IN CHECKERBOARD FASHION IN LENGTHS NOT TO EXCEED 24'-0" IN ANY DIRECTION.
9. PLACE CONTROL JOINTS IN SLABS AT 12'-0" O.C. IN EACH DIRECTION BY SAW CUTTING OR PREMOLDED STRIP. 1/4TH THE SLAB THICKNESS.
10. REINFORCE ALL CONCRETE WALLS AS SHOWN ON THE PLANS.
11. USE (2) #4 AT TOPS, BOTTOM, AND SIDES OF ALL OPENINGS.
12. ALL DOWELS SHALL HAVE AT LEAST 30 BAR DIA EMBEDMENT AND A STANDARD HOOK AT ENDS.
13. PROVIDE 2-15L CORNER BARS AT ALL INTERSECTING CORNERS OF WALLS AND FOOTINGS. USE SAME SIZE AND SPACING AS HORIZONTAL REINFORCEMENT.
14. CONTRACTOR IS RESPONSIBLE FOR ALL FORMING AND BRACING REQUIREMENTS TO ENSURE THAT THE FORMS ARE STABLE AND PLUMB DURING CONCRETE PLACEMENT
15. PROVIDE CONCRETE MIX WITH A MIN COMPRESSIVE STRENGTH OF 3,000 PSI.
16. TOP OF FOUNDATION WALL TO BE A MIN OF 6" ABOVE ADJACENT FINISH GRADE.

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER
ADAM J. HUS
4-1-16
STATE OF UTAH

SCALES
As indicated
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST SCALES ACCORDINGLY

PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

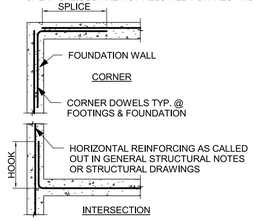
SHEET TITLE:
FOUNDATION PLAN

PLAN SET: PERMIT
SHEET S1.1

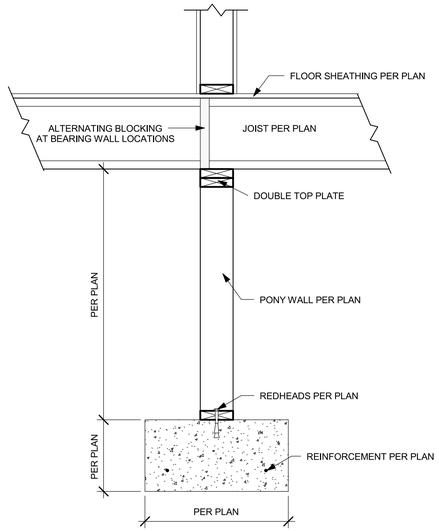
C:\Users\chan\Documents\STRUCTURAL PLANS CENTRAL 3-31-15_CCLATRUN.rvt

REINFORCING LAP LENGTH SPLICE SCHEDULE								
TENSION BARS "Ld"								
BAR SIZE	fc=3000 PSI				fc=4000 PSI			
	REGULAR CLASS		TOP CLASS		REGULAR CLASS		TOP CLASS	
	A	B	A	B	A	B	A	B
#3	17"	22"	22"	28"	15"	19"	19"	24"
#4	22"	29"	29"	38"	18"	25"	26"	33"
#5	28"	36"	37"	48"	24"	31"	32"	42"
#6	33"	43"	45"	58"	29"	37"	39"	50"
#7	48"	63"	63"	82"	42"	55"	55"	71"
#8	55"	72"	72"	93"	48"	63"	63"	81"
#9	62"	81"	81"	105"	54"	71"	71"	92"
#10	70"	91"	91"	118"	61"	79"	79"	103"

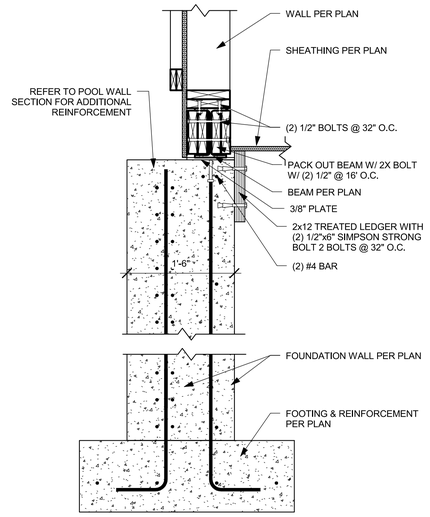
NOTES:
1. THE SCHEDULE SHOWN APPLIES TO REG WT CONCRETE WITH 60KSI GRADE REINFORCING BARS.
2. TOP BARS ARE HORIZONTAL BARS WITH 12" (OR MORE), OF FRESH CONCRETE CAST BELOW THE BARS.
3. CLASS "A' SPLICES SHALL BE USED WHEN 50% (OR LESS) OF BARS SPLICED WITHIN LAP.
4. CLASS "B" SPLICES SHALL BE USE FOR ALL ELSE, TYPICALLY WITH SHEAR WALL, COLUMNS, BEAM & SLABS.
5. FOR BUNDLED BARS, INCREASE LAP LENGTHS AS FOLLOWS:
   BUNDLED BARS, THREE OR LESS: LdX1.2
   BUNDLED BARS, FOUR OR MORE: LdX1.33
   INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
6. LAP SPLICES ARE NOT ALLOWED FOR TIES AND STIRRUPS.



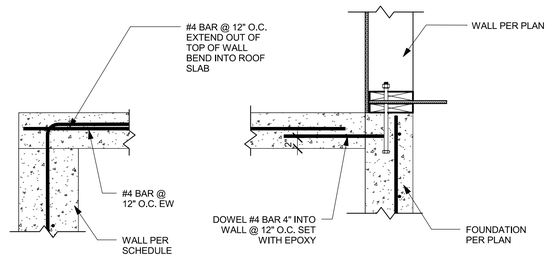
REQUIRED LAP LENGTH			
TYPE	CONCRETE	MASONRY	MIN.
SPLICE	40 BAR DIA.	48 BAR DIA.	24"
HOOK	12 BAR DIA.	20 BAR DIA.	12"



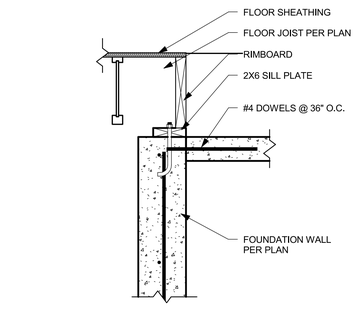
2 (TYP) PONY WALL
1" = 1'-0"



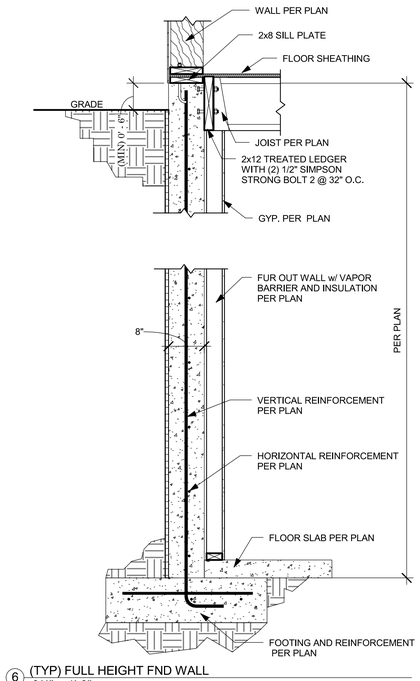
3 S. HOT TUB SIDE WALL
1" = 1'-0"



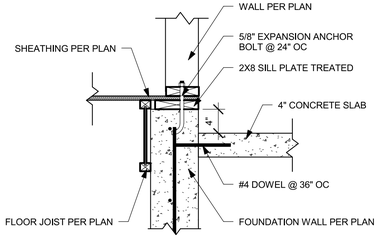
4 LOWER ROOF SLAB @ HOUSE WALL
1" = 1'-0"



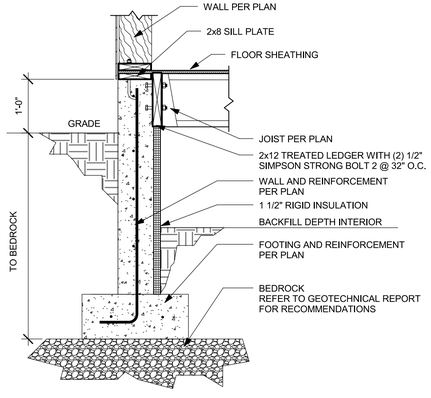
1 FLOOR STEP
1" = 1'-0"



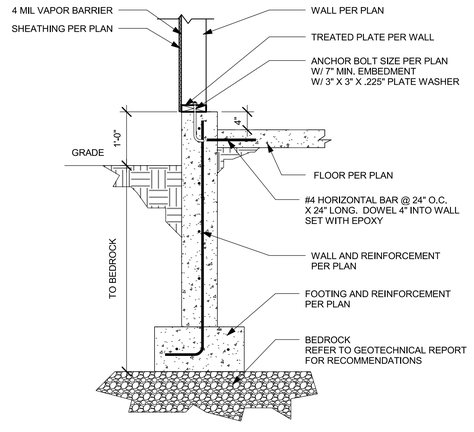
6 (TYP) FULL HEIGHT FND WALL
3/4" = 1'-0"



5 S. GARAGE STEM 2
1" = 1'-0"



8 (TYP) PERIMETER FOUNDATION WALL
3/4" = 1'-0"



9 (TYP) GARAGE STEM WALL
3/4" = 1'-0"

CONSTRUCTION NOTES

FOUNDATION NOTES:
1. ALLOWABLE SOIL PRESSURE USED IN DESIGN = 5000 PSF.
2. DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL BRACING FLOOR IS IN PLACE OR ADEQUATE SHORING IS INSTALLED.
3. ALL FOUNDATION WALLS ARE 8" THICK UNLESS NOTED OTHERWISE ON PLAN. REFER TO CONCRETE NOTES AND PLANS FOR WALL REINFORCEMENT. TYPE AND SIZE OF ATTACH. ANCHORS REQUIRED.

CONCRETE NOTES:
1. PERFORM ALL CONCRETE WORK IN ACCORDANCE WITH ACI 301-84.
2. ALL CONCRETE SHALL BE STONE AGGREGATE AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI TYPICAL, 4000 PSI AT SLABS ON GRADE, WITHIN 28 DAYS AFTER 2,500 PSI COMPRESSIVE STRENGTH (F'C) WAS ASSUMED IN THE CALCULATIONS. PLACING.
3. ALL METAL REINFORCEMENT SHALL CONFORM TO A.S.T.M. A615 AND SUPPLEMENT (S1), GRADE 60, WITH A MINIMUM YIELD STRENGTH OF 60 KSI.
4. ALL REINFORCING BARS SHALL BE DETAILED, BOLSTERED AND SUPPORTED IN ACCORDANCE WITH ACI 315, 318, AND PUBLICATION SP-66.
5. ALL REINFORCEMENT BARS SHALL BE SECURELY ANCHORED TO THE FORMS AND SPACED FROM THEM AS FOLLOWS: (A) FOR CONCRETE NOT EXPOSED DIRECTLY TO THE GROUND OR WEATHER, 3/4" IN SLABS, JOISTS AND WALLS; 1-1/2" IN PIERS, COLUMNS, BEAMS, AND GIRDERS. (B) FOR CONCRETE EXPOSED TO THE GROUND OR WEATHER, 2" IN WALLS, PIERS AND COLUMNS. 3" ABOVE BOTTOM OF FOOTINGS.
6. ALL SPLICES IN CONTINUOUS REINFORCING BARS SHALL LAP 30 BAR DIAMETERS. ALL SUCH SPLICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS SHOWN OTHERWISE.
7. PROVIDE 1/4" MINIMUM AMPLITUDE ROUGHENED JOINT IN TOP OF ALL FOOTINGS.
8. LARGE AREAS OF SLAB ON GRADE SHALL BE PLACED IN CHECKERBOARD FASHION IN LENGTHS NOT TO EXCEED 24'-0" IN ANY DIRECTION.
9. PLACE CONTROL JOINTS IN SLABS AT 12'-0" O.C. IN EACH DIRECTION BY SAW CUTTING OR PREMOLDED STRIP, 1/4TH THE SLAB THICKNESS.
10. REINFORCE ALL CONCRETE WALLS AS SHOWN ON THE PLANS.
11. USE (2) #4 AT TOPS, BOTTOM, AND SIDES OF ALL OPENINGS
12. ALL DOWELS SHALL HAVE AT LEAST 30 BAR DIAMETER EMBEDMENT AND/OR STANDARD HOOK AT ENDS.
13. PROVIDE STD. CORNER BARS AT ALL INTERSECTING CORNERS OF WALLS AND FOOTINGS. USE SAME SIZE AND SPACING AS HORIZONTAL REINFORCEMENT.
14. CONTRACTOR IS RESPONSIBLE FOR ALL FORMING AND BRACING REQUIREMENTS TO ENSURE THAT THE FORMS ARE STABLE AND PLUMB DURING CONCRETE PLACEMENT
15. ALL FOOTINGS TO BE A MINIMUM OF 36" BELOW FINISHED GRADE -IRC R403.1.4
16. PROVIDE CONCRETE MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI -IRC R402
17. TOP OF FOUNDATION WALL TO BE A MINIMUM OF 8 INCHES ABOVE ADJACENT FINISH GRADE -IRC R404.1.6
18. CONCRETE FLOOR SLABS, EXCEPT THOSE IN UNHEATED ACCESSORY STRUCTURES, SHALL HAVE A VAPOR RETARDER CONSISTING OF A 6 MIL (.006 INCH)POLYETHYLENE BARRIER OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE MATERIAL.
19. SLAB ON GRADE FLOORS AT EXTERIOR PERIMETER FOUNDATION WALLS THAT ARE ABOVE GRADE. ARE REQUIRED TO BE INSULATED. ALSO BETWEEN THE WALL AND THE END OF THE SLAB A THERMO BREAK IS REQUIRED. IECC 102.4.1, 802.2.7.

DATE
JUNE 2015

epic ENGINEERING

REVISIONS		
MARK	DATE	DESCRIPTION

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER (6277) ADAM J. HUNT 4-1-16 STATE OF UTAH

SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

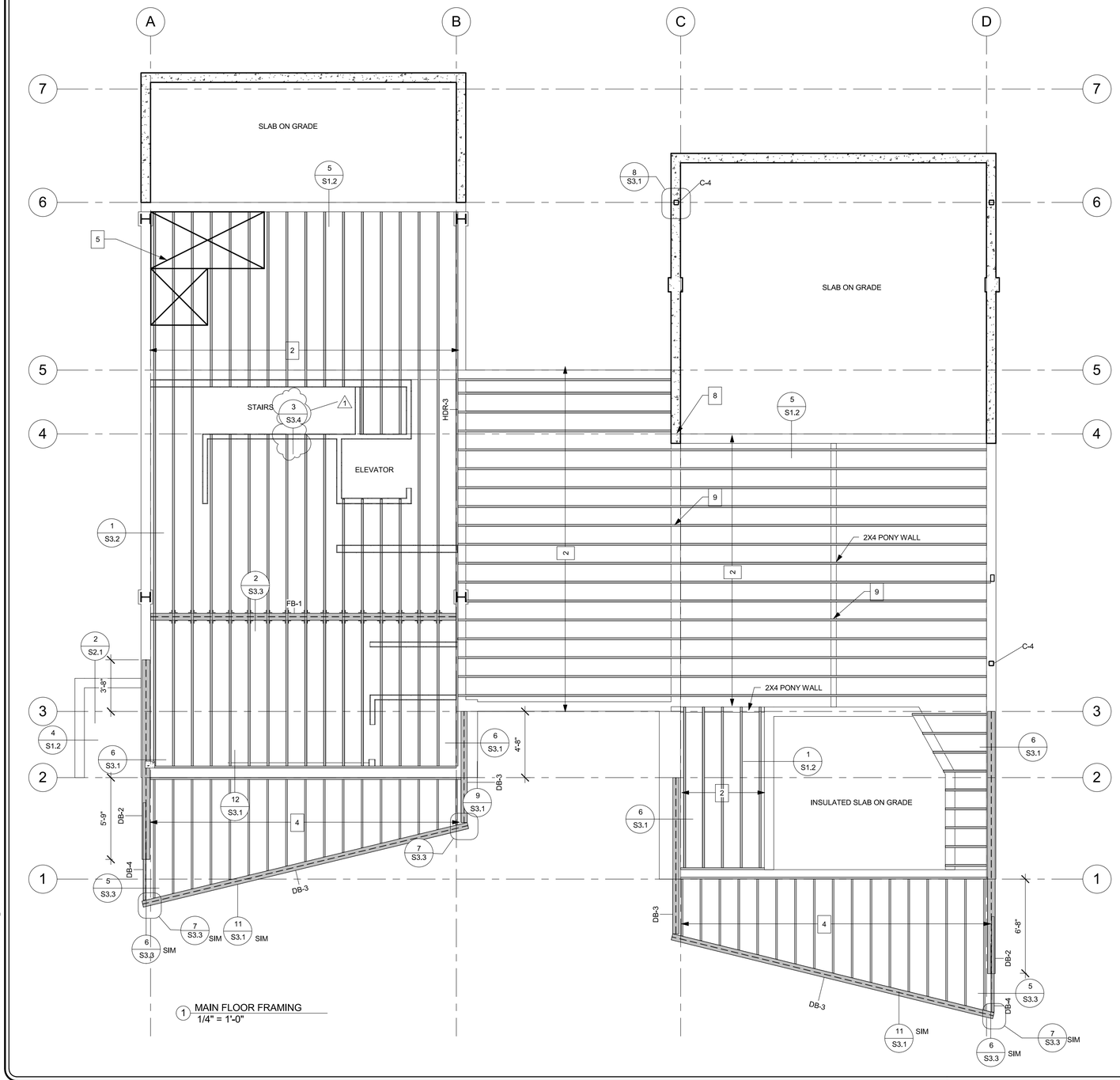
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
FOUNDATION SCHEDULES

PLAN SET: PERMIT

SHEET S1.2

C:\Users\hunt\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_CCLAYBURN.rvt



1 MAIN FLOOR FRAMING
1/4" = 1'-0"

STRUCTURAL HEADER SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-2	(2) 1-3/4" x 9-1/2"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-3	(2) 2x10	#2 DF	#2 DF	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-4	(3) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-5	(2) 1-3/4" x 16"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)

STRUCTURAL FLOOR & DECK BEAM SCHEDULE

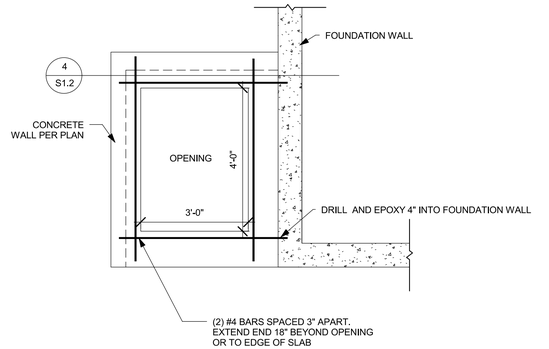
MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	W 10X30	STEEL	50 KSI	
FB-2	1-3/4" X 11-7/8"	LVL	1.9E	
DB-1	W 10X12	STEEL	50 KSI	
DB-2	W 12X35	STEEL	50 KSI	
DB-3	W 8X21	STEEL	50 KSI	
DB-4	C 8X11.5	STEEL	36 KSI	

STRUCTURAL COLUMN SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	W12X22	STEEL	50 KSI	
C-2	W18X35	STEEL	50 KSI	
C-3	(3) 2x8	#2 DF	#2 DF	
C-4	HSS 4X4X1/4	STEEL	46 KSI	
C-5	W14X22	STEEL	50 KSI	

KEY NOTES

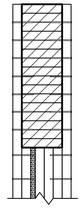
MARK	COMMENTS
1	(2) 16" TJI 560 @ 19.2" O.C. USE HB 7.12/16 HANGERS AS NEEDED
2	11-7/8" TJI 210 @ 16" O.C. USE ITS 2.06/11.88 HANGERS AS NEEDED
3	16" TJI 360 @ 16" O.C. USE IUS 2.37/16 HANGERS
4	2X8 #2DF @ 16" O.C. USE LUS28 HANGERS AS NEEDED
5	WARMBOARD 'S'
6	DOUBLE JOIST
7	5/8" OSB SHEATHING W/ 8d NAILS @ 4" O.C. EDGE, 12" O.C. FIELD
8	2X12 TREATED LEDGER W/ (2) 1/2"X6" EXPANSION BOLTS @ 16" O.C.
9	BLOCKING (TYP)
10	LVL RIMBOARD
11	ATTACH RB-1 TO C-2 AS PER DETAIL 3/S3.1
12	2x8 #2DF @ 24" O.C. W/ LUS26 HANGERS
13	FLOOR HATCH TO BE A MINIMUM OF 18"X24" OPENING. VERIFY W/ ARCHITECT ON LOCATION
14	BEARING ON LOWER ROOF BEAM. SEE SHEET S2.4



2 ROOF SLAB OPENING REINFORCEMENT
1/2" = 1'-0"

COLUMN NOTES:

1. ALL COLUMNS (POSTS) SHALL STOP AT FLOOR LEVEL AND BE SOLID BLOCKED THROUGH THE FLOOR JOIST SPACE UNLESS NOTED OTHER WISE.
2. ALL TRIMMERS SHALL BE NAILED TO A SINGLE KING STUD(FULL HT.), OR TO A DOUBLE KING STUD IF A SHEAR WALL HOLDOWN OR STRAP IS SPECIFIED.
3. PROVIDE FULL BEARING COLUMN w/ TRIMMERS ON EACH SIDE OF BEAMS INTERSECTING PARALLEL TO ADJOINING FRAMING. (U.N.O.)
4. ALL MULTI-STUD COLUMNS SHALL BE CONSTRUCTED WITH STUDS ORIENTED THE SAME DIRECTION AS THE WALL STUDS. INSTALL SOLID PLYWD. FILLER AS REQ'D TO FLUSH THE COLUMN SIDE WITH BEAM. ADD KING STUD EACH SIDE.
5. NAIL DOUBLE-STUD COLUMNS TOGETHER w/ 10d @12"O.C. NAIL ALL OTHER MULTI-STUD COLUMNS TOGETHER w/16d @12"O.C. EACH MEMBER.
6. KING STUD TO BEAM: 16d@TOP, BTM, & 3" O.C. (STAGGERED)



FRAMING COLUMN NOTES
1" = 1'-0"

CONSTRUCTION NOTES

FRAMING NOTES:
1. PROVIDE A MINIMUM 18 INCH CLEARANCE FOR WOOD JOISTS AND 12 INCHES CLEARANCE FOR WOOD GIRDERS IN THE CRAWLSPACE UNLESS PROPER REDWOOD OR PRESSURE TREATED WOOD IS SPECIFIED - IRC R319.1
2. ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY INCLUDING LEDGERS AND FURRING WALLS MUST BE PRESERVATIVE TREATED OR FOUNDATION GRADE REDWOOD - IRC 319
3. PROVIDE 1/2" AIRSPACE AT TOPS, SIDES AND ENDS OF GIRDERS ENTERING EXTERIOR CONCRETE OR MASONRY WALLS UNLESS WOODS RESISTANT TO DECAY ARE USED IRCR319
4. NO WOOD SHALL BE NEARER THAN 8 INCHES TO EARTH UNLESS SEPARATED BY CONCRETE AT LEAST 3 INCHES IN THICKNESS WITH AN IMPERVIOUS MEMBRANE INSTALLED BETWEEN THE EARTH AND THE CONCRETE. THIS INCLUDES DECKS AND SIDING - IRC R319
5. ACCESSIBLE BELOW-FLOOR AREAS SHALL BE PROVIDED WITH A MINIMUM 18" X 24" ACCESS OPENING. IRC R408.3. FOR ACCESS TO MECHANICAL EQUIPMENT IN THESE AREAS, SEE IRC M1305.1.4
6. PROVIDE A MINIMUM 22" 30" ATTIC ACCESS IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION -IRC R807, SEE M1305.1.3 FOR ACCESS TO FURNACES AND OTHER MECHANICAL EQUIPMENT IN ATTICS.
7. PROVIDE A MINIMUM OF 2 INCH THICK REDWOOD PLANKS FOR DECK IF DECK JOIST SPACING IS 16" ON CENTER OR GREATER. NOMINAL 1" THICK PLANKING SHALL NOT BE USED WHERE DECK JOISTS ARE SPACED GREATER THAN 12" ON CENTER. -IRC R501.2
8. FIRE BLOCK STUD SPACES AT SOFFITS, FLOOR AND CEILING JOIST LINES, AT 10 FT. VERTICALLY AND HORIZONTALLY, AND AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY SPACES FOR FACTORY BUILT CHIMNEYS, AND AT ANY OTHER LOCATIONS NOT SPECIFICALLY MENTIONED WHICH COULD AFFORD PASSAGE FOR FLAMES - IRC R602.8
9. **ALL HEADERS TYPICAL FOR ALL 2X4 WALLS** ARE (2) 2 X 10 #2DF U.N.O.
10. **ALL HEADERS TYPICAL FOR ALL 2X6 WALLS** ARE (3)2 X 10 #2DF U.N.O.

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT #
14SM2068

LICENSED STRUCTURAL ENGINEER
ADAM J. HUS
4-1-16
STATE OF UTAH

SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

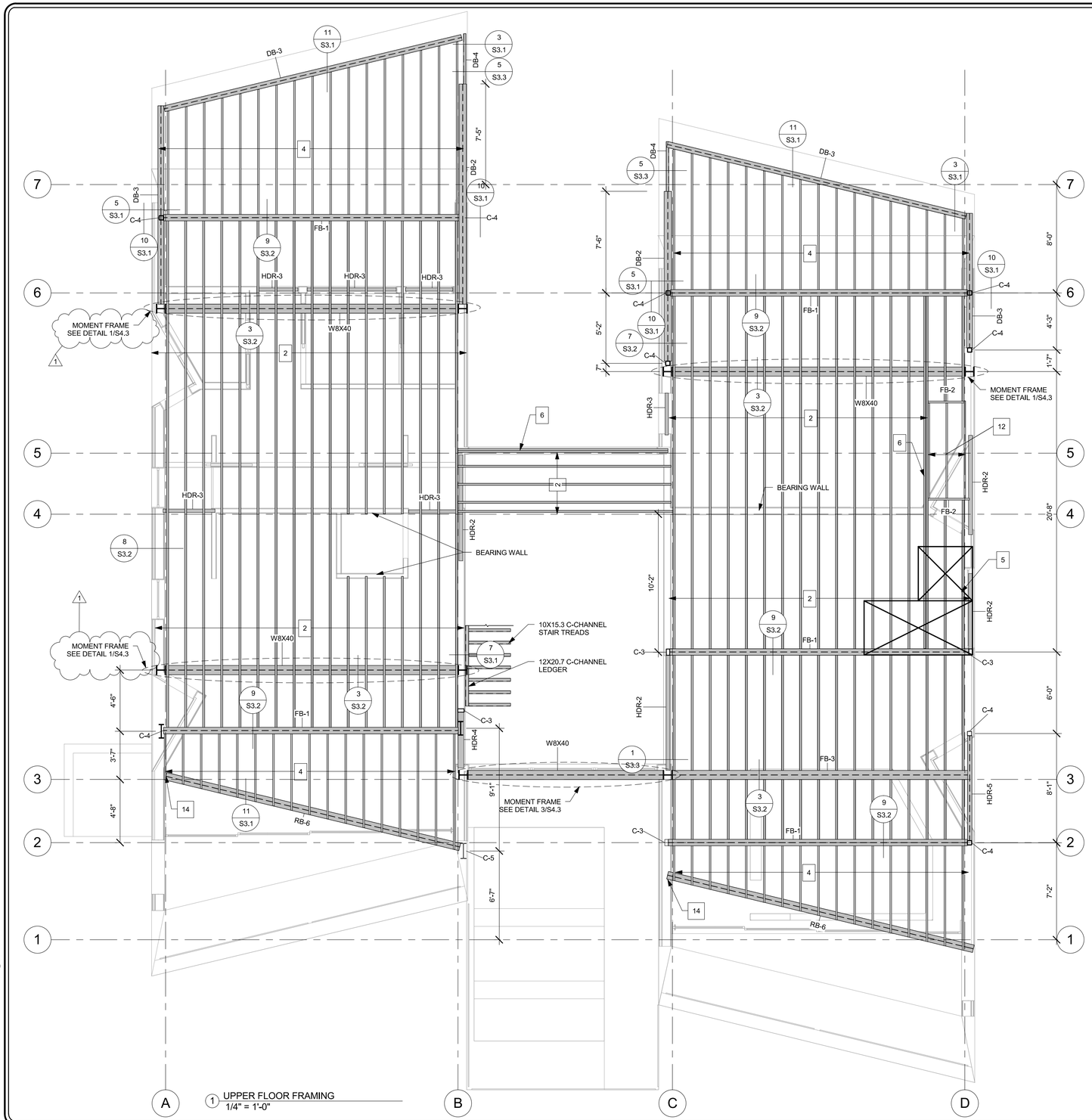
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
MAIN FLOOR FRAMING PLAN

PLAN SET: PERMIT

SHEET S2.1

C:\Users\Other\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_CCLAYBURN.rvt



1 UPPER FLOOR FRAMING
1/4" = 1'-0"

STRUCTURAL HEADER SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-2	(2) 1-3/4" x 9-1/2"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-3	(2) 2x10	#2 DF	#2 DF	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-4	(3) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-5	(2) 1-3/4" x 16"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)

STRUCTURAL FLOOR & DECK BEAM SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	W 10X30	STEEL	50 KSI	
FB-2	1-3/4" X 11-7/8"	LVL	1.9E	
FB-3	W 8X40	STEEL	50 KSI	
DB-1	W 10X12	STEEL	50 KSI	
DB-2	W 12X35	STEEL	50 KSI	
DB-3	W 8X21	STEEL	50 KSI	
DB-4	C 8X11.5	STEEL	50 KSI	

STRUCTURAL COLUMN SCHEDULE

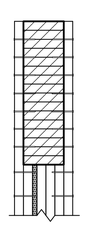
MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	W12X22	STEEL	50 KSI	
C-2	W18X35	STEEL	50 KSI	
C-3	(3) 2x8	#2 DF	#2 DF	
C-4	HSS 4X4X1/4	STEEL	46 KSI	
C-5	W14X22	STEEL	50 KSI	

KEY NOTES

MARK	COMMENTS
1	(2) 16" TJI 560 @ 19.2" O.C. USE HB 7.12/16 HANGERS AS NEEDED
2	11-7/8" TJI 210 @ 16" O.C. USE ITS 2.06/11.88 HANGERS AS NEEDED
3	16" TJI 360 @ 16" O.C. USE IUS 2.37/16 HANGERS
4	2X8 #2DF @ 16" O.C. USE LUS28 HANGERS AS NEEDED
5	WARMBOARD 'S'
6	DOUBLE JOIST
7	5/8" OSB SHEATHING W/ 8d NAILS @ 4" O.C. EDGE, 12" O.C. FIELD
8	2X12 TREATED LEDGER W/ (2) 1/2"X6" EXPANSION BOLTS @ 16" O.C.
9	BLOCKING (TYP)
10	LVL RIMBOARD
11	ATTACH RB-1 TO C-2 AS PER DETAIL 3/S3.1
12	2x8 #2DF @ 24" O.C. W/ LUS26 HANGERS
13	FLOOR HATCH TO BE A MINIMUM OF 18"X24" OPENING. VERIFY W/ ARCHITECT ON LOCATION
14	BEARING ON LOWER ROOF BEAM. SEE SHEET S2.4

COLUMN NOTES:

1. ALL COLUMNS (POSTS) SHALL STOP AT FLOOR LEVEL AND BE SOLID BLOCKED THROUGH THE FLOOR JOIST SPACE UNLESS NOTED OTHER WISE.
2. ALL TRIMMERS SHALL BE NAILED TO A SINGLE KING STUD(FULL HT.), OR TO A DOUBLE KING STUD IF A SHEAR WALL HOLDOWN OR STRAP IS SPECIFIED.
3. PROVIDE FULL BEARING COLUMN w/ TRIMMERS ON EACH SIDE OF BEAMS INTERSECTING PARALLEL TO ADJOINING FRAMING. (U.N.O.)
4. ALL MULTI-STUD COLUMNS SHALL BE CONSTRUCTED WITH STUDS ORIENTED THE SAME DIRECTION AS THE WALL STUDS. INSTALL SOLID PLYWD. FILLER AS REQ'D TO FLUSH THE COLUMN SIDE WITH BEAM. ADD KING STUD EACH SIDE.
5. NAIL DOUBLE-STUD COLUMNS TOGETHER w/ 10d @12"O.C. NAIL ALL OTHER MULTI-STUD COLUMNS TOGETHER w/16d @12"O.C. EACH MEMBER.
6. KING STUD TO BEAM: 16d@TOP, BTM, & 3" O.C. (STAGGERED)



FRAMING COLUMN NOTES
1" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — 7248577 — ADAM J. HUNT — 4-1-16 — STATE OF UTAH

SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

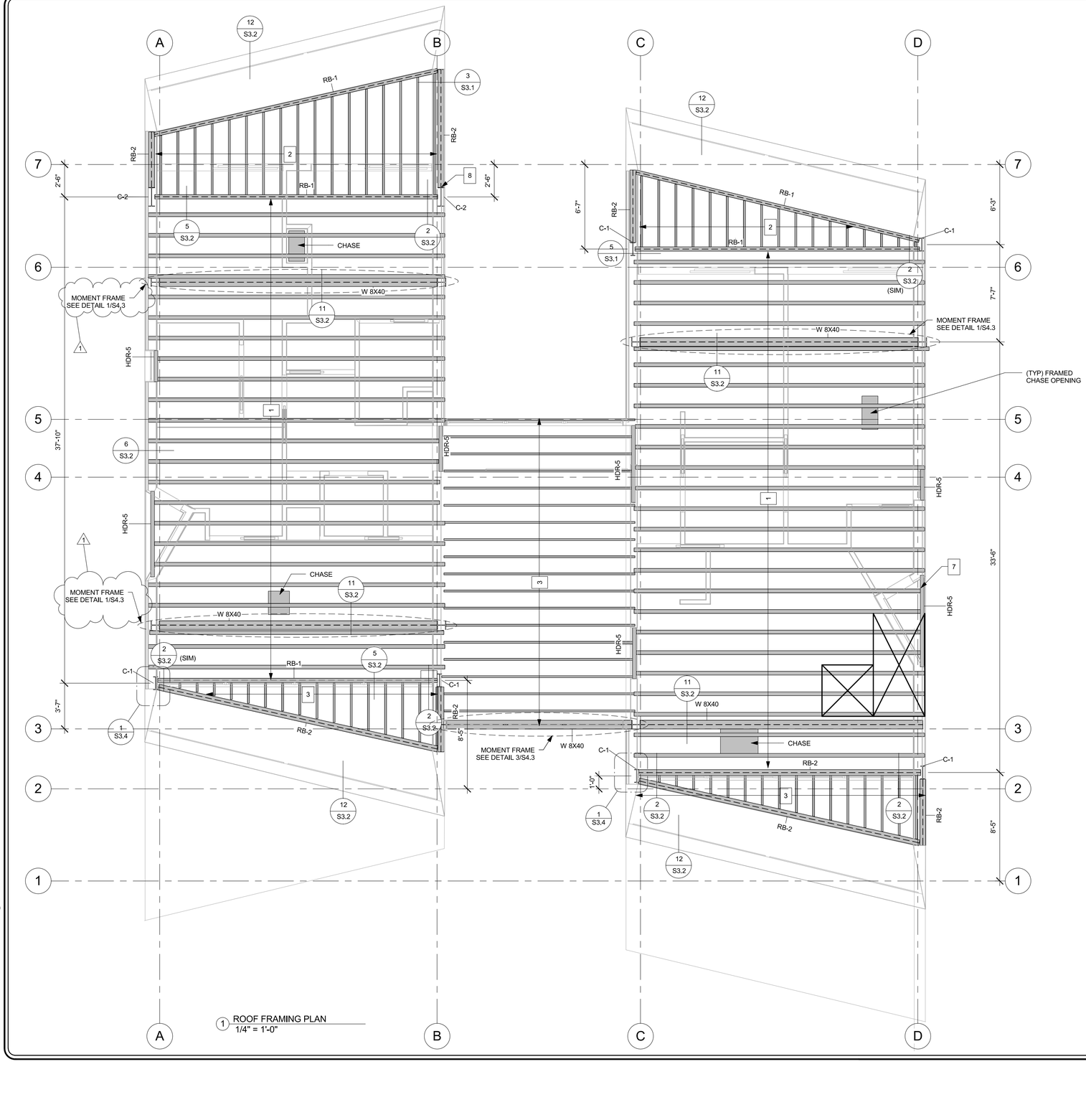
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
UPPER FLOOR FRAMING PLAN

PLAN SET: PERMIT

SHEET S2.2

C:\Users\hm\Documents\STRUCTURAL PLANS CENTRAL_2-21-16_CCLAYTBURN.rvt



1 ROOF FRAMING PLAN
1/4" = 1'-0"

STRUCTURAL HEADER SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-2	(2) 1-3/4" x 9-1/2"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-3	(2) 2x10	#2 DF	#2 DF	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-4	(3) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-5	(2) 1-3/4" x 16"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)

* ALL HEADERS @ ROOF FRAMING LEVEL ARE FLUSH WITH THE FRAMING SEE DETAIL 4/S3.1

STRUCTURAL ROOF BEAM SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
RB-1	W 12X22	STEEL	50 KSI	
RB-2	W 16X26	STEEL	50 KSI	
RB-3	W 14X38	STEEL	50 KSI	
RB-4	W 12X26	STEEL	50 KSI	
RB-5	(2) 1-3/4" x 11-7/8"	LVL	1.9E	

STRUCTURAL COLUMN SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	W12X22	STEEL	50 KSI	
C-2	W18X35	STEEL	50 KSI	
C-3	(3) 2x8	#2 DF	#2 DF	
C-4	HSS 4X4X1/4	STEEL	46 KSI	
C-5	W14X22	STEEL	50 KSI	

KEY NOTES

MARK	COMMENTS
1	(2) 16" TJI 560 @ 19.2" O.C. USE HB 7.12/16 HANGERS AS NEEDED
2	11-7/8" TJI 210 @ 16" O.C. USE ITS 2.06/11.88 HANGERS AS NEEDED
3	16" TJI 360 @ 16" O.C. USE IUS 2.37/16 HANGERS
4	2X8 #2DF @ 16" O.C. USE LUS28 HANGERS AS NEEDED
5	WARMBOARD 'S'
6	DOUBLE JOIST
7	5/8" OSB SHEATHING W/ 8d NAILS @ 4" O.C. EDGE, 12" O.C. FIELD
8	2X12 TREATED LEDGER W/ (2) 1/2"X6" EXPANSION BOLTS @ 16" O.C.
9	BLOCKING (TYP)
10	LVL RIMBOARD
11	ATTACH RB-1 TO C-2 AS PER DETAIL 3/S3.1
12	2x8 #2DF @ 24" O.C. W/ LUS26 HANGERS
13	FLOOR HATCH TO BE A MINIMUM OF 18"X24" OPENING. VERIFY W/ ARCHITECT ON LOCATION
14	BEARING ON LOWER ROOF BEAM. SEE SHEET S2.4

CONSTRUCTION NOTES

FRAMING NOTES:

1. PROVIDE A MINIMUM 18 INCH CLEARANCE FOR WOOD JOISTS AND 12 INCHES CLEARANCE FOR WOOD GIRDERS IN THE CRAWLSPACE UNLESS PROPER REDWOOD OR PRESSURE TREATED WOOD IS SPECIFIED - IRC R319.1
2. ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY INCLUDING LEDGERS AND FURRING WALLS MUST BE PRESERVATIVE TREATED OR FOUNDATION GRADE REDWOOD - IRC 319
3. PROVIDE 1/2" AIRSPACE AT TOPS, SIDES AND ENDS OF GIRDERS ENTERING EXTERIOR CONCRETE OR MASONRY WALLS UNLESS WOODS RESISTANT TO DECAY ARE USED IRCR319
4. NO WOOD SHALL BE NEARER THAN 8 INCHES TO EARTH UNLESS SEPARATED BY CONCRETE AT LEAST 3 INCHES IN THICKNESS WITH AN IMPERVIOUS MEMBRANE INSTALLED BETWEEN THE EARTH AND THE CONCRETE. THIS INCLUDES DECKS AND SIDING - IRC R319
5. ACCESSIBLE BELOW-FLOOR AREAS SHALL BE PROVIDED WITH A MINIMUM 18" X 24" ACCESS OPENING. IRC R408.3. FOR ACCESS TO MECHANICAL EQUIPMENT IN THESE AREAS. SEE IRC M1305.1.4
6. PROVIDE A MINIMUM 22" X 30" ATTIC ACCESS IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION -IRC R807. SEE M1305.1.3 FOR ACCESS TO FURNACES AND OTHER MECHANICAL EQUIPMENT IN ATTICS.
7. PROVIDE A MINIMUM OF 2 INCH THICK REDWOOD PLANKS FOR DECK IF DECK JOIST SPACING IS 16" ON CENTER OR GREATER. NOMINAL 1" THICK PLANKING SHALL NOT BE USED WHERE DECK JOISTS ARE SPACED GREATER THAN 12" ON CENTER. -IRC R501.2
8. FIRE BLOCK STUD SPACES AT SOFFITS, FLOOR AND CEILING JOIST LINES, AT 10 FT. VERTICALLY AND HORIZONTALLY, AND AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY SPACES FOR FACTORY BUILT CHIMNEYS, AND AT ANY OTHER LOCATIONS NOT SPECIFICALLY MENTIONED WHICH COULD AFFORD PASSAGE FOR FLAMES - IRC R602.8
9. **ALL HEADERS TYPICAL FOR ALL 2X4 WALLS** ARE (2) 2 X 10 #2DF U.N.O.
10. **ALL HEADERS TYPICAL FOR ALL 2X6 WALLS** ARE (3)2 X 10 #2DF U.N.O.

DATE

JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER
STATE OF UTAH
No. 10577
ADAM J. HUDE
4-1-16

SCALES

1/4" = 1'-0"

0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE PLOT. IF NOT, RESCALE.

PROJECT NAME:

FALCONE RESIDENCE

PROJECT LOCATION:

7947 EAST HEARTWOOD DRIVE WEBER COUNTY, UT

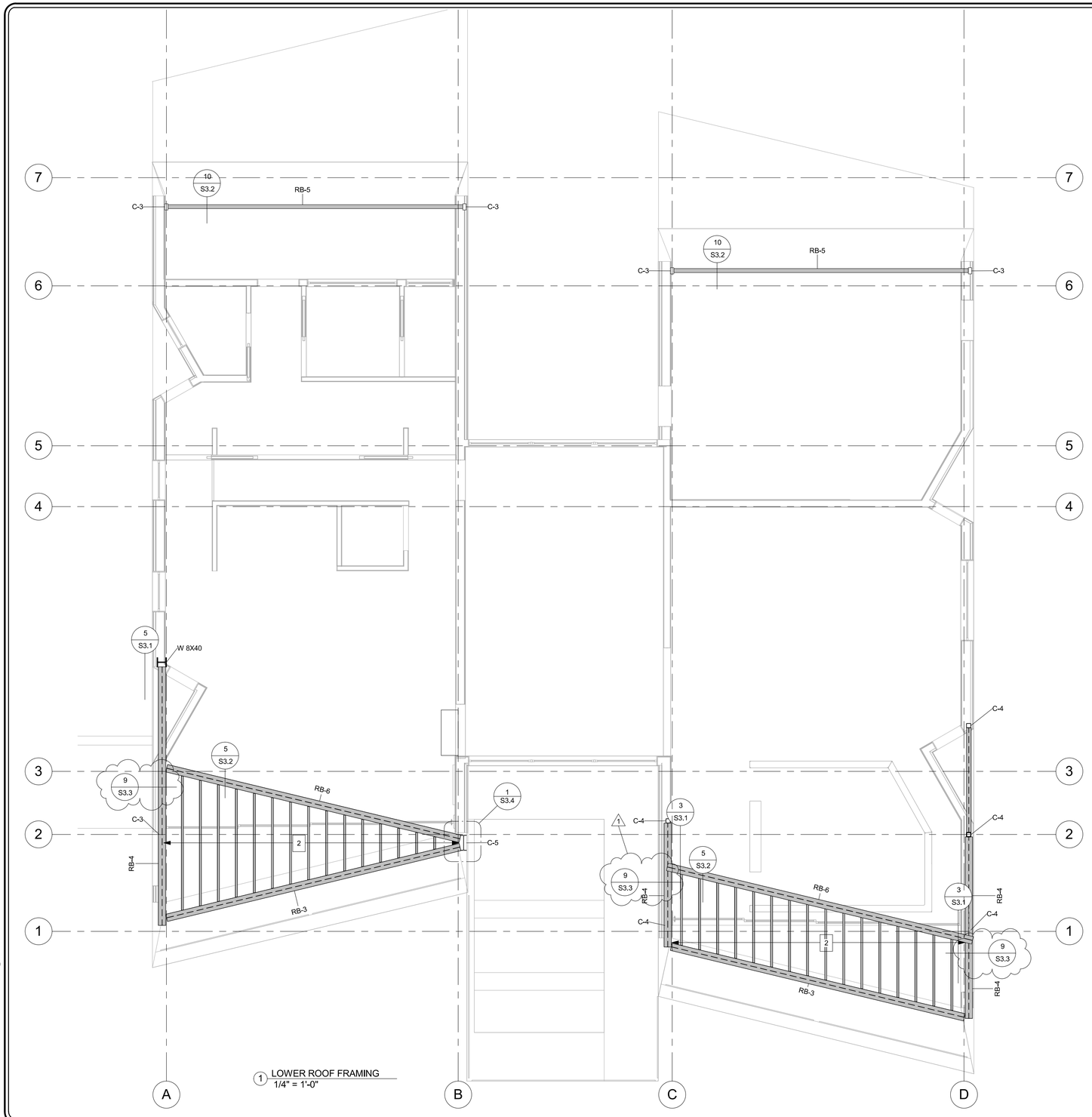
SHEET TITLE:

ROOF FRAMING PLAN

PLAN SET: PERMIT

SHEET S2.3

C:\Users\hart\Documents\STRUCTURAL PLANS CENTRAL 3-31-15_CCLAYBURN.rvt



1 LOWER ROOF FRAMING
1/4" = 1'-0"

STRUCTURAL HEADER SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-2	(2) 1-3/4" x 9-1/2"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-3	(2) 2x10	#2 DF	#2 DF	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-4	(3) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-5	(2) 1-3/4" x 16"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)

STRUCTURAL ROOF BEAM SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
RB-1	W 12X22	50 KSI	A192	
RB-2	W 16X26	50 KSI	A192	
RB-3	W 12X30	50 KSI	A192	
RB-4	W 14X22	50 KSI	A192	
RB-5	(2) 1-3/4" x 11-7/8"	LVL	1.9E	
RB-6	W 14X38	50 KSI	A192	

STRUCTURAL COLUMN SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	W12X22	STEEL	50 KSI	
C-2	W18X35	STEEL	50 KSI	
C-3	(3) 2x8	#2 DF	#2 DF	
C-4	HSS 4X4X1/4	STEEL	46 KSI	
C-5	W14X22	STEEL	50 KSI	

KEY NOTES

MARK	COMMENTS
1	(2) 16" TJI 560 @ 19.2" O.C. USE HB 7.12/16 HANGERS AS NEEDED
2	11-7/8" TJI 210 @ 16" O.C. USE ITS 2.06/11.88 HANGERS AS NEEDED
3	16" TJI 360 @ 16" O.C. USE IUS 2.37/16 HANGERS
4	2X8 #2DF @ 16" O.C. USE LUS28 HANGERS AS NEEDED
5	WARMBOARD 'S'
6	DOUBLE JOIST
7	5/8" OSB SHEATHING W/ 8d NAILS @ 4" O.C. EDGE, 12" O.C. FIELD
8	2X12 TREATED LEDGER W/ (2) 1/2"X6" EXPANSION BOLTS @ 16" O.C.
9	BLOCKING (TYP)
10	LVL RIMBOARD
11	ATTACH RB-1 TO C-2 AS PER DETAIL 3/S3.1
12	2x8 #2DF @ 24" O.C. W/ LUS26 HANGERS
13	FLOOR HATCH TO BE A MINIMUM OF 18"X24" OPENING. VERIFY W/ ARCHITECT ON LOCATION
14	BEARING ON LOWER ROOF BEAM. SEE SHEET S2.4

NOTE: IF GREEN ROOF SYSTEM IS USED ON LOWER ROOF FRAMING FOOR JOISTS WILL NEDD TO BE CHANGED TO 11 7/8" TJI 360 @ 16" O.C.

CONSTRUCTION NOTES

DATE

JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — 4597777-2202 — ADAM J. HUFF — 4-1-16 — STATE OF UTAH

SCALES

1/4" = 1'-0"

1" — IF NOT FULL SIZE THIS SHEET, ADJUST FROM A HALF SIZE SHEET

PROJECT NAME:

FALCONE RESIDENCE

PROJECT LOCATION:

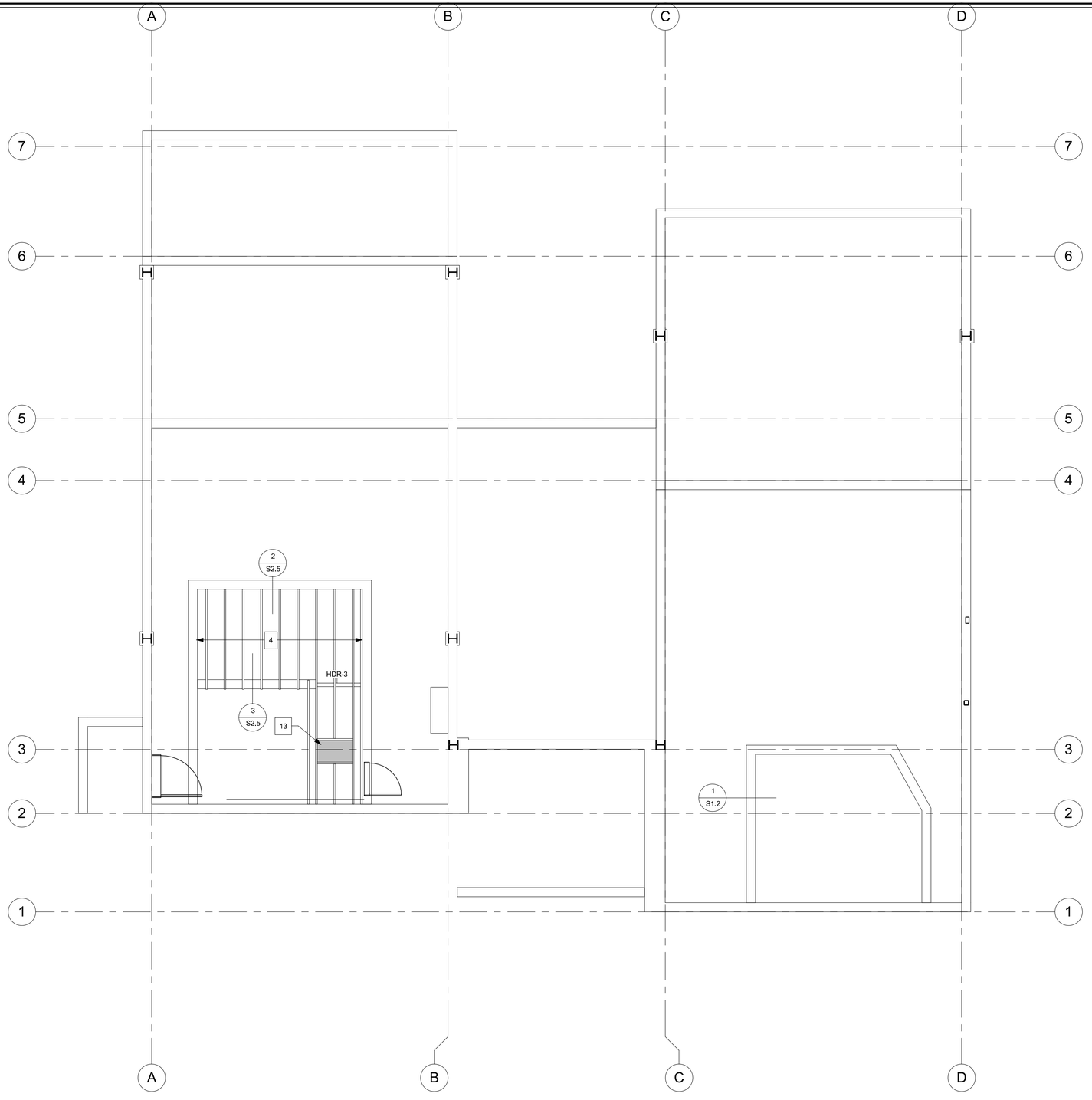
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:

LOWER ROOF FRAMING PLAN

PLAN SET: PERMIT

SHEET S2.4



1 BASEMENT FRAMING
1/4" = 1'-0"

STRUCTURAL HEADER SCHEDULE

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-2	(2) 1-3/4" x 9-1/2"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-3	(2) 2x10	#2 DF	#2 DF	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-4	(3) 1-3/4" x 11-7/8"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)
HDR-5	(2) 1-3/4" x 16"	LVL	1.9E	(2) 2X6 #2DF TRIMMERS (TYP)

STRUCTURAL FLOOR & DECK BEAM SCHEDULE

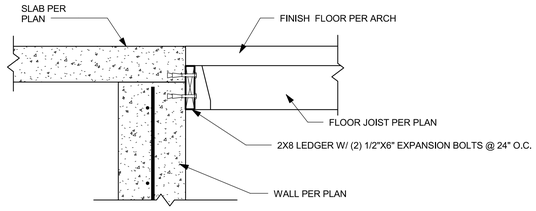
MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	W 10X30	50 KSI	A992	
FB-2	1-3/4" X 11-7/8"	LVL	1.9E	
DB-1	W 10X12	50 KSI	A992	
DB-2	W 12X35	50 KSI	A992	
DB-3	W 8X21	50 KSI	A992	
DB-4	C 8X11.5	50 KSI	A992	

STRUCTURAL COLUMN SCHEDULE

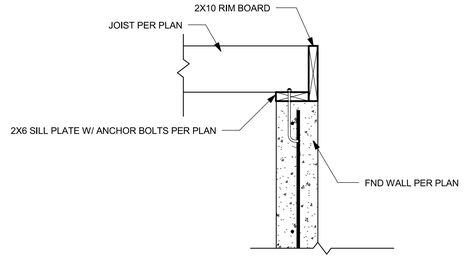
MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	W12X22	STEEL	50 KSI	
C-2	W18X35	STEEL	50 KSI	
C-3	(3) 2x8	#2 DF	#2 DF	
C-4	HSS 4X4X1/4	STEEL	46 KSI	
C-5	W14X22	STEEL	50 KSI	

KEY NOTES

MARK	COMMENTS
1	(2) 16" TJI 560 @ 19.2" O.C. USE HB 7.12/16 HANGERS AS NEEDED
2	11-7/8" TJI 210 @ 16" O.C. USE ITS 2.06/11.88 HANGERS AS NEEDED
3	16" TJI 360 @ 16" O.C. USE IUS 2.37/16 HANGERS
4	2X8 #2DF @ 16" O.C. USE LUS28 HANGERS AS NEEDED
5	WARMBOARD 'S'
6	DOUBLE JOIST
7	5/8" OSB SHEATHING W/ 8d NAILS @ 4" O.C. EDGE, 12" O.C. FIELD
8	2X12 TREATED LEDGER W/ (2) 1/2"X6" EXPANSION BOLTS @ 16" O.C.
9	BLOCKING (TYP)
10	LVL RIMBOARD
11	ATTACH RB-1 TO C-2 AS PER DETAIL 3/S3.1
12	2x8 #2DF @ 24" O.C. W/ LUS26 HANGERS
13	FLOOR HATCH TO BE A MINIMUM OF 18"X24" OPENING. VERIFY W/ ARCHITECT ON LOCATION
14	BEARING ON LOWER ROOF BEAM. SEE SHEET S2.4



2 BASEMENT FLOOR TO WALL
1" = 1'-0"



3 BASEMENT FLOOR TO WALL 2
1" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — 163771 — ADAM J. HUS — 4-1-16 — STATE OF UTAH

SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

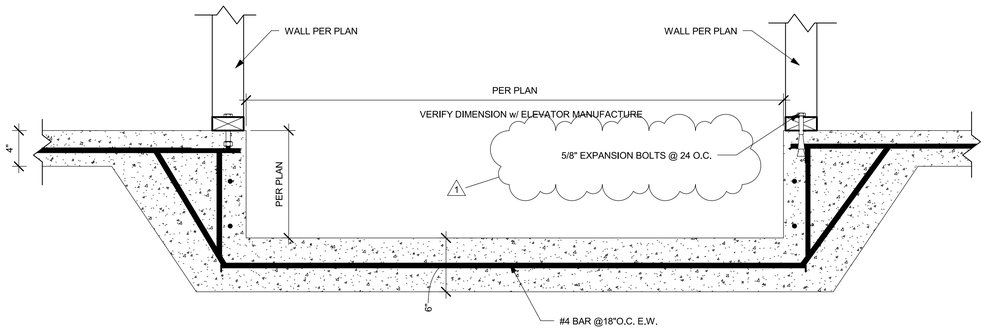
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
BASEMENT FRAMING @ HOT TUB PIT

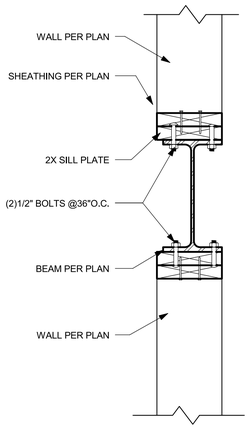
PLAN SET: PERMIT

SHEET S2.5

C:\Users\other\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_CCLAYBURN.rvt

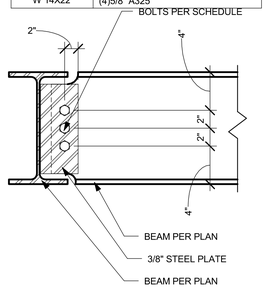


1 S. ELEVATOR PIT
1 1/2" = 1'-0"

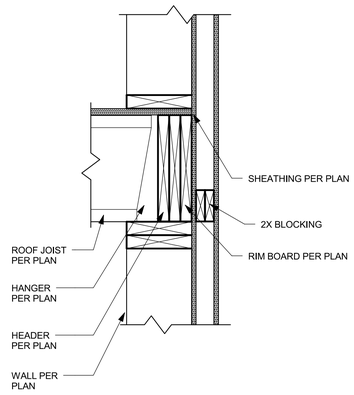


2 STEEL BEAM IN WALL
1 1/2" = 1'-0"

BOLTING SCHEDULE	
BEAM	BOLTS
W 12X35	(4)5/8" A325
W 8X21	(2)5/8" A325
W 10X30	(2)5/8" A325
W 12X22	(4)5/8" A325
W 14X22	(4)5/8" A325



3 STEEL BEAM TO BEAM
1 1/2" = 1'-0"



4 ROOF JOIST TO HEADER
1 1/2" = 1'-0"

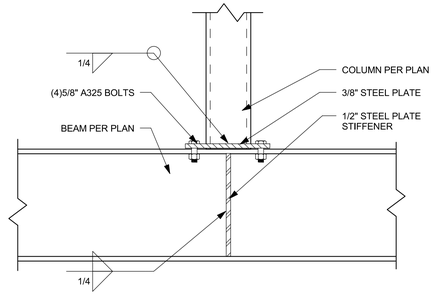
BOLTING SCHEDULE	
BEAM	BOLTS
W 12X35	(4)5/8" A325
W 8X21	(2)5/8" A325
W 10X30	(2)5/8" A325
W 12X22	(4)5/8" A325
W 14X22	(4)5/8" A325

5 STEEL BEAM TO COLUMN
1 1/2" = 1'-0"

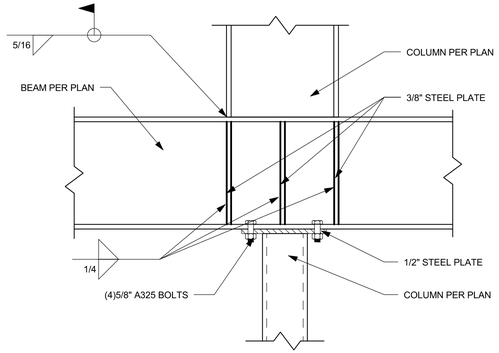
6 STEEL BEAM TO FDN WALL
1 1/2" = 1'-0"

STEEL C-CHANNEL CONNECTION @ STAIRS
1 1/2" = 1'-0"

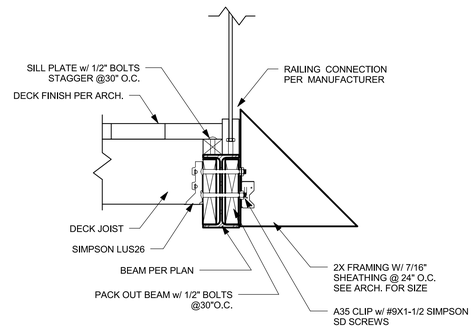
8 STEEL COLUMN DETAIL
1 1/2" = 1'-0"



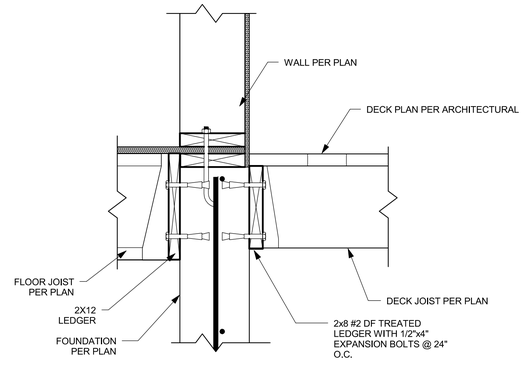
9 STEEL COLUMN TO BEAM
1 1/2" = 1'-0"



10 STEEL COLUMN-BEAM-COLUMN
1 1/2" = 1'-0"



11 STEEL DECK END DETAIL
1 1/2" = 1'-0"



12 STEEL DECK TO MAIN FLOOR
1 1/2" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS		
MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — 4897711 — ADAM J. HUS — 4-1-16 — STATE OF UTAH

SCALES
1 1/2" = 1'-0"
0 1"
IF BAR IS NOT 1" AS INDICATED, THIS IS NOT A FULL SIZE SHEET

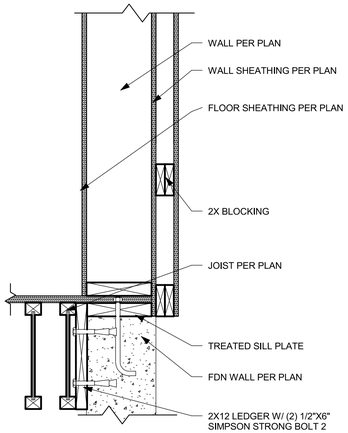
PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

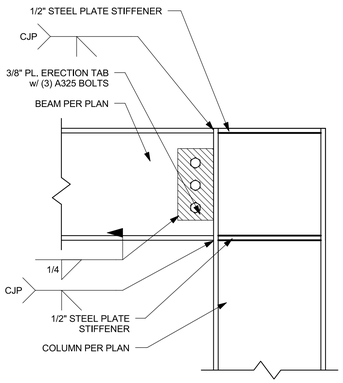
SHEET TITLE:
STRUCTURAL DETAILS

PLAN SET: PERMIT
SHEET S3.1

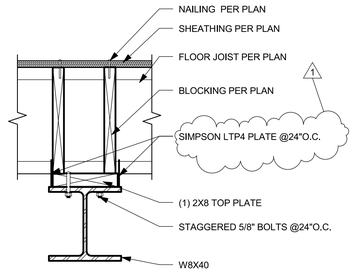
C:\Users\Adam\Documents\STRUCTURAL PLANS CENTRAL 3-31-15_CCLAYBURN.rvt



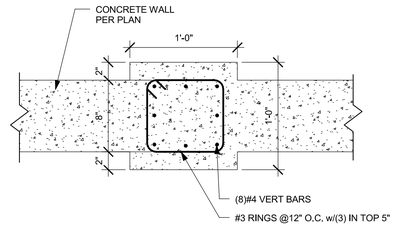
1 MAIN FLOOR TO WALL
1 1/2" = 1'-0"



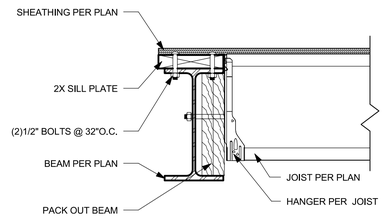
2 STEEL ROOF-ROOF MOMENT CONNECTION
1 1/2" = 1'-0"



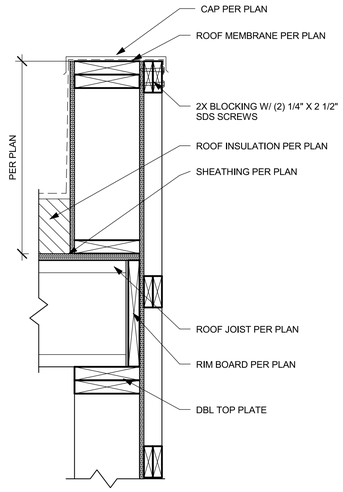
3 STEEL MF BEAM TO DIAPHRAGM 2
1 1/2" = 1'-0"



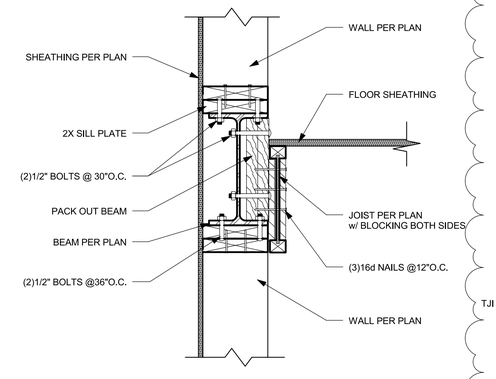
4 PIER 1
1 1/2" = 1'-0"



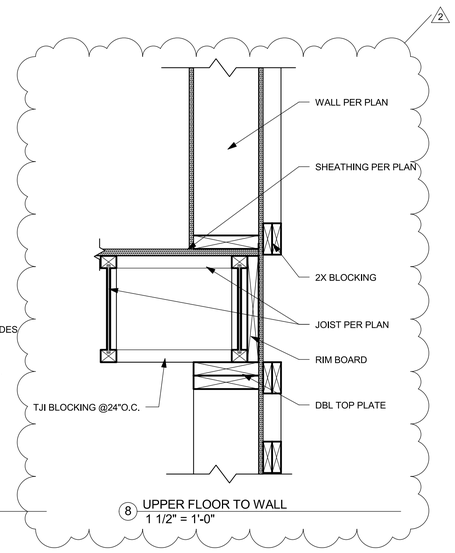
5 STEEL ROOF JOIST TO BEAM
1 1/2" = 1'-0"



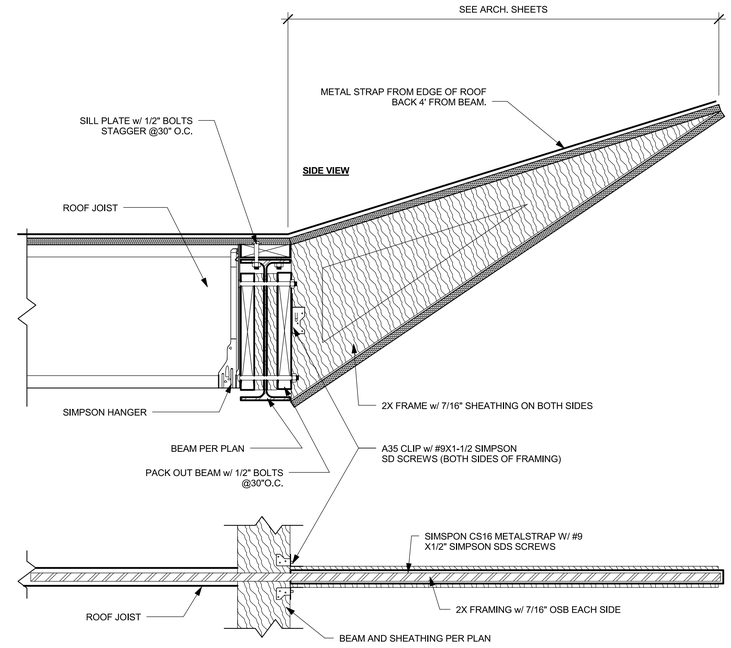
6 ROOF TO WALL
1 1/2" = 1'-0"



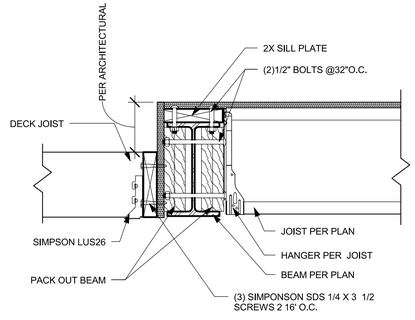
7 STEEL FLOOR TO WALL
1 1/2" = 1'-0"



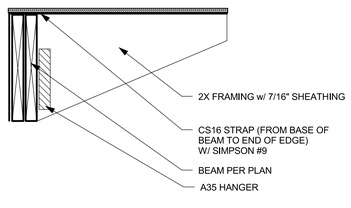
8 UPPER FLOOR TO WALL
1 1/2" = 1'-0"



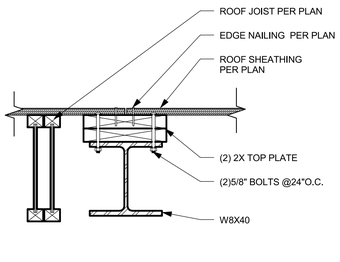
12 ROOF END DETAIL
1 1/2" = 1'-0"



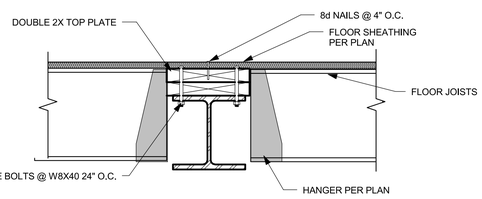
9 UPPER DECK TO FLOOR
1 1/2" = 1'-0"



10 LOWER ROOF FRONT
1 1/2" = 1'-0"



11 MF BEAM TO DIAPHRAGM 1
1 1/2" = 1'-0"



13 COLLECTOR BEAM TO DIAPHRAGM
1 1/2" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1
2	3-31-16	Revision 2

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — ADAM J. HUS — 4-1-16 — STATE OF UTAH

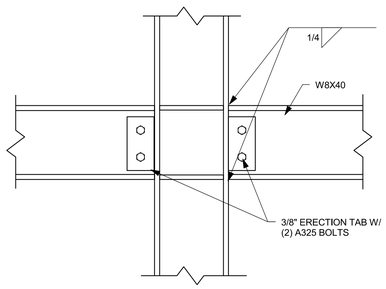
SCALES
1 1/2" = 1'-0"
0" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12" 13" 14" 15" 16"
IF NOT FULL SHEET, ADJUST FROM A 24x36 SHEET

PROJECT NAME:
FALCONE RESIDENCE

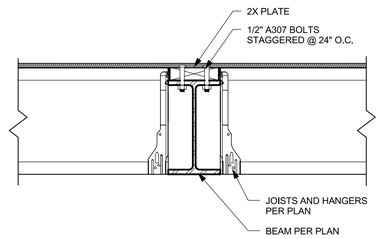
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
STRUCTURAL DETAILS

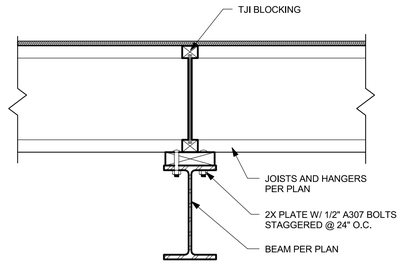
PLAN SET: PERMIT
SHEET S3.2



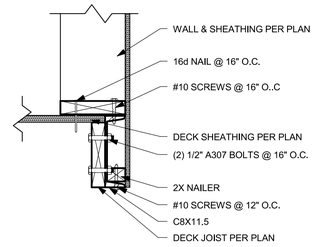
1 STEEL COLLECTOR TO MF CONNECTION
1 1/2" = 1'-0"



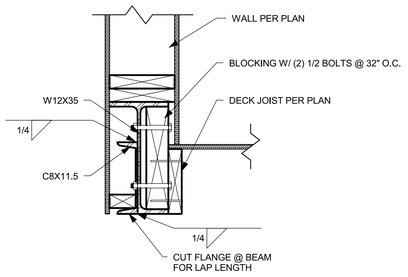
2 FLOOR JOIST TO BEAM 1
1 1/2" = 1'-0"



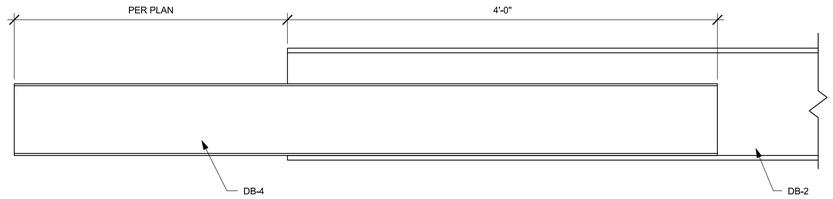
3 FLOOR JOIST TO BEAM
1 1/2" = 1'-0"



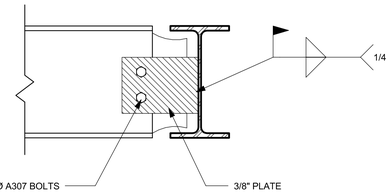
4 DECK WALL SETCION AT C-CHANNEL
1 1/2" = 1'-0"



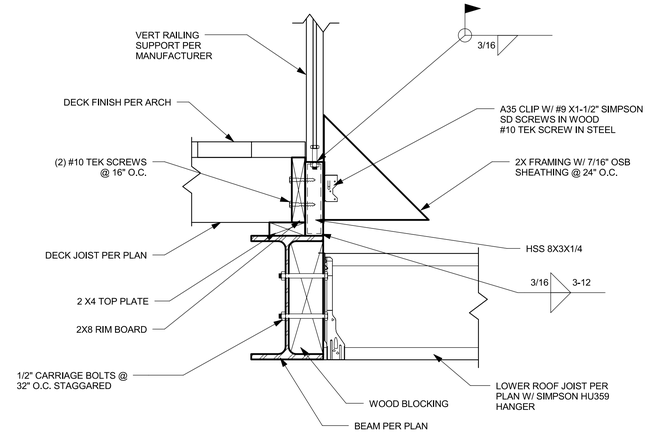
5 S. BEAM EXTENSION 1
1 1/2" = 1'-0"



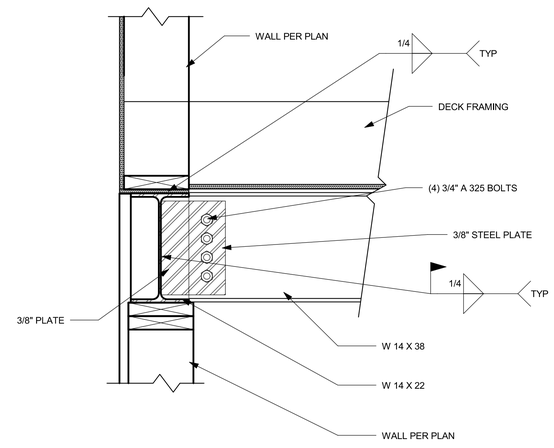
6 S. BEAM EXTENSION 2
1 1/2" = 1'-0"



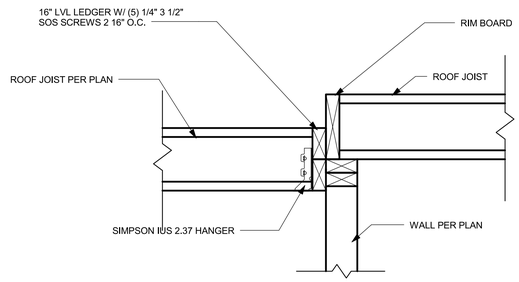
7 STEEL BEAM CONNECTION
1 1/2" = 1'-0"



8 S. DECK/LOWER ROOF CONNECTION
1 1/2" = 1'-0"



9 S. W14 X38 TO W12X26
1 1/2" = 1'-0"



10 S. ROOF TO WALL 1
1 1/2" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT #
14SM2068

LICENSED STRUCTURAL ENGINEER
ADAM J. HUFF
4-1-16
STATE OF UTAH

SCALES
1 1/2" = 1'-0"
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST SCALES ACCORDINGLY

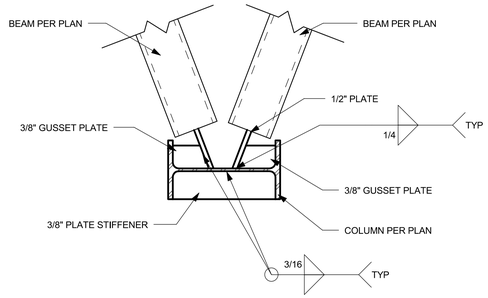
PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

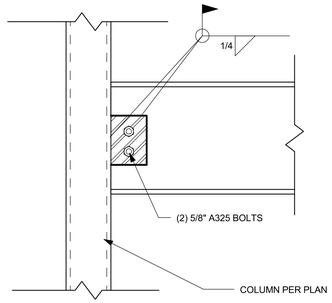
SHEET TITLE:
STRUCTURAL DETAILS

PLAN SET: PERMIT
SHEET S3.3

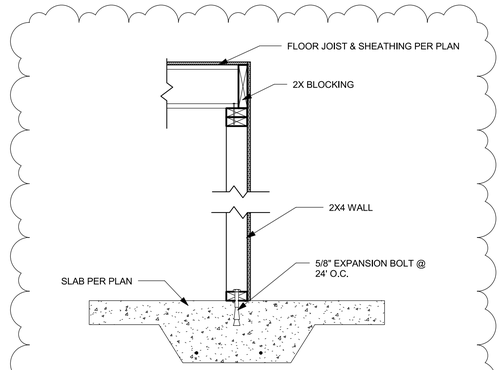
C:\Users\ken\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_COLLYBURN.rvt



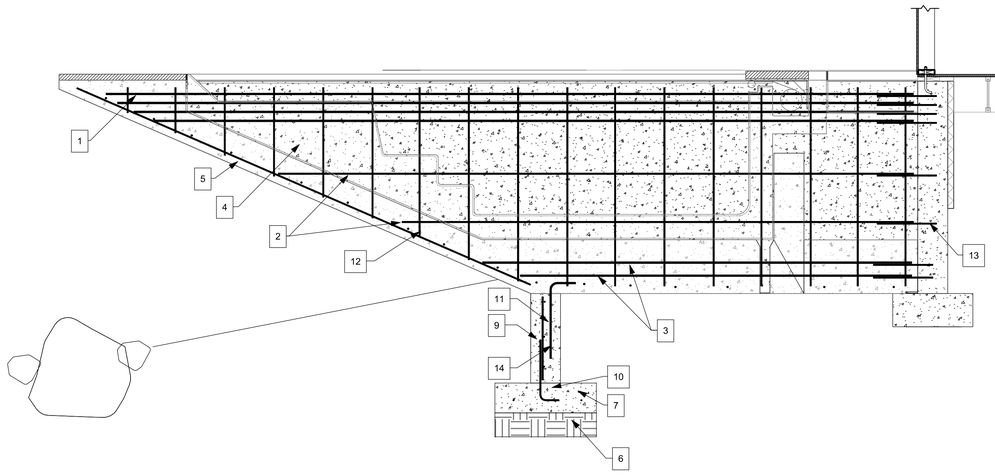
1 S. BEAM TO COLUMN 2
1 1/2" = 1'-0"



2 S. BEAM TO COLUMN SIDE VIEW
1 1/2" = 1'-0"



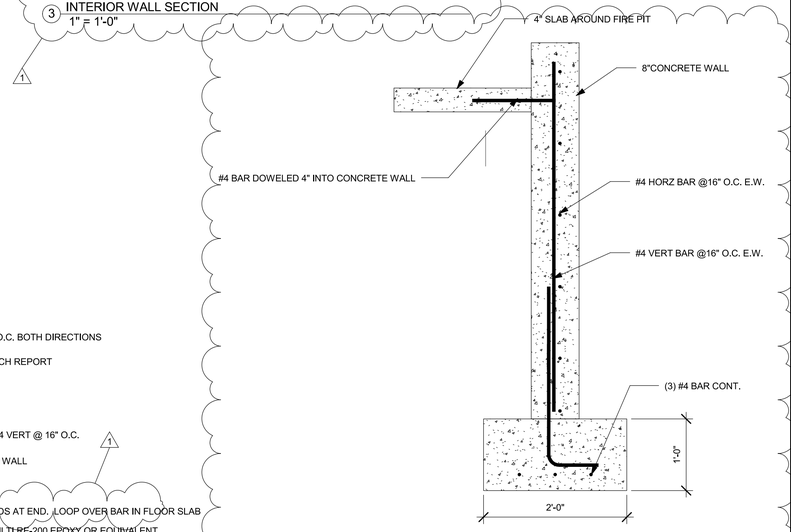
3 INTERIOR WALL SECTION
1" = 1'-0"



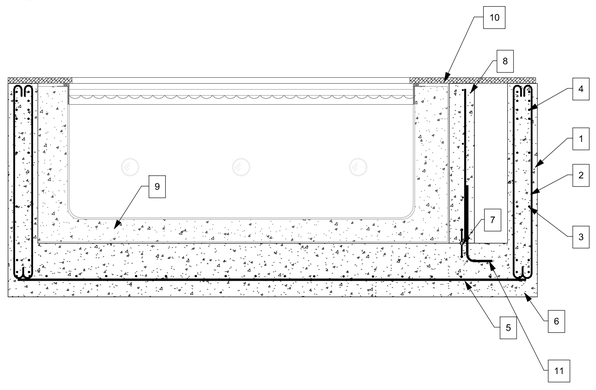
KEYNOTES

1	(4) ROWS OF (2) #5 BAR SPACED 3" APART
2	(2) ROWS OF (2) #4 BAR EQUALLY SPACED
3	(2) ROWS OF (2) #5 BAR EQUALLY SPACED
4	SHOT CRETE BY POOL MANUFACTURER
5	10" THICK FLOOR SLAB. REINFORCE WITH #5 @ 10" O.C. BOTH DIRECTIONS
6	EXTEND FOOTING TO BEDROCK - REFER TO GEO-TECH REPORT
7	FOOTING AND REINFORCEMENT PER PLAN
8	4" PVC WATER STOP - CENTER BULB
9	10" THICK FOUNDATION WALL REINFORCED WITH #4 VERT @ 16" O.C. #4 HORIZONTAL @ 18" O.C.
10	#4 DOWEL SPACED PER VERTICAL BAR SPACING IN WALL
11	VERTICAL BAR - SEE NOTE 9
12	#4 VERTICAL BAR @ 12" OC WITH 180 DEGREE BENDS AT END. LOOP OVER BAR IN FLOOR SLAB
13	DOWEL INTO CONCRETE WALL 4" MIN. SET WITH HILTI RE-200 EPOXY OR EQUIVALENT EXTEND DOWEL 12" INTO WALL. MATCH BAR SIZE AND SPACING TO WALL REINFORCEMENT
14	#5 DOWEL SPACED 12" O.C. INTO FLOOR SLAB

4 SIDEWALL REINFORCEMENT
1/2" = 1'-0"



5 CONCRETE RETAINING WALL @ FIRE PIT
1" = 1'-0"



KEYNOTES

1	10" THICK SIDE WALL REINFORCED AS INDICATED POUR MONOLITHICALLY WITH FLOOR SECTION
2	#4 VERTICAL @ 12" O.C. WITH 180 DEGREE BAR ENDS. SEE SIDEWALL SECTION
3	(2) ROWS OF (2) #5 BAR EQUALLY SPACED
4	(4) ROWS OF (2) #5 BAR SPACED 3" O.C.
5	10" THICK FLOOR SLAB. REINFORCE WITH #5 @ 10" O.C. BOTH DIRECTIONS
6	POUR SLAB MONOLITHICALLY WITH SIDE WALL
7	4" PVC WATER STOP - CENTER BULB
8	8" THICK WALL REINFORCED WITH #4 VERT @ 16" O.C. AND HORIZONTAL
9	SHOT CRETE BY POOL SUPPLIER
10	GRANITE WALK WAY
11	#4 DOWEL SPACED PER VERTICAL BAR SPACING IN WALL

6 POOL CROSS SECTION
1/2" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER
ADAM J. HUFF
4-1-16
STATE OF UTAH

SCALES
As indicated
1" (FOR FULL SIZE SHEET) ADJUST FOR A HALF SIZE SHEET

PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
STRUCTURAL DETAILS

PLAN SET: PERMIT
SHEET S3.4

ANCHOR BOLT SCHEDULE

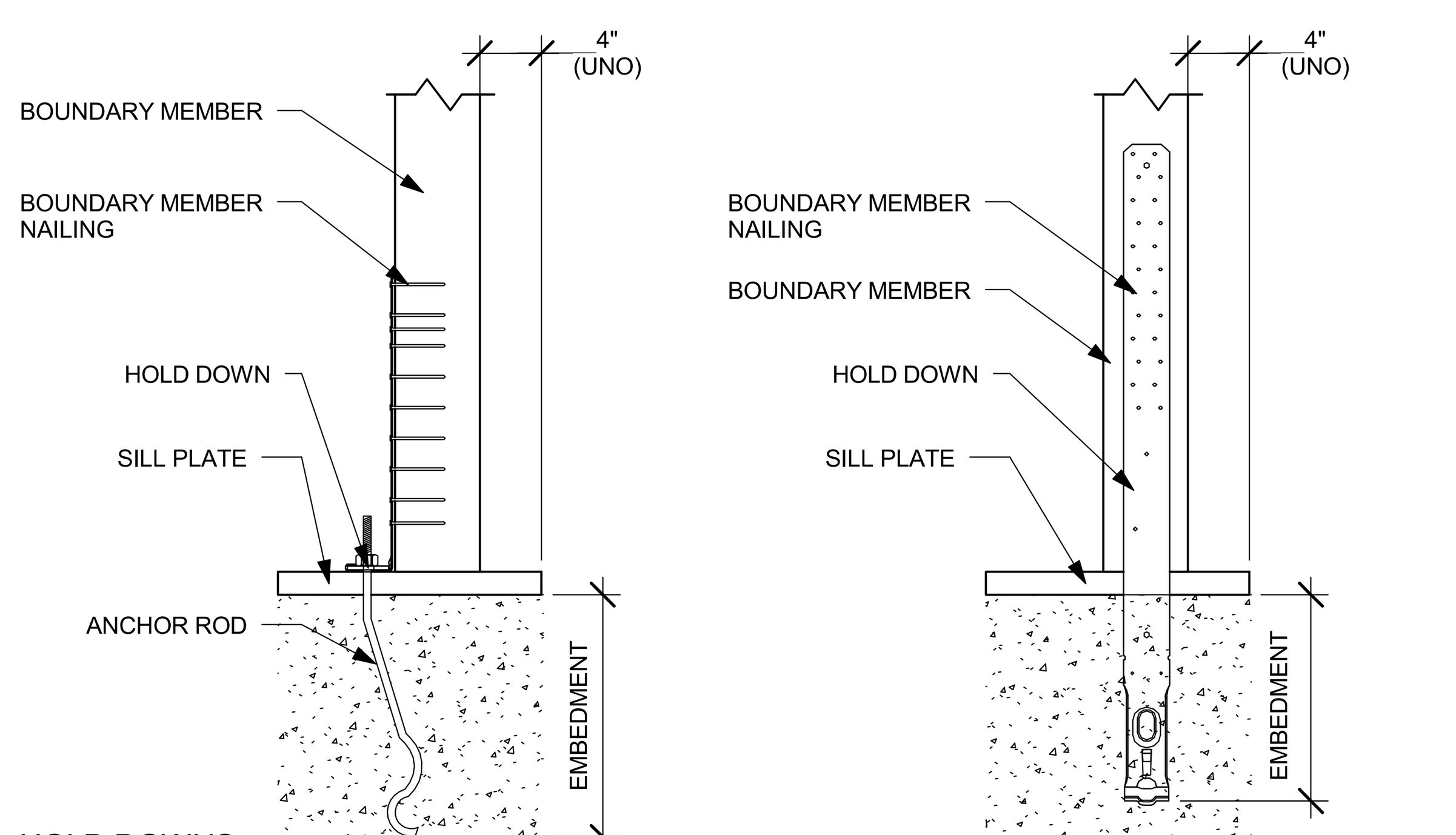
** 5/8" DIAM x 12" w/ Standard Hook @ 32" o.c. unless noted otherwise per schedule.

MARK	DESCRIPTION	SPACING	WASHER	SILL PLATE	STRENGTH (plf)
BP-1	5/8" Dia. X 12" w/ stnd. Hook	16"	3"x3"x1/4"	2x6	434
BP-2	5/8" Dia. X 12" w/ stnd. Hook	12"	3"x3"x1/4"	2x6	579
BP-3	5/8" Dia. X 12" w/ stnd. Hook	18"	3"x3"x1/4"	3x6 min	772
BP-4	5/8" Dia. X 12" w/ stnd. Hook	12"	3"x3"x1/4"	3x6 min	1158
BP-5	1/2" Dia. Thru Bolt to Steel Below	32"	NA	2x6	410

HOLD DOWN AND STRAP SCHEDULE

MARK	HOLD DOWN	TYPE	Allow. LOAD
A	Simpson STHD10	Embedded Hold down	2940 lbs
B	Simpson MSTC28	Strap Tie	1155 lbs

HOLD DOWN NOTES:
1. ANCHOR RODS SHALL BE HEADED BOLTS OR RODS THREADED WITH HEAVY HEX NUT.
2. INCREASE FOOTING DEPTH WHERE EMBEDMENT LENGTH PLUS 3" IS GREATER THAN FOOTING DEPTH SPECIFIED.
3. ALL HOLD DOWNS SPECIFIED ARE "SIMPSON-STRONG TIE", SEE GENERAL STRUCTURAL NOTES FOR SUBSTITUTIONS
4. LAG SCREWS SHALL NOT BE USED.
5. DO NOT OVER TORQUE NUTS; SEE MANUFACTURES TORQUE REQUIREMENTS.
6 SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



1 HOLD DOWNS
1" = 1'-0"

SHEAR WALL SCHEDULE

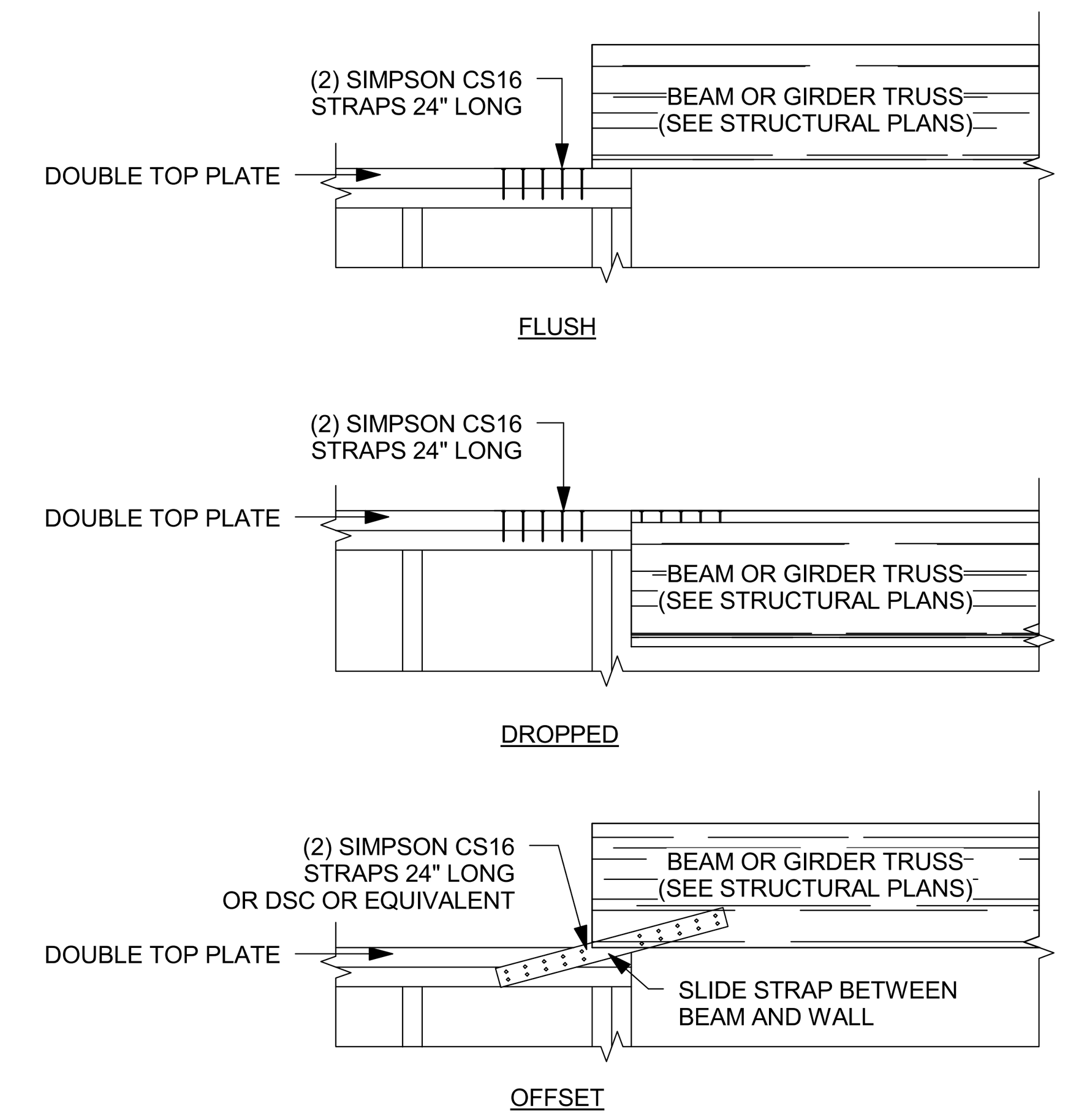
MARK	NAILING REQ. EDGE	FIELD	NOTES	Vallow SEISMIC	WIND
SW-1	6"	12"	1,2,3,4	255	357
SW-2	4"	12"	1,2,3,4,5	395	552
SW-3	3"	12"	1,2,3,4,5	505	707
SW-4	2"	12"	1,2,3,4,5	670	937

NOTES:
1. 16" o.c. max stud spacing (AWC SDPWS-2008 Note 2)
2. 7/16" APA rated OSB panel.
3. 8d common or galvanized box nailing. Provide hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper nails at perservative- treated and fire-retardant-treated wood locations.
4. Block all edges.
5. 3" nominal framing at abutting panel edges (IBC Notes d & g)
6. Wind Capicties increased by 40% per IBC 2012 Section 2306.3
*IBC notes above refer to "Notes to Table 2306.3(1)" in 2012 IBC

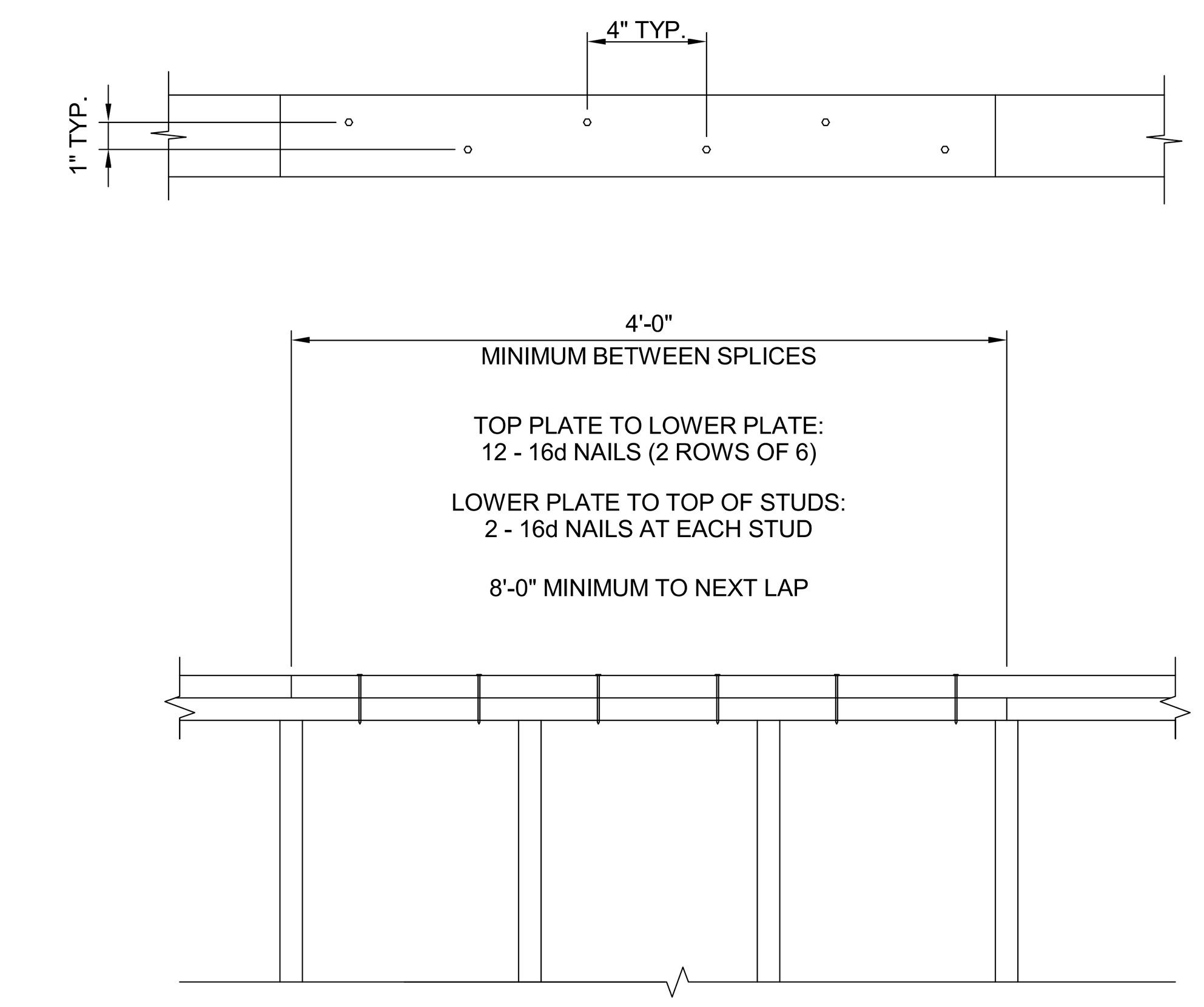
PENNY WEIGHT DESIGNATION	EQUIVALENT SPACING (INCHES) COMMON NAIL	BOX NAIL	16 GAGE STAPLE
6d	4	4	3 1/2
	6	6	5
	8	8	6 1/2
	10	10	8 1/2
	12	12	10
8d	3	3	2
	4	4	2 1/2
	6	6	4
	8	8	5 1/2
	10	10	6 1/2
	12	12	8
10d	4	4	2
	6	6	3 1/2
	8	8	4 1/2
	10	10	5 1/2
	12	12	6 1/2

NOTES:
1. SPACING VALID FOR LATERAL LOAD ONLY, 7/16 STRUCTURAL II PLYWOOD OR OSB SHEATHING.
2. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
3. INTERNATIONAL BUILDING CODE (IBC) TABLE 2306.4.1.
4. ICC EVALUATION SERVICE REPORT NO. 1539, TABLE 14.
5. LOS ANGLES DEPARTMENT OF BUILDING AND SAFETY RESEARCH REPORT NO. 23633, TABLE 1.
6. FASTENERS IN PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, SILICON BRONZE OR COPPER (2012 IBC 2304.9.5).

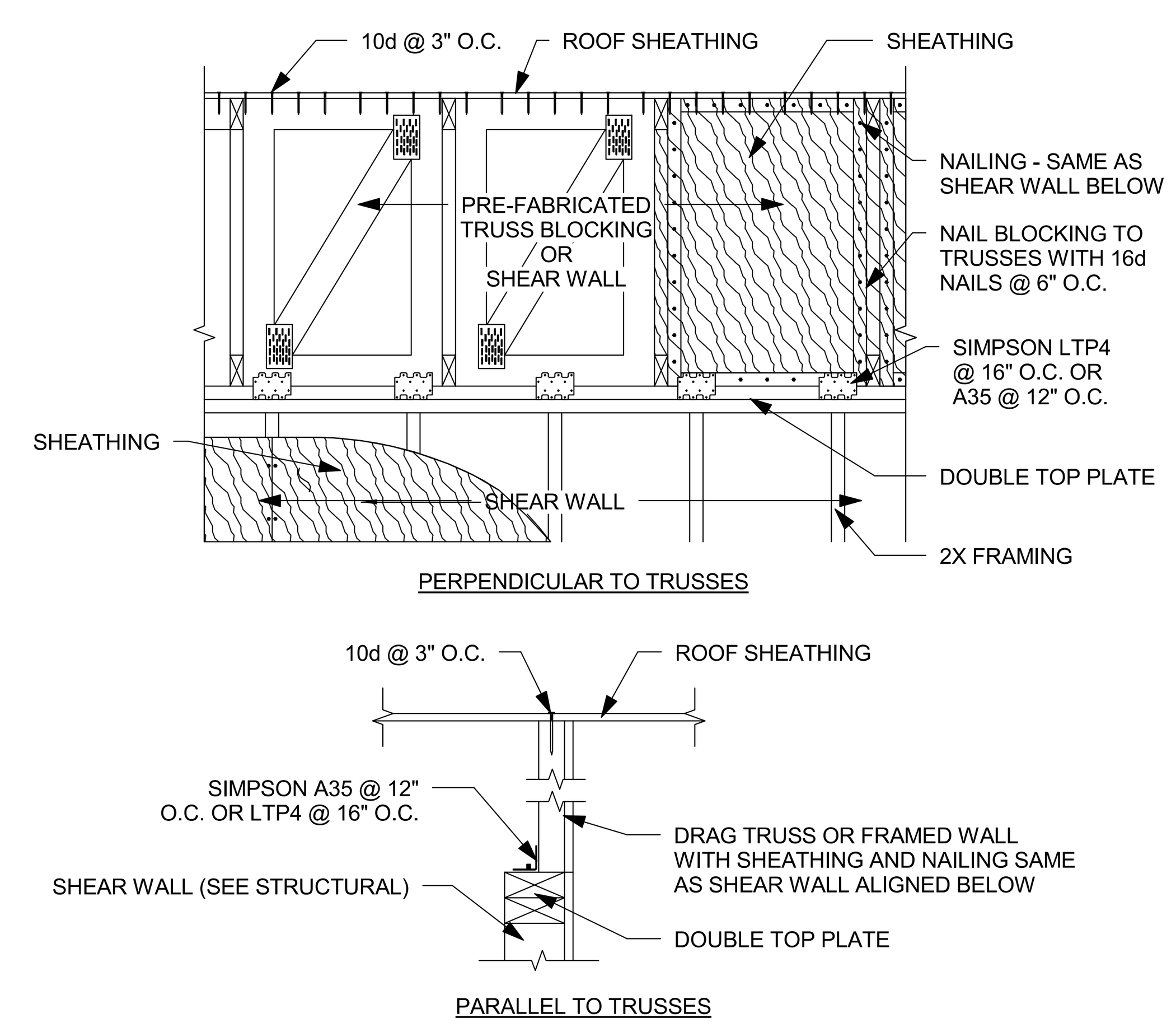
WOOD SHEATHING SHEAR WALL NOTES:
1. PROVIDE 1/4" X 3" X 0'-3" WASHER PLATES AT BOLTS. CONTRACTOR HAS OPTION TO PROVIDE A DIAGONAL SLOTTED HOLE WITH A WIDTH OF T UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH OF UP TO 1.3/4". PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
2. USE COMMON NAILS. AT SILL PLATE USE HOT DIPPED OR TUMBLED GALVANIZED.
3. ANCHOR BOLTS SHALL HAVE A 7" MINIMUM EMBEDMENT INTO CONCRETE AND TERMINATE WITH A 3" STANDARD 90 DEG. HOOK AND BE HOT-DIPPED GALVANIZED STAINLESS STEEL IN ACCORDANCE WITH IBC 2304.95
4. WHERE STUDS ARE CUT FOR PLACEMENT OF ANCHOR BOLTS OR OTHER ELEMENTS, AN ADJACENT STUD SHALL BE ADDED.
5. WHERE WOOD SHEATHING IS APPLIED TO BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBER SHALL BE 3" OR THICKER AND NAILS ON EITHER SIDE SHALL BE STAGGERED.
6. PRE-DRILLED HOLE ARE REQUIRED AT 20d NAILS.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



4 DIAPHRAGM - CHORD/COLLECTOR STRAP
1" = 1'-0"

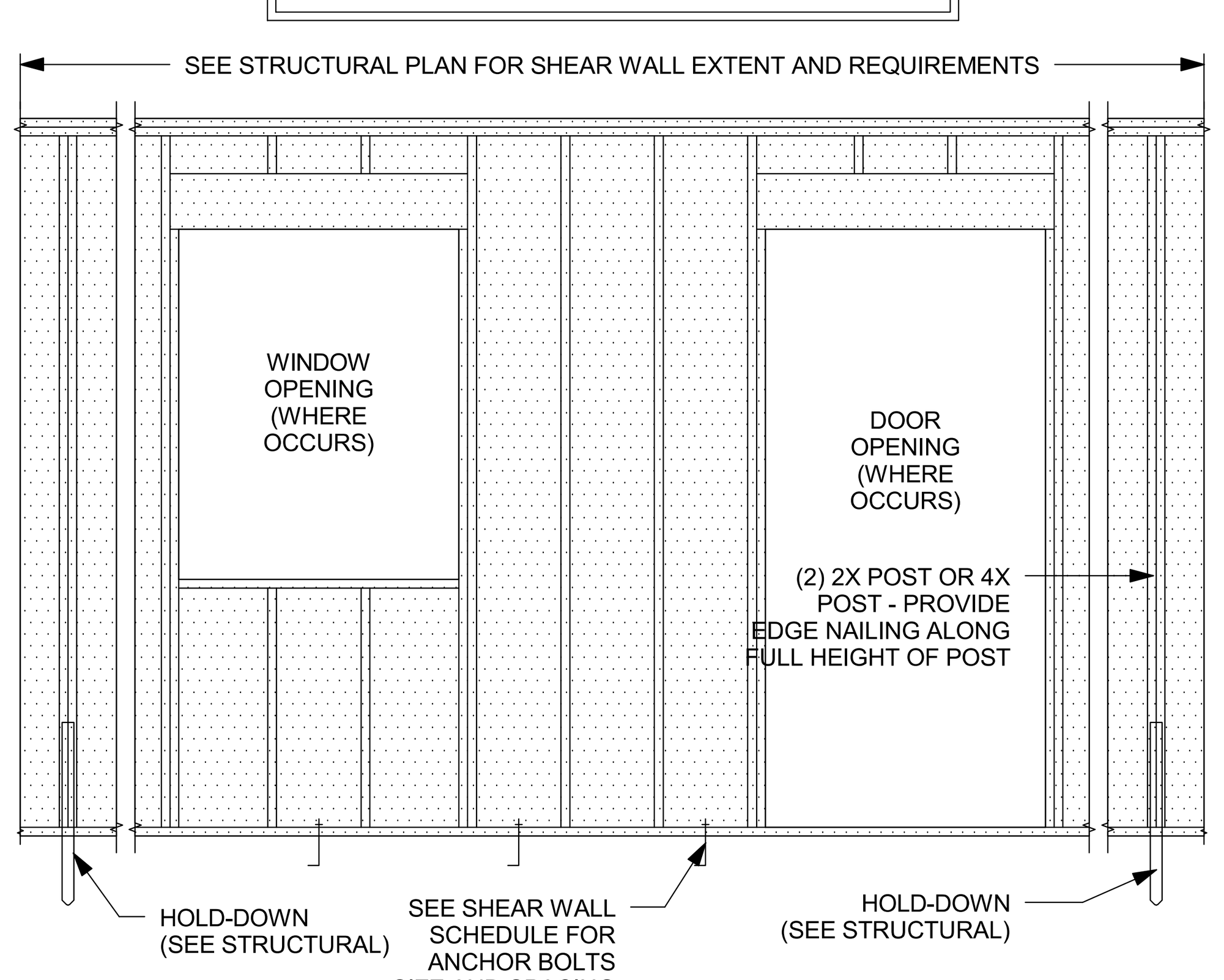


7 DIAPHRAGM- TOP PLATE SPLICE
1" = 1'-0"

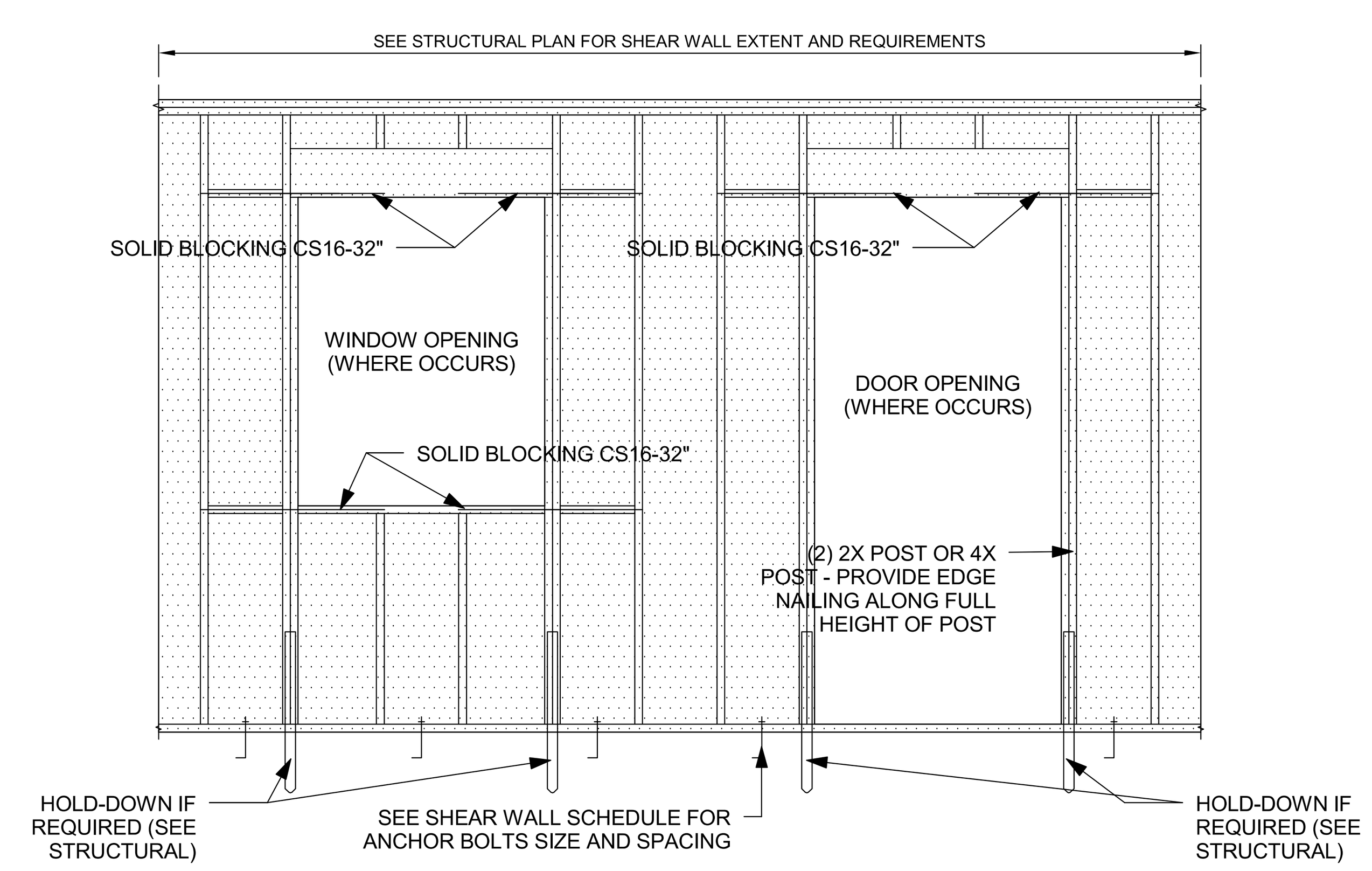


2 SHEAR WALL - ROOF DIAPHRAGM CONNECTION
1" = 1'-0"

ADDITIONAL STRAPPING AND BLOCKING AROUND OPENINGS ARE NOT REQUIRED (2012 IBC 2302).



3 SHEAR WALL- PERFORATED
1" = 1'-0"



6 SHEAR WALL - FORCE TRANSFER AROUND OPENINGS
1" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT #
14SM2068

LICENSED STRUCTURAL ENGINEER ADAM J. HU... 4-1-16 STATE OF UTAH

SCALES
1" = 1'-0"

PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
SCHEDULES

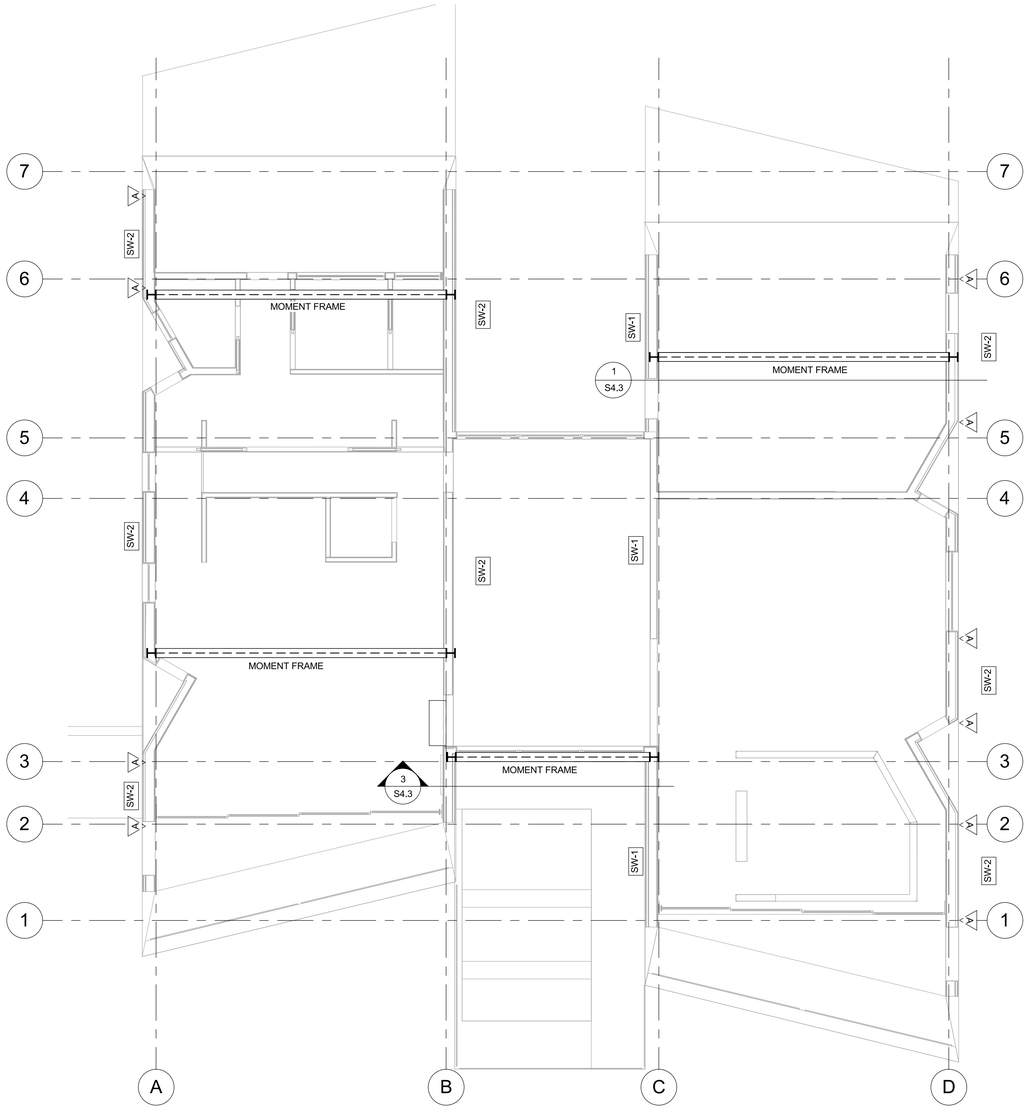
PLAN SET: PERMIT
SHEET S4.1

HOLD DOWN AND STRAP SCHEDULE			
MARK	HOLD DOWN	TYPE	Allow. LOAD
A	Simpson STHD10	Embedded Hold down	2940 lbs
B	Simpson MSTC28	Strap Tie	1155 lbs

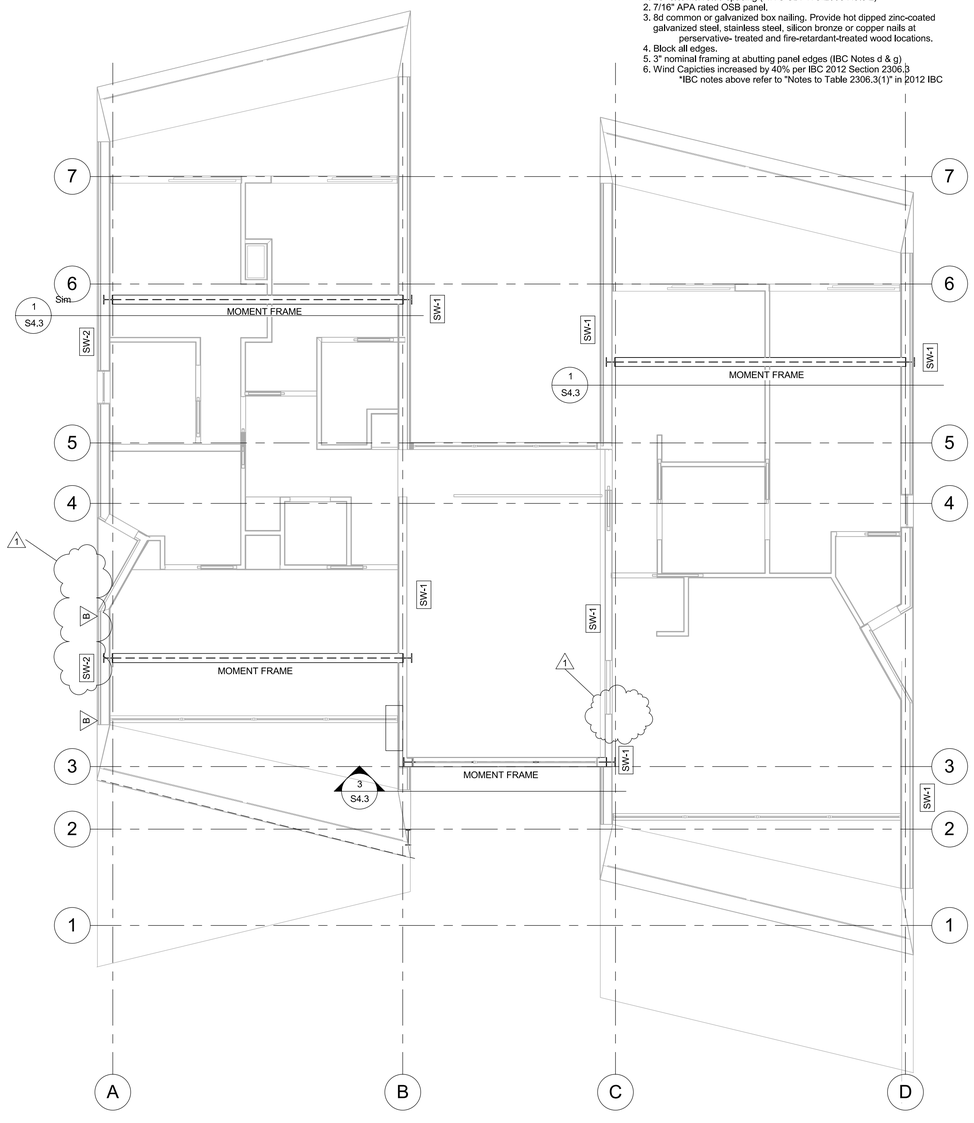
SHEAR WALL SCHEDULE

MARK	NAILING REQ. EDGE	FIELD	NOTES	Vallow SEISMIC	WIND
SW-1	6"	12"	1,2,3,4	255	357
SW-2	4"	12"	1,2,3,4,5	395	552
SW-3	3"	12"	1,2,3,4,5	505	707
SW-4	2"	12"	1,2,3,4,5	670	937

NOTES:
1. 16" o.c. max stud spacing (AWC SDPWS-2008 Note 2)
2. 7/16" APA rated OSB panel.
3. 8d common or galvanized box nailing. Provide hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper nails at perservative- treated and fire-retardant-treated wood locations.
4. Block all edges.
5. 3" nominal framing at abutting panel edges (IBC Notes d & g)
6. Wind Capicties increased by 40% per IBC 2012 Section 2306.3
*IBC notes above refer to "Notes to Table 2306.3(1)" in 2012 IBC



1 MAIN LEVEL SHEARWALL
3/16" = 1'-0"



2 UPPER LEVEL SHEARWALL
3/16" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH
PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER
ADAM J. HUFF
4-1-16
STATE OF UTAH

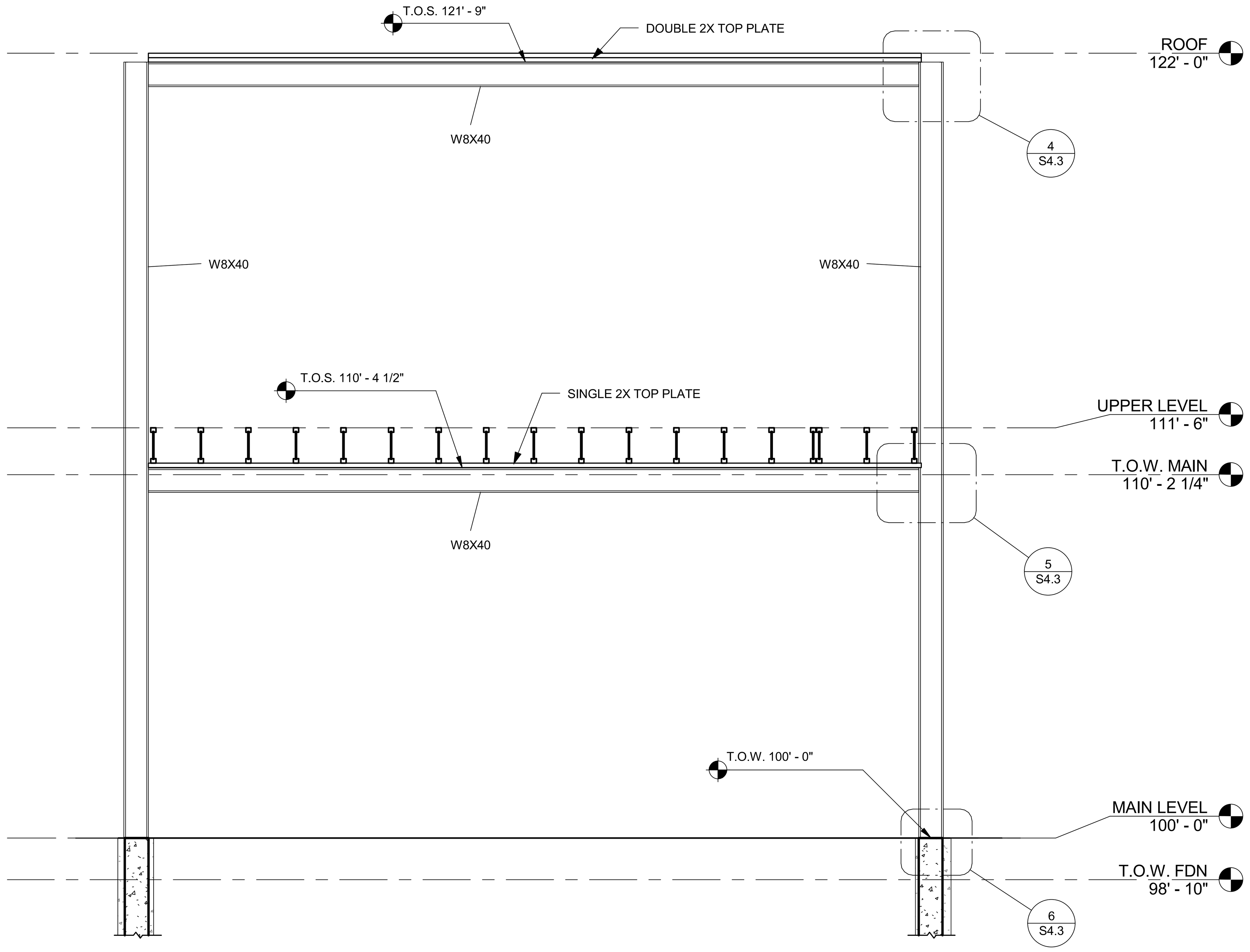
SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

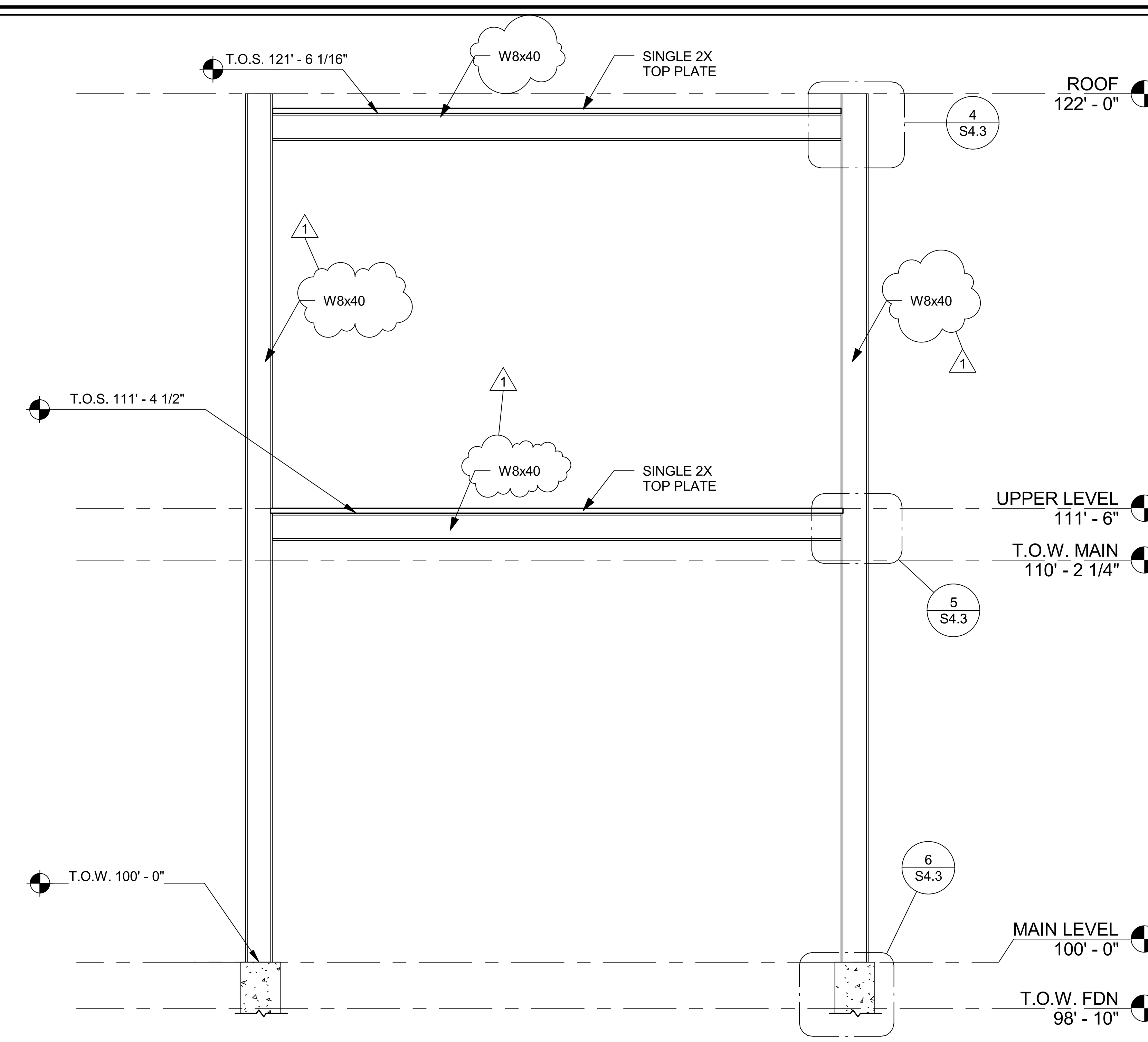
PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
SHEARWALL PLAN

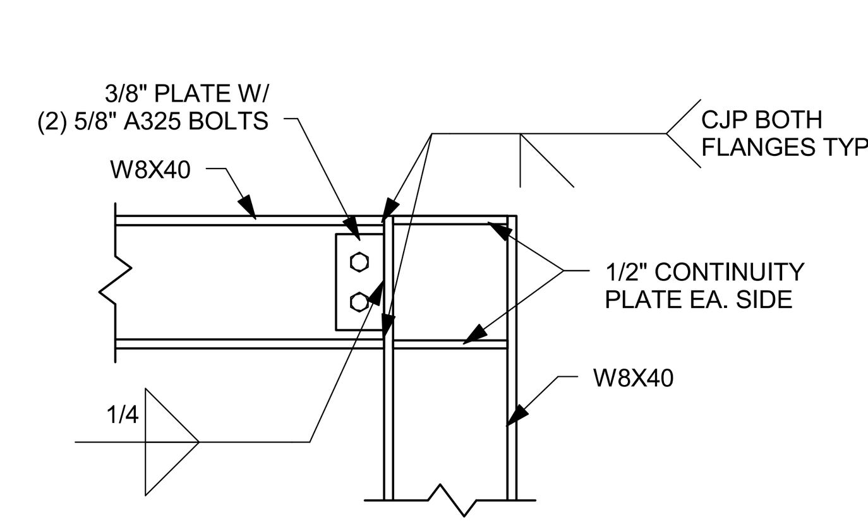
PLAN SET: PERMIT
SHEET S4.2



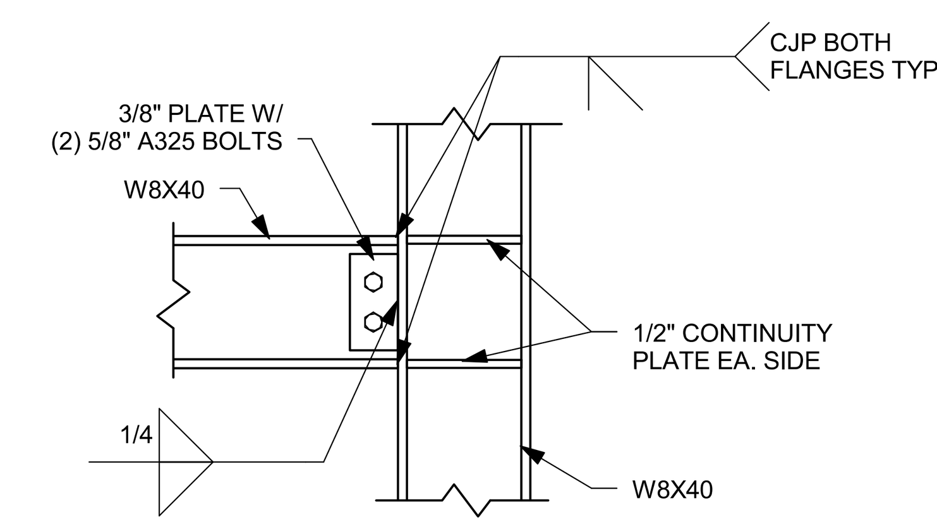
1 MOMENT FRAME ELEVATION
3/8" = 1'-0"



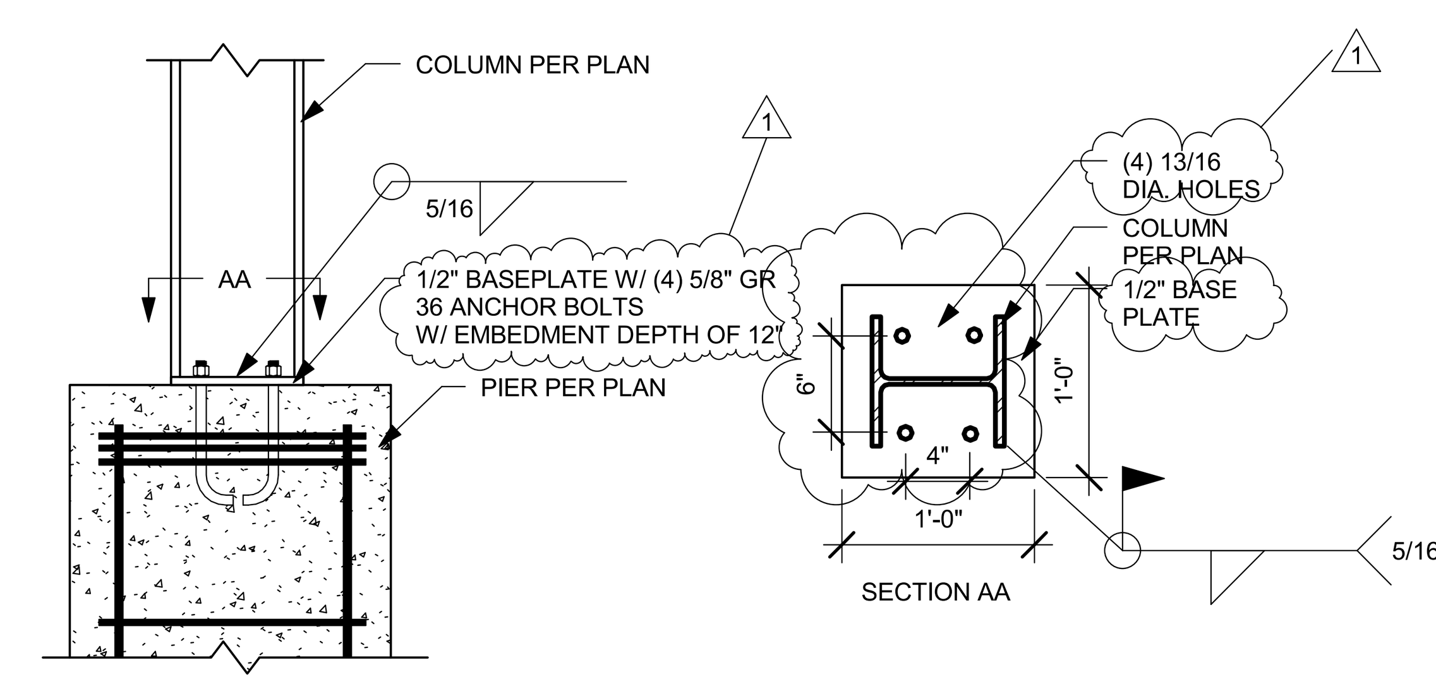
3 MOMENT FRAME ELEVATION 3
3/8" = 1'-0"



4 MOMENT FRAME DETAIL 1
1" = 1'-0"



5 MOMENT FRAME DETAIL 2
1" = 1'-0"



6 MOMENT FRAME DETAIL 3
1" = 1'-0"

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH
PROJECT #
14SM2068

LICENSED STRUCTURAL ENGINEER ADAM J. HUFF 4-1-16 STATE OF UTAH

SCALES
As indicated

PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
MOMENT FRAME DETALS

PLAN SET: PERMIT
SHEET S4.3

C:\Users\chan\Documents\STRUCTURAL PLANS CENTRAL 3-31-16_CCLAYBURN.rvt

SPECIAL INSPECTION, MATERIAL TESTING & STRUCTURAL OBSERVATION ITEMS REQUIRED BY CHAPTER 17 OF THE 2012 IBC

Indicate items requiring special inspection, structural testing, or structural observations by checking the appropriate box. All items not requiring inspection/testing should be removed from the form. For items requiring continuous inspection, a special inspector must be present onsite during the performance of that task. In most cases "periodic" inspections/tests shall be performed prior to commencing the task, intermittently during the task, and at the completion of the task. The "Detailed Instructions & Frequency" provides a description of the presumed requirements for tasks requiring "periodic" inspections. The design professional responsible should revise the requirements as needed on a project-specific basis.

STRUCTURAL STEEL (IBC 1705.2.1, 1705.11.1 & 1705.12.2)

Item			Detailed Instructions and Frequencies
AFTER WELDING (TABLE N5.4-3, AISC 360-10):			
Welds cleaned	☐ Continuous	☒ Periodic	Verify that welds have been properly cleaned.
Size, length, and location of welds	☐ Continuous	☒ Periodic	
Welds meet visual acceptance criteria	☐ Continuous	☒ Periodic	
Repair activities	☐ Continuous	☒ Periodic	
Document acceptance or rejection of welded joint/member	☐ Continuous	☒ Periodic	
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):			
CJP welds (Risk Cat. II)	☐ Continuous	☒ Periodic	Ultrasonic testing shall be performed on 10% of CJP groove welds in butt, T- and corner joints subject to transversely applied tension loading in materials 5/16-inch thick or greater. Testing rate must be increased if > 5% of welds tested have unacceptable defects.
AFTER BOLTING (TABLE N5.6-3, AISC 360-10):			
Document acceptance or rejection of bolted connections	☐ Continuous	☒ Periodic	
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10; Tables J8-1 & J10-1, AISC 341-10):			
Structural steel details	☐ Continuous	☒ Periodic	All fabricated steel or steel frames shall be inspected to verify compliance with the details shown in the construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.
Anchor rods and other embedments supporting structural steel	☐ Continuous	☒ Periodic	Shall be on the premises during the placement of anchor rods and other embedments supporting structural steel for compliance with construction documents. Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete.
STEEL ELEMENTS OF COMPOSITE CONSTRUCTION (TABLE N6.1, AISC 360-10; TABLES J9-1 thru J9-3, AISC 341-11):			
Placement and installation of steel headed stud anchors	☐ Continuous	☒ Periodic	

CONCRETE CONSTRUCTION (IBC 1705.3 & 1705.12.1)

Item			Detailed Instructions and Frequencies
Cast-in bolts & embeds	☐ Continuous	☒ Periodic	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used.
Post-installed anchors or dowels	☐ Continuous	☒ Periodic	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report.
Concrete & Shotcrete placement	☒ Continuous	☐ Periodic	

Special Inspectors Shall:

- Be approved by the Building Official prior to performing any duties;
- Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
- Inspection reports are to meet the requirements of IBC 1704.2.4 and DFCM standards;
- Inspection reports are to be submitted to the code consultant, architect, DFCM project manager, and the State of Utah Building Official within 48 hours of performing inspections;
- A final inspection report shall be submitted following completion of the project documenting the types of special inspections performed and a statement indicating that the structure is in compliance with the approved construction documents and applicable codes (see IBC 1704.2.4).

CONSTRUCTION NOTES

DATE
JUNE 2015

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION
1	6/8/2015	Revision 1

DRAWN: JKC
DESIGNER: PW
REVIEWED: AJH

PROJECT # 14SM2068

LICENSED STRUCTURAL ENGINEER — ADAM J. HUS — 4-1-16 — STATE OF UTAH

SCALES

PROJECT NAME:
FALCONE RESIDENCE

PROJECT LOCATION:
7947 EAST HEARTWOOD DRIVE
WEBER COUNTY, UT

SHEET TITLE:
SPECIAL INSPECTIONS

PLAN SET: PERMIT

SHEET S5.0

C:\Users\otherDocuments\STRUCTURAL PLANS CENTRAL 3.31-16_CCLAYBURN.rvt