

**ABBREVIATIONS & ACRONYMS**

A.P.A.	AMERICAN PLYWD ASSOC.	JST	JOIST(S)
AEOR	ARCH/ENG OF RECORD	JT	JOINT(S)
AB	ANCHOR BOLT	K	KIP, 1000 LBS
ABV	ABOVE	KLF	KIPS PER LINEAL FOOT
ADFL	ADDITIONAL ABOVE FINISHED) FLOOR	KSF	KIPS PER SQUARE FOOT
AGGR	AGGREGATE	KSI	KIPS PER SQUARE INCH
ALT	ALTERNATE	LAT	LATERAL
ALUM	ALUMINUM	LB(S)	POUND(S)
AMT	AMOUNT	LD	LOAD
ANCH	ANCHOR	LEV	LEVEL
APPROX	APPROXIMATE	LF	LINEAL FOOT/FEET
APRVD	APPROVED	LL	LIVE LOAD
APVL	APPROVAL	LLH	LONG LEG HORIZONTAL
ARCH	ARCHITECT / ARCHITECTURE	LLV	LONG LEG VERTICAL
ATCH	ATTACH(ED)	LT	LIGHT
AVG	AVERAGE	LT WT	LIGHT WEIGHT
BD	BOARD	LVL	LAMINATED VENEER LUMBER
BHD	BUCKHEAD	LWC	LIGHT WEIGHT CONC
BL	BOLLARD	MAS	MASONRY
BLDG	BUILDING	MAX	MAXIMUM
BLKG	BLOCKING	MC	MOMENT CONNECTION
BLW	BELONG	MECH	MECHANICAL
BM	BEAM	MEMB	MEMBRANE
B.O.	BOTTOM OF	MEZZ	MEZZANINE
BOF	BOTTOM OF FOOTING	MFD	MANUFACTURED
BOT	BOTTOM	MFR	MANUFACTURER
BRG	BEARING	MIN	MINIMUM
BRK	BRICK	MISC.	MISCELLANEOUS
BSMT	BASEMENT	MO	MASONRY OPEN
BTR	BETTER	MTL	MATERIAL/ METAL
BTWN	BETWEEN	N/A	NOT APPLICABLE
CANT	CANTILEVER	NF	NEAR FACE
C-C	CENTER TO CENTER	NS	NEAR SIDE / NON-SHRINK
CG	CENTER OF GRAVITY	N-S	NORTH-SOUTH
CIP	CAST IN PLACE	NIC	NOT IN CONTRACT
CJ	CONSTR/ CONTROL JOINT	NTS	NOT TO SCALE
CJP	COMPLETE JT PENETRATION	O.C.	ON CENTER
CL	CENTERLINE	OF	OUTSIDE FACE
CLG	CEILING	OD	OUTSIDE DIAMETER
CLR	CLEAR	OP	OUTSIDE FACE
CMU	CONCRETE MASONRY UNIT	OPNG	OPENING
COL	COLUMN	OPP	OPPOSITE
CONC	CONCRETE	O.H.	OPPOSITE HAND
CONN	CONNECTION	OSB	ORIENTED STRAND BOARD
CONST	CONSTRUCTION	OWST	OPEN WEB STEEL JOIST
CONT	CONTINUE (CONTINUOUS)	PARA	PARALLEL
CONTR	CONTRACTOR	PC	PRECAST
CTR	CENTER	PCF	POUNDS PER CUBIC FOOT
CU FT	CUBIC FOOT (FEET)	PCI	POUNDS PER CUBIC INCH
CU IN	CUBIC INCH	PEJ	PREMOLDED EXPANSION JOINT
CU YD	CUBIC YARD	PENN	PENETRATION
DBA	DEFORMED BAR ANCHOR	PERM	PERMANENT
DBL	DOUBLE	PERP	PERPENDICULAR
DEG	DEGREE	PFJ	PERIMETER FELT JOINT
DF	DOUGLAS FIR	PJP	PARTIAL JOINT PENETRATION
DIA	DIAMETER	PL	PLATE
DIAG	DIAGONAL	PLF	POUNDS PER LINEAR FOOT
DIM	DIMENSION	PLYWD	PLYWOOD
DL	DEAD LOAD	PNL	PANEL
DN	DOWN	PP	PANEL POINT
DTL	DETAIL	PREFAB	PREFABRICATED
DUP	DUPLICATE	PRELIM	PRELIMINARY
DVLP	DEVELOP	PS	PRESTRESSED
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
DWL	DOWEL	PSI	POUNDS PER SQUARE INCH
EA	EACH	PT	PRESSURE TREATED
E-E	END TO END	PWDR	POWDER ROOM
EF	EACH FACE	QTY	QUANTITY
ELEC	ELECTRICAL	RAD, R	RADIUS
ELEV	ELEVATION	RD	ROOF DRAIN
ELVR	ELEVATOR	RE	REFER (REFERENCE)
ENG	ENGINEER / ENGINEERING	REIN	REINFORCE (ING)
EQ	EQUAL	REQ(D)	REQUIRE(D)
EQ SP	EQUAL SPACE(D)	REQMT	REQUIREMENT
EQUIP	EQUIPMENT	REV	REVISED/REVISION
ES	EACH SIDE	RF	ROOF
EST	ESTIMATE	RND	ROUND
EW	EACH WAY	RO	ROUGH OPENING
E-W	EAST TO WEST	RTU	ROOF TOP UNIT
EXC	EXCAVATE	SCHED	SCHEDULE
EXIST	EXISTING	SCVD	SOLID CORE WOOD
EXP	EXPANSION	SECT	SECTION
EXT	EXTERIOR	FDN	FOUNDATION
FAB	FABRICATE	FF	FINISH FLOOR
FA	FLOOR DRAIN	FF-F	FACE TO FACE
FDN	FOUNDATION	FIN	FINISH
FF	FINISH FLOOR	FLG	FLANGE
FF-F	FACE TO FACE	FLR	FLOOR
FIN	FINISH	FRAMG	FRAMING
FLG	FLANGE	FRZR	FREEZER
FLR	FLOOR	FS	FAR SIDE
FRAMG	FRAMING	FT	FOOT
FRZR	FREEZER	FT2	SQUARE FOOT
FS	FAR SIDE	FT3	CUBIC FOOT
FT	FOOT	FTG	FOOTING
FT2	SQUARE FOOT	G.C.	GENERAL CONTRACTOR
FT3	CUBIC FOOT	GA	GAGE OR GAUGE
FTG	FOOTING	GALV	GALVANIZED
G.C.	GENERAL CONTRACTOR	GL	GLASS
GA	GAGE OR GAUGE	GLB	GLUE LAMINATED BEAM
GALV	GALVANIZED	GND	GROUND
GL	GLASS	GR	GRADE
GLB	GLUE LAMINATED BEAM	GWB	GYPSUM WALL BOARD
GND	GROUND	HC	HOLLOW CORE
GR	GRADE	HCA	HEADED CONCRETE ANCHOR
GWB	GYPSUM WALL BOARD	HD	HOLDOWN, HEADED
HC	HOLLOW CORE	HDR	HEADER
HCA	HEADED CONCRETE ANCHOR	HGR	HANGER
HD	HOLDOWN, HEADED	HM	HOLLOW METAL
HDR	HEADER	HORIZ	HORIZONTAL
HGR	HANGER	HSA	HEADED STUD ANCHOR
HM	HOLLOW METAL	HSS	HOLLOW STRUCTURAL STEEL
HORIZ	HORIZONTAL	HT	HEIGHT
HSA	HEADED STUD ANCHOR	HVAC	HEATING, VENTILATING & AIR COND
HSS	HOLLOW STRUCTURAL STEEL	I.C.	INSIDE DIAMETER
HT	HEIGHT	IBC	INTERNATIONAL BUILDING CODE
HVAC	HEATING, VENTILATING & AIR COND	ICC	INTERNATIONAL CODE COUNCIL
I.C.	INSIDE DIAMETER	IF	INSIDE FACE
IBC	INTERNATIONAL BUILDING CODE	IN	INCH
ICC	INTERNATIONAL CODE COUNCIL	IN2	SQUARE INCHES
IF	INSIDE FACE	IN3	CUBIC INCHES
IN	INCH	INCL	INCLUDE
IN2	SQUARE INCHES	INFO	INFORMATION
IN3	CUBIC INCHES	INT	INTERIOR
INCL	INCLUDE	IRC	INTERNATIONAL RESIDENTIAL COD
INFO	INFORMATION	ISBU	INTERMODAL STEEL BUILDING UNIT
INT	INTERIOR		
IRC	INTERNATIONAL RESIDENTIAL COD		
ISBU	INTERMODAL STEEL BUILDING UNIT		

**STATEMENT OF SPECIAL INSPECTIONS**

- IN ADDITION TO STANDARD INSPECTIONS BY THE BUILDING OFFICIAL REQUIRED IN IBC SECTION 110, THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE SPECIAL INSPECTIONS AS REQUIRED IN IBC SECTION 1704. THIS SECTION REFERS TO THE SPECIAL INSPECTIONS PERTAINING TO THE STRUCTURAL SYSTEM ONLY AND DOES NOT ENCOMPASS INSPECTIONS REQUIRED BY OTHER DISCIPLINES.
- UNLESS WAIVED BY THE BUILDING OFFICIAL, THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE REQUIRED INSPECTIONS.
- TYPES OF WORK REQUIRING SPECIAL INSPECTION AND TESTING ARE LISTED IN THE "STRUCTURAL SPECIAL INSPECTION REQUIRED" TABLE. THIS TABLE IS NOT MEANT TO ENCOMPASS ALL SPECIAL INSPECTION ON THE PROJECT. JUST THOSE DIRECTLY RELATED TO STRUCTURAL.
- STRUCTURAL OBSERVATIONS
  - STRUCTURAL OBSERVATIONS MAY BE PERFORMED AS DEEMED NECESSARY BY THE STRUCTURAL ENGINEER OF RECORD.
  - OBSERVATION VISITS TO THE SITE BY THE ENGINEER'S FIELD REPRESENTATIVES SHALL NOT BE CONSTRUED AS AN INSPECTION OR APPROVAL OF CONSTRUCTION

**STRUCTURAL SPECIAL INSPECTIONS**

- P INDICATES PERIODIC INSPECTION REQUIRED.
- C INDICATES CONTINUOUS INSPECTION REQUIRED.

**GENERAL**

**INSPECTION OF FABRICATORS (1704.2.5)**

P	VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES. (1704.2.5.1)
P	SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK. (1704.2.5.1)

**SOILS (1705.6)**

P	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. (IBC TABLE 1705.6)
P	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. (IBC TABLE 1705.6)
C	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. (IBC TABLE 1705.6)
C	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL. (IBC TABLE 1705.6)
P	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY (IBC TABLE 1705.6)

**CONCRETE CONSTRUCTION (1705.3)**

P	INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT. (ACI 318 Ch 20, 25.2, 25.3, 26.6.1-26.6.3)
P	INSPECTION OF ANCHORS CAST IN CONCRETE. (ACI 318: 17.8.2)
P	INSPECTION OF ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS. (ACI 318: 17.8.2.4)
P	VERIFYING USE IF REQUIRED DESIGN MIX. (ACI 318: Ch. 19, 26.4.3, 26.4.4)
C	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. (ASTM C172, ASTM C31, ACI 318:26.4, 26.12)
P	INSPECT FRAMEWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED. (ACI 318: 26.11.1,2(b))

**STEEL CONSTRUCTION (1705.2)**

C	COMPLETE AND PARTIAL PENETRATION GROOVE WELDS. (AWS D1.1, IBC 1704.3.1)
C	MULTI-PASS FILLET WELDS. (AWS D1.1, IBC 1704.3.1)
P	SINGLE-PASS FILLET WELDS > 5/16" (AWS D1.1, IBC 1704.3.1)
P	SINGLE-PASS FILLET WELDS <= 5/16" (AWS D1.1, IBC 1704.3.1)
P	FLOOR AND ROOF DECK WELDS. (AWS D1.3)

**SEISMIC RESISTANCE (1707.3)**

C	INSPECTION OF FIELD GLUING OPERATIONS
P	INSPECTION FOR NAILING, BOLTING, ANCHORING FOR WOOD SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, HOLDOWNS

**SYMBOLS LEGEND**

FC-1.0	INDICATES CONTINUOUS FOOTING, SEE SCHEDULE	1	INDICATES KEYED NOTE. SEE KEYED NOTES SPECIFIC TO EACH SHEET
FS-2.0	INDICATES SPOT FOOTING, SEE SCHEDULE	SW X	INDICATES SHEAR WALL EXTENT & TYPE SEE SHEAR WALL SCHDL
F.S.	INDICATES FOOTING STEP	HD X	INDICATES HOLDDOWN LOCATION - SEE HOLDDOWN SCHDL
W.S.	INDICATES FDN WALL STEP	ST X	INDICATES FLOOR TO FLOOR STRAP LOCATION - SEE STRAP TIE SCHDL
FB-1	INDICATES FLOOR BEAM. SEE BEAM SCHEDULE	DF X	INDICATES POST LOCATION - SEE POST SCHDL
RB-1	INDICATES ROOF BEAM. SEE BEAM SCHEDULE	FJ X	INDICATES JOIST FRAMING - SEE JOIST SCHDL
--- --	FRAMING MEMBER	1	TYPICAL (TYP) OR SIMILAR (SIM) DETAIL
== ==	BEAM	S-900	SHEET REFERENCE
====	GIRDER OR DBL JOIST	T.O.F.	INDICATES TOP OF FOUNDATION WALL
	OVERBUILD	T.O.W.	INDICATES TOP OF FOOTING
	VENEER (BRICK OR STONE) ABOVE	MAIN	INDICATES FINISHED FLOOR ELEVATION, COORDINATE W/ DESIGN PLANS
	BEARING / SHEAR / EXTERIOR WALL		
	SHEAR WALL		
	NON BEARING WALL		
	CONCRETE WALL		
	SUPPORTING POST		
	POST FROM ABOVE		
	REVISION CLOUD TAG		
	REVISION CLOUD		

**GENERAL**

- VISITS TO THE JOB SITE BY REPRESENTATIVES OF THE ENGINEER DO NOT CONSTITUTE APPROVAL OF THE WORK PERFORMED.
- THE CONTRACTOR, SUBCONTRACTORS, AND OWNER AS PART OF THE PROJECT TEAM, SHALL REVIEW AND BE RESPONSIBLE FOR INFORMATION CONTAINED IN ALL PROJECT DOCUMENTS PRIOR TO INITIATION OF ANY WORK ON THE PROJECT.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED. DO NOT SCALE DRAWINGS.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES.
- CONTRACTOR SHALL BE FULLY & SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. FOR COORDINATING ALL PORTIONS OF THE WORK AND FOR JOB SITE SAFETY OF SUCH METHODS, MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR & ALL SUBS SHALL PERFORM THEIR TRADES & DUTIES IN A MANNER CONFORMING TO THE PROCEDURES & REQUIREMENTS AS STATED IN THE LATEST ACCEPTED CODE(S) ADOPTED BY THE STATE & LOCAL JURISDICTIONS.
- CONTRACTOR IS RESPONSIBLE FOR AND SHALL BEAR THE COSTS OF CORRECTING WORK WHICH DOES NOT CONFORM TO CONSTRUCTION DOCUMENTS. THE COST OF WORK ENGINEER(S) TO APPROVE CORRECTIVE WORK SHALL BE RESPONSIBILITY OF CONTRACTOR.
- CONTRACTOR SHALL BEAR ALL RESPONSIBILITY FOR MODIFICATIONS REQUIRED IN ARCHITECTURAL, STRUCTURAL, PLUMBING, ELECTRICAL OR MECHANICAL SYSTEMS, ECT. DUE TO SUBSTITUTION OF MATERIALS, METHODS, AND/OR EQUIPMENT.
- THE MATERIALS AND LABOR COVERED BY THIS CONTRACT MUST CONFORM W/ THE SAFETY ORDERS OF THE LOCAL AUTHORITY HAVING JURISDICTION. STATE, OSHA AND THE DIVISION OF WORKER'S COMPENSATION.
- ALL SUPPORT OF CONSTRUCTION LOADS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SHORING AND BRACING REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION PROCESS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL PROCEDURES OF SOIL EXCAVATION, BACK FILL, AND SUPPORT OF ADJACENT PROPERTY DURING EARTHWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL DIMENSIONS INDICATED ON PLANS SHALL BE TO FACE OF STUDS, FACE OF CONCRETE BLOCK, FACE OF ROUGH CONCRETE, CENTERLINE OF COLUMNS, BOTTOM OF METAL DECK, AND TOP OF SLAB, UNLESS NOTED OTHERWISE. DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS ARE TO BE COORDINATED WITH DIMENSIONS SHOWN ON THE ARCHITECTURAL DRAWINGS. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.
- ALTHOUGH SPECIFIC BRANDS MAY BE SPECIFIED, ALTERNATE BRANDS MAY BE USED WITH PRODUCT SPECIFICATIONS SUBMITTED TO ENGINEER FOR WRITTEN APPROVAL. EQUAL OR GREATER DESIGN VALUES MUST BE PROVIDED.
- SHOP DRAWINGS SHALL BE PREPARED & SUBMITTED FOR REVIEW PRIOR TO FABRICATION FOR STEEL ITEMS AND FLOOR OR ROOF TRUSS SYSTEMS. ALLOW (1) WEEK FOR ENG. REVIEW.
- MODIFICATIONS TO PLANS, FRAMING AND LOADING (DIMENSIONS, MATERIALS, DETAILS, LOCATION AND SIZE OF OPENINGS IN SHEAR OR BEARING WALLS, HOT TUBS, ETC.) FROM THAT SHOWN ON THE DESIGN PLANS CAN ALTER THE LOAD PATHS USED AND WILL VOID THE DESIGN AND PROFESSIONAL ENGINEERS STAMP (LIABILITY), WITHOUT ADDITIONAL ENGINEERING REVIEW AND ANALYSIS INCREASING THE SIZE, NUMBER OR LOCATION OF OPENINGS IN SHEAR WALLS CAN VARY THE LOADING ON SHEAR PANELS BEYOND THEIR LOAD CARRYING CAPACITIES. THE OWNER AND CONTRACTOR SHALL CAREFULLY REVIEW PLANS AND SPECIFICATIONS PRIOR TO INITIATION OF CONSTRUCTION.
- BECAUSE THE RANDOM AND UNPREDICTABLE NATURE OF WIND AND EARTHQUAKE LOADING EVEN A RELATIVELY COMPLETE ANALYSIS, METHODOLOGY, AND DESIGN CANNOT ENSURE THAT THERE WILL BE NO DAMAGE TO STRUCTURES DURING SUCH EVENTS. LOCAL CODES (INTERNATIONAL BUILDING CODE (IBC)) ARE BASED ON LIFE SAFETY AND NOT "EARTHQUAKE PROOFING", ETC. OF THE STRUCTURE, IT IS EXTREMELY IMPORTANT THAT ATTENTION BE PAID TO THE PLACEMENT OF REINFORCING, HOLDDOWN EMBEDS, ETC. IN THE FOUNDATIONS, NAILING OF VERTICAL AND HORIZONTAL SHEATHING (WALLS, FLOORS, AND ROOF) AND TO DETAILING SHOWN ON THE PLANS. PROPER IMPLEMENTATION IS REQUIRED TO ENSURE THE DESIRED DESIGN RESPONSE.

**STRUCTURAL DESIGN INFORMATION**

1. GOVERNING BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE (IBC)	
2. ROOF LOADING	
2.1 ROOF DEAD LOAD.....	15 PSF
2.2 ROOF LIVE LOAD.....	20 PSF
GROUND SNOW LOAD, P <sub>s</sub> .....	243 PSF
FLAT ROOF SNOW LOAD, P <sub>f</sub> .....	170 PSF
SNOW EXP. FACTOR, C <sub>e</sub> .....	1.0
THERMAL FACTOR, C <sub>t</sub> .....	1.0
IMPORTANCE FACTOR, I.....	1.0
3. FLOOR LOADING	
3.1 FLOOR DEAD LOAD.....	24 PSF
3.2 FLOOR LIVE LOAD.....	40 PSF
4. DECK LOADING	
4.1 DECK DEAD LOAD.....	42 PSF
4.2 DECK LIVE LOAD.....	60 PSF
5. WALL WEIGHTS	
5.1 TYP WALL DEAD LOAD.....	17 PSF
6. SEISMIC PARAMETERS	
6.1 SEISMIC RISK CATEGORY.....	II
6.2 SEISMIC DESIGN CATEGORY.....	D
6.3 IMPORTANCE FACTOR.....	1.0
6.4 SNOW USED AS SEISMIC WT., W <sub>s</sub> .....	34.0 PSF
6.5 ANALYSIS PROCEDURE USED.....	EQUIVALENT LATERAL FORCE
6.6 SPECTRAL RESPONSE ACCELERATIONS	
S <sub>1</sub> .....	0.863g
S <sub>2</sub> .....	0.283g
F <sub>1</sub> .....	1.00g
F <sub>2</sub> .....	1.50g
S <sub>s</sub> .....	0.664g
S <sub>rs</sub> .....	0.351g
6.7 SEISMIC FORCE RESISTING SYSTEM.....	LIGHT-FRAME (WOOD)
R.....	6.5
C.....	4.0
D.....	3.0
V.....	0.102"W
7. WIND PARAMETERS	
7.1 ULTIMATE DESIGN WIND SPEED.....	115 MPH
7.2 WIND RISK CATEGORY.....	II
7.3 WIND EXPOSURE.....	C
7.4 INTERNAL PRESSURE COEFFICIENT.....	0.18
7.5 COMPONENTS & CLADDING PRESSURE.....	16 PSF
8. SOILS CRITERIA	
8.1 SOIL BEARING PRESSURE.....	1,500 PSF
8.2 SOIL SITE CLASS.....	D
8.3 FROST DEPTH.....	42 INCHES
8.4 GEOTECH STUDY USED.....	YES IGES PROJECT #02347-001, JUNE, 9 2017

**CONCRETE**

- EXTERIOR FLAT WORK, CURBS, GUTTERS, ETC.
  - f<sub>c</sub> = 3500 PSI @ 28 DAYS (MIN) f<sub>c</sub> = 4000 PSI RECOMMENDED
  - SLUMP ≤ 4" WATER / CEMENT RATIO ≤ 0.50
  - 5% AIR ENTRAINMENT IN SLABS AND WALLS MIN CEMENT 575 LBS / CU YD
- FOOTINGS, FOUNDATIONS, INTERIOR SLABS
  - f<sub>c</sub> = 3000 PSI @ 28 DAYS (MIN) WATER / CEMENT RATIO ≤ 0.50
  - SLUMP ≤ 4" MIN CEMENT 504 LBS / CU YD
- ALL CONC WORK SHALL BE PLACED, CURED, STRIPPED, & PROTECTED AS DIRECTED BY THE SPECIFICATIONS AND ACI STANDARDS & PRACTICES. DO A GOOD JOB.
- BEFORE CONCRETE IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC.
- CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL SHORING AND FORM WORK
- REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR EMBEDS, MOLDS, GROOVES, ORNAMENT, CLIPS OR GROUNDS, REQUIRED TO BE ENCASED IN CONCRETE AND FLOOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.
- IN HOT WEATHER, FOLLOW "RECOMMENDED PRACTICES FOR HOT WEATHER CONCRETING", ACI 305. IN COLD WEATHER, FOLLOW "RECOMMENDED PRACTICES FOR COLD WEATHER CONCRETING", ACI 306. CONCRETE SHALL BE PROTECTED FROM FREEZING DURING DEPOSITION AND FOR NOT LESS THAN 5 DAYS.

**SLAB ON GRADE NOTES**

- CONC SLAB ON GRADE SHALL BE 4" MIN THICK. NO REINFORCING REQ'D, U.N.O.
- SLABS ON GRADE SHALL HAVE A VAPOR RETARDER CONSISTING OF A 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" PLACED BETWEEN THE CONC SLAB AND BASE COURSE.
- SUB GRADE PREPARATION SHALL CONSIST OF 4" MIN GRAVEL OR CAPILLARY WATER BARRIER OVER COMPACTED FILL OR NATIVE SOIL.
- FLOOR SLAB JOINTS SHALL BE CONSTRUCTION OR CONTROL JOINTS PER DETAIL BELOW.
- ALL SLAB EDGES SHALL BE CHAMFERED 3/4" ON EXPOSED CORNERS U.N.O.
- REIN IS NOT REQ'D IN FLOOR SLABS. W.W.F. OR # 4 BAR MAY BE USED BUT REQUIRES 1-1/2" CLR FROM TOP OF SLAB & 3" CLR FROM BOTTOM OF SLAB.

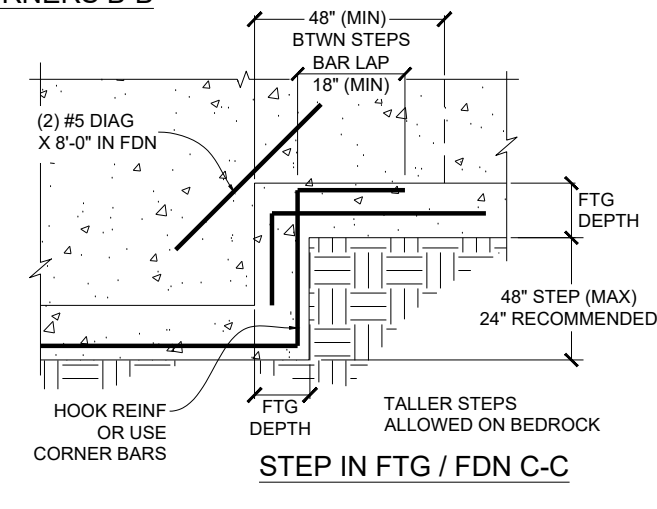
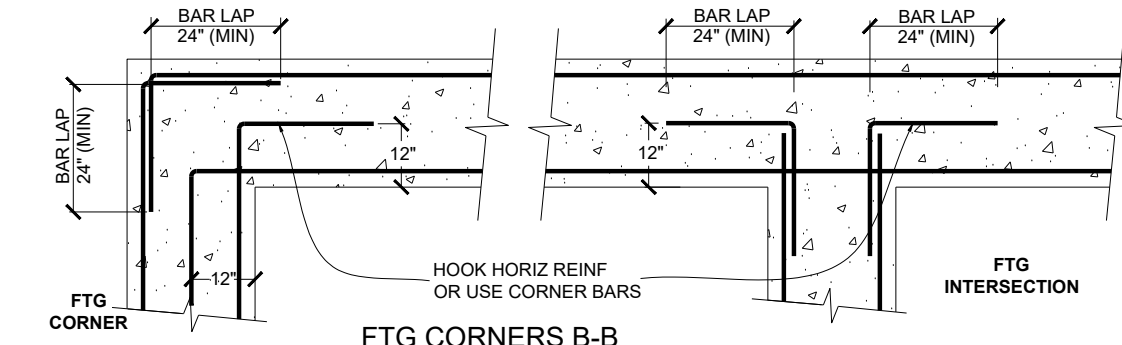
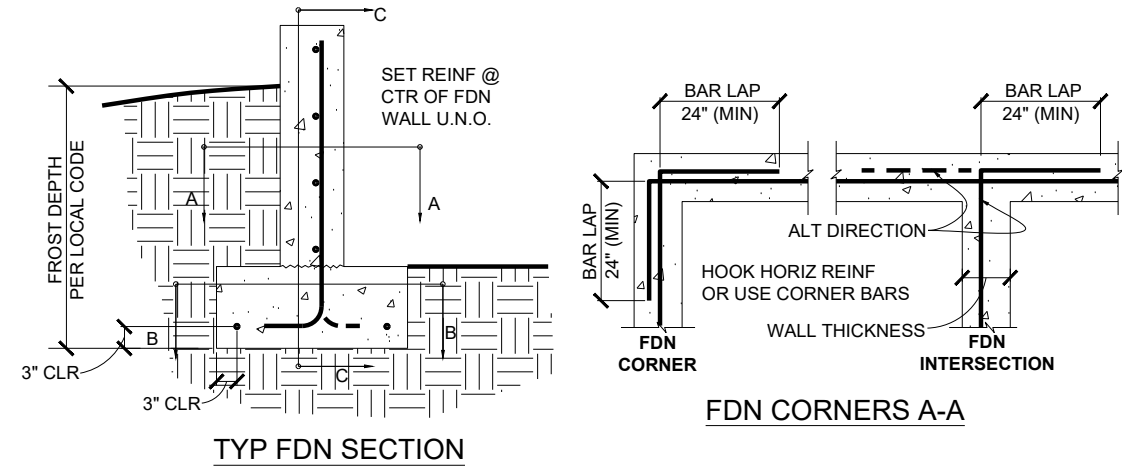
**CONSTRUCTION / CONTROL JOINT**

- CONTROL JOINT SPACING RULE OF THUMB IS 24X SLAB THICKNESS 4" SLAB - 8'-0" MAX O.C. EACH WAY 6" SLAB - 12'-0" MAX O.C. EACH WAY.
- SAW CUT WITHIN 6-18 HOURS OF POURING CONC - 24 HOURS MAX. CONC MUST BE HARD ENOUGH TO PREVENT RAVELING OF JOINT EDGES OR DISINTEGRATION OF COARSE AGGREGATE.
- ALL SLABS-ON-GRADE SHALL BE OVER 4" MIN. OF 3/4" FREE DRAINING GRANULAR FILL, BEARING ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL.



**CONCRETE REINFORCING**

- ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL AND ACI STANDARD.
- ALL REINFORCING AND EMBEDS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.
- ALL METAL REINFORCEMENT SHALL BE DEFORMED TYPE BARS (EXCEPT #2 BARS) AND SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS A.S.T.M. A615 GRADE 60.
- REINFORCEMENT SHALL BE FREE FROM MUD, OIL, OR OTHER NONMETALLIC COATINGS THAT ADVERSELY AFFECT BONDING CAPACITY.
- MAINTAIN MINIMUM CONC. COVER FOR REINFORCING AS FOLLOWS:  
UNFORMED CONC AGAINST & PERM. EXPOSED TO EARTH.....3"  
FORMED CONC EXPOSED TO EARTH OR WEATHER (#6 THRU #18 BARS).....1-1/2"  
FORMED CONC EXPOSED TO EARTH OR WEATHER (#5 & SMALLER BARS).....1-1/4"  
SLABS & WALLS NOT EXPOSED TO WEATHER (#11 & SMALLER BARS).....3/4"  
BEAMS, COLUMNS USED FOR PRIMARY REINFORCING & TIES.....1-1/2"  
6. SEE BAR DEVELOPMENT & LAP SPLICE TABLE FOR REINFORCING DEVELOPMENT & LAP SPLICE.



**BAR DEVELOPMENT AND LAP SPLICE**

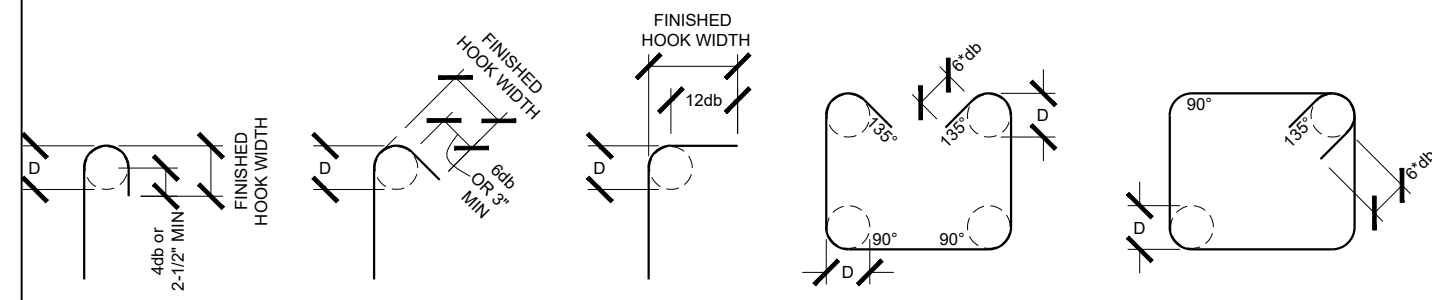
- DEFINITIONS:  
Ld.....TENSION DEVELOPMENT FOR REINFORCEMENT SATISFYING THE FOLLOWING CONDITIONS:  
SLABS & WALLS.....CLEAR SPACING > 2db AND CONCRETE CLEAR COVER > db.  
BEAMS & COLUMNS.....CLEAR COVER SPACING > db AND CONCRETE CLEAR COVER > db.  
Lt.....DEVELOPMENT LENGTH FOR TOP BARS IN TENSION.  
Lsb.....TENSION LAP SPLICE LENGTH FOR OTHER THAN TOP BARS (CLASS B).  
Lsbt.....TENSION LAP SPLICE LENGTH OF TOP BARS.  
db.....NOMINAL BAR DIAMETER (INCHES).  
TOP BARS.....HORIZONTAL REINFORCEMENT WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST BELOW.
- MULTIPLY VALUES IN SCHEDULE BY 1.5 IF CLEAR SPACING OR CONCRETE COVER DO NOT MEET REQUIREMENTS FOR Ld IN NOTE 1.
- MULTIPLY VALUES IN SCHEDULE BY 1.3 FOR USE IN LIGHTWEIGHT AGGREGATE CONCRETE.
- FOR EPOXY COATED BAR: MULTIPLY VALUES IN SCHEDULE BY 1.5 FOR BARS WITH CLEAR COVER < 3db OR CLEAR SPACING < 6db. OTHERWISE MULTIPLY VALUES BY 1.2.
- a. FOR BUNDLED BARS OF THREE OR LESS MULTIPLY LENGTH BY 1.2.  
b. FOR BUNDLED BARS OF FOUR OR MORE MULTIPLY LENGTHS BY 1.3.  
c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
- SCHEDULE LENGTHS ARE FOR fy=60ksi REINFORCING.

BAR SIZE	fc = 3000 PSI				fc = 4000 PSI			
	Ld	Lt	Lsb	Lsbt	Ld	Lt	Lsb	Lsbt
#3	17"	22"	22"	28"	15"	19"	19"	25"
#4	22"	29"	29"	38"	19"	25"	25"	33"
#5	28"	36"	36"	47"	24"	31"	31"	41"
#6	33"	43"	43"	56"	29"	37"	37"	49"
#7	48"	63"	63"	81"	42"	54"	54"	71"
#8	55"	72"	72"	93"	58"	62"	62"	81"

**REIN STANDARD HOOKS**

BAR NO.	db (IN.)	AREA IN. <sup>2</sup>	D (IN.)	6" db	FINISHED HOOK WIDTH		
					180° HOOK	135° HOOK	90° HOOK
#3	0.375	0.11	2.25	4	3"	3"	6"
#4	0.500	0.20	3.00	4	5"	5"	8"
#5	0.625	0.31	3.75	4	5"	3-3/4"	10"
#6	0.750	0.44	4.50	4	6"	4-1/2"	12"
#7	0.875	0.60	5.25	5	7"	5-1/4"	14"
#8	1.000	0.79	6.00	6	8"	6"	16"
#9	1.128	1.00	6.92	6	11-3/4"	--	19"
#10	1.270	1.22	10.16	7	13-1/4"	--	22"
#11	1.410	1.56	11.28	8	14-3/4"	--	24"

DEFINITIONS:  
db: ACTUAL DIAMETER OF BAR (IN.)  
D: 6" db FOR #3 BAR TO #8 BAR  
D: 8" db FOR #9 TO #11 BAR



**LUMBER**

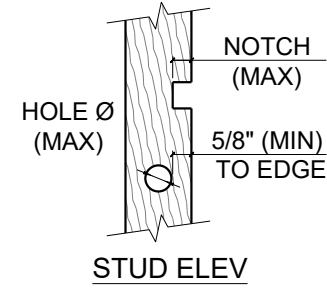
- MEMBER GRADES SHALL BE AS FOLLOWS:  
GLU-LAM BEAMS, GLB (Simple Span).....24F-V4 DF/DF  
(Cantilevered).....24F-V8 DF/DF  
JOISTS & HEADERS.....DOUG FIR #2 BTR  
POST.....DOUG FIR #1 BTR  
STUDS NON-BRG WALLS.....D.F. STUD GRADE BTR  
STUDS BEARING WALLS.....DOUG FIR #2 BTR  
LVL'S.....1.9E DF LVL. Fb = 2,800 PSI  
SILL PLS IN CONTACT W/CONC.....DOUG FIR #2 BTR  
(PRESSURE TREATED FOR MOISTURE PROTECTION)
- ALL MULTIPLE PLATES AND LEDGERS SHALL BE NAILED TOGETHER WITH 16d NAILS AT 8 IN. ON CENTER. STAGGERED SIDE TO SIDE.
- STUD WALLS SHALL RUN CONTINUOUS BETWEEN POINTS OF HORIZONTAL SUPPORT. PROVIDE BRACING WHERE OTHERWISE.
- SOLID 2 IN. NOMINAL BLOCKING SHALL BE PROVIDED AT ENDS OR POINTS OF SUPPORT OF ALL WOOD JOISTS AND TRUSSES. CROSS BRIDGING OF NOT LESS THAN 1 IN. X 3 IN. MATERIAL SHALL BE PLACED IN ROWS BETWEEN SUPPORT POINTS. NOT TO EXCEED 8 FT APART. FOR SPANS OF 14 FT AND GREATER. INSTALL CROSS BRIDGING FOR WOOD JOISTS AS PER MFR.
- MIN NAILING SHALL BE AS PER INTERNATIONAL BUILDING CODE.
- ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED LUMBER OR FOUNDATION REDWOOD. ALL WOOD SUPPORT MEMBERS EXPOSED TO WEATHER SHALL BE TREATED OR PROTECTED TO PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE. ENDS OF UNTREATED WOOD BEAMS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS SHALL HAVE A CLEARANCE OF NOT LESS THAN 0.5 INCH ON TOP, SIDES AND ENDS.
- FASTENERS SUCH AS STAPLES, CAN ONLY BE SUBSTITUTED FOR NAILS AT A RATE EQUAL TO LOAD VALUES PROVIDED BY I.C.B.O. APPROVAL.
- BOLT HOLES SHALL BE 1/16" MAX LARGER THAN THE BOLT SIZE. RETIGHTEN ALL NUTS PRIOR TO CLOSING IN.

**MULTI-MEMBER BEAMS**

- NAIL W/ 16d @ 12" O.C EACH SIDE  
EACH LAYER - STAGGERED T&B  
2" MIN THRU-BOLT @ 24"  
O.C. - STAGGERED  
DBL 2x OR TRIPLE 2x OR LVL  
QUAD 2x OR LVL

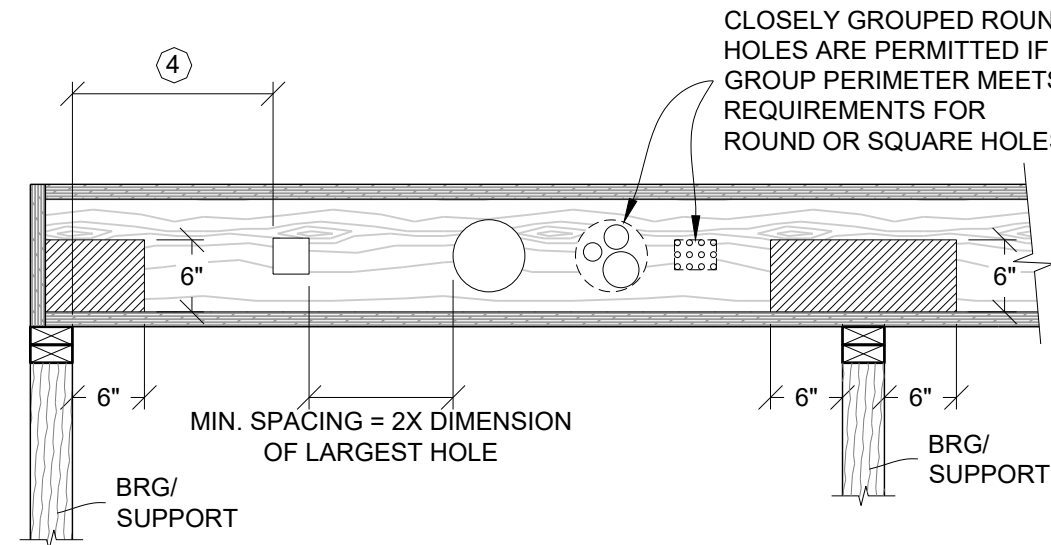
**STUD CUTTING/NOTCHING**

- NOTE: IF BRG STUDS ARE DOUBLED UP, THEY MAY BE BORED W/ 2" HOLE IN 2x4 & 3-1/4" HOLE IN 2x6 @ NO MORE THAN TWO SUCCESSIVE STUDS. ADD SIMPSON "STUD SHOE" WHERE LIMITS OF TABLE ARE EXCEEDED.
- | STUD USE    | NOTCH      | HOLE   |
|-------------|------------|--------|
| BEARING     | 2X4 7/8"   | 1-3/8" |
|             | 2X6 1-3/8" | 2-1/8" |
| NON-BEARING | 2X4 1-3/8" | 2"     |
|             | 2X6 2-1/8" | 3-1/4" |



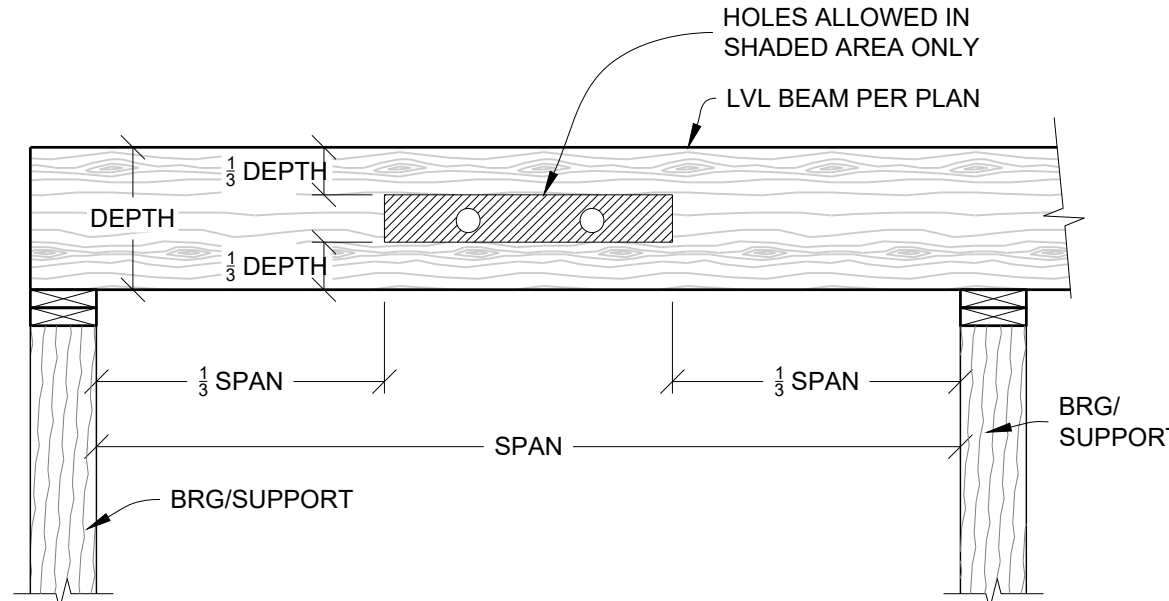
**I-JOIST ALLOWABLE HOLES**

- 1-1/2" HOLE MAY BE CUT ANYWHERE IN WEB OUTSIDE OF SHADED ZONE. PROVIDE AT LEAST 3" OF CLEARANCE FROM OTHER HOLES.
- DO NOT CUT HOLES LARGER THAN 1-1/2" ROUND IN CANTILEVERS.
- DO NOT CUT OR NOTCH FLANGES.
- FOR MINIMUM DISTANCE FROM SUPPORTS, SEE MANUFACTURER'S SPECIFICATIONS
- HOLES ALLOWED PER THIS DETAIL DO NOT OVER-RIDE MFR REQUIREMENTS. IF MFR REQUIREMENTS ARE MORE STRICT, THEY SHOULD BE FOLLOWED.



**LVL ALLOWABLE HOLES**

- MAX HOLE DIAMETER OF 2".
- NO HOLES IN CANTILEVERS.
- ROUND HOLES ONLY.
- NO MORE THAN 3 HOLES PER SPAN
- DETAIL VALID FOR UNIFORMLY LOADED BM ONLY. ADDITIONAL ANALYSIS REQ'D FOR POINT LOADED BEAM.
- HOLES ALLOWED PER THIS DETAIL DO NOT OVER-RIDE MFR REQUIREMENTS. IF MFR REQUIREMENTS ARE MORE STRICT, THEY SHOULD BE FOLLOWED.

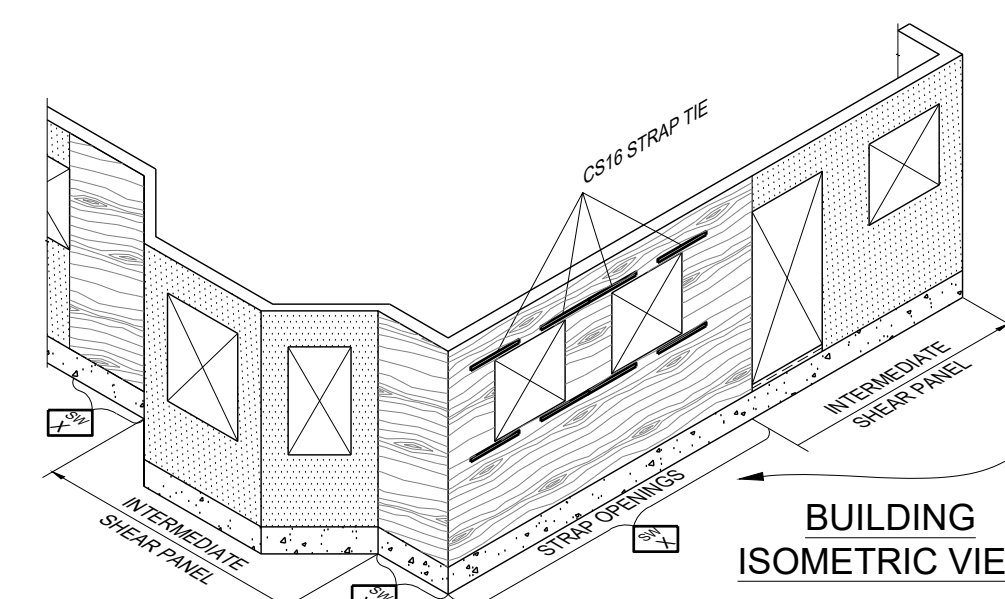
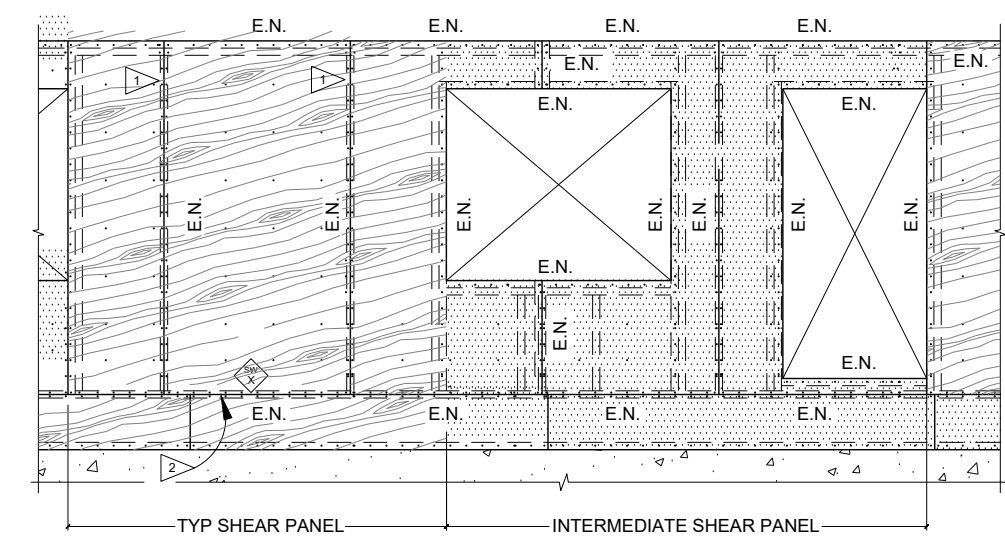
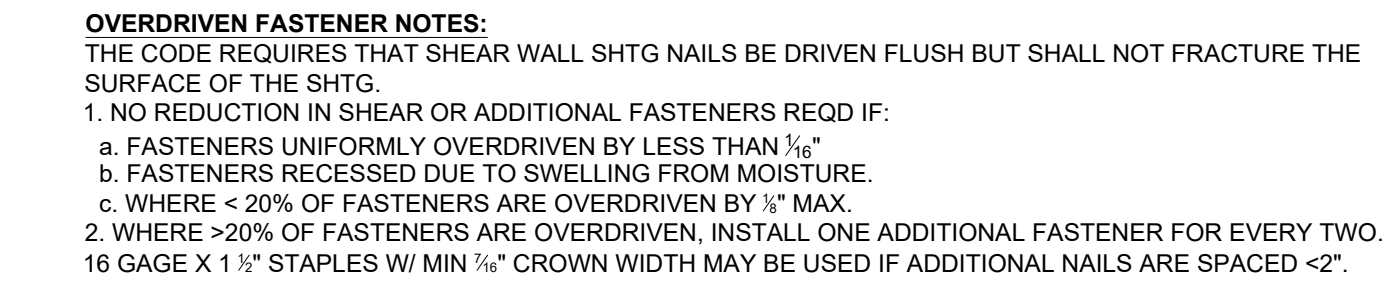


**SHEAR WALL NOTES**

- ALL EXTERIOR WALLS, INTERIOR WALLS INDICATED ON THE PLANS, AND VERTICAL SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH APA RATED 24/0 (OR BTR) CDX PANEL SIDING OR OTHER GRADES COVERED IN UBC STANDARD NO. 25-9. TYPICAL NAILING SHALL BE AS INDICATED IN SHEAR WALL SCHEDULE. NAIL ALL PANELS WITH INDICATED NAIL SIZE AT 12 IN. O.C. ALONG INTERMEDIATE SUPPORTS.
- BLOCK ALL HORIZONTAL PANEL EDGES WITH 2 IN. NOMINAL OR WIDER FRAMING. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED 3 INCHES OR LESS ON CENTER.
- ALL SHEATHING SHALL EXTEND CONTINUOUS FROM SILL PLATE TO ROOF OR FLOOR SHEATHING. SEE NOTE 2 ABOVE.
- SHEATHING SHALL EXTEND CONTINUOUS FROM FLOOR FRAMING TO HIGH ROOF FRAMING ON UPPER LEVEL EXTERIOR WALLS ABOVE A LOW ROOF.
- NAILS SHALL BE SPACED NOT LESS THAN 3/8 IN. FROM EDGES AND ENDS OF SHEATHING AND SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING. GAP ALL SHEATHING 1/8" AT PANEL EDGES.
- ANCHOR BOLTS FOR ALL SHEAR WALLS SHALL BE SIZED AND SPACED AS INDICATED IN SCHEDULE ABOVE WITH 7 IN. MIN EMBED. PLATE WASHERS A MINIMUM OF 3 INCHES BY 3 INCHES BY 1/4 INCH THICK SHALL BE USED ON EACH BOLT.
- STAPLES SHALL BE 16 GA (MIN) X 1 1/2" MIN LENGTH W/ 7/16" MIN CROWN.

**SHEAR WALL NAILING**

- SHTG MAY BE INSTALLED IN VERT OR HORIZ ORIENTATION. 1/8" GAP AT END JOINTS & 1/16" GAP @ SIDE JOINTS.
- ALL EXTERIOR WALLS & INTERIOR WALLS INDICATED ON PLANS SHALL BE SHEATHED & NAILED AS SW-1 MIN.
- SHEATHING E.N. REQ'D @ ALL HOLDDOWN POSTS.
- INTERMEDIATE SHEAR PANELS ARE WALL SECTIONS W/ HEIGHT/WIDTH RATIOS TOO HIGH ("NARROW") TO MEET CODE LIMITS. SHEATH & NAILS SW-1



FOR S.W. TYPES HIGHER THAN SW-2, LOCATE 3X OR (2) 2X STUDS @ ADJOINING PANEL JOINTS, BOTH HORIZ & VERT W/IN SHEAR PANELS. (2) 2X STUDS TO BE FACE NAILED W/ 10d EACH FACE STAGGERED. MATCH S.W. PANEL NAIL SPACING.  
LOCATE PANEL EDGES @ PLATES, BLKG, SOLID RIM JST OR OTHER SOLID FRMG MEMBERS.  
E.N. PERIMETER (EDGE) NAILING

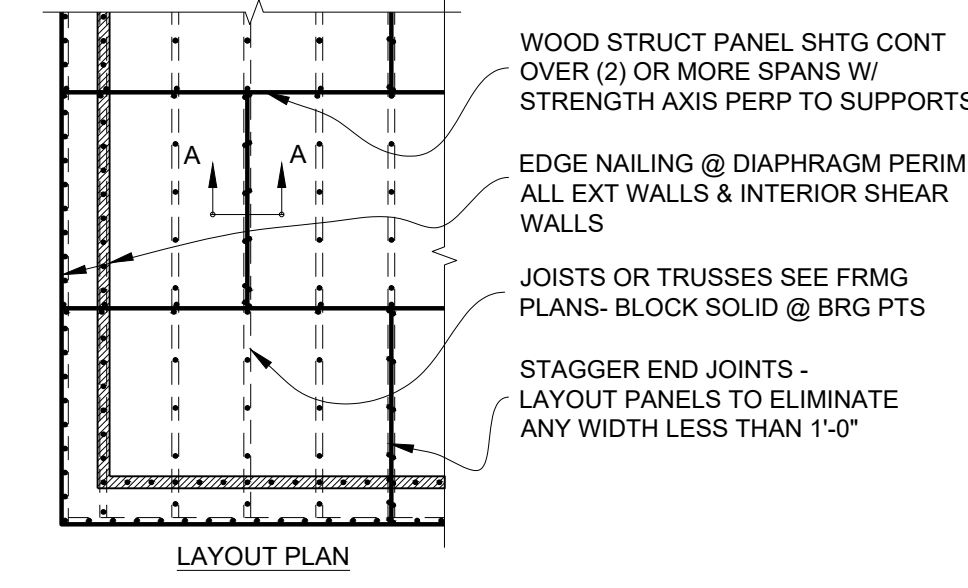
"STRAP OPENINGS" INDICATES SHEAR PANELS THAT ARE FULLY NAILED INCLUDING ABOVE & BELOW OPENINGS AS INDICATED BY SHEAR WALL SCHEDULE. ALL OPENINGS SHALL HAVE 6S16 X 2'-0" MIN STRAP TIE FULLY NAILED EACH SIDE & T&B OF OPENINGS. INSTALL SOLID HORIZ BLOCKING BEHIND STRAPS.

**ROOF TRUSS NOTES**

- TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM UNIFORM LOADS.  
TOP CHORD DEAD LOAD & LIVE LOAD ..... SEE DESIGN CRITERIA  
BOTTOM CHORD DEAD LOAD ..... 5 PSF (MIN)  
THE DESIGN ENGINEER SHALL BE NOTIFIED IF HEAVY ROOFING MATERIAL SUCH AS CLAY TILE, ETC. IS USED.
- EACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE FOLLOWING INFORMATION LOCATED WITHIN 2 FEET OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD:  
A. IDENTITY OF THE TRUSS MFG.  
B. THE DESIGN LOADS  
C. THE SPACING OF THE TRUSSES
- TRUSSES AND GIRDERS SHALL BE DESIGNED FOR ALL TRIBUTARY LOADING. UNBALANCED SNOW LOADS, EAVE LOADS, DRIFT, AND SLIDING LOADS AS PER LATEST ADOPTED CODES. PROVIDE CALCULATIONS TO EOR FOR RECORDS.
- TRUSSES AND GIRDER LOADS SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL LOADS FROM APPLICABLE HVAC EQUIPMENT.
- GABLE END TRUSSES SHALL BE DESIGNED TO CARRY SUPPORTED LOADS OVER GABLE END WINDOWS AND BAYS.
- DESIGN TRUSSES & GIRDERS TO LIMIT DEFLECTION TO THE SPAN (INCHES) DIVIDED BY 360 (L/360) OR 1 INCH MAX, WHICHEVER IS SMALLER.
- CHECK DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD VERIFY WITH CONTRACTOR. TRUSS MANUFACTURER IS RESPONSIBLE TO PROVIDE WEB AND CHORD MEMBERS TO SATISFY LOADING AND CONNECTION REQUIREMENTS.
- CONTRACTOR / TRUSS SUPPLIER SHALL SUBMIT SHOP DRAWINGS AND ERECTION DRAWINGS FOR REVIEW BY THE DESIGN ENGINEER PRIOR TO FABRICATION OR ERECTION. SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE STRUCTURE RESIDES.
- TRUSS PACKAGE SHALL BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION AS DEFERRED SUBMITTAL AFTER REVIEW BY DESIGN ENGINEER.
- ALTHOUGH SUGGESTED CONNECTION HANGER SIZES MAY BE INDICATED ON THE PLANS, ALL TRUSS HANGER CONNECTIONS (I.E. TRUSS TO BEAM, TRUSS TO GIRDER TRUSS, AND GIRDER TRUSS TO GIRDER TRUSS) SHALL BE DESIGNED BY THE TRUSS SUPPLIER / MANUFACTURER. CONNECTION HANGER SIZE AND ENGINEERING SHALL BE JOINED WITH THE SHOP DRAWINGS.
- TRUSS PRE-ENGINEERED JOINT CONNECTORS SHALL HAVE I.C.C. CERTIFICATION.
- ANY CHANGES TO THE TRUSS CONFIGURATION SHOWN ON PLANS SHALL BE APPROVED IN WRITING BY THE DESIGN ENGINEER PRIOR TO CONSTRUCTION
- TRUSS LAYOUT SHALL PROVIDE REQUIRED OPENINGS FOR ACCESS PANELS, DOORS, SKYLIGHTS, ETC.

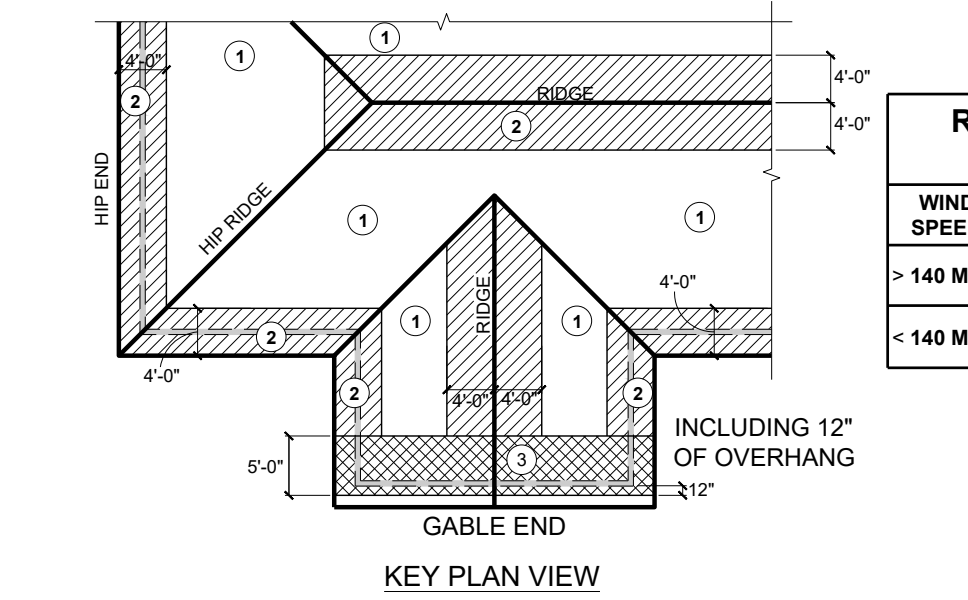
**ROOF SHEATHING**

- NOTES:  
1. ALL SHTG: APA RATED EXP 1  
2. 1/2" APA RATED 30/16 SHTG MIN RECOMMENDED UNLESS STRONGER PANEL REQ'D FOR SNOW LOAD (USE MAX SNOW LOAD, P.) WITH DRIFTING, ETC. COORDINATE W/ ROOF TRUSS SUPPLIER.  
3. NAIL W/ 8d COMMON NAILS (1 1/4" DIA, 2 1/2" LENGTH)  
4. TIGHTER NAILING PATTERN AND / OR 10d COMMON NAILS (1 1/4" DIA, 3" LENGTH) MAY BE REQ'D FOR HIGH LATERAL LOADS. SEE PLANS.



SPAN RATING	PANEL THICKNESS	MAX SNOW LOAD PSF		
		SPACING IN. O.C.	12"	16"   19.2"   24"
24/16	7/16	120	100	65
32/16	1/2	150	100	70
40/20	19/32	200	150	100
48/24	23/32	300	200	130

WIND SPEED	PANEL LOCATION	ROOF FASTENING ZONE		
		(1)	(2)	(3)
> 140 MPH	EDGES	6" O.C.	6" O.C.	4" O.C.
	FIELD	6" O.C.	6" O.C.	6" O.C.
< 140 MPH	EDGES	6" O.C.	6" O.C.	4" O.C.
	FIELD	12" O.C.	6" O.C.	6" O.C.



**STRUCTURAL STEEL**

- ALL STRUCTURAL STEEL SHALL BE ASTM A-992 (EXCEPT FOR TUBE COLUMNS WHICH SHALL BE ASTM A-500-B, Fy = 46 KSI) AND SHALL COMPLY WITH THE "STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" OF THE A.I.S.C. AND WITH THE A.I.S.C. CODE OF STANDARD PRACTICE.
- ALL BOLTS FOR STEEL TO STEEL, SHALL BE A325, TIGHTEN TO SPECIFIED TORQUE AS PER AISC REQUIREMENTS. BOLTS FOR CONCRETE AND STEEL TO WOOD, SHALL BE ASTM A307, U.N.O.
- WELDED REBAR OR BOLTS WILL NOT BE ACCEPTED IN LIEU OF WELDED STUD ANCHORS AND DEFORMED BARS. WELDED STUD ANCHORS AND DEFORMED BARS SHALL BE APPLIED USING MANUFACTURER APPROVED WELDING PROCEDURES.
- ALL WELDING SHALL CONFORM TO MOST CURRENT ADOPTED ANS D1.1 REQUIREMENTS AND SHALL BE MADE WITH E70XX ELECTRODES BY WELDERS CERTIFIED FOR THE WELD TO BE DONE. CERTIFICATION SHALL BE CURRENT WITHIN THE PAST TWELVE MONTHS.
- ALL BEARING PLATES FOR BMS AND COLUMNS RESTING ON MASONRY OR CONC SHALL BE UNDERLAIN FULLY WITH A HIGH COMPRESSION, NON-SHRINK GROUT.
- PRIOR TO FABRICATION AND ERECTION, SHOP DRAWINGS FOR ALL STL ITEMS SHALL BE REVIEWED BY THE DESIGN ENGINEER. ALL STL SHALL BE PRIMED / PAINTED IN THE SHOP. ALL STL THAT MAY BE EXPOSED TO EXT. SHALL BE SHOP PAINTED TO INHIBIT RUST. WELD AREAS SHALL BE TOUCHED UP IN THE FIELD.
- SPECIAL INSPECTIONS AND TESTING OF WELDS AS REQUIRED BY THE LATEST ADOPTED BUILDING CODE(S) SHALL BE PROVIDED BY THE OWNER. COPIES OF ALL INSPECTION REPORTS SHALL BE FORWARDED TO THE DESIGN ENGINEER.
- U.N.O. ON SPEC. DTL'S HIGH-STRENGTH BOLTS ARE REQ'D TO BE TIGHTENED ONLY TO THE SNUG-TIGHT CONDITION. THE SPECIAL INSPECTOR NEED ONLY VERIFY THAT THE CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SQUEEZED.

CHK	APP								
BY									
REVISION									
DATE									
NO.									

**Iridium AE**  
STRUCTURAL ENGINEERING  
635 WEST 5300 SOUTH, SUITE 203, SALT LAKE CITY, UT 84123  
PHONE: (801) 974-5101  
FAX: (801) 974-5102

PROJECT: **HOLLIS**

8452 E SPRING PARK, LOT 75R POWDER MOUNTAIN, WEBER COUNTY UT

CLIENT: **UPWALL DESIGN**

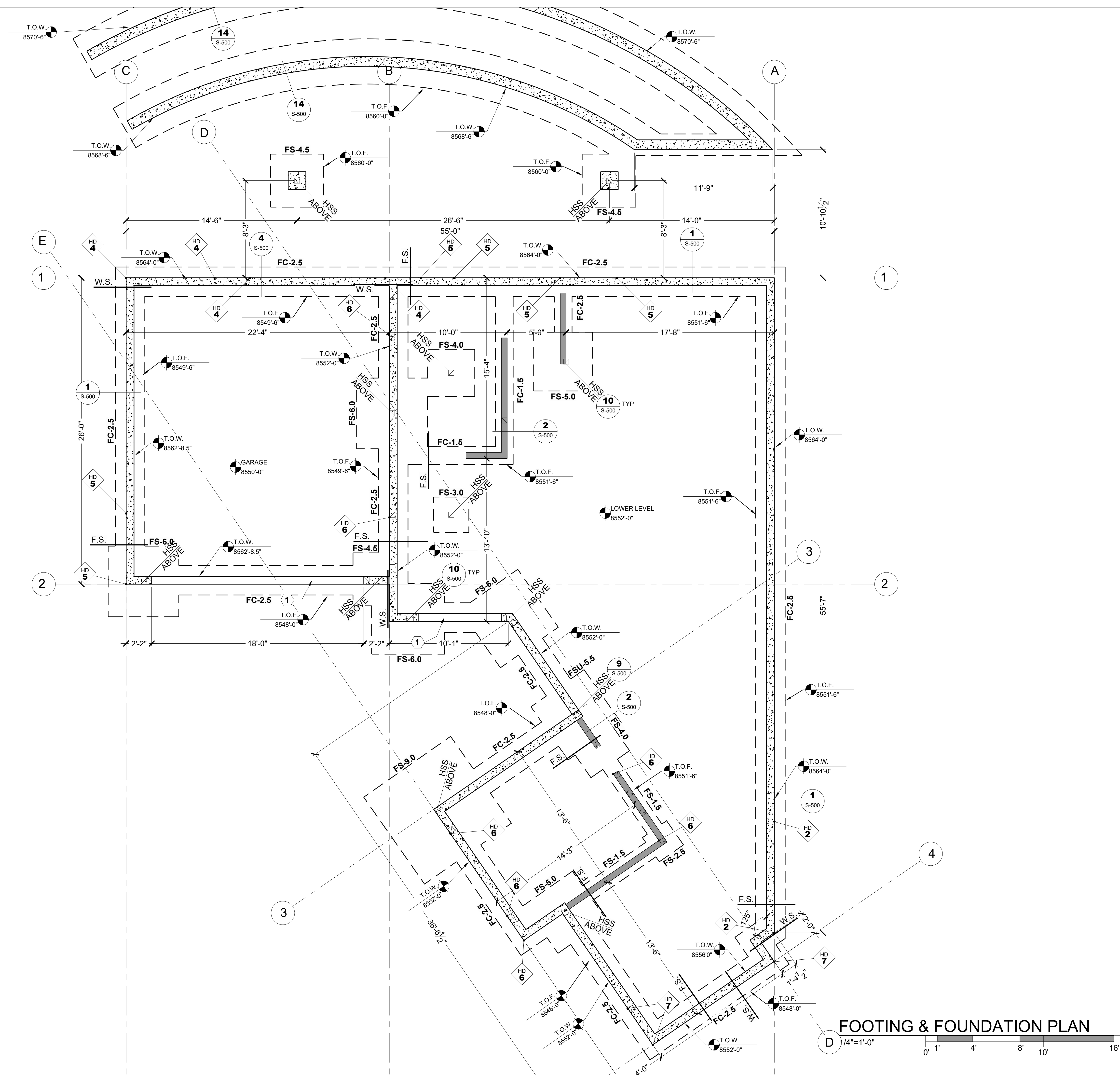
SHEET TITLE: **COVER SHEET**

DESIGN TEAM  
LEAD: **GARRETT E. JENKINS**  
**AUSTIN L. GREER**  
**TROY JENKINS**  
**BRADEN JENKINS**

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PROJECT NO: **17-244**  
DRAWN BY: **TAJ, BBJ**  
CHECKED BY: **GEJ, ALG**  
ISSUE DATE: **AUG 04 2017**  
PLOT DATE: **Aug 10, 2017 9:26am**  
SHEET NO: **S-001**  
STATUS: **PERMIT SET**





**KEYED NOTES**

- RECESS T.O. FDN FOR SLAB
- INSTALL 20FT #4 REBAR OR #4 BARE COPPER WIRE @ 8" O. C. FTS & EXTEND 4FT MIN FROM T.O. FDN FOR UPPER GROUND. COORDINATE W/ ELECTRICIAN.

**FOOTING AND FOUNDATION PLAN NOTES**

- THIS IS ONE PAGE OF A SET OF PROJECT DOCUMENTS, AND MAY NOT BE USED ALONE. THE CONTRACTOR, SUBCONTRACTORS AND OWNER, AS PART OF THE PROJECT TEAM, SHALL REVIEW AND BE RESPONSIBLE FOR INFORMATION CONTAINED IN ALL PROJECT DOCUMENTS PRIOR TO INITIATION OF ANY WORK ON THE PROJECT.
- DETAILS ARE NOTED ON THE PLANS IN TYPICAL LOCATIONS AND SHALL BE REPEATED WHERE SIMILAR CONDITIONS EXIST. SEE TYPICAL DETAILS AND GENERAL NOTES.
- SEE STRUCTURAL DETAIL SHEETS (S-6XX) FOR STRUCTURAL NOTES & DETAILS
- SEE PLANS, SHEAR WALL NOTES, AND SCHEDULE FOR WALL SHEATHING AND ANCHOR BOLTS. U.N.O. MINIMUM ANCHOR BOLTS SHALL BE 5/8" Ø WITH 7 INCHES MIN EMBED INSTALLED AT 32 INCHES MAX ON CENTER. PLATE WASHERS A MINIMUM OF 3 INCHES BY 3 INCHES BY 1/4 INCH THICK SHALL BE USED ON EACH BOLT.
- FOUNDATION WALLS SHALL BE LATERALLY SUPPORTED UNTIL SUPPORT MEMBERS (FLOOR FRAMING AND SLABS) HAVE BEEN INSTALLED.
- BASEMENT WINDOWS SHALL BE INSTALLED TO MEET EGRESS, LIGHT AND VENTILATION REQUIREMENTS PER IBC. WINDOWS, FRAMES AND AREA WELLS ARE FURNISHED AND LOCATED ON SITE BY CONTRACTOR.
- DIMENSIONS SHOWN SHALL BE COORDINATED W/ DESIGN DRAWINGS.

**FOOTING SCHEDULE**

MARK	WIDTH	LENGTH	THICK	CROSSWISE REINFORCING		LENGTHWISE REINFORCING			
				NO.	SIZE	NO.	SIZE	LENGTH	
FC-1.5	1'-6"	CONT	10"			2	#4	CONT	
FC-1.7	1'-8"	CONT	10"			2	#4	CONT	
FC-2.0	2'-0"	CONT	10"			2	#5	CONT	
FC-2.5	2'-6"	CONT	12"			3	#5	CONT	
FS-2.5	2'-6"	2'-6"	12"	4	#4	2'-0"	4	#4	2'-0"
FS-3.0	3'-0"	3'-0"	12"	4	#4	2'-6"	4	#4	2'-6"
FS-3.5	3'-6"	3'-6"	12"	5	#4	3'-0"	5	#4	3'-0"
FS-4.0	4'-0"	4'-0"	12"	6	#4	3'-6"	6	#4	3'-6"
FS-4.5	4'-6"	4'-6"	12"	6	#4	4'-0"	6	#4	4'-0"
FS-5.0	5'-0"	5'-0"	12"	5	#5	4'-6"	5	#5	4'-6"
FSU-5.5	5'-6"	5'-6"	48"	6	#5	5'-0"	6	#5	5'-0"
FS-6.0	6'-0"	6'-0"	16"	8	#5	5'-6"	8	#5	5'-6"
FS-9.0	9'-0"	9'-0"	16"	8	#5	8'-6"	8	#5	8'-6"

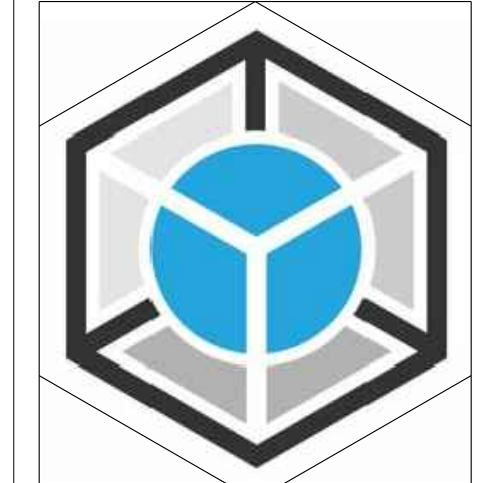
NOTES:  
-SPACE REIN. EVENLY THROUGH FOOTING W/ 3" CLEARANCE AT OUTSIDE EDGE.

**HOLDOWN SCHEDULE**

MARK	MODEL#	MIN MEMBER THK	MEMBER FASTENERS	A.B. DIA.	A.B. EMBED(IG)	MAX LOAD(LBS)
HD-1	DTT1Z	1-1/2"	(8) 10dX1-1/2"	3/8"	8"	910
HD-2	DTT2Z	3"	(8) SDS 1/4"X1-1/2"	1/2"	8"	2145
HD-3	LSTHD8 (RJ)	3"	(16) 16d SINKERS			1610
	STHD10 (RJ)	3"	(20) 16d SINKERS			2175
HD-4	HDU2-SDS2.5	3"	(10) SDS 1/4"X2-1/2"	5/8"	12"	4565
	STHD14 (RJ)	3"	(24) 16d SINKERS			3500
HD-5	HTT5	3"	(14) SDS 1/4"X2-1/2"	5/8"	12"	5645
HD-6	HDU8-SDS2.5	3"	(20) SDS 1/4"X2-1/2"	7/8"	15"	6765
HD-7	HDU11-SDS2.5	5-1/2"	(30) SDS 1/4"X2-1/2"	1"	16"	9535

NOTES:  
-ALL HOLDOWNS ARE SIMPSON BRAND. EQUIVALENT STRENGTH HD MAY BE USED.  
-STRONGER HOLDOWN MAY BE USED. HD-2 MAY BE USED IN LIEU OF HD-1  
-MULTIPLE OPTIONS FOR HD-X ARE SHOWN TO ALLOW CAST IN PLACE OR POST INSTALLED HOLDOWN  
-(RJ) INDICATES USE OF STRAPS AT RIM JOIST APPLICATION. NOT REQ'D FOR ALL APPLICATIONS  
-VALUES SHOWN FOR TENSION ARE FOR 8" MIN FDN WALL THICKNESS.

NO.	DATE	REVISION	BY	CHK APP



**Iridium AE**  
STRUCTURAL ENGINEERING  
635 WEST 5300 SOUTH, SUITE 203, SALT LAKE CITY, UT 84123  
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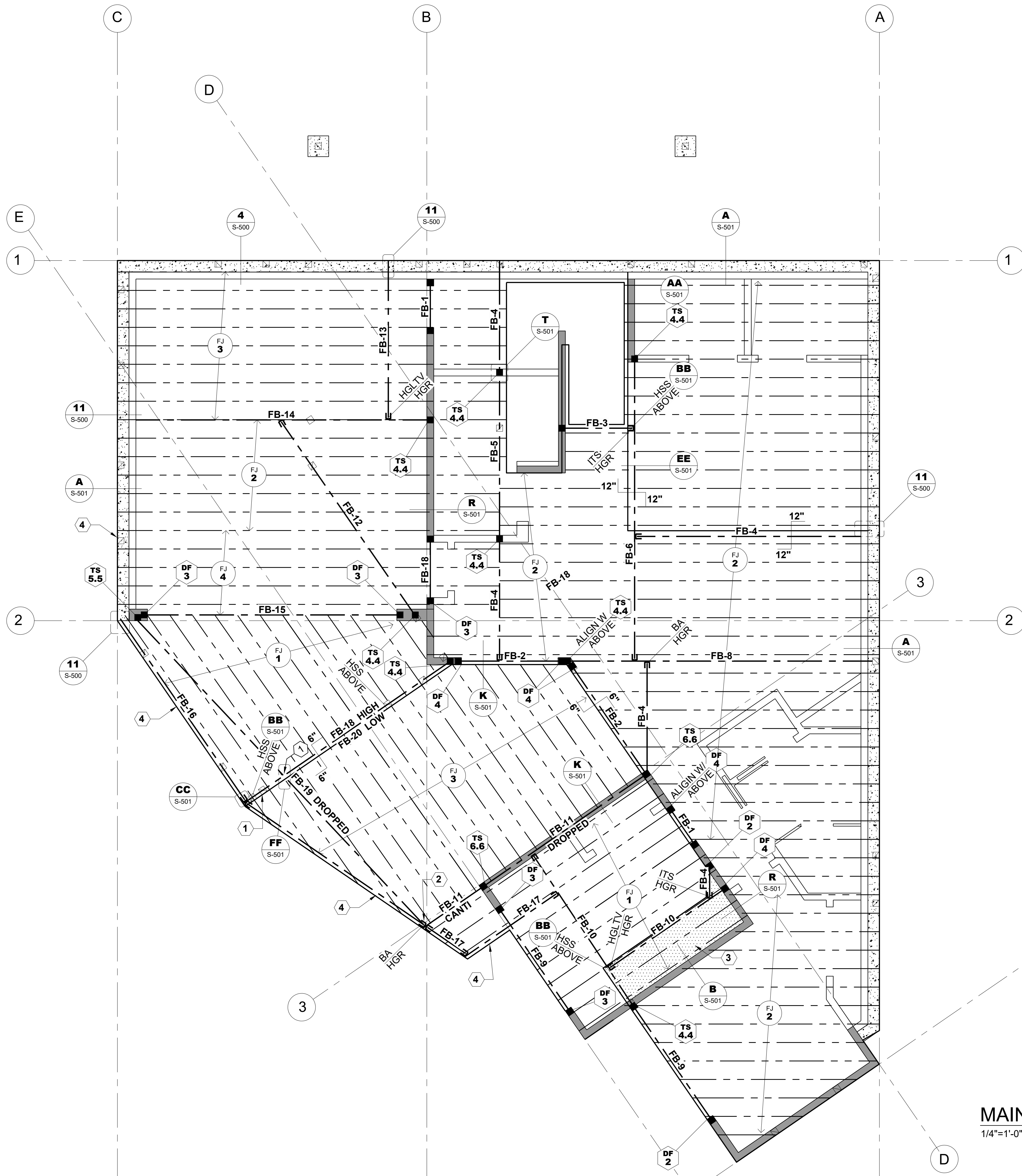
SHEET TITLE:  
**FOOTING & FOUNDATION PLAN**

**DESIGN TEAM**  
LEAD: GARRETT E. JENKINS  
AUSTIN L. GREER  
ROSADER KINGSTON  
BRADEN JENKINS

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PROJECT NO.: **17-244**  
DRAWN BY: ARK, BBJ  
CHECKED BY: GEJ, ALG  
ISSUE DATE: AUG 04 2017  
PLOT DATE: Aug 10, 2017 9:26am  
SHEET NO.: **S-100**  
STATUS: **PERMIT SET**





**MAIN LEVEL FRAMING PLAN**  
1/4"=1'-0"

**FLOOR BEAM SCHEDULE**  
SEE DESIGN CRITERIA FOR LOADING

MARK	SIZE	FOOTNOTES
FB-1	(2) - 2 X 10 (S)	1
FB-2	(2) 1-3/4" X 9-1/2" LVL(S)	1
FB-3	(1) 1-3/4" X 11-7/8" LVL(S)	2
FB-4	(3) 1-3/4" X 11-7/8" LVL(S)	2, 5
FB-5	W10X30	5, 7
FB-6	W12X72	5, 7
FB-7	W10X19	7
FB-8	W10X88	5, 7
FB-9	(3) 1-3/4" X 9-1/2" LVL(S)	1
FB-10	W10X45	2, 5
FB-11	W12X136	8
FB-12	W10X88	5, 7
FB-13	(4) 1-3/4" X 11-7/8" LVL(S)	2, 5
FB-14	W12X136	5, 7
FB-15	W10X17	1
FB-16	W10X39	5, 7
FB-17	(2) 1-3/4" X 11-7/8" LVL(S)	7
FB-18	W10X88	4, 7
FB-19	W12X160	8
FB-20	(4) 1-3/4" X 11-7/8" LVL(S)	2

**BEARING WALL HEIGHT SCHEDULE**

WALL TYPE	STUD SPAC'G	LUMBER GRADE	PERP. FRMG	PARA. FRMG
2x4	16"	DOUG FIR	8'-0"	9'-0"
2x4	12"	DOUG FIR	9'-0"	10'-0"
2x6	16"	DOUG FIR	14'-0"	14'-6"
2x6	12"	DOUG FIR	16'-0"	16'-0"
1-3/4" x 5-1/2" LSL STUDS	16"	1.55 E LSL	15'-0"	15'-0"
1-3/4" x 5-1/2" LSL STUDS	12"	1.55 E LSL	16'-6"	16'-6"
DBL 2x6	16"	DOUG FIR	18'-6"	18'-6"
DBL LSL	16"	1.55 E LSL	19'-0"	19'-0"
LSL 7-1/4"	16"	1.55 E LSL	20'-0"	20'-0"

**NOTES:**  
1. TABLE DESIGNED FOR 115 MPH EXPOSURE 1" 50 PSF FLAT ROOF SNOW LOAD  
2. FRAMING PERP. TO WALL SHALL NOT EXCEED 45'-0" SPAN. CONTACT ENGINEER FOR MAX HT OF STUDS SUPPORTING LONGER SPANS THAN 45'-0"  
3. MAX HT. REFERS TO UN-BRACED WALL HEIGHTS  
4. FULL HEIGHT STUD WALLS WHICH ARE BRACED LATERALLY (TRUSSES OR RAFTERS) WALL HEIGHTS MAY BE REDUCED TO THE POINT AT WHICH THE FIRST LATERAL BRACE OCCURS. SPECIAL STUD SPACING CONDITIONS TO BE NOTED ON FRAMING PLANS.

**KEY:**  
1. HEADER  
2. FLUSH IN FLOOR  
3. DROPPED  
4. CANTILEVER END OF BEAM  
5. ALIGN WITH WALLPOST ABOVE  
6. T.O. BM = T.O. JOISTS  
7. T.O. BM = 1'-1/2" BELOW T.O. JOISTS

**NOTES:**  
-DEEPER AND/OR WIDER MEMBERS MAY BE SUBSTITUTED OF SAME GRADE. OTHER SUBSTITUTIONS SHALL NOT BE MADE W/O PRIOR WRITTEN APPROVAL FROM ENGINEER.  
-ALL EXT. BMS (DECKS, ETC.) SHALL BE EXT. GRADE & SHALL BE CLEARLY MARKED.  
-SEE S-501 FOR REQUIRED BEAM GRADE.

**KEYED NOTES**

- FB-18 HIGH CANTILEVERS OVER TOP OF FB-19 TO SUPPORT HSS ABOVE. FB-18 HIGH SHALL BE FLUSH IN FLOOR W/ FB-19 DIRECTLY BELOW. FB-20 LOW IS FLUSH IN DECK TO SUPPORT DECK JOISTS. HANG FB-20 LOW INTO FB-19 PER DTL. DDIS-501.
- HANG FB-19 INTO FB-11 PER DTL. CCS-501. T.O. FB-11 = T.O. FB-19.
- AT SHADED AREA, BLOCK PANEL EDGES & NAIL SHTG W/ 10d NAILS @ 4" O.C. EDGES & 8" O.C. FIELD.
- INSTALL DECO 18" CHANNEL AT PERIMETER OF DECK SEE ARCH PLANS

**FLOOR FRAMING PLAN NOTES**

- DETAILS ARE NOTED ON THE PLANS IN TYPICAL LOCATIONS AND SHALL BE REPEATED WHERE SIMILAR CONDITIONS EXIST. SEE TYPICAL DETAILS AND GENERAL NOTES.
- SEE STRUCTURAL DETAIL SHEETS (S-5XX) FOR STRUCTURAL NOTES & DETAILS.
- PLACE 2 STUDS MINIMUM AT ALL BEAMS, HEADERS AND GIRDER TRUSS BEARING POINTS WITH SPANS GREATER THAN SIX FEET, UNLESS NOTED OTHERWISE. MULTIPLE STUDS AND COLUMNS SHALL EXTEND CONTINUOUS TO FOUNDATION OR SUPPORTING BEAM BELOW. USE MULTIPLE SOLID BLOCKING AT FLOORS.
- SEE FLOOR SHEATHING NOTES FOR FLOOR SHEATHING SIZE & NAILING.
- AT FLUSH BEAMS USE SIMPSON LBV SERIES (TOP JOISTS) OR JB SERIES (WOOD JOISTS) TOP FLANGE JOIST HANGERS EACH JOIST U.N.O.
- ARRANGE JOIST LOCATIONS AT BATHROOM AND KITCHEN AREAS TO AVOID CONFLICT WITH PLUMBING.
- FLOOR JOISTS UNDER FIREPLACE HEARTHSS MAY NEED SPACING REDUCED AND/OR SUBSTITUTED W/ LVL'S TO SUPPORT THE ADDED LOADING. VERIFY W/ ENGINEER.
- HOT TUBS OR OTHER OWNER INSTALLED ITEMS THAT IMPOSE HEAVY LOADS ON STRUCTURAL MEMBERS WILL REQUIRE ADDITIONAL ENGINEERING IF NOT SHOWN ON ORIGINAL PLANS USED FOR DESIGN. STRUCTURAL MEMBERS MAY NEED TO BE INCREASED FOR THE ADDITIONAL IMPOSED LOADING.
- ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED LUMBER OR FOUNDATION REDWOOD. ALL WOOD SUPPORT MEMBERS EXPOSED TO WEATHER SHALL BE TREATED OR PROTECTED TO PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE.

**11-7/8" FLOOR JOIST SCHDL**

40 PSF LIVE LOAD AND 12 PSF DEAD LOAD

MARK	SERIES	MAX SPAN	SPACING	FLANGE WIDTH
FJ-1	TJI 110	18'-5"	16"	1-3/4"
	LPI 18	18'-1"	16"	2-1/2"
FJ-2	BCI 5000 - 1.7	18'-5"	16"	2"
	TJI 210	19'-3"	16"	2-1/16"
FJ-3	LPI 20+	19'-4"	16"	2-1/2"
	BCI 6000 - 1.8	19'-5"	16"	2-5/16"
FJ-4	TJI 230	19'-10"	16"	2-5/16"
	LPI 32+	20'-2"	16"	2-1/2"
FJ-5	BCI 6500 - 1.8	20'-0"	16"	2-9/16"
	TI 360	20'-11"	16"	2-5/16"
FJ-5	LPI 36	21'-0"	16"	2-1/4"
	BCI 60 - 2.0	21'-3"	16"	2-5/16"
	TJI 560	23'-8"	16"	3-1/2"
FJ-5	LPI 56	24'-1"	16"	3-1/2"
	BCI 90 - 2.0	23'-11"	16"	3-1/2"

**NOTES:**  
-SPAN REPRESENTS CLR DIST. BETWEEN SUPPORTS  
-SHTG SHALL BE GLUED AND NAILED FOR MAX SPANS.

**POST SCHEDULE**

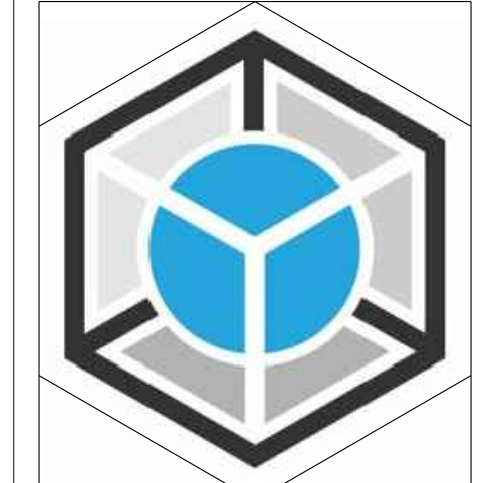
MARK	DESCRIPTION	GRADE/ NOTES
DF-2	(2) STUDS/TRIMMERS	DF#2
DF-3	(3) STUDS/TRIMMERS	DF#2
DF-4	(4) STUDS/TRIMMERS	DF#2
DF-4.4	4 x 4 POST	DF#1 or BTR
DF-4.6	4 x 6 POST	DF#1 or BTR
DF-6.6	6 x 6 POST	DF#1 or BTR
TS-4.4	HSS 4 x 4 x 1/4	A500-GR B-46
TS-6.6	HSS 6 x 6 x 3/8	A500-GR B-46

**NOTES:**  
-POST SIZE IS MINIMUM REQ'D. SIZE & GRADE MAY BE INCREASED FOR ARCHITECTURAL DETAILING OR CONTRACTOR PREFERENCE  
-ADDITIONAL STUDS TO BE USED UNDER WIDE BMS TO PROVIDE FULL BM BEARING  
-ALL BUILT UP POSTS SHALL BE BUILT FROM STUDS TO MATCH WALL THICKNESS.

**FLOOR SHEATHING**

- TYPICAL FLOOR SHEATHING SHALL BE 3/4 IN. T&G APA RATED 48/24 EXPOSURE 1 SHEATHING NAILED WITH 8d RING SHANK NAILS AT 6 IN. O.C. AT ALL PANEL ENDS, SUPPORTED EDGES, TOP OF SHEAR WALLS (ALL EXTERIOR WALLS ARE SHEAR WALLS) AND ALL BLOCKING; 8d AT 12 IN. O.C. ALONG INTERMEDIATE FRAMING MEMBERS. NAILING SHALL BE SPACED AT 3/8 IN. MIN FROM EDGE OF PANEL.
- LAY SHEATHING WITH FACE GRAIN AT RIGHT ANGLES TO FRMG W/ END JOINTS STAGGERED (SEE TYP DETAILS).
- BLOCK JOISTS SOLID AT ALL BEARING POINTS.

NO.	DATE	REVISION	BY	CHK	APP



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PROJECT: **HOLLIS**

8452 E SPRING PARK, LOT 75R POWDER MOUNTAIN, WEBER COUNTY UT

CLIENT: **UPWALL DESIGN**

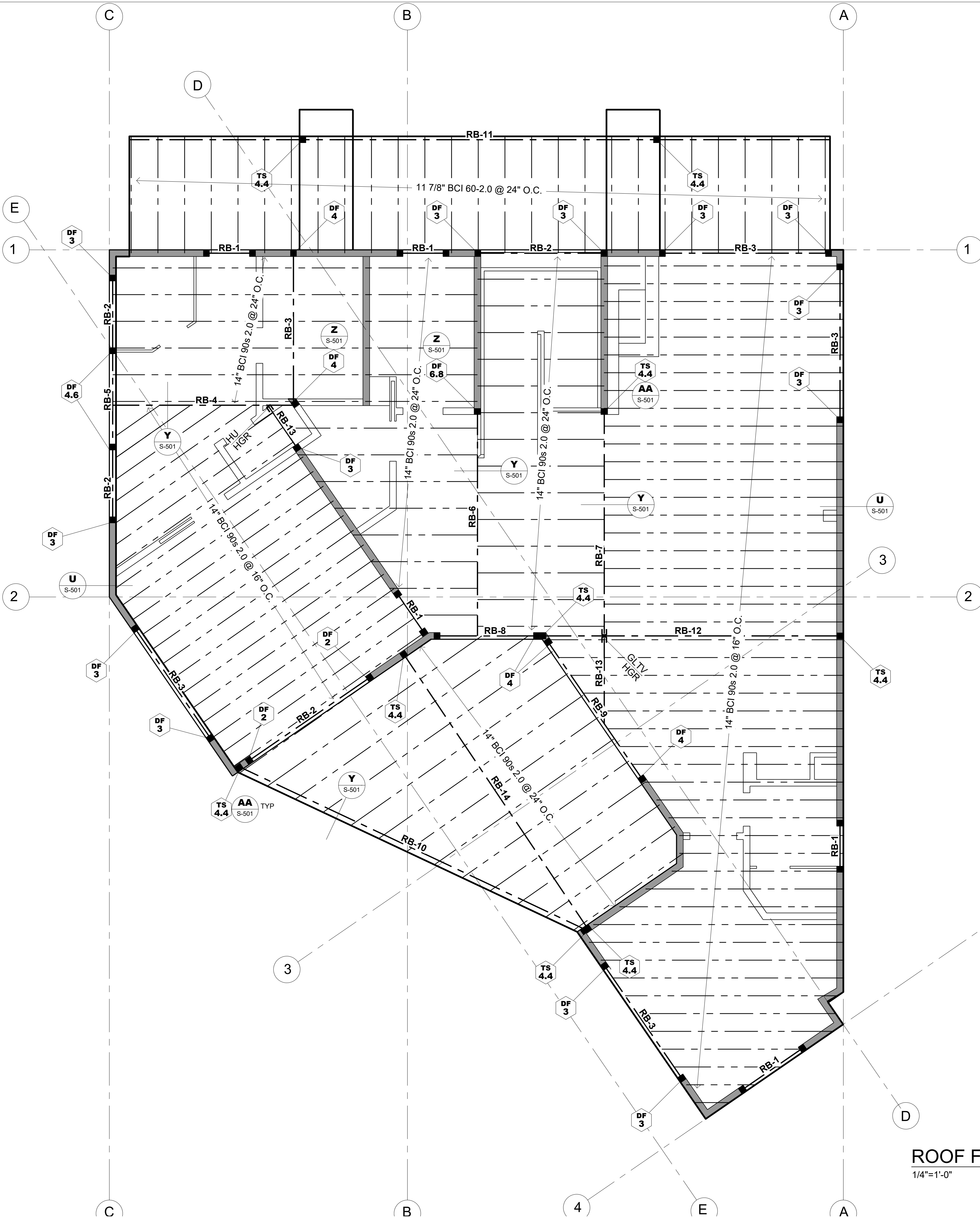
SHEET TITLE: **MAIN LEVEL FRAMING PLAN**

**DESIGN TEAM**  
LEAD: GARRETT E. JENKINS  
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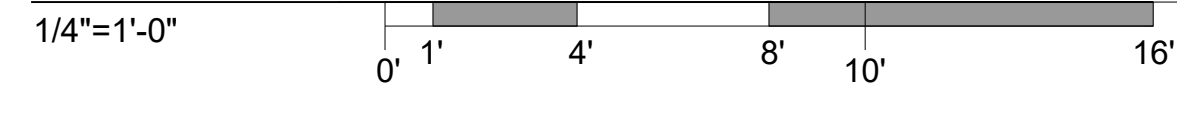
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PROJECT NO: **17-244**  
DRAWN BY: ARK, BBJ  
CHECKED BY: GEJ, ALG  
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SHEET NO: **S-101**  
STATUS: **PERMIT SET**





### ROOF FRAMING PLAN



- #### KEYED NOTES
- INSTALL GARAGE HEADER ACROSS T.O. BRG WALL FOR PORTAL FRAME. SEE DETAIL.
  - STRUCTURAL FASCIA SHALL BE 1-3/4" x 11-7/8" LVL W/ BACK SPAN SUPPORTED BY CANTILEVERED JOISTS. ATTACH FASCIA TO JOISTS W/ UPSIDE DOWN LSSU HANGERS AT EACH JOIST. STRAP BEAM TO POST W/ CS16 STRAP 24" LONG. INSTALL STRAP ON EA. SIDE OF POST.
  - STRAP BEAM TO POST W/ CS16 STRAP 24" LONG ON EACH SIDE OF POST. CONNECT POST TO FDN W/ HOUZ HOLDOWN.

- #### ROOF FRAMING PLAN NOTES
- DETAILS ARE NOTED ON THE PLANS IN TYPICAL LOCATIONS AND SHALL BE REPEATED WHERE SIMILAR CONDITIONS EXIST. SEE TYPICAL DETAILS AND GENERAL NOTES.
  - SEE STRUCTURAL DETAIL SHEETS FOR STRUCTURAL NOTES & GENERAL USE DETAILS.
  - SEE DESIGN PLANS FOR DIMENSIONS. DO NOT SCALE STRUCTURAL DRAWINGS.
  - SEE TRUSS NOTES FOR ROOF TRUSSES. EXTEND CONTINUOUS TO FOUNDATION OR SUPPORTING BEAM BELOW. USE MULTIPLE SOLID BLOCKING AT FLOORS.
  - PLACE 2 STUDS MINIMUM AT ALL BEAMS, HEADERS AND GIRDER TRUSS BEARING POINTS WITH SPANS GREATER THAN SIX FEET, UNLESS NOTED OTHERWISE. MULTIPLE STUDS AND COLUMNS SHALL EXTEND CONTINUOUS TO FOUNDATION OR SUPPORTING BEAM BELOW. USE MULTIPLE SOLID BLOCKING AT FLOORS.
  - COORDINATE ALL TRUSS CONFIGURATIONS W/ DESIGN PLANS. SEE ROOF TRUSS NOTES.
  - OVER BUILT AREAS ARE SHOWN SHADED. SEE OVER BUILD DETAIL(S).
  - ALL TRUSS HANGERS TO BE SPECIFIED BY TRUSS MANUFACTURER.

#### BEARING WALL HEIGHT SCHEDULE

WALL TYPE	STUD SPAC'G	LUMBER GRADE	PERP. FRMG	PARA FRMG
2x4	16"	DOUG FIR	8'-0"	9'-0"
2x4	12"	DOUG FIR	9'-0"	10'-0"
2x6	16"	DOUG FIR	14'-0"	14'-6"
2x6	12"	DOUG FIR	16'-0"	16'-0"
1-3/4" x 5-1/2" LSL STUDS	16"	1.55 E LSL	15'-0"	15'-0"
1-3/4" x 5-1/2" LSL STUDS	12"	1.55 E LSL	16'-6"	16'-6"
DBL 2x6	16"	DOUG FIR	18'-6"	18'-6"
DBL LSL	16"	1.55 E LSL	19'-0"	19'-0"
LSL 7-1/4"	16"	1.55 E LSL	20'-0"	20'-0"

#### ROOF BEAM SCHEDULE

MARK	SIZE	FOOTNOTES
RB-1	(3) - 2 X 10 (S)	1
RB-2	(2) 1-3/4" X 9-1/2" LVL(S)	1
RB-3	(3) 1-3/4" X 14" LVL(S)	1
RB-4	(3) 1-3/4" X 14" LVL(S)	2 CR 3
RB-5	(3) 1-3/4" X 11-7/8" LVL(S)	1
RB-6	W12X35	3
RB-7	W12X35	3
RB-8	W10X19	1
RB-9	W10X26	1
RB-10	W10X88	3
RB-11	W12X136	3
RB-12	W12X45	3
RB-13	(2) 1-3/4" X 14" LVL(S)	2
RB-14	W12X65	3

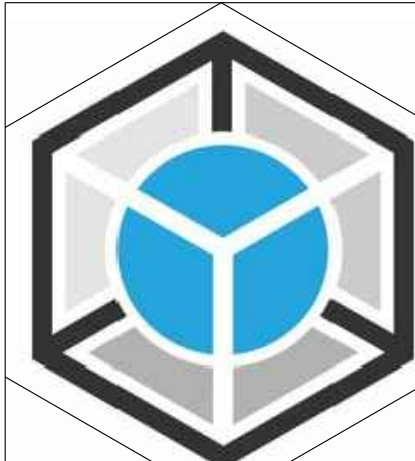
#### POST SCHEDULE

MARK	DESCRIPTION	GRADE/ NOTES
DF-2	(2) STUDS/TRIMMERS	DF#2
DF-3	(3) STUDS/TRIMMERS	DF#2
DF-4	(4) STUDS/TRIMMERS	DF#2
DF-4.4	4 x 4 POST	DF#1 or BTR
DF-4.6	4 x 6 POST	DF#1 or BTR
DF-6.6	6 x 6 POST	DF#1 or BTR
TS-4.4	HSS 4 x 4 x 1/4	A500-GR-B-46
TS-6.6	HSS 6 x 6 x 3/8	A500-GR-B-46

NOTES:  
 -POST SIZE IS MINIMUM REQ'D. SIZE & GRADE MAY BE INCREASED FOR ARCHITECTURAL DETAILING OR CONTRACTOR PREFERENCE.  
 -ADDITIONAL STUDS TO BE USED UNDER WIDE BMS TO PROVIDE FULL BM BEARING  
 -ALL BUILT UP POSTS SHALL BE BUILT FROM STUDS TO MATCH WALL THICKNESS.

NOTES:  
 -DEEPER AND/OR WIDER MEMBERS MAY BE SUBSTITUTED OF SAME GRADE. OTHER SUBSTITUTIONS SHALL NOT BE MADE W/O PRIOR WRITTEN APPROVAL FROM ENGINEER.  
 -ALL EXT. BMS (DECKS, ETC.) SHALL BE EXT. GRADE & SHALL BE CLEARLY MARKED.  
 -HEADERS < 7'-0" WIDE @ GABLE END WALLS ARE NOT REQUIRED WHEN STRUCTURAL GABLE TRUSSES ARE USED.  
 -SEE S-101 FOR REQUIRED BEAM GRADE.

NO.	DATE	REVISION	BY	CHK	APP



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PROJECT: **HOLLIS**

8452 E SPRING PARK, LOT 75R POWDER MOUNTAIN, WEBER COUNTY UT

CLIENT: **UPWALL DESIGN**

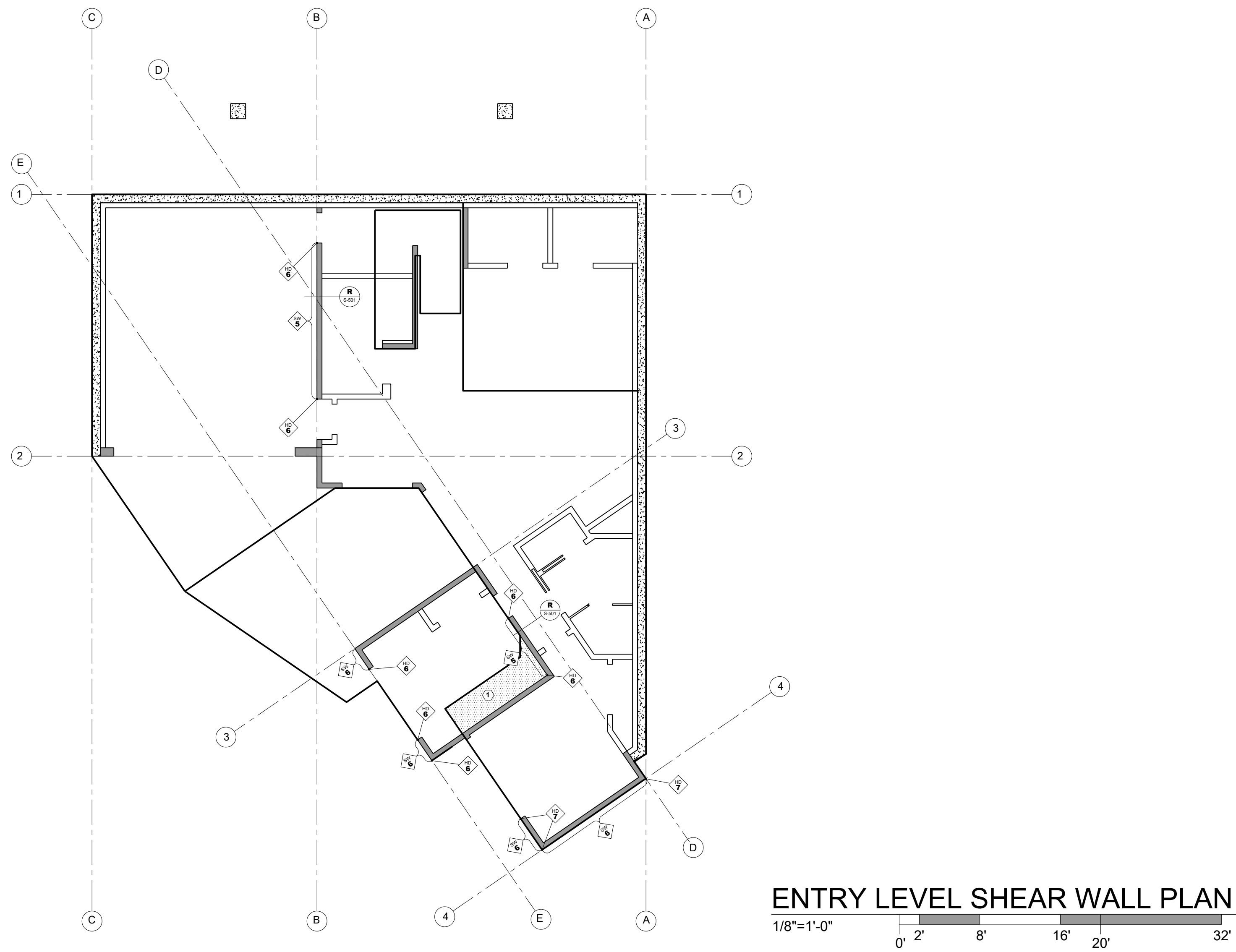
SHEET TITLE: **ROOF FRAMING PLAN**

DESIGN TEAM  
 LEAD: GARRETT E. JENKINS  
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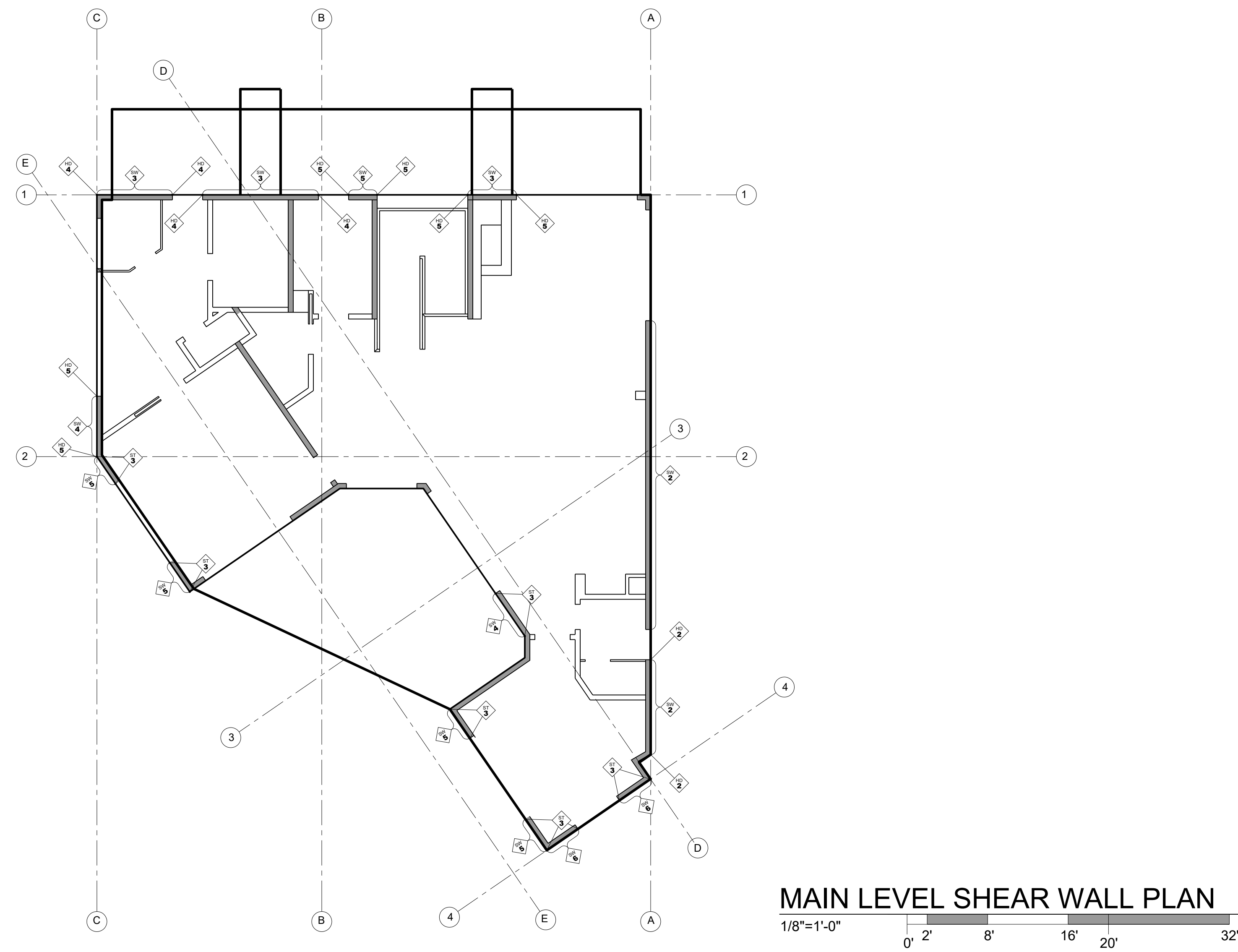
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 DRAWN BY: ARK, BBJ  
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 ISSUE DATE: AUG 04 2017  
 PLOT DATE: Aug 10, 2017 9:26am  
 SHEET NO: **S-102**  
 STATUS: **PERMIT SET**





**ENTRY LEVEL SHEAR WALL PLAN**

1/8"=1'-0" 0' 2' 8' 16' 20' 32'



**MAIN LEVEL SHEAR WALL PLAN**

1/8"=1'-0" 0' 2' 8' 16' 20' 32'

STRAP TIE SCHEDULE					
MARK	TIE	TYP LOC	ALLOWABLE TENSION (LBS)	FASTENERS REQUIRED	NOTES
ST-1	CS16	FLOOR TO FLOOR	1705	(20) 10d	11" END LENGTH
ST-2	CS14	FLOOR TO FLOOR	2490	(26) 10d	15" END LENGTH
ST-3	MST60	FLOOR TO FLOOR	5240	(40) 16d	
ST-4	HTT5	FLOOR TO FLOOR	5090	(26) 16d SINKERS	3" x 3-1/2" MMBER REQ'D
ST-4	FTA7	FLOOR TO FLOOR	7600	(6) 7/8"Ø BOLTS	3-1/2" MMBER REQ'D

HOLDOWN SCHEDULE						
MARK	MODEL#	MIN MEMBER THK	MEMBER FASTENERS	A.B. DIA	A.B. EMBED(1c)	MAX LOAD(LBS)
HD-1	DTT1Z	1-1/2"	(8) 10dX1-1/2"	3/8"	8"	910
HD-2	DTT2Z	3"	(8) SDS 1/4"X1-1/2"	1/2"	8"	2145
HD-2	LSTHD8 (R.J)	3"	(16) 16d SINKERS			1610
HD-3	HDU2-SDS2.5	3"	(6) SDS 1/4"X2-1/2"	5/8"	8"	3075
HD-3	STHD10 (R.J)	3"	(20) 16d SINKERS			2175
HD-4	HDU4-SDS2.5	3"	(10) SDS 1/4"X2-1/2"	5/8"	12"	4565
HD-4	STHD14 (R.J)	3"	(24) 16d SINKERS			3500
HD-5	HTT5	3"	(14) SDS 1/4"X2-1/2"	5/8"	12"	5645
HD-6	HDU8-SDS2.5	3"	(20) SDS 1/4"X2-1/2	7/8"	15"	6765
HD-7	HHDU11-SDS2.5	5-1/2"	(30) SDS 1/4"X2-1/2	1"	16"	9535

NOTES:  
 -ALL HOLDOWNS ARE SIMPSON BRAND. EQUIVALENT STRENGTH HD MAY BE USED.  
 -STRONGER HOLDOWN MAY BE USED; HD-2 MAY BE USED IN LIEU OF HD-1  
 -MULTIPLE OPTIONS FOR HD-X ARE SHOWN TO ALLOW CAST IN PLACE OR POST INSTALLED HOLDOWN  
 -(R.J) INDICATES USE OF STRAPS AT RIM JOIST APPLICATION. NOT REQ'D FOR ALL APPLICATIONS  
 -VALUES SHOWN FOR TENSION ARE FOR 8" MIN FDN WALL THICKNESS.

SHEAR WALL SCHEDULE									
MARK	SHTG	NAILING		STAPLES		A.B. SPCG	SOLE PLATE TO RIM JST	NOTES	
		EDGES	FIELD	SIZE	FIELD				
SW-1	7/16"	8d @ 6" O.C.	12" O.C.	1 1/2"	4" O.C.	8" O.C.	32" O.C.	16d @ 6" O.C.	2X STUDS @ 16" O.C. MAX
SW-2	7/16"	8d @ 4" O.C.	12" O.C.	1 1/2"	2.5" O.C.	8" O.C.	32" O.C.	16d @ 4" O.C.	2X STUDS @ 16" O.C. MAX
SW-3	7/16"	8d @ 3" O.C.	12" O.C.	1 1/2"	2" O.C.	8" O.C.	32" O.C.	16d @ 4" O.C.	3X STUDS @ PANEL EDGES
SW-4	7/16"	8d @ 2" O.C.	12" O.C.				24" O.C.	16d @ 3" O.C.	3X STUDS @ PANEL EDGES
SW-5	15/32"	10d @ 2" O.C.	12" O.C.				16" O.C.	16d @ 2" O.C.	3X STUDS @ PANEL EDGES
SW-6	BOTH SIDES 7/16"	8d @ 2" O.C.	12" O.C.				12" O.C.	16d @ 2" O.C.	3X STUDS @ PANEL EDGES

NOTES:  
 -ALL SHTG TO BE APA RATED  
 -"BOTH SIDES" INDICATES SHTG IS REQUIRED ON BOTH SIDES OF WALL  
 -ANCHOR BOLTS SHALL BE 5/8" Ø W/ 7" MIN EMBED W/ 3"x3"x1/4" PLATE WASHERS  
 -3X STUDS MAY BE REPLACED W/ DBL 2X STUDS STITCH NAILED

**KEYED NOTES**

1. AT SHADED AREA, BLOCK PANEL EDGES & NAIL SHTG W/ 10d NAILS @ 4" O.C. EDGES & 8" O.C. FIELD.

**SHEAR WALL PLAN NOTES**

A. ALL HD AND ST CALLOUTS SHOWN SHALL BE INSTALLED AT BASE OF SHEAR WALL SHOWN  
 B. SEE SHEAR WALL NOTES AND NAILING REQUIREMENTS ON S-001  
 C. DETAILS ARE NOTED ON THE PLANS IN TYPICAL LOCATIONS AND SHALL BE REPEATED WHERE SIMILAR CONDITIONS EXIST. SEE TYPICAL DETAILS AND GENERAL NOTES.  
 D. SEE STRUCTURAL DETAIL SHEETS (S-5XX) FOR STRUCTURAL NOTES & GENERAL USE DETAILS.  
 E. SEE DESIGN PLANS FOR DIMENSIONS. DO NOT SCALE STRUCTURAL DRAWINGS.  
 F. "STRAP OPENINGS" INDICATES PERFORATED SHEAR WALL THAT REQUIRES STRAPS AT OPENINGS. SEE SHEAR NAILING ON S-001.

NO.	DATE	REVISION	BY	CHK	APP



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PROJECT:  
**HOLLIS**

8452 E SPRING PARK, LOT 75R POWDER MOUNTAIN, WEBER COUNTY UT

CLIENT:  
**UPWALL DESIGN**

SHEET TITLE:  
**SHEAR WALL PLANS**

**DESIGN TEAM**  
 LEAD: GARRETT E. JENKINS  
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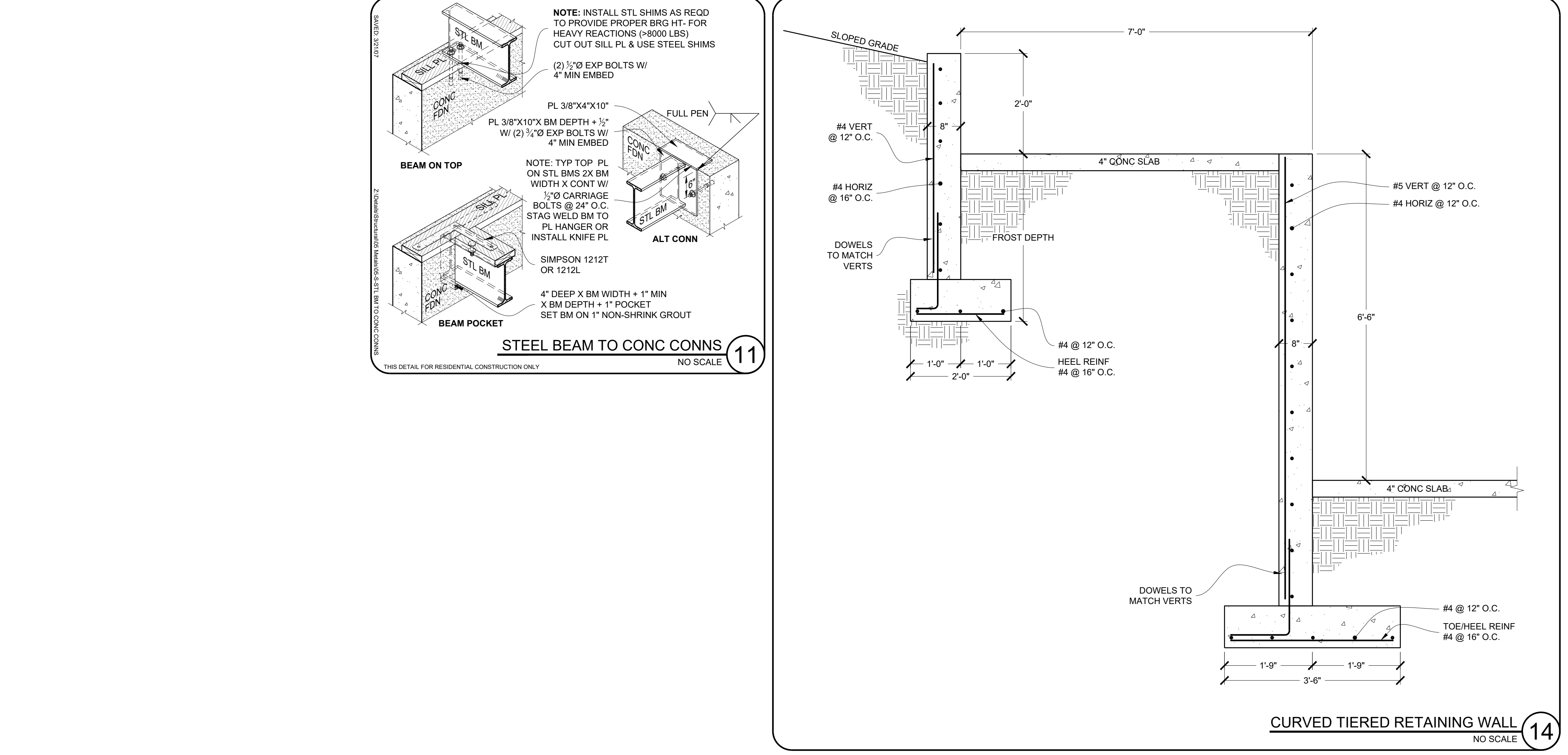
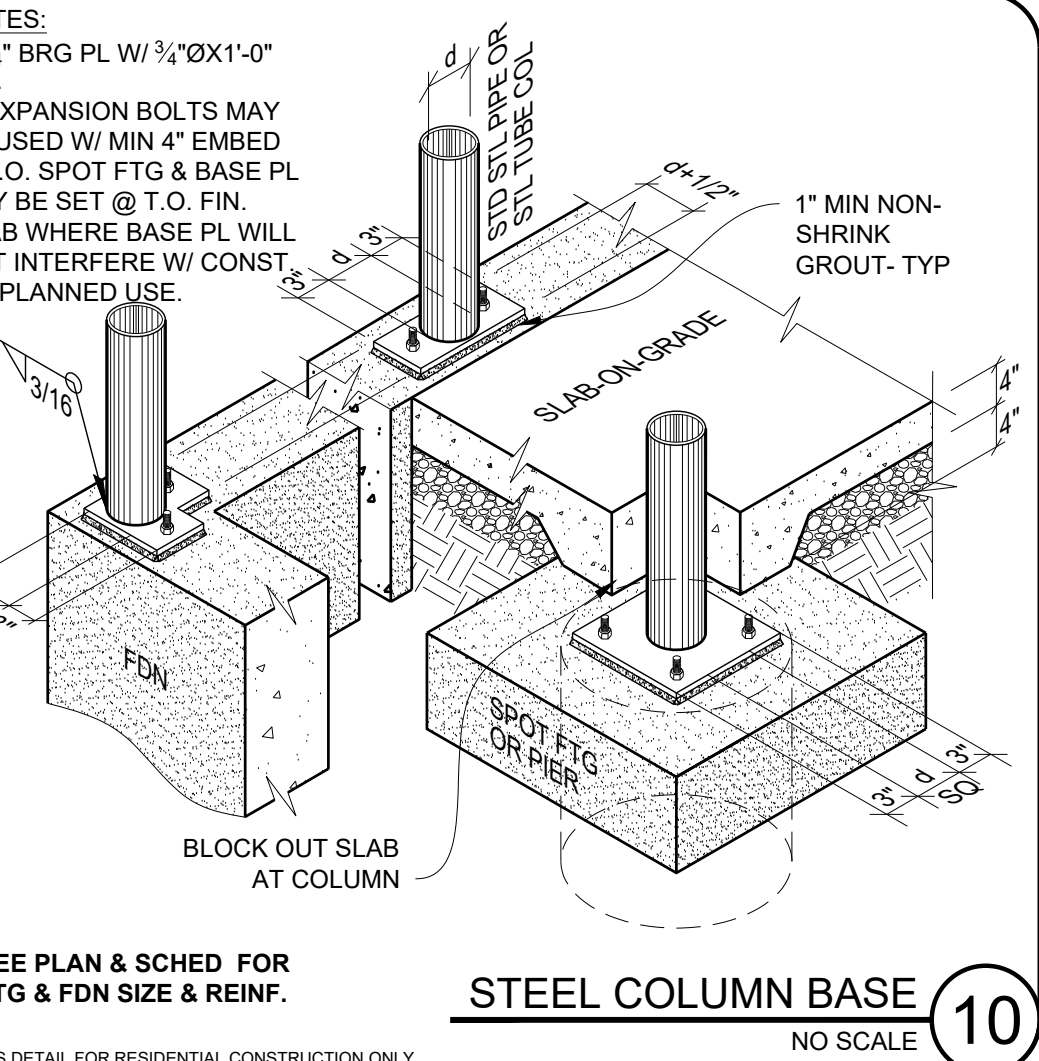
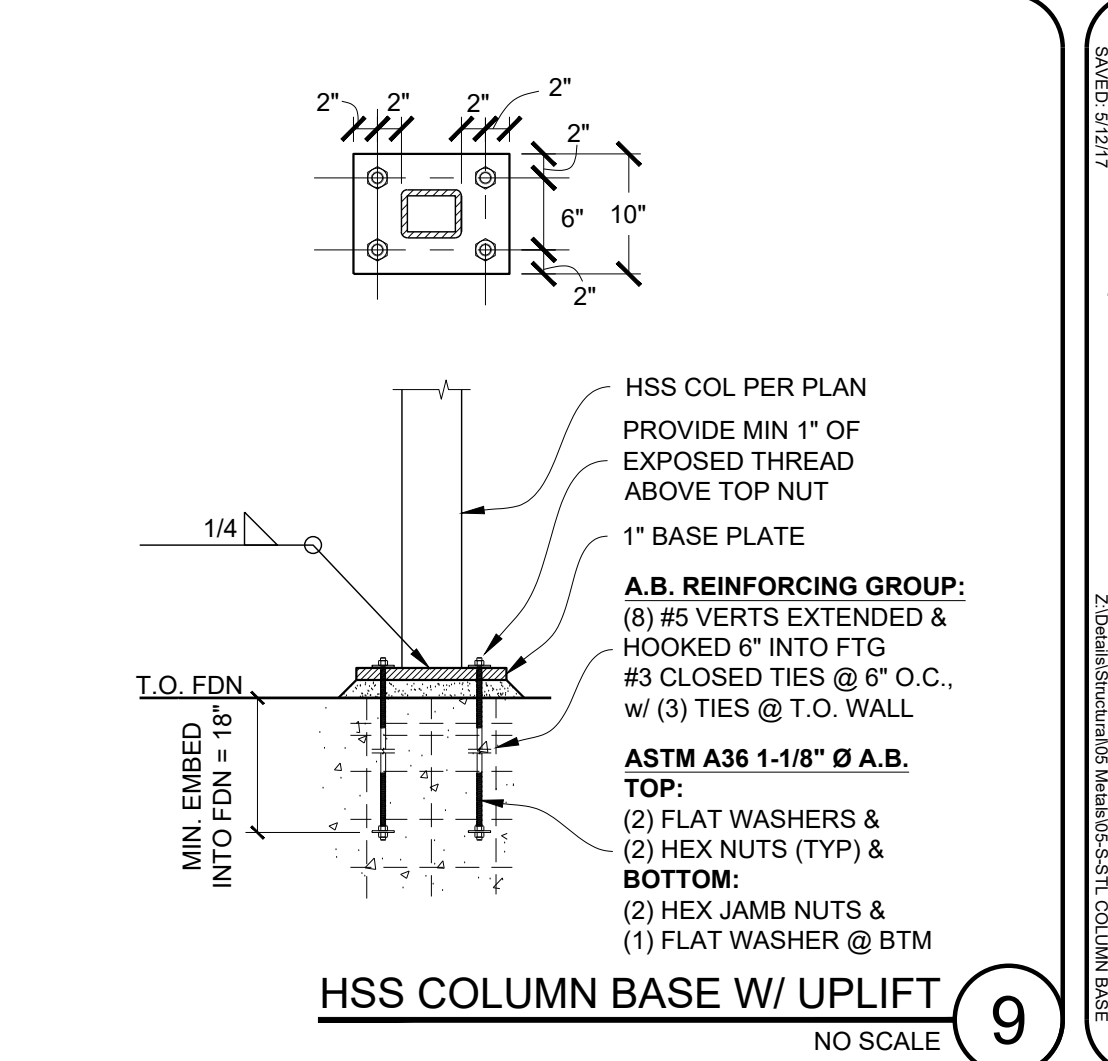
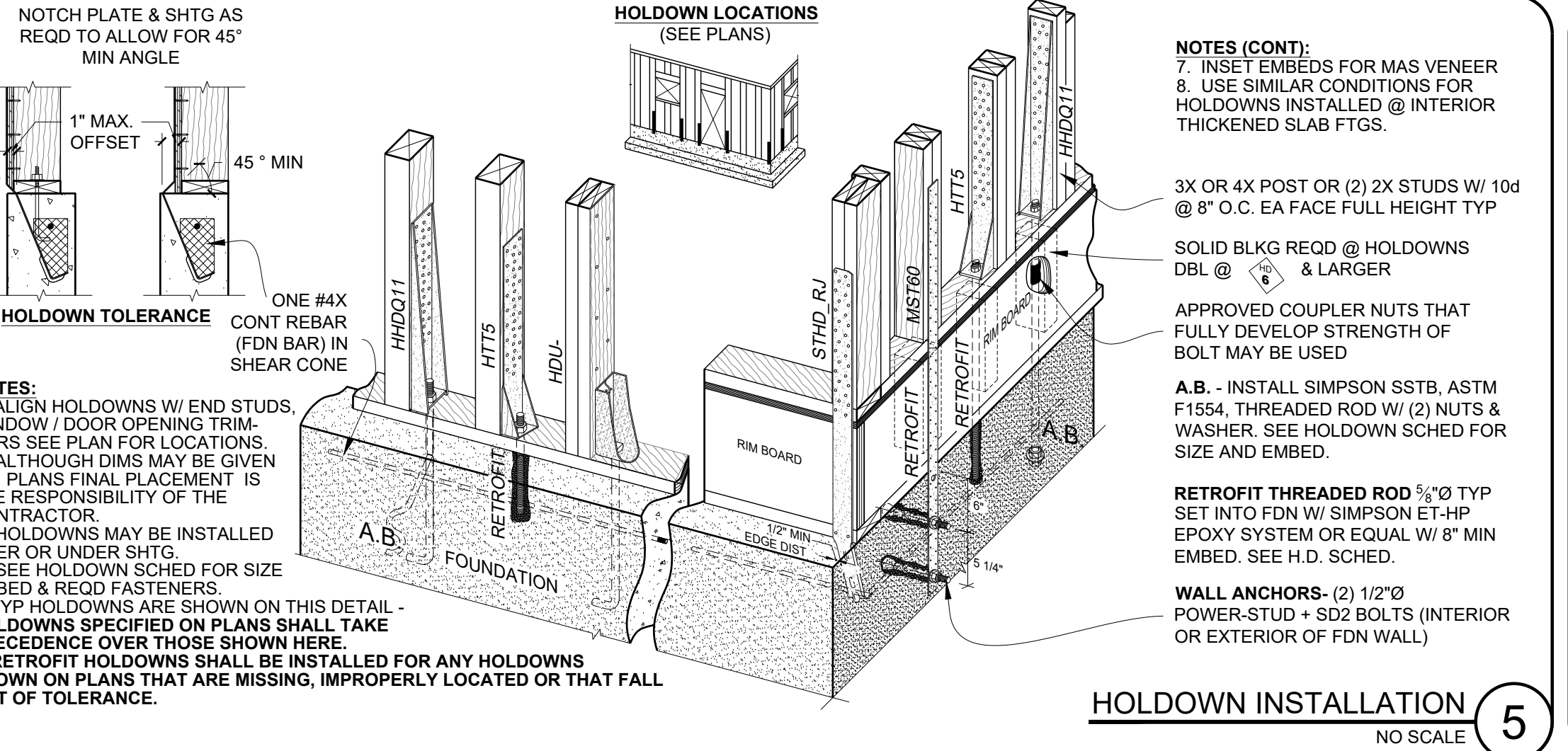
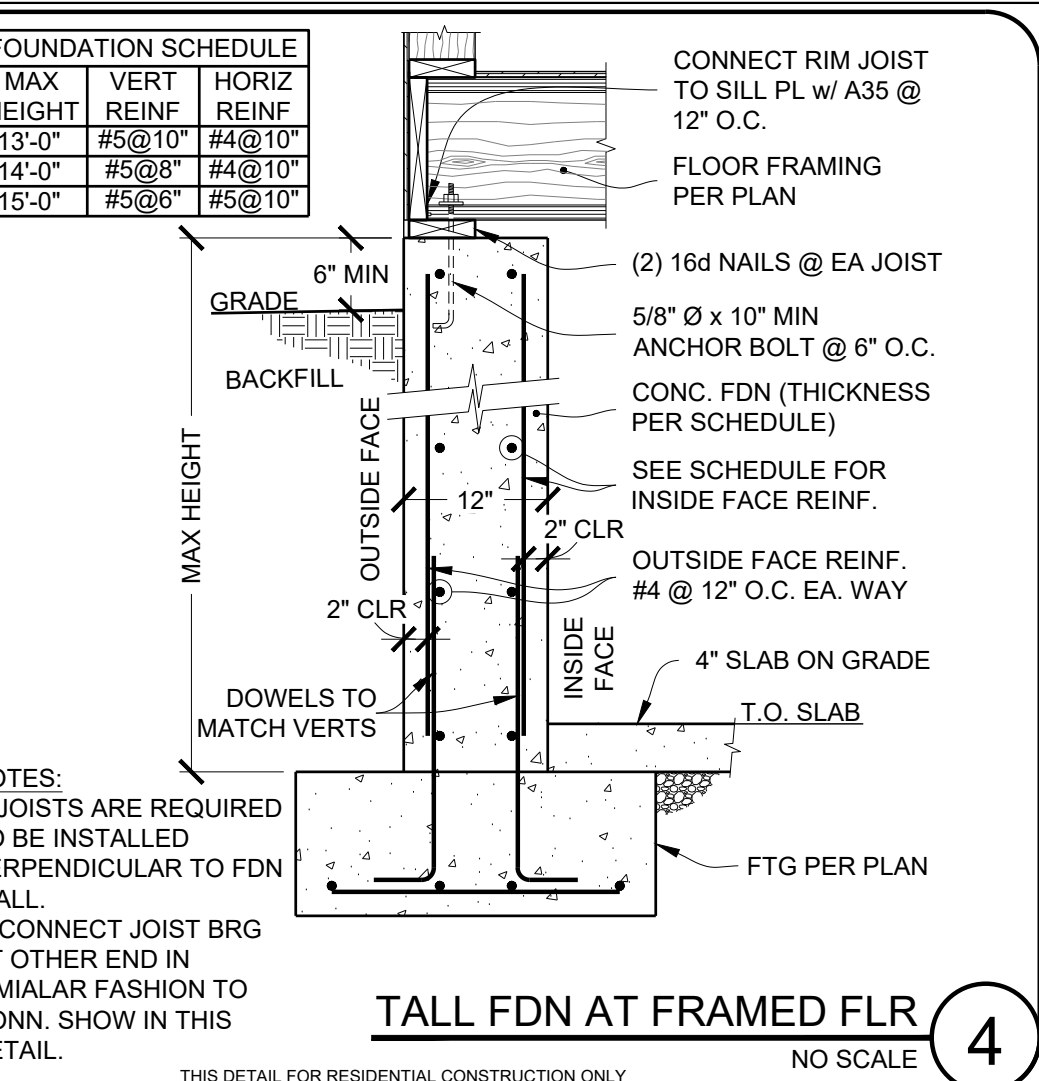
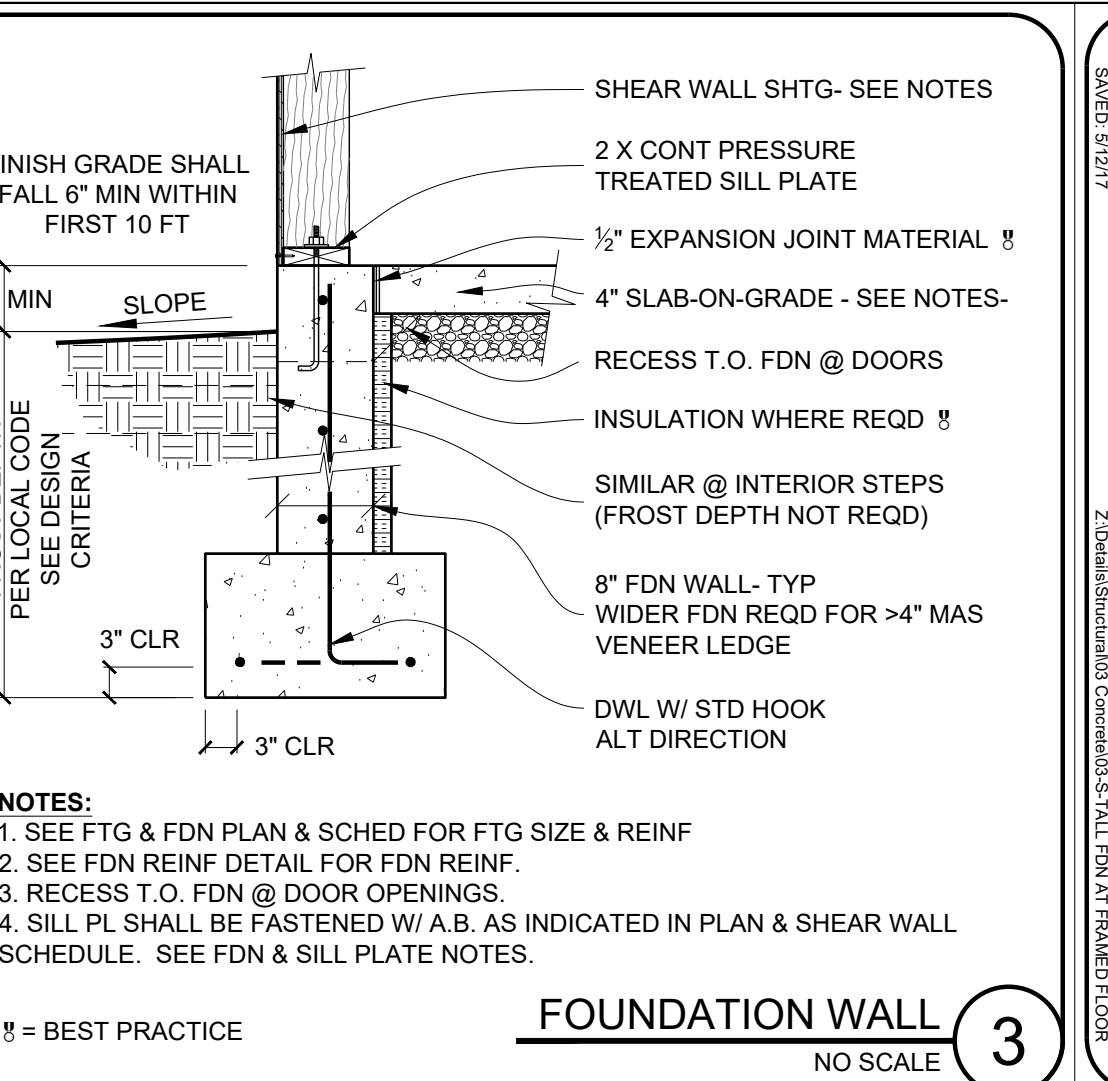
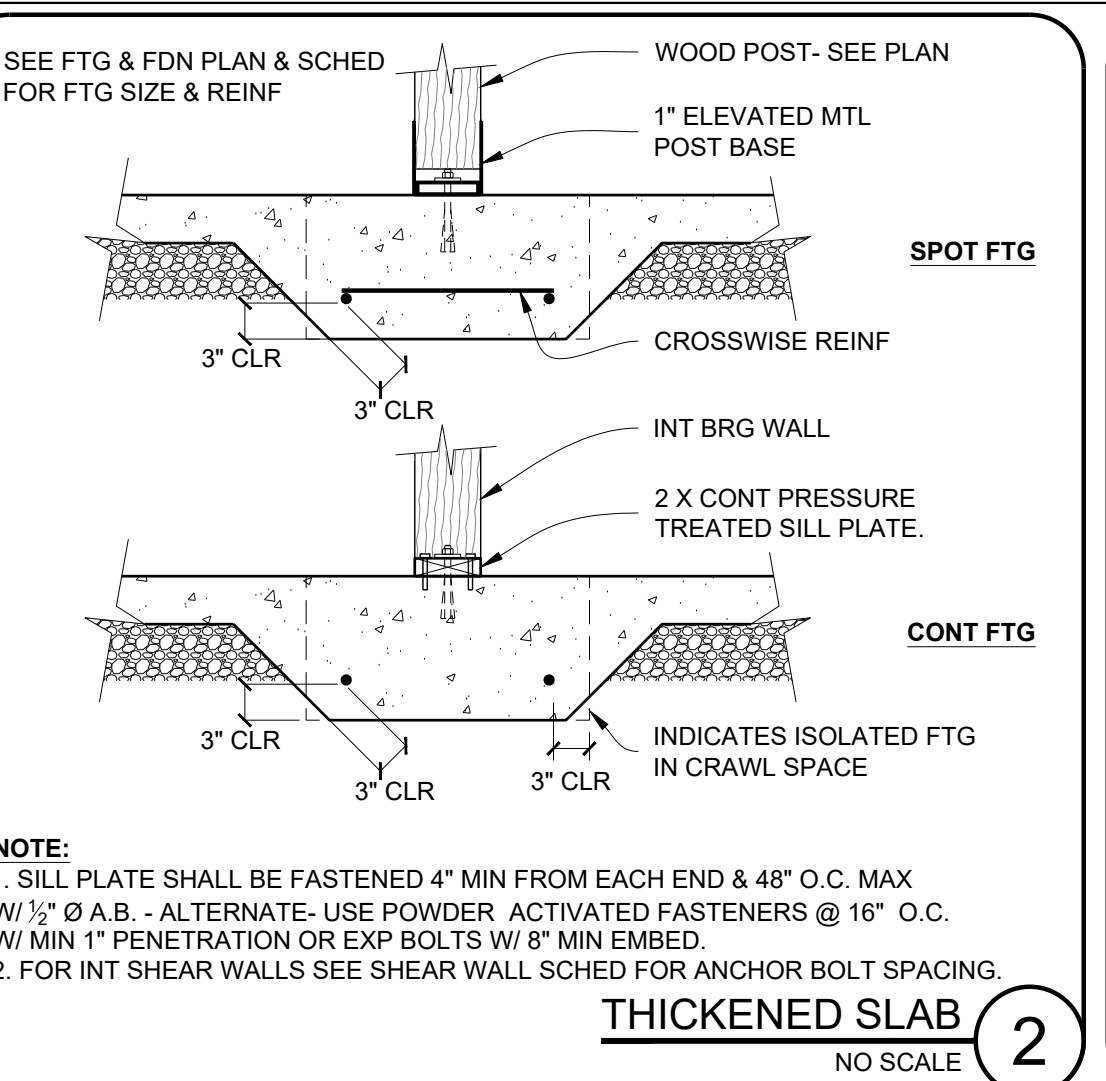
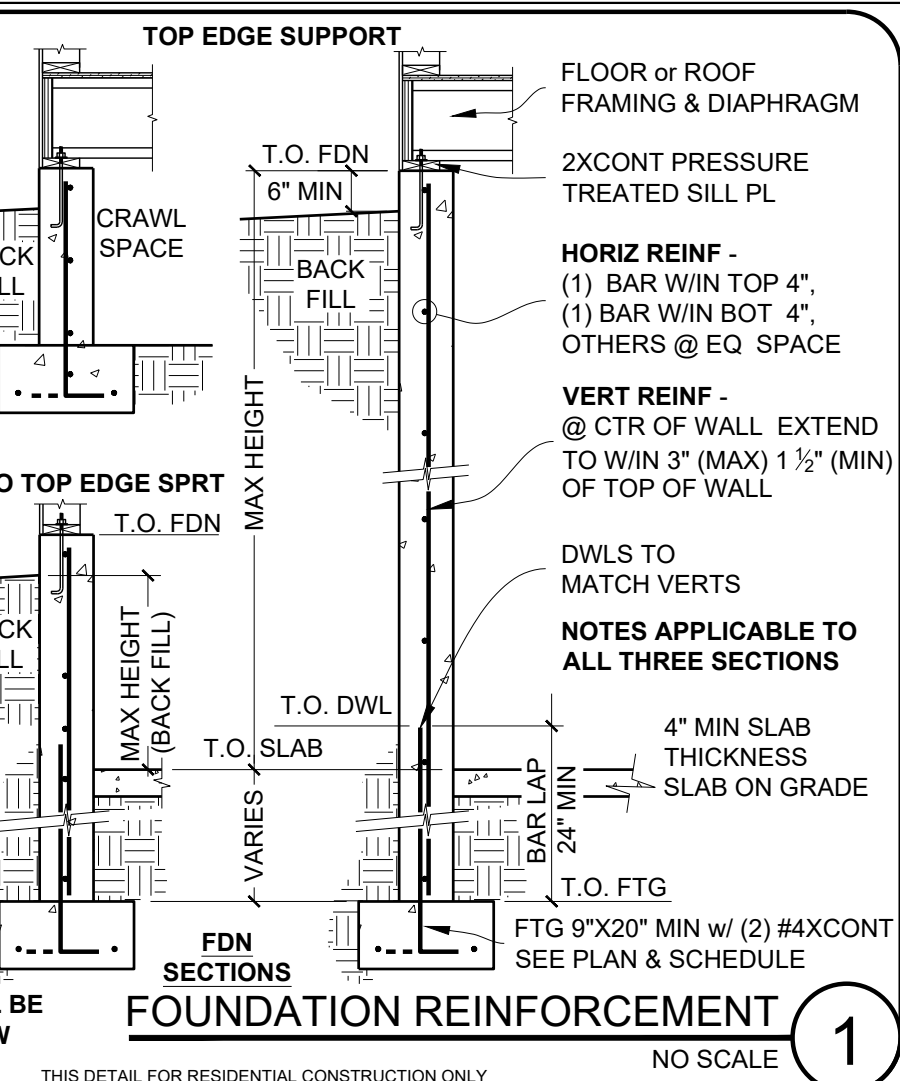
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PROJECT NO: **17-244**  
 DRAWN BY: ARK, BBJ  
 CHECKED BY: GEJ, ALG  
 ISSUE DATE: **AUG 04 2017**  
 PLOT DATE: Aug 10, 2017 9:26am  
 SHEET NO: **S-103**  
 STATUS: **PERMIT SET**



FOUNDATION SCHEDULE			
FOUNDATION WALL	THICK	VERT REINF	HORIZ REINF
MAX HEIGHT ≤ 4'	8" MIN	#4 @ 16"	#4 @ 12"
4'-6"	8" MIN	#4 @ 16"	#4 @ 12"
> 6"	8" MIN	#4 @ 16"	#4 @ 12"
8'-0"	8" MIN	#4 @ 16"	#4 @ 12"
9'-10"	8" MIN	#4 @ 12"	#4 @ 12"
11'	8" MIN	#4 @ 12"	#4 @ 12"
12'	10" MIN	#5 @ 9"	#4 @ 10"
> 12'	SEE TALL FDN DETAILS		

UTAH AMENDED FDN SCHED			
FOUNDATION WALL	THICK	VERT REINF	HORIZ REINF
MAX HEIGHT ≤ 4'	6" MIN	#4 @ 32"	(2) #4
4'-6"	6" MIN	#4 @ 24"	(4) #4
> 6"	6" MIN	#4 @ 24"	(5) #4
8'-0"	6" MIN	#4 @ 24"	(6) #4
9'-10"	6" MIN	#4 @ 16"	(7) #4



PROJECT NO.	DATE	REVISION	BY	CHK	APP

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FAX: (801) 974-5102

PROJECT: **HOLLIS**

CLIENT: **UPWALL DESIGN**

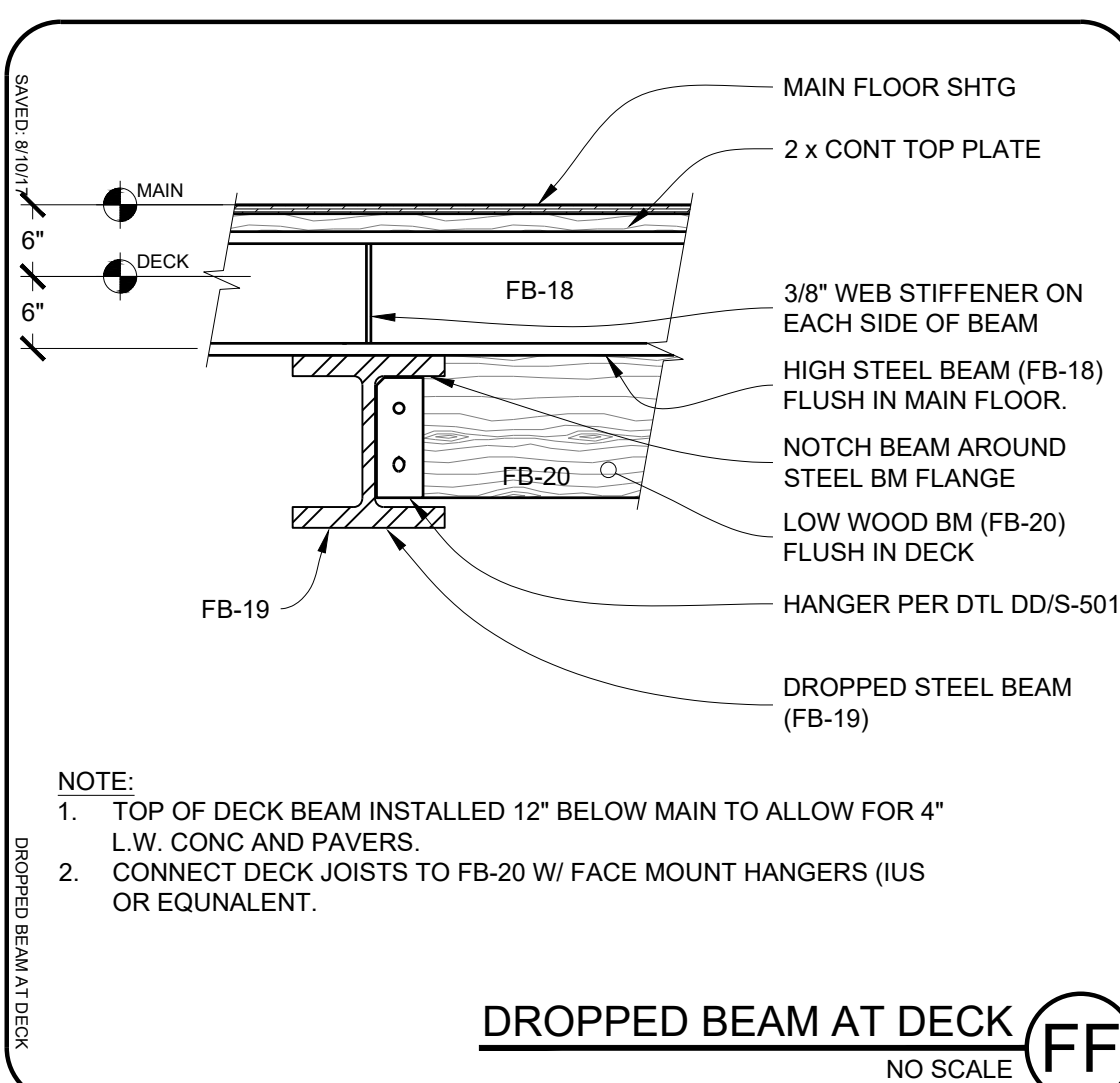
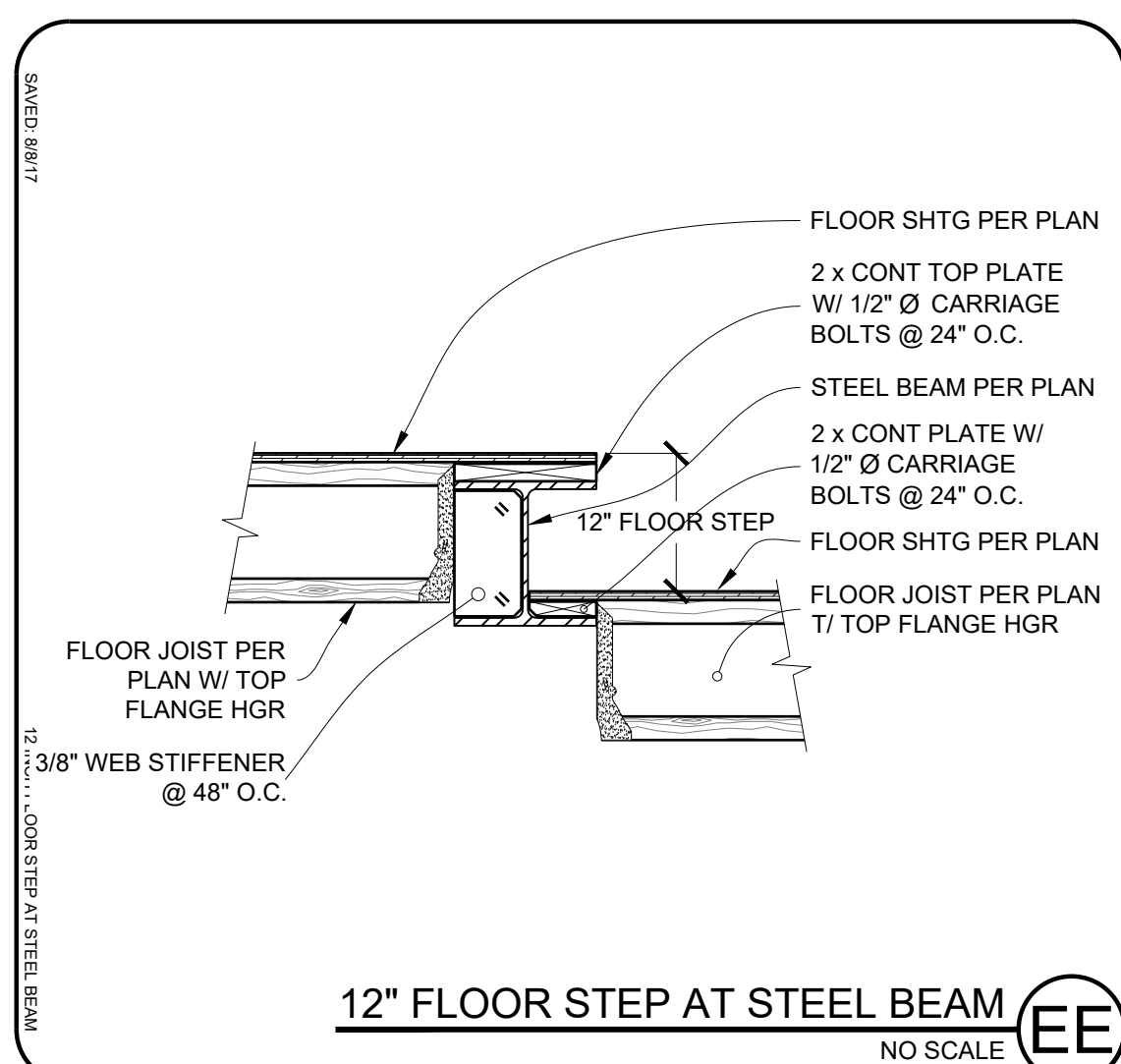
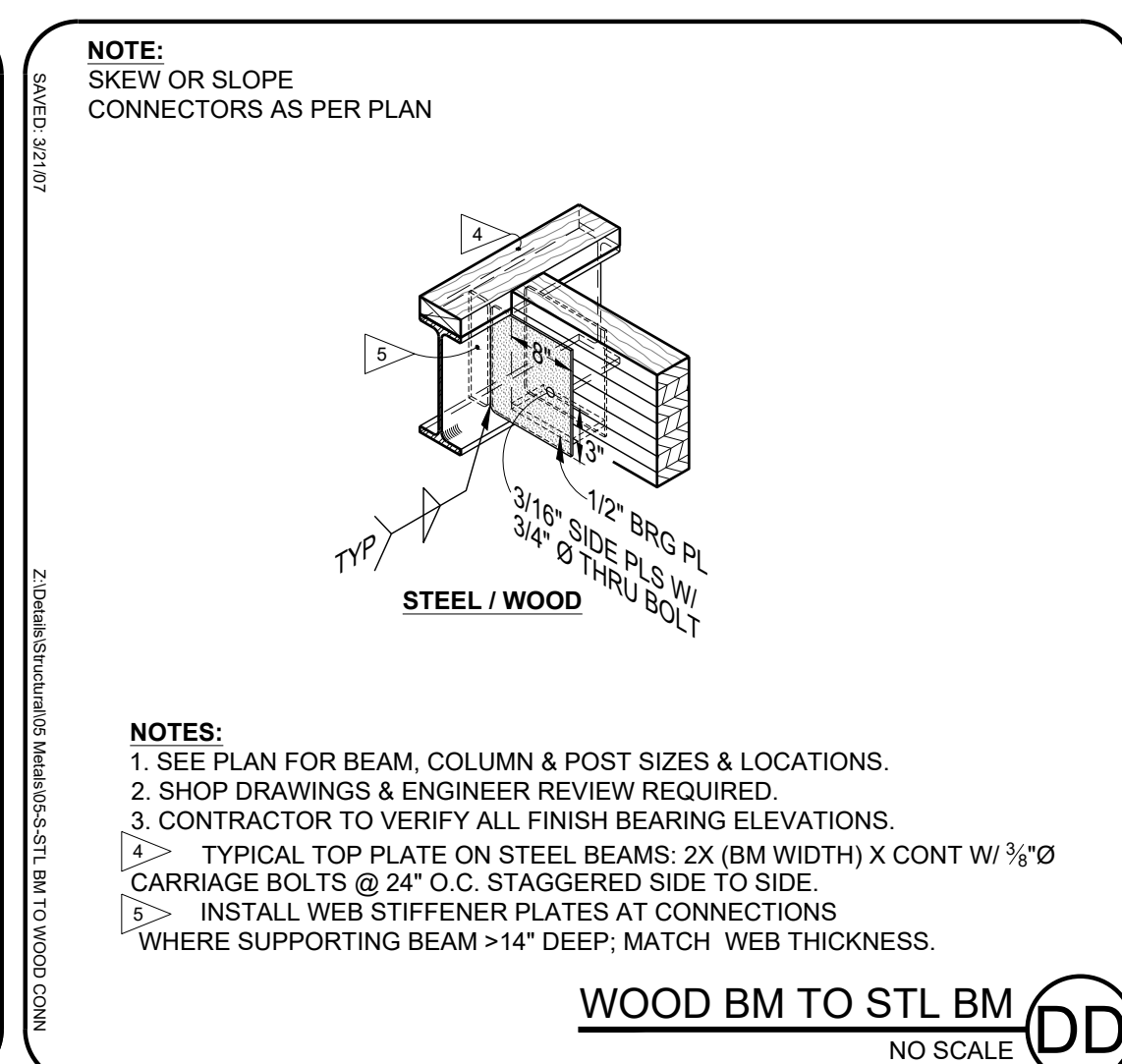
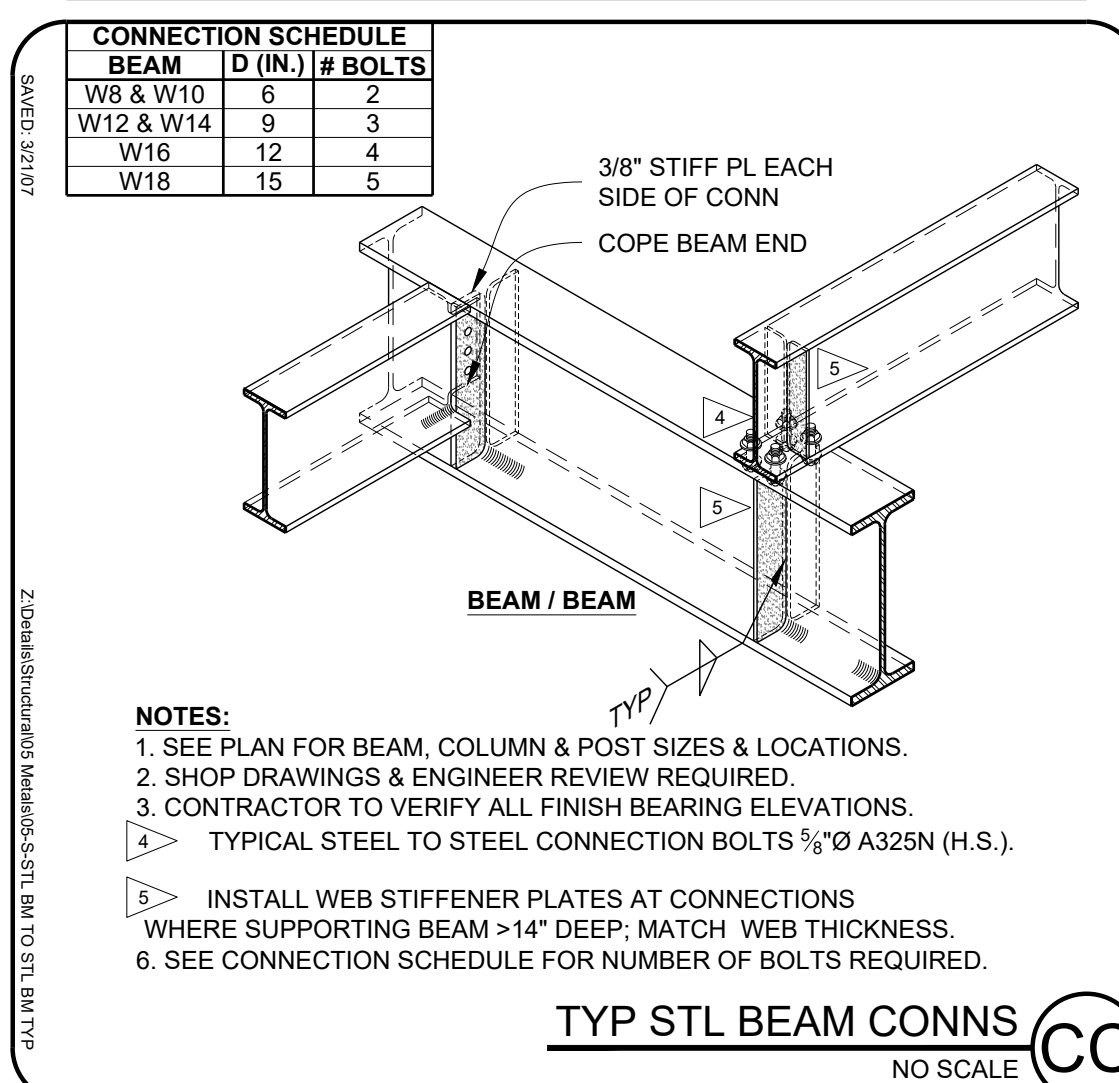
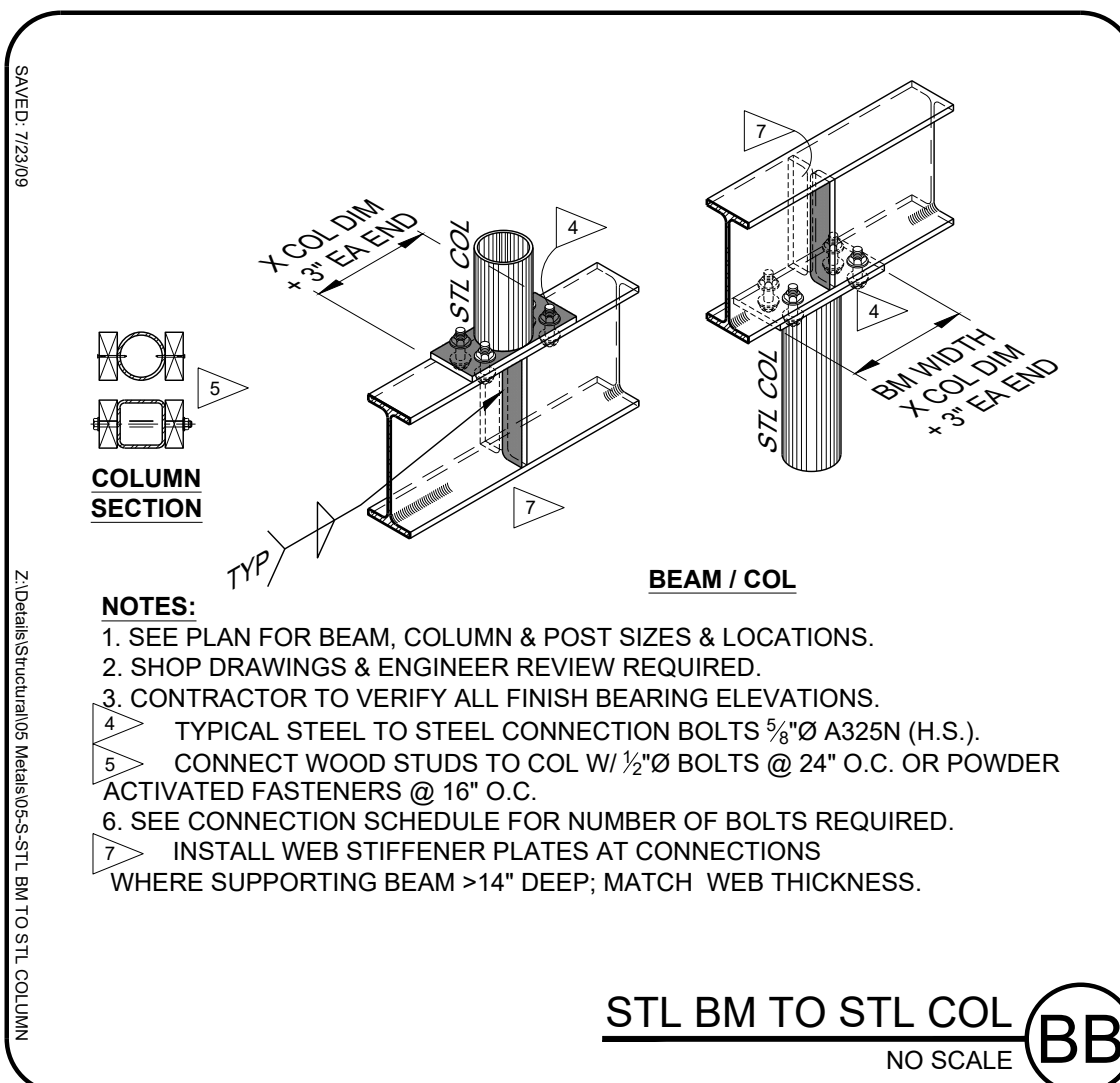
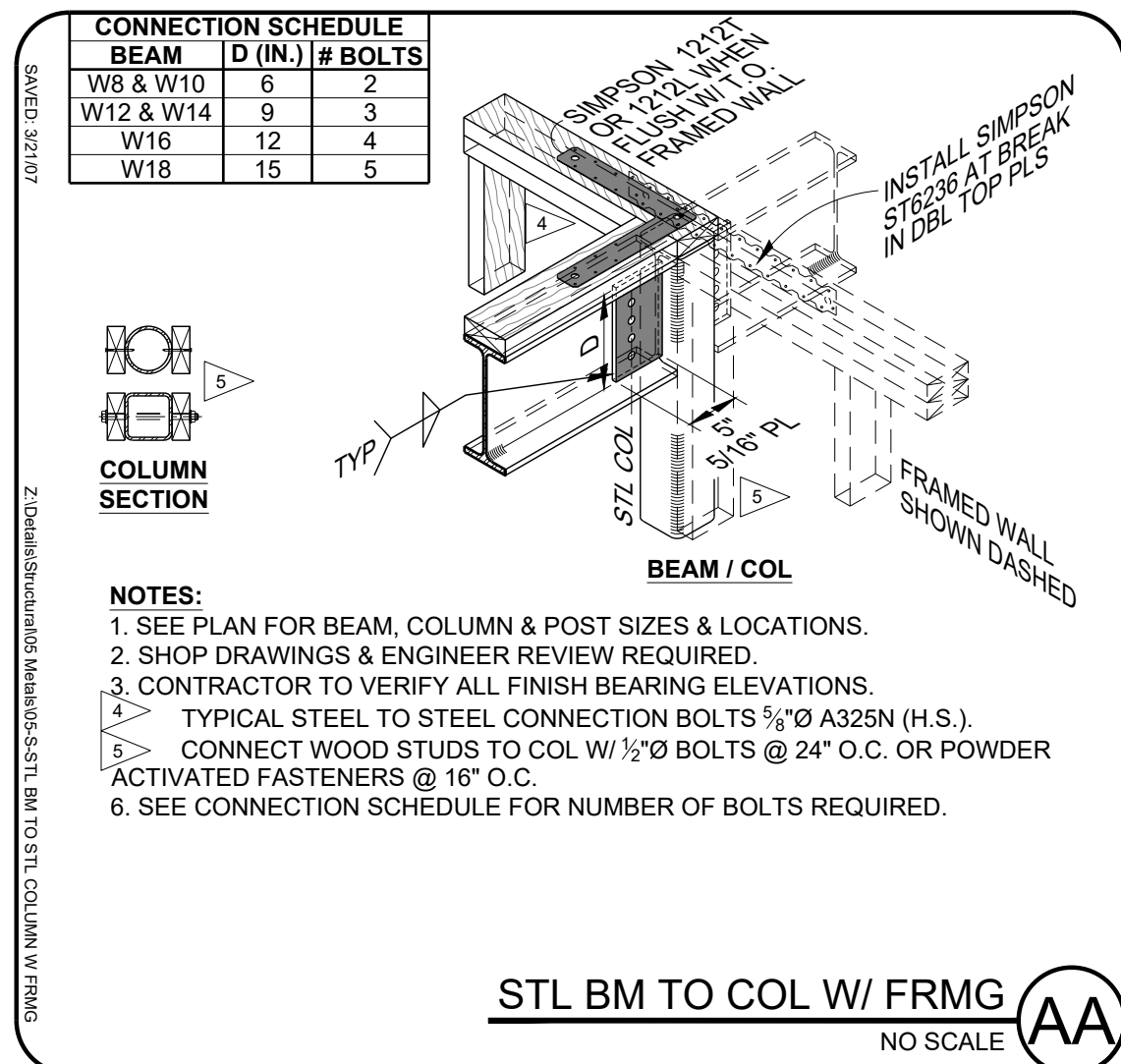
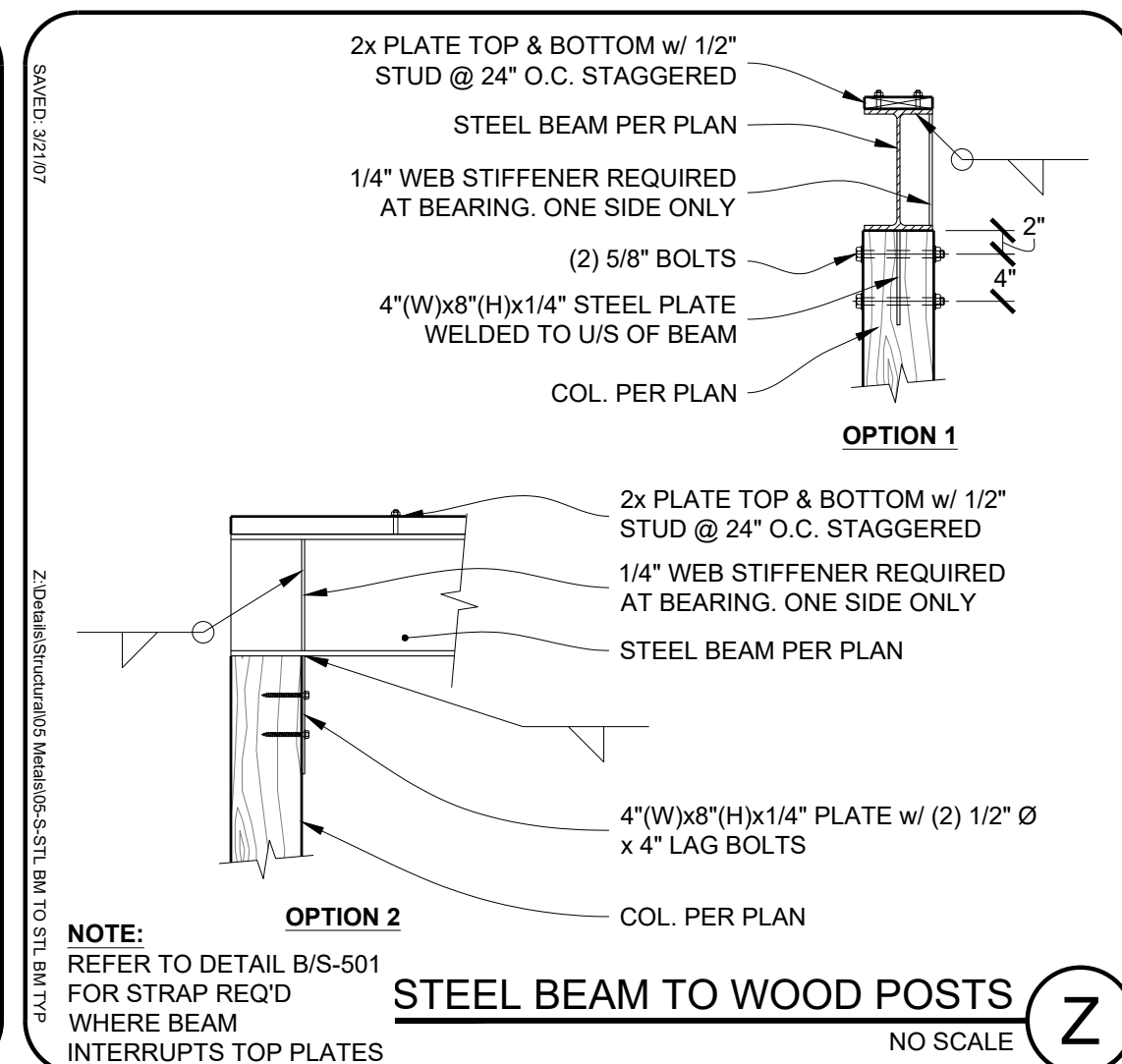
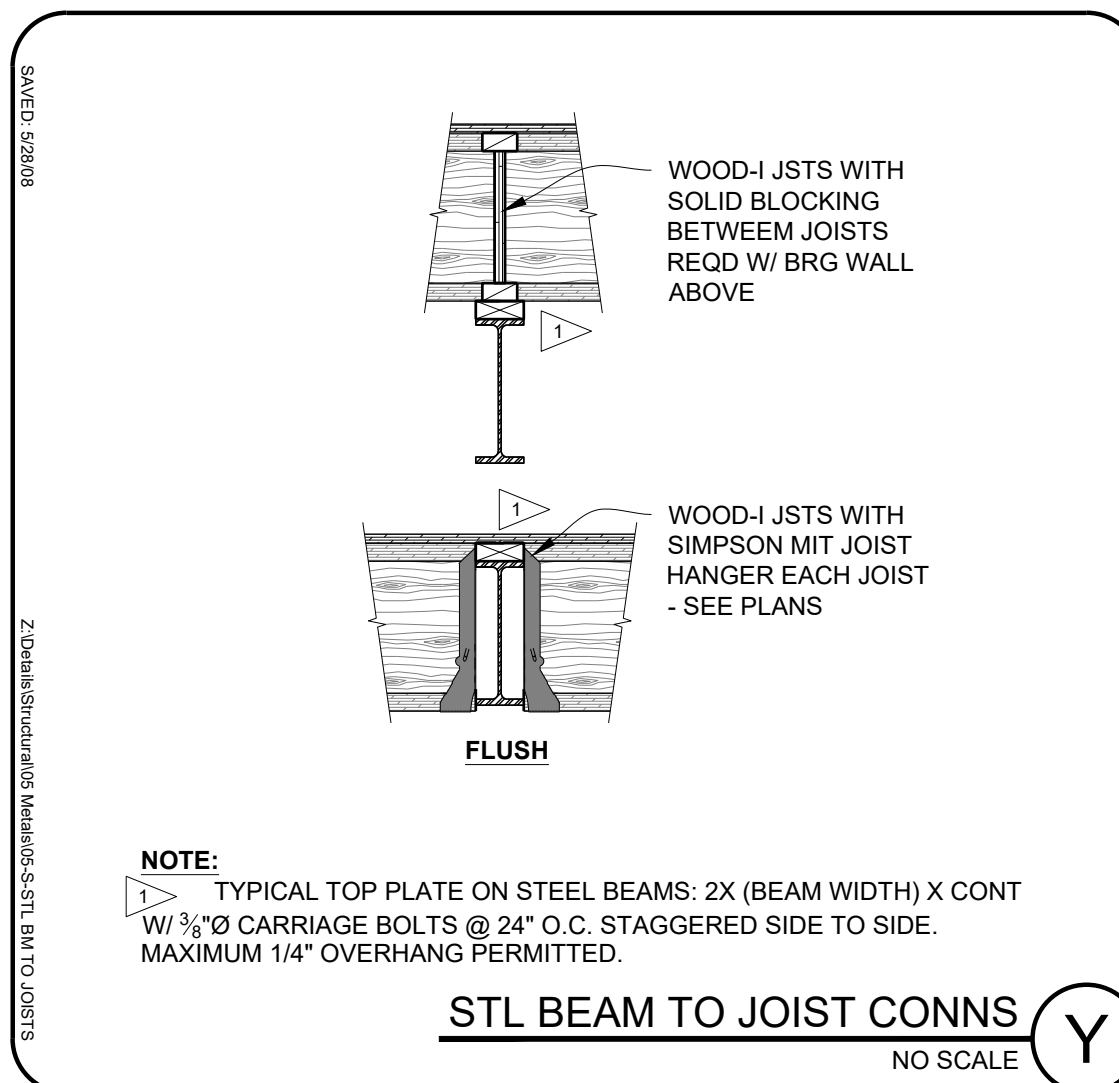
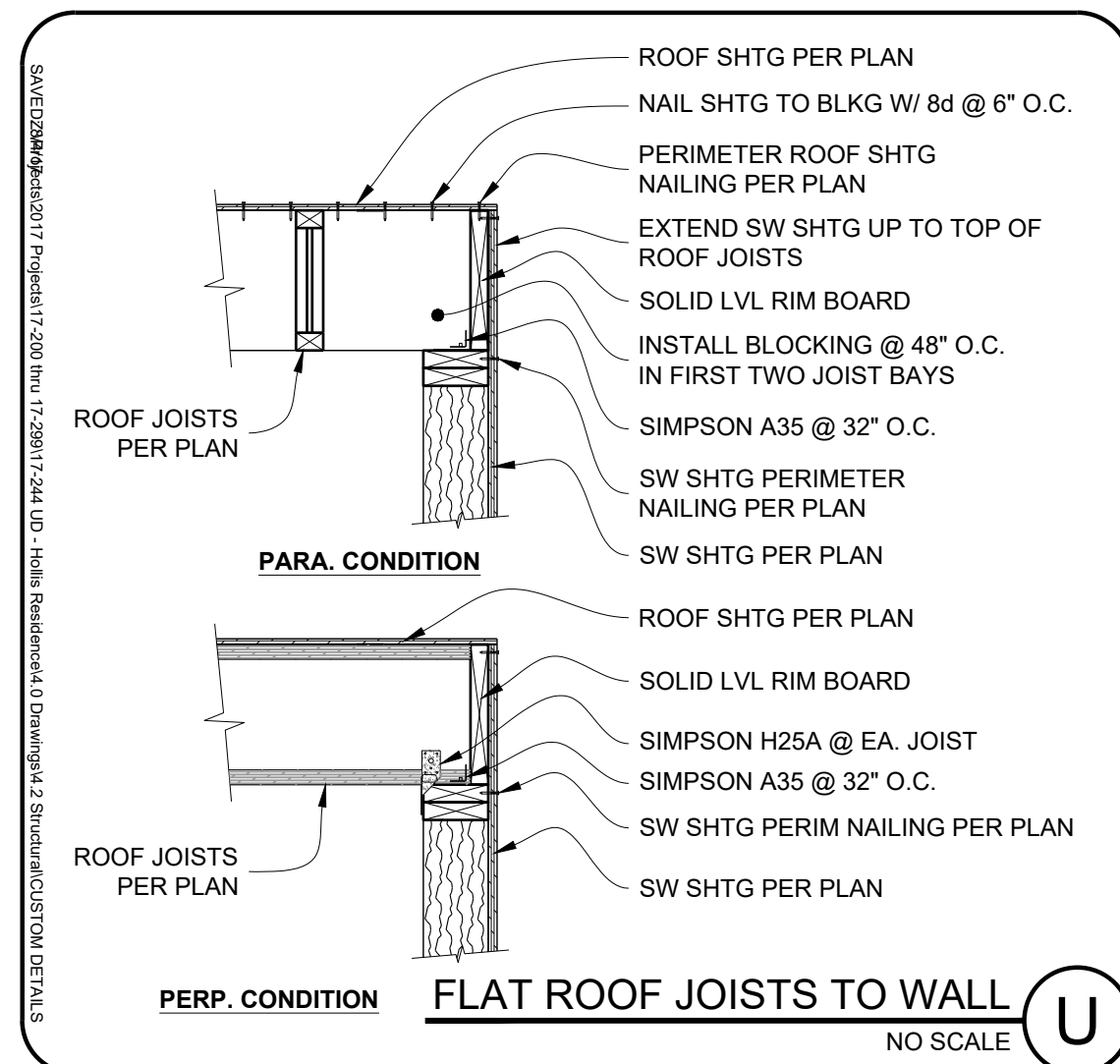
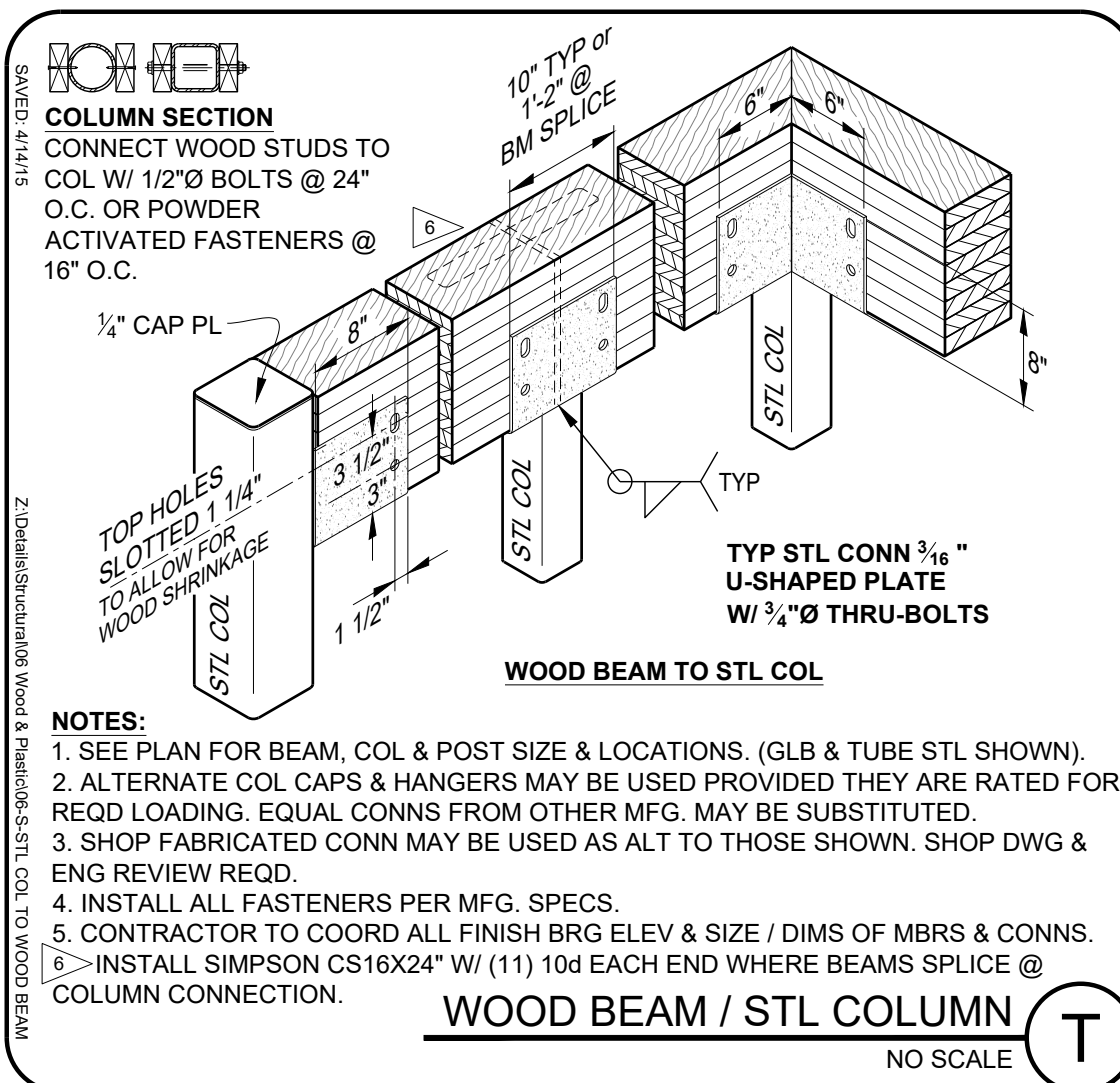
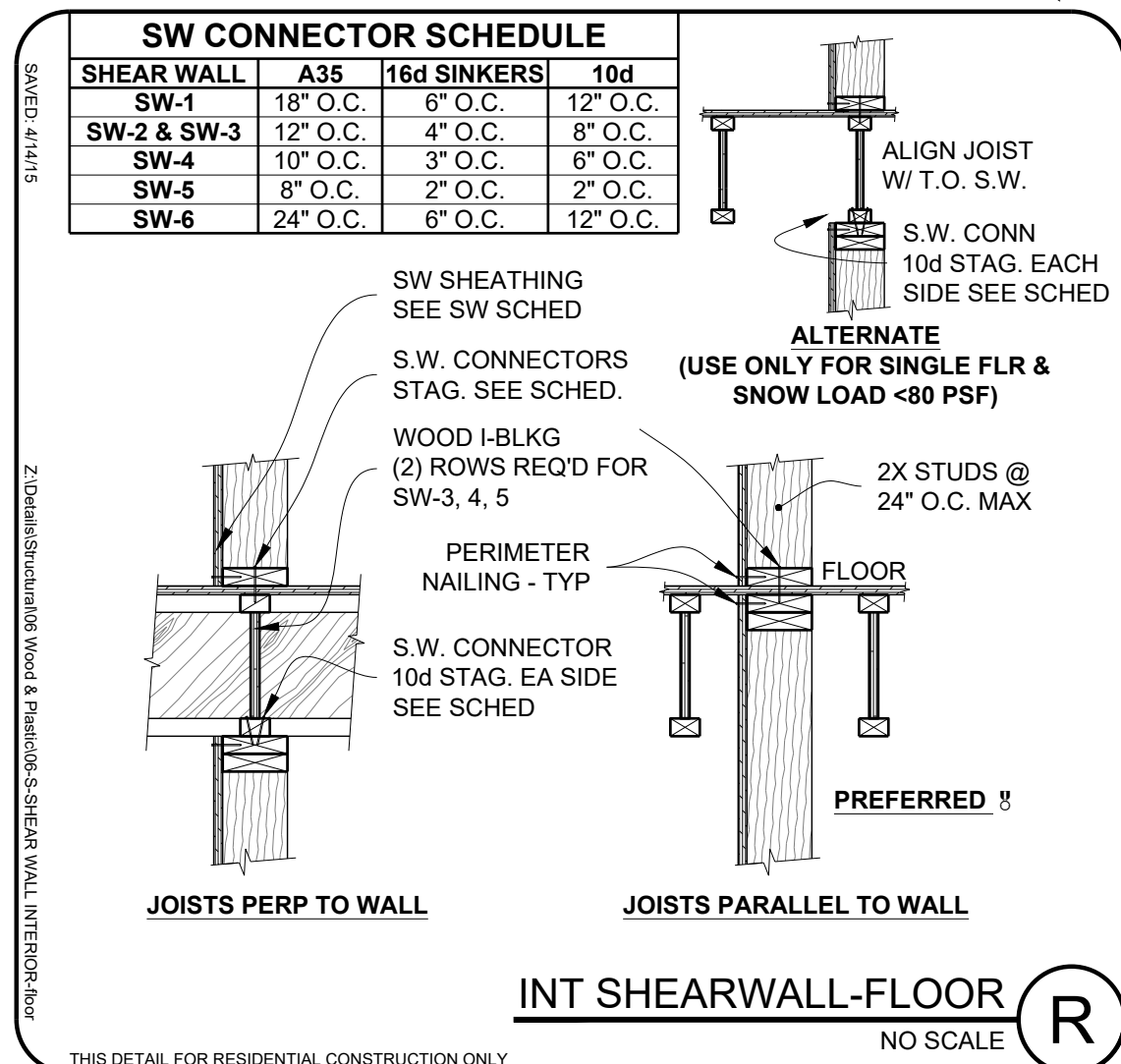
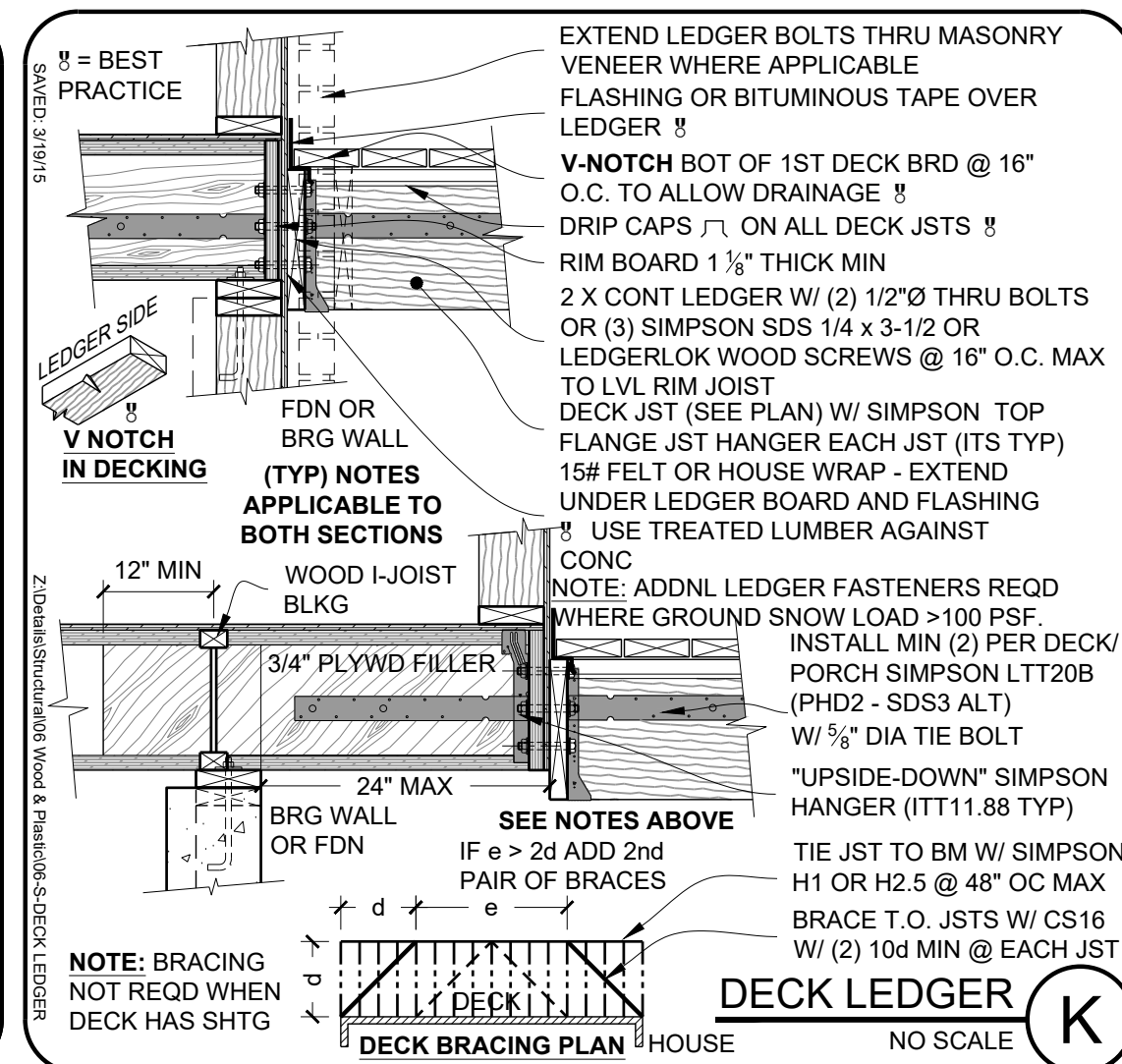
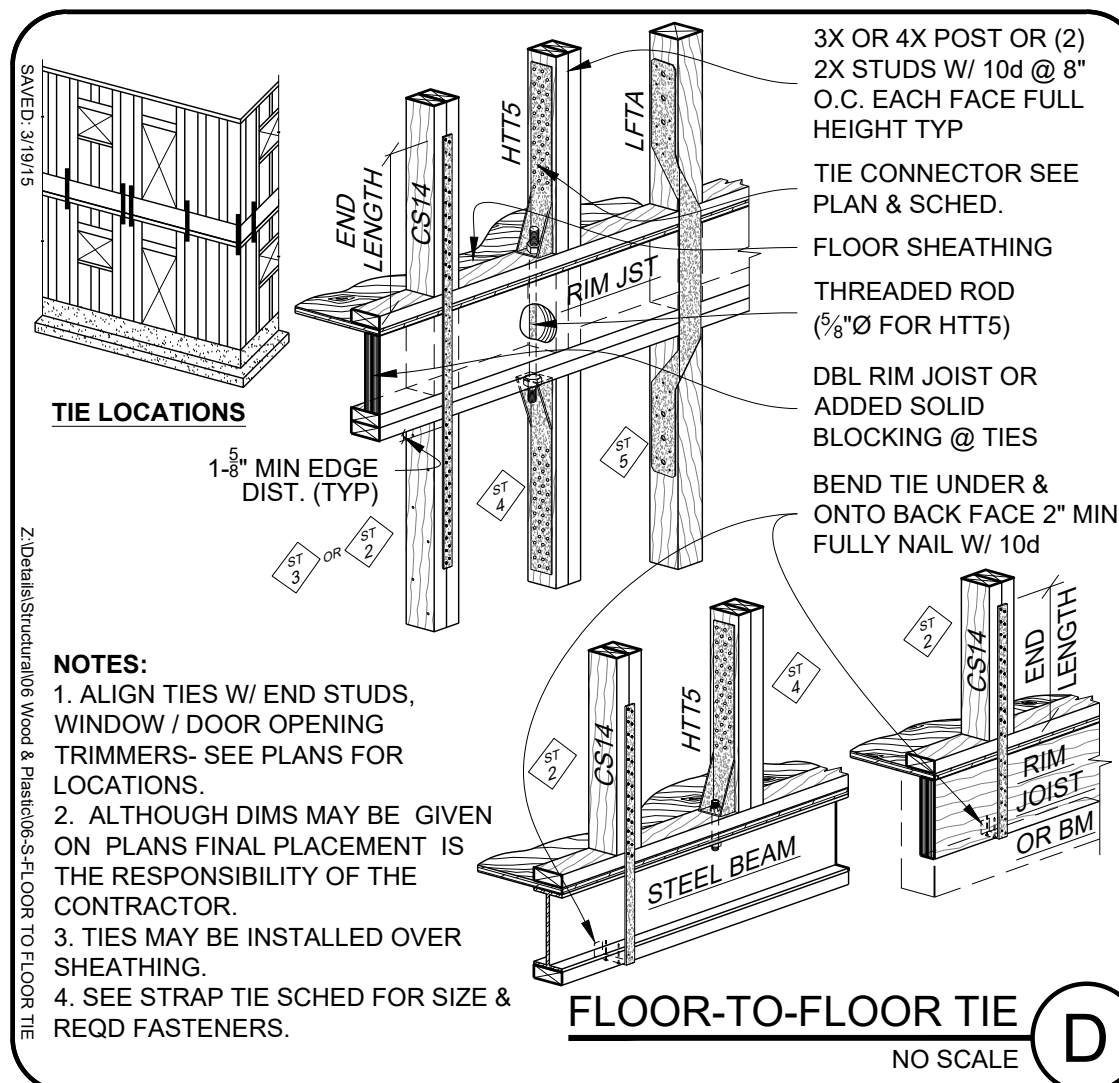
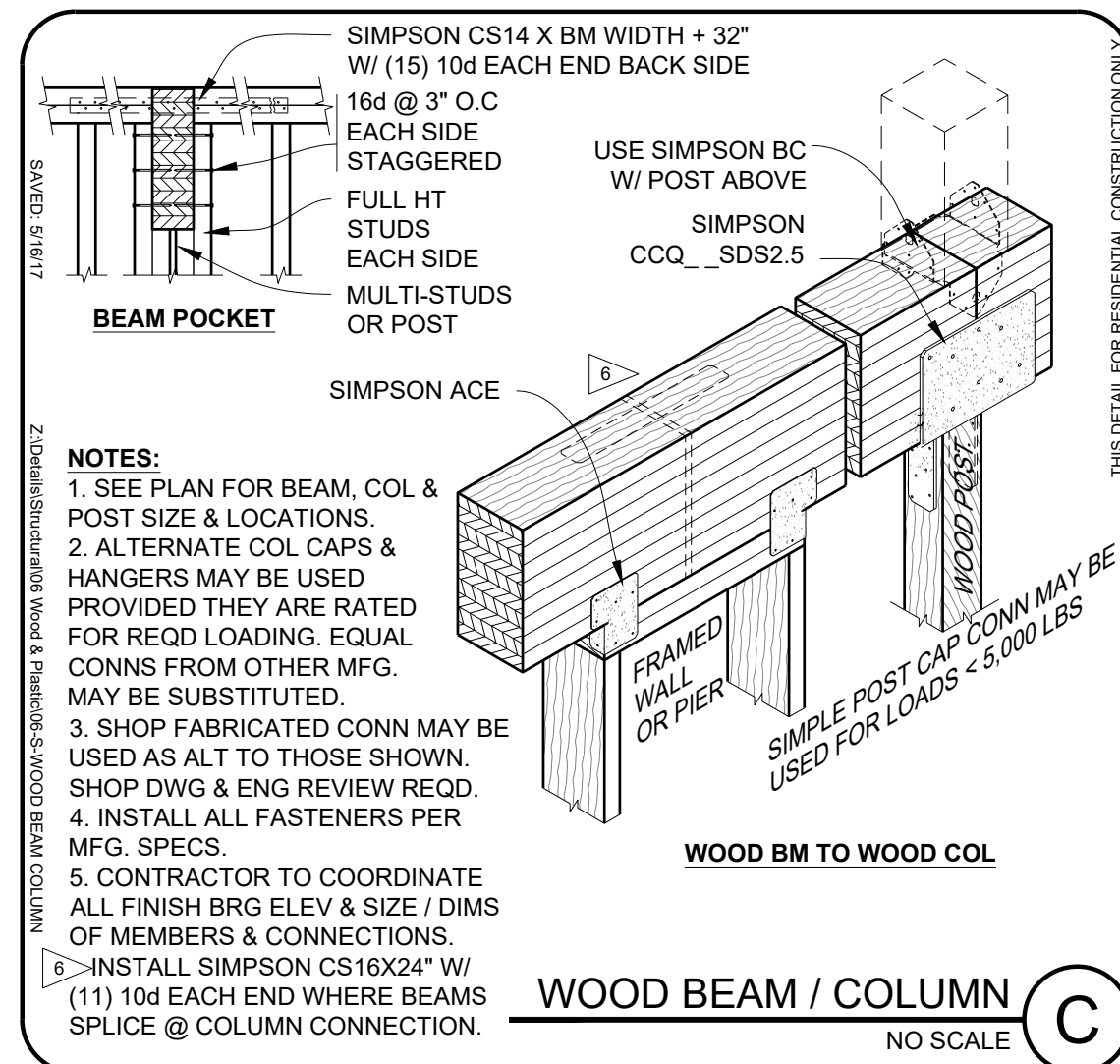
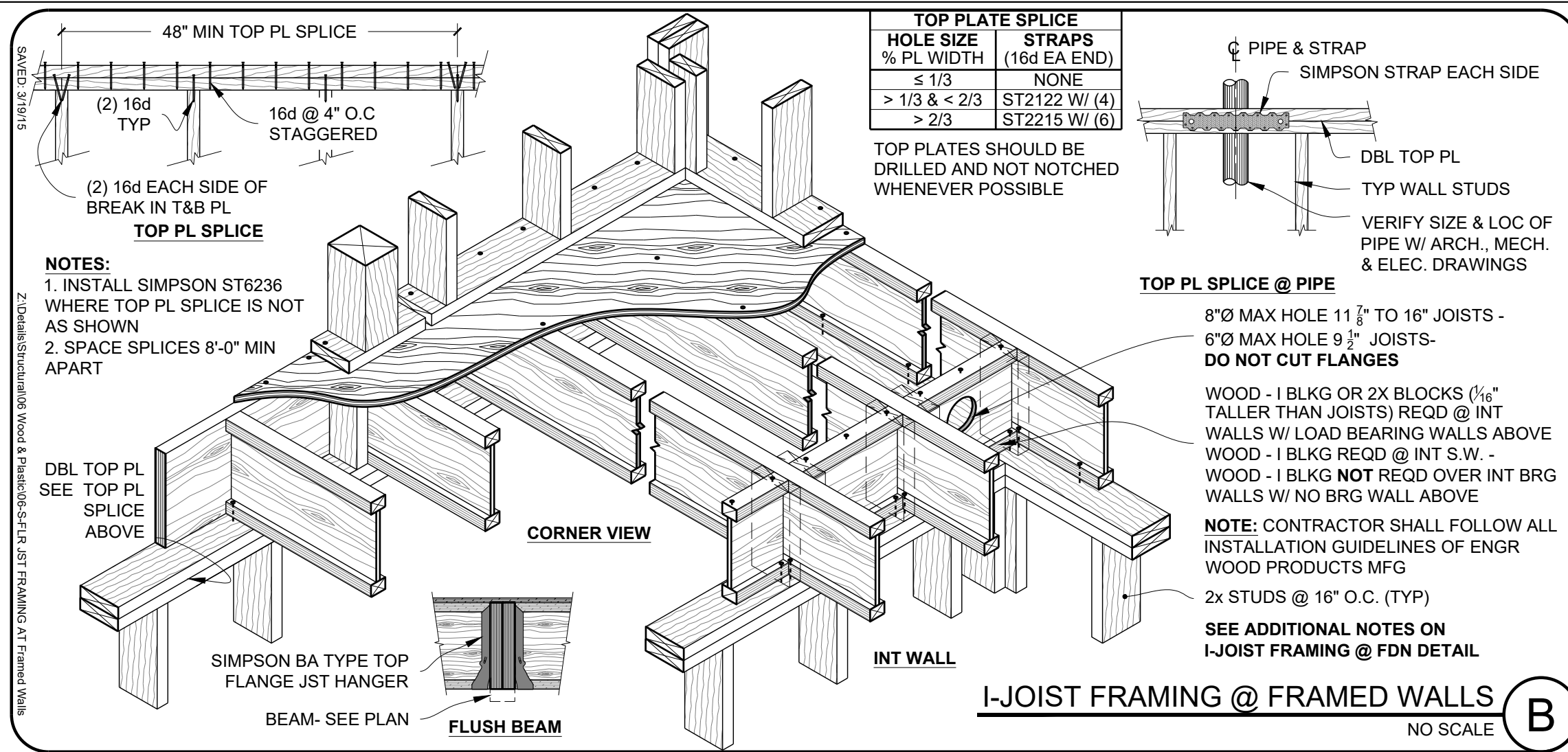
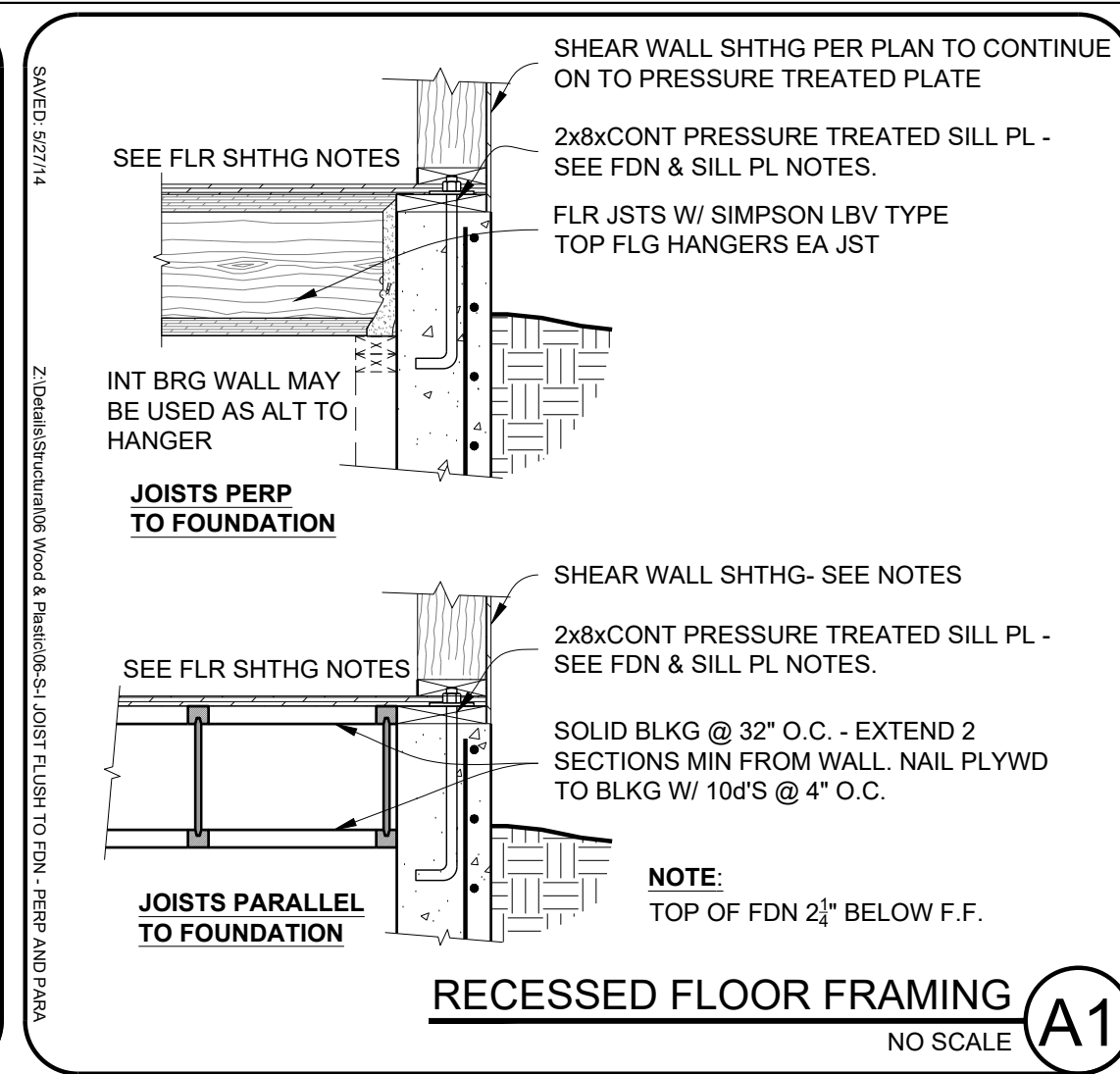
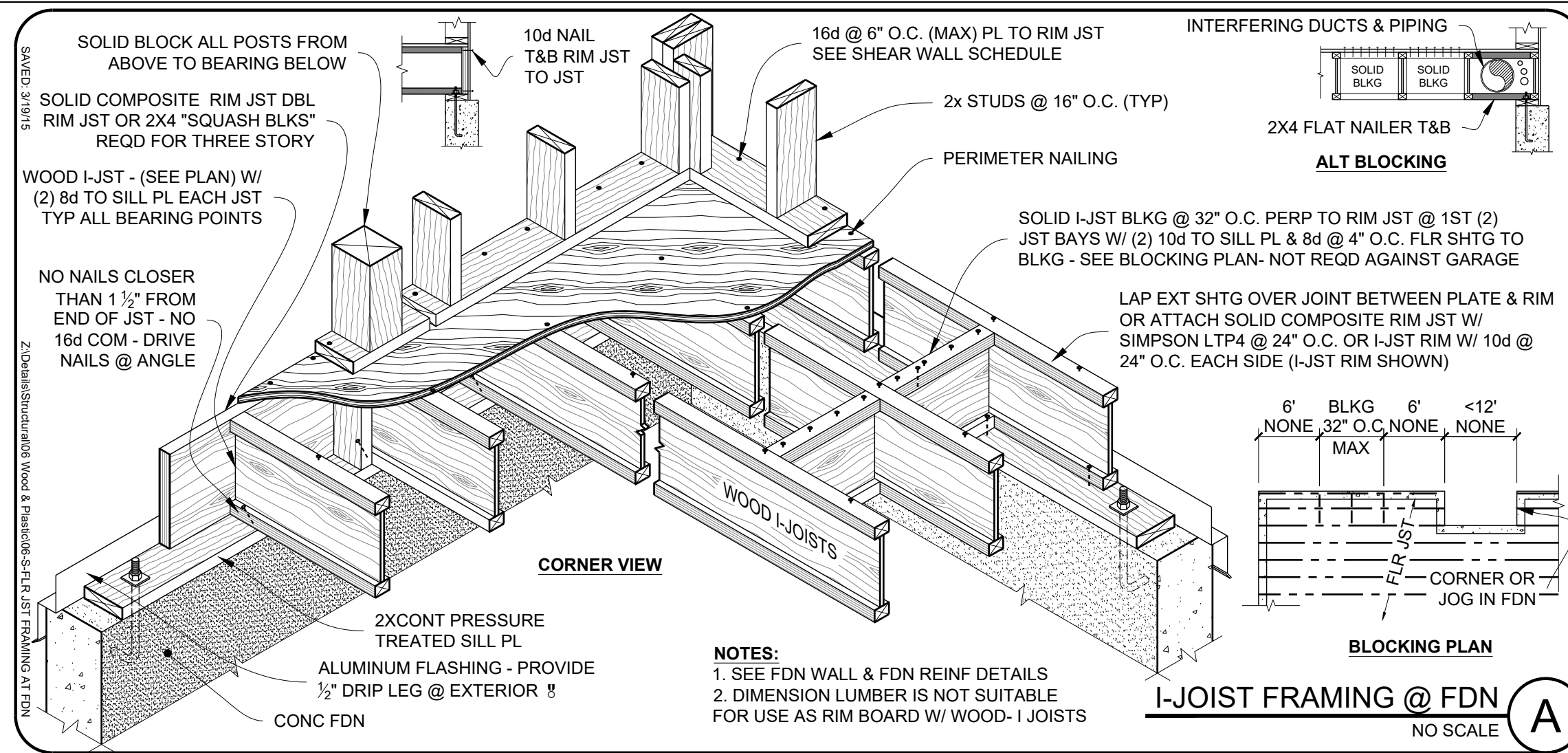
SHEET TITLE: **STRUCTURAL DETAILS AND NOTES**

DESIGN TEAM  
LEAD: GARRETT E. JENKINS  
AUSTIN L. GREER  
TROY JENKINS  
BRADEN JENKINS

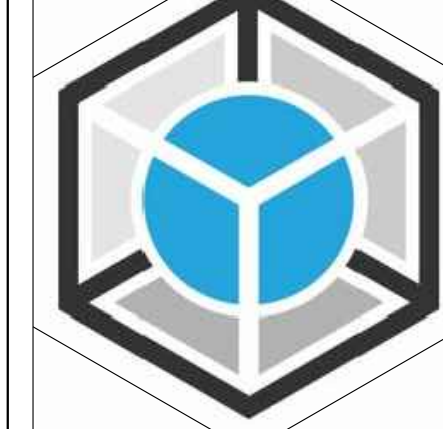
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PROJECT NO.: **17-244**  
DRAWN BY: **TAJ, BBJ**  
CHECKED BY: **GEJ, ALG**  
ISSUE DATE: **AUG 04 2017**  
PLOT DATE: **Aug 10, 2017 9:28am**  
SHEET NO.: **S-500**  
STATUS: **PERMIT SET**





NO.	DATE	REVISION	BY	CHK	APP



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PROJECT: **HOLLIS**

8452 E SPRING PARK, LOT 75R POWDER MOUNTAIN, WEBER COUNTY UT

CLIENT: **UPWALL DESIGN**

SHEET TITLE: **STRUCTURAL DETAILS AND NOTES**

**DESIGN TEAM**  
 LEAD: GARRETT E. JENKINS  
 AUSTIN L. GREER  
 TROY JENKINS  
 BRADEN JENKINS

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PROJECT NO: **17-244**  
 DRAWN BY: **TAJ, BBJ**  
 CHECKED BY: **GEJ, ALG**  
 ISSUE DATE: **AUG 04 2017**  
 PLOT DATE: **Aug 10, 2017 9:28am**  
 SHEET NO: **S-501**  
 STATUS: **PERMIT SET**