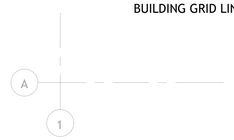
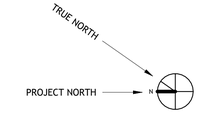
HOLDDOWNS

WALL STEP

BUILDING GRID LINES

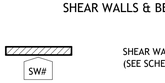


DETAIL



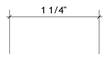
WORK POINT OR CONTROL POINT

EXTERIOR ELEVATION



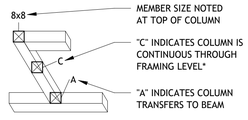
WINDOW TAG

DIMENSION STRING



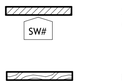
NORTH ARROW

COLUMN TAGS



* U.N.O., STEEL COLUMNS ARE CONTINUOUS THROUGH THIS LOCATION (NO SPLICE); WOOD COLUMNS AND STUD PACKS MAY BE BROKEN AT FLOOR CAVITY; PROVIDE A CONTINUOUS LOAD PATH PER STRUCTURAL NOTES AND DETAILS

SHEAR WALLS & BEARING WALL



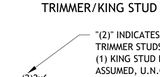
SYMBOLS
NO SCALE
9

REVISION CLOUD

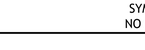
MATCH LINE

SECTION

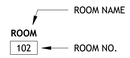
INTERIOR ELEVATION



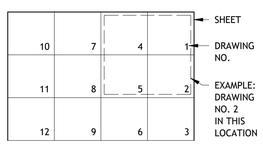
DOOR TAG



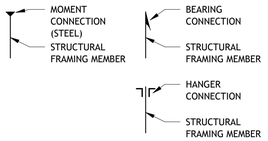
ROOM TAG



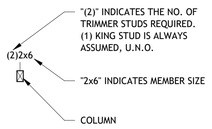
SHEET GRID (ARCH D)



STRUCTURAL FRAMING CONNECTIONS



TRIMMER/KING STUD NOTATION

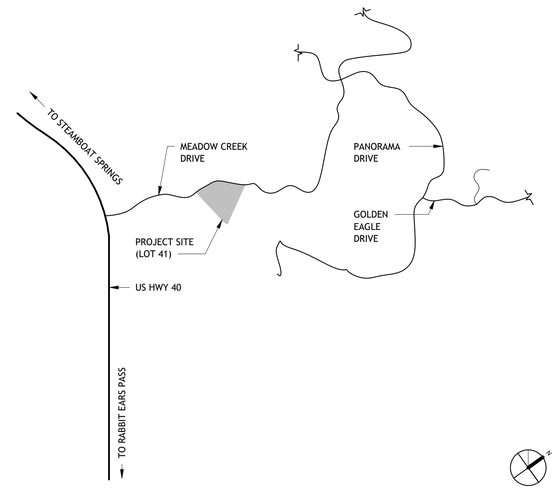


SHEET INDEX
NO SCALE
1

&	And
<	Angle
@	At
℄	Centerline
	Flush
⌀	Diameter or Round
⊥	Perpendicular
#	Number
(E)	Existing
A.C.	Asphaltic Concrete
A.D.	Area Drain
APPROX	Approximate
ARCH	Architectural
ASPH	Asphalt
BLDG	Building
BOT	Bottom
B.O.C	Bottom of Curb
B.O.W.	Bottom of Wall
C.B.	Catch Basin
CIP	Cast In Place
CLR	Clear
CMU	Concrete Masonry Unit
CONC	Concrete
CONT	Continuous
CTR	Center
DET	Detail
DIA	Diameter
DIM	Dimension
DWG	Drawing
E	East
EJ	Expansion Joint
ELEC	Electrical
EQ	Equal
EQUIP	Equipment
EXT	Exterior
F.G.	Finish Grade
FF	Finish Floor
FLR	Floor
FLUOR	Flourescent
FTG	Footing
GA	Gauge
GALV	Galvanized
GND	Ground
GR	Grade
GYP	Gypsum
H.B.	Hose Bib
I.D.	Inside Diameter
INT	Interior
L.F.	Lineal Foot
L.H.	Left Hand
MATL	Material
MAX	Maximum
MECH	Mechanical
MFR	Manufacturer
MH	Manhole
MIN	Minimum
MISC	Miscellaneous
MTD	Mounted
N	North
N/A	Not Applicable
N.I.C.	Not in Contract
NO	Number
NOM	Nominal
N.S.	No Scale
N.T.S.	Not to Scale
O/	Over
OA	Overall
O.C.	On Center
O.D.	Outside Diameter
O.F.D.	Overflow Drain
O.H.	Overall Height
P.D.	Planter Drain
P.L.	Property Line
PLMG	Plumbing
POB	Point of Beginning
RAD	Radius
R.D.	Roof Drain
REF	Reference
REQ	Required
REV	Revised
R.H.	Right Hand
RWD	Redwood
S	South
SCHED	Schedule
SECT	Section
SHT	Sheet
SIM	Similar
SPEC	Specification
SQ	Square
S.S.	Stainless
STD	Standard
STL	Steel
SYM	Symmetrical
T.O.	Top of
T.O.C.	Top of Curb
T.O.D.	Top of Drain
T.O.P.	Top of Pavement
T.O.S.	Top of Slab
T.O.W.	Top of Wall
TBD	To Be Determined
TYP	Typical
UNF	Unfinished
U.N.O.	Unless Noted Otherwise
VERT	Vertical
V.I.F.	Verify in Field
W	West
W/	With
W/O	Without
WD	Wood
WP	Waterproof
WPM	Waterproof Membrane
WT	Weight

ABBREVIATIONS
NO SCALE
6

SHEET NUMBER	SHEET NAME
S000	STRUCTURAL TITLE SHEET
S001	STRUCTURAL GENERAL NOTES
S100	FOUNDATION PLAN
S101	LOWER LEVEL FRAMING PLAN
S102	MAIN LEVEL FLOOR FRAMING AND GARAGE FOUNDATION PLAN
S103	UPPER LEVEL FLOOR AND LOW ROOF FRAMING PLAN
S104	HIGH ROOF FRAMING PLAN
S200	STRUCTURAL DETAILS - CONCRETE
S201	STRUCTURAL DETAILS - CONCRETE
S210	STRUCTURAL DETAILS - WOOD
S211	STRUCTURAL DETAILS - WOOD
S220	STRUCTURAL DETAILS - STEEL



VICINITY MAP
NO SCALE
2

ARCHITECT
SPROUT AEC, LLC
SCOTT BEANS
SCOTT@SPROUTAEC.COM
970.759.3745

STRUCTURAL ENGINEER
SPROUT AEC, LLC
SCOTT BEANS
SCOTT@SPROUTAEC.COM
970.759.3745

CIVIL ENGINEER
FOUR POINTS SURVEYING AND ENGINEERING
WALTER MAGILL
WALTERM@FOURPOINTSSE.COM
970.819.1161

GENERAL CONTRACTOR
ALPINE MASTER BUILDERS
CODY KUROWSKI
CKUROWSKI@ALPINEMB.COM
970.819.6729

GEOTECHNICAL ENGINEER
WESTERN SLOPE GEOTECH
HAL SCHLICHT
HAL@WSGEOTECH.COM
970.875.4075

PROJECT DIRECTORY
NO SCALE
3

sprout
ARCHITECTURE • ENGINEERING • CONSTRUCTION MANAGEMENT
626 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

COLORADO LICENSED
SCOTT T. BEANS
0058845
PROFESSIONAL ENGINEER

REVIEWED FOR CODE COMPLIANCE
01/08/2025

STRUCTURAL TITLE SHEET

	DATE	DESCRIPTION
1	10.28.2024	PERMIT SET

S000

GENERAL NOTES:

1. PROJECT SCOPE: THESE STRUCTURAL DRAWINGS MAY BE USED TO CONSTRUCT ONLY 33170 MEADOW CREEK DRIVE, STEAMBOAT SPRINGS, CO 80487.
2. THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING AND SITE DRAWINGS. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THIS PLAN PRIOR TO CONCRETE PLACEMENT. CONFLICTS IN DIMENSION AND INTERFERENCE SHALL BE DIRECTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.
3. GOVERNING CODE: 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) AND ALL LOCAL AMENDMENTS, EXCEPT AS NOTED. ANY STRUCTURAL ELEMENTS (IF ANY) NOT IN CONFORMANCE WITH THE IRC HAVE BEEN DESIGNED PER THE 2021 IBC PER IRC R301.1.3
4. DESIGN LOADS:
   - A. RISK CATEGORY: II, STANDARD
   - B. ROOF LIVE LOADS:
     - a. ROOF LIVE LOAD: 20 PSF
     - b. GROUND SNOW LOAD (P/G): 105 PSF
     - c. ROOF SNOW LOAD (P/R): 80 PSF
   - C. SNOW DRIFTING AND UNBALANCED LOADS: IN ACCORDANCE WITH ASCE 7-16 AND AS DEPICTED ON THE ROOF PLANS.
   - D. FLOOR LIVE LOADS:
     - a. RESIDENTIAL: 40 PSF
     - b. EXTERIOR DECKS: 1.5* OCCUPANCY SERVED
     - c. BALCONIES <= 100 SQ. FT OR 1 & 2 FAMILY RESIDENCES: 60 PSF
   - E. ROOF AND FLOOR DEAD LOADS:
     - a. ROOF - METAL: 20 PSF
     - b. FLOOR - CARPET OR HARDWOOD: 15 PSF
     - c. FLOOR - CONCRETE TOPPING: 13 PSF
     - d. FLOOR - CONCRETE SLAB: 65 PSF
     - e. FLOOR - PARTITIONS: 4 PSF
     - f. BALCONY/DECK: 15 PSF
   - F. WIND LOADS (ASCE 7-16):
     - a. BASIC WIND SPEED, 3-SECOND GUST (VULT): 115 MPH
     - b. ALLOWABLE STRESS DESIGN WIND SPEED (VASD): 89 MPH
     - c. OCCUPANCY RISK CATEGORY: II
     - d. INTERNAL PRESSURE COEFFICIENT (GCPI): +/-0.18
     - e. WIND EXPOSURE: C

FOUNDATION DESIGN:

1. REFER TO SOILS REPORT BY WESTERN SLOPE GEOTECH, PROJECT NO. 24-1031, DATED JUNE 5, 2024.
2. SOIL CONDITIONS SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FORMWORK OR CONCRETE. IF DIFFERENT SOIL CONDITIONS EXIST THE STRUCTURAL ENGINEER SHALL BE NOTIFIED TO RE-EVALUATE THE FOUNDATION DESIGN AT ADDITIONAL EXPENSE TO THE OWNER.
3. SLOPE FINAL GRADES DOWN AND AWAY FROM FOUNDATION WALLS AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
4. THE FOUNDATION EXCAVATION SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
5. FOUNDATION WALLS TO BE BACKFILLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
6. BELOW GRADE FOUNDATION WALLS BACKFILLED ON ONE SIDE ONLY SHALL BE DAMPPROOFED ON THE EXTERIOR OF THE WALL.
7. A PERIMETER DRAIN SHALL BE INSTALLED AROUND THE FOUNDATION AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
8. FOOTINGS:
   - A. FOOTINGS, SELECTED BY THE OWNER SHALL BEAR ON THE NATURAL, UNDISTURBED SOILS, OR APPROVED COMPACTED STRUCTURAL FILL.
   - B. EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH; MINIMUM FROST DEPTH SHALL BE 4'-0" BELOW ADJACENT EXTERIOR FINISHED GRADE.
   - C. DESIGN OF FOOTINGS IS BASED ON:
     - a. MAXIMUM ALLOWABLE BEARING PRESSURE: 3,000 PSF
     - b. MINIMUM DEAD LOAD PRESSURE: 650 PSF
9. EARTH RETAINING STRUCTURES:
   - A. EARTH EQUIVALENT FLUID LATERAL PRESSURE:
     - a. WALLS RESTRAINED AT TOP (AT REST): 55 PCF
     - b. CANTILEVERED WALLS (ACTIVE): 45 PCF
   - B. COEFFICIENT OF SLIDING FRICTION: 0.30

REINFORCED CONCRETE:

1. CONCRETE DESIGN IS BASED ON THE AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND SHALL BE MIXED, TRANSPORTED, AND PLACED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" (ACI 301).
2. ALL CONCRETE SHALL BE CONSTRUCTED WITHIN THE TOLERANCES SPECIFIED IN ACI STANDARD 117.
3. STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES (NORMAL WEIGHT CONCRETE UNLESS NOTED OTHERWISE):
   - A. CEMENT TYPE: I/II
   - B. MAXIMUM AGGREGATE SIZE: 3/4"
   - C. MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c) AS FOLLOWS:

a.	FOOTINGS:	3,500 PSI (f'c)	0.52 (w/cm max)	1.5% (±1.5%) (entrained air)	5 INCHES (±1")
b.	STEM WALLS:	3,500 PSI (f'c)	0.52 (w/cm max)	5.0% (±1.5%) (entrained air)	4 INCHES (±1")
c.	GRADDE BEAMS:	4,000 PSI (f'c)	0.52 (w/cm max)	5.0% (±1.5%) (entrained air)	4 INCHES (±1")
d.	WALLS:	4,000 PSI (f'c)	0.50 (w/cm max)	5.0% (±1.5%) (entrained air)	4 INCHES (±1")
e.	INT. SLABS-ON-GRADE:	3,500 PSI (f'c)	0.50 (w/cm max)	3.0% (±1.5%) (entrained air)	4 INCHES (±1")
f.	EXT. SLABS-ON-GRADE:	3,500 PSI (f'c)	0.45 (w/cm max)	6.0% (±1.5%) (entrained air)	4 INCHES (±1")

4. CONCRETE PLACED IN CONTACT WITH SOILS SHALL MEET THE REQUIREMENTS OF EXPOSURE CLASS (S2) IN TABLE 4.3.1 OF ACI 318-11. THESE REQUIREMENTS INCLUDE A MAXIMUM WATER-CEMENT RATIO (W/C) OF 0.45 AND TYPE V CEMENT AND/OR THE USE OF FLY ASH OR AN EQUIVALENT MIX DESIGN. REFERENCE THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
5. REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
6. WHEN COLD WEATHER CONDITIONS EXIST, PLACE AND CURE CONCRETE IN ACCORDANCE WITH ACI 306.
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
8. DEFORMED REINFORCEMENT SHALL BE DOMESTIC NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 INCLUDING STIRRUPS AND TIES, EXCEPT THAT REINFORCING WHICH IS REQUIRED TO BE WELDED SHALL CONFORM TO ASTM A706.
9. EPOXY COATED REINFORCING BARS SHALL CONFORM TO ASTM A775.
10. ZINC COATED (GALVANIZED) REINFORCING BARS SHALL CONFORM TO ASTM A767.
11. UNLESS OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS, LAP BARS 50 DIAMETERS (50*BAR DIAMETER MINIMUM).
12. REINFORCING AT ALL ABUTTING CONCRETE (INCLUDING FOOTINGS) SHALL BE CONTINUOUS THROUGH OR AROUND ALL CORNERS AND INTERSECTIONS, OR USE MATCHING CORNER BARS OF EQUAL SIZE AND SPACING TO REINFORCING IN THE ABUTTING MEMBERS.
13. INSTALL (2) #5 BARS (MINIMUM) AROUND ALL SIDES OF ALL OPENINGS IN CONCRETE AND EXTEND 2'-8" PAST EDGES OF OPENINGS, UNLESS OTHERWISE NOTED.
14. IN CONTINUOUS MEMBERS, SPLICE TOP BARS AT MID-SPAN BETWEEN SUPPORTS AND SPLICE BOTTOM BARS OVER SUPPORTS.
15. FORM INTERMITTENT SHEAR KEYS AT ALL CONSTRUCTION JOINTS AND AS SHOWN ON THE STRUCTURAL DRAWINGS.
16. UNLESS OTHERWISE NOTED ON THE DRAWINGS, MINIMUM CONCRETE COVER OVER REINFORCING SHALL BE AS FOLLOWS:

A.	UNFORMED SURFACE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"
B.	FORMED SURFACE EXPOSED TO EARTH OR WEATHER:	
a.	#6 THROUGH #18 BARS	2"
b.	#5 BAR, W31 OR D31 WIRE, AND SMALLER	1-1/2"
C.	FORMED SURFACE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
a.	SLABS, WALLS, JOISTS: #11 BARS AND SMALLER	3/4"
D.	BEAMS AND COLUMNS	
a.	PRIMARY REINFORCEMENT	1-1/2"
b.	STIRRUPS, TIES, SPIRALS	1-1/2"

17. INSTALL CHAIRS, BOLSTERS, ADDITIONAL REINFORCEMENT, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITION SHOWN ON DRAWINGS. SUPPORT OF REINFORCEMENT ON WOOD, BRICK, OR OTHER UNACCEPTABLE MATERIALS SHALL NOT BE PERMITTED.
18. KEEP REINFORCEMENT CLEAN AND FREE OF DIRT AND OIL. OIL FORMS PRIOR TO PLACING REINFORCEMENT.
19. FIBER ADMIXTURE SHALL BE 100% VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS, TYPE III 4.1.3, PERFORMANCE LEVEL ONE, PER ASTM C1116.
20. PROPERLY PLACE, ACCURATELY POSITION AND MAINTAIN SECURELY IN PLACE ALL EMBEDDED ITEMS PRIOR TO AND DURING CONCRETE PLACEMENT.
21. ANCHOR BOLTS AND RODS FOR BEAM AND COLUMN-BEARING PLATES SHALL BE PLACED WITH SETTING TEMPLATES.
22. UNLESS OTHERWISE SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT ALL COLUMN, WALL, SLAB OR BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE.
23. FILL MATERIAL UNDER SLABS ON GRADE SHALL BE AN APPROVED MATERIAL PLACED IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
24. SLAB CONTROL JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH ACI RECOMMENDATIONS.
25. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE OWNER OF THE POTENTIAL FOR DAMAGE DUE TO SLAB MOVEMENT AND THE PRECAUTIONS TO BE TAKEN TO MINIMIZE POTENTIAL DAMAGE WHEN MOVEMENT OCCURS. IF THE OWNER CHOOSES SLAB-ON-GRADE CONSTRUCTION INSTEAD OF A STRUCTURAL FLOOR, THE OWNER SHALL ASSUME ALL RISK OF SLAB ON GRADE CONSTRUCTION.
26. ALL NON-BEARING FRAME WALLS PLACED ON SLABS-ON-GRADE SHOULD BE PROVIDED WITH A SLIP JOINT (1 1/2" VOID) AT THE BOTTOM OF THE WALL.

GENERAL NOTES
NO SCALE
12

LOOSE LINTELS:

1. UNLESS NOTED OTHERWISE, PROVIDE LOOSE LINTELS AS FOLLOWS: (ONE ANGLE FOR EACH 4" OF WALL THICKNESS TO BEAR 4" MINIMUM EACH END)

	opening	angle required	bearing (ea. end)
a.	0'-8" TO 4'-0"	L3 1/2X3 1/2X1/4	4"
b.	4'-1" TO 5'-4"	L5X3 1/2X1/4 (LLV)	6"
c.	5'-5" TO 10'-0"	L6X3 1/2X5/16 (LLV)	8"

STRUCTURAL WOOD & TIMBER:

1. DESIGN IS BASED ON ANSI/AF&PA NDS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH SUPPLEMENT: DESIGN VALUES FOR WOOD CONSTRUCTION" AND ANSI/AF&PA SDPWS "SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC."
2. 2X FRAMING LUMBER SHALL BE S4S HEM-FIR NO. 2 AND BETTER UNLESS NOTED OTHERWISE.
3. ALL LUMBER SHALL BE 19% OR LESS MAXIMUM MOISTURE CONTENT, UNLESS NOTED OTHERWISE.
4. SOLID TIMBER BEAMS AND POSTS SHALL BE KILN DRIED DOUGLAS FIR-LARCH NO. 1.
5. 2X STUD BEARING WALLS SHALL BE 2X6 @ 16" (UNO) HEM-FIR STUD GRADE OR BETTER.
6. 2X TOP AND BOTTOM PLATES SHALL BE DOUG-FIR NO. 2 OR BETTER.
7. USE OF WOOD BEARING WALLS SHOWN ON DRAWINGS WITH LATERALLY UNSUPPORTED HEIGHTS IN EXCESS OF THAT SHOWN IN IBC 2308.5.1 HAVE BEEN JUSTIFIED BY SPROUT'S ANALYSIS.
8. FASTENERS FOR USE WITH TREATED WOOD SHALL COMPLY WITH IRC SECTION R317.3.
9. WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE-TREATED DOUGLAS FIR-LARCH OR SOUTHERN YELLOW PINE.
10. PRESERVATIVE TREATED WOOD SHALL BE TREATED IN ACCORDANCE WITH AWPA U1 AND AWPA M4.
11. CONVENTIONAL LIGHT FRAMING SHALL COMPLY WITH IRC SECTIONS R502, R602, AND R802.
12. MINIMUM NAILING SHALL BE PROVIDED AS SPECIFIED IN IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR STRUCTURAL MEMBERS."
13. METAL FRAMING ANCHORS SHOWN OR REQUIRED, SHALL BE SIMPSON STRONG-TIE OR EQUAL CODE APPROVED CONNECTORS AND INSTALLED PER THE HANGER SCHEDULE. NOTE THAT HEAVY-DUTY HANGERS AND SKEWED HANGERS MAY NOT BE STOCKED LOCALLY AND REQUIRE SPECIAL ORDER FROM THE FACTORY.
14. GLUE WOOD NAILER PLATES TO STEEL BEAMS AND ATTACH WITH EITHER 1/2"Ø BOLTS @ 32" O.C., STAGGERED OR 0.145"Ø POWDER ACTUATED DRIVE PINS @ 16" O.C. STAGGERED. WIDTH OF NAILER PLATE SHALL MATCH BEAM WIDTH + 1/8" MIN (1/4" MAX) OVERHANG EACH SIDE.
15. LEAD HOLES FOR LAG SCREWS SHALL BE 40%-70% OF THE SHANK DIAMETER AT THE THREADED SECTION AND EQUAL TO THE SHANK DIAMETER AT THE UNTHREADED SECTION PER NDS SECTION 12.1.4.
16. CONNECTOR BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME B18.2.1 AND ASTM SAE J429 GRADE 1.
17. NAILS AND SPIKES SHALL CONFORM TO ASTM F1667.
18. WOOD SCREWS SHALL CONFORM TO ANSI/ASME B18.6.1.

WOOD FRAMING NOTES:

1. INSTALL SOLID BLOCKING BETWEEN JOISTS UNDER JAMB STUDS OF OPENINGS.
2. COLUMNS MUST HAVE A CONTINUOUS LOAD PATH TO FOUNDATION.
3. UNLESS NOTED OTHERWISE, INSTALL TWO LENGTHS OF SOLID BLOCKING X JOIST DEPTH X 12 INCHES LONG IN FLOOR FRAMING UNDER COLUMN LOADS. PROVIDE FULL DEPTH SQUASH BLOCKING BELOW BEARING WALLS TO BEARING ELEMENT BELOW (CRIPPLE WALL TOP PLATE, SILL PLATE, OR SIMILAR).
4. BUILT-UP STUD COLUMNS SHALL CONSIST OF 2X4, 2X6, OR 2X8 STUDS WITH NUMBER OF LAMINATIONS NOTED ON PLAN AND EACH LAMINATION SHALL BE NAILED TOGETHER WITH (2) ROWS OF 12D GUN NAILS (0.131"Ø X 3 1/4") @ 6" FULL HEIGHT OF COLUMN. DO NOT SPLICE LAMINATIONS.
5. ALL BEAMS AND TRUSSES SHALL BE BRACED AGAINST ROTATION AT POINTS OF BEARING.
6. UNLESS NOTED OTHERWISE, LOWER CHORD OF GABLE END TRUSSES SHALL BE ANCHORED TO WALL PLATE WITH FRAMING ANCHORS AT 4'-0" SPACING AND LATERALLY BRACED TO ROOF FRAMING AT 8'-0" SPACING.
7. PROVIDE CONTINUOUS WALL STUDS EACH SIDE OF OPENINGS EQUAL TO ONE-HALF OR GREATER THE NUMBER OF STUDS INTERRUPTED BY OPENING UNLESS NOTED OTHERWISE.
8. ALL WALL STUDS SHALL BE CONTINUOUS FROM FLOOR TO FLOOR OR FROM FLOOR TO ROOF.
9. PROVIDE SOLID BLOCKING OR RIM JOISTS AT ALL JOIST SUPPORTS AND JOIST ENDS.
10. SOLE PLATE AT ALL PERIMETER WALLS AND AT DESIGNATED SHEAR WALLS SHALL BE NAILED WITH (4) 0.131"ØX3" NAILS AT 16" MINIMUM.
11. ALL ROOF RAFTERS, JOISTS, TRUSSES, BEAMS SHALL BE ANCHORED TO SUPPORTS WITH METAL FRAMING ANCHORS.
12. MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED AND TOP-LOADED BEAMS SHALL BE INSTALLED PER MANUFACTURER ASSEMBLY REQUIREMENTS.
13. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED (P.T.) IN ACCORDANCE WITH IRC SECTION R317. ALL PRESERVATIVE TREATED LUMBER SHALL CONFORM TO AWPA STANDARD U1 AND THE APPROPRIATE USE CATEGORY. CONNECTORS USED IN CONTACT WITH P.T. WOOD SHALL BE COATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. FASTENERS USED IN P.T. WOOD SHALL CONFORM WITH IRC SECTION R317.3.1.

WOOD SHEATHING:

1. PLYWOOD AND ORIENTED STRAND BOARD (OSB) FLOOR, ROOF, AND WALL SHEATHING SHALL BE APA RATED WITH STAMP INCLUDING APA TRADEMARK AND PANEL SPAN RATING.
   - A. MINIMUM FLOOR SHEATHING: SEE PLAN NOTES
   - B. MINIMUM ROOF SHEATHING: SEE PLAN NOTES
   - C. MINIMUM WALL SHEATHING: SEE PLAN NOTES
2. SHEATH ALL EXTERIOR WALLS. SHEATH INTERIOR WALLS AS SHOWN ON THE DRAWINGS.
3. SHEATHING SHALL BE CONTINUOUS FROM BOTTOM PLATE TO TOP PLATE. CUT IN "L" AND "T" SHAPES AROUND OPENINGS. LAP SHEATHING OVER RIM JOISTS A MINIMUM 4" AT ALL FLOORS TO TIE UPPER AND LOWER STUD WALLS TOGETHER.
4. MINIMUM HEIGHT OF SHEATHING PANELS SHALL BE 16" TO ENSURE THAT PLATES ARE TIED TO STUDS.
5. MACHINE APPLIED NAILING (I.E. GUN NAILING): THE USE OF MACHINE APPLIED NAILING IS SUBJECT TO SATISFACTORY JOBSITE DEMONSTRATION AND THE APPROVAL BY THE PROJECT STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

TONGUE AND GROOVE DECKING:

1. TONGUE AND GROOVE DECKING SHALL BE DOUGLAS FIR-LARCH AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. F_B = 1,750 PSI
   - B. F_V = 165 PSI
   - C. E = 1,800 KSI
2. TONGUE AND GROOVE DECKING SHALL COMPLY WITH SECTION 2304.9 OF THE IBC INSTALLED IN A CONTROLLED RANDOM LAYUP PATTERN.

GENERAL NOTES
NO SCALE
9

PLANT FABRICATED / PRE-ENGINEERED WOOD FRAMING:

1. I-SERIES ROOF AND FLOOR JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER TRUSS JOIST WITH STRUCTURAL WOOD FLANGES AND WEBS DESIGNED FOR STRUCTURAL CAPACITIES AND DESIGN PROVISIONS ACCORDING TO ASTM D 5055. SUBSTITUTION OF EQUIVALENT SERIES BY OTHER MANUFACTURER IS ACCEPTABLE WITH ENGINEER APPROVAL.
2. I-SERIES ROOF AND FLOOR JOISTS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT OR NOTCH CHORDS IN ANY MANNER. HOLES IN WEBS SHALL NOT EXCEED MANUFACTURER'S PUBLISHED LIMIT CRITERIA.
3. MEMBERS NOTED AS LVL (LAMINATED VENEER LUMBER) ON PLAN SHALL BE 1 3/4" WIDE X DEPTH INDICATED, PLANT FABRICATED, AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. F_B = 2,600 PSI
   - B. F_V = 285 PSI
   - C. $F_{C||}$ = 2,510 PSI
   - D. $F_{C\perp}$ = 750 PSI
   - E. E = 2,000 KSI
4. MEMBERS NOTED AS PSL (PARALLEL STRAND LUMBER) ON PLAN SHALL BE PLANT-FABRICATED AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. BEAMS:
     - a. F_B = 2,900 PSI
     - b. F_V = 290 PSI
     - c. $F_{C||}$ = 2,900 PSI
     - d. $F_{C\perp}$ = 750 PSI
     - e. E = 2,000 KSI
   - B. COLUMNS:
     - a. F_B = 2,400 PSI
     - b. F_V = 190 PSI
     - c. $F_{C||}$ = 2,500 PSI
     - d. $F_{C\perp}$ = 425 PSI
     - e. E = 1,800 KSI
5. MEMBERS NOTED AS LSL (LAMINATED STRAND LUMBER) ON PLAN SHALL BE PLANT-FABRICATED AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   - A. ≤1 1/2"
     - a. F_B = 1,700 PSI
     - b. F_V = 400 PSI
     - c. $F_{C||}$ = 1,400 PSI
     - d. $F_{C\perp}$ = 680 PSI
     - e. E = 1,300 KSI
   - B. 1 3/4"
     - a. F_B = 2,325 PSI
     - b. F_V = 310 PSI
     - c. $F_{C||}$ = 2,325 PSI
     - d. $F_{C\perp}$ = 800 PSI
     - e. E = 1,550 KSI
6. BRIDGING AND BLOCKING SHALL BE INSTALLED ACCORDING TO THE FABRICATOR'S REQUIREMENTS.

STRUCTURAL GLUED LAMINATED TIMBER:

1. MATERIALS, MANUFACTURE, AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH ANSI/AITC A190.1 "STRUCTURAL GLUED LAMINATED TIMBER" AND AITC 117 "STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER OF SOFTWOOD SPECIES, DESIGN AND MANUFACTURING REQUIREMENTS."
2. SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION SYMBOL 24F-V4 DF/DF WITH NO CAMBER.
3. CONTINUOUS AND CANTILEVERED MEMBERS SHALL BE DOUGLAS FIR COMBINATION SYMBOL 24F-V8 DF/DF WITH NO CAMBER. ALL EXTERIOR APPLICATION SHALL BE ALASKAN YELLOW CEDAR OF GREATER OR EQUAL STRENGTH.
4. COLUMNS SHALL BE COMBINATION #2 OR BETTER.
5. ALL GLUED LAMINATED TIMBER SHALL HAVE LESS THAN 16% MOISTURE CONTENT, UNLESS NOTED OTHERWISE.
6. MEMBERS SHALL BE ARCHITECTURAL APPEARANCE GRADE.
7. ADHESIVES SHALL MEET THE REQUIREMENTS FOR WET CONDITIONS OF SERVICE.
8. SEAL CUT EDGES AND ENDS EXPOSED TO WEATHERING.
9. THE FABRICATOR SHALL FURNISH ALL ITEMS OF CONNECTION STEEL AND HARDWARE FOR JOINING TIMBER MEMBERS TO EACH OTHER AND TO THEIR SUPPORTS; EXCLUSIVE OF ANCHORAGE EMBEDDED IN MASONRY, SETTING PLATES, AND ITEMS FIELD-WELDED TO STRUCTURAL STEEL.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC 360) AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC 303) BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM STANDARDS AND GRADES INDICATED BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS OR DETAILS.
   - A. STRUCTURAL STEEL WIDE FLANGE BEAMS AND WTS: ASTM A992, 50 KSI YIELD
   - B. ROLLED STEEL FLOOR PLATES: ASTM A786, COMMERCIAL GRADE
   - C. OTHER ROLLED SHAPES, INCLUDING PLATES, CHANNELS, AND ANGLES: ASTM A36, 36 KSI YIELD
   - D. HOLLOW STRUCTURAL SECTION (HSS) RECTANGULAR SHAPES: ASTM A500, GRADE B, 46 KSI YIELD
   - E. HSS ROUND SHAPES: ASTM A500, GRADE B, 42 KSI YIELD
   - F. PIPE SHAPES: ASTM A53, GRADE B, 35 KSI YIELD
   - G. ADJUSTABLE PIPE COLUMNS:
     - a. 3" DIAMETER 11 GAUGE, SHALL BE CERTIFIED BY THE MANUFACTURER FOR A SAFE LOAD CAPACITY OF 13,500 LBS AT 7'-6".
     - b. 3" DIAMETER "HEAVY DUTY" SCHEDULE 40 SHALL BE CERTIFIED FOR A SAFE LOAD CAPACITY OF 28,000 LBS AT 7'-6".
3. UNLESS OTHERWISE NOTED, FRAMED BEAM CONNECTIONS SHALL BE BEARING-TYPE WITH 3/4" DIAMETER, SNUG TIGHT, ASTM A325 BOLTS, DETAILED IN CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND THE "STEEL CONSTRUCTION MANUAL" BY THE AISC, 16TH EDITION. INSTALL BOLTS IN ACCORDANCE WITH AISC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
4. ALL BEAMS SHALL HAVE FULL DEPTH WEB STIFFENERS EACH SIDE OF WEBS ABOVE AND BELOW COLUMNS (1/4" PLATE OR AS NOTED).
5. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 55 AS NOTED ON THE STRUCTURAL DRAWINGS WITH WELDABILITY SUPPLEMENT S1.
6. HEADED ANCHOR STUDS (HAS) SHALL CONFORM TO ASTM A108 AND SHALL BE CONNECTED TO STRUCTURAL STEEL WITH EQUIPMENT APPROVED BY THE STUD MANUFACTURER ACCORDING TO THE STUD MANUFACTURER'S RECOMMENDATIONS.
7. WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH THE AISC DOCUMENTS LISTED ABOVE, AND THE AMERICAN WELDING SOCIETY (AWS) D1.1: STRUCTURAL WELDING CODE, AND THE RECOMMENDATIONS FOR USE OF E70XX ELECTRODES. WHERE NOT SPECIFICALLY NOTED, MINIMUM WELD SHALL BE 3/16" FILLET BY LENGTH OF CONTACT EDGE.
8. ALL POST-INSTALLED ANCHORS SHALL HAVE CURRENT INTERNATIONAL CODE COUNCIL EVALUATION SERVICE (ICC-ES) REPORTS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
9. EXPANSION ANCHORS SHALL BE APPROVED "WEDGE" TYPE UNLESS SPECIFICALLY NOTED TO BE "SLEEVE" TYPE AS NOTED ON THE STRUCTURAL DRAWINGS.
10. CHEMICAL ANCHORS SHALL BE APPROVED EPOXY OR SIMILAR ADHESIVE TYPE AS APPROPRIATE FOR INSTALLATION IN SOLID AND NON-SOLID BASE MATERIALS.
11. GROUT BENEATH COLUMN BASE AND BEAM BEARING PLATES SHALL HAVE A MINIMUM 28-DAY, COMPRESSIVE STRENGTH OF 7,500 PSI AND SHALL BE NON-SHRINK, NON-METALLIC, AND TESTED IN ACCORDANCE WITH ASTM C1107.

SHOP DRAWINGS:

1. THE STRUCTURAL DRAWINGS ARE COPYRIGHTED AND SHALL NOT BE COPIED FOR USE AS ERECTION PLANS OR SHOP DETAILS. USE OF SPROUT'S ELECTRONIC FILES AS THE BASIS FOR SHOP DRAWINGS REQUIRES PRIOR APPROVAL BY SPROUT, A SIGNED RELEASE OF LIABILITY BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS, AND DELETION OF SPROUT'S NAME AND LOGO FROM ALL SHEETS SO USED.
2. THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO MODIFY THE STRUCTURAL DRAWINGS OR PROJECT SPECIFICATIONS.
3. ALL SHOP AND ERECTION DRAWINGS SHALL BE CHECKED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION FOR STRUCTURAL ENGINEER'S REVIEW; SHOP DRAWING SUBMITTALS NOT CHECKED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER WILL BE RETURNED WITHOUT REVIEW.
4. FURNISH TWO (2) PRINTS OF SHOP AND ERECTION DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION FOR:
   - A. STRUCTURAL STEEL
   - B. PLANT FABRICATED WOOD JOISTS
   - C. PRE-ENGINEERED WOOD TRUSSES
   - D. GLUED-LAMINATED TIMBER
5. SUBMIT IN A TIMELY MANNER TO PERMIT 10 WORKING DAYS FOR REVIEW BY THE STRUCTURAL ENGINEER.
6. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "REQUEST FOR CHANGE IN WRITING" UNLESS SPECIFIC SUGGESTED CHANGES ARE CLEARLY MARKED. IN ANY EVENT, CHANGES MADE BY MEANS OF THE SHOP DRAWING SUBMITTAL PROCESS BECOME THE RESPONSIBILITY OF THE ONE INITIATING THE CHANGE.

FIELD VERIFICATION OF EXISTING CONDITIONS:

1. THE EXISTING CONDITIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY THE EXISTING STRUCTURE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS.
3. THE GENERAL CONTRACTOR SHALL REPORT ANY VARIATIONS OR DISCREPANCIES TO THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING.

GENERAL NOTES
NO SCALE
6

STRUCTURAL ERECTION AND BRACING REQUIREMENTS:

1. THE STRUCTURAL DRAWINGS ILLUSTRATE AND DESCRIBE THE COMPLETED STRUCTURE WITH ELEMENTS IN THEIR FINAL POSITIONS, PROPERLY SUPPORTED, CONNECTED, AND/OR BRACED.
2. THE STRUCTURAL DRAWINGS ILLUSTRATE TYPICAL AND REPRESENTATIVE DETAILS TO ASSIST THE GENERAL CONTRACTOR. DETAILS SHOWN APPLY AT ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED. ALTHOUGH DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT EVERY DETAIL IS ILLUSTRATED AND NOT EVERY EXCEPTIONAL CONDITION IS ADDRESSED.
3. ALL PROPRIETARY CONNECTIONS AND ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS.
4. ALL WORK SHALL BE ACCOMPLISHED IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE APPLICABLE CODES AND LOCAL ORDINANCES.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL WORK, INCLUDING LAYOUT AND DIMENSION VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF SUBCONTRACTORS. ANY DISCREPANCIES OR OMISSIONS DISCOVERED IN THE COURSE OF THE WORK SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR RESOLUTION. CONTINUATION OF WORK WITHOUT NOTIFICATION OF DISCREPANCIES RELIEVES THE ARCHITECT AND STRUCTURAL ENGINEER FROM ALL CONSEQUENCES.
6. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE STRUCTURAL DRAWINGS DO NOT DESCRIBE METHODS OF CONSTRUCTION.
7. THE GENERAL CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO TEMPORARY BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.
8. DO NOT BACKFILL AGAINST BASEMENT OR RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE TEMPORARY BRACING IS INSTALLED.
9. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND ANY OTHER SUPPORTING ELEMENTS ARE IN PLACE.
10. THE ARCHITECT AND STRUCTURAL ENGINEER BEAR NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND OBSERVATION VISITS TO THE SITE DO NOT IN ANY WAY INCLUDE INSPECTIONS OF THESE ITEMS.
11. THESE PLANS HAVE BEEN ENGINEERED FOR CONSTRUCTION AT ONE SPECIFIC BUILDING SITE. BUILDER ASSUMES ALL RESPONSIBILITY FOR USE OF THESE PLANS AT ANY OTHER BUILDING SITE. PLANS SHALL NOT BE USED FOR CONSTRUCTION AT ANY OTHER BUILDING SITE WITHOUT SPECIFIC REVIEW BY THE ENGINEER.

PRECAUTIONARY NOTES ON STRUCTURAL BEHAVIOR:

1. INTERIOR ARCHITECTURAL FINISH DETAILING MUST ACCOMMODATE THE RELATIVE DIFFERENTIAL MOVEMENTS OF SUPPORTING STRUCTURAL ELEMENTS.
2. WHERE THE ROOF FRAMING ELEMENT SPANS ARE LONG, APPLIED LOADING WILL NATURALLY CAUSE SUBSTANTIAL DEFLECTION. INTERIOR ELEMENTS HUNG FROM THE ROOF STRUCTURE WILL DEFLECT WITH THE ROOF.
3. WHERE LOWER LEVEL (ON GRADE) FLOOR IS A FLOATING CONCRETE SLAB-ON-GRADE, SLAB MAY EXPERIENCE MOVEMENTS INDEPENDENT OF THE STRUCTURAL FOUNDATIONS. INTERIOR ELEMENTS SUPPORTED ON THE SLAB-ON-GRADE FLOOR WILL MOVE WITH THE FLOOR. INTERIOR ELEMENTS SUPPORTED ON FOUNDATIONS AND COLUMNS WILL NOT EXPERIENCE SIMILAR MOVEMENTS.
4. EXTERIOR/PERIMETER WALL ASSEMBLIES HUNG FROM THE EDGE OF THE BUILDING STRUCTURE WILL BE DIRECTLY AFFECTED (TO SOME DEGREE) BY CHANGES IN EXTERNAL TEMPERATURE AND FLOOR DEFLECTION.
5. ARCHITECTURAL FINISH DETAILS SHOULD ALLOW FOR RELATIVE MOVEMENTS BETWEEN ELEMENTS WITH DIFFERENT SUPPORT CONDITIONS.
6. THE FOUNDATION DESIGN SHOWN ASSUMES THAT THE OWNER/BUILDER IS AWARE OF THE PRESENCE OF EXPANSIVE SOILS, AND THAT HE HAS READ THE PREVIOUSLY REFERENCED SOILS REPORT. USE OF THESE PLANS IS INDICATION THAT THE OWNER/BUILDER ACCEPTS THE RISKS ASSOCIATED WITH BUILDING ON THIS SITE, ESPECIALLY THOSE RELATED TO SLAB ON GRADE CONSTRUCTION IN FINISHED AREAS. SPROUT AEC, LLC WILL NOT BE HELD LIABLE FOR DAMAGES CAUSED BY SLAB MOVEMENT.

DEFERRED SUBMITTALS:

1. PORTIONS OF THE STRUCTURE HAVE ELEMENTS OF PROPRIETARY DESIGN AND FABRICATION, WHICH SHALL BE SUBMITTED BY THE SUPPLIER FOR APPROVAL AFTER AWARD OF CONTRACT.
2. THESE ITEMS SHALL CONFORM TO THE LOAD, CAPACITY, SIZE, GEOMETRY, CONNECTION, AND SUPPORT CRITERIA NOTED ON THE STRUCTURAL DRAWINGS.
3. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN ENGINEER REGISTERED IN THE STATE OF COLORADO. FINAL SHOP DRAWING SUBMITTALS SHALL BE STAMPED AND SIGNED.
4. FURNISH DEFERRED SUBMITTALS FOR:
   - A. SUPPLIER ENGINEERED OPEN-WEB WOOD TRUSSES
   - B. SUPPLIER ENGINEERED STAIRS
   - C. SUPPLIER ENGINEERED CANOPIES, SUNSCREENS, AND SUNSHADES
5. SUBMITTALS WILL BE REVIEWED BY THE STRUCTURAL ENGINEER OF RECORD FOR COMPLIANCE WITH THE SPECIFIED DESIGN REQUIREMENTS, STAMPED AS "REVIEWED," AND FORWARDED TO THE LOCAL BUILDING AUTHORITY FOR REVIEW AS REQUIRED.
6. FINAL ISSUE OF THE BUILDING PERMIT MAY, AT THE APPROVAL AUTHORITY'S OPTION, BE CONTINGENT ON ITS APPROVAL OF THE DEFERRED SUBMITTAL DOCUMENTS.
7. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN CALCULATIONS AND DRAWINGS HAVE BEEN REVIEWED BY THE ARCHITECT, STRUCTURAL ENGINEER, AND/OR LOCAL BUILDING AUTHORITY AS REQUIRED.

LETTERS OF CONSTRUCTION COMPLIANCE:

1. THE GENERAL CONTRACTOR SHALL DETERMINE FROM THE LOCAL BUILDING AUTHORITY, AT THE TIME THE BUILDING PERMIT IS OBTAINED, WHETHER ANY LETTERS OF CONSTRUCTION COMPLIANCE WILL BE REQUESTED FROM THE STRUCTURAL ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ALL SUCH REQUIREMENTS IN WRITING PRIOR TO THE START OF CONSTRUCTION.
3. TWO DAY ADVANCE NOTICE SHALL BE GIVEN WHEN REQUESTING SITE VISITS NECESSARY AS THE BASIS FOR THE COMPLIANCE LETTER.
4. THE GENERAL CONTRACTOR SHALL PROVIDE COPIES OF ALL THIRD-PARTY TESTING AND INSPECTION REPORTS TO THE ARCHITECT AND STRUCTURAL ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DATE THAT THE COMPLIANCE LETTER IS NEEDED.

INSPECTIONS:

1. INSPECTIONS AND TESTING SHALL BE PERFORMED BY A QUALIFIED INSPECTOR IN ACCORDANCE WITH IRC SECTION R109. THE INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING INSPECTION.
2. EXCEPT AS NOTED, THE INSPECTIONS OUTLINED IN THE IRC ARE IN ADDITION TO, AND BEYOND THE SCOPE OF, PERIODIC STRUCTURAL OBSERVATIONS. STRUCTURAL OBSERVATIONS ARE INCLUDED IN THE STRUCTURAL ENGINEERING DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES PROVIDED BY THE STRUCTURAL ENGINEER.

GENERAL NOTES
NO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

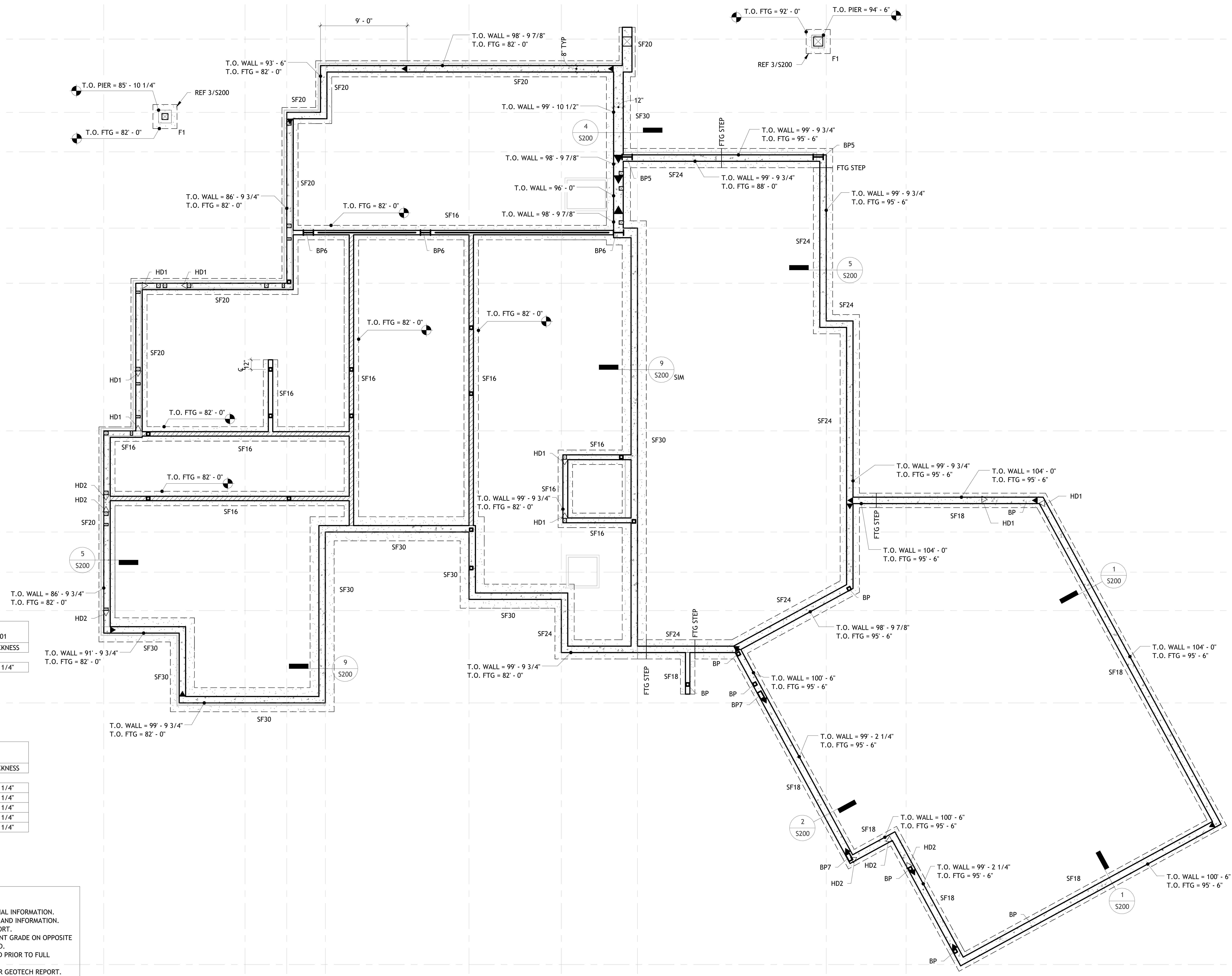
SCOTT T. BEANS
0058345

REVIEWED FOR CODE COMPLIANCE
01/08/2025

STRUCTURAL GENERAL NOTES

#	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

S001



CONCRETE SPREAD FOOTING SCHEDULE (UNO, REINFORCE ALL SPREAD FOOTINGS PER 5/S201			
TYPE MARK	WIDTH	LENGTH	THICKNESS
F1	2' - 6"	2' - 6"	11 1/4"

CONCRETE STRIP FOOTING SCHEDULE			
TYPE MARK	WIDTH	LENGTH	THICKNESS
SF16	1' - 6"	<varies>	11 1/4"
SF18	1' - 6"	<varies>	11 1/4"
SF20	1' - 8"	<varies>	11 1/4"
SF24	2' - 0"	<varies>	11 1/4"
SF30	2' - 6"	<varies>	11 1/4"

FOUNDATION NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. FOOTINGS TO BEAR ON APPROPRIATE SUBGRADE PER GEOTECH REPORT.
4. BACKFILL MAY BE PLACED TO AN ELEVATION EQUIVALENT TO CURRENT GRADE ON OPPOSITE SIDE OF WALL NO SOONER THAN 7 DAYS AFTER CONCRETE IS POURED.
5. SLAB ON GRADE, FLOOR FRAMING, AND SHEATHING TO BE INSTALLED PRIOR TO FULL FOUNDATION BACKFILLING AT BASEMENT WALLS.
6. TYPICAL CONCRETE SLAB ON GRADE IS 4" THICK WITH SUBGRADE PER GEOTECH REPORT. REINFORCE WITH #4 @ 16" EACH WAY, CENTERED IN SLAB DEPTH. PROVIDE SAW CUT OR TOOLED 1/8" CONTROL JOINTS AT 12'-0" MAX EACH WAY. AT ALL RE-ENTRANT CORNERS, PROVIDE (3) #4 x 5'-0" DIAGONAL BARS, CENTERED IN SLAB DEPTH.
7. FLOAT INTERIOR PARTITION WALLS BEARING ON SLAB ON GRADE W/ MIN 1 1/2" GAP. REF DETAILS AND GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
8. IF FOUNDATION IS TO SIT THROUGH WINTER WITHOUT COMPLETE FRAMING, INSULATION, AND FROST PROTECTION, CONTRACTOR TO PROVIDE ADEQUATE BACKFILL, FRAMING, AND FLOOR SHEATHING TO PROTECT FOUNDATION BEARING SOILS FROM MOISTURE ACCUMULATION AND FROST HEAVE.
9. [BEAM POCKET PLACEHOLDER NOTE]

FOUNDATION PLAN 3
3/16" = 1'-0"

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

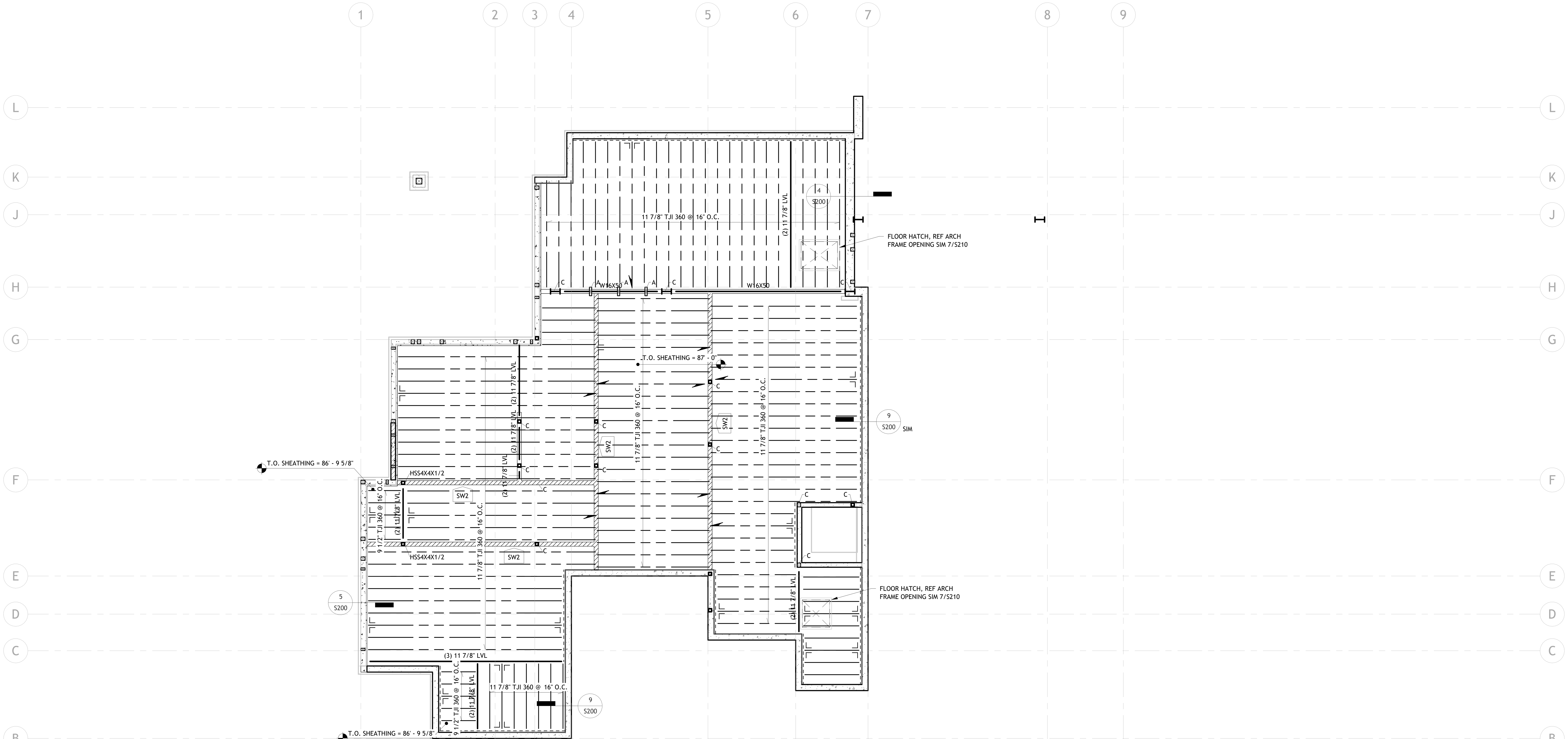
COLORADO LICENSED SCOTT T. BEANS 0058345 PROFESSIONAL ENGINEER

REVIEWED FOR CODE COMPLIANCE 01/08/2025

FOUNDATION PLAN

DATE	DESCRIPTION
10.28.2024	PERMIT SET

S100



FLOOR FRAMING NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
4. FLOOR CONSTRUCTION (UNO): 3/4" STURD-I-FLOOR APA RATED @ 24" O.C. TONGUE AND GROOVE SHEATHING, OVER WOOD I-JOISTS W/ 1 1/4" LSL RIM. GLUE AND FASTEN SHEATHING TO EDGE JOISTS, RIM, FLUSH BEAMS, AND LEDGERS WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" O.C. AND @ 8" O.C. ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
5. EXTERIOR WALLS (UNO): 2x STUDS @ 16" O.C. SHEATHED WITH 1 1/2" ZIP PANEL (7/16" PLYWOOD PLUS 1" INSULATION). NAIL WALL SHEATHING WITH (0.131" ∅ x 3 1/2") GUN NAILS @ 4" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
6. SHEAR WALLS (SW1): 2x STUDS @ 16" O.C. WITH 1 1/2" ZIP PANEL LAYER (PLYWOOD PLUS INSULATION) OVER 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 3" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. LOCATE ZIP PANEL ON EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
7. SHEAR WALLS (SW2): 2x STUDS @ 16" O.C. WITH 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 2" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. WHERE REQUIRED (AT EXTERIOR WALLS), ATTACH 1 1/2" ZIP PANEL OVER EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
8. INTERIOR BEARING WALLS (UNO): 2x STUDS @ 16" O.C., SHEATHED WITH 1/2" MIN. GYPSUM WALLBOARD ON EACH FACE. ATTACH W/ NO.6 x 1 1/4" DRYWALL SCREWS @ 8" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
9. WALL OPENING (UNO): (2) 2x8 HEADER W/ MINIMUM (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END. HEADERS ARE DROPPED UNO.
10. WHERE WOOD BEAMS/JOISTS ARE FACE MOUNTED TO FLUSH STEEL BEAMS, PACK OUT WEB WITH 2x AND PLYWOOD/OSB TIGHT TO TOP AND BOTTOM FLANGES. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
11. INSTALL LOOSE LINTELS PER GENERAL NOTES AND TYPICAL DETAILS AT ALL OPENINGS W/ VENEER ABOVE.
12. TYPICAL DECK CONSTRUCTION (UNO): 2x EXTERIOR DECKING OVER WOOD JOISTS PER PLAN. LAY DECKING PERPENDICULAR TO FRAMING AND FASTEN DECKING TO JOIST W/ (2) #8 x 3" EXTERIOR DECK SCREWS PER BOARD. FLASH THE TOP OF MULTI-PLY JOISTS AND BEAMS.
13. BEARING WALL ABOVE; BLOCK BETWEEN JOISTS, SIM 11/S210
14. ALIGN DECK JOIST AND INTERIOR JOIST; PROVIDE DTT2Z AT EACH JOIST AND FASTEN WITH THREADED ROD + NUTS; REFER TO IRC FIGURE R507.9.2(1). WHERE FRAMING MEMBERS ARE PARALLEL TO RIM BOARD, PROVIDE FULL DEPTH BLOCKING BETWEEN RIM AND FIRST JOIST AND ATTACH DTT2Z TO BLOCKING.

LOWER LEVEL FRAMING PLAN
NOT TO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

COLORADO LICENSED PROFESSIONAL ENGINEER

REVIEWED FOR CODE COMPLIANCE
01/08/2025

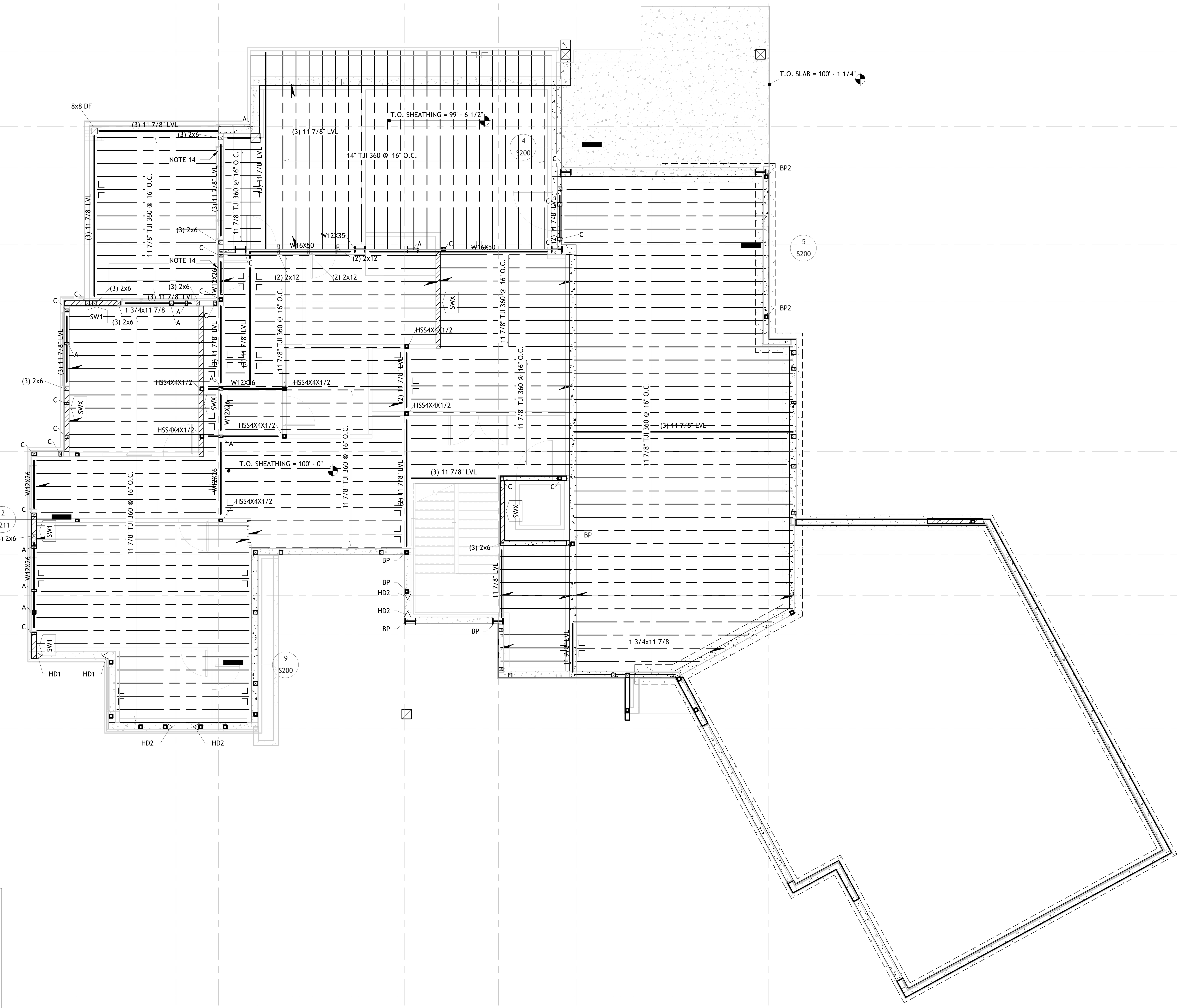
LOWER LEVEL FRAMING PLAN

DATE	DESCRIPTION
10.28.2024	PERMIT SET

S101

FLOOR FRAMING NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
4. FLOOR CONSTRUCTION (UNO): 3/4" STURD-I-FLOOR APA RATED @ 24" O.C. TONGUE AND GROOVE SHEATHING, OVER WOOD I-JOISTS W/ 1 1/4" LSL RIM. GLUE AND FASTEN SHEATHING TO EDGE JOISTS, RIM, FLUSH BEAMS, AND LEDGERS WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" O.C. AND @ 8" O.C. ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
5. EXTERIOR WALLS (UNO): 2x STUDS @ 16" O.C. SHEATHED WITH 1 1/2" ZIP PANEL (7/16" PLYWOOD PLUS 1" INSULATION). NAIL WALL SHEATHING WITH (0.131" ∅ x 3 1/2") GUN NAILS @ 4" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
6. SHEAR WALLS (SW1): 2x STUDS @ 16" O.C. WITH 1 1/2" ZIP PANEL LAYER (PLYWOOD PLUS INSULATION) OVER 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 3" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. LOCATE ZIP PANEL ON EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
7. SHEAR WALLS (SW2): 2x STUDS @ 16" O.C. WITH 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 2" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. WHERE REQUIRED (AT EXTERIOR WALLS), ATTACH 1 1/2" ZIP PANEL OVER EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
8. INTERIOR BEARING WALLS (UNO): 2x STUDS @ 16" O.C., SHEATHED WITH 1/2" MIN. GYPSUM WALLBOARD ON EACH FACE. ATTACH W/ NO.6 x 1 1/4" DRYWALL SCREWS @ 8" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
9. WALL OPENING (UNO): (2) 2x8 HEADER W/ MINIMUM (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END. HEADERS ARE DROPPED UNO.
10. WHERE WOOD BEAMS/JOISTS ARE FACE MOUNTED TO FLUSH STEEL BEAMS, PACK OUT WEB WITH 2x AND PLYWOOD/OSB TIGHT TO TOP AND BOTTOM FLANGES. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
11. INSTALL LOOSE LINTELS PER GENERAL NOTES AND TYPICAL DETAILS AT ALL OPENINGS W/ VENEER ABOVE.
12. TYPICAL DECK CONSTRUCTION (UNO): 2x EXTERIOR DECKING OVER WOOD JOISTS PER PLAN. LAY DECKING PERPENDICULAR TO FRAMING AND FASTEN DECKING TO JOIST W/ (2) #8 x 3" EXTERIOR DECK SCREWS PER BOARD. FLASH THE TOP OF MULTI-PLY JOISTS AND BEAMS.
13. BEARING WALL ABOVE; BLOCK BETWEEN JOISTS, SIM 11/S210
14. ALIGN DECK JOIST AND INTERIOR JOIST; PROVIDE DTT2Z AT EACH JOIST AND FASTEN WITH THREADED ROD + NUTS; REFER TO IRC FIGURE R507.9.2(1). WHERE FRAMING MEMBERS ARE PARALLEL TO RIM BOARD, PROVIDE FULL DEPTH BLOCKING BETWEEN RIM AND FIRST JOIST AND ATTACH DTT2Z TO BLOCKING.



CONCRETE STRIP FOOTING SCHEDULE

TYPE MARK	WIDTH	LENGTH	THICKNESS
SF16	1' - 6"	<varies>	11 1/4"
SF18	1' - 6"	<varies>	11 1/4"
SF20	1' - 8"	<varies>	11 1/4"
SF24	2' - 0"	<varies>	11 1/4"
SF30	2' - 6"	<varies>	11 1/4"

FOUNDATION NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. FOOTINGS TO BEAR ON APPROPRIATE SUBGRADE PER GEOTECH REPORT.
4. BACKFILL MAY BE PLACED TO AN ELEVATION EQUIVALENT TO CURRENT GRADE ON OPPOSITE SIDE OF WALL NO SOONER THAN 7 DAYS AFTER CONCRETE IS POURED.
5. SLAB ON GRADE, FLOOR FRAMING, AND SHEATHING TO BE INSTALLED PRIOR TO FULL FOUNDATION BACKFILLING AT BASEMENT WALLS.
6. TYPICAL CONCRETE SLAB ON GRADE IS 4" THICK WITH SUBGRADE PER GEOTECH REPORT. REINFORCE WITH #4 @ 16" EACH WAY, CENTERED IN SLAB DEPTH. PROVIDE SAW CUT OR TOOLED 1/8" CONTROL JOINTS AT 12'-0" MAX EACH WAY. AT ALL RE-ENTRANT CORNERS, PROVIDE (3) #4 x 5'-0" DIAGONAL BARS, CENTERED IN SLAB DEPTH.
7. FLOAT INTERIOR PARTITION WALLS BEARING ON SLAB ON GRADE W/ MIN 1 1/2" GAP. REF DETAILS AND GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
8. IF FOUNDATION IS TO SIT THROUGH WINTER WITHOUT COMPLETE FRAMING, INSULATION, AND FROST PROTECTION, CONTRACTOR TO PROVIDE ADEQUATE BACKFILL, FRAMING, AND FLOOR SHEATHING TO PROTECT FOUNDATION BEARING SOILS FROM MOISTURE ACCUMULATION AND FROST HEAVE.
9. [BEAM POCKET PLACEHOLDER NOTE]

MAIN LEVEL FLOOR FRAMING AND GARAGE FOUNDATION PLAN 3
3/16" = 1'-0"

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

COLORADO LICENSED PROFESSIONAL ENGINEER 0058345

REVIEWED FOR CODE COMPLIANCE 01/08/2025

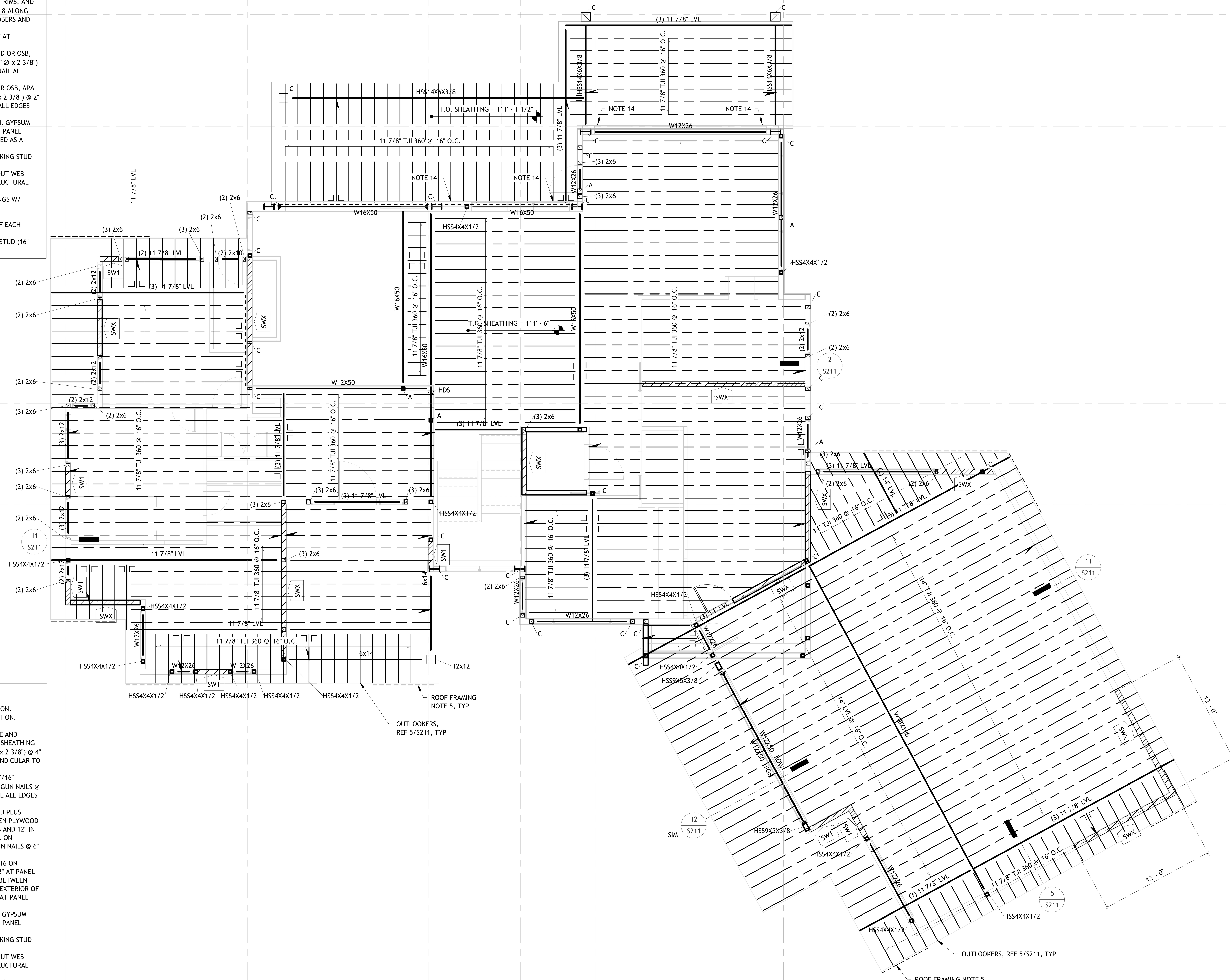
MAIN LEVEL FLOOR FRAMING AND GARAGE FOUNDATION PLAN

DATE	DESCRIPTION
10.28.2024	PERMIT SET

S102

ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
4. ROOF CONSTRUCTION (UNO): 5/8" NOMINAL APA 40/20 RATED SHEATHING OVER PE TRUSSES/RAFTERS/I-JOISTS PER PLAN. FASTEN SHEATHING TO TRUSSES/RAFTERS, RIMS, AND LEDGERS WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" ALONG PANEL EDGES AND @ 8"ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
5. TYPICAL TRUSS/RAFTER/I-JOIST TIE TOWN (UNO): SIMPSON H2.5T OR EQUIVALENT AT BEARING, AND (2) CLIPS PER MEMBER WITHIN 8'-0" OF CORNERS.
6. EXTERIOR WALLS (UNO): 2x STUDS @ 16" O.C. SHEATHED WITH 7/16" CDX PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. NAIL WALL SHEATHING WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS NOTED AS (SW1) WHERE USED AS A SHEAR WALL.
7. SHEAR WALLS (SW2): 2x STUDS @ 16" O.C. SHEATHED WITH 7/16" CDX PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. NAIL WALL SHEATHING WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 2" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
8. INTERIOR BEARING WALLS (UNO): 2x6 STUDS @ 16" O.C., SHEATHED WITH 1/2" MIN. GYPSUM WALLBOARD ON EACH FACE. ATTACH W/ NO.6 x 1 1/4" DRYWALL SCREWS @ 8" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL NOTED AS (SW3) WHERE USED AS A SHEAR WALL.
9. WALL OPENING (UNO): (2) 2x8 HEADER W/ MINIMUM (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END. HEADERS ARE DROPPED UNO.
10. WHERE WOOD BEAMS/JOISTS ARE FACE MOUNTED TO FLUSH STEEL BEAMS, PACK OUT WEB WITH 2x AND PLYWOOD/OSB TIGHT TO TOP AND BOTTOM FLANGES. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
11. INSTALL LOOSE LINTELS PER GENERAL NOTES AND TYPICAL DETAILS AT ALL OPENINGS W/ VENEER ABOVE.
12. 2x12 STRUCTURAL FASCIA, TYP; MIN. BACKSPAN 2x CANTILEVER LENGTH AND MIN. CONNECTION TO (4) OUTLOOKERS W/ (4) 0.131" x 3 1/4" NAILS INTO END GRAIN OF EACH OUTLOOKER
13. 2x12 LEDGER; FASTEN TO STUD WALL WITH (4) 1/4" x 3 1/2" SDS SCREWS @ EACH STUD (16" O.C. MAX SPACING)



FLOOR FRAMING NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
4. FLOOR CONSTRUCTION (UNO): 3/4" STURD-I-FLOOR APA RATED @ 24" O.C. TONGUE AND GROOVE SHEATHING, OVER WOOD I-JOISTS W/ 1 1/4" LSL RIM. GLUE AND FASTEN SHEATHING TO EDGE JOISTS, RIM, FLUSH BEAMS, AND LEDGERS WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" O.C. AND @ 8" O.C. ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
5. EXTERIOR WALLS (UNO): 2x STUDS @ 16" O.C. SHEATHED WITH 1 1/2" ZIP PANEL (7/16" PLYWOOD PLUS 1" INSULATION). NAIL WALL SHEATHING WITH (0.131" ∅ x 3 1/2") GUN NAILS @ 4" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
6. SHEAR WALLS (SW1): 2x STUDS @ 16" O.C. WITH 1 1/2" ZIP PANEL LAYER (PLYWOOD PLUS INSULATION) OVER 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 3" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. LOCATE ZIP PANEL ON EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
7. SHEAR WALLS (SW2): 2x STUDS @ 16" O.C. WITH 7/16" PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. FASTEN PLYWOOD TO STUDS WITH 0.131" x 2 3/8" GUN NAILS @ 2" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. WHERE REQUIRED (AT EXTERIOR WALLS), ATTACH 1 1/2" ZIP PANEL OVER EXTERIOR OF 7/16" OSB LAYER AND FASTEN ZIP TO STUDS WITH 0.131" x 3 1/2" GUN NAILS @ 6" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
8. INTERIOR BEARING WALLS (UNO): 2x STUDS @ 16" O.C., SHEATHED WITH 1/2" MIN. GYPSUM WALLBOARD ON EACH FACE. ATTACH W/ NO.6 x 1 1/4" DRYWALL SCREWS @ 8" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL.
9. WALL OPENING (UNO): (2) 2x8 HEADER W/ MINIMUM (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END. HEADERS ARE DROPPED UNO.
10. WHERE WOOD BEAMS/JOISTS ARE FACE MOUNTED TO FLUSH STEEL BEAMS, PACK OUT WEB WITH 2x AND PLYWOOD/OSB TIGHT TO TOP AND BOTTOM FLANGES. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
11. INSTALL LOOSE LINTELS PER GENERAL NOTES AND TYPICAL DETAILS AT ALL OPENINGS W/ VENEER ABOVE.
12. TYPICAL DECK CONSTRUCTION (UNO): 2x EXTERIOR DECKING OVER WOOD JOISTS PER PLAN. LAY DECKING PERPENDICULAR TO FRAMING AND FASTEN DECKING TO JOIST W/ (2) #8 x 3" EXTERIOR DECK SCREWS PER BOARD. FLASH THE TOP OF MULTI-PLY JOISTS AND BEAMS.
13. BEARING WALL ABOVE; BLOCK BETWEEN JOISTS, SIM 11/S210
14. ALIGN DECK JOIST AND INTERIOR JOIST; PROVIDE DTT2Z AT EACH JOIST AND FASTEN WITH THREADED ROD + NUTS; REFER TO IRC FIGURE R507.9.2(1). WHERE FRAMING MEMBERS ARE PARALLEL TO RIM BOARD, PROVIDE FULL DEPTH BLOCKING BETWEEN RIM AND FIRST JOIST AND ATTACH DTT2Z TO BLOCKING.

UPPER LEVEL FLOOR AND LOW ROOF FRAMING PLAN 3
3/16" = 1'-0"

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

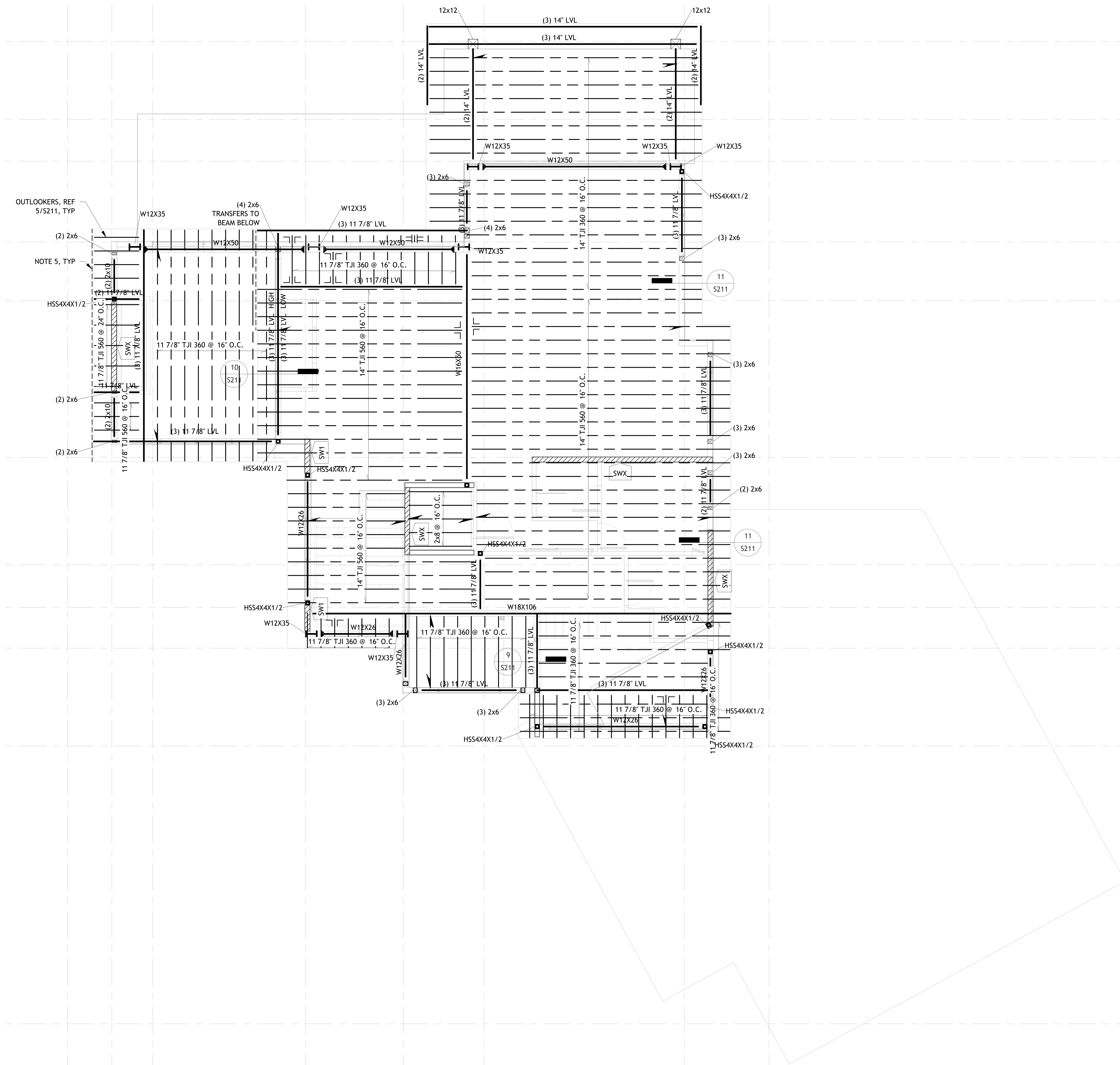
COLORADO LICENSED PROFESSIONAL ENGINEER

REVIEWED FOR CODE COMPLIANCE 01/08/2025

UPPER LEVEL FLOOR AND LOW ROOF FRAMING PLAN

#	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

S103



ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND INFORMATION.
3. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
4. ROOF CONSTRUCTION (UNO): 5/8" NOMINAL APA 40/20 RATED SHEATHING OVER PE TRUSSES/RAFTERS/I-JOISTS PER PLAN. FASTEN SHEATHING TO TRUSSES/RAFTERS, RIMS, AND LEDGERS WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" ALONG PANEL EDGES AND @ 8"ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
5. TYPICAL TRUSS/RAFTER/I-JOIST TIE TOWN (UNO): SIMPSON H2.5T OR EQUIVALENT AT BEARING, AND (2) CLIPS PER MEMBER WITHIN 8'-0" OF CORNERS.
6. EXTERIOR WALLS (UNO): 2x STUDS @ 16" O.C. SHEATHED WITH 7/16" CDX PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. NAIL WALL SHEATHING WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 4" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS NOTED AS (SW1) WHERE USED AS A SHEAR WALL.
7. SHEAR WALLS (SW2): 2x STUDS @ 16" O.C. SHEATHED WITH 7/16" CDX PLYWOOD OR OSB, APA 24/16 ON EXTERIOR FACE. NAIL WALL SHEATHING WITH 8d GUN NAILS (0.113" ∅ x 2 3/8") @ 2" AT PANEL EDGES AND BOUNDARIES AND 12" IN FIELD OF PANEL. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
8. INTERIOR BEARING WALLS (UNO): 2x6 STUDS @ 16" O.C., SHEATHED WITH 1/2" MIN. GYPSUM WALLBOARD ON EACH FACE. ATTACH W/ NO.6 x 1 1/4" DRYWALL SCREWS @ 8" AT PANEL EDGES AND BOUNDARIES AND @ 12" IN FIELD OF PANEL NOTED AS (SW3) WHERE USED AS A SHEAR WALL.
9. WALL OPENING (UNO): (2) 2x8 HEADER W/ MINIMUM (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END. HEADERS ARE DROPPED UNO.
10. WHERE WOOD BEAMS/JOISTS ARE FACE MOUNTED TO FLUSH STEEL BEAMS, PACK OUT WEB WITH 2x AND PLYWOOD/OSB TIGHT TO TOP AND BOTTOM FLANGES. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.
11. INSTALL LOOSE LINTELS PER GENERAL NOTES AND TYPICAL DETAILS AT ALL OPENINGS W/ VENEER ABOVE.
12. 2x12 STRUCTURAL FASCIA, TYP; MIN. BACKSPAN 2x CANTILEVER LENGTH AND MIN. CONNECTION TO (4) OUTLOOKERS W/ (4) 0.131" x 3 1/4" NAILS INTO END GRAIN OF EACH OUTLOOKER
13. 2x12 LEDGER; FASTEN TO STUD WALL WITH (4) 1/4" x 3 1/2" SDS SCREWS @ EACH STUD (16" O.C. MAX SPACING)

HIGH ROOF FRAMING PLAN 3
3/16" = 1'-0"

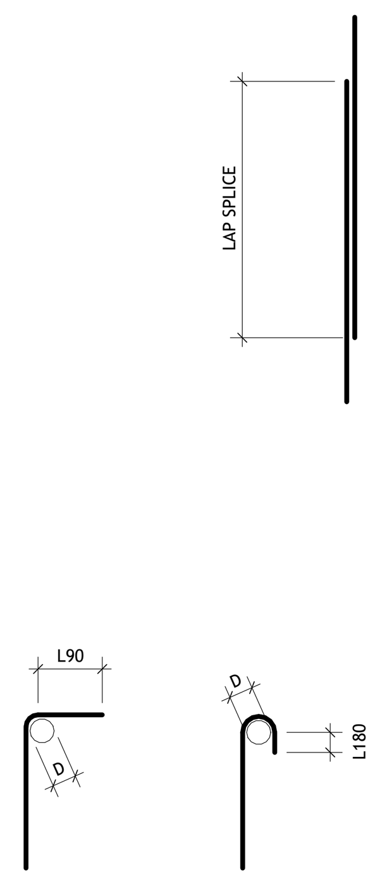
sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

REVIEWED FOR CODE COMPLIANCE
01/08/2025

HIGH ROOF FRAMING PLAN

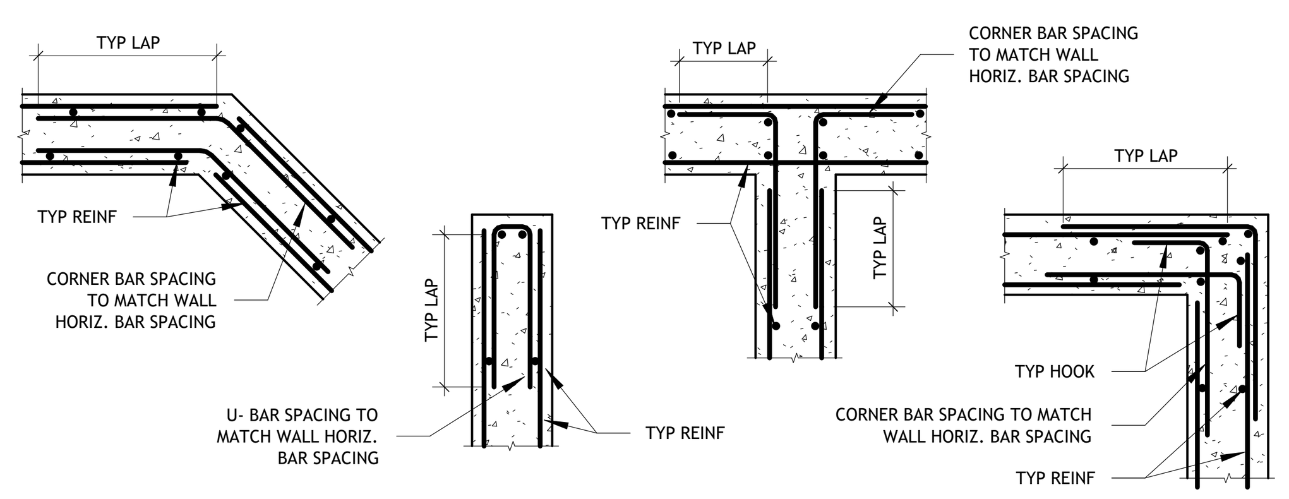
DATE	DESCRIPTION
10.28.2024	PERMIT SET



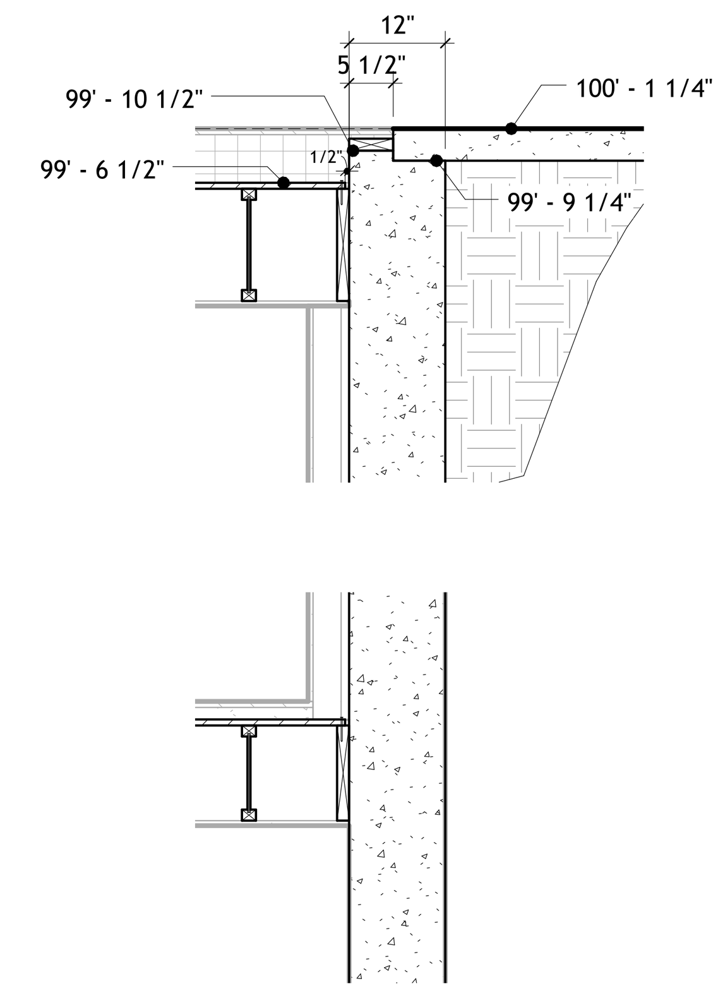
LAP SPLICE SCHEDULE	
BAR SIZE	LAP LENGTH
#3	19"
#4	25"
#5	31"
#6	37"
#7	54"
#8	62"

BEND & HOOK SCHEDULE			
BAR SIZE	D	L90	L180
#3	2-1/4"	6"	2-1/2"
#4	3"	8"	2-1/2"
#5	3-3/4"	10"	2-1/2"
#6	4-1/2"	12"	3"
#7	5-1/4"	14"	3-1/2"
#8	6"	16"	4"

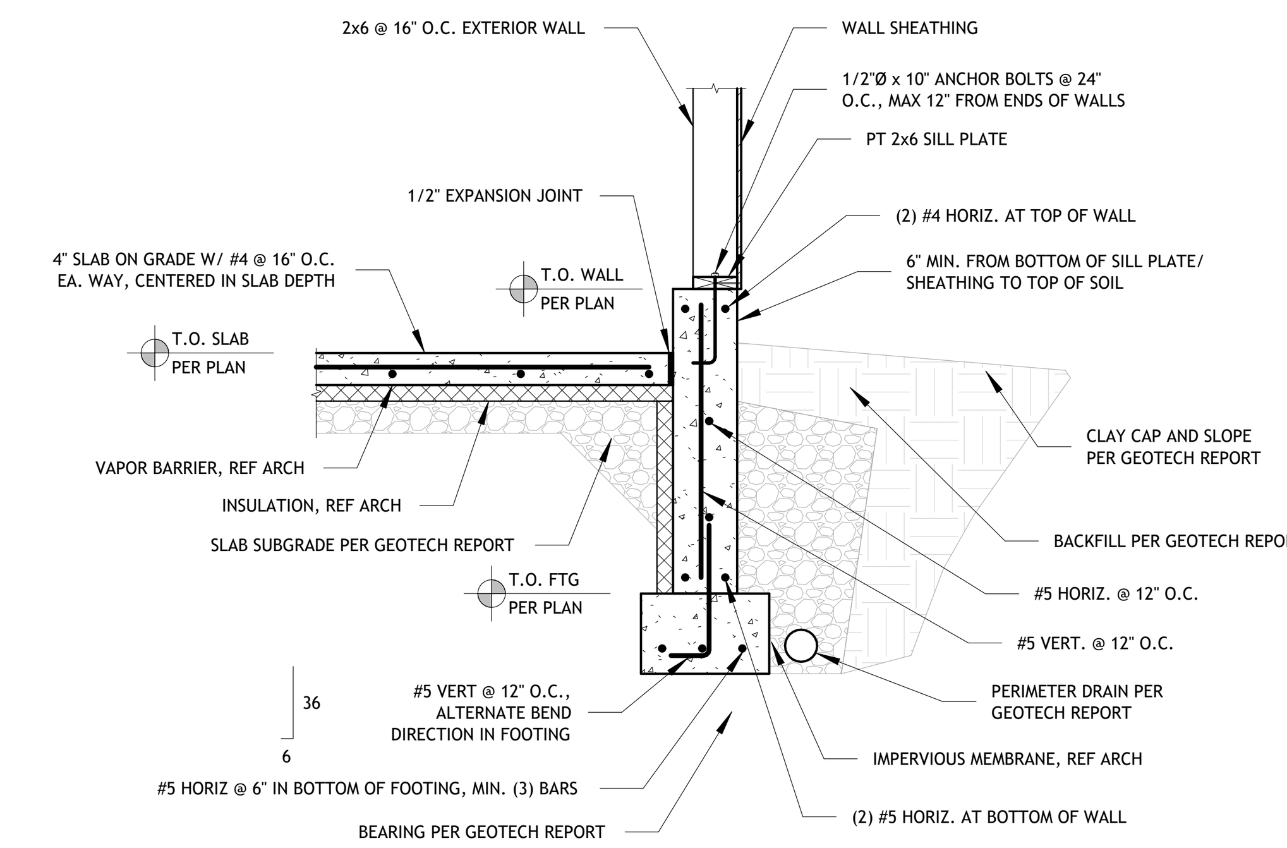
REBAR, LAPS, BENDS AND HOOKS
NOT TO SCALE
10



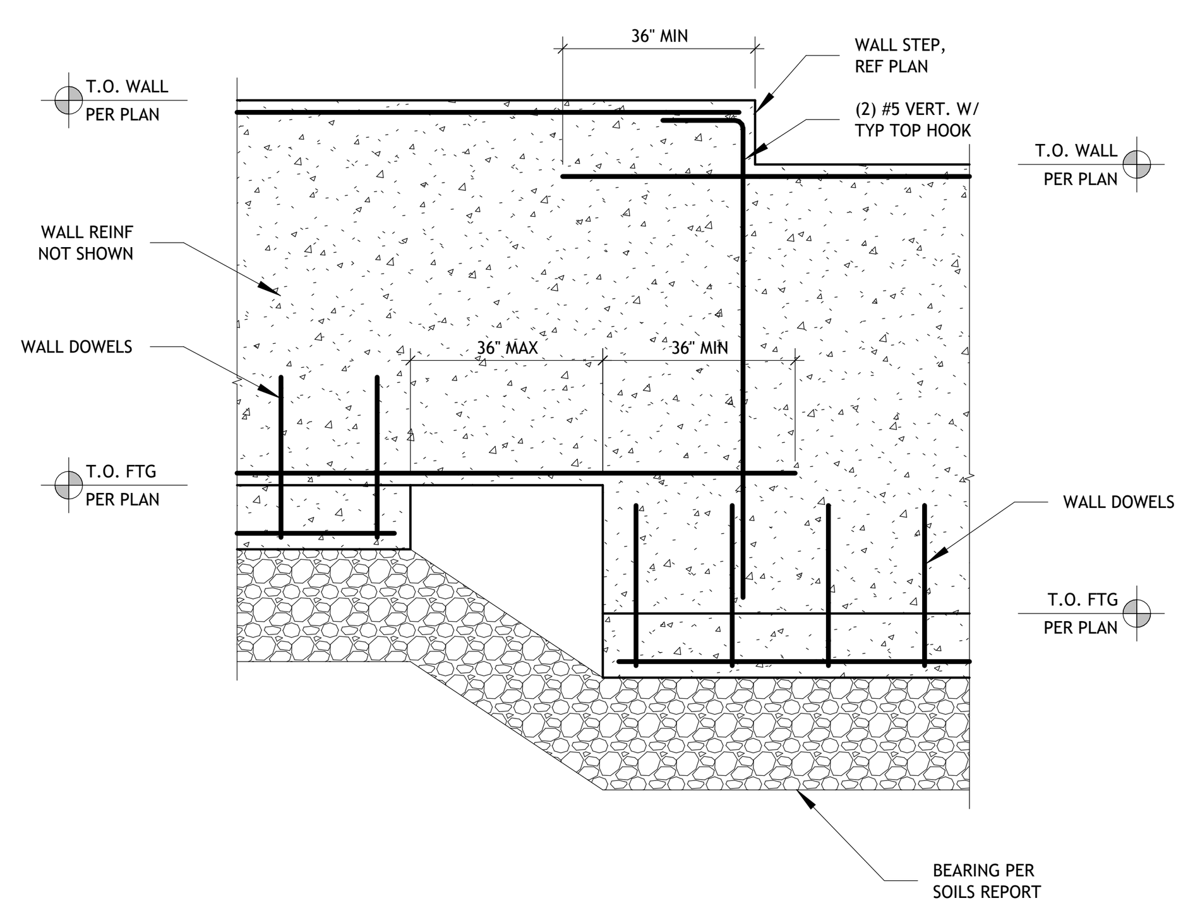
REINFORCING DETAILS AT WALL CORNERS
NOT TO SCALE
7



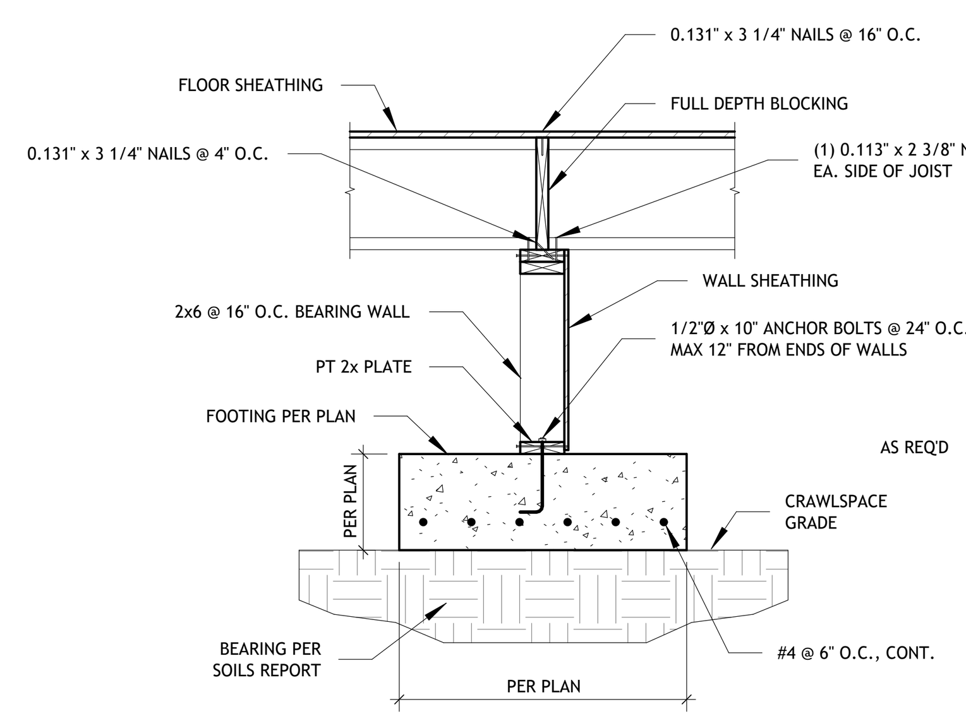
SLAB ON GRADE TO FRAMED DECK AT CONC WALL DETAIL
NOT TO SCALE
4



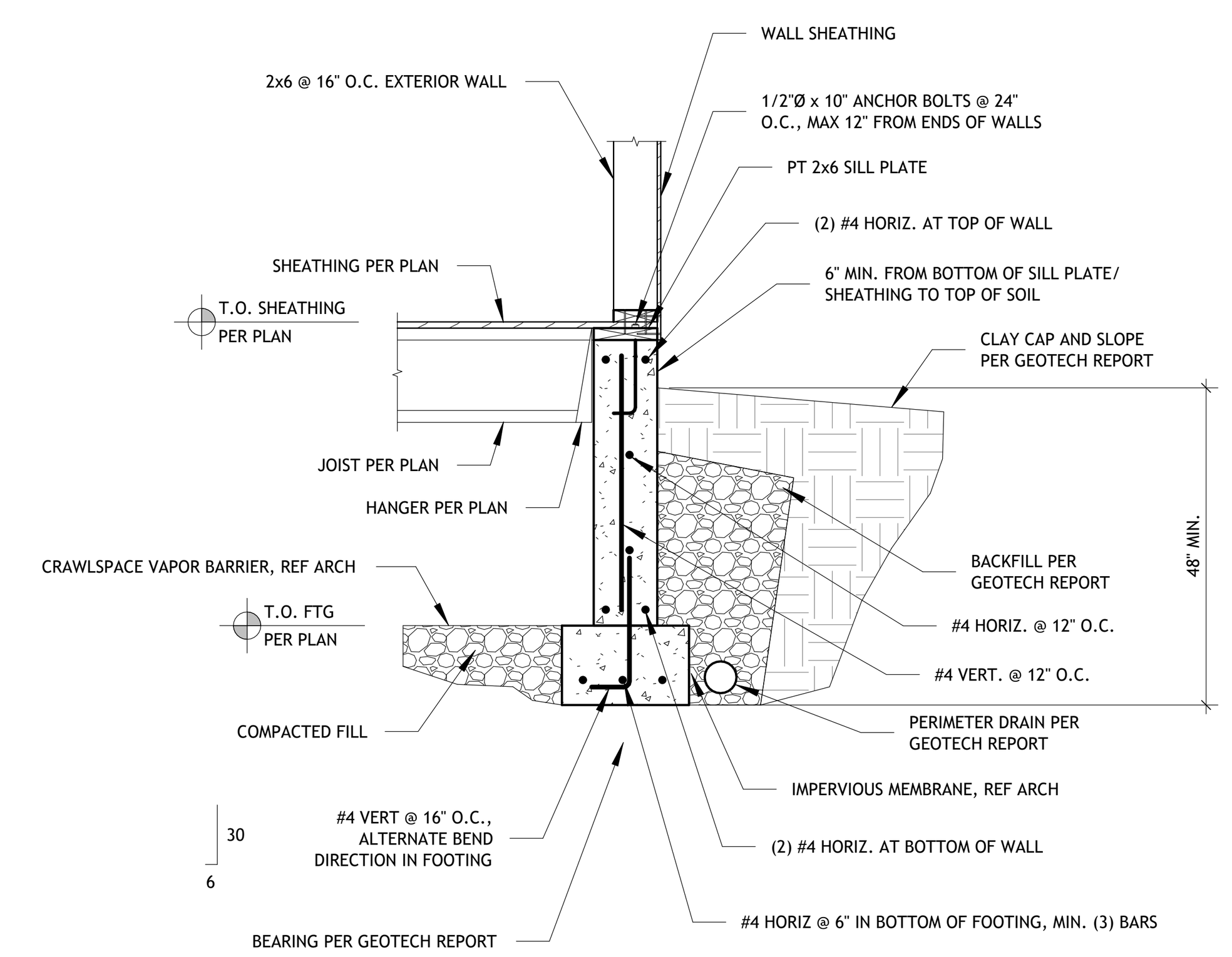
FOUNDATION WALL DETAIL
NOT TO SCALE
1



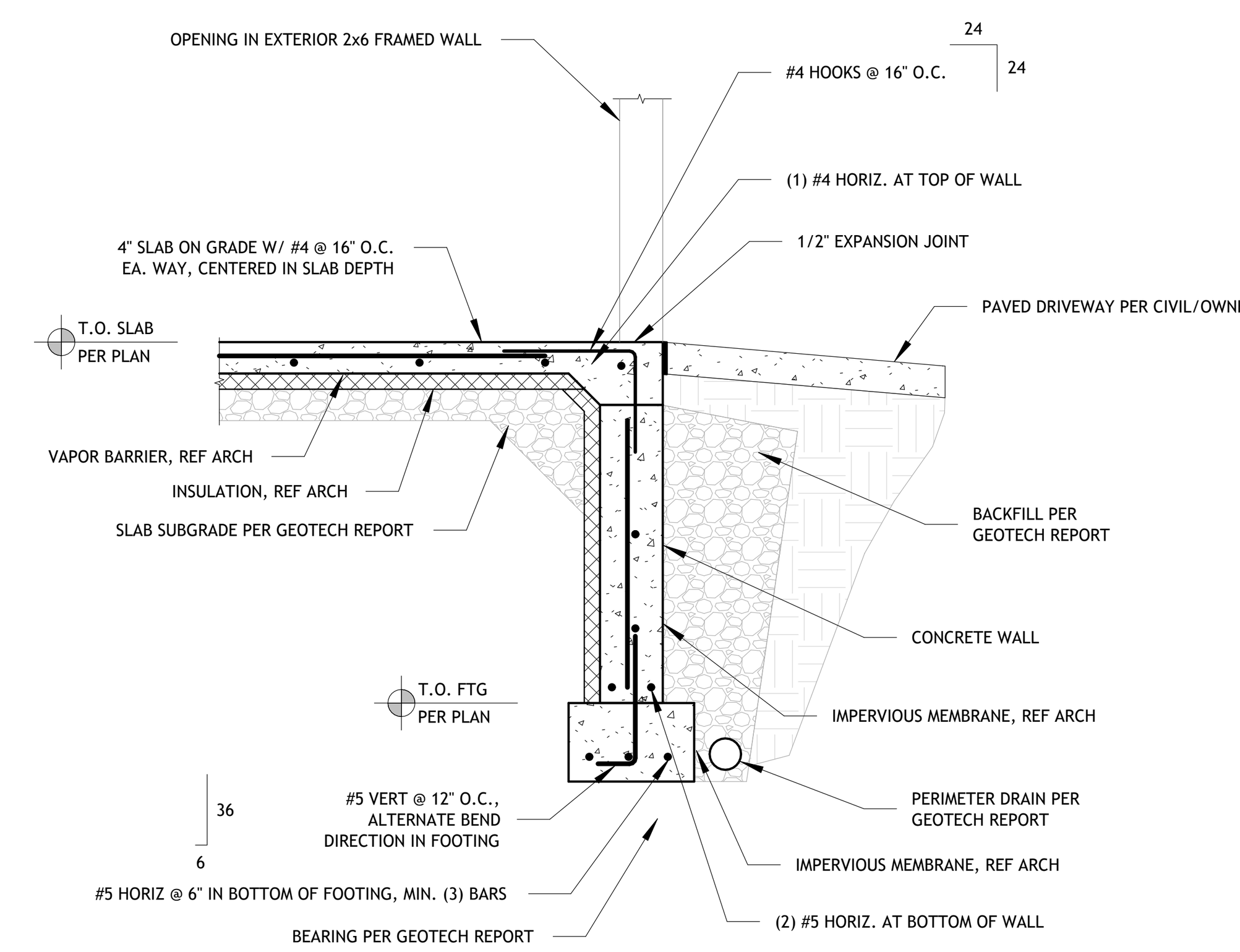
REINFORCING AT WALL STEPS
NOT TO SCALE
11



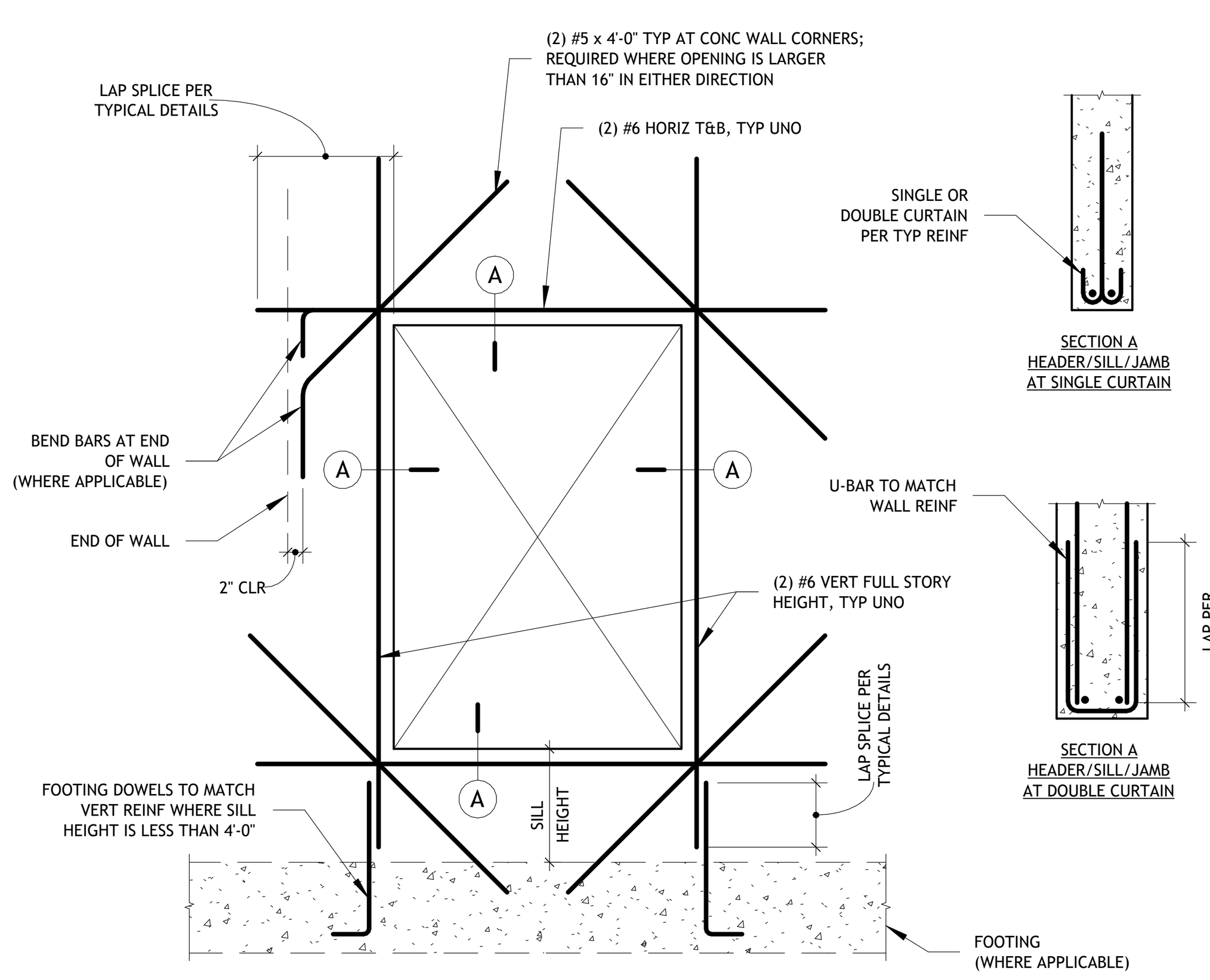
WOOD FRAMING DETAIL
NOT TO SCALE
8



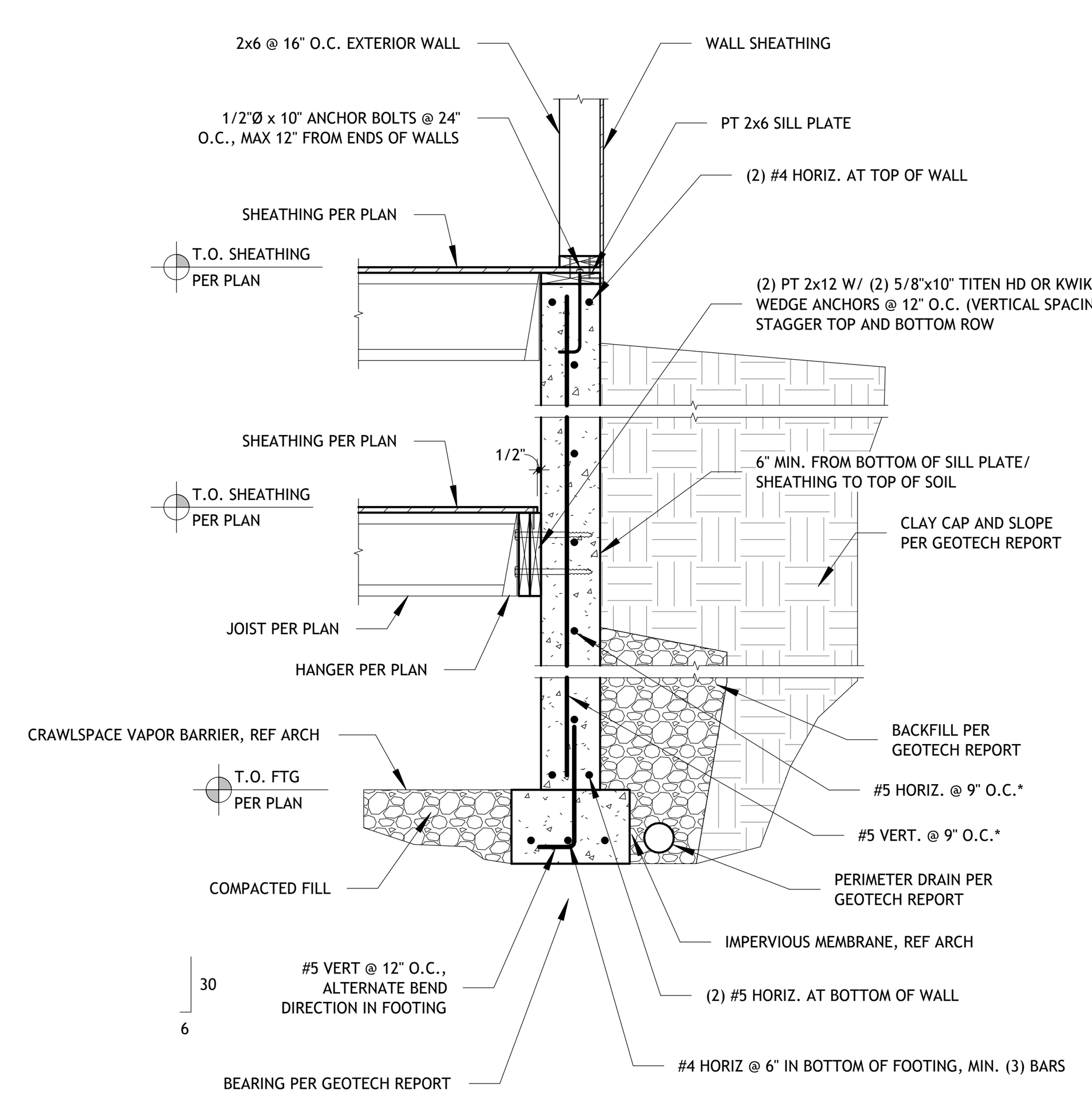
FOUNDATION WALL DETAIL
NOT TO SCALE
5



FOUNDATION WALL DETAIL
NOT TO SCALE
2



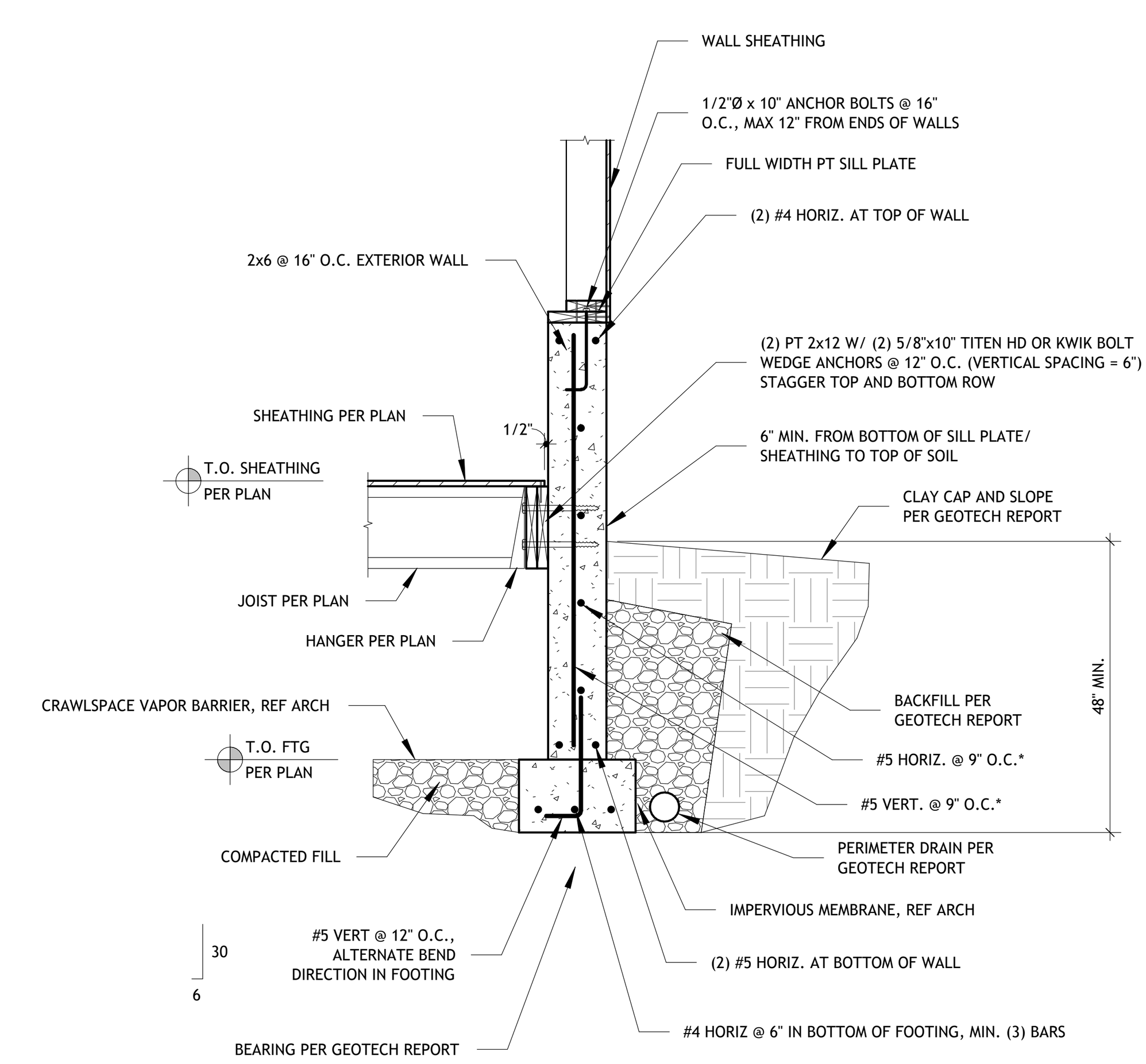
REINFORCING AT WALL OPENINGS
NOT TO SCALE
12



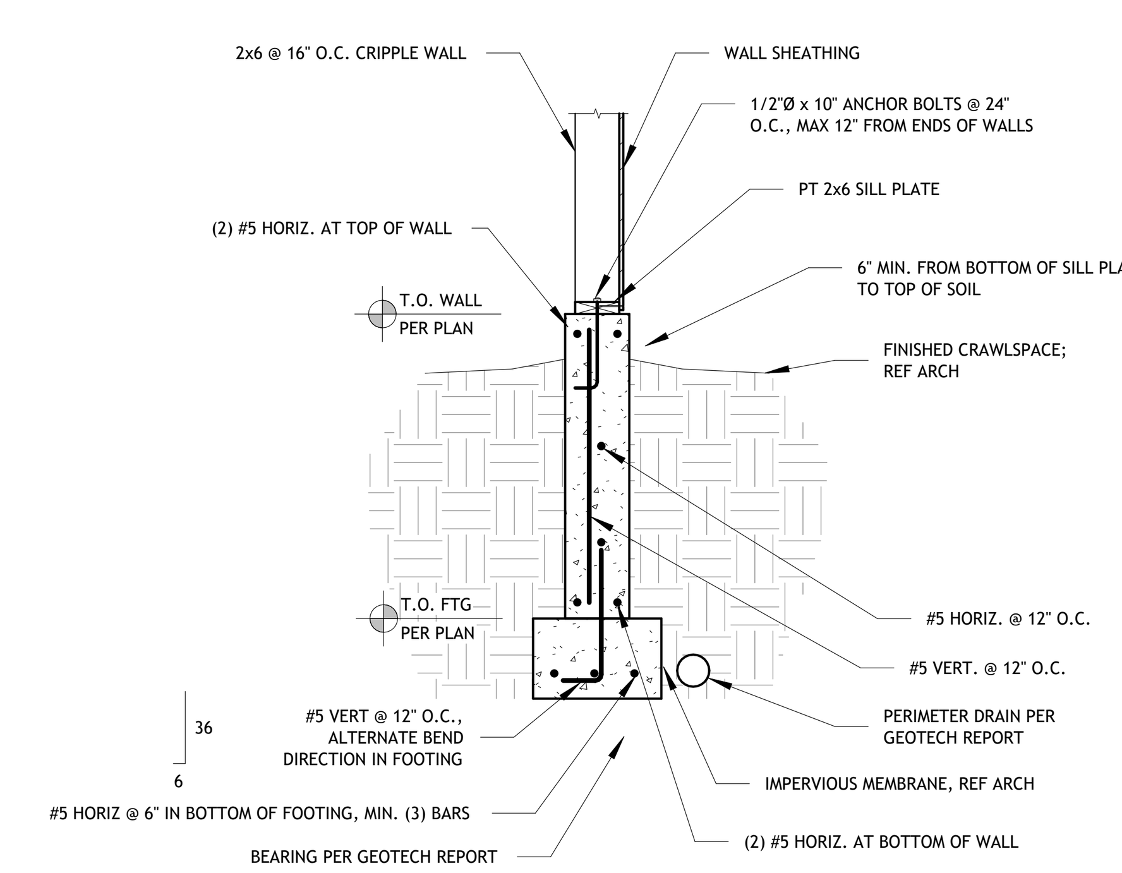
NOTE:

* WHERE THIS DETAIL APPLIES ALONG GRIDS A & D, CONTRACTOR MAY PROVIDE VERTICAL AND HORIZONTAL SPACING AT 12" O.C.

FOUNDATION WALL DETAIL
NOT TO SCALE
9



FOUNDATION WALL DETAIL
NOT TO SCALE
6



FOUNDATION WALL DETAIL
NOT TO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE

33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

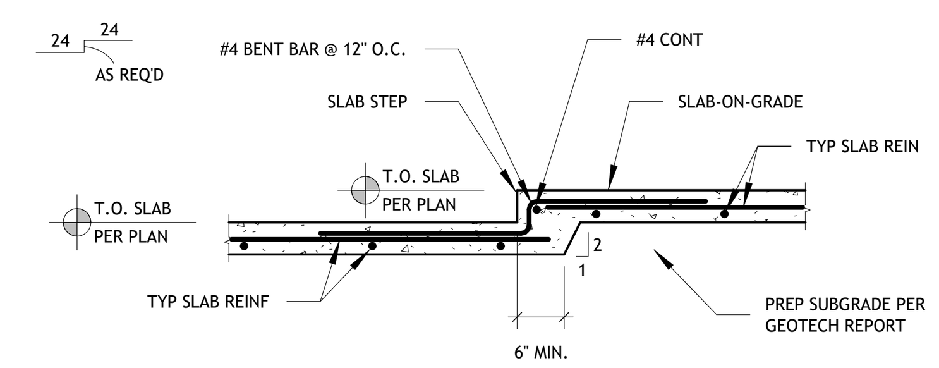
COLORADO LICENSED
SCOTT T. BEANS
0058345
PROFESSIONAL ENGINEER

REVIEWED FOR CODE COMPLIANCE
01/08/2025

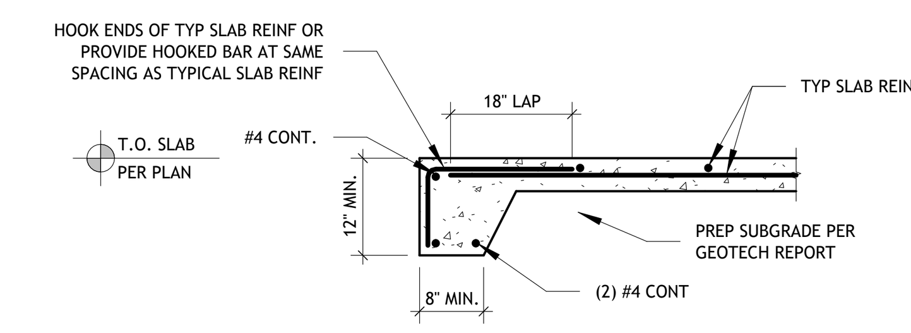
STRUCTURAL DETAILS - CONCRETE

△	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

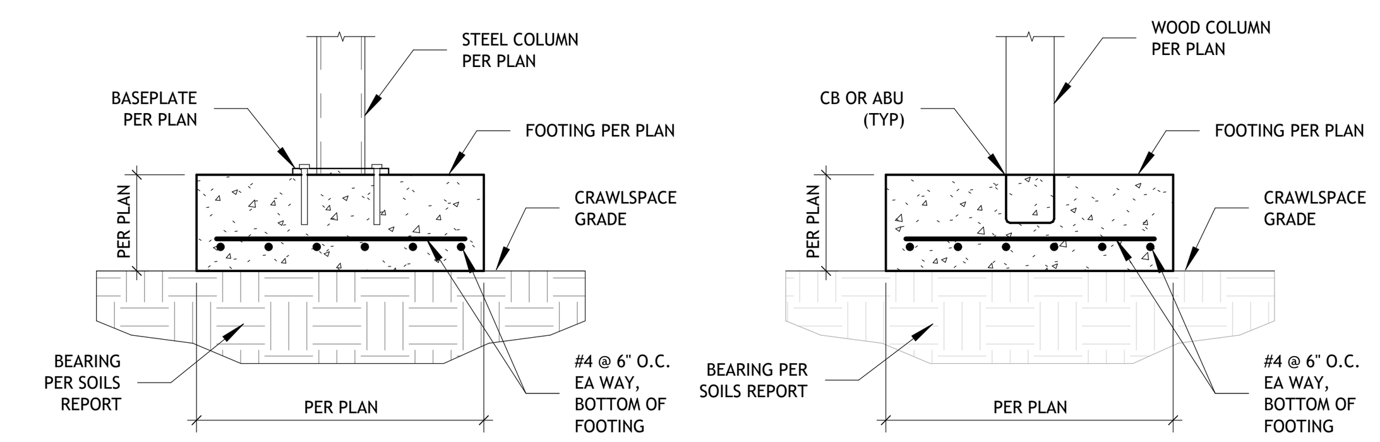
S200



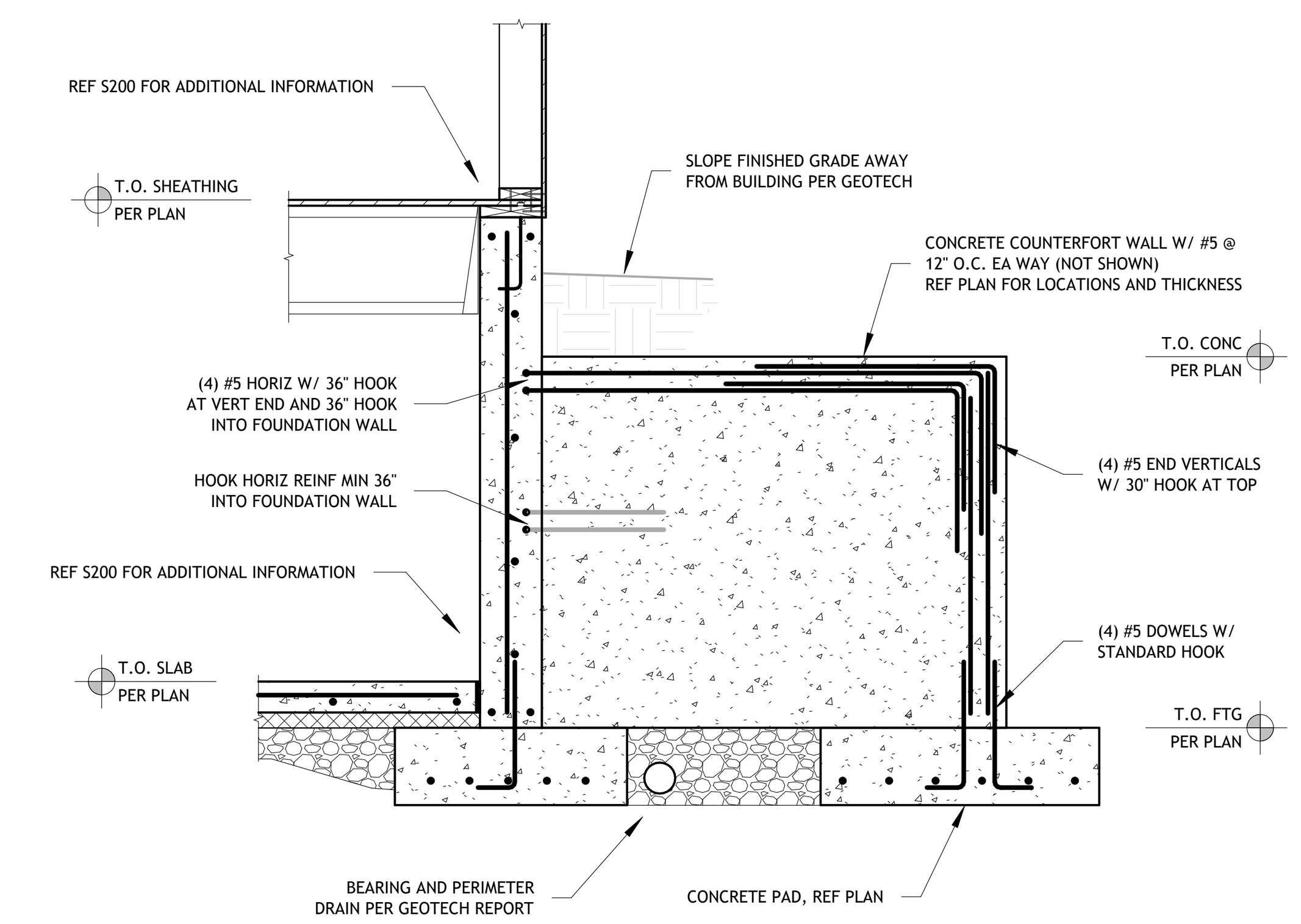
CONCRETE SLAB STEP DETAIL
NOT TO SCALE
4



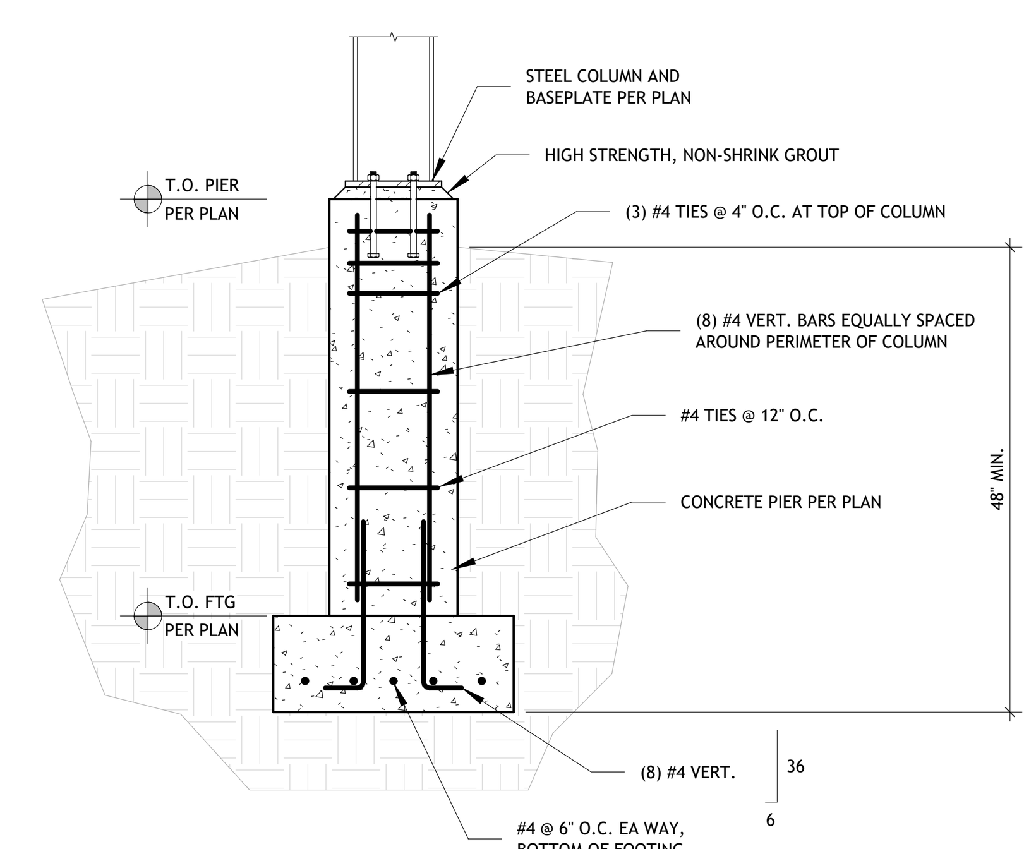
CONCRETE SLAB EDGE TURNDOWN DETAIL
NOT TO SCALE
1



CONCRETE FOOTING DETAILS
NOT TO SCALE
5



COUNTERFORT DETAIL
NOT TO SCALE
2



CONCRETE PIER DETAIL
NOT TO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

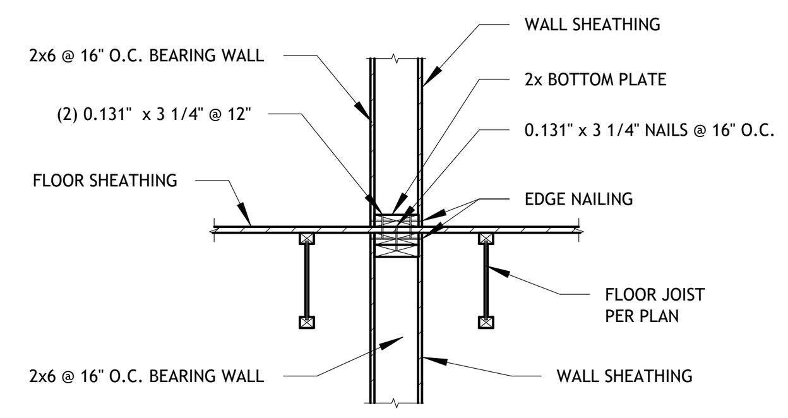
WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

REVIEWED
FOR
CODE
COMPLIANCE
01/08/2025

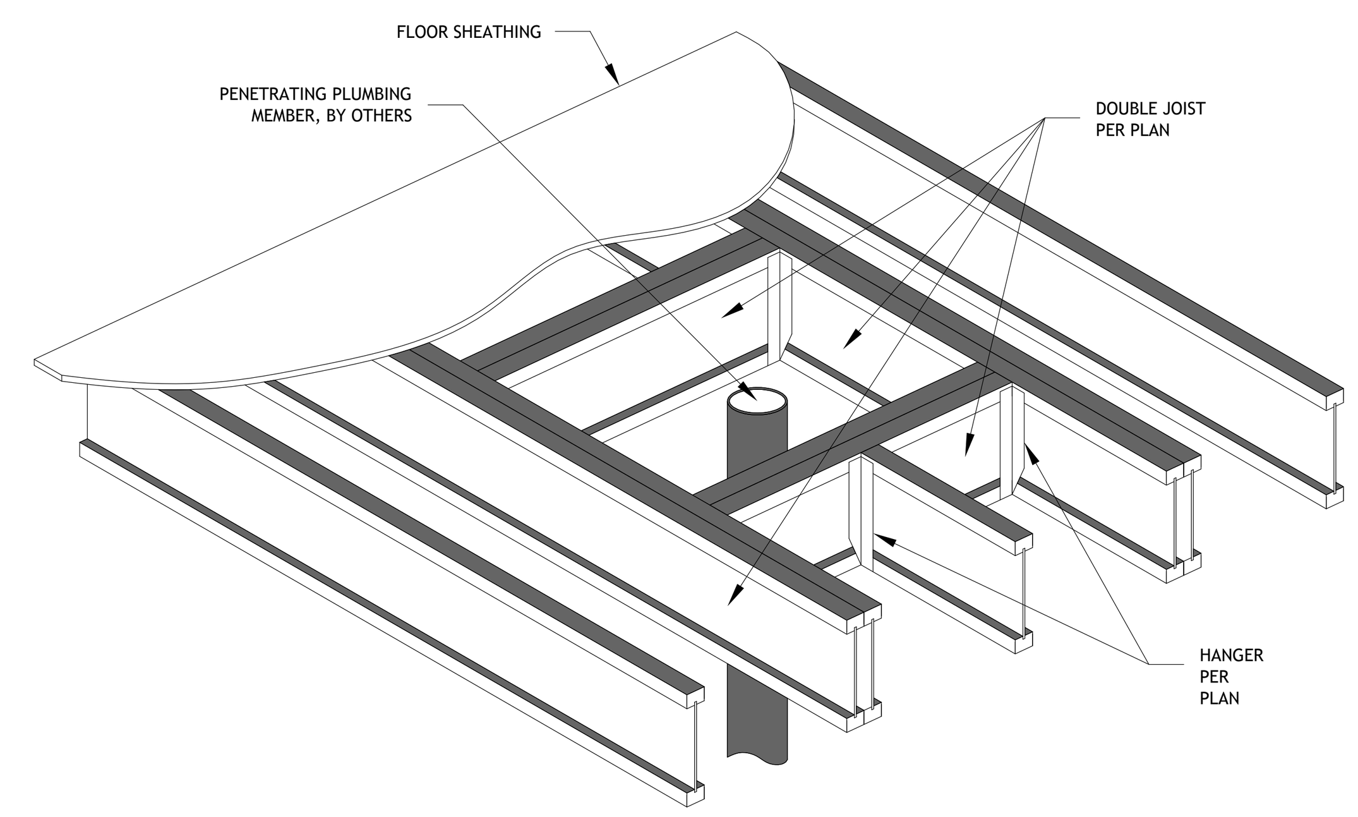
STRUCTURAL DETAILS - CONCRETE

△	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

S201

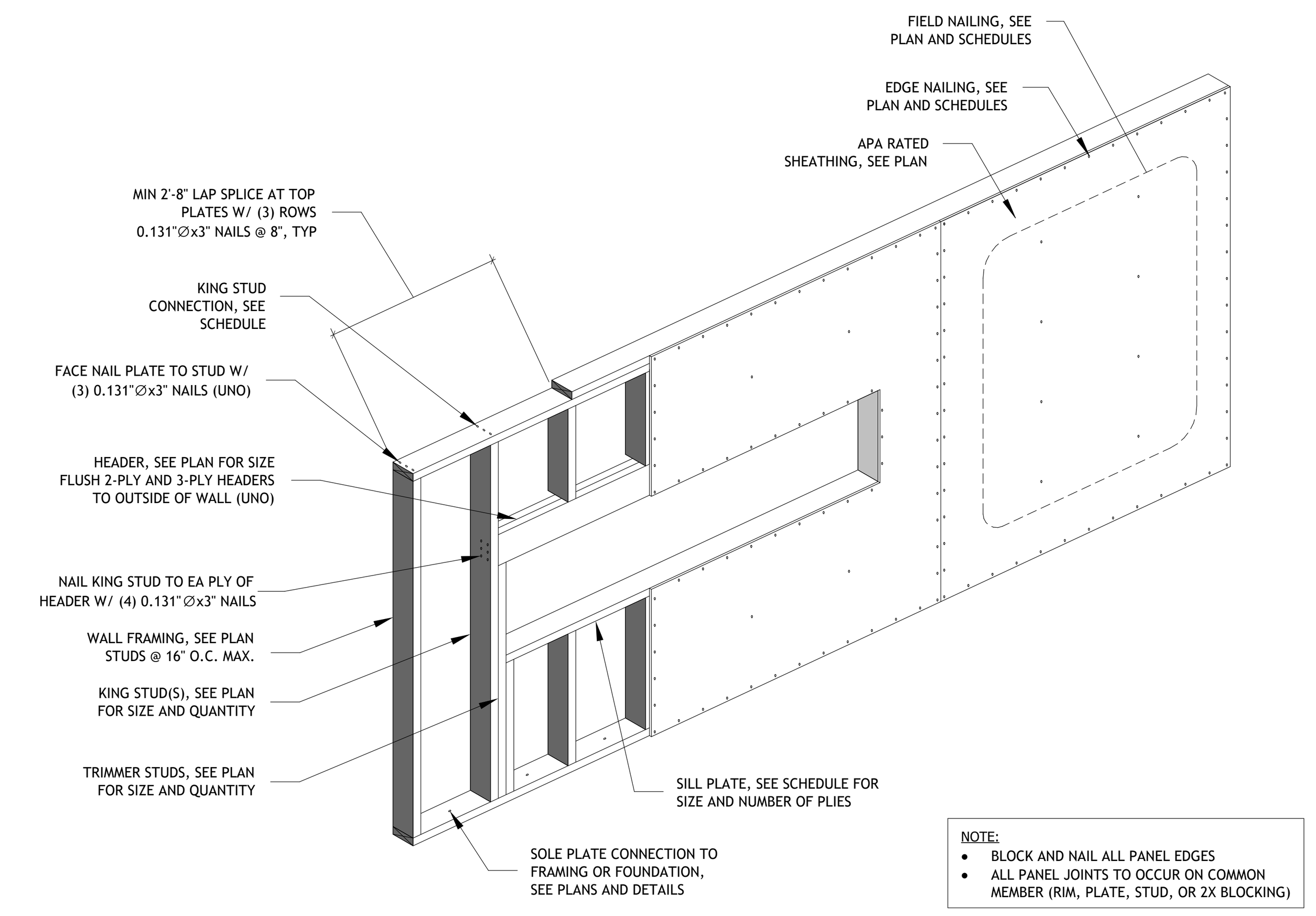


WOOD FRAMING DETAIL
NOT TO SCALE
10



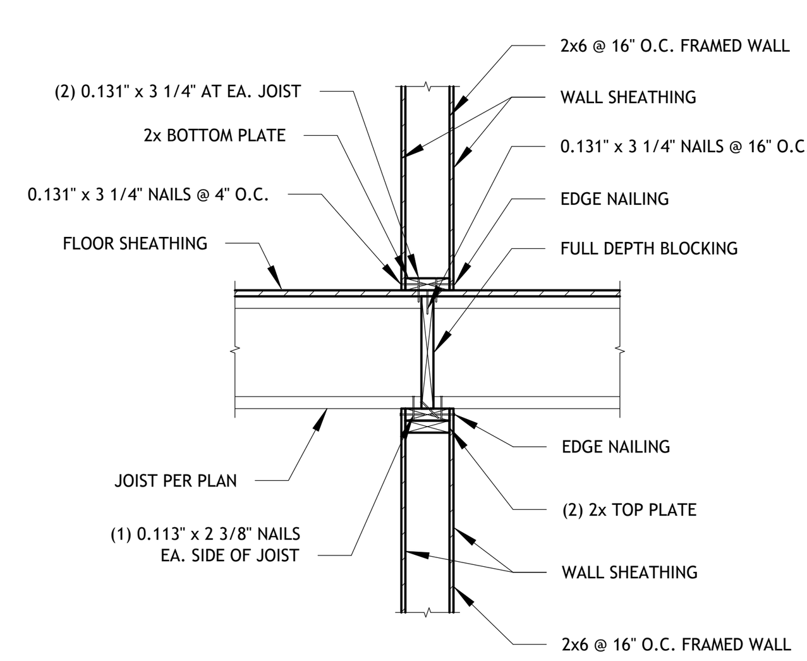
WOOD FRAMING DETAIL
NOT TO SCALE
7

WOOD WALL OPENING SCHEDULE				
OPENING WIDTH	KING STUDS (UNO)		WINDOW SILL (UNO)	
	FRAMING	END CONNECTION	FRAMING	END CONNECTION
≤1'-6"	SEE PLAN	(3) 12d GUN NAILS	(1) 2x6	(3) 12d GUN NAILS
≤4'-5"	SEE PLAN	(3) 12d GUN NAILS PER STUD	(2) 2x6	(3) 12d GUN NAILS PER PLATE
≤7'-5"	SEE PLAN	(3) 12d GUN NAILS PER STUD	(3) 2x6	(3) 12d GUN NAILS PER PLATE
≤10'-3"	SEE PLAN	(3) 12d GUN NAILS PER STUD	(4) 2x6	(3) 12d GUN NAILS PER PLATE

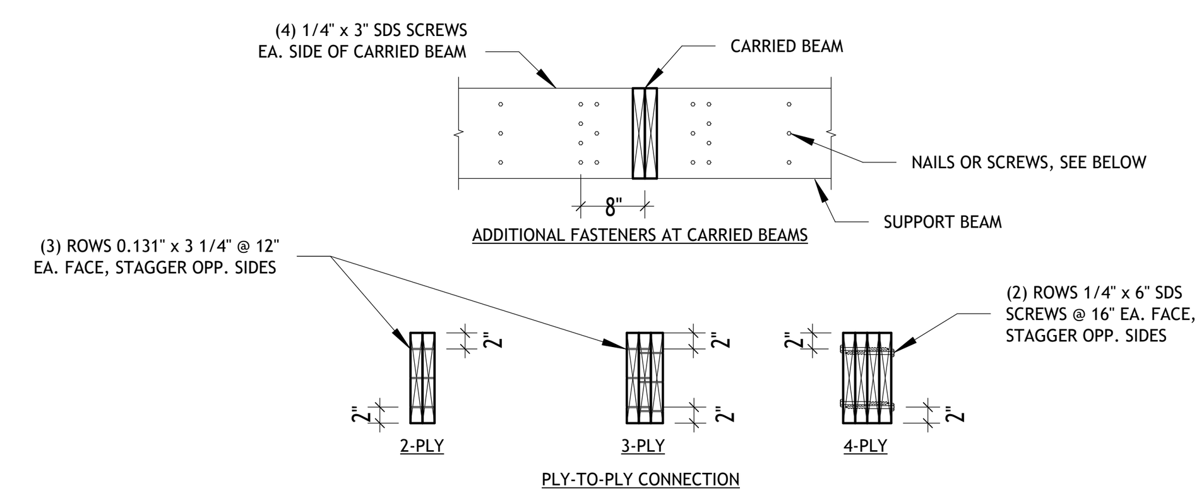


NOTE:
- BLOCK AND NAIL ALL PANEL EDGES
- ALL PANEL JOINTS TO OCCUR ON COMMON MEMBER (RIM, PLATE, STUD, OR 2X BLOCKING)

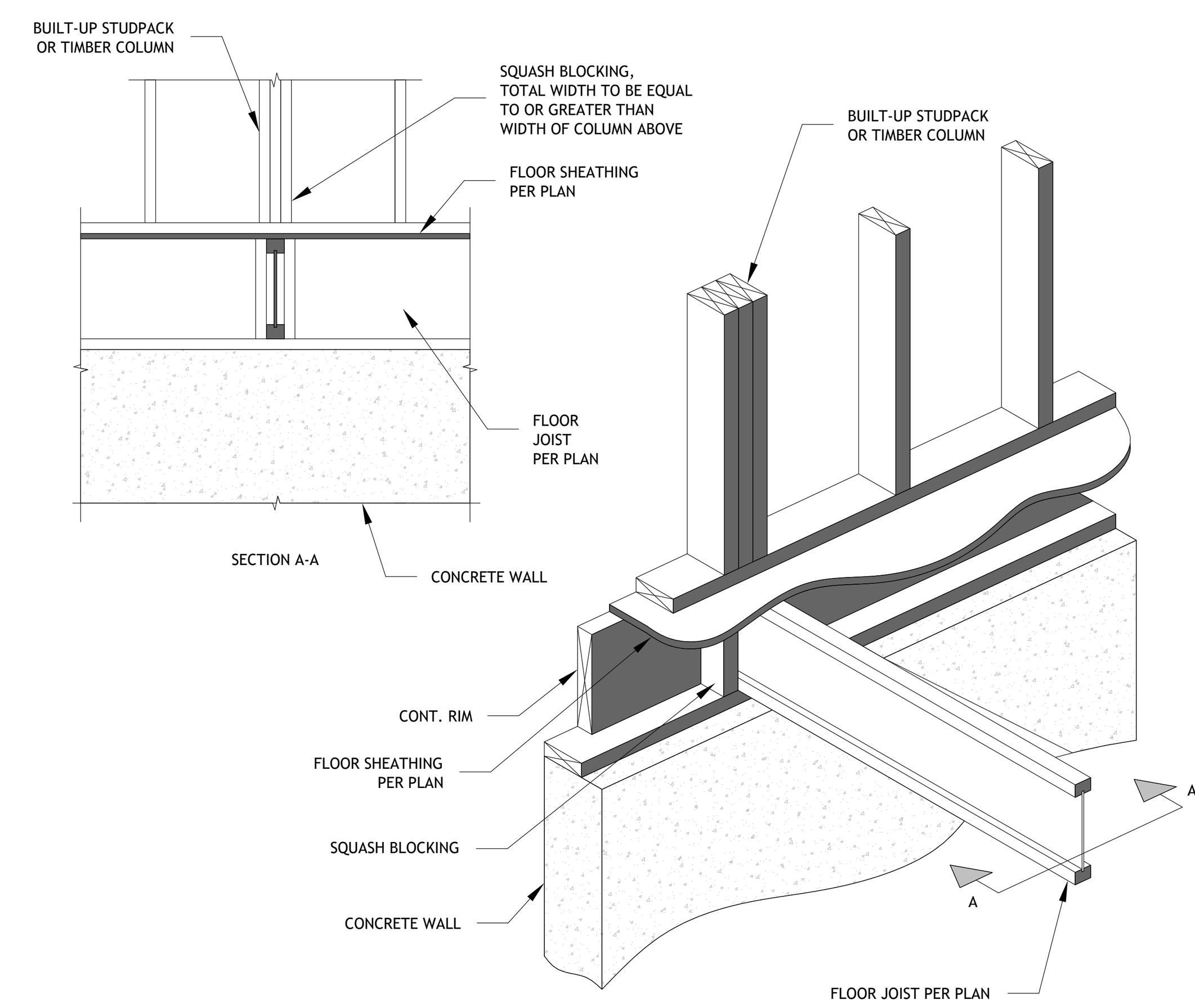
TYPICAL WALL FRAMING
NOT TO SCALE
1



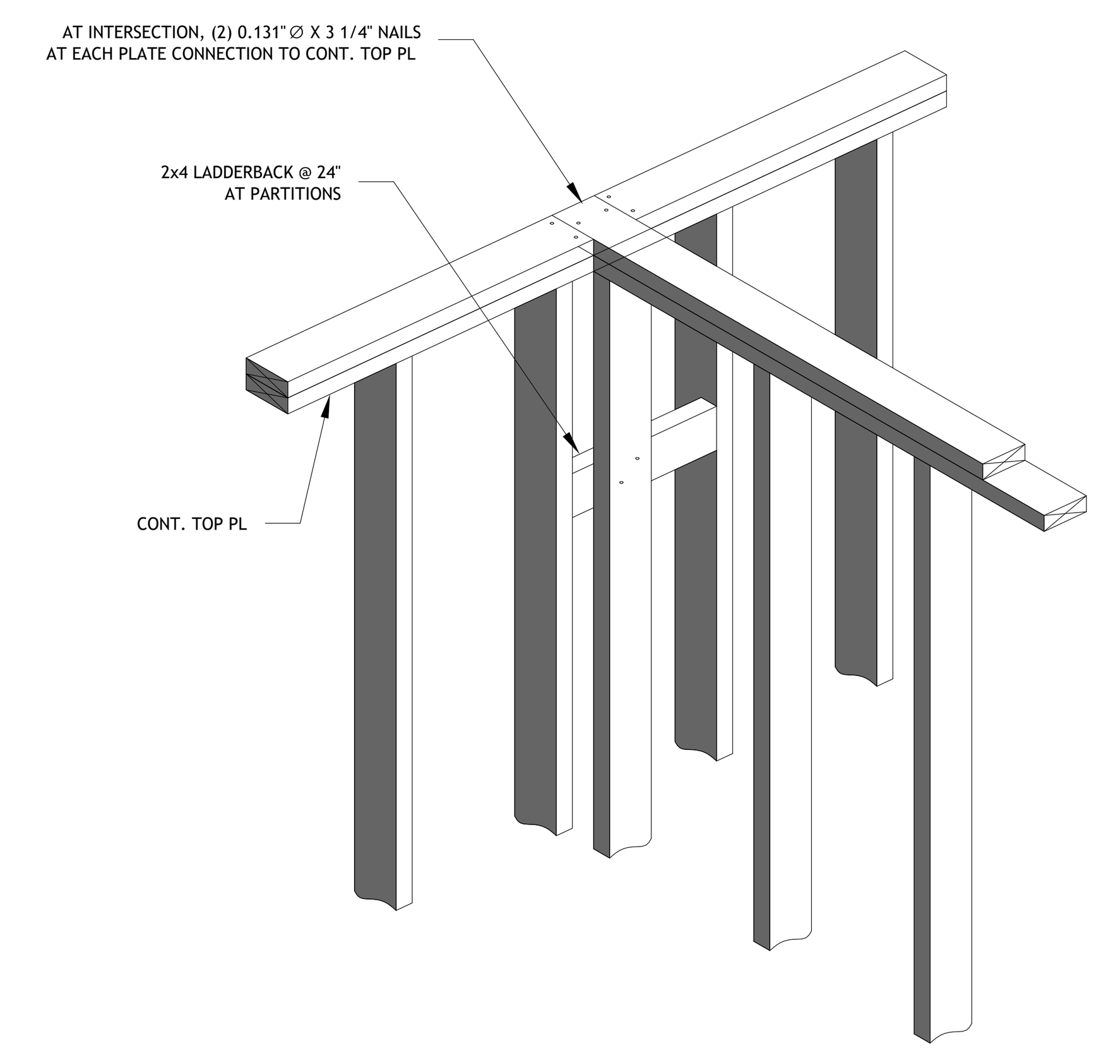
WOOD FRAMING DETAIL
NOT TO SCALE
11



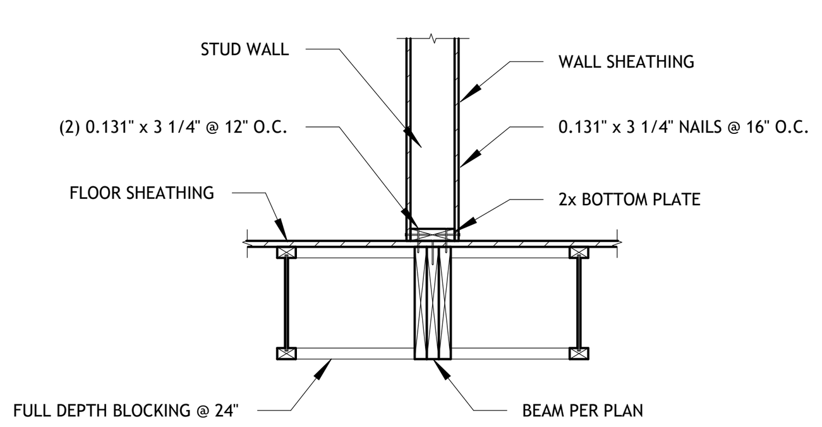
MULTI-PLY WOOD MEMBER DETAIL
NOT TO SCALE
8



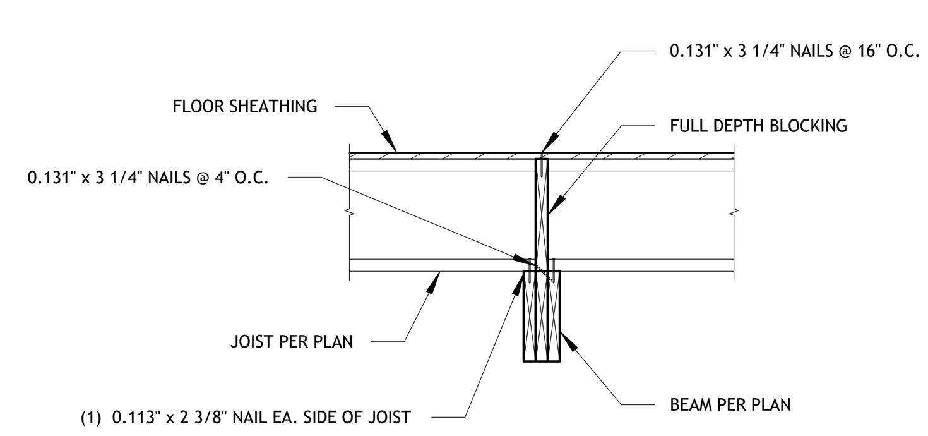
WOOD FRAMING DETAIL
NOT TO SCALE
5



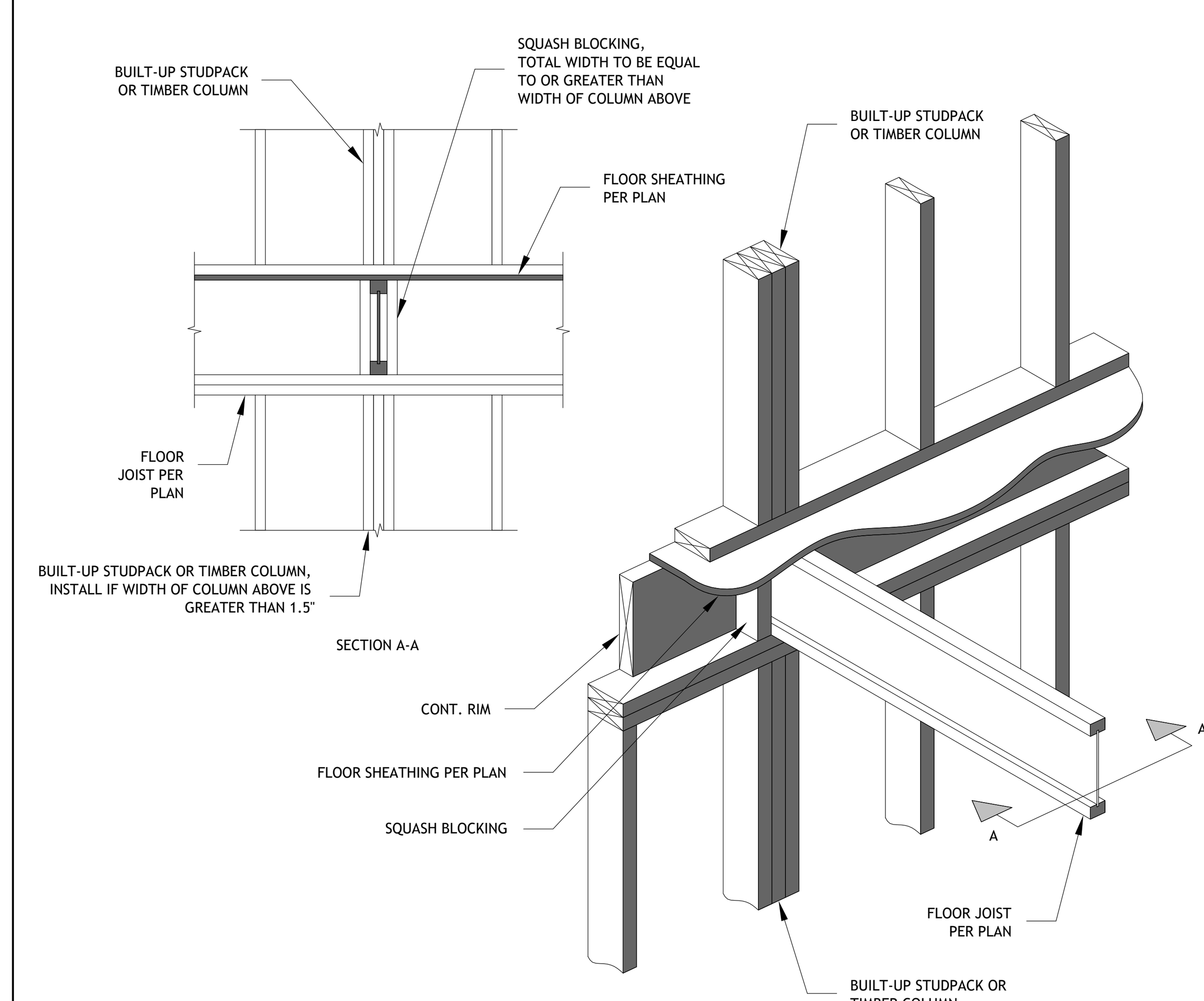
WOOD FRAMING DETAIL
NOT TO SCALE
2



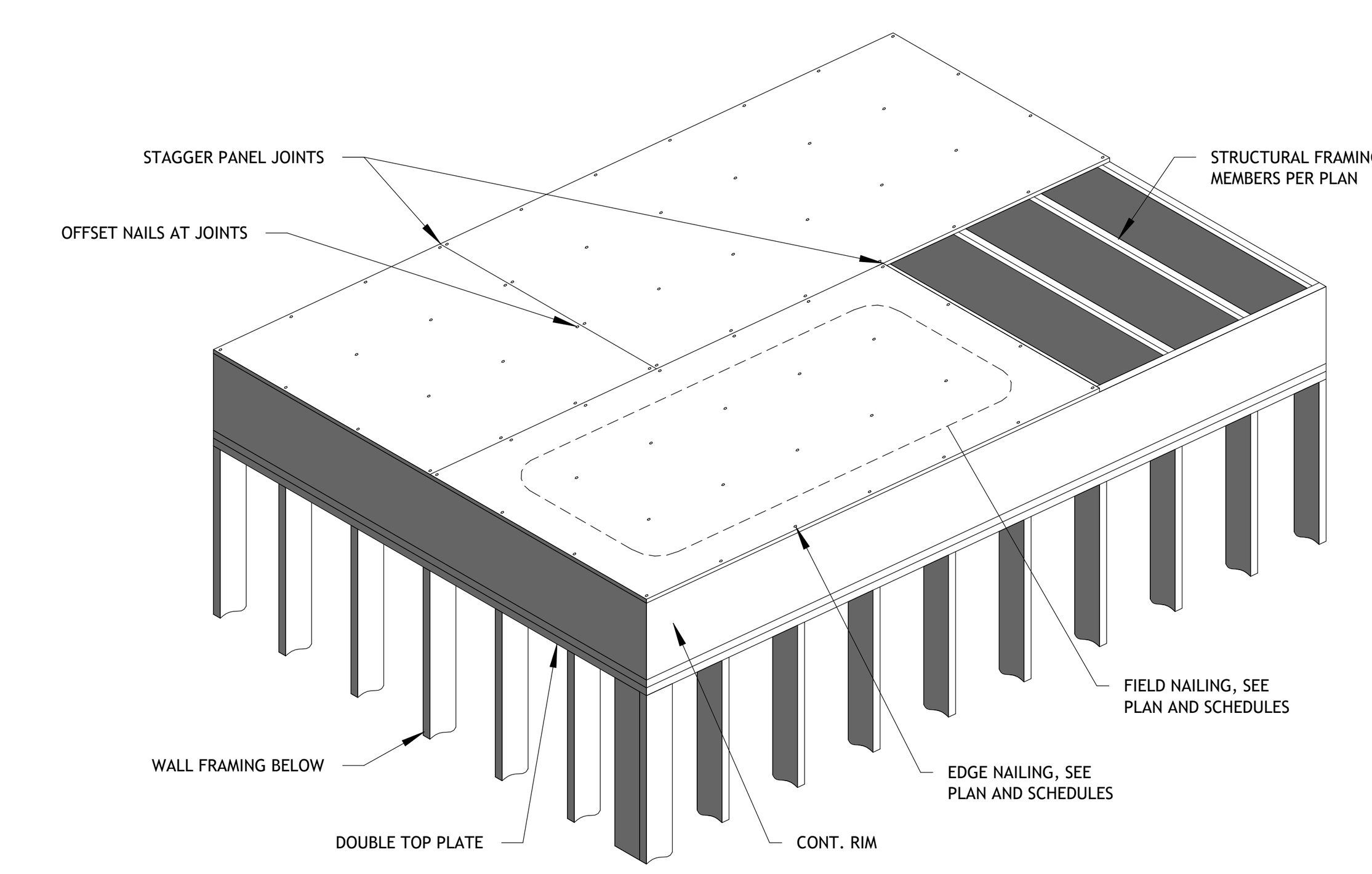
WOOD FRAMING DETAIL
NOT TO SCALE
12



WOOD FRAMING DETAIL
NOT TO SCALE
9



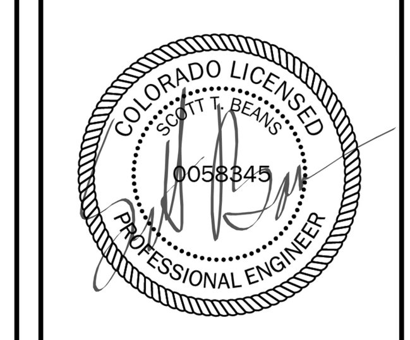
WOOD FRAMING DETAIL
NOT TO SCALE
6



WOOD FRAMING DETAIL
NOT TO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

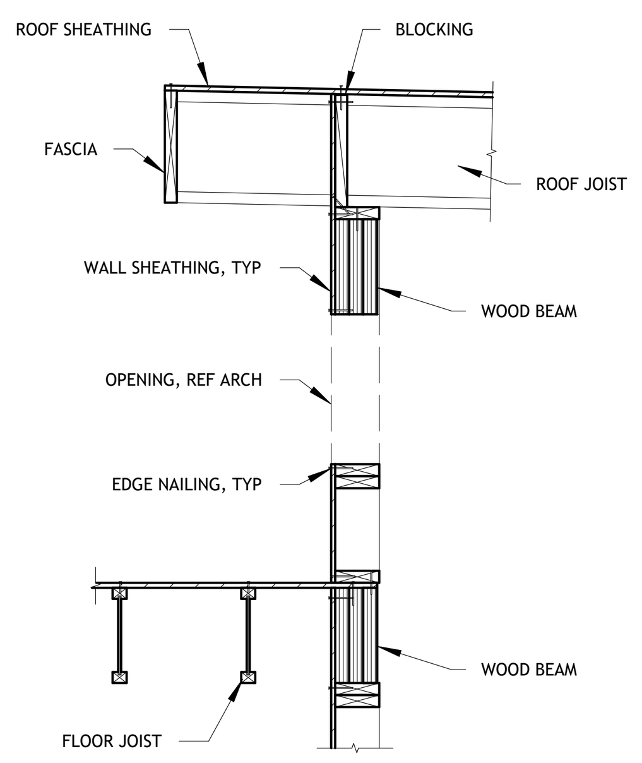


REVIEWED FOR CODE COMPLIANCE
01/08/2025

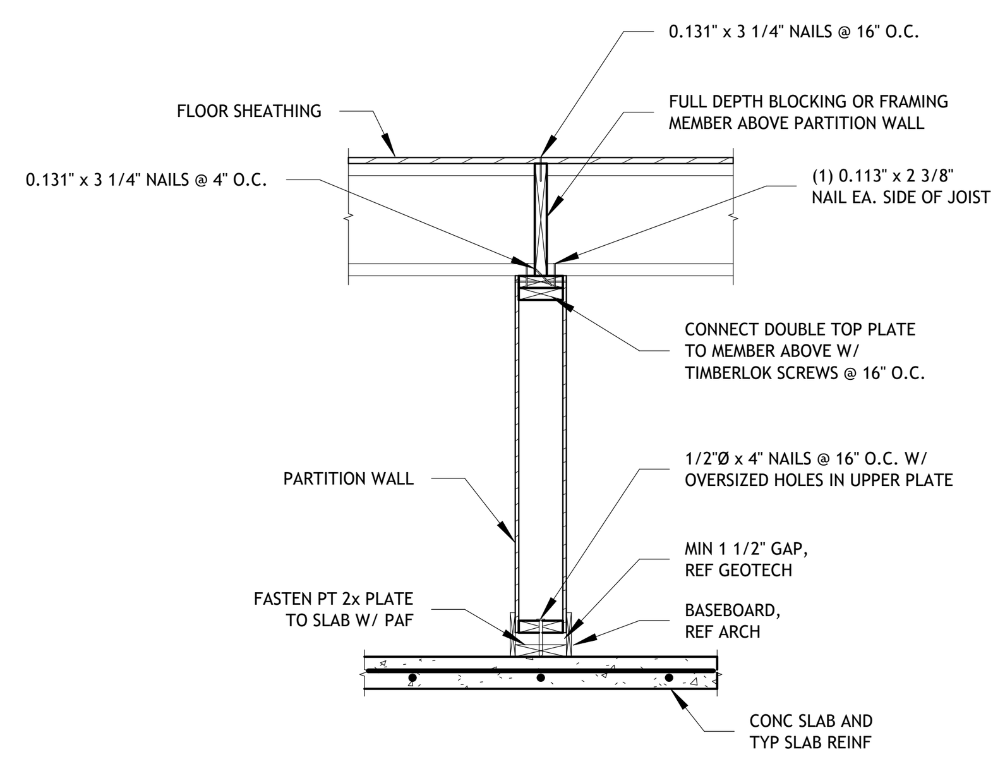
STRUCTURAL DETAILS - WOOD

	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

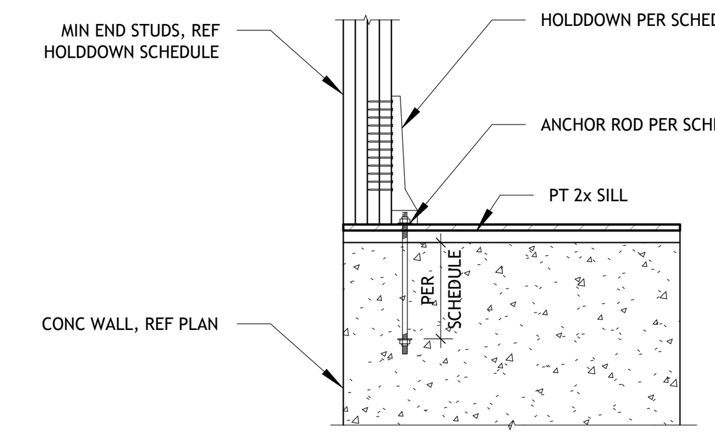
S210



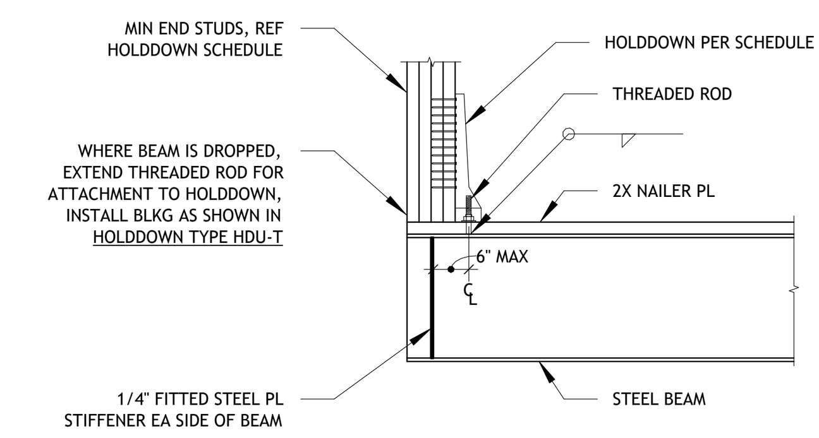
ROOF FRAMING DETAIL
NOT TO SCALE
10



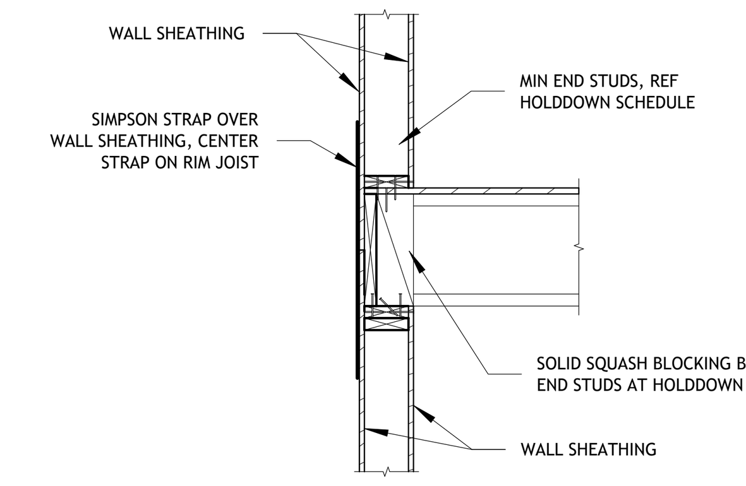
WOOD FRAMING DETAIL
NOT TO SCALE
7



HOLDDOWN TYPE HD1, HD2



HOLDDOWN TYPE HDS



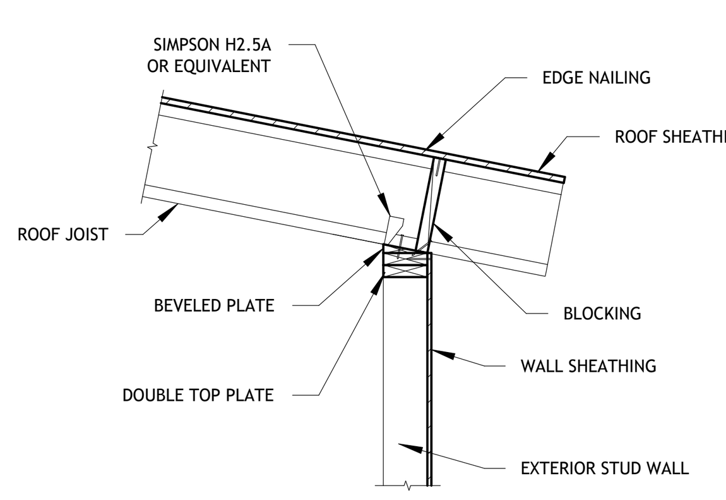
HOLDDOWN HDT

HOLDDOWN SCHEDULE				
MARK	SIMPSON HOLDDOWN	ANCHOR ABOVE	ANCHOR BELOW	END STUDS
HD1	HDU2-SDS2.5	(6) SDS2512 SCREWS	7/8"Φ THREADED ANCHOR ROD, DRILL & EPOXY 12"	(2) 2X
HD2	HDU5-SDS2.5	(14) SDS2512 SCREWS	7/8"Φ THREADED ANCHOR ROD, DRILL & EPOXY 20"	(3) 2X
HDS	HDU4-SDS2.5	(10) SDS2512 SCREWS	5/8" THREADED ROD WELDED TO STEEL BEAM	(3) 2X
HDT	CS16 STRAP (NOTE 5) HTS30 (@ SIM)	15" LAP TO STUD W/ (16) 0.148 x 2 1/2" NAILS (NOTE 4)	15" LAP TO STUD W/ (16) 0.148 x 2 1/2" NAILS (NOTE 4)	(2) 2X

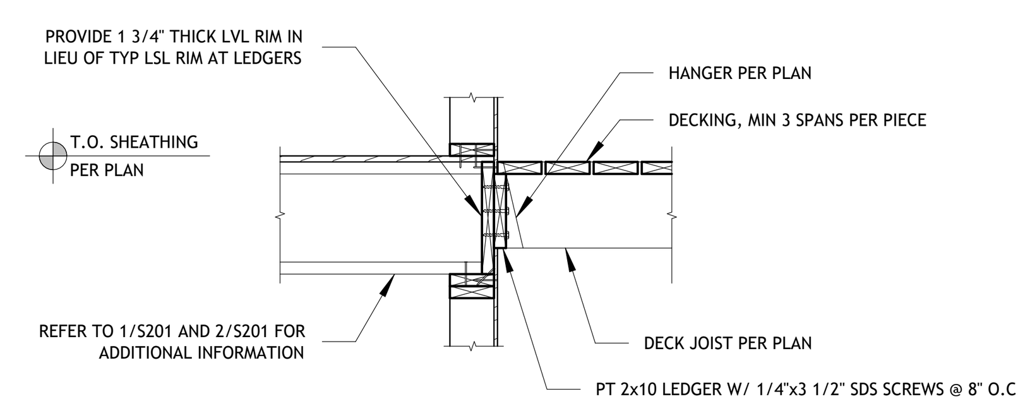
NOTES:

1. REFER TO MANUFACTURER'S INSTALLATION REQUIREMENTS FOR HOLDDOWN TYPE INDICATED.
2. COORDINATE HOLDDOWN LOCATIONS WITH ARCHITECTURAL FLOOR PLANS AND WINDOW/DOOR OPENINGS TO ENSURE PROPER PLACEMENT OF TRIM & KING STUDS.
3. WHERE DRILL & EPOXY IS PERMITTED, USE HILTI HIT-HY 200 OR EQUIVALENT. REFER TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
4. WHERE STRAPS ARE INSTALLED OVER MAX 1/2" SHEATHING, USE MINIMUM 3" LONG FASTENERS.
5. 5. CS16 STRAP MAY BE OMMITTED WHERE COLUMN IS CONTINUOUS THROUGH FLOOR ASSEMBLY (COLUMN NOT INTERRUPTED BY A BEAM, TOP PLATES, AND/OR SQUASH BLOCKING)

HOLDDOWNS
NOT TO SCALE
1

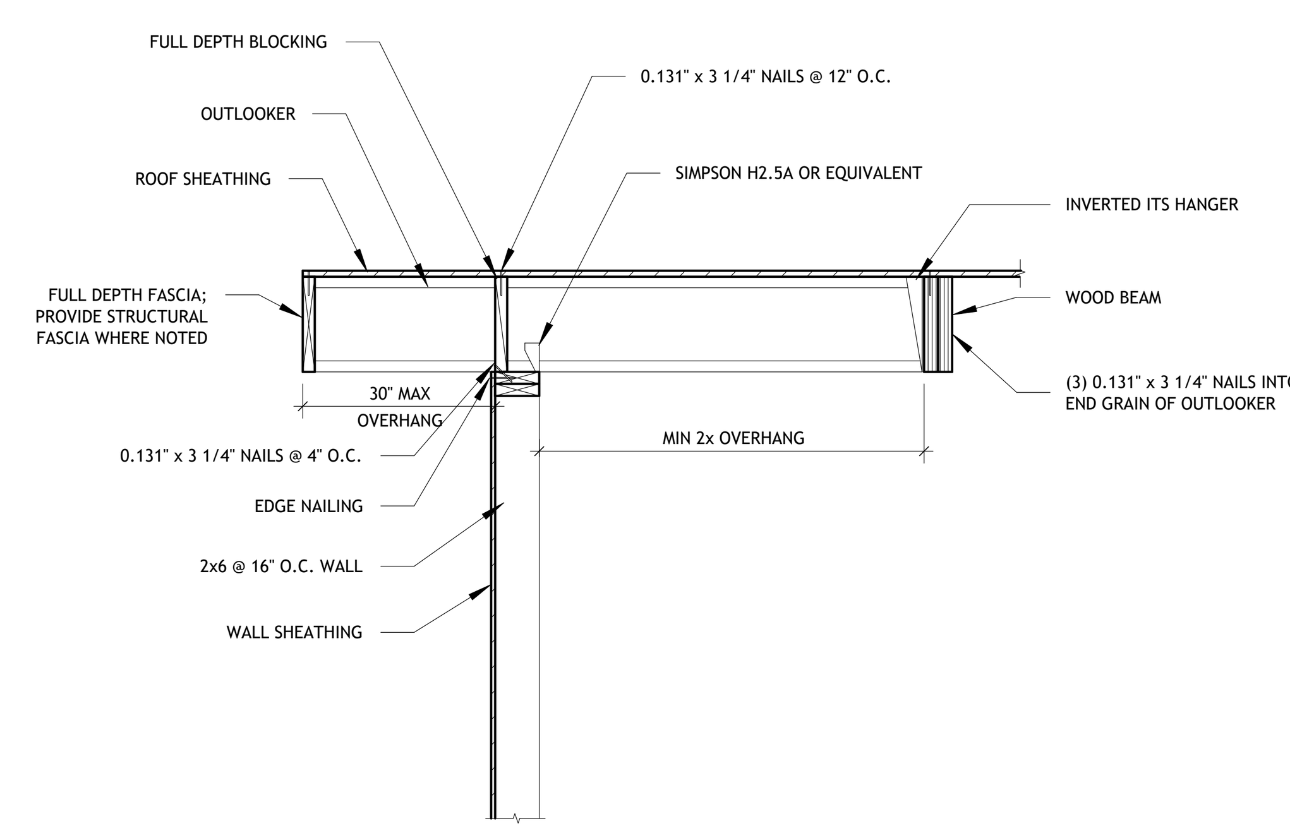


TYPICAL ROOF FRAMING AT OVERHANG
NOT TO SCALE
11

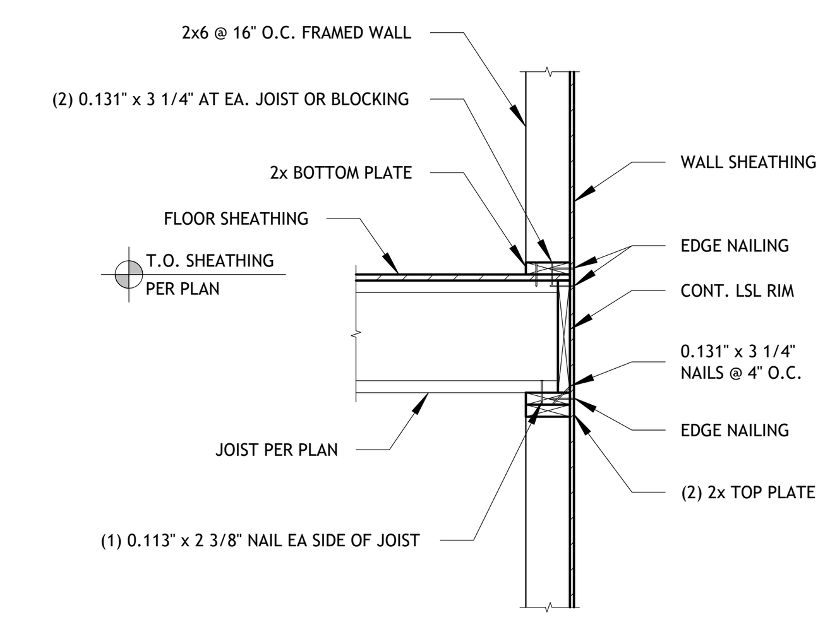


NOTES:
1. AT SIM CONDITION, PROVIDE LEDGER AS SHOWN; FASTEN ENDS OF DECKING TO LEDGER

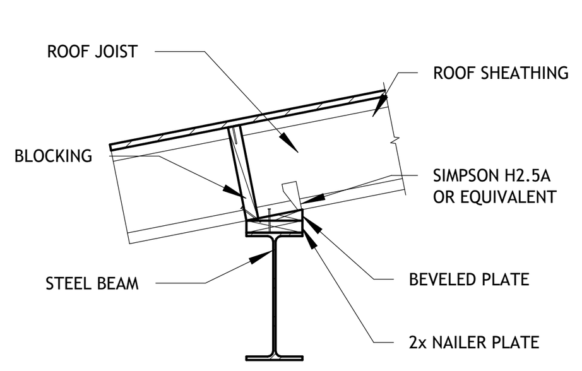
WOOD FRAMING DETAIL
NOT TO SCALE
8



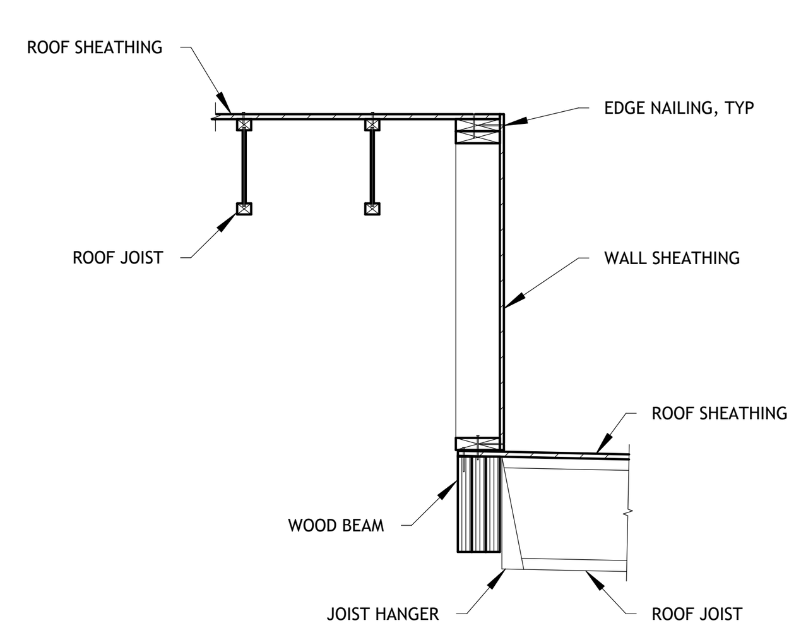
WOOD FRAMING DETAIL
NOT TO SCALE
5



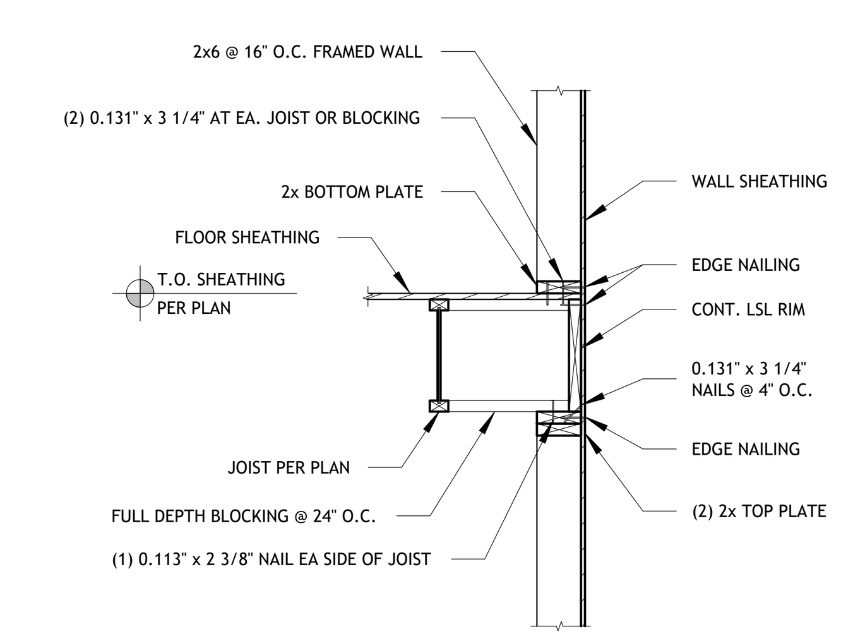
WOOD FRAMING DETAIL
NOT TO SCALE
2



TYPICAL ROOF FRAMING AT OVERHANG
NOT TO SCALE
12



ROOF FRAMING DETAIL
NOT TO SCALE
9



WOOD FRAMING DETAIL
NOT TO SCALE
3

sprout
ARCHITECTURE + ENGINEERING + CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

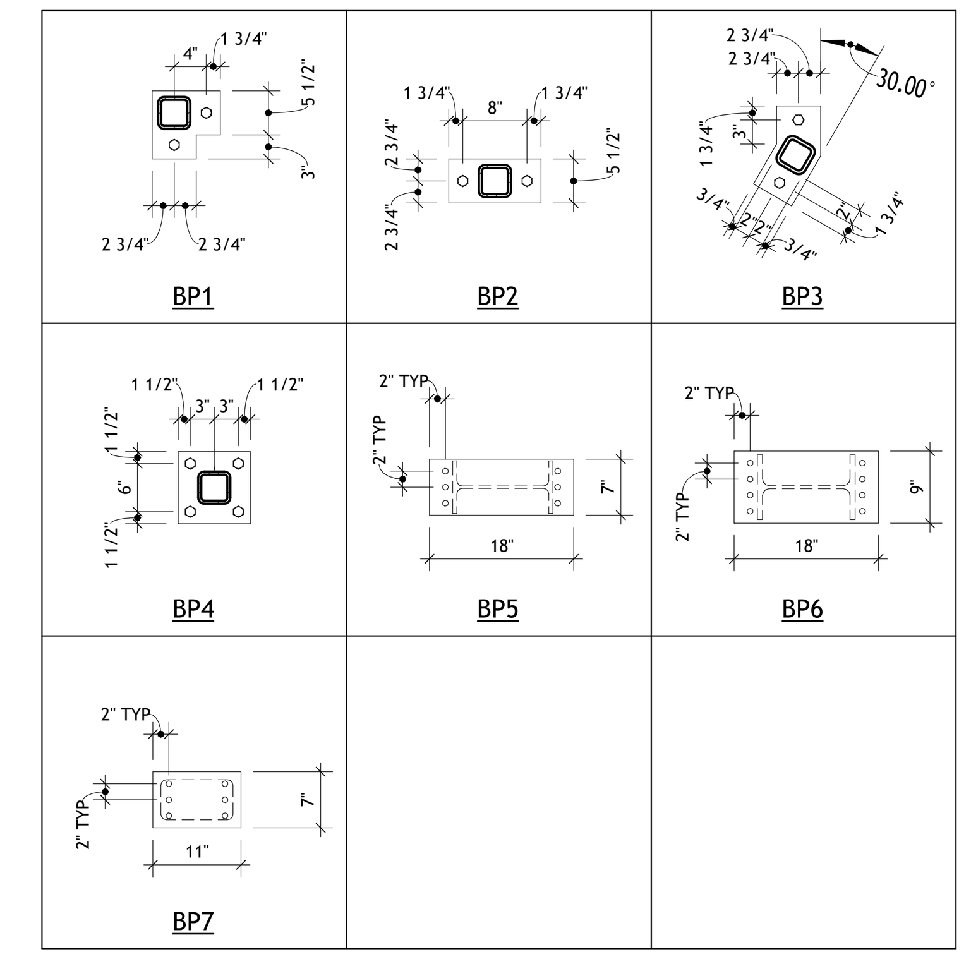
REVIEWED FOR CODE COMPLIANCE
01/08/2025

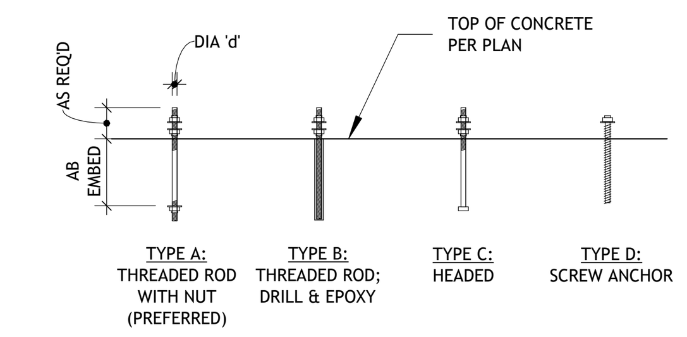
STRUCTURAL DETAILS - WOOD

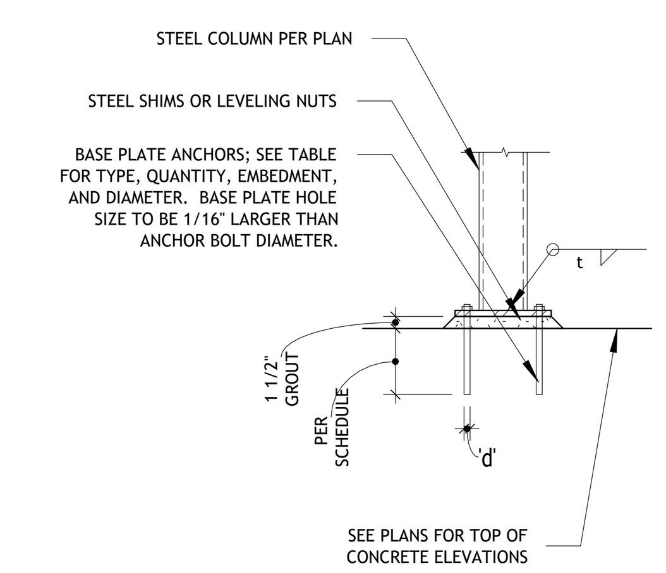
△	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

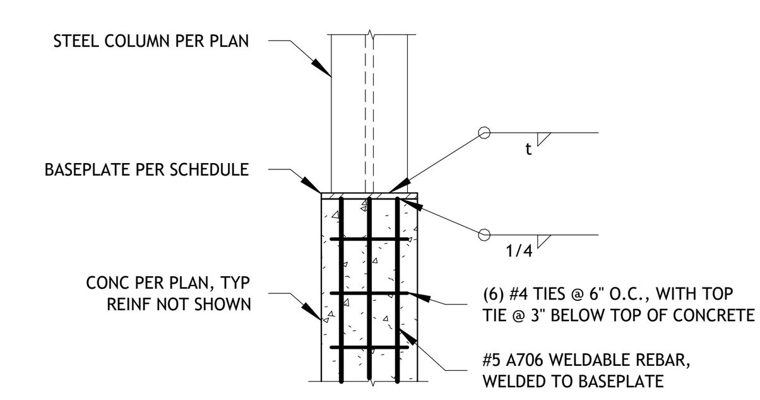
S211

BASE PLATE SCHEDULE					
MARK	AB TYPE	AB DIA. ('d')	AB EMBED	BP THICKNESS	WELD TO PLATE
BP1	A/B/C/D	3/4"	10"	5/8"	1/4"
BP2	A/B/C/D	5/8"	10"	5/8"	1/4"
BP3	A/B/C/D	3/4"	10"	3/4"	1/4"
BP4	A/B/C/D	3/4"	10"	3/4"	1/4"
BP5	(6) REBAR	#5 A706	30"	3/4"	1/4"
BP6	(8) REBAR	#5 A706	36"	3/4"	1/4"
BP7	(6) REBAR	#5 A706	36"	3/4"	1/4"









DETAIL AT BP5, BP6 BP7

BASEPLATES & ANCHOR RODS
NOT TO SCALE
2

sprout
ARCHITECTURE • ENGINEERING • CONSTRUCTION MANAGEMENT
628 OAK STREET
STEAMBOAT SPRINGS, CO 80487
SCOTT@SPROUTAEC.COM
970.759.3745

WIEMERS RESIDENCE
33170 MEADOW CREEK DRIVE
STEAMBOAT SPRINGS, CO 80487

COLORADO LICENSED PROFESSIONAL ENGINEER 0058345

REVIEWED FOR CODE COMPLIANCE
01/08/2025

STRUCTURAL DETAILS - STEEL

△	DATE	DESCRIPTION
	10.28.2024	PERMIT SET

S220