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begotten Son, that whosoever believeth in him should not perish, but have

VEWPOINT RESIDENTIAL DESIGN LLC

Drawing Title:

SVF092 Spec
The HEATHER

Site Description:

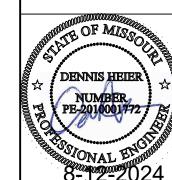
Lot 92, Summit

View Farms

Street Address:

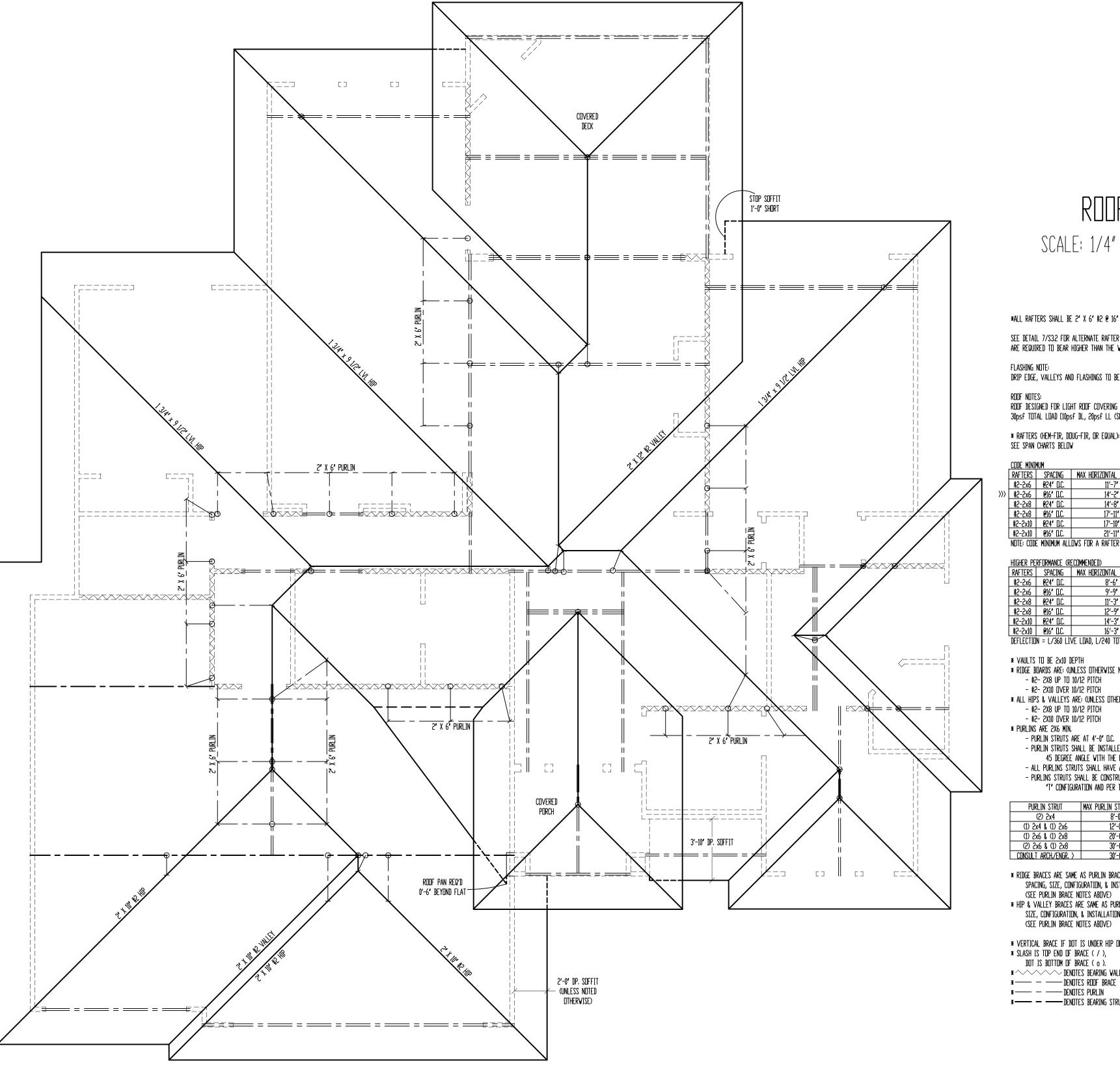
2317 SW Morris

Dr., Lee's Summit,
Missouri
General Contractor:
Walker Custom
Homes, LLC



Date: 7 - 26 - AD 2024
Rev. 1:
Rev. 2:
Rev. 3:

Sheet Title: **ELEVATIONS**



ROOF

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

*ALL RAFTERS SHALL BE 2' X 6' #2 € 16' D.C., UNLESS NOTED OTHERVISE.

SEE DETAIL 7/S3.2~FDR ALTERNATE RAFTER BEARING DETAIL WHEN RAFTERS

Flashing Note: DRIP EDGE, VALLEYS AND FLASHINGS TO BE METAL CLAD.

30psf TOTAL LOAD [10psf DL, 20psf LL (SL)]

* RAFTERS (HEM-FIR, DOUG-FIR, OR EQUAL): SEE SPAN CHARTS BELOW

	CODE MINIMUM					
	RAFTERS	SPACING	MAX HORIZONTAL CLEARSPAN			
	#2-2x6	@24″ □.C.	11'-7 "			
$\langle \langle \langle$	#2-2x6	016 ″ □.C.	14'-2 '	/ ((
	#2-2x8	@24″ □.C.	14'-8 '			
	#2-2x8	016 ′ □.C.	17'-11 '			
	#2-2x10	@24" D.C.	17'-10 "			
	#2-2x10	0 16 ′ □.C.	21′-11 ′			
	MOTEL COM	MINIMIM ALL	U/6 CUD Y DYCLCD DCC/CCTIUN	п г		

NOTE: CODE MINIMUM ALLOWS FOR A RAFTER DEFLECTION OF L/180 TOTAL LOAD

HIGHER PE	RFORMANCE (R	ECOMMENDED)
RAFTERS	SPACING	MAX HORIZONTAL CLEARSPAN
#2-2x6	@24″ □.C.	8'-6 "
#2-2x6	016 ′ □.C.	9'-9 '
#2-2x8	@24" D.C.	11'-3 '
#2-2x8	0 16 ′ □.C.	12′-9 ′
#2-2x10	@24″ □.C.	14′-3 ″
#2-2x10	0 16″ □.C.	16′-3 ″
DEFLECTIO	N = L/360 LI'	VE LOAD, L/240 TOTAL LOAD

* VAULTS TO BE 2x10 DEPTH * RIDGE BUARDS ARE: (UNLESS UTHERWISE NUTED) - #2- 2X8 UP TO 10/12 PITCH

- #2- 2X10 DVER 10/12 PITCH * ALL HIPS & VALLEYS ARE: (UNLESS DTHERWISE NOTED)

- #2- 2X8 UP TO 10/12 PITCH - #2- 2X10 OVER 10/12 PITCH

* PURLINS ARE 2X6 MIN. - PURLIN STRUTS ARE AT 4'-0' D.C.

- PURLIN STRUTS SHALL BE INSTALLED AT NOT LESS THAN A 45 DEGREE ANGLE WITH THE HORIZONTAL - ALL PURLINS STRUTS SHALL HAVE A MAXIMUM UNBRACED LENGTH DF 8'-0' - PURLINS STRUTS SHALL BE CONSTRUCTED IN A

"T" CONFIGURATION AND PER THE FOLLOWING CHART:

<u> </u>				
PURLIN	STRUT	MAX	PURLIN STRUT	LENG
(2)	2x4		8'-0 '	
(1) 2x4 8	(1) 2x6		12'-0 '	
(1) 2x6 8	(1) 2x8		20′-0 ′	
(2) 2x6 8	k (1) 2x8		30'-0 '	
CONSULT AR	CH./ENGR. >		30'-0 '	ď

* RIDGE BRACES ARE SAME AS PURLIN BRACES-SPACING, SIZE, CONFIGURATION, & INSTALLATION (SEE PURLIN BRACE NOTES ABOVE)

* HIP & VALLEY BRACES ARE SAME AS PURLIN SIZE, CONFIGURATION, & INSTALLATION (SEE PURLIN BRACE NOTES ABOVE)

* VERTICAL BRACE IF DOT IS UNDER HIP OR VALLEY * SLASH IS TOP END OF BRACE (/),

DOT IS BOTTOM OF BRACE (o). * DENOTES BEARING WALL

* DENOTES ROOF BRACE

*---- DENOTES PURLIN

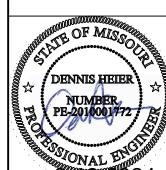
*---- DENDTES BEARING STRUCTURE

Drawing Title: SVF092 Spec

The HEATHER Site Description: Lot 92, Summit View Farms Street Address: 2317 SW Morris Dr., Lee's Summit, Missouri General Contractor:

Walker Custom

Homes, LLC

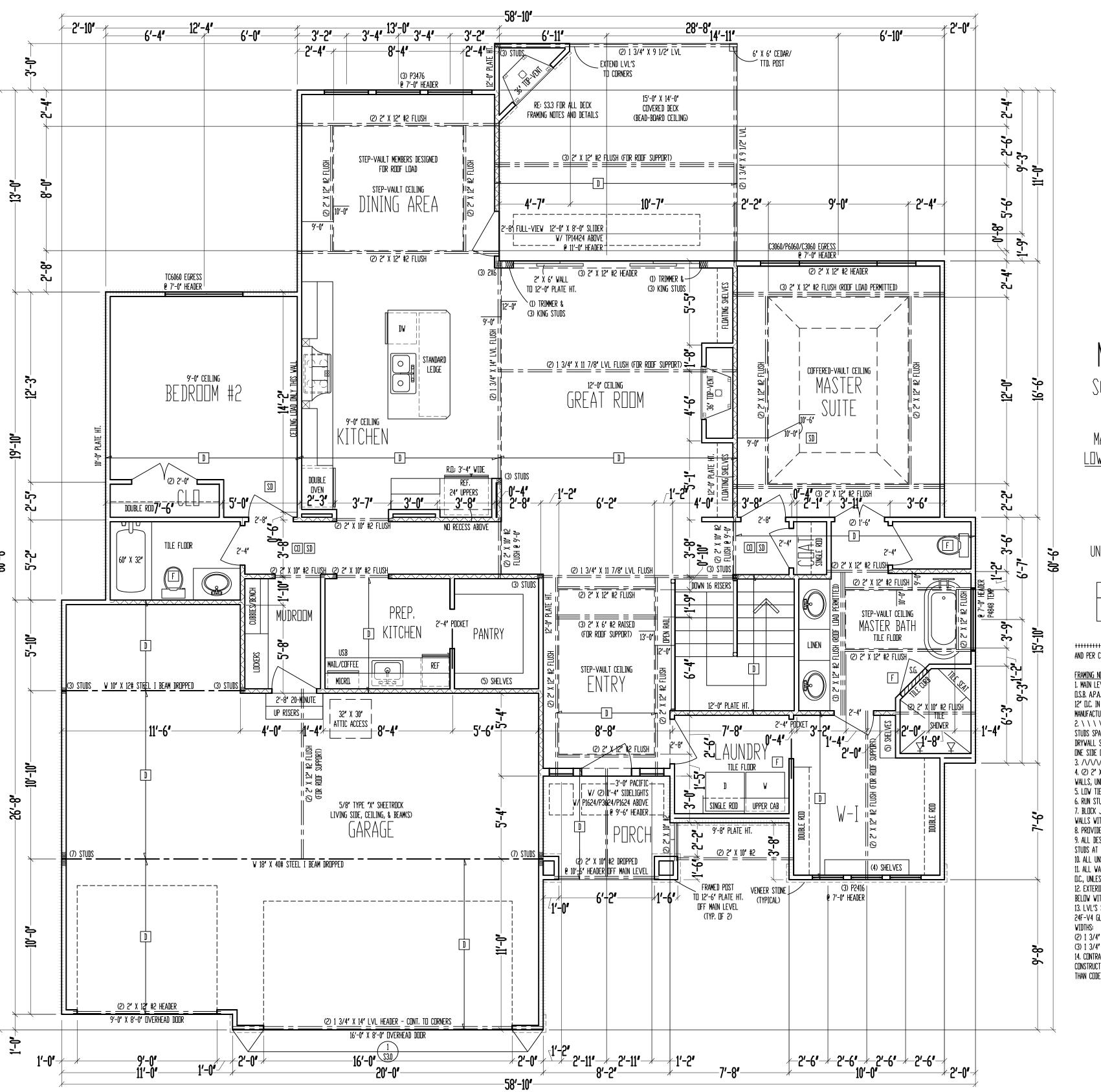


Date: <u>7 - 26 - AD 2024</u> Rev. 1: Rev. 2:

Sheet Title:

ROOF PLAN

Rev. 3:



9'-0" CEILING SCALE: 1/4'' = 1'-0''

MAIN LEVEL: 1856 SQ. FT. LOWER LEVEL: 1225 SQ. FT. TOTAL: 3081 SQ. FT.

GARAGE: 726 SQ. FT. CDV. DUT/LIV: 216 SQ. FT. UNFIN. BASEMENT: 423 SQ. FT.

> JOIST SCHEDULE 2" X 6" #2 CEILING JOIST **€** 16″ □.C.

AND PER CALCULATIONS ON SHEET S1.1.

. MAIN LEVEL EXTERIOR WALLS SHALL BE SHEATHED W/ 7/16" D.S.B. A.P.A. PANELS W/ 8d COMMON NAILS @ 6" D.C. AT EDGES & @ 12' D.C. IN THE FIELD. SMART PANEL, DR EQUAL, INSTALLED PER

DRYWALL SCREWS @ 7' D.C. EDGES & FIELD. (MIN. 8'-0' SECTIONS ONE SIDE OF WALL (OR) MIN. 4'-O' SECTION FOR BOTH SIDES) 3. / / / / / / / / / / / = LDAD bearing interior wall 4. (2) 2" X 10" #2 HEADER AT ALL EXTERIOR AND LOAD BEARING WALLS, UNLESS NOTED OTHERWISE. 5. LOW TIES @ 4'-0" D.C. (TYPICAL)

12. EXTERIOR WALL BOTTOM PLATES SHALL BE NAILED TO FRAMING 13. LVL'S SHOWN ON PLANS MAY BE REPLACED WITH DF/DF GRADE 24F-V4 GLULAM BEAMS OF THE SAME DEPTH, AND THE FOLLOWING

(2) 1 3/4" LVL PLIES = 3 1/2" GLULAM (3) 1 3/4" LVL PLIES = 5 1/2" GLULAM 14. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY DEFLECTION LIMITATIONS MORE STRINGENT THAN CODE MINIMUMS ABOVE ANY OPENINGS.

MANUFACTURER'S SPECIFICATIONS.

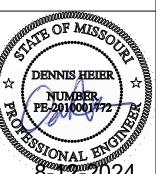
6. RUN STUDS THE FULL HEIGHT OF RAISED PLATE WALLS. 7. BLOCK JOISTS ABOVE BEAMS, CANTILEVERS AND LOAD BEARING WALLS WITH JOIST MATERIAL (NOT REQUIRED WITH I-JOISTS). 8. PROVIDE MULTIPLE STUDS FOR SOLID BEARING BELOW ALL BEAMS. 9. ALL DESIGNATED 2' X 6' WALLS SHALL HAVE DOUBLE KING STUDS AT DOOR AND WINDOW OPENINGS.

10. ALL UNSQUARE WALLS SHALL BE 45°, UNLESS NOTED OTHERWISE. 11. ALL WALLS TO BE FRAMED W/ MIN. STUD GRADE 2' X 4'S @ 16' D.C., UNLESS NOTED OTHERWISE.

BELOW WITH 16d COMMON NAILS @ 8" D.C. MAX. (WHERE APPLICABLE.)

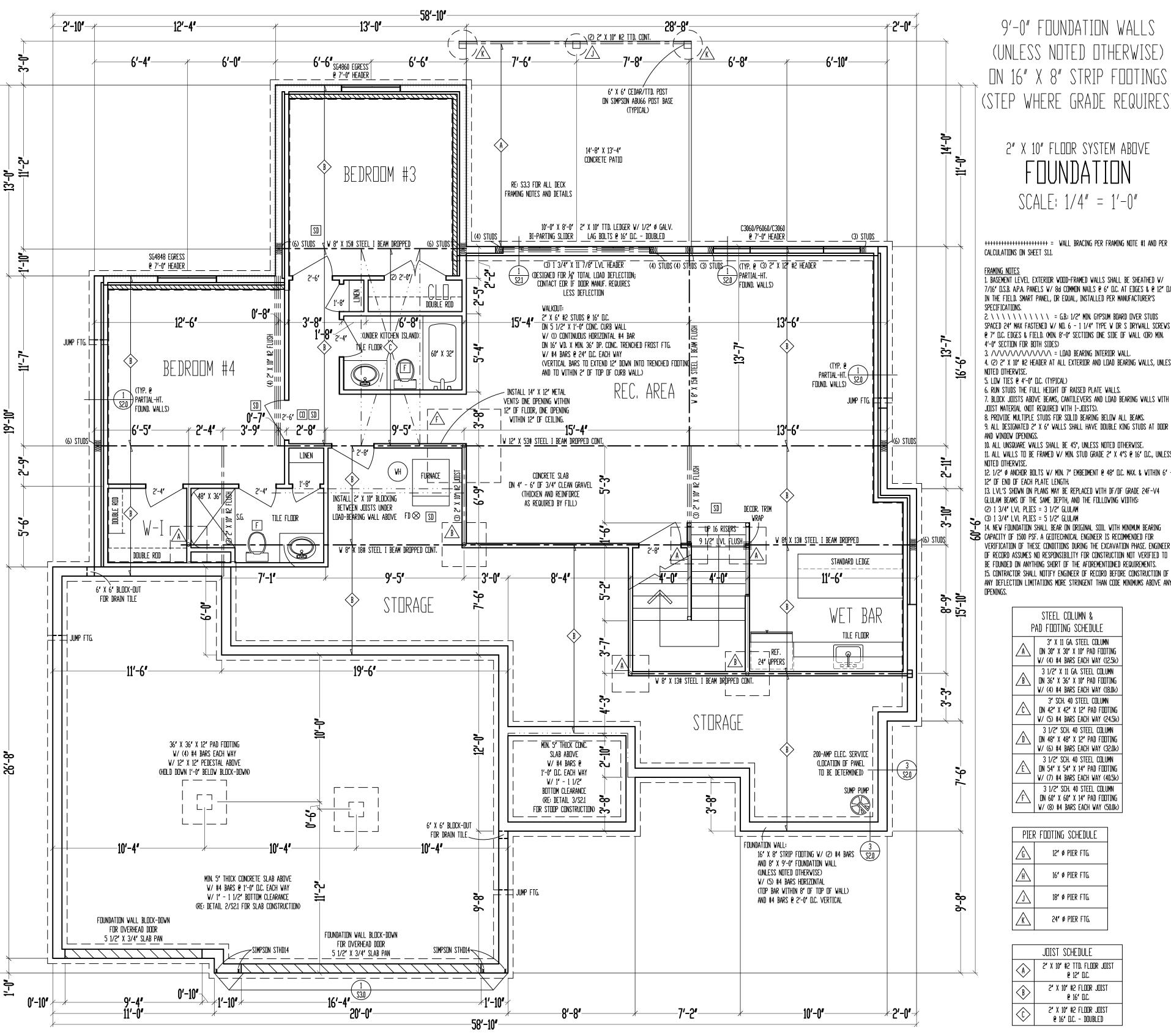
Drawing Title: SVF092 Spec The HEATHER

Site Description: Lot 92, Summit View Farms Street Address: 2317 SW Morris Dr., Lee's Summit, Missouri General Contractor: Walker Custom Homes, LLC



Date: <u>7 - 26 - AD 2024</u> Rev. 1: Rev. 2:

Rev. 3: Sheet Title: MAIN LEVEL **PLAN**



9'-0" FOUNDATION WALLS (UNLESS NOTED OTHERWISE) ON 16" X 8" STRIP FOOTINGS (STEP WHERE GRADE REQUIRES)

2" X 10" FLOOR SYSTEM ABOVE FOUNDATION

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

CALCULATIONS ON SHEET \$1.1.

1. BASEMENT LEVEL EXTERIOR WOOD-FRAMED WALLS SHALL BE SHEATHED W/ 7/16" D.S.B. A.P.A. PANELS W/ 8d COMMON NAILS @ 6" D.C. AT EDGES & @ 12" D.C. IN THE FIELD. SMART PANEL, OR EQUAL, INSTALLED PER MANUFACTURER'S

2. \ \ \ \ \ \ \ \ \ = G.B.: 1/2' MIN. GYPSUM BDARD DVER STUDS SPACED 24' MAX FASTENED W/ ND. 6 - 1 1/4' TYPE W DR S DRYWALL SCREWS € 7' D.C. EDGES & FIELD. (MIN. 8'-0" SECTIONS ONE SIDE OF WALL (OR) MIN. 4'-0" SECTION FOR BOTH SIDES)

3. /\/\/\/\/\/\\\ = LOAD BEARING INTERIOR WALL. 4. (2) 2' X 10' #2 HEADER AT ALL EXTERIOR AND LOAD BEARING WALLS, UNLESS

5. LOW TIES @ 4'-0' D.C. (TYPICAL) 6. RUN STUDS THE FULL HEIGHT OF RAISED PLATE WALLS.

JOIST MATERIAL (NOT REQUIRED WITH I-JOISTS) 8. PROVIDE MULTIPLE STUDS FOR SOLID BEARING BELOW ALL BEAMS. 9. ALL DESIGNATED 2" X 6" WALLS SHALL HAVE DOUBLE KING STUDS AT DOOR

10. ALL UNSQUARE WALLS SHALL BE 45°, UNLESS NOTED OTHERWISE. 11. ALL WALLS TO BE FRAMED W/ MIN. STUD GRADE 2' X 4'S @ 16' O.C., UNLESS

12. 1/2' Ø ANCHOR BOLTS W/ MIN. 7' EMBEDMENT @ 48' D.C. MAX. & WITHIN 6'

13. LVL'S SHOWN ON PLANS MAY BE REPLACED WITH DF/DF GRADE 24F-V4 GLULAM BEAMS OF THE SAME DEPTH, AND THE FOLLOWING WIDTHS: (2) 1 3/4" LVL PLIES = 3 1/2" GLULAM

(3) 1 3/4' LVL PLIES = 5 1/2' GLULAM
14. NEW FOUNDATION SHALL BEAR ON ORIGINAL SOIL WITH MINIMUM BEARING VERIFICATION OF THESE CONDITIONS DURING THE EXCAVATION PHASE, ENGINEER BE FOUNDED ON ANYTHING SHORT OF THE AFOREMENTIONED REQUIREMENTS. 15. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY DEFLECTION LIMITATIONS MORE STRINGENT THAN CODE MINIMUMS ABOVE ANY

> STEEL COLUMN & PAD FOOTING SCHEDULE 3' X 11 GA. STEEL COLUMN

ON 30" X 30" X 10" PAD FOOTING W/ (4) #4 BARS EACH WAY (12.5k) 3 1/2" X 11 GA. STEEL COLUMN B ON 36' X 36' X 10' PAD FOOTING W/ (4) #4 BARS EACH WAY (18.0k) 3" SCH. 40 STEEL COLUMN ON 42' X 42' X 12' PAD FOOTING W/ (5) #4 BARS EACH WAY (24.5k) 3 1/2" SCH. 40 STEEL COLUMN ON 48' X 48' X 12' PAD FOOTING W/ (6) #4 BARS EACH WAY (32.0k) 3 1/2" SCH. 40 STEEL COLUMN ON 54' X 54' X 14' PAD FOOTING W/ (7) #4 BARS EACH WAY (40.5k) 3 1/2" SCH. 40 STEEL COLUMN ON 60" X 60" X 14" PAD FOOTING W/ (8) #4 BARS EACH WAY (50.0k)

PIER	R FOOTING SCHEDULE
	12" Ø PIER FTG.
₩	16' Ø PIER FTG.
\bigcirc	18' Ø PIER FTG.
K	24" Ø PIER FTG.

	JOIST SCHEDULE
Â	2" X 10" #2 TTD. FLOOR JOIST @ 12" O.C.
<u>B</u>	2" X 10" #2 FLOOR JOIST @ 16" D.C.
ĵ>	2" X 10" #2 FLOOR JOIST @ 16" D.C DOUBLED

Drawing Title: SVF092 Spec

The HEATHER Site Description: Lot 92, Summit

View Farms Street Address: 2317 SW Morris Dr., Lee's Summit, Missouri General Contractor: Walker Custom

Homes, LLC



Date: 7 - 26 - AD 2024 Rev. 1: Rev. 2:

Rev. 3: Sheet Title:

FOUNDATION PLAN

NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
ROOF 1	
4-8d (2 ½ " x 0.113")	TOENAIL
4-8d (2 ½ " x 0.113")	PER JOIST, TOENAIL
4-10d (3" x 0.128")	FACE NAIL
TBLE R802.5.2	FACE NAIL
4-10d (3" x 0.128")	FACE NAIL, EACH RAFTER
3-16d BOX NAILS (3½" x 0.135") OR 3-10d COMMON NAILS (3" x 0.148")	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
4-16d (3 ½" x 0.135") - TOENAIL; 3-16d BOX (3 ½" x 0.135") - END NAIL	TOENAIL, END NAIL
WALL	
10d (3" x 0.128")	16" O.C. FACE NAIL
16d (3 ½ " x 0.135")	12" O.C. FACE NAIL
16d (3 ½ " x 0.135")	12" O.C. EACH EDGE FACE NAIL
4-8d (2 ½ " x 0.131")	TOENAIL
10d (3" x 0.128")	12" O.C. FACE NAIL
8-16d COMMON (3 ½" x 0.162")	FACE NAIL ON EACH SIDE OF END JOINT (MIN. 24 LAP SPLICE LENGTH EACH SIDE OF END JOINT)
16d COMMON (3 ½ " x 0.162")	16" O.C. FACE NAIL
3-16d BOX (3 ½" x 0.135")	3 EACH 16" O.C. FACE NAIL
4-8d BOX (2 ½" x 0.113") - TOENAIL; 3-16d BOX (3 ½" x 0.135") - END NAIL	TOENAIL, END NAIL (SEE LEFT)
3-10d BOX (3" x 0.128")	FACE NAIL
3-8d BOX (2 ∮ " x 0.113")	FACE NAIL
3-8d BOX (2 ½" x 0.113")	FACE NAIL
3-8d BOX (2 ½" x 0.113") - FACE NAIL; WIDER THAN 1"x8" - 4-8d BOX (2 ½" x 0.113")	FACE NAIL
FLOOR	
4-8d BOX (2 ½" x 0.113")	TOE NAIL
8d BOX (2 ½" x 0.113")	4" O.C. TOE NAIL
3-8d BOX (2 ½" x 0.113")	FACE NAIL
3-16d BOX (3 ½" x 0.135")	BLIND AND FACE NAIL
3-16d BOX (3 ½" x 0.135")	AT EACH BEARING, FACE NAIL
3-16d COMMON (3 ½" x 0.162")	END NAIL
10d BOX (3" x 0.128")	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
10d BOX (3" x 0.128") 4-16d BOX (3 ½" x 0.135")	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES AT EACH JOIST OR RAFTER, FACE NAIL
	4-8d (2½" x 0.113") 4-8d (2½" x 0.113") 4-10d (3" x 0.128") TBLE R802.5.2 4-10d (3" x 0.128") 3-16d BOX NAILS (3½" x 0.135") OR 3-10d COMMON NAILS (3" x 0.148") 4-16d (3½" x 0.135") - TOENAIL; 3-16d BOX (3½" x 0.135") - END NAIL 10d (3" x 0.128") 16d (3½" x 0.135") 4-8d (2½" x 0.135") 4-8d (2½" x 0.131") 10d (3" x 0.128") 8-16d COMMON (3½" x 0.162") 3-16d BOX (3½" x 0.162") 4-8d BOX (2½" x 0.113") - TOENAIL; 3-16d BOX (3½" x 0.135") 4-8d BOX (2½" x 0.113") - TOENAIL; 3-16d BOX (3½" x 0.135") 4-8d BOX (2½" x 0.113") - TOENAIL; 3-16d BOX (3½" x 0.135") 5-8d BOX (2½" x 0.113") - FACE NAIL; WIDER THAN 1"x8" - 4-8d BOX (2½" x 0.113") 5-8d BOX (2½" x 0.113") - FACE NAIL; WIDER THAN 1"x8" - 4-8d BOX (2½" x 0.113") 8d BOX (2½" x 0.113") 3-8d BOX (2½" x 0.113") 3-8d BOX (2½" x 0.113") 3-8d BOX (2½" x 0.113")

CRIPTION OF BUILDING MATERIAL WOOD STRUCTURAL PANELS, SU	SI DESCRIPTION OF FASTENER JBFLOOR, ROOF AND INTERIOR WALL SHEA	EDGE SPACING (INCHES) ATHING TO FRAMING AND PARTICLEBOA	INTERMEDIATE SUPPORTS (INCH INCH INCH INCH INCH INCH INCH INCH INCH
K" - K"	6d COMMON (2" x 0.113") NAIL (SUBFLOOR, WALL) 8d COMMON NAIL (ROOF)	6	12
¹⁹ / ₃₂ " - 1"	8d COMMON NAIL (2 ½ " x 0.131")	6	12
1 ½ " - 1½"	10d COMMON (3" x 0.148") NAIL OR 8d (2½" x 0.131") DEFORMED NAIL	6	12
	OTHER WALL	SHEATHING ¹	
½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	$1\frac{1}{2}$ " GALVANIZED ROOFING NAIL, $\frac{7}{6}$ " HEAD DIAMETER, OR $1\frac{1}{4}$ " LONG 16 GA. STAPLE WITH $\frac{7}{6}$ " OR 1" CROWN	3	6
25" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	$1\frac{2}{4}$ " GALVANIZED ROOFING NAIL, $\frac{7}{6}$ " HEAD DIAMETER, OR $1\frac{1}{2}$ " LONG 16 GA. STAPLE WITH $\frac{7}{6}$ " OR 1" CROWN	3	6
½ " GYPSUM SHEATHING	1½" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1½" LONG; 1½" SCREWS, TYPE W OR S	7	7
% " GYPSUM SHEATHING	1¾" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1¾" LONG; 1¾" SCREWS, TYPE W OR S	7	7
v	VOOD STRUCTURAL PANELS, COMBINATIO	N SUBFLOOR UNDERLAYMENT TO FRAM	ING
火 " AND LESS	6d DEFORMED (2" x 0.120") NAIL OR 8d COMMON (2½" x 0.131") NAIL	6	12
½ " - 1"	8d COMMON (2½" x 0.131") NAIL OR 8d DEFORMED (2½" x 0.120") NAIL	6	12
1 ½ " - 1 ½ "	10d COMMON (3" x 0.148") NAIL OR 8d DEFORMED (2½" x 0.120") NAIL	6	12

LISTED IN THIS TABLE

FOUNDATION NOTES

- CONCRETE SHALL BE AIR-ENTRAINED BETWEEN 5%-7% WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI FOR BASEMENT AND INTERIOR FLOOR SLABS-ON-GRADE, 3000 PSI FOR FOUNDATION WALLS, AND 3500 PSI FOR PORCHES AND GARAGE FLOOR SLABS
- THE FOUNDATION DESIGN SHALL COMPLY WITH THE ENFORCING JURISDICTION'S RESIDENTIAL FOUNDATION
- PROVIDE A MINIMUM 4"-DIAMETER PERFORATED DRAIN PIPE ALONG PERIMETER OF USABLE SPACE AT FOOTING LEVEL OR OTHER EQUIVALENT MATERIALS PER IRC SECTION R405.1. THE PIPE SHALL BE COVERED WITH A MINIMUM OF 6" OF GRAVEL OR CRUSHED ROCK. THE DRAIN SHALL DAYLIGHT BELOW FOOTING LEVEL OR TERMINATE IN A MINIMUM 20 GALLON SUMP PIT.
- FOUNDATION SHALL BE DESIGNED FOR A BEARING CAPACITY OF 1500 PSF AND FOUNDED ON COMPETENT ORIGINAL SOIL AS DETERMINED AND CONFIRMED BY A LICENSED GEOTECHNICAL ENGINEER OR ENGINEERING GEOLOGIST. ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION NOT VERIFIED TO BE FOUNDED ON ANY
- SOIL WITH THE AFOREMENTIONED MINIMUM PROPERTIES. FOOTINGS SHALL BE A MINIMUM OF 16" WIDE x 8" DEEP AND SHALL HAVE A MINIMUM OF (2) CONTINUOUS GRADE 40 #4 BARS WITH 3" BOTTOM CLERANCE. BOTTOM OF FOOTING SHALL BE LOCATED A MINIMUM OF 3'-0" BELOW GRADE
- CONCRETE PADS SUP0PORTING COLUMN LOADS SHALL BE NO SMALLER THAN 2'-0" x 2'-0" x 1'-0" DEEP WITH A
- MINIMUM OF (4) GRADE 40 #4 BARS EACH WAY WITH 3" BOTTOM CLEARANCE FOUNDATION WALLS SHALL BE A MINIMUM OF 8" NOMINAL WIDTH AND SHALL HAVE HOIZONTAL GRADE 40 #4 BARS
- AT 2'-0" O.C. MAX. WITH VERTICAL #4 BARS AS REQUIRED ON FOUNDATION CROSS SECTION ON SHEET S2.0 REINFORCEMENT SHALL LAP A MINIMUM OF 2'-0" (CLASS B SPLICE)
- INTERIOR BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB
- BASEMENT FLOOR SLAB SHALL BE A MINIMUM OF 4" THICK ON A MINIMUM BASE COURSE OF 4" TO 6" OF SAND, GRAVEL OR CRUSHED ROCK. BETWEEN THE BASE COURSE AND FLOOR SLAB SHALL BE PLACED A 6-MIL POLY VAPOR RETARDER WITH MINIMUM OVERLAP OF 6" AT DISCONTINUITIES
- IF A FLOOR IS TO BE SUPPORTED BY A MINIMUM OF 2'-0" OF GRANULAR FILL OR 8" OF EARTH, BASEMENT SLAB SHALL BE DESIGNED BY A LICENSED ENGINEER
- SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WALL WITH ½" Ø ANCHOR BOLTS EMBEDDED A MINIMUM OF 7" INTO CENTER OF WALL STEM AND SHALL BE INSTALLED AT A MAXIMUM OF 6'-0" O.C. (OR AS NOTED ON PLANS) AND SHALL BE INSTALLED WITHIN 6" TO 12" OF EACH END OF EACH SILL PLATE LENGTH. PER IRC SECTION R403.1.6
- FOUNDATION WINDOW WELLS SHALL BE PROVIDED WITH MINIMUM DIMENSIONS AS SHOWN IN DETAIL ON SHEET THE GARAGE FLOOR SHALL SLOPE TOWARD THE VEHICLE DOORS OR TO A TRENCH OR UNTRAPPED DRAIN THAT

FRAMING NOTES

MINIMUM OF 1/2

- 15. ALL DIMENSIONAL LUMBER SHALL BE DOUGLAS-FIR-LARCH GRADE #2, UNLESS NOTED OTHERWISE ON PLANS ALL INTERIOR LOAD-BEARING AND EXTERIOR WALL HEADERS SHALL BE (2) #2 - 2x10's, UNLESS NOTED OTHERWISE
- BLOCK OVER BEAMS AND AT CANTILEVERS AND DOOR JAMBS

DISCHARGES TO THE EXTERIOR, ABOVE GRADE

- INTERIOR NON-BEARING WALLS RESTING ON BASEMENT SLAB SHALL BE ISOLATED FROM ABOVE FRAMING BY A
- ALL HEADERS/BEAMS SHALL BEAR ON A MINIMUM OF (2) 2x4 POSTS (KING AND JACK STUDS), UNLESS NOTED **OTHERWISE**
- WHERE JOISTS SPAN PARALLEL TO FOUNDATION, BLOCKING SHALL BE PROVIDED IN THE TWO SPACES MOST ADJACENT TO THE FOUNDATION WALL AT 4'-0" O.C. FOR THE PURPOSE OF TRANSFERRING LATERAL FOUNDATION WALL LOAD TO THE FLOOR DIAPHRAGM. FASTEN JOISTS AND BLOCKING TO SILL PLATE WITH (4) 10d NAILS. IF MECHANICAL DUCTWORK IS INSTALLED IN ONE OF THESE FIRST TWO BAYS, FASTEN 2x4's FLAT AT 4'-0" O.C. BETWEEN JOIST(S) AND/OR SILL AND PROVIDE BLOCKING AS PRESCRIBED ABOVE IN THE NEXT TWO JOIST BAYS. SECURE 2x4's TO JOIST(S)/SILL PLATE WITH (4) 10d NAILS.
- ALL WOOD MATERIAL SUPPORTED ON CONCRETE OR MASONRY SHALL BE TREATED OR OF DECAY-RESISTANT
- JOISTS UNDER BEARING PARTITIONS ON PLANS HAVE BEEN SIZED TO SUPPORT THE DESIGN LOAD. JOISTS FRAMING INTO THE FACE OF A STEEL OR WOOD BEAM SHALL BE SUPPORTED WITH APPROPRIATE
- JOISTS FRAMED ON TOP OF STRUCTURAL MEMBER SHALL BE SUPPORTED AT EN DS BY FULL-DEPTH SOLID
- BLOCKING MIN. 1%" IN THICKNESS OR BY FASTENING RIM TO JOISTS PER FASTENING TABLE TO LEFT
- ALL WALL COVERINGS SHALL COMPLY WITH IRC SECTION R702.3 ALL RAFTERS AND COLLAR TIES SHALL COMPLY WITH IRC SECTION R802.3.
- ALL RAFTERS SHALL HAVE 2x4 COLLAR TIES @ 4'-0" O.C. IN UPPER ½ OF VERTICAL DISTANCE BETWEEN CEILING AND
- BLOCKING BETWEEN JOISTS UNDER A LOAD-BEARING WALL IS NOT REQUIRED
- PER IRC SECTION 501.3, BOTTOM OF ALL FLOOR ASSEMBLIES ABOVE UNFINISHED AREAS SHALL BE PROVIDED WITH A %" GYPSUM BOARD MEMBRANE OR RESIDENTIAL FIRE SPRINKLER SYSTEM WHEN FLOOR SYSTEM IS CONSTRUCTED OF OTHER THAN DIMENSION LUMBER OR STRUCTURAL COMPOSITE LUMBER EQUAL TO OR GREATER THAN 2x10 NOMINAL DIMENSION(WHERE REQUIRED BY ENFORCING JURISDICTION)
- ENGINEERED LVL's SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E=1900 ksi, AND Fv=285 psi ENGINEERED PARALLAMS SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E = 2000 ksi, AND Fv = 290 psi
- COLUMN CONNECTION TO STEEL BEAMS SHALL BE WITH A CLIP POST CAP WITH ALL FOUR TAB EARS BENT AROUND THE BOTTOM FLANGE OF THE BEAM. FOR A BEARING PLATE, FOUR HOLES SHALL BE DRILLED IN THE BOTTOM FLANGE OF THE STEEL BEAM TO MATCH THE HOLE PATTERN OF THE PLATE. ½" x 2" BOLTS SHALL THEN BE INSTALLED WITH A FLAT WASHER, LOCK WASHER, AND A NUT IN EACH OF THE HOLES. THE POST CAP MAY BE WELDED TO THE STEEL BEAM IN ACCORDANCE WITH AWS D1.1-92 AS AN ALTERNATIVE, AND WOULD NEED TO BE INSPECTED BY AN AWS-CERTIFIED INSPECTOR.
- WHEN MECHANICAL EQUIPMENT IS LOCATED IN AN ENCLOSED ROOM, THERE SHALL BE (2) 14"x12" VENTS LOCATED IN A WALL COMMON WITH ADDITIONAL LIVING AREA. ONE VENT SHALL BE LOCATED SUCH THAT THE BOTTOM OF THE VENT BEGINS 12" FROM THE FLOOR AND THE OTHER VENT SHALL BE LOCATED SUCH THAT THE TOP OF THE
- ALL ROOF SHEATHING SHALL BE $\frac{7}{6}$ " OSB WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. IN FIELD

GLAZING NOTES

- GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 2'-0" ARC OF THE DOOR IN A CLOSED POSITION AND FOR WHICH THE BOTTOM EDGE IS WITHIN 5'-0" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE ${\tt GLAZING~IS~WITHIN~5"-0"}~{\tt OF~THE~TOP~OR~BOTTOM~OF~THE~STAIR, ENCLOSURES~FOR~SPAS, TUBS, SHOWERS, AND}$ WHIRLPOOLS, GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING NINE SQUARE FEET AND FOR WHICH THE
- BOTTOM EDGE IS LESS THAN 1'-6" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 3'-0" ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC SECTION R612.2

ATTIC VENTILATION

ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/4" TO 1/4" OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN χ_{50} OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS ARE LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED - THE REQUIRED AREA MAY BE REDUCED TO 1/300.

EMERGENCY EGRESS

- 38. PROVIDE A MINIMUM OF ONE WINDOW FOR EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 SQUARE FEET WITH A MINIMUM OPENABLE HEIGHT OF 2'-0" AND A MINIMUM WIDTH OF 1'-9". IN ADDITION, THE OPENABLE PORTION OF EGRESS WINDOWS SHALL NOT EXCEED 3'-8" ABOVE THE ADJOINING FLOOR OR PERMANENT STEP
- PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR, INCLUDING BASEMENT (IF APPLICABLE). ALARMS SHALL BE HARDWIRED TOGETHER SO THAT THE ACTIVATION OF ONE SMOKE ALARM WILL ACTIVATE ALL SMOKE ALARMS IN THE DWELLING. PROVIDE CARBON MONOXIDE DETECTORS OUTSIDE EACH SLEEPING AREA

MASONRY VENEER

- MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION-RESISTANT METAL TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1½", WITH NOT LESS THAN %" MORTAR OR GROUT COVER TO OUTSIDE FACE.
- VENEER TIES, IF STRAND WIRE, SHALL NOT BE LESS IN THICKNESS THAN NO. 9 U.S. GAGE WIRE AND SHALL HAVE A HOOK EMBEDDED IN THE MORTAR JOINT, OR IF SHEET METAL, SHALL BE NOT LESS THAN NO. 22 U.S. GAGE BY 🔏 CORRUGATED.

EACH TIE SHALL SUPPORT NOT MORE THAN 2.67 SQUARE FEET OF WALL AREA AND SHALL BE SPACED NOT MORE

- THAN 32 INCHES ON CENTER HORIZONTALLY AND 24 INCHES ON CENTER VERTICALLY. VENEER TIES AROUND WALL OPENINGS: ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL
- OPENINGS GREATER THAN 16 INCHES IN EITHER DIMENSION. METAL TIES AROUND THE PERIMETER OF OPENINGS SHALL BE SPACED NOT MORE THAN 3 FEET ON CENTER AND PLACED WITHIN 12 INCHES OF THE WALL OPENING.

GARAGE NOTES

- DOOR(S) BETWEEN THE GARAGE AND DWELLING SHALL BE MINIMUM 1%" SOLID CORE OR HONEY-COMBED STEEL
- DOOR WITH 20-MINUTE FIRE RATING EQUIPPED WITH A SELF-CLOSING DEVICE
- VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115-MPH 3-SECOND GUST LOADING PER DASMA 108 AND ASTM E 330-96 PER IRC 2018

GARAGE NOTES (CONTINUED)

- THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY MINIMUM %" GYP. BOARD APPLIED TO THE GARAGE SIDE OF FRAMING. WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE, THE GARAGE CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM 5/4" TYPE X GYP, BOARD. WHERE A FLOOR/CEILING SPACE IS PROVIDED ABOVE THE GARAGE COLUMNS AND BEAMS
- SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 5/8" GYP. BOARD. GARAGE DOOR H-FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING AND SHALL BE FASTENED WITH 2½"" x 0.120" NAILS AT 7" O.C. STAGGERED WITH (7) 31/4" x 0.120" NAILS THROUGH THE JAMB INTO THE HEADER. MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.

DESIGN LOADING (PER TABLE R301.5)

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (PSF)					
USE	LIVE LOAD	DEAD LOAD			
UNINHABITABLE ATTICS WITHOUT STORAGE	10	10			
UNINHABITABLE ATTICS WITH LIMITED STORAGE	20	10			
HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30	10			
BALCONIES (EXTERIOR) AND DECKS	40	10 ^d			
FIRE ESCAPES	40	10			
GUARDRAILS AND HANDRAILS ^a	200°	-			
GUARDRAIL IN-FILL COMPONENTS ^b	50°	-			
PASSENGER VEHICLE GARAGES	50	DEPENDENT UPON SLAB CONSTRUCTION			
ROOMS OTHER THAN SLEEPING ROOM	40	10 ^d			
SLEEPING ROOM	30	10 ^d			
STAIRS	40	10 ^d			

a. A single concentrated load applied in any direction at any point along the top.

b. Guard in-fill components (all those except the handrail), ballusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to one square foot. This load need not be assumed to act concurrently with any other live load requiremen c. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety

factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the

infill components. These loads shall be determined independently of one another, and loads are assumed not to occur with any other live load. d. An additional dead loading of 10 psf shall be applied where thinset tile floor is to be installed. An additional dead loading of 50 psf shall be applied where mudset tile floor is to be installed

INSULATION/EFFICIENCY

- BUILDING ENVELOPE INSULATION SHALL COMPLY WITH IRC TABLE N1102.1.1 OR THE 2012 IECC (SEE SHEET S3.1 FOR FRAMING DETAILS AND TABLES ON THIS SHEET FOR MORE INFORMATION)
- CATHEDRAL -VAULTED CEILING FRAMING SHALL BE FRAMED WITH A MINIMUM INSULATION VALUE OF R-38. IF VAULTED RAFTERS DO NOT PROVIDE REQUIRED DEPTH TO ACHIEVE R-38 INSULATION BUILDER SHALL FUR DOWN RAFTERS PER DETAILS PROVIDED ON

INSULATION AND FENESTRATION REQUIRE	EMENTS BY COMPONENT (TABLE N1102.1.1)
CLIMATE ZONE	4-A
FENESTRATION U-FACTOR	0.35
SKYLIGHT U-FACTOR	0.55
GLAZED FENSTRATION SHGC	0.40
CEILING R-VALUE	49
WOOD FRAME WALL R-VALUE	15
MASS WALL R-VALUE	8 / 13
FLOOR R-VALUE	19
BASEMENT WALL R-VALUE	10-CONTINUOUS OR 13-CAVITY
SLAB R-VALUE AND DEPTH	10 AT 2'-0"
CRAWL SPACE WALL R-VALUE	10-CONTINUOUS OR 13-CAVITY
DUCTWORK EXPOSED TO OUTSIDE AIR R-VALUE	8
DUCTWORK NOT EXPOSED TO OUTSIDE AIR R-VALUE	6
CATHEDRAL VAULTED CEILING R-VALUE	38
-	

DUCT SEALING

N1103.2.2 (R403.2.2) SEALING (MANDATORY). DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1 OF 2018 IRC. **EXCEPTIONS:**

- AIR-IMPERMEABLE SPRAY FOAM PRODUCTS SHALL BE PERMITTED TO BE APPLIED WITHOUT ADDITIONAL JOINT SEALS.
- WHERE A DUCT CONNECTION IS MADE THAT IS PARTIALLY INACCESSIBLE. THREE SCREWS OR RIVETS SHALL BE EQUALLY SPACED ON THE EXPOSED PORTION OF THE JOINT SO AS TO PREVENT A HINGE EFFECT.
- CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS IN DUCTS OPERATING AT STATIC PRESSURES LESS THAN 2 INCHES OF WATER COLUMN

DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER OF THE FOLLOWING: POST-CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM

- PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
- ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM PER 100 $\,$ SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST. IF THE AIR HANDLER IS NOT INSTALLED AT THE TIME OF THE TEST, TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 3 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA.

EXCEPTION: THE TOTAL LEAKAGE TEST IS NOT REQUIRED FOR DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

ME	CHANICAL VENTILATIO	N SYSTEM FAN EFFICA	CY
FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
RANGE HOODS	ANY	2.8	ANY
IN-LINE FAN	ANY	2.8	ANY
BATHROOM, UTILITY ROOM	10	1.4	90
BATHROOM, UTILITY ROOM	90	2.8	ANY

	MULTIPLE-PLY WOOD BEAM FASTENING SCHEDULE							
DIMENSIONAL LUMBER BEAM SIZE/TYPE	FASTENERS	LVL BEAM SIZE/TYPE	FASTENERS	LVL BEAM SIZE/TYPE	FASTENERS			
(2) 2x	(2) ROWS 10d @ 12" O.C. ONE SIDE	(2) 1 ¾" UP TO 11 ⅓" DEPTH	(2) ROWS 16d @ 12" O.C. ONE SIDE	(3) 1 ¾" x 14"+ DEPTH	(3) ROWS 16d @ 12" O.C. BOTH SIDES			
(3) 2x	(2) ROWS 10d @ 12" O.C. BOTH SIDES	(2) 1 ¾" 14"+ DEPTH	(3) ROWS 16d @ 12" O.C. ONE SIDE	(4) 1 ¾" UP TO 11 ¾" DEPTH	(2) ROWS ¼" x 5" SIMPSON SDS OR SDWS SCREWS @ 16" O.C. STAGGERED TOP & BOTTOM BOTH SIDES			
(4) 2x	(2) ROWS ¼" x 5" SIMPSON SDS SCREWS @ 16" O.C. STAGGERED TOP & BOTTOM, BOTH SIDES	(3) 1 ¾" UP TO 11 ½" DEPTH	(2) ROWS OF 16d @ 12" O.C. BOTH SIDES	(4) 1 ¾" x 14"+ DEPTH	(3) ROWS ¼" x 5" SIMPSON SDS OR SDWS SCREWS @ 16" O.C. STAGGERED TOP & BOTTOM BOTH SIDES			



HOMES, CUSTOM SPEC SUMMIT SVF092 LOT 92, E

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RESIDENTIAL SEISMIC & WIND ANALYSIS

				1141 01
DETERMINE WEIGHT OF HOUSE:				CALCULATED VALUE
LOCATION		DEAD LOAD (psf)	AREA (ft ²)	WEIGHT (lbs.)
ROOF		10	2787	27870
CEILING		10	2787	27870
FIRST FLOOR		10	2787	27870
	WALL LENGTH (ft)	WALL HEIGHT (ft)	WALL UNIT WT. (psf)	WEIGHT (lbs)
FIRST FLOOR EXT. WALL DL	238.66	10	10	23866
		DEAD LOAD (psf)	AREA (ft2)	WEIGHT (lbs)
FIRST FLOOR INT. PARTITION WALL DL		6	2787	16722

	PROJECTED AREAS (WIND DESIGN PER 115 MPH 3-SECOND GUST, EXPOSURE C AND MEAN ROOF HEIGHT <= 30 FT ASSUMED)										
FRONT-TO-BACK			SIDE-TO-SIDE								
	AREA	LOAD			AREA	LOAD					
SLOPED ROOF	250	1101		SLOPED ROOF	315	1379					
VERT. ROOF	33	460	CUMULATIVE	VERT. ROOF	39	541	CUMULATIVE				
1ST	647.13	9024	10732	1ST	665.5	9237	11305				
BSMT ^a	0	0	0	BSMT ^a	123	2140	7793				
			PRESSURE (PSF) - PER ASCE CH. 6								
	SLOPED ROOF	ZONE B		5.9	ZONE C	11.6	2a (FIG. 28.6-1, ASCE7)				
	WALL/VERT. ROOF	ZONE A		17.4	ZONE D	3.4	11.766				
I	MEAN ROOF HT., h				The state of the s		·				

a) If there is a walkout wall to be sheathed, determine tributary wind area and enter here. If no walkout, enter 0 for area.

 $q_{z_{10_ASD}}$ =0.6 $q_{z_{10}}$ (Design Velocity Pressure for ASD analysis under ASCE7-16 and IRC/IBC 2018) q_{z10} =0.00256 $K_z K_{zt} K_d V^2$ (ASCE7-16 Velocity Pressure)

1ST FLOOR TRIBUTARY WEIGHT $\ensuremath{\mathsf{S}}_{\ensuremath{\mathsf{S}}}(\ensuremath{\mathsf{SITE}}\ensuremath{\mathsf{GROUND}}\ensuremath{\mathsf{MOTION}}\ensuremath{\mathsf{-}}\ensuremath{\mathsf{\%}}\ensuremath{\mathsf{g}}\mbox{-}\ensuremath{\mathsf{FROM}}\ensuremath{\mathsf{ASCE7}}\ensuremath{\mathsf{SEISMIC}}\ensuremath{\mathsf{MAP}})$ F_a (from ASCE7 Table 11.4-1) S_{DS} (= 2/3 * S_S * F_a)

R (from ASCE7 Table 12.2-1)

12.0% 1.6 0.128

SEISMIC SHEAR		
LOCATION	From ASCE7 (Eq. 12.8-1):	V (= 1.2 * S _{DS} * W / R) (lbs.)
1ST FLOOR		1599
BASEMENT		1599

Sheathing Location	Min. Sheathing Schedule	Fastening Schedule	Allowable Shear (#/LF)	Code Reference
Exterior (Option #1)	7/16" APA Rated Plywood/OSB	1-1/2" 18ga, Staples w/ 1" penetration@ 8" OC Edges, 6" OC Field For 24" stud specing, 12" OC Field For 16" stud specing	155	per IBC, Table 2305.3(1)
Exterior (Option #2)	7/16" APA Rated Plywood/OSB	1-1/2" 18ga, Staples w/ 1" penetration@ 4" OC Edges, 5" OC Field For 24" stud spacing, 12" OC Field For 16" atud spacing	230	per IBC, Table 2306.3(1)
Exterior (Option #3)	7/16" APA Rated Plywood/OSB	1-1/2" 18gs. Staples w/ 1" penetration@ 3" OC Edges, 6" OC Field For 24" stud spscing, 12" OC Field For 16" stud spscing	310	per IBC, Table 2306.3(1)
Exterior (Option #4)	7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing	8d Common Nails w/ 1-3/8" penetration @ 6" O.C. Edges, 12" O.C. Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing OR @ 4" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing	220	AWC SDPWS Table 4.3A
Exterior (<i>Option #5</i>)	7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing	8d Common Nails w/ 1-3/8" penetration @ 4" O.C. Edges, 12" O.C. Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing OR @ 3" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing	320	AWC SDPWS Table 4.3A
Exterior (<i>Option #6</i>)	7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing and double studs at each pane edge	8d Common Nails w/ 1-3/8" penetration @ 3" O.C. Edges, 12" O.C.	410	AWC SDPWS Table 4.3A
Interior	1/2" Gypsum Board	No. 6- 1 ¹ / ₄ " Type W or S Screws @ 8" O.C. Edges, 12" O.C. Field	60	per IBC, Table 2306.4.4
Interior	16 Ga. Simpson/USP Type WB Steel X-Brace (or equal)	(3) 16d @ end studs & (1) 8d @ intermediate studs (per manufacture specifications - see detail on sheet S3)	325	

EXTERIOR SHEATHING OPTION FOR FIRST FLOOR	5	WIDTH OF 1ST STORY (F)	58.83	WIDTH OF 2ND STORY (I
EXTERIOR SHEATHING OPTION FOR BASEMENT WALLS	4	DEPTH OF 1ST STORY (F	60.5	DEPTH OF 2ND STORY (I
		BACK WALL OF GARAGE (F	.) 0	
		GAR. WALL: 1=F-B, 2=S-S	2	

		:	EXTER	RIOR STRUCTURAL WALL	LENGTHS (ft.) & RESISTANCES			·	
	SEISMIC				WIND				
	FRONT-TO-BACK	RESISTANCE (lbs.)	SIDE-TO-SIDE	RESISTANCE (lbs.)	FRONT-TO-BACK	RESISTANCE (lbs.)	SIDE-TO-SIDE	RESISTANCE (lbs.	
1ST FLOOR	49	18620	24	9120	49	26068	24	12768	
BASEMENT	0	0	20.5	5740	0	0	20.5	8036	
-				_					
		ADDITIONAL RESIS	STANCE REQUIRED		Anchor Bolt Spacing	(in.)	16d Nail Spacing req'd at	bottom plate (in	
		SEISMIC	WIND		diameter (in.)	0.5	1st Floor F-B	3	
1ST FLOOR FRONT-T	O-BACK	0	0		Shear value (per NDS)	944	1st Floor S-S	2	
1ST FLOOR SIDE-TO-	-SIDE	0	0	1	Spacing F-B (inches)	204.4			
BASEMENT FRONT-T	O-BACK	0	0	1	spacing S-S (inches)	188.6			

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	RESISTANCE REQUIRED IN ADDITION TO RESISTANCE PROVIDED BY EXTERIOR WALLS**										
	ADDITIONAL RESISTANCE REQUIRED (POUNDS)	PORTAL FRAMES OR PERF. SHEAR WALL RESISTANCE	INTERIOR X-BRACES (325#/BRACE)	INTERIOR WALL LENGTH W/ 1/2" GYPSUM BOARD PER TABLE (FT.)	INT. WALL LENGTH SHEATHED W/ OSB (TOTAL LENGTH, ONE SIDE, FT.)	RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS)	OK?				
1ST FLOOR FRONT-TO-BACK	0					0	YES				
1ST FLOOR SIDE-TO-SIDE	0					0	YES				
BASEMENT FRONT-TO-BACK	0					0	YES				
BASEMENT SIDE-TO-SIDE	0					Ö	YES				

**NOTES: 1) SEE ATTACHED CALCULATIONS FOR PORTAL FRAME OR PERFORATED SHEAR WALL RESISTANCE CAPACITIES (IF APPLICABLE),

2) SEE SHEET ST FOR INTERIOR STEEL X-BRACE INSTALLATION, 3) INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NAILING
PATTERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE ONLY APPLICABLE FOR FULL-HEIGHT SECTIONS OF 2'-8" OR LONGER
ALL LATERAL BRACING ACHIEVED AT EXTERIOR WALLS AND WALLS DIRECTLY ON FOUNDATIONS; THEREFORE, NO INTERIOR BRACING PER 2018 IRC SECTION R502.2.1 IS REQUIRED

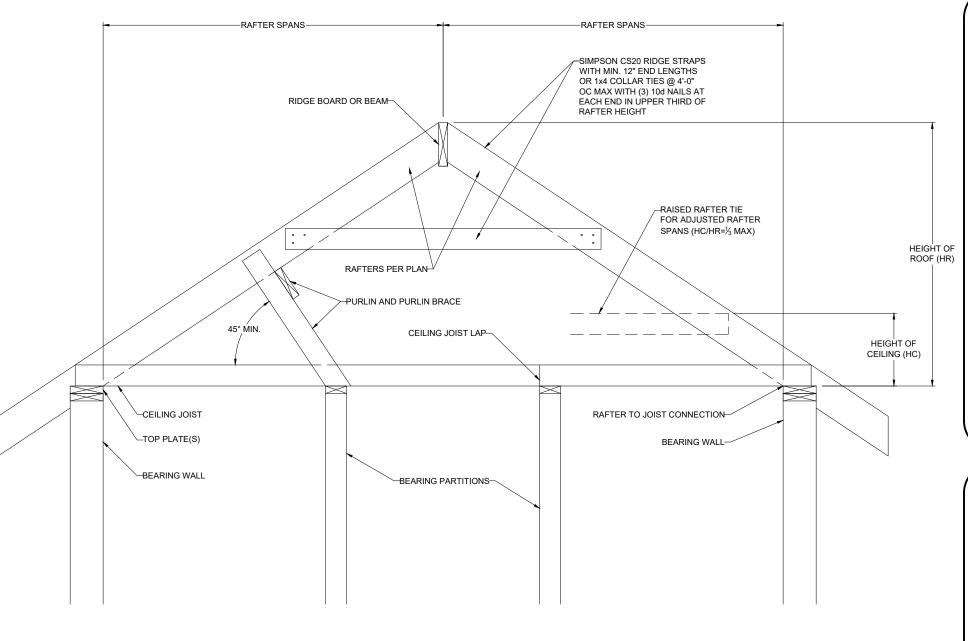
	WIND UPLIFT ANALYSIS										
X/12 DEGREES					-	-					
ROOF PITCH (MAX)	4	18.4	PITCH OF 6 OR LESS:	EOH -13.3, E -7.2, G -5.2							
		ASCE 7									
	LENGTH (FT.)	PRESSURE (PSF)	LINEAL FT. OF OH	UPLIFT PER FT* (LBS)							
OVERHANG	1	16.56	240.66	16.56							
	TOTAL AREA (FT ²)	ZONE E AREA (FT ²)	ZONE G AREA (FT ²)	PRESSURE ZN. E (PSF)	PRESSURE ZN. G (PSF)	TOTAL FORCE (LBS)	FORCE PER LINEAL FT @ PERIMETER (LBS)				
MAIN ROOF**	3559.215	-506.691024	4065.906024	15.12	10.5	35031	146.8				
*ALONG PERIMETER	*ALONG PERIMETER TOTAL UPLIFT PER LINEAL FOOT ALON		FOOT ALONG EXTERIOR (PO	UNDS)	163.3	UPLIFT OK					
**INSIDE EXTERIOR V	VALLS	RESISTANCE DUE TO DEAD	WEIGHT & (3) 10d TOENAILS		251.6						

BASEMENT SIDE-TO-SIDE

THE CONTINUOUS STRUCTURAL PANEL SHEATHING BRACING METHOD REQUIRES USE OF THE ABOVE TABLE FOR SHEATHING OF THE ENTIRE STRUCTURE. IN ADDITION, FRAMING MEMBERS SHALL BE @ 16" O.C. MAX., UNBLOCKED, AND W/ SHEATHING APPLIED DIRECTLY TO FRAMING MEMBERS

ALL WALLS USED IN THE CALCULATION OF THE RESISTANCE FOR THIS STRUCTURE SHALL HAVE A MINIMUM UNINTERRUPTED HEIGHT OF 8-0" AND LENGTH OF 2-8". ALLOWABLE RESISTANCES HAVE BEEN #/FT AND INCREASED BY 40% FOR WIND LOADS, PER VALUES IN 2018 IBC SECTION 2306 AND AWC SDPWS TABLE 4.3A. FOR EXAMPLE, 7/16" APA-RATED SHEATHING WITH 8d @ 6" & 12" HAS A SEISMIC SHEAR VALUE OF 240 A WIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC)

NOTE: SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE DETERMINED TO BE CLASS E OR F, CONSULT ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION



1 BRACED RAFTER CONSTRUCTION S1.1 SCALE: 1" = 1'-0" (18x24) OR 1½" = 1'-0" (24x36)

Combustion Air Calculation Per 2018 IRC Section G2407.5

100000 BTU/h Appliance #1 Furnace BTU/h Appliance #2 Appliance #3 Water Heater 50000 BTU/h

Total BTU/hr 150000 BTU/h

1218 ft² Area of Combined Space (floor where appliances are located) Ceiling Height in Usable Space 8.5 ft

Note: Per 2018 IRC Section G2407.5.3.2, The volumes of spaces in different stories shall be considered as communicating spaces where such spaces are connected by one or more openings in doors or floors having a total minimum free area of 2 square

Is floor where appliances are located open to adjacent level? If Yes, what is the area of open space adjacent to appliance area?

inches per 1,000 BTU/h of total input rating of all appliances

Per 2018 IRC Section G2407.5.1 (Standard Method), the minimum required volume shall be 50 cubic feet per 1,000 BTU/hr (Total BTU/hr / 1,000 BTU/hr x 50 ft 3)

Required air space in combined areas:

Area of Combined Space > Required combined area?

7500 ft³

882 ft²

Required combined area:

OK

Per Section G2407.5.3.1, each opening shall have a minimum free area of 1 square inch per 1,000 BTU/hr of the total input rating of all appliances in the space, but not less than 100 square inches. One

opening shall commence within 12 inches of the top and one opening shall commence within 12 inches of the bottom of the enclosure. The minimum dimension of air openings shall be not less than 3 inches.

Note: two grills required - one within 12" of floor, one within 12" of clg.

150 in² Minmum required opening area: Minimum grill size: 14 x 11 (inches)



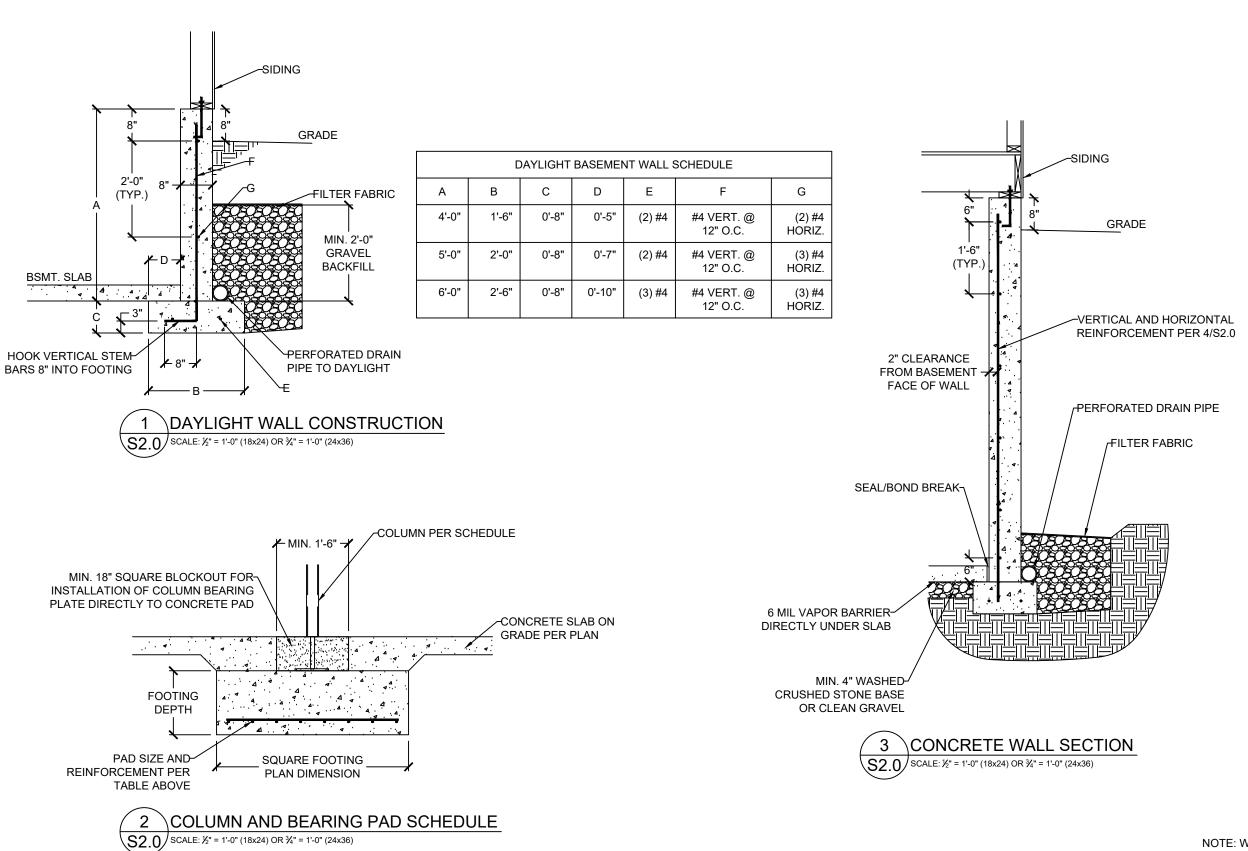
SPEC SUMMIT VIEW FARMS WALKER CUSTOM HOMES, SVF092 : LOT 92, : CLIENT:

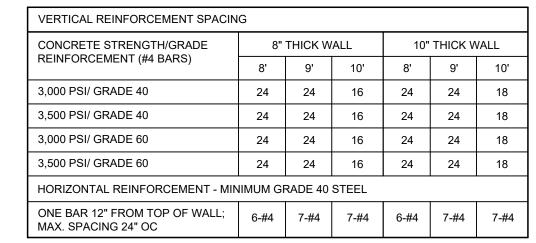
2317 SW MORRIS DR. LEE'S SUMMIT, MISSOU



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FOOTNOTES:

1) WALL HEIGHT IS MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE FLOOR SLAB 2) VERTICAL REINFORCEMENT FOR CONCRETE WALLS THAT ARE NOT FULL HEIGHT, AND FOR REINFORCEMENT SPACING 24" OC, REINFORCEMENT MAY BE PLACED IN THE MIDDLE OF THE WALL. OTHER WALLS SHALL HAVE VERTICAL REINFORCEMENT AS FOLLOWS:

A) 8" WALL - MINIMUM 5" FROM THE OUTSIDE FACE

B) 10" WALL - MINIMUM 6%" FROM THE OUTSIDE FACE C) EXTEND BARS TO WITHIN 8" OF THE TOP OF THE WALL

3) REINFORCEMENT CLEARANCES:

A) CONCRETE EXPOSED TO EARTH - MINIMUM 11/2"

B) NOT EXPOSED TO WEATHER (INTERIOR SIDE OF WALLS) -3/4"

C) CONCRETE EXPOSED TO WEATHER (TOP CLEARANCE IN GARAGE AND DRIVEWAY SLABS) - 1½"

4) HORIZONTAL REINFORCEMENT:

A) ONE BAR SHALL BE PLACED WITHIN 12" OF THE TOP OF THE WALL

B) OTHER BARS SHALL BE EQUALLY SPACED WITH SPACING NOT TO EXCEED 24" OC C) HORIZONTAL BARS SHOULD BE AS CLOSE TO THE TENSION FACE AS POSSIBLE (INTERIOR) AND BEHIND THE VERTICAL REINFORCEMENT (I.E. 2" TOWARD THE

D) SUPPLEMENTAL REINFORCEMENT AT CORNERS - PLACE (1) #4 BAR 48" LONG AT 45 DEGREE ANGLE AT CORNERS OF OPENINGS. PLACE REINFORCEMENT WITHIN 6" OF THE EDGE OF INSIDE CORNERS.

5) REINFORCEMENT SHALL BE LAPPED A MINIMUM 24" AT ENDS, SPLICES, AND AROUND CORNERS.

6) AT MASONRY LEDGES THE MINIMUM WALL THICKNESS SHALL BE 3½". LEDGES SHALL NOT EXCEED A DEPTH OF MORE THAN 24" BELOW THE TOP OF THE WALL. FOR WALL THICKNESSES LESS THAN 4" PROVIDE #4 BARS AT MAX. 24" OC TO WITHIN 8" OF THE TOP OF THE WALL

7) STRAIGHT WALLS MORE THAN 5' TALL AND MORE THAN 16 FEET LONG SHALL BE PROVIDED WITH EXTERIOR BRACED RETURN WALLS. WALL LENGTH SHALL BE MEASURED USING INSIDE THE SHORTEST DIMENSION BETWEEN INTERSECTING WALLS

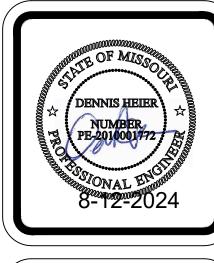
8) WALL SHALL NOT BE BACKFILLED UNTIL FLOOR SYSTEM AND DIAPHRAGM ARE IN PLACE

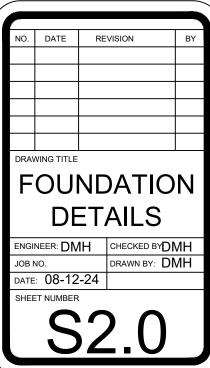
4 FOUNDATION WALL REINFORCEMENT TABLE

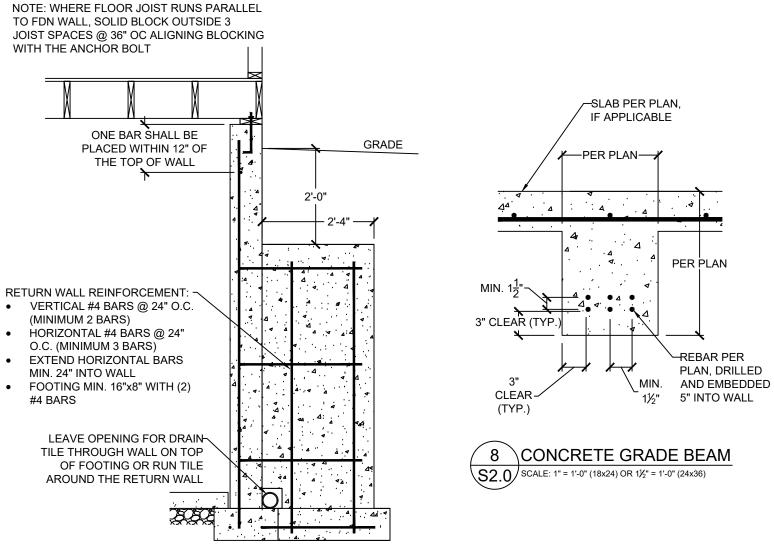
S2.0 NO SCALE



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LOT 92, SUMMIT VIEW FARMS
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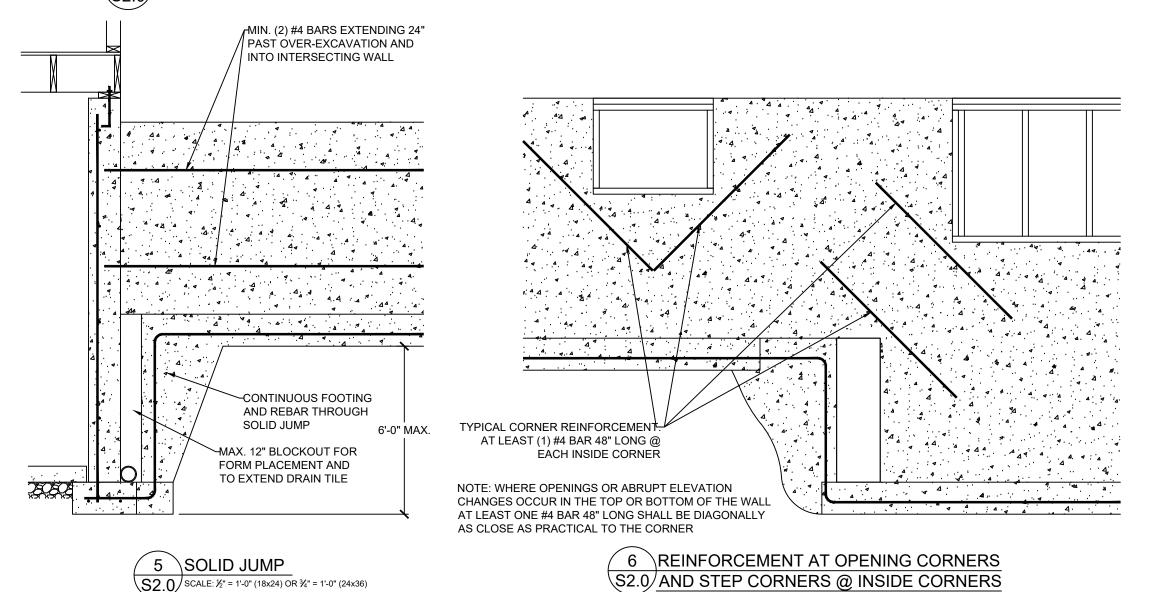




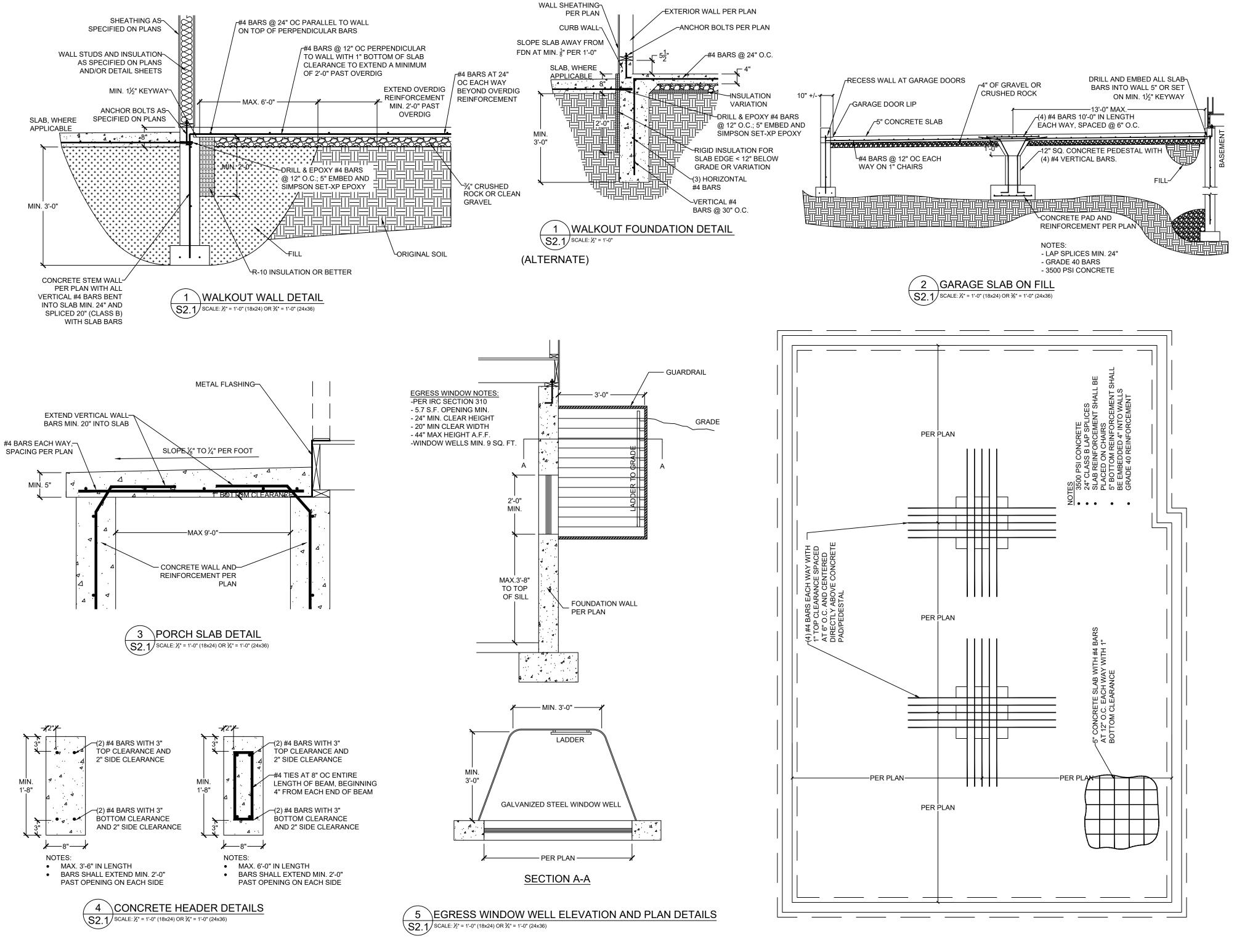


\RETURN WALL DETAIL

S2.0/SCALE: $\frac{1}{2}$ " = 1'-0" (18x24) OR $\frac{3}{4}$ " = 1'-0" (24x36)



SCALE: ½" = 1'-0" (18x24) OR ¾" = 1'-0" (24x36)

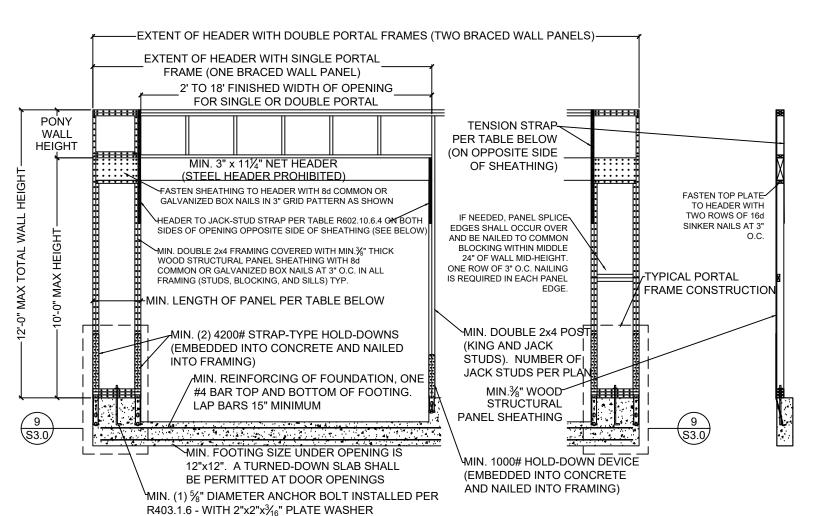


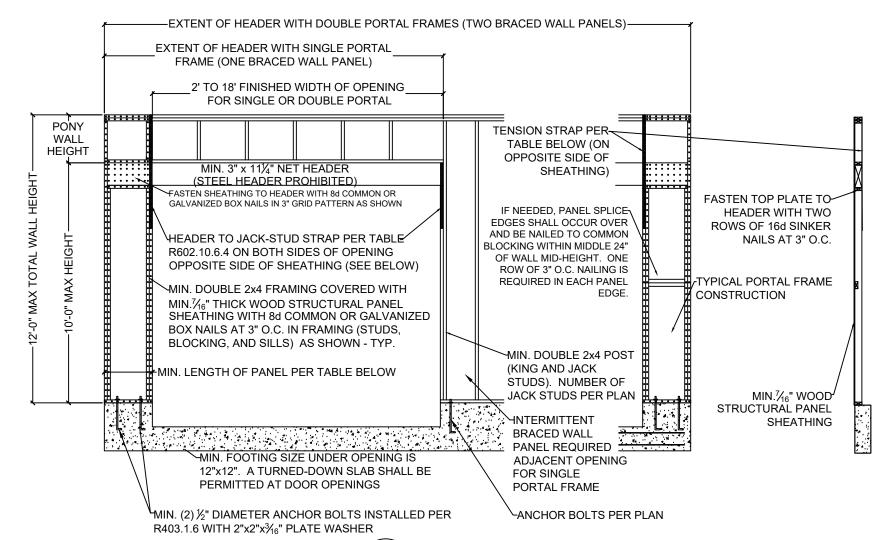


CLIENT: WALKER CUSTOM HOMES, LLC
JOB TITLE: SVF092 SPEC
LOT 92, SUMMIT VIEW FARMS
LOCATION: 2317 SW MORRIS DR.
LEE'S SUMMIT, MISSOURI



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METHOD PFH (PORTAL FRAME WITH

S3.0/HOLD-DOWNS) - PER FIGURE IRC R602.10.6.2

SCALE: ½" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

	MINIMUN	MINIMUM PANEL LENGTH FOR DETAIL 1/S3.0 (INCHES)					
		W	ALL HEIG	HT			
	8 FEET	9 FEET	10 FEET	11 FEET	12 FEET		
SUPPORTING ROOF ONLY	16	16	16	18	20		
SUPPORTING ONE STORY AND ROOF	24	24	24	27	29		

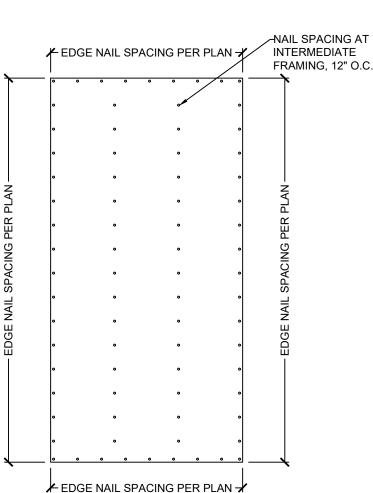
			3 1/S3.0 AND 2/S3.0 (FROM	
MAX GARAGE OPENING	PONY WALL WALL HT.	REQUIRED SIMPSON	MIN. STRAP END LENGTH	NAILS REQUIRED IN EACH
(FT.)	(FT.)	STRAP	INIIN. STRAP END LENGTH	STRAP END LENGTH
18'-0"	0'-0"	CS20	0'-9"	(7) 8d
9'-0"	1'-0"	CS20	0'-9"	(7) 8d
18'-0"	1'-0"	CS14	1'-4"	(15) 8d
9'-0"	2'-0"	CS18	0'-11"	(9) 8d
18'-0"	2'-0"	CMSTC16	1'-8"	(25) 16d SINKER
9'-0"	4'-0"	CMSTC16	1'-8"	(25) 16d SINKER
16'-0"	4'-0"	CMST14	2'-6"	(33) 10d

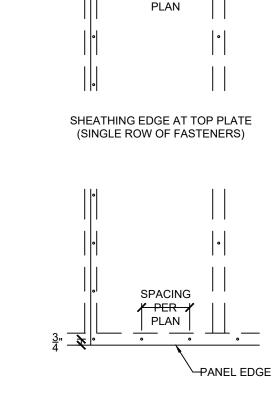
2 \METHOD PFG (PORTAL FRAME AT GARAGE \S3.0/DOOR) - PER FIGURE IRC R602.10.6.3

SCALE: 1/4" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

MINIMUM PANEL LENGTH FOR DETAIL 2/S3.0 (INCHES) WALL HEIGHT						
8 FEET 9 FEET		10 FEET	11 FEET	12 FEET		
24	27	30	33 ^a	36 ^a		

a. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height may be increased to 12 feet with pony wall



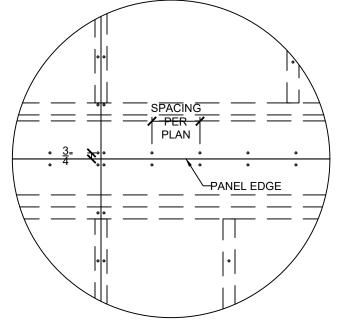


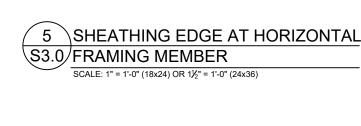
SHEATHING EDGE AT BOTTOM PLATE (SINGLE ROW OF FASTENERS)

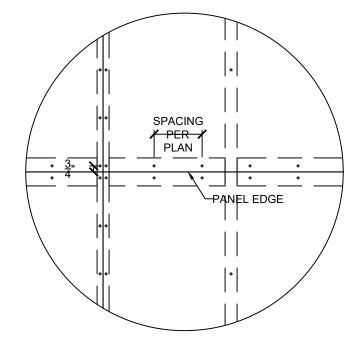
SPACING

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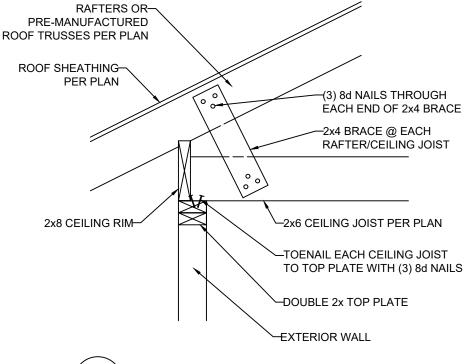




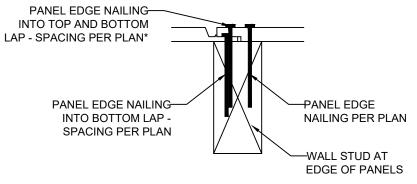






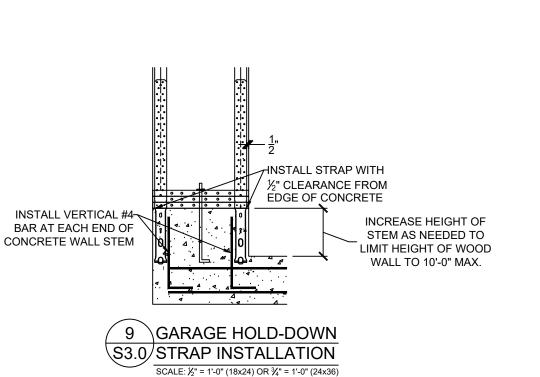


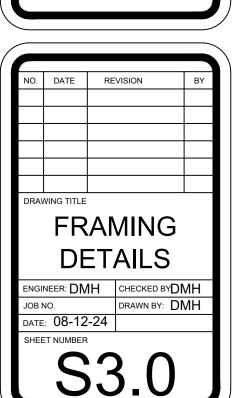
7 RAFTER BEARING OPTION DETAIL S3.0 SCALE: 1" = 1'-0" (18x24) OR $1\frac{1}{2}$ " = 1'-0" (24x36)



*NOTE: NAILING INTO TOP AND BOTTOM LAP IS IN ADDITION TO NAILING REQUIRED INTO BOTTOM LAP. FOR EXAMPLE, IF PLAN CALLS FOR NAILS @ 6" O.C. AT EDGES, BOTTOM LAP SHALL BE FASTENED AT 6" O.C AND, IN ADDITION, NAILING SHALL ALSO BE INSTALLED THROUGH TOP AND BOTTOM LAP @ 6" O.C. STAGGERED 3" FROM BOTTOM LAP NAILING

\FASTENING INSTRUCTIONS FOR S3.0/SHIPLAP PANEL SHEATHING SCALE: 4" = 1'-0" (18x24) OR 6" = 1'-0" (24x36)







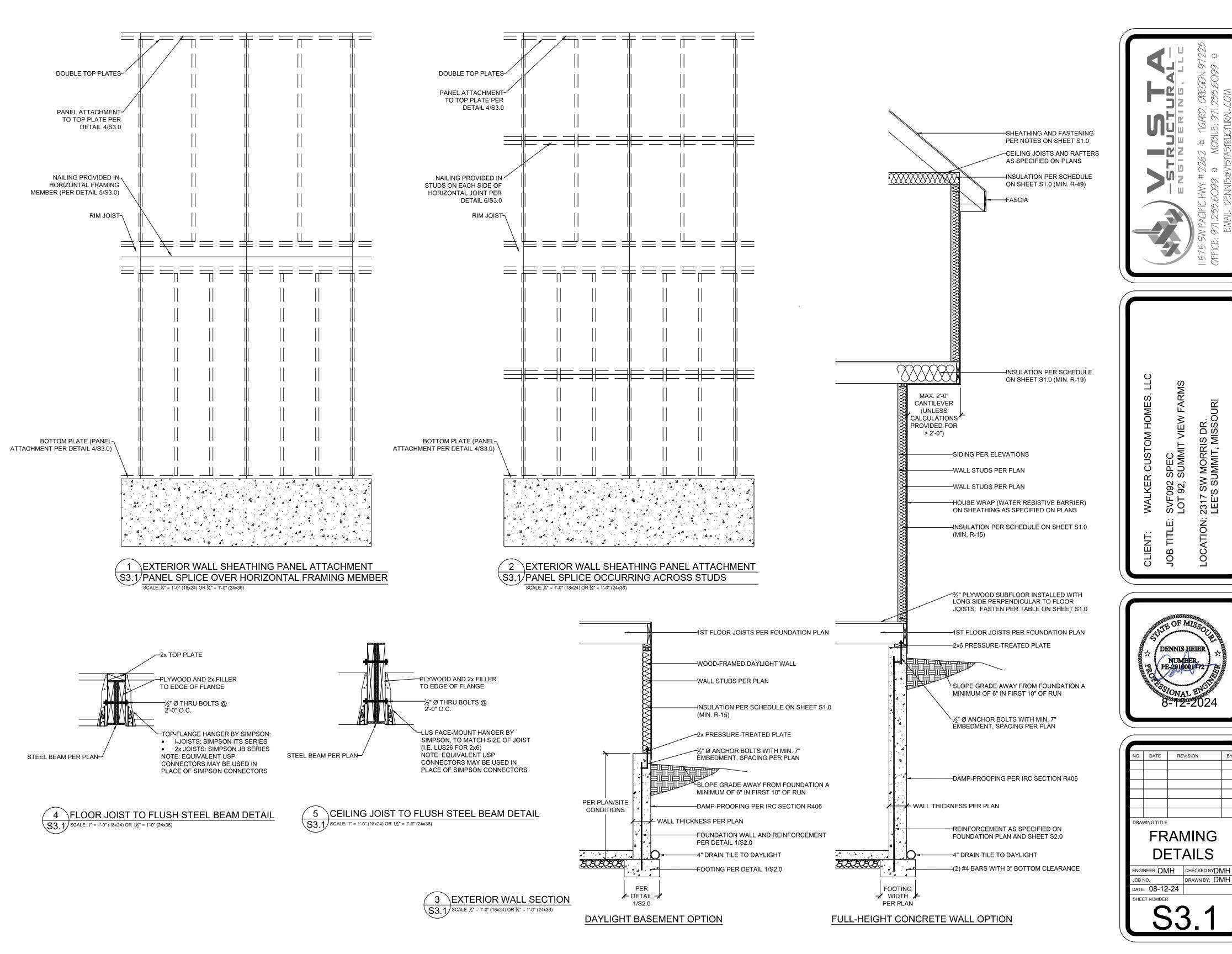
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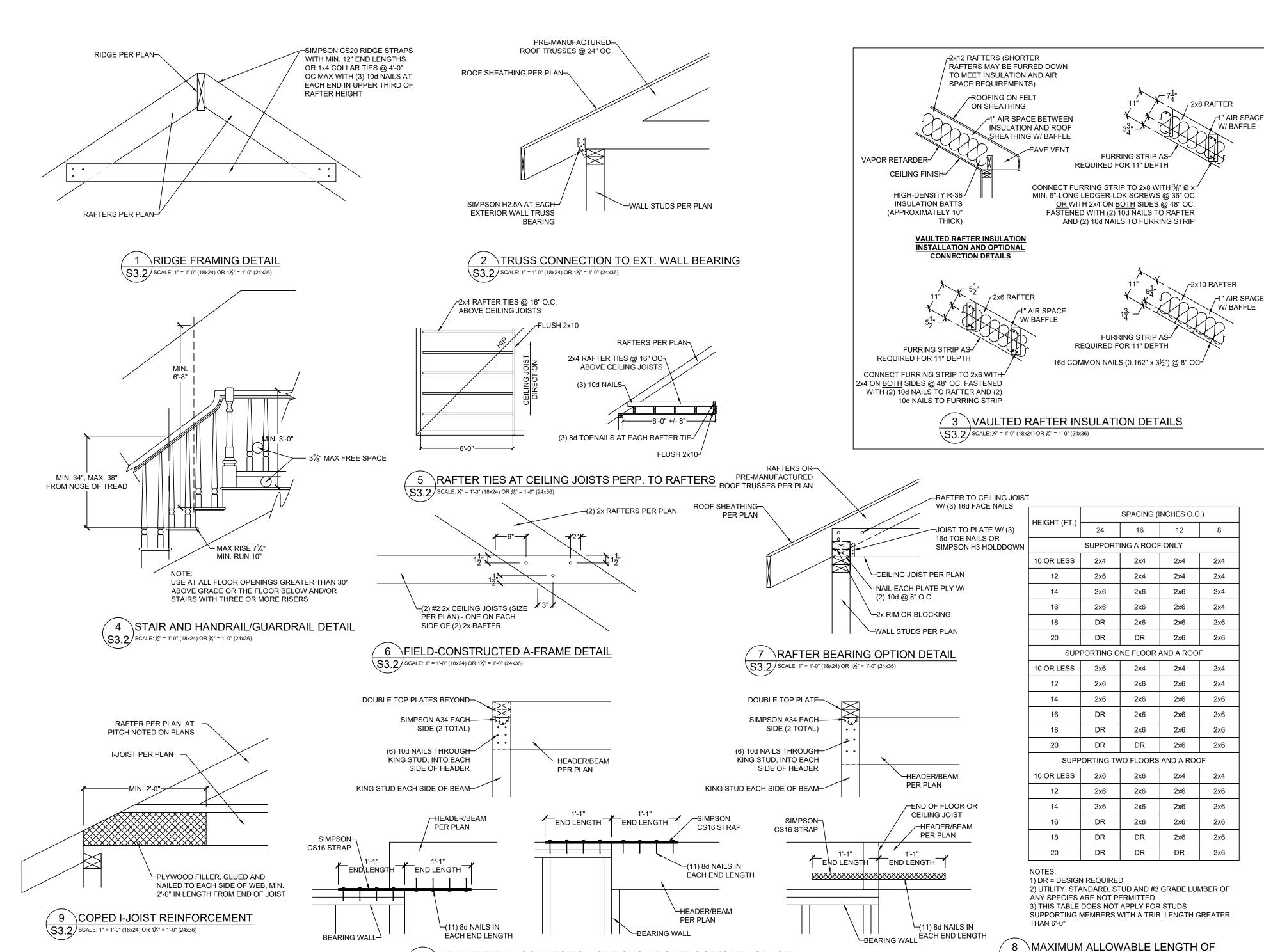
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10 \HEADER/BEAM CONNECTION OPTIONS AT OUTDOOR/OPEN SPACE

\\$3.2\rightarrow\\$CALE: 1" = 1'-0" (18x24) OR 1½" = 1'-0" (24x36)



NT: WALKER CUSTOM HOMES, LLC
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LOT 92, SUMMIT VIEW FARMS
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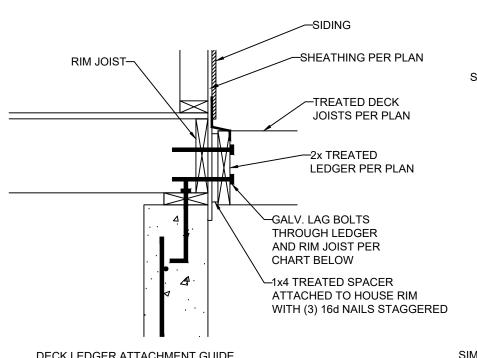


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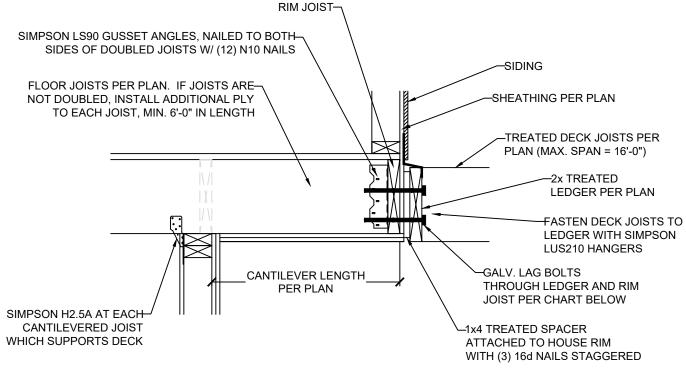
SHEET NUMBER

S3.2/WOOD WALL STUDS (IRC TABLE 602.3.1)



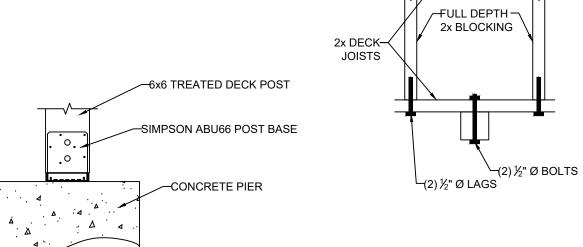
DECK LEDGER ATTACHMENT GUIDE

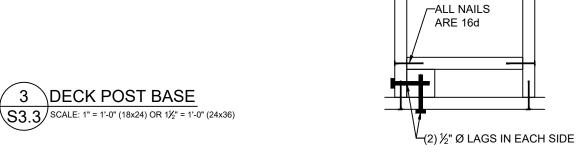
DECK JOIST SPAN	½" Ø GALV. LAG OR ¾" Ø LEDGER-LOK SPACING
10'-0" OR LESS	16" OC
10'-0" - 13'-11"	12" OC OR @ 16" OC DOUBLED EVERY OTHER
14'-0" - 18'-0"	8" OC OR @ 16" OC DOUBLED



CANTILEVER WITH DECK ATTACHMENT

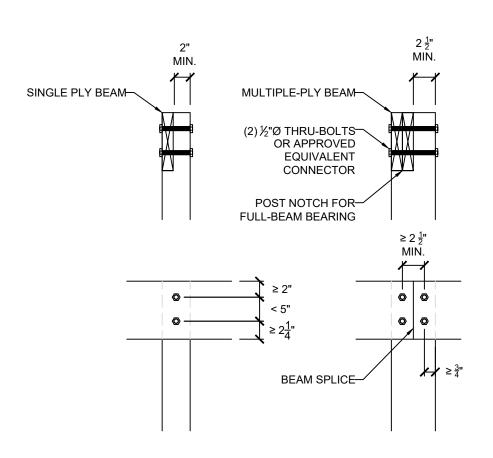
S3.3/SCALE: 1" = 1'-0" (18x24) OR 1½" = 1'-0" (24x36)



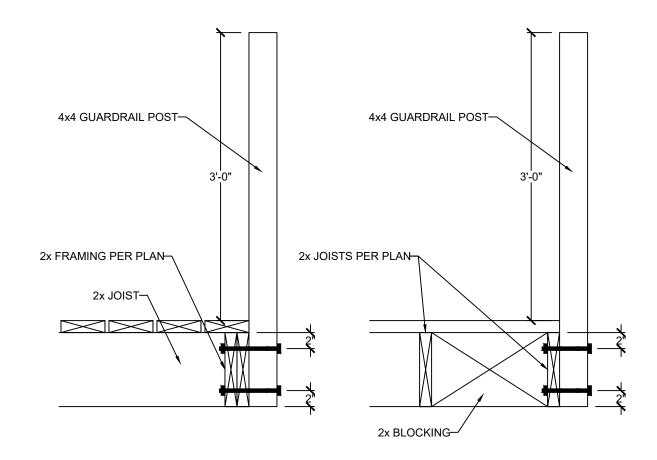


REINF. POST CONNECTIONS \$3.3 SCALE: 1" = 1'-0" (18x24) OR 1½" = 1'-0" (24x36)

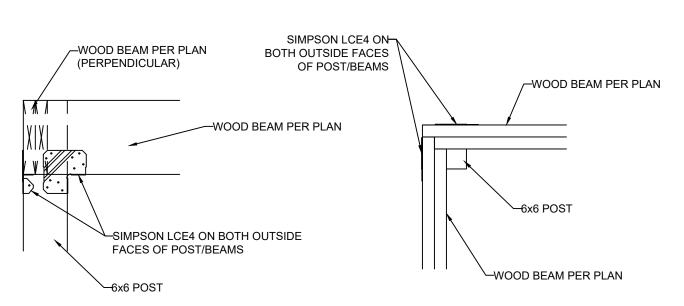
LEDGER ATTACHMENT \$3.3\rightarrow\scale: 1" = 1'-0" (18x24) OR 1\frac{1}{2}" = 1'-0" (24x36)



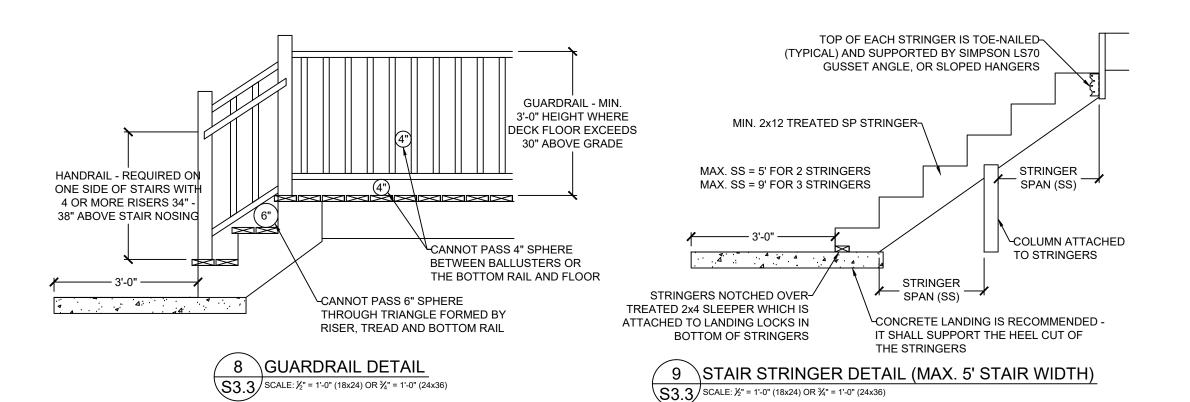




GUARDRAIL CONNECTION \$\S3.3\ SCALE: 1" = 1'-0" (18x24) OR $1\frac{1}{2}$ " = 1'-0" (24x36)



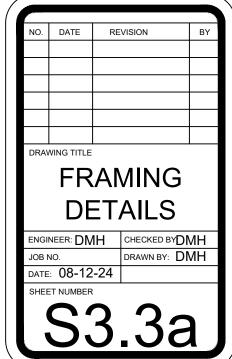
ALTERNATE COVERED DECK/PORCH INTERSECTION S3.3/CORNER BEAM CONNECTION SCALE: 1" = 1'-0" (18x24) OR 1½" = 1'-0" (24x36)

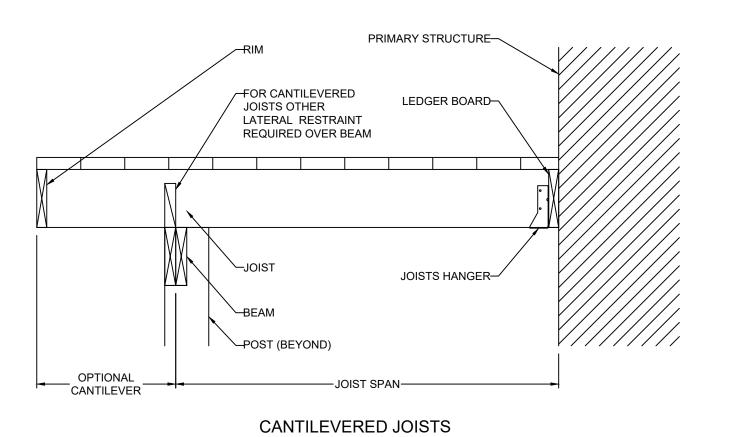


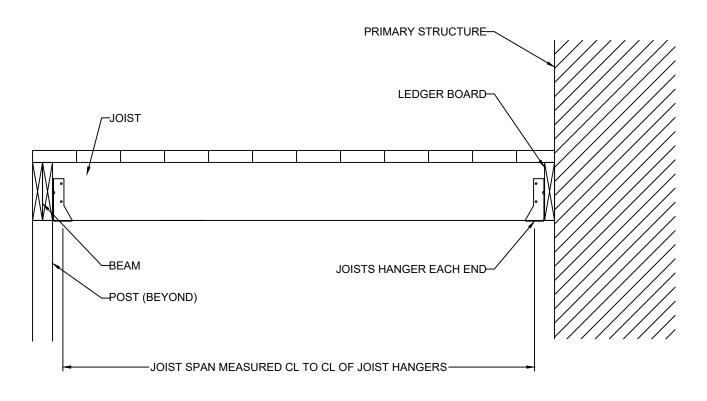




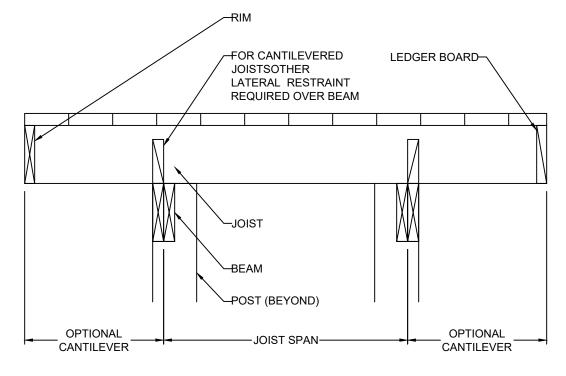






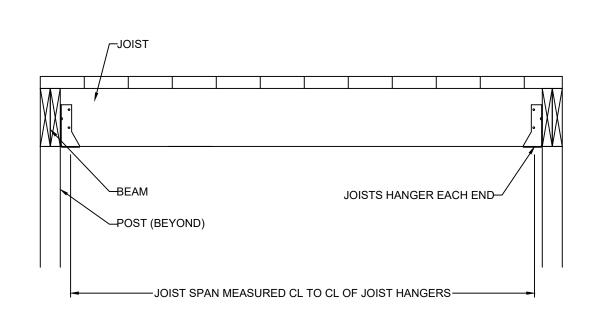


JOISTS WITH FLUSH BEAM

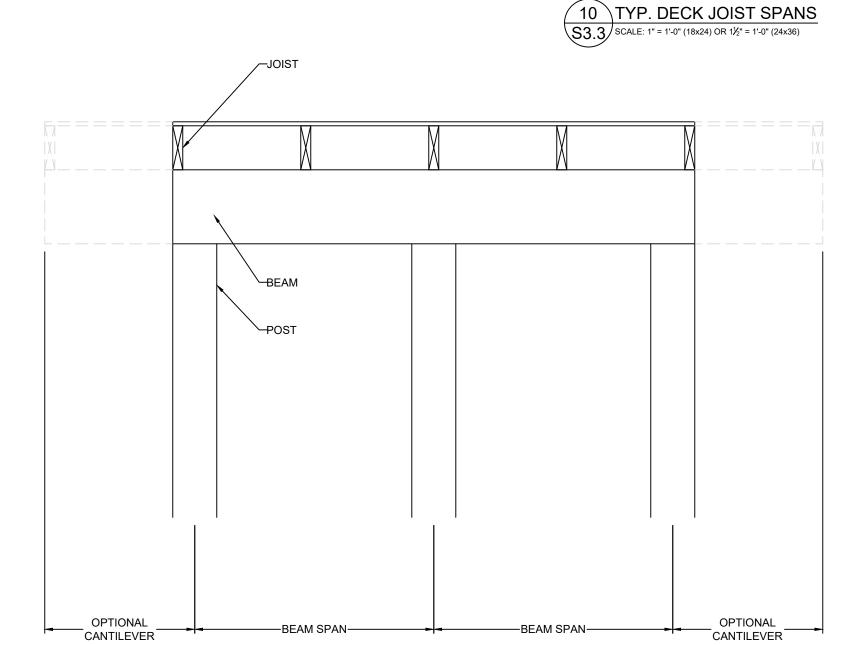


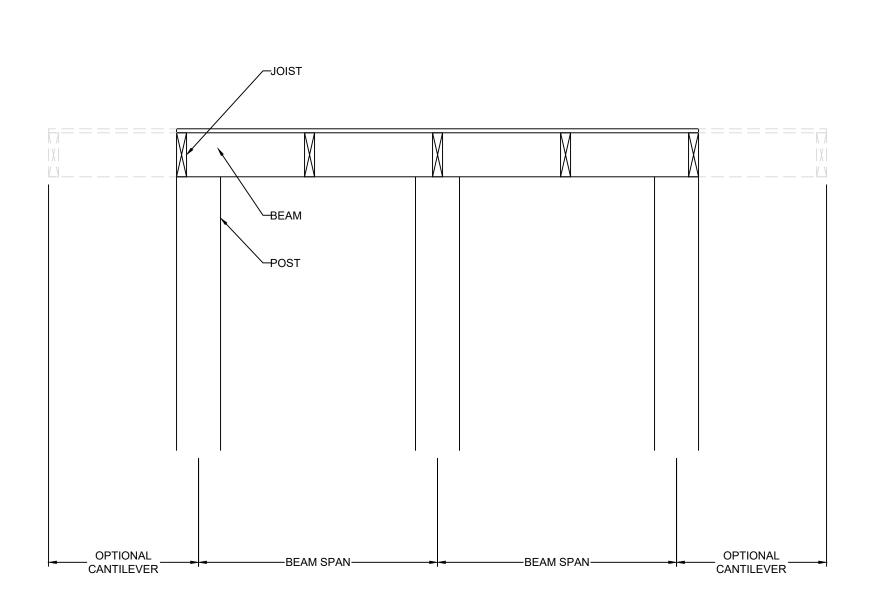
DECK WITH DROPPED BEAM

WITH DROPPED BEAM



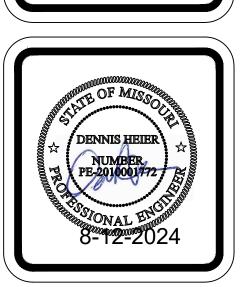
JOISTS WITH FLUSH BEAM JOISTS ON FREE-STANDING







SVF092 SPEC LOT 92, SUMMIT VIEW FARMS WALKER CUSTOM HOMES, LL 2317 SW MORRIS DR. LEE'S SUMMIT, MISSOURI



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DROPPED BEAM **FLUSH BEAM**

CANTILEVER