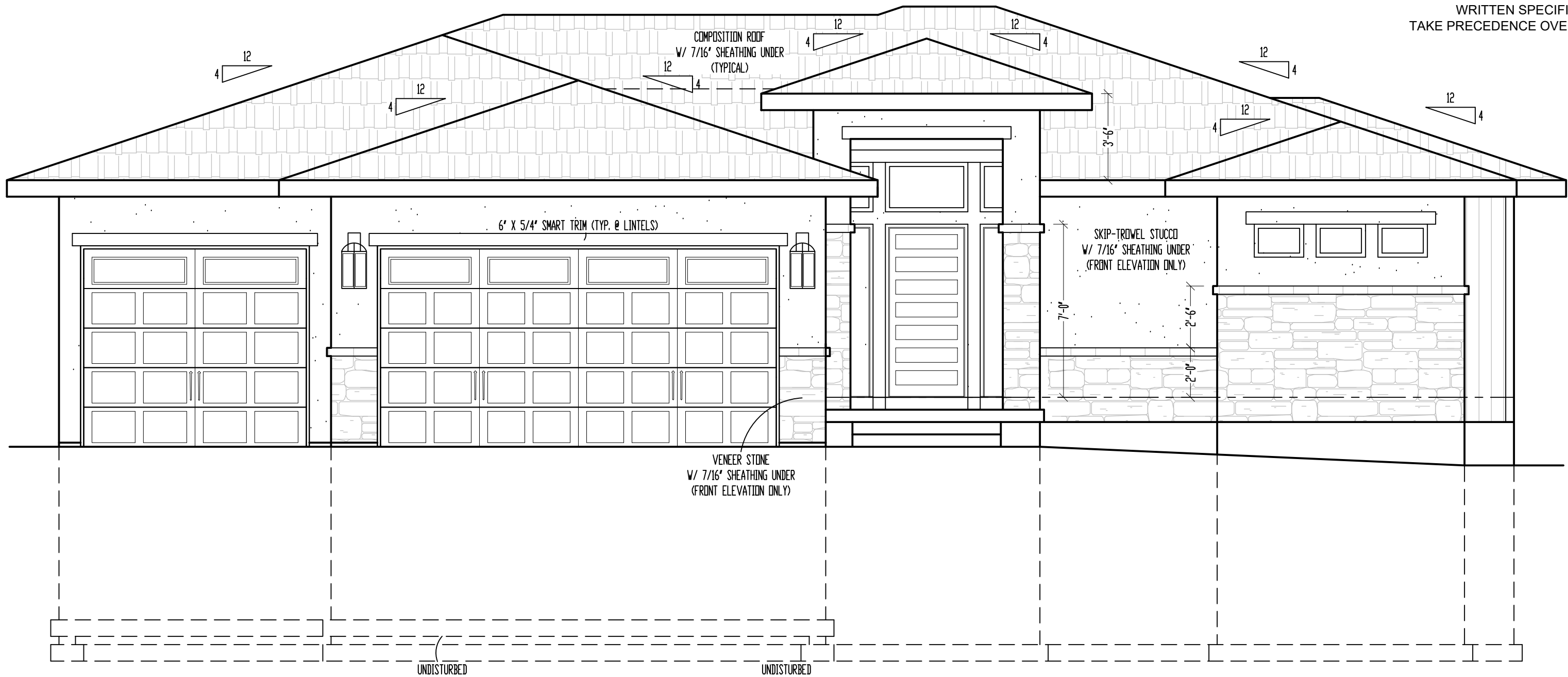
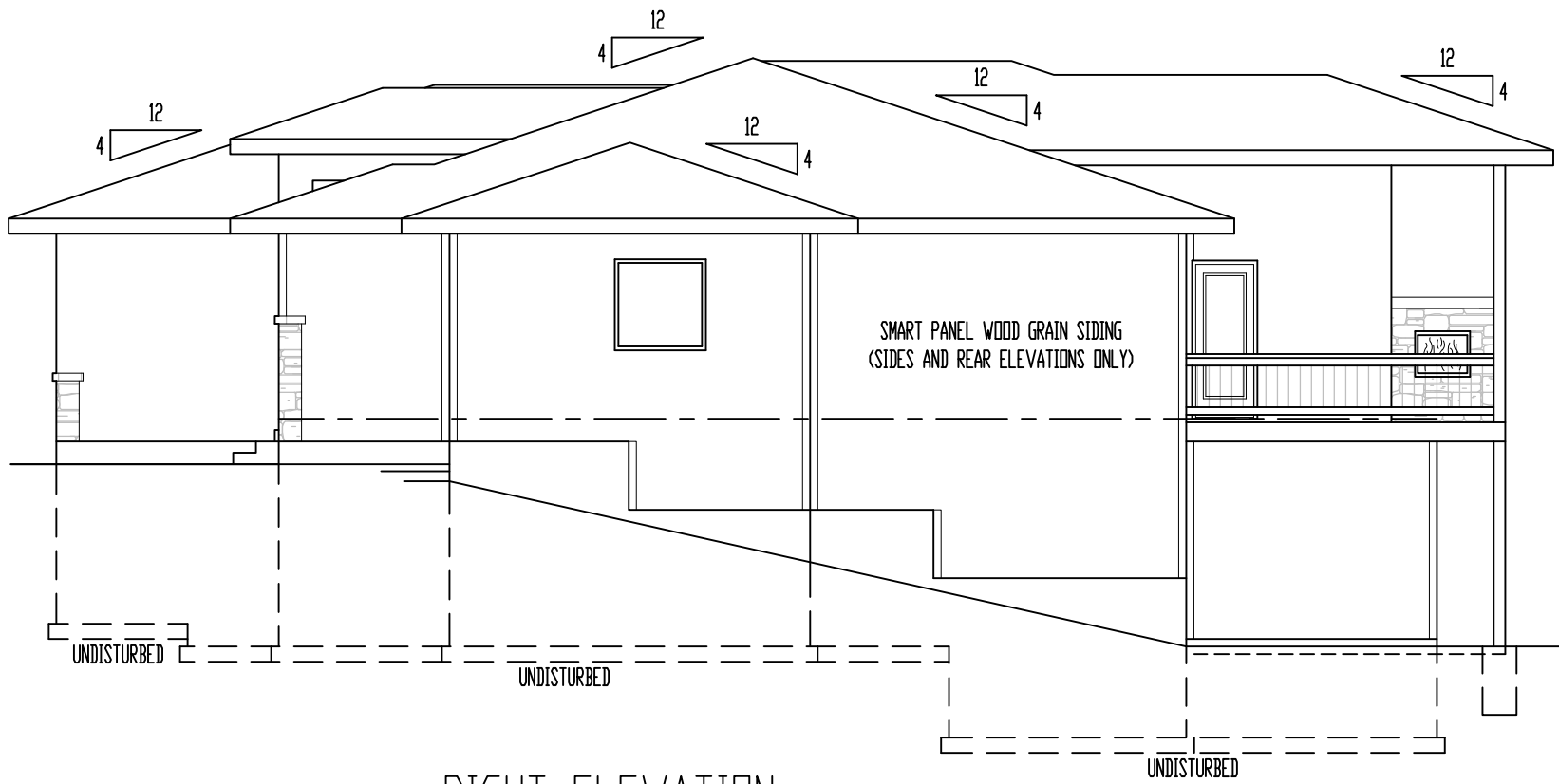


NOTE: GOVERNING CODES & GENERAL CONTRACTOR'S
WRITTEN SPECIFICATIONS
TAKE PRECEDENCE OVER THESE PLANS.

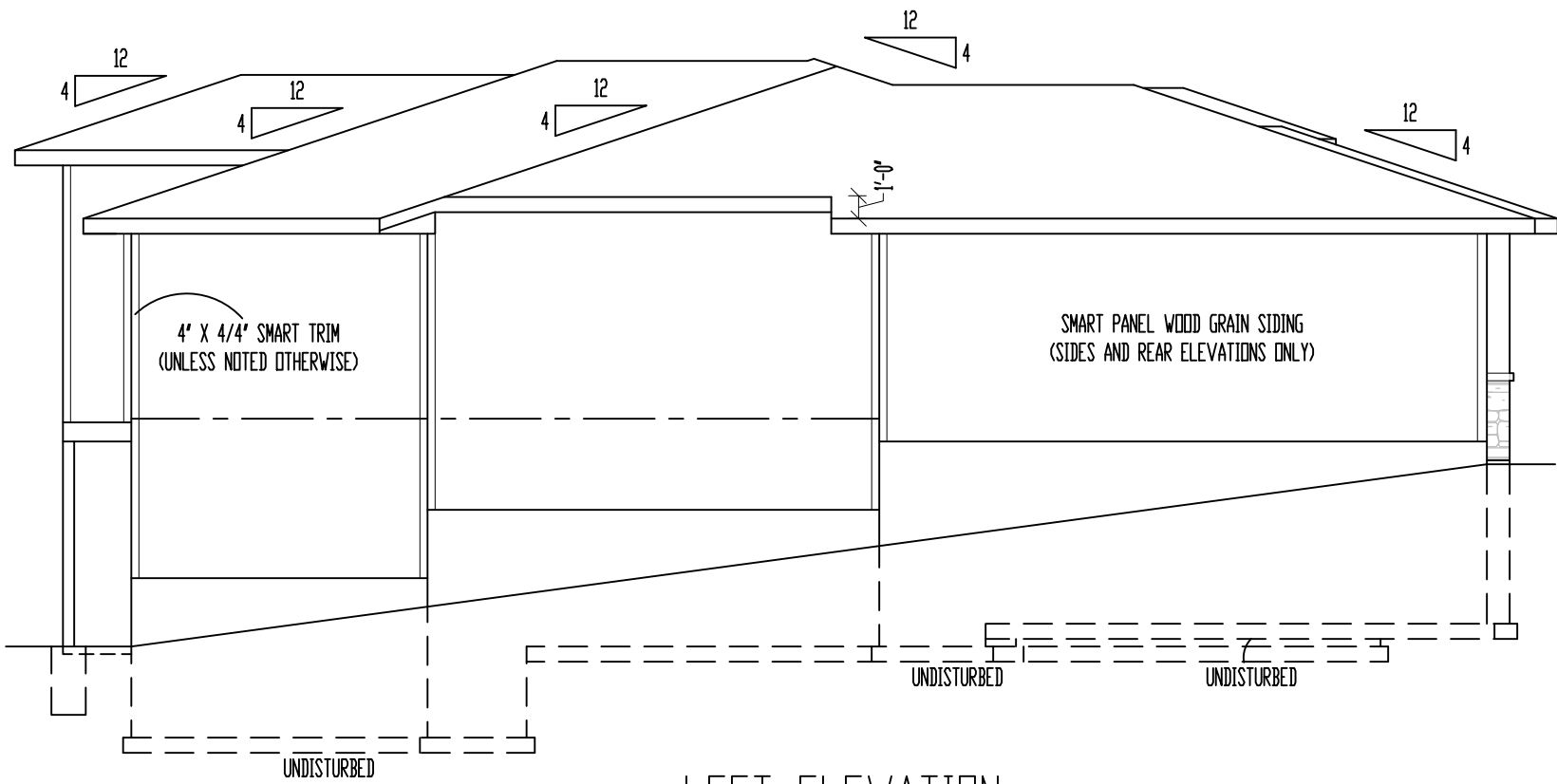


RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/19/2024

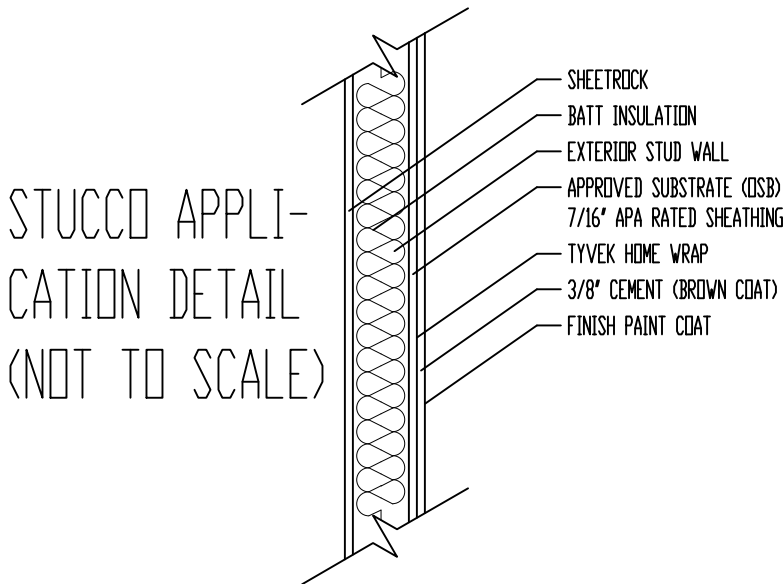
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



LEFT ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATIONS:
SMART PANEL WOOD GRAIN SIDING ON SIDES AND REAR ELEVATIONS
COMPOSITION ROOF SHINGLES
LOCATE ROOF AND SOFFIT VENTS PER CODE
ADJUST FOUNDATION TO GRADE

DECK:
DECK CONSTRUCTION TO COMPLY WITH MUNICIPALITY'S
RESIDENTIAL DECK STANDARDS
2" X 10" #2 TTD. @ 12" O.C. FLOOR JOISTS
2" X 6" TTD. DECKING
6" X 6" TTD. POSTS
2" X 2" TTD. SPINDLES
2" X 6" TTD. TOP RAIL
DETERMINE OPTIONAL STAIRS ON SITE

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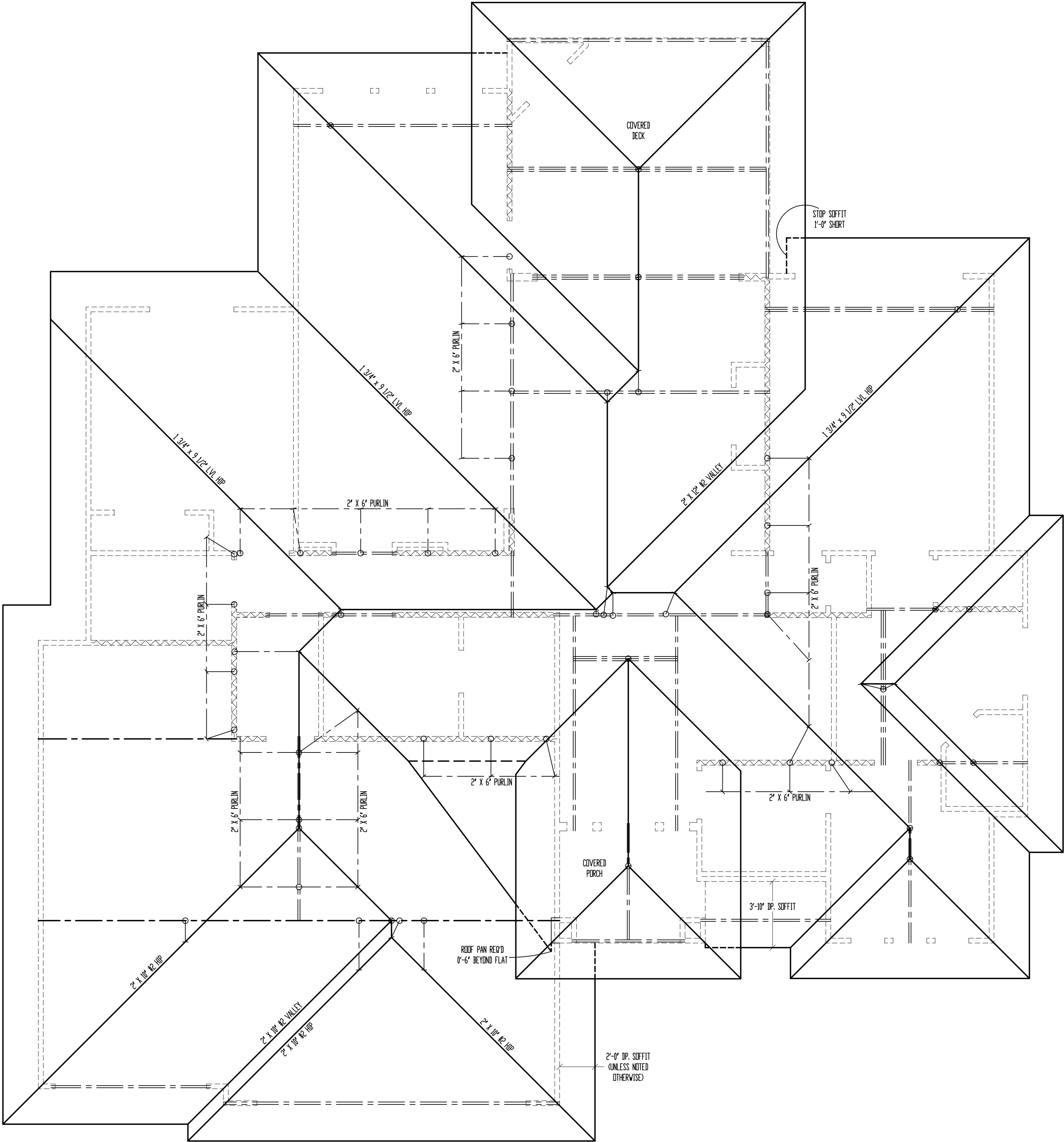
Drawing Title:
**SVF092 Spec
The HEATHER**
Site Description:
**Lot 92, Summit
View Farms**
Street Address:
**2317 SW Morris
Dr., Lee's Summit,
Missouri**
General Contractor:
**Walker Custom
Homes, LLC**

STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2014001772
8-12-2024

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

Sheet Title:
ELEVATIONS

Sheet No.:
A-1 of 4



ROOF

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

*ALL RAFTERS SHALL BE 2" X 6" #2 @ 16' O.C., UNLESS NOTED OTHERWISE.

SEE DETAIL 7/S32 FOR ALTERNATE RAFTER BEARING DETAIL WHEN RAFTERS ARE REQUIRED TO BEAR HIGHER THAN THE WALL DOUBLE TOP PLATE.

FLASHING NOTE:
DRIP EDGE, VALLEYS AND FLASHINGS TO BE METAL CLAD.

ROOF NOTES:
ROOF DESIGNED FOR LIGHT ROOF COVERING
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" O.C.	11'-7"
#2-2x6	#16" O.C.	14'-2"
#2-2x8	#24" O.C.	14'-8"
#2-2x8	#16" O.C.	17'-11"
#2-2x10	#24" O.C.	17'-10"
#2-2x10	#16" O.C.	21'-11"

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

HIGHER PERFORMANCE (RECOMMENDED)		
RAFTERS	SPACING	MAX HORIZONTAL CLEARSPAN
#2-2x6	#24" O.C.	8'-6"
#2-2x6	#16" O.C.	9'-9"
#2-2x8	#24" O.C.	11'-3"
#2-2x8	#16" O.C.	12'-9"
#2-2x10	#24" O.C.	14'-3"
#2-2x10	#16" O.C.	16'-3"

DEFLECTION = L/360 LIVE LOAD, L/240 TOTAL LOAD

- * VAULTS TO BE 2x10 DEPTH
- * RIDGE BOARDS ARE: (UNLESS OTHERWISE NOTED)
 - #2- 2X8 UP TO 10/12 PITCH
 - #2- 2X10 OVER 10/12 PITCH
- * ALL HIP & VALLEYS ARE: (UNLESS OTHERWISE NOTED)
 - #2- 2X8 UP TO 10/12 PITCH
 - #2- 2X10 OVER 10/12 PITCH
- * PURLINS ARE 2X6 MIN.
 - PURLIN STRUTS ARE AT 4'-0" O.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 OF 8'-0"
 - PURLINS STRUTS SHALL BE CONSTRUCTED IN A "T" CONFIGURATION AND PER THE FOLLOWING CHART:

PURLIN STRUT	MAX PURLIN STRUT LENGTH
(2) 2x4	8'-0"
(1) 2x4 & (1) 2x6	12'-0"
(1) 2x6 & (1) 2x8	20'-0"
(2) 2x6 & (1) 2x8	30'-0"
CONSULT ARCH/ENGR. >	30'-0"

- * 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
- * --- DENOTES BEARING STRUCTURE

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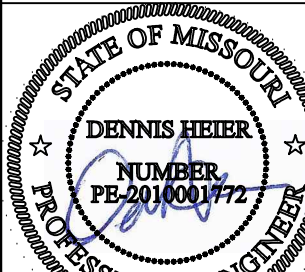


VIEWPOINT

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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



8-12-2024

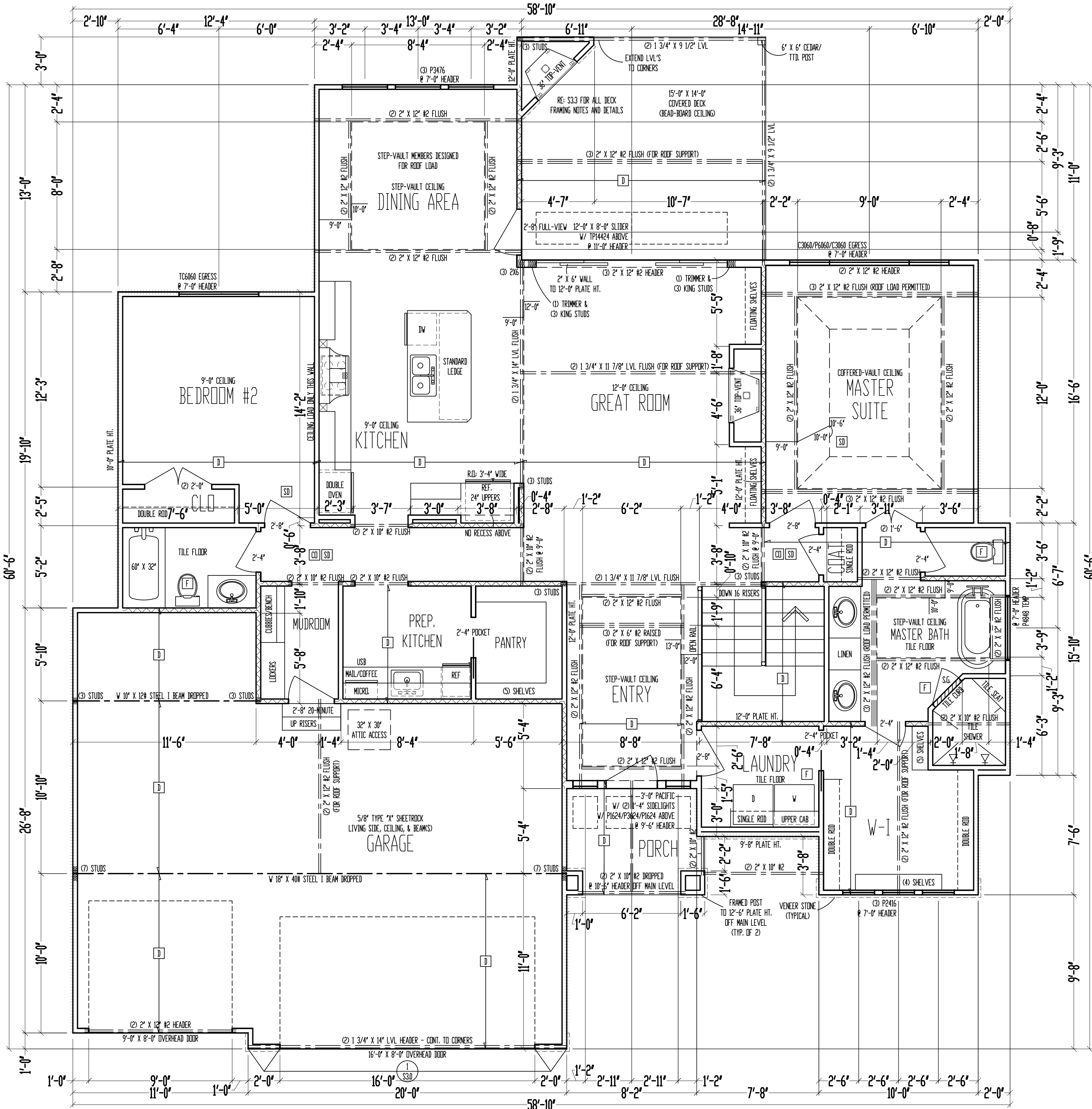
Date: 7 - 26 - AD 2024
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Rev. 2:
Rev. 3:

Sheet Title:
ROOF PLAN

Sheet No.:
A

08/19/2024

PLEASE FOR CONSTRUCTION
NOT FOR REVIEW
DEVELOPMENT SHEET 4
LEE'S SUMMIT, MISSOURI



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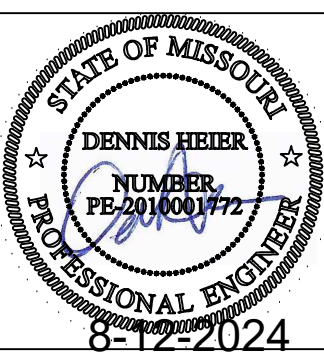
Office: (816) 547-4437 Email: jpfifer@viewpointdesign.net

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**

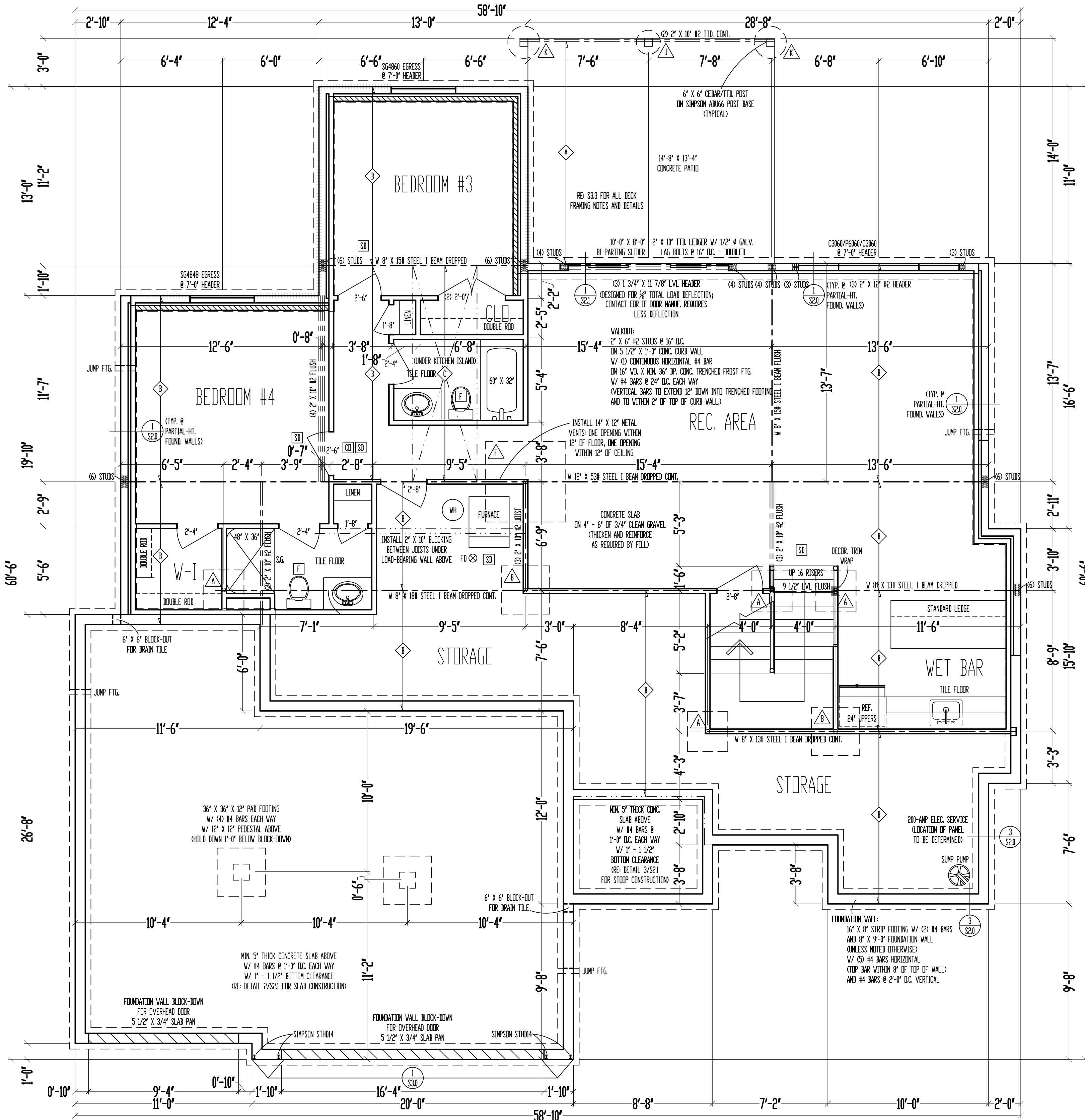


Date: 7-26-AD 2024
Rev. 1:
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Rev. 3:

Sheet Title:
**MAIN LEVEL
PLAN**

Sheet No.:

08/19/2024



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"

***** = WALL BRACING PER FRAMING NOTE #1 AND PER CALCULATIONS ON SHEET S11.

- FRAMING NOTES:
1. BASEMENT LEVEL EXTERIOR WOOD-FRAMED WALLS SHALL BE SHEATHED W/ 7/16" D.S.B. APA PANELS W/ 8d COMMON NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE FIELD. SMART PANEL, OR EQUAL, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 2. / / / / / = G.B. 1/2" MIN. GYPSUM BOARD OVER STUDS SPACED 24" MAX FASTENED W/ NDL 6 - 1 1/4" TYPE W OR S DRYWALL SCREWS @ 7" O.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 NOTED OTHERWISE.
 5. LOW TIES @ 4'-0" O.C. (TYPICAL)
 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" O.C., UNLESS NOTED OTHERWISE.
 12. 1/2" Ø ANCHOR BOLTS W/ MIN. 7" EMBEDMENT @ 48" O.C. MAX. & WITHIN 6" - 12" OF END OF EACH PLATE LENGTH.
 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 CAPACITY OF 1500 PSF. A GEOTECHNICAL ENGINEER IS RECOMMENDED FOR VERIFICATION OF THESE CONDITIONS DURING THE EXCAVATION PHASE. ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION NOT VERIFIED TO BE FOUND 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 OPENINGS.

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

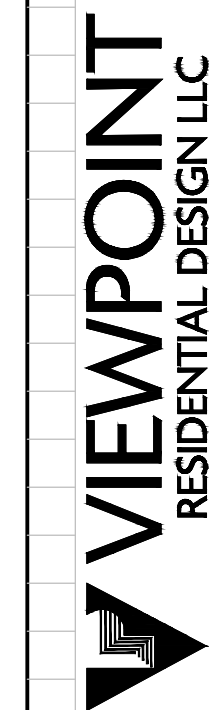
PIER FOOTING SCHEDULE	
G	12" Ø PIER FTG.
H	16" Ø PIER FTG.
J	18" Ø PIER FTG.
K	24" Ø PIER FTG.

JOIST SCHEDULE	
A	2" X 10" #2 TTD. FLOOR JOIST @ 12" O.C.
B	2" X 10" #2 FLOOR JOIST @ 16" O.C.
C	2" X 10" #2 FLOOR JOIST @ 16" O.C. - DOUBLED

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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

Sheet No.:

PLEASE FOR CONSTRUCTION
DO NOT ALTER OR REVIEW
DEVELOPMENT OF 14
LEE'S SUMMIT, MISSOURI
08/19/2024

RESIDENTIAL SEISMIC & WIND ANALYSIS					INPUT
DETERMINE WEIGHT OF HOUSE:					CALCULATED VALUE
LOCATION	DEAD LOAD (psf)		AREA (ft²)	WEIGHT (lbs.)	
ROOF	10		2787	27870	
CEILING	10		2787	27870	
FIRST FLOOR	10		2787	27870	
FIRST FLOOR EXT. WALL DL	WALL LENGTH (ft)	WALL HEIGHT (ft)	WALL UNIT WT. (psf)	WEIGHT (lbs)	
	238.66	10	10	23866	
FIRST FLOOR INT. PARTITION WALL DL	DEAD LOAD (psf)		AREA (ft²)	WEIGHT (lbs)	
	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	666.5	9237	11305
BSMT*	0	0	0	BSMT*	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
MEAN ROOF HT., ft	22						

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_{z10}=0.00256K_zK_{zt}K_dV² (ASCE7-16 Velocity Pressure) q_{z10,ASD}=0.6q_{z10} (Design Velocity Pressure for ASD analysis under ASCE7-16 and IRC/IBC 2018)

1ST FLOOR TRIBUTARY WEIGHT	67673
BASEMENT TRIBUTARY WEIGHT	67673
S _g (SITE GROUND MOTION - %g - FROM ASCE7 SEISMIC MAP)	12.0%
F _a (from ASCE7 Table 11.4-1)	1.6
S _{DS} (= 2/3 * S _g * F _a)	0.128
R (from ASCE7 Table 12.2-1)	6.5

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 @ 3" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 16" stud spacing	155	per IBC, Table 2306.3(i)
Exterior (Option #3)	7/16" APA Rated Plywood/OSB	1-1/2" 18ga. Staples w/ 1" penetration @ 4" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 16" stud spacing	230	per IBC, Table 2306.3(i)
Exterior (Option #3)	7/16" APA Rated Plywood/OSB	1-1/2" 18ga. Staples w/ 1" penetration @ 3" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 16" stud spacing	310	per IBC, Table 2306.3(i)
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 (Option #5)	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 (Option #6)	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 panel edge	8d Common Nails w/ 1-3/8" penetration @ 3" O.C. Edges, 12" O.C. Field	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 (FT.)	58.83	WIDTH OF 2ND STORY (FT.)	1
EXTERIOR SHEATHING OPTION FOR BASEMENT WALLS	4	DEPTH OF 1ST STORY (FT.)	60.5	DEPTH OF 2ND STORY (FT.)	1
		BACK WALL OF GARAGE (FT.)	0		
		GAR. WALL: 1=F-B, 2=S-S	2		

EXTERIOR 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
1ST FLOOR	49	18620	24	9120	49	26068	24
BASEMENT	0	0	20.5	5740	0	0	20.5

	ADDITIONAL RESISTANCE REQUIRED		Anchor Bolt Spacing (in.)		16d Nail Spacing req'd at bottom plate (in)	
	SEISMIC	WIND	diameter (in.)		1st Floor F-B	
1ST FLOOR FRONT-TO-BACK	0	0	0.5		31	
1ST FLOOR SIDE-TO-SIDE	0	0	0		28	
BASEMENT FRONT-TO-BACK	0	0	0			
BASEMENT SIDE-TO-SIDE	0	0	0			

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					0	YES

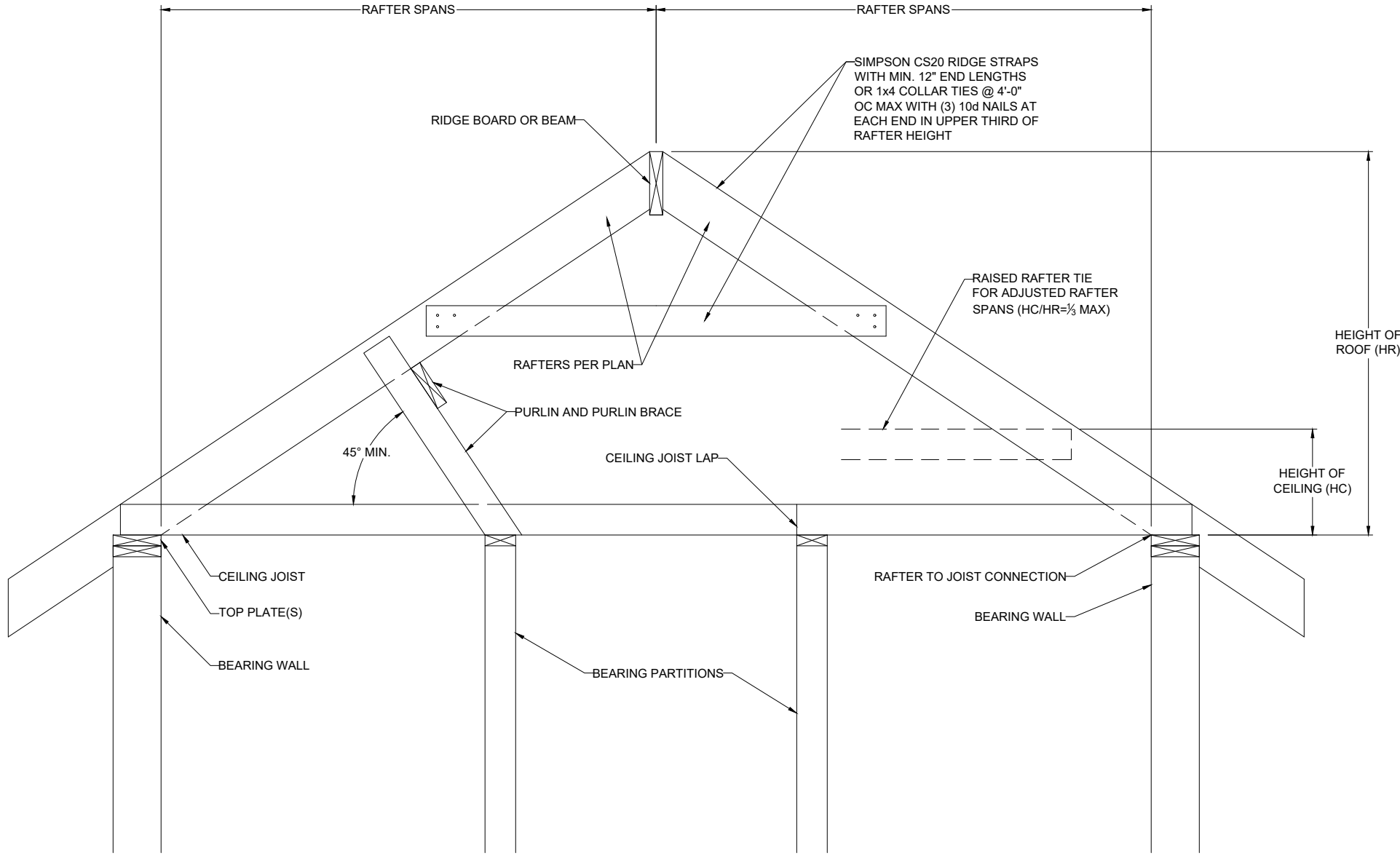
**NOTES: 1) SEE ATTACHED CALCULATIONS FOR PORTAL FRAME OR PERFORATED SHEAR WALL RESISTANCE CAPACITIES (IF APPLICABLE).
2) SEE SHEET S1 FOR INTERIOR STEEL X-BRACE INSTALLATION, 3) INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NAILING PATTERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE ONLY APPLICABLE FOR FULL-HEIGHT SECTIONS OF 2'-4" 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					
ROOF PITCH (MAX)	X/12	DEGREES	PITCH OF 6 OR LESS: EOH -13.3, E -7.2, G -5.2		
	4	18.4	ASCE 7		
	LENGTH (FT.)	PRESSURE (PSF)	LINEAL FT. OF OH	UPLIFT PER FT* (LBS)	
OVERHANG	1	16.56	240.96	16.56	
	TOTAL AREA (FT²)	ZONE G AREA (FT²)	ZONE G AREA (FT²)	PRESSURE ZN. G (PSF)	
MAIN ROOF**	3559.215	-506.691024	4065.906024	10.5	
				15.12	
				10.5	
				35031	
				146.8	
*ALONG PERIMETER	TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS)			163.3	UPLIFT OK
**INSIDE EXTERIOR WALLS	RESISTANCE DUE TO DEAD WEIGHT & (3) 10d TOENAILS			251.6	

NOTE FOR CONSTRUCTION:
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

NOTE FOR DESIGN:
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

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)

Combustion Air Calculation

Per 2018 IRC Section G2407.5

Appliance #1	Furnace	100000	BTU/h
Appliance #2			BTU/h
Appliance #3	Water Heater	50000	BTU/h
Total BTU/hr		150000	BTU/h

Area of Combined Space (floor where appliances are located)	1218	ft²
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 inches per 1,000 BTU/h of total input rating of all appliances

Is floor where appliances are located open to adjacent level?	Yes
If Yes, what is the area of open space adjacent to appliance area?	0

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 ft³)

Required air space in combined areas:	7500	ft³
---------------------------------------	------	-----

Required combined area:	882	ft²
-------------------------	-----	-----

Area of Combined Space > 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.

Minimum required opening area:	150	in²
Minimum grill size:	14 x 11	(inches)
Note: two grills required - one within 12" of floor, one within 12" of clg.		



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CLIENT: WALKER CUSTOM HOMES, LLC

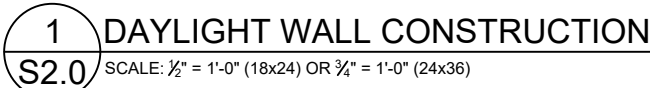
JOB TITLE: SVF092 SPEC
LOT 92, SUMMIT VIEW FARMS

LOCATION: 2317 SW MORRIS DR.
LEE'S SUMMIT, MISSOURI



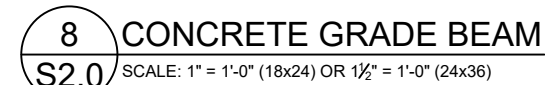
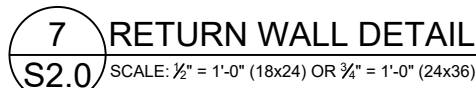
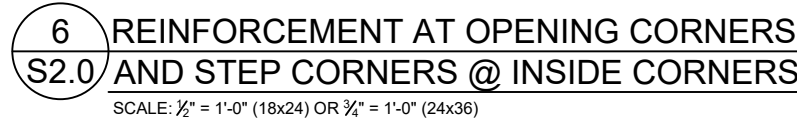
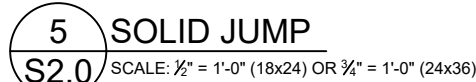
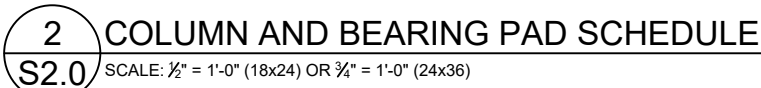
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DRAWING TITLE			
STRUCTURAL CALCULATIONS			
ENGINEER: DMH		CHECKED BY: DMH	
JOB NO.		DRAWN BY: DMH	
DATE: 08-12-24			
SHEET NUMBER			

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/19/2024

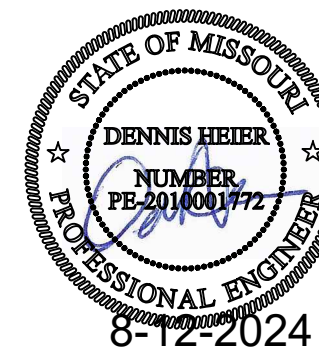
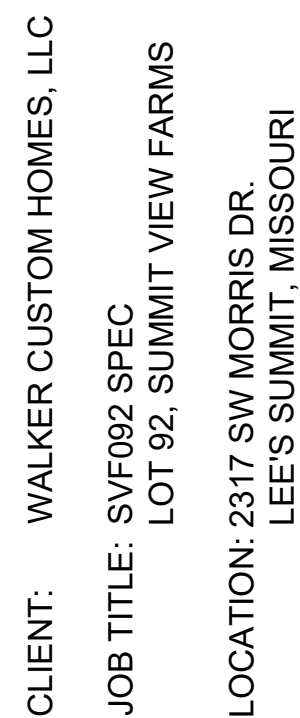


This technical cross-section diagram illustrates the foundation and drainage details for a basement wall. The wall is shown with a vertical reinforcement bar (labeled "VERTICAL AND HORIZONTAL REINFORCEMENT PER 4/S2.0") and a horizontal reinforcement bar (labeled "1'-6\" (TYP.)"). The wall is finished with "SIDING" and "GRADE" is indicated. A "2\" CLEARANCE FROM BASEMENT FACE OF WALL" is shown. A "PERFORATED DRAIN PIPE" is installed within the foundation, surrounded by "FILTER FABRIC". A "SEAL/BOND BREAK" is shown at the base of the wall. The foundation is supported by a "CARRIER SLAB" and a "6\" WASHED ONE BASE IN GRAVEL".

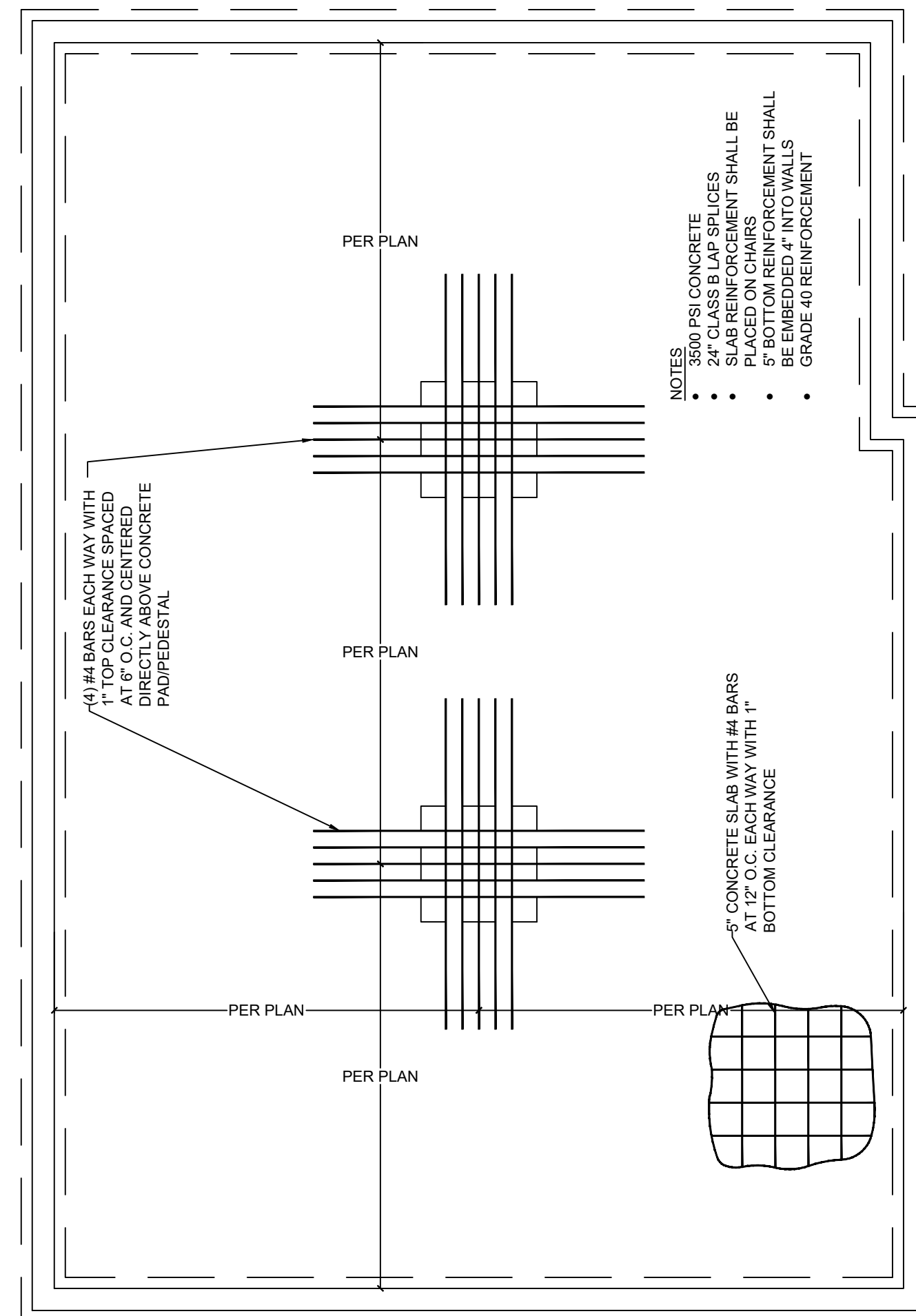
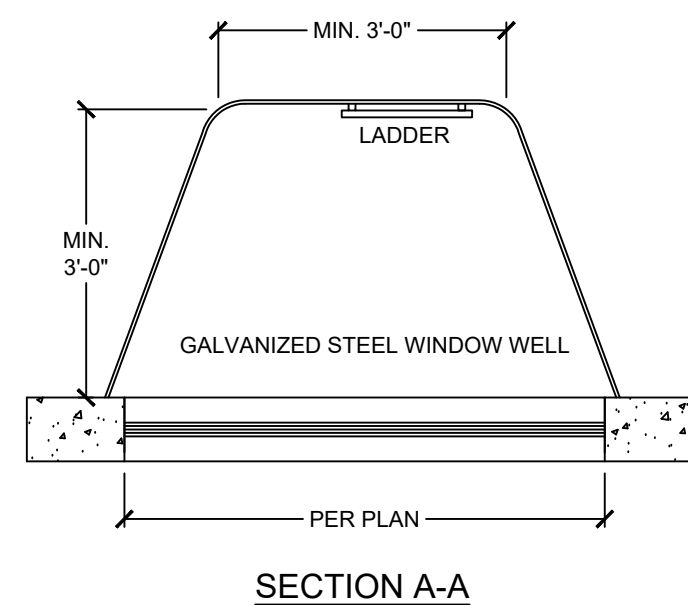
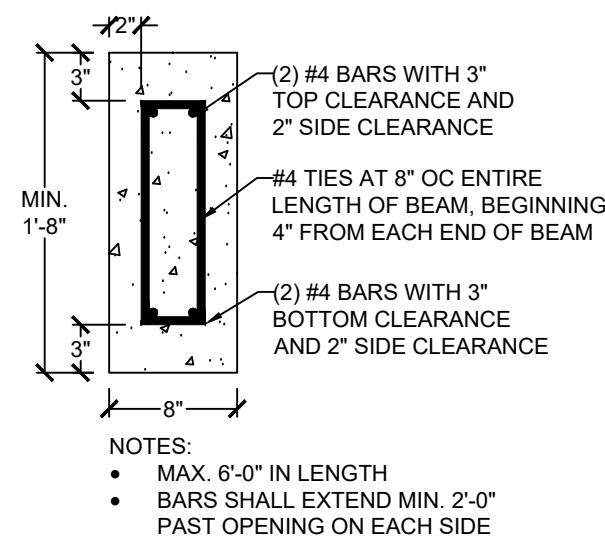
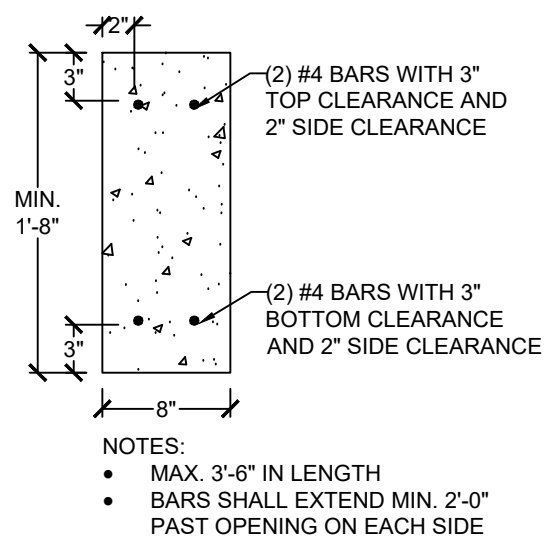
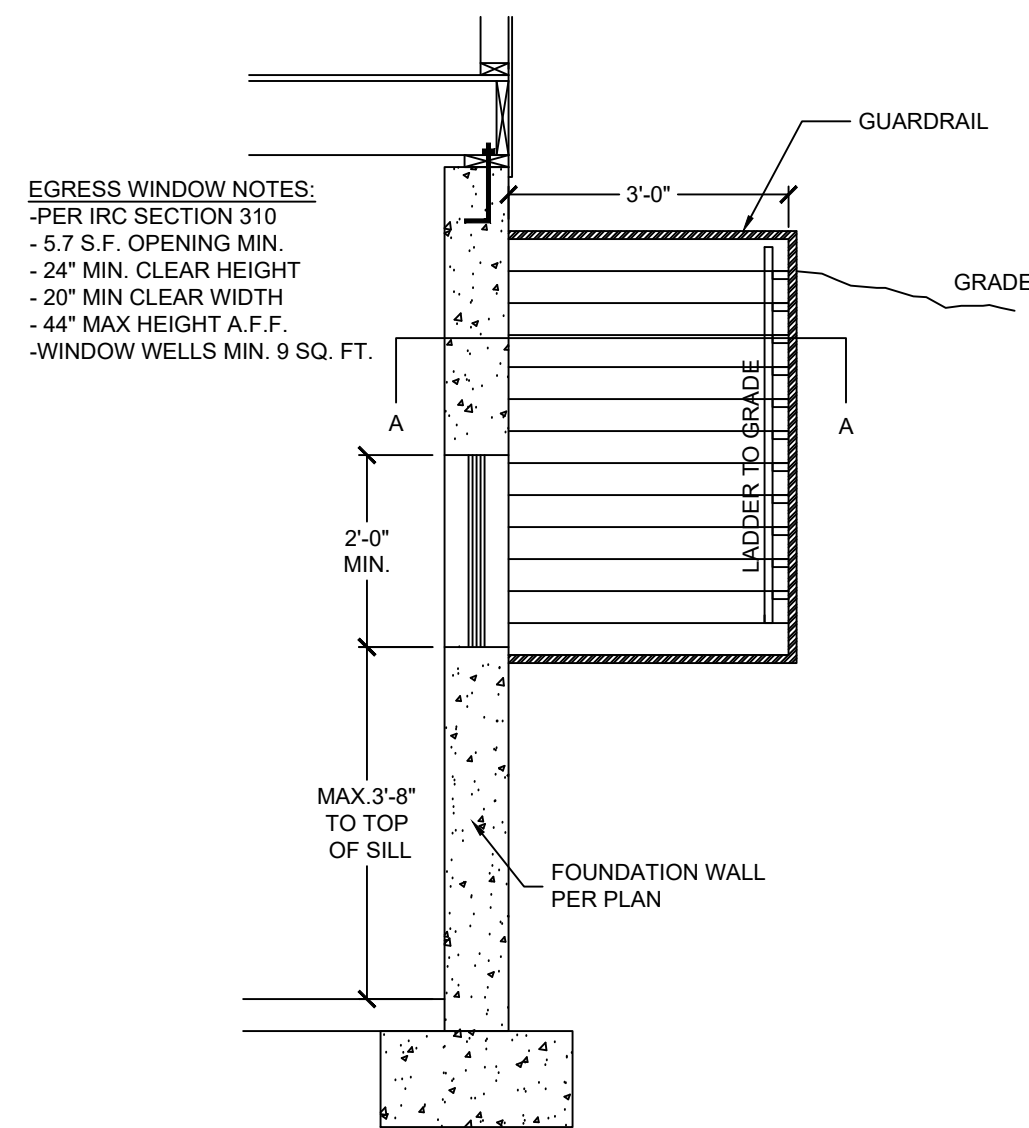
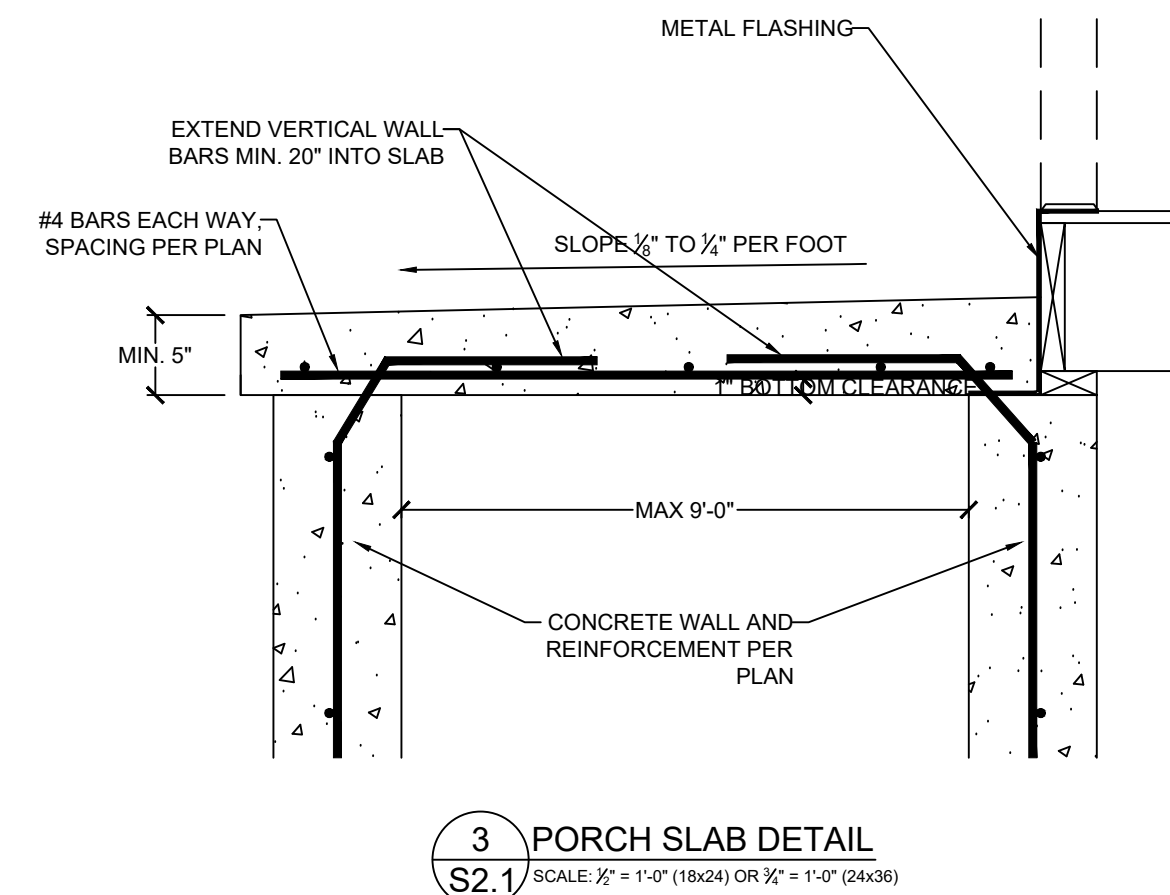
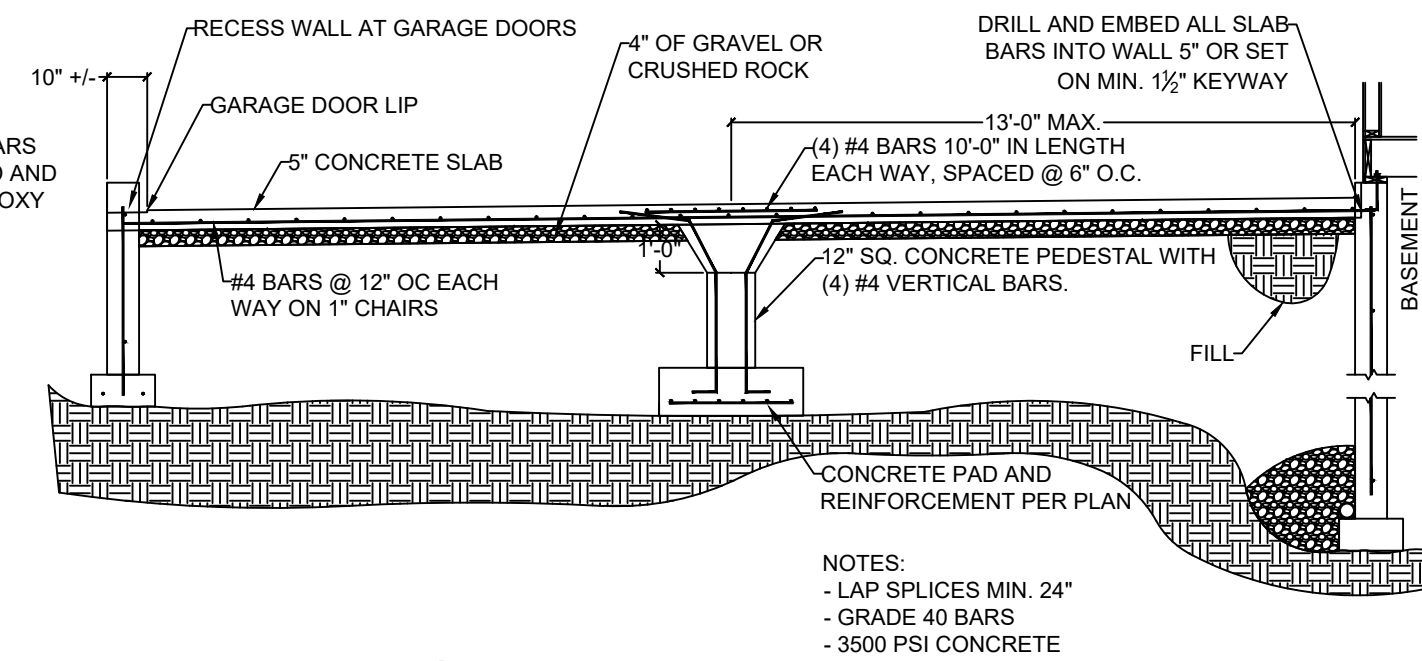
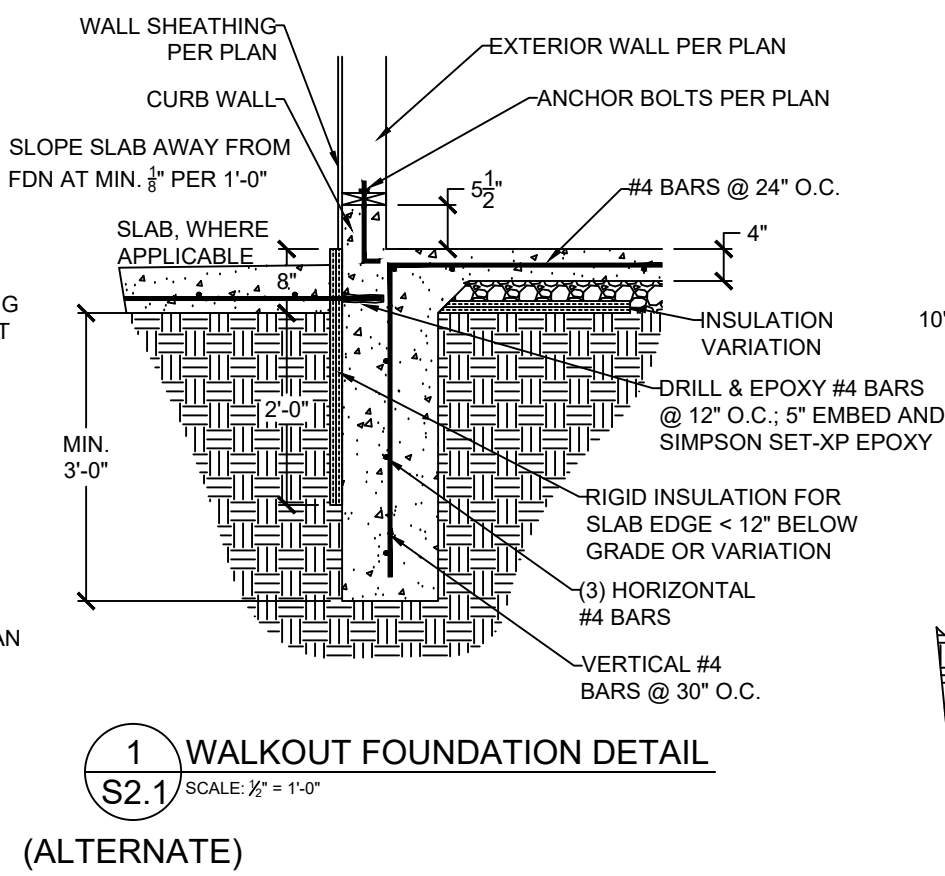
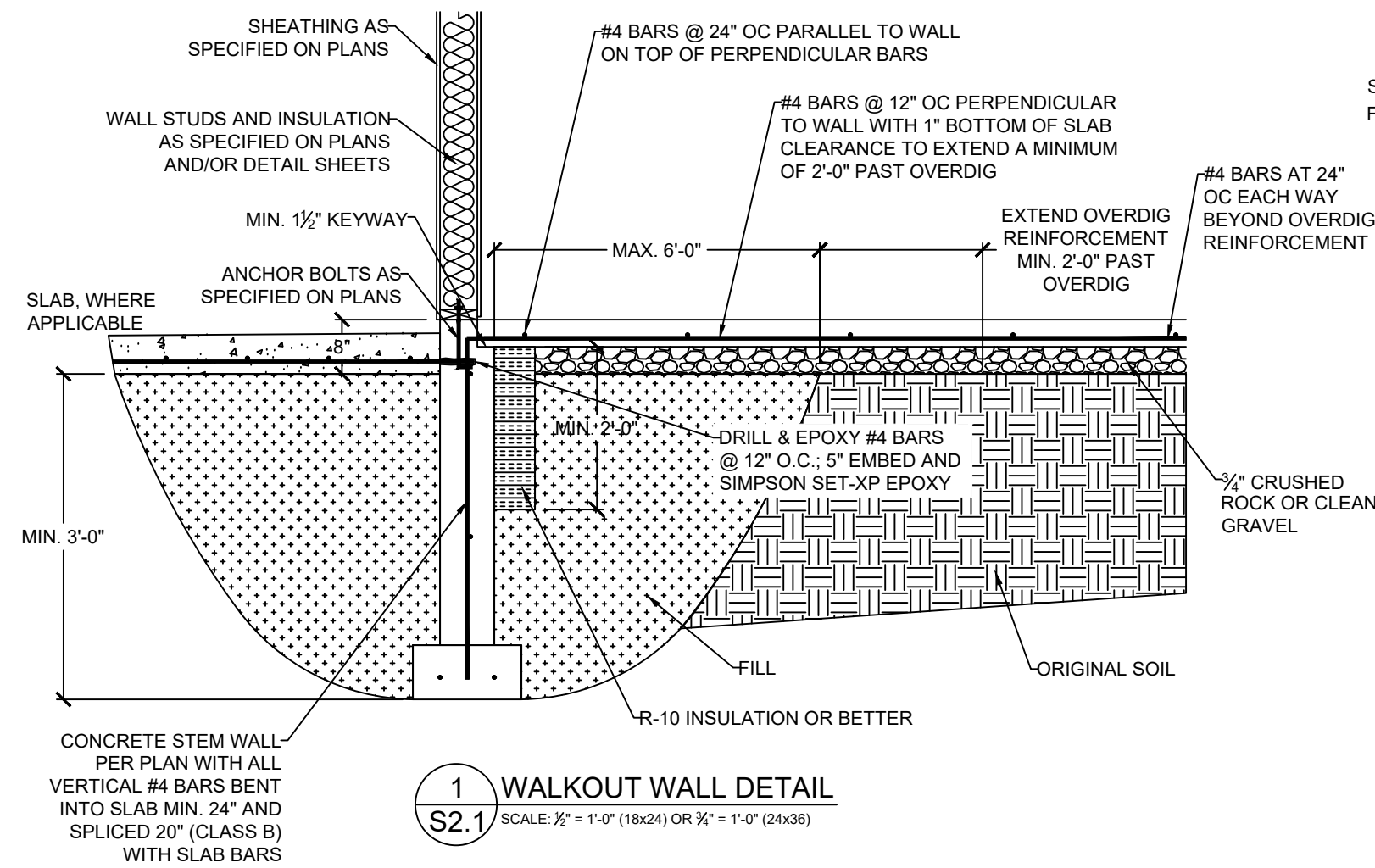
3 CONCRETE WALL SECTION
S2.0 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



VERTICAL REINFORCEMENT SPACING						
CONCRETE STRENGTH/GRADE REINFORCEMENT (#4 BARS)	8" THICK WALL			10" THICK WALL		
	8'	9'	10'	8'	9'	10'
3,000 PSI/ GRADE 40	24	24	16	24	24	18
3,500 PSI/ GRADE 40	24	24	16	24	24	18
3,000 PSI/ GRADE 60	24	24	16	24	24	18
3,500 PSI/ GRADE 60	24	24	16	24	24	18
HORIZONTAL REINFORCEMENT - MINIMUM GRADE 40 STEEL						
ONE BAR 12" FROM TOP OF WALL; MAX. SPACING 24" OC	6-#4	7-#4	7-#4	6-#4	7-#4	7-#4



RELEASE FOR CONSTRUCTION
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CLIENT: WALKER CUSTOM HOMES, LLC

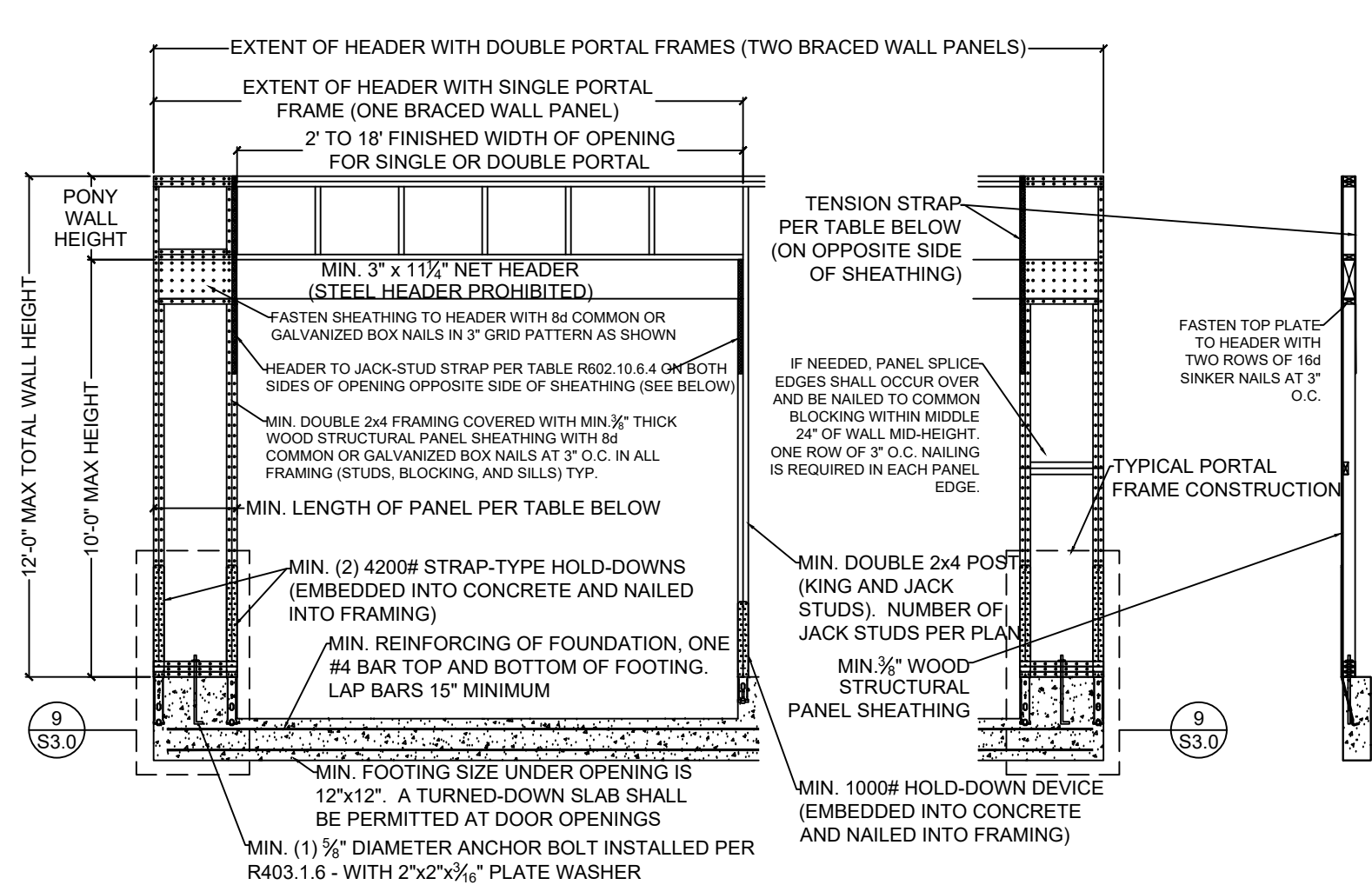
JOB TITLE: SVF092 SPEC
LOT 92, SUMMIT VIEW FARMS

LOCATION: 2317 SW MORRIS DR.
LEE'S SUMMIT, MISSOURI



NO.	DATE	REVISION	
DRAWING TITLE			
FOUNDATION DETAILS			
ENGINEER: DMH		CHECKED BY: DMH	
JOB NO.		DRAWN BY: DMH	
DATE: 08-12-24			
SHEET NUMBER			

2.1
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/19/2024



1 METHOD PFH (PORTAL FRAME WITH HOLD-DOWNS) - PER FIGURE IRC R602.10.6.2

SCALE: $\frac{1}{2}" = 1'-0"$ (18x24) OR $\frac{3}{8}" = 1'-0"$ (24x36)

	MINIMUM PANEL LENGTH FOR DETAIL 1/S3.0 (INCHES)				
	WALL HEIGHT				
	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

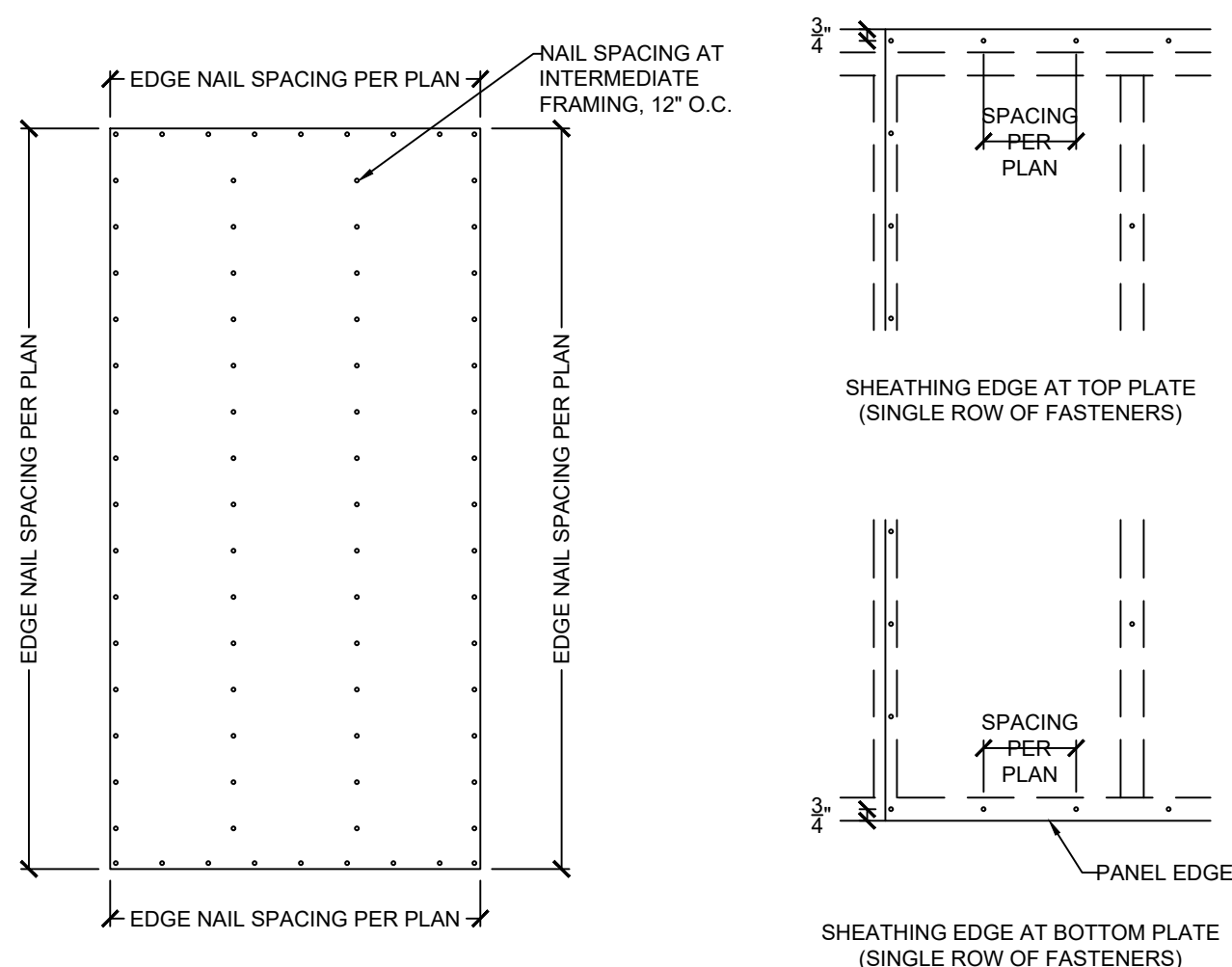
MAX GARAGE OPENING (FT.)	PONY WALL WALL HT. (FT.)	REQUIRED SIMPSON STRAP	MIN. STRAP END LENGTH	NAILS REQUIRED IN EACH STRAP END LENGTH
18'-0"	0'-0"	CS20	0'-9"	(7) 8d
9'-0"	1'-0"	CS20	0'-9"	(7) 8d
18'-0"	1'-0"	CS14	1'-4"	(15) 8d
9'-0"	2'-0"	CS18	0'-11"	(9) 8d
18'-0"	2'-0"	CMSTC16	1'-8"	(25) 16d SINKER
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 DOOR) - PER FIGURE IRC R602.10.6.3

SCALE: $\frac{1}{2}" = 1'-0"$ (18x24) OR $\frac{3}{8}" = 1'-0"$ (24x36)

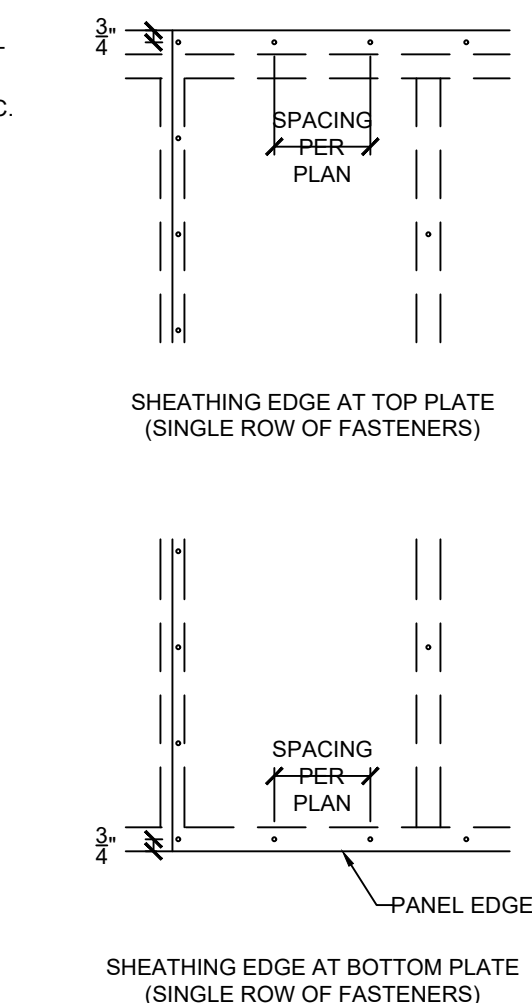
MINIMUM PANEL LENGTH FOR DETAIL 2/S3.0 (INCHES)				
WALL HEIGHT				
8 FEET	9 FEET	10 FEET	11 FEET	12 FEET
24	27	30	33 ^a	36 ^a

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



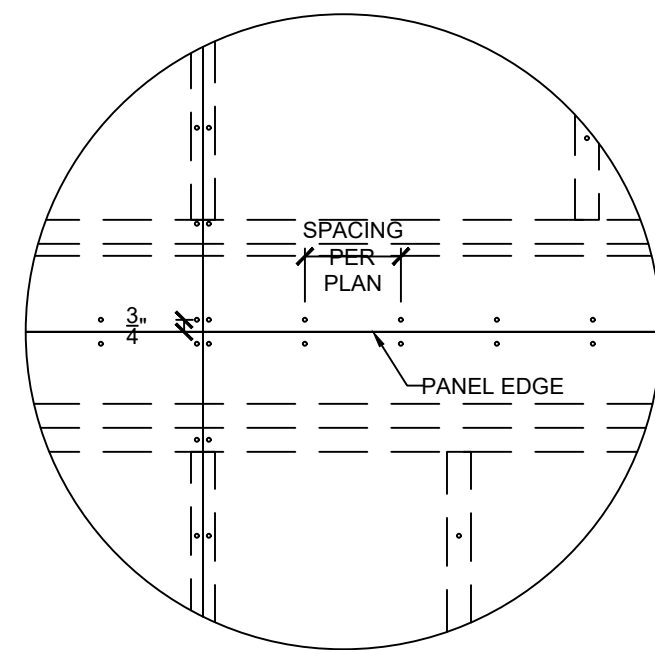
3 EXTERIOR WALL SHEATHING PANEL ATTACHMENT

SCALE: $\frac{1}{2}" = 1'-0"$ (18x24) OR $\frac{3}{8}" = 1'-0"$ (24x36)



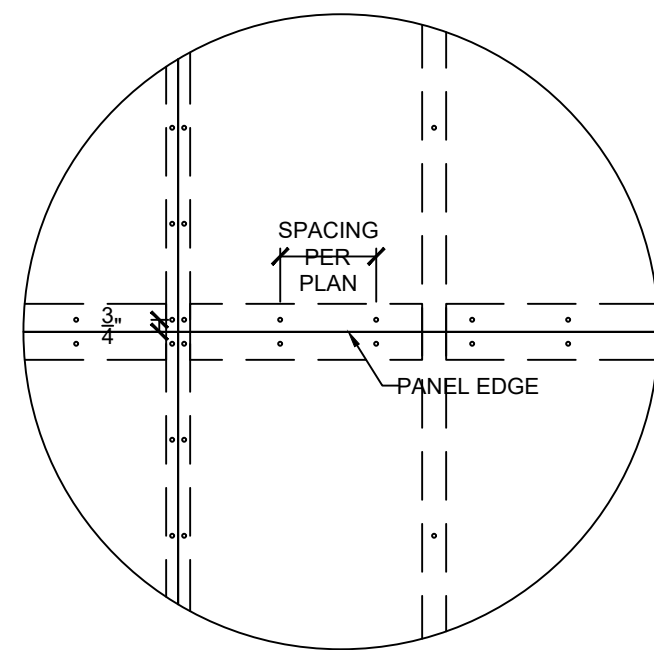
4 SHEATHING EDGE AT TOP AND BOTTOM PLATES

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



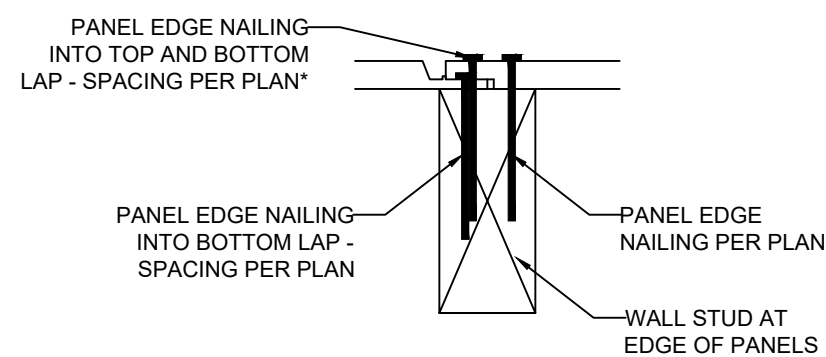
5 SHEATHING EDGE AT HORIZONTAL FRAMING MEMBER

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



6 SHEATHING EDGE AT PANEL SPLICE ACROSS STUDS

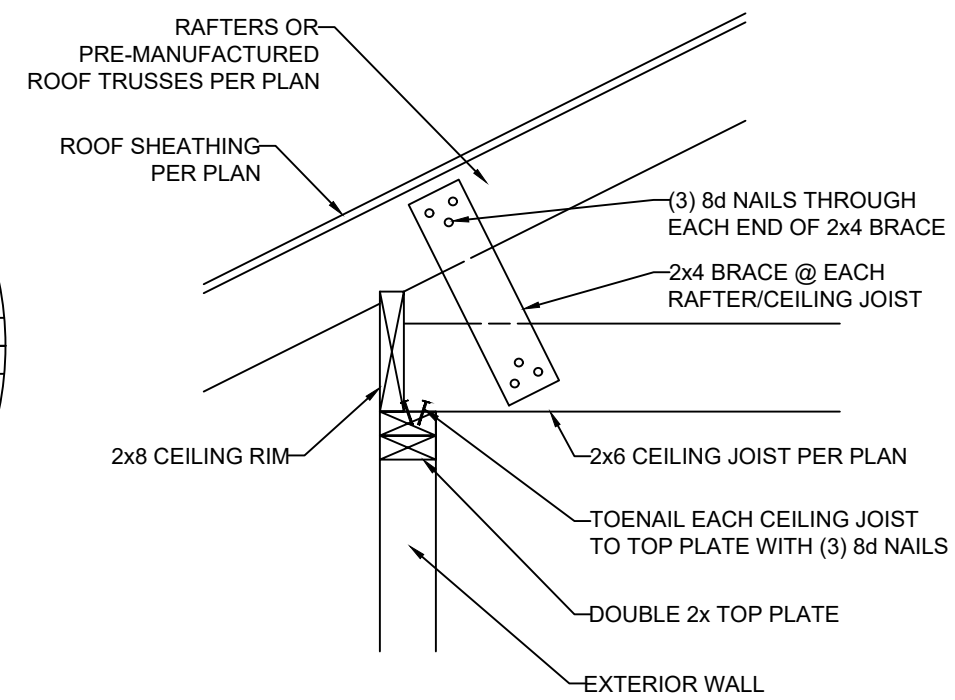
SCALE: $1" = 1'-0"$ (18x24) OR $1\frac{1}{2}" = 1'-0"$ (24x36)



*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

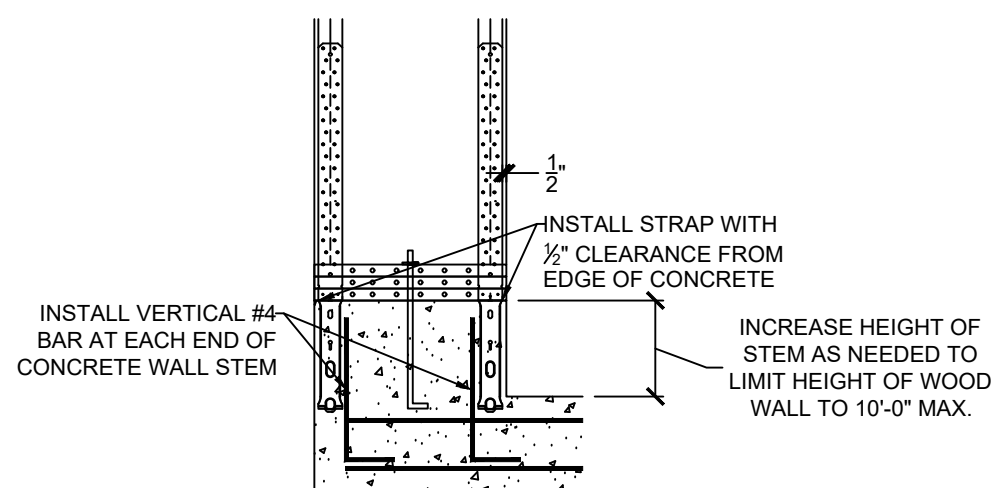
8 FASTENING INSTRUCTIONS FOR SHIPLAP PANEL SHEATHING

SCALE: $4" = 1'-0"$ (18x24) OR $6" = 1'-0"$ (24x36)



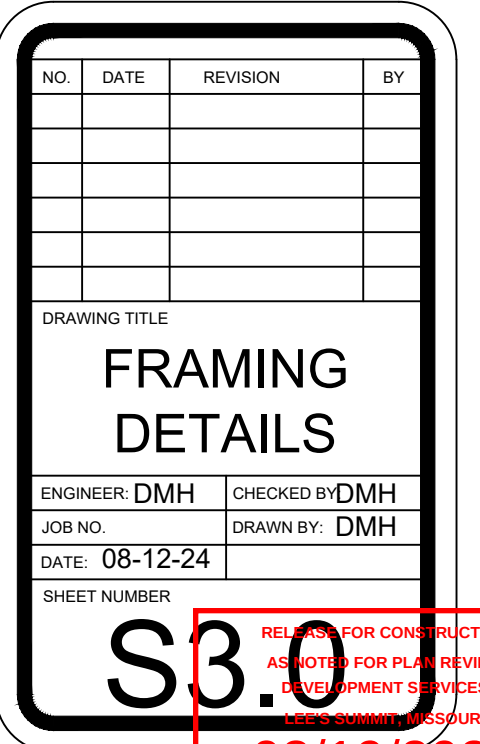
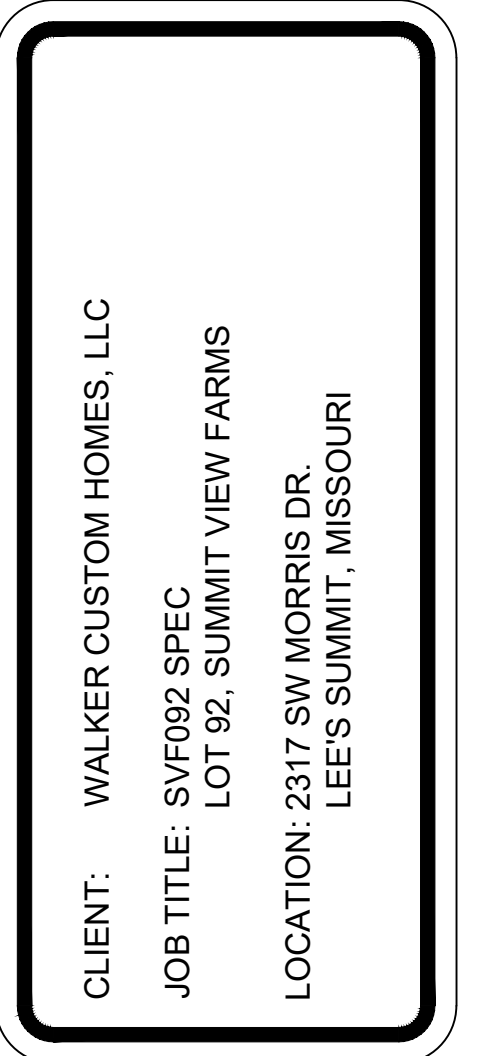
7 RAFTER BEARING OPTION DETAIL

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

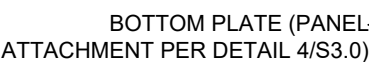


9 GARAGE HOLD-DOWN STRAP INSTALLATION

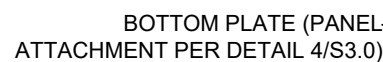
SCALE: $\frac{1}{2}" = 1'-0"$ (18x24) OR $\frac{3}{4}" = 1'-0"$ (24x36)



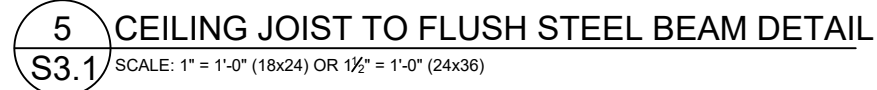
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LEE'S SUMMIT, MISSOURI
08/19/2024



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



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



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

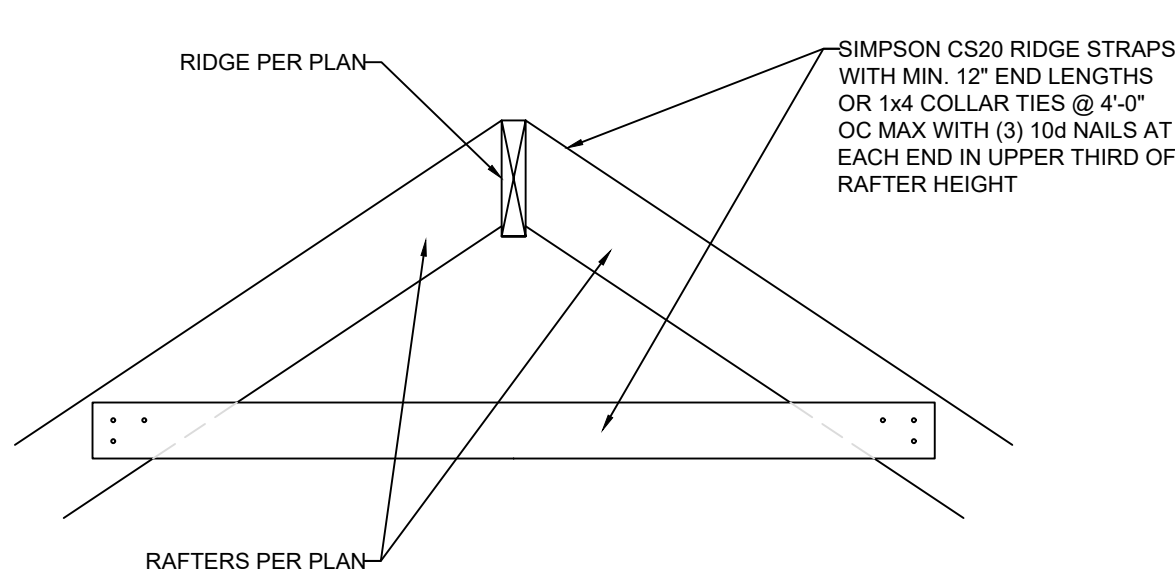


CLIENT: WALKER CUSTOM HOMES, LLC
JOB TITLE: SVF092 SPEC
LOT 92, SUMMIT VIEW FARMS
LOCATION: 2317 SW MORRIS DR.
LEE'S SUMMIT, MISSOURI

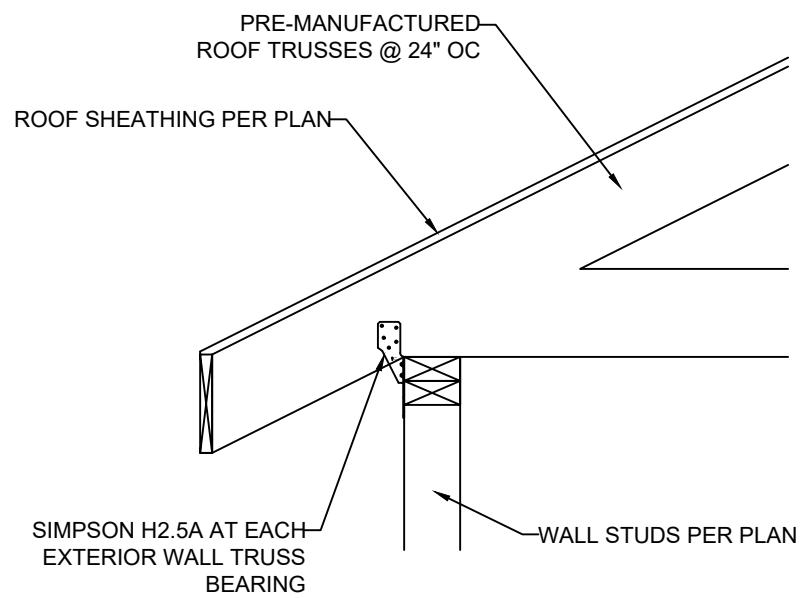
STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-201000172
PROFESSIONAL ENGINEER
8-12-2024

DATE	REVISION
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FRAMING DETAILS	
DRAWN BY: DMH	CHECKED BY: DMH
DATE: 08-12-24	DRAWN BY: DMH
SHEET NUMBER	

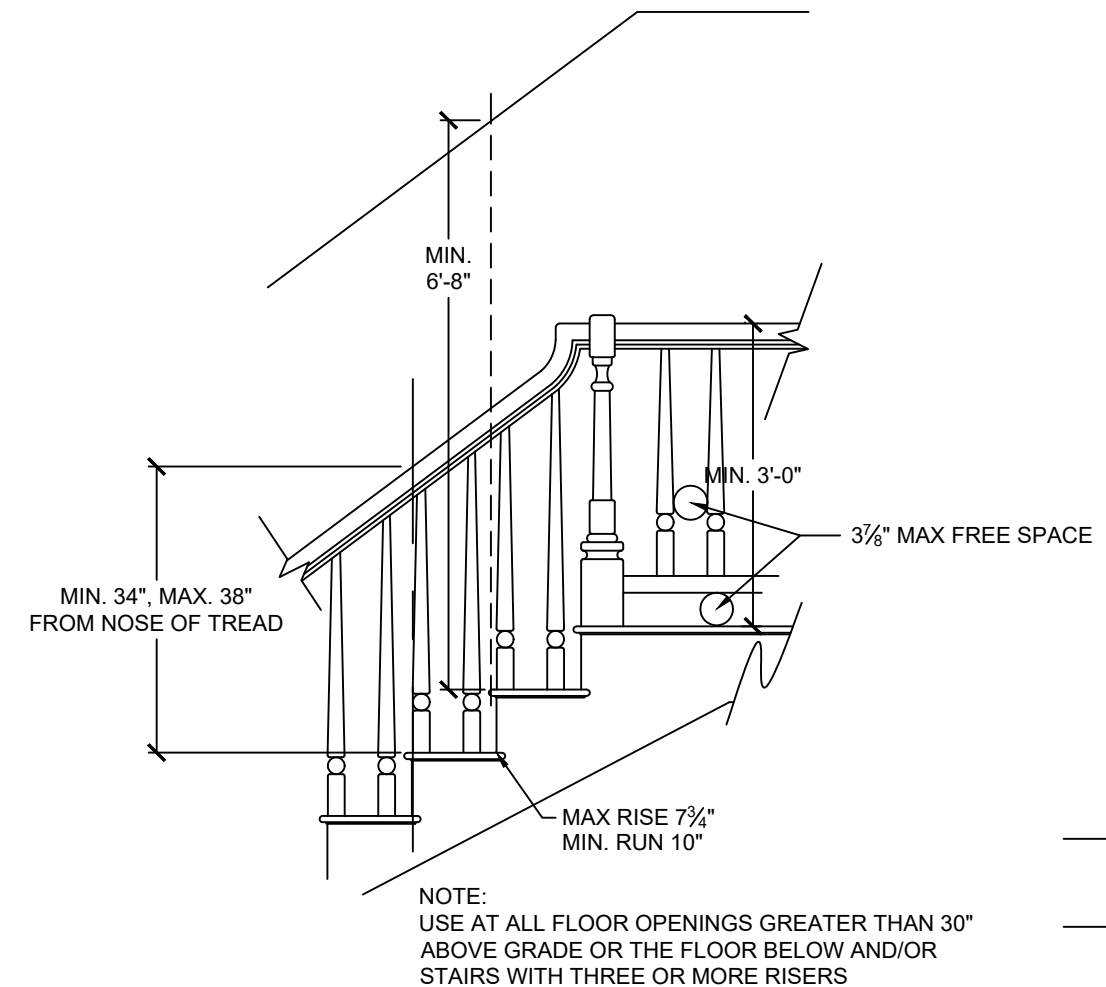
3.1
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/19/2024



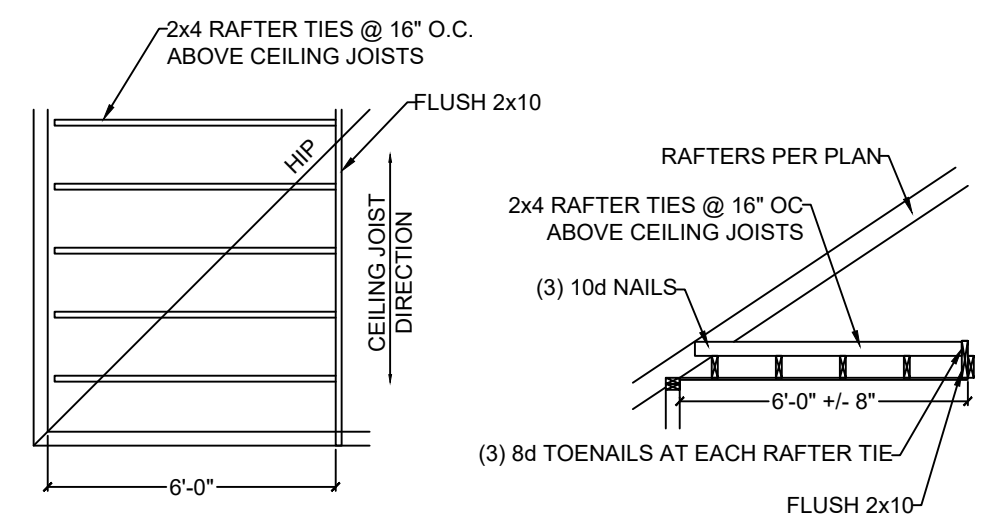
1 RIDGE FRAMING DETAIL
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



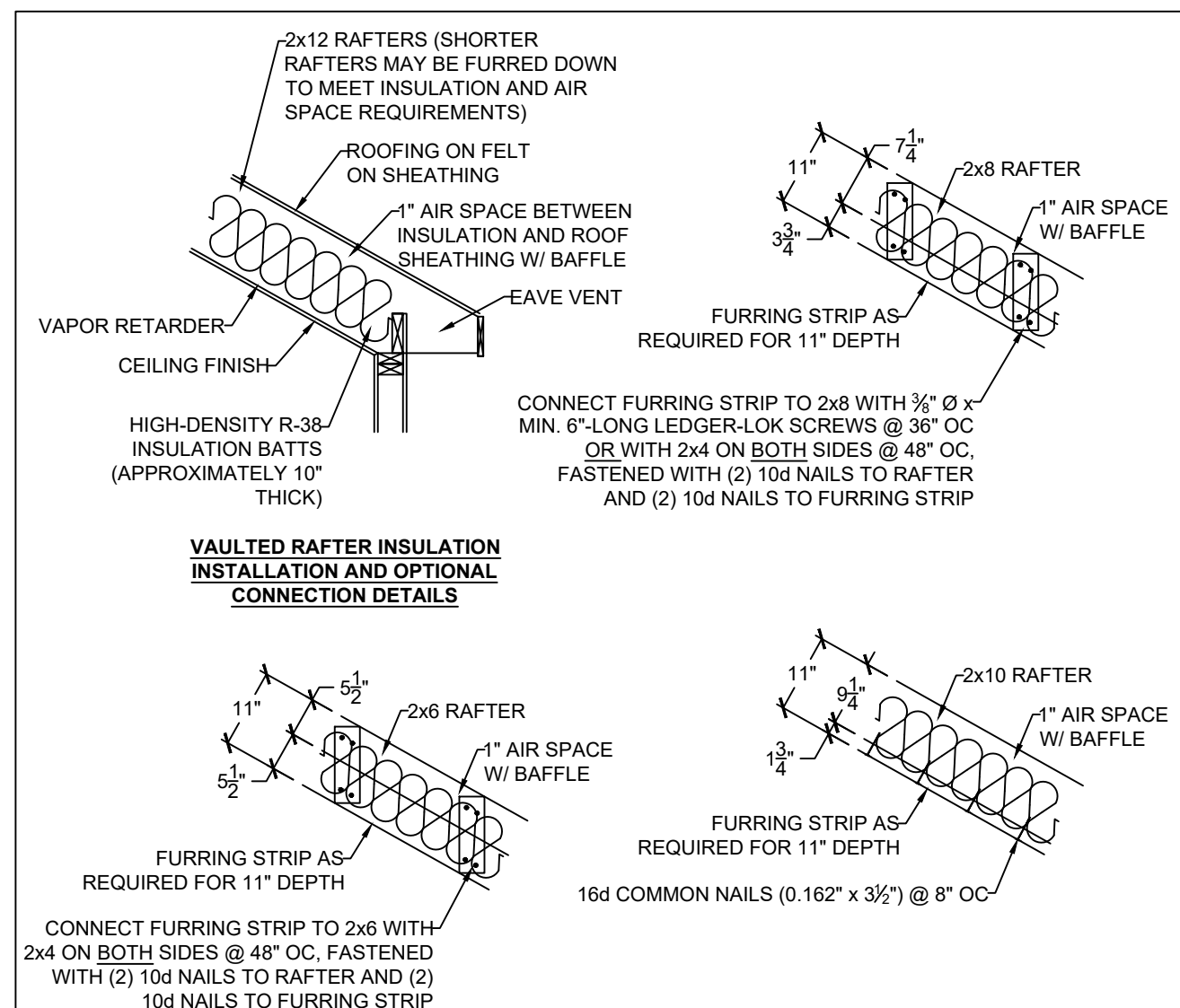
2 TRUSS CONNECTION TO EXT. WALL BEARING
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



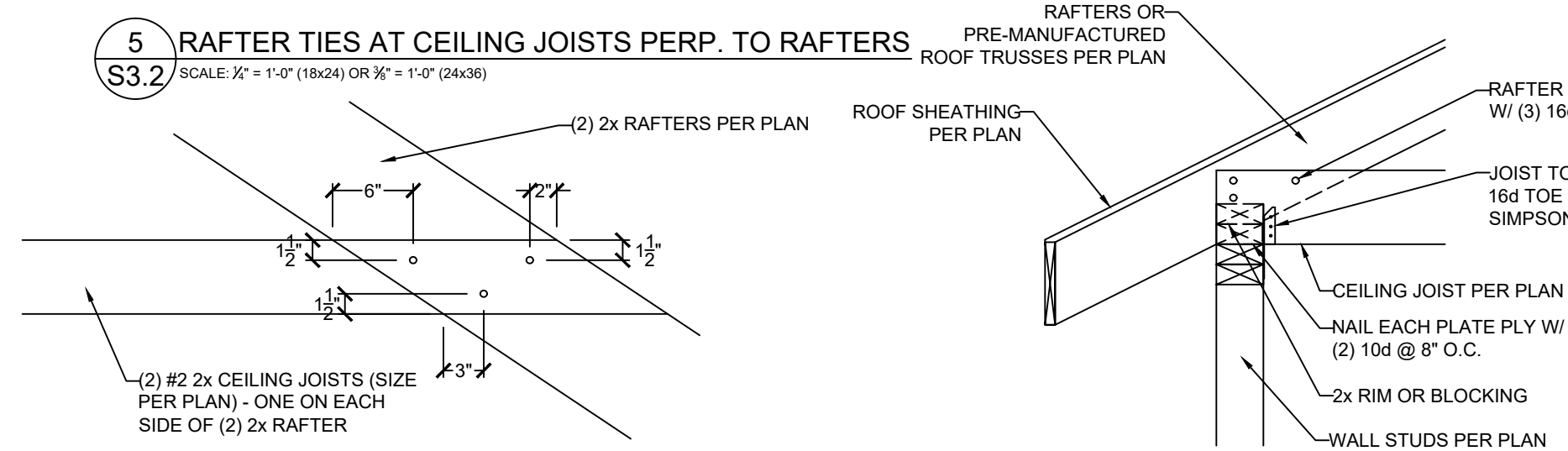
4 STAIR AND HANDRAIL/GUARDRAIL DETAIL
S3.2 SCALE: 1/2" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)



5 RAFTER TIES AT CEILING JOISTS PERP. TO RAFTERS
S3.2 SCALE: 1/2" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

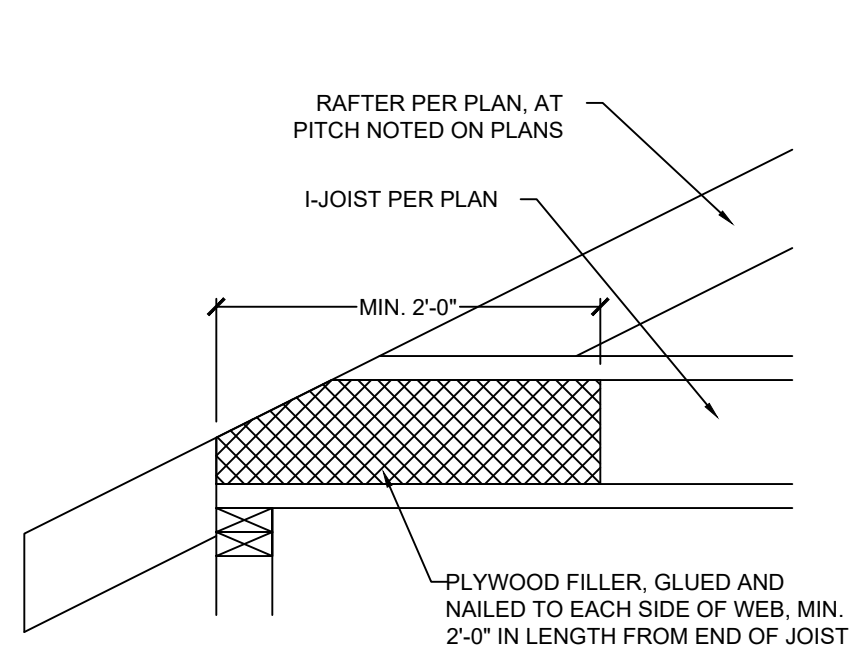


3 VAULTED RAFTER INSULATION DETAILS
S3.2 SCALE: 1/2" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

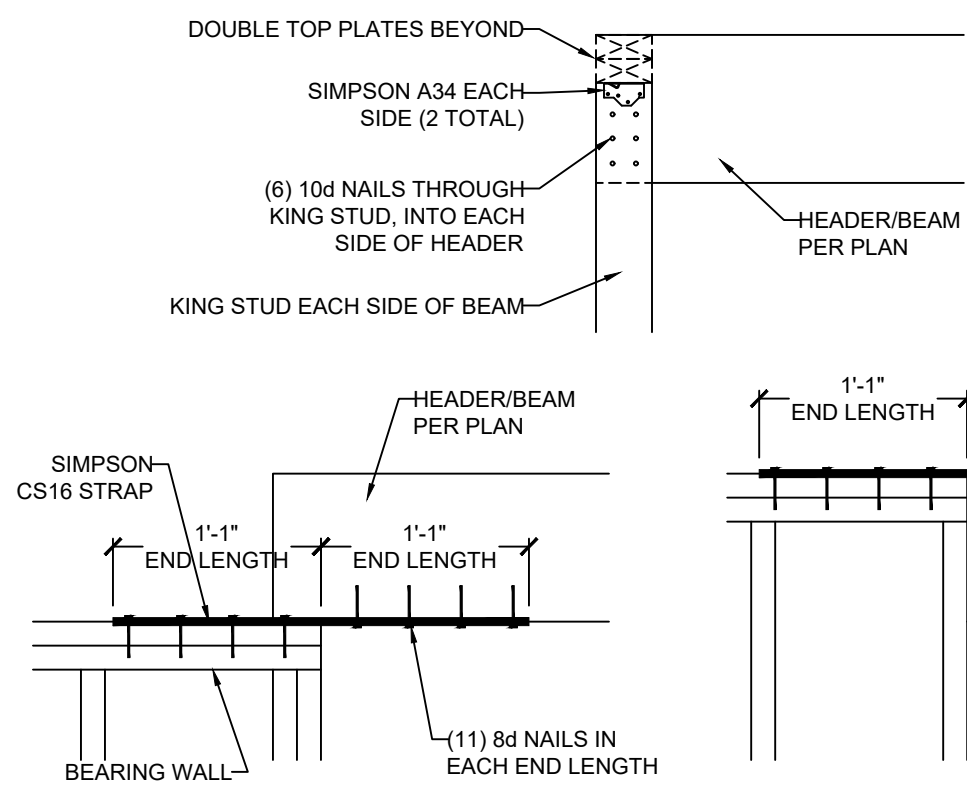


7 RAFTER BEARING OPTION DETAIL
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)

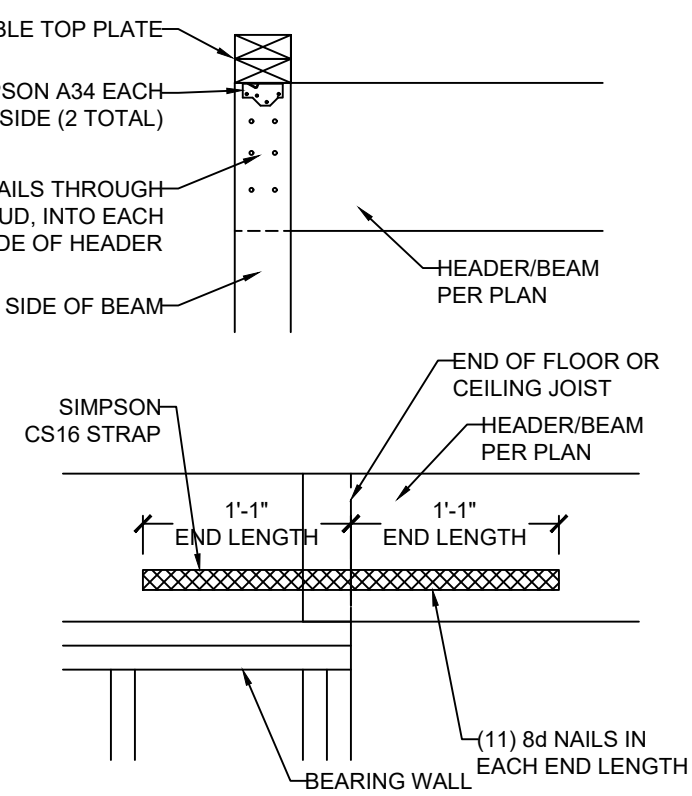
6 FIELD-CONSTRUCTED A-FRAME DETAIL
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



9 COPED I-JOIST REINFORCEMENT
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



10 HEADER/BEAM CONNECTION OPTIONS AT OUTDOOR/OPEN SPACE
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



8 MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS (IRC TABLE 602.3.1)
S3.2

HEIGHT (FT.)	SPACING (INCHES O.C.)			
	24	16	12	8
SUPPORTING A ROOF ONLY				
10 OR LESS	2x4	2x4	2x4	2x4
12	2x6	2x4	2x4	2x4
14	2x6	2x6	2x6	2x4
16	2x6	2x6	2x6	2x4
18	DR	2x6	2x6	2x6
20	DR	DR	2x6	2x6
SUPPORTING ONE FLOOR AND A ROOF				
10 OR LESS	2x6	2x4	2x4	2x4
12	2x6	2x6	2x6	2x4
14	2x6	2x6	2x6	2x6
16	DR	2x6	2x6	2x6
18	DR	2x6	2x6	2x6
20	DR	DR	2x6	2x6
SUPPORTING TWO FLOORS AND A ROOF				
10 OR LESS	2x6	2x6	2x4	2x4
12	2x6	2x6	2x6	2x6
14	2x6	2x6	2x6	2x6
16	DR	2x6	2x6	2x6
18	DR	DR	2x6	2x6
20	DR	DR	DR	2x6

NOTES:
1) DR = DESIGN REQUIRED
2) UTILITY, STANDARD, STUD AND #3 GRADE LUMBER OF ANY SPECIES ARE NOT PERMITTED
3) THIS TABLE DOES NOT APPLY FOR STUDS SUPPORTING MEMBERS WITH A TRIB. LENGTH GREATER THAN 6'-0"

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

STATE OF MISSOURI
DENNIS HIER
NUMBER: PE-2010001772
PROFESSIONAL ENGINEER
8-12-2024

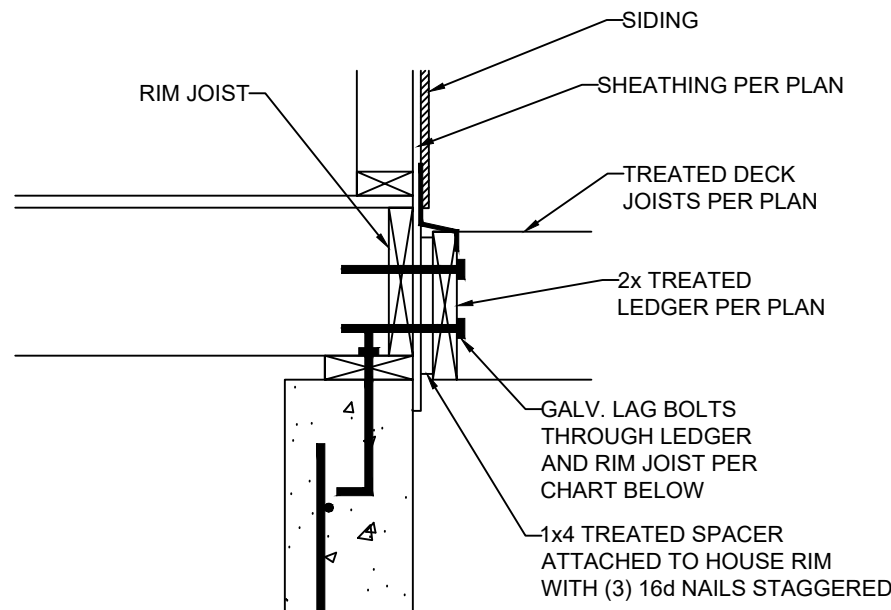
NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS

ENGINEER: DMH	CHECKED BY: DMH
JOB NO.	DRAWN BY: DMH
DATE: 08-12-24	
SHEET NUMBER	

S3.2

08/19/2024

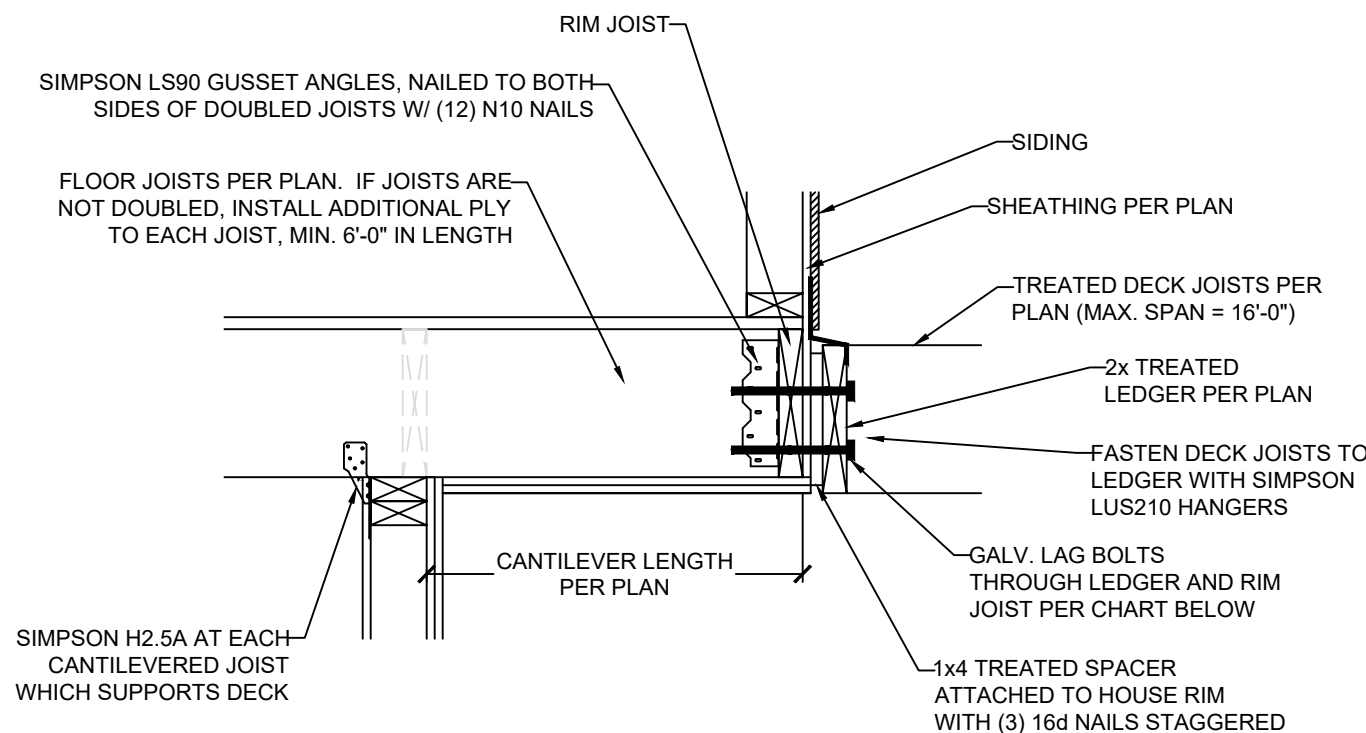


DECK LEDGER ATTACHMENT GUIDE

DECK JOIST SPAN	1/2" Ø GALV. LAG OR 3/8" 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

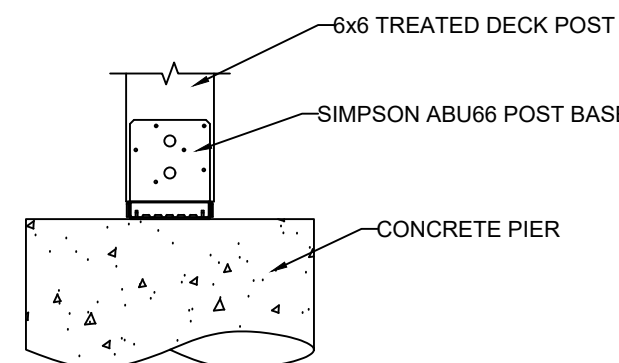
1 LEDGER ATTACHMENT
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



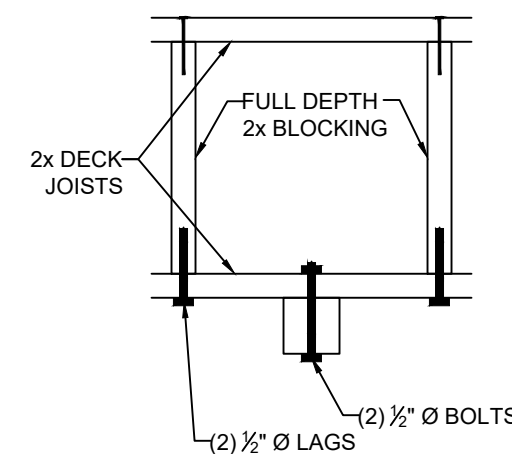
2 CANTILEVER WITH DECK ATTACHMENT
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



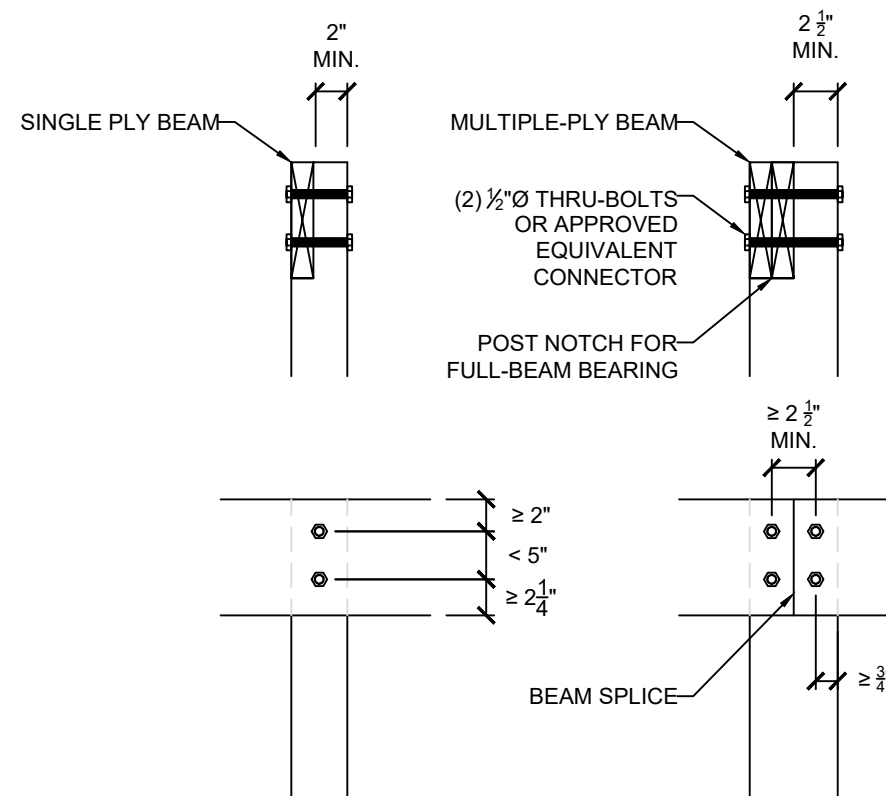
3 DECK POST BASE
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



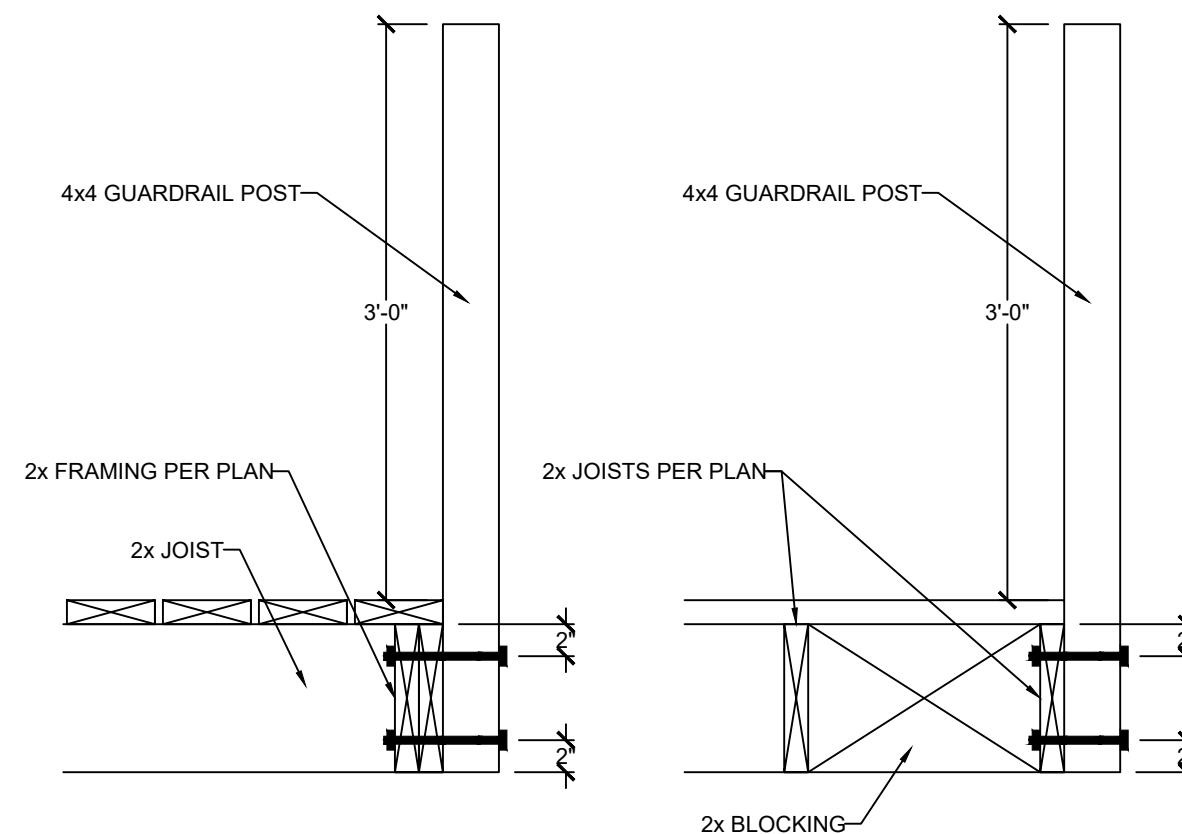
4 REINF. POST CONNECTIONS
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



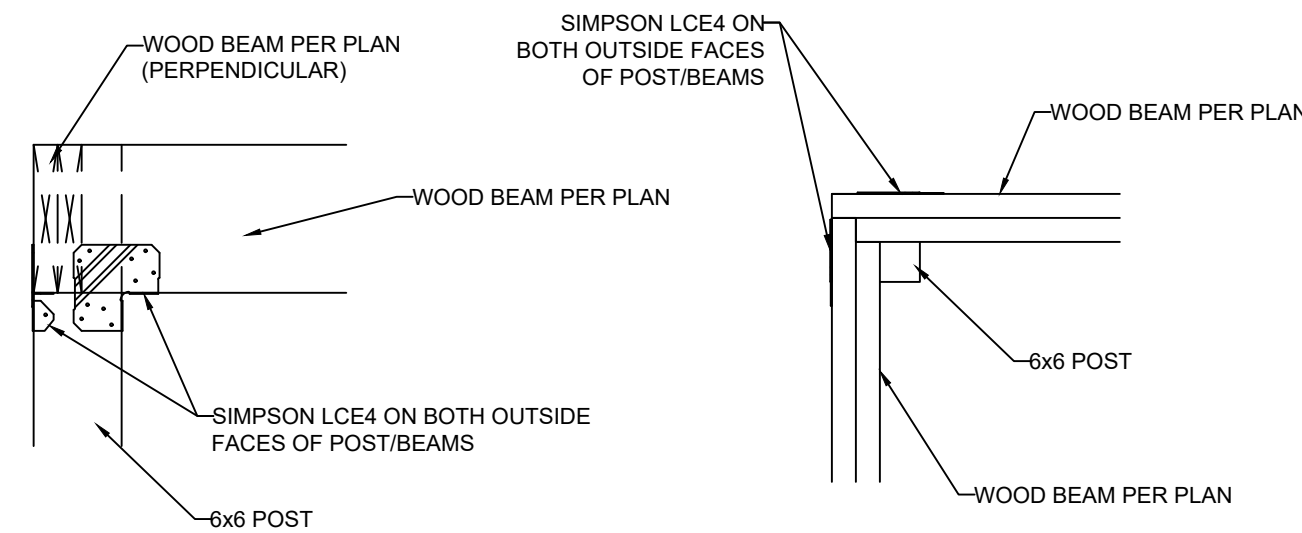
5 LET-IN (COVERED) DECK BEAM CONNECTION
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



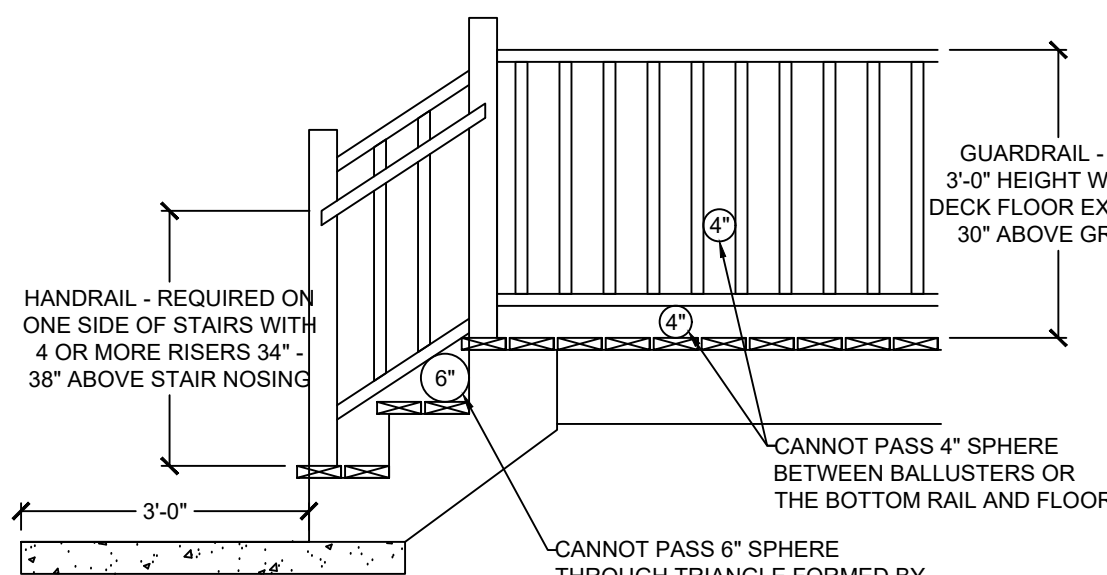
6 GUARDRAIL CONNECTION
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



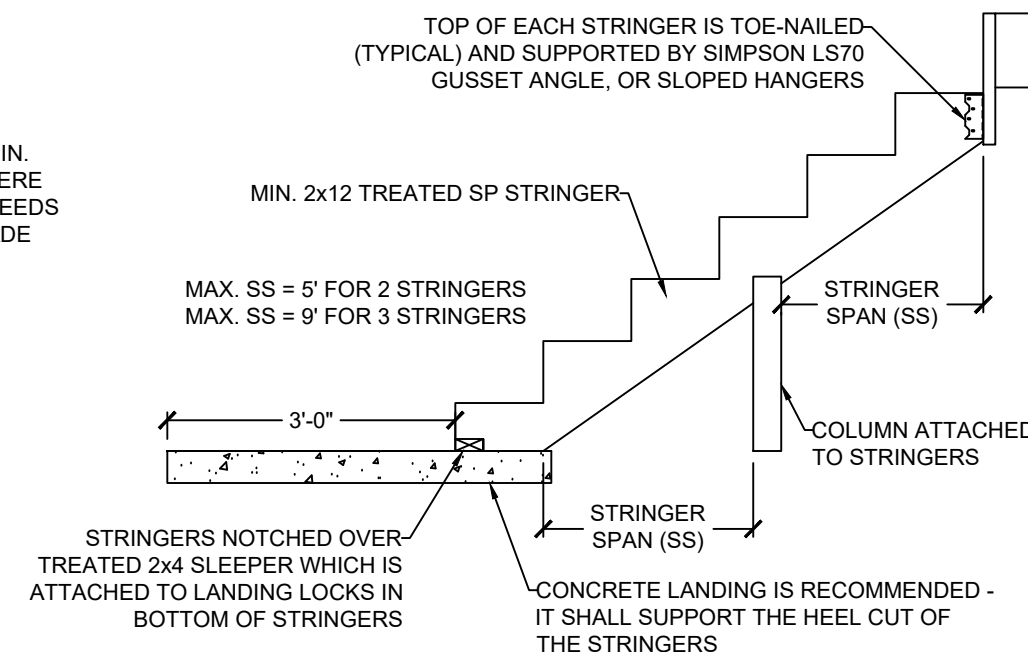
7 ALTERNATE COVERED DECK/PORCH INTERSECTION CORNER BEAM CONNECTION
S3.3

SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



8 GUARDRAIL DETAIL
S3.3

SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)

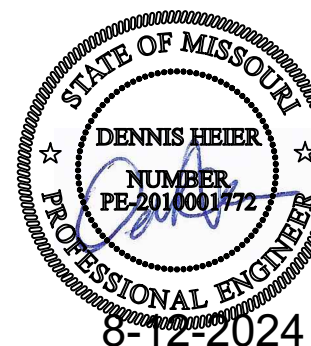


9 STAIR STRINGER DETAIL (MAX. 5' STAIR WIDTH)
S3.3

SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 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

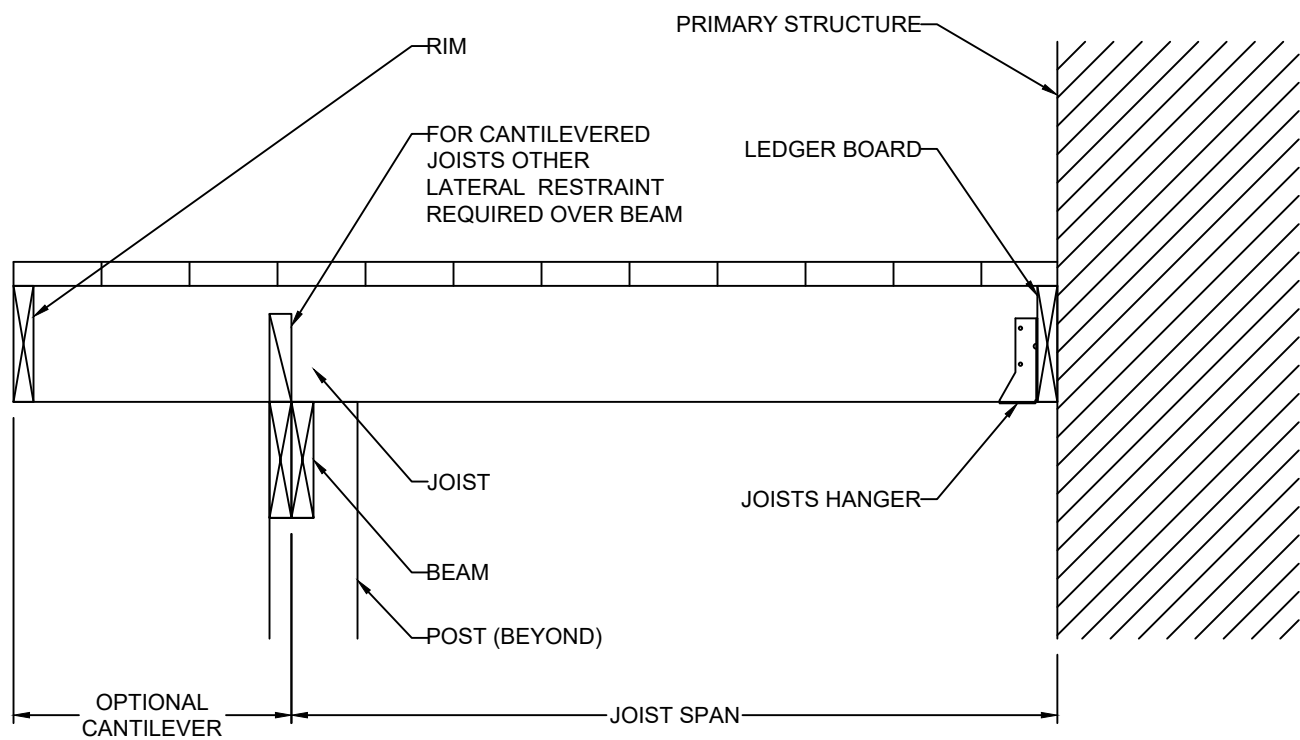


NO.	DATE	REVISION	BY

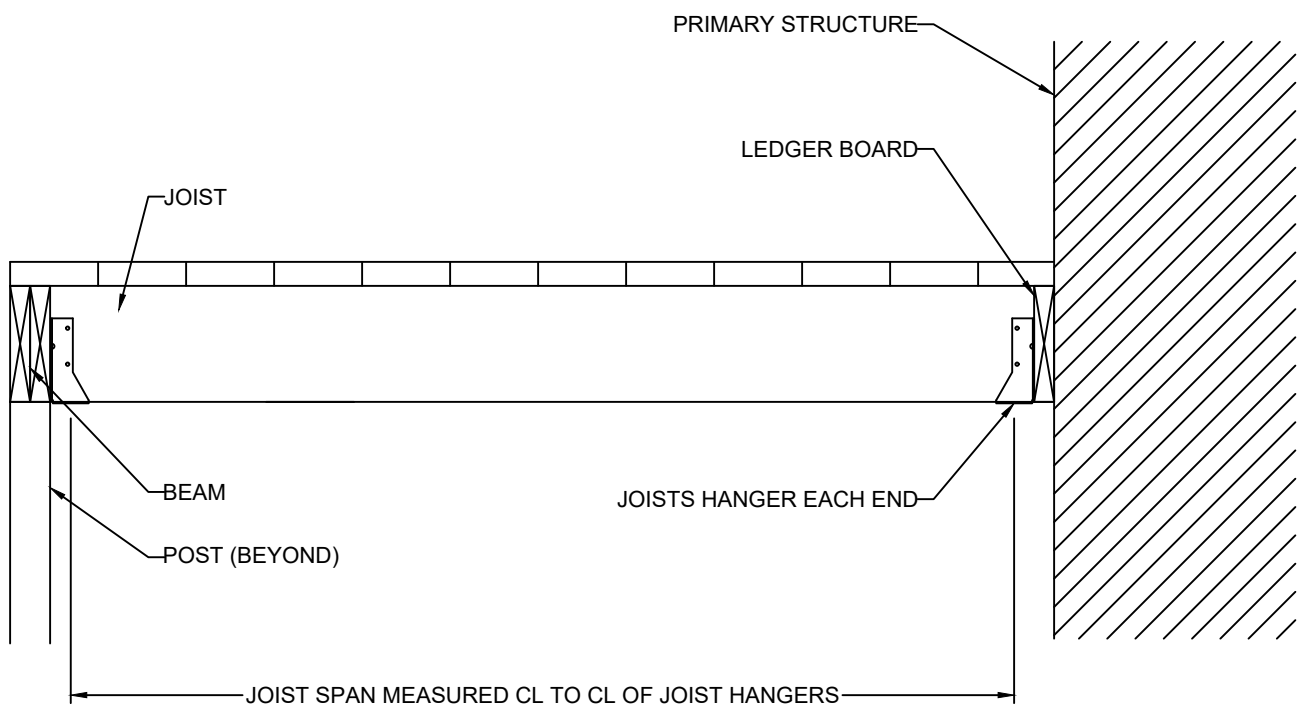
DRAWING TITLE
FRAMING DETAILS
ENGINEER: DMH CHECKED BY: DMH
JOB NO. DRAWN BY: DMH
DATE: 08-12-24
SHEET NUMBER

S3.3

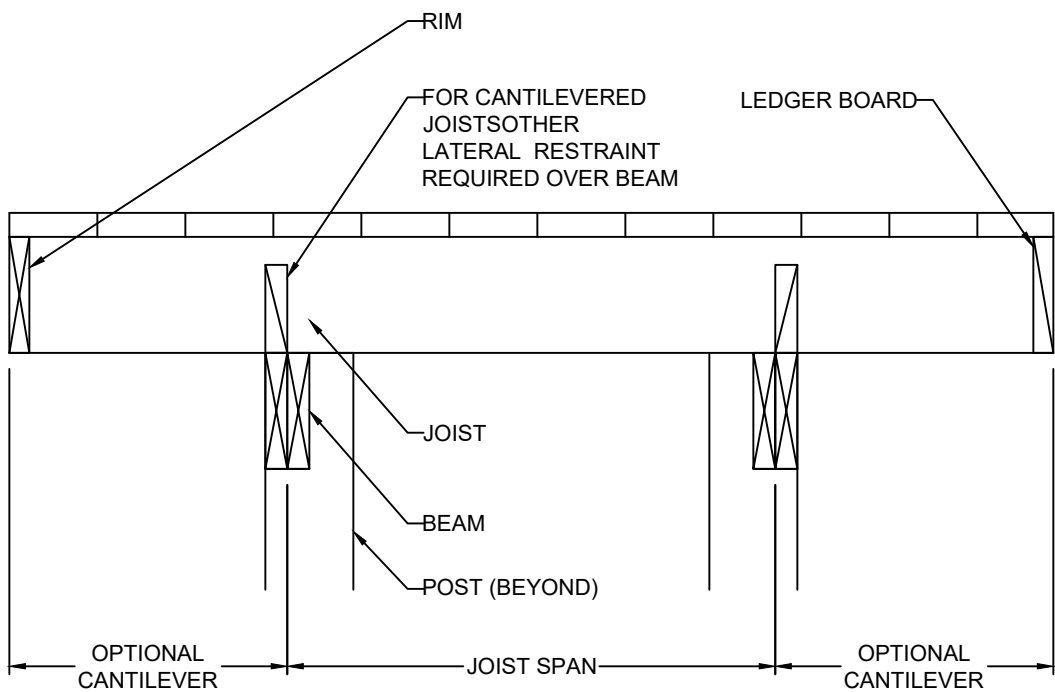
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/19/2024



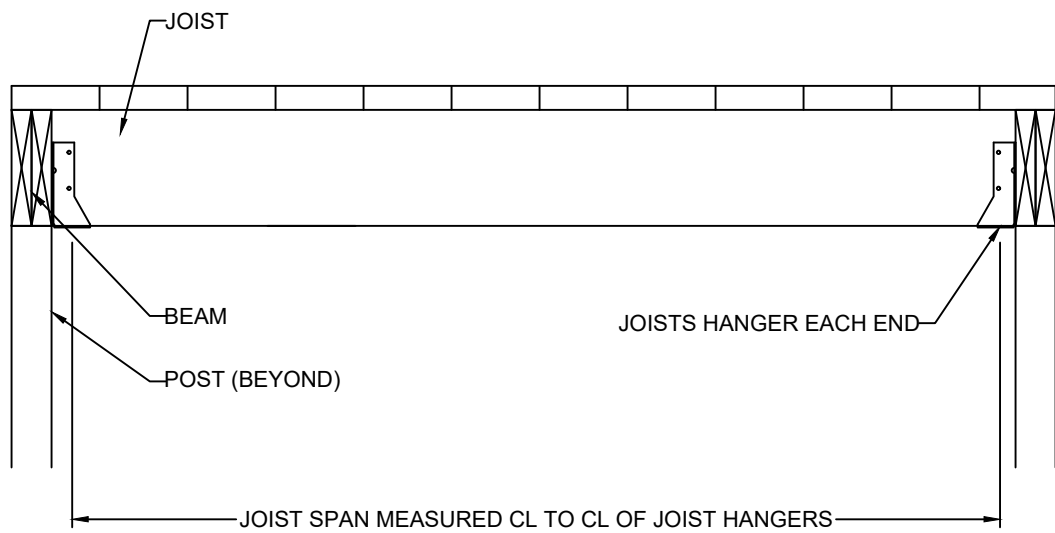
CANTILEVERED JOISTS WITH DROPPED BEAM



JOISTS WITH FLUSH BEAM

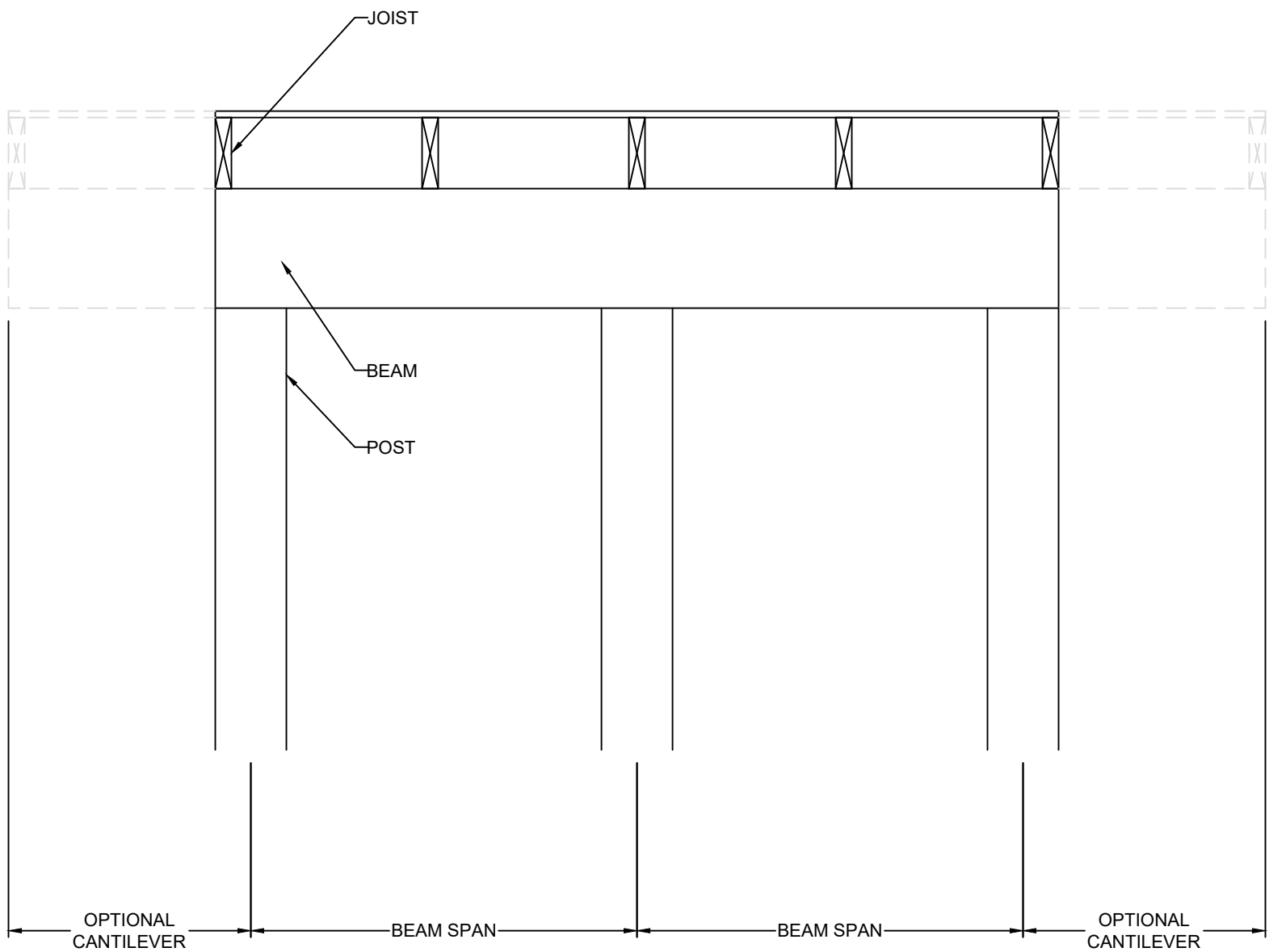


JOISTS ON FREE-STANDING DECK WITH DROPPED BEAM

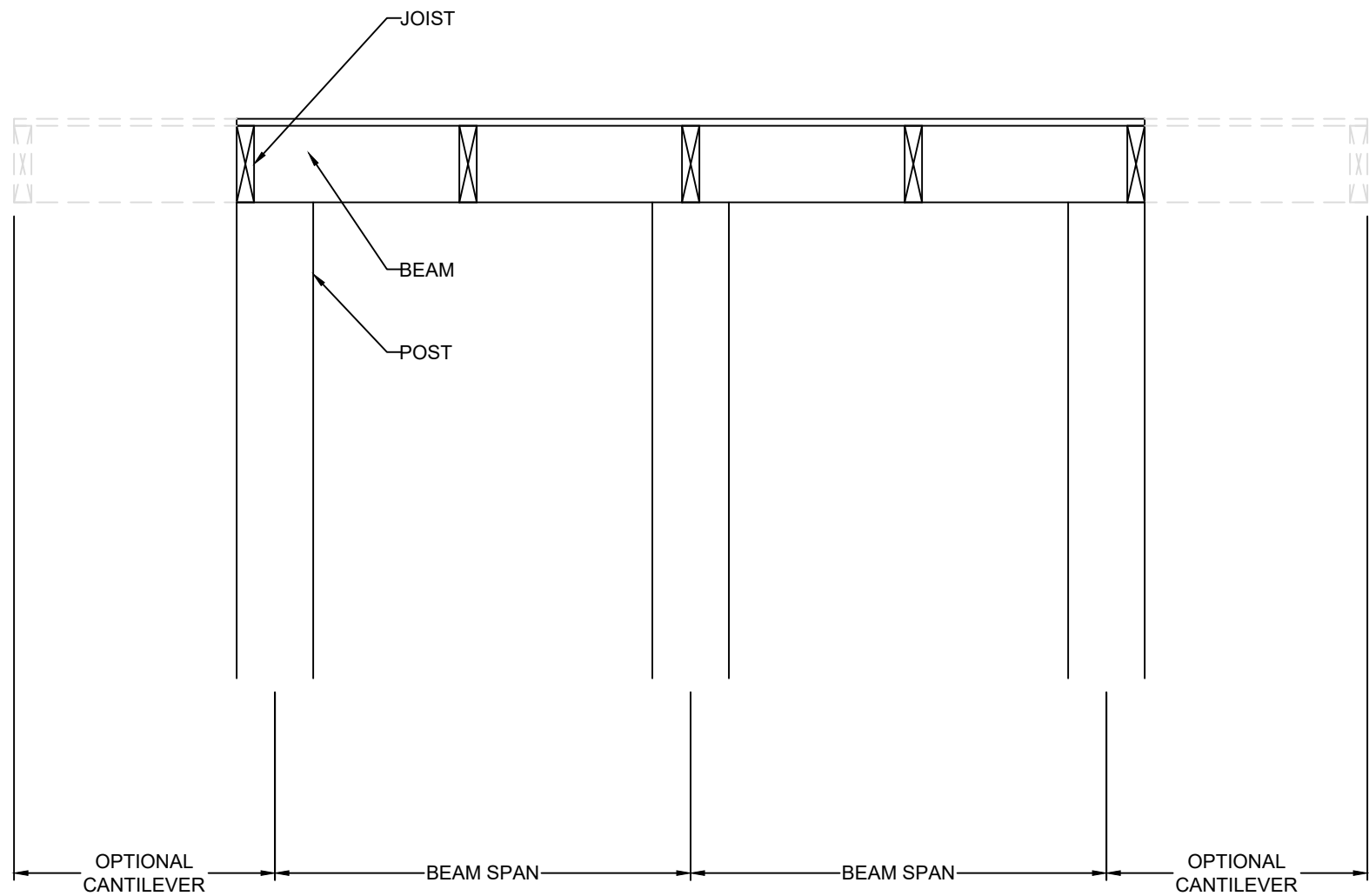


JOISTS WITH FLUSH BEAM

10 TYP. DECK JOIST SPANS
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



DROPPED BEAM



FLUSH BEAM



VISTA
— STRUCTURAL —
ENGINEERING, LLC

11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 97225
OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
EMAIL: DENNIS@VISTASTRUCTURAL.COM

CLIENT: WALKER CUSTOM HOMES, LLC

JOB TITLE: SVF092 SPEC
LOT 92, SUMMIT VIEW FARMS

LOCATION: 2317 SW MORRIS DR.
LEE'S SUMMIT, MISSOURI



STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2010001772
PROFESSIONAL ENGINEER
8-12-2024

NO.	DATE	REVISION	BY

DRAWING TITLE

**FRAMING
DETAILS**

ENGINEER: DMH	CHECKED BY: DMH
JOB NO.	DRAWN BY: DMH
DATE: 08-12-24	
SHEET NUMBER	

S3.30

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

08/19/2024