

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



FRONT ELEVATION

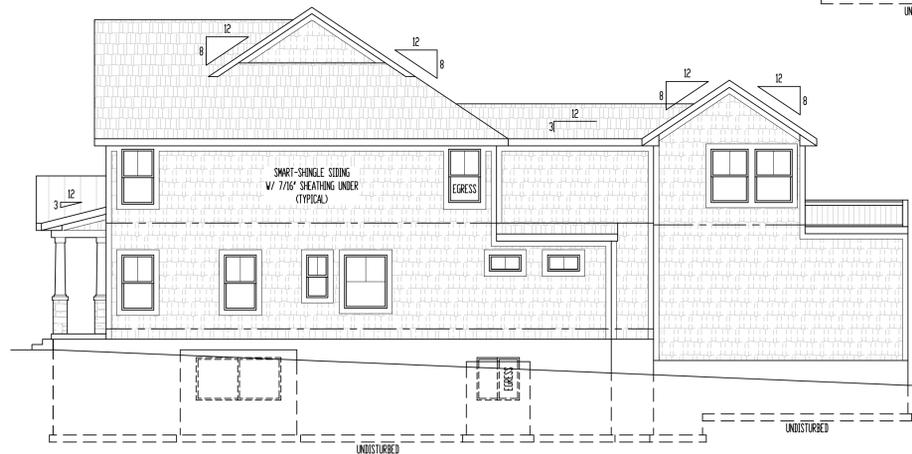
SCALE: 1/4" = 1'-0"



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



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



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

ELEVATIONS:
SMART-SHINGLE SIDING ON ALL ELEVATIONS
COMPOSITION ROOF SHINGLES
LOCATE ROOF AND SOFFIT VENTS PER CODE
ADJUST FOUNDATION TO GRADE

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/27/2025 4:48:20

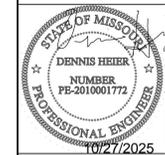
These plans and specifications are protected under federal copyright laws.
Copyright A.D. 2025 Bellah Homes, LLC.
Care and effort have gone into the creation and design of this plan. However, the designer is not an architect or engineer and construction from these plans should not be undertaken without the supervision of a licensed professional architect, engineer, or contractor. The designer, engineer, or contractor shall be responsible for any damages, including structural failures, due to any omissions, errors or omissions in the design or construction. The designer, engineer, or contractor shall not be held responsible for any damages or omissions in the design or construction. Consult your architect to determine the suitability of these plans for use on your specific site and application.

"For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life." (John 3:16)



Site Description:
**Lot 125, Pergola Park,
New Longview**
Sheet Address:
**1117 SW Corinthian Ln.,
Lee's Summit, Missouri**

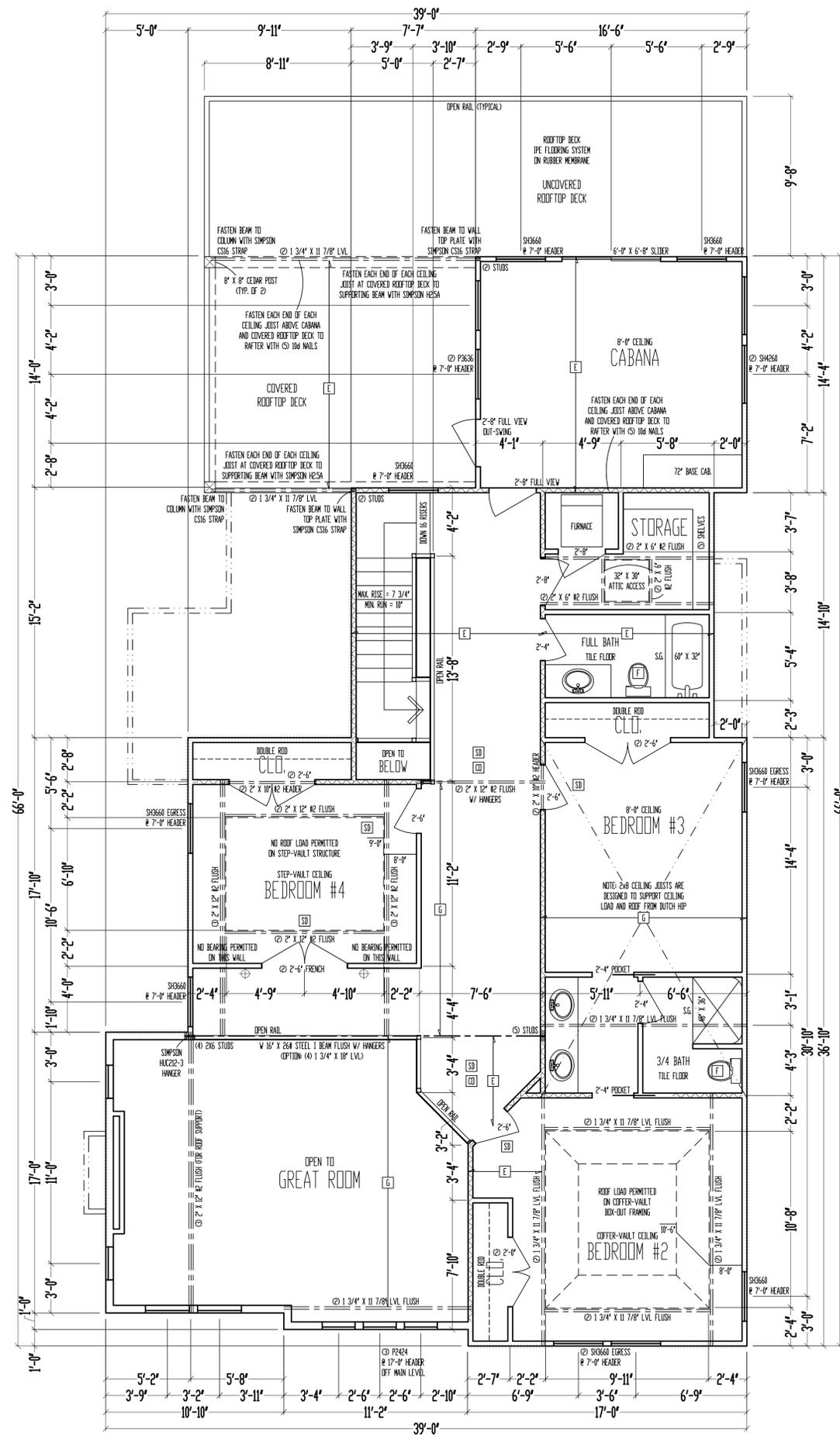
Designed for:
**Richard & Debbie
LeBOURVEAU**
General Contractor:
Bellah Homes, LLC



Date: 9 - 29 - AD 2025
Rev. 1: 10 - 24 - AD 2025
Rev. 2: _____
Rev. 3: _____

Sheet Title:
ELEVATIONS

Sheet No.:
A-1 of 5



JOIST SCHEDULE	
E	2" X 6" R2 CEILING JOIST @ 16" O.C.
G	2" X 6" R2 CEILING JOIST @ 16" O.C.

8'-0" CEILING
SECOND LEVEL
SCALE: 1/4" = 1'-0"

- ***** = WALL BRACING PER FRAMING NOTE #1 AND PER CALCULATIONS ON SHEET S11.
- FRAMING NOTES**
- SECOND LEVEL EXTERIOR WALLS SHALL BE SHEATHED W/ 7/16" OSB. APA PANELS W/ 8d COMMON NAILS @ 3" O.C. AT EDGES & @ 12" O.C. IN THE FIELD. SMART PANEL, OR EQUAL, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 - ***** = 6d-17d MIN. GYPSUM BOARD OVER STUDS SPACED 24" MAX. FASTENED W/ NO. 6 - 1 1/4" TYPE W OR S DRYPWALL SCREWS @ 7" O.C. EDGES & FIELD. MIN. 8'-0" SECTIONS ONE SIDE OF WALL OR MIN. 4'-0" SECTION FOR BOTH SIDES.
 - ***** = LOAD BEARING INTERIOR WALL.
 - @ 2" X 10" R2 HEADER AT ALL EXTERIOR AND LOAD BEARING WALLS, UNLESS NOTED OTHERWISE.
 - LOW TIES @ 4'-0" O.C. (TYPICAL).
 - RUN STUDS THE FULL HEIGHT OF RAISED PLATE WALLS.
 - BLOCK JOISTS ABOVE BEAMS, CANTILEVERS AND LOAD BEARING WALLS WITH JOIST MATERIAL NOT REQUIRED WITH I-JOISTS.
 - PROVIDE MULTIPLE STUDS FOR SOLID BEARING BELOW ALL BEAMS.
 - ALL DESTAGATED 2" X 6" WALLS SHALL HAVE DOUBLE KING STUDS AT DOOR AND WINDOW OPENINGS.
 - ALL UNSQUARE WALLS SHALL BE 45°, UNLESS NOTED OTHERWISE.
 - ALL WALLS TO BE FRAMED W/ MIN. R2 GRADE DOUG-FIR OR HEM-FIR 2" X 4" STUDS @ 16" O.C. UNLESS NOTED OTHERWISE.
 - EXTERIOR WALL BOTTOM PLATES SHALL BE NAILED TO FRAMING BELOW WITH 16d COMMON NAILS @ 16" O.C. MAX. (WHERE APPLICABLE).
 - CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY REFLECTION LIMITATIONS MORE STRINGENT THAN CODE MINIMUMS ABOVE ANY OPENINGS.
 - FOR ALL MANUFACTURED ROOF TRUSSES AND I-JOISTS, LAYOUT PROVIDED BY SUPPLIER SHALL BE REVIEWED AND APPROVED BY ENGINEER OF RECORD BEFORE CONSTRUCTION.

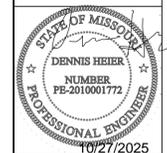
These plans and specifications are prepared under federal copyright laws. Copyright A.D. 2025 Bellah Homes, LLC. Care and effort have gone into the creation and design of this plan. However, the designer is not an architect or engineer and construction from these plans should not be undertaken without the supervision of a licensed professional architect, engineer, or contractor. The liability of the designer is limited to the design and construction of the structure shown on these plans. The designer assumes no responsibility for any damages, including structural failures, due to any omissions, errors or in the design or construction of the structure shown on these plans for use on your specific site. Consult your architect to determine the suitability of these plans for your specific site and application.

"For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life." (John 3:16)



Site Description:
**Lot 125, Pergola Park,
New Longview**
Sheet Address:
**1117 SW Corinthian Ln.,
Lee's Summit, Missouri**

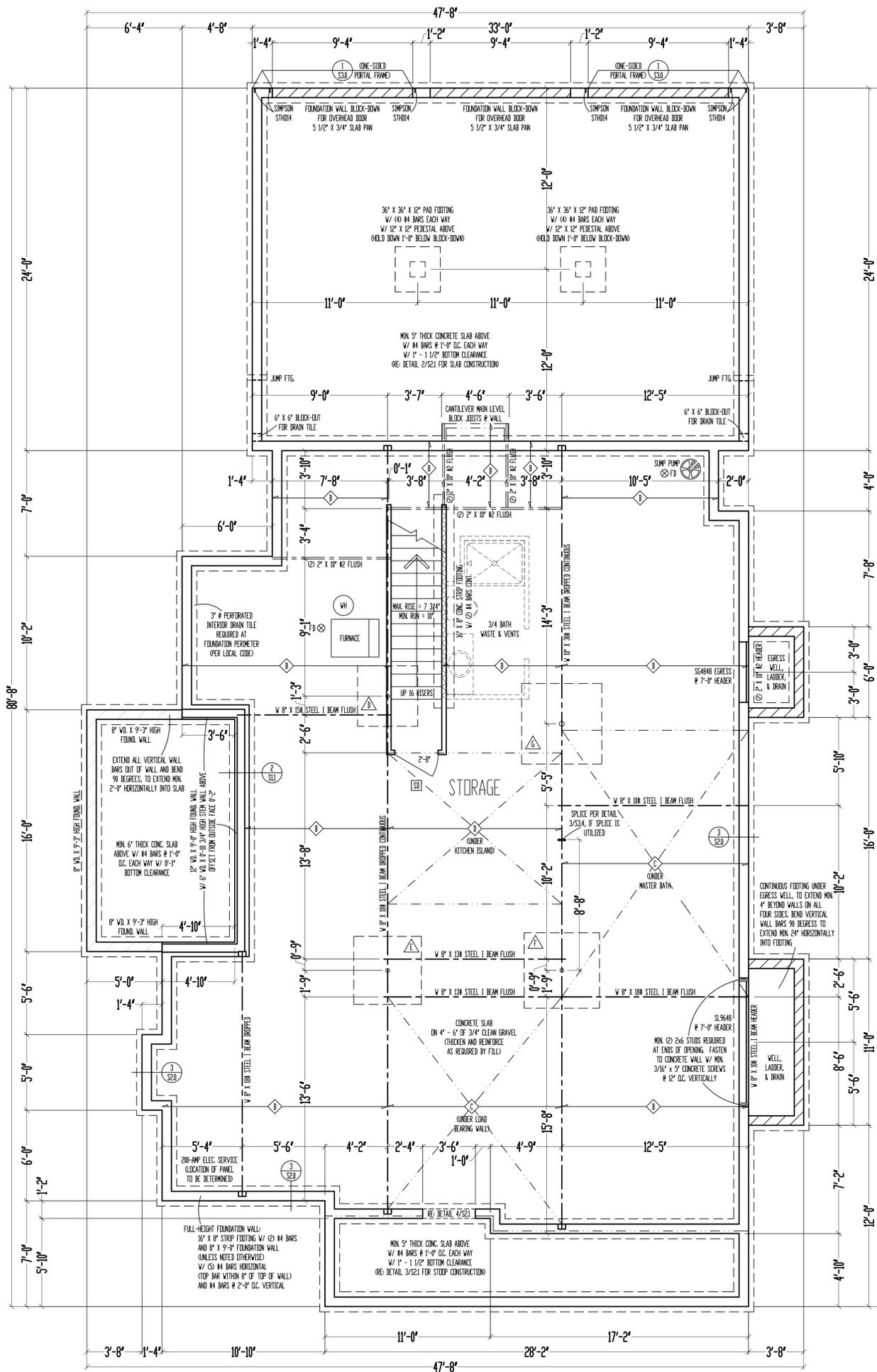
Designed for:
**Richard & Debbie
LeBOURVEAU**
General Contractor:
Bellah Homes, LLC



Date: 9 - 29 - AD 2025
Rev. 1: 10 - 24 - AD 2025
Rev. 2:
Rev. 3:

Sheet Title:
**SECOND LEVEL
PLAN**

Sheet No.:
A-4 of 5



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 H1 AND PER CALCULATIONS ON SHEET S11.
- FRAMING NOTES
- BASEMENT LEVEL EXTERIOR WOOD-FRAMED WALLS SHALL BE SHEATHED W/ 7/16" OSB. APA PANELS W/ 8# COMMON WALLS @ 6" OC. AT EDGES & @ 12" OC. IN THE FIELD. SMART PANEL, OR EQUAL, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 - = @ 1/2" MIN. GYPSUM BOARD OVER STUDS SPACED 24" MAX FASTENED W/ #6 1-1/4" TYPE W OR S DRYWALL SCREWS @ 7" OC. EDGES & FIELD. MIN. 8'-0" SECTIONS ONE SIDE OF WALL OR MIN. 4'-0" SECTION FOR BOTH SIDES.
 - = LEAD BEARING INTERIOR WALL.
 - = 2" X 10" #2 HEADER AT ALL EXTERIOR AND LEAD BEARING WALLS, UNLESS NOTED OTHERWISE.
 - = LOW TIES @ 4'-0" (TYPICAL).
 - RAN STUDS THE FULL HEIGHT OF RAISED PLATE WALLS.
 - BLOCK JOISTS ABOVE BEAMS, CANTILEVERS AND LEAD BEARING WALLS WITH JOIST MATERIAL ONLY REQUIRED WITH I-JOISTS.
 - PROVIDE MULTIPLE STUDS FOR SOLID BEARING BELOW ALL BEAMS.
 - ALL DESIGNATED 2" X 6" WALLS SHALL HAVE DOUBLE KING STUDS AT DOOR AND WINDOW OPENINGS.
 - ALL UNSHARE WALLS SHALL BE 45°, UNLESS NOTED OTHERWISE.
 - ALL WALLS TO BE FRAMED W/ MIN. #2 GRADE DOUG-FIR OR HEM-FIR 2" X 4" STUDS @ 16" OC., UNLESS NOTED OTHERWISE.
 - 12" X 12" ANCHOR BOLTS W/ MIN. 7" EMBEDMENT @ 48" OC. MAX. & WITHIN 6'-12" OF END OF EACH PLATE LENGTH.
 - 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 FOLLOWS IN ANYTHING SHORT OF THE REFERENCED REQUIREMENTS.
 - CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY DEFLECTION LIMITATIONS MORE STRINGENT THAN CODE MINIMUMS ABOVE ANY OPENINGS.
 - FOR ALL MANUFACTURED ROOF TRUSSES AND I-JOISTS, LAYOUT PROVIDED BY SUPPLIER SHALL BE REVIEWED AND APPROVED BY ENGINEER OF RECORD BEFORE CONSTRUCTION.
 - IF STEEL BEAM IS REQUIRED TO BE SPLICED, CONSULT ENGINEER FOR ALLOWABLE LOCATIONS BEFORE CONSTRUCTION.

STEEL COLUMN & PAD FOOTING SCHEDULE	
▲	3" SCH. 40 STEEL COLUMN ON 30" X 30" X 10" PAD FOOTING W/ (4) #4 BARS EACH WAY (S40)
▲	3" SCH. 40 STEEL COLUMN ON 36" X 36" X 10" PAD FOOTING W/ (4) #4 BARS EACH WAY (S36)
▲	3" SCH. 40 STEEL COLUMN ON 42" X 42" X 12" PAD FOOTING W/ (5) #4 BARS EACH WAY (S42)
▲	3 1/2" SCH. 40 STEEL COLUMN ON 48" X 48" X 12" PAD FOOTING W/ (6) #4 BARS EACH WAY (S48)
▲	3 1/2" SCH. 40 STEEL COLUMN ON 54" X 54" X 14" PAD FOOTING W/ (7) #4 BARS EACH WAY (S54)
▲	3 1/2" SCH. 40 STEEL COLUMN ON 60" X 60" X 14" PAD FOOTING W/ (8) #4 BARS EACH WAY (S60)
▲	4" SCH. 40 STEEL COLUMN ON 64" X 64" X 14" PAD FOOTING W/ (9) #4 BARS EACH WAY (S64)
▲	4" SCH. 40 STEEL COLUMN ON 72" X 72" X 14" PAD FOOTING W/ (10) #4 BARS EACH WAY (S72)

3 1/2" OUTSIDE DIAMETER, 0.25" WALL THICKNESS, A500 GRADE B (Fy=43ksi)

4" OUTSIDE DIAMETER, 0.25" WALL THICKNESS, A500 GRADE B (Fy=43ksi)

4 1/2" OUTSIDE DIAMETER, 0.25" WALL THICKNESS, A500 GRADE B (Fy=43ksi)

5" OUTSIDE DIAMETER, 0.25" WALL THICKNESS, A500 GRADE B (Fy=43ksi)

PIER FOOTING SCHEDULE	
▲	18" # PIER FTG.
▲	24" # PIER FTG.
▲	30" # PIER FTG.

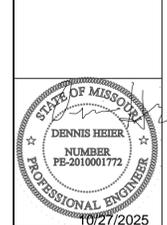
JOIST SCHEDULE	
◆	2" X 10" #2 TTD FLOOR JOIST @ 16" OC.
◆	2" X 10" #2 FLOOR JOIST @ 16" OC.
◆	2" X 10" #2 FLOOR JOIST @ 16" OC. - DOUBLE EVERY OTHER

These plans and specifications are prepared under federal copyright laws. Copyright A.D. 2025 Bellah Homes, LLC. Care and effort have gone into the creation and design of this plan. However, the designer is not an architect or engineer and construction from these plans should not be undertaken without the supervision of a licensed professional architect, engineer, or contractor. The liability of the contractor shall remain with the contractor. Bellah Homes, LLC, and Designer assume no responsibility for any damages, including structural failures, due to any omissions, errors or in the design or construction of these plans. The contractor shall be responsible for obtaining all necessary permits and ensuring compliance with all applicable codes and regulations. The contractor shall be responsible for determining the suitability of these plans for use on your specific site. Consult your architect to determine the suitability of these plans for your specific site and application. (John 3:16).



Site Description:
**Lot 125, Pergola Park,
New Longview**
Sheet Address:
**1117 SW Corinthian Ln.,
Lee's Summit, Missouri**

Designed for:
**Richard & Debbie
LeBOURVEAU**
General Contractor:
Bellah Homes, LLC



Date: 9 - 29 - AD 2025
Rev. 1: 10 - 24 - AD 2025
Rev. 2:
Rev. 3:

Sheet Title:
**FOUNDATION
PLAN**

Sheet No.:
A-5 of 5

RESIDENTIAL SEISMIC & WIND ANALYSIS

DETERMINE WEIGHT OF HOUSE:

LOCATION	DEAD LOAD (psf)	AREA (ft ²)	WEIGHT (lbs.)
ROOF	10	2910	29100
CEILING	10	2910	29100
SECOND FLOOR	10	1216	12160
FIRST FLOOR	10	2927	29270
SECOND FLOOR EXT. WALL DL	8	210	1680
FIRST FLOOR EXT. WALL DL	8	239.34	1914.72
SECOND FLOOR INT. PARTITION WALL DL	6	1216	7296
FIRST FLOOR INT. PARTITION WALL DL	6	2927	17562

FRONT-TO-BACK				SIDE-TO-SIDE			
SLOPED ROOF	AREA	LOAD	CUMULATIVE	SLOPED ROOF	AREA	LOAD	CUMULATIVE
VERT. ROOF	131	1629	8295	VERT. ROOF	303	2481	11764
2ND	351	4415	14316	2ND	594	7157	21711
1ST	494	6017	14316	1ST	832.37	9947	21711
PRESSURE (PSF) - PER ASCE CH. 6				PRESSURE (PSF) - PER ASCE CH. 6			
SLOPED ROOF	ZONE B	9.7		ZONE C	11.3		2a (FIG. 28.6-1, ASCE7)
WALL/VERT. ROOF	ZONE A	14.2		ZONE D	7.7		8.8
MEAN ROOF HT. (ft)	25.5						

a) If there is a walkout wall to be sheathed, determine tributary wind area and enter here. If no walkout, enter 0 for area.
 $q_{10} = 0.00256 K_z K_{x1} K_{y1} V^2$ (ASCE7-16 Velocity Pressure) $q_{10, ASD} = 0.8 q_{10}$ (Design Velocity Pressure for ASD analysis under ASCE7-16 and IRC/IBC 2018)

2ND FLOOR TRIBUTARY WEIGHT	64820
1ST FLOOR TRIBUTARY WEIGHT	103863
S ₀ (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 ₀ * F _a)	0.128
R (from ASCE7 Table 12.2-1)	6.5
SEISMIC DESIGN CATEGORY	A

LOCATION	From ASCE7 (Eq. 12.8-1)	V (= 1.2 * S _{DS} * W / R) (lbs.)
2ND FLOOR		1534
1ST FLOOR		2435

Sheathing Location	Min. Sheathing Schedule	Fastening Schedule	Allowable Shear (#/LF)	Code Reference
Exterior (Option #1)	7/16" APA Rated Plywood/OSB	1-1/2" 19ga. Staples w/ 1" penetration @ 3" O.C. Edges, 6" O.C. Field. For 2 1/2" stud spacing, 12" O.C. Field For 18" stud spacing	155	per IRC, Table 2306.3(1)
Exterior (Option #2)	7/16" APA Rated Plywood/OSB	1-1/2" 19ga. Staples w/ 1" penetration @ 4" O.C. Edges, 6" O.C. Field. For 3 1/2" stud spacing, 12" O.C. Field For 18" stud spacing	230	per IRC, Table 2306.3(1)
Exterior (Option #3)	7/16" APA Rated Plywood/OSB	1-1/2" 19ga. Staples w/ 1" penetration @ 3" O.C. Edges, 6" O.C. Field. For 3 1/2" stud spacing, 12" O.C. Field For 18" stud spacing	310	per IRC, 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 (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 IRC, 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 manufacturer specifications - see detail on sheet S3)	325	

EXTERIOR SHEATHING OPTION FOR SECOND FLOOR	6
EXTERIOR SHEATHING OPTION FOR FIRST FLOOR	6

WIDTH OF 1ST STORY (FT.)	44	WIDTH OF 2ND STORY (FT.)	39
DEPTH OF 1ST STORY (FT.)	75.67	DEPTH OF 2ND STORY (FT.)	66
BACK WALL OF GARAGE (FT.)	0		
GAR. WALL: 1=F-B, 2=S-S	2		

	SEISMIC				WIND			
	FRONT-TO-BACK	RESISTANCE (lbs.)	SIDE-TO-SIDE	RESISTANCE (lbs.)	FRONT-TO-BACK	RESISTANCE (lbs.)	SIDE-TO-SIDE	RESISTANCE (lbs.)
2ND FLOOR	69.34	32587	20.42	6596	69.335	45622	20.417	13434
1ST FLOOR	73.54	33550	21	6870	71.34	46942	21	13818

	ADDITIONAL RESISTANCE REQUIRED		Anchor Bolt Spacing (in.)		16d Nail Spacing req'd at bottom plate (in.)	
	SEISMIC	WIND	diameter (in.)	spacing (inches)	2nd Floor F-B	1st Floor S-S
2ND FLOOR FRONT-TO-BACK	0	0	0.5	94d	49	29
2ND FLOOR SIDE-TO-SIDE	0	0	191.6			
1ST FLOOR FRONT-TO-BACK	0	0	73.5			
1ST FLOOR SIDE-TO-SIDE	0	7893				

RESISTANCE REQUIRED IN ADDITION TO RESISTANCE PROVIDED BY EXTERIOR WALLS**							
	ADDITIONAL RESISTANCE REQUIRED (POUNDS)	PORTAL FRAMES OR PERP. 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?
2ND FLOOR FRONT-TO-BACK	0					0	YES
2ND FLOOR SIDE-TO-SIDE	0					0	YES
1ST FLOOR FRONT-TO-BACK	0					0	YES
1ST FLOOR SIDE-TO-SIDE	7893			96		8064	YES

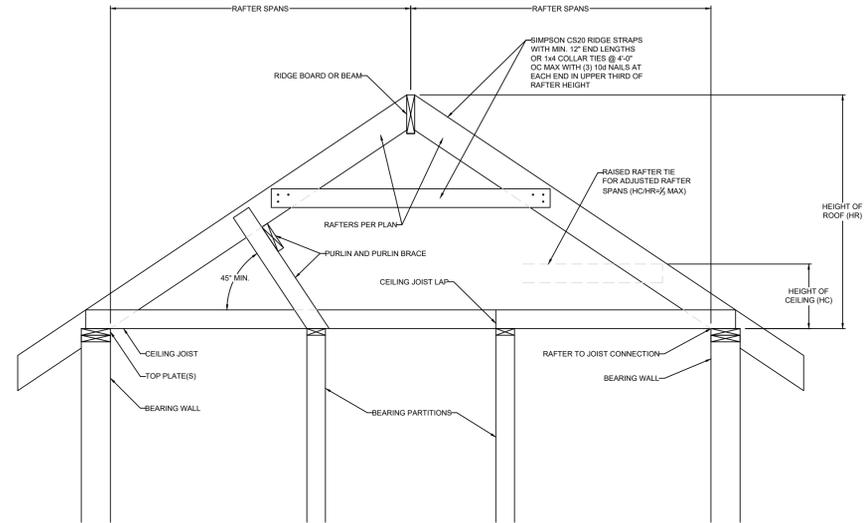
**NOTES: 1) SEE ATTACHED CALCULATIONS FOR PORTAL FRAME OR PERFORATED SHEAR WALL RESISTANCE CAPACITIES (IF APPLICABLE).
 2) SEE SHEET S1 FOR INTERIOR STEEL X-BRACE INSTALLATION. 3) INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NAILING PATTERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE ONLY APPLICABLE FOR FULL-HEIGHT SECTIONS OF 2'-8" OR LONGER

WIND UPLIFT ANALYSIS							
X/12	DEGREES	PITCH OF 8 OR LESS: EOH -13.3, E-7.2, G-6.2					
ROOF PITCH (MAX)	8	33.7					
ASCE 7							
OVERHANG	LENGTH (FT.)	PRESSURE (PSF)	LINEAL FT. OF OH	UPLIFT PER FT* (LBS)			
TOTAL AREA (FT ²)	3329.48	1538.24	1791.24	-1.08	PRESSURE ZN. G (PSF)	-0.36	TOTAL FORCE (LBS)
MAIN ROOF**						-2306	FORCE PER LINEAL FT @ PERIMETER (LBS)
							-9.6
*ALONG PERIMETER	TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS)				-10.7	UPLIFT OK	
**INSIDE EXTERIOR WALLS	RESISTANCE DUE TO DEAD WEIGHT & (3) 16d NAILS				251.6		

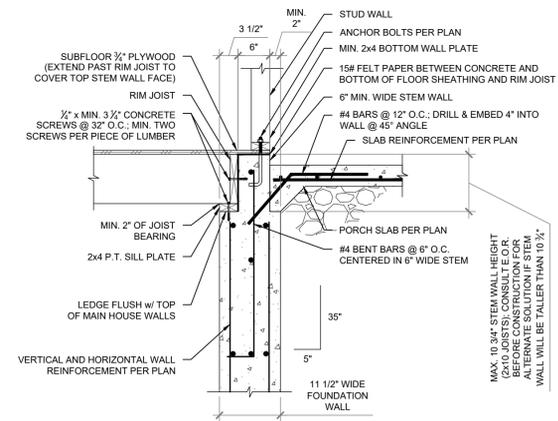
NOTE FOR CONSTRUCTION:
 THE CONTINUOUS STRUCTURAL PANEL SHEATHING BRACING METHOD REQUIRES USE OF THE ABOVE TABLE FOR SHEATHING OF THE ENTIRE STRUCTURE. IN ADDITION, FRAMING MEMBERS SHALL BE @ 16" O.C. MAX., UNBLOCKED, AND W/ SHEATHING APPLIED DIRECTLY TO FRAMING MEMBERS

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
 S1.1 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



2 PORCH ENTRY DETAIL
 S1.1 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)

VISTA
 ENGINEERING, LLC
 11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 97125
 OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
 DENNIS@VISTASTRUCTURAL.COM * VISTASTRUCTURAL.COM

CLIENT: BELLAH HOMES, LLC
 JOB TITLE: LEBOURVEAU RESIDENCE
 LOT 125, PERGOLA PARK, NEW LONGVIEW
 LOCATION: 1117 SW CORINTHIAN LN.,
 LEE'S SUMMIT, MISSOURI

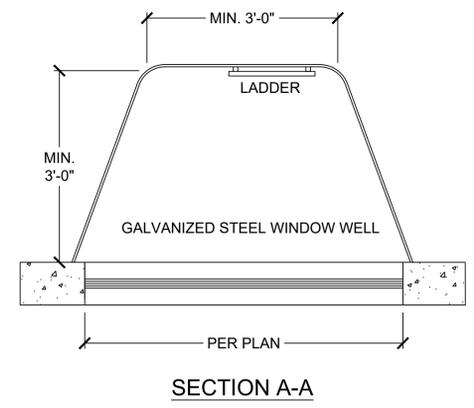
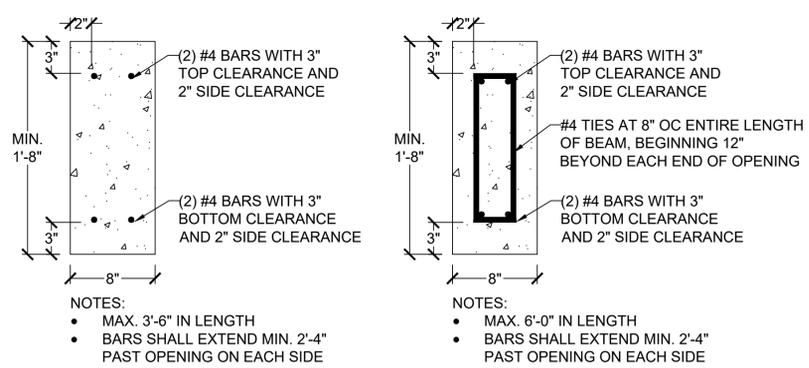
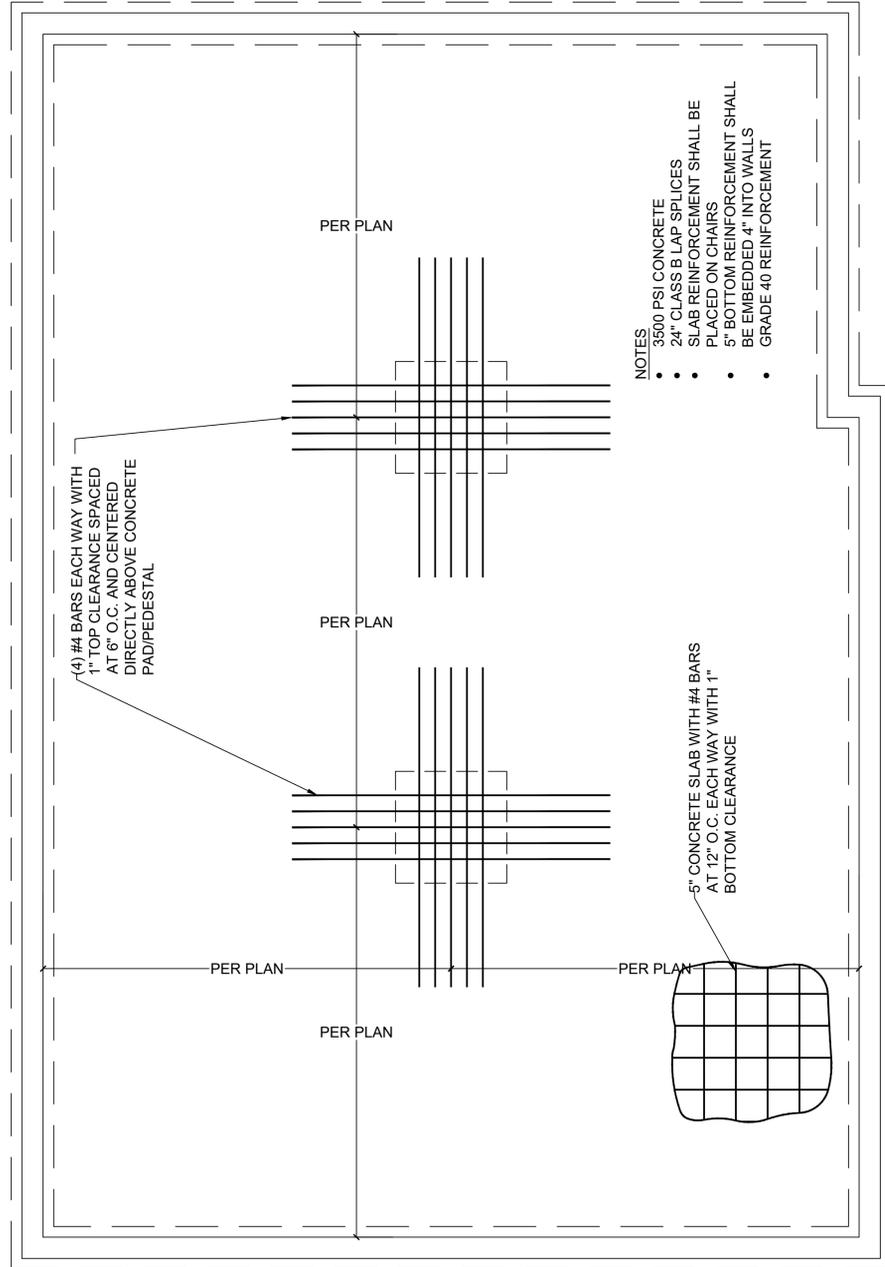
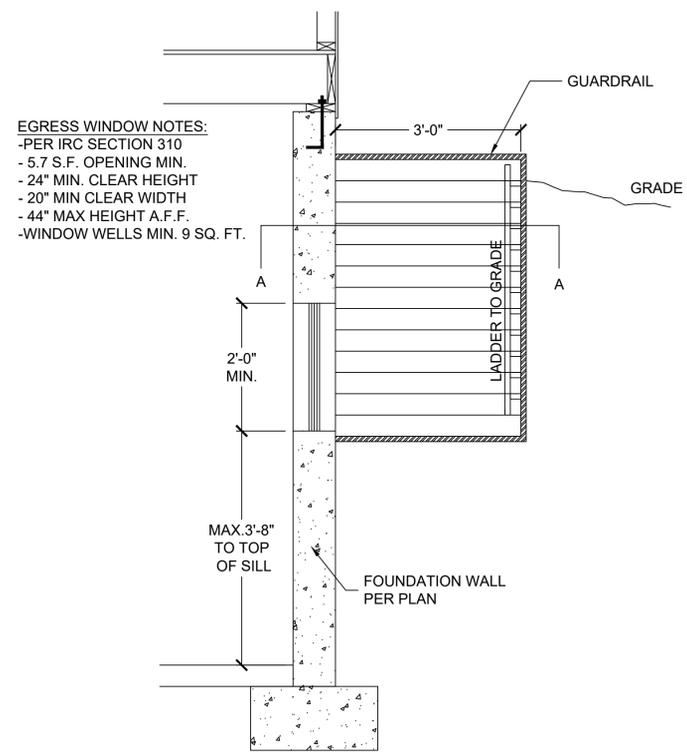
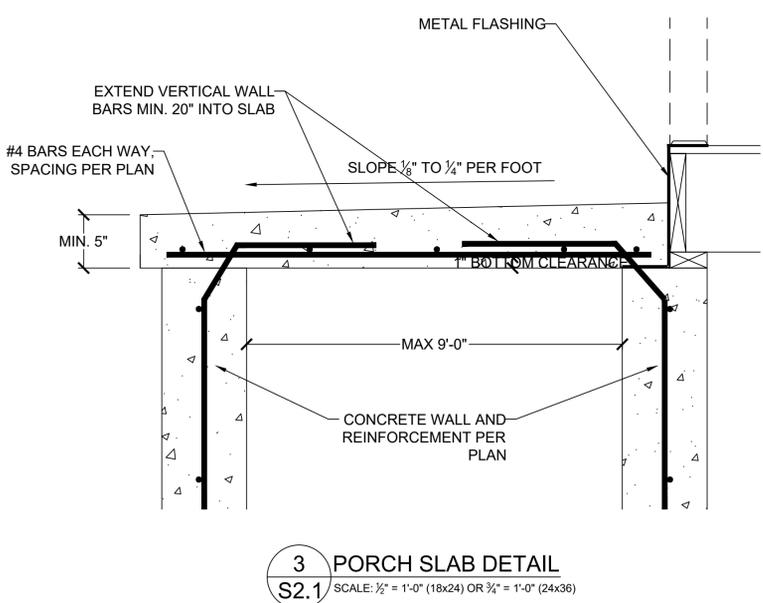
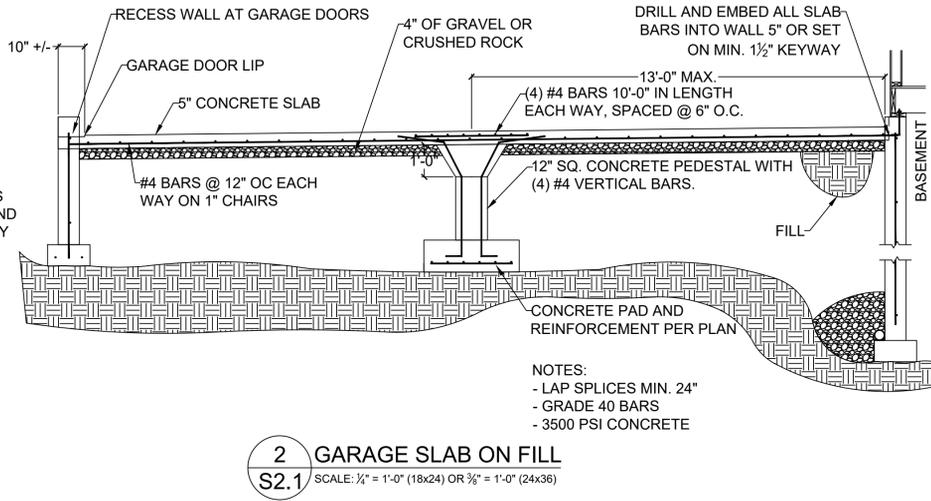
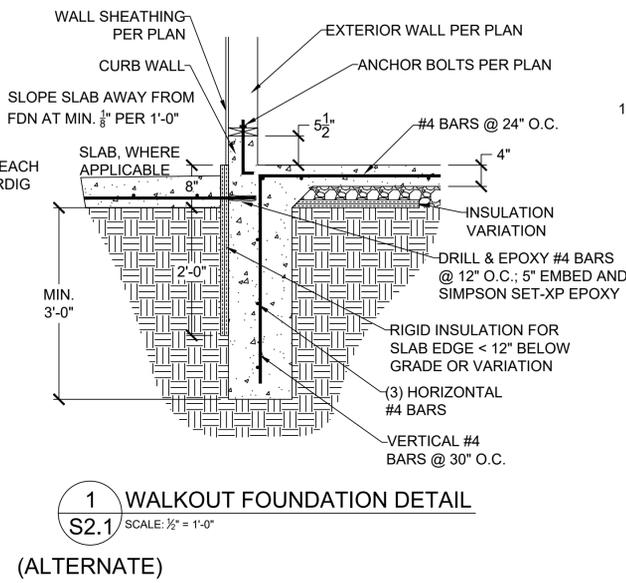
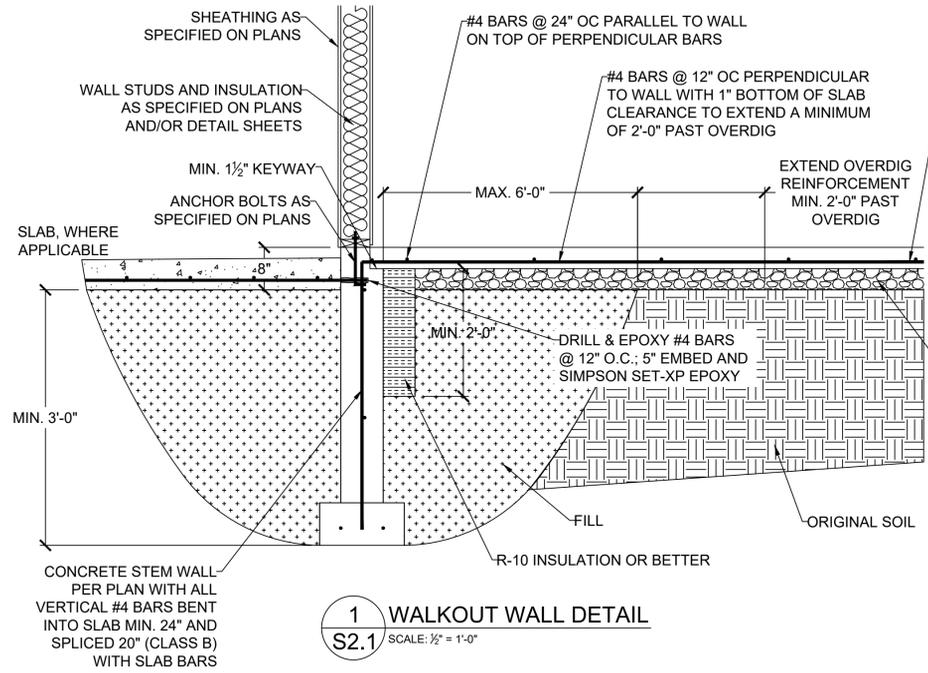
STATE OF MISSOURI
 DENNIS HEIER
 NUMBER: PE-2018001772
 PROFESSIONAL ENGINEER
 10-27-2025

NO.	DATE	REVISION	BY

DRAWING TITLE
STRUCTURAL CALCULATIONS

ENGINEER: DMH CHECKED BY: DMH
 JOB NO. DRAWN BY: DMH
 DATE: 10-27-25
 SHEET NUMBER
S1.1

RELEASE FOR CONSTRUCTION
 AS NOTED ONLY DAYS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 10/27/2025 4:48:20



VISTA ENGINEERING, LLC
11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 97125
OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
DENNIS@VISTAENGINEERING.COM * VISTAENGINEERING.COM

CLIENT: BELLAH HOMES, LLC
JOB TITLE: LEBOURVEAU RESIDENCE
LOT 125, PERGOLA PARK, NEW LONGVIEW
LOCATION: 1117 SW CORINTHIAN LN.,
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
DENNIS HEIER
NUMBER: PE-201801172
PROFESSIONAL ENGINEER
10-27-2025

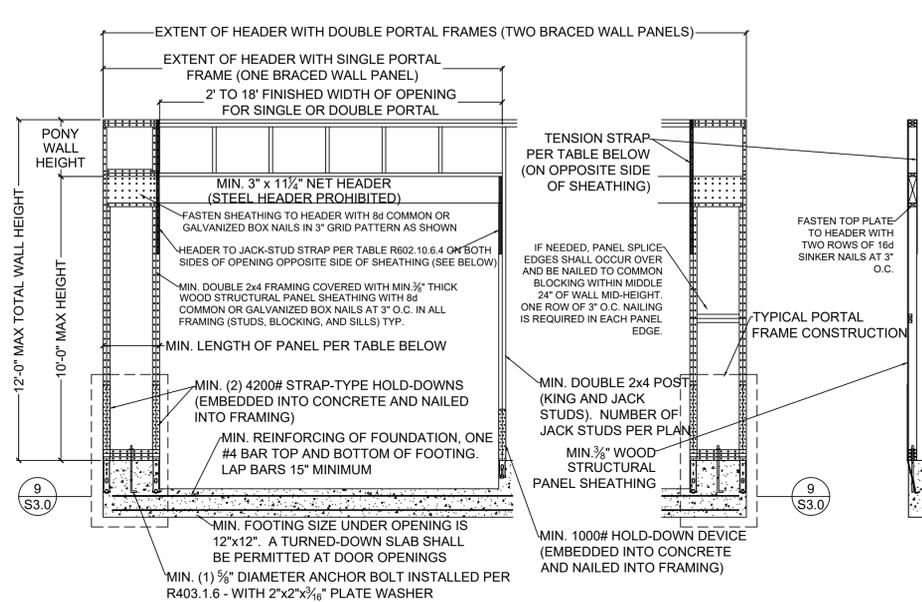
NO.	DATE	REVISION	BY

DRAWING TITLE
FOUNDATION DETAILS

ENGINEER: DMH CHECKED BY: DMH
JOB NO. DRAWN BY: DMH
DATE: 10-27-25
SHEET NUMBER

S2.1

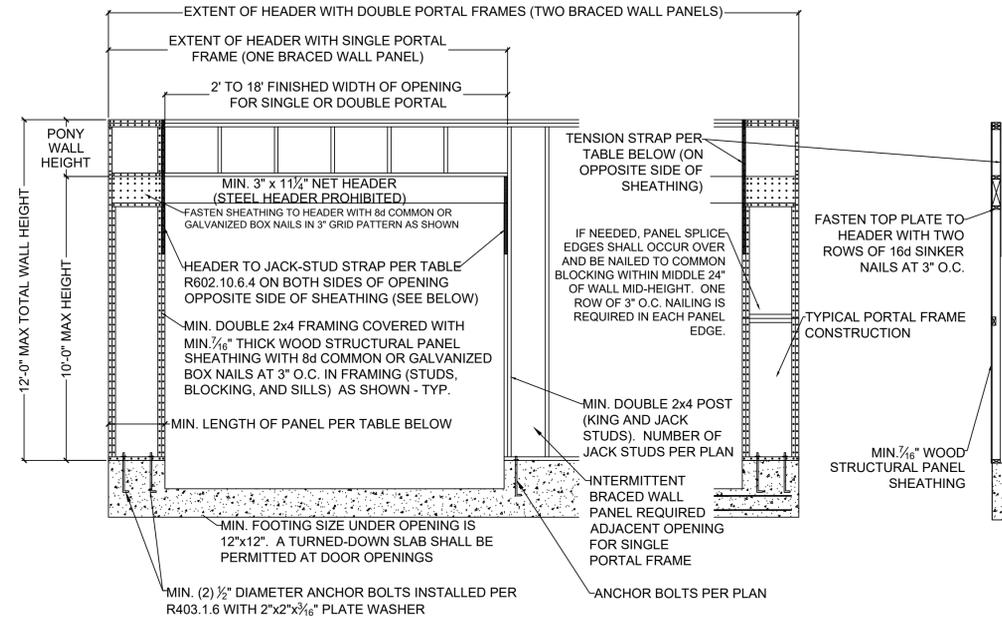
RELEASE FOR CONSTRUCTION
FOR REVIEW ONLY - NO REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/27/2025 4:48:20



1 METHOD PFH (PORTAL FRAME WITH S3.0 HOLD-DOWNS) - PER FIGURE IRC R602.10.6.2

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

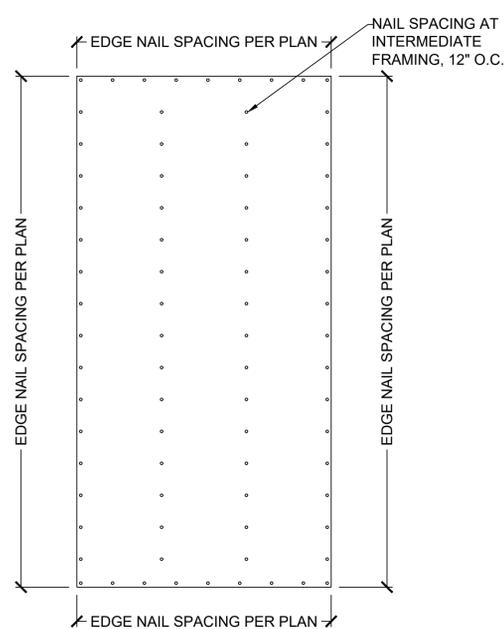


2 METHOD PFG (PORTAL FRAME AT GARAGE S3.0 DOOR) - PER FIGURE IRC R602.10.6.3

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

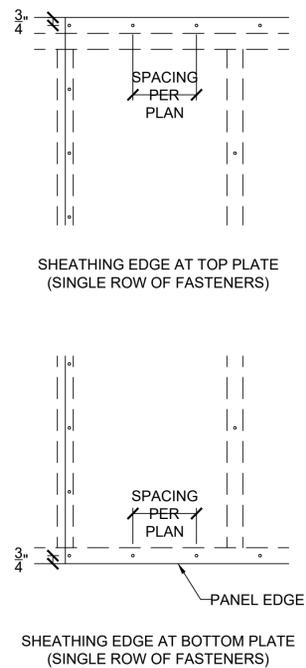
MINIMUM PANEL LENGTH FOR DETAIL 2/S3.0 (INCHES)				
WALL HEIGHT				
8 FEET	9 FEET	10 FEET	11 FEET	12 FEET
24	27	30	33 ^a	36 ^a

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



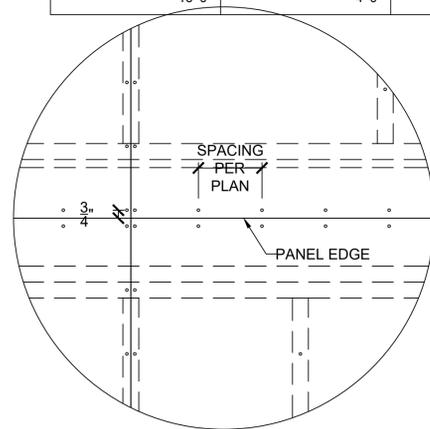
3 EXTERIOR WALL SHEATHING S3.0 PANEL ATTACHMENT

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



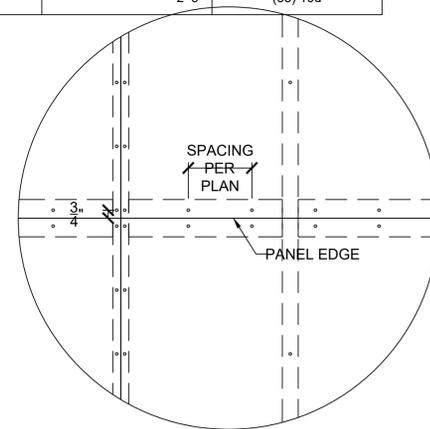
4 SHEATHING EDGE AT TOP AND BOTTOM PLATES S3.0

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



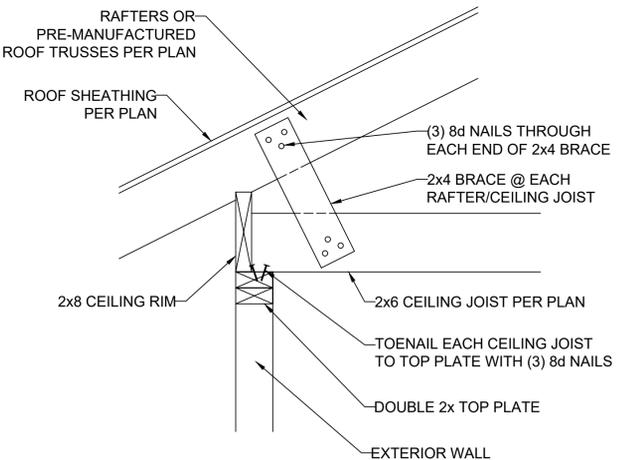
5 SHEATHING EDGE AT HORIZONTAL S3.0 FRAMING MEMBER

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



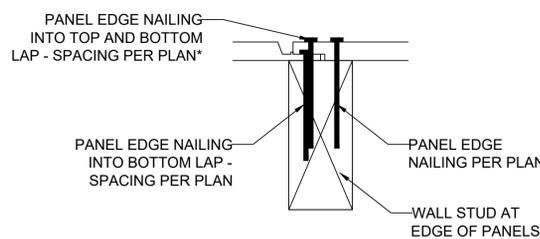
6 SHEATHING EDGE AT PANEL S3.0 SPLICE ACROSS STUDS

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



7 RAFTER BEARING OPTION DETAIL S3.0

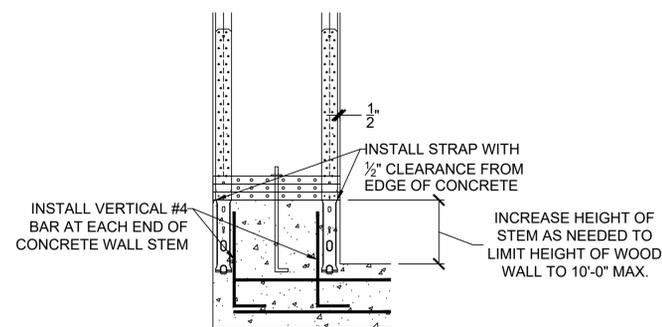
SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)



8 FASTENING INSTRUCTIONS FOR S3.0 SHIPLAP PANEL SHEATHING

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



9 GARAGE HOLD-DOWN S3.0 STRAP INSTALLATION

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

VISTA ENGINEERING, LLC
 11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 97225
 OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
 DENNIS@VISTAENGINEERING.COM * VISTAENGINEERING.COM

CLIENT: BELLAH HOMES, LLC
 JOB TITLE: LEBOURVEAU RESIDENCE
 LOT 125, PERGOLA PARK, NEW LONGVIEW
 LOCATION: 1117 SW CORINTHIAN LN.,
 LEE'S SUMMIT, MISSOURI

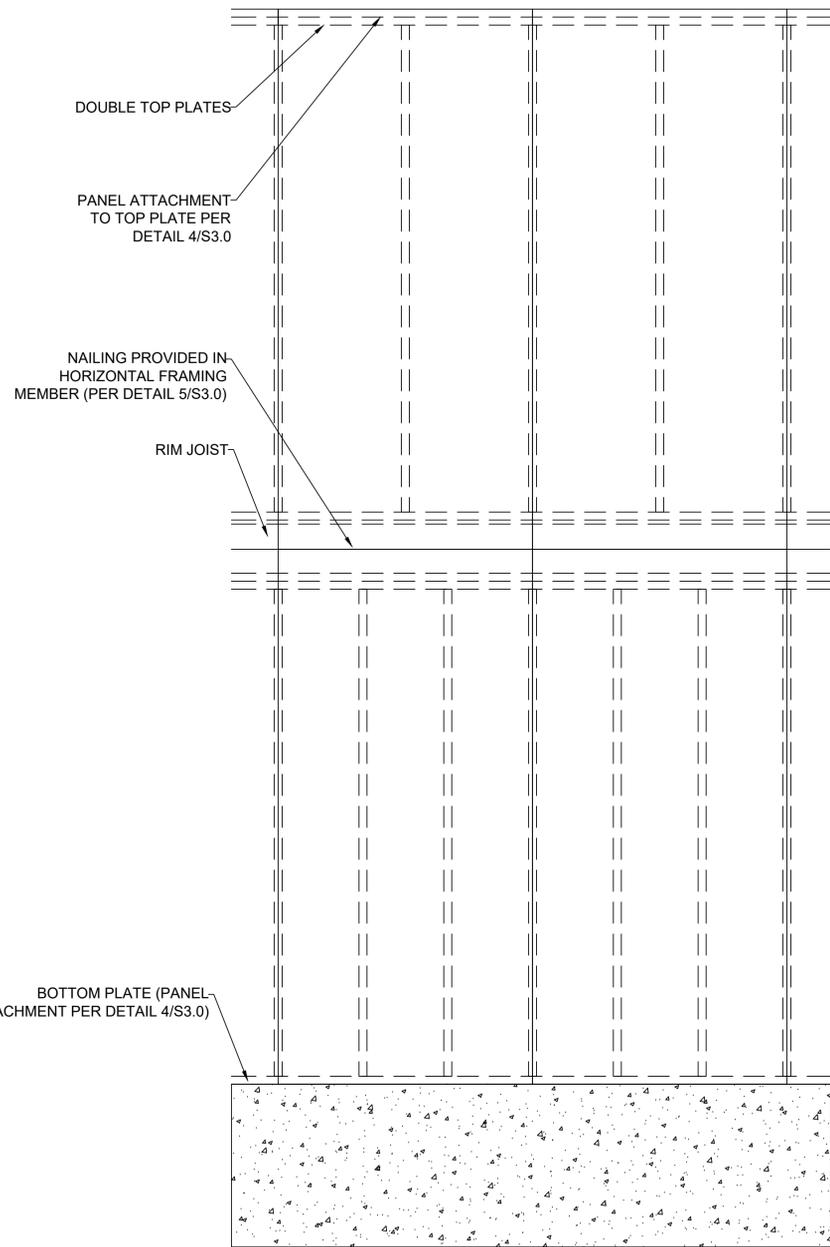
STATE OF MISSOURI
 DENNIS HEIER
 NUMBER: PE-2018001772
 PROFESSIONAL ENGINEER
 10-27-2025

NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS

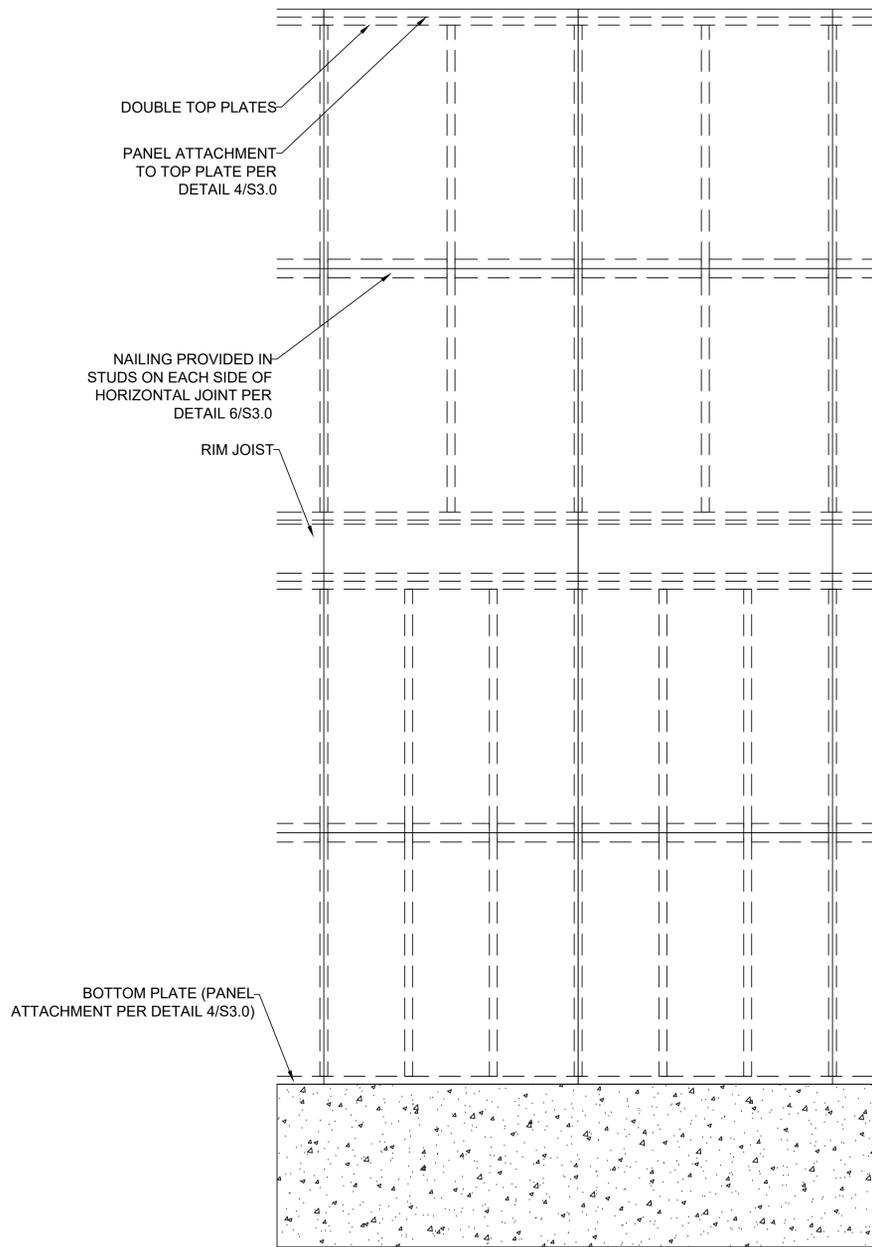
ENGINEER: DMH CHECKED BY: DMH
 JOB NO. DRAWN BY: DMH
 DATE: 10-27-25
 SHEET NUMBER

S3.0



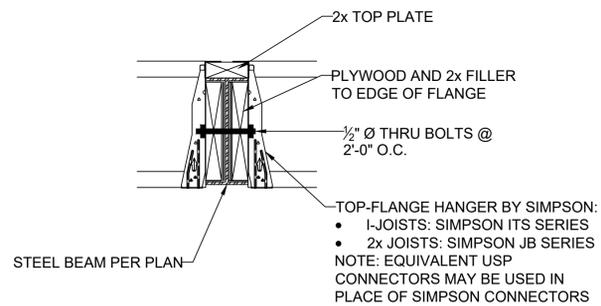
1 EXTERIOR WALL SHEATHING PANEL ATTACHMENT
S3.1 PANEL SPLICE OVER HORIZONTAL FRAMING MEMBER

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



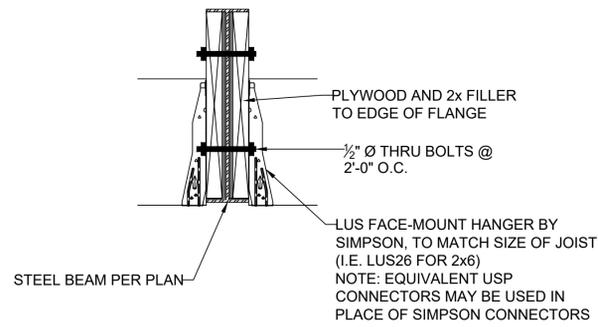
2 EXTERIOR WALL SHEATHING PANEL ATTACHMENT
S3.1 PANEL SPLICE OCCURRING ACROSS STUDS

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



4 FLOOR JOIST TO FLUSH STEEL BEAM DETAIL
S3.1

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

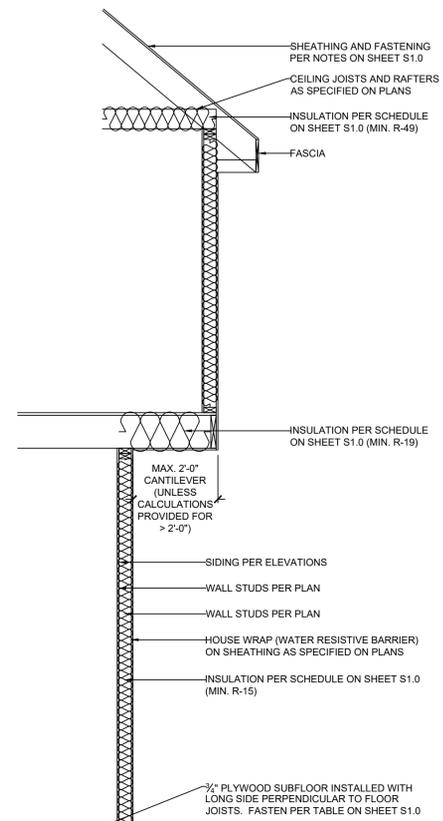
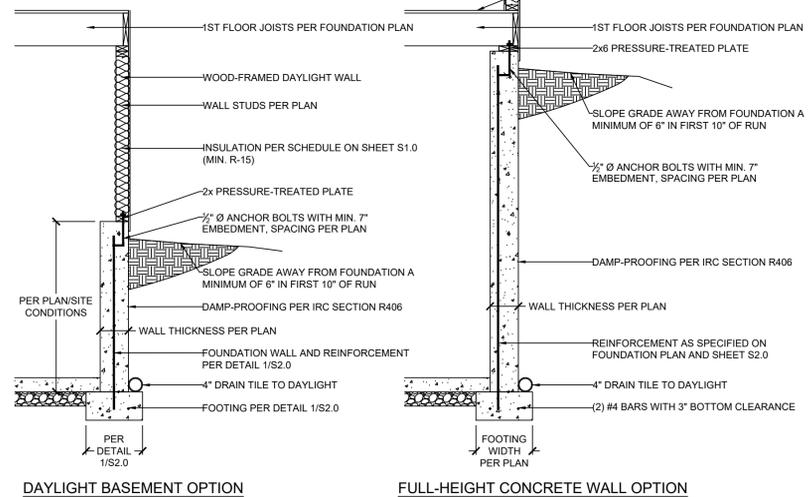


5 CEILING JOIST TO FLUSH STEEL BEAM DETAIL
S3.1

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

3 EXTERIOR WALL SECTION
S3.1

SCALE: 3/4" = 1'-0"



VISTA
 STRUCTURAL
 ENGINEERING, LLC

11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 971225
 OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
 PENNISE@VISTASTRUCTURAL.COM * VISTASTRUCTURAL.COM

CLIENT: BELLAH HOMES, LLC
 JOB TITLE: LEBOURVEAU RESIDENCE
 LOT 125, PERGOLA PARK, NEW LONGVIEW
 LOCATION: 1117 SW CORINTHIAN LN.,
 LEE'S SUMMIT, MISSOURI

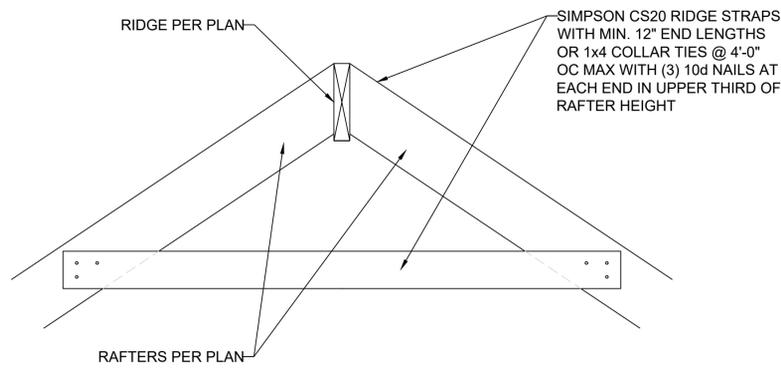
STATE OF MISSOURI
 DENNIS HEIER
 NUMBER: PE-2018001772
 PROFESSIONAL ENGINEER
 10-27-2025

NO.	DATE	REVISION	BY

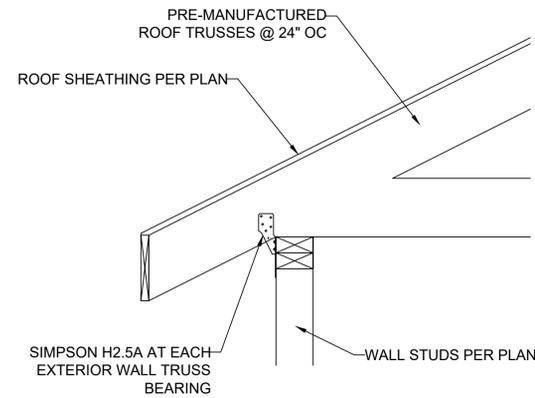
DRAWING TITLE
FRAMING DETAILS

ENGINEER: DMH CHECKED BY: DMH
 JOB NO. DRAWN BY: DMH
 DATE: 10-27-25
 SHEET NUMBER
S3.1

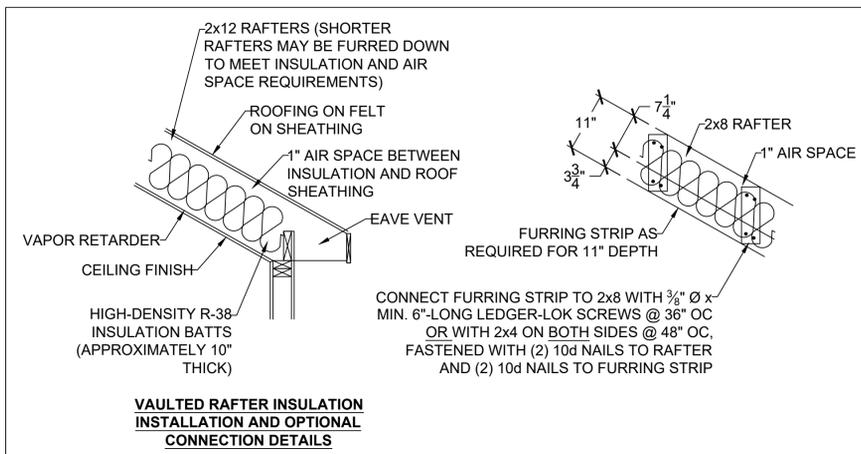
RELEASE FOR CONSTRUCTION
 AS NOTED ONLY. ANY REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 10/27/2025 4:48:21



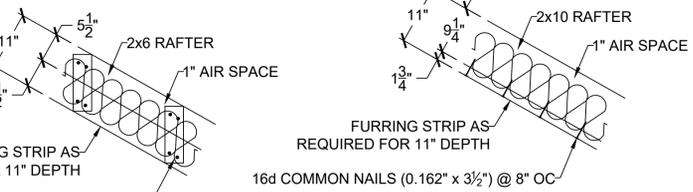
1 RIDGE FRAMING DETAIL
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



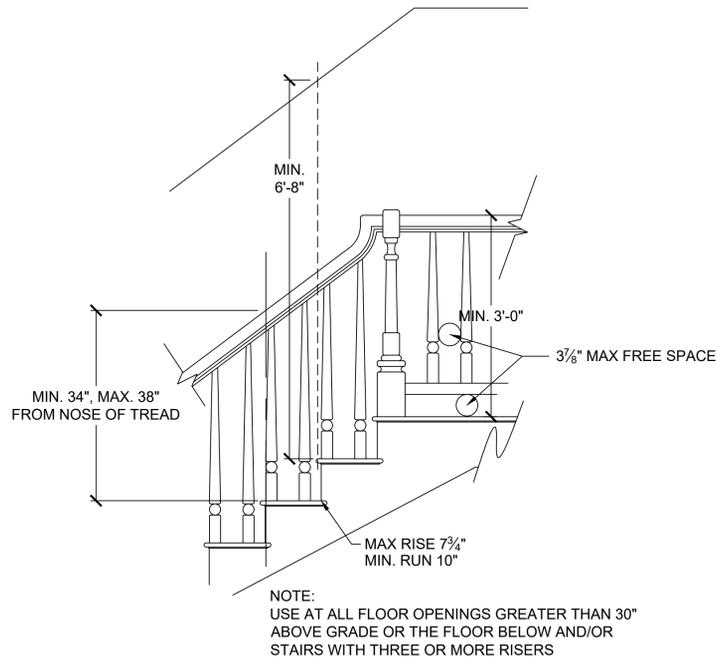
2 TRUSS CONNECTION TO EXT. WALL BEARING
S3.2 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



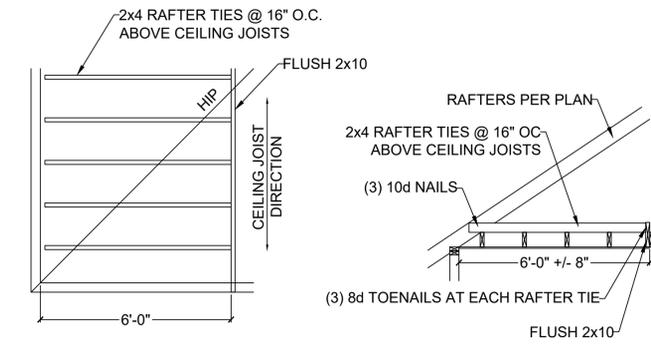
VAULTED RAFTER INSULATION INSTALLATION AND OPTIONAL CONNECTION DETAILS



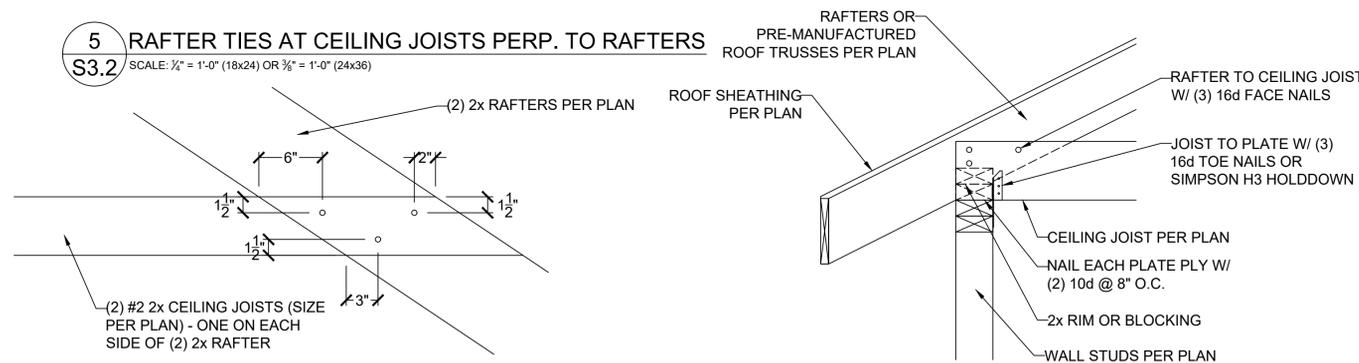
3 VAULTED RAFTER INSULATION DETAILS
S3.2 SCALE: 3/4" = 1'-0"



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

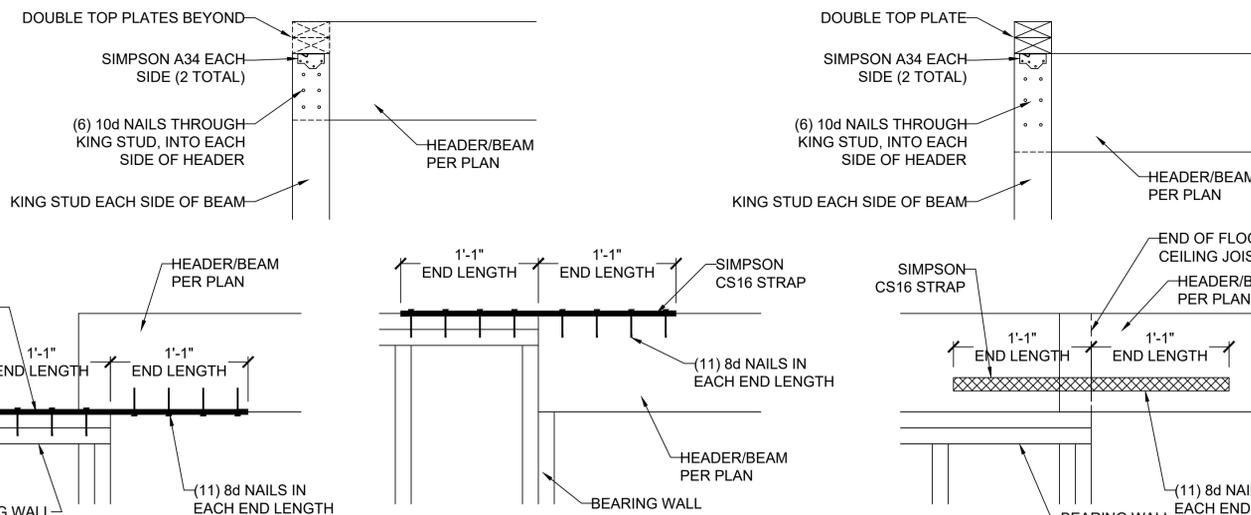


5 RAFTER TIES AT CEILING JOISTS PERP. TO RAFTERS
S3.2 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



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)



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

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"

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

VISTA ENGINEERING, LLC
11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 97225
OFFICE: 971.255.6099 * MOBILE: 971.255.6099 *
DENNIS@VISTAENGINEERING.COM * VISTAENGINEERING.COM

CLIENT: BELLAH HOMES, LLC
JOB TITLE: LEBOURVEAU RESIDENCE
LOT 125, PERGOLA PARK, NEW LONGVIEW
LOCATION: 1117 SW CORINTHIAN LN.,
LEE'S SUMMIT, MISSOURI

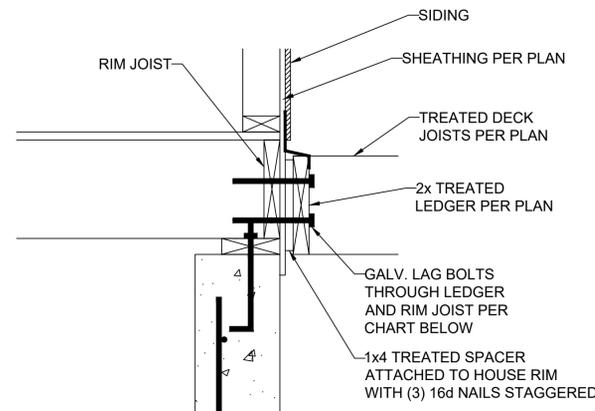
STATE OF MISSOURI
DENNIS HEIER
NUMBER: PE-2018001772
PROFESSIONAL ENGINEER
10-27-2025

NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS

ENGINEER: DMH CHECKED BY: DMH
JOB NO. DRAWN BY: DMH
DATE: 10-27-25
SHEET NUMBER

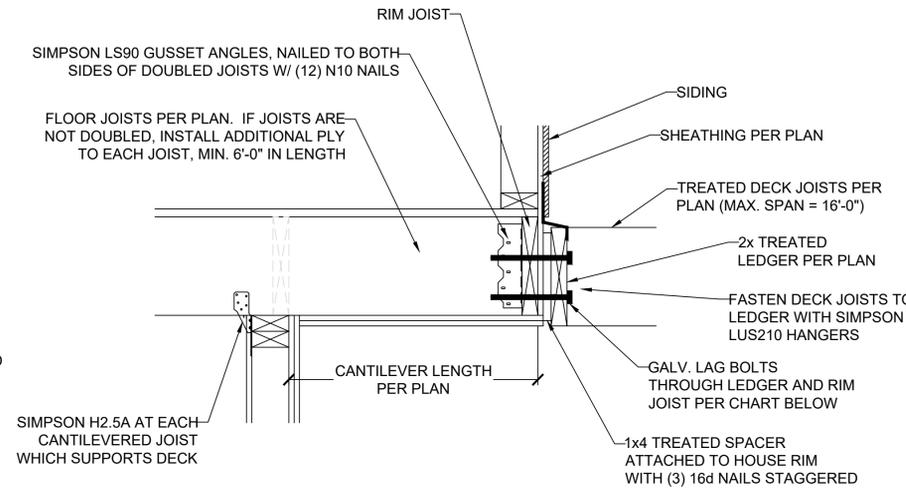
S3.2



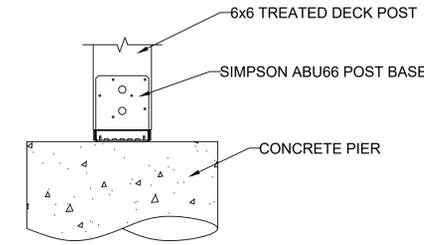
DECK LEDGER ATTACHMENT GUIDE

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

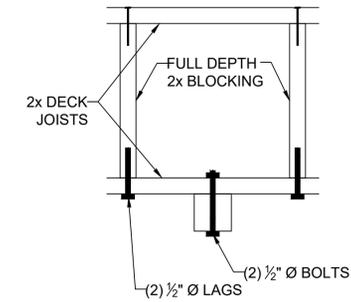
1 LEDGER ATTACHMENT
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



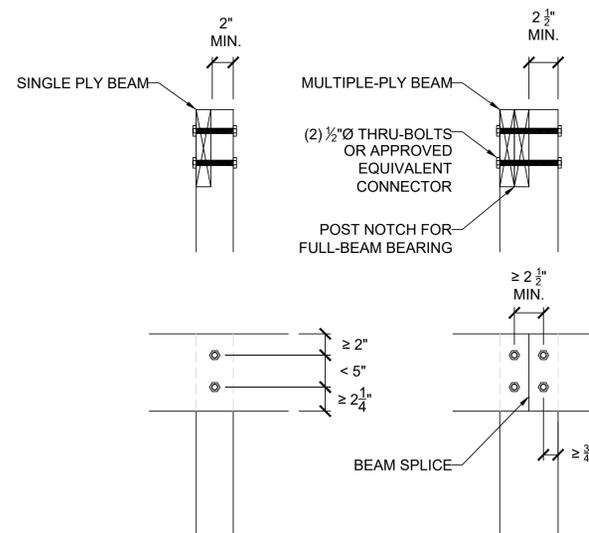
2 CANTILEVER WITH DECK ATTACHMENT
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



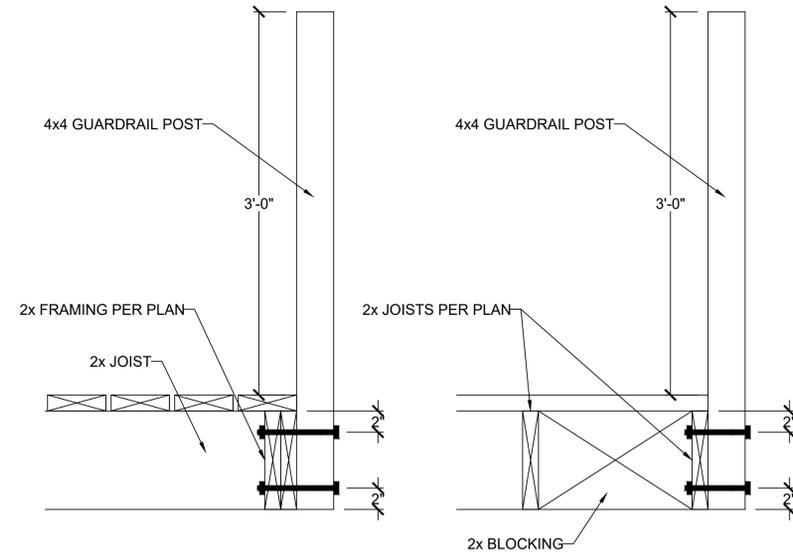
3 DECK POST BASE
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



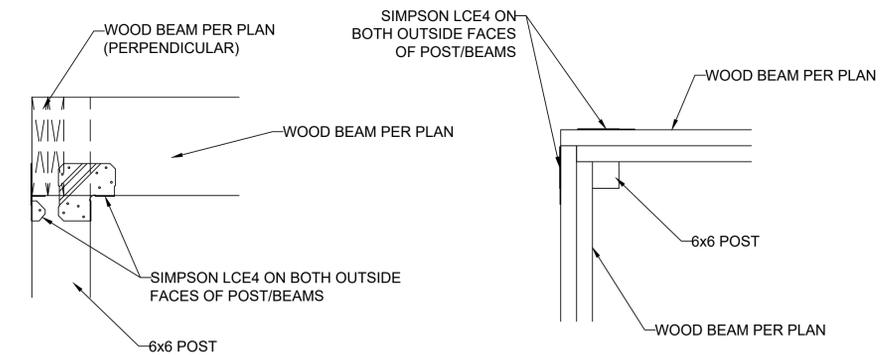
4 REINF. POST CONNECTIONS
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



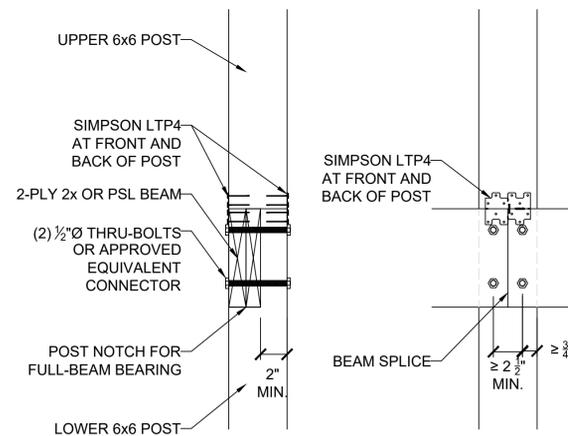
5 LET-IN (COVERED) DECK BEAM CONNECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



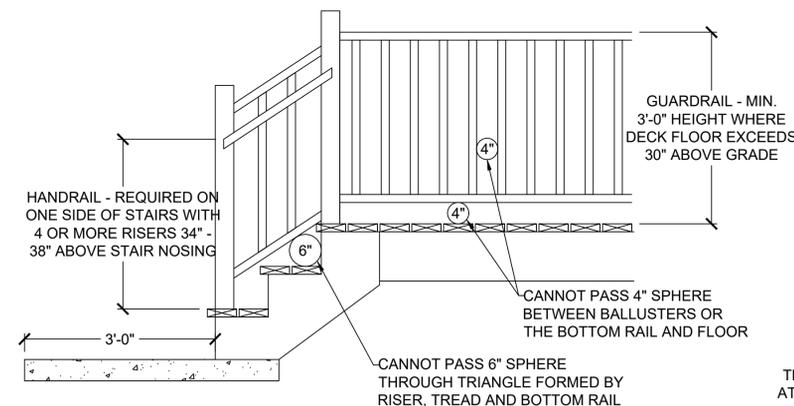
6 GUARDRAIL CONNECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



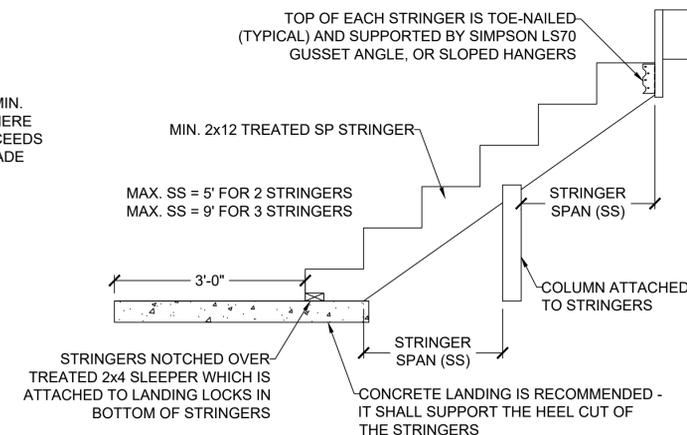
7 ALTERNATE COVERED DECK/PORCH INTERSECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



10 BEAM W/ DISCONTINUOUS POST ABOVE & BELOW
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)

VISTA
ENGINEERING, LLC

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

CLIENT: BELLAH HOMES, LLC
JOB TITLE: LEBOURVEAU RESIDENCE
LOT 125, PERGOLA PARK, NEW LONGVIEW
LOCATION: 1117 SW CORINTHIAN LN.,
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
DENNIS HEIER
NUMBER: PE-201801772
PROFESSIONAL ENGINEER
10-27-2025

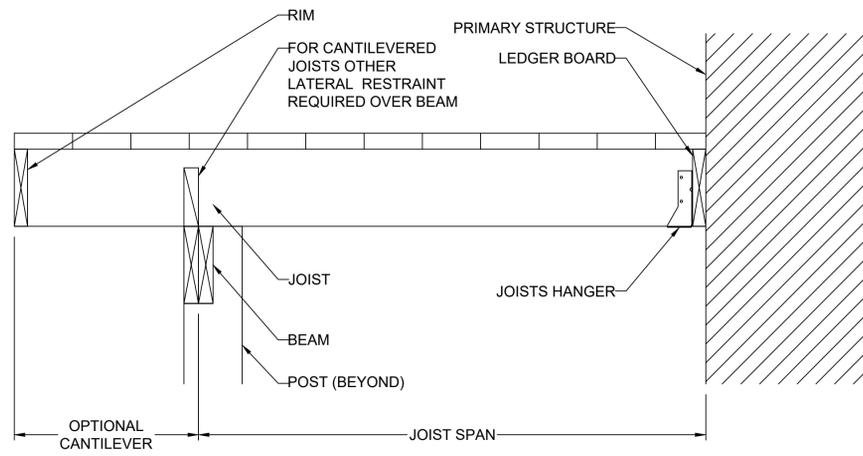
NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS

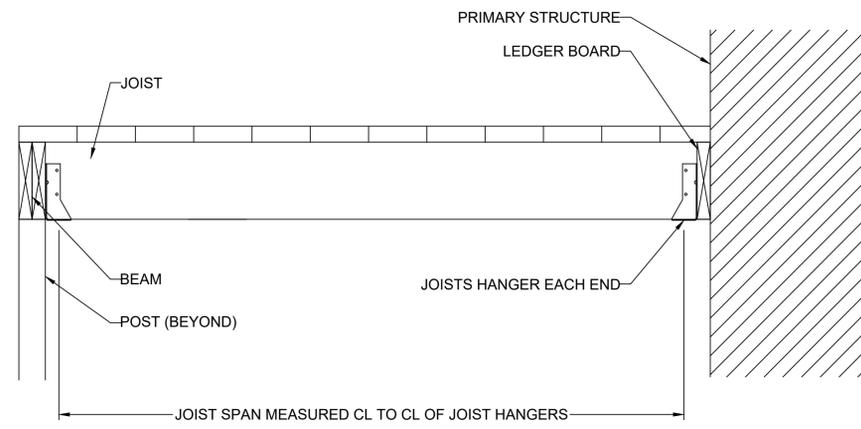
ENGINEER: DMH CHECKED BY: DMH
JOB NO. DRAWN BY: DMH
DATE: 10-27-25
SHEET NUMBER

S3.3a

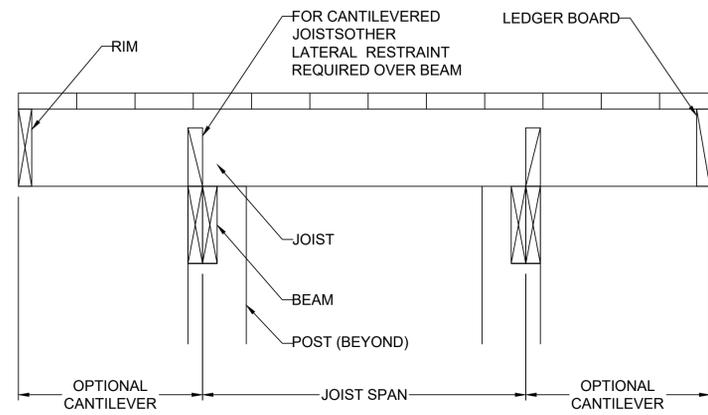
SEE PAGE FOR CONSTRUCTION
REVISIONS ONLY DAYS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/27/2025 4:48:21



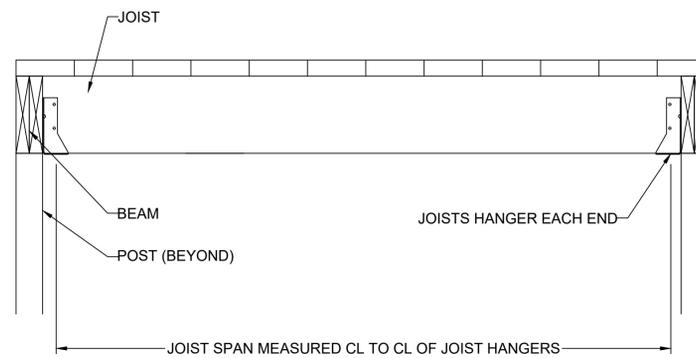
CANTILEVERED JOISTS WITH DROPPED BEAM



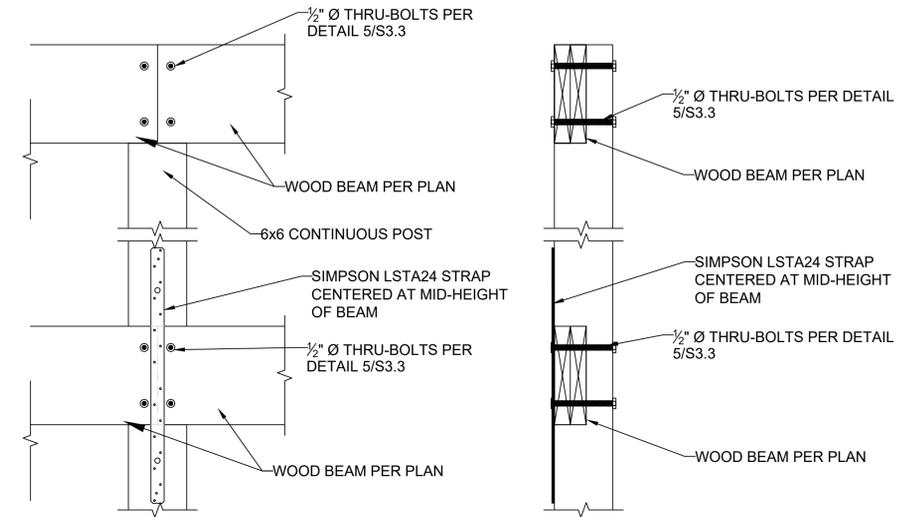
JOISTS WITH FLUSH BEAM



JOISTS ON FREE-STANDING DECK WITH DROPPED BEAM

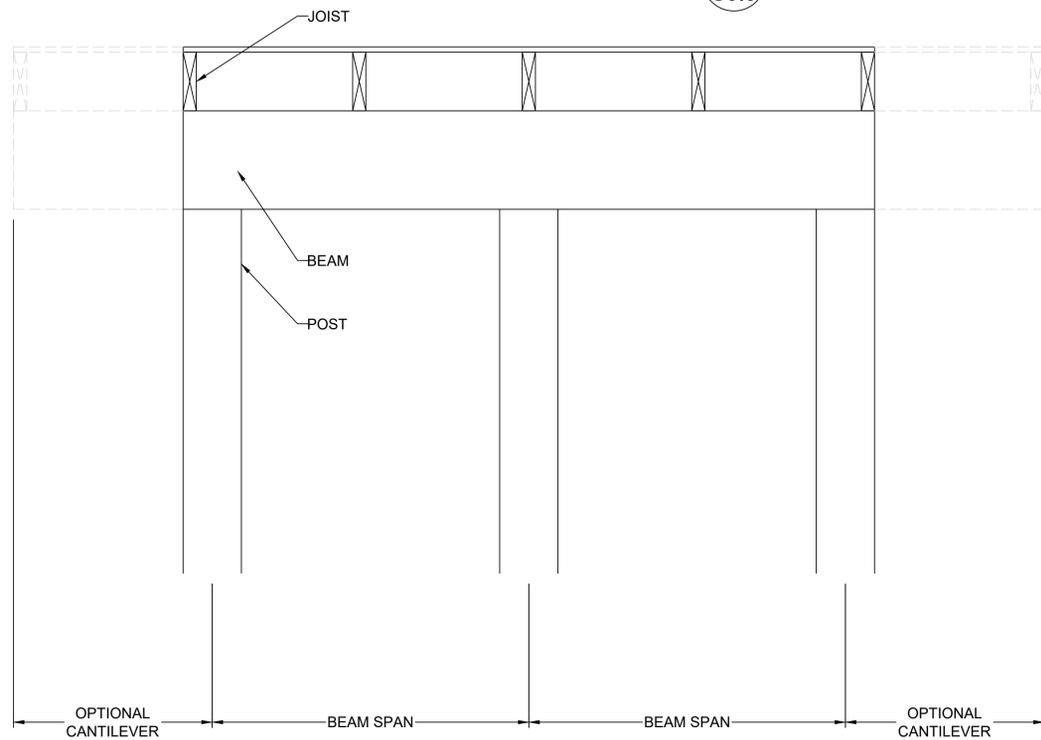


JOISTS WITH FLUSH BEAM

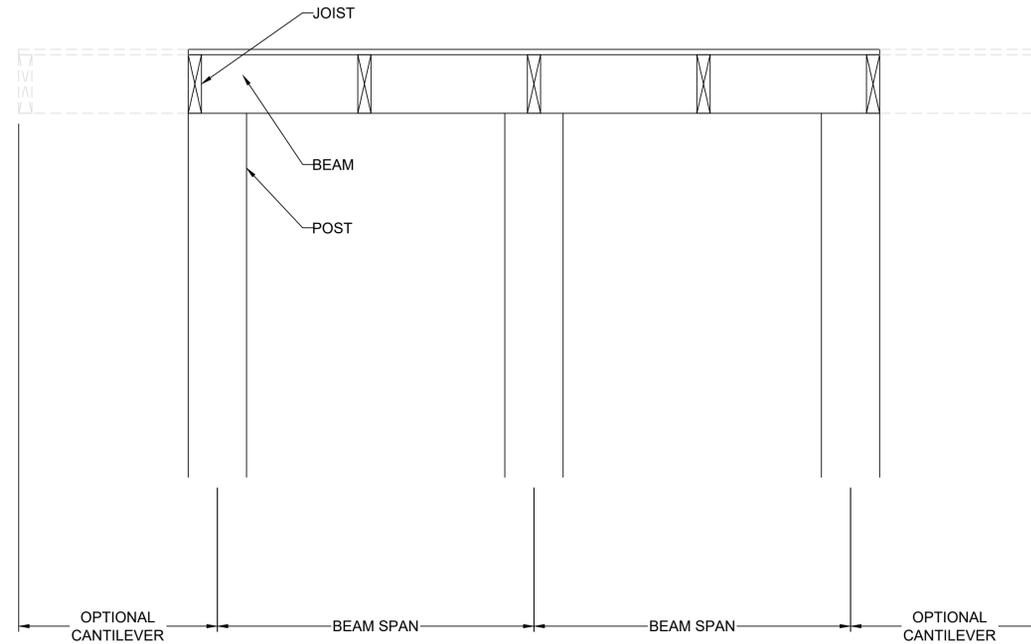


11 CONTINUOUS (TWO-STORY) DECK POST
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)

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



DROPPED BEAM



FLUSH BEAM

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

VISTA
STRUCTURAL
ENGINEERING, LLC

11575 SW PACIFIC HWY # 2262 * TIGARD, OREGON 971225
OFFICE: 971.235.6099 * MOBILE: 971.235.6099 *
* DENNIS@VISTASTRUCTURAL.COM * VISTASTRUCTURAL.COM

CLIENT: BELLAH HOMES, LLC
JOB TITLE: LEBOURVEAU RESIDENCE
LOT 125, PERGOLA PARK, NEW LONGVIEW
LOCATION: 1117 SW CORINTHIAN LN.,
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
DENNIS HEIER
NUMBER: PE-2018001772
PROFESSIONAL ENGINEER
10-27-2025

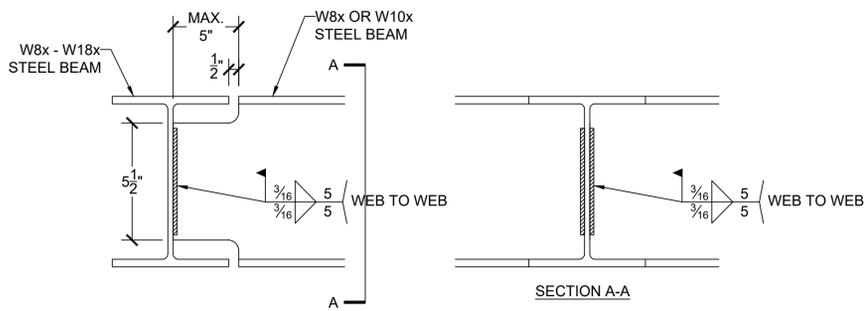
NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS

ENGINEER: DMH CHECKED BY: DMH
JOB NO. DRAWN BY: DMH
DATE: 10-27-25
SHEET NUMBER

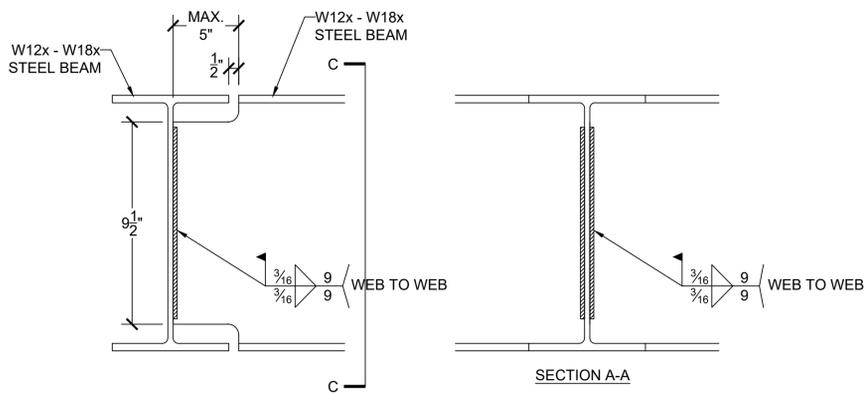
S3.3b

SEE ME FOR CONSTRUCTION DEVELOPMENT SERVICES
10/27/2025 4:48:21



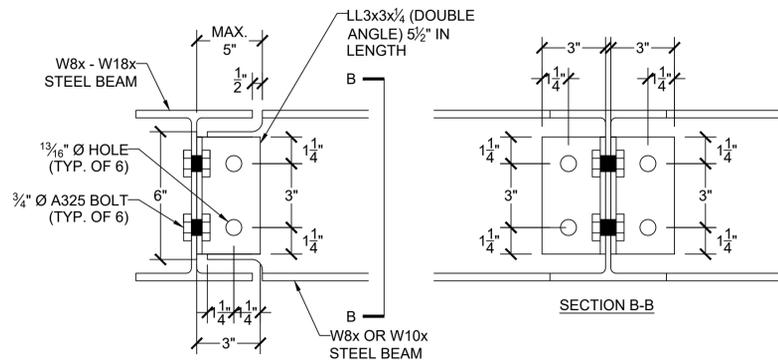
1 WELDED T-BEAM CONNECTION FOR W8x AND W10x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

(OPTION #1)



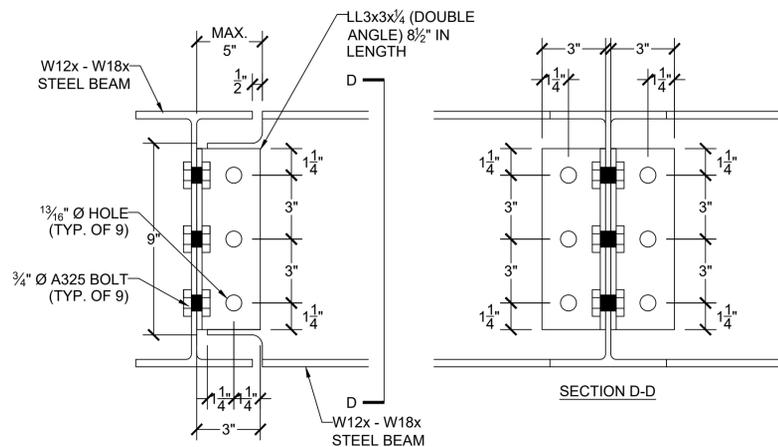
2 WELDED T-BEAM CONNECTION FOR W12x, W14x, W16x & W18x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

(OPTION #1)



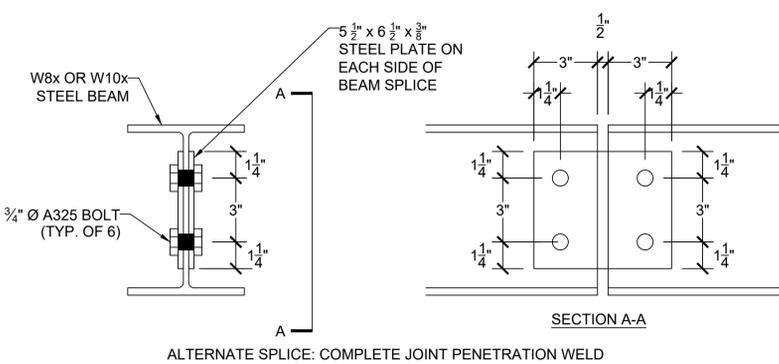
1 BOLTED T-BEAM CONNECTION FOR W8x AND W10x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

(OPTION #2)



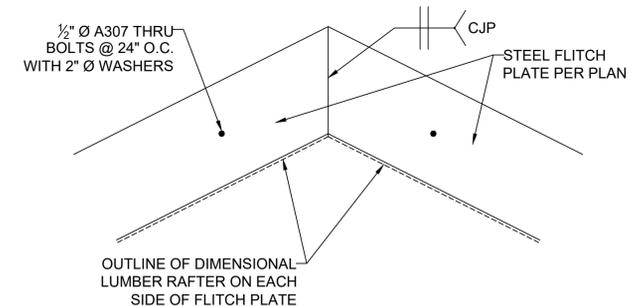
2 BOLTED T-BEAM CONNECTION FOR W12x, W14x, W16x & W18x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

(OPTION #2)

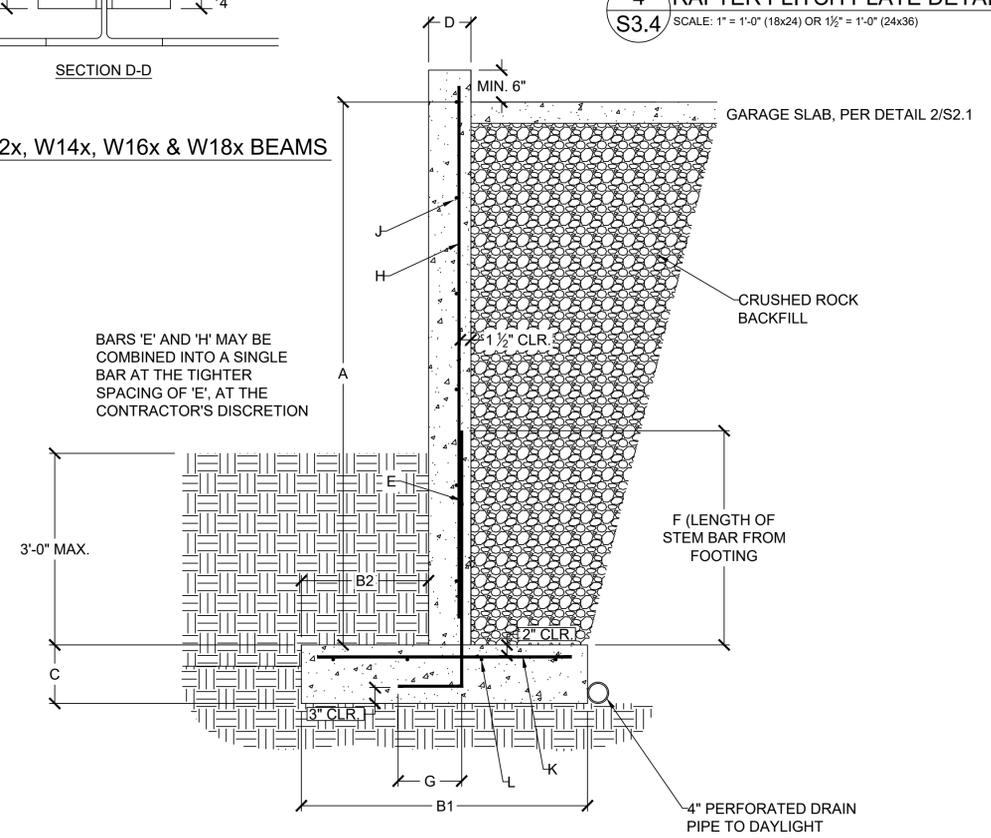


3 BEAM SPLICE CONNECTION FOR W8x AND W10x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

ALTERNATE SPLICE: COMPLETE JOINT PENETRATION WELD

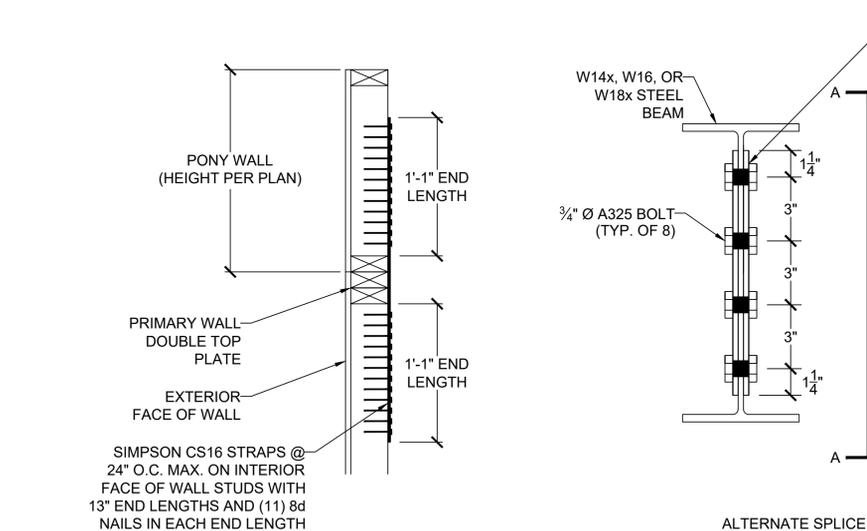


4 RAFTER FLITCH PLATE DETAIL
S3.4 SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)

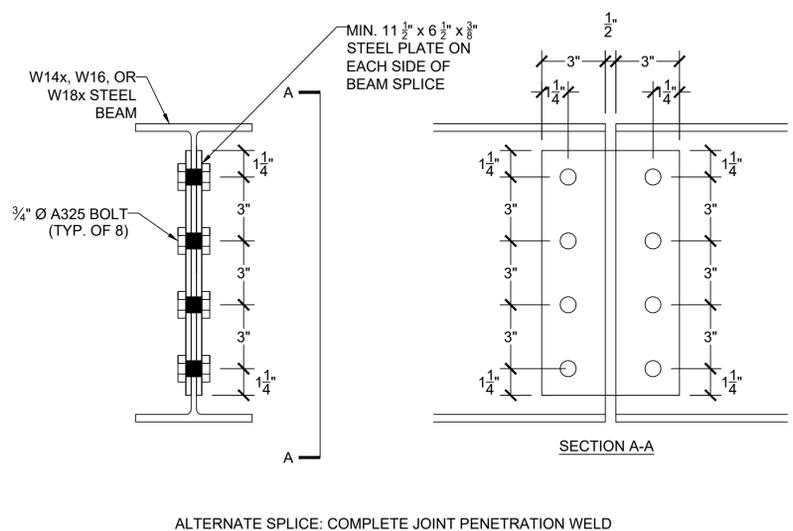


CANTILEVERED RETAINING WALL SCHEDULE											
A	B1	B2	C	D	E	F	G	H	J	K	L
10'-0"	6'-9"	0'-9"	1'-2"	0'-8"	#5 @ 8" O.C.	3'-0"	1'-0"	#4 @ 8" O.C.	#4 @ 12" O.C.	#4 @ 6" O.C.	(11) #4 BARS
8'-0"	4'-4"	0'-9"	0'-9"	0'-8"	#4 @ 6" O.C.	3'-0"	1'-0"	#4 @ 12" O.C.	#4 @ 12" O.C.	#4 @ 8" O.C.	(6) #4 BARS
6'-0"	3'-0"	1'-2"	0'-9"	0'-8"	#4 @ 12" O.C.	3'-0"	1'-0"	#4 @ 12" O.C.	#4 @ 12" O.C.	N/A	(3) #4 BARS

7 CANTILEVERED RETAINING WALL SECTION AT GARAGE
S3.4 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



5 SPLICED WALL CONNECTION
S3.4 SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)



6 BEAM SPLICE CONNECTION FOR W14x THROUGH W18x BEAMS
S3.4 SCALE: 2" = 1'-0" (18x24) OR 3" = 1'-0" (24x36)

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

CLIENT: BELLAH HOMES, LLC
 JOB TITLE: LEBOURVEAU RESIDENCE
 LOT 125, PERGOLA PARK, NEW LONGVIEW
 LOCATION: 1117 SW CORINTHIAN LN.,
 LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
 DENNIS HEIER
 NUMBER: PE-201001772
 PROFESSIONAL ENGINEER
 10-27-2025

NO.	DATE	REVISION	BY

DRAWING TITLE
FRAMING DETAILS
 ENGINEER: DMH CHECKED BY: DMH
 JOB NO. DRAWN BY: DMH
 DATE: 10-27-25
 SHEET NUMBER
S3.4