

Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (<http://www.portlandoregon.gov/bds/article/519984>)



APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 26439	Project Address: 3145 NE 55th Ave
Hearing Date: 1/26/22	Appellant Name: Joe Robertson
Case No.: B-002	Appellant Phone: 9712353675
Appeal Type: Building	Plans Examiner/Inspector: Derek Wildermuth
Project Type: residential	Stories: 1 Occupancy: Residential Construction Type: Wood - Residential
Building/Business Name: Shelter Solutions LLC	Fire Sprinklers: No
Appeal Involves: Alteration of an existing structure	LUR or Permit Application No.:
Plan Submitted Option: pdf [File 1] [File 2] [File 3] [File 4] [File 5] Proposed use: Detached Studio/Bedroom	

APPEAL INFORMATION SHEET

Appeal item 1

Code Section 24.10.075

Requires Section R302.1 requires that any exterior wall parallel to a property line must comply with the requirements of Table R302.1 for Fire Resistant Construction. Table R302.1 requires that any wall less than three feet from a property line, the Fire Separation Distance, must be constructed with a fire-resistance rating time period of 1-hour with exposure from both sides. No openings are allowed in the 1 hour fire resistant wall.

Code Modification or Alternate Requested Substitute an alternative method to achieve a 1 hour fire rating of an existing structure less than 3' from the property line, to preserve the existing siding and finish on that side.

Proposed Design We are proposing to convert it to a detached Studio/Bedroom. It is 1'-6" from the South property line, and less than 1' from the West property line and adjacent concrete firewall. We are requesting: in lieu of 5/8" type X drywall on the exterior and interior of this wall, to be allowed to install 2 layers of 5/8" type X drywall on the inside surface of the West wall up to the top of the bottom of the roof sheathing. There is not roof overhang. We proposing cutting in a cobra vent in the roof 4' from the property line for ventilation.

Reason for alternative We believe this alternative will provide the intent of the code for fire protection at property line.

he city has approved similar appeals to this request.

Reference: similar previous approved appeals: # 15382, 12072, 18143

APPEAL DECISION

Garage conversion to living space with alternate one hour exterior wall assembly at South and West sides within three feet of property line: Granted provided:

Where roof framing is perpendicular to the wall.

- a. Two layers of Type X gypsum are installed on the interior side of the wall continuous to the top of the double top plate.**
- b. Two layers of 2x blocking are provided between the top of the double top plate and underside of the roof sheathing, beveled where required, to fit tight against the sheathing.**
- c. The underside of the roof adjacent to the property line is provided with one layer of 5/8" Type X gypsum board installed directly against the underside of the roof sheathing between the roof joists or trusses with support provided by a minimum of 2 x ledgers attached to the side of the roof joists or truss members for a minimum distance of four feet measured from the inside face of the finished wall surface.**
- d. No openings including eave vents may be installed in the soffit and no openings including windows, roof vents or skylights may be installed in that portion of the wall or roof that is within three feet of the property line.**
- e. No built elements including gutters and footings may cross the property line and stormwater must remain and be disposed of on site.**

Where roof framing is parallel to the wall.

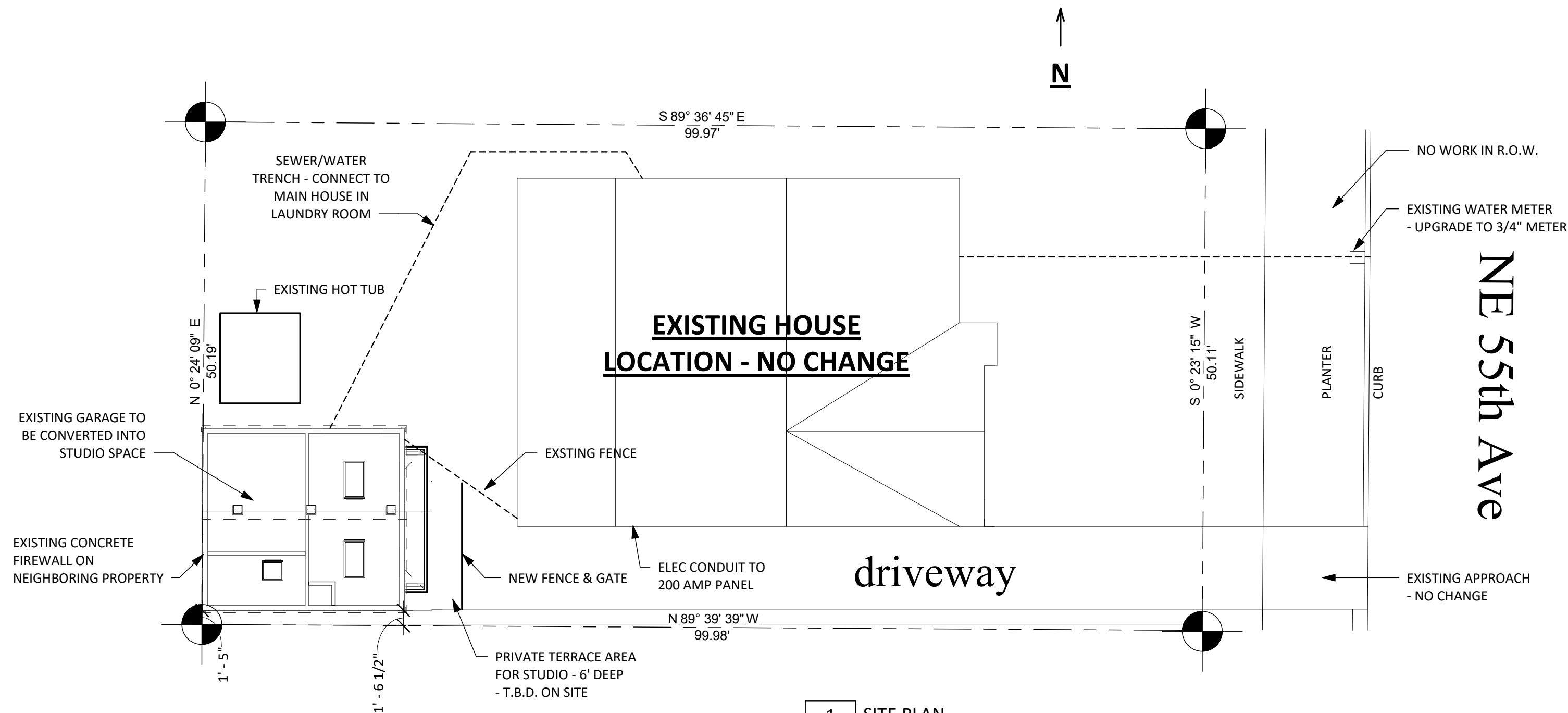
Same as above except at condition (a) the Type X is continuous to the bottom of the roof sheathing and condition (b) may not apply.

Appellant may contact John Butler (503 865-6427) or e-mail at John.Butler@portlandoregon.gov with questions.

The Administrative Appeal Board finds with the conditions noted, that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 90 calendar days of the date this decision is published. For information on the appeals process, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

SHELTER SOLUTIONS, LLC



1	SITE PLAN
0.SP	1" = 10'-0"

Address	3145 NE 55TH AVE
Address2	PORTLAND, OR 97213
Property ID	R260203
Tax Roll	ROSE CITY PK, BLOCK 115, LOT 6
Use	RESIDENTIAL IMPROVED
Lot	6
Block	115
County	M
State ID	1N2E30AB 13300
New State ID	1N2E30AB -13300
Alt Account Number	R723113100
Map Number	2736 OLD
Land Type	RES - RESIDENTIAL LAND
Total Land Area	0.11 acres (5,000 sq ft)

- NO CHANGE TO EXISTING F.A.R.
- NO CHANGE TO EXISTING BUILDING COVERAGE
- NO INCREASE TO EXISTING IMPERVIOUS AREAS
- NO TREES GREATER THAN 12" DIAMETER ON SITE

NOTE: NEW AND EXISTING BUILDING SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCHES. THE ADDRESS FOR THE ADU SHALL BE CLEARLY POSTED SO THAT IS VISIBLE FROM THE PUBLIC STREET.
24 HOUR EROSION CONTROL CONTACT:
NICK SLADE - SHELTER SOLUTIONS
(971) 708-3216

1973 SE DUNCAN DRIVE
HILLSBORO, OR 97123
PHONE and FAX : (503)681-8940
www.Shelter-Solutions.net
joe@Shelter-Solutions.com



JACOBS STUDIO / BEDROOM
3145 NE 55TH AVE
SITE PLAN

Revisions

Sheet

0.SP

SHELTER SOLUTIONS, LLC

2021 ORSC INSULATION

REQUIREMENTS

1/4" = 1'-0"

TABLE N1101.1(2)ADDITIONAL MEASURES

5 DUCTLESS HEAT PUMP

For dwelling units with all-electric heat provide:

Ductless heat pump of minimum HSPF 10 in primary zone replaces zonal electric heat sources, and

Programmable thermostat for all heaters in bedrooms

FOOTNOTES

A balanced, whole-house ventilation system will be provided in accordance with M1505.4."

PANASONIC FV-11-VKDS1 - TO BE USED MEETS 1507.3 & ASHRAE 1507.3

a.Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors.

b.The maximum vaulted ceiling surface area shall not be greater than 50 percent of the total heated space floor area unless vaulted area has a U-factor no greater than U-0.026.

c.In accordance with Table N1104.1(1), the Proposed UA total of the Proposed Alternative Design shall be a minimum of 8 percent less than the Code UA total of the Standard Base Case.

TABLE N1101.1(1) PRESCRIPTIVE ENVELOPE REQUIREMENTS	
ABOVE GRADE WALL	R-21 INT. ^c
BELOW GRADE WALL	R-15c.i/R-21
FLAT CEILINGS	R-49
VAULTED CEILINGS	R-30 RAFTER
	R-30A ^{b,i} SCISSOR TRUSS
UNDERFLOORS	R-30
SLAB-EDGE PERIMETER	R-15
HEATED SLAB INTERIOR	R-10
WINDOWS	U-0.27
SKYLIGHTS	U-0.50
EXTERIOR DOORS	U-0.20
EXTERIOR DOORS W/ 2.5 ft GLAZING	U-0.40
FORCED AIR DUCT INSULATION	R-8

TABLE M1507.4 EXHAUST RATES FOR RESIDENTIAL DWELLINGS	
DOMESTIC KITCHENS	
RANGE HOODS / DOWNDRAFT EXHAUST	MIN. 150 CFM INTERMITTENT
BATHROOMS-TOILET ROOMS	
ROOMS CONTAINING BATHING AND SPA FACILITIES (STATIC PRESSURE SHALL BE RATED @ 0.10-INCH WATER GAUGE FOR INTERMITTENT FANS	MIN. 80 CFM INTERMITTENT OR 20 CFM CONTINUOUS
TOILET ROOMS WITHOUT BATHING OR SPA FACILITIES, WHEN NOT PROVIDED WITH NATURAL VENTILATION IN ACCORDANCE WITH SECTION R303.3.2	MIN. 50 CFM

NOTE

MECHANICAL EXHAUST VENTS SHALL NOT TERMINATE
WITHIN 36" OF OPERABLE WINDOWS

a. As allowed in Section N1104.1, thermal performance of a component may be adjusted provided that overall heat loss does not exceed the total resulting from conformance to the required U-factor standards. Calculations to document equivalent heat loss shall be performed using the procedure and approved U-factors contained in Table N1104.1(1).

b. R-values used in this table are nominal for the insulation only in standard wood-framed construction and not for the entire assembly.

c. Wall insulation requirements apply to all exterior wood-framed, concrete or masonry walls that are above grade. This includes cripple walls and rim joist areas. Nominal compliance with R-21 insulation and Intermediate Framing (N1104.5.2) with insulated headers.

e. Below-grade wood, concrete or masonry walls include all walls that are below grade and do not include those portions of such wall that extend more than 24 inches above grade. R-21 for insulation in framed cavity; R-15 continuous insulation.

f. Insulation levels for ceilings that have limited attic/rafter depth such as dormers, bay windows or similar architectural features totaling not more than

150 square feet in area may be reduced to not less than R-21. When reduced, the cavity shall be filled (except for required ventilation spaces). R-49 insulation installed to minimum 6-inches depth at top plate at exterior of structure to achieve U-factor.

g. Vaulted ceiling surface area exceeding 50 percent of the total heated space floor area shall have a U-factor no greater than U-0.026 (equivalent to R38 rafter or scissor truss with R-38 advanced framing).

h. A = Advanced frame construction. See Section N1104.6.

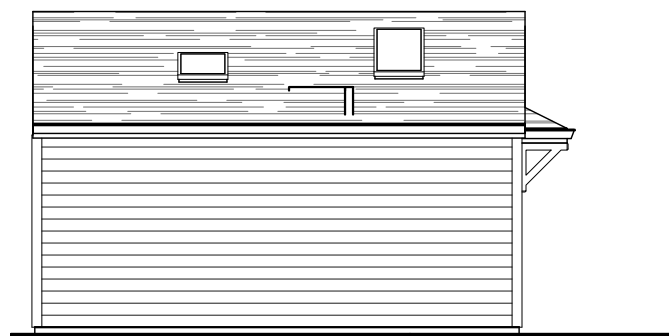
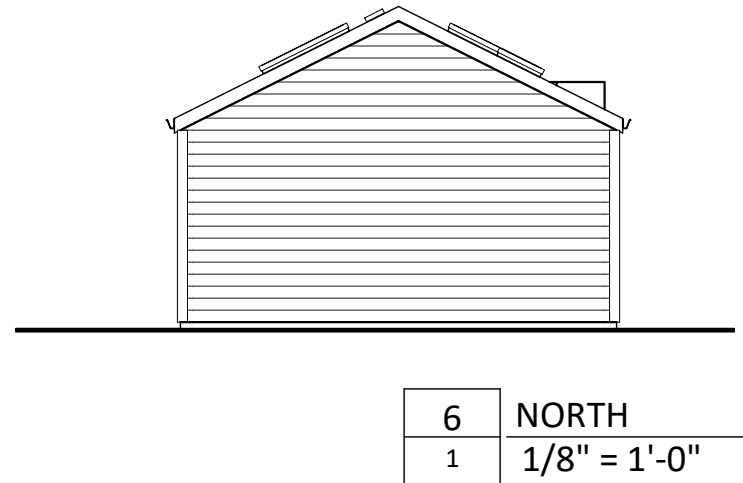
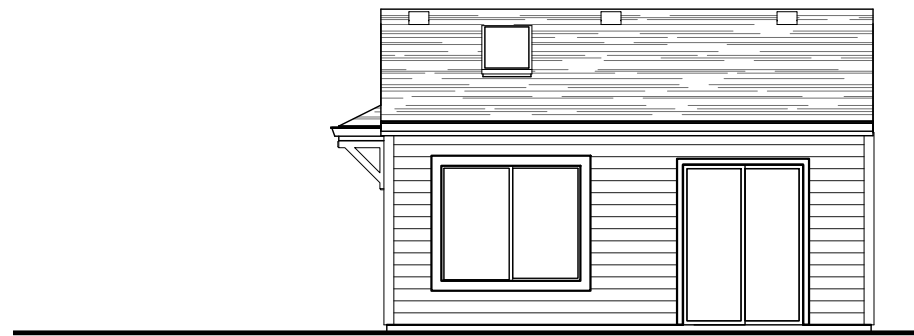
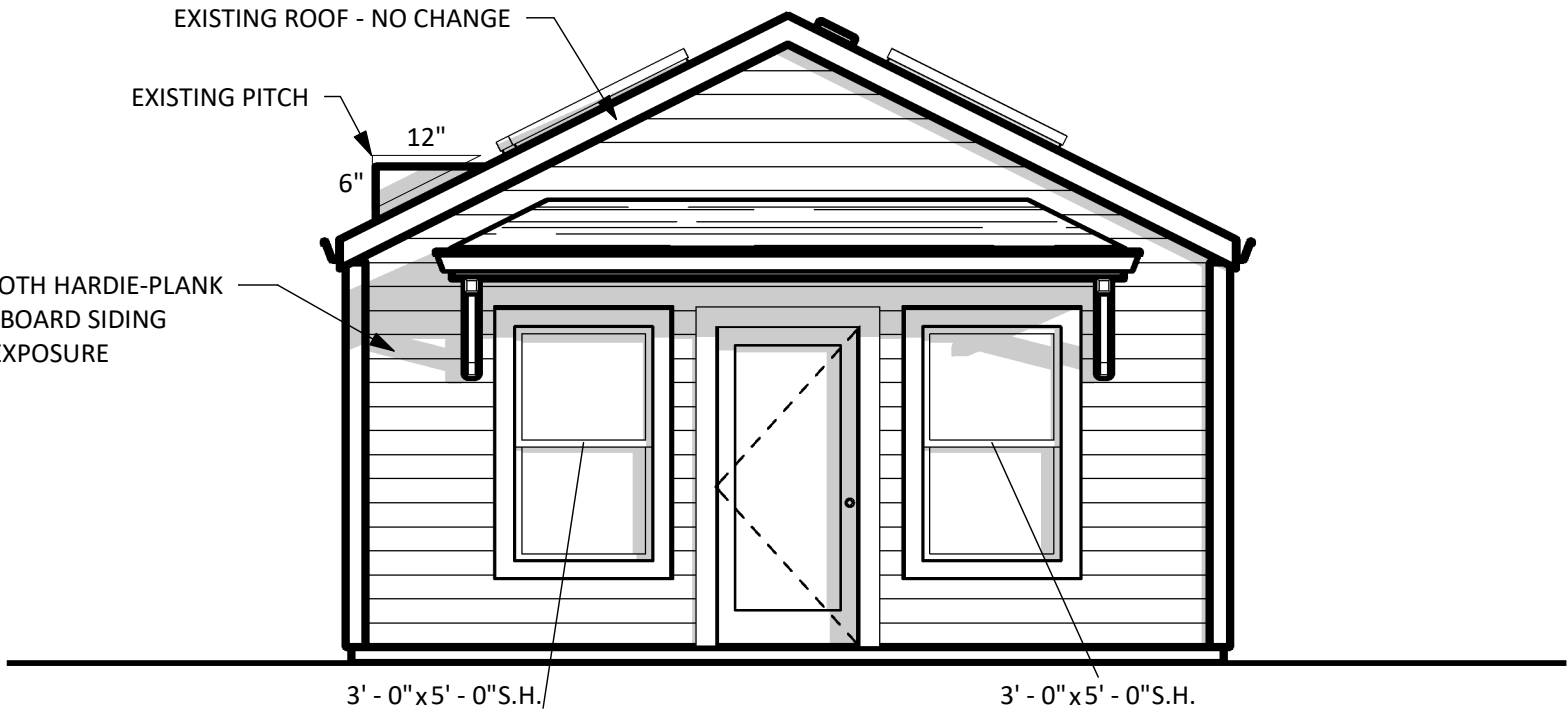
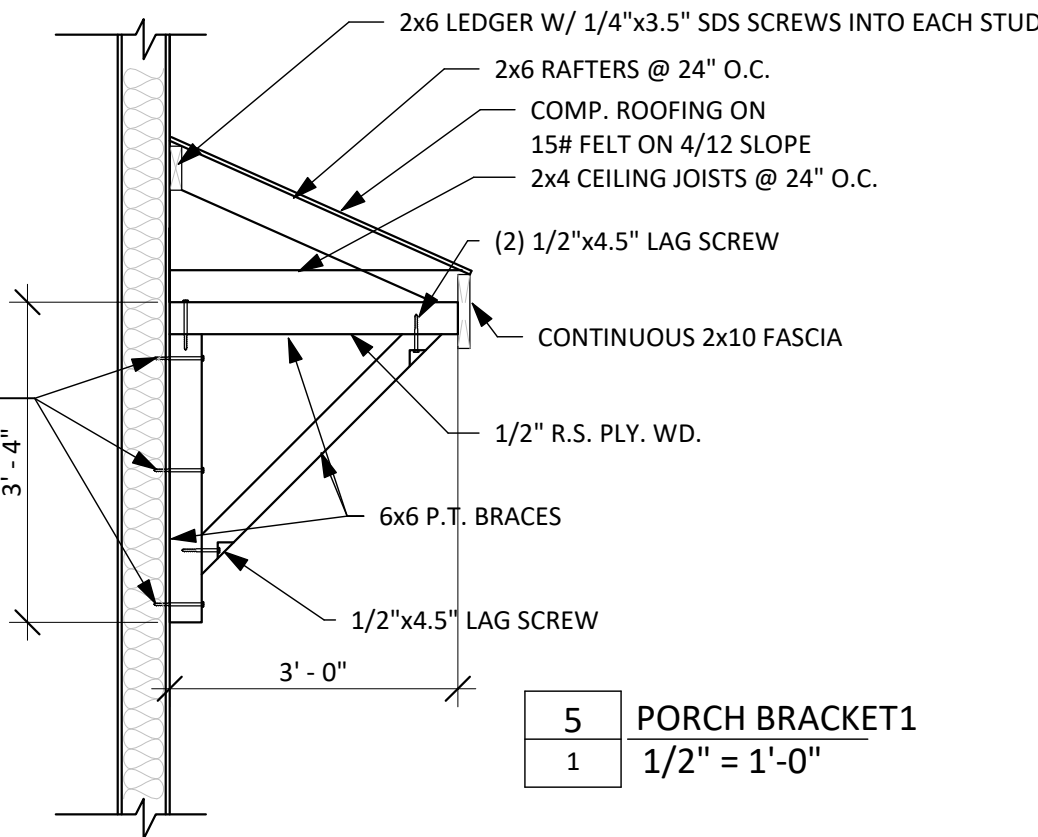
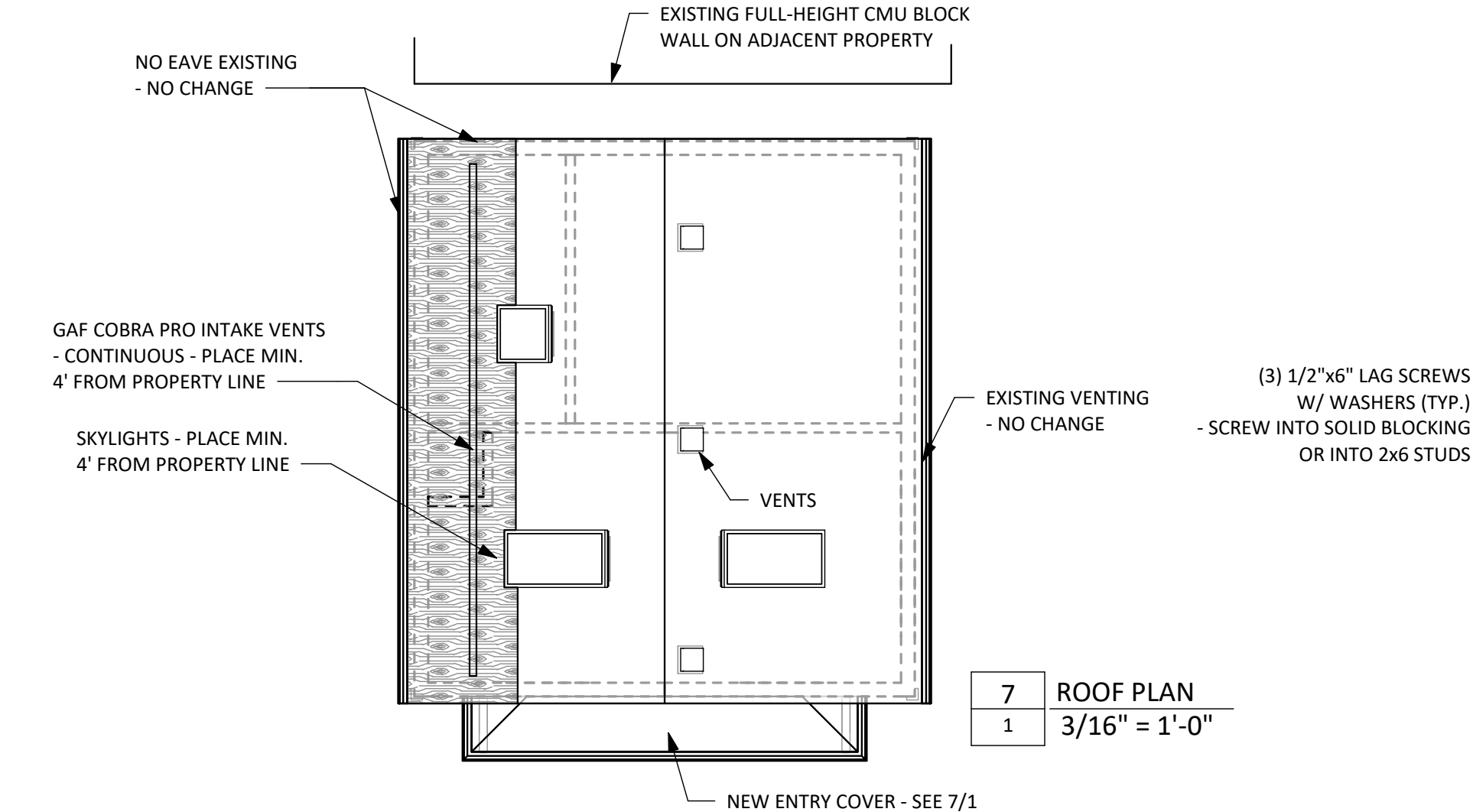
i. Heated slab interior applies to concrete slab floors (both on and below grade) that incorporate a radiant heating system within the slab. Insulation shall be installed underneath the entire slab.

j. Sliding glass doors shall comply with window performance requirements. Windows exempt from testing in accordance with Section NF1111.2, Item 3 shall comply with window performance requirements if constructed with thermal break aluminum or wood, or vinyl, or fiberglass frames and double-pane glazing with low-emissivity coatings of 0.10 or less. Buildings designed to incorporate passive solar elements may include glazing with a U-factor greater than 0.35 by using Table N1104.1(1) to demonstrate equivalence to building thermal envelope requirements.

k. A maximum of 28 square feet of exterior door area per dwelling unit can have a U-factor of 0.54 or less.

l. Glazing that is either double pane with low-e coating on one surface, or triple pane shall be deemed to comply with this requirement.

m. Minimum 24-inch horizontal or vertical below-grade.



1973 SE DUNCAN DRIVE
HILLSBORO, OR 97123
PHONE and FAX : (503)681-8940
www.Shelter-Solutions.net
joe@Shelter-Solutions.com



JACOBS STUDIO / BEDROOM
3145 NE 55TH AVE
ELEVATIONS

Revisions

Sheet

1

SHELTER SOLUTIONS, LLC

GENERAL CONDITIONS

1. ALL WORK SHALL CONFORM WITH THE LATEST ADOPTED ISSUE OF THE OREGON RESIDENTIAL SPECIALTY CODE.
2. THE CONTRACTOR IS RESPONSIBLE FOR CAREFULLY CHECKING THE PLANS AND SITE CONDITIONS AND TO NOTIFY THE DESIGNER OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION. BUILDER'S DESIGN IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.
3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. PLEASE CONTACT DESIGNER IF ADDITIONAL DIMENSIONS ARE NECESSARY.
4. ALL GRADING SHOWN ON PLANS IS APPROXIMATE, CONTRACTOR IS TO BE RESPONSIBLE FOR DETERMINING ALL FINAL GRADING AND NOTIFYING DESIGNER IF CHANGES TO THE PLAN SET ARE NECESSARY.
5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT PLANS MEET ALL STATE AND LOCAL BUILDING CODES, IN ADDITION TO WHAT IS SHOWN ON THE PLAN SET. BUILDER'S DESIGN WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RELATING TO THE ACCURACY OF THE PLANS IN EXCESS OF THE FEE PAID TO BUILDER'S DESIGN.

FOUNDATIONS

1. CONCRETE - MIX AND 28 DAY STRENGTH OF CONCRETE - 3000 PSI
2. ALL REINFORCING STEEL TO BE A-615 GRADE 60. WELDED WIRE MESH TO BE A-185.
3. LAP ALL CONTINUOUS BARS 30 x DIA. (MIN.) PLACE ALL REINFORCING AS PER ACI CODES & STANDARDS.
4. PROVIDE A MINIMUM CLEARANCE OF 18" UNDER GIRDERS, BEAMS, OR JOISTS, IN CRAWL SPACES.
5. COVER ENTIRE CRAWL SPACE WITH 6 MIL. BLACK "VISQUEEN" AND EXTEND UP FOUNDATION WALLS AND FASTEN TO MUD SILL
6. PROVIDE A MINIMUM OF 1 S.F. OF NET VENTILATION AREA FOR EACH 150 S.F. OF CRAWL SPACE AREA. VENTS ARE TO BE CLOSABLE AND HAVE 1/4" OPENINGS IN CORROSIVE RESISTANT SCREEN. POST NOTICE ABOUT OPENING VENTS NEAR ELECTRICAL PANEL.
7. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.

FLASHING & MOISTURE PROTECTION

1. CONTRACTOR TO PROVIDE A "WATER TIGHT ENCLOSURE" FOR THE VALLEY ENVIRONMENT, EMPLOYING THE HIGHEST QUALITY MATERIALS, CRAFTSMAN AND CONSTRUCTION METHODOLOGY, BOTH GENERAL AND SPECIFIC TO THE VALLEY
2. ALL EXTERIOR FLASHING ARE TO BE CONSTRUCTED WITH MIN. GAGE 28 EXPOSED & 30 GAGE CONCEALED, BAKED ENAMEL
3. FLASHING SHALL BE INSTALLED AT JUNCTIONS OF CHIMNEYS AND ROOFS, IN ROOF VALLEYS AND AROUND ALL ROOF OPENINGS, INCLUDING SKYLIGHTS, ROOF VENTS, ROOF EDGES BOTH RAKE AND EAVE.
4. FLASHING SHALL BE INSTALLED AROUND ALL EXTERIOR DOORS AND WINDOWS, TRANSITIONS BETWEEN SIDING AND ROOF.
5. ALL FLASHING TO BE INSTALLED PER "SMACNA" LATEST EDITION OF THE "ARCHITECTURAL SHEET METAL MANUAL".
6. BUILDING WRAP OF "TYVEK" OR SAME TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS, INCLUDING WRAPPING WINDOW AND DOOR OPENINGS AND TAPING JOINTS.
7. FLASHING FOR WINDOWS: INSTALL ADHESIVE FLASHING THE WIDTH OF SILL AND UP 12" EACH JAMB, AND LAP ENTIRE LENGTH OF JAMB, AND LAP ADHESIVE FLASHING THE WIDTH OF HEAD AND LAP 12" DOWN EACH JAMB. (DETAIL)
8. ALL PRODUCTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. DESIGNER TAKES NO RESPONSIBILITY FOR INSTALLATION.

- SUPPORT 4X BEAMS AND 3 1/8" GLB'S WITH 4X4 POST, MINIMUM.
- ALL 2X AND 4X FRAMING SHALL BE DF-L NO. 2 MINIMUM.
- ALL 6X FRAMING SHALL BE DF-L NO. 2 MINIMUM.
- EXTERIOR DOORS AND WINDOWS ARE TO BE PROVIDED WITH 4x12 HEADERS, U.N.O.
- ALL EXTERIOR HEADERS SHALL BE SUPPORTED WITH 2X6 STUD AND KING STUDS AS LISTED IN TABLE 602.7.5, TYPICAL.
- INTERIOR NON-LOAD-BEARING HEADERS SHALL BE (2)2X6 U.N.O. SUPPORT WITH (2)2X4 STUDS, MAX SPAN=3'-0".
- EVERY ROOF TRUSS SHALL BE CONNECTED TO WALL TOP PLATES WITH SIMPSON H2.5A UPLIFT CLIPS.
- SIMPSON TOP FLANGE HANGERS SHALL BE TYPE LB, BA(MIN), OR HU.
- FACE MOUNT HANGERS SHALL BE LUC OR HUC TYPE HANGERS.
- ALL METAL HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED-GALVANIZED OR ZINC-COATED.
- 6X BEAM TO 6X6 POST CONNECTOR SHALL BE SIMPSON PC6Z(MIN).
- 4X BEAM TO 4X POST CONNECTOR SHALL BE SIMPSON PC4Z
- EXTERIOR WALLS AT STAIRWELLS ARE TO BE BALLOON FRAMED FROM BOTTOM SOLE PLATE TO DOUBLE TOP PLATE.

R602.7.5 SUPPORTS FOR HEADERS

- HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS. THE FULL-HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH (4) 16d NAILS. THE MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADER SHALL BE IN ACCORDANCE WITH TABLE R602.7.5

TABLE R602.7.5.
MINIMUM NUMBER OF FULL HEIGHT
STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	
< 3'	1
4'	2
8'	3
12'	5
16'	6

FRAMING

1. WOOD FRAMING MEMBER GRADES ARE AS FOLLOWS UNLESS, OTHERWISE NOTED ON THE DRAWINGS:
- A. POSTS, BEAMS, HEADERS, JOISTS AND RAFTERS - MIN. # 2 DOUG FIR OR LVL'S - 2650 FB & 1.8E
- B. PLATES, BLOCKING AND BRIDGING - NO. 3 DOUG FIR
- C. STUDS - STUD GRADE DOUG FIR
- D. T&G DECKING - STUD & BETTER GRADE DOUG FIR
- E. WALL SHEATHING - 7/16" OSB
- F. GLU-LAM - 24-F V-4 (OR 24-F V-8 PER PLAN)
2. UNLESS OTHERWISE NOTED ON DRAWINGS, ALL EXTERIOR WINDOW AND DOOR HEADERS ARE TO BE 4x12 DOUG FIR No. 2
3. PROVIDE DOUBLE JOISTS UNDER ALL BEARING PARTITIONS.
4. DESIGN LOADS:
- | | |
|----------------|-----------------|
| ROOF - | 25 P.S.F. (LL) |
| FLOOR - | 40 P.S.F. (LL) |
| STAIRS - | 100 P.S.F. (LL) |
| GARAGE FLOOR - | 50 P.S.F. (LL) |
| DECKS - | 40 P.S.F. (LL) |

5. SOIL BEARING PRESSURE IS ASSUMED TO BE 1500 P.S.F.
6. PROVIDE H2.5A CLIPS AT ALL NEW RAFTER TO TOP PLATE CONNECTIONS.
7. ALL EXTERIOR FASTENERS, EXPOSED TO THE ELEMENTS TO BE STAINLESS STEEL OR GALVANIZED. INCLUDING NAIL, STAPLES, CLIPS, ETC.

GYPSON BOARD FINISH

1. ERECT SINGLE LAYER 1/2" STANDARD, 5/8" F.R. AND 1/2" MOISTURE RESISTANT GYPSUM BOARD IN MOST ECONOMICAL DIRECTIONS, WITH ENDS OCCURRING OVER FIRM BACKING.

HEALTH AND SAFETY:

- ALL NEW SMOKE AND CO ALARMS SHALL BE HARDWIRED WITH BATTERY BACKUP AND INTERCONNECTED WITHIN THE DWELLING UNIT ONLY SMOKE ALARMS SHALL BE LOCATED WITHIN EACH SLEEPING ROOM, IMMEDIATELY OUTSIDE OF EACH SLEEPING ROOM, AND ON EACH LEVEL OF THE DWELLING. CO ALARMS SHALL BE LOCATED WITHIN 15' OUTSIDE OF EACH BEDROOM DOOR. ALL ALARMS SHALL BE CROSS LISTED FOR INTERCONNECTION.

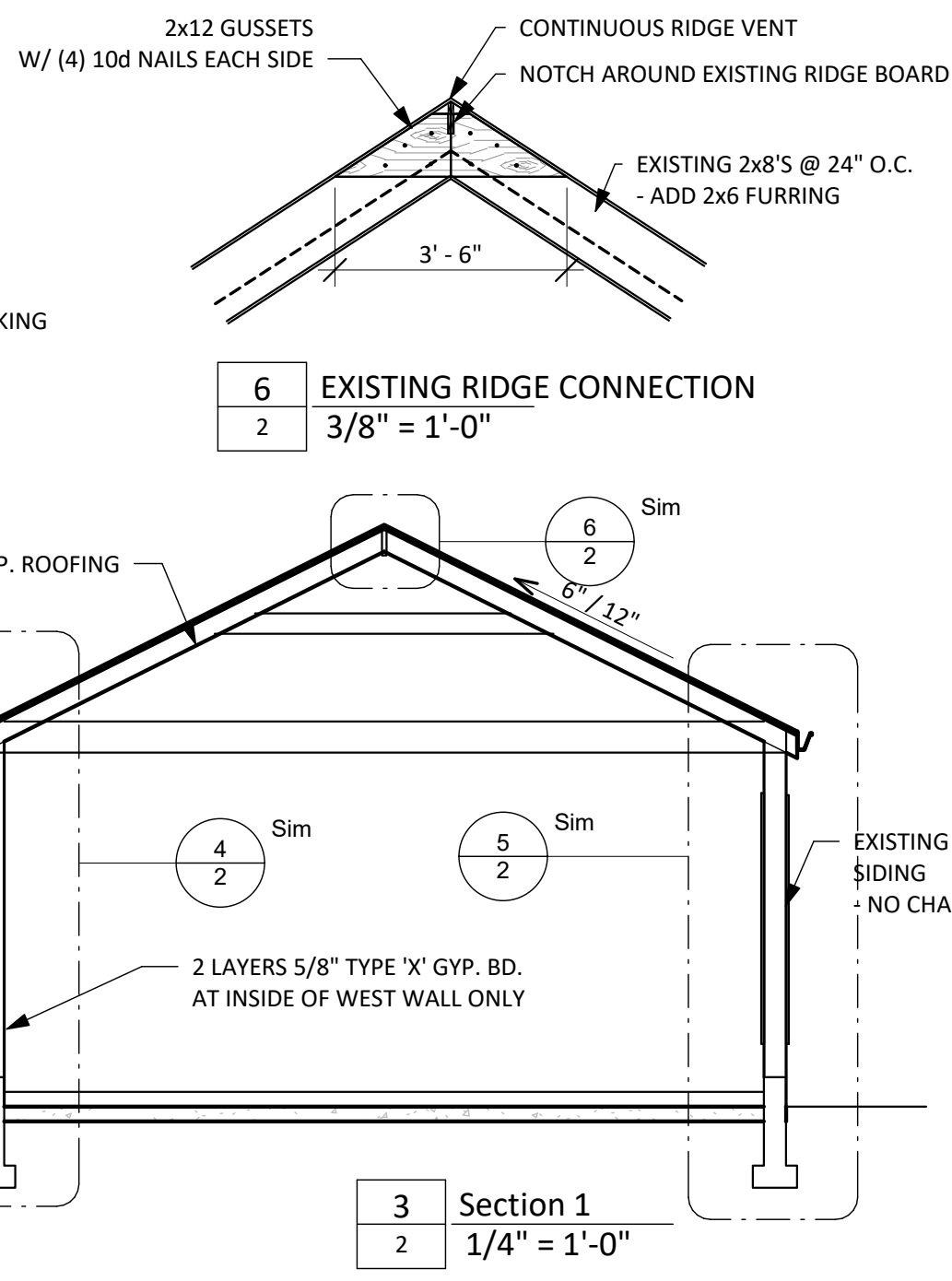
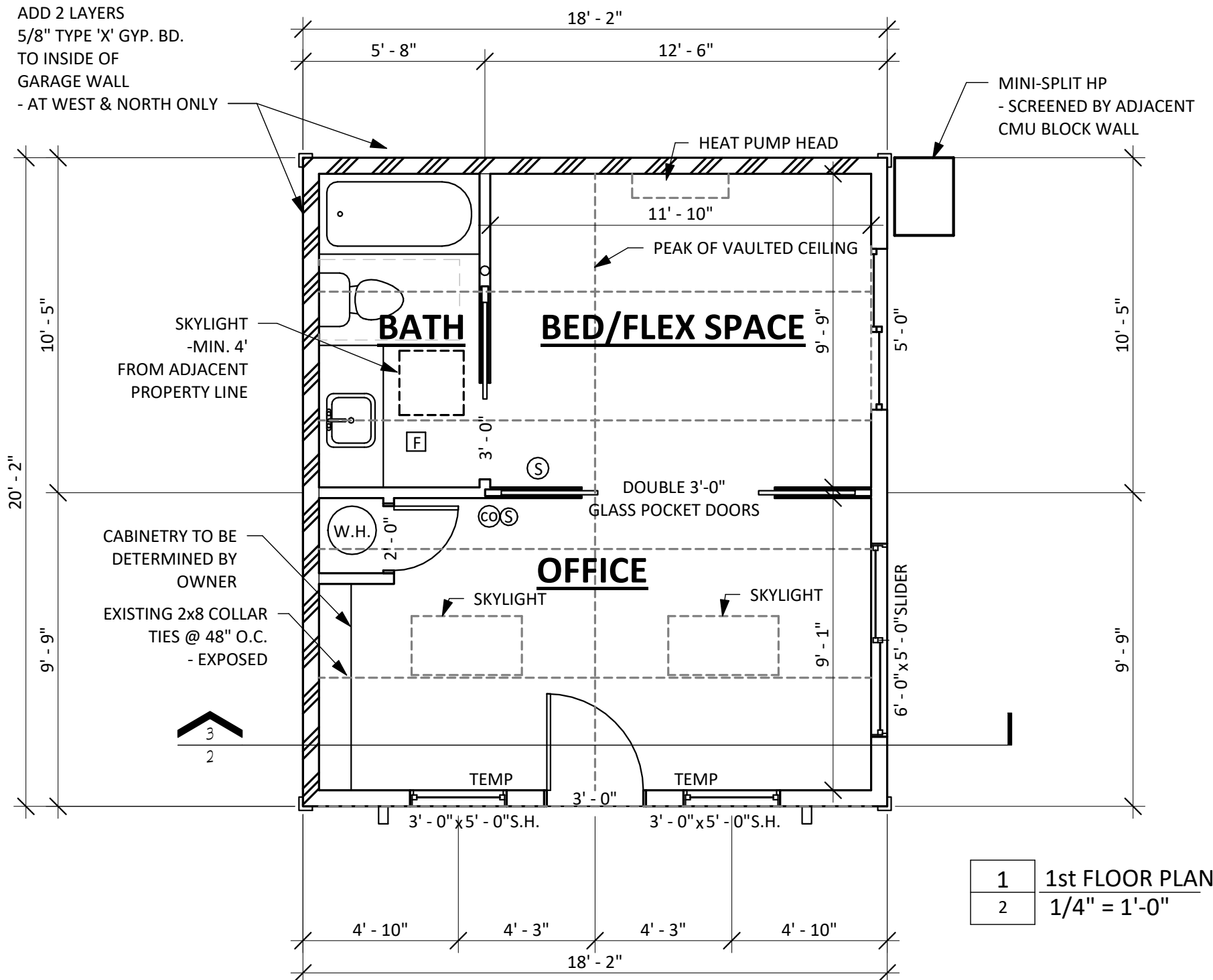
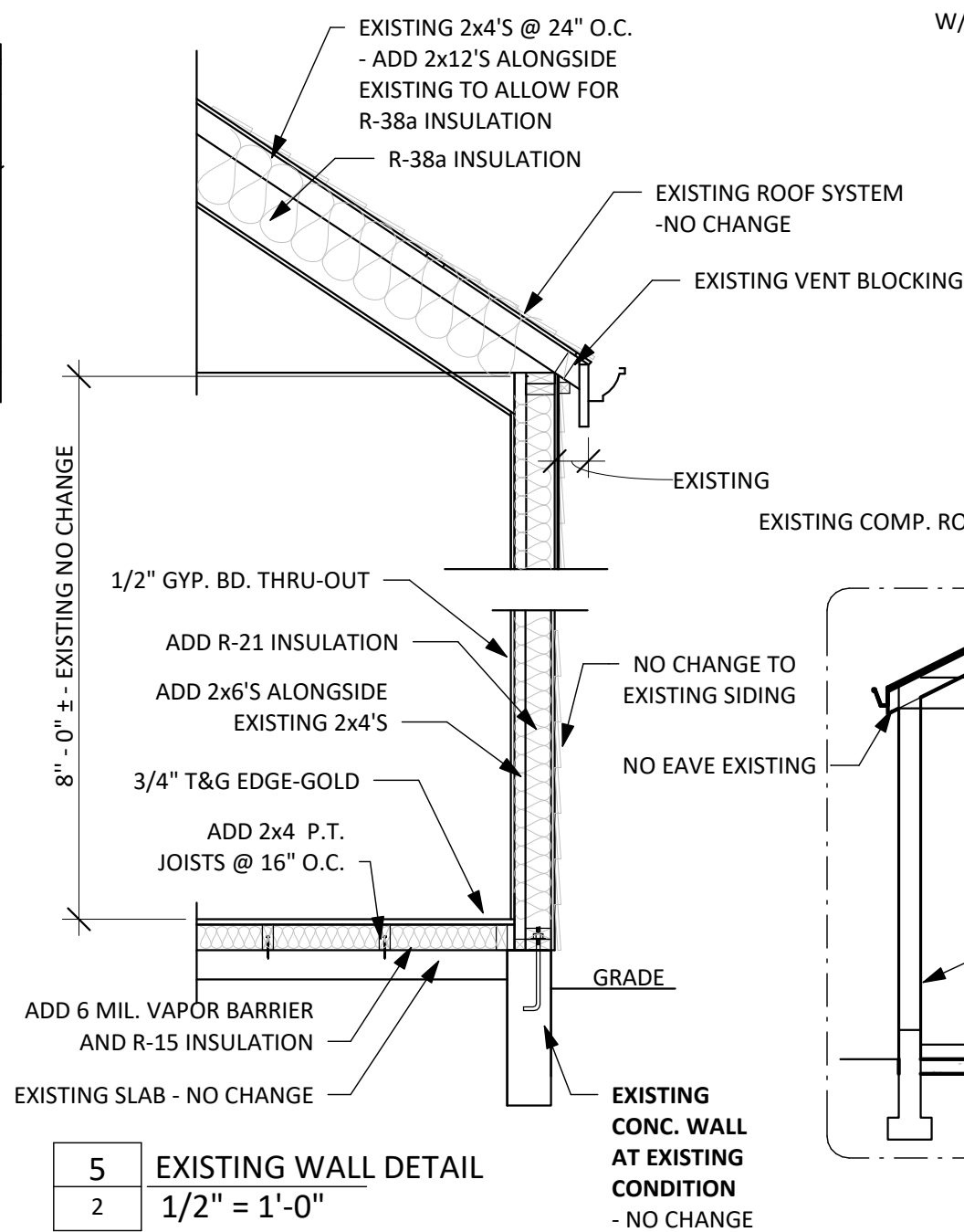
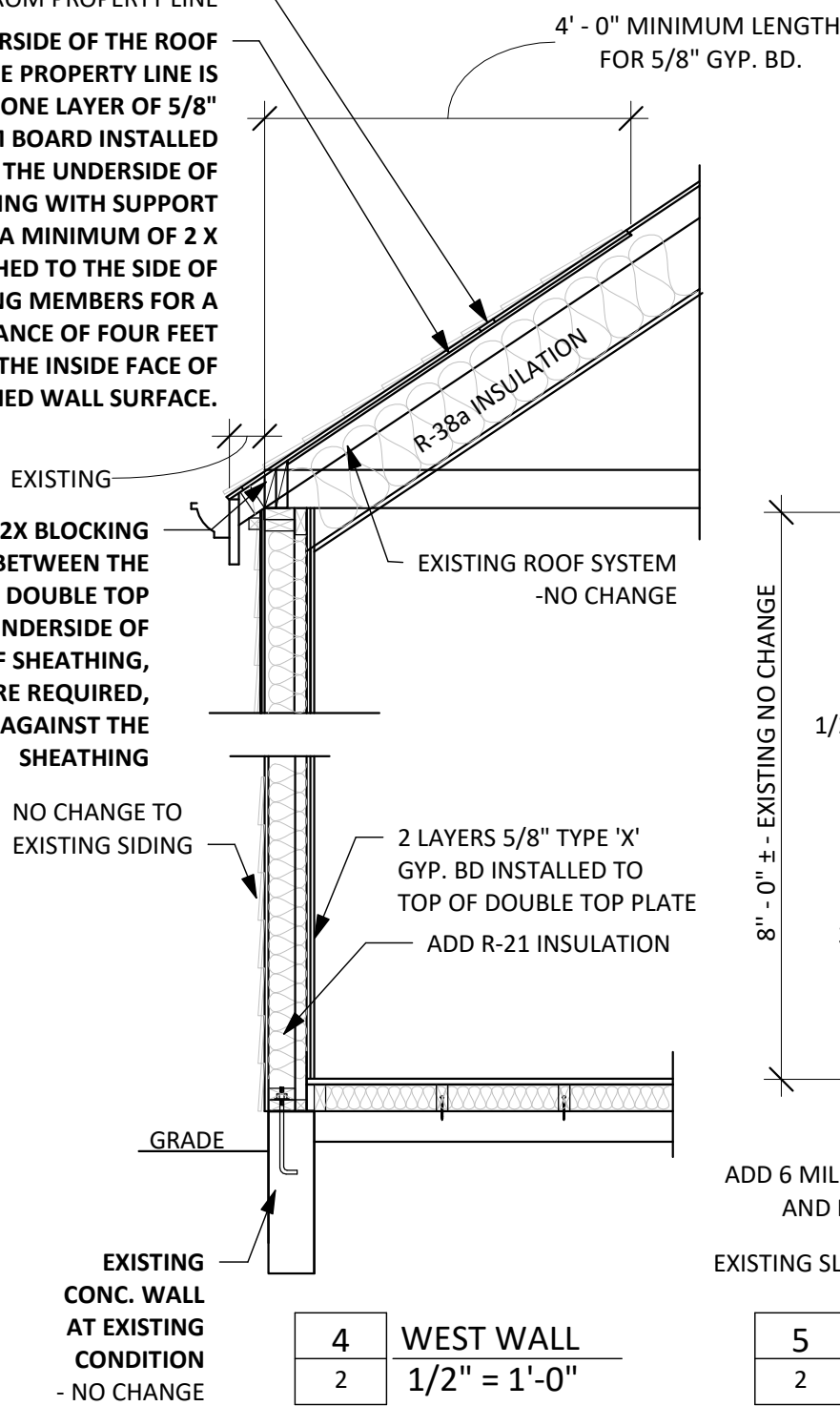
FANS AND SMOKE DETECTORS

- FANS IN BATHING AREAS SHALL BE CONTROLLED BY TIMER.
SMOKE DETECTORS SHALL BE 110V BATTERY BACKUP.

- ADD GAF COBRAPRO INTAKE VENT
AS INDICATED ON ROOF PLAN
- ON WEST SIDE ONLY
- MIN. 3'-0" FROM PROPERTY LINE

THE UNDERSIDE OF THE ROOF
ADJACENT TO THE PROPERTY LINE IS
PROVIDED WITH ONE LAYER OF 5/8"
TYPE X GYPSUM BOARD INSTALLED
DIRECTLY AGAINST THE UNDERSIDE OF
THE ROOF SHEATHING WITH SUPPORT
PROVIDED BY A MINIMUM OF 2 X
LEDGERS ATTACHED TO THE SIDE OF
THE ROOF FRAMING MEMBERS FOR A
MINIMUM DISTANCE OF FOUR FEET
MEASURED FROM THE INSIDE FACE OF
THE FINISHED WALL SURFACE.

**TWO LAYERS OF 2X BLOCKING
ARE PROVIDED BETWEEN THE
TOP OF THE DOUBLE TOP
PLATE AND UNDERSIDE OF
THE ROOF SHEATHING,
BEVELED WHERE REQUIRED,
TO FIT TIGHT AGAINST THE
SHEATHING**



1973 SE DUNCAN DRIVE
HILLSBORO, OR 97123
PHONE and FAX : (503)681-8940
www.Shelter-Solutions.net
joe@Shelter-Solutions.com



shelter
solutions

CCB#192367

JACOBS STUDIO / BEDROOM
3145 NE 55TH AVE
FLOOR PLANS

Revisions

Sheet

2





