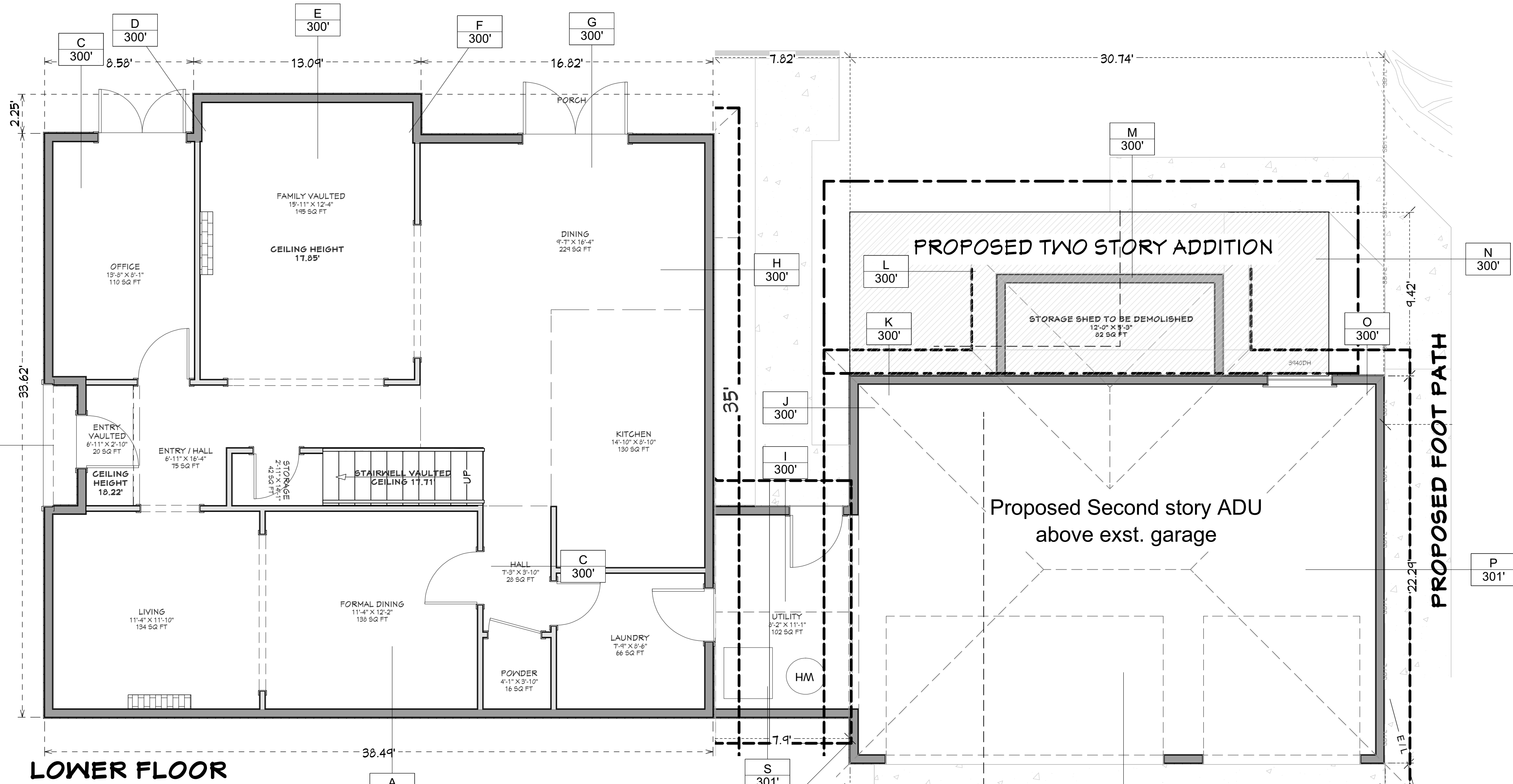




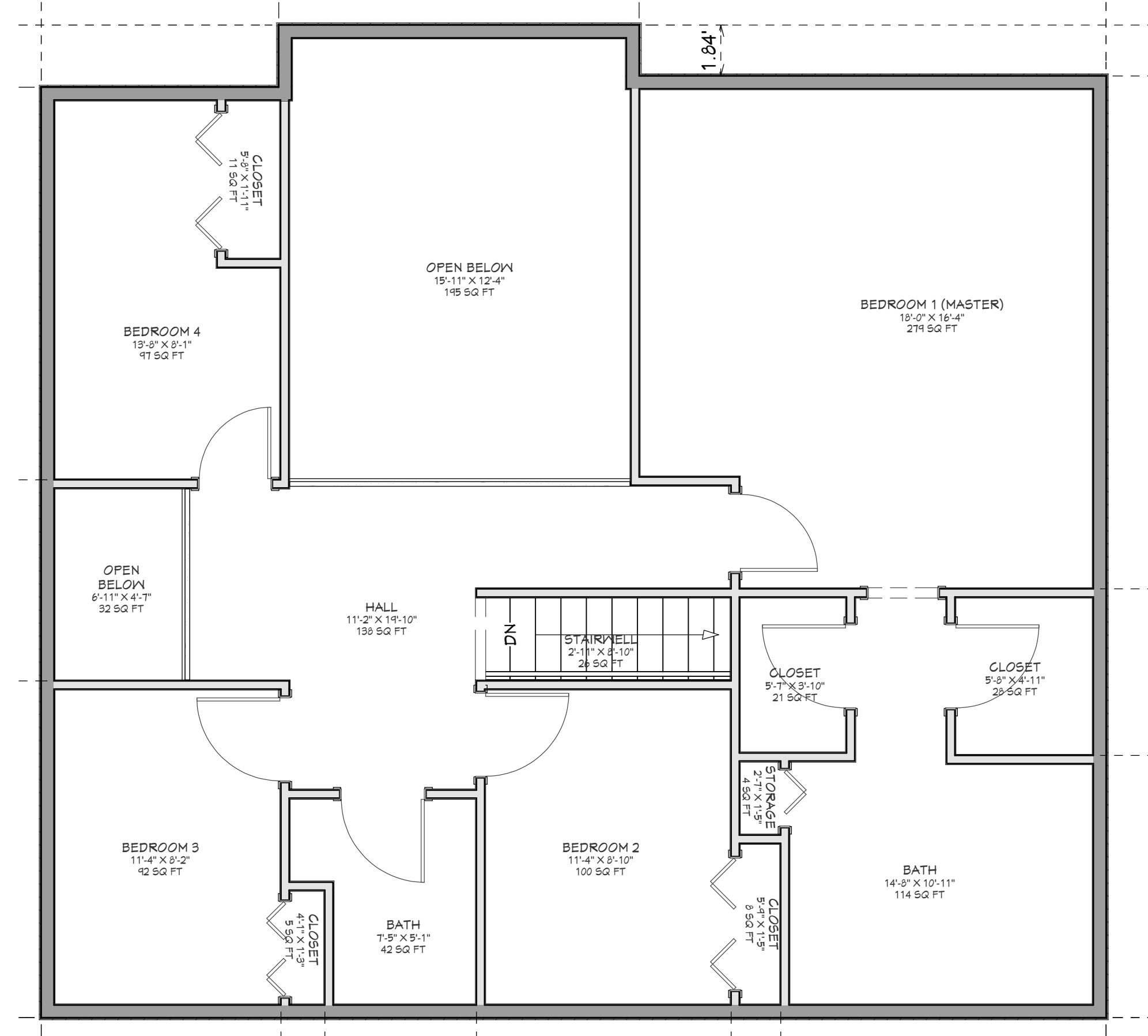
ROOM SIZE SCHEDULE (LOWER FLOOR)		
ROOM NAME	AREA, INTERIOR (SQ FT)	CEILING FINISH HEIGHT
ENTRY VAULTED	20	120 1/4"
FAMILY VAULTED	195	120 1/4"
STORAGE	42	107 5/8", 120 1/4"
DINING	229	107 5/8"
ENTRY / HALL	75	107 5/8"
FORMAL DINING	138	107 5/8"
HALL	28	107 5/8"
KITCHEN	130	107 5/8"
LAUNDRY	66	107 5/8"
LIVING	134	107 5/8"
OFFICE	110	107 5/8"
POWDER	16	107 5/8"
TOTALS:	1182	

GARAGE SIZE		
ROOM NAME	AREA, INTERIOR (SQ FT)	CEILING HEIGHT
GARAGE	635	109 1/8"
STORAGE SHED TO BE DEMOLISHED	63	109 1/8"
UTILITY	90	97 1/2"
TOTALS:	789	

No change proposed to main house lower & upper floors



LOWER FLOOR



UPPER FLOOR

ROOM FINISH SCHEDULE (UPPER FLOOR)		
ROOM NAME	AREA, INTERIOR (SQ FT)	CEILING FINISH HEIGHT
OPEN BELOW	32	218 1/8"
OPEN BELOW	195	
STAIRWELL	26	
BATH	42	96 3/8"
BATH	114	96 3/8"
BEDROOM 1 (MASTER)	279	96 3/8"
BEDROOM 2	100	96 3/8"
BEDROOM 3	92	96 3/8"
BEDROOM 4	97	96 3/8"
CLOSET	21	96 3/8"
CLOSET	28	96 3/8"
CLOSET	8	96 3/8"
CLOSET	5	96 3/8"
CLOSET	11	96 3/8"
HALL	138	96 3/8"
STORAGE	4	96 3/8"
TOTALS:	1192	

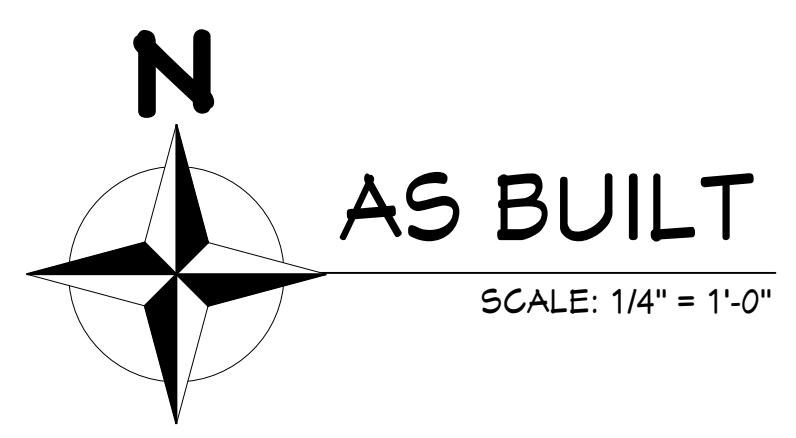
BUILDING HEIGHT CALCS.

HEIGHT CALCULATIONS			
BENCHMARK: POWER POLE 100'			
LABEL	MIDPOINT ELV. *	WALL SEG.**	* X **
A	101'	39.49'	3,988
B	100'	33.62'	3,362
C	100'	8.58'	858
D	100'	2.25'	225
E	100'	13.09'	1309
F	100'	2.25'	225
G	100'	16.82'	1582
H	100'	33.62'	3362
I	100'	7.82'	782
J	100'	6.91'	691
K	100'	4.25'	425
L	100'	9.34'	934
M	100'	23.17'	2317
N	100'	9.34'	934
O	100'	3.38'	338
P	101'	21.82'	2204
Q	101'	30.80'	3111
R	101'	2.91'	294
S	101'	7.74'	782
TOTAL:	1,905'	277.20'	27723
(A) X (B) =	27723		
DIVIDE WALL SEG. =	277.20'		
ABE =	100' + 30' =	130'	
EXIST. HOUSE HEIGHT:	127.21'	CONFORMS	
PROPOSED ADU HEIGHT:	124.38'	CONFORMS	

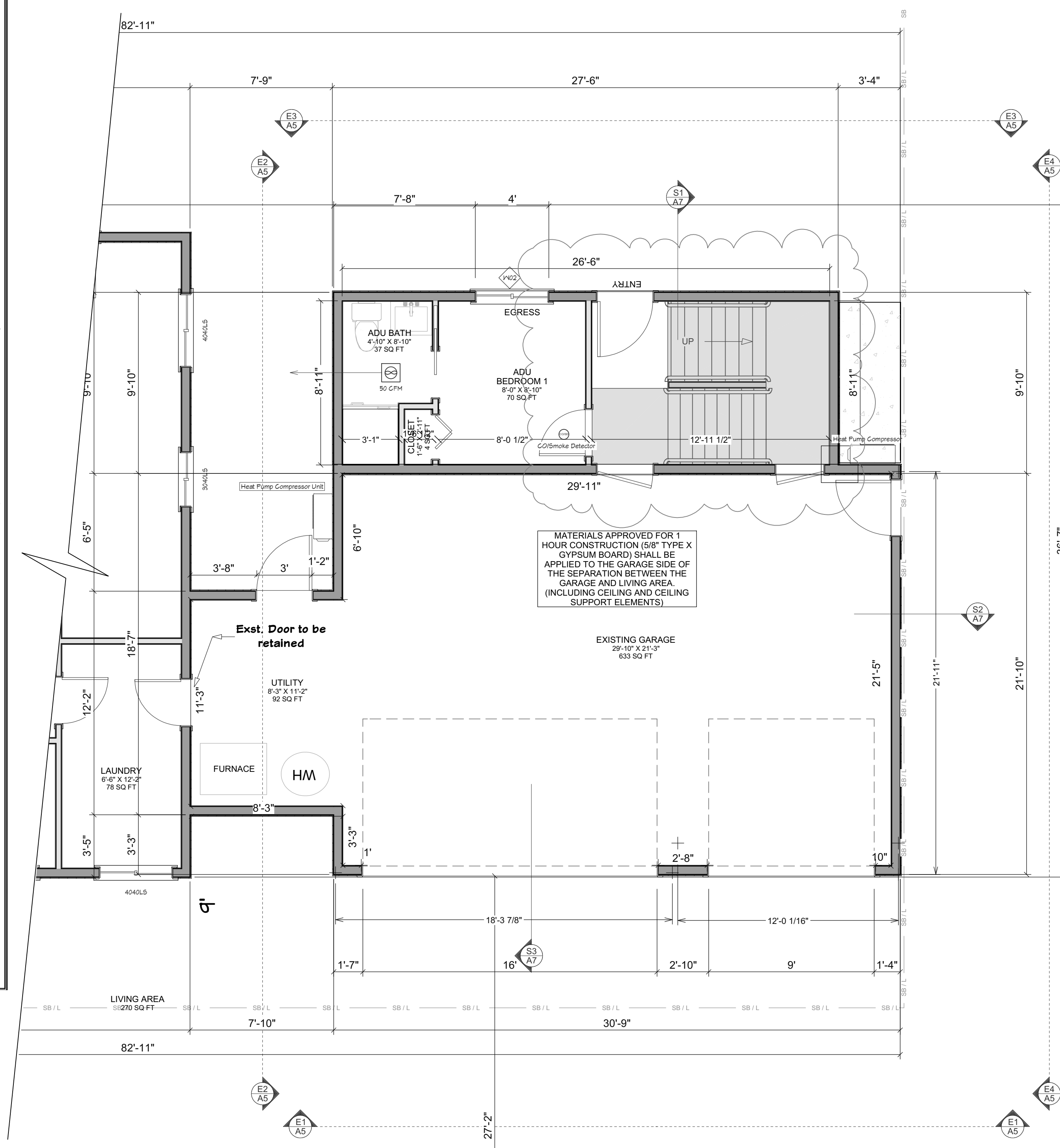
A. Average Building Elevation (ABE) calculations located on sheet #:  
 B. Allowable Building Height (ABE + 30 ft.)  
 C. Proposed Building Height  
 D. Benchmark Elevation\*  
 E. Describe Benchmark Location (must be undisturbed throughout project)

A3  
130  
124.28  
100  
Power Pole

Feet  
Feet  
Feet

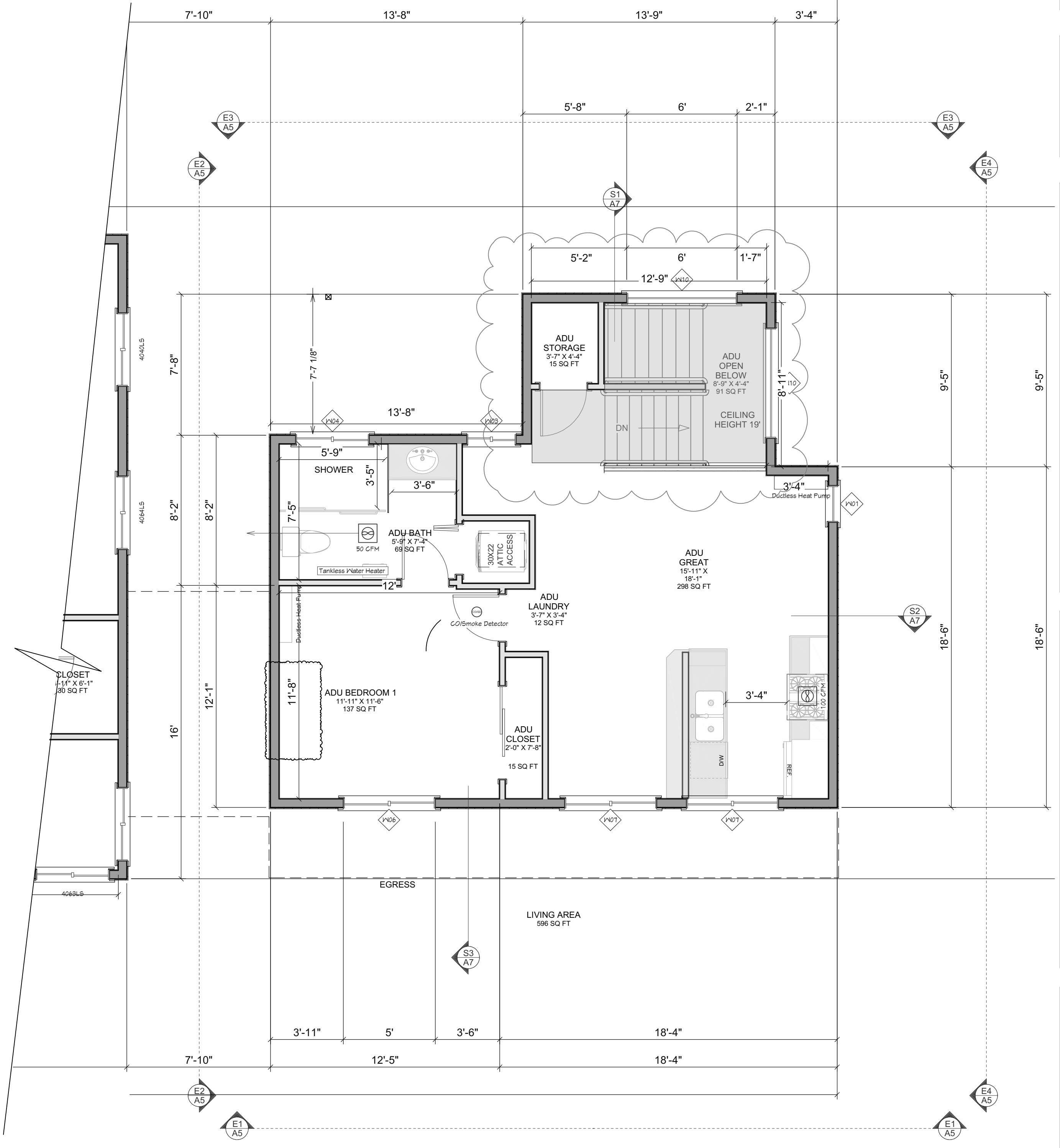


- NOTES**
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
  - SEE STRUCTURAL PLANS FOR ALL HEADERS AND BEAM SIZES.
  - BOTTOM OF HEADERS TO BE 9'-0" THIS FLOOR UNLESS NOTED OTHERWISE.
  - ALL EXTERIOR WALLS 2x6 W/ R-21 INSULATION UNO.
  - ALL FRAME NAILING TO SATISFY CHAPTER 6 IRC BLOCK ALL FINISHED EDGES. ALL EXTERIOR SHEATHING NAILED W/ 10d # 6" O.C. (EDGE) AND 12" O.C. (FIELD) UNO, TYP.
  - PROVIDE DOUBLE JOISTS OR BLOCKING WHERE PARTITIONS OCCUR ABOVE.
  - PROVIDE SOLID BLOCKING OVER SUPPORTS.
  - PLATE HEIGHT 9'-0" THIS FLOOR UNO.
  - FIRE BLOCKING TO ALL PLUMBING PENETRATIONS.
  - ALL STORAGE AND SPACES UNDER STAIRCASES TO BE FINISHED WITH 5/8" TYPE "X" GYPSUM BOARD.
  - FINISH ALL CEILINGS WITH 1/2" GYPSUM BOARD.
  - AT GARAGE USE 1/2" TYPE "X" GYP. BD. AT ALL CORNER WALLS 1/8" TYPE "X" AT ALL CEILINGS AND ALL EXPOSED BEAMS.
  - PROVIDE 26-GAUGE GALVANIZED SHEET METAL FLASHING ABOVE WINDOWS AND DOORS. (TYP) LAP BUILDING PAPER OVER.
  - HOLD SIDING 6" ABV. FINISHED GRADE, TYP.
  - FASTEN MULTI-LAM 2X BEAMS PER IRC STANDARDS, CHAPTER 6, TABLE R602.3(1), TYPICAL DIRECTION.
  - ALL VOIDS TO BE FIRE/DRAFT BLOCKED PER IRC SECTION R602.9.
  - INSTALL WATER HEATER PER IRC, CHAPTER 28 AND PER 2008 IMC. THE PILOTS, BURNERS, HEATING ELEMENTS, AND SWITCHES SHALL BE A MIN. OF 18" ABOVE THE GARAGE FLOOR PER 2008 IMC.
  - STRAP THE WATER HEATERS AT POINTS WITH THE UPPER 1/3 AND LOWER 1/3 OF ITS VERTICAL DIMENSION. LOWER POINT SHALL BE MINIMUM 4" ABOVE CONTROLS.
  - FURNACE TO BE PLACED 18" ABV. FLOOR ON 1 HOUR RATED FLATIRON W/ 3/4" LAYERS PLYWOOD. THE PILOTS, BURNERS, HEATING ELEMENTS AND SWITCHES SHALL ALSO BE A MIN. OF 18" ABOVE THE GARAGE FLOOR. PROTECT FROM IMPACT PER 2008 IMC.
  - DOOR BETWEEN HOUSE AND GARAGE TO BE 20 MIN RATED, SOLID CORE, TIGHT FITTING, WITH SELF CLOSURE.
  - ALL SMOKE DETECTORS TO BE 10 VOLT WITH BATTERY BACKUP, INTERCONNECTED. DENOTES: INSTALL CARBON MONOXIDE ALARMS PER IRC R631 (UNAPPLICABLE).
  - 36" I.C.C. APPROVED DIRECT VENT FIREPLACE W/ 20" D. FLUSH HEARTH. MIN. 6 SQ. IN. O.S. COMB. AIR. INSTALL DIR. VENT FRPL. PER TERMS OF LISTING AND FIGS. SPEC. PER SECTION R901.1 RC.
  - PROVIDE CONT. HANDRAIL AT STAIRS A MIN. OF 1 1/2" FROM WALL.
  - LIGHTING CONTROLS FOR INTERIOR STAIRWAYS MUST BE PROVIDED AT THE TOP AND BOTTOM OF THE STAIR.
  - WALLS W/ GREATER THAN 350 PLF REQUIRE A MINIMUM OF A 3x MEMBER AT ABUTTING PANEL EDGES AND BULL PLATES FOR WALLS BETWEEN 350 AND 600 PLF. ANCHOR BOLT SPACING HAS BEEN DECREASED BY 1/2 (USE 2x BULL PLATE) PER IRC R603.6.
  - TUBS AND SHOWERS:
    - FIRE BLOCKING BETWEEN STUDS.
    - LIMIT SHOWER FLOW TO 1.5 GPM.
    - LIMIT LAV SINK FLOW TO 1.0 GPM, OR LESS.
    - WATERPROOF WALL TO WITHIN 10" ABOVE DRAIN INLET.
    - VAPOR BARRIER BEHIND GYPSUM BD.
    - ALL GLAZING WITHIN 10" ABOVE DRAIN INLET TO BE SAFETY GLASS.
  - OF 5.7 SQ. FT. NET CLEAR OPENING 4.44" MAX. ABV. FIN. FLR. MIN. EGRESSIBLE WIDTH IS 20". MIN. HEIGHT IS 24".
  - SAFETY GLAZING REQUIRED IN THE FOLLOWING AREAS:
    - A. GLAZING LESS THAN 60" ABOVE TUB OR SHOWER.
    - B. ALL TUB & SHOWER DOORS & ENCLOSURES EXCEPT GLASS BLOCK, GREATER THAN 3" SPHERE UNLESS DECORATIVE GLASS.
    - C. ALL WINDOWS WITHIN 24" OF A DOOR SWING, LESS THAN 60" ABOVE FLOOR.
    - D. DOORS AND SLIDING PANELS OF SLIDING DOORS.
    - E. ALL UNFRAMED SWINGING DOORS.
    - F. ALL UNFRAMED SWINGING DOORS & GLAZING LESS THAN 3' HORIZ. OF STAIR OR LANDING LESS THAN 60" ABOVE FIN. FLR.
    - G. GLAZING LESS THAN 60" ABOVE STAIRS.
  - ATTIC ACCESS TO BE A MIN. OF 22"x30" W/INBL. & WEATHER-STRIPPING PER CODE.
  - SHOUL HOUSE FAN WITH AUTO TIMER AND MANUAL OVERRIDE.



ADU LOWER FLOOR			
ROOM NAME	AREA, INTERIOR (SQ FT)	AREA, INC. WALLS	NOTES
ADU BATH	43.0		
ADU BEDROOM 1	90.0		
ADU CLOSET 1	13.0		
ADU HALL/ENTRY	78.0		
(CEILING HEIGHT MODIFIER)	26.0		GRAY AREA
<b>TOTALS:</b>	<b>250.00</b>	<b>260.00 SQ. FT.</b>	

**MAIN FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



ADU UPPER FLOOR		
ROOM NAME	AREA, INTERIOR (SQ FT)	AREA, INC. WALLS
ADU BATH	74.0	
ADU BEDROOM 1	137.0	
ADU CLOSET	15.0	
ADU GREAT	296.0	
ADU LAUNDRY	10.0	
ADU STORAGE	14.0	
ADU OPEN BELOW 33%		36
<b>TOTALS:</b>	<b>650.0</b>	<b>604 SQ. FT.</b>

**UPPER FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

ADU TOTAL	
ROOM NAME	AREA, INTERIOR (SQ FT)
LOWER FLOOR	260.0 SF
UPPER FLOOR	640.0 SF
<b>TOTAL:</b>	<b>900.0 SF</b>
COMPLIES	



**PROPOSED MAIN & UPPER FLOOR PLAN**

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

SHEET NUMBER  
**A4**

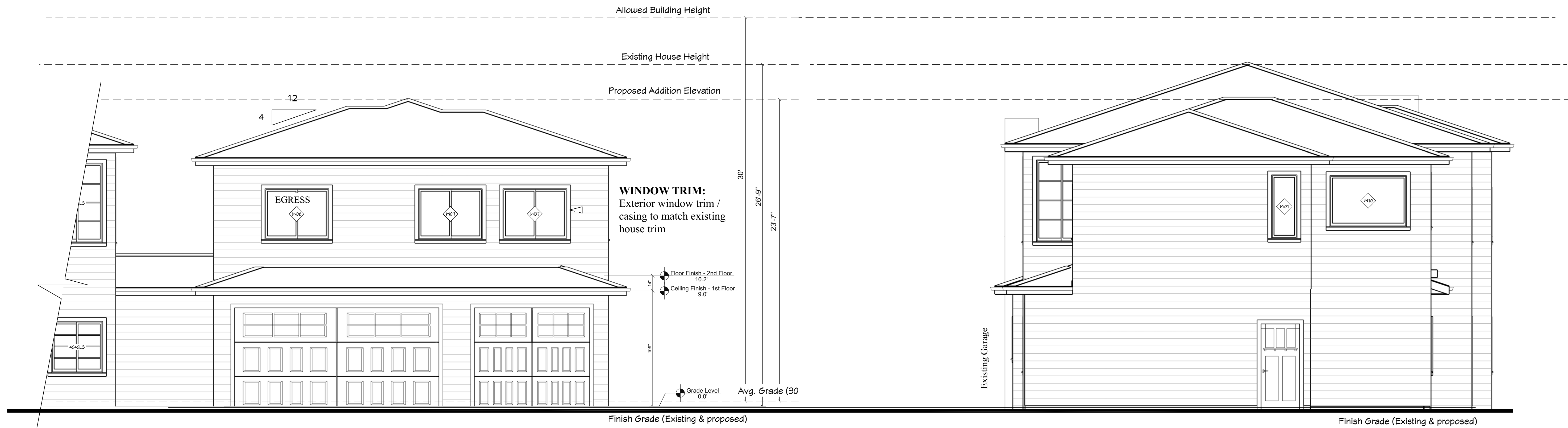
DATE: 06.12.20  
REV #10: 07.17.23  
DRAWN BY: K.C.

**PROPOSED  
MAIN & UPPER FLOOR**

**TOM & KIM TSO  
ADDITION & ADU**  
8802 SE 9TH ST, MERCER ISLAND WA 98040

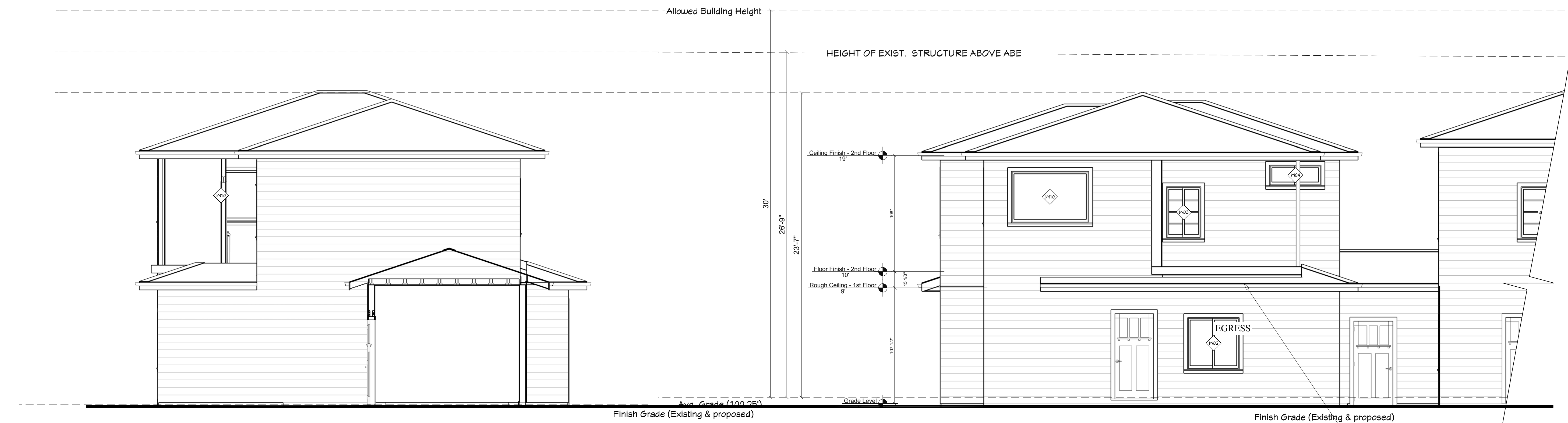
**KESH DESIGN LINES LLC**  
425 344 9906





**E1 SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"

**E3 WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



**E2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"

**E4 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"

Provide roof intake vents along length of roof. (per manufactures installation specifications)

SEE NEW STRUCTURAL (S) SHEETS



KESH DESIGN LINES LLC

425 344 9906

**TOM & KIM TSO**  
**ADDITION & ADU**  
2802 SE 9TH ST. MERCER ISLAND WA 98040

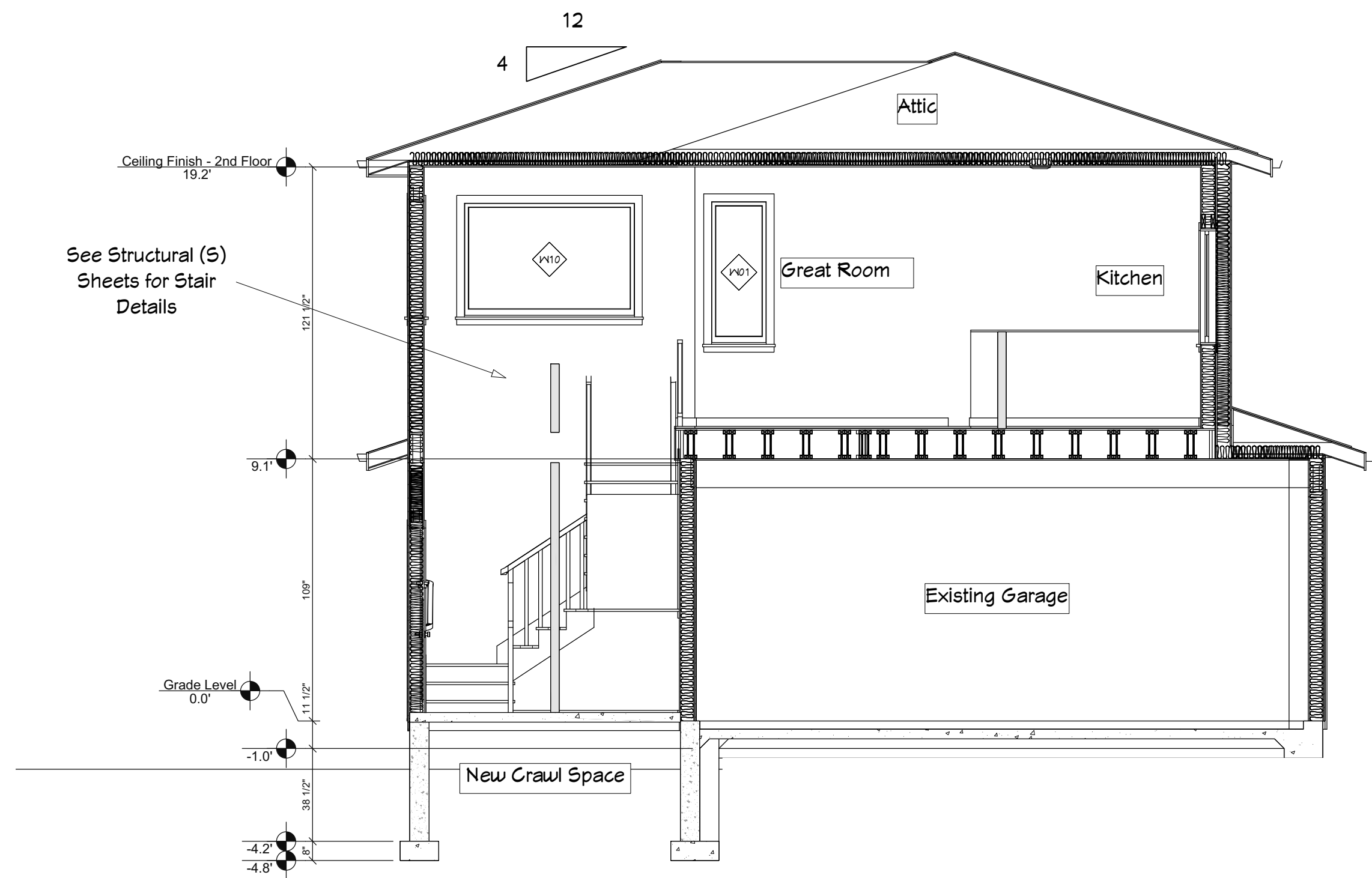
**FOUNDATION and 1st FLOOR**  
**FRAMING PLAN**

DATE: 06.12.20  
REV #10: 07.17.23  
DRAWN BY: K.C.

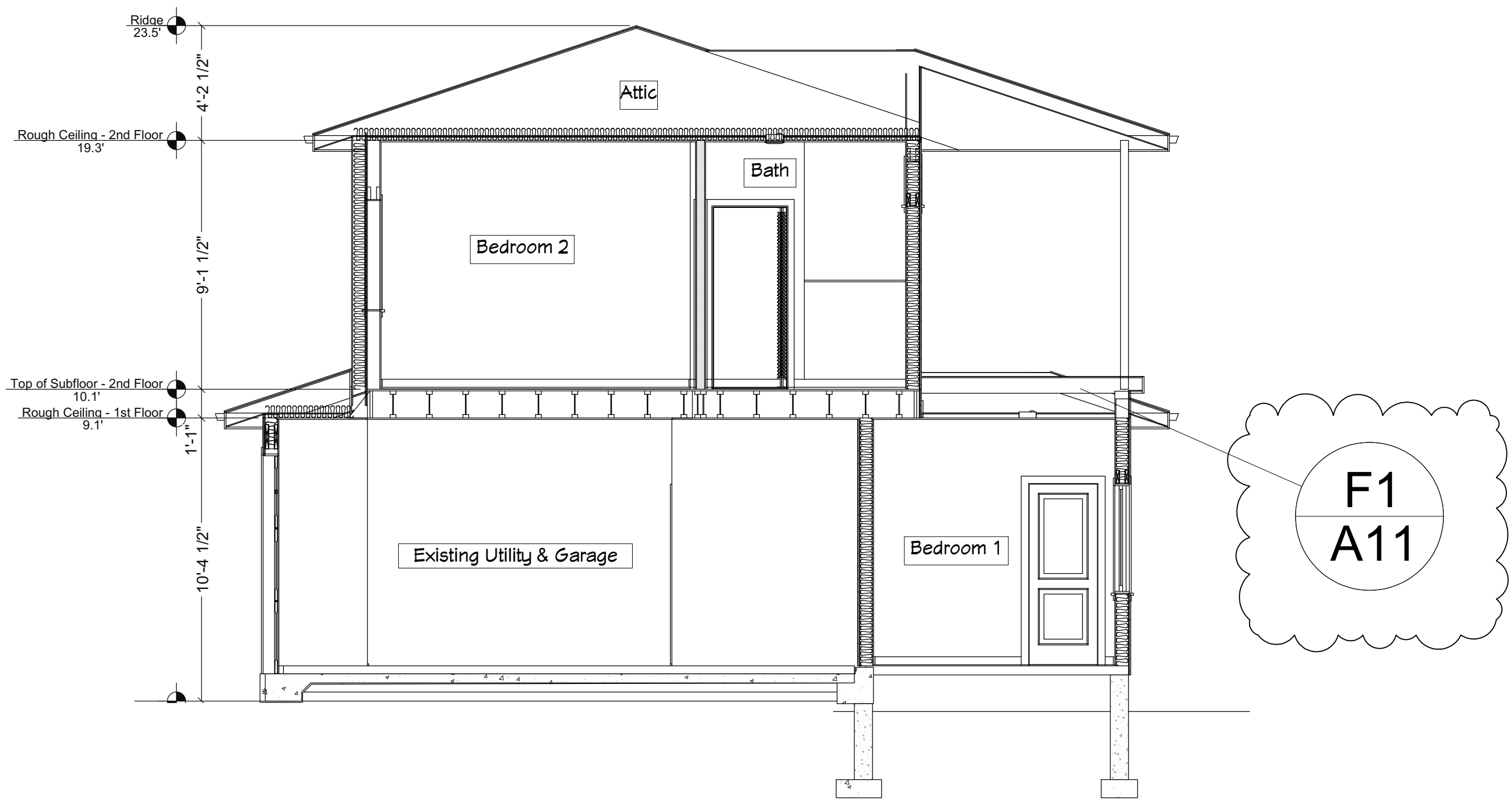
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**A6**

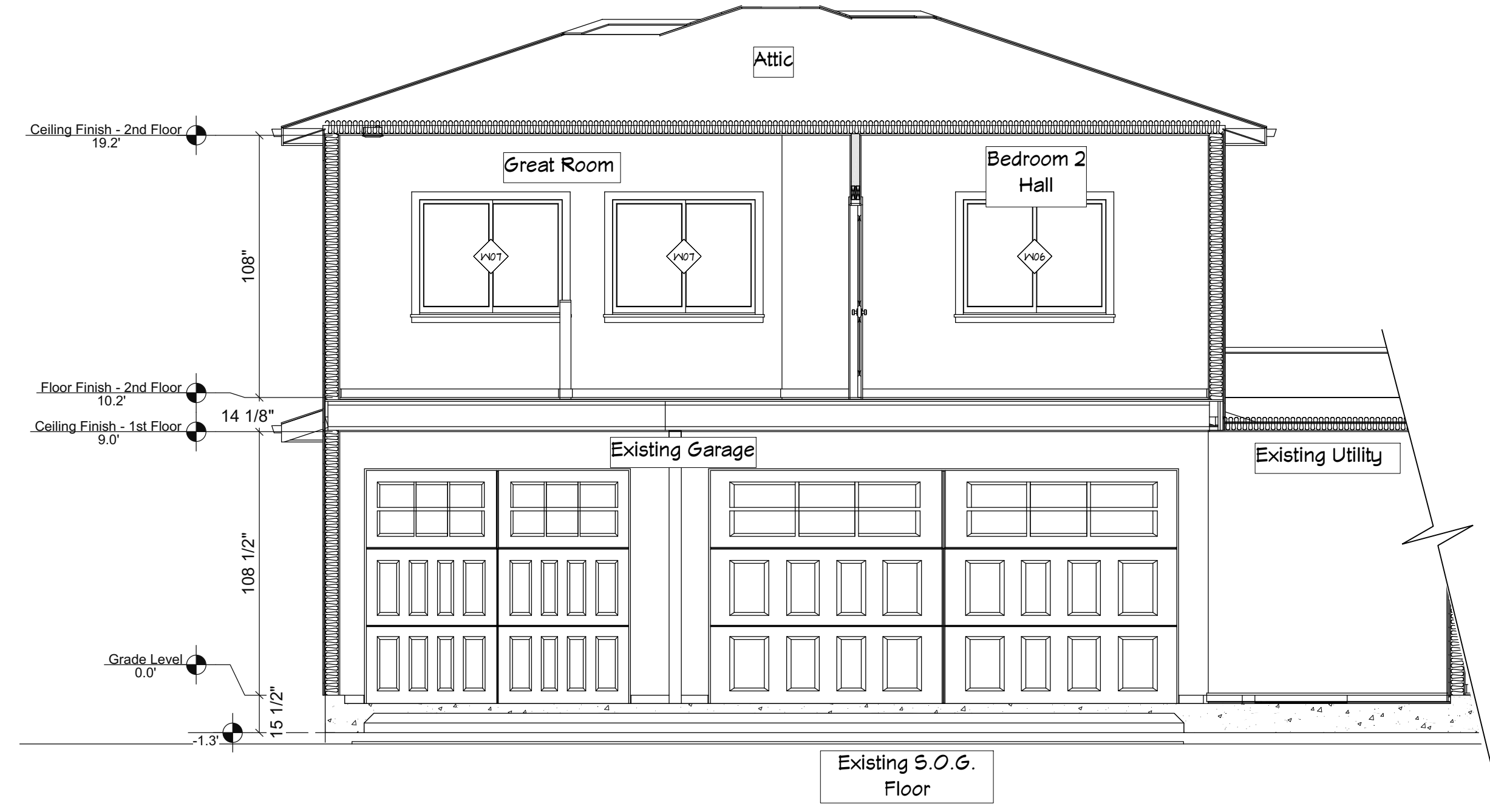
Revision #:



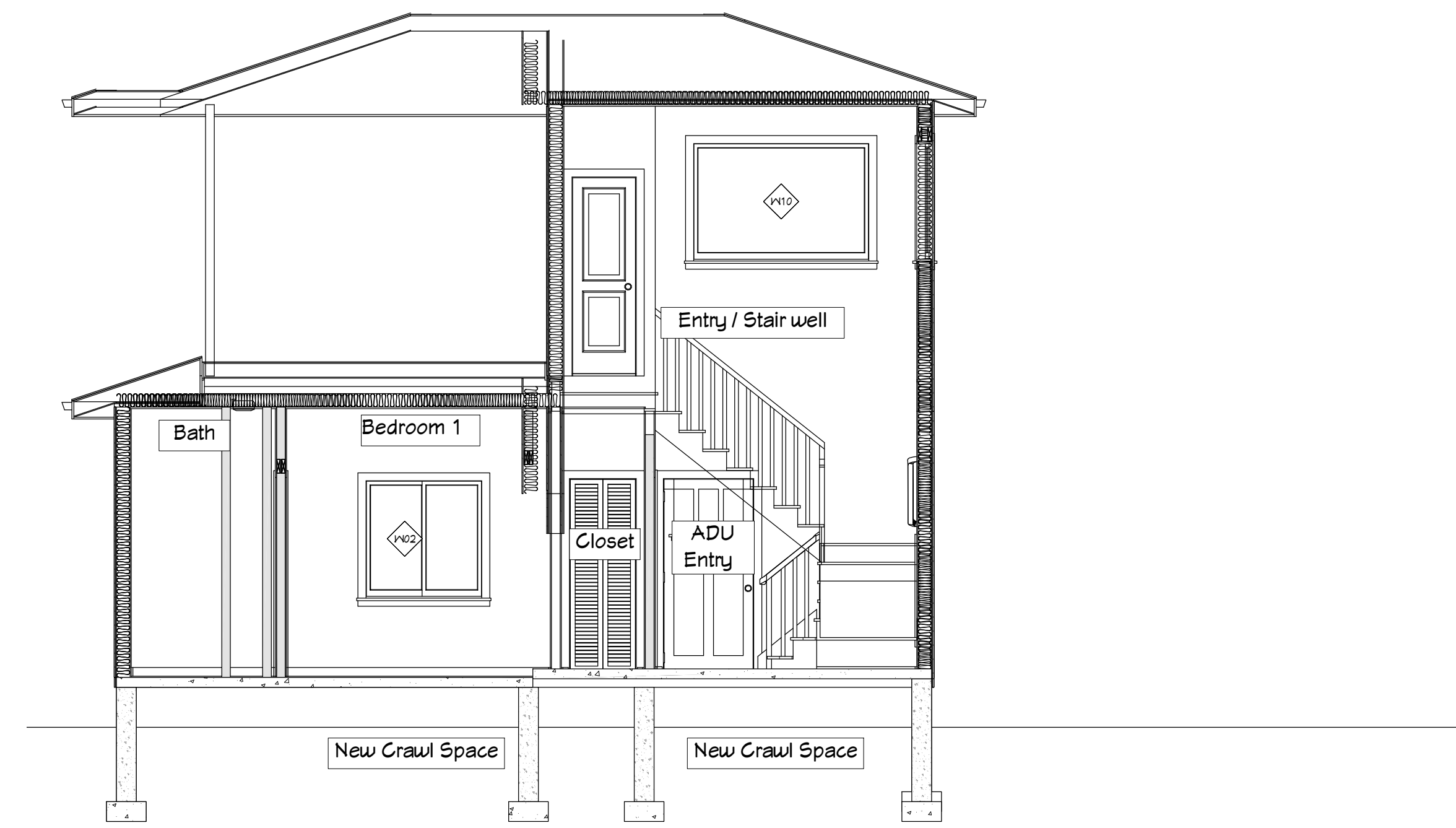
**S1 SECTION**  
SCALE: 1/4" = 1'-0"



**S3 SECTION**  
SCALE: 1/4" = 1'-0"

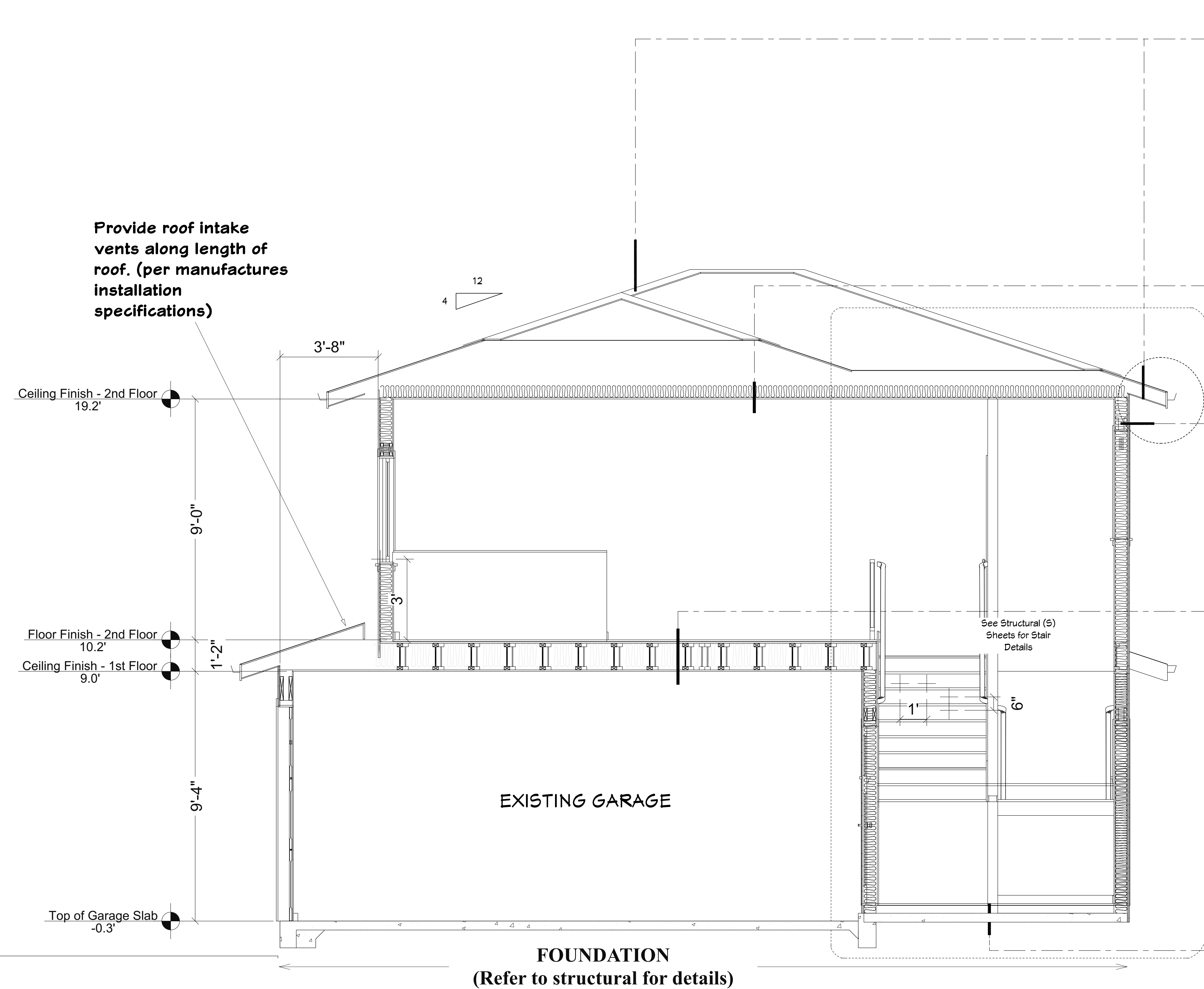


**S2 SECTION**  
SCALE: 1/4" = 1'-0"



**S4 SECTION**  
SCALE: 1/4" = 1'-0"





**TYP. ROOF CONSTRUCTION:**

Comp. Shingles to match existing house roof  
 1/2" CDX Plywood  
 Per Manufactured Trusses @ 24" O.C.  
 R-49 Batt Insulation  
 Insulation Baffle Extended 12" Abv. Insul. 1 1/2" Clr. Airspace  
 Provide Intake Vents (as detailed or similar)  
 Vented 2x Blocking w/ Toe Nail (Per IRC R806)  
 Hurricane Ties per Truss Manuf. Specs @ each truss  
 Provide Screened soffit vents 1 sq.ft. per 150 Sq.ft. of attic area.( sq.ft).

**UPPER FLOOR CEILING ASSEMBLY:**

Bottom Truss Ceiling  
 Min. R-49 Batt Insulation  
 1/2" GWB

**TYP. EXTERIOR WALL CONSTRUCTION:**

Siding to match existing Wood Lap house siding.  
 5# felt building wrap  
 2x6 studs @ 16 OC (std framing)  
 Min. R-21 Batt Insulation (Heated Spaces)  
 1/2" GWB @ inside face per plan

**UPPER FLOOR ASSEMBLY:**

See Structural for Floor Joists & subfloor details

**1HR U311 STC 50 - CEILING ASSEMBLY**

U311: Resilient furring channels attached 24" o.c. horizontally to one side of 2x4 wood studs 16" or 24" o.c. with 1-1/4" type W screws. 1/2" x 3" gypsum board filler strips attached to floor and ceiling plates with 1-1/4" type W screws 3'-0" o.c. 5/8" (15.9 mm) Fire-Shield C Gypsum Board applied horizontally to channel with 1" type S screws 12" o.c. on all edges and intermediate channels and attached to top and bottom plates with 1-7/8" type S screws 12" o.c. Vertical butt joints between studs back-blocked with 20" long piece of resilient channel. 5/8" (15.9 mm) Fire-Shield C Gypsum Board applied horizontally on opposite side directly to wood studs with 1-1/4" type W screws spaced 12" o.c. Horizontal joints in line, vertical joints staggered each side. Mineral wool insulation 3" thick friction fit between studs.

**FLOOR ASSEMBLY:**

Finish floor by owner  
 New S.O.G. Concrete floor  
 Min. R10 Rigid Insulation  
 Compact Crushed Rock

SHEET NUMBER  
**A8**  
Revision #:

DATE: 06.12.20  
 REV #10: 07.17.23  
 DRAWN BY: K.C.

SECTION & DETAILS

**TOM & KIM TSO**  
**ADDITION & ADU**  
8802 SE 9TH ST. MERCER ISLAND WA 98040

**KESH DESIGN LINES LLC**  
 425 344 9906

SEE NEW STRUCTURAL (S) SHEETS



KESH DESIGN LINES LLC

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**TOM & KIM TSO**  
**ADDITION & ADU**

8802 SE 9TH ST. MERCER ISLAND WA 98040

**FRAMING PLAN & NOTES**

DATE: 06.12.20  
REV #10: 07.17.23  
DRAWN BY: K.C.

SHEET NUMBER

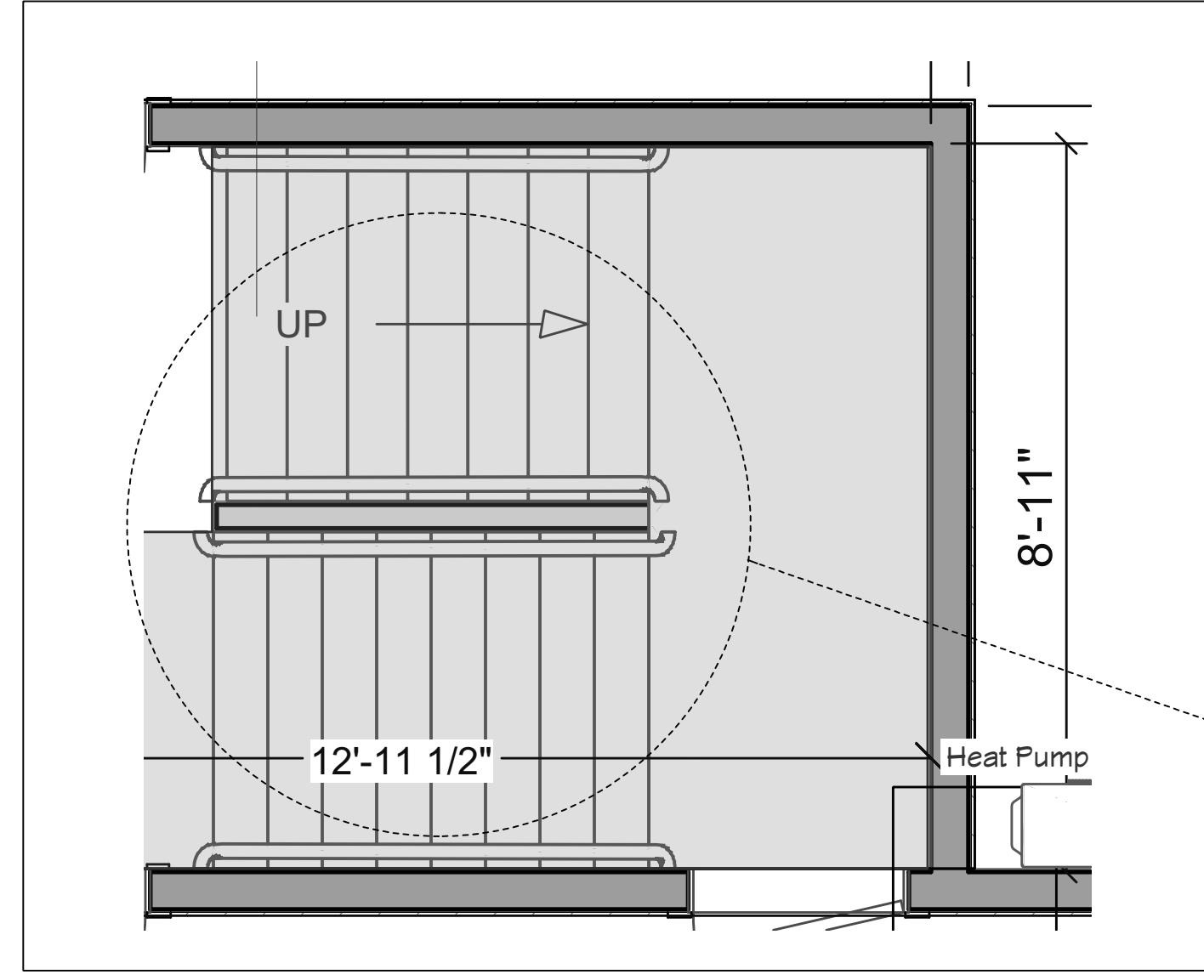
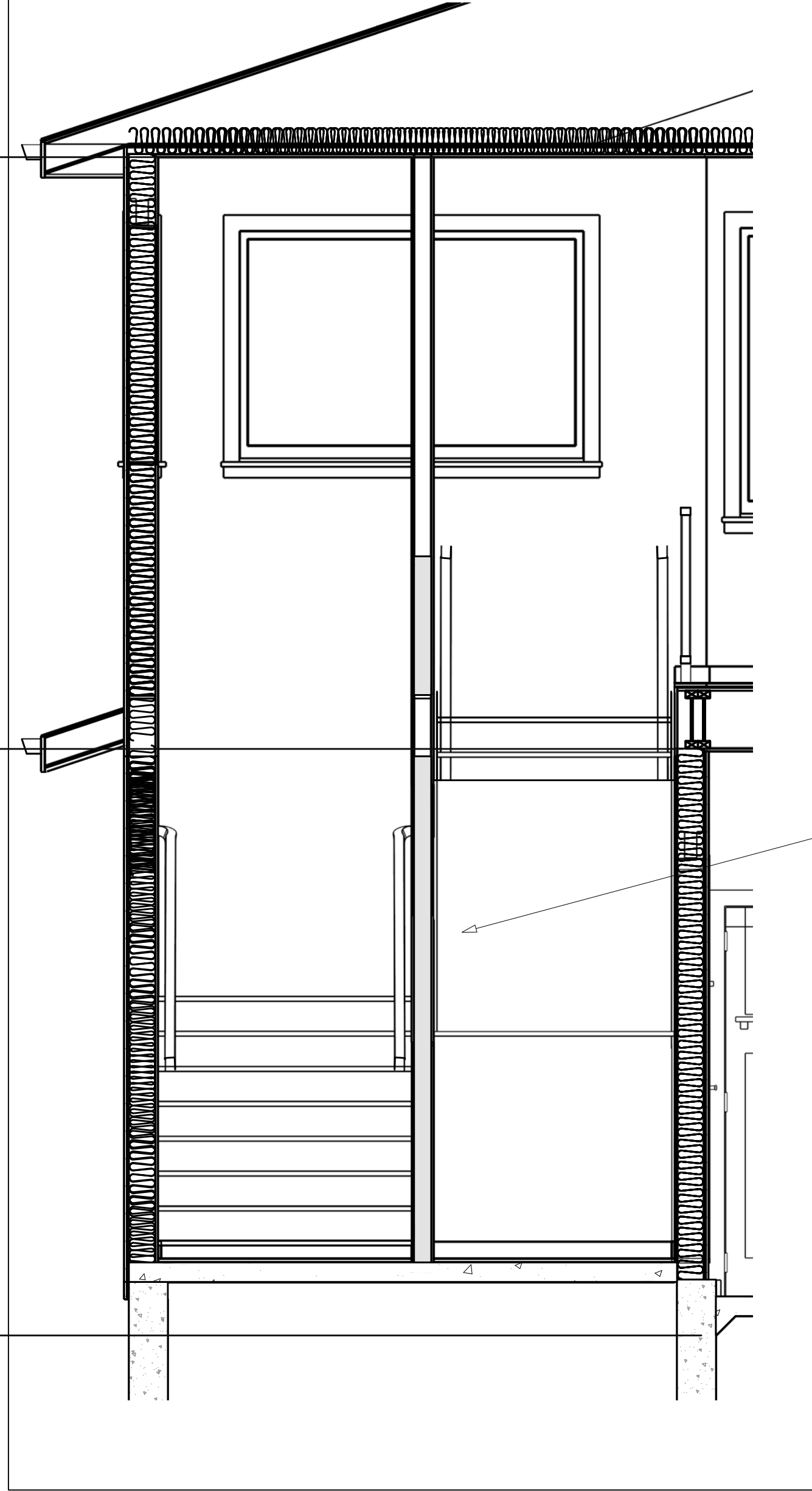
**A9**

Revision #:



**S1 STAIR DETAILS**

SCALE: = 1'-0"



11  
D2  
5  
D1



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425 344 9906

**TOM & KIM TSO**  
**ADDITION & ADU**  
8802 SE 9TH ST. MERCER ISLAND WA 98040

**STAIR DETAILS**

DATE: 06.12.20  
REV #10: 07.17.23  
DRAWN BY: K.C.

SHEET NUMBER  
**A10**  
Revision #:

**ROOF FRAMING NOTES**

1. USE 4x10 OR 6x8 DF #2 FOR BEAMS AND HEADERS UNO.
2. ALL RAFTERS TO BE 2x12 HF #2 AT 24" O.C. TYPICAL UNO.
3. ALL TRUSSES TO BE AT 24" O.C. TYPICAL UNO.
4. PROVIDE ROOF VENTS PER SEC. R206 IRC.
5. ROOF PITCH TO BE 4:12 PICAL UNLESS OTHERWISE NOTED.
6. 36" O.H. TYPICAL • EAVES 4 6" O.H. TYPICAL • GABLE ENDS, RAKES.
7. APPROVED ANCHORS SHALL BE USED AT ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TRUSS (PER TRUSS MANUF.) WHERE APPLICABLE. PROVIDE "SIMPSON" HI FRAMING ANCHORS AT EVERY RAFTER/TRUSS AT EACH END AND AT GABLE END TRUSSES.
8. VENTED BLOCKING OVER SUPPORTS.
9. CHIMNEY HEIGHT TO BE 2'-0" MIN. ABOVE ANY PORTION OF BUILDING WITHIN 10'-0" PER IRC SECTION R1001.6
10. BRACING: (STICK FRAMED AREAS ONLY)
  - (2) 2x4 UP TO 10' LONG.
  - (2) 2x6 10' TO 14' LONG.
  - (3) 2x6 OVER 14' LONG.
11. PLATE HEIGHTS:
  - MAIN FLOOR 9'-0", TYP. UNO.
  - UPPER FLOOR 9'-0", TYP. UNO.
12. TRUSSES:
  - CARRY MFR. STAMP.
  - DO NOT ALTER WITHOUT BUILDING DEPARTMENT APPROVAL.
  - INSTALL AND BRACE PER MFR. SPEC.
  - NON-BEARING WALLS SHALL BE HELD DOWN FROM THE TRUSS BOTTOM CHORDS WITH AN APPROVED FASTENER (SUCH AS SIMPSON STC).
13. CONTRACTOR TO VERIFY LOCATION OF ALL ROOF SUPPORT BRACING OR POSTING AND PROVIDE ADEQUATE BEARING TO FOUNDATION.
14. HANGERS AT POSITIVE CONNECTIONS TO BE SIMPSON OR EQUAL.

**TRUSS FRAMING NOTES**

- TRUSS ENGINEERING: PER IRC R202.10.1 TRUSS ENGINEER OF RECORD WHO WILL REVIEW, APPROVE AND NOTE ON THE DOCUMENTS THAT THEY HAVE FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE ENGINEER-APPROVED DOCUMENTS WILL THEN BE FORWARDED TO THE BUILDING OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO FRAMING INSPECTION. CITY APPROVED DOCUMENTS SHALL BE ON THE JOB SITE AT INSPECTIONS. TRUSS ENGINEERING SHALL INCLUDE SPECIFIC TRUSS BRACING REQUIREMENTS.

**NOTE**

**VENTILATION CALCULATIONS AND REQUIREMENTS**

AT LEAST 40% & NOT MORE THAN 50% OF REQUIRED VENTS SHALL BE IN UPPER PORTION OF VENTILATED ROOF SPACE (MIN. 3' ABOVE EAVE OR CORNICE VENTS) WITH THE BALANCE OF REQUIRED VENTILATION PROVIDED BY EAVE VENTING.

PER IRC 206.1 ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FOR WHERE CEILING IS A FLOOR/CEILING ASSEMBLY. CEILING VENTILATION SHALL HAVE CROSS VENTILATION OF EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION RESISTANT WIRE MESH, WITH 1/8" MIN. & 1/4" MAX. OPENINGS.

IF EAVE VENTS ARE INSTALLED INSULATION SHALL NOT OBSTRUCT THE FREE FLOW OF AIR (MIN. 1" SPACE BETWEEN INSULATION AND ROOF SHEATHING • VENT LOCATION.

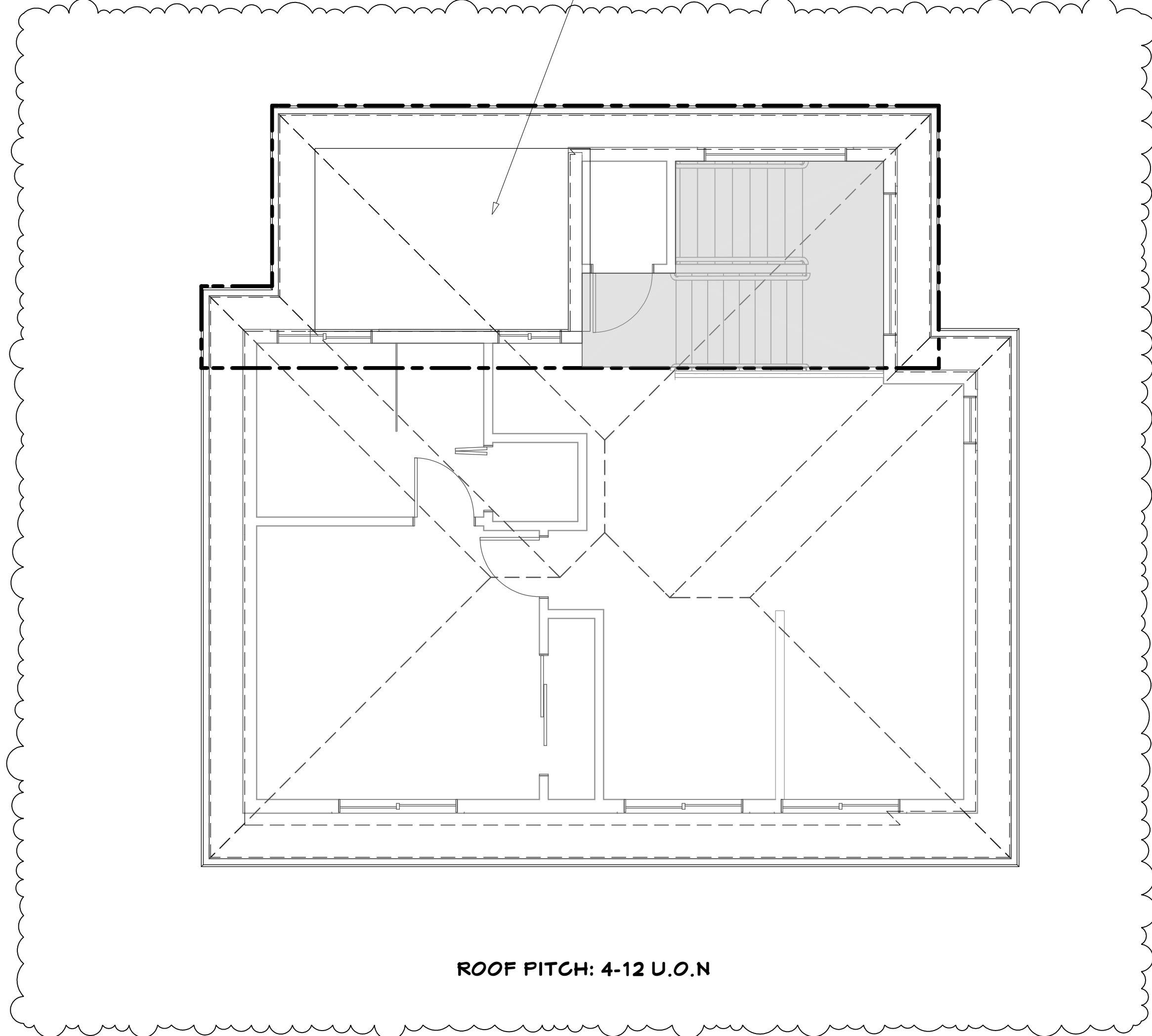
BAFFLING OF THE VENT OPENINGS SHALL BE INSTALLED. BAFFLES SHALL BE RIGID AND WIND-DRIVEN. MOISTURE RESISTANT. IF FEASIBLE BAFFLES SHOULD BE INSTALLED FROM THE TOP OF THE OUTSIDE OF THE EXTERIOR WALL, EXTENDING INWARD, TO A POINT 6" VERTICALLY ABOVE THE HEIGHT OF NON-COMPRESSIBLE INSULATION. VERTICALLY ABOVE LOOSE FILL INSULATION. (ALL CALCULATIONS WILL BE NET FREE AREA.)

1444 SQ. FT. OF ATTIC AREA/300+4.81 SQ. FT. OF VENTILATION REQUIRED (694 SQ. INCHES)  
 HIGH VENT • 341 SQ. IN.  
 LOW VENT • 341 SQ. IN.

NOTE: EAVE VENTING PROVIDED BY 3x7" DIAMETER "BIRD HOLES" PER EAVE BLOCK (1 1/2" sq. in. PER BLOCK).

NOTE: UPPER ROOF VENTING PROVIDED BY 1"x1" ROOF VENTS. (49 # IN. PER VENT)

TPA or OTHER MEMBRANE ROOF ON LOWER LEVEL (per manufactures installation instructions)



ROOF PITCH: 4-12 U.O.N

**ROOF PLAN**

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

**FIREBLOCKING AND DRAFTSTOPPING**

PER IRC SECTION R602.6 FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED VERTICAL AND HORIZONTAL DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- 1) IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROUS OF STUDS OR STAGGERED STUDS AS FOLLOWS: A) VERTICALLY AT THE CEILING AND FLOOR LEVELS. B) HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
- 2) AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR IN SOFFITS, DROP CEILING, AND COVE CEILING.
- 3) IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R312.2.
- 4) AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
- 5) FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES SEE IRC SECTION R1003.15.
- 6) FIREBLOCKING OF CORNICES OF A TWO FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPERATION. FIREBLOCKING MATERIALS SHALL CONSIST OF MATERIAL LISTED IN IRC SECTION R602.6.1. LOOSE FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED. THE INTEGRITY OF ALL FIREBLOCKS SHALL BE MAINTAINED.

PER IRC SECTION R502.12 DRAFTSTOPPING: WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPPING SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SF. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROX. EQUAL AREAS, WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:  
 1) CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.  
 2) FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.  
 DRAFTSTOPPING MATERIALS SHALL CONSIST OF MATERIALS LISTED IN IRC SECTION R502.12.1.

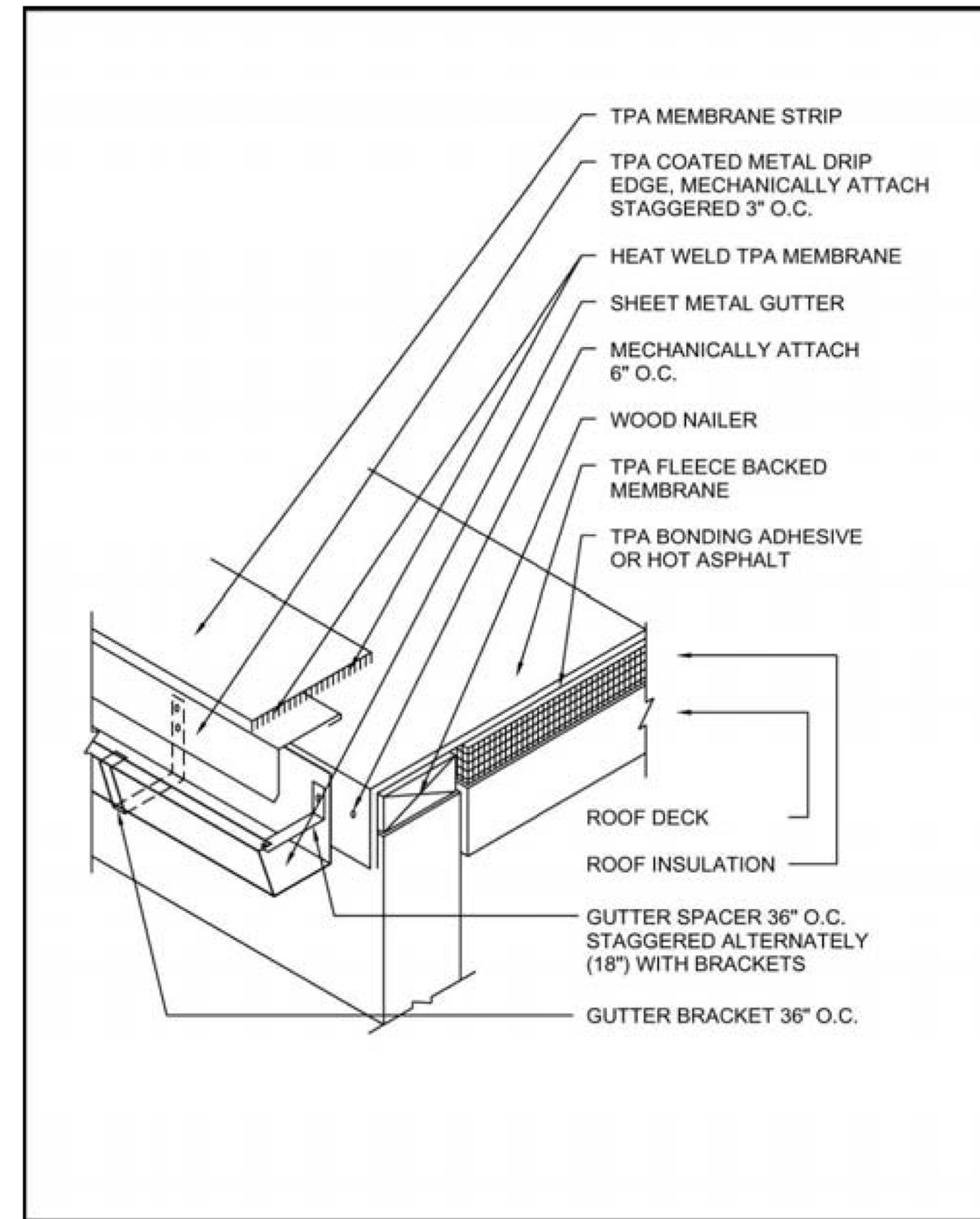
**WOOD TRUSSES**

TRUSSES SHALL BE DESIGNED BY A REGISTERED WASHINGTON STATE ENGINEER AND FABRICATED FROM ONLY THESE DESIGNS. TRUSSES TO BE STAMPED BY THE MANUFACTURER OR BY A QUALITY CONTROL AGENCY SUCH AS THE WASHINGTON STATE TRUSS FABRICATORS COUNCIL. ROOF TRUSS DESIGN SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD WITH AN APPROVED FASTENER (SUCH AS SIMPSON STC) TO ENSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL. APPROVED HANGERS SHALL BE USED AT ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO THE MAIN GIRDER TRUSS. ALL ROOF TRUSSES SHALL BE INTEGRAL PART OF THE WHOLE BUILDING. ROOF TRUSSES SHALL HAVE JOINTS WELL FITTED AND SHALL HAVE ALL TENSION MEMBERS WELL TIGHTENED BEFORE ANY LOAD IS PLACED UPON THE TRUSS. DIAGONAL AND SWAY BRACING SHALL BE USED TO BRACE ALL TRUSSES. TRUSSES SHALL BE DESIGNED FOR UNIFORM LOADING AS FOLLOWS:

TOP CHORD 35 PSF OF TRIBUTARY AREA  
 BOTTOM CHORD 10 PSF OF TRIBUTARY AREA  
 TILE ROOF 45 PSF TOP CHORD AND 5 PSF BOTTOM CHORD

5/8" FORE CLAY (OR EQUIVALENT) PER IRC SECTION R1001.8

**TPA MEMBRANE ROOF OR SIMILAR**



F

**Per R802.10 Wood Trusses**

ATTIC VENTILATION: AREA / 300

PROVIDE 1" MIN. AIR GAP AT EAVES WITH INSULATION BAFFLES TYP. AT ALL TRUSS BAYS.

PROVIDE GABLE VENTS ALL GABLE ENDS.

PROVIDE GALV. ROOF VENTS ON BACKSIDE OF ROOFLINE ABOVE CONDITIONED AREA.

1. ALL TRUSSES SHALL CARRY MANUFACTURERS STAMP.
2. ALL TRUSSES SHALL BE INSTALLED & BRACED TO MANUFACTURERS SPECIFICATIONS.
3. ALL TRUSSES WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPT. APPROVAL OF ENGINEERING CALCULATIONS.
4. ALL TRUSSES SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION.
5. NON BEARING WALLS SHOULD BE HELD DOWN FROM THE TRUSS BOTTOM CHORD W/ SIMPSON STC TO INSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL.
6. ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY TRUSS MANUFACTURE.
7. ALL ROOF FRAMING 24" O.C.
8. ALL ROOF PITCH 8:12
9. SCISSORS TRUSS CEILING PITCH 2:12.
10. TRUSSES MANUFACTURED BY (TO BE DETERMINED)
11. ALL OVERHANGS 16".

SHEET NUMBER  
**A11**

DATE: 06.12.20  
 REV #10: 07.17.23  
 DRAWN BY: K.C.

ROOF PLAN

**TOM & KIM TSO**  
**ADDITION & ADU**  
 2802 SE 9TH ST. MERCER ISLAND WA 98040

**KESH DESIGN LINES LLC**  
 425 344 9906



SEE NEW STRUCTURAL (S) SHEETS



KESH DESIGN LINES LLC

425 344 9906

**TOM & KIM TSO**  
**ADDITION & ADU**  
2802 SE 9TH ST. MERCER ISLAND WA 98040

**SHEARWALL DETAILS**

DATE: 06.12.20  
REV #10: 07.17.23  
DRAWN BY: K.C.

SHEET NUMBER

**A12**

Revision #:

WINDOW SCHEDULE										
ROOM NAME	NUMBER	QTY	FLOOR	WIDTH	HEIGHT	EGR ESS	TEM PERE D	DESCRIPTION	U-FACTOR	3D EXTERIOR ELEVATION
ADU GREAT	W01	1	2	24"	60"			SINGLE CASEMENT-HR	0.28	
ADU BEDROOM 1	W02	1	1	48"	48"	YES		LEFT SLIDING	0.28	
ADU GREAT	W03	1	2	32 1/8"	48"			LEFT SLIDING	0.28	
ADU BATH	W04	1	2	48"	19"			LEFT SLIDING	0.28	
ADU BEDROOM 1	W06	1	2	60"	48"	YES		RIGHT SLIDING	0.28	
ADU GREAT	W07	2	2	60"	48"	YES		RIGHT SLIDING	0.28	
ADU OPEN BELOW	W10	2	2	72"	48"	YES		FIXED GLASS	0.28	

DOORS AND WINDOWS

DOORS TO THE EXTERIOR SHALL HAVE MAX. 7 3/4" STEP TO MIN. 36" DEEP X (12" + OPERABLE DOOR WIDTH) MIN. LANDING ALL GLAZING TO BE PER WSEC TABLE 6-1 UNLESS NOTED OTHERWISE.  
 ALL SKYLIGHTS AND SKYWALLS TO BE SAFETY LAMINATED GLASS UNLESS NOTED OTHERWISE.  
 FRENCH DOORS TO BE DOUBLE GLAZED NON TESTED ASSUMED U VALUE OF .80, UNLESS NOTED OTHERWISE WITH SAFETY GLAZING.  
 FACTORY BUILT WINDOWS TO BE CONSTRUCTED TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER LINEAL FOOT OF OPERABLE SASH PERIMETER AS TESTED BY STANDARD ASTM E 283/73. SITE BUILT AND MILL WORK SHOP BUILT WOODEN SASH ARE EXEMPT FROM INFILTRATION CRITERIA ABOVE BUT MUST BE MADE TIGHTLY FITTING AND WEATHER STRIPPED OR CAULKED.

SLIDING GLASS DOORS TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM INFILTRATION PER SQUARE FOOT OF DOOR AREA. EACH LIGHT SHALL BEAR THE MANUFACTURER'S LABEL DESIGNATING THE TYPE AND THICKNESS OF GLASS. IDENTIFICATION OF GLAZING, IN HAZARDOUS LOCATIONS SHALL BE IN ACCORDANCE WITH IRC SECTION (B) 308.4  
 PROVIDE SOLID CORE DOORS \* ENTRY AND FROM GARAGE TO LIVING AREAS ( AS WELL AS ANY OTHER DOORS TO THE EXTERIOR. PROVIDE SELF-CLOSURE DEVICE ON DOOR TO GARAGE. PER IRC. SEE PLANS FOR:  
 - MAXIMUM GLAZING AREA.  
 - GLAZING MFG. AND MODEL NUMBERS.  
 - WEIGHTED UA CALCULATION FOR SUB-STANDARD GLAZING.

SAFETY GLAZING LOCATIONS AS PER IRC SECTION (B) 308.4:  
 1. INGRESS AND EGRESS DOORS  
 2. SLIDING GLASS DOORS, SUNGLASS GLASS DOORS  
 3. SHOWER AND BATH TUB ENCLOSURES  
 4. GLAZING W/ THE EXPOSED EDGE WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION. 4 BOTTOM EDGE IS LESS THAN 60" ABOVE THE WALKING SURFACE  
 5. GLAZING GREATER THAN 9 SF, LESS THAN 18" ABOVE FINISHED FLOOR  
 6. GLAZING IN GUARDRAILS  
 7. GLAZING IN STAIRWELLS AND WITHIN 3' OF TOP / BOTTOM OF STAIRS.  
 UNLESS NOTED OTHERWISE, INSULATION TO BE PER WSEC TABLE 6-1  
 INSULATION Baffles TO MAINTAIN 1" ABOVE INSULATION  
 Baffles TO EXTEND 6" ABOVE BATT INSULATION  
 Baffles TO EXTEND 12" ABOVE LOOSE FILL INSULATION.  
 INSULATE BEHIND TUBS/SHOWERS, PARTITIONS AND CORNERS.  
 FACE STABLE Batts  
 FRICTION FIT FACED Batts  
 USE 4 MIL POLY VAPOR RETARDER AT WALLS  
 USE PVA PAINT WITH A DRY CUP PERM RATING OF 1 MAX.

- WALLS BETWEEN HOUSE AND GARAGE HAVE TO HAVE R-21 UNO.  
 - FLOORS ABY CRAWL SPACES, GARAGE, OR AT CANTILEVERS OVER GRADE HAVE TO HAVE R-30 UNO  
 - ALL ATTIC AT CEILING HAVE TO HAVE R-38 (MIN) UNO.  
 - DUCTS IN UNHEATED SPACES HAVE TO HAVE R-8  
 - GAS WATER HEATERS SHALL MEET REQUIREMENTS OF 202 UPC AND BE 60 LABELED.

MISCELLANEOUS NOTES

- GUARDRAILS TO BE 36" MIN. ABOVE FINISH FLOOR.
- HANDRAILS TO BE 34" - 38" ABOVE NOSING, WITH HANDGRIP OF 1 1/2" - 2" IN.
- OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A SPHERE 4" IN DIAMETER CANNOT PASS THROUGH.
- ONE HOUR FIRE SEPARATIONS BETWEEN GARAGE AND DWELLING. INSTALL 1/2" TYPE-X ON ALL WALLS AND CEILING. BEARING WALLS. STAGGER JOINTS FROM PLYWOOD BELOW WHERE APPLICABLE.
- BEDROOM EMERGENCY EGRESS WINDOWS: MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. WIDTH OF 20" AND MINIMUM 24". MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE.
- EACH SLEEPING ROOM SHALL BE PROVIDED W/ A SMOKE DETECTOR (INTERCONNECTED) PER SECTION (F) R313.1. SMOKE DETECTORS SHALL BE PROVIDED W/ A BATTERY BACK-UP, PER SEC. (F) R313.1 AND, LOCATED PER SECTION (F) R313.1.
- ANCHORED VENEER SHALL BE PROVIDED WITH #2 GA. X 3/4" CORROSION RESISTANT ANCHOR TIES. THE ANCHOR TIES SHALL BE SPACED A MAX. OF 24" O.C. AND SUPPORT NO MORE THAN 2 SQ. FT. OF VENEER. IN SEISMIC ZONE 3 & 4 THE EXTENDED LEG OF THE ANCHOR TIE SHALL LOOP AROUND A #3 GA. CONT. HORIZ. JOINT REINFORCEMENT WIRE.

2018 Washington State Energy Code – Residential  
 Prescriptive Energy Code Compliance for All Climate Zones in Washington  
 Single Family – New & Additions (effective February 1, 2021) Version 1.1

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information	Contact Information
8802 SE 37th ST. MERCER ISLAND WA 98040	Kesh Chavda - KDL Designs LLC
	425 344 9906

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative: Kesh Chavda Date: 04/12/2022

All Climate Zones (Table R402.1.1)	
R-Value <sup>a</sup>	U-Factor <sup>a</sup>
Fenestration U-Factor <sup>b</sup>	n/a
Skylight U-Factor <sup>b</sup>	0.50
Glazed Fenestration SHGC <sup>b,c</sup>	n/a
Ceiling <sup>e</sup>	49
Wood Frame Wall <sup>d,h</sup>	21 int
Floor	30
Below Grade Wall <sup>c,h</sup>	10/15/21 int + TB
Slab <sup>d,f</sup> R-Value & Depth	10, 2 ft

- <sup>a</sup> R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.
- <sup>b</sup> The fenestration U-factor column excludes skylights.
- <sup>c</sup> "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
- <sup>d</sup> R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
- <sup>e</sup> For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
- <sup>f</sup> R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.
- <sup>g</sup> For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
- <sup>h</sup> Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

2018 Washington State Energy Code – Residential  
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 Single Family – New & Additions (effective February 1, 2021)

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control operation of operation.

- Small Dwelling Unit: 3 credits**  
Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
- Medium Dwelling Unit: 6 credits**  
All dwelling units that are not included in #1 or #3
- Large Dwelling Unit: 7 credits**  
Dwelling units exceeding 5,000 sf of conditioned floor area
- Additions less than 500 square feet: 1.5 credits**  
All other additions shall meet 1-3 above

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

Summary of Table R406.2 and 406.3			
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option	User Notes
1	Combustion heating minimum NAECA <sup>a</sup>	0.0	<input type="checkbox"/>
2	Heat pumps <sup>b</sup>	1.0	<input type="checkbox"/>
3	Electric resistance heat only - furnace or zonal	-1.0	<input type="checkbox"/>
4	DHP with zonal electric resistance per option 3.4	0.5	<input type="checkbox"/>
5	All other heating systems	-1.0	<input type="checkbox"/>
Energy Options	Energy Credit Option Descriptions	Credits - select ONE energy option from each category <sup>d</sup>	User Notes
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.2	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.4	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.5	Efficient Building Envelope	2.0	<input type="checkbox"/>
1.6	Efficient Building Envelope	3.0	<input type="checkbox"/>
1.7	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input type="checkbox"/>
2.2	Air Leakage Control and Efficient Ventilation	1.0	<input type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
2.4	Air Leakage Control and Efficient Ventilation	2.0	<input type="checkbox"/>
3.1 <sup>e</sup>	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.2	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.3 <sup>e</sup>	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.4	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.5	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.6 <sup>e</sup>	High Efficiency HVAC	2.0	<input type="checkbox"/>
4.1	High Efficiency HVAC Distribution System	0.5	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>

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Summary of Table R406.2 (cont.)			
Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category <sup>d</sup>	User Notes
5.1 <sup>d</sup>	Efficient Water Heating	0.5	<input type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/>
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input type="checkbox"/>
5.6	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1 <sup>e</sup>	Renewable Electric Energy (3 credits max)	1.0	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
<b>Total Credits</b>		<b>3.0</b>	<input type="checkbox"/> <b>Calculate Total</b> <input type="button" value="Clear Form"/>

- An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
- Equipment listed in Table C403.3.2(4) or C403.3.2(5)
- Equipment listed in Table C403.3.2(1) or C403.3.2(2)
- You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.
- 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max. See the complete Table R406.2 for all requirements and option descriptions.
- Use the single radiobutton in the upper right of the second column to deselect radiobuttons in that group.

Please print only pages 1 through 3 of this worksheet for submission to your building official.

For Building Officials Only

NOTE: See Sheet A.02 for:  
 APPLIANCE SPECS.  
 HEAT PUMP SPECS.  
 WATER HEATER SPECS.

SHEET NUMBER  
**A13**  
 Revision #:

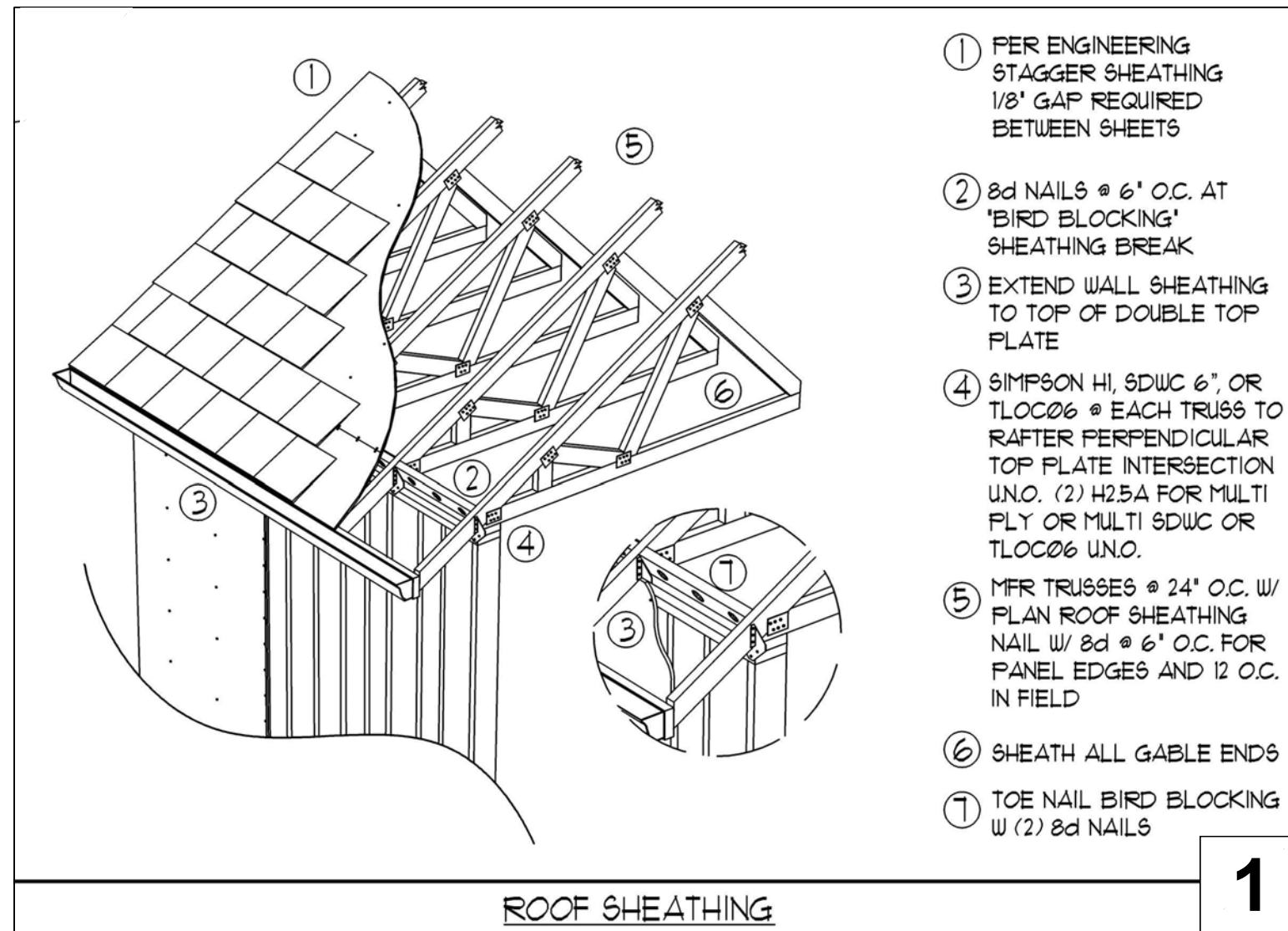
DATE: 06.12.20  
 REV #10: 07.17.23  
 DRAWN BY: K.C.

WINDOW SCHEDULE ENERGY  
 CALCCS.

TOM & KIM TSO  
 ADDITION & ADU  
 8802 SE 37th ST. MERCER ISLAND WA 98040

KESH DESIGN LINES LLC  
 425 344 9906

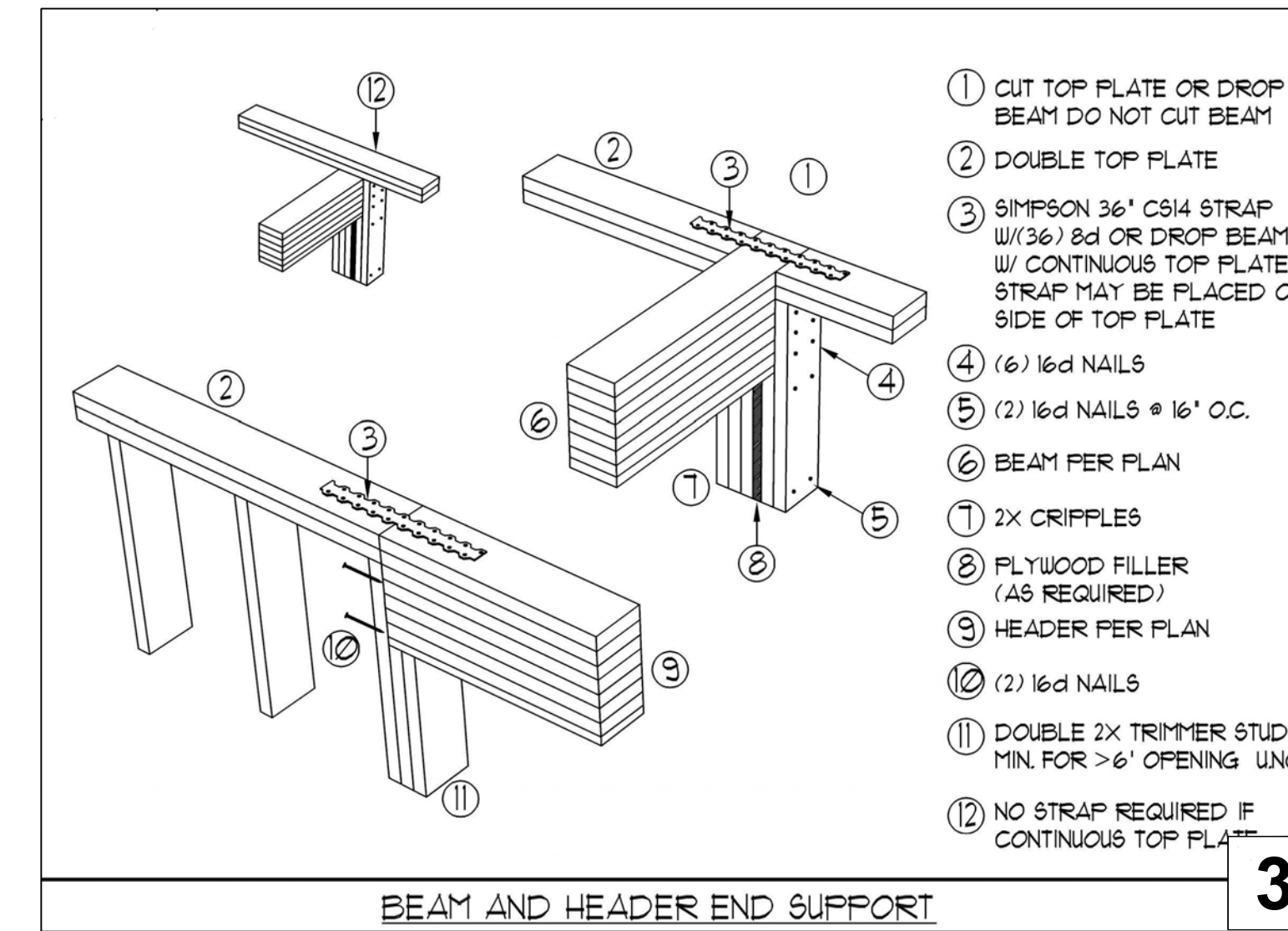




- 1 PER ENGINEERING STAGGER SHEATHING 1/8" GAP REQUIRED BETWEEN SHEETS
- 2 2d NAILS @ 6" O.C. AT "BIRD BLOCKING" SHEATHING BREAK
- 3 EXTEND WALL SHEATHING TO TOP OF DOUBLE TOP FLATE
- 4 SIMPSON HI SDUC @ 6", OR TLOC@ @ EACH TRUSS TO RAFTER PERPENDICULAR TOP FLATE INTERSECTION UNO. (2) H25A FOR MULTI FLY OR MULTI SDUC OR TLOC@ UNO.
- 5 MFR TRUSSES @ 24" O.C. W/ PLAN ROOF SHEATHING NAIL W/ 2d @ 6" O.C. FOR PANEL EDGES AND 12" O.C. IN FIELD
- 6 SHEATH ALL GABLE ENDS
- 7 TOE NAIL BIRD BLOCKING W/ (2) 2d NAILS

ROOF SHEATHING

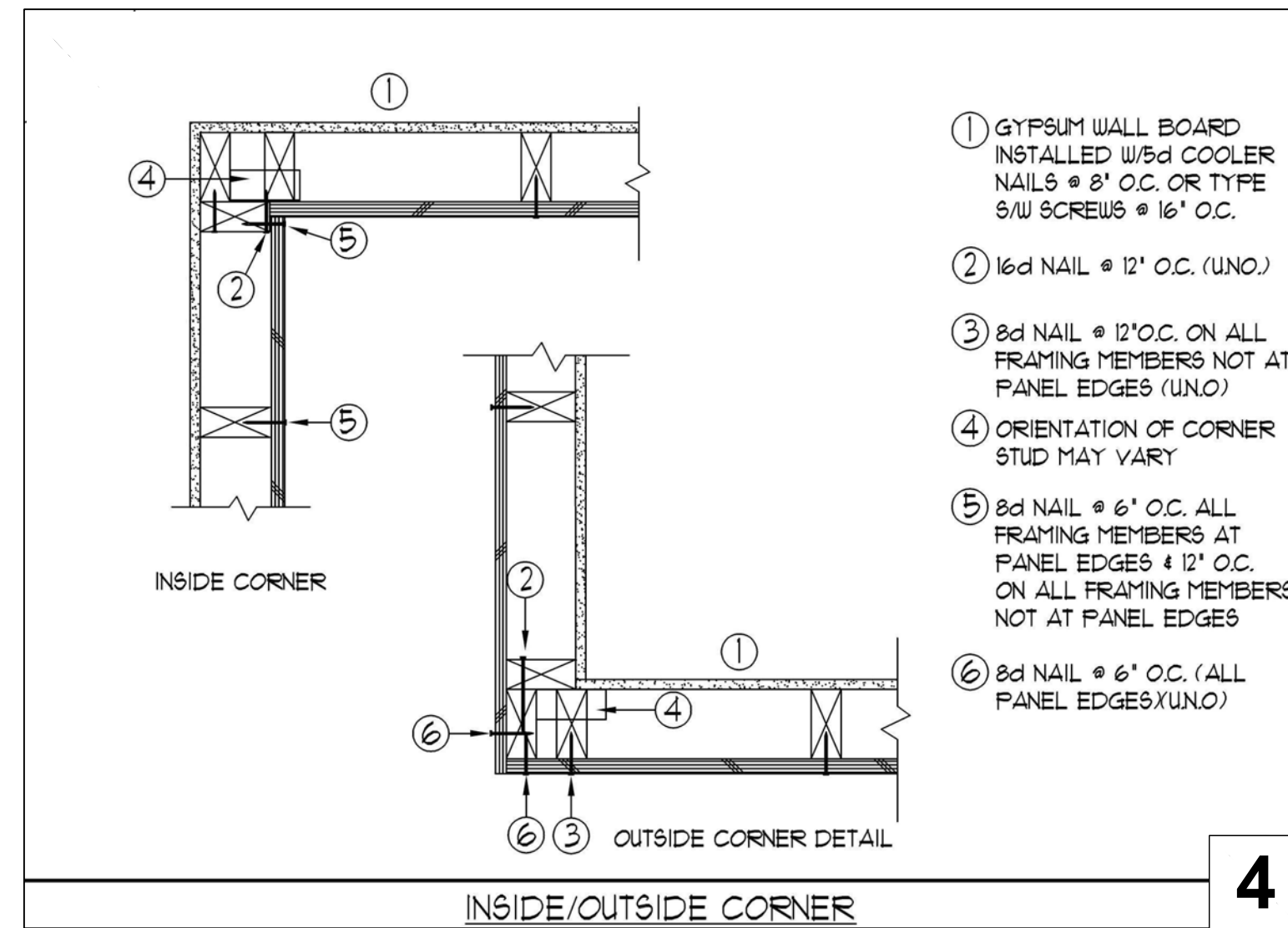
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- 1 CUT TOP FLATE OR DROP BEAM DO NOT CUT BEAM
- 2 DOUBLE TOP FLATE
- 3 SIMPSON 36" CS14 STRAP W/ (36) 2d OR DROP BEAM W/ CONTINUOUS TOP FLATE. STRAP MAY BE PLACED ON SIDE OF TOP FLATE
- 4 (6) 16d NAILS
- 5 (2) 16d NAILS @ 16" O.C.
- 6 BEAM PER PLAN
- 7 2X CRIPPLES
- 8 PLYWOOD FILLER (AS REQUIRED)
- 9 HEADER PER PLAN
- 10 (2) 16d NAILS
- 11 DOUBLE 2X TRIMMER STUDS MIN. FOR >6' OPENING UNO.
- 12 NO STRAP REQUIRED IF CONTINUOUS TOP FLATE

BEAM AND HEADER END SUPPORT

3



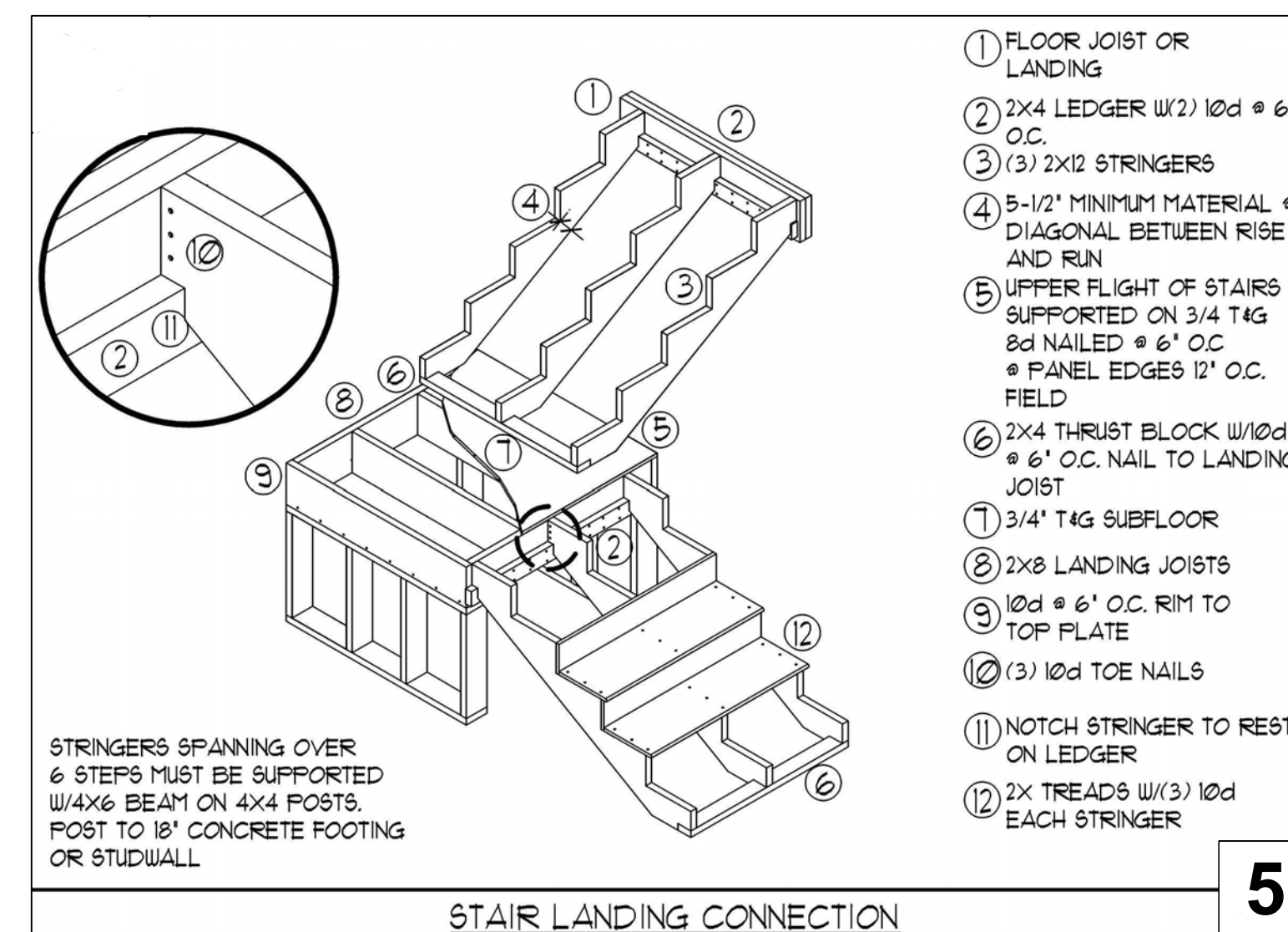
- 1 GYPSUM WALL BOARD INSTALLED W/ 2d COOLER NAILS @ 8" O.C. OR TYPE S/W SCREWS @ 16" O.C.
- 2 16d NAIL @ 12" O.C. (UNO.)
- 3 2d NAIL @ 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES (UNO.)
- 4 ORIENTATION OF CORNER STUD MAY VARY
- 5 2d NAIL @ 6" O.C. ALL FRAMING MEMBERS AT PANEL EDGES @ 12" O.C. ON ALL FRAMING MEMBERS NOT AT PANEL EDGES
- 6 2d NAIL @ 6" O.C. (ALL PANEL EDGES/UNO.)

INSIDE CORNER

OUTSIDE CORNER DETAIL

INSIDE/OUTSIDE CORNER

4

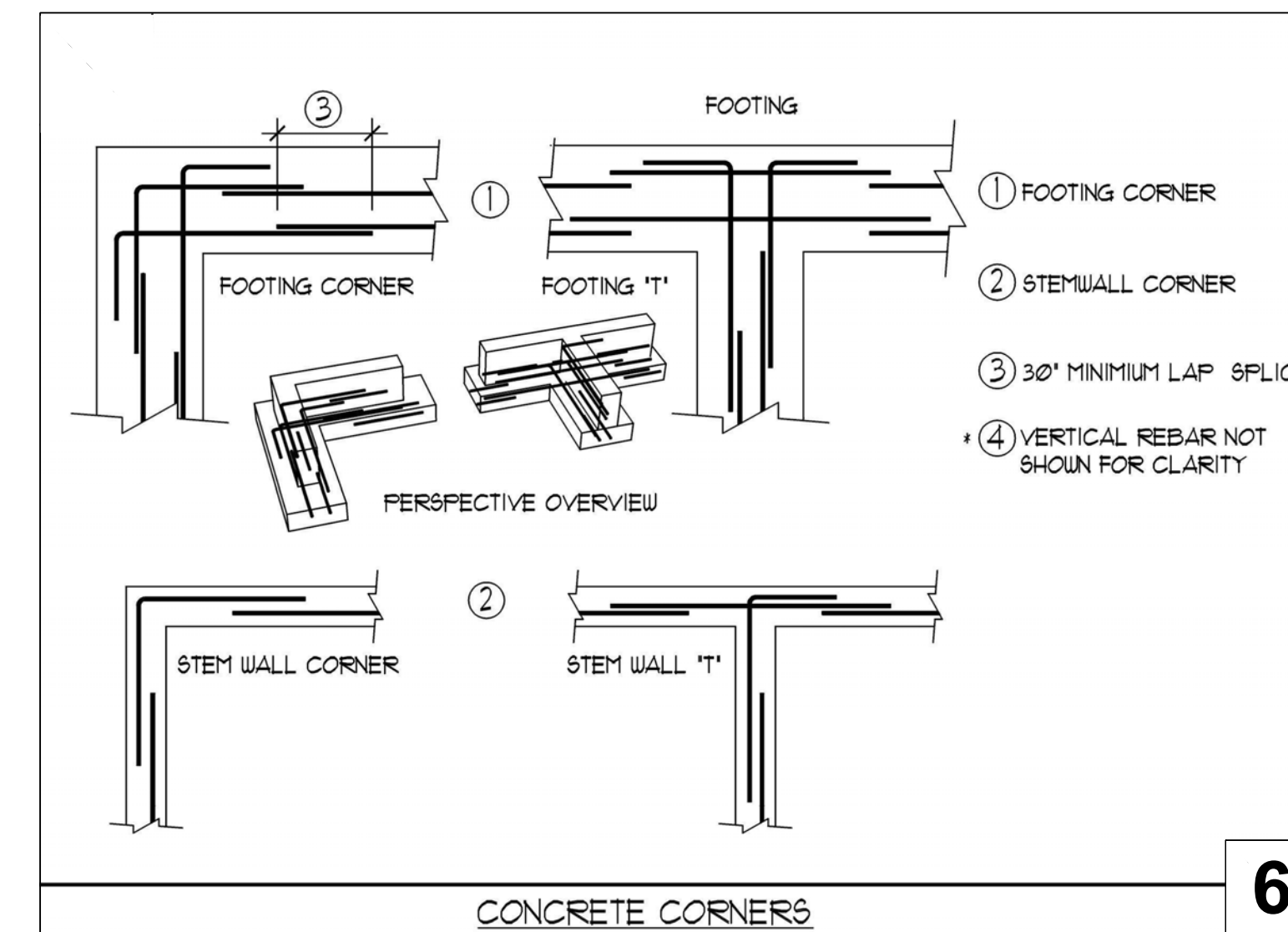


- 1 FLOOR JOIST OR LANDING
- 2 2x4 LEDGER W/ (2) 10d @ 6" O.C.
- 3 (3) 2x12 STRINGERS
- 4 5-1/2" MINIMUM MATERIAL @ DIAGONAL BETWEEN RISE AND RUN
- 5 UPPER FLIGHT OF STAIRS SUPPORTED ON 3/4 T&G 2d NAIL @ 6" O.C. @ PANEL EDGES 12" O.C. FIELD
- 6 2x4 THRUST BLOCK W/ 10d @ 6" O.C. NAIL TO LANDING JOIST
- 7 3/4" T&G SUBFLOOR
- 8 2x8 LANDING JOISTS
- 9 10d @ 6" O.C. RIM TO TOP FLATE
- 10 (3) 10d TOE NAILS
- 11 NOTCH STRINGER TO REST ON LEDGER
- 12 2x TREADS W/ (3) 10d EACH STRINGER

STRINGERS SPANNING OVER 6 STEPS MUST BE SUPPORTED W/ 4x6 BEAM ON 4x4 POSTS. POST TO 18" CONCRETE FOOTING OR STUDWALL

STAIR LANDING CONNECTION

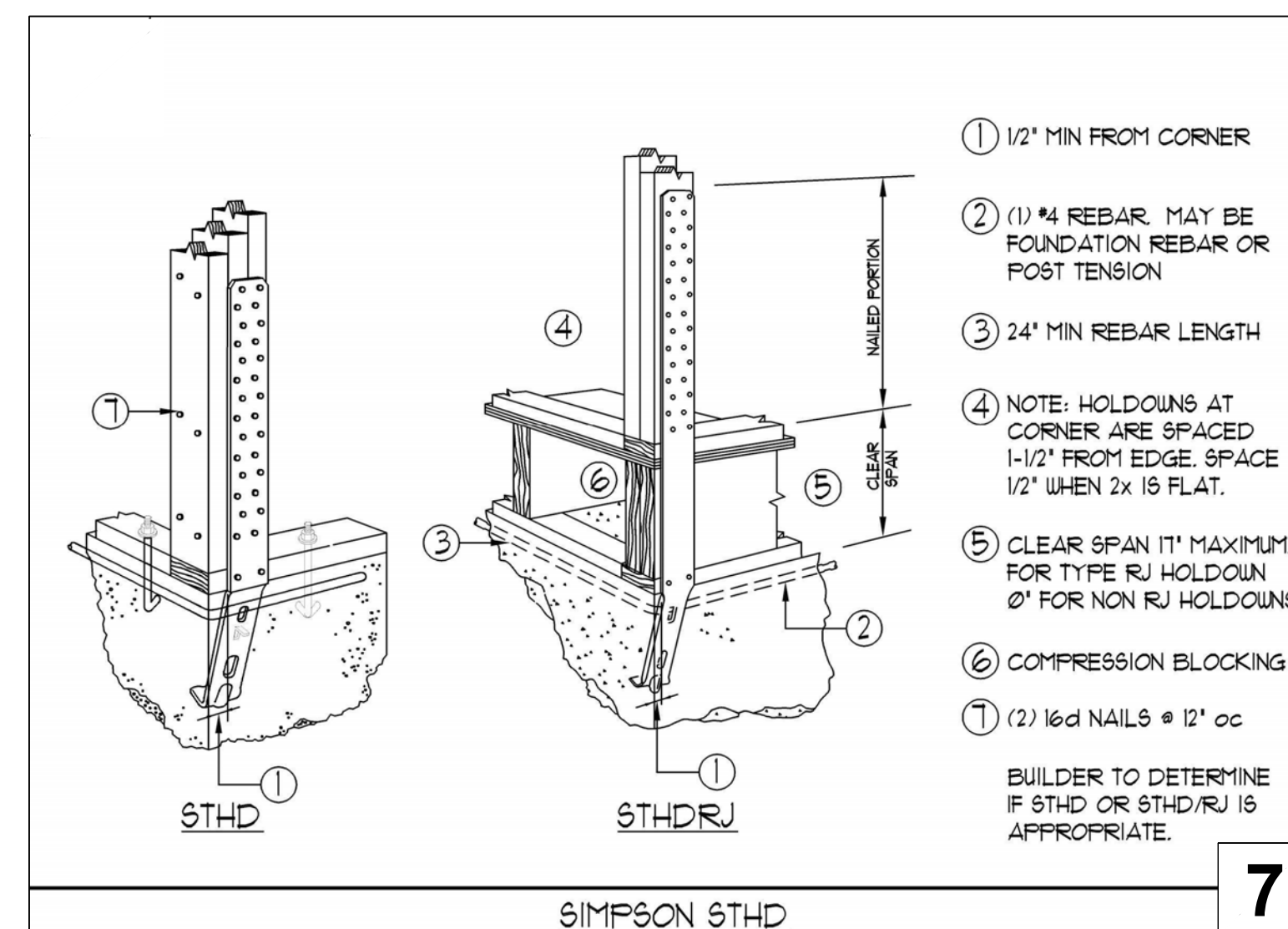
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- 1 FOOTING CORNER
- 2 STEM WALL CORNER
- 3 30" MINIMUM LAP SPLICE
- 4 VERTICAL REBAR NOT SHOWN FOR CLARITY

CONCRETE CORNERS

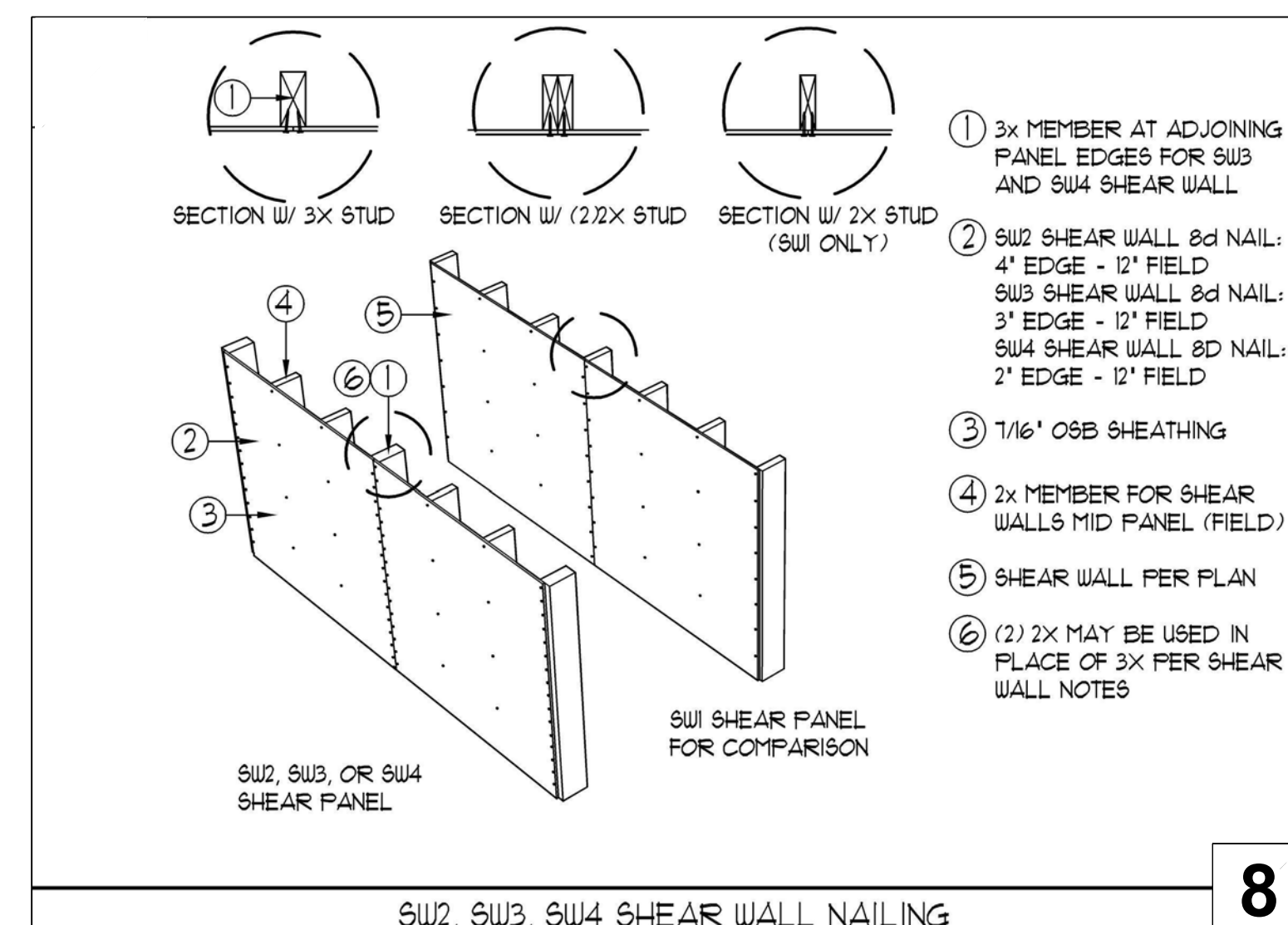
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- 1 1/2" MIN FROM CORNER
  - 2 (1) #4 REBAR MAY BE FOUNDATION REBAR OR POST TENSION
  - 3 24" MIN REBAR LENGTH
  - 4 NOTE: HOLDDOWNS AT CORNER ARE SPACED 1-1/2" FROM EDGE. SPACE 1/2" WHEN 2x IS FLAT.
  - 5 CLEAR SPAN 1" MAXIMUM FOR TYPE RJ HOLDDOWN 0" FOR NON RJ HOLDDOWNS
  - 6 COMPRESSION BLOCKING
  - 7 (2) 16d NAILS @ 12" oc
- BUILDER TO DETERMINE IF STHD OR STHDRJ IS APPROPRIATE.

SIMPSON STHD

7



- 1 3x MEMBER AT ADJOINING PANEL EDGES FOR SW3 AND SW4 SHEAR WALL
- 2 SW2 SHEAR WALL 2d NAIL: 4" EDGE - 12" FIELD  
SW3 SHEAR WALL 2d NAIL: 3" EDGE - 12" FIELD  
SW4 SHEAR WALL 2d NAIL: 2" EDGE - 12" FIELD
- 3 1/16" OSB SHEATHING
- 4 2x MEMBER FOR SHEAR WALLS MID PANEL (FIELD)
- 5 SHEAR WALL PER PLAN
- 6 (2) 2x MAY BE USED IN PLACE OF 3x PER SHEAR WALL NOTES

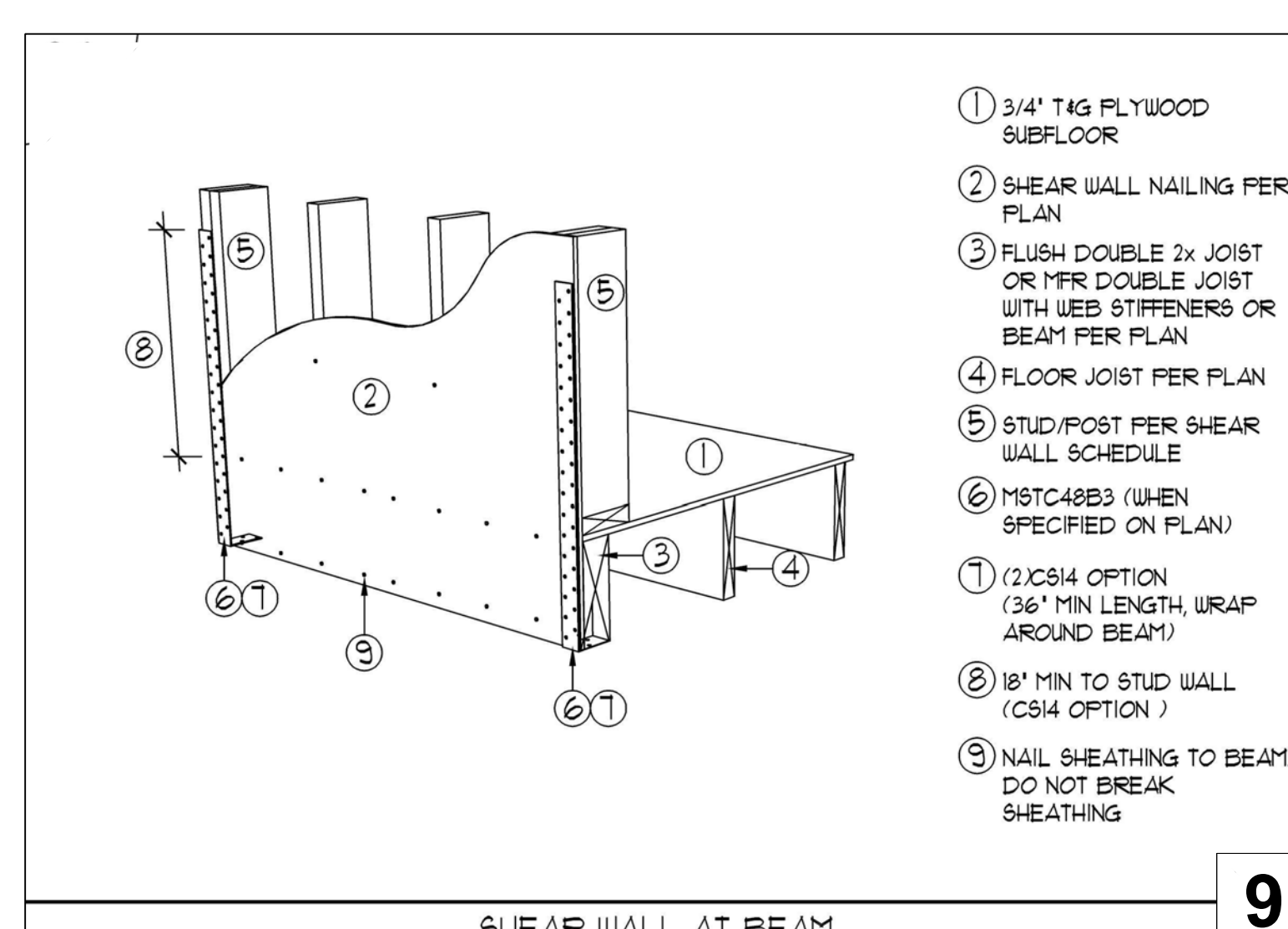
SECTION W/ 3X STUD SECTION W/ (2)2X STUD SECTION W/ 2X STUD (SW1 ONLY)

SW2, SW3, OR SW4 SHEAR WALL

SW1 SHEAR PANEL FOR COMPARISON

SW2, SW3, SW4 SHEAR WALL NAILING

8

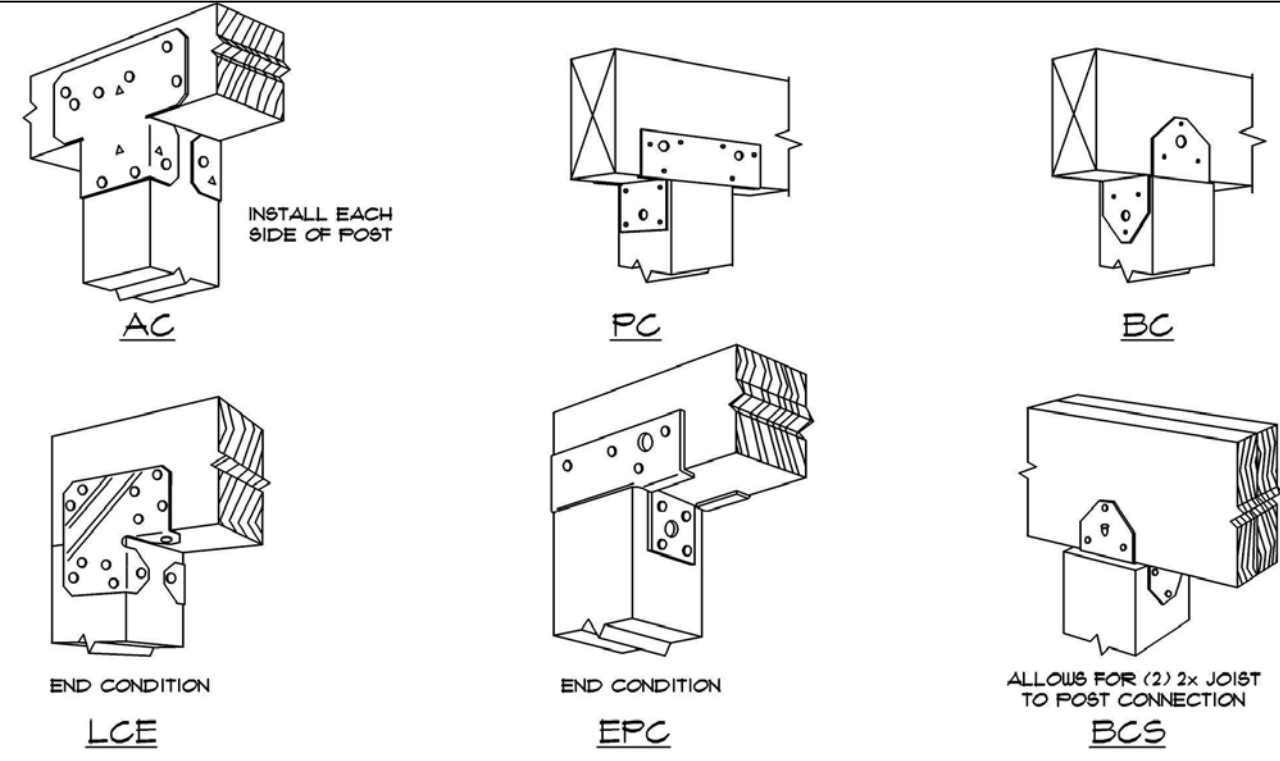


- 1 3/4" T&G FLYWOOD SUBFLOOR
- 2 SHEAR WALL NAILING PER PLAN
- 3 FLUSH DOUBLE 2x JOIST OR MFR DOUBLE JOIST WITH WEB STIFFENERS OR BEAM PER PLAN
- 4 FLOOR JOIST PER PLAN
- 5 STUD/POST PER SHEAR WALL SCHEDULE
- 6 MSTC48B3 (WHEN SPECIFIED ON PLAN)
- 7 (2)CS14 OPTION (36" MIN LENGTH, WRAP AROUND BEAM)
- 8 18" MIN TO STUD WALL (CS14 OPTION)
- 9 NAIL SHEATHING TO BEAM. DO NOT BREAK SHEATHING

SHEAR WALL AT BEAM

9

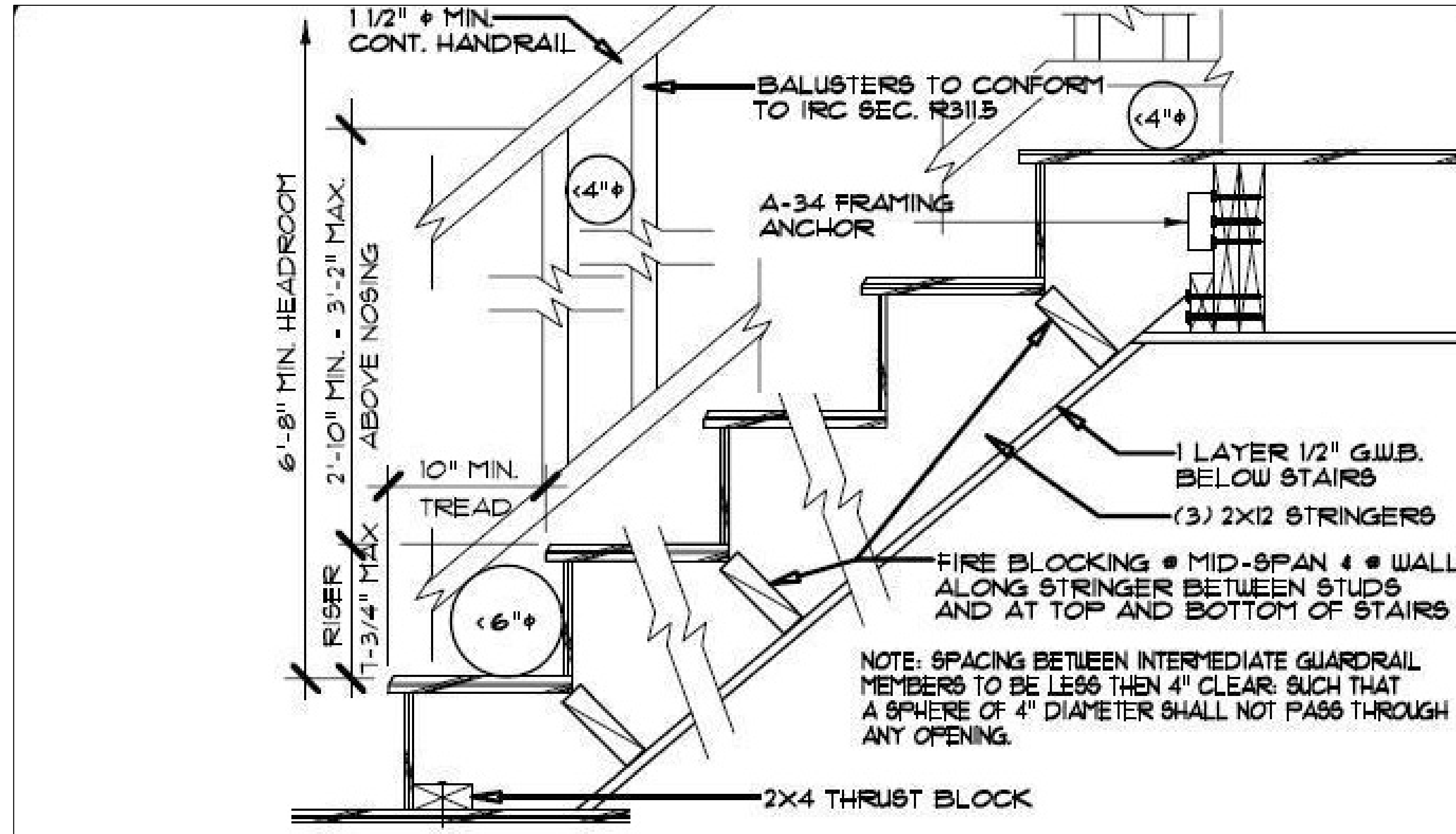




- ① WHERE POSTS AND BEAM OR GIRDER CONSTRUCTION IS USED TO SUPPORT FLOOR FRAMING, POSITIVE CONNECTION SHALL BE PROVIDED TO ENSURE AGAINST UPLIFT AND LATERAL DISPLACEMENT.
- ② ACE/LCE ELIMINATE THE NEED FOR RIGHT AND LEFTS. FOR USE W/ 4x OR 6x LUMBER
- ③ PC/EPC PROVIDES A CUSTOM CONNECTION FOR POST BEAM COMBINATIONS
- ④ PBC/ECS OFFER A LIGHT CAP CONNECTION

BEAM TO POST CONNECTIONS

10

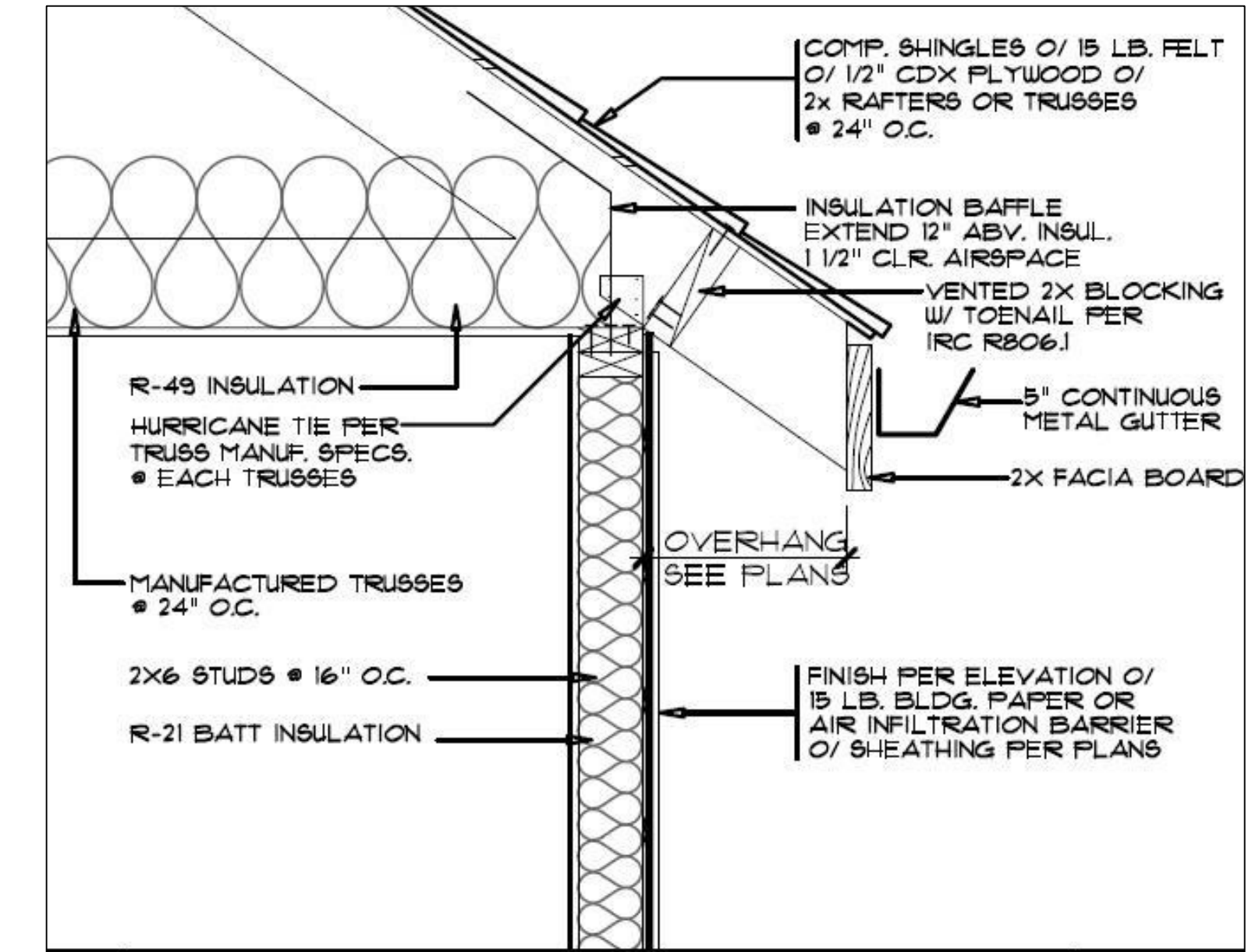


NOTES: PER IRC SECTION 309.6, R311.5.1 ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A MEANS TO ILLUMINATE THE STAIR INCLUDING LANDINGS & TREADS. INTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE LANDING OF THE STAIRWAY. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP OF THE LANDING OF THE STAIRWAY. LIGHTING CONTROLS SHALL BE ACCESSIBLE AT THE TOP & BOTTOM OF EACH STAIRWAY WITHOUT TRAVERSING ANY STEPS. 4 OR MORE RISERS TO HAVE AT LEAST ONE HANDRAIL RUNNING CONTINUOUS THROUGH FULL LENGTH OF STAIR 34' MIN. HT., 38" MAX. HEIGHT. END SHALL RETURN TO WALL OR NEWEL POST OR VOLUTE. HANDRAIL MUST BE STRONG ENOUGH TO RESIST A 200 LB. FT. LOAD IN ANY DIRECTION. HANDRAIL TO BE PRESENT ON AT LEAST ONE SIDE OF STAIR. HAND GRIP PORTION OF HANDRAILS SHALL HAVE CIRCULAR CROSS SECTION OF 1 1/4" MIN. & 2 1/4" MAX. EDGES SHALL HAVE A MIN. RADIUS OF 1/8". ALL REQUIRED GUARDRAILS TO BE 36" MIN. IN HEIGHT.

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WOOD STAIR DETAIL

SCALE  
NTS



14 TOP PLATE TO TRUSS CONNECTION

SCALE  
NTS

SHEET NUMBER

D2

DATE: 06.12.20

REV #10: 07.17.23

DRAWN BY: K.C.

DETAILS & NOTES

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