

PREPARED FOR:

# 8456 SE 40TH RESIDENCE

PROJECT DATA:

PARCEL NO .: PROPERTY TYPE: LAND AREA: ACRES: Q,S,T,R: ADDRESS:

ZONE:

SETBACKS:

SM-7 -24-5 8456 SE 40TH R-8.4

MAX HEIGHT:

MATER: SEWER/SEPTIC: ROAD ACCESS: STREET SURFACE:

502190-0790 R, RESIDENTIAL

11. 930 S.F. MERCER ISLAND, WA 98040

FRONT: 20 FEET

REAR: 25 FEET SIDE: 5 FT. MIN. 30 FEET

WATER DISTRICT PUBLIC PAVED

DESIGN TEAM:

OWNER:

URBAN DESIGN GROUP 15445 53rd AVE. S. STE. 110 TUKMILA, MA 98188 (206) 838-8250 urbandesigncenter@yahoo.com CONTACT: PAVEL MELNIK

NN ENGINEERING STRUCTURAL ENGINEER:

P.O. BOW 39681 LAKEWOOD, WA 98499 (253) 250-6651 NNENGINEERING@COMCAST.NET CONTACT: NORM P. NAVARRO

PHILIP SUDO Q LLC mackuntu@gmail.com laurieyang92@gmail.com CONTACT: KUN QIAN & LAURIE QIAN





AO COVER BOUNDARY/TOPOGRAPHIC SURVEY ARCHITECTURAL SITE PLAN CIVIL ENGINEERING TESC/DEMO/CSWPPP DRAINAGE SITE PLAN DETENTION DETAIL ARCHITECTURAL PLAN GENERAL NOTES AND PLAN PREVIEW ENERGY CREDITS OPTIONS GROSS FLOOR AREA (GFA) A2.2 PARKING MAIN FLOOR PLAN UPPER FLOOR PLAN FRONT AND REAR ELEVATIONS LEFT AND RIGHT ELEVATIONS PERSPECTIVE VIEWS BUILDING CROSS-SECTION AND DETAILS ROOF LAYOUT SCHEDULES AND NOTES A10 DETAILS A11 A12 PROJECT DETAILS HARDIE PANEL SIDING DETAILS A13 ARTISAN LAP SIDING DETAILS STRUCTURAL PLAN GENERAL NOTES **S1.1** 51.2 GENERAL NOTES FOUNDATION DETAILS FRAMING DETAILS FOUNDATION/ FLOOR FRAMING UPPER FLOOR FRAMING 56 ROOF FRAMING

3D RENDERING NOTES:

3D ELEVATIONS ARE FOR REFERENCE ONLY. THESE SHOULD NOT BE USED TO DETERMINE ANY PORTION OF THE CONSTRUCTION OTHER THAN GENERAL MATERIAL AND APPEARANCE. REFER TO ELEVATION SHEETS FOR DETAILS.

PROJECT DESCRIPTION:

SINGLE FAMILY RESIDENCE (4 016 S.F.) AND ATTACHED 2-CAR GARAGE (500 S.F.).

BUILDING DEPARTMENT NOTES:

FIRE SPRINKLER'S REQUIRED BY SEPARATE PERMIT







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SUBMITTAL/REVISION: DATE: SUBMITTED -/-/2022 REVISED -/-/2022

DESIGN BY: PAVEL MELNIK DRAFTED BY: ANNA KONYAKINA

SHEET TITLE:

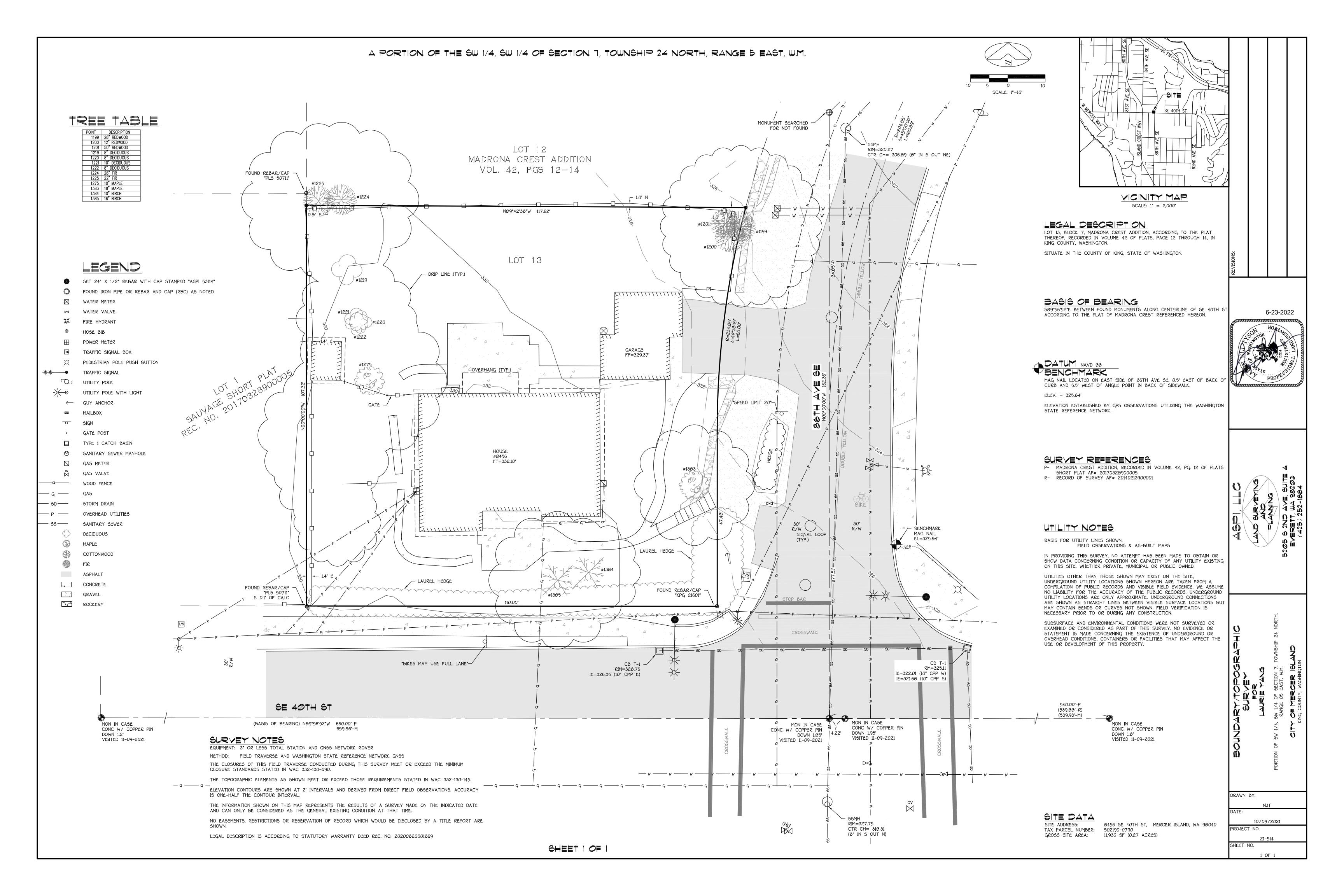
COVER SHEET

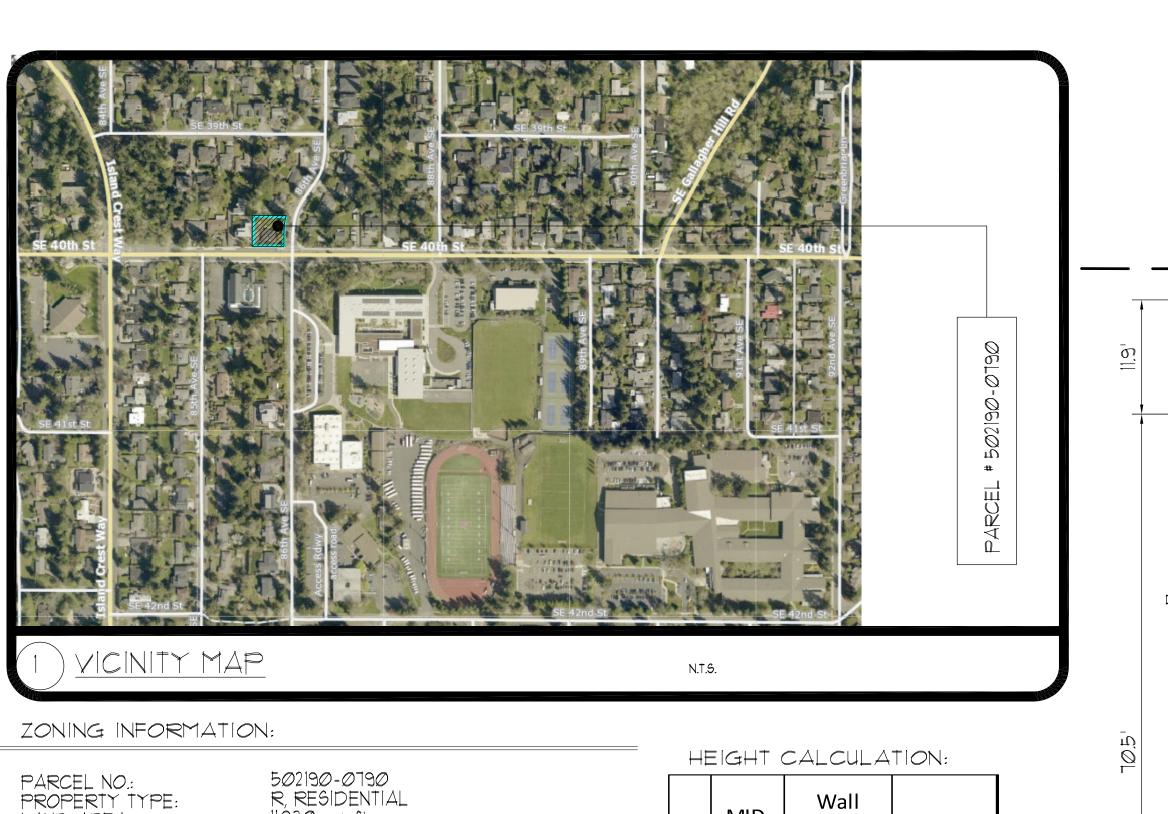
21257

PROJECT NUMBER:









LAND AREA: ACRES: Q.S.T.R.: ADDRESS:	11,930 sq. ft. 0.27 SW-7 -24-5 8456 SE 40TH ST MERCER ISLAND, WA 98040
ZONING: SETBACKS: MAX. HEIGHT:	R-8.4 FRONT: 20 FEET REAR: 25 FEET SIDE: 17% OF THE LOT WIDTH OR 18.2 (107.32 × 17% = 18.24) 30 FEET
MAX. LOT COVERAGE:	40% (PERCENT)
WATER: SEWER/SEPTIC: ROAD ACCESS: STREET SURFACE:	WATER DISTRICT PUBLIC PUBLIC PAVED

LOT COVE

11,930 S.F.

3,255 S.F.

1,13Ø S.F.

<u>4,394 S.F.,</u>

HARDSCA 11,930 S.F.

9 S.F./Ø.Ø

GROSS FL

R = 25' MIN.

4"-8" QUARRY SPALLS ----

12" MIN. THICKNESS

LOT AREA ALLOWED GFA W/ALI

MAIN FLOC GARAGE: UPPER FLO STAIRCAS

TOTAL GR

IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD

	WATER DISTRICT		G	329.5	10	3295	
SEPTIC:	PUBLIC		Н	329.5	2	659	
(CCESS: SURFACE:	PUBLIC PAYED		1	329.5	3.9	1285.05	
			J	329.5	5	1647.5	
/FRAGE (	CALCULATION		K	329.5	18.7	6161.65	
			L	331	22.2	7348.2	
	TOTAL LOT AREA		M	332	2	664	
	BUILDING STRUCTURE W/ COV PATIO, CANTILEVERS AND RO	ERED PORCH, POF OVERHANGS	N	332	18.3	6075.6	
	,		0	331.8	2	663.6	
	CONCRETE DRIVEWAY		P	331.8	2	663.6	
./36.8%	TOTAL LOT COVERAGE (MAX	40%)	Q	331.5	37.5	12431.25	T/S
APE CAL	CULATION		R	331.6	2.5	829	<b>-</b> €
	TOTAL LOT AREA		S	331.2	16.3	5398.56	-×-
75%	CONCRETE STOOP (MAX 9%)		T	331	2.5	827.5	
			U	330.8	5.7	1885.56	
LOOR AR	REA:		V	330.5	7	2313.5	
A: 11 930			W	329.8	9	2968.2	
D GFA *: 4 _LOWANC!	±0% E (40%): 4 772 s.f.		X	329.5	24.5	8072.75	
OOR:		2 Ø25 S.F.					
: Loor:		500 S.F. 2 244 S.F.	OTA	۱L	235.2	77717.53	
SE:		EXCLUDED					
ROSS FLO	DOR AREA (GFA):	4 769 S.F. / 39.96%	ABE			330.43168	,
	AS PER KING COUNTY ROAD STA DRIVEWAYS SHALL BE PAVED TO OF R-O-W PRIOR TO INSTALLAT	THE EDGE ION OF THE	TRE	E TABLE	E (ON SITE T	REES)	
EXIS	DRIVEWAYS SHALL BE PAVED TO OF R-O-W PRIOR TO INSTALLAT CONSTRUCTION ENTRANCE TO AN DAMAGING OF THE ROADWAY	/OID	PO	INT	DESCRIPTIC	N REMA	1N?

TREE TABLE (NEIGHBORING TREES)

POINT	DESCRIPTION	REMAIN?
1199	REDWOOD 28" 22'	YES
1224	FIR 28" 20'	YES
1225	FIR 22" 20'	YES

REDWOOD 12" 14'

DECIDUOUS 8" 10'

DECIDUOUS 10" 16'

1219 DECIDUOUS 8" 10'

1222 DECIDUOUS 8"

1275 | MAPLE 10" 20'

1383 | MAPLE 18" 16'

1385 | BIRCH 16" 18'

BIRCH 10" 14'

YES

YES

YES

YES

YES

YES

YES YES

YES

POST SPACING MÁY BE INCREASED TO 8' IF WIRE BACKING IS USED

NOTE: FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE

2"x4" WOOD POSTS, STEEL FENCE POSTS, REBAR, OR EQUIVALENT

**SEGMENT** 

LENGTH

22

3.9

PT. HT

A 329.3

В 329.5

C 329.7

D 329.7

E 329.3

F | 329.2

RESULT

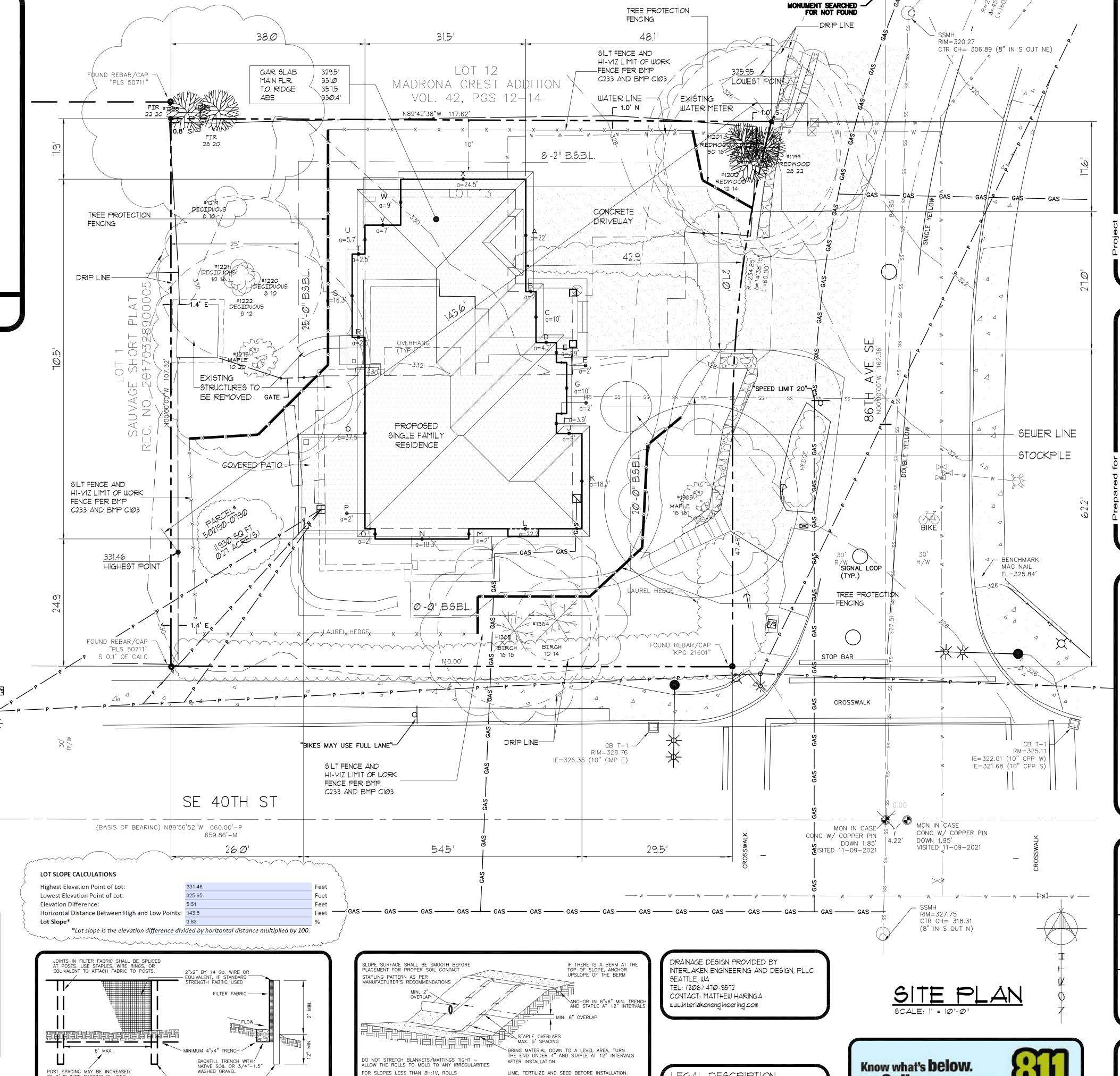
7244.6

3297

1384.74

1284.27

658.4



LEGAL DESCRIPTION:

MADRONA CREST ADD

PLat Block: 7

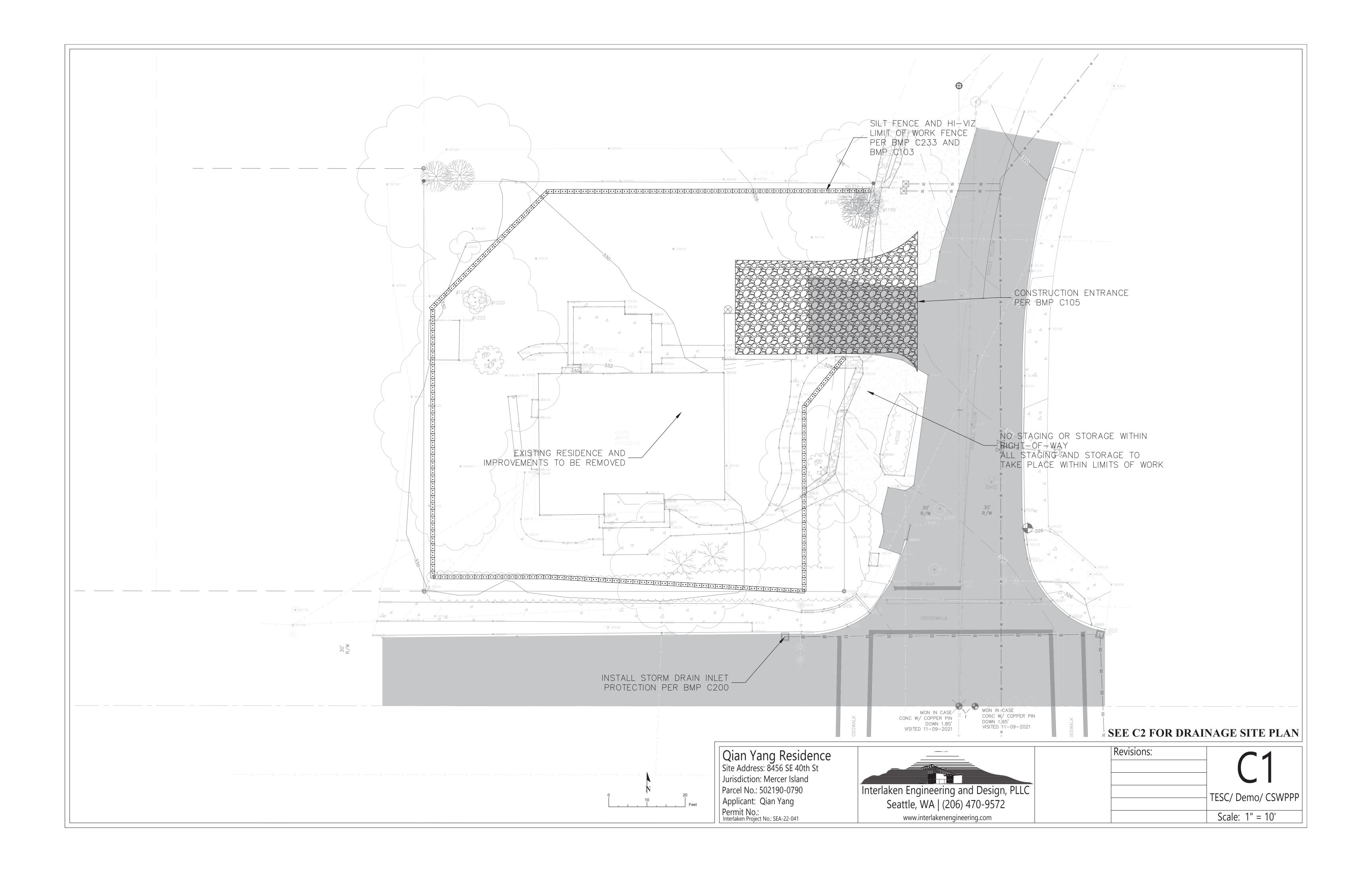
Plat Lot: 13

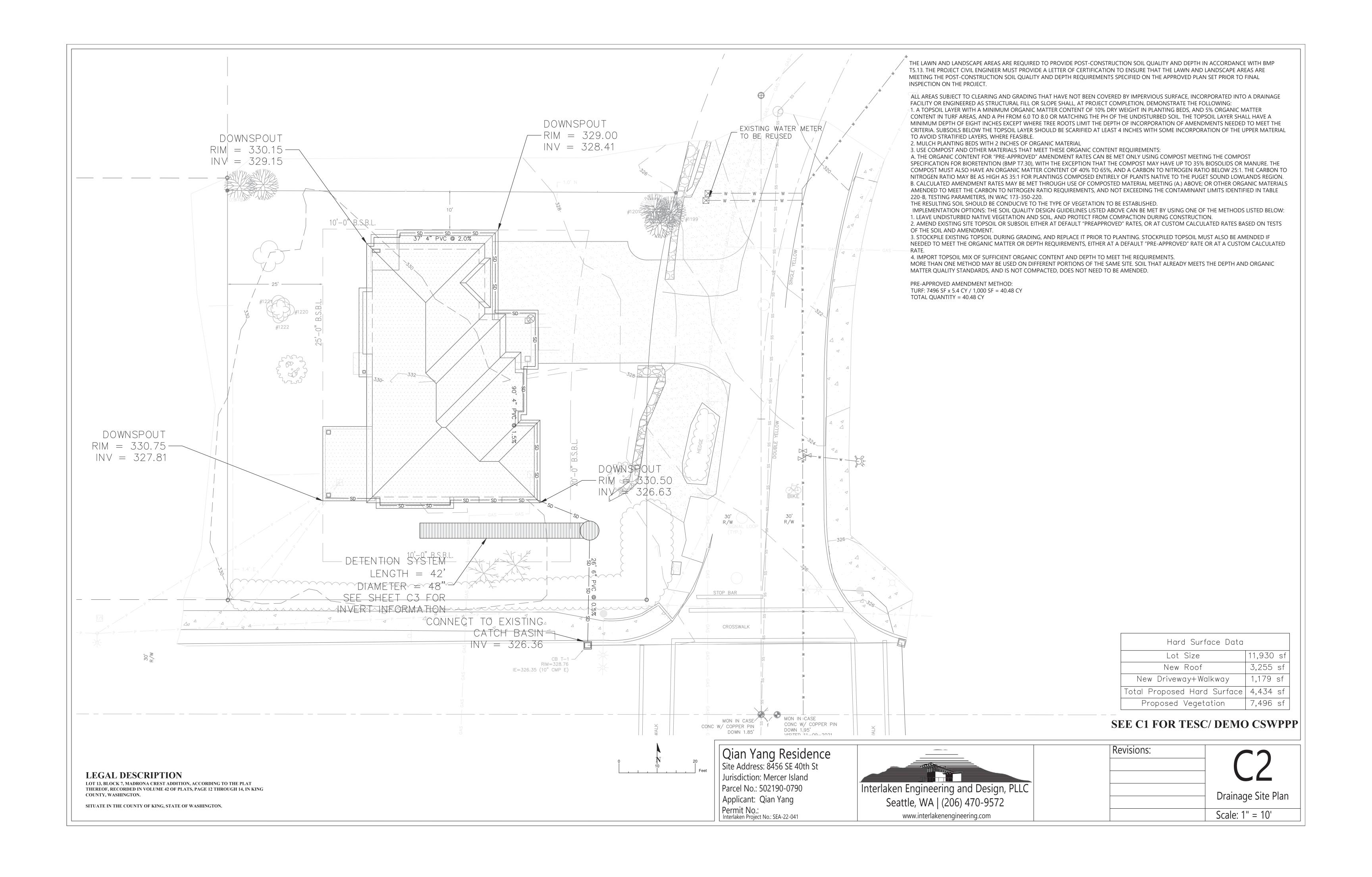
Call before you dig.

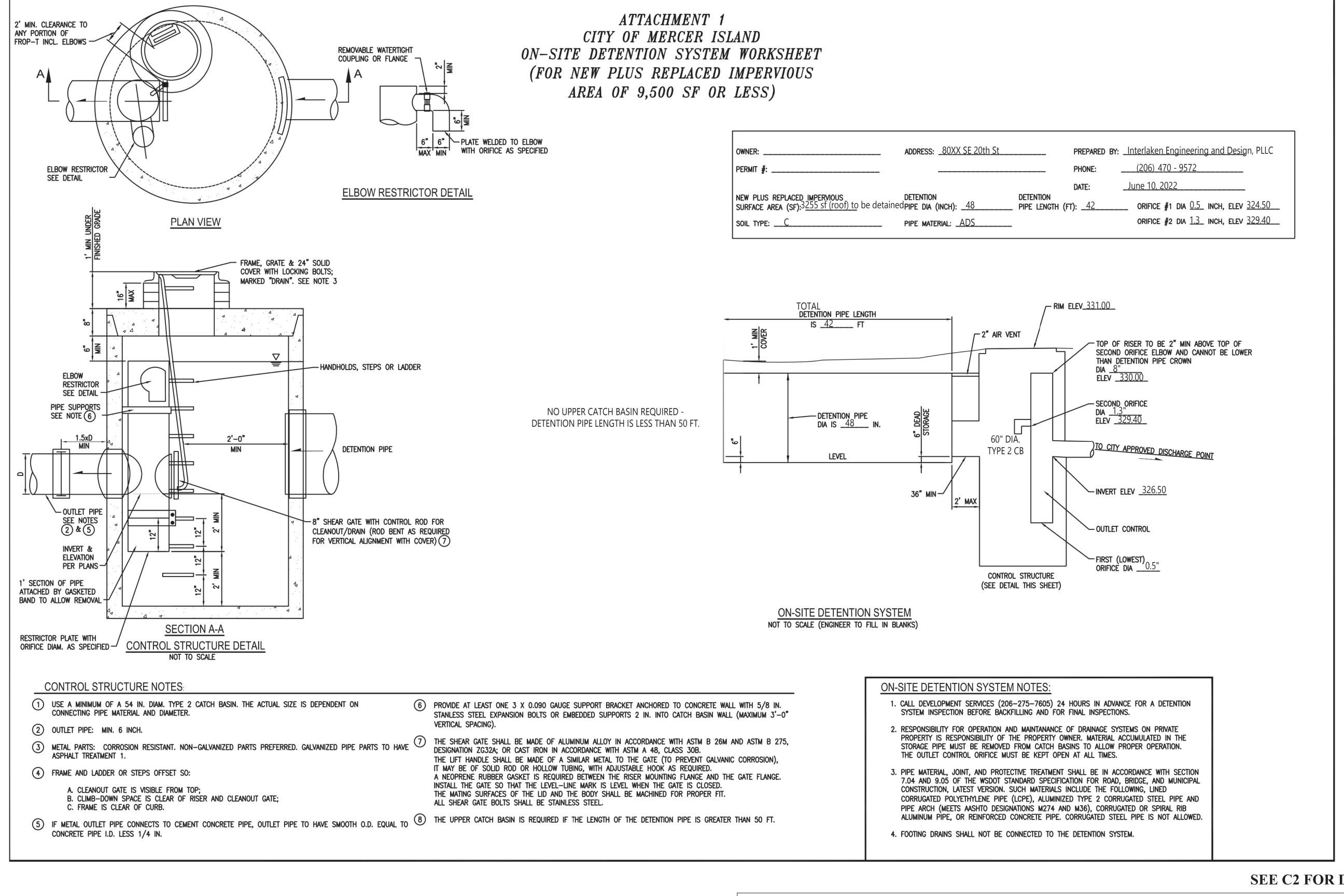
FOR SLOPES LESS THAN 3H:1V, ROLLS MAY BE PLACED IN HORIZONTAL STRIPS

GROUND COVER

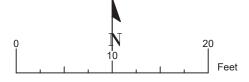
21257 🗕 Sheet 🛚 SITE







SEE C2 FOR DRAINAGE SITE PLAN



Qian Yang Residence
Site Address: 8456 SE 40th St
Jurisdiction: Mercer Island
Parcel No.: 502190-0790
Applicant: Qian Yang
Permit No.:
Interlaken Project No.: SEA-22-041



# GENERAL NOTES

- 2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL RESIDENTIAL CODE
- 2018 UNIFORM PLUMBING CODE
- 2018 WASHINGTON STATE ENERGY CODE 2018 WASHINGTON STATE AMENDMENTS

CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION & PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS HAVE BEEN INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY

REPETITIVE FEATURES NOT NOTED ON THE DRAWINGS SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL

CONTRACTOR SHALL VERIFY ALL ROUGH-IN DIMENSIONS FOR ALL EQUIPMENT TO BE INSTALLED

# SITE WORK

UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 1500 PSF. EXTERIOR FOOTINGS SHALL BEAR 1'6" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS BACK FILL TO BE THOROUGHLY COMPACTED. FOUNDATION VENTS SHALL NOT INTERFERE WITH DIRECT LOAD PATH OF COLUMNS.

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CONCRETE

MIX AND 28 DAY STRENGTH OF CONCRETE - BASEMENT WALLS & FOUNDATIONS & OTHER CONCRETE NOT EXPOSED TO MEATHER:

- BASEMENT SLABS & INTERIOR SLABS & INTERIOR SLABS ON GRADE, EXCEPT GARAGE DOOR SLABS

- BASEMENT WALLS & FOUNDATION WALLS, EXTERIOR WALLS & OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER:

- PORCHES, CARPORT SLABS & STEPS EXPOSED TO WEATHER, & GARAGE

FLOOR SLABS:

OR WEATHER.

GARAGE FLOORS TO SLOPE 1/8"/FT. MIN. TOWARDS OPENING AS REQUIRED FOR DRAINAGE. CONCRETE SLABS TO HAVE CONTROL JOINTS AT 25' FT. (MAX.) INTERVALS EA. WAY. SLABS ARE TO BE 5-AIR ENTRAINED CONCRETE SIDEWALKS TO HAVE 3/4" IN. TOOLED JOINTS AT 5' FT. (MIN.) O.C.

CONCRETE COVER OF REINFORCING

3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. 1 1/2" CONCRETE EXPOSED TO EARTH OR WEATHER. 1 1/2" BEAMS AND COLUMNS NOT EXPOSED TO EARTH

3/4" SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER.

LAP COLUMN VERTICALS. CLASS "A" CONCRETE AND MASONRY COLUMN AND WALL VERTICALS 52 DIAMETERS. LAP ALL OTHER REINFORCING 24 DIAMETERS. SPLICES AT TENSION REGIONS SHALL NOT BE PERMITTED.

# CARPENTRY

ALL FRAMING TO COMPLY WITH ENGINEERING S-SHEETS FOR NAIL SIZES AND SPACING.

ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.

6" MIN. CLEARANCE BETWEEN WOOD AND EARTH. 18" MIN. CLEARANCE BETWEEN FLOOR JOIST AND 12" MIN. CLEARANCE BETWEEN FLOOR BEAMS AND

FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF

REFERENCE SHEET-S1 FOR SPECIES AND GRADE

(BASE DESIGN VALUES)

HOT-DIPPED GALVANIZED STEEL.

BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH 3"X3"X.229" PLATE WASHERS. WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2 X THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS. BETWEEN SUPPORTS PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS, JOISTS, 10'-0" FOR ROOF JOISTS. TYPICAL SILL BOLTS TO BE 5/8" DIAMETER AT 6'-0" O.C. MINIMUM 7" EMBED. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE STRONG TIE CONNECTORS AS MANUFACTURED BY SIMPSON COMPANY.

PLYMOOD

PLYWOOD WALL AND ROOF SHEATHING SHALL BE 3/4" CDX, UNLESS OTHERWISE SPECIFIED. PLYMOOD FLOOR SHEATHING SHALL BE 3/4" CDX T&G. UNLESS OTHERWISE SPECIFIED. STAGGER END LAPS AT ROOF AND FLOOR SHEATHING. OSB SHEATHING PRODUCTS OF EQUIVALENT SPAN RATINGS SHALL BE ALLOWED.

MOOD TRUSSES ALL ROOF TRUSSES SHALL BE FRAMED AND TIED INTO THE FRAME WORK AND SUPPORTING WALLS SO AS TO FROM AN 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

SEE SHEET-S1 FOR DESIGN CRITERIA

SHALL BE USED TO BRACEALL TRUSSES.

# INSULATION AND MOISTURE PROTECTION

INSULATION BAFFLES TO MAINTAIN 1" ABOVE BATT INSULATION BAFFLES TO EXTEND 6" ABOVE BATT INSULATION

BAFFLES TO EXTEND 12" ABOVE LOOSE FILL INSULATION INSULATE BEHIND TUBS/SHOWERS, PARTITIONS AND CORNERS FACE STAPLE BATTS FRICTION FIT FACED BATTS

USE 4 MIL POLY VAPOR RETARDER AT

\* R-10 RIGID FOAM INSULATION ON 4X EVADERS AT EXTERIOR WALLS.

INFILTRATION CONTROL

 EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS, OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS FLOOR AND ROOFS, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE, INCLUDING ACCESS PANELS INTO UNHEATED SPACES, SHALL BE SEALED, CAULKED, CASKETED OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE. ALL OPENINGS SHALL BE FLASHED. APPROVED CORROSION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR WALL ENVELOPE. APPROVED CORROSION-RESISTANT FLASHING SHALL

BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS: AT TOP OF ALL EXTERIOR WINDOW AND DOOR OPENINGS IN SUCH A MANNER AS TO BE LEAKPROOF, EXCEPT THAT SELF-FLASHING WINDOWS HAVING A CONTINUOUS LAP OF NOT LESS THAN 1-1/8" OVER THE SHEATHING MATERIAL AROUND THE PERIMETER OF THE OPENING, INCLUDING CORNERS, DO NOT REQUIRE ADDITIONAL FLASHING; JAMB FLASHING MAY ALSO BE OMITTED WHEN SPECIFICALLY

APPROVED BY THE BUILDING OFFICIALS. 2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS. 3. UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.

CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION. AT WALL AND ROOF INTERSECTIONS. 7. AT BUILT-IN GUTTERS.

- ALL EXTERIOR DOORS, OTHER THAN FIRE-RATED DOORS, SHALL BE DESIGNED TO LIMIT AIR LEAKAGE AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION DOORS BETWEEN RESIDENCE AND GARAGE ARE NOT CONSIDERED FIRE-RATED AND MUST MEET THE ABOVE REQUIREMENT.

- ALL EXTERIOR WINDOWS SHALL BE DESIGNED TO ADMIT INFILTRATION INTO OR FROM THE BUILDING ENVELOPE.

- RECESSED LIGHTING FIXTURES: WHEN INSTALLED IN THE BUILDING ENVELOPE, RECESSED LIGHTING FIXTURES SHALL BE TYPE IC RATED AND CERTIFIED TO HAVE NO MORE THAN 2.0 CFM AIR MOVEMENT FROM THE CONDITIONED SPACE TO THE CEILING CAVITY THE LIGHTING FIXTURE SHALL BE TESTED AT 75 PASCAL'S OR 1.57 LBS/FT2 PRESSURE DIFFERENCE AND HAVE A LABEL ATTACHED, SHOWING COMPLIANCE WITH THIS TEST METHOD. RECESSED LIGHTING FIXTURES SHALL BE INSTALLED WITH A GASKET OR CAULK BETWEEN THE FIXTURE AND CEILING TO PREVENT AIR LEAKAGE.

VAPOR BARRIERS/ GROUND COVERS AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND AT EXTERIOR WALLS, INSET STAPLED BATTS WITH A PERM RATING LESS THAN ONE MAY BE INSTALLED IF THE VAPOR BARRIER IS TO THE WARM SIDE, STAPLES ARE PLACED NOT MORE THAN 8 INCHES ON CENTER AND GAPS BETWEEN THE FACING AND THE FRAMING DO NOT EXCEED 1/16 INCH.

A GROUND COVER OF 6 MIL (0.006")BLACK POLYETHYLENE OR EQUIVALENT, SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

MINDOWS, DOORS, HVAC, & ELECT. EQUIP

GLAZING MAXIMUM: ALL CLIMATE ZONES: GLAZING "U" VALUE: VERTICAL (MAX): .28 OVERHEAD (MAX): .50 DOOR "U" VALUE (MAX): .20 (DOORS W/ MORE THAN 50 CONSIDERED A WINDOW) HVAC PERFORMANCE: "MED" OR AFUE = .97 RECESSED LIGHT FIXTURES: IC RATED

DOORS, WINDOWS AND SKYLIGHTS

DOORS TO THE EXTERIOR SHALL HAVE MAX. 3" STEP TO MIN. 36" DEEP LANDING.

BEDROOM EMERGENCY EGRESS WINDOWS MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. MIN. NET CLEAR OPEN ABLE WIDTH OF 20" AND MINIMUM NET CLEAR OPENING HEIGHT OF 24", MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE FLOOR.

FACTORY BUILT WINDOWS TO BE CONSTRUCTED TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER LINEAL FOOT OF OPERABLE SASH PERIMETER AS TESTED BY ASTM STANDARDS. 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.

SAFETY GLAZING SHALL BE LOCATED WITHIN

1. INGRESS AND EGRESS DOORS 2. SLIDING GLASS DOORS, SWINGING GLASS DOORS 3. SHOWER AND BATHTUB ENCLOSURE'S 4.GLAZING W/ THE EXPOSED EDGE WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED PORTION & BOTTOM EDGE IS LESS THAN 60" ABOVE THE WALKING SURFACE GLAZING GREATER THAN 9 S.P. LESS THAN 13"ABOVE FINISHED

WINDOW SILLS: 612.2, 24" MINIMUM SILL HEIGHT EXCEPTIONS ALLOW FOR OPENING LIMITING DEVICE FOR 4" DIAMETER SPHERE AND WINDOW FALL PREVENTION DEVICE THAT COMPLIES WITH 612.3.

# STRUCTURAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CONTRACT DRAWINGS. 2. DURING THE CONSTRUCTION PERIOD THE CONTRACTOR SHALL BE

RESPONSIBLE FOR THE SAFETY OF THE BUILDING. 3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF ENGINEER

5. ALL DETAILS DESIGNATED AS STANDARD OR TYPICAL SHALL OCCUR IN ADDITION TO ANY OTHER SPECIFIC DETAIL CALLED OUT 6. COORDINATE WITH MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS FOR SIZE AND LOCATION OF ALL OPENINGS REQUIRED FOR DUCTS, PIPES, AND PIPE SLEEVES, ELECTRICAL CONDUITS, AND OTHER ITEMS TO BE EMBEDDED IN CONCRETE OR OTHERWISE INCORPORATED IN STRUCTURAL WORK. 7. PROVIDE OPENINGS AND SUPPORTS, AS REQUIRED PER STANDARD DETAILS FOR HEATERS, MECHANICAL EQUIPMENT, VENTS, DUCTS, PIPING, ETC. ALL SUSPENDED MECHANICAL EQUIPMENT

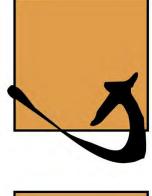
SHALL BE SWAY OR LATERALLY BRACED.

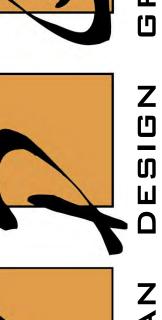
# TYPE OF CONSTRUCTION

PLAN PREVIEW

NOT TO SCALE

UNPROTECTED WOOD FRAME (EXAMPLES OF CONSTRUCTION ARE SINGLE FAMILY HOMES AND GARAGES. THEY OFTEN HAVE EXPOSED WOOD SO THERE IS NO FIRE RESISTANCE.)





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SUBMITTAL/REVISION: DATE: SUBMITTED REVISED

DESIGN BY: DRAFTED BY:

SHEET TITLE:

GENERAL NOTES AND PLAN PREVIEW

-/-/2022

-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

PROJECT NUMBER: 2125

			Prescriptive En	18 Washington State E ergy Code Compliance Family – New & Additi	for All Clir	nate Zones i	in Washington	/ersion 1.0
		Th		oly to all IRC building ty s and multiple single-fa	A COLOR OF THE PARTY OF THE PAR	From the second		mily
			Project Information	n		Contac	t Information	
		incorporat additional Provide all	e the minimum values credits are checked as information from the fo	roject will use the requisited. Based on the size chosen by the permit ollowing tables as building ponent, Table R406.2	ze of the st applicant. ng permit o	tructure, the	appropriate number	er of n and
RTICAL FENESTRATION U	U=	Authorized	Representative				Date	
8	_			All Climate Zones ( R-Value <sup>a</sup>		.1.1)	U-Factor <sup>a</sup>	
		Fenestration Skylight U-I	on U-Factor <sup>b</sup> Factor <sup>b</sup>	n/a n/a			0.30	
		Glazed Fen	estration SHGC b/e	n/a			n/a	
	_	Ceiling <sup>e</sup> Wood Fran	ne Wall <sup>g,h</sup>	49 21 int			0,026 0,056	
00R R-38		Floor Below Grad		30 10/15/21 int	+ TR		0.029 0.042	
		Slab <sup>d,f</sup> R-Va	alue & Depth	10, 2 ft			n/a	
		The second second		ors and SHGC are maximous of the insulation, the				
		Table A		han the R-value specified	and the same of th			
		f slab in: meet t For log climate Int. (in: h framin;	sulation when applied to the requirements for the structures developed in e zone 5 of ICC 400. termediate framing) den g 16 inches on center, 78	talled over an existing sla existing slabs complying rmal barriers protecting f compliance with Standa otes framing and insulati 3% of the wall cavity insu	with Section with Section of ICC 400, on as description	in R503.1.1. If is. log walls shall ibed in Sectio	f foam plastic is used, I meet the requirement on A103.2.2 including s	nts for standard
		insulat	2-27	018 Washington State En	eray Code -	- Residential		
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b. 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)

with options 5.2 through 5.6. See Table 406.3.

d. You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined

e. 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max.

f. Use the single radiobutton in the upper right of the second column to deselect radiobuttons in that group.

See the complete Table R406.2 for all requirements and option descriptions.

#### Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.25 Wall R-21 plus R-4 ci 1.4 Basement wall R-21 int plus R-5 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and Compliance based on Section R402.1.4: Reduce the Total conductive UA by 15% Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.22 Ceiling and single-rafter or joist-vaulted R-49 advanced Wood frame wall R-21 int plus R-12 ci Floor R-38 1.5 Basement wall R-21 int plus R-12 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and Compliance based on Section R402.1.4: Reduce the Total conductive UA by 30% Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.18 Ceiling and single-rafter or joist-vaulted R-60 advanced Wood frame wall R-21 int plus R-16 ci Basement wall R-21 int plus R-16 ci Slab on grade R-20 perimeter and under entire slab Below grade slab R-20 perimeter and Compliance based on Section R402.1.4: Reduce the Total conductive UA by 40%. Advanced framing and raised heel trusses or rafters Vertical Glazing U-0.28 1.7 R-49 Advanced (U-0.020) as listed in Section A102.2.1, Ceilings below a vented attic and R-49 vaulted ceilings with full height of uncompressed insulation extending over the wall Table 406.3 – Energy Credits (Single Family) 2. AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION OPTIONS Compliance based on R402.4.1.2: Reduce the tested air leakage to 3.0 air changes per hour maximum at 50 Pascals or For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.3 cfm/sf maximum at 50 Pascals and All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a high efficiency fan(s) (maximum 0.35 watts/cfm), not interlocked with the furnace fan (if present). Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only To qualify to claim this credit, the building permit drawings shall specify the option being selected and the maximum tested building air leakage, and shall show the qualifying ventilation system and its control sequence of operation. Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 2.0 air changes per hour maximum at 50 Pascals or For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested 2.2 air leakage to 0.25 cfm/sf maximum at 50 Pascals and All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.65. 1 Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 1.5 air changes per hour maximum at 50 Pascals or For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.25 cfm/sf maximum at 50 Pascals and All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.75. 1 Compliance based on Section R402.4.1.2: Reduce the tested air leakage to **0.6 air changes per hour** maximum at 50 Pascals **or** For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested 2.4 air leakage to 0.15 cfm/sf maximum at 50 Pascals and All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.80. Duct installation shall comply with Section R403.3.7. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the maximum tested building air leakage and shall show the heat recovery ventilation system. Table 406.3 – Energy Credits (Single Family) 3. HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS Only one option from Items 3.1 through 3.6 may be selected in this category. 3.1<sup>2</sup> Energy Star rated (U.S. North) Gas or propane furnace with minimum AFUE of 95% or 1.0 Energy Star rated (U.S. North) Gas or propane boiler with minimum AFUE of 90%. <sup>2</sup> 3.2 Air-source centrally ducted heat pump with minimum HSPF of 9.5. 3 Closed-loop ground source heat pump; with a minimum COP of 3.3 or 3.3<sup>2</sup> Open loop water source heat pump with a maximum pumping hydraulic head of 150 feet and minimum COP of 3.6. 3 Ductless mini-split heat pump system, zonal control: In homes where the primary space heating system is zonal electric heating, a ductless mini-split heat pump system with a minimum HSPF of 10.0 shall be installed and provide heating to the largest zone of the housing unit. 4 3.5 2 Air-source, centrally ducted heat pump with minimum HSPF of 11.0. 4 Ductless split system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF of 10 shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. To qualify to claim this credit, the building permit drawings shall specify the option being selected, the heated floor area calculation, the heating equipment type(s), the minimum equipment efficiency, and total installed heat capacity (by equipment type). 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. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. 4. HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS All supply and return ducts located in an unconditioned attic shall be deeply buried in ceiling insulation in accordance with Section R403.3.7. For mechanical equipment located outside the conditioned space, a maximum of 10 linear feet of return duct and 5 linear feet of supply duct connections to the equipment may be outside the deeply buried insulation. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices. Duct leakage shall be limited to 3 cfm per 100 square feet of conditioned floor area. Air handler(s) shall be located within the conditioned space. HVAC equipment and associated duct system(s) installation shall comply with the Locating system components in conditioned crawl spaces is not permitted under this Electric resistance heat and ductless heat pumps are not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and shall show the location of the heating and cooling equipment and all the ductwork.

Table 406.3 – Energy Credits (Single Family)

Prescriptive compliance is based on Table R402.1.1 with the following modifications:

Prescriptive compliance is based on Table R402.1.1 with the following modifications:

Prescriptive compliance is based on Table R402.1.1 with the following modifications:

1.3 Slab on grade R-10 perimeter and under entire slab below grade slab R-10 perimeter and

Compliance based on Section R402.1.4: Reduce the Total conductive UA by 5%

1. EFFICIENT BUILDING ENVELOPE OPTIONS

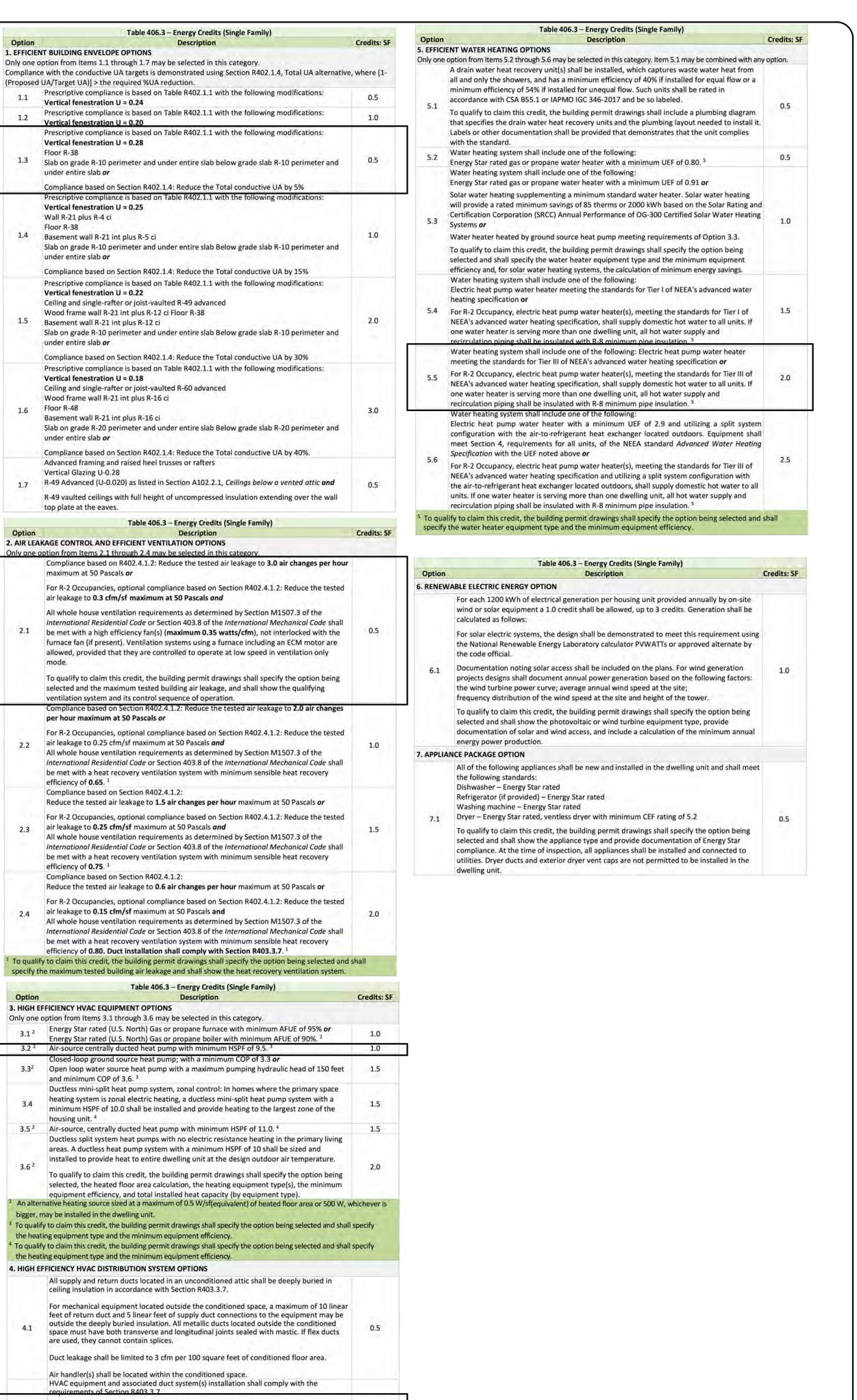
(Proposed UA/Target UA)] > the required %UA reduction.

Vertical fenestration U = 0.24

Vertical fenestration U = 0.20

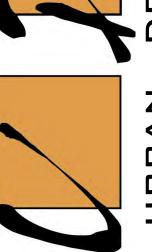
Vertical fenestration U = 0.28

Only one option from Items 1.1 through 1.7 may be selected in this category.









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-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

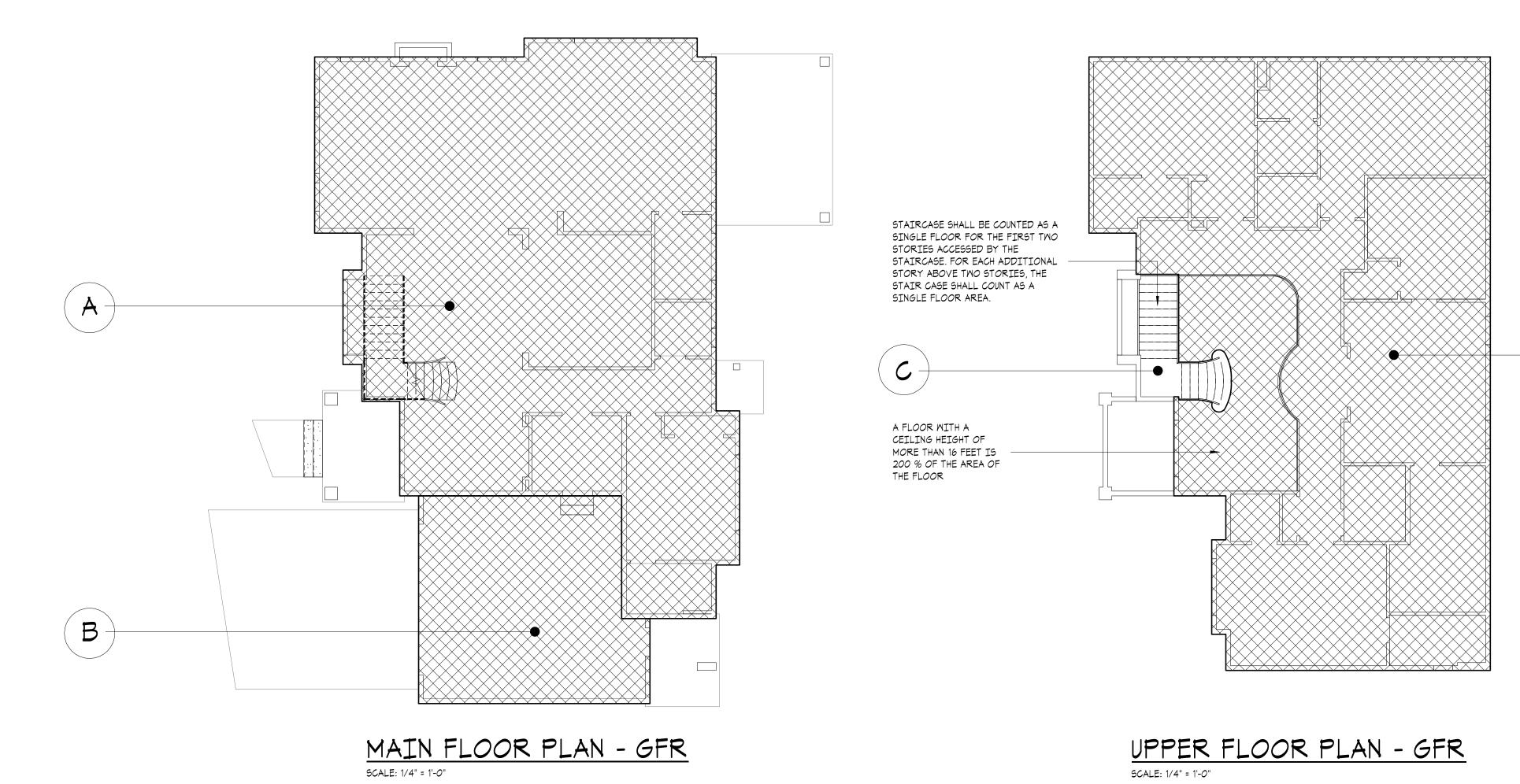
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SHEET TITLE:

ENERGY CREDITS

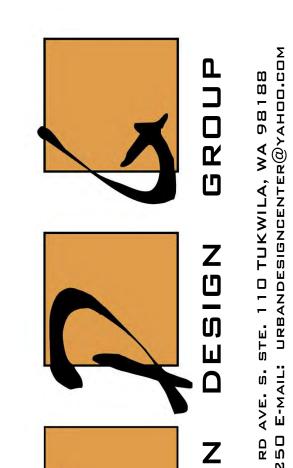
PROJECT NUMBER:

21257



GRO	OSS FLOOR AREA:		
A	MAIN FLOOR:	2 025	S.F.
B	GARAGE:	500	S.F
<b>O</b>	UPPER FLOOR:	2 244	5.F.
D	STAIRCASE:	EXCLUDED	
T <i>0</i> 1	TAL GROSS FLOOR AREA (GFA):	4 769	5.F.

GROSS FLOOR AREA:	
LOT AREA:	11 930 s.f.
ALLOWED GFA *:	40%
GFA M/ALLOWANCE (40%):	4 772 s.f.
TOTAL PROPOSED GFA:	4,769 S.F. / 39.96%
* ZONING R-8.4: 5,000 SQUARE FEET OR 40% C	F THE LOT AREA, WHICHEVER IS LESS.
LESSER OF 5 PERCENTILE POINTS, OR THE FLC	OSED, THE 40% ALLOWED GFA MAY BE INCREASED BY THE DOR AREA OF THE ACCESSORY DWELLING UNIT. PROVIDED, OF MORE THAN 4,500 SQUARE FEET OR 45% OF THE LOT AREA,
ROOFED DECKS ON THE SECOND OR THIRD STO	AIN BUILDING, ACCESSORY BUILDINGS, GARAGES, ATTACHED DRY OF A SINGLE FAMILY HOME, STAIR CASES, ETC. THE GFA ERED DECKS OR UNCOVERED ROOFTOP DECKS.



ILY RESIDENCE

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AND, WA 98040

HILIP SUDO A LLC TUN AIAN &

SINGLE-F 8456 SE MERCER PARCEL #

SUBMITTAL/REVISION: DATE:

SUBMITTED REVISED

DESIGN BY: DRAFTED BY:

SHEET TITLE:

GROSS FLOOR AREA (GFA)

-/-/2022 -/-/2022

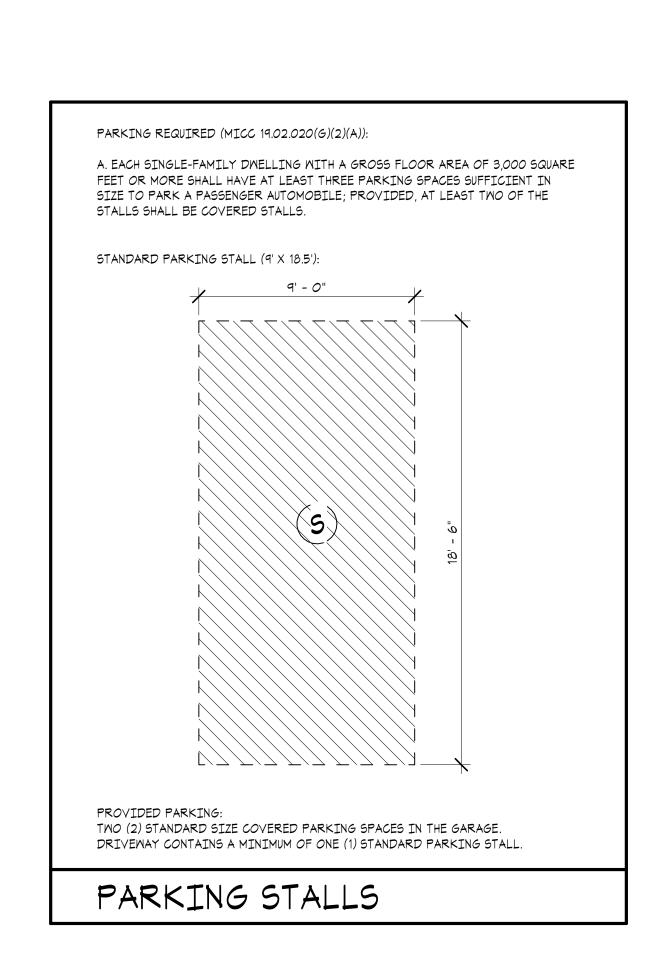
PAVEL MELNIK ANNA KONYAKINA

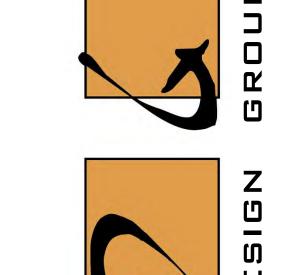
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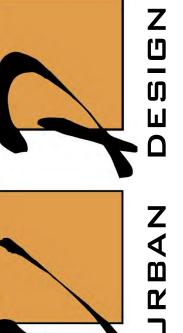
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SUBMITTAL/REVISION: DATE:

-/-/2022 -/-/2022 SUBMITTED REVISED

DESIGN BY: DRAFTED BY:

SHEET TITLE:

PARKING

PAVEL MELNIK

ANNA KONYAKINA

PROJECT NUMBER: 21257

SHEET NUMBER:

A2.2

#### TYPICAL FLOOR NOTES:

INSTALL SMOKE DETECTORS IN ALL SLEEPING ROOMS AND AT AREAS ADJACENT TO SLEEPING ROOMS, AND AT CEILING HEIGHT CHANGES GREATER THAN 24". SMOKE DETECTORS TO BE HARD-WIRED AND

INTERCONNECTED, WITH BATTERY BACK-UP PER CODE. INSTALL CARBON MONOXIDE SENSORS ADJACENT TO SLEEPING AREAS.

ALL INTERIOR WALLS TO BE 2x4 @ 16" O.C. (U.N.O.)

ALL EXTERIOR WALLS TO BE 2x6 @ 16" O.C. (U.N.O.)

MAIN FLOOR HEADERS PER STRUCTURAL @ 9'-0" A.F.F. (U.N.O.)

WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT.

DOOR SIZES NOTED ARE SLABS NOT ROUGH OPENINGS PROVIDE FIREBLOCKING AT ALL PLUMBING OPENINGS.

PROVIDE SOLID BLOCKING OVER SUPPORTS.

WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF CONCEALED SPACE DOES NOT EXCEED 1000 SF. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS AND SHALL BE OF 1/2" GYP BOARD OR OTHER APPROVED MATERIALS INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS

1. PROVIDE FIREBLOCKING TO CUT OFF ALL CONCEALED HORIZONTAL AND VERTICAL DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STOIRES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL CONSIST OF NOT LESS THAN 2" NOMINAL LUMBER OR OTHER APPROVED

12. ASPHALT-SATURATED FELT FREE FROM HOLES OR BREAKS, WEIGHING NOT LESS THAN 14 POUNDS PER 100 SQUARE FEET AND COMPLYING WITH ASTM D 226 OR OTHER APPROVED WEATHER RESISTANT MATERIAL SHALL BE APPLIED OVER SHEATHING OF ALL EXTERIOR WALLS. APPROVED ALTERNATIVE WEATHERPROOF MEMBRANES SHALL BE USED FOR OPEN JOINT RAIN SCREEN SIDING. WEATHER RESISTANT MATERIALS SHALL BE APPLIED HORIZONTALLY PERMANUFACTURERS RECOMMENDATIONS, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES AND NOT LESS THAN 6 INCHES WHERE JOINTS OCCUR PER CODE.

13. APPROVED CORROSION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDINGS STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL SURFACE AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR WALL ENVELOPE. FLASHING SHALL BE INSTALLED AT, BUT NOT LIMITED TO THE FOLLOWING LOCATIONS:

-THE TOP OF ALL EXTERIOR WINDOW & DOOR OPENINGS -INTERSECTIONS OF FRAME WALLS AND MASONRY OR STUCCO

-UNDER MASONRY, WOOD OR METAL COPINGS AND SILLS

-CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM -WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL

-AT WALL AND ROOF OR SOFFIT INTERSECTIONS

-AT BUILT-IN GUTTERS

14. EXTERIOR LOCATIONS FOR ENVIRONMENTAL AIR DUCT EXHAUST & INTAKE OPENINGS TO BE A MINIMUM OF 3'-0" FROM PROPERTY LINE & MINIMUM 3'-0" FROM BUILDING OPENINGS. EQUIP ALL DUCTS W/ BACK-DRAFT

15. AIR EXHAUST & INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED W/ CORROSION RESISTANT SCREENS, LOUVERS, OR GRILLS W/ 1/4" MINIMUM & 1/2" MAX OPENINGS IN ANY DIMENSION. OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS PER 2015 IRC.

16. DUCTS FOR KITCHEN RANGES SHALL BE OF METAL AND BE EQUIPPED W/ BACK-DRAFT DAMPERS PER 17. ALL INTERIOR FINISHES TO MEET MINIMUM FLAME SPREAD INDEX AND SMOKE DEVELOPMENT INDEX AS

REQUIRED BY 2015 IRC. 18. UNDER FLOOR CLEANOUT NOT MORE THAN 20' FROM ACCESS DOOR WITH AN UNOBSTRUCTED 30" WIDE X 18" HIGH PATH PATHWAY. CLEANOUTS ARE ACCESSIBLE. 12" CLEARANCE REQUIRED AT LINES LESS THAN OR EQUAL TO 2", 18" CLEARANCE AT LINES GREATER THAN 2". (UPC 707.9)

19. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SMINGING, SLIFDING AND BIFOLD DOORS SHALL BE CONSIDERED A HAZARDOUS LOCATION, SAFETY GLAZING.

#### GARAGE NOTES:

GARAGES SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 5/8" TYPE X GWB APPLIED TO THE GARAGE SIDE. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT.

2. OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8" THICK, OR 20-MINUTE FIRE-RATED DOORS.

DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIALS AND SHALL HAVE NO OPENINGS INTO THE GARAGE. IRC R309.1.

IN SIESMIC ZONES 3 & 4, WATER HEATERS SHALL BE ANCHORED TO RESIST HORZ. DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE @ POINTS WITHIN THE UPPER ONE THIRD AND LOWER ONE THIRD PER UPC SEC. 510.5

PROVIDE OUTDOOR COMBUSTION AIR FOR WATER HEATER GARAGE FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL AND THE AREA USED FOR THE PARKING OF AUTOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY.

AREA	SUMMARY:

MAIN FLOOR: UPPER FLOOR:	2 <i>0</i> 25 1 991	SF SF
LIVING/HEATED SPACE:	4 016	SF
GARAGE: FRONT PORCH: CONCRETE LANDING: COVERED PATIO:	500 92 63 210	SF SF SF

REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS

EACH DOOR TO BE UNDERCUT A MINIMUM OF 1/2-INCH TO ASSURE FREE FLOW OF FRESH AIR THROUGHOUT HABITABLE ROOMS

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

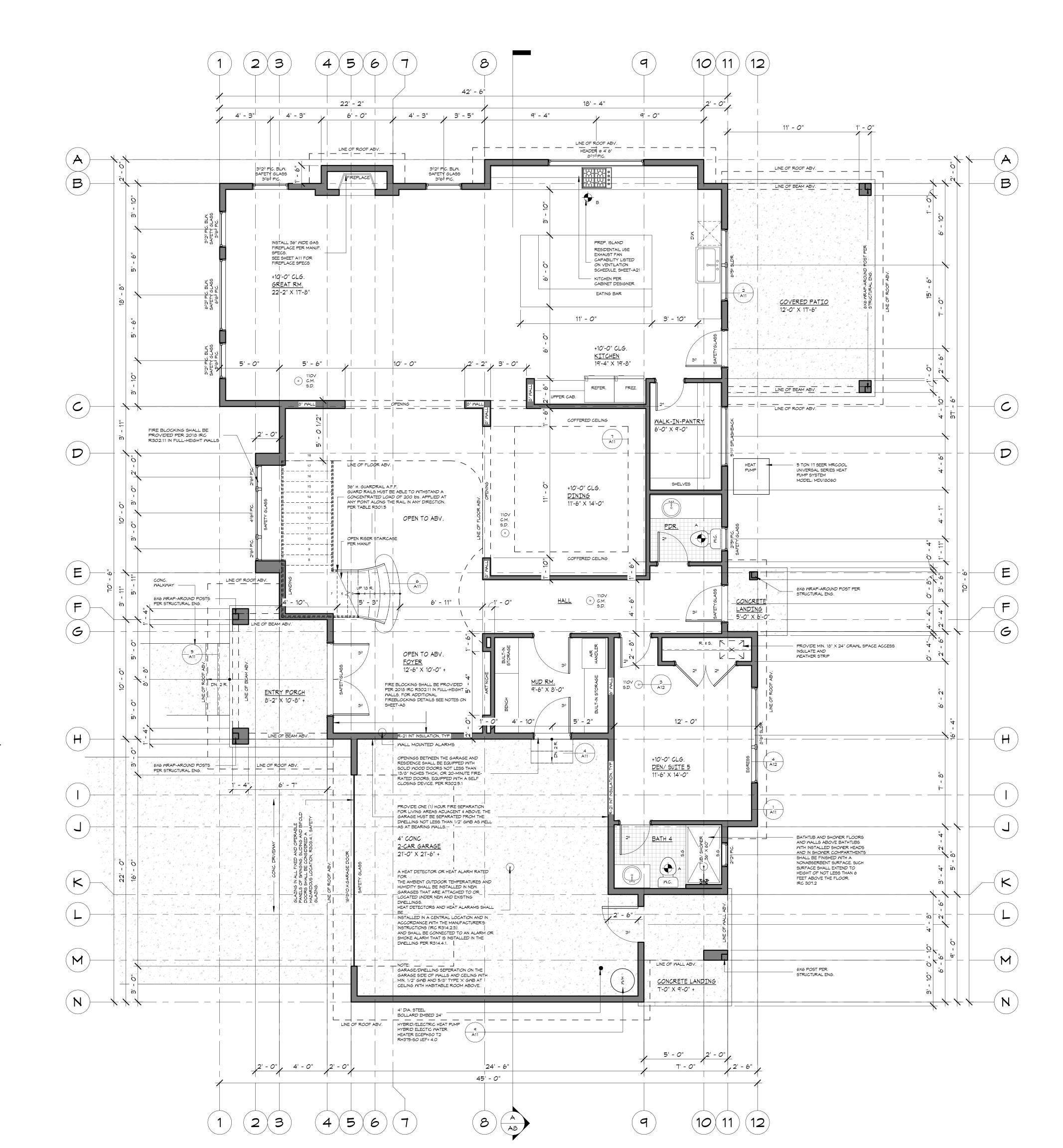
THE DOOR IN THE DWELLIN/GARAGE SEPARATION MUST BE EQUIPPED WITH A SELF-CLOSING OR AUTOMATED CLOSING DEVICE. PER IRC 302.5.1

FOR SMOKE & CARBON MONOXIDE ALARMS NOTES SEE SHEET A5.

MAIN FLOOR PLAN

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









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SUBMITTAL/REVISION: DATE: -/-/2022 SUBMITTED

REVISED DESIGN BY:

PAVEL MELNIK DRAFTED BY: ANNA KONYAKINA

-/-/2022

SHEET TITLE:

MAIN FLOOR PLAN

PROJECT NUMBER: 21257

#### TYPICAL FLOOR NOTES:

INSTALL SMOKE DETECTORS IN ALL SLEEPING ROOMS AND AT AREAS ADJACENT TO SLEEPING ROOMS. AND AT CEILING HEIGHT CHANGES GREATER THAN 24". SMOKE DETECTORS TO BE HARD-WIRED AND INTERCONNECTED, WITH BATTERY BACK-UP PER CODE.

INSTALL CARBON MONOXIDE SENSORS ADJACENT TO SLEEPING AREAS.

ALL INTERIOR WALLS TO BE 2x4 @ 16" O.C. (U.N.O.) ALL EXTERIOR WALLS TO BE 2x6 @ 16" O.C. (U.N.O.)

UPPER FLOOR HEADERS PER STRUCTURAL @ 8'-0" A.F.F. (U.N.O.)

WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT. DOOR SIZES NOTED ARE SLABS NOT ROUGH OPENINGS

PROVIDE FIREBLOCKING AT ALL PLUMBING OPENINGS. PROVIDE SOLID BLOCKING OVER SUPPORTS.

WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF CONCEALED SPACE DOES NOT EXCEED 1000 SF. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS AND SHALL BE OF 1/2" GYP BOARD OR OTHER APPROVED MATERIALS INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS PER CODE.

11. PROVIDE FIREBLOCKING TO CUT OFF ALL CONCEALED HORIZONTAL AND VERTICAL DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STOIRES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL CONSIST OF NOT LESS THAN 2" NOMINAL LUMBER OR OTHER APPROVED MATERIAL

12. ASPHALT-SATURATED FELT FREE FROM HOLES OR BREAKS, WEIGHING NOT LESS THAN 14 POUNDS PER 100 SQUARE FEET AND COMPLYING WITH ASTM D 226 OR OTHER APPROVED MEATHER RESISTANT MATERIAL SHALL BE APPLIED OVER SHEATHING OF ALL EXTERIOR WALLS. APPROVED ALTERNATIVE WEATHERPROOF MEMBRANES SHALL BE USED FOR OPEN JOINT RAIN SCREEN SIDING. WEATHER RESISTANT MATERIALS SHALL BE APPLIED HORIZONTALLY PERMANUFACTURERS RECOMMENDATIONS, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES AND NOT LESS THAN 6 INCHES WHERE JOINTS OCCUR PER CODE.

13. APPROVED CORROSION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDINGS STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL SURFACE AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR

WALL ENVELOPE. FLASHING SHALL BE INSTALLED AT, BUT NOT LIMITED TO THE FOLLOWING LOCATIONS:

-THE TOP OF ALL EXTERIOR WINDOW & DOOR OPENINGS

-INTERSECTIONS OF FRAME WALLS AND MASONRY OR STUCCO -UNDER MASONRY, WOOD OR METAL COPINGS AND SILLS

-CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM

-WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL -AT WALL AND ROOF OR SOFFIT INTERSECTIONS

-AT BUILT-IN GUTTERS 14. EXTERIOR LOCATIONS FOR ENVIRONMENTAL AIR DUCT EXHAUST & INTAKE OPENINGS TO BE A MINIMUM

OF 3'-0" FROM PROPERTY LINE & MINIMUM 3'-0" FROM BUILDING OPENINGS. EQUIP ALL DUCTS M/ BACK-DRAFT DAMPERS. 15. AIR EXHAUST & INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED W/ CORROSION

RESISTANT SCREENS, LOUVERS, OR GRILLS W/ 1/4" MINIMUM & 1/2" MAX OPENINGS IN ANY DIMENSION. OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS PER 2015 IRC. 16. DUCTS FOR KITCHEN RANGES SHALL BE OF METAL AND BE EQUIPPED W/ BACK-DRAFT DAMPERS PER CODE.

17. ALL INTERIOR FINISHES TO MEET MINIMUM FLAME SPREAD INDEX AND SMOKE DEVELOPMENT INDEX AS

18. UNDER FLOOR CLEANOUT NOT MORE THAN 20' FROM ACCESS DOOR WITH AN UNOBSTRUCTED 30" WIDE X 18" HIGH PATH PATHWAY. CLEANOUTS ARE ACCESSIBLE. 12" CLEARANCE REQUIRED AT LINES LESS THAN OR EQUAL TO 2", 18" CLEARANCE AT LINES GREATER THAN 2". (UPC 707.9)

19. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIFDING AND BIFOLD DOORS SHALL BE CONSIDERED A HAZARDOUS LOCATION, SAFETY GLAZING.

AREA SUMMARY:		
MAIN FLOOR: UPPER FLOOR:	2 <i>0</i> 25 1 991	SF SF
LIVING/HEATED SPACE:	4 016	SF
GARAGE: FRONT PORCH: CONCRETE LANDING: COVERED PATIO:	500 92 63 210	SF SF SF SF

REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND

ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS

EACH DOOR TO BE UNDERCUT A MINIMUM OF 1/2-INCH TO ASSURE FREE FLOW OF FRESH AIR THROUGHOUT HABITABLE ROOMS

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

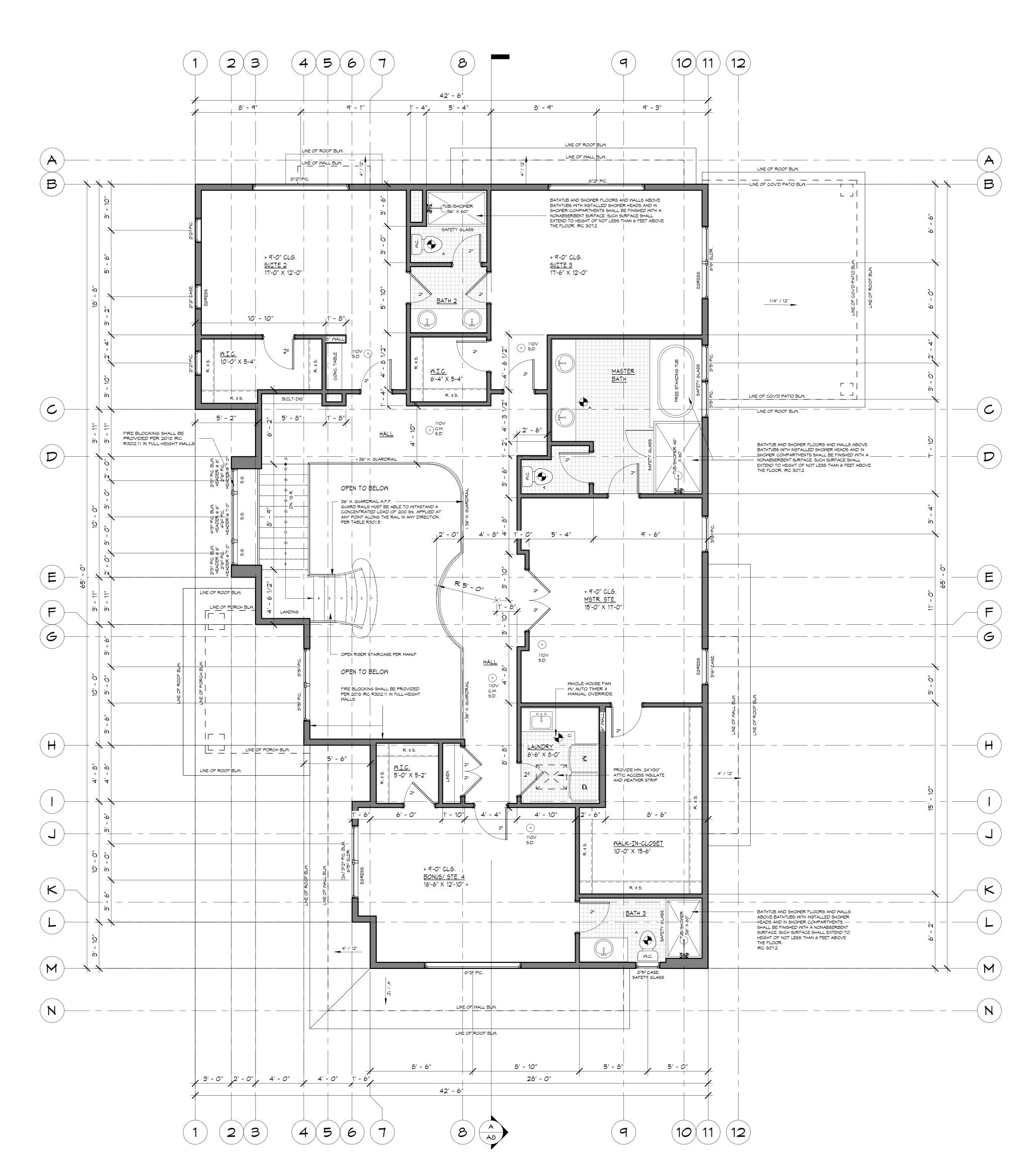
THE DOOR IN THE DWELLIN/GARAGE SEPARATION MUST BE EQUIPPED WITH A SELF-CLOSING OR AUTOMATED CLOSING DEVICE. PER IRC 302.5.1

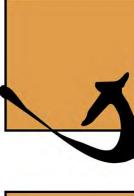
FOR SMOKE & CARBON MONOXIDE ALARMS NOTES SEE SHEET AS

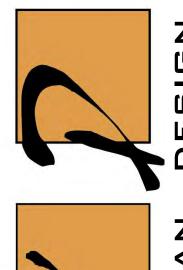
DUCT TO EXTERIOR. FOR INTERMITENT DISTRIBUTED

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











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SUBMITTAL/REVISION: DATE: SUBMITTED -/-/2022 REVISED

DESIGN BY:

DRAFTED BY: SHEET TITLE:

UPPER

-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

FLOOR PLAN

PROJECT NUMBER: 21257

ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING & HOLDOWNS PER PLAN PRIOR TO INSTALLING SIDING.

2. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.

3. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R703.8

4. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R905.2.8

5. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.

6. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.

ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE. MIN. 4" HEIGHT, 1/2" STROKE WIDTH AND CONTRASTING BACKGROUND.

8. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.6

9. SEE SHEET A1 FOR ADDITIONAL NOTES.

10. PROVIDE SURFACE DRAINAGE 6": 10' MIN. AWAY FROM HOUSE FOOTPRINT IRC R401.3

NO OPERABLE WINDOW SHALL BE INSTALLED LESS THAN 24 INCHES ABOVE FINISHED FLOOR THAT IS GREATER THAN 12 INCHES ABOVE THE FINISH GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

FOR HARDIE PANEL DETAILS SEE SHEET A13 FOR ARTISAN LAP SIDING DETAILS SEE SHEET A14

SMOKE & CARBON MONOXIDE ALARMS: SMOKE AND CARBON MONOXIDE ALARMS MUST BE PROVIDED IN ALL REQUIRED LOCATIONS AND MUST BE: \* AUDIBLE IN ALL PARTS OF THE HOUSE \* INSTALLED PER MANUFACTURER'S INSTRUCTIONS NEW HOUSES (IRC R314 & R315)

SMOKE ALARMS AND CARBON MONOXIDE ALARMS ARE REQUIRED AND MUST BE CONNECTED TO THE MAIN ELECTRICAL SYSTEM WITH BATTERY

CARBON MONOXIDE ALARMS ARE REQUIRED IN ALL NEW AND EXISTING HOMES, APARTMENTS, CONDOMINIUMS, AND OTHER MULTI-FAMILY UNITS. REQUIRED LOCATIONS \* SMOKE ALARMS SHALL BE LOCATED IN EACH SLEEPING ROOM AND IN

NAPPING AREAS IN A FAMILY HOME CHILD CARE. \* SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL BE LOCATED OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

\* SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL BE LOCATED ON EVERY FLOOR LEVEL, INCLUDING BASEMENTS (DOES NOT INCLUDE CRAWLSPACE AND UNINHABITABLE ATTICS). \* IN SPLIT LEVEL FLOOR PLANS, AT THE UPPER LEVEL, PROVIDED THERE IS

NO INTERVENING DOOR BETWEEN ADJACENT LEVELS AND THE LOWER LEVEL IS LESS THAN A FULL STORY BELOW THE UPPER LEVEL \* A CARBON MONOXIDE ALARM IS REQUIRED IN A BEDROOM WHEN A FUELBURNING

APPLIANCE IS INSTALLED IN THE BEDROOM OR ITS ATTACHED BATHROOM.

\* A COMBINATION ALARM (COMBINED SMOKE AND CARBON MONOXIDE ALARM) IS ACCEPTABLE IN ANY REQUIRED LOCATION. \*WALL MOUNTED ALARMS MUST BE NOT MORE THAN 12 INCHES FROM THE ADJOINING CEILING SURFACE.

\* AVOID PLACING ALARMS LESS THAN 3 FEET FROM SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND DO NOT PLACE ALARMS IN THE DIRECT AIRFLOW OF THE REGISTERS.

\* AVOID PLACING ALARMS WITHIN 3 FEET HORIZONTALLY FROM DOORS TO BATHROOMS CONTAINING A BATHTUB OR SHOWER. \* DO NOT PLACE ALARMS IN SPACES WHERE TEMPERATURES MAY BE

ABOVE OR BELOW THE ALARM'S OPERATING TEMPERATURE RANGE. \* DO NOT PLACE ALARMS WITHIN 3 FEET OF THE BLADES OF A CEILING FAN. \* ALARMS IN PEAKED OR SLOPED CEILINGS MUST BE WITHIN 3 FEET OF THE PEAK, MEASURED HORIZONTALLY, BUT NOT IN THE HIGHEST 4 INCHES OF THE CEILING, MEASURED VERTICALLY.

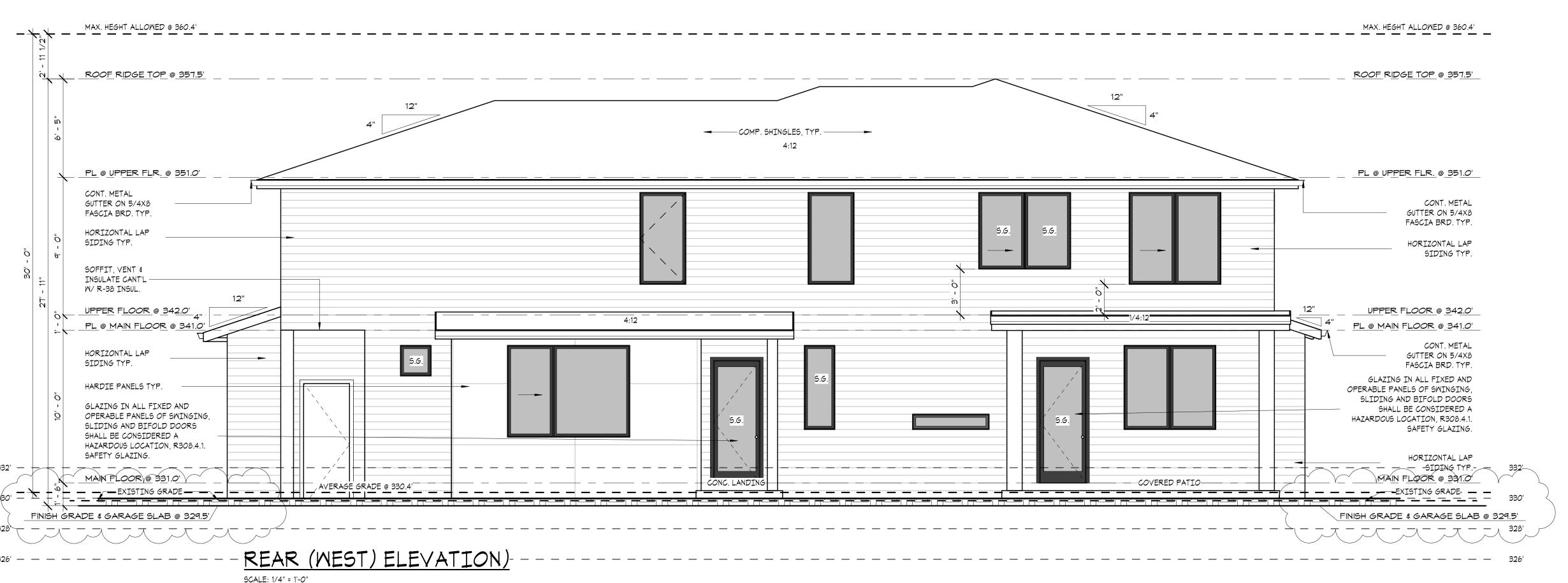
A. PHOTOELECTRIC SMOKE ALARMS MUST NOT BE LESS THAN 6 FEET FROM A PERMANENT COOKING APPLIANCE.

B. IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH MUST NOT BE LESS THAN 10 FEET FROM A PERMANENT COOKING APPLIANCE. C. IONIZATION SMOKE ALARMS WITHOUT AN ALARM-SILENCING SWITCH MUST NOT BE LESS THAN 20 FEET FROM A PERMANENT COOKING APPLIANCE CARBON MONOXIDE ALARM LOCATION LIMITATIONS \* DO NOT PLACE ALARMS DIRECTLY ABOVE OR BESIDE FUEL-BURNING

APPLIANCES.

\* DO NOT PLACE ALARMS IN DIRECT SUNLIGHT. \* DO NOT PLACE ALARMS IN LOW AREAS WHERE CHILDREN CAN REACH. DO NOT PLACE ALARMS BEHIND CURTAINS OR ANY STRUCTURE THAT MIGHT PREVENT CARBON MONOXIDE FROM REACHING THE SENSOR.





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SUBMITTAL/REVISION: DATE: SUBMITTED

DESIGN BY: DRAFTED BY:

REVISED

SHEET TITLE:

FRONT AND REAR ELEVATIONS

-/-/2022

-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

PROJECT NUMBER:

21257

ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING & HOLDOWNS PER PLAN PRIOR TO INSTALLING SIDING.

2. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.

3. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R703.8

4. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R905.2.8

5. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.

6. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.

ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE. MIN. 4" HEIGHT, 1/2" STROKE WIDTH AND CONTRASTING BACKGROUND.

8. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.6

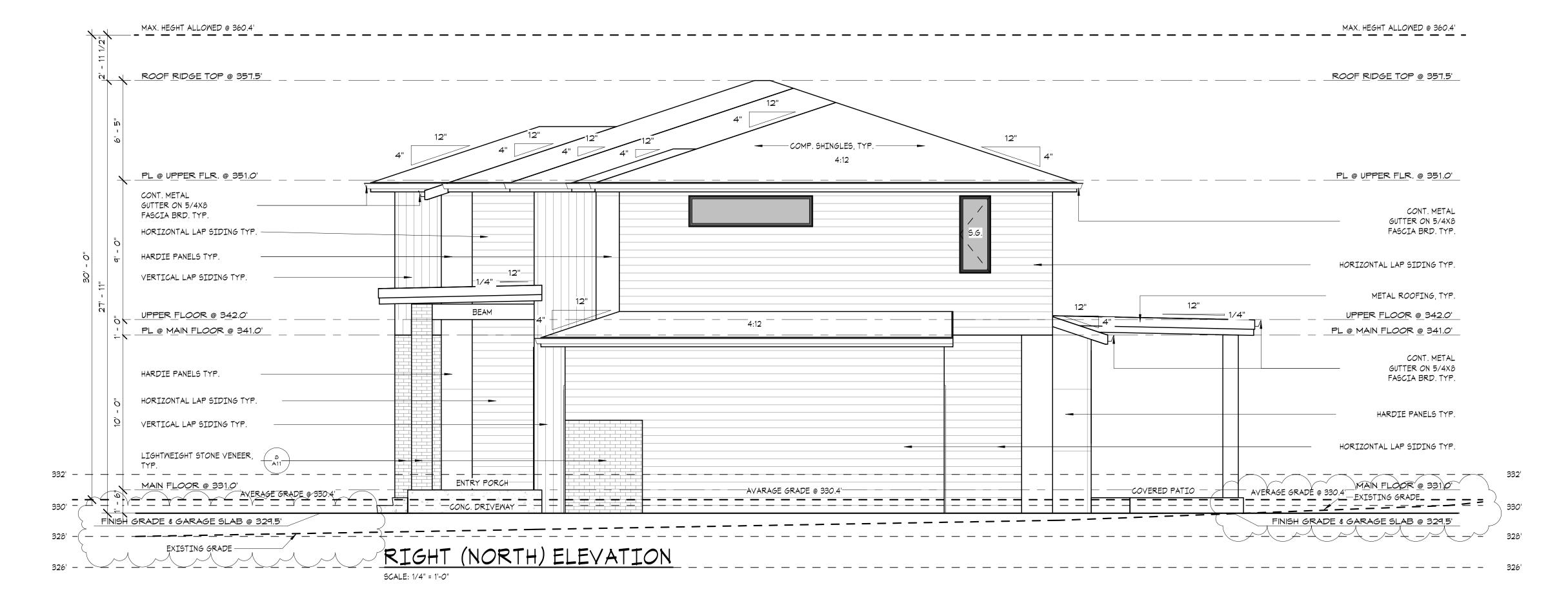
9. SEE SHEET A1 FOR ADDITIONAL NOTES.

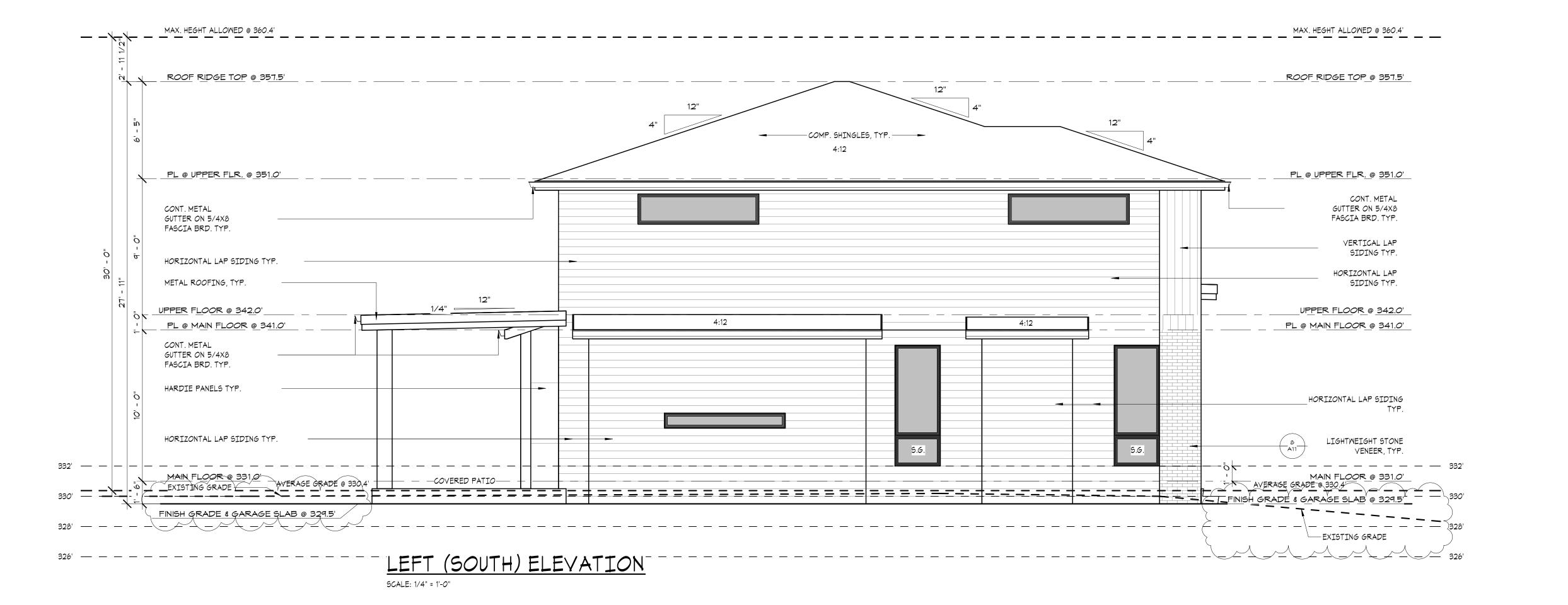
10. PROVIDE SURFACE DRAINAGE 6": 10' MIN. AWAY FROM HOUSE FOOTPRINT IRC

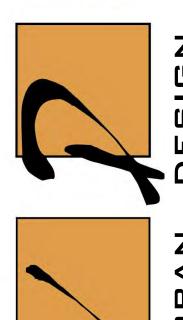
NO OPERABLE WINDOW SHALL BE INSTALLED LESS THAN 24 INCHES ABOVE FINISHED FLOOR THAT IS GREATER THAN 72 INCHES ABOVE THE FINISH GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

FOR HARDIE PANEL DETAILS SEE SHEET A13 FOR ARTISAN LAP SIDING DETAILS SEE SHEET A14







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SUBMITTAL/REVISION: DATE: SUBMITTED

REVISED DESIGN BY:

DRAFTED BY:

SHEET TITLE:

-/-/2022

-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

LEFT AND RIGHT ELEVATIONS

PROJECT NUMBER:

21257





PERSPECTIVE VIEW: FRONT VIEW



PERSPECTIVE VIEW: BIRD EYE VIEW



PERSPECTIVE VIEW: REAR ELEVATION



PERSPECTIVE VIEW: REAR/ LEFT ELEVATION

PERSPECTIVE VIEW:

PERSPECTIVE VIEWS ARE FOR REFERENCE ONLY.
THEY SHOULD NOT BE USED TO DETERMINE ANY PORTION OF THE CONSTRUCTION
OTHER THAN GENERAL MATERIAL APPEARANCE. REFER TO ELEVATION SHEETS FOR
DETAILS.







RESIDENCE PROJECT NAME:

STNGL

8456

MERCI

PARCI

SUBMITTAL/REVISION: DATE:

SUBMITTED REVISED DESIGN BY:

DRAFTED BY:

ANNA KONYAKINA

-/-/2022 -/-/2022

PAVEL MELNIK

SHEET TITLE:

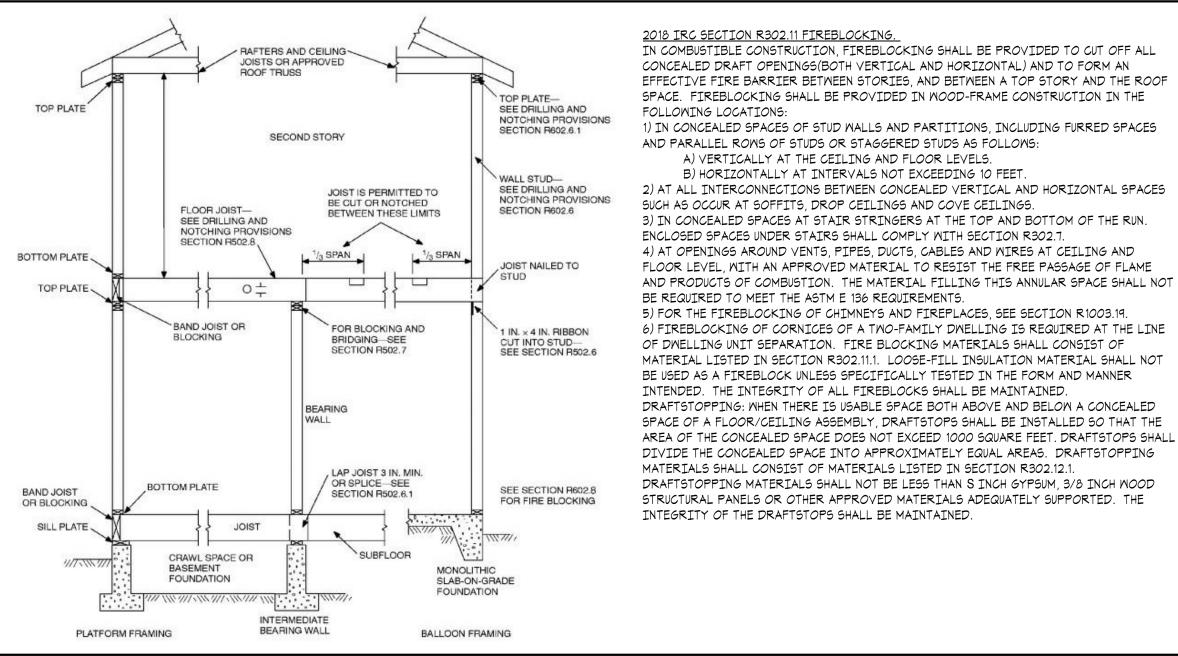
PERSPECTIVE VIEWS

PROJECT NUMBER:

21257

# BUILDING CROSS-SECTION - 'A'

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



CERTIFICATE (WSEC R401.3): A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR WITHIN THREE FEET OF ELECTRICAL DISTRIBUTION PANEL. THE CERTICATE MUST LIST THE ENERGY FEATURES OF THE STRUCTURE.

DUCTS (WSEC R403.2.2):

DUCTS MUST BE LEAK TESTED IN ACCORDANCE WITH WSU RS-33 USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED. DUCT TIGHTNESS MUST BE VERIFIED BY EITHER THE POSTCONSTRUCTION TEST OR ROUGH-IN TEST PER MSEC R403.2.2. TOTAL LEAKAGE MUST BE LESS THAN OR EQUAL TO 4 CFM PER 100 S.F. OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1" W.G. (25 Pa) ACROSS THE ENTIRE SYSTEM. PROVIDE GENERAL NOTES TO ADDRESS THIS REQUIREMENT.

PER WSEC R402.4, THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE(3). THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL (R402.4.1.2).

PER MSEC R403.1.1, AT LEAST ONE THERMOSTAT PER DMELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

PER WSEC R404.1, A MINIMUM OF 90 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.

DUCTS (503.10.1)

INSTALLATION OF DUCTS IN EXTERIOR WALLS, FLOOR OR CEILING CANNOT DISPLACE REQUIRED INSULATION.

BUILDING CAVITIES CANNOT BE USED AS DUCTS DUCT TESTING (503.10.2) DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST BE TESTED.

REFER TO STRUCTURAL ENGINEERING SHEETS FOR FOUNDATION/CRAWL SPACE VENTILATION.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

FOR MORE DETAILS SEE STRUCTURAL ENGINEERING PLAN.

REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN

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SUBMITTAL/REVISION: DATE:

SUBMITTED REVISED

DESIGN BY: DRAFTED BY:

SHEET TITLE:

BUILDING CROSS-SECTION AND DETAILS

-/-/2022

-/-/2022

PAVEL MELNIK

ANNA KONYAKINA

PROJECT NUMBER:

2125

SHEET NUMBER:

SECTION 312.12: RODENT PROOFING: STRAINER PLATES ON DRAIN INLETS SHALL BE DESIGNED AND INSTALLED SO THAT NO OPENING EXCEEDS 1/2 OF AN INCH IN THE LEAST DIMENSION.

METER BOXES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT RATS CANNOT ENTER A BUILDING BY FOLLOWING THE SERVICE PIPES FROM THE BOX INTO THE BUILDING. 312.12.2: METAL COLLARS.

IN OR ON BUILDINGS WHERE OPENINGS HAVE BEEN MADE IN WALLS, FLOORS, OR CEILINGS FOR THE PASSAGE OF PIPES, SUCH OPENINGS SHALL BE CLOSED AND PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS SECURELY FASTENED TO THE ADJOINING STRUCTURE. 312.12.3: TUB WASTE OPENINGS.

TUB WASTE OPENINGS IN FRAMED\_CONSTRUCTION TO CRAWL SPACES AT OR BELOW THE FIRST FLOOR SHALL BE PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS OR METAL SCREEN SECURELY FASTENED TO THE ADJOINING STRUCTURE WITH NO OPENING GREATER THAN 1/2 OF AN INCH IN THE LEAST DIMENSION. \* 2018 UNIFORM PLUMBING CODE WITH WASHINGTON STATE AMENDMENTS (UPC)

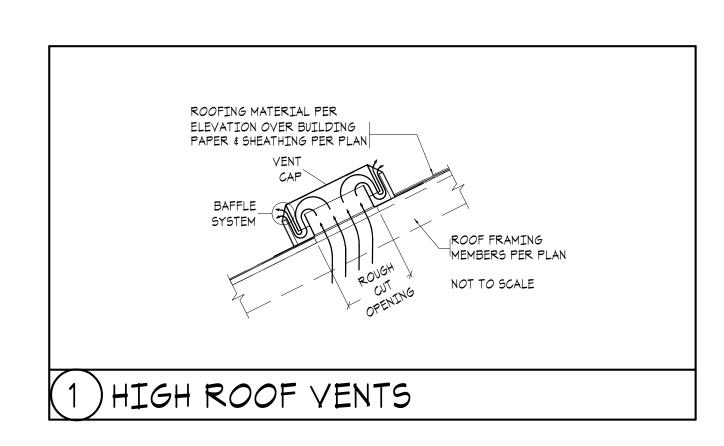
6) FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE

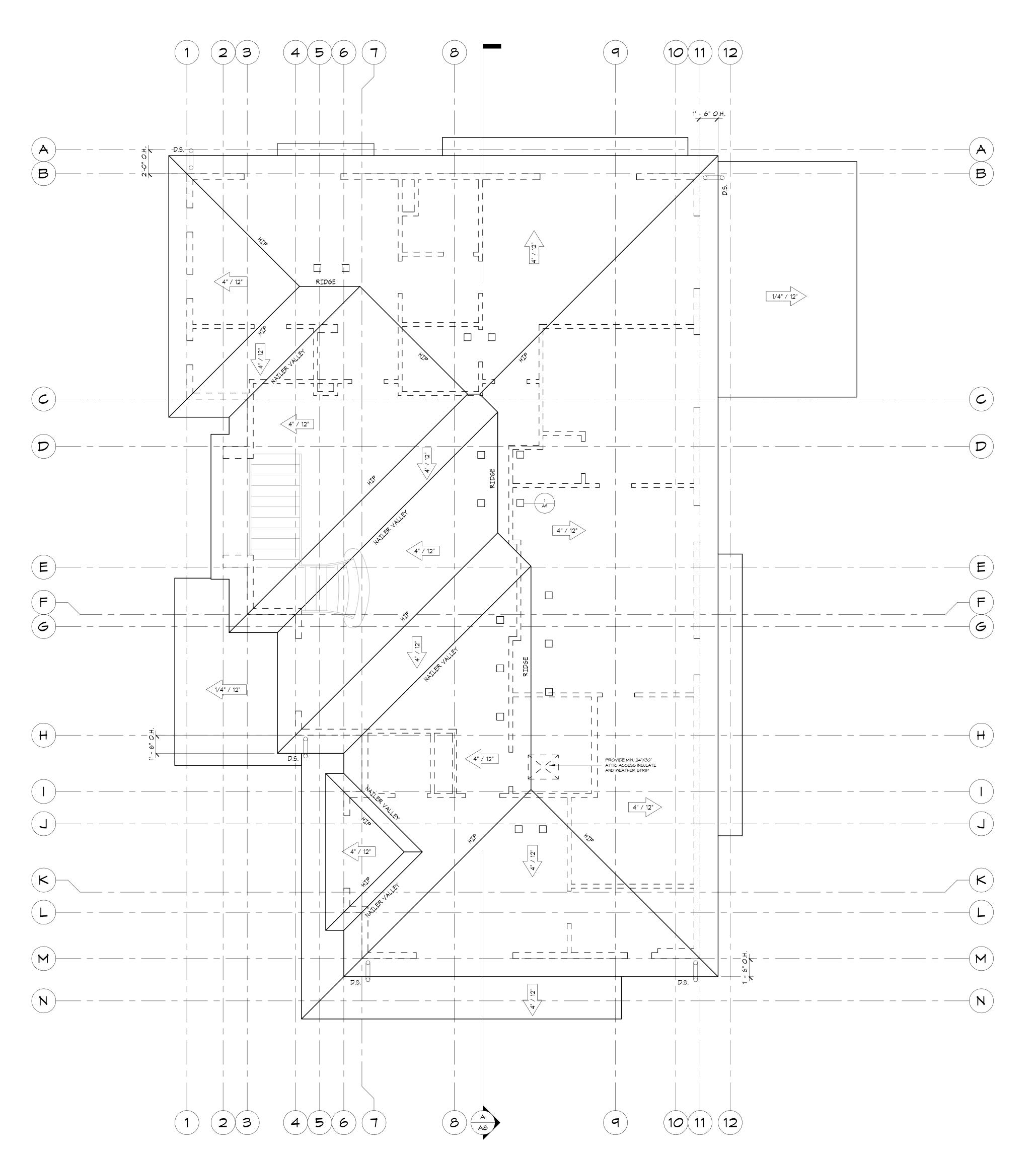
MATERIAL LISTED IN SECTION R302.11.1. LOOSE-FILL INSULATION MATERIAL SHALL NOT DRAFTSTOPPING: WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW A CONCEALED

SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPS SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. DRAFTSTOPPING

DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN S INCH GYPSUM, 3/8 INCH WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. THE

# ROOF LAYOUT SCALE: 1/4" = 1'-0"





RESIDENCE SINGLE-F 8456 SE MERCER PARCEL

SUBMITTAL/REVISION: DATE: -/-/2022 -/-/2022

SUBMITTED REVISED

DESIGN BY: DRAFTED BY:

PAVEL MELNIK ANNA KONYAKINA

SHEET TITLE:

ROOF LAYOUT

PROJECT NUMBER: 21257

SHEET NUMBER:

A9

ROOM	# OF WNDS.	WND. W.	WND. H.	MANUF.	FRAME TYPE	WDW. TYPE	MODEL NO.	AIR GAP	GAS	LO-E	U-VAL. (1)	AREA	N.A.
MAIN FLOOR													
STAIRCASE	2	2,00	6,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	24,00	6,72
STAIRCASE	1	4,00	6,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	24,00	6,72
GREAT RM.	4	3,00	6,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	72,00	20,10
GREAT RM.	4	3,00	2,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	24,00	6,72
GREAT RM.	1	6,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	36,00	10,08
GREAT RM.	1	6,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	12,00	3,3
KITCHEN	1	8,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	8,00	2,2
KITCHEN	1	6,00		MILGARD	VINYL	SLIDER	5120	1/2"	AIR	YES	0,28	33,00	9,2
KITCHEN	1	3,00		MILGARD	VINYL	S.G.D.	5621	1/2"	AIR	YES	0,28	24,00	6,7
WALK-IN-PANTRY	1	5,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	5,00	1,4
PDR.	1	2,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	11,00	3,0
HALL	1	3,00		MILGARD	VINYL	S.G.D.	5621	1/2"	AIR	YES	0,28	24,00	6,7
DEN/SUITE 5	1	8,00		MILGARD	VINYL	SLIDER	5120	1/2"	AIR	YES	0,28	48,00	13,4
BATH 4	1	2,00	2,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	4,00	1,1
UPPER FLOOR		0.00	F 00	MILOADD	MENZ	CLIDED	F100	1 /0"	AID	VE 2	0.00	00.00	2.1
BONUS/SUITE 4	1	6,00		MILGARD	VINYL	SLIDER	5120	1/2"	AIR	YES	0,28	30,00	8,4
BONUS/SUITE 4	2	3,00		MILGARD	VINYL	PICTURE	5320 5320	1/2"	AIR AIR	YES	0,28	12,00	3,30
OPEN TO BELOW STAIRCASE	2	3,00 2,00		MILGARD MILGARD	VINYL	PICTURE PICTURE	5320	1/2"	AIR	YES YES	0,28	30,00 24,00	8,4 6,7
STAIRCASE	2	2,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	12,00	3,3
STAIRCASE	1	4,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	24,00	6,7
STAIRCASE	1	4,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	12,00	3,3
W.I.C.	1	2,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	4,00	1,12
SUITE 2	1	2,00		MILGARD	VINYL	CASE.	5521	1/2"	AIR	YES	0,28	4,00	1,12
SUITE 2	1	2,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	4,00	1,12
SUITE 2	1	8,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	16,00	4,4
SUITE 3	1	8,00		MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	16,00	4,4
SUITE 3	1	6,00		MILGARD	VINYL	SLIDER	5120	1/2"	AIR	YES	0,28	36,00	10,0
MASTER BATH	2	3,00	5,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	30,00	8,4
MSTR. STE.	1	3,00	6,00	MILGARD	VINYL	PICTURE	5320	1/2"	AIR	YES	0,28	18,00	5,0
MSTR. STE.	1	3,00		MILGARD		CASE.	5521			YES	_	18,00	5,0
BATH 3	1	2,00	5,00	MILGARD	VINYL	CASE.	5521	1/2"	AIR	YES	0,28	10,00	2,80
DOORS WITH MOF	E THAN	J 50% (	21 488									649,00	181,7
FOYER	2	3,00		MILGARD	VINYL	S.G.D.	5621	1/2"	AIR	YES	0,28	48,00	13,4
						OORS WITH M						48,00	
						AVO	G. U-VALI	JE (VE	RTIC	AL GI	LASS):		13,4
SKYLIGHTS AND S	KYWAL	LS					1						
								s	KYLK	SHT T	OTAL:		
						AVG.	. U-VALUI						
												AREA	UA
												697,00	
												TOTAL 1	TOTAL 2
	GLAZIN	IG % =		TOTAL 1		=	697		S.F.	=		17,36%	
				EATED ARE			4016		S.F.				
A۱	/G. U-V/	ALUE =		TOTAL (TO		.=	195		UA	=		0,28	U-VALUE
			ARE	A TOTAL (T	OT. 1)		697	,00	Α				
NON-LIVING SPAC	F WIND	OWS:											

		ON SC					7000		
	HINGTON STA					1505.4	l.3(1) &(	4)	
SYMBOL	LOCATION	MINIMUM F			ENTS				
•	Bath, Powder,	Min. 50 cfm	@ 0.2	25" WG					
A	Laundry Kitchen	Min 100 of	- A O	25" \\/C					
<b>→</b> B	Kitchen	Min. 100 cfi (Range hoo	-		haust fa	n rated	at min 1	00 cfm	
T 5		at 0.10" WC							
	Whole House		128	DC 4004 101	Oxiliador	iunio		505.4.3(1	)
<b>+</b> c	Fan	(based on		6 s.f. floor a	area &	5		ooms)	,
10000									
	-	SEE EQ. 15	5-1						
		PART Y	100						
2010 Da	cidential \	/ontilati	ont	omnline	200 51	mm	201		
	sidential \			-				121 0205	
Applicant: 40	TH MERCER IS	LAND <sub>Parcel</sub>			_Permit I	Numbe	r:DWE	EL21-0295	
	VENTILA	TION AND I	NDOC	R AIR QUA	LITYRE	QUIRE	MENTS		
Whole House Ve	entilation fan(s) sh	all be sized acc	cording	to Internationa	al Resident	ial Code	M1505.4:		
	CFM = (0.01 x tota		-						15-1)
	ems shall provide r								7
WHOLE HOU Exhaust fan Integrated	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a  with forced air sys	5.4.3(3) accord ION SYSTE and fresh air inle tem per IRC M	ing to the Markets in each	ne formula Qf Exempt: Addit ach habitable r .1.5 Ba	= Qr x Co ion less that room per If alanced an	q x Cf an 500 s RC M150 d Distrib	q.ft. or Rei 05.4.1.2 outed	model only	
Exhaust fan Integrated Supply fan Balanced S	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a  with forced air syst  per IRC M1505.4  Supply and Exhaus	5.4.3(3) accord ION SYSTE and fresh air inlet tem per IRC M 1.1.3 st fans per IRC	ing to the man of the	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi Bi 4.1.4 N	= Qr x Co ion less that room per If alanced an alanced an OT balance	an 500 s RC M150 d Distrib d NOT ( ed and [	q.ft. or Rei 05.4.1.2 outed Distributed Distributed	model only	
WHOLE HOU Exhaust fan Integrated Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a  with forced air syst  per IRC M1505.4  Supply and Exhaus  d design complying	15.4.3(3) according to the second sec	ing to the man of the	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi Bi 4.1.4 N	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance	ax Cf an 500 s RC M150 d Distrib d NOT ( ed and D ed and N	q.ft. or Rei 05.4.1.2 outed Distributed Distributed NOT distrib	model only	
Exhaust fan Integrated y Supply fan Balanced S Engineered	JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4 Supply and Exhaus d design complying of Whole House F	ION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC g with IMC sect	ing to the man of the	ne formula Qf  Exempt: Addit  ach habitable r  .1.5 Ba  4.1.4 No.  8.10 No.	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size:	an 500 s RC M150 d Distrib d NOT I ed and I ed and I 128	q.ft. or Rei 05.4.1.2 outed Distributed Distributed NOT distributed	model only outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	JSE VENTILAT  with 24-hr timer a with forced air sys per IRC M1505.4 Supply and Exhaus design complying of Whole House F	15.4.3(3) according to the per IRC Minus frans per IRC gwith IMC sectors and LAUND 13.4.3 [Incomplete IRC] [	ing to the man of the	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10X Ni	e Qr x Co ion less that room per life alanced an alanced an OT balance OT balance Size:	an 500 s RCM150 d Distrib d NOT I ed and I ed and N 128	q.ft. or Rei 05.4.1.2 outed Distributed Distributed NOT distributed	model only outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	JSE VENTILAT  with 24-hr timer a with forced air system of Whole House F  Table M1505.4.3  Floor Area	5.4.3(3) according to the section of	ing to the man of the	ne formula Qf  Exempt: Addit  ach habitable r  1.5 Bi  4.1.4 Ni  8.10 Ni  SYSTEM MIN  Number	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor	an 500 s RC M150 d Distrib d NOT I ed and I ed and N 128	q.ft. or Rel 05.4.1.2 outed Distributed Distributed NOT distributed Cfm_COI	model only outed NTIN.hrs./da s, Q <sub>r</sub>	
Exhaust fan Integrated y Supply fan Balanced S Engineered	JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4 Supply and Exhaus d design complying of Whole House F Table M1505.4.3  Floor Area (sq.ft.)	15.4.3(3) according to the per IRC Minus per IRC Minus per IRC gwith IMC sector an: LAUND 13.1 LAUN	ing to the ing the ing to the ing the i	ne formula Qf  Exempt: Addit  ach habitable r  1.5 Bi  4.1.4 Ni  8.10X Ni  SYSTEM MIN  Number  2	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor	an 500 s RC M150 d Distrib d NOT I ed and I ed and N 128  NTILATI ns 4	q.ft. or Rei 05.4.1.2 outed Distributed Distributed NOT distribcfmGOI ON RATE	outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4  Supply and Exhaus d design complying of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)	5.4.3(3) accord ION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC g with IMC sect an: LAUND: 3(1) WHOLE-H	M ets in ea 1505.4 M1505. ion 403. RY	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 Ni  SYSTEM MIN Number 2 30	e Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor	an 500 s RC M150 d Distrib d NOT I ed and I 128  NTILATI ns 4 450	q.ft. or Rei 05.4.1.2 buted Distributed Distributed NOT distrib  cfm_GOI  ON RATE:  >4	outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4 Supply and Exhaus d design complying of Whole House F Table M1505.4.3  Floor Area (sq.ft.)	5.4.3(3) accord ION SYSTE and fresh air inletem per IRC M 1.3 st fans per IRC g with IMC sect an: LAUND 3(1) WHOLE-H a 0 30 30	M	ne formula Qf  Exempt: Addit  ach habitable r  .1.5 Bi  4.1.4 Ni  8.10 Ni  SYSTEM MIN  Number  2 30 35	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor	an 500 s RC M150 d Distrib d NOT I ed and I ed and N 128  NTILATI ns 4	q.ft. or Rei 05.4.1.2 outed Distributed Distributed NOT distrib cfmCOI ON RATE:    >2   56   55	outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4  Supply and Exhaus d design complying of Whole House F  Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100	5.4.3(3) accord  ION SYSTE  and fresh air inletem per IRC M  1.1.3 st fans per IRC g with IMC sect  an: LAUND!  3(1) WHOLE-H  a  0  30  30  30  30	M	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 Ni  SYSTEM MIN Number	e Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40	an 500 s RC M150 d Distrib d NOT I ded and I ed and I 128  NTILATI ms 4 450 50	q.ft. or Rei 05.4.1.2 buted Distributed Distributed NOT distrib  cfm GOI  ON RATE  >4 0 56 60	outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4  Supply and Exhaus d design complying of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15	5.4.3(3) accord  ION SYSTE  and fresh air inletem per IRC M  1.1.3 st fans per IRC g with IMC sect  an: LAUND  3(1) WHOLE-H  a  0  30  00  30  00  30  00  30	M	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 X Ni  SYSTEM MIN Number 2 30 35 40 45	e Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor 3 35 40 45	an 500 s RC M150 d Distrib d NOT I ed and I 128  NTILATI ms  450 55	q.ft. or Rei 05.4.1.2 buted Distributed Distributed NOT distrib  cfm GOI  ON RATE  50 50 60 65	outed NTIN.hrs./da	
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Exhaust fan Integrated y Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air system of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15  1501 to 20  2001 to 25  2501 to 30  3001 to 350  3501 to 40  4001 to 450  4501 to 500	5.4.3(3) accord FION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC gwith IMC sect fan: LAUNDI  3(1) WHOLE-H  a  0  00  30  00  30  00  40  00  45  00  50  60  60  60	M	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 X Ni  SYSTEM MIN Number 2 30     35     40     45     50     55     60     65     70	e Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40 45 50 55 60 65 70	x Cf an 500 s RC M150 d Distrib d NOT I ed and I 128  NTILATI ms 4 450 55 60 65 70 80	q.ft. or Rei 05.4.1.2 0uted Distributed Distributed NOT distribcfmCOI ON RATE  0 50 60 60 70 80 80 90	outed NTIN.hrs./da	
Exhaust fan Integrated y Supply fan Balanced S Engineered	5.4.3(2) and M150  JSE VENTILAT  With 24-hr timer a  with forced air syst per IRC M1505.4  Supply and Exhaus design complying of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15  1501 to 20  2001 to 25  2501 to 30  3001 to 35  3501 to 40  4001 to 45	5.4.3(3) accord FION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC gwith IMC sect fan: LAUNDI  3(1) WHOLE-H  a  0  00  30  00  30  00  40  00  45  00  50  60  60  60	M	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 X Ni  SYSTEM MIN Number 2 30     35     40     45     50     55     60     65     70	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40 45 50 55 60 65 70 75 80	X Cf   an 500 s   RC M150   d Distributed   NOT   Red and   NOT   Red and   NOT	q.ft. or Rei 05.4.1.2 buted Distributed Distributed NOT distrib  cfm_COI  ON RATE  0 56 66 70 75 80 85	outed NTIN.hrs./da	
Exhaust fan Integrated of Supply fan Balanced S Engineered Specify location 2018	5.4.3(2) and M150  JSE VENTILAT  With 24-hr timer a  with forced air syst per IRC M1505.4  Supply and Exhaus d design complying of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15  1501 to 20  2001 to 25  2501 to 30  3001 to 35  3501 to 40  4001 to 45  4501 to 50  Greater than 5	5.4.3(3) accord  ION SYSTE  INDICATE TO SYST	M	ne formula Qf Exempt: Addit ach habitable r 1.5 Bi 4.1.4 Ni 8.10 X Ni  SYSTEM MIN Number	e Qr x Co ion less that room per If alanced an alanced an OT balance OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40 45 50 55 60 65 70 75 80 for minimi	X Cf     an 500 s     RC M150     d Distributed NOT     ed and Died and D	q.ft. or Rei 05.4.1.2 buted Distributed Distributed NOT distrib  cfm GOI  ON RATE  32 0 56 66 70 75 80 85 90 95 rate	model only	
Exhaust fan Integrated of Supply fan Balanced S Engineered Specify location 2018	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4 Supply and Exhaus design complying of Whole House F  Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15  1501 to 20  2001 to 25  2501 to 30  3001 to 35  3501 to 40  4001 to 45  4501 to 500  Greater than 5	5.4.3(3) accord FION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC g with IMC sect fan: LAUND 3(1) WHOLE-H a 0 00 30 00 30 00 30 00 30 00 35 00 45 00 65 00 65 00 65	ing to the	Exempt: Addit   Addi	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40 45 50 55 60 65 70 75 80 for minimum ON QUALIT	X Cf   an 500 s   RC M150   d Distributed   NOT   Red and   Not   Red and   Not   Red and   Not   No	q.ft. or Rei 05.4.1.2 0uted Distributed Distributed NOT distrib  cfm_COI  ON RATE  0 56 66 70 75 80 85 90 95 rate	outed NTIN.hrs./da	ау
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Exhaust fan Integrated of Supply fan Balanced S Engineered Specify location 2018	5.4.3(2) and M150  JSE VENTILAT  with 24-hr timer a with forced air syst per IRC M1505.4 Supply and Exhaus d design complying of Whole House F  B Table M1505.4.3  Floor Area (sq.ft.)  0 to 500  501 to 100  1001 to 15  1501 to 20  2001 to 25  2501 to 30  3001 to 35  3501 to 40  4001 to 45  4501 to 50  Greater than 5  IS Table M1505.4  YPE  NCED	5.4.3(3) accord FION SYSTE and fresh air inletem per IRC M 1.1.3 st fans per IRC g with IMC sect fan: LAUND 3(1) WHOLE-H a 0 00 30 00 30 00 30 00 30 00 35 00 45 00 65 00 65 00 65	ing to the	Exempt: Addit   Addi	= Qr x Co ion less that room per If alanced an alanced an OT balance OT balance Size: IIMUM VEI of Bedroor  3 35 40 45 50 55 60 65 70 75 80 for minimum ON QUALIT	X Cf   an 500 s   RC M150   d Distributed   NOT   Red and   Not   Red and   Not   Red and   Not   No	q.ft. or Rei 05.4.1.2 0uted Distributed Distributed NOT distrib  cfm_COI  ON RATE  0 56 66 70 75 80 85 90 95 rate	outed NTIN.hrs./da	ау

66% ( 2 hrs 40 min every 4 hrs; 16 hrs /day)

75% ( 3 hrs every 4 hrs; 18 hrs /day) 100% (continuouslyoperating)

ROOF VENTILATION		LOWER ROO
Standard Truss / Scissor Truss Roof Roof Area :	235 s.f.	LOWER ROC
Ventilation Required:	235 s.f. x 144 s.i. / s.f. / 300 =	110 0 o i Dogld
	ove midpoint & min. 3 ft. above eave vents	112,8 s.i. Req'd
Eave Ventilation:	ove mapoint a min. o n. above cave vents	
Birdblocking =	4,71 s.i. / l.f 25% reduction =	3,53 s.i. / l.f.
Eave Ventilation Req'd =	112,8 s.i. / 2 / s.i. per l.f. =	15,97 l.f.
Provide :	16 l.f. birdblocking. Ventilation =	56,52 s.i.
Min. Ventilation Provided =	56,52 s.i. is greater than	56,4 s.i. Req'd
Upper Roof Ventilation:	CO,OL OIL IO GIOGLOI LIIGII	30, + 3.1. Hequ
7"x7" Attic Roof Jack =	49 s.i. each - 25% screen reduction =	36,75 s.i. each.
Upper Ventilation Reg'd =	112,8 s.i. / 2 / s.i. of each vent =	1,53 vents
Provide:	2 -7"x7" roof jacks. Ventilation =	73,50 s.i.
Ventilation Provided =	73,50 s.i. is greater than	56,4 s.i. Req'd
Use : (minimum)	16 l.f. birdblocking. Ventilation =	56,52 s.i.
Use : (minimum)	2 -7"x7" roof jacks. Ventilation =	73,50 s.i.
Total Min. Ventilation Provided =	130,02 s.i. IS GREATER THAN :	112,8 s.i. Reg'd
Total Will. Velitilation Flovided =		,
Total Willi. Velitilation Flovided =		, , , , , , , , , , , , , , , , , , , ,
ROOF VENTILATION		,
	ON	MAIN ROO
ROOF VENTILATION	ON	
ROOF VENTILATION	ON Framing Assembly:	•
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required:	Praming Assembly: 2350 s.f.	MAIN ROO
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required:	Traming Assembly:  2350 s.f. 2350 s.f. x 144 s.i. / s.f. / 300 =	MAIN ROO
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above	Traming Assembly:  2350 s.f. 2350 s.f. x 144 s.i. / s.f. / 300 =	MAIN ROO
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation:	Framing Assembly:  2350 s.f.  2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents	MAIN ROO
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking =	Praming Assembly:  2350 s.f.  2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / l.f 25% reduction =	MAIN ROO 1128 s.i. Req'd 3,53 s.i. / l.f.
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking = Eave Ventilation Req'd =	Framing Assembly:  2350 s.f.  2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / l.f 25% reduction =  1128 s.i. / 2 / s.i. per l.f. =	MAIN ROO 1128 s.i. Req'd 3,53 s.i. / l.f. 159,66 l.f.
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking = Eave Ventilation Req'd = Provide:	Framing Assembly:  2350 s.f.  2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / l.f 25% reduction =  1128 s.i. / 2 / s.i. per l.f. =  160 l.f. birdblocking. Ventilation =	3,53 s.i. / l.f. 159,66 l.f. 565,20 s.i.
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking = Eave Ventilation Req'd = Provide: Min. Ventilation Provided =	Framing Assembly:  2350 s.f.  2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / l.f 25% reduction =  1128 s.i. / 2 / s.i. per l.f. =  160 l.f. birdblocking. Ventilation =	3,53 s.i. / l.f. 159,66 l.f. 565,20 s.i.
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking = Eave Ventilation Req'd = Provide: Min. Ventilation Provided = Upper Roof Ventilation:	Framing Assembly:  2350 s.f. 2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / I.f 25% reduction =  1128 s.i. / 2 / s.i. per l.f. =  160 l.f. birdblocking. Ventilation =  565,2 s.i. is greater than	3,53 s.i. / l.f. 159,66 l.f. 565,20 s.i. 564 s.i. Req'd
ROOF VENTILATION Standard Truss / Scissor Truss Roof Roof Area: Ventilation Required: Provide 1/2 ventilation at eaves, 1/2 above Eave Ventilation: Birdblocking = Eave Ventilation Req'd = Provide: Min. Ventilation Provided = Upper Roof Ventilation: 7"x7" Attic Roof Jack =	Framing Assembly:  2350 s.f. 2350 s.f. x 144 s.i. / s.f. / 300 =  ove midpoint & min. 3 ft. above eave vents  4,71 s.i. / l.f 25% reduction =  1128 s.i. / 2 / s.i. per l.f. =  160 l.f. birdblocking. Ventilation =  565,2 s.i. is greater than	3,53 s.i. / l.f. 159,66 l.f. 565,20 s.i. 564 s.i. Req'd

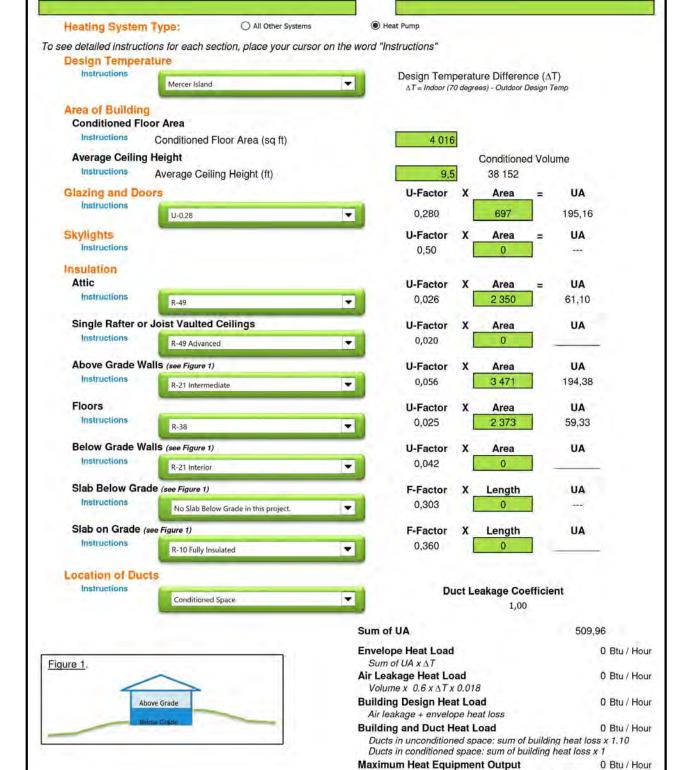
588,00 s.i. is greater than

1153,20 s.i. IS GREATER THAN:

160 l.f. birdblocking. Ventilation = 565,20 s.i.

16 -7"x7" roof jacks. Ventilation = 588,00 s.i.

1128 s.i. Req'd



## ENERGY NOTES:

Use: (minimum)

Use: (minimum)

Total Min. Ventilation Provided =

1. A RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE COMPLYING WITH SEC R401.3 IS REQUIRED TO BE COMPLETED BY THE DESIGN PROFESSIONAL OR BUILDING AND PERMANENTLY POSTED WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.

Building and duct heat loss x 1.40 for forced air furnace

Building and duct heat loss x 1.25 for heat pump

2. DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR AND HOMEOWNER PRIOR TO AN APPROVED FINAL INSPECTION PER SEC R403.2.2.

3. EACH DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR THE REGULATION OF TEMPERATURE PER SEC R403.1. 4. BUILDING AIR LEAKAGE TESTING, DEMONSTRATING THAT LEAKAGE RATE NOT EXCEED 5 AIR CHANGES PER HOUR AND CONFORM TO SEC R402.4.1 THROUGH R402.4.4.

5. MINIMUM 90% OF ALL INTERIOR LIUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES. ALL

EXTERIOR LIGHTING SHALL BE HIGH EFFICACY LUMINAIRES PER SEC R404.1.

6. BUILDING ENVELOPE MEETS REQUIREMENTS OF TABLE R402.1.1, CLIMATE ZONE 4 OF 2018 SEC.

#### **TABLE R302.6**

# DWELLING-GARAGE SEPARATION

SEPARATION	MATERIAL				
From the residence and attics	Not less than <sup>1</sup> / <sub>2</sub> -inch gypsum board or equivalent applied to the garage side				
From habitable rooms above the garage	Not less than <sup>5</sup> / <sub>8</sub> -inch Type X gypsum board or equivalent				
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than <sup>1</sup> / <sub>2</sub> -inch gypsum board or equivalent				
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

A HEAT DETECTOR OR HEAT ALARM RATED FOR THE AMBIENT OUTDOOR TEMPERATURES AND HUMIDITY SHALL BE INSTALLED IN NEW GARAGES THAT ARE ATTACHED TO OR LOCATED UNDER NEW AND EXISTING DWELLINGS. HEAT DETECTORS AND HEAT ALARMS SHALL BE INSTALLED IN A CENTRAL LOCATION AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

EXCEPTION: HEAT DETECTORS AND HEAT ALARMS SHALL NOT BE REQUIRED IN DWELLINGS WITHOUT COMMERCIAL POWER.

#### REQUIRED SAFETY GLAZING LOCATIONS:

GLAZING IN SMINGING DOORS EXCEPT LOUVERED WINDOWS AND JALOUSIES COMPLYING WITH IRC R308.2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.

GLAZING IN STORM DOORS.

4. GLAZING IN ALL UNFRAMED SWINGING DOORS 5. GLAZING IN DOORS, WALLS, FENCES AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHROOMS, AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE ANY STANDING OR WALKING SURFACE. EXCEPTION: OPENINGS THROUGH WHICH A 3" SHPERE IS UNABLE TO PASS.

6. GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE.

EXCEPTION: WHERE THERE IS AN INTERVENING WALL OR PARTITION BETWEEN DOOR AND GLAZING OR WHERE THE DOOR ACCESSES A CLOSET 3' OR LESS IN DEPTH.

7. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, WHEN ALL OF THE FOLLOWING APPLY:

7.1 EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 S.F. 7.2 BOTTOM EDGE LESS THAN 18" ABOVE THE FLOOR.

7.3 TOP EDGE GREATER THAN 36" ABOVE THE FLOOR.

7.4 ONE OR MORE WALKING SURFACES WITHIN 36" HORIZONTALLY OF THE GLAZING.

EXCEPTION: WHERE A PROTECTIVE 1-1/2"-WIDE BAR IS INSTALLED ON THE ACCESSIBLE SIDE OF THE GLAZING 34" - 38" ABOVE THE FLOOR AND IS CAPABLE OF WITHSTANDING A LOAD OF 50 LBS PER LINEAL FOOT OR WHERE THE BOTTOM EDGE OF THE GLASS IS 25' OR MORE ABOVE GRADE, A ROOF, WALKING SURFACE, OR OTHER HORIZONTAL SURFACE.

8. GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. INCLUDES STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS.

9. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS, AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE A WALKING SURFACE AND WITHIN 60" HORIZONTALLY OF THE WATER'S EDGE. THIS WILL APLY TO ALL SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING. 10. R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS.

GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES (914 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

1. WHERE A RAIL IS INSTALLED ON THE ACCESSIBLE SIDE(S) OF THE GLAZING 34 TO 38 INCHES (864 TO 965 MM) ABOVE THE WALKING SURFACE. THE RAIL SHALL BE CAPABLE OF MITHSTANDING A HORIZONTAL LOAD OF 50 POUNDS PER LINEAR FOOT (730 N/M) WITHOUT CONTACTING THE GLASS AND HAVE A CROSS-SECTIONAL HEIGHT OF NOT LESS THAN 11/2 INCHES (38 MM).

2. GLAZING 36 INCHES (914 MM) OR MORE MEASURED HORIZONTALLY FROM THE WALKING SURFACE. R308.4.7 GLAZTNG ADJACENT TO THE BOTTOM STATE LANDING.

GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES (914 MM) ABOVE THE LANDING AND WITHIN A 60-INCH (1524 MM) HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

EXCEPTION: THE GLAZING IS PROTECTED BY A GUARD COMPLYING WITH SECTION R312 AND THE PLANE OF THE GLASS IS MORE THAN 18 INCHES (457 MM) FROM THE GUARD.

R302.6 DWELLING-GARAGE FIRE SEPARATION THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. ATTACHMENT OF GYPSUM BOARD SHALL COMPLY WITH TABLE R702.3.5. THE WALL SEPARATION PROVISIONS OF TABLE R302.6 SHALL NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN REFERENCES AND/OR INSTRUCTIONS

PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN.







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# SCHEDULES AND NOTES

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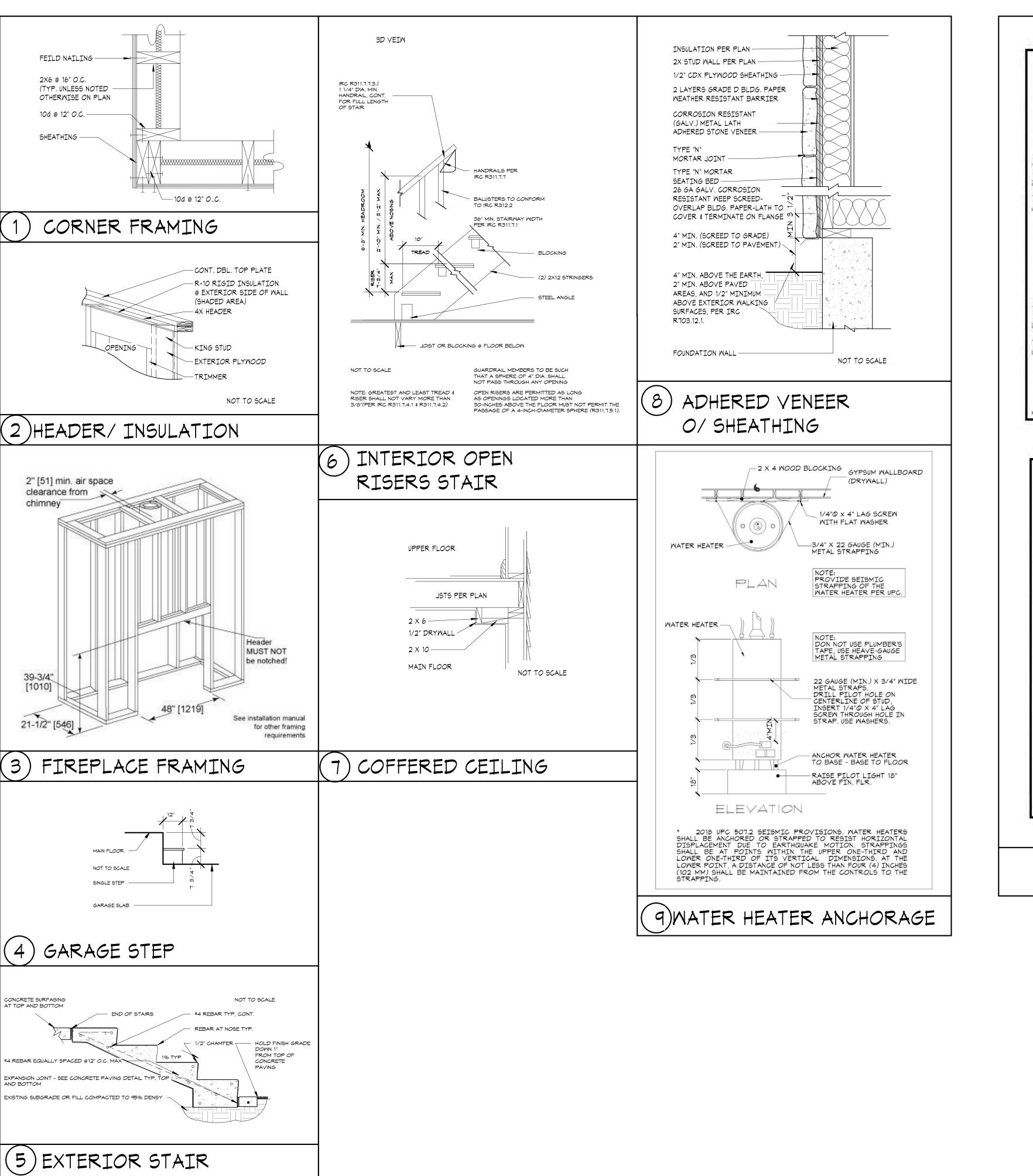
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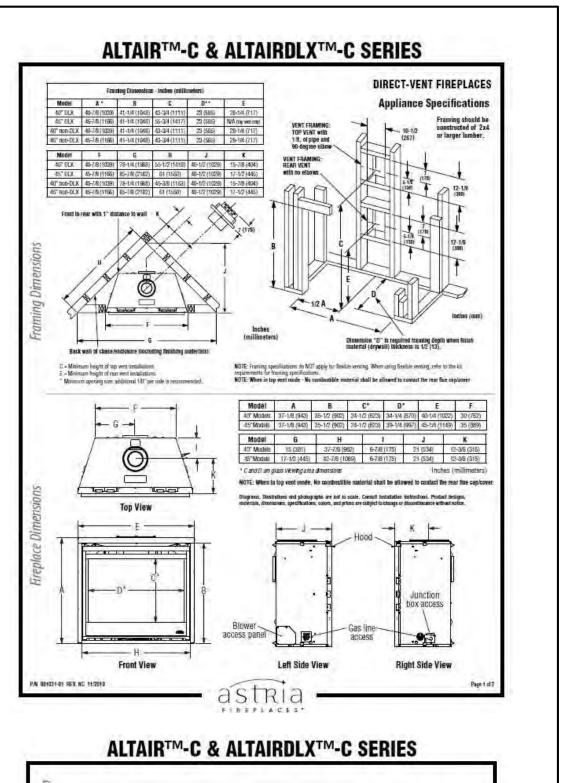
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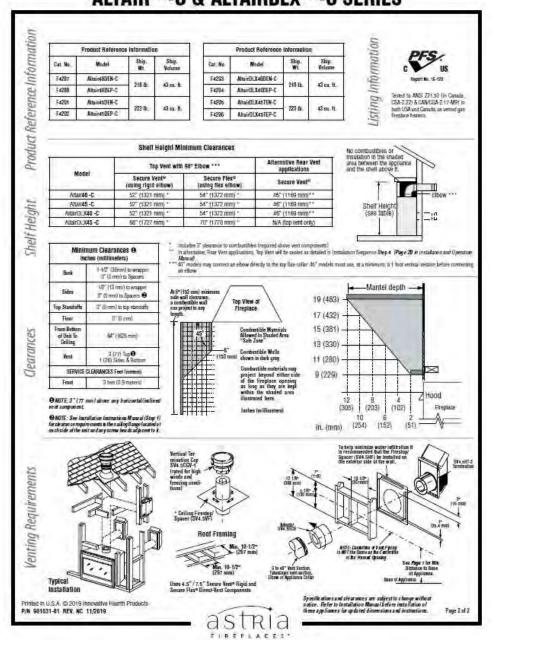
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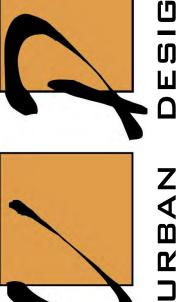
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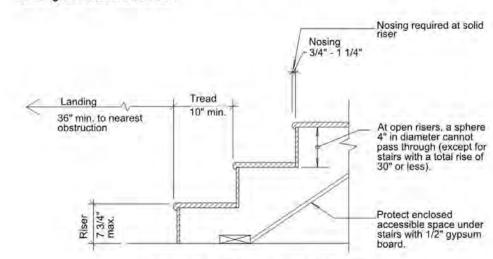


Figure 1: Typical Stair Treads and Risers

### Stair Treads and Risers

☐ The largest tread or riser within any flight of stairs is not to exceed the smallest by more than 3/8 inches. (R311.7.5)

- ☐ Interior stairways shall be provided with an artificial light source to illuminate landings and treads. There shall be a wall switch at each floor level to control the light source where the stairway has 6 or more risers. (R303.7)
- ☐ Exterior stairways shall be provided with an artificial light source located at the top landing of the stairway and located at the bottom landing where accessing a basement. (R303.8)
- ☐ Handrails are required on at least one side for stairways with four or more risers. See Tip Sheet 2 for additional information regarding handrails. (R311.7.8)

- ☐ Landings are required at the top and the bottom of stairways. A floor landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs. (R311.7.6)
- ☐ A landing extending the width of the stair and measuring a minimum of 36 inches in the direction of travel is required at the top and bottom of every stairway. (R311.7.6)

## Circular, Winding, or Spiral Stairways

☐ For exceptions related to the construction of circular, winding, or spiral stairways, see IRC R311.7.5.2.1 and R311.7.10.

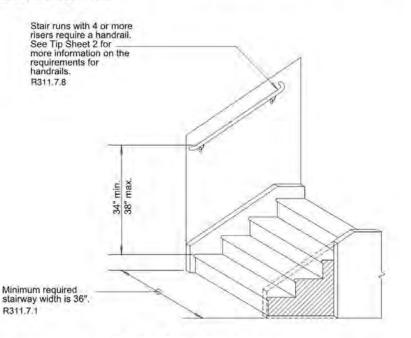


Figure 2: Typical Stair Elevation

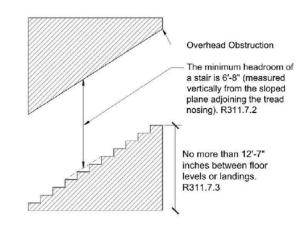
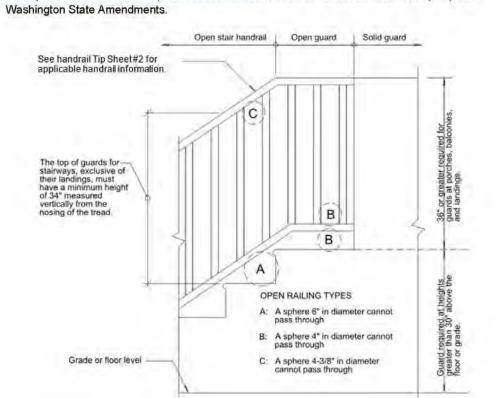


Figure 3: Headroom Clearance Requirements

# BASIC STAIRS DETAIL

#### Residential Guards (Guardrails) This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with



## Figure 1: Guard Elevation (IRC R312)

# Requirements

- ☐ Guards shall comply with IRC R312.1; refer to Figure 1 for major requirements.
- ☐ Guards shall be structurally designed to comply with IRC Table R301.5 (i.e., designed for a 200-pound load in any direction along the top and a 50-pound point load elsewhere).
- ☐ For glass guards or guards with glazing, see IRC R308.4.4.

#### Smoke, Heat, and Carbon Monoxide Alarms This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with

Washington State Amendments and the 2016 edition of NFPA 72.

indicator of fire.

- ☐ Smoke alarm: A device designed to respond when it senses smoke, typically as an indicator of
- ☐ Heat alarm: A device designed to respond when it senses a rise in temperature, typically as an
- ☐ Carbon monoxide alarm: A device designed to respond when it senses carbon monoxide, a poisonous gas.
- ☐ All alarms shall be UL listed and installed per manufacturer instructions. (R314.1.1, R315.1.1)
- ☐ Smoke alarms and carbon monoxide alarms shall be installed throughout each dwelling unit in all required locations. (R314.2.1, R315.2.1)
- ☐ A heat detector shall be provided in each new attached garage. (R314.2.3)
- ☐ Smoke alarms, heat alarms, and carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. (R314.6,
- ☐ Where more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. (R314.4, R315.5)
- ☐ Heat alarms shall be connected to a heat alarm or smoke alarm that is installed in the dwelling unit. Alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification. (R314.4.1)
- ☐ Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. (R314.4, R315.5)

#### Alterations, Repairs, and Additions

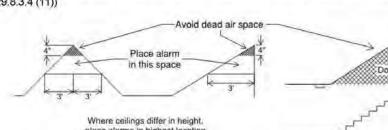
- ☐ In a dwelling unit where alterations, repairs or additions occur, smoke alarms and carbon monoxide alarms shall be installed throughout each dwelling unit, in all required locations, where not already present. (R314.2.2, R315.2.2)
- □ Smoke and carbon monoxide alarms can be powered by the building wiring or batteries. (R314.6, R315.6)
- ☐ Smoke alarms shall be interconnected within an individual dwelling except where such existing smoke alarms are not interconnected or where such new smoke alarm or alarm is not capable of being interconnected to the existing smoke alarms. (R314.4)
- ☐ Carbon monoxide alarms shall be interconnected except where the permit related work does not provide access to the building wiring (such as removing interior walls or ceiling finishes) and there is no attic, crawlspace, or basement available. (R315.5)

#### Required Locations

- ☐ A smoke alarm shall be located in each sleeping room or sleeping loft. (R314.3)
- ☐ A smoke alarm shall be located in each napping area of a family home childcare. (R314.3)
- ☐ A smoke alarm and a carbon monoxide alarm (or combination smoke and carbon monoxide alarm) shall be located outside each sleeping area in the immediate vicinity of the bedroom(s). (R314.3, R315.3)
- ☐ At least one smoke alarm and one carbon monoxide alarm shall be located on each floor level, including basements and habitable attics. (R314.3, R315.3)
- ☐ In split level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level. (R314.3)
- ☐ A carbon monoxide alarm is required in a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom. (R315.3)
- ☐ A combination alarm (combined smoke and carbon monoxide alarm) is acceptable in any required location. (R314.5, R315.4)
- ☐ A heat alarm is required in each new attached garage. (R314.2.3)

## Alarms and Detectors on Walls and Sloped/Peaked/Coffered Ceilings per

- □ Wall mounted alarms must be not more than 12 inches from the adjoining ceiling surface. (NFPA 72 29.8.3.3)
- ☐ Alarms in peaked or sloped ceilings must be within 3 feet horizontally and no closer than 4 inches vertically to the peak. Avoid placing alarms in dead air spaces; refer to Figure 1. (NFPA 72 29.8.3.1, 29.8.3.2, 29.8.3.4 (9), (10))
- ☐ For coffered ceilings, alarms shall be installed on the highest portion of the ceiling or on the sloped portion of the ceiling within 12 inches vertically down from the highest point. (NFPA 72



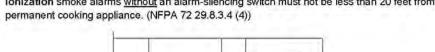
## Figure 1: Smoke Alarms and Smoke Detectors in Sloped/Peaked Ceilings

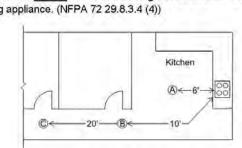
## Specific Location Requirements per NFPA 72

- ☐ Do not place alarms in spaces where temperatures may be above or below the alarm's operating temperature range. (NFPA 72 29.8.3.4 (1), (2), (3))
- ☐ Avoid placing alarms within 3 feet horizontally from doors or openings to bathrooms containing a bathtub or shower. (NFPA 72 29.8.3.4 (6))
- ☐ Do not place alarms within 3 feet from a supply register of a forced air heating or cooling system and it shall be installed outside of the direct airflow from those registers. (NFPA 72
- ☐ Do not place alarms within 3 feet of the blades of a ceiling fan. (NFPA 72 29.8.3.4 (8))

#### Alarms and Detectors Near Cooking Appliances per NFPA 72 Refer to Figure 2:

- A Photoelectric smoke alarms shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance. (NFPA 72 29.8.3.4 (4))
- B. Ionization smoke alarms with an alarm-silencing switch must not be less than 10 feet from a permanent cooking appliance. (NFPA 72 29.8.3.4 (4))
- C. Ionization smoke alarms without an alarm-silencing switch must not be less than 20 feet from a





## Figure 2: Smoke Alarms and Smoke Detectors Near Cooking Appliances

#### Carbon Monoxide Alarm Location Limitations ☐ Do not place alarms directly above or beside fuel-burning appliances.

- ☐ Do not place alarms in direct sunlight.
- ☐ Do not place alarms in low areas where children can reach. Do not place alarms behind

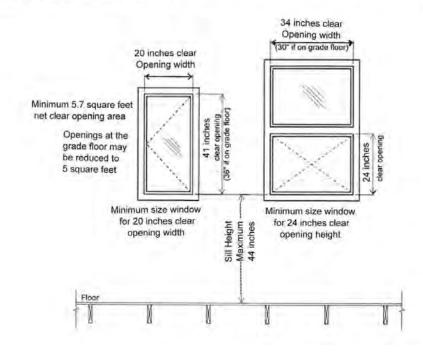
curtains or any structure that might prevent carbon monoxide from reaching the sensor.

## Residential Emergency Egress Openings

This Tip Sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

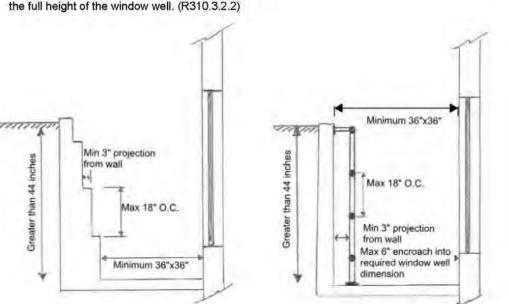
## **Emergency Escape and Rescue Opening**

- ☐ Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall be operational from the inside without the use of keys, tools, or special knowledge, and open directly into a public way, or to a yard or court that opens to a public way. (R310.1)
- ☐ Where bars, grilles, covers, screens, or opening control devices are placed on emergency escape and rescue openings, area or window wells, the minimum net clear opening sizes shall comply and such devices shall be releasable or removable from the inside without the use of key, tool, special knowledge, or force greater than that required for normal operation of the escape and rescue opening. (R310.4)



### Window Wells in Conjunction with Emergency Escape and Rescue Openings

- ☐ The horizontal area of the window well shall be not less than 9 square feet, with a horizontal projection and width not less than 36 inches. The area of the window well shall allow the emergency escape and rescue opening to be fully opened. (R310.3.2)
- ☐ Window wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps useable with the emergency escape and rescue opening in the fully opened position and shall not encroach into the required dimensions of the window well. (R310.3.2.2)
- ☐ Ladder rungs or steps shall have an inside width of not less than 12 inches, shall project not less than 3 inches from the wall, and be spaced not more than 18 inches on center vertically for



Safety Glazing This Tip Sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

## What is Safety Glazing?

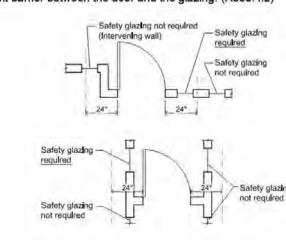
Safety glazing is glass that is less dangerous when it breaks, such as tempered or laminated

Per R308.1, where safety glazing is required, each pane must be provided with a manufacturer's label defining the type of glass and safety glazing standard to which it complies. For tempered glazing the label must be permanently etched, fired, or embossed, on the glass or be a type that once applied cannot be removed without being destroyed. For other types of safety glazing, a certificate, affidavit or other evidence confirming compliance with the code shall be provided at time of inspection.

#### Required Safety Glazing in Hazardous Locations

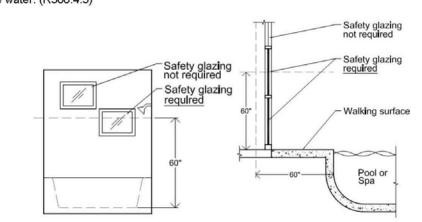
1. Glazing in Doors: Safety glazing is required in fixed and operable panels of swinging, sliding, and bifold doors. Safety glazing is not required in a door if the glazed openings do not allow the passage of a 3-inch sphere, or if the glazing in the door is decorative. (R308.4.1)

2. Glazing Adjacent to Doors: Glazing adjacent to doors is required in the following locations if the bottom edge of the glazing is less than 60 inches above the walking surface: Within 24 inches of either side of the door in the plane of the door in a closed position, or if glazing is in a wall less than 180 degrees from the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door. Safety glazing is not required if there is an intervening wall or permanent barrier between the door and the glazing. (R308.4.2)

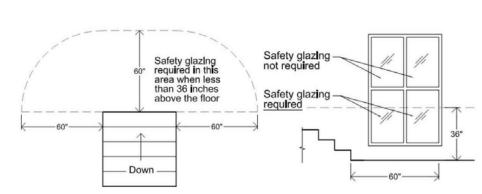


#### 3. Glazing in Windows: Safety glazing in windows is required if the individual panel meets all of the following requirements (R308.4.3):

- a. Exposed area of the individual panel is greater than 9 square feet.
- b. The bottom edge of the glazing is less than 18 inches from the floor.
- c. The top edge of the glazing is more than 36 inches above the floor. d. There is a walking surface within 36 inches, measured horizontally, from the glazing.
- Exceptions: i. Decorative glazing.
- ii. Where a horizontal rail capable of resisting 50 pounds per linear foot of force without making contact with the glass is installed on the accessible side of the
- glazing 34 to 38 inches above the walking surface. 4. Glazing in Railings and Guards: All glazing in railings and guards, including structural
- baluster panels and nonstructural in-fill panels, is required to be safety glazing. (R308.4.4) 5. Glazing and Wet Surfaces: Glazing in walls, enclosures, or fences around showers, bathtubs,
- pools, hot tubs, spas, saunas, and steam rooms where the bottom edge of the glazing is less than 60 inches from the standing or walking surface is required to be safety glazing. Safety glazing is not required where the glazing is more than 60 inches, horizontally, from the edge of the water. (R308.4.5)

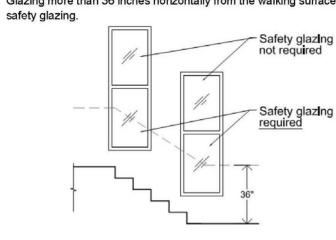


6. Glazing Adjacent to Bottom Stair Landings: Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60-inch horizontal arc from the bottom tread must be safety glazing. (R308.4.7)



7. Glazing Adjacent to Stairs and Ramps: Glazing where the bottom edge is less than 36 inches above the plane of the adjacent walking surface of stairways, ramps, and landings between stair flights and ramp runs, must be safety glazing. (R308.4.6) Exceptions:

1. Where a horizontal rail capable of resisting 50 pounds per linear foot of force without making contact with the glass is installed on the accessible side of the glazing 34 to 38 inches above the walking surface. 2. Glazing more than 36 inches horizontally from the walking surface is not required to be



#### Window Fall Protection

ASTM F 2090 (see Figure 2).

This Tip Sheet reflects code requirements of the 2018 International Residential Code (IRC) and the 2018 International Building Code (IBC) with Washington State Amendments.

#### Requirements

- ☐ Where the sill height above finished grade on the exterior side of an operable window opening is greater than 72 inches, and the sill height above the finished floor on the interior side of the operable window opening is less than 24 inches (or 36 inches in dwelling units regulated by the IBC) (see Figure 1), then window fall protection shall be provided by one of the following
- (R312.2.1, R312.2.2; IBC 1015.8):
- - 1. Operable windows with openings that, when in their largest opened position, will not allow the passage of a 4-inch sphere (see Figure 2). 2. Operable windows that are provided with window fall prevention devices that comply with
  - 3. Operable windows that are provided with opening control devices that comply with ASTM F 2090 (see Figure 2). (Note: When installed on required emergency egress windows, these devices must not reduce the net clear opening to less than the minimum required size or dimensions; see Tip Sheet 10 for more information.)
  - 4. In dwelling units regulated by the IBC where the sill height of an operable window above exterior finished grade is more than 75 feet, provide window fall prevention devices complying with ASTM F 2006 (see Figure 2).

- ☐ ASTM F 2006: Standard Safety Specification for Window Fall Prevention Devices for Non-Emergency Escape (Egress) and Rescue (Ingress) Windows
- ☐ ASTM F 2090: Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms.

#### **Egress Windows**

- ☐ Egress windows must meet minimum size requirements. Minimum clear opening size of 5.7 square feet (5 square feet on the grade level) with minimum clear height of 24 inches and minimum clear width of 20 inches.
- ☐ For additional emergency egress window requirements refer to Tip Sheet 10.

☐ For additional safety glazing requirements refer to Tip Sheet 19.

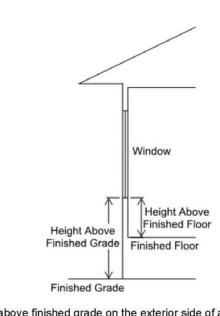


Figure 1: Sill height above finished grade on the exterior side of an operable window opening

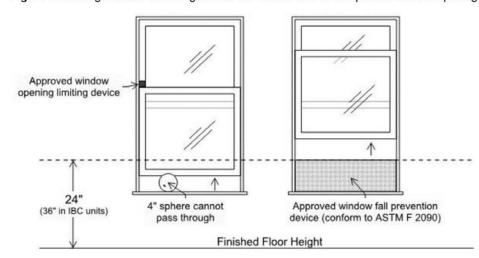


Table 1: Summary of Requirements

Figure 2: Window fall protection

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Exterior Sill Height Above Finished Grade	Interior Sill Height Above Finished Floor	Can be used for Egress	Safety Glazing Required	Fall Protection Required
	Greater than 44 inches	No		No
	Between 18 and 44 inches	Yes	Ε	No
72 inches or less	Sill below 18 inches, top of window above 36 inches, and individual pane of glass is greater than 9 square feet	Yes	Yes	No
	Greater than 44 inches	No	×	No
	Between 24 and 44 inches (IRC dwelling units)	Yes	E	No
	Less than 24 inches (IRC dwelling units)	Yes	-	Yes
Greater than 72 inches	Between 36 and 44 inches (IBC dwelling units)	Yes	-	No
	Less than 36 inches (IBC dwelling units)	Yes	E	Yes
	Sill below 18 inches, top of window above 36 inches, and individual pane of glass is greater than 9 square feet	Yes	Yes	Yes
Greater than 75 feet	Less than 36 inches (IBC dwelling units)	No	ii ii	Yes

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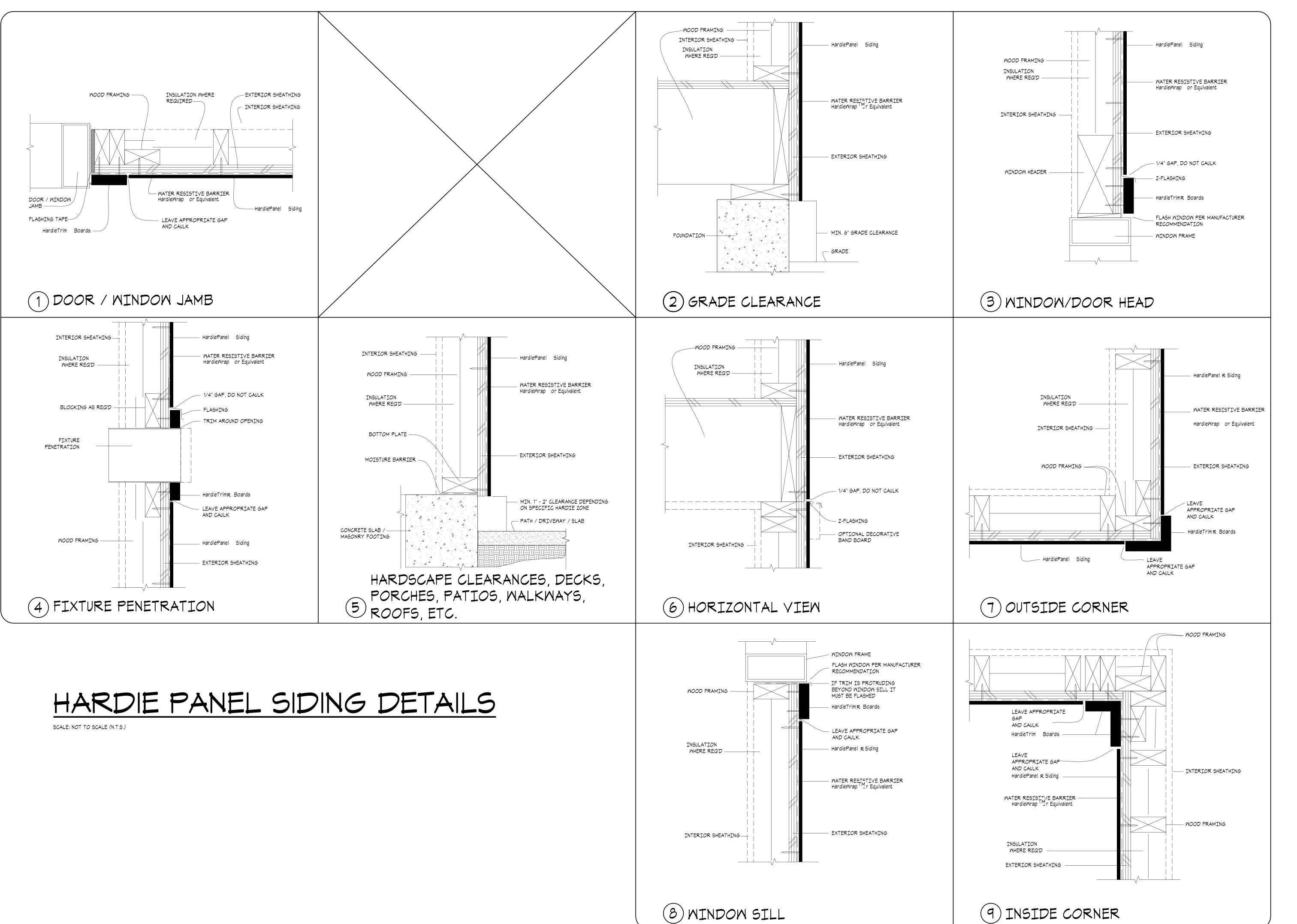
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(3) ALARMS DETAIL

(4) EMERGENCY EGRESS DETAIL (5) SAFETY GLAZING DETAIL

(6) MINDOM FALL PROTECTION



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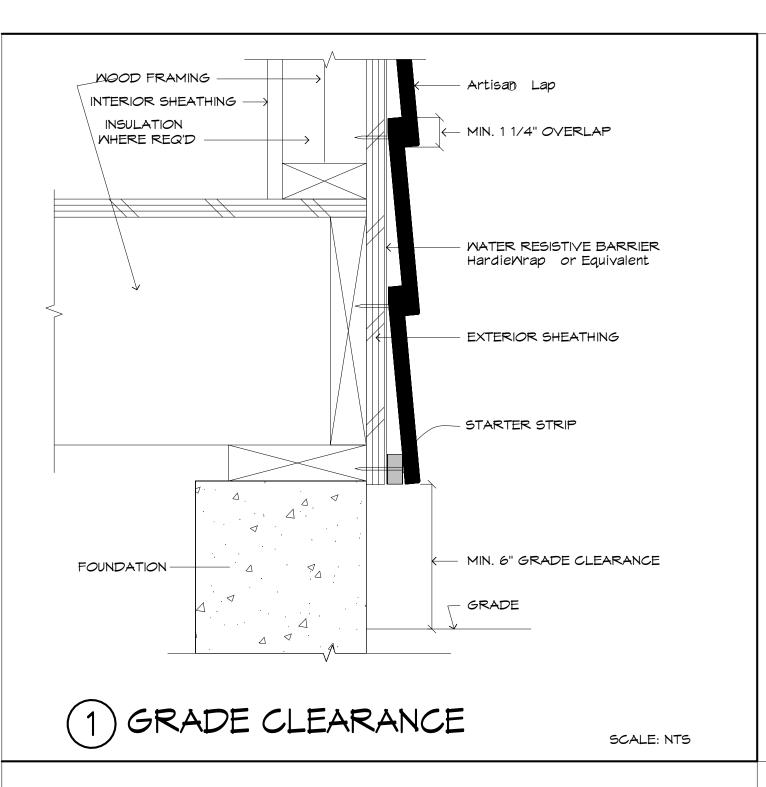
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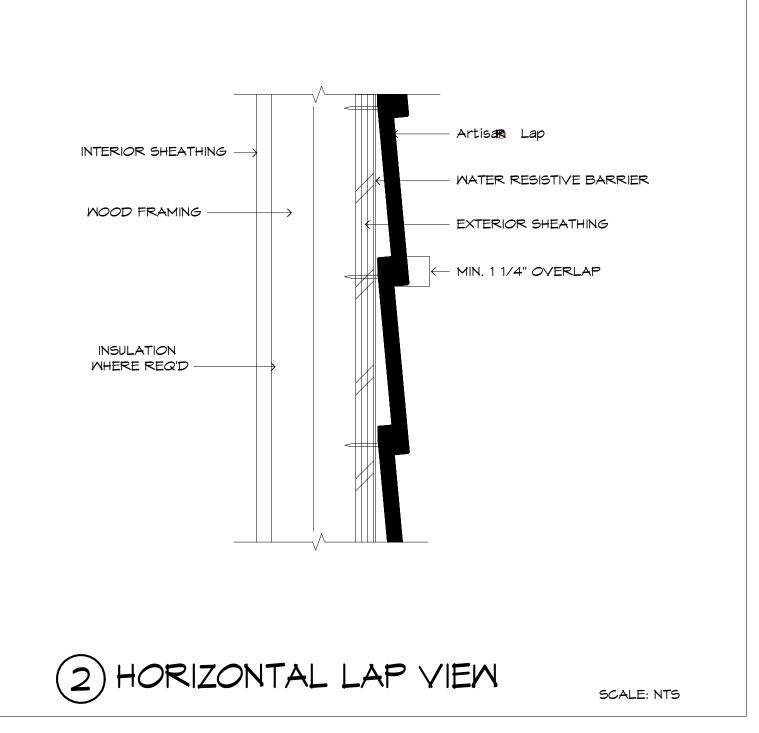
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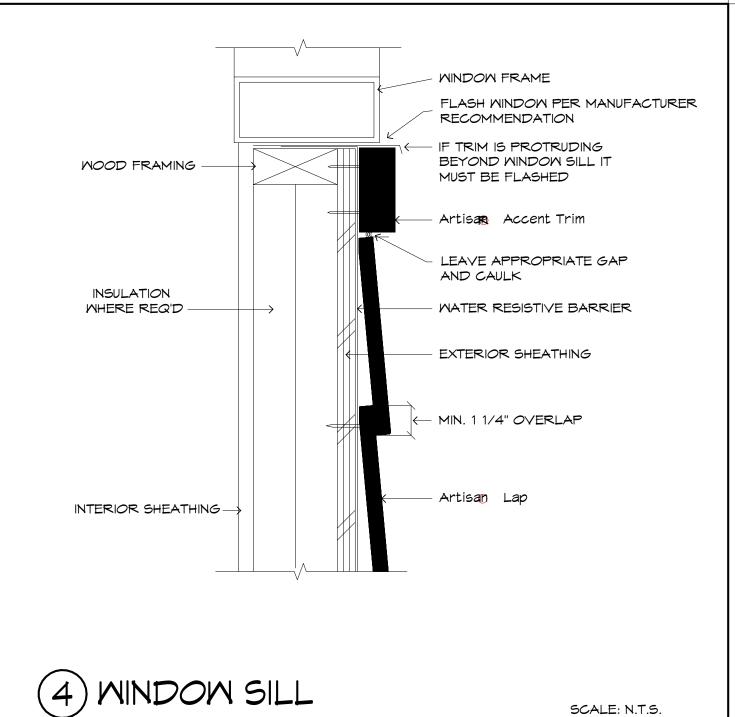
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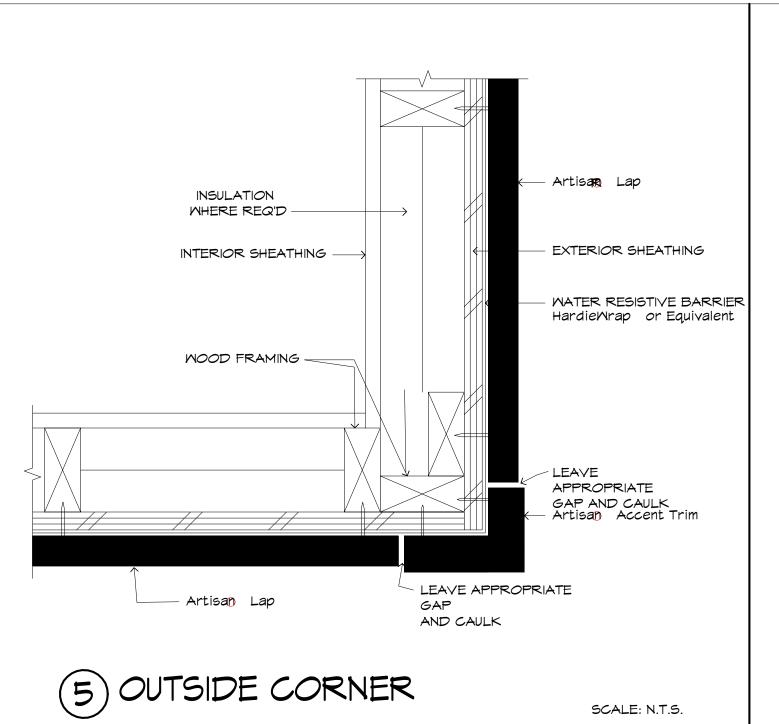


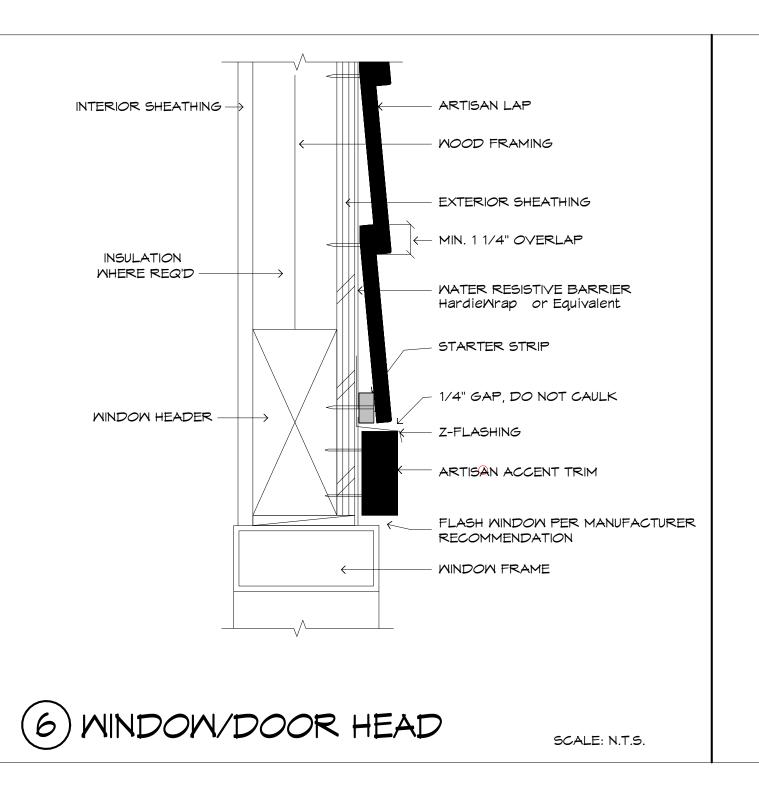
INTERIOR SHEATHING Artisan Lap MOOD FRAMING - WATER RESISTIVE BARRIER HardieWraph or Equivalent INSULATION EXTERIOR SHEATHING WHERE REQ'D MIN. 1 1/4" OVERLAP BOTTOM PLATE -MOISTURE BARRIER - STARTER STRIP MIN. 1" - 2" CLEARANCE DEPENDING ON SPECIFIC HARDIE ZONE PATH / DRIVEWAY / SLAB CONCRETE SLAB / MASONRY FOOTING HARDSCAPE CLEARANCES, DECKS, PORCHES, PATIOS, WALKWAYS, ROOFS, ETC.

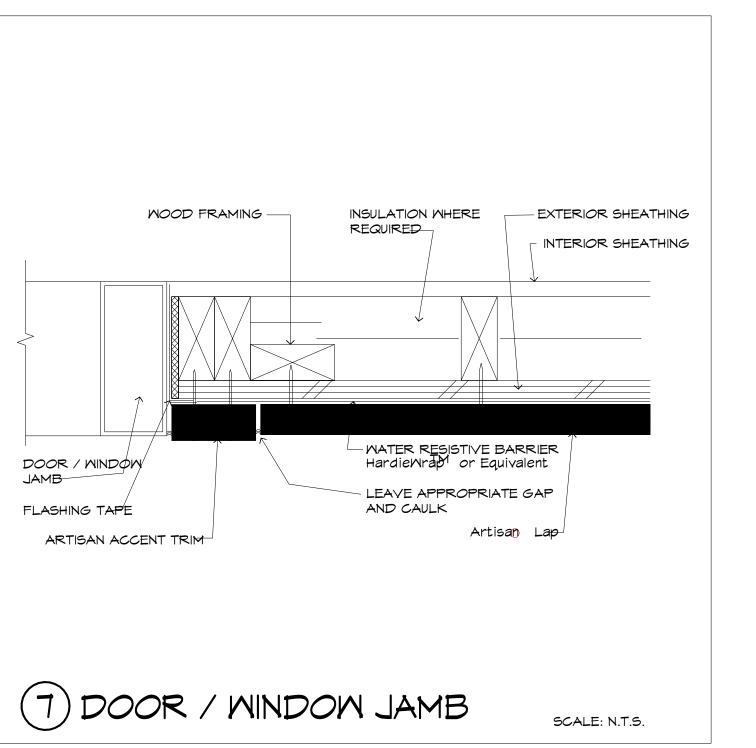
LAP SIDING DETAILS SCALE: NOT TO SCALE (N.T.S.)

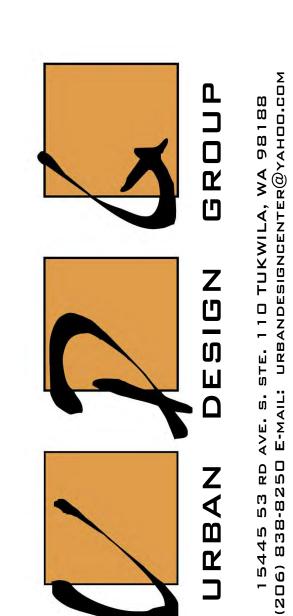


SCALE: N.T.S.









RESIDENCE SINGLE-F 8456 SE MERCER PARCEL

SUBMITTAL/REVISION: DATE: -/-/2022 SUBMITTED

REVISED -/-/2022 PAVEL MELNIK

DESIGN BY: DRAFTED BY:

SHEET TITLE:

ARTISAN LAP SIDING DETAILS

ANNA KONYAKINA

PROJECT NUMBER: 21257

SHEET NUMBER:

A14

#### STANDARDS

ALL METHODS, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND SEI/ASCE 1-16 "MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES AS AMENDED BY LOCAL JURISDICTION

#### PROJECT LOCATION:

GPS LOCATION: 47.5876405 LAT., -122.1725013 LONGIT. SITE ADDRESS: 12445 SE 25TH PL, BELLEVUE, WA 98005

STRUCTURAL DESIGN CRITERIA (CH. 16)

## LATERAL FORCES:

1. WIND ( IBC 1609 & ASCE 28.5.3 ):	II. SEISMIC ( IBC 1613 & ASCE 12.14-12 ):
IIØ MPH WIND SPEED (ult) 85 MPH WIND SPEED (asd) EXPOSURE - B IMPORTANCE FACTOR IW = 1.0 WIND SPEED UP: KzT=1.60 ANALYSIS: ENCLOSED SIMPLE DIAPHRAGM ps = \lambda * K_zt *Psso	SEISMIC DESIGN CATEGORY - D2 OCCUPANCY RISK - II  2% PE IN 50 YR ( 2006 LAT-LON ) USGS-CD: 02 SEC. (Ss) 1.36g 1.0 SEC. (Sl) 0.474g BASIC SEISMIC FORCE-FORCE RESISTING SYSTEM LIGHT-FRAME (WOOD) SHEATHED DESIGN BASE SHEAR: 14.66K R = 6.5 F = 1.1 (2 STORY) ANALYSIS: SIMPLIFIED DESIGN PROCEDURE  V = F*SDS * W R

#### VERTICAL FORCES - GRAVITY ( IBC 1607 & TABLE 1607.1 )

VERTICAL LOADS:	DEAD LOAD	LIVE LOAD
ROOF	ACTUAL	25 PSF SNOW (OR PER LOCAL JURISDICTION)
FLOOR	ACTUAL	40 PSF
GARAGE	ACTUAL	50 PSF (or 3000* WHEEL LOAD)
DECK	ACTUAL	60 PSF

#### SOILS AND FOUNDATION DESIGN CRITERIA (IBC CH. 18):

SUBSURFACE INVESTIGATION SHALL BE REQUIRED PER 1803.2: FOUNDATION DESIGN SHALL BE BASED IN THE ABSENCE OF A SOILS REPORT, THE PRESUMPTIVE LOAD BEARING VALUES DETERMINED BY LOCAL JURISDICTION OR PER IBC TABLE 1806.2 SHALL BE USED:

1.	SOIL BEARING PRESSURE	1500 PSF
2.	ACTIVE PRESSURE - RESTRAINED	50 PCF
3.	ACTIVE PRESSURE - UNRESTRAINED	35 PCF
4.	PASSIVE RESISTANCE	300 PCF
5.	COEFFICIENT OF FRICTION	0.40
6.	LOCAL FROST DEPTH	12 INCH
٦.	TRAFFIC SURCHARGE	70 PSF
8.	SEISMIC SURCHARGE	6H PSF

ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED EARTH OR COMPACTED "STRUCTURAL BACKFILL". AREAS OVER EXCAYATED SHALL BE BACKFILLED WITH LEAN CONCRETE (f'c = 2000 PSI) OR STRUCTURAL BACK FILL.

### CONCRETE (IBC CH. 19 & ACI 318-14)

CONCRETE: SHALL BE MADE WITH PORTLAND CEMENT ASTM C-150 TYPE I OR TYPE I AND SHALL BE READY-MIXED PER ASTM C-94, MAXIMUM SLUMP 5". MINIMUM CEMENT CONTENT 51/2 SACKS PER YARD PROVIDE 5%-1% AIR-ENTRAINED CONCRETE FOR CONCRETE (F'C = 3000 PSI) EXPOSED TO WEATHER.

MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'c AT 28 DAYS) ACI 318-14						
USE OR LOCATION OF CONCRETE CONSTRUCTION:	f'c (PSI)	SPECIAL INSPECTION & TESTING REQUIRED				
FOOTING PADS & FOUNDATIONS NOT EXPOSED TO WEATHER	3,000	NOT REQUIRED				
PORCHES, PATIOS, DRIVEWAYS, AND GARAGE SLAB	3,000	NOT REQUIRED				
FOUNDATION STEM WALLS AND INTERIOR SLABS ON GRADE	3,000	NOT REQUIRED				

CONTRACTOR SHALL HAVE AVAILABLE ON SITE A CONCRETE BATCH TICKET OR RECEIPT OF DELIVERY

FOR MIX OF 3000 PSI OR GREATER FOR BUILDING INSPECTOR VERIFICATION IF REQUESTED.

REINFORCING STEEL: REINFORCEMENT SHALL CONFORM TO ASTM A-615, "DEFORMED AND PLAIN BILLET STEEL BARS FOR REINFORCING STEEL". BARS SHALL BE GRADE 60 EXCEPT THAT NO. 3 AND 4 MAY BE GRADE 40. BARS SHALL BE DEFORMED. SPLICE SHALL BE 24 BAR DIAMETERS OR IS' MINIMUM. PROVIDE CORNER BARS FOR ALL HORIZONTAL BARS IN WALLS AND FOOTINGS AT INTERSECTIONS. MILL TICKET FOR REINFORCING BARS SHALL BE MADE AVAILABLE TO THE BUILDING INSPECTOR AND ENGINEER OF RECORD FOR VERIFICATION IF REQUESTED.

WIRE FABRIC SHALL CONFORM TO ANSI/ASTM A-185, STEEL WELDED WIRE FABRIC PLAIN FOR CONCRETE PLACEMENT.

# CONCRETE ACCESSORIES:

ANCHOR BOLTS, BARS AND RODS SHALL CONFORM TO ASTM A-3071 "LOW CARBON STEEL EXTERNALLY AND INTERNALLY THREADED FASTENERS".

CAST-IN-PLACE COLD-FORM STEEL CONNECTORS IN CONCRETE FOR LIGHT FRAME CONSTRUCTION SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE AS SPECIFIED IN THE CURRENT SIMPSON STRONG-TIE ICC ES OR IAPMO ES REPORT. ALTERNATE PRODUCTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND WRITTEN APPROVAL. REQUEST FOR SUBSTITUTION WILL ONLY BE APPROVED WITH CURRENT ICC ES OR IAPMO ES REPORT AND A LIST STATING THE PROPOSED ITEM SUBSTITUTION WITH EQUIVALENT OR GREATER LOAD CAPACITY. IN ADDITION, SUBSTITUTIONS WILL BE REQUIRED TO COMPLY WITH THE CURRENT ICC ACCEPTANCE CRITERIA, AC398 (CAST-IN-PLACE

COLD-FORMED STEEL CONNECTORS IN CONCRETE FOR LIGHT FRAME CONSTRUCTION)

PROPRIETARY CAST-IN-PLACE ANCHOR BOLTS SHALL BE 'SB' AND 'SSTB' ANCHOR BOLTS MANUFACTURED BY SIMPSON STRONG-TIE AS SPECIFIED ON THEIR LATEST CATALOG AND ICC ESR-2611. SUBSTITUTION PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED WITH A CURRENT ICC ES REPORT TO THE STRUCTURAL ENGINEER FOR REVIEW AND WRITTEN APPROVAL. IN ADDITION, **SUBSTITUTIONS WILL** BE REQUIRED TO COMPLY WITH THE CURRENT ICC ACCEPTANCE CRITERIA, AC399 (CAST-IN-PLACE PROPRIETARY BOLTS IN CONCRETE)

EXPANSION ANCHORS (WEDGE ANCHORS) SHALL BE AS NOTED ON PLANS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS. WHEN NOTED ON CONSTRUCTION DOCUMENTS, INSTALLATION SHALL BE SPECIAL INSPECTED.

NON-SHRINK GROUT: MASTER BUILDERS "MASTERFLOW 928 OR PRE-APPROVED EQUAL GROUT MAY BE PLACED FROM A 25 SECOND FLOW TO A STIFF PACKING CONSISTENCY. FILL OR PACK ENTIRE SPACE UNDER PLATES OR SHAPES. NO GROUTING SHALL BE DONE BELOW 40 DEGREES F.

EPOXY GROUT: SIMPSON STRONG-TIE "SET", COVERT OPERATIONS "CIA" GEL, OR PRE-APPROVED EQUAL. TWO PART LOW SAGEPOXY. USE EQUIPMENT, WHICH SHALL ACCURATELY MIX AND DISPENSE THE COMPONENTS. HOLES SHALL BE DRILLED AT THE DIAMETER AS SPECIFIED BY THE MANUFACTURER BASED ON THE DOWEL BAR OR THREADED ROD DIAMETER. HOLES SHALL BE DRY AND CLEANED WITH PRESSURIZED AIR JUST PRIOR TO INSTALLING GROUT. THE REBAR DOWEL OR THREADED ROD SHALL BE CLEAN AND INSTALLED SLOWLY, AND SHALL BE ROTATED AS IT IS PUSHED INTO THE HOLE. COLD WEATHER GROUTING SHALL BE DONE WITH PROPER GROUT FORMULA. EMBED (9) DIAMETERS MINIMUM UNLESS NOTED OTHERWISE IN PLANS AND DETAILS. GROUTING OPERATION SHALL BE INSPECTED BY AN AGENT AS RECOMMENDED BY THE OWNER.

#### WOOD CONSTRUCTION (IBC CH. 23 & NDS)

GENERAL REQUIREMENTS: PROVIDE MINIMUM NAILING PER 2018 IBC TABLE 2304.10.1 OR MORE, AS OTHERWISE SHOWN. PRESSURE TREAT ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY. PROVIDE CUT WASHERS WHERE BOLT HEADS, NUTS AND LAG SCREW HEADS BEAR ON WOOD. DO NOT NOTCH OR DRILL STRUCTURAL MEMBERS, EXCEPT AS ALLOWED BY IBC SECTIONS 2308.4.2.4 AND 2308.7.4 OR AS APPROVED PRIOR TO INSTALLATION.

WOOD SHEATHING: SHALL BE STRUCTURAL #1 PLYWOOD OR ORIENTED STRAND BOARD. PLYWOOD SHALL BE GROUP I OR GROUP 2 SPECIES, C-D GRADE EXPOSURE I CONFORMING TO PS 1-83. EACH PANEL SHALL BEAR THE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ORIENTED STRAND BOARD (05B) SHALL BE APA RATED STRUCT.-I FOR ROOF AND WALLS AND APA RATED STURDY-1-FLOOR FOR FLOORS. EACH PANEL SHALL BE CLASSIFIED AS EXPOSURE I AND SHALL BEAR THE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA).

<u> STANDARDS: CONFORM TO WEST COAST LUMBER INSPECTION BUREAU (WCLIB), OR WESTERN WOOD</u> PRODUCTS ASSOCIATION (WWPA). EACH PIECE SHALL BEAR THE SCLIB OR WWPA GRADE TRADE-

	STRUCTURAL ELEMENT	SPECIES/GRADE	fbx	f <sub>VX</sub>	f <sub>C</sub> ⊥	fc	ft	E
1.	6x BEAMS AND HEADERS	DF NO. 2	875	170	625	600	425	1300000
2.	4× BEAMS AND HEADERS	DF NO. 2	900	180	625	1350	525	1600000
3.	2x JOIST	HF NO. 2	850	150	4Ø5	1300	525	1300000
4.	6x P06T	DF NO. 1	1200	170	625	1000	825	1600000
5.	4X P06T	DF NO. 2	850	180	625	1400	500	1600000
6.	51/8×6 GLU-LAM POST	24F-V4, 24F-V8	2400	265	650	1650	1100	1700000
٦.	GLU-LAM BEAM	24F-V4, 24F-V8	2400	265	650	1650	1100	1800000
8.	31/2× OR 51/4× PSL BEAM	PARALLAM P6L	2900	29Ø	750	2900	-	2000000
9.	31/2× OR 51/4× LVL BEAM	MICROLLAM LVL	2600	285	750	2510	-	1900000
10.	31/2× OR 51/4× LSL BEAM	TIMBERSTRAND LSL	1700	400	680	1400	-	1300000
11.	2× WALL FRAMING	HF NO. 2	85Ø	150	4Ø5	1300	525	1300000
12.	2x WALL FRAMING > 15FT	DF NO. 1	1000	180	625	1500	675	1700000

GLUE-LAMINATED MEMBERS: CONFORM TO ANSI/AITC A190.1. MEMBERS SHALL BE COMBINATION 24F-V4 DOUGLAS FIR FOR SIMPLE SPANS, 24F-V8 DOUGLAS FIR FOR CANTILEVERED SPANS WITH EXTERIOR GLUE.

<u>I-JOISTS:</u> SHALL BE TRUS JOIST MACMILLAN, OR APPROVED EQUAL, AS INDICATED ON THE STRUCTURAL DRAWINGS. I-JOISTS SHALL BE MANUFACTURED IN ACCORDANCE WITH A CURRENT ICBO REPORT AND APPROVED SHOP AND INSTALLATION DRAWINGS.

WOOD CONSTRUCTION CONNECTORS: SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE AS SPECIFIED IN THEIR LATEST CATALOG. PROVIDE MAXIMUM SIZE AND QUANTITY OF NAILS, BOLTS, OR SCREWS SPECIFIED ON CONNECTOR HARDWARE. CONTRACTOR'S PROPOSED SUBSTITUTION OF OTHER MANUFACTURE'S CONNECTORS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO ORDERING. REQUESTS FOR SUBSTITUTION SHALL INCLUDE CURRENT ICC AND/OR IAPMO ES REPORTS AND A LIST STATING THE PROPOSED ITEM-FOR-ITEM SUBSTITUTION HAS AN EQUIVALENT OR GREATER LOAD CAPACITY. IN ADDITION, SUBSTITUTIONS SHALL COMPLY WITH CURRENT ICC ACCEPTANCE CRITERIA ACI3 AND/OR IAPMO EVALUATION CRITERIA 002-2001 FOR JOIST HANGERS AND SIMILAR DEVICES AND ICC AC 155 FOR HOLDOWNS AND TENSION TIES. BOLTS IN WOOD CONNECTORS SHALL CONFORM TO ASTM A-301, GRADE A.

STRUCTURAL WOOD SCREWS: WHERE SPECIFIED OR REQUIRED BY SPECIFIC HARDWARE, SCREWS SHALL BE '5D5' STRONG-DRIVE SCREWS MANUFACTURED BY SIMPSON STRONG-TIE AS SPECIFIED IN THEIR LATEST CATALOG AND ICC ESR-2236. SUBSTITUTION PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED WITH A CURRENT ICC ES REPORT TO THE STRUCTURAL ENGINEER FOR REVIEW AND WRITTEN APPROVAL. IN ADDITION, SUBSTITUTIONS SHALL COMPLY WITH CURRENT ICC ACCEPTANCE CRITERIA AC233 (ALTERNATE DOWEL TYPE THREADED FASTENERS)

REQUIREMENTS FOR FASTENERS IN TREATED MATERIAL: ALL HARDWARE AND FASTENERS IN PRESSURE TREATED MATERIAL SHALL BE SIMPSON GI85 HDG (HOT DIPPED GALVANIZED) OR 667300 STAINLESS STEEL CONNECTORS OR EQUIVALENT.

HOT DIPPED GALVANIZED FASTENERS SHALL BE USED WITH GI85 Z-MAX AND HDG CONNECTORS AND STAINLESS STEEL FASTENERS SHALL BE USED WITH SST300 CONNECTORS. <u>DO NOT USE STAINLESS</u> STEEL FASTENERS WITH GI85 Z-MAX OR HDG CONNECTORS.

ALL ANCHOR BOLTS, WASHERS, AND NUTS SHALL BE HOT DIPPED GALVANIZED.

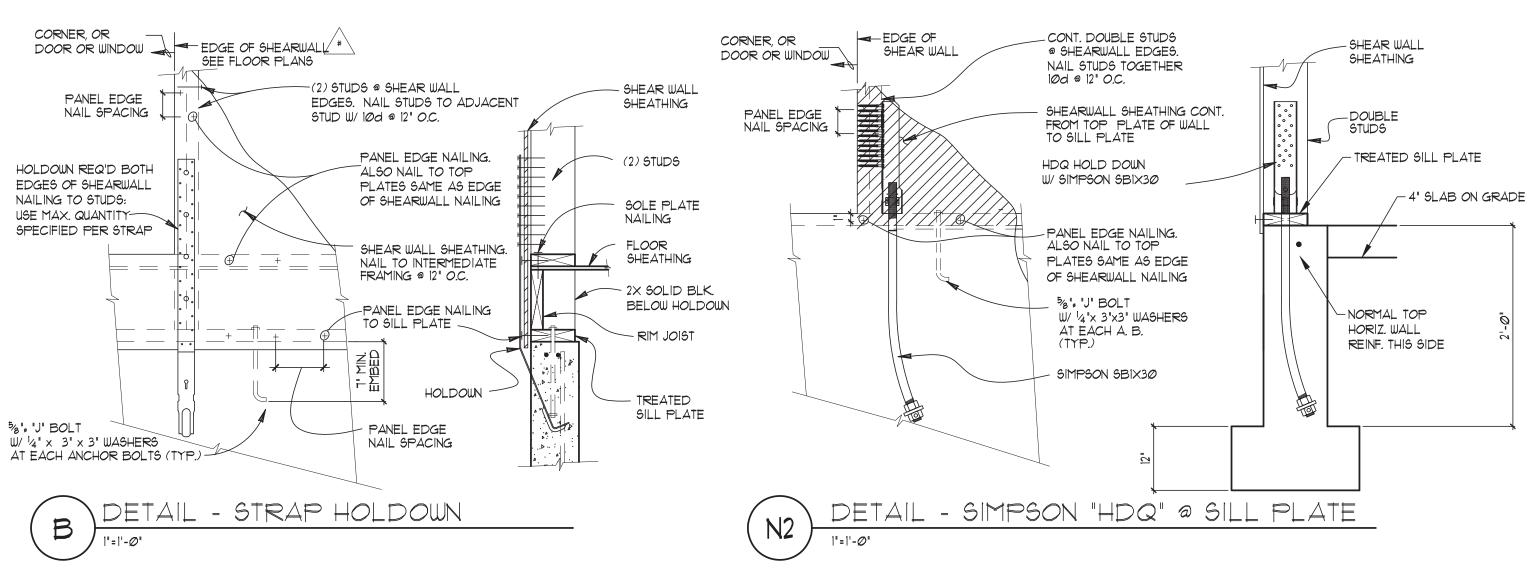
HOT DIPPED OR STAINLESS STEEL NAILS MUST BE USED WHEN FASTENING SHEATHING, STUDS, AND JOIST INTO TREATED MUDSILL. HOT DIPPED GALVANIZED OR STAINLESS STEEL FASTERES SHALL BE USED WHEN FASTENING DECKING TO TREATED MEMBERS.

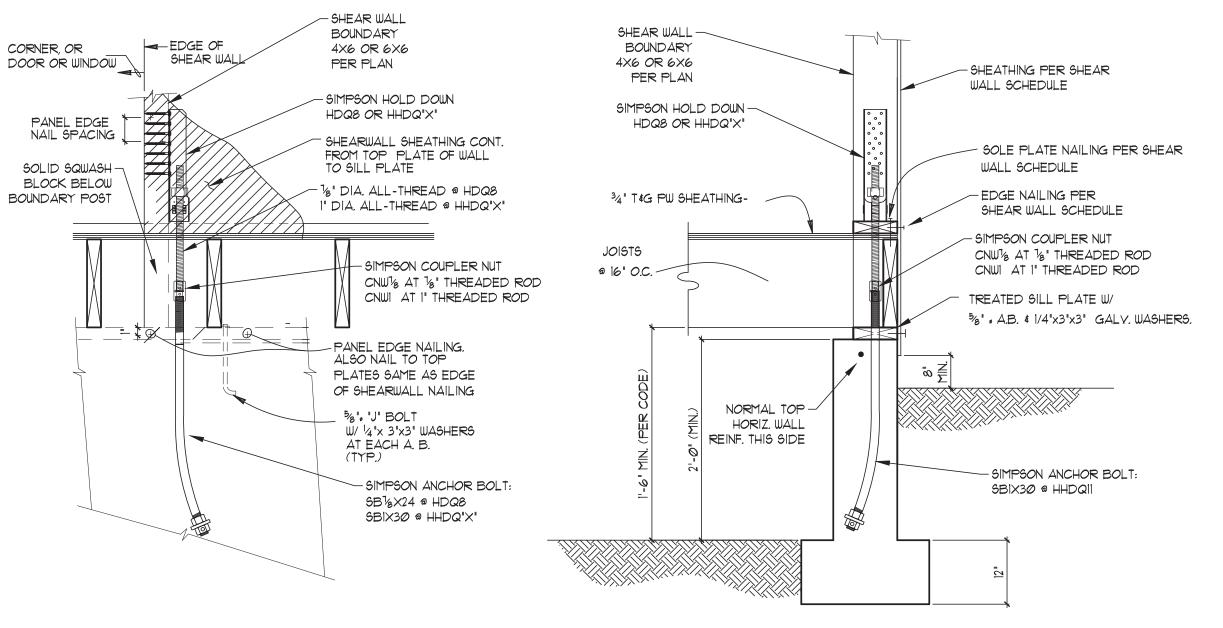
# WOOD TRUSSES (IBC 2303.4) SHALL BE:

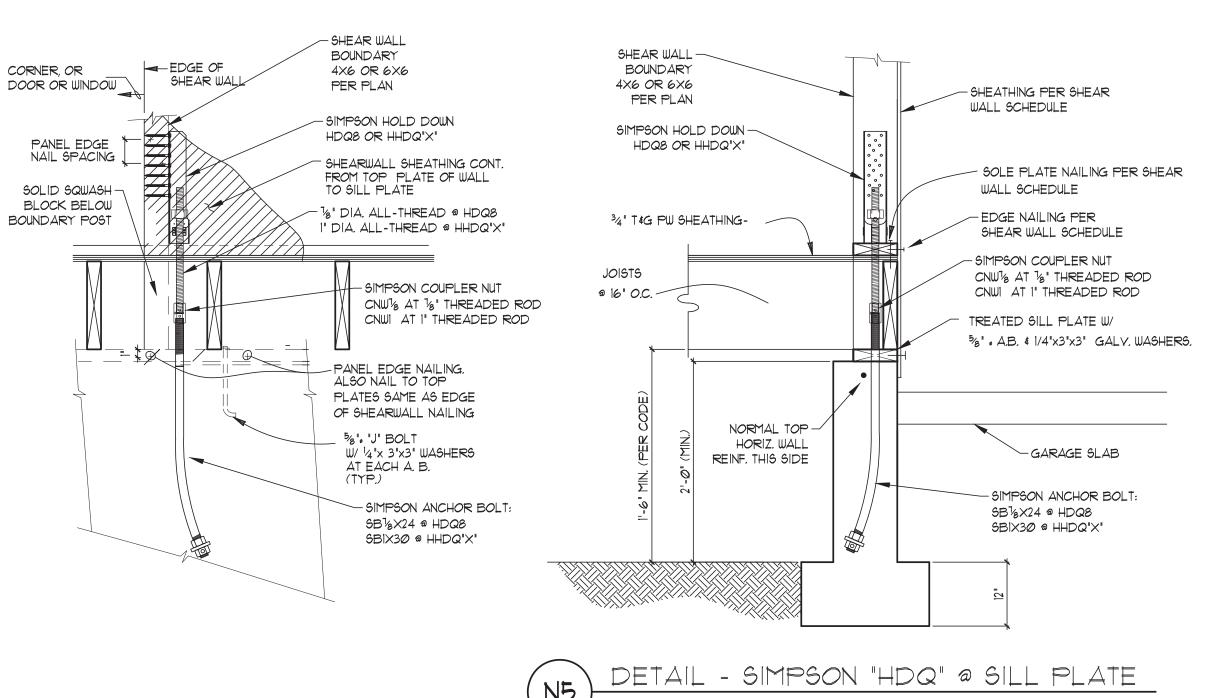
- DESIGNED PER IBC 23/03.4.I.I TO CARRY LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL POINT LOADS, UNIFORM LOADS, OR DRAG STRUT FORCES NOTED ON FRAMING PLANS.
- 2. NON-ATTIC STORAGE TRUSSES SHALL BE DESIGNED WITH A LIVE LOAD OF 20 PSF LOCATED IN THE PLANE OF THE TRUSS. THE MAXIMUM STORAGE SPACE ABOVE THE BOTTOM CHORD SHALL BE LESS THAN 42" HIGH AND 24" WIDE.
- 3. TRUSS DESIGN DRAWINGS AND DOCUMENT SUBMITTAL (2303.4.1.1) SHALL INCLUDE STRESS ANALYSIS AND PICTORIAL DEPICTION OF EACH TRUSS TYPE FOR THE PROJECT AND INCLUDING A TRUSS PLACEMENT DIAGRAM (23/03.4.2). TRUSS INSTALLATION DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A LICENSED ENGINEER IN THE STATE OF WASHINGTON. APPROVED TRUSS DOCUMENTS SHALL REMAIN ON THE JOB SITE FOR INSPECTION.
- 4. ALTERATIONS (2303.4.5): TRUSS MEMBERS SHALL NOT BE NOTCHED, DRILLED, SPLICED, OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGNER. ALTERATIONS RESULTING IN THE ADDITION OF LOADS TO ANY MEMBER (E.G. HYAC EQUIPMENT, PIPING, ETC.) SHALL NOT BE PERMITTED WITHOUT APPROVAL OF TRUSS DESIGNER.
- 5. TPLI SPECIFICATIONS: THE DESIGN, MANUFACTURE, FABRICATION, AND QUALITY ASSURANCE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH TPI 1.
- 6. THE TRUSS TEMPORARY AND PERMANENT BRACING SHALL BE PER IRC SECTIONS 502.11.2 AND 802.10.3 AS WELL AS TRUSS PLATE INSTITUTES' BUILDING COMPONENT SAFETY INFORMATION.
- 1. UNLESS NOTED OTHERWISE ON PLANS, ALL TRUSSES SHALL HAVE SIMPSON H-1 CLIPS AT EXTERIOR BEARING WALLS. AT GABLE END TRUSSES, PROVIDE SIMPSON A35 AT
- 8. PROVIDE STC CLIPS AT ALL TRUSSES OVER NON-BEARING WALLS.
- 9. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION, FOR INSPECTOR'S USE AND REFERENCE.

MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION, FOR THE INSPECTOR'S USE AND REFERENCE.

INSPECTION: (IBC CH. 1 SECT. 110) CONSTRUCTION SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR CONTINUING INSPECTION UNTIL APPROVED. THE OWNER OR CONTRACTOR SHALL NOTIFY THE BUILDING OFFICIAL TO MAKE THE INSPECTIONS SET FORTH IN SECTIONS 110.3.1 THROUGH 110.3.10. INSPECTION REQUESTS SHALL BE THE RESPONSIBILITY OF THE BUILDING PERMIT HOLDER. WORK SHALL NOT PROCEED BEYOND THE POINT INDICATED IN EACH SUCCESSIVE INSPECTION WITHOUT OBTAINING THE APPROVAL OF THE BUILDING OFFICIAL. THE BUILDING OFFICIAL SHALL INDICATE ANY OF CONSTRUCTION THAT IS SATISFACTORY AS COMPLETED, OR NOTIFY THE CONTRACTOR ANY PORTIONS THAT ARE NOT IN COMPLIANCE TO THIS CODE. ANY PORTIONS THAT DO NOT COMPLY SHALL BE CORRECTED BY THE CONTRACTOR AND SUCH PORTION(S) SHALL NOT BE COVERED OR CONCEALED UNTIL AUTHORIZED OR SIGNED OFF BY THE BUILDING OFFICIAL.







DETAIL - SIMPSON "HDQ" @ SILL PLATE



2022 Sheet

SHE	EARWA!	LL SCHEDU		(1)(2)(4)										
WALL TYPE	(5) SHTG.	(3) EDGE NAILING LENGTH x GAGE)	(6) FIELD NAILING LENGTH x GAGE)	%" DIA. A.B. SPACING SOLE PLATE NAILING (GA.)	ABUTTING VERT. PW EDGES	ABUTTING HORIZ, PW EDGES	(9) SOLE PL	MUD SILL	BOUNDARY FRAMING (VERT.)	HOLDOWN TYPES	HOLDOWN BOLTS	REMARKS / DETAILS	SHEAR (PLF)	UPLIFT FORCE
(1) DF	15/ <sub>32</sub> " PW	8d @ 3" O.C. $(2-\frac{1}{2}" \times O. 3 ")$	8d @ 12" O.C. $(2-\frac{1}{2}" \times O.131")$	5%" A.B. @ 36" O.C. 16d @ 8" O.C. (3-½" × Ø.135")	2×6	2×6	2×6	2x6	4×6	HDQ8	SB7/8×24	N5 Sl.I	287 plf	4.1 k
2(8)	15/ <sub>32</sub> " PW	8d @ 3" O.C. (2-1/2" × 0.131")	8d a 12" O.C. $(2-\frac{1}{2}" \times 0.131")$	5/8" A.B. @ 24" O.C. 16d @ 8" O.C. (3-½" × Ø.135")	2×6	2×6	2×6	2x6	2-2×6	STHD14RJ		B 51.1	219 plf	2.4 k
3	15/ <sub>32</sub> " 06B	8d @ 4" O.C. (2-1/2" × 0.131")	8d a 12' O.C. $(2-\frac{1}{2}^{"} \times O.131")$	5/8" A.B. @ 36" O.C. 16d @ 8" O.C. (3-1/2" × Ø.135")	2×6	2x6	2×6	2x6	2-2×6	STHD14RJ		B 51.1	274 plf	3.5 k
4	<sup>15</sup> / <sub>32</sub> " <i>O</i> SB	8d @ 6" O.C. (2-1/2" × O.131")	8d @ 12" O.C. $(2-\frac{1}{2}" \times O.131")$	5%" A.B. @ 24" O.C. 16d @ 4" O.C. (3-½" × Ø.135")	3x6	3x6	3x6	3x6	4×6	HHDQII	9BIX3Ø	N4 \$1.1	487 plf	5.6 k
<u> </u>	15/ <sub>32</sub> " OSB	8d @ 6" O.C. (2-1/2" × 0.131")	8d $\approx$ 12" O.C. $(2-\frac{1}{2}" \times 0.131")$	5%" A.B. @ 48" O.C. 16d @ 16" O.C. (3-½" × Ø.135")	2×6	2x6	2×6	2×6		NONE			223 plf	0.0 k
5	15/32" PW	10d @ 3' O.C. (3' × 0.131')	10d @ 12" O.C. (3" × 0.131")	16d @ 4" O.C. (3-½" × Ø.135")	2x6	2×6	2×6	2x6	2-2×6			C J 93 93	401 plf	4.1 k
6	15/32" PW	8d @ 3" O.C. (2-½" × O.131")	8d @ $ 2 $ O.C. $(2-\frac{1}{2} ^2 \times O. 3 ^2)$	5%" A.B. @ 36" O.C. 16d @ 8" O.C. (3-½" × Ø.135")	2×6	2×6	2x6	2×6	2-2×6			C J S3 S3	343 plf	3.4 k
7	15/32" PW	8d @ 4" O.C. $(2-\frac{1}{2}" \times O. 3 ")$	8d @ 12" O.C. (2-½" × O.131")	%" A.B. @ 36" O.C. 16d @ 8" O.C. (3-½" × Ø.135")	2×6	2×6	2x6	2x6	2-2×6			C J S3 S3	243 plf	3.9 k
8	15/32" PW	8d @ 4" O.C. (2-1/2" × 0.131")	8d @ 12" O.C. $(2-\frac{1}{2}" \times O.131")$	5%" A.B. @ 36" O.C. 16d @ 8" O.C. (3-½" × Ø.135")	2×6	2×6	2x6	2x6	2-2×6			C J S3 S3	150 plf	Ø.5 k
$\bigcirc$	15/32" PW	8d @ 4" O.C. (2-½" × 0.131")	8d @ 12" O.C. (2-½" × 0.131")	16d @ 3" O.C. (3-½" × Ø.135")	3x6	3x6	3x6		2-2×6	NONE			, 223 plf	0.0 k

NOTE: FOR ALL OTHER EXTERIOR WALLS NOT SPECIFIED IN SCHEDULE ABOVE, SEE NOTE 2. IN 'SHEAR WALL SCHEDULE NOTES'

## SHEAR WALL SCHEDULE NOTES MAIN FLOOR)

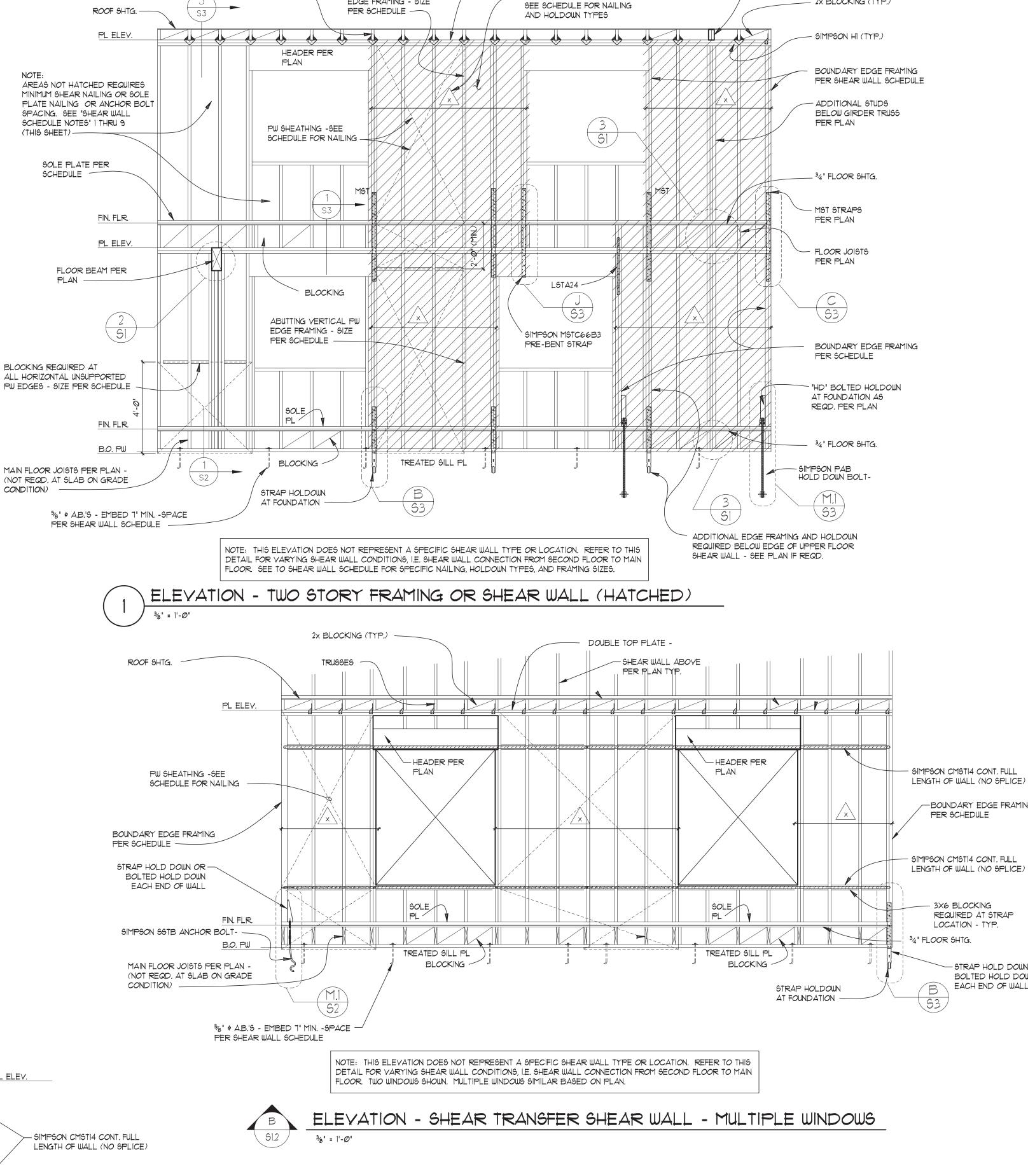
- 1. SHEAR WALLS NOTED IN SCHEDULE ARE WALLS WITH ADDITIONAL EDGE NAILING, ABUTTING HORIZONTAL AND VERTICAL EDGE FRAMING, AND ANCHOR BOLT SPACING. FIELD NAIL SIZE SHALL MATCH THE EDGE FRAMING SPECIFIED AND BE SPACED AT 12" O.C. SHEAR NAILING APPLIES TO ALL VERTICAL AND HORIZONTAL ABUTTING SHTG. EDGES, DOUBLE TOP PLATES, AND SOLE PLATES.
- 2. ALL EXTERIOR WALLS NOT SPECIFIED IN SHEAR WALL SCHEDULE, SHALL BE DESIGNATED AS MINIMUM SHEAR PANELS WITH EDGE NAIL SIZE MATCHING SPECIFIED NAILS IN SCHEDULE AND SPACED AT 6" O.C. FIELD NAIL SPACING SHALL BE 12" O.C.
- 3. SHEATHING SHALL BE 1/16" OSB UNLESS SPECIFIED 15/32" STRUCTURAL # IN SCHEDULE.
- 4. EXTERIOR SHEAR WALL FRAMING SHALL BE 2X6 HEM FIR #2 UNLESS NOTED "DF" (DOUG FIR) IN SCHEDULE. FRAMING SHALL BE SPACED AT 16" O.C.
- 5. INTERIOR SHEAR WALL FRAMING SHALL BE 2X4 (OR 2X6 PER SCHEDULE) HEM FIR \*2 SPACED AT 16" O.C.
- 6. EDGE FRAMING OR END OF SHEAR WALLS SHALL BE FRAMED WITH: (2) MINIMUM 2X6
- 1. BLOCK ALL UNSUPPORTED HORIZONTAL SHEATHING EDGES WITH 2X6 OR 3X6 AS NOTED IN SCHEDULE. ALL VERTICAL ABUTTING SHEATHING EDGES SHALL BE 2X6 FOR EXTERIOR WALLS OR 2X4 FOR INTERIOR WALLS OR AS NOTED IN SCHEDULE.

(2X6 WALLS), (2) 2X4 (2X4 WALLS), OR SOLID SAWN POSTS AS NOTED IN THE SCHEDULE.

- 8. SOLE PLATE SHALL BE 2X6 FOR EXTERIOR WALLS . SOLE PLATE SHALL BE 2X4 OR 2X6 FOR INTERIOR WALLS. SOLE PLATE NAILING SHALL BE 16d SPACED 12" O.C (MAX. OR LESS AS SPECIFIED IN SCHEDULE)
- 9. MUD SILLS SHALL BE 2X6 HF #2 P.T. CONTINUOUS AROUND PERIMETER OF FOUNDATION
- 10. FOUNDATION ANCHOR SHALL BE  $\frac{1}{2}$ " DIA.  $\times$  10" A.B. FOR 2×6 MUD SILL OR  $\frac{1}{2}$ " DIA.  $\times$  12" A.B. FOR 3X6 MUD SILLS. IF NOT SPECIFIED BY THE SHEAR WALL SCHEDULE, ANCHOR BOLTS SHALL BE SPACED NO MORE THAN 48" O.C. ALL ANCHOR BOLTS SHALL BE EMBEDDED IN CONCRETE 7' MIN. PROVIDE (2) MINIMUM A.B.'S FOR EACH MUD SILL SECTION.
- 11. PROVIDE 3"X3"X4" GALY, WASHERS FOR EACH ANCHOR BOLT. THE CONTRACTOR MAY USE 3"X3"X1/4" GALY. WASHERS WITH DIAGONAL SLOTTED HOLES IF STANDARD CUT WASHERS ARE USED AND PLACED ABOVE THE SLOTTED PLATE WASHERS.

## SHEAR WALL SCHEDULE NOTES (UPPER FLOOR)

- SHEAR WALLS NOTED IN SCHEDULE ARE WALLS WITH ADDITIONAL EDGE NAILING, ABUTTING HORIZONTAL AND VERTICAL EDGE FRAMING, AND ANCHOR BOLT SPACING. FIELD NAIL SIZE SHALL MATCH THE EDGE FRAMING SPECIFIED AND BE SPACED AT 12" O.C. SHEAR NAILING APPLIES TO ALL VERTICAL AND HORIZONTAL ABUTTING SHTG. EDGES, DOUBLE TOP PLATES, AND SOLE PLATES.
- 2. ALL EXTERIOR WALLS NOT SPECIFIED IN SHEAR WALL SCHEDULE, SHALL BE DESIGNATED AS MINIMUM SHEAR PANELS WITH EDGE NAIL SIZE MATCHING SPECIFIED NAILS IN SCHEDULE AND SPACED AT 6" O.C. FIELD NAIL SPACING SHALL BE 12" O.C.
- 3. SHEATHING SHALL BE 1/16" OSB UNLESS SPECIFIED 15/32" STRUCTURAL #1 IN SCHEDULE.
- 4. EXTERIOR SHEAR WALL FRAMING SHALL BE 2X6 HEM FIR #2 UNLESS NOTED "DF" (DOUG FIR) IN SCHEDULE, FRAMING SHALL BE SPACED AT 16" O.C.
- 5. INTERIOR SHEAR WALL FRAMING SHALL BE 2X4 (OR 2X6 PER SCHEDULE) HEM FIR \*2 SPACED AT 16" O.C.
- 6. EDGE FRAMING OR END OF SHEAR WALLS SHALL BE FRAMED WITH: (2) MINIMUM 2X6 (2×6 WALLS), (2) 2×4 (2×4 WALLS), OR SOLID SAWN POSTS AS NOTED IN THE SCHEDULE.
- 1. BLOCK ALL UNSUPPORTED HORIZONTAL SHEATHING EDGES WITH 2X6 OR 3X6 AS NOTED IN SCHEDULE. ALL VERTICAL ABUTTING SHEATHING EDGES SHALL BE 2X6 FOR EXTERIOR WALLS OR 2X4 FOR INTERIOR WALLS OR AS NOTED IN SCHEDULE.
- 8. SOLE PLATE SHALL BE 2X6 FOR EXTERIOR WALLS . SOLE PLATE SHALL BE 2X4 OR 2X6 FOR INTERIOR WALLS. SOLE PLATE NAILING SHALL BE 16d SPACED 12' O.C (MAX. OR LESS AS SPECIFIED IN SCHEDULE)



ABUTTING VERTICAL PW

EDGE FRAMING - SIZE

TRUSSES OR RAFTERS-

DOUBLE TOP PLATE - MIN. LAP SPLICE

SHALL BE 7'-0" - NAIL W/ 10d @ 4" O.C.

SPECIAL SHEAR WALL PANELS

GIRDER TRUSS

- 2x BLOCKING (TYP.)

-BOUNDARY EDGE FRAMING

PER SCHEDULE

3X6 BLOCKING

LOCATION - TYP.

REQUIRED AT STRAP

STRAP HOLD DOWN OR

2022

Sheet

BOLTED HOLD DOWN

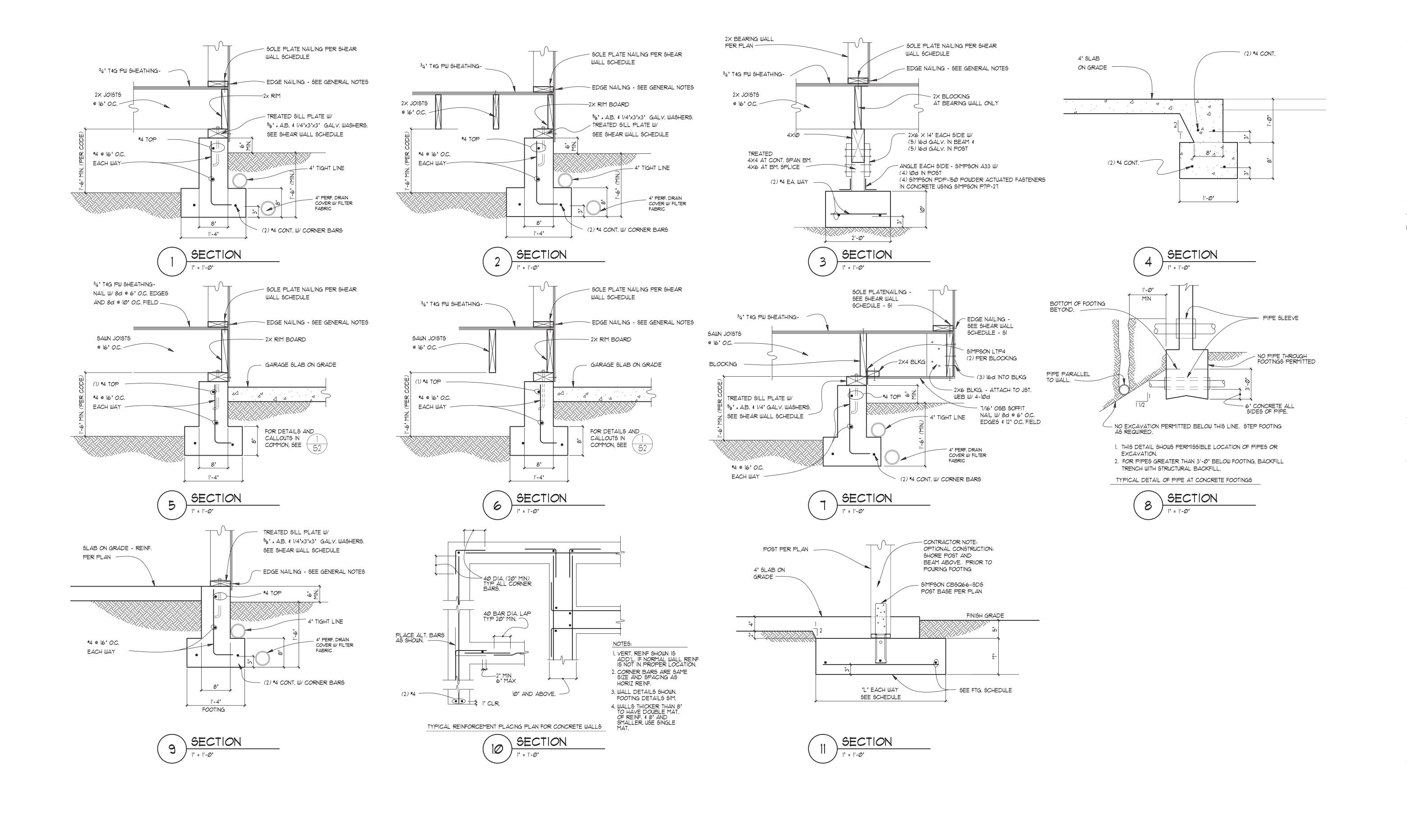
EACH END OF WALL

PER PLAN

BEAM PER PLAN FULL WIDTH WALL BOUNDARY EDGE FRAMING PL ELEY. PER SCHEDULE -3X6 BLOCKING REQUIRED AT STRAP LOCATION -MSTC4Ø FIN. FLR. — 2×6 @ 16" O.C.

3/8" = 1'-Ø"

ELEVATION - SHEAR TRANSFER SHEAR WALL



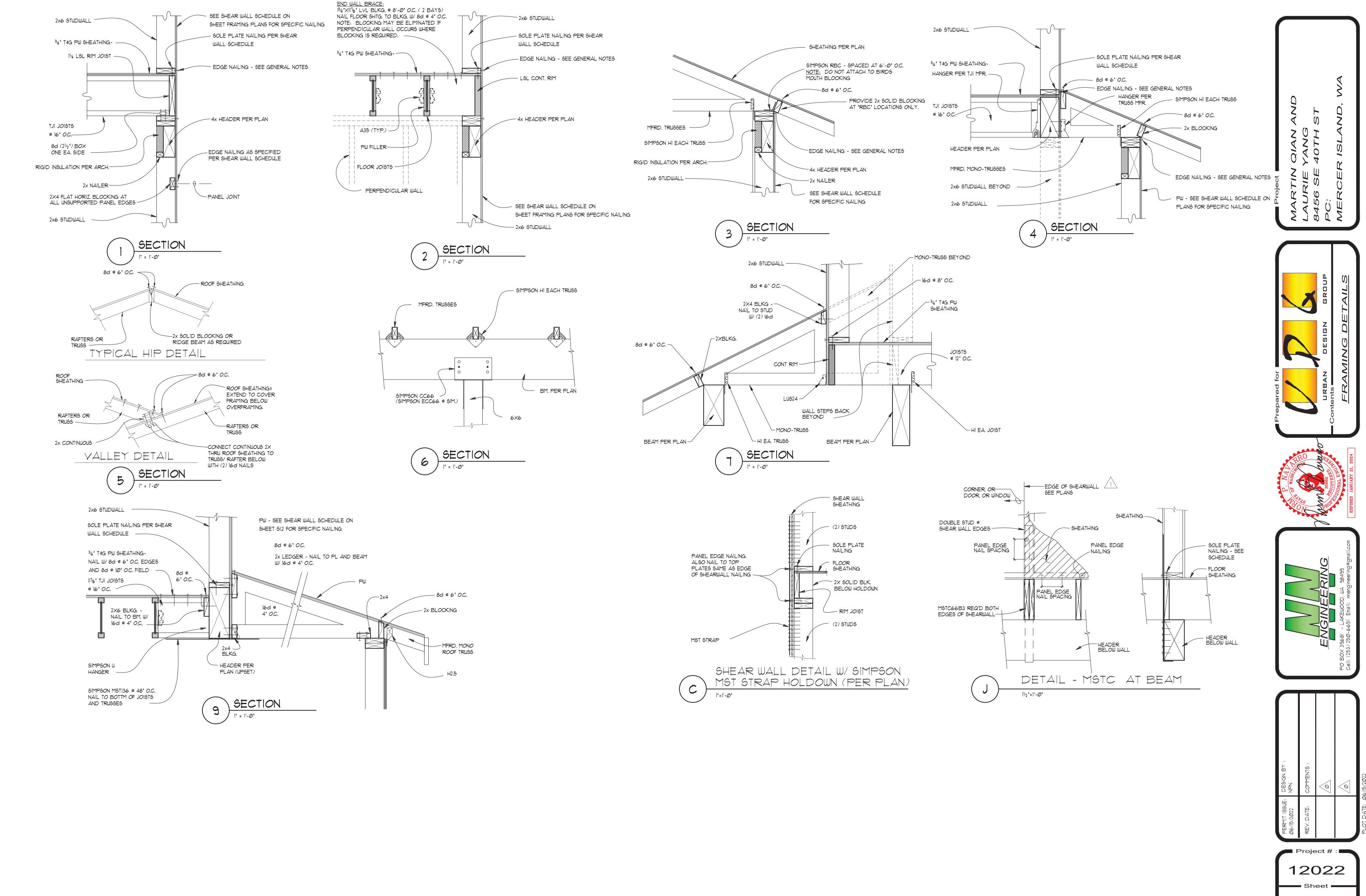
PERMIT 195UE: NPN

REV. DATE: COMMENTS:

A REV. DATE: PO BOX 339681 - LAKEWOOD, WA 98499

Cell: (253) 250-6651 Email: miengineering@gmail.com

EXPIRES JANUARY 21, 2024



# FOUNDATION / MAIN FLOOR FRAMING PLAN

1/4" = 1'-0" DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

FOUNDATION VENTILATION:

PROVIDE CRAWL SPACE VENTILATION AS PER IBC SEC. 1203.3.1

'CRAWLSPACE AREA' × 1/150 = TOTAL VENT AREA REQUIRED (S.F.)

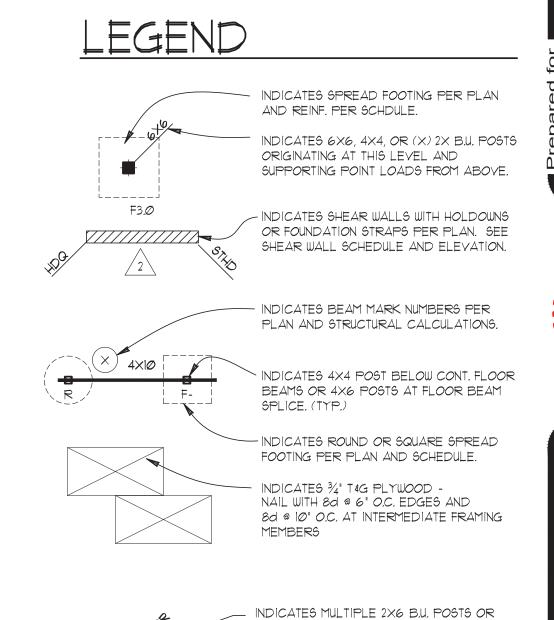
QTY. OF 1'X14' VENTS REQUIRED: 

2024 SF (3000X0520) = 13

#### FOUNDATION & MAIN FLOOR FRAMING NOTES:

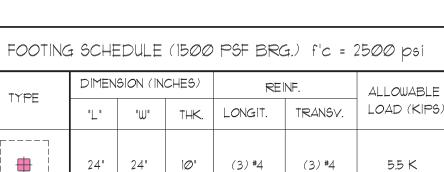
- 1. ALL FLOOR BEAMS SHALL BE 4X10 DF #2 UNLESS NOTED OTHERWISE ON PLAN. NOTE LOCATE BEAMS UNDER BEARING WALL WHERE NOTED ON PLAN.
- 2. ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED GLACIAL TILL OR STRUCTURAL FILL. SEE GENERAL NOTES FOR ASSUMED ALLOWABLE SOIL LATERAL OR VERTICAL BEARING PRESSURES.
- 3. THE BOTTOMS OF FOOTING EXCAVATIONS SHALL BE LEVEL, CLEAN, AND FREE OF LOOSE MATERIAL OR WATER WHEN CONCRETE IS PLACED. OVER EXCAVATION SHALL BE FILLED CONCRETE THE SAME STRENGTH AS FOOTINGS.
- 4. FINISH GRADE AROUND THE PERIMETER OF THE STRUCTURE SHALL BE DRAINED AWAY FROM THE FOUNDATION FOR RAIN OR IRRIGATION WATER
- 5. THE CONTRACTOR SHALL FOLLOW THE AVAILABLE GEO-TECH. REPORT FOR THE RECOMMENDED SITE PREPARATIONS BEFORE CONSTRUCTING THE FOUNDATION.
- 6. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE. ANY FIELD CUTS, NOTCHES, AND DRILLED HOLES SHALL BE RE-TREATED PER AWPAM4.
- 1. ALL FASTENERS & HARDWARE IN PRESSURE TREATED OR FIRE TREATED WOOD SHALL BE SIMPSON "ZMAX" (GI85 HDG PER ASTM A653).
- 8. PROVIDE DOUBLE JOISTS OR BEAM (PER PLAN) BELOW SHEAR WALL PARALLEL TO TO JOISTS. NAIL WALL SOLE PLATE TO JOISTS OR BEAM PER SHEAR WALL SCHEDULE OR NOTE 8. OF SHEAR WALL SCHEDULE NOTES.
- 9. PROVIDE 5/8" DIA. GALY. ANCHOR BOLTS EMBED 1" MIN. IN CONCRETE. PROVIDE 1/4"X3"X3" GALYANIZED WASHERS AT EACH ANCHOR BOLT.
- 10. PROVIDE APPROPRIATE BLOCKOUT IN STEM WALLS OR FOOTINGS FOR PLUMBING & ELECTRICAL STUB-OUTS PER ARCH. PLANS. COORDINATE WITH GENERAL CONTRACTOR.
- 11. PROVIDE CRAWL SPACE ACCESS PER IBC AND ARCHITECTURAL PLANS.

  COORDINATE LOCATION IN SITE WITH CONTRACTOR.
- 12. PROVIDE CRAWL SPACE VENTILATION PER IBC AND FOUNDATION PLANS. DO NOT LOCATE VENTS WITHIN 8" OF HOLDOWN STRAPS OR HOLDOWN BOLTS. MAINTAIN 3'-Ø' CLEAR FROM EACH CORNER.
- 13. FOR TYPICAL PLACEMENT OF HORIZONTAL REINF. IN CONCRETE, SEE 14/62.
- 14. FOR TYPICAL DETAIL FOR INSTALLATION OF PIPES NEAR FOOTINGS, SEE 8/62.
- 15. PROVIDE SQUASH BLOCKING BELOW ALL SOLID SAWN OR BUILT-UP 2X POSTS ALONG EXTERIOR OR INTERIOR STEM WALLS PER DETAIL 4/SI.



SOLID POST BEARING ON BEAM AT THIS LEVEL AND SUPPORTING POINT LOADS

FROM ABOVE.



BEAM PER PLAN

	"L"	"W"	THK.	LONGII.	IRANSV.	LOAD (RII 5)		
F2.0	24" 24" 24"		10"	(3) #4	(3) #4	5.5 K		
	24" DIA.		24" DIA.		10"	(2) #4	(2) #4	4.3 K
F3.Ø	36"	36"	10"	(3) #4	(3) #4	12.4 K		
F3.5	42"	42"	12"	(3) #4	(3) #4	16.5 K		
F4.Ø	48"	48"	12"	(3)#5	(3)#5	21.6 K		
	60"	60"	14"	(6) #5	(6) #5	33.5 K		

SPREAD FOOTING DETAIL

NRTIN QIAN AND URIE YANG 56 SE 40TH ST

SN GROUP

URBAN DESIGN
Contents
FOUNDATION - FLOC



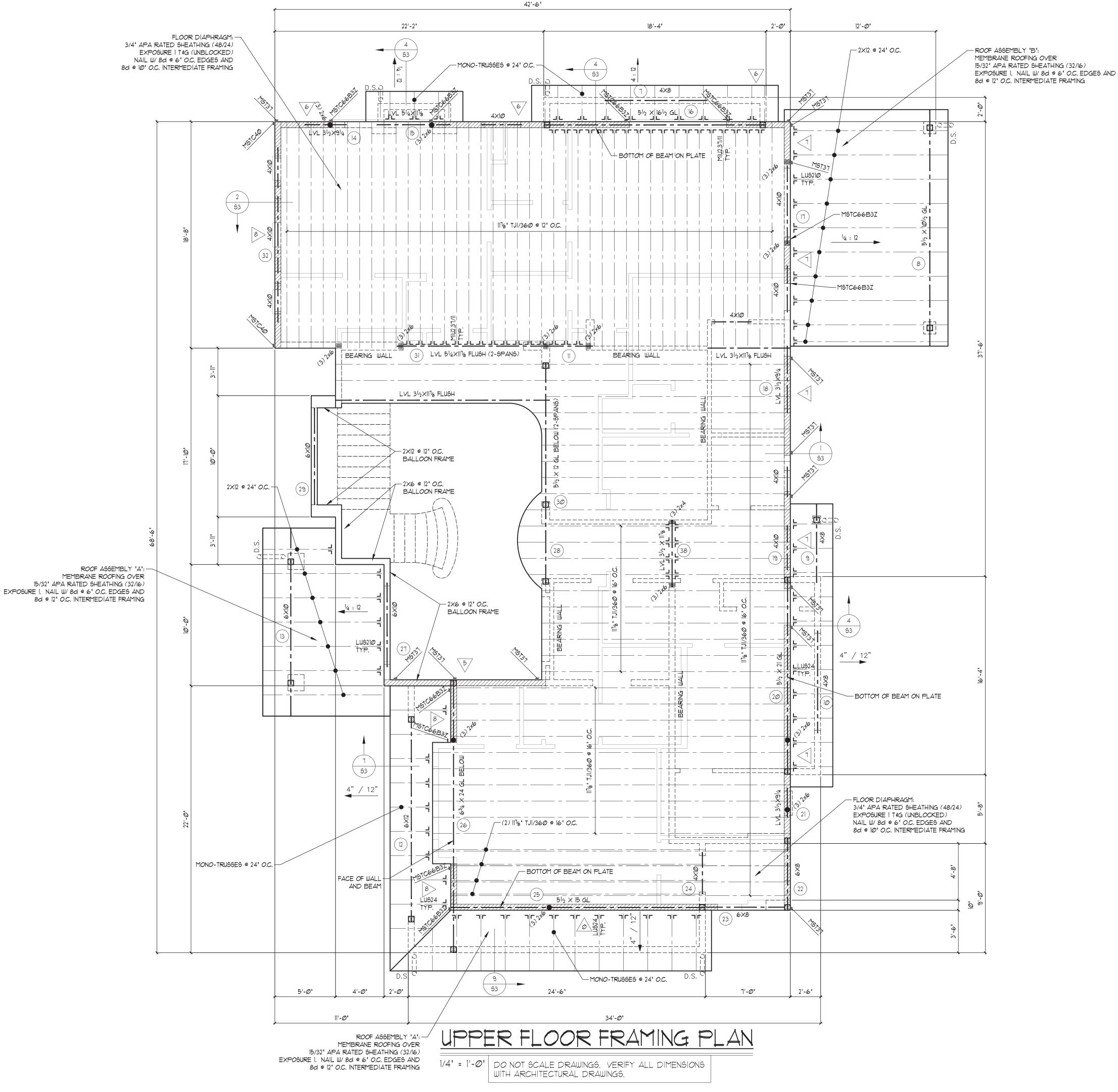


DATE: COMMENTS:

Project # : 12022

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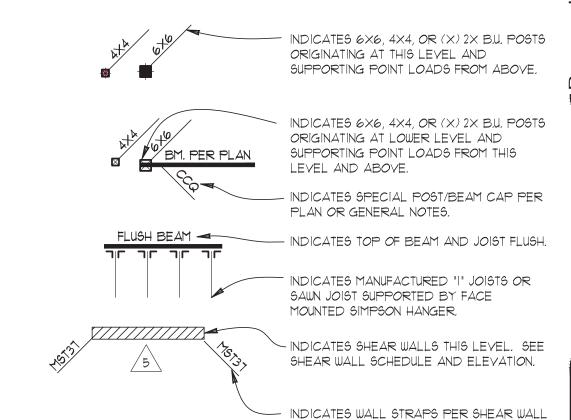
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FLOOR FRAMING NOTES:

- 1. ALL EXTERIOR HEADERS SHALL BE 6X10 DF#2 UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR HEADERS SHALL BE 4X10 DF#2 UNLESS NOTED OTHERWISE.
- 2. ALL EXTERIOR WALL STUDS SHALL BE 2X6 HEM-FIR #2 SPACED AT 16" O.C. UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR WALL STUDS SHALL BE 2X4 HEM FIR #2 SPACED AT 16" O.C. UNLESS NOTED OTHERWISE.
- 3. FOR TYPICAL WALL FRAMING OR SHEAR WALL FRAMING SEE ELEVATION ON SHEET SI.
- 4. PROVIDE SOLID BLOCKING BELOW BEARING WALL OR SHEAR WALL PERPENDICULAR TO JOISTS. NAIL SOLE WALL SOLE PLATE TO BLOCKING PER SHEAR WALL SCHEDULE OR NOTE 8. OR SHEAR WALL SCHEDULE NOTES.
- 5. PROVIDE DOUBLE JOISTS OR BEAM (PER PLAN) BELOW SHEAR WALL PARALLEL TO TO JOISTS. NAIL WALL SOLE PLATE TO JOISTS OR BEAM PER SHEAR WALL SCHEDULE OR NOTE 10. OF SHEAR WALL SCHEDULE NOTES.
- 6. PROVIDE JOIST BRIDGING PER JOIST MFR'S RECOMMENDATIONS.
- 1. PROVIDE SOLID 2X OR LVL RIM JOIST AT EXTERIOR WALL PER DETAIL AND PLAN. NAIL WALL SOLE PLATE TO RIM WITH PER SHEAR WALL SCHEDULE OR NOTE 10. OF SHEAR WALL SCHEDULE NOTES.
- 8. FOR JOIST CONNECTION TO FLUSH OR UPSET BEAM ON ONE OR TWO SIDES, SEE DETAIL
- 9. FOR SOLID POST OR BUILT UP 2X POST BEARING ON EXTERIOR OR INTERIOR WALL,
- 11. NAIL JOISTS TO BEARING WALL TOP PLATES OR TOP OF BEAM WITH (2) 100d TOE NAIL EACH SIDE.
- 12. PROVIDE WEB STIFFENERS AT "I" JOIST BEARING PER MFR'S RECOMMENDATIONS.
- 13. NOTCHING IN "I" JOISTS NOT PERMITTED WITHOUT MFR'S APPROVAL.
- 14. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE. ANY FIELD CUTS, NOTCHES, OR DRILLED HOLES SHALL BE RE-TREATED WITH AWPAM4.
- 15. ALL FASTENERS & HARDWARE IN PRESSURE TREATED WOOD OR FIRE-RETARDANT WOOD SHALL BE "ZMAX"(G185 HDG PER ASTM A653).





INDICATES SPECIAL BEAM MARK NUMBER PER PLAN AND STRUCTURAL CALCULATIONS. SEE WALL ELEVATION ON SI FOR FRAMING REQUIREMENTS. INDICATES WALL BELOW INDICATES WALL AT THIS LEVEL.

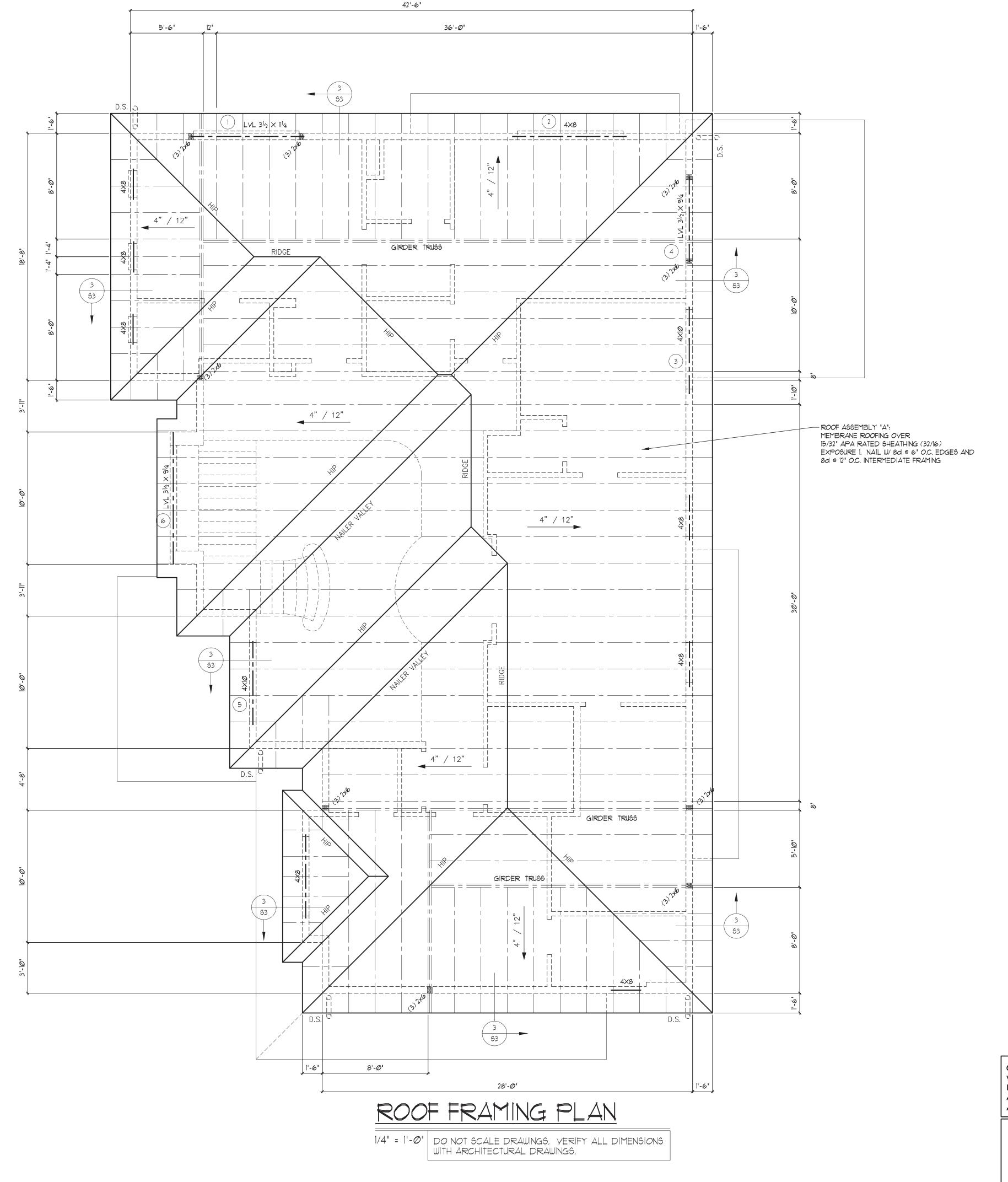
SCHEDULE AND PLAN.



INDICATES MULTIPLE 2X6 B.U. POSTS OR SOLID POST BEARING ON BEAM AT THIS LEVEL AND SUPPORTING POINT LOADS FROM ABOVE.

BEAM PER PLAN

12022

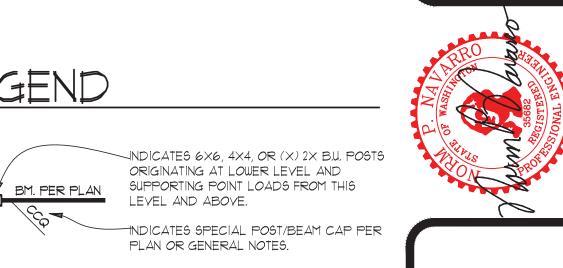


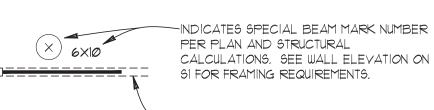
#### ROOF FRAMING NOTES:

- 1. ALL EXTERIOR HEADERS SHALL BE 6X8 DF#2 UNLESS NOTED OTHERWISE ON PLAN. ALL INTERIOR HEADERS SHALL BE 4X10 DF#2 UNLESS NOTED OTHERWISE ON PLAN.
- 2. SEE GENERAL NOTES AND TRUSS NOTES BELOW FOR TRUSS DESIGN SPECIFICATIONS.
- 3. ALL SAWN ROOF JOISTS SHALL BE HF#2 OR BETTER AND SPACED AT 24" O.C. UNLESS NOTED OTHERWISE.
- 4. PRE-MFRD. TJI JOISTS SHALL BE OF THE SIZE AND SERIES SPECIFIED ON THE PLAN. VERIFY MFRD, PLACEMENT PLAN WITH STRUCTURAL. NOTIFY THIS OFFICE OF ANY CONFLICTS IN LAYOUT BEFORE INSTALLATION.
- 5. PROVIDE ROOF VENTILATION PER CURRENT IRC OR IBC. SEE ARCHITECTURAL PLANS FOR SPECIFIC REQUIREMENTS.
- 6. PROVIDE ATTIC ACCESS PANEL PER CURRENT IRC, IBC, AND ARCHITECTURAL PLANS FOR SPECIFIC REQUIREMENTS.

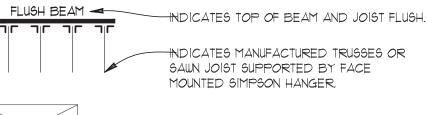
#### WOOD TRUSSES (IBC 2303.4) SHALL BE:

- DESIGNED PER IBC 2303.4.1.1 TO CARRY LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL POINT LOADS, UNIFORM LOADS, OR DRAG STRUT FORCES NOTED ON FRAMING PLANS.
- 2. NON-ATTIC STORAGE TRUSSES SHALL BE DESIGNED WITH A LIVE LOAD OF 20 PSF LOCATED IN THE PLANE OF THE TRUSS. THE MAXIMUM STORAGE SPACE ABOVE THE BOTTOM CHORD SHALL BE LESS THAN 42" HIGH AND 24" WIDE.
- 3. ATTIC TRUSSES SHALL BE DESIGNED FOR FLOOR LOADS LISTED IN THE DESIGN CRITERION AND LOCATED IN AREAS NOTED ON THE FRAMING PLANS.
- 4. TRUSS DESIGN DRAWINGS AND DOCUMENT SUBMITTAL (2303.4.1.1) SHALL INCLUDE STRESS ANALYSIS AND PICTORIAL DEPICTION OF EACH TRUSS TYPE FOR THE PROJECT AND INCLUDING A TRUSS PLACEMENT DIAGRAM (2303.4.2). TRUSS INSTALLATION DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A LICENSED ENGINEER IN THE STATE OF WASHINGTON. APPROVED TRUSS DOCUMENTS SHALL REMAIN ON THE JOB SITE FOR INSPECTION.
- 5. ALTERATIONS (2303.4.5): TRUSS MEMBERS SHALL NOT BE NOTCHED, DRILLED, SPLICED, OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGNER. ALTERATIONS RESULTING IN THE ADDITION OF LOADS TO ANY MEMBER (E.G. HYAC EQUIPMENT, PIPING, ETC.) SHALL NOT BE PERMITTED WITHOUT APPROVAL OF TRUSS DESIGNER.
- 6. TPI I SPECIFICATIONS: THE DESIGN, MANUFACTURE, FABRICATION, AND QUALITY ASSURANCE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH TPI I.
- 7. TRUSSES SHALL BE BRACED TO MANUFACTURE'S SPECIFICATIONS.
- 8. UNLESS NOTED OTHERWISE ON PLANS, ALL TRUSSES SHALL HAVE SIMPSON H-1 CLIPS AT EXTERIOR BEARING WALLS. AT GABLE END TRUSSES, PROVIDE SIMPSON A35 AT 24" O.C.
- 9. PROVIDE STC CLIPS AT ALL TRUSSES OVER NON-BEARING WALLS.

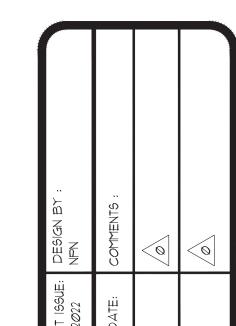




HNDICATES WALL BELOW



INDICATES 1/6" OSB SHEATHING -NAIL WITH 8d @ 6" O.C. EDGES AND 8d @ 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (TYP.)



Project #: 12022

Sheet S6

COORDINATION OF CONSTRUCTION, INCLUDING
VERIFICATION OF DIMENSIONS & FIELD CONDITIONS,
IS THE RESPONSIBILITY OF THE CONTRACTOR.
ANY DISCREPANCIES SHALL BE BROUGHT TO THE
ATTENTION OF THE DESIGN TEAM PRIOR TO CONSTRUCTION.

# **CONTRACTOR NOTE:**

REFER TO TRUSS MANUFACTURER DWG. FOR TRUSS
LAYOUT AND TYPES. USE THIS DRAWING FOR
LOCATION OF SPECIAL BEAM SIZES, GIRDER TRUSS
AND BUILT-UP POST LOCATIONS.