2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021) Version 1.0

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

Project Information	*Contact Information*
Job 9119, Lot 2, Block 1 Timberland No. 4	DAVE STAVE
9017 SE 60th St	DAVES@BUCHANHOMES.COM

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

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

Authorized Representative David Stave ***Date*** 10/30/2021

All Climate Zones (Table R402.1.1)	R-Value [a]	U-Factor [a]
Fenestration U-Factor [b]	n/a	0.30
Skylight U-Factor [b]	n/a	0.50
Glazed Fenestration SHGC [b,e]	n/a	n/a
Ceiling [e]	49	0.026
Wood Frame Wall [g,h]	21 int	0.056
Floor	30	0.029
Below Grade Wall [c,h]	10/15/21 int + TB	0.042
Slab [d,f] R-Value & Depth	10, 2 ft	n/a

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

Prescriptive Path – Single Family 2018 Washington State Energy Code-R 1

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

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

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

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

Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option		User Notes
1	Combustion heating minimum NAECA[b]	0.0	○	
2	Heat pump[c]	1.0	◉	
3	Electric resistance heat only - furnace or zonal	-1.0	○	
4	DHP with zonal electric resistance per option 3.4	0.5	○	
5	All other heating systems	-1.0	○	
Energy Options	**Energy Credit Option Descriptions**	**Credits - select ONE energy option from each category [d]**		
1.1	Efficient Building Envelope	0.5	○	
1.2	Efficient Building Envelope	1.0	○	
1.3	Efficient Building Envelope	0.5	◉	
1.4	Efficient Building Envelope	1.0	○	
1.5	Efficient Building Envelope	2.0	○	
1.6	Efficient Building Envelope	3.0	○	
1.7	Efficient Building Envelope	0.5	○	
2.1	Air Leakage Control and Efficient Ventilation	0.5	○	
2.2	Air Leakage Control and Efficient Ventilation	1.0	○	
2.3	Air Leakage Control and Efficient Ventilation	1.5	○	
2.4	Air Leakage Control and Efficient Ventilation	2.0	○	
3.1[a]	High Efficiency HVAC	1.0	○	
3.2	High Efficiency HVAC	1.0	○	
3.3[a]	High Efficiency HVAC	1.5	○	
3.4	High Efficiency HVAC	1.5	○	
3.5	High Efficiency HVAC	1.5	◉	
3.6[a]	High Efficiency HVAC	2.0	○	
4.1	High Efficiency HVAC Distribution System	0.5	○	
4.2	High Efficiency HVAC Distribution System	1.0	◉	

Prescriptive Path – Single Family 2018 Washington State Energy Code-R 2

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

Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category [d]		User Notes
5.1[d]	Efficient Water Heating	0.5	☐	
5.2	Efficient Water Heating	0.5	○	
5.3	Efficient Water Heating	1.0	○	
5.4	Efficient Water Heating	1.5	○	
5.5	Efficient Water Heating	2.0	◉	
5.6	Efficient Water Heating	2.5	○	
6.1[e]	Renewable Electric Energy (3 credits max)	1.0		
7.1	Appliance Package	0.5	☐	
	Total Credits		6	Calculate Total / Clear Form

a. 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.
b. Equipment listed in Table C403.3.2(4) or C403.3.2(5)
c. Equipment listed in Table C403.3.2(1) or C403.3.2(2)
d. **You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.**
e. 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max. See the complete Table R406.2 for all requirements and option descriptions.
f. Use the single radiobutton in the upper right of the second column to deselect radiobuttons in that group.

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

Window, Skylight and Door Schedule

Project Information: Job 9119, Lot 2, Block 1 Timberland No. 4 / 9017 SE 60th St
Contact Information: DAVE STAVE / DAVES@BUCHANHOMES.COM

	Ref.	U-factor	Qt.	Width Feet	Inch	Height Feet	Inch	Area	UA
Exempt Swinging Door (24 sq. ft. max.)								0.0	0.00
Exempt Glazed Fenestration (15 sq. ft. max.)								0.0	0.00

Vertical Fenestration (Windows and doors)

Component Description	Ref.	U-factor	Qt.	Width Feet	Inch	Height Feet	Inch	Area	UA
FOYER		0.28	1	2	0	5	6	11.0	3.08
FOYER		0.28	1	6	2	2	4	14.4	4.03
STUDY		0.28	1	6		8	3	49.5	13.86
G. BATH		0.28	1	2		3		6.0	1.68
GEN SUITE		0.28	1	7	6	6		45.0	12.60
GEN SUITE		0.28	3	2		2		12.0	3.36
GREAT RM		0.28	1	5		7		35.0	9.80
GREAT RM		0.28	2	6		7		84.0	23.52
DINING		0.28	1	11	10	8		94.7	26.51
KITCHEN		0.28	1	5		5	6	27.5	7.70
MUD		0.28	1	2	6	5		12.5	3.50
MUD		0.28	1	2		3		6.0	1.68
LAUNDRY		0.28	1	5		2	6	12.5	3.50
BDRM 2		0.28	1	6		5		30.0	8.40
UPPER STAIR		0.28	1	4		5	7	22.3	6.25
OWNERS BATH		0.28	1	5		2	6	12.5	3.50
W.I.C.		0.28	1	2		2	6	5.0	1.40
OWNERS SUITE		0.28	3	2		2		12.0	3.36
OWNERS SUITE		0.28	1	10		5		50.0	14.00
RECRATION		0.28	1	8		5		40.0	11.20
BDRM 3/4		0.28	2	6		4		48.0	13.44
BATH 3		0.28	1	2		2	6	5.0	1.40
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00
		0.28						0.0	0.00

Sum of Vertical Fenestration Area and UA 634.9 177.77
Vertical Fenestration Area Weighted U = UA/Area 0.28

Overhead Glazing (Skylights)

Component Description	Ref.	U-factor	Qt.	Width Feet	Inch	Height Feet	Inch	Area	UA
								0.0	0.00
								0.0	0.00
								0.0	0.00
								0.0	0.00
								0.0	0.00
								0.0	0.00

Sum of Overhead Glazing Area and UA 0.0 0.00
Overhead Glazing Area Weighted U = UA/Area 0.00

Total Sum of Fenestration Area and UA *(for heating system sizing calculations)* 634.9 177.77

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads.

Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at energycode@energy.wsu.edu or (360) 956-2042 for assistance.

Project Information: Job 9119, Lot 2, Block 1 Timberland No. 4 / 9017 SE 60th St
Contact Information: DAVE STAVE / DAVES@BUCHANHOMES.COM

Heating System Type: ○ All Other Systems ● Heat Pump

To see detailed instructions for each section, place your cursor on the word "Instructions"

Design Temperature — Instructions: Mercer Island — Design Temperature Difference (ΔT) 45 (*ΔT = Indoor (70 degrees) - Outdoor Design Temp*)

Area of Building
Conditioned Floor Area — Conditioned Floor Area (sq ft): 3,987
Average Ceiling Height — Average Ceiling Height (ft): 9.0 — Conditioned Volume 35,883

Component	Selection	U-Factor / F-Factor	X	Area / Length	=	UA
Glazing and Doors	U-0.28	0.280		635		177.80
Skylights		0.50				---
Insulation – Attic	R-49	0.026		2,360		61.36
Single Rafter or Joist Vaulted Ceilings	No Vaulted Ceilings in this project.	---				
Above Grade Walls (see Figure 1)	R-21 Intermediate	0.056		3,509		196.50
Floors	R-38	0.025		2,360		59.00
Below Grade Walls (see Figure 1)	No Below Grade Walls in this project.	0.028				
Slab Below Grade (see Figure 1)	No Slab Below Grade in this project.	0.303				---
Slab on Grade (see Figure 1)	No Slab on Grade in this project.	---				
Location of Ducts	Conditioned Space					

Duct Leakage Coefficient 1.00

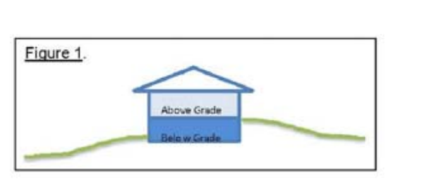


Figure 1.

Sum of UA	494.66	
Envelope Heat Load (*Sum of UA x ΔT*)	22,260	Btu / Hour
Air Leakage Heat Load (*Volume x 0.6 x ΔT x 0.018*)	17,439	Btu / Hour
Building Design Heat Load (*Air leakage + envelope heat loss*)	39,699	Btu / Hour
Building and Duct Heat Load (*Ducts in unconditioned space: sum of building heat loss x 1.10; Ducts in conditioned space: sum of building heat loss x 1*)	39,699	Btu / Hour
Maximum Heat Equipment Output (*Building and duct heat loss x 1.40 for forced air furnace; Building and duct heat loss x 1.25 for heat pump*)	49,624	Btu / Hour

(07/01/13)

TABLE R402.4.1.1
AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA[a]	INSULATION CRITERIA[a]
General Requirements	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.
Cavity insulation installation		All cavities in the thermal envelope shall be filled with insulation. The density of the insulation shall be at the manufacturers' product recommendation and said density shall be maintained for all volume of each cavity. Batt type insulation will show no voids or gaps and maintain an even density for the entire cavity. Batt insulation shall be installed in the recommended cavity depth. Where an obstruction in the cavity due to services, blocking, bracing or other obstruction exists, the batt product will be cut to fit the remaining depth of the cavity. Where the batt is cut around obstructions, loose fill insulation shall be placed to fill any surface or concealed voids, and at the manufacturers' specified density. Where faced batt is used, the installation tabs must be stapled to the face of the stud. There shall be no compression to the batt at the edges of the cavity due to inset stapling installation tabs. Insulation that upon installation readily conforms to available space shall be installed filling the entire cavity and within the manufacturers' density recommendation.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier. Batt insulation installed in attic roof assemblies may be compressed at exterior wall lines to allow for required attic ventilation.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.	

Prescriptive Checklist for the 2018 Washington State Energy Code - Residential 12

TABLE R402.4.1.1 (continued)
AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA[a]	INSULATION CRITERIA[a]
Rim Joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking or floor framing cavity insulation shall be permitted to be in contact with the topside of sheathing or continuous insulation installed on the underside of floor framing and extend from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I, black vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	
Narrow cavities		Batts in narrow cavities shall be cut to fit and installed to the correct density without any voids or gaps or compression, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls. There shall be no voids or gaps or compression where cut to fit. Insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate the wall from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior wall	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.	
HVAC register boots	HVAC supply and return register boots shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	

IC = insulation contact
a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

Prescriptive Checklist for the 2018 Washington State Energy Code - Residential 13

DRAWING INDEX

ENGINEER:

SWENSON SAY FAGET
CONTACT: JOCELYN TETREAULT
2124 THIRD AVENUE, SUITE 100
SEATTLE, WA. 98121
PH. 206-443-6212, FAX 206-443-4870
E-MAIL: jtetreault@swensonsayfaget.com

BUILDER

WILLIAM E. BUCHAN INC.
2630 116TH AVE NE
BELLEVUE, WA. 98004
PHONE: 425-828-6424
FAX: 425-828-4435
www.BUCHANHOMES.COM

GENERAL NOTES

ALL WORK SHALL CONFORM TO CURRENT CODES INCLUDING BUT NOT LIMITED TO:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 EDITION OF ANSI Z223.1, NFPA 54, NATIONAL FUEL GAS CODE
2018 EDITION OF NFPA 58, LIQUEFIED PETROLEUM GAS CODE
2018 INTERNATIONAL FUEL GAS CODE CODE
2018 INTERNATIONAL FIRE CODE
2018 UNIFORM PLUMBING CODE
2018 WASHINGTON STATE ENERGY CODE

SUB-CONTRACTORS SHALL VERIFY ALL DIMENSIONS, AND SITE CONDITIONS, AND SHALL NOTIFY THE BUILDER IMMEDIATELY IN WRITING OF ANY DISCREPANCIES, ERRORS, OR OMISSIONS PRIOR TO PROCEEDING WITH THE WORK.

DO NOT SCALE THE DRAWINGS FOR CRITICAL DIMENSIONS. DIMENSIONS ARE SHOWN TO FACE OF STUDS UNLESS INDICATED OTHERWISE.

ALL SUB-CONTRACTORS SHALL VERIFY ALL REQUIREMENTS FOR THIS PROJECT AND COMPLY WITH ALL LOCAL CODES, SUBMIT PLANS FOR APPROVAL AND OBTAIN PERMIT BEFORE STARTING WORK.

DO NOT VARY OR MODIFY THE WORK SHOWN WITHOUT WRITTEN AUTHORIZATION FROM THE BUILDER.

DETAILS WHICH OCCUR BOTH RIGHT- AND LEFT-HAND ARE SHOWN ONLY ONCE. TYPICAL DETAILS ARE NOT REFERENCED AT ALL

ENERGY CODE OPTIONS

HEATING OPTIONS: #2 HEAT PUMP = 1 CREDIT

1.3 EFFICIENT BUILDING ENVELOPE OPTIONS = .5 CREDITS
Prescriptive compliance is based on Table R402.1.1 with the following modifications:
Vertical fenestration U =0.28
Floor R-38
Slab on grade R-10 perimeter and under entire slab, below grade slab R-10 perimeter and under entire slab or,
Compliance based on Section R402.1.4: Reduce the Total conductive UA by 5%.

3.5 HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS = 1.5 CREDITS
Air-source, centrally ducted heat pump with minimum HSPF of 11.0.
Outdoor heat pump - Hitachi HVAHP060B21S VRF (5 ton, 64,000 Max BTU/h)
Multi-Stage 6,400 BTU/h - 64,000 BTU/h (11.0 HSPF efficiency).
Indoor Air Handler - Hitachi AP60DX22 (5 ton blower with coil).

4.2 HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS = 1 CREDIT
HVAC equipment and associated duct system(s) installation shall comply with the requirements of Section R403.3.7.
Locating system components in crawl spaces is not permitted under this option.
Electric resistance heat and ductless heat pumps are not permitted under this option.
Direct combustion heating equiptment with AFUE less than 80% is not permitted under this option.
To qualify to claim this credit, the building permit drawings shall specify the option be selected and shall specify the heating equiptment type, and shall show the location of the heating and cooling equiptment and all ductwork.
Ventilation - Air King model FAS (supply fan ventilation - 110CFM continuously operating, home requires 106 CFM)

5.5 EFFICIENT WATER HEATING OPTIONS = 2 CREDITS
Water heating system shall include one of the following:
Electric heat pump water heater meeting the standards for Tier III of NEEA's advanced water heating specifications.
Water heater - RUUD PROH80T2RU310BM (80 gallon heat pump water heater, UEF=3.5, Tier III)

TOTAL = 6 CREDITS

VAPOR RETARDER CLASS I OR II CLIMATE ZONE MARINE 4:
6-Mil Poly Vapor Barrier in Crawl Space
R-21 Poly Encapsulated at Rim Joist
PVA Paint at Interior Sheet Rock (Roof/Ceiling assemblies and Exterior Walls) must have rating of 1.0 perm or less.

FIRE:

NFPA 13D FIRE SPRINKLER SYSTEM REQUIRED.
NFPA72 "CHAPTER 29" MONITORED FIRE ALARM SYSTEM REQUIRED FOR DEFICIENCY OF ROADWAY WIDTH.

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. · Bellevue, Washington 98004 · (425) 828-6424

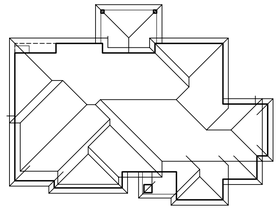
SHELBURNE II

CONTENT: COVER SHEET
9017 SE 60th St

JOB NO.	DATE	DRAWN BY	ENGINEER
9119	10/30/21	DS	S.S.F.

REVISION	DATE
1	6/7/22

SHEET 1 OF 16



FOOTPRINT

SCALE: 1" = 20'-0"

FOUNDATION VENT CALC.

CRAWL SPACE AREA = 1863 SQ.FT.

VENT AREA REQ'D = (1863 SQ. FT)(144 SQ. IN/SQ. FT) / 150

= 1788 SQ. IN.

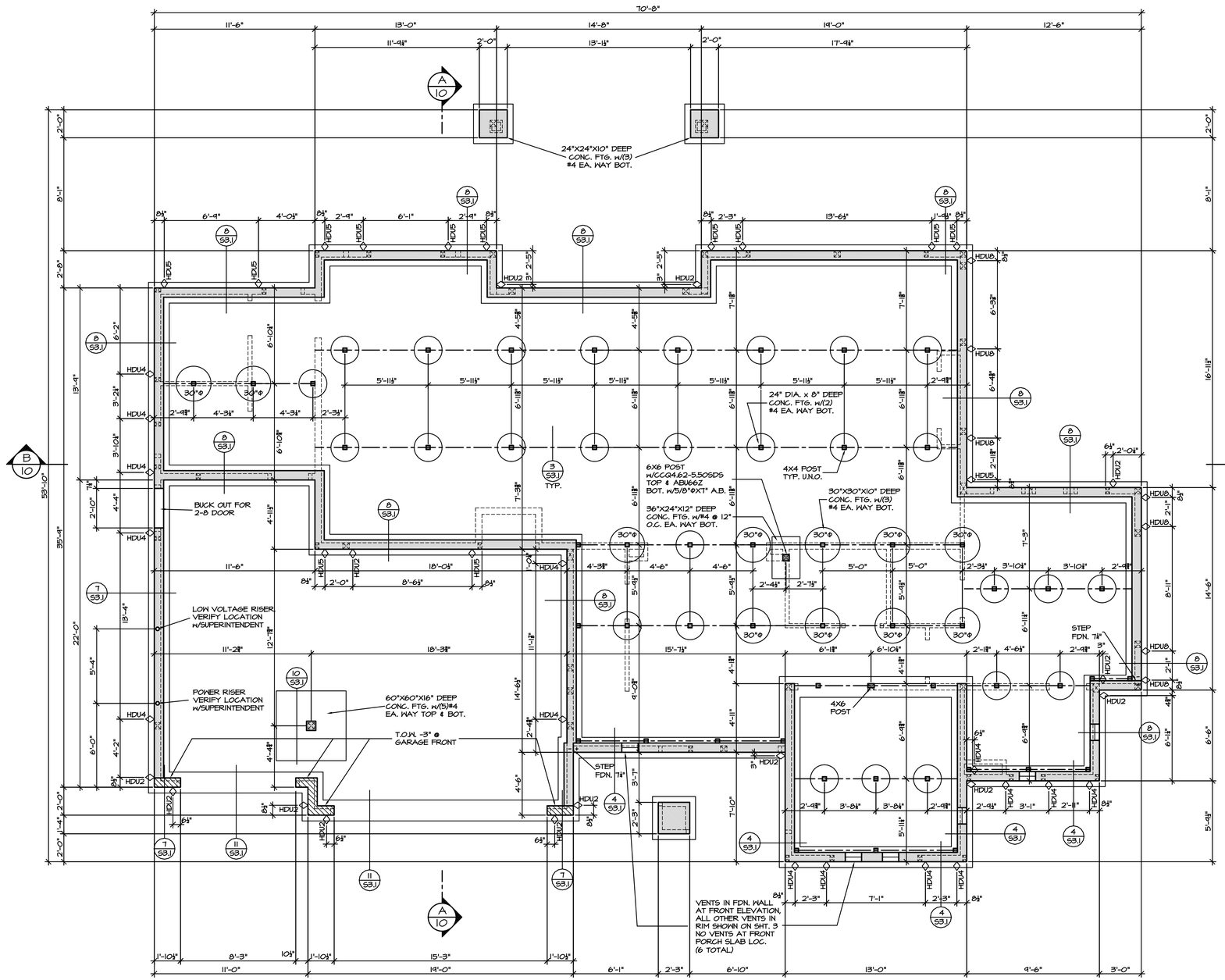
VENTS REQUIRED = (1788 SQ. IN.) / (72.5 SQ. IN. per 7x14 vent)

= (24) 7"X14" VENTS

VENTS AT FRONT ELEVATION ARE IN FOUNDATION (JOIST INSIDE), REMAINDER WILL BE IN RIM SHOWN ON SHT #3.

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. ALL FOOTINGS AND STRUCTURAL SLABS TO BEAR ON COMPETENT NATIVE SOIL AND/OR STRUCTURAL FILL
3. ALL WOOD IN CONTACT W/ CONCRETE TO BE PRESSURE TREATED OR EQUAL
4. ALL POST TO BE 4X4 OR 4X6 AT BEAM SPLICES (U.N.O.)
5. ALL BEAMS TO BE 4X10 D.F. (U.N.O.)
6. ALL CONCRETE PADS TO BE 24"dia. x 8" W/(3) #4 EACH WAY TYP. (U.N.O.)
7. STEM WALLS TO BE 8" WIDE WITH 18" WIDE X 8" DEEP FOOTINGS (U.N.O.)
8. STEP FOOTINGS AS REQUIRED BY GRADE
10. CONTRACTOR SHALL LOCATE AND VERIFY WITH OTHERS PRIOR TO POURING CONCRETE, ALL DOOR OPENINGS IN EXTERIOR FOUNDATION WALLS; DRAINS AND BLOCKOUTS FOR PLUMBING
11. ANCHOR BOLTS TO BE 5/8" DIA X 1" MINIMUM EMBEDMENT @ 48" O.C. U.N.O. ON SHEARWALL SCHEDULE. PROVIDE HOT-DIPPED GALVANIZED WASHERS AT PRESSURE TREATED SILL PLATES
12. 4" CONCRETE SLAB IN GARAGE, SLOPED TO DRAIN TOWARD OVERHEAD DOORS. REINF. W/6X6W1.4XW1.4 WWF. SEE 2/S3.1 FOR CONTROL & CONST. JOINT REQUIREMENTS.
13. SEE CRAWL SPACE CALCULATION FOR NUMBER OF VENTS, ONE VENT OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING PER IRC R408.2. NO VENTS AT FRONT PORCH.
14. A GROUND COVER OF 6 MIL POLYETHYLENE REQ'D PER WA STATE ADMENDMENT TO IRC SECTION R408.1
15. ALL HARDWARE TO BE SIMPSON OR EQUAL
16. ALL DIMENSIONS ARE TO FACE OF FRAMING
17. VERIFY ALL +/- DIMENSIONS IN FIELD



PROVIDE FULL DEPTH VERTICAL GRAIN BLOCKING IN FLOOR CAVITY BELOW SUPPORTED POSTS & MULTI-STUD COLUMNS TYP. ALL LOCATIONS

FOUNDATION PLAN

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

WILLIAM E BUCHAN INC.

2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

SHELBURNE II

CONTENT: FOUNDATION PLAN
9017 SE 60th St

JOB NO. 9119

DATE 10/30/21

DRAWN BY DS

ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

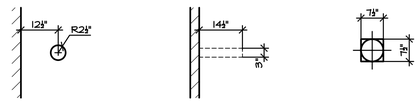
SHEET 2 OF 16

R-38 INSULATION SHALL BE HELD IN PLACE WITH OUT COMPRESSION. USE LOOSE TWINE METHOD, SO AS TO NOT COMPRESS THE MATERIAL WITH FASTENERS AT 24" O.C. MAX

INSULATION DETAIL

SCALE: 1/2" = 1'-0"

HEAD-OUT OR ADJUST JOIST LAYOUT TO PROVIDE FRAMING ALLOWANCE PER DETAILS :



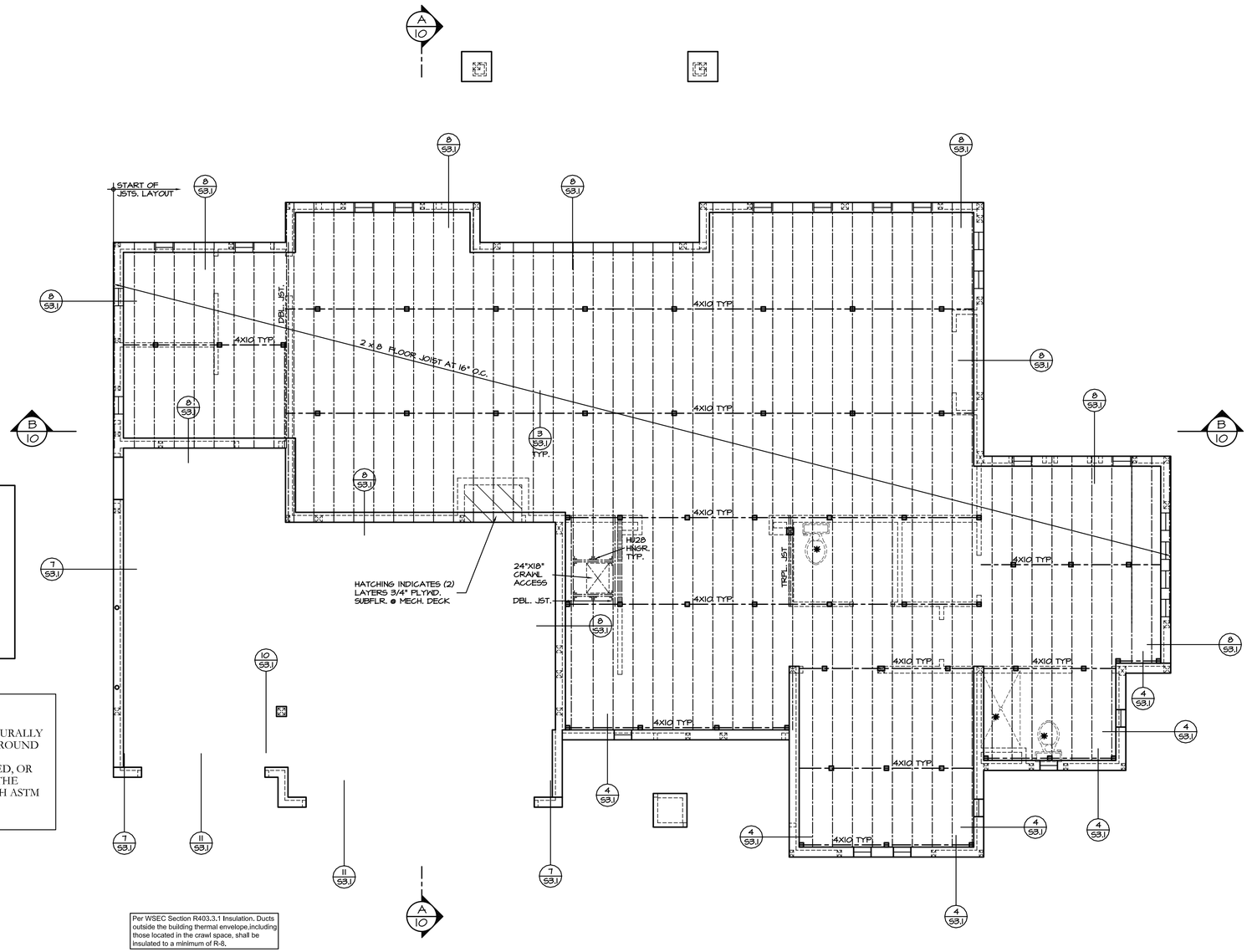
TOILET DRAIN TUB DRAIN RECESSED CAN

CONSTRUCTION NOTES:

1. ALL WOOD IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED OR NATURALLY RESISTENT TO DECAY. TREAT ALL CUT ENDS WITH END CUT SOLUTION. USE GROUND CONTACT TREATED WOOD. ALL WOOD TO BE HEM-FIR #2 OR BETTER.
2. FASTENERS , NAILS, HANGERS, ETC. , STAINLESS STEEL, HOT-DIPPED GALVANIZED, OR AS SPECIFICALLY REQUIRED FOR THE SPECIFIED WOOD PRESERVATIVE USED. THE COATING WEIGHTS FOR ZINC COATED FASTENERS TO BE IN ACCORDANCE WITH ASTM A 153.
3. ATTACHEMENT TO BE PER MANUFACTURE SPECIFICATIONS.

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. ALL WOOD IN CONTACT W/ CONCRETE TO BE PRESSURE TREATED OR EQUAL
3. ALL MAIN FLOOR JOIST TO BE 2x8 LAYOUT. NOTIFY ENGINEER/BUILDER OF ANY REVISIONS TO PLAN
4. ALL JOISTS TO LAP 6" MINIMUM
5. PROVIDE DOUBLE JOISTS AROUND ALL FLOOR OPENINGS GREATER THAN 24" ON ONE SIDE
6. FLOOR SHEATHING TO BE 23/32" TONGUE AND GROOVE APA-RATED STURD-I-FLOOR OR EQUAL. SHEATHING, TO BE GLUED AND NAILED TO FRAMING WITH 0.131" DIA X 2-1/2" NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. FIELD (U.N.O.). LAY SHEATHING WITH FACE GRAIN (LONG DIRECTION) PERPENDICULAR TO SUPPORTS AND STAGGER PANEL END JOINTS. ALLOW 1/8" SPACE BETWEEN PANEL ENDS AND EDGES
7. SEE CRAWL SPACE CALCULATION FOR NUMBER OF VENTS, ONE VENT OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING PER IRC R408.2.
8. CROSS HATCHING INDICATES OVER-FRAMING
9. ALL HARDWARE TO BE SIMPSON OR EQUAL
10. ALL DIMENSIONS ARE TO FACE OF FRAMING
11. VERIFY ALL +/- DIMENSIONS IN FIELD.



Per WSEC Section R403.3.1 Insulation. Ducts outside the building thermal envelope,including those located in the crawl space, shall be insulated to a minimum of R-8.

PROVIDE FULL DEPTH VERTICAL GRAIN BLOCKING IN FLOOR CAVITY BELOW SUPPORTED POSTS & MULTI-STUD COLUMNS TYP. ALL LOCATIONS

MAIN FLR. FRAMING

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

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

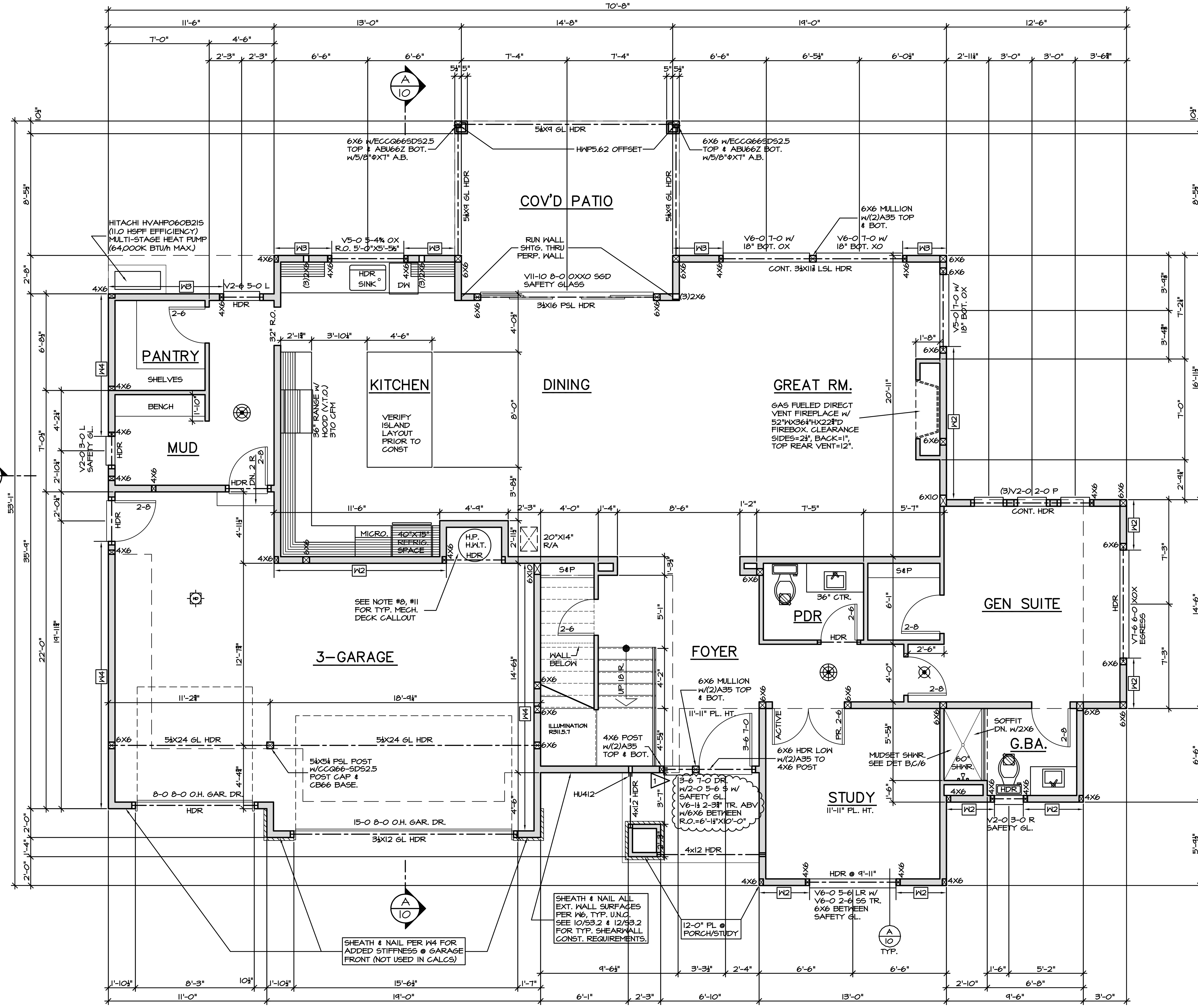
SHELBURNE II

CONTENT: MAIN FLR. FRAMING
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHEET 3 OF 16



608.3 Expansion Tanks, and Combination, Temperature and Pressure-Relief Valves. A water system provided with a check valve, backflow preventer, or other normally closed device that prevents dissipation of building pressure back into the water main, independent of the type of water heater used, shall be provided with an approved, listed, and adequately sized expansion tank or other approved device having a similar function to control thermal expansion. Such expansion tank or other approved device shall be installed on the building side of the check valve, backflow preventer, or other device and shall be sized and installed in accordance with the manufacturer's installation instructions..

R302.11 Fireblocking. In combustible construction, fire-blocking shall be provided to cut off both vertical and horizontal concealed draft openings and to form an effective fire barrier between stories, and between a top story and the roof space.

Fireblocking shall be provided in wood-framed construction in the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs, as follows:
    1.1. Vertically at the ceiling and floor levels.
    1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R302.7.
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E 136 requirements.
5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. ALL WOOD PLATES TO BE 10'-0" (U.N.O.)
3. ALL HEADERS (HDR) TO BE @ 8'-8" EXTERIOR AND 6'-10¾" INTERIOR (U.N.O.), POCKETS @ 7'-0¼", BI-FOLDS @ 6'-10".
4. ALL EXTERIOR WALLS ARE 2X6 @ 16" O.C., FOR LUMBER GRADE, REFERENCE STRUCTURAL GENERAL NOTES
5. ALL INTERIOR BEARING WALLS ARE 2X4 @ 16" O.C., FOR LUMBER GRADE, REFERENCE STRUCTURAL GENERAL NOTES
6. HEADERS(HDRS)/BEAMS(BMS) SHOWN BUT NOT SPECIFIED SHALL BE 4X12(U.N.O.).ALL HEADERS/BEAMS SHALL BE SUPPORTED BY (1)TRIMMER AND (1) KING STUD (U.N.O.). WHERE MORE THAN 1 TRIMMER IS REQUIRED, THE NUMBER OF TRIMMER STUDS SHALL BE NOTED THUS: (N). TRIMMER LOADS TO BE ADEQUATELY TRANSFERRED TO THE FOUNDATION. SEE 3/S3.2 FOR TYP HDR. CONST. REQUIREMENTS.
7. PILOTS, BURNERS, HEATING ELEMENTS AND SWITCHES TO FURNACE AND WATER HEATER SHALL BE LOCATED A MINIMUM OF 18" ABOVE GARAGE FLOOR AND BE PROTECTED FROM VEHICULAR COLLISION
8. FIRE STOPS SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS FROM VERTICAL TO HORIZONTAL SPACES, INCLUDING STAIRWELLS, TUBS AND SHOWERS, FIREPLACES, ETC.
9. GWB NOTE: USE ½" TYPE X GWB UNDER STAIRS W/ FINISHED SPACE BELOW
10. AREA SEPARATION NOTE: USE 2 LAYERS ¾" PLYWOOD FOR TOP DECKING ON ALL EXPOSED SUB-FLOOR IN GARAGE
11. R 309.1, OPENINGS BETWEEN THE GARAGE AND THE RESIDENCE SHOULD BE EQUIPPED WITH SOLID WOOD DOORS OR SOLID/HONEYCOMB STEEL DOORS AT LEAST 1-3/8" THICK. A 20 MINUTE FIRE RATED DOOR IS ALSO ACCEPTABLE. REQ'D TO BE SELF CLOSING PER IRC 302.5.1
12. R309.2, SEPARATION REQUIRED. THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN ½" GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" TYPE-X GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN ½" GYPSUM BOARD OR EQUIVALENT
13. ALL HARDWARE TO BE SIMPSON OR EQUAL
14. ALL DIMENSIONS TO FACE OF FRAMING
15. VERIFY ALL +/- DIMENSIONS IN FIELD
16. ALL EXTERIOR WALLS SHALL BE W6 UNLESS NOTED OTHERWISE.
17. PER TABLE R402.1.1 FOOTNOTE M, ALL EXT. WALL HDRS ARE REQ'D TO BE INSULATED WITH MIN. R-10 INSUL.

GROSS FLOOR AREA

MAIN FLOOR (STAIR INCLUDED)	1868 S.F.
UPPER FLOOR	1980 S.F.
GARAGE	609 S.F.
TOTAL FLOOR AREA	4457 S.F.

ELECTRICAL SYMBOLS

- 50 CFM EXHAUST FAN VENTED TO OUTSIDE (U.N.O.)
- SMOKE DETECTOR WIRED TO HOUSE CURRENT WITH BATTERY BACKUP
- CARBON MONOXIDE/ SMOKE DETECTOR WIRED TO HOUSE CURRENT WITH BATTERY BACKUP
- HEAT DETECTOR WIRED TO HOUSE CURRENT WITH BATTERY BACKUP CONNECT TO SMOKE ALARM INSIDE THE DWELLING THAT WILL PROVIDE OCCUPANT NOTIFICATION.

MAIN FLOOR PLAN

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

Per IRC Section R302.5.2 Duct penetration. 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 (0.48 mm) sheet steel or other approved material and shall not have openings into the garage.

Per WSEC Section R403.3.1 Insulation. Ducts outside the building thermal envelope,including those located in the crawl space, shall be insulated to a minimum of R-8.

SQUARE FOOTAGE CALC.

MAIN FLOOR PLAN	1868 S.F.
UPPER FLOOR PLAN	2119 S.F.
TOTAL LIVING AREA	3987 S.F.
GARAGE	609 S.F.
COVERED PORCH	59 S.F.
COVERED PATIO	184 S.F.

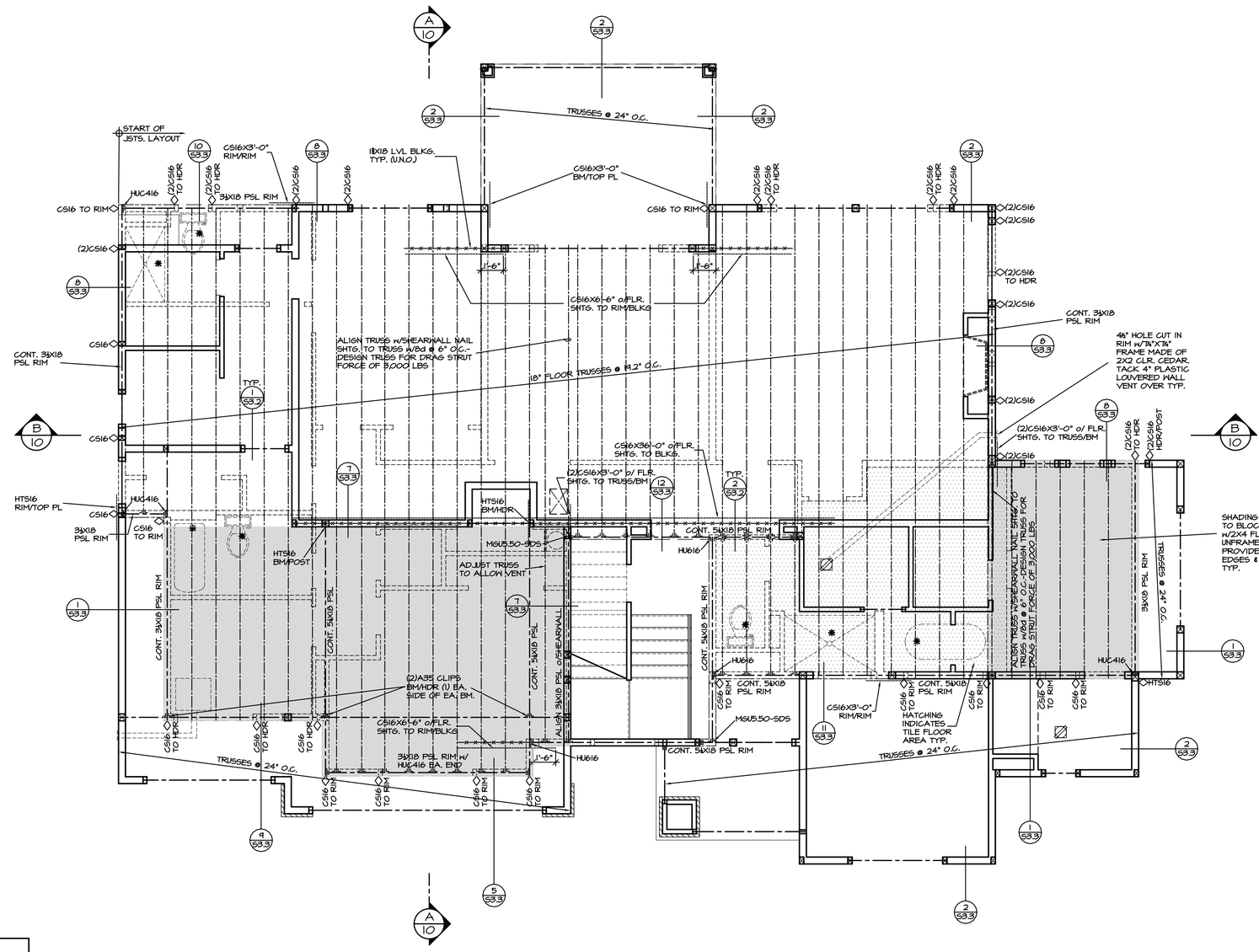
WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. · Bellevue, Washington 98004 · (425) 828-6424

CONTENT: MAIN FLOOR PLAN
9017 SE 60th St

JOB NO.	9119
DATE	10/30/21
DRAWN BY	DS
ENGINEER	S.S.F.

REVISION	DATE
1	6/7/22

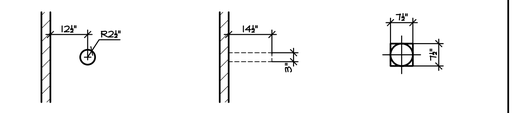
SHELBURNE II



NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. FLOOR TRUSS LAYOUT IS APPROXIMATE. FLOOR TRUSS SUPPLIER IS RESPONSIBLE FOR FINAL LAYOUT & CONFIGURATION. NOTIFY ENGINEER/BUILDER OF ANY REVISIONS TO PLAN
3. ALL UPPER FLOOR JOIST TO BE 18" FLOOR TRUSSES @ 19.2" O.C. U.N.O.
4. ALL JOISTS TO LAP 6" MINIMUM
5. ALL RIM JOISTS TO BE 1-1/2" LSL MINIMUM (U.N.O.)
6. PROVIDE DOUBLE JOISTS AROUND ALL FLOOR AND ROOF OPENINGS GREATER THAN 24" ON ONE SIDE (U.N.O.)
7. FLOOR SHEATHING TO BE 23/32" TONGUE AND GROOVE APA-RATED STURD-I-FLOOR OR EQUAL. SHEATHING TO BE GLUED AND NAILED TO FRAMING WITH 0.131" DIA X 2-1/2" NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. FIELD (U.N.O.). LAY SHEATHING WITH FACE GRAIN (LONG DIRECTION) PERPENDICULAR TO SUPPORTS AND STAGGER PANEL END JOINTS. ALLOW 1/8" SPACE BETWEEN PANEL ENDS AND EDGES
8. CROSS HATCHING INDICATES OVER-FRAMING
9. ALL HARDWARE TO BE SIMPSON OR EQUAL
10. ALL DIMENSIONS TO FACE OF FRAMING
11. VERIFY ALL +/- DIMENSIONS IN FIELD

* HEAD-OUT OR ADJUST JOIST LAYOUT TO PROVIDE FRAMING ALLOWANCE PER DETAILS :



TOILET DRAIN TUB DRAIN RECESSED CAN

PROVIDE FULL DEPTH BLKG IN JST CAVITY @ ALL POST & MULTI-STUD COLUMNS FROM UPPER FLOOR TYP.

UPPER FLR. FRAMING

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

SHELBURNE II

CONTENT: UPPER FLR. FRAMING
9017 SE 60th St

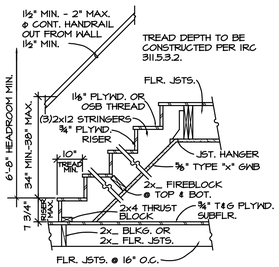
JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHEET 5 OF 16

R302.11 **Fireblocking.** In combustible construction, fire-blocking shall be provided to cut off both vertical and horizontal concealed draft openings and to form an effective fire barrier between stories, and between a top story and the roof space.

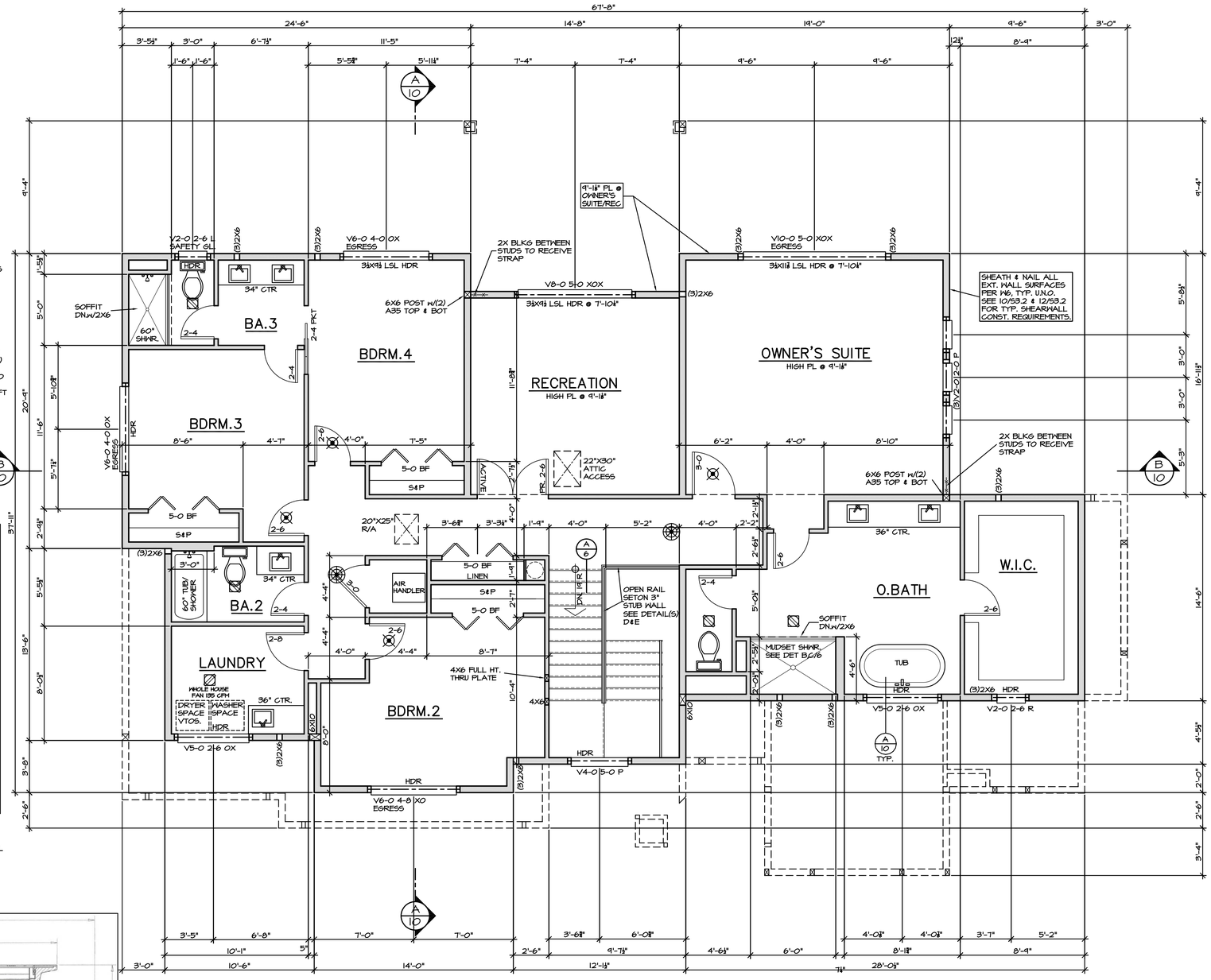
Fireblocking shall be provided in wood-framed construction in the following locations:
1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs, as follows:
   1.1. Vertically at the ceiling and floor levels.
   1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R302.7.
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E 136 requirements.
5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.



A STAIR DETAIL
1/2" = 1'-0"

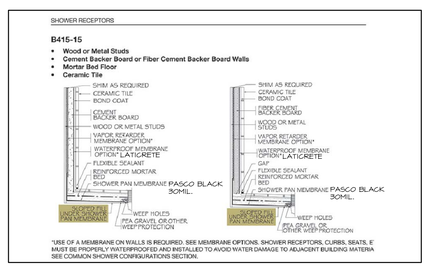
NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. ALL WOOD PLATES TO BE 5"-14" (U.N.O.)
3. ALL HEADERS (HDR) TO BE 4X10 @ 7'-0" EXTERIOR AND 6'-10" INTERIOR (U.N.O.) BIFOLDS @ 6'-10", POCKETS @ 7'-0".
4. ALL EXTERIOR WALLS ARE 2X6 @ 16" O.C., FOR LUMBER GRADE, REFERENCE STRUCTURAL GENERAL NOTES.
5. ALL INTERIOR BEARING WALLS ARE 2X4 @ 16" O.C., FOR LUMBER GRADE, REFERENCE STRUCTURAL GENERAL NOTES.
6. HEADERS (HDRS)/BEAMS (BMS) SHOWN BUT NOT SPECIFIED SHALL BE 4X10 (U.N.O.). ALL HEADERS/BEAMS SHOWN SHALL BE SUPPORTED BY (2) TRIMMER AND (1) KING STUD MINIMUM (U.N.O.). WHERE MORE THAN (2) TRIMMER IS REQUIRED, THE NUMBER OF TRIMMER STUDS SHALL BE NOTED THUS: (N). TRIMMER LOADS TO BE ADEQUATELY TRANSFERRED TO THE FOUNDATION.
7. FIRE STOPS SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS FROM VERTICAL TO HORIZONTAL SPACES, INCLUDING STAIRWELLS, TUBS AND SHOWERS, FIREPLACES, ETC.
8. THE WATER RESISTANT VAPOR GNB BASE FOR TILE IN THE SHOWER ENCLOSURES SHOULD NOT BE USED OVER A VAPOR BARRIER OR ON THE CEILING
9. ALL DIMENSIONS TO FACE OF FRAMING
10. ALL HARDWARE TO BE SIMPSON OR EQUAL
11. VERIFY ALL +/- DIMENSIONS IN FIELD.
12. ALL EXTERIOR WALLS SHALL BE N6 UNLESS NOTED OTHERWISE.

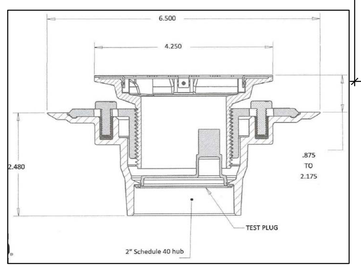


D HANDRAIL DETAIL
N.T.S.

E GUARDRAIL DETAIL
N.T.S.



B SHOWER DETAIL
N.T.S.



C SHOWER DRAIN
N.T.S.

ELECTRICAL SYMBOLS

- EXHAUST FAN VENTED TO OUTSIDE
- SMOKE DETECTOR HARD WIRED TO HOME CURRENT WITH BATTERY BACKUP
- CARBON MONOXIDE/ SMOKE DETECTOR HARD WIRED TO HOME CURRENT WITH BATTERY BACKUP

UPPER FLOOR PLAN

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

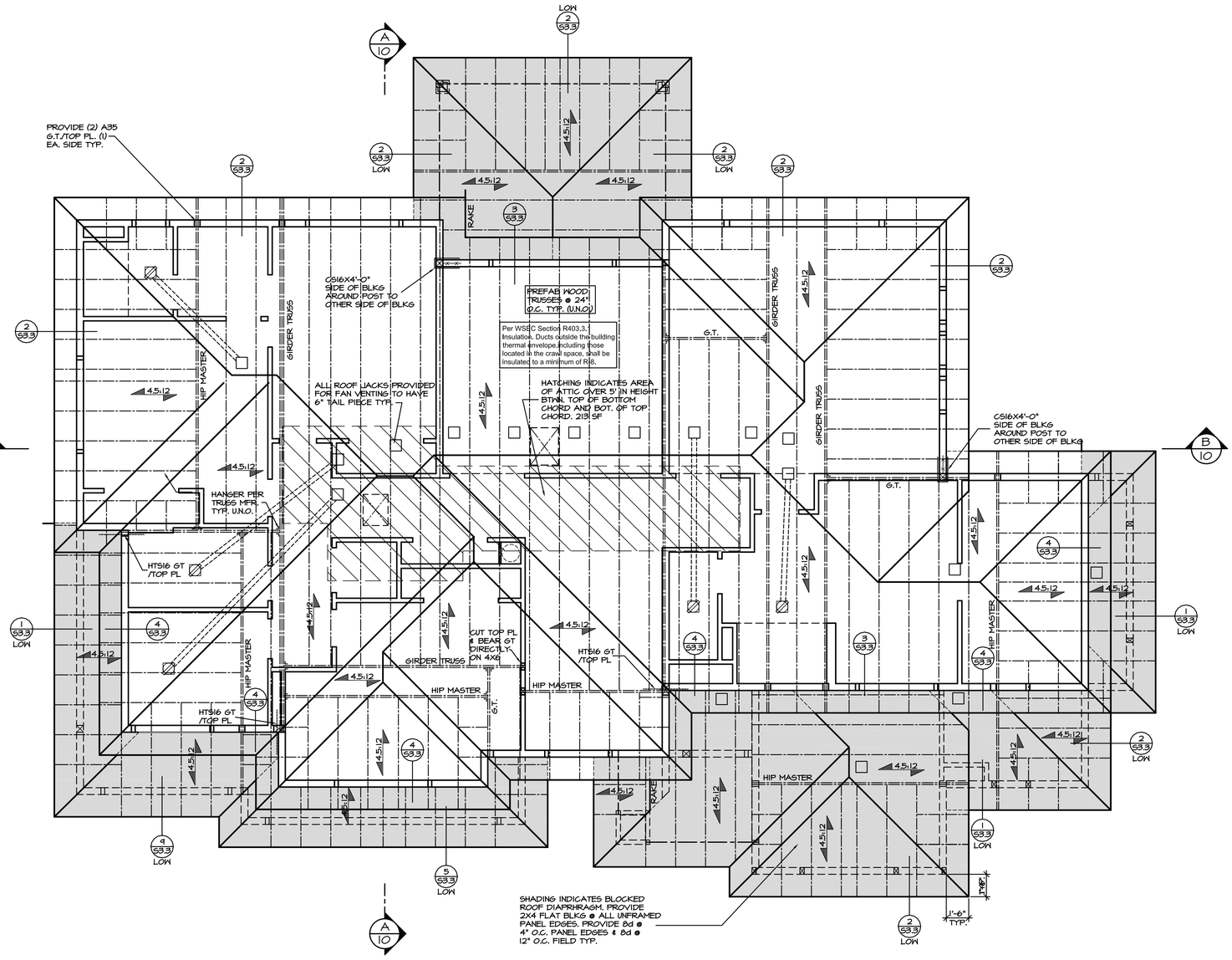
SHELBURNE II

CONTENT: UPPER FLOOR PLAN
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHEET 6 OF 16



ATTIC VENT CALCULATION

ATTIC AREA = 2360 SQ.FT

VENT AREA REQD = $\frac{2360\ SQ.FT}{300}$ = 7.86 SQ.FT.

VENTS REQUIRED = (3.93 SQ.FT.) / (0.334 SQ.FT./VENT)
= (12) 8"x8" ROOF JACKS

8"x8" ROOF JACK VENT AREA = 0.667x0.667x75% = 0.334 S.F./VENT
MINIMUM 3' ABOVE EAVE

EAVE VENTS REQ'D = 3.93 SQ.FT. X 144 = 566 SQ. IN.
2" DIA. EAVE VENT = 3.1 SQ. IN.
= (566 SQ. IN.) / (3.1 SQ. IN. VENT)
= (182) 2" DIAMETER EAVE VENTS

EAVE VENTS LOCATED ON FRONT/REAR ELEVATIONS ONLY

LOWER VENTILATION AREA = (9) 2"ø HOLES AT EA. CONTINUOUS BIRD BLOCKING

ATTIC VENT OPENINGS SHALL HAVE A MIN. ⅛" AND A MAX. ¼" CORROSION RESISTANT METAL MESH COVERING. MIN. 1" VENT SPACE ABOVE CEILING INSULATION WITH CROSS VENTILATION.

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND, REFERENCE TO STRUCTURAL DRAWINGS.
2. ALL TRUSSES TO BE 2x4 TOP CHORD @ 24" O.C. (U.N.O.)
3. TRUSSES TO CARRY MANUFACTURERS STAMP
4. TRUSSES TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS
5. TRUSSES SHALL BE ACCOMPANIED BY DESIGN DRAWINGS FOR INSPECTOR'S APPROVAL
6. ROOF SHEATHING TO BE 7/16" APA RATED SHEATHING WITH A MINIMUM 32/16 SPAN RATING. SHEATHING TO BE NAILED TO ROOF FRAMING WITH 0.131" DIA X 2-1/2" NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. FIELD (U.N.O.). LAY SHEATHING WITH FACE GRAIN (LONG DIRECTION) PERPINDICULAR TO SUPPORTS AND STAGGER PANEL END JOINTS. ALLOW 1/8" SPACE BETWEEN PANEL ENDS AND EDGES. PROVIDE PANEL SHEATHING CLIPS CENTERED BETWEEN FRAMING AT UNBLOCKED SHEATHING EDGES AS REQUIRED BY ROOFING WARRANTY
7. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING CRITERIA:
   a. TRUSS LAYOUT SHOWN IS APPROXIMATE. TRUSS SUPPLIER IS RESPONSIBLE FOR FINAL TRUSS LAYOUT AND CONFIGURATION. NOTIFY ENGINEER OF REVISIONS TO PLAN
   b. FOR STANDARD DEAD AND LIVE LOADS AND SUBMITTAL INFORMATION, REFERENCE TO THE STRUCTURAL GENERAL NOTES
   c. ALL GIRDER TRUSSES SHALL BE SUPPORTED BY A MINIMUM OF (3) STUDS. TRUSS MANUFACTURER TO SUBMIT TO ENGINEER GIRDER TRUSS REACTIONS
   d. PROVIDE SIMPSON HI OR H2.5 HURRICANE TIES AT ALL ROOF TRUSSES AND ROOF JOISTS, TYP.
   e. ALL MULTIPLE STUDS SUPPORTING HIP MASTER AND GIRDER TRUSSES TO CONTINUE TO FOUNDATION
8. TRUSS HANGERS SHALL BE SUPPLIED AND DESIGNED BY THE TRUSS SUPPLIER
9. CROSS HATCHING INDICATES OVERFRAMING
10. ALL HARDWARE TO BE SIMPSON OR EQUAL
11. ALL DIMENSIONS TO FACE OF FRAMING
12. VERIFY ALL +/- DIMENSIONS IN FIELD.
13. PROVIDE HI HURICANE TIE EACH END OF ALL ROOF JACKS.

ROOF FRAMING PLAN

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

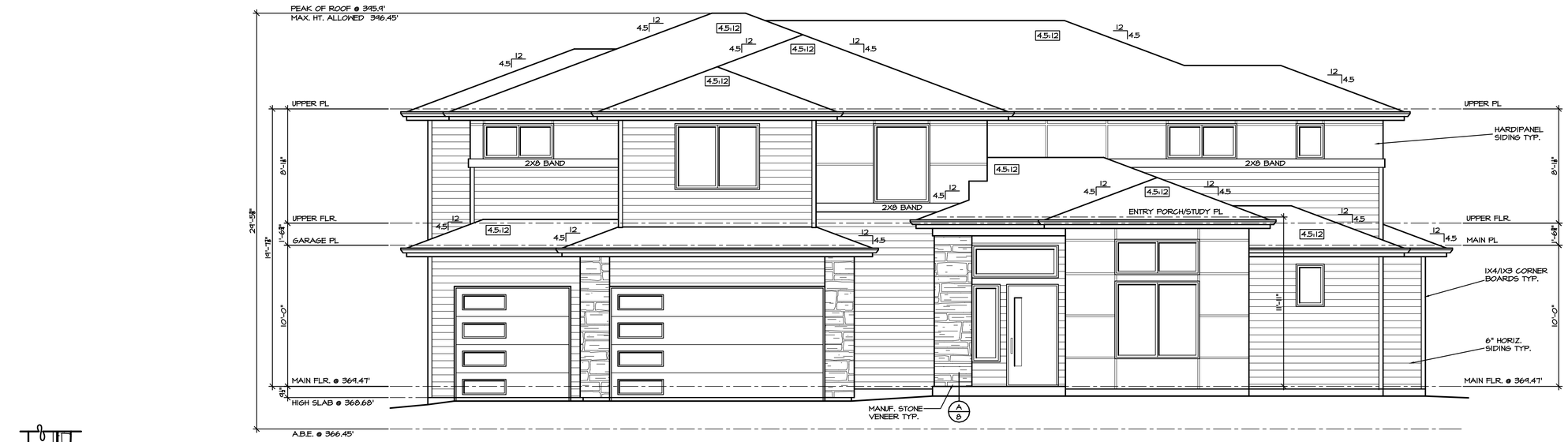
SHELBURNE II

CONTENT: ROOF FRAMING PLAN
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

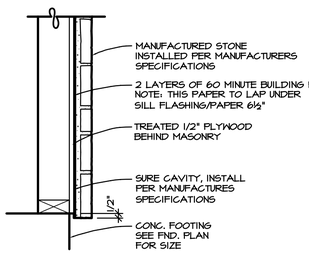
REVISION	DATE
1	6/7/22

SHEET 7 OF 16



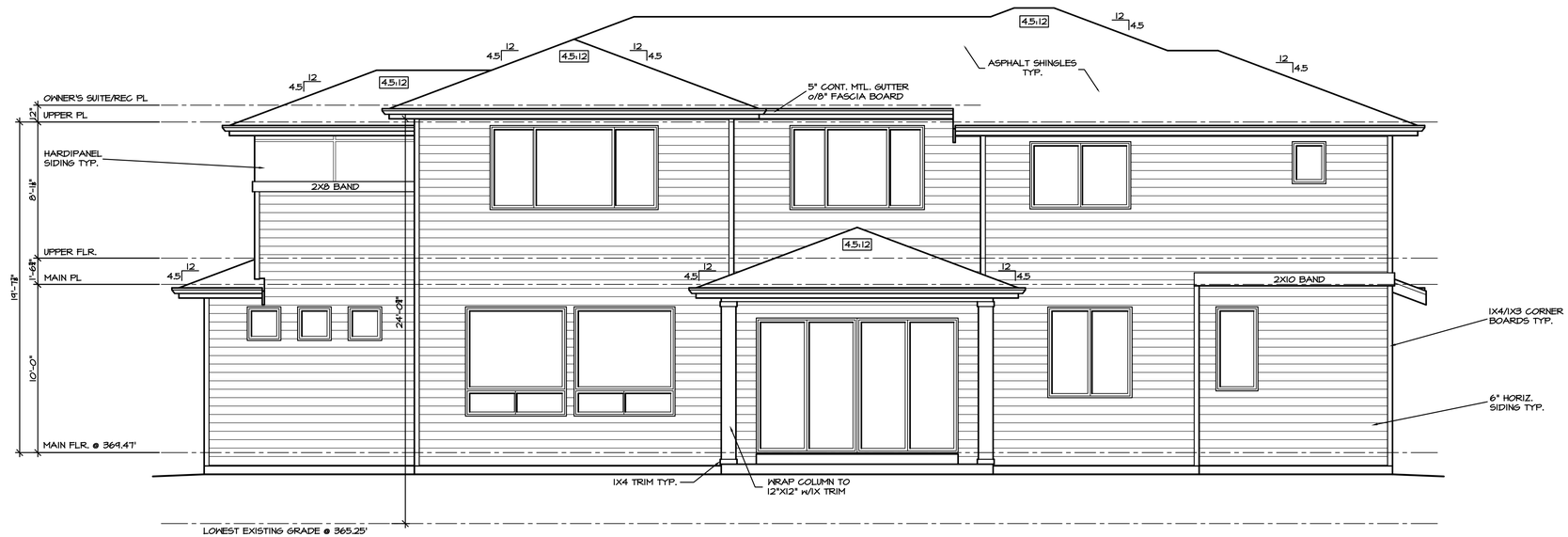
NORTH ELEVATION

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



A FAUX STONE WAINSCOT DETAIL

SCALE: 1-1/2" = 1'-0"



SOUTH ELEVATION

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

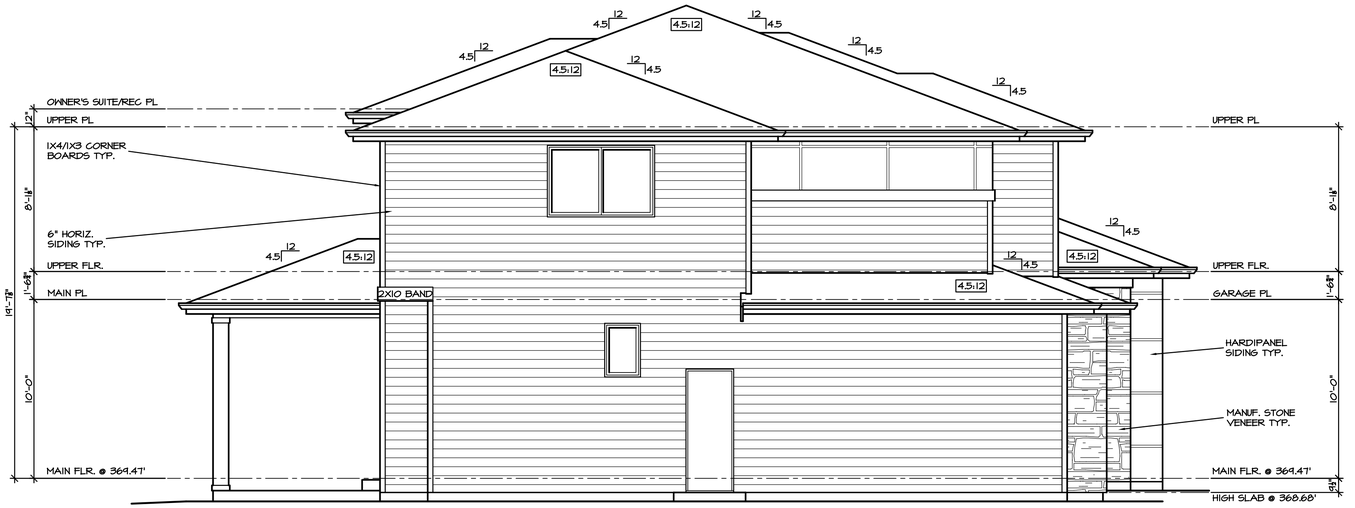
SHELBURNE II

CONTENT ELEVATIONS
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

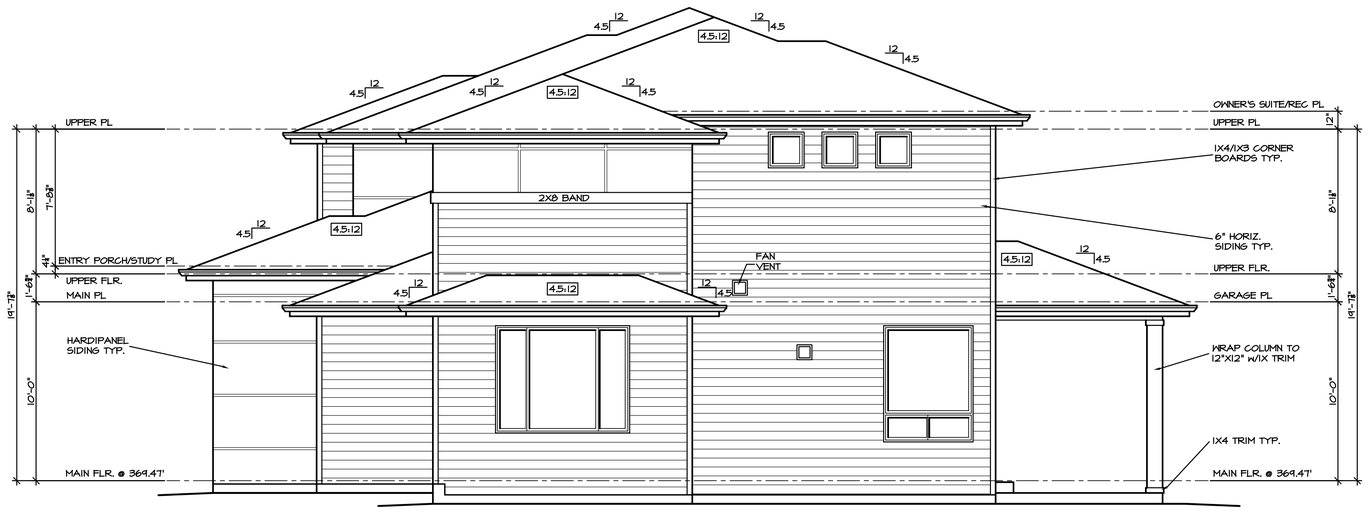
REVISION	DATE
1	6/7/22

SHEET 8 OF 16



EAST ELEVATION

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



WEST ELEVATION

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

SHELBURNE II

CONTENT
ELEVATIONS
9017 SE 60th St

JOB NO.
9119

DATE
10/30/21

DRAWN BY
DS

ENGINEER
S.S.F.

REVISION	DATE
1	6/7/22

SHEET
9
OF 16

ROOF CONSTRUCTION

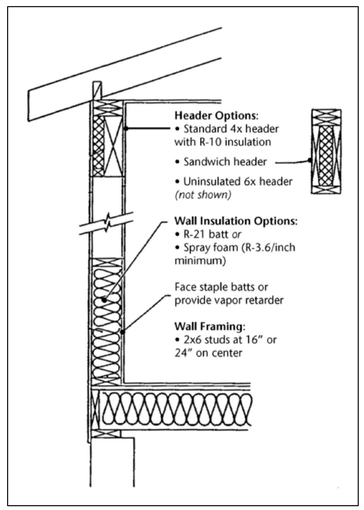
ASPHALT SHINGLES
15# BUILDERS FELT
1/2" PLYWOOD OR 7/16" OSB
MANUFACTURED TRUSSES @ 24" O.C. (U.N.O.) SEE PLANS.
1/2" GYPSUM WALL BOARD
INSULATION PER ENERGY CODE (R-49 FLAT CEILING, R-38 VAULTED)

WALL CONSTRUCTION

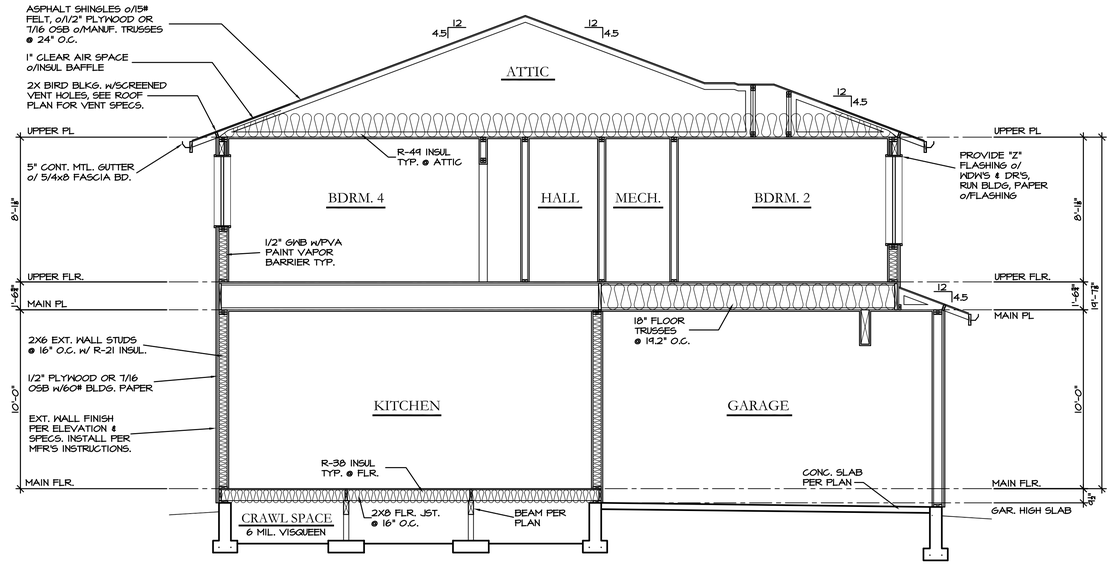
SIDING AS PER EXTERIOR ELEVATIONS (SHINGLE, HORIZ., BD. & BATT., OR MANUF. STONE PER SPECS.)
60# BUILDING PAPER
1/2" PLYWOOD OR 7/16 OSB
2x6 EXTERIOR WALL STUDS @ 16" O.C. 2x4 INTERIOR WALL STUDS @ 16" O.C.
INSULATION PER ENERGY CODE (R-21)
1/2" GYPSUM WALL BOARD
PVA PAINT VAPOR BARRIER

FLOOR CONSTRUCTION

FINISHED FLOOR PER SPECIFICATIONS.
3/4" T&G PLYWOOD SUB FLOOR GLUED & NAILED
2X8 FLOOR JOISTS @ 16" O.C. (MAIN)
18" FLOOR TRUSSES @ 19.2" O.C. (UPPER)
BEAMS, HEADERS, POSTS PER PLANS
INSULATION PER ENERGY CODE (R-38)

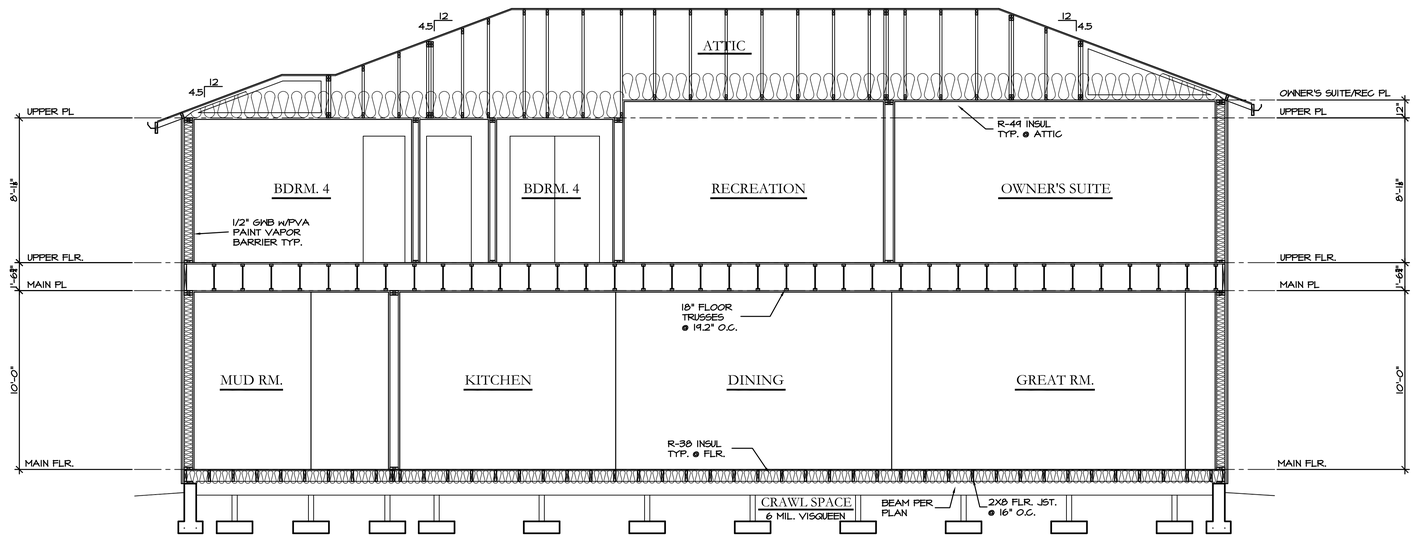


A 4X HDR w/R-10 INSUL.
SCALE: 1/2" = 1'-0"



BUILDING SECTION "A"

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



BUILDING SECTION "B"

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

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

CONTENT
SECTIONS
9017 SE 60th St

SHELBURNE II

JOB NO.
9119

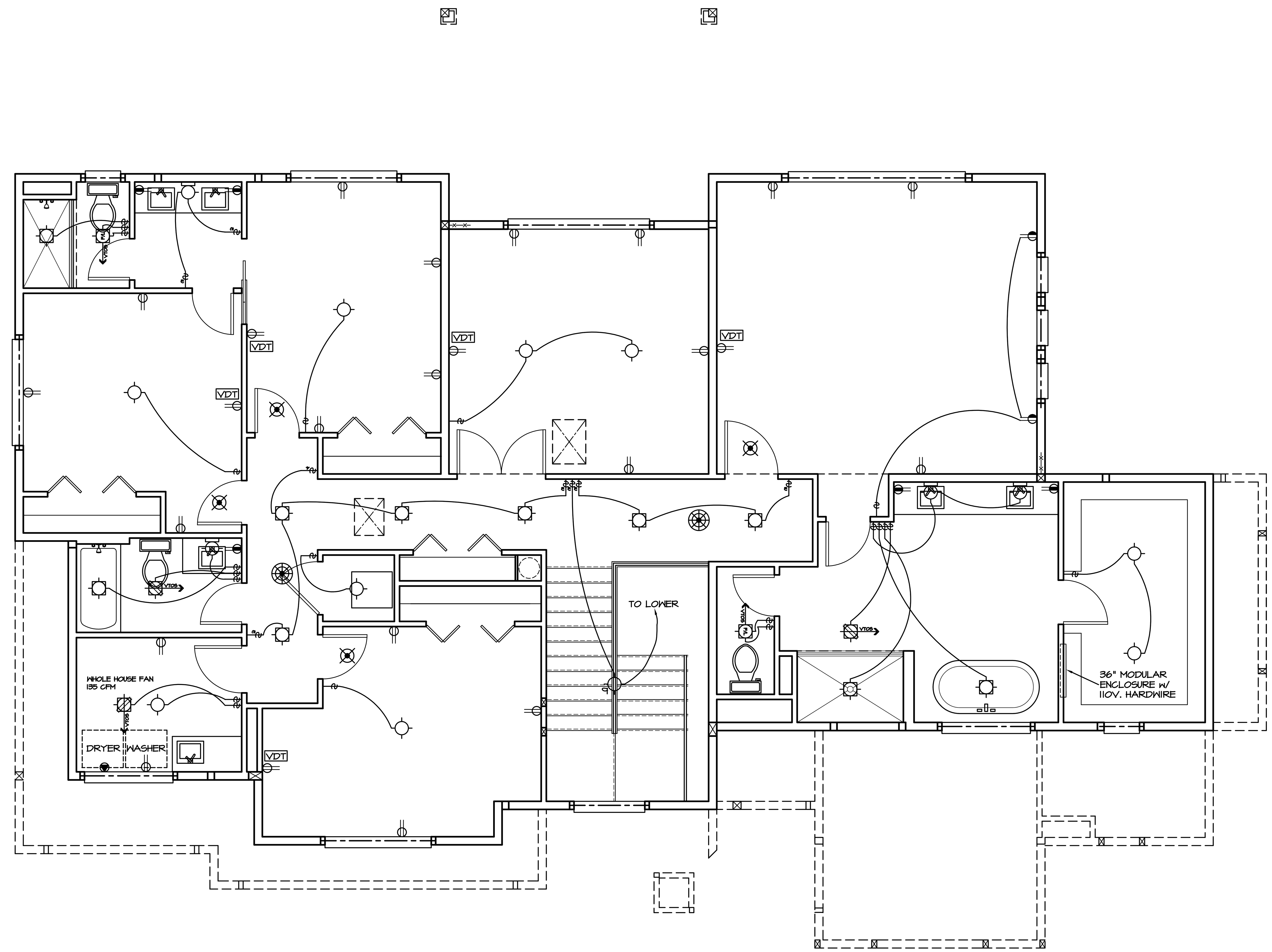
DATE
10/30/21

DRAWN BY
DS

ENGINEER
S.S.F.

REVISION	DATE
1	6/7/22

SHEET
10
OF 16



ALL UPPER FLOOR FANS TO VENT OUT THROUGH DESIGNATED ROOF JACKVENTS SHOWN ON SHEET 7, ROOF JACK VENTS PROVIDED FOR FAN VENTING TO HAVE 6" TAIL PIECE TYP.

ELECTRICAL SYMBOLS

- 110 VOLT OUTLET
- SWITCHED OUTLET
- G.F.I. OUTLET GROUND FAULT INTERRUPT
- WEATHER PROOF 110 VOLT OUTLET (WP)
- DEDICATED OUTLET
- 220 VOLT OUTLET
- SWITCH - 2 POLE
- SWITCH - 3 POLE
- SWITCH - 4 POLE
- SWITCH - DIMMER
- SMOKE DETECTOR WIRED TO HOUSE CURRENT WITH BATTERY BACKUP
- VDT VIDEO/DATA TELECOM PORT
- CARBON MONOXIDE/ SMOKE DETECTOR COMBO WIRED TO HOUSE CURRENT WITH BATTERY BACKUP
- RECESSED CAN LIGHT FIXTURE
- RECESSED CAN DIRECTIONAL
- PENDANT LIGHT FIXTURE (P)
- CEILING MOUNTED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- UNDER COUNTER FLOURESCENT
- VTOS 50 CFM EXHAUST FAN VENTED TO OUTSIDE (U.N.O.)
- HD HEAT DETECTOR WIRED TO HOUSE CURRENT WITH BATTERY BACKUP CONNECT TO SMOKE ALARM INSIDE THE DWELLING THAT WILL PROVIDE OCCUPANT NOTIFICATION.
- VTOS F/L 50 CFM EXHAUST FAN/ LIGHT COMBO (U.N.O.)

NOTE:
75% OF ALL LIGHT FIXTURES MUST BE HIGH EFFICIENCY.

UPPER ELECTRICAL

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

N

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. · Bellevue, Washington 98004 · (425) 828-6424

CONTENT
UPPER ELECT. PLAN
9017 SE 60th St

JOB NO.	DATE	DRAWN BY	ENGINEER
9119	10/30/21	DS	S.S.F.

REVISION	DATE
1	6/7/22

SHELBURNE II

R303.7 Interior Stairway Illumination

Interior stairways shall be provided with an artificial light source to illuminate the landings and treads. The light source shall be capable of illuminating treads and landings to levels of not less than 1 foot-candle (11 lux) as measured at the center of treads and landings. There shall be a wall switch at each floor level to control the light source where the stairway has six or more risers.

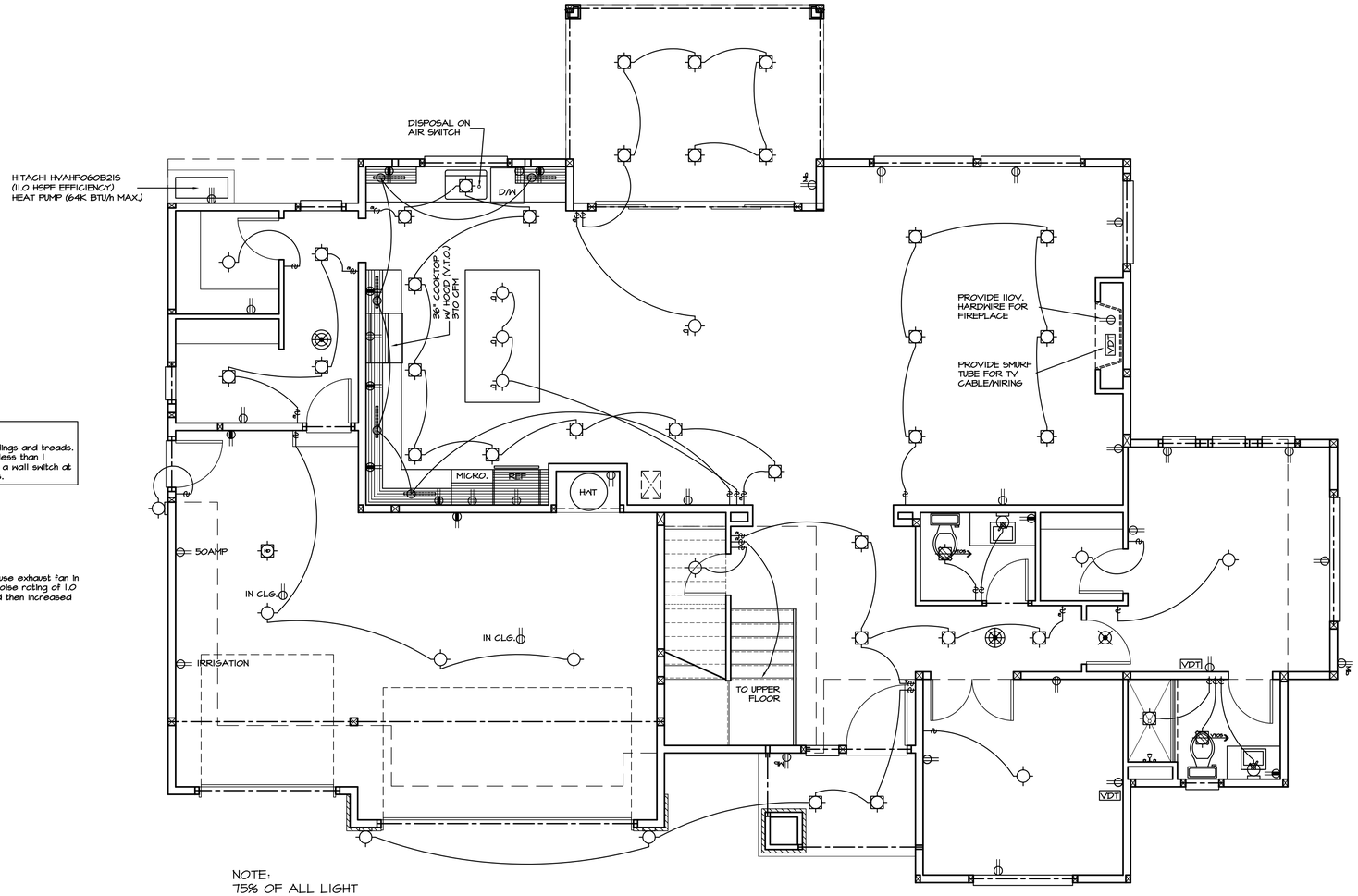
FAN SCHEDULE

Whole house ventilation system shall be shall be provided by using a central whole house exhaust fan in accordance with M1505.4.1.1. Whole house fan shall operate continuously and have a noise rating of 1.0 sones or less. Continuous ventilation shall be determined using table M1505.4.3(1), and then increased by a factor of 1.5 in accordance with table M1505.4.3(2).

LOCATION	C.F.M.
KITCHEN	100 C.F.M.
LAUNDRY RM	50 C.F.M.
POWDER RM	50 C.F.M.
MASTER BATH	50 C.F.M.
BATH #2	50 C.F.M.
ADDITIONAL BATHS	50 C.F.M.

ELECTRICAL SYMBOLS

- 110 VOLT OUTLET
- SWITCHED OUTLET
- G.F.I. OUTLET GROUND FAULT INTERRUPT
- WEATHER PROOF 110 VOLT OUTLET
- DEDICATED OUTLET
- 220 VOLT OUTLET
- SWITCH - 2 POLE
- SWITCH - 3 POLE
- SWITCH - 4 POLE
- SWITCH - DIMMER
- SMOKE DETECTOR HARD WIRED TO HOME CURRENT WITH BATTERY BACKUP
- VIDEO/DATA TELECOM PORT
- CARBON MONOXIDE/ SMOKE DETECTOR COMBO HARD WIRED TO HOME CURRENT WITH BATTERY BACKUP
- RECESSED CAN LIGHT FIXTURE
- RECESSED CAN DIRECTIONAL
- PENDANT LIGHT FIXTURE
- CEILING MOUNTED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- UNDER COUNTER FLOURESCENT
- 50 CFM EXHAUST FAN VENTED TO OUTSIDE (U.N.O.)
- HEAT DETECTOR HARD WIRED TO HOME CURRENT WITH BATTERY BACKUP INTERCONNECTED WITH ALARM ABOVE THE DWELLING THAT WILL PROVIDE OCCUPANT NOTIFICATION.
- 50 CFM EXHAUST FAN/ LIGHT COMBO (U.N.O.)



NOTE:
75% OF ALL LIGHT FIXTURES MUST BE HIGH EFFICIENCY.

MAIN ELECTRICAL

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

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

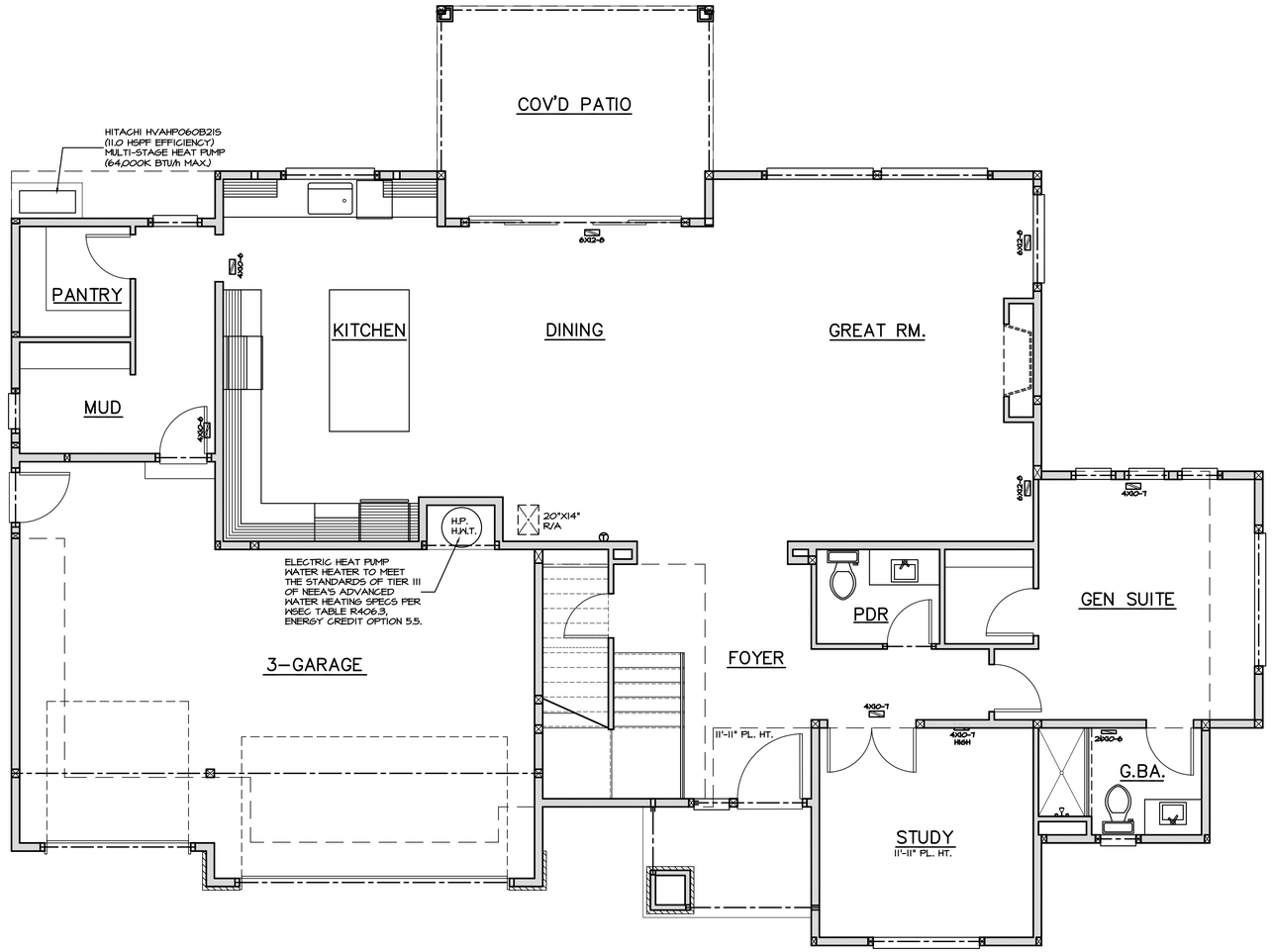
SHELBURNE II

CONTENT: MAIN ELECT. PLAN
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHEET 11 OF 16



HEATING SYMBOLS

2¼"X REGISTER

4"X REGISTER

NOTE: REGISTERS TO BE PLACED 6" FROM EXT. WALLS, & 3" FROM INT. WALLS.

HEAT LAYOUT IS SHOWN TO ASSIST WITH FRAMING LAYOUT ONLY. THE FINAL DESIGN FOR HEATING OF THE HOME WILL BE DETERMINED BY THE HEAT CONTRACTORS.

MAIN FLOOR MECH.

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

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

SHELBURNE

CONTENT: MAIN FLOOR MECH.
9017 SE 60th St

JOB NO. 9119

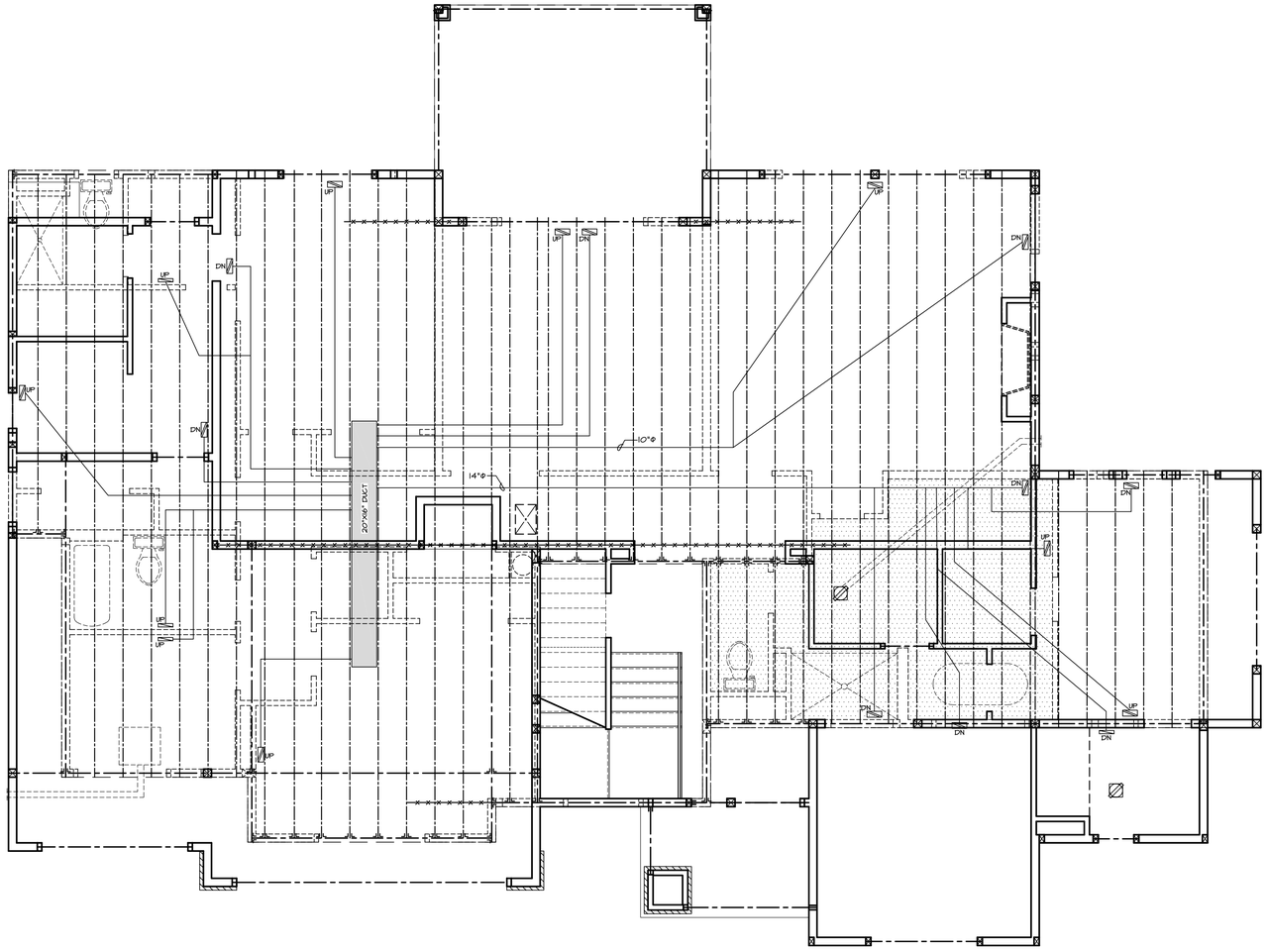
DATE 10/30/21

DRAWN BY DS

ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHEET M1 OF 16



HEATING SYMBOLS

- 24"X REGISTER
- 4"X REGISTER

NOTE: REGISTERS TO BE PLACED 6" FROM EXT. WALLS, & 3" FROM INT. WALLS.

HEAT LAYOUT IS SHOWN TO ASSIST WITH FRAMING LAYOUT ONLY. THE FINAL DESIGN FOR HEATING OF THE HOME WILL BE DETERMINED BY THE HEAT CONTRACTORS.

UPPER FLR. FRMG. MECH.

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

N

WILLIAM E BUCHAN INC.
2630 – 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

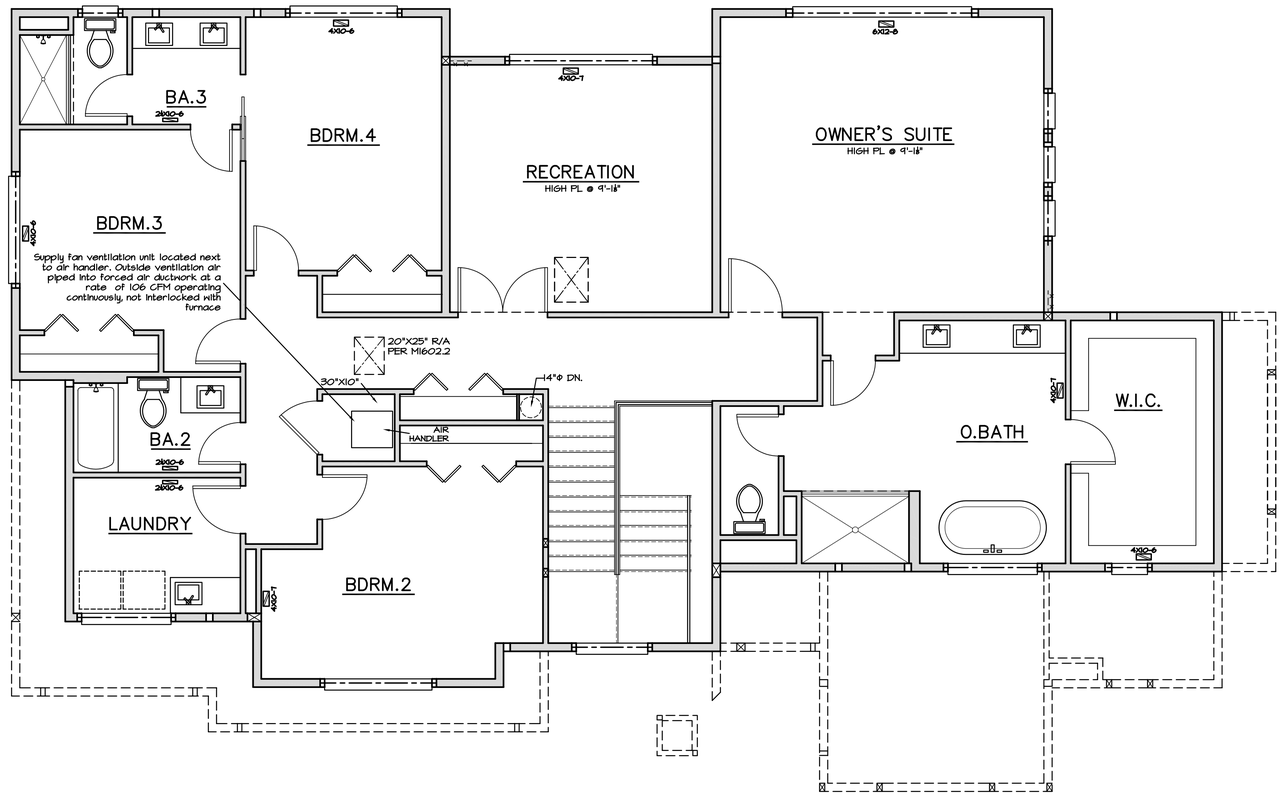
CONTENT
UPPER FLR. FRMG MECH.
9017 SE 60th St

JOB NO. 9119
DATE 10/30/21
DRAWN BY DS
ENGINEER S.S.F.

REVISION	DATE
1	6/7/22

SHELBURNE

SHEET M2 OF 16



HEATING SYMBOLS

24"X REGISTER

4"X REGISTER

NOTE: REGISTERS TO BE PLACED 6" FROM EXT. WALLS, & 3" FROM INT. WALLS.

HEAT LAYOUT IS SHOWN TO ASSIST WITH FRAMING LAYOUT ONLY. THE FINAL DESIGN FOR HEATING OF THE HOME WILL BE DETERMINED BY THE HEAT CONTRACTORS.

UPPER FLOOR MECH.

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

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

CONTENT
UPPER FLOOR MECH.
9017 SE 60th St

JOB NO.
9119

DATE
10/30/21

DRAWN BY
DS

ENGINEER
S.S.F.

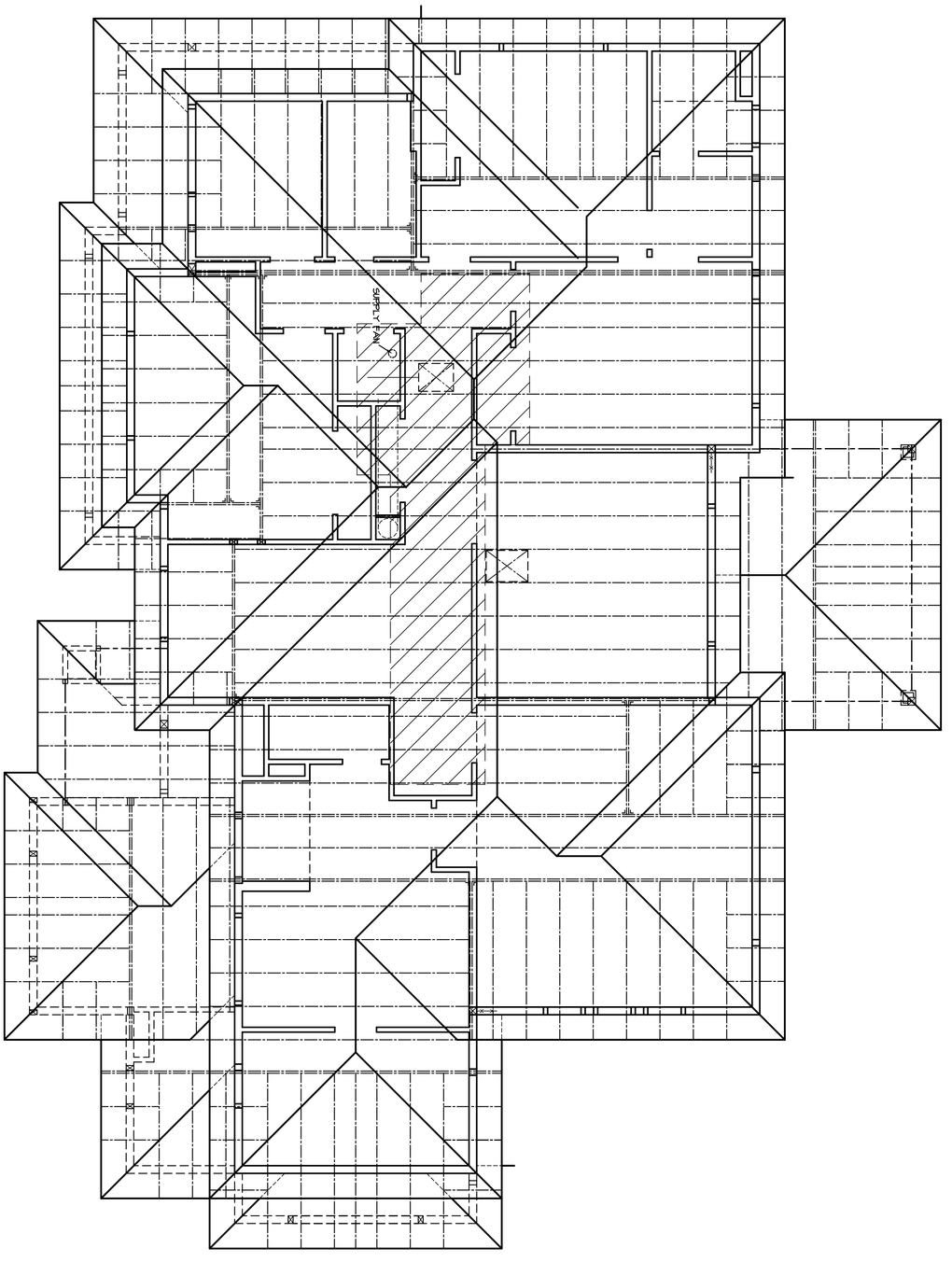
REVISION	DATE
1	6/7/22

SHELBURNE

SHEET
M3
OF 16

ROOF FRAMING MECH.

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



SHELBURNE

SHEET	REVISION	DATE
M4 OF 16	1	6/7/22

JOB NO.	DATE	DRAWN BY	ENGINEER
9119	10/30/21	DS	S.S.F.

CONTENT
ROOF FRAMING MECH.
9017 SE 60th St

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. · Bellevue, Washington 98004 · (425) 828-6424

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2018 EDITION).

2. DESIGN LOADING CRITERIA:

   RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS
   FLOOR LIVE LOAD . . . . 40 PSF
   ROOF
   ROOF LIVE LOAD . . . . 25 PSF

   DEFLECTION CRITERIA
   LIVE LOAD DEFLECTION L/360
   TOTAL LOAD DEFLECTION L/240

   ENVIRONMENTAL LOADS
   SNOW . . . . Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=20 PSF
   WIND . . . . GCpi=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "B", Kzt=1.3
   EARTHQUAKE . . . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
   LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, Vs=16.9 KIPS
   SITE CLASS=D, Ss=146, Sds=116, S1=50, SD1=57, Cs=0.179
   SDC D (DEFAULT), Ie=1.0, R=6.5

   SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.

4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".

7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.

9. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

QUALITY ASSURANCE

10. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

EXPANSION BOLTS AND THREADED EXPANSION INSERTS	PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS	PER MANUFACTURER

    PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.
    CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

11. UNLESS OTHERWISE NOTED, THE FOLLOWING ELEMENTS COMPRISE THE SEISMIC-FORCE-RESISTING SYSTEM AND ARE SUBJECT TO SPECIAL INSPECTION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH SECTION 1705.12 OF THE INTERNATIONAL BUILDING CODE.

    A. STRUCTURAL WOOD SHEAR WALL SYSTEMS REQUIRE PERIODIC INSPECTION FOR FIELD GLUING, NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SEISMIC FORCE, RESISTING SYSTEM INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLDOWNS.

GEOTECHNICAL

12. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

    FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

    BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

    ALLOWABLE SOIL PRESSURE. . . . . 1500 PSF
    LATERAL EARTH PRESSURE (UNRESTRAINED) . . . . .35 PCF
    ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 1.5 INCLUDED). . . . . . . 350 PCF
    COEFFICIENT OF FRICTION (FS OF 1.5 INCLUDED). 0.45
    SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD) . . . . 7H PSF

CONCRETE

13. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500 PSI.

14. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.

15. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.

16. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-18 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

    NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

17. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

    FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . 3"
    FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2"

18. CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

    8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN

19. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

20. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3000 PSI MINIMUM).

ANCHORAGE

21. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.

22. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2508. MINIMUM BASE MATERIAL TEMPERATURE IS 50 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.

23. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "AT-XP" AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH IAMPO REPORT NO. ER-0281. MINIMUM BASE MATERIAL TEMPERATURE IS 14 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.

24. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

WOOD

25. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WWPA STANDARD, WESTERN LUMBER GRADING RULES 2017. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
STUDS, PLATES & MISC. FRAMING:		DOUGLAS FIR-LARCH NO. 2 OR HEM-FIR NO. 2

26. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv =265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS, WITH SPANS OVER 30', TO 3,500' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

27. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E WS)	Fb = 2900 PSI,	E = 2000 KSI,	Fv = 290 PSI
LVL (2.0E-2600FB WS)	Fb = 2600 PSI,	E = 2000 KSI,	Fv = 285 PSI
LSL (1.55E)	Fb = 2325 PSI,	E = 1550 KSI,	Fv = 310 PSI

    ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

    MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

28. PREFABRICATED OPEN WEB WOOD TRUSSES (OR COMBINATION WOOD AND METAL) SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF WASHINGTON. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.

29. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

TOP CHORD LIVE LOAD	25 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD DEAD LOAD	5 PSF
TOTAL LOAD	40 PSF
WIND UPLIFT (TOP CHORD)	5 PSF
BOTTOM CHORD LIVE LOAD	10 PSF

    (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)

    WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

30. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

    ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

    FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

    WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

    PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

    REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

31. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

32. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

33. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER	INTERIOR DRY	G90 GALVANIZED
CONTAINS AMMONIA CARRIER	INTERIOR DRY	G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER	INTERIOR WET	TYPE 304 OR 316 STAINLESS
CONTAINS AMMONIA CARRIER	EXTERIOR	TYPE 304 OR 316 STAINLESS
AZCA	ANY	TYPE 304 OR 316 STAINLESS

    INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

34. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

    ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

    WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

    ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM)AS MEMBERS CONNECTED.

35. WOOD FASTENERS

    A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d BOX	3-1/2"	0.135"

    IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

    NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

    B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

36. NOTCHES AND HOLES IN WOOD FRAMING:

    A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

    B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

    C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

37. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

    A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

    B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

    ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS @ 4" O.C. EACH SIDE JOINT.

    ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d @12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL)APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES)AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

    C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

    UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER UNLESS OTHERWISE NOTED.

STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

11/03/21

DRAWN: JDT
DESIGN: JDT
CHECKED: JDT
APPROVED: GFJ

REVISIONS:

PROJECT TITLE:
Shelburne II 9119

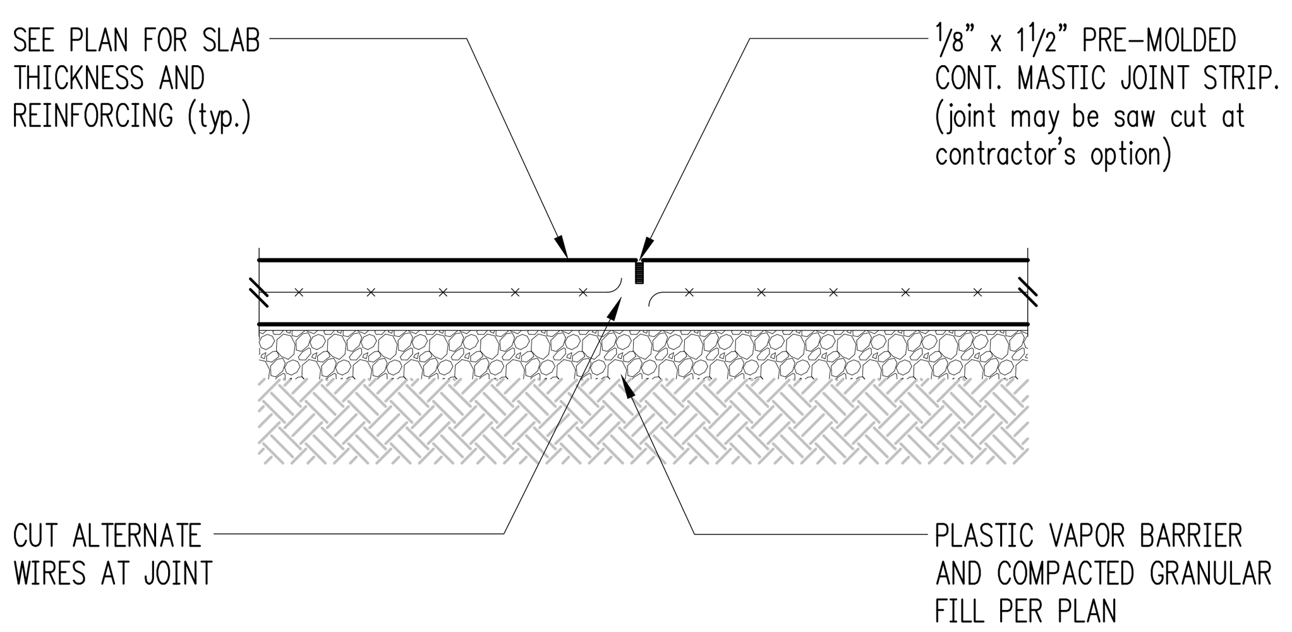
ARCHITECT:
William E. Buchan Homes
2630 116th Ave NE Suite 100
Bellevue, WA 98004

ISSUE:
PERMIT SET

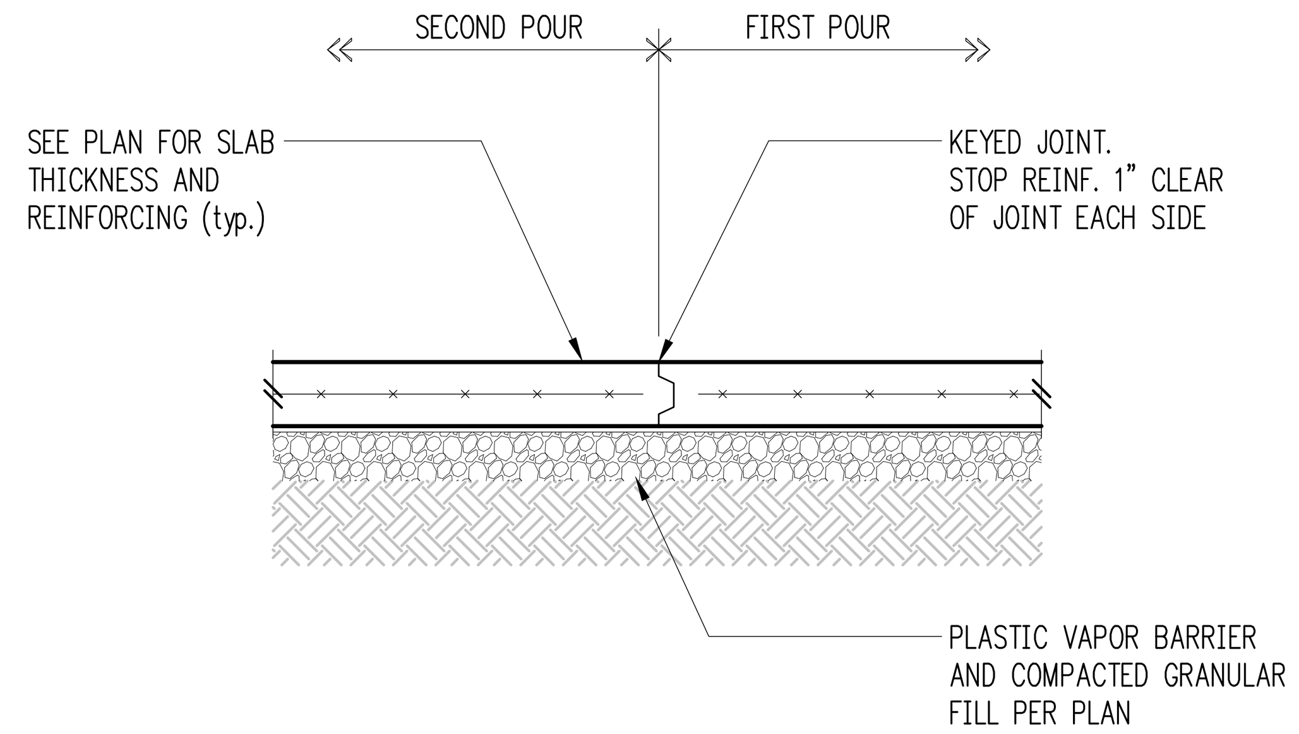
SHEET TITLE:
General Structural Notes

SCALE: none
DATE: November 3, 2021
PROJECT NO: 01011-2021-11
SHEET NO:
S1.1

NO: OF SHEETS:



Control Joint

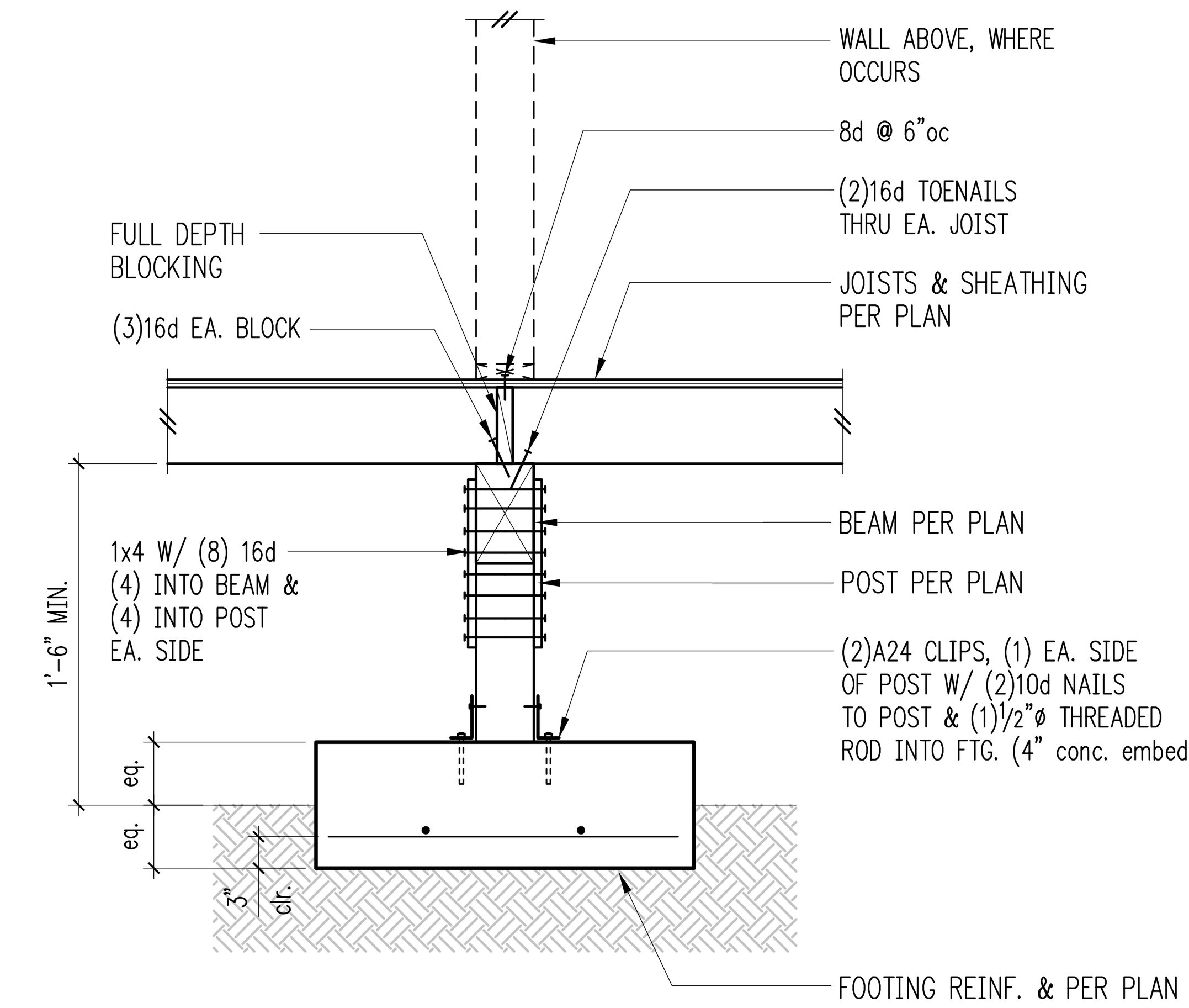


Construction Joint

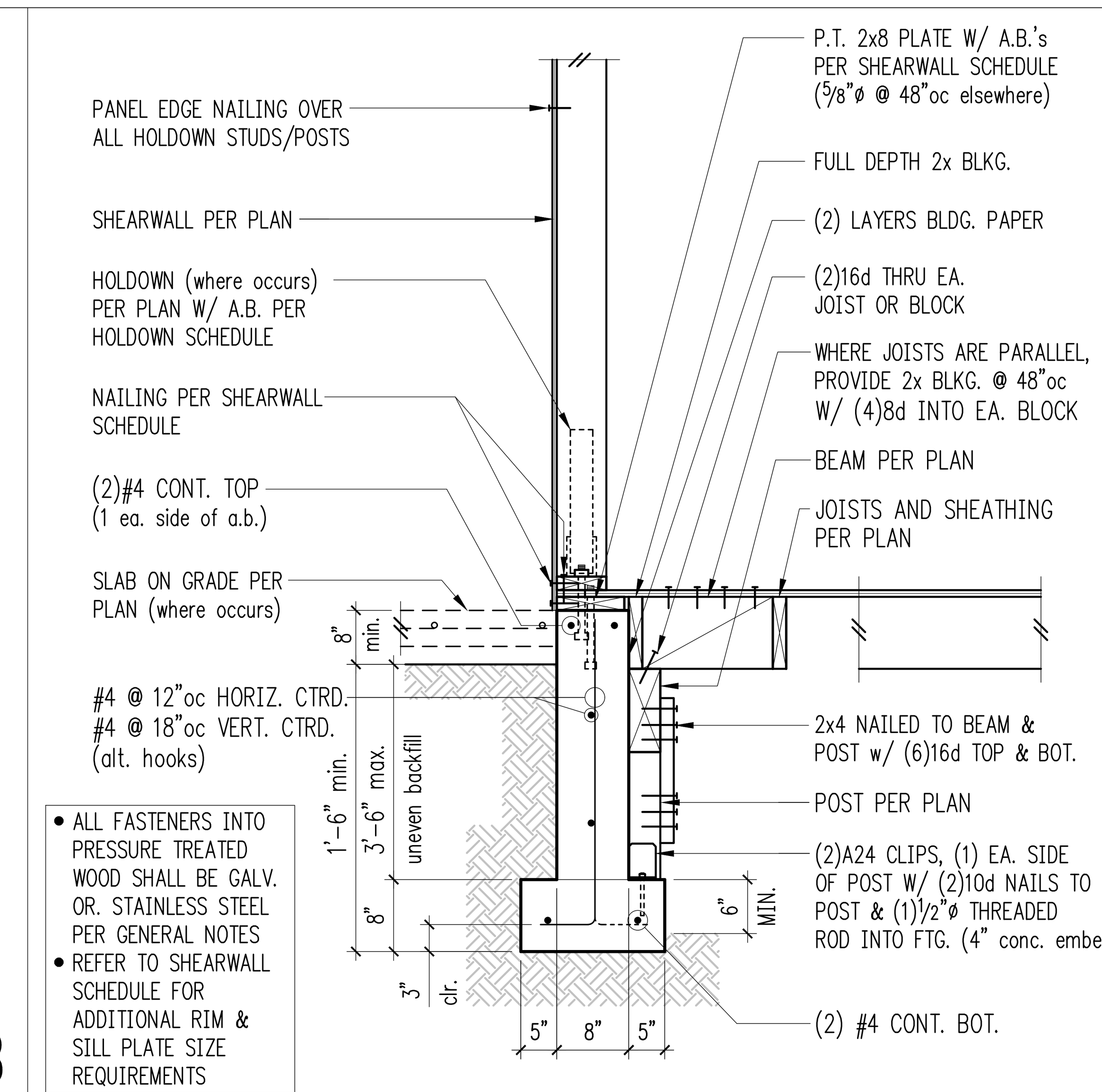
PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 250 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

Typical Slab Joints (w.w.m.)

2



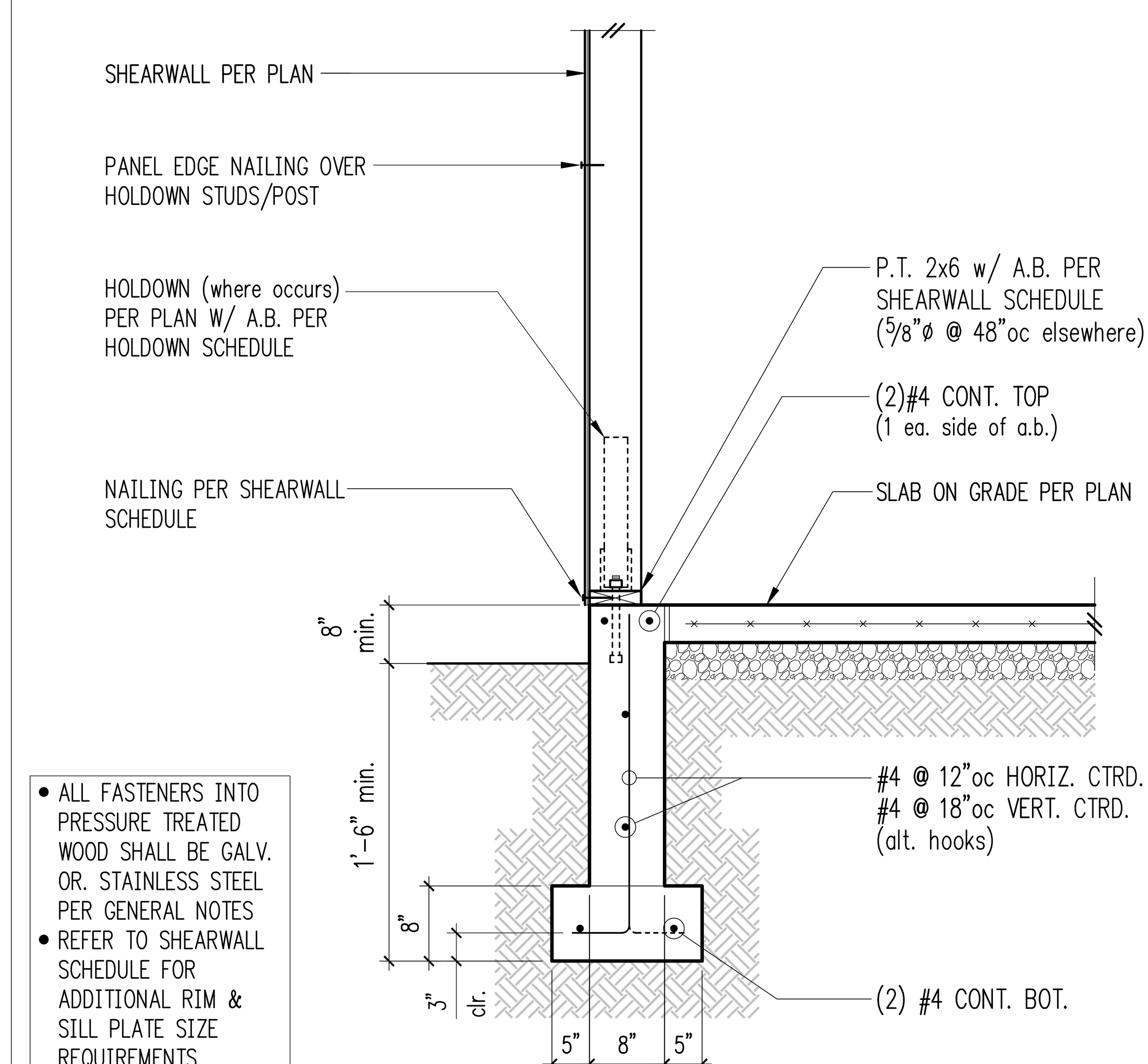
3



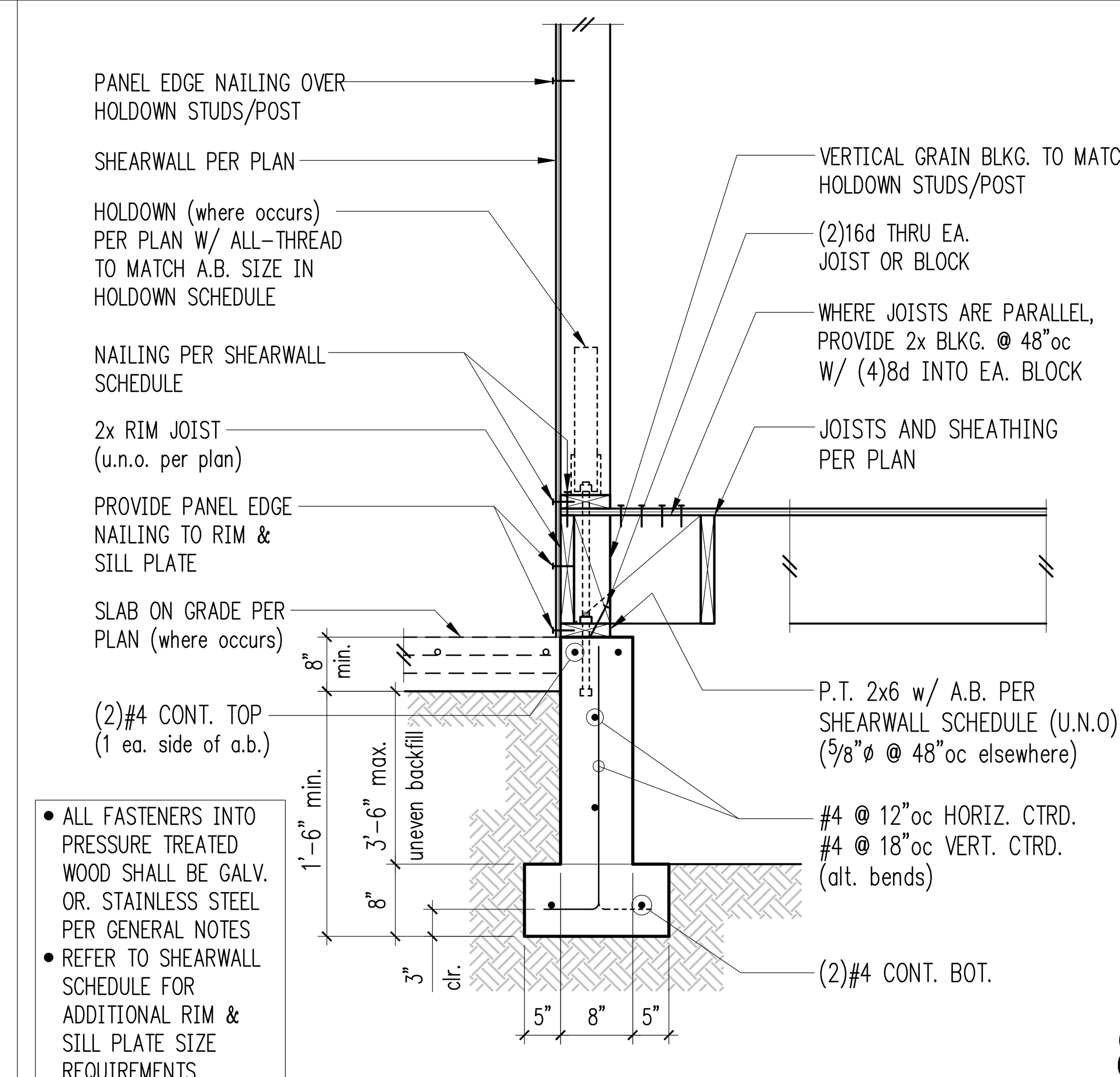
4

5

6

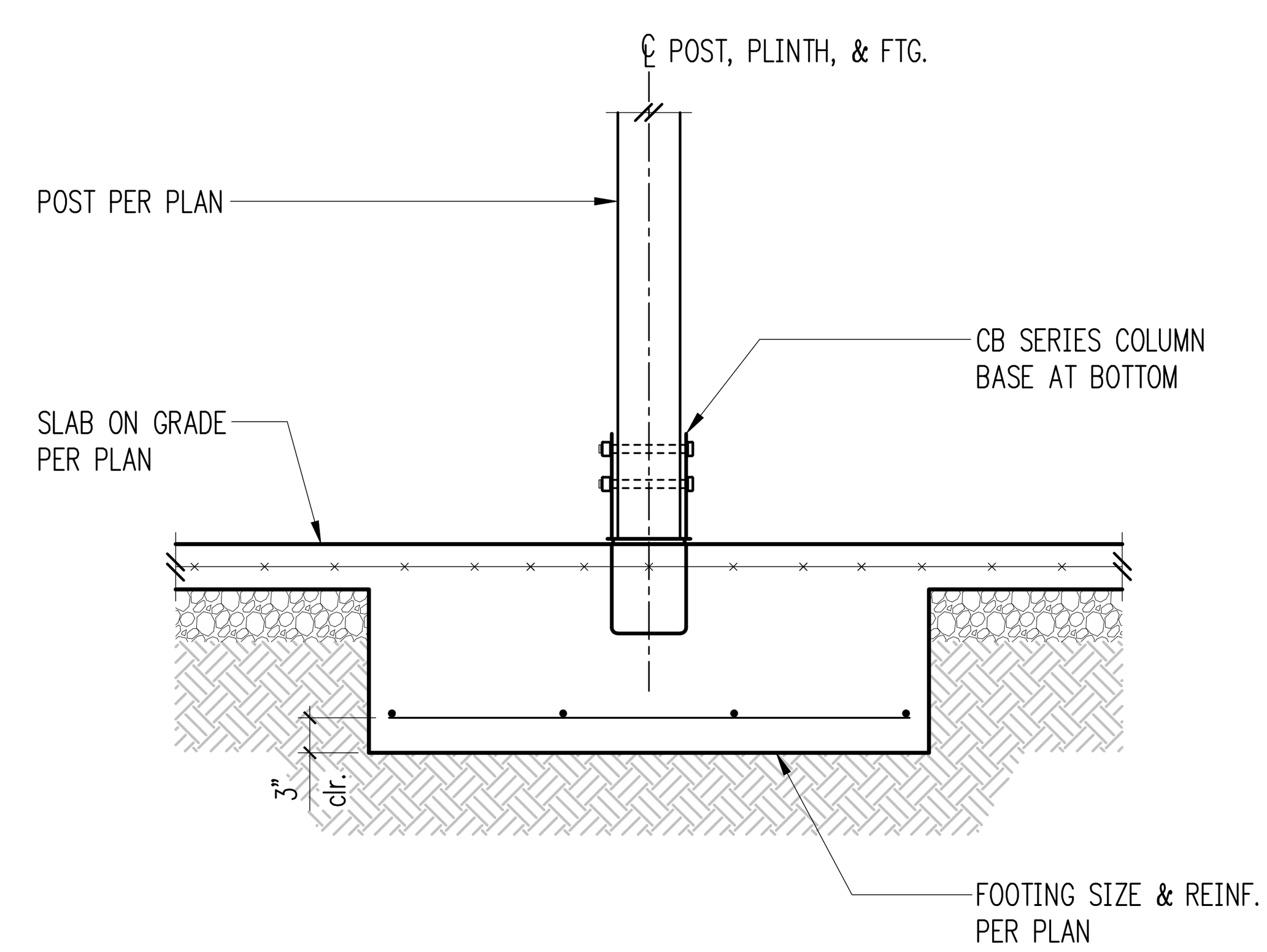


7

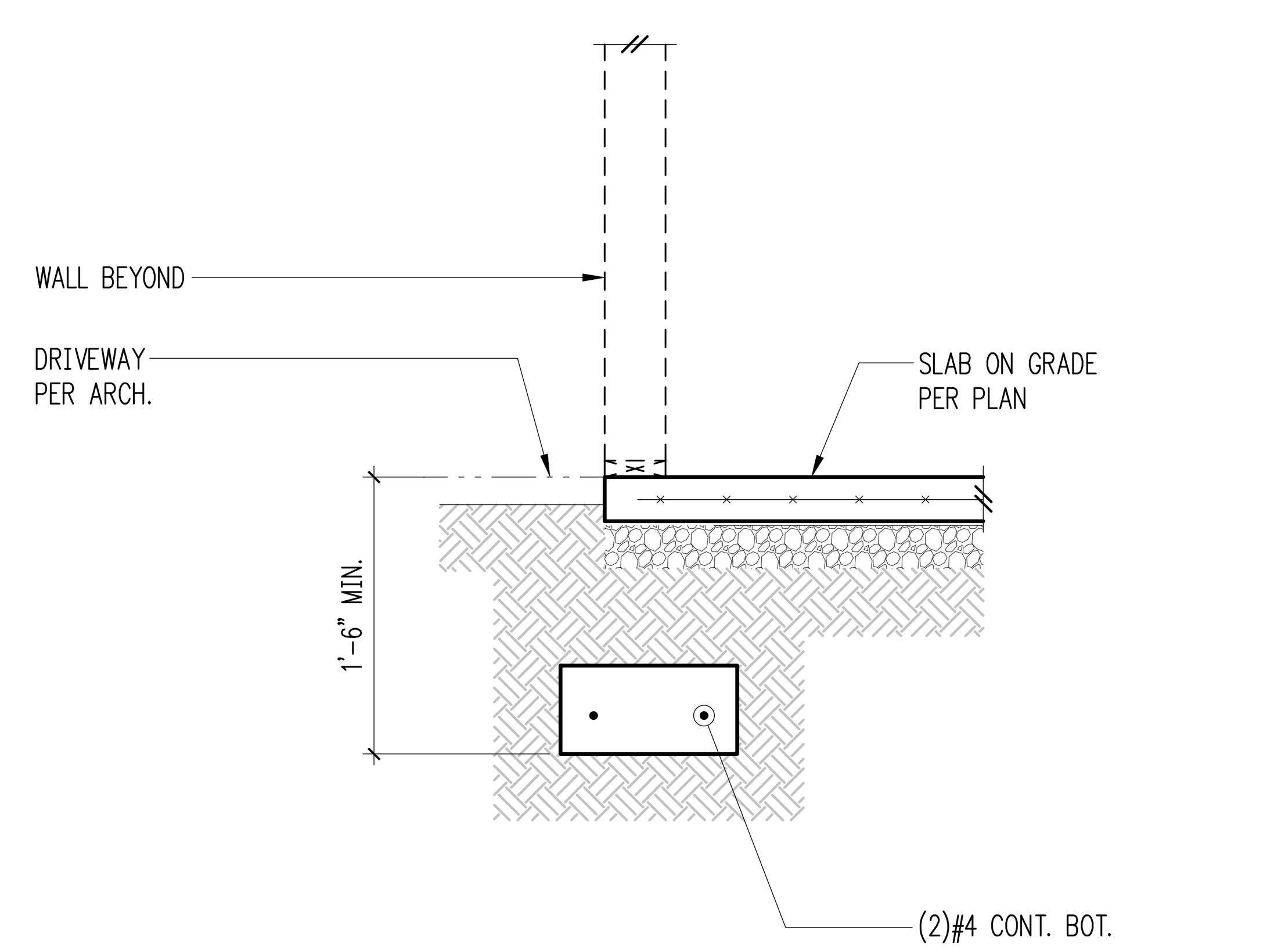


8

9



10



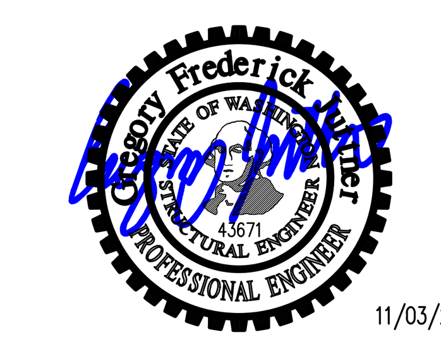
FOR CALLOUTS IN COMMON REFER 7/S3.1

11

12

STRUCTURAL ENGINEERING

2124 Third Avenue · Suite 100 · Seattle, WA 98121
p: 206.443.6212 ssfengineers.com



DRAWN:	JDT
DESIGN:	JDT
CHECKED:	JDT
APPROVED:	GFJ

REVISIONS:

PROJECT TITLE:

Shelburne II 9119

ARCHITECT:

William E. Buchan Homes
2630 116th Ave NE Suite 100
Bellevue, WA 98004

ISSUE:

PERMIT SET

SHEET TITLE:

Typ. Foundation & Wood Framing Details

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

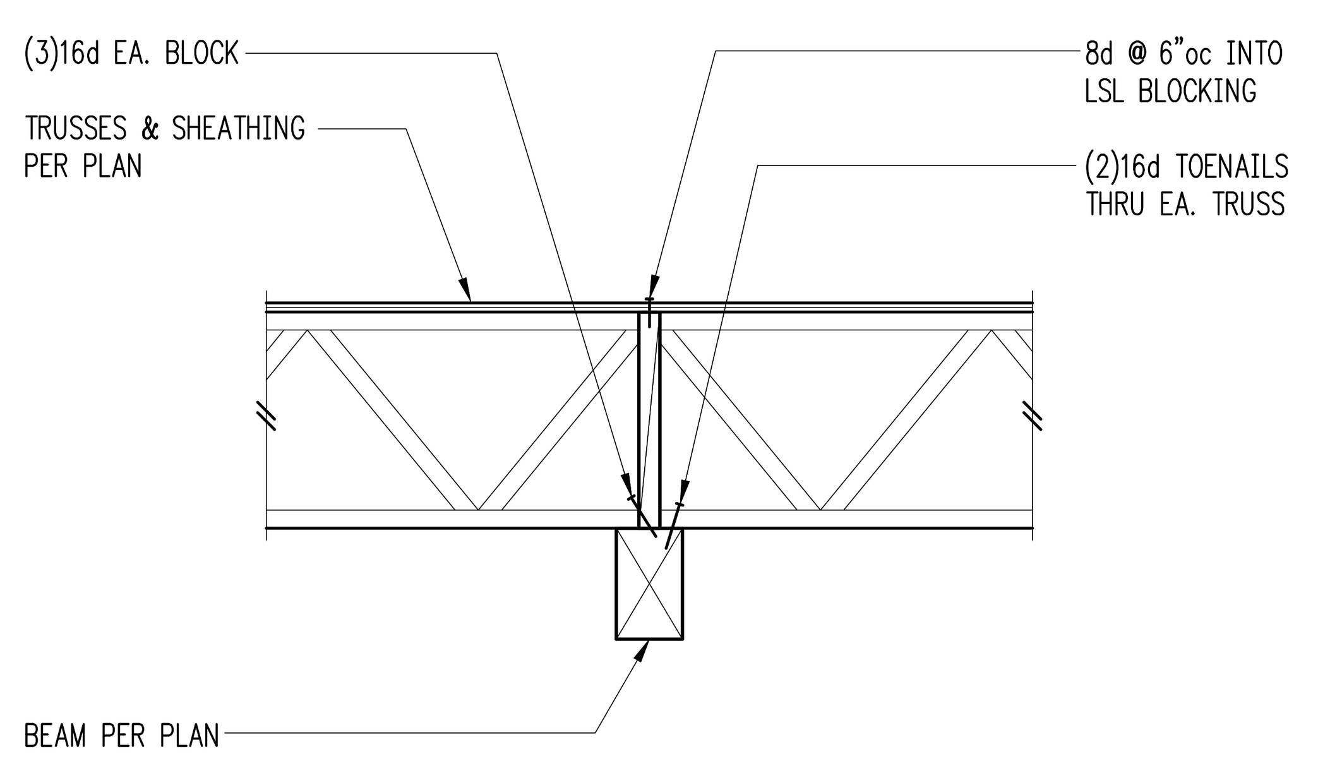
DATE: November 3, 2021

PROJECT NO: 01011-2021-11

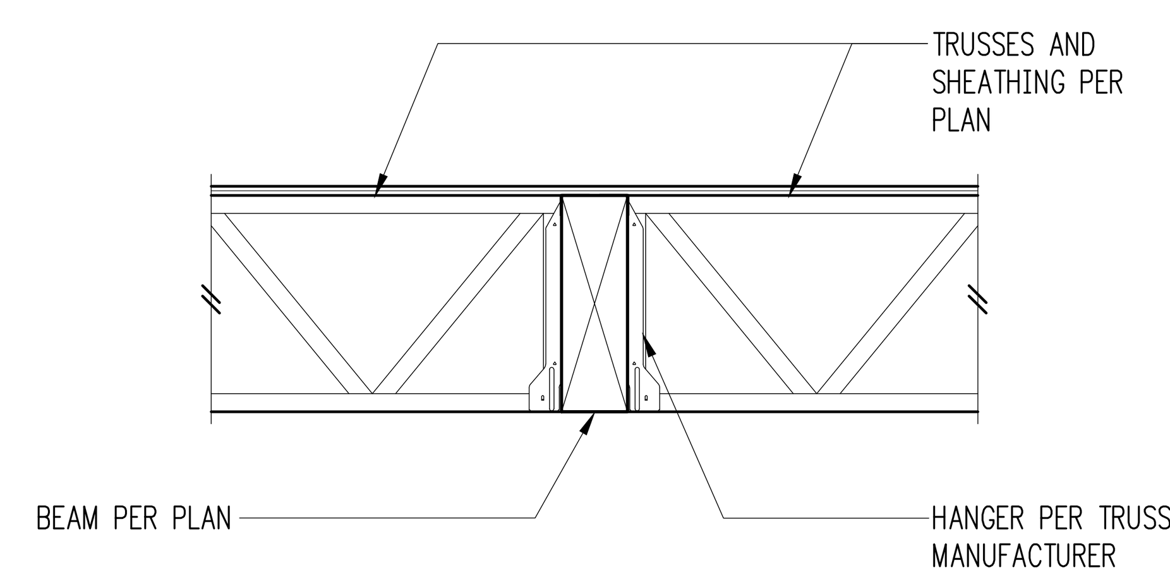
SHEET NO:

S3.1

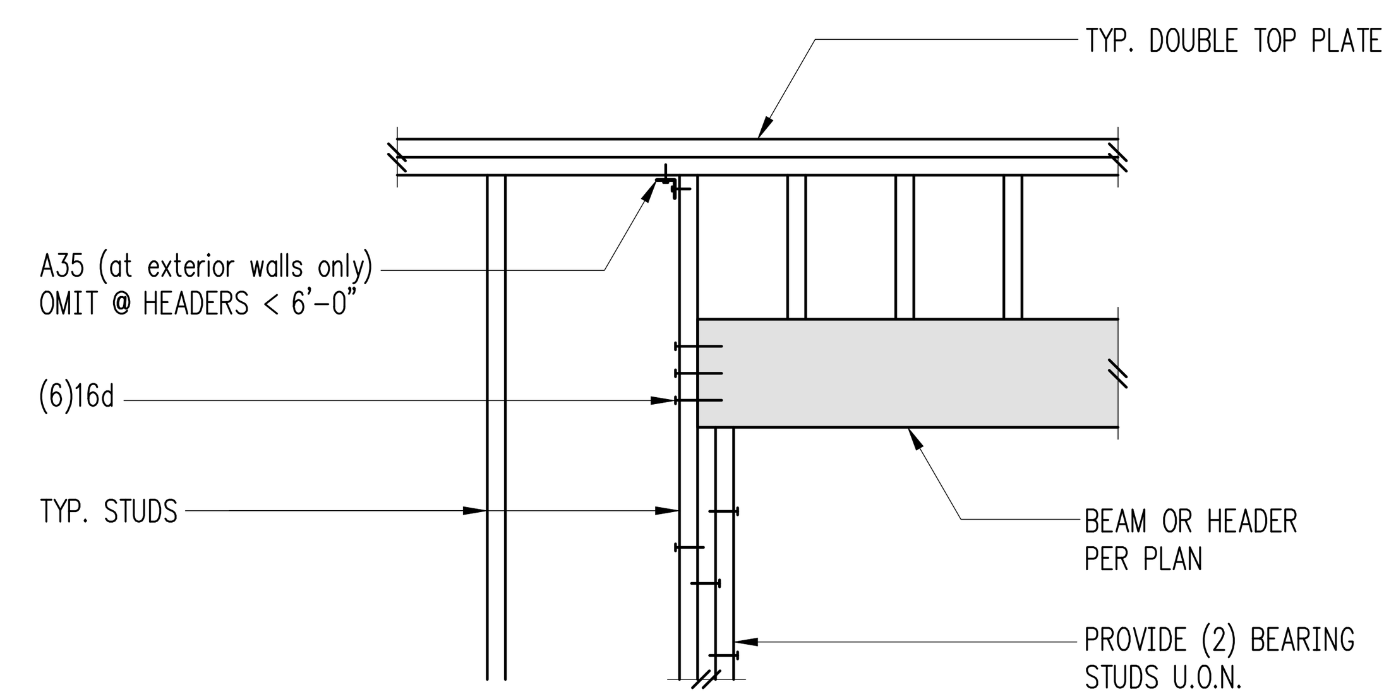
NO: OF SHEETS:



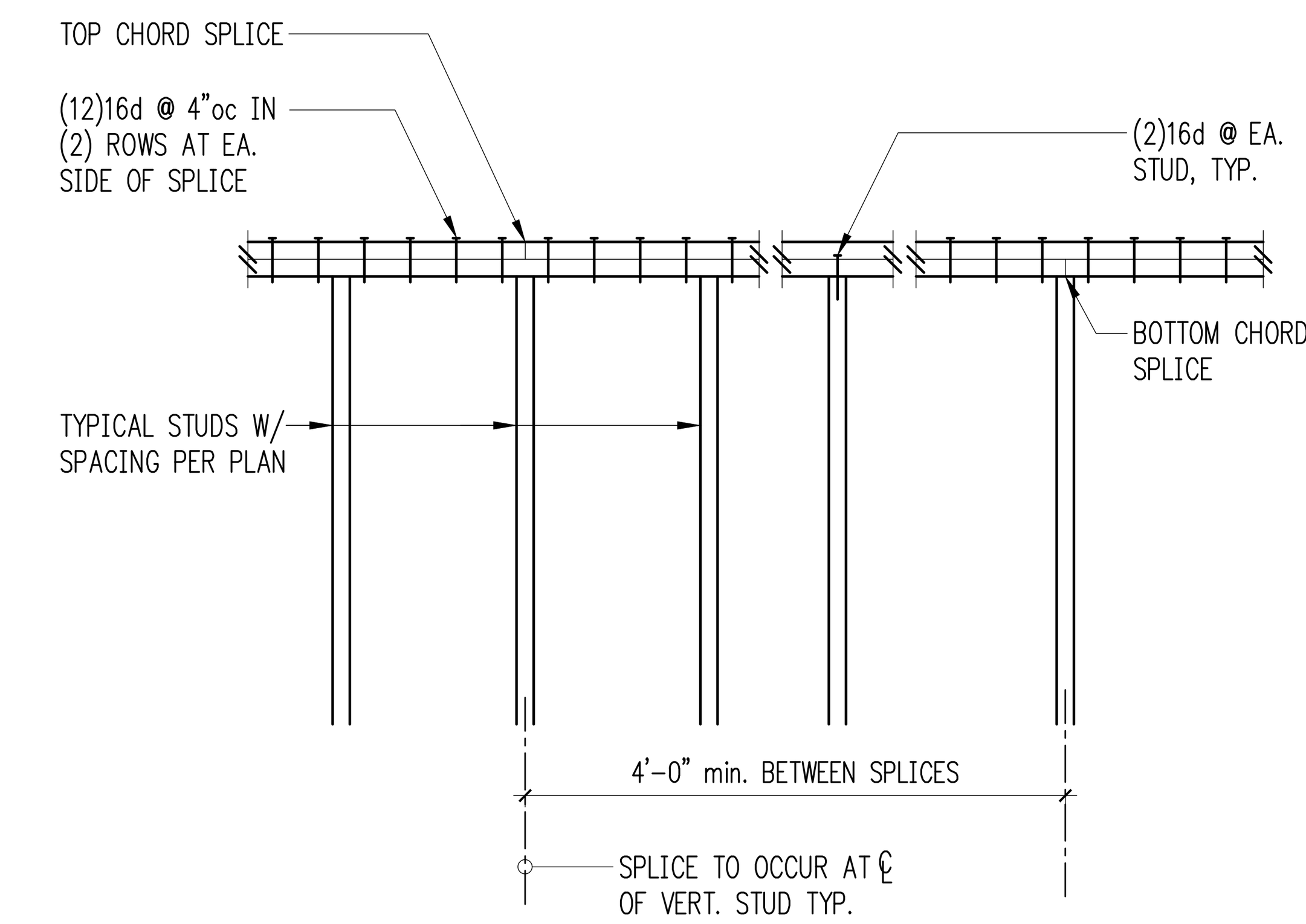
Typical Header Beam 1



Typical Flush Beam (w/ Trusses) 2

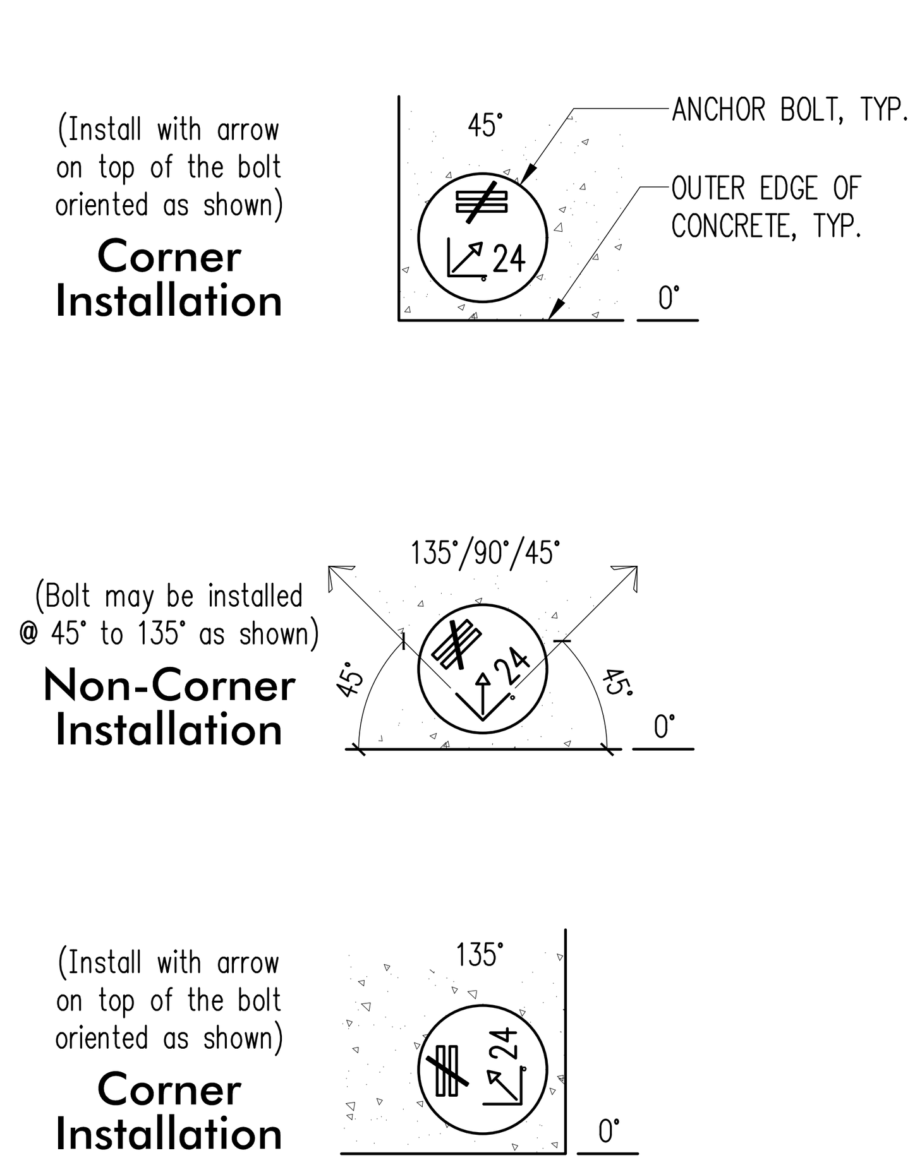


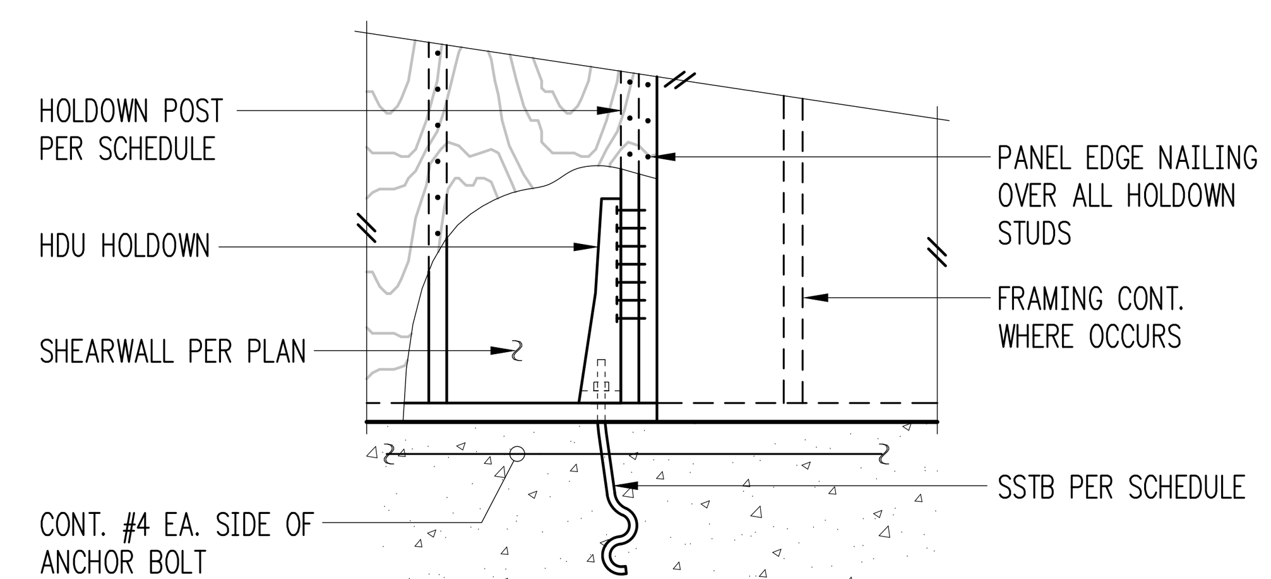
Typical Header Support 3



Typical Top Plate Splice 4

5





Holdown Schedule

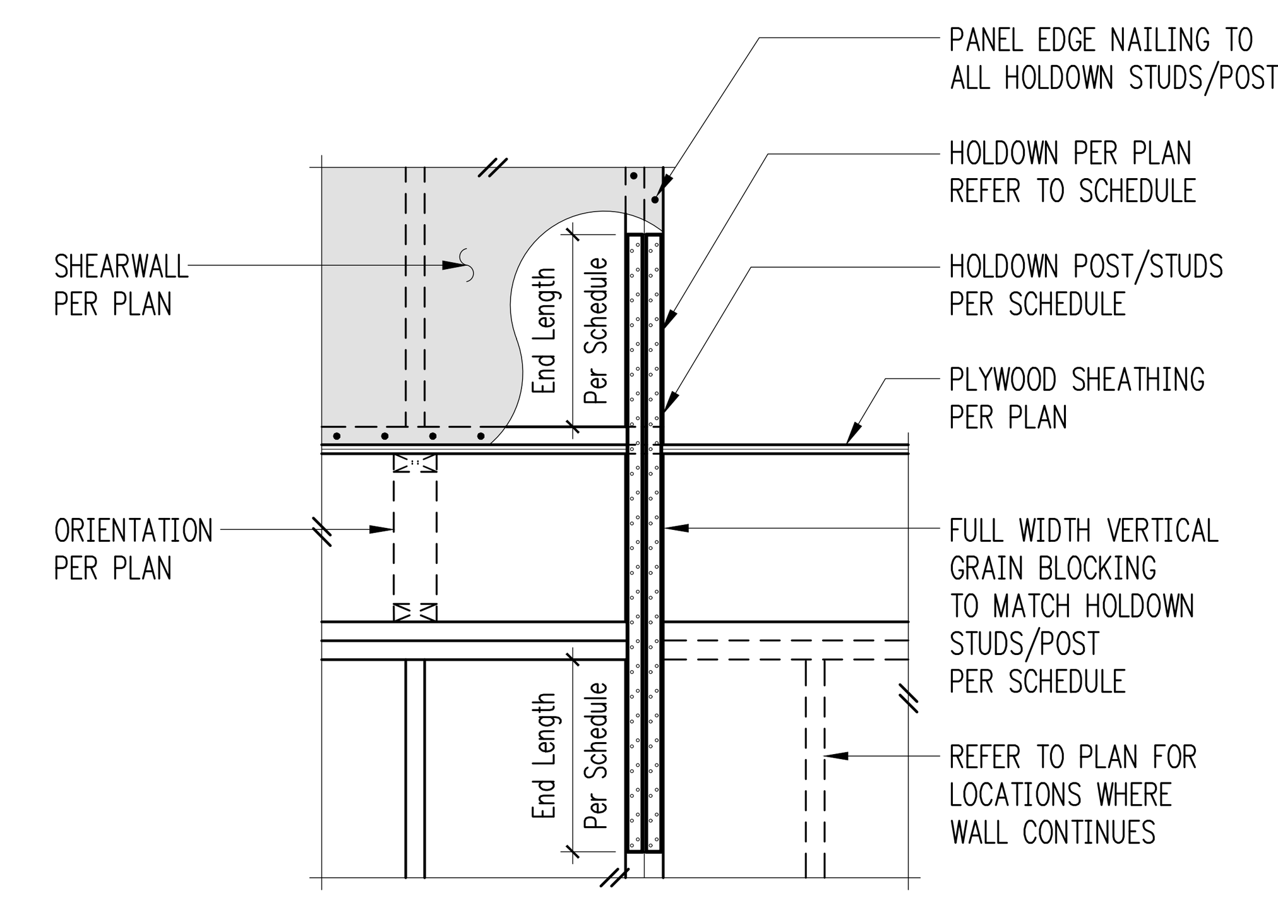
Plan Mark	Screws	Anchor Bolt	A.B. Embed	Holdown Post ①	
				if 2x4	if 2x6
HDU2-SDS2.5	(6)SDS 1/4"x2 1/2"	SSTB20	16 5/8"	(2) 2x4	(2) 2x6
HDU4-SDS2.5	(10)SDS 1/4"x2 1/2"	SB5/8x24	18"	4x4	4x6
HDU5-SDS2.5	(14)SDS 1/4"x2 1/2"	SB5/8x24	18"	4x4	4x6
HDU8-SDS2.5	(20)SDS 1/4"x2 1/2"	SSTB28	24 7/8"	4x6	6x6
HDU11-SDS2.5	(30)SDS 1/4"x2 1/2"	SB1x30	24"	4x8	6x6

① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

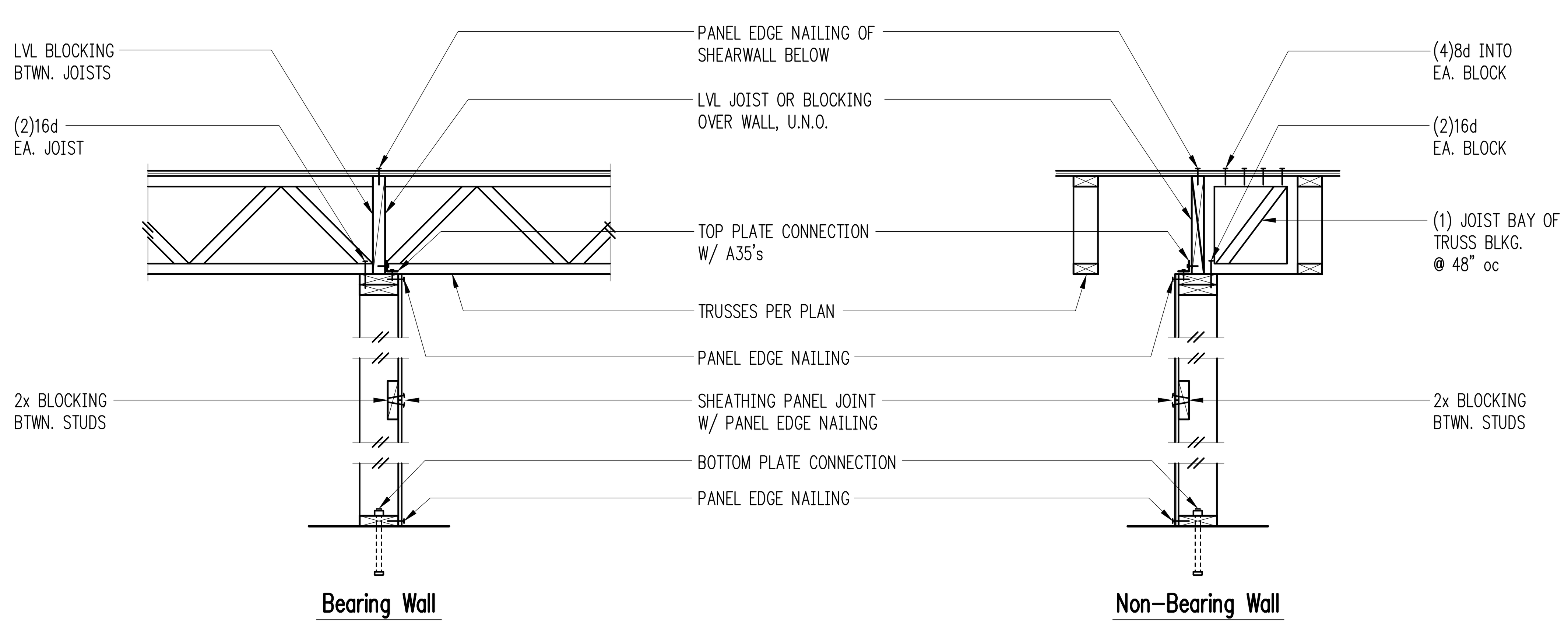
Typical HDU Holdown 7

Holdown Strap Schedule

Plan Mark	End Length	#Nails Ea. End Length	Holdown Studs/Post	
			if 2x4	if 2x6
CS16	1'-2"	(13) 8d	(1) 2x4	(1) 2x6

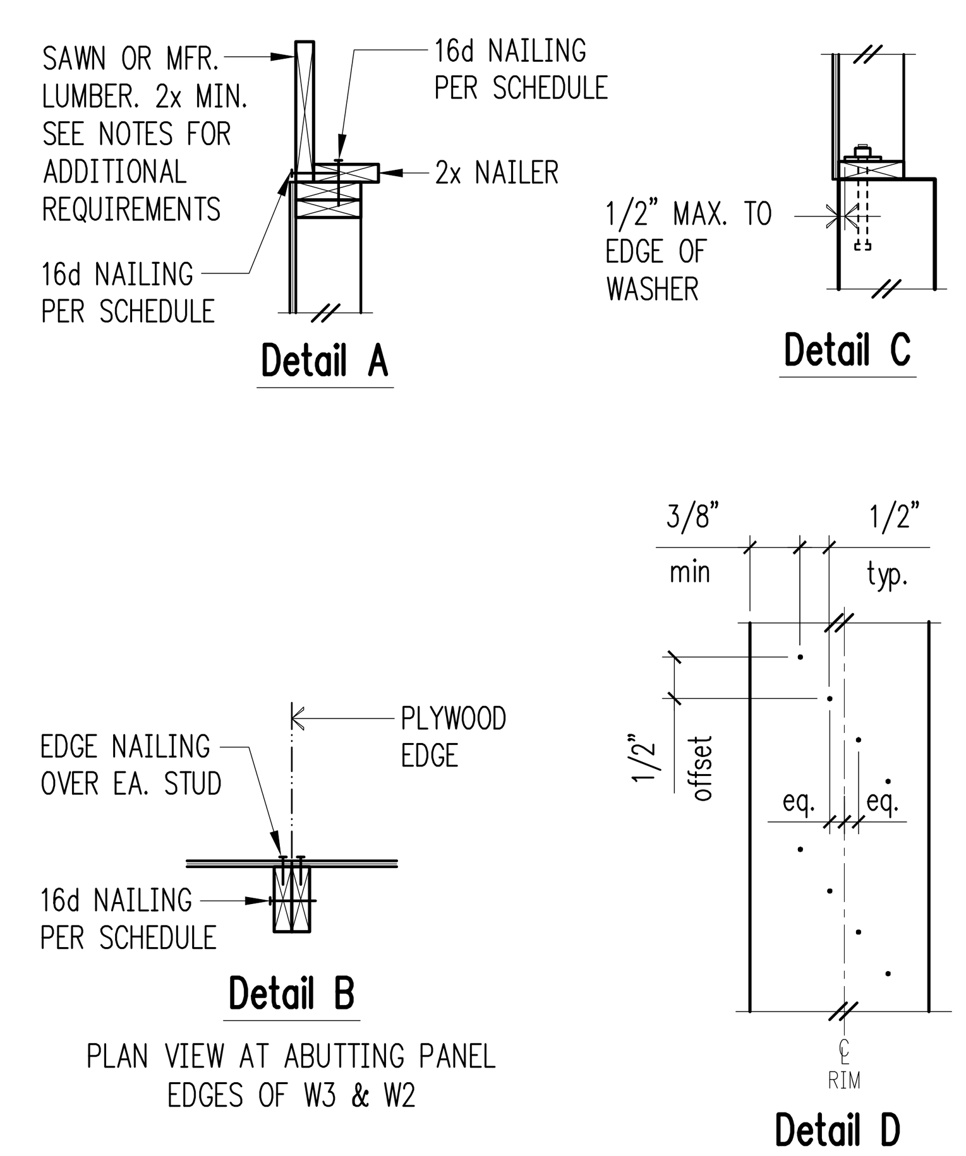


Typical Holdown Schedule 8



NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, NOT OTHERWISE NOTED

Typical Shearwall Construction (w/ Trusses) 10



Shearwall Schedule ①②③⑥⑦⑧

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if Wood ⑨	at Wood ⑪⑫	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc ⑩	16d @ 6"oc	5/8"ø A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc ⑩	(2)rows 16d @ 6"oc	5/8"ø A.B. @ 32"oc
W3 ④	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 4"oc	A35 @ 12"oc ⑩	(2)rows 16d @ 6"oc	5/8"ø A.B. @ 24"oc
W2 ④	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4"oc	A35 @ 9"oc ⑩	(2)rows 16d @ 4"oc ⑬	5/8"ø A.B. @ 16"oc
2W3 ⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 3"oc EA. SIDE	n/a	A35 @ 6"oc	(3)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 16"oc
2W2 ⑤	15/32" CDX PLYWD. EA. SIDE	8d @ 2"oc EA. SIDE	n/a	HGA10KT @ 8"oc	(3)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 12"oc
2W2-10 ⑤	15/32" CDX PLYWD. EA. SIDE	10d @ 2"oc EA. SIDE	n/a	HGA10KT @ 6"oc	(4)rows 16d @ 4"oc ⑭	5/8"ø A.B. @ 12"oc

① BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"o.c.
② 8d NAILS SHALL BE 0.131"ø x 2 1/2" (common) – 16d NAILS SHALL BE 0.135"ø x 3 1/2" (box) – 10d NAILS SHALL BE 0.148"ø x 3" (common).
③ EMBED ANCHOR BOLTS AT LEAST 7". EXPANSION BOLTS MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 4" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. SEE DETAIL C.
④ 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
⑤ 3x FOUNDATION SILL PLATES ARE REQUIRED FOR 2W3 AND 2W2. 3x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES AND PANEL JOINTS SHALL BE OFFSET EACH SIDE OF WALL. STAGGER NAILS AT ADJOINING PANEL EDGES. 3x STUD, MIN., REQUIRED AT END OF SHEARWALL.
⑥ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SINGLE-SIDED SHEARWALLS. ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
⑦ ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
⑧ 7/16" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX, EXCEPT AT 10d PANEL EDGE NAILING.
⑨ LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑩ A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
⑪ AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
⑫ LVL RIMS PERMITTED AT SINGLE SIDED SHEAR WALLS ONLY.
⑬ PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.
⑭ MINIMUM RIM OR JOIST 3 1/2" WIDE BELOW SHEARWALL.

Shearwall Schedule 12

SSF STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

11/03/21

DRAWN: JDT
DESIGN: JDT
CHECKED: JDT
APPROVED: GFJ

REVISIONS:

PROJECT TITLE:
Shelburne II 9119

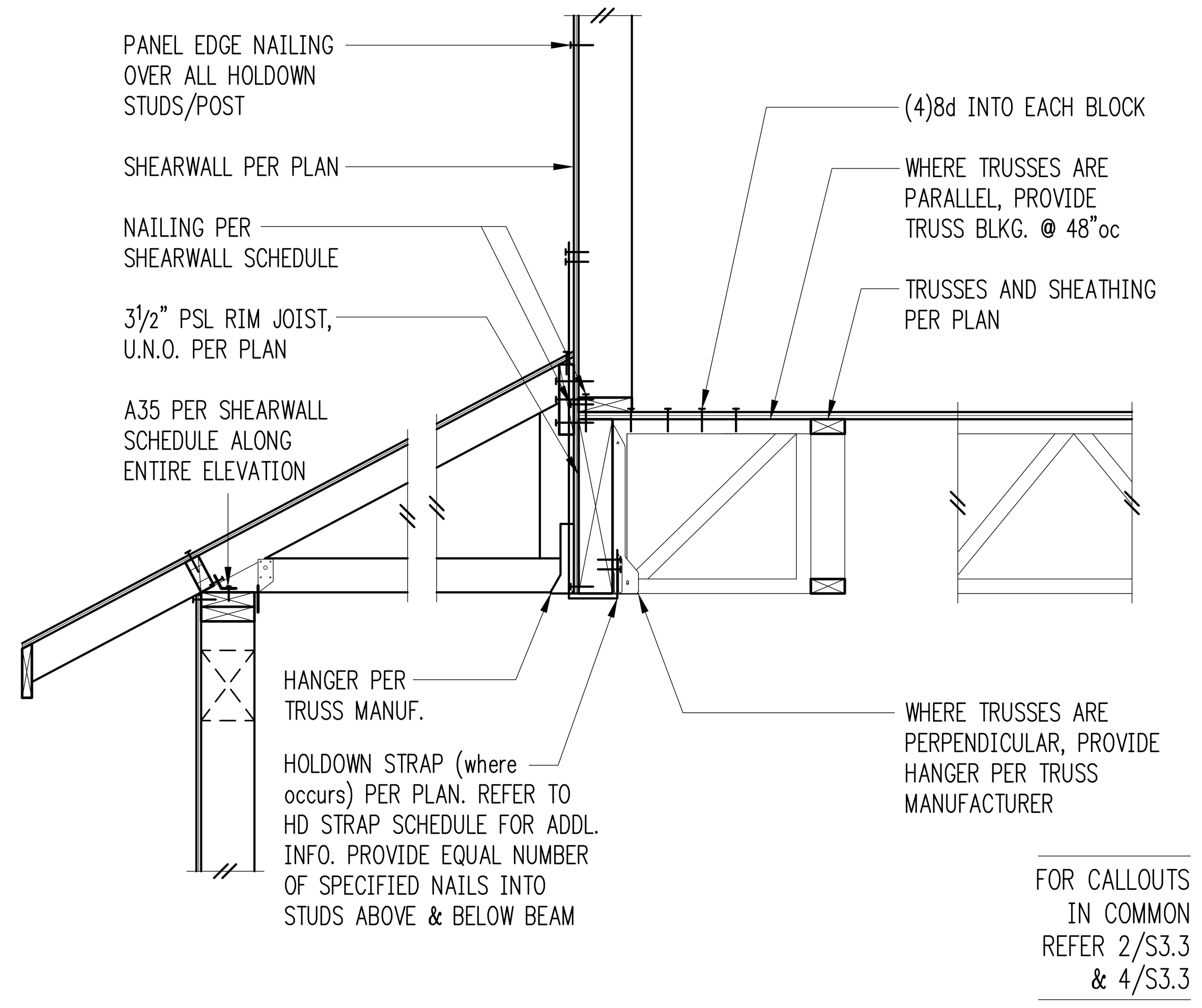
ARCHITECT:
William E. Buchan Homes
2630 116th Ave NE Suite 100
Bellevue, WA 98004

ISSUE:
PERMIT SET

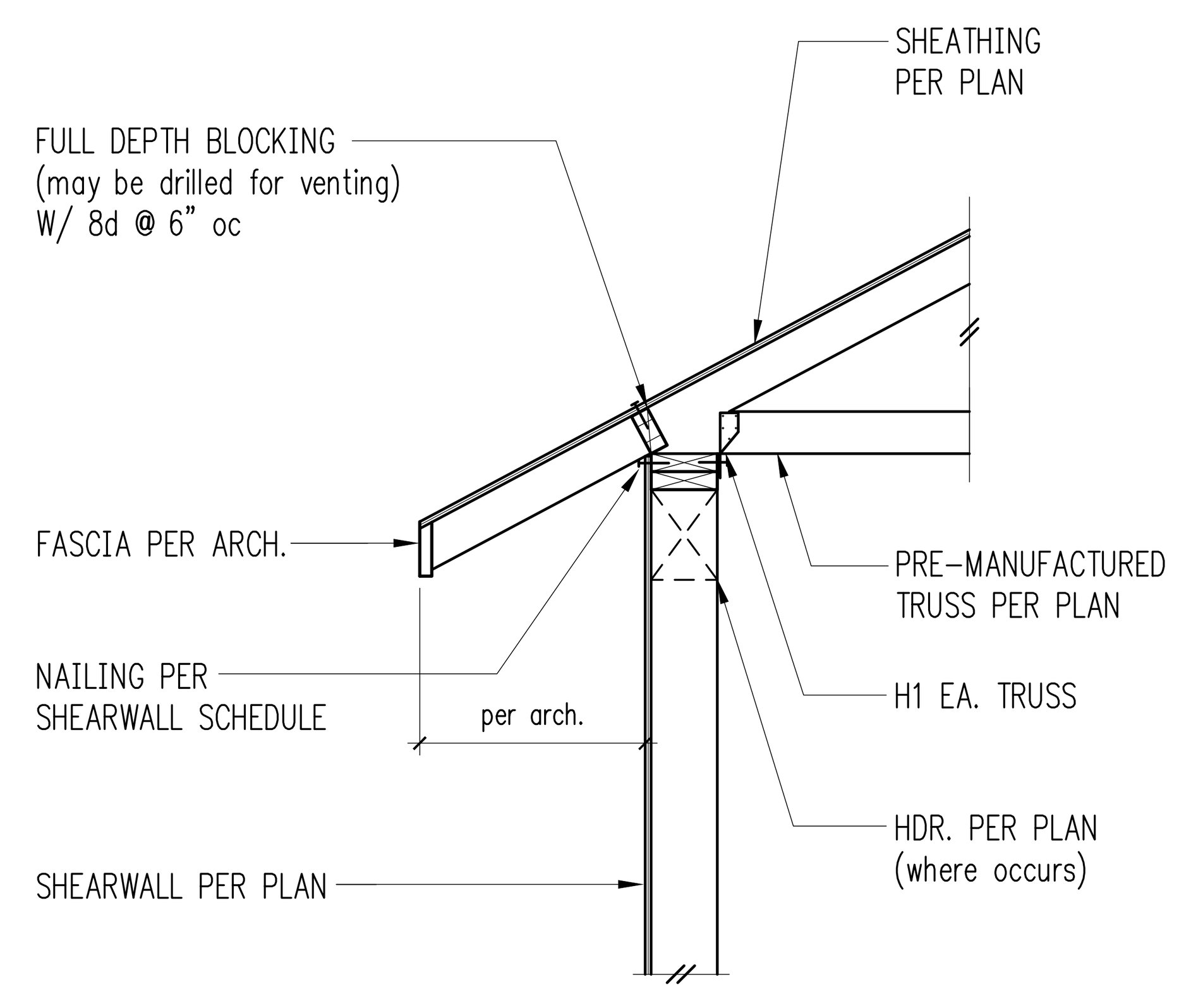
SHEET TITLE:
Wood Framing Details

SCALE: 3/4" = 1'-0"
DATE: November 3, 2021
PROJECT NO: 01011-2021-11
SHEET NO:
S3.2

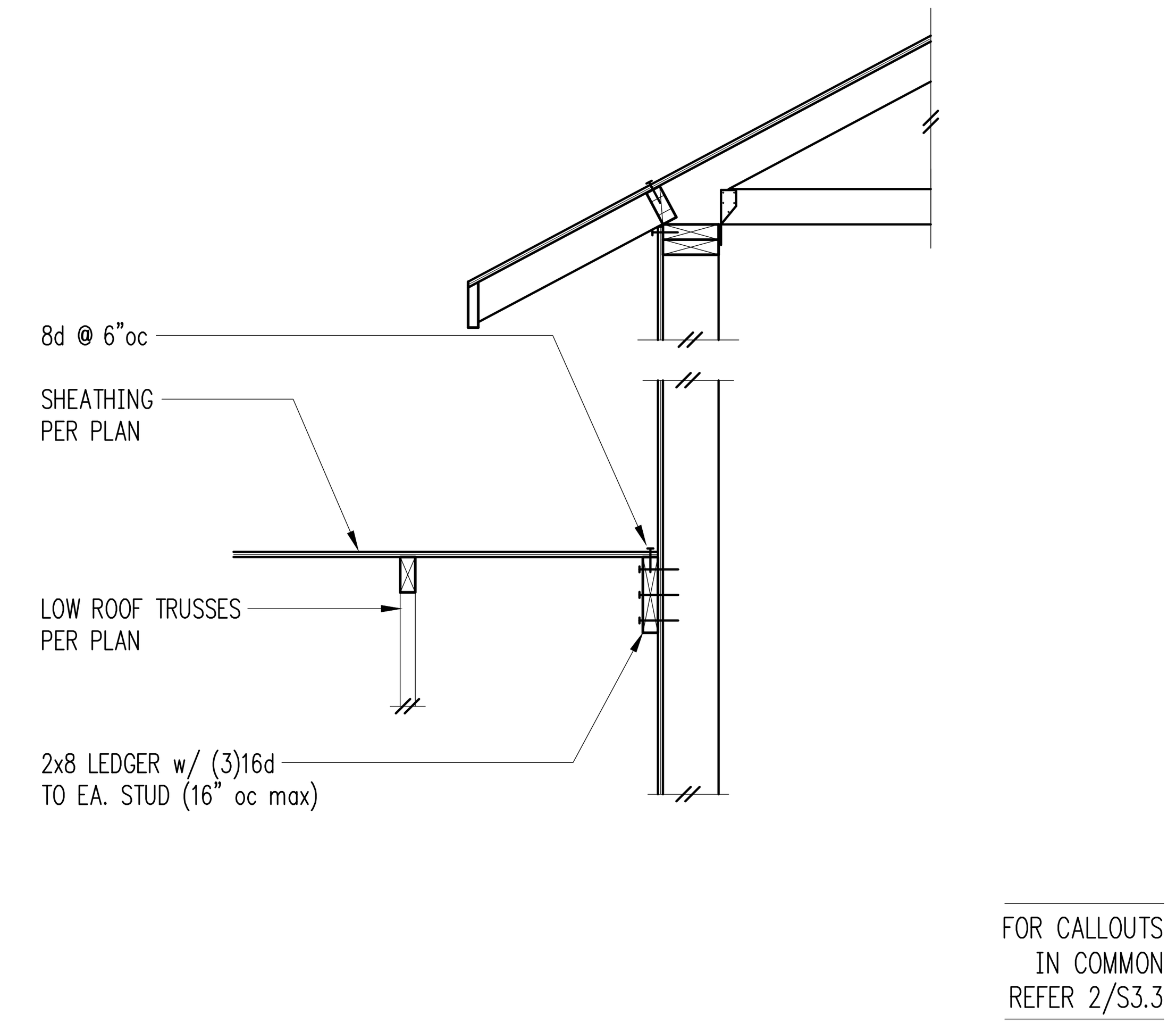
NO: OF SHEETS:



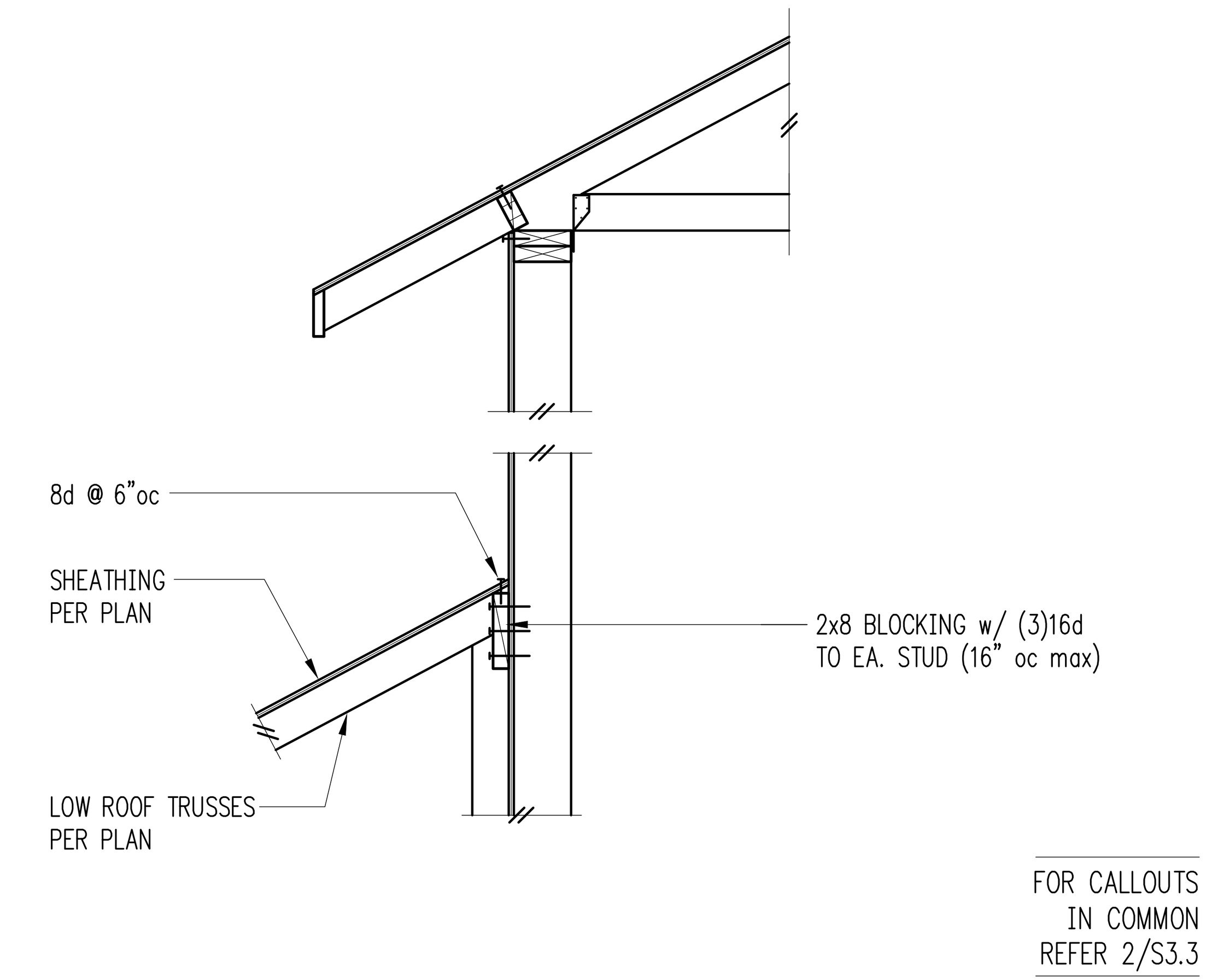
1



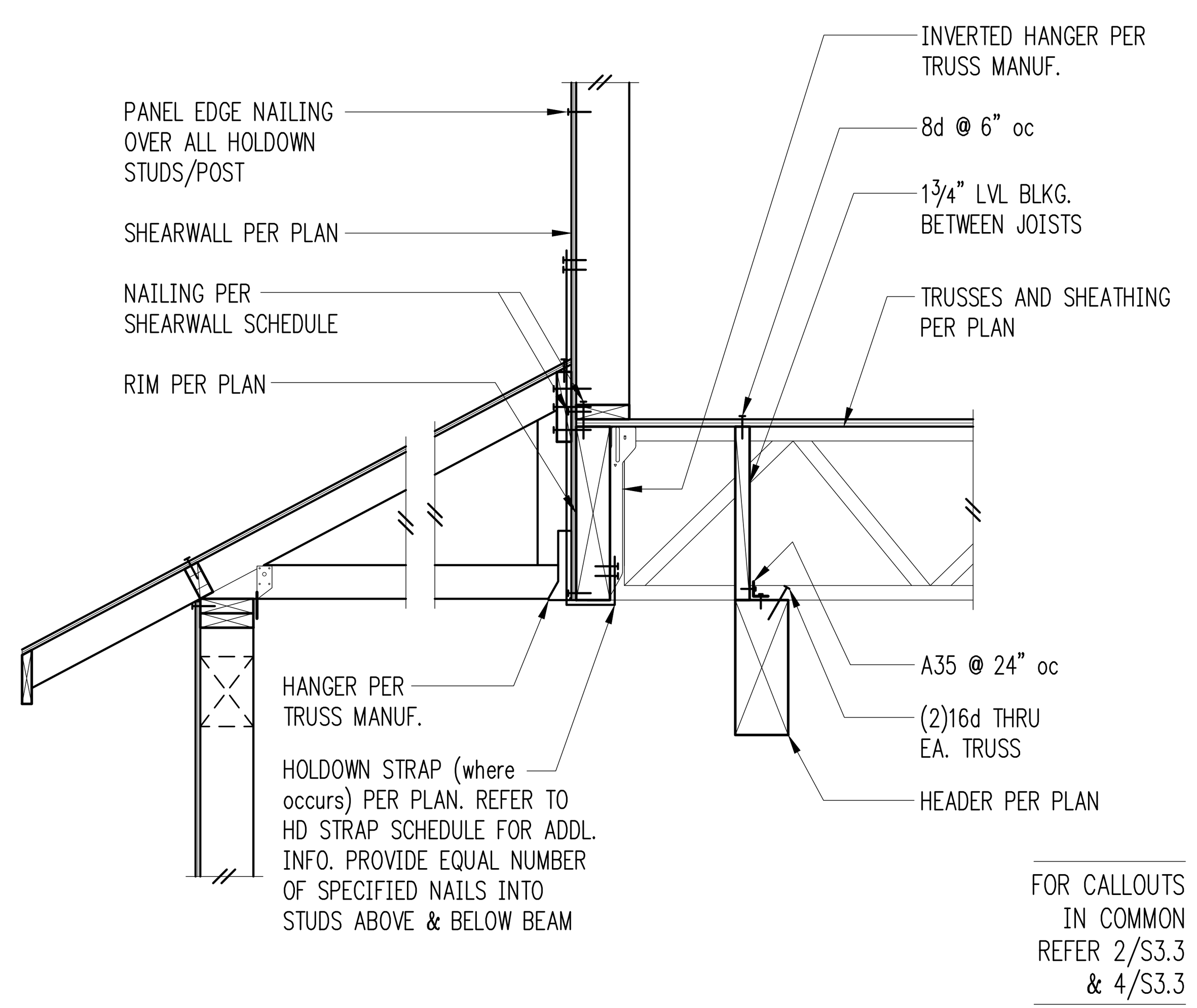
2



3

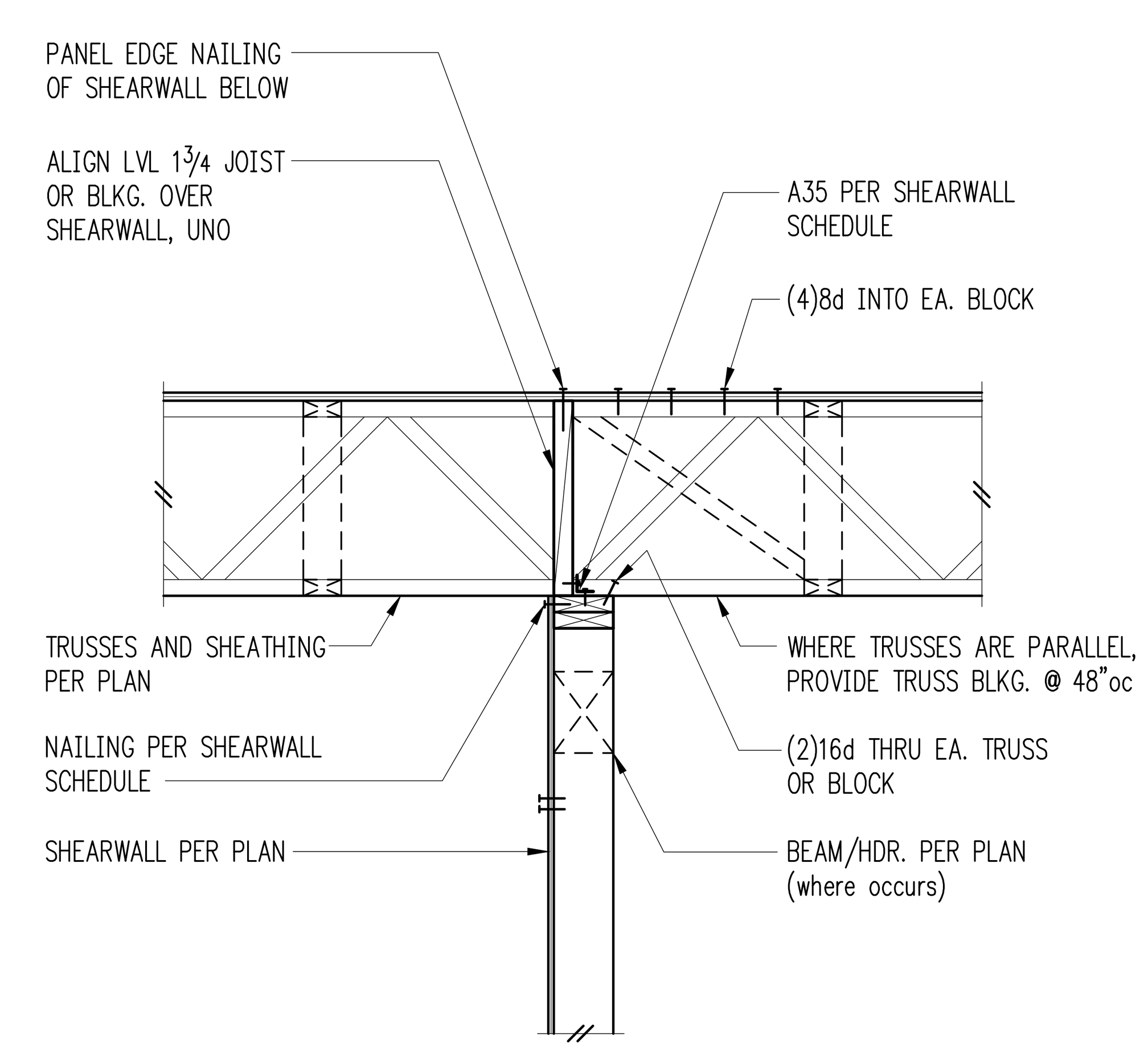


4

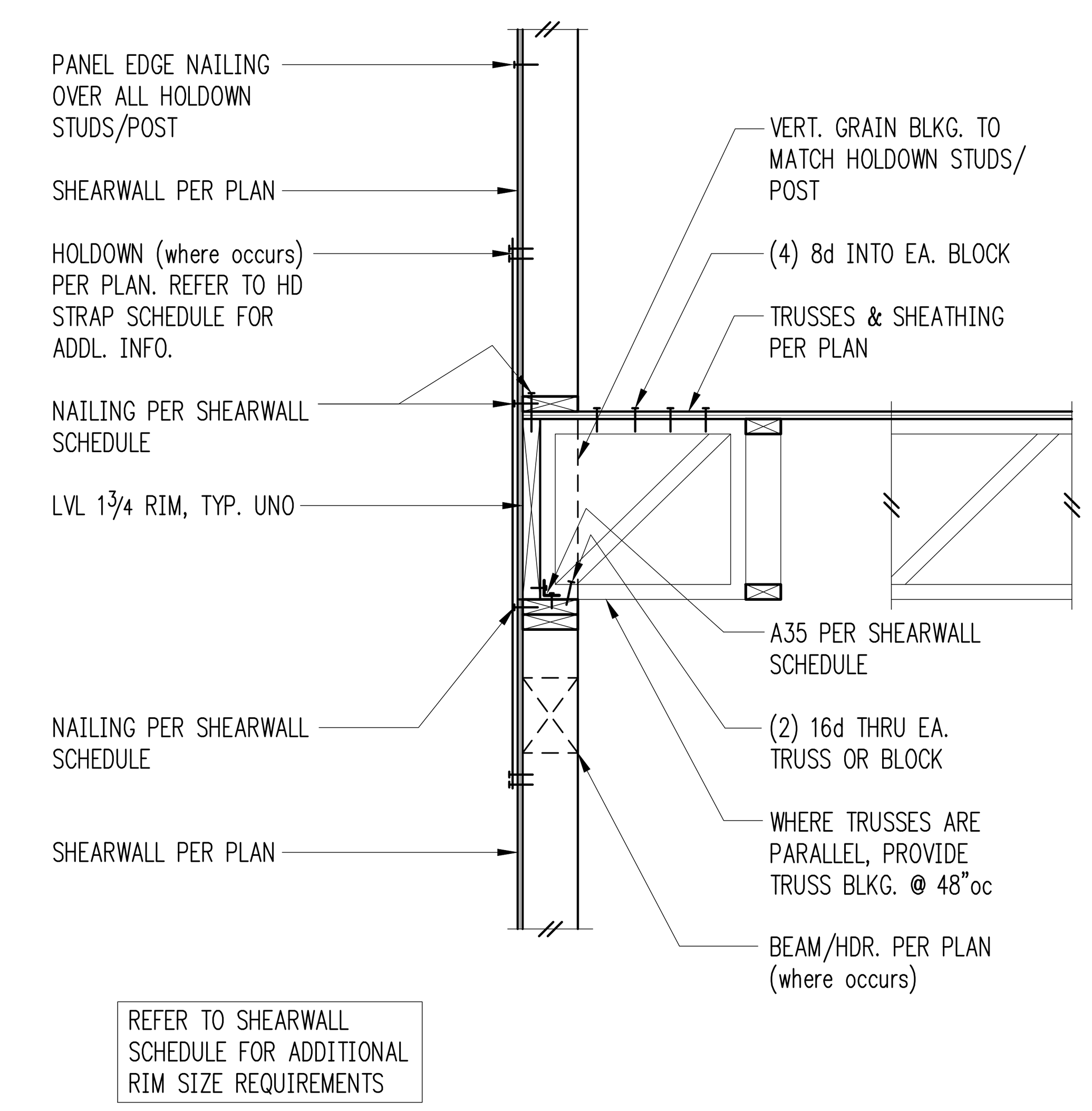


5

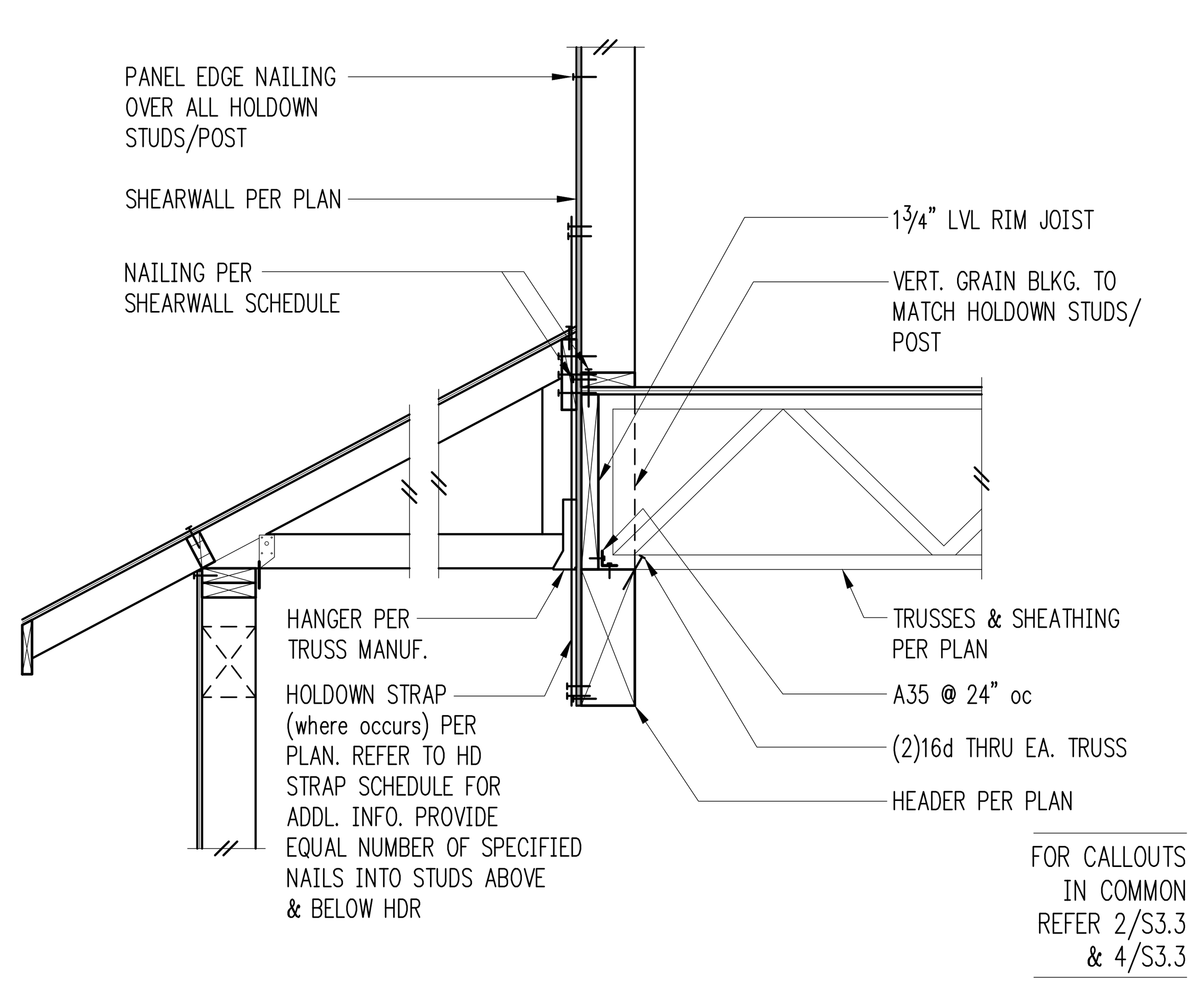
6



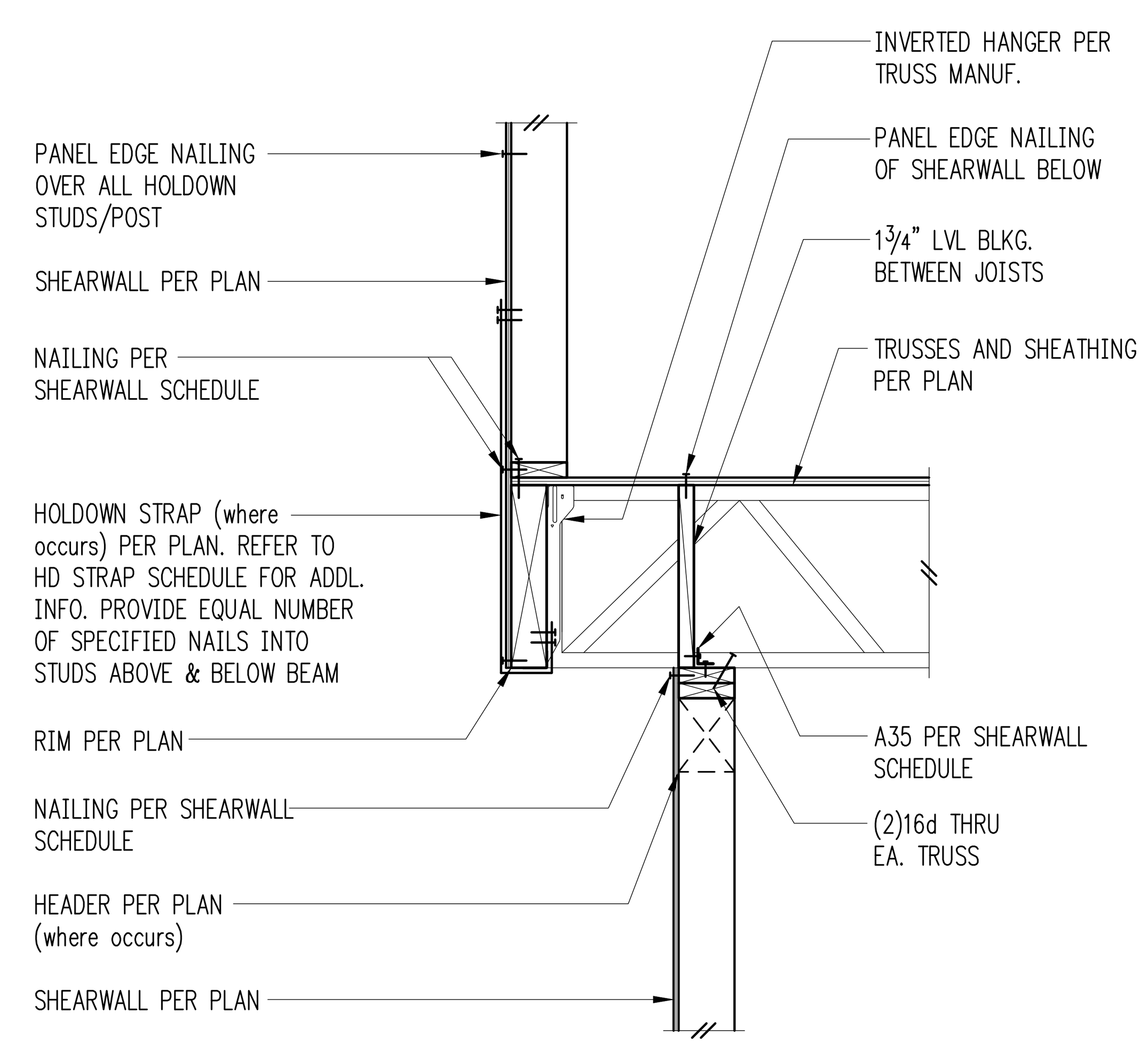
7



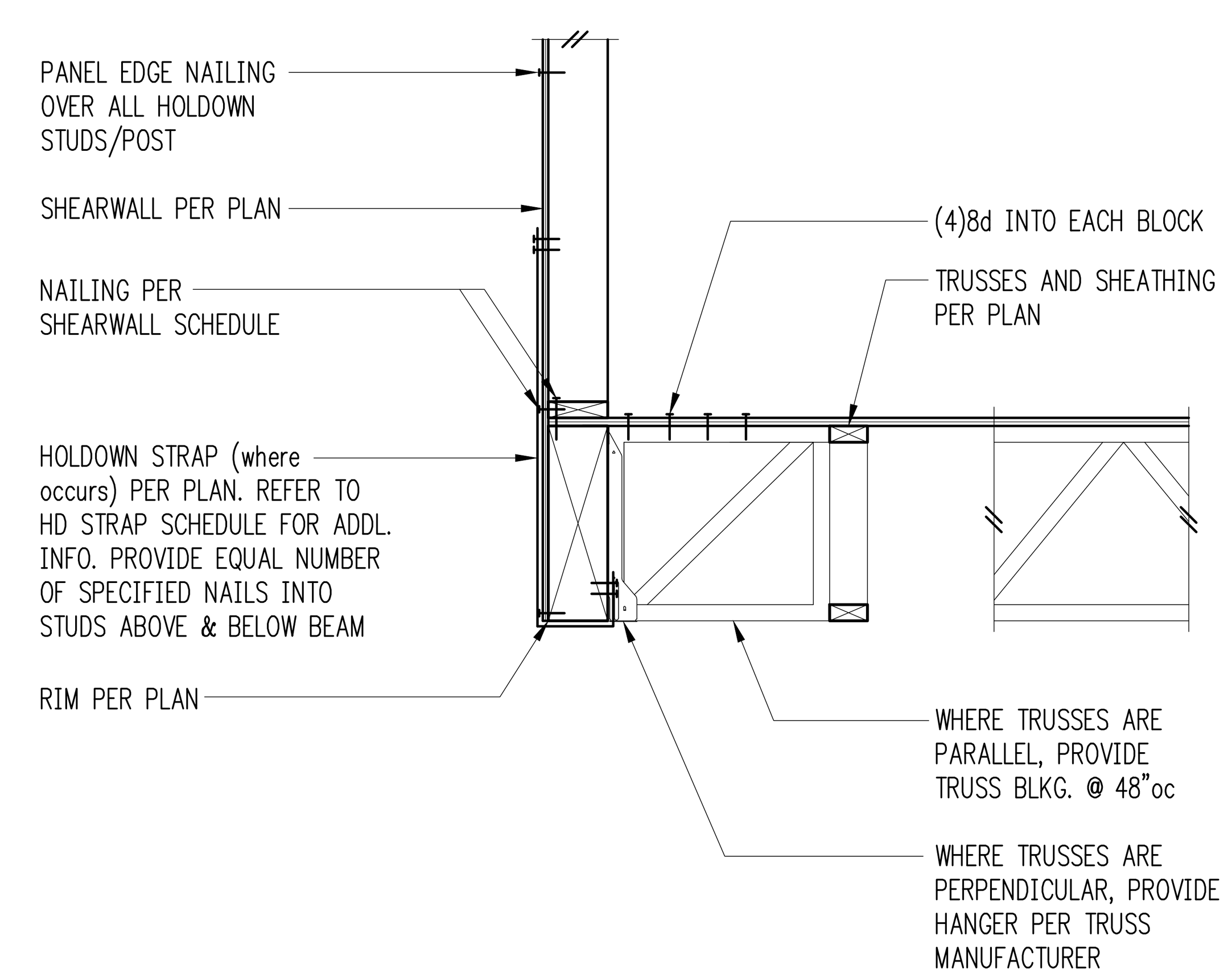
8



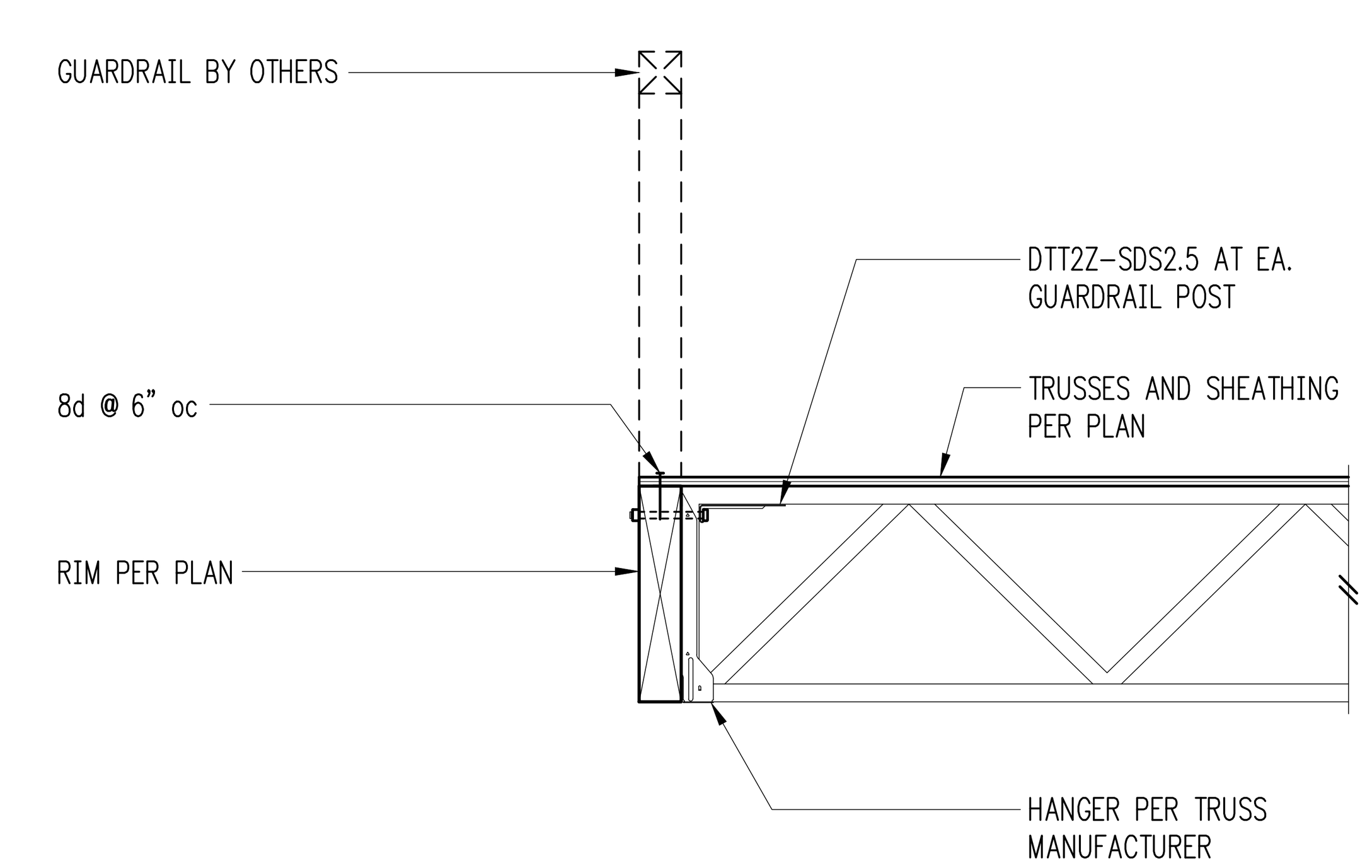
9



10



11



12

SSF STRUCTURAL ENGINEERING
2124 Third Avenue - Suite 100 - Seattle, WA 98121
p: 206.443.6212 ssfengineers.com

Gregory Frederick Jones, State of Washington, 45678, Registered Professional Engineer, 11/03/21

DRAWN:	JDT
DESIGN:	JDT
CHECKED:	JDT
APPROVED:	GFJ

REVISIONS:

PROJECT TITLE:
Shelburne II 9119

ARCHITECT:
William E. Buchan Homes
2630 116th Ave NE Suite 100
Bellevue, WA 98004

ISSUE:
PERMIT SET

SHEET TITLE:
Wood Framing Details

SCALE:	3/4" = 1'-0"
DATE:	November 3, 2021
PROJECT NO:	01011-2021-11
SHEET NO:	S3.3

NO: OF SHEETS:

Jamie Buchan

Site address: 9017 Se 60th St, Mercer Island, WA
Revised May 5, 2022

Thomas Quigley
ISA certified arborist PN0655A, TRAQ

			Dripline Radius '							
Tree #	Species	DBH"	N	S	E	W	Cndtn	Comments		Rmv	Rtn
1	Psuedotsuga menziessii, Douglas fir	21.6	17	10	17		Good	Shared canopy with Tree OS3.			X
2	Cornus Florida, Flowering Dogwood	10.3	8	8	8	8	Fair	Dogwood leaf fungal issues, typical of species.		X	
OS 1	Pinus, Pine sp	12.0 est.	6	6		8	Fair	Off-site (OS) but with overhanging limb(s). Shard canopy with Tree OS2.	Off-site		
OS 2	Pinus, Pine sp	10.0 est.	6	8		6	Fair	Off-site (OS) but with overhanging limb(s). Shared canopy with Tree OS1	Off-site		
OS 3	Psuedotsuga menziessii, Douglas fir	24.0 est	8	8	18		Good	Off-site (OS) but with overhanging limb(s). 18' overhanging east of property line. Shared canopy.	Off-site		
OS 4	Psuedotsuga menziessii, Douglas fir	13.0	8	8	5		Good	Off-site (OS) but with overhanging limb(s). In canopy of OS3 and OS4.	Off-site		
OS 5	Psuedotsuga menziessii, Douglas fir	30.0	10	25	20		Good	Off-site (OS) but with overhanging limb(s). 18' limb extension east of property line.	Off-site		
OS 6	Prunus, Flowering cherry	18.0 est				12	Good	Overhang of limbs is 12' west, but could easily be pruned back to 5'	Off-site		
ROW	Acer palmatum, Japanese laceleaf maple	8.0	6	6	5	5	Good	Located in the Right-of-Way (ROW)	ROW		
ROW	Madrone	5.0	12	0	6	4	Poor	Leans 30 degrees north toward street. Under canopy of Tree #1	ROW		

TREE PROTECTION AREA (TPZ)

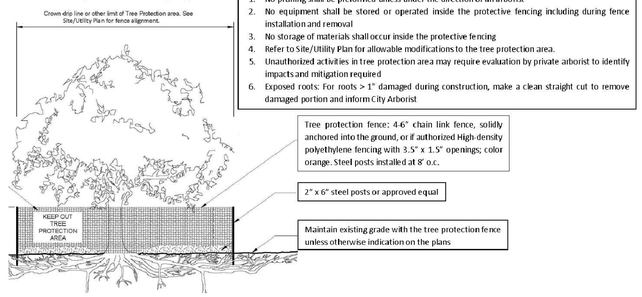
KEEP OUT!

DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

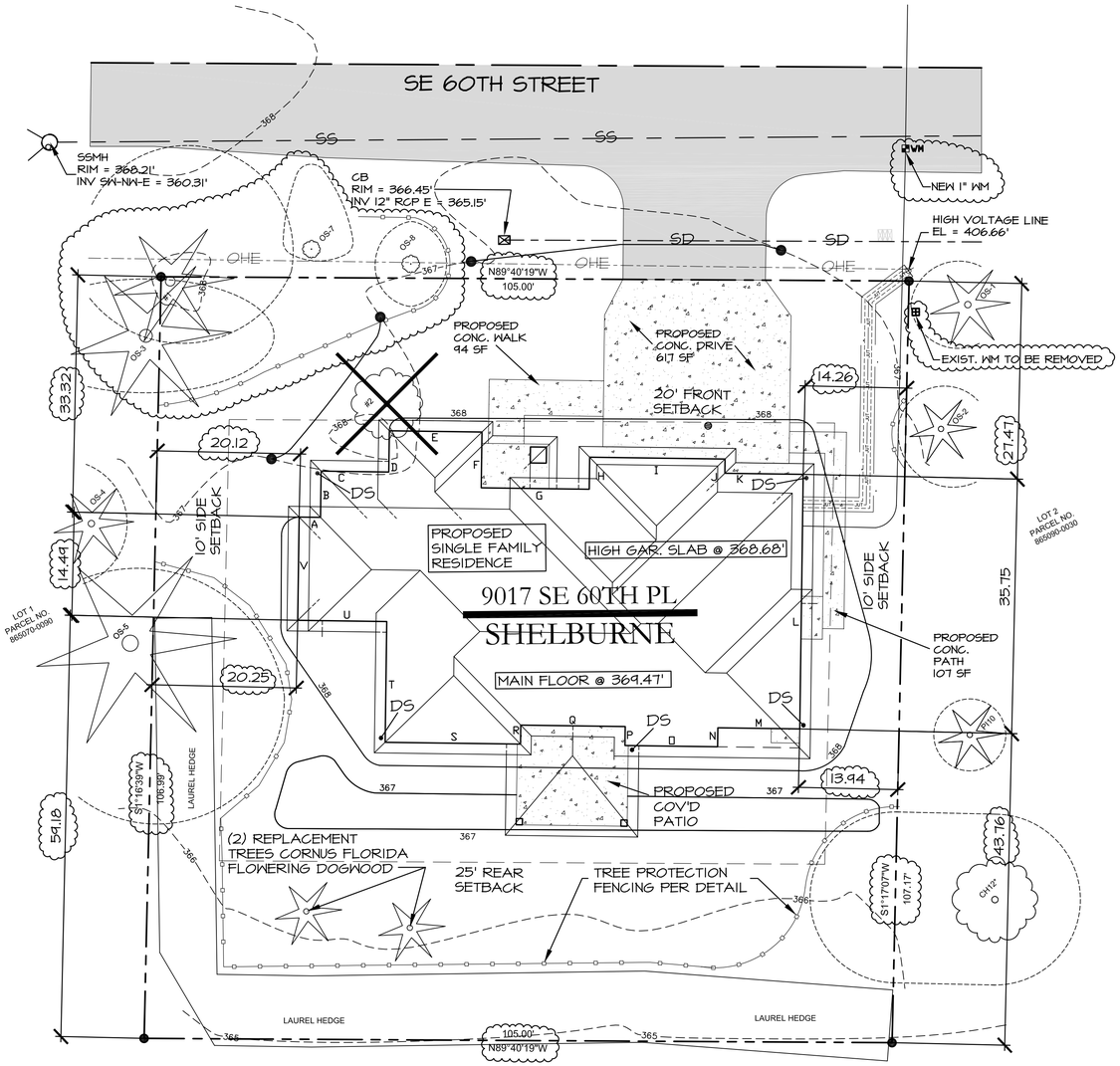
1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees
3. Arborist reports recommending mitigation

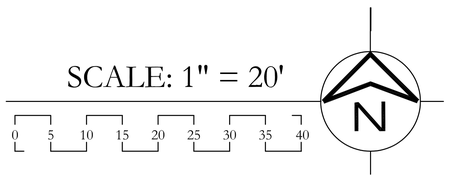
Notes
1. No pruning shall be preformed unless under the direction of an arborist
2. No equipment shall be stored or operated inside the protective fencing including during fence installation and removal
3. No storage of materials shall occur inside the protective fencing
4. Refer to Site/Utility Plan for allowable modifications to the tree protection area.
5. Unauthorized activities in tree protection area may require evaluation by private arborist to identify impacts and mitigation required
6. Exposed roots: For roots > 1" damaged during construction, make a clean straight cut to remove damaged portion and inform City Arborist



Any Work in the protected area must be with the permission of the City Arborist john.kenney@mercergov.org

- All of the protection fencing should be installed prior to any demolition work or other site work. Signage that explains the tree protection zone shall be installed as detailed on Plan Sheet 'S'.
- The installation of tree protection for Off-Site Tree #5 will be more involved in-so-much as the existing structure currently intrudes into the proposed tree protection zone. The tree protection for this tree should be initially installed as close to the existing structure as possible, while still leaving room for the demolition process.
- The removal of the existing concrete foundation in this area is likely to reveal roots from Tree #OS-5 right up against the foundation wall; every effort should be made not to damage these roots.
- Once the concrete is removed, the tree protection fence should be moved to provide for protection of any revealed roots.
- The removal of the concrete in this area, as well as the re-location of the tree protection fencing in this area should be completed under the supervision or monitoring of a tree professional.
- Any roots that are exposed and in need of removal should be severed using proper pruning tools and by the use of techniques as detailed in *ANSI Standard A300 (Part 8)-2013 Root Management*.
- If any limbs of any of the trees need to be pruned or removed in order to provide construction clearance, said pruning should be undertaken by a tree professional. Pruning standards are detailed in *ANSI Standard A300 (Part i)-2017 Pruning*.





THE MARK IS A MONUMENT IN CASE AT THE EAST END OF SE 60TH STREET, ± 150 FEET EAST OF THE INTERSECTION OF 92ND AVENUE SE.

POINT ID NO. MI-1063;
ELEVATION: 334.534 FEET NAVD 88

LOT SLOPE CALCULATION:
HIGHEST ELEVATION POINT OF LOT = 368.0
LOWEST ELEVATION POINT ON LOT = 365.25
ELEVATION DIFFERENCE = 2.75
HORIZ. DISTANCE BETWEEN HIGH AND LOW POINTS = 92.15
LOT SLOPE = 2.98

LOT COVERAGE BY CALCULATIONS:
A. GROSS LOT AREA = 11,251 SF
B. NET LOT AREA = 11,251 SF
C. ALLOWED LOT COVERAGE AREA = 4500 SF
D. ALLOWED LOT COVERAGE = 40% OF LOT
I. TOTAL NEW LOT COVERAGE AREA
1. MAIN ROOF AREA = 2882 SF
2. ACCESORY STRUCTURE ROOF AREA = 0 SF
3. VEHICULAR USE = 617 SF
4. COVERED PATIOS = 294 SF
5. TOTAL NEW LOT COVERAGE AREA 3733 SF
J. TOTAL PROJECT NEW LOT COVERAGE AREA 3733 SF
K. TOTAL PROJECT LOT COVERAGE AREA = 33% OF LOT

HARDSCAPE CALCULATIONS:
A. GROSS LOT AREA 11,251 SF
B. NET LOT AREA 11,251 SF
C. AREA BORROWED FROM LOT COVERAGE = 767 SF
D. ALLOWED HARDSCAPE AREA = 9% OF LOT AREA + C = 15.82% OF LOT
E. ALLOWED HARDSCAPE AREA = 1780
F. TOTAL EXISTING HARDSCAPE AREA:
7. TOTAL EXISTING HARDSCAPE AREA = 0 SF
H. TOTAL NEW HARDSCAPE AREA:
3. WALKWAYS = 201
7. TOTAL NEW HARDSCAPE AREA = 201
I. TOTAL PROJECT HARDCAPE AREA = 201
J. TOTAL PROJECT HARDCAPE AREA = 1.7%

AVERAGE BUILDING ELEVATION:
A = 366.65 x 25.29 = 9272.58
B = 366.68 x 2.17 = 795.69
C = 366.72 x 9.50 = 3483.84
D = 366.76 x 5.79 = 2123.54
E = 366.85 x 13.00 = 4769.05
F = 366.45 x 7.83 = 2869.30
G = 366.00 x 15.17 = 5552.22
H = 366.20 x 4.50 = 1647.90
I = 366.50 x 19.00 = 6963.50
J = 366.37 x 2.00 = 732.74
K = 366.25 x 11.00 = 4028.75
L = 366.55 x 35.75 = 13,104.16
M = 366.32 x 11.50 = 4212.68
N = 366.31 x 2.67 = 978.05
O = 366.30 x 13.00 = 4761.90
P = 366.31 x 2.67 = 978.05
Q = 366.32 x 14.67 = 5373.91
R = 366.31 x 2.67 = 978.05
S = 366.30 x 19.00 = 6959.70
T = 366.39 x 16.96 = 6213.97
U = 366.48 x 12.50 = 4581.00
V = 366.57 x 14.50 = 5315.26

AVG. BUILDING ELEVATION (ABE) = 95695.84/261.14 = 366.45
ALLOWABLE BUILDING HEIGHT = 396.45
TOTAL BUILDING HEIGHT = 29.45
PROPOSED RIDGE HEIGHT = 395.9
MAIN FLOOR ELEVATION = 369.47
HIGH GAR. SLAB ELEVATION = 368.68

LEGAL DESCRIPTION

Lot 2, Block 1 Timberland No. 4, according to the plat thereof recorded in in Volume 41 of Plats, Page 38, of King County, Washington.
Situate in the City of Mercer Island, County of King, State of Washington.

PROJECT INFORMATION

TAX PARCEL NUMBER: 865090-0025

PROJECT ADDRESS: 9017 SE 60TH STREET
MERCER ISLAND, WA. 98040

ZONING: R-9.6

LOT SIZE: 11,251 S.F.

OWNER: WILLIAM E. BUCHAN INC.
2639 116TH AVE NE #100
425-828-6424
CONTACT: DAVE STAVE
Daves@Buchanhomes.com
425-831-5503

WILLIAM E BUCHAN INC.
2630 - 116th Ave. NE. • Bellevue, Washington 98004 • (425) 828-6424

CONTENT: SITE PLAN
9017 SE 60th St

JOB NO. 9119

DATE 5/4/22

DRAWN BY DS

ENGINEER SSF

REVISION	DATE
▷	xx/xx/xx

SHELBURNE II

SHEET S

SW 1/4, SEC 19, TWP 24N, RGE 5E, W.M.

9017 SE 60TH ST
MERCER ISLAND
SITE PLAN

LEGAL DESCRIPTION

LOT 1, BLOCK 2, TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 60 OF PLATS, PAGE(S) 41, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARING

THE PLAT OF TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 60 OF PLATS, PAGE(S) 41, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM & CONTROL INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A MONUMENT IN CASE AT THE EAST END OF SE 60TH STREET, ± 150 FEET EAST OF THE INTERSECTION OF 92ND AVENUE SE.

POINT ID NO. MI-1063;
ELEVATION: 334.534 FEET NAVD 88

2.0' CONTOUR INTERVAL – THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.

SURVEY NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN SEPTEMBER 2020 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

SITE DATA

HIGHEST ELEVATION OF LOT:	368.00	
LOWEST ELEVATION OF LOT:	365.25	
LOT SLOPE:	2.98%	
TOTAL SITE AREA:	11,251	SF
ALLOWED LOT COVERAGE:	40%	
PROPOSED LOT COVERAGE *	3,794	SF (33.7%)
PROPOSED HARDSCAPE	201	SF (1.8%)
PROJECT IMPERVIOUS AREA:	3,995	SF (35.5%)

* LOT COVERAGE INCLUDES THE COMBINATION OF BUILDINGS, INCLUDING EAVES AND ROOF OVERHANGS, AND VEHICULAR DRIVING SURFACES AS DEFINED PER MIMC 19.16.010

OWNER / ARCHITECT

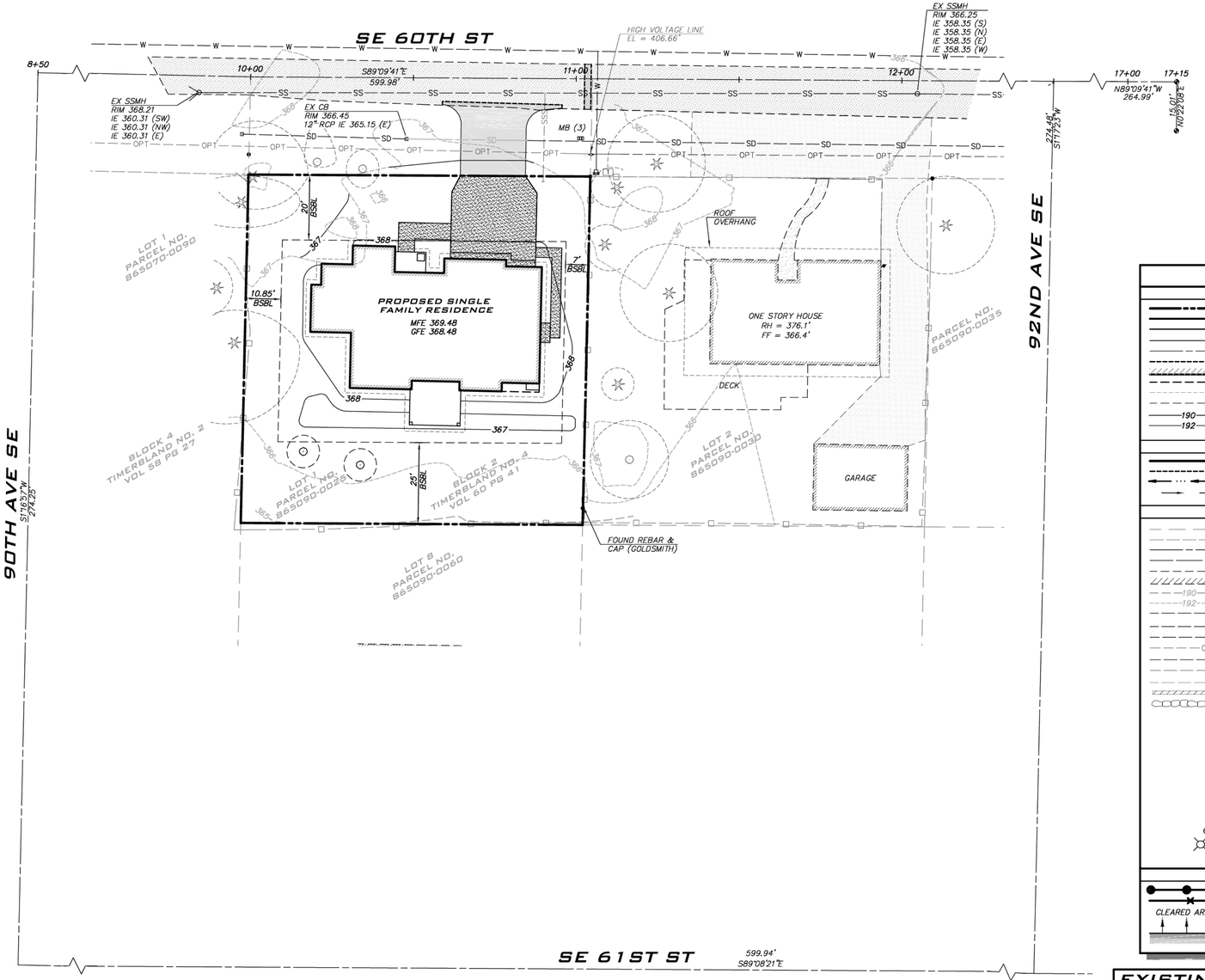
WILLIAM E. BUCHAN INC.
2630 116 AVE NE #100
BELLEVUE, WA 98004
(425) 831-5503
CONTACT: DAVID STAVE

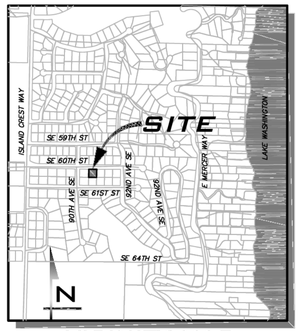
ENGINEER

THE BLUELINE GROUP
25 CENTRAL WAY, SUITE 400
KIRKLAND, WA 98033
(425) 250-7224
CONTACT: TODD A. OBERG, PE

GEOTECH ENGINEER

TERRA ASSOCIATES, INC
12220 113TH AVE NE, SUITE 130
KIRKLAND, WA 98034
(425) 821-7777
CONTACT: CAROLYN S. DECKER, PE





VICINITY MAP
NOT TO SCALE

N

SCALE: 1" = 20'
0 10 20 40

LEGEND

PROPOSED FEATURES

- BOUNDARY
- RIGHT-OF-WAY
- LOT LINE
- SIDEWALK
- CENTER LINE
- SAWCUT
- BUILDING FOOTPRINT
- BUILDING OVERHANG
- BUILDING ROOFLINE
- BUILDING SETBACK (BSBL)
- 190 10' PROPOSED CONTOURS
- 192 2' PROPOSED CONTOURS
- MAILBOX
- ASPHALT PAVEMENT
- CONCRETE

PROPOSED STORM DRAINAGE

- STORM DRAIN PIPE
- ROOF & FOOTING DRAIN
- SWALE OR DITCH
- SURFACE FLOW
- TYPE I CB – STANDARD GRATE
- TYPE I CB – LOCKING LID
- STORM CLEANOUT
- YARD DRAIN

EXISTING FEATURES

- ADJACENT PLAT/PARCEL LINE
- ADJACENT RIGHT-OF-WAY
- CENTERLINE
- EASEMENT
- SURFACE FEATURES
- BUILDING FOOTPRINT
- 190 10' CONTOURS
- 192 2' CONTOURS
- SD STORM DRAIN PIPE
- SS SEWER MAIN
- W WATER MAIN
- OHP AERIAL POWER LINE
- G GAS MAIN
- X WIRE FENCE
- BOARD FENCE
- RETAINING WALL
- ROCKERY
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- SD PIPE FLOW
- SEWER MANHOLE
- SS PIPE FLOW
- FIRE HYDRANT
- WATER METER
- GATE VALVE
- POWER POLE
- GUY ANCHOR
- STREET LIGHT
- P POWER VAULT
- POWER METER
- MAIL BOX
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- DRIP LINE
- CONIFEROUS TREE TO BE SAVED
- DECIDUOUS TREE TO BE SAVED
- EXISTING CONIFEROUS TREE TO BE REMOVED
- EXISTING DECIDUOUS TREE TO BE REMOVED
- ASPHALT
- CONCRETE
- GRAVEL

TESC FEATURES

- FILTER FENCE
- CONSTRUCTION FENCE
- CLEARED AREA
- LIMITS OF CLEARING
- PIPE FLOW
- INTERIM CATCH BASIN PROTECTION (INSERT)

SHEET INDEX

BUILDING CALCULATIONS

SEE ARCHITECTURAL SITE PLAN FOR TREE RETENTION, BUILDING HEIGHTS AND FAR CALCULATIONS.

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

BLUELINE
25 CENTRAL WAY, SUITE 400,
KIRKLAND, WA 98033
P: 425.216.4051 F: 425.216.4052
WWW.THEBLUELINEGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: TODD A OBERG, PE
PROJECT ENGINEER: YANNICK METS, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 6/1/2022

NO	DATE	BY	REVISIONS

COVER SHEET
9017 SE 60TH ST
SITE PLAN
CITY OF MERCER ISLAND WASHINGTON

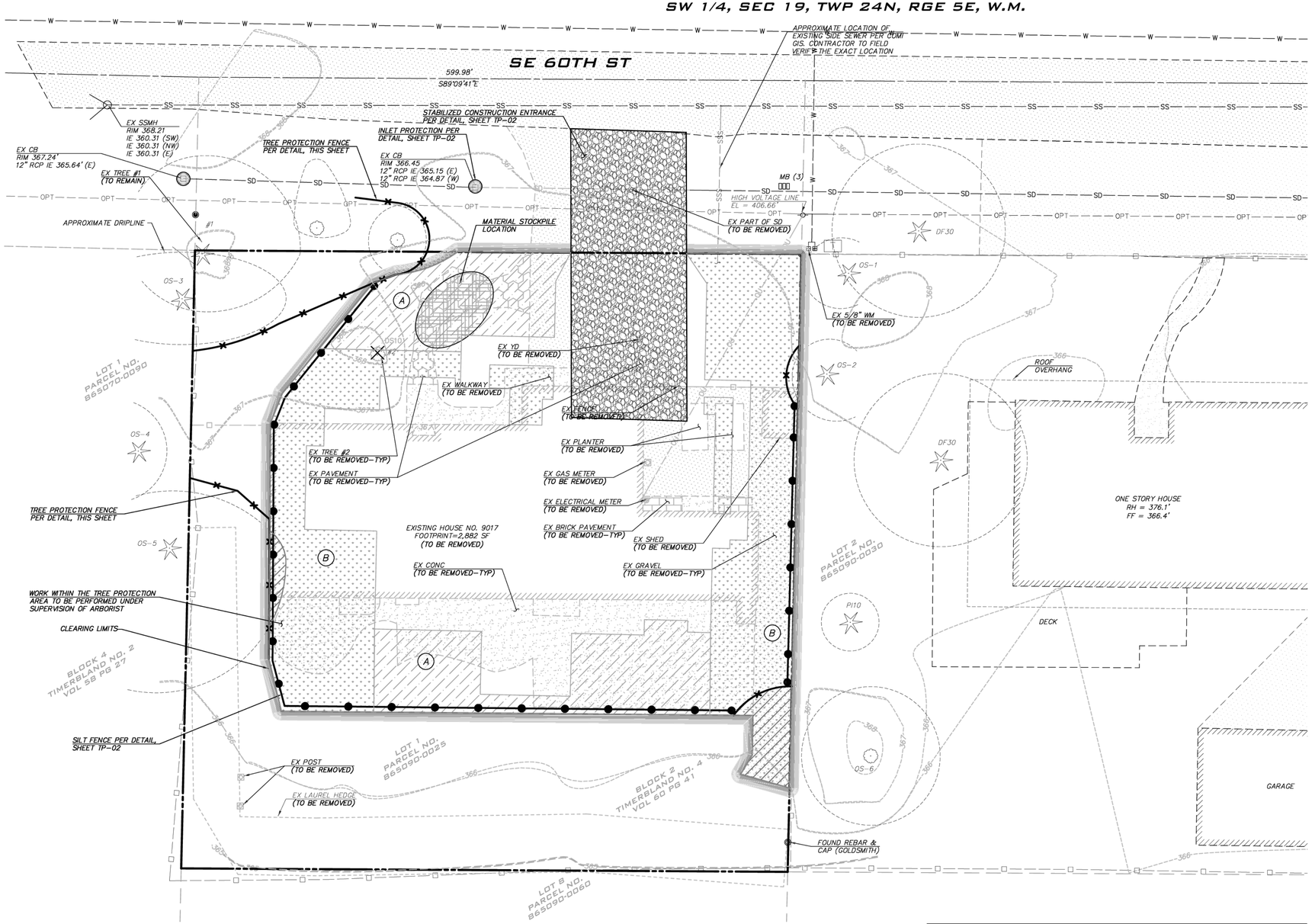
TODD A. OBERG STATE OF WASHINGTON 37408 REGISTERED PROFESSIONAL ENGINEER

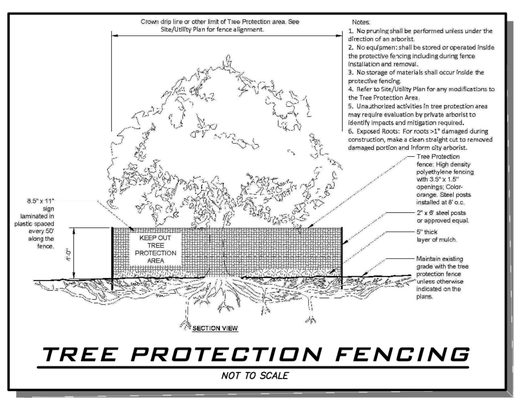
6/1/22

JOB NUMBER: 21-377
SHEET NAME: CV-01
SHT 1 OF 5

22x34
Jun 01, 2022 - 9:29am - User aromazani
E:\Projects\21377\Dwg\Site Plan\21377CV.dwg

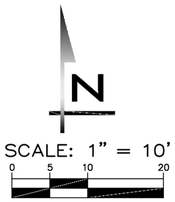
SW 1/4, SEC 19, TWP 24N, RGE 5E, W.M.





TREE PROTECTION FENCING

NOT TO SCALE



NOTE

CATCH BASIN INLET PROTECTION TO BE INSTALLED UP TO 250' DOWNSTREAM OF THE PROJECT SITE.

SOIL AMENDMENT LEGEND

(A) NEW TURF AREA REQUIRING AMENDMENT (1,180 SF)

(B) NEW PLANTING AREA REQUIRING AMENDMENT (2,180 SF)

POST-CONSTRUCTION SOIL MANAGEMENT NOTES

AMEND SOILS WITH COMPOST PER PRE-APPROVED AMENDMENT METHOD

SCARIFY EXISTING SOILS TO DEPTH OF 8 INCHES

REFER TO CITY OF MERCER ISLAND SECTION D: POST-CONSTRUCTION SOIL MANAGEMENT FORM UNDER SEPARATE COVER FOR CALCULATED AMENDMENT QUANTITIES.

NOTE

EXISTING WATER METER TO BE REMOVED AND THE SERVICE TO BE CAPPED.

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

BLUELINE
25 CENTRAL WAY, SUITE 400,
KIRKLAND, WA 98033
P: 425.216.4051 F: 425.216.4052
WWW.THEBLUELINEGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: TODD A OBERG, PE
PROJECT ENGINEER: YANNICK METS, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 6/1/2022

NO	DATE	BY	REVISIONS

TESC, DRAINAGE & TREE RETENTION PLAN
9017 SE 60TH ST
SITE PLAN
CITY OF MERCER ISLAND WASHINGTON

TODD A. OBERG
STATE OF WASHINGTON
37408
REGISTERED PROFESSIONAL ENGINEER

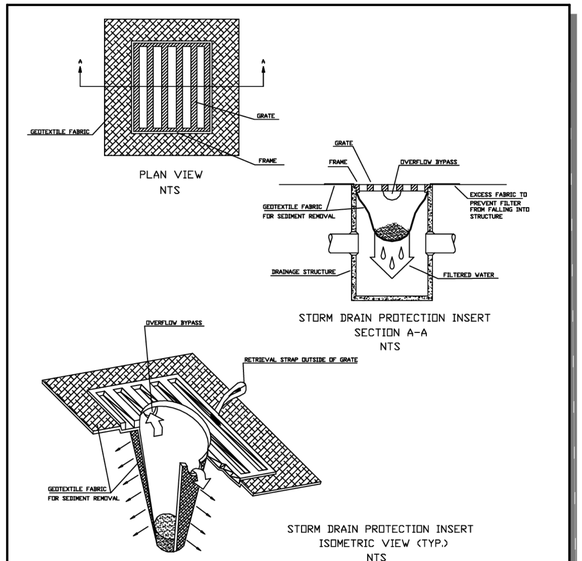
6/1/22

JOB NUMBER: 21-377
SHEET NAME: TP-01
SHT 2 OF 5

22x34
Jun 01, 2022 - 9:29am - User: aramezani
E:\Projects\21377\Dwg Site Plan\21377tp.dwg

TESC - PLAN NOTES

1. THE APPROVED CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS:
   A. CONDUCT PRE-CONSTRUCTION MEETING.
   B. FLAG OR FENCE CLEARING LIMITS.
   C. POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR.
   D. INSTALL CATCH BASIN PROTECTION IF REQUIRED.
   E. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
   F. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
   G. CONSTRUCT SEDIMENT PONDS AND TRAPS.
   H. GRADE AND STABILIZE CONSTRUCTION ROADS.
   I. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
   J. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
   K. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY TESC MINIMUM REQUIREMENTS.
   L. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT.
   M. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 7 DAYS.
   N. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
   O. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.
2. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
3. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
4. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE SET BY SURVEY AND CLEARLY FLAGGED IN THE FIELD BY A CLEARING CONTROL FENCE PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE OR REMOVAL OF ANY GROUND COVER BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMITTEE/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
5. THE TESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE TESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.
7. THE ESC FACILITIES SHALL BE INSPECTED BY THE PERMITTEE/CONTRACTOR DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT DOCUMENTING THE REVIEWS OF THE ESC FACILITIES.
8. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.
9. ALL DENUDED SOILS MUST BE STABILIZED WITH AN APPROVED TESC METHOD (E.G. SEEDING, MULCHING, PLASTIC COVERING, CRUSHED ROCK) WITHIN THE FOLLOWING TIMELINES: APRIL 1 TO OCTOBER 31 – SOILS MUST BE STABILIZED WITHIN 7 DAYS OF GRADING. NOVEMBER 1 TO MARCH 31 – SOILS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING.
10. AT NO TIME SHALL MORE THAN 1' OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
11. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.
13. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
14. WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2".
15. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6" MUST HAVE A PERIMETER FENCE WITH A MINIMUM HEIGHT OF 3'.
16. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND SPECIFICATIONS.
17. THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY OF MERCER ISLAND INSPECTOR.
18. A COPY OF THE APPROVED EROSION CONTROL PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
19. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A 4' HIGH TEMPORARY CONSTRUCTION FENCE (CYCLONE OR PLASTIC MESH) SEPARATING THE LOT (OR BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL A DWELLING IS CONSTRUCTED AND OWNERSHIP TRANSFERRED TO THE FIRST OWNER/OCCUPANT.
20. CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A 6-FT. HIGH CHAIN LINK FENCE ADJACENT THE DRIP LINE OF TREES TO BE SAVED, WETLAND OR STREAM BUFFERS, AND SENSITIVE SLOPES. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY AN EROSION CONTROL FENCE, IF APPROVED BY THE CITY, A FOUR-FOOT HIGH ORANGE MESH CLEARING CONTROL FENCE MAY BE USED TO DELINEATE CLEARING LIMITS IN ALL OTHER AREAS.
21. OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM, THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.
22. ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE THEIR GRATES COVERED WITH FILTER FABRIC DURING CONSTRUCTION. CATCH BASINS DIRECTLY DOWNSTREAM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE CITY INSPECTOR SHALL BE PROTECTED WITH A "FILTER FABRIC SOCK" OR EQUIVALENT.
23. THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY OF MERCER ISLAND. ALSO, ALL INTERCEPTOR SWALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.
24. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1' AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40 %-70 % PASSING; 2"-4" ROCK/30 %-40 % PASSING; AND 1"-2" ROCK/10 %-20 % PASSING.
25. IF ANY PART(S) OF THE CLEARING LIMIT BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED IMMEDIATELY.
26. ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.
27. DO NOT FLUSH CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RE-CLEANING THE ENTIRE DOWNSTREAM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.
28. PRIOR TO THE OCTOBER 1 OF EACH YEAR (THE BEGINNING OF THE WET SEASON), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEEDED WITHIN ONE WEEK AFTER OCTOBER 1. A SITE PLAN DEPICTING THE AREAS TO BE SEEDED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

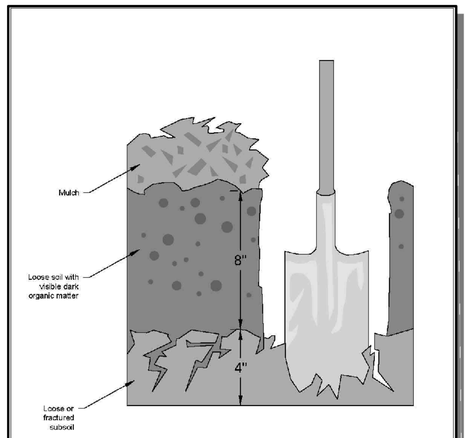


NOTES

1. SEE ECOLOGY STORMWATER MANAGEMENT MANUAL FOR W. WA, BMP C220 FOR ADDITIONAL DESIGN INFORMATION.

INLET PROTECTION

NOT TO SCALE



Reprinted from: *Guidelines and Resources For Implementing Soil Quality and Depth BMP T5.13 in WDOE Stormwater Management Manual for Western Washington*, 2010, Washington Organic Recycling Council

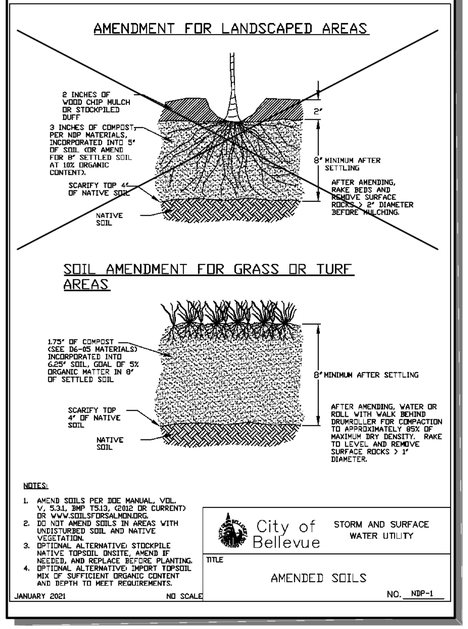
NOT TO SCALE

DEPARTMENT OF ECOLOGY State of Washington

Figure V-5.3.3
Planting Bed Cross-Section
Revised January 2016

AMENDED SOILS - BMP T5.13

NOT TO SCALE



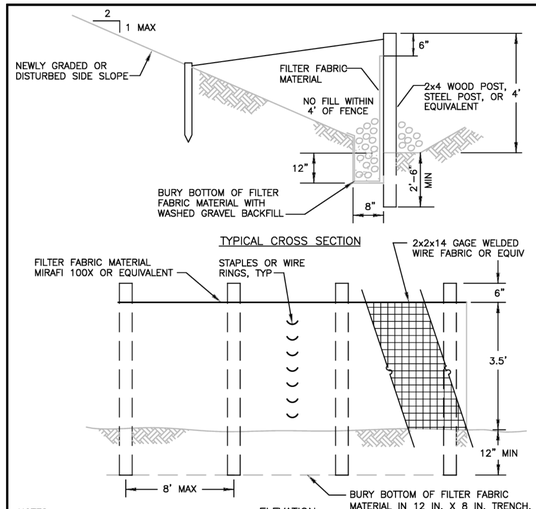
NOTES:

1. AMEND SOILS PER BDE MANUAL, VOL. V, 5.31, BMP T5.13, (2012 OR CURRENT) OR WWW.SOILSFORSALMONKIRG.
2. DO NOT AMEND SOILS IN AREAS WITH UNDISTURBED SOIL AND NATIVE VEGETATION.
3. OPTIONAL ALTERNATIVE: STOCKPILE NATIVE TOPSOIL ONSITE, AMEND IF NEEDED, AND REPLACE BEFORE PLANTING.
4. OPTIONAL ALTERNATIVE: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

JANUARY 2021 — NO SCALE — NO. NDP-1

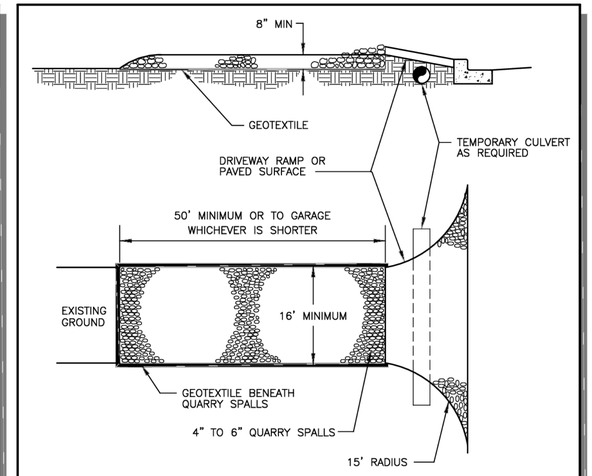


NOTES

1. PREFAB FENCE ALLOWED IF REINFORCED AND APPROVED BY THE CITY CLEARING AND GRADING INSPECTOR.
2. FENCE SHALL NOT BE INSTALLED ON SLOPES STEEPER THAN 2:1.
3. JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 6 INCHES AT POST.
4. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO FENCE.
5. REMOVE SEDIMENT WHEN IT REACHES 1/3 FENCE HEIGHT.
6. LOCATION OF FENCING SHALL BE AS SHOWN ON APPROVED PLANS OR AS DIRECTED BY THE CITY.

SILT FENCE

NOT TO SCALE



NOTES

1. PAD SHALL BE REMOVED AND REPLACED WHEN SOIL IS EVIDENT ON THE SURFACE OF THE PAD OR AS DIRECTED BY THE CITY CLEARING AND GRADING INSPECTOR.
2. PAD SHALL BE INSTALLED IN PLANTING STRIP AS APPROPRIATE.
3. PAD THICKNESS SHALL BE INCREASED IF SOIL CONDITIONS DICTATE AND/OR PER THE DIRECTION OF THE CITY CLEARING AND GRADING INSPECTOR.
4. CONTRACTOR RESPONSIBLE FOR CURB & GUTTER CONDITION.

CONSTRUCTION ENTRANCE

NOT TO SCALE

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

BLUELINE
25 CENTRAL WAY, SUITE 400,
KIRKLAND, WA 98033
P: 425.216.4051 F: 425.216.4052
WWW.THEBLUELINEGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: TODD A OBERG, PE
PROJECT ENGINEER: YANNICK METS, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 6/1/2022

NO	DATE	BY	REVISIONS

TESC NOTES & DETAILS
9017 SE 60TH ST
SITE PLAN
CITY OF MERCER ISLAND WASHINGTON

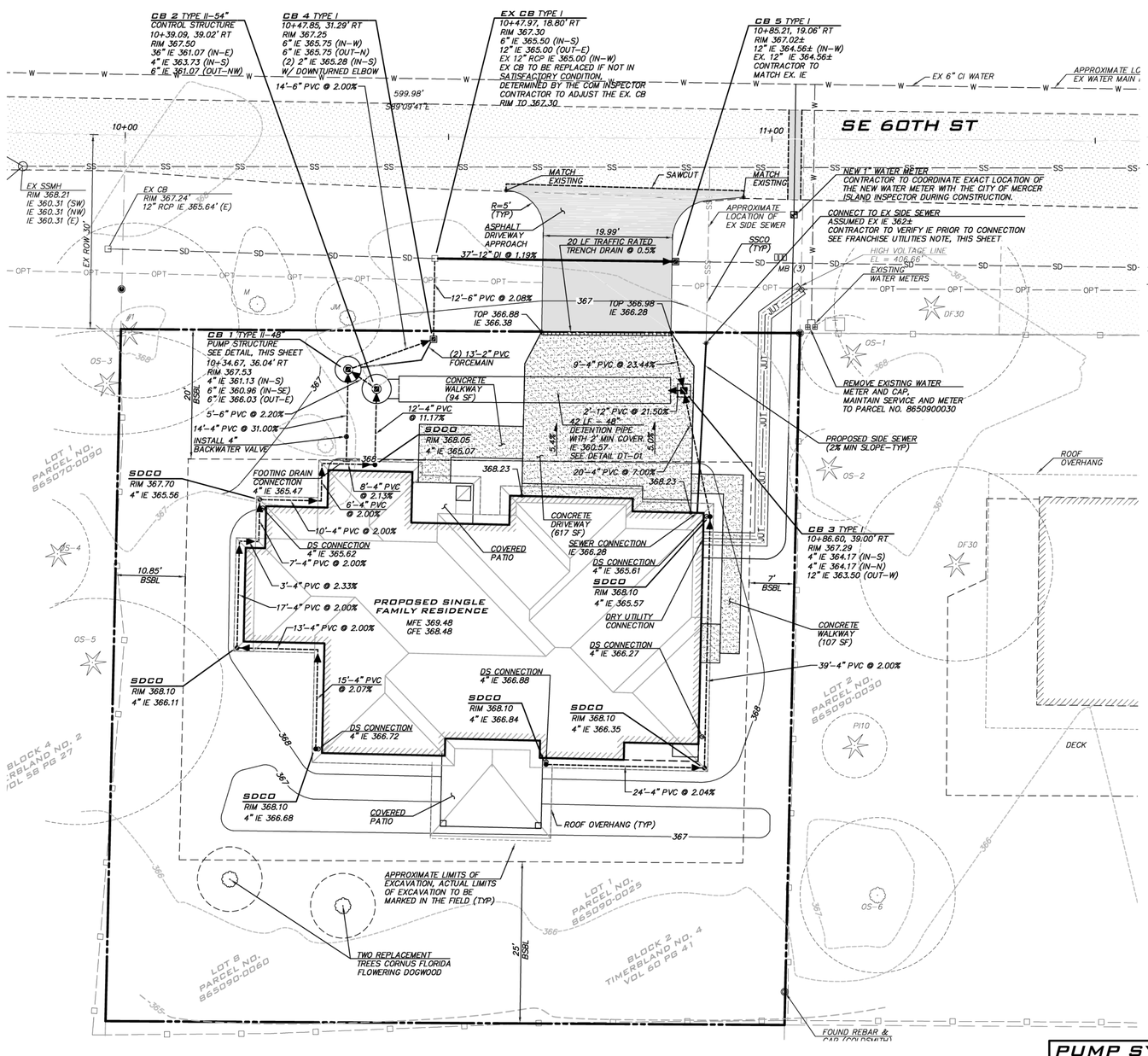
TODD A OBERG — STATE OF WASHINGTON — 37408 — REGISTERED PROFESSIONAL ENGINEER

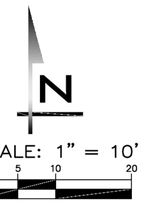
6/1/22

JOB NUMBER: 21-377
SHEET NAME: TP-02
SHT 3 OF 5

22x34
Jun 01, 2022 - 9:29am - User aromazani
E:\Projects\21377\Dwg\Site Plan\21377TP.dwg

SW 1/4, SEC 19, TWP 24N, RGE 5E, W.M.

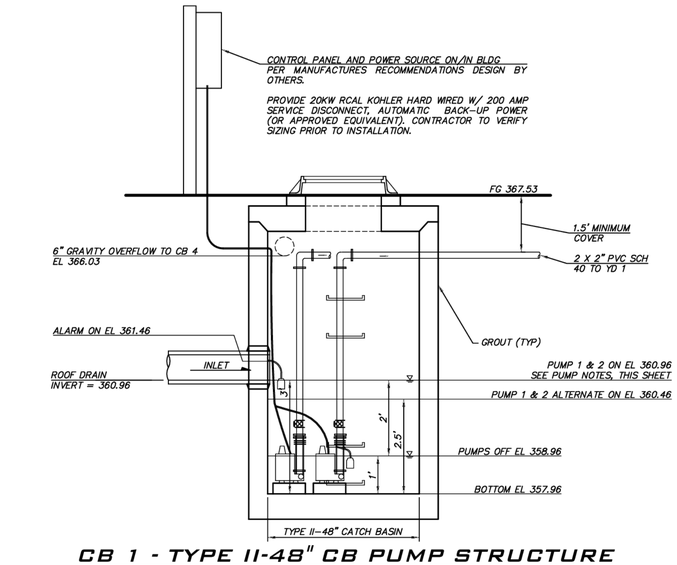




PUMP SPECIFICATIONS & NOTES

1. THIS PUMP STATION DETAIL IS FOR SCHEMATIC PURPOSES ONLY AND TO OUTLINE THE BASIC PERFORMANCE REQUIREMENTS FOR THE SYSTEM. THE CONTRACTOR SHALL FOLLOW THE INSTALLATION REQUIREMENTS SPECIFIED BY THE PUMP MANUFACTURER. A REPRESENTATIVE OF THE PUMP MANUFACTURER SHALL BE ON-SITE TO INSPECT THE INSTALLATION OF THE SYSTEM.

2. DUPLEX SUBMERSIBLE PUMP STATION REQUIREMENTS:
   - SUGGESTED PUMP: ZOELLER MODEL 264 SEWAGE PUMP
   - TOTAL HEAD = 6.6 FT
   - FLOW= 26.3 GPM / PUMP (0.059 CFS / PUMP)
   - PROVIDE ADJUSTABLE FLOW RESTRICTION VALVES ON DISCHARGE LINE
   - PUMPS SHALL BE RATED CONTINUOUS DUTY, SINGLE PHASED, 115V
   - 2" NPT DISCHARGE LINE
   - INSTALL PUMPS ON DISCONNECT RAIL SYSTEM
   - PROVIDE ON, OFF AND ALARM FLOAT SWITCHES
   - DUPLEX PUMP SYSTEM CONTROL PANEL TO BE INSTALLED BY QUALIFIED ELECTRICIAN PER NATIONAL ELECTRICAL CODE
   - SECURE/LOCKABLE OUTDOOR DUPLEX CONTROL PANEL WITH BATTERY BACKUP ALARM
   - BACKUP POWER SHALL BE ON SITE NATURAL GAS POWERED GENERATOR OR APPROVED EQUIVALENT.



CB 1 - TYPE II-48" CB PUMP STRUCTURE

SCALE: 1" = 2'

PUMP SYSTEM NOTE

1. THE PRIVATE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS FOR INJURIES AND DAMAGE DUE TO THE OPERATION OR NON-OPERATION OF THE PUMP SYSTEM.
2. PUMP 1 & 2 TURN ON ALTERNATIVELY WHEN WATER REACHES EL 360.46.
3. BOTH PUMPS TURN ON SIMULTANEOUSLY WHEN WATER REACHES EL 360.96.

AMENDED SOILS

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP T5.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

WATER NOTES

1. CUT AND CAP SERVICE PER CURRENT PUBLIC WORKS SPECIFICATIONS AND INSTALL NEW SERVICE. MAINTAIN THE SERVICE TO THE PARCEL NO. 8650900030.
2. INSTALL NEW WATER METER PER MERCER ISLAND SDT DTL W-13.

SANITARY SEWER NOTES

1. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN ON SE 60TH ST IS REQUIRED PRIOR TO ANY WORK RELATED TO THE SIDE SEWER. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED.
2. IF RE-USE OF SANITARY SEWER LINE WAS APPROVED BY THE CITY OF MERCER ISLAND INSPECTOR, THE LINE SHALL BE CLEANED BEFORE RE-USE.
3. PROPOSED SEWER SERVICE LINE TO BE INSTALLED PER CITY OF MERCER ISLAND STANDARD DETAIL S-18.
4. SANITARY SEWER CLEANOUT TO BE INSTALLED PER CITY OF MERCER ISLAND STANDARD DETAIL S-19.
5. REFER TO CITY OF MERCER ISLAND STANDARD DETAIL S-22 FOR DISCONNECTION AND RECONNECTION NOTES AND SPECIFICATIONS

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

RIGHT-OF-WAY STORM

EXISTING STORM RIMS AND IE'S HAVE BEEN UPDATED PER CONTRACTOR'S FIELD MEASUREMENTS.

FRANCHISE UTILITIES NOTE

FRANCHISE UTILITIES SHOWN ON THIS PLAN ARE NOT REVIEWED OR PERMITTED BY THE CITY OF MERCER ISLAND.

BLUELINE
25 CENTRAL WAY, SUITE 400,
KIRKLAND, WA 98033
P: 425.216.4051 F: 425.216.4052
WWW.THEBLUELINEGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: TODD A OBERG, PE
PROJECT ENGINEER: YANNICK METS, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 6/1/2022

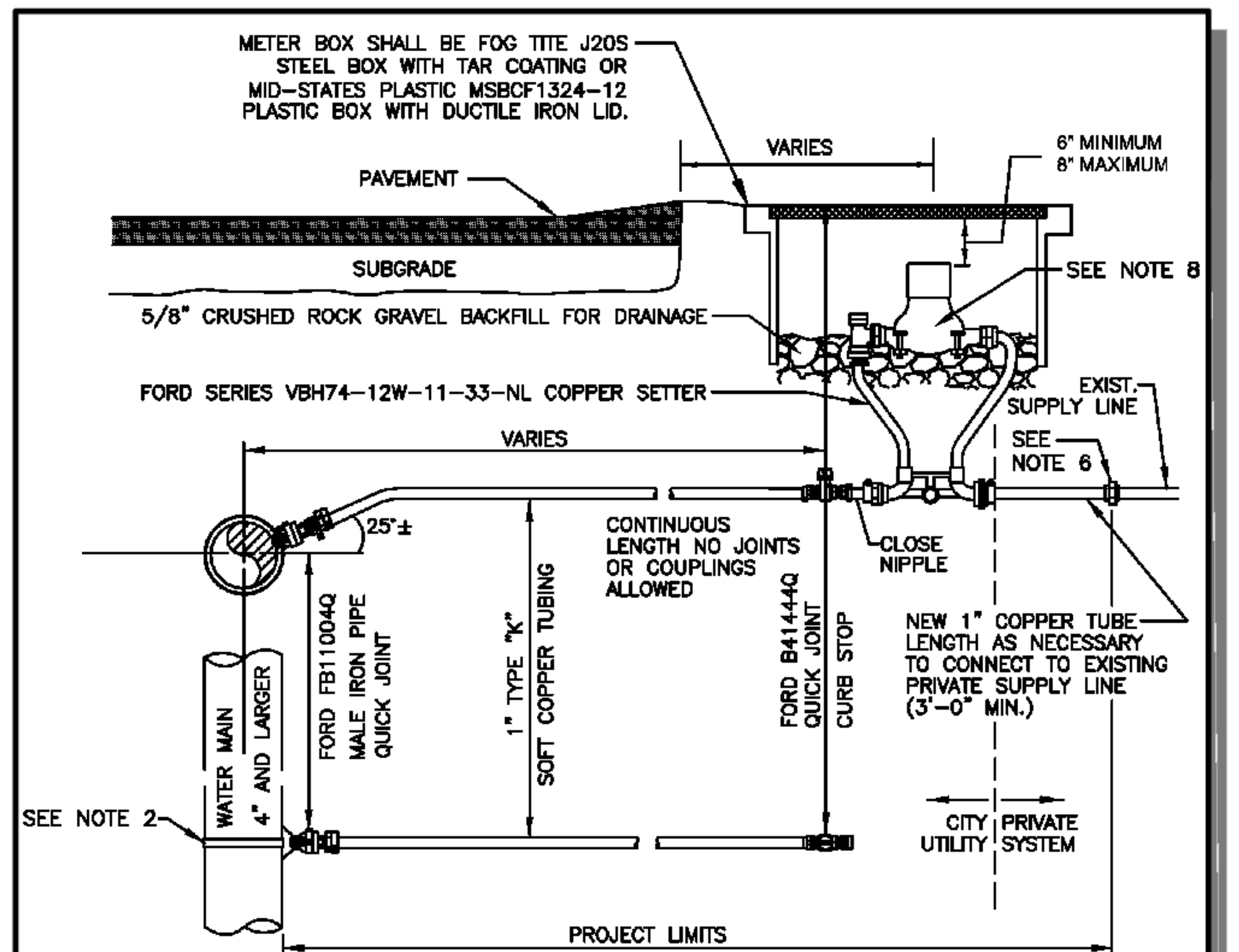
NO	DATE	BY	REVISIONS

SITE PLAN
9017 SE 60TH ST
SITE PLAN
CITY OF MERCER ISLAND WASHINGTON

TODD A. OBERG — STATE OF WASHINGTON — 37408 — REGISTERED PROFESSIONAL ENGINEER

6/1/22

JOB NUMBER: 21-377
SHEET NAME: SP-01
SHT 4 OF 5



NOTES

1. WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014.
2. ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 202NS, OR APPROVED EQUAL.
3. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18". MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24", ALL HORIZONALLY STAGGERED.
4. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
5. UPON CITY ENGINEER'S APPROVAL, METER BOXES ARE ALLOWED TO BE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK.
6. WHEN CONNECTING TO EXISTING PRIVATE SUPPLY LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING PRIVATE SUPPLY LINE DIAMETER.
7. SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
8. WATER METER SUPPLIED BY CITY.
9. ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
10. NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

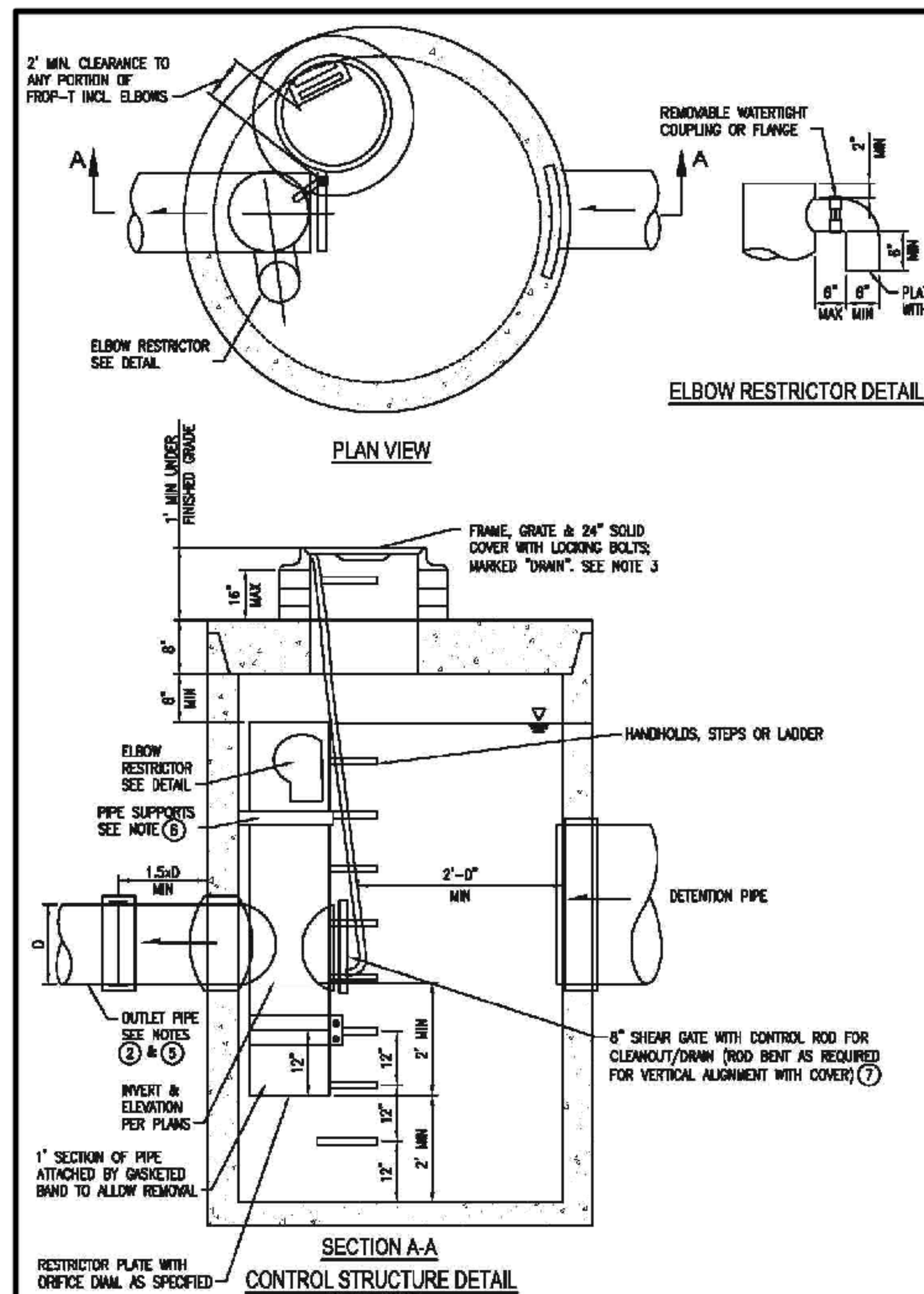
CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
1" WATER METER INSTALLATION

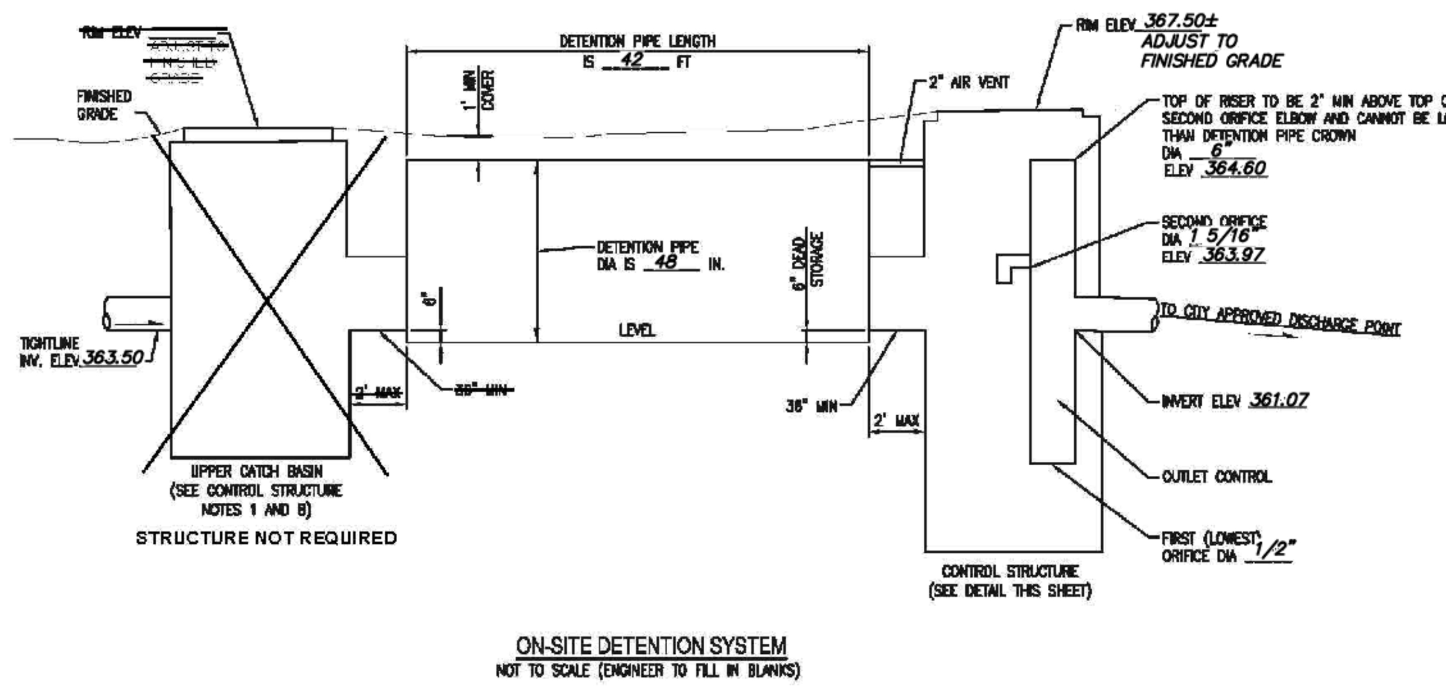
02-05-2021	NO SCALE	W-13

REV DATE						APPROVED

ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS AREA OF 9,500 SF OR LESS)

OWNER: WILLIAM E BUCHAN	ADDRESS: 9017 SE 60TH ST, MERCER ISLAND, WA 98040	PREPARED BY: THE BLUELINE GROUP, LLC
PERMIT #: 2112-184		PHONE: (425) 216-4051
		DATE: 5/26/2022
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 3,995 SF	DETENTION PIPE DIA (INCH): 48"	DETENTION PIPE LENGTH (FT): 42 LF
SOIL TYPE: TILL (SOIL GROUP C)	PIPE MATERIAL: CMP	ORIFICE #1 DIA 1/2 INCH, ELEV 361.07; ORIFICE #2 DIA 1 5/16 INCH, ELEV 363.97



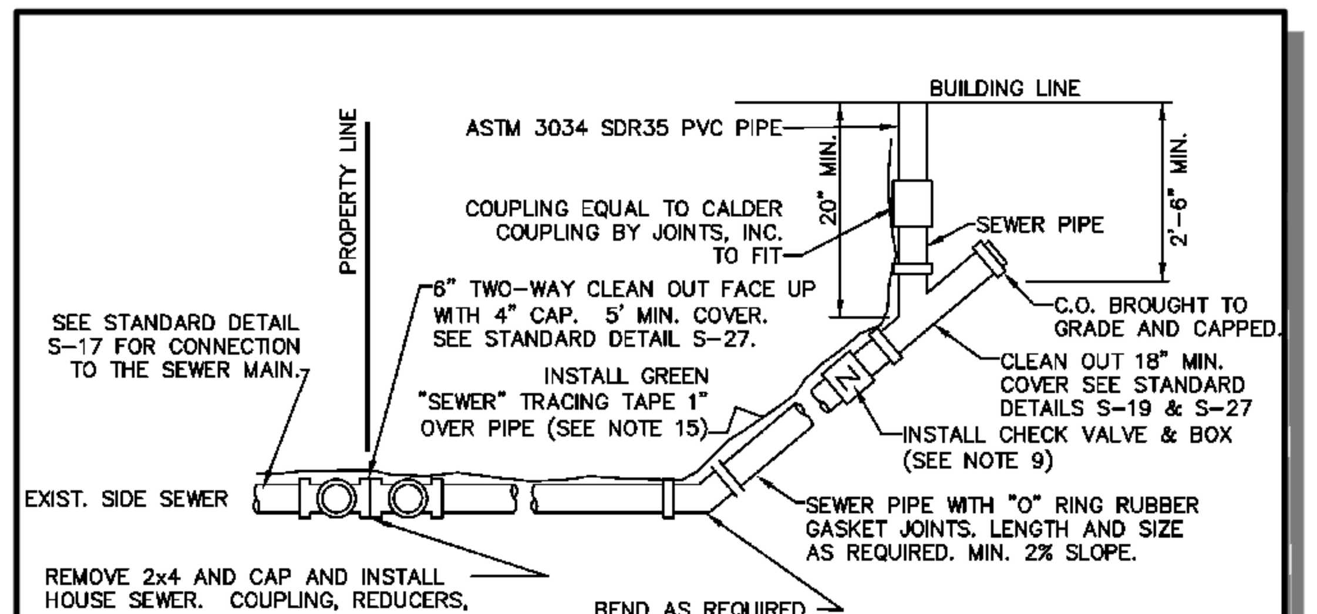


CONTROL STRUCTURE NOTES:

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
   A. CLEANOUT GATE IS VISIBLE FROM TOP;
   B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
   C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.



BUILDING CONNECTION

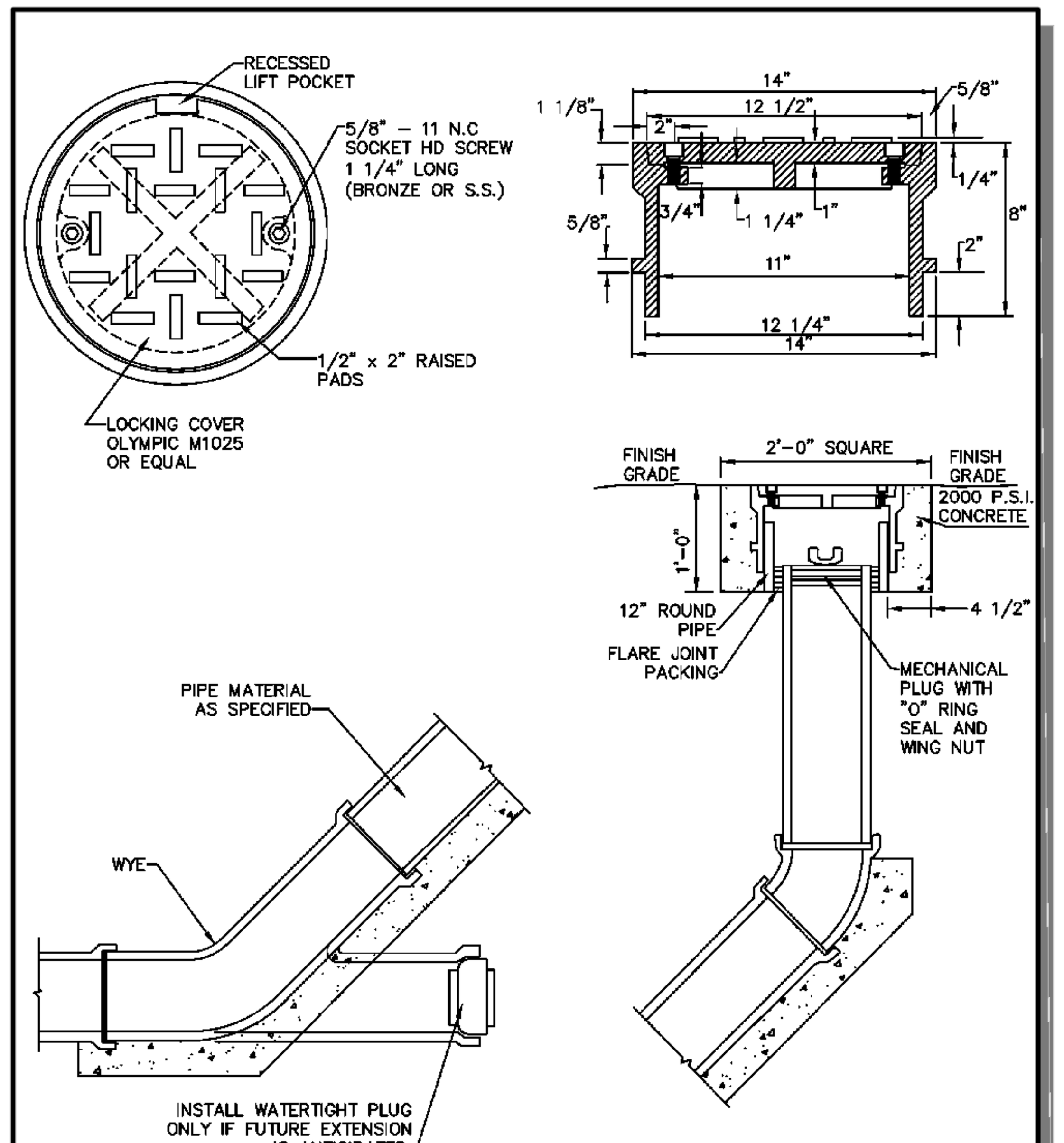
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
4. 18" MINIMUM COVERAGE OVER PIPE.
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 4" SEWER PIPE MINIMUM SIZE ON PROPERTY. 2% MINIMUM GRADE.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER ORDINANCES.
8. ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
9. BACK WATER VALVE (CHECK VALVE) IS REQUIRED:
   A. IF CONNECTED TO A SHARED SIDE SEWER.
   B. IF CONNECTION AT HOUSE IS LOWER THAN BOTH UPSTREAM AND DOWNSTREAM MANHOLE.
   C. SEE S-23 & S-24 FOR LAKE LINE REQUIREMENTS.
10. AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER & ALL BENDS, C.O. ETC., IN RELATION TO THE HOUSE IS REQUIRED AFTER INSPECTION & INSTALLATION. SEE STANDARD DETAIL S-38 FOR A TYPICAL "AS BUILT".
11. THE MINIMUM PIPE SIZE FOR SIDE SEWERS SHALL BE:
    6" – WITHIN THE PUBLIC RIGHT-OF-WAY.
    4" – SINGLE FAMILY RESIDENCES.
    6" – 2 TO 6 SINGLE FAMILY RESIDENCES.
    6" – BUILDINGS OTHER THAN SINGLE FAMILY RESIDENCES.
12. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
HOUSE SEWER CONNECTION

6-5-2009	NO SCALE	S-18

REV DATE						APPROVED



NOTES

1. SEE S-27 FOR INSTALLATION DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
CLEAN OUT DETAIL

6-5-2009	NO SCALE	S-19

REV DATE						APPROVED

DISCONNECTION

WHEN DEMOLISHING AN EXISTING BUILDING, THE BUILDING SIDE SEWER SHALL BE DISCONNECTED PRIOR TO REMOVAL OF BUILDING FOUNDATIONS. THE CONTRACTOR SHALL INSTALL A MECHANICAL PLUG WITH NON-SHRINK GROUT AT THE END OF THE SIDE SEWER TO REMAIN IN PLACE. DISCONNECTION'S SHALL BE PERFORMED IN THE PRESENCE OF THE CITY'S UTILITY INSPECTOR. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT DRAWING DEPICTING THE DISCONNECTED SIDE SEWER UPON COMPLETION OF THE WORK.

RECONNECTION

WHEN RECONNECTING TO AN EXISTING SIDE SEWER, THE POINT OF RECONNECTION WILL BE DETERMINED BASED ON THE MAGNITUDE OF THE CONSTRUCTION ON THE PROPERTY.

1. PARTIAL INTERIOR REMODEL AND/OR BUILDING ADDITION – NO SIDE SEWER REPLACEMENT REQUIRED UNLESS A KNOWN PROBLEM EXISTS IN THE SIDE SEWER.
2. COMPLETE INTERIOR REMODEL OF RESIDENCE – ASSESS CONDITION OF EXISTING SIDE SEWER THROUGH VIDEO INSPECTION FROM BUILDING TO PROPERTY LINE AND REPLACE AS NEEDED. IF EXISTING SIDE SEWER IS ASBESTOS CEMENT OR CONCRETE, SIDE SEWER SHALL BE REPLACED FROM BUILDING TO PROPERTY LINE, UNLESS THE APPLICANT PROVES, TO THE SATISFACTION OF THE CITY ENGINEER, THAT THE SIDE SEWER IS WATER TIGHT AND IN SOUND CONDITION.*
3. COMPLETE INTERIOR REMODEL AND BUILDING ADDITION – NEW SIDE SEWER FROM BUILDING TO PROPERTY LINE.*
4. CONSTRUCTION OF A NEW SINGLE FAMILY RESIDENCE – NEW SIDE SEWER FROM BUILDING TO PROPERTY LINE.*
5. BACK WATER VALVE INSTALLATION PER CITY ENGINEER, IF SCENARIO 2, 3 OR 4 IS DIRECTLY ATTACHED TO THE LAKE LINE.

VIDEO INSPECTION OF THE EXISTING SIDE SEWER, BETWEEN THE PROPERTY LINE AND THE SEWER MAIN SHALL BE PERFORMED FOR SCENARIOS NUMBER 3 AND 4.

PROVIDE A COPY OF THE VIDEO DOCUMENTATION TO THE CITY ENGINEER.

REPLACEMENT OR REPAIR OF THAT PORTION OF THE SIDE SEWER BETWEEN THE PROPERTY LINE AND THE SEWER MAIN, WILL BE DETERMINED BY THE CITY ENGINEER, BASED ON THE VIDEO INSPECTION.

*IF THE EXISTING SIDE SEWER IS PVC AND IS LESS THAN TEN YEARS OLD, THE SIDE SEWER DOES NOT HAVE TO BE REPLACED IF A VIDEO INSPECTION AND HYDROSTATIC PRESSURE TEST CONFIRMS THAT THE SIDE SEWER IS IN PROPER WORKING CONDITION. THESE TESTS SHALL BE PERFORMED AFTER ALL HEAVY EQUIPMENT THAT COULD DAMAGE THE SIDE SEWER IS OFF OF THE SITE.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
RESIDENTIAL SIDE SEWER DISCONNECTION & RECONNECTION

6-5-2009	NO SCALE	S-22

REV DATE						APPROVED

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

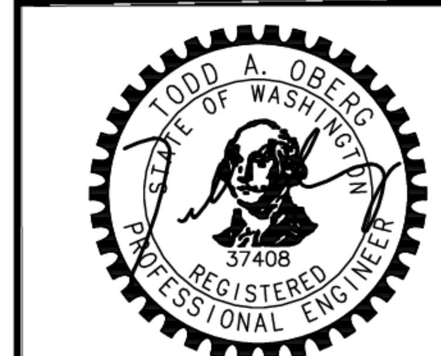
BLUELINE
25 CENTRAL WAY, SUITE 400, KIRKLAND, WA 98033
P: 425.216.4051 F: 425.216.4052
WWW.THEBLUELINEGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: TODD A OBERG, PE
PROJECT ENGINEER: YANNICK METS, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 6/1/2022

REVISIONS

NO	DATE	BY	REVISIONS

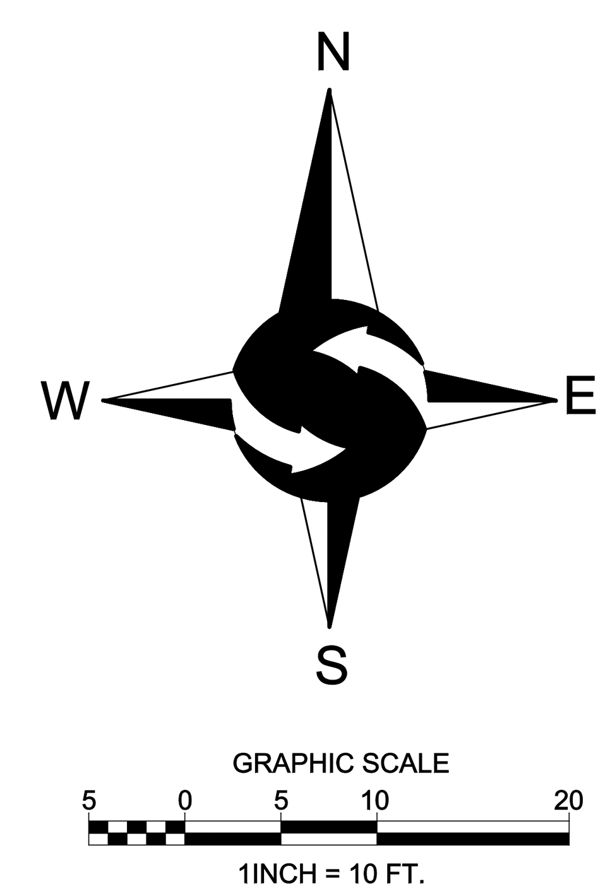
DETAILS
9017 SE 60TH ST
SITE PLAN
CITY OF MERCER ISLAND WASHINGTON



6/1/22

JOB NUMBER: 21-377
SHEET NAME: DT-01
SHT 5 OF 5

22x34
Jun 01, 2022 – 9:30am – User oromeson!
E:\Projects\21377\Dwg\Site Plan\21377DT1.dwg



LEGEND

	FOUND MONUMENT AS DESCRIBED	— OHE —	HIGH VOLTAGE LINE
	FOUND REBAR AS DESCRIBED	— OHU —	OVERHEAD UTILITIES
	SET 4" X 4" WOODEN HUB	— X —	CHAINLINK FENCE
	SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP		WOOD FENCE
	POWER METER		ASPHALT SURFACE
	UTILITY POLE		CONCRETE SURFACE
	GAS METER		GRAVEL SURFACE
	CATCH BASIN		BRICK SURFACE
	YARD DRAIN		FLAGSTONE SURFACE
	SANITARY SEWER MANHOLE	CH	CHERRY
	WATER VALVE	DF	DOUGLAS FIR
	FIRE HYDRANT	DS	DECIDUOUS
	WATER METER	PI	PINE
	TELEPHONE PEDESTAL		* INDICATES MULTI-TRUNK
	MAILBOX		

LEGAL DESCRIPTION

LOT 1, BLOCK 2, TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 60 OF PLATS, PAGE(S) 41, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

THE PLAT OF TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 60 OF PLATS, PAGE(S) 41, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	9017 SE 60 LLC 7675 NE 14TH STREET MEDINA, WA 98039
TAX PARCEL NUMBER:	865090-0025
PROJECT ADDRESS:	9017 SE 60TH STREET MERCER ISLAND, WA 98040
ZONING:	R-9.6
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	11,251 S.F. (0.258 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN SEPTEMBER 2020 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

VERTICAL DATUM & CONTOUR INTERVAL

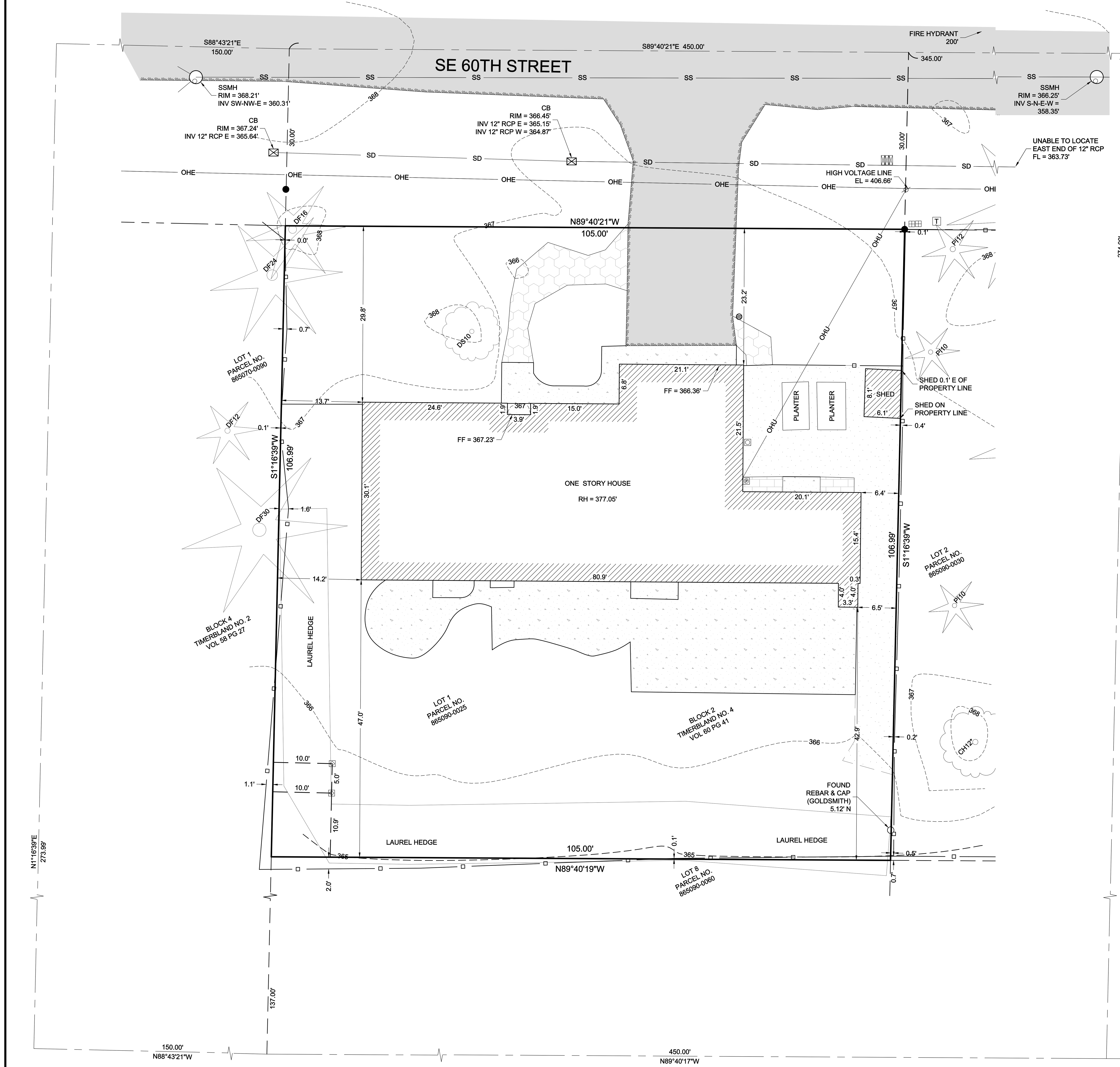
DATUM

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A MONUMENT IN CASE AT THE EAST END OF SE 60TH STREET, ± 150 FEET EAST OF THE INTERSECTION OF 92ND AVENUE SE.

POINT ID NO. MI-1063;
ELEVATION: 334.534 FEET NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



VICINITY MAP
NTS

SE 1/4, SW 1/4, SEC 19, TWP 24N, RNG 5E, W.M.

Site Surveying, Inc.

21923 NE 11th Street Sammamish, WA 98074
Phone: 425.298.4412
www.sitesurveymapping.com

THOMAS N. WOLDENDORP, STATE OF WASHINGTON, PROFESSIONAL LAND SURVEYOR

DATE	REVISION	DRN

TOPOGRAPHIC SURVEY
9017 SE 60 LLC
9017 SE 60TH STREET
MERCER ISLAND, WA 98040

PROJECT NO. 20-365

DRAWN BY:	MTS
CHECKED BY:	TNW
DATE:	9/4/2020