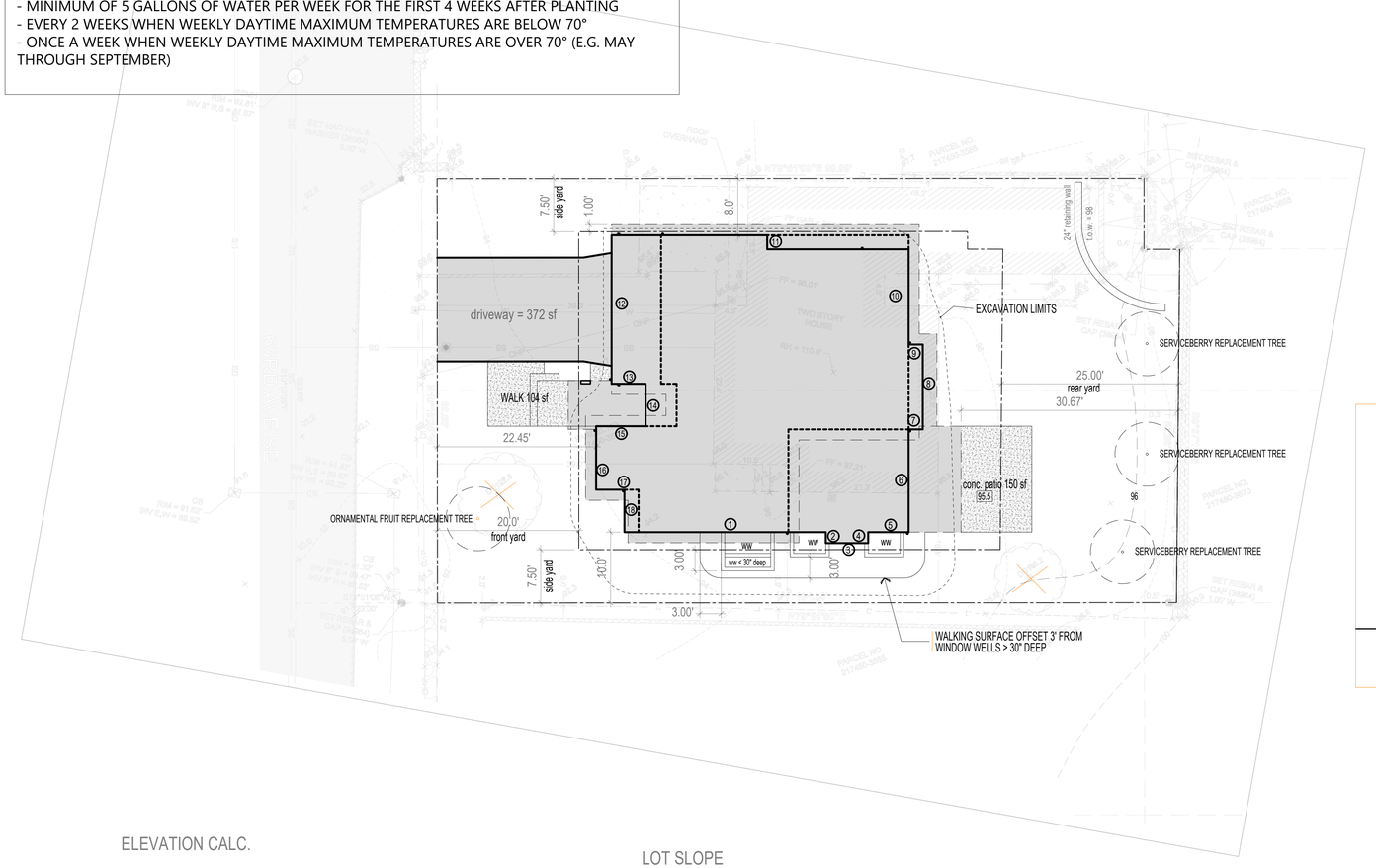
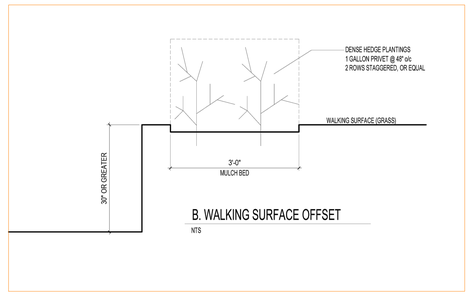
TREE PLANTING PLAN

1. NEW TREES WILL BE AT LEAST 6 FEET TALL FOR CONIFERS AND 1.5 INCHES IN CALIPER FOR DECIDUOUS SPECIES
2. NEW TREES WILL BE PLANTED BETWEEN OCTOBER AND MARCH
3. MINIMUM SPACING BETWEEN TREES AND DISTANCES FROM BUILDINGS OR INFRASTRUCTURE WILL BE 10 FEET
4. EACH NEW TREE WILL BE WATERED FOR THE FIRST 2 YEARS ON THE FOLLOWING SCHEDULE:
- MINIMUM OF 5 GALLONS OF WATER PER WEEK FOR THE FIRST 4 WEEKS AFTER PLANTING
- EVERY 2 WEEKS WHEN WEEKLY DAYTIME MAXIMUM TEMPERATURES ARE BELOW 70°
- ONCE A WEEK WHEN WEEKLY DAYTIME MAXIMUM TEMPERATURES ARE OVER 70° (E.G. MAY THROUGH SEPTEMBER)

FIRE PROTECTION REQUIREMENTS

NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.





ELEVATION CALC.

	EL @ MIDPOINT	segment (ft)	wtd sgmnt
1	95.00	28.46	2703.70
2	95.00	1.54	146.30
3	95.00	6	570.00
4	95.00	1.54	146.30
5	**95.00**	5.73	544.35
6	95.50	14.54	1388.57
7	**95.00**	2	190.00
8	**95.00**	12	1140.00
9	**95.00**	2	190.00
10	**95.00**	15.46	1468.70
11	**95.00**	42	3990.00
12	95.00	21	1995.00
13	95.00	4.81	456.95
14	95.00	6	570.00
15	95.00	7	665.00
16	95.00	9	855.00
17	95.00	4	380.00
18	95.00	6	570.00
		189.08	17969.87

AVG. EL = 95.03845
BOLD = NEW EL LOWER THAN EXIST
all others exist = final

LOT SLOPE

HIGH POINT = 98.1'
LOW POINT = 92'
LOT SLOPE = 6.1'/104.5' = 5.84%
LOT COVERAGE = 40%
6237sf x .4 = 2494.8 sf total lot coverage allowed

F.A.R. CALCULATION

Main Floor FA= 1695 sf (inc. gar)
Basement FA = 1010 sf (95.3% below grade)
Upper Floor FA = 1311.5 sf
4016.5 sf

excepted FA = (962.2 sf)
stairs = (124.3 sf x 2 = 248.6 sf)

TOTAL chargeable FA = 2805.7 sf
Lot is < 7500 sf therefor FAR = lesser of 3000 sf or, 45% of lot area
.45 x 6237 sf = 2806.7 sf, FAR limit = 2806.7 sf

LOT COVERAGE (SHADED AREA)

House Roof to eaves (shaded) = 2113 sf
driveway (shaded) = 372 sf
TOTAL = 2485 sf
6237sf x .4 = 2494.8 sf total allowed

HARDSCAPE

patio = 150 sf
walks = 104 sf
window wells = 73.5 sf
retaining wall = 25 sf
TOTAL = 352.5 sf

allowable = 6237 sf x .09 = 561.33 sf

A. SITE PLAN

1/10" = 1'-0"

N

xxx = SPOT ELEVATION, FINAL
= EAVE/ROOF LINE
= EXTENT OF LIVING AREA @ upper floor
= BUILDING FOOTPRINT (FOUNDATION EXTENTS)
SHADED AREA = BLDG EXTENTS TO EAVE
EXISTING HOUSE, DRIVEWAY AND ALL HARDSCAPE ON PROPERTY TO BE REMOVED
= EXISTING TOPOGRAPHY
① = WALL SEGMENT TAG FOR HEIGHT CALCULATION
SEE SHEET 03 FOR BASEMENT EXCEPTION CALC.
ww = WINDOW WELL

Code Data

2021 International Building Code (IBC) - struct.
2021 International Residential Code (IRC)
2021 International Mechanical Code (IMC)
2021 International Fuel Gas Code (IFGC)
2021 Uniform Plumbing Code (UPC)
2021 International Fire Code (IFC)
2021 International Existing Building Code
2021 International Swimming Pool and Spa Code
2921 Washington State Energy Code (WCEC)
ICC/ANSI A117.1-09, Accessible and Usable Buildings and Facilities, with statewide and City amendments

All Japanese knotweed (Polygonum cuspidatum) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, shall be removed from the property.

development proposals for a new single-family home shall remove japanese knotweed (polygonum cuspidatum) and regulated class a, regulated class b, and regulated class c weeds identified on the king county noxious weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(f)(3)(a). new landscaping associated with new single-family home shall not incorporate any weeds identified on the king county noxious weed list, as amended. provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

Civil Engineer

Duffy Ellis
CES Civil Engineering
102 NW Canal St Seattle WA 98107
206.930.0342

Structural Engineer

Javid Abdi, PE, SE Atlas Consulting Structural Engineers
6810 NE 149th St Kenmore WA 98028
Phone: (206) 427-7233

Contractor

Artoush Construction and Remodeling
13101 NE 50th ST Bellevue WA
(425) - 890 - 9995

Project Description

Demolish existing and build new single family residence.

Parcel Number/Legal

Parcel # = 2174503575
Legal Description:

EAST SEATTLE ADD LOTS 5 & 6 TGW POR LOTS 24 & 25 BLOCK 21 SD ADD AS DEC IN KC COURT CASE #23-2-02297-1 SEA REC #20240509000143

ZONING = R-9.6
lot size = 6237 sf

Owner

Farhad Imani
8215 Juanita Dr. Kirkland WA
206-910-7959

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CONTENTS

Site Plan

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3.31.25

01

NOTES

SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP
HD = HEAT DETECTOR, HARDWIRE w/ BATTERY BACK-UP

DOORS ARE 3-0 x 7'-10 (r.o. = 3'-2" x 8-0") unless otherwise indicated
= FAN, 50 CFM UNLESS OTHERWISE INDICATED
FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS
ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING
(E) =EGRESS WINDOWS

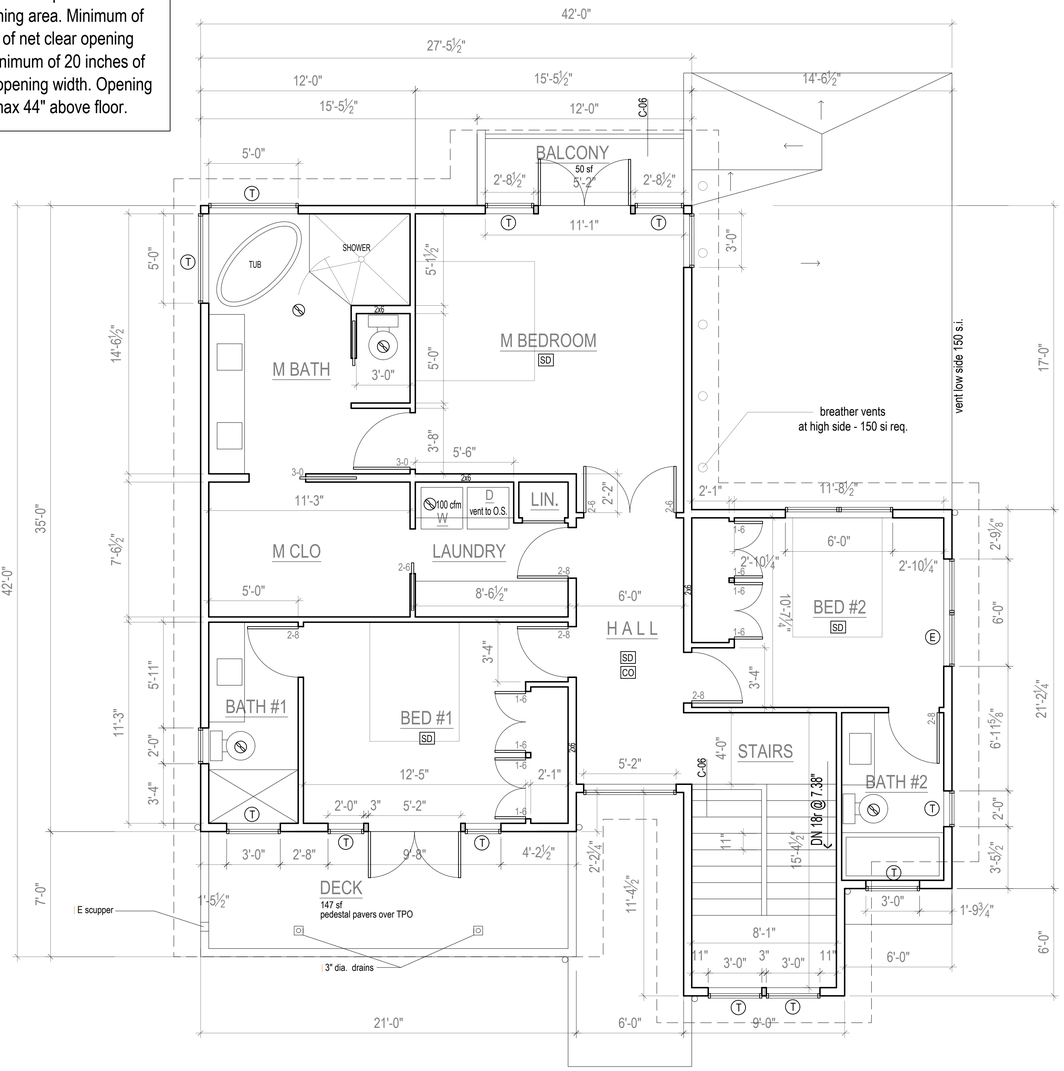
Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.

ALL WALLS FULL HIEGHT UNLESS OTHERWISE INDICATED
(T) =TEMPER/SAFETY GLAZE WINDOWS
ALL GAS F.P. TO BE APPROVED DIRECT VENT

Fire blocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space.

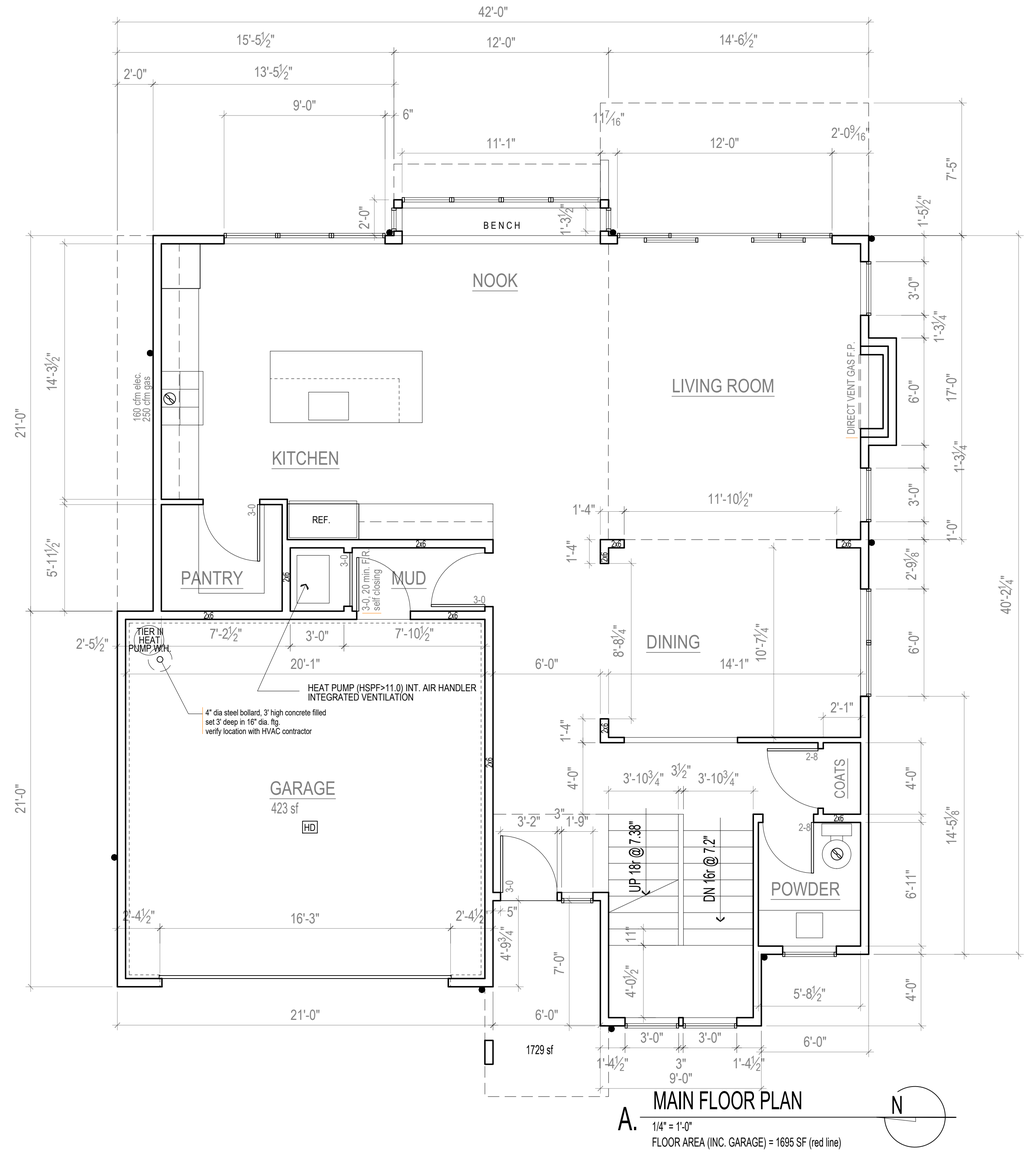
EGRESS WINDOW REQUIREMENTS

Minimum of 5.7 square feet of net clear opening area. Minimum of 24 inches of net clear opening height. Minimum of 20 inches of net clear opening width. Opening must be max 44" above floor.



Membrane used as a walking surface must be IBC ES approved or be tested to the AC39 standard

B. UPPER FLOOR PLAN
1/4" = 1'-0"
Floor Area =1311.5 sf (red line)
N



A. MAIN FLOOR PLAN
1/4" = 1'-0"
FLOOR AREA (INC. GARAGE) = 1695 SF (red line)
N

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Floor Plans

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3.31.25

02

NOTES

SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP
HD = HEAT DETECTOR, HARDWIRE w/ BATTERY BACK-UP

DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") unless otherwise indicated

= FAN, 50 CFM UNLESS OTHERWISE INDICATED

FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS

ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING

(E) =EGRESS WINDOWS

Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.

ALL WALLS FULL HIEGHT UNLESS OTHERWISE INDICATED

(T) =TEMPER/SAFETY GLAZE WINDOWS

ALL GAS F.P. TO BE APPROVED DIRECT VENT

EGRESS WINDOW REQUIREMENTS

Minimum of 5.7 square feet of net clear opening area. Minimum of 24 inches of net clear opening height. Minimum of 20 inches of net clear opening width. Opening must be max 44" above floor.

WINDOW WELL NOTES

Window Well Dimensions:
Minimum horizontal area: 9 square feet
Minimum horizontal projection and width: 36 inches (window must fully open)
Emergency Escape and Rescue Opening (Window):
Minimum net clear opening: 5.0 square feet
Minimum net clear height: 24 inches
Minimum net clear width: 20 inches
Maximum sill height from floor: 44 inches

Ladder Requirements (if well depth exceeds 44 inches):
Permanently affixed ladder or steps
Minimum interior width: 12 inches
Minimum projection from wall: 3 inches
Maximum vertical spacing between rungs: 18 inches
Ladder may encroach up to 6 inches into required well dimensions

Drainage:
Connect to building's foundation drainage system or use approved alternative method

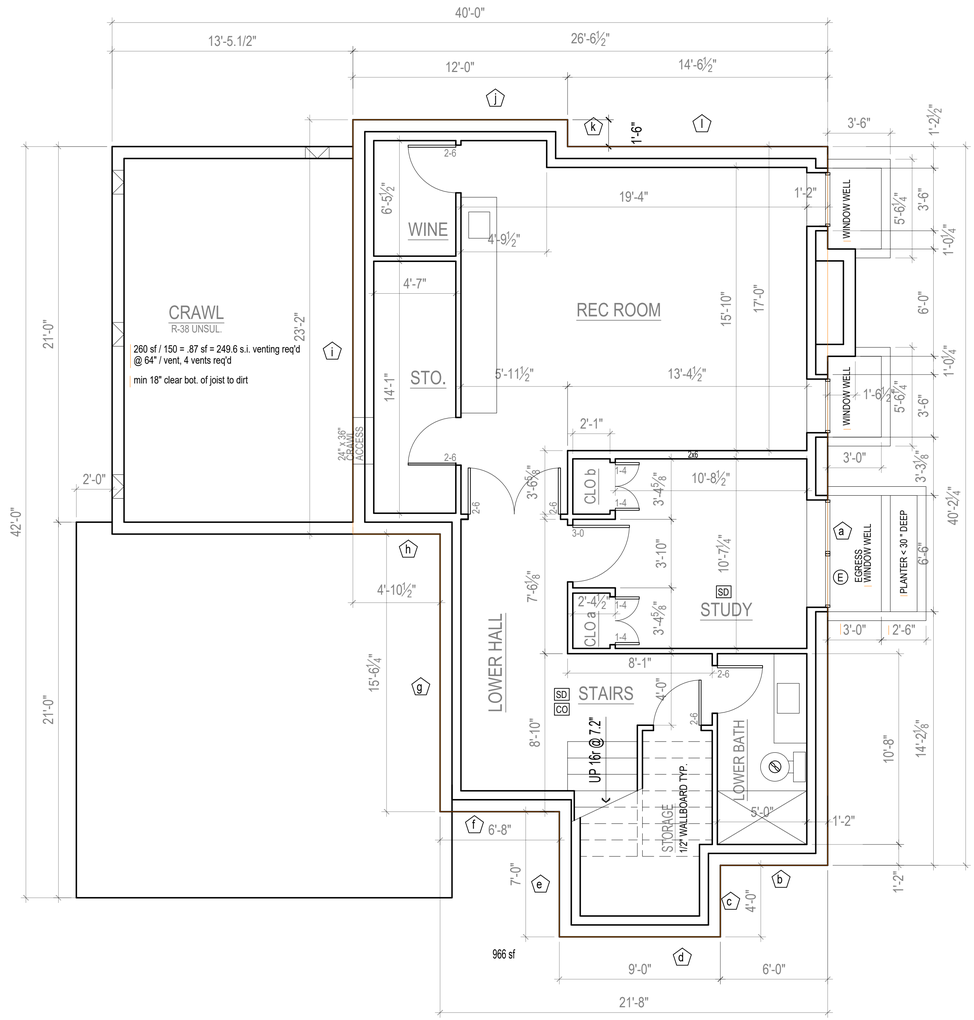
BASEMENT EXCEPTION CALC.

segment	length	beginning elev.	end elev.	begin cov	end cover	avg cover	%cover	wtd
a	40.19					341.615	83.0%	283.54
b	6					51	100.0%	51.00
c	4					34	100.0%	34.00
d	9					76.5	100.0%	76.50
e	7					59.5	100.0%	59.50
f	6.67					56.695	100.0%	56.70
g	15.52					131.92	100.0%	131.92
h	4.88					41.48	100.0%	41.48
i	23.17					196.945	100.0%	196.95
j	12					102	100.0%	102.00
k	1.5					12.75	100.0%	12.75
l	14.54					123.59	100.0%	123.59
perim=	144.47					avg.	95.3%	1169.92

raw FAR 1010

full cover = 8.5 ft (fin. clg.)

excepted area = 962.2349



B. BASEMENT FLOOR PLAN

1/4" = 1'-0"

N

FLOOR AREA = 1010 SF (red line)

(x) = BASEMENT WALL SEGMENTS FOR BASEMENT EXCEPTION CALC.

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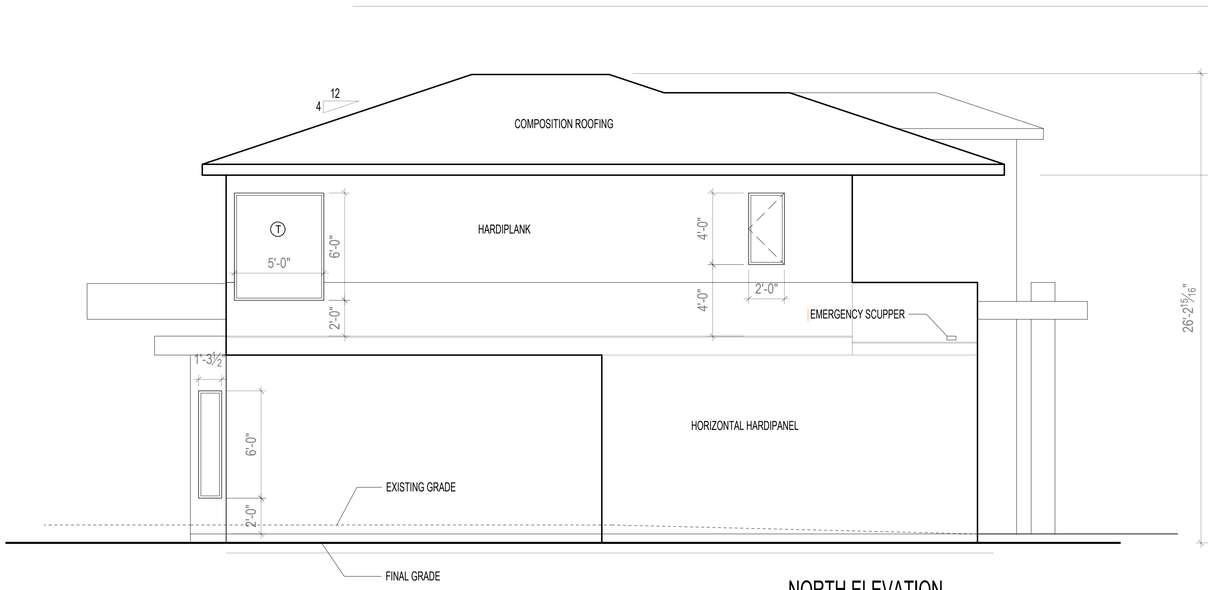
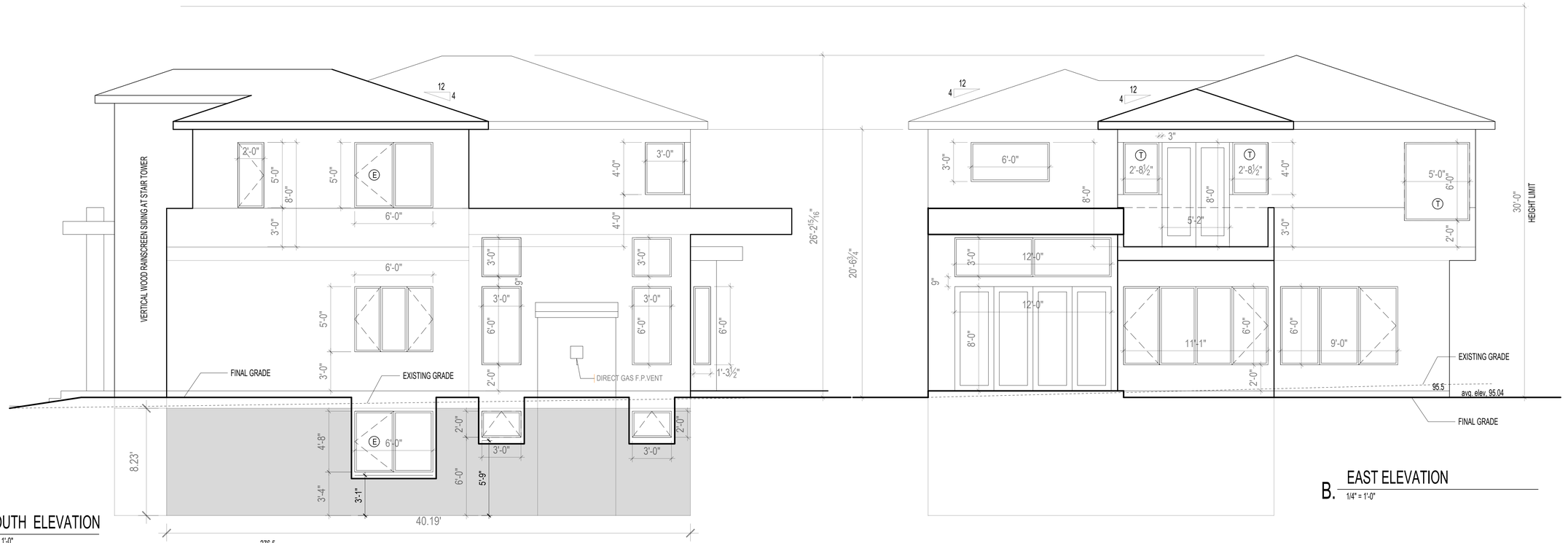


C. NORTH ELEVATION
1/4" = 1'-0"

ALL WINDOW DIMENSIONS ARE ROUGH OPENING

A. WEST ELEVATION
1/4" = 1'-0"



D. SOUTH ELEVATION
1/4" = 1'-0"

B. EAST ELEVATION
1/4" = 1'-0"

276.5 / 330.8 = 83.6% BASEMENT COVERAGE THIS WALL SEGMENT (a)

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Elevations

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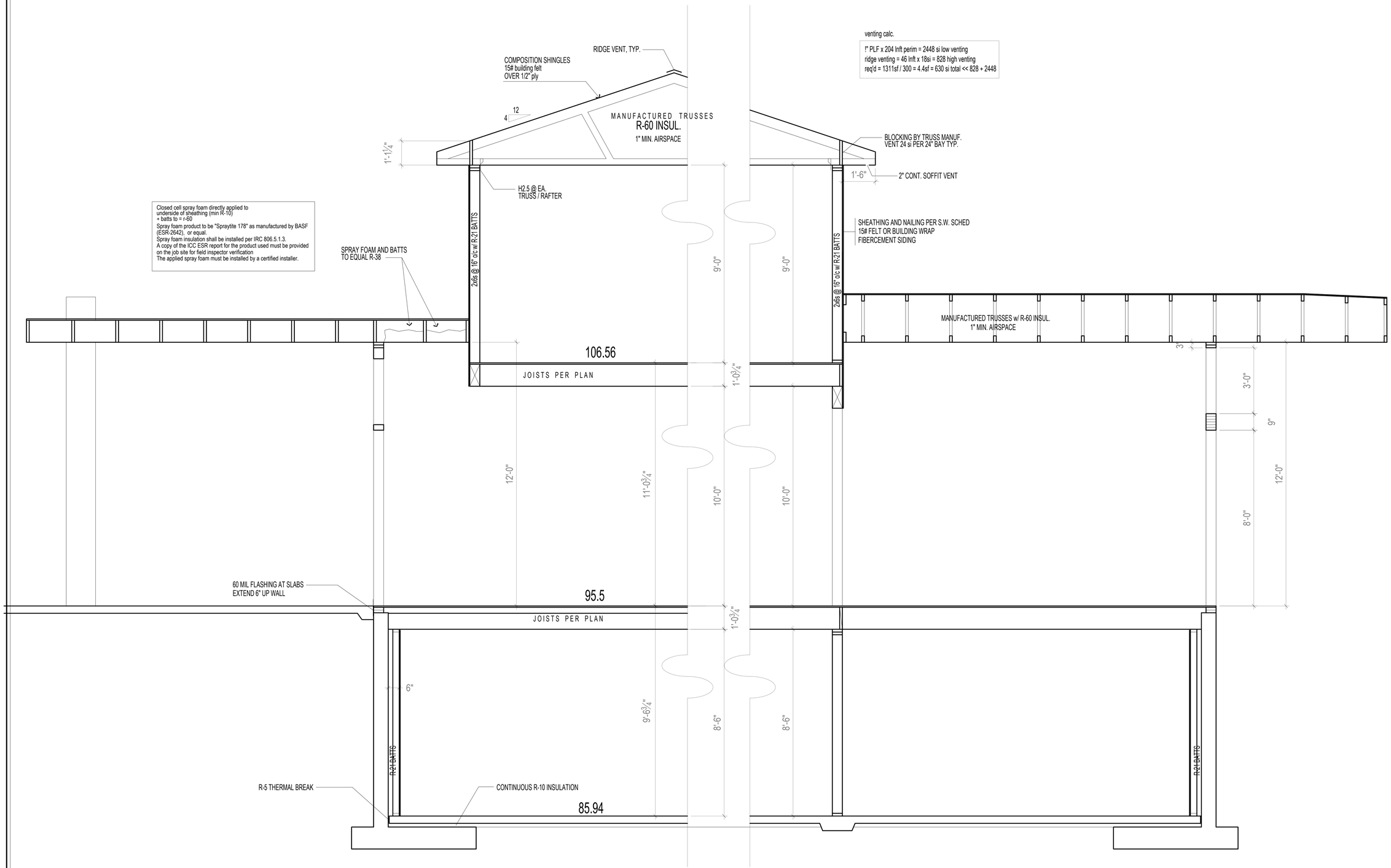

B. SECTION THROUGH FRONT ENTRY

1/2" = 1'-0"

A. SECTION THROUGH LIVING ROOM

1/2" = 1'-0"

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Sections

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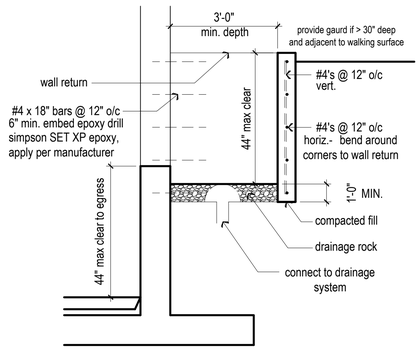
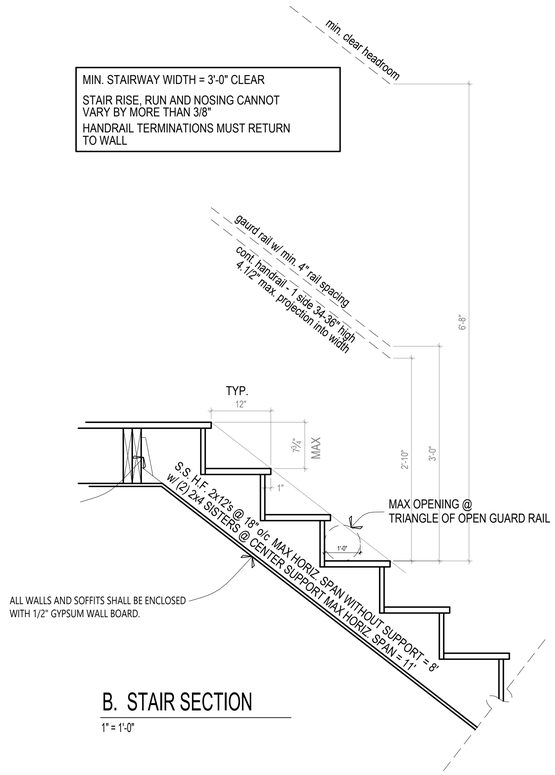
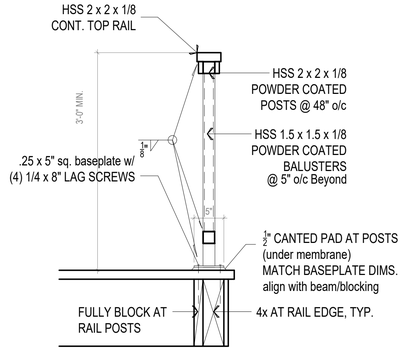


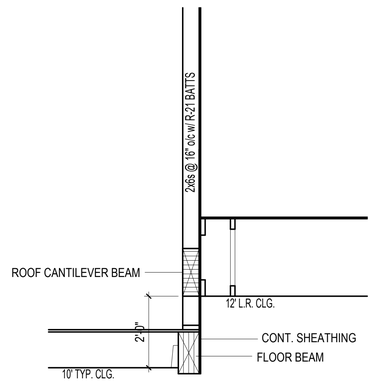
A. WINDOW WELL DETAIL
1/2" = 1'-0"



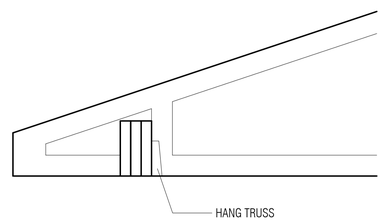
B. STAIR SECTION
1" = 1'-0"



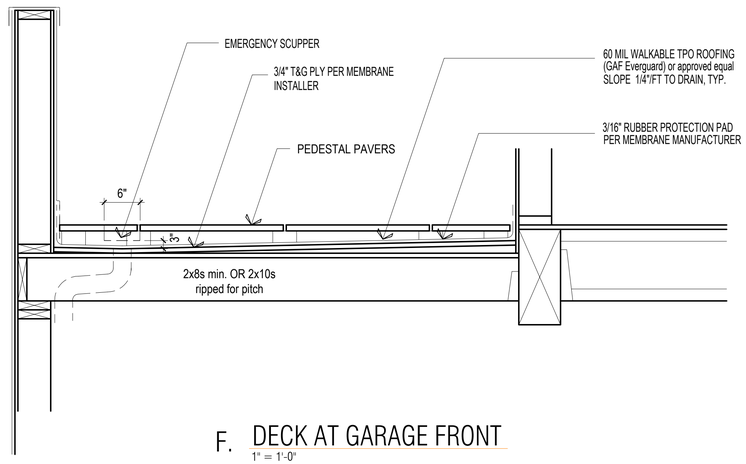
C. RAILING DETAIL
1" = 1'-0"



D. L.R. TO BEDROOM SECTION
1/2" = 1'-0"



E. FLUSH BEAM AT EAVE
1" = 1'-0"



F. DECK AT GARAGE FRONT
1" = 1'-0"

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Details

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3.31.25

Project Information
2728 63RD

Contact Information
Chris Luthi
cluthi@comcast.net

Messages / Comments * RESULT= PASS

UA Reduction = 0.97, Proposed UA is better than baseline by 0.2%

Window area is 16% of floor area

-

Whole House Mechanical Ventilation Airflow Rate: 80 CFM with Run Time Percent of 100%, Balanced, Distributed

Maximum allowable total measured duct leakage: 288 CFM25

* Results assume your inputs are complete and correct. Results do not constitute an approval. Analysis should be reviewed by your AHJ.

ANALYSIS SET UP

What code compliance pathway are you using?	U-Factor Compliance Path
Project Building Type?	New Construction
Occupancy Type?	R3 Single family dwellings and townhouses
Code Version?	WSEC 2021
Classification:	Medium Dwelling Unit -- 3594 sq. ft.
Baseline Description:	Code Baseline - Baseline and proposed window areas are equal.
About Your Selection:	Up to 15 sf exempt window and 24 sf exempt door allowable
	-

RESULTS - Comparison of Baseline and Proposed Design **

Component Performance, R occupancies	Baseline U *	Baseline Area	Baseline UA	Proposed U	Proposed Area	Proposed UA
Doors U =	0.300	229	68.8	0.375	229	86.1
Overhead Glazing U =	0.500	0	0.0		0	0.0
Vertical Glazing U =	0.300	577	173.1	0.300	577	173.1
Flat/Vaulted Ceilings U =	0.024	1,562	37.5	0.017	1,562	26.6
Wall (above grade) U =	0.056	3,088	172.9	0.054	3,088	166.8
Floors over Crawlspace U =	0.029	284	8.2	0.025	284	7.1
Slab on Grade F =	0.540	0	0.0		0	0.0
Below Grade Wall U =	0.035	1,158	40.5	0.035	1,158	40.5
Below Grade Slab F =	0.500	145	72.3	0.500	145	72.3

* Values from Table R402.1.2 (Oct 2023)

Baseline UA Total	573.3	Proposed UA Total	572.3
Required Credits	8.0	Proposed Credits	8.0 from Tables 406.2 and 406.3
		UA Percent Reduction	0%
		UA Reduction	1.0

If the Proposed UA ≤ the Target UA, and the Proposed Credits from Table 406 are ≥ those required in Section R406, then the home meets the WSEC.

** Results assume your inputs are complete and correct. Results do not constitute an approval. Analysis should be reviewed by your AHJ.

Table R406.2 Energy Equalization Credits

System No.	Full Description	Select System Type	Fuel Normalization Credits (406.2)	Energy Credits (406.3)	Total Credits (406.2 & 406.3)
4	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or Table C403.3.2(9) OR Air to Water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 550/590	Variable Refrigerant Heat Pump or Air-to-Water Heat Pump	3.0	5.0	8.0

Table R406.3 Energy Credits

Option No.	Category	Select Options	Energy Credits	Brief Description of Selected Options*
1	Efficient Building Envelope	Not Selected	0.0	-
2	Air Leakage Control and Efficient Ventilation	Option 2.1	1.0	Per Section R402.4.1.2 / 2.0 ACH50 / For R-2, 0.25 cfm per ft2 at 50 Pa. / HRV with min SHR eff of 0.65 per IRC Section M1505.3 or IMC Section 403.8
3.1 -3.10	High Efficiency HVAC	Option 3.6	1.0	Air source ducted Heat Pump w/ Min HSPF2 of 10 (HSPF of 11). If htg design temp is 23F or below,a cold climate variable capacity heat pump is required.
3.11	High Efficiency HVAC: Smart Thermostat	Option 3.11	0.5	Connected Energy Star Certified smart thermostat.
4	High Efficiency HVAC Distribution System	Option 4.1	0.5	Ducts/distribution system in conditioned space per R403.3.2 Electric resistance, hydronic, ductless and gas fired systems < 80% AFUE systems not permitted
5.1	Efficient Water Heating: Drain Heat Recovery		0.0	

Option No.	Category	Select Options	Energy Credits	Brief Description of Selected Options*
5.2	Efficient Water Heating: Compact Hot Water Distribution	Not Selected	0.0	-
5.3-5.8	Efficient Water Heating	Option 5.6	2.0	Electric heat pump water heater meeting NEEA Tier 3.
6	Renewable Electric Energy 3,000 kWh		0.0	
7	Appliance Package		0.0	
	Energy Credits		5.0	

*Refer to WSEC 2015 Table R406.2 for complete option descriptions and requirements

THERMAL ENVELOPE DETAILS - Proposed Design

Conditioned Floor Area, Proposed Design: 3,594 sq. ft

Classification: Medium Dwelling Unit

Notes:

Exterior Doors

Plan ID	Component Description	Ref.	Door U	Qt.	Width Feet	Width Inch	Height Feet	Height Inch	Area	UA
Exempt									0	0.0
ENTRY	Code Baseline, U=0.30	-	0.30	1	3	2	8	0	25	7.6
LR	WoodSWF 2gl >50% 1/2" LowE .1 Ar	10-6A	0.48	1	12	0	8	0	96	46.1
GAR	Code Baseline, U=0.30	-	0.30	1	3	2	8	0	25	7.6
BED1	Code Baseline, U=0.30	-	0.30	1	5	2	8	0	41	12.4
MBED	Code Baseline, U=0.30	-	0.30	1	5	2	8	0	41	12.4
									0	0.0
									0	0.0
									0	0.0
									0	0.0
									0	0.0
								Sum of Area and UA	229	86.1
								Exterior Doors Area Weighted U		0.375

Overhead Glazing

Plan ID	Component Description	Ref.	Glazing U	Qt.	Width Feet	Width Inch	Height Feet	Height Inch	Area	UA
									-	
									-	
									-	
									-	
									-	
								Sum of Area and UA	0.0	0
								Overhead Glazing Area Weighted U		

Vertical Glazing Schedule

Rows to Show: 23

	Plan ID	Component Description	Ref.	Glazing U	Qt.	Width Feet	Width Inch	Height Feet	Height Inch	Area	UA
	Exempt			-						-	-
1	ENTRY	U=0.30 (Code Baseline)	Table 406.2	0.30	1	1	7.5	8	0	13.0	3.90
2	ENTRY	U=0.30 (Code Baseline)	Table 406.2	0.30	1	5	2	3	0	15.5	4.65
3	STAIRS	U=0.30 (Code Baseline)	Table 406.2	0.30	2	6	3	6	3	78.1	23.44
4	STAIRS	U=0.30 (Code Baseline)	Table 406.2	0.30	4	3	0	3	0	36.0	10.80
5	POWDER	U=0.30 (Code Baseline)	Table 406.2	0.30	1	3	0	3	0	9.0	2.70
6	DINING	U=0.30 (Code Baseline)	Table 406.2	0.30	1	6	0	5	0	30.0	9.00
7	LR	U=0.30 (Code Baseline)	Table 406.2	0.30	2	3	0	6	0	36.0	10.80
8	LR	U=0.30 (Code Baseline)	Table 406.2	0.30	2	3	0	3	0	18.0	5.40
9	NOOK	U=0.30 (Code Baseline)	Table 406.2	0.30	2	1	3.5	6	0	15.5	4.65
10	NOOK	U=0.30 (Code Baseline)	Table 406.2	0.30	1	11	1	6	0	66.5	19.95
11	KITCHEN	U=0.30 (Code Baseline)	Table 406.2	0.30	1	9	0	6	0	54.0	16.20
12	ENTRY	U=0.30 (Code Baseline)	Table 406.2	0.30	1	5	2	5	2	26.7	8.01
13	B2BATH	U=0.30 (Code Baseline)	Table 406.2	0.30	1	3	0	3	0	9.0	2.70
14	B2BATH	U=0.30 (Code Baseline)	Table 406.2	0.30	1	2	0	5	0	10.0	3.00
15	B2	U=0.30 (Code Baseline)	Table 406.2	0.30	1	6	0	5	0	30.0	9.00
16	B2	U=0.30 (Code Baseline)	Table 406.2	0.30	1	6	0	3	0	18.0	5.40
17	MBED	U=0.30 (Code Baseline)	Table 406.2	0.30	1	3	0	4	0	12.0	3.60
18	MBED	U=0.30 (Code Baseline)	Table 406.2	0.30	2	2	8.5	4	0	21.7	6.50
19	MBATH	U=0.30 (Code Baseline)	Table 406.2	0.30	2	5	0	6	0	60.0	18.00
20	B1BATH	U=0.30 (Code Baseline)	Table 406.2	0.30	1	2	0	4	0	8.0	2.40
21	B1BATH	U=0.30 (Code Baseline)	Table 406.2	0.30	1	3	0	3	0	9.0	2.70
22	B1BATH	U=0.30 (Code Baseline)	Table 406.2	0.30	1	2	2	0	5	0.9	0.27
23										-	-
									Sum of Area and UA	576.9	173.1
									Vertical Glazing Area Weighted U		0.300
									Vertical Glazing and Doors Area Weighted U		0.321

Flat/Vaulted Ceilings

Plan ID	Component Description	Ref.	Attic U	Area	UA
MAIN	R60 blown Attic ADV baffled (2021 1.3, 1.4; 2018 1.6)	10-7	0.017	1,312	22.3
LOWER	R60 blown Attic ADV baffled (2021 1.3, 1.4; 2018 1.6)	10-7	0.017	250	4.3

Sum of Area and UA: 1,562 | 26.6

Walls (Above Grade)

Plan ID	Component Description	Ref.	Wall U	Net Area	UA
	R21 cavity+R0 foam INT 2X6W Lap (Code Baseline)	10-5	0.054	3,088	167
			Sum of Area and UA	3,088	167

Floor (over crawl or exterior)

Plan ID	Component Description	Ref.	Floor U	Area	UA
	R38 vented Joist (2021 1.2, 1,3; 2018 1.3-1.5)	10-3	0.025	284	7
			Sum of Area and UA	284	7

Slab on Grade (less than 2 feet below grade)

Plan ID	Component Description	Ref.	Slab F	Slab Perim	FP
			Sum of Perimeter and FP	0	0

Below Grade Walls and Slabs

Plan ID	Component Description	Slab Depth	Ref.	Wall U	Wall Area	Wall UA	Slab F	Slab Perim	Slab UA
	R21 Batt w/TB	7' depth	WSU	0.035	1,158	40.5	0.500	145	72
				Sum of Area, Length and UA	1,158	40.5		145	72

Links to Download Forms, Checklists and Other Resources

	Link
Compliance Certificate	Compliance Certificate; Instructions
Insulation Certificate for Residential New Construction	Insulation Certificate
Duct Testing Affadavits	
Existing Construction	Affidavit, Existing
New Construction	Affidavit, New
Prescriptive Checklist for 2018 WSEC	Prescriptive Checklist
Alterations (Remodel) Worksheet	Worksheet
EER SEER2 COP HSPF2 Converter	https://www.adicotengineering.com/eer-seer2-cop-hspf2-kwton-converter

Show Ventilation Calculator? Show

Ventilation Requirements

Conditioned Floor Area	3,594 sq. ft.
Number of Bedrooms	4
Run-Time Percent in Each 4-Hour Segment	100%
Is the system Balanced?	Balanced — Verify system meets definition of 'Balanced Whole-House Ventilation'
Is the system Distributed?	Distributed — Verify system meets definition of 'Distributed Whole-House Ventilation'
Ventilation Code Section	IRC, Chapter 15
Whole House Mechanical Ventilation Airflow Rate	80 CFM

Show Distribution System Calculator? Show

HVAC Thermal Distribution System

Download RS-33 (2018) http://www.energy.wsu.edu/Documents/Duct%20Testing%20Standards%20_2018%

Is this a hydronic heating system?	No
Location of Ducts	Conditioned Space
Location of Air Handler	Conditioned Space
Is Duct Testing Required?	Yes

Maximum Duct Leakage:

Maximum total measured duct leakage per square foot	0.08 CFM25 per sq. ft.
Maximum allowable total measured duct leakage	288 CFM25

A maximum of 10 feet of return ducts and 5 feet of supply ducts are allowed to be located outside of the building thermal envelope, if insulated and sealed per R403.3.7.

Show Heating System Sizing? Show

Heating System Sizing - Proposed Design

Try Out BetterBuiltNW's HVAC Sizing Tool: https://betterbuiltnw.com/resources/hvac-sizing-tool

Nearest Weather Station	Vancouver
Indoor Design Temperature	70 F
Outdoor Design Temperature	22 F
Design Temperature Difference (ΔT)	48 F
Conditioned Floor Area, Proposed Design	3,594 ft2
Conditioned Volume (Leave blank to use default of 8.5 ft. ceiling height)	ft3 — Volume assuming ceiling height of 8.5 ft = 30549 ft3
Average ceiling height	8.5 ft

HVAC System Type	Heat Pump
Location of HVAC Distribution System	Conditioned Space
Sum of UA, including exempt door and window	572
Envelope Heat Load (Sum of UA X ΔT)	27,472 Btu / Hour
Air Leakage Heat Load ((Volume X 0.6) X ΔT) X .018))	15,837 Btu / Hour
Building Design Heat Load (Air Leakage + Envelope Heat Loss)	43,309 Btu / Hour
Building and Duct Heat Load (For ducts located in unconditioned space: Sum of Building Heat Loss X 1.1; For ducts located in conditioned space or ductless: Sum of Building Heat Loss X 1)	43,309 Btu / Hour
Maximum Heat Equipment Output (Building and Duct Heat Loss X 1.25 for heat pumps; Building and Duct Heat Loss X 1.40 for all other systems)	54,136 Btu / Hour; 15.9 kW

PRIMARY RESIDENCE HVAC NOTES

DUCTED HEAT PUMP (HSPF>11.0) INT. AIR HANDLER
INTEGRATED HEAT RECOVERY VENTILATION
REQUIRED VENTING = CONTINUOUS 80CFM
SET TO OPERATE AT 160 CFM FOR 2 HOURS IN EA. 4 HR PERIOD (50%)
PROVIDED BY VARIABLE SPEED HIGH EFF. FAN (MAX .35 WATTS/CFM)
CONTOLLED TO OPERATE AT LOW SPEED IN VENTILATION
MODE ONLY.

design professional or builder shall complete and post an "Insulation Certificate for Residential Construction" within 3' of the electrical panel prior to final inspection.

Maximum flow rates for shower heads and kitchen sink - 1.75 GPM or less. All other lavatory faucets - 1.0 GPM or less.

Per WSEC R402.4, The building thermal Envelope shall be constructed to limit air leakage to 2.0 air changes per hour maximum. The results of the test shall be signed by the party conducting the test and provided to the code official (R402.4.1.2). Per WSEC R403.1.1, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule. Per WSEC R403.2.2, Ducts, air handlers, and filter boxes shall be sealed. Per WSEC R404.1, A minimum of 90 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

9317 REGISTERED ARCHITECT CHRIS LUTHI STATE OF WASHINGTON

2728 63rd Ave SE
Mercer Island WA

CONTENTS
C3 Energy Code

DRAWN BY
CRL

DATE
1.6.25

07

General Structural Notes (GSN's)

CRITERIA:

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE SEATTLE BUILDING CODE (SBC) WITH WASHINGTON STATE ADMINISTRATIVE CODE AMENDMENTS, 2021 EDITION.

2. DESIGN LOADING CRITERIA

RISK CATEGORY SBC TABLE 1604.5 II
ROOF SNOW LOAD . . . . 25 PSF (I_S = 1.0)
ROOF DEAD LOAD . . . . 15 PSF
RESIDENTIAL LIVE LOAD . . . . 40 PSF
DECK LIVE LOAD . . . . 60 PSF
FLOOR DEAD LOAD . . . . 20 PSF

EARTHQUAKE . . . . SEISMIC DESIGN CATEGORY D
S_S = 1.55, S_1 = 0.64, S_{DS} = 1.13, S_{D1} = 0.89
EQUIVALENT LATERAL FORCE PROCEDURE
LIGHT FRAME (WOOD) WALLS AND ROOFS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR
R = 6.5, Ω_0 = 2½, I_E = 1.0, C_d = 4, C_s = 0.178
BASE SHEAR, V = 16.5 K (LRFD)

WIND . . . . 110 MPH, EXPOSURE "C", Kzt = 1.0
COMPONENTS & CLADDING . . . . −48.6/−29.2 PSF MAX. AT WALLS (LRFD/ASD)
−48.6/−29.2 GROSS UPLIFT AT ROOF (LRFD/ASD)

WIND PRESSURES BASED ON LESS THAN 10 SQUARE FOOT TRIBUTARY AREAS NEAR WALL CORNERS OR ROOF EDGES (EXCLUDING CORNER ZONES AT ROOF). REDUCED DESIGN PRESSURES MAY BE CALCULATED IN ACCORDANCE WITH ASCE 7-16 CHAPTER 30.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BUILDING LAYOUT DIMENSIONS (GRID LAYOUTS, SITE COORDINATES, ETC.) AMONGST ALL TRADES, INCLUDING SHOP FABRICATED ITEMS.

4. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, BOTH FOR VERTICAL LOADS AND LATERAL STABILITY, FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

6. 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.

7. ALL STRUCTURAL SYSTEMS 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.

8. SEISMIC BRACING AND/OR GRAVITY SUPPORT AND ANCHORAGE OF ALL MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON, EXCEPT FOR ELEMENTS SPECIFICALLY SHOWN AND DETAILED ON THE STRUCTURAL DRAWINGS. THE MECHANICAL/ELECTRICAL CONTRACTOR MUST HIRE THE ENGINEER AND IS RESPONSIBLE FOR ALL COSTS RELATED TO THE PURCHASE AND INSTALLATION OF NECESSARY SUPPORTS, BRACING AND ANCHORAGE. SEISMIC BRACING AND ANCHORAGE DESIGN AND CONSTRUCTION SHALL COMPLY WITH CHAPTER 13 OF ASCE 7-10.

9. SHOP DRAWING REVIEW: SHOP DRAWINGS FOR TRUSSES SHALL BE SUBMITTED TO THE CONTRACTOR, ARCHITECT, AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY. THE REPRODUCIBLE SHALL BE MARKED AND RETURNED. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

10. DEFERRED SUBMITTALS SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE COMPONENT DESIGNER SHALL BE A REGISTERED STRUCTURAL ENGINEER IF REQUIRED BY THE BUILDING OFFICIAL OF THE LOCAL JURISDICTION. BUILDING COMPONENT SUBMITTALS SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE INCLUDING ACCOMMODATION FOR STRUCTURAL DISPLACEMENT PER ASCE 7-10 SECTION 13.3.2. AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL. THE CONTRACTOR SHALL FORWARD DEFERRED SUBMITTALS TO THE BUILDING OFFICIAL AND HAVE THE DEFERRED SUBMITTALS ON SITE FOR THE GOVERNING JURISDICTIONS INSPECTORS USE AND REFERENCE. THE FOLLOWING BUILDING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:
    - PREFABRICATED CONNECTOR PLATE WOOD TRUSSES (SEE GENERAL NOTE #23)

GEOTECHNICAL:

11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE SPECIFICATIONS OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER WHERE APPLICBLE. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH OR CONTROLLED, COMPACTED STRUCTURAL FILL AT LEAST 12" BELOW LOWEST ADJACENT FINISHED GRADE.

ALLOWABLE SOIL PRESSURE . . . . 1,500 PSF
REFERENCE: ASSUMED PER IBC TABLE 1806.2

ALL BOTTOM OF EXTERIOR FOOTINGS, AND INTERIOR FOOTINGS IN AN UNCONDITIONED SPACE, SHALL BE SET 12" BELOW GRADE AT A MINIMUM TO REACH FROST DEPTH.

ANCHORAGE:

12. DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC-ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "TE SERIES" (0.157" DIAMETER) AS MANUFACTURED BY ITW RAMSET (ICC-ES NO. 1799); OR "X-U" (0.157" DIAMETER) AS MANUFACTURED BY HILTI, INC. (ICC-ES NO. 2269); OR "STRONG-TIE PDPA" (0.157" DIAMETER) AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. (ICC-ES NO. 2138); OR "CSI PIN" (0.157" DIAMETER) AS MANUFACTURED BY DEWALT/POWERS (ICC-ES NO. 2024); OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3-1/2" TO NEAREST CONCRETE EDGE.

CONCRETE:

13. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318-18 CHAPTER 4 AND 26, AND ACI 301. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 2,500 PSI (5½ SACK 2500 PSI CONCRETE MIX PER SBC SECTION CA1904.2). AIR-ENTRAINMENT IS NOT RQUIRED FOR DURABILITY PURPOSES. MIXES SHALL BE PROPORTIONED TO PRODUCE A 5-INCH OR LESS SLUMP, WITH A MAXIMUM ALLOWABLE TOLERANCE OF 1-INCH PLUS.

14. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60,000 PSI. GRADE 60 REINFORCING BARS WHICH ARE TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCEMENT COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.

15. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315-99 AND 318-18. LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH "REINFORCEMENT SPLICE AND DEVELOPMENT LENGTH SCHEDULE" OF 10/S3.1. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 12" AT SIDES AND ENDS. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

16. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
    - FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST & PERMANENTLY EXPOSED TO EARTH
      3" FOR ALL REINFORCING BAR SIZES
    - FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER
      1½" FOR #5 REINFORCING BARS OR SMALLER
      2" FOR #6 REINFORCING BARS OR LARGER

17. DEVELOPMENT AND SPLICE LENGTH SHALL BE NO LESS THAN THAT SHOWN IN TABLE BELOW:

		MISCELLANEOUS BARS		TOP BARS		HOOKED BARS
	BAR SIZE	Ld	SPLICE	Ld	SPLICE	Ldh
f_c < 3000 psi	#3	17"	23"	22"	29"	9"
	#4	22"	29"	29"	38"	11"
	#5	28"	37"	36"	47"	14"
	#6	33"	43"	43"	56"	17"
	BAR SIZE	Ld	SPLICE	Ld	SPLICE	Ldh
f_c = 4000 psi	#3	15"	20"	19"	25"	8"
	#4	19"	25"	25"	33"	10"
	#5	24"	32"	31"	41"	12"
	#6	29"	38"	37"	49"	15"
	BAR SIZE	Ld	SPLICE	Ld	SPLICE	Ldh
f_c = 5000 psi	#3	13"	17"	17"	23"	7"
	#4	17"	23"	23"	30"	9"
	#5	22"	29"	28"	37"	11"
	#6	26"	34"	34"	45"	13"
	BAR SIZE	Ld	SPLICE	Ld	SPLICE	Ldh
f_c = 6000 psi	#3	12"	16"	16"	21"	6"
	#4	16"	21"	21"	28"	8"
	#5	20"	26"	26"	34"	10"
	#6	24"	32"	31"	41"	12"

A. VALUES FOR UNCOATED REINFORCING AND NORMAL WEIGTH CONCRETE WITH CLEAR SPACING > db, CLEAR COVER > db, AND MINIMUM STIRRUPS OR TIES THROUGHOUT Ld OR CLEAR SPACING > 2db AND CLEAR COVER > db
B. DEVELOP ALL REINFORCING IN STRUCTURAL SLABS WITH MINIMUM DEVELOPMENT LENGTH Ld
C. Ldh = DEVELOPMENT LENGTH OF BAR WITH STANDARD HOOK
D. TOP BAR = HORIZONTAL BAR WITH MORE THAN 12" OF FRESH CONCRETE BELOW (EXCLUDING WALL HORIZONTAL REINFORCING) OR AS NOTED ON DOCUMENTS AS 'TOP BAR'
E. ALL TABULATED VALUES ARE IN INCHES

18. BONDING AGENT SHALL BE "MASTEREMACO ADH 326" BY BASF CORPORATION. OR EQUIVALENT, AND SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST HARDENED CONCRETE. PLACE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING PREPARATION OF EXISTING SURFACES. CONCRETE SHALL BE CONSIDERED HARDENED AFTER 56 DAYS.

19. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (6,000 PSI MINIMUM).

IBC TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

REQUIRED?	VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	REF STD.	IBC REF.
N/A	1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS AND VERIFY PLACEMENT.	---	X	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
N/A	2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706. B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS	--- X	X X	AWSD1.4 ACI 318 26.5.4	---
N*	3. INSPECT ANCHORS CAST IN CONCRETE.	---	X	ACI 318: 17.8.2	---
N/A	4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A	X	X	ACI 318: 17.8.2.4 ACI 318:17.8.2	---
N*	5. VERIFY USE OF REQUIRED DESIGN MIX.	---	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
N*	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	---	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
N*	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	---	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
N*	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X	ACI 318: 26.4.7-26.4.9	1908.9
N/A	9. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS	X X	--- ---	ACI 318: 26.9.2.1 ACI 218: 26.9.2.3	---
N/A	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	---	X	ACI 318: CH. 26.8	---
N*	11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCT'L SLABS.	---	X	ACI 318: 26.10.2	---
N*	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X	ACI318: 26.10.1(b)	---

* EXCEPTIONS 2 PER IBC SECTION 1705.3 APPLIES TO CONCRETE WORK ON THIS PROJECT.

WOOD:

20. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17 OR W.W.P.A. WESTERN LUMBER GRADING RULES. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

PLATES, LEDGERS & MISC.	DOUGLAS FIR NO. 3 OR STUD GRADE
LIGHT FRAMING:	MIN. BASIC DESIGN STRESS, F_b = 525 PSI, E = 1400 KSI F_c = 775 PSI, F_t = 325 PSI
JOISTS & RAFTERS:	DOUGLAS FIR NO. 2 MIN. BASIC DESIGN STRESS, F_b = 900 PSI, E = 1600 KSI F_c = 1350 PSI, F_t = 575 PSI
BEAMS:	DOUGLAS FIR NO. 1
4x_	MIN. BASIC DESIGN STRESS, F_b = 1000 PSI, E = 1700 KSI F_c = 1500 PSI, F_t = 675 PSI
6x_	MIN. BASIC DESIGN STRESS, F_b = 1350 PSI, E = 1600 KSI F_c = 925 PSI, F_t = 675 PSI
COLUMNS:	DOUGLAS FIR NO. 1
4x_	MIN. BASIC DESIGN STRESS, F_b = 1000 PSI, E = 1700 KSI F_c = 1500 PSI, F_t = 675 PSI
6x_	MIN. BASIC DESIGN STRESS, F_b = 1200 PSI, E = 1600 KSI F_c = 1000 PSI, F_t = 825 PSI

21. MANUFACTURED LUMBER SHALL BE AS MANUFACTURED BY TRUS JOIST OR APPROVED EQUAL. REQUESTS FOR APPROVAL AS EQUAL WILL REQUIRE SUBMITTAL OF ICC REPORT EQUIVALENT TO ESR-1387 FOR LAMINATED VENEER LUMBER (LVL, LAMINATED STRAND LUMBER (LSL), OR PARALLEL STRAND LUMBER (PSL). THE MINIMUM ALLOWABLE DESIGN VALUES ARE AS FOLLOWS:

LVL −	F_b = 2,600	F_v = 290 PSI	E = 2,000,000 PSI
LSL −	F_b = 1,900	F_v = 150 PSI	E = 1,300,000 PSI

22. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND A.I.T.C. STANDARDS IN ACCORDANCE WITH SBC SECTION 2303.1.3. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. HORIZONTAL MEMBERS AND INCLINED MEMBERS OF LESS THAN 1:1 SLOPE SHALL HAVE A RADIUSED CAMBER OF 3,500 FT. UNLESS OTHERWISE NOTED.

SIMPLE SPAN BEAMS	DOUGLAS FIR COMBINATION 24F-V4 F_b = 2400 PSI; F_v = 265 PSI; E = 1,800,000 PSI
CONTINUOUS OR CANTILEVERED BEAMS	DOUGLAS FIR COMBINATION 24F-V8 F_b = 2400 PSI; F_v = 265 PSI; E = 1,800,000 PSI THESE MEMBERS ARE NOTED AS '*' IN PLAN

GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE, APPROVED PRESERVATIVE.

23. ENGINEERED WOOD I-JOISTS SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH ENGINEERED WOOD I-JOISTS PROVIDED. DESIGN SHOWN ON THE DRAWINGS IS BASED ON RESIDENTIAL JOISTS MANUFACTURED BY WEYERHAUSER IN ACCORDANCE WITH ICC-ES REPORT NO. ESR-1153. ALTERNATE ENGINEERED WOOD I-JOISTS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD

24. PREFABRICATED CONNECTOR PLATE WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH ANSI/TPI I-2007 AND IBC SECTION 2303.4 FOR THE SPANS AND CONDITIONS SHOWN ON THE DRAWINGS. DESIGN LOADS SHALL BE AS FOLLOWS:

ROOF TRUSSES	
TOP CHORD LIVE LOAD	25 PSF, SNOW
BOTTOM CHORD LIVE LOAD	0 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD DEAD LOAD	5 PSF
WIND UPLIFT (TOP CHORD)	SEE NOTE#2 COMPONENTS & CLADDING ROOF LOADS

THE TRUSS MANUFACTURER SHALL COORDINATE LOCATIONS AND SUPPORT CONFIGURATIONS OF PLUMBING, MECHANICAL UNITS, DUCTS, AND/OR OTHER MISCELLANEOUS ITEMS WITH THE CONTRACTOR PRIOR TO TRUSS FABRICATION. THE TRUSS MANUFACTURER SHALL DESIGN TRUSSES TO SUPPORT ALL LOADS ASSOCIATED WITH SUCH ITEMS. THE TRUSS SHOP DRAWINGS SHALL INCLUDE ALL DESIGN LOADS AND APPROVED HANGER CONNECTION DETAILS TO TRUSS CHORDS FOR SUPPORT OF HUNG MECHANICAL SYSTEM COMPONENTS AS APPLICABLE.

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED AS A DEFERRED SUBMITTAL TO THE CONTRACTOR AND STRUCTURAL ENGINEER OF RECORD PER GENERAL STRUCTURAL NOTE 13. SHOP DRAWINGS SHALL INDICATE SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC. 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 OTHERWISE NOTED ON THE DRAWINGS. THE TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS BEAM/JOIST CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE DETAILS FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

25. ROOF & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR ORIENTED STRAND BOARD (OSB) IN CONFORMANCE WITH SBC SECTION 2303.1.5. SHEATHING SHALL BE MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC PS 1-09, PS 2-10, OR APA PRP-108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS.

26. AT NON-SHEAR WALL EXTERIOR WALLS, UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE ½" (NOMINAL) WITH SPAN RATING OF 24/0; WITH 8d @ 6" oc PANEL NAILING (APPLIES TO ALL SHEATHING PANEL EDGES); AND 8d @ 12" oc TO INTERMEDIATE FRAMING.

27. ALL PRESSURE-TREATED (P.T.) WOOD MEMBERS SPECIFIED ON THE DRAWINGS THAT OCCUR ABOVE GROUND AND CONTINUOUSLY PROTECTED FROM MOISTURE (INTERIOR LOCATIONS) SHALL BE PRESSURE-TREATED WITH DOT SODIUM BORATE (SBX) WITHOUT $NaSiO_2$. AT LOCATIONS PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, WOOD MEMBERS SHALL BE PRESSURE-TREATED WITH ALKALINE COPPER QUAT (ACQ-C FOR DOUGLAS-FIR) PRESERVATIVE UNLESS OTHERWISE NOTED. AMMONIACAL COPPER ZINC ARSENATE (ACZA) PRESERVATIVE OR OTHER PRESERVATIVES WITH AMMONIA CARRIERS, SHALL NOT BE USED.
GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE, APPROVED PRESERVATIVE.
SEE NOTE #27 FOR MATERIAL REQUIREMENTS OF CONNECTORS AND FASTENERS IN CONTACT WITH PRESSURE-TREATED MEMBERS.

28. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED N THEIR WOOD CONSTRUCTION CONNECTORS CATALOG NO. C-C-2017-18. INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL TIMBER CONNECTORS IN CONTACT WITH PRESSURE-TREATED WOOD THAT USED PRESERVATIVE CHEMICALS OTHER THAN DOT SODIUM BORATE (SBX) WITHOUT $NaSiO_2$ SHALL BE MANUFACTURED FROM Z_{MAX} STEEL BY SIMPSON (G185 STEEL PER ASTM A653), OR TYPE 304 OR 316 STAINLESS STEEL. ALTERNATIVELY, CONNECTORS CAN BE POST HOT DIP GALVANIZED PER ASTM A123 OR MECHANICALLY GALVANIZED PER ASTM B695, CLASS 55 OR GREATER. STAINLESS STEEL FASTENERS SHALL BE USED WITH STAINLESS STEEL CONNECTORS, AND HOT DIP GALVANIZED FASTENERS PER ASTM A153 SHALL BE USED WITH GALVANIZED CONNECTORS.

29. WOOD FRAMING NOTES: THE FOLLOWING SHALL APPLY UNLESS OTHERWISE NOTED ON THE DRAWINGS:

A. ALL WOOD FRAMING DETAILS SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE SBC. MINIMUM NAILING SHALL CONFORM TO SBC TABLE 2304.9.1 OR CURRENT ICC-ES REPORT NER-272. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF LAG SCREWS SHALL CONFORM TO 2012 NDS SECTION 11.1.4, AND INSTALLATION OF BOLTS SHALL CONFORM TO 2012 NDS SECTION 11.1.3.

B. WALL FRAMING: TWO STUDS MINIMUM SHALL BE INSTALLED AT THE ENDS OF ALL WALLS, UNLESS NOTED OTHERWISE NOTED. INSTALL SOLID BLOCKING FOR WOOD COLUMN THROUGH FLOOR SPACES TO SUPPORTS BELOW.
ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 12" oc STAGGERED OR BOLTED TO CONCRETE WITH ⅝"ø ANCHOR BOLTS @ 4'-0" oc PER SBC SECTION 2308.6 (EMBED 7"), UNLESS OTHERWISE NOTED. 3" x 3" x 0.229" PLATE WASHERS SHALL BE USED WITH ALL SILL PLATE ANCHOR BOLTS AND INSTALLED PER AF&PA SDPWS-2008 SECTION 4.3.6.4.3. INDIVIDUAL MEMBERS OF BUILT-UP STUD POSTS SHALL BE NAILED TO EACH OTHER WITH 16d @ 12" oc STAGGERED.

C. FLOOR AND ROOF FRAMING: INSTALL SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL JOISTS TO SUPPORTS WITH (2)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 16d@12"oc STAGGERED.
ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AS SHOWN ON THE DRAWINGS. INSTALL APPROVED PANEL EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING ALLOW ⅛" SPACING AT ALL PANEL EDGES AND ENDS OF LOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d@12"oc. IN ACCORDANCE WITH SBC SECTION 1604.8.3, DECKS SHALL BE POSITIVELY ANCHORED TO THE STRUCTURE BY MEANS OTHER THAN NAILS SUBJECT TO WITHDRAWAL. ANCHOR WITH MINIMUM (1) CS16 STRAP AT EACH END ATTACHED TO DECK JOISTS AND TO A SOLID BLOCKING MEMBER WITHIN THE BUILDING.

D. NAILING: A MINIMUM NAIL DIAMETER AND LENGTH SHALL BE AS FOLLOWS:

	NAIL SIZE ON DRAWINGS	DIAMETER x LENGTH
SHEATHING NAILS	8d	0.131" x 2¼"
	10d	0.148" x 2½"
FRAMING NAILS	10d	0.148" x 3"
	16d	0.148" x 3¼"

E. WOOD SHRINKAGE: THE PLUMBING, FIRE PROTECTION, DRAINAGE, MECHANICAL, ELECTRICAL, CLADDING, AND OTHER SYSTEMS INSTALLED WITHIN THE BUILDING SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE VERTICAL SHRINKAGE AT ALL WOOD FRAMING LEVELS. THE WOOD SHRINKAGE AMOUNT SHALL BE ASSUMED TO EQUAL ⅜" FOR EACH WOOD FRAMED FLOOR LEVEL.

Minimum Connectors and Fasteners for Wood Members per IBC 2021

DESCRIPTION OF BLDG. ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
ROOF		
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON (2½" x 0.131") 2-3" x 0.131" NAILS 2-3" x 14 GAGE STAPLES	EACH END, TOENAIL
	2-16d COMMON (3½" x 0.162") 3-3" x 0.131" NAILS 3-3" x 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3½" x 0.162") @ 6" oc 3" x 0.131" NAILS @ 6" oc 3" x 14 GAGE STAPLES @ 6" oc	FACE NAIL
2. CEILING JOISTS TO TOP PLATE	3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITION (NO THRUST) (SEE 2308.7.3.1, TABLE 2308.7.3.1)	3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3-10d COMMON (3" x 0.148"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE 2308.7.5, TABLE 2308.7.5)	3-10d COMMON (3" x 0.148"); or 3-16d BOX (3½" x 0.135"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2" RIDGE BEAM	2-16d COMMON (3½" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131 NAILS; or 3-3" x 14 GAGE STAPES, 7/16" CROWN	END NAIL
	3-10d COMMON (3½" x 0.148"); or 3-16d BOX (3½" x 0.135"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131 NAILS; or 4-3" x 14 GAGE STAPES, 7/16" CROWN	TOENAIL
WALL		
8. STUD TO STUD (NOT AT SHEARWALL CHORDS)	16d COMMON (3½" x 0.162")"	24" oc FACE NAIL
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	16" oc FACE NAIL
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTION WALL CORNERS	16d COMMON (3½" x 0.162")"; or	16" oc FACE NAIL
	16d BOX (3½" x 0.135")"; or	12" oc FACE NAIL
	3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HDR.)	16d COMMON (3½" x 0.162")"; or	16" oc EA. EDGE, FACE NAIL
	16d BOX (3½" x 0.135")	12" oc EA. EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4-8d COMMON (2½" x 0.131"); or 4-10d BOX (3" x 0.128")	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON (3½" x 0.162"); or	16" oc FACE NAIL
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON (3½" x 0.162"); or 12-10d BOX (3" x 0.128"); or 12-3" x 0.131" NAILS; or 12-3" x 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EA. SIDE OF END JOINT
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING NOT AT SHEARWALL	16d COMMON (3½" x 0.162")"; or	16" oc FACE NAIL
	16d BOX (3½" x 0.135")"; or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
WALL (CONTINUED)		
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING AT SHEARWALL	2-16d COMMON (3½" x 0.162"); or 3-16d BOX (3½" x 0.135"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	16" oc FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON (2½" x 0.131"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	2-16d COMMON (3½" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
17. TOP OR BOTTOM PLATE TO STUD	2-16d COMMON (3½" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
18. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON (3½" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
19. 1" BRACE TO EACH STUD AND PLATE	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128"); or 2-3" x 0.131" NAILS; or 2-3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
20. 1" x 6" SHEATHING TO EACH BEARING	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128"); or	FACE NAIL
21. 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or	FACE NAIL
FLOOR		
22. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON (2½" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
23. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL, OR OTHER FRAMING BELOW	8d COMMON (2½" x 0.131"); or 10d BOX (3" x 0.128"); or 3" x .131" NAILS; r 3" x 14 GAGE STAPLES, 7/16" CROWN	6" o.c., TOENAIL
24. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128")	FACE NAIL
25. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON (3½" x 0.162")	FACE NAIL
26. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d COMMON (3½" x 0.162")"	EA. BEARING, FACE NAIL
27. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" o.c., FACE NAIL TOP & BOT. STAGGERED ON OPPOSITE SIDES
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	24" o.c., FACE NAIL AT TOP & BOT. STAGGERED ON OPP. SIDES
	AND: 2-20d COMMON (4" x 0.192"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL
28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL
29. JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON (3½" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
30. BRIDGING OR BLOCKING TO JOIST, RAFTER, OR TRUSS	2-8d COMMON (2½" x 0.131"); or 2-10d BOX (3" x 0.128"); or 2-3" x 0.131" NAILS; or 2-3" x 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL

ATLAS
CONSULTING
STRUCTURAL
ENGINEERS

JAVID ABDI
53159

Imani Residence
2728 63rd Ave SE Mercer Island WA

CONTENTS
General
Structural
Notes

DRAWN BY
JDA

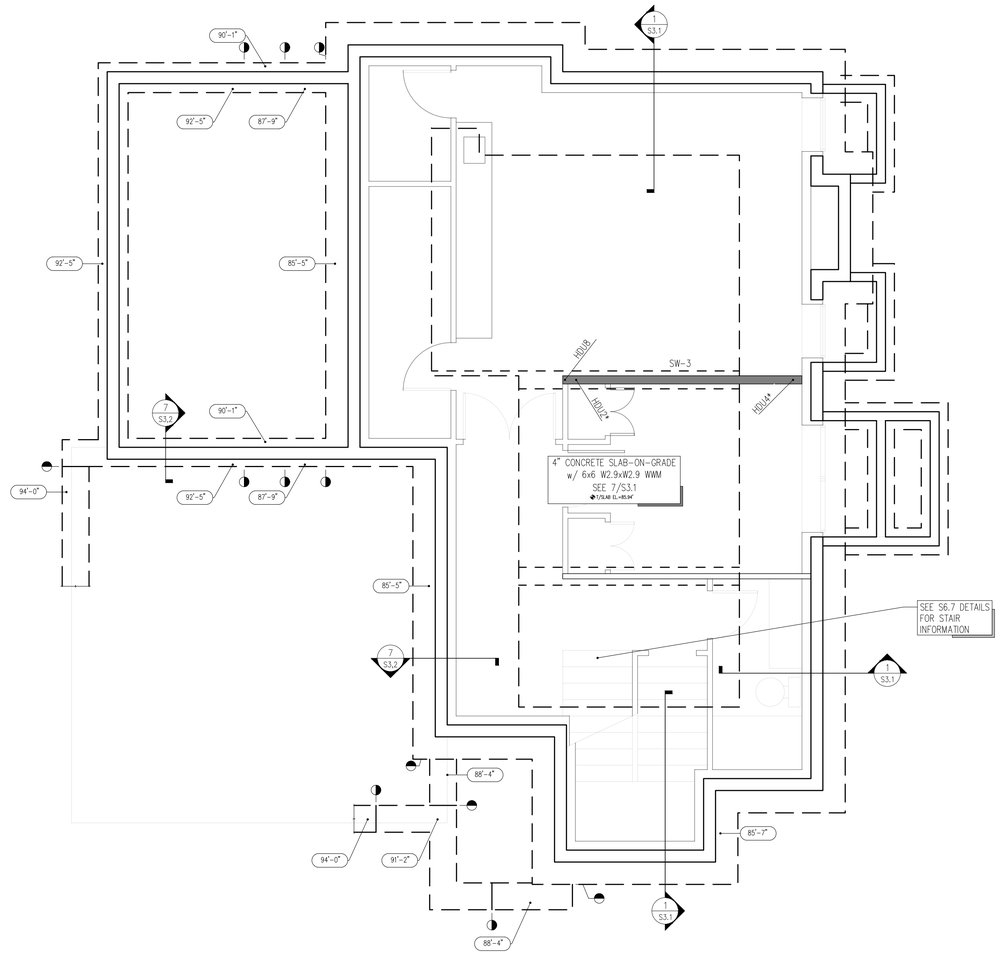
DATE
02.03.25
03.28.25

S1.1

LEGEND

- CONCRETE FOOTING
- CONCRETE WALL
- POST
- STEP IN FOOTING PER 9/S3.1 (high / low)
- DENOTES TOP OF FOOTING ELEVATION (±) (xx'-xx")

CONNECTOR TABLE		
	SIMPSON DESIGNATION	NOTES
Ⓐ	ITS ~or~ IUS	HANGER
Ⓑ	HB7.12/16	TOP FLANGE HANGER
Ⓒ	JB ~or~ LUS	HANGER
Ⓓ	HUC410	CONCEALED FLANGE HANGER
Ⓔ	IUS3.56/9.5	FACE MOUNT HANGER
Ⓕ	IUS3.56/11.88	FACE MOUNT HANGER



BASEMENT FLOOR AND FOUNDATION PLAN NOTES

1. SOLID WALLS SHOWN IN PLAN ARE ABOVE FOUNDATION LEVEL (FROM FOUNDATION TO UNDERSIDE OF MAIN FLOOR FRAMING).
2. EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.2, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
3. SEE STRUCTURAL GENERAL NOTES #13 – 19 FOR CONCRETE AND CONCRETE REINFORCING REQUIREMENTS.
4. SEE GENERAL STRUCTURAL NOTE #11 FOR FOUNDATION CRITERIA.

1 / S2.1 BASEMENT FLOOR AND FOUNDATION PLAN

1/4" = 1'-0"

NORTH

ATLAS CONSULTING STRUCTURAL ENGINEERS

JAVID ABDI — STATE OF WASHINGTON — 53199 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

Imani Residence

2728 63rd Ave SE Mercer Island WA

CONTENTS

Lower Floor and Foundation Plan

DRAWN BY

JDA

DATE

02.03.25

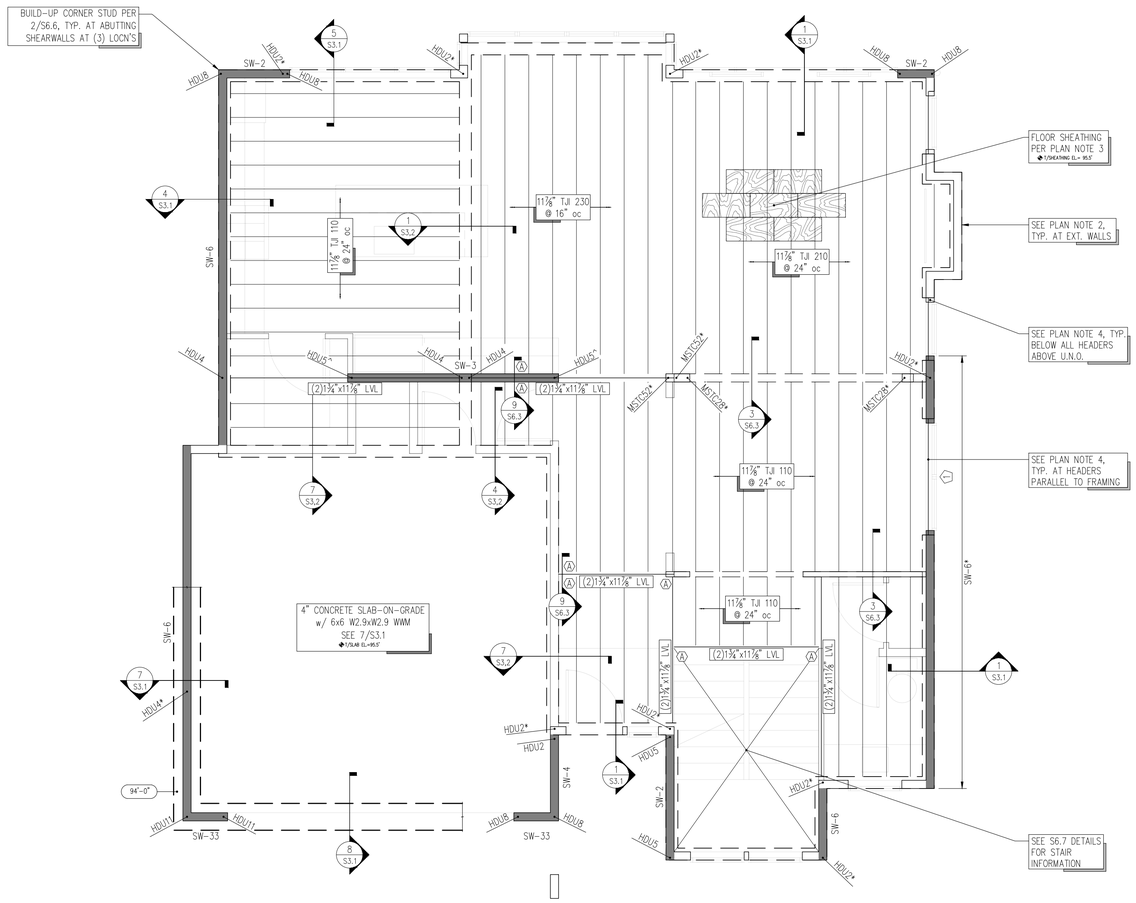
S2.1

LEGEND

CONCRETE WALL BELOW	DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.5
CONCRETE WALL	
STRUCTURAL WOOD STUDWALL	DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH ⬠ DENOTING STRAP PER SCHEDULE ABOVE & BELOW OPENING
POST BELOW	
POST	DENOTES SHEARWALL TENSION TIE PER 4/S6.6 or 8/S6.6
HEADER or BEAM	* – DENOTES TRANSFER TIE FROM TIE ABOVE
JOIST	⁵ – DENOTES TIE ATOP STEEL BEAM, SEE 8/S6.6

CONNECTOR TABLE

	SIMPSON DESIGNATION	NOTES
Ⓐ	ITS ~or~ IUS	HANGER
Ⓑ	HB7.12/16	TOP FLANGE HANGER
Ⓒ	JB ~or~ LUS	HANGER
Ⓓ	HUC410	CONCEALED FLANGE HANGER
Ⓔ	IUS3.56/9.5	FACE MOUNT HANGER
Ⓕ	IUS3.56/11.88	FACE MOUNT HANGER



MAIN FLOOR FRAMING PLAN NOTES

1. SOLID WALLS SHOWN IN PLAN ARE ABOVE MAIN FLOOR FRAMING ELEVATION (FROM MAIN FLOOR TO UNDERSIDE OF UPPER FLOOR). DASHED WALLS SHOWN IN PLAN ARE BELOW MAIN FLOOR FRAMING ELEVATION (FROM FOUNDATION TO UNDERSIDE OF MAIN FLOOR FRAMING)
2. EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.2, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
3. FLOOR SHEATHING SHALL CONSIST OF ¾" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.1). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
4. ALL HEADERS ABOVE (SEE 1/S2.3) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.2 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.2 AT LOAD BEARING EXTERIOR WALLS
5. HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.1 U.N.O. IN PLAN.
6. HEADERS IN EXTERIOR WALLS PERPENDICULAR TO FRAMING SHALL BE PER DETAIL 6/S6.1 U.N.O. IN PLAN.

1 / S2.2 MAIN FLOOR FRAMING PLAN

1/4" = 1'-0"

NORTH

ATLAS CONSULTING STRUCTURAL ENGINEERS

JAVID ABDI — STATE OF WASHINGTON — 53199 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

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CONTENTS

Main Floor Framing Plan

DRAWN BY

JDA

DATE

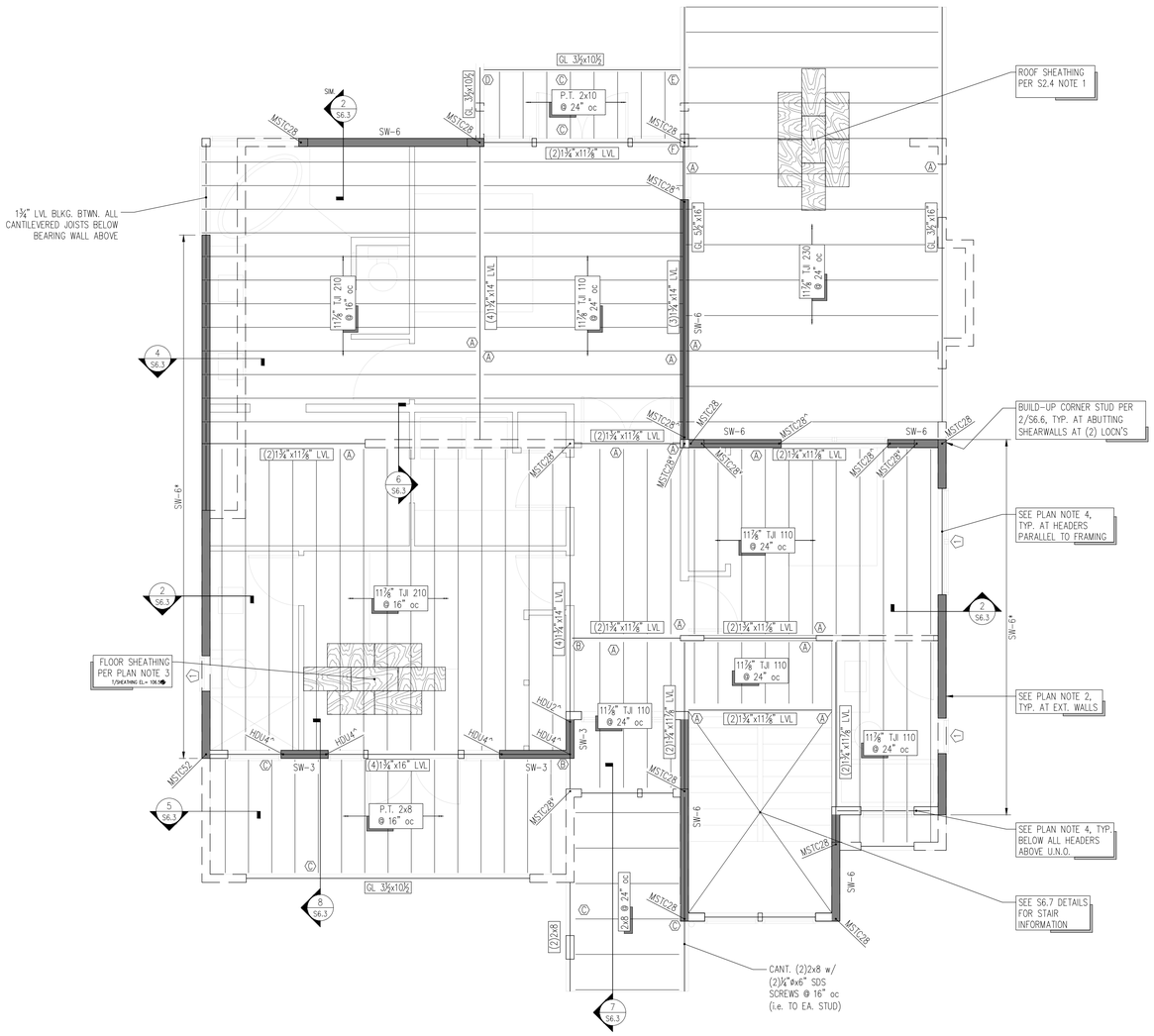
02.03.25

S2.2

LEGEND

STRUCTURAL WOOD STUDWALL BELOW	DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.5
STRUCTURAL WOOD STUDWALL	
POST BELOW	DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH ⬠ DENOTING STRAP PER SCHEDULE ABOVE & BELOW OPENING
POST	DENOTES SHEARWALL TENSION TIE PER 4/S6.6 or 8/S6.6
HEADER or BEAM	* – DENOTES TRANSFER TIE FROM TIE ABOVE
JOIST	⁵ – DENOTES TIE ATOP STEEL BEAM, SEE 8/S6.6

CONNECTOR TABLE		
	SIMPSON DESIGNATION	NOTES
Ⓐ	ITS ~or~ IUS	HANGER
Ⓑ	HB7.12/16	TOP FLANGE HANGER
Ⓒ	JB ~or~ LUS	HANGER
Ⓓ	HUC410	CONCEALED FLANGE HANGER
Ⓔ	IUS3.56/9.5	FACE MOUNT HANGER
Ⓕ	IUS3.56/11.88	FACE MOUNT HANGER



MAIN FLOOR FRAMING PLAN NOTES

1. SOLID WALLS SHOWN IN PLAN ARE ABOVE MAIN FLOOR FRAMING ELEVATION (FROM UPPER FLOOR TO UNDERSIDE OF ROOF). DASHED WALLS SHOWN IN PLAN ARE BELOW UPPER FLOOR FRAMING ELEVATION (FROM MAIN FLOOR TO UNDERSIDE OF UPPER FLOOR FRAMING)
2. EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.2, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
3. FLOOR SHEATHING SHALL CONSIST OF ¾" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.1). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
4. ALL HEADERS ABOVE (SEE 1/S2.3) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.2 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.2 AT LOAD BEARING EXTERIOR WALLS
5. HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.1 U.N.O. IN PLAN.
6. HEADERS IN EXTERIOR WALLS PERPENDICULAR TO FRAMING SHALL BE PER DETAIL 6/S6.1 U.N.O. IN PLAN.

1 S2.3 UPPER FLOOR FRAMING PLAN

1/4" = 1'-0"

NORTH

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Upper Floor Framing Plan

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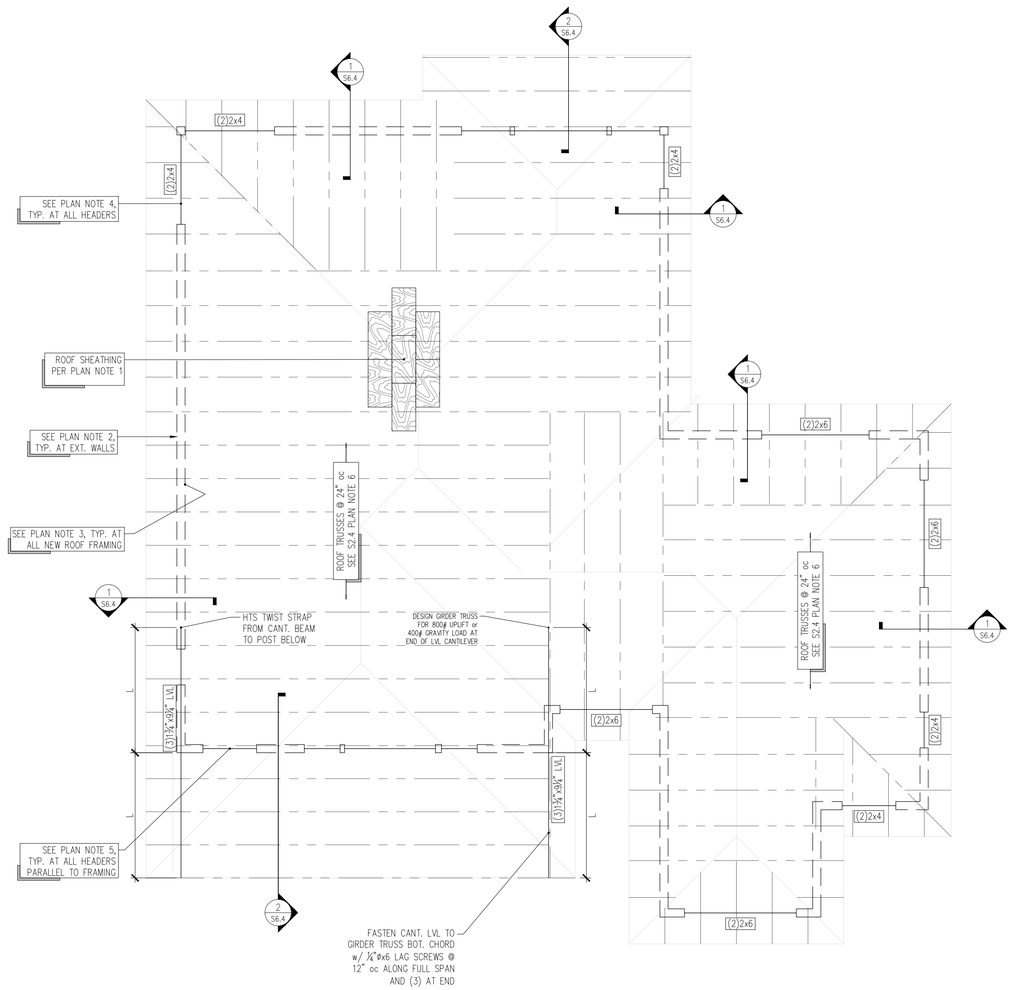
S2.3

LEGEND

- STRUCTURAL WOOD STUDWALL BELOW
- POST BELOW
- HEADER or BEAM
- CONNECTOR PLATE WOOD TRUSS
- ROOF FRAMING

CONNECTOR TABLE		
	SIMPSON DESIGNATION	NOTES
Ⓐ	ITS ~or~ IUS	HANGER
Ⓑ	HB7.12/16	TOP FLANGE HANGER
Ⓒ	JB ~or~ LUS	HANGER
Ⓓ	HUC410	CONCEALED FLANGE HANGER
Ⓔ	IUS3.56/9.5	FACE MOUNT HANGER
Ⓕ	IUS3.56/11.88	FACE MOUNT HANGER



ROOF FRAMING PLAN NOTES

1. ROOF SHEATHING SHALL CONSIST OF ⅝" SHEATHING (PANEL SPAN RATING 32/16) NAILED AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.2).
2. DASHED WALLS AND SHEARWALLS SHOWN IN PLAN ARE BELOW ROOF FRAMING ELEVATION.
3. PROVIDE H2.5A HURRICANE TIES AT EACH END OF ALL ROOF FRAMING.
4. ALL HEADERS SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.1 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.1 AT LOAD BEARING EXTERIOR WALLS.
5. HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.1 U.N.O. IN PLAN.
6. SEE GENERAL STRUCTURAL NOTE #9, 10, AND 24 FOR CONNECTOR PLATE ROOF TRUSS REQUIREMENTS.

1 / S2.4 ROOF FRAMING PLAN

1/4" = 1'-0"

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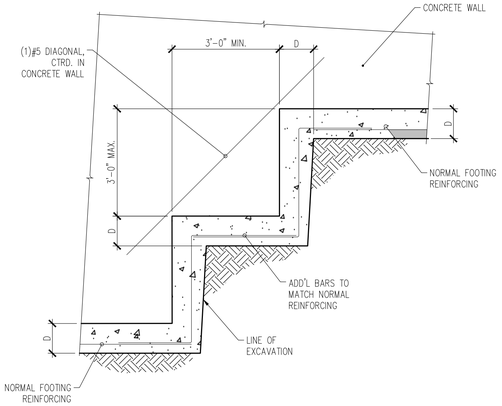
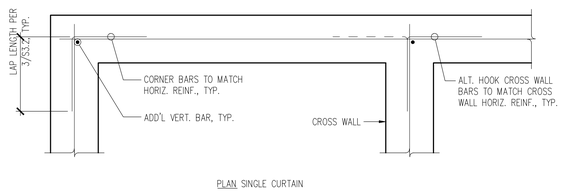
S2.4



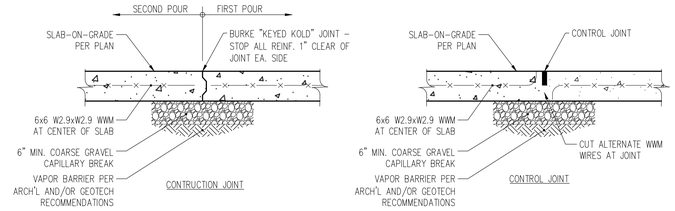
9 S3.1 TYPICAL STEPPED FOOTING
N.T.S.



PLAN SINGLE CURTAIN

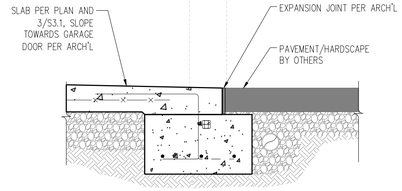
6 S3.1 WALL CORNER REINFORCING
N/A

CONSTRUCTION/CONTROL JOINTS IN SLABS ON GRADE SHALL BE PROVIDED TO DIVIDE SLAB INTO RECTANGULAR AREAS 225 SQUARE FEET OR LESS. AREAS SHALL BE APPROXIMATELY SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS MUST BE APPROVED BY THE ARCHITECT



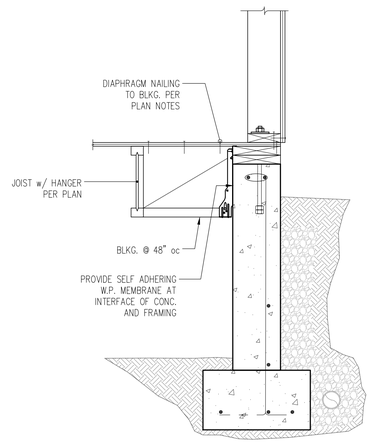
3 S3.1 EXTERIOR SLAB-ON-GRADE JOINTING
1" = 1'-0"

SEE DETAIL 7/S3.1 FOR CALL OUTS IN COMMON

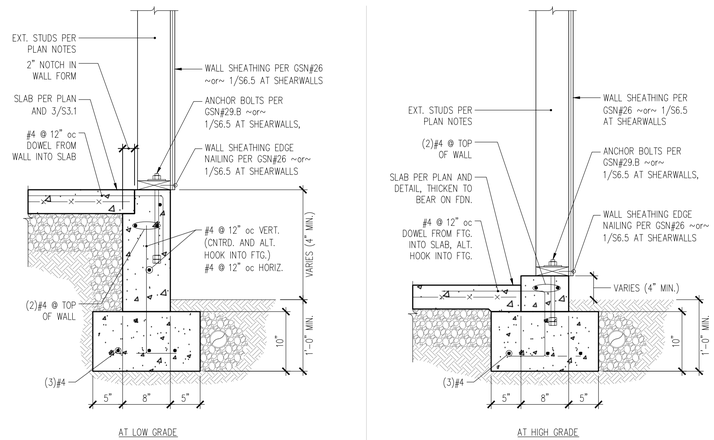


8 S3.1 SECTION AT GARAGE SLAB AT GARAGE DOOR
1" = 1'-0"

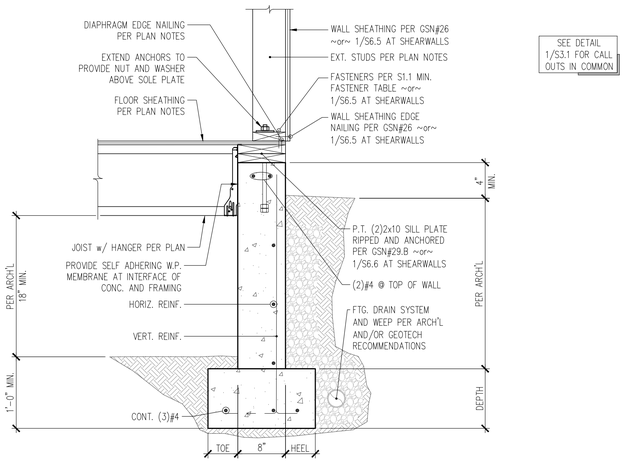
SEE DETAIL 4/S3.1 FOR CALL OUTS IN COMMON



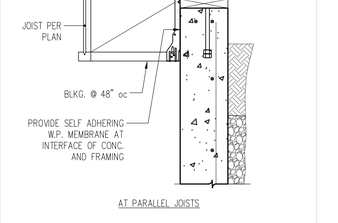
5 S3.1 SECTION AT CRAWLSPACE FOUNDATION WALL AND PARALLEL JOISTS
1" = 1'-0"



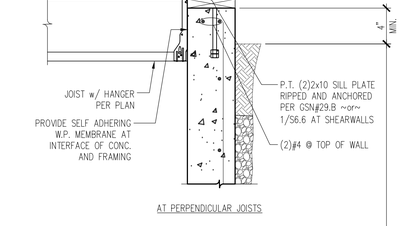
7 S3.1 SECTION AT GARAGE SLAB ON GRADE FOUNDATION WALL
1" = 1'-0"



4 S3.1 SECTION AT CRAWLSPACE FOUNDATION WALL AND PERPENDICULAR JOISTS
1" = 1'-0"



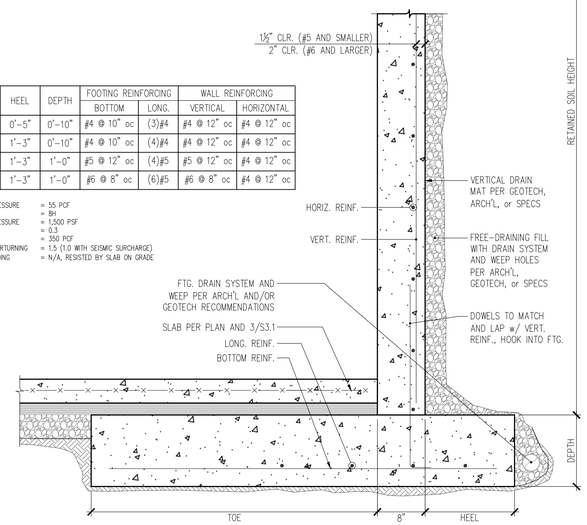
AT PARALLEL JOISTS



AT PERPENDICULAR JOISTS

RETAINED SOIL HEIGHT	TOE	HEEL	DEPTH	FOOTING REINFORCING		WALL REINFORCING	
				BOTTOM	LONG.	VERTICAL	HORIZONTAL
≤ 3'-6"	0'-10"	0'-5"	0'-10"	#4 @ 10" oc	(3)#4	#4 @ 12" oc	#4 @ 12" oc
≤ 5'-6"	1'-3"	1'-3"	0'-10"	#4 @ 10" oc	(4)#4	#4 @ 12" oc	#4 @ 12" oc
≤ 7'-6"	2'-3"	1'-3"	1'-0"	#5 @ 12" oc	(4)#5	#5 @ 12" oc	#4 @ 12" oc
≤ 9'-6"	4'-0"	1'-3"	1'-0"	#6 @ 8" oc	(6)#5	#6 @ 8" oc	#4 @ 12" oc

NOTE
MAXIMUM HORIZONTAL DESIGN PRESSURE = 55 PCF
SEISMIC OVERCHARGE = 8H
MINIMUM ALLOWABLE BEARING PRESSURE = 1,500 PSF
COEFFICIENT OF FRICTION = 0.3
PASSIVE RESISTANCE = 350 PCF
MINIMUM FACTOR OF SAFETY, OVERTURNING = 1.5 (1.0 WITH SEISMIC SURCHARGE)
MINIMUM FACTOR OF SAFETY, SLIDING = N/A, RESISTED BY SLAB ON GRADE



1 S3.1 SECTION THROUGH FOUNDATION WALL AT SLAB ON GRADE BASEMENT
N.T.S.

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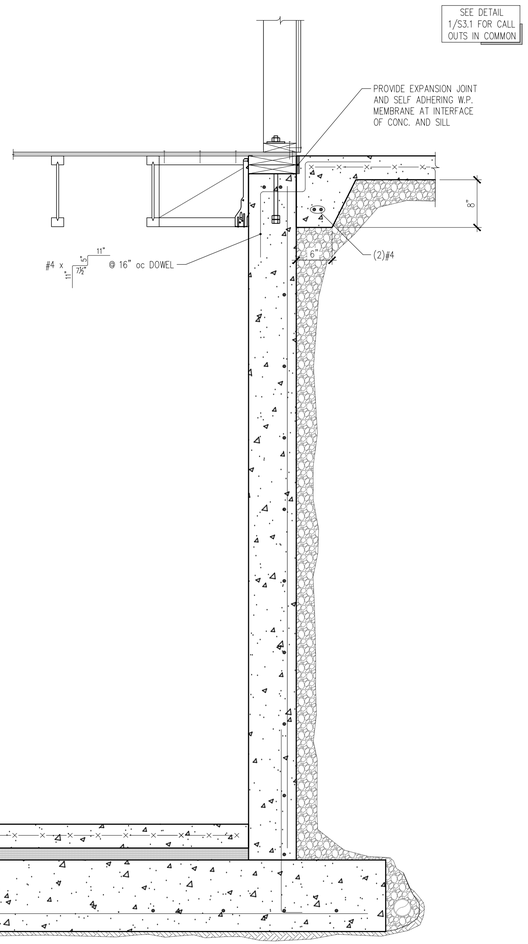
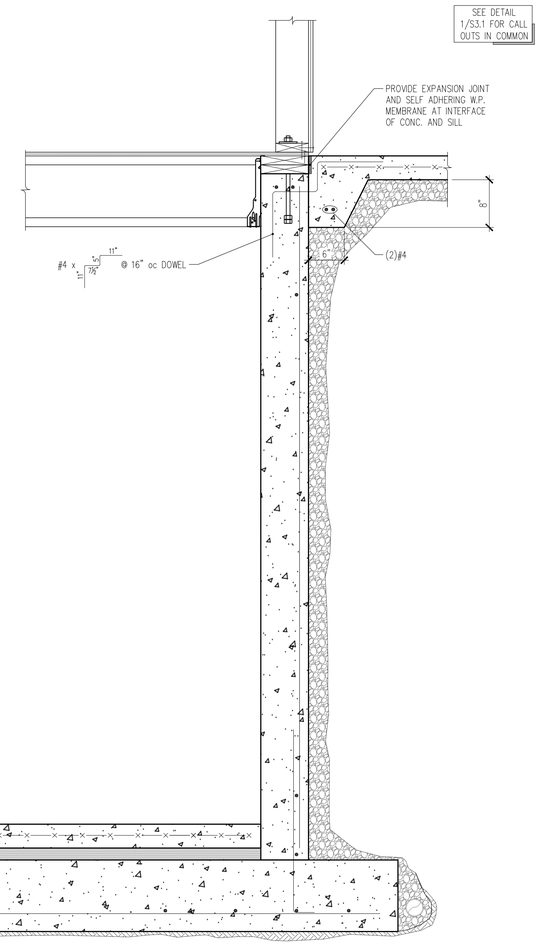
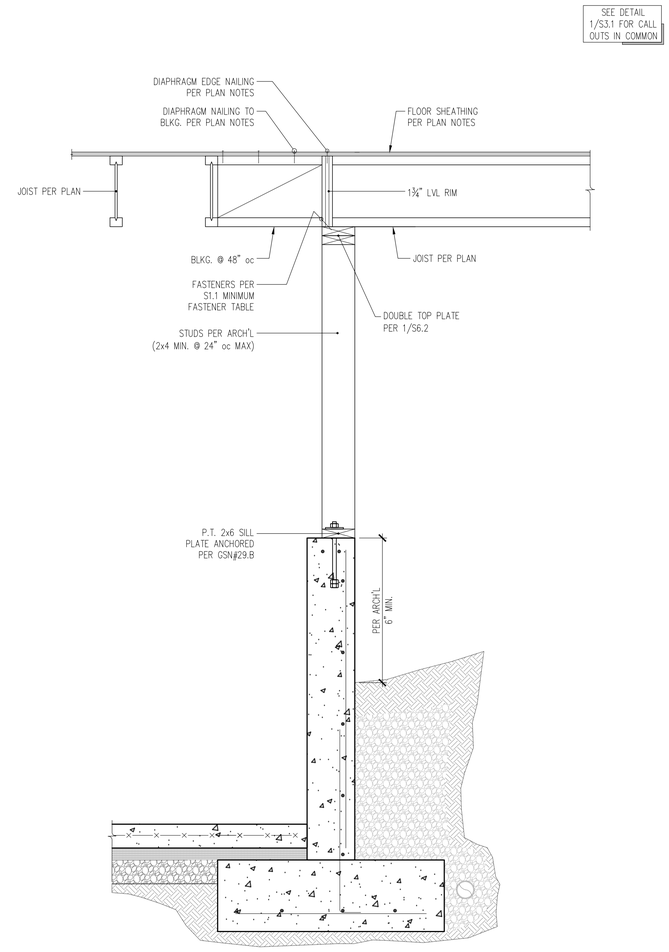
S3.1



7 / S3.2 SECTION THROUGH FOUNDATION WALL AT PARALLEL JOISTS AND GARAGE SLAB ON GRADE
1" = 1'-0"



4 / S3.2 SECTION THROUGH FOUNDATION WALL AT PERPENDICULAR JOISTS AND GARAGE SLAB ON GRADE
1" = 1'-0"



1 / S3.2 SECTION THROUGH FOUNDATION WALL AT SLAB ON GRADE BASEMENT AND CRAWLSPACE JOISTS
N.T.S.

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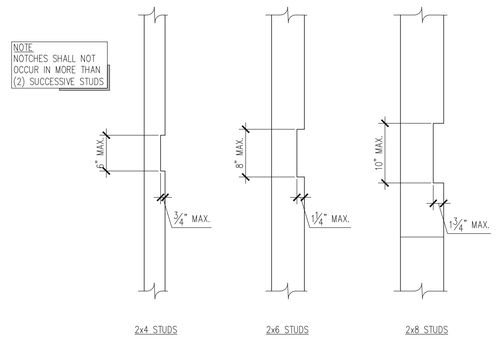
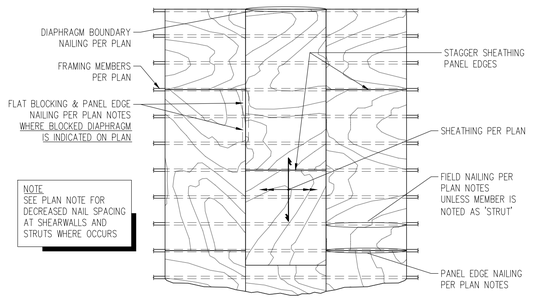
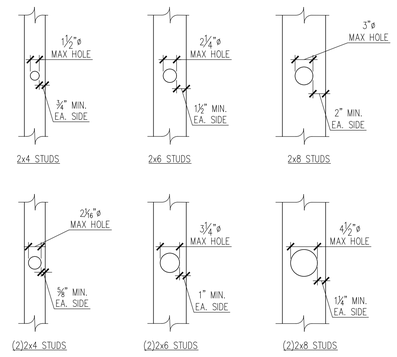
S3.2



6 S6.1 ALLOWABLE HOLES IN STUDWALL STUDS
NTS



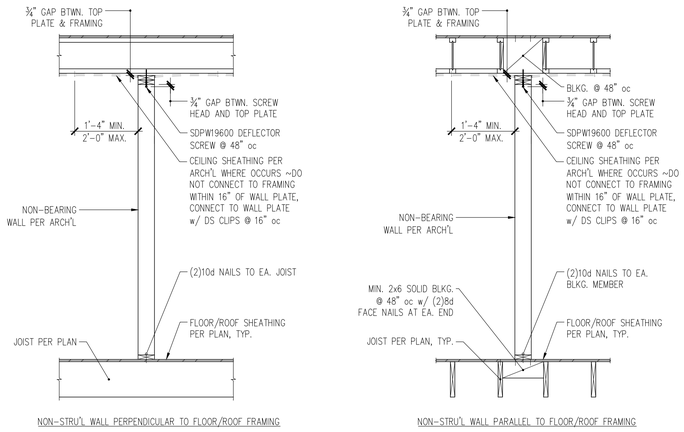
3 S6.1 TYPICAL DIAPHRAGM NAILING
NTS



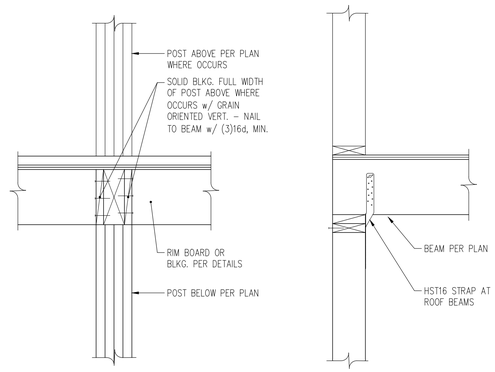
5 S6.1 ALLOWABLE HOLES IN STUDWALL STUDS
NTS

	NO REINF. REQUIRED	STRAP REINF. REQUIRED
2x4 PLATES	1½"ø MAX. HOLE, ¾" MIN. EA. SIDE	2⅝"ø MAX. HOLE, CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES), ⅜" MIN. EA. SIDE
2x6 PLATES	2¼"ø MAX. HOLE, 1½" MIN. EA. SIDE	3¾"ø MAX. HOLE, CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES), ¾" MIN. EA. SIDE
2x8 PLATES	¾"ø MAX. HOLE, 2" MIN. EA. SIDE	5"ø MAX. HOLE, CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES), 1¼" MIN. EA. SIDE

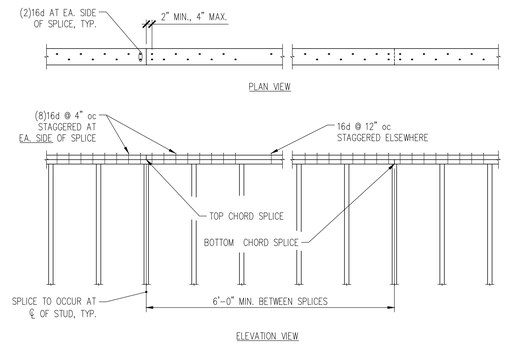
2 S6.1 ALLOWABLE HOLES THROUGH TOP PLATES
NTS



7 S6.1 CONNECTION OF NON-STRUC'L PARTITION WALL TO STRUCTURE
NTS



4 S6.1 TYPICAL BEAM PERPENDICULAR TO WALL
NTS



1 S6.1 TOP PLATE SPLICE
NTS

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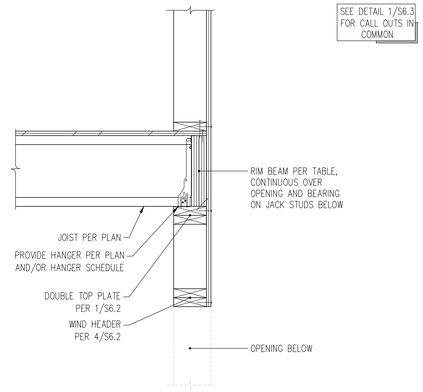
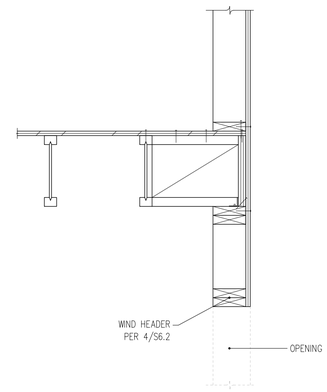
S6.1

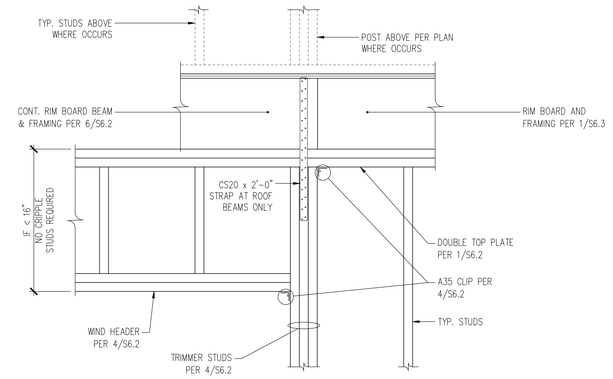
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
UPPER FLOOR		
L ≤ 2'-6"	1¾"x11⅞" LVL	(1)2x6
L ≤ 5'-0"	1¾"x11⅞" LVL	(2)2x6
MAIN FLOOR		
L ≤ 2'-6"	1¾"x11⅞" LVL	(2)2x6
L ≤ 5'-0"	1¾"x11⅞" LVL	(3)2x6



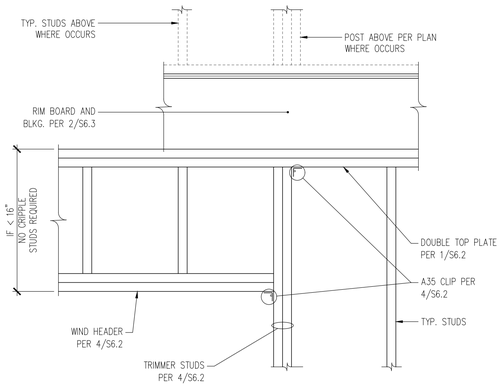
6 S6.2 TYPICAL RIMBOARD HEADER & WIND HEADER IN LOAD BEARING EXTERIOR WALL
NTS



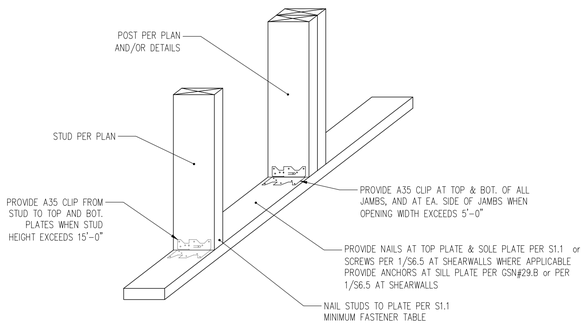
3 S6.2 TYPICAL WIND HEADER IN NON-LOAD BEARING EXTERIOR WALL
NTS



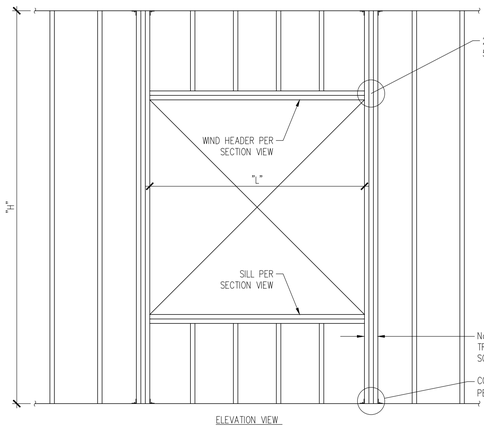
5 S6.2 TYPICAL FLUSH BEAM/HEADER IN EXTERIOR WALL
NTS



2 S6.2 TYPICAL WIND HEADER DETAIL
NTS



7 S6.2 CONNECTION OF EXTERIOR STUDS AT TOP & BOTTOM PLATES
NTS



ELEVATION VIEW

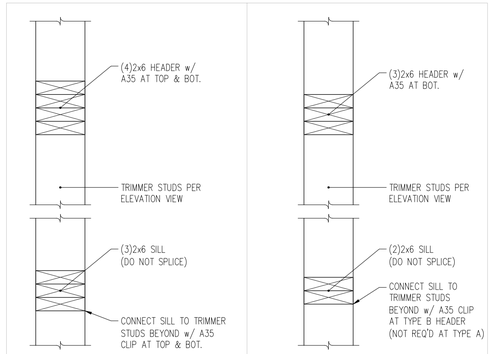
TYPICAL EXTERIOR WALL OPENING FRAMING SCHEDULE ②			
CLEAR ③ HEIGHT "H"	OPENING WIDTH "L"	HDR./SILL TYPE PER SECTION AT RIGHT	No. OF FULL HEIGHT TRIMMER STUDS ①
H < 12'	L ≤ 6'-0"	A	2
	6' < L < 10'	B	2
	10' ≤ L ≤ 15'	C	3
12' < H < 16'	L ≤ 10'	B	3
	10' ≤ L ≤ 15'	C	6x8

① ALL TRIMMER STUDS, HEADERS, AND SILLS SHALL BE NAILED TOGETHER PER S1.1

② ALL STRUCTURAL TRIMMER STUDS, SILLS, AND HEADERS SHALL BE DOUGLAS FIR #2 OR BETTER

③ SEE PLANS FOR LVL STUD WALL LOCATIONS, WHERE APPLICABLE

4 S6.2 TYPICAL WIND HEADER
NTS



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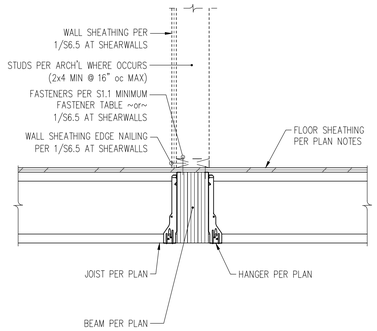
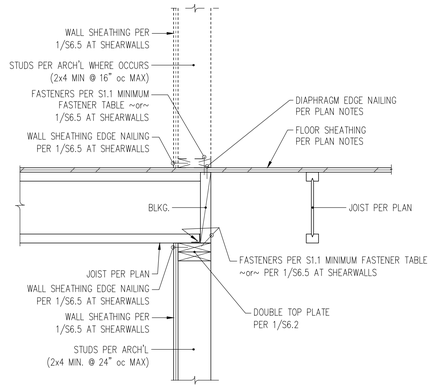
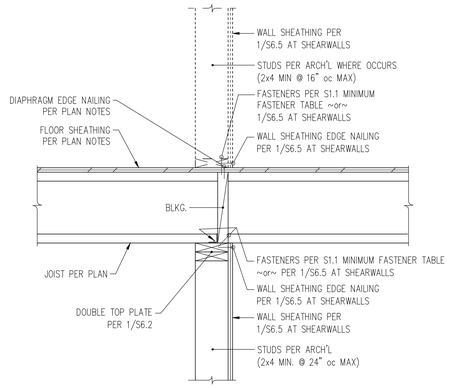
S6.2



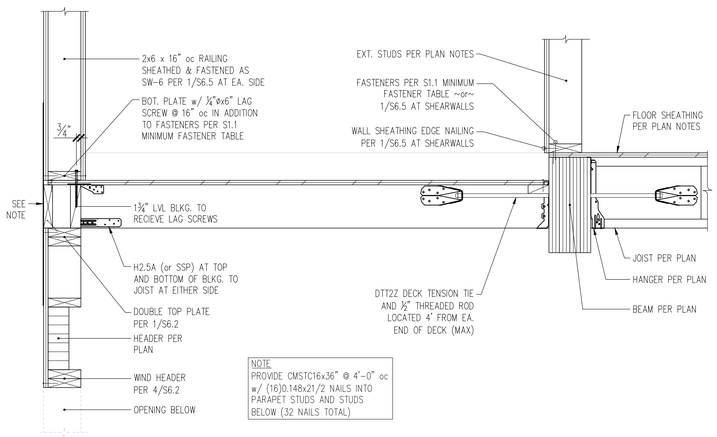
9 S6.3 SECTION THROUGH INTERIOR BEAM AT PERPENDICULAR JOISTS
1" = 1'-0"



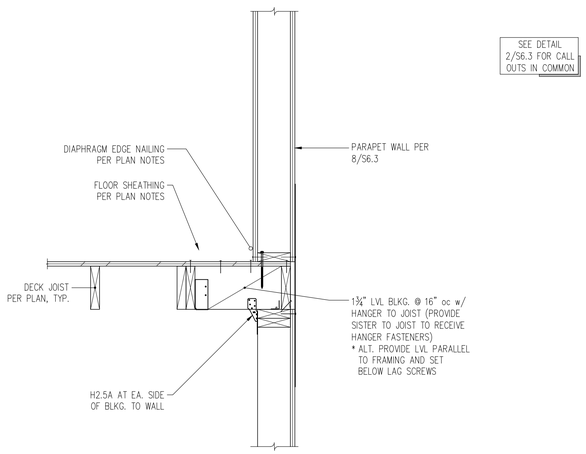
6 S6.3 SECTION THROUGH INTERIOR WALL AT PERPENDICULAR AND PARALLEL JOISTS
1" = 1'-0"



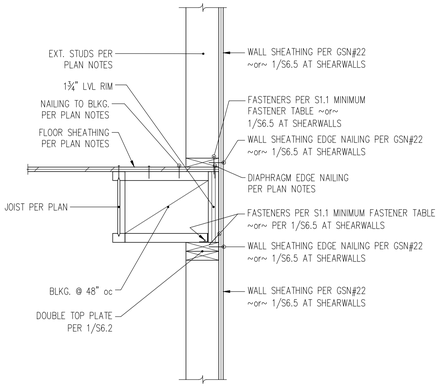
3 S6.3 SECTION THROUGH INTERIOR STRUCTURAL WALL AT PERPENDICULAR JOISTS
1" = 1'-0"



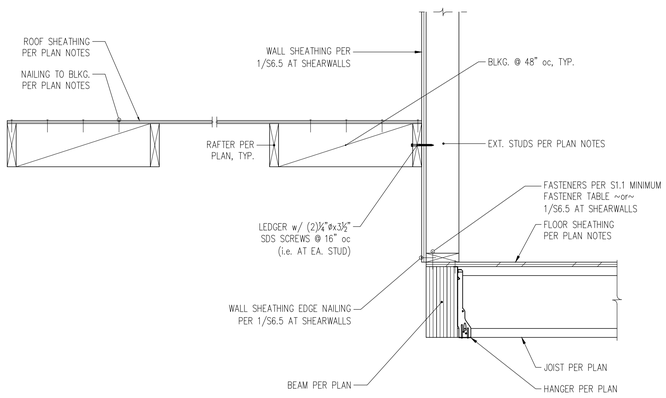
8 S6.3 SECTION THROUGH UPPER FLOOR DECK AT PERPENDICULAR DECK AND FLOOR JOISTS
1" = 1'-0"



5 S6.3 SECTION THROUGH EXTERIOR WALL AT PARALLEL JOISTS
1" = 1'-0"



2 S6.3 SECTION THROUGH EXTERIOR WALL AT PARALLEL JOISTS
1" = 1'-0"



7 S6.3 SECTION THROUGH ENTRY PORCH FRAMING
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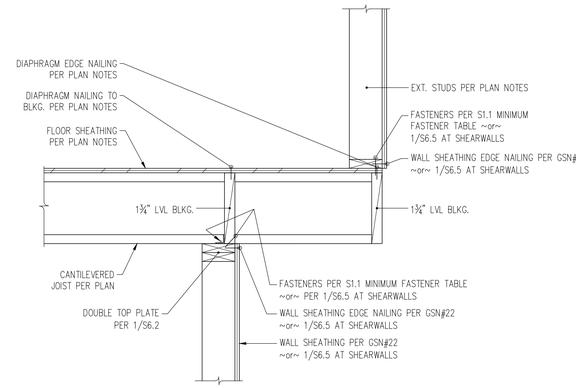
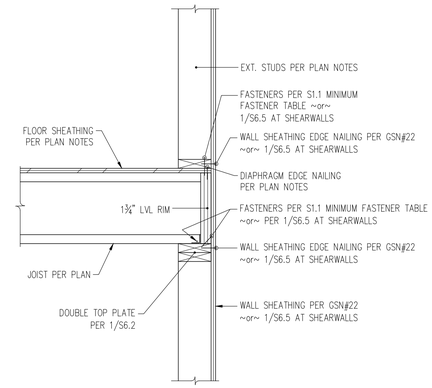


4 S6.3 SECTION THROUGH OFFSET EXTERIOR WALLS AT PERPENDICULAR JOIST
1" = 1'-0"



1 S6.3 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR JOISTS
1" = 1'-0"

ATLAS CONSULTING STRUCTURAL ENGINEERS

DAVID ABDI STATE OF WASHINGTON 53199 STRUCTURAL ENGINEER PROFESSIONAL ENGINEER

Imani Residence

2728 63rd Ave SE Mercer Island WA

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Floor Framing Details

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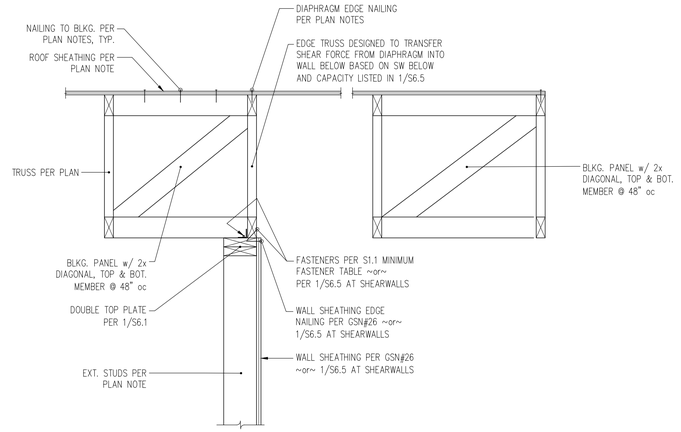
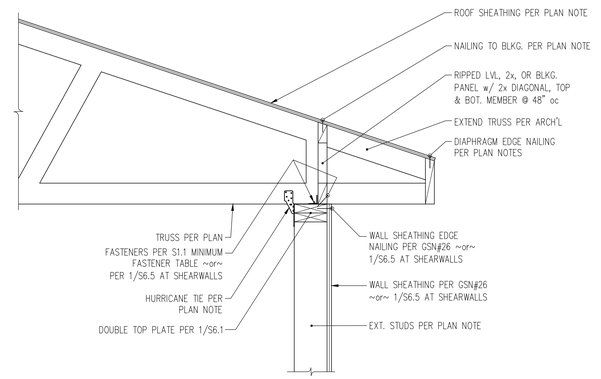


2 / S6.4 SECTION THROUGH EXTERIOR WALL AT PARALLEL ROOF TRUSSES
1" = 1'-0"



1 / S6.4 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR ROOF TRUSSES
1" = 1'-0"

ATLAS CONSULTING STRUCTURAL ENGINEERS

JAVID ABDI — STATE OF WASHINGTON — 53199 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

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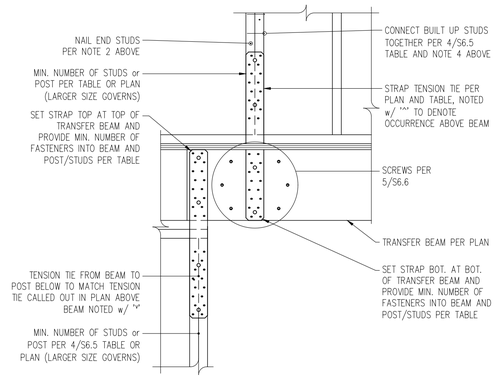


ELEVATION VIEW – TENSION TIE ABOVE BEAM

9 / S6.5 STRAP TENSION TIE ABOVE TRANSFER BEAM
1" = 1'-0"

STRAP TENSION TIE SCHEDULE

TIE ① MARK	Min. # of studs	CLEAR SPAN AND TOTAL FASTENERS ②	ASD ③ CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS ④
MSTC28	(2)2x	18" – (12)0.148"ø x 3¼"	1,150#	10d @ 6" oc
MSTC40	(2)2x	18" – (28)0.148"ø x 3¼"	2,690#	10d @ 4" oc
MSTC52	(3)2x	18" – (44)0.148"ø x 3¼"	4,225#	(8)¼"ø x4½" SDS
MSTC66	(3)2x	18" – (64)0.148"ø x 3¼"	5,850#	(12)¼"ø x6" SDS

TENSION TIE ABOVE BEAM

TIE ① MARK	Min. # of studs	FASTENERS ②	ASD ③ CAPACITY	BUILT-UP STUD ④ FACE NAILS or SCREWS
MSTC28^	(2)2x	(16)0.148"x2½"	1,400#	10d @ 6" oc
HDU2^	(2)2x	(6)¼"ø x 2½" SDS	3,100#	10d @ 4" oc
HDU4^	(3)2x	(10)¼"ø x 2½" SDS	4,465#	(9)¼"ø x4½" SDS
HDU5^	(3)2x	(14)¼"ø x 2½" SDS	5,645#	(10)¼"ø x4½" SDS

① TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.

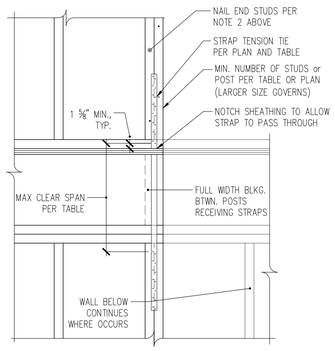
② NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.

③ FASTENERS NOTED IN TABLE ABOVE REPRESENT THE TOTAL AMOUNT. FOR STRAPS, HALF OF THE FASTENERS SHALL BE PROVIDED INTO EACH STUD.

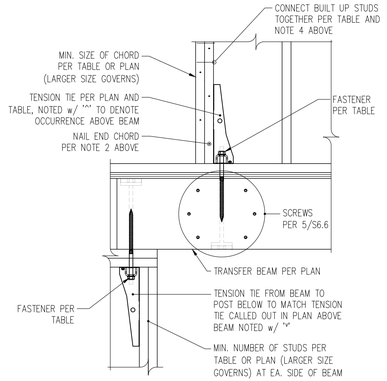
④ SCREWS SHALL BE SPACED EQUALLY ALONG FULL HEIGHT OF STUD ABOVE TENSION TIE. PROVIDE SCREWS AS NOTED IN TABLE AT ONE FACE OF BUILT-UP STUD, AND 10d @ 6" oc NAILS AT OPPOSITE FACE OF BUILT UP STUD.

^ DENOTES TENSION TIE THAT OCCURS ATOP OF A FRAMING MEMBER BELOW. FOR:

MSTC28^	–	SET STRAP SO ½ OF FASTENERS ARE INSTALLED INTO BEAM, SEE 9/S6.5	–	4 TOTAL SDW EWP-PLY SCREWS, SEE 5/S6.6
HDU2^	–	⅜"ø LAG SCREW WITH 7" MINIMUM PENETRATION INTO BEAM	–	6 TOTAL SDW EWP-PLY SCREWS, SEE 5/S6.6
HDU4^	–	⅜"ø LAG SCREW WITH 10" MINIMUM PENETRATION INTO BEAM	–	8 TOTAL SDW EWP-PLY SCREWS, SEE 5/S6.6
HDU5^	–	⅜"ø THREADED ROD w/ BEARING PL ⅜"x3½"x0'-3½", RECESSED NUT & WASHER	–	10 TOTAL SDW EWP-PLY SCREWS, SEE 5/S6.6



ELEVATION VIEW – TYPICAL CONDITION



ELEVATION VIEW – TENSION TIE ABOVE BEAM

HOLDOWN TENSION TIE SCHEDULE

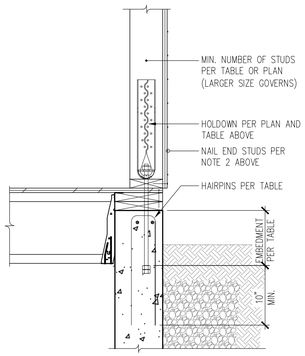
TIE ① MARK	MIN. NUMBER ② OF STUDS	ANCHOR (ø x EMBEDMENT) and No. OF HAIRPIN DOWELS ③	FASTENERS FROM TIE TO STUD	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS ④
HDU2	(2)2x	⅝"ø x 10" – (2)#4 HAIRPIN	(6)¼"ø x 2½" SDS SCREWS	3,075#	10d @ 4" oc
HDU4	(3)2x	⅝"ø x 10" – (2)#4 HAIRPIN	(10)¼"ø x 2½" SDS SCREWS	4,565#	(9)¼"ø x4½" SDS
HDU5	(3)2x	⅝"ø x 10" – (2)#4 HAIRPIN	(14)¼"ø x 2½" SDS SCREWS	5,645#	(10)¼"ø x4½" SDS
HDU8	(4)2x	⅞"ø x 10" – (4)#4 HAIRPIN	(20)¼"ø x 2½" SDS SCREWS	7,870#	(15)¼"ø x6" SDS
HDU11	6x6	1"ø x 10" – (4)#4 HAIRPIN	(30)¼"ø x 2½" SDS SCREWS	11,175#	N/A
HDU14	6x6	1"ø x 10" – (6)#4 HAIRPIN	(36)¼"ø x 2½" SDS SCREWS	14,445#	N/A

① TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.

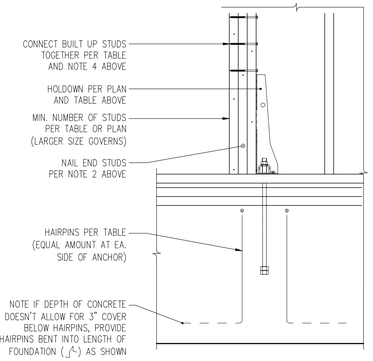
② NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.

③ ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE.
ASTM F 1554 Gr. 36 FOR ⅝"ø ANCHOR
ASTM F 1554 Gr. 55 FOR ⅞"ø AND 1"ø ANCHORS

④ SCREWS SHALL BE SPACED EQUALLY ALONG FULL HEIGHT OF STUD ABOVE TENSION TIE. PROVIDE SCREWS AS NOTED IN TABLE AT ONE FACE OF BUILT-UP STUD, AND 10d @ 6" oc NAILS AT OPPOSITE FACE OF BUILT UP STUD.



SECTION VIEW



ELEVATION VIEW

4 / S6.5 HOLDOWN DETAIL AND SCHEDULE
1" = 1'-0"

SHEARWALL SCHEDULE

SHEARWALL PANEL TYPE	① SHEATHING THICKNESS	② 0.148" x 2¼" PANEL NAILING	③ STUD/BLKG. AT ABUTTING PANEL EDGES & SILL PLATE THICKNESS	⑦ CONN. OF BLKG. OR FRAMING to TOP PLATE, AND SOLE PLATE TO SILL PLATE. ④ ¼"ø x 3½" SDS SCREWS	⑤ A35 CLIPS	⑥ LTP4 PLATES	⑧ ⑨ ANCHOR BOLTS TO CONC. ⅝"ø	¾"ø	ASD CAPACITY, PLF
SW-6	½"	6" oc	2x	15" oc	25" oc	24" oc	48" oc	48" oc	310
SW-4	½"	4" oc	3x	10" oc	16" oc	16" oc	38" oc	48" oc	460
SW-3	½"	3" oc	3x	8" oc	13" oc	12" oc	29" oc	40" oc	600
SW-2	½"	2" oc	3x	6" oc	10" oc	9" oc	19" oc	26" oc	770
SW-44	½"	4" oc EA. SIDE	3x	5" oc	8" oc	8" oc	14" oc	20" oc	920
SW-33	½"	3" oc EA. SIDE	3x	4" oc	6" oc	6" oc	14" oc	20" oc	1200
SW-22	½"	2" oc EA. SIDE	3x	3" oc	5" oc	4" oc	11" oc	15" oc	1540

① SHEATHING SHALL CONSIST OF ½" PLYWOOD AND HAVE A MINIMUM SPAN RATING OF 24/16. AT INTERIOR SHEARWALLS ONLY, 15/32" OSB SHALL BE USED

② PANEL NAILING APPLIES TO ALL SHEATHING PANEL EDGES. INSTALL BLOCKING AT ALL UNFRAMED PANEL EDGES. ENSURE SHEATHING IS NAILED TO ALL INTERMEDIATE STUDS/BLOCKING WITH PANEL NAILS AT 12"oc.

③ DOUBLE 2x MEMBERS MAY BE SUBSTITUTED FOR 3x MEMBERS AT WALLS WITH ONLY ONE LAYER OF SHEATHING. 2x MEMBERS SHALL BE NAILED TOGETHER WITH 10d FACE: @ 3" oc FOR SW-4 AND @ 2¼" oc FOR SW-3 (116#/NAIL)

④ ROWS OF NAILS AND SDS SCREWS SHALL BE OFFSET AT LEAST ½" AND STAGGERED. MINIMUM EDGE DISTANCE FOR NAILS AND SDS SCREWS INTO EDGE OF MEMBERS SHALL BE ⅜" (400#/SCREW)

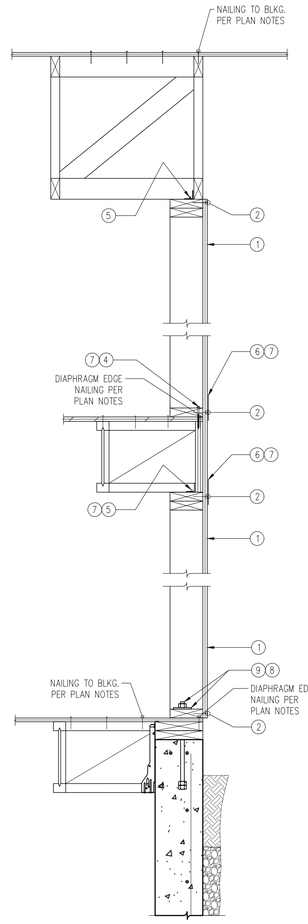
⑤ A35 CLIPS SHALL BE INSTALLED w/ (12)0.131 x 1½ " NAILS (650#/CLIP)

⑥ LTP4 LATERAL TIE PLATES MAY BE INSTALLED OVER SHEATHING w/ (12)0.131 x 2½" NAILS (625#/CLIP)

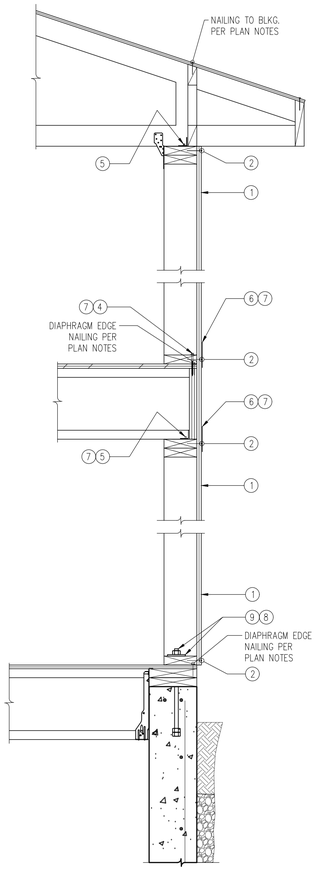
⑦ CONTRACTOR SHALL USE LTP4 PLATES FROM SHEATHING TO RIM ~or~ SDS SCREWS FROM SHEATHING TO RIM
CONTRACTOR SHALL USE A35 CLIPS FROM RIM TO STUDWALL DOUBLE TOP PLATE ~or~ LTP4 PLATES FROM SHEATHING TO STUDWALL DOUBLE TOP PLATE.

⑧ PLATE WASHERS IN 2x4 STUD WALLS AND ALL SINGLE SIDED SHEARWALLS SHALL BE 3"x3"x0.229". DOUBLE SIDED 2x6 SHEARWALLS SHALL HAVE 4½"x3"0.229" PLATE WASHERS. THE EDGE OF PLATE WASHERS SHALL BE LOCATED WITHIN ½" OF THE EDGE OF BOTTOM PLATE ON THE SIDE WITH SHEATHING.

⑨ CAST ANCHORS A MINIMUM OF 7" INTO CONCRETE. PROVIDE ADDITIONAL ANCHOR BOLTS AT EACH SIDE OF PLATE BREAKS AND PENETRATIONS EXCEEDING THE "NO REINFORCING" HOLE SIZE PER 2/S6.1.



FRAMING PARALLEL TO SW



FRAMING PERPENDICULAR TO SW

1 / S6.5 SHEARWALL SECTION AND SCHEDULE
1" = 1'-0"

ATLAS CONSULTING STRUCTURAL ENGINEERS

JAVID ABDI STATE OF WASHINGTON 53199 REGISTERED STRUCTURAL ENGINEER PROFESSIONAL ENGINEER

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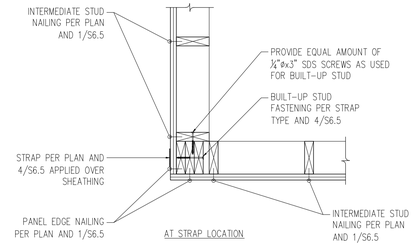
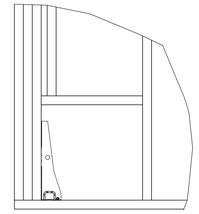
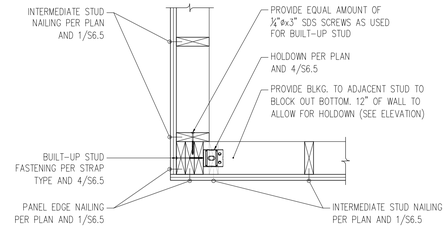


AT STRAP LOCATION



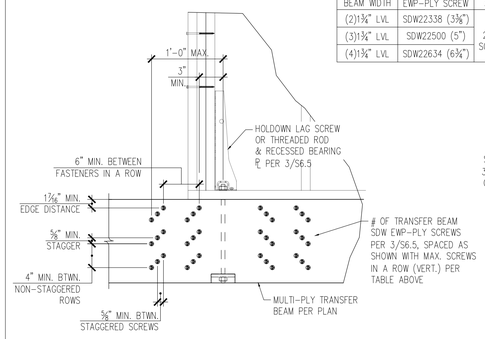
ELEVATION VIEW



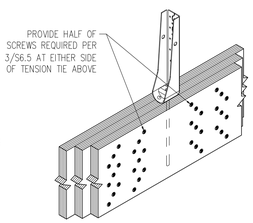
AT HOLDOWN LOCATION

2 S6.6 SHEAR WALL INTERSECTION AND TENSION TIE POSITIONING
N.T.S.

TRANSFER BEAM WIDTH	SIMPSON SDW EWP-PLY SCREW	TRANSFER BEAM DEPTH			
		7¼" to 9¼"	11¼" to 14"	16" to 18"	20" to 24"
(2)1¾" LVL	SDW22338 (3⅜")	2 ROWS OF SCREWS, MAX	3 ROWS OF SCREWS, MAX	4 ROWS OF SCREWS, MAX	5 ROWS OF SCREWS, MAX
(3)1¾" LVL	SDW22500 (5")				
(4)1¾" LVL	SDW22634 (6¾")				

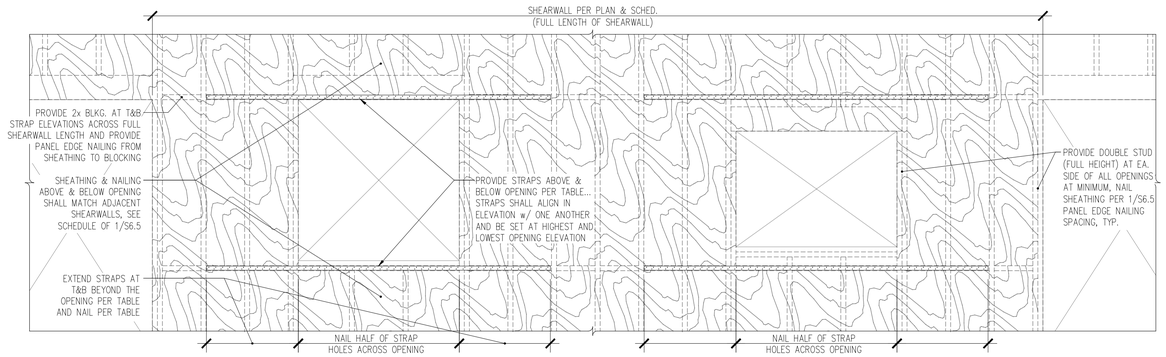


TRANSFER BEAM ELEVATION VIEW

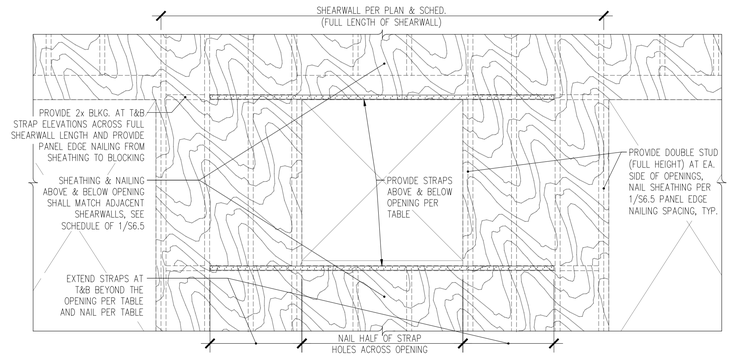


ISOMETRIC VIEW

5 S6.6 MULTI-PLY TRANSFER BEAM CONNECTION DETAILS
1" = 1'-0"



MULTIPLE OPENINGS



ONE OPENING

TYPE	STRAP	END LENGTH	NAILS
1	CS20	16"	(12)0.148"x2½"
2	CS20	24"	(12)0.148"x2½"
3	CS20	30"	(12)0.148"x2½"
4	CS18	24"	(16)0.148"x2½"
5	CS18	30"	(16)0.148"x2½"
6	CS18	34"	(16)0.148"x2½"
7	CS16	30"	(20)0.148"x2½"
8	CS16	45"	(20)0.148"x2½"

STRAP TABLE

7 S6.6 STRAPPED SHEARWALL DETAIL
N.T.S.

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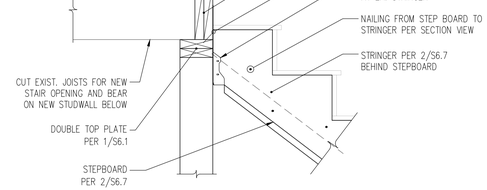
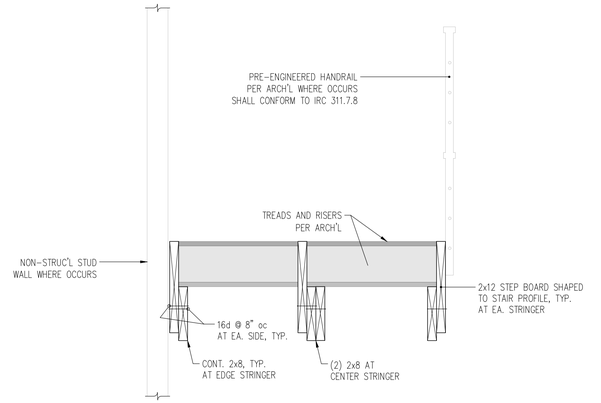
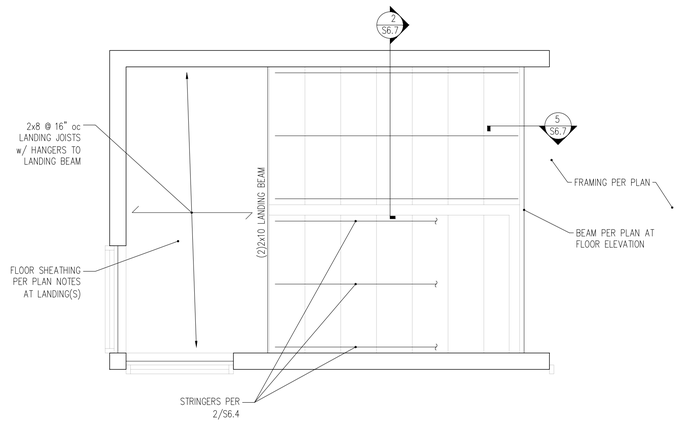


STRINGER STEPPING DOWN FROM FLOOR LEVEL

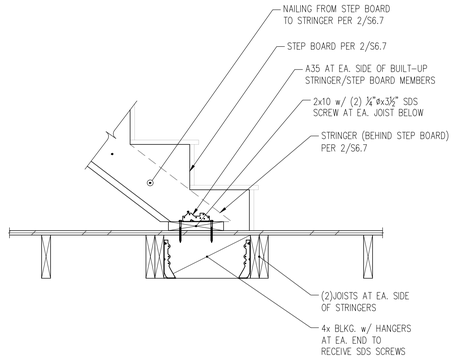
5 S6.7 ELEVATION OF STRINGER TO SUPPORT MEMBER
1" = 1'-0"



2 S6.7 SECTION THROUGH STAIR FRAMING
1" = 1'-0"



4 S6.7 TYPICAL STAIR FRAMING/LANDING PLAN VIEW
1" = 1'-0"



1 S6.7 ELEVATION VIEW OF STAIR STRINGERS BEARING ATOP FRAMING
1" = 1'-0"

ATLAS CONSULTING STRUCTURAL ENGINEERS
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Typical Stair Details

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TREE PROTECTION DETAIL

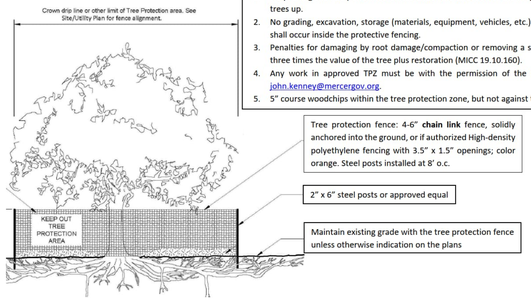
TREE PROTECTION AREA (TPZ)

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/financial penalties
3. Arborist reports recommending mitigation



Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenney@mercergov.org.
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.

Tree protection fence: 4-6" **chain link** fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.

2" x 6" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indication on the plans

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

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE		
FILTER FABRIC FENCE (SILT FENCE)	SF	
STABILIZED CONSTRUCTION ENTRANCE	CE	
CATCH BASIN INLET PROTECTION	IP	
TREE PROTECTION FENCING	TP	
STRAW WATTLES	SW	USE AS NEEDED
PLASTIC COVERING	PC	COVER EXPOSED AREAS WITHIN MERCER ISLAND TIME LIMIT
STOCKPILE	SP	

SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

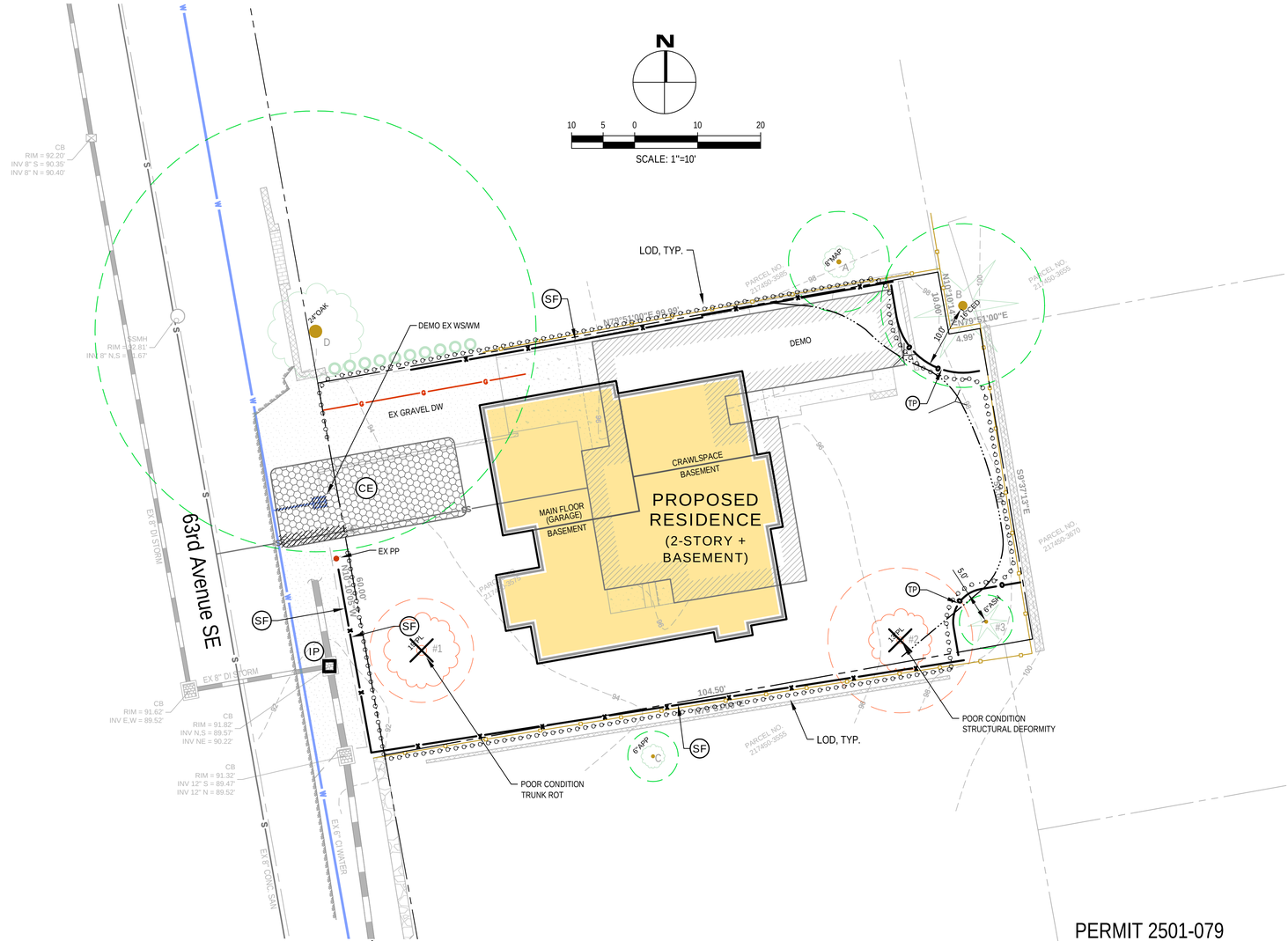
LEGAL DESCRIPTION

LOTS 5 AND 6 IN BLOCK 21 OF EAST SEATTLE AS PER PLAT RECORDED IN VOLUME 3 OF PLATS, PAGE 22, RECORDS OF KING COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF LOTS 24 AND 25 OF SAID BLOCK 21, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 25;
THENCE NORTH 10°10'24" WEST ALONG THE WESTLINE OF SAID LOTS 25 AND 24 A DISTANCE OF 50.00 FEET;
THENCE NORTH 79° 51'00" EAST 4.99 FEET;
THENCE SOUTH 09°37'23" EAST 50.00 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 25 THAT IS NORTH 79°51'00" EAST 4.51 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 25;
THENCE SOUTH 79°51'00" WEST 4.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 25 AND THE POINT OF BEGINNING PURSUANT TO STUPULATED ORDER FILED MAY 7, 2024 UNDER KING COUNTY CASE NUMBER 23-2-02297-1 SEA, RECORDED UNDER KING COUNTY RECORDING NUMBER 20240509000143, RECORDS OF THE KING COUNTY SUPERIOUR COURT OF THE STATE OF WASHINGTON;

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.



PERMIT 2501-079

NO.	DATE	BY	REVISIONS

APPLICANT
JASON IMANI
IMANI HOMES

DATE: Mar 31, 2025
JOB# 2106
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 31, 2025
JEFFREY B. DUFFY
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39766
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701 N 36th STREET, SUITE 450 SEATTLE, WA 98103
206.930.0342 DUFFY@CESOLUTIONS.US

TESC PLAN

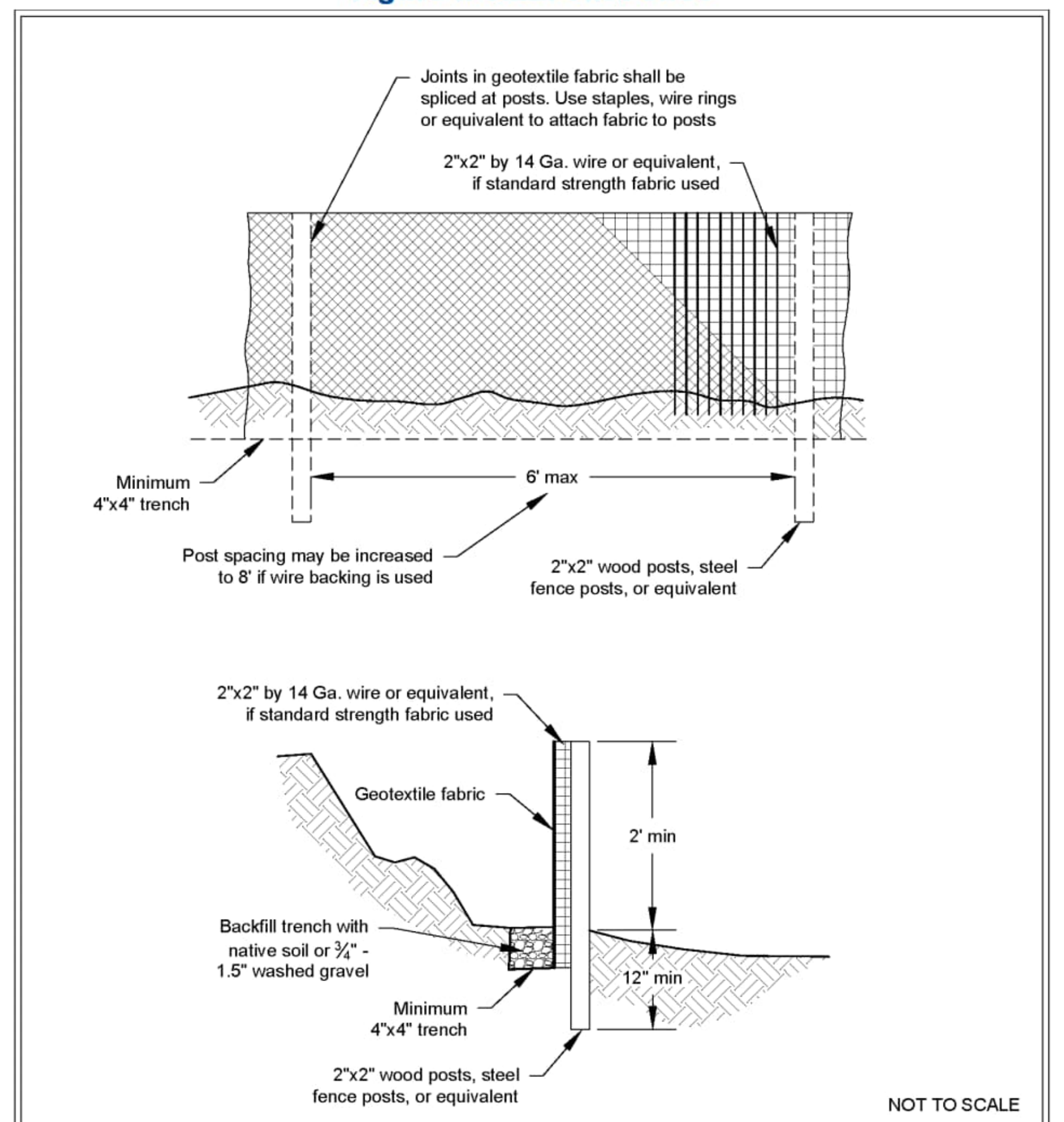
PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0

APN 217450-3575
#2501-079

SILT FENCE DETAIL DOE

Figure II-3.22: Silt Fence



DEPARTMENT OF ECOLOGY State of Washington

Silt Fence

Revised July 2017

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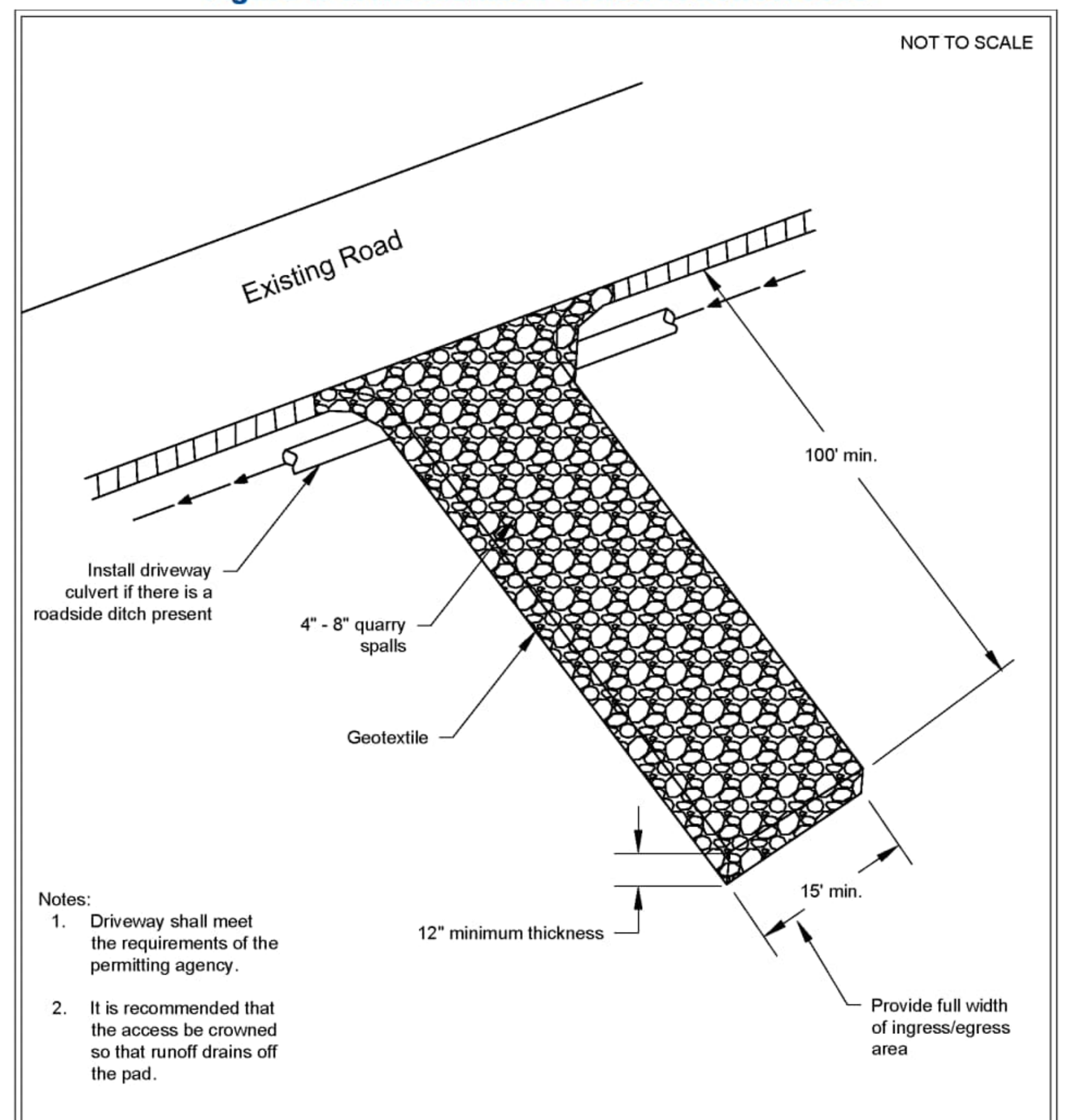
CONSTRUCTION ENTRANCE DOE

Figure II-3.1: Stabilized Construction Access



DEPARTMENT OF ECOLOGY State of Washington

Stabilized Construction Access

Revised June 2018

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RECOMMENDED CONSTRUCTION SEQUENCE

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).

3. FLAG OR FENCE CLEARING LIMITS.

4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.

5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).

7. CONSTRUCT SEDIMENT PONDS AND TRAPS.

8. GRADE AND STABILIZE CONSTRUCTION ROADS.

9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.

10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.

12. COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.

13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.

14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

DENUDED AREAS REQUIREMENTS

APRIL 1 TO SEPT 30
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.

OCT 1 TO MARCH 31
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

EROSION CONTROL NOTES

D.8.2 STANDARD ESC PLAN NOTES
THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.

1. APPROVAL OF THIS EROSION AND 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.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND
UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.

5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

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 AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.

7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.

8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.

11. AT NO TIME SHALL MORE THAN ONE (1) FOOT 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.

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 FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.

2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.

3. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.

4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.

5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555

6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED

7. EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:

8. PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.

9. CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.

10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.

11. ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.

12. INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.

13. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.

14. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.

15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.

16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.

17. SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.

18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.

19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.

16. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. 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. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.

20. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.

21. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.

22. THE LIMITS AND EXTENDS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

PERMIT 2501-079

NO.	DATE	BY	REVISIONS

APPLICANT
JASON IMANI
IMANI HOMES

DATE: Mar 31, 2025
JOB# 2106
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Mar 31, 2025
JEFFREY E. ... STATE OF WASHINGTON ... REGISTERED PROFESSIONAL ENGINEER

CIVIL ENGINEERING SOLUTIONS
701 N 36th STREET, SUITE 450 SEATTLE, WA 98103
206.930.0342 DUFFY@CESOLUTIONS.US

TESC & CITY NOTES
TESC DETAILS

PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C1.2

APN 217450-3575
#2501-079

SANITARY SEWER IMPROVEMENTS

(1) -

(2) -4 OR 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.

(3) -

(4) -6" SEWER CLEANOUT PER MERCER ISLAND DETAIL S-19

(7) -LOCATE AND VIDEO CONDITION OF EXISTING SANITARY SIDE SEWER. REPLACE LINE IF FOUND DEFECTIVE AS DETERMINED BY CITY INSPECTOR.

WATER IMPROVEMENTS

(10) -1" WATER METER AND WATER SERVICE IS REQUIRED PER STANDARD DETAIL W-13. FIRE REQUIRES 13D SPRINKLER SYSTEM.

(11) -1.5" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.

(12) -

(14) -

STORM DRAIN

(20) -4" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE

(21) -4" FOUNDATION DRAIN (3034 PVC) @ MIN 2 % GRADE

(22) -6" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE

(23) -

(24) -

(25) -

(26) -

(28) -

(29) -

STORM DRAIN STRUCTURES

(30) -

(31) -

(32) -

(33) -

(34) -

(35) -MIN 18" ID YARD DRAIN (OR EQUAL) WITH SOLID LID

(36) -6" WIDE NDS DURASLOPE CHANNEL DRAIN OR EQUAL. CLASS B VEHICLE RATED GRATE.

(36A) -

(39) -

(40) -

(41) -

(43) -

(46) -

(47) -

(48) -FOOTING DRAIN SUMP PUMP: USE 1/3 HP HYDROMATIC SUMP PUMP OR EQUAL. 120V, 1/3 HP, SINGLE PHASE, 8.0 AMP 1-1/2" DISCHARGE. PLACE IN 24" GREEN ULTRA-RIB PVC PIPE OR EQUAL.

STREET IMPROVEMENTS

(63) -PRELIMINARY PSE JOINT TRENCH LOCATION

(71) -PAVEMENT RESTORATION - COORDINATE SCOPE OF PAVEMENT RESTORATION WITH CITY INSPECTOR

MINIMUM 10% ORGANIC - COMPOST & MULCH REQUIRED

STORM BMP's

(50) -COMPOST AMENDED SOIL TO ALL DISTURBED AREAS (SEE DETAIL SHEET C3.5). TILL 2-3" OF COMPOST INTO UPPER 8" OF SOIL. LOOSEN COMPACTED SUBSOIL, IF NEEDED BY RIPPING TO 12" DEPTH. MULCH LANDSCAPE BEDS AFTER PLANTING.

(51) -

(52) -

(53) -

(54) -

(55) -

(56) -

(57) -

(58) -

SOILS

MAPPED AS "INFILTRATING LID FACILITIES ARE NOT PERMITTED"

SURVEYOR

TOPOGRAPHIC SURVEY BY:
SITE SURVEYING, INC.
21923 NE 11th STREET
SAMMAMISH, WA 98074
PHONE 425-298-4412
www.sitesurveymaping.com

VERTICAL DATUM

NAVD 88 PER GPS OBSERVATIONS USING THE WSRN SEE SURVEY

LEGAL DESCRIPTION

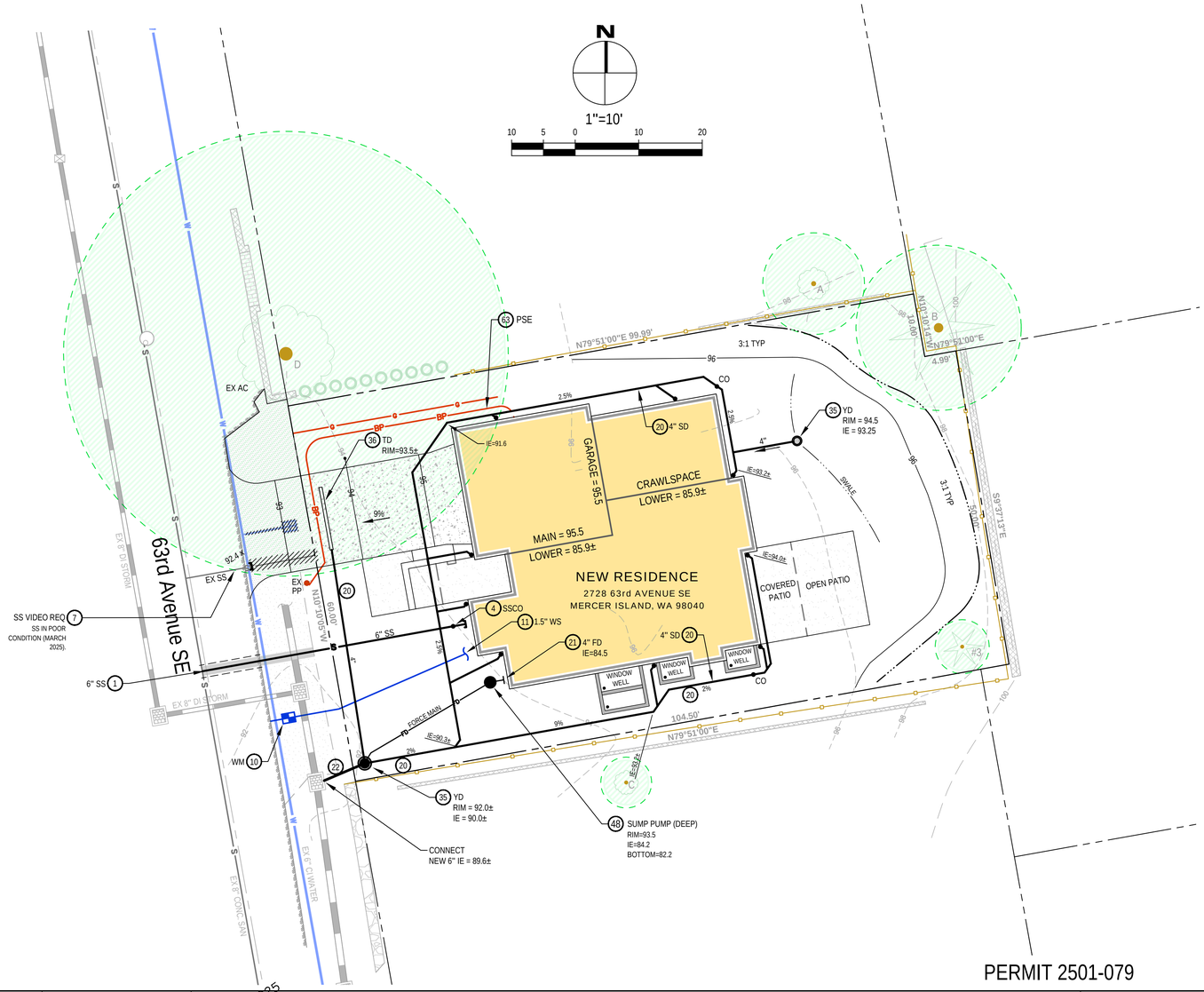
SEE C1.0

SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL PERMITSIGN-OFF AND CERTIFICATE OF OCCUPANCY.



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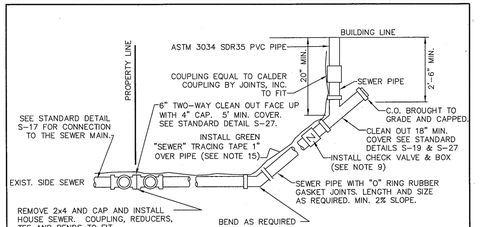
DRAINAGE / CIVIL PLAN

PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C2.0

APN 217450-3575
#2501-079

SIDE SEWER CONNECTION AT HOUSE



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 ⅛ 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.

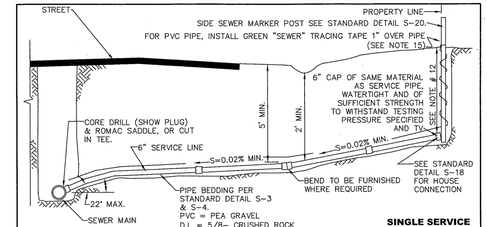
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER

HOUSE SEWER CONNECTION

6-5-2009	NO SCALE	**S-18**

REV DATE | | | | | | APPROVED

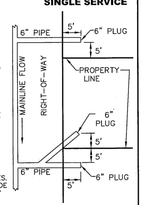
SIDE SEWER STUB



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. RIGHT-OF-WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION AND BE IN ACCORDANCE WITH CITY STANDARDS.
4. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS OR MAY BE CDF WHEN DIRECTED BY THE CITY ENGINEER (SEE DETAIL S-3).
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. 6" SEWER PIPE MINIMUM SIZE IN RIGHT-OF-WAY, AND ELSEWHERE AS DIRECTED BY ENGINEER. 2% MIN. GRADE (UNLESS DIRECTED BY ENGINEER), 50% MAXIMUM.
7. ALL A.C. MAINS TO BE TAPPED IN ACCORDANCE WITH WAC 296-62-00775 STATE/FEDERAL GUIDELINES AND CERTIFICATION.
8. CONSTRUCTION IN RIGHT-OF-WAY MUST BE DONE BY A REGISTERED AND LICENSED CONTRACTOR.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY SEWER ORDINANCES.
10. WHERE CITY ENGINEER ALLOWS SIDE SEWER CONNECTIONS TO MANHOLE, INVERT OF SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN SEWER.
11. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICH EVER IS LOWER.
12. ALL PIPE MATERIALS NOT TO STANDARDS WILL BE ABANDONED AND REPLACED WITH DUCTILE IRON OR PVC PIPE OF THE SAME SIZE.
13. IF A BUILDING SEWER IS TO SERVE MORE THAN ONE PROPERTY, BY JOINT AGREEMENT OF THE OWNERS, AN APPROVED EASEMENT INSURING THAT ALL PROPERTIES INVOLVED SHALL HAVE PERPETUAL USE OF THE SIDE SEWER, HAVING PROVISIONS FOR OPERATION, MAINTENANCE, RECONSTRUCTION AND FOR ACCESS FOR REPAIR PURPOSES, SHALL BE SIGNED BY THE OWNERS. THIS EASEMENT SHALL BE RECORDED WITH THE COUNTY AUDITOR. A SIX INCH (MINIMUM) DIAMETER PIPE SHALL BE USED FOR THE COMMON LINE AND A SIX INCH CLEANOUT EXTENDING TO WITHIN 12 INCHES OF THE GROUND SURFACE SHALL BE PROVIDED AT THE WYE WHERE THE UPPER GRADE CONNECTIONS ARE MADE. BACKWATER VALVES SHALL BE INSTALLED ON SERVICE LINES UPSTREAM OF THE CONNECTION TO THE SHARED SIDE SEWER.
14. THE CITY ENGINEER MAY REQUIRE BACKWATER VALVES ON SIDE SEWERS WHEN DEEMED NECESSARY. THE EFFECTIVE OPERATION AND MAINTENANCE OF ANY BACKWATER VALVE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE SIDE SEWER.
15. 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.

SINGLE SERVICE



DOUBLE SERVICE

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER

SIDE SEWER CONNECTION AND STUB

6-5-2009	NO SCALE	**S-17**

REV DATE | | | | | | APPROVED

PERMIT 2501-079

NO.	DATE	BY	REVISIONS

APPLICANT
JASON IMANI
IMANI HOMES

DATE: Mar 31, 2025
JOB# 2106
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 31, 2025
JEFFREY E. ALLEN
STATE OF WASHINGTON
39766
REGISTERED
PROFESSIONAL ENGINEER

CIVIL ENGINEERING SOLUTIONS
701 N 36th STREET, SUITE 450 SEATTLE, WA 98103
206.930.0342 DUFFY@CESOLUTIONS.US

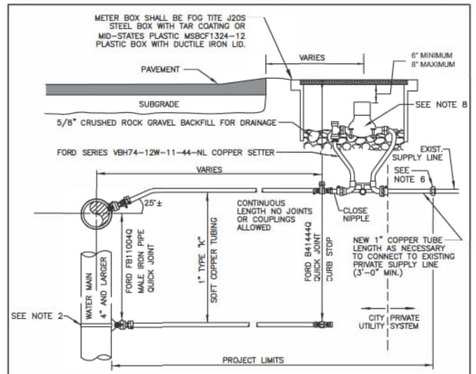
SAN SEWER DETAILS

PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C3.2

APN 217450-3575
#2501-079

WATER METER INSTALLATION



NOTES

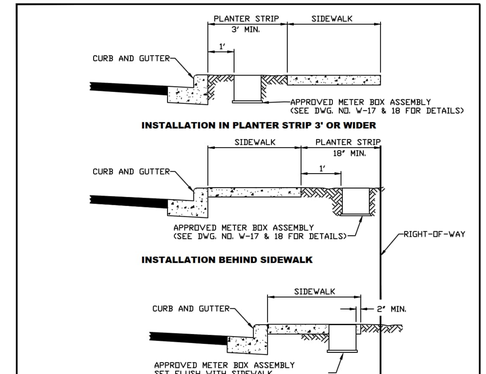
1. WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014.
2. ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 202NS, OR APPROVED EQUAL.
3. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18" MINIMUM DISTANCE BETWEEN TAPS, 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

REV DATE					05-02-2023	NO SCALE	W-13
							APPROVED

WATER METER PLACEMENT



CITY OF MERCER ISLAND
STANDARD DETAILS
WATER

WATER METER PLACEMENT

REV DATE					3-20-2006	NO SCALE	W-16
							APPROVED

PERMIT 2501-079

NO.	DATE	BY	REVISIONS

APPLICANT
JASON IMANI
IMANI HOMES

DATE: Mar 31, 2025
JOB# 2106
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 31, 2025
JEFFREY E. DUFFY
STATE OF WASHINGTON
30766
REGISTERED
PROFESSIONAL ENGINEER

CIVIL ENGINEERING SOLUTIONS
701 N 36th STREET, SUITE 450 SEATTLE, WA 98103
206.930.0342 DUFFY@CESOLUTIONS.US

WATER DETAILS

PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C3.3

APN 217450-3575
#2501-079

MINIMUM 10% ORGANIC - COMPOST SOIL REQUIRED

SOIL AMENDMENT REQUIRED

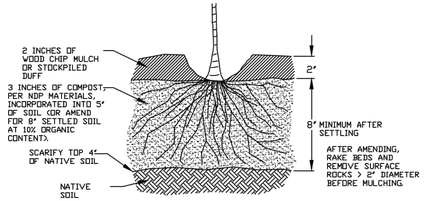
COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL BELOW.

SOIL INSPECTION REQUIRED BY ENGINEER

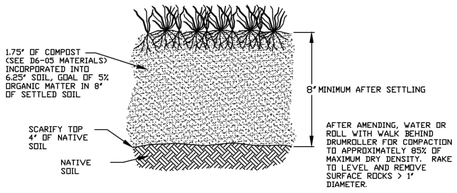
A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER.
THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

COMPOST AMENDED SOIL SPEC

AMENDMENT FOR LANDSCAPED AREAS



SOIL AMENDMENT FOR GRASS OR TURF AREAS



NOTES:

1. AMEND SOILS PER DOE MANUAL, VOL. V, S.3.1, BMP T5.13, (2012 OR CURRENT) OR WWW.SOILSFORSALMON.ORG.
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.

JANUARY 2023 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. ~~NDP-1~~

PERMIT 2501-079

NO.	DATE	BY	REVISIONS

APPLICANT
JASON IMANI
IMANI HOMES

DATE: Mar 31, 2025
JOB# 2106
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 31, 2025 — JEFFREY E. KLEIN — STATE OF WASHINGTON — 39765 REGISTERED PROFESSIONAL ENGINEER

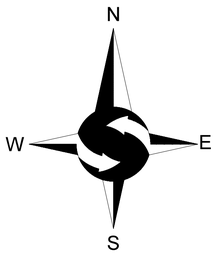
CIVIL ENGINEERING SOLUTIONS
701 N 36th STREET, SUITE 450 SEATTLE, WA 98103
206.930.0342 DUFFY@CESOLUTIONS.US

STORMWATER BMP DETAILS

PROPOSED RESIDENCE
2728 63rd AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO: C3.5

APN 217450-3575
#2501-079



GRAPHIC SCALE

5 0 5 10 20

1 INCH = 10 FT.

LEGEND

FOUND MONUMENT IN CASE	OHP — OVERHEAD POWER
FOUND REBAR AS DESCRIBED	OHU — OVERHEAD UTILITIES
FOUND TACK & LEAD	X — CHAINLINK FENCE
SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP	WOOD FENCE
POWER METER	CONCRETE WALL
GAS METER	ROCKERY
HVAC UNIT	ASPHALT SURFACE
UTILITY POLE	CONCRETE SURFACE
CATCH BASIN	GRAVEL SURFACE
SANITARY SEWER MANHOLE	
WATER VALVE	CE CEDAR
FIRE HYDRANT	DF DOUGLAS FIR
WATER METER	DS DECIDUOUS
SS — APPROXIMATE LOCATION SANITARY SEWER LINE	MP MAPLE
SD — APPROXIMATE LOCATION STORM DRAIN LINE	PI PINE
	SP SPRUCE

* INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOTS 5 AND 6 IN BLOCK 21 OF EAST SEATTLE AS PER PLAT RECORDED IN VOLUME 3 OF PLATS, PAGE 22, RECORDS OF KING COUNTY, WASHINGTON

TOGETHER WITH THAT PORTION OF LOTS 24 AND 25 OF SAID BLOCK 21, DESCRIBED AS FOLLOWS

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 25;
THENCE NORTH 10°10'24" WEST ALONG THE WESTLINE OF SAID LOTS 25 AND 24 A DISTANCE OF 50.00 FEET;
THENCE NORTH 79°51'00" EAST 4.99 FEET;
THENCE SOUTH 09°37'23" EAST 50.00 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 25 THAT IS NORTH 79°51'00" EAST 4.51 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 25;
THENCE SOUTH 79°51'00" WEST 4.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 25 AND THE POINT OF BEGINNING PURSUANT TO STIPULATED ORDER FILED MAY 7, 2024 UNDER KING COUNTY CASE NUMBER 23-2-02297-1 SEA, RECORDED UNDER KING COUNTY RECORDING NUMBER 20240509000143, RECORDS OF THE KING COUNTY SUPERIOR COURT OF THE STATE OF WASHINGTON;

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

RECORD OF SURVEY AS RECODED UNDER KING COUNTY RECORDING NUMBER 20240521900001

PROJECT INFORMATION

PROPERTY OWNER:	FARHAD AND VIRGINIA IMANI 2728 63RD AVE SE MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	217450-3575
PROJECT ADDRESS:	2728 63RD AVE SE MERCER ISLAND, WA 98040
ZONING:	R-8.4
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	6,237 S.F. (0.143 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 AND AN EMLID REACH RS2 GPS RECEIVER. 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 OCTOBER 2024 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

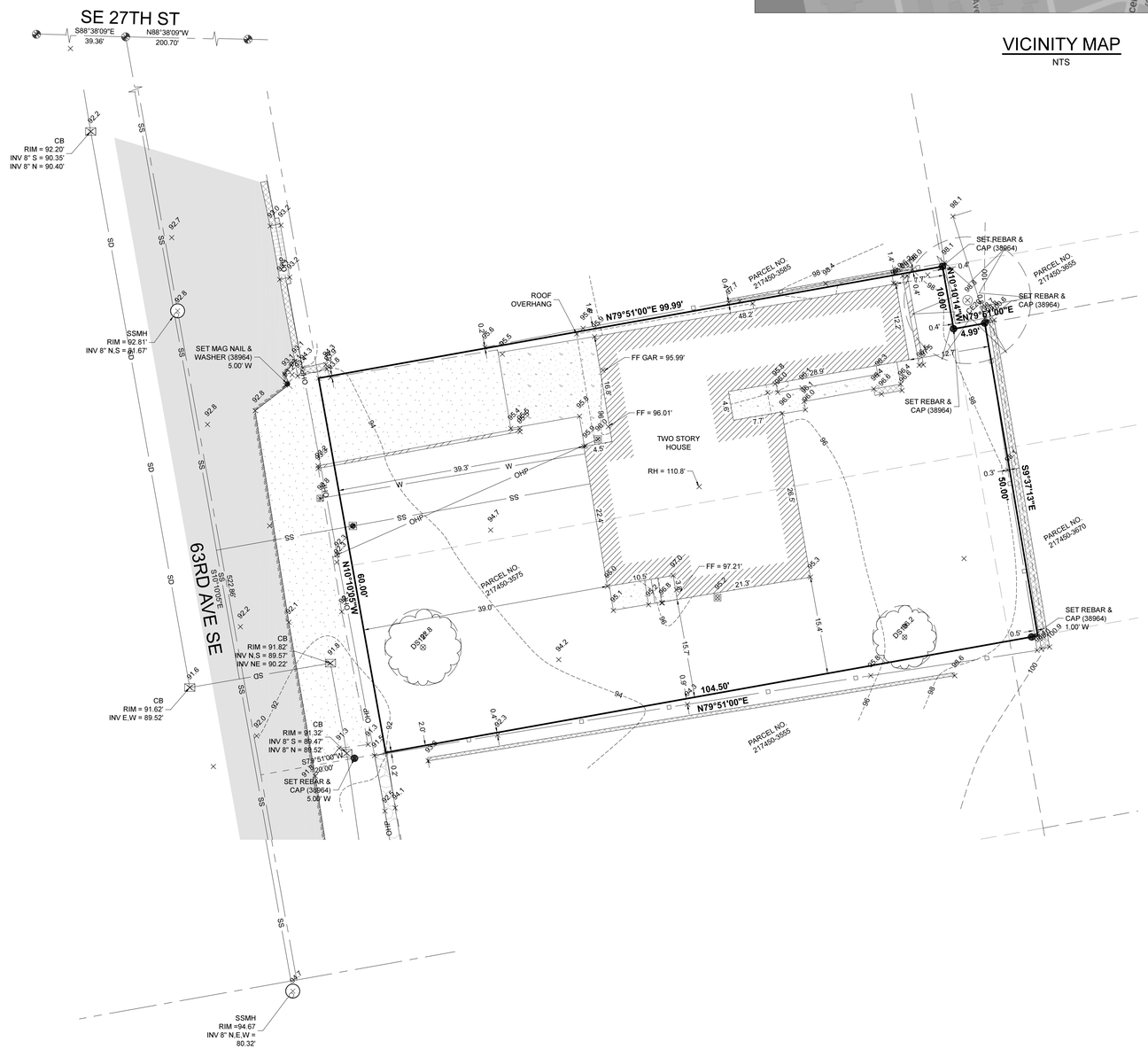
DATUM

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM GPS OBSERVATION USING THE WSRN.

DATUM - 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



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

NE 1/4, NE 1/4, SEC 11, TWP 24N, RNG 4E, W.M.

WOLDENDORP WASHINGTON TIMOTHY N. STATE OF 38964 REGISTERED PROFESSIONAL LAND SURVEYOR

DRN
REVISION
DATE

TOPOGRAPHIC SURVEY

FARHAD & VIRGINIA IMANI
2728 63RD AVE SE
MERCER ISLAND, WA 98040

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PROJECT NO. 24-559

DRAWN BY:	EFJ
CHECKED BY:	TNW
DATE:	10/16/2024
SHEET	1 OF 1