

PROJECT: LOO & WAI'S REMODEL
REMODEL INTERIOR, REPLACE WINDOWS, AND
BUMP OUT

SUBJECT SITE ADDRESS:
4124 94th PI SE Mercer Island 98040

LEGAL DESCRIPTION:
MERCERWOOD DIV #10
PLAT BLOCK:
PLAT LOT: 2

PARCEL TAX ID #: 546060-0020
YEAR BUILT: 1974
ZONE: R-8.4
JURISDICTION: MERCER ISLAND

Area Summary:

	s.f.
Existing Main Floor	1650
Existing Finished Basement	1410
Existing Attached Garage	400
Proposed Main Floor Addition	109
Total	3,569
Lot Size	12,349
% of Lot	28.9%

Impervious Surface Coverage

	s.f.
(Pr) Principal Building Roof	2,772
(Ex) Conc. Driveway	178
(Ex) Deck w/ Removal	114
(Ex) Exterior Stairs	38
(Ex) Walkway + Landing Pad to Ext. Stairs	45
(Pr) Walkway (Main Entrance)	85
Total	3,232
Lot Size	12,349
% of Lot	26.1%

Lot Slope Calculation

Highest Elevation Point of Lot	315'
Lowest Elevation Point of Lot	275'
Elevation Difference	40'
Horizontal Difference Low & High Point	136'

Calculation: $\frac{40}{136} \times 100 = 29.4\%$

VALUATION OF THE WORK:

CONSTRUCTION	\$ 60,000
ADMINISTRATION	10,000
MATERIAL	60,000
TOTAL	\$ 130,000

CONTACTS INFORMATION

Owner: Kevin Ka Wing Loo & Ting Wai
Address: 4124 94th PI SE Mercer Island 98040
Phone: 425-301-0883

Contractor:
Contact: Chris Vong (M&C Remodeling LLC)
Address: 3732 S Perry St Seattle WA 98118
Phone: 206-393-2167

Structural Design Engineer:
Contact: Ken Nguyen
Address: 17614 NE 29th St - Redmond WA 98052
Phone: 425-891-5111
Email: HouseDesign4u@outlook.com

CODES

2018 International Building Code (IBC)

2018 International Mechanical Code (IMC)

2018 International Fuel Gas Code (IFGC)

2018 International Fire Code (IFC)

DESIGN CRITERIA NOTES

ROOF DEAD LOAD	= 10.0 PSF		
ROOF LIVE LOAD	= 25.0 PSF		
FLOOR DEAD LOAD	= 10.0 PSF		
FLOOR LIVE LOAD	= 40.0 PSF		
DECK DEAD LOAD	= 10.0 PSF		
DECK LIVE LOAD	= 60.0 PSF		
SOIL BEARING CAPACITY	= 2000 PSF		
WIND			
BASIC WIND SPEED	= 110 MPH		
EXPOSURE	= B		
SEISMIC			
SOIL SITE CLASS	= D		
$S_s = 1.291$	$S_1 = 0.523$	$S_{D5} = 0.861$	$S_{D1} = 0.523$

CARBON MONOXIDE DETECTORS:

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.

SMOKE DETECTORS:

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM.
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLINGS UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDE THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.
4. SMOKE DETECTORS TO BE HARWIRE, INTERCONNECTED WITH BATTERY BACKUP.

RECESSED LIGHTING: (R402.4.4)

* RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE TYPE IC-RATED AND CERTIFIED UNDER ASTM E283 AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2 CFM WHEN TESTED AT A 1.57 PSF PRESSURE DIFFERENTIAL AND SHALL HAVE A LABEL ATTACHED SHOWING COMPLIANCE WITH THIS TEST METHOD. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING.

PROGRAMMABLE THERMOSTAT.

WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THE THERMOSTAT SHALL ALLOW FOR, AT A MINIMUM, A 5-2 PROGRAMMABLE SCHEDULE (WEEKDAYS/WEEKENDS) AND BE CAPABLE OF PROVIDING AT LEAST TWO PROGRAMMABLE SETBACK PERIODS PER DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70°F (21°C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78°F (26°C). THE THERMOSTAT AND/OR CONTROL SYSTEM SHALL HAVE AN ADJUSTABLE DEADBAND OF NOT LESS THAN 1.0°F.

SEALING (R403.2.2)

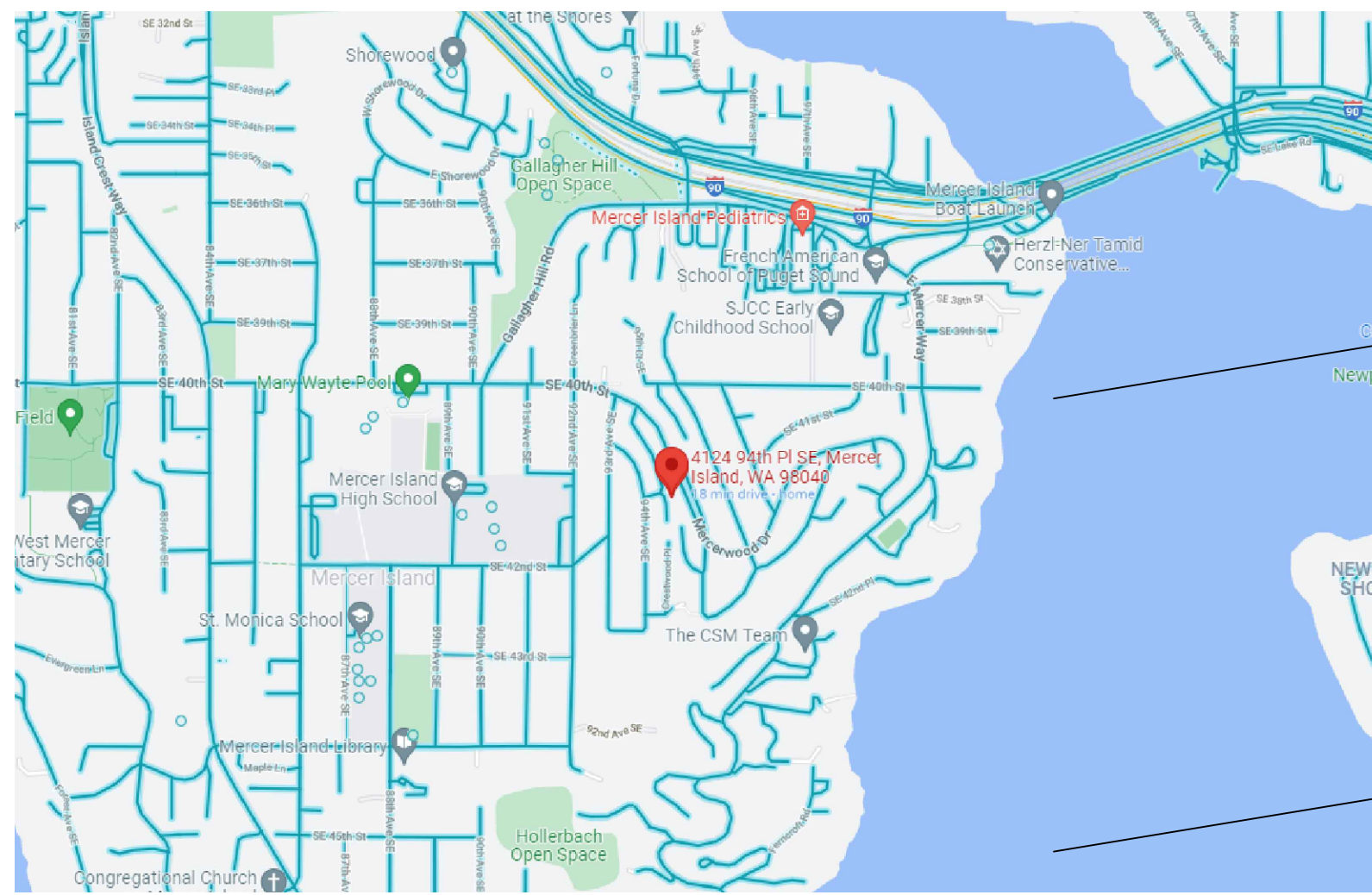
DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH EITHER THE INTERNATIONAL MECHANICAL CODE OR INTERNATIONAL RESIDENTIAL CODE, AS APPLICABLE.

BUILDING CAVITIES (R403.2.3)

BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS. INSTALLATION OF DUCTS IN EXTERIOR WALLS, FLOORS OR CEILING SHALL NOT DISPLACE REQUIRED ENVELOPE INSULATION.

MECHANICAL SYSTEM PIPING INSULATION (R403.3)

MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105°F (41°C) OR BELOW 55°F (13°C) SHALL BE INSULATED TO A MINIMUM OF R-6.

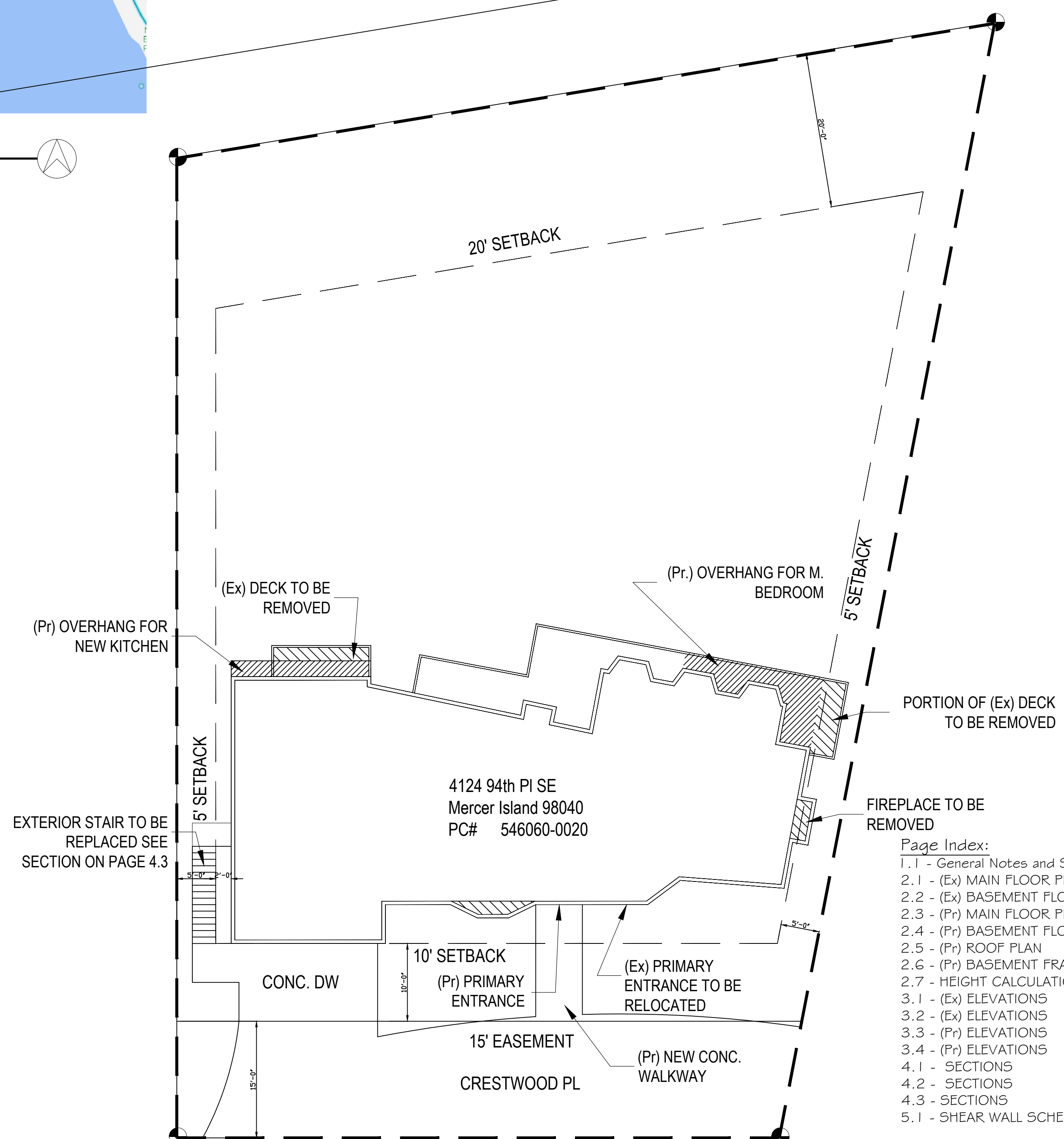


Vicinity Map

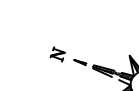
NTS

Lot Coverage Calculation:

Gross Lot Area	12,349 SF
Net Lot Area	12,349 SF
Allowed Lot Coverage Area	4332 SF
Allowed Lot Coverage	35%
Existing Lot Coverage	
Main Structure Roof Area	2137 SF
Vehicular Use (driveway)	178 SF
Covered Patio and Covered Decks	364 SF
Total (Ex) Lot Coverage	2679 SF
Total Lot Area Removed	250 SF
Total New Lot Coverage Area	635 SF
Main Structure Roof Area	635 SF
Total Project Lot Coverage Area	3064 SF
Proposed Lot Coverage Area	24.8 %



SITE PLAN



SCALE: 1" = 10'



NOTES:

- * ELECTRICAL OR PLUMBING UNDER SEPARATE PERMIT.
- * ALL REPLACED EGRESS WINDOWS AND DOORS REQUIRED INSPECTION.
- * EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THESE CAVITIES ARE FILLED WITH INSULATIONS, SHALL BE REINSULATED AS FOLLOWS:

Wood Wall Use	R-21 int
Basement Wall Use	R-21 int + TB
Slab on Grade	R-10 perimeter and under entire slab
Below Grade	R-10 perimeter and under entire slab
Floor Use	R-30
Ceiling Use	R-49

NT Engineers ~*~ 17614 NE 29th St - Redmond WA 98052 ~*~ housedesign4u@outlook.com ~*~ 425-900-7666 or 425-891-5111

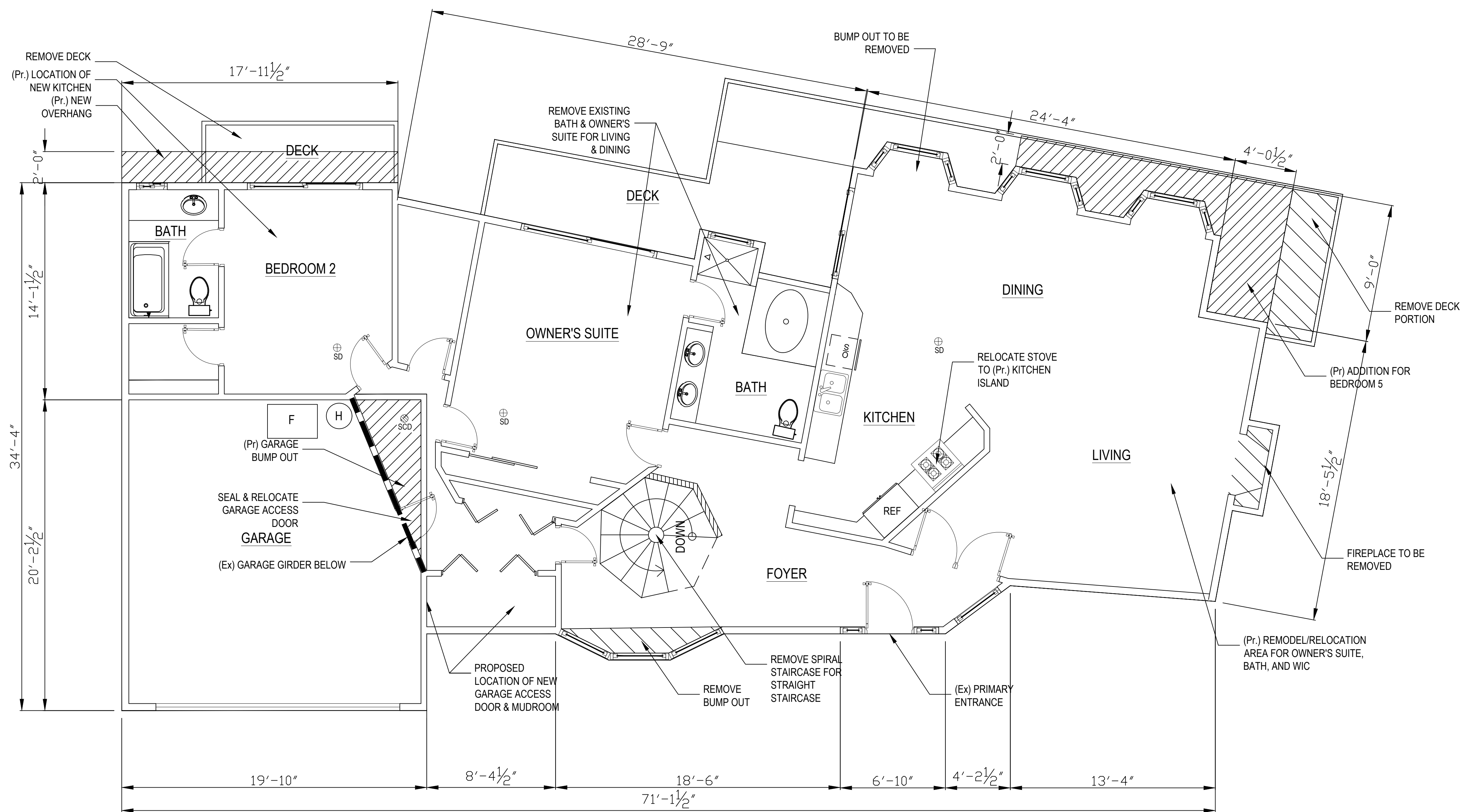
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Loo & Wai's Remodel 4124 94th PI SE Mercer Island 98040	DATE 01-20 2022
GENERAL NOTES	SHEET 1.1

01/20/22

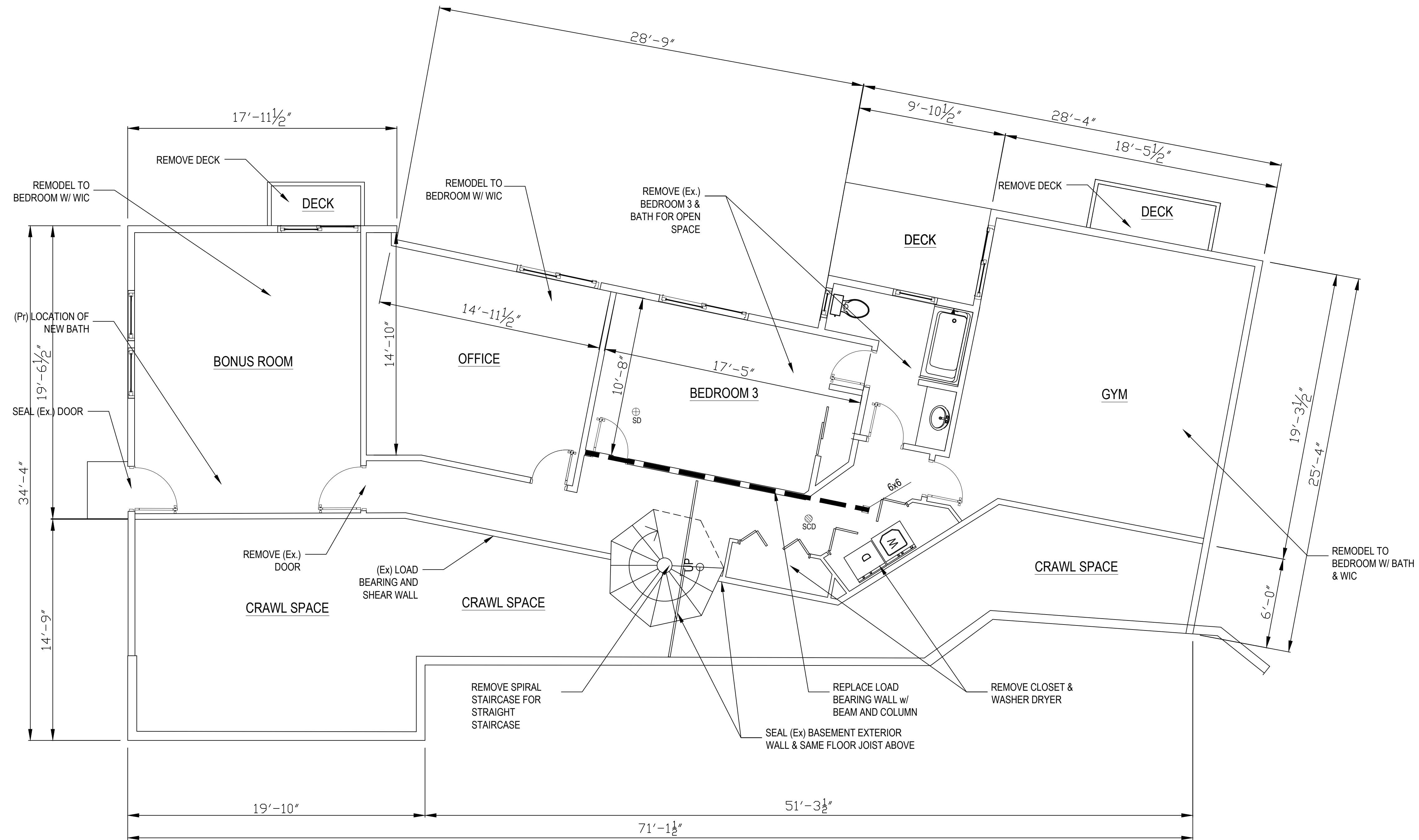


(Ex) MAIN LEVEL FLOOR PLAN 

SCALE 1/4" = 1'-0"



Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.1 24x36"
EXISTING MAIN PLAN VIEW	



(Ex) BASEMENT FLOOR PLAN 
 SCALE 1/4" = 1'-0"



01/20/22

Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.2 24x36"
EXISTING BASEMENT PLAN VIEW	

FRAMING LUMBER:

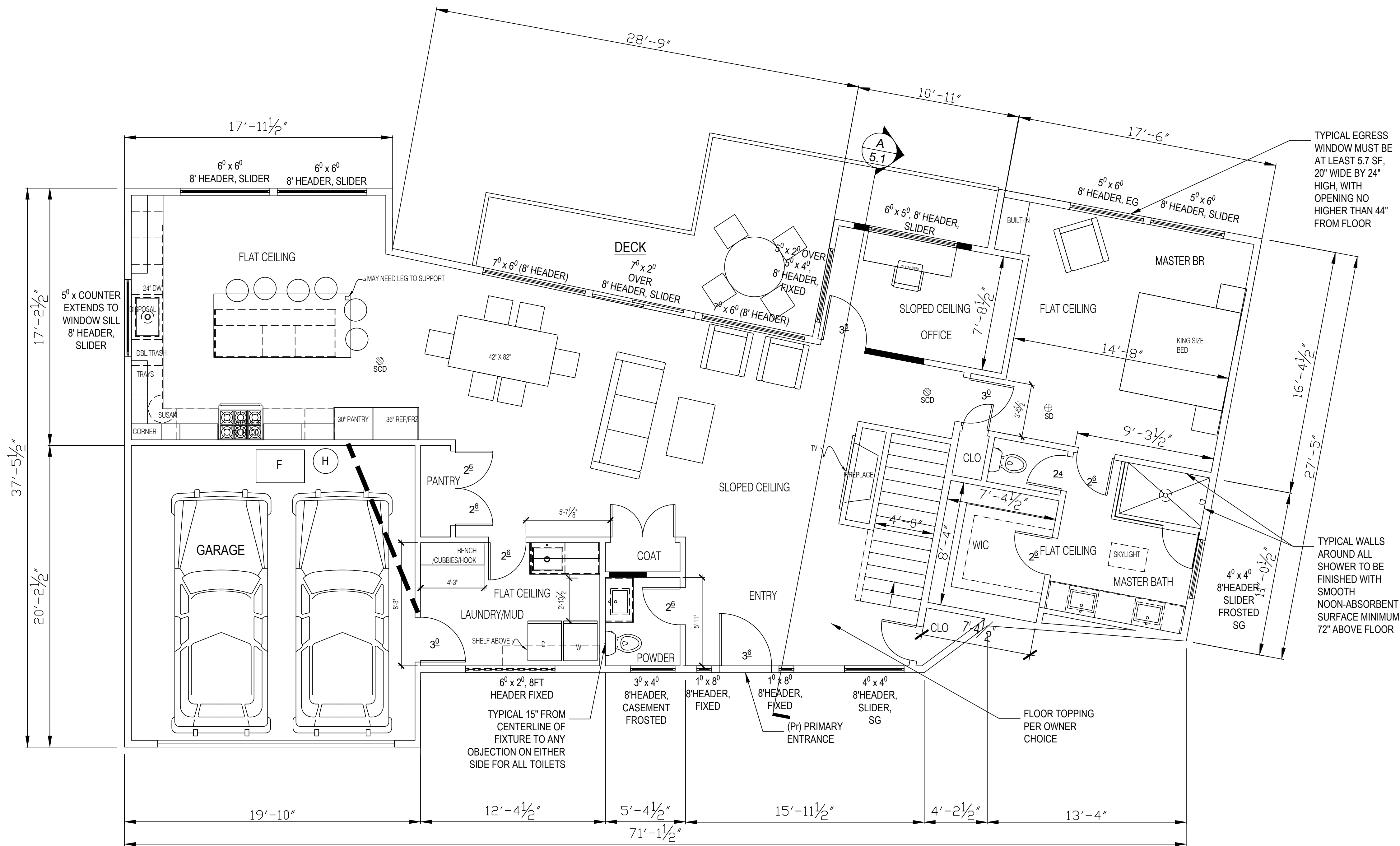
- FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH NO. 1 FOR POSTS, BEAMS, AND HEADERS. HEM-FIR/LARCH NO. 2 (OR BETTER) AND STUDS, AND HEM FIR NO. 2 OR BETTER FOR ALL TOP AND BOTTOM PLATES (GRADES ARE TYPICAL UNLESS OTHERWISE NOTED ON PLANS). LUMBER TO BE GRADE MARKED PER WCLIB SPECIFICATIONS.
- STRUCTURAL SHEATHING SHALL BE APA RATED, EXPOSURE 1 SHEATHING CONFORMING TO EITHER COMMERCIAL STANDARDS PS 1-83, APA PRP-1 08, OR VOLUNTARY PRODUCT STANDARD PS 2-92. SHEATHING INDEXES AND THICKNESS ARE NOTED ON THE PLANS. PROVIDE MINIMUM OF 3/8" EDGE DISTANCE ON ALL NAILS AND A 1/8" EXPANSION JOINT BETWEEN ALL PANEL EDGES.
- NAILING SHALL CONFORM TO TABLE R602.3(1) OF THE IRC 2015 UNLESS NOTED OTHERWISE.
- NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITTEN BY THE STRUCTURAL ENGINEER.
- USE DOUBLE JOIST UNDER WALLS OR PARTITIONS PARALLEL TO JOISTS UNLESS SPECIFICALLY NOTED OTHERWISE. USE SOLID BLOCKING UNDER PARTITIONS PERPENDICULAR TO JOISTS.
- MAXIMUM MOISTURE CONTENT SHALL NOT EXCEED 16% FOR ALL STRUCTURAL MEMBERS.
- PROVIDE WASHERS UNDER HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.
- BOLT HOLES SHALL BE NOMINAL DIAMETER OF BOLT PLUS 1/16" UNLESS OTHERWISE NOTED. LAG BOLT, PILOT HOLES SHALL BE PRE-DRILLED TO 60% OF THE NOMINAL DIAMETER OF THE LAG BOLT UNLESS OTHERWISE NOTED.
- ALL SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WITH 5/8" MINIMUM Ø BOLTS SPACED AT 48" O.C. MAXIMUM SPACING (EMBED 5" MINIMUM INTO CONCRETE OR MASONRY). SEE PLANS AND DETAILS FOR SPECIFIC REQUIREMENTS WHERE THEY OCCUR.
- ALL FRAMING LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED (SEE NOTE 1 FOR MINIMUM GRADE INFORMATION).
- EXTERIOR STUD WALL SHALL BE 2x6 AT 24" O.C. UNLESS NOTED OTHERWISE. INTERIOR STUD BEARING WALLS SHALL BE CONSTRUCTED USING 2x4 AT 16" O.C. BELOW TOP TWO FLOORS. STUD NONBEARING WALLS SHALL BE CONSTRUCTED USING 2x4 AT 24" O.C. UNLESS OTHERWISE NOTED. SEE NOTE 1 FOR LUMBER GRADE OF STUDS AND PLATES.
- FRAMING ANCHORS FOR JOISTS PURLING AND POSTS SHALL BE SIMPSON, OR APPROVED EQUAL APPROVAL MUST BE OBTAINED IN WRITING PRIOR TO INSTALLATION. FILL ALL FASTENER HOLES WITH FASTENER TYPES (NAILS, BOLTS, ETC...), SIZES, AND QUANTITIES AS SPECIFIED BY THE MANUFACTURER.
- FASTENERS INSTALLED IN PRESERVATIVE-TREATED WOOD SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED WITH A MINIMUM COATING WEIGHT COMPLYING WITH ASTM A 153. THIS INCLUDES NUTS AND WASHERS. FASTENERS OTHER THAN NAILS AND TIMBER RIVETS ARE PERMITTED TO BE MECHANICALLY DEPOSITED ZINC-COATED WITH COATING WEIGHTS COMPLYING WITH ASTM B 695, CLASS 55 MINIMUM. PLAIN CARBON STEEL FASTENERS IN WOOD PRESERVATIVE TREATED WITH SBX/DOT OR ZINC BORATE ARE NOT REQUIRED TO BE GALVANIZED. SEE IRC SECTION 317.3

ELECTRICAL LEGEND:

- SD Smoke Detector (Wire-In W/Battery Back-Up)
- SCD Smoke + Carbon Detector (Wire-In W/Battery Back-Up)
- 50 CFM Exhaust Fan (Vent to Exterior)
- ⊙ Recessed 13W LED Light Fixture
- ⊖ Ceiling Mounted Light Fixture
- ⊕ Wall Mounted Light Fixture
- ⊞ Switch
- ⊞ 3-Way Switch
- ⊞ 110V Wall Outlet
- ⊞ 220V Wall Outlet
- ⊞ CAT 6E Ethernet 2 Sockets
- Universal Serial Bus
- ⊞ Thermostat
- ⊞ Warm Air Supply
- ⊞ Warm Air Supply (ToeKick)
- ⊞ Whole House Ventilation
- ⊞ (Vent to Exterior)
- ⊞ Automation Panel
- FLUOR LED Fluorescent Tube Light
- ⊞ SMA Solar Motion Activated LED

WINDOW & DOOR ABBREVIATION

- 59 36 = 5'-9"W x 3'-6"H
- EG = Egress
- SG = Safety Glazing
- SL = Slider Door
- OB = Obscure Glass
- WS = Weather Seals Door



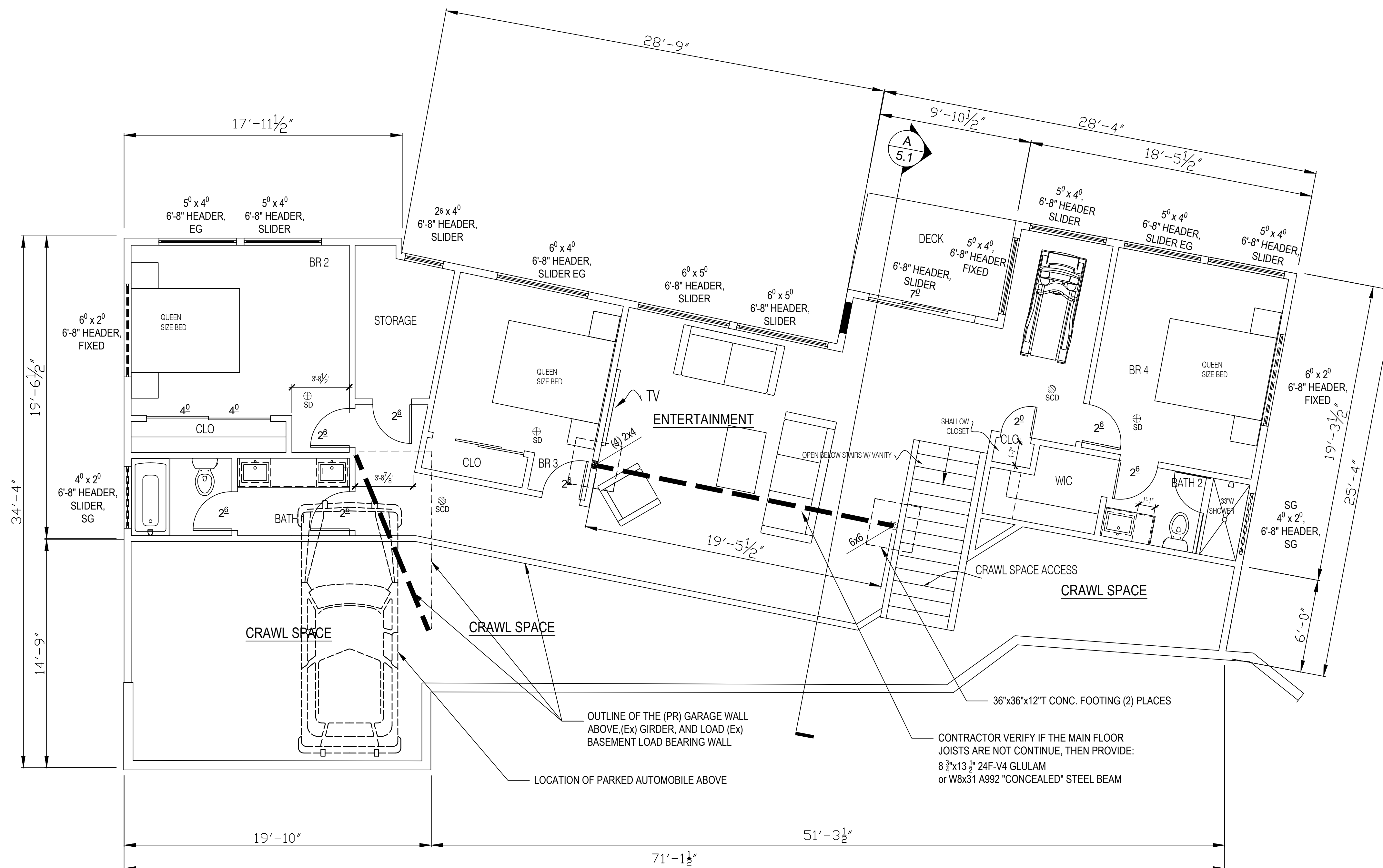
(Pr) MAIN LEVEL FLOOR PLAN

SCALE 1/4" = 1'-0"



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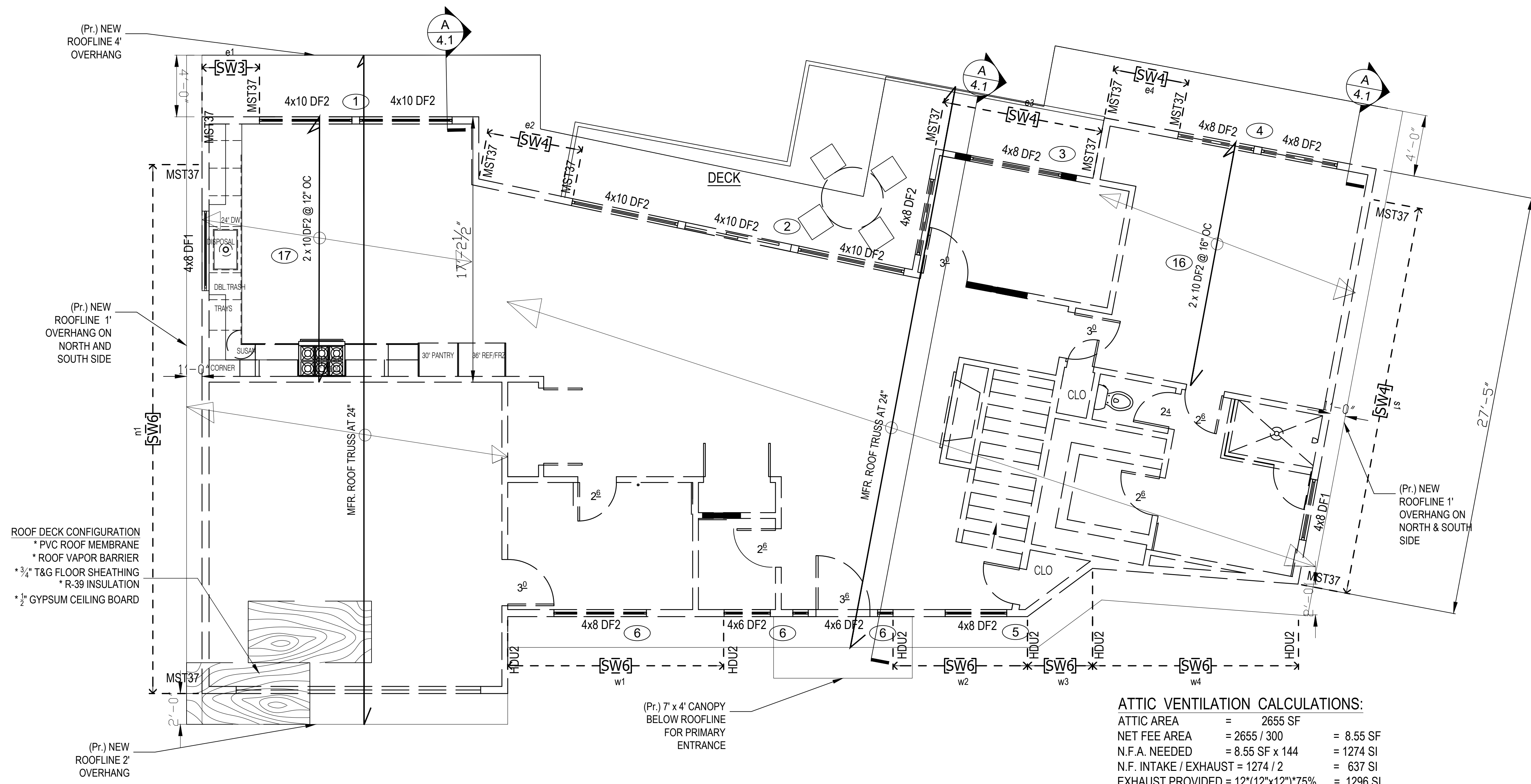
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022
PROPOSED MAIN LEVEL PLAN VIEW	SHEET 2.3 24x36"



(Pr) BASEMENT FLOOR PLAN 
 SCALE 1/4" = 1'-0"



Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.3 24x36"
PROPOSED BASEMENT PLAN VIEW	



ROOF DECK CONFIGURATION
 * PVC ROOF MEMBRANE
 * ROOF VAPOR BARRIER
 * 3/4" T&G FLOOR SHEATHING
 * R-39 INSULATION
 * 1/2" GYPSUM CEILING BOARD

ATTIC VENTILATION CALCULATIONS:

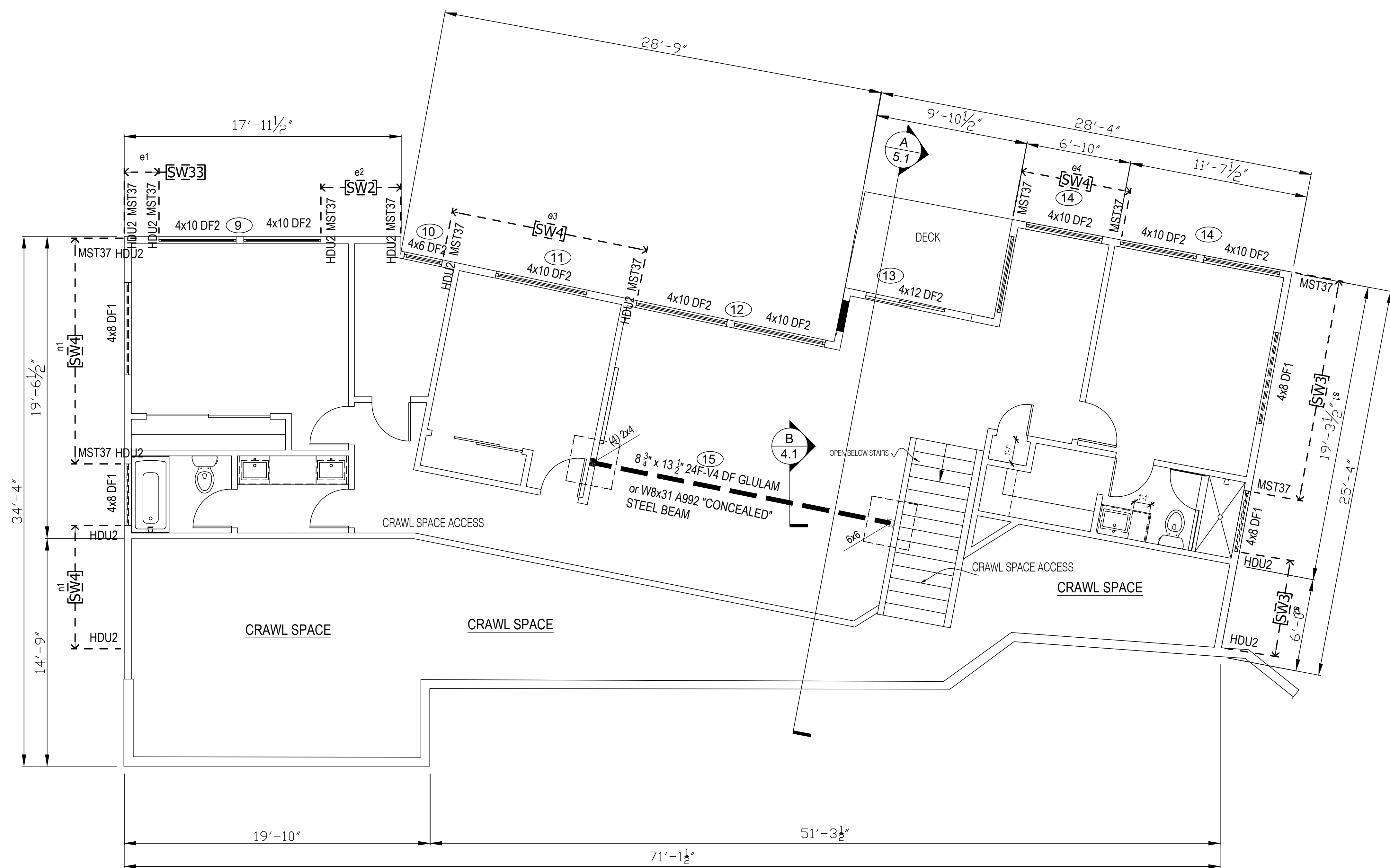
ATTIC AREA	=	2655 SF	
NET FEE AREA	=	2655 / 300	= 8.55 SF
N.F.A. NEEDED	=	8.55 SF x 144	= 1274 SI
N.F. INTAKE / EXHAUST	=	1274 / 2	= 637 SI
EXHAUST PROVIDED	=	12*(12"x12")*75%	= 1296 SI
USED TOTAL (12) AT ROOF RIDGE			
EACH 2 1/2" Ø VENT HOLE AREA	=	4.9 SI	
SIDE ELEV. INTAKE w/(3) HOLES @ 60 SPACES	=	882 SI	
BOTH ELEV. = 2 * (882)*75%	=	1323 SI	

(Pr) ROOF FRAMING PLAN 

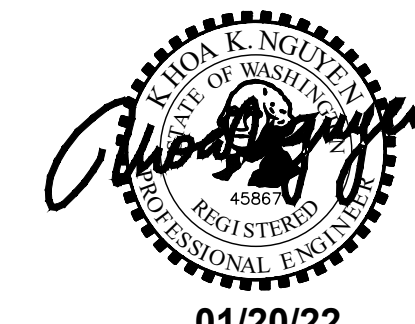
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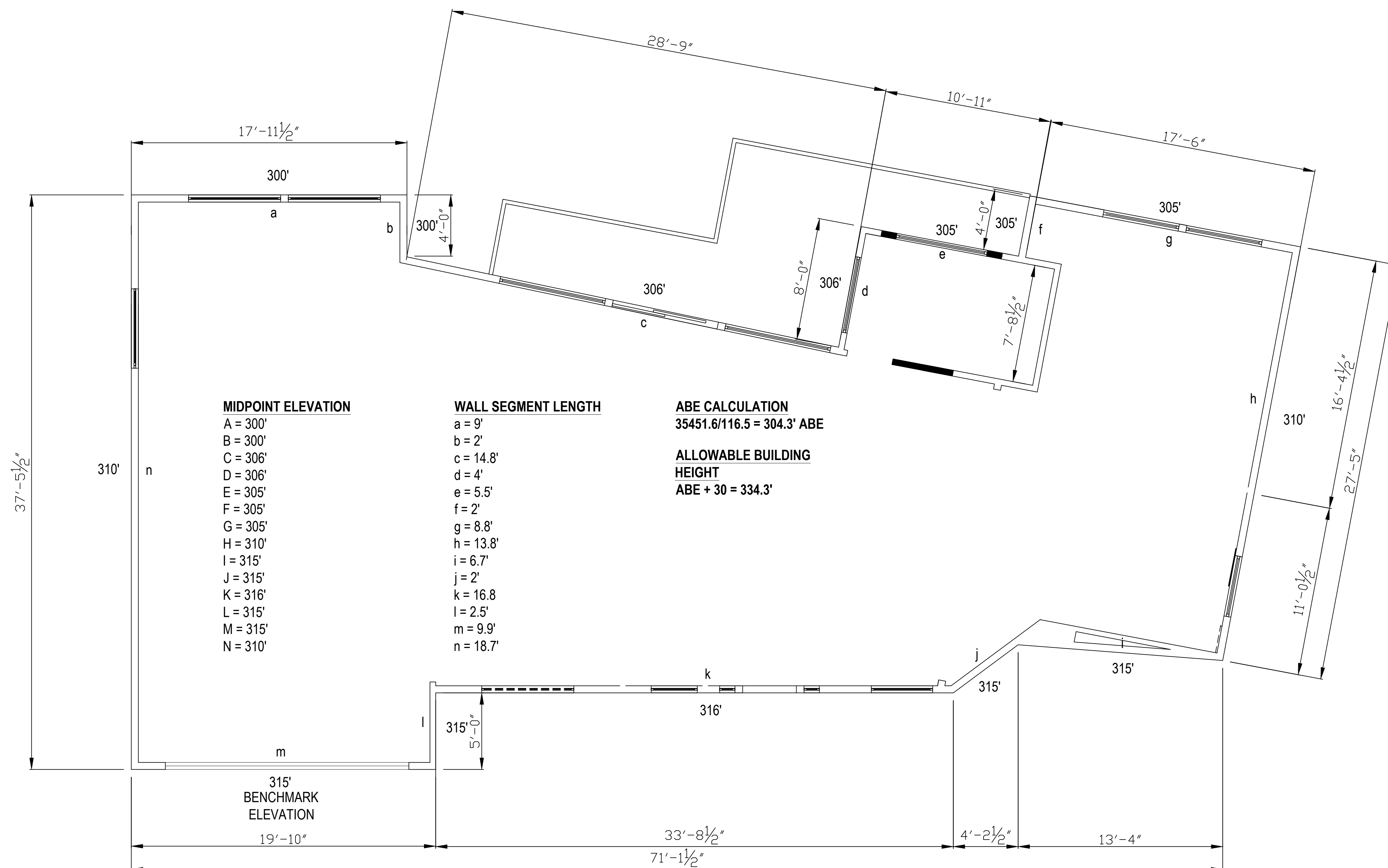
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.5 24x36"
ROOF PLAN	



(Pr) BASEMENT FRAMING 
 SCALE 1/4" = 1'-0"

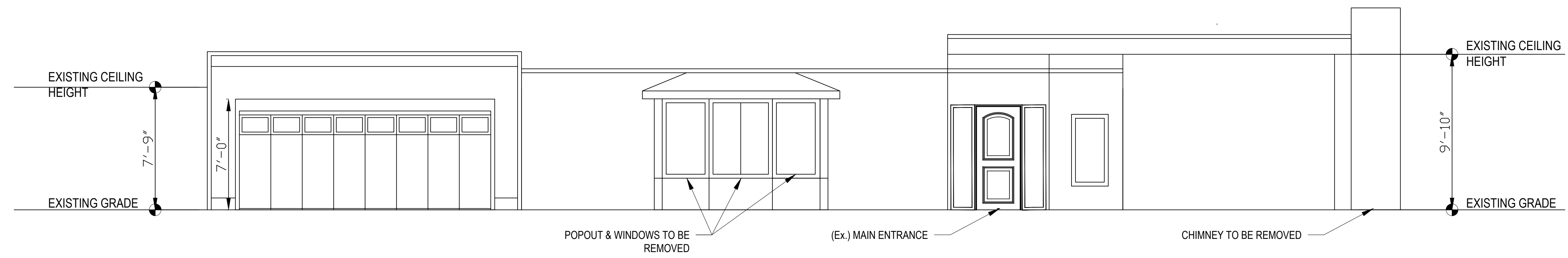


Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.6 24x36"
FRAMING	



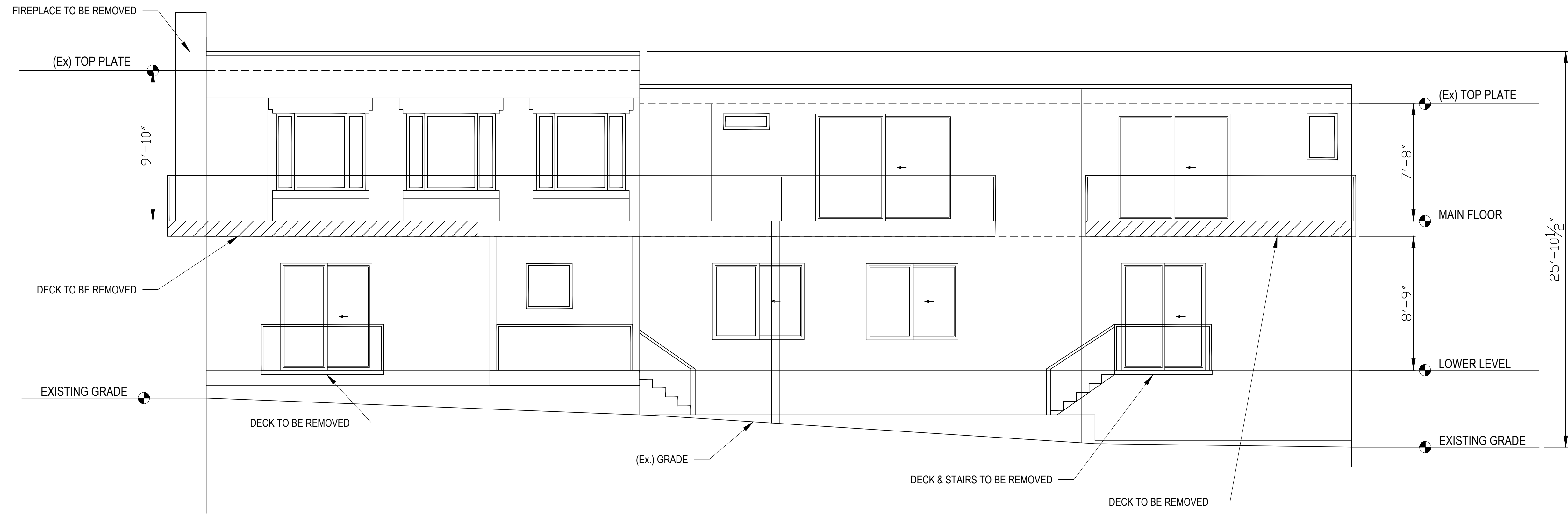
01/20/22

Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.5 24x36"
ELEVATION	



(Ex) WEST ELEVATION

SCALE 1/4" = 1'-0"



(Ex) EAST ELEVATION

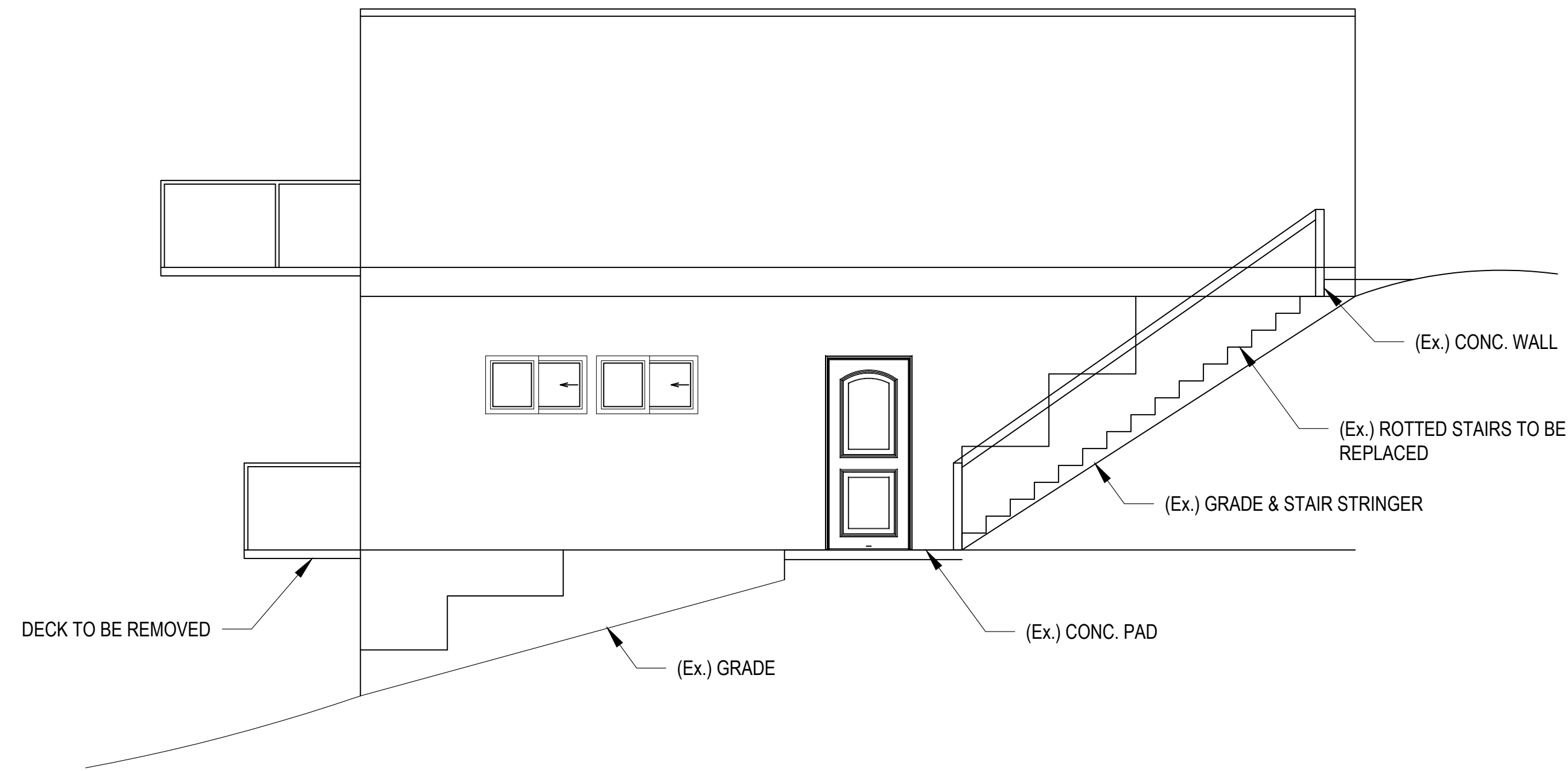
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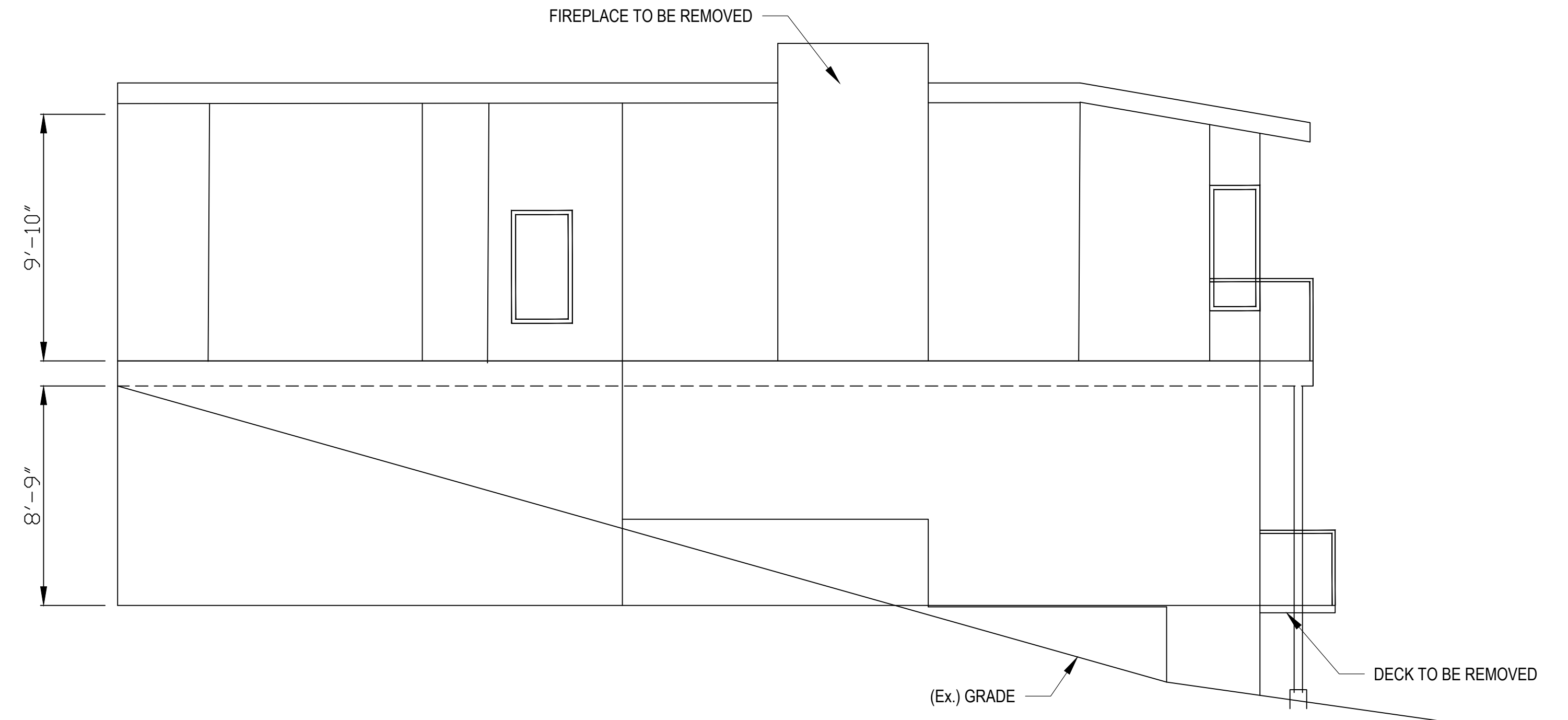
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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040 (Ex) ELEVATION	DATE 01-20 2022 SHEET 3.1
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(Ex) NORTH ELEVATION

SCALE 1/4" = 1'-0"



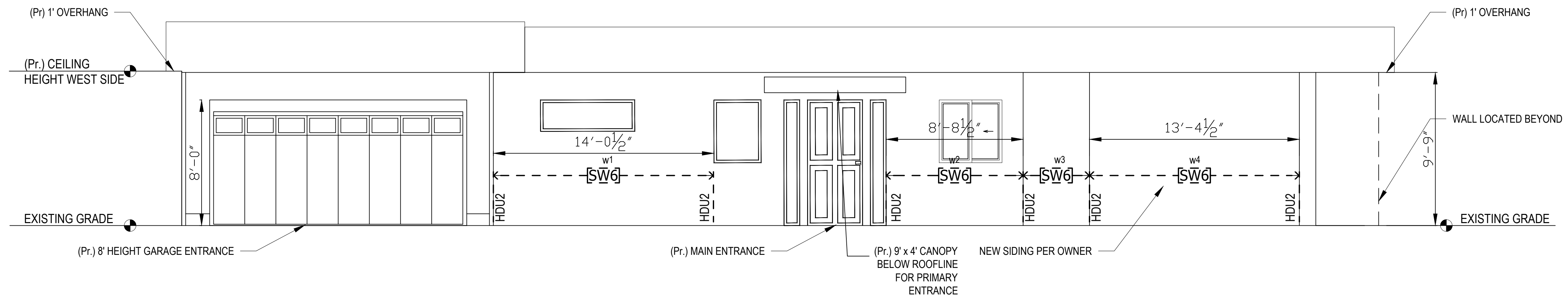
(Ex) SOUTH ELEVATION

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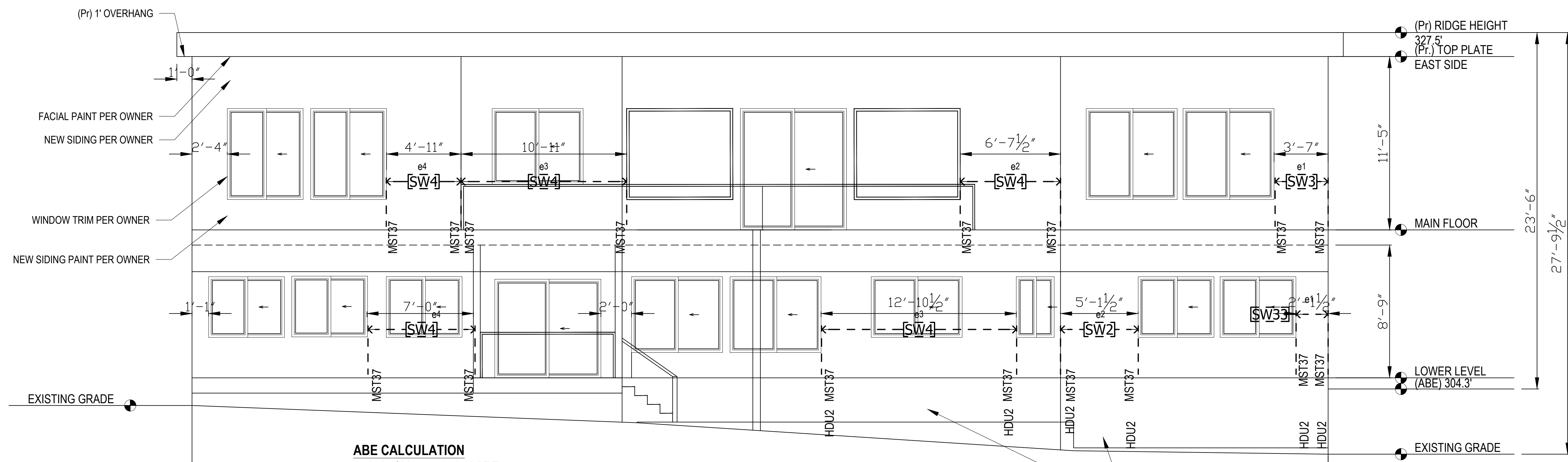
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Loo & Wai's Remodel	DATE
4124 94th Pl SE	01-20
Mercer Island 98040	2022
(Ex) ELEVATIONS	SHEET
	3.2



(Pr) WEST ELEVATION

SCALE 1/4" = 1'-0"



ABE CALCULATION
 $35451.6/116.5 = 304.3'$ ABE

ALLOWABLE BUILDING HEIGHT
 ABE + 30 = 334.3'

(Pr) EAST ELEVATION

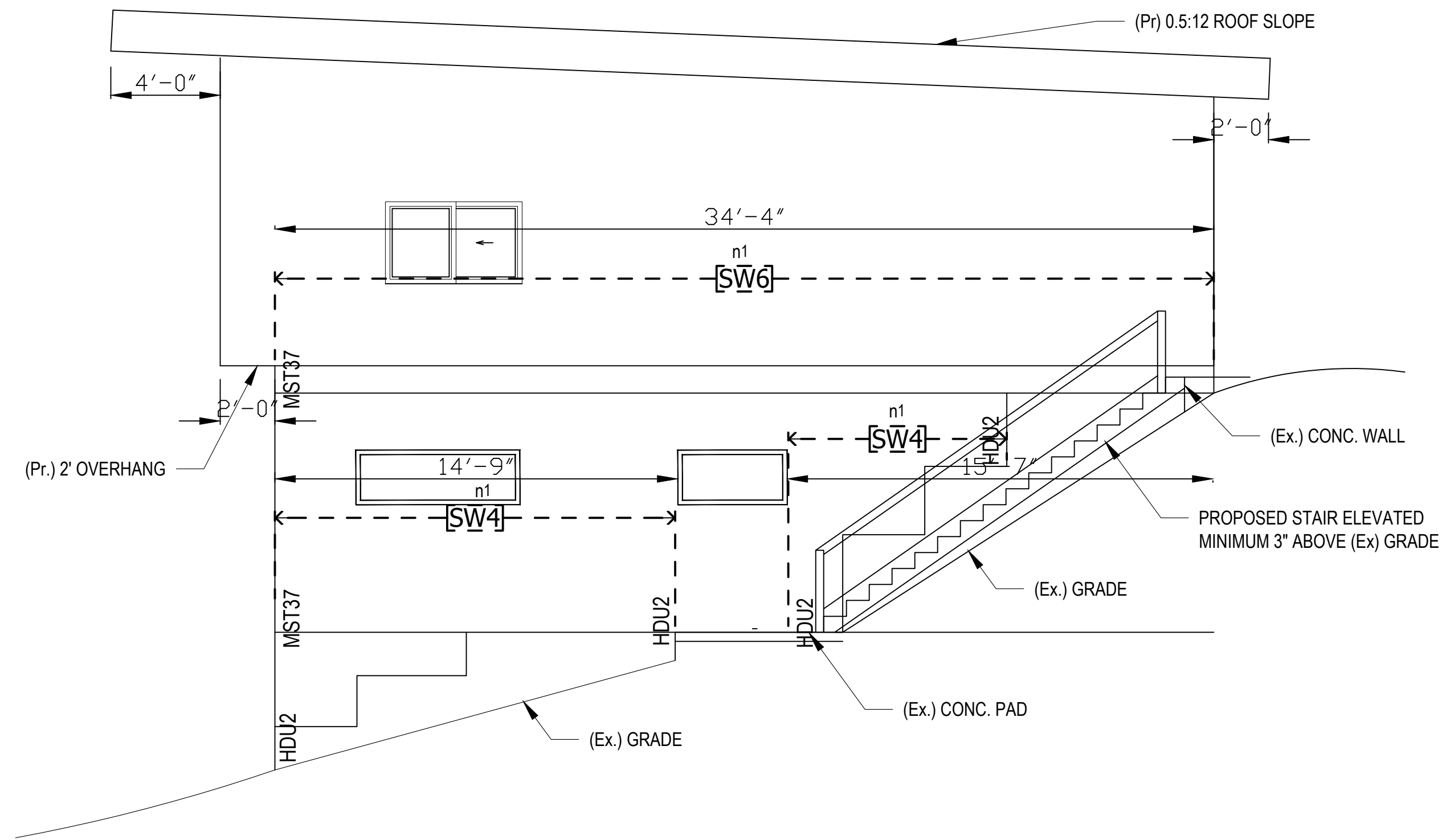
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SHEATHING AND FRAMING UPGRADE PER SHEAR WALL SCHEDULE TYPICAL

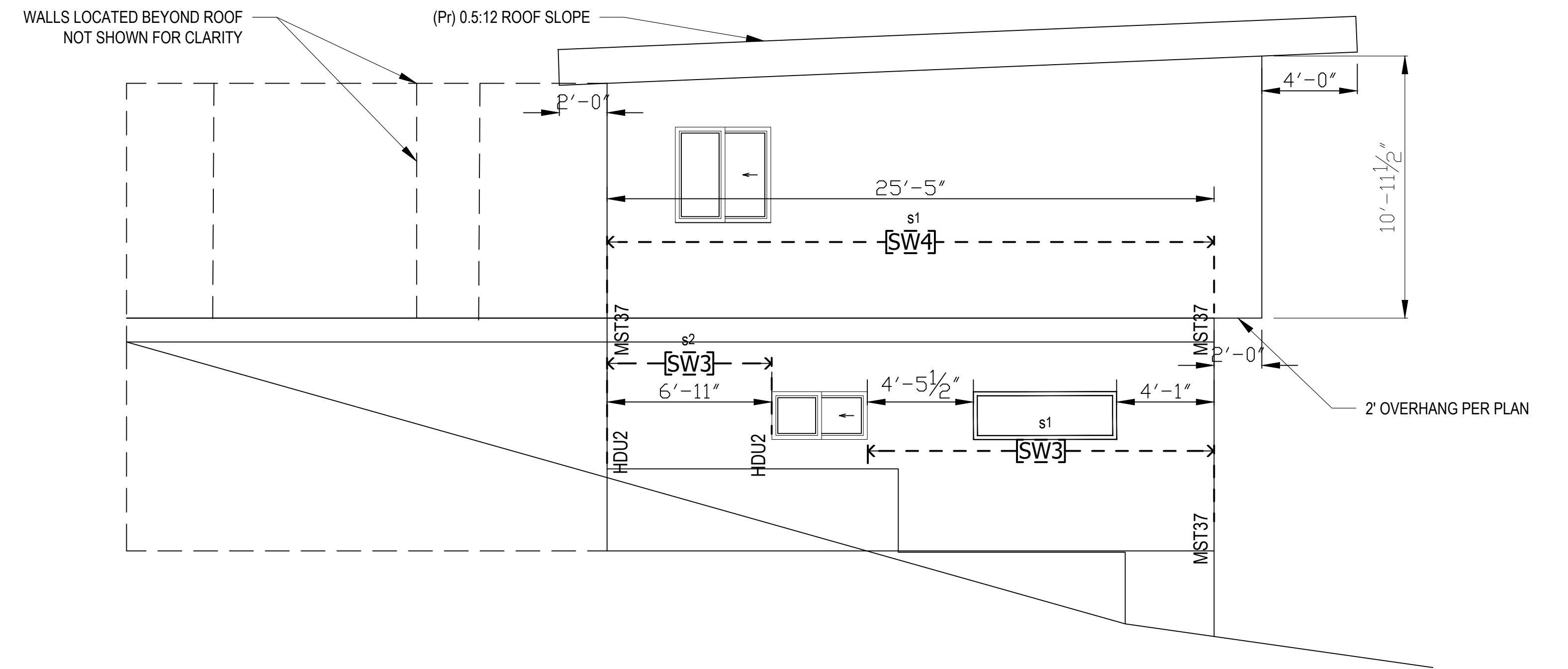


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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 3.3
(Pr) ELEVATIONS	



(Pr) NORTH ELEVATION
SCALE 1/4" = 1'-0"



(Pr) SOUTH ELEVATION
SCALE 1/4" = 1'-0"



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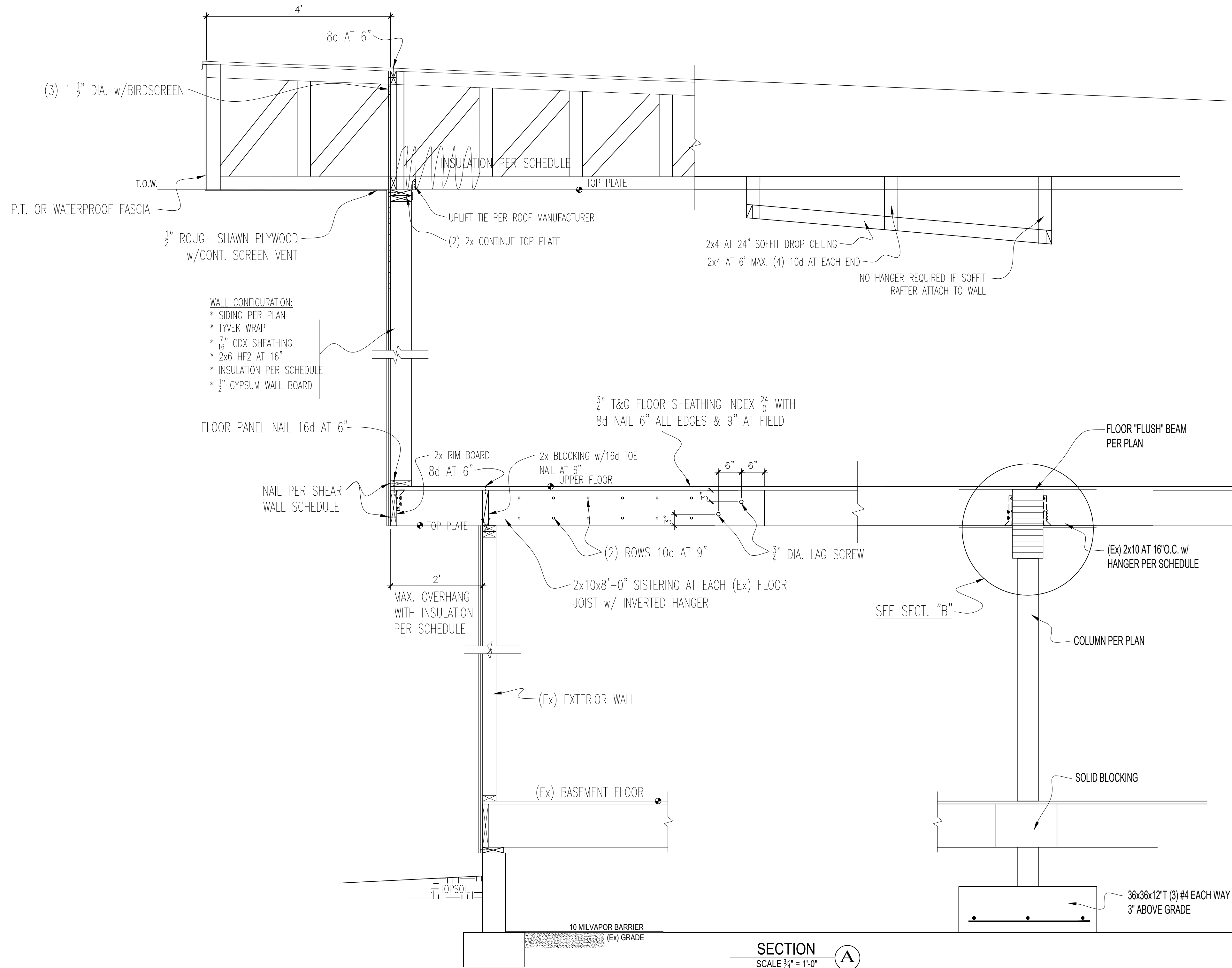
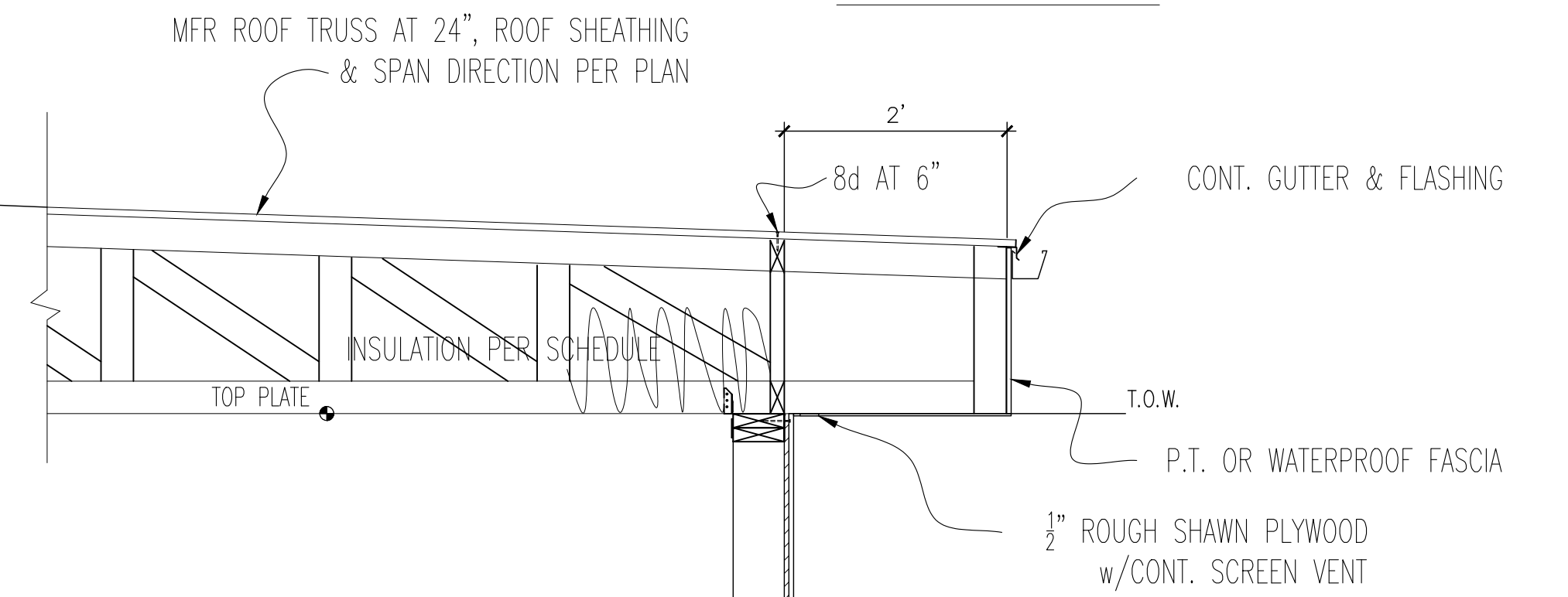
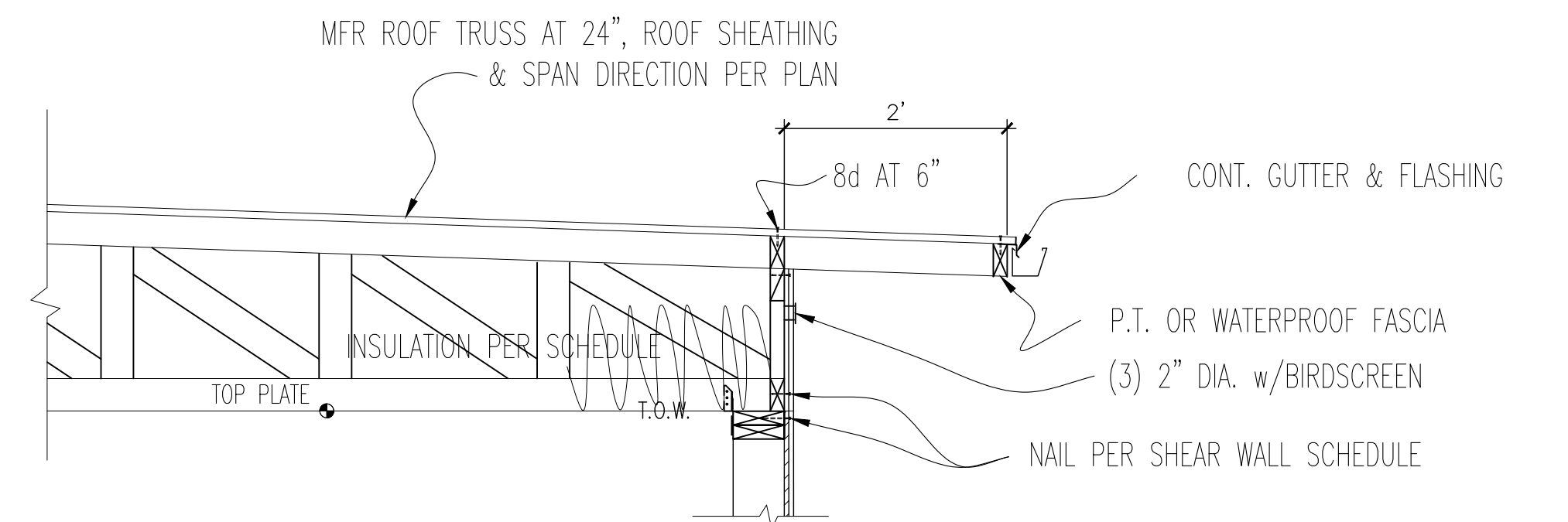
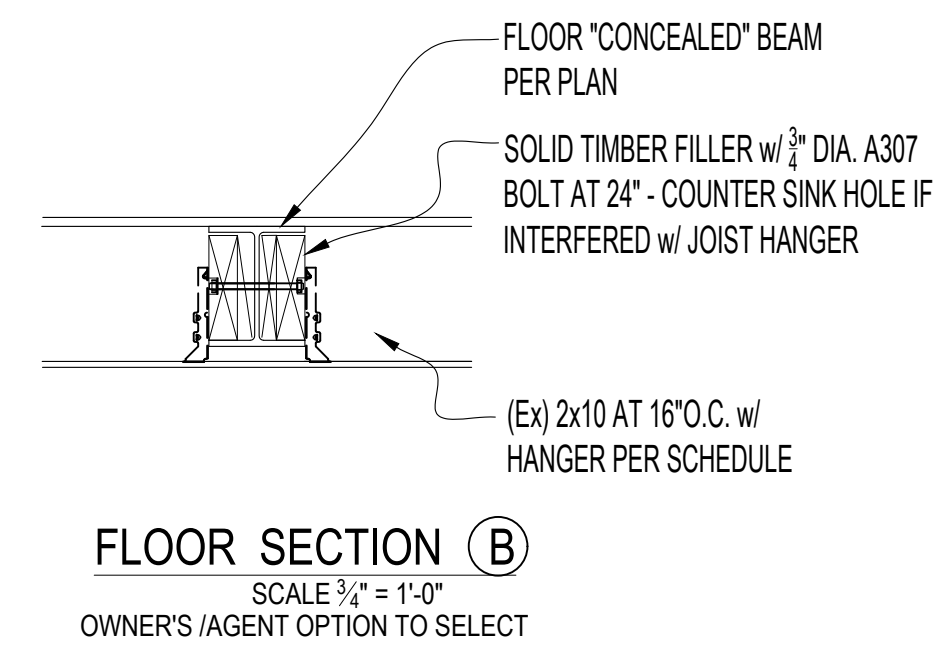
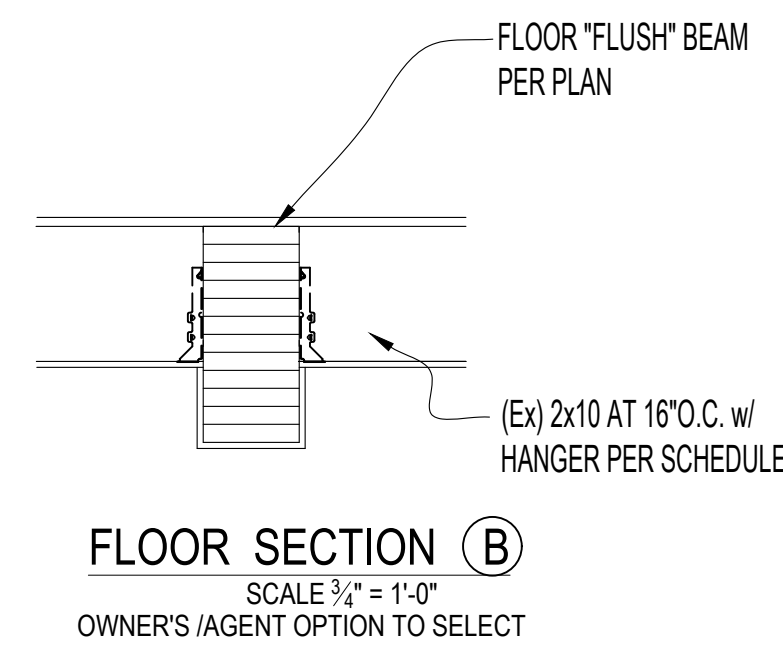
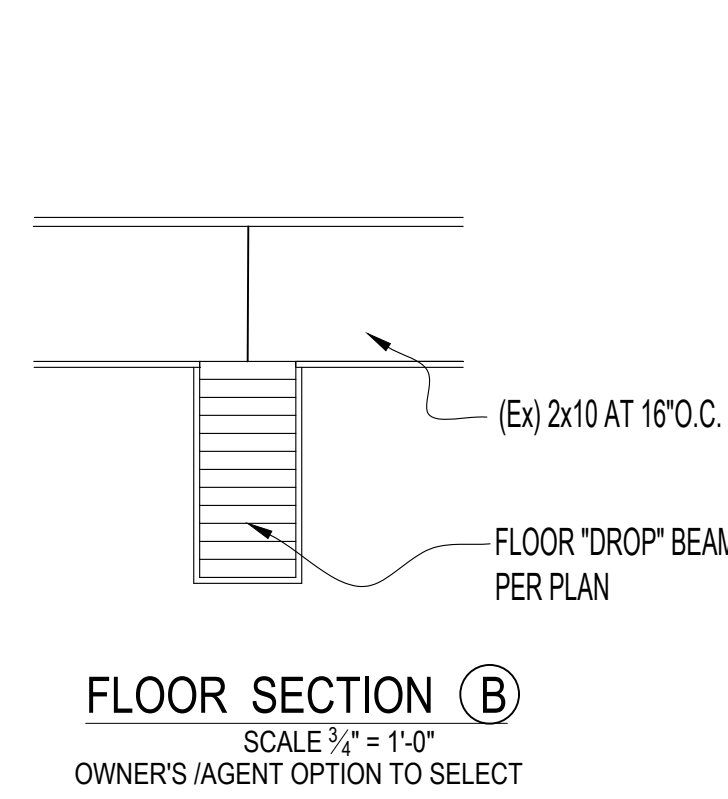
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040 (Pr) ELEVATIONS	DATE 01-20 2022 SHEET 3.4 24x36"
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JOIST HANGER SCHEDULE

Joist	Single	Double	SKewed 45 DEG	CONCEALED FLANGES
Face Mount	IUS	HUS	SUR	IUC
Top Mount	ITS	MIT	SUR	-
Face Mount	LUS	LUS-2	SUR	LUC
Top Mount	HUS-TF	HUS-2TF	SUR	-

USE HSURight OR HSULeft HANGER FOR SKEWED 45 DEGREE

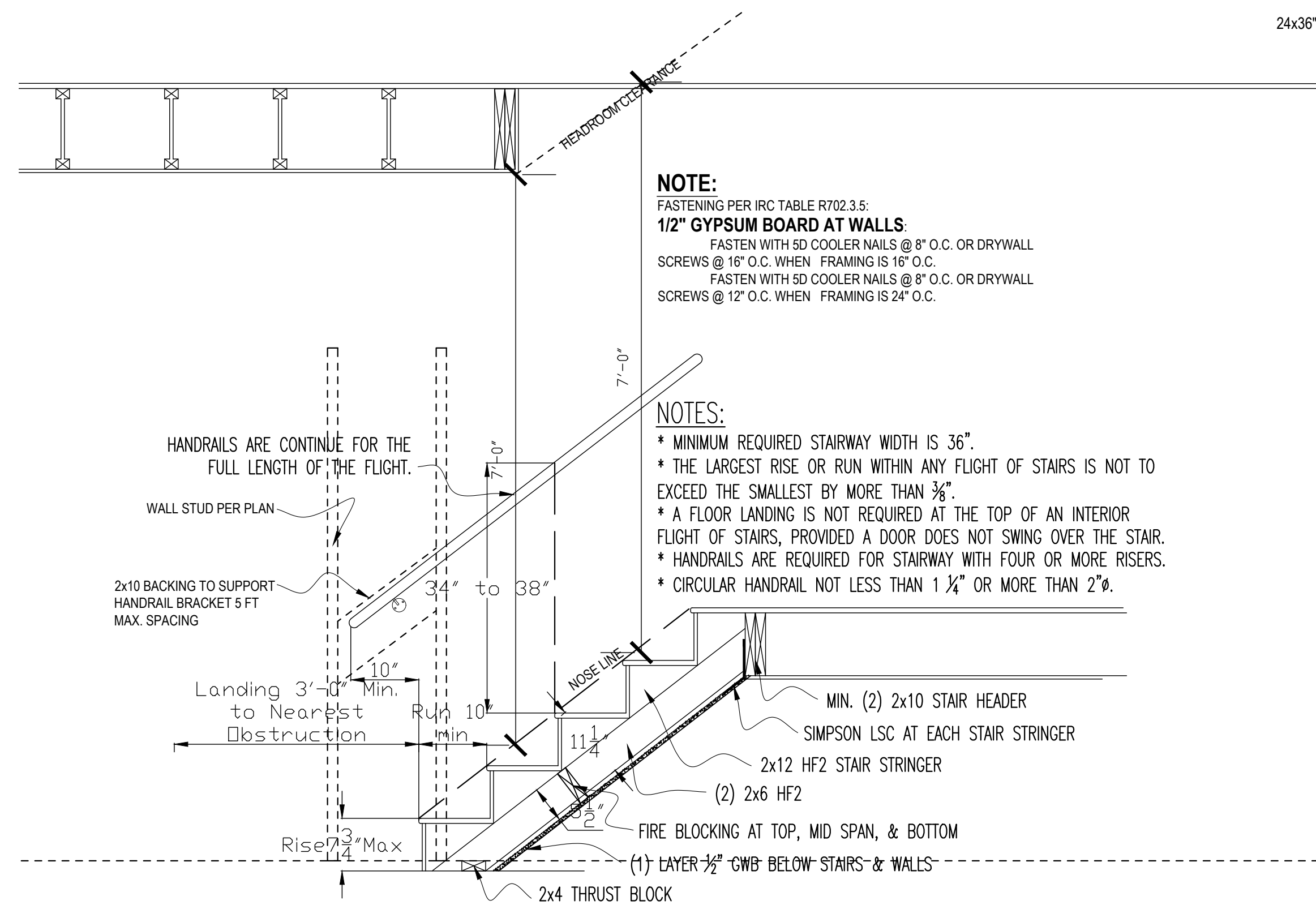
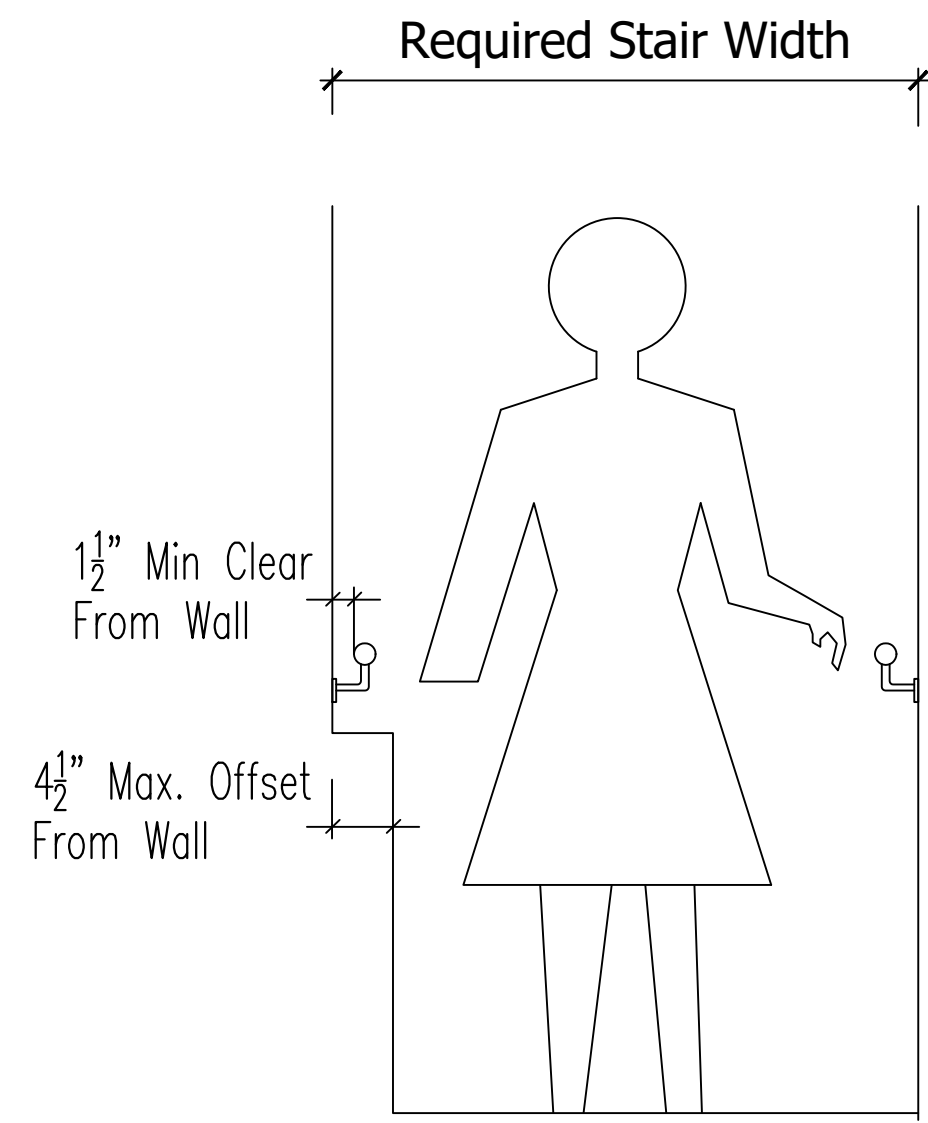
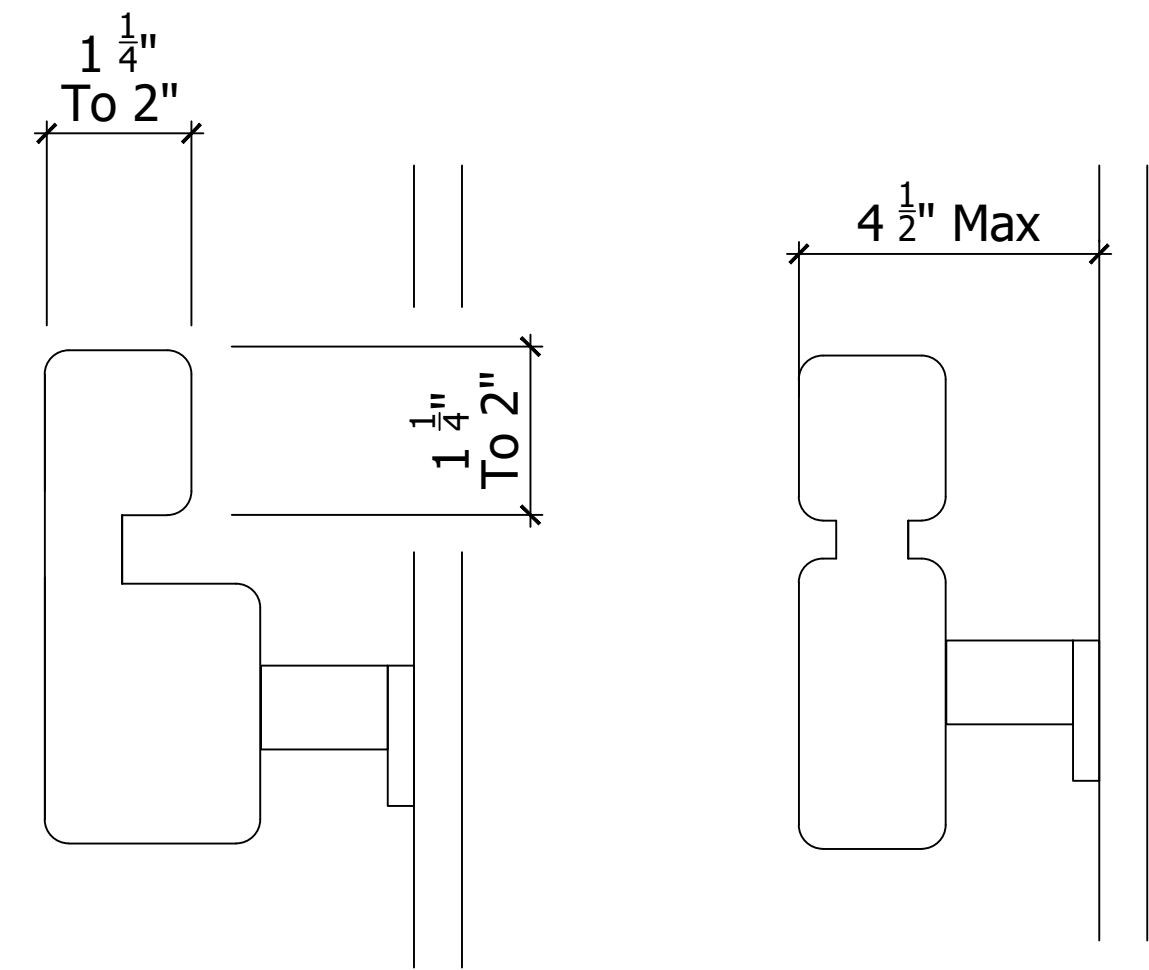
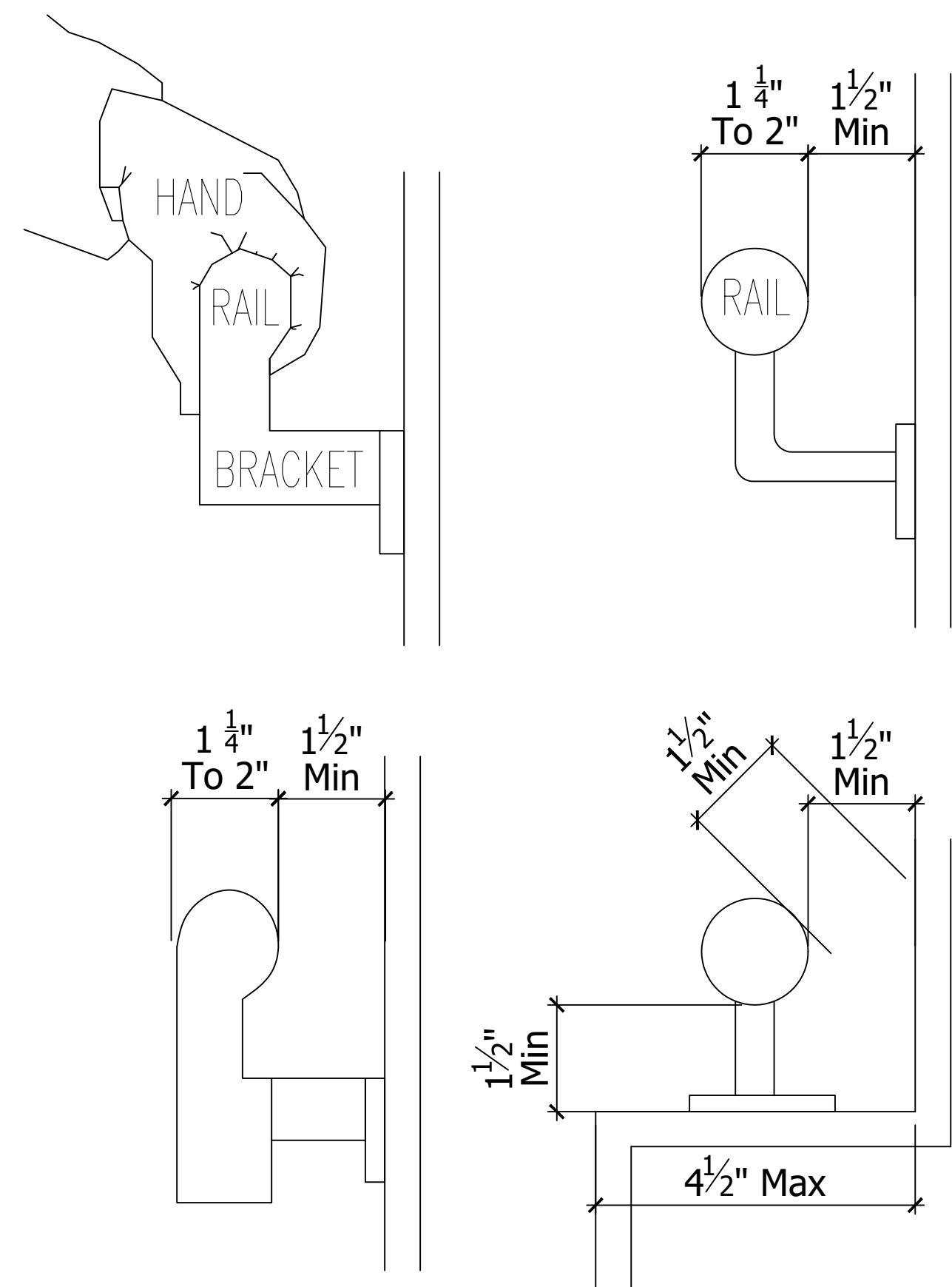
SOLID LUMBER TJI



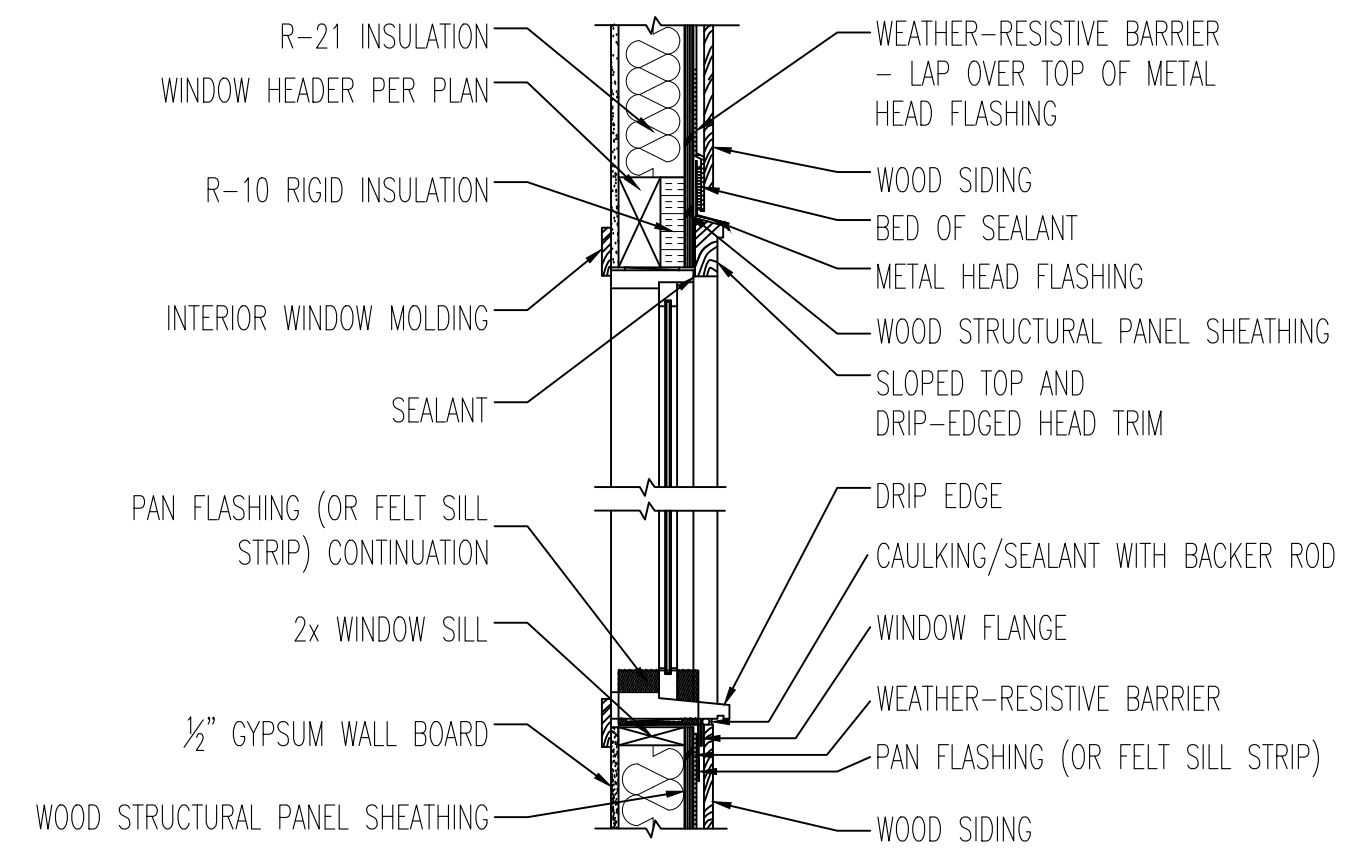
- WALL CONFIGURATION:
- * SIDING PER PLAN
 - * TYVEK WRAP
 - * 7/16\" CDX SHEATHING
 - * 2x6 HF2 AT 16"
 - * INSULATION PER SCHEDULE
 - * 1/2\" GYPSUM WALL BOARD



Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 4.1
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STAIR SECTION
SCALE 3/4" = 1'-0"

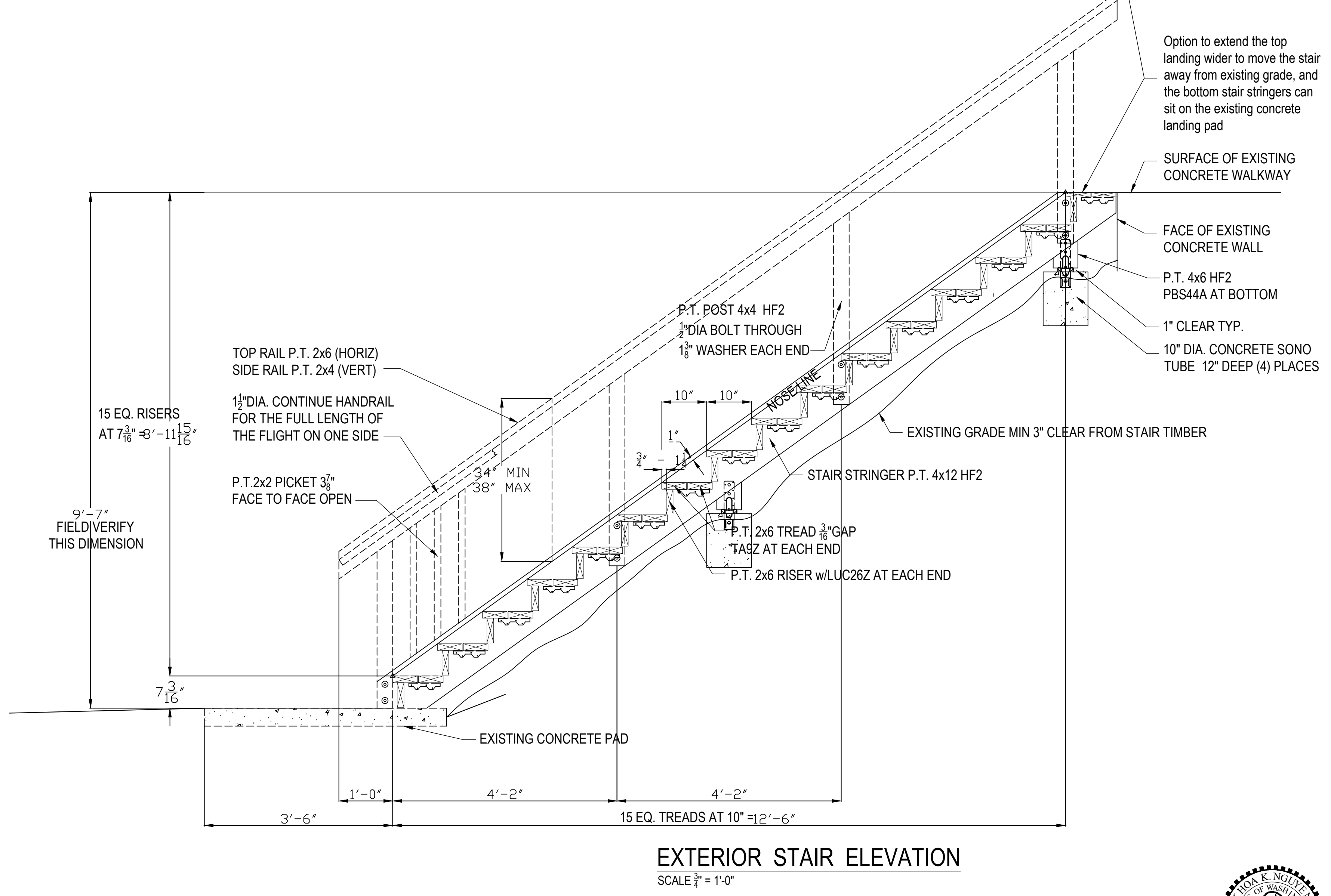
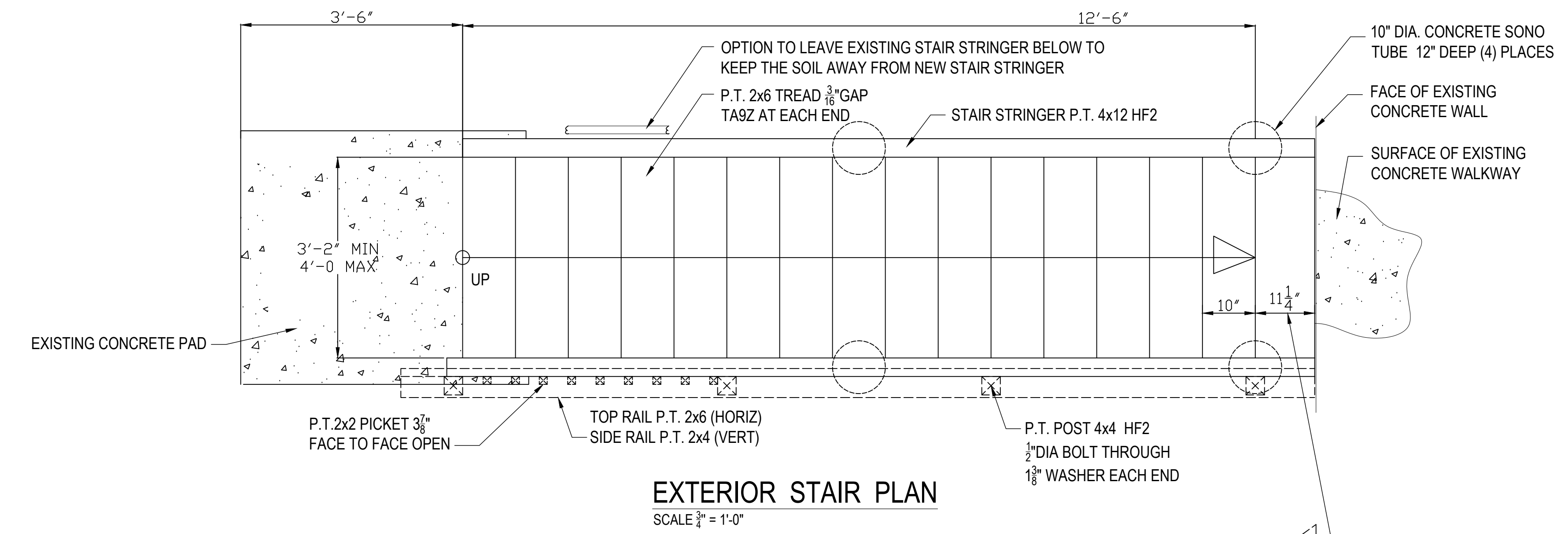


WINDOW HEADER & SILL DETAIL
SCALE 3/4" = 1'-0"



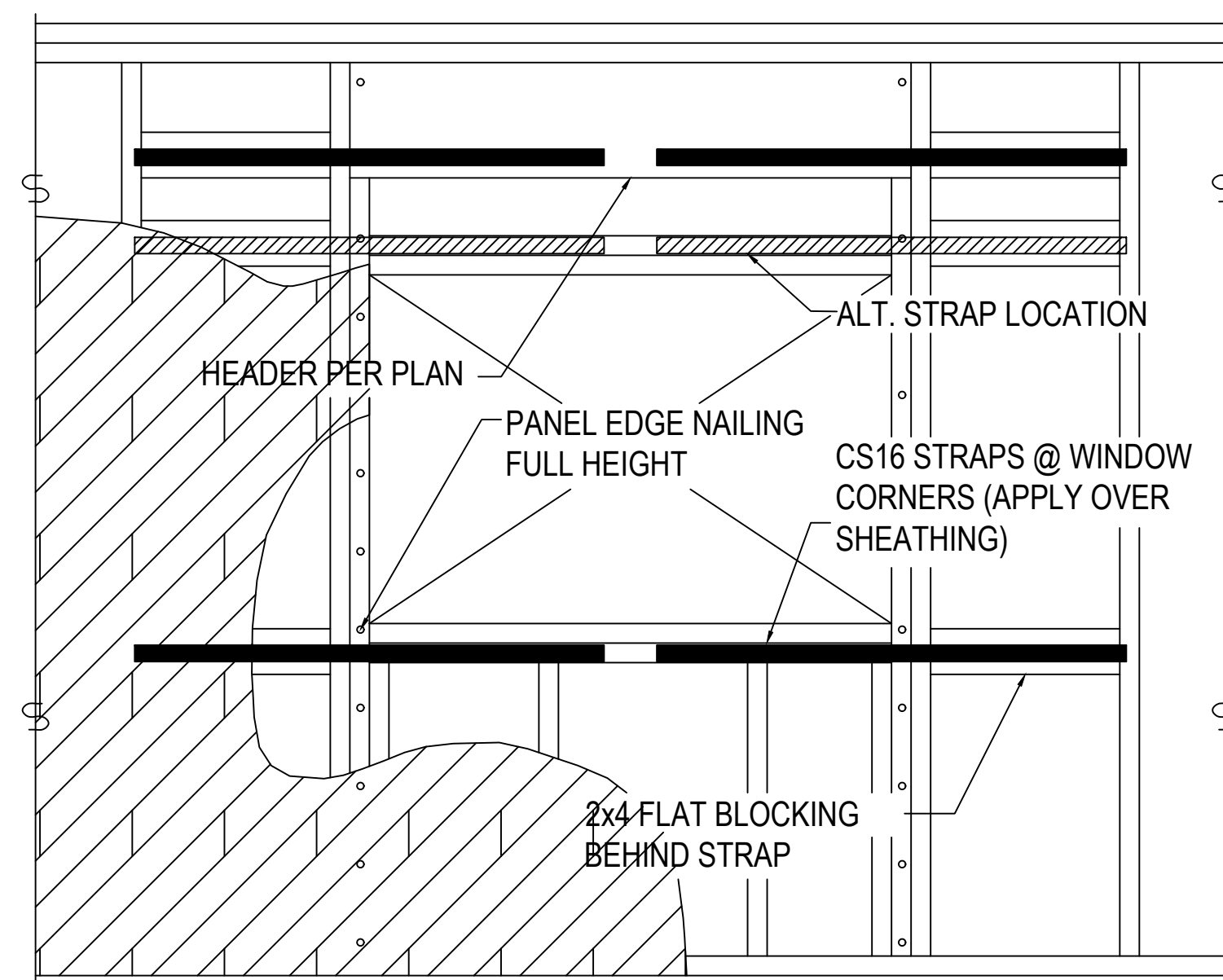
01/20/22

Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 4.2
SECTION DETAILS	



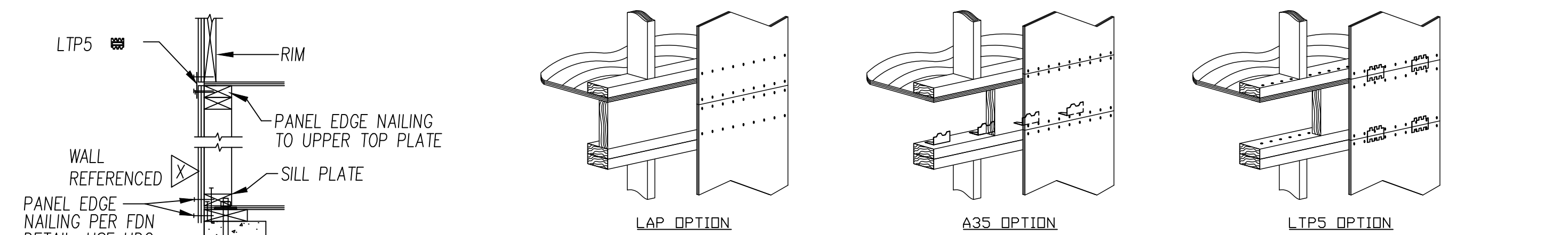
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 4.3
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EXTERIOR STAIR DETAILS



WINDOW SHEAR STRAPPING
N.T.S.

- * FACE NAILING APPLIES TO CONDITIONS WHERE FRAMING NAILS CAN BE STRAIGHT DRIVEN THRU FIRST MEMBER AND PENETRATE MAIN MEMBER MINIMUM OF 1 1/2". FRAMING NAILS SHALL BE 0.131"Ø x 3 1/4". 0.131"Øx3" NAILS MAY BE USED WHEN STITCHING TOGETHER (2)2x MEMBERS WITH NO SPACERS.
- * AT ADJOINING PANEL EDGES WHERE SHEATHING CANNOT LAP ON SINGLE MEMBER AND FACE NAILING CANNOT BE ACCOMPLISHED, FRAMING CLIPS SHALL BE USED TO FASTEN BUILT-UP MEMBERS.



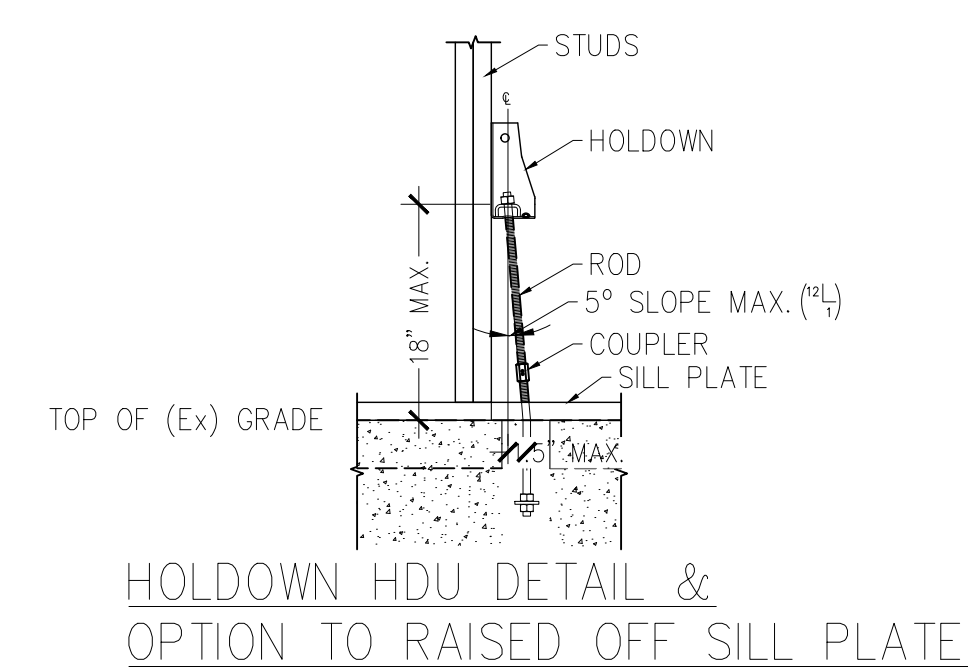
ANCHOR BOLTS EMBEDMENT SHALL BE 7", U.O.N. ALL ANCHORS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. IF SHEATHING IS ON BOTH SIDES OF THE WALL, STAGGER THE ANCHOR BOLTS, AS REQUIRED, SO THAT HALF OF THE PLATE WASHERS ARE WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON EACH SIDE. HOLE IN PLATE WASHERS MAY BE DIAGONALLY SLOTTED. (SECTION 4.3.6.4.3)

ALTERNATIVELY, SIMPSON STRONG TIE MUDSILL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S PROCEDURES AND ESR-2555.

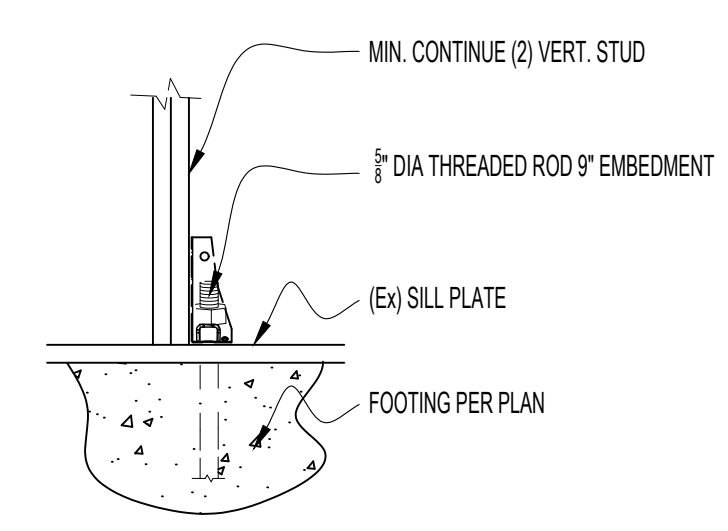
SHEAR WALL SCHEDULE

WALL	SHEATHING	PANEL EDGE NAILING (COMMON OR GALV BOX NAILS)	PANEL EDGE STUDS	MASA OR MASAP or A. BOLT -->	ANCHOR BOLTS, 5/8"Ø EMBED 7"	RIM CONNECTION		
						AT TOP PLATE	AT ROOF EAVE TOP PLATE	AT SILL PLATE (COMMON NAIL .162Ø x 3.5")
SW6	7/16" APA PLY ONE SIDE	8d AT 6" O.C.	2x	40" O.C. IN 2x PLATE	48" O.C. IN 2x PLATE	LTP5 AT 24" O.C.	RBC AT 16" O.C.	16d AT 6" O.C.
SW4	7/16" APA PLY ONE SIDE	8d AT 4" O.C.	2x	28" O.C. IN 2x PLATE	32" O.C. IN 2x PLATE	LTP5 AT 16" O.C.	RBC AT 12" O.C.	16d AT 4" O.C.
SW3	7/16" APA PLY ONE SIDE	8d AT 3" O.C.	3x	12" O.C. IN 2x PLATE	16" O.C. IN 2x PLATE	LTP5 AT 16" O.C.	RBC AT 8" O.C.	16d AT 3" O.C.
SW2	7/16" APA PLY ONE SIDE	8d AT 2" O.C.	3x	7" O.C. IN 2x PLATE	12" O.C. IN 2x PLATE	LTP5 AT 12" O.C.	RBC AT 8" O.C.	16d AT 2" O.C.
SW44	7/16" APA PLY TWO SIDES	8d AT 4" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	24" O.C. IN 3x PLATE	LTP5 AT 8" O.C.	N.A. AT ROOF EAVE	(2) ROWS 16d AT 4" O.C.
SW33	7/16" APA PLY TWO SIDES	8d AT 3" O.C. EA SIDE	3x	12" O.C. IN 3x PLATE	16" O.C. IN 3x PLATE	LTP5 AT 8" O.C.	N.A. AT ROOF EAVE	(2) ROWS 16d AT 3" O.C.
SW22	7/16" APA PLY TWO SIDES	8d AT 2" O.C. EA SIDE	3x	12" O.C. IN 3x PLATE	16" O.C. IN 3x PLATE	LTP5 AT 6" O.C.	N.A. AT ROOF EAVE	(2) ROWS 16d AT 2" O.C.

AT NEW SHEAR WALL ONLY

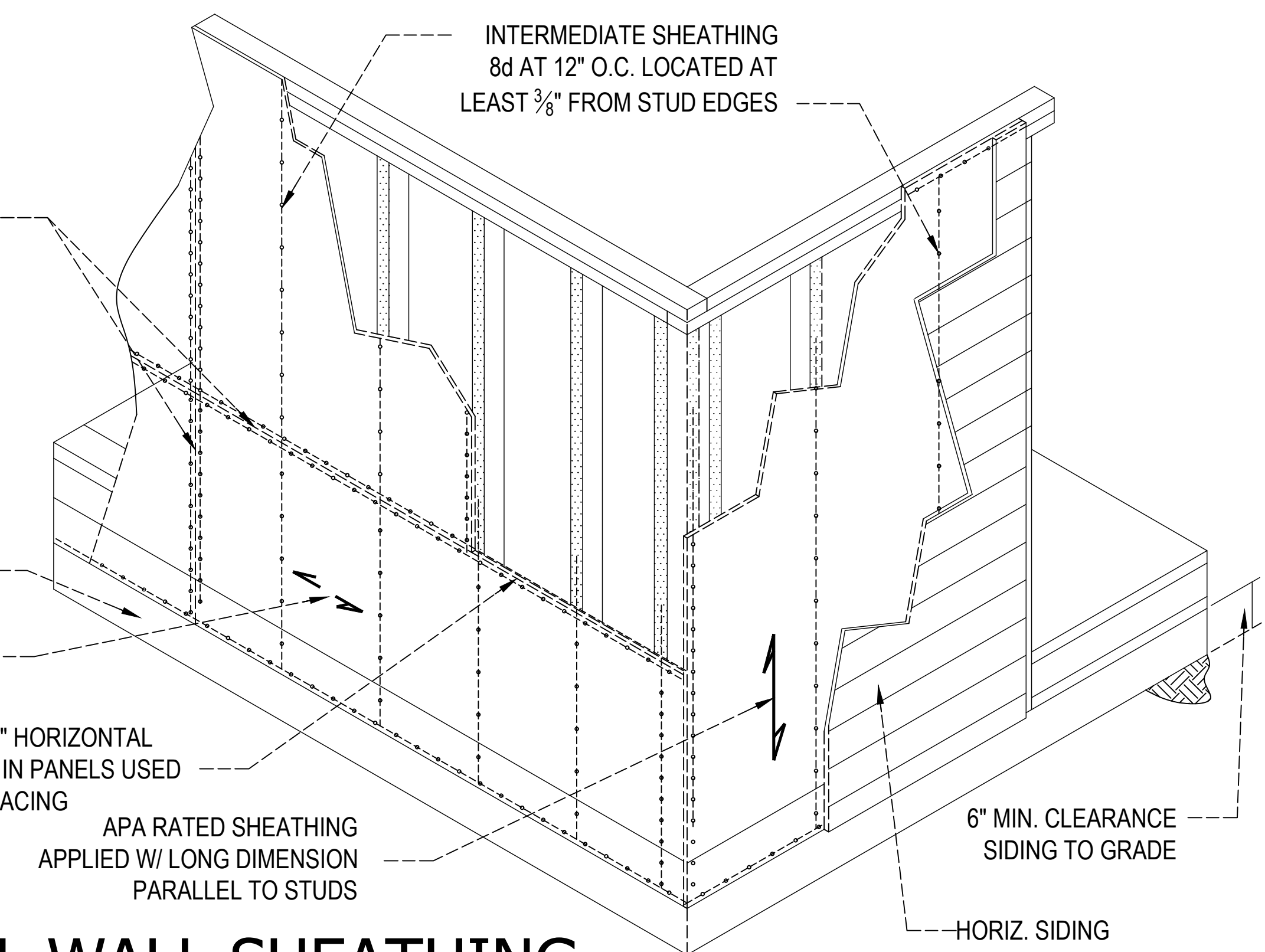


HOLDOWN HDU DETAIL & OPTION TO RAISED OFF SILL PLATE



HUD TIE CONNECTION DETAIL

- * ALL PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS OR HORIZ. BLOCKING
- * 1/8" SPACING IS RECOMMENDED AT ALL EDGE AND END JOINTS
- * NAIL SHALL BE LOCATE AT LEASE 3/8" FROM THE PANEL EDGES & STAGGERED
- * STAGGER NAILING ON 3x FRAMING WHERE SHEATHING IS ON BOTH SIDES OR NAIL SPACING IS 3" O.C. OR LESS.
- * PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES.
 - (2) 2X STUDS ARE ACCEPTABLE ALTERNATE 3x STUDS.
 - (2) 2X STUDS ARE TO BE NAILED TOGETHER WITH (2) ROWS 16d AT 6" O.C



APA PANEL WALL SHEATHING
N.T.S.



Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 5.1
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Window, Skylight and Door Schedule

Project Information: Loo & Wai's Remodel, 4124 94th PI SE, Mercer Island 98040. Contact Information: Khoa Nguyen, 17614 NE 29th St, Redmond 98052.

Table with columns: Ref., U-factor, Width (Qt. Feet, Inch, Feet), Height (Inch, Feet), Area, UA. Rows: Exempt Swinging Door, Exempt Glazed Fenestration.

Vertical Fenestration (Windows and doors)

Main table for vertical fenestration with columns: Component, Description, Ref., U-factor, Width (Qt. Feet, Inch, Feet), Height (Inch, Feet), Area, UA. Lists various rooms like Laundry, Powder, Entry Windows, etc.

Summary table: Sum of Vertical Fenestration Area and UA (782.0, 187.68) and Vertical Fenestration Area Weighted U = UA/Area (0.24).

Overhead Glazing (Skylights)

Table for overhead glazing with columns: Component, Description, Ref., U-factor, Width (Qt. Feet, Inch, Feet), Height (Inch, Feet), Area, UA.

Summary table: Sum of Overhead Glazing Area and UA (0.0, 0.00) and Overhead Glazing Area Weighted U = UA/Area (0.00).

Total Sum of Fenestration Area and UA (for heating system sizing calculations) (782.0, 187.68).

ENERGY CODE: (R40G)
2018 WASHINGTON STATE ENERGY CODE - RESIDENTIAL
Item #4. Additions less than 500 SF: 1.5 credits

Energy Option # 1.1 0.5 credits
Energy Option # 3.1 1.0 credits
Total Credits 1.5 credits

Table with columns: FLOOR AREA (SQ. FT) and # OF BEDROOM (0-1, 2-3, 4-5, 6-7, >7). Shows ventilation rates for different room sizes.

- VENTILATION RATES IN TABLE ARE MINIMUM OUTDOOR AIRFLOW RATES MEASURED IN CFM.
- WHOLE HOUSE VENTILATION SYSTEM IS REQUIRED AND SHALL CONFORM TO WAC 51-52-0403.8.6 WHOLE HOUSE VENTILATION WITH EXHAUST FAN SYSTEM
- FRESH AIR SHALL DRAWN IN THROUGH A MIN. OF ONE OPERABLE WINDOW IN EACH HABITABLE SPACE. THESE WINDOWS WILL HAVE SCREENS AND BE CONTROLLABLE AND SECURABLE.
- FOR ALL DWELLINGS UP TO 5000 SQ FT, 3.5 CREDIT ARE REQUIRED FROM TABLE 406.2 SEE "METHOD OF OBTAINING ENERSY CREDITS" ON SHEET 13.
- HEATING DUCT ARE NOT ALLOWED TO DISPLACE REQUIRED INSULATION WITH THE EXTERIOR WALLS, FLOOR, AND CEILING.
- DUCTS SHALL BE LEAKED TESTED IN ACCORDANCE WITH RS-33, USING THE MAX. DUCT LEAKAED TESTED IN ACCORDANCE WITH RS-33, USING THE MAX. DUCT LEAKAGE RATE SPECIFIED IN SECTION R403.2.2.
- ENERGY CODE COMPLIANCE CHART WITH 3' OF ELECTRICAL PANEL.
- A MINIMUM OF 75% OF ALL LIGHTING MUST BE HIGH EFFICIENCY.

WHOLE HOUSE VENTILATION

EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM COMPLYING WITH SECTION M1507.3.4, M1507.3.5, M1507.3.6 OR M1507.3.7. PROVIDE A MINIMUM 45 CFM, CONTINUOUSLY OPERATING SYSTEM FOR A DWELLING UNIT CONSISTS OF 2 TO 3 BEDROOMS AND LESS THAN 1500 SF. BEDROOM DOOR SHALL BE UNDERCUT TO A MINIMUM OF 1/2" ABOVE THE SURFACE OF THE FINISH FLOOR COVERING. PROVIDE NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA OF OPENING, SCREENED WITH DAMPER CONTROL FOR EACH BEDROOM.

- NOTE: IF A WINDOW IN EACH HABITABLE ROOM IS EQUIPPED WITH A 4 SQUARE INCH MIN. FRESH AIR PORT, THEN THRU-WALL INLETS AS SHOWN ON PLANS WILL NOT BE REQUIRED.
OUTDOOR AIR INLETS SHALL BE LOCATED SO AS NOT TAKE AIR FROM THE FOLLOWING AREAS:
1. CLOSER THAN 10 FEET FROM AN APPLIANCE VENT OUTLET, UNLESS SUCH VENT OUTLET IS 3 FEET ABOVE THE OUTDOOR AIR INLET.
2. WHERE IT WILL PICK UP OBJECTIONABLE ODORS, FUMES OR FLAMMABLE VAPORS.
3. A HAZARDOUS OR UNSANITARY LOCATION.
4. A ROOM OR SPACE HAVING ANY FUEL-BURNING APPLIANCE THEREIN.
5. CLOSER THAN 10 FEET FROM A VENT OPENING OR PLUMBING DRAINAGE SYSTEM UNLESS THE VENT OPENING IS AT LEAST 3 FEET ABOVE THE AIR INLET.
6. ATTIC, CRAWL SPACES OR GARAGES.

FENESTRATION OF PRODUCT RATING
NFRC 100, labeled and certified by the manufacturer



01/20/22

Project information box: Loo & Wai's Remodel, 4124 94th PI SE, Mercer Island 98040. DATE: 01-20-2022, SHEET: 6.1, ENERGY.