

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

CODES

- 2018 International Building Code (IBC)
- 2018 International Residential Code (IRC)
- 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 S₁ = 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 DETECTOS 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)

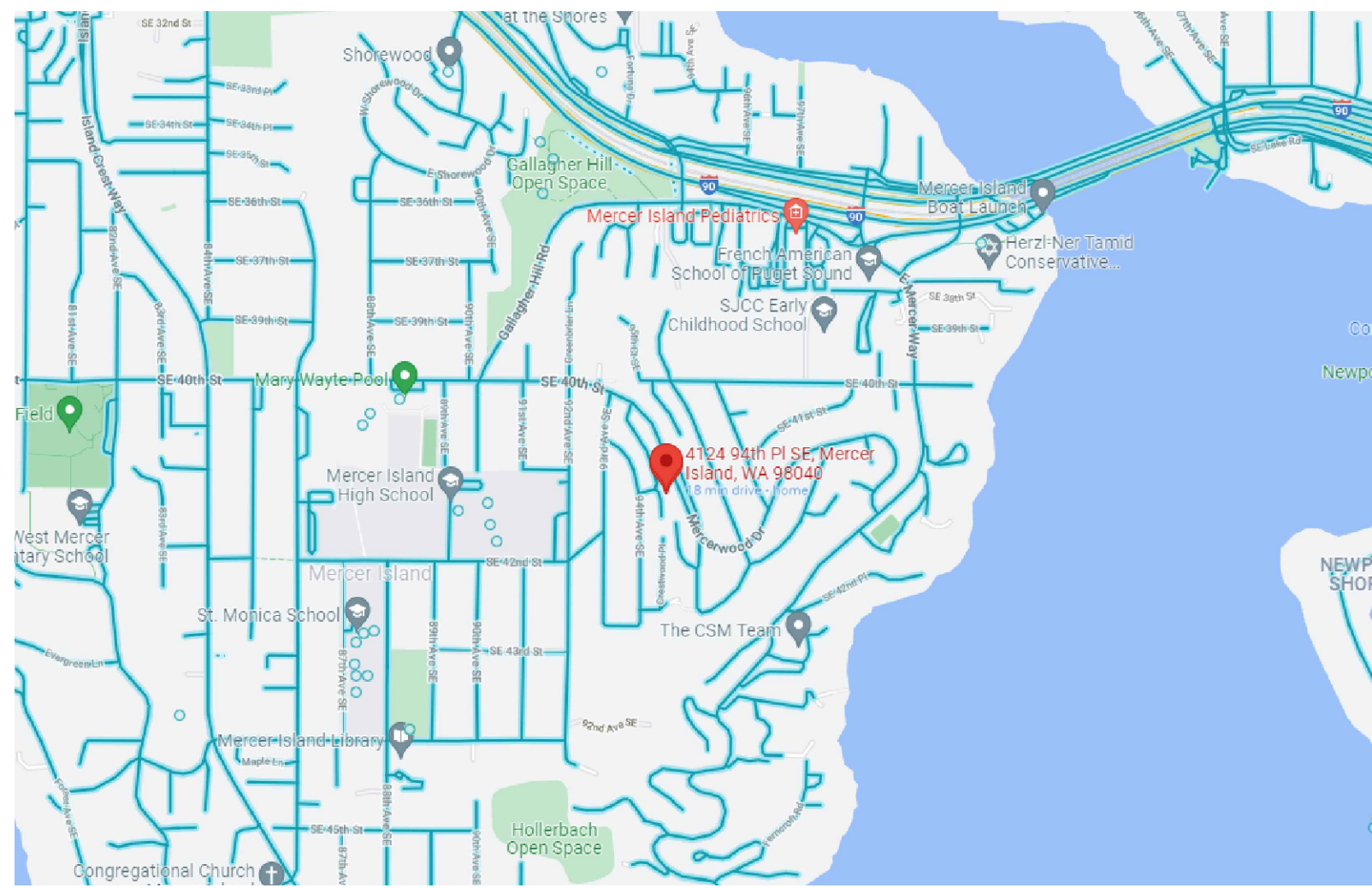
DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH EITHER THE INTERNATIONAL MECHANICAL CODE OR INTERNATIONAL RESIDENTIAL CODE, AS APPLICABLE.

BUILDING CAVITIES (R403.2.3)

BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS. INSTALLATION OF DUCTS IN EXTERIOR WALLS, FLOORS OR CEILINGS 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

Lot Coverage Calculation:

Gross Lot Area	12,351 SF
Net Lot Area	11,458 SF
Allowed Lot Coverage Area	3437 SF
Allowed Lot Coverage	30%
Existing Lot Coverage	
Main Structure Roof Area	2072 SF
Vehicular Use (driveway)	280 SF
Covered Patio and Covered Decks	225 SF
Total (Ex) Lot Coverage	2577 SF
Total Lot Area Removed	49 SF
Total New Lot Coverage Area	464 SF
Main Structure Roof Area	464 SF
Total Project Lot Coverage Area	2992 SF
Proposed Lot Coverage Area	26.1 %

Hardscape Calculation:

Gross Lot Area	12,351 SF
Net Lot Area	11,458 SF
Allowed Hardscape Area	1031 SF
Total Existing Hardscape Area	
Uncovered Decks	364 SF
Walkways	391 SF
Stairs	69 SF
Total (Ex) Hardscape Area	824 SF
Total Hardscape Area Removed	74 SF
Total New Hardscape Area	50 SF
Walkways	50 SF
Total Project Hardscape Area	800 SF
Total Project Hardscape Area	7.0 %

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

Area Summary:

	s.f.
Existing Main Floor	1650
Existing Finished Basement	1410
Existing Attached Garage	400
Existing Deck	364
Proposed Deck Removal	-114
Proposed Garage "Addition"	28
Total	3,738

Lot Size: 12,351
% of Lot: 30.3%

Impervious Surface Coverage:

	s.f.
(Pr) Principal Building Roof	2,577
(Ex) Conc. Driveway	280
(Ex) Deck w/ Removal	114
(Ex) Exterior Stairs	38
(Ex) Walkway + Landing Pad to Ext. Stairs	45
(Pr) Walkway (Main Entrance)	30
Total	3,084

Lot Size: 12,351
% of Lot: 25.0%

Lot Slope Calculation

Highest Elevation Point of Lot	318.77'
Lowest Elevation Point of Lot	267.59'
Elevation Difference	51.18'
Horizontal Difference Low # High Point	146.84'

Calculation: (51.18/146.84) x 100 = 34.9%

VALUATION OF THE WORK:

CONSTRUCTION	\$ 120,000
ADMINISTRATION	10,000
MATERIAL	120,000
TOTAL	\$ 250,000

CONTACTS INFORMATION

Owner: Kevin Ka Wing Loo & Ting Wai
Address: 4124 94th PI SE Mercer Island 98040
Phone: 425-301-0883
Email: alicewating@hotmail.com

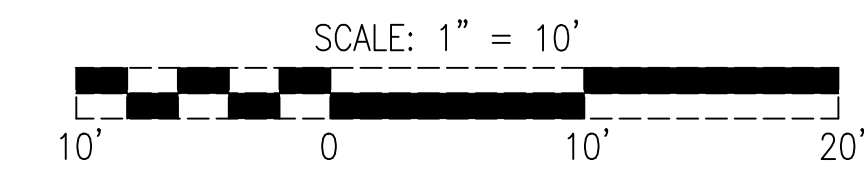
Contractor:
Contact: Chris Vong (M+C Remodeling LLC)
Address: 3732 S Perry St Seattle WA 98118
Phone: 206-393-2167
Email: vong_chris@yahoo.com

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

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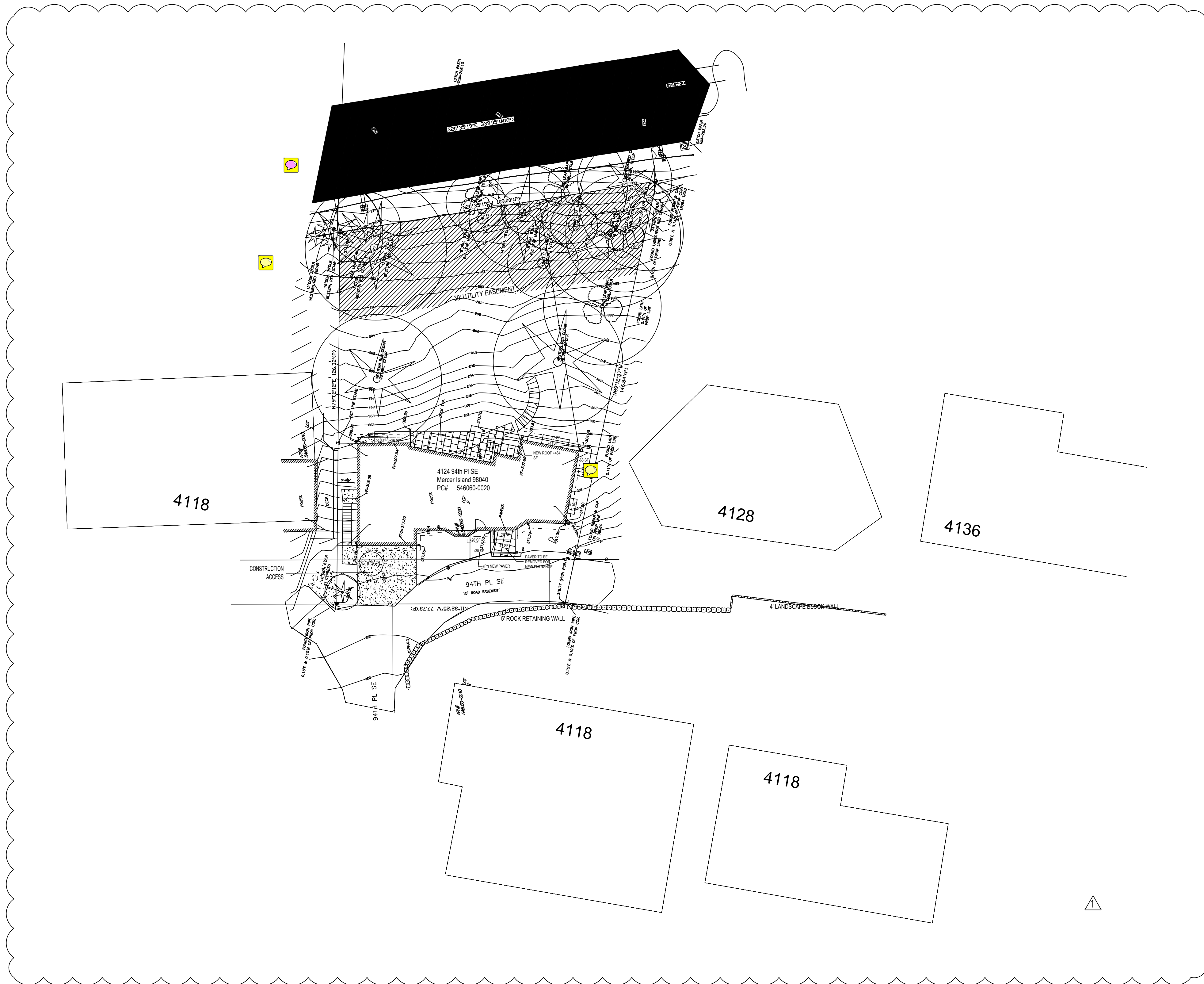
SITE PLAN Was Moved to Sheet 1.2



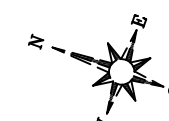
Loo & Wai's Remodel 4124 94th PI SE Mercer Island 98040	DATE 01-20 2022 SHEET 1.1
GENERAL NOTES	24x36"

11-28-22 REV #

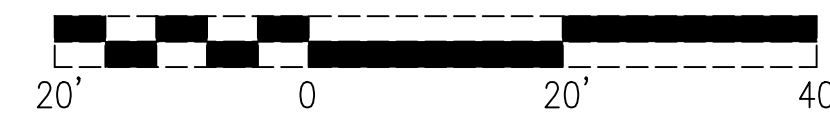
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SITE PLAN



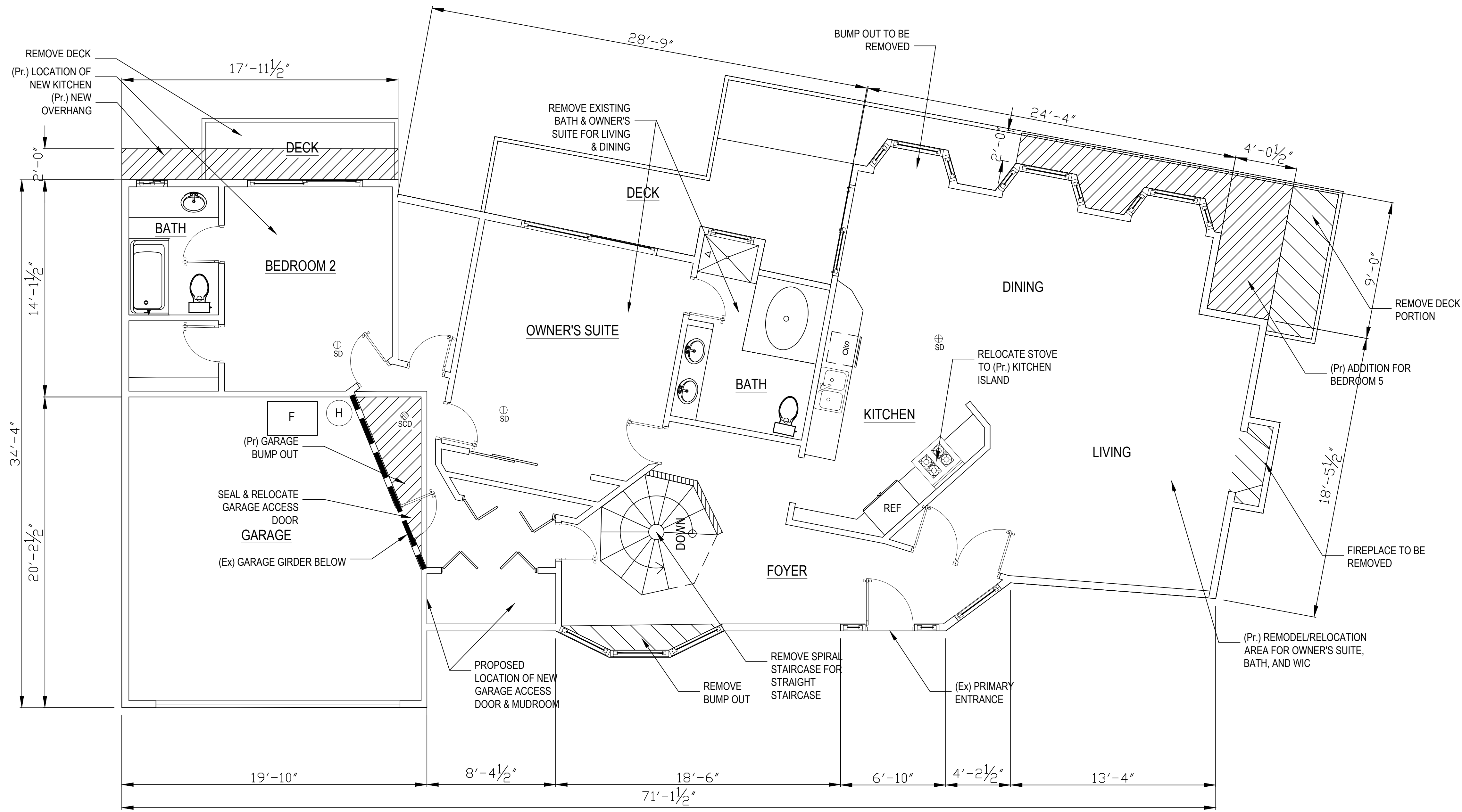
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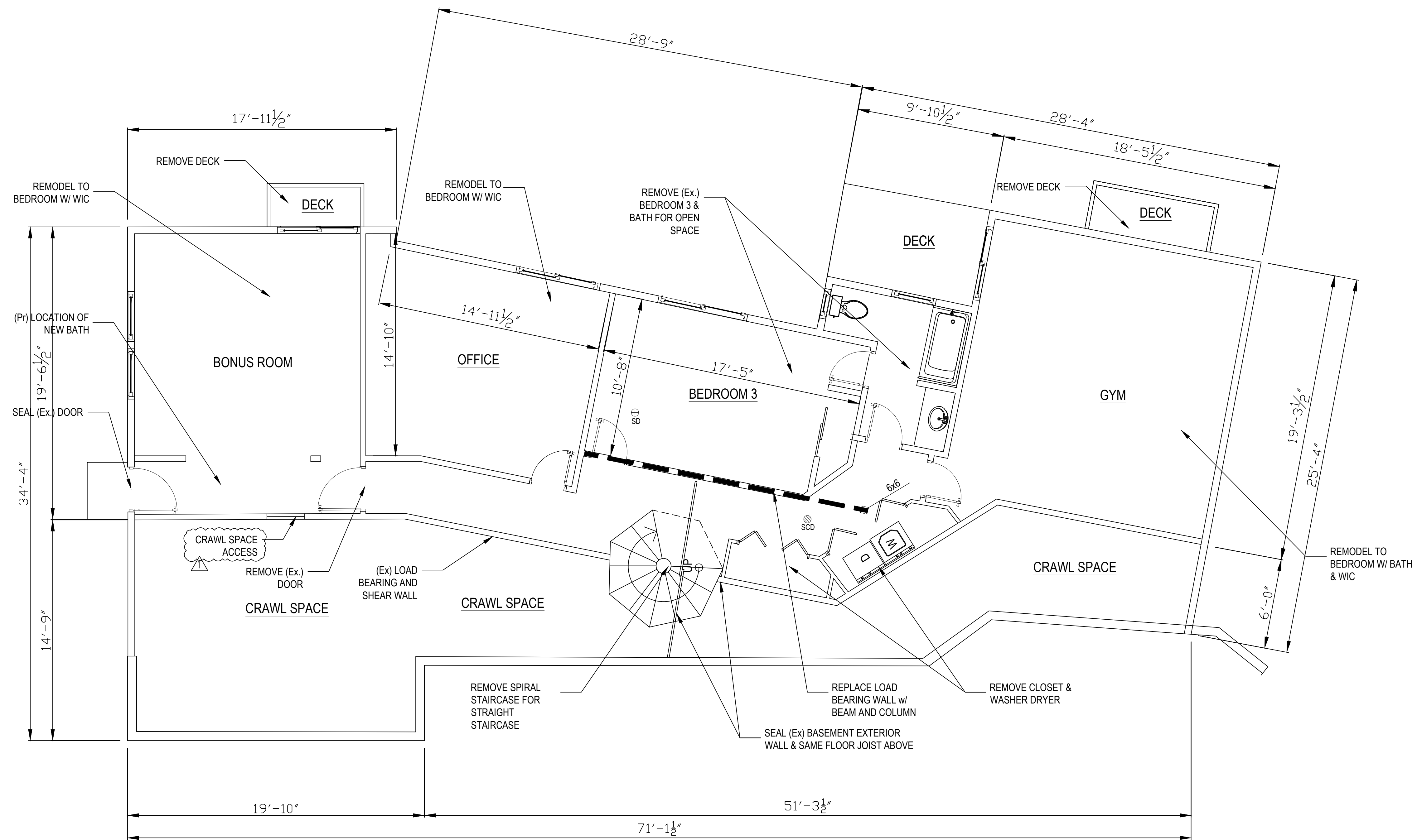
Loo & Wai's Remodel	DATE 01-20
4124 94th PI SE	2022
Mercer Island 98040	SHEET
SITE PLAN	1.2



(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"

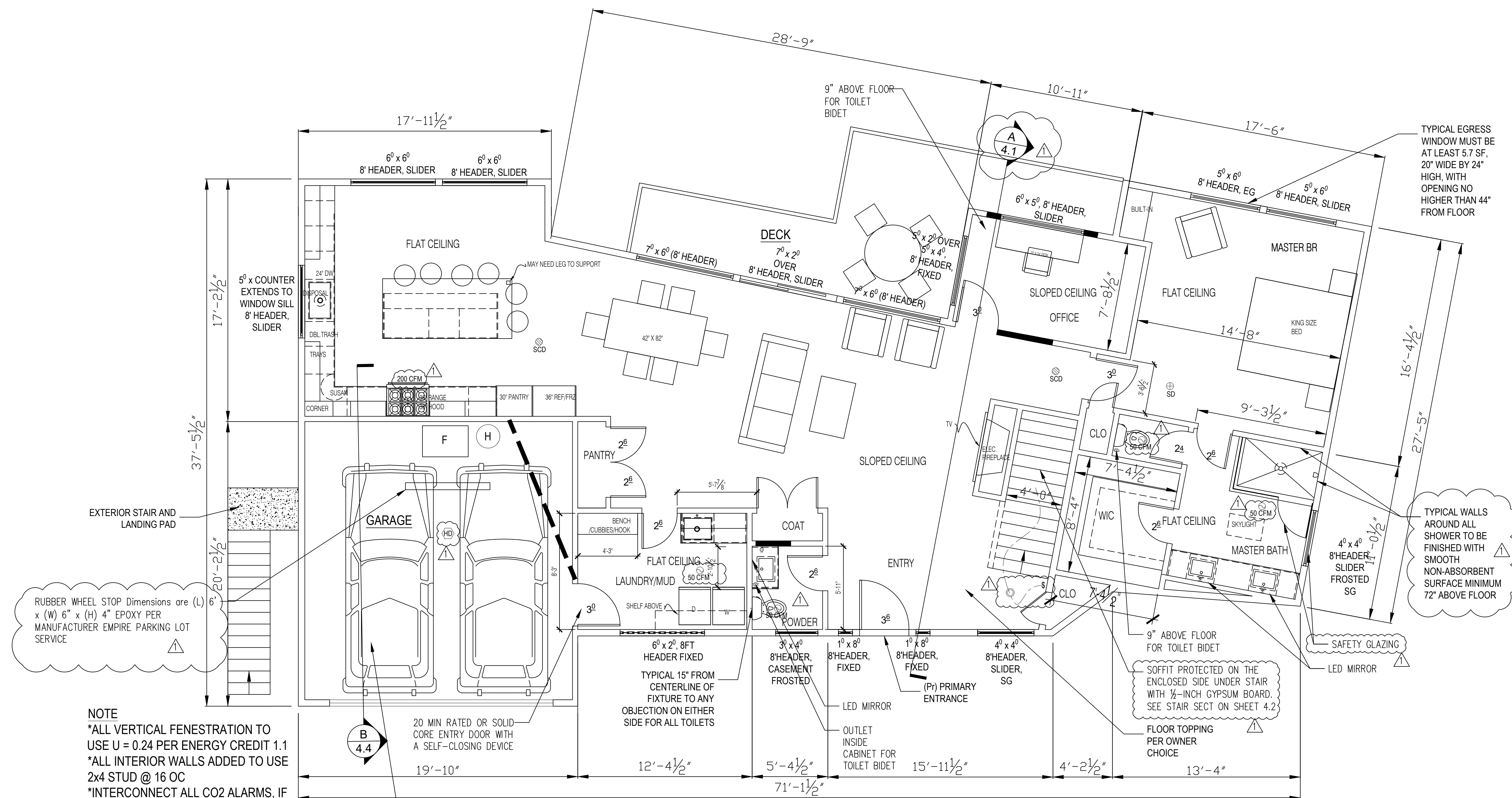


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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.2 24x36"
EXISTING BASEMENT PLAN VIEW	

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
- PER R302.11, FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE



ELECTRICAL LEGEND:

- ⊕SD Smoke Detector
- ⊕HD Heat detector
- ⊕SCD Smoke + Carbon Detector
- ⊕ Exhaust Fan
- (Vent to Exterior)
- ⊕50 CFM Recessed 13W LED Light Fixture
- ⊕ Ceiling Mounted Light Fixture
- ⊕ Wall Mounted Light Fixture
- ⊕ Switch
- ⊕ 3-Way Switch
- ⊕\$3 110V Wall Outlet
- ⊕\$3 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)
- ⊕ WHF Automation Panel
- ⊕ FLUOR LED Fluorescent Tube Light
- ⊕ SMA Solar Motion Activated LED

NOTE
 *ALL VERTICAL FENESTRATION TO USE U = 0.24 PER ENERGY CREDIT 1.1
 *ALL INTERIOR WALLS ADDED TO USE 2x4 STUD @ 16 OC
 *INTERCONNECT ALL CO2 ALARMS, IF ONE IS ACTIVATED ALL WILL ACTIVATE

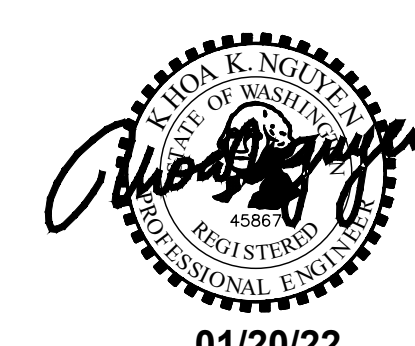
WINDOW & DOOR ABBREVIATION

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

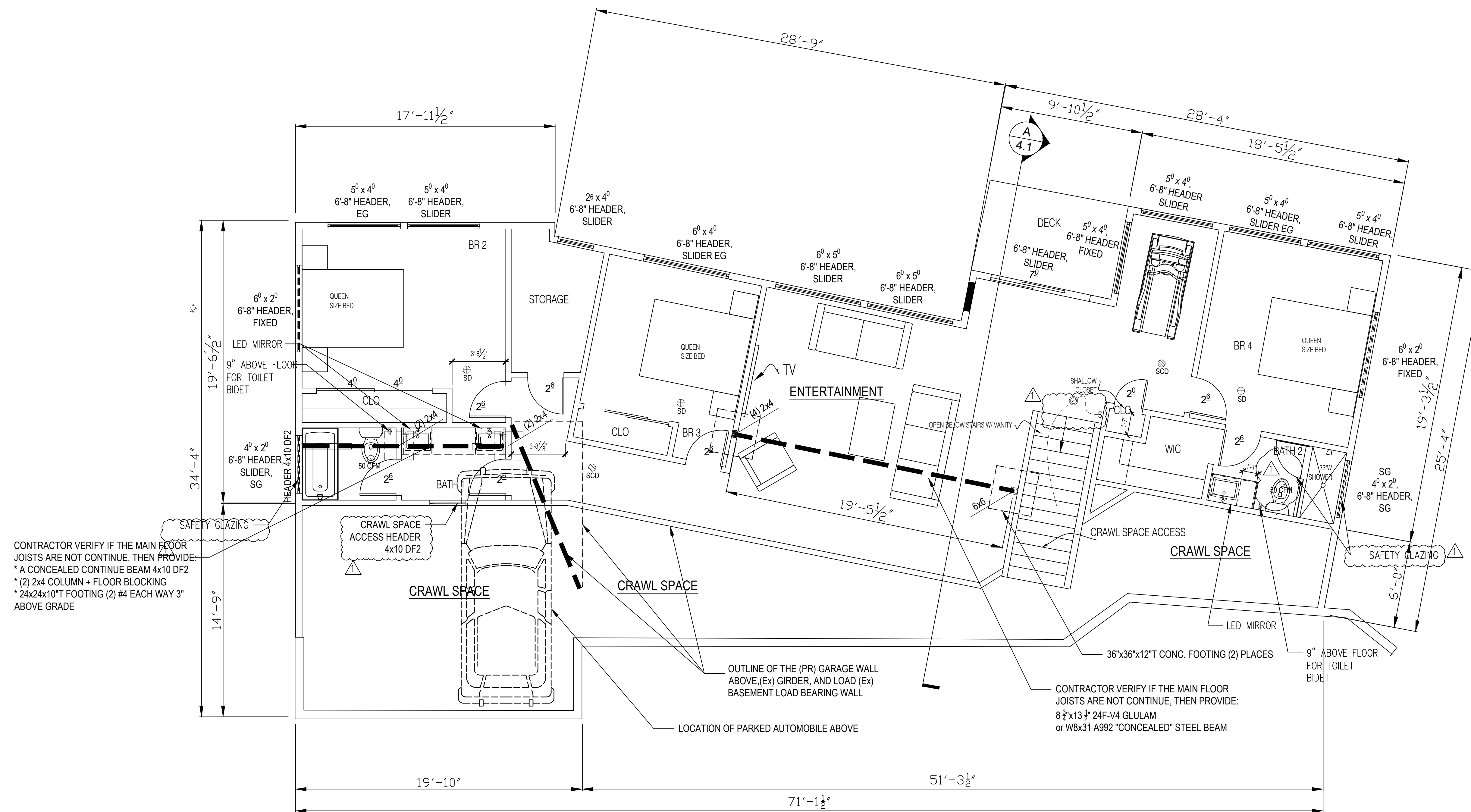
GARAGE SEPARATION REQUIREMENTS INCLUDE 5/8" TYPE X BETWEEN GARAGE AND HABITABLE SPACE ABOVE, 1/2" BETWEEN GARAGE AND HABITABLE SPACE ON GARAGE SIDE OF WALLS

(Pr) MAIN LEVEL FLOOR PLAN

SCALE 1/4" = 1'-0"



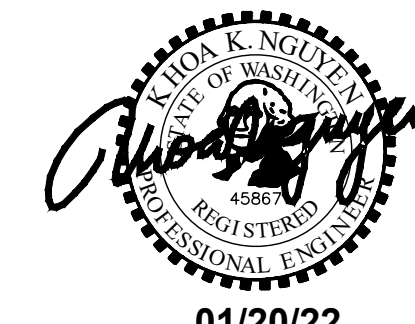
Loo & Wai's Remodel		DATE
4124 94th Pl SE		01-20
Mercer Island 98040		2022
PROPOSED MAIN LEVEL PLAN VIEW		SHEET
		2.3



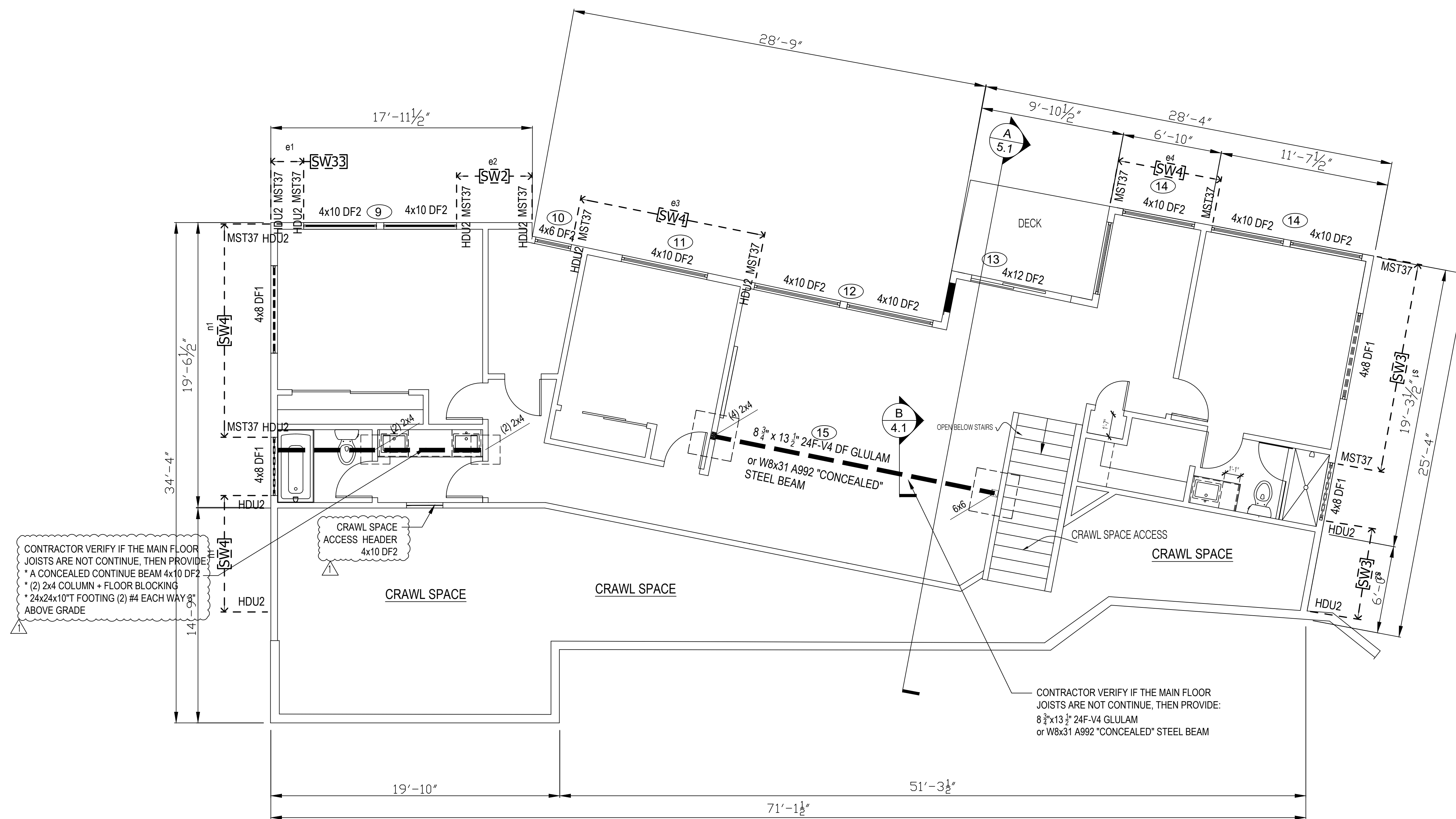
CONTRACTOR VERIFY IF THE MAIN FLOOR JOISTS ARE NOT CONTINUE, THEN PROVIDE:
 * A CONCEALED CONTINUE BEAM 4x10 DF2
 * (2) 2x4 COLUMN + FLOOR BLOCKING
 * 24x24x10" T FOOTING (2) #4 EACH WAY 3" ABOVE GRADE

CONTRACTOR VERIFY IF THE MAIN FLOOR JOISTS ARE NOT CONTINUE, THEN PROVIDE:
 8 3/4"x13 1/2" 24F-V4 GLULAM
 or W8x31 A992 "CONCEALED" STEEL BEAM

(Pr) BASEMENT FLOOR PLAN 
 SCALE 3/8" = 1'-0"



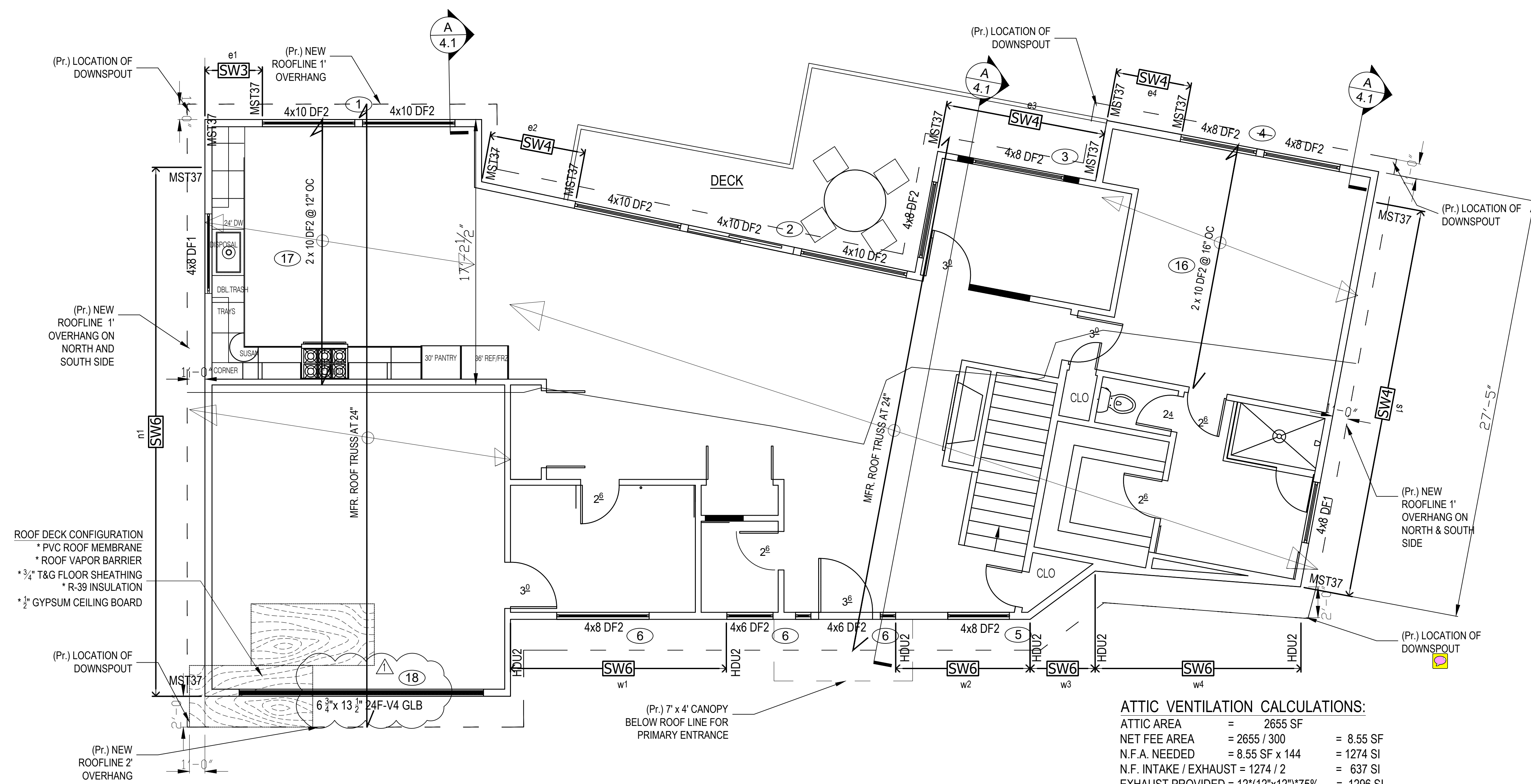
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.4 24x36"
PROPOSED BASEMENT PLAN VIEW	



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



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



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:

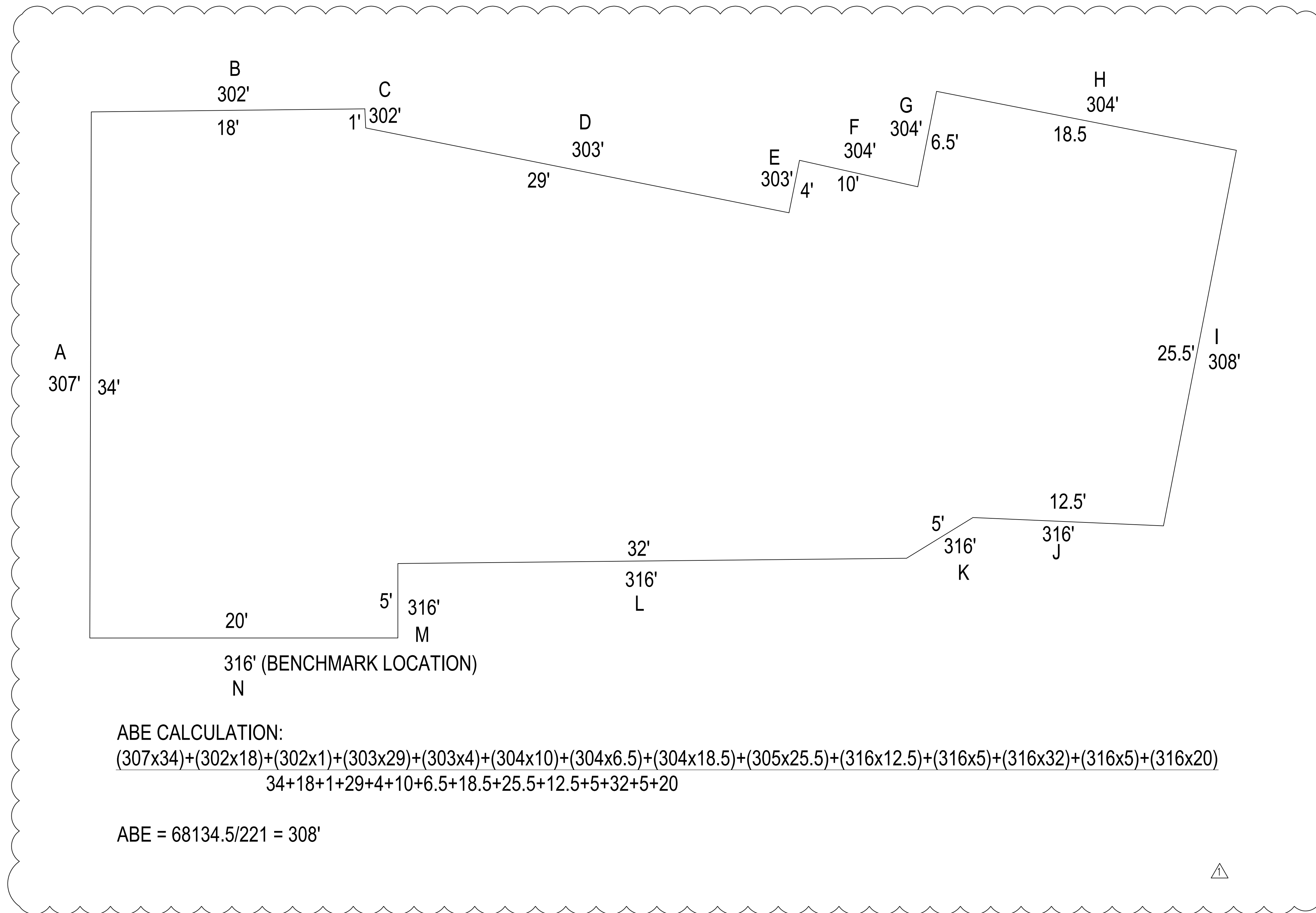
ATTIC AREA	=	2655 SF
NET FEE AREA	=	2655 / 300 = 8.85 SF
N.F.A. NEEDED	=	8.85 SF x 144 = 1274 SI
N.F. INTAKE / EXHAUST	=	1274 / 2 = 637 SI
EXHAUST PROVIDED	=	12 * (12" x 12") * 75% = 1296 SI
USED TOTAL (12) AT ROOF RIDGE		
EACH 2 1/2" Ø VENT HOLE AREA	=	4.9 SI
SIDE ELEV. INTAKE w/(3) HOLES @ 60 SPACES	=	882 SI
BOTH ELEV. = 2 * (882) * 75%	=	1323 SI

(Pr.) ROOF FRAMING PLAN 
 SCALE 1/4" = 1'-0"



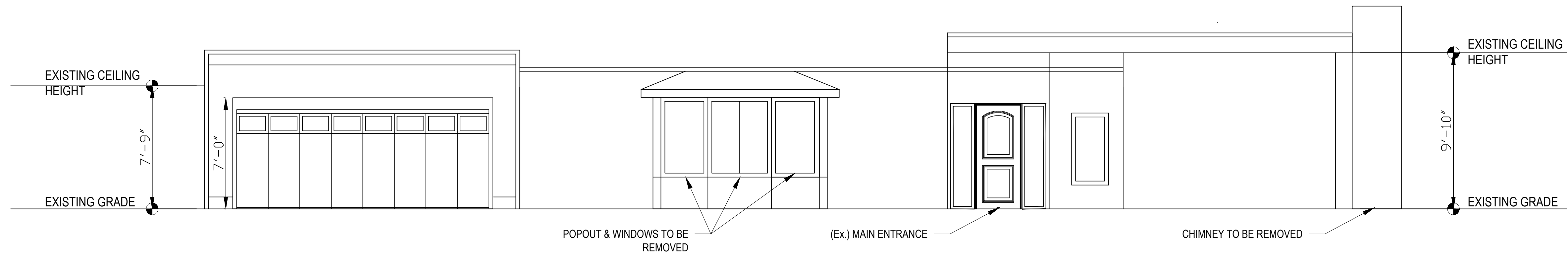
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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.6 24x36"
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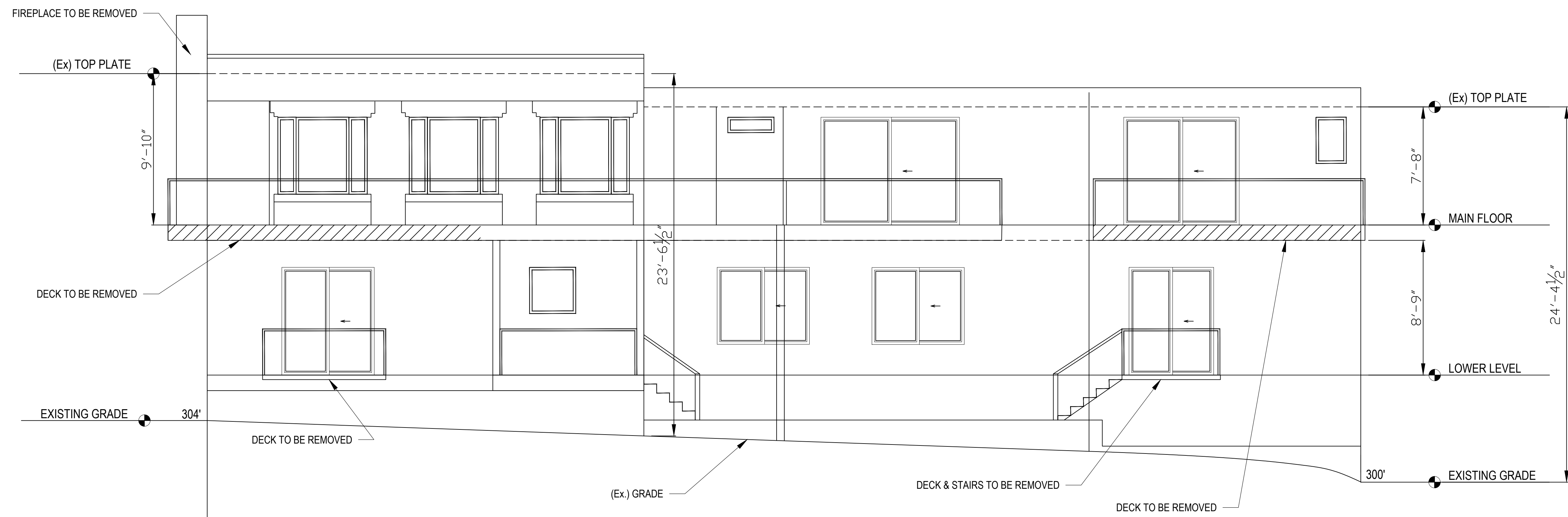
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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 2.6 24x36"
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(Ex) WEST ELEVATION

SCALE 1/4" = 1'-0"



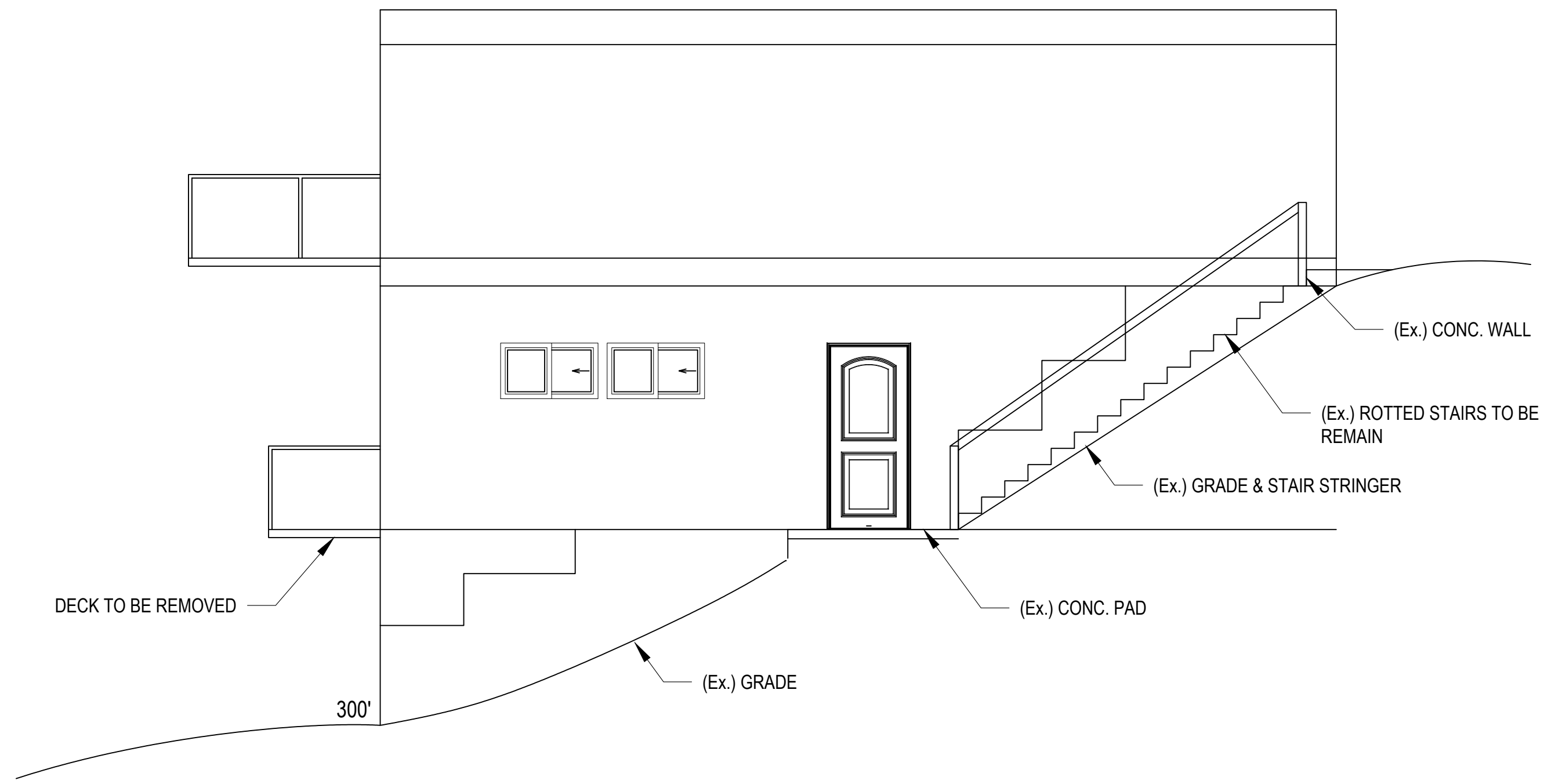
(Ex) EAST ELEVATION

SCALE 1/4" = 1'-0"



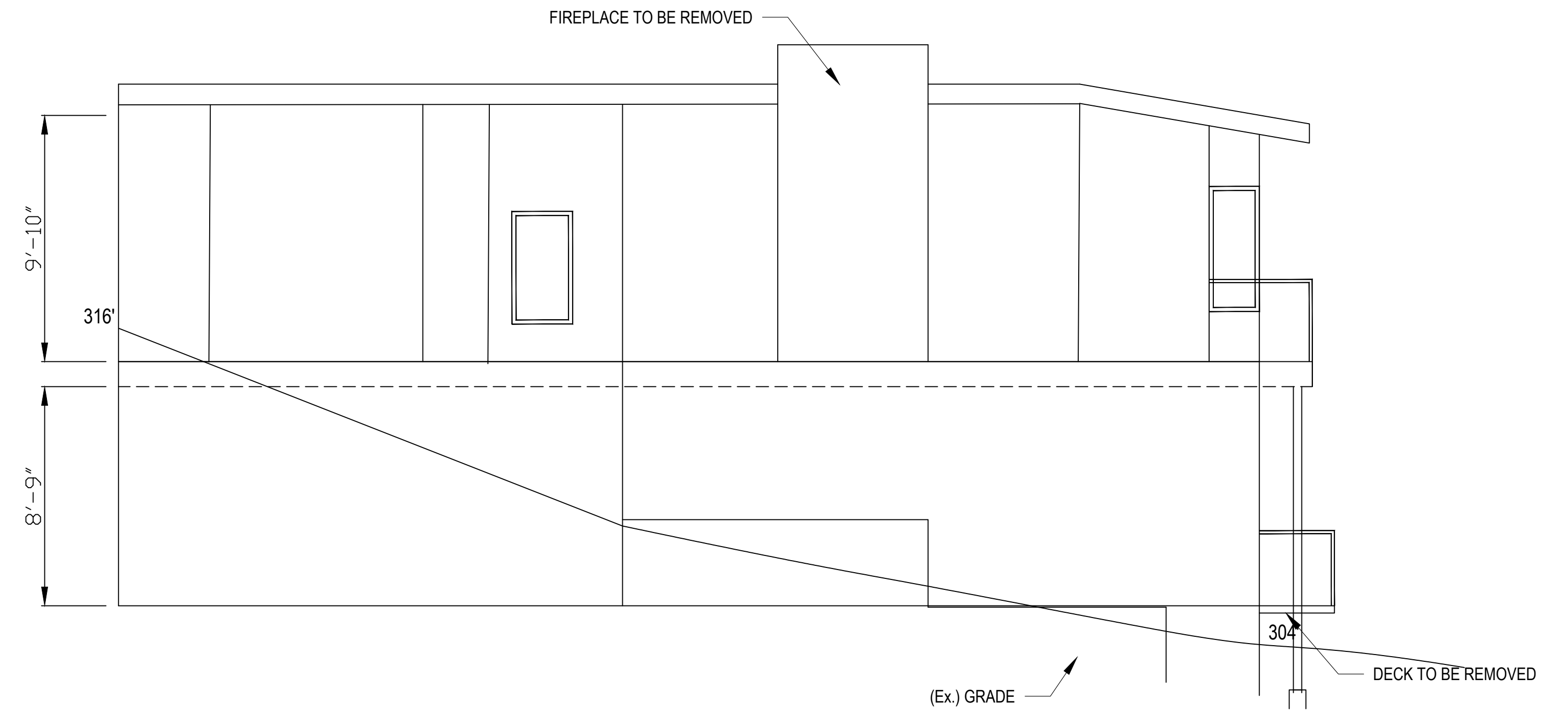
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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040 (Ex) ELEVATION	DATE 01-20 2022 SHEET 3.1
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(Ex) NORTH ELEVATION

SCALE 1/4" = 1'-0"



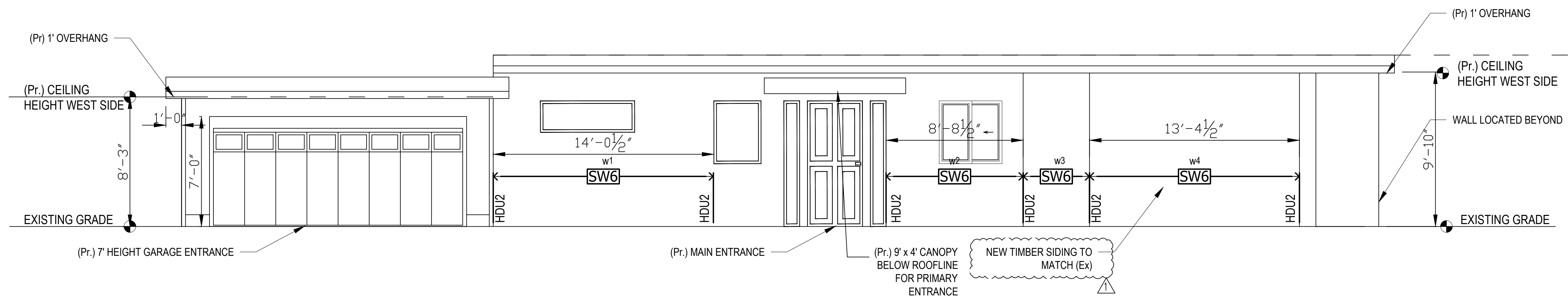
(Ex) SOUTH ELEVATION

SCALE 1/4" = 1'-0"



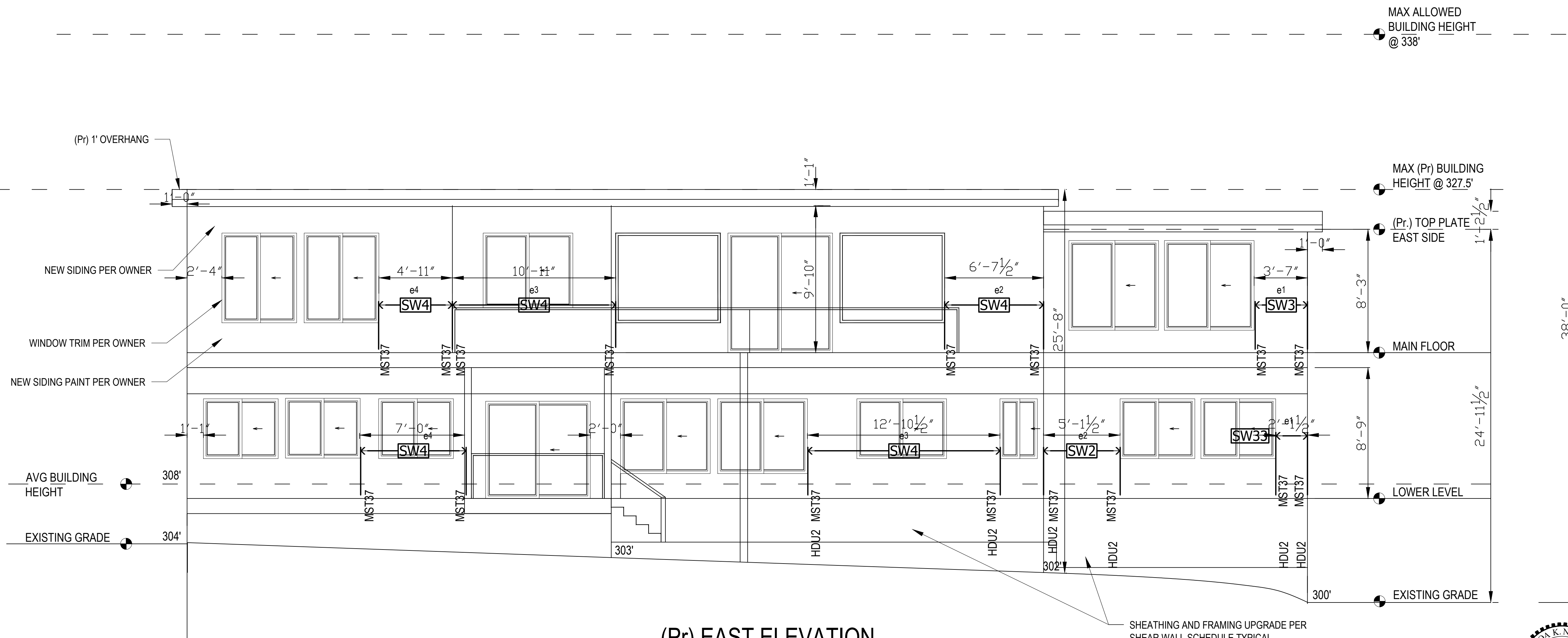
07-15-22 REV# 1

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"



(Pr) EAST ELEVATION

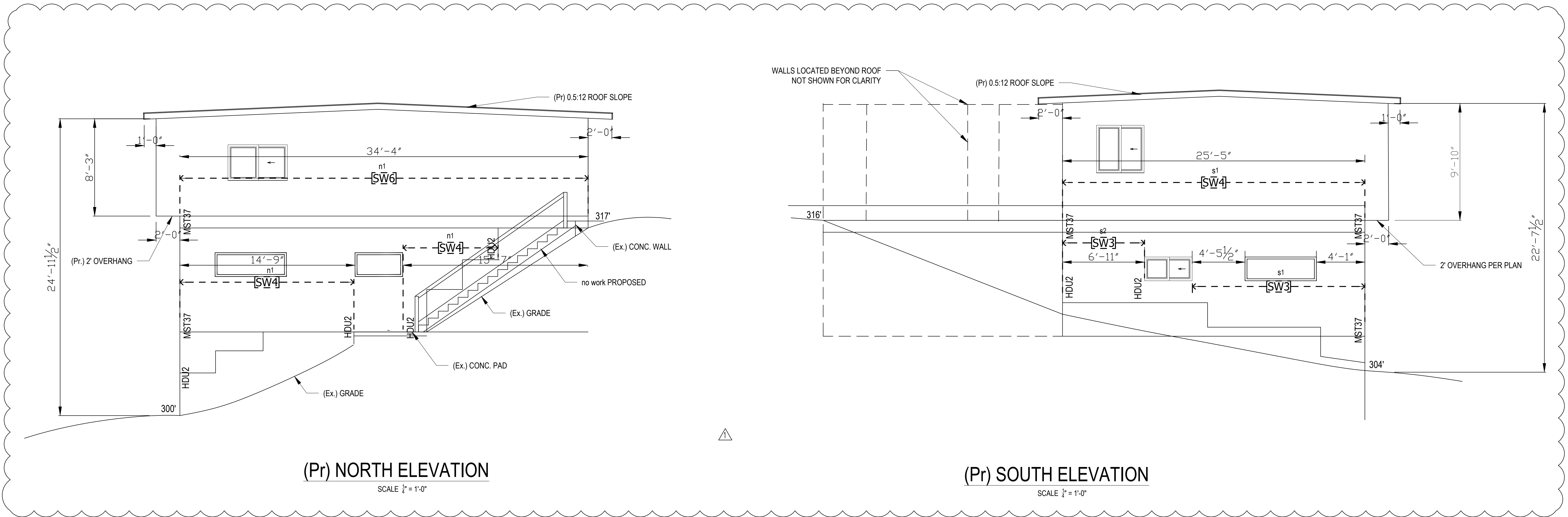
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Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040 (Pr) ELEVATIONS	DATE 01-20 2022 SHEET 3.3
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11-28-22 REV# 1



(Pr) NORTH ELEVATION

SCALE 1/4" = 1'-0"

(Pr) SOUTH ELEVATION

SCALE 1/4" = 1'-0"



01/20/22

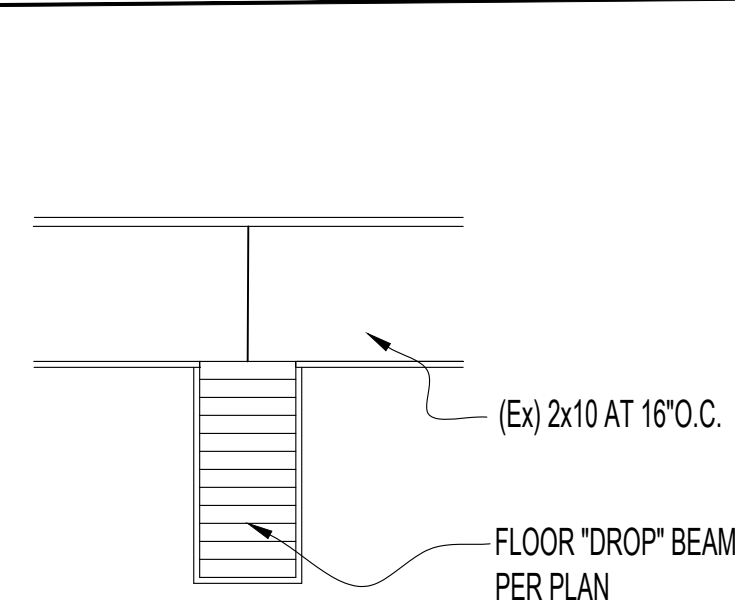
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040 (Pr) ELEVATIONS	DATE 01-20 2022 SHEET 3.4 24x36"
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JOIST HANGER SCHEDULE

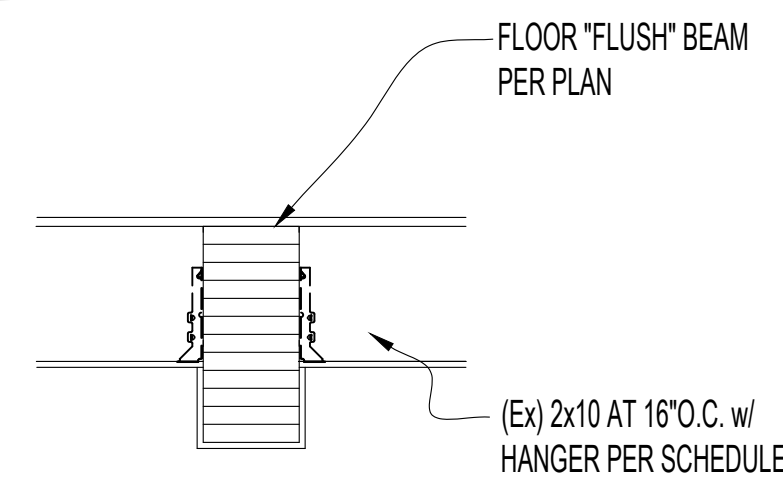
Joist	Single	Double	SKewed 45 DEG	CONCEALED FLANGES
Face Mount	IUS	HUS	SUR	IUC
Top Mount	ITS	MIT	SUR	-
Face Mount	LUS	LUS-2	SUR	LUC
Top Mount	HUS-TF	HUS-2TF	SUR	-

USE HSURight OR HSULeft HANGER FOR SKEWED 45 DEGREE

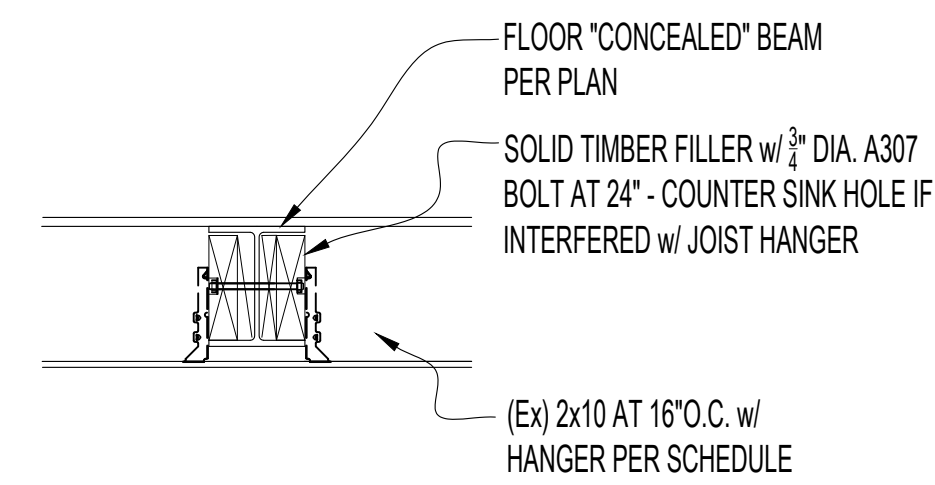
SOLID LUMBER TJI



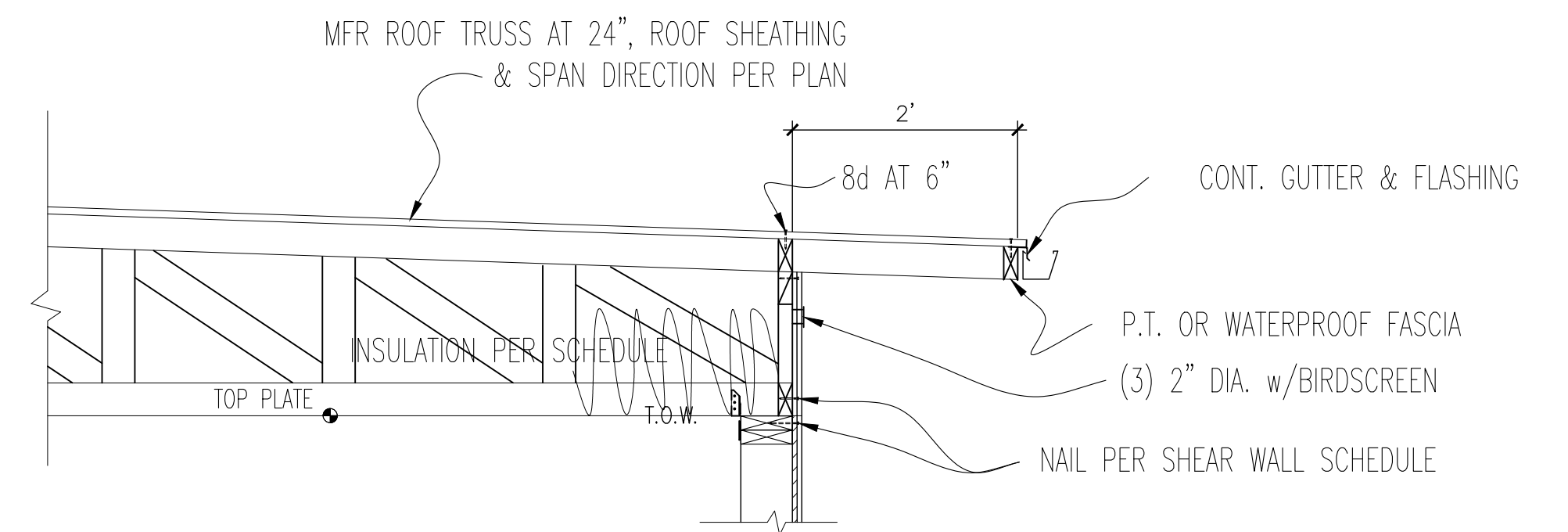
FLOOR SECTION (B)
SCALE 3/4" = 1'-0"
OWNER'S /AGENT OPTION TO SELECT



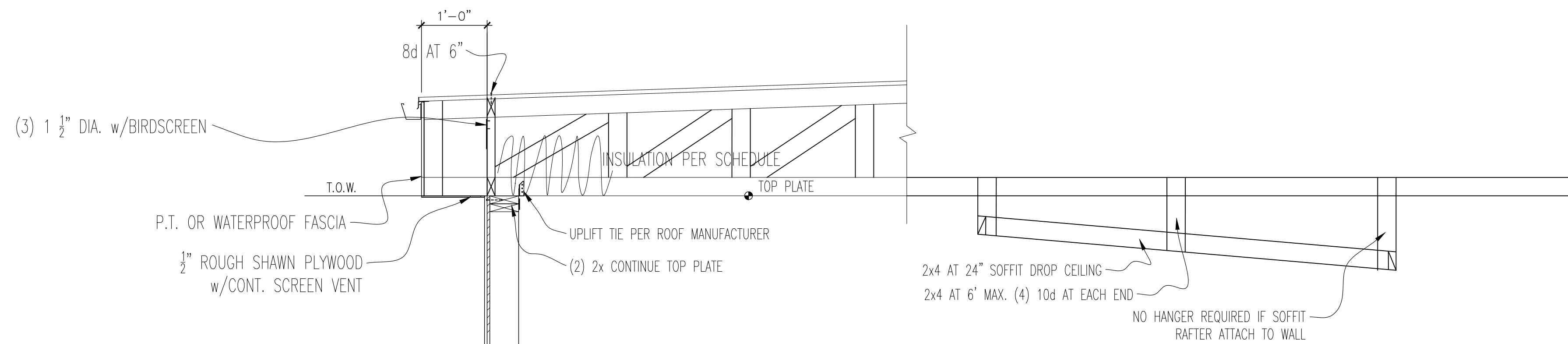
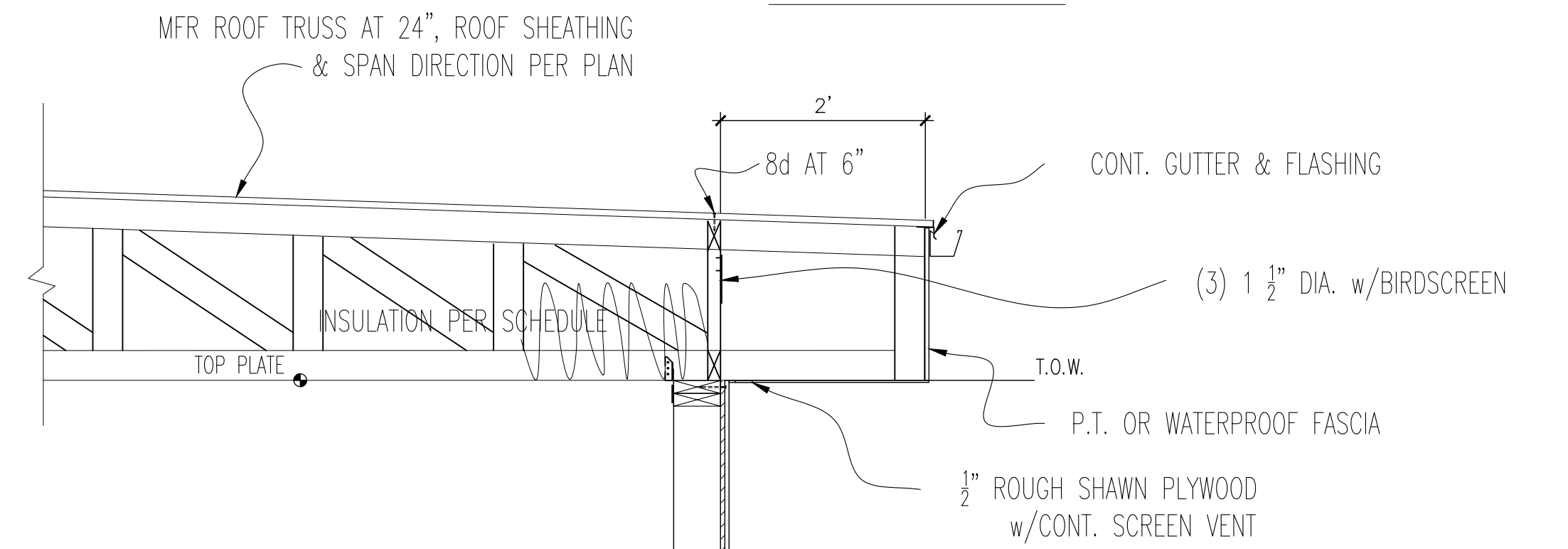
FLOOR SECTION (B)
SCALE 3/4" = 1'-0"
OWNER'S /AGENT OPTION TO SELECT



FLOOR SECTION (B)
SCALE 3/4" = 1'-0"
OWNER'S /AGENT OPTION TO SELECT

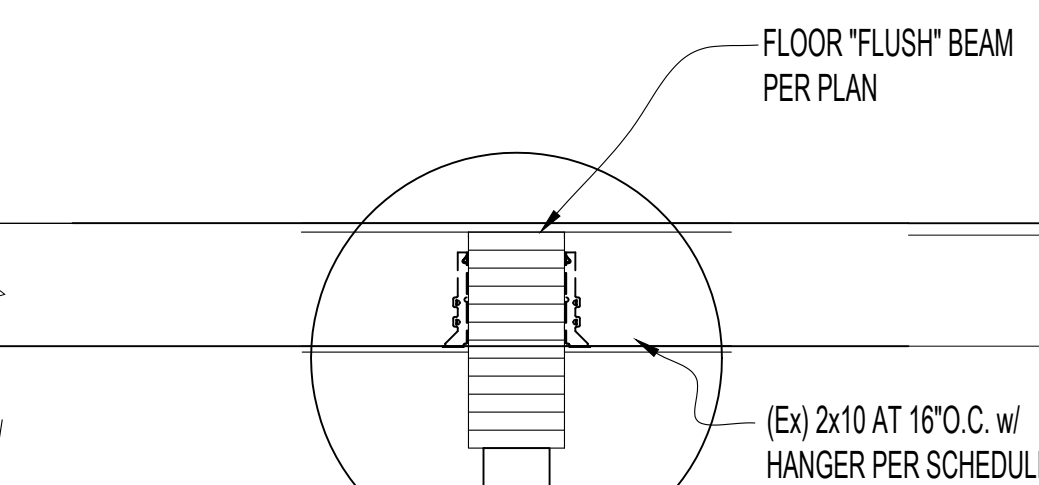
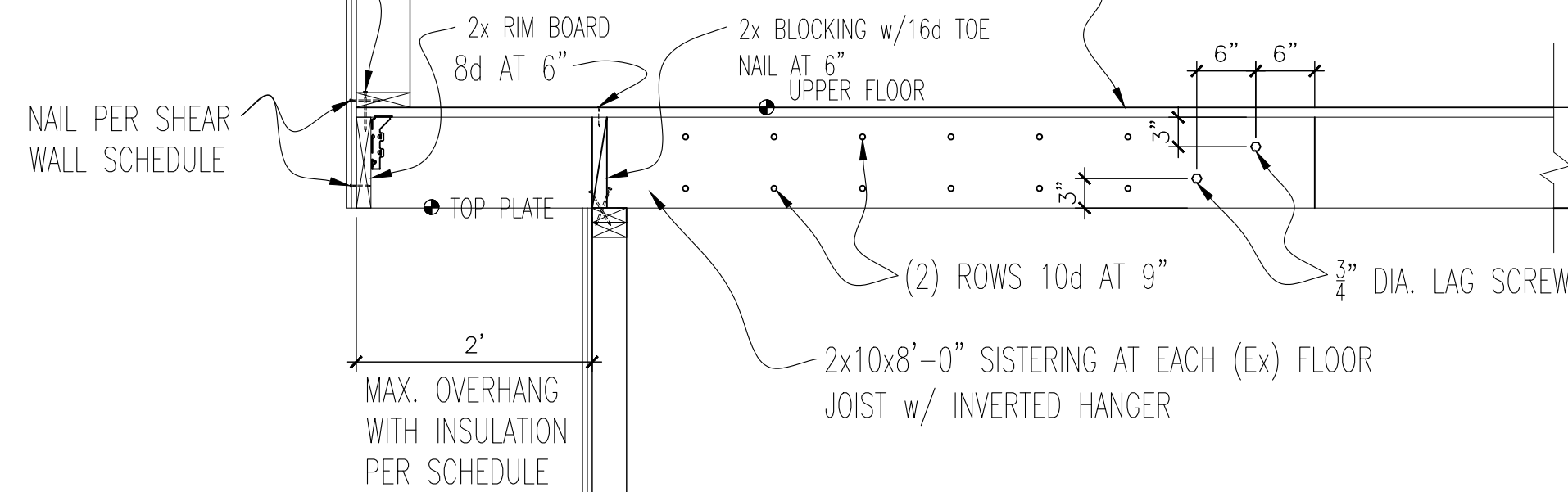


OVERHANG OPTION

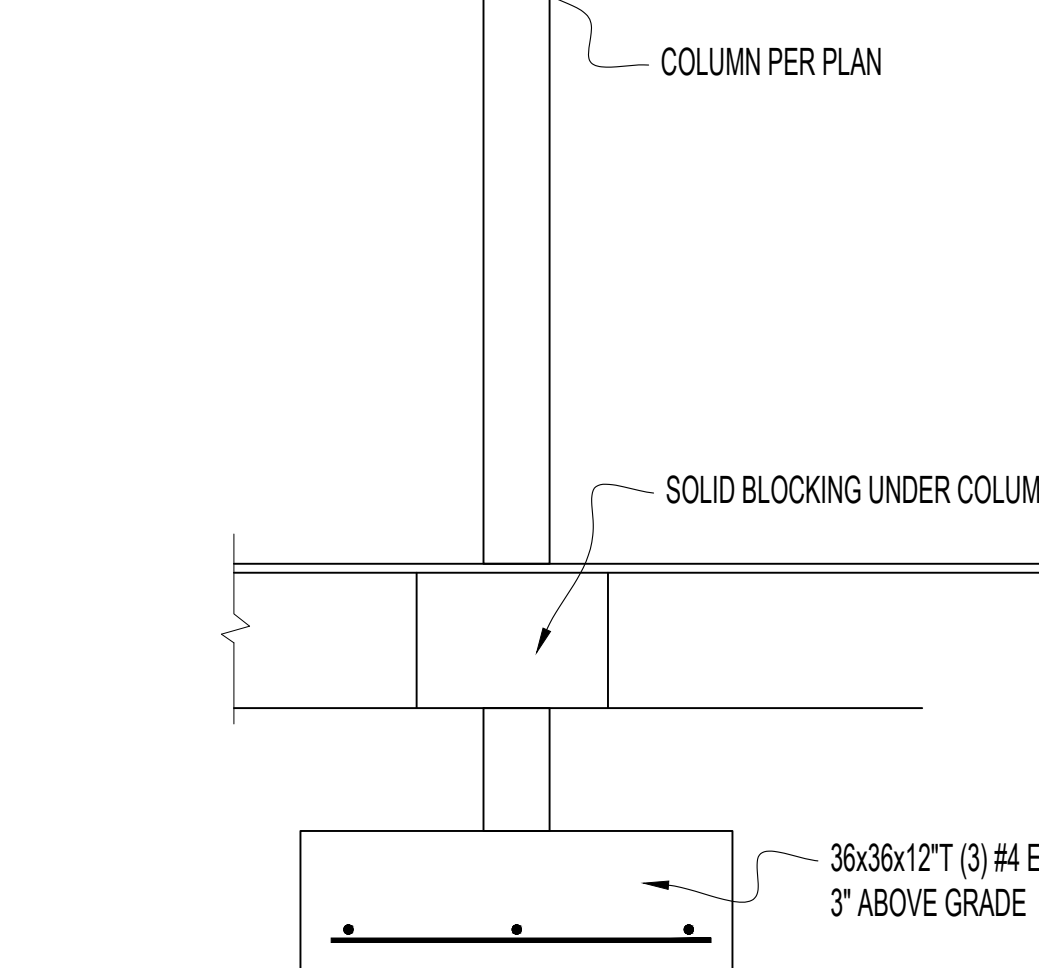


- WALL CONFIGURATION:
 * SIDING PER PLAN
 * TYVEK WRAP
 * 7" CDX SHEATHING
 * 2x6 HF2 AT 16"
 * INSULATION PER SCHEDULE
 * 1/2" GYPSUM WALL BOARD

FLOOR PANEL NAIL 16d AT 6"



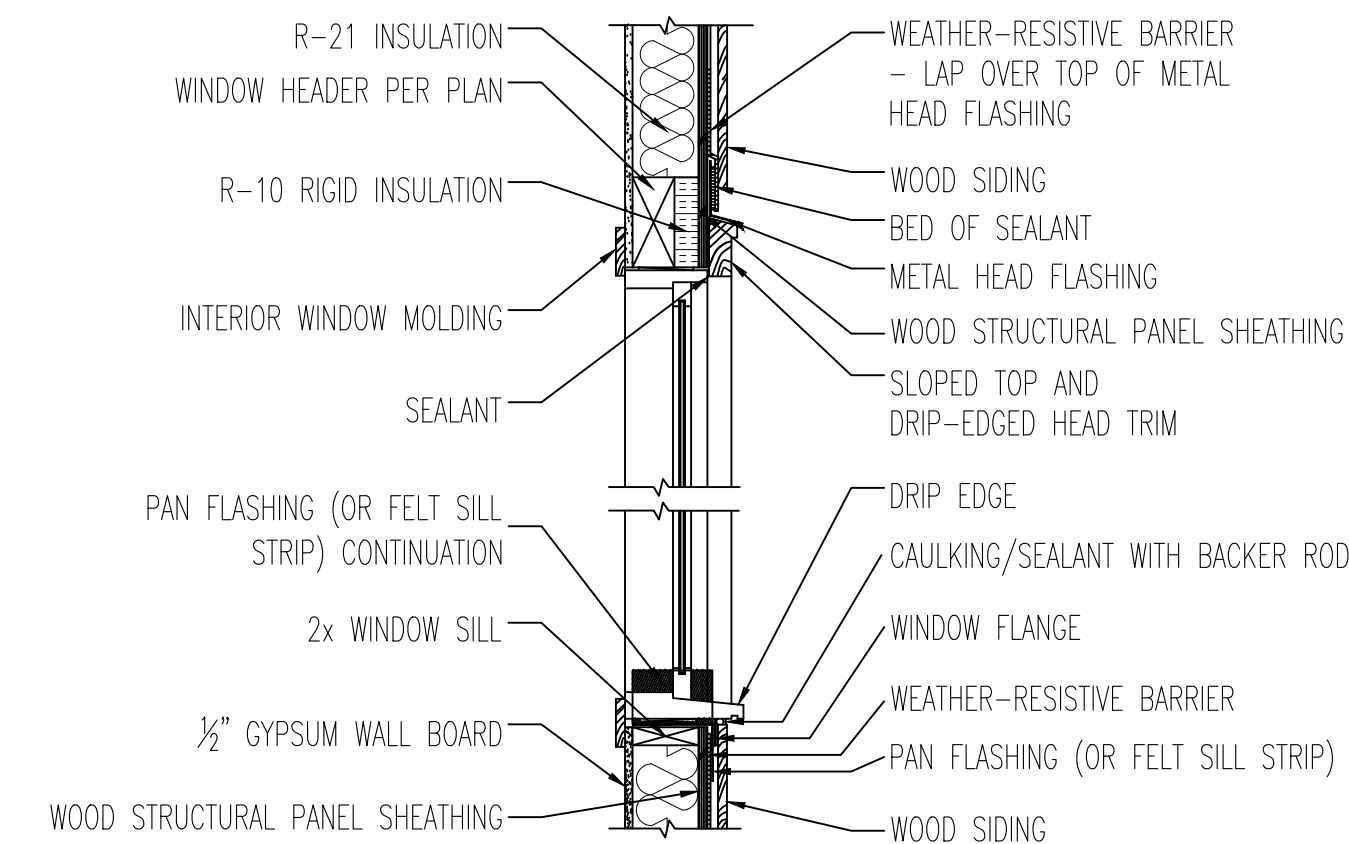
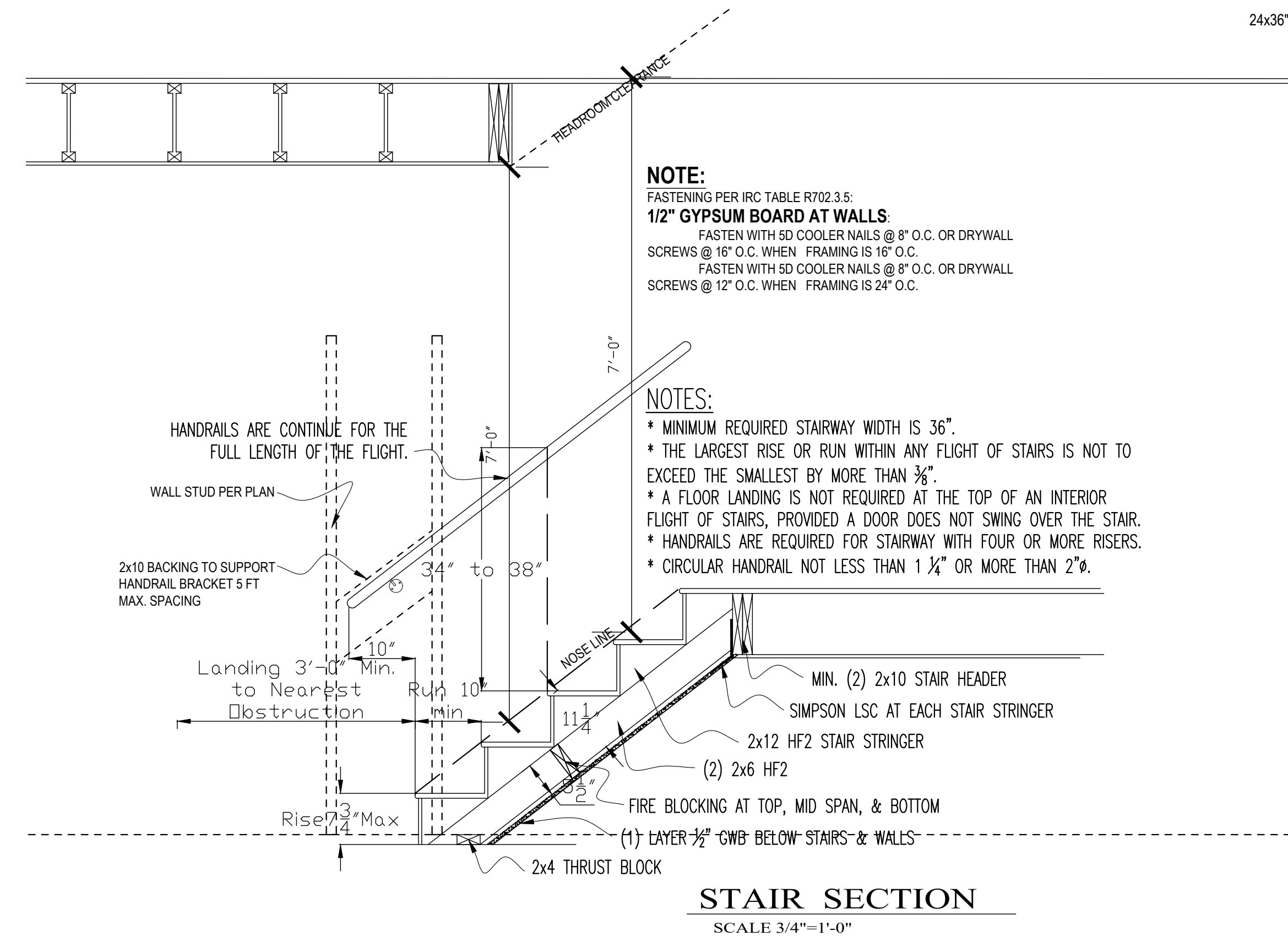
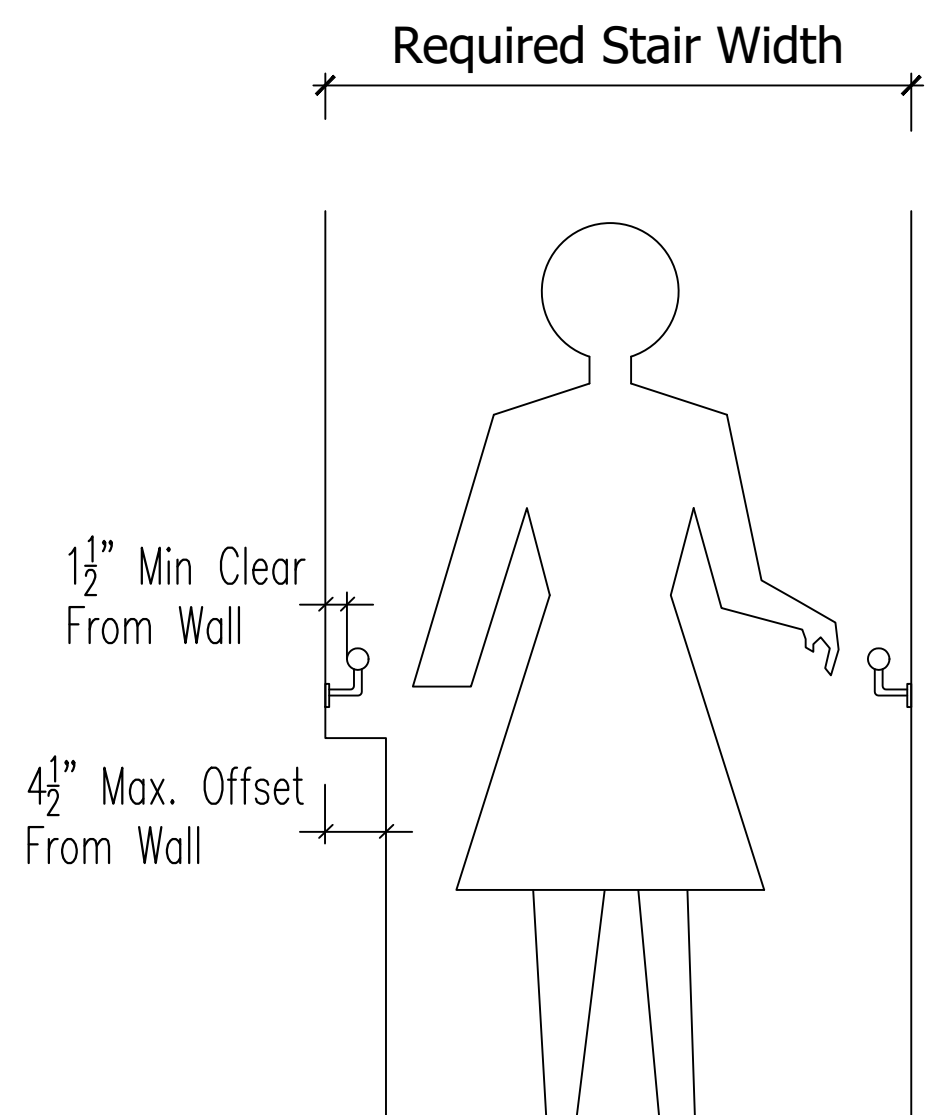
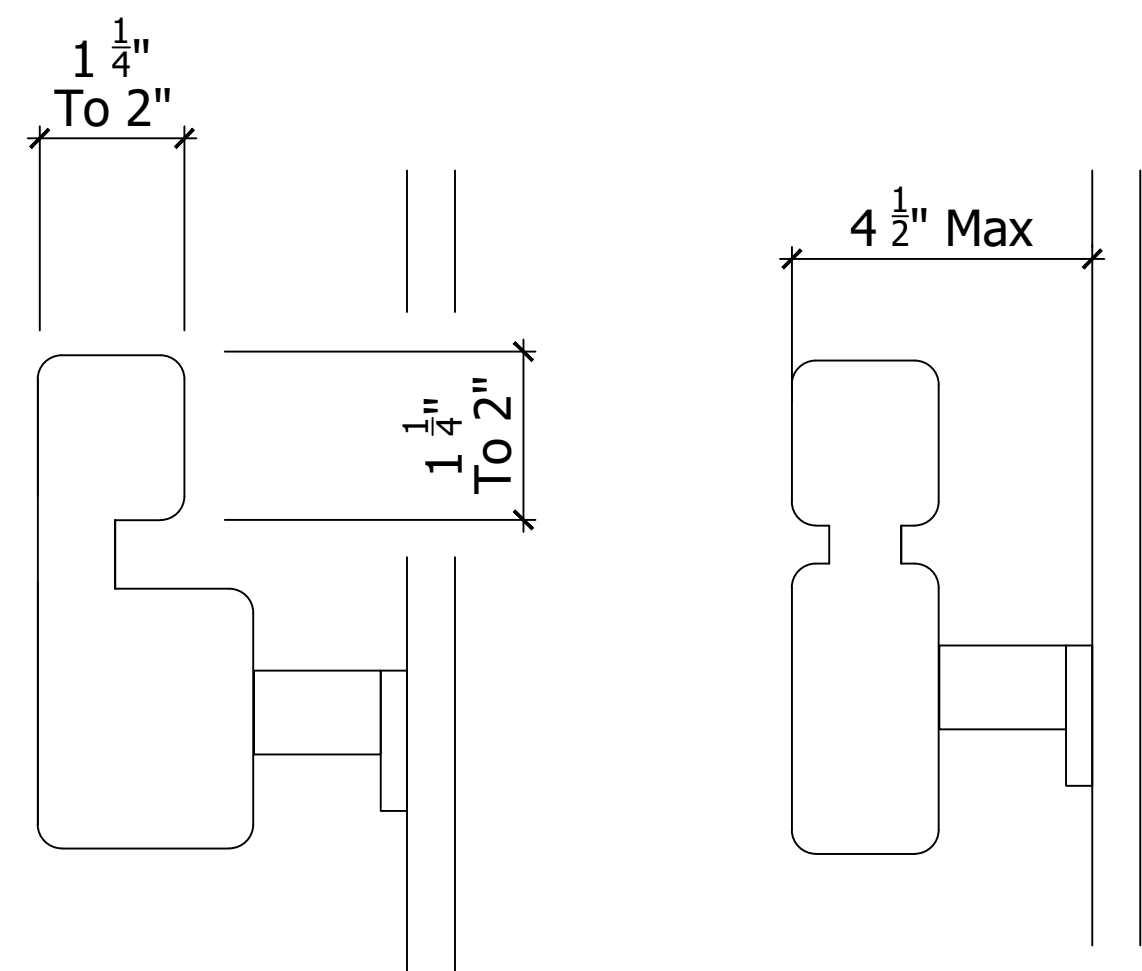
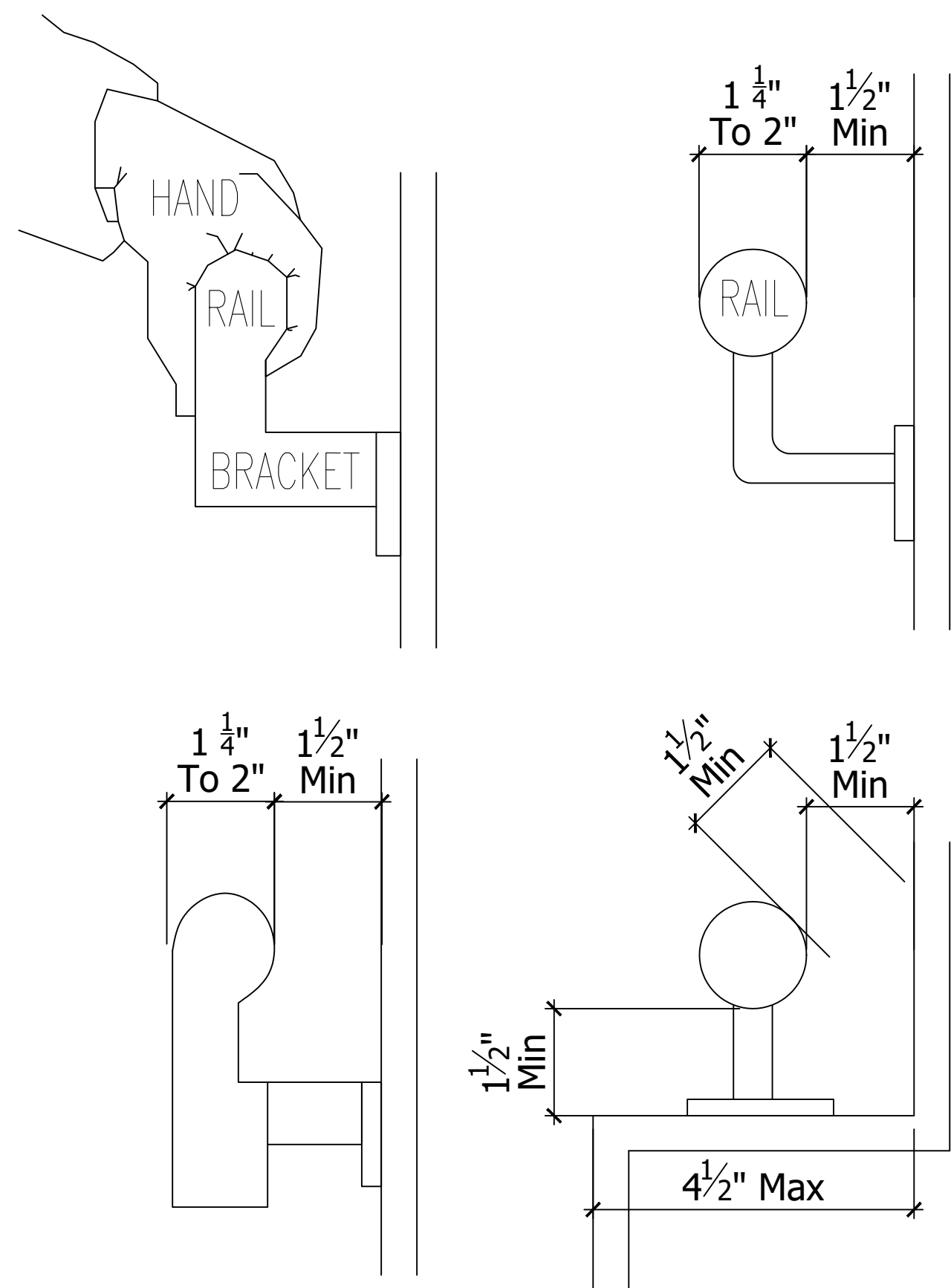
SEE SECT. \"B\"



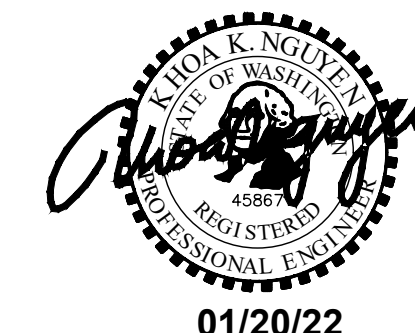
SECTION (A)
SCALE 3/4" = 1'-0"



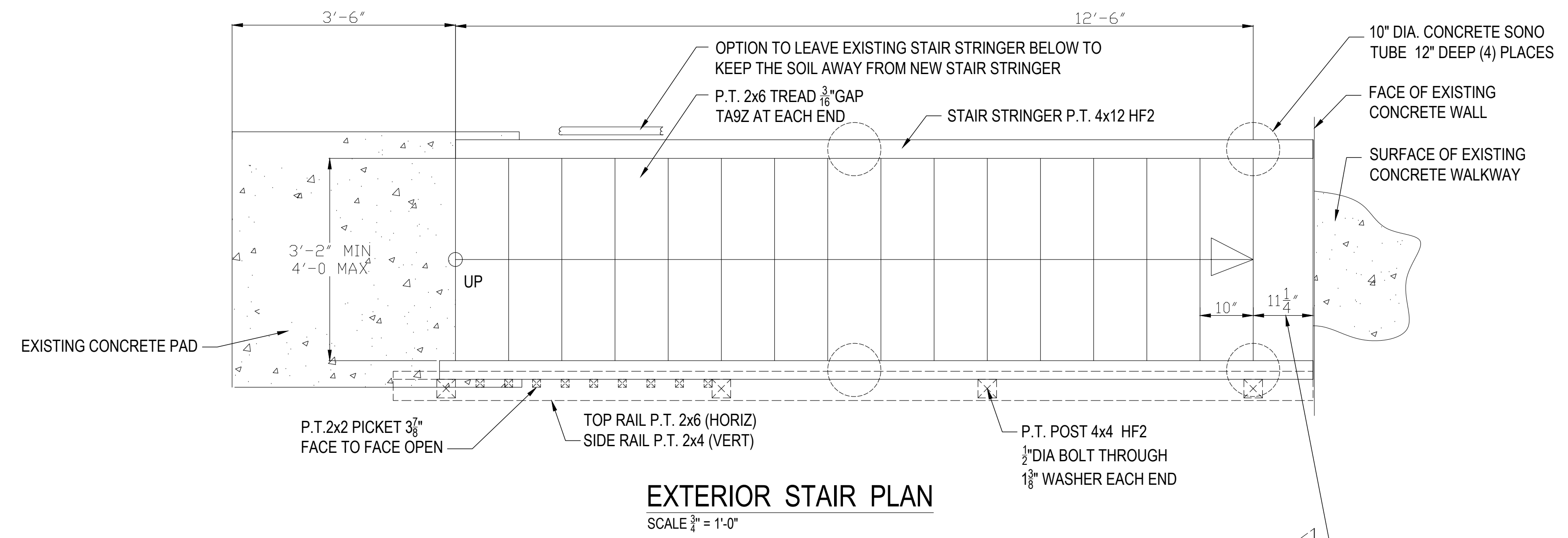
Loo & Wai's Remodel 4124 94th Pl SE Mercer Island 98040	DATE 01-20 2022 SHEET 4.1
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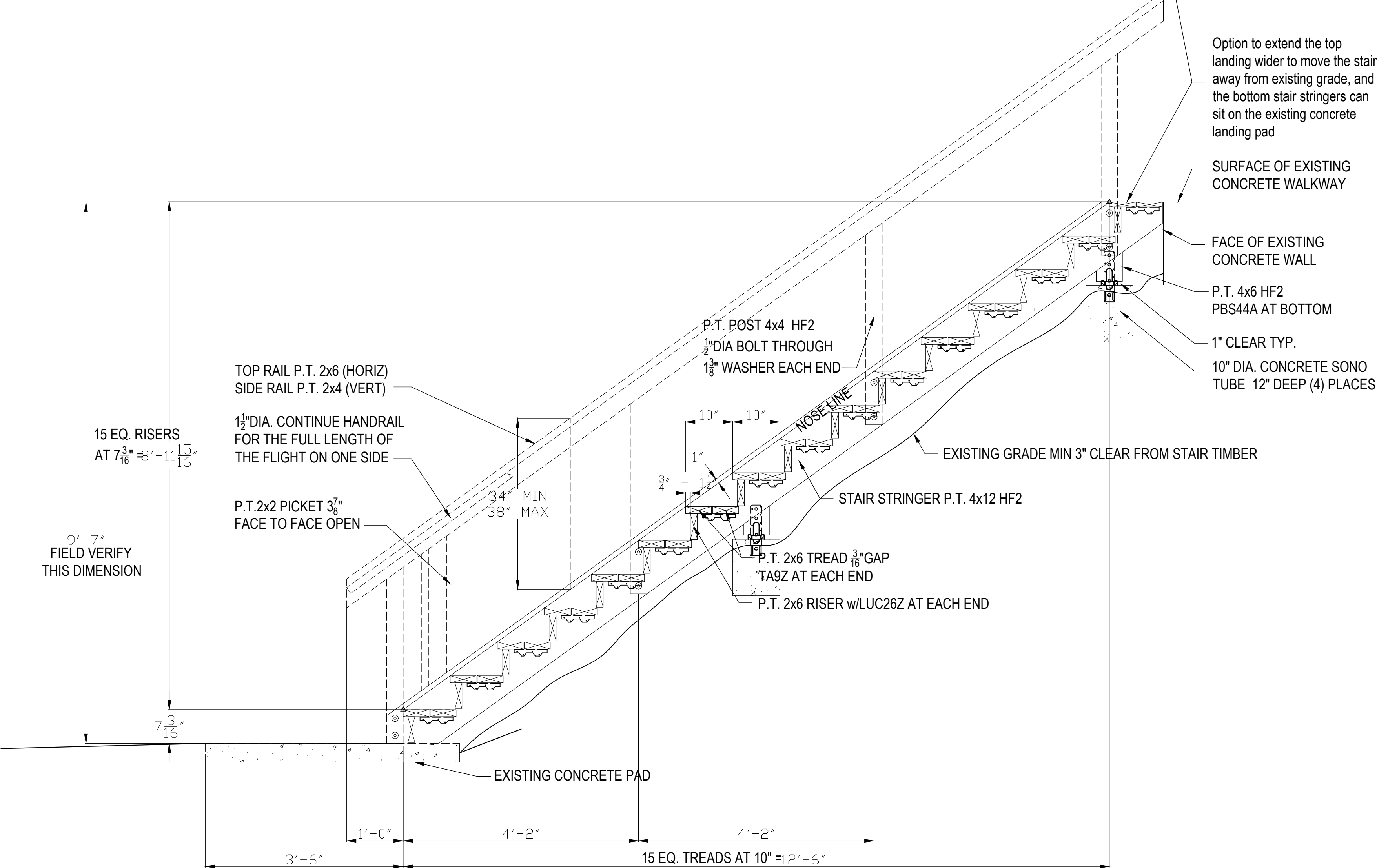
WINDOW HEADER & SILL DETAIL
SCALE 3/4" = 1'-0"



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



EXTERIOR STAIR PLAN
SCALE 3/8" = 1'-0"



EXTERIOR STAIR ELEVATION
SCALE 3/8" = 1'-0"



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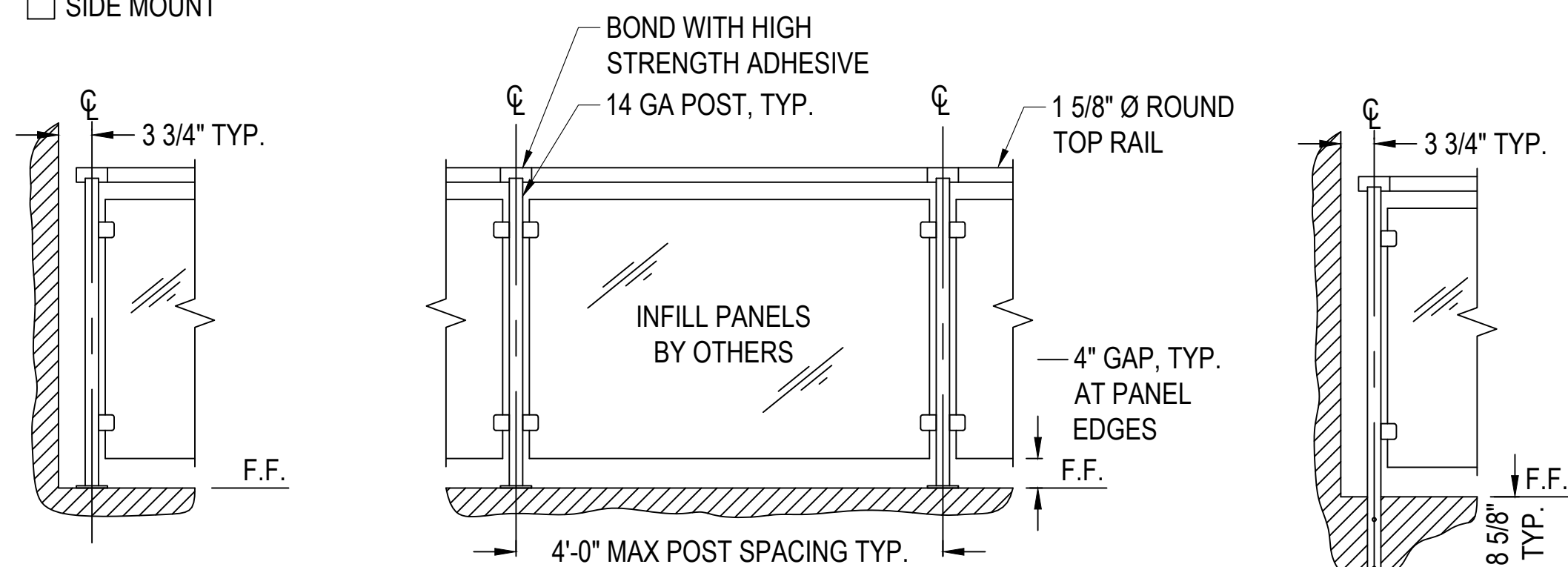


AGS STAINLESS INC.
 7873 NE DAY RD
 BAINBRIDGE ISLAND, WA 98110
 TOLL FREE: 1-888-842-9492
 PHONE: (206) 842-9492
 FAX: (206) 842-8179
 www.agsstainless.com

SELECT DESIRED POST

TOP MOUNT

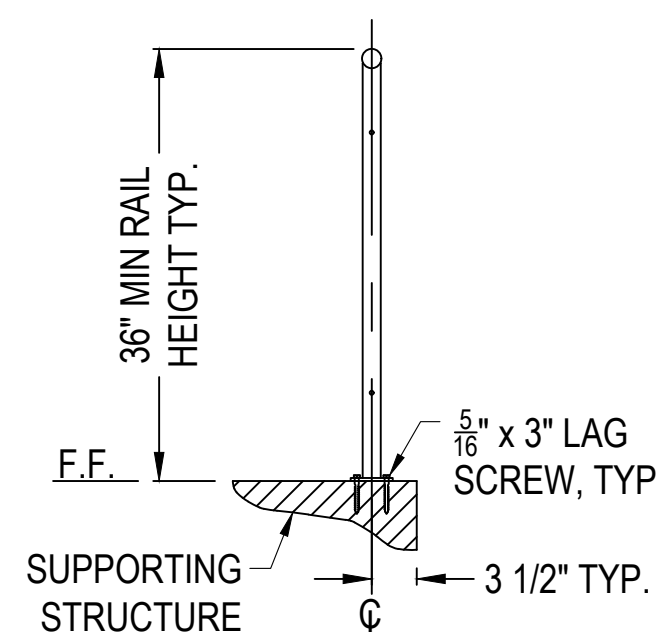
SIDE MOUNT



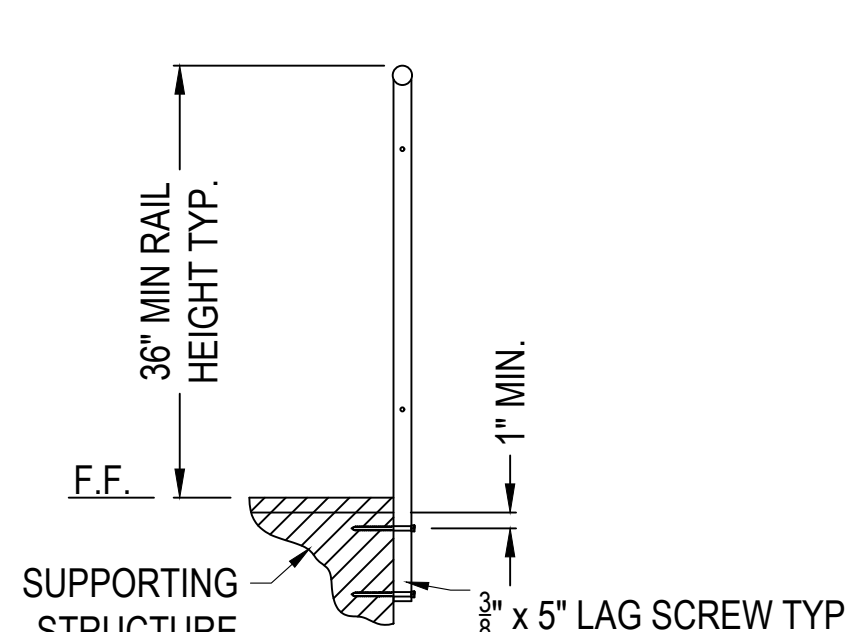
TOP MOUNT WALL CONNECTION ELEVATION

TOP MOUNT INTERMEDIATE POST ELEVATION

SIDE MOUNT WALL CONNECTION ELEVATION



TOP MOUNT POST DETAIL



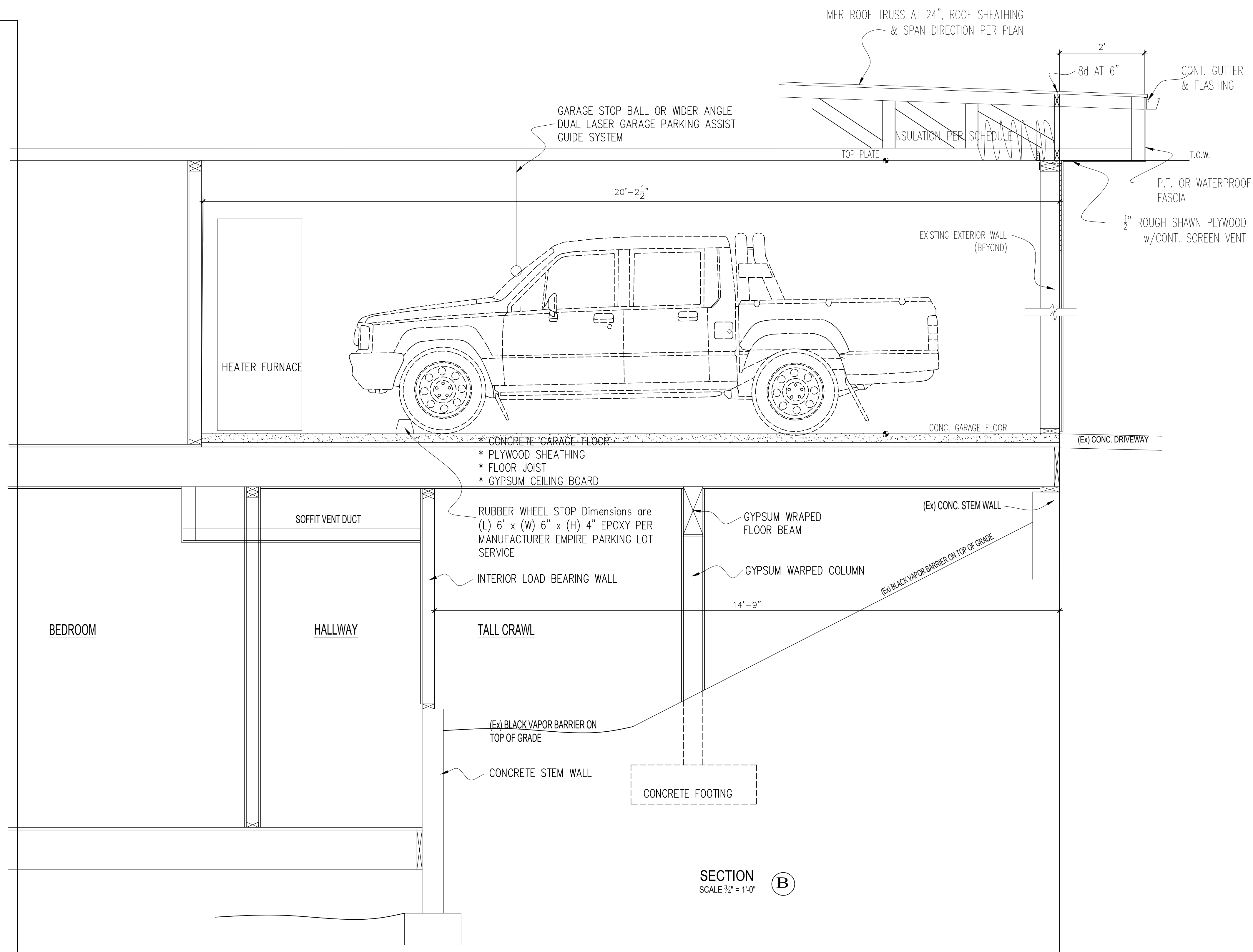
SIDE MOUNT POST DETAIL

NOTES:

- CUSTOM LAYOUTS WILL BE DETAILED BY AGS.
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- DO NOT SCALE DRAWING.
- THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
- ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
- CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER Mercer 11-29.

GRASS RAIL SYSTEMS

GLASS RAILING SYSTEM WITH ROUND TOP, 36 INCH



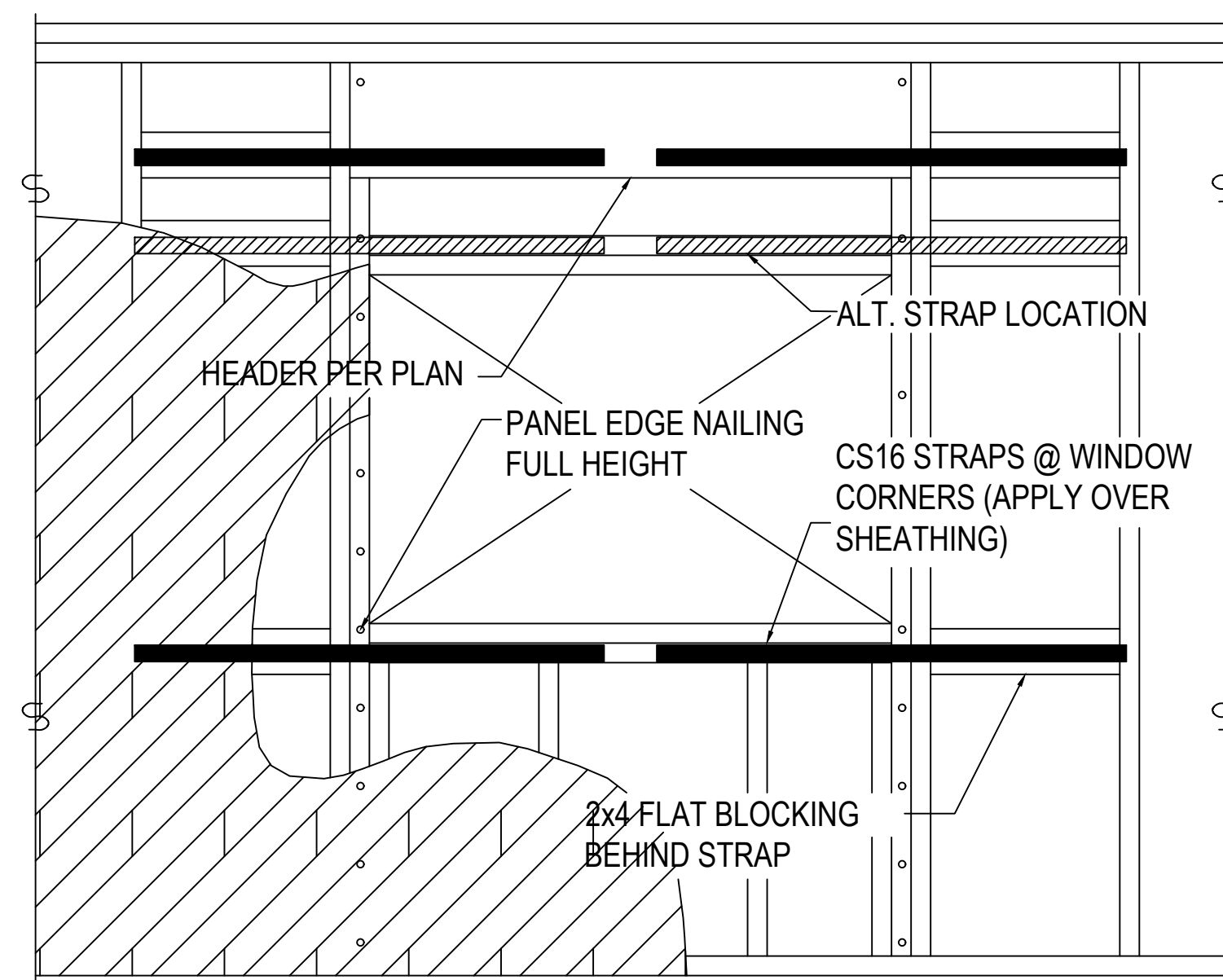
01/20/22

11-28-22 REV#

Loo & Wai's Remodel
 4124 94th Pl SE
 Mercer Island 98040

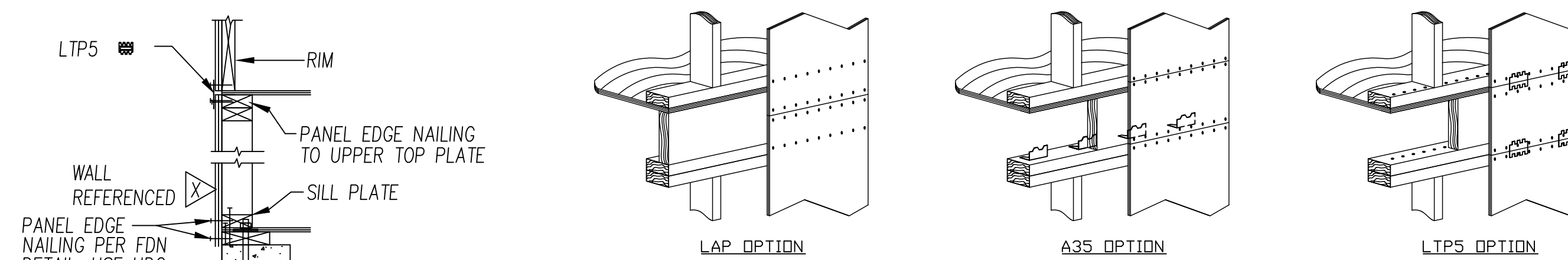
DATE
 01-20
 2022
 SHEET
 4.4

SECTION 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.

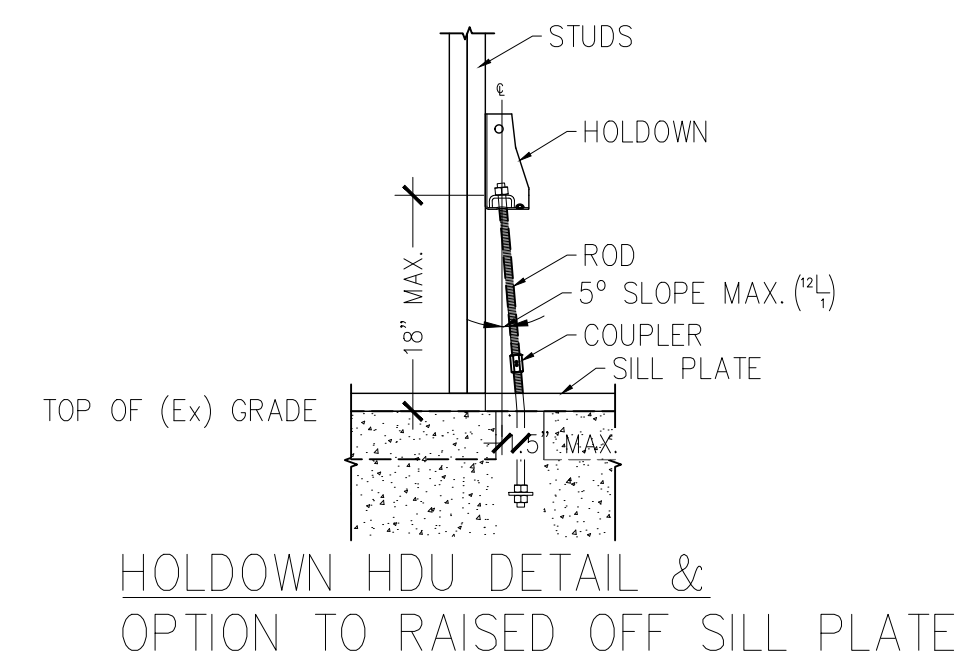


ANCHOR BOLTS EMBEDMENT SHALL BE 7", U.O.N. ALL ANCHORS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING. IF SHEATHING IS ON BOTH SIDES OF THE WALL, STAGGER THE ANCHOR BOLTS, AS REQUIRED, SO THAT HALF OF THE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

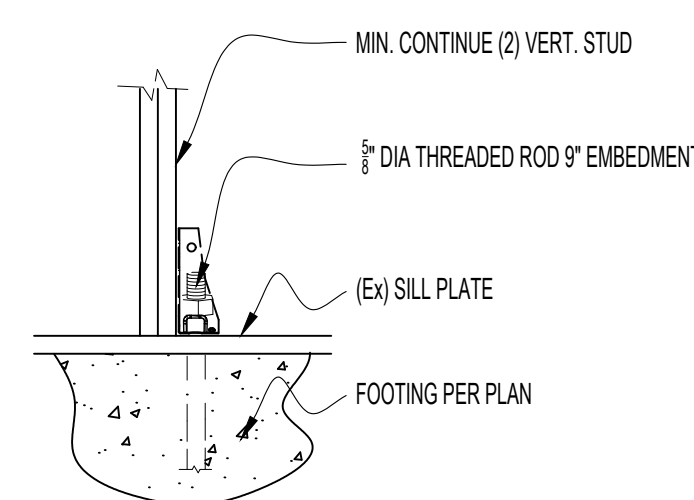
ALTERNATIVELY, SIMPSON STRONG TIE MUDSILL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S PROCEDURES AND ESR-2555.

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								

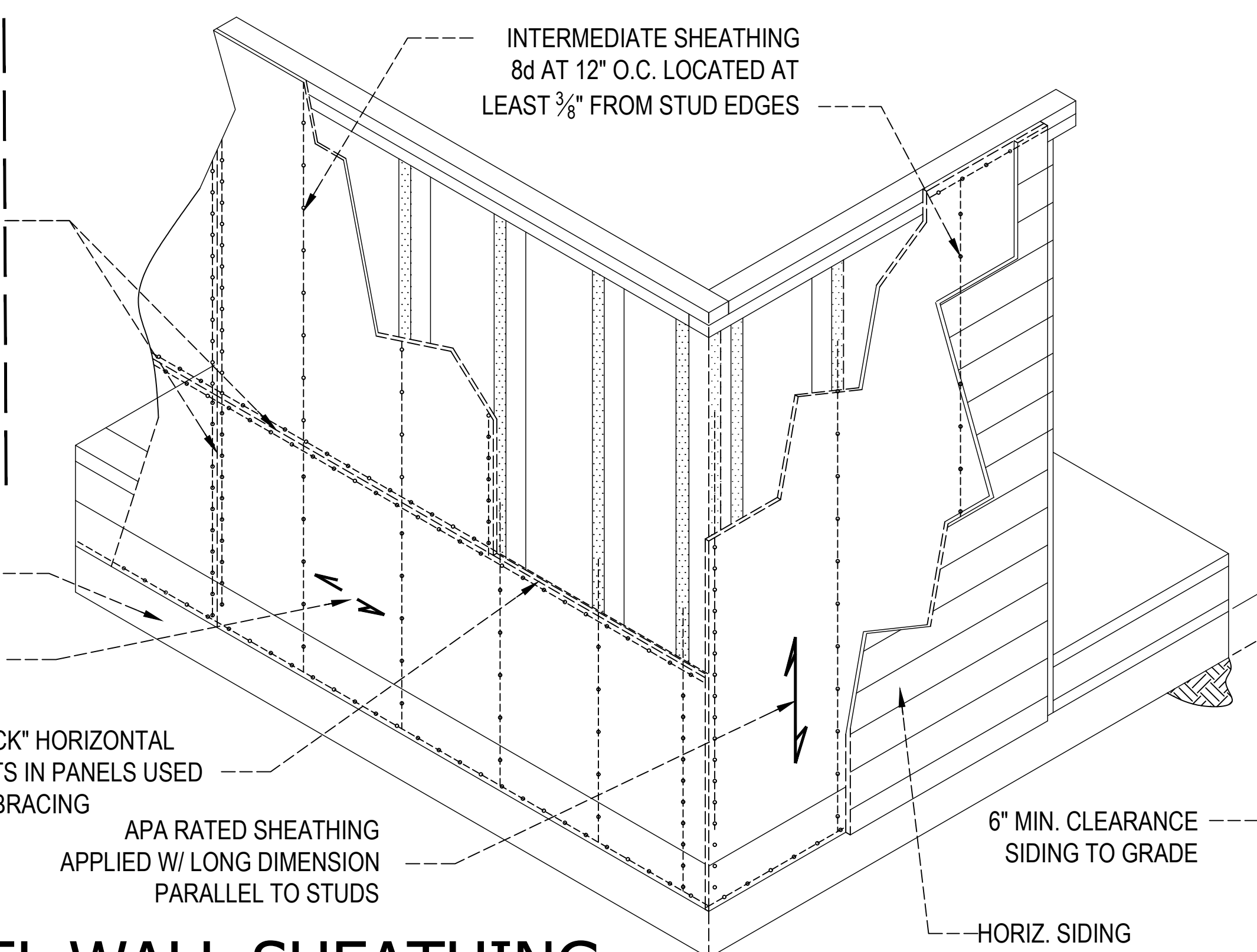


HOLDOWN HDU DETAIL & OPTION TO RAISED OFF SILL PLATE



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 table with fields: Loo & Wai's Remodel, 4124 94th PI SE, Mercer Island 98040

Contact Information table with fields: Khoa Nguyen, 17614 NE 29th St, Redmond 98052

Table with columns: Ref., U-factor, Width (Qt., Feet, Height (Inch, Feet), Area, UA. Rows: Exempt Swinging Door (24 sq. ft. max.), Exempt Glazed Fenestration (15 sq. ft. max.)

Vertical Fenestration (Windows and doors)

Main table for Vertical Fenestration with columns: Component, Description, Ref., U-factor, Width (Qt., Feet, Height (Inch, Feet), Area, UA. Rows include Laundry, Powder, Entry Windows, etc.

Summary table: Sum of Vertical Fenestration Area and UA, Vertical Fenestration Area Weighted U = UA/Area

Overhead Glazing (Skylights)

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

Summary table: Sum of Overhead Glazing Area and UA, Overhead Glazing Area Weighted U = UA/Area

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

ENERGY CODE: (R406) 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 showing FLOOR AREA (SQ. FT) vs # OF BEDROOM (0-1, 2-3, 4-5, 6-7, >7) with values for different floor area ranges.

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 ENESY 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 FEETS 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.

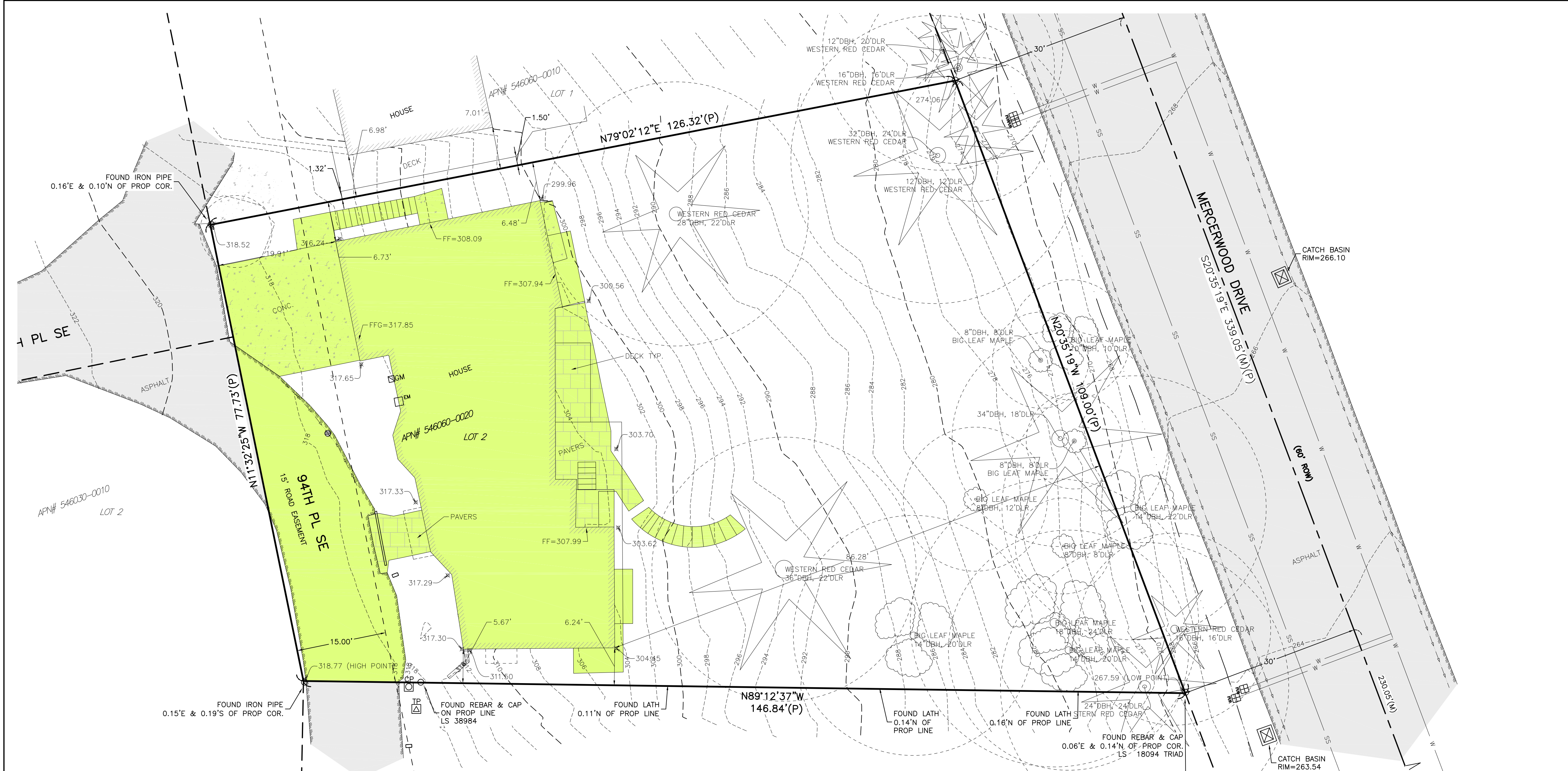
FENESTRATION OF PRODUCT RATING

NFRC 100, labeled and certified by the manufacturer



01/20/22

Table with project name Loo & Wai's Remodel, address, and sheet information SHEET 6.1 ENERGY



SYMBOL LEGEND	
	MONUMENT AS NOTED
	SECTION CORNER
	QUARTER SECTION CORNER
	FOUND REBAR AS NOTED
	SET REBAR AND CAP LS 31976
	FOUND SURFACE MARKER/DISK
	SET SURFACE MARKER/DISK LS 31976
	SEWER MAINTENANCE HOLE
	SEPTIC MAINTENANCE HOLE
	SEWER CLEAN OUT
	SEWER LINE
	STORM DRAIN MAINTENANCE HOLE
	CATCH BASIN (TYPE 2)
	CATCH BASIN (TYPE 1)
	STORM DRAIN CLEAN OUT
	ROUND YARD DRAIN
	SQUARE YARD DRAIN
	SD—STORM DRAIN LINE
	WMH—WATER MAINTENANCE HOLE
	WV—WATER VALVE
	WM—WATER METER
	FH—FIRE HYDRANT
	BOV—BLOW OFF VALVE
	IVJ—IRRIGATION VALVE/JUNCTION
	W—WATER LINE
	GV—GAS VALVE
	GM—GAS METER
	G—GAS LINE
	CR—CABLE RISER
	CB—CABLE BOX
	CMH—CABLE MAINTENANCE HOLE
	FOMH—FIBER OPTIC MAINTENANCE HOLE
	TMH—TELEPHONE MAINTENANCE HOLE
	TSMH—TRAFFIC SIGNAL MAINTENANCE HOLE
	PMT—PAD MOUNTED TRANSFORMER
	HH—HAND HOLE
	AC—A/C COMPRESSOR
	YL—YARD LIGHT
	PP—POWER POLE
	GW—GUY WIRE
	SL—STREET LIGHT
	O—OVERHEAD UTILITIES (GENERAL/MIXED)
	OHE—OVERHEAD ELECTRICAL
	OHC—OVERHEAD CABLE
	OHT—OVERHEAD TELEPHONE
	U—UNDERGROUND UTILITIES (GENERAL/MIXED)
	UGE—UNDERGROUND ELECTRICAL
	UGC—UNDERGROUND CABLE
	UGT—UNDERGROUND TELEPHONE
	UFO—UNDERGROUND FIBER OPTIC
	B—BOLLARD
	M—MAILBOX
	S—SIGN
	WF—WETLAND FLAG
	SN—SNAG
	DM—DECIDUOUS MULTI-TRUNK
	D—DECIDUOUS
	CM—CONIFER MULTI-TRUNK
	C—CONIFER

BOUNDARY SURVEY NOTES

1. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND LEICA VIVA TS15 SMART POLE TOTAL STATION/RTK GPS.
2. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090. SURVEY WAS COMPLETED BY A FIELD TRAVERSE.
3. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.
4. ENCROACHMENTS NOTED AS "IN" OR "OUT" ARE RELATIVE TO THE SUBJECT PROPERTY.
5. FENCE DIMENSIONS ARE GENERALLY TO THE CENTERLINE OF THE FENCE UNLESS OTHERWISE NOTED.
6. STRUCTURE LOCATIONS ARE MEASURED TO THE FINISHED FASCIA UNLESS OTHERWISE NOTED.
7. TREE LOCATIONS ARE MEASURED TO THE ESTIMATED CENTER OF THE TREE.
8. ALL DIMENSIONS ARE IN DECIMAL FEET.

PROJECT INFORMATION

SURVEYOR: PLOG ENGINEERING, PLLC
P.O. BOX 412
RAVENSDALE, WA 98051
PH: (206) 420-7130

PROPERTY OWNER: WAN TING ALICE CHAU & KA WING KEVIN LOO
4124 94TH PL SE
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 546060-0020

PROJECT ADDRESS: 4124 94TH PL SE
MERCER ISLAND, WA 98040

PARCEL AREA: 12,351 S.F. (0.284 ACRES ±)
AS SURVEYED

LEGAL DESCRIPTION

LOT 2 OF MERCERWOOD DIVISION NO. 10, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 80 OF PLATS, PAGE 100, RECORDS OF KING COUNTY WASHINGTON.

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

VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.

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

BASIS OF BEARINGS

PER THE PLAT OF MERCERWOOD DIVISION NO. 10, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 80 OF PLATS, PAGE 100, RECORDS OF KING COUNTY WASHINGTON.

ACCEPTED THE BEARING OF N 4°09'56" E FOR 95TH AVE SE BASED ON FOUND MONUMENTS IN CASE.

TOPOGRAPHIC SURVEY NOTES

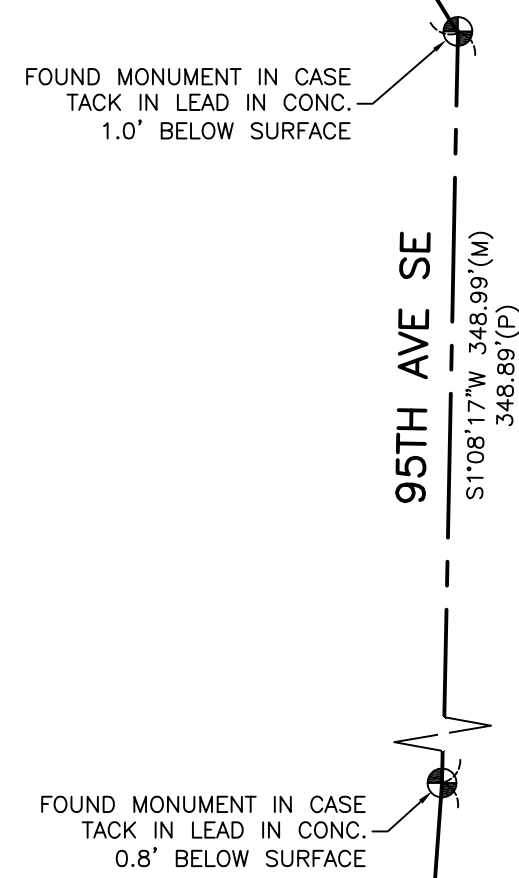
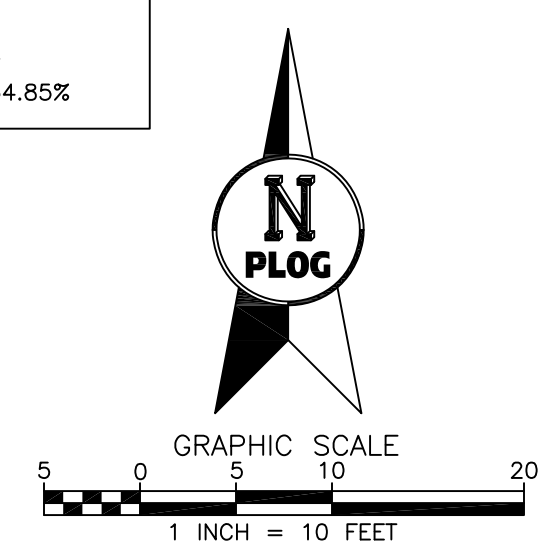
1. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS, UTILITY LOCATES BY THIRD PARTIES, AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
2. CONTOURS SHOWN ARE BASED ON A FIELD SURVEY.
3. TREE IDENTIFICATION WAS PERFORMED BY SURVEY FIELD PERSONNEL AND SHOULD BE CONSIDERED A BEST GUESS. AN ARBORIST SHOULD BE RELIED UPON FOR MORE ACCURATE AND DETAILED IDENTIFICATION OF TREE SPECIES AND HEALTH.

PERMITTING NOTES

CURRENT LOT COVERAGE:
ALL EXISTING SURFACES: 3,892 SF
LOT AREA: 12,351 SF

COVERAGE = 3,892/12,351 X 100% = 31.51%

LOT SLOPE CALCULATION:
HIGH POINT: SW CORNER ELEV=318.77
LOW POINT: SE CORNER ELEV=267.59
DISTANCE BETWEEN HIGH/LOW POINTS=146.84 FT
SLOPE = (318.77-267.59)/146.84 X 100% = 34.85%



PLOG ENGINEERING
Surveyors & Civil Engineers

P.O. Box 412
Ravensdale, WA 98051
(206) 420-7130
www.PlogEngineering.com

SW1/4, NE1/4, SEC18, TWP 24N, RNG 5E, W.M.
BOUNDARY & TOPOGRAPHIC SURVEY

ALICE CHAU
4124 94TH PL SE
MERCER ISLAND, WA 98040

PROJECT NO.:	REVISION DATE:	REVISION NO.:	SHEET
207-22	10/27/2022	0	1 OF 1