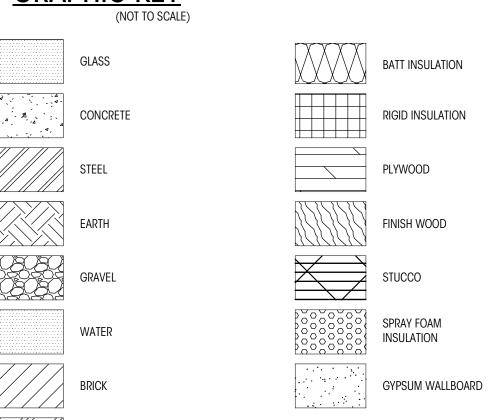
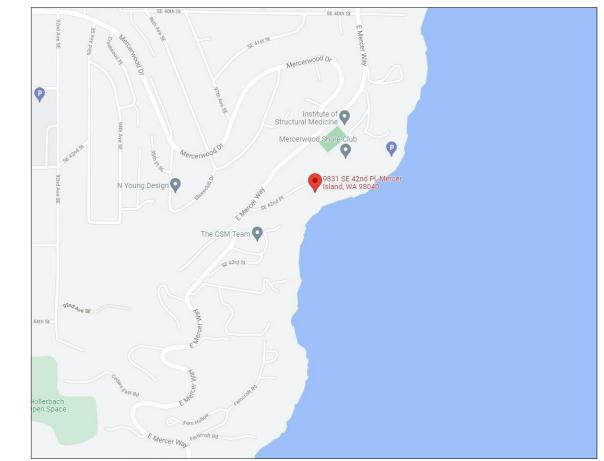
ABBREVIATIONS

ABOVE **ABOVE FINISH FLOOR** ADDITIONAL **ADJUSTABLE** AD.J ALTERNATE ARCHITECT, ARCHITECTURAL ARCH BLW BASEMENT BETWEEN BUILDING CABINET CALCULATION CEILING CENTERLINE CLR CLEAR COL COLUMN CONC CONCRETE CONSTRUCTION CONT CONTINUOUS CONTR CONTRACTOR DEMO DEMOLISH DIAMETER DIMENSION DISHWASHER DOUBLE ELECTRIC, ELECTRICIAN ELEV ELEVATION ENGINEER FQHIV **EQUIVALENT** EXIST OR (E) EXISTING EXTERIOR FINISH FLOOR GALVANIZED GYPSUM WALL BOARD HEADER HEIGHT HORIZONTAL INSULATION INTERIOR LOCATE, LOCATION MANUFACTURER MECHANICAL NOT TO SCALE ON CENTER PLYWOOD PRELIMINARY PRESSURE-TREATED PROPERTY LINE REFRIGERATOR REINFORCE, REINFORCING REQUIRED SCHEDULE **SHEARWALL** SQUARE FOOT SPECIFICATIONS STAINLESS STEEL STRUCTURE, STRUCTURAL TEMPORARY TOP OF WALL UNLESS NOTED OTHERWISE VERIFY IN FIELD WATERPROOF, WEATHERPROOF WINDOW WITH WITHOUT

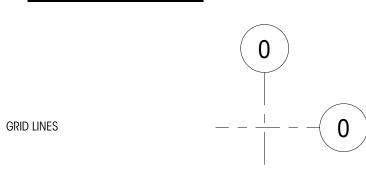
WOOD



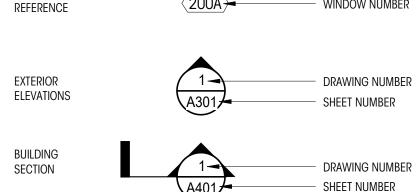
LOCATION PLAN



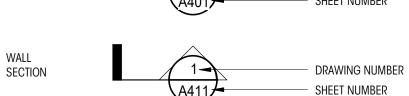
SYMBOLS KEY

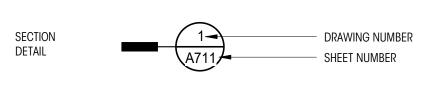


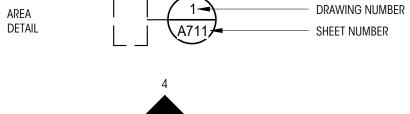
ROOM REFERENCE	ROOM NAME	Room Name Room Number
DOOR REFERENCE	(100A)-	ROOM NUMBER DOOR NUMBER
WINDOW REFERENCE	(200A)	ROOM NUMBER

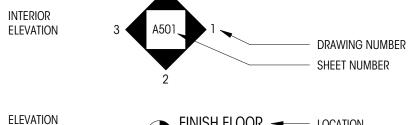


WINDOW NUMBER

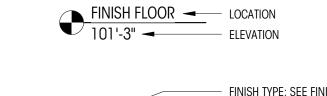


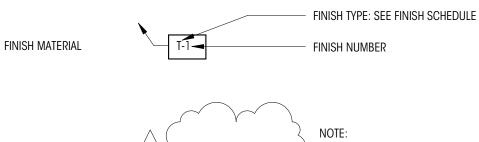


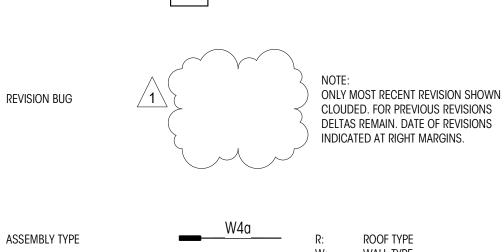




DATUM







ASSEMBLY TYPE	<u>W</u> 4a	R: ROOF TYPE W: WALL TYPE F: FLOOR TYPE SEE ASSEMBLIES FOR MORE INFO
EXHAUST FAN	\bigcirc	
SMOKE DETECTOR	(
SMOKE/CARBON MONOXIDE DETECTOR	Ø	
CENTERLINE	C.	

GENERAL NOTES

ALL WORK SHALL BE IN COMPLIANCE WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE AS ADOPTED AND MODIFIED BY THE JURISDICTIONAL LAND USE CODE, AND ALL OTHER LAWS, CODES, ORDINANCES AND REGULATIONS OF THE COUNTY, STATE, AND FEDERAL JURISDICTIONS. (LATEST EDITION AND AMENDMENTS)

ALL UNDERGROUND UTILITIES MUST BE VERIFIED AS TO EXACT LOCATIONS SO AS NO INTERFERENCE BY DISRUPTION WILL BE CAUSED. GENERAL CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES BY THE METHODS RECOMMENDED AT THE PRE-CONSTRUCTION SITE MEETING. DAMAGE THAT MAY BE CAUSED BY GENERAL CONTRACTOR OR SUBCONTRACTOR TO ANY OF THE ABOVE MENTIONED SHALL BE REPAIRED BY HIM AND LEFT IN AS GOOD A CONDITION AS EXISTED PRIOR TO DAMAGING.

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL **DIMENSIONS AND JOB CONDITIONS** RELATED TO THIS WORK. ALL DIMENSIONS SHALL BE CONSIDERED "NOMINAL" UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. DIMENSIONS ON LARGE SCALE DRAWINGS OR DETAILS WILL PREVAIL OVER SMALLER SCALED DRAWINGS. WRITTEN DIMENSIONS ARE DRAWN TO THE FACE OF STUD, U.N.O. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT, PROVIDE ALL BUCKOUTS, BLOCKING, AND JACKS AS REQUIRED BY THE DRAWINGS AND OTHER TRADES. ANY DISCREPANCY IN DIMENSIONS SHALL BE REPORTED IN WRITING TO THE PROJECT MANAGER/ DESIGNER FOR CLARIFICATION, OR APPROVAL OF MODIFICATION BEFORE COMMENCING WORK. THE RESPONSIBILITY TO THE PROJECT MANAGER/DESIGNER, SHALL REST WITH THE CONTRACTOR OR ANY OTHER PERSON APPROVING SUCH A CHANGE.

ALL WORKMANSHIP AND MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF CERTIFICATE OF OCCUPANCY UNLESS SPECIFIED FOR A LONGER PERIOD OF TIME ON SPECIFIED ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING HIS OWN DEFECTIVE WORK AS WELL AS PAY ALL COSTS INCIDENTAL THERETO INCLUDING DAMAGE TO OTHER WORK, FURNISHINGS OR EQUIPMENT.

SHALL BE CONTAINED IN THE CONTRACT OR SUBCONTRACT WHICH SHALL BE SO WRITTEN THAT SUCH GUARANTEE OR WARRANTIES SHALL INSURE TO THE BENEFIT OF OWNER. INSURANCE: PRIOR TO THE COMMENCEMENT OF WORK THE GENERAL CONTRACTOR SHALL DELIVER TO THE OWNER

ALL WARRANTIES OR GUARANTEES AS TO MATERIALS OR WORKMANSHIP ON OR WITH RESPECT TO THE OWNER'S WORK

CERTIFICATES OF INSURANCE FOR BOTH COMPREHENSIVE GENERAL LIABILITY AND WORKMAN'S COMPENSATION INCLUDING THE TOTAL AMOUNT OF COVERAGE AND CONDITIONS STIPULATED AND AGREED BY BOTH PARTIES.

THE OWNER SHALL BE RESPONSIBLE FOR PAYING FOR THE BUILDING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED OR NECESSARY FOR THE COMPLETION OF THE WORK FROM THE RESPECTIVE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE GOVERNING AGENCIES AS REQUIRED FOR SITE

ALL TRADES SHALL REFER TO THE ARCHITECTURAL DRAWINGS REGARDING LOCATIONS OF WORK TO BE INSTALLED.

UNLESS OTHERWISE NOTED, PROVIDE ALL MISCELLANEOUS FASTENERS, HARDWARE AND ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. EVEN THOUGH SUCH ITEMS MAY NOT HAVE BEEN SPECIFICALLY MENTIONED IN THE DRAWINGS AND SPECIFICATIONS, NOTIFY THE ARCHITECT OF ANY REVISIONS OR ADDITIONAL INFORMATION OBTAINED FROM THE MANUFACTURER OF SPECIFIED MATERIALS OR EQUIPMENT WHICH MAY AFFECT THE CONTRACT TIME, COST OR QUALITY OF WORK.

THE GENERAL CONTRACTOR, ALL SUB-CONTRACTORS AND ALL MAJOR SUPPLIERS SHALL SUBMIT TO THE OWNER WITHIN 30 DAYS AFTER COMPLETION ALL "RELEASE OF LIENS" FOR ALL WORK PERFORMED PRIOR TO FINAL PAYMENT.

PARTIAL LIEN WAIVERS TO BE SUBMITTED WITH MONTHLY REQUISITION.

WHICH MUST BE SUBMITTED TO OWNER/ DESIGNER PRIOR TO ANY CONSTRUCTION.

ALL MANUFACTURERS AND/OR SUPPLIERS SHALL SUBMIT SHOP DRAWINGS AND/OR MATERIAL SAMPLES TO THE DESIGNER/OWNER FOR APPROVAL PRIOR TO FABRICATION.

ALL OF THE GENERAL CONTRACTOR'S EQUIPMENT, SCAFFOLDING HOISTS, ETC., SHALL BE AVAILABLE TO THE OWNER/ DESIGNER AND THEIR STAFF FOR INSPECTION OF ANY AND ALL WORK DURING NORMAL WORKING HOURS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DELIVERY POINTS, HOISTS LOCATIONS, ACCESS TO AND FROM THE SITE OF THE BUILDING AND UTILITY SERVICES. BID TO INCLUDE ALL NECESSARY AND REQUIRED PERMITS, LICENSES, FEES, BONDS AND INSURANCE - EVIDENCE OF

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBCONTRACTORS WORKING AT JOB SITE AND FOR ALL COORDINATION OF WORK.

THE MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTOR SHALL FULLY COORDINATE ALL EQUIPMENT WITH THE OTHER TRADES. THESE CONTRACTORS SHALL BE RESPONSIBLE FOR FINAL HOOK-UP OF ALL EQUIPMENT NOT FURNISHED BY THEM BUT REQUIRING THE SAME FOR FINAL COMPLETION.

GENERAL CONTRACTOR TO BE RESPONSIBLE FOR SECURITY OF ALL MATERIALS AT JOB SITE UNTIL FINAL ACCEPTANCE OF

ANY SUBCONTRACTOR CUTTING INTO WORK ALREADY COMPLETED. CUTTING CHASES AND TRENCHES FOR THE INTRODUCTION OF HIS WORK AND EQUIPMENT IN THE BUILDING SHALL DO OR PAY FOR ALL BACK FILLING, REPARATION OF WALLS, FLOOR, ETC., DAMAGE BY SUCH A COMPANY. ALL REPAIRS SHALL MATCH EXISTING SURFACES.

CONSTRUCTION SPECIFICATIONS

NO SUBSTITUTIONS ARE ALLOWED FOR MATERIALS WHERE SPECIFIC MANUFACTURERS ARE INDICATED, UNLESS APPROVED BY THE OWNER/ARCHITECT. REQUESTS FOR SUBSTITUTIONS SHALL BE MADE IN WRITING PRIOR TO ORDERING MATERIALS OR COMMENCING WORK. SUCH REQUESTS SHALL INCLUDE THE DATE, SCOPE OF WORK, ANY ADDITIONAL COSTS TO THE OWNER, AND ANY ANTICIPATED DELAYS CAUSED BY SUCH CHANGES.

NO EXTRA WORK OR CHANGE SHALL BE MADE UNLESS A WRITTEN CHANGE ORDER IS SUBMITTED AND SIGNED BY THE OWNER AND ARCHITECT. THE ORDER SHALL STATE THAT THE OWNER HAS AUTHORIZED THE EXTRA WORK OR CHANGE, AND NO CLAIM FOR AN ADDITIONAL SUM SHALL BE VALID UNLESS SO OFFERED AS DESCRIBED ABOVE.

ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.

WOOD SPECIFICATIONS TO CONFORM TO OUTLINE SPECIFICATIONS, STRUCTURAL PLANS, NOTES, AND GENERAL

CAULKING AND SEALANTS: INSTALLED SHALL BE GUARANTEED WATERTIGHT. EXTERIOR METAL WORK, INCLUDING WINDOWS AND DOOR FRAMES AND ALL JUNCTIONS BETWEEN MASONRY, CONCRETE AND METAL SHALL BE SEALED WITH NEOPRENE OR POLYURETHANE FILLER AND APPROVED SEALANT COMPOUNDS.

PROVIDE GALVANIC INSULATION BETWEEN ALL DISSIMILAR METALS.

PROVIDE WATERPROOFING MEMBRANE OVER PROTECTIVE BOARD AT ALL WALLS EXPOSED TO EARTH.

ALL PIPING AND CONDUIT UNDER SLAB SHALL BE A MINIMUM OF 2"-0' CLEAR OF UNDERSIDE OF FOOTING.

ALL FINAL SURFACE GRADING SHALL BE COMPLETED TO FACILITATE POSITIVE DRAINAGE AWAY FROM THE BUILDING UNLESS NOTED OTHERWISE.

PROVIDE AND INSTALL INSULATION AT EXTERIOR WALLS, ROOF, FLOOR LOCATIONS AS SHOWN, SPECIFIED AND IN ACCORDANCE WITH WASHINGTON STATE ENERGY CODE.

WATER PIPES TO BE INSULATED IN ALL UNHEATED AREAS.

INSULATE ALL ROUGH-IN PLUMBING IN WALLS, FLOORS, AND CEILINGS FOR SOUND TRANSMISSION.

GENERAL INFORMATION

PROJECT ADDRESS	9831 SE 42ND PL, MERCER ISLAND, WA 98040
PROJECT NUMBER	TBD
ASSESSOR'S PARCEL #	777670-0035
LEGAL DESCRIPTION	LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING;
	SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

PROJECT DESCRIPTION DEMOLITION OF AN EXISTING SINGLE FAMILY RESIDENCE AND NEW CONSTRUCTION OF A SINGLE FAMILY RESIDENCE

ZONE SINGLE FAMILY RESIDENCE **BUILDING TYPE**

PROJECT DATA

EXISTING LOT AREA SUMMARY	
GROSS LOT AREA	16,953 SF
ACCESS EASEMENTS	0 SF
NET LOT AREA	16,953 SF
LOT SLOPE	36.94 / 252.34 = 14.6%
201 0201 2	00.747 202.04 = 14.070
OCCUPANCY SUMMARY	
EXISTING TYPE	R-3
OCCUPANT LOAD	SINGLE FAMILY
SETBACKS	
SIDE YARD (PER 19.02.020.C.1.c.)	15'
MINIMUM:	5'
FRONT YARD	20'
SHORELINE	25' FROM ORDINARY HIGH WATER MAI
SHORLLINE	23 TROW ORDINART HIGH WATER WAT
TREE REMOVAL	
(E) TREES TO BE REMOVED	3
(N) TREES TO BE PLANTED AS REPLACEMENT	6
EXISTING LOT COVERAGE	
(E) RESIDENCE, GARAGE, AND OVERHANGS	2,684.80 SF
(É) DRIVING SURFACES	1,855.63 SF
(E) SHEDS	180.52 SF
(E) TOTAL LOT COVERAGE	4,720.95 SF = 27.9 % OF LOT AREA
PROPOSED LOT COVERAGE	
(N) RESIDENCE, GARAGE, AND OVERHANGS	4,533.06 SF
(N) DRIVING SURFACES	2,024.82 SF
(E) SHEDS TO REMAIN	20.52 SF 4 579 40 SE 29 9 9 OE LOT ADEA
(N) TOTAL LOT COVERAGE	6,578.40 SF = 38.8 % OF LOT AREA
ALLOWABLE LOT COVERAGE	
40% OF LOT AREA BASED ON LOT SLOPE, PER 19.02.020.F.3.a.	16,953 SF * 0.40 = 6,781.20 SF
EXISTING HARDSCAPE	
STAIRS	329.91 SF
DECKS	964.04 SF
PATIOS / WALKWAYS	603.63 SF
GRAVEL AREAS	117.11 SF
ROCKERIES	369.70 SF
SITE WALLS	274.49 SF
TOTAL EXISTING	2,658.88 SF = 15.7 % OF LOT AREA
DEMOLISHED HARDSCAPE	
STAIRS	162.13 SF
DECKS	964.04 SF
PATIOS / WALKWAYS	397.33 SF
GRAVEL AREAS	117.11 SF
ROCKERIES	234.11 SF
SITE WALLS	37 30 SE

DEMOLISHED HARDSCAPE	
STAIRS	162.13 SF
DECKS	964.04 SF
PATIOS / WALKWAYS	397.33 SF
GRAVEL AREAS	117.11 SF
ROCKERIES	234.11 SF
SITE WALLS	37.39 SF
TOTAL DEMOLISHED	1,912.11 SF

OPOSED HARDSCAPE	
(E) HARDSCAPE TO REMAIN	
STAIRS	167.78 SF
PATIOS / WALKWAYS	206.30 SF
ROCKERIES	135.59 SF
SITE WALLS	237.10 SF
TOTAL TO REMAIN	746.77 SF
(N) ADDED HARDSCAPE	
STAIRS	170.33 SF
DECKS	82.50 SF
PATIOS / WALKWAYS	246.93 SF
SITE WALLS	97.59 SF
TOTAL ADDED	597.35 SF

PATIOS / WALKWAYS	246.93 SF
SITE WALLS	97.59 SF
TOTAL ADDED	597.35 SF
TOTAL HARDSCAPE	(746.77+597.35) = 1,344.12 SF = 7.9 % OF l
ALLOWARIE HARDSCAPE	

9% OF LOT AREA

PER 19.02.020.F.3.b.ii., HARDSCAPE IMPROVEMENTS ARE PERMITTED IN THE MAXIMUM LOT COVERAGE AREA REMAINING LOT COVERAGE 6.781.20 SF - 6.578.40 SF = 1,525.77 SF + 202.80 SF = 1TOTAL ALLOWABLE HARDSCAPE

EXISTING BUILDING AREA SUMMARY (GFA) (PER KING	G COUNTY ASSESSOR)
(E) BASEMENT LEVEL	1,330 SF
(E) MAIN LEVEL	1,810 SF
(E) UPPER LEVEL	650 SF
(E) ATTACHED GARAGE	320 SF
TOTAL EXISTING BUILDING AREA (GSF)	4,110 SF
EXISTING FLOOR AREA RATIO:	4,110 / 16,953 = 24.2 % OF LOT
PROPOSED BUILDING AREA SUMMARY (GEA)	

PROPOSED BUILDING AREA SUMMARY (GFA)	
PROPOSED BASEMENT LEVEL	1,546.75 SF
PROPOSED MAIN LEVEL	2,140.67 SF
(EXCLUDES STAIR PER MICC 19.02.020.D.2.c.)	
PROPOSED MAIN LEVEL COVERED DECK	251.62 SF
(PER MICC CHAPTER 19.16.010.G.1.e.)	
PROPOSED UPPER LEVEL	1,704.17 SF
PROPOSED UPPER LEVEL COVERED DECK	17.31 SF
PROPOSED ATTACHED GARAGES	1,096.62 SF
TOTAL PROPOSED BUILDING AREA (GSF)	6,757.14 SF
PROPOSED FLOOR AREA RATIO:	6,757.14 / 16,953 = 39.9 % OF LOT A
40% ALLOWABLE GROSS FLOOR AREA:	16,953 SF x 0.40 = 6,781 SF

ENERGY CODE SUMMARY (2018 WSEC, RESIDENTIAL PROVISIONS) CLIMATE ZONE 4C PER TABLE R301.1

PROJECT CONSIDERED A MEDIUM DWELLING UNIT PER R406.3 (4,997.27 SF OF CONDITIONED FLOOR) PRESCRIPTIVE THERMAL ENVELOPE PER TABLE R402.1.1 (WITH ADJUSTMENTS PER EFFICIENT ENVELO FENESTRATION U-FACTOR (VERTICAL):

SKYLIGHT U-FACTOR (OVERHEAD):	0.50
CEILING:	R-49
VAULTED CEILING:	R-38
WALL ABOVE GRADE:	R-21
WALL BELOW GRADE (INT.):	R-21 (INT.) OR R-10 (EXT.)
FLOOR ABOVE GRADE:	R-38
SLAB ON GRADE @ BASEMENT:	R-10 PERIMETER AND UNDER ENTIRE SLAB

INSTALLED PER INTERNATIONAL MECHANICAL CODE, WORK TO BE COMPLETED UNDER A SEPARATE PERMIT.

<u>VENTILATION</u>
FANS ON TIMERS, PER PLANS. VOLUME OF REQUIRED OUTDOOR VENTILATION AIR TO BE PROVIDED BASED ON TABLE
403.8.5.1 OF THE INTERNATIONAL MECHANICAL CODE.
* PLUMBING, MECHANICAL, ELECTRICAL WORK TO BE PERMITTED SEPARATELY.
SEE SHEET GOO1 FOR VENTILATION & ENERGY CALCULATIONS.

<u>FIRE DEPARTMENT NOTES</u>
PROJECT TO BE EQUIPPED WITH A NFPA-13D FIRE SPRINKLER SYSTEM.
PROJECT TO BE EQUIPPED WITH A NFPA-72 HOUSEHOLD MONITORED SMOKE ALARM SYSTEM.
PROJECT TO HAVE 5/8" TYPE X GYPSUM WALL BOARD AT GARAGE WALLS AND CEILING.
PROJECT TO HAVE SELF CLOSING, RATED FIRE DOOR FROM GARAGE TO RESIDENCE.
PROJECT TO USE SOLID CORE DOORS THROUGHOUT.

EFFICIENT BUILDING ENVELOPE (OPTION 1.3 - 0.5) COMPLIANCE WITH THE CONDUCTIVE UA TARGETS IS DEMONSTRATED USING SECTION R402.1.1. PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.28, FLOOR R-38 SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB BELOW GRADE SLAB R-10 PERMIMETER AND UNDER ENTIRE SLAB **OR** COMPLIANCE BASED ON SECTION R402.1.4: REDUCE THE TOTAL CONDUCTIVE UA BY 5%

AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION (OPTION 2.1 - 0.5 CREDITS) COMPLIANCE BASED ON R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS **OR** FOR R-2 OCCUPANCIES, OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CFM/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE INTERNATIONAL RESIDENTIAL CODE SECTION 403.8 OF THE INTERNATIONAL CODE MECHANICAL CODE SHAL BE MET WITH HIGH EFFICIENCY FAN(S) (MAXIMUM 0.35 WATTS/CFM), NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEM USING A FURNACE

INCLUDING AN ECM MOTOR ARE ALLOWED, PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN

HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS)

CLOSED-LOOP GROUND SOURCE HEAT PUMP; WITH A MINIMUM COP OF 3.3 OR OPEN LOOP WATER SOURCE HEAT PUMP WITH A MAXIMUM PUMPING HYDRAULIC HEAD OF 150 FEET AND MINIMUM COP OF 3.6.

HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (OPTION 4.2 - 1.0 CREDITS) HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.

	_		
	<u>PROJ</u>	<u>IECT DIRECTORY</u>	-
16,953 SF 0 SF	<u>OWNER</u>		SHARON & DZON NGUYEN 9831 SE 42nd PL., MERCER ISLAND, WA 98040
16,953 SF	ADOUITEOT		COLIN BRANDT
36.94 / 252.34 = 14.6%	<u>ARCHITECT</u>		BRANDT DESIGN GROUP
R-3			66 BELL ST., UNIT 1 SEATTLE, WA 98121
SINGLE FAMILY			206.239.0850
			colin@brandtdesigninc.com
15' 5'	OWNER'S AGE	ENT/CONTACT	BREE MEDLEY BRANDT DESIGN GROUP
20'			66 BELL ST., UNIT 1
25' From Ordinary High Water Mark			SEATTLE, WA 98121 206.239.0850 ext. 0012
3			bree@brandtdesigninc.com
6	GENERAL CON	NTRACTOR	ED KOROLAK WOODLAND HOMES
0.404.00.05			18835 SE 134TH PL RENTON, WA 98059
2,684.80 SF 1,855.63 SF			206.713.8288
180.52 SF 4,720.95 SF = 27.9 % OF LOT AREA			woodlandhomes@comcast.net
,,,,	STRUCTURAL I	<u>ENGINEER</u>	BRETT MOZDEN SWENSON SAY FAGET
4,533.06 SF			2124 THIRD AVENUE, SUITE 100
2,024.82 SF 20.52 SF			SEATTLE, WA 98121 206.443.6212
6,578.40 SF = 38.8 % OF LOT AREA			bmozden@ssfengineers.com
1/00000*040 /70000	CIVIL ENGINEE	<u>ER</u>	DUFFY ELLIS
16,953 SF * 0.40 = 6,781.20 SF			CIVIL ENGINEERING SOLUTIONS 102 NW CANAL ST.
329.91 SF			SEATTLE, WA 98107 206.930.0342
964.04 SF			duffy@cesolutions.us
603.63 SF 117.11 SF	GEOTECHNICA	AL ENGINEER	MARC MCGINNIS
369.70 SF 274.49 SF			GEOTECH CONSULTANTS, INC. 2401 10TH AVENUE EAST
2,658.88 SF = 15.7 % OF LOT AREA			SEATTLE, WA 98102
			425.260.1116 marcm@geotechnw.com
162.13 SF 964.04 SF	ARBORIST	JOHN	HUSHAGEN
397.33 SF	<u> </u>		SEATTLE ARBORICULTURAL ASSOCIATES
117.11 SF 234.11 SF			18032 17TH AVE NW SHORELINE, WA 98177
37.39 SF 1,912.11 SF			206.510.4107 hushagenjohnd@gmail.com
1,7,12.11 01	SURVEYOR		THOMAS WOLDENDORP
	SURVETOR		SITE SURVEYING, INC.
167.78 SF 206.30 SF			21923 NE 11TH STREET SAMMAMISH, WA 98074
135.59 SF 237.10 SF	SHEE	T INDEX	425.298.4412 tnw@sitesurveymapping.com
746.77 SF			iiiii e aneadar e y iii depping.com
170.00.05	SHEET NUMBE	ER SHEET NAME	
170.33 SF 82.50 SF	GENERAL	I	
246.93 SF 97.59 SF	G000 G001	COVERSHEET ENERGY CODE / VENTILATION CALCU	II ATIONS
597.35 SF = 1,344.12 SF = 7.9 % OF LOT AREA	0001	ENERGY GODE, VENTILATION GALOG	Bullone
= 1,344.12 3F = 7.9 % OF LOT AREA	SURVEY S-1	TOPOGRAPHIC SURVEY	
16,953 SF * 0.09 = 1,525.77 SF	S-1 S-2	TOPOGRAPHIC SURVEY	
	OIV/II		
6,781.20 SF - 6,578.40 SF = 202.80 SF 1,525.77 SF + 202.80 SF = 1,728.57 SF	CIVIL C1.0	EROSION CONTROL/ TREE RETENTION	N PLAN
	C1.1	TREE RETENTION NOTES	
<u>(SSOR)</u> 1,330 SF	C1.2 C2.0	TESC & CITY NOTES / TESC DETAILS SITE CIVIL PLAN	
1,810 SF 650 SF	C3.5	BMP DETAILS	
320 SF	VDUITEUTI ID	al Demolition	
4,110 SF 4,110 / 16,953 = 24.2 % OF LOT AREA	AD101	SITE DEMOLITION PLAN	
	AD102	DEMOLITION LOT COVERAGE SITE PL	AN
1,546.75 SF 2,140.67 SF	<u>ARCHITECTUR</u>	<u>AL</u>	
	A101	SITE PLAN	
251.62 SF	A102 A104	SETBACK SITE PLAN PROPOSED LOT COVERAGE SITE PLA	N
1,704.17 SF 17.31 SF	A105	TREE RETENTION PLAN	
1,096.62 SF	A106 A211	CRITICAL AREAS SITE PLANTING PLAN LOWER FLOOR PLAN	l .
6,757.14 SF 6,757.14 / 16,953 = 39.9 % OF LOT AREA	A211 A212	MAIN FLOOR PLAN	
16,953 SF x 0.40 = 6,781 SF	A213	UPPER FLOOR PLAN	
	A214 A301	ROOF PLAN EXTERIOR ELEVATIONS (N&E)	
27 SF OF CONDITIONED FLOOR AREA)	A302	EXTERIOR ELEVATIONS (N&W)	
0.28	A303	GARAGE EXTERIOR ELEVATIONS	
0.50 R-49	A401 A402	BUILDING SECTIONS BUILDING SECTIONS	
R-38	A403	BUILDING SECTIONS	
R-21 R-21 (INT.) OR R-10 (EXT.)	A411 A412	WALL SECTIONS WALL SECTIONS	
R-38 R-10 Perimeter and under entire Slab	A412 A413	WALL SECTIONS WALL SECTIONS	
	۸۸01	DOOD /WINDOW/ SCHEDINES EGE	NDC & NOTEC

HORIZONTAL ASSEMBLY DETAILS

HIGH EFFICIENY WATER HEATING (OPTION 5.4 - 1.5 CREDITS)

ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER I NEEA'S ADVANCED WATER HEATING SPECIFICATION **OR** FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER(S), MEETING THE STANDARDS FOR TIER I OF NEEA'S ADVANCED WATER

RENEWABLE ELECTRIC ENERGY (OPTION 6.1 - 1.0 CREDITS)

FOR EACH 1200 kWH OF ELECTRICAL GENERATION PER HOUSING UNIT PROVIDED ANNUALLY BY ON-SITE WIND OR SOLAR EQUIPMENT A 1.0 CREDIT SHALL BE ALLOWED, UP TO 3 CREDITS. GENERATION SHALL BE CALCULATED AS FOLLOWS: FOR SOLAR ELECTRIC SYSTEMS, THE DESIGN SHALL BE DEMOSTRATED TO MEET THIS REQUIREMENT USING THE NATIONAL RENEWABLE ENERGY LABORATORY CALCULATOR PVWATTS OR APPROVED BY THE CODE OFFICIALLY. DOCUMENTATION NOTING SOLAR ACCESS SHALL BE INCLUDED ON THE PLANS. FOR WIND GENERATION PROJECTS DESIGNS SHALL DOCUMENT ANNUAL POWER GENERATION BASED ON THE FOLLOWING FACTORS: THE WIND TURBINE POWER CURVE; AVERAGE ANNUAL WIND SPEED AT THE SITE; FREQUENCY DISTRIBUTION OF THE WIND SPEED AT THE SITE AND HEIGHT OF THE TOWER.

Brandt

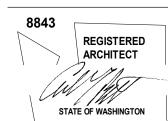
Design Group

66 Bell Street Unit 1 Seattle, WA

98121

brandtdesigninc.com

206.239.0850



<u>ARCHITECTUI</u>	RAL
A101	SITE PLAN
A102	SETBACK SITE PLAN
A104	PROPOSED LOT COVERAGE SITE PLAN
A105	TREE RETENTION PLAN
A106	CRITICAL AREAS SITE PLANTING PLAN
A211	LOWER FLOOR PLAN
A212	MAIN FLOOR PLAN
A213	UPPER FLOOR PLAN
A214	ROOF PLAN
A301	EXTERIOR ELEVATIONS (N&E)
A302	EXTERIOR ELEVATIONS (S&W)
A303	GARAGE EXTERIOR ELEVATIONS
A401	BUILDING SECTIONS
A402	BUILDING SECTIONS
A403	BUILDING SECTIONS
A411	WALL SECTIONS
A412	WALL SECTIONS
A413	WALL SECTIONS
A601	DOOR / WINDOW SCHEDULES, LEGENDS, & NOTES
A701	VERTICAL ASSEMBLY DETAILS

STRUCTURAL	<u>-</u>
S1.1	GENERAL STRUCTURAL NOTES
S1.2	GENERAL STRUCTURAL NOTES
S2.1	FOUNDATION PLAN
S2.2	MAIN FLOOR FRAMING PLAN
S2.3	UPPER FLOOR FRAMING PLAN
S2.4	LOW ROOF FRAMING PLAN
S2.5	HIGH ROOF FRAMING PLAN
S3.1	TYPICAL CONCRETE DETAILS
S3.2	CONCRETE DETAILS
S3.3	CONCRETE DETAILS
S4.1	TYPICAL WOOD DETAILS
S4.2	WOOD DETAILS
S4.3	TYPICAL CONCRETE DETAILS
S4.4	WOOD DETAILS
S4.5	WOOD DETAILS
S5.1	STEEL DETAILS
S5.2	STEEL DETAILS

WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING:

HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION.

PERMIT DOCUMENTS

DATE:

CHECKED BY:

COVERSHEET

As indicated

05.19.22

D (24X36)

WA STATE ENERGY CODE FORMS

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

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

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

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

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

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

2018 Washington State Energy Code – Residential Prescriptive Energy Code Compliance for All Climate Zones in Washington

Single Family – New & Additions (effective February 1, 2021) Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

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

	Summary of T	able R406.2		
Heating Options	Fuel Normalization Descriptions		select ONE g option	User Notes
1	Combustion heating minimum NAECAb	0.0		
2	Heat pump ^c	1.0	•	
3	Electric resistance heat only - furnace or zonal	-1.0		
4	DHP with zonal electric resistance per option 3.4	0.5		
5	All other heating systems	-1.0		
Energy Options	Energy Credit Option Descriptions			
1.1	Efficient Building Envelope	0.5		
1.2	Efficient Building Envelope	1.0		
1.3	Efficient Building Envelope	0.5	•	
1.4	Efficient Building Envelope	1.0		
1 5	Efficient Building Envelope	2.0		

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

1.5 Efficient Building Envelope 1.6 Efficient Building Envelope 1.7 Efficient Building Envelope 2.1 Air Leakage Control and Efficient Ventilation 2.2 Air Leakage Control and Efficient Ventilation 2.3 Air Leakage Control and Efficient Ventilation 2.4 Air Leakage Control and Efficient Ventilation 2.0 3.1^a High Efficiency HVAC 3.2 High Efficiency HVAC 3.3^a High Efficiency HVAC 3.4 High Efficiency HVAC 3.5 High Efficiency HVAC 3.6^a High Efficiency HVAC 2.0 0.5 4.1 High Efficiency HVAC Distribution System

2018 Washington State Energy Code – Residential Prescriptive Energy Code Compliance for All Climate Zones in Washington

1.0

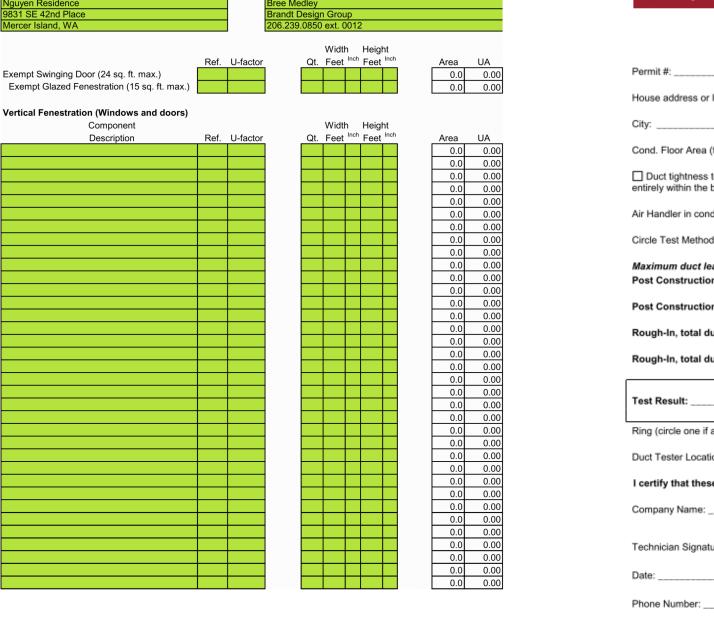
	Summary of Tab	le R406.2 (co	nt.)	
Energy Options	Energy Credit Option Descriptions (cont.)	energy or	select ONE otion from otegory d	User Notes
5.1 ^d	Efficient Water Heating	0.5		
5.2	Efficient Water Heating	0.5		
5.3	Efficient Water Heating	1.0		
5.4	Efficient Water Heating	1.5	•	
5.5	Efficient Water Heating	2.0		
5.6	Efficient Water Heating	2.5		
6.1 ^e	Renewable Electric Energy (3 credits max)	1.0		
7.1	Appliance Package	0.5		

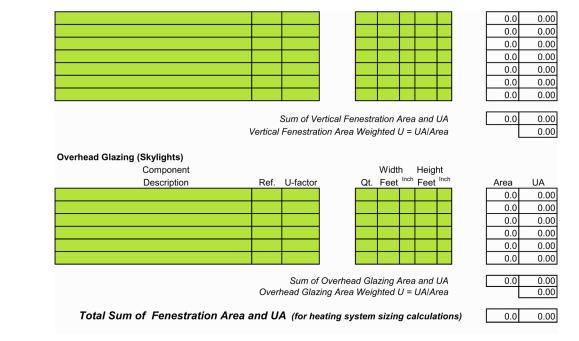
- a. An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W,
- whichever is bigger, may be installed in the dwelling unit.

4.2 High Efficiency HVAC Distribution System

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

SEE DOOR & WINDOW SCHEDULES, SHEET A601





Window, Skylight and Door Schedule

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads lease complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at code@energy.wsu.edu or (360) 956-2042 for assistance. Contact Information

331 SE 42nd PLACE			BREE MEDLEY					
IERCER ISLAND, WA 98040			BRANDT DESI	GN GF	ROUP			
Heating System T	ype: All Other Systems	● He	at Pump					
see detailed instruction	is for each section, place your cursor o	n the word "I	nstructions"					
Design Temperatu								
Instructions	Mercer Island	T	Design Tem					4
	Mercer Island		$\Delta T = Indoor (7)$) degre	es) - Outdoor L	Design 1	Temp	
Area of Building								
Conditioned Floor	Area							
Instructions	Conditioned Floor Area (sq ft)		5,500					
Average Ceiling H	eight				Conditione	d Vol	ume	
Instructions	Average Ceiling Height (ft)		9.6		52,743			
Glazing and Doors	6		U-Factor	Χ_	Area	_ =	UA	
Instructions	U-0.28	T	0.280		1,632		457.01	
Skylights			U-Factor	x	Area		UA	
Instructions			0.50	^_	0	1		
Insulation			0.00					
Attic			U-Factor	х	Area	=	UA	
Instructions	R-49	—	0.026	Î,	0	1	OA.	
				_		_		
-	pist Vaulted Ceilings		U-Factor	X	Area	-	UA	
Instructions	R-38 Vented	T	0.027	L	2,131		57.55	
Above Grade Wall	S (see Figure 1)		U-Factor	Х	Area		UA	
Instructions	R-21 Intermediate	T	0.056		4,244		237.67	
5 1						_		
Floors Instructions			U-Factor 0.025	Х	Area 851		UA 21.27	
mon donono	R-38		0.025	L	651		21.27	
Below Grade Wall	S (see Figure 1)		U-Factor	Χ_	Area	_	UA	
Instructions	R-21 Interior	T	0.042		1,361		57.15	
Slab Below Grade	(see Figure 1)		F-Factor	х	Length		UA	
Instructions			0.303	Î,	1,547		468.86	
	R-10 Fully insulated				.,	_		
Slab on Grade (see	Figure 1)		F-Factor	X	Length	-	UA	
Instructions	No Slab on Grade in this project.	▼		L	0			
Location of Ducts								
Instructions			Du	ct Le	akage Coe	efficie	ent	
	Conditioned Space	-			1.00			
		Sum of	UA				1299.50)

Envelope Heat Load

Air Leakage Heat Load

Building Design Heat Load Building and Duct Heat Load

Ducts in conditioned space: sum of building i Maximum Heat Equipment Output

Building and duct heat loss x 1.40 for forced air furnace Building and duct heat loss x 1.25 for heat pump

58,478 Btu / Hour

25,633 Btu / Hour

84,111 Btu / Hour

84,111 Btu / Hour

105,139 Btu / Hour



Duct Leakage Affidavit (New Construction)

Permit #: _ House address or lot number: Cond. Floor Area (ft2): _ Source (circle one): Plans Estimated Measured Duct tightness testing is not required. The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope. Ducts located in crawl spaces do not qualify for this exception. Air Handler in conditioned space? ☐ yes ☐ no Air Handler present during test? ☐ yes ☐ no Circle Test Method: Leakage to Outside Total Leakage Maximum duct leakage: Post Construction, total duct leakage: (floor area x .04) = _____CFM@25 Pa Post Construction, leakage to outdoors: (floor area x .04) = _____CFM@25 Pa Rough-In, total duct leakage with air handler installed: (floor area x .04) = _____CFM@25 Pa Rough-In, total duct leakage with air handler not installed: (floor area x .03) = _____CFM@25 Pa Test Result: CFM@25Pa Ring (circle one if applicable): Duct Tester Location: Pressure Tap Location: , I certify that these duct leakage rates are accurate and determined using standard duct testing protocol. Technician:

Property address	s;				HVAC System Duct Leakage Testing (R40
	d design professional na				All ductwork and air handler in conditioned space? (See Option
	gn pro. signature:				All ductwork in unconditioned spaces buried and tested at 3% t handler in conditioned space? (See Option 4.1.)
Conditioned floo	r area:	ft² (per buile	ding permit)		All ductwork & air handler outside conditioned space insulated
	D.V.	(D202 4 4)			Air handler present at duct leakage test? (Total leakage 4% if ye
Ceiling/		lues (R303.1.1) Floors: 0	ver unconditions	od ennes P	HVAC leakage to outside test conducted at final?
Attic:		ribors: C			Do HVAC duct leakage tests include GPS and time stamp verifi-
	Attic R			ade floor R	HVAC system leakage test calculated design target:
Walls: Abo	ove grade R			? Y/N (Circle one)	HVAC system leakage test measured results:
В	Selow, int. R	Doors: R	, R, R-		Building Leakage Testing (R402
В	elow, ext. R				Dwelling unit leakage test calculated design target:
U	J-Value of Windows, S	Skylights and Do	oors (R303.1.1.3	3)	Dwelling unit leakage test, measured results:
	ighted U-value from Gla		•	age U	Whole Building Leakage test (R2 non-corridor only) design targ
_	malization (Tables R4			-	Whole Building Leakage test (R2 non-corridor only) measured:
	mber (1 to 5)		y Creans (rabi	C 71400.0/	Do building leakage tests include GPS and time stamp verificat
	elected (1 to 7)			-	Whole House Ventilation System Measured Flow Rates (M
	on Credit + Total	Energy Credits	= Total C	redits	Are the system controls correctly labeled?
	Heating, Cooling		Hot Water		The Whole House Ventilation (WHV) system operation and main instructions were provided to the building owner?
System		cturer and Mode		Efficiency	Provided to: o
Heating	7,		,		
Cooling					Whole House Ventilation System Type: (Circle one)
DHW				 	(1) Whole house exhaust fan, location
Drain water heat				 	(2) Balanced HRV/ ERV, location For R2 low-rise, serves more than one unit?
recovery					(3) Supply or HRV WHV integral to the air handler. Describe s
C	Onsite Renewable E	nergy Electric	Power System	m	operations or reference to design submittal:
System type		System de:	sign capacity	kW	
Rated annual ger	neration	kWh/yr			Specify run-time: hours per day
	A	Appliances		Energy Star?	WHV calculated design minimum flow rate per plan submittal:
		cturer and Mode	el	(Circle one)	WHV measured min flow rate at commissioning: Exhaust
Dish washer				Y or N	Do WHV flow tests include GPS & time stamp verification?
Refrigerator				Y or N	HRV/ERV sensible heat recovery efficiency:
Washer				Y or N	Commissioning Notes:
Dryer	Vented or unvented?	If vented, CEF	rating	Y or N	
Gas fireplace / he	eating stove (Section R4		eplace efficiency	(FE)	Other Mandatory Requirements
	corative? (Circle one)			, ,	All other mandatory requirements of WSEC-R have been met?

HVAC System Duct Leakage Testing (R403.3)	Circle one
All ductwork and air handler in conditioned space? (See Option 4.2)	Y or N
All ductwork in unconditioned spaces buried and tested at 3% total leakage, and a handler in conditioned space? (See Option 4.1.)	ir YorN
All ductwork & air handler outside conditioned space insulated to minimum R-8?	Y or N
Air handler present at duct leakage test? (Total leakage 4% if yes, 3% if no)	Y or N
HVAC leakage to outside test conducted at final?	Y or N
Do HVAC duct leakage tests include GPS and time stamp verification?	Y or N
HVAC system leakage test calculated design target:	CFM @ 25 Pa
HVAC system leakage test measured results:	CFM @ 25 Pa
Building Leakage Testing (R402.4.1.2)	
Dwelling unit leakage test calculated design target:	ACH @ 50 Pa
Dwelling unit leakage test, measured results:	ACH @ 50 Pa
Whole Building Leakage test (R2 non-corridor only) design target: CF	M/sf @ 50 Pa
Whole Building Leakage test (R2 non-corridor only) measured: CF	M/sf @ 50 Pa
Do building leakage tests include GPS and time stamp verification?	Y or N
Whole House Ventilation System Measured Flow Rates (M1505.4 IRC-WA)	Circle one
Are the system controls correctly labeled?	Y or N
The Whole House Ventilation (WHV) system operation and maintenance (O&M) instructions were provided to the building owner?	Y or N
Provided to: on on	(date)
Whole House Ventilation System Type: (Circle one)	
(1) Whole house exhaust fan, location	
(2) Balanced HRV/ ERV, location	
For R2 low-rise, serves more than one unit?	YorN
(3) Supply or HRV WHV integral to the air handler. Describe system control sequing operations or reference to design submittal:	ence of
Specify run-time: hours per day	CFM
WHV calculated design minimum flow rate per plan submittal:	
WHV measured min flow rate at commissioning: ExhaustCFM, Supply	CFM
Do WHV flow tests include GPS & time stamp verification?	Y or N
HRV/ERV sensible heat recovery efficiency:	
Commissioning Notes:	
Other Mandatory Requirements	Circle one
water indicates? Tradem contains	

Y or N

WA STATE VENTILATION REQUIREMENTS

M1505.4 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM

THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4.

M1505.4.1 SYSTEM DESIGN THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY FANS, ONE OR MORE EXHAUST FANS, OR AN ERV/HRV WITH INTEGRAL FANS, ASSOCIATED DUCTS AND CONTROLS. WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM WITH SUPPLY AND EXHAUST FANS PER SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4, AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF THE WHOLE-HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH THE PROPER CONTROLS PER SECTION M1505.4.2. THE SYSTEMS SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM OUTDOOR AIRFLOW RATES PER SECTION M1505.4.3 AS MODIFIED BY THE WHOLE-HOUSE VENTILATION SYSTEM COEFFICIENTS IN SECTION M1504.5.3.1 WHERE APPLICABLE. THE WHOLE-HOUSE VENTILATION SYSTEM SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATE DETERMINED PER SECTION M1505.4.2 UNLESS CONFIGURED WITH INTERMITTENT

M1505.4.1.4 BALANCED WHOLE-HOUSE VENTILATION SYSTEM

A BALANCED WHOLE-HOUSE VENTILATION SYSTEM SHALL INCLUDE BOTH SUPPLY AND EXHAUST FANS. THE SUPPLY AND EXHAUST FANS SHALL HAVE AIRFLOW THAT IS WITHIN 10% OF EACH OTHER. THE TESTED AND BALANCED TOTAL MECHANICAL EXHAUST AIRFLOW RATE IS WITHIN 10% OR 5 CFM (0.0024 M3/S), WHICHEVER IS GREATER, OF THE TOTAL MECHANICAL SUPPLY AIRFLOW RATE. THE FLOW RATE TEST RESULTS SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7. THE EXHAUST FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.2. THE SUPPLY FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.3. BALANCED VENTILATION SYSTEMS WITH BOTH SUPPLY AND EXHAUST FANS IN A PACKAGED PRODUCT. SUCH AS AN ERV/HRV. SHALL MEET THE REQUIREMENTS OF HVI 920, AS APPLICABLE. INTERMITTENT DRYER EXHAUST, INTERMITTENT RANGE HOOD EXHAUST, AND INTERMITTENT TOILET ROOM EXHAUST AIRFLOW RATES ABOVE THE RESIDENTIAL DWELLING OR SLEEPING UNIT MINIMUM VENTILATION RATE ARE EXEMPT FROM THE BALANCED AIRFLOW CALCULATION.

M1505.4.1.5 FURNACE INTEGRATED SUPPLY

OFF CONTROLS PER SECTION M1505.4.3.2.

SYSTEMS USING SPACE HEATING AND/OR COOLING AIR HANDLER FANS FOR OUTDOOR AIR SUPPLY DISTRIBUTION ARE NOT PERMITTED. EXCEPTION: AIR HANDLER FANS SHALL HAVE MULTI-SPEED OR VARIABLE SPEED SUPPLY AIRFLOW CONTROL CAPABILITY WITH A LOW Speed operation not greater than 25% of the rated supply airflow capacity during ventilation only operation. OUTDOOR AIR INTAKE OPENINGS MUST MEET THE PROVISIONS OF SECTIONS R303.5 AND R303.6 AND MUST INCLUDE A MOTORIZED DAMPER THAT IS ACTIVATED BY THE WHOLE-HOUSE VENTILATION SYSTEM CONTROLLER. THE MOTORIZED DAMPER MUST BE CONTROLLED TO MAINTAIN THE OUTDOOR AIRFLOW INTAKE AIRFLOW WITHIN 10% OF THE WHOLE-HOUSE MECHANICAL EXHAUST AIRFLOW RATE. THE FLOW RATE FOR THE OUTDOOR AIR INTAKE MUST BE TESTED AND VERIFIED AT THE MINIMUM VENTILATION FAN SPEED AND THE MAXIMUM HEATING OR COOLING FAN SPEED. THE RESULTS OF THE TEST SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7.

M1505.4.2 SYSTEM CONTROLS

THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT COMPLY WITH THE FOLLOWING: THE WHOLE-HOUSE VENTILATION SYSTEM SHALL BE CONTROLLED WITH MANUAL SWITCHES, TIMERS OR OTHER MEANS THAT PROVIDE

- FOR AUTOMATIC OPERATION OF THE VENTILATION SYSTEM THAT ARE READILY ACCESSIBLE BY THE OCCUPANT; WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE OFF OF THE SYSTEM BY THE OCCUPANT DURING PERIODS OF POOR OUTDOOR AIR QUALITY. CONTROLS SHALL INCLUDE PERMANENT TEXT OR A SYMBOL INDICATING THEIR FUNCTION. RECOMMENDED CONTROL PERMANENT LABELING TO INCLUDE TEXT SIMILAR TO THE FOLLOWING: "LEAVE ON UNLESS OUTDOOR AIR QUALITY IS VERY POOR." MANUAL CONTROLS SHALL BE READILY ACCESSIBLE BY THE OCCUPANT;
- WHOLE-HOUSE VENTILATION SYSTEMS SHALL BE CONFIGURED TO OPERATE CONTINUOUSLY EXCEPT WHERE INTERMITTENT OFF CONTROLS AND SIZING ARE PROVIDED PER SECTION M1505.4.3.2.

M1505.4.3 Mechanical Ventilation Rate The whole-house mechanical ventilation system shall provide outdoor air at a continuous rate as determined in accordance with Table M1505.4.3(1) or Equation 15-1.

M1505.4.3.1 Ventilation Quality Adjustment

The minimum whole-house ventilation rate from Section 1505.4.3 shall be adjusted by the system coefficient in Table M1505.4.3(2) based on the system type not meeting the definition of a Balanced Whole-House Ventilation System and/or not meeting the definition of a Distributed Whole-House Ventilation System.

M1505.4.3.2 Intermittent Off Operation

Wholehouse mechanical ventilation systems shall be provided with advanced controls that are configured to operate the system with intermittent off operation and shall operate for at least two hours in each four-hour segment. The whole-house ventilation airflow rate determined in accordance with M1505.4.3 as corrected by M1505.4.3.1 is multiplied by the factor determined in accordance with Table M1505.4.3(3).

TABLE M1505.4.3(1)

WHOLE-HOUSE MECHANICAL VENTILATION AIRFLOW RATE

NUMBER OF BEDROOMS							
0 - 1	2	3	4	5 or more			
Airflow in cfm							
30	30	35	45	50			
30	35	40	50	55			
30	40	45	55	60			
35	45	50	60	65			
40	50	55	65	70			
45	55	60	70	75			
50	60	65	75	80			
55	65	70	80	85			
60	70	75	85	90			
65	75	80	90	95			
	30 30 30 35 40 45 50 55 60	0-1 2 30 30 30 35 30 40 35 45 40 50 45 55 50 60 55 65 60 70	0-1 2 3 Airflow 30 30 35 30 35 40 30 40 45 35 45 50 40 50 55 45 55 60 50 60 65 55 65 70 60 70 75	0-1 2 3 4 Airflow in colspan="4">Airflow in colspan="4">Airfl			

For SI: 1 square foot = 0.0929 m^2 , 1 cubic foot per minute = 0.0004719 m^3 /s.

TABLE M1505.4.3(3)

INTERMITTENT OFF WHOLE-HOUSE M	ECHANI	CAL VI	ENTILA	TION RA	TE FACTORS ^{a,I}
RUN-TIME % IN EACH	50%	66%	75%	100%	

- 4-HOUR SEGIVIEIVI Factor^a
- a. For ventilation system run-time values between those given, the factors are permitted to be determined by interpolation.

EQUATION 15-1

100 CFM * 2 = **200 CFM**

100 CFM

50%

(0.01 * 4997.27) + [7.5 * (5 + 1)] = 94.97

Extrapolation beyond the table is prohibited.

WHOLE HOUSE VENTILATION CALC

PROPOSED CONDITIONED SF = NUMBER OF BEDROOMS =

AIRFLOW IN CF REQUIRED FOR CONTINUOUS VENTILATION = RUN TIME PERCENTAGE IN EACH 4 HOUR SEGMENT =

FACTOR = CALCULATION

NOTE: VENTILATION SYSTEM ASSUMED TO BALANCED AND DISTRIBUTED, CONTRACTOR TO VERIFY. WHOLE HOUSE VENTILATION TO BE SERVED BY HRV.

M1505.4.3.2 INTERMITTENT OFF OPERATION

WHOLE HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE PROVIDED WITH ADVANCED CONTROLS THAT ARE CONFIGURED TO OPERATE THE SYSTEM WITH INTERMITTENT OFF OPERATION AND SHALL OPERATION FOR AT LEAST TWO HOURS IN EACH FOUR-HOUR SEGMENT. THE WHOLE HOUSE VENTILATION AIRFLOW RATE DETERMINED IN ACCORDANCE WITH SECTION M1505.4.3 AS CORRECTED BY SECTION M1505.4.3.1 IS MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(3).

*OUTDOOR AIR INLET DUCT TO BE FIELD LOCATED WITH HVAC SUBCONTRACTOR IN CONJUSTION WITH PLACING EXHAUSE DUCTS TO AVOID CONFLICT.

Design Group

66 Bell Street Unit 1

Seattle, WA 98121

206.239.0850 brandtdesigninc.com



PERMIT DOCUMENTS

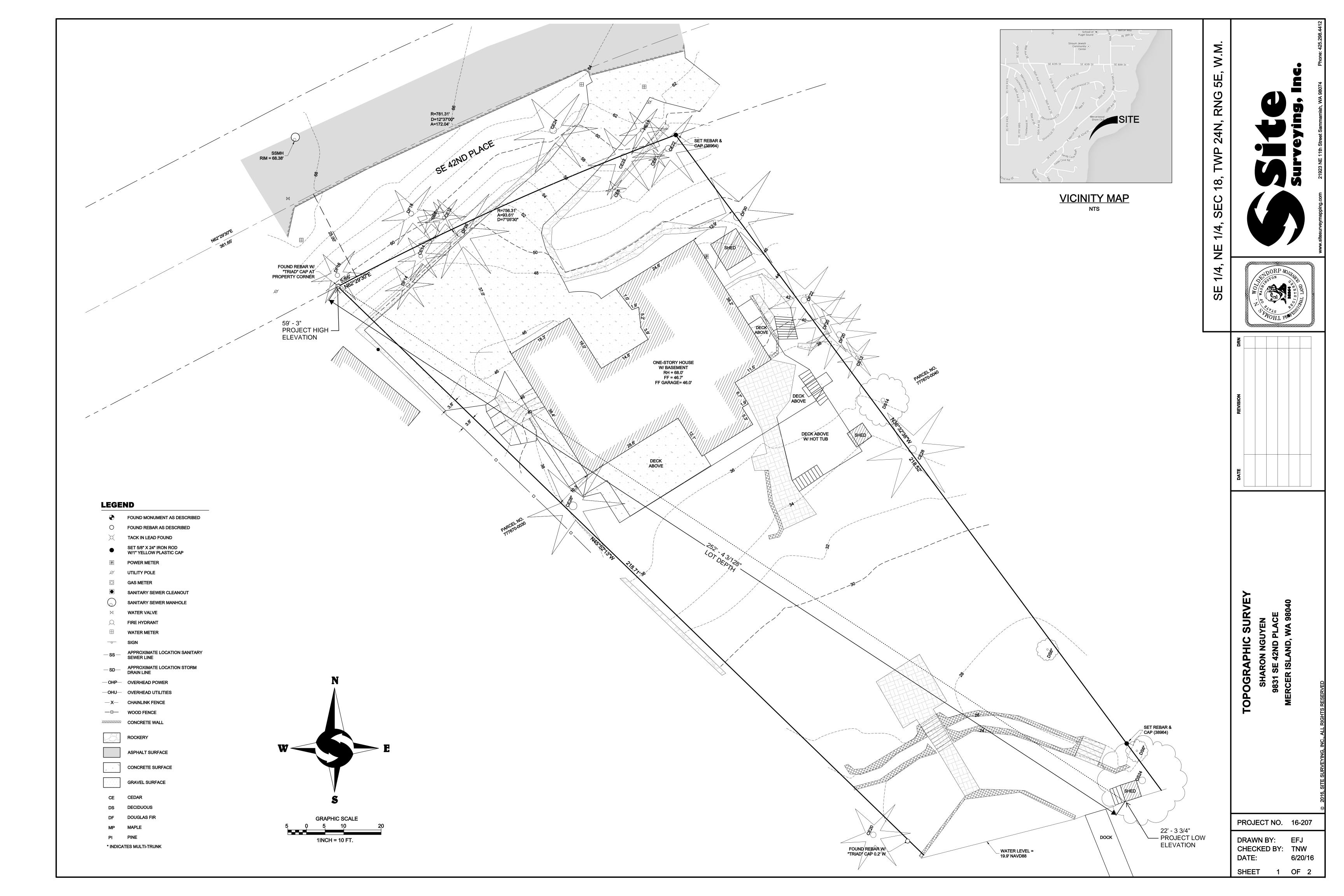
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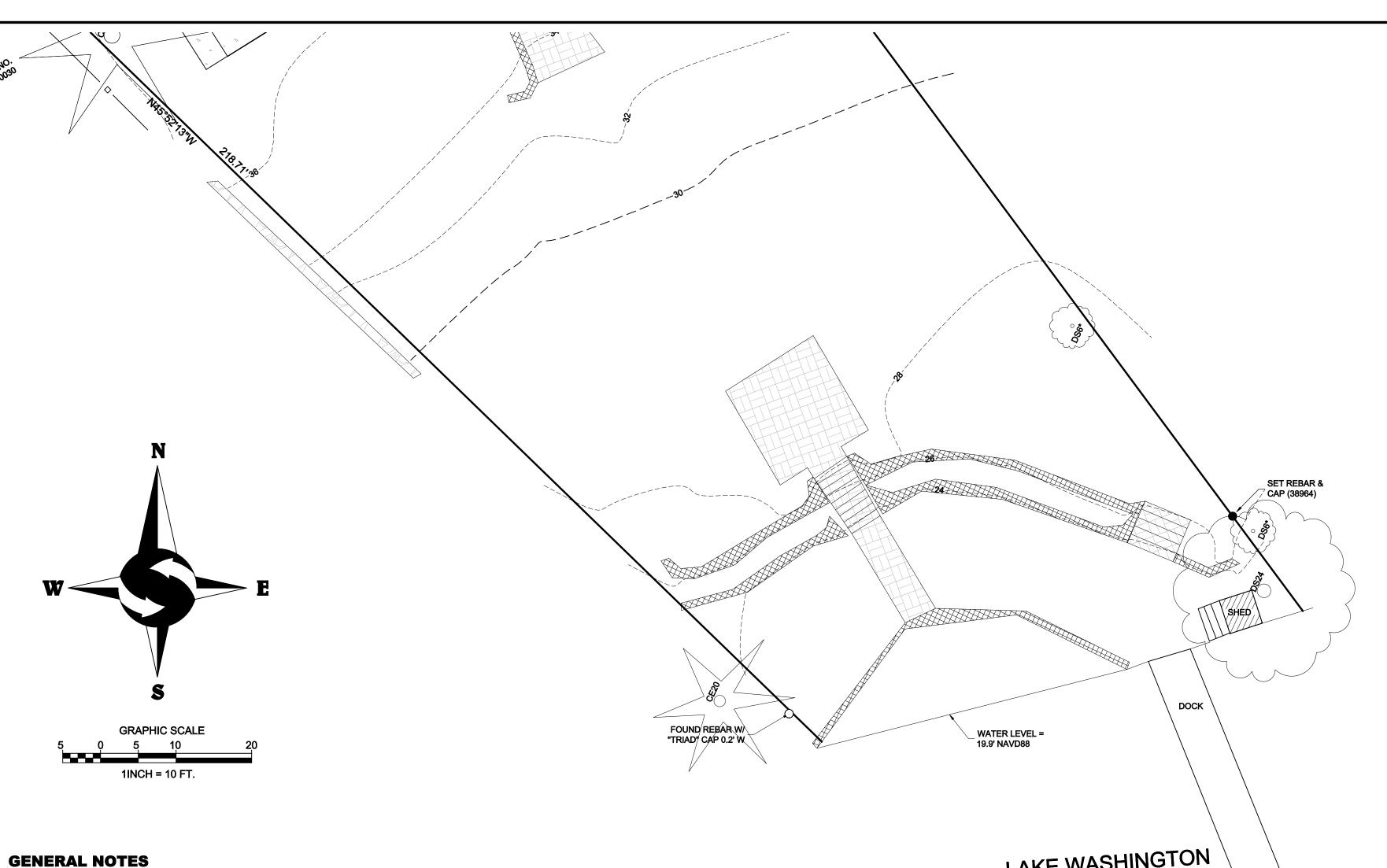
REVISIONS

DRAWN BY:

CHECKED BY: ENERGY CODE / VENTILATION **CALCULATIONS**

1/4" = 1'-0"







DOCK



VICINITY MAP

 ∞

POGRAPHIC SURVEY
SHARON NGUYEN
9831 SE 42ND PLACE
ERCER ISLAND, WA 98040

PROJECT NO. 16-207

DRAWN BY: EFJ CHECKED BY: TNW 6/20/16

DATE: SHEET 2 OF 2

LEGAL DESCRIPTION

CONDITIONS EXISTING AT THAT TIME.

ARE NOT SHOWN HEREON.

BY WAC 332-130-090.

MAY EXIST ON THIS SITE.

LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING;

THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT.
 EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT

STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET

3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN JUNE 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL

OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY

2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NPL 352 TOTAL

4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND

5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE

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

BASIS OF BEARINGS

THE PLAT OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON. ACCEPTED THE PLAT BEARING FOR SE 42ND PLACE BASED ON FOUND MONUMENTS.

VERTICAL DATUM & CONTOUR INTERVAL



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

POINT ID NO. 4155

MONUMENT IN CASE AT THE END OF THE CUL-DE-SAC OF 42ND PLACE SE, MERCER ISLAND. ELEVATION: 56.197 FEET (NAVD 88).

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

PROJECT INFORMATION

SURVEYOR:

SITE SURVEYING, INC. 21923 NE 11TH STREET SAMMAMISH, WA 98074 PHONE: 425.298.4412

PROPERTY OWNER: SHARON NGUYEN 9831 SE 42ND PLACE MERCER ISLAND, WA 98040

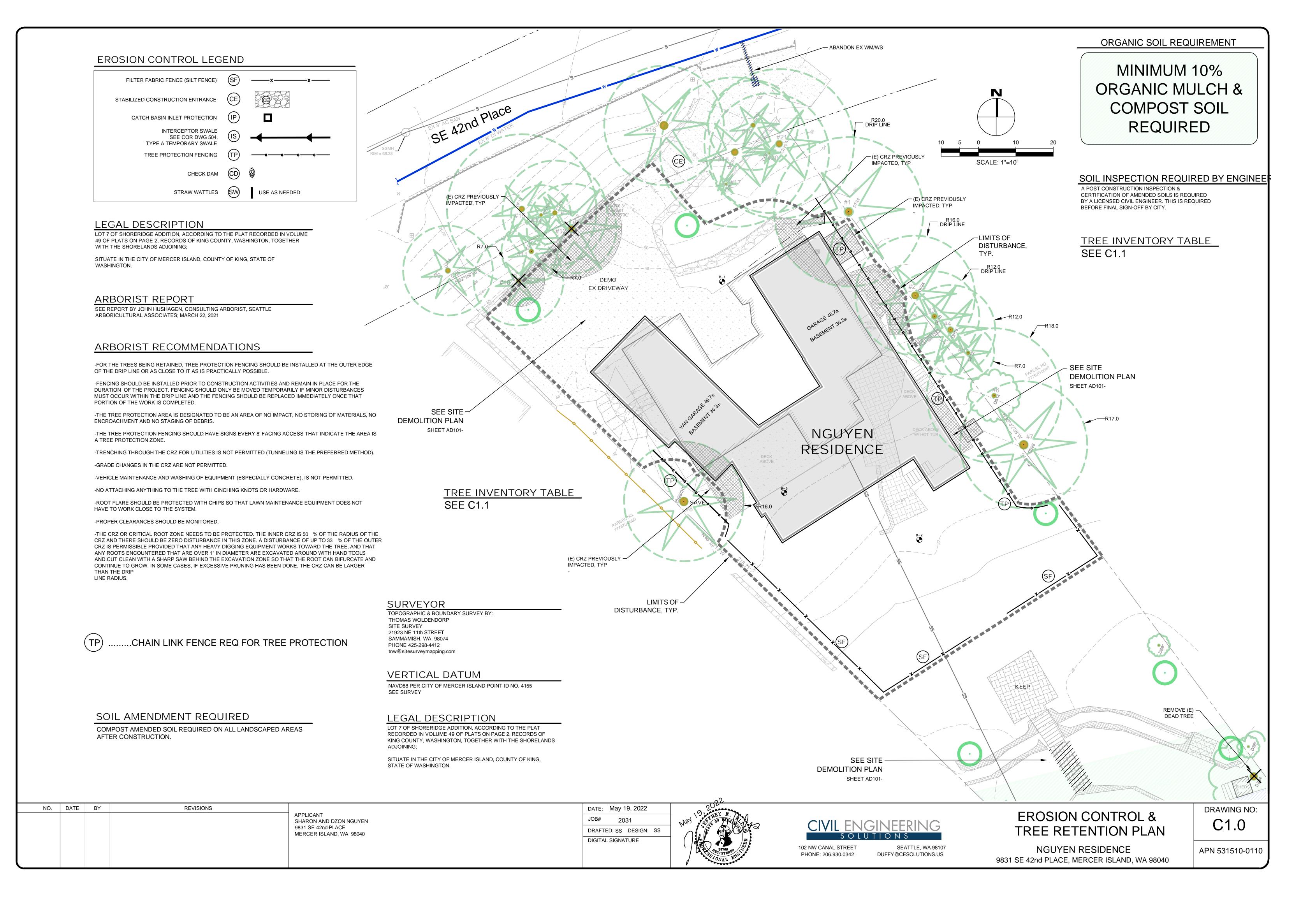
TAX PARCEL NUMBER: 9831 SE 42ND PLACE MERCER ISLAND, WA 98040 PROJECT ADDRESS:

ZONING:

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: UPLAND AS SURVEYED

16,953 S.F. (± 0.389 ACRES)



TREE REPLACEMENT

See replacement legend for tree species

TREE REPLACEMENT REQUIREMENTS:

Replacement conifer trees shall be 6-8 feet tall, each with a single, straight trunk without defect or deformity. Each tree shall have even branch distribution around and along the trunk's axis, with a minimum 90 % live crown ratio (percent of trunk with foliage-bearing branches).

Deciduous trees shall be minimum 2" caliper, a trunk free from defect or injury, even and uniform branch distribution,

and a LCR of 30 % or greater.

The trees shall have foliage that is normal in color and density, and shoot growth evident of good tree vitality.

Tree planting activities shall comply with ANSI A-300 Part 6:Tree, Shrub, and Other Woody Plant Maintenance -

Standard Practice (Transplanting). And shall follow ISAs Best Management Practices - Tree Planting (2005).

Rootballs shall be set on undisturbed or packed soil to prevent sinking, and the rootcrowns shall be exposed prior to planting and set level with finished grade. All wires, cords and burlap shall be removed at planting. If staking is required to keep the tree upright during establishment, all cores, stakes and wires shall be removed after one year.

TREE PROTECTION MEASURES AROUND RETAINED TREES

Prior to site clearing or demolition, minimum six (6) foot temporary chain-link fence shall be installed at the driplines of all retained trees, or at the limits of disturbance, when construction or access is required within the dripline. Fence shall completely encircle the retained trees. Install fence posts using pier block only. A City planner must approve any modifications to the fencing material and location. Fencing must be in accordance with the tree protection standards as outlined in KZC 95.34.

No stockpiling of materials, vehicular or pedestrian traffic, material storage or use of equipment or machinery shall be allowed within the protective fencing. Fencing shall not be moved or removed unless approved by a City planner. Any work, activity or soil disturbance within the protection fencing, or critical root zone, shall be reviewed, approved and monitored by the project arborist.

Protection guidelines be implemented on this project.

1. Root Zone Mulching: I recommend that prior to beginning demolition; enough arborist wood chips be brought in to cover the South areas of the drip line radius or CRZ of Tees #1-7 by 4-5". Avialable CRZ areas to East and North of Tree #8 should also be mulched. The purpose of mulching is to cool the soil, preserve the moisture and protect the roots. It will not be necessary to add mulch to the CRZ areas near Trees #9-20.

2. Root Zone Fencing: Simultaneously with mulching, a 6' tall, moveable chain link fence should be installed at the outer edge of the drip line radius of CRZ. The purpose of the fencing is to create a NO GO ZONE where no construction materials may be stored or equipment staged. Trees #1-8 and #9-16 should be fenced off in this wall.

3. Excavation: During excavation, if roots of protected trees that are 3" diameter or greater are encountered, they should be cut cleanly to the edge of the trench and not ripped from the ground.

4. Irrigation: Providing extra water to the root zones of trees is the MOST CRITICAL factor in preserving trees during and after construction. If the project takes place during the growing season, I recommend that all available CRZ areas receive, either from rainfall or supplemental irrigation, the equivalent of 1" of water per week from at least MAY 1 - SEPTEMBER 30. This watering program should continue for TWO YEARS following completion of the project.

Fencing signage as detailed (see attached) must be posted every fifteen (15) feet along the fencing.

Tree Protection Signage must include the following language:

WARNING TREE PROTECTION ZONE (TPZ)

This fence shall not be removed/moved from the approved location without written authorization from the City Arborist and supervision by the Project Arborist.

No pruning shall be performed unless under the direction of a Project Arborist.

No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.

Unauthorized activities in tree protection areas may require immediate evaluation by the Project Arborist to identify impacts and potential mitigation.

Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC)

Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).

Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenney@mercergov.org.

Per MICC 19.02.020(F)(3)(d), the project 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 (F)(3)(a) of this section. 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.

TREE RETENTION CALCULATION

TREE RETENTION CALCULATION
8 ONSITE TREES
30% RETENTION REQUIRED = (2.4) 3 TREES
PROPOSED REMOVAL = 3 TREES
PROPOSED RETAINAGE = 5 TREES (> 3 REQUIRED)

TREE INVENTORY TABLE

TREE #	OFFSITE	REMAIN	REMOV E	LARGE/REGULATED >10"	SIZE EXCEPTIONAL >24"	SIZE EXCEPTIONAL .36"	DBH (INCHES)	SPECIES	UNIMPACTED ROOT ZONE (SF)	PROPOSED IMPACT (SF)	HEALTH	COMMENT	REPLACEMENT
1		Χ		Х	Χ		24"	DOUGLAS FIR	1,012	90	GOOD		
2	X	χ		X	X		24"	DOUGLAS FIR	694	48	GOOD		
3	X	X		X	Λ		16"	DOUGLAS FIR	452	0	GOOD	NO PROPOSED IMPACT	*
4	X	X		X			18"	DOUGLAS FIR	439	0	GOOD	NO PROPOSED IMPACT	
5	X	X		X			12"	WESTERN RED CEDAR	154	0	GOOD	NO PROPOSED IMPACT	
6	X	X		X			14"	FLOWERING CHERRY	930	25	GOOD	110 1 110 1 0025 1111 1101	
7		X		X	Χ		28"	FLOWERING CHERRY	220	4	V. GOOD		
8		Х		Х	Χ	X	37"	WESTERN CEDAR	647	5	V. GOOD	DOUBLE STEMMED	*
9	Х	Χ		Χ			16"	DOUGLAS FIR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
10		- 1000	X	Х			14"	DOUGLAS FIR	72	0	FAIR	PROPOSED TO BE REMOVED	2:1
11		Χ		Х			12"	WESTERN RED CEDAR	112	0	GOOD	NO PROPOSED IMPACT	
12			X	Х			19"	DOUGLAS FIR	302	0	FAIR	PROPOSED TO BE REMOVED	2:1
13	Х	Χ	Î	Х			16"	WESTERN RED CEDAR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
14	Х	Х					10"	WESTERN RED CEDAR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
15	Х	Χ		Х			18"	DOUGLAS FIR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
16	X	X		Х	Χ		28.5"	WESTERN RED CEDAR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
18		X		X			20.5"	WESTERN RED CEDAR	N/A	N/A	FAIR	NO PROPOSED IMPACT	
19	Χ	X		Х			12"	TRUE FIR	N/A	N/A	POOR	NO PROPOSED IMPACT	
20		X		Х			18"	WESTERN RED CEDAR	N/A	N/A	POOR	NO PROPOSED IMPACT	
21			Χ				19"	WILLOW	N/A	N/A	DEAD	FELL IN STORM 2017-2018	2:1

NO. DATE BY REVISIONS

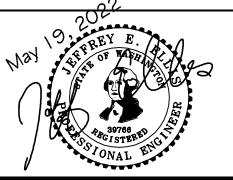
APPLICANT
SHARON AND DZON NGUYEN
9831 SE 42nd PLACE
MERCER ISLAND, WA 98040

DATE: May 19, 2022

JOB# 2031

DRAFTED: SS DESIGN: SS

DIGITAL SIGNATURE





DUFFY@CESOLUTIONS.US

PHONE: 206.930.0342

TREE RETENTION NOTES

C1.1

NGUYEN RESIDENCE 9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

NOT TO SCALE

2019 Stormwater Management Manual for Western Washington Volume II - Chapter 3 - Page 371

Figure II-3.1: Stabilized Construction Access

CONSTRUCTION ENTRANCE

Install driveway culvert if there is a oadside ditch present Driveway shall meet the requirements of the permitting agency. Provide full width It is recommended that of ingress/egress the access be crowned so that runoff drains off

2019 Stormwater Management Manual for Western Washington Volume II - Chapter 3 - Page 279

Stabilized Construction Access

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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,

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

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

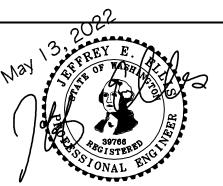
14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

- ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
- APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
- 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
- 4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.
- AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
- DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
- 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
- 15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
- ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING
- 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
- 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
- 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

NO. DATE BY **REVISIONS** APPLICANT SHARON AND DZON NGUYEN 9831 SE 42nd PLACE MERCER ISLAND, WA 98040

DATE: May 13, 2022 DRAFTED: SS DESIGN: DE DIGITAL SIGNATURE





DUFFY@CESOLUTIONS.US

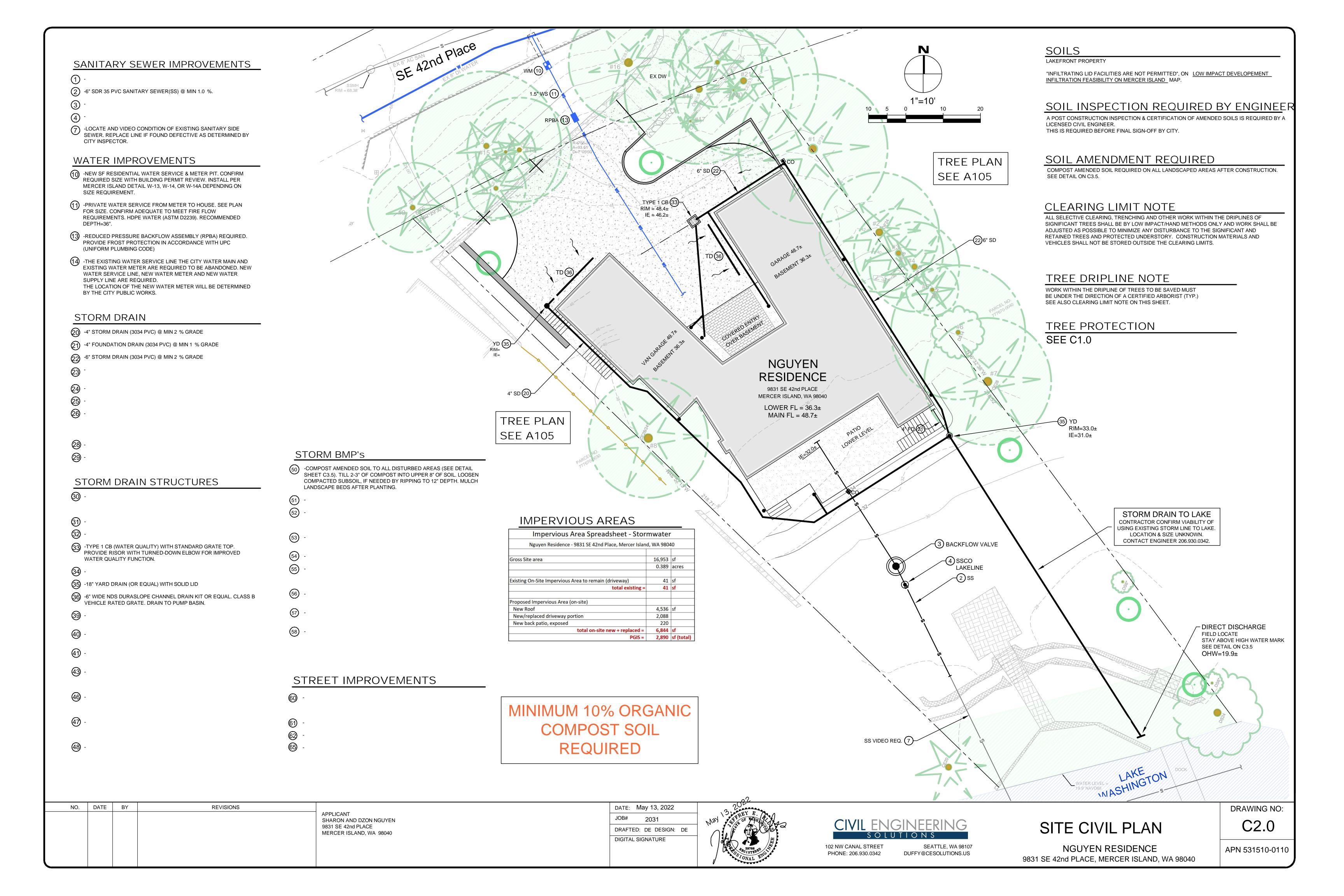
PHONE: 206.930.0342

TESC & CITY NOTES **TESC DETAILS**

DRAWING NO:

APN 531510-0110

NGUYEN RESIDENCE 9831 SE 42nd PLACE, MERCER ISLAND, WA 98040



MINIMUM 10% ORGANIC COMPOST SOIL REQUIRED

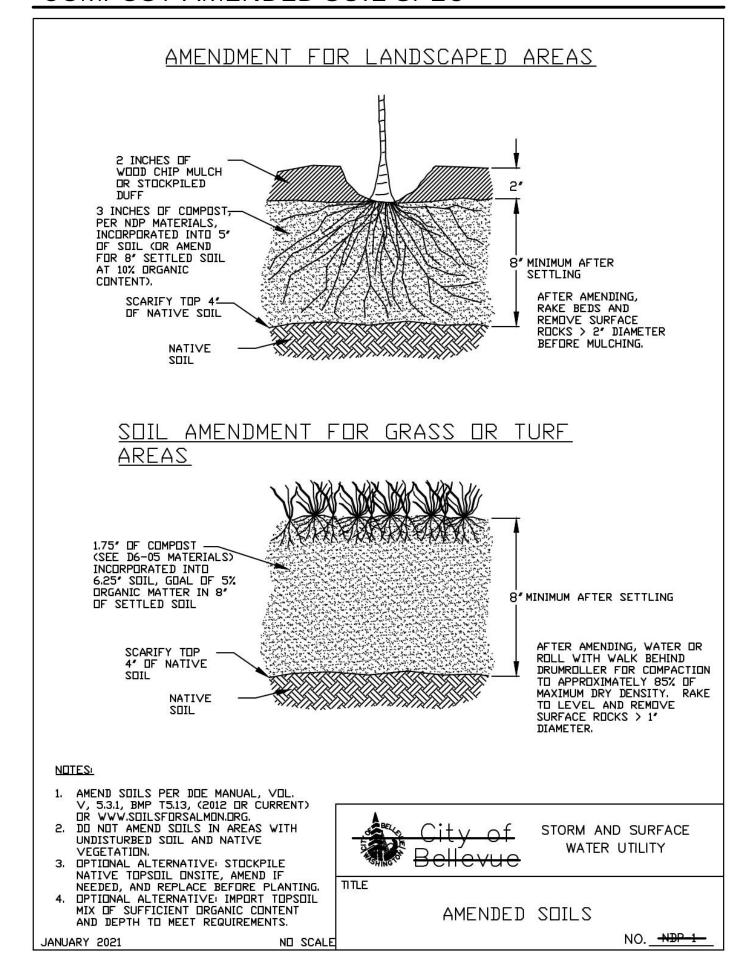
SOIL AMENDMENT REQUIRED

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



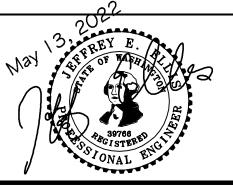
NO.	DATE	BY	REVISIONS	
				APPLICANT SHARON AND DZON NGUYEN 9831 SE 42nd PLACE MERCER ISLAND, WA 98040

DATE: May 13, 2022

JOB# 2031

DRAFTED: SS DESIGN: SS

DIGITAL SIGNATURE





BMP DETAILS

DRAWING NO:

NGUYEN RESIDENCE 9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

APN 531510-0110

Design Group

66 Bell Street Unit 1 Seattle, WA 98121

206.239.0850

brandtdesigninc.com

REGISTERED ARCHITECT STATE OF WASHINGTON

RESIDENCE

PERMIT DOCUMENTS

DATE: 05.19.22 SHEET SIZE: D (24X36) REVISIONS

DRAWN BY:

CHECKED BY: SITE DEMOLITION PLAN

1" = 10'-0"

AD101



CALCULATIONS

(E) LOT COVERAGE TO BE DEMOLISHED

ROOF, GARAGE, AND OVERHANGS DRIVING SURFACES

(E) HARDSCAPE TO REMAIN

PATIOS / WALKWAYS

R-2 R-3

R-4

SW-1

SW-2 SW-3

SW-4

D-S-3

D-S-4

D-S-5

D-P-1

D-P-2

D-P-3

D-P-4

D-P-5

D-G-1

D-R-2

D-R-3

D-R-4

D-SW-1

D-SW-2

D-SW-3

<u>LEGEND</u>

EL= 148.5' (+0'-0")

MAIN LEVEL FIN. FLR.

GRAVEL AREAS

ROCKERIES

SITE WALLS

TOTAL

PATIOS / WALKWAYS

(E) HARDSCAPE TO DEMOLISHED

ROCKERIES

SITE WALLS

TOTAL

DECKS

41.52 SF 20.52 SF **62.04 SF**

2,684.80 SF 1,814.11 SF

160 SF 4,658.91 SF

167.78 SF

206.30 SF

135.59 SF

237.10 SF

746.77 SF

162.13 SF

964.04 SF

397.33 SF

117.11 SF

234.11 SF

37.39 SF

1,912.11 SF

DEMOLISHED

REMAIN

42.64 SF 39.04 SF 86.10 SF

206.30 SF

64.01 SF 20.02 SF 16.28 SF

11.32 SF 23.96 SF

40.37 SF

30.71 SF

49.88 SF

9.95 SF

72.23 SF

19.15 SF

31.39 SF

25.96 SF

13.40 SF

673.60 SF

290.44 SF

85.54 SF

17.03 SF

20.98 SF

61.91 SF

211.87 SF

117.11 SF

175.03 SF

35.16 SF

4.64 SF

19.28 SF

3.96 SF

12.60 SF

20.83 SF

ELEVATION DATUM

ORDINARY HIGH

WATER MARK

PROPERTY LINE

ROOF OVERHANG

TREE PROTECTION FENCE

(E) SITE WALL TO REMAIN

106.19 SF

(E) LOT COVERAGE TO REMAIN

(E) DRIVING SURFACES

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Design Group

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RESIDENCE

PERMIT DOCUMENTS

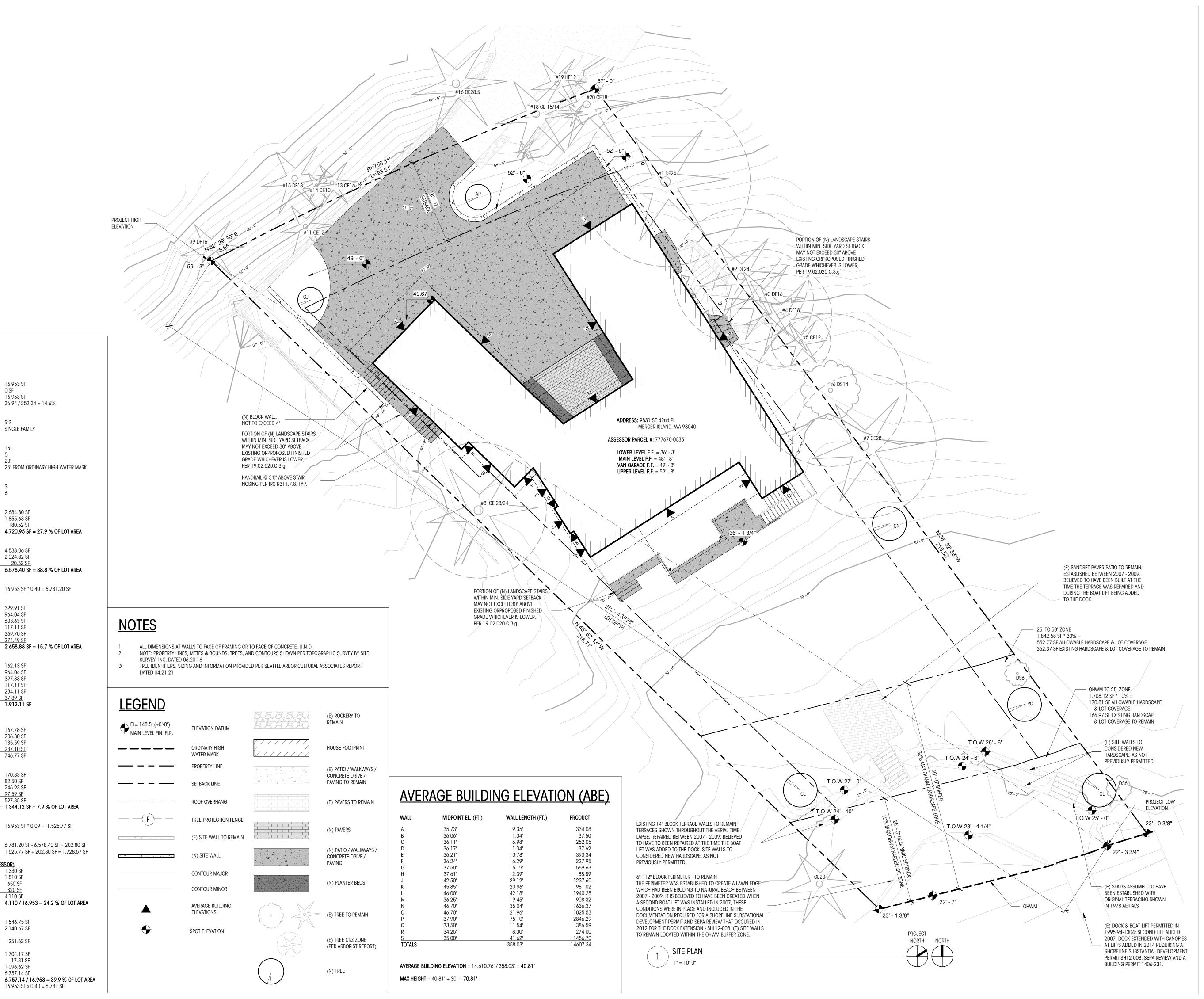
DATE: 05.19.22 D (24X36) SHEET SIZE: REVISIONS

DATE:

DRAWN BY: CHECKED BY: DEMOLITION LOT **COVERAGE SITE**

PLAN

1" = 10'-0"



PROJECT DATA

16,953 SF 0 SF

16,953 SF

SINGLE FAMILY

2,684.80 SF

1,855.63 SF

4,533.06 SF 2,024.82 SF

20.52 SF

329.91 SF

964.04 SF

603.63 SF

117.11 SF

369.70 SF

274.49 SF

162.13 SF

964.04 SF

397.33 SF

117.11 SF

234.11 SF

167.78 SF

206.30 SF

135.59 SF

237.10 SF

746.77 SF

170.33 SF

82.50 SF

246.93 SF

97.59 SF

597.35 SF

1,810 SF

650 SF

320 SF 4,110 SF

1,546.75 SF

2,140.67 SF

251.62 SF

1,704.17 SF

17.31 SF

1,096.62 SF

6,757.14 SF

(746.77+597.35) = 1,344.12 SF = 7.9 % OF LOT AREA

16,953 SF * 0.09 = 1,525.77 SF

37.39 SF 1,912.11 SF

16,953 SF * 0.40 = 6,781.20 SF

36.94 / 252.34 = 14.6%

EXISTING LOT AREA SUMMARY GROSS LOT AREA

SIDE YARD (PER 19.02.020.C.1.c.)

MINIMUM:

(E) TREES TO BE REMOVED

EXISTING LOT COVERAGE

E) DRIVING SURFACES

(E) TOTAL LOT COVERAGE

PROPOSED LOT COVERAGE

(N) DRIVING SURFACES (E) SHEDS TO REMAIN

(N) TOTAL LOT COVERAGE

EXISTING HARDSCAPE

PATIOS / WALKWAYS

GRAVEL AREAS

TOTAL EXISTING

PATIOS / WALKWAYS

TOTAL DEMOLISHED

PROPOSED HARDSCAPE

(E) HARDSCAPE TO REMAIN

PATIOS / WALKWAYS

TOTAL TO REMAIN

(N) ADDED HARDSCAPE

PATIOS / WALKWAYS

PER 19.02.020.F.3.b.ii., HARDSCAPE IMPROVEMENTS ARE

EXISTING BUILDING AREA SUMMARY (GFA) (PER KING COUNTY ASSESSOR)

PERMITTED IN THE MAXIMUM LOT COVERAGE AREA

ROCKERIES

SITE WALLS

STAIRS

DECKS

TOTAL HARDSCAPE

9% of Lot area

ALLOWABLE HARDSCAPE

REMAINING LOT COVERAGE

(E) BASEMENT LEVEL

(E) ATTACHED GARAGE

TOTAL EXISTING BUILDING AREA (GSF)

PROPOSED BUILDING AREA SUMMARY (GFA)

PROPOSED MAIN LEVEL COVERED DECK

PROPOSED UPPER LEVEL COVERED DECK

TOTAL PROPOSED BUILDING AREA (GSF)

PROPOSED ATTACHED GARAGES

PROPOSED FLOOR AREA RATIO: 40% ALLOWABLE GROSS FLOOR AREA:

(PER MICC CHAPTER 19.16.010.G.1.e.)

(EXCLUDES STAIR PER MICC 19.02.020.D.2.c.)

EXISTING FLOOR AREA RATIO:

PROPOSED BASEMENT LEVEL

PROPOSED MAIN LEVEL

PROPOSED UPPER LEVEL

(E) MAIN LEVEL

(E) UPPER LEVEL

TOTAL ALLOWABLE HARDSCAPE

SITE WALLS TOTAL ADDED

GRAVEL AREAS

ROCKERIES

SITE WALLS

DEMOLISHED HARDSCAPE

ROCKERIES

SITE WALLS

DECKS

STAIRS

DECKS

ALLOWABLE LOT COVERAGE

(N) TREES TO BE PLANTED AS REPLACEMENT

(E) RESIDENCE, GARAGE, AND OVERHANGS

(N) RESIDENCE, GARAGE, AND OVERHANGS

40% OF LOT AREA BASED ON LOT SLOPE, PER 19.02.020.F.3.a.

ACCESS EASEMENTS

OCCUPANCY SUMMARY

NET LOT AREA

EXISTING TYPE

<u>SETBACKS</u>

FRONT YARD

SHORELINE

(E) SHEDS

OCCUPANT LOAD

LOT SLOPE

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REGISTERED ARCHITECT STATE OF WASHINGTON

RESIDENCE

PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36) REVISIONS

DRAWN BY:

CHECKED BY:

SITE PLAN

As indicated

Design Group

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98121

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REGISTERED ARCHITECT STATE OF WASHINGTON

PERMIT DOCUMENTS

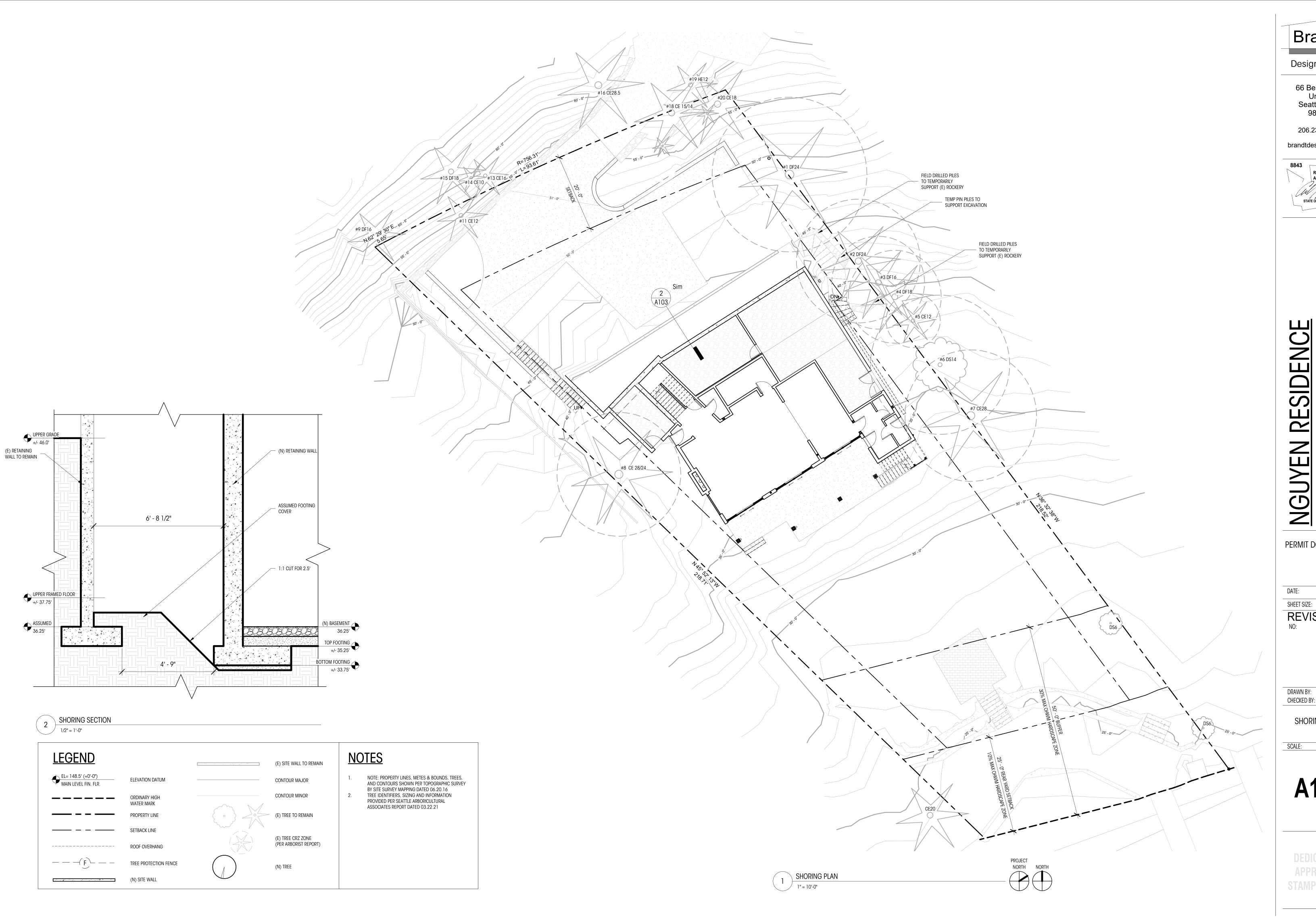
DATE: 05.19.22

D (24X36) SHEET SIZE: REVISIONS

DRAWN BY:

SETBACK SITE PLAN

1" = 10'-0"



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REGISTERED ARCHITECT STATE OF WASHINGTON

RESIDENCE

PERMIT DOCUMENTS

DATE:

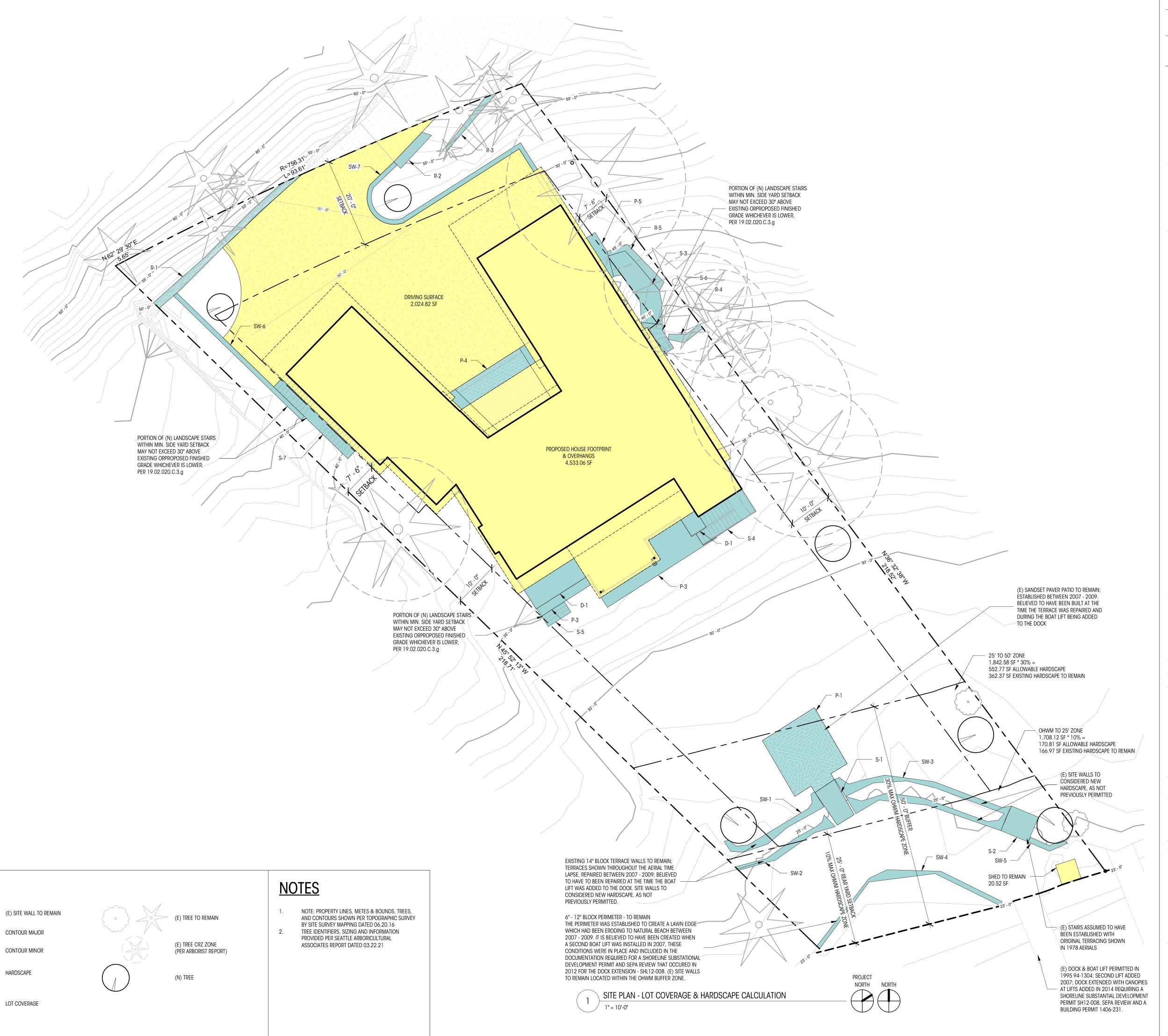
05.19.22 SHEET SIZE: D (24X36) REVISIONS NO: DATE:

DRAWN BY:

SHORING PLAN

As indicated

A103



CALCULATIONS

ROOF, GARAGE, AND OVERHANGS

(E) HARDSCAPE TO REMAIN

S-2

R-2

R-3

SW-1

SW-2

SW-3 SW-4

(N) PROPOSED HARDSCAPE

PATIOS / WALKWAYS

ROCKERIES

SITE WALLS

TOTAL

DECKS

SITE WALLS

TOTAL PRPOSED

TOTAL HARDSCAPE

PATIOS / WALKWAYS

P-4

SW-6

LEGEND

EL= 148.5' (+0'-0")

MAIN LEVEL FIN. FLR.

TOTAL ALLOWABLE (9% OF LOT AREA)

4,533.06 SF 2,024.82 SF

20.52 SF **6,578.40 SF**

167.78 SF

206.30 SF

135.59 SF

237.10 SF

746.77 SF

170.33 SF

82.50 SF

246.93 SF

97.59 SF

597.35 SF

746.77 + 597.35 = 1,344.12 SF

16,953 SF * 0.09 = 1,526 SF

42.64 SF

39.04 SF

86.10 SF

206.30 SF

64.01 SF

20.02 SF 16.28 SF

11.32 SF

23.96 SF

40.37 SF 30.71 SF

106.19 SF

49.88 SF

9.95 SF

74.90 SF

16.50 SF

21.43 SF 57.50 SF

82.50 SF

137.91 SF

90.16 SF

18.86 SF

39.60 SF

57.99 SF

ELEVATION DATUM

ORDINARY HIGH

WATER MARK

PROPERTY LINE

SETBACK LINE

ROOF OVERHANG

--- F $\overline{}$ Tree protection fence

LOT COVERAGE

SHEDS TOTAL

STAIRS

DRIVING SURFACES

Brandt

Design Group

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206.239.0850

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REGISTERED ARCHITECT

STATE OF WASHINGTON

STATE OF WASHINGTON

NGUYEN RESIDENCE

NB31 SE 42nd PLACE
AERCER ISLAND, WA 98040

PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO: DATE:

DRAWN BY:
CHECKED BY:
PROPOSED LOT
COVERAGE SITE
PLAN

CALE: 1" = 10'-0"

A104

DEDICATED
APPROVAL
STAMP SPACE

TREE REPLACEMENT

TREE REPLACEMENT REQUIREMENTS:

- Replacement conifer trees shall be 6-8 feet tall, each with a single, straight trunk without defect or deformity. Each tree shall have even branch distribution around and along the trunk's axis, with a minimum 90% live crown ratio
- Deciduous trees shall be minimum 2" caliper, a trunk free from defect or injury, even and uniform branch distribution, and a LCR of 30% or greater.
- The trees shall have foliage that is normal in color and density, and shoot growth evident of good tree vitality. Tree planting activities shall comply with ANSI A-300 Part 6:Tree, Shrub, and Other Woody Plant Maintenance – Standard Practice (Transplanting). And shall follow ISAs Best Management Practices – Tree Planting (2005).
- Rootballs shall be set on undisturbed or packed soil to prevent sinking, and the rootcrowns shall be exposed prior to planting and set level with finished grade. All wires, cords and burlap shall be removed at planting. If staking is required to keep the tree upright during establishment, all cores, stakes and wires shall be removed after one year. See replacement legend for tree species

TREE PROTECTION MEASURES AROUND RETAINED TREES Prior to site clearing or demolition, minimum six (6) foot temporary chain-link fence shall be installed at the driplines of all retained trees, or at the limits of disturbance, when construction or access is required within the dripline. Fence shall completely encircle the retained trees. Install fence posts using pier block only. A City planner must approve any modifications to the fencing material and location. Fencing must be in accordance with the tree protection standards as

No stockpiling of materials, vehicular or pedestrian traffic, material storage or use of equipment or machinery shall be allowed within the protective fencing. Fencing shall not be moved or removed unless approved by a City planner. Any work, activity or soil disturbance within the protection fencing, or critical root zone, shall be reviewed, approved and monitored by the project arborist.

Protection guidelines be implemented on this project.

outlined in KZC 95.34.

1. Root Zone Mulching: I recommend that prior to beginning demolition; enough arborist wood chips be brought in to cover the South areas of the drip line radius or CRZ of Tees #1-7 by 4-5". Avialable CRZ areas to East and North of Tree #8 should also be mulched. The purpose of mulching is to cool the soil, preserve the moisture and protect the roots. It will not be necessary to add mulch to the CRZ areas near Trees #9-20.

2. Root Zone Fencing: Simultaneously with mulching, a 6' tall, moveable chain link fence should be installed at the outer edge of the drip line radius of CRZ. The purpose of the fencing is to create a NO GO ZONE where no construction materials may be stored or equipment staged. Trees #1-8 and #9-16 should be fenced off in this wall.

cut cleanly to the edge of the trench and not ripped from the ground. 4. Irrigation: Providing extra water to the root zones of trees is the MOST CRITICAL factor in preserving trees during and after construction. If the project takes place during the growing season, I recommend that all available CRZ areas receive, either from rainfall or supplemental irrigation, the equivalent of 1" of water per week from at least MAY 1 - SEPTEMBER 30. This

3. Excavation: During excavation, if roots of protected trees that are 3" diameter or greater are encountered, they should be

Fencing signage as detailed (see attached) must be posted every fifteen (15) feet along the fencing.

watering program should continue for TWO YEARS following completion of the project.

Tree Protection Signage must include the following language:

WARNING TREE PROTECTION ZONE (TPZ)

•This fence shall not be removed/moved from the approved location without written authorization from the City Arborist and supervision by the Project Arborist. •No pruning shall be performed unless under the direction of a Project Arborist.

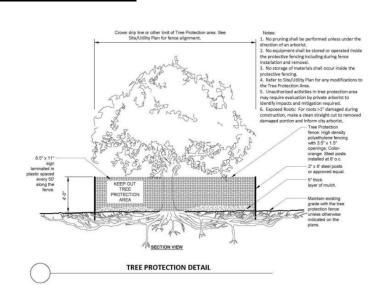
•No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing. •Unauthorized activities in tree protection areas may require immediate evaluation by the Project Arborist to identify impacts

and potential mitigation •Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC

19.10.160). •Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenney@mercergov.org.

Per MICC 19.02.020(F)(3)(d), the project 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 (F)(3)(a) of this section. New landscaping associated with new singlefamily 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.

TREE RETENTION



REPLACEMENT TREE LEGEND



KATSURA: CORICIDIPHYLLUM JAPORICA



SHORE PINE: PINUS CONTORTA



RED JAPANESE MAPLE: ACER PALMATUM



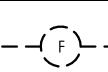
'EDDIES WHITE WONDER' DOGWOOD CORNUS NUTALIIX FLORIDA

WEEPING BLUE ATLAS CEDAR: CEDRUS LIBANI (GLAUCA PENDLUA)

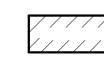
TREE RETENTION CALCULATION

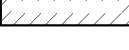
TREE RETENTION CALCULATION 8 ONSITE TREES 30% RETENTION REQUIRED = (2.4) 3 TREES PROPOSED REMOVAL = 3 TREES PROPOSED RETAINAGE = 5 TREES (> 3 REQUIRED)

SURFACE LEGEND









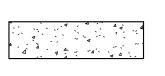






(E) TREE CRZ ZONE

(PER ARBORIST REPORT)





PORTION OF (E) CRZ PREVIOUSLY IMPACTED

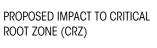
TREE INVENTORY SCHEDULE







ROOT ZONE (CRZ)





TREE TO BE REMOVED

TRUE FIR X

CONC. PAVERS

(N) RESIDENCE

PROPOSED TREE PLAN

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PERMIT DOCUMENTS

DATE: 05.19.22

REVISIONS

CHECKED BY:

25' TO 50' ZONE 1,842.58 SF * 30% =

552.77 SF ALLOWABLE HARDSCAPE & LOT COVERAGE 362.37 SF EXISTING HARDSCAPE & LOT COVERAGE TO REMAIN

OHWM TO 25' ZONE

& LOT COVERAGE

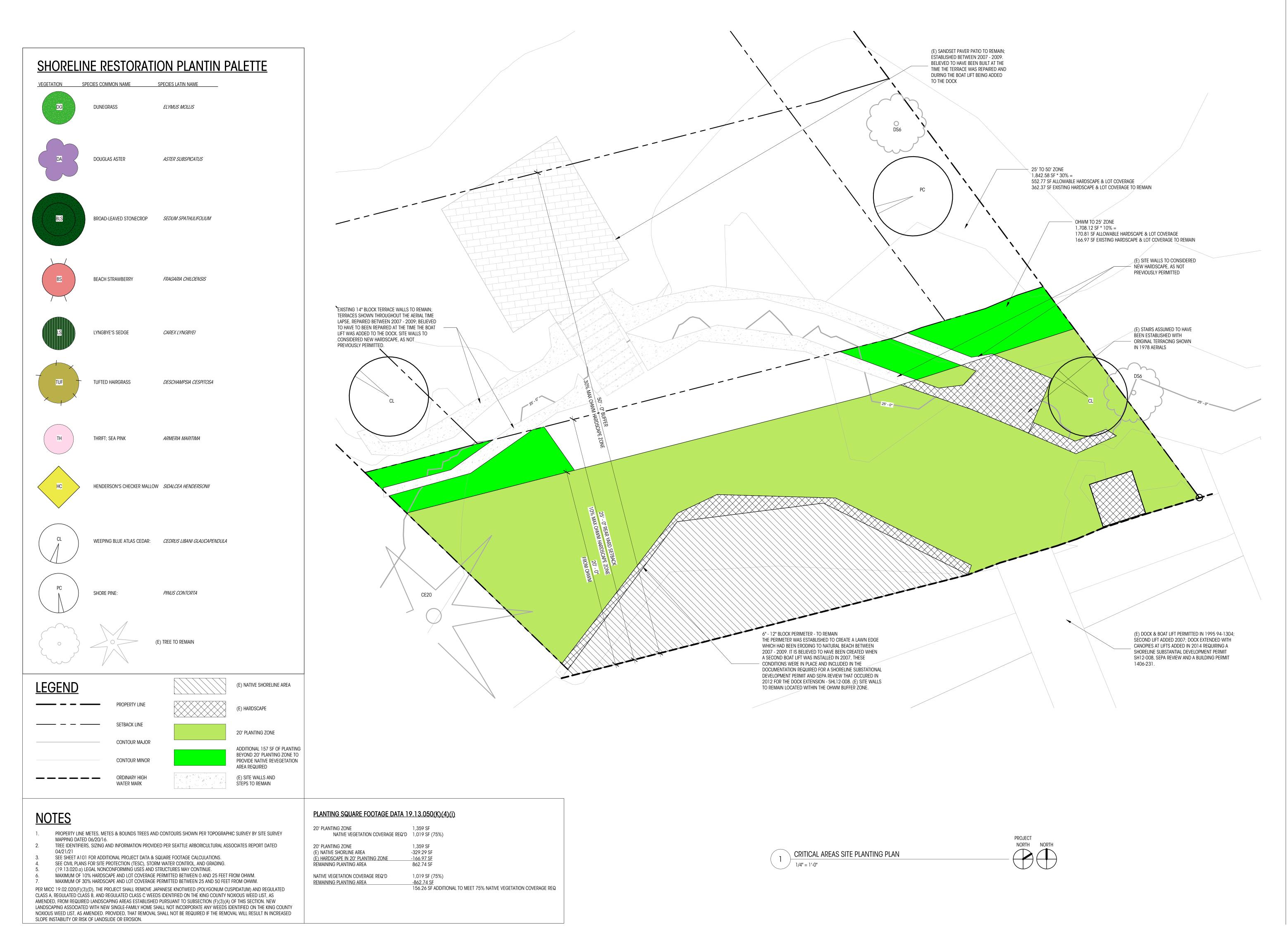
1,708.12 SF * 10% = 170.81 SF ALLOWABLE HARDSCAPE

166.97 SF EXISTING HARDSCAPE & LOT COVERAGE TO REMAIN

> TREE RETENTION PLAN

As indicated

A105



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REGISTERED ARCHITECT

STATE OF WASHINGTON

SUYEN RESIDEI

PERMIT DOCUMENTS

DATE: 05.19.22

REVISIONS
NO: DATE:

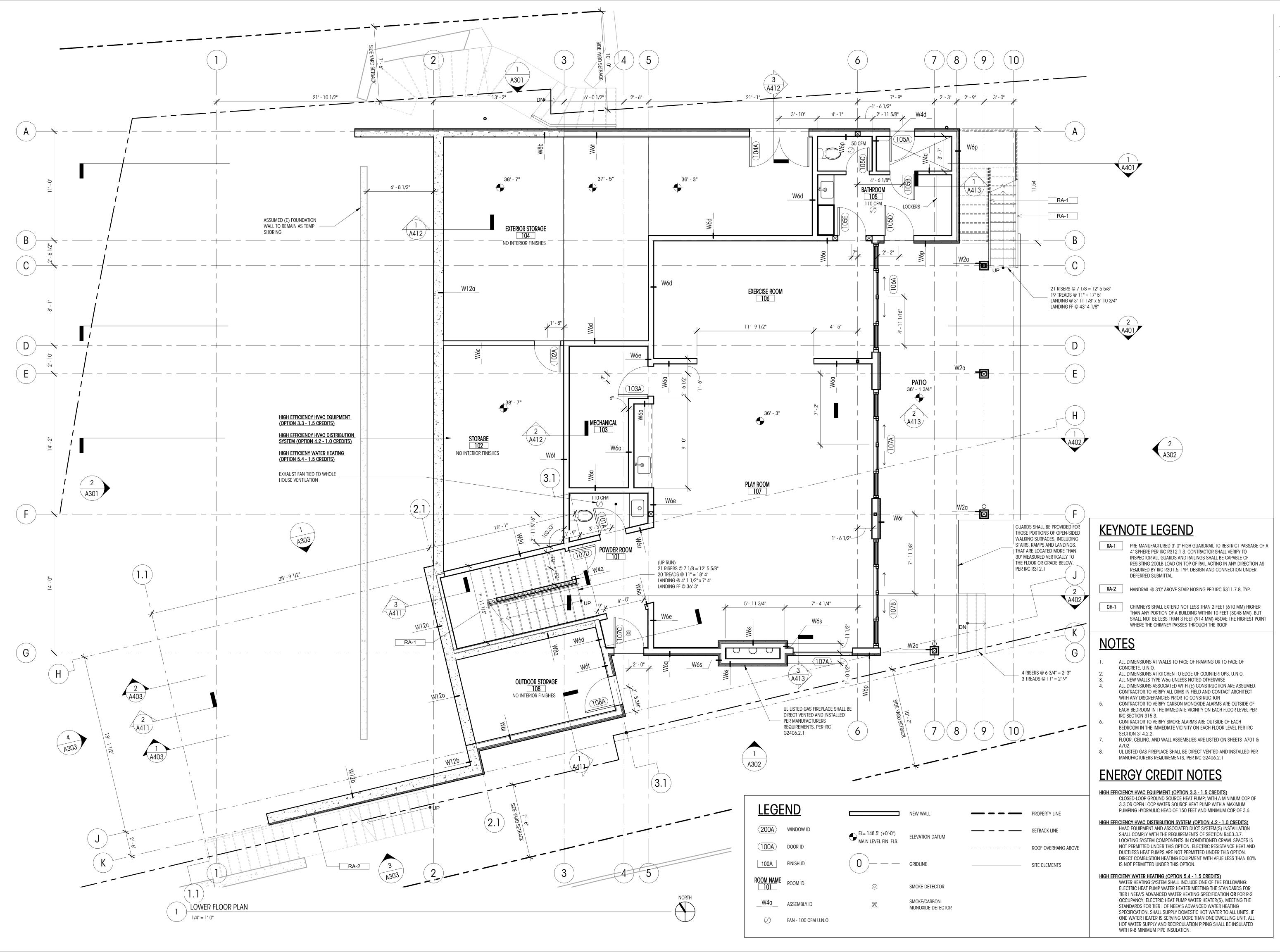
DRAWN BY: CHECKED BY:

CRITICAL AREAS SITE PLANTING PLAN

CALE: As indicated

A106

DEDICATED
APPROVAL



Design Group

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8843 REGISTERED ARCHITECT STATE OF WASHINGTON

RESIDENCE

PERMIT DOCUMENTS

DATE: 05.19.22 SHEET SIZE: D (24X36) **REVISIONS**

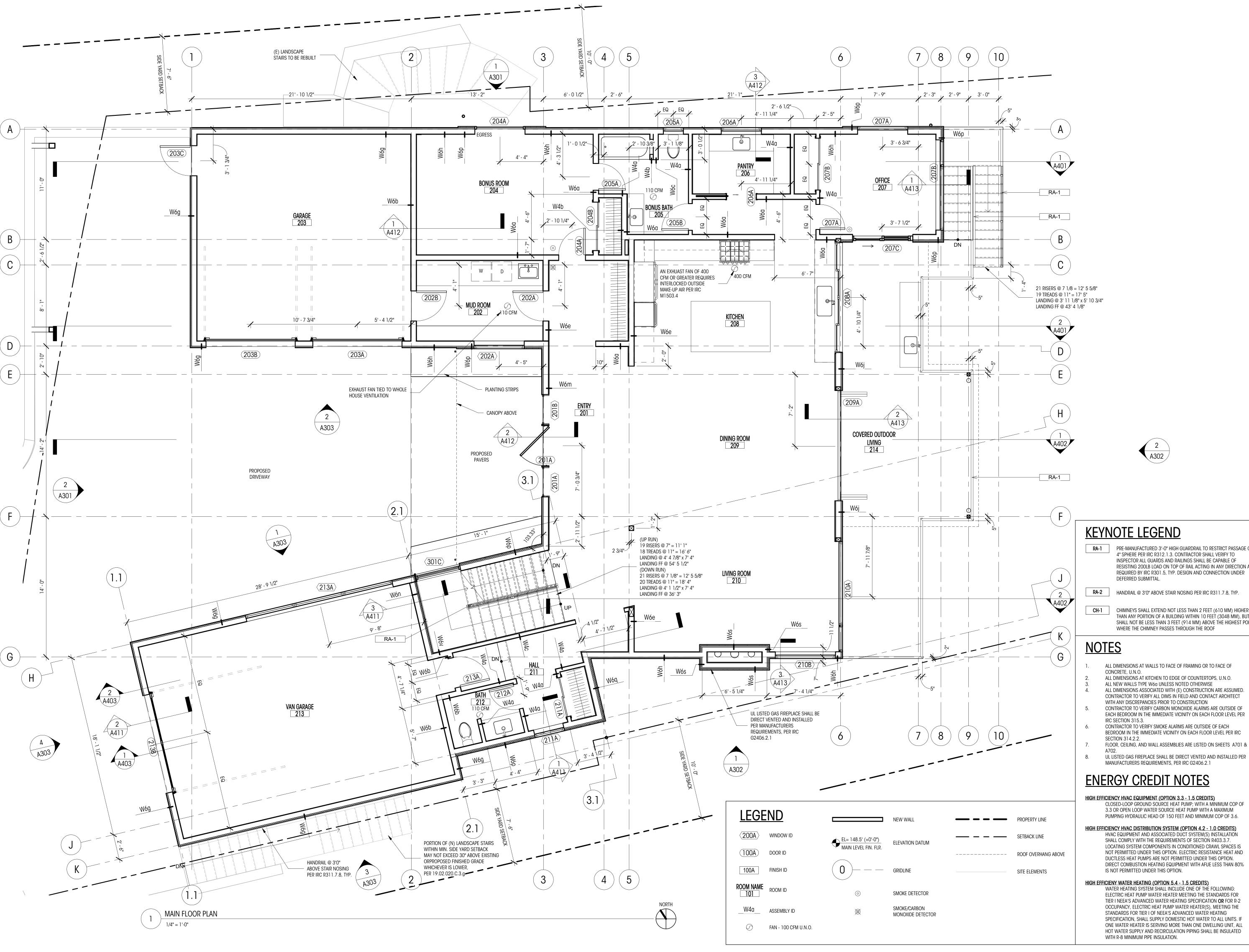
DATE:

DRAWN BY:

CHECKED BY:

LOWER FLOOR PLAN

1/4" = 1'-0"



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98121

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8843 REGISTERED ARCHITECT

STATE OF WASHINGTON

RESIDENCE

PERMIT DOCUMENTS

REVISIONS

05.19.22

D (24X36)

DATE:

DATE:

SHEET SIZE:

RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS

RA-2 HANDRAIL @ 3'0" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.

CH-1 CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF

- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF
- ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O. ALL NEW WALLS TYPE W6a UNLESS NOTED OTHERWISE ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT
- CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 315.3.
- CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC FLOOR, CEILING, AND WALL ASSEMBLIES ARE LISTED ON SHEETS A701 &
- UL LISTED GAS FIREPLACE SHALL BE DIRECT VENTED AND INSTALLED PER MANUFACTURERS REQUIREMENTS, PER IRC G2406.2.1

ENERGY CREDIT NOTES

HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS) CLOSED-LOOP GROUND SOURCE HEAT PUMP; WITH A MINIMUM COP OF 3.3 OR OPEN LOOP WATER SOURCE HEAT PUMP WITH A MAXIMUM PUMPING HYDRAULIC HEAD OF 150 FEET AND MINIMUM COP OF 3.6.

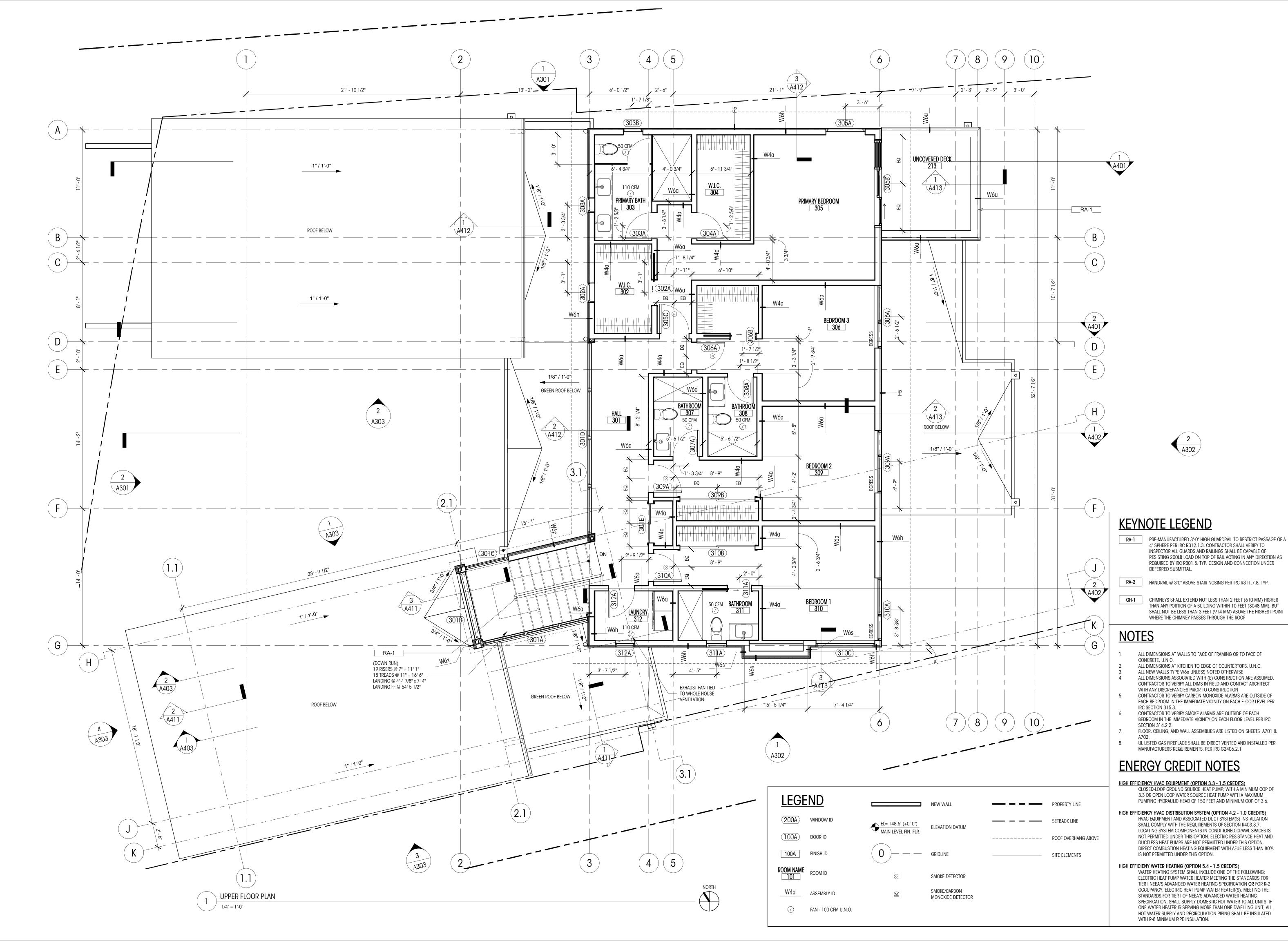
HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (OPTION 4.2 - 1.0 CREDITS) HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.

HIGH EFFICIENY WATER HEATING (OPTION 5.4 - 1.5 CREDITS) WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER I NEEA'S ADVANCED WATER HEATING SPECIFICATION **OR** FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER(S), MEETING THE STANDARDS FOR TIER I OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED

DRAWN BY: CHECKED BY:

MAIN FLOOR PLAN

1/4" = 1'-0"



Design Group

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STATE OF WASHINGTON

NGUYEN RESIDENCE

PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO: DATE:

DRAWN BY:

CHECKED BY:

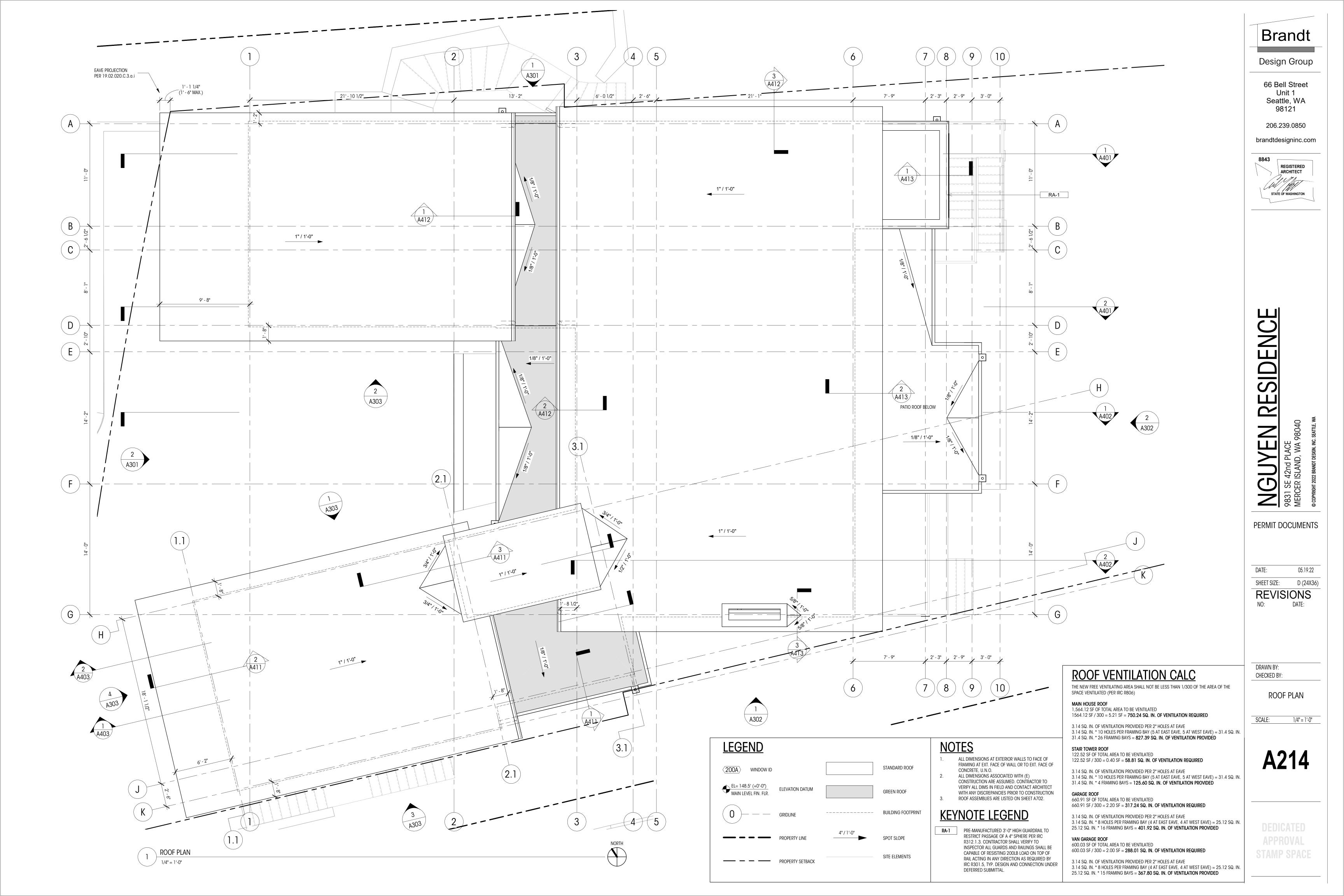
UPPER FLOOR PLAN

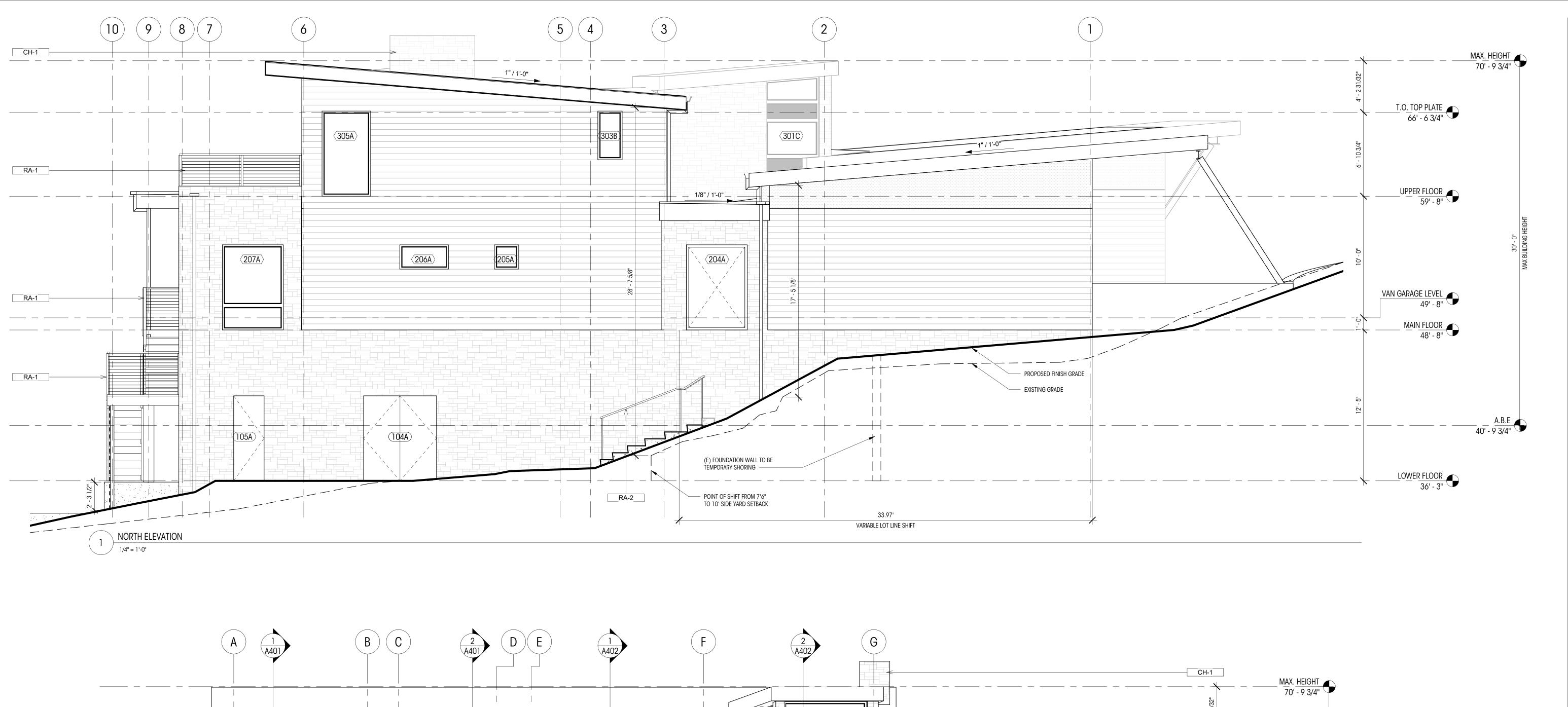
NLE: 1/4" = 1'-0"

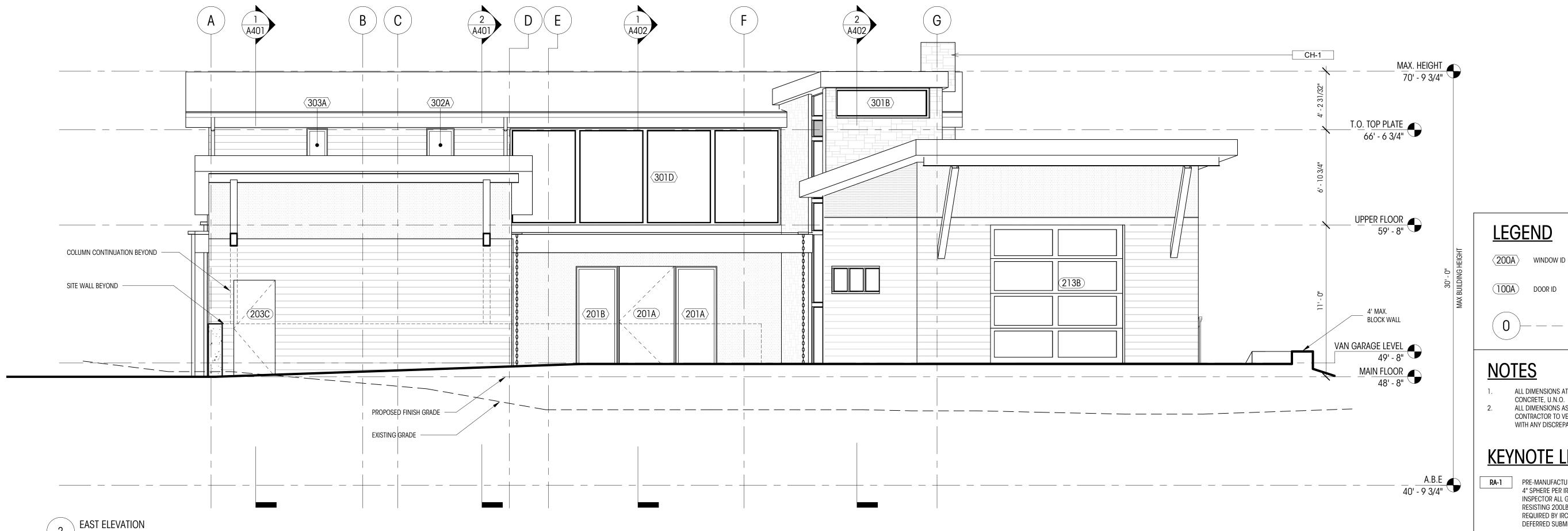
1040

4213

DEDICATED APPROVAL STAMP SPACE







Design Group

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Unit 1 Seattle, WA 98121

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RESIDENCE

PERMIT DOCUMENTS

DATE: 05.19.22 SHEET SIZE: D (24X36) REVISIONS

DRAWN BY:

CHECKED BY:

PROPOSED GRADE

EXTERIOR ELEVATIONS (N&E)

1/4" = 1'-0"

A301

APPROVAL

KEYNOTE LEGEND

CONCRETE, U.N.O.

RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER

ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF

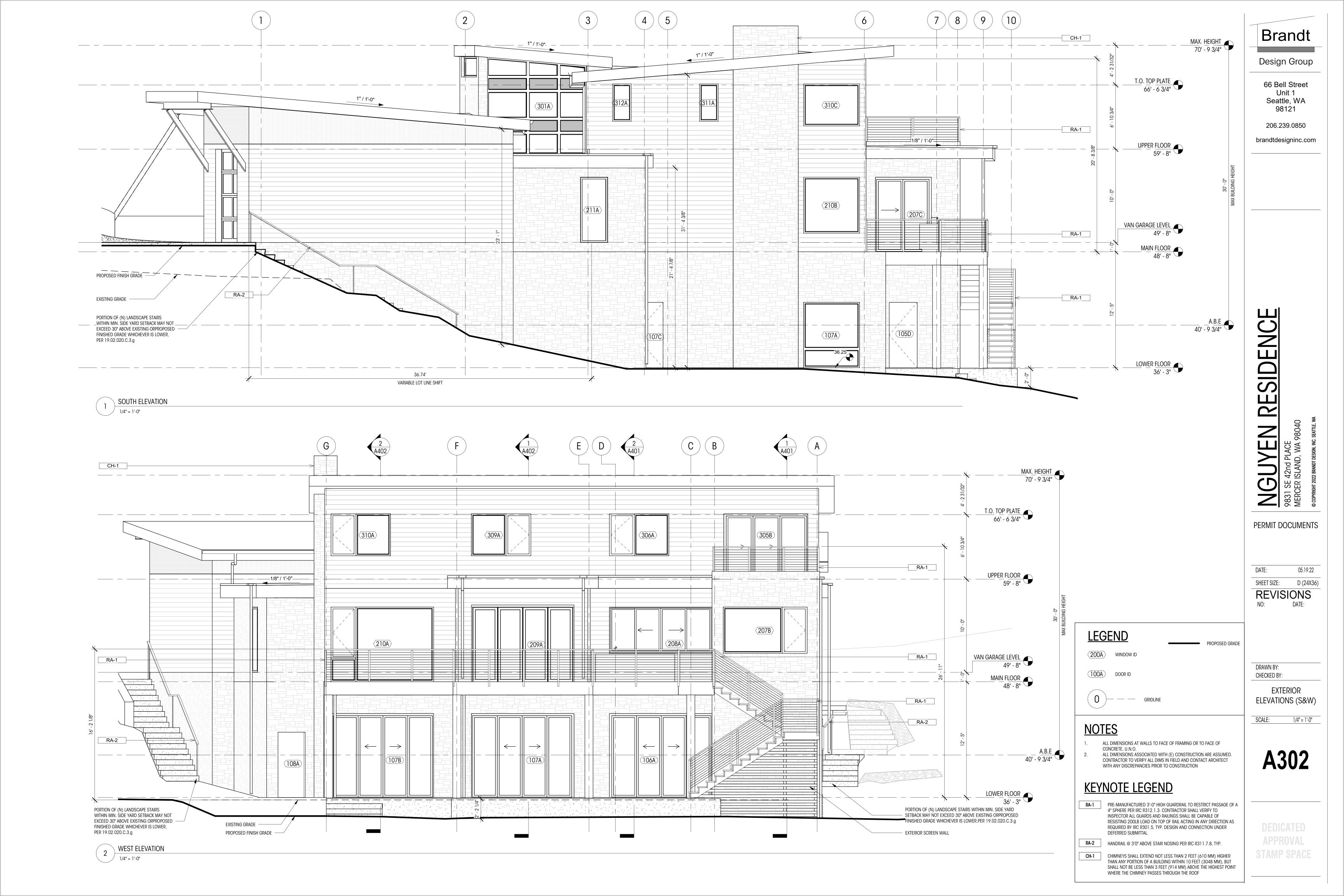
WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

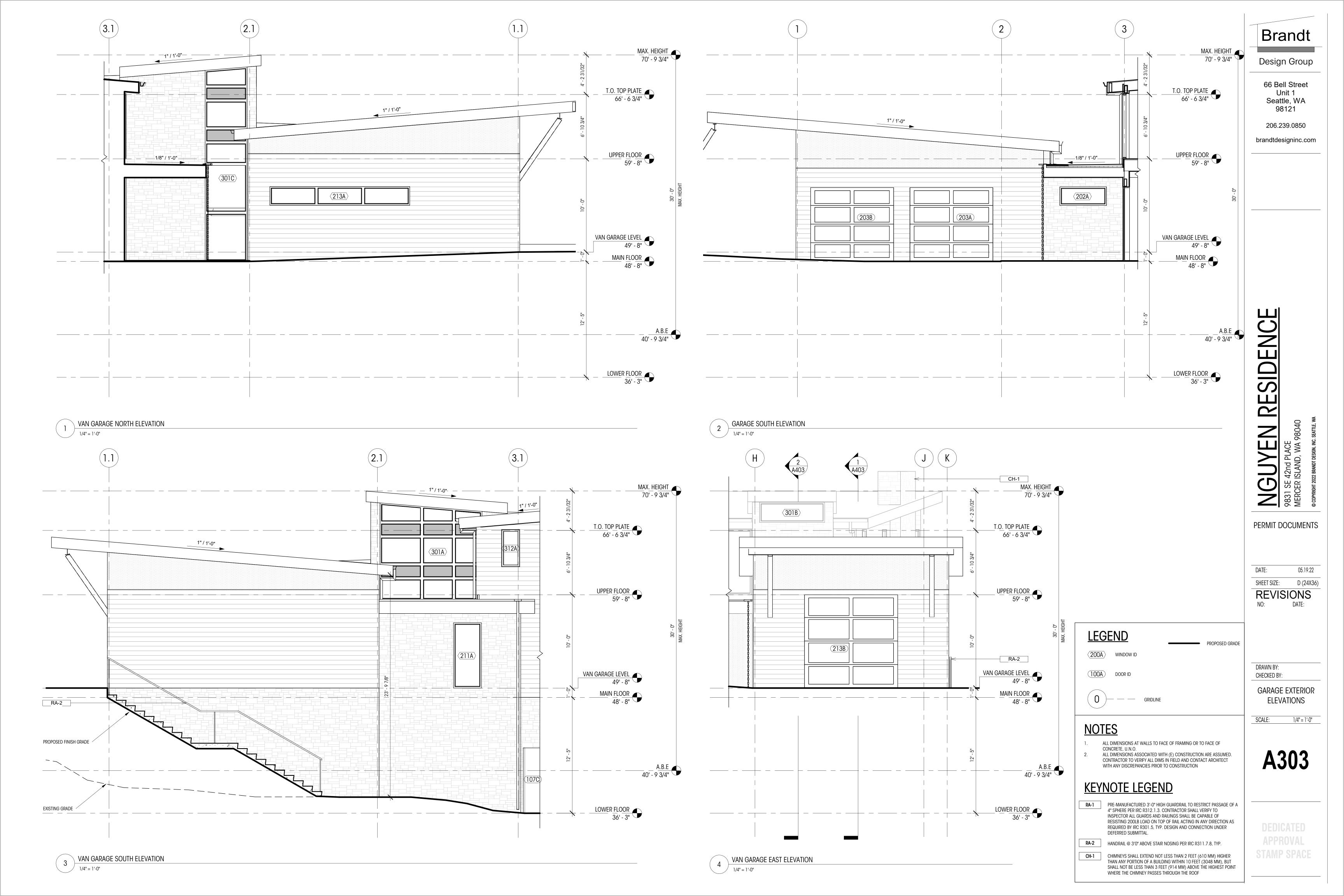
ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT

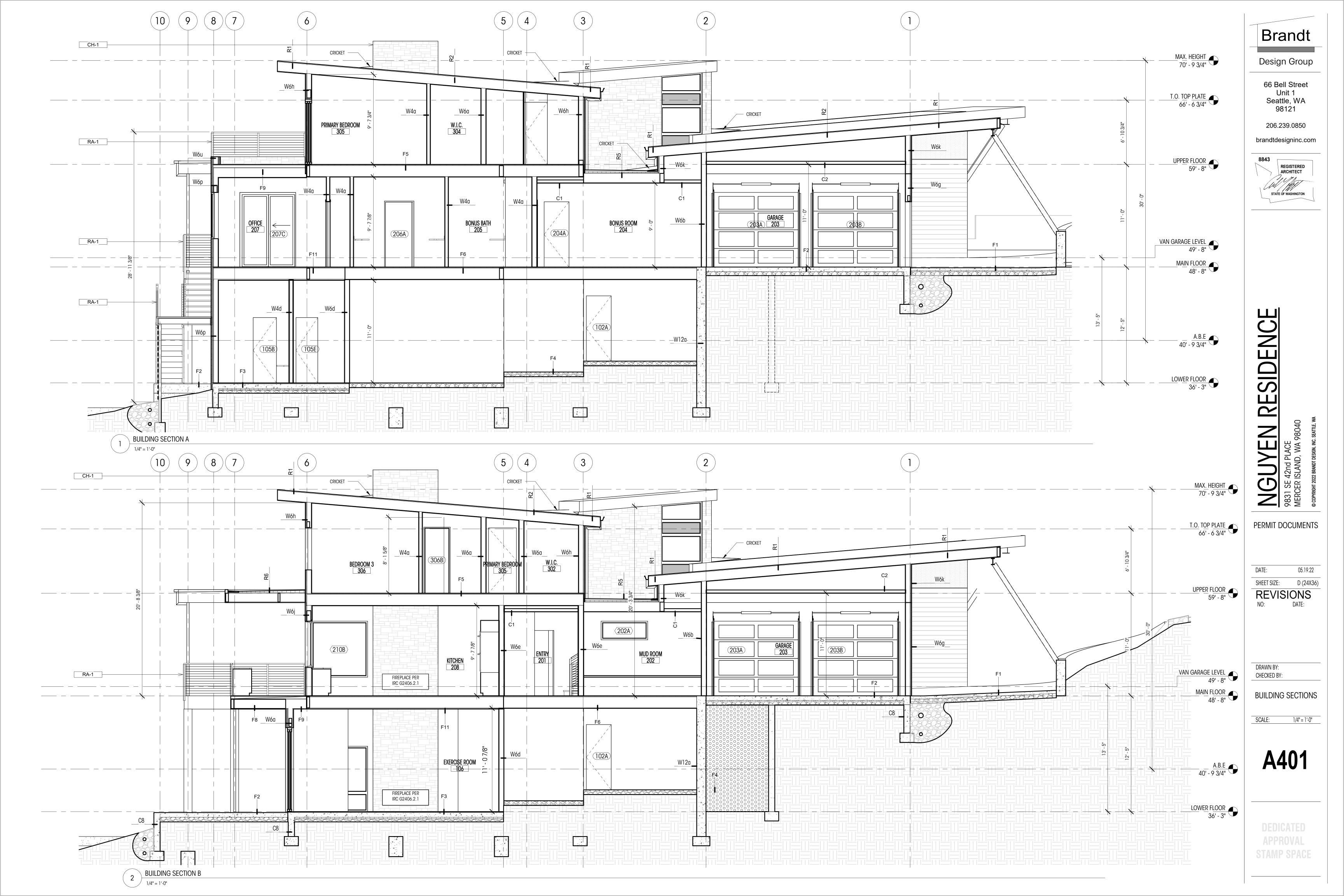
DEFERRED SUBMITTAL. RA-2 HANDRAIL @ 3'0" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.

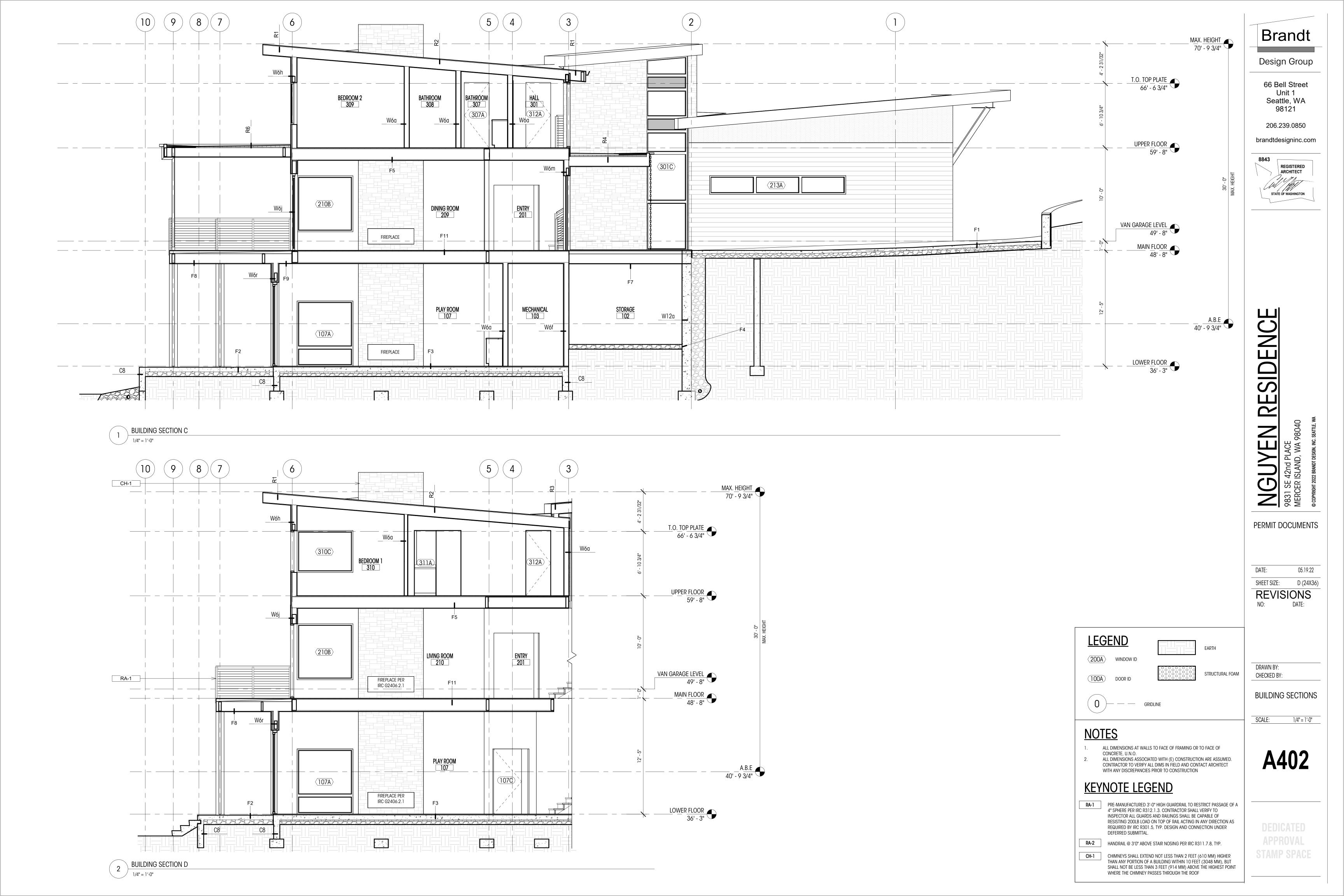
CH-1 CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF

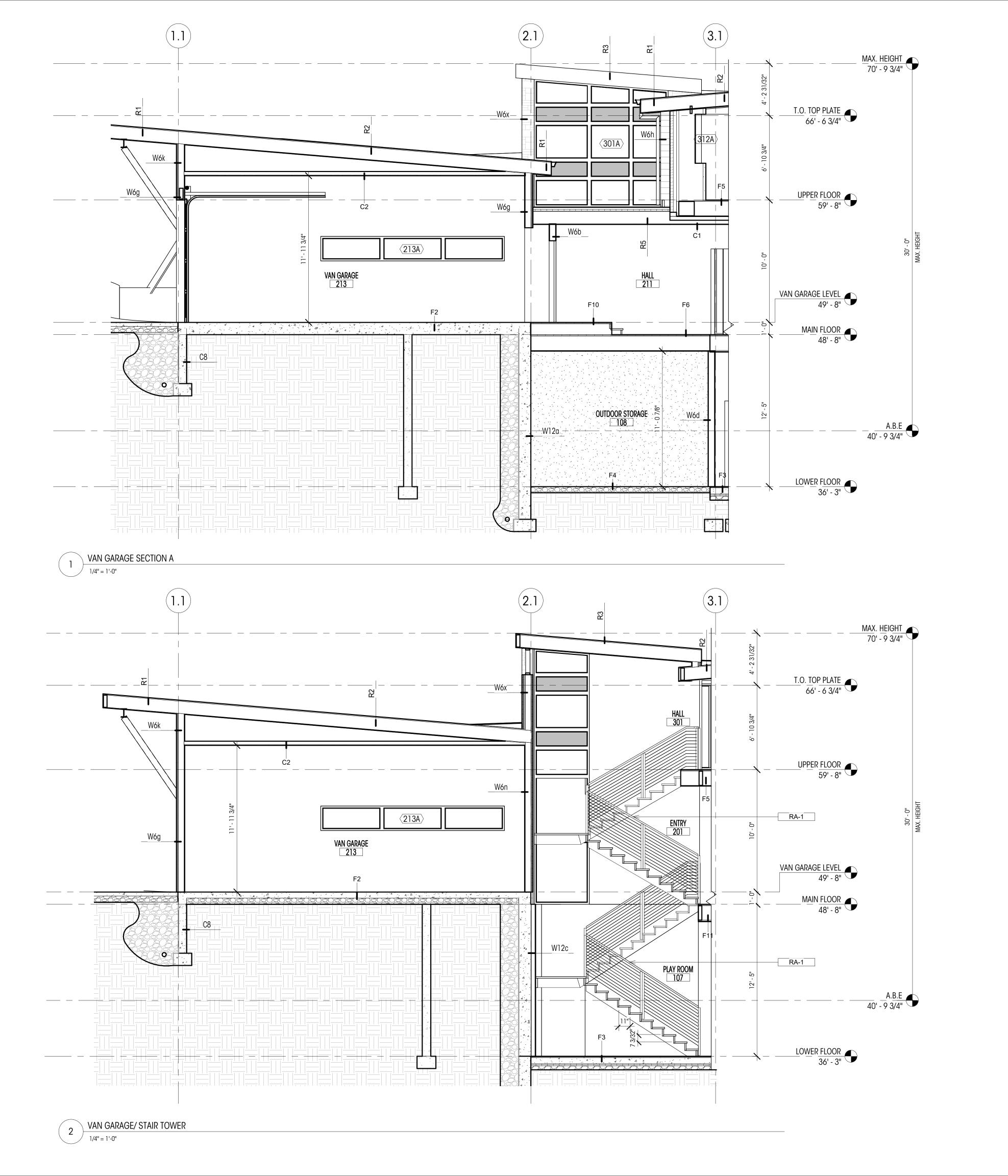
2 EAST ELEV











Design Group

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RESIDENCE

PERMIT DOCUMENTS

REVISIONS

05.19.22

D (24X36)

<u>LEGEND</u>

NOTES

 $\langle 200A \rangle$ WINDOW ID

STRUCTURAL FOAM CHECKED BY:

DATE:

SHEET SIZE:

BUILDING SECTIONS

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

APPROVAL

KEYNOTE LEGEND

RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.

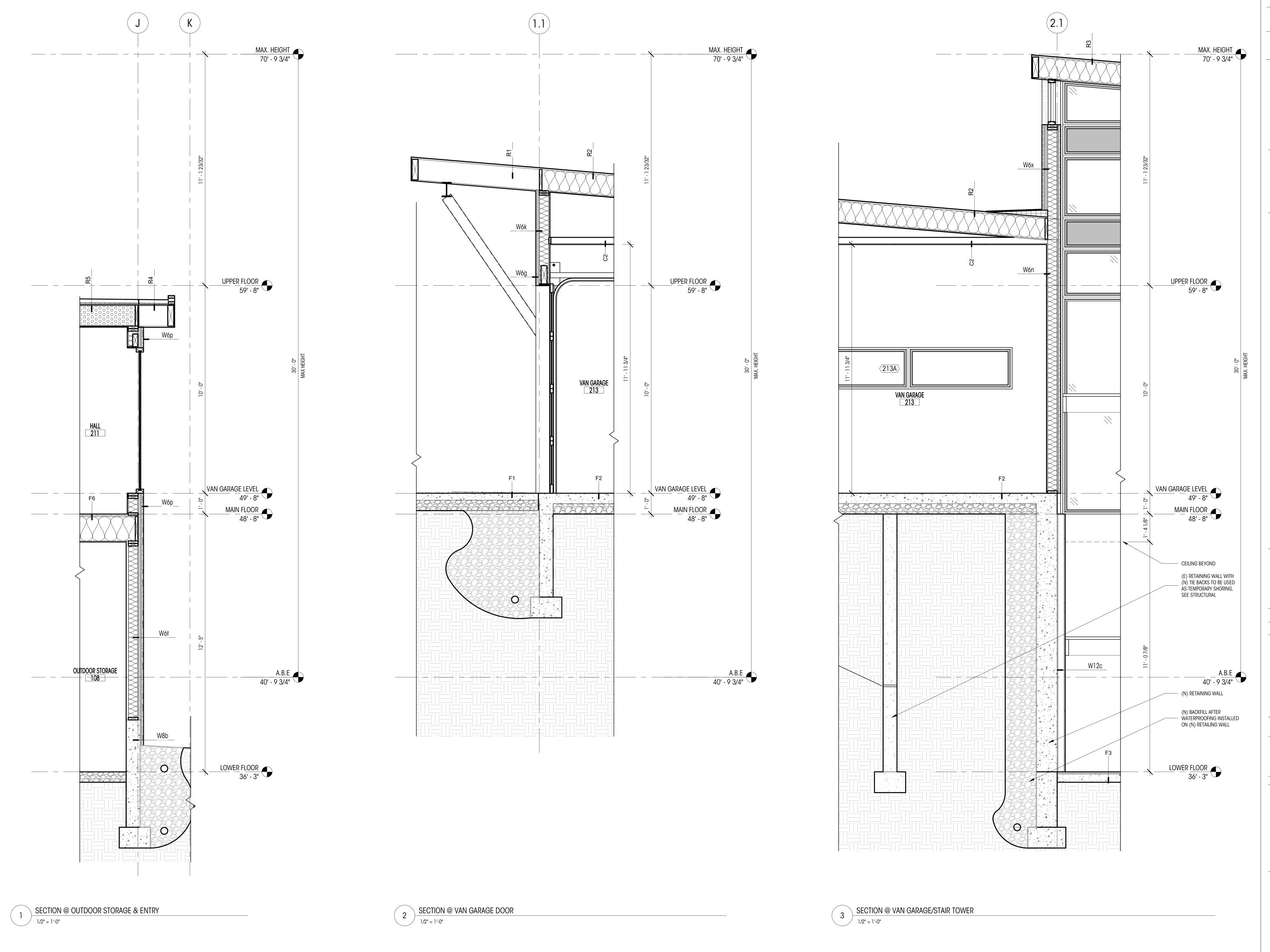
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ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.

WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT



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8843 REGISTERED ARCHITECT

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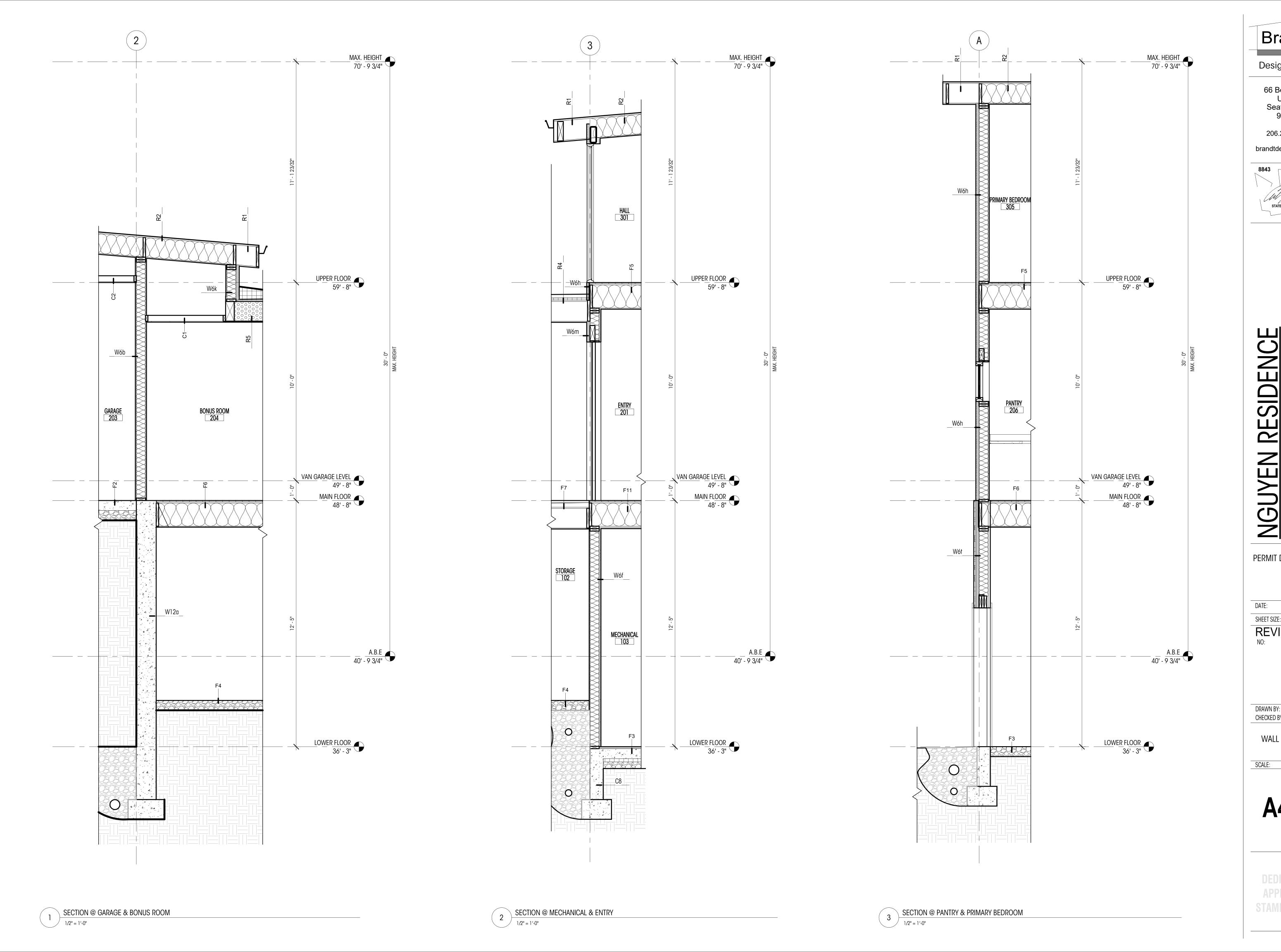
DATE: 05.19.22 SHEET SIZE: D (24X36) REVISIONS NO: DATE:

DRAWN BY: CHECKED BY:

WALL SECTIONS

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

A411



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DATE: 05.19.22 SHEET SIZE: D (24X36

REVISIONS

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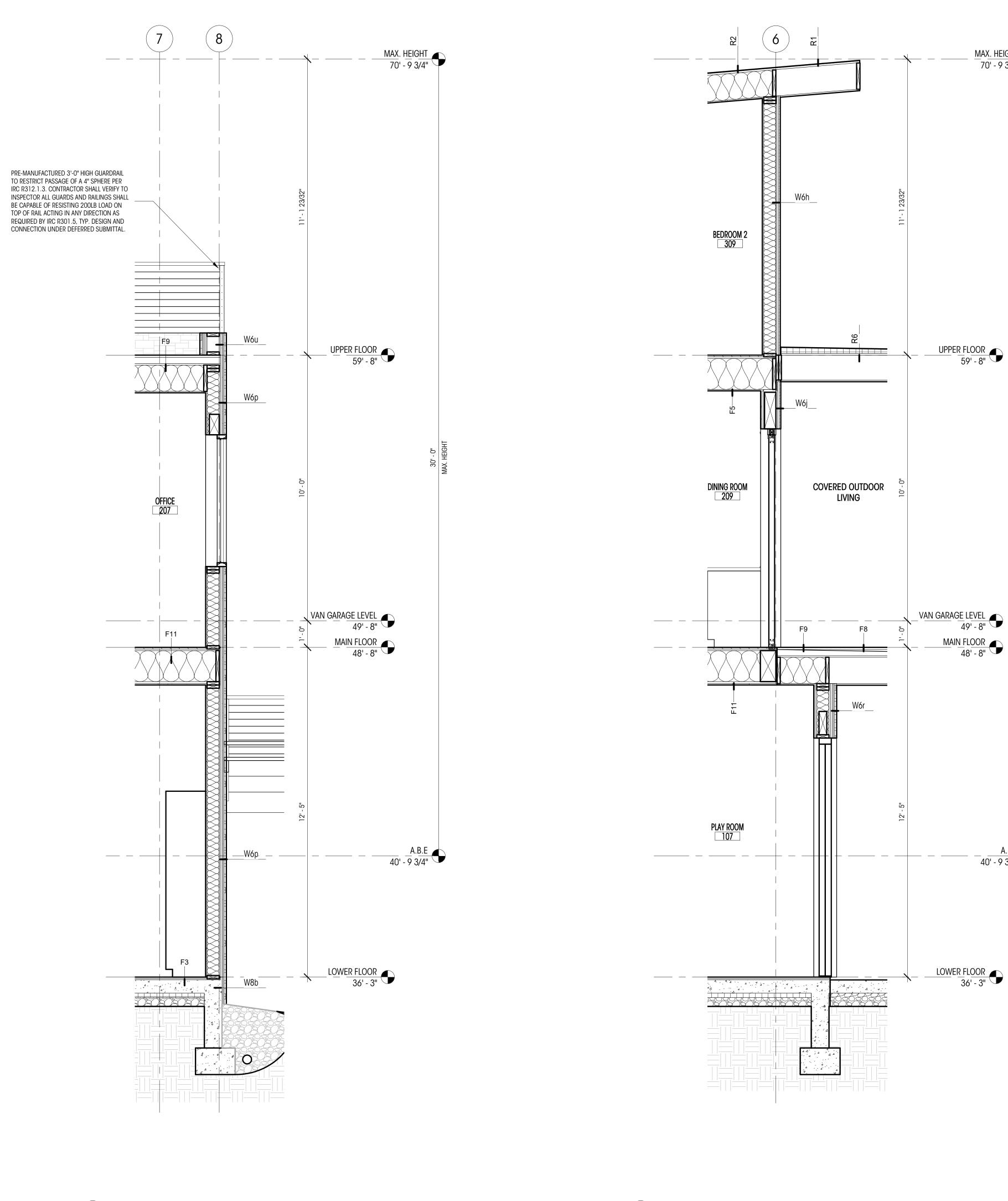
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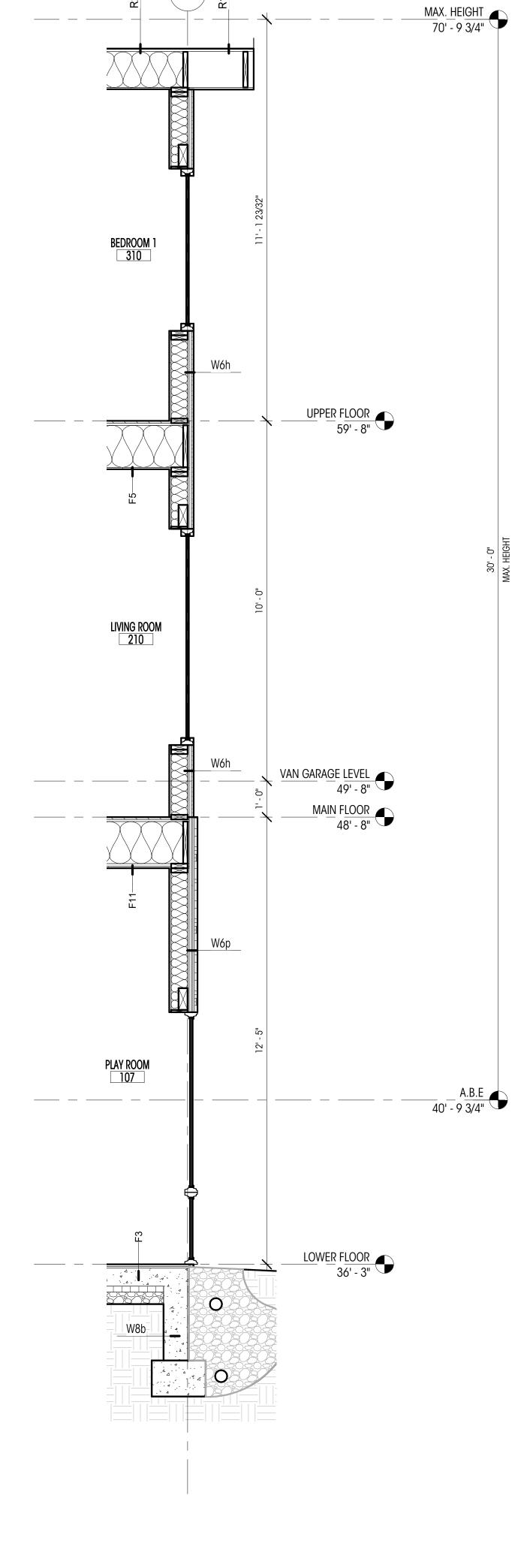
WALL SECTIONS

1/2" = 1'-0"

A412

DEDICATED APPROVAL





3 SECTION @ LIVING ROOM & BEDROOM

1/2" = 1'-0"

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8843 REGISTERED ARCHITECT

STATE OF WASHINGTON

RESIDENCE

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REVISIONS

NO: DATE: D (24X36)

DRAWN BY: CHECKED BY:

WALL SECTIONS

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

A413

APPROVAL

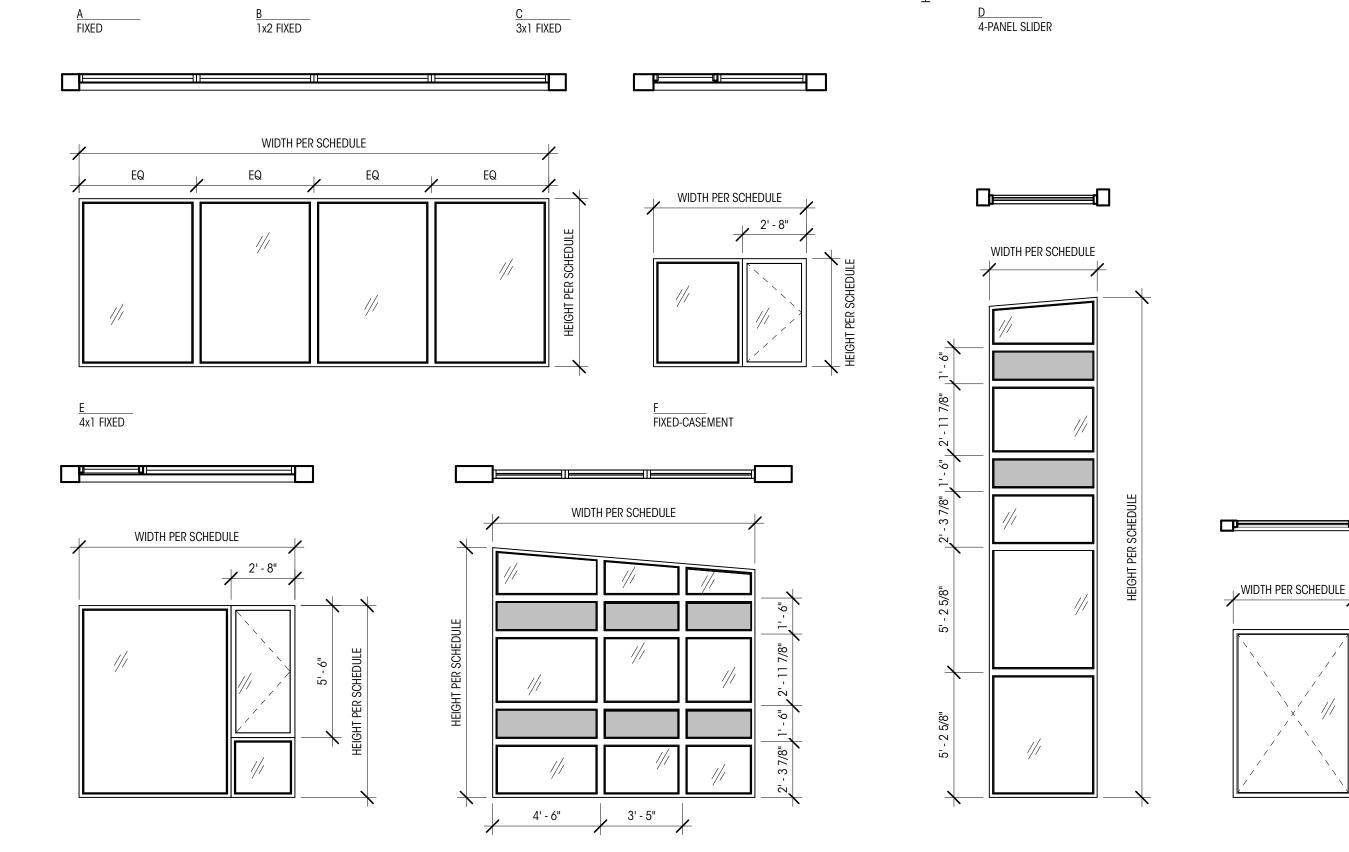
MAX. HEIGHT 70' - 9 3/4"

UPPER FLOOR
59' - 8"

MAIN FLOOR 48' - 8"

WIND	OW S	CHEDI	ULE										
PLAN ID	TYPE	WIDTH (ff)	HEIGHT (ff)	HEAD HT	UNIT AREA (sf)	U VALUE	UA	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	SAFETY GLAZING	EGRESS	NOTES
107A	В	6' - 0"	7' - 0"	7' - 0"	42 SF								
201A	A	3' - 0"	8' - 0"	8' - 0"	24 SF								
201A 201B	A	3' - 0"	8' - 0"	8' - 0"	24 SF						•		
201B 202A	A	5' - 0"	2' - 0"	8' - 0"	10 SF						•		
202A 204A	K	5' - 0"	7' - 0"	7' - 0"	35 SF						•	•	
204A 205A	A	2' - 0"	2' - 0"	7' - 0"	4 SF						_		
206A	A	4' - 0"	2' - 0"	7' - 0"	8 SF								
207A	В	5' - 0"	7' - 0"	7' - 0"	35 SF								
207B	F	9' - 0"	4' - 11 1/2"	8' - 0"	45 SF						•		
208A	D	11' - 0"	4' - 11 1/2"	8' - 0"	55 SF								
210A	G	11' - 0"	8' - 0"	8' - 0"	88 SF						•		
210B	Α	6' - 0"	6' - 0"	8' - 0"	36 SF						•		
211A	А	3' - 0"	7' - 0"	8' - 0"	21 SF						•		
213A	С	15' - 0"	2' - 0"	7' - 0 1/4"	30 SF								
301A	Н	10' - 11 1/4"	10' - 5"	20' - 10 1/4"	114 SF								
301B	А	6' - 11 3/4"	2' - 2"	9' - 11"	15 SF								
301C	J	4' - 6"	20' - 10 1/4"	20' - 10 1/4"	94 SF						•		
301D	Е	19' - 7"	7' - 0"	7' - 0"	137 SF						•		
302A	А	2' - 0"	6' - 0"	7' - 0"	12 SF								
303A	Α	1' - 6"	4' - 0"	7' - 0"	6 SF								
303B	Α	2' - 0"	4' - 0"	7' - 0"	8 SF								
305A	Α	4' - 0"	7' - 0"	7' - 0"	28 SF						•		
306A	F	6' - 4 1/2"	4' - 6"	7' - 0"	29 SF							•	
309A	F	6' - 4 1/2"	4' - 6"	7' - 0"	29 SF							•	
310A	F	6' - 4 1/2"	4' - 6"	7' - 0"	29 SF							•	
310C	Α	6' - 0"	4' - 6"	7' - 0"	27 SF								
311A	A	2' - 0"	4' - 0"	7' - 0"	8 SF								
312A	A	2' - 0"	4' - 0"	7' - 0"	8 SF								

309A	F	6' - 4 1/2"	4' - 6"	7' - 0"	29 SF					•	
310A	F	6' - 4 1/2"	4' - 6"	7' - 0"	29 SF					•	
310C	А	6' - 0"	4' - 6"	7' - 0"	27 SF						
311A	А	2' - 0"	4' - 0"	7' - 0"	8 SF						
312A	А	2' - 0"	4' - 0"	7' - 0"	8 SF						
CONTI ALL NI ALL W REFER ALL EL ALL NI PER IB HEIGH THE W PER IR	MENSIONS SHORACTOR TO VEI EW WINDOWS INDOW WALL IS TO PLANS AND EVATIONS ARE EW VERTICAL FI C 8310.2 ALL I T OPENING SH. VINDOW SILL SH C R308.4.3, G Y GLAZING IF A THE EXPOS THE BOTTO THE TOP E	ALL NOT BE LESS HALL HAVE HEIGH LAZING IN AN INI LL OF THE FOLLO SED AREA OF AN DM EDGE OF THE DGE OF THE GLA: ORE WALKING SL	ND DIMENSIONS TIFIED. ASS. ATION AND SWIF RIOR. VALUE TO MEET GS SHALL HAVE THAN 24" AND IT OF NOT MORE DIVIDUAL FIXED WING CONDITIC INDIVIDUAL PAN GLAZING IS LES ZING IS MORE T	NGS. ENERGY COMPI A NET CLEAR OI THE NET CLEAR E THAN 44" ABO' OR OPERABLE P DNS ARE PRESEI IE IS LARGER TH SS THAN 18" ABO HAN 36" AVOVE	Owner Befor Liance, See Sh Pening of No' Width Shall I Ve the Floor Anel Needs To Nt: An 9 Sf, DVE The Floor, A	IEET G001. I LESS THAN 5.7 SF, NET CLEAR BE NOT LESS THAN 20". D BE TEMPERED GLASS /	1.	C NOTES FROSTED / OPAQU G LEGEND STANDARD GLAZIN SPANDREL			
WIDTH PER SCH	HEIGHT PER SCHEDULE	₩II	OTH PER SCHED		HEIGHT PEK SCHEDULE	EQ V	VIDTH PER SCHEDL EQ	JLE EQ.	Societorie (1974)	WIDTH PER S	SCHEE

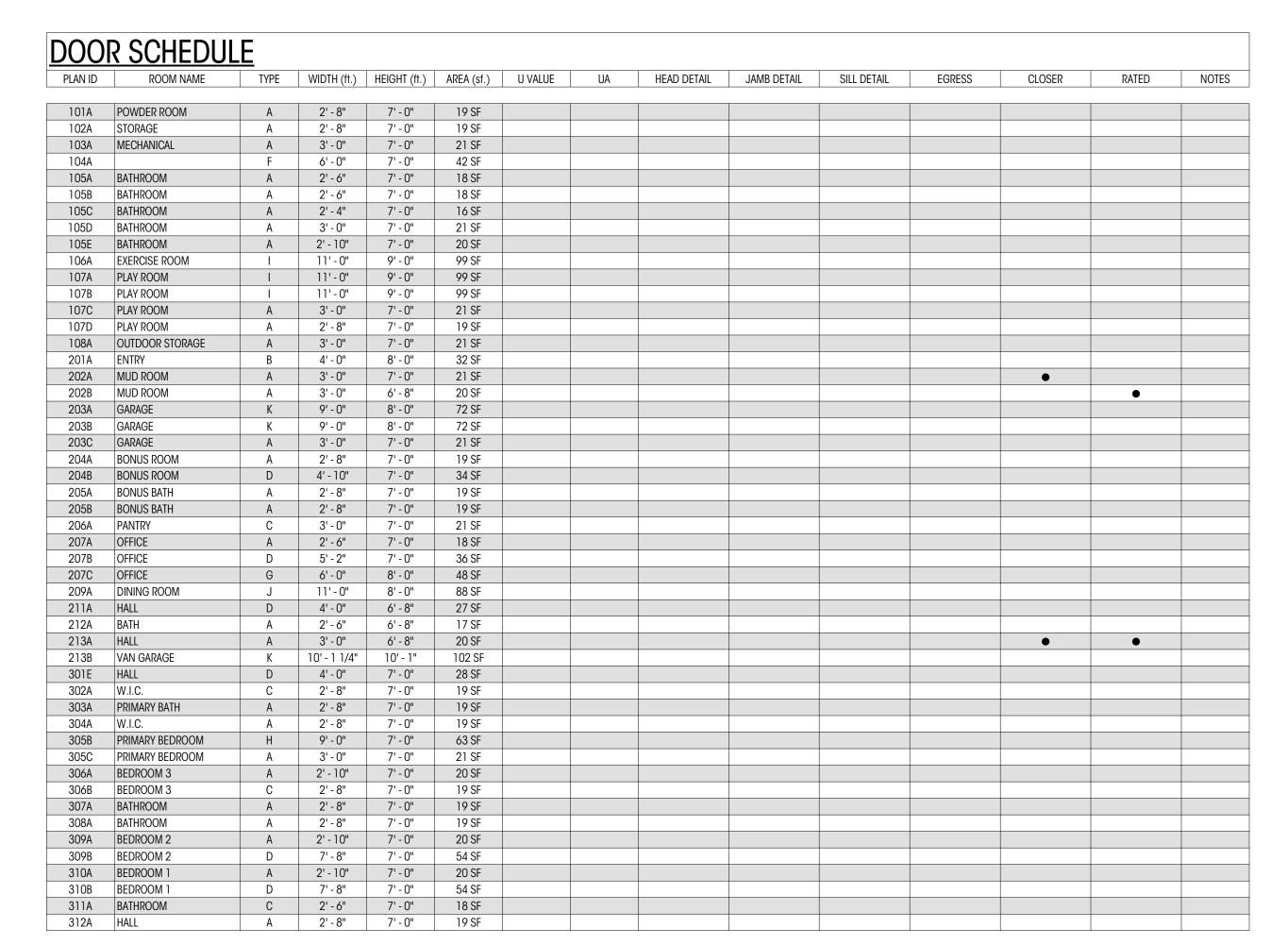


J North Stair Tower Fixed

H____SOUTH STAIR TOWER FIXED

ARCH - WINDOW TYPES
1/4" = 1'-0"

<u>G</u> FIXED-FIXED-CASEMENT



SPECIFIC NOTES

GENERAL NOTES

- ALL NEW DOORS TO BE NFRC CERTIFIED

 1. FROSTED / OPAQUE GLAZING
- ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE, SEE SHEET GOOT

 ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE, SEE SHEET GOOT

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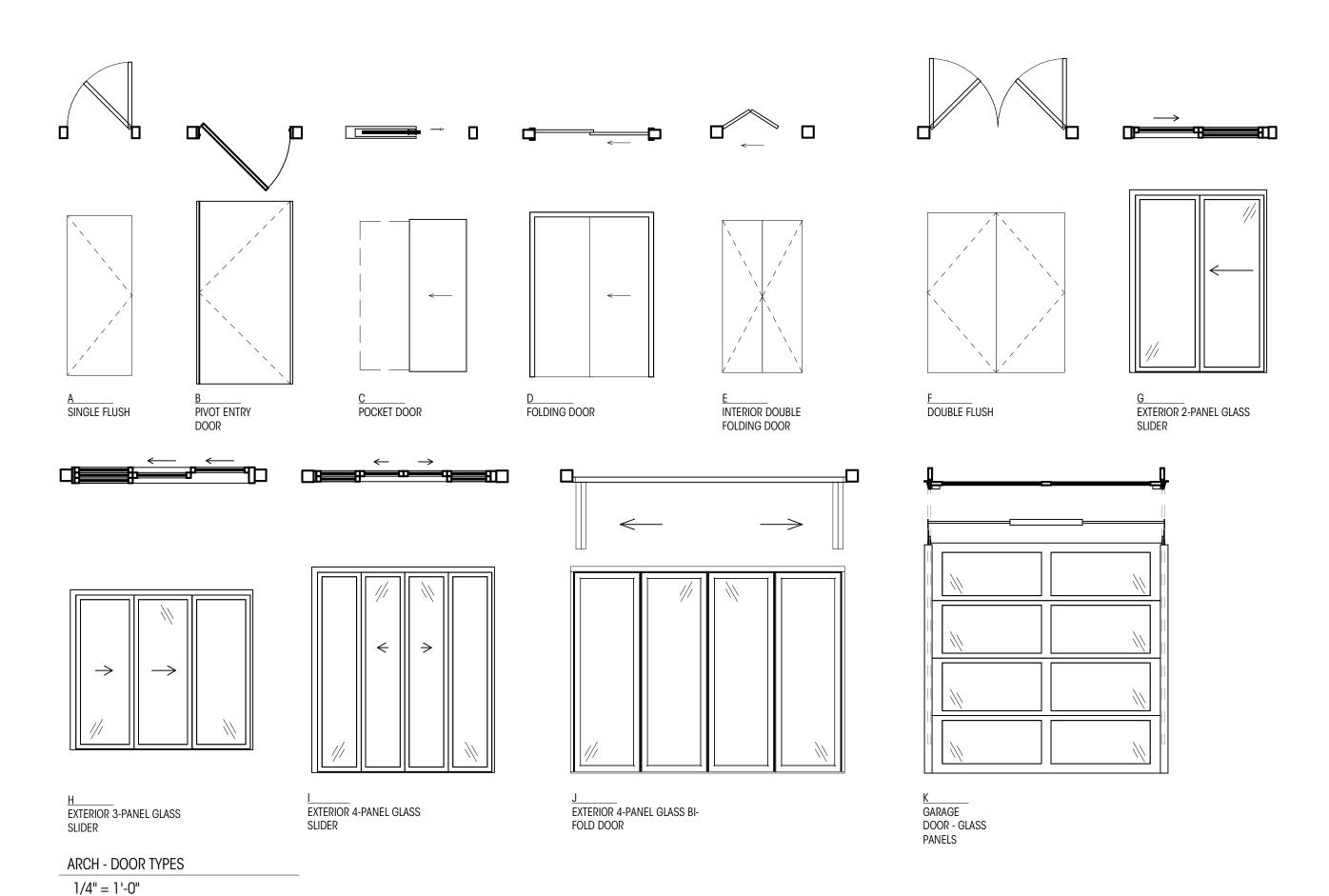
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 ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE TO MEET EN
- ALL DOORS TO BE SOLID-CORE WOOD VENEER FLAT PANELS UNO
 ALL GLAZED DOORS TO RECEIVE TEMPERED / SAFTEY GLAZING



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NGUYEN RESIDENCE
831 SE 42nd PLACE
IERCER ISLAND, WA 98040

PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO: DATE:

DRAWN BY:
CHECKED BY:
DOOR / WINDO

DOOR / WINDOW SCHEDULES, LEGENDS, & NOTES

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

A601

DEDICATED
APPROVAL
STAMP SPACE

VERTICAL ASSEMBLIES 2X4 FLAT FRAMING 5/8" GWB TYPE X 2X4 FRAMING 2X6 FRAMING 2X4 FRAMING SOUND BATT INSULATION 2X4 FRAMING 1/2" PLY 2X6 FRAMING 2X6 FRAMING 2X6 FRAMING 1/2" PLY 2X6 FRAMING 1/2" PLY 1/2" WOOD FINISH SOUND BATT INSULATION 5/8" GWB SOUND BATT INSULATION 2X6 FRAMING SOUND BATT INSULATION R-21 MIN INSULATION R-21 MIN INSULATION SOUND BATT INSULATION SOUND BATT INSULATION 5/8" GWB TYPE X 1/2" PLY 5/8" GWB 1/2" PLY 5/8" GWB 5/8" GWB 5/8" GWB 1/2" PLY 5/8" GWB 5/8" GWB 5/8" GWB TYPE X 5/8" GWB TYPE X 5/8" GWB TYPE X 2X6 FRAMING 2X6 FRAMING 2X6 FRAMING 3/4" PLY 2X6 FRAMING 2X6 FRAMING 2X6 FRAMING 2X6 FRAMING R-21 MIN INSULATION R-21 MIN INSULATION R-21 MIN INSULATION 2X6 FRAMING R-21 MIN INSULATION R-21 MIN INSULATION R-21 MIN INSULATION R-21 MIN INSULATION 1/2" PLY R-21 MIN INSULATION 1/2" PLY 1/2" PLY 1/2" PLY 1/2" PLY 1/2" PLY 1/2" PLY 5/8" GWB WRB 3/4" PLY WRB 3/4" VERTICAL FURRING STRIP, 3/4" VERTICAL FURRING STRIP, 3/4" VERTICAL FURRING STRIP, 3/4" VERTICAL FURRING STRIP, 1/2" LATH AND SCRATCH COAT 3/4" VERTICAL FURRING STRIP, 3/4" VERTICAL FURRING STRIP, PNT BLACK PNT BLACK PNT BLACK PNT BLACK 3/4" TO 1-1/4" CULTURED STONE PNT BLACK 3/4" HORIZONTAL WOOD SIDING 3/4" HORIZONTAL WOOD SIDING PNT BLACK 3/4" CEMENTITIOUS PLASTER 3/4" CEMENTITIOUS PLASTER 1/2" CEMENT BOARD 3/4" HORIZONTAL WOOD SIDING SIDING OVER WIRE MESH SIDING OVER WIRE MESH 1/2" LATH AND SCRATCH COAT 3/4" TO 1-1/4" CULTURED STONE *STONE VENEER MUST COMPLY **VENEER*** WITH IRC SECTION R703.12 *STONE VENEER MUST COMPLY WITH IRC SECTION R703.12 5/8" GWB 5/8" GWB 2X6 FRAMING 2X6 FRAMING W/ SISTERED 3/4" TO 1-1/4" CULTURED STONE 5/8" GWB TYPE X 3/4" TO 1-1/4" CULTURED STONE 1/2" PLY 3/4" PLY 1/2" PLY FRAMING FOR 6-3/4" CAVITY DEPTH **VENEER*** 2X6 FRAMING 2X6 FRAMING 2X6 FRAMING 1/2" LATH AND SCRATCH COAT 1/2" PLY R-21 MIN INSULATION 1/2" LATH AND SCRATCH COAT R-21 MIN INSULATION R-21 MIN INSULATION 3/4" VERTICAL FURRING STRIP, 1/2" PLY 1/2" CEMENT BOARD 1/2" PLY 1/2" PLY 3/4" PLY 5/8" GWB TYPE X PNT BLACK 3/4" VERTICAL FURRING STRIP, 3/4" VERTICAL FURRING STRIP, 2X6 FRAMING WRB WRB PNT BLACK 1/2" CEMENT BOARD R-21 MIN INSULATION PNT BLACK 3/4" VERTICAL FURRING STRIP. 3/4" VERTICAL FURRING STRIP, 1/2" LATH AND SCRATCH COAT 1/2" CEMENT BOARD 1/2" PLY 1/2" PLY PNT BLACK PNT BLACK 1/2" LATH AND SCRATCH COAT 3/4" TO 1-1/4" CULTURED STONE 2X6 FRAMING 1/2" CEMENT BOARD 1/2" CEMENT BOARD 3/4" TO 1-1/4" CULTURED STONE R-21 MIN INSULATION 3/4" VERTICAL FURRING STRIP, VENEER* 1/2" LATH AND SCRATCH COAT 1/2" LATH AND SCRATCH COAT VENEER* 1/2" PLY PNT BLACK 3/4" TO 1-1/4" CULTURED STONE 3/4" TO 1-1/4" CULTURED STONE 1/2" CEMENT BOARD WRB VENEER* **VENEER*** 3/4" VERTICAL FURRING STRIP. *STONE VENEER MUST COMPLY 1/2" LATH AND SCRATCH COAT WITH IRC SECTION R703.12 *STONE VENEER MUST COMPLY PNT BLACK 3/4" TO 1-1/4" CULTURED STONE WITH IRC SECTION R703.12 1/2" CEMENT BOARD VENEER* *STONE VENEER MUST COMPLY *STONE VENEER MUST COMPLY 1/2" LATH AND SCRATCH COAT WITH IRC SECTION R703.12 WITH IRC SECTION R703.12 3/4" TO 1-1/4" CULTURED STONE *STONE VENEER MUST COMPLY VENEER* WITH IRC SECTION R703.12 *STONE VENEER MUST COMPLY WITH IRC SECTION R703.12 <u>W6x</u> 12" CONCRETE 12" CONCRETE 8" CONCRETE 1/2" PLY 1/2" PLY 2X4 FRAMING 1/2" PLY 4- 1. 4 4 1. 4 34 2X4 FRAMING WRB R-21 MIN INSULATION 4 4 4 44 R-21 MIN INSULATION 1/2" LATH AND SCRATCH COAT 1/2" LATH AND SCRATCH COAT 1/2" AIR GAP 3/4" TO 1-1/4" CULTURED STONE 3/4" TO 1-1/4" CULTURED STONE 1/2" AIR GAP 12" CONCRETE 44 4 4 4 8" CONCRETE *STONE VENEER MUST COMPLY *STONE VENEER MUST COMPLY 4 4 4 4 4 44 4 WITH IRC SECTION R703.12 WITH IRC SECTION R703.12 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

<u>W12c</u>

<u>W8b</u>

<u>W12a</u>

<u>W12b</u>

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STATE OF WASHINGTON

RESIDENCE

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REVISIONS

DATE:

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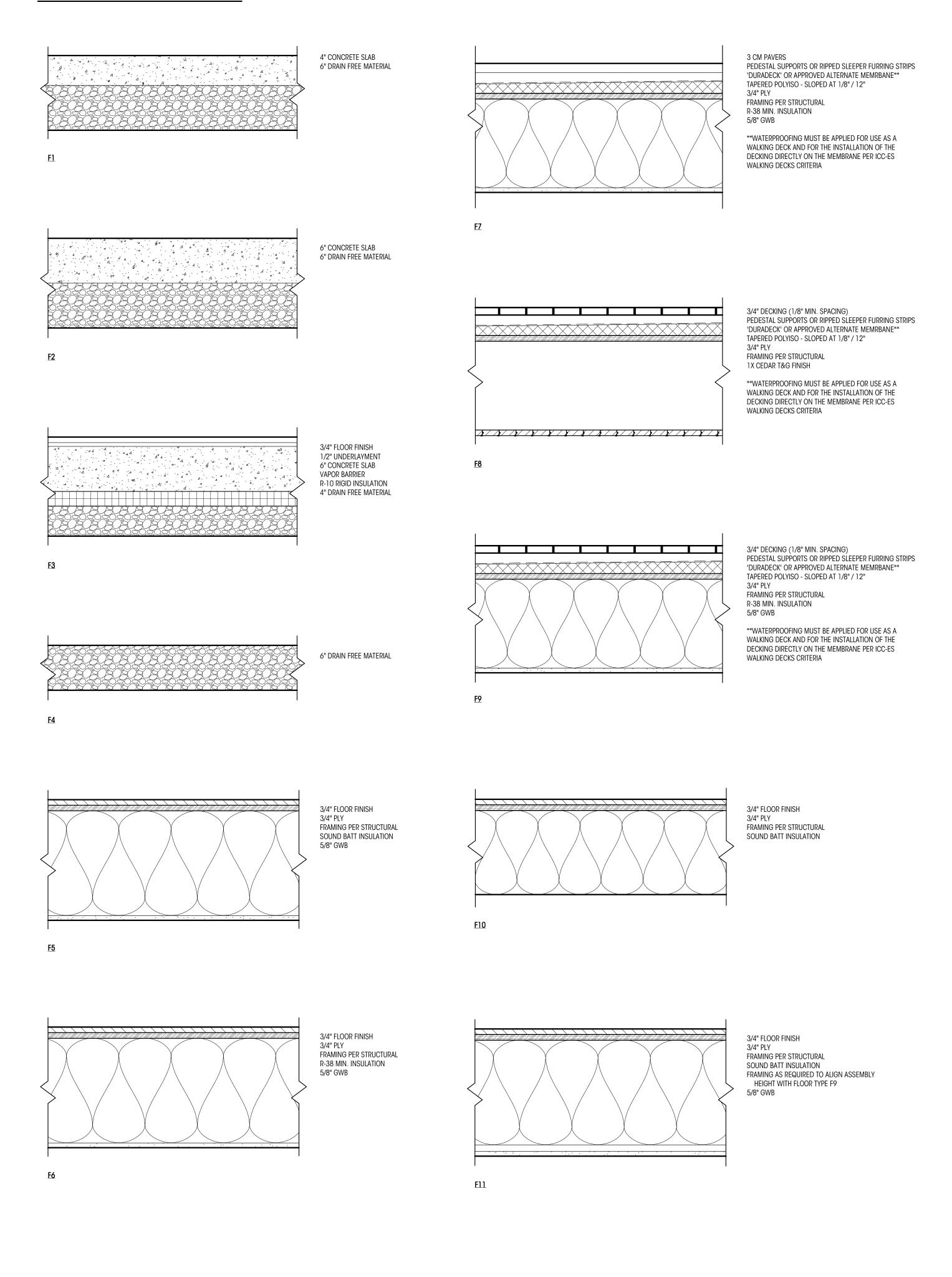
VERTICAL ASSEMBLY DETAILS

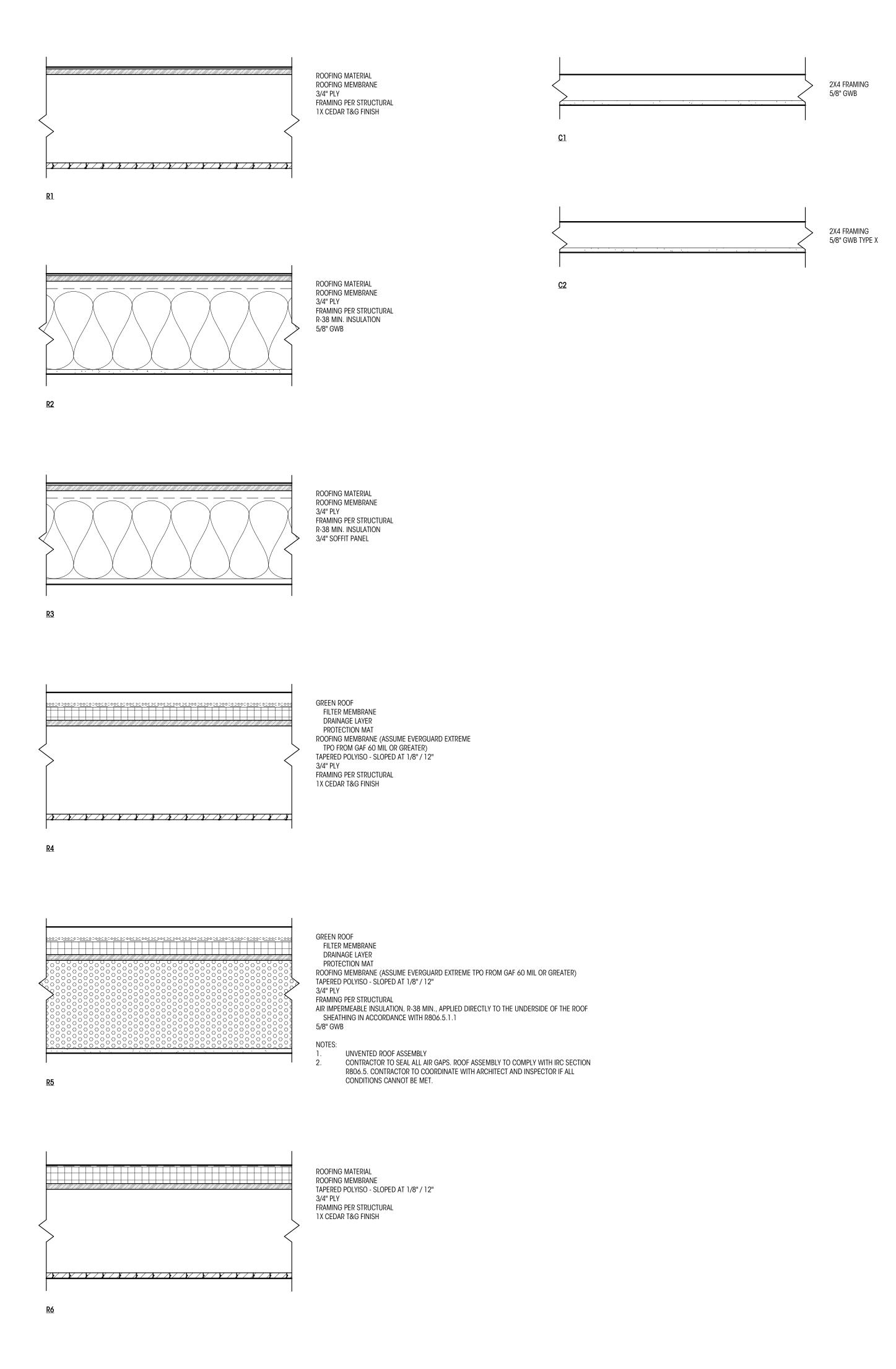
CALE: 1 1/2" = 1'-0"

A701

EDICATED APPROVAL AMP SPACE

HORIZONTAL ASSEMBLIES





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9831 SE 42nd PLACE MERCER ISLAND, WA 98040

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DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO: DATE:

DRAWN BY: CHECKED BY:

HORIZONTAL ASSEMBLY DETAILS

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

A702

EDICATED
PPROVAL
MP SPACE

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

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

CRITERIA

- 3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- 4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- 6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- 7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.
- 9. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- 10. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

GLUED LAMINATED MEMBERS

MANUFACTURED LUMBER (PSL'S, LSL'S, LVL'S)
PLYWOOD WEB JOISTS
STRUCTURAL STEEL

11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

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.

12. SHOP DRAWINGS OF DESIGN BUILD COMPONENTS INCLUDING CANOPIES, BALCONIES, COLD FORM STEEL FRAMING, TEMPORARY SHORING, CURTAIN WALL SYSTEMS, SKYLIGHT FRAMES, PREFABRICATED STAIR SYSTEMS, EXTERIOR CLADDING, AND PRE-ENGINEERED SYSTEMS SHALL BE STAMPED AND SIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WASHINGTON. SHOP DRAWINGS SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO REVIEW OF THE ARCHITECT OR ENGINEER OF RECORD FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.

QUALITY ASSURANCE

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

SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY PER TABLE 1705. 6
DRIVEN DEEP FOUNDATION PER TABLE 1705. 7
HELICAL PILE FOUNDATION CONTINUOUS

PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.

CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

GEOTECHNICAL

14. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) 40 PCF + 10H PSF/40 PCF
ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 1.5 INCLUDED) 200 PCF
TRAFFIC SURCHARGE PRESSURE (UNIFORM LOAD) ADD 2FT SOIL PSF
SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD)
PILE CAPACITY - 4"dia (COMPRESSION)

SOILS REPORT REFERENCE:
PROPOSED NEW RESIDENCE
9831 SOUTHEAST 42ND/ PLACE
MERCER ISLAND, WASHINGTON

PREPARED BY:
GEOTECH CONSULATIONS, INC. ON JUNE 7, 2021
JN 21165

15. HELICAL ANCHORS SHALL BE DESIGNED TO MEET THE LOADING REQUIREMENTS SHOWN ON THE DRAWINGS AND SHALL INCLUDE A MINIMUM SAFETY FACTOR OF 2. DRAWINGS AND CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON SHALL BE SUBMITTED PRIOR TO INSTALLATION. INSTALLATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS OF THE ANCHOR MANUFACTURER AND INSTRUCTIONS OF THE GEOTECHNICAL ENGINEER. THE CAPACITY OF THE INSTALLED ANCHORS SHALL BE VERIFIED BY FIELD TESTING THE GREATER OF ONE ANCHOR OR 5% OF THE TOTAL ANCHORS TO THE SPECIFIED ANCHOR CAPACITY MULTIPLIED BY THE SAFETY FACTOR USED FOR DESIGN.

RENOVATION

16. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

- 17. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.
- 18. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED.
- A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. CORNERS SHALL NOT BE
- B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
- C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING.

 D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DRILL AND EPOXY DOWELS MATCHING THE NEW REINFORCING INTO THE EXISTING CONCRETE WITH 6" EMBED, UNLESS OTHERWISE NOTED ON PLANS.

CONCRETE

19. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS:

MEMBER TYPE/CONSTRUCTION	STRENGTH F'C -PSI-	TEST AGE -DAYS-	MAX AGG -INCH-	MAX W/C RATIO	AIR CONT.
SLABS ON GRADE (INTERIOR)	3000	28	1	. 45	
SLABS ON GRADE (EXTERIOR)	3000	28	1	. 45	5
FOOTINGS	4000	28	1	. 50	
RETAINING WALLS	4000	28	1	. 50	
ALL ELEVATED SLABS AND BEAMS	5000	28	3/4	. 42	
ALL STRUCTURAL CONCRETE, UNO	3000	28	1	. 50	

MIX DESIGN NOTES:

- A. MAXIMUM SHRINKAGE IN ALL 5000 PSI MIXES SHALL BE LIMITED TO .04 PERCENT IN 28 DAYS AS TESTED IN ACCORDANCE WITH ASTM C157 MODIFIED STANDARD TEST METHOD FOR LENGTH CHANGE OF CEMENT MORTAR AND CONCRETE.
- B. W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS. RATIOS NOT NOTED IN TABLE ABOVE ARE CONTROLLED BY STRENGTH REQUIREMENTS.
- C. CEMENTITIOUS CONTENT: THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM TO ACI 301 SEC 4.2.2.8.B. FOR CONCRETE USED IN ELEVATED FLOORS, PORTLAND CEMENT CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.1. ACCEPTANCE OF LOWER CEMENT CONTENT IS CONTINGENT ON PROVIDING SUPPORTING DATA TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.
- D. AIR CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.4. HORIZONTAL EXTERIOR SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. USE "MODERATE EXPOSURE". VERTICAL EXTERIOR SURFACES REQUIRE "MODERATE EXPOSURE". TOLERANCE IS +/- 1.5 PERCENT. AIR CONTENT SHALL BE MEASURED AT POINT OF PLACEMENT.
- E. SLUMP SHALL CONFORM TO ACI 301 SEC 4.2.2.2. SLUMP SHALL BE DETERMINED AT THE POINT OF PLACEMENT.
- F. CHLORIDE CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.6 AND TABLE 4.2.2.6 FOR "OTHER REINFORCED CONCRETE CONSTRUCTION".
- 20. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.
- 21. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, FY = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.
- 22. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-18 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

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

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

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

6"	WALLS	#4	@	16	HORIZ.	#4	@	18	VERTICAL	1	CURTAIN
8"	WALLS	#4	@	12	HORIZ.	#4	@	18	VERTICAL	1	CURTAIN
10"	WALLS	#4	@	18	HORIZ.	#4	@	18	VERTICAL	2	CURTAINS
12"	WALLS	#4	@	16	HORIZ.	#4	@	18	VERTICAL	2	CURTAINS

- 25. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.
- 26. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3000 PSI MINIMUM).

MASONRY

27. ADHERED MASONRY VENEER, 2-5/8" MAXIMUM THICKNESS, SHALL BE ADHERED TO BACKING WALLS PER SECTION 1405. 10 OF THE INTERNATIONAL BUILDING CODE. ADHERED MASONRY SHALL BE ABLE TO DEVELOP SHEAR STRENGTH OF 50 PSI MINIMUM BETWEEN THE BACKING AND THE UNIT IN ACCORDANCE WITH ASTM C 482 OR SHALL BE ADHERED PER ARTICLE 3. 3C OF TMS 602-2016.

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28. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:

- A. AISC 360-16 AND SECTION 2205. 2 OF THE INTERNATIONAL BUILDING CODE.

 B. JUNE 15, 2016 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AMENDED AS FOLLOWS: AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4. 4. 1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3. 1.
- C. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

29. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	FY
A. WIDE FLANGE SHAPES B. OTHER SHAPES, PLATES, AND RODS	A992 A36	50 KSI 36 KSI
C. OTHER SHAPES AND PLATES (NOTED GRADE 50 ON PLANS)	A572 (GRADE 50)	50 KSI
D. PIPE COLUMNS E. STRUCTURAL TUBING	A53 (E OR S, GR.B) A500 (GR.C)	35 KSI
-SQUARE OR RECTANGULAR -ROUND	71000 (on. 0)	50 KSI 46 KSI
-ANY SHAPE	ASTM A1085	50 KSI
F. CONNECTION BOLTS (3/4" ROUND, UNLESS SHOWN OTHERWISH	A325-N E)	

- 30. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 31. ALL STEEL EXPOSED TO THE WEATHER OR IN CONTACT WITH GROUND SHALL BE CORROSION PROTECTED BY GALVANIZATION OR PROVIDED WITH EXTERIOR PAINT SYSTEM. UNLESS OTHERWISE NOTED.
- 32. SHOP PRIME ALL STEEL EXCEPT:
- A. STEEL ENCASED IN CONCRETE.
- B. SURFACES TO BE WELDED.
- C. CONTACT SURFACES AT HIGH-STRENGTH BOLTS.
 D. MEMBERS TO BE GALVANIZED.
- E. MEMBERS WHICH WILL BE CONCEALED BY INTERIOR FINISHES.
- F. SURFACES TO RECEIVE SPRAYED FIREPROOFING.G. SURFACES TO RECEIVE OTHER SPECIAL SHOP PRIMERS.
- 33. ALL A-325N CONNECTION BOLTS NEED ONLY BE TIGHTENED TO A SNUG TIGHT CONDITION, DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH.
- 34. ALL ANCHORS EMBEDDED IN MASONRY OR CONCRETE SHALL BE A307 HEADED BOLTS OR A36 THREADED ROD WITH AN ASTM 563 HEAVY HEX NUT TACK WELDED ON THE EMBEDDED END.
- 35. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES F AND 40 FT LBS AT 70 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.



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DESIGN:	LAN	
DRAWN:	NHD	
CHECKED:	SRW	
APPROVED:	BDM	

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DPD:	

PROJECT TITLE:

Nguyen Residence

9831 SE 42nd Place Mercer Island, WA 98040

ARCHITECT:

Brandt Design Group

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Seattle, WA 98121 PH 206.239.0850 brandtdesigninc.com

PERMIT

General Structural Notes

SCALE:

SHEET NO:

DATE: May 19, 2022
PROJECT NO: 01519-2022-01

S11

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

WOOD

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

JOISTS AND BEAMS	(2X & 3X MEMBERS)	DOUGLAS-FIR NO. 2 MINIMUM BASE VALUE, Fb = 900 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
P0STS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI

STUDS, PLATES & MISC. FRAMING: DOUGLAS FIR-LARCH NO. 2

- 37. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI.
- 38. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

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PSL (2.0E WS) Fb = 2900 PSI, E = 2000 KSI, Fv = 290 PSI LVL (2.0E-2600FB WS) Fb = 2600 PSI, E = 2000 KSI, Fv = 285 PSI LSL (1.55E) Fb = 2325 PSI, E = 1550 KSI, Fv = 310 PSI
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ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

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

- 39. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1157. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.
- 40. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

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

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

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

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

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- 41. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
- 42. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

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

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

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

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

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

OR BOLTS IN EACH MEMBER.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS

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

45. WOOD FASTENERS

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

SIZE	LENGTH	DIAMETE
6d	2"	0. 113"
8d	2-1/2"	0. 131"
10d	3"	0. 148"
12d	3-1/4"	0. 148"
16d B0X	3-1/2"	0. 135"

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

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

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

46. NOTCHES AND HOLES IN WOOD FRAMING:

- A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.
- B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.
- C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

47. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE

- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.
- B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

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

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

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BETWEEN RAFTERS AND JOISTS AT ALL BEARING POINTS WITH A MINIMUM OF (3) 16d TOE NAILS EACH END. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

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



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LAN	
NHD	
SRW	
BDM	
	NHD SRW

REVISIONS:

PROJECT TITLE:	

Nguyen Residence
9831 SE 42nd Place
Mercer Island, WA 98040

CHITECT:

Brandt Design Group 66 Bell Street, Unit 1 Seattle, WA 98121 PH 206.239.0850 brandtdesigninc.com

PERMIT

SHEET TITLE:

General Structural Notes

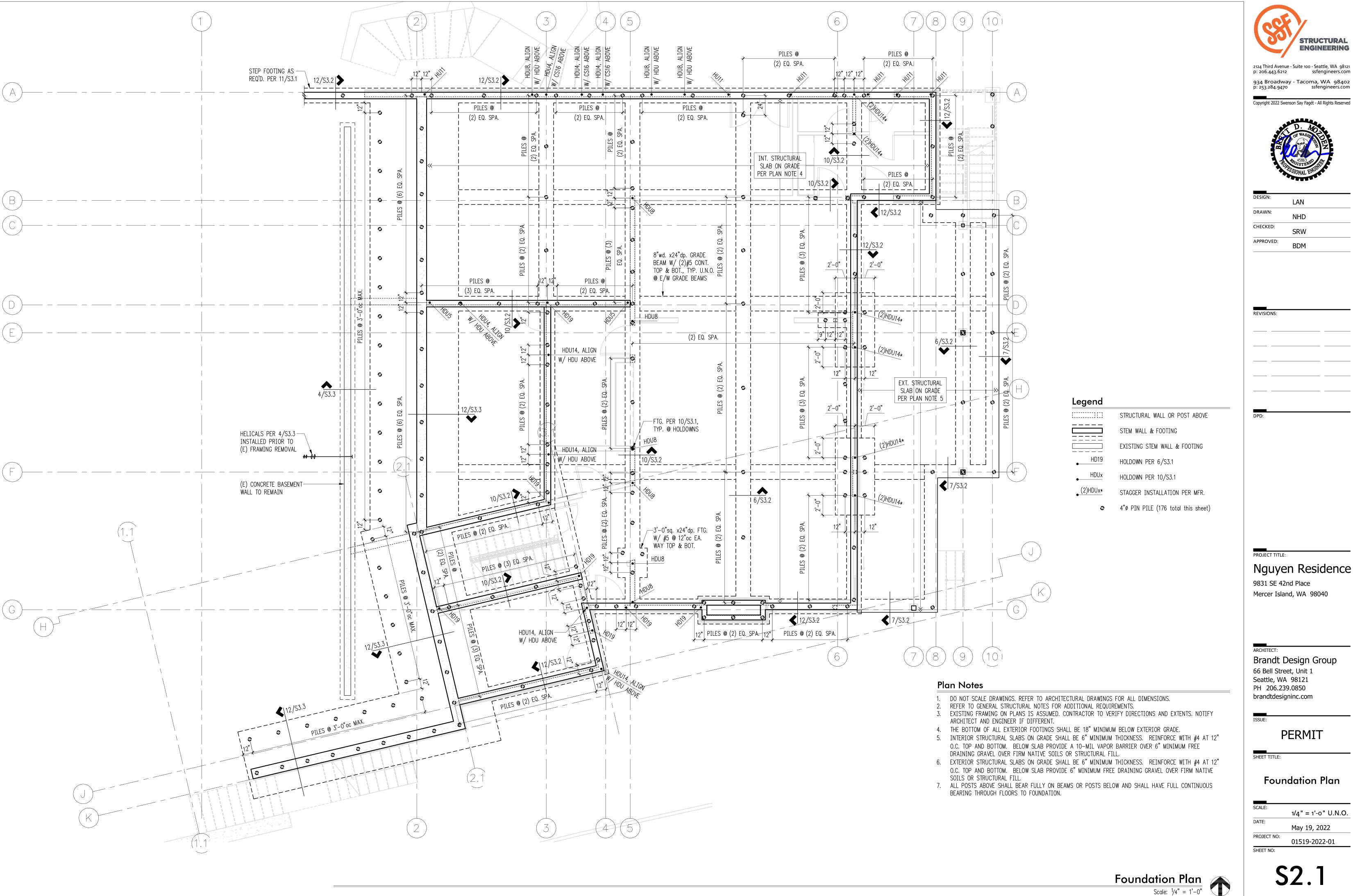
SCALE:

DATE:

May 19, 2022
PROJECT NO: 01519-2022-01

SHEET NO:

S12





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APPROVED:	DDM	

Nguyen Residence

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Brandt Design Group 66 Bell Street, Unit 1

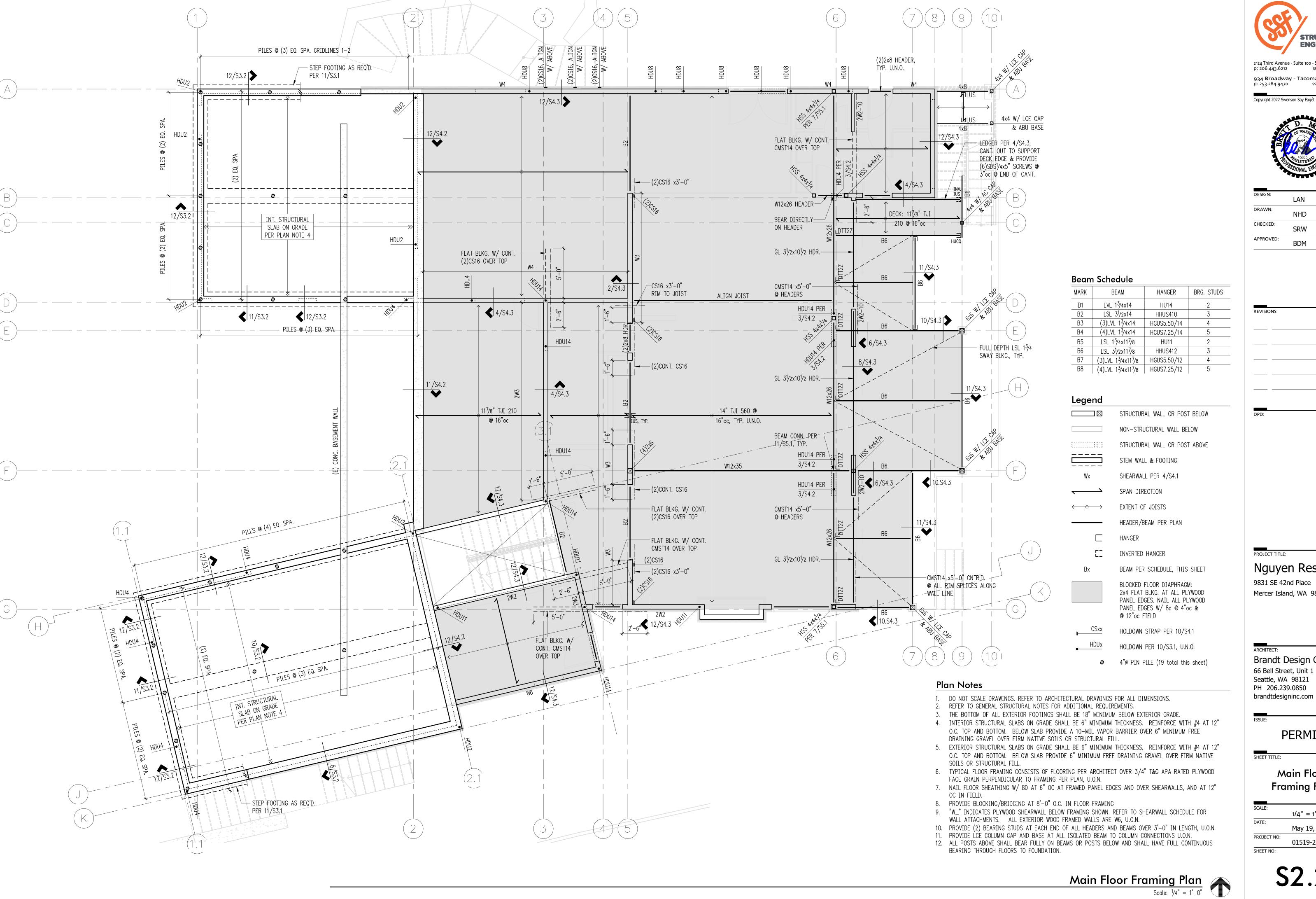
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Foundation Plan

1/4" = 1'-0" U.N.O. May 19, 2022

01519-2022-01



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PROJECT TITLE: Nguyen Residence

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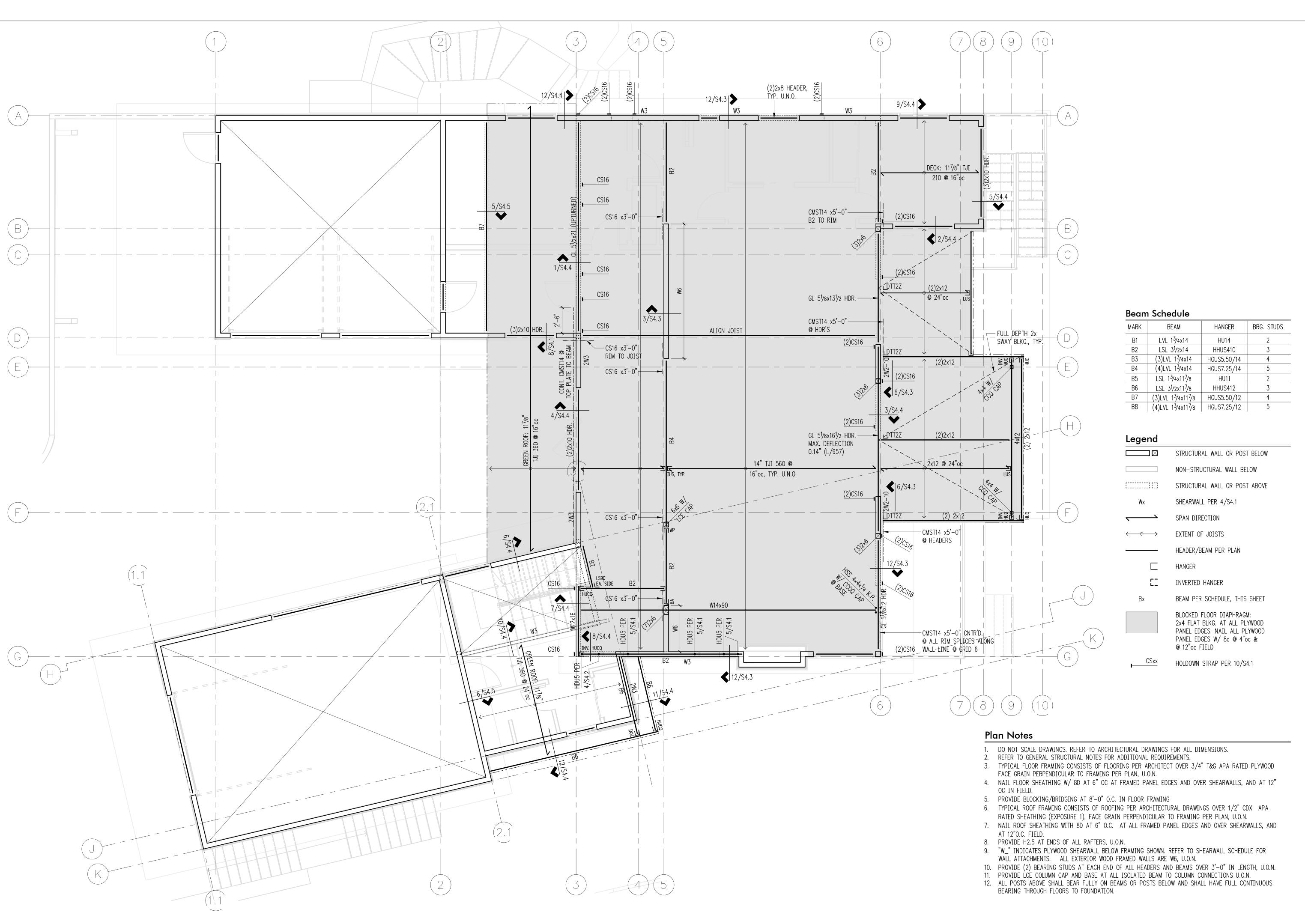
ARCHITECT: Brandt Design Group 66 Bell Street, Unit 1 Seattle, WA 98121 PH 206.239.0850

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SHEET TITLE:

Main Floor Framing Plan

1/4" = 1'-0" U.N.O. DATE: May 19, 2022 PROJECT NO: 01519-2022-01



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SHEET TITLE:

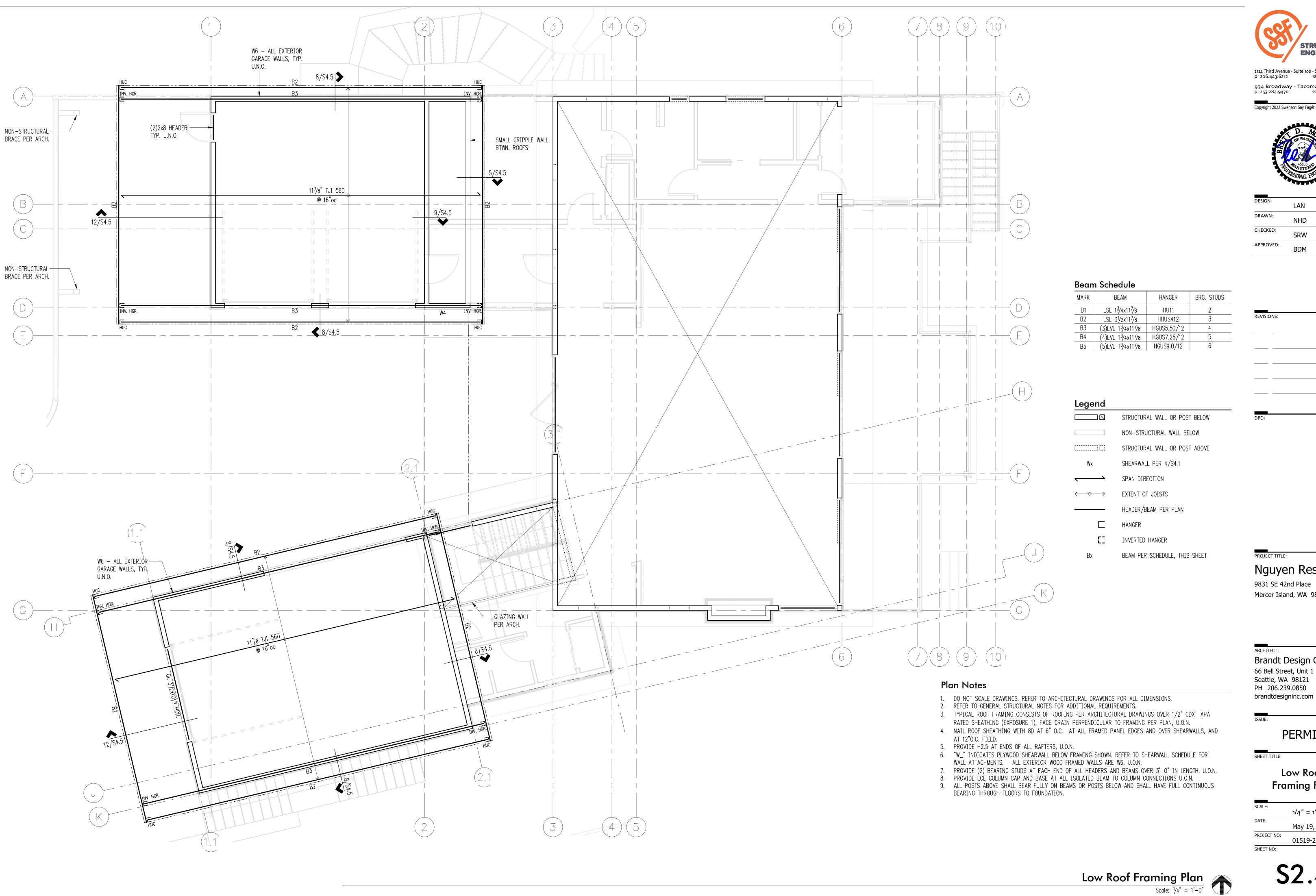
Upper Floor Framing Plan

1/4" = 1'-0" U.N.O. DATE: May 19, 2022

PROJECT NO: 01519-2022-01 SHEET NO:

Upper Floor Framing Plan

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



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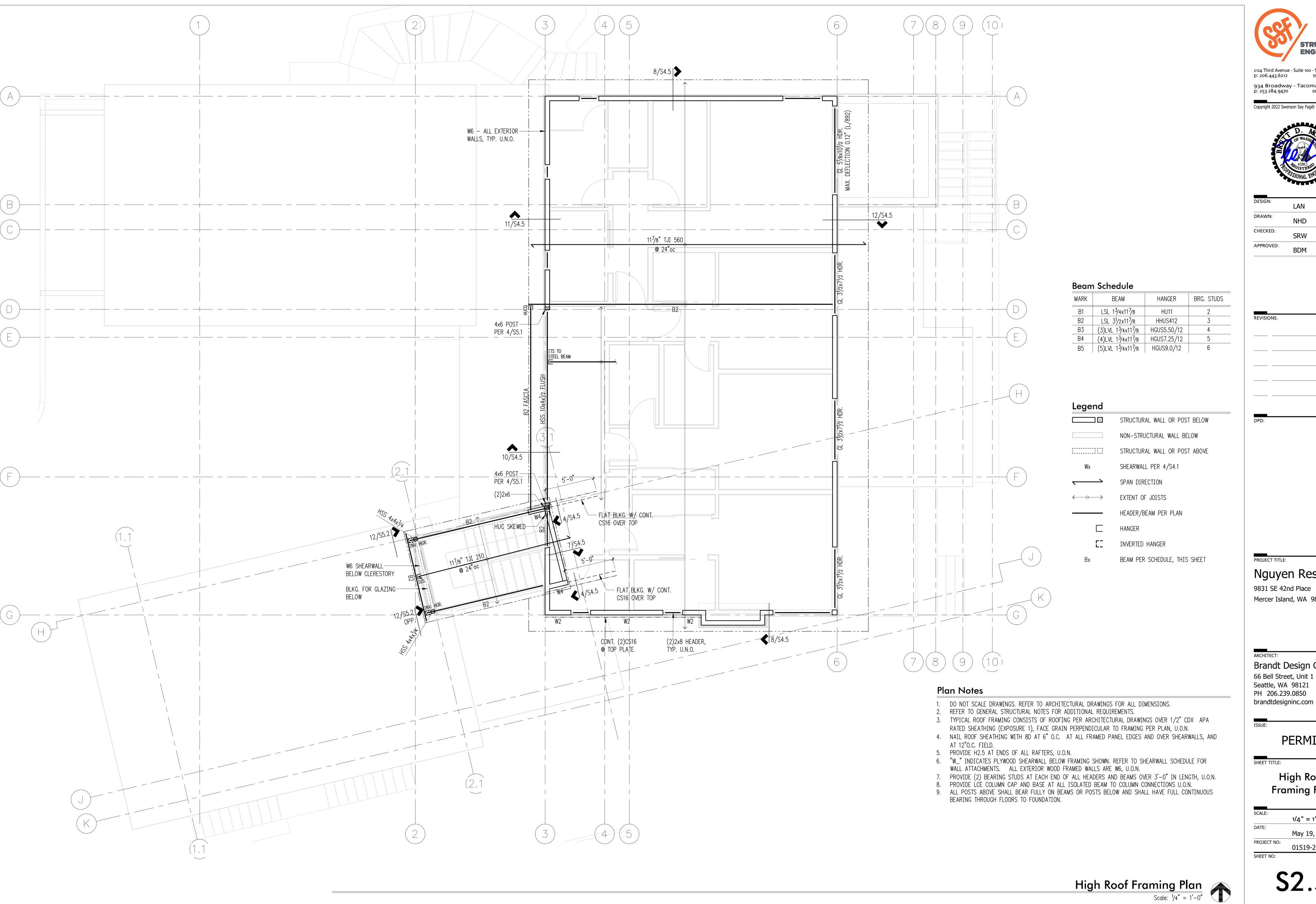
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SHEET TITLE:

Low Roof Framing Plan

1/4" = 1'-0" U.N.O. May 19, 2022

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REVISIO	NS:		

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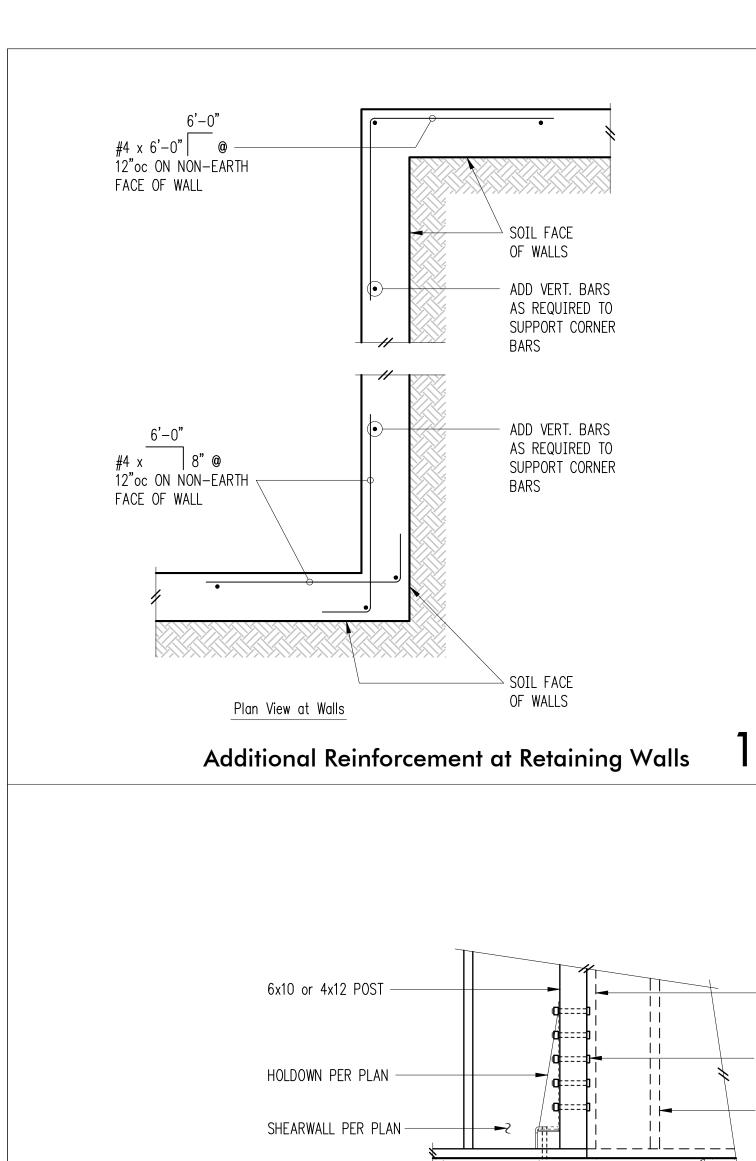
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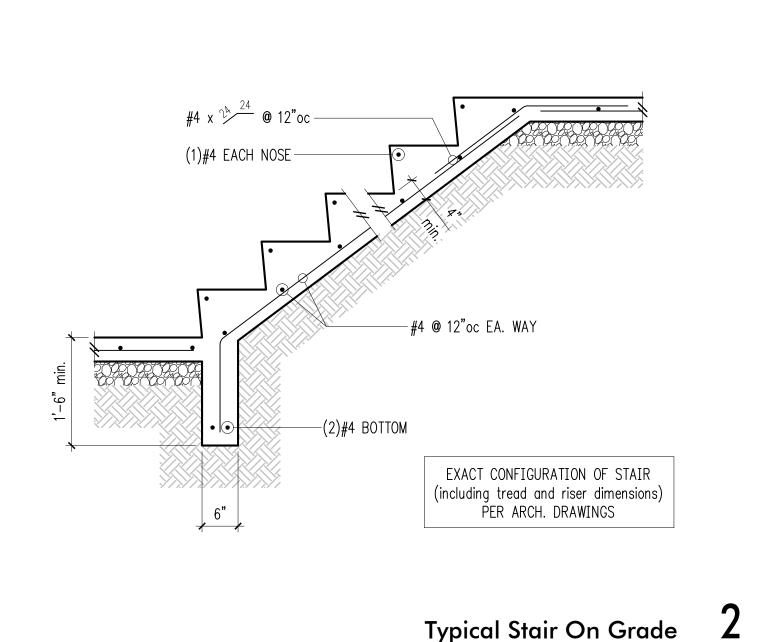
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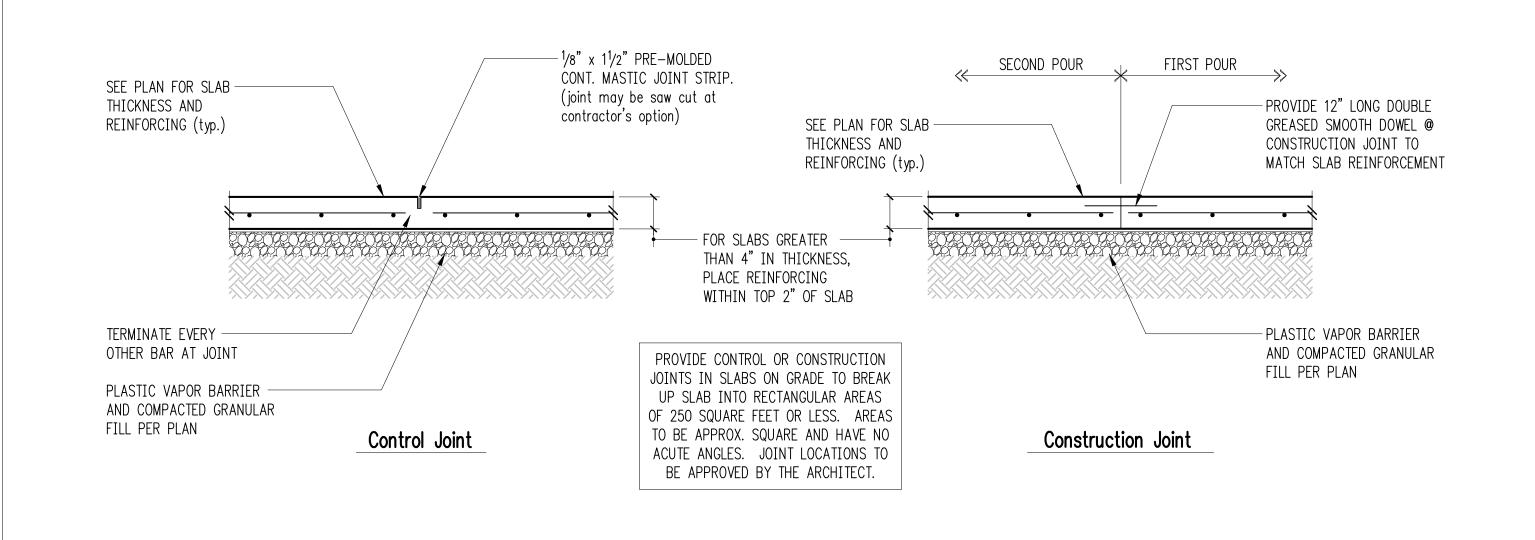
SHEET TITLE:

High Roof Framing Plan

1/4" = 1'-0" U.N.O. May 19, 2022 PROJECT NO: 01519-2022-01









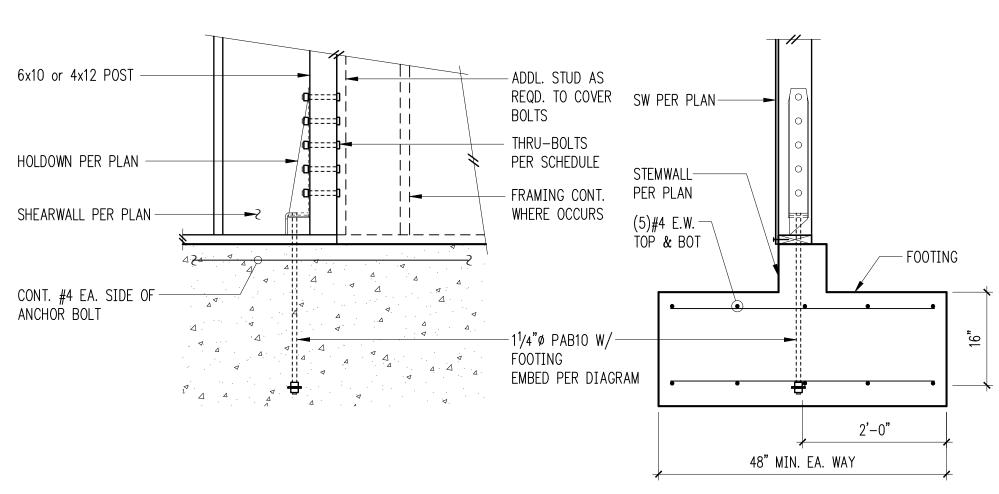
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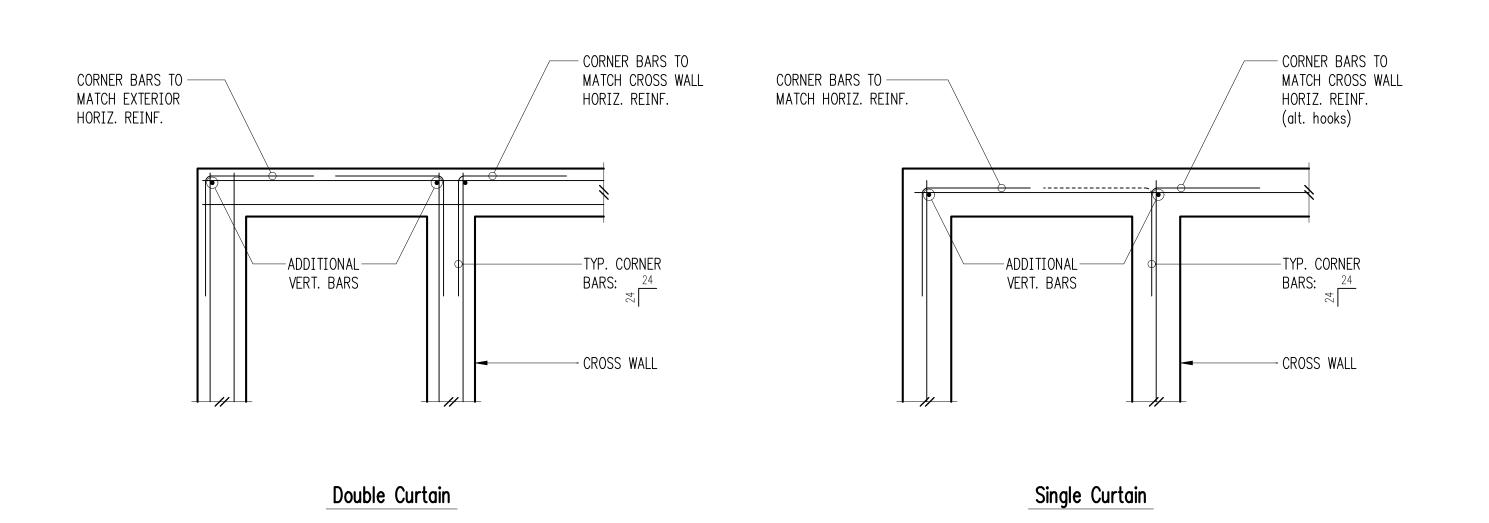


DESIGN:	LAN	
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CHECKED:	SRW	
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Typical Slab Joints



Typical HD19 Holdown **6**



Typical Corner Bars at Concrete Walls and Footings

PROJECT TITLE: Nguyen Residence

9831 SE 42nd Place Mercer Island, WA 98040

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Typical

Concrete

Details

3/4" = 1'-0" U.N.O.

May 19, 2022

01519-2022-01

66 Bell Street, Unit 1

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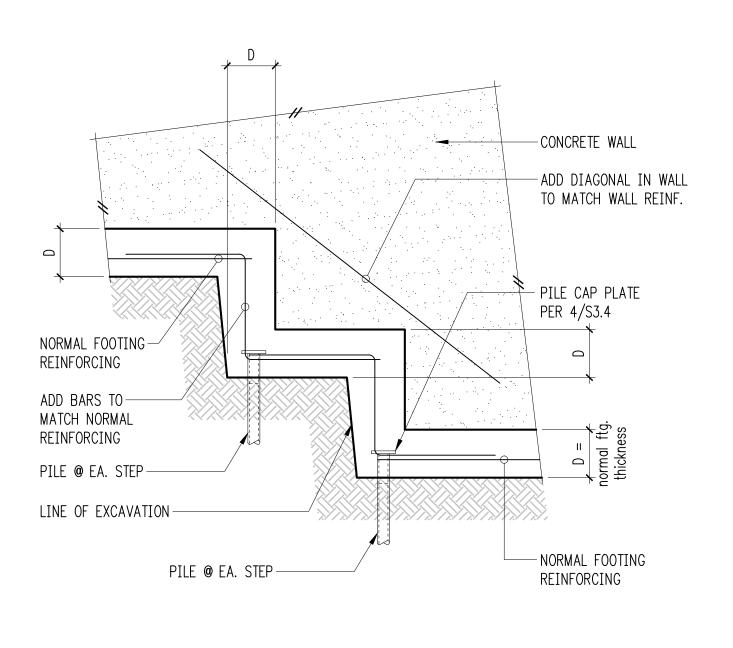
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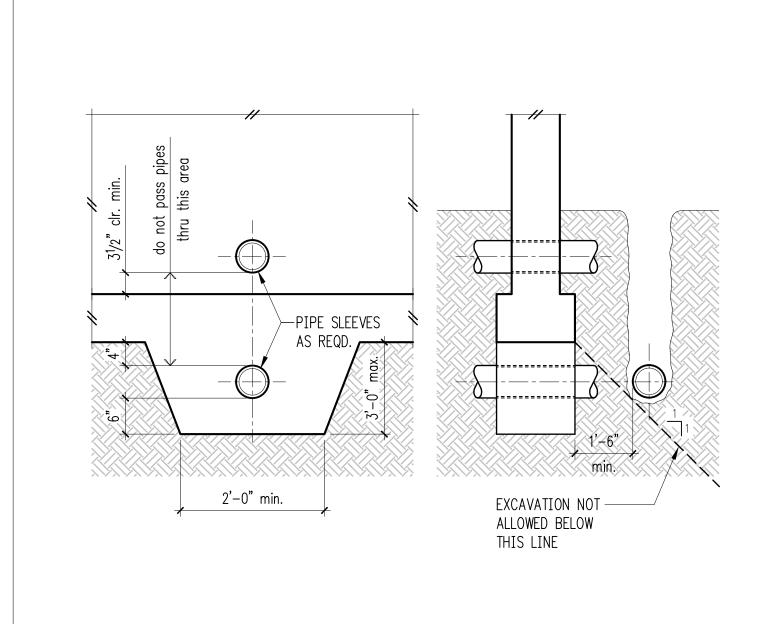
PANEL EDGE NAILING OVER HOLDOWN POST SHEARWALL PER PLAN HDU HOLDOWN WASHER & NUT PER SCHEDULE	PANEL EDGE NAILING OVER HOLDOWN POST SHEARWALL PER PLAN HDU HOLDOWN
(2)#4 TOP MIN #4 @ 12"oc E.W. TOP & BOT.	• (2)#4 TOP CONT.
3D min.	STEM WALL W/ REINF. PER GEN. NOTES (u.n.o.)
HDU Into Footing Option	HDU Into Stem Wall Option

Holdow	n Schedule	
Plan Mark	Screws	1
	(0)000 1, 2, 01, 2	

Plan Mark Screws	Anchor	anchor Min. A.B. Embed (D)		Holdown Post ①		
	Bolt	Stem Wall	Footing	if 2x4	if 2x6	
HDU2-SDS2.5	(6)SDS ¹ /4"x2 ¹ /2"	⁵ /8"ø	12"	4"	(2) 2x4	(2) 2x6
HDU4-SDS2.5	(10)SDS ¹ /4"x2 ¹ /2"	⁵ /8"ø	18"	6"	4x4	4x6
HDU5-SDS2.5	(14)SDS ¹ /4"x2 ¹ /2"	⁵ /8"ø	SB ⁵ /8x24	7"	4x4	4x6
HDU8-SDS2.5	(20)SDS ¹ /4"x2 ¹ /2"	⁷ /8"ø	SSTB28	8"	4x6	6x6
HDU11-SDS2.5	(30)SDS ¹ /4"x2 ¹ /2"	1"ø	SB1x30	10"	4x8	6x6
HDU14-SDS2.5	(36)SDS ¹ /4"x2 ¹ /2"	1"ø	N/A	12"	4x8	6x6

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





\$3.1

DATE:

PROJECT NO:

Typical HDU Holdown 10

Typical Stepped Footing 11

Pipe and Trench Locations 12

