ABBREVIATIONS LOWER JOIST ANCHOR BOLT ABOVE FINISH FLOOR MAXIMUM MANUFACTURER MICRO-LAM BEAM BTWN BLKG BM REFERS TO ACTUAL SIZE TO SCALE TOM OF BEAM VERFLOW DRAIN TTOM OF WALL VERHANG DWNER-SUPPLIED ABINET/CASEWORK ONTRACTOR-INSTALLED PLASTIC LAMINATE ONCRETE MASONRY UNIT PRESSURE TREATED RADIUS/RISER REINFORCEMENT CTRSNK CTOP OUNTERSINK RESILIENT FLOORING DROPPED BEAM ROUGH OPENING. BLDG CODE DIMENSION QUARE INCHES SHEATHING LEC L, ELEV SPRING POINT ËŠMT ASEMENT EW EXIST, (E) SHEAR WALL BE REMOVED JSH FRAMED OP OF CONCRETE ACE OF BRICK FOC MASONRY L FOF FOFIN OILET PAPER HOLDER FACE OF FINISH TO REMAIN TUBE STEEL TYPICAL TONGUE AND GROOVE ALVANIZED GROUND FAULT INTERRUPTOR (IPE VAPOR BARRIER -LAM BEAM VERTICAL GRAIN VERIFY IN FIELD YPSUM WALL BOARD WASHER & DRYER HORIZ WELDED WIRE FABRIC WEATHER RESISTANT BARRIER

SYMBOL LEGEND KITCHEN ——— ROOM NAME ROOM INFO. - ROOM NUMBER - FLOOR FINISH MATERIAL ELEV: ----- T.O. FINISH FLOOR ELEV. GRID NUMBER/LINES DOOR TAG — DOOR NUMBER (102.1) -WINDOW TAG - WINDOW LETTER REVISION TAG - REVISION NUMBER - DRAWING NUMBER EXT. ELEV. CALL-OUT -SHEET NUMBER - DRAWING NUMBER, TYP INT. ELEV. CALL-OUT SHEET NUMBER SHEET NUMBER BLDG. SECTION CUT - DRAWING NUMBER LINE SHOWS DIRECTION SECTION IS LOOKING - ARROW SHOWS DIRECTION SECTION IS LOOKING - DRAWING NUMBER WALL SECTION CUT - SHEET NUMBER LINE SHOWS DIRECTION DETAIL IS LOOKING — DETAIL NUMBER DETAIL CALL—OUT (A5.2)------ SHEET NUMBER DETAIL CALL-OUT — SHEET NUMBER - DRAWING/DETAIL NUMBER DRAWING/DETAIL TITLE FLOOR PLAN DRAWING TITLE - DRAWING SCALE CAD FILE NAME — ---- ELEVATION ELEV. 0'-0" DATUM LINE MAIN LEVEL FIN. FLR. ----- REFERENCE COMBINATION SMOKE

MONOXIDE DETECTOR

SMOKE DETECTOR

GENERAL NOTES

- 1. IF ERRORS, OMISSIONS OR CONFLICTS IN THESE DOCUMENTS ARE FOUND OR SUSPECTED, NOTIFY THE ARCHITECT IMMEDIATELY AT THE ADDRESS OR TELEPHONE NO. SHOWN.
- 2. CONTRACTOR TO VERIFY ALL DIMENSIONS AT THE SITE. 3. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, LOCATION, AND DISPOSITION OF EXISTING UTILITIES AND EASEMENTS. 4. FOR ACCURATE DIMENSIONS, DO NOT SCALE DRAWINGS.
- 5. INFORMATION, INCLUDING NOTES AND DIMENSIONS, ON REPETITIOUS DETAILS MAY BE INDICATED IN ONLY ONE LOCATION. AT OTHER LOCATIONS WHERE DETAILING OR CONSTRUCTION IS SIMILARLY IMPLIED, PROVIDE SAME CONSTRUCTION. 6. UNLESS NOTED OTHERWISE (UNO):
 - DIMENSIONS FOR CONC. ARE TO FACE OF CONC. - DIMENSIONS FOR WOOD AND METAL STUD FRAMING ARE TO FACE

- DIMENSIONS FOR CABINETS ARE TO FACE OF FINISH WALL AND CABINET BOXES

APPLICABLE CODES

MERCER ISLAND LAND USE & ZONING CODE 2018 INTERNATIONAL RESIDENTIAL CODE W/ STATEWIDE AND CITY AMENDMENTS 2018 WASHINGTON STATE ENERGY CODE 2018 INTERNATIONAL FIRE CODE W/ STATEWIDE AND CITY AMENDMENTS 2018 INTERNATIONAL MECHANICAL CODE W/ STATEWIDE AND CITY AMENDMENTS NFPA 70 NATIONAL ELECTRICAL CODE 2018 UNIFORM PLUMBING CODE

FIRE SAFETY & LIFE SAFETY NOTES

	. , , _	
FIRE AREA SQUARE FOOTAGE CALCULATION		
MAIN FLOOR INTERIOR MEASUREMENT	=	1642 SF
LOWER FLOOR INTERIOR MEASUREMENT	=	878 SF
OTHER FLOOR INTERIOR MEASUREMENT	=	756 SF
ATTACHED CARPORT INTERIOR MEASUREMENT	=	670 SF
MAIN FLOOR COVERED DECK MEASUREMENT	=	130 SF
LOWER LEVEL COVERED EXTERIOR DECK MEASUREME	EN≢	197 SF
TOTAL GROSS SQUARE FEET	=	4273 GSF

- 1. PROVIDE NEW BIDDER DESIGNED FIRE SPRINKLER SYSTEM FOR ENTIRE HOUSE AS REQUIRED BY MERCER ISLAND FIRE DEPARTMENT; TO BE MONITORED AND COMBINED WITH MONITORED SMOKE DETECTION SYSTEM 2. SYSTEM TO MEET REQUIREMENTS OF NFPA 13D
- 3. PROVIDE HOUSEHOLD FIRE ALARM PER MERCER ISLAND STANDARDS AND NFPA 72 CHAPTER 29
- 4. PROVIDE 5/8" TYPE X SHEETROCK THROUGHOUT
- 5. SMOKE DETECTORS PROVIDED PER IRC R314, UNLESS NOT REQUIRED DUE TO FIRE ALARM.; SMOKE DETECTION SYSTEM TO BE MONITORED AND COMBINED WITH MONITORED FIRE SPRINKLER SYSTEM
- 6. CARBON MONOXIDE DETECTORS PROVIDED PER IRC R315
- 7. PROVIDE SOLID CORE DOORS THROUGHOUT IN NEW STRUCTURE

UTILITIES NOTES

- 1. PROVIDE NEW WATER SERVICE METER PER FIRE SAFETY REQUIREMENTS. PROVIDE NEW PIPING TO DESIGNATED LOCATIONS PER PLAN. NEW SERVICE TO ACCOMMODATE REQUIREMENTS FOR DOMESTIC & FIRE SPRINKLER WATER. IRRIGATION TO BE PROVIDED BY EXISTING SERVICE.
- 2. ELECTRICAL PANEL: PROVIDE NEW ELECTRICAL SERVICE TO SUPPLEMENT EXISTING SERVICE AS REQ'D FOR NEW LOADS. SIZE T.B.D.
- 3. GAS: PROVIDE NEW GAS SERVICE AS REQUIRED. PROVIDE NEW PIPING TO DESIGNATED LOCATIONS PER PLAN.
- 4. PRIOR TO CONSTRUCTION, PROVIDE TV INSPECTION OF EXISTING PRIVATE SIDE SEWER BETWEEN THE RESIDENCE AND THE PUBLIC SEWER MAIN AND REPLACE IF FOUND TO BE DEFECTIVE.
- 5. FINAL LOCATION OF WATER SERVICE, METER BOX AND RPBA SHALL BE DETERMINED BY THE WATER DEPARTMENT PRIOR TO CONSTRUCTION.
- 6. REFER TO CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS

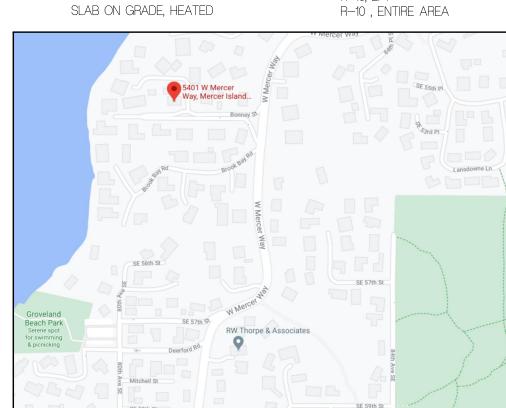
MECHANICAL CODE NOTES

- 1. MECHANICAL PERMIT WILL BE SUBMITTED AND OBTAINED BY BIDDER-
- 2. PROVIDE VENTILATION SYSTEM PER SECTION R403
- 3. WHOLE HOUSE VENTILATION SYSTEM TO BE PER M1507.3

ENERGY CODE NOTES

1. COMPLIANCE IS SHOWN THROUGH PRESCRIPTIVE APPROACH 2018 WASHINGTON STATE ENERGY CODE PRESCRIPTIVE REQUIREMENTS EOD COOLID D_3 OCCUDANCY CLIMATE 70NE 40

FOR GROUP R—3 OCCUPANC	TOLIVITE ZOINE TO
COMPONENT	MIN. REQUIREMENT
FENESTRATION U-VALUE	0.30
OVERHEAD GLAZING U-VALUE	0.50
CEILING	R-49
VAULTED CEILING	R-38, IF UNCOMPRESSED FU
	DEPTH AT PLATE
WALL ABOVE GRADE	R-21 INT
WALL BELOW GRADE	10/15/21 INT + 5TB
FLOOR	B-30
SLAB ON GRADE	R-10, 2FT
SLAB ON GRADE, HEATED	R—10 , ENTIRE AREA
	Wilder (Mg)



2002A-SITE.dwg

 $\bigcirc 2^{\frac{\text{VICINITY MAP}}{\text{N.T.S.}}}$

ENERGY CODE NOTES CONTINUED

- 2. EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAME OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOORS, AND ROOFS, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER-STRIPED TO LIMIT AIR LEAKAGE.
- 3. WINDOW AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM OF R-10 INSULATION
- 4. CONFORM TO AIR BARRIER REQUIREMENTS PER TABLE R402.4.1.1
- 5. CONFORM TO AIR LEAKAGE REQUIREMENTS IN SECTIONS R402.4.1 THROUGH R402.4.5
- 6. PROVIDE TESTING PER R402.4.1.2
- 7. TEST MECHANICAL SYSTEM PER R101.4.3.1
- 8. TOTAL ENERGY CREDITS REQUIRED (MEDIUM DWELLING UNIT): 6 CREDITS HEATING OPTION: 1 COMBUSTION HEATING MINIMUM NAECA 0 CREDIT
- OPTION 1.3: EFFICIENT BUILDING ENVELOPE 0.5 CREDITS -REFER TO BLDG SECTIONS FOR ASSEMBLY R-VALUES & WINDOW/DOOR SCHEDULE FOR U-VALUES OPTION 2.2: AIR LEAKAGE CONTROL & WHOLE HOUSE 1.0 CREDITS
- PER R402.4.1.2: TESTED AIR LEAKAGE TO BE 2.0 AIR CHANGES/HR MAX @ 50 PASCALS OPTION 3.1: HIGH EFFICIENCY HVAC EQUIPMENT 1.0 CREDITS ENERGY STAR RATED GAS BOILER; MIN AFUE 90%
- OPTION 4.2: HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM 1.0 CREDITS HVAC EQUIPMENT AND DUCT INSTALLATION COMPLY W/REQUIREMENT PER R403.3.7 OPTION 5.3: EFFICIENT WATER HEATING 1.0 CREDITS
- ENERGY STAR RATED GAS WATER HEATER W/MIN UEF OF 0.91; REFER TO SHEET A3.1 OPTION 6.1: RENEWABLE ELECTRIC ENERGY 1.0 CREDITS 1200kWh SOLAR ARRAY; REFER TO SHEET A1.2

#236

TREE DRIPLINE

TYPICAL

OPTION 7.1: APPLIANCE PACKAGE 0.5 CREDITS SEE APPLIANCE SCHEDULE ON SHEET A2.3 6.0 CREDITS TOTAL CREDITS:

PROPERTY LINE N90d00'00"W 145.00'

PER MICC 19.02.020.C.3.A:

MÀX 18" INTO REQUIRED

(N) CONCRETE

(E) DECK TO BE

DEMOLI\$HED; SHOWN

TREE PROTECTION AS

#S-3 FOR EXTENT —

REQ'D PER MICC 19.10.080 &

#233 (E)

PER ARBORIST, REFER TO

LINE OF PROPOSED FOOF;

OUTLINE OF WALLS BELOW -

#228

5'-\0" SIDE YARD

SETBACK

、\$HOWN DASHED—

(E) SHÈD TO BE

SHOWN DASHED——

\ DEMOLISHED;

PER\MICC 19.02.020.C.3.A:

MAX 18" INTO RÉQUIRED YARD/SETBACK \

EAVÉ MAY PRÔJECT

SITE WALL-

DASHED —

`68'+3 3/4"/TO F.O. EAVI

_10'<u>+0" SIDE YARD SETBACK</u>

#234

ÉAVE MAY PROJÈST

YARD SETBACK -

ZONING INFORMATION

R-15 ZONING: CONSTRUCTION TYPE: V-B (NON-RATED) OCCUPANCY: SINGLE-FAMILY DWELLING CONDITIONED AREA CONDITIONED LOWER LEVEL

<u>CONDITONED MAIN LEVEL</u> + 1,642 SF TOTAL CONDITIONED AREA UNCONDITIONED LOWER LEVEL <u>UNCONDITIONED CARPORT</u> TOTAL UNCONDITIONED AREA

TOTAL CONDITONED & UNCONDITONED AREA 3,946 SF LOT COVERAGE: 3603 SF PROPOSED NEW / 11,600 SF LOT AREA = 31% LOT COVERAGE = OK

40% MAX

(REFER TO 2/TS-2) HARDSCAPE AREA: (REFER TO 3/TS-2) HEIGHT LIMIT: 30' ABOVE AVERAGE MAX BUILDING HEIGHT BUILDING ELEVATION (REFER TO 1/TS-2) SETBACKS: FRONT YARD: 20'-0"

> SIDE YARD: 15'-0" MIN SUM; 5'-0" MIN; MIN 10'-0" @ ADJOINING SIDE YARD, IF GABLE ROOF HT >25'-0" REAR YARD: 25'-0"

TREE REQUIREMENTS: REFER TO TS-3 TREE RETENTION AND REPLANTING PLAN AND ARBORIST REPORT ON SITE TREE INVENTORY: #201, #204, #206, #208, #213,

> #224, #225, #226, #227, #228, #229, #230(E), #231, #233(E), OFF SITE TREE INVENTORY: #202, #203, #205, #207, #209, #210, #211, #212, #232, #237(E)

> > GRÁVEL

BELOW

(N) DECK @

MAIN LEVEL

_PROPERTY_LINE_N90d'00'00";\\ 145.00'\

BONNEY STREET VACATED

#214(E), # 215, #216, #217, #218, #219, #220, #221, #222, #223,

PROJECT INFORMATION

ASSESSOR'S PARCEL: 2948900022 QUARTER-SECTION-TOWNSHIP-RANGE: NE-24-24-4

PROJECT ADDRESS: 5401 W MERCER MERCER ISLAND, WA 98040

BE REMOVED

(E) TREES TO BE

NOTATED-W/X'-

FOOTPRINT OF PROPOSED

W/ATTACHED (2) CAR

CARPORT

MERCER ISLAND, WA 98040

MAIN LEVEL FIN FLR = 82'-2 1/4"

WATER SUPPLY

FROM STREET

5401 W. MERCER WAY

PARCEL: 2948900022

SINGLE-FAMILY RESIDENCE

REMOVED

PROJECT DESCRIPTION:

DEMOLITION OF EXISTING SINGLE FAMILY RESIDENCE; CONSTRUCTION OF NEW SINGLE-FAMILY RESIDENCE W/ ATTACHED (2)-CAR CARPORT.

LEGAL DESCRIPTION: N 10 FT OF VAC BONNEY ST ADJ PLat Block: 2

GROVELAND PARK ADD S 70 FT OF 20-21-22 & S 70 FT OF E 25 FT OF 19 & Plat Lot: 19 THRU 22

IMPERVIOUS ON OUR ATIONS

IMPERVIOUS CALCULATIONS (MICC 19.02.020.3.B)					
EXISTING IMPERVIOUS SURFACE	AREA (SF)	NEW IMPERVIOUS SURFACE	AREA (SF)		
EXISTING ROOF	1449	NEW ROOF: MAIN	2221		
EXISTING CARPORT ROOF	520	NEW ROOF: CARPORT	884		
EXISTING DRIVEWAY	426	NEW DRIVEWAY	498		
EXISTING SHED	127	NEW UNCOVERED DECK #1	147		
EXISTING UNCOVERED DECK	373	NEW SITE WALLS	126		
EXISTING UNCOVERED PATIO	228				
EXISTING WALKWAY	191				
EXISTING STAIR #1	44				
EXISTING STAIR #2	40				
EXISTING TOTAL IMPERVIOUS SURFACE TO	3398	NEW + REPLACED	3876		

FOTAL NET AREA CHANGE IN PROJECT IMPERVIOUS SURFACE AREA =

(E) TREES; COVERED

BY (N) ROOF; TO BE

REMOVED NOTATED

_ W/ **'X**'; TY₽∕OF 2----

• — (N) DECK/@

MAIN LÉVEL

PLANTER AREA —

DRIVEWAY SLOPED REFER TO CIVIL

(N) CARPORT

(E) GAS SUPPLY FROM

TREE DRIPLINE

STREET TO BE RELOCATED, VIF

EXISTING TO REMAIN - EXISTING TO BE REMOVED) - NEW

ET NEW = 478 SF IMPERVIOUS SURACE < 500 SF

IMPERVIOUS SURFACE

PROJECT DIRECTORY

TOMOKO LUMPKIN 5401 W MERCER WAY MERCER ISLAND, WA 98040

ARCHITECT: JAY DEGUCHI SUYAMA PETERSON DEGUCHI 8601 8TH AVE S SEATTLE, WA 98108

PHONE: (206) 256-0809 EMAIL: jay@s-pd.com GEOTECHINCAL ENGINEER: KEITH JOHNSON GEO GROUP NORTHWEST. INC

PHONE: (206) 850-2643 CIVIL ENGINEER: REBEKAH WESTON RED BARN ENGINEERING, INC. 6610 NE 181ST STREET KENMORE, WA 98028 PHONE: (425) 419-4979

STRUCTURAL ENGINEER:

SEATTLE, WA 98121

THOMAS QUIGLEY

P.O. BOX 2013

ARBORIST:

SWENSON SAY FAGET

PHONE: (206) 443-6212

OLYMPIC NURSERY, INC

WOODINVILLE, WA 98072

2124 3RD AVENUE SUITE #100

EMAIL: randerson@ssfengineers.com

Suyama Peterson Deguchi

8601 8th Avenue South Seattle, Washington 98108

RYAN ANDERSON

DRAWING LIST

13705 BEL-RED ROAD

BELLEVUE, WA 98005

PHONE: (425) 649-8757

MERCER ISLAND BUILDING PERMIT COVER SHEET TITLE SHEET, PROJECT INFO, & SITE PLAN SITE SURVEY CODE COMPLIANCE DIAGRAMS TREE RETENTION AND REPLANTING PLAN C0.0 C0.1 COVER SHEET NOTES C1.0 TESC PLAN TESC DETAIL GRADING & UTILITY PLAN C2.0 C2.1 GRADING & UTILITY SECTIONS DETAILS A1.0 LOWER LEVEL FLOOR PLAN MAIN LEVEL FLOOR PLAN ROOF PLAN A1.2 BUILDING ELEVATIONS A2.1 BUILDING ELEVATIONS WINDOW + DOOR & APPLIANCE SCHEDULE A2.3 BUILDING SECTIONS BUILDING SECTIONS BUILDING SECTIONS GENERAL STRUCTURAL NOTES S2.1a PIN PILE FRAMING PLAN FOUNDATION PLAN UPPER FLOOR FLOOR FRAMING PLAN ROOF FRAMING PLAN CONCRETE DETAILS CONCRETE DETAILS

WOOD DETAILS

(E) TREES ON

REMAIN, UNO/

SITE TO

#213

REVISED; REFER TO OWN

FOR EXACT GRADE INFID —

TREE DRIPLINE

TYPICAL

WOOD FRAMING DETAILS

WOOD FRAMING DETAILS

(2) NEW REPLACEMENT

TREES, SPECIES TBD IN

ACCORDANCE WITH

MICO CODE -

NEW SITE WALL

-(E) CARRORT AND

(E)\TRENCH DRAIN TO

GROUNDCOVER FINISH

BE RELOCATED \

NORIVEWAY TO BE

DEMOLISHÈD

MATCH (E)

DRIVEWAY LENGTH 20'-9 1/4"/ VIF

81/-0 1/4" AT DEMO'D DRIVEWAY

/|FIN CONC \n r.p.w. | | |

#208

#204

#203

LUMPKIN RESIDENCE 5401 W. MERCER WAY MERCER ISLAND, WA, 98040 TREE DRIPLINE Job No. 2002 PRIVATE DRIVE SSUE

TITLE SHEET, PROJECT INFO. SITE + VICINTY PLAN

REGISTERED

ARCHITECT

STATE OF WASHINGTO

03/17/2021

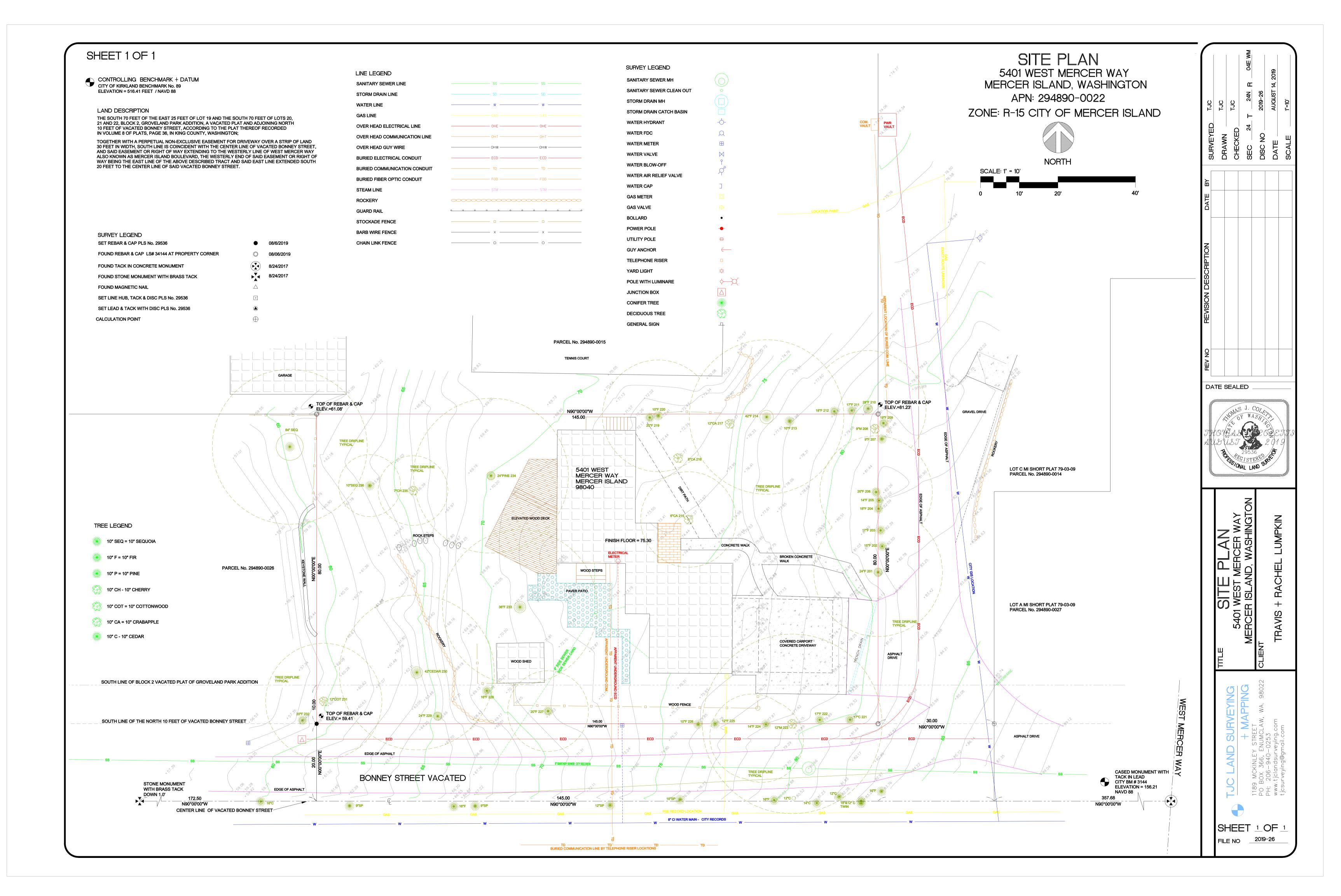
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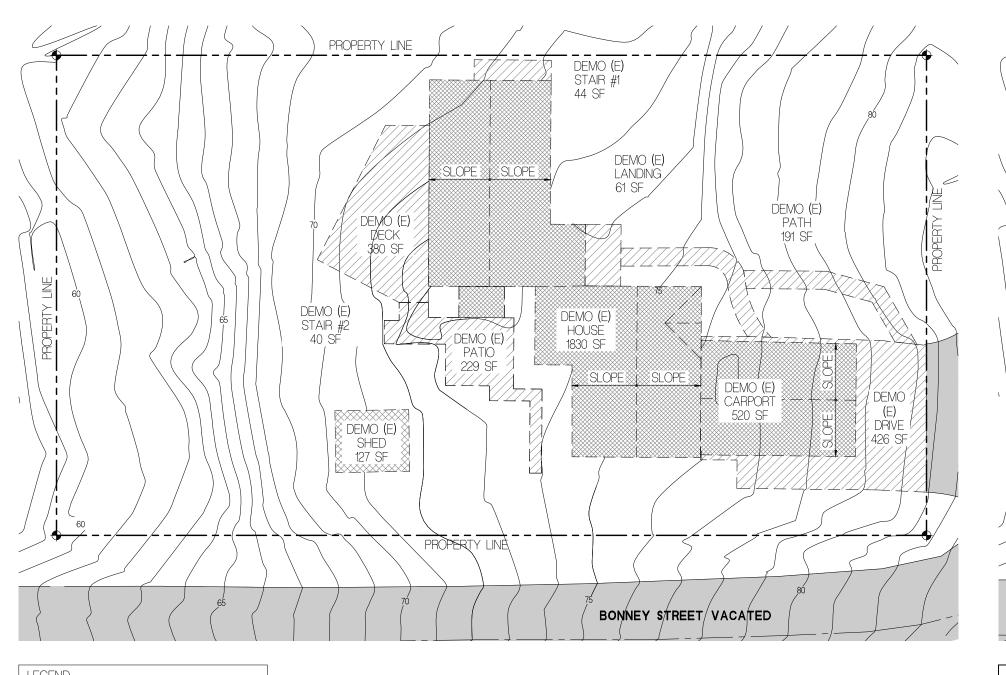
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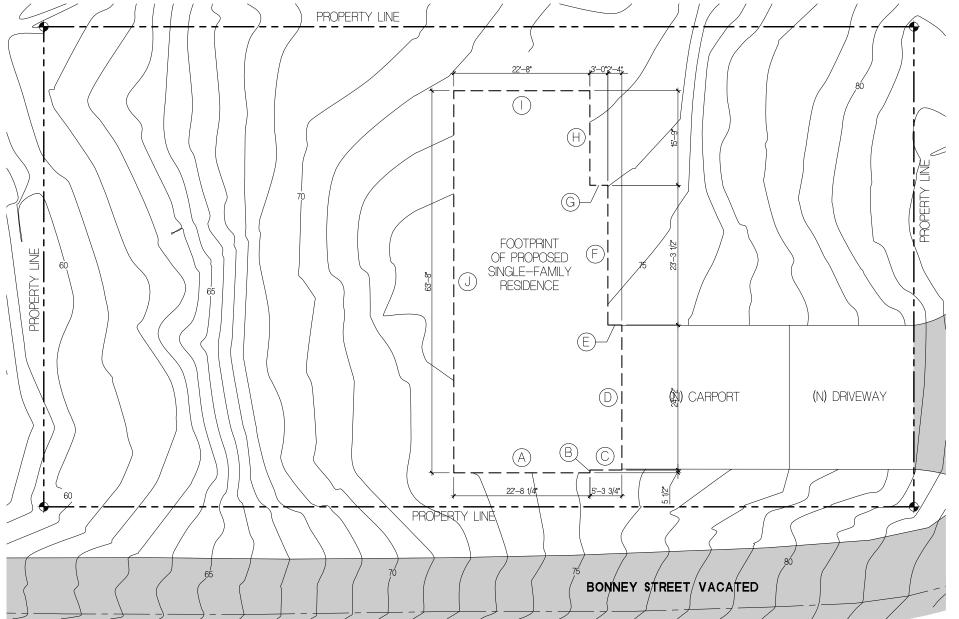
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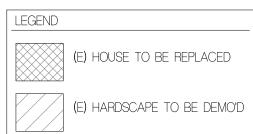
Sheet No.







	PROPERTY LINE	
PROPERTY LINE	POOTPRINT OF PROPOSED SINGLE—FAMILY RESIDENCE	PROPERTY LINE
	DI (3) CARPORT	(N) DRIVEWAY
60	A B C 5-3 3/4* 5-3 3/4*	
	PROPERTY LINE	80
65	BONNEY STREET VACATED	





WALL SEGMENT	MID-POINT ELEV (ME)	SEGMENT LENGTH (SL)	ME x SL
Α	73.80	22.70	1675.26
В	75.00	0.46	34.50
С	75.40	5.30	399.62
D	75.50	24.20	1827.10
E	75.00	2.30	172.50
F	75.60	23.30	1761.48
G	73.75	3.00	221.25
Н	73.00	15.75	1149.75
1	72.00	22.70	1634.40
J	74.00	63.70	4713.80
SUBTOTAL		183.41	13589.66
	JILDING ELEV 83.41 =	ATION =	74.09
13591.40 / 18 (74.09' OR 74'-	83.41 =		74
иахімим ві	JILDING ELEV	ATION ALLOWED	104.0

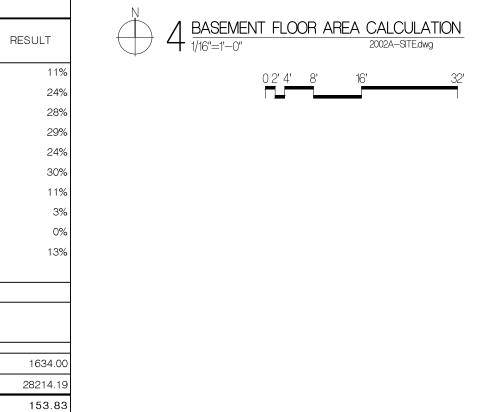
= ABE + 30' =

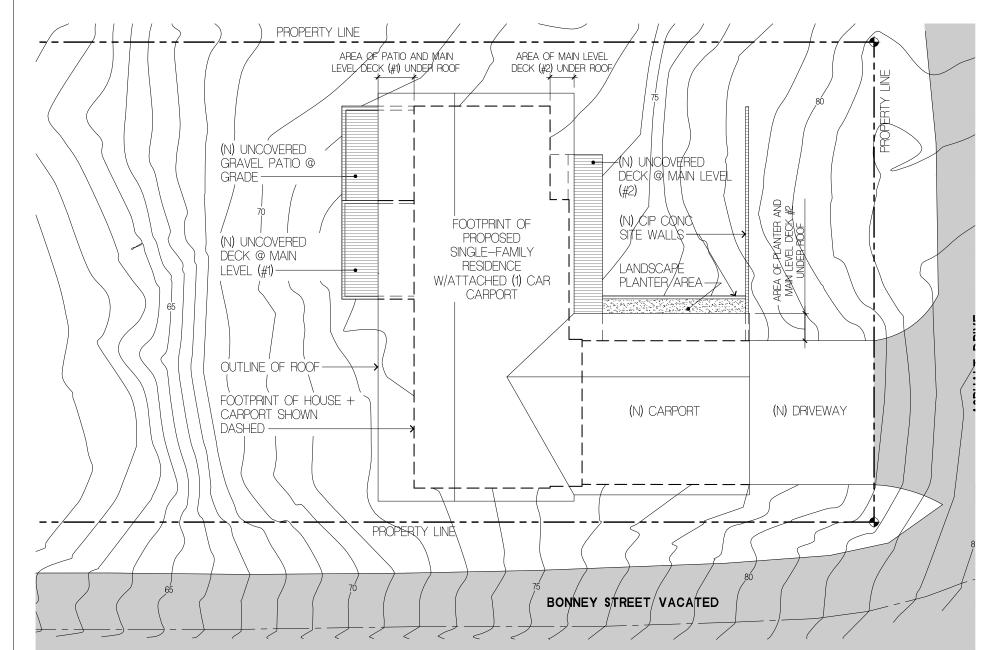
				ASEMEN 020.A &			CULATIO	N	
AVERAGE BUILDING ELEVI/16"=1"-0"	VATION CALCULATION 2002A—SITEdwg	WALL SEGMENT	LENGTH (FT)	MID-POINT ELEVATION	MID-POINT HT	FLR HT	MID-PT HT x FLR HT	COVERAGE	RI
0 2' 4'	8' 16' 32'	Α	22.70	73.80	1.05	9.44	0.11	11.12	
		В	0.46	75.00	2.25	9.44	0.24	23.83	
		С	5.30	75.40	2.65	9.44	0.28	28.07	
		D	24.20	75.50	2.75	9.44	0.29	29.13	
		E	2.30	75.00	2.25	9.44	0.24	23.83	
		F	23.30	75.60	2.85	9.44	0.30	30.19	
		G	3.00	73.75	1.00	9.44	0.11	10.59	
		Н	15.75	73.00	0.25	9.44	0.03	2.65	
		1	22.70	72.00	0.00	9.44	0.00	0.00	
		J	63.70	74.00	1.25	9.44	0.13	13.24	
		SUBTOTAL	183.41					172.67	
		AVERAGE COVERAGE						17.27	

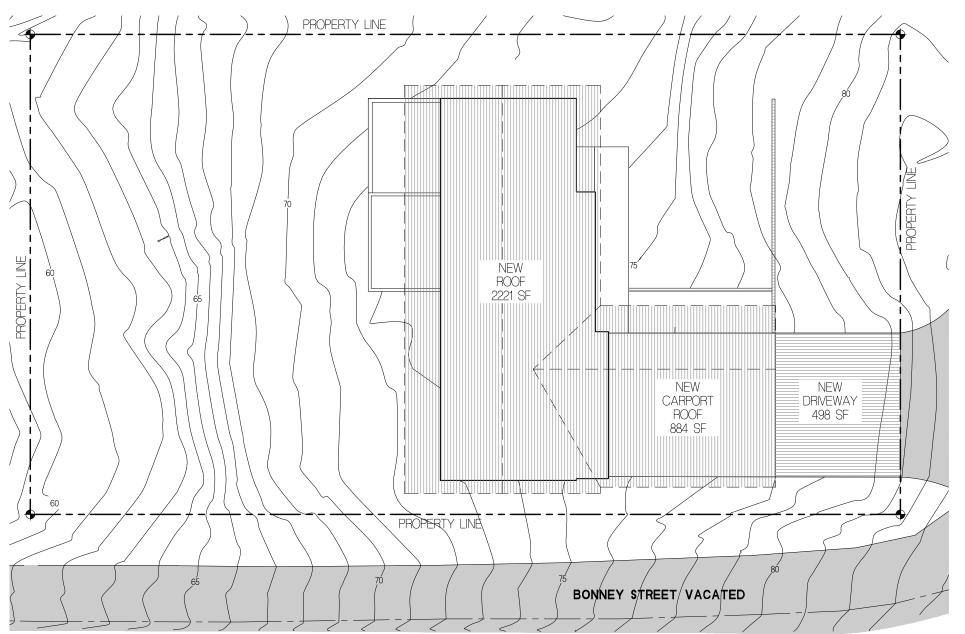
BASEMENT AREA SF INCLUDING CONDITIONED AND UNCONDITIONED) =

BASEMENT AREA (BA) x AVERAGE COVERAGE (AC) =

BC x AC / TOTAL OF ALL WALL SEGMENT LENGTHS =

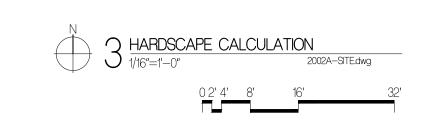


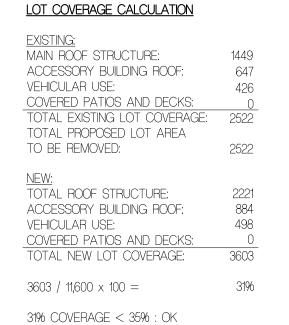


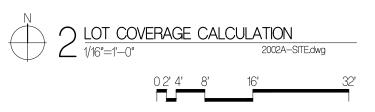


	PROPERTY LINE FOOTPRINT OF PROPOSED SINGLE-FAMILY RESPONDED THE MAN ON PROPERTY LINE (N) CAPPORT (N) DEMENSAY FOOTPRINT OF LOW CAPPORT (N) DEMENSAY
4	BONNEY STREET VACATED

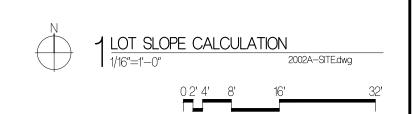
EXISTING HARDSCAPE SURFACE	AREA (SF)	NEW HARDSCAPE SURFACE	ARE. (SF
EXISTING UNCOVERED DECK	373	NEW UNCOVERED DECK #1	147
EXISTING UNCOVERED PATIO	228	NEW UNCOVERED DECK #2	99
EXISTING WALKWAY	191	NEW UNCOVERED GRAVEL PATIO	95
EXISTING STAIR #1	44	NEW SITE WALLS	126
EXISTING STAIR #2	40		
EXISTING TOTAL HARDSCAPE SURFACE TO BE REMOVED	876	NEW + REPLACED HARDSCAPE SURFACE	467
TOTAL PROJECT HARDSCAPE AF (EXISTING TO REMAIN - EXISTING REMOVED) + NEW			467
HARDSCAPE % = NEW / 11,6	SOO (LOT	ADEA) v 100	4.03







LOT SLOPE CALCULATION	
HIGHEST ELEVATION LOWEST ELEVATION DIFFERENCE IN HT	82.0' -58.5' 23.5'
SHORTEST HORIZONTAL DISTANCE BETWEEN PTS	149.1'
LOT SLOPE: 23.5' / 149.1' × 100 =	15.7%
15.7% SLOPE = MAXIMUM LO REQUIRED LANDSCAPING AF	
GROSS/NET LOT AREA: ALLOWED LOT COVERAGE:	11,600 4060



PERMIT SET
Sheet No.

Project Title **LUMPKIN**

Drawing Title

03/17/2021

Job No. 2002

ISSUE

PERMIT SET

CODE DIAGRAMS

RESIDENCE 5401 W. MERCER WAY MERCER ISLAND, WA, 98040

REGISTERED

ARCHITECT

STATE OF WASHINGTON

LAND USE AND BUILDING

Suyama Peterson Deguchi

8601 8th Avenue South Seattle, Washington 98108

P 206.256.0809

TS-2

DATE

03/17/2021

TREE INVENTORY TREE # ON-SITE SPECIES DBH" DRPLN RAD' CONDITION COMMENTS DESIGNATION RMV RTN 201 X Pseudotsuga menziesii, Douglas fir 24.1 20' W Canopy ver Tree #202, 203. Deadwood typical of stress. Large ROW Pseudotsuga menziesii, Douglas fir 15.3 18' W Good Off-site. Deadwood, significant ROW Pseudotsuga menziesii, Douglas fir 17.2 Good Off-site. Deadwood, significant, combined canopies. 15' w Large Pseudotsuga menziesii, Douglas fir 17.2 deadwood, planted very close to 205, 206 Large ROW Pseudotsuga menziesii, Douglas fir 13.4 Off-site. 8" from 205, 6" from 206 Large Pseudotsuga menziesii, Douglas fir 18.7 Shared canopy Limbed high, shared canopy Large ROW Pseudotsuga menziesii, Douglas fir 9.6 Off-site. Runted by nearby trees Non-reg Acer macrophyllum, Big leaf maple 7.6 Shared canopy Good Non-reg Shared canopy ROW Pseudotsuga menziesii, Douglas fir 16.4 Shared canopy Off-site, shared canopy that is primarily east. Large Off-site Pseudotsuga menziesii, Douglas fir 24.8 Off-site, ivy infested, shared canopy Large Off-site Pseudotsuga menziesii, Douglas fir 14.1 Off-site. Ivy, may have been topped. Off-site Pseudotsuga menziesii, Douglas fir 19.1 Off-site, minor ivy, response wood 'rib' on buttress south. Large 213 Pseudotsuga menziesii, Douglas fir 9.9 Shared canopy Fair Runt in canopy of other trees Non-reg 214 Pseudotsuga menziesii, Douglas fir 41.3 33' South Exceptional Tree by size definition Exceptional 215 Styrax japonica, Japanese snowball 6.1 12' average Good Close to exisitng house. Non-reg 216 Prunus Blierianna, flowering Plum 6.5 15'S & W Fair/Poor Leans toward house, poor vigor, poor structure Non-reg Prunus Blierianna, flowering Plum 10.7 15' N & S Poor Leans west over exisitng home. Large 219 Pseudotsuga menziesii, Douglas fir 18.7 12' S, 18' W Good Sweeping trunk, self righted, topped? Large 220 Pseudotsuga menziesii, Douglas fir 9.6 Shared canopy Poor Runt, may be attached at base of #219 Non-reg 221 Thuja plicata, Western red cedar 15.3 12-15' avg Fair Enemic, partial root collar buried, poor soil conditions Large 222 Pseudotsuga menziesii, Douglas fir 15.3 10' North Fair/Poor Enemic, girdling root(s), poor soil conditions Large Roots exposed with impacts from foot traffic, poor soil Large 223 Acer macrophyllum, Big leaf maple 12.6 18' North 224 Pseudotsuga menziesii, Douglas fir 9.9 In canopy of Maple #223, 15% deadwood 225 Pseudotsuga menziesii, Douglas fir 13.4 5' North Significant deadwood on east and north. Large Fair/Poor Significant deadwood on east and north. 226 Pseudotsuga menziesii, Douglas fir 11.8 5' North Large Pseudotsuga menziesii, Douglas fir 21.0 Un-remarkable Large 228 Pseudotsuga menziesii, Douglas fir 14.5 8' North Good Limbed high on North side Large Thuia plicata, Western red cedar 24.0 229 15' East Sparse canopy, drought stress? 30.7 15' N, 12' E 3 stem Cedar. Used Sq roots to determine DBH Exceptional Alnus, Red alder 12.6 12' N, 10' E Large 232 Off-site Pseudotsuga menziesii, Douglas fir 20.0 12' N, 8' E Good Off-site, unremarkable Large 233 Pseudotsuga menziesii, Douglas fir 33.6 18' avg Good Exceptional by size, located close to decks and home. Exceptional 23.3 19' Avg Good Limbs hang over house and deck. Prunus, Flowering cherry Good Landscape tree Non-reg Calocedrus decurrens, Incense 5.5' Avg Excellent Unremarkable Non-reg 237 Off-site Giant Sequoia Excellent Off-site, no proposed impacts. Exceptional 36 trees total 10 trees located off-site 26 trees located on-site, 8 are non-regulated by size. Net 18 regulated trees on-site. #237 (E)

TREE DRIPLINE TYPICAL

#232

#234

PROPOSED NEW ROOF ----

DASHED LINE INDICATES

APPROXIMATE LINE OF

#230 (E)

#229

TO BE VERIFIED BY GC -

EXCAVATION; EXACT LOCATION

TREE PROTECTION MEASURES (TPM) SHOULD BE 4' TALL ORANGE POLY FENCING, OR EQUIVALENT, STAKED INTO PLACE AT THE LIMITS OF DISTURBANCE (LOD), EXCEPT THAT TPM FOR THE TREES LOCATED ALONG THE ROW SHALL BE 6' TALL.

CHAIN-LINK PANELS SECURED IN PLACE.

PROPOSED NEW

GRAVEL AREA

ON GRADE

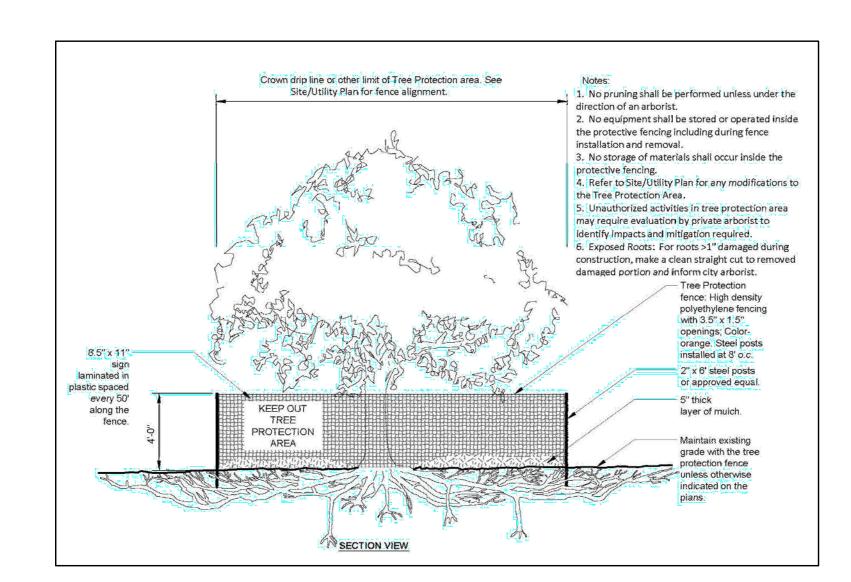
DECK @ MAIN

#227

- SIGNAGE SHALL BE PROVIDED EVERY 20' ALONG THE SECTIONS OF TPM STATING THE FENCE PROVIDES A "TREE PROTECTION ZONE" "NO SOILS, BUILDING MATERIALS OR EQUIPMENT ALLOWED IN PROTECTION ZONE". THESE SIGNS SHOULD BE 8.5" BY 11.0" AND MADE TO BE WEATHER RESISTANT.
- SITE CLEARING, GRADING AND EXCAVATION SHOULD BE MONITORED BY A
 PROFESSIONAL TREE PERSON. ANY ROOTS ENCOUNTERED SHOULD BE CLEANLY CUT
 AS—IF IT WERE A ROOT FROM A TREE SCHEDULED FOR RETENTION. ANY STUMP
 REMOVAL SHOULD BE CONSIDERED FOR ITS POTENTIAL IMPACT TO NEARBY
 PROTECTED TREES.
- ROOT PRUNING, AS NEEDED, SHOULD BE UNDERTAKEN WITH CARE. ADDITIONAL PRUNING STANDARDS ARE DETAILED IN ANSI STANDARD A300 (PART8)—2013 ROOT MANAGEMENT.
- AN ASSESSMENT OF THE ENCOUNTERED ROOTS SHOULD BE UNDERTAKEN TO
 DETERMINE IF ANY OF THE RETAINED TREES INCUR ROOT IMPACTS AND THE EXTENT
 OF THE ROOT IMPACTS.
- ALL EXPOSED ROOTS SHOULD BE COVERED WITH MOIST NATIVE SOIL OR A
 COMMERCIAL COMPOST OR MULCH PRODUCT, SUFFICIENT TO COVER THE FRESHLY
 CUT ROOTS AS SOON AS IS REASONABLE.
- ALL BARE SOILS AROUND THE RETAINED TREES SHOULD BE COVERED WITH 3" OF ARBORIST WOOD CHIPS OR A COMMERCIAL MULCH MATERIAL.
- IF LIMB REMOVAL IS NEEDED IN ORDER TO PROVIDE BUILDING CLEARANCE, SUCH PRUNING SHOULD BE UNDERTAKEN BY A TREE PROFESSIONAL AND SHOULD BE DONE WITH PROPER PRUNING EQUIPMENT.
- THE TREES WOULD BENEFIT FROM ADDITIONAL SUMMER—TIME HYDRATION, AS MAY BE POSSIBLE.

PROPOSED

HOUSE



TREE PROTECTION DETA

-(4) TREES TO BE REMOVED,
MARKED WITH "X"; TYP

PROPOSED SITE WALL -

(2) REPLACEMENT TREES,

SPECIES PER ARBORIST

TREE PROTECTION FENCING

DASHED LINE INDICATES

EXCAVATION; EXACT LOCATION

TO BE VERIFIED BY GC —

PROPOSED
PLANTER AREA

PROPOSED

ATTACHED

CARPORT

PROPOSED NEW ROOF -

1 TREE RETENTION AND REPLANTING PLAN

APPROXIMATE LINE OF

REPORT, TBD ---

PREPARED FOR: THOMAS QUIGLEY OLYMPIC NURSERY, INC. ISA CERTIFIED ARBORIST, TRAQ # PN0655A #206 P: (206) 850-2643 #205 Project Title LUMPKIN #204 **RESIDENCE** 5401 W. MERCER WAY MERCER ISLAND, WA, 98040 #203 #202 #201 TREE RETENTION AND REPLANTING PLAN Date 03/17/2021 TREE D Job No. 2002 TYPICA DATE ISSUE PROPOSED PERMIT SET 03/17/2021 DRIVEWAY **PERMIT SET** Sheet No.

TS-3

Suyama Peterson Deguchi

8601 8th Avenue South Seattle, Washington 98108



VICINITY MAP

SCALE: 1" = 1,000' APPROX.

LEGAL DESCRIPTION

PARCEL #: 294890-0022 GROVELAND PARK ADD S 70 FT OF 20-21-22 & S 70 FT OF E 25 FT OF 19 & N 10 FT OF VAC BONNEY ST ADJ

	SHEET INDEX
SHEET #	SHEET TITLE
C0.0	COVER SHEET
C0.1	NOTES
C1.0	TESC PLAN
C1.1	TESC DETAIL
C2.0	GRADING & UTILITY PLAN
C2.1	GRADING & UTILITY SECTIONS
C2.2	DETAILS

DISCLAIMER: RED BARN ENGINEERING INC. SHALL NOT BE HELD RESPONSIBLE FOR DISCREPANCIES IN THE SITE DIMENSIONS AND ELEVATIONS PREPARED BY OTHERS. IN THE EVENT THAT A DISCREPANCY OCCURS THAT AFFECTS THE DESIGN, CONTACT RED BARN ENGINEERING INC. TO PROVIDE A SITE VISIT AND DESIGN UPDATE.

LEGEND AND ABBREVIATIONS DDUDUCED

PROPOSED		SURVEY LINE LEGEND	
сом	COMMUNICATION LINE	SANITARY SEWER LINE	ss
OHC	OVERHEAD COMMUNICATION LINE	STORM DRAIN LINE	
—— Е ——	ELECTRIC LINE	WATER LINE	w
OHE-	OVERHEAD ELECTRIC LINE	GAS LINE	GAS
F0	FIBER OPTIC LINE	OVER HEAD ELECTRICAL LINE	
G	NATURAL GAS LINE	OVER HEAD COMMUNICATION LIN	
s	SANITARY SEWER LINE	OVER HEAD GUY WIRE	OHW
D	STORM DRAIN LINE	BURIED ELECTRICAL CONDUIT	
т	TELEPHONE LINE	BURIED COMMUNICATION CONDUI	
w	WATER LINE		
——— FM ———	FORCE MAIN	BURIED FIBER OPTIC CONDUIT	FOD
	EDGE OF ASPHALT	STEAM LINE	STM
X X	FENCE LINE	ROCKERY	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
_///////	TO BE REMOVED	GUARD RAIL	
	PROPERTY LINE	STOCKADE FENCE	
	RIGHT OF WAY LINE	BARB WIRE FENCE	x
	STREET CENTERLINE	CHAIN LINK FENCE	o
	LIMIT OF DISTURBANCE/CLEARNING LIMIT		
→ ···	DITCH LINE	SURVEY LEGEND SET REBAR & CAP PLS No. 29536	● 08/6/201s
<u> </u>	SECURITY FENCE	SET NEBAN & OAL TES NO. 25550	

CONCRETE SURFACE

ASPHALT SURFACE

— FILTER FABRIC FENCE

EDGE OF VEGETATION

— · · · — EDGE OF WETLAND

CATCH BASIN (CB)

CULVERT

CLEANOUT

YARD DRAIN

AIR RELEASE

FIRE DEPT CONN

BLOW OFF

(FDC)

	STABILIZED	CONSTRUCTION	ENTRANCE
)	COMM MANHOLE	•	HYDRANT
	COMM BOX	₽	METER
•	COMM POLE	W	MANHOLE
	ANCHOR	A	POST INDICATO
•	GUY POLE	D	THRUST BLOCK
	ELEC BOX	W	VAULT
-	LIGHT	H	VALVE
	YARD LIGHT	•	WELL
 	LUMINAIRE	æ	IRR METER
	METER	*	SPRINKLER
)	ELEC MANHOLE	₽R	IRR VALVE
•	POLE	P	PUMP
	TRANSFORMER		INLET PROTECTION
	GAS METER	*	REMOVE TREE
	GAS VALVE	\ \ \ \ \ \	00110007-000
)	SEWER MANHOLE		COMPOST SOC
	CLEANOUT	P	FLAG
)	CB MANHOLE	- \ -#	MONITOR WELL
.		ф	SIGN
)	STORM MANHOLE	□#	TEST PIT

F>#

 \odot

BUSH

SHRUB

WETLAND FLAG

STOCK PILE

ABBREVIATIONS

AC ACRES ADA AMERICANS W/ DISABILITIES ACT BC BACK OF CURB BOTTOM OF WALL CURB CUT CENTERLINE CL CLEAN OUT COMI CITY OF MERCER ISLAND CY CUBIC YARDS

ESC EROSION AND SEDIMENT CONTROL EX EXISTING FDCO FOUNDATION DRAIN CLEAN OUT

FL FLOWLINE FM FORCE MAIN NORTH NTS NOT TO SCALE

ROW RIGHT OF WAY S SOUTH

TC TOP OF CURB

CONIFER TREE W WEST DECIDUOUS TREE

O 08/06/2019

8/24/2017

8/24/2017

FOUND REBAR & CAP LS# 34144 AT PROPERTY CORNER

FOUND TACK IN CONCRETE MONUMENT FOUND STONE MONUMENT WITH BRASS TACK

FOUND MAGNETIC NAIL SET LINE HUB, TACK & DISC PLS No. 29536

SET LEAD & TACK WITH DISC PLS No. 29536

CALCULATION POINT

DS DOWNSPOUT

EAST

FH FIRE HYDRANT

OHWM ORDINARY HIGH WATER MARK PC POINT OF CURVATURE PCC POINT OF COMPOUND CURVATURE

PRC POINT OF REVERSE CURVATURE PT POINT OF TANGENCY PVC POLYVINYL CHLORIDE PIPE

SCH SCHEDULE SD STORM DRAIN

SDCO STORM DRAIN CLEAN OUT SL SLOPE SSCO SANITARY SEWER CLEAN OUT

STD STANDARD S/W SIDEWALK

TS TOP OF STAIRS TW TOP OF WALL

OWNER/APPLICANT: TOMOKO S LUMPKIN 5401 W MERCER WAY

MERCER ISLAND, WA 98040 TOMOKOLUMPKIN@GMAIL.COM 206-499-0160

CIVIL ENGINEER/CONTACT: RED BARN ENGINEERING INC. 6610 NE 181ST ST STE 2 KENMORE, WA 98028 CONTACT: REBEKAH WESTON, PE REBEKAH@REDBARN-ENGINEERING.COM 206-200-7174

ARCHITECT: JAY DEGUCHI, ARCHITECT 8601 8TH AVE S SEATTLE, WA 98108 206-256-0809 JAY@S-PD.COM

GEOTECHNICAL ENGINEER: KEITH JOHNSON GROUP NORTHWEST, INC. 13705 BEL-RED ROAD BELLEVUE, WA 98005 425-649-8757 PARCEL #: 294890-0022

LOT SIZE: 11,600 SF± ZONE: R-15

EXISTING IMPERVIOUS: 3,744 SF

TOTAL NEW AND REPLACED IMPERVIOUS AREA: 4,156 SF DISTURBED AREA: APPROX. 5,000 SF±

HORIZONTAL DATUM: ASSUMED

VERTICAL DATUM: NAVD '88

BENCH MARK: CASED MONUMENT TACK IN LEAD CITY BENCHMARK #3144 ELEVATION = 156.21

FLOODPLAIN ELEVATIONS:

SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PER FEMA PANEL 53033C0685F

WATER DISTRICT: MERCER ISLAND PUBLIC WORKS

CONSTRUCTION SEQUENCE:

1. FLAG CLEARING LIMITS.

2. INSTALL CSC.

3. PERFORM ROUGH GRADING. 4. CONSTRUCT BUILDING ADDITION.

5. PERFORM FINAL GRADING.

6. INSTALL PLANTINGS.

7. REMOVE CSC.

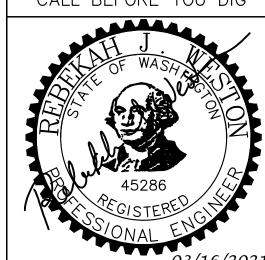
QUANTITIES (FOR PERMITTING ONLY)	CY
CUT	50
FILL	150
NET CUT/FILL	+100

\$ C) Clearing / Grading Approval **Engineering / Drainage Approval** SHEET NO .: CO.0 Signature: 21-0035



RED BARN ENGINEERING INC. 6610 NE 181ST ST, STE 2 KENMORE, WA 98028 PH. (206) 200-7174 REDBARN-ENGINEERING.COM

CALL BEFORE YOU DIG



DESIGN RJW DRAWN EJW CHECKED RJW

> 0 \circ S: WA WA MERCER ISLAND, PROJECT 5401 W MERCER

HEET OVE

PROJECT NAME: LUMPKIN RESIDENCE

RB PROJECT NO .:

GENERAL NOTES

- ALL IMPROVEMENTS SHALL BE INSTALLED PURSUANT TO PLANS APPROVED BY THE CITY IN ACCORDANCE WITH THE APPROVED CONSTRUCTION SCHEDULE.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF MERCER ISLAND, CONDITIONS OF PERMITS ISSUED, THE GEOTECHNICAL EVALUATION RECOMMENDATIONS AND CONSTRUCTION PLANS ACCEPTED BY THE CITY. THE ENGINEER OF RECORD MAY BE REQUIRED TO MONITOR THE CONSTRUCTION, EROSION CONTROL, SITE STABILIZATION MEASURES AND PROVIDE INSPECTION REPORTS TO THE CITY ENGINEER THAT DOCUMENT ALL OF THE WORK PERFORMED.
- 3. THE SEASON FOR CLEARING, GRADING, AND THE CONSTRUCTION OF UTILITIES, STORM DRAINAGE FACILITIES, ROADWAYS AND RETAINING WALLS SHALL NOT BEGIN UNTIL APRIL 1, AND SHALL END BY OCTOBER 1 OF ANY YEAR, UNLESS OTHERWISE APPROVED BY THE CODE OFFICIAL AND CITY ENGINEER.
- 4. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN A MANNER THAT RETAINS AS MUCH NATURAL VEGETATION AS POSSIBLE.
- 5. THE TYPE OF EQUIPMENT TO BE USED FOR LAND CLEARING AND ROADWAY AND UTILITIES CONSTRUCTION SHALL BE DEFINED AT THE PRE—CONSTRUCTION CONFERENCE WITH THE CITY. THE NECESSARY DEVELOPMENT AND ROW USE PERMITS SHALL BE OBTAINED PRIOR TO MOVING EQUIPMENT ONTO THE SITE.

6. THE CITY ENGINEER MAY REQUIRE THAT CERTAIN IMPROVEMENTS BE HAND DUG.

- 7. THE CITY MAY REQUIRE THAT SPECIFIC CLEARING, GRADING, EXCAVATION, OR SENSITIVE CONSTRUCTION WORK BE EVALUATED AND DETAILED BY A GEOTECHNICAL ENGINEER. AS A CONDITION FOR COMPLETION OF THE WORK, THE CITY MAY REQUIRE THAT THE ENGINEER BE PRESENT DURING THE WORK TO MONITOR AND REVIEW SITE CONDITIONS, AND TO RECOMMEND APPROPRIATE SPECIAL CONSTRUCTION TECHNIQUES OR MITIGATING MEASURES.
- 8. ALL DAMAGE TO ADJACENT PROPERTIES OR PUBLIC RIGHTS-OF-WAY RESULTING FROM CONSTRUCTION (E.G., SILTATION, MUD, WATER, RUNOFF, ROADWAY DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT OR HAULING) SHALL BE EXPEDITIOUSLY MITIGATED AND REPAIRED BY THE CONTRACTOR, AT THEIR EXPENSE. FAILURE TO MITIGATE AND REPAIR SAID DAMAGE, OR TO COMPLY WITH THE ACCEPTED CONSTRUCTION PLANS, THE PERMITS ISSUED BY THE CITY, OR THE CITY REQUIREMENT FOR CORRECTIVE ACTION SHALL BE CAUSE FOR THE ISSUANCE OF A "STOP WORK" ORDER, FORECLOSURE ON THE PLAT PERFORMANCE GUARANTEE, AND/OR OTHER MEASURES DEEMED APPROPRIATE BY THE CITY ENGINEER.

9. FOLLOWING CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL SUBMIT A LETTER TO THE CITY CONTAINING THE FOLLOWING STATEMENTS:

THIS CONSTRUCTION HAS BEEN COMPLETED SUBSTANTIALLY IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL INVESTIGATION AND EVALUATION REPORT AND MADE IN CONNECTION WITH OUR ON—SITE MONITORING OF THE ACTIVITIES.

10. FOLLOWING CONSTRUCTION, THE PROJECT CIVIL ENGINEER SHALL SUBMIT A LETTER TO THE CITY CONTAINING THE FOLLOWING STATEMENT:
THIS CONSTRUCTION HAS BEEN COMPLETED SUBSTANTIALLY IN ACCORDANCE WITH

RECOMMENDATIONS CONTAINED WITHIN THE STORM DRAINAGE TECHNICAL INFORMATION REPORT, APPROVED PLAN SET, AND OUR ONSITE MONITORING OF THE ACTIVITIES.

- 11. IF THE DEVELOPER WISHES TO DEFER CERTAIN ON—SITE OR OFF—SITE IMPROVEMENTS, (I.E. LANDSCAPING, CURBS OR SIDEWALKS), WRITTEN APPLICATION WITH FULL AND COMPLETE ENGINEERING DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER. THE APPLICANT SHALL STATE THE REASONS WHY SUCH DELAY IS NECESSARY. IF APPROVAL IS GRANTED, SECURITY IN THE FORM OF A BOND OR ASSIGNMENT OF FUNDS SHALL BE FURNISHED TO THE CITY OF MERCER ISLAND IN AN AMOUNT EQUAL TO A MINIMUM OF 150 PERCENT OF THE ESTIMATED COST OF THE REQUIRED IMPROVEMENTS. THE CITY ENGINEER MUST ACCEPT AND ESTABLISH THE BOND AMOUNT. SUCH SECURITY SHALL LIST THE EXACT WORK THAT SHALL BE PERFORMED BY THE APPLICANT AND SHALL SPECIFY THAT ALL OF THE DEFERRED IMPROVEMENTS SHALL BE COMPLETED WITHIN THE TIME SPECIFIED BY THE CITY ENGINEER, AND IF NO TIME IS SO SPECIFIED, THEN NOT LATER THAN ONE YEAR. ALL PLAT IMPROVEMENTS SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR RESIDENTIAL CONSTRUCTION. REQUESTS TO CONCURRENTLY COMPLETE PLAT IMPROVEMENTS WITH BUILDING CONSTRUCTION PERMITS MUST BE MADE IN WRITING FOR REVIEW AND APPROVED BY THE CODE OFFICIAL IN CONSULTATION WITH CITY ENGINEER.
- 12. THE DEVELOPER SHALL SUBMIT AS—BUILT DRAWINGS SURVEYED BY A WASHINGTON STATE LICENSED PROFESSIONAL LAND SURVEYOR OF ALL UTILITY LINES, STORM DRAIN STUBS, WATER SERVICE LINES, AND DETAILED SIDE SEWER STUBS OR CONNECTIONS TO THE MUNICIPAL SEWAGE COLLECTION SYSTEM FOR EACH LOT PRIOR TO FINAL INSPECTION. AS—BUILT PLAN SHOULD BE PROVIDED IN HARDCOPY, AUTOCAD, DXF, AND PDF FORMAT TO BE INCORPORATED INTO THE CITY'S GIS SYSTEM.
- 13. A BILL OF SALE FOR ANY IMPROVEMENTS TO BE TRANSFERRED TO PUBLIC OWNERSHIP AND MAINTENANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO FINAL INSPECTION OF PLAT IMPROVEMENT.

ON-SITE STORMWATER MANAGEMENT PLANTINGS

PLANTING GENERAL NOTES:

1. PLANTS SHALL BE SITED ACCORDING TO SUN, SOIL, WIND AND MOISTURE REQUIREMENTS.

2. AT A MINIMUM, PROVISIONS MUST BE MADE FOR SUPPLEMENTAL IRRIGATION DURING THE FIRST TWO GROWING SEASONS.

BIORETENTION CELLS, PLANTERS AND RAIN GARDEN NOTES:

- 1. FOR A LIST OF APPROVED PLANTS FOR BIORETENTION/RAIN GARDEN FACILITIES SEE LANDSCAPE PLANS.
- 2. VEGETATION COVERAGE OF SELECTED PLANS MUST ACHIEVE 90—PERCENT COVERAGE WITHIN 2 YEARS OR ADDITIONAL PLANTINGS SHALL BE PROVIDED. UNLESS DESIGNED BY A LICENSED LANDSCAPE ARCHITECT, PROVIDE A MINIMUM OF 1 PLANT PER EVERY 2 SQUARE FEET OF BIORETENTION BOTTOM AND SLOPED SIDE AREA.
- 3. PROVIDE A MINIMUM OF THREE DIFFERENT SPECIES OF SHRUBS AND HERBACEOUS PLANTS IN EACH FACILITY.

STORMWATER FACILITIES/CONTROL OPERATIONS & MAINTENANCE REQUIREMENTS:

ALL STORMWATER FACILITIES/CONTROLS SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2016 SEATTLE STORMWATER MANUAL, APPENDIX G.

WATER NOTES:

1. CONTRACTOR TO COORDINATE EXACT LOCATION OF THE NEW WATER METER WITH THE CITY WATER DEPARTMENT DURING CONSTRUCTION.

EROSION & SEDIMENT CONTROL (ESC) NOTES:

- A. PRIOR TO BEGINNING EARTH DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRADING, ALL CLEARING LIMITS, EASEMENTS, SETBACKS, TREES AND DRAINAGE COURSES SHALL BE CLEARLY DEFINED AND MARKED IN THE FIELD TO PREVENT DAMAGE AND OFFSITE IMPACTS.
- B. CONSTRUCTION VEHICLE ACCESS AND EXIT SHALL BE LIMITED TO ONE ROUTE IF POSSIBLE. ACCESS POINTS SHALL BE STABILIZED WITH QUARRY SPALLS OR CRUSHED ROCK TO MINIMIZE THE TRACKING OF SEDIMENTS ONTO PUBLIC STREETS. WHEEL WASH OR TIRE BATHS SHALL BE LOCATED ON—SITE. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE PAVEMENT SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE PAVEMENT BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- C. PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE DEVELOPMENT SITE SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.
- D. PRIOR TO LEAVING THE SITE, STORMWATER RUNOFF SHALL PASS THROUGH A SEDIMENT POND, SEDIMENT TRAP, OR OTHER APPROVED SEDIMENT REMOVAL FACILITY. SEDIMENT PONDS AND TRAPS, VEGETATED BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, OR ANY OTHER APPROVED FACILITY INTENDED TO TRAP SEDIMENT ON—SITE SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. THESE FACILITIES SHALL BE FUNCTIONAL BEFORE ANY OTHER LAND DISTURBING ACTIVITY TAKES PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS SHALL BE SEEDED AND MULCHED ACCORDING TO THE TIMING INDICATED UNDER ITEM E.
- E. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE PLACEMENT OF SOD OR OTHER VEGETATION, PLASTIC COVERING, MULCHING, APPLICATION OF BASE ROCK WITHIN AREAS TO BE PAVED, OR SOME OTHER APPROVED MEANS, TO PROTECT THE SOIL FROM THE EROSIVE FORCES OF RAINDROP IMPACT AND FLOWING WATER. FROM OCTOBER 1 THROUGH APRIL 30, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. FROM MAY 1 THROUGH SEPTEMBER 30, NO SOIL SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN 7 DAYS. THIS CONDITION APPLIES TO ALL SOILS ON SITE, WHETHER AT FINAL GRADE OR NOT. THE SOIL STABILIZATION MEASURES SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND THE POTENTIAL WATER QUALITY IMPACTS THAT THE STABILIZATION MEASURES MAY HAVE ON THE DOWNSTREAM WATERS. SOIL STOCKPILES SHALL BE STABILIZED AND PROTECTED WITH SEDIMENT TRAPPING MEASURES.
- CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. CONSIDER SOIL TYPE AND ITS POTENTIAL FOR EROSION. REDUCE SLOPE RUNOFF VELOCITIES BY (1) REDUCING THE LENGTH OF CONTINUOUS SLOPES BY USING TERRACING AND DIVERSIONS, (2) REDUCING THE GRADE OF THE SLOPE, AND (3) ROUGHEN SLOPE SURFACE. CONTAIN DOWNSLOPE COLLECTED WATER IN PIPES OR PROTECTED CHANNELS.
- G. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENTS.
- H. ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION. STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION AT ALL DISCHARGE POINTS, ADJACENT STREAM BANKS, SLOPES AND DOWNSTREAM REACHES, SHALL BE PROVIDED.
- . ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GREASING CLEANING OPERATIONS AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF, MUST BE CONDUCTED UNDER COVER AND ON IMPERVIOUS SURFACES. THESE SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILLAGE INCIDENT. WHEEL WASH, OR TIRE BATH WASTEWATER, SHALL NOT BE DISCHARGED TO THE STORM DRAIN, OR ON-SITE STORMWATER TREATMENT SYSTEM.
- J. ALL FOUNDATION, VAULT, AND TRENCH DE-WATERING WATER, WHICH HAS SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM, PRIOR TO DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND. CHANNELS MUST BE STABILIZED.
- K. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

BIORETENTION SOIL MIX FOR COMPOST AMENDED AREAS:
PROJECTS WHICH USE THE FOLLOWING REQUIREMENTS FOR THE BIORETENTION SOIL MEDIA DO NOT HAVE
TO TEST THE MEDIA FOR ITS SATURATED HYDRAULIC CONDUCTIVITY (AKA. INFILTRATION RATE). THEY MAY
ASSUME THE RATES SPECIFIED IN THE SUBSECTION TITLED "DETERMINING BIORETENTION SOIL MIX
INFILTRATION RATE."

MINERAL AGGREGATE

PERCENT FINES: A RANGE OF 2 TO 4 PERCENT PASSING THE #200 SIEVE IS IDEAL AND FINES SHOULD NOT BE ABOVE 5 PERCENT FOR A PROPER FUNCTIONING SPECIFICATION ACCORDING TO ASTM D422.

AGGREGATE GRADATION

THE AGGREGATE PORTION OF THE BSM SHOULD BE WELL-GRADED. ACCORDING TO ASTM D 2487-98 (CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOIL CLASSIFICATION SYSTEM)), WELL-GRADED SAND SHOULD HAVE THE FOLLOWING GRADATION COEFFICIENTS:

- COEFFICIENT OF UNIFORMITY (CU = D60/D10) EQUAL TO OR GREATER THAN 4, AND
- COEFFICIENT OF CURVE (CC = (D30)2/D60 \times D10) GREATER THAN OR EQUAL TO 1 AND LESS THAN OR EQUAL TO 3.

TABLE V-7.4.1 GENERAL GUIDELINE FOR MINERAL AGGREGATE GRADATION PROVIDES A GRADATION GUIDELINE FOR THE AGGREGATE COMPONENT OF A BIORETENTION SOIL MIX SPECIFICATION IN WESTERN WASHINGTON (HINMAN, ROBERTSON, 2007). THE SAND GRADATION BELOW IS OFTEN SUPPLIED AS A WELL-GRADED UTILITY OR SCREENED. WITH COMPOST THIS BLEND PROVIDES ENOUGH FINES FOR ADEQUATE WATER RETENTION, HYDRAULIC CONDUCTIVITY WITHIN RECOMMENDED RANGE (SEE BELOW), POLLUTANT REMOVAL CAPABILITY, AND PLANT GROWTH CHARACTERISTICS FOR MEETING DESIGN GUIDELINES AND OBJECTIVES.

TABLE V-7.4.1 GENERAL GUIDELINE F	FOR MINERAL AGGREGATE GRADATION
SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95–100
#10	75–90
#40	25-40
#100	4–10
#200	2-5

WHERE EXISTING SOILS MEET THE ABOVE AGGREGATE GRADATION, THOSE SOILS MAY BE AMENDED RATHER THAN IMPORTING MINERAL AGGREGATE.

COMPOST TO AGGREGATE RATIO, ORGANIC MATTER CONTENT, CATION EXCHANGE CAPACITY

- COMPOST TO AGGREGATE RATIO: 60-65 PERCENT MINERAL AGGREGATE, 35 40 PERCENT COMPOST BY VOLUME.
- ORGANIC MATTER CONTENT: 5 8 PERCENT BY WEIGHT.
- CATION EXCHANGE CAPACITY (CEC) MUST BE > 5 MILLIEQUIVALENTS/100 G DRY SOIL NOTE: SOIL MIXES MEETING THE ABOVE SPECIFICATIONS DO NOT HAVE TO BE TESTED FOR CEC. THEY WILL READILY MEET THE MINIMUM CEC.

COMPOST

TO ENSURE THAT THE BSM WILL SUPPORT HEALTHY PLANT GROWTH AND ROOT DEVELOPMENT, CONTRIBUTE TO BIOFILTRATION OF POLLUTANTS, AND NOT RESTRICT INFILTRATION WHEN USED IN THE PROPORTIONS CITED HEREIN, THE FOLLOWING COMPOST STANDARDS ARE REQUIRED.

- FILIRATION WHEN USED IN THE PROPORTIONS CITED HEREIN, THE FOLLOWING COMPOST TANDARDS ARE REQUIRED.

 MEETS THE DEFINITION OF "COMPOSTED MATERIAL" IN WAC 173-350-100 AND COMPLIES WITH TESTING PARAMETERS AND OTHER STANDARDS IN WAC 173-350-220.
- PRODUCED AT A COMPOSTING FACILITY THAT IS PERMITTED BY THE JURISDICTIONAL HEALTH AUTHORITY. PERMITTED COMPOST FACILITIES IN WASHINGTON ARE INCLUDED ON

 A LIST AVAILABLE

AT HTTP://WWW.ECY.WA.GOV/PROGRAMS/SWFA/ORGANICS/SOIL.HTML

- THE COMPOST PRODUCT MUST ORIGINATE A MINIMUM OF 65 PERCENT BY VOLUME FROM RECYCLED PLANT WASTE COMPRISED OF "YARD DEBRIS," "CROP RESIDUES," AND "BULKING AGENTS" AS THOSE TERMS ARE DEFINED IN WAC 173-350-100. A MAXIMUM OF 35 PERCENT BY VOLUME OF "POST-CONSUMER FOOD WASTE" AS DEFINED IN WAC 173-350-100, BUT NOT INCLUDING BIOSOLIDS, MAY BE SUBSTITUTED FOR RECYCLED PLANT WASTE.
- STABLE (LOW OXYGEN USE AND CO2 GENERATION) AND MATURE (CAPABLE OF SUPPORTING PLANT GROWTH) BY TESTS SHOWN BELOW. THIS IS CRITICAL TO PLANT SUCCESS IN A BIORETENTION SOIL MIXES.
- MOISTURE CONTENT RANGE: NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING THE MATERIAL.
- TESTED IN ACCORDANCE WITH THE U.S. COMPOSTING COUNCIL "TEST METHOD FOR THE EXAMINATION OF COMPOST AND COMPOSTING" (TMECC), AS ESTABLISHED IN THE COMPOSTING COUNCIL'S "SEAL OF TESTING ASSURANCE" (STA) PROGRAM. MOST WASHINGTON COMPOST FACILITIES NOW USE THESE TESTS.
- SCREENED TO THE FOLLOWING SIZE GRADATIONS FOR FINE COMPOST WHEN TESTED IN ACCORDANCE WITH TMECC TEST METHOD 02.02-B, SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION." FINE COMPOST SHALL MEET THE FOLLOWING GRADATION BY DRY WEIGHT

MINIMUM PERCENT PASSING 2": 100%

MINIMUM PERCENT PASSING 1": 99%

MINIMUM PERCENT PASSING 5/8": 90%

MINIMUM PERCENT PASSING 1/4": 75%

- PH BETWEEN 6.0 AND 8.5 (TMECC 04.11-A). "PHYSICAL CONTAMINANTS" (AS DEFINED IN WAC 173-350-100) CONTENT LESS THAT 1% BY WEIGHT (TMECC 03.08-A) TOTAL, NOT TO EXCEED 0.25 PERCENT FILM PLASTIC BY DRY WEIGHT.
- MINIMUM ORGANIC MATTER CONTENT OF 40% (TMECC 05.07-A "LOSS ON IGNITION)
- SOLUBLE SALT CONTENT LESS THAN 4.0 DS/M (MMHOS/CM) (TMECC 04.10-A "ELECTRICAL CONDUCTIVITY, 1:5 SLURRY METHOD, MASS BASIS")
- MATURITY INDICATORS FROM A CUCUMBER BIOASSAY (TMECC 05.05-A "SEEDLING EMERGENCE AND RELATIVE GROWTH) MUST BE GREATER THAN 80% FOR BOTH EMERGENCE AND VIGOR")
- STABILITY OF 7 MG CO2-C/G OM/DAY OR BELOW (TMECC 05.08-B "CARBON DIOXIDE EVOLUTION RATE")
- CARBON TO NITROGEN RATIO (TMECC 05.02A " CARBON TO NITROGEN RATIO" WHICH USES 04.01 "ORGANIC CARBON" AND 04.02D "TOTAL NITROGEN BY OXIDATION") OF LESS THAN 25:1. THE C:N RATIO MAY BE UP TO 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PUGET SOUND LOWLAND NATIVE SPECIES AND UP TO 40:1 FOR COARSE COMPOST TO BE USED AS A SURFACE MULCH (NOT IN A SOIL MIX).

DESIGN CRITERIA FOR CUSTOM BIORETENTION SOIL MIXES
PROJECTS WHICH PREFER TO CREATE A CUSTOM BIORETENTION SOIL MIX RATHER THAN
USING THE DEFAULT REQUIREMENTS ABOVE MUST DEMONSTRATE COMPLIANCE WITH THE
FOLLOWING CRITERIA USING THE SPECIFIED TEST METHOD:

- CEC ≥ 5 MEQ/100 GRAMS OF DRY SOIL; USEPA 9081
- PH BETWEEN 5.5 AND 7.0
- 5 8 PERCENT ORGANIC MATTER CONTENT BEFORE AND AFTER THE SATURATED HYDRAULIC CONDUCTIVITY TEST; ASTM D2974 (STANDARD TEST METHOD FOR MOISTURE, ASH, AND ORGANIC MATTER OF PEAT AND OTHER ORGANIC SOILS)
- 2-5 PERCENT FINES PASSING THE 200 SIEVE; TMECC 04.11-A
- MEASURED (INITIAL) SATURATED HYDRAULIC CONDUCTIVITY OF LESS THAN 12 INCHES PER HOUR; ASTM D 2434 (STANDARD TEST METHOD FOR PERMEABILITY OF GRANULAR SOILS (CONSTANT HEAD)) AT 85% COMPACTION PER ASTM D 1557 (STANDARD TEST METHOD S FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING MODIFIED EFFORT). ALSO, USE APPENDIX V—B: RECOMMENDED MODIFICATIONS TO ASTM D 2434 WHEN MEASURING HYDRAULIC CONDUCTIVITY FOR BIORETENTION SOIL MIXES.
- DESIGN (LONG-TERM) SATURATED HYDRAULIC CONDUCTIVITY OF MORE THAN 1 INCH PER HOUR. NOTE: DESIGN SATURATED HYDRAULIC CONDUCTIVITY IS DETERMINED BY APPLYING THE APPROPRIATE INFILTRATION CORRECTION FACTORS AS EXPLAINED ABOVE UNDER "DETERMINING BIORETENTION SOIL MIX INFILTRATION RATE."
- IF COMPOST IS USED IN CREATING THE CUSTOM MIX, IT MUST MEET ALL OF THE SPECIFICATIONS LISTED ABOVE FOR COMPOST EXCEPT FOR THE GRADATION SPECIFICATION. AN ALTERNATIVE GRADATION SPECIFICATION MUST INDICATE THE MINIMUM PERCENT PASSING FOR A RANGE OF SIMILAR PARTICLE SIZES.



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PROJECT NAME: LUMPKIN RESIDENCE PROJECT ADDRESS: 5401 W MERCER WAY MERCER ISLAND, WA 98040

sheet title: NOTES

SHEET NO.: CO.1

RB PROJECT NO.: 21-0035

PROJECT SPECIFIC TESC NOTES: . MARK CLEARING LIMITS AND ENVIRONMENTALLY CRITICAL AREAS. WITHIN THE BOUNDARIES OF THE PROJECT SITE AND PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES. CLEARLY MARK ALL CLEARING LIMITS, EASEMENTS, SETBACKS, ALL ENVIRONMENTALLY CRITICAL AREAS AND THEIR BUFFERS, AND ALL TREES, AND DRAINAGE

COURSES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA. 2. RETAIN TOP LAYER AND/OR AMEND ALL DISTURBED

- SOILS. WITHIN THE BOUNDARIES OF THE PROJECT SITE, THE DUFF LAYER, TOP SOIL, AND NATIVE VEGETATION, IF THERE IS ANY, SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT FEASIBLE. IF IT IS NOT FEASIBLE TO RETAIN THE TOP LAYER IN PLACE, IT SHALL BE STOCKPILED ON-SITE AND COVERED TO PREVENT EROSION. SOIL SHALL THEN BE AMENDED AND REPLACED IMMEDIATELY UPON COMPLETION OF THE GROUND DISTURBING ACTIVITIES.
- ESTABLISH CONSTRUCTION ENTRANCE. CONSTRUCTION VEHICLE ACCESS TO ONE ROUTE. STABILIZE ACCESS POINTS AND PREVENT TRACKING SEDIMENT ONTO PUBLIC ROADS. PROMPTLY REMOVE ANY SEDIMENT TRACKED OFFSITE.
- 4. PROTECT DOWNSTREAM PROPERTIES AND RECEIVING WATERS. PROTECT PROPERTIES AND RECEIVING WATERS DOWNSTREAM FROM THE DEVELOPMENT SITES FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY, AND PEAK FLOW RATE OF DRAINAGE WATER FROM THE PROJECT SITE.
- 5. PREVENT EROSION AND SEDIMENT TRANSPORT FROM THE SITE. PASS ALL DRAINAGE WATER FROM DISTURBED AREAS THROUGH A SEDIMENT TRAP OR OTHER APPROPRIATE SEDIMENT REMOVAL BEST MANAGEMENT PRACTICES BEFORE DISCHARGING FROM THE SITE SEDIMENT CONTROLS INTENDED TO TRAP SEDIMENT ON-SITE SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING AND SHALL BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.ONE OF THE FOLLOWING SHALL BE USED TO PREVENT THE TRANSPORT OF SEDIMENT FORM THE SITE: COMPOST SOCKS, BERMS OR BLANKETS, FILTER FENCE,

STRAW BALE BARRIER, BRUSH BARRIER, GRAVEL FILTER BERM, SEDIMENT POND OR SEDIMENT TRAP. SANDBAGS MAY ALSO BE UTILIZED TO PREVENT SEDIMENT FROM BEING DISCHARGED OFFSITE. RETAINING NATURAL VEGETATION AND BUFFER ZONES ARE ENCOURAGED, BUT MAY NOT BE USED AS A SUBSTITUTE.

- 6. PREVENT EROSION AND SEDIMENT TRANSPORT FROM THE SITE BY VEHICLES. LIMIT CONSTRUCTION VEHICLE ACCESS, WHENEVER POSSIBLE, TO ONE LOCATION. STABILIZE ALL ACCESS POINTS. PROVIDE PERIODIC STREET CLEANING BY SWEEPING OR SHOVELING ANY SEDIMENT THAT MAY HAVE BEEN TRACKED OUT. PLACE SEDIMENT IN A SUITABLE DISPOSAL AREA WHERE IT WILL NOT ERODE ANY FURTHER.
- 7. STABILIZE SOILS. PREVENT ON-SITE EROSION BY STABILIZING ALL EXPOSED AND UNWORKED SOILS, INCLUDING STOCK PILES. FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN TWO DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN SEVEN DAYS. SOILS SHALL BE STABILIZED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS, AND DRAINAGE CHANNELS. BEFORE THE COMPLETION OF THE PROJECT, PERMANENTLY STABILIZE ALL EXPOSED SOILS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION. EXAMPLES OF BMPS TO USE TO STABILIZE SOILS, INCLUDING STOCKPILES ARE: COMPOST BLANKETS, SEEDING AND MULCHING, OR MATTING/ROLLED EROSION CONTROL PRODUCTS. COMPOST BLANKETS CAN BE USED AS TEMPORARY EROSION CONTROL AND THEN BE MIXED INTO THE SOIL TO HELP MEET THE POST CONSTRUCTION SOIL AMENDMENT REQUIREMENTS.
- 8. PROTECT SLOPES. EROSION FROM SLOPES SHALL BE MINIMIZED. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE OFFSITE STORMWATER RUN-ON OR GROUNDWATER SHALL BE DIVERTED AWAY FROM SLOPES AND UNDISTURBED AREAS.

9. PROTECT STORM DRAINS. PREVENT SEDIMENT FROM ENTERING ALL STORM DRAINS, INCLUDING DITCHES, THAT RECEIVE DRAINAGE WATER FROM THE PROJECT. STORM DRAIN INLET PROTECTION DEVICES SHALL BE CLEANED OR REMOVED AND REPLACED AS RECOMMENDED BY THE PRODUCT MANUFACTURER, OR MORE FREQUENTLY IF REQUIRED TO PREVENT FAILURE OF THE DEVICE OR FLOODING. STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT DRAINAGE WATER DOES NOT ENTER THE DRAINAGE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENTS. STORM DRAIN INLET PROTECTION DEVICES SHALL BE REMOVED AT THE CONCLUSION OF

- 10. STABILIZE CHANNELS AND OUTLETS. ALL TEMPORARY ON-SITE DRAINAGE SYSTEMS SHALL BE DESIGNED, CONSTRUCTED, AND STABILIZED TO PREVENT EROSION. STABILIZATION SHALL BE PROVIDED AT THE OUTLETS OF ALL DRAINAGE SYSTEMS THAT IS ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM REACHES.
- 11. CONTROL POLLUTANTS. MEASURES SHALL BE TAKEN TO CONTROL POTENTIAL POLLUTANTS. COMPLY WITH THE REQUIREMENTS OF WASHINGTON STATE DEPARTMENT OF ECOLOGY'S 2014 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMMWW) VOLUME IV FOR EACH OF THE FOLLOWING CONSTRUCTION RELATED ACTIVITIES: POLLUTANT DISPOSAL (INCLUDING SEDIMENT, WASTE MATERIALS, AND DEMOLITION DEBRIS; CHEMICAL STORAGE: ON-SITE FUELING: MAINTENANCE, FUELING AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES; CLEANUP OF CONTAMINATED SURFACES: DISCHARGE OF WHEEL WASH WASTEWATER; FERTILIZER AND PESTICIDE APPLICATION; PH-MODIFYING SOURCES.
- 12. CONTROL DEWATERING. WHEN DEWATERING DEVICES DISCHARGE ON-SITE OR TO A PUBLIC DRAINAGE SYSTEM, DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP TO REMOVE SEDIMENT CONTAMINATION, OR OTHER SEDIMENT REMOVAL BMP.

13. MAINTAIN AND INSPECT BMPS. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPS SHALL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED WITHIN FIVE (5) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY CONTROLS ARE NO LONGER NEEDED, WHICHEVER IS LATER. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON-STIE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

- 14. EXECUTE CONSTRUCTION STORMWATER CONTROL PLAN. CONSTRUCTION SITE OPERATORS SHALL MAINTAIN, UPDATE. AND IMPLEMENT THEIR CONSTRUCTION STORMWATER CONTROL PLAN. CONSTRUCTION SITE OPERATORS SHALL MODIFY THEIR CONSTRUCTION STORMWATER CONTROL PLAN TO MAINTAIN COMPLIANCE.
- 15. MINIMIZE OPEN TRENCHES. IN THE CONSTRUCTION OF UNDERGROUND UTILITY LINES, WHERE FEASIBLE, NO MORE THAN ONE HUNDRED FIFTY (150) FEET OF TRENCH SHALL BE OPENDED AT ONE TIME.
- 16. PHASE THE PROJECT. DEVELOPMENT PROJECTS SHALL BE PHASED IN ORDER TO MINIMIZE THE AMOUNT OF LAND DISTURBING ACTIVITY OCCURRING AT THE SAME TIME AND SHALL TAKE INTO ACCOUNT SEASONAL WORK LIMITATIONS.
- 17. INSTALL PERMANENT FLOW CONTROL FACILITIES. AFTER CONSTRUCTION BUT BEFORE THE PROJECT IS CONSIDERED COMPLETED, PERMANENTLY STABILIZE ALL EXPOSED SOILS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION. USE ONE OF THE FOLLOWING TO PERMANENTLY STABILIZE SOILS: PERMANENT SEEDING, PLANTING, OR SODDING.

1. THE BMPS SHOWN IN THE PLAN VIEW OF THIS PLAN ARE THE MINIMUM REQUIRED. ADDITIONAL BMPS ARE REQUIRED WHEN MINIMUM CONTROLS ARE NOT SUFFICIENT TO PREVENT EROSION OR TRANSPORT OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE.

FXCEPTIONAL TREE LIST:

CONTRACTOR TO FIELD VERIFY UTILITIES PRIOR TO CONSTRUCTION. BASEMAP WAS PROVIDED BY OWNER AND CITY AS-BUILTS. SURVEY SHOULD BE INDEPENDENTLY VERIFIED



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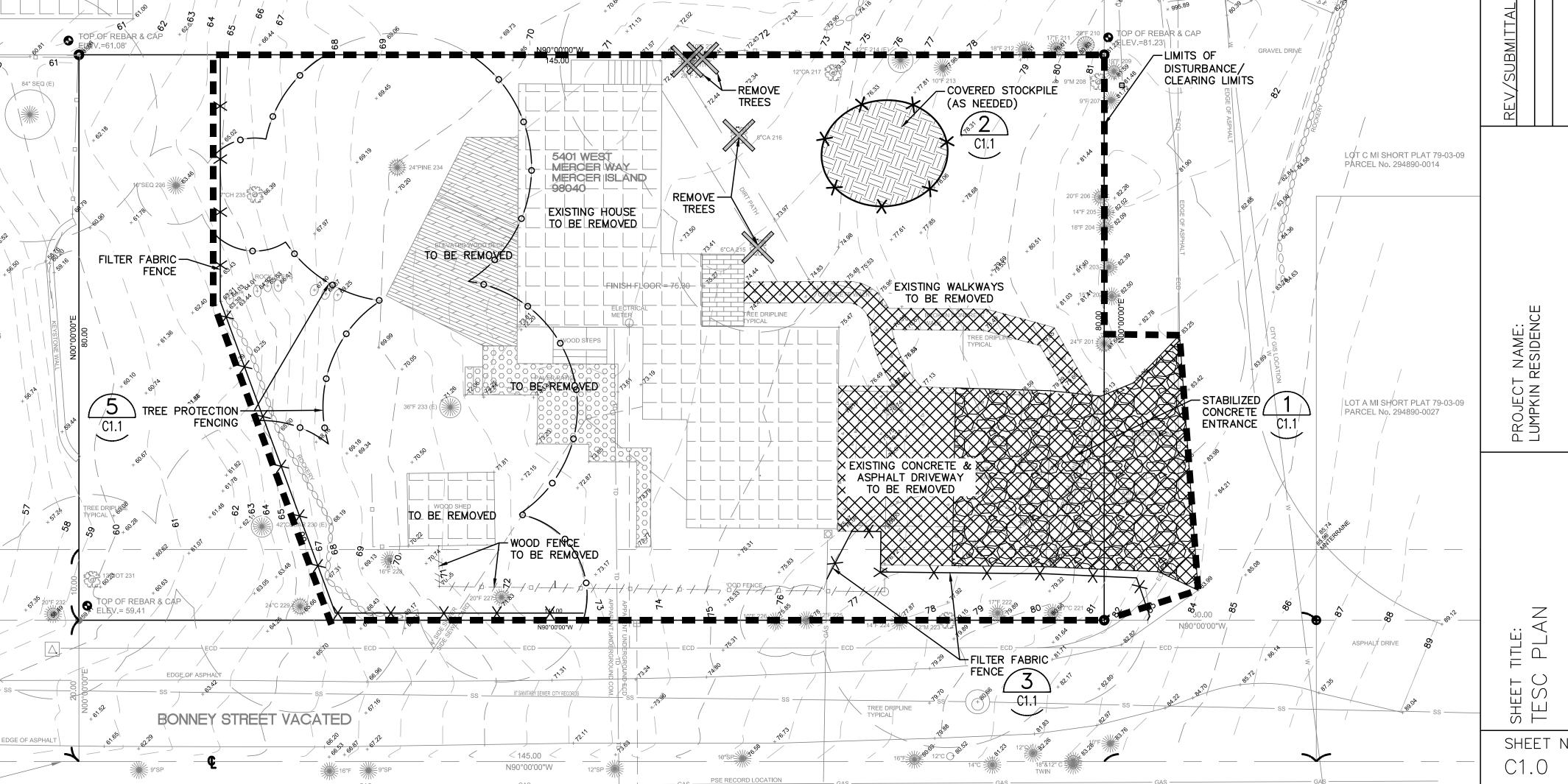
SCALE IN FEET

WAY WAY MERCER ISLAND,

PROJECT 5401 W MERCER

SHEET NO .:

RB PROJECT NO .: 21-0035



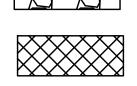
BURIED COMMUNICATION LINE BY TELEPHONE RISER LOCATIONS

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH WSDOT CURRENT STANDARD SPECIFICATIONS.

2. CONTRACTOR TO NOT DISTURB MORE THAN 1 AC ON-SITE. IF MORE THAN 1 AC WILL BE DISTURBED STABILIZE A PORTION OF THE SITE AND NOTIFY RED BARN ENGINEERING INC.

<u>LEGEND:</u> - FILTER FABRIC FENCE IMITS OF DISTURBANCE CLEARING LIMITS -PROPERTY LINE GRASS-LINED SWALE COMPOST SOCK · /· /· /· /· /· /· /· /· /· /· REMOVE UTILITY/ **FENCE**

— • — TREE PROTECTION FENCING



ENTRANCE



FLOW DIRECTION





SANITARY SEWER CLEAN OUT STORM DRAIN MH STORM DRAIN CATCH BASIN

EXISTING

SANITARY SEWER MH

WATER HYDRANT

WATER FDC WATER METER WATER VALVE

WATER BLOW-OFF WATER AIR RELIEF VALVE

GAS METER GAS VALVE BOLLARD

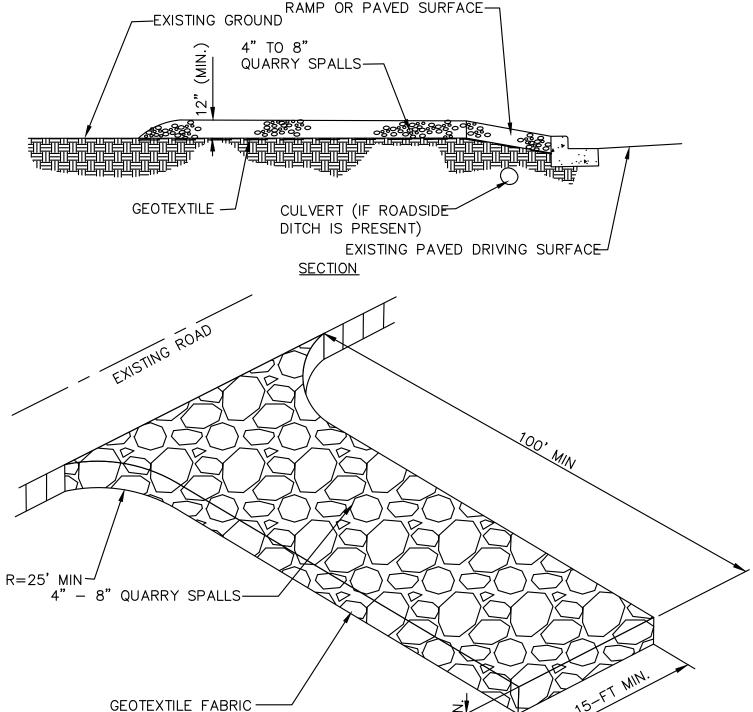
POWER POLE UTILITY POLE **GUY ANCHOR** TELPHONE RISER

YARD LIGHT POLE WITH LUMINARE JUNCTION BOX

CONIFER TREE DECIDUOUS TREE

GENERAL SIGN

INLET PROTECTION



QUARRY SPALL DRIVEWAY

MAINTENANCE STANDARD:

- QUARRY SPALLS SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
- ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET. EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP
- ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY. 5. IF VEHICLES ARE ENTERING OR EXITING THE
- SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING SHALL BE INSTALLED TO CONTROL TRAFFIC.
- 1. STABILIZED ACCESS SHALL BE USED IN ALL AREAS OF THE SITE WITH VEHICLE TRAFFIC AND PARKING, INCLUDING PLANTING STRIPS. SEE SECTION 9-37.2 (TABLE 3) FOR
- GEOTEXTILE REQUIREMENTS. GEOTEXTILE MODIFICATIONS BASED ON SPECIFIC PROJECT SITE CONDITIONS MUST BE APPROVED BY THE ENGINEER.
- 3. 100-FT MIN FOR LARGE SITES. INSPECTOR APPROVAL LENGTH FOR SMALL SITES MAY BE REDUCED TO 50-FT OR LESS.

GROUND SURFACE ASPHALT SURFACE SAND BAG, (TYP.)-- VISQUEEN COVER SECURE FILTER FABRIC STAKED INTO GROUND-AS NEEDED IF SEDIMENT APPEARS WITH SAND BAGS, (TYP.) TO BE TRANSPORTED AWAY FROM STOCKPILE -VISQUEEN UNDER STOCKPILE WRAPPED ON TOP. — ASPHALT GROUND SURFACE -

> 1. CLEAR PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL AND SHOULD MEET THE REQUIREMENTS OF THE SDOT STANDARD SPECIFICATIONS SECTION 9-14.5.

- 2. PLACE PLASTIC INTO A SMALL (12-INCH WIDE BY 6-IN DEEP) SLOT TRENCH AT THE TOP OF THE SLOPE AND BACKFILL WITH SOIL TO KEEP WATER FROM FLOWING UNDERNEATH.
- 3. INSTALL COVERING AND MAINTAIN TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10 FOOT GRID SPACING IN ALL DIRECTIONS. TAPE OR WEIGH DOWN ALL SEAMS FULL LENGTH WITH AT LEAST A 1- TO 2-FT OVERLAP OF ALL SEAMS. THEN ROLL, STAKE OR TIE ALL SEAMS.
- 4. IMMEDIATELY INSTALL COVERING ON AREAS SEEDED FROM NOVEMBER 1 TO MARCH 1, AND KEEP COVERING IN PLACE UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- 5. WHEN THE COVERING IS USED ON UNSEEDED SLOPES, LEAVE IN PLACE UNTIL THE NEXT SEEDING PERIOD.
- 6. TOE IN SHEETING AT THE TOP OF THE SLOPE TO PREVENT SURFACE FLOW BENEATH THE PLASTIC. IF EROSION AT THE TOP OF SLOPE IS LIKELY, INSTALL A GRAVEL BERM, RIPRAP, OR OTHER SUITABLE PROTECTION AT THE TOE OF THE SLOPE IN ORDER TO REDUCE THE VELOCITY OF RUNOFF.
- 7. REMOVE SHEETING AS SOON AS IS POSSIBLE ONCE VEGETATION IS WELL GROWN TO PREVENT BURNING THE VEGETATION THROUGH THE PLASTIC SHEETING, WHICH ACTS AS A GREENHOUSE.

STOCKPILE AND PLASTIC COVERING

CHECK REGULARLY FOR RIPS AND PLACES WHERE THE PLASTIC MAY

BE DISLODGED. CONTACT BETWEEN THE PLASTIC AND THE GROUND

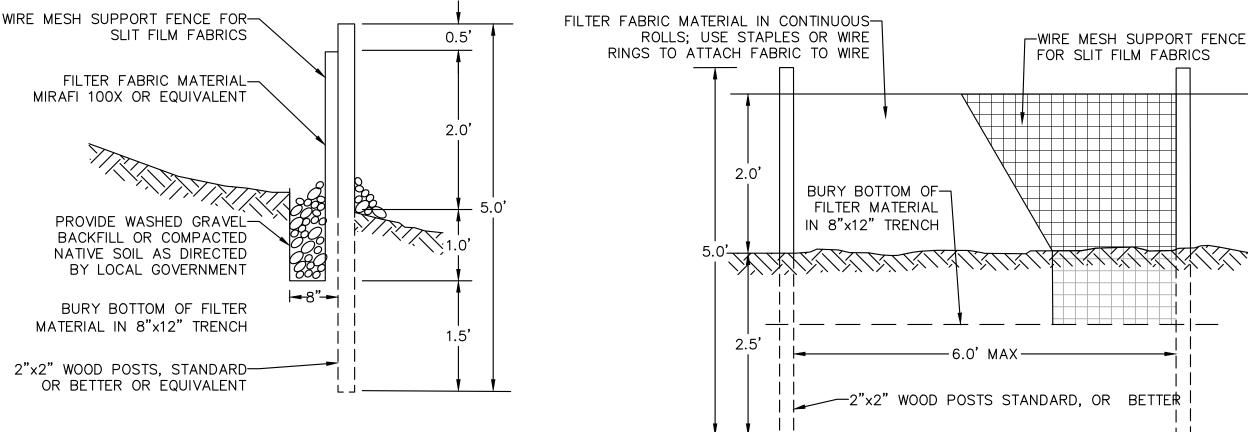
WINDY PERIOD. RE-ANCHOR OR REPLACE THE PLASTIC AS

NECESSARY.

SHOULD ALWAYS BE MAINTAINED. ANY AIR BUBBLES FOUND SHOULD

BE REMOVED IMMEDIATELY OR THE PLASTIC MAY RIP DURING THE NEXT

STABILIZED CONSTRUCTION ENTRANCE



TILTER FABRIC FENCE PLAN NOTES

IN THE PLANS. CONSTRUCT SILT FENCES IN AREAS OF CLEARING, GRADING, OR DRAINAGE PRIOR TO STARTING THOSE

ACTIVITIES. THE SILT FENCE SHALL HAVE A 2-FEET MIN. AND A 2½-FEET MAX. HEIGHT ABOVE THE ORIGINAL GROUND SURFACE. THE FILTER FABRIC SHALL BE SEWN TOGETHER AT THE POINT OF MANUFACTURE TO FORM FILTER FABRIC LENGTHS AS REQUIRED. LOCATE ALL SEWN SEAMS AT SUPPORT POSTS. ALTERNATIVELY, TWO

SECTIONS OF SILT FENCE CAN BE OVERLAPPED, PROVIDED THE CONTRACTOR CAN DEMONSTRATE, TO THE SATISFACTION OF THE ENGINEER, THAT THE OVERLAP IS LONG ENOUGH AND THAT THE ADJACENT 11. LOCATE SILT FENCES ON CONTOUR AS MUCH AS POSSIBLE, EXCEPT AT THE ENDS OF THE FENCE, FENCE SECTIONS ARE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP. ATTACH THE FILTER FABRIC ON THE UP-SLOPE SIDE OF THE POSTS AND SECURE WITH STAPLES, 12. IF THE FENCE MUST CROSS CONTOURS, WITH THE EXCEPTION OF THE ENDS OF THE FENCE, PLACE WIRE, OR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ATTACH THE FILTER

FABRIC TO THE POSTS IN A MANNER THAT REDUCES THE POTENTIAL FOR TEARING. SUPPORT THE FILTER FABRIC WITH WIRE OR PLASTIC MESH, DEPENDENT ON THE PROPERTIES OF THE GEOTEXTILE SELECTED FOR USE. IF WIRE OR PLASTIC MESH IS USED, FASTEN THE MESH SECURELY TO THE UP-SLOPE SIDE OF THE POSTS WITH THE FILTER FABRIC UP-SLOPE OF THE MESH MESH SUPPORT, IF USED, SHALL CONSIST OF STEEL WIRE WITH A MAXIMUM MESH SPACING OF 2-INCHES, OR A PREFABRICATED POLYMERIC MESH. THE STRENGTH OF THE WIRE OR POLYMERIC MESH SHALL BE EQUIVALENT TO OR GREATER THAN 180 LBS. GRAB TENSILE STRENGTH. THE POLYMERIC MESH MUST BE AS RESISTANT TO THE SAME LEVEL OF ULTRAVIOLET RADIATION AS THE FILTER FABRIC IT SUPPORTS.

AND TAMP SOIL IN PLACE OVER THE BURIED PORTION OF THE FILTER FABRIC, SO THAT NO FLOW CAN PASS BENEATH THE FENCE AND SCOURING CANNOT OCCUR. WHEN WIRE OR POLYMERIC BACK-UP SUPPORT MESH IS USED, THE WIRE OR POLYMERIC MESH SHALL EXTEND INTO THE GROUND 3-INCHES DRIVE OR PLACE THE FENCE POSTS INTO THE GROUND 18-INCHES MIN. A 12-INCH MIN. DEPTH IS ALLOWED IF TOPSOIL OR OTHER SOFT SUBGRADE SOIL IS NOT PRESENT AND 18-INCHES CANNOT BE WATER PERMITTIVITY (ASTM D4491) REACHED. INCREASE FENCE POST MIN. DEPTHS BY 6 INCHES IF THE FENCE IS LOCATED ON SLOPES |-

BURY THE BOTTOM OF THE FILTER FABRIC 4-INCHES MIN. BELOW THE GROUND SURFACE. BACKFILL

OF 3H: 1V OR STEEPER AND THE SLOPE IS PERPENDICULAR TO THE FENCE. IF REQUIRED POST GRAB TENSILE STRENGTH (ASTM D4632) DEPTHS CANNOT BE OBTAINED, THE POSTS SHALL BE ADEQUATELY SECURED BY BRACING OR GUYING TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT LOADING.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SILT FENCES AT THE LOCATIONS SHOWN 10. USE WOOD, STEEL OR EQUIVALENT POSTS. THE SPACING OF THE SUPPORT POSTS SHALL BE A MAXIMUM OF 6-FEET. POSTS SHALL CONSIST OF EITHER:

O WOOD WITH DIMENSIONS OF 2-INCHES BY 2-INCHES WIDE MIN. AND A 3-FEET MIN. LENGTH. WOOD POSTS SHALL BE FREE OF DEFECTS SUCH AS KNOTS, SPLITS, OR GOUGES. O NO. 6 STEEL REBAR OR LARGER.

O ASTM A 120 STEEL PIPE WITH A MINIMUM DIAMETER OF 1-INCH

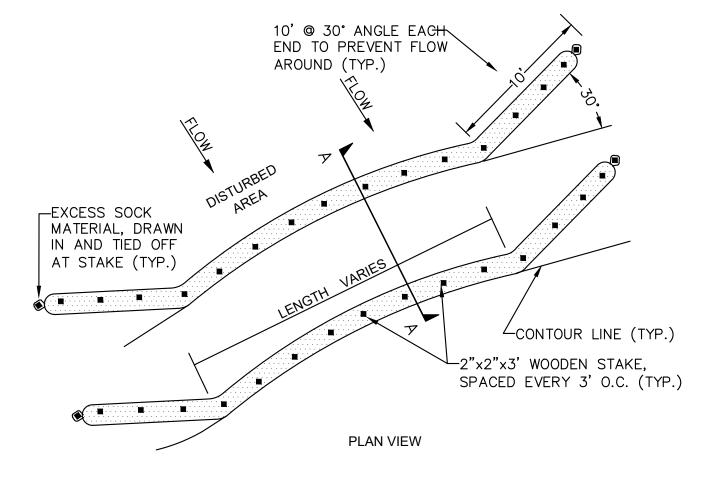
O U, T, L, OR C SHAPE STEEL POSTS WITH A MINIMUM WEIGHT OF 1.35 LBS./FT. O OTHER STEEL POSTS HAVING EQUIVALENT STRENGTH AND BENDING RESISTANCE TO THE POST SIZES LISTED ABOVE.

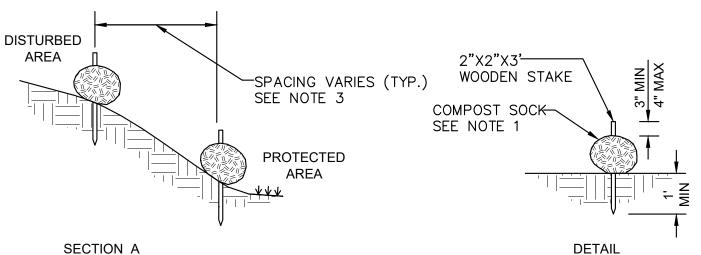
WHERE THE FENCE SHALL BE TURNED UPHILL SUCH THAT THE SILT FENCE CAPTURES THE RUNOFF WATER AND PREVENTS WATER FROM FLOWING AROUND THE END OF THE FENCE GRAVEL CHECK DAMS PERPENDICULAR TO THE BACK OF THE FENCE TO MINIMIZE CONCENTRATED

FLOW AND EROSION. THE SLOPE OF THE FENCE LINE WHERE CONTOURS MUST BE CROSSED SHALL NOT BE STEEPER THAN 3H:1V. O GRAVEL CHECK DAMS SHALL BE APPROXIMATELY 1-FOOT DEEP AT THE BACK OF THE FENCE. GRAVEL CHECK DAMS SHALL BE CONTINUED PERPENDICULAR TO THE FENCE AT THE SAME ELEVATION UNTIL THE TOP OF THE CHECK DAM INTERCEPTS THE GROUND SURFACE BEHIND THE

O GRAVEL CHECK DAMS SHALL CONSIST OF CRUSHED SURFACING BASE COURSE, GRAVEL BACKFILL FOR WALLS, OR SHOULDER BALLAST. GRAVEL CHECK DAMS SHALL BE LOCATED EVERY 10 FEET ALONG THE FENCE WHERE THE FENCE MUST CROSS CONTOURS.

FILTER FABRIC SPECIFICATIONS 30-100 SIEVE SIZE (0.60-0.15 mm) FOR SLIT FILM AOS (ASTM D4751) |50-100 SIEVE SIZE (0.30-0.15 MM) FOR OTHER FABRIC 0.02 SEC⁻¹ MINIMUM 180 LBS MIN. FOR EXTRA STRENGTH 100 LBS MIN. FOR STD. STRENGTH FABRIC GRAB TENSILE ELONGATION (ASTM D4632)|30% MAX ULTRAVIOLET RESISTANCE (ASTM D4355) |70% MAX.





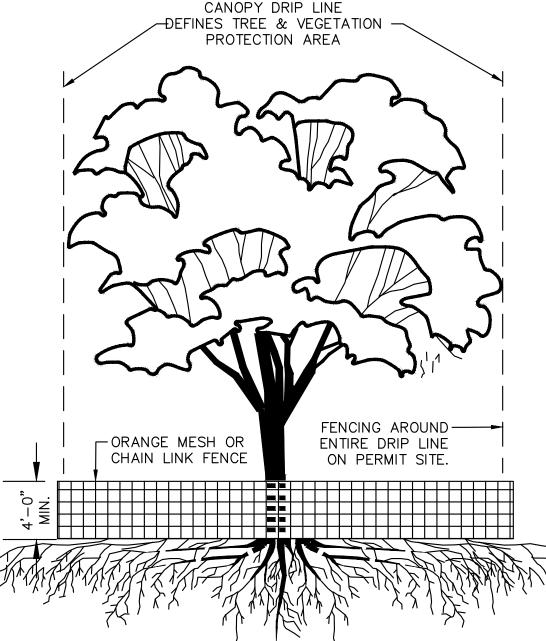
(SHOWN AS SLOPE PROTECTION)

NOTES:

I. COMPOST SOCK SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 9.14.4(9). COMPOST SOCK SHALL BE A MINIMUM OF 10" IN DIAMETER OR SIZED TO SUIT CONDITIONS AS SPECIFIED BY THE ENGINEER. 2. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR

3. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK. 1. MAY BE USED IN PLACE OF FILTER FENCE FOR PREMIER CONTROL.

COMPOST SOCK



TREE PROTECTION FENCING

MUST BE INSTALLED PRIOR TO DEMOLITION OR GROUND DISTURBANCE.

KEPT IN PLACE FOR THE DURATION OF CONSTRUCTION NO SOIL DISTURBANCE OR ACTIVITY ALLOWED WITHIN FENCED AREA, SUCH AS MATERIAL STORAGE/STOCKPILING, PARKING, EXCAVATION, DUMPING, OR WASHING. MODIFICATIONS OF THESE REQUIREMENTS BY APPROVAL OF COMI PLANNER

- 5. IF ROOTS GREATER THAN 2 INCH FOUND OUTSIDE OF FENCING, PROTECT BY HAND EXCAVATION AND, IF NECESSARY, CUT CLEANLY AND KEEP MOIST
- USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

VEGETATION PROTECTION

MINIMIZE CONSTRUCTION ZONE PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE WITH FENCING AS SHOWN USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO

PROTECT FEEDER ROOTS TREE PROTECTION RED BARN ENGINEERING INC. 6610 NE 181ST ST, STE 2 KENMORE, WA 98028 PH. (206) 200-7174

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03/16/2021 DESIGN RJW DRAWN EJW CHECKED RJW

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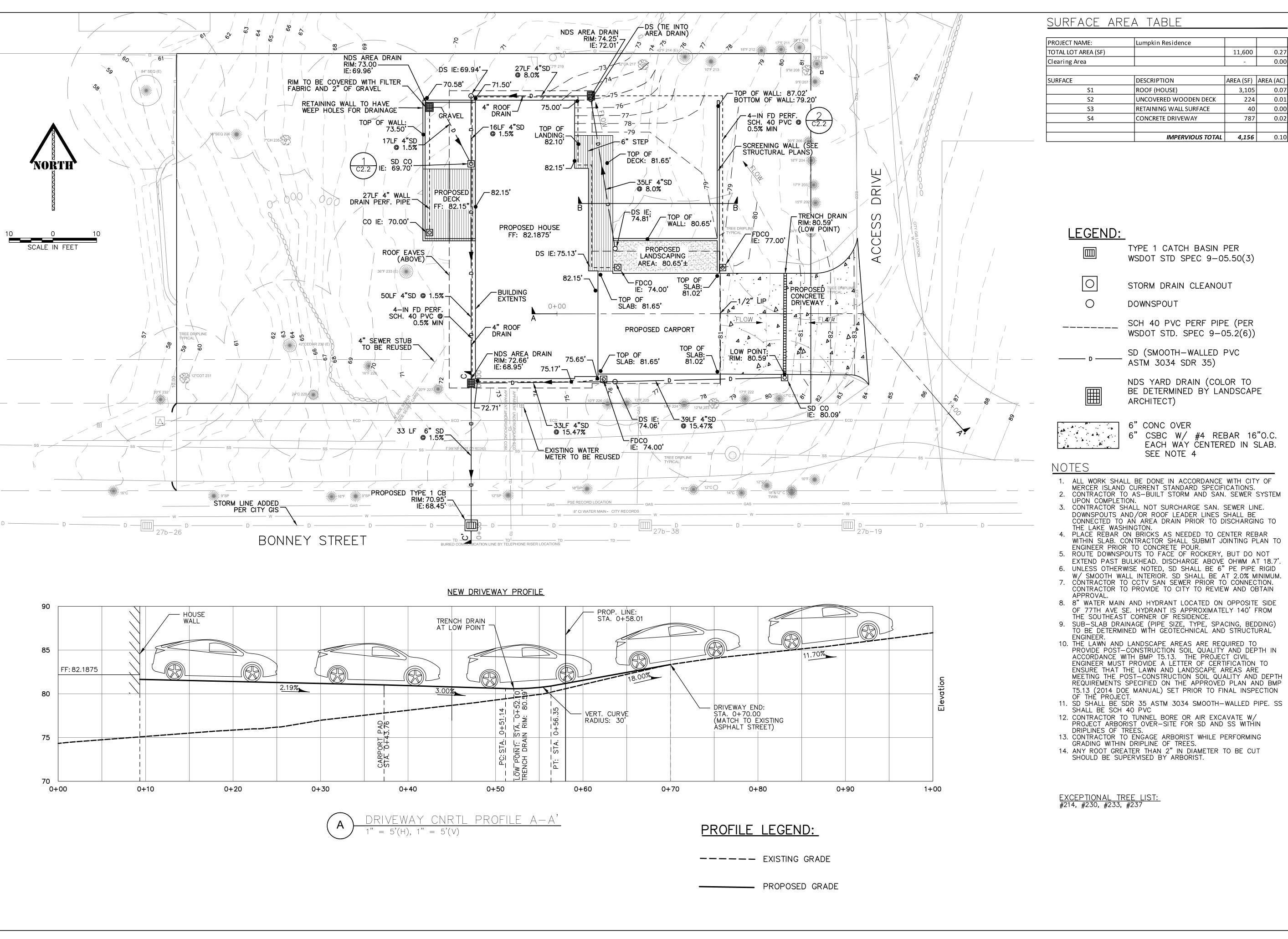
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SHEET NO .:

RB PROJECT NO .: 21-0035

TER FABRIC FENCE



	INADEDVIOLIS TOTAL	1156	l 0.10
S4	CONCRETE DRIVEWAY	787	0.02
S3	RETAINING WALL SURFACE	40	0.00
S2	UNCOVERED WOODEN DECK	224	0.01
S 1	ROOF (HOUSE)	3,105	0.07
SURFACE	DESCRIPTION	AREA (SF)	AREA (AC)
J			
Clearing Area		-	0.00
TOTAL LOT AREA (SF)		11,600	0.27
PROJECT NAME:	Lumpkin Residence		



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- WITHIN SLAB. CONTRACTOR SHALL SUBMIT JOINTING PLAN TO
- EXTEND PAST BULKHEAD. DISCHARGE ABOVE OHWM AT 18.7'.
- W/ SMOOTH WALL INTERIOR. SD SHALL BE AT 2.0% MINIMUM. CONTRACTOR TO CCTV SAN SEWER PRIOR TO CONNECTION.

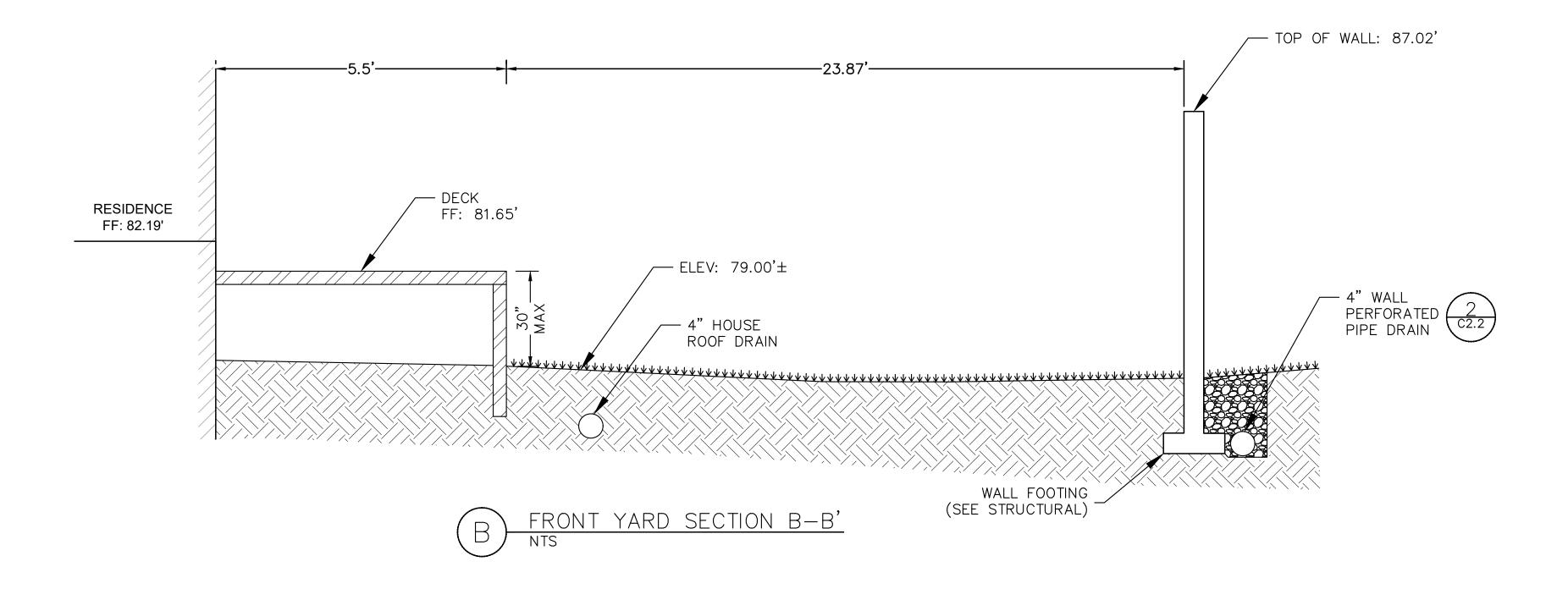
- 11. SD SHALL BE SDR 35 ASTM 3034 SMOOTH-WALLED PIPE. SS SHALL BE SCH 40 PVC

03/16/2021

0 980 S: WAY WA T NAME: RESIDENCE MERCER VISLAND, VI PROJECT LUMPKIN PROJECT 5401 W MERCER

 \triangleleft HEET TITLE: RADING ITILITY P S 50 . SHEET NO .:

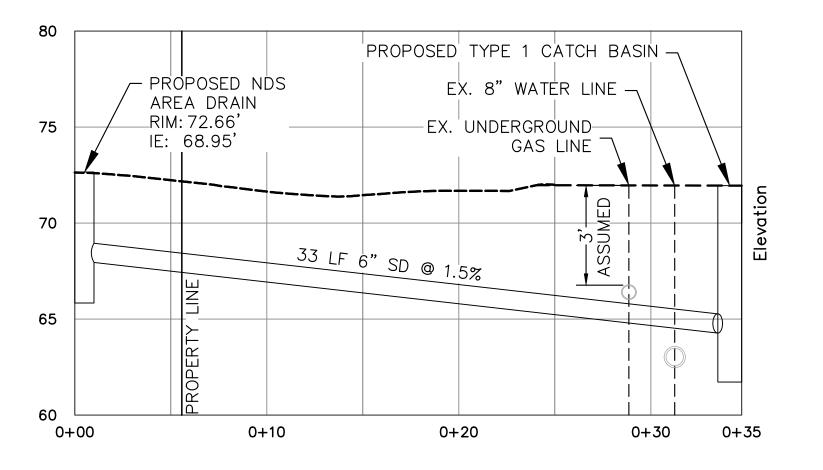
RB PROJECT NO .: 21-0035



LEGEND:

---- EXISTING GRADE

PROPOSED GRADE

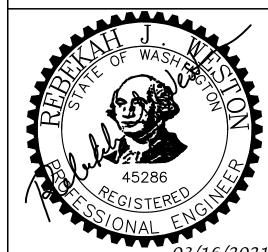


STORM DRAIN SECTION C-C'



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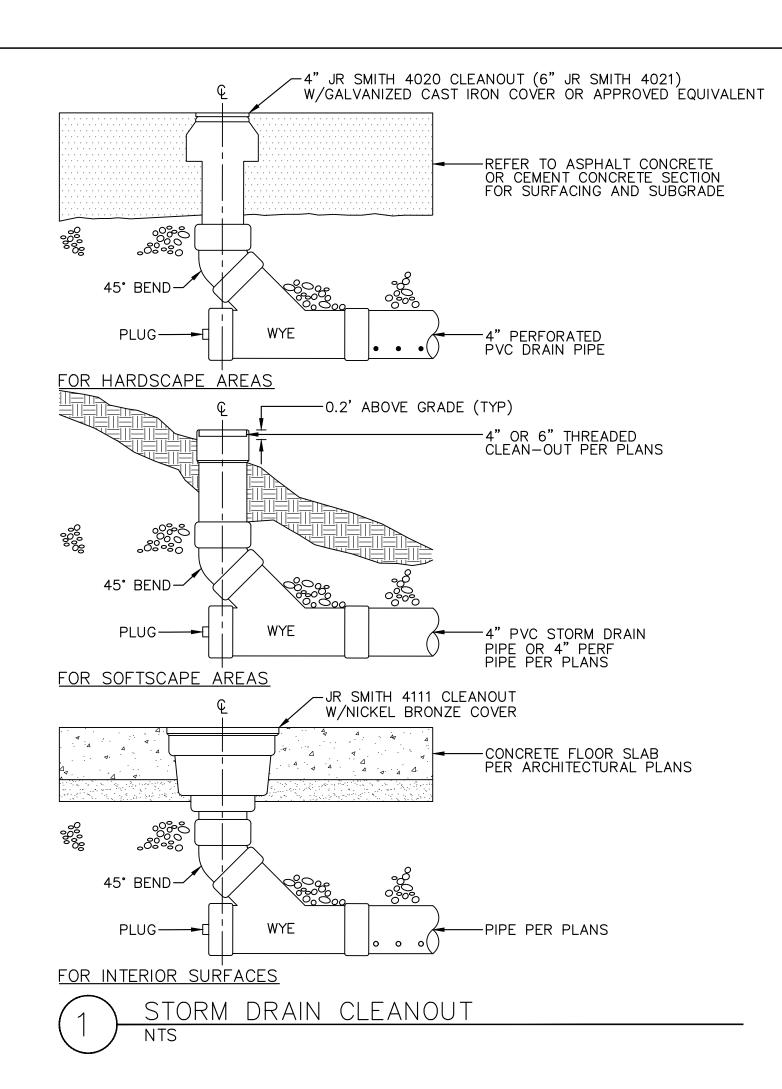
DESIGN RJW DRAWN EJW CHECKED RJW

> PROJECT ADDRESS: 5401 W MERCER WAY MERCER ISLAND, WA 98040 PROJECT NAME: LUMPKIN RESIDENCE

SHEET TITLE: GRADING SECTIONS

SHEET NO .: C2.1

RB PROJECT NO.: 21-0035





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

RECONNECTION

REV DATE

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

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

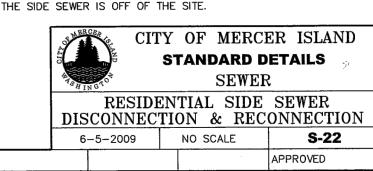
BACK WATER VALVE INSTALLATION PER CITY ENGINEER, IF SCENARIO 2, 3, 4, OR 5 IS DIRECTLY ATTACHED TO THE LAKE LINE OR THE ELEVATION OF THE LOWEST DRAIN IN THE RESIDENCE IS LOWER THAN THE RIM ELEVATION OF THE UPSTREAM SEWER MANHOLE ON THE MAIN.

VIDEO INSPECTION OF THE EXISTING SIDE SEWER, BETWEEN THE PROPERTY LINE AND THE SEWER MAIN SHALL BE PERFORMED FOR SCENARIOS NUMBER 4 AND 5.

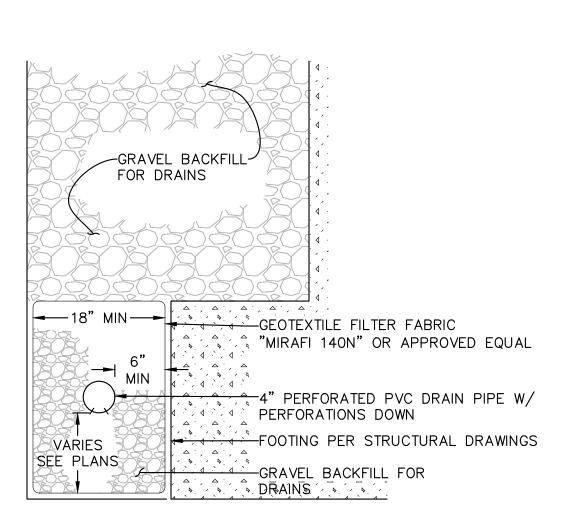
PROVIDE A COPY OF THE VIDEO DOCUMENTATION (VIDEO AND HARDCOPY REPORT) TO THE CITY

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

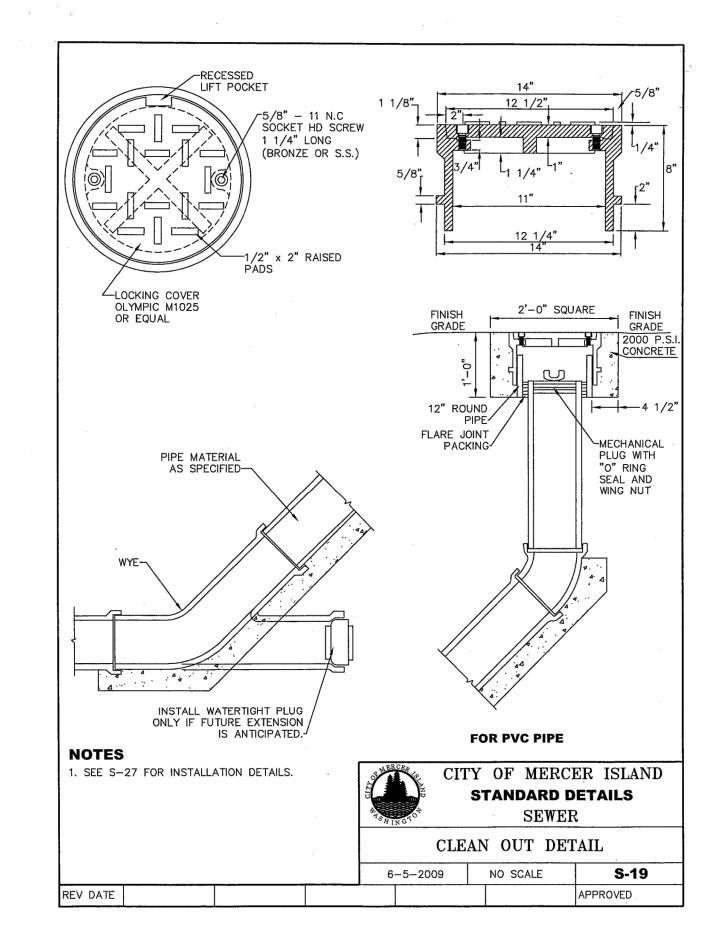
*IF THE EXISTING SIDE SEWER IS PVC AND IS LESS THAN TEN YEARS OLD, THE SIDE SEWER DOES NOT HAVE TO BE REPLACED IF A VIDEO INSPECTION AND/OR HYDROSTATIC PRESSURE TEST CONFIRMS THAT THE SIDE SEWER IS IN PROPER WORKING CONDITION. THESE TESTS SHALL BE PERFORMED AFTER ALL HEAVY EQUIPMENT THAT COULD DAMAGE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

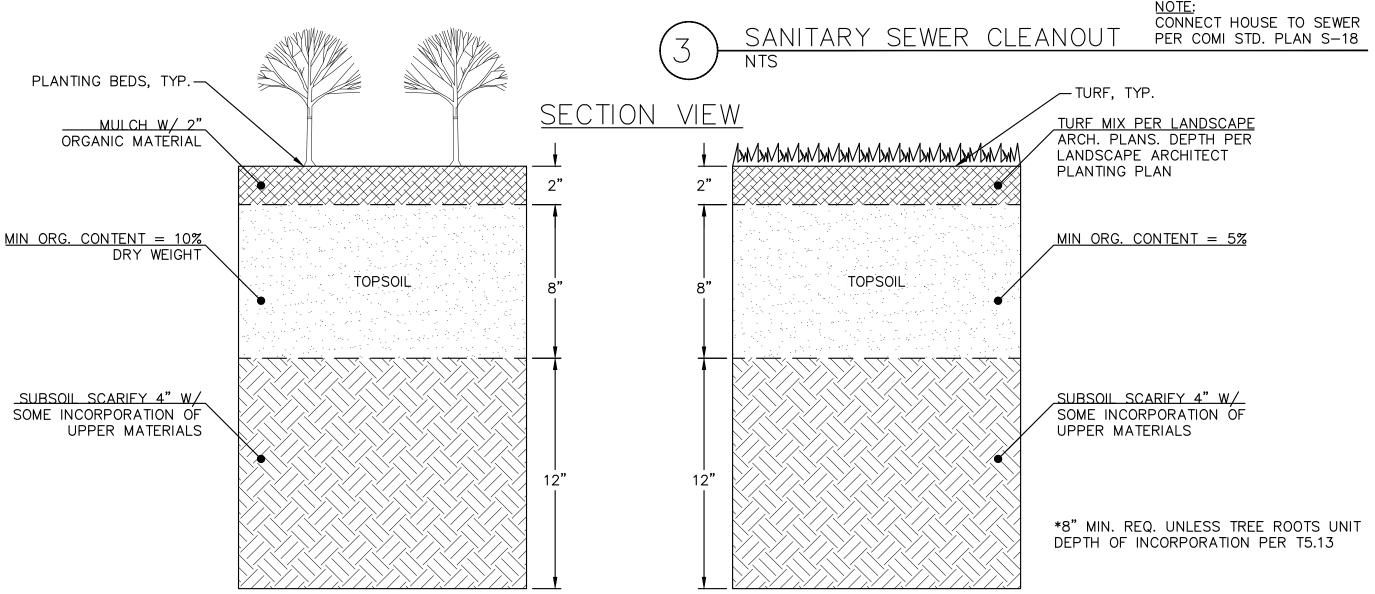


RESIDENTIAL SIDE SEWER - NTS DISCONNECTION & RECONNECTION



FOOTING DRAIN





- 1. pH OF TOP SOIL SHALL BE BETWEEN 6.0 AND 8.0 OR MATCH THE pH OF UNDISTURBED SOIL
- USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
- A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FROM BMP 17.30 (SEE NOTE 3) WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE.
- THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRLEY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
- B. THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.
- C. IMPLEMENTATION OPTIONS:
- LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
- AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
- STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
- IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.

MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED. 3. BIORETENTION SOIL MIX SEE CO.1 GENERAL NOTES. USED FOR PRE-APPROVED AMENDMENT RATES AS NEEDED.

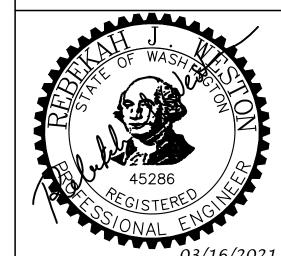
- A. ESTABLISH SOIL QUALITY AND DEPTH TOWARD THE END OF CONSTRUCTION AND ONCE ESTABLISHED, PROTECT FROM COMPACTION, SUCH AS FROM LARGE MACHINERY USE, AND FROM EROSION.
- B. PLANT VEGETATION AND MULCH THE AMENDED SOIL AREA AFTER INSTALLATION.
- C. LEAVE PLANT DEBRIS OR ITS EQUIVALENT ON THE SOIL SURFACE TO REPLENISH ORGANIC MATTER. D. REDUCE AND ADJUST, WHERE POSSIBLE, THE USE OF IRRIGATION, FERTILIZERS, HERBICIDES AND PESTICIDES, RATHER THAN CONTINUING TO IMPLEMENT FORMERLY ESTABLISHED PRACTICES.





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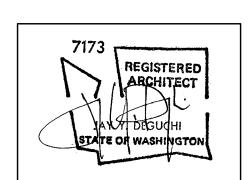
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SHEET NO .:

RB PROJECT NO .: 21-0035

Suyama Peterson Deguchi
8601 8th Avenue South Seattle, Washington 98108
P 206.256.0809

Project Title
LUMPKIN
RESIDENCE
5401 W. MERCER WAY
MERCER ISLAND, WA, 98040



Drawing Title

LOWER LEVEL FLOOR PLAN

Date 03/17/2021

Job No. 2002

DD PRICING SET 09/28/2020 PERMIT SET 03/17/2021

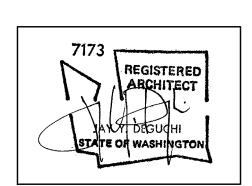
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Suyama Peterson Deguchi 8601 8th Avenue South Seattle, Washington 98108 P 206.256.0809

LUMPKIN
RESIDENCE
5401 W. MERCER WAY
MERCER ISLAND, WA, 98040



Drawing Title MAIN LEVEL FLOOR PLAN

Date 03/17/2021

Job No. 2002

ISSUE DATE DD PRICING SET PERMIT SET 09/28/2020 03/17/2021

PERMIT SET

Sheet No.

Suyama Peterson Deguchi

8601 8th Avenue South P 206.256.0809

Seattle, Washington 98108

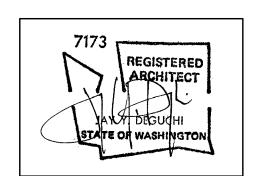
Project Title

LUMPKIN

RESIDENCE

5401 W. MERCER WAY

MERCER ISLAND, WA, 98040



Drawing Title ROOF PLAN

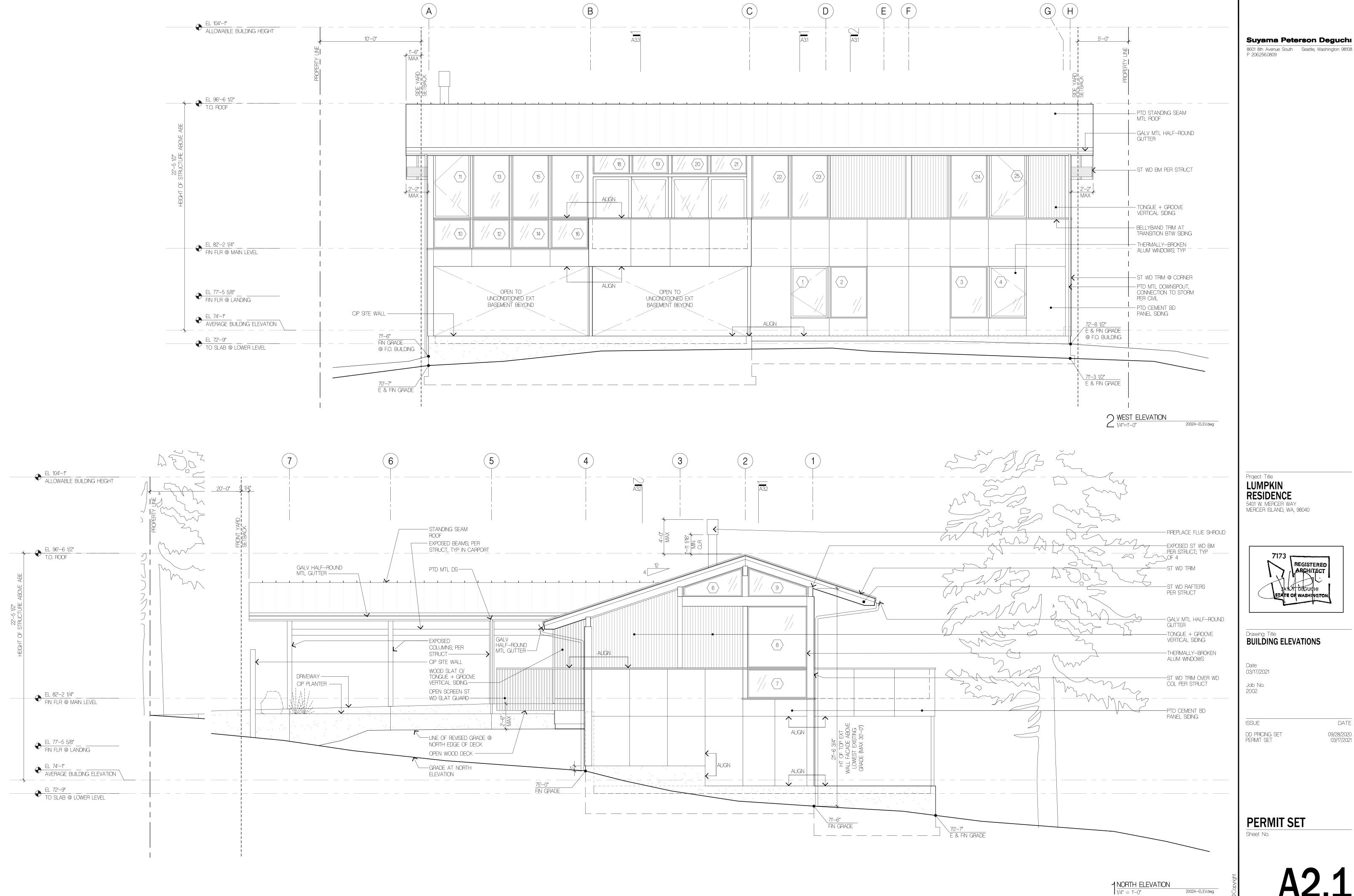
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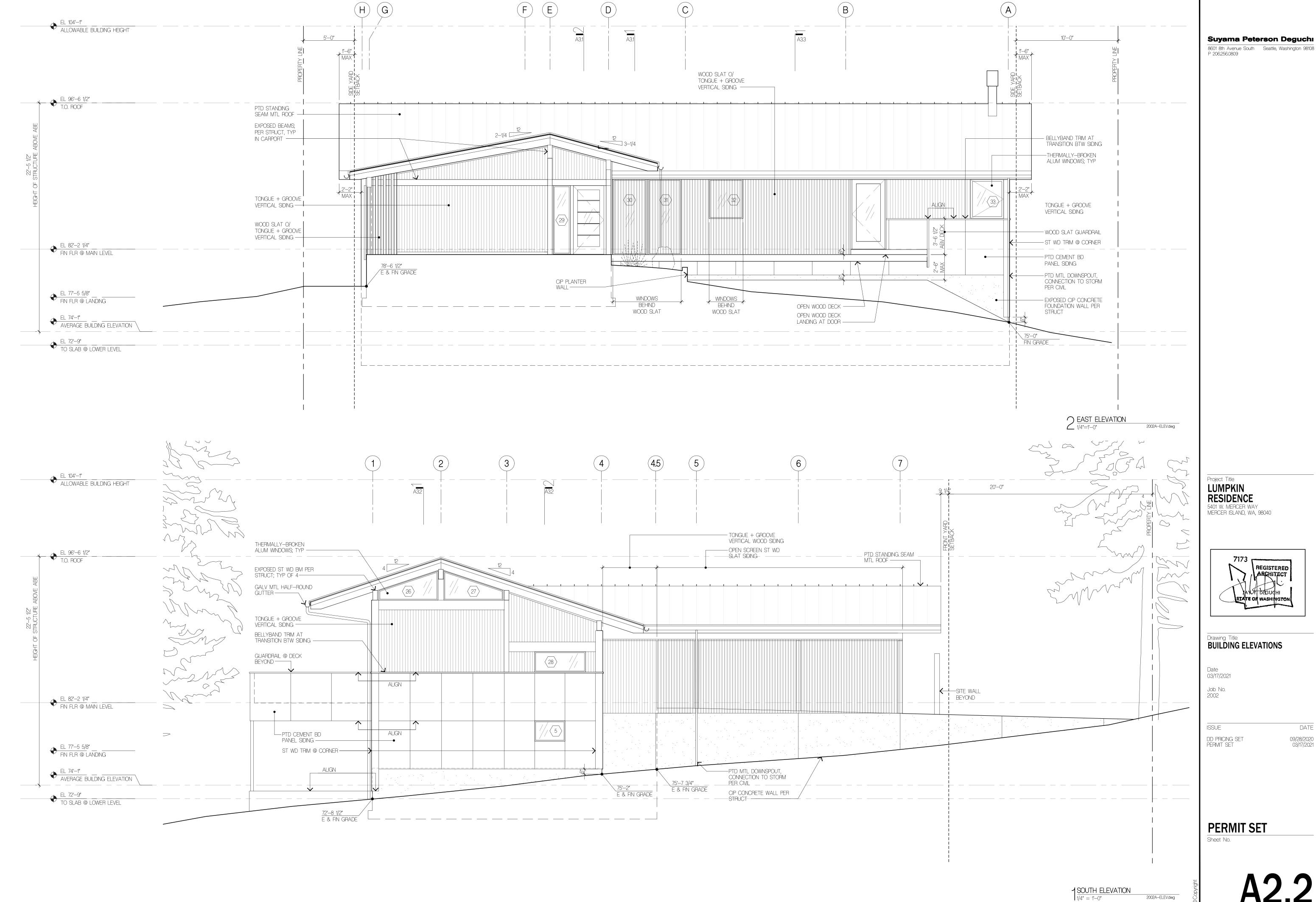
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PERMIT SET 03/17/2021

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APPLIANCE PACKAGE SCHEDULE (WSEC TABLE 406.3 OPTION 7)

APPLIANCE MFR MODEL# SIZE FINISH DISHWASHER MIELE G 4993 SCVi AM 24" W PANEL READY Y REFRIGERATOR MIELE KFNF 9955 iDE 36" W SSTL WASHING MACHINE FISHER PAYKEL WH2424P2 24" W WHITE Y DRYER - VENTLESS FISHER PAYKEL DE4024P2 24" W WHITE Y

I.D.	OW SCHI	DESCRIPTION	U-VAL.	SHGC	NFRC	R.O. WIDTH	1	R.O. HE	EIGHT		AREA	UxA	ORIEN-	OPERATION	FRAME	SAFETY	NOTE
						FT.	IN.	FT.	IN.		SF		TATION		MATERIAL	GLASS	
1	FLEETWOOD	ALUMINUM CASEMENT	0.29	0.29	FLE-M-111-00044-00001	3	8 1/2	5	1 3/4		19.1	5.5	W	SWING	ALUM.		
2	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	5	1 3/4		19.1	4.6	W	FIXED	ALUM.		
3	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	5	1 3/4		19.1	4.6	W	FIXED	ALUM.		
4	FLEETWOOD	ALUMINUM CASEMENT	0.29	0.29	FLE-M-111-00044-00001	3	8 1/2	5	1 3/4		19.1	5.5	W	SWING	ALUM.		
5	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	2	11 3/4	2	1/2		6.1	1.5	S	FIXED	ALUM.		
6	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11 1/4	*	17.4	4.2	N	FIXED	ALUM.	YES	
7	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11		17.3	4.1	N	FIXED	ALUM.		
8	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	6	1 3/4		36.4	8.7	N	FIXED	ALUM.		
9	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11 1/4	*	17.4	4.2	N	FIXED	ALUM.		
10	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	11		10.8	2.6	W	FIXED	ALUM.	YES	
11	FLEETWOOD	ALUMINUM CASEMENT	0.29	0.29	FLE-M-111-00044-00001	3	8 1/2	7	1 1/4		26.3	7.6	W	SWING	ALUM.		
12	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	11		10.8	2.6	W	FIXED	ALUM.	YES	
13	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
14	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	11		10.8	2.6	W	FIXED	ALUM.	YES	
15	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
16	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	11		10.8	2.6	W	FIXED	ALUM.	YES	
17	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
18	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	8 3/4		10.1	2.4	W	FIXED	ALUM.		
19	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	8 3/4		10.1	2.4	W	FIXED	ALUM.		
20	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	8 3/4		10.1	2.4	W	FIXED	ALUM.		T
21	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	2	8 3/4		10.1	2.4	W	FIXED	ALUM.		
22	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
23	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
24	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	8 1/2	7	1 1/4		26.3	6.3	W	FIXED	ALUM.		
25	FLEETWOOD	ALUMINUM CASEMENT	0.29	0.29	FLE-M-111-00044-00001	3	8 1/2	7	1 1/4		26.3	7.6	W	SWING	ALUM.		
26	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11 1/4	*	17.4	4.2	S	FIXED	ALUM.		
27	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11 1/4	*	17.4	4.2	S	FIXED	ALUM.		
28	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	5	11	2	11 1/4		17.4	4.2	S	FIXED	ALUM.		
29	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	1	8	6	9 1/4		11.3	2.7	Е	FIXED	ALUM.	YES	T
30	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	3 1/2	7	8 1/4		25.3	6.1	E	FIXED	ALUM.		
31	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	3 1/2	7	8 1/4		25.3	6.1	E	FIXED	ALUM.		
32	FLEETWOOD	ALUMINUM PICTURE	0.24	0.35	FLE-M-113-00044-00001	3	3 1/2	4	1		13.4	3.2	Е	FIXED	ALUM.		1
33	FLEETWOOD	ALUMINUM CASEMENT	0.29	0.29	FLE-M-111-00044-00001	3	3 1/2	4	1		13.4	3.9	E	SWING	ALUM.		T

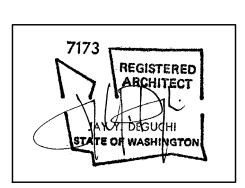
						WINDOW SUBTOTAL			606.2	150.7						
GLAZE	GLAZED EXTERIOR DOOR SCHEDULE															
I.D.	MANUF.	DESCRIPTION	U-VAL.			R.O. WIDTH		R.O. HEIGH	I T	AREA	UxA	ORIEN-	OPERATION	FRAME	SAFETY	NOTES
						FT IN		FT	IN	SF		TATION		MATERIAL	GLASS	
200	FLEETWOOD	ALUMINUM DOOR, SINGLE LITE	0.39	0.27	FLE-M-106-00329-00001	3 6	-	6	10	23.9	9.3	Е	SWING	ALUM	YES	
201.1	FLEETWOOD	ALUMINUM DOOR, XO SLIDER	0.35	0.32	FLE-M-75-00208-00001	7 6 1,	/2	7	1	53.4	18.7	W	SLIDER	ALUM	YES	
201.2	FLEETWOOD	ALUMINUM DOOR, OX SLIDER	0.35	0.32	FLE-M-75-00208-00001	7 6 1,	/2	7	1	53.4	18.7	W	SLIDER	ALUM	YES	
204	FLEETWOOD	ALUMINUM DOOR, SINGLE LITE	0.39	0.27	FLE-M-106-00329-00001	3 2		6	9 1/4	21.4	8.4	Е	SWING	ALUM	YES	
							•									

	TERIOR DOOR SCHEDULE					T T			T	1	1	
BD	SOLID CORE WOOD DOOR	3	2	6	9	21.4		N	SWING	WOOD	-	
	GLAZED DOOR SUBTOTAL					152.2	55.1					
	WINDOW SUBTOTAL					606.2	150.7	SEE WINDO	DW SCHEDULE	E ABOVE		
	FENESTRATION TOTAL					758.4	205.8					
	GLAZING AREA-WEIGHTED U-FACTOR						0.27	≤ 0.28 MAXI	IMUM ALLOWE	ED FENESTRA	TION U-FAC	STOF
							•	PER 2018 W	SEC TABLE 40	6.3; OPTION	1.3 (.5 CRED)IT)
	OPAQUE DOOR TOTAL					21.4	0.0					
	OPAQUE DOOR AREA-WEIGHTED U-FACTOR					,	0.00					

NOTES: 1. WINDOWS ARE REFERENCED ON EXTERIOR ELEVATIONS. DOORS ARE REFERENCED ON FLOOR PLANS.

- 2. BOD IS FLEETWOOD SERIES 450-T. ALL WINDOWS TO MEET U-FACTOR AS STATED ABOVE, TO MEET THE 2018 PRESCRIPTIVE ENERGY CODE FOR CLIMATE ZONE MARINE 4.
- 3. ALL WINDOWS WITHIN A 2-FOOT ARC OF A DOOR AND 60" OR LESS ABOVE FLOOR MUST HAVE TEMPERED GLASS.
- 4. ALL WINDOWS 18" OR LESS ABOVE FLOOR MUST HAVE TEMPERED GLASS.
- 5. TYPICAL RO = UNIT SIZE + 1/2"; CONTRACTOR TO VERIFY ALL R.O.'s AFTER FRAMING IS COMPLETE AND PRIOR TO ORDERING DOORS AND WINDOWS.

LUMPKIN
RESIDENCE
5401 W. MERCER WAY
MERCER ISLAND, WA, 98040

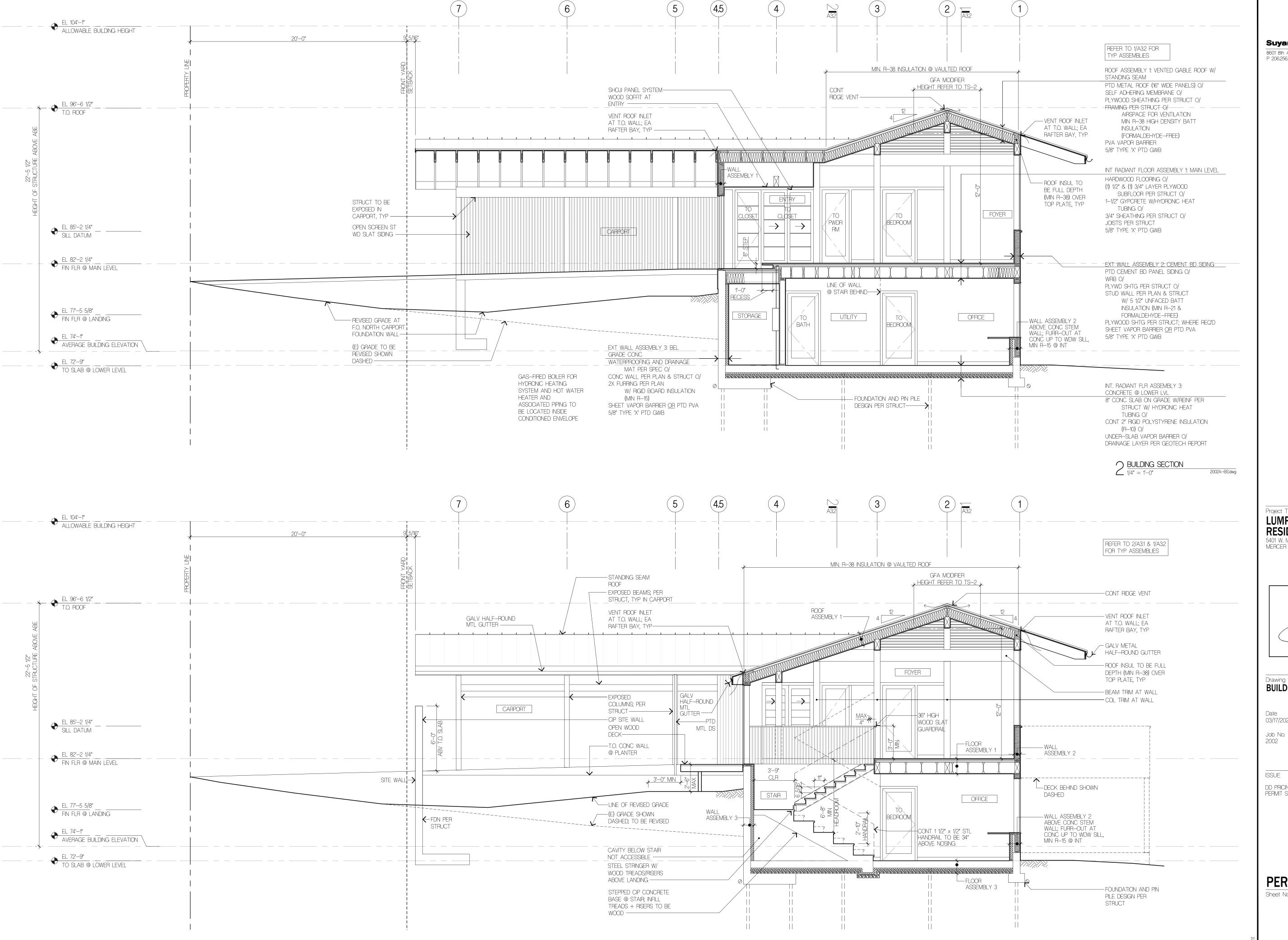


Drawing Title SCHEDULES

Date 03/17/2021 Job No. 2002

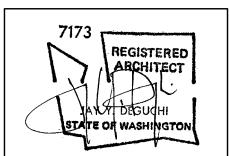
DATE ISSUE PERMIT SET 03/17/2021

PERMIT SET



Suyama Peterson Deguchi 8601 8th Avenue South Seattle, Washington 98108

LUMPKIN RESIDENCE 5401 W. MERCER WAY MERCER ISLAND, WA, 98040



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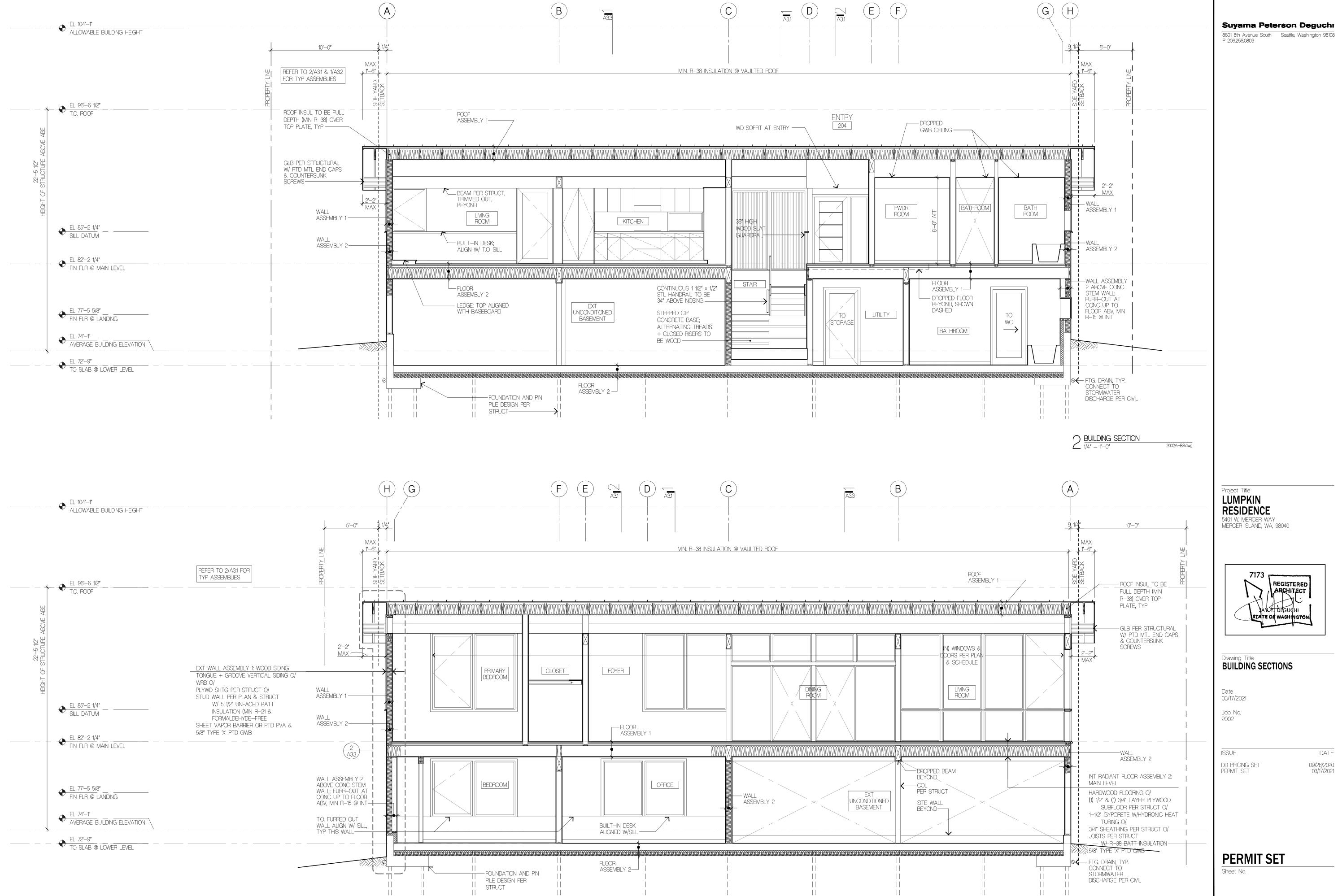
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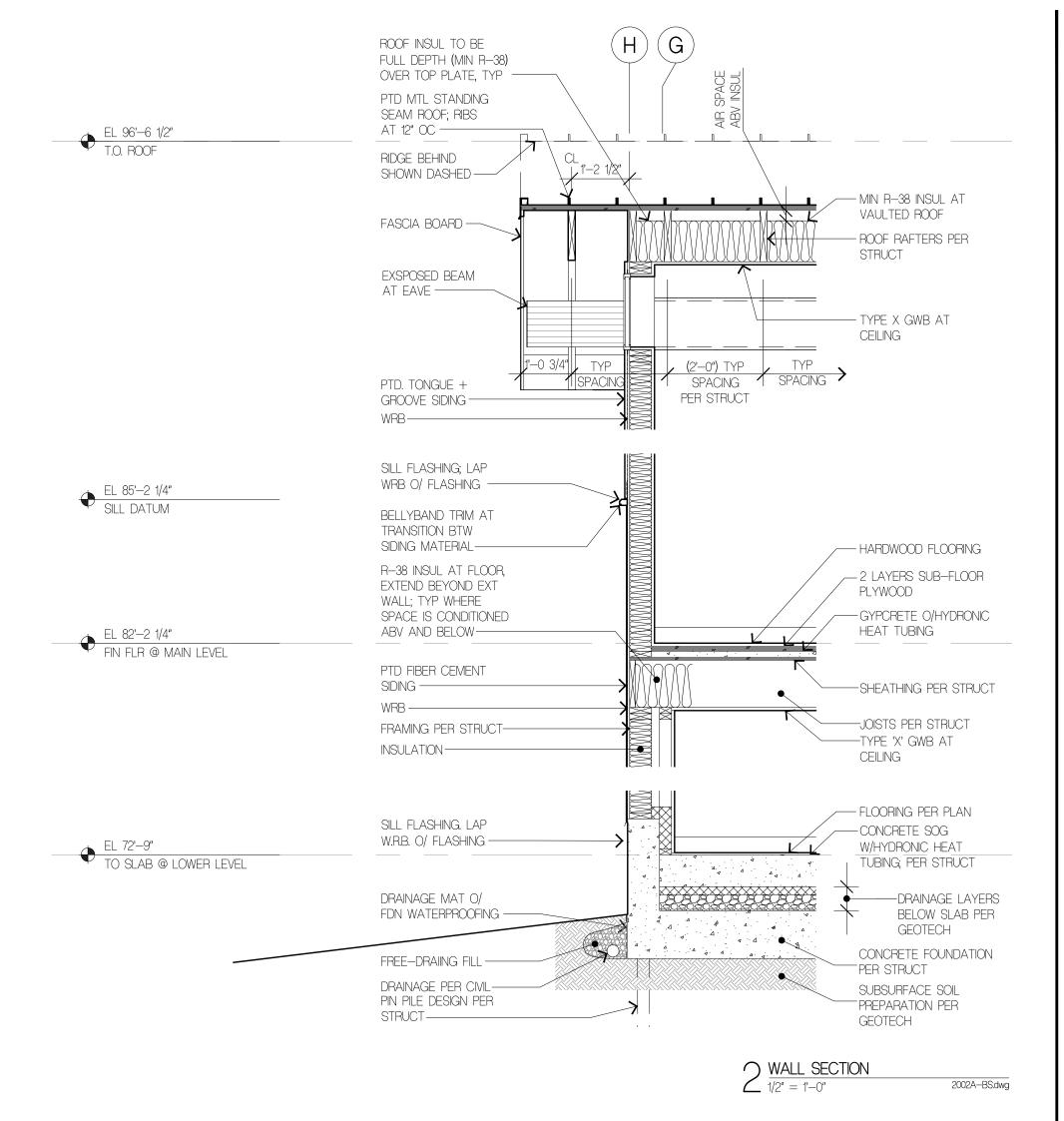
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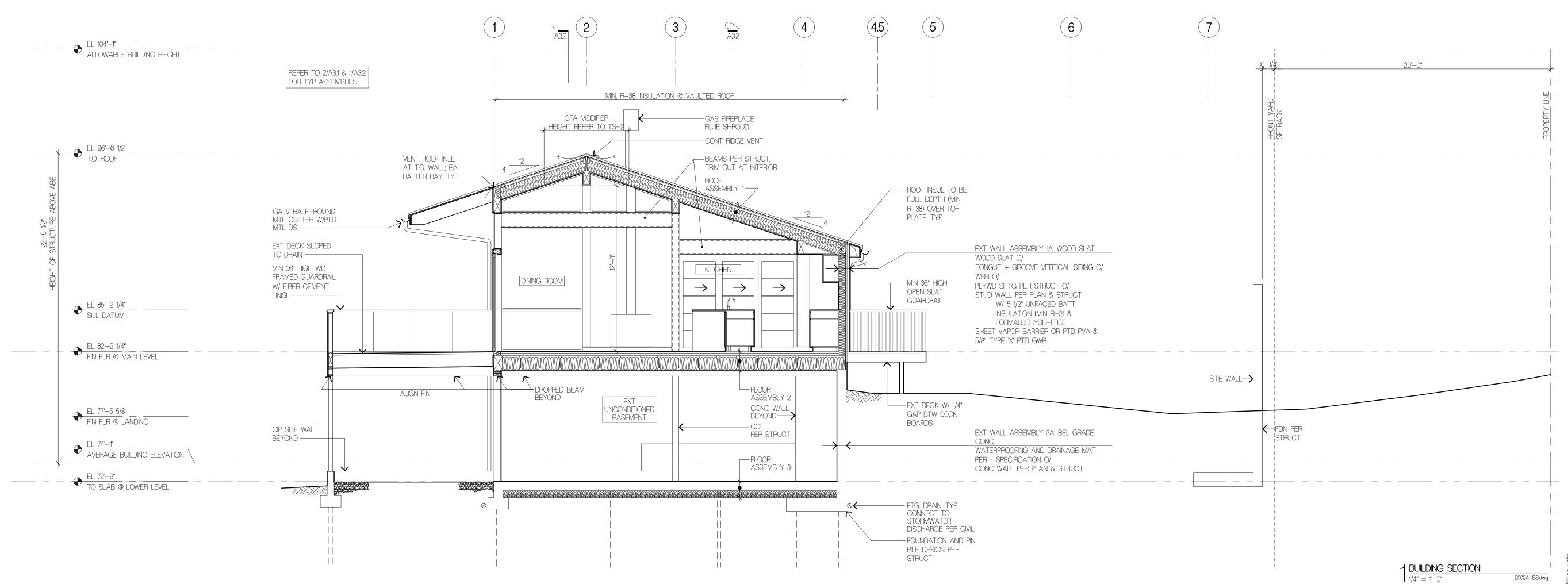
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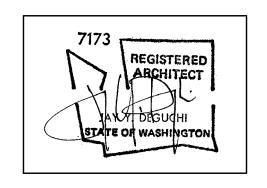
 $\frac{1}{1/4"} = \frac{1}{1} - 0"$

A3.2









Suyama Peterson Deguchi

8601 8th Avenue South Seattle, Washington 98108

P 206.256.0809

Drawing Title BUILDING SECTIONS

Date 03/17/2021

Job No. 2002

ISSUE DATE
PERMIT SET 03/17/2021

PERMIT SET

Sheet No.

43.3

General Structural Notes

CRITERIA DRAWINGS. SPECIFICATIONS. AND THE INTERNATIONAL BUILDING CODE (2018)

2. DESIGN LOADING CRITERIA: RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS WIND GCpi=0.18, 98 MPH, RISK CATEGORY II, EXPOSURE "C"

EARTHQUAKE . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS SITE CLASS=D. Ss=150, Sds=1.457, S1=0.506, SD1=0.573, Cs=0. 154

SDC D (DEFAULT), Ie=1.0, R=6.5 SEE PLANS FOR ADDITIONAL LOADING CRITERIA

EDITION).

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.

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.

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".

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

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

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

QUALITY ASSURANCE

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

PER TABLE 1705. 3 CONCRETE CONSTRUCTION SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY PER TABLE 1705.6 DRIVEN DEEP FOUNDATION PER TABLE 1705. 7 EXPANSION BOLTS AND THREADED EXPANSION INSERTS PER MANUFACTURER EPOXY GROUTED INSTALLATIONS PER MANUFACTURER

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

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

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

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

GEOTECHNICAL

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE 12. 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) 50	۱ D	CE	/25 DCE
· · · · · · · · · · · · · · · · · · ·		•	
ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 1.5 INCLUDED)		. 3	300 PCF
COEFFICIENT OF FRICTION (FS OF 1.5 INCLUDED)			0. 35
TRAFFIC SURCHARGE PRESSURE (UNIFORM LOAD)			75 PSF
SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD)			7H PSF
3" DIA. PILE CAPACITY (COMPRESSION)			6 T

SOILS REPORT REFERENCE: GEO GROUP NORTHWEST, #G-5244

13. PIN PILES SHOWN ON THE PLAN SHALL BE 3" DIAMETER EXTRA-STRONG, GRADE A, GALVANIZED, UNLESS OTHERWISE NOTED. THE MAXIMUM CAPACITY OF 3" PILES SHALL BE 6 TONS. ALL PILES SHALL BE DRIVEN TO REFUSAL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. AS A MINIMUM, PILE REFUSAL SHALL BE DEFINED AS 1 INCH OF PENETRATION IN 12 SECONDS DURING CONTINUOUS DRIVING OF A 650 LB HYDRAULIC HAMMER (TELEDYNE TB225 OR EQUIVALENT) UNDER THE FULL WEIGHT AND EFFORT OF THE OPERATOR. PILES USED IN COMMON TO RESIST LATERAL EARTH PRESSURES SHALL HAVE THE ADDITIONAL REQUIREMENT OF BEING EMBEDDED A MINIMUM OF 10 FEET BELOW RETAINED GRADE. THE MAXIMUM PILE ECCENTRICITY SHALL BE 2 INCHES. GEOTECHNICAL SPECIAL INSPECTION SHALL BE SUBJECT TO THE DISCRETION OF THE GEOTECHNICAL ENGINEER AND THE BUILDING DEPARTMENT. SEE PLANS FOR OTHER SIZES AND CRITERIA.

CONCRETE

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

15. 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.

16. 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.

17. 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.

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

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) . . . 2" FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2"

SLABS AND WALLS (INT. FACE). . . GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

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

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

20. 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.

21. 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).

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

ANCHORAGE

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

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

24. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO 33. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

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

- - (JOISTS AND BEAMS	(2X & 3X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 900 PSI
<u>2</u> N		(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
-, N	POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
,		(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
N	STUDS, PL	ATES & MISC. FRAMING:	DOUGLAS FIR-LARCH NO. 2

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

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

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

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW 35. NOTCHES AND HOLES IN WOOD FRAMING: AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS. OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

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

28. PREFABRICATED 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.

29. 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.

30. 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.

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.

HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION 32. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE

WOOD TREATMENT HAS NO AMMONIA CARRIER CONTAINS AMMONIA CARRIER	CONDITION INTERIOR DRY INTERIOR DRY	PROTECTION G90 GALVANIZED 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.

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.

34. WOOD FASTENERS

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

SIZE	LENGTH	DIAMETER
8d	2-1/2"	0. 131"
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.

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

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

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

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

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

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

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6' ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER UNLESS OTHERWISE



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DESIGN: CHECKED:

PROJECT TITLE:

Lumpkin Residence 5401 West Mercer Way Mercer Island, WA 98040

Suyama Peterson Deguchi 2324 2nd Ave.

Seattle, WA 98121 PH 206.256.0809 FX 206.256.0810

Permit

General Structural Notes

DATE: March 17, 2021 PROJECT NO:

00043-2020-04 SHEET NO:

Plan Notes

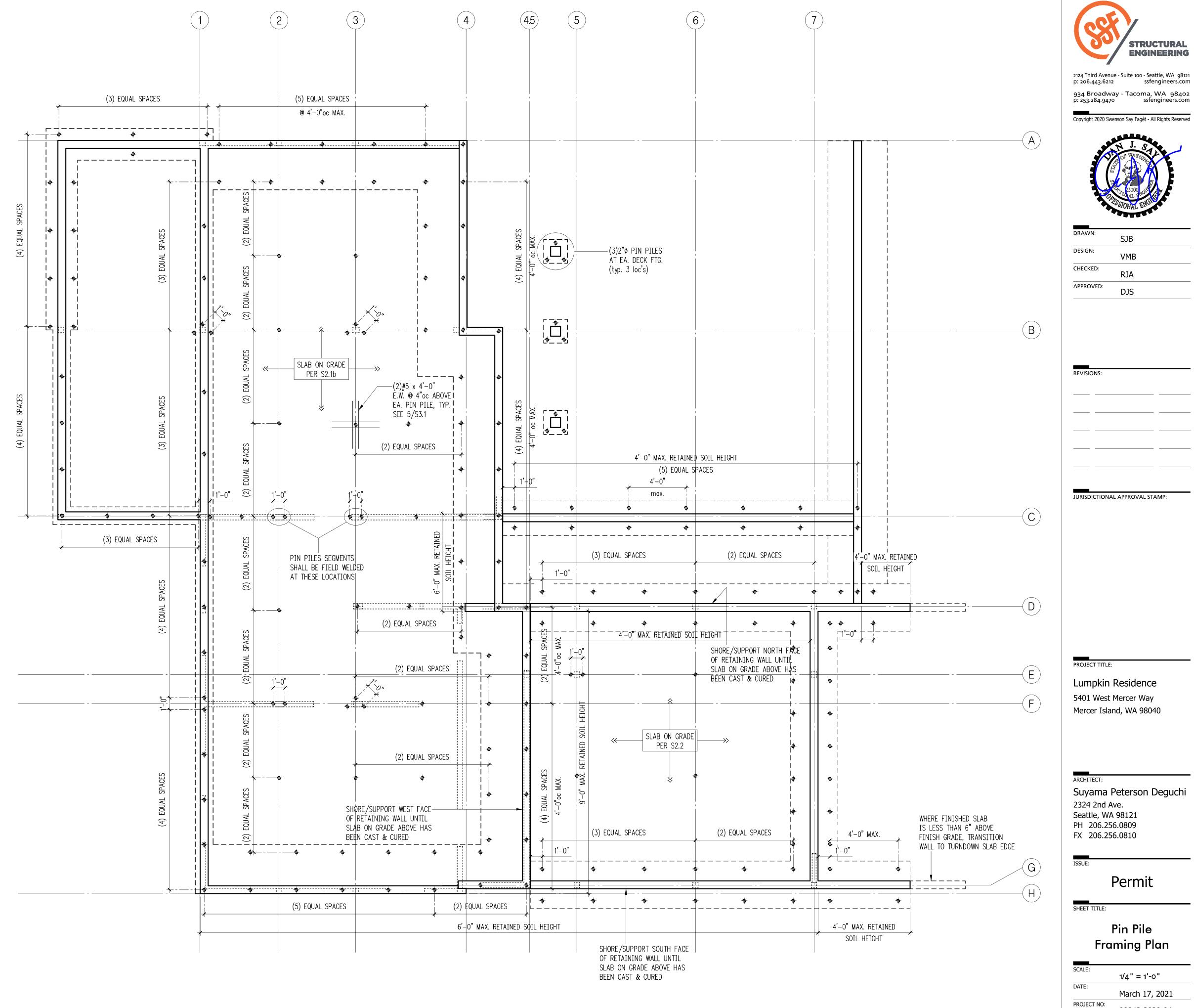
- 1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- 2. PIPE PILES SHALL BE A COMBINATION OF 2" AND 3" DIAMETER BLACK PIPE, EXTRA-STRONG SCHEDULE 80.
- 3. 2" PIN PILES SHALL BE DRIVEN TO REFUSAL. REFUSAL FOR 2" PILES IS DEFINED AS LESS THAN 1" OF PILE PENETRATION DURING 1 MINUTE OF CONTINUOUS DRIVING WITH A 90-POUND (MIN.) JACKHAMMER.
- 4. 2" PIN PILES HAVE BEEN DESIGNED WITH AN ALLOWABLE AXIAL COMPRESSIVE CAPACITY OF 6,000-POUNDS AS PER THE GEOTECHNICAL REPORT.
- 5. 3" PIN PILES SHALL BE DRIVEN TO REFUSAL. REFUSAL FOR 3" PILES IS DEFINED AS LESS THAN 1" OF PILE PENETRATION DURING 12 SECONDS OF CONTINUOUS DRIVING WITH A 650-POUND (MIN.) HYDRAULIC HAMMER. MAXIMUM PENETRATION RATE FOR 3" PIN PILES SHALL BE SUSTAINED THROUGH AT LEAST (3) TIME CYCLES OF CONTINUOUS DRIVING.
- 6. 3" PIN PILES HAVE BEEN DESIGNED WITH AN ALLOWABLE AXIAL COMPRESSIVE CAPACITY OF 12,000-POUNDS AS PER THE GEOTECHNICAL REPORT.
- MINIMUM EMBEDMENT: ALL PILES SHALL BE DRIVEN COMPLETELY THROUGH LOOSE FILL MATERIAL INTO THE UNDERLYING COMPETENT NATURAL SEDIMENTS AS DETERMINED IN THE FIELD. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- 8. MONITORING: CONTINUOUS INSPECTION SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- 9. LOAD TESTING: PIN PILES SHALL BE LOAD TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- 10. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

STEM WALL & FOOTING SEE S2.1b

STRUCTURAL WALL OR POST ABOVE

3"ø SCHEDULE 80 X-STRONG PIN PILE







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Pin Pile

Framing Plan

SHEET NO:

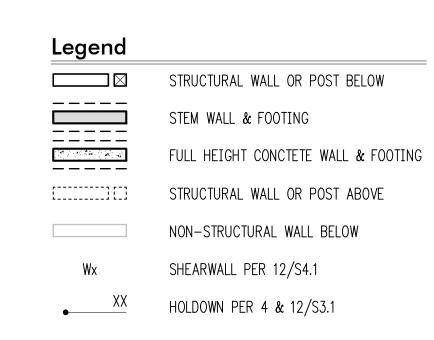
1/4" = 1'-0"

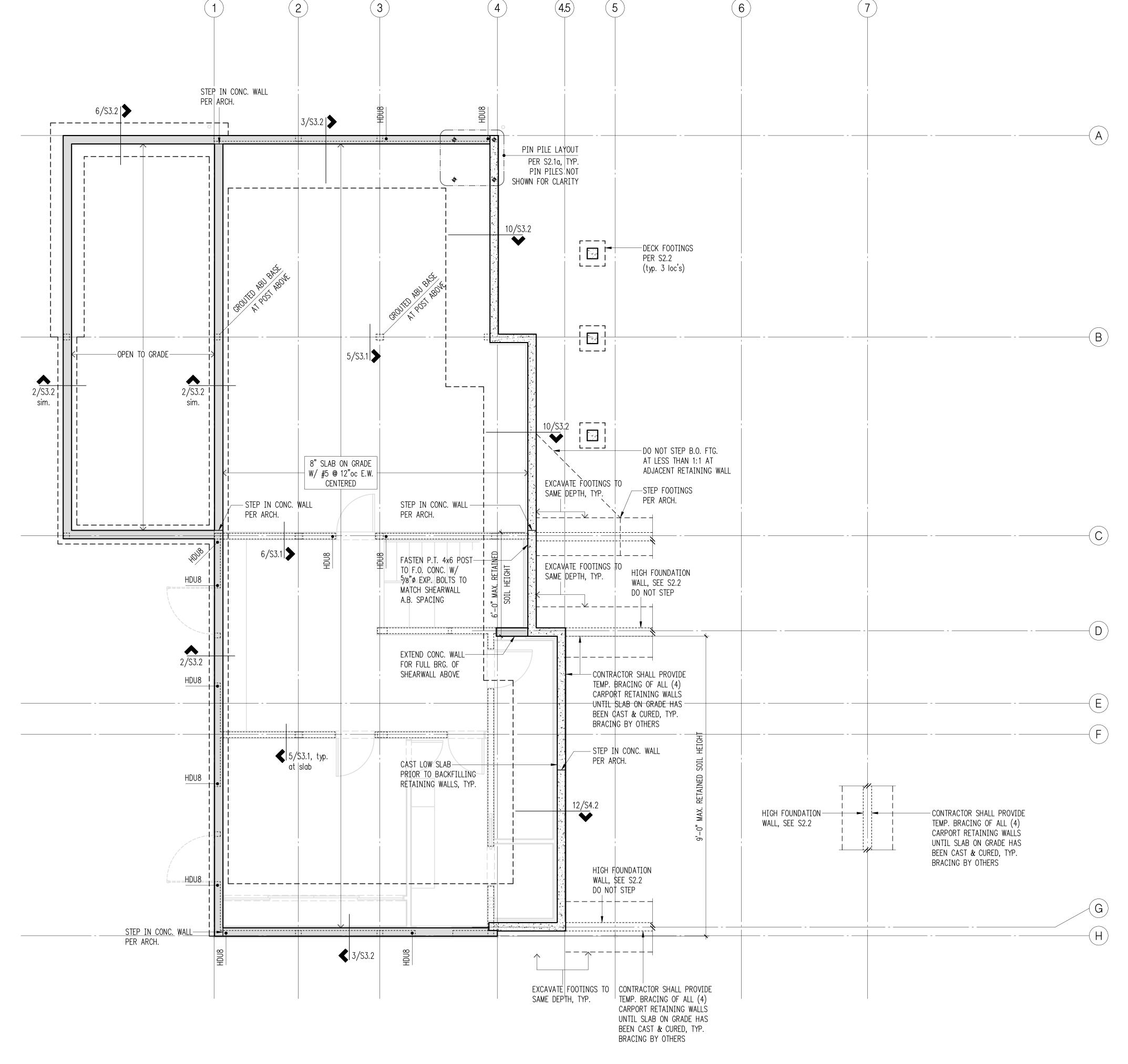
March 17, 2021

00043-2020-04

Plan Notes

- 1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- 2. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW GRADE.
- 3. 8" CONCRETE SLAB OVER 6 MIL VAPOR BARRIER ON 4" OF GRAVEL OR CRUSHED ROCK OVER FIRM UNDISTURBED SOIL OR ENGINEERED COMPACTED BACK-FILL. REINFORCE WITH #5 REBAR @ 12"oc.
- 4. PROVIDE EPOXY GROUTED #4 x 2'-6" DOWELS EMBEDDED A MINIMUM OF 6" IN TO EXISTING CONCRETE TO MATCH NEW HORIZONTAL REINFORCING. TYPICAL WHERE NEW CONCRETE WALL OR FOOTING TERMINATES AT EXISTING CONCRETE. EPOXY GROUT PER GENERAL STRUCTURAL NOTES.
- 5. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- 6. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



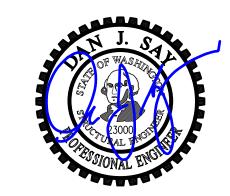






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DRAWN:

SJB

DESIGN:

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CHECKED:

RJA

APPROVED:

DJS

EVISIONS:

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:

Lumpkin Residence 5401 West Mercer Way Mercer Island, WA 98040

ARCHITECT:

Suyama Peterson Deguchi
2324 2nd Ave.

Seattle, WA 98121 PH 206.256.0809 FX 206.256.0810

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SHEET TITLE:

Foundation Plan

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

DATE: March 17, 2021

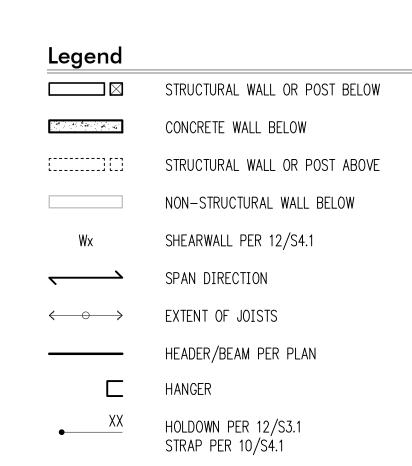
PROJECT NO: 00043, 2020, 04

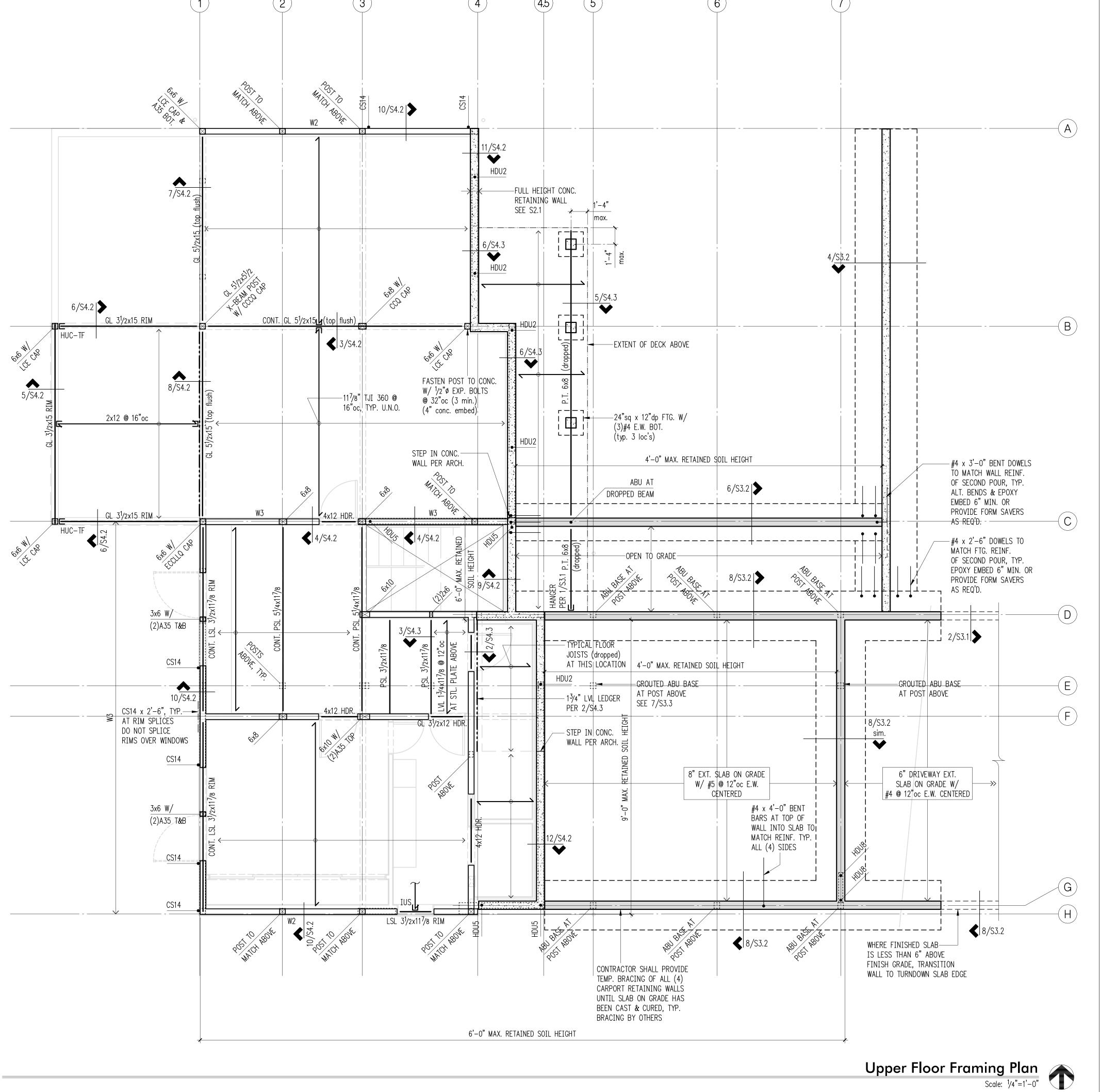
00043-2020-04 SHEET NO:

S2.1b



- 1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- 2. FLOOR SHEATHING SHALL BE 3/4" A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 48/24), FACE GRAIN PERPENDICULAR TO FLOOR FRAMING PER PLAN. NAIL AT ALL FRAMED PANEL EDGES WITH 8d AT 6"oc AND TO ALL INTERMEDIATE FRAMING AT 12"oc.
- 3. MAIN FLOOR JOISTS SHALL BE 11%" TJI 360 SPACED PER PLAN.
- 4. DECK FLOOR JOISTS SHALL BE 2x12 SPACED PER PLAN.
- 5. HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2)2x8/4x8 MINIMUM. PROVIDE (2) JACK STUDS AND (1) KING STUD (MINIMUM) AT EACH END OF ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS.
- 6. W# INDICATES SHEARWALL. SEE SHEARWALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.
- 7. (X)CS16 INDICATES VERTICAL HOLDOWN STRAP AT END OF SHEAR WALL ABOVE. (X) INDICATES STRAP QUANTITY.
- 8. MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) 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%.
- 9. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- 10. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.







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JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:

Lumpkin Residence

5401 West Mercer Way Mercer Island, WA 98040

ARCHITECT:
Suyama Peterson Deguchi

2324 2nd Ave. Seattle, WA 98121 PH 206.256.0809 FX 206.256.0810

Permit

TITLE:

Upper Floor Framing Plan

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

DATE: March 17, 2021

PROJECT NO: 000 43, 2000, 04

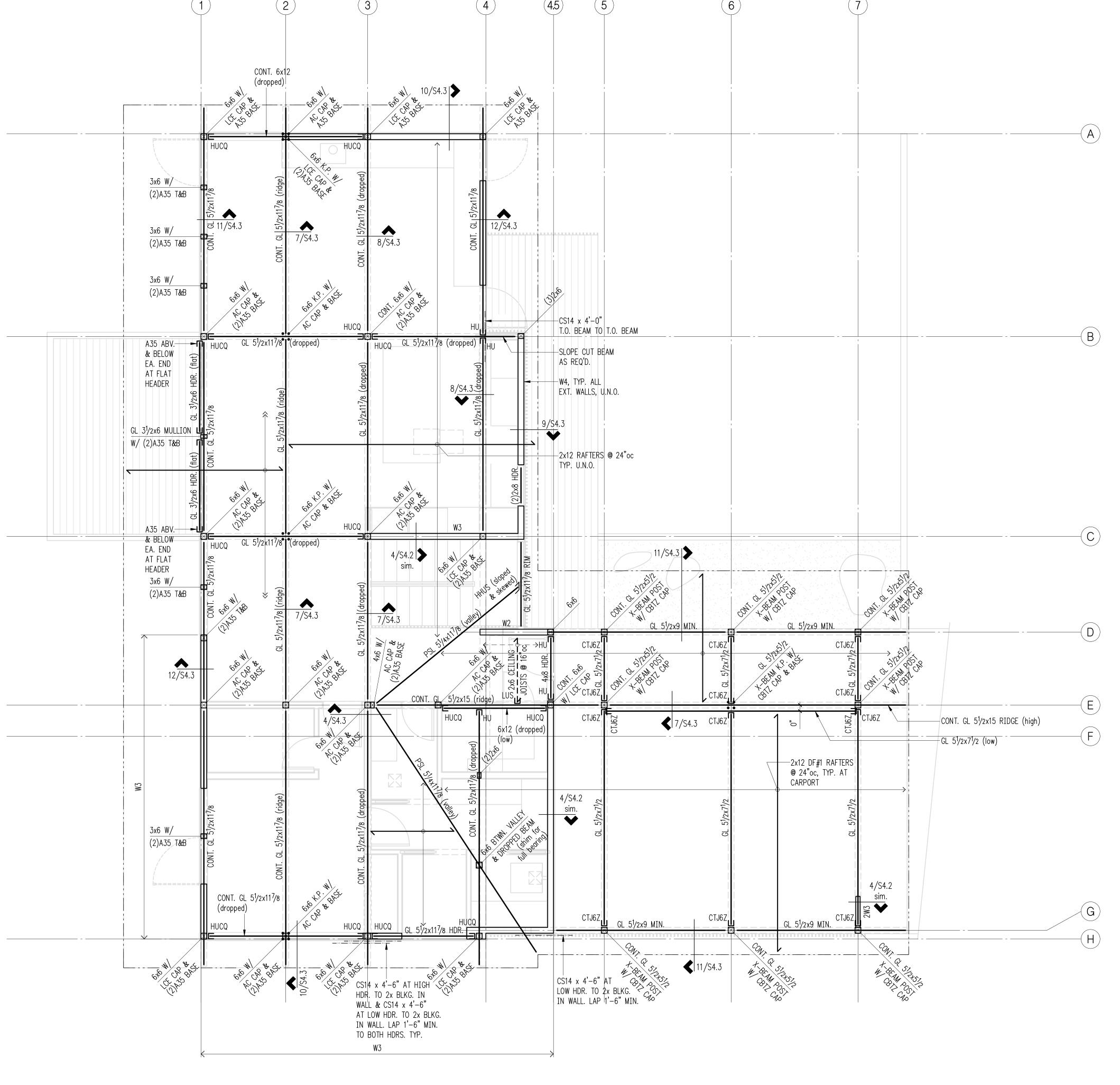
00043-2020-04 SHEET NO:

S2.2

Plan Notes

- 1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- 2. ROOF SHEATHING SHALL BE 1/2" A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 32/16), FACE GRAIN PERPENDICULAR TO ROOF FRAMING PER PLAN. NAIL SHEATHING AT ALL FRAMED PANEL EDGES WITH 8d AT 6"oc AND TO ALL INTERMEDIATE FRAMING AT 12"oc.
- 3. ROOF FRAMING SHALL BE 2x12 HEMFIR NO. 2 SPACED PER PLAN.
- 4. HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2)2x8/4x8 MINIMUM. PROVIDE (2) JACK STUDS AND (1) KING STUD (MINIMUM) AT EACH END OF ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS.
- 5. W# INDICATES SHEARWALL. SEE SHEARWALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.
- 6. PROVIDE H6 HURRICANE TIE AT EACH TRUSS/RAFTER WHERE IT BEARS ON EXTERIOR WALL.
- 7. MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) 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%.
- 8. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- 9. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend STRUCTURAL WALL OR POST BELOW NON-STRUCTURAL WALL BELOW Wx SHEARWALL PER 12/S4.1 SPAN DIRECTION ← → EXTENT OF JOISTS HEADER/BEAM PER PLAN HANGER







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JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:

Lumpkin Residence 5401 West Mercer Way Mercer Island, WA 98040

ARCHITECT:
Suyama Peterson Deguchi

2324 2nd Ave. Seattle, WA 98121 PH 206.256.0809 FX 206.256.0810

Permit

ET TITLE:

Roof Framing Plan

SCALE:

1/4" = 1'-0"

DATE:

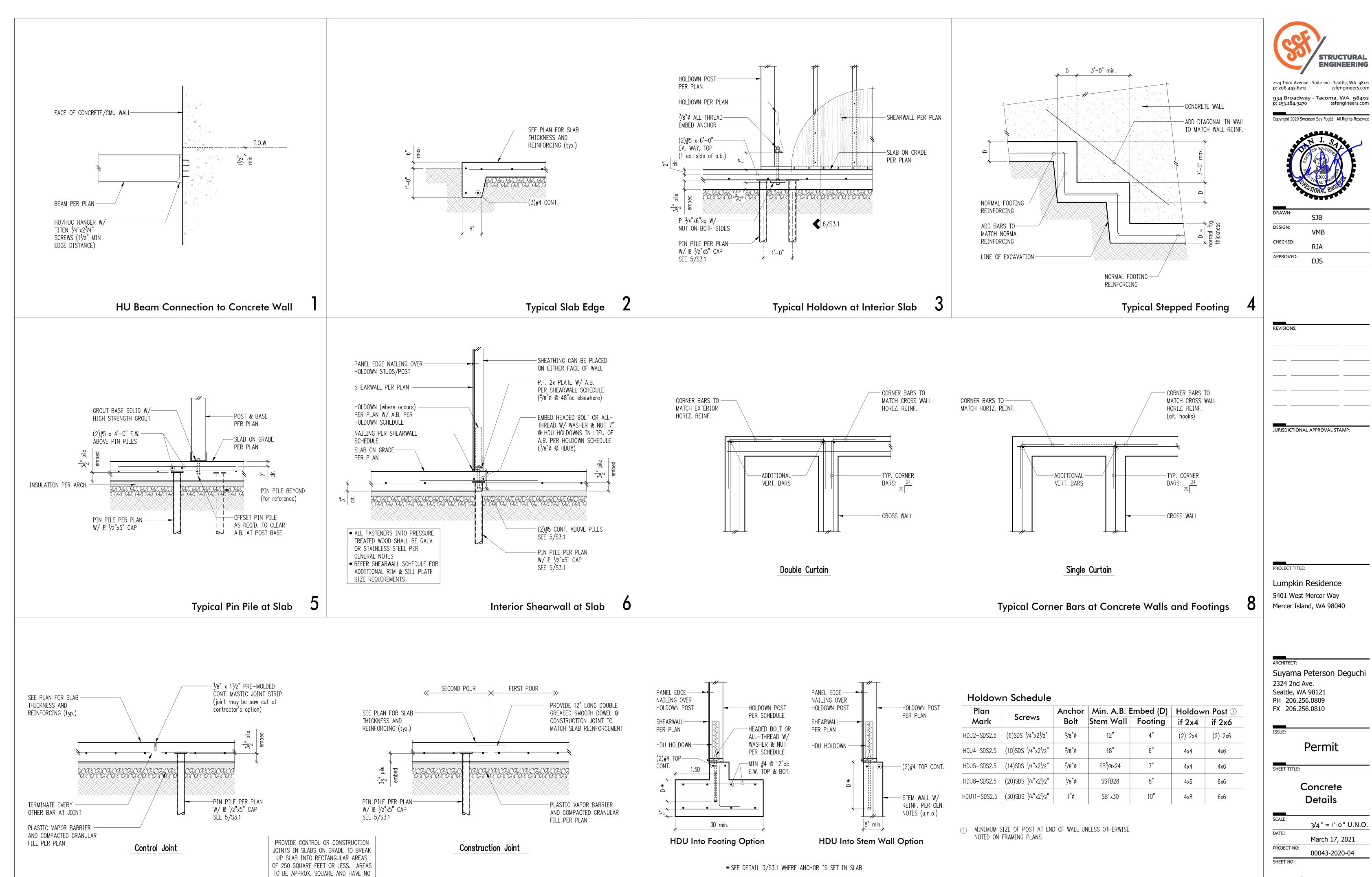
March 17, 2021

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00043-2020-04

00043-2020-04 SHEET NO:

523



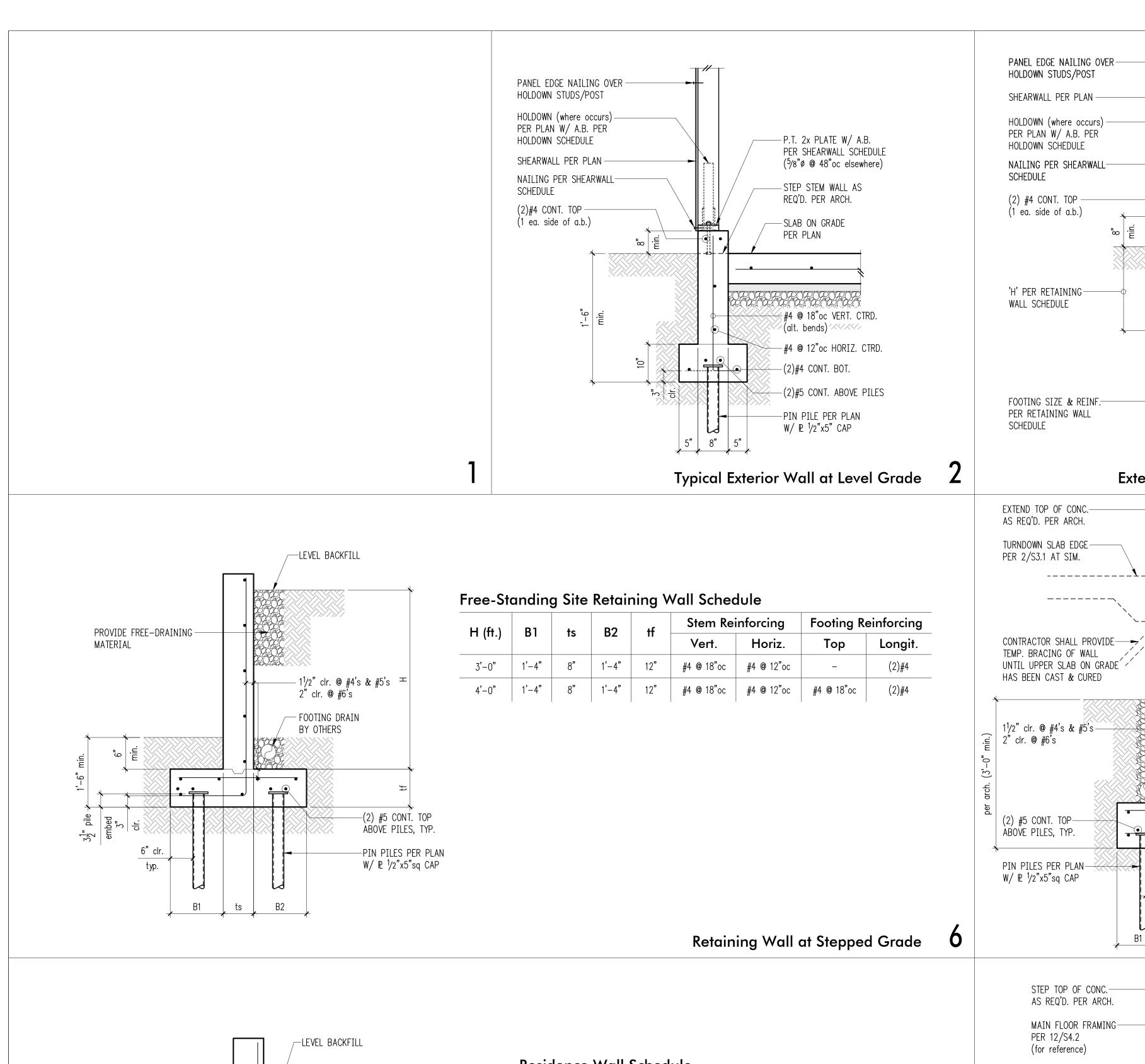
Typical Slab Joints 10

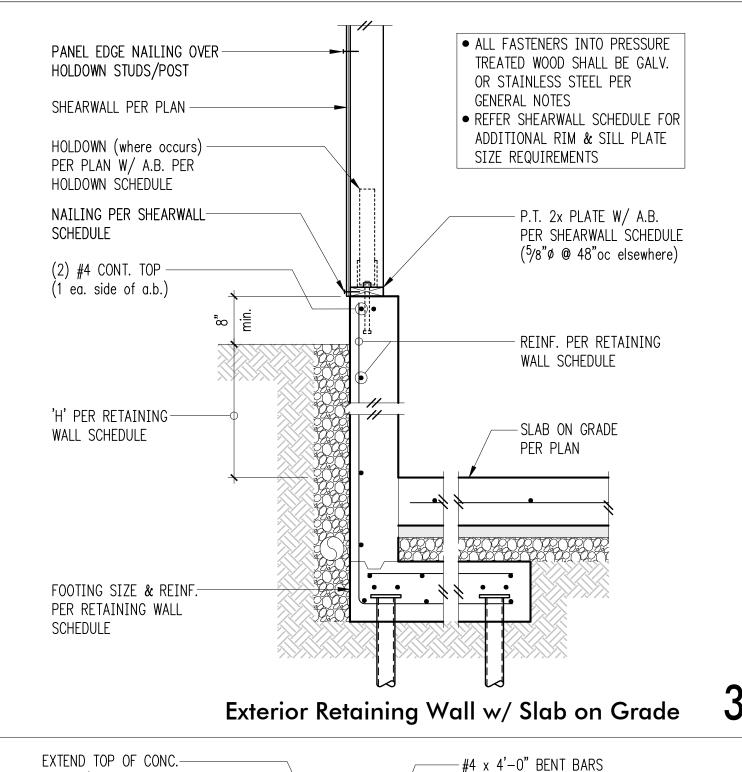
ACUTE ANGLES. JOINT LOCATIONS TO

BE APPROVED BY THE ARCHITECT.

S3.1

Typical HDU Holdown 12





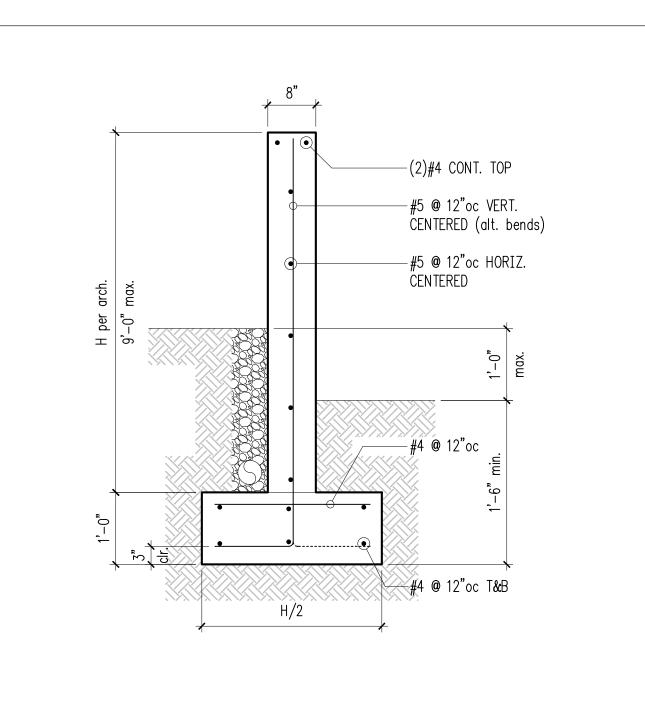
ÄT TOP OF WALL TO SLAB

— SLAB ON GRADE

PER PLAN

-HORIZ. JOINT PER

ARCH. (where occurs)



DRAWN: DESIGN: CHECKED: RJA APPROVED: DJS

REVISIONS:

PROJECT TITLE:

2324 2nd Ave.

Seattle, WA 98121

PH 206.256.0809

FX 206.256.0810

PROJECT NO:

SHEET NO:

Lumpkin Residence

5401 West Mercer Way

Mercer Island, WA 98040

Suyama Peterson Deguchi

Permit

Concrete

Details

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

March 17, 2021

00043-2020-04

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Typical Site Retaining Wall at Level Grade

Carport Retaining Wall Schedule W/ Slab

•		•			_			
⊔ /f+ \	B1	ts	B2	tf	Stem Re	inforcing	Footing R	einforcing
H (ft.)	БІ	15	DZ	11	Vert.	Horiz.	Тор	Longit.
3'-0"	1'-4"	8"	1'-4"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(2)#4
4'-0"	1'-4"	8"	1'-4"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(2)#4
6'-0"	1'-4"	8"	1'-4"	12"	#4 @ 12"oc	#4 @ 12"oc	_	(4)#4
8'-0"	1'-4"	8"	1'-4"	12"	#5 @ 12"oc	#4 @ 12"oc	#4 @ 18"oc	(6)#5
10'-0"	1'-4"	8"	1'-4"	12"	#7 @ 12"oc	#4 @ 12"oc	#4 @ 18"oc	(8)#5

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Typical Retaining Wall at Carport

Residence	Wall	Schedule

H (ft.)		В1	ts	tf	Stem Rei	inforcing	Footing Reinforcing		
11 (11.)	Vert.				Horiz.	Bot.	Longit.		
UP TO 3	·-0"	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(3)#5	
4'-0	,,	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(3)#5	
6'-0	"	3'-6"	8"	12"	#5 @ 12"oc	#4 @ 12"oc	_	(4)#5	

NOTE: CAST AND CURE SLAB PRIOR TO BACKFILLING WALL

STEP TOP OF CONC. AS REQ'D. PER ARCH. -#4 x 4'-0" BENT BARS AT TOP OF WALL TO SLAB MAIN FLOOR FRAMING — PER 12/S4.2 -SLAB ON GRADE (for reference) PER PLAN CONTRACTOR SHALL PROVIDE TEMP. BRACING OF WALL UNTIL UPPER SLAB ON GRADE HAS BEEN CAST & CURED 1¹/2" clr. @ #4's & #5's— 2" clr. @ #6"s SLAB ON GRADE-PER PLAN —(2) #5 CONT. TOP ABOVE PILES, TYP. $3\frac{1}{2}$ " pile embed 6" clr.

typ.

ı		J			•		
H (ft.)	B1	ts	tf	Stem Reinforcing Footing Reinforci			einforcing
11 (11.)	DТ	15	11	Vert.	Horiz.	Тор	Longit.
3'-0"	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(2)#4
4'-0"	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(2)#4
6'-0"	3'-6"	8"	12"	#4 @ 12"oc	#4 @ 12"oc	_	(4)#4
8'-0"	3'-6"	8"	12"	#5 @ 12"oc	#4 @ 12"oc	#4 @ 18"oc	(6)#5
LID TO O' O"	7' C"	0"	10"	#7 @ 10"···	// @ 10"	#4 @ 10"	/o\

1.1. /fr. \	B1 ts	1.	tf	Stem Re	inforcing	Footing Reinforcing		
H (ft.)		TS		Vert.	Horiz.	Тор	Longit.	
3'-0"	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	_	(2)#4	
4'-0"	3'-6"	8"	12"	#4 @ 18"oc	#4 @ 12"oc	-	(2)#4	
6'-0"	3'-6"	8"	12"	#4 @ 12"oc	#4 @ 12"oc	-	(4)#4	
8'-0"	3'-6"	8"	12"	#5 @ 12"oc	#4 @ 12"oc	#4 @ 18"oc	(6)#5	
TO 9'-0"	3'-6"	8"	12"	#7 @ 12"oc	#4 @ 12"oc	#4 @ 18"oc	(8)#5	

S3.2

-PIN PILES PER PLAN

W/ № 1/2"x5"sq CAP

Typical Residence Retaining Wall 10

Typical Retaining Wall at Carport/Residence Connection 12

FOOTING DRAIN BY OTHERS

1¹/2" clr. @ #4's & #5's 2" clr. @ #6's

LOCATE PER ARCH.

(2) #5 CONT. TOP ABOVE PILES, TYP.

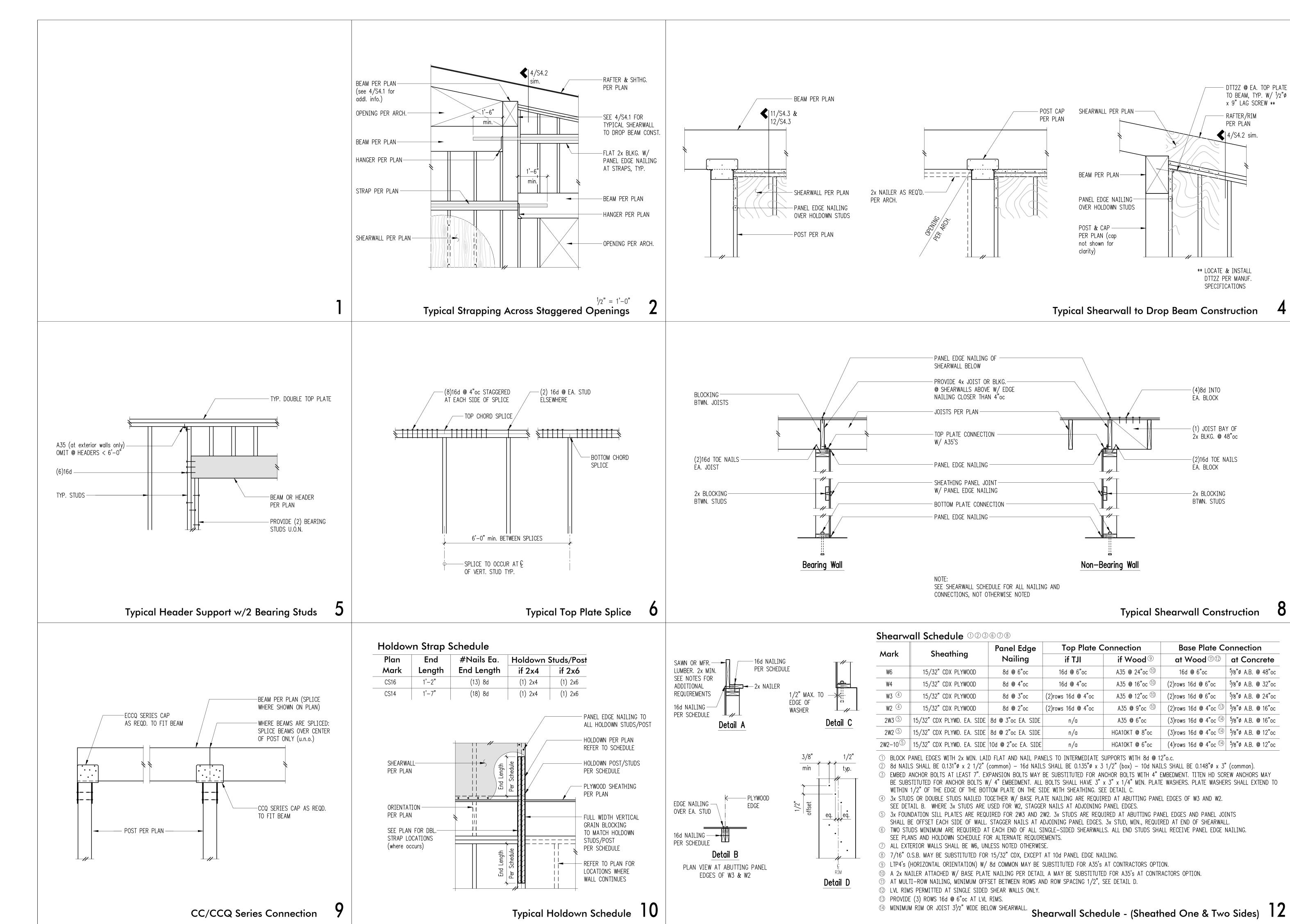
-PIN PILES PER PLAN

W/ P 1/2"x5"sq CAP

PROVIDE FREE-DRAINING-MATERIAL

SLAB ON GRADE —

PER PLAN



STRUCTURAL ENGINEERING

2124 Third Avenue - Suite 100 - Seattle, WA 98121 934 Broadway - Tacoma, WA 98402 p: 253.284.9470

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DTT2Z @ EA. TOP PLATE

TO BEAM, TYP. W/ 1/2"ø

x 9" LAG SCREW **

- RAFTER/RIM

PER PLAN

4/S4.2 sim.

** LOCATE & INSTALL DTT2Z PER MANUF. SPECIFICATIONS

-(4)8d INTO

ÈÁ. BLOCK

-(1) JOIST BAY OF

2x BLKG. @ 48"oc

-(2)16d TOE NAILS

EA. BLOCK

-2x BLOCKING

BTWN. STUDS

⁵/8"ø A.B. @ 48"oc



DRAWN:	SJB
DESIGN:	VMB
CHECKED:	RJA
APPROVED:	DIS

REVISIONS:

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE: Lumpkin Residence

5401 West Mercer Way Mercer Island, WA 98040

ARCHITECT: Suyama Peterson Deguchi 2324 2nd Ave.

Seattle, WA 98121 PH 206.256.0809 FX 206.256.0810

Permit

SHEET TITLE:

Wood **Details**

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

March 17, 2021 PROJECT NO: 00043-2020-04 SHEET NO:

S4.1

