#### APPLICABLE CODES

INSULATION

INTERNATIONAL RESIDENTIAL

INTERIOR

CODE

INSUL

MERCER ISLAND CITY CODE 2018 INTERNATIONAL RESIDENTIAL CODE 2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL EXISTING BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL FIRE CODE 2018 WASHINGTON STATE ENERGY CODE

2018 INTERNATIONAL ELECTRICAL CODE

FIRE PROTECTION NOTES FIRE AREA SQUARE FOOTAGE CALCULATION (EACH AREA IS CALCULATED TO THE INTERIOR FACE PER 2022 RESIDENTIAL FIRE AREA SQUARE FOOTAGE CALCULATION FORM. MAIN LEVEL INTERIOR 2,268 SF BASEMENT INTERIOR 1,620 SF 542 SF ATTACHED GARAGE INTERIOR COVERED DECK INTERIOR TOTAL AREA PROVIDE NEW NFPA 13-R FIRE SPRINKLER SYSTEM FOR ENTIRE HOUSE AS REQUIRED BY MERCER ISLAND FIRE DEPARTMENT; TO BE MONITORED AND COMBINED WITH MONITORED SMOKE DETECTION SYSTEM. FIRE SPRINKLER SYSTEM TO BE BIDDER DESIGNED; ALL PERMIT DOCUMENTS SHALL BE SUBMITTED BY BIDDER-DESIGNER FOR APPROVAL BY CITY OF MERCER ISLAND FIRE MARSHALL . IF REQ'D BY CITY OF MERCER ISLAND FIRE DEPT., PROVIDE A NFPA 72 CHAPTER 29 MONITORED FIRE ALARM. SMOKE DETECTORS PROVIDED PER IRC R314, UNLESS NOT REQUIRED DUE

TO FIRE ALARM: SMOKE DETECTION SYSTEM TO BE MONITORED AND

3. INSTALL APPROVED SMOKE ALARM & CO COMBINATION ALARM PER IRC 314, &

COMBINED WITH MONITORED FIRE SPRINKLER SYSTEM

#### GENERAL NOTES

1. IF ERRORS, OMISSIONS OR CONFLICTS IN THESE DOCUMENTS ARE FOUND OR SUSPECTED. NOTIFY THE ARCHITECT IMMEDIATELY AT THE ADDRESS OR TELEPHONE NUMBER SHOWN.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS AT THE SITE AND NOTIFY ARCHITECT OF DISCREPANCIES AND CONFLICTS.

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 ONLY IN ONE LOCATION. AT OTHER LOCATIONS WHERE DETAILING OR CONSTRUCTION IS SIMILARLY IMPLIED, PROVIDE SAME CONSTRUCTION.

6. UNLESS NOTED OTHERWISE (UNO):

DIMS. FOR CONC. ARE TO FACE OF CONC. DIMS. FOR INSUL. CONC. FORMS ARE TO FACE OF RIGID INSULATION DIMS. FOR WOOD AND METAL STUD FRAMING ARE TO FACE OF STUD. DIMS FOR CABINETS ARE TO FACE OF FINISH WALL AND CABINET BOXES.

7. IN THE CASE OF CONFLICT OR AMBIGUITY, THE SPECIFICATIONS SHALL GOVERN AS TO MATERIALS, WORKMANSHIP, PERFORMANCE, AND INSTALLATION PROCEDURES, AND DRAWINGS SHALL GOVER AS TO LOCATION, ARRANGEMENT SHAPE, AND DETAILS OF CONSTRUCTION; ALSO, THE BETTER QUALITY AND/OR GREATER QUANTITY SHALL GOVERN.

8. DEFINITIONS: WORDS SUCH AS "SHALL," "SHALL BE," "THE CONTRACTOR SHALL AND SIMILAR MANDATORY PHRASES SHALL BE SUPPLIED BY INFERENCE IN THE SAME MANNER AS WHEN THEY ARE IN A NOTE ON THE DRAWINGS. WHERE "OR EQUAL" IS USED, THE ARCHITECT IS THE SOLE JUDGE OF ANY PROPOSED SUBSTITUTION. BE IT CLEARLY UNDERSTOOD THAT ALL INSTRUCTIONS AND DIRECTIONS ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY MENTIONED OTHERWISE. THE PHRASE "APPROVED BY ARCHITECT" AS USED HEREIN MEANS APPORVED BY THE ARCHITECT BEFORE MATERIALS ARE PURCHASED AND OR WORK COMMENCED. THE WORD "PROVIDE" MEANS TO FURNISH AND INSTALL COMPLETE AND READY FOR USE BY OWNER.

9. DIMENSIONS: ALL DETAILED DRAWINGS, WHERE NECESSARY, WILL BE FURNISHED BY THE ARCHITECT AND SHALL BE FOLLOWED IN REFERENCE TO THE GENERAL DRAWINGS. WHERE POSSIBLE, ALL DIMENSIONS SHALL BE VERIFY AT THE WORK BY THE CONTRACTOR. CONTRACTOR SHALL ALSO VERIFY EXISTING. DIMENSIONS AND CONDITIONS WITH PLANS AND SPECIFICATIONS, AND REPORT ANY ERRORS, OMISSIONS, OR DISCREPANCIES TO THE ARCHITECT.

10. OMISSIONS: THE CONTRACTOR MUST NOT MAKE ANY ALTERATIONS TO THE DRAWINGS; ANY ERRORS THAT SHOULD APPEAR SHALL BE IMMEDIATELY REFERRED TO THE ARCHITECT. ALL QUESTONS AS TO THE MEANING OR INTERPRETATION OF THE DRAWINGS AND THE SPECIFICATIONS SHALL BE REFERRED TO THE ARCHITECT FOR INTERPRETATION BEFORE PROCEEDING WITH THE WORK. SHOULD ANY WORK APPEAR IN THE DRAWINGS WHICH IS NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AN NOT SHOWN IN THE DRAWINGS, THE SAME SHALL BE DONE AS IF APPEARING IN BOTH. ONE COMPLETE SET OF PLANS AND SPECIFICATIONS SHALL BE KEPT ON THE JOB AT ALL TIMES FOR THE USE OF THE OWNER, THE ARCHITECT, OR THEIR REPRESENTATIVE.

11. MANUFACTURER'S ITEMS: WHEREVER A PARTICULAR MANUFACTURER'S PRODUCT IS HEREINAFTER SPECIFIED, IT IS TO BE USED, APPLIED OR OTHERWISE INCORPORATED IN THE WORK IN STRICT CONFORMITY TO THE MANUFACTURER'S RECOMMENDATIONS FOR SUCH USAGE.

#### SYMBOL LEGEND

WASHER & DRYER

WELDED THREADED

WATER CLOSET

WOOD

STUD

FABRIC

WELDED WIRE

WIDE

WD

WTS

ROOM INFO.	KITCHEN ————————————————————————————————————	— ROOM NAME — ROOM NUMBER — FLOOR FINISH MATERIAL — T.O. FINISH FLOOR ELEV.
GRID NUMBER/LINES	(A)	
DOOR TAG	(102.1) ———	— DOOR NUMBER
WINDOW TAG	(B) ——	- WINDOW LETTER
REVISION TAG	<u>^</u>	— REVISION NUMBER
EXT. ELEV. CALL-OUT	1 A2.0	— DRAWING NUMBER — SHEET NUMBER
INT. ELEV. CALL-OUT	2	— DRAWING NUMBER, TYP.
	3 %	— SHEET NUMBER
		- SHEET NUMBER
BLDG. SECTION CUT	ଞ୍ଚା3—	— DRAWING NUMBER
		— LINE SHOWS DIRECTION SECTION IS LOOKING
		— ARROW SHOWS DIRECTION SECTION IS LOOKING
WALL SECTION CUT		— DRAWING NUMBER
WALL GLOTION COT	A4.2	— SHEET NUMBER
		— LINE SHOWS DIRECTION DETAIL IS LOOKING
DETAIL CALL-OUT	5 A52	— DETAIL NUMBER — SHEET NUMBER
DETAIL CALL-OUT	5 A52	— DETAIL NUMBER — SHEET NUMBER
		— DRAWING/DETAIL NUMBER — DRAWING/DETAIL TITLE
DRAWING TITLE	1 FLOOR PLAN	2110A—SITE.dwg
	<b>1</b> 1/4"=1'-0"	— DRAWING SCALE
		CAD FILE NAME
		— ELEVATION
DATUM LINE	ELEV. 0'-0"  MAIN LEVEL FIN	

MAIN LEVEL FIN. FLR.

COMBINATION SMOKE

MONOXIDE DETECTOR

SMOKE DETECTOR

AND CARBON

REFERENCE

#### ENERGY CODE NOTES

1. 2018 WASHINGTON STATE ENERGY CODE (WSEC) COMPLIANCE METHOD: PRESCRIPTIVE (TABLE R402.1.1) CLIMATE ZONE 4C PER 2018 WSEC CLIMATE ZONE TABLE - TABLE R301.1

INSULATION VALUES REQUIRED BY COMPONENT (FOR ADDITION):

GLASS FENESTRATION U-VALUE: 0.30 (WEIGHTED AVERAGE) CEILING R-VALUE (VAULTED/SINGLE-RAFTER): 38 CEILING R-VALUE (ATTIC): 49 WOOD FRAME WALL R-VALUE: 21 FLOOR R-VALUE: 30 BELOW-GRADE WALL R-VALUE: 21 (INT. SIDE W/IN CAVITY WALL) SLAB R-VALUE: 2 FT/R-10 (NO RADIANT HEATED SLABS) OPAQUE DOORS: 0.30 SKYLIGHT U-VALUE: 0.50

INSULATION VALUES FOR REMODEL/ALTERATION: EXISTING WALLS: PORTIONS WHERE FRAMING CAVITIES ARE EXPOSED FOR WORK, INSULATE CAVITIES TO R-15 AT 2X4 WALLS AND R-21 AT 2X6 WALLS.

EXISTING ROOFS: PORTIONS WHERE FRAMING CAVITIES ARE EXPOSED FOR WORK, INSULATE TO THE FULL DEPTH OF THE FRAMING MEMBER MINUS THE REQUIRED MIN. 1" VENTILATED SPACE ABOVE INSULATION.

2. FENESTRATION: ALL WINDOWS AND DOORS SHALL HAVE AN AREA WEIGHTED "U" VALUE RATING PER ENERGY CODE NOTES. REFER TO WINDOW & DOOR SCHEDULES ON SHEET A3.4 FOR GLAZING & U-FACTOR INFORMATION & ENERGY COMPLIANCE CALCULATIONS. FOR REPLACED DOORS & WINDOWS, NEW WINDOWS & DOORS MUST HAVE AN AREA WEIGHTED AVERAGE U-FACTOR OF ≤ 0.30

3. EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAME OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS 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-STRIPPED TO LIMIT AIR LEAKAGE PER TABLE R402.4.1.1.

5. ENERGY CREDITS PER TABLE 406.2 - SMALL DWELLING UNIT

3.0 CREDITS MIN. REQ'D 1.0 CREDIT - HEATING OPTION 2, HEAT PUMP 1.0 CREDIT - ENERGY OPTION 3.2, HIGH EFFICIENCY HVAC 1.5 CREDIT - ENERGY OPTION 5.4, EFFICIENT WATER HEATING 3.5 CREDITS PROVIDED

6. LIGHT FIXTURE LAMPS: A MINIMUM OF 75% OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH EFFICACY LAMPS.

7. RECESSED LIGHT FIXTURES: RECESSED CAN LIGHTS INSTALLED IN THE BUILDING

8. FOR THE ADDITION AREAS ONLY - CONTRACTOR SHALL TEST THE BUILDING THERMAL ENVELOPE WITH BLOWER DOOR TEST TO VERIFY AIR LEAKAGE DOES NOT EXCEED A MAXIMUM OF 5 AIR CHANGES PER HOUR.

#### MECHANICAL SYSTEM NOTES

THERMAL ENVELOPE SHALL BE TYPE IC RATED AND SEALED.

1. THE MECHANICAL SYSTEM SHALL BE A DUCTED FORCED AIR SYSTEM. THE EXISTING SPACES IN THE HOUSE WILL BE HEATED BY AN EXISTING GAS-FIRED FURNACE THAT IS RELOCATED. THE EXISTING SPACES WILL BE COOLED BY A NEW ELECTRIC HEAT-PUMP THAT IS CONNECTED TO THE EXISTING FAN AND DUCTWORK USED BY THE EXISTING FURNACE. THE OUTDOOR CONDENSING UNIT OF THE NEW HEAT PUMP WILL BE LOCATED TO THE EAST OF PRIMARY DRESSING ROOM.

2. THE NEW/ADDED SPACES OF THE ADDITION WILL BE HEATED AND COOLED BY A NEW  $\Lambda$  DUCTED ELECTRIC HEAT-PUMP SYSTEM MEETING FEDERAL STANDARDS FOR THE  $\frac{7.13}{1.00}$  EQUIPMENT LISTED IN TABLE C403.32(1)C OR C403.32(2), AND MEETING MIN. HSPF OF 9.5 TO ACHIEVE 1.0 CREDIT FOR SYSTEM OPTION 2 AND 1.0 CREDIT FOR ENERGY OPTION 32. THE INDOOR FAN UNIT WILL BE LOCATED IN THE ATTIC SPACE EITHER IN THE GARAGE OR ABOVE THE NEW MUDROOM ADJACENT TO THE GARAGE. THE NEW OUTDOOR CONDENSING UNIT WILL BE LOCATED UNDER EXTENDED DECK AT NORTH END OF HOUSE.

3. THE DOMESTIC HOT-WATER HEATING SYSTEM SHALL INCLUDE AN ELECTRIC HEAT PUMP ⚠ WATER HEATER MEETING THE STANDARDS FOR TIER 1 OF NEEA'S ADVANCED WATER HEATER SPECIFICATION TO ACHIEVE 1.5 POINTS FOR ENERGY OPTION 5.4.

#### WATER SERVICE NOTES

 $\land$  THE CITY COMMENTED THAT THE EXISTING 3/4" WATER METER NEEDS TO BE UPGRADED TO A NEW 1.5" METER + 2" SERVICE PIPE FROM METER TO HOUSE. THIS IS REQUIRED BY THE FIRE DEPT FOR A NEW FIRE—SPRINKLER SYSTEM. CONTRACTOR TO VERIFY THE SERVICE ADDRESS OF THE EXISTING WATER METER PRIOR TO ABANDONING THE EXISTING WATER METER AND SERVICE LINE. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.

EXCAVATION PHASE TO VERIFY SOILS CONDITIONS AND PILE INSTALLATION PRIOR TO

#### EARTHWORK NOTES

FORMING NEW FOUNDATIONS.

1. REFER TO GEOTECHNICAL REPORTS PROVIDED FOR SOIL CONDITIONS AND RECOMMENDATIONS FOR EARTHWORK. 2. CONTRACTOR TO SCHEDULE SITE VISITS BY GEOTECHNICAL ENGINEER DURING

#### STORMWATER SYSTEM NOTES

GENERAL STORMWATER SYSTEM CONFIGURATION: 1. THE EXISTING ROOF DOWNSPOUTS OF THE HOUSE & GARAGE MAINTAIN THEIR EXISTING CONFIGURATION OF BEING COLLECTED IN A TIGHTLINE SYSTEM THAT DISCHARGES INTO AN EXISTING DRYWELL IN WEST YARD.

2. THE ADDITION AREA ROOF DOWNSPOUTS ON THE NORTH END OF THE HOUSE WILL BE COLLECTED IN A TIGHTLINE SYSTEM THAT DISCHARGES INTO A NEWLY PROPOSED DISPERSION TRENCH PER CIVIL DRAWINGS NEAR THE WEST EDGE OF THE PROPERTY. REFER TO CIVIL DRAWINGS FOR CONSTRUCTION DETAILS AND REQUIREMENTS.

REFER TO THE CIVIL DRAWINGS PROVIDED FOR MORE DETAILED INFORMATION

#### SANITARY SEWER NOTES

ALL EXISTING AND NEW SANITARY SEWER LINES WITHIN THE HOUSE WILL BE CONNECTED TO THE EXISTING SIDE SEWER ON THE WEST SIDE OF THE HOUSE.

#### STREET WORK PERMITS

FOR WORK IN THE RIGHT-OF WAY.

THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY THE CITY OF MERCER ISLAND

#### ZONING INFORMATION

ZONING: R-15 CONSTRUCTION TYPE: V-B (NON RATED) OCCUPANCY: R-3 SINGLE FAMILY RESIDENCE CONDITIONED AREA EXISTING MAIN LEVEL 1,921 SF <u>EXISTING BASEMENT</u> OTAL EXISTING CONDITIONED AREA EXISTING UNCONDITIONED GARAGE 587 SF ADDED MAIN LEVEL 456 SF <u>ADDED BASEMENT</u> FOTAL ADDED CONDITIONED AREA PROPOSED MAIN LEVEL PROPOSED BASEMENT (EXISTING UNCHANGED) FOTAL PROPOSED CONDITIONED AREA

PROPOSED UNCONDITIONED ATTACHED GARAGE 587 SF (EXISTING UNCHANGED) CRITICAL AREA: PROJECT SITE CONTAINS POTENTIAL LANDSLIDE AND SOIL EROSION HAZARD CRITICAL AREAS AS NOTED IN THE GEOTECHNICAL REPORT. (REFER TO LOT SLOPE DIAGRAM, 1/TS-3) LOT SLOPE:

LOT COVERAGE: (REFER TO LOT COVERAGE DIAGRAM, 2/TS-3) (REFER TO HARDSCAPE DIAGRAM, 3/TS-3) HARDSCAPE AREA: (REFER TO HEIGHT DIAGRAM, 4/TS-3) BUILDING HEIGHT:

(REFER TO FLOOR AREA DIAGRAM, 5/TS-3) GROSS FLOOR AREA: BASEMENT AREA: (REFER TO FLOOR AREA DIAGRAM, 6/TS-3) (REFER TO FLOOR AREA DIAGRAM, 1/TS-4) IMPERVIOUS AREA:

SETBACKS:

HARD SURFACE AREA: (REFER TO FLOOR AREA DIAGRAM, 2/TS-4) LAND DISTURBANCE AREA: (REFER TO FLOOR AREA DIAGRAM, 3/TS-4)

PARKING REQUIREMENTS: EXISTING 2-CAR GARAGE PARKING TO REMAIN (NO CHANGES). ACCEPTABLE PER MICC 19.02.020.G. - FOR

(REFER TO SETBACK DIAGRAM, 4/TS-4)

REMODELS WHERE NO MORE THAN 40% OF THE

LENGTH OF THE STRUCTURE'S EXTERIOR WALLS ARE DRIVEWAY: (REFER TO DIMENSIONS ON SITE PLAN, TS-2)

TREE REQUIREMENTS: 30% OF EXISTING TREES REQUIRED TO BE RETAINED: REPLACEMENT TREES ARE REQUIRED FOR REMOVED TREES, DEPENDENT ON SIZE PER MICC 19.10.070.

PROPOSED REMOVAL:	#	REQ'D	TO	REPL
<u>/</u> \hat{\pi} #348				2
#349 — NON-REGULATED	TREE			(
#350 — NON-REGULATED	TREE			(
#354				1
#356				1
 #357				-
#360				2
<i>"</i> #361				2
#362				2
#363				,
#364				2
#365				2
TOTAL TREE REPLACEME	ENT			1

PROPOSED NEW/REPLACED TREES: AT LEAST 50% OF REPLACED TREES TO BE PACIFIC NORTHWEST NATIVE TREES. REFER TO TREE PLANTING

PLAN, 5/TS-4. TREE SIZE TO MEET REQUIREMENTS NOTED IN

MICC 19.10.070 B.3; a) CONIFEROUS: 6'-0" TALL b) DECIDUOUS: 1-1/2" CALIPER REFER TO SITE PLAN SHEET TS-2 FOR LOCATIONS.

EXCEPTIONAL TREES ARE PRIORITIZED FOR RETENTION; TREE PROTECTION IS BASED ON THE BEST MANAGEMENT PRACTICES (BMP) PER INT'L SOCIETY OF ARBORISTS. LOCATION OF TREE PROTECTION DEFINES BUILDABLE AREA.

FOR EXCAVATION WITHIN DRIP LINE OF EXISTING EXCEPTIONAL TREES FOR NEW POST FOOTINGS, REF. TO PROJECT ARBORIST'S EXPLORATORY EXCAVATION REPORT ON TS-5.

PROVIDE FOLLOWING TREE WATERING PLAN INSTRUCTED BY THE PROJECT ARBORIST: ABOVE GROUND SOAKER HOSES TO BE INSTALLED AROUND EACH REPLACEMENT TREE, SMALLER DIAMETER TREES TO HAVE HOSE LOOPED AROUND THEM ONCE AND LARGER DIAMETER TREES TO HAVE HOSE LOOPED AROUND TWICE. IF USING HOSES WITH EMITTERS THEN MULTIPLE EMITTERS ARE REQUIRED FOR LARGER TREES.

2. WATERING TIMES WILL DEPEND ON SOAKER HOSE SYSTEM BUT DEEPER, LESS FREQUENT WATERINGS IS IDEAL (POSSIBLY A COUPLE OF HOURS ONCE OR TWICE A WEEK). CHECK SOIL PERIODICALLY TO DETERMINE HOW DEEPLY THE WATER IS SOAKING IN. TREES THAT ARE PLANTED NEAR OTHER LARGE, ESTABLISHED TREES WILL LIKELY NEED MORE

3. WATERING TO BE APPLIED FOR AT LEAST TWO FULL SEASONS (APRIL - OCTOBER OR LONGER IF LITTLE

RAINFALL) 4. 2-3" MULCH TO BE APPLIED OVER SOAKER HOSES TO AID WATER RETENTION. CARE SHOULD BE TAKEN TO KEEP SOAKER HOSE AND MULCH AWAY FROM THE TRUNKS.

#### PROJECT INFORMATION

ASSESSORS PARCEL: 362570-0150 QUARTER-SECTION-TOWNSHIP-RANGE: NE-36-24-4

LEGAL DESCRIPTION: ISLAND POINT #3 TGW UND INT IN TRACT B AND AN UND INT IN COMMUNITY TRACT

PROJECT ADDRESS: 8455 SE 83RD ST. MERCER ISLAND, WA 98040 PROJECT DESCRIPTION: REMODEL & ADDITION OF AN EXISTING SINGLE FAMILY

RESIDENCE OF A 1-STORY WITH BASEMENT & ATTACHED GARAGE. WORK ALSO INCLUDE FRONT YARD AND DECK UPDATES.

#### PROJECT DIRECTORY

#### ERIC & TRICIA JAFFE 8455 SE 83RD ST. MERCER ISLAND, WA 98040

STRUCTURAL ENGINEER: ARCHITECT: JAY DEGUCHI + CHRIS HADDAD RYAN ANDERSON SWENSON SAY FAGE SUYAMA PETERSON DEGUCHI 8601 8TH AVE S 2124 3rd AVENUE SUITE #100 SEATTLE, WA 98121 SFATTLE. WA 98108 (206) 256-0809 (206) 956-3714 EMAIL: randerson@ssfengineers.com EMAIL: iav@s-pd.com chris@s-pd.com

CIVIL ENGINEER:

REBEKAH WESTON

6610 NE 181ST ST. STE 2

KENMORE. WA 98028

(425) 375–2664

RED BARN ENGINEERING, INC.

EMAIL: rebekah@redbarn—engineering.com

GEOTECHNICAL ENGINEER: KEITH JOHNSON GEO GROUP NORTHWEST. INC. 13705 BEL-RED ROAD BELLEVUE, WA 98005

(425) 649-8757 EMAIL: kjohnson@geogroupnw.com SURVEYOR: RRITT MACKENZIE APEX ENGINEERING

2601 S. 35TH ST. STE 200 TACOMA, WA 98409 (253) 473-4494 X1198 EMAIL: mckenzie@apexengineering.net

#### SEPARATE PERMIT

FOLLOWING PERMITS TO BE SUBMITTED UNDER SEPARATE PERMITS MECHANICAL SYSTEM ELECTRICAL SYSTEM PLUMBING SYSTEM

#### CITY REQUIREMENTS

1. A PUBLIC NOTICE SIGN MUST BE POSTED PER CITY'S INSTRUCTION.

LIMITATION FOR WORK DURING OCT. 1 THRU APRIL 1 PER CITY'S INSTRUCTION.

2. CONTRACTOR TO SUBMIT FOR A WAIVER TO THE SEASONAL DEVELOPMENT

3. OWNER TO SIGN THE HOLD HARMLESS AGREEMENT PER CITY'S INSTRUCTION.

# WEST BELLEVUE 8455 SE 83rd St

PROJECT SITE (SEE ENLARGED MAP BELOW) -

PROJECT SITE -

1 VICINITY MAP 1 2110A-SITE.dwg



DRAWING LIST

C0.0

C2.1

A1.0a

A1.0b

A3.4

A4.1

SITE PLAN

SITE DIAGRAMS

COVER SHEET

TESC PLAN

ROOF PLAN

TESC DETAILS

DRAINAGE PLAN

DRAINAGE DETAILS

BASEMENT DEMO PLAN

MAIN LEVEL DEMO PLAN

BASEMENT FLOOR PLAN

BUILDING ELEVATIONS

BUILDING ELEVATIONS

**BUILDING SECTIONS** 

BUILDING SECTIONS

**BUILDING SECTIONS** 

FOUNDATION PLAN

ROOF FRAMING PLAN

STRUCTURAL DETAILS

STRUCTURAL DETAILS

STRUCTURAL DETAILS

STRUCTURAL DETAILS

GENERAL STRUCTURAL NOTES

MAIN LEVEL FRAMING PLAN

WALL SECTIONS

BUILDING SECTION & WINDOW/DOOR SCHEDULE

MAIN LEVEL FLOOR PLAN

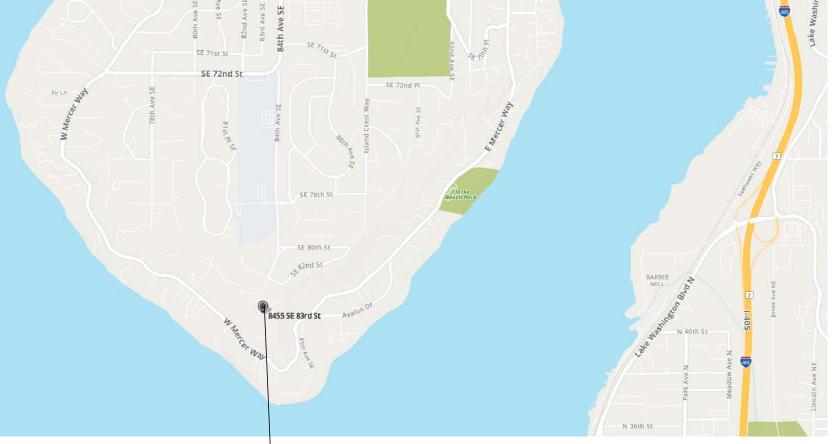
NOTES

PROJECT INFORMATION

TS-4 SITE DIAGRAMS
TS-5 UPDATED ARBORIST REPORT

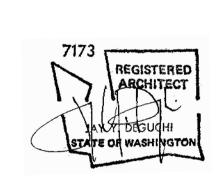
- SURVEY

UPDATED ARBORIST REPORT (CONT.)



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

Project Title **RESIDENCE** 8455 SE 83RD STREET MERCER ISLAND, WA 98040



PROJECT INFORMATION

08.08.2022 Job No.

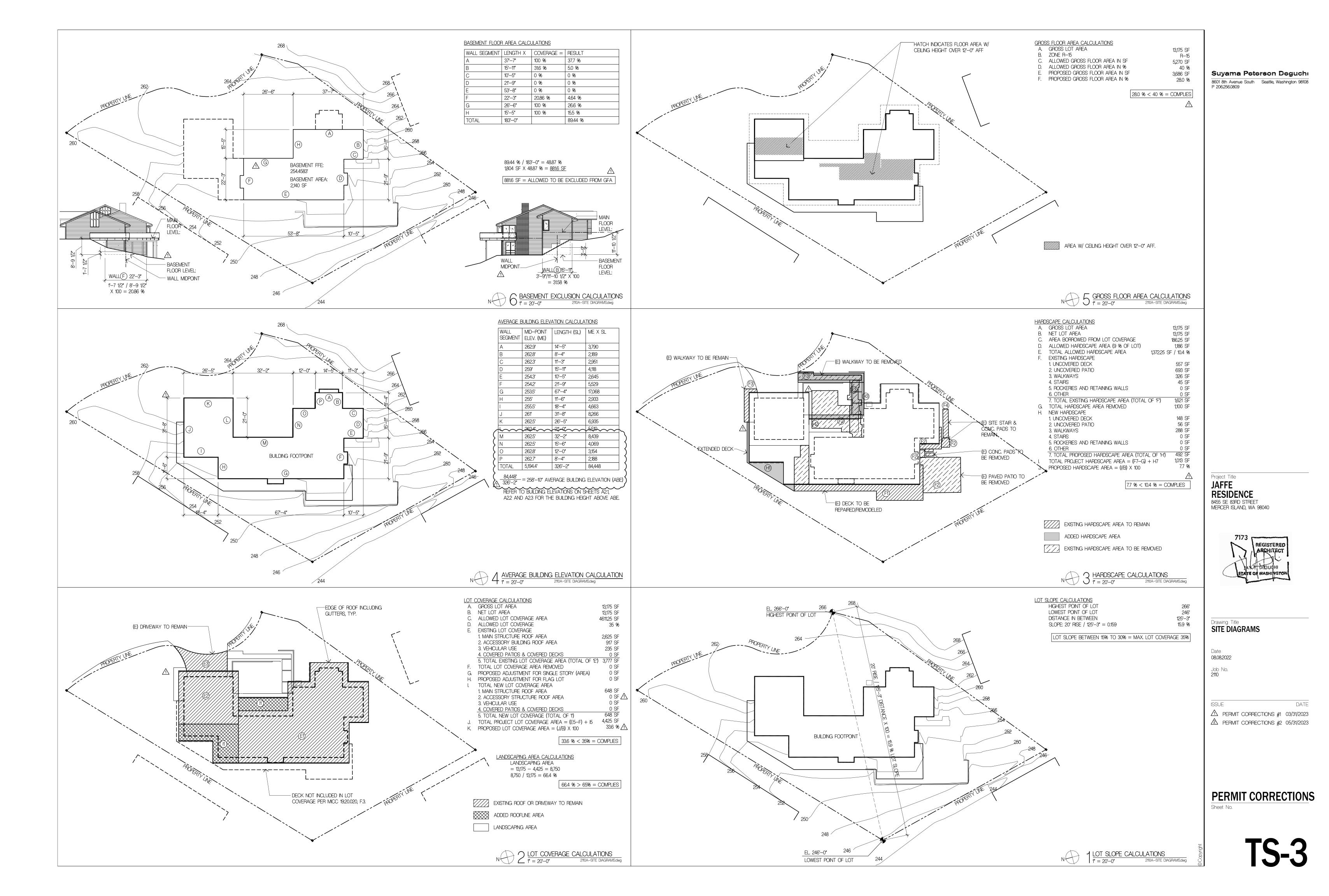
2110

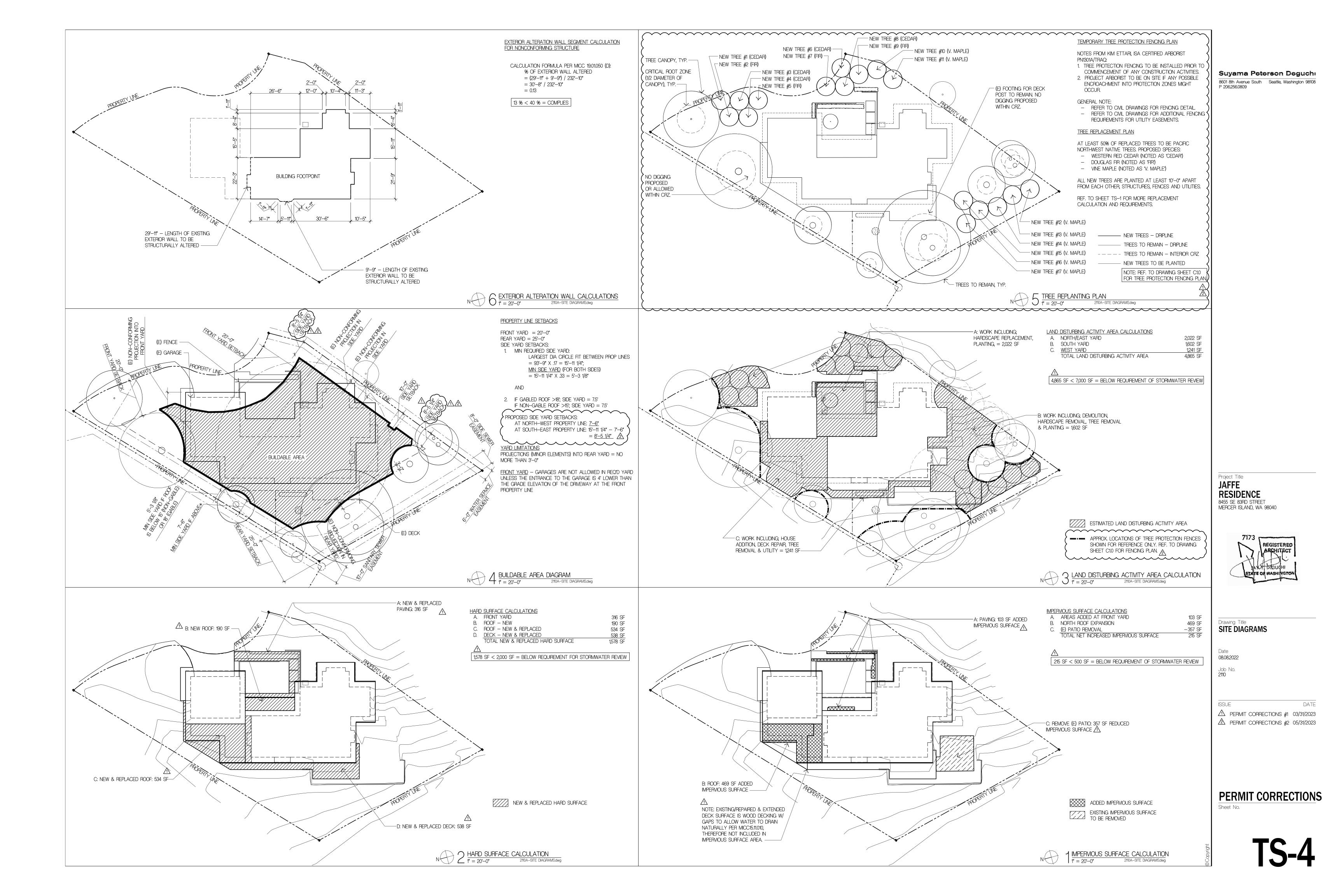
2110A-SITE.dwg

PERMIT CORRECTIONS #1 03/31/2023 PERMIT CORRECTIONS #2 05/31/2023

Suyama Peterson Deguchi

△ PERMIT CORRECTIONS #1 03/31/2023







#### ARBORIST REPORT

#### DATE:

June 3, 2023

#### PREPARED FOR:

Eric & Tricia Jaffe

#### SITE ADDRESS:

8455 SE 83rd St Mercer Island, WA 98040 / Lot # 3625700150

#### PREPARED BY:

Kim Ettari - ISA Certified Arborist PN1301A / TRAQ Laughing Trees Landscapes 5607 40th Ave NE Seattle, WA 98105 828-318-6088 / laughingtreeslandscapes@gmail.com

#### **NARRATIVE**

#### SCOPE OF WORK

You have asked me to complete a tree retention and replacement plan in preparation for the proposed construction project that will include 1) an addition to the northwest corner of the residence and 2) the rebuilding of the upper decks that surround the north and west sides of the residence.

#### METHODOLOGY

The methods used for this assessment are as outlined in Tree Risk Assessment by Julian Dunster and as adopted by the International Society of Arboriculture (ISA). The end goal of most assessments is to provide the owner or manager of the tree(s) with factual information, enabling them to make decisions about the management of the tree(s). For this particular assessment, I used a Level II Assessment that includes inspection of the root collar, lower trunk, upper limbs and canopy of the trees as can be seen from the ground. Basic assessment does not include climbing the tree or excavation of soils to inspect root structure or condition.

I measured sixteen (16) significant trees (10" diameter or greater) for their diameter at breast height (DBH), an industry standard of measuring trees at 4.5' above grade. Trees that were multi-stemmed or branched below the standard 4.5' point of measurement were measured using an alternative method and noted as such. Each tree was tagged with a round metal tag with a number that corresponds to the inventory.

A tree inventory was created that details the tree by reference number, species/common name, size (DBH), drip line or canopy extension and condition with remarks as needed. Any recommended action items are also included on said sheet. (See attached inventory.)

A tree map was created indicating the location of the trees, their canopy extensions and the locations of required tree protection fencing. (See attached CAD site plan marked with notes.)

A tree replacement plan was created by the architect, Suyama Peterson Deguchi, with my input and approval of the final species choices and rendering. (See attached CAD tree replacement plan.)

#### FINDINGS & OBSERVATIONS

The subject site is a residential property with an existing home in an established neighborhood on Mercer Island, WA. The following significant trees (10" or greater) were located on the site for a total of 398 caliper inches.

1. Tree #347 - Pseudotsuga menziesii / Douglas Fir - 43" DBH (exceptional) - GOOD CONDITION / LOW RISK - RETAIN

This tree is approximately 80' tall with a 20' drip line in all directions. The trunk has a small corrected lean to the north but shows good vigor and a healthy balanced crown.

#### 2. Tree #348 - Tsuga heterophylla / Western Hemlock - 18" DBH - POOR CONDITION / LOW RISK - REMOVE\*

This tree is 50' tall with a slight uncorrected lean to the NE. Bark splitting is present between 10' - 20' on the south side of the trunk. The tree has chlorotic needles, a wooly adelgid infestation and extremely poor vigor. \*Slated for removal due to poor health.

#### 3. Tree #351 - Pseudotsuga menziesii / Douglas Fir - 38" DBH (exceptional) - GOOD CONDITION / LOW RISK - RETAIN

This tree is 100' tall with a slight corrected lean to the north. There is oozing sap on the west side of the trunk at 10'. There are a few small dead hanging branches and surface roots at base.

#### 4. Tree #352 - Pseudotsuga menziesii / Douglas Fir - 35" DBH (exceptional) - GOOD CONDITION / LOW RISK - RETAIN

This tree is 80' tall with a 50' canopy spread. The tree shows good vigor with a slight, smaller canopy. There is a small section of dead bark on the base on the north side of the trunk. This tree is close to Tree # 353.

#### 5. Tree #353 - Pseudotsuga menziesii / Douglas Fir - 32" DBH (exceptional) - GOOD CONDITION / LOW RISK - RETAIN

This tree is 80' tall with a canopy spread of 40' running east to west. There is a small section of dead bark at the base but the tree shows good vigor. Close to Tree #352.

#### 6. Tree #354 - Prunus species / Flowering Cherry - 10" DBH - POOR CONDITION / MODERATE RISK - REMOVE\*

This tree is approximately 25' tall with a 30' spread. There is evidence of decay in several previous pruning cuts with dead branches and previous branch failures. This tree shows poor vigor. \*Slated for removal due to poor health.

#### 7. Tree #355 - Pseudotsuga menziesii / Douglas Fir - 38" DBH (exceptional) - FAIR CONDITION / LOW RISK - RETAIN

This tree is approximately 80' tall with a crown spread of 30' mostly north and south. It has sparse foliage on the lower branches and is crowded with Trees #356 & 357.

#### 8. Tree #356 - Tsuga heterophylla / Western Hemlock - 16" DBH - POOR CONDITION / MODERATE RISK - REMOVE\* This tree is approximately 60' tall with a small, unbalanced crown 20' to the north, south and west. The canopy is intertwined with Tree #357. There is a wooly adelgid infestation with slightly chlorotic needles, low vigor and poor inside growth. \*Slated for removal due to poor health.

#### 9. Tree #357 - Pseudotsuga menziesii / Douglas Fir - 22" DBH - FAIR CONDITION / LOW RISK - REMOVE\*

This tree is approximately 70' tall with a canopy spread of 20'. The canopy is weighted to the north towards the residence and is intertwined with Tree #356 and shows poor vigor. \*Slated for removal due to poor health.

#### 10. Tree #358 - Thuja plicata / Western Red Cedar - 26" DBH (exceptional) - GOOD CONDITION / LOW RISK - RETAIN

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. Good vigor.

#### 11. Tree #359 - Thuja plicata / Western Red Cedar - 17" DBH - GOOD CONDITION / LOW RISK - RETAIN

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. Good vigor.

#### 12. Tree #360 - Thuja plicata / Western Red Cedar - 17" DBH - GOOD CONDITION / LOW RISK - REMOVE\*

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. Good vigor. \*This overgrown "hedge" planting slated for removal to allow light to south side of house.

#### 13. Tree #361 - Thuja plicata / Western Red Cedar - 15" DBH - GOOD CONDITION / LOW RISK - REMOVE\*

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. Good vigor. \*This overgrown "hedge" planting slated for removal to allow light to south side of house.

#### 14. Tree #362 - Thuja plicata / Western Red Cedar - 17" DBH - GOOD CONDITION / LOW RISK - REMOVE\*

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. Good vigor. \*This overgrown "hedge" planting slated for removal to allow light to south side of house.

#### 15. Tree #363 - Thuja p. / Western Red Cedar - 25" DBH (exceptional) - FAIR CONDITION / MOD RISK - REMOVE\*

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. There are many surface roots at the base. Good vigor. \*Slated for removal for tripping hazard from large surface roots making access to south side of

#### 16. Tree #364 - Thuja p. / Western Red Cedar - 29" DBH (exceptional) - FAIR CONDITION / MOD RISK - REMOVE\*

This tree is part of a row of trees (Tree #358 - 364) planted together. It is 70' tall with a 20' spread. There are many surface roots at the base. Good vigor. \*Slated for removal for tripping hazard from large surface roots making access to south side of house treacherous.

PAGE 2 PAGE 3 PAGE 4

#### Eric Jaffe Tree Inventory - 8455 SE 83rd Street Mercer Island, WA 98040

Tree #	Botanical Name	Common Name	DBH	CRZ	Condiition	Condition / Notes	Action
347	Pseudotsuga menziesii	Douglas Fir	43" EXCEPTIONAL	20N/20E/ 20S/20W	GOOD	80' tall, balanced crown, 5 degree corrected lean to N, small dead hangers, good vigor	RETAIN
348	Tsuga heterophylla	Western Hemlock	18"	10N/10E/10S/ 10W	POOR	50' tall, poor vigor, chlorotic needles, wooly adelgid infestation, growth only at tips of branches, slight uncorrected lean to NE towards residence, splitting bark between 10°-20' on S side of trunk	REMOVE
351	Pseudotsuga menziesii	Douglas Fir	38" EXCEPTIONAL	10N/10E/10S/ 10W	GOOD	100' tail, good vigor, slight corrected lean to N, oozing sap on W side of trunk at 10', small dead hangers, roots above ground	RETAIN
352	Pseudotsuga menziesii	Douglas Fir	35" EXCEPTIONAL	20N/20E/20S/ 20W	GOOD	80' tall, canopy over deck on E, good vigor, smaller canopy, small section of dead bark at base on N side of trunk, close to 353	RETAIN
353	Pseudotsuga menziesii	Douglas Fir	32" EXCEPTIONAL	30E/30W	GOOD	80' tall, small dead bark at base, good vigor	RETAIN
354	Prunus species	Flowering Cherry	10"	15N/15E/15S/ 15W	POOR	25' tall, cavities with decay in old pruning cuts, dead inner branches, poor vigor	REMOVE
355	Pseudotsuga menziesii	Douglas Fir	38" EXCEPTIONAL	20SW/15N	FAIR	80' tall, intertwined with 356 & 357, sparse foliage on lower branches	RETAIN
356	Tsuga heterophylla	Western Hemlock	16"	20W/20S/20N	POOR	60' tall, sparse canopy - intertwined with 357, woolly adelgid infestation, poor inside growth, small dead hangers, slightly chlorotic needles, low vigor	REMOVE
357	Pseudotsuga menziesii	Douglas Fir	22"	20N	FAIR	70' tall, intertwined with 356, canopy weighted to N towards residence, low vigor	REMOVE
358	Thuja plicata	Western Red Cedar	26" EXCEPTIONAL	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364	RETAIN
359	Thuja plicata	Western Red Cedar	17"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364	RETAIN
360	Thuja plicata	Western Red Cedar	17"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364	REMOVE
361	Thuja plicata	Western Red Cedar	15"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364	REMOVE
362	Thuja plicata	Western Red Cedar	17"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364	REMOVE
363	Thuja plicata	Western Red Cedar	25"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364, large surface roots making walkway treacherous	REMOVE
364	Thuja plicata	Western Red Cedar	29"	10N/10E	GOOD	70' tall, good vigor, in row with 358 - 364, many surface roots, large surface roots making walkway treacherous	REMOVE

Inventory revised on 6/1/2023 by Laughing Trees Landscapes - Kim Ettari (ISA Certified Arborist PN1301A) \*DBH = diameter at breast height (4.5' from base) / \*\*DBH for multi-stem = square root of sum of squared stem diameters / \*CRZ = measured in radius

#### RECOMMENDATIONS & CONSIDERATIONS

PAGE 1

PAGE 5

As per the tree retention requirements in Mercer Island Municipal Code (19.10.060 (2.a)) a "minimum of 30 percent of trees with a diameter of 10 inches or greater, or that otherwise meet the definition of large trees, shall be retained over a rolling fiveyear period."

REMOVAL CALCULATION - The proposed construction project will require the removal of trees #348, #354, #356, #357, #360, #361, #362, #363, #364 for the reasons listed in each tree's description. These trees represent 169 caliper inches or 42.5% of the caliper inches and 56% of the significant trees on the property.

#### TREE RETENTION

RETENTION CALCULATION - The remaining trees #347(E), #351(E), #352(E), #355(E), #355(E), #358(E), and #359 represent 229 caliper inches or 57.5% of the caliper inches and 44% of the significant trees on the property. As per MICC this percentage meets the 30% tree retention requirement.

#### PROTECTION OF RETAINED TREES

Tree #347 - Pseudotsuga menziesii / Douglas Fir - 43" DBH (exceptional)

Exploratory hand trenching was completed in December 2021 to determine what and where, if any, significant roots were located. Only one 1.5" root was found near the northwest corner of the residence. (See attached trenching report with photos.) The 7.2' eastern and northern limits of disturbance on this tree were calculated using the trenching information and the construction requirements in this portion of the property. Tree protection fencing should be placed at that line. Due to the narrow access on this side of the residence the fencing will be slightly less than 5' from the structure.

Tree #351 - Pseudotsuga menziesii / Douglas Fir - 38" DBH (exceptional)

Exploratory hand trenching was completed in December 2021 to determine what and where, if any, significant roots were located. One 8" and one 1.5" root were found between the trunk and the base of the deck to the east. (See attached trenching report with photos.) The 3.5' eastern limit of disturbance on this tree was calculated using the trenching information and the construction requirements in this portion of the property. Tree protection fencing should be placed at that line. Due to the narrow access on this side of the residence the fencing will be slightly less than 5' from the structure.

Tree #352 - Pseudotsuga menziesii / Douglas Fir - 35" DBH (exceptional)

This tree grows at the base of a 3.5' high railroad tie retaining wall. Root excavation was unnecessary as all construction to the deck under the critical root zone will be conducted at the top of the wall and will not impact these roots. (See attached photo.) The limits of disturbance on this tree were calculated based on the usable ground level space. Fencing is to be

installed at the base of the retaining wall between the laurel hedge and the trunk. Absolutely no mechanized equipment is permitted inside the ground level tree protection zone. (See attached tree protection plan for location of protection fencing.)

#### Tree #353 - Pseudotsuga menziesii / Douglas Fir - 35" DBH (exceptional)

This tree grows at the base of a 3.5' high railroad tie retaining wall. Root excavation was unnecessary as all construction to the deck under the critical root zone will be conducted at the top of the wall and will not impact these roots. (See attached photo.) The limits of disturbance on this tree were calculated based on the usable ground level space. Fencing is to be installed at the base of the retaining wall between the laurel hedge and the trunk. Absolutely no mechanized equipment is permitted inside the ground level tree protection zone. (See attached tree protection plan for location of protection fencing.)



Tree #355 - Pseudotsuga menziesii / Douglas Fir - 38" DBH (exceptional)

This exceptional tree grows near the southernmost point of the property. The limits of disturbance on this tree is the critical root zone at 15' radius in all directions, Tree protection fencing to be installed at this measurement.

Tree #358 - Thuja plicata / Western Red Cedar - 26" DBH

PAGE 6

This tree grows at the southwestern end of row of Cedars that were apparenty planted as a screen many years ago. The row of trees have become crowded together and caste deep shade over the southern part of the residence. This tree along with Tree #359 are more exposed to wind and sun at the end away from the house and should not be greatly impacted by the

removed of the trees to the east. The limits of disturbance for this tree is its dripline of 10'N and 10SE and tree protection fencing should be installed at the point.

#### Tree #359 - Thuja plicata / Western Red Cedar - 17" DBH

This tree grows at the southwestern end of row of Cedars that were apparenty planted as a screen many years ago. The row of trees have become crowded together and caste deep shade over the southern part of the residence. This tree along with Tree #358 are more exposed to wind and sun at the end away from the house and should not be greatly impacted by the removed of the trees to the east. The limits of disturbance for this tree is its dripline of 10'N and 10SE and tree protection fencing should be installed at the point.

#### TREE PROTECTION NOTES:

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I recommend that steel plates be installed in the 4-5' gap between the tree protection zones of Tree #347 and Tree #351 and the structure. This will reduce foot traffic compaction in those critical areas. (See tree protection plan for locations of plates.)

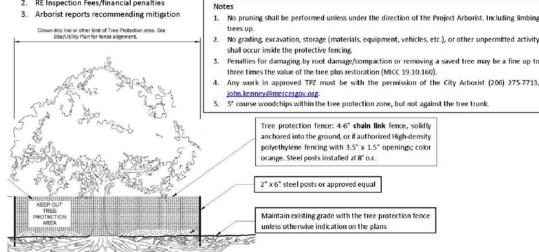
3-4" of bark mulch is to be installed inside the tree protection zones of all other retained trees.

Mercer Island approved tree protection signage is to be used on all tree protection fences.

#### TREE PROTECTION AREA (TPZ) KEEP OUT!

#### DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to: 1. Correction Notices or Stop Work Orders until compliance is achieved 2. RE Inspection Fees/financial penalties 3. Arborist reports recommending mitigation



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

PAGE 8

Project Title RESIDENCE 8455 SE 83RD STREET MERCER ISLAND, WA 98040



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

ARBORIST EXCAVATION REPORT

**(** 08.08.2022

Job No.

PERMIT CORRECTIONS #1 03/31/2023 PERMIT CORRECTIONS #2 05/31/2023

#### TREE REPLACEMENT

The following tree replacements are proposed and will be a mixture of Vine Maple, Douglas Fir and Western Red Cedar to satisfy MICC requirements that 50% of replacement trees be PNW natives. (See attached tree replanting plan.)

In my earlier report submittal John Kenney, city arborist of Mercer Island, calculated the number of required tree replacements at 17 total trees so I have used that number here.

NOTE REGARDING FEE-IN-LIEU: Eric and Tricia Jaffe would like the option to either a) install all of the required replacement trees as proposed or b) pay a full or partial fee-in-lieu of some of the replantings.

#### WATERING PLAN FOR REPLACEMENT TREES

- 1. Above ground soaker hoses to be installed around each replacement tree. Smaller diameter trees to have hose looped around them once and larger diameter trees to have hose looped around them twice. If using hoses with emitters then multiple emitters are required for larger trees.
- 2. Watering times will depend on soaker hose system but deeper, less frequent waterings is ideal (possibly a couple of hours once or twice per week.) Check soil periodically to determine how deeply the water is soaking in. Trees that are planted near other large, established trees will likely need more water.
- 3. Watering to be applied for at least two full seasons (April October or longer if little rainfall.)
- 4. 2-3" mulch to be applied over soaker hoses to aid water retention. Care should be taken to keep soaker hose and mulch away from the trunks.

#### LIMITATIONS

This report was based on the conditions of the trees and site at the time the report was written. Weather and site changes can alter the conditions at any time. Trees inherently pose a certain degree of hazard and risk from breakage, failure or other causes and conditions. Recommendations that are made by Laughing Trees Landscapes are intended to minimize or reduce hazardous conditions that may be associated with trees. However, there is and there can be no guarantee or certainty that efforts to correct unsafe conditions will prevent breakage or failure of the tree. Any recommendations made should reduce the risk of tree failure but they cannot eliminate such risk, especially in the event of a storm or any act of God. There can be no guarantee or certainty that all hazardous conditions will be detected.



#### ARBORIST / TRENCHING REPORT

#### DATE:

December 11, 2021

#### PREPARED FOR:

Eric Jaffe

#### SITE ADDRESS:

8455 SE 83rd St Mercer Island, WA 98040

#### PREPARED BY:

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PAGE 14

Kim Ettari, ISA Certified Arborist PN1301A

Laughing Trees Landscapes

5607 40th Ave NE Seattle, WA 98105

828-318-6088 / laughingtreeslandscapes@gmail.com

#### **NARRATIVE**

#### SCOPE OF WORK

- 5. Dig a 10' exploratory trench (24" deep) to determine the locations of any significant roots of regulated exceptional Tree #351 - 38" Douglas Fir that may be impacted by the proposed rebuilding of the upper deck.
- 6. Dig a 25' exploratory trench (24" deep) to determine the locations of any significant roots of regulated exceptional Tree #347 - 43" Douglas Fir that may be impacted by the proposed northwest addition to the garage.

#### FINDINGS AND RECOMMENDATIONS

Trench #1 - Tree #351 - The trench was located on the north east corner of the existing deck between Tree #351 and the footing on that corner and running north to south. One 8" diameter root and one 1.5" diameter root were found in the 10' long trench at approximately 20" deep. The proposed rebuilding of the deck will require no excavation as the existing footings will be used but will require disturbance from foot traffic to the outer half of the critical root zone on the east side of the tree.

I recommend that steel plates be placed prior to the commencement of construction along the western edge of the deck between Tree #351 and the pylons to alleviate compaction from construction foot traffic while the deck is rebuilt. Absolutely no mechanized equipment is to be used in this area.



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Trench #2 - Tree #347 - This 25' trench was located approximately 8' from the trunk running north to south. Only one 1.5" diameter root was found at approximately 18" deep close to the north west corner of the residence. No other significant roots were found. The proposed building of a small deck and the cantilevered addition to the garage will require the installation of one pylon. No significant roots should be impacted although this activity will occur in the outer half of the critical root zone on the south side of the tree.

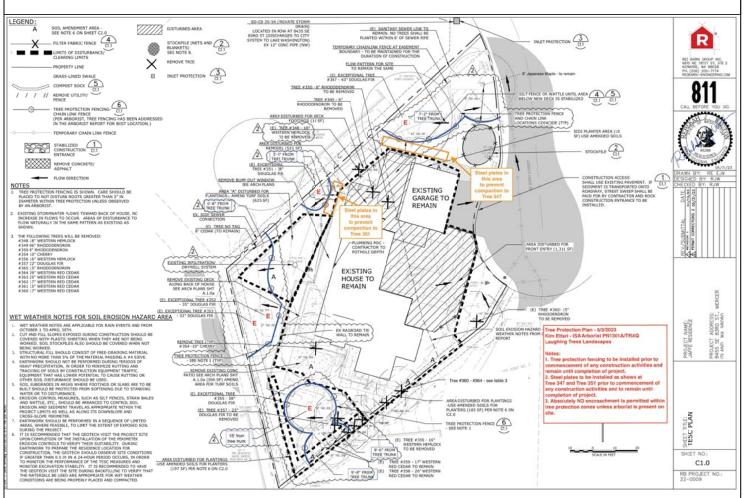
I recommend that steel plates be placed prior to the commencement of construction along the northern edge of the garage and westward 5' past the boundary of the garage expansion. Absolutely no mechanized equipment is to be used in this area after the pylon is installed.

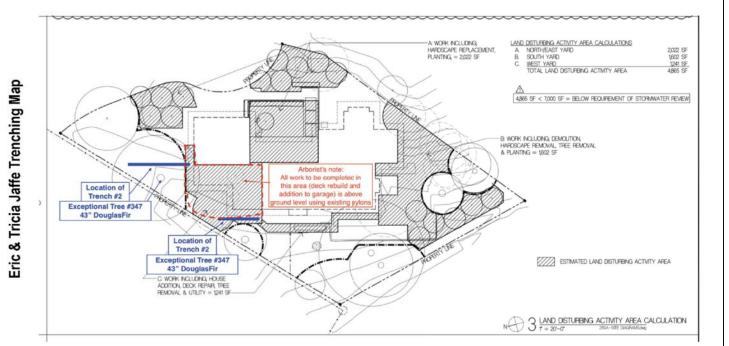




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#### NEW TREE #6 (CEDAR) PRISIDA/TIFAC: THEE PROTECTION FENCING TO BE INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. PROJECT ARBORIST TO BE ON SITE IF ANY POSSIBLE BIOCROACHMENT NTO PROTECTION ZONES MIGHT OCC. NEW TREE #2 (FIR) TREE REPLACEMENT PLAN AT LEAST 50% OF REPLACED TREES TO BE PACIFIC NORTHWEST NATIVE TREES, PROPOSED SPECIES. EF. TO SHEET TS-1 FOR MORE REPLACEMENT CALCULA NEW TREE #12 (V. MAPLE) NEW TREE #13 (V. MAPLE) NEW TREE #4 (V. MAPLE) TREES TO REMAIN - DRIPLINE NEW TREE #15 (V. MAPLE) -- TREES TO REMAIN - INTERIOR CRZ NEW TREE #16 (V. MAPLE) - NEW TREES TO BE PLANTED PAGE 13





#### CITY OF MERCER ISLAND

**COMMUNITY PLANNING & DEVELOPMENT** 9611 SE 36TH STREET | MERCER ISLAND, WA 98040 PHONE: 206.275.7605 | www.mercergov.org

#### MERCER ISLAND TREE INVENTORY & REPLACEMENT SUBMITTAL INFORMATION

PROJECT INFORM	MATION	
Property Owner		
Name:	ERIC & TRICIA JAFFE	
Site Address or		
Parcel Number:	8455 SE 83RD ST.	
Project Contact		
Name:	CHRIS HADDAD	
Contact Email		
Address:	CHRIS@S-PD.COM	
Contact Phone		
Number:	206-256-0809	

#### **EXCEPTIONAL TREES**

Exceptional Trees- means a tree or group of trees that because of its unique historical, ecological or aesthetic value constitutes an important community resource. A tree that is rare or exceptional by virtue of its size, species, condition, cultural/historical importance, age, and/or contribution as part of a tree grove. Trees with a diameter of more than 36 inches, or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table shown in MICC 19.16 under Tree, Exceptional.

List the total number of trees for each category and the tree identification numbers from the arborist report.

Number of trees 36	or greater	3
List tree numbers:	347, 351, 355	
Number of trees 24	" or greater (including 36" or greater)	8
List tree numbers:	347, 351, 352, 353, 355, 358, 363, 364	
Number of trees fro	m Exceptional Tree Table (MICC 19.16)	5
List tree numbers:	347, 351, 352, 353, 355	

LARGE REGULATED TREES

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Large Regulated Trees- means any tree with a diameter of 10 inches or more, and any tree that meets the

definition of an Exceptional Tree. Number of Large Regulated Trees on site List tree numbers: 347,348,351,352,353,354,355,356,357,358,359,360,361,362,363,364, Number of Large Regulated Trees on site proposed for removal List tree numbers: 348,354,358,359,360,361,362,363,364,

Percentage of trees to be retained ((A-B)/Ax100) note: must be at least 30% RIGHT OF WAY TREES

Number of Large Regulated Trees in right of way List tree numbers:

Right of Way Trees- means a tree that is located in the street right of way adjacent to the project property.

Number of Large Regulated Trees in right of way proposed for removal List tree numbers:

TREE REPLACEMENT Tree replacement- removed trees must be replaced based on the ratio in the table below. Replacement trees shall be conifers at least six feet tall and or deciduous at least one and one-half inches in diameter at

Diameter of Removed Tree (measured 4.5' above ground)	Tree replacement Ratio	Number of Trees Proposed for Removal	Number of Tree Required for Replacement Based on Size/Type
Less than 10"*	1		12 - 13 - 13 - 13 - 13 - 13 - 13 - 13 -
10" up to 24"	2		
Greater than 24" up to 36"	3		
Greater than 36" and any Exceptional Tree	6		
	TOTAL TO	E DEDI ACEMENTS	17

\*no replacement tree is needed if the tree fits all of the following; Less than 10 inches in diameter, not an exceptional tree, and not a replacement tree from another tree permit. \*

**PERMIT CORRECTIONS** 

ARBORIST EXCAVATION REPORT

A PERMIT CORRECTIONS #1 03/31/2023

PERMIT CORRECTIONS #2 05/31/2023

Project Title

08.08.2022

Job No. **2110** 

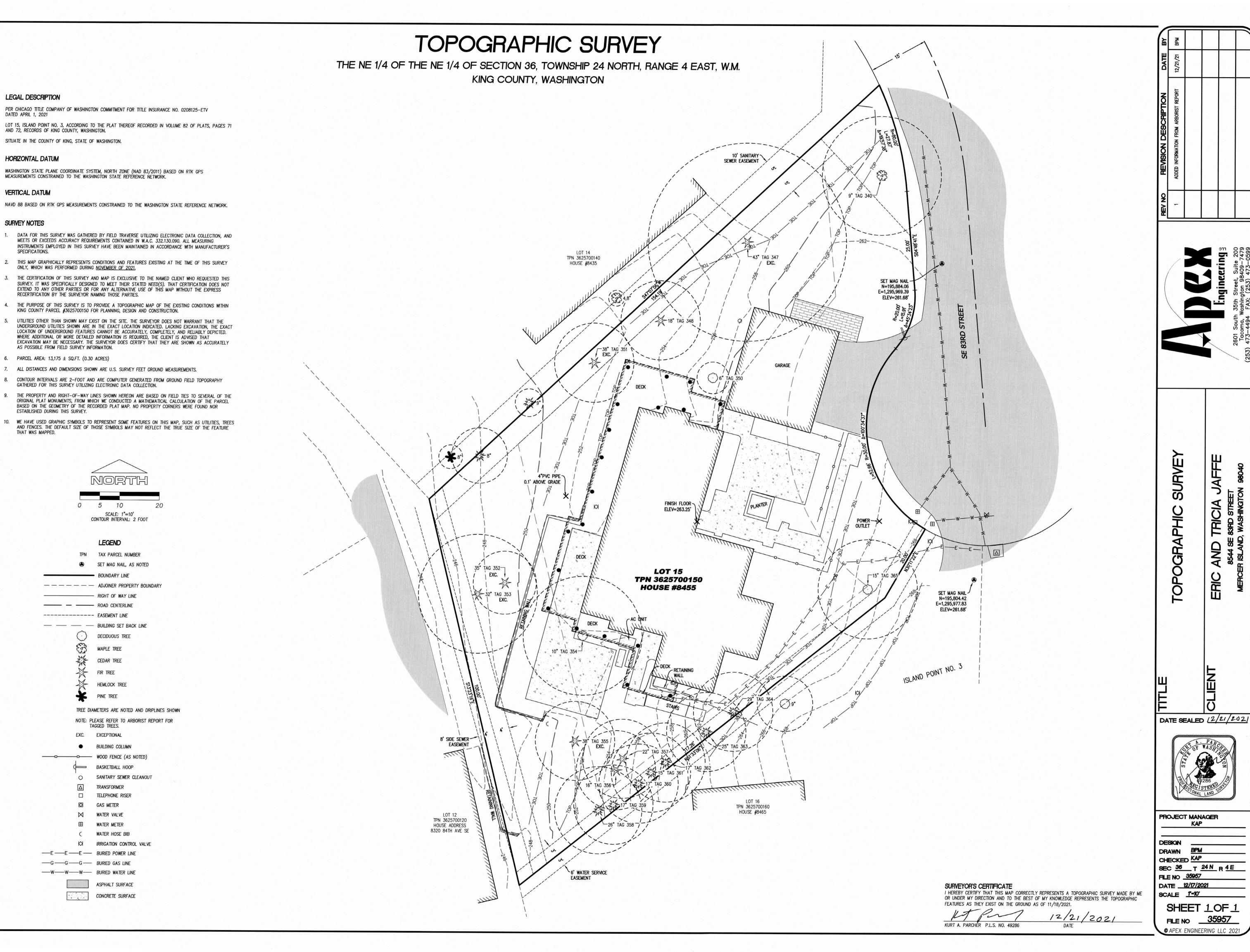
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8455 SE 83RD STREET

MERCER ISLAND, WA 98040

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

1 UPDATED ARBORIST REPORT (CONT. FROM PREVIOUS PAGE)



LEGAL DESCRIPTION

HORIZONTAL DATUM

VERTICAL DATUM

SURVEY NOTES

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

ONLY, WHICH WAS PERFORMED DURING NOVEMBER OF 2021.

RECERTIFICATION BY THE SURVEYOR NAMING THOSE PARTIES.

AS POSSIBLE FROM FIELD SURVEY INFORMATION.

6. PARCEL AREA: 13,175 ± SQ.FT. (0.30 ACRES)

KING COUNTY PARCEL #3625700150 FOR PLANNING, DESIGN AND CONSTRUCTION.

7. ALL DISTANCES AND DIMENSIONS SHOWN ARE U.S. SURVEY FEET GROUND MEASUREMENTS.

SCALE: 1"=10' CONTOUR INTERVAL: 2 FOOT

LEGEND

TPN TAX PARCEL NUMBER SET MAG NAIL, AS NOTED

BOUNDARY LINE

DECIDUOUS TREE

MAPLE TREE

CEDAR TREE

HEMLOCK TREE

EXC. EXCEPTIONAL

BUILDING COLUMN

WOOD FENCE (AS NOTED) BASKETBALL HOOP

> TRANSFORMER TELEPHONE RISER

GAS METER

WATER VALVE

WATER HOSE BIB

IRRIGATION CONTROL VALVE

ASPHALT SURFACE

CONCRETE SURFACE

——E ——E —— BURIED POWER LINE

----W-----W BURIED WATER LINE

----G -----G ----- BURIED GAS LINE

TREE DIAMETERS ARE NOTED AND DRIPLINES SHOWN

NOTE: PLEASE REFER TO ARBORIST REPORT FOR TAGGED TREES.

SANITARY SEWER CLEANOUT

— — — — — ADJOINER PROPERTY BOUNDARY

----- ROAD CENTERLINE

--- BUILDING SET BACK LINE

---- EASEMENT LINE

GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.

WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD 83/2011) BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

## JAFFE RESIDENCE

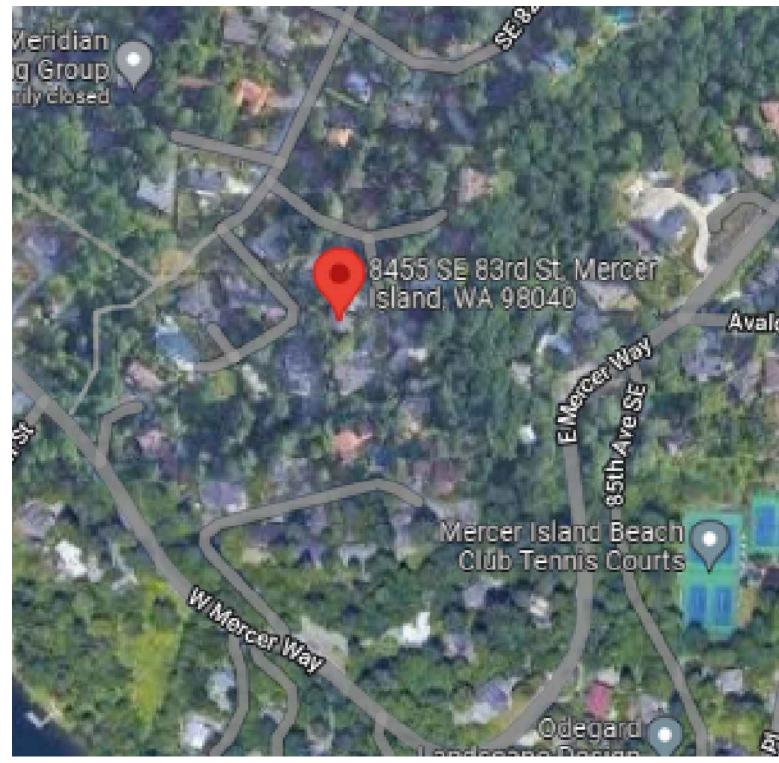
BUSH

SHRUB

CONIFER TREE

STOCK PILE

**DECIDUOUS TREE** 



#### **VICINITY MAP**

SCALE: 1'' = 1,000' APPROX.

#### LEGAL DESCRIPTION

PARCEL #: 362570-0150

ISLAND POINT #3 TGW UND INT IN TRACT B AND AN UND IN COMMUNITY TRACT

#### LEGEND AND ABBREVIATIONS

#### PROPOSED

CULVERT

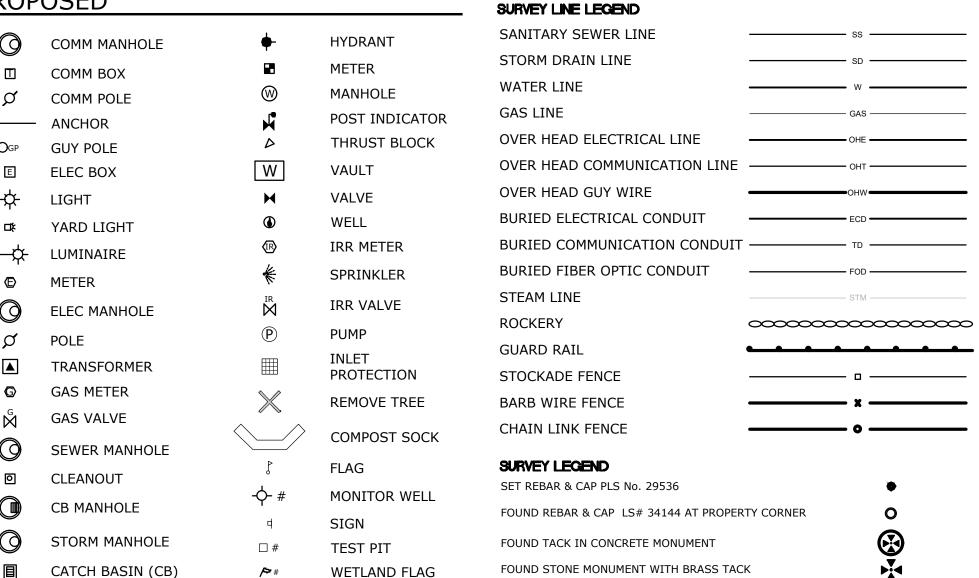
CLEANOUT

YARD DRAIN

AIR RELEASE

FIRE DEPT CONN (FDC)

**BLOW OFF** 



## FOUND MAGNETIC NAIL SET LINE HUB, TACK & DISC PLS No. 29536 SET LEAD & TACK WITH DISC PLS No. 29536 CALCULATION POINT

AC ACRES ADA AMERICANS W/ DISABILITIES ACT BACK OF CURB **BOTTOM OF WALL** CURB CUT

CO CLEAN OUT COMI CITY OF MERCER ISLAND CY CUBIC YARDS

DOWNSPOUT

CENTERLINE

ESC EROSION AND SEDIMENT CONTROL EX EXISTING

FDCO FOUNDATION DRAIN CLEAN OUT FH FIRE HYDRANT

FL FLOWLINE FM FORCE MAIN

N NORTH

NTS NOT TO SCALE OHWMORDINARY 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

ROW RIGHT OF WAY S SOUTH

SCH SCHEDULE SD STORM DRAIN

SDCO STORM DRAIN CLEAN OUT

SL SLOPE

SSCO SANITARY SEWER CLEAN OUT STD STANDARD

S/W SIDEWALK TC TOP OF CURB

TS TOP OF STAIRS

TW TOP OF WALL

W WEST

SHEET INDEX SHEET TITLE SHEET # COVER SHEET TESC NOTES TESC PLAN TESC DETAIL DRAINAGE OVERALL DRAINAGE DETAILS OWNER/APPLICANT: ERIC AND TRICIA JAFFE 8455 SE 83RD ST. MERCER ISLAND, WA 98040

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

ARCHITECT: CHRIS HADDAD, ARCHITECT 8601 8TH AVE S SEATTLE, WA 98108 CHRIS@SUYAMAPETERSONDEGUCHI.COM 206-256-0809

TOTAL NEW AND REPLACED IMPERVIOUS AREA: 1,578 SF DISTURBED AREA: 4,865 SF

#### HORIZONTAL DATUM:

WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD 83/2011) BASED ON RTK GPS MEASUREMENTS CONTAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

#### **VERTICAL DATUM:**

NAVD 88 BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK

#### **BENCH MARK:**

TBM MAG NAILS SET IN/NEAR CUL DE SAC ELEVATION = 261.68'

#### FLOODPLAIN DESIGNATION:

PROPERTY IS ZONED X PER FEMA PANEL 53033C0663G

WATER DISTRICT: CITY OF MERCER ISLAND

#### **CONSTRUCTION SEQUENCE:**

1. INSTALL TESC

2. CONSTRUCT REMODEL

3. CONNECT ROOF DOWNSPOUTS TO DRAINAGE SYSTEM

4. PLANT DISTURBED AREAS

5. REMOVE TESC

QUANTITIES (FOR PERMITTING ONLY)	CY
CUT	2
FILL	0
NET CUT/FILL	2

DISCLAIMER:

RED BARN GROUP 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 GROUP INC. TO PROVIDE A SITE VISIT AND DESIGN UPDATE.

HEET **OVE** th O **Engineering/ Drainage Approval Clearing / Grading Approval** SHEET NO .: C0.0 Signature: Signature: 22-0009 Date:

RB PROJECT NO .:

RED BARN GROUP INC.

KENMORE, WA 98028

PH. (206) 200-7174

6610 NE 181ST ST, STE 2

REDBARN-ENGINEERING.COM

CALL BEFORE YOU DIG

DRAWN BY: RE EJW

DESIGNED BY: RJW

CHECKED BY: RJW

REV/SUBMITTA A REVISION 1 A PERMIT CORREC

#### PROJECT SPECIFIC TESC NOTES:

- 1. 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.
- 3. ESTABLISH CONSTRUCTION ENTRANCE. LIMIT 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. SOME 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 EROSION. 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 THE PROJECT.
- 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.

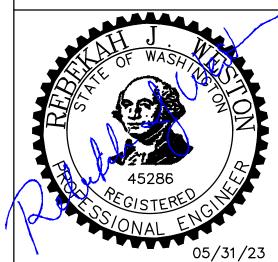
- 12. CONTROL DEWATERING. WHEN DEWATERING DEVICES DISCHARGE ON-SITE OR TO A PUBLIC DRAINAGE SYSTEM, DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP TO REMOVE SEDIMENT CONTAMINATION, OR OTHER SEDIMENT REMOVAL BMP.
- 13. MAINTAIN AND INSPECT BMPS. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT 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.



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FWISION 1

CORRECTIONS 2 05/31/23

CHAINT CORRECTIONS 2 05/31/

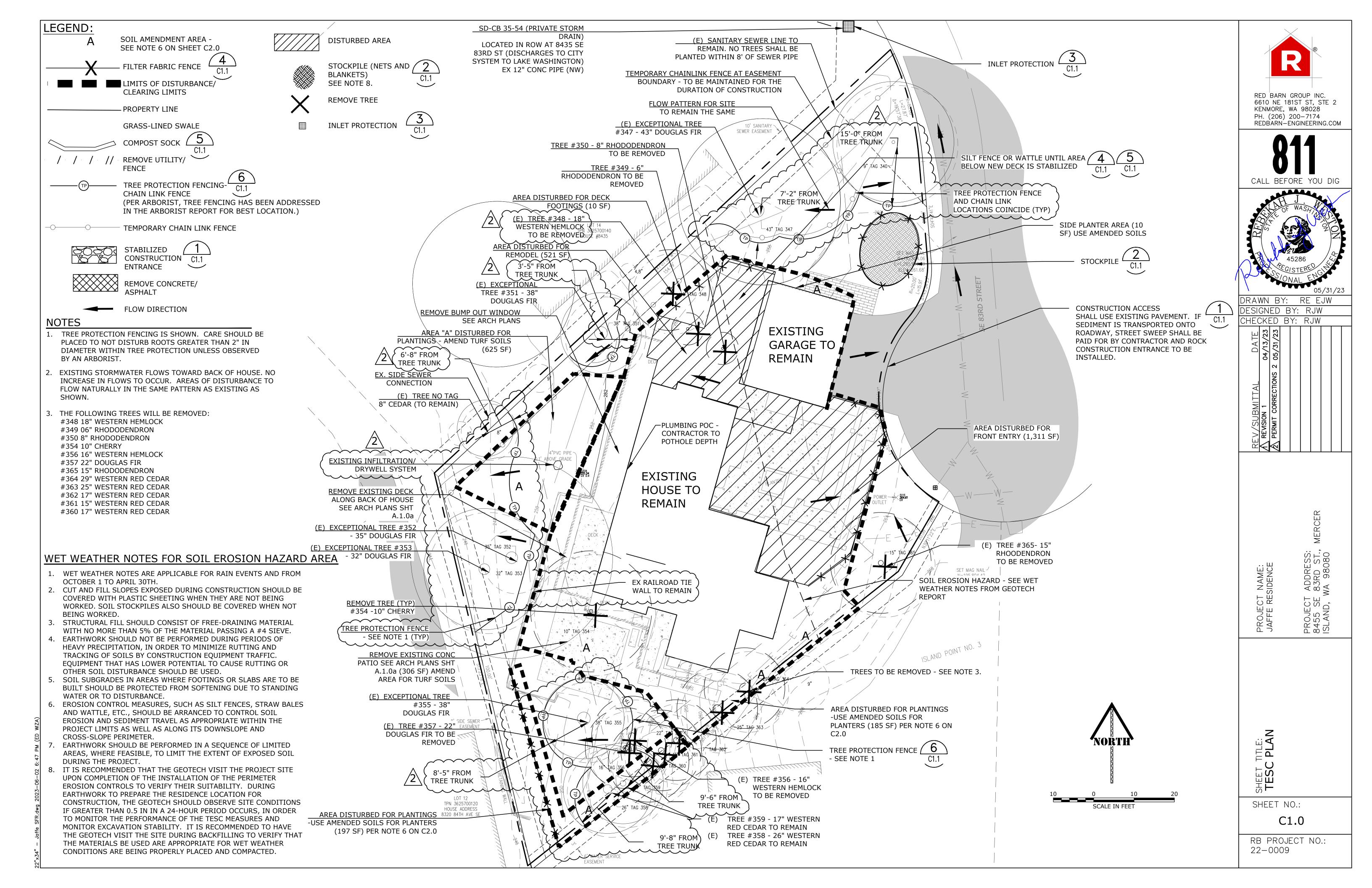
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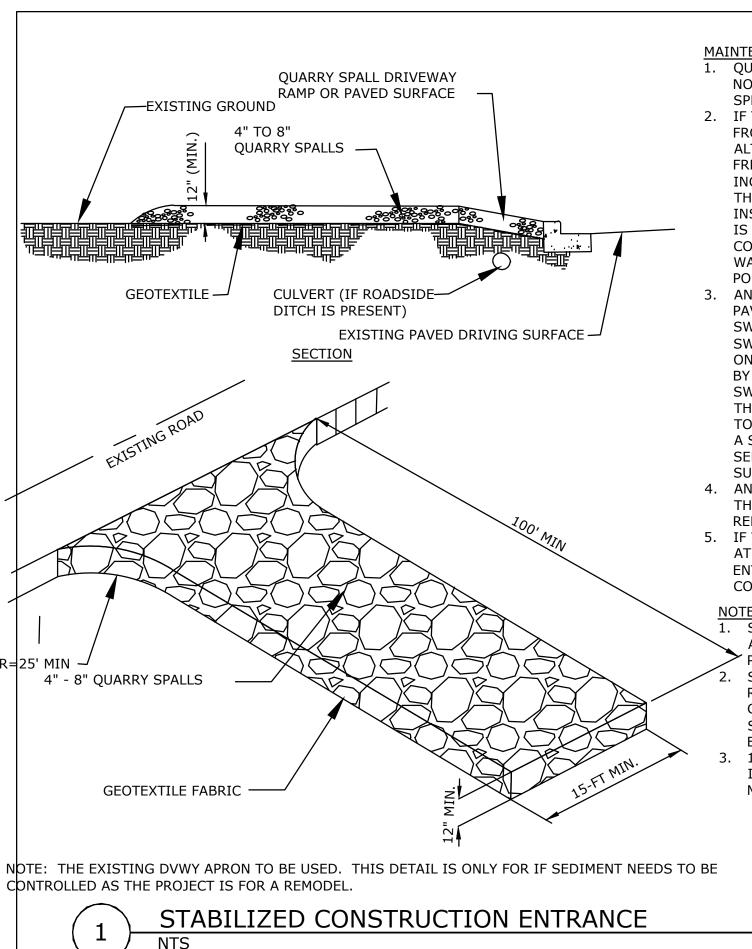
JAFFE RESIDENCE
PROJECT ADDRESS:
8455 SE 83RD ST.,
ISLAND, WA 98080

SHEET TITLE:

SHEET NO.:
C0.1

RB PROJECT NO.: 22-0009





## WIRE MESH SUPPORT FENCE FOR-

FILTER FABRIC MATERIAL IN CONTINUOUS ROLLS; USE STAPLES OR WIRE -WIRE MESH SUPPORT FENCE RINGS TO ATTACH FABRIC TO WIRE FOR SLIT FILM FABRICS SLIT FILM FABRICS 0.5' FILTER FABRIC MATERIAL— MIRAFI 100X OR EQUIVALENT BURY BOTTOM OF-FILTER MATERIAL IN 8"x12" TRENCH PROVIDE WASHED GRAVEL-BACKFILL OR COMPACTED NATIVE SOIL AS DIRECTED BY LOCAL GOVERNMENT 2.5' BURY BOTTOM OF FILTER - 6.0' MAX MATERIAL IN 8"x12" TRENCH 2"x2" WOOD POSTS, STANDARD-—2"x2" WOOD POSTS STANDARD, OR BETTER OR BETTER OR EQUIVALENT 10. USE WOOD, STEEL OR EQUIVALENT POSTS. THE SPACING OF THE SUPPORT POSTS SHALL

GOUGES.

END OF THE FENCE.

O NO. 6 STEEL REBAR OR LARGER.

THE POST SIZES LISTED ABOVE

GROUND SURFACE BEHIND THE FENCE.

FILTER FABRIC FENCE PLAN NOTES THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SILT FENCES AT THE LOCATIONS SHOWN 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 21/2-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 11. THE OVERLAP IS LONG ENOUGH AND THAT THE ADJACENT 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, 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.

BURY THE BOTTOM OF THE FILTER FABRIC 4-INCHES MIN. BELOW THE GROUND SURFACE. BACKFILL 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 MIN. 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 REACHED. INCREASE FENCE POST MIN. DEPTHS BY 6 INCHES IF THE FENCE IS LOCATED ON SLOPES OF 3H:1V OR STEEPER AND THE SLOPE IS PERPENDICULAR TO THE FENCE. IF REQUIRED POST DEPTHS CANNOT BE OBTAINED, THE POSTS SHALL BE ADEQUATELY SECURED BY BRACING OR GUYING TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT LOADING.

FILTER FABRIC FENCE

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.

3. 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

4. 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.

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.

100-FT MIN FOR LARGE SITES. UPON 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 -WITH SAND BAGS, (TYP.) AS NEEDED IF SEDIMENT APPEARS TO BE TRANSPORTED AWAY FROM STOCKPILE - VISQUEEN UNDER STOCKPILE WRAPPED ON TOP. GROUND SURFACE -

CLEAR PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL AND SHOULD MEET THE REQUIREMENTS OF THE SDOT STANDARD SPECIFICATIONS

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

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

WHEN THE COVERING IS USED ON UNSEEDED SLOPES, LEAVE IN PLACE UNTIL THE NEXT SEEDING PERIOD

10' @ 30° ANGLE EACH-

END TO PREVENT FLOW

AROUND (TYP.)

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

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.

CHECK REGULARLY FOR RIPS AND PLACES WHERE THE PLASTIC MAY BE DISLODGED. CONTACT BETWEEN THE PLASTIC AND THE GROUND SHOULD ALWAYS BE MAINTAINED. ANY AIR BUBBLES FOUND SHOULD BE REMOVED IMMEDIATELY OR THE PLASTIC MAY RIP DURING THE NEXT WINDY PERIOD. RE-ANCHOR OR REPLACE THE PLASTIC AS NECESSARY.

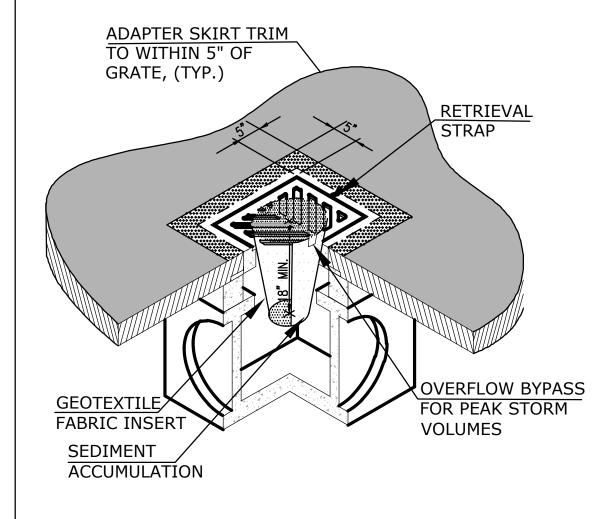
STOCKPILE AND PLASTIC COVERING

-EXCESS SOCK

MATERIAL, DRAWN

IN AND TIED OFF

AT STAKE (TYP.)

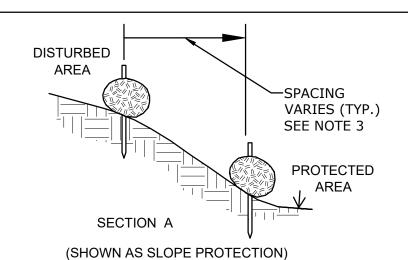


INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.

SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF

SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND REINSERTING IT INTO THE CATCH BASIN.





1. 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.

 ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR LINES. 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. 4. MAY BE USED IN PLACE OF FILTER FENCE FOR PREMIER CONTROL

SPACED EVERY 3' O.C. (TYP.) PLAN VIEW

∠CONTOUR LINE (TYP.)

2"x2"x3' WOODEN STAKE,

### COMPOST SOCK

#### DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

DETAIL

1. Correction Notices or Stop Work Orders until compliance is achieved

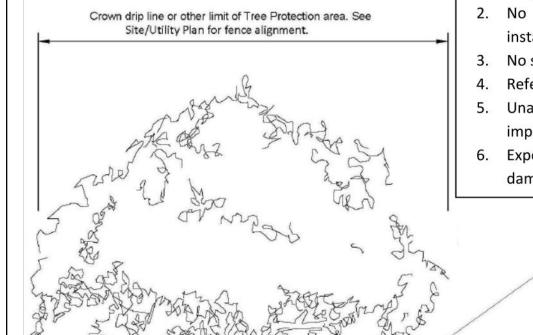
2"X2"X3'——

COMPOST SOCK-

SEE NOTE 1

WOODEN STAKE

2. RE Inspection Fees 3. Arborist reports recommending mitigation



1. No pruning shall be preformed unless under the direction of an arborist

3. No storage of materials shall occur inside the protective fencing

4. Refer to Site/Utility Plan for allowable modifications to the tree protection area.

5. Unauthorized activities in tree protection area may require evaluation by private arborist to identify impacts and mitigation required

6. Exposed roots: For roots > 1" damaged during construction, make a clean straight cut to remove damaged portion and inform City Arborist

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

2" x 6" steel posts or approved equal

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

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

TTLE: **DET**,  $\square$   $\square$ ШШ

PROJECT NAME: JAFFE RESIDENCE

**RB PROJECT NO.:** 22-0009

SHEET NO .: C1.1

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DESIGNED BY: RJW

CHECKED BY: RJW

/SUBMITT



2. No equipment shall be stored or operated inside the protective fencing including during fence installation and removal KEEP OUT TREE PROTECTION AREA

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 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 FILTER FABRIC SPECIFICATIONS

GRAB TENSILE ELONGATION (ASTM D4632) 30% MAX. ULTRAVIOLET RESISTANCE (ASTM D4355) 70% MAX.

BE A MAXIMUM OF 6-FEET. POSTS SHALL CONSIST OF EITHER:

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

CONTOURS MUST BE CROSSED SHALL NOT BE STEEPER THAN 3H:1V.

O WOOD WITH DIMENSIONS OF 2-INCHES BY 2-INCHES WIDE MIN. AND A 3-FEET MIN.

O OTHER STEEL POSTS HAVING EQUIVALENT STRENGTH AND BENDING RESISTANCE TO

LOCATE SILT FENCES ON CONTOUR AS MUCH AS POSSIBLE, EXCEPT AT THE ENDS OF

THE FENCE, WHERE THE FENCE SHALL BE TURNED UPHILL SUCH THAT THE SILT FENCE

CAPTURES THE RUNOFF WATER AND PREVENTS WATER FROM FLOWING AROUND THE

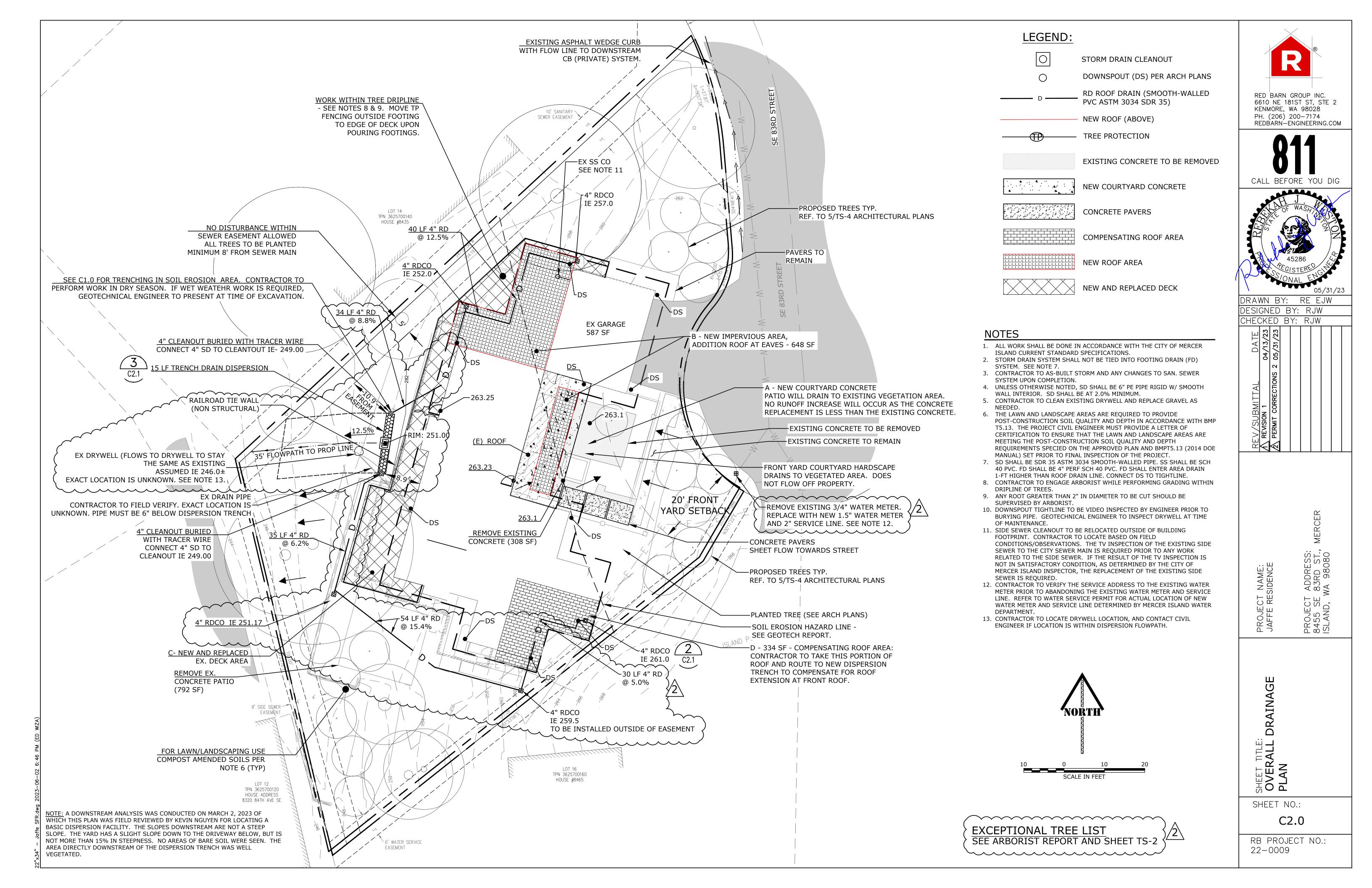
. IF THE FENCE MUST CROSS CONTOURS, WITH THE EXCEPTION OF THE ENDS OF THE

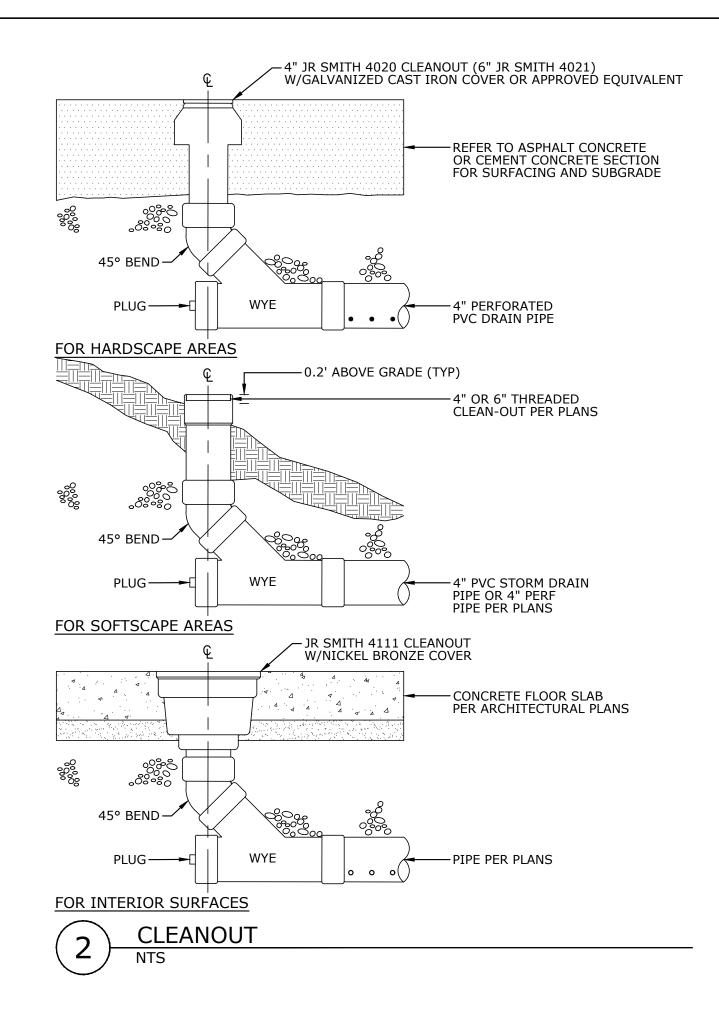
FENCE, PLACE GRAVEL CHECK DAMS PERPENDICULAR TO THE BACK OF THE FENCE TO

MINIMIZE CONCENTRATED FLOW AND EROSION. THE SLOPE OF THE FENCE LINE WHERE

O U, T, L, OR C SHAPE STEEL POSTS WITH A MINIMUM WEIGHT OF 1.35 LBS./FT.

LENGTH. WOOD POSTS SHALL BE FREE OF DEFECTS SUCH AS KNOTS, SPLITS, OR

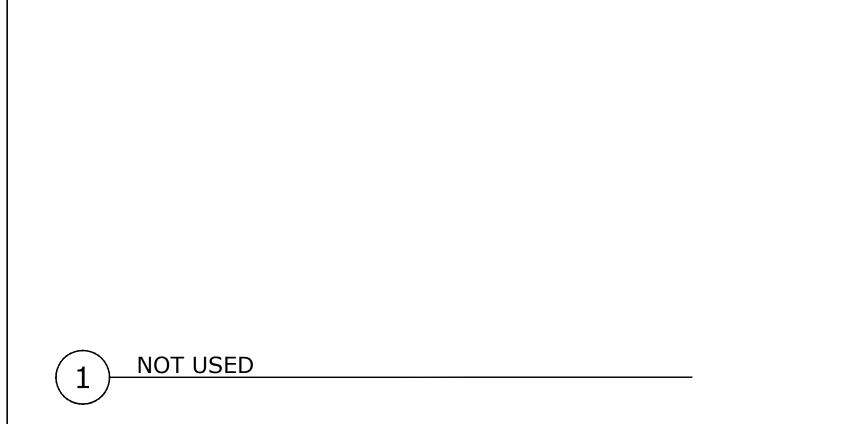




AREA	DESC.	NEW IMPERVIOUS AREA (SF)	DRAINAGE DISCUSSION	IMPERVIOUS AREA TO EXISTING DRAINAGE SYSTEM
Α	WALKWAYS & UNCOVERED PATIO	288	THE AREA IS LOCATED  NEAR THE FRONT ENTRY AND DOES NOT DRAIN OFF-SITE. (SEE ARCH PLANS TS-3)	0
B1	ROOF	190	THIS AREA WILL BE ROUTED TO THE BASIC DISPERSION TRENCH (SEE ARCH PLANS TS-3)	0
B2	ROOF	(COVER EX. CONCRETE)	THE ROOF EXTENSION IS OVER THE EXISTING CONCRETE. THEREFORE IT DOES NOT COUNT AS "NEW IMPERVIOUS". IT IS COUNTED ONLY FOR MAKING SURE FEWER FLOWS GO TO THE EXISTING TIGHTLINE SYSTEM. (SEE ARCH PLANS TS-3, AREA H2)	CURRENTLY, 193 SF GOES TO THE EXISTING SYSTEM. THE EXTENSION OF 2 FEET ADDS 100 SF OF IMPERVIOUSNESS. WE ARE REROUTING AREA D TO THE BASIC DISPERSION TRENCH IN ORDER TO NOT ADD OR COMPENSATE FOR THE ADDITIONAL 100 SF.
O	UNCOVERED DECK		FLOWS THROUGH BOARDS TO MULCH AREA BELOW DECK AND FLOWS WITH NATURAL FLOW PATTERN.	THE ARCH PLANS CALL FOR 148 SF. PER DRAINAGE CODE IT HAS FLOW-THROUGH BOARDS AND IS THEREFORE PERVIOUS PER MICC.
D	COMPENSATING ROOF		334 SF OF THE SOUTHEAST ROOF IS ROUTED TO THE BASIC DISPERSION TRENCH TO ACCOMMODATE THE B2 ROOF EXTENSION AND THE ADDITIONAL 100 SF TO THE EXISTING SYSTEM.	THE EXISTING SYSTEM WILL HAVE 100 SF - 334 SF = -234 SF (SO 234 FEWER SQUARE FEET GOING TO THE EXISTING SYSTEM)
R	REMOVED IMPERVIOUS SURFACE	(1,100)	PER ARCH PLANS TS-3 THERE IS 1,100 SF OF REMOVED IMPERVIOUS SURFACE	
NET		743-1,100=- 357	A REDUCTION IN TOTAL IMPERVIOUS AREA OCCURS PER THE EXISTING PLAN	

SURFACE AREA TABLE - IMPERVIOUS AREA TABLE 1

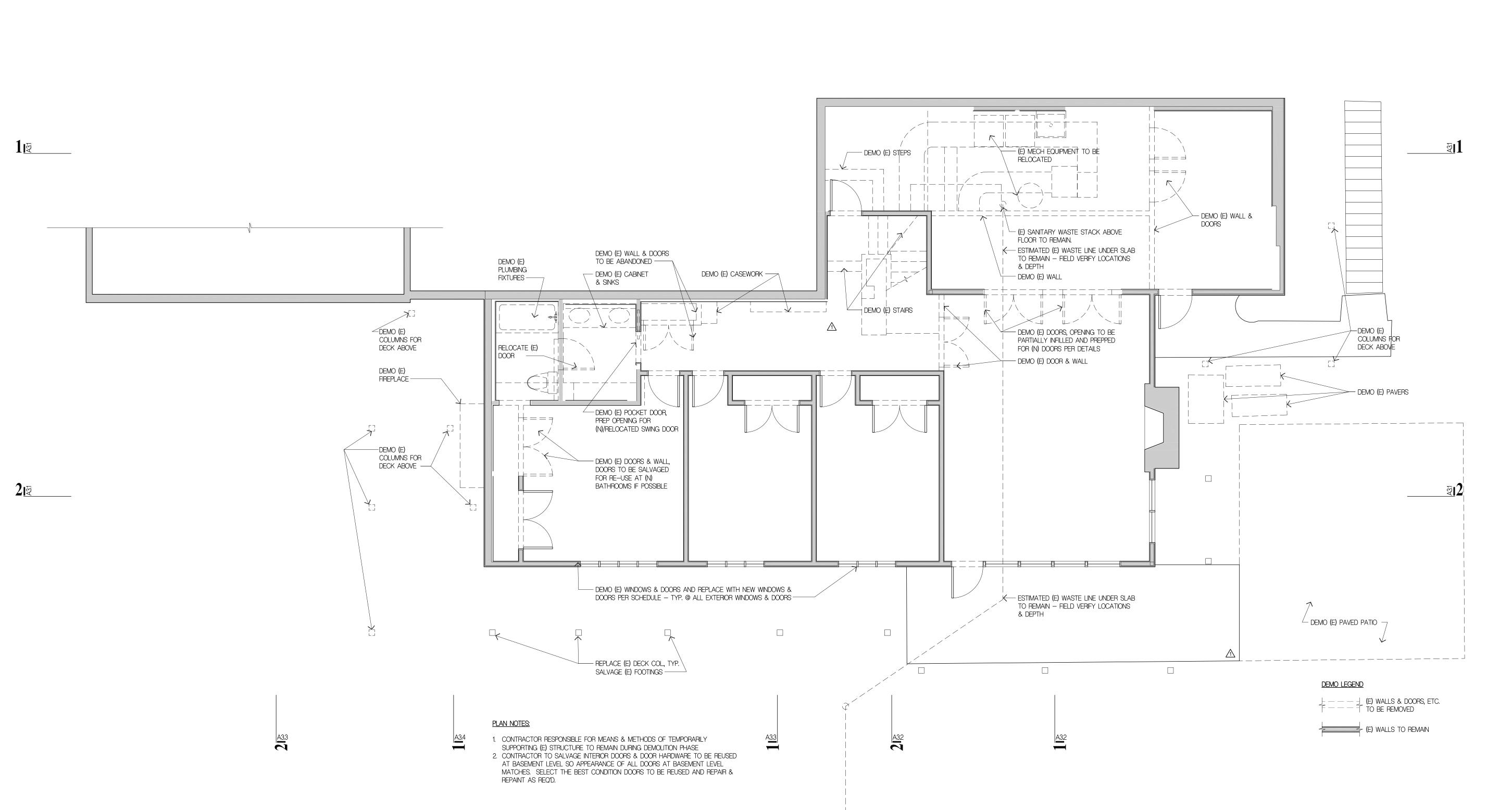
SURFACE AREA TABLE - PERVIOUS AREA TABLE 2				
AREA	DESCRIPTION	NEW PERVIOUS AREA (SF)	DRAINAGE DISCUSSION	
Р	LANDSCAPING	90	FOLLOWS EXISTING FLOW PATTERN	



1'- 0 MIN.	1'- 0 MIN.	_END CAP OR PLUG -CLEAN OUT WYE FROM PIPE	FLOW TO SECOND DISPERSAL TRENCH IF NECESSARY
NOTCHED	FLOV		TYPE I CB W/SOLID COVER  OW TO OTHER BRANCHING B'S AS NECESSARY
2" > 2" NOTCHES —	HAN ITS  PIPE 1'- 0 1'-0 MIN.  MIN.	NOTCHES*  SEE NOTE 5  *FOR WASEE SEE	TER QUALITY FACILITIES, TION 6.2.6.1, OPTION A FOR DIMENSIONS AND SPACING H LINER
6"	SECTION A-A NTS	2. NOT USED 3. TRENCH AND GRADI ALIGN TO FOLLOW O 4. SUPPORT POST SPA CONDITIONS TO ENS REMAINS LEVEL.	CHARGE AND/OR EROSION.  E BOARD MUST BE LEVEL.  CONTOURS OF SITE.  CING AS REQUIRED BY SOIL  SURE GRADE BOARD  THERWISE EVALUATED AND

3 DISPERSION TRENCH DETAIL NTS

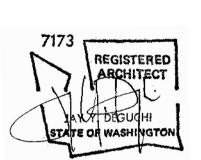
RED BARN GROUP INC. 6610 NE 181ST ST, STE 2 KENMORE, WA 98028 PH. (206) 200-7174 REDBARN-ENGINEERING.COM CALL BEFORE YOU DIG DRAWN BY: RE EJW DESIGNED BY: RJW CHECKED BY: RJW SHEET TITLE: DRAINAGE I SHEET NO .: C2.1 RB PROJECT NO.: 22-0009



Project Title

JAFFE
RESIDENCE

8455 SE 83RD STREET
MERCER ISLAND, WA 98040



Drawing Title
BASEMENT
DEMO PLAN

Date 08.08.2022

Job No. **2110** 

 ISSUE
 DATE

 ⚠ PERMIT CORRECTIONS #1 03/31/2023

 ⚠ PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

1 BASEMENT DEMOLITION PLAN
1/4"=1"-0"

1 BASEMENT DEMOLITION PLAN
2 2110A-FP00.dwg

A3.2

1. CONTRACTOR RESPONSIBLE FOR MEANS & METHODS OF TEMPORARILY

SUPPORTING (E) STRUCTURE TO REMAIN DURING DEMOLITION PHASE.

REPAINT AS REQ'D.

2. CONTRACTOR TO SALVAGE INTERIOR DOORS & DOOR HARDWARE TO BE REUSED

AT BASEMENT LEVEL SO APPEARANCE OF ALL DOORS AT BASEMENT LEVEL MATCHES. SELECT THE BEST CONDITION DOORS TO BE REUSED AND REPAIR &

A3.3

Suyama Peterson Deguchi

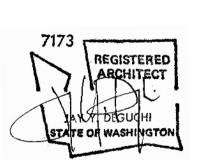
8601 8th Avenue South P 206256.0809

Seattle, Washington 98108

Project Title

JAFFE
RESIDENCE

8455 SE 83RD STREET
MERCER ISLAND, WA 98040



Drawing Title
MAIN LEVEL
DEMO PLAN

Date 08.08.2022

Job No. 2110

DATE

A PERMIT CORRECTIONS #1 03/31/2023

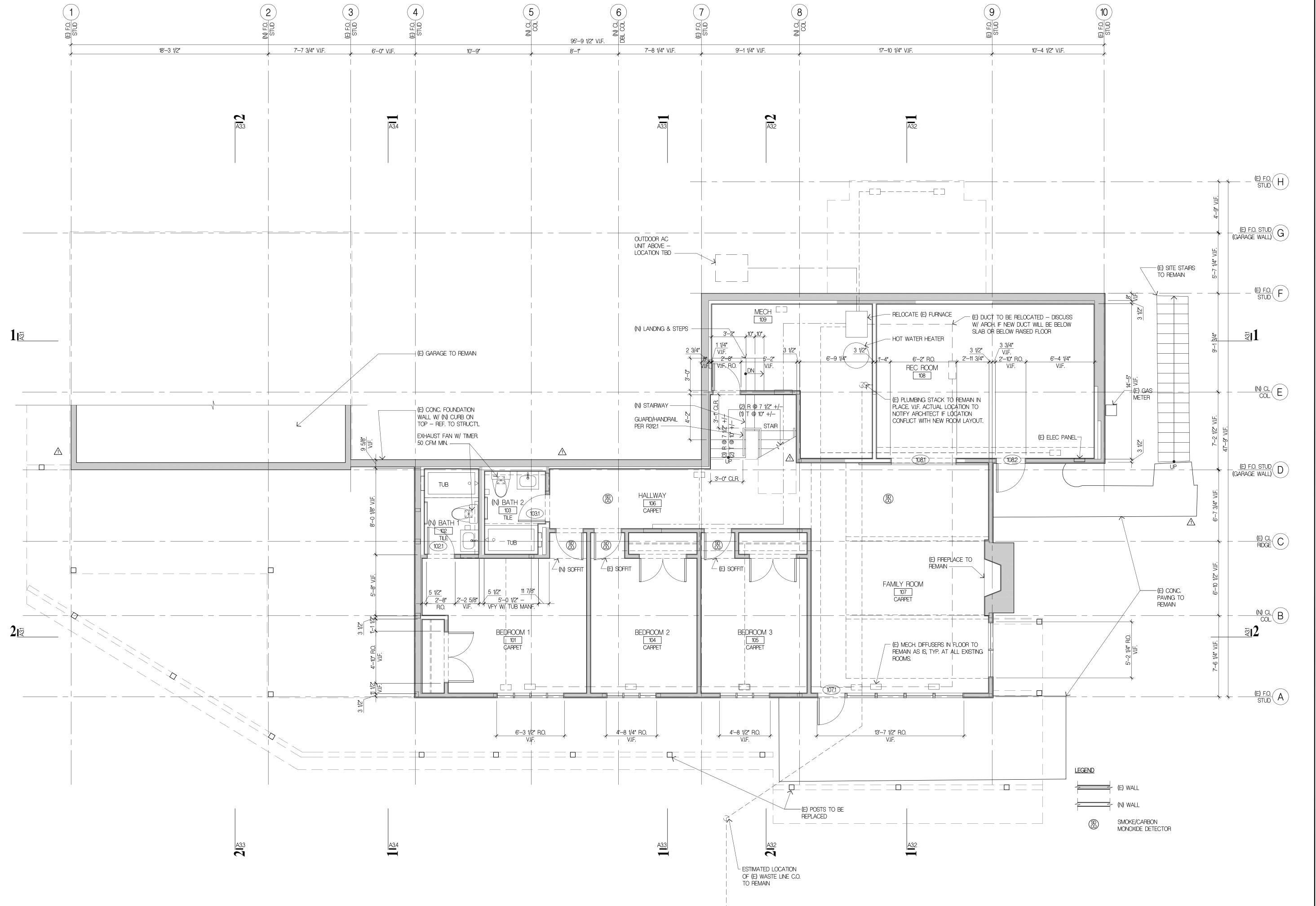
PERMIT CORRECTIONS #1 03/31/2023

PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

N T MAIN LEVEL DEMOLITION PLAN
1/4"=1"-0" 2110A-FP01.dwg

A1.0b



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

Project Title

JAFFE
RESIDENCE

8455 SE 83RD STREET
MERCER ISLAND, WA 98040



Drawing Title
BASEMENT
FLOOR PLAN

Date 08.08.2022

Job No. 2110

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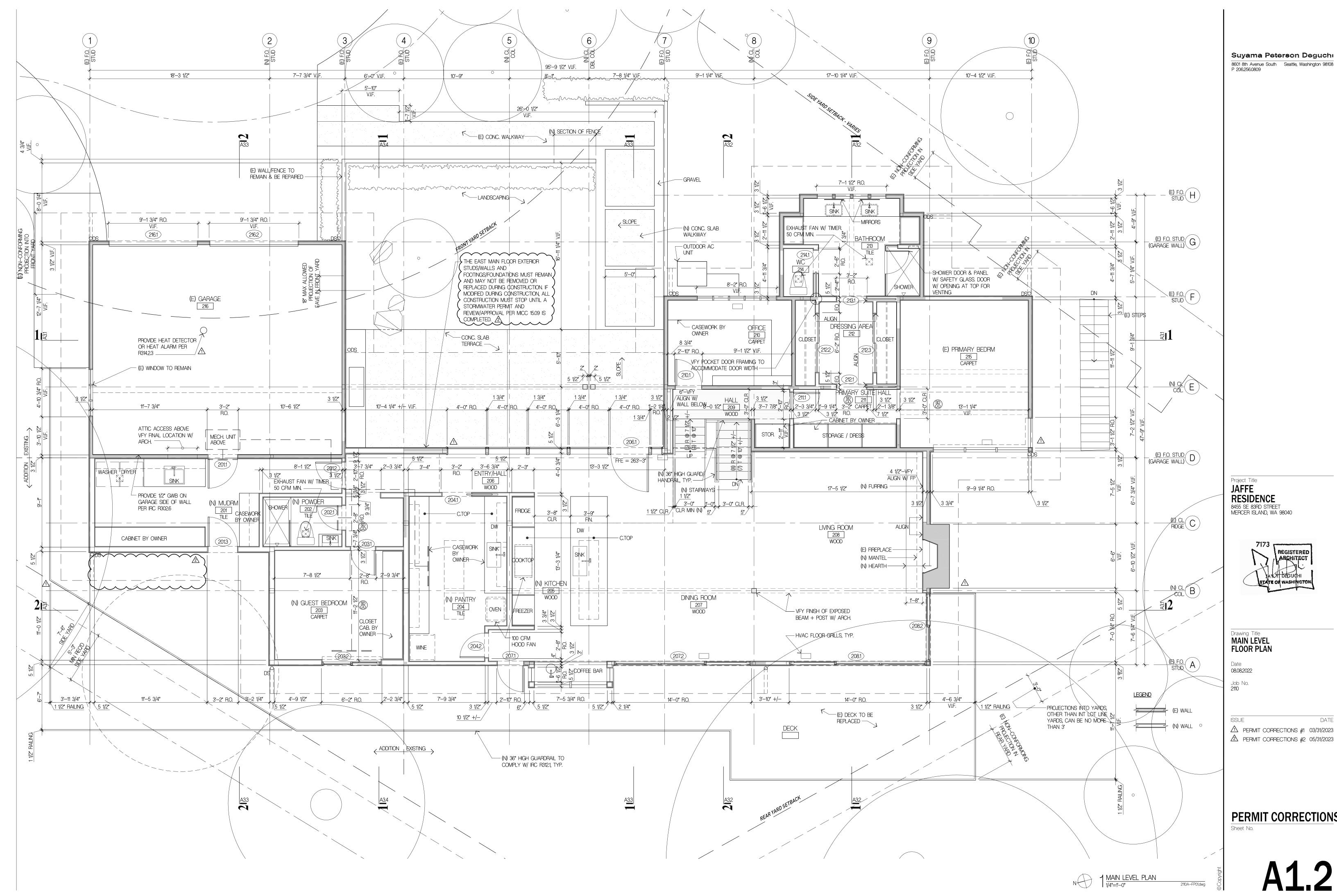
DATE

A PERMIT CORRECTIONS #1 03/31/2023

△ PERMIT CORRECTIONS #1 03/31/2023
△ PERMIT CORRECTIONS #2 05/31/2023

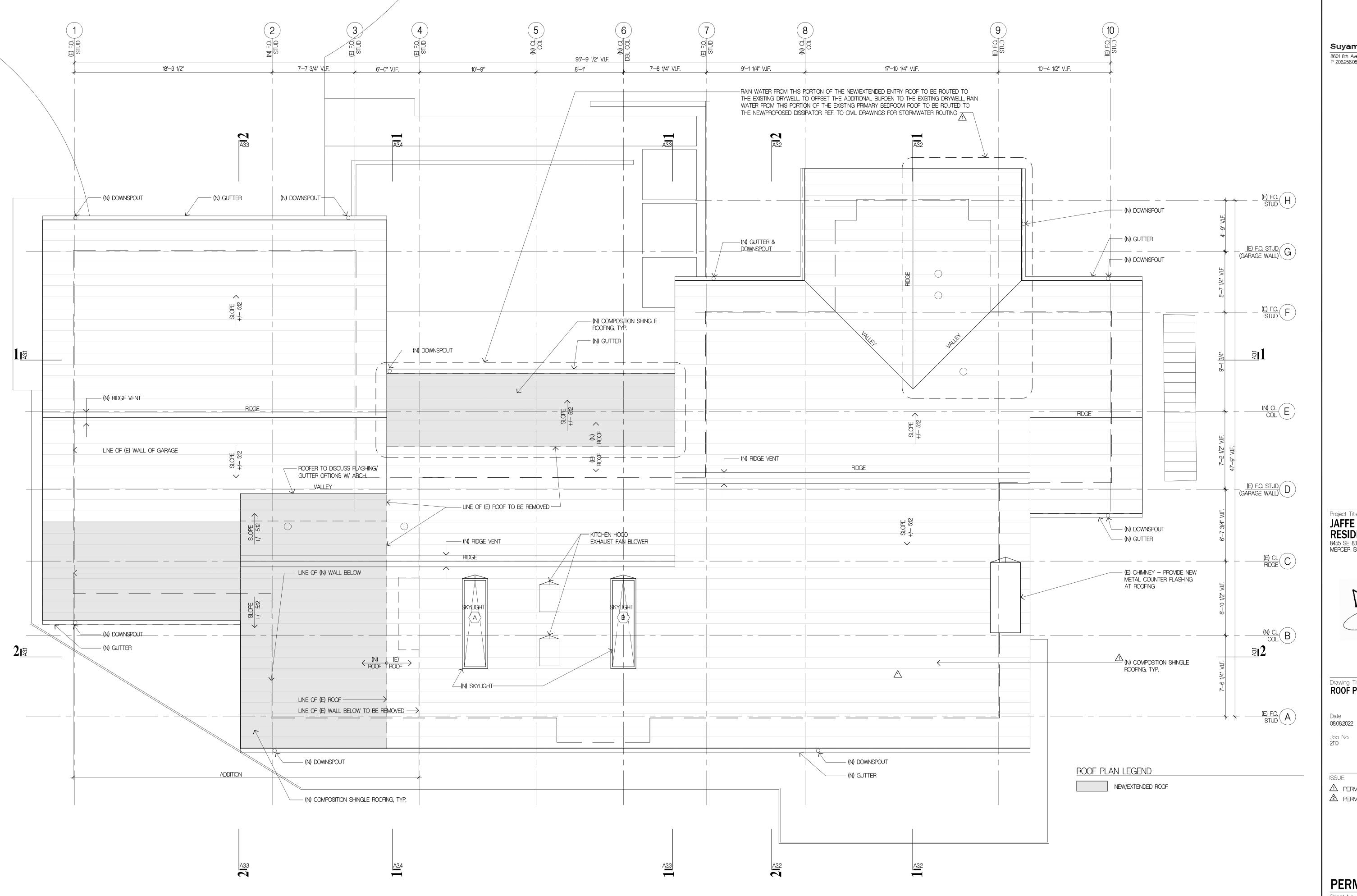
PERMIT CORRECTIONS

A1.1



Suyama Peterson Deguchi

△ PERMIT CORRECTIONS #2 05/31/2023



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

Project Title

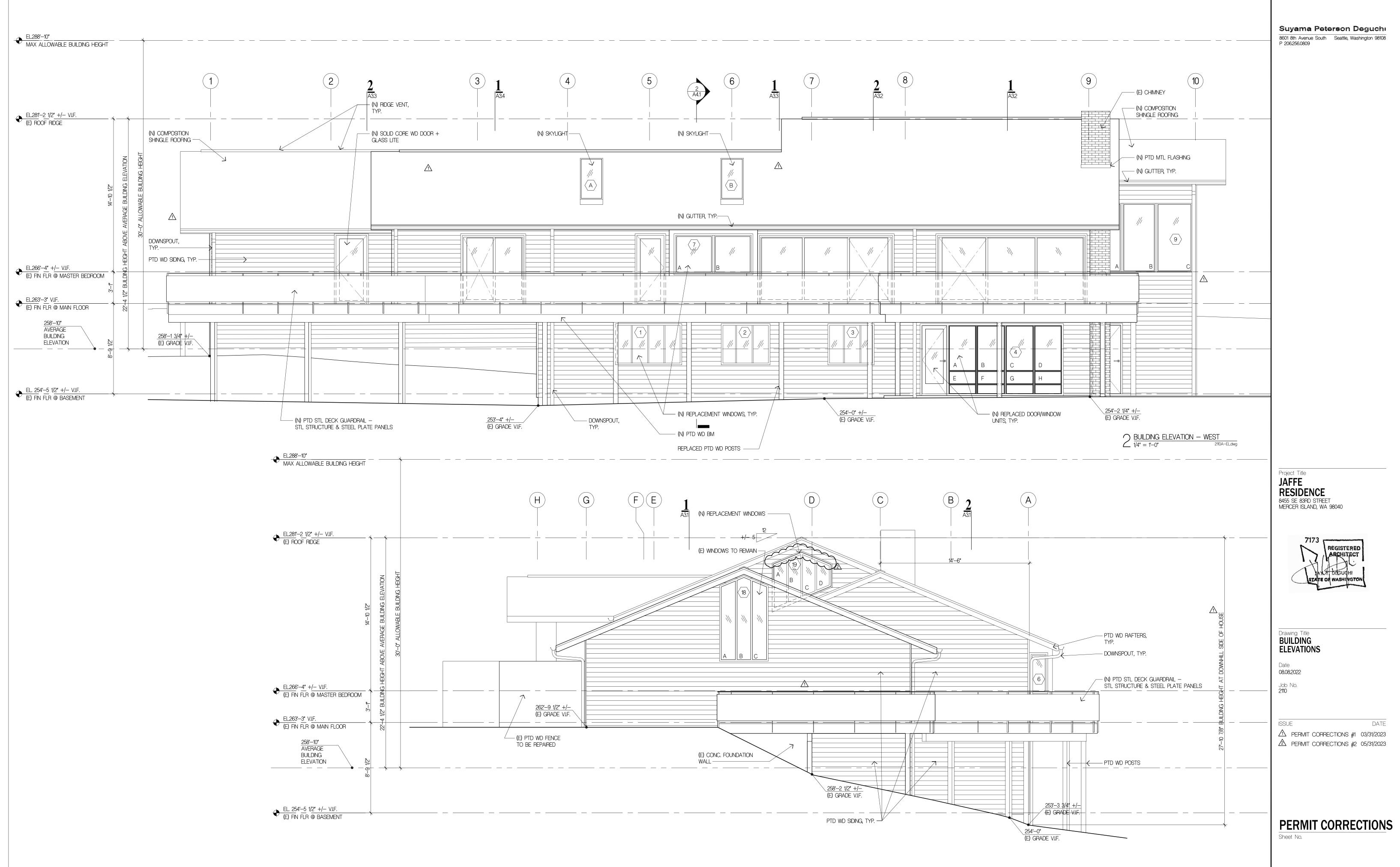
JAFFE
RESIDENCE

8455 SE 83RD STREET
MERCER ISLAND, WA 98040



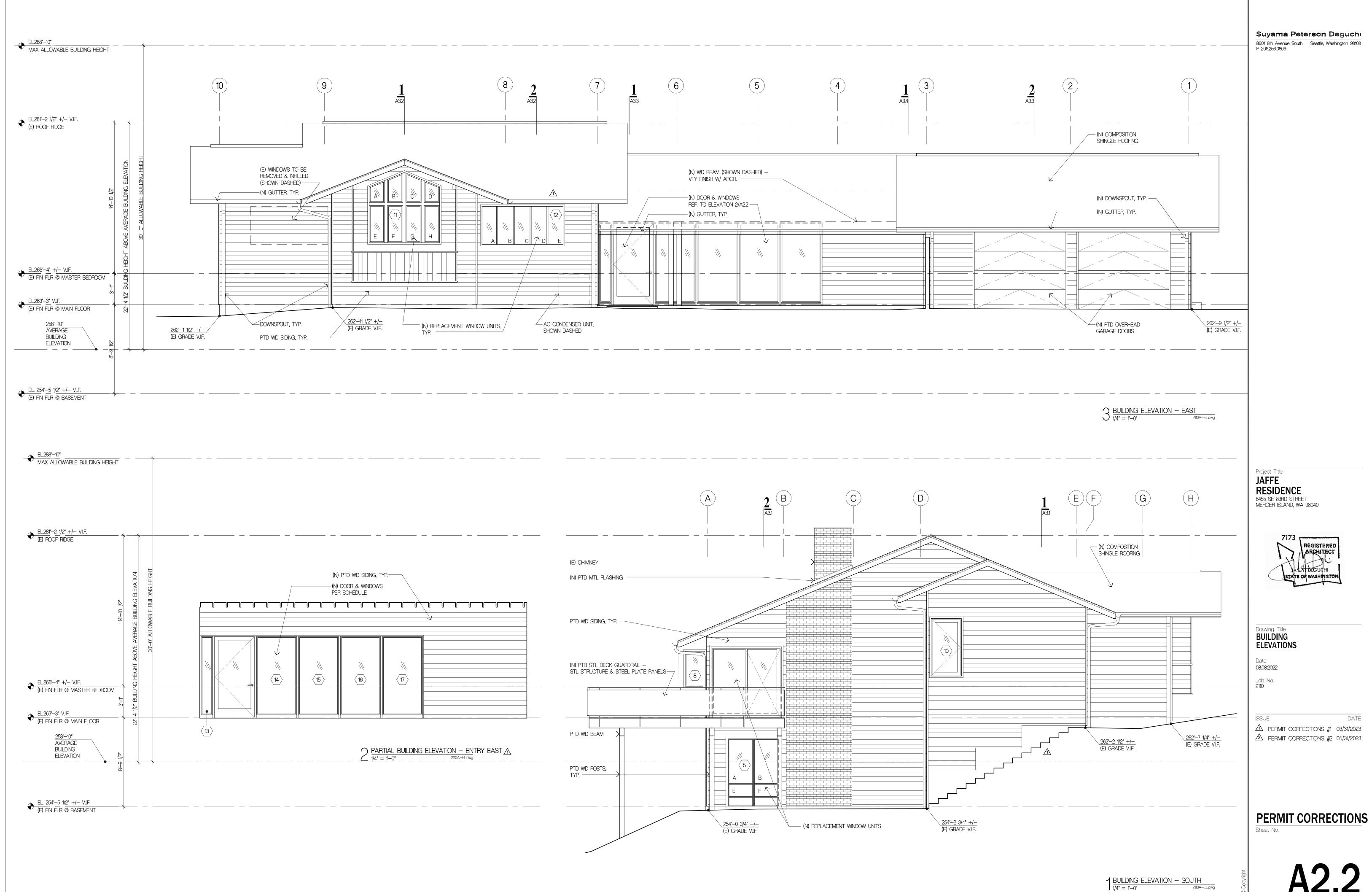
Drawing Title ROOF PLAN

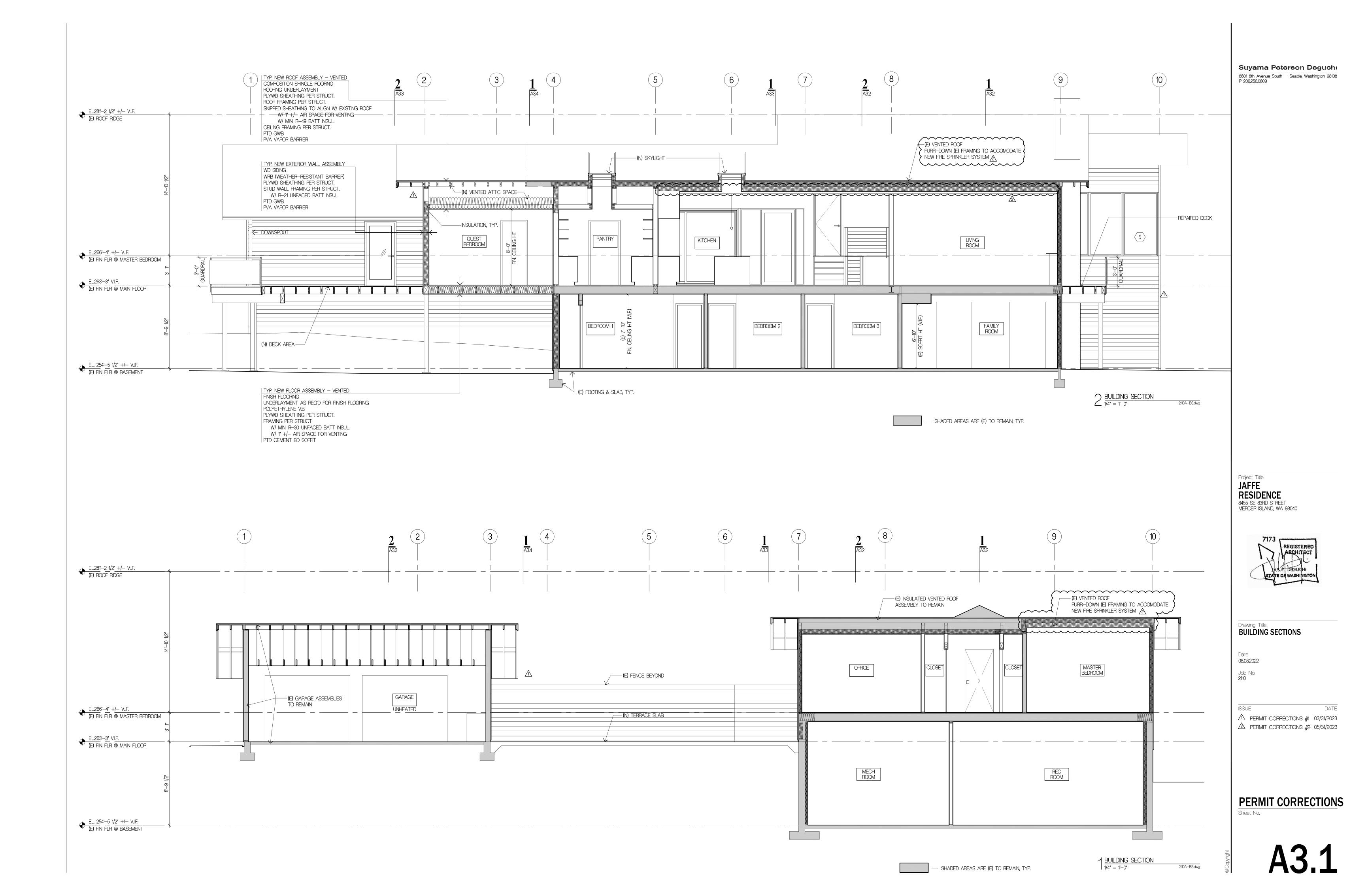
A PERMIT CORRECTIONS #1 03/31/2023 



A2.1

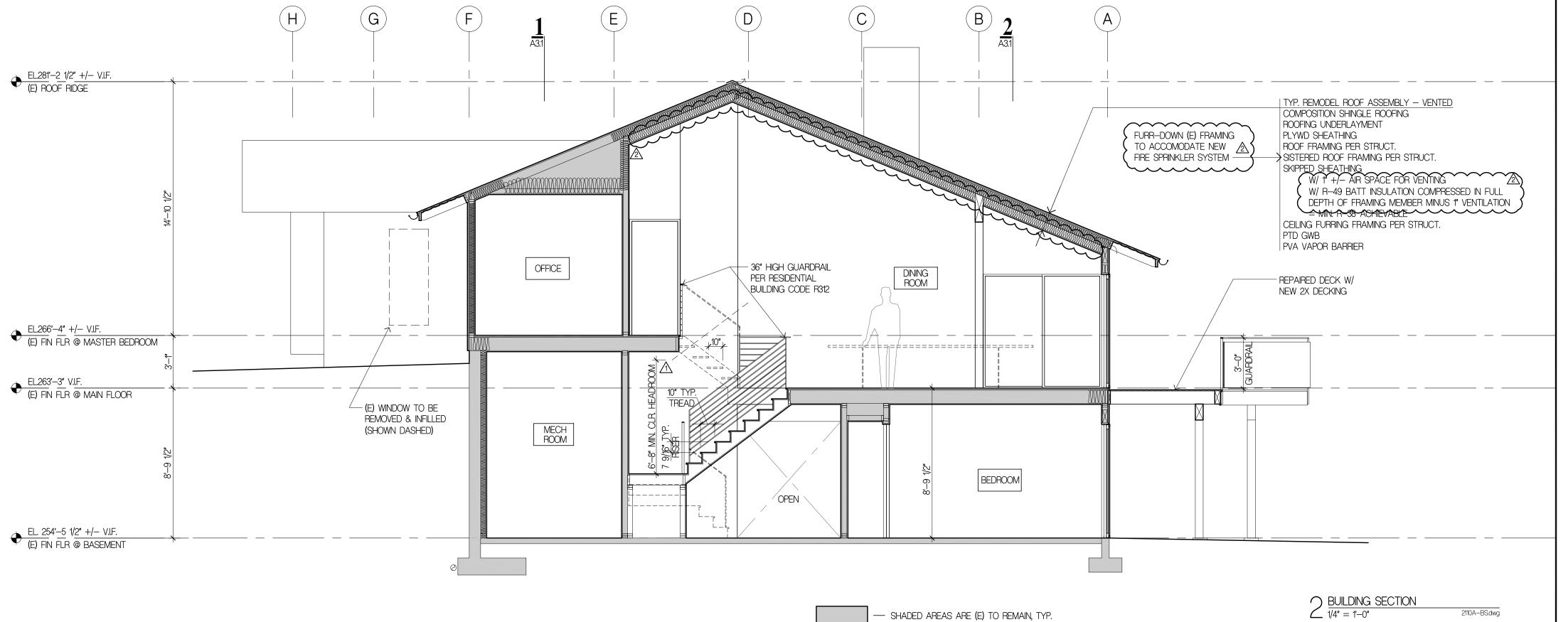
1 BUILDING ELEVATION — NORTH
1/4" = 1'-0" 2110A-ELdwg

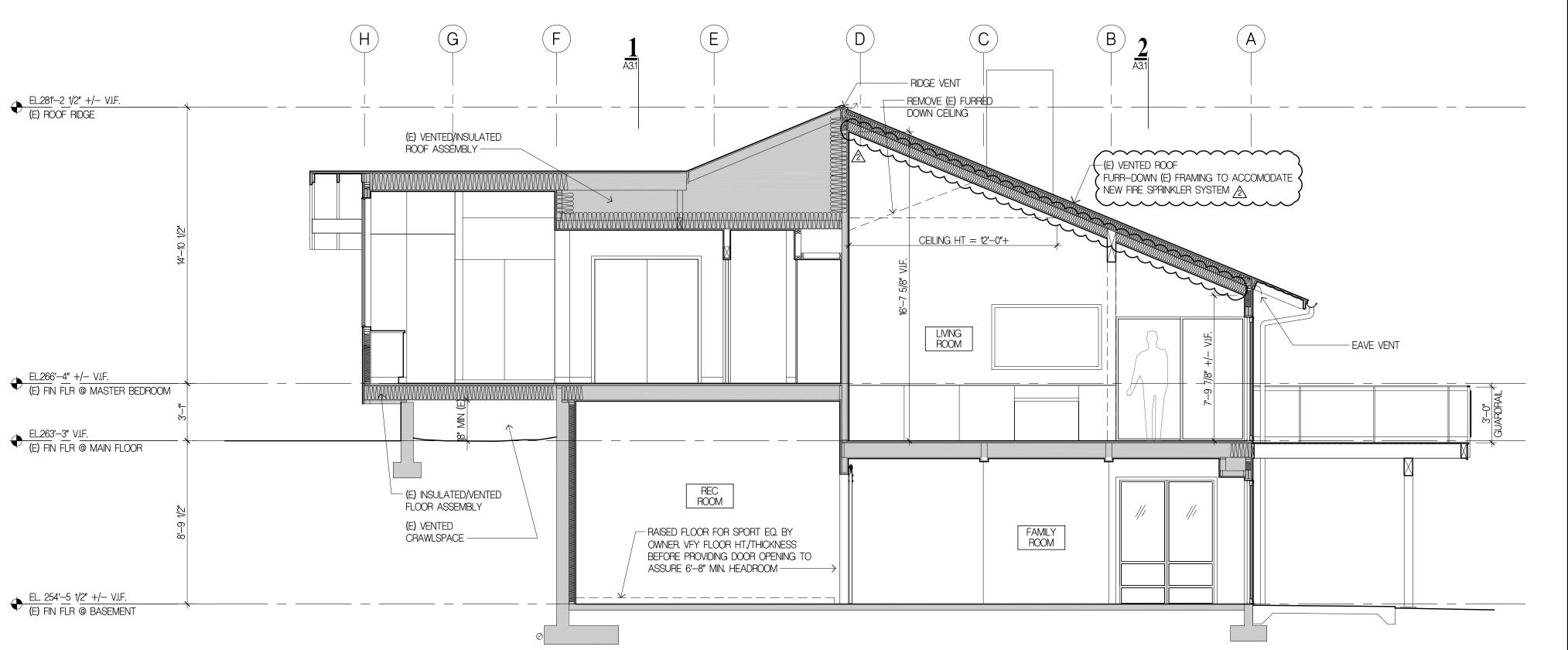




Suyama Peterson Deguchi

8601 8th Avenue South Seattle, Washington 98108
P 206256.0809

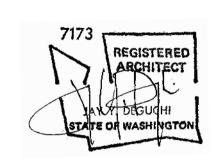




— SHADED AREAS ARE (E) TO REMAIN, TYP.

Project Title

JAFFE
RESIDENCE
8455 SE 83RD STREET
MERCER ISLAND, WA 98040



#### Drawing Title BUILDING SECTIONS

Date 08.08.2022

Job No. **2110** 

1 BUILDING SECTION 1/4" = 1'-0"

DATE

A PERMIT CORRECTIONS #1 03/31/2023

PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

**A3.2** 

Suyama Peterson Deguchi

9601 8th Avenue South Seattle, Washington 98108
P 2062560809

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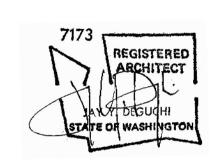
Project Title

JAFFE

RESIDENCE

8455 SE 83RD STREET

MERCER ISLAND, WA 98040



#### Drawing Title BUILDING SECTIONS

Date 08.08.2022 Job No. 2110

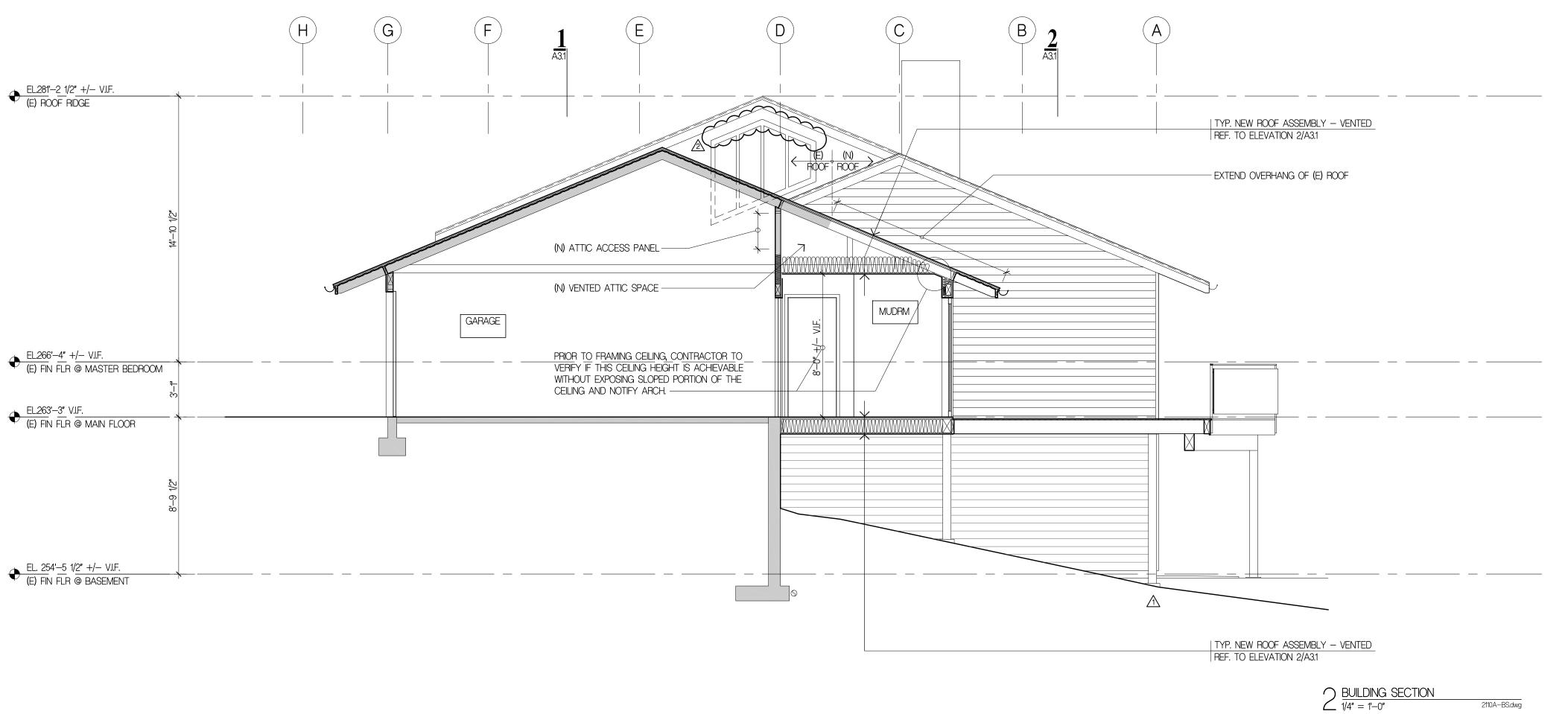
 $\begin{array}{l}
1 & \text{BUILDING SECTION} \\
1/4" = 1'-0"
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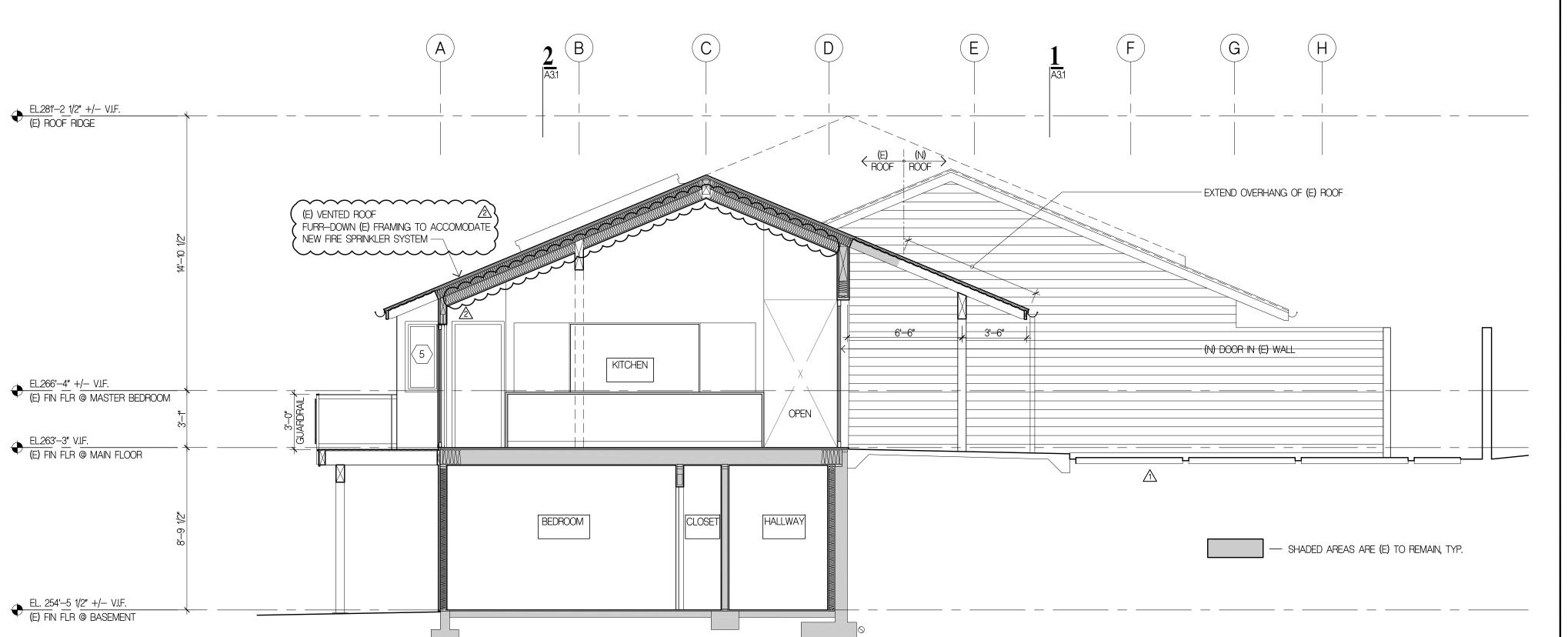
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⚠ PERMIT CORRECTIONS #1 03/31/2023
 ⚠ PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

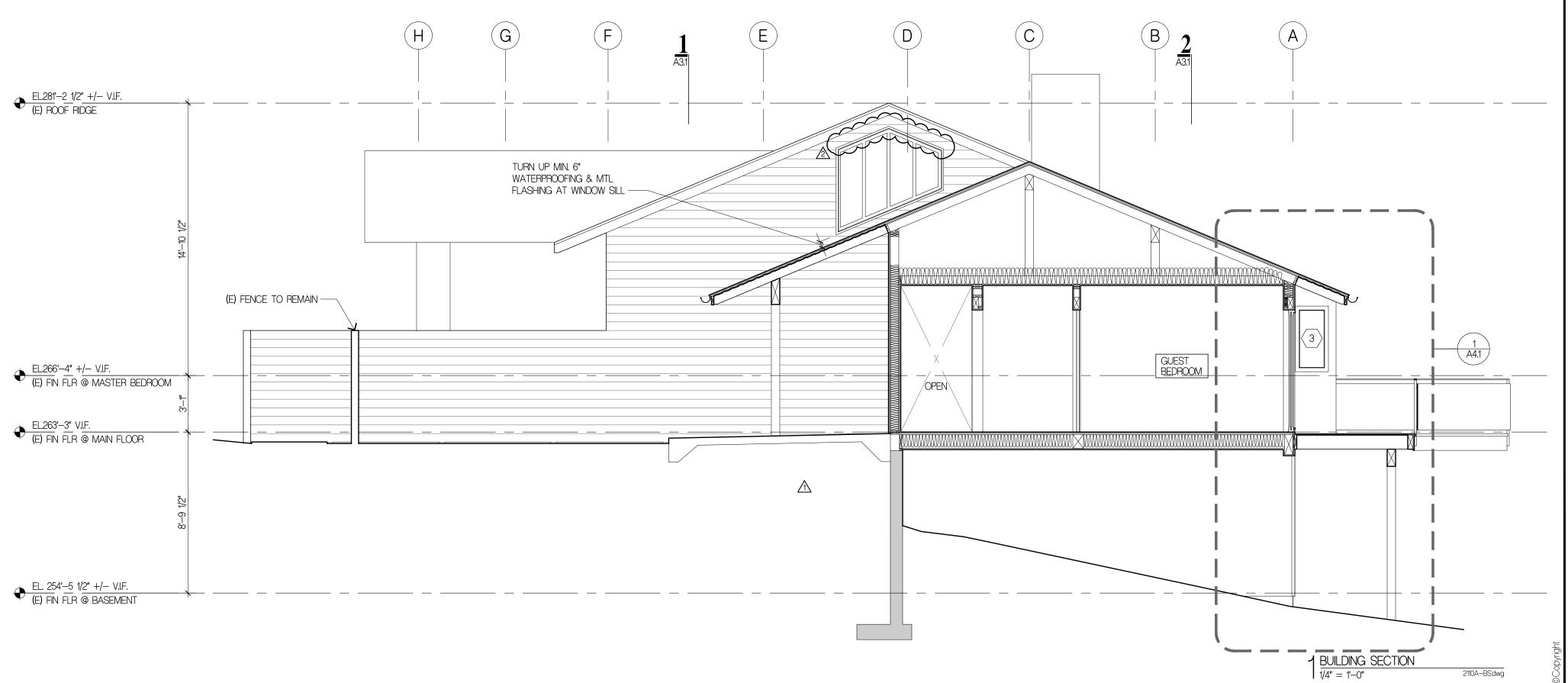
A3.3





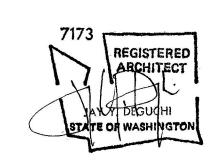
WINDOW & DOOR SCHEDULE		OPAQUE DOOR SCHEDULE  I.D. IMANUE. IDESCRIPTION	THIVAL I DEFEDENCE FOR THE OFFICE TO BE TO HEIGHT I ADEA I THAT I OPEN I DEPART TO THE OPEN I DEMARKS.
\		I.D. MANUF. DESCRIPTION	U-VAL. REFERENCE FOR R.O. WIDTH R.O. HEIGHT AREA UXA ORIEN- OPERATION DOOR FRAME REMARKS U-FACTOR FT IN FT IN SF TATION MATERIAL MATERIAL
2018 WSEC ENERGY COMPLIANCE METHOD:	CHAPTER 4 PRESCRIPTIVE REQUIREMENTS APPROACH	BASEMENT	
	CLIMATE ZONE 4C (KING COUNTY)	<u>/1\</u> 102.1	- 2 8 6 8 1/4 17.8 SWING WOOD WOOD INSTALL SALVAGED DOOR FROM (E) REMOVED DOOR IF POSSIBLE
	UNLIMITED GLAZING AREA (REFER TO TABLE 402.1.1 FOR MINIMUM PRESCRIPTIVE U-FACTORS)	103.1	- SWING WOOD WOOD INSTALL SALVAGED DOOR FROM (E) REMOVED DOOR IF POSSIBLE
		108.1	- BARN WOOD WOOD (2) PANELS
WINDOW SCHEDULE		108.2	-         2         8         6         8         1/4         17.8         SWING         WOOD         WOOD         INSTALL SALVAGED DOOR FROM (E) REMOVED DOOR IF POSSIBLE           -         6         2         6         8         1/4         41.2         BARN         WOOD         WOOD         (2) PANELS           0.60         2         10         6         8         1/4         11.4         SWING         WOOD         WOOD
I.D. MANUF. DESCRIPTION	U-VAL.   REFERENCE FOR  R.O. WIDTH  R.O. HEIGHT   AREA   UXA   ORIEN-   OPERATION   FRAME   SAFETY   REMARKS	MAIN FLOOR	
	U-VAL. REFERENCE FOR R.O. WIDTH R.O. HEIGHT AREA UXA ORIEN- OPERATION FRAME SAFETY REMARKS U-FACTOR <sup>3</sup> FT. IN. FT. IN. SF TATION MATERIAL GLASS	201.1	0.60   3 2   6 8 1/4   21.2   12.7   SWING   WOOD   WOOD   20 MIN. FIRE-RATING WITH GASKET & SELF-CLOSING HARDWARE. 1   18.9   SWING   WOOD
BASEMENT		201.2	- 2 10 6 8 1/4 18.9 SWNG WOOD WOOD
1	0.30 0.30 6 3 1/2 4 2 26.2 7.9 W FIXED ALUMINUM	202.1	0.60
2	0.30 4 8 1/4 4 2 19.5 5.9 W FIXED ALUMINUM	203.1	-   2 8  6 8 1/4   17.8   SWING   WOOD   WOOD   -   3 2   6 8 1/4   21.2   POCKET   WOOD   WOOD
3	0.30 4 8 1/2 4 2 19.6 5.9 W FIXED ALUMINUM	204.1	-   3 2 6 8 1/4 21.2   POCKET WOOD WOOD   WOOD   -   2 8 6 8 1/4   17.8   SWING WOOD WOOD
4	0.30   13 7 1/2 6 8 3/8   91.3   27.4 W   FIXED   ALUMINUM   YES	210.1	-   2 8   6 8 1/4   17.8   SWING   WOOD   WOOD   WOOD
5	0.30 5 2 1/4 6 8 3/8 34.7 10.4 S FIXED ALUMINUM YES	210.1	-   2 10   6 8 1/4   18.9   SWING   WOOD   WOOD   -   2 10   6 8 1/4   18.9   SWING   WOOD   WOOD
MAIN FLOOR		212.1	-   2 10   6 8 1/4   18.9   SWING   WOOD   WOOD   -   3 2   6 8 1/4   21.2   POCKET   WOOD   WOOD
6	0.30 21 1 61/2 3 8 3/4/1 5.7 1.7 N FIXED ALUMINUM	212.2	-   3 2   6 8 1/4   21.2   POCKET   WOOD   WOOD   -   6 2   6 8 1/4   41.2   BI-PASS   WOOD   WOOD
7	0.30 7 5 3/4 3 8 3/4 27.9 8.4 W FIXED ALUMINUM	212.2	- 2 10 6 8 1/4 18.9 SWING WOOD WOOD - 2 10 6 8 1/4 18.9 SWING WOOD WOOD - 3 2 6 8 1/4 21.2 POCKET WOOD WOOD - 6 2 6 8 1/4 41.2 BI-PASS WOOD WOOD - 6 2 6 8 1/4 41.2 BI-PASS WOOD WOOD - 7 3 2 6 8 1/4 21.2 POCKET WOOD WOOD - 8 1 3 2 6 8 1/4 21.2 POCKET WOOD WOOD - 9 1 3/4 7 3/8 64.3 SECTIONAL WOOD MTL GARAGE DOOR - 9 1 3/4 7 3/8 64.3 SECTIONAL WOOD MTL GARAGE DOOR
8	0.30 1 6 1/2 3 8 3/4 5.7 1.7 S FIXED ALUMINUM	213.1	-   3 2   6 8 1/4   21.2   POCKET   WOOD   WOOD
9	0.30 9 9 1/4 6 8 3/8 65.4 19.6 W FIXED ALUMINUM YES	214.1	- 2 6 6 8 1/4 16.7 POCKET WOOD WOOD
10	0.30 3 1 1/2 5 10 3/8 18.3 5.5 S CASEMENT ALUMINUM YES		- 9 1 3/4 7 3/8 64.3 SECTIONAL WOOD MTL GARAGE DOOR
11	0.30 7 1 1/2 6 5 45.7 13.7 E FIXED ALUMINUM *R.O. HEIGHT VARIES, GIVEN NUMBER IS AVER	RAGE 216.2	- 9 1 3/4 7 3/8 64.3 SECTIONAL WOOD MTL GARAGE DOOR
12	0.30 8 2 1/4 4 3 34.8 10.4 E FIXED ALUMINUM	210.2	5 1 0/4 1 0/0 04.0 GEOTHORNE WOOD WITE GALVAGE BOOK
13	0.30		- OPAQUE DOOR SUBTOTAL 40.1 24.1
15			entace bosh of the land of the
15	0.30		OPAQUE DOOR SUBTOTAL 40.11 24.11 SEE OPAQUE DOOR SCHEDULE
16			OPAQUE DOOR SUBTOTAL 40.1 24.1 SEE OPAQUE DOOR SCHEDULE GLAZED DOOR SUBTOTAL 348.2 104.5 SEE GLAZED DOOR SCHEDULE
17   18 (E) TO REMAIN	0.30 4 0 8 3/8 32.1 9.6 E FIXED ALUMINUM YES (E) GARAGE WINDOWS TO REMAIN AS-IS		WINDOW SUBTOTAL 560.0 168.0 SEE WINDOW SCHEDULE
18 (E) TO REIVIAIN	(-)	DACE	WINDOW SUBTOTAL 560.0 168.0 SEE WINDOW SCHEDULE SKYLIGHT SUBTOTAL 41.2 12.4 SEE SKYLIGHT SCHEDULE
19	0.30   5 10  4 7 3/8   26.9   8.1 N   FIXED   ALUMINUM   * R.O. HEIGHT VARIES, GIVEN NUMBER IS AVER	MAGE	FENESTRATION TOTAL 989.5 296.5
	0.30 WINDOW SUBTOTAL 560.0 168.0		AREA-WEIGHTED U-FACTOR 0.2997 ≤ 0.30 MAXIMUM ALLOWED FENESTRATION U-FACTOR  PER 2018 WSEC TABLE 402.1.1
GLAZED DOOR SCHEDULE		SKYLIGHT SCHEDULE	
I.D. MANUF. DESCRIPTION	U-VAL. REFERENCE FOR R.O. WIDTH R.O. HEIGHT AREA UXA ORIEN- OPERATION DOOR FRAME SAFETY SCREEN REMARKS U-FACTOR <sup>3</sup> FT IN FT IN SF TATION MATERIAL MATERIAL GLASS	I.D. MANUF. DESCRIPTION	U-VAL. REFERENCE FOR R.O. WIDTH R.O. HEIGHT AREA UXA ORIEN- OPERATION FRAME SAFETY REMARKS
	U-FACTOR <sup>3</sup> FT IN FT IN SF TATION MATERIAL MATERIAL GLASS	INANOF. DESCRIPTION	
BASEMENT		Λ Δ	U-FACTOR3         FT. IN.         FT. IN.         SF         TATION         MATERIAL         GLASS           0.60         2 2 1/2         9 4         20.6         12.4         W         FIXED         ALUMINUM         YES
107.1	0.30     2 7 5/8   6 8 3/8   17.7   5.3 W   SWING   ALUMINUM   YES		0.60   2 2 1/2   9 4   20.6   12.4   W   FIXED   ALUMINUM   YES
MAIN FLOOR			0.00   2 2 1/2   9 4   20:0   12:4   W   11/LD   ALDIVINOVI   1E0
201.3	0.30         3         2         6         8         3/8         21.2         6.4         W         SWING         ALUMINUM ALUMINUM YES         YES           0.30         6         2         6         8         3/8         41.3         12.4         W         XXO SLIDER         ALUMINUM ALUMINUM YES         YES		0.60 SKYLIGHT SUBTOTAL 20.6 12.4
203.2	0.30 6 2 6 8 3/8 41.3 12.4 W XXO SLIDER ALUMINUM ALUMINUM YES YES		ON THE PROPERTY OF THE PROPERT
206.1	0.30 4 0 8 3/8 32.1 9.6 E SWNG ALUMINUM ALUMINUM YES		
207.1	0.30   2 10 6 8 3/8   19.0 5.7 W   SWING   ALUMINUM   ALUMINUM   YES	WINDOW/DOOR/SKYLIGHT NOTES:	1. WINDOWS ARE REFERENCED ON EXTERIOR ELEVATIONS. DOORS ARE REFERENCED ON FLOOR PLANS. SKYLIGHTS ARE REFERENCED ON ROOF PLAN.
207.2	0.30 14 0 6 8 3/8 93.8 28.1 W XXO SLIDER ALUMINUM ALUMINUM YES YES	231,3331,311.131.231	2. REFER TO EXTERIOR ELEVATIONS AND FLOOR PLANS FOR MULLION LAYOUTS.
208.1	0.30		3. PER TABLE R303.1.3(5), ALL WINDOWS AND GLAZED DOORS TO HAVE A MINIMUM OF DOUBLE-PANED UNITS
208.2	0.30     7 1/4   6 8 3/8   47.0   14.1   S   XXO SLIDER   ALUMINUM   YES   YES		WITH Low-eB (EMISSIVITY) of 0.15 to 0.08/ ANY SPACER/ ARGON TO ACHIEVE DEFAULT WEIGHTED U-FACTOR OF 0.30.
			4. MINIMUM PRESCRIPTIVE U-FACTORS PER 2018 WSEC TABLE 402.1.1. & ENERGY CODE NOTES ON SHEET TS-1
	0.30 GLAZED DOOR SUBTOTAL 348.2 104.5		5. ALL WINDOWS WITHIN A 2-FOOT ARC OF A DOOR AND 60" OR LESS ABOVE FLOOR MUST HAVE TEMPERED GLASS.
			6. ALL WINDOWS 18" OR LESS ABOVE FLOOR MUST HAVE TEMPERED GLASS.
			7. CONTRACTOR TO VERIFY ALL R.O.'S AFTER FRAMING IS COMPLETE AND PRIOR TO ORDERING DOORS AND WINDOWS.
			7. CONTRACTOR TO VERIFY ALL R.O.'S AFTER FRAMING IS COMPLETE AND PRIOR TO ORDERING DOORS AND WINDOWS.  8. R.O.'S FOR REPLACEMENT WINDOWS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AFTER FRAMING IS COMPLETE AND PRIOR TO ORDERING DOORS AND WINDOWS.

WINDOW & DOOR SCHEDULE
NTS 2110A-BS.dwg



Project Title

JAFFE
RESIDENCE
8455 SE 83RD STREET
MERCER ISLAND, WA 98040



Drawing Title
BUILDING SECTION &
WINDOW & DOOR SCHEDULE

Date 08.08.2022

Job No. **2110** 

 ISSUE
 DATE

 ⚠
 PERMIT CORRECTIONS #1 03/31/2023

 ⚠
 PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS
Sheet No.

**A3.4** 

WALL SECTION @ (N) GUEST BEDRM A 2t10A-WS.dwg

#### GENERAL STRUCTURAL NOTES

#### CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL

2. DESIGN LOADING CRITERIA:

STRUCTURAL DRAWINGS.

BUILDING CODE (2018 EDITION).

EARTHQUAKE . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

Cs=0.181, SDC D, Ie=1.0, R=6.5

LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, Vs = 15.5 KIPS SITE CLASS=D, Ss=1.467, Sds=1.174, S1=0.505, SD1=0.572,

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

#### STRUCTURAL STEEL

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

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

#### QUALITY ASSURANCE

11.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.

STRUCTURAL STEEL FABRICATION AND ERECTION PER AISC 360
CONCRETE CONSTRUCTION PER TABLE 1705.3
SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY PER TABLE 1705.6
DRIVEN DEEP FOUNDATION PER TABLE 1705.7
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.

#### GEOTECHNICAL

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. ALL NEW FOOTINGS SHALL BE SUPPORTED ON PIN PILES WITH CONCRETE GRADE BEAMS EXTENDING 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)45 PCF/35 PCF
ALLOWABLE PASSIVE EART	H PRESSURE (FS OF 1.5 INCLUDED) 300 PCF
COEFFICIENT OF FRICTION	N (FS OF 1.5 INCLUDED) 0.35
SEISMIC SURCHARGE PRESS	SURE (UNIFORM LOAD) 8H PSE
2" PILE CAPACITY (COMPI	RESSION)

#### SOILS REPORT REFERENCE: GEO GROUP NORTHWEST, INC. (G-5571) DATED 7-21-22

13.PIN PILES SHOWN ON THE PLAN SHALL BE 2" DIAMETER EXTRA-STRONG (SCH 80) UNLESS OTHERWISE NOTED. THE MAXIMUM CAPACITY OF 2" PILES SHALL BE 3 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 60 SECONDS DURING CONTINUOUS DRIVING OF A 90 LB JACK HAMMER 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 PERFORMED IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS. SEE PLANS FOR OTHER SIZES AND CRITERIA.

#### RENOVATION

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

15.CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.

16.CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

#### CONCRETE

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

MEMBER TYPE	/CONSTRUCTION	STRENGTH	TEST	MAX	MAX	AIR
		F'C	AGE	AGG	W/C	CONT
		-PSI-	-DAYS-	-INCH-	RATIO	
SLABS ON GR	ADE	3000	28	1	.45	5
FOOTINGS		4000	28	1	.50	
BASEMENT WA	LLS	4000	28	1	.50	

#### MIX DESIGN NOTES:

- A. W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS. RATIOS NOT NOTED IN TABLE ABOVE ARE CONTROLLED BY STRENGTH REQUIREMENTS.
- B. CEMENTITIOUS CONTENT: THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM TO ACI 301 SEC 4.2.2.8.B. FOR CONCRETE USED IN ELEVATED FLOORS, PORTLAND CEMENT CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.1. ACCEPTANCE OF LOWER CEMENT CONTENT IS CONTINGENT ON PROVIDING SUPPORTING DATA TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.
- C. AIR CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.4. HORIZONTAL EXTERIOR SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. USE "MODERATE EXPOSURE". VERTICAL EXTERIOR SURFACES REQUIRE "MODERATE EXPOSURE". TOLERANCE IS +/- 1.5 PERCENT. AIR CONTENT SHALL BE MEASURED AT POINT OF PLACEMENT.
- D. SLUMP SHALL CONFORM TO ACI 301 SEC 4.2.2.2. SLUMP SHALL BE DETERMINED AT THE POINT OF PLACEMENT.
  E. CHLORIDE CONTENT SHALL CONFORM TO ACI 301 SEC 4.2.2.6 AND TABLE 4.2.2.6 FOR "OTHER REINFORCED CONCRETE CONSTRUCTION".

- 18.A CONCRETE PERFORMANCE MIX SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318-14, SECTIONS 26.4.3 AND 26.4.4. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.
- 19.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.
- 20. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI.
- 21. 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.

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

FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2"

#### ANCHORAGE

23. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT 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, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.

24. 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 EMBEDDED 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.

25. 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 FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

#### STEEL

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

- A. AISC 360-16 AND SECTION 2205.2 OF THE INTERNATIONAL BUILDING CODE.

  B. JUNE 15, 2016 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AMENDED AS FOLLOWS: AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3.1.
- C. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

#### 27.STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	FY
A. WIDE FLANGE SHAPES B. OTHER SHAPES, PLATES, AND RODS C. OTHER SHAPES AND PLATES (NOTED GRADE 50 ON PLANS)	A992 A36 A572 (GRADE 50)	50 KSI 36 KSI 50 KSI
D. PIPE COLUMNS E. STRUCTURAL TUBING	A53 (E OR S, GR.B) A500 (GR.C)	35 KSI
-SQUARE OR RECTANGULAR -ROUND	21000 (02110)	50 KSI 46 KSI
-ANY SHAPE  F. CONNECTION BOLTS (3/4" ROUND, UNLESS SHOWN OTHERWIS	ASTM A1085 A325-N EE)	50 KSI

- 28. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, FY = 50 KSI. OTHER ROLLED SHAPES INCLUDING PLATES, SHALL CONFORM TO ASTM A36, FY = 36 KSI. STEEL PIPE SHALL CONFORM TO ASTM A-53, TYPE E OR S, GRADE B, FY = 35 KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, FY = 42 KSI (ROUND), FY = 46 KSI (SQUARE AND RECTANGULAR). CONNECTION BOLTS SHALL CONFORM TO ASTM A307.
- 29. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 30.ALL STEEL EXPOSED TO THE WEATHER OR IN CONTACT WITH GROUND SHALL BE CORROSION PROTECTED BY GALVANIZATION OR PROVIDED WITH EXTERIOR PAINT SYSTEM, UNLESS OTHERWISE NOTED.
- 31.SHOP PRIME ALL STEEL EXCEPT:
- A. STEEL ENCASED IN CONCRETE.
- B. SURFACES TO BE WELDED.
  C. CONTACT SURFACES AT HIGH-STRENGTH BOLTS.
- D. MEMBERS TO BE GALVANIZED.

  E. MEMBERS WHICH WILL BE CONCEALED BY INTERIOR FINISHES.
- F. SURFACES TO RECEIVE SPRAYED FIREPROOFING.
  G. SURFACES TO RECEIVE OTHER SPECIAL SHOP PRIMERS.
- 32.ALL A-325N CONNECTION BOLTS NEED ONLY BE TIGHTENED TO A SNUG TIGHT CONDITION, DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH.
- 33.ALL A-325 CONNECTION BOLTS SHALL BE APPROVED SELF LOAD INDICATING TYPES (SUCH AS BETHLEHEM LOAD INDICATOR BOLTS, LeJEUNE TENSION CONTROL BOLTS, ETC.) AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS.
- 34.ALL ANCHORS EMBEDDED IN MASONRY OR CONCRETE SHALL BE A307 HEADED BOLTS OR A36 THREADED ROD WITH AN ASTM 563 HEAVY HEX NUT TACK WELDED ON THE EMBEDDED END.
- 35.ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES F AND 40 FT LBS AT 70 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

#### WOOD

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

JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
		PROVIDE DOUGLAS-FIR NO. 1 @ EXPOSED ROOF EAVES
	(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
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
		PROVIDE SELECT STRUCTURAL OR DOUGLAS-FIR NO. 1 @ EXPOSED WD COLUMNS
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
		PROVIDE SELECT STRUCTURAL OR DOUGLAS-FIR NO. 1 @ EXPOSED WD COLUMNS
STUDS, PLAT	TES & MISC. FRAMING:	DOUGLAS FIR-LARCH NO. 2

OR HEM-FIR NO. 2

- 37.GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI. NO CAMBER AT ALL SIMPLE SPAN GLULAM BEAMS, UNLESS SHOWN OTHERWISE ON THE PLANS.
- 38.MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E WS) Fb = 2900 PSI, E = 2000 KSI, Fv = 290 PSI LVL (2.0E-2600FB WS) Fb = 2600 PSI, E = 2000 KSI, Fv = 285 PSI

Fb = 2325 PSI, E = 1550 KSI, Fv = 310 PSI

LSL (1.55E)

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

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

39.PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2.

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.

40.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.

41.PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

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

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.

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

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

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

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

44.WOOD FASTENERS

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

SIZE	LENGTH	DTAMET
8d	2-1/2"	0.131"
10d	3"	0.148"
	9	**
16d BOX	3-1/2"	0 135"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO

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.

#### 47.NOTCHES AND HOLES IN WOOD FRAMING:

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

48.WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

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

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

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

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

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

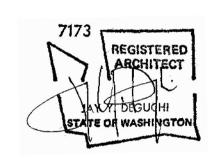
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Project Title

JAFFE
RESIDENCE

8455 SE 83RD STREET
MERCER ISLAND, WA 98040



#### Drawing Title GENERAL STRUCTURAL NOTES

Date **08.08.2022**Job No.

2110

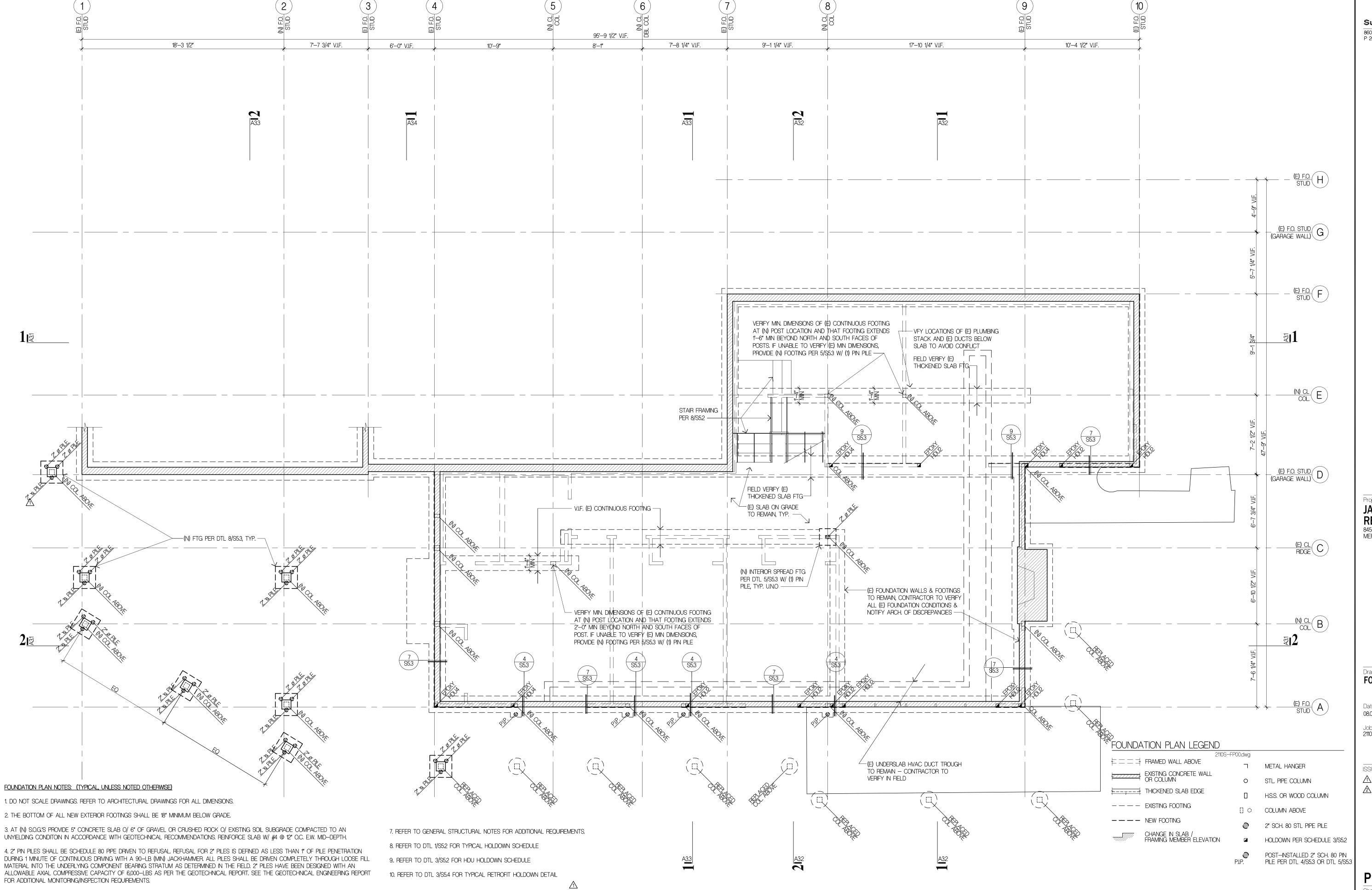
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PERMIT CORRECTIONS #1 03/31/2023

PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

**S1.0** 



5. PROVIDE EPOXY GROUTED #4 x 2'-6" DOWELS EMBEDDED A MINIMUM OF 4" INTO EXISTING CONCRETE TO MATCH NEW HORIZONTAL REINFORCING. TYPICAL WHERE NEW CONCRETE WALL OR FOOTING TERMINATES AT EXISTING CONCRETE. EPOXY GROUT PER GENERAL

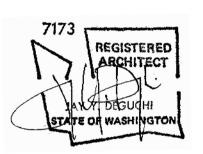
6. ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO

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Drawing Title
FOUNDATION PLAN

Date **08.08.2022** 

Job No. **2110** 

DATE

A PERMIT CORRECTIONS #1 03/31/2023

PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS

**S1.1** 

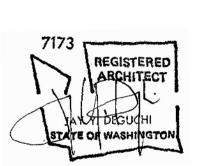
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Project Title

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FLOOR FRAMING PLAN

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Job No. **2110** 

08.08.2022

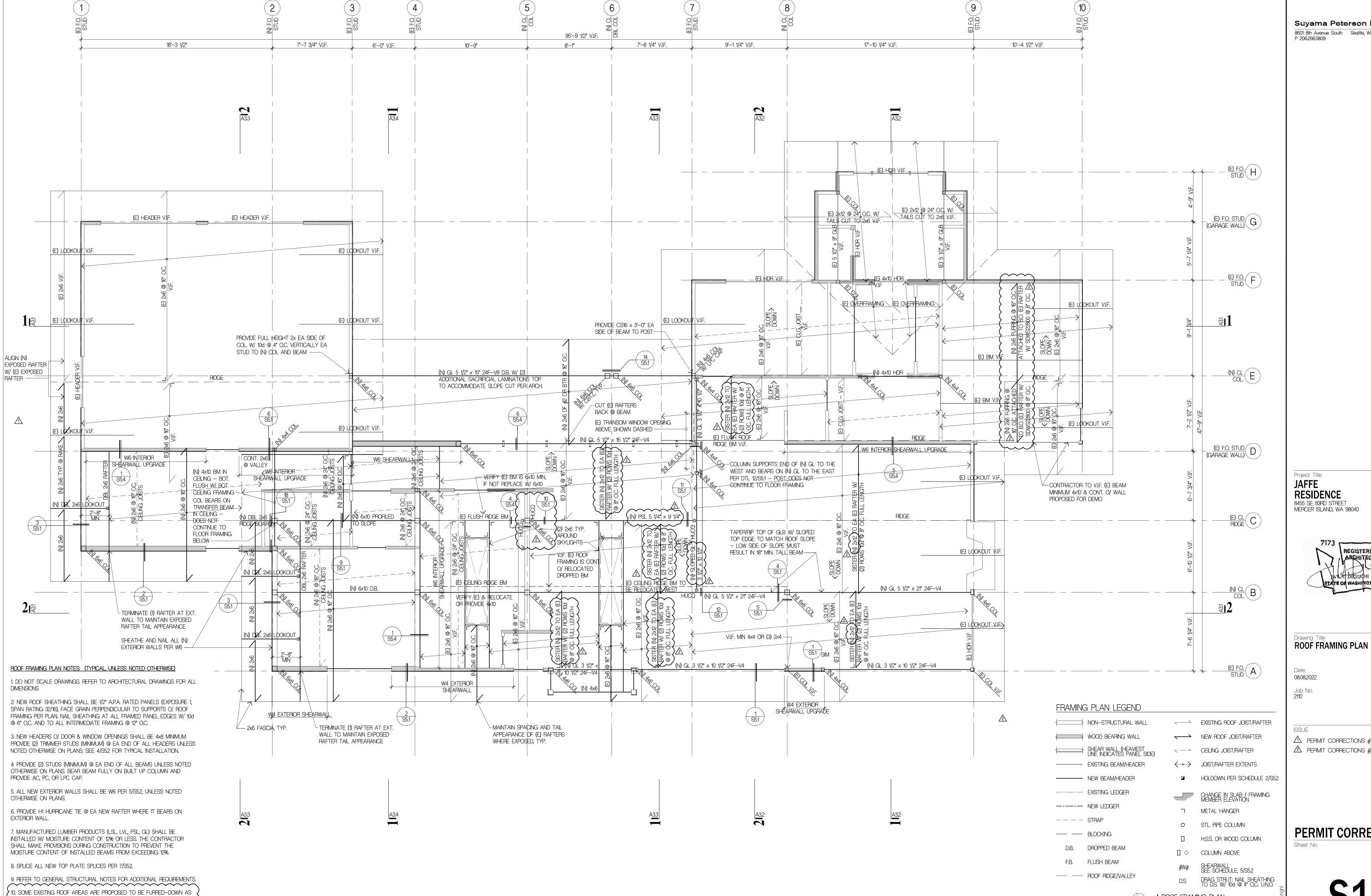
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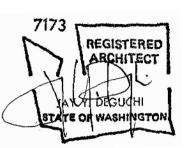
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Sheet No.

**S1.2** 

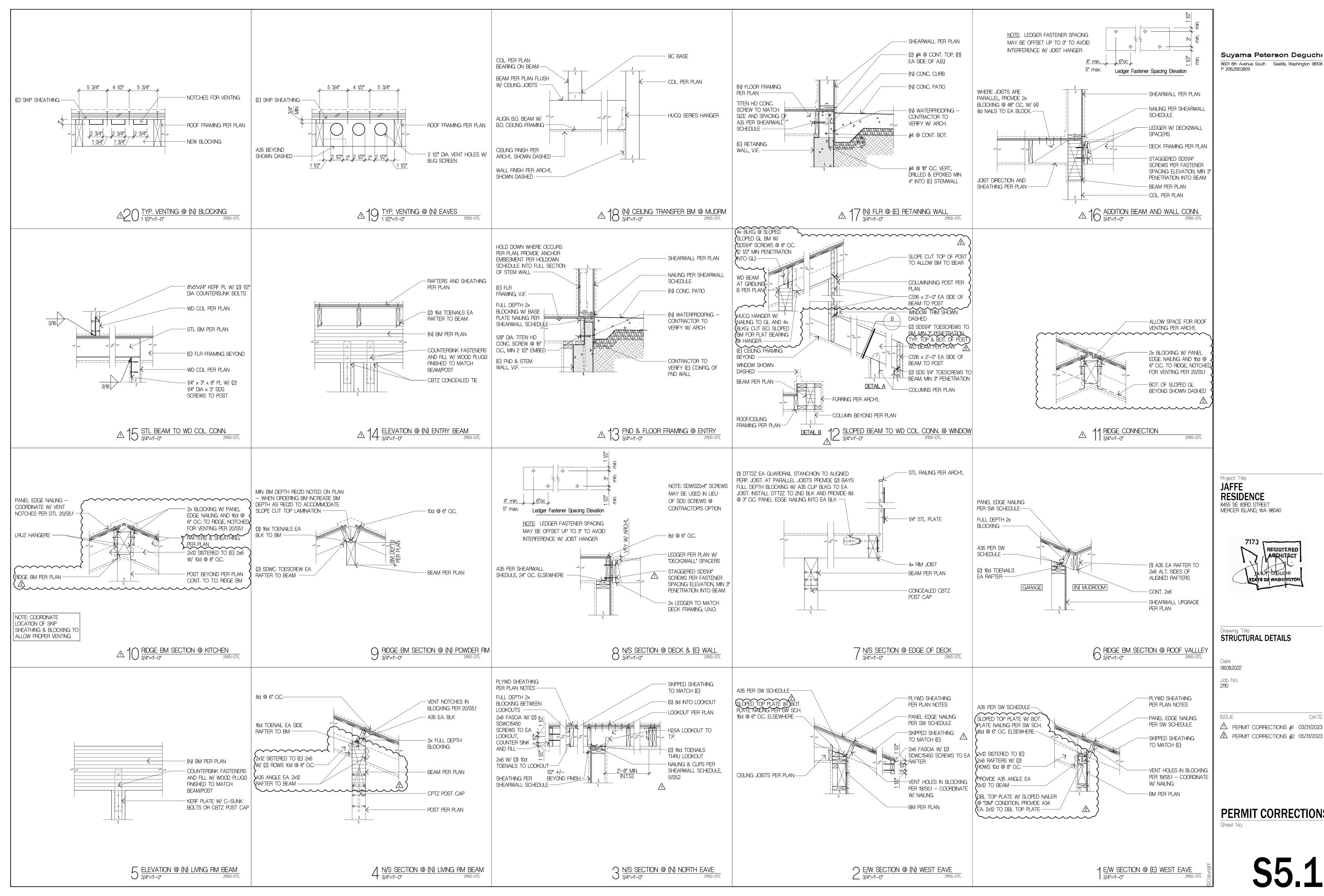


SHOWN ON THIS PLAN TO ACCOMMODATE NEW FIRE SPRINKLER SYSTEM.

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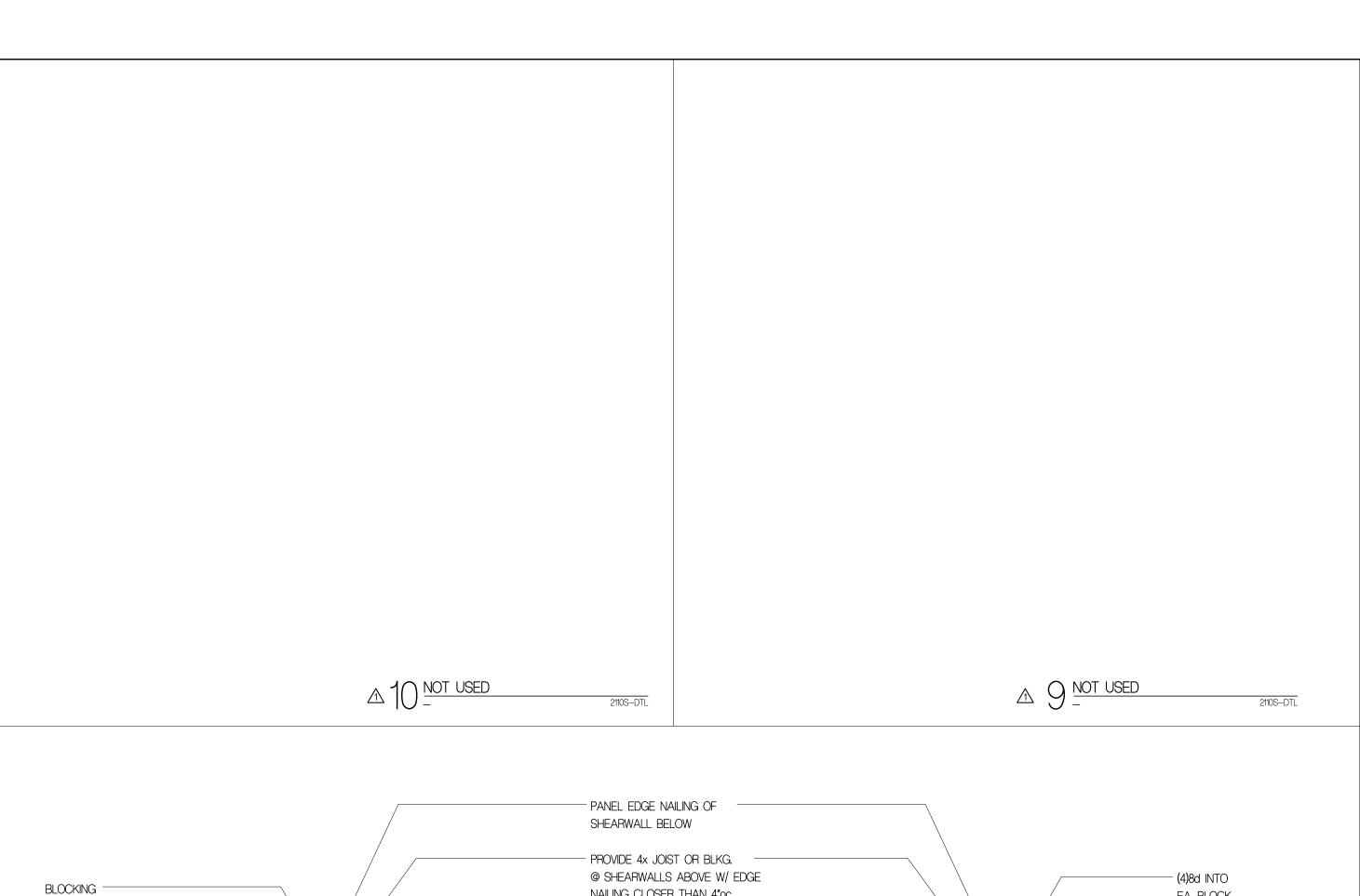


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A PERMIT CORRECTIONS #1 03/31/2023 2 PERMIT CORRECTIONS #2 05/31/2023



NAILING CLOSER THAN 4"oc

- TOP PLATE CONNECTION -

PANEL EDGE NAILING

PANEL EDGE NAILING

SHEATHING PANEL JOINT

BOTTOM PLATE CONNECTION

SEE SHEARWALL SCHEDULE FOR ALL NAILING AND

CONNECTIONS, NOT OTHERWISE NOTED

JOISTS PER PLAN

W/ A35'S

BTWN. JOISTS

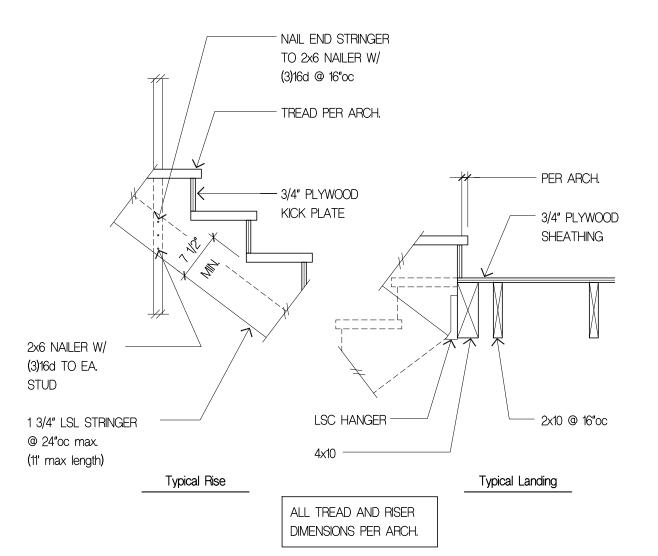
(2)16d TOE NAILS

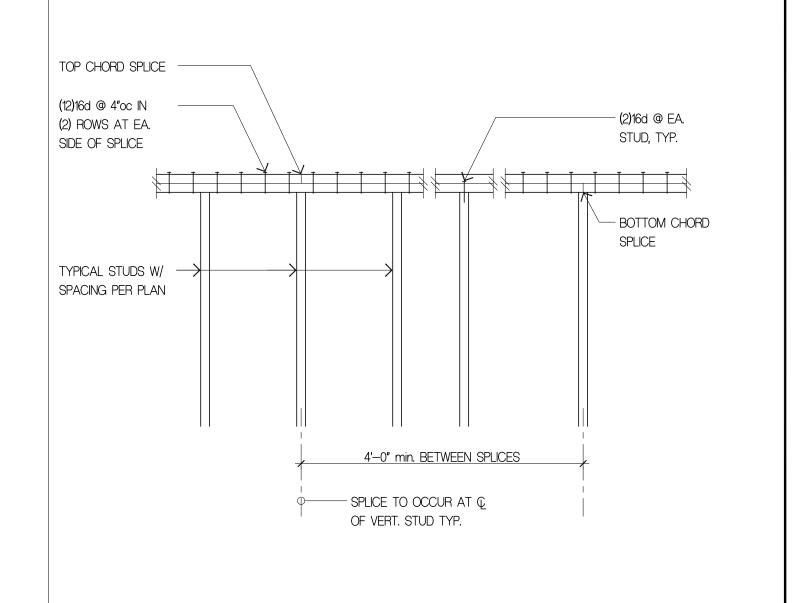
EA. JOIST

2x BLOCKING

BTWN. STUDS

Bearing Wall

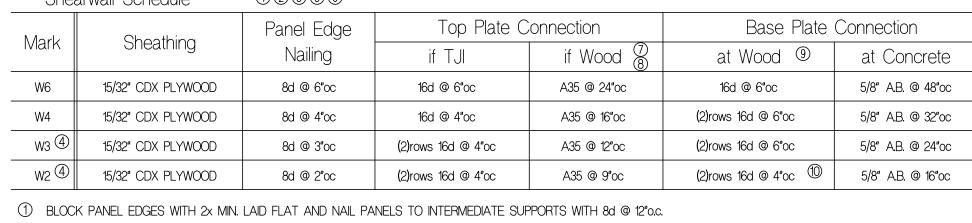




STYPICAL STAIR AND LANDING DETAIL 3/4"=1"-0" 2110S-DTL  $7 \frac{\text{TYPICAL TOP PLATE SPLICE}}{3/4"=1"-0"}$ 12356 Shearwall Schedule

PER SCHEDULE LUMBER. 2x MIN. SEE NOTES FOR 2x NAILER ADDITIONAL REQUIREMENTS EDGE OF 16d NAILING WASHER PER SCHEDULE Detail C

min



Holdown Strap Schedule

End

Length

1'-2"

2'--6"

3'-3"

#Nails Ea.

End Length

(13) 8d

(43) 10d

(1) 2×4

4x6

4x8

Plan

CS16

CMST14

CMST12

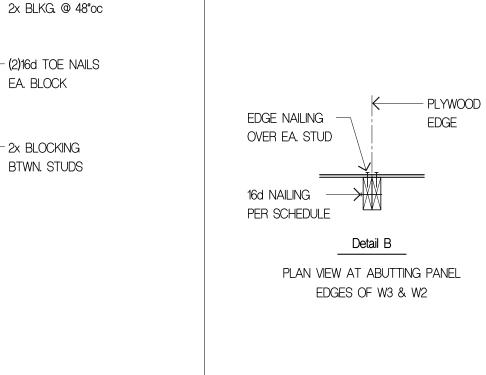
SHEARWALL

PER PLAN

ORIENTATION

PER PLAN

- ② 8d NAILS SHALL BE 0.131" $\phi$  x 2 1/2" (common) 16d NAILS SHALL BE 0.135" x 3 1/2" (box)
- ③ EMBED ANCHOR BOLTS AT LEAST 7". DRILLED AND EPOXIED THREADED ROD MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 6" EMBEDMENT. TITEN HD SCREW ANCHORS MAY BE SUBSTITUTED FOR ANCHOR BOLTS W/ 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING, SEE DETAIL C.
- ④ 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
- ⑤ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
- 6 ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
- ① LTP4's (HORIZONTAL ORIENTATION) W/ 8d COMMON MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- 9 AT MULTI-ROW NAILING, MINIMUM OFFSET BETWEEN ROWS AND ROW SPACING 1/2", SEE DETAIL D.
- PROVIDE (3) ROWS 16d @ 6"oc AT LVL RIMS.



EA. BLOCK

- (1) JOIST BAY OF

EA. BLOCK

-2x BLOCKING

BTWN. STUDS

TYPICAL SHEARWALL CONSTRUCTION
3/4"=1'-0"
2110S-DTL

Non-Bearing Wall



(1) 2x6

PANEL EDGE NAILING TO

HOLDOWN PER PLAN REFER TO SCHEDULE

HOLDOWN POST/STUDS

PLYWOOD SHEATHING

FULL WIDTH VERTICAL

TO MATCH HOLDOWN

REFER TO PLAN FOR

LOCATIONS WHERE WALL CONTINUES

TYPICAL HOLDOWN SCHEDULE
3/4°=1'-0°
2110S-DTL

GRAIN BLOCKING

STUDS/POST

PER SCHEDULE

PER SCHEDULE

PER PLAN

ALL HOLDOWN STUDS/POST

Holdown Studs/Post if 2x4if 2x6

STRUCTURAL DETAILS

Project Title

**RESIDENCE** 

8455 SE 83RD STREET MERCER ISLAND, WA 98040

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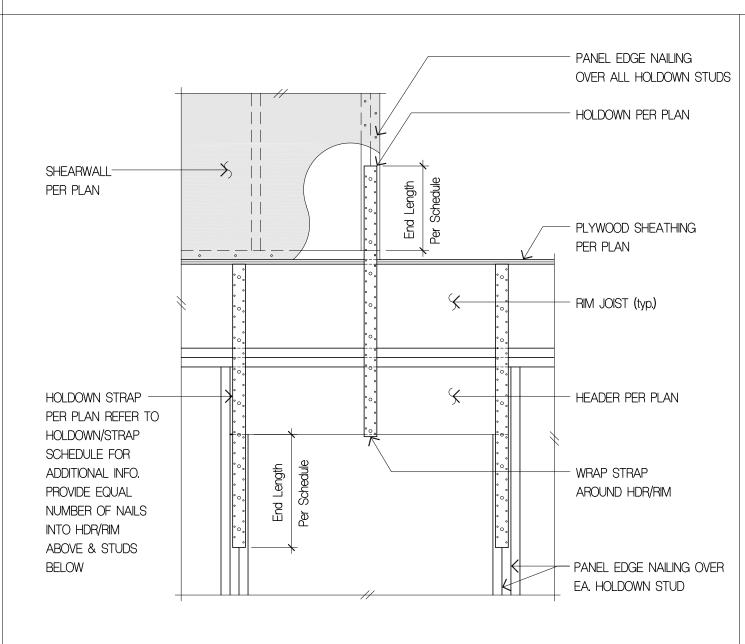
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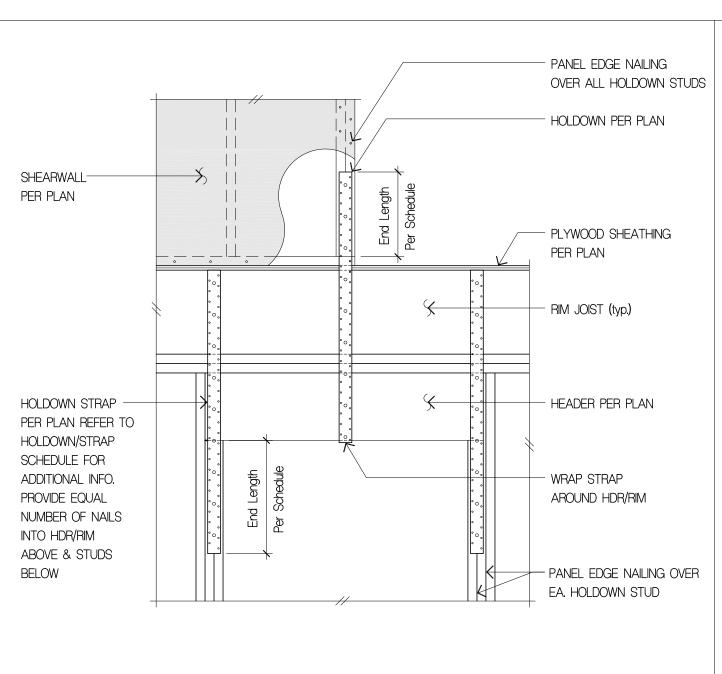
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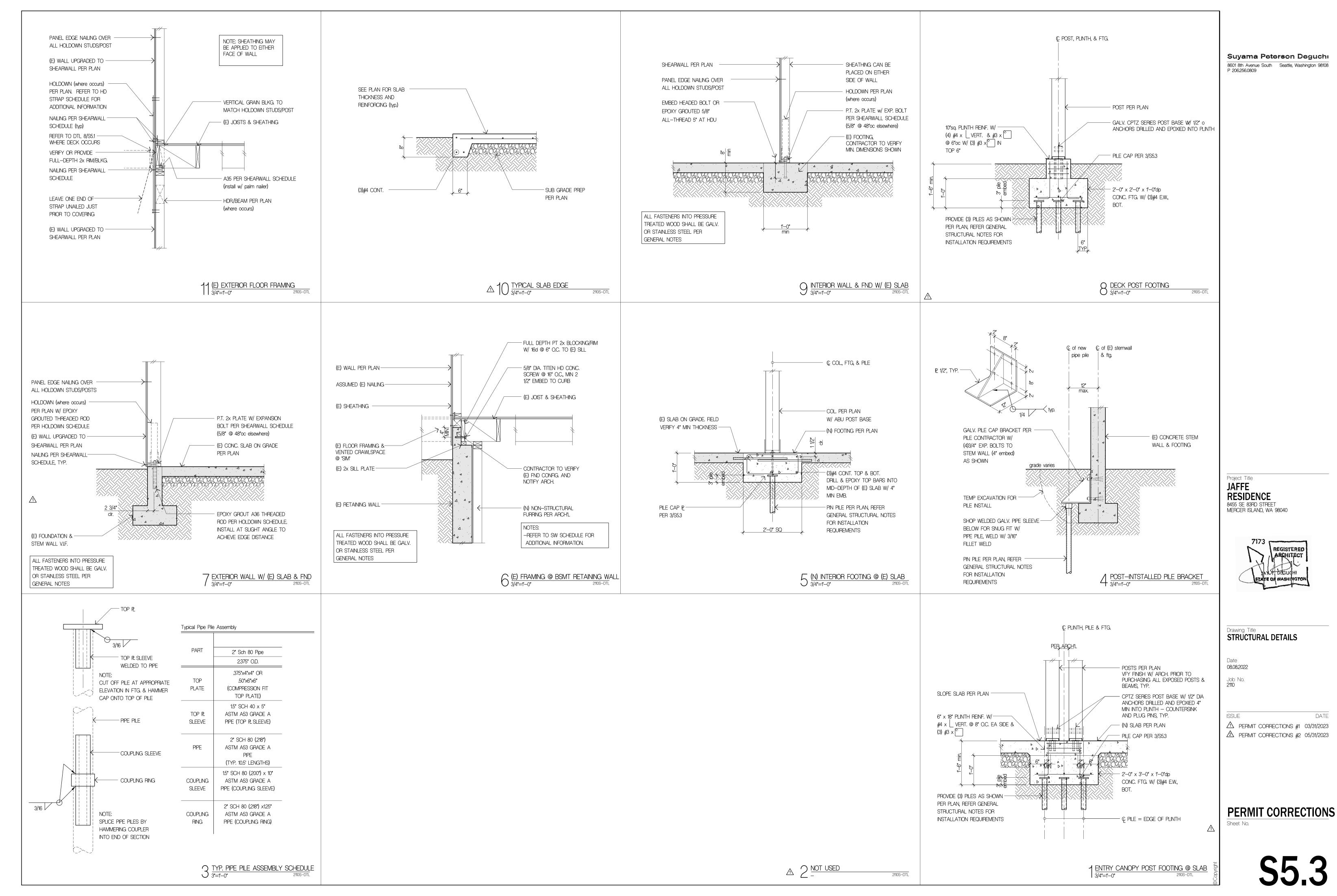
A PERMIT CORRECTIONS #1 03/31/2023 PERMIT CORRECTIONS #2 05/31/2023

PERMIT CORRECTIONS





A35 (at exterior walls only) OMIT @ HEADERS < 6'-0" (6)16d	TYP. DOUBLE TOP PLATE	HOLDOWN POST PER SCHEDULE  HDU HOLDOWN  FRAMING CONT. WHERE OCCURS  EDGE NAIL PER SW SCHEDULE  FRAMING CONT. WHERE OCCURS							
TYP. STUDS —		BEAM OR HEADER PER PLAN PROVIDE (2) BEARING	Holdown S Plan Mark	chedule Screws	Anchor Bolt	A.B. Embed	Holdowr if 2x4	n Post ① if 2x6	
		STUDS U.O.N.	HDU2-SDS2.5	(6)SDS 1/4"x2 1/2"	5/8"	12"	(2) 2x4	(2) 2x6	
			HDU4-SDS2.5	(10)SDS 1/4"x2 1/2"	5/8"	16"	4x4	4x6	
		TYPICAL HDR SUPPORT 3/4"=1"-0" 2110S-DTL		ZE OF POST AT END C FRAMING PLANS.	DF WALL UNLESS	2	TYPICAL HDI 3/4"=1'-0"	U HOLDOWN	2110S-DTL



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