CITY OF MERCER ISLAND





INSPECTION REQUESTS:

online	2:
-	MyBuildingPermit.com
ioicai	mail:

DEVELOPMENT SERVICES GROUP 611 SE 36TH STREET MERCER ISLAND, WA 98040	Z Z Z	MyBuildingPermit.co
HONE: 206.275.7605 www.mercergov.org	**************************************	a service of eCityGov
MERCEP	SHINGTO	voicemail: (206) 275-7730
Merian		(200) 273 7730
OTE: ALL RECORDS AND DRAWINGS ARE SUBJECT TO	PUBLIC DISCLOSURE AS REC	QUIRED BY RCW 42.56
CONTACT INFORMATION:		
Applicant is to complete the following information.		
Applicant Contact information <i>prior</i> to permit issuance:		ation <i>post</i> permit issuance:
Name: Amanda Anderson & Anna Urban	Name: Amanda Ande	erson & Anna Urban
Address: 118 N. 35th St, Seattle, WA 98103	Address: 118 N. 35th St	t, Seattle, WA 98103
Phone: (206) 634-0177	Phone: (206) 634-017	7
Email: annaurban@millerhayashi.com	Email: annaurban@n	nillerhayashi.com
REQUIRED SPECIAL INSPECTIONS / STRUCT	TURAL OBSERVATION	IS:
t is the Engineer of Record's responsibility to specify all required		
The owner is responsible for hiring an approved private Special II	· · ·	
nspectors (except Geotechnical) must be WABO certified.	apara a a a a a a a a a a a a a a a a a	, , , , , , , , , , , , , , , , , , , ,
When Special Inspection or Structural Observation is required, the	report shall be submitted to the	City Building Inspector prior to the City
nspection. Note: Inspection by the City Inspector is required in a	·	
pelow. Do not cover or conceal any work prior to the City inspect	tion.	
STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR)	:	
Engineer of Record: <u>Joe Dixon</u> Con	npany: Swenson Say Faget	Phone: <u>(206) 956-3753</u>
General Conformance to Construction Documents		
General comormance to construction bocaments		
SOILS / GEOTECHNICAL:		
Special Inspector: Ricky Wang Con	npany: Riley Group	Phone: <u>(425) 415-0551</u>
✓ Erosion control measures	Subsurface drainage pla	acement
Shoring installation and monitoring		
Observe and monitor excavation		•
✓ Verification of soil bearing	•	cast/driven pile)
Other:	Other:	
REINFORCED CONCRETE:		
Special Inspector: Con	nnany:	Phone:
Concrete strength		tion
Reinforcing steel and concrete placement		
Shotcrete placement		
Other:	Other:	
STRUCTURAL STEEL: (AISC 360, Chapter N)		
Special Inspector: Con	npany: Otto Rosenau	Phone: (206) 725-4600
Fabrication and shop welds		
Structural steel erection, field welds and bolting		10000
Other:	Other:	
STRUCTURAL MASONRY:		
Special Inspector: Con	npany:	Phone:
■ Mortar strength	Glass unit masonry inst	
Masonry unit strength	Wall panel and veneer	installation
Other:		
Other:	Other:	
WOOD		
WOOD:		
Special Inspector / Engineer of Record: Con	nnanv.	Phone:
Lateral resisting system construction	High strength diaphrag	m construction
Other:	Other:	
OTHER SPECIAL INSPECTIONS:		
Special Inspector: Con	npany: Otto Rosenau	Phone: 206-725-4600
✓ Epoxy grout installations	Stucco installation	
Expansion anchor installations	Infiltration System	
Other post installed anchors		sh System (EIFS) installation
Alternative construction methods:		on system (Lii 3) installation
Alternative construction materials:	Other:	

ı	☐ Metal joist / metal trusses	Exterior cladding			
١	☐ Premanufactured structures (stairs, etc.)	☐ Window wall / curtain wall construction			
١	Precast concrete elements	Other:			
:	Other:	Other:			
	ENERGY CODE COMPLIANCE INFORMATION:				
:1	Indicate where the following information is located in the drawing set. Alternatively, incorporate or include the Residential Energy Code				
: [Prescriptive Compliance (RECPC) Form into the drawing set.				

The Applicant is required to select all deferred submittals / shop drawings for submittal to the City for review and approval prior to item

Post tension layout

Indicate where the following information is Prescriptive Compliance (RECPC) Form into		set. Alternatively, incorporate or include the Residential Energy Co
	Sheet:	
 ✓ Building envelope: wsec Table 402.1.1 (include U-factors, insulation and moisture of the work of the work	A2.10 - 2.12 applicable) A2.10 - 2.12	Air Leakage Testing. IRC Section R402.4.1.2 WA Amendments Provide air leakage test report verifying air leakage rate does not to exceed 5 air changes per hour. Duct Leakage Testing. WSEC R403.2.2 Postconstruction Test. WSEC R403.2.2.1 Rough-in Test. WSEC R403.2.2.3

SG	PROJECT ALERTS:			
BY DS	Construction of the project shall be from <i>approved plans only</i> . No d			
TO BE COMPLETED B	Refer to "Conditions of Permit Approval" provided at permit is Site Considerations ROW restricti Hours of Work Construction Vehicle Parking Restrictions Acess Road Requirements Refer to "Preconstruction Meeting Checklist" provided at the particular of the parking and the parking are to the start of any site work.	 Additional Fire Code Requirements Planning Requirements Noise Abatement Certification Requirements Tree Requirements preconstruction meeting for development related requirements. from the street must be installed. ject drawings. All erosion control is to be in place and inspected 		
	Tree protection as shown on approved drawings shall be insta	lled at tree dripline prior to start of any site work and		
	☐ For this project, N/A trees are authorized to be removed ☐ This project appears to be within a protected eagle nest area. website at http://www.fws.gov/pacific/eagle	llation. They must be planted and approved prior to final inspection.		
	FIRE PROTECTION REQUIREMENTS: Separate Permits are required for ALL fire protection systems. For m	nore information, see http://www.mercergov.org/Page.asp?NavID=2614		
	Fire Sprinkler	Monitored Household		
	Plus	Fire Alarm per NFPA 72		
	☐ NFPA 13R			
	Approved Fire Code Alternatives: FCA1			
	□ FCA2			
	WATER SUPPLY REQUIREMENTS:			
BY DSG	 □ Fire sprinkler design calculations must be provided prior to determining water supply system requirements. □ Water Supply system upgrade required □ City Installation. □ Applicant Installation. □ Required Service Line Size: N/A Required Supply Line Size: N/A Required Meter Size: N/A (water main to meter) (water main to house) □ Abandonment of existing service and meter required at main. ☑ Pressure reducing valve required if pressure exceeds 80 psi. ☑ Reduced pressure backflow assembly (RPBA) required for all lots with waterfront or non-city water supply (private wells 			
ED B				
ET.	DRAINAGE REQUIREMENTS:			
COMPLET	☐ On site detention system required ☐ On site infiltration system required			
00	As-built Utility drawings required. Full Size drawings required.			
BE	SIDE SEWER REQUIREMENTS:	Other.		
TO	Side sewer requires a backflow preventer when connecting to lower than the elevation of the upstream manhole rim or when the lower than the elevation of the upstream manhole rim or when the lower than the elevation of the upstream manhole rim or when the lower than the elevation of the upstream manhole rim or when the lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the elevation of the upstream manhole rim or when lower than the lower	Disconnect permit required. Reconnect permit required. u will need to schedule three (3) days in advance with the City of		
	APPROVED CODE ALTERNATIVES:			
	Code alternatives must be Inspected. Refer to the Inspection Checkl CA1:			
	SURVEY REQUIREMENTS (The following survey inform Surveyor shall verify points chosen for height calculations and point Inspection. A property survey may be required to verify setbacks an reserves the right to request an impervious area survey at any time	verification shall be submitted at the time of City foundation d in some cases buildings must be surveyed onto the lot. The City prior to issuance of Certificate of Occupancy.		
	☐ Building height survey			
	40 percent of the dwelling's exterior walls are structurally a Civil / Drainage	legally nonconforming single family dwelling to ensure no more than		
	GEOTECHNICAL INFORMATION: Land clearing, grading, filling and foundation work within geologic has without an approved Seasonal Development Limitation Waiver.	azard areas is NOT PERMITTED between October 1 and April 1		
DSG	Geotechnical Report provided. All construction must comply verified and other geotechnical information must be kept on significant to the contract of the cont	with the recommendations of the Geotechnical Report. A copy of te at all times.		
BY D		Phone		
	Geotechnical Engineer SEASONAL DEVELOPMENT LIMITATION RESTRICTION:	en October 1 through April 1.		

BY DSG	REQUIRED CONSTRUCTION INSPECTIONS: It is the applicant's responsibility to contact DSG to schedule ALL inspections appropriate for the project. Request inspections online at www.MyBuildingPermit.com or by calling the Inspection Hotline at (206) 275-7730. Allow at least 24 hours (48 hours for Reinforcing steel) in advance of desired inspection. Be specific as to type of inspection.					
COMPLETED	Inspector shall initial and date appropriate inspection <i>only</i> if approved. Note: <i>Items marked with an "*" require a separate permit.</i> It is the applicants responsibility to apply for and obtain all City of Mercer Island permits. INSPECTIONS: (Listed in order of typical sequencing)					
	Inspector Date Approved Pre-construction Meeting to Review Conditions of Permit Approval.					
	* Tree protection					
BE	Erosion control * Sewer disconnect and cap. If applicable, separate side-sewer permit required					
10	* Right-of-way use or work / easement, material delivery, etc. If applicable,					
	separate ROW permit required Land clearing, grading and demolition					
	Temporary power					
	Pilings / Shoring / Shotcrete. If applicable, provide survey letter (property line); Geotechnical Engineer / Special Inspector					
	reports of inspections (pile and shoring installation, etc.)					
	Footings, setbacks, UFER ground. If applicable, provide survey letter					
	(building height and setbacks); Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)					
	Foundation walls / concrete columns					
	Roof and footing drains Foundation damproofing					
	* Storm drainage, including (but not limited to):					
	• Connections to storm — main in ROW • Area drains • Conveyance piping / cleanouts					
	• Detention systems • Storm drain in ROW					
	• Infiltration systems • Control structures / manholes • Cotch basins including					
	 Catch basins including Pump systems Retaining wall drainage 					
	* Water Service					
	Water Supply Water as-built drawings					
	* Side sewer installation, including (but not limited to):					
	• Connections to side sewer main • Grinder pump systems					
	• Connections to existing • Sewer manholes					
	side sewer Driveway / Access road					
	Underslab electrical / mechanical / plumbing					
	Underslab insulation / vapor barrier / reinforcing Underfloor framing					
ğ	Nailing-Roof sheathing. If applicable, provide Special Inspection					
DSG	letter for lateral wood inspection					
ВУ	Inspection letter for lateral wood inspection.					
ED	Rough hydronic installation					
ET.	Rough electric installation * Rough fire alarm (wiring inspection)					
COMPLETED	Rough plumbing installation (DWV, water)					
0	Rough mechanical Gas Piping					
	* Rough fire sprinkler / hydrostatic and flow (bucket) test					
) BE	Framing and glazing. If applicable, provide Special Inspection letter for lateral wood inspection, welding epoxy anchors, etc.					
2	Masonry construction (fireplace / walls / veneer / etc.)					
	Insulation installation Stucco (paper and lath)					
	Shower pan (or tub)					
	Miscellaneous Code Alternative CA1:					
	Code Alternative CA2:					
	Impact Fees Paid (If applicable)					
	Final Inspection: Tree Restoration TT					
	Final Inspection: Fire protection, including (but not limited to): • Sprinkler • Fuel Tank Installation					
	• Access Road • Fire Extinguishing System					
	• Fire Code Alternatives (see below) • Fire Alarm System FCA1: FCA3:					
	Final Inspection: Water supply protection, including (but not limited to)					
	• Waterfront property • Well water on property					
	• Fire / lawn sprinkler • Boiler					
	Final Inspection: Site and utility: includes landscape, utilities and ROW. Site TS restoration complete and as-built drawings ready for submittal.					
	Final Inspection: Building, including electrical / mechanical / plumbing. If TB					
	applicable, provide closeout (summary) letters from Engineer, Special Inspectors, Geotechnical Engineer, and exterior wall cladding inspectors (EIFS).					
	90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO):					
	Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.					
	Approved Start Date End Date					
	ADDITIONAL REQUIRED CITY INSPECTIONS:					
SG	ADDITIONAL REQUIRED CITY INSPECTIONS: Call the appropriate contact to arrange the inspection.					
ВУ D						
핃	Required Inspection(s): Contact: Phone: Scheduling:					
OMPLETED	IMPACT FEES: PLAN REVIEW APPROVALS:					
8	If applicable. Not all review disciplines may be required to review the documents. Impact fees apply and are due <i>prior</i> to Final Inspection or on					
BE						
\sim 1	, whichever occurs first.					

FILE NAME: DSG CVR 2016 24x36.PDF

fabrication / construction.

Connector plate wood trusses

General Notes

1. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE PROCEEDING WITH WORK, CONTRACTOR SHALL REPORT ERRORS, OMMISSIONS AND DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.

- 2. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE AND FACE OF FRAMING EXCEPT WHERE OTHERWISE NOTED. DO NOT SCALE DRAWINGS.
- 3. ALL APPLICABLE CODES, ORDINANCES AND MIN. STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER ALL DRAWINGS, NOTES & SPECIFICATIONS.
- 4. ALL WORK TO CONFORM TO THE VERSION OF THE INTERNATIONAL RESIDENTIAL CODE (IRC) AND ALL AMENDMENTS IN EFFECT IN THE PERMITTING JURISDICTION AT THE TIME OF PERMITTING.
- 5. REPETITIVE FEATURES DRAWN OR NOTED ONLY ONCE SHALL BE COMPLETELY PROVIDED AS IF DRAWN OR NOTED IN FULL.
- 6. THESE DRAWINGS ARE SPECIFIC TO THIS PROJECT. THESE DRAWINGS OR PORTIONS THEREOF SHALL NOT BE USED FOR OTHER PROJECTS.
- 7. ASBESTOS OR OTHER HAZARDOUS MATERIALS FOUND IN THE PROJECT SHALL BE MITIGATED ACCORDING TO ALL APPLICABLE STATE AND FEDERAL STANDARDS. THE OWNER SHALL DIRECT SUCH WORK.

Structural Notes

REFER TO SHEETS S101 AND S102

2015 International Residential Code

1. PROVIDE SAFETY GLAZING WITH VISIBLE MANUFACTURER'S SEAL AT ALL DOORS, GLAZING ADJACENT TO DOORS, RAILINGS, AND BATHING AREAS PER R308.4.

- 2. AUTOMATIC GARAGE DOOR OPENERS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 325 PER R309.3.
- 3. EXTERIOR DECK SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE TO RESIST BOTH VERTICAL AND LATERAL FORCED PER R311.5.
- 4. PROVIDE GUARDS NOT LESS THAN 36" IN HEIGHT AT ALL AREAS LOCATED MORE THAN 30" ABOVE GRADE AT ANY POINT PER R312. GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER PER R312.

FOUNDATIONS, FLOORS, WALLS AND ROOFS:

5. PROVIDE THE FOLLOWING:
FOUNDATIONS PER IRC CHAPTER 4 AND STRUCTURAL NOTES
FLOORS PER IRC CHAPTER 5 AND STRUCTURAL NOTES
WALLS PER IRC CHAPTER 6 AND STRUCTURAL NOTES
WALL COVERINGS/FINISHES PER IRC CHAPTER 7
ROOF/CEILING CONSTRUCTION PER IRC CHAPTER 8 AND STRUCTURAL NOTES
ROOF ASSEMBLIES PER IRC CHAPTER 9

Related Work

- 1. SECURE ALL REQUIRED PERMITS FOR TRADE WORK RELATED TO THE PROJECT.
- 2. CHIMNEYS AND FIREPLACES TO CONFORM TO IRC CHAPTER 10
- 3. MECHANICAL SYSTEMS TO CONFORM TO IRC CHAPTER 13
- 4. PLUMBING SYSTEMS TO CONFORM TO IRC CHAPTER 265. ELECTRICAL SYSTEMS TO CONFORM TO IRC CHAPTER 34

Washington State Energy Code (2015 edition)

1. PROVIDE MIN. 50 CFM EXHAUST AT BATHROOMS AND LAUNDRY ROOMS AND 100 CFM EXHAUST FANS AT KITCHEN PER IRC M 1507.4 WITH MINIMUM FAN EFFICIENCY PER WAC 51-11R. (SEE PLANS).

2. PROVIDE 90 CFM WHOLE HOUSE VENTILATION AND CONTROLS SYSTEM AT 100% RUN TIME CONFORMING TO IRC M1507.3.4 SECTION 303.4.

4. PROVIDE INSULATION AS DESCRIBED IN WSEC R402.1.1. SEE THERMAL REQUIREMENTS BELOW.

5. PROVIDE VAPOR RETARDER AND GROUND COVER/RAT SLAB PER WSEC R402.2

6. PROVIDE SEALS AND WEATHERSTRIPPING AT ALL OPENINGS, JOINTS, PENETRATIONS ANS SITE BUILT WINDOWS PER WSEC R402.4.1

7. PROVIDE EXTERIOR RECESSED LIGHTING FIXTURES CONFORMING WITH WSEC R402.4.5

8. PROVIDE DUCT INSULATION PER WSEC R403.3.1

9. INSTALL AND SEAL DUCTS PER WSEC R403.3.2.1

10. PROVIDE PIPE INSULATION PER WSEC R403

11. PROVIDE WATER FLOW CONTROL DEVICES PER WSEC TABLE 406.2 OPTION 5A: LAVATORIES: 1.0 GPM
KITCHEN SINKS: 1.75 GPM
SHOWERS: 1.75 GPM

12. RESIDENTIAL PRESCRIPTIVE REQUIREMENTS PER IECC CHAPTER 4 TABLE R402.1.1 AND TABLE R402.2.6:

GLAZING AREA: UNLIMITED FENESTRATION: U=0.30 WOOD FRAME WALL: R-21

National Fire Protection Agency 72 1. PROVIDE A MONITORED HOUSEHOLD FIRE ALARM PER NFPA 72 AND

COMMENTS FROM MERCER ISLAND FIRE MARSHAL ON 8/29/2019:

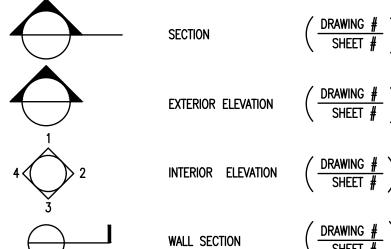
901.4.4 ADDITIONAL FIRE PROTECTION SYSTEMS. IN OCCUPANCIES OF A HAZARDOUS NATURE, WHERE SPECIAL HAZARDS EXIST IN ADDITION TO THE NORMAL HAZARDS OF THE OCCUPANCY, OR WHERE THE FIRE CODE OFFICIAL DETERMINES THAT ACCESS FOR FIRE APPARATUS IS UNDULY DIFFICULT, THE FIRE CODE OFFICIAL SHALL HAVE THE AUTHORITY TO REQUIRE ADDITIONAL SAFEGUARDS. SUCH SAFEGUARDS INCLUDE, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING:

AUTOMATIC FIRE DETECTION SYSTEMS, FIRE ALARM SYSTEMS, AUTOMATIC FIRE—EXTINGUISHING SYSTEMS, STANDPIPE SYSTEMS, OR PORTABLE OR FIXED EXTINGUISHERS.

FIRE PROTECTION EQUIPMENT REQUIRED UNDER THIS SECTION SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPLICABLE REFERENCED STANDARDS.

AV107.3 HOUSEHOLD FIRE ALARM SYSTEM. AN APPROVED HOUSEHOLD FIRE ALARM SYSTEM SHALL BE INSTALLED THROUGHOUT THE RESIDENCE IN EXISTING ONE-FAMILY AND TWO-FAMILY DWELLINGS (AND TOWNHOUSES) THAT HAVE DEFICIENCIES IN FIRE FLOW, HYDRANTS OR ACCESS. THIS SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 CHAPTER 29 WHEN UNDERGOING A REMODEL OR ADDITION WHEN THE CONSTRUCTION VALUE OF ALL ADDITIONS, ALTERATIONS OR REPAIRS PERFORMED WITHIN A SIXTY-MONTH PERIOD IS WITHIN 10% TO 50% OF THE VALUE OF THE RESIDENCE. VALUE SHALL BE DETERMINED BY A METHOD APPROVED BY THE FIRE CODE OFFICIAL.

Proje



DETAIL $\left(\frac{\text{DRAWING } \#}{\text{SHEET } \#} \right)$

WORK POINT/DATUM

FOUND PROPERTY BOUNDARY MARKER

PROPERTY BOUNDARY

WINDOW/DOOR BUG

Abbroviotion List

Symbols

Abbreviation List A.F.F. ABOVE FINISH FLOOR **APPROXIMATE** APPROX. CATCH BASIN CLR. CLEAR CONC. CONCRETE C.Y. **CUBIC YARDS** EXISTING EQUAL F.G. FIBERGLASS F.0. FACE OF GYPSUM BOARD, TYPE X GWB GYPSUM WALL BOARD MINIMUM MTL METAL 0.H. OVERHANG req'd REQUIRED RAIN WATER LEADER SQUARE FEET SMOKE DETECTOR

TONGUE AND GROOVE

UNLESS NOTED OTHERWISE

WRGWB WATER RESISTANT GYPSUM WALL BOARD

TYPICAL

WINDOW

U.N.O.

WDW

Project Team:

Owner
LUCIO C. AND LUCIMAR M. TINOCO
4702 E. MERCER WAY
MERCER ISLAND, WA 98040

Contractor

\ MELCO ENTERPRISES, INC

-) 24531 SE 45TH WAY
ISSAQUAH, WA 98029
P:206-930-7140
EMAIL: KHEMSTREET2@COMCAST.NET

Architect

CONTACT: KEITH HEMSTREET

MILLER HAYASHI ARCHITECTS, PLLC
118 NORTH 35TH STREET SUITE 200
SEATTLE, WA 98103
P: 206-634-0177
EMAIL: AMANDAANDERSON@MILLERHAYASHI.COM
CONTACT: AMANDA ANDERSON, BRUCE HAYASHI

Structural

SWENSON SAY FAGET
2124 3RD AVENUE, SUITE 100
SEATTLE, WA 98121
P: 206.443.6212
EMAIL: JDIXON@SSFENGINEERS.COM
CONTACT: JOE DIXON

GeoTech

RILEY GROUP
17522 BOTHELL WAY NE
BOTHELL, WA 98011
P: 425-415-0551
EMAIL: RWANG@RILEY-GROUP.COM
CONTACT: RICKY WANG

Survey

TERRANE
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
P: 425-458-4488
EMAIL: RENES@TERRANE.NET
CONTACT: RENE SCHADE

Project Address

4702 E. MERCER WAY, MERCER ISLAND, WA 98040

Project Description

PROJECT SCOPE RECAP ONLY, REFER TO DRAWINGS FOR FULL DESCRIPTION
AND REQUIREMENTS

ADDITION OF A DECK AND TERRACE AREA TO AN EXISTING SINGLE FAMILY RESIDENCE, ALTERATIONS TO FAMILY ROOM AND MASTER BATHROOM.

THE PROJECT IS SUBJECT TO A CRITICAL AREAS REVIEW 2 FOR ALTERING A GEOLOGICALLY HAZARDOUS AREA. A CONSOLIDATED REVIEW IS BEING REQUESTED PER MICC 19.07.090 B2 bii. SEE CRITICAL AREAS NARRATIVE BELOW.

Parcel # 8699300010

Legal Description

TRYON WOODS TGW UND INT IN TRACT A - PRIVATE RD

ZONE R-15 SINGLE FAMILY DWELLING
SITE AREA 15,952 SQ. FT.
FRONT YARD REQUIRED 20' OR MORE
REAR YARD REQUIRED 25' OR MORE
SIDE YARD REQUIRED SUM OF SIDE YARDS AT LEAST 15'

Critical Areas Review Project Narrative:

THE PORTION OF WORK SUBJECT TO A CRITICAL AREAS REVIEW RELATES TO THE DECK ADDITION AND ASSOCIATED REGRADING. A DECK WILL BE CONSTRUCTED OFF OF THE EXISTING FAMILY ROOM. IT WILL SPAN ABOVE AN EXISTING ASPHALT DRIVEWAY, SUPPORTED AT THE FAR END BY CONCRETE PILES. THE DECK TERMINATES WHERE THERE IS CURRENTLY A STEEP SLOPE AND ROCKERY. THIS AREA OF STEP SLOPE IS TO BE ALTERED, INCLUDING REMOVING THE ROCKERY, REPLACING THE ROCKERY WITH A GABION RETAINING WALL, AND REGRADING / BACKFILLING BEHIND THE GABION WALL TO CREATE A FLAT AREA ACCESSIBLE BY THE NEW DECK. ONE TREE (A 34" FIR) IS TO BE REMOVED AS PART OF THE WORK. IT WILL BE REPLACED WITH 6 NEW TREES.

THIS WORK CONCERNS ONLY GEOLOGICAL HAZARDOUS AREAS (STEEP SLOPE). AS SUCH, WE ARE REQUESTING CONSOLIDATION OF THE REVIEW TOGETHER WITH THE CONSTRUCTION PERMIT REVIEW.

PLEASE SEE THE ENCLOSED DRAWING SET AND ADDITIONAL INFORMATION PREPARED BY OUR GEOTECHNICAL ENGINEER.

Sheet Index

COVERSHEET

T1.0 TITLE SHEET

SURVEY

ARCHITECTURAL
A1.01 SITE DEMO PLAN
A1.02 EROSION CONTROL PLAN
A1.03 SITE PLAN

A1.10 BASEMENT DEMO PLAN
A1.11 FIRST FLOOR DEMO PLAN
A1.12 SECOND FLOOR DEMO PLAN

A2.10 BASEMENT FLOOR PLAN
A2.11 FIRST FLOOR PLAN
A2.12 SECOND FLOOR PLAN

A2.20 ROOF PLAN
A3.00 BUILDING ELEVATIONS
A3.01 BUILDING ELEVATIONS

A3.10 BUILDING SECTIONS

A4.00 SCHEDULES & WALL SECTIONS

A6.00 EXTERIOR DETAILS

STRUCTURAL

S101 GENERAL STRUCTURAL NOTES
S102 GENERAL STRUCTURAL NOTES
S200 FOUNDATION PLAN
S210 MAIN FLOOR / BRIDGE FRAMING PLAN
S211 UPPER FLOOR FRAMING PLAN
S212 ROOF FRAMING PLAN

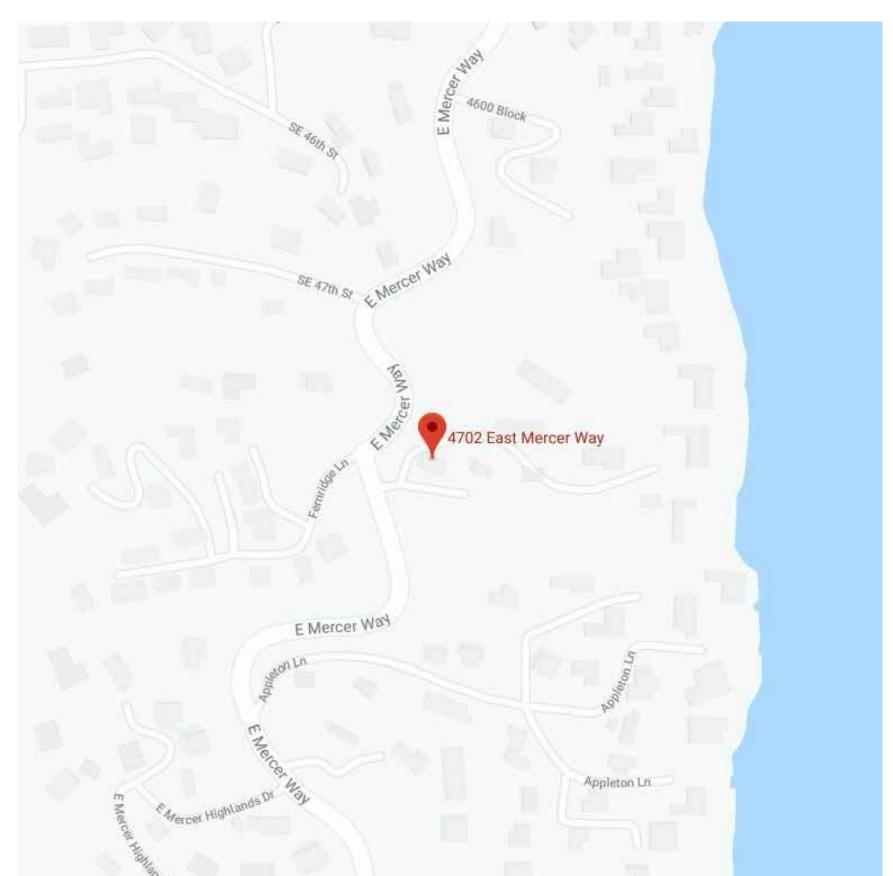
S311 DETAILS - CONCRETE AND WOOD

GABION WALL DESIGN
W-1 TITLE AND SHEET INDEX

S310 DETAILS - STEEL

W-2 GABIONS WALL LOCATIONS W-3 GABIONS WALLS

W-4 GABIONS WALLS CONSTRUCTION NOTES



Vicinity Map N.T.S.

PROJECT LOCATION: 4702 E. MERCER WAY, MERCER ISLAND, WA 98040

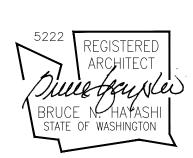
Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

PHASE
Permit Set

DATE

10/10/19

REVISIONS

SHEET TITLE

Title Sheet

SHEET NO.

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED REC. NO. 20160505001389)

LOT 1, TRYON WOODS, AS PER PLAT RECORDED IN VOLUME 98 OF PLATS, PAGE 21, RECORDS OF KING COUNTY AUDITOR;

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

BASIS OF BEARINGS

THE NORTH LINE OF TRYON WOODS BETWEEN FOUND MONUMENTS BEARS N 88°11'13" W, PER R1.

REFERENCES

R1. TRYON WOODS, RECORDED IN VOLUME 98 OF PLATS, PAGE(S) 21 AND 22, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS SITE BENCHMARK-TOP OF CONCRETE MONUMENT AT NW COR. OF PLAT, AS SHOWN HEREON. ELEV=136.21'

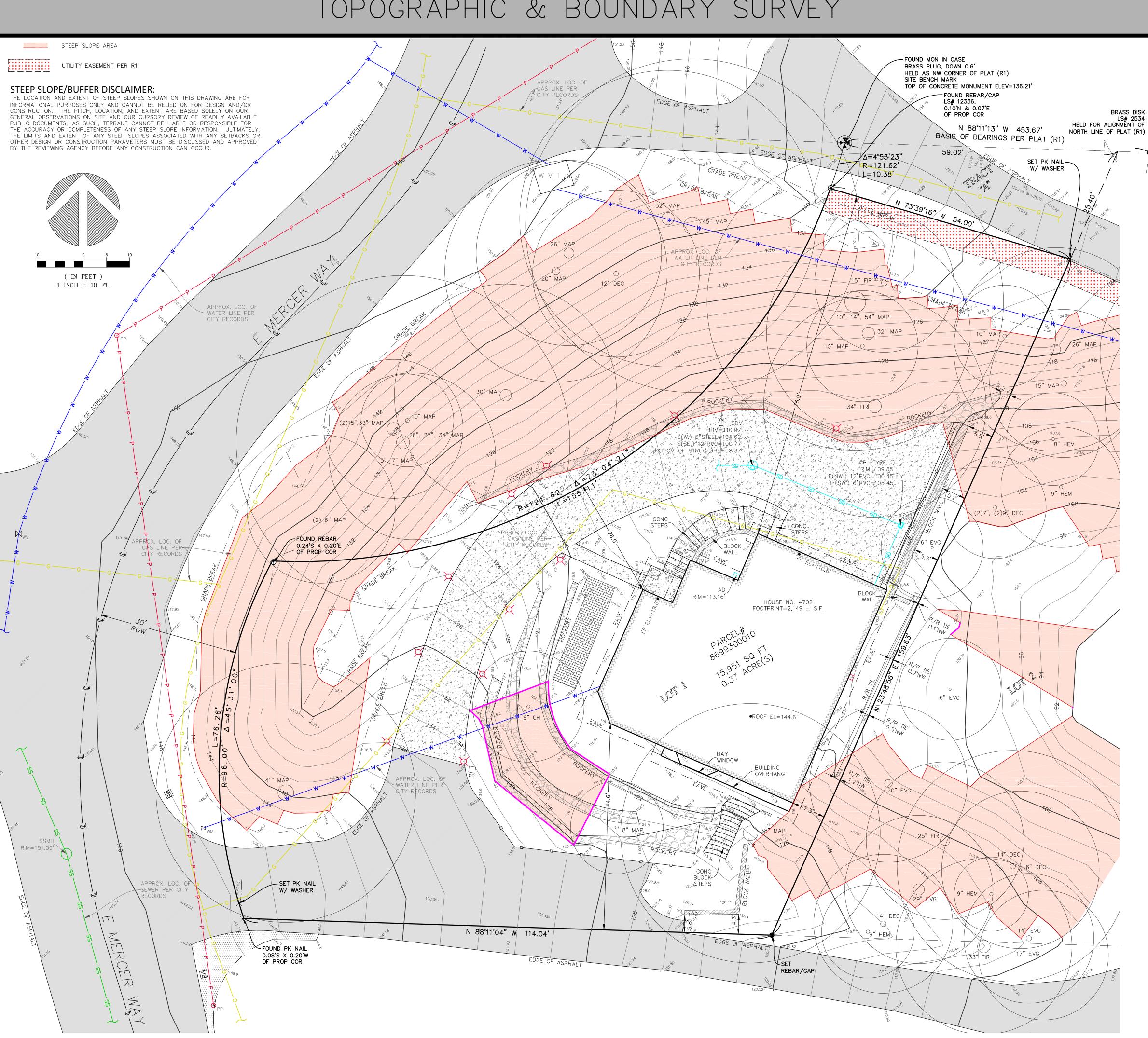
SURVEYOR'S NOTES

- 1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN MAY OF 2019. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
- 2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
- 3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
- 4. SUBJECT PROPERTY TAX PARCEL NO. 8699300010.
- 5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 15,951 \pm S.F. (0.37 ACRES)
- 6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
- 7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND AREA DRAIN X YARD LIGHT ASPHALT SURFACE P POWER METER POWER (OVERHEAD) BRICK SURFACE PPO POWER POLE REBAR AS NOTED (FOUND) — CENTERLINE ROW REBAR & CAP (SET) CONCRETE SURFACE ROCKERY RETAINING WALL FENCE LINE (WOOD) SEWER MANHOLE — G — GAS LINE STORM MANHOLE ☐G GAS METER GRAVEL SURFACE SIZE TYPE (o) TREE (AS NOTED) INLET (TYPE 1) NAIL AS NOTED WATER METER MAILBOX (RESIDENTIAL) WATER VALVE MONUMENT IN CASE (FOUND) W VLT WATER VAULT col COLUMN MONUMENT (SURFACE, FOUND) VICINITY MAP



TOPOGRAPHIC & BOUNDARY SURVEY

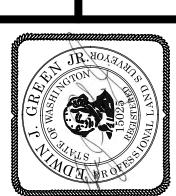


UNDARY

BOL SEC

OGRAPHIC SW 1/4 OF SE

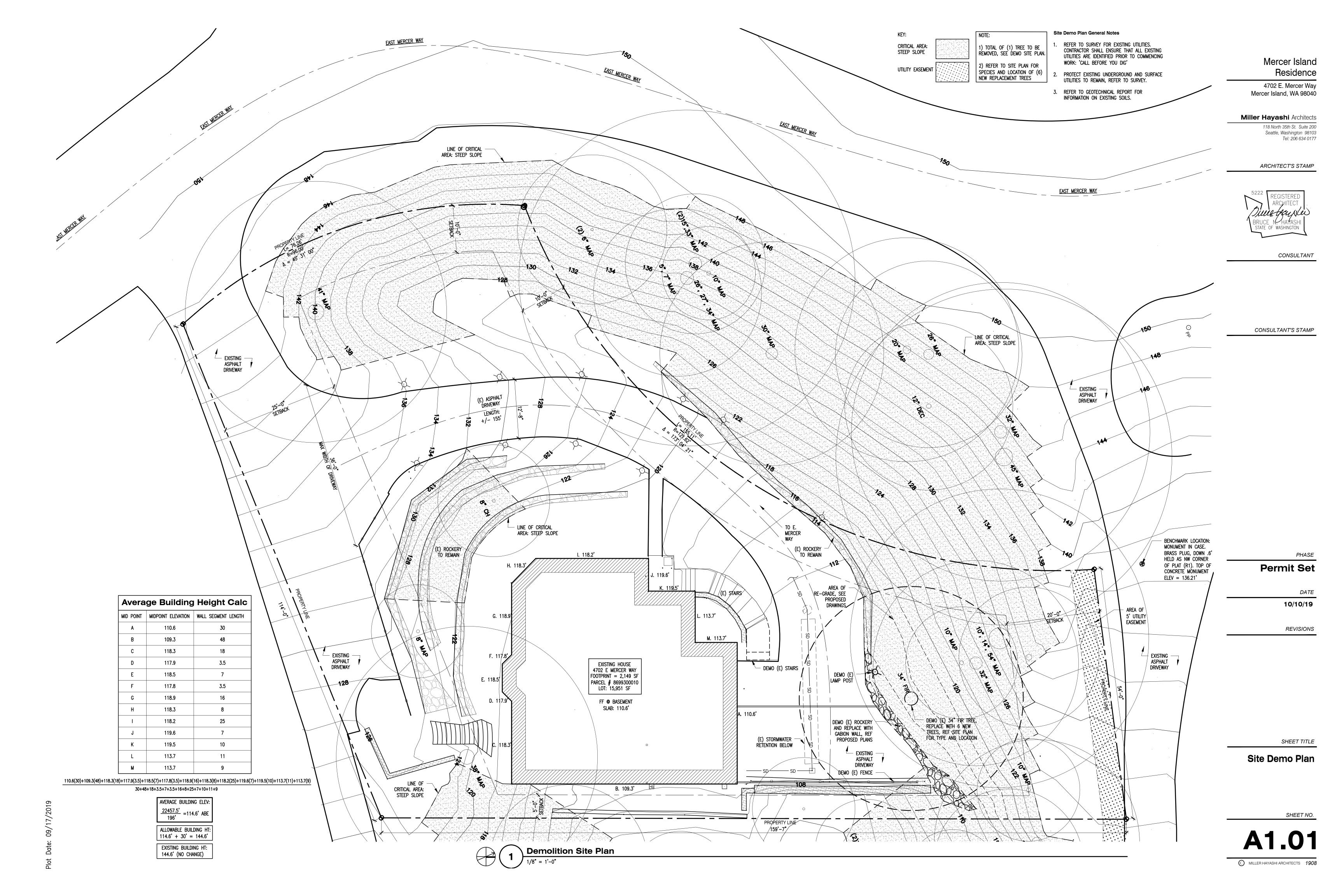
SIDENCE RCER WAY \cong ONIL

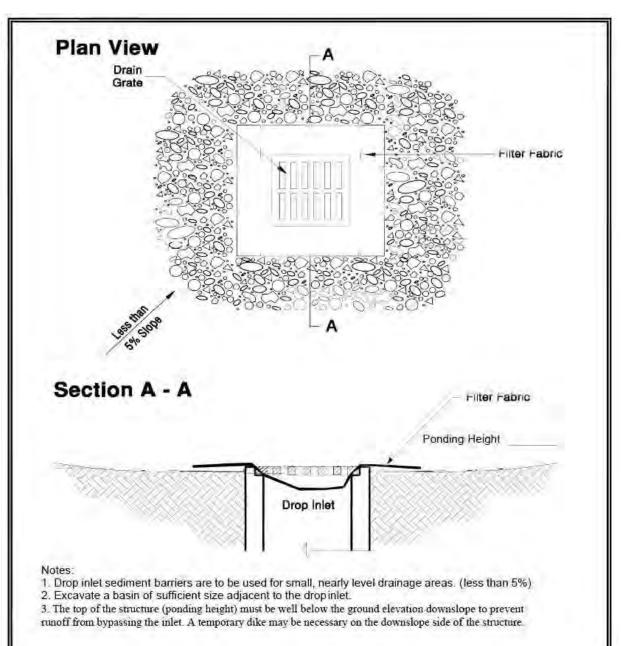




JOB NUMBER: 190768 05/16/ DRAFTED BY: EJG/TMM CHECKED BY: SCALE: REVISION HISTORY /13/19ADDED BM

> SHEET NUMBER 1 OF 1







1. NO STOCKPILING ON SITE; DIRECT LOAD AND HAUL ALL SOILS.

2. CONCRETE HANDLING:

a) Assure that washout of concrete trucks, chutes, pumps, and internals is performed at an approved off—site location or in designated concrete washout areas. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Refer to BMP C154 for information on concrete washout areas.

b) Return unused concrete remaining in the truck and pump to the originating batch plant for recycling. Do not dump excess concrete on site, except in designated concrete washout areas.

 c) Wash off hand tools including, but not limited to, screeds, shovels, rakes, floats, and trowels into formed areas only.

d) Wash equipment difficult to move, such as concrete pavers in areas that do not directly drain to natural or constructed stormwater conveyances.

e) Do not allow washdown from areas, such as concrete aggregate driveways, to drain directly to natural or constructed stormwater conveyances.

f) Contain washwater and leftover product in a lined container when no formed areas are available. Dispose of contained concrete in a manner that does not violate ground water or surface water quality standards

g) Always use forms or solid barriers for concrete pours, such as pilings, within 15—feet of surface waters.

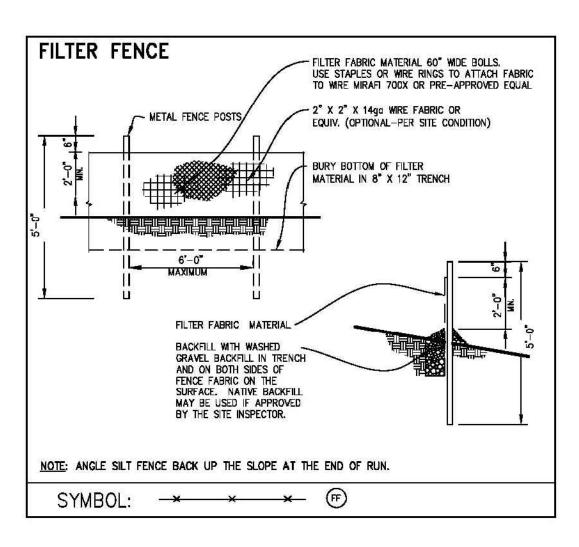
h) Refer to BMPs C252 and C253 for pH adjustment requirements.

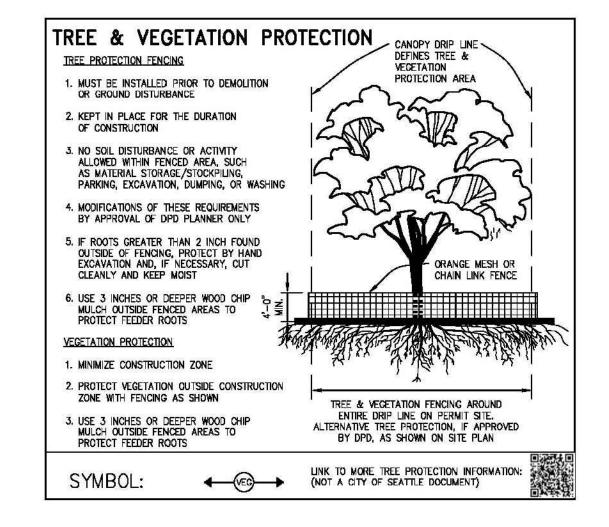
i) Refer to the Construction Stormwater General Permit for pH monitoring requirements if the project involves one of the following activities:
 —Significant concrete work (greater than 1,000 cubic yards poured concrete or recycled concrete used over the life of

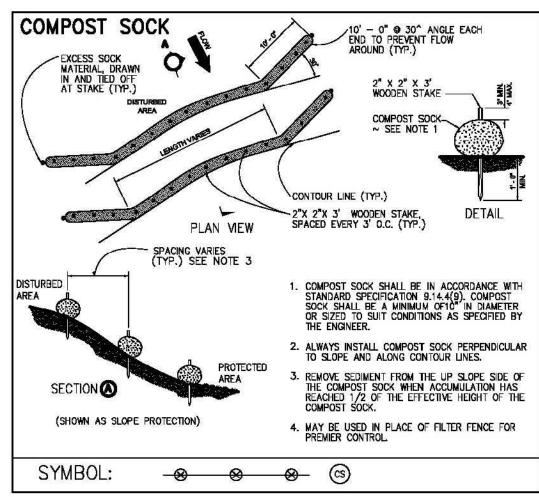
a project).

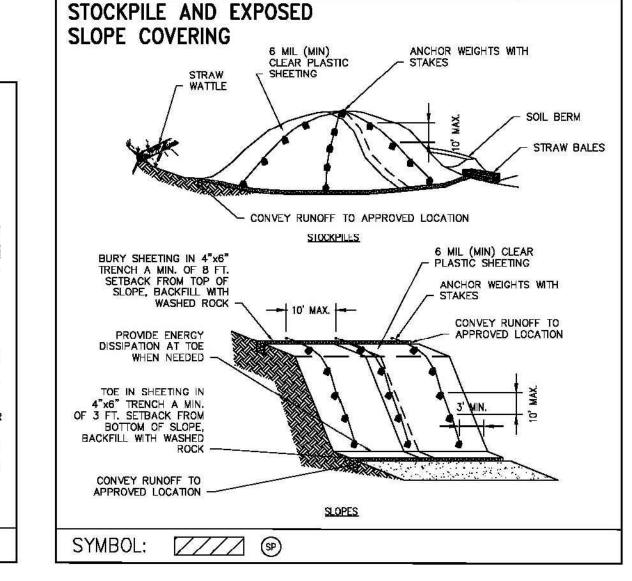
-The use of engineered soils amended with (but not limited to) Portland cement—treated base, cement kiln dust or fly

-Discharging stormwater to segments of water bodies on the 303(d) list (Category 5) for high pH.









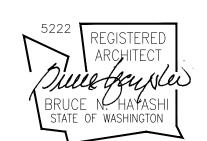
Mercer Island Residence

Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200
Seattle, Washington 98103
Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

PHASE

Permit Set

DATE

10/10/19

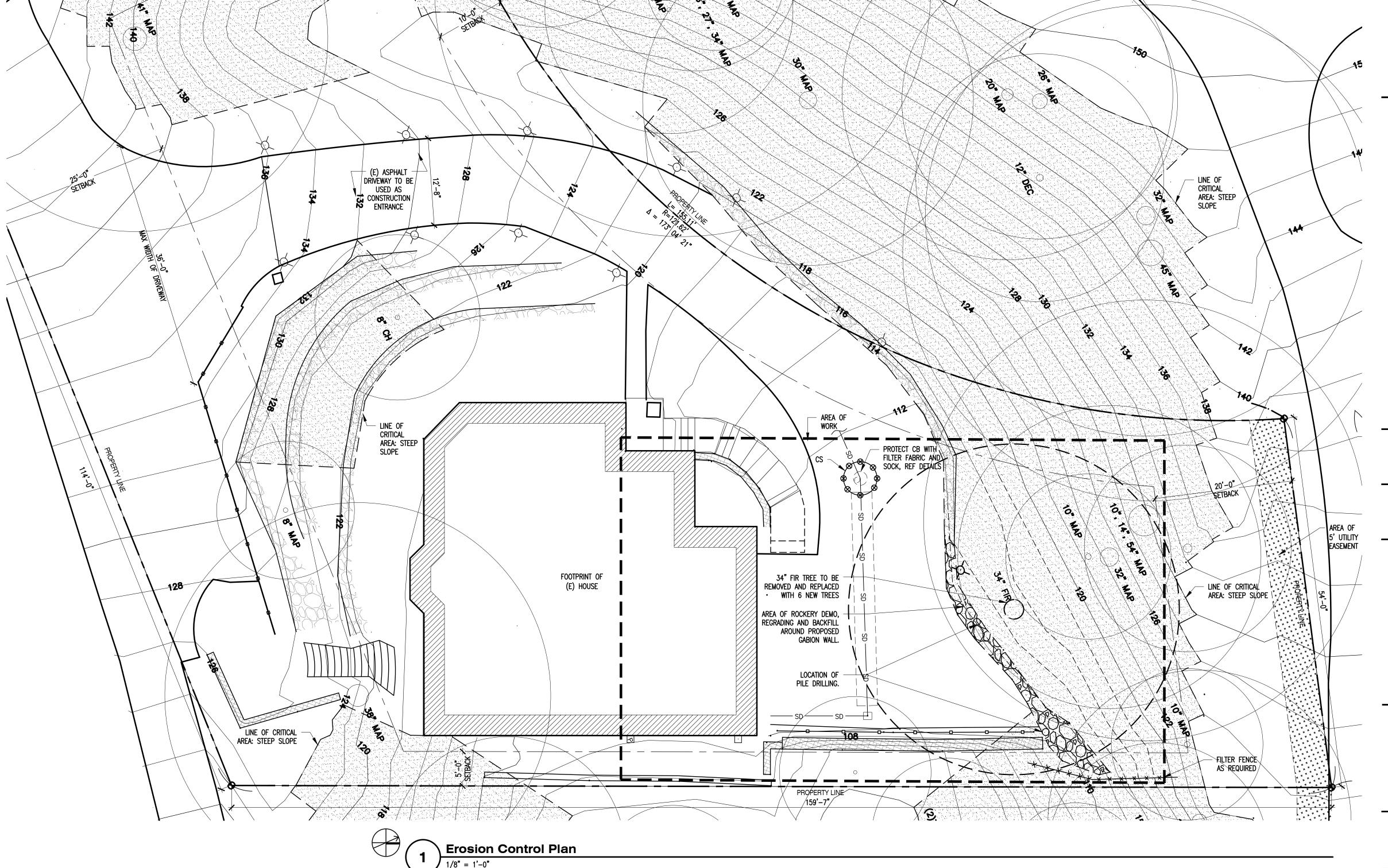
REVISIONS

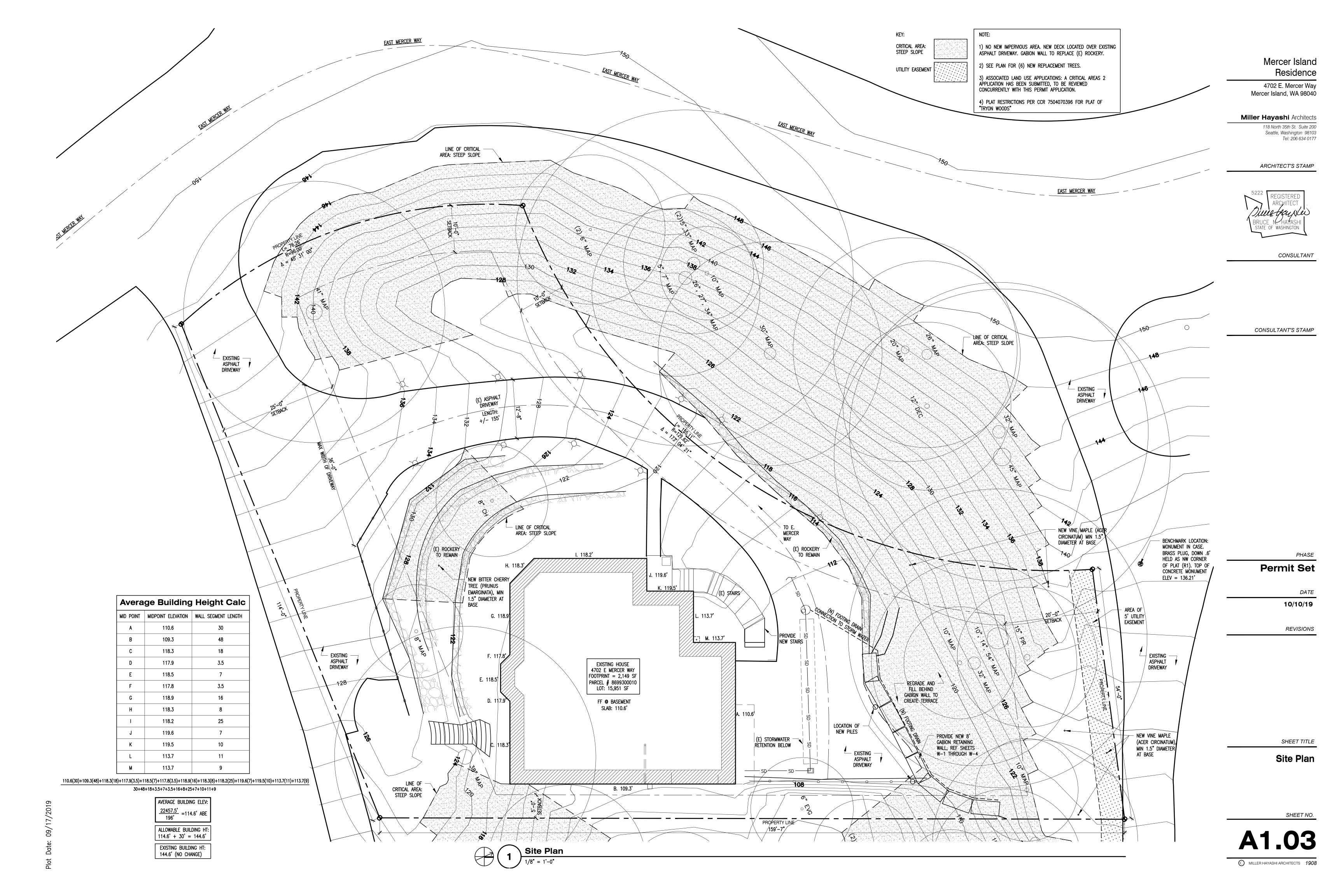
SHEET TITLE

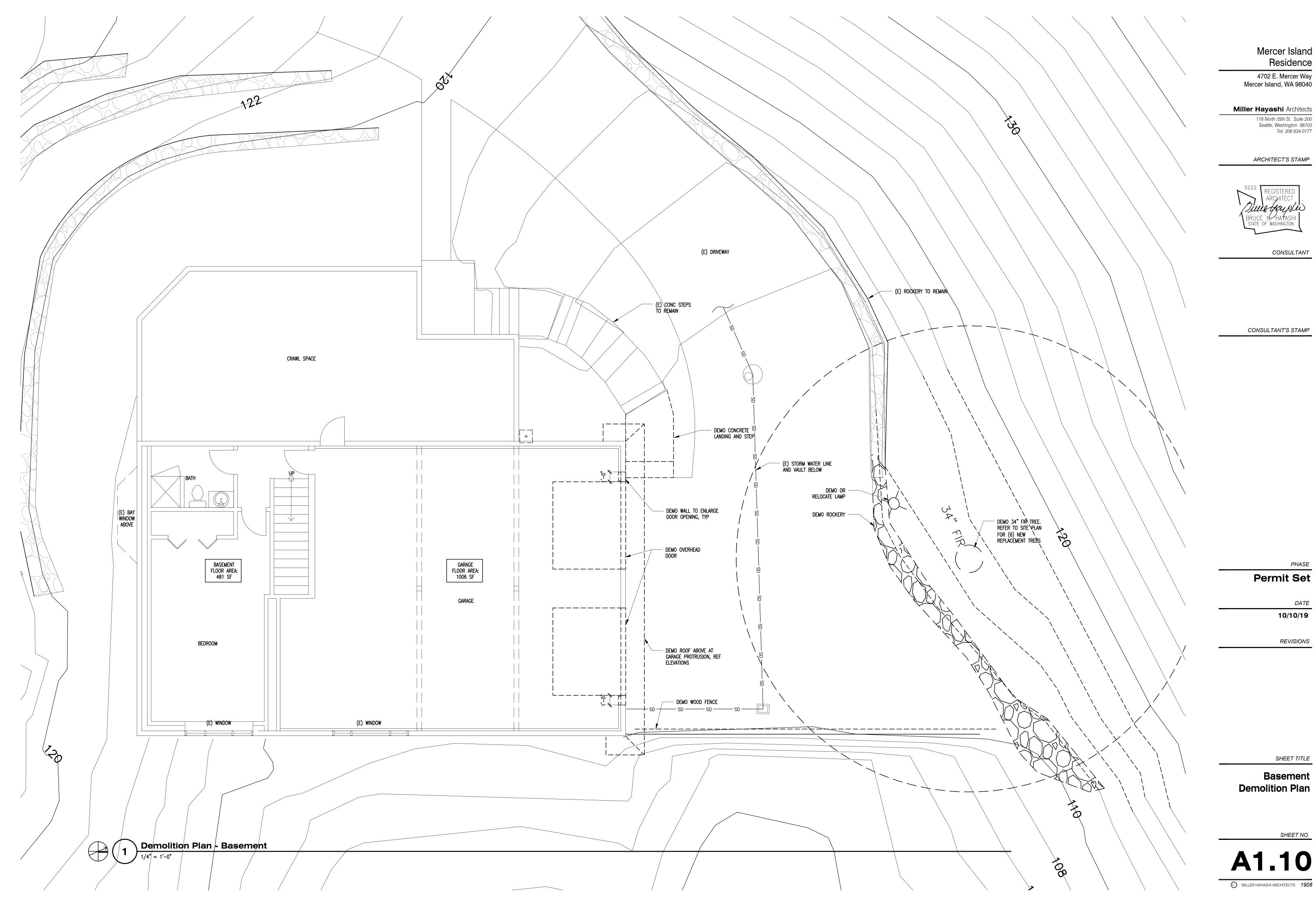
SHEET NO.

Erosion Control Plan

A1.02





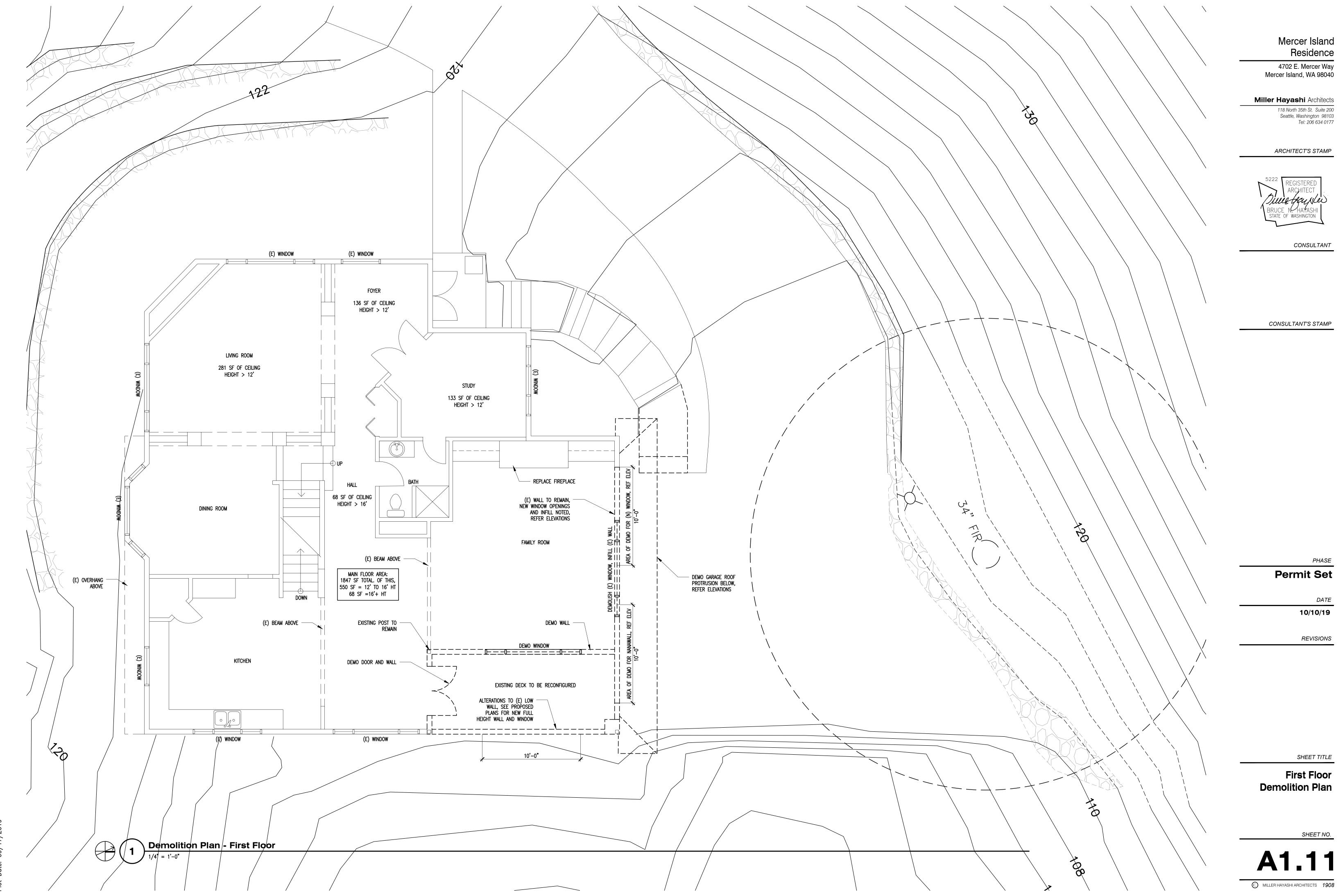


Residence

REVISIONS

SHEET TITLE

Basement

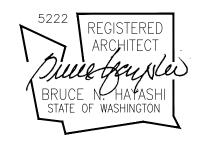


4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

Permit Set

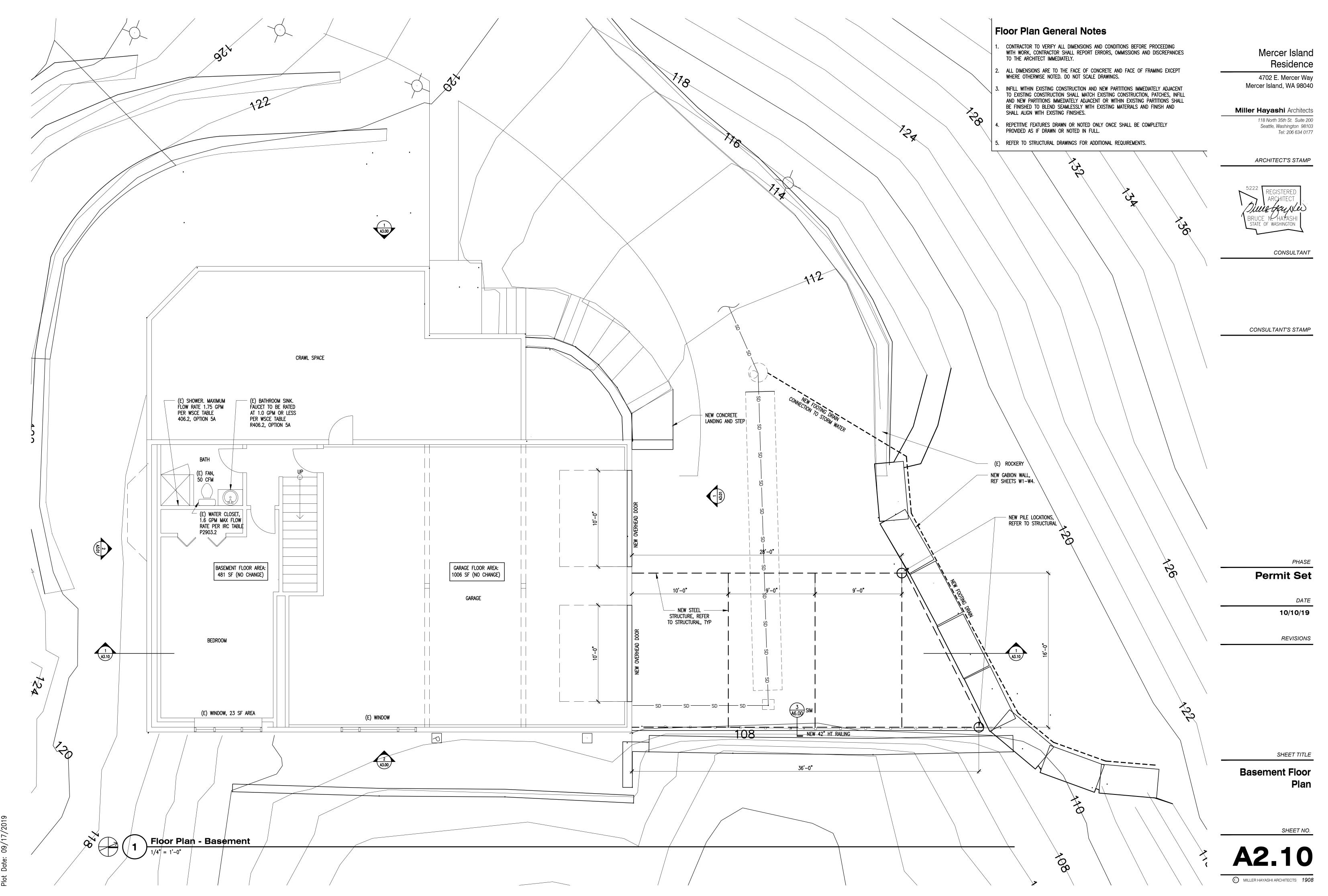
DATE 10/10/19

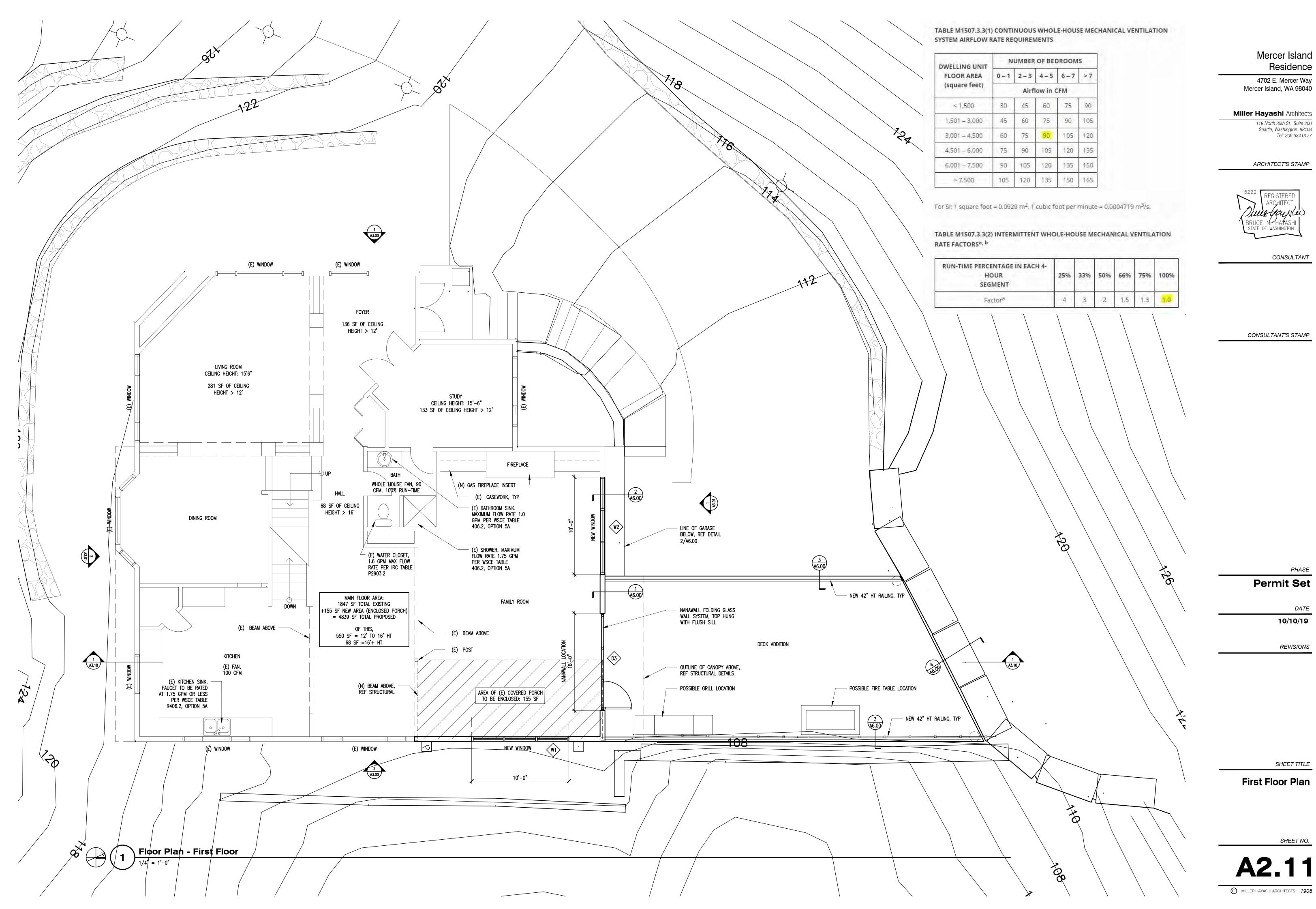
REVISIONS

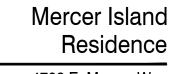
SHEET TITLE

Second Floor **Demolition Plan**







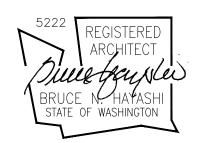


4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

Permit Set

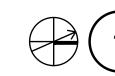
DATE 10/10/19

REVISIONS

SHEET TITLE

Second Floor

SHEET NO.



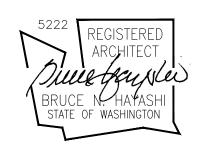
Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

Permit Set

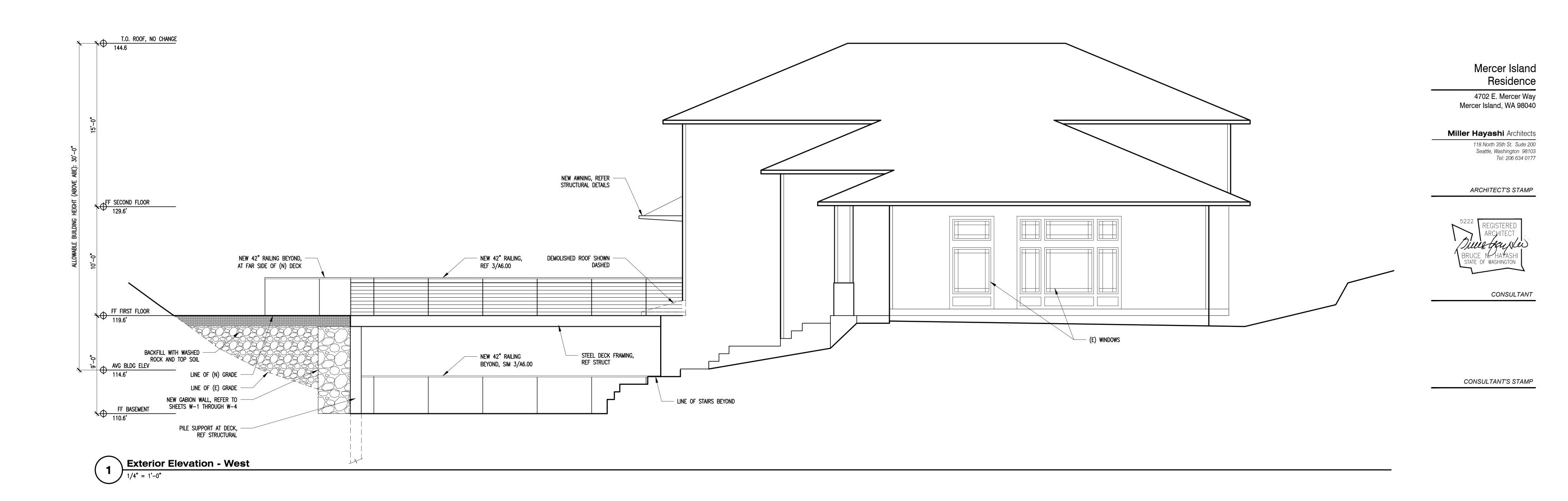
10/10/19

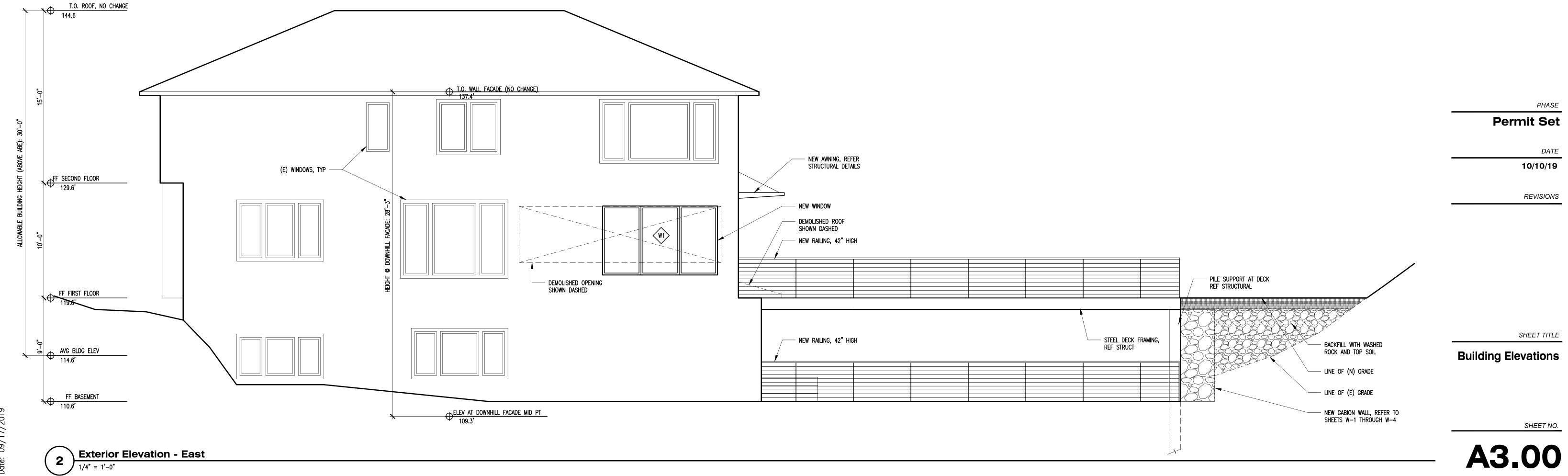
REVISIONS

SHEET TITLE

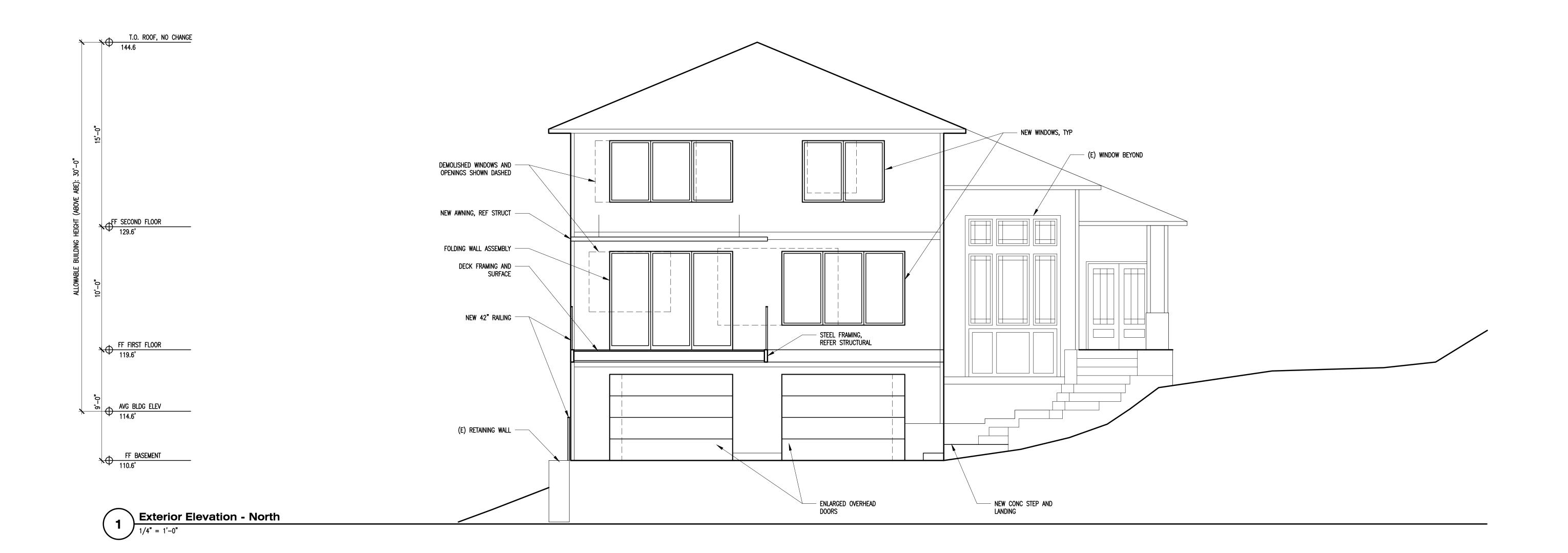
Roof Plan

SHEET NO.





Plot Date: 09/17/2019





2 Exterior Elevation - South (No Change)

1/4" = 1'-0"

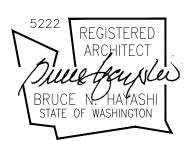
Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200
Seattle, Washington 98103
Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

Permit Set

10/10/19

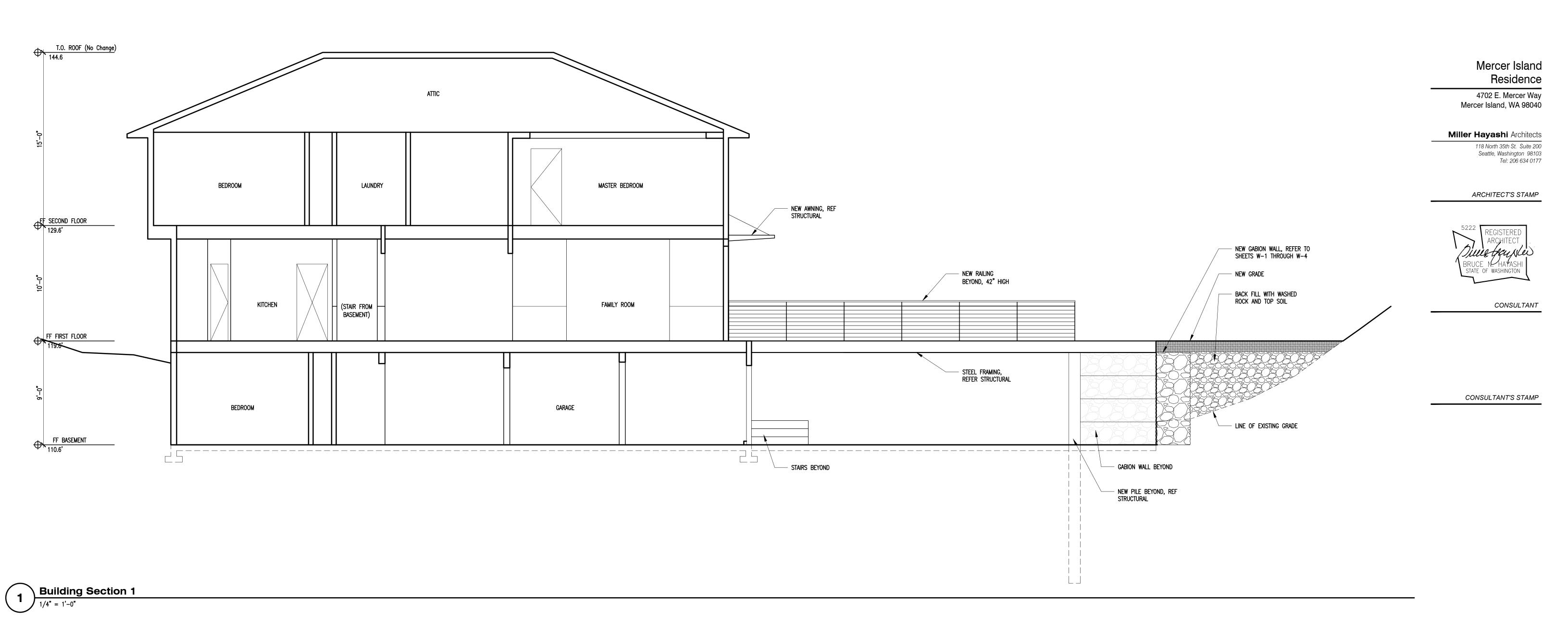
REVISIONS

SHEET TITLE

Building Elevations

SHEET NO

A3.01



Permit Set

DATE

10/10/19

REVISIONS

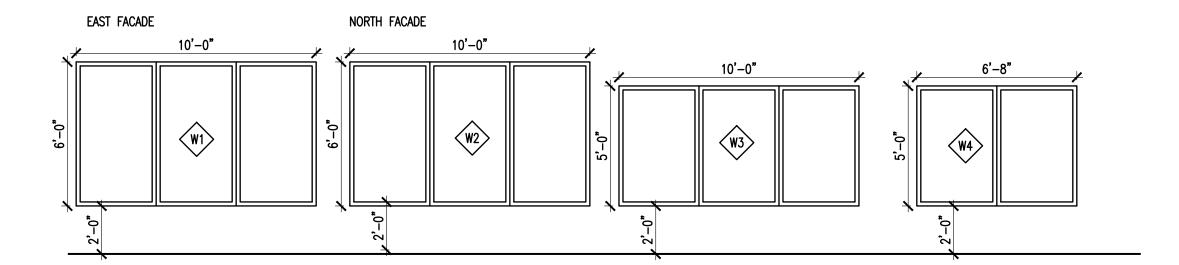
SHEET TITLE

Building Sections

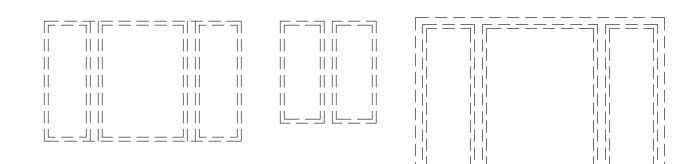
SHEET NO

A3.10

Windows: New



Windows: To be Demolished



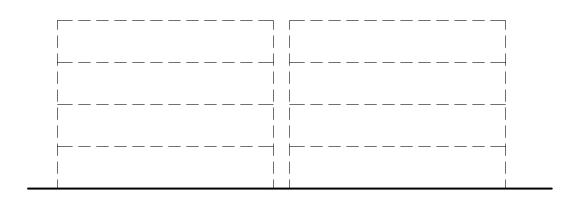
TOTAL GLAZING AREA DEMOLISHED: 90.3 SF TOTAL NEW GLAZING AREA: 239.5 SF CHANGE IN GLAZING AREA: 149 SF INCREASE

Doors: New

NORTH FACADE

10'-0"
10'-0"
10'-0"
10'-0"
10'-0"
10'-0"
10'-0"
10'-0"
10'-0"

Doors: To be Demolished



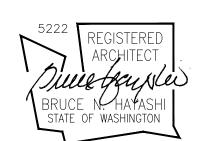
Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



CONSULTANT

CONSULTANT'S STAMP

Window Schedule

MARK	R.O. (WxH)	GLAZED AREA	U-VALUE	UA	REMARKS
W1	10' x 6'	51 SF	U-0.3	15.3	_
W2	10' x 6'	51 SF	U-0.3	15.3	_
W 3	10' x 5'	42 SF	U-0.3	12.6	_
W4	6'8" x 5'	28 SF	U-0.3	8.4	_

Window Schedule General Notes

1. FENESTRATION TO COMPLY WITH TABLE WSEC 2015 TABLE R402.1.1, PER ALTERATIONS SECTION R503.1.1 ("BUILDING ENVELOPE ASSEMBLIES THAT ARE PART OF THE ALTERATION SHALL COMPLY WITH SECTION R402.1.1 OR R402.1.4...")

WSEC 2015 ENERGY CODE REQUIREMENTS:

PRESCRIPTIVE REQUIREMENTS: TABLE R402.1.1, CLIMATE ZONE 5 AND MARINE 4

U-VALUE FENESTRATION = 0.30

2. WINDOW DIMENSIONS:

ROUGH OPENING DIMENSIONS ARE SHOWN ON SCHEDULE FOR REFERENCE ONLY. VERIFY ROUGH OPENINGS PRIOR TO FRAMING.

3. HEAD HEIGHT:

COORDINATE FRAMING AND ROUGH OPENING DIMENSIONS.

4. PROVIDE SAFETY GLAZING WITH VISIBLE MANUFACTURER'S SEAL AT ALL HAZARDOUS LOCATIONS INCLUDING:

NS INCLUDING: —GLAZING IN DOORS

GLAZED FENESTRATION SHGC = NR

-GLAZING ADJACENT TO DOORS WHEN THE BOTTOM EDGE OF THE GLAZING IS
LESS THAN 60" ABOVE THE FINISH FLOOR.
-GLAZING IN WINDOWS THAT MEET ALL THE FOLLOWING CRITERIA:
A. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQ. FT.

B. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" A.F.F. C. THE TOP EDGE OF THE GLAZING IS MORE THAN 36" A.F.F.

D. THE WINDOW IS WITHIN 36" OF A WALKING SURFACE.

NOTE: SEE ALSO WSEC WINDOW AND DOOR WORKSHEET

Do	Door Schedule										
OPENING #	TYPE	МОПН х НЕІСНТ	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HEAD DETAIL	JAMB DETAIL	THRESHOLD DETAIL	HARDWARE GROUP	KEY NOTES
D1	Overhead Door	10"0"x7'0"	WD	STN	WD	STN					
D2	Overhead Door	10'0"X7'0"	WD	STN	WD	STN					
D3	NanaWall	10'0"X8'0"	WD	STN	WD	STN					

PHASE
Permit Set

Permit 5

10/10/19

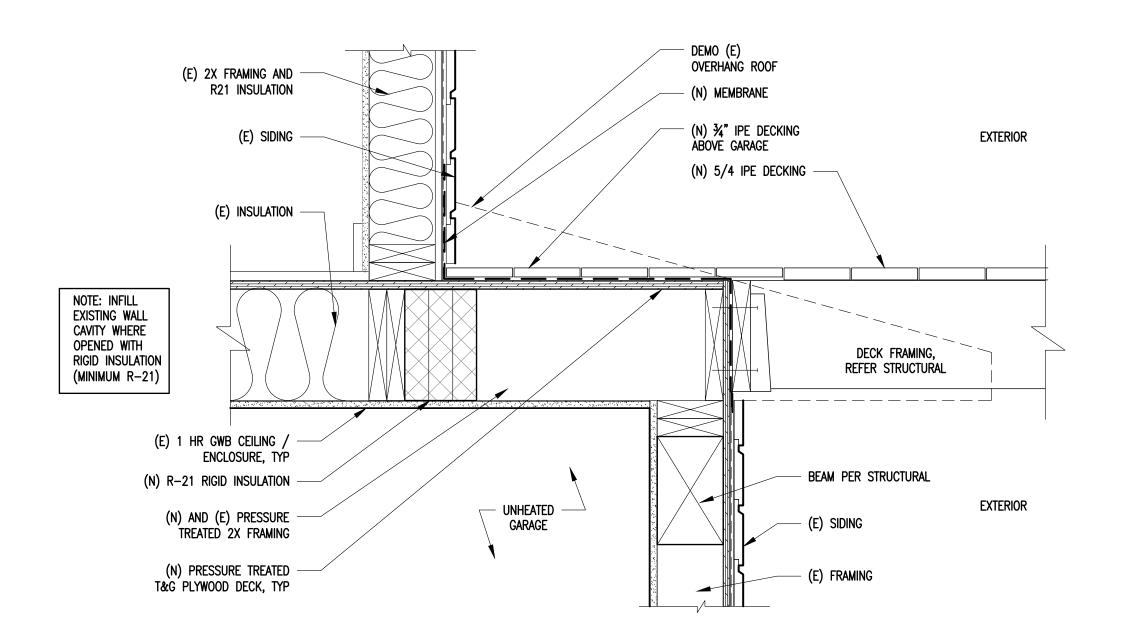
REVISIONS

SHEET TITLE

Window and Door Schedule

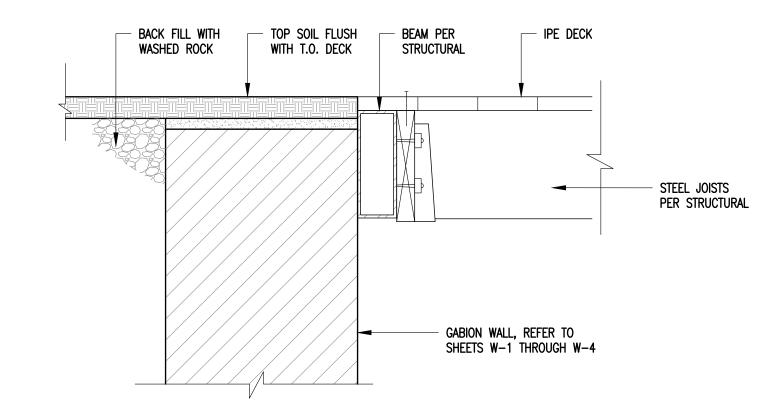
SHEET NO.

A4.00



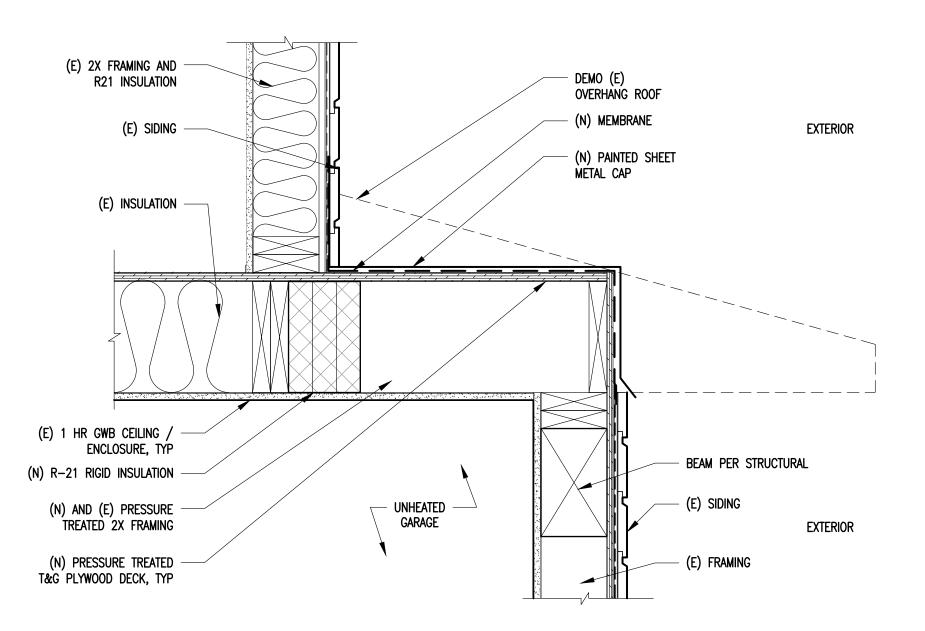
Typical Deck Transition @ Garage

1 1/2" = 1'-0"



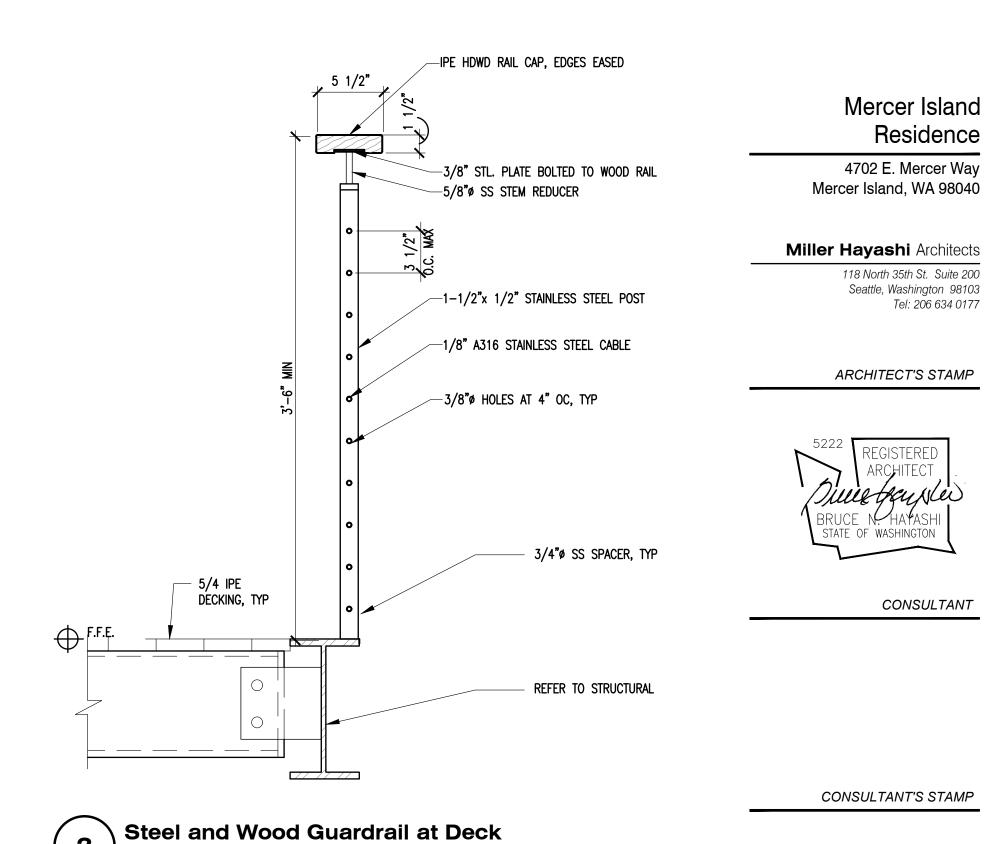
Deck @ Gabion Wall

1 1/2" = 1'-0"



Typical Roof Overhang @ Garage

1 1/2" = 1'-0"



Permit Set

Permit Se

10/10/19

REVISIONS

SHEET TITLE

Exterior Details

SHEET NO.

A6.00

CRITERIA

- 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2015 EDITION).
- 2. DESIGN LOADING CRITERIA:

RESIDENTIAL - ONE AND TWO-FAMILY	DWELLINGS
FLOOR LIVE LOAD	40 PSF
CNIVIDANIACNITAL LAADO	

SITE CLASS=D, Ss=1. 424g, Sds=0. 949g, S1=0. 546g, SD1=0. 546g Cs=0. 146, SDC D, Ie=1. 0, R=6. 5

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

STRUCTURAL STEEL

APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.

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

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

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

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

QUALITY ASSURANCE

STRUCTURAL STEEL FABRICATION AND ERECTION PER AISC 360
DRIVEN DEEP FOUNDATION PER TABLE 1705. 7
CAST-IN-PLACE DEEP FOUNDATION PER TABLE 1705. 8
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

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

ALLOWABLE SOIL PRESSURE	. 2000) PS
LATERAL EARTH PRESSURE (UNRESTRAINED)	35	5 P(
ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 1.5 INCLUDED)	. 250) P(
COEFFICIENT OF FRICTION (FS OF 1.5 INCLUDED)		0.
TRAFFIC SURCHARGE PRESSURE (UNIFORM LOAD)	. 75	5 PS
SEISMIC SURCHARGE PRESSURE (UNIFORM LOAD)		
12" PILE CAPACITY (COMPRESSION/TENSION)	IPS/30)K I F

SOILS REPORT REFERENCE: REPORT #2019-095 BY THE RILEY GROUP OF BOTHELL, WASHINGTON DATED MAY 9, 2019 AND ADDENDUM A DATED JULY 24, 2019.

15. AUGERCAST PILING INSPECTION BY THE SOILS ENGINEER SHALL BE PERFORMED DURING PLACEMENT. MAXIMUM AUGERCAST PILE ECCENTRICITY SHALL BE 3" LATERALLY. PILE LENGTH INDICATED ON DRAWINGS IS ESTIMATED. ACTUAL LENGTH SHALL BE DETERMINED IN FIELD BY SOILS ENGINEER. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING PILES.

RENOVATION

- 16. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
- 17. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.
- 18. 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

- 19. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500 PSI
- 20. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14, TABLE 19. 3. 2. 1 MODERATE EXPOSURE, F1.
- 21. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, FY = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.
- 22. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 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.

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

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

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

ANCHORAGE

- 26. 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.
- 27. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2508. MINIMUM BASE MATERIAL TEMPERATURE IS 50 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.
- 28. 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.

STEEL

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

A. AISC 360 AND SECTION 2205.2 OF THE INTERNATIONAL BUILDING CODE.
B. APRIL 14, 2010 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

- 30. 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.
- 31. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 32. 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.

33. 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.

- 34. 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.
- 35. 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.
- 36. 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.

WOOD

37. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD "GRADING RULES FOR WEST COAST LUMBER NO. 17", OR WWPA STANDARD, "WESTERN LUMBER GRADING RULES 2011". FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

THE FULLOW	ING MINIMUM STANDARDS:	
JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
STUDS, PLA	TES & MISC. FRAMING:	HEM-FIR NO. 2

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

39. 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) Fb = 2900 PSI, E = 2000 KSI, Fv = 290 PSI LVL (2.0E) Fb = 2600 PSI, E = 2000 KSI, Fv = 285 PSI LSL (1.55E) Fb = 2325 PSI, E = 1550 KSI, Fv = 310 PSI

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.

40. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

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

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

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

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

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

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

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

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

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

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

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

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.

General Structural Notes Continued on \$102 Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com Copyright 2019 Swenson Say Fagét - All Rights Reserved CONSULTANT



PHASE

Permit Set

10/10/19

REVISIONS

SHEET TITLE

General Structural

SHEET NO.

510

General Structural Notes, Continued

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

45. WOOD FASTENERS

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

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

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

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

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

46. NOTCHES AND HOLES IN WOOD FRAMING:

A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

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

47. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE 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 AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

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

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

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

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL 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 AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

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

Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

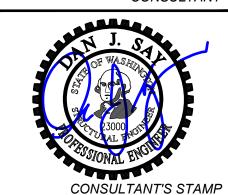
118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



p: 206.443.6212 ssfengineers.com
934 Broadway - Tacoma, WA 98402
p: 253.284.9470 ssfengineers.com
Copyright 2019 Swenson Say Fagét - All Rights Reserved

CONSULTANT



PHASE

Permit Set

DATE

10/10/19

REVISIONS

SHEET TITLE

General Structural Notes, Continued

SHEET NO.

5102

EXISTING BLOCK WALL —

Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



2124 Third Avenue - Suite 100 - Seattle, WA 98121 p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com Copyright 2019 Swenson Say Fagét - All Rights Reserved CONSULTANT



Permit Set

DATE 10/10/19

REVISIONS

SHEET TITLE

Foundation Plan

SHEET NO.

Mercer Island Residence

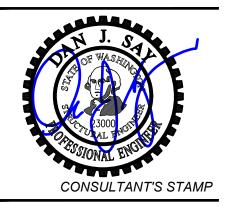
4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects 118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP

STRUCTURAL

2124 Third Avenue - Suite 100 - Seattle, WA 98121 p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com Copyright 2019 Swenson Say Fagét - All Rights Reserved CONSULTANT



Permit Set

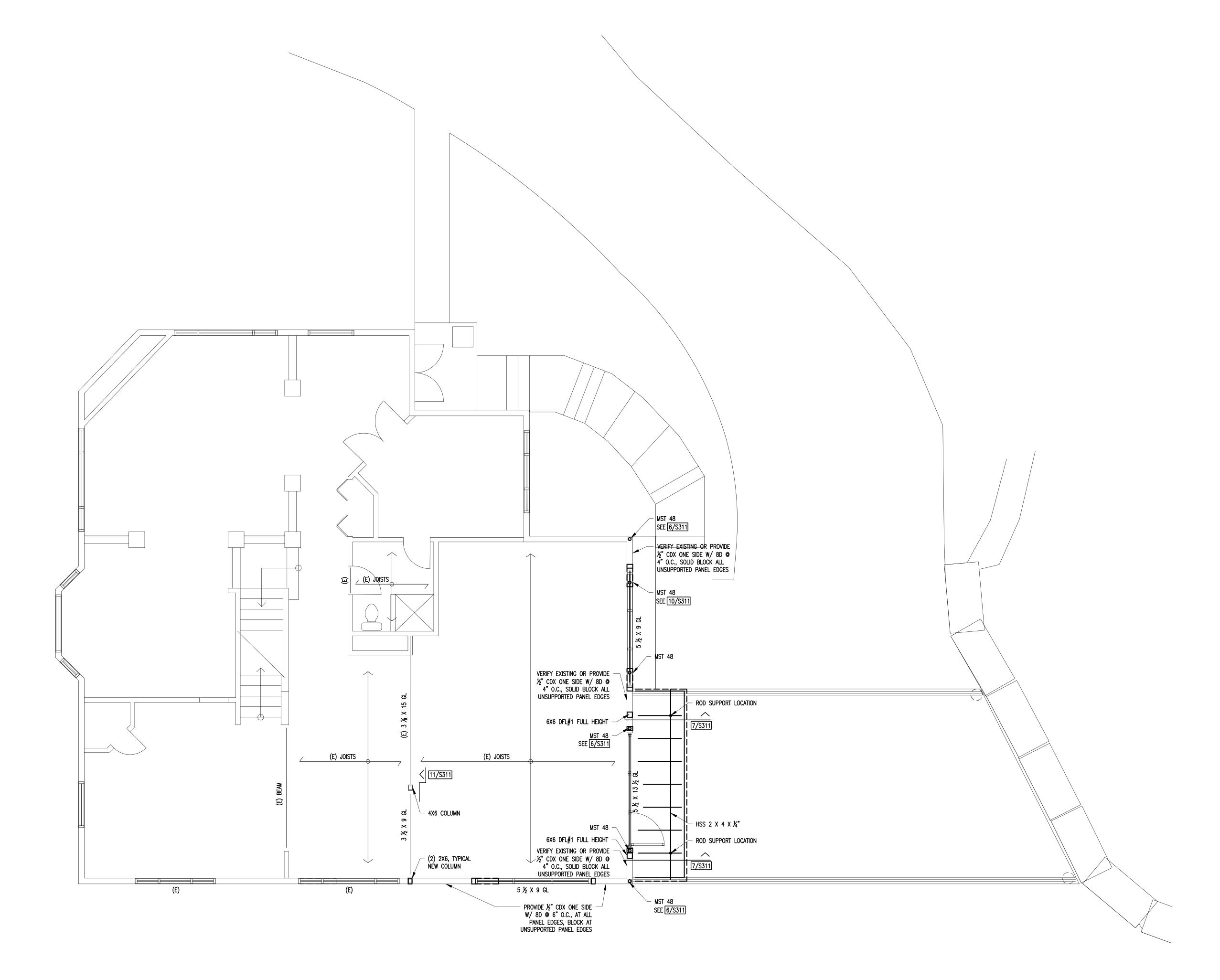
DATE 10/10/19

REVISIONS

SHEET TITLE

Main Floor / **Bridge Framing**

SHEET NO.



Upper Floor Framing Plan

4702 E. Mercer Way Mercer Island, WA 98040

Mercer Island

Residence

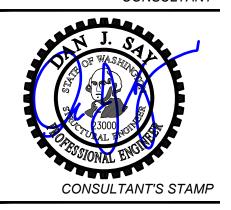
Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



2124 Third Avenue - Suite 100 - Seattle, WA 98121 p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com Copyright 2019 Swenson Say Fagét - All Rights Reserved



PHASE

Permit Set

10/10/19

REVISIONS

SHEET TITLE

Upper Floor Framing Plan

SHEET NO.

S211

Mercer Island Residence

4702 E. Mercer Way Mercer Island, WA 98040

Miller Hayashi Architects

118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP



2124 Third Avenue - Suite 100 - Seattle, WA 98121 p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com Copyright 2019 Swenson Say Fagét - All Rights Reserved



PHASE
Permit Set

Permit S

10/10/19

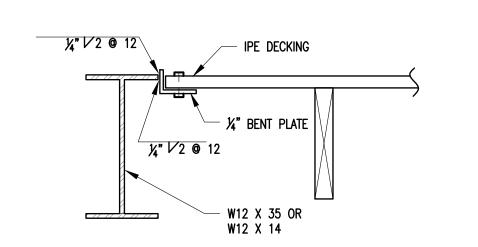
REVISIONS

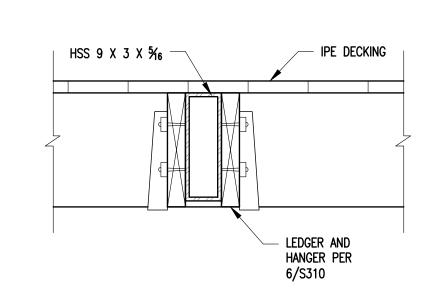
SHEET TITLE

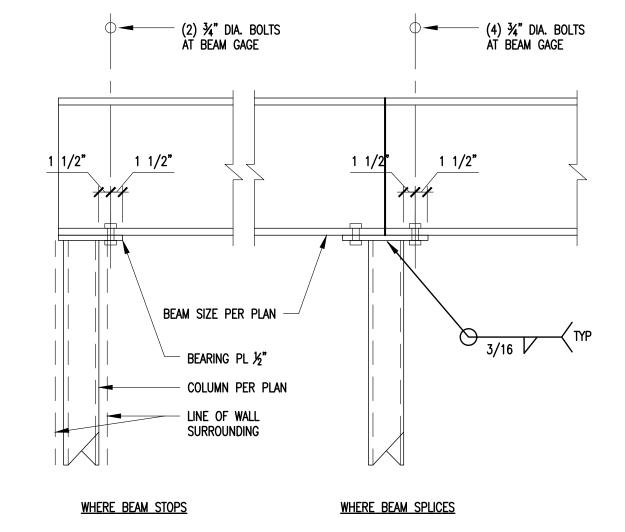
Roof Framing Plan

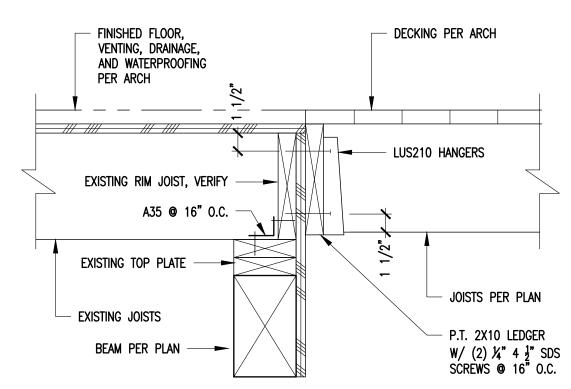
SHEET NO.

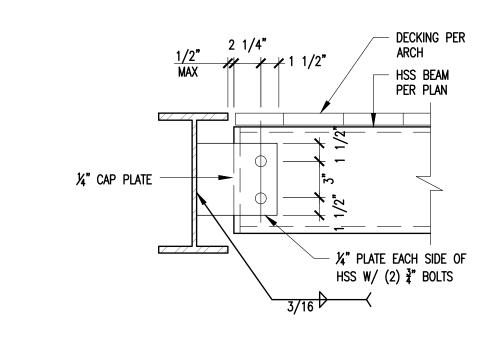
S212













Mercer Island

4702 E. Mercer Way Mercer Island, WA 98040

> 118 North 35th St. Suite 200 Seattle, Washington 98103 Tel: 206 634 0177

ARCHITECT'S STAMP

CONSULTANT'S STAMP

Miller Hayashi Architects

Residence

Deck Edge @ Girder

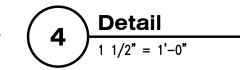
1 1/2" = 1'-0"

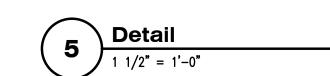
Deck at Typical Beam

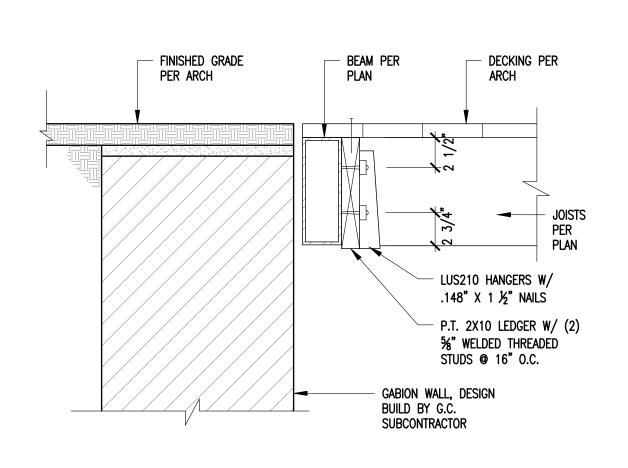
1 1/2" = 1'-0"

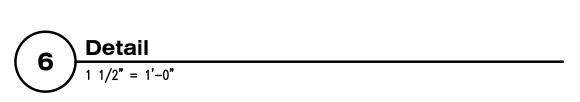
Typical Beam Bearing on HSS or Pipe Column

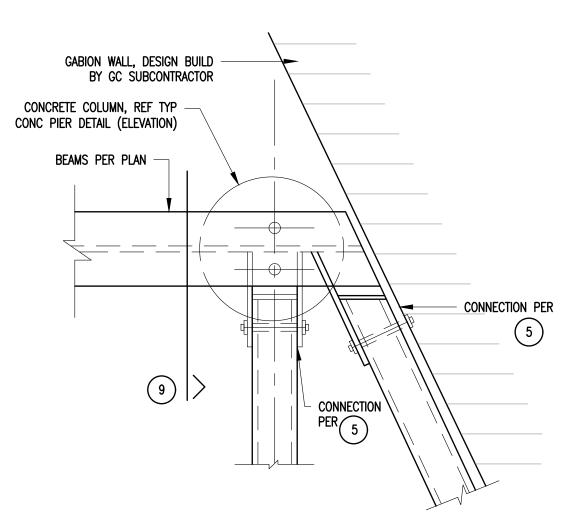
| 1" = 1'-0"

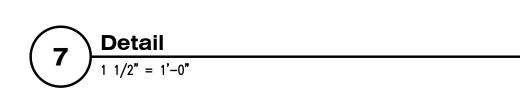


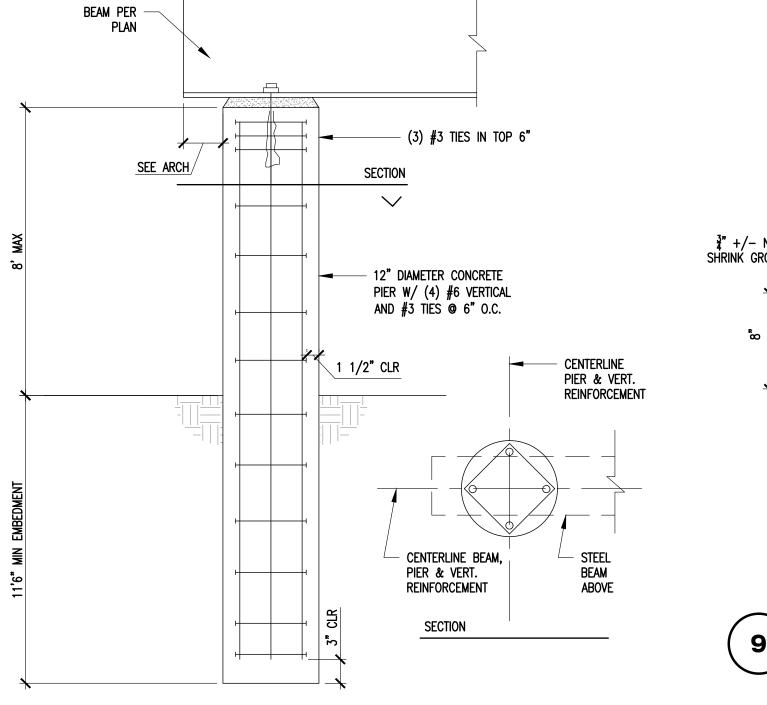




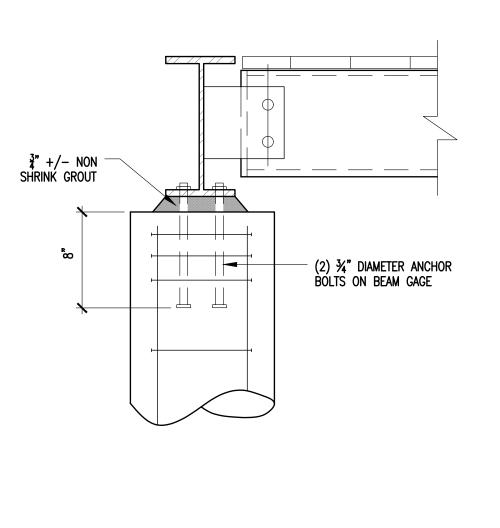












9 Detail
1 1/2" = 1'-0"

PHASE
Permit Set

DATE

REVISIONS

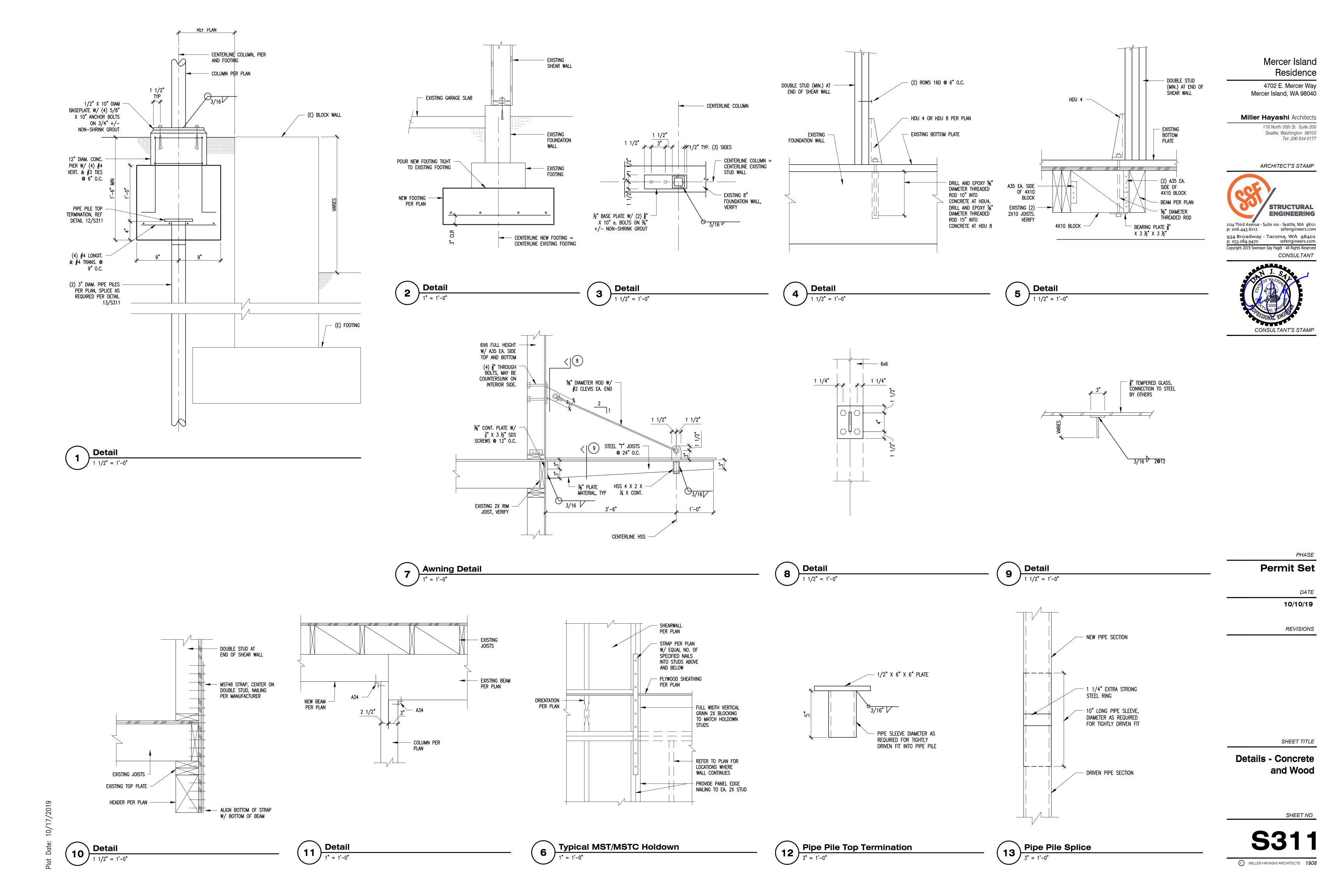
10/10/19

SHEET TITLE

Details - Steel

SHEET NO.

S310



Gabions Retaining Walls

East Mercer Residence 4702 East Mercer Way Mercer Island, Washington 98040

Sheet Index

Sheet No. Title

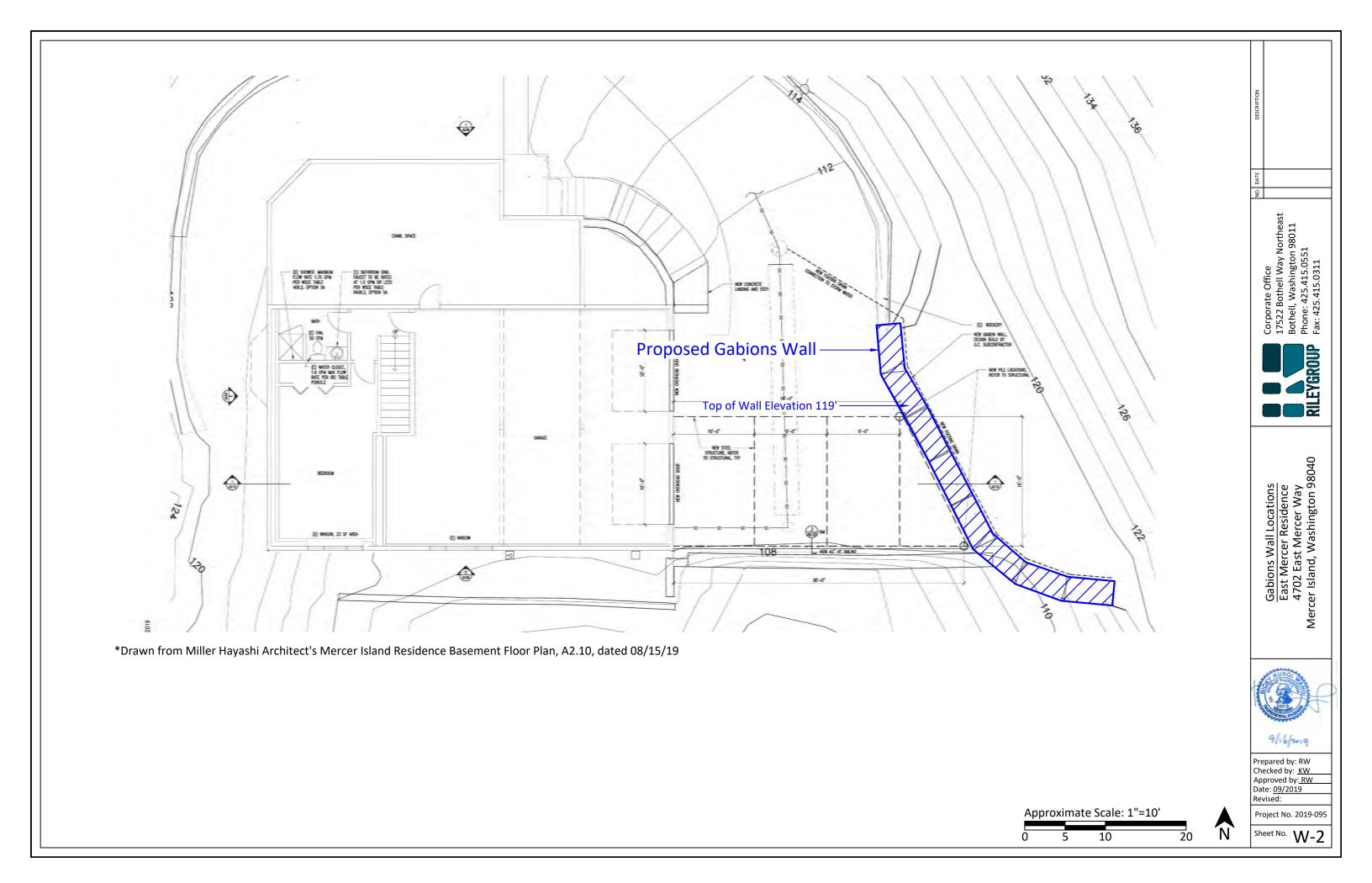
W-1 Title and Sheet Index

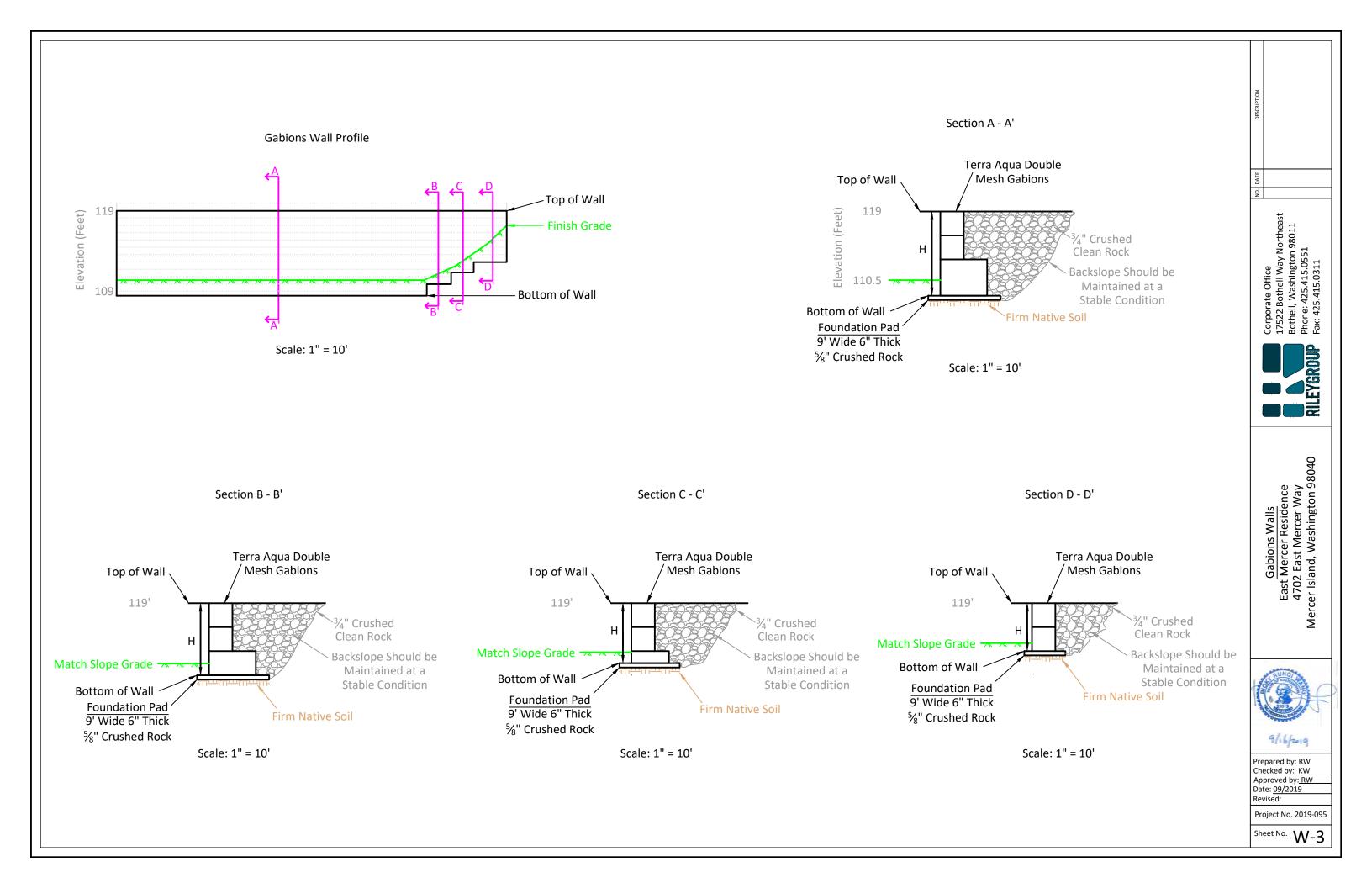
W-2 Gabions Wall Locations

Gabions Walls

W-4 Gabions Walls Construction Notes







Gabions Wall Construction Notes

Criteria

Refer to Basement Floor Plan (A2.10) prepared by Miller Hayashi Architects August 15, 2019 for retaining wall locations, alignments, and elevations.

All grading and earthwork should be completed per The Riley Group, Inc. Geotechnical Engineering Report, dated September 16, 2019.

2. Subgrade

6-inch foundation pad should be supported on firm native soil or compacted structural fill if needed.

3. Structural Fill

The backfill behind the gravity wall should consist of imported $1\frac{1}{4}$ -inch clean crushed rock. A sample of the $1\frac{1}{4}$ -inch or proposed backfill should be submitted to RGI prior to importing materials on Site.

Imported structural fill and compaction requirements should follow the Geotechnical Engineering Report prepared by The Riley Group, Inc. dated September 16, 2019.

4. Foundation Pad

Foundation pad should consist of at least 6 inches thick of 5/8-inch minus crushed rock base on firm soil subgrade, which is firm native soil or compacted structural fill.

5. Gabions Basket

The gabions basket should consist of Terra Aqua double twisted mesh gabions.

6. Others

Finish grade in front of the retaining wall must be at 18" higher than the bottom of the retaining wall.

Gabions wall should be built by qualified contractor. A geotechnical inspector should be on site to examine the material, verify the subgrade and compaction, and monitor the wall installation.



Gabions Wall Construction Notes
East Mercer Residence
4702 East Mercer Way
Mercer Island, Washington 98040



Prepared by: RW Checked by: <u>KW</u> Approved by: <u>RW</u> Date: <u>09/2019</u>

Project No. 2019-095

Sheet No. W-4