

ABBREVIATIONS:

ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
BLW	BELOW
BOT	BOTTOM
BOW	BOTTOM OF WALL
CAB	CABINET
CL	CENTERLINE
CONC	CONCRETE
CONT	CONTINUOUS
CP	CENTERPOINT
DET	DETAIL
DIA	DIAMETER
DM	DIMENSION
DR	DOOR
DS	DOWNSPOUT
D/W	DISHWASHER
EA	EACH
EX	EXISTING
EXT	EXTERIOR
FOC	FACE OF CONCRETE
FOW	FACE OF WALL
FN GRDE	FINISHED GRADE
FNDN	FOUNDATION
FLR	FLOOR
FP	FIREPLACE
GA	GAUGE
GWB	GYPSUM WALL BOARD
HB	HOSE BIBB
HGT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
LV	LOW VOLTAGE
MTL	METAL
MFR	MANUFACTURER
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NFC	NOT FOR CONSTRUCTION
OC	ON CENTER
PL	PROPERTY LINE
RAD	RADIUS
RE:	REFER TO
SIM	SIMILAR
TBD	TO BE DETERMINED
TG	TEMPERED GLASS
T&G	TONGUE & GROOVE
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
WD	WOOD
WDW	WINDOW

PLAN LEGEND:

	EXISTING WALL TO REMAIN
	NEW FULL-HEIGHT WALL
	NEW FULL-HEIGHT CONCRETE WALL
	PARTIAL-HEIGHT WALL
	PROPERTY LINE
	BUILDING / STRUCTURE ABOVE
	BUILDING / STRUCTURE BELOW
	CENTERLINE
	AREA OF DRAWING REVISION
	ELEVATION MARKER
	SECTION MARKER

GENERAL NOTES:

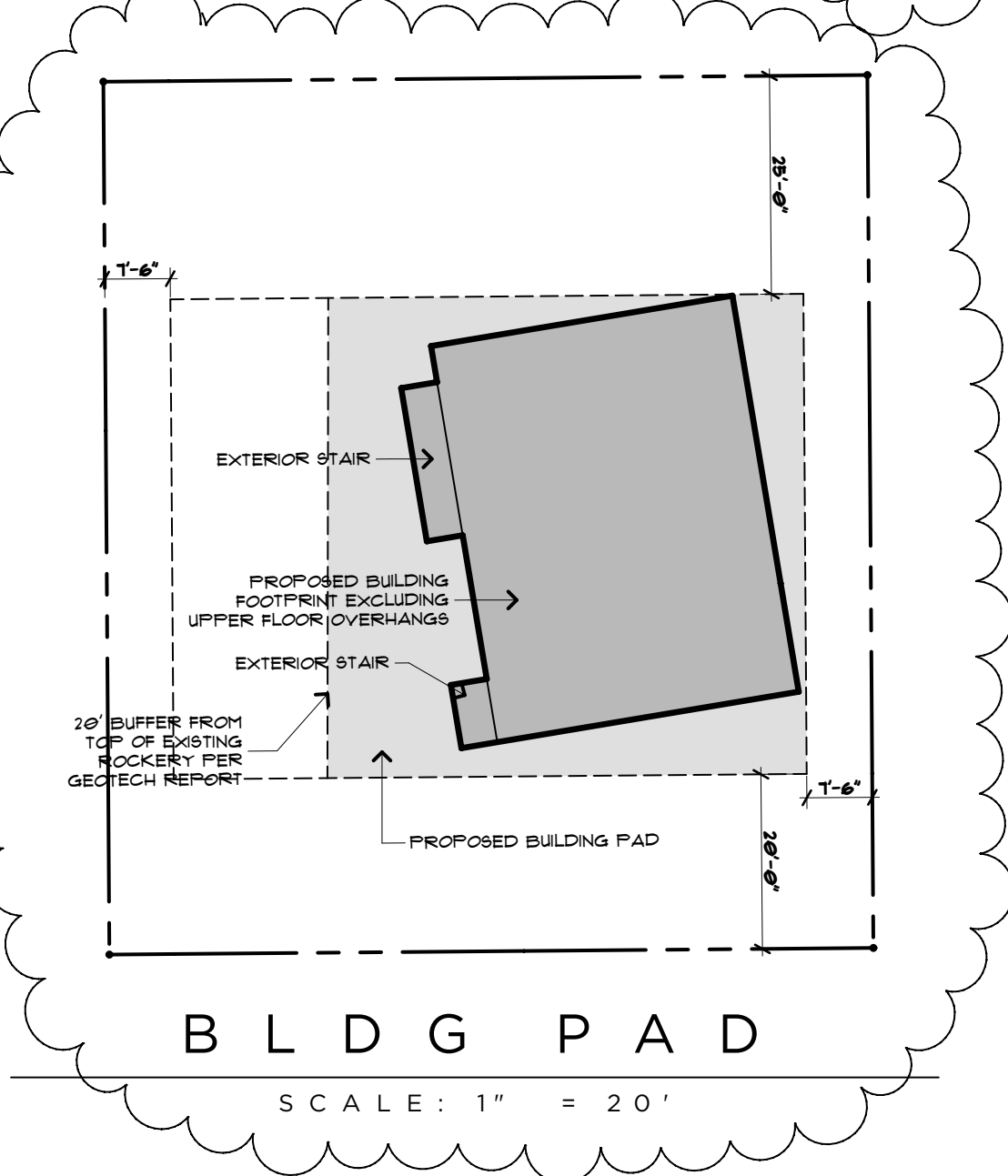
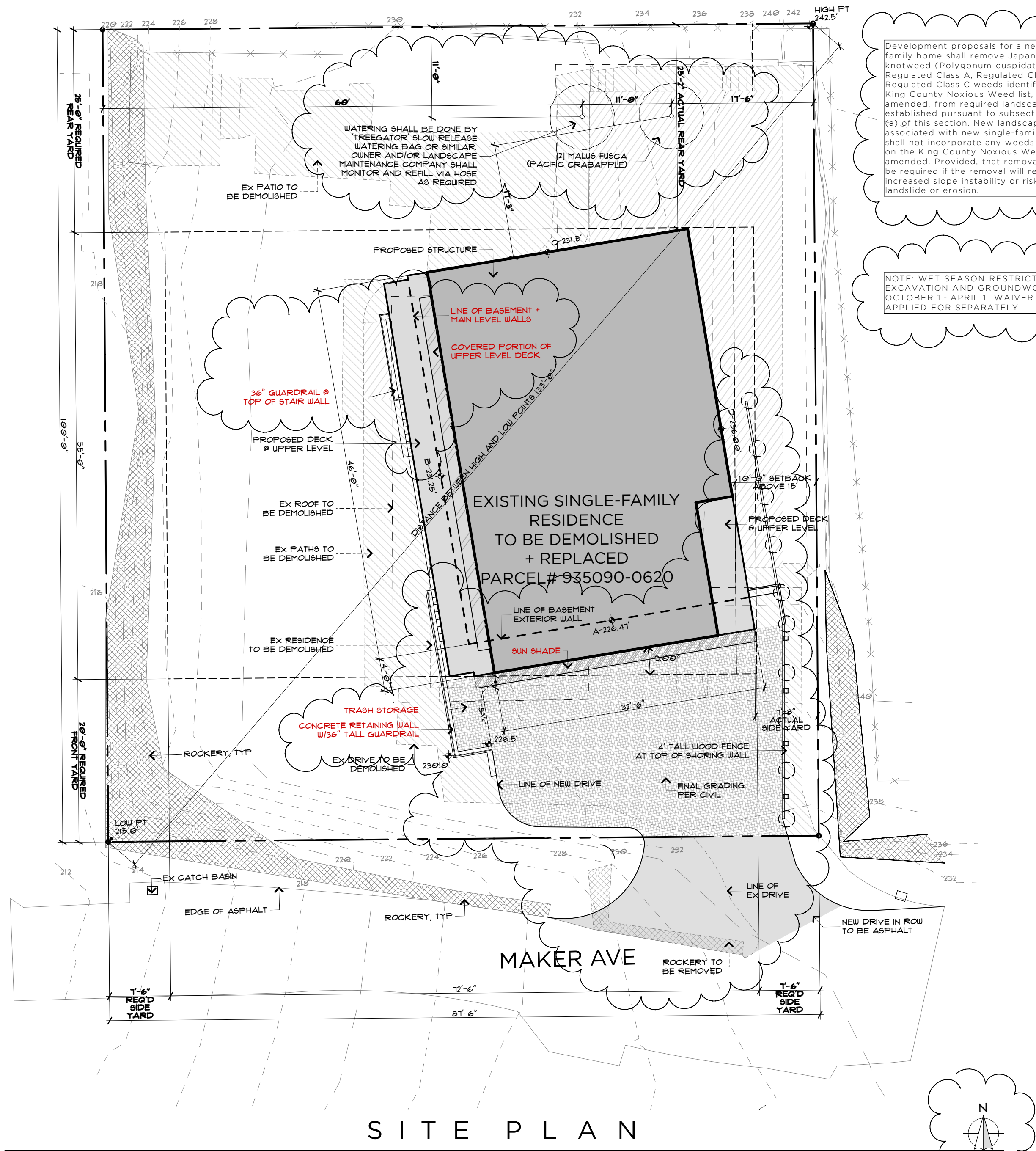
- DO NOT SCALE DRAWINGS.
- THIS PROJECT SHALL COMPLY WITH ALL GOVERNING REGULATIONS, ORDINANCES, BUILDING CODES, OR COVENANTS OF THE AREA IN WHICH IT IS BUILT.
- APPROVAL BY AN INSPECTOR DOES NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS OR SPECIFICATIONS.
- THE CONTRACTOR SHALL SCHEDULE WALK-THROUGHS AT EACH OF BELOW NOTED INTERVALS:
 - PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
 - PRIOR TO THE COMMENCEMENT OF ALL MECHANICAL + ELECTRICAL WORK.
- PROVIDE ALL NECESSARY BARRICADES, WARNING SIGNS, + DEVICES TO PROTECT PUBLIC + CONSTRUCTION PERSONNEL DURING CONSTRUCTION.
- MAINTAIN ALL REQUIRED ACCESS + EGRESS DURING CONSTRUCTION.

DUTY OF COOPERATION:

RELEASE + ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, THE CONTRACTOR, + JEFFREY ALMETER. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED BY THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO JEFFREY ALMETER. FAILURE TO DO SO SHALL RELIEVE JEFFREY ALMETER FROM ANY RESPONSIBILITY OF THE CONSEQUENCES.

ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT THE CONSENT OF JEFFREY ALMETER IS UNAUTHORIZED. FAILURE TO OBSERVE THESE PROCEDURES SHALL RELIEVE JEFFREY ALMETER OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH ACTIONS.

MERCER RESIDENCE
6950 SE MAKER ST, MERCER ISLAND, WA 98040



LOT COVERAGE / IMPERVIOUS CALCS:

LOT AREA	8,750 FT ²
MAXIMUM ALLOWABLE IMPERVIOUS COVERAGE:	(35%) 3,062.50 FT ²
LOT SLOPE CALCULATION:	20.1% SLOPE
HIGH POINT 242.5	
LOW POINT 215.0	
HORIZONTAL DISTANCE 133'	

EXISTING ROOF IMPERVIOUS SURFACE:	3,010 FT ²
EXISTING DRIVES + WALKS IMPERVIOUS SURFACE:	1,970 FT ²
EXISTING IMPERVIOUS:	4,980 FT ²
EXISTING IMPERVIOUS TO BE REMOVED:	4,980 FT ²
EXISTING IMPERVIOUS SURFACE TO REMAIN:	0 FT ²

PROPOSED STRUCTURE IMPERVIOUS (INC UPPER DECK):	1,897 FT ²
PROPOSED DRIVES IMPERVIOUS:	802 FT ²
PROPOSED HARDSCAPE:	82 FT ²
TOTAL PROPOSED IMPERVIOUS:	2,781 FT ²

TOTAL IMPERVIOUS SURFACE UPON COMPLETION: (31.8%) 2,781 FT²

PROPOSED LANDSCAPE AREA (REMAINDER OF LOT (68.2%) 5,969 FT² EXCEPT AREAS OF EXISTING ROCKERY):

HARDSCAPE CALCULATIONS:

LOT AREA	8,750 FT ²
MAXIMUM ALLOWABLE HARDSCAPE AREA:	(9%) 787.5 FT ²

PROPOSED TRASH AREA (INC RETAINING WALL):	46 FT ²
PROPOSED NORTH STEPS (INC WALL):	21 FT ²
PROPOSED SOUTH STEPS NEAR TRASH (INC WALL):	15 FT ²
TOTAL PROPOSED HARDSCAPE:	(9%) 82 FT ²

PROJECT INFO:

PROJECT ADDRESS:
6950 SE MAKER ST
MERCER ISLAND, WA 98040

SCOPE OF WORK:
NEW SINGLE FAMILY RESIDENCE

ZONE:
R-8.4

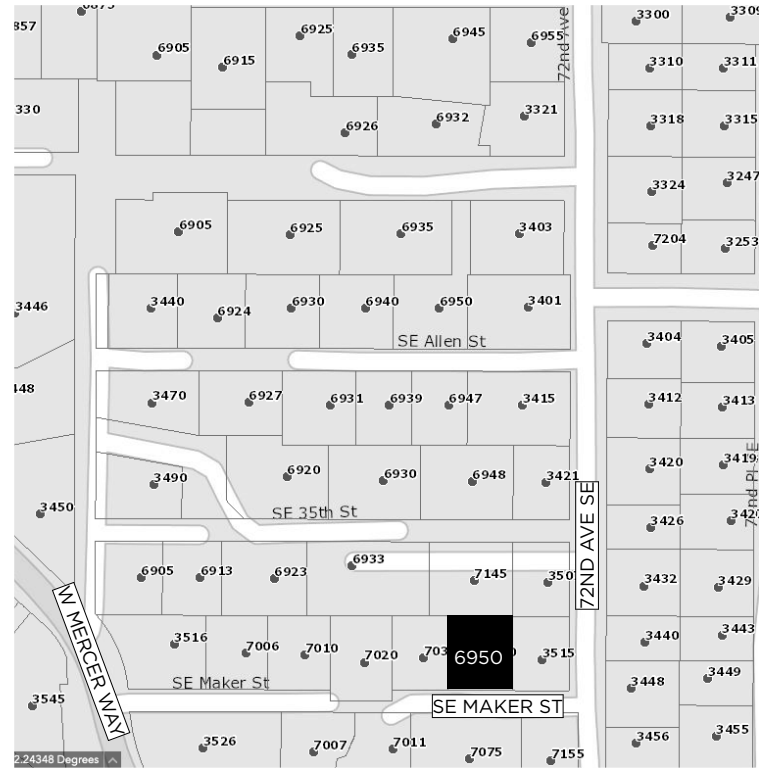
LEGAL DESCRIPTION:
WHITE BROS 1ST TO EAST SEATTLE 46-47-48 & W 1/2 OF 49. BLOCK 3, LOT 46 TO 49

ACCESSOR'S PARCEL NUMBER:
935090-0620

BUILDING CODE + OCCUPANCY:
2018 IRC, IBC, IFC, WSEC. 2018 IMC, IFGC, UPC WILL BE DEFERRED PERMITS BY INDIVIDUAL TRADES
R-3 SINGLE FAMILY RESIDENTIAL (RESIDENCE)
U STORAGE (GARAGE, STORAGE)

TYPE OF CONSTRUCTION:
TYPE-VB NON-SPRINKLERED

VICINITY MAP:



7/4/20227/4/20227/4/2022

LEGAL DESCRIPTION

(PER PERSONAL REPRESENTATIVE DEED RECORDING# 20210415002461)

LOTS 46, 47, 48 AND THE WEST ONE-HALF OF LOT 49 IN BLOCK 3 OF WHITE BROTHERS FIRST ADDITION TO EAST SEATTLE, AS PER PLAT RECORDED IN VOLUME 4 OF PLATS, PAGE 100, RECORDS OF KING COUNTY AUDITOR;

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

BASIS OF BEARINGS

HELD N 88°48'41" W BETWEEN MONUMENTS FOUND ON THE CENTERLINE OF SE 32ND ST PER GPS OBSERVATIONS, NAD83/2011 WASHINGTON STATE PLANE, NORTH ZONE.

REFERENCES

- R1. RECORD OF SURVEY, VOL. 133, PG. 28,
R2. RECORD OF SURVEY, VOL. 7, PG. 171,
R3. PLAT OF WHITE & NOBLES FIRST ADD., REC. NO. 1889050232489, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88, PER GPS OBSERVATIONS.

SURVEYOR'S NOTES

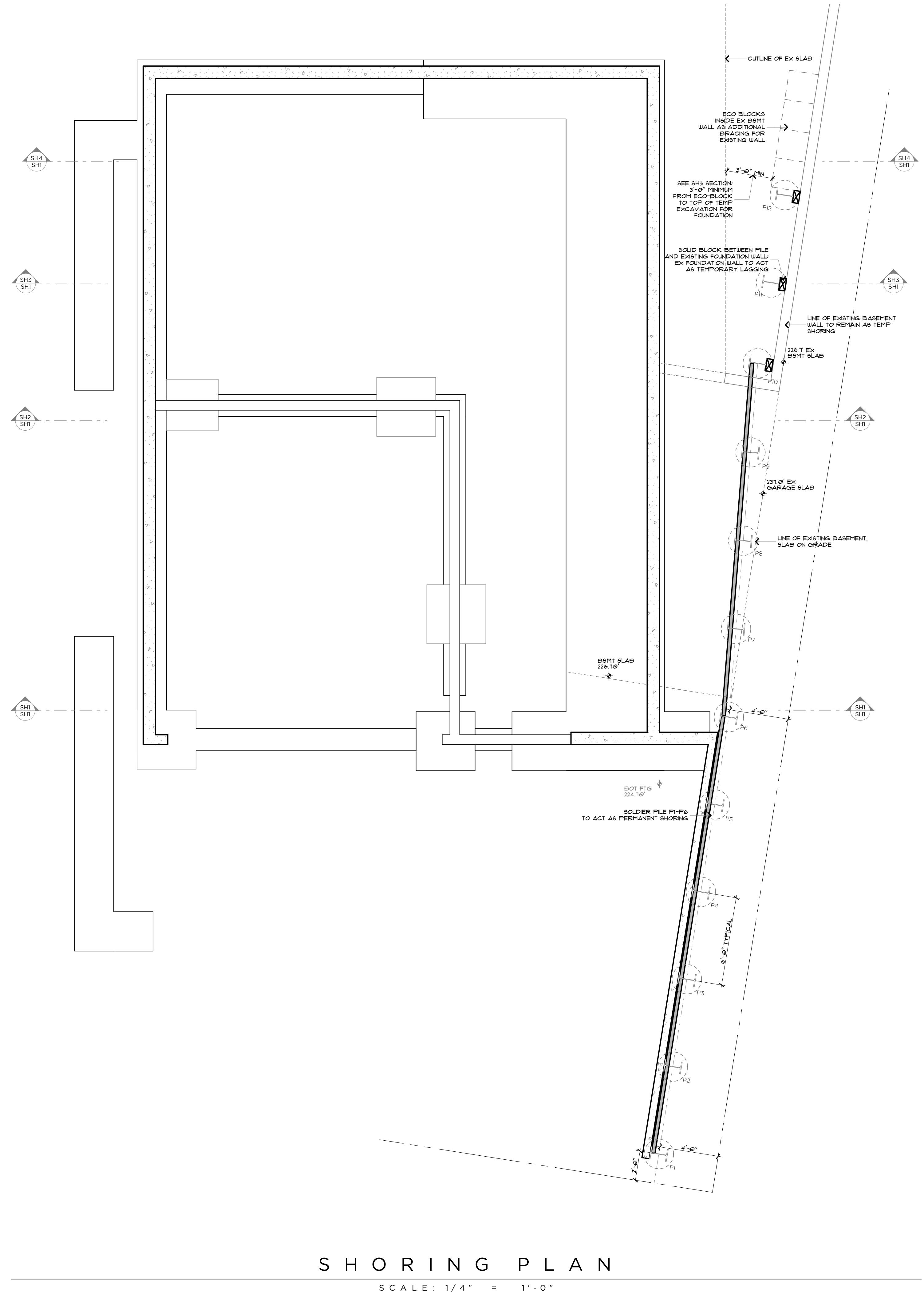
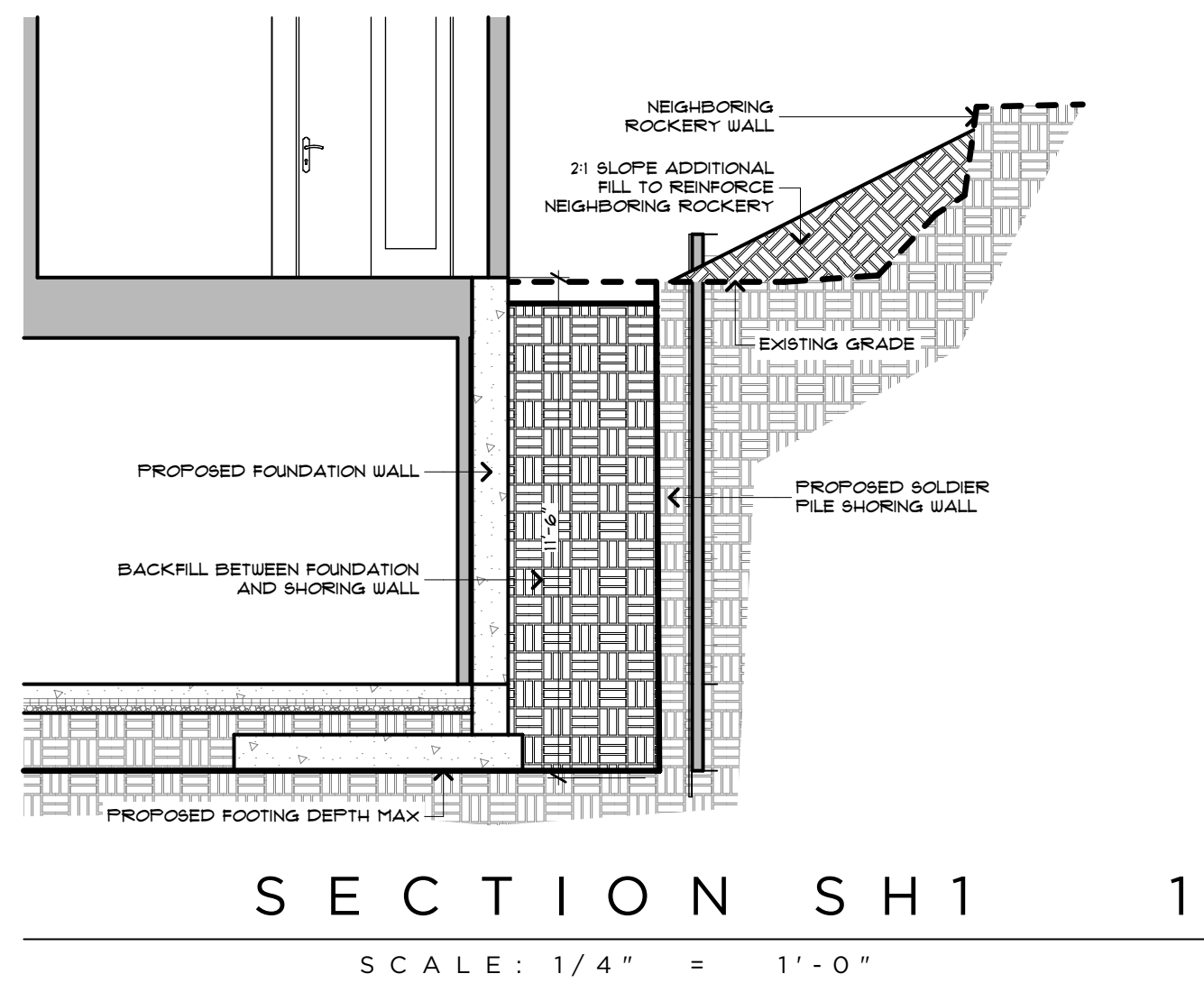
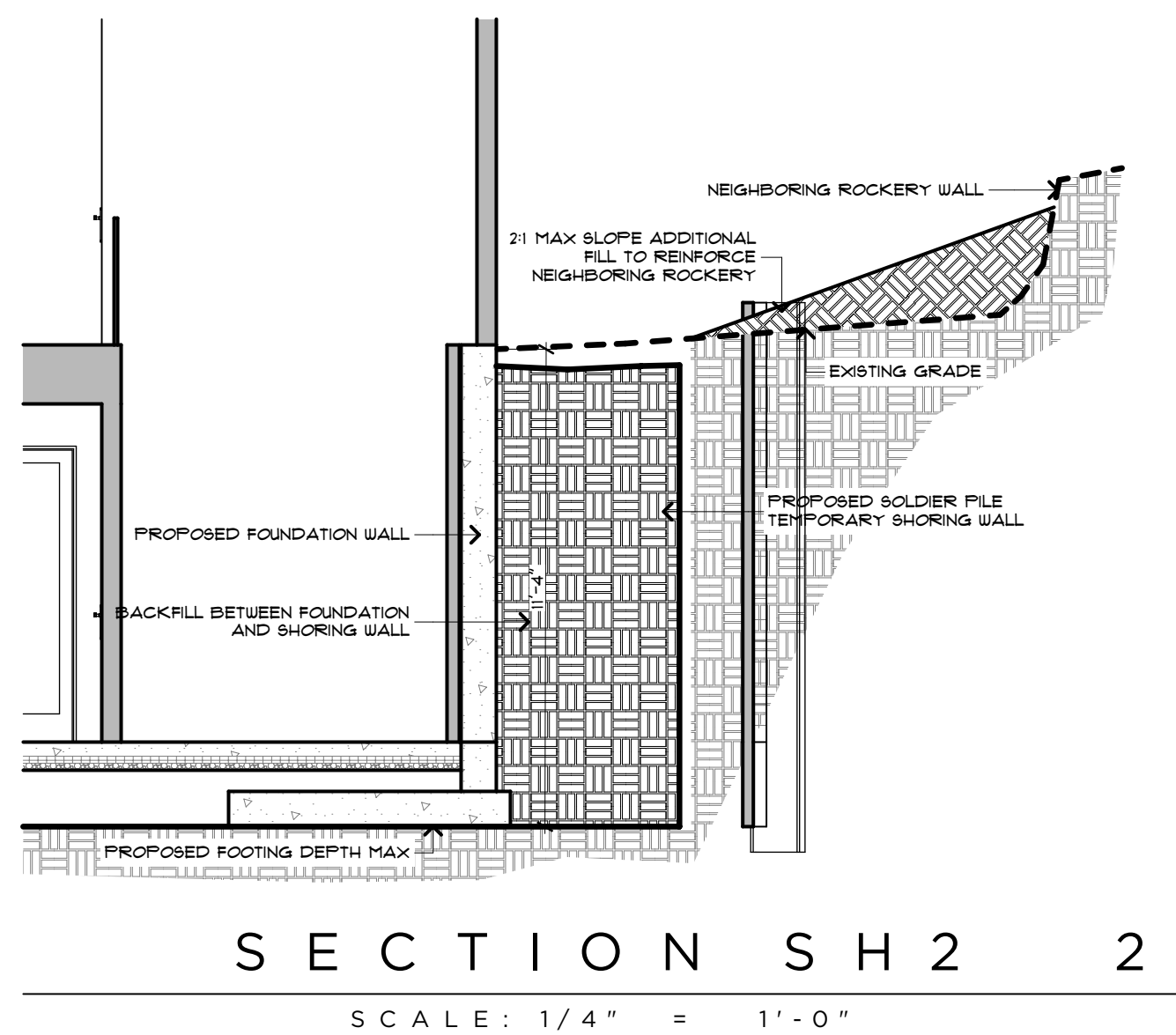
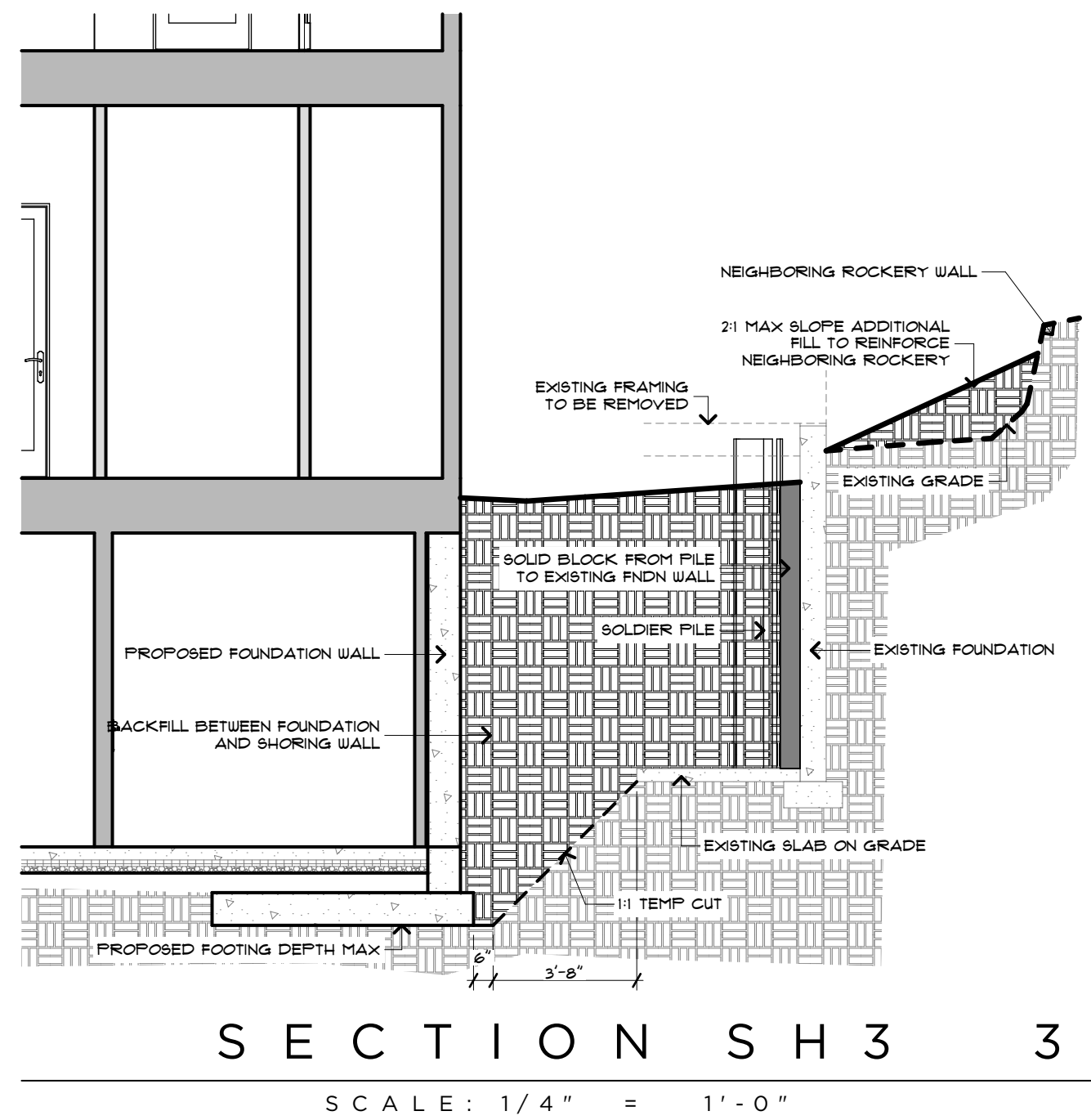
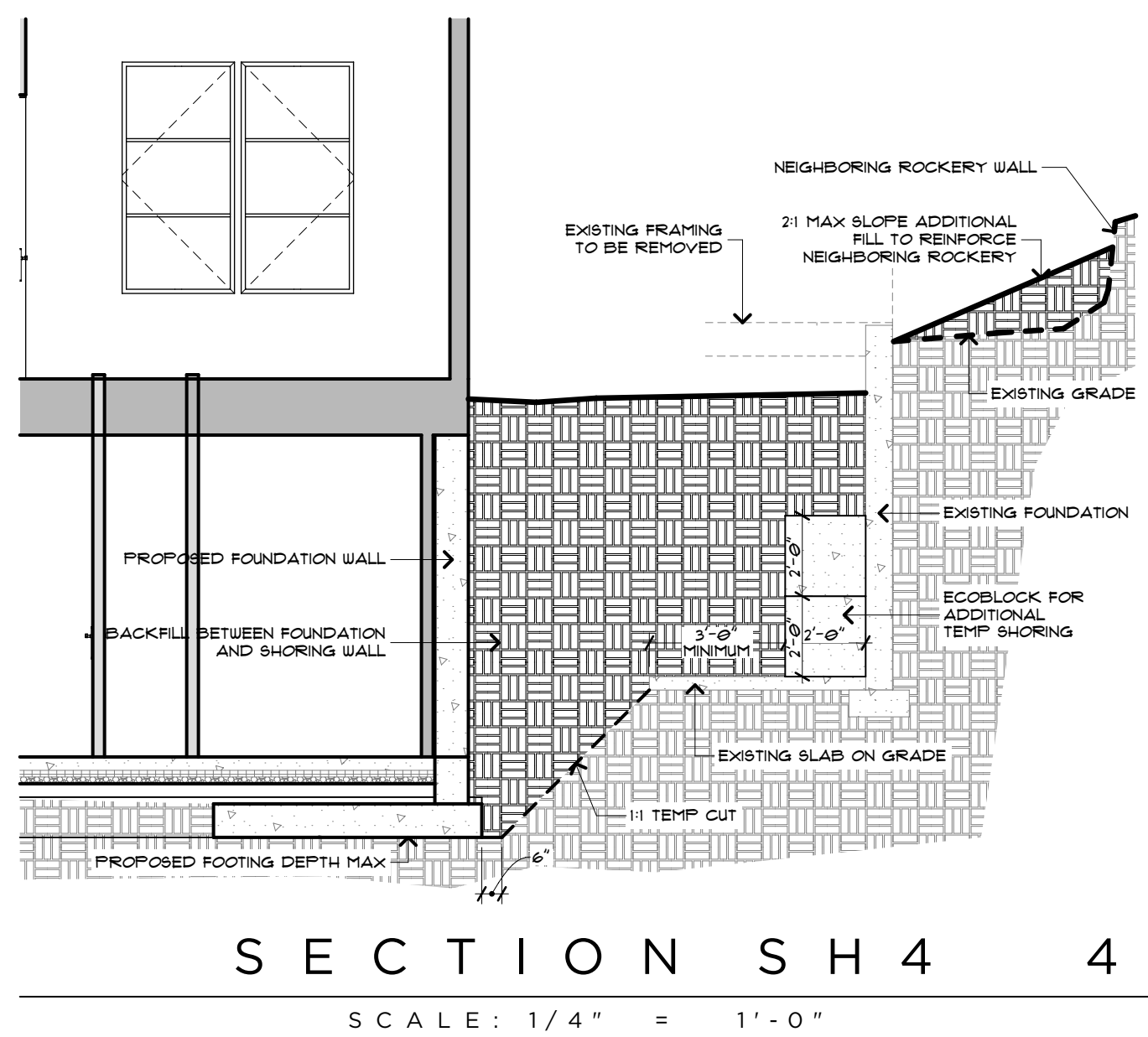
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN MAY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON 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. 9350900620.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 8,750± S.F. (0.20 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 | | NAIL AS NOTED |
| | ASPHALT SURFACE | | PAVER SURFACE |
| | BUILDING | | POWER METER |
| | CENTERLINE ROW | | POWER (OVERHEAD) |
| | COLUMN | | ROCKERY |
| | CONCRETE SURFACE | | SEWER LINE |
| | RETAINING WALL | | SEWER MANHOLE |
| | DECK | | STORM DRAIN LINE |
| | FENCE LINE (WOOD) | | SEWER CLEANOUT |
| | GAS METER | | TREE (AS NOTED) |
| | INLET (TYPE 1) | | WATER LINE |
| | MONUMENT IN CASE (FOUND) | | WATER METER |
| | MONUMENT (SURFACE, FOUND) | | WATER VALVE |

VICINITY MAP
N.T.S.





JA
10651 REGISTERED ARCHITECT
Jeffrey P. Almeter
Jeffrey P. Almeter
State of Washington

MERCER RESIDENCE
6950 SE MAKER ST
MERCER ISLAND, WA

SHODING PLANS
AND SECTIONS
RELEASE
17 FEB 2023
PERMIT CORRECTIONS
20 FEBRUARY 2023

SH1
MAKER AVE
AUTUMN 2022

General Structural Notes

The Following Apply Unless Noted Otherwise on the Drawings

Criteria

- CODE REQUIREMENTS: ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2018 EDITION.
- REFERENCE DOCUMENTS:
 - TOPOGRAPHIC AND BOUNDARY SURVEY BY Terrane DATED May 27, 2021
 - REPORT ON GEOTECHNICAL INVESTIGATION BY Geotech Consultants, INC, DATED MARCH 21 2022, (Proj #JN-22007)
- DESIGN LOADS: THE SOIL PRESSURE INDICATED ON THE SOIL PRESSURE DIAGRAMS WHERE USED FOR DESIGN.
- SOILS INSPECTION: INSPECTION BY THE SOILS ENGINEER SHALL BE PERFORMED FOR PILE PLACEMENT . ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF PILE. SOIL COMPACTION SHALL BE SUPERVISED/TESTED BY THE GEOTECHNICAL ENGINEER.
- SPECIAL INSPECTION: SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 110 AND 1701 OF THE INTERNATIONAL BUILDING CODE AND THE PROJECT SPECIFICATIONS 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.

-STRUCTURAL STEEL FABRICATION AND ERECTION (INCLUDING FIELD WELDING AND HIGH-STRENGTH FIELD BOLTING)

- UTILITY LOCATION: THE SHORING CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING PILE HOLES OR CUTTING OR DIGGING IN STREETS OR ALLEYS. THE UTILITIES INFORMATION SHOWN ON THE PLANS MAY BE NOT COMPLETE.
- SPECIAL CONDITIONS: CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES IN THE FIELD AND SHALL NOTIFY THE ENGINEER OF ALL FIELD CHANGES PRIOR TO FABRICATION AND INSTALLATION.
- SOILS: SEE REPORT OF GEOTECHNICAL INVESTIGATION FOR MORE COMPLETE INFORMATION, INCLUDING RECOMMENDATIONS FOR SHORING IN GENERAL, SHORING MONITORING, EXCAVATION, LAGGING, AND DRAINAGE.
- SAWN LUMBER: SAWN LUMBER SHALL CONFORM TO "GRADING AND DRESSING RULES,"WEST COAST LUMBER INSPECTION BUREAU (WCLIB), LATEST EDITION. LUMBER SHALL BE THE SPECIES AND GRADE NOTED IN THE LAGGING TABLE.

TIMBER LAGGING SHALL BE PRESSURE TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPB STANDARD U1 AND SHALL MEET A USE CATEGORY OF UC4B OR BETTER. LAGGING SHALL BE 4X10 UNLESS OTHERWISE NOTED ON DRAWINGS.

- STEEL SPECIFICATIONS: DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS:
 - STRUCTURAL STEEL: AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS--ALLOWABLE STRESS DESIGN.
 - WELDING: AWS D1.1.(AWS PREQUALIFIED JOINT DETAILS USE 1/4" MINIMUM WELDS UNLESS NOTED OTHERWISE).
 - WELDER CERTIFICATION: WASHINGTON ASSOCIATION OF BUILDING OFFICIALS (WABO).vv

- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
WIDE FLANGE	A992	50 KSI
PIPE	A53	35 KSI
PLATES, SHAPES, ANGLES, AND RODS	A36	36 KSI
STRUCTURAL BOLTS	A325-N	
WOOD CONNECTION BOLTS	A307	
WELDING ELECTRODES	E70XX	

Concrete

- CONCRETE: CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF CHAPTER 19 OF THE 2018 IBC. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD CYLINDER TESTS, UNLESS APPROVED OTHERWISE. REQUIRED ULTIMATE COMPRESSIVE STRENGTH OF STRUCTURAL GROUT SHALL BE REACHED BY 7 DAYS FOR TIEBACKS AND 28 DAYS FOR PILES.

f'c (psi)	Minimum Cement Per Cubic Yard	Max. Water Per 94 LB Cement	Use
-----	1-1/2 Sacks	-----	Pile lean concrete
3,000	6 Sacks (PILING)	6 Gallons	Pile struct. grout

CONCRETE WALL SHALL ATTAIN A 28-DAY STRENGTH OF f'c=3,000 PSI

AS AN ALTERNATIVE TO THE ABOVE, THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE ALTERNATE MIX DESIGN WILL BE REVIEWED FOR CONFORMANCE TO ACI 318 Ch. 5 WITH SBC REVISIONS.

- 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 TABLE ACI 318 TABLE 4.2.1 MODERATE EXPOSURE.
- 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 PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy=60,000 PSI.

Pipe and Lagging Construction

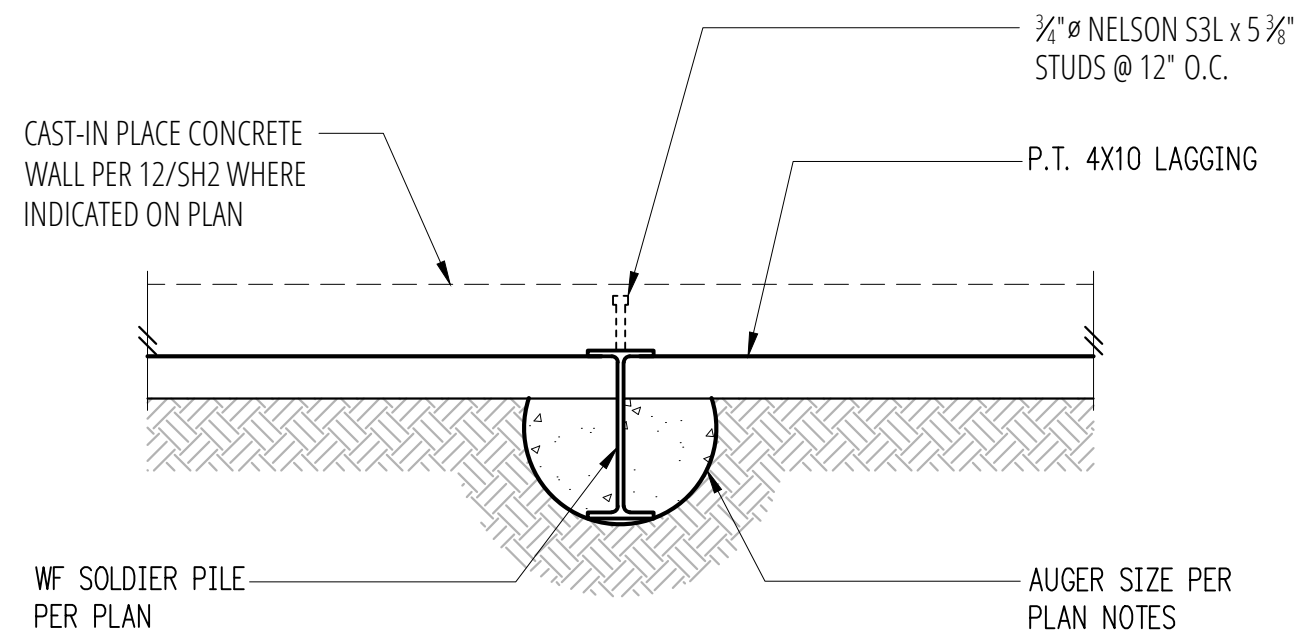
- DEMOLITION: SHORING AND SOIL EXCAVATION SHALL BE DONE SIMULTANEOUSLY.
- VERIFICATION: DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE VERIFIED PRIOR TO FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBER. NOTIFY ENGINEER ABOUT ANY DISCREPANCIES PRIOR TO FABRICATION.
- STEEL PILE PLACEMENT TOLERANCES:
1" INSIDE PERPENDICULAR TO SHORING WALL.
1" OUTSIDE PERPENDICULAR TO SHORING WALL.
3" LATERALLY.
- LAGGING: TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS. VOIDS BETWEEN LAGGING AND SOIL SHALL BE BACKFILLED PER THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS. DRAINAGE BEHIND THE WALL MUST BE MAINTAINED. IT IS CONTRACTOR'S RESPONSIBILITY TO LIMIT THE AMOUNT OF EXPOSED SOIL WITHOUT LAGGING TO AVOID LOSS OF SOIL. MAXIMUM HEIGHT OF 4 FEET IS RECOMMENDED. SPECIAL CARE SHOULD BE TAKEN TO AVOID GROUND LOSS DURING EXCAVATION.
- SHORING MONITORING: A SYSTEMATIC PROGRAM OF OBSERVATION SHALL BE CONDUCTED DURING THE PROJECT EXECUTION TO DETERMINE THE EFFECT OF CONSTRUCTION ON ADJACENT FACILITIES AND STRUCTURES IN ORDER TO PROTECT THEM FROM DAMAGE. REFER TO REPORT OF GEOTECHNICAL INVESTIGATION FOR RECOMMENDATIONS. FIELD DATA AND MEASUREMENTS ARE TO BE SUBMITTED TO STRUCTURAL AND GEOTECHNICAL ENGINEER FOR REVIEW.

MONITORING PLAN SHALL INCLUDE THE FOLLOWING:

- THE TOP OF EVERY OTHER PILE SHALL BE MONITORED.
- MULTIPLE REFERENCE POINTS SHOULD BE ESTABLISHED SUFFICIENTLY FAR AWAY FROM THE SHORING TO ACT AS CONTROL POINTS FOR THE MONITORING PLAN
- ESTABLISH A BASELINE READING OF MONITORING POINTS ON THE GROUND SURFACE AND SETTLEMENT-SENSITIVE STRUCTURES BEHIND THE SHORING WALL ALIGNMENT PRIOR TO EXCAVATION AND INSTALLATION OF THE SHORING SYSTEMS.
- A LICENSED SURVEYOR MUST DO THE SURVEYING AT LEAST ONCE A WEEK.
- SURVEY FREQUENCY CAN BE DECREASED AFTER THE SHORING SYSTEM HAS BEEN INSTALLED AND EXCAVATION IS COMPLETE IF THE DATA INDICATES LITTLE OR NO ADDITIONAL MOVEMENT. SURVEYING MUST CONTINUE UNTIL THE PERMANENT STRUCTURE IS COMPLETE UP TO THE TOP OF THE SHORING WALL. THE SURVEY FREQUENCY WILL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AFTER REVIEW AND APPROVAL BY DPD AND SDOT.
- THE GEOTECHNICAL ENGINEER SHALL REVIEW SURVEY DATA AND PROVIDE AN EVALUATION OF WALL PERFORMANCE ALONG WITH SURVEY DATA TO DPD AND SDOT ON AT LEAST A WEEKLY BASIS. IMMEDIATELY AND DIRECTLY, NOTIFY DPD AND SDOT IF ANY UNUSUAL OR SIGNIFICANTLY INCREASED MOVEMENT OCCURS.
- IMMEDIATELY AND DIRECTLY NOTIFY THE GEOTECHNICAL AND STRUCTURAL ENGINEERS, IF 0.5 INCHES OF MOVEMENT OCCURS BETWEEN TWO CONSECUTIVE READINGS AND WHEN TOTAL MOVEMENTS REACH 0.5 INCH. AT THAT AMOUNT OF MOVEMENT, THE ENGINEERS AND DESIGNERS SHALL DETERMINE THE CAUSE OF DISPLACEMENT AND DEVELOP REMEDIAL MEASURES SUFFICIENT TO LIMIT TOTAL WALL MOVEMENTS TO WHAT HAS BEEN DEFINED AS ACCEPTABLE BY THE DESIGN TEAM.

3 SCALE: 3/4"=1'-0"

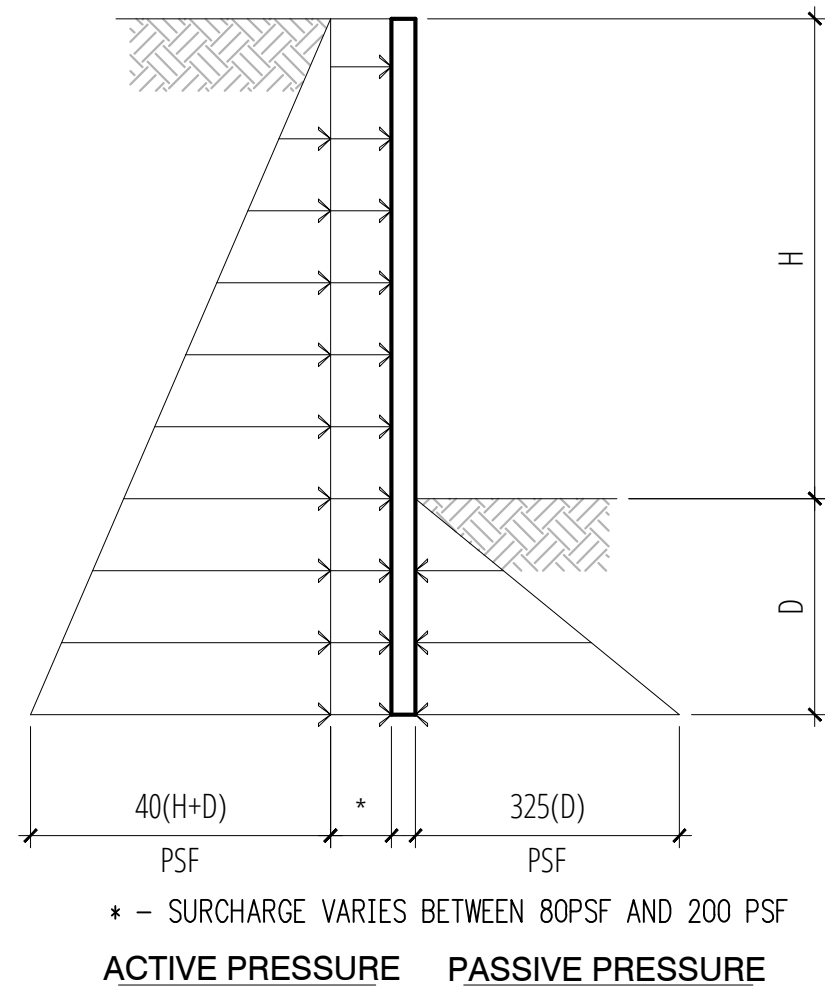
4 SCALE: 3/4"=1'-0"



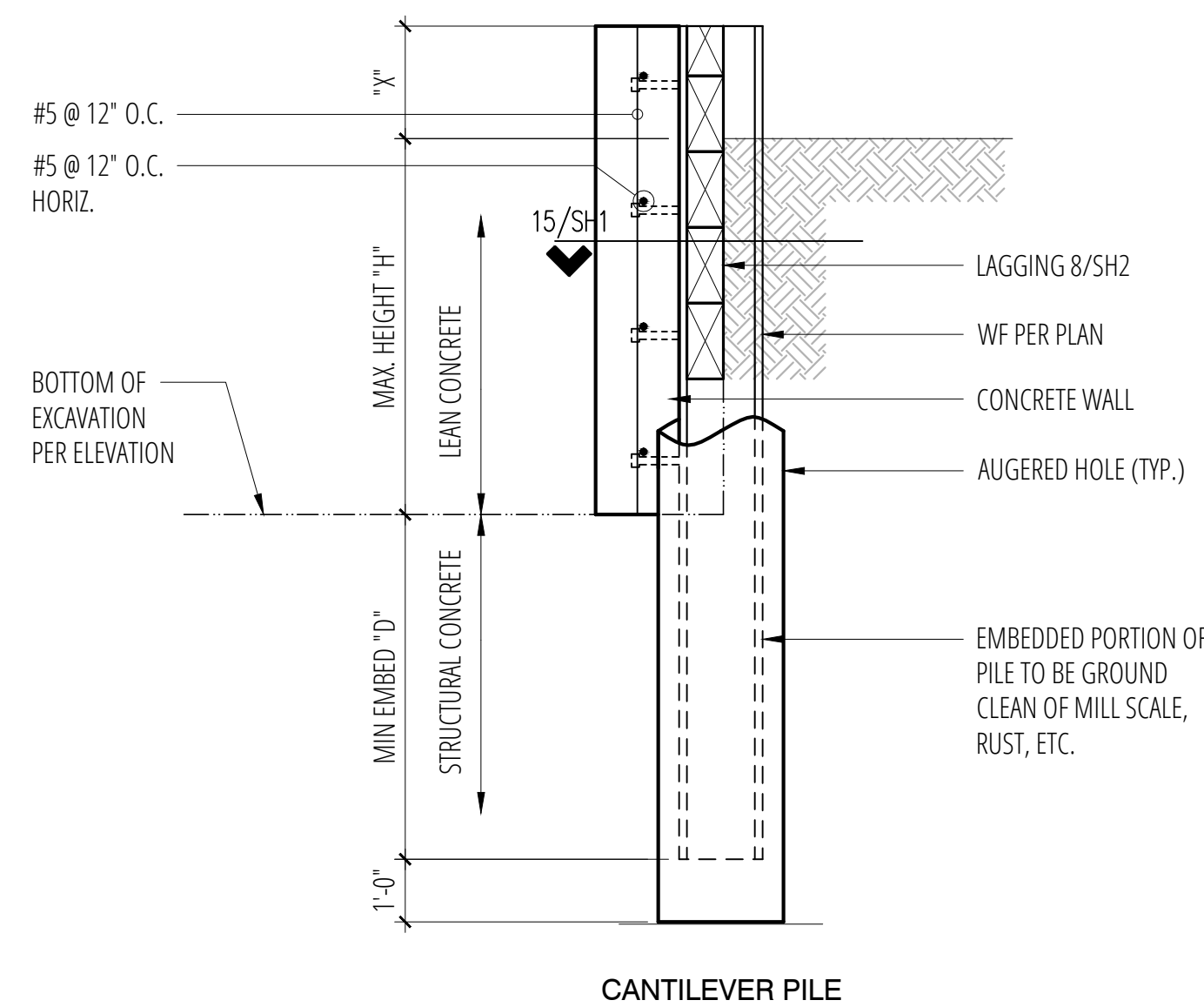
Pile Schedule						
Pile Mark	Auger Dia.	Wide Flange	Max. Height H (ft.)	Min Embed D (ft.)	Min. X (ft.) Above Top of Excavation	Type
P1	24"	W16x100	11'-6"	20'-0"	1'-0"	Cantilever
P2	24"	W16x100	11'-6"	20'-0"	1'-0"	Cantilever
P3	24"	W16x100	11'-6"	20'-0"	1'-0"	Cantilever
P4	24"	W16x100	11'-6"	20'-0"	1'-0"	Cantilever
P5	24"	W16x100	11'-6"	20'-0"	1'-0"	Cantilever
P6	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P7	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P8	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P9	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P10	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P11	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever
P12	24"	W14x68	11'-6"	15'-0"	1'-0"	Cantilever

7 Pile Schedule
SCALE:

8 Typical Pile Plan
SCALE: 3/4"=1'-0"



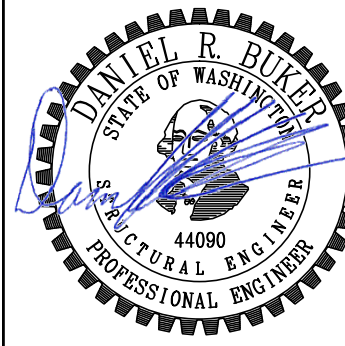
11 Pile Loading Diagram
SCALE: 3/4"=1'-0"



12 Cantilever Pile
SCALE: 3/4"=1'-0"

buker
ENGINEERING LLC

4303 Stone Way N
Seattle, WA 98103
206.258.6333



Mercer Residence

6950 SE Maker St
Mercer Island, WA

No.	Date	Issue
1/30/23		Permit

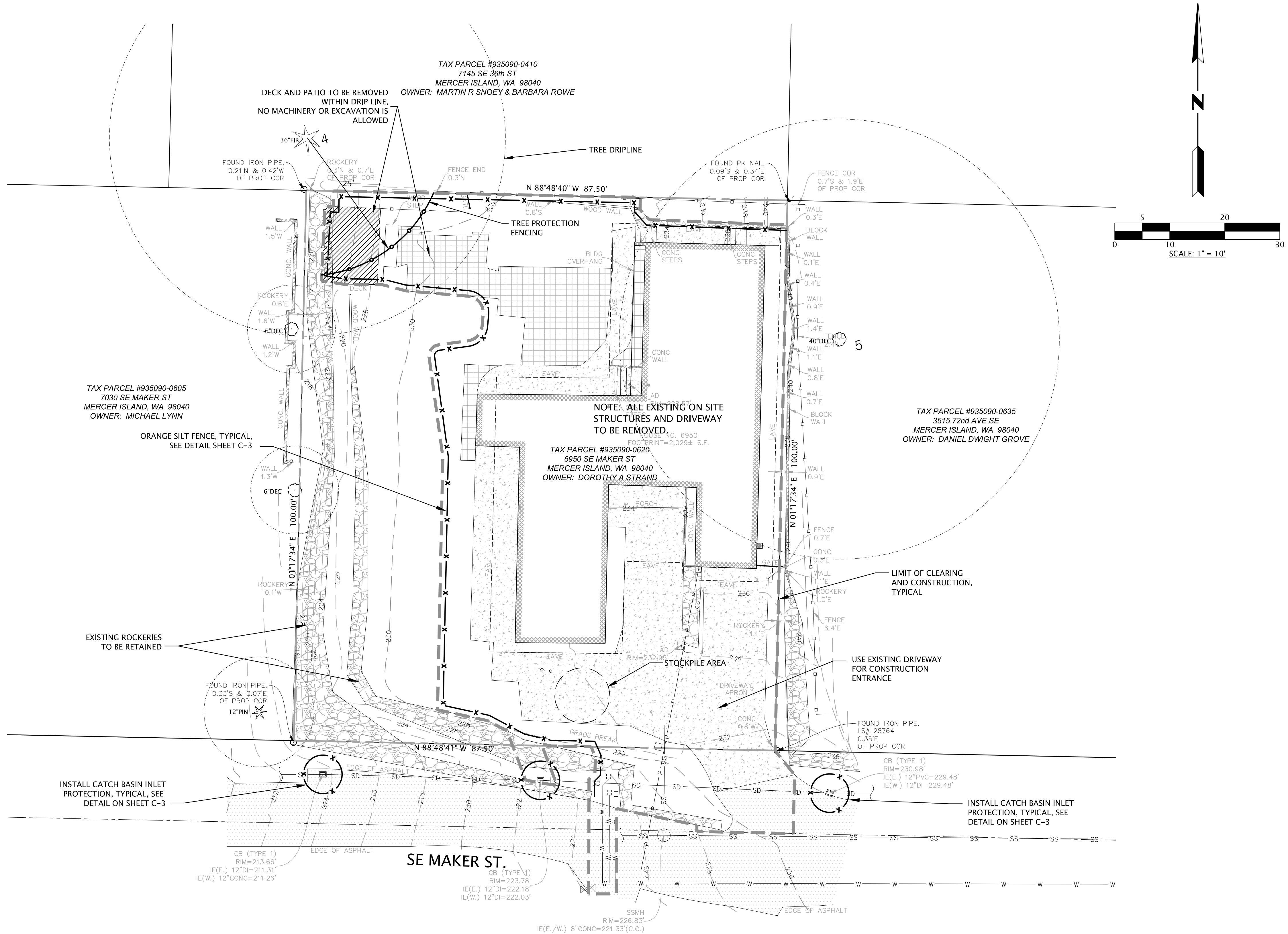
Sheet Contents

SHORING NOTES
& DETAILS

Sheet No.

SH2

NW ¼, SW ¼ SECTION 12, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON



LEGEND

- | | |
|---------------------------|------------------|
| AREA DRAIN | NAIL AS NOTED |
| ASPHALT SURFACE | PAVER SURFACE |
| BUILDING | POWER METER |
| CENTERLINE ROW | POWER (OVERHEAD) |
| COLUMN | ROCKERY |
| CONCRETE SURFACE | SEWER LINE |
| RETAINING WALL | SEWER MANHOLE |
| DECK | STORM DRAIN LINE |
| FENCE LINE (WOOD) | SEWER CLEANOUT |
| GAS METER | TREE (AS NOTED) |
| INLET (TYPE 1) | WATER LINE |
| MONUMENT IN CASE (FOUND) | WATER METER |
| MONUMENT (SURFACE, FOUND) | WATER VALVE |

LEGEND (EROSION)

- | | |
|-----------------------------|--------------------------------|
| EXISTING CONTOUR LINE | PROPOSED CONTOUR LINE |
| PROPOSED SILT FENCE | PROPOSED LIMIT OF CONSTRUCTION |
| PROPOSED CATCH BASIN INSERT | EXISTING TREE TO BE RETAINED |
| EXISTING TREE TO BE REMOVED | TREE PROTECTION |

SURVEY NOTE

EXISTING SURVEY INFORMATION SHOWN HEREON IS BASED ON SURVEY BY TERRANE SURVEYING & MAPPING, AND ELECTRONIC DRAWING FILES AS PROVIDED ON 03/25/2022. SURVEY INFORMATION HAS NOT BEEN FIELD VERIFIED BY GOLDSMITH.

GOLDSMITH
LAND DEVELOPMENT SERVICES
11400 SE 8th St, Suite 450, Bellevue, WA 98004 | PO Box 3565, Bellevue, WA 98009
T 425 462 1080 www.goldsmithengineering.com

PLOTTED:	2023/02/07 10:32	Eoregon
DRAWN:		
DESIGNED:		
APPROVED:		
FIELD BOOK:		
PAGE #:		

Digitally signed by Mark Barber
Date: 2023.02.07 10:51:28-08'00'

KEITH J. GOLDSMITH
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
34597

MARK A. BARBER
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
36000

DOROTHY STRAND		JOB NO. 22038
TESC PLAN FOR STRAND PROPERTY		SHEET
6950 SE MAKER ST., CITY OF MERCER ISLAND		C-1
KING COUNTY, WASHINGTON		

NW ¼, SW ¼ SECTION 12, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

STORM & ROOF DRAINAGE SYSTEM
STRUCTURE TABLE

NAME	TYPE	VERTICAL	I.E. IN / OUT
CB # 1	TYPE 1, EXISTING	RIM = 213.66	12" SD D.I. IN (E) = 211.31 12" CONC. D.I. OUT (W) = 211.26
CB # 2	TYPE 1, EXISTING TIE INTO	RIM = 223.78	12" EX. SD D.I. IN (E) = 222.18 6" SD PVC IN (N) = 222.03 12" SD D.I. OUT (W) = 222.03
CB # 3	TYPE 1, W/ OIL & WATER SPERATOR	RIM = 230.39	4" RD PVC IN (N) = 225.81 4" TRENCH RD PCV IN (E) = 225.81 6" SD PVC OUT (S) = 225.81
TRENCH DRAIN	TRENCH DRAIN	RIM = 226.34	4" TRENCH RD PCV OUT (W) = 225.97
X-CB	TYPE I CB	RIM = 230.98	12" PVC IN (E) = 229.48 12" EX. SD D.I. OUT (W) = 229.48
YD # 1	YARD DRAIN	RIM = 230.06	4" RD PVC IN (E) = 227.25 4" RD PVC OUT (S) = 227.25
YD # 2	YARD DRAIN	RIM = 233.10	4" RD PVC OUT (W) = 230.57

STORM & ROOF DRAINAGE SYSTEM
PIPE TABLE

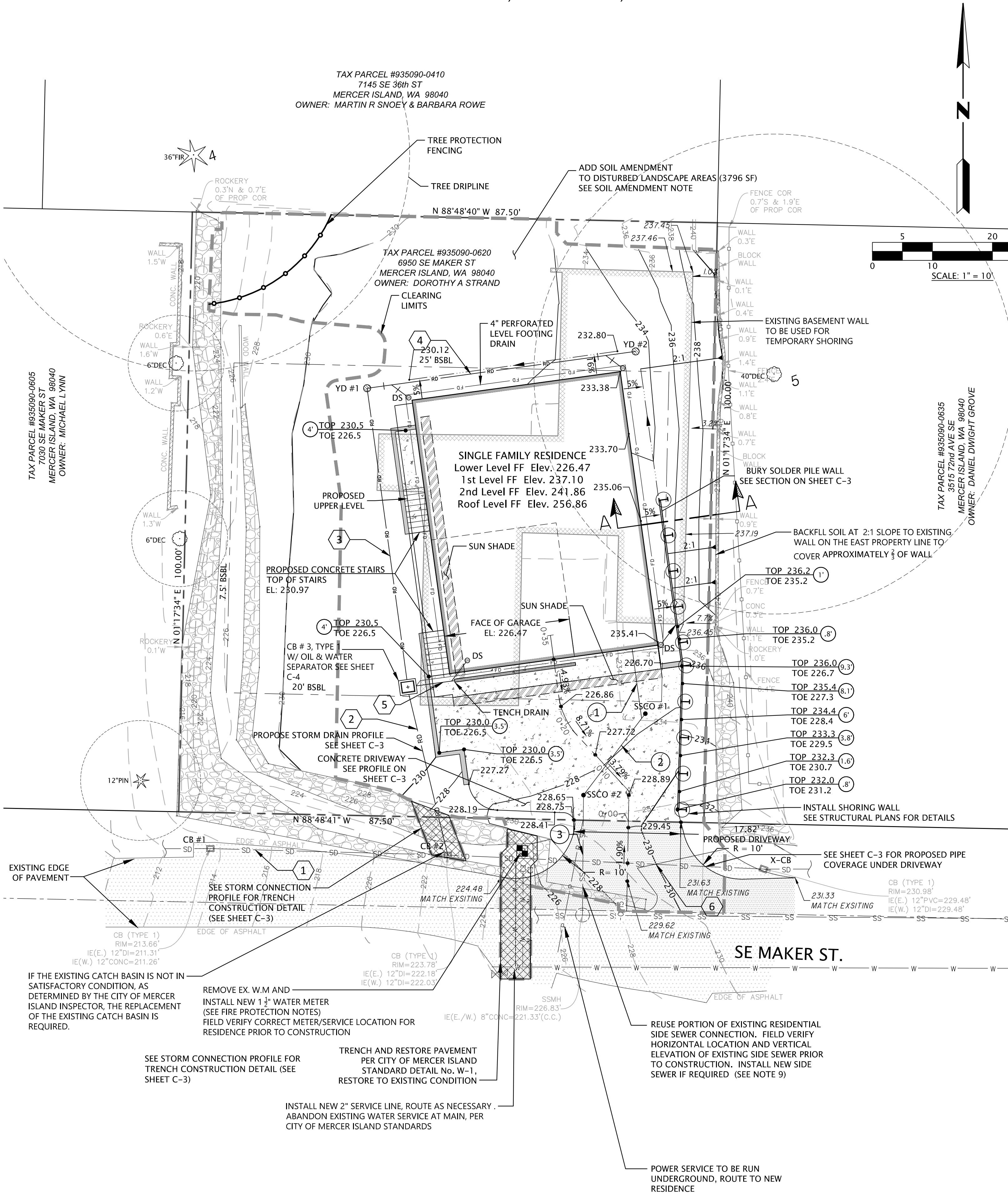
PIPE	SIZE	LENGTH	PIPE INFORMATION
1	12"	40 LF	SD D.I. @ 27.09%
2	6"	29 LF	SD PVC @ 13.13%
3	4"	50 LF	RD PVC @ 2.87%
4	4"	45 LF	RD PVC @ 7.34%
5	4"	8 LF	TRENCH RD PCV @ 2.00%
6	12"	53 LF	EX. SD D.I. @ 13.87%

SANITARY SEWER SYSTEM
STRUCTURE TABLE

NAME	TYPE	VERTICAL	I.E. IN / OUT
EX-SSMH # 1	SSMH, EXISTING	RIM = 226.83	6" PVC IN (N) = 221.91 8" D.I. IN (E) = 221.33 8" D.I. OUT (W) = 221.33
HOUSE	LOWER LEVEL FF	RIM = 226.47	6" PVC OUT (S) = 222.86
SSCO # 1	CLEAN OUT W/ TRAFFIC RATED LID	RIM = 223.17	6" PVC IN (N) = 222.63 6" PVC OUT (SW) = 222.63
SSCO # 2	CLEAN OUT W/ TRAFFIC RATED LID	RIM = 222.85	6" PVC IN (NE) = 222.31 6" PVC OUT (S) = 222.31

SANITARY SEWER SYSTEM
PIPE TABLE

PIPE	SIZE	LENGTH	PIPE INFORMATION
1	6"	12 LF	PVC @ 2.00%
2	6"	16 LF	PVC @ 2.00%
3	6"	20 LF	PVC @ 2.00%



NOTES

- DEMOLISH EXISTING HOUSE, PATIO, DECK, WALKWAY, WALL AND DRIVEWAY PRIOR TO PROPOSED CONSTRUCTION.
- SITE AREA: 8,750 SF (0.20 AC)
- IMPERVIOUS CALCULATIONS:
ON-SITE
HOUSE = 1,888 SF
CONCRETE DRIVEWAY = 790 SF
DECK = 61 SF
STAIRS = 13 SF
RETAINING WALLS = 49 SF
NEW AND REPLACED SUBTOTAL = 2,801 SF
EX. ROCKERY / WALL = 736 SF
TOTAL IMPERVIOUS = 3,537 SF (40% OF LOT AREA)

OFF-SITE
ASPHALT DRIVEWAY = 485 SF
TOTAL PROJECT IMPERVIOUS = 4,022 SF
- EARTHWORK QUANTITY:
CUT = 662.75 CY
FILL = 19.92 CY
- ROOF DRAIN PIPES SHALL MEET MATERIAL STANDARDS FOR SDR35 FOR PVC PIPE AND N-12 FOR SMOOTH-BORE HDPE PIPE.
- FOOTING DRAIN PIPES SHALL MEET MATERIAL STANDARDS FOR D2729 FOR PVC, WITH THE PERFORATIONS DIRECTED DOWNWARD.
- CONTRACTOR SHALL COMPLY WITH THE CITY OF MERCER ISLAND "STORM DRAINAGE REQUIREMENTS" FOR ALL NEW CONSTRUCTION OF DRAINAGE SYSTEM IMPROVEMENTS, INCLUDING ROOF DRAINS, FOOTING DRAINS, AND DRIVEWAY/PARKING AREA DRAINS.
- CONTRACTOR TO COORDINATE EXACT LOCATION OF THE NEW METER WITH THE CITY'S WATER DEPARTMENT DURING CONSTRUCTION.
- THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN ON SE MAKER ST IS REQUIRED PRIOR TO ANY WORK RELATED TO THE SIDE SEWER. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED.

LEGEND (DEVELOPED)

	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVEMENT
	TRENCH RESTORATION
	PROPOSED SANITARY SIDE SEWER
	PROPOSED SANITARY SIDE SEWER CLEANOUT
	PROPOSED WATER SERVICE LINE
	PROPOSED WATER METER
	PROPOSED YARD DRAIN
	PROPOSED ROOF DRAIN PIPE
	PROPOSED ROOF DRAIN CLEANOUT
	PROPOSED FOOTING DRAIN PIPE
	PROPOSED FOOTING DRAIN PIPE
	PROPOSED DOWNSPOUT
	PROPOSED CONTOUR LINE
	PROPOSED CATCH BASIN, TYPE I

FIRE PROTECTION NOTES:

FIRE SPROKLER REQUIRED

BUILDER AND FIRE PROTECTION DESIGNER TO CONFIRM METER AND WATER SERVICE SIZE PRIOR TO CONSTRUCTION OF WATER SERVICE

SURVEY NOTE

EXISTING SURVEY INFORMATION SHOWN HEREON IS BASED ON SURVEY BY TERRANE SURVEYING & MAPPING, AND ELECTRONIC DRAWING FILES AS PROVIDED ON 03/25/2022. SURVEY INFORMATION HAS NOT BEEN FIELD VERIFIED BY GOLDSMITH.

TEMPORARY SHORING

TEMPORARY SHORING SHALL BE INSTALLED AT THE DIRECTION OF THE PROJECT GEOTECHNICAL ENGINEER.

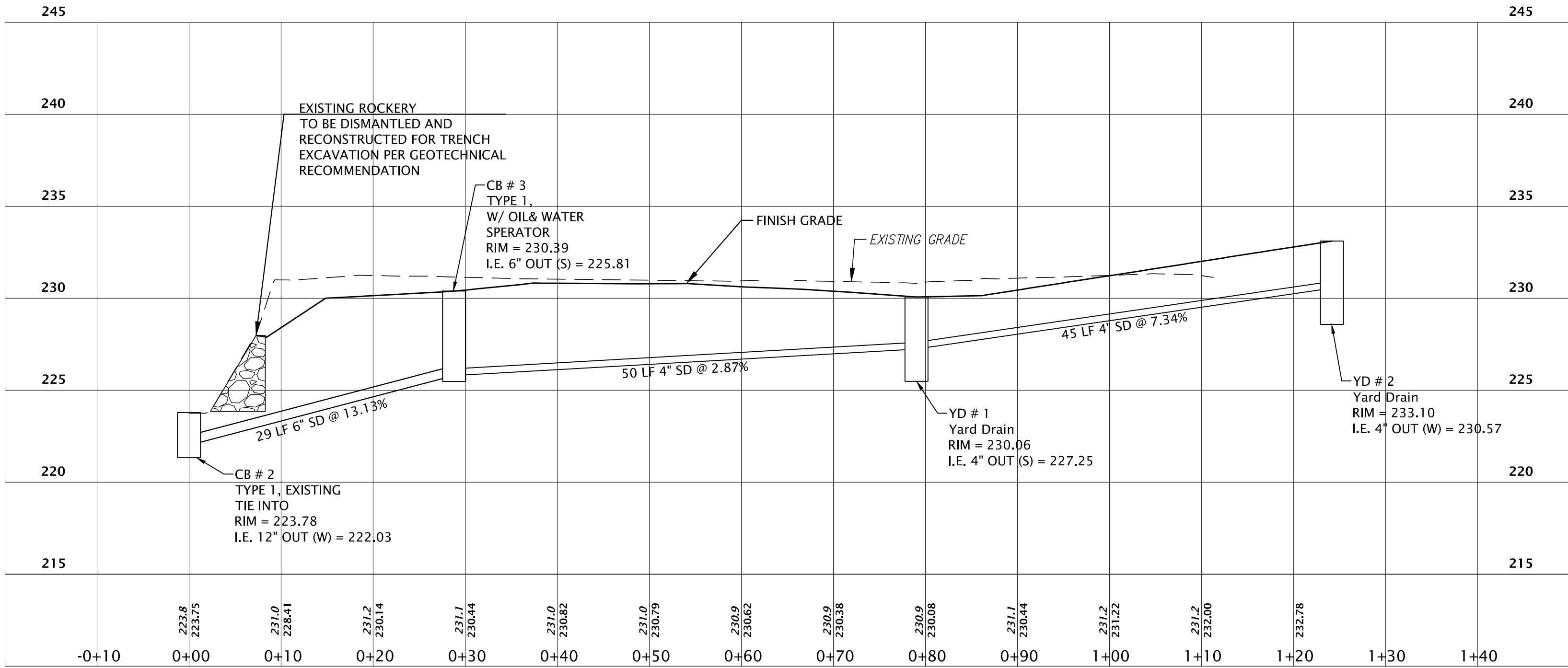
SOIL AMENDMENT NOTE

STOCKPILE AND COMPOST AMENDED DISTURBED LANDSCAPED AREAS PER CITY OF MERCER ISLAND POST-CONSTRUCTION SOIL MANAGEMENT

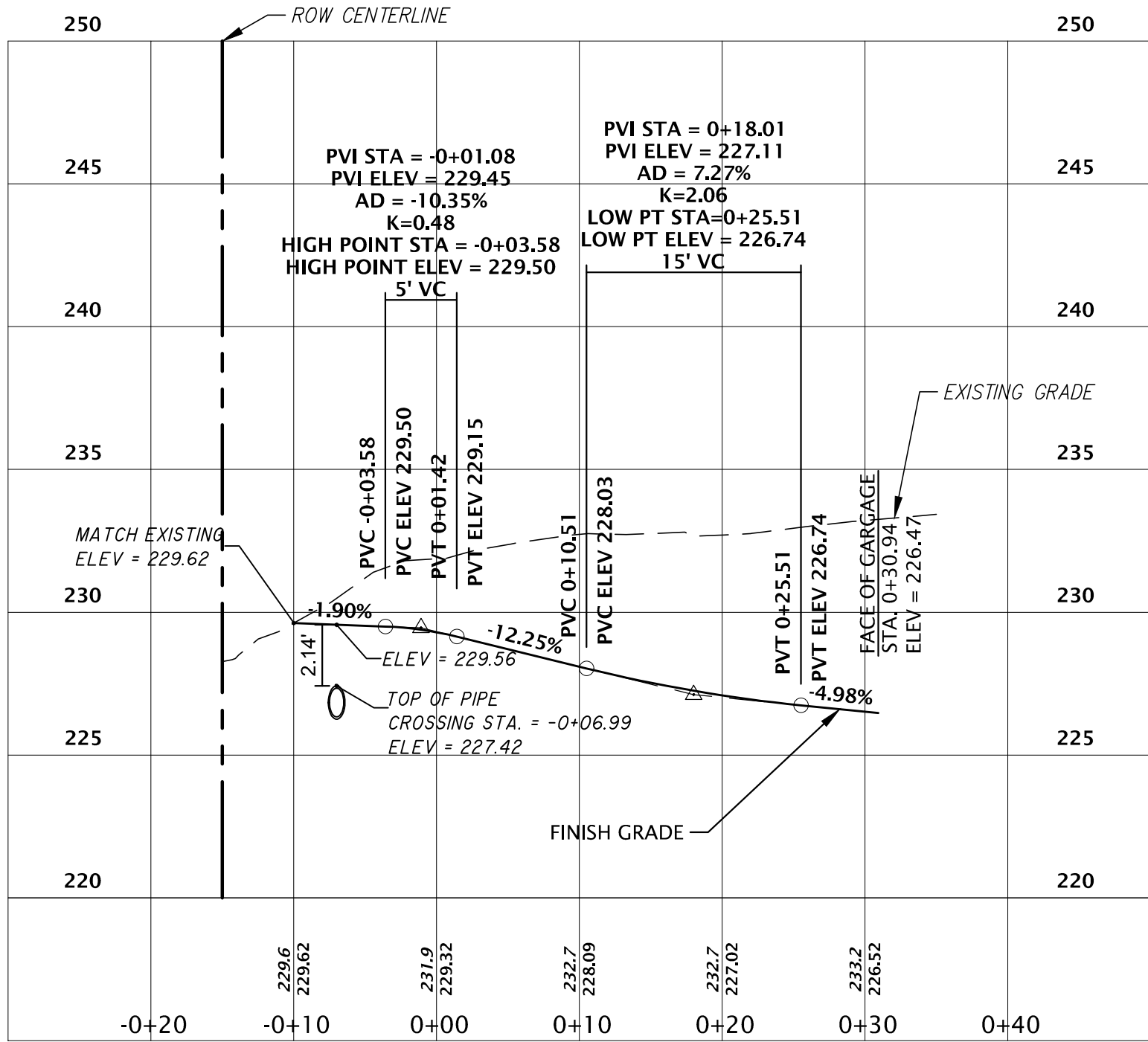
TOP SOIL LAYER SHALL HAVE A MINIMUM DEPTH OF 8" AND A ORGANIC CONTENT OF 5% IN TURF AREAS AND 10% IN PLANTER BEDS. SUBSOIL BELOW TOP SOIL LAYER SHALL BE SCARIFIED TO A DEPTH OF 4" BELOW TOPSOIL LAYER. PLANTER BEDS SHALL BE MULCH WITH 2" OF ORGANIC MATERIAL.

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP TS.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

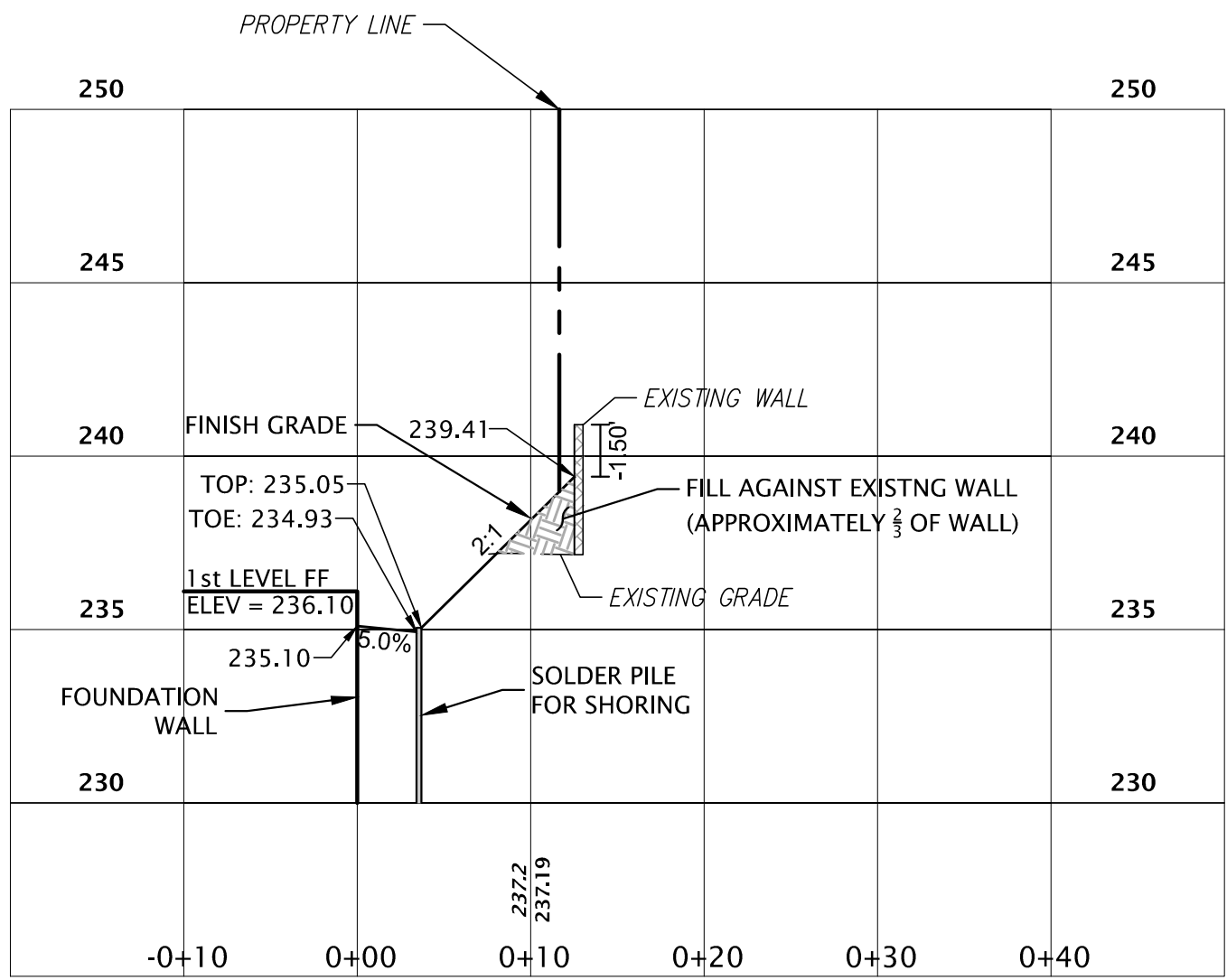
NW ¼, SW ¼ SECTION 12, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON



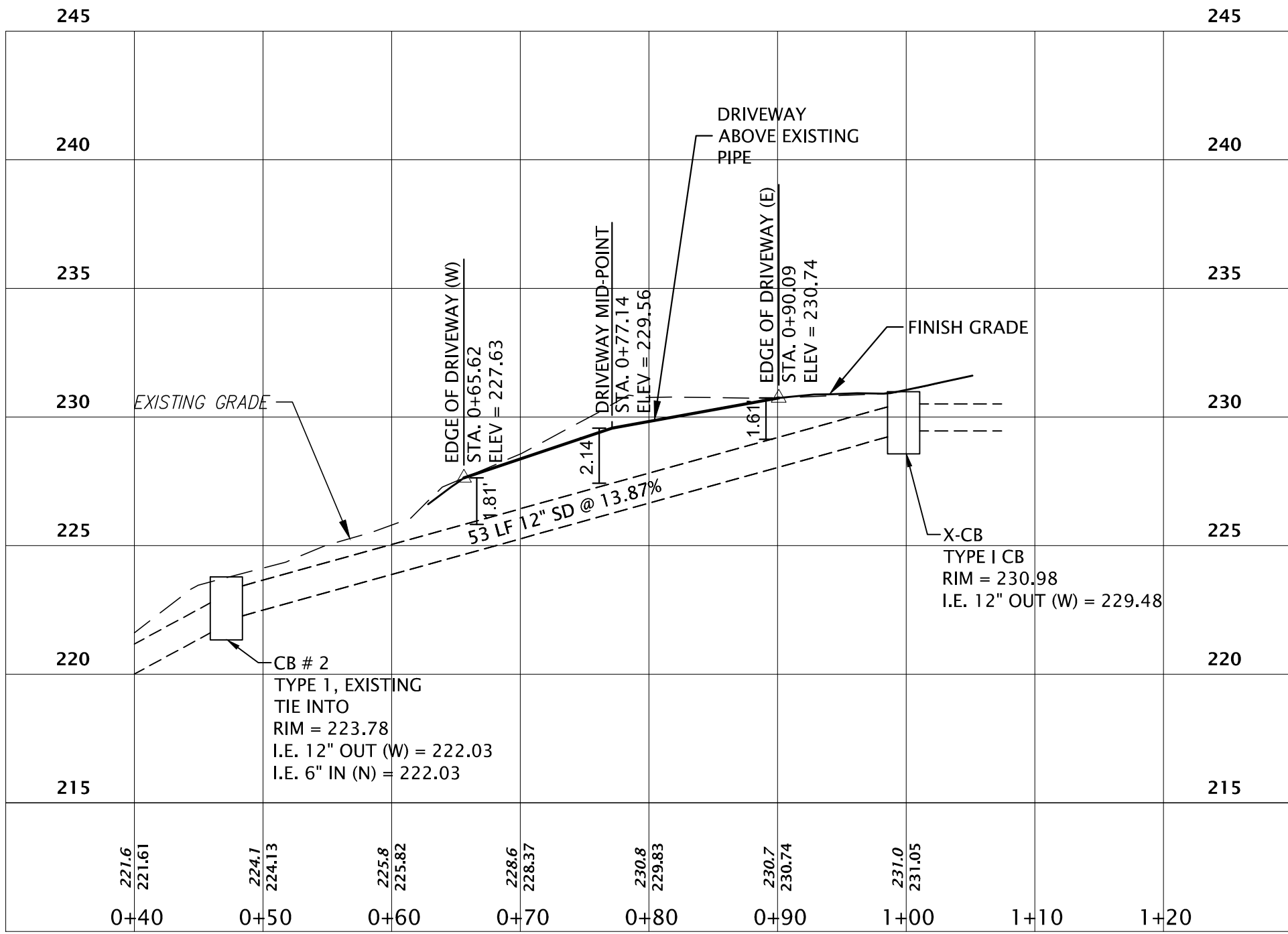
PROPOSE RESIDENTIAL STORM DRAIN CONNECTION PROFILE
STA. -0+10.00 TO STA. 1+40.00
1" = 10.00' HORIZ.
1" = 5.00' VERT.



PROPOSE DRIVEWAY PROFILE
STA. -0+20.00 TO STA. 0+40.00
1" = 10.00' HORIZ.
1" = 5.00' VERT.

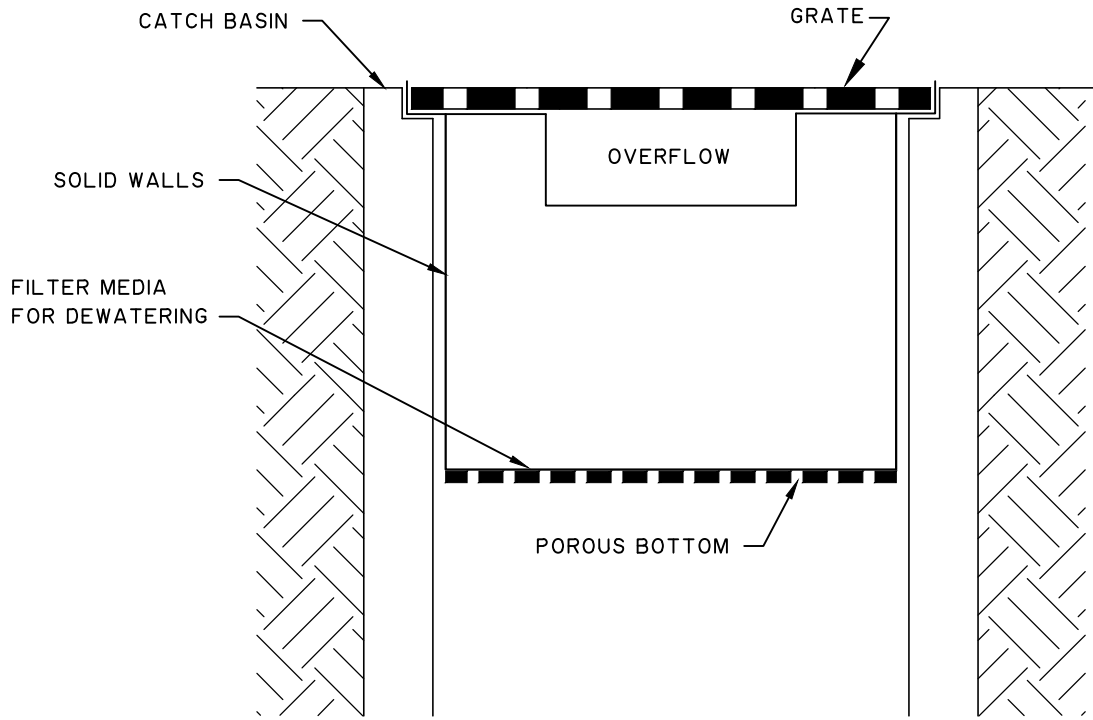


WALL SECTION VIEW PROFILE
STA. -0+10.00 TO STA. 0+40.00
1" = 10.00' HORIZ.
1" = 5.00' VERT.



EXISTING SE MARKER ST. STORM PROFILE
STA. 0+40.00 TO STA. 1+20.00
1" = 10.00' HORIZ.
1" = 5.00' VERT.

NW ¼, SW ¼ SECTION 12, TOWNSHIP 24 N, RANGE 4 E, W.M.
CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON

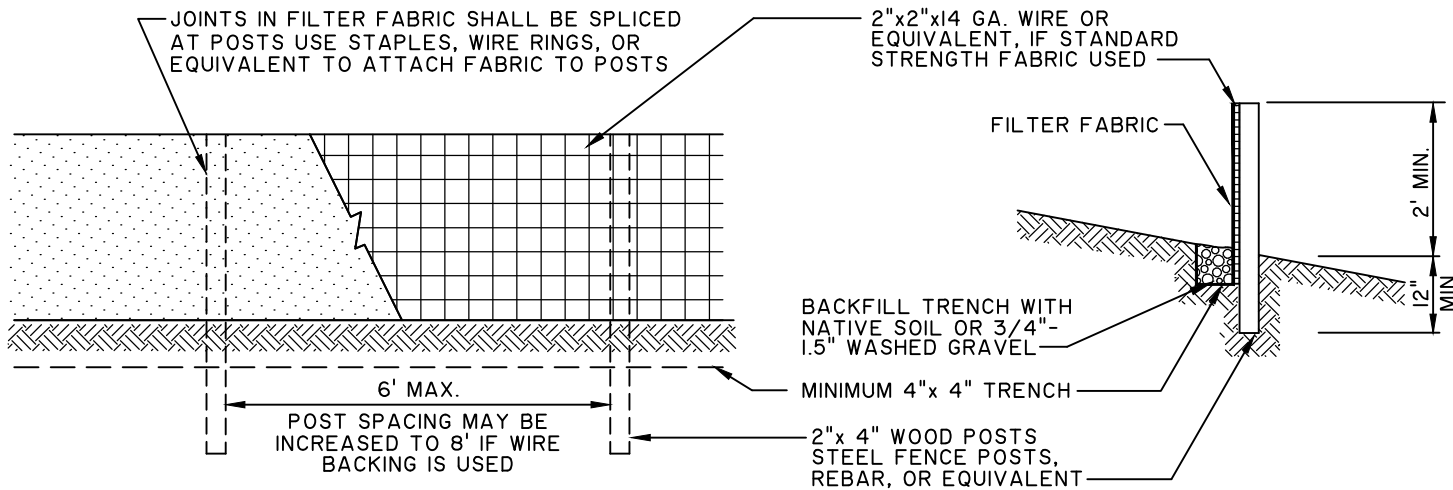


MAINTENANCE STANDARDS

1. ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC PROTECTION SHALL BE REMOVED IMMEDIATELY. SEDIMENT SHALL NOT BE REMOVED WITH WATER, AN ALL SEDIMENT MUST BE DISPOSED OF AS FILL ON-SITE OR HAULED OFF-SITE.
2. ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN THE SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE. THE FILTER MEDIA FOR THE INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.
3. REGULAR MAINTENANCE IS CRITICAL FOR BOTH FORMS OF CATCH BASIN PROTECTION. UNLIKE MANY FORMS OF PROTECTION THAT FAIL GRADUALLY, CATCH BASIN PROTECTION WILL FAIL SUDDENLY AND COMPLETELY IF NOT MAINTAINED PROPERLY.

CATCH BASIN INSERT DETAIL

NTS



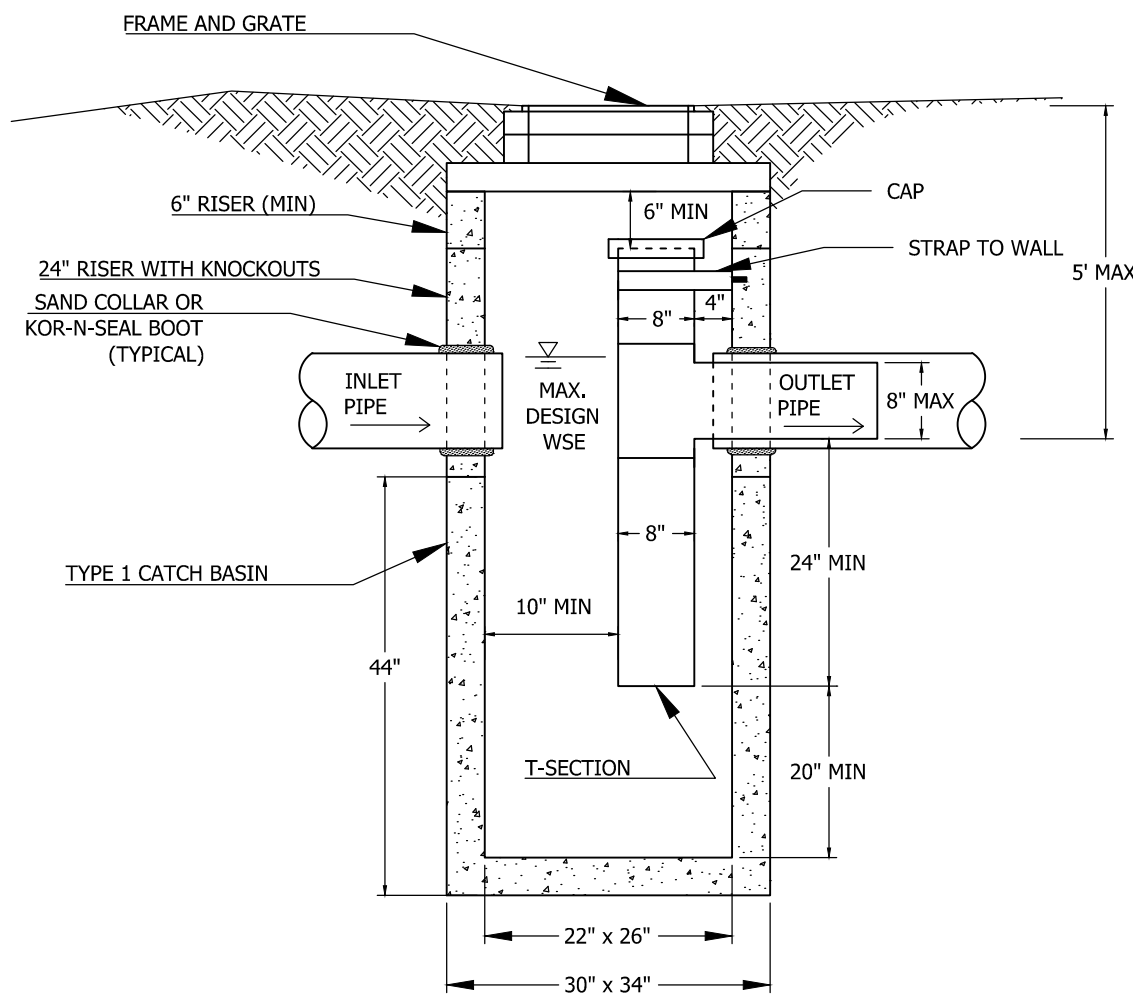
NOTE: FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.

MAINTENANCE STANDARDS

1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLELED TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE AND/OR REMOVE THE TRAPPED SEDIMENT.
4. SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6" HIGH.
5. IF THE FILTER FABRIC HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

SILT FENCE

NTS



CB TYPE 1 W/ OIL & WATER SEPARATOR

NTS

NOTES

1. MAX. OUTLET PIPE DIAMETER IS 8 INCHES. VERTICAL RISER SECTION SHALL BE ALIGNED PLUMB VERTICALLY. HORIZONTAL RISER SECTION SHALL MATCH OUTLET PIPE SLOPE.
2. ALL METAL PARTS AND SURFACES MUST BE CORROSION RESISTANT. STEEL HARDWARE SHALL BE GALVANIZED. PIPES SHALL BE PVC. COMPLETE CORROSION PROTECTION MUST BE ASSURED.
3. APPLY NON-SHRINK GROUT TO INSIDE AND OUTSIDE OF ALL JOINTS, RINGS, RISERS AND FRAMES.
4. SLIP SMOOTH-BORE HORIZONTAL LEG OF FLOW CONTROL TEE INSIDE CARRIER PIPE.
5. NO FLOW CONTROL JOINT OUTSIDE OF STRUCTURE.

STANDARD TESC PLAN NOTES:

1. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO INSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
7. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.
8. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
9. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

PLAN NOTES:

1. THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL COMPLIANCE W/ ALL CODES + REGULATIONS.
2. ALL EXTERIOR WALLS SHALL BE 2x6 UNO.
3. ALL INTERIOR WALLS SHALL BE 2x4 UNO.
4. ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A GRASP DIMENSION BETWEEN 1 1/4" - 2".
5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.
6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.
7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.
8. 5/8" TYPE 'X' GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.
9. ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM.
10. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.11.
11. A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.
13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M1501.1 AND M1506.2.
14. ALL NEW STAIRS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. MINIMUM 36" WIDTH.
 - B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
 - C. MINIMUM 6'-8" HEAD ROOM.
 - D. MINIMUM LANDING LENGTH 36"
15. CONTRACTOR TO COMPLETE AND POST INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION FORM WITHIN 3' OF ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.
16. WINDOW AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM R-10 INSULATION.
17. SHOULD AN AIR LEAKAGE TEST BE CONDUCTED, A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/HOUR.
18. WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER SRC M1507.3.5 AND SHALL RUN INTERMITTENTLY.

WSEC 2018 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2018 PRESCRIPTIVE METHOD.
2. INSULATION VALUES SHALL BE AS FOLLOWS:
 - A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
 - B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
 - C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
 - D. ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
 - E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
 - F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
 - G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
 - H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
 - I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
 - J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).
7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT² FOR EACH 300 FT² OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE. EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

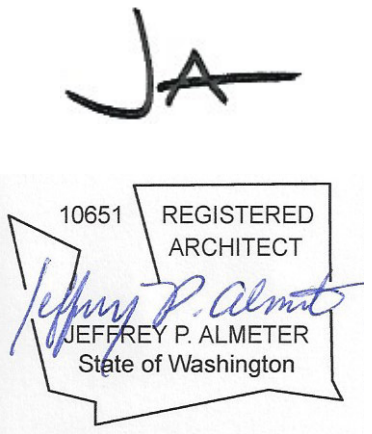
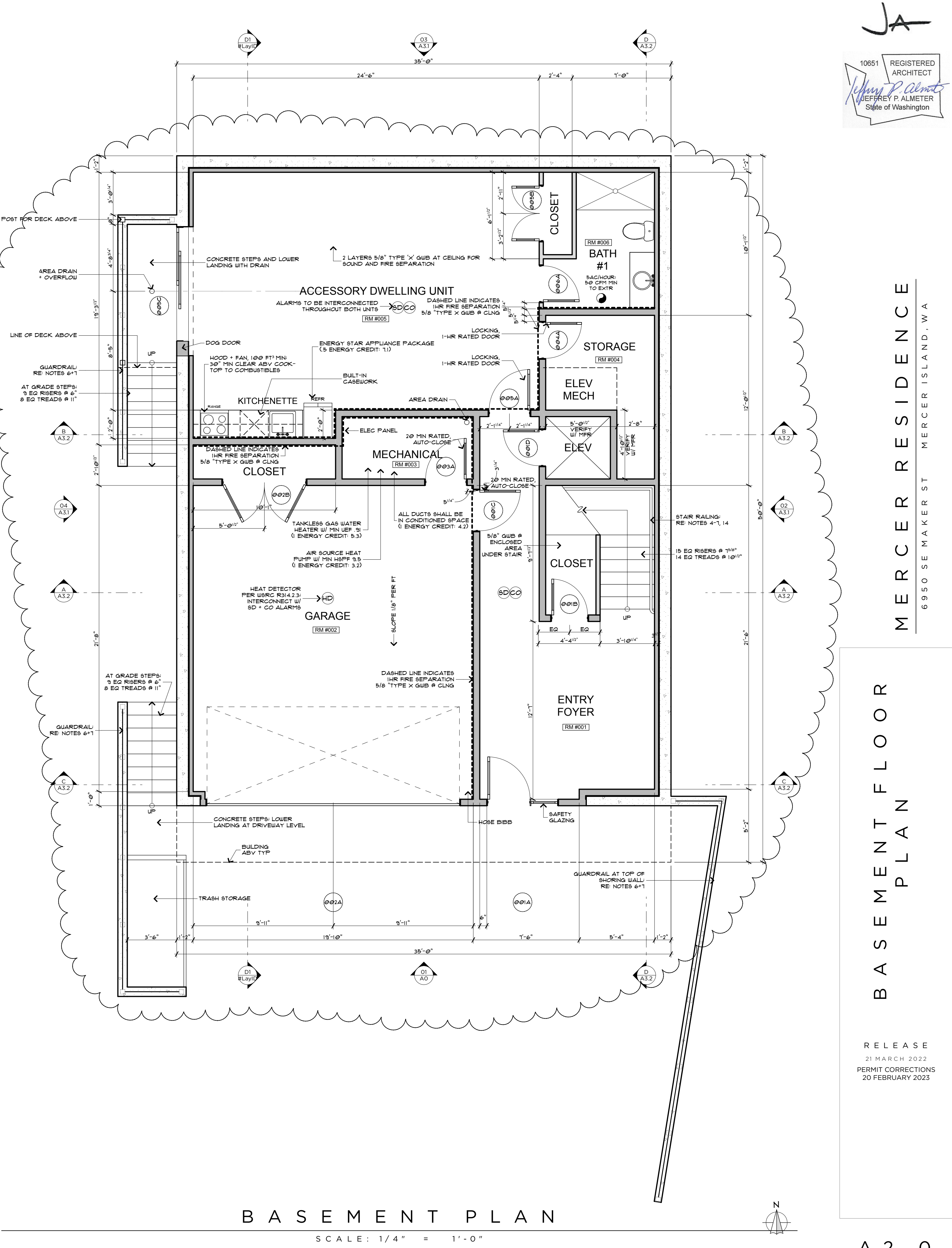
FLOOR AREAS:

LOT AREA:	8,750 FT²
MAXIMUM ALLOWABLE GFA:	(40%) 3,500 FT²
ADDITIONAL GFA FOR ADU:	(5%) 437.5 FT²
TOTAL ALLOWABLE GFA W/ ADU:	(45%) 3,937.5 FT²
BASEMENT GFA (937.5 FT² EXCLUDED SEE BELOW):	672 FT²
FIRST FLOOR GFA (EXCLUDE STAIR PER 19.02.020.2.2.c):	1,669 FT²
SECOND FLOOR GFA (EXCLUDE ELEVATOR SHAFT PER 19.02.020.2.d, 100% AT BASEMENT LEVEL + 100% AT FIRST FLOOR):	1,529 FT²
SECOND FLOOR COVERED DECK GFA:	66 FT²
TOTAL GROSS FLOOR AREA:	(44.9%) 3,936 FT²

BASEMENT FLOOR EXCLUSION CALCS:

WALL SEGMENT	LENGTH	COVERAGE %	RESULT
A	35'	0%	0'
B	46'	59.37%	27'-3"
C	35'	60.42%	21'-1"
D	46'	100%	46'-0"
TOTALS	162'		94'-4"

94'-4" / 162' = 58.23%
1,610 FT² X 58.23% = 937.5 FT² EXCLUDED
1,610 FT² - 937.5 FT² = 672.5 FT²



MERCER RESIDENCE
6950 SE MAKER ST MERCER ISLAND, WA

BASEMENT FLOOR PLAN

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

PLAN NOTES:

1. THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL COMPLIANCE W/ ALL CODES + REGULATIONS.
2. ALL EXTERIOR WALLS SHALL BE 2x6 UNO.
3. ALL INTERIOR WALLS SHALL BE 2x4 UNO.
4. ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A GRASP DIMENSION BETWEEN 1 1/4" - 2".
5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.
6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.
7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.
8. 5/8" TYPE "X" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.
9. ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM.
10. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.11.
11. A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.
13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M150.1 AND M150.2.
14. ALL NEW STAIRS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. MINIMUM 36" WIDTH.
 - B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
 - C. MINIMUM 6'-8" HEAD ROOM
 - D. MINIMUM LANDING LENGTH 36"
15. CONTRACTOR TO COMPLETE AND POST INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION FORM WITHIN 3' OF ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.
16. WINDOW AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM R-10 INSULATION.
17. SHOULD AN AIR LEAKAGE TEST BE CONDUCTED, A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/HOUR.
18. WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER SRC M150.3.5 AND SHALL RUN INTERMITTENTLY.

WSEC 2018 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2018 PRESCRIPTIVE METHOD.
2. INSULATION VALUES SHALL BE AS FOLLOWS:
 - A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
 - B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
 - C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
 - D. ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
 - E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
 - F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
 - G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
 - H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
 - I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
 - J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).
7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT² FOR EACH 300 FT² OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE. EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

FLOOR AREAS:

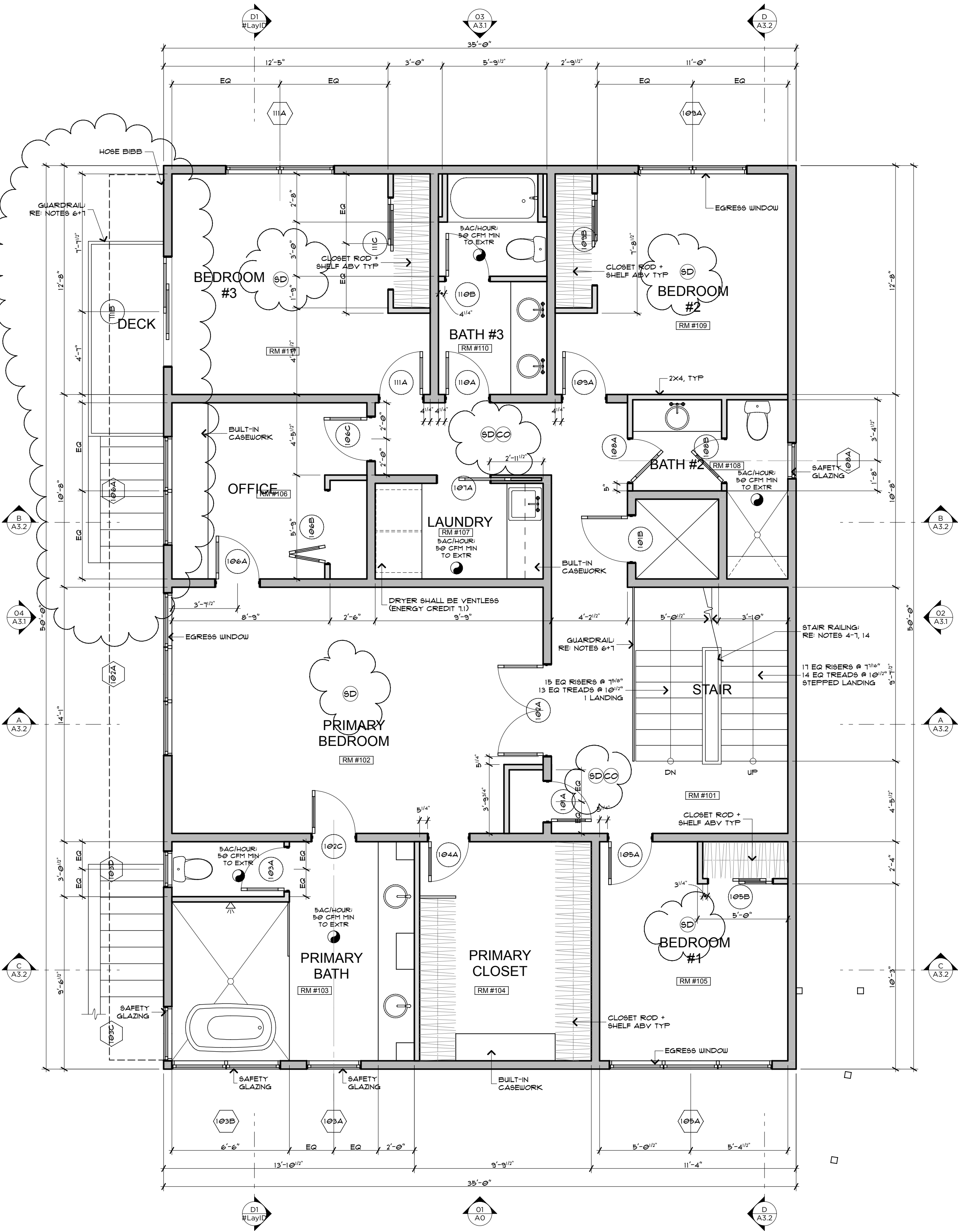
LOT AREA:	8,750 FT²
MAXIMUM ALLOWABLE GFA:	(40%) 3,500 FT²
ADDITIONAL GFA FOR ADU:	(5%) 437.5 FT²
TOTAL ALLOWABLE GFA W/ ADU:	(45%) 3,937.5 FT²

BASEMENT GFA (937.5 FT² EXCLUDED SEE BELOW):	672 FT²
FIRST FLOOR GFA (EXCLUDE STAIR PER 19.02.020.2.2.2):	1,669 FT²
SECOND FLOOR GFA (EXCLUDE ELEVATOR SHAFT PER 19.02.020.2.2.2):	1,529 FT²
FLOOR:	
SECOND FLOOR COVERED DECK GFA:	66 FT²
TOTAL GROSS FLOOR AREA:	(44.9%) 3,936 FT²

BASEMENT FLOOR EXCLUSION CALCS:

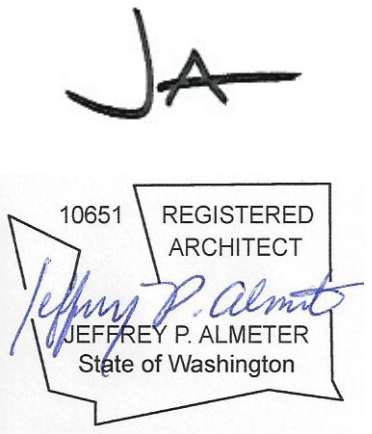
WALL SEGMENT	LENGTH	COVERAGE %	RESULT
A	35'	0%	0'
B	46'	59.37%	27'-3"
C	35'	60.42%	21'-1"
D	46'	100%	46'-0"
TOTALS	162'		94'-4"

94'-4" / 162' = 58.23%
1,610 FT² X 58.23% = 937.5 FT² EXCLUDED
1,610 FT² - 937.5 FT² = 672.5 FT²



FIRST FLOOR PLAN

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



MERCER RESIDENCE
6950 SE MAKER ST
MERCER ISLAND, WA

FIRST FLOOR PLAN

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

A 2.1

MAKER AVE
AUTUMN 2022

PLAN NOTES:

1. THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL COMPLIANCE W/ ALL CODES + REGULATIONS.
2. ALL EXTERIOR WALLS SHALL BE 2x6 UNO.
3. ALL INTERIOR WALLS SHALL BE 2x4 UNO.
4. ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A GRASP DIMENSION BETWEEN 1 1/4" - 2".
5. ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.
6. ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4" SPHERE.
7. ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.
8. 5/8" TYPE "X" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.
9. ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM.
10. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.11.
11. A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
12. ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.
13. ALL EXHAUST AIR SHALL VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M501.1 AND M506.2.
14. ALL NEW STAIRS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. MINIMUM 36" WIDTH.
 - B. MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
 - C. MINIMUM 6'-8" HEAD ROOM
 - D. MINIMUM LANDING LENGTH 36"
15. CONTRACTOR TO COMPLETE AND POST INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION FORM WITHIN 3' OF ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.
16. WINDOW AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM R-10 INSULATION.
17. SHOULD AN AIR LEAKAGE TEST BE CONDUCTED, A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/HOUR.
18. WHOLE HOUSE VENTILATION INTEGRATED WITH FORCED-AIR SYSTEM PER SRC M507.3.5 AND SHALL RUN INTERMITTENTLY.

WSEC 2018 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2018 PRESCRIPTIVE METHOD.
2. INSULATION VALUES SHALL BE AS FOLLOWS:
 - A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
 - B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
 - C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
 - D. ALL CEILINGS OVER UNCONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
 - E. ALL VAULTED CEILING SHALL RECEIVE R-38 BATT INSULATION MIN.
 - F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
 - G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
 - H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
 - I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
 - J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).
7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT² FOR EACH 300 FT² OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE. EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.4.1 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

FLOOR AREAS:

LOT AREA:	8,750 FT²
MAXIMUM ALLOWABLE GFA:	(40%) 3,500 FT²
ADDITIONAL GFA FOR ADU:	(5%) 437.5 FT²
TOTAL ALLOWABLE GFA W/ ADU:	(45%) 3,937.5 FT²
BASEMENT GFA (937.5 FT² EXCLUDED SEE BELOW):	672 FT²
FIRST FLOOR GFA (EXCLUDE STAIR PER B.02.020.2.2.2):	1,669 FT²
SECOND FLOOR GFA (EXCLUDE ELEVATOR SHAFT PER B.02.020.2.2.2, 100% AT BASEMENT LEVEL + 100% AT FIRST FLOOR):	1,529 FT²
SECOND FLOOR COVERED DECK GFA:	66 FT²
TOTAL GROSS FLOOR AREA:	(44.9%) 3,936 FT²

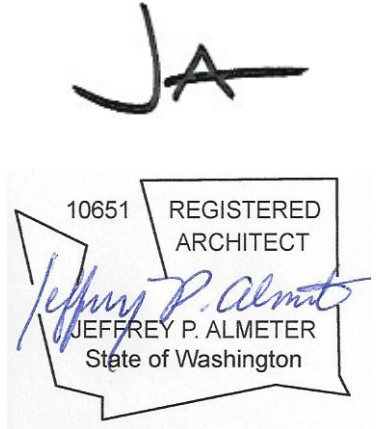
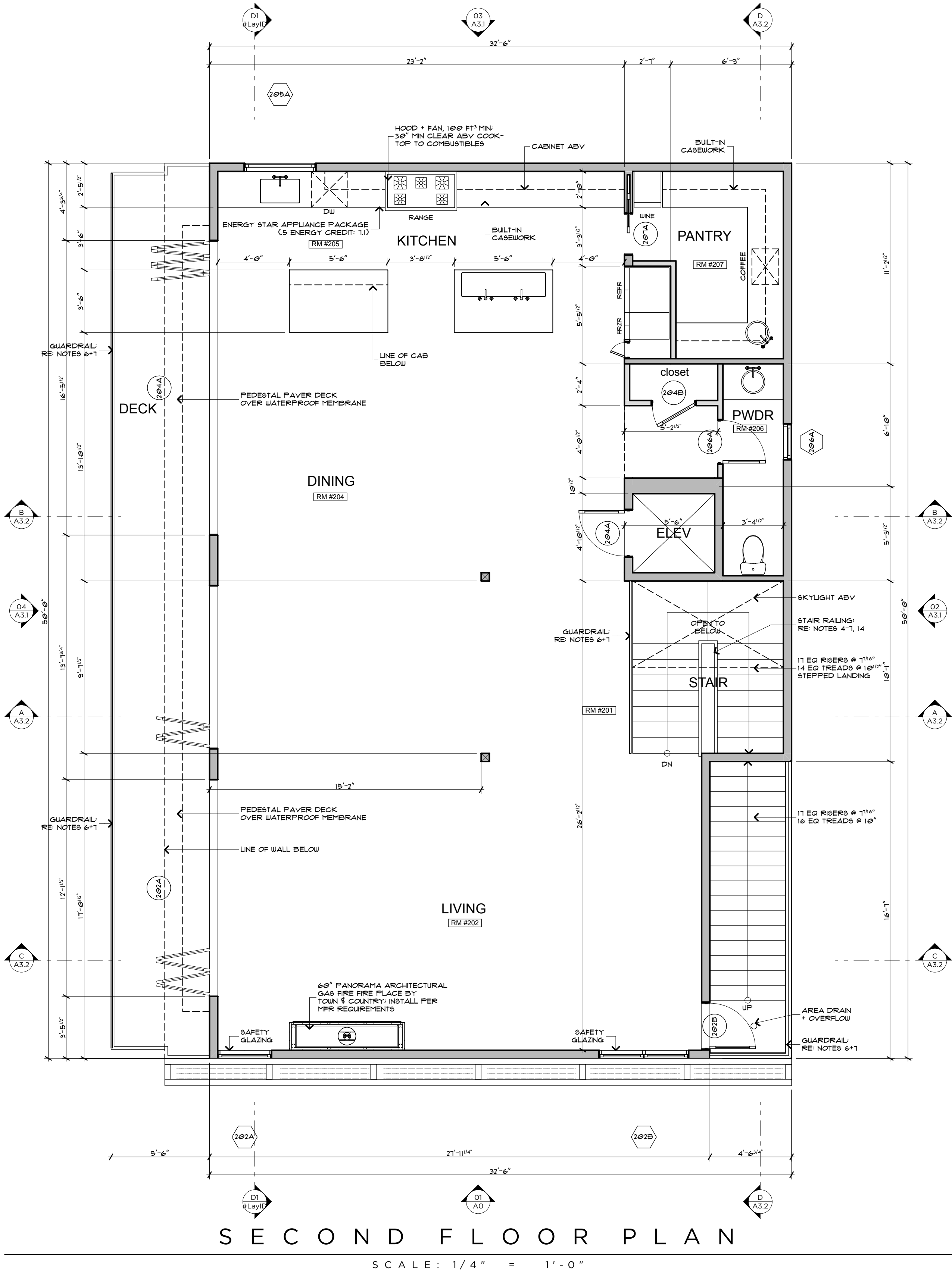
BASEMENT FLOOR EXCLUSION CALCS:

WALL SEGMENT	LENGTH	COVERAGE %	RESULT
A	35'	0%	0'
B	46'	59.37%	27'-3"
C	35'	60.42%	21'-1"
D	46'	100%	46'-0"
TOTALS	162'		94'-4"

94'-4" / 162' = 58.23%

1,610 FT² X 58.23% = 937.5 FT² EXCLUDED

1,610 FT² - 937.5 FT² = 672.5 FT²



MERCER RESIDENCE

6950 SE MAKER ST MERCER ISLAND, WA

SECOND FLOOR PLAN

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

A 2 . 2

MAKER AVE
AUTUMN 2022

1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABOVE ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL.
2. COORDINATE DOWNSPOUT LOCATION W/ JEFFREY ALMETER, INC. PRIOR TO INSTALLATION.
3. ALL VENTS SHALL BE LOCATED AWAY FROM VISIBILITY @ PUBLIC RIGHT-OF-WAY.
4. TRUSS MANUFACTURERS TO PROVIDE TRUSS SHOP DRAWINGS TO JEFFREY ALMETER FOR DESIGN APPROVAL A MINIMUM OF 10 BUSINESS DAYS PRIOR TO TRUSS MANUFACTURING.

THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2018 PRESCRIPTIVE METHOD.

2. INSULATION VALUES SHALL BE AS FOLLOWS:

- A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
- B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
- C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
- D. ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
- E. ALL VALUED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
- F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
- G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
- H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
- I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 2" OF SLAB PERIMETER.
- J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.

3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.

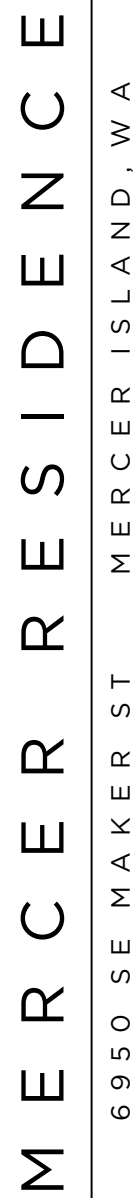
- 4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
- 5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.

6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5).

7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL BE 1" PER 15 SQ FT FOR EACH 100 SQ FT OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.

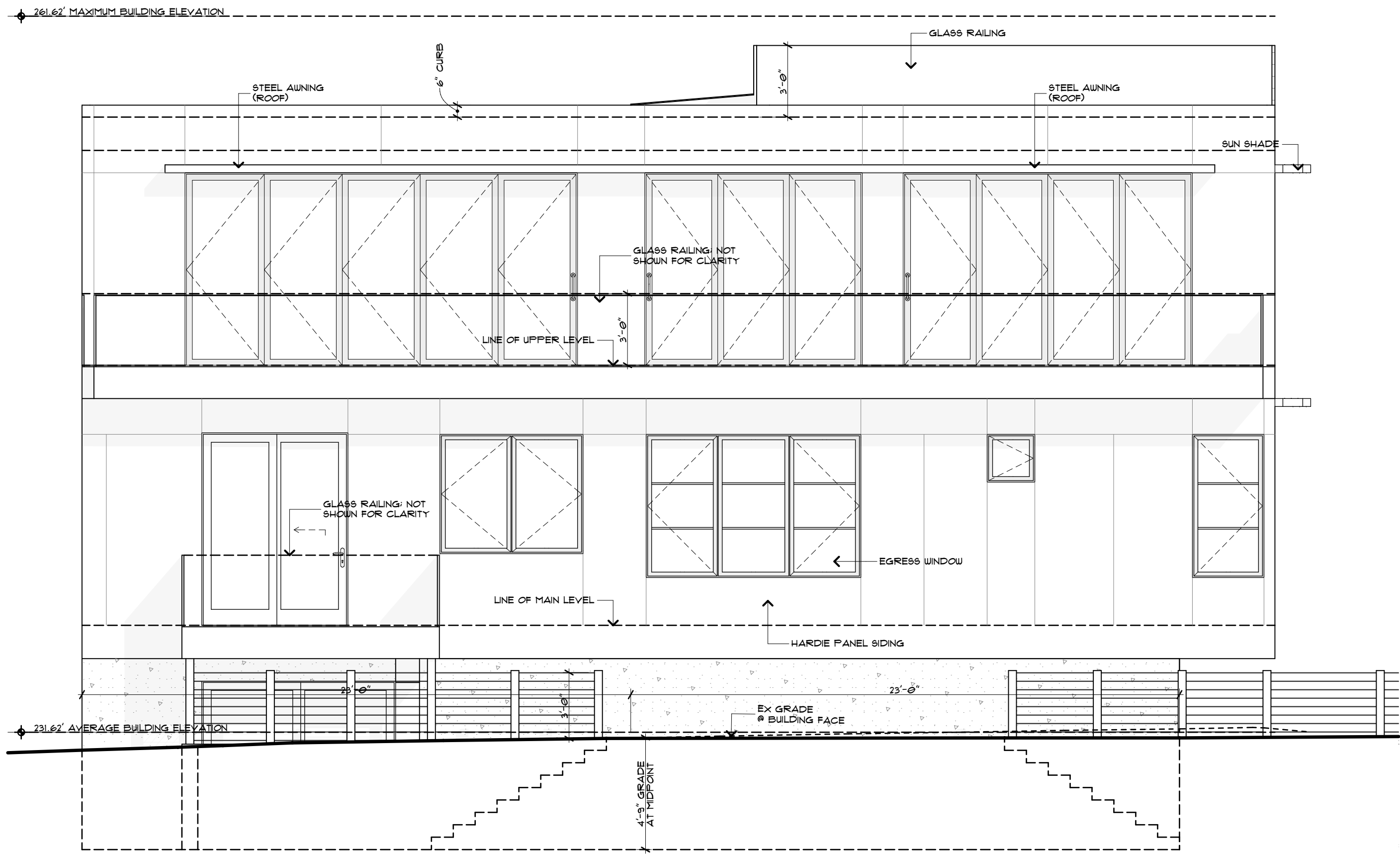
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.41 THROUGH R402.44. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.

9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.



ROOF PLAN

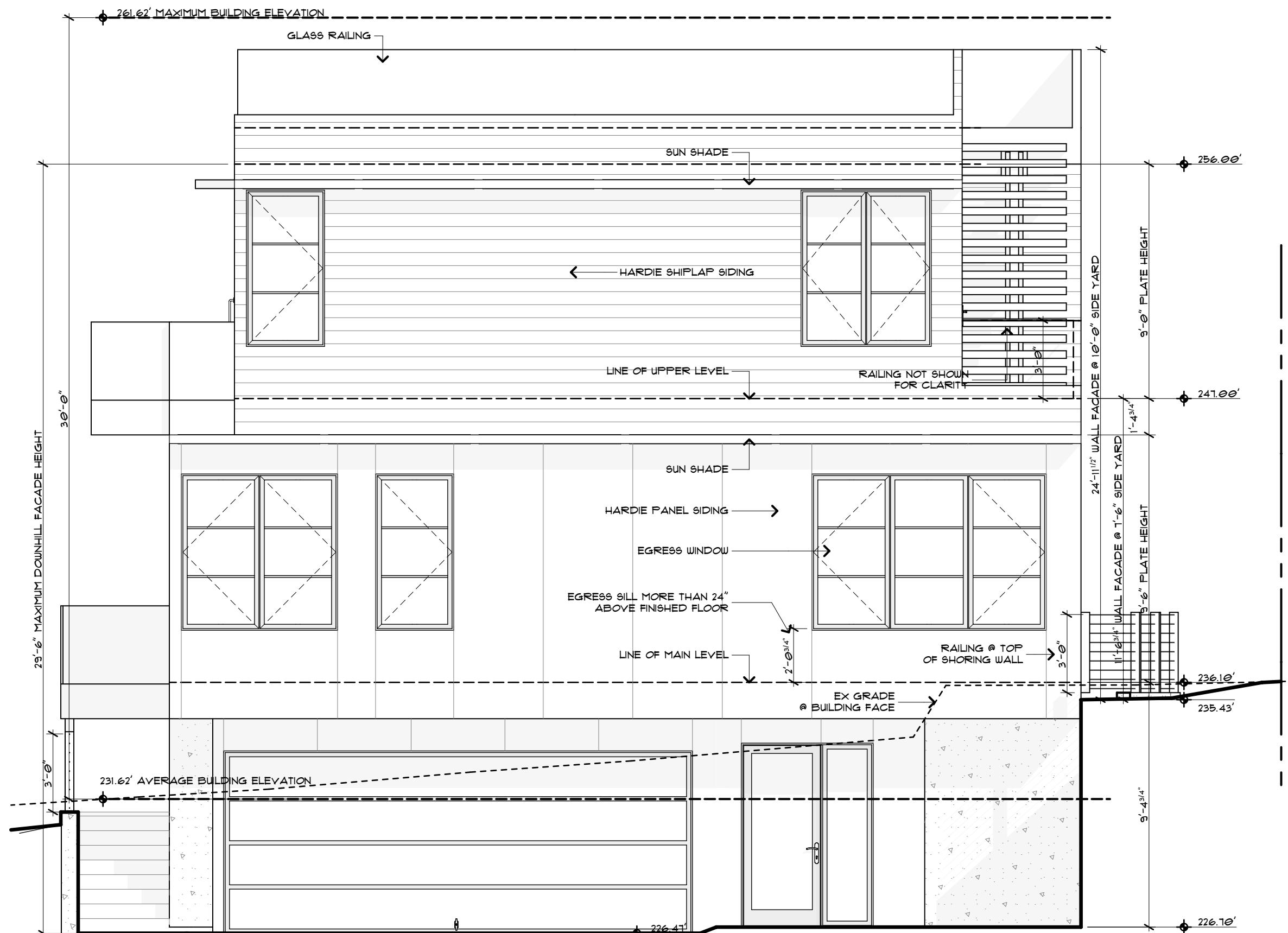
RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023



WEST ELEVATION

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

2



SOUTH ELEVATION

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

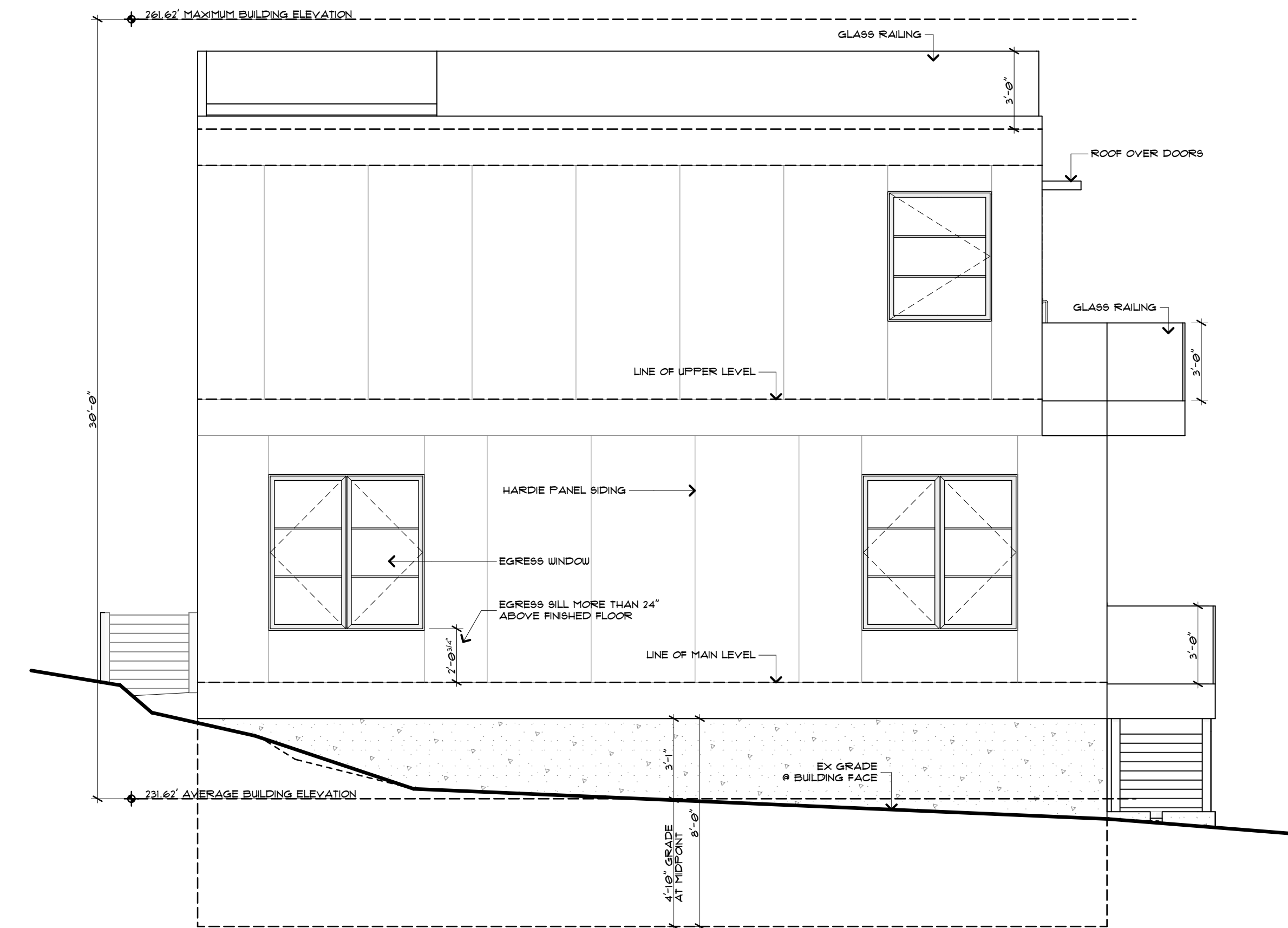
1

AVERAGE BUILDING ELEVATION CALCS:

SEGMENT "A" ELEVATION:	226.47'
SEGMENT "A" LENGTH:	35'
SEGMENT "A" ELEVATION x LENGTH:	7,926.45 FT ²
SEGMENT "B" ELEVATION:	231.25'
SEGMENT "B" LENGTH:	46'
SEGMENT "B" ELEVATION x LENGTH:	10,637.5 FT ²
SEGMENT "C" ELEVATION:	231.50'
SEGMENT "C" LENGTH:	35'
SEGMENT "C" ELEVATION x LENGTH:	8,102.50 FT ²
SEGMENT "D" ELEVATION:	236.00'
SEGMENT "D" LENGTH:	46'
SEGMENT "D" ELEVATION x LENGTH:	10,856.00 FT ²
TOTAL OF AGGREGATE ELEVATION:	37,522.45'
TOTAL OF SEGMENT LENGTHS:	162'
AVERAGE BUILDING ELEVATION:	231.62'



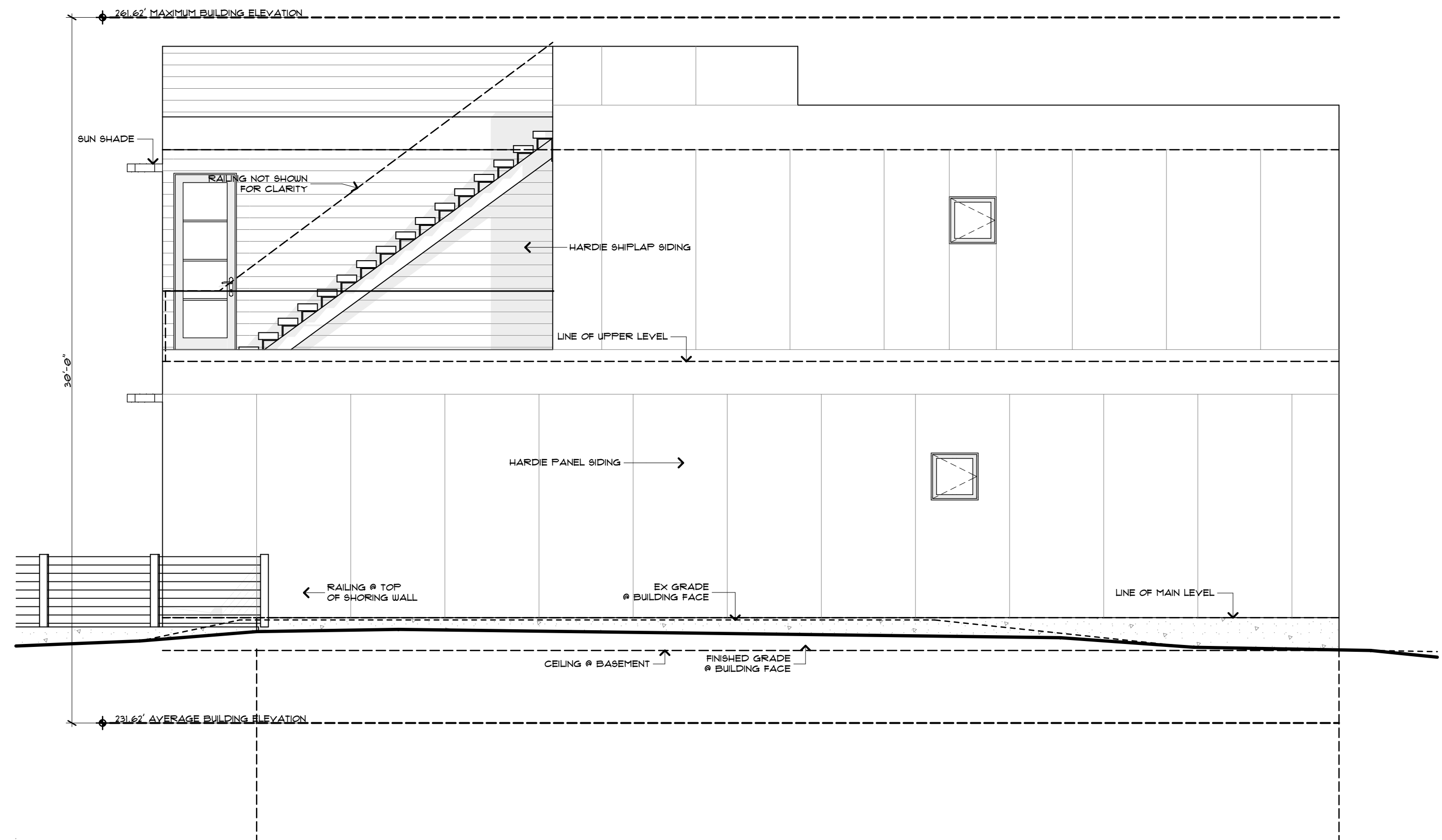
MERCER RESIDENCE
6950 SE MAKER ST
MERCER ISLAND, WA



NORTH ELEVATION

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

4



EAST ELEVATION

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

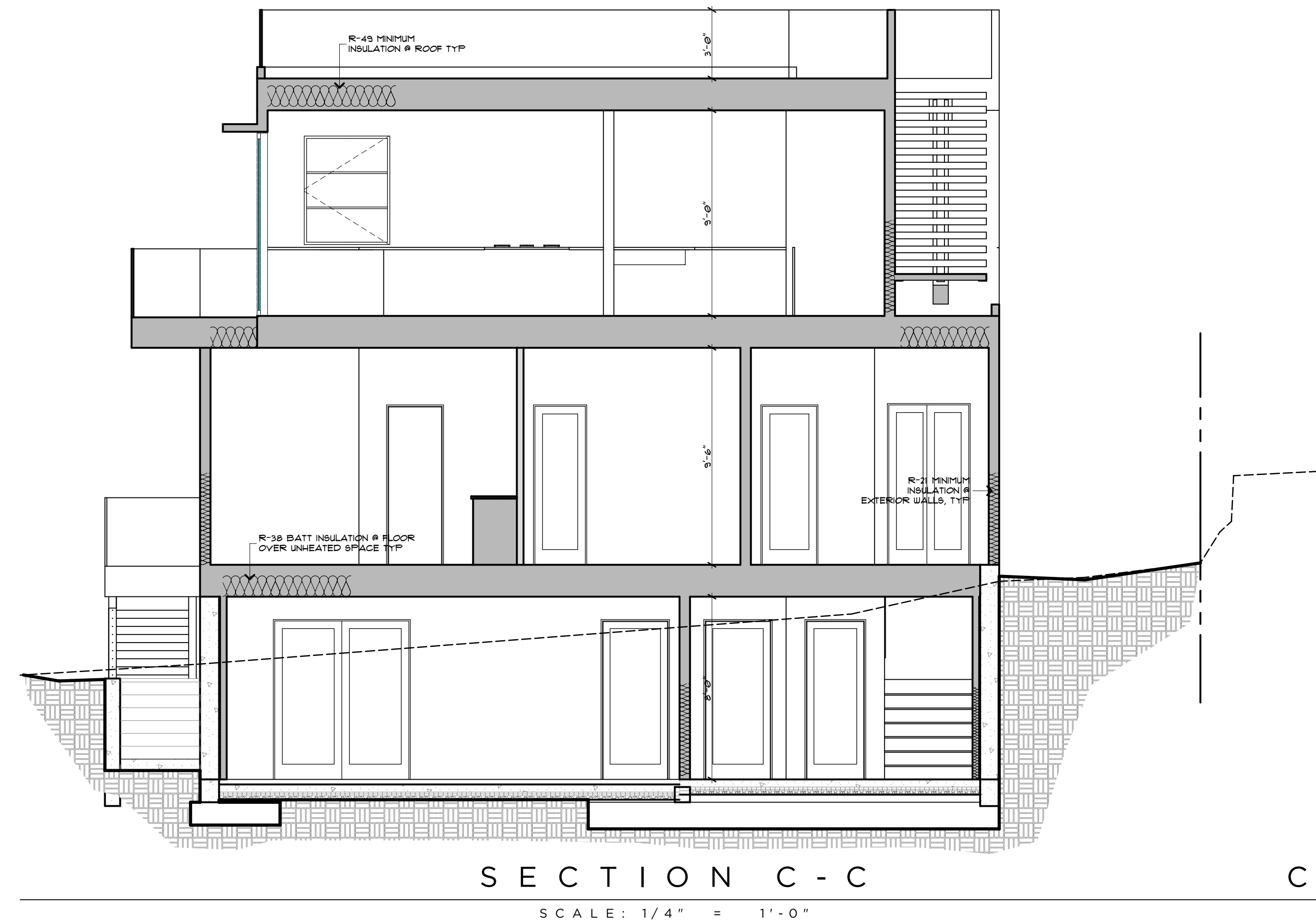
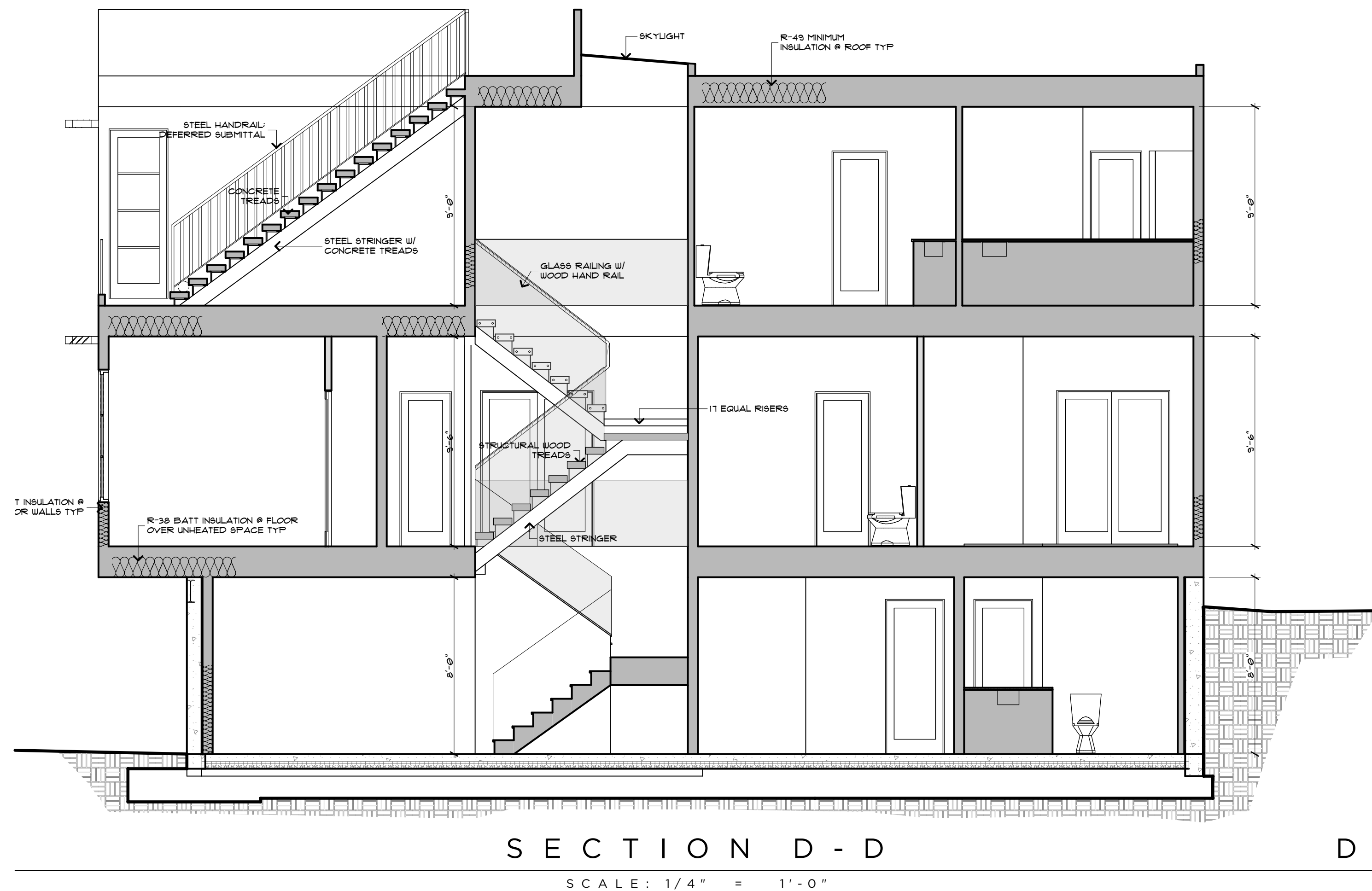
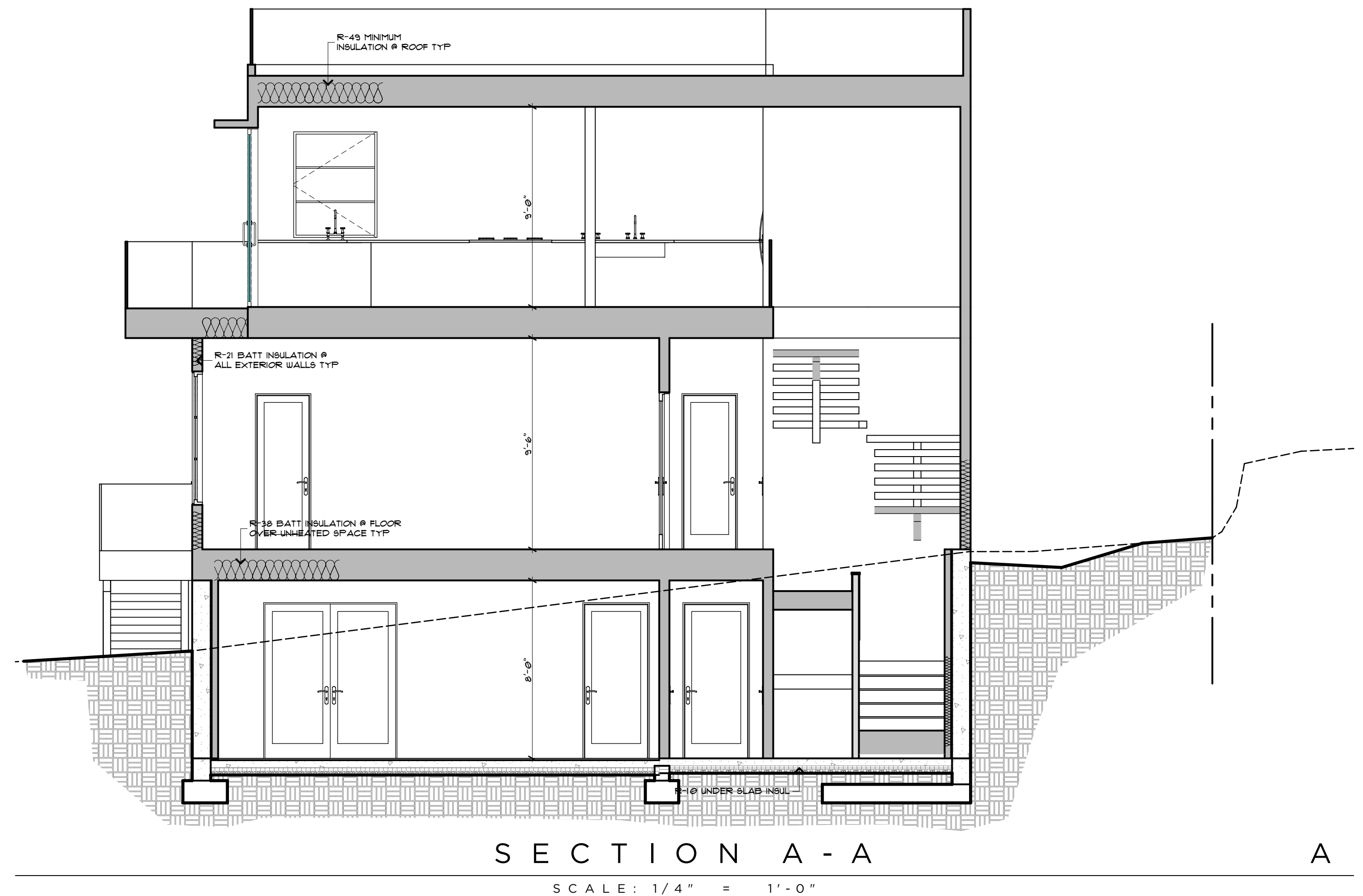
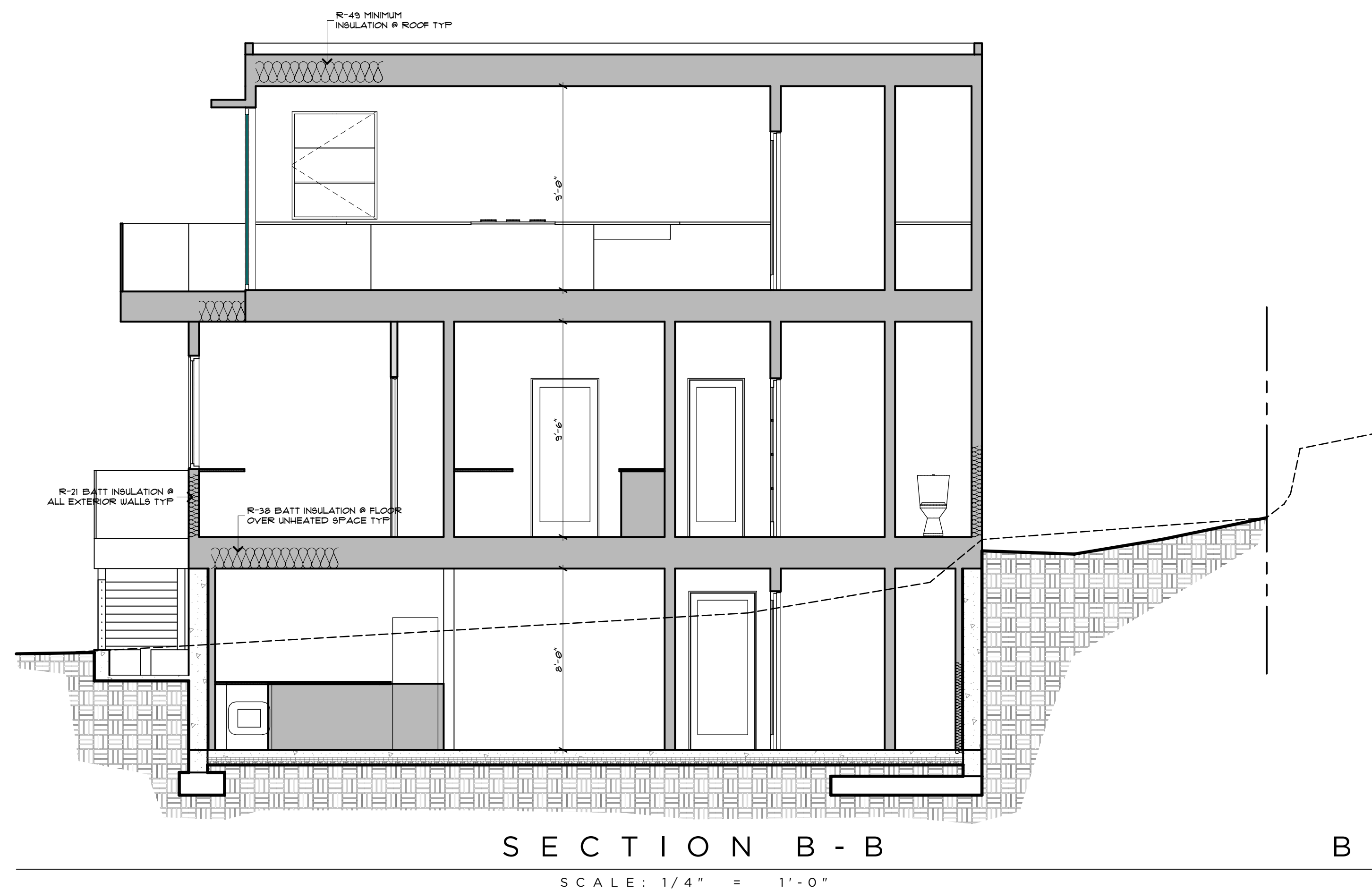
3

BUILDING
ELEVATIONS

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

A3.1

MAKER AVE
AUTUMN, 2022



WSEC 2018 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2018 PRESCRIPTIVE METHOD.
2. INSULATION VALUES SHALL BE AS FOLLOWS:

A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.

B. ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.

C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.

D. ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.

E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.

F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.

G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.

H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.

I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.

J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
6. NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).
7. AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT² FOR EACH 300 FT² OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE. EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
8. THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.41 THROUGH R402.4.4. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
9. AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

DOOR SCHEDULE: (ALL GLAZING TO BE NFRC CERTIFIED)

DOOR NO.	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	HARDWARE	NOTES / REMARKS
001A	3'-0"	7'-0"	ENTRY	CLAD WOOD	PAINTED	TBD	WITH 2'-0" SIDELIGHT
001B	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	
001C	3'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	20-MIN RATED, AUTO-CLOSE
001D	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	LOCKING, ELEVATOR
002A	18'-0"	7'-0"	OVERHEAD	WOOD	PAINTED	TBD	
002B	6'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	
003A	3'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	20 MIN RATED, AUTO-CLOSE
004A	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	LOCKING, 1-HR RATED
005A	3'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	LOCKING, 1-HR RATED
005B	4'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	
005C	9'-0"	7'-0"	BI-FOLD	CLAD WOOD	PAINTED	TBD	3-PANEL
005C	9'-0"	8'-0"	BI-FOLD	CLAD WOOD	PAINTED	TBD	3-PANEL, SAFETY GLAZING
006A	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	
101A	2'-4"	7'-0"	SWING	WOOD	PAINTED	TBD	
101B	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	ELEVATOR, LOCKING
102A	5'-0"	7'-0"	SWING	WOOD	PAINTED	TBD	PAIR
102B	8'-0"	7'-0"	SLIDER	CLAD WOOD	PAINTED	TBD	LOCKING, SAFETY GLAZING
102C	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	
103A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
104A	2'-4"	7'-0"	SWING	WOOD	PAINTED	TBD	
105A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
105B	3'-6"	7'-0"	BYPASS	WOOD	PAINTED	TBD	CLOSET
106A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
106B	4'-0"	7'-0"	BI-FOLD	WOOD	PAINTED	TBD	
106C	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
107A	3'-0"	7'-0"	POCKET	WOOD	PAINTED	TBD	
108A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
108B	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
109A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
109B	5'-0"	7'-0"	BYPASS	WOOD	PAINTED	TBD	CLOSET
110A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
110B	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
111A	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	
111B	6'-0"	8'-0"	SLIDER	CLAD WOOD	PAINTED	TBD	2-PANEL, WITH SCREEN
111C	5'-0"	7'-0"	BYPASS	WOOD	PAINTED	TBD	CLOSET
202A	12'-0"	8'-0"	BI-FOLD	CLAD WOOD	PAINTED	TBD	4-PANEL, SAFETY GLAZING
202B	2'-8"	7'-8"	SWING	WOOD/GLASS	PAINTED	TBD	SAFETY GLAZING
204A	2'-8"	7'-0"	SWING	WOOD	PAINTED	TBD	ELEVATOR, LOCKING
204A	16'-4"	8'-0"	BI-FOLD	CLAD WOOD	PAINTED	TBD	6-PANEL, SAFETY GLAZING
204B	11'10"	7'-0"	SWING	WOOD	PAINTED	TBD	
204B	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
206A	2'-6"	7'-0"	SWING	WOOD	PAINTED	TBD	
207A	2'-4"	7'-0"	POCKET	WOOD	PAINTED	TBD	

WINDOW SCHEDULE: (ALL GLAZING TO BE NFRC CERTIFIED)

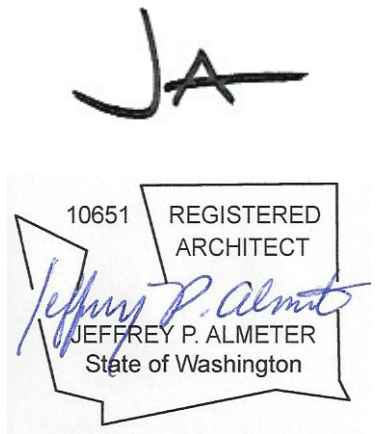
WINDOW NO.	WIDTH	HEIGHT	HEADER	TYPE	MATERIAL	FINISH	NOTES / REMARKS
102A	9'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	TRIPLE, EGRESS
103A	3'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	
103B	6'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	PAIR
103C	3'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	
103D	2'-0"	2'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	
105A	9'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	TRIPLE, EGRESS
106A	6'-0"	5'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	PAIR
108A	2'-0"	2'-0"	7'-0"	CASEMENT	CLAD WOOD	PAINTED	
109A	6'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	PAIR, EGRESS
111A	6'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	PAIR
202A	3'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	
202B	5'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD	PAINTED	PAIR
205A	4'-0"	5'-0"	8'-0"	FIXED	CLAD WOOD	PAINTED	
206A	2'-0"	2'-0"	7'-0"	CASEMENT	CLAD WOOD	PAINTED	

NANAWALL SYSTEM CPD INFO

CPD #	U-factor	SHGC	VT	Condensation Resistance	Air Leakage	Ventilation Rating (Standard Screen)	Ventilation Rating (Enhanced Screen)	Close				
NAN-M-1-03122-00001	0.30	0.21	0.39	59								
Group ID	Manufacturer Product Code	Frame/Sash Type	Glazing Layers	Low-E	Gap Widths	Spacer	Gap Fill	Grid	Divider	Tint		
1	"Outswing-Floor Mounted-Flush Sill: SKN 165 / Arg / Clear - 1"" (1/4""-5/32""")	WA/WA	2	0.019(2)	0.625	TP-D	Fill 1: ARG/AIR(90/10)	N	-	CL		

PELLA SLIDING DOOR CPD INFO

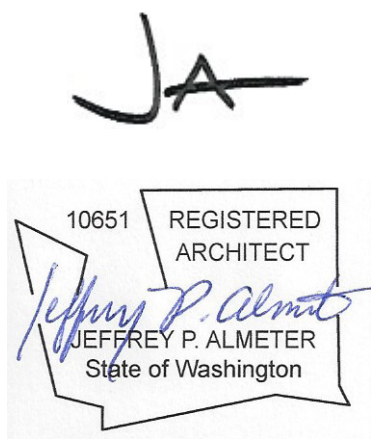
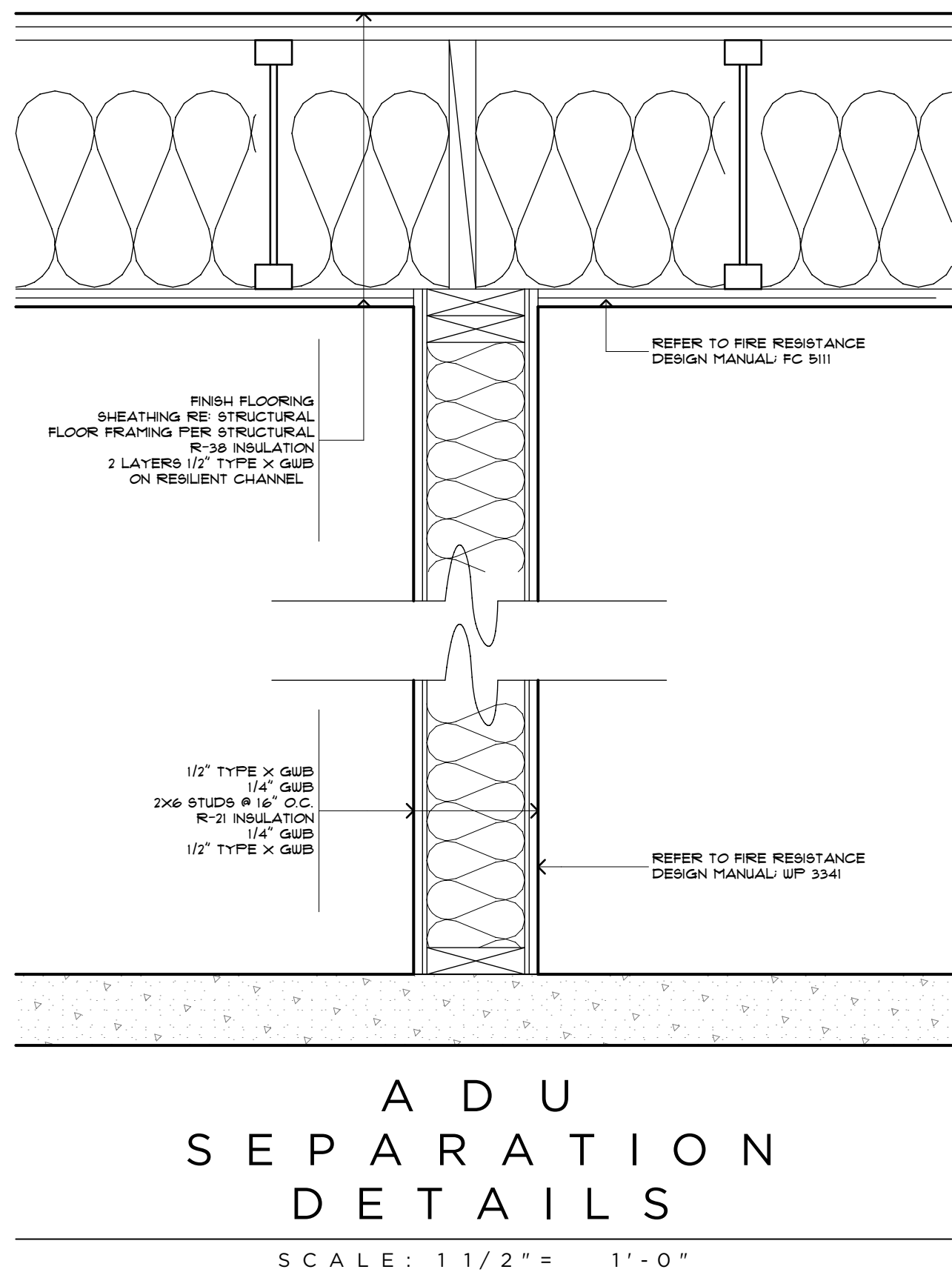
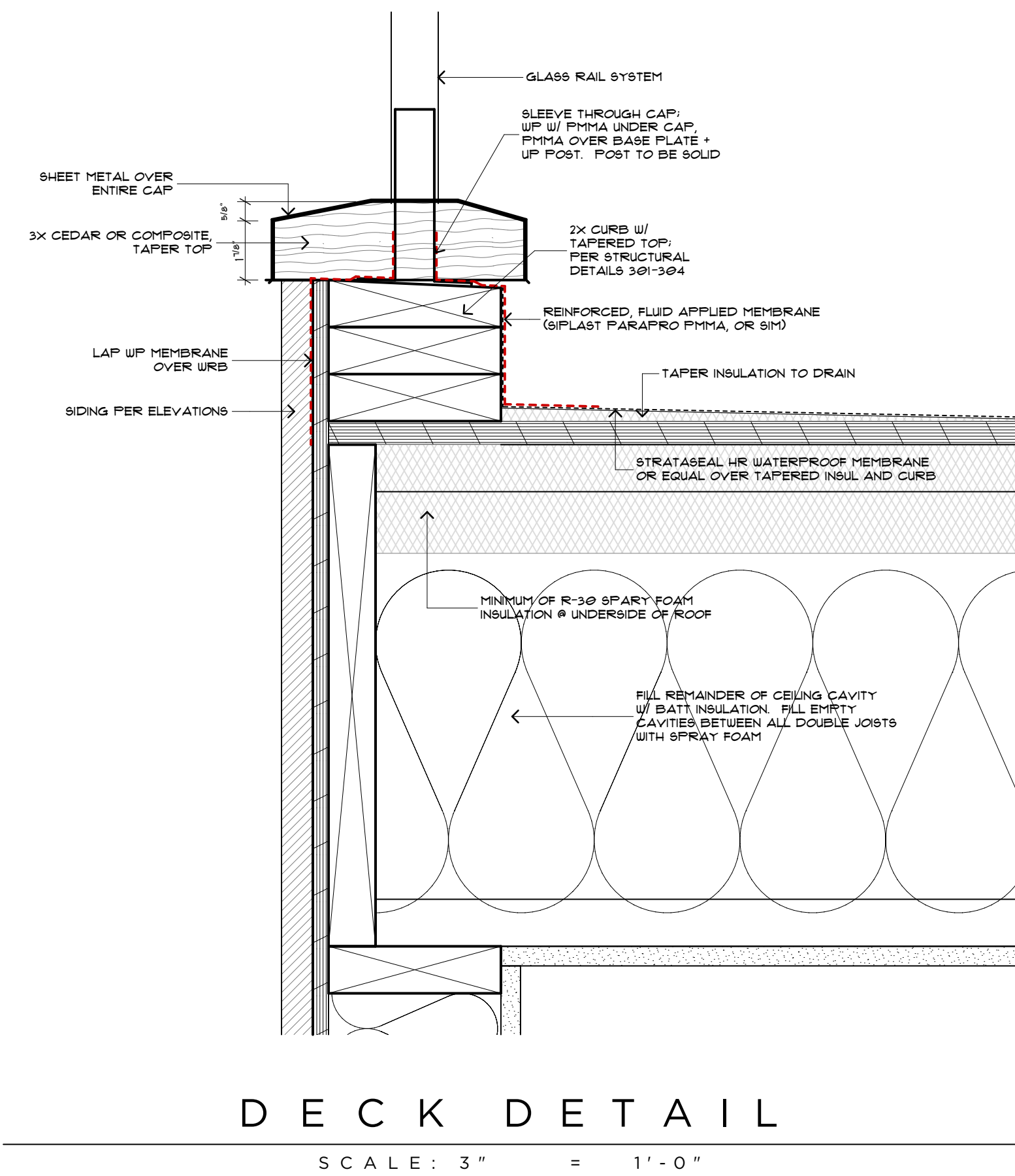
CPD #	U-factor	SHGC	VT	Condensation Resistance	Air Leakage	Ventilation Rating (Standard Screen)	Ventilation Rating (Enhanced Screen)	Close				
PEL-N-237-00945-00001	0.28	0.17	0.39	57								
Group ID	Manufacturer Product Code	Frame/Sash Type	Glazing Layers	Low-E	Gap Widths	Spacer	Gap Fill	Grid	Divider	Tint		
1	"Pine - 3mm 366 Arg 3mm - 13/16""	WA/WA	2	0.02(2)	0.58	SS-D	Fill 1: ARG/AIR(90/10)	N	-	CL		



MERCER RESIDENCE
6050 SE MAKER ST
MERCER ISLAND, WA

DOOR + WINDOW
SCHEDULES

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023



MERCER RESIDENCE
6950 SE MAKER ST
MERCER ISLAND, WA

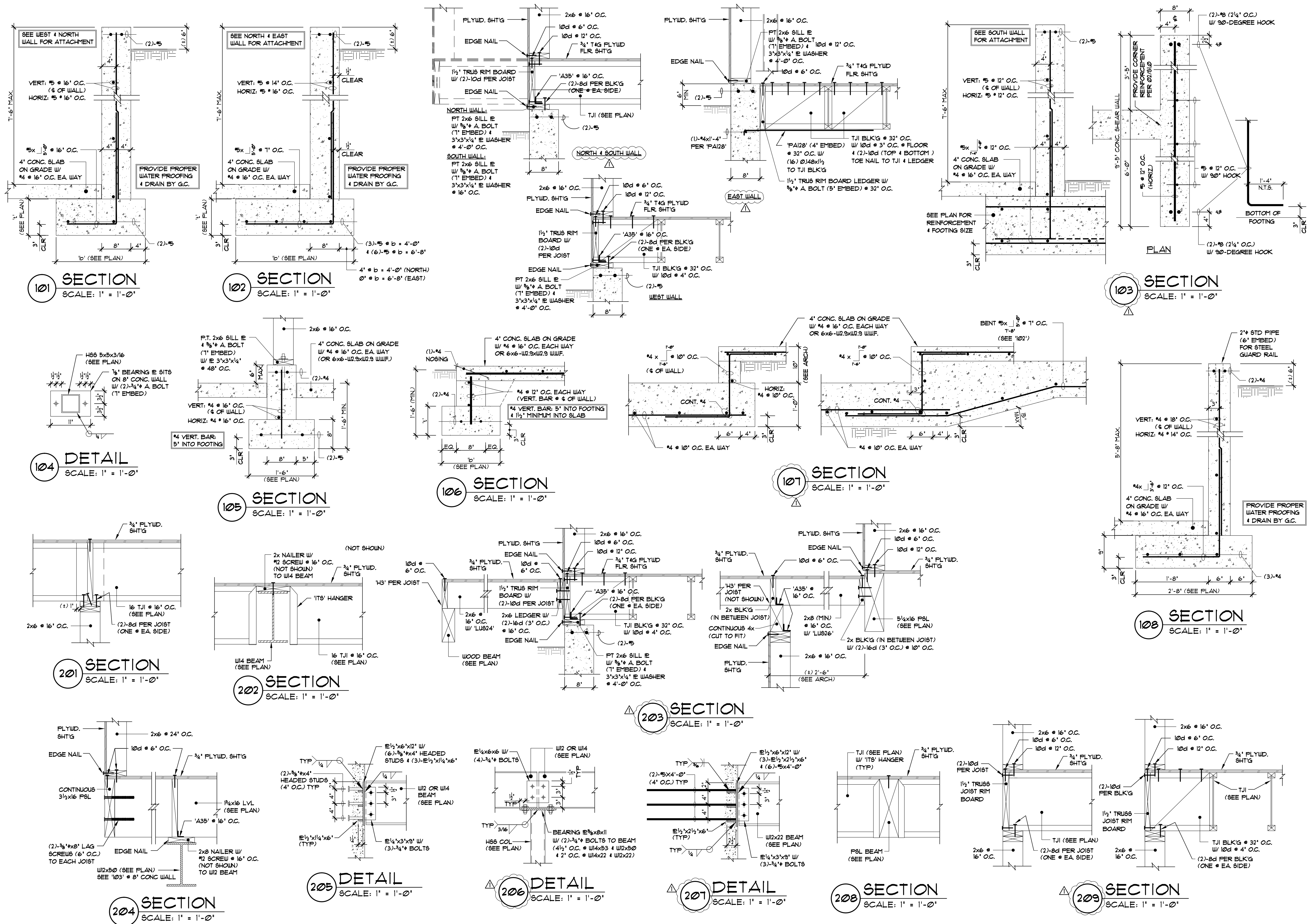
DETAILS

RELEASE
21 MARCH 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

A 4 . 2

MAKER AVE
AUTUMN 2022

S1.0



REVISIONS:		
NO.	DATE	DESCRIPTIONS
1	2/2/2023	CORRECTIONS

D.S Engineering
Consulting Structural Engineers
3121 147th Place SE
Mill Creek, WA 98012
T: 425-338-4776

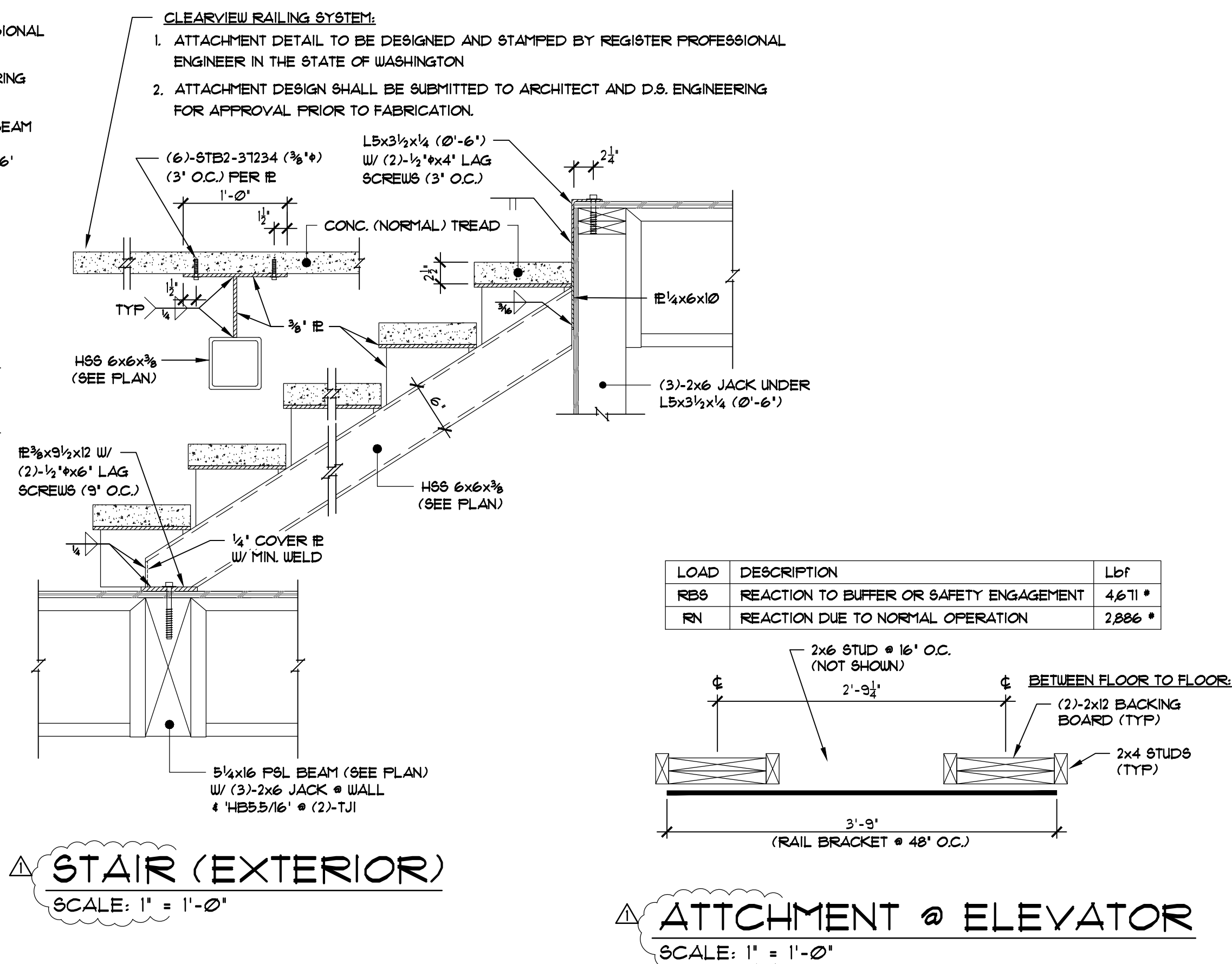
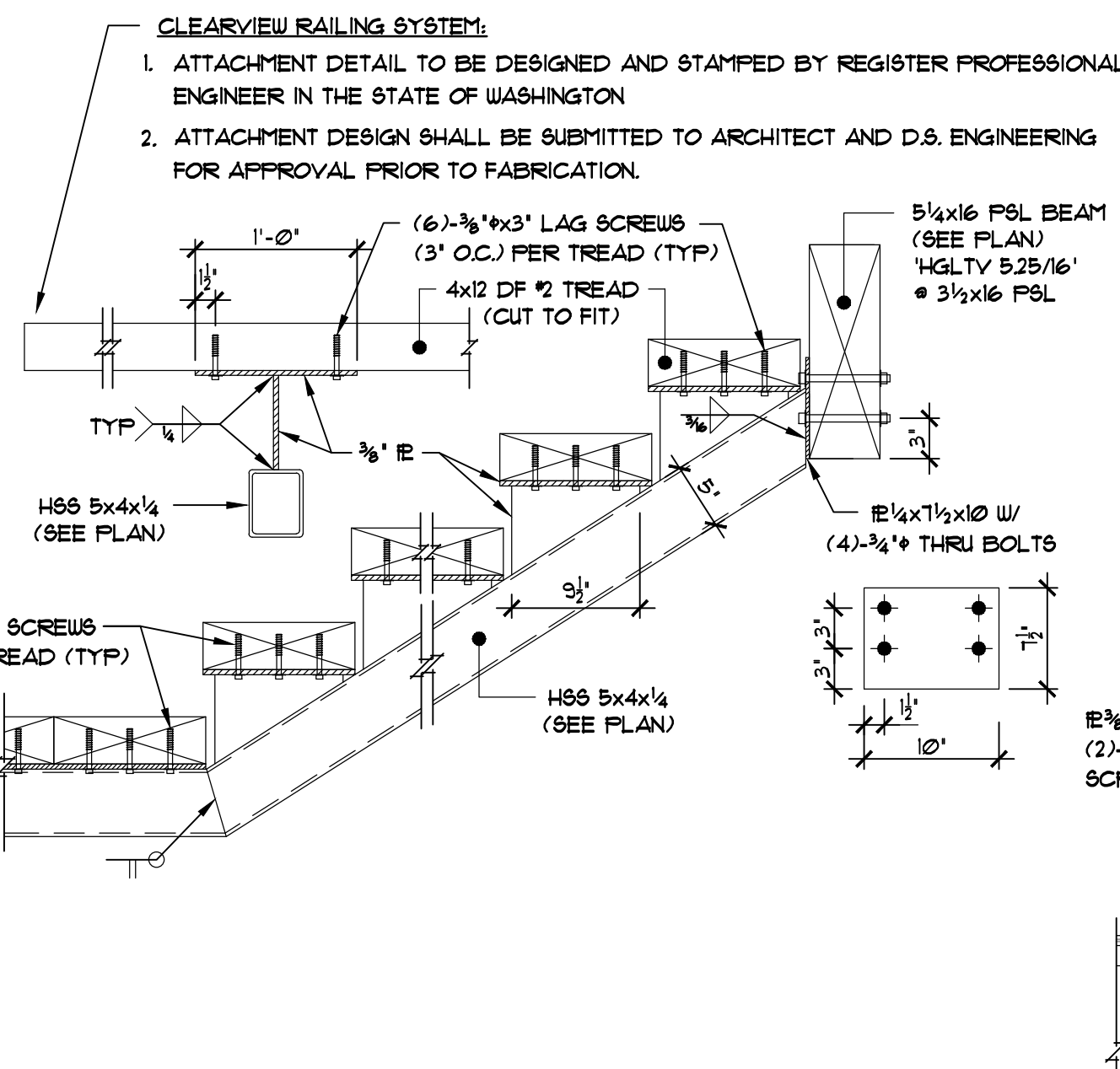
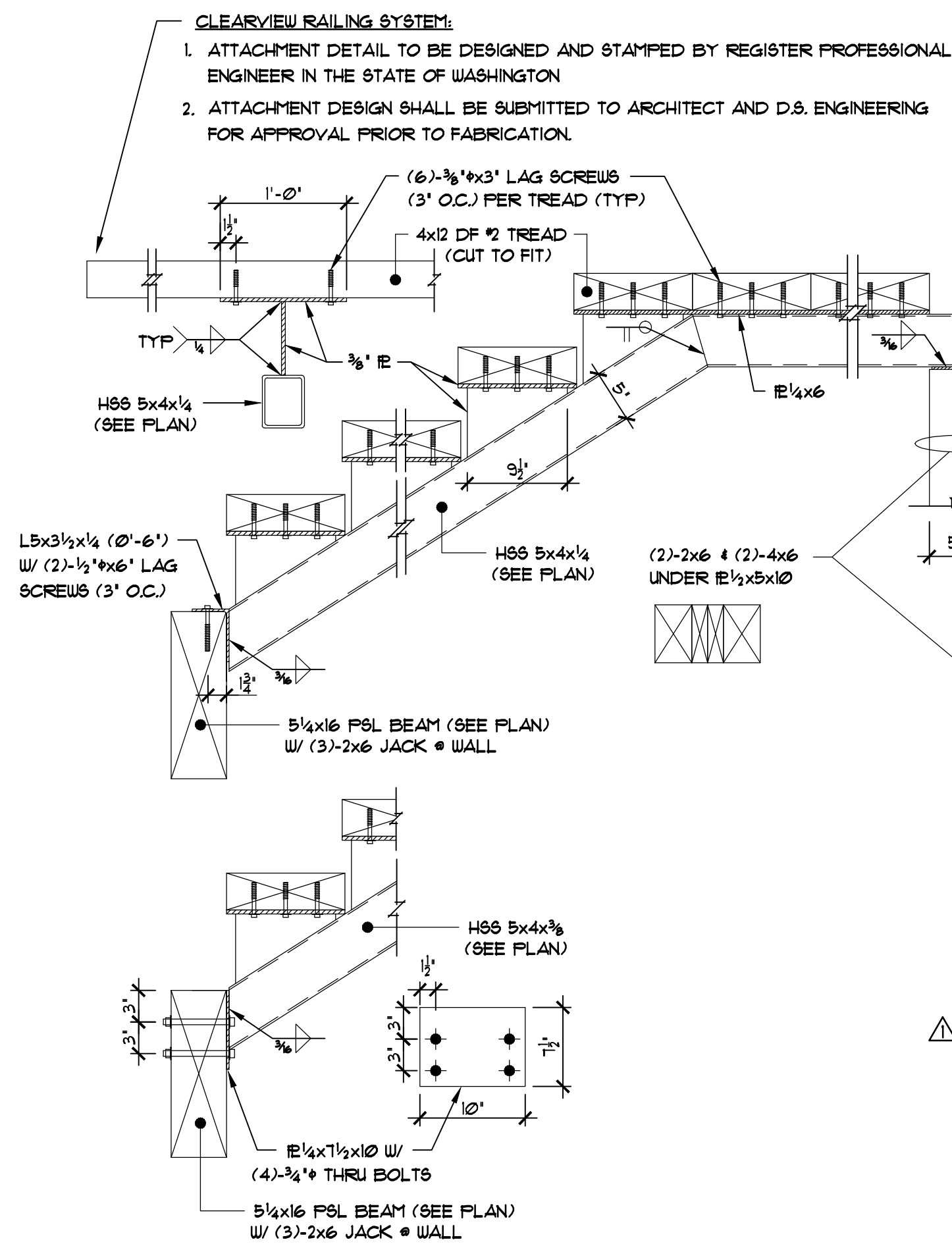
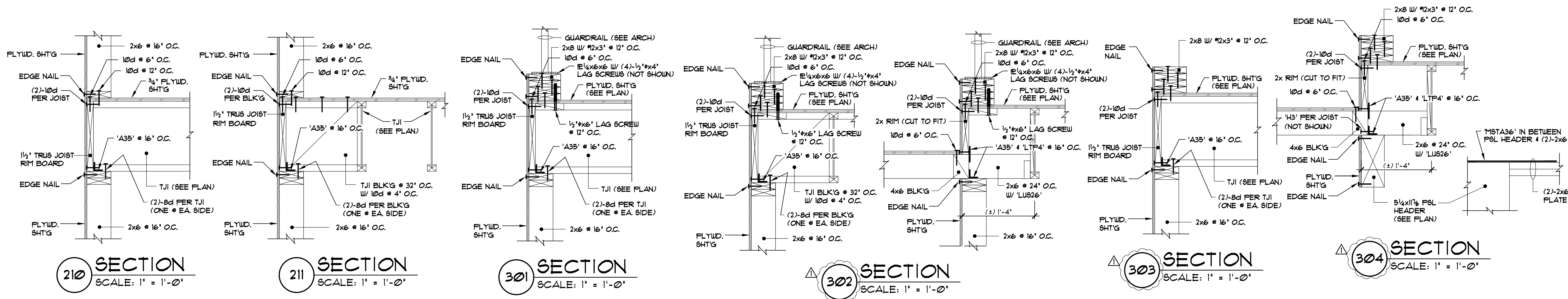


PROJECT:
MERCER RESIDENCE
6950 SE MAKER STREET
MERCER ISLAND, WA 98040

DATE: June 22, 2022
SCALE: SEE PLAN
JOB NO.: 22-300
DRAWN: D.S.
CHECK: D.S.

SHEET TITLE
SECTIONS
& DETAILS

SHEET
S1.1



LOAD	DESCRIPTION	Lbf
RB	REACTION TO BUFFER OR SAFETY ENGAGEMENT	4,671 *
RN	REACTION DUE TO NORMAL OPERATION	7,886 *

REVISIONS:		
NO.	DATE	DESCRIPTIONS
1	2/2/2023	CORRECTIONS

D.S. Engineering
Consulting Structural Engineers
3121 147th Place SE
Mill Creek, WA 98012
T: 425-338-4776



PROJECT:
MERCER RESIDENCE
6950 SE MAKER STREET
MERCER ISLAND, WA 98040

DATE: June 22, 2022
SCALE: SEE PLAN
JOB NO.: 22-300
DRAWN: D.S.
CHECK: D.S.

SHEET TITLE
SECTIONS
& DETAILS

SHEET
S1.2



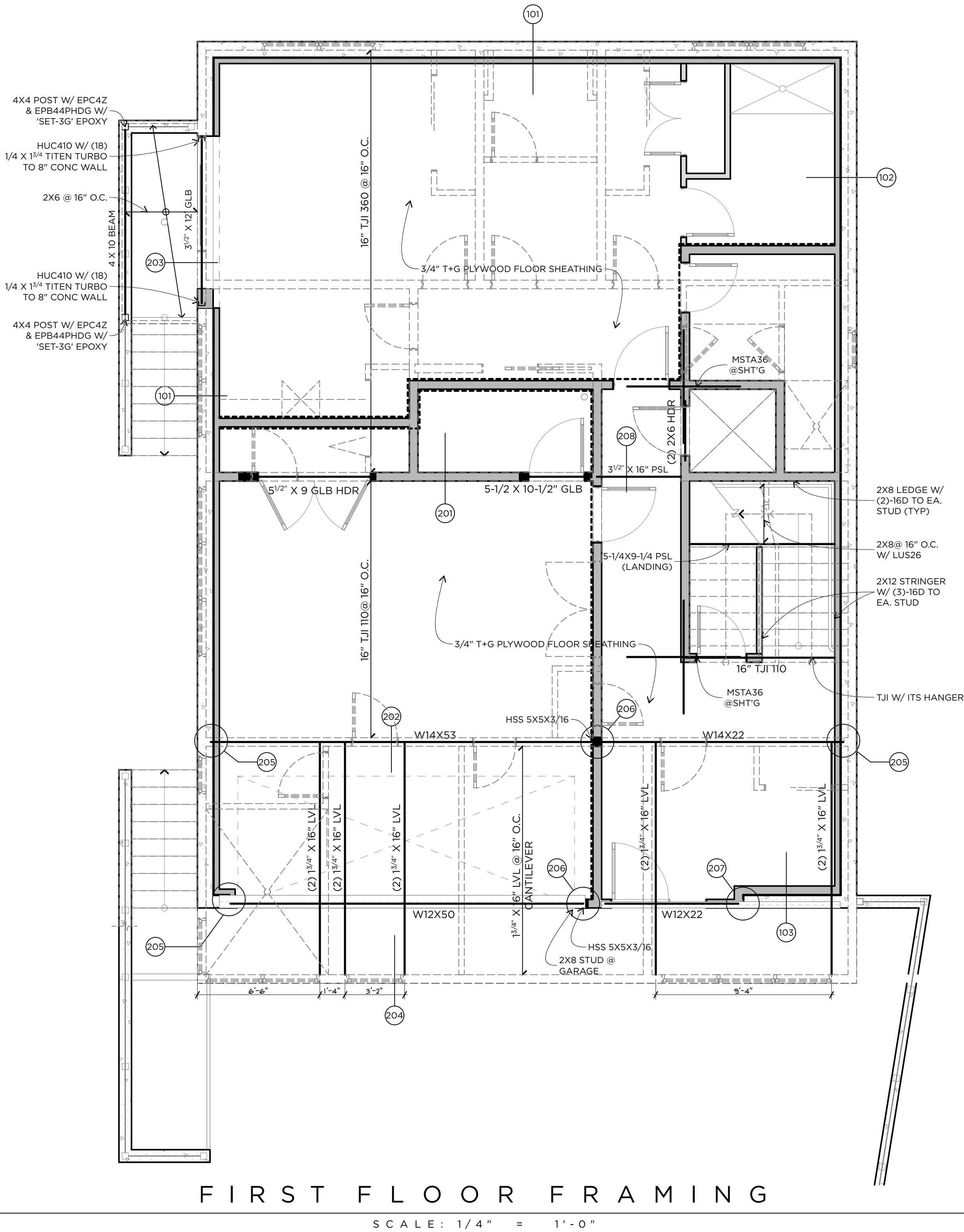
MERCER RESIDENCE
6950 SE MAKER ST MERCER ISLAND, WA

FOUNDATION +
FIRST FLOOR
FRAMING PLANS

RELEASE
10 MAY 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

S 2 . 0

MAKER AVE
AUTUMN 2022





MERCER RESIDENCE
6950 SE MAKER ST MERCER ISLAND, WA

SECOND FLOOR +
ROOF FRAMING
PLANS

RELEASE
10 MAY 2022
PERMIT CORRECTIONS
20 FEBRUARY 2023

S 2 . 2

MAKER AVE
AUTUMN 2022

