

GENERAL NOTES

PERMITS

1. THIS DRAWING SET IS DEVELOPED AS REQUIRED FOR ATTAINING A BUILDING PERMIT AND IDENTIFYING AESTHETIC DESIGN ELEMENTS OF THE PROJECT. THIS SET IS NOT INTENDED, COORDINATED OR COMPLETED AS A DETAILED CONSTRUCTION DOCUMENT SET.

2. MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL BE SUBMITTED UNDER SEPARATE PERMIT AND COORDINATED BY THE CONTRACTOR.

3. CONTRACTOR IS TO COORDINATE AND SCHEDULE ALL REQUIRED CITY INSPECTIONS

4. THE ELECTRICAL SUBCONTRACTOR SHALL SUBMIT TO THE OWNER AND CONTRACTOR FOR APPROVAL ELECTRICAL PLANS SHOWING ALL LIGHT FIXTURE, SWITCH, RECEPTACLE, AND EQUIPMENT LOCATIONS BEFORE CONSTRUCTION BEGINS.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ANY SUBCONTRACTOR'S WORK INTO THE PROJECT, TO SECURE COMPLIANCE WITH THE DRAWINGS AND CODES. ALONG WITH THE ACCURATE VERIFICATION AND LOCATION OF PENETRATIONS THROUGH FOUNDATION WALLS, STRUCTURAL MEMBERS AND BUILDING SPACES.

6. INSTALLATION CONFLICT: IN CASE OF ANY CONFLICT WHEREIN THE METHODS OR STANDARDS OF INSTALLATION OF THE MATERIALS SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE CODE OR ORDINANCES, THE CODE OR ORDINANCES SHALL GOVERN.

7. THE ROLE OF THE ARCHITECT INCLUDES CONSTRUCTION ADMINISTRATION AND REVIEW OF CONSTRUCTION CHANGES, SUBSTITUTIONS AND CLARIFICATIONS REVIEWED WITH THE CONTRACTOR, OWNER PRIOR TO FABRICATION AND OR INSTALLATION

DIMENSIONING

1. GRID LINES ARE LOCATED AT THE FACE OF CONCRETE FOUNDATION WALL. DIMENSIONS ARE TO FACE OF FRAMING AND/OR EXTERIOR CONCRETE FOUNDATION GRID LINES.

2. DIMENSIONS WITHIN DETAILS AND ENLARGED PLANS IDENTIFY FACE OF FINISHES.

3. VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN TO CONFIRM COORDINATION WITH ACTUAL FIELD FRAMING CONDITIONS.

4. DO NOT SCALE DRAWINGS. USE DIMENSIONS SHOWN ON THE DRAWINGS AND ACTUAL FIELD MEASUREMENTS.

SITE SAFETY

1. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SECURE THE SAFETY OF OCCUPANTS AND WORKERS AT ALL TIMES.

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFORM AND COMPLY TO ALL HEALTH AND SAFETY CODES AND ORDINANCES

CHANGE ORDERS

1. THE ARCHITECT IS NOT AUTHORIZED TO APPROVE ANY COST INCREASES.

2. ALL COST INCREASES FOR ANY REASON MUST BE AUTHORIZED BY THE OWNER PRIOR TO COMMENCING THE WORK REQUIRING THE COST INCREASE.

SHOP DRAWINGS, AND PRODUCT INFORMATION

SUBMITTALS SHOP DRAWINGS AND PRODUCT INFORMATION SUBMITTALS FOR FINAL COORDINATION AND REVIEW, IN ADDITION TO THE MECHANICAL, ELECTRICAL AND PLUMBING APPLIANCES AND EQUIPMENT IS TO BE REVIEWED FOR DESIGN INTENT BY THE ARCHITECT BEFORE PURCHASING. SHOP DRAWINGS ARE TO INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

-COLOR AND/OR MATERIAL SAMPLES OF ALL EXTERIOR AND INTERIOR FINISH COMPONENTS THAT WILL BE VISIBLE

- EXTERIOR AND INTERIOR DOOR AND WINDOW PRODUCT INFORMATION

- DOORS AND WINDOWS ARE TO BE ORDERED BASED ON ACTUAL SITE MEASUREMENT OF ROUGH OPENINGS.

- ARCHITECTS REVIEW OF SHOP DRAWINGS DOES NOT ALLOW FOR PRICE INCREASES

- A CHANGE ORDER IS REQUIRED FOR ANY PRICE INCREASES.

MISCELLANEOUS

1. ABBREVIATIONS: THROUGH OUT THE PLAN ARE ABBREVIATIONS WHICH ARE OF COMMON USE. THE ARCHITECT WILL DEFINE THE INTENT OF ANY ABBREVIATIONS IN QUESTION.

2. THESE DRAWINGS ARE COPYRIGHTED BY JOSEPH GREIF ARCHITECTS. THEY CAN NOT BE RE-USED, ADDED TO, MODIFIED OR REFERENCED TO WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT

FLASHING AND DRAINAGE

ALL EXTERIOR FLASHING AND COUNTER FLASHING IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT TO MAKE WEATHERPROOF IN COOPERATION WITH A WATERPROOFING CONSULTANT

SPECIFIC WATERPROOFING AND FLASHING NOTES:

PROVIDE GALVANIC INSULATION BETWEEN DISSIMILAR METALS

ALL EXTERIOR WOOD TRIM IS TO BE PRIMED AND PAINTED OR STAINED ALL SIDES

ALL WOOD MEMBERS IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED AND METAL FLASHED WHERE POSSIBLE

USE PLASTIC WOOD AT ANY LOCATION WHERE EARTH COULD MAKE CONTACT WITH FRAMING MATERIALS

INSPECTIONS IN THE WATERPROOFING CONSULTANT SHALL BE (BUT NOT LIMITED TO THE FOLLOWING:

PRE-CONSTRUCTION MEETING ON SITE
BEFORE FOUNDATION IS BACKFILLED
BEFORE BASEMENT AND GARAGE SLABS ARE POURED
BEFORE WINDOWS AND DOORS ARE INSTALLED
BEFORE ROOFING IS INSTALLED

CODE SPECIFIC DETAILS

GLAZING CODE REQUIREMENTS
SEE A5.2 FOR REFERENCE DETAILS

EGRESS OPENING REQUIREMENTS
SEE A5.2 FOR REFERENCE DETAILS

STAIRS AND RAILINGS
SEE A5.1 FOR REFERENCE DETAILS

SMOKE DETECTORS
SEE A5.1 FOR REFERENCE DETAILS

CARBON MONOXIDE ALARMS
SEE A5.1 FOR REFERENCE DETAILS

NOTCHING OF CONSTRUCTION FRAMING
SEE A5.3 FOR REFERENCE DETAIL

PROJECT DIRECTORY

CITY OF MERCER ISLAND
DEVELOPMENT SERVICES GROUP
9611 SE 36TH STREET | MERCER ISLAND, WA 98040
PHONE - 206 275 7605 - WWW.MERCERGOV.ORG

ARCHITECT
N5 ARCHITECTURE
4200 STONE WAY N SEATTLE, WA 98103
SETH HALE - PRINCIPAL - 206 300 5339 - seth@n5architecture.com

STRUCTURAL ENGINEERING
FRANK CO
LIZ FEKETE - 206 579 8160 - liz@frankcompany.com

GEOTECH
PANGE0, INC
3213 EASTLAKE AVENUE EAST, SUITE B | SEATTLE, WA 98102
PHONE - 206 262 0370 - WWW.MERCERGOV.ORG
JON C. REHKOPF - 206 940 8895 - jrehkopf@pangeoinc.com

WET LAND ENVIROMENTALIST
MARK RIGOS - 425 652 6013 - markrigos@hotmail.com

SURVEYOR AND CIVIL ENGINEERING
PACE
11255 KIRKLAND WAY | SUITE 300 | KIRKLAND, WA 98033
PHONE 45 827 2014 - WWW.PACEENGRS.COM
JOHN ANDERSON - PE | PROJECT MANAGER

ARBORIST
ARBOR OPTIONS,LLC
RYAN RINGE - PRINCIPAL - 206 755 5826 - ryan@arboroptions.com

PROJECT DATA

ALL WORK TO CONFORM TO ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO:

- A. 2021 INTERNATIONAL BUILDING CODE (STRUCTURAL)
- B. 2021 INTERNATIONAL RESIDENTIAL CODE (ARCHITECTURAL)
- C. 2021 INTERNATIONAL MECHANICAL CODE
- D. 2021 UNIFORM PLUMBING CODE
- E. 2021 INTERNATIONAL FIRE CODE
- F. WASHINGTON STATE ENERGY CODE

OCCUPANCY: R3
TYPE OF CONSTRUCTION: VB SPRINKLED

FIRE ALARM:
A NFPA 72-CHAPTER 29 MONITORED FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

THIS SYSTEM MAY TAKE THE PLACE OF LINE-VOLTAGE INTERCONNECTED SMOKE AND CO DETECTORS REQUIRED IN IRC R314.3 AND IRC 315.3

SPRINKLER SYSTEM:
A NFPA 13D (FULL COVERAGE) FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

PROJECT INFORMATION

PROJECT ADDRESS

5236 WEST MERCER WAY, MERCER ISLAND, WA 98125

OWNER

LEVEL CAPITAL
ATTN: TERRY VAN NOSTRAND
11250 KIRKLAND WAY, SUITE 100
KIRKLAND, WA 98033
206-595-4545
terry@levelcapital.com

PROJECT DESCRIPTION

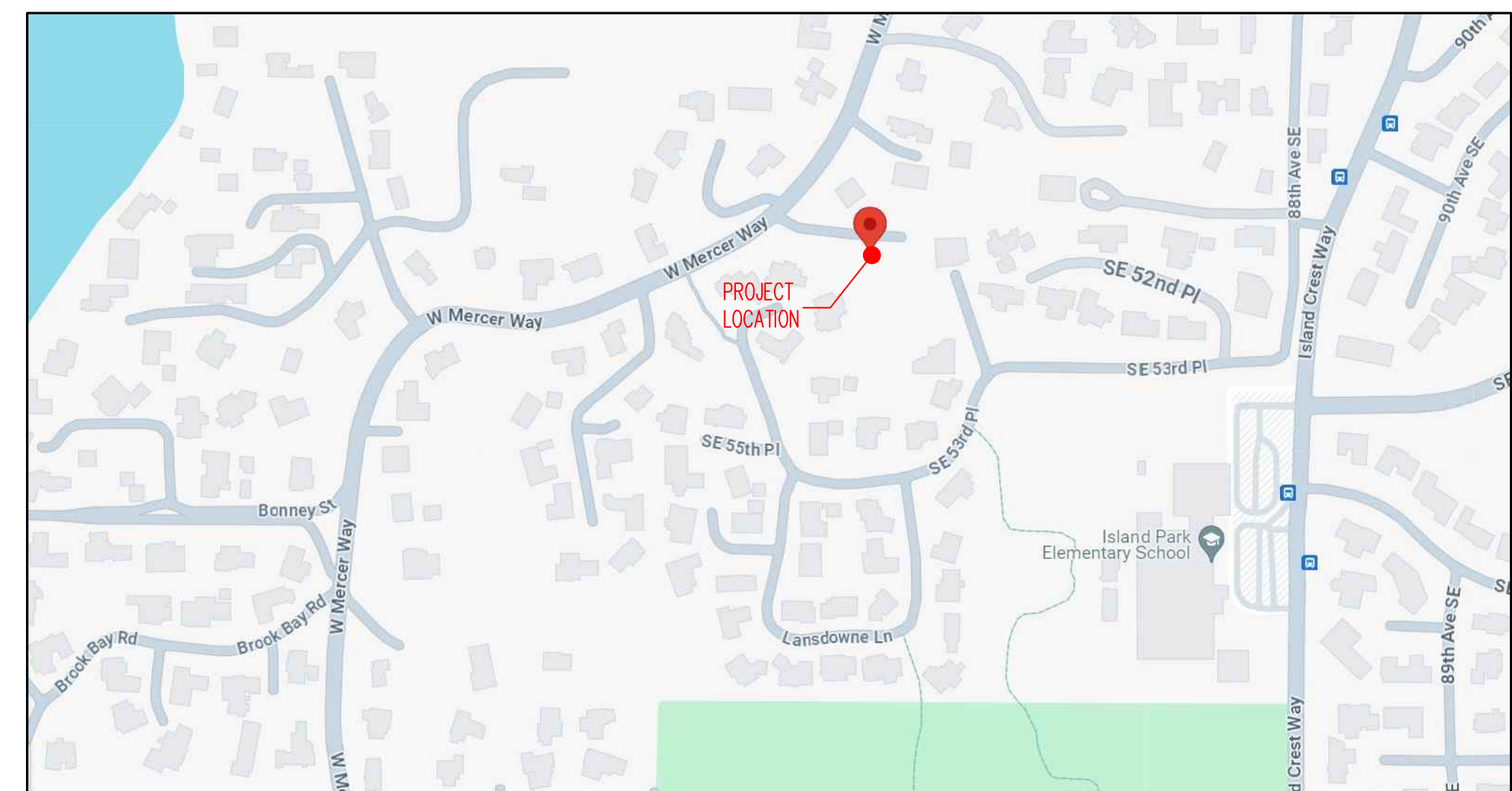
CONSTRUCTION OF NEW SINGLE FAMILY HOUSE ON AN UNDEVELOPED LOT WITH STEEPSLOPS AND WETLANDS

LEGAL DESCRIPTION

LOT 4A OF THE REVISED MILLS LOT LINE REVISION. PORTION OF : NW ¼, SW ¼, NW ¼ SECTION 19, T, 24N, R S E W M

PARCEL NUMBER: 192405-9324
ZONING: R-15

PROJECT LOCATION MAP



PROJECT DRAWING INDEX

GENERAL INFORMATION

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A0.01 PROJECT NOTES, INFORMATION, INDEX
A0.2 WSEC & VENTILATION
A0.3 SITE SURVEY
A0.4 ARBORIST PLAN

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W2.0 WETLAND MITIGATION PLAN EAST
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A1.0d LOT COVERAGE AREA

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A2.2 STAIR SECTION
A2.3 NORTH SECTION

A2.4 WEST SECTION
A2.5 EAST SECTIO
A2.6 WALL SECTIONS

A.3 BUILDING ELEVATION

A3.1 WEST ELEVATION
A3.2 SOUTH ELEVATION
A3.3 NORTH ELEVATION
A3.4 EAST ELEVATION

A.4 DR & WND SCHDS & DETAILS

A4.1 GLAZING SCHEDULE

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C1.1 TESC DETAILS
C2.0 ROAD, GRADING AND STORM PLANS
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C3.0 SITE, UTILITY, AND SEWER PLAN
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S1.2 GENERAL STRUCTURAL NOTES
S2.1 GROUND FLOOR AND FOUNDATION PLAN
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S4.1 WOOD FRAMING DETAILS
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S4.3 WOOD FRAMING DETAILS

SHORING - NEW

SH1.1 GENERAL SHORING NOTES AND DETAILS
SH2.1 SHORING PLAN

SHORING - FOR REFERENCE

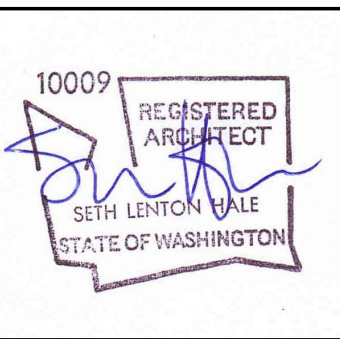
S-0 COVER SHEET
S-1 STRUCTURAL GENERAL NOTES
S-2 SHORING AND TEMPORARY EXCAVATION PLANS
S-3 SOLDIER PILE SECTION AND SCHEDULE

SUPPLEMENTAL DOCUMENTS

- | | |
|--|--------------------------------------|
| 1) CITY OF MERCER ISLAND BUILDING PERMIT APPLICATION | 9) ARBORIST REPORT |
| 2) SITE DEVELOPMENT WORKSHEET | 10) CRITICAL AREA REVIEW APPLICATION |
| 3) GEOTECHNICAL REPORT | 11) CONCURRENT REVIEW |
| 4) ENERGY CODE INFORMATION SHEET | 12) MERCER ISLAND COVER SHEET |
| 5) STRUCTURAL CALCULATION | 13) DEVELOPMENT APPLICATION FORM |
| 6) STORM DRAINAGE REPORT | 14) SEPA |
| 7) WATER SIZING WORKSHEET | 15) TRANSPORTATION CONCURRENCY |
| 8) FIRE AREA VALUATION FORM | 16) CRITICAL AREA STUDY |
| | 17) TREE INVENTORY |



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MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SOC1 PERMIT#: XXX

DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK
REVISION
PERMIT
CORRECTION
SETBACK/DEVIATION
CORRECTION

SOC1 STAMP:

PROJECT TEAM:

SETH HALE

PROJECT NUMBER:

2023.014

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

A0.01

PRESCRIPTIVE ENERGY CODE COMPLIANCE FOR CLIMATE ZONE MARINE 4								
COMPONENT:	FENESTRATION:		CEILING WITH ATTIC:	VAULTED CEILING:	WOOD FRAMED WALL (INT):	FRAMED FLOOR:	BELOW GRADE WALL:	SLAB R-VALUE & DEPTH:
	VERTICAL:	OVERHEAD:						
PRESCRIPTIVE VALUE:	0.30	0.50	R60	R38	20+5 OR 13+10 R20+5	R30	10/15/24 INT + 5TB R21+5TB	10, 4 FT R10 CONTINUOUS INSULATION UNDER HEATED SLAB ON GRADE FLOORS

2021 WSEC - TABLE R406.2

CREDITS REQUIRED:
MEDIUM DWELLING UNIT: 8.0 CREDITS
DWELLING UNITS NOT INCLUDED IN #1, #3 OR #4.

TABLE R406.2 ENERGY EQUALIZATION CREDITS		
SYSTEM TYPE:	DESCRIPTION OF PRIMARY HEATING SOURCE:	CREDITS
4.	FOR HEATING SYSTEMS USING A HEAT PUMP THAT MEETS FEDERAL STANDARDS FOR THE EQUIPMENT LISTED IN TABLE C403.3.2(2) OR C403.3.2(9) OR AIR TO WATER HEAT PUMP UNITS THAT ARE CONFIGURED TO PROVIDE BOTH HEATING AND COOLING AND ARE RATED IN ACCORDANCE WITH AHRI 550/590.	3.0

TABLE R406.3 ENERGY CREDITS

OPTION:	DESCRIPTION:	CREDITS
3.7	HIGH EFFICIENCY HVAC Ductless split system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF2 of 9 (HSPF of 10) shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. Exception: In homes with total heating loads of 24,000 or less using multi-zone mini-split systems with nominal ratings of 24,000 or less, the minimum HSPF s to claim this credit shall be 8.19 HSPF2 (or 9 HSPF).	2.0
5.1	EFFICIENT WATER HEATING A drain water heat recovery unit(s) shall be installed, which captures waste water heat from at least two showers, including tub/shower combinations. It is acceptable, but not required, for sink water to be connected. Unit shall have a minimum efficiency of 40% if installed for equal flow or a minimum efficiency of 54% if installed for unequal flow. Such units shall be rated in accordance with CSA B55.1 or IAPMO IGC 346-2017 and be so labeled.	0.5
5.6	EFFICIENT WATER HEATING Electric heat pump water heater with a minimum UEF of 2.9 and utilizing a split system configuration with the air-to-refrigerant heat exchanger located outdoors. Equipment shall meet Section 4, requirements for all units, of the NEEA standard Advanced Water Heating Specification with the UEF noted above	2.0
7.1	APPLIANCE PACKAGE All of the following appliances shall be new and installed in the dwelling unit and shall meet the following standards: 1. Dishwasher, standard – Energy Star rated, Most Efficient 2021 or Dishwasher, compact – Energy Star rated (Version 6.0) 2. Refrigerator (if provided) – Energy Star rated (Version 5.1) 3. Washing machine (Residential) – Energy Star rated (Version 8.1) 4. Dryer – Energy Star rated, Most Efficient 2022	0.5
TOTAL ENERGY CREDITS		8.0

GLAZING SCHEDULE

SEE A4.1 FOR DETAILS

SECTION M1505 - MECHANICAL VENTILATION

M1505.3: EXHAUST EQUIPMENT
EXHAUST FANS AND WHOLE HOUSE MECHANICAL VENTILATION FANS SHALL BE LISTED AND LABELED AS PROVIDING THE MINIMUM REQUIRED AIRFLOW IN ACCORDANCE WITH ANSI/AMCA 210-ANSI/ASHRAE 51.

M1505.4.1 SYSTEM DESIGN:
THE WHOLE HOUSE VENTILATION SYSTEM SHALL CONSIST AN ERV/HRV WITH INTEGRAL FANS, ASSOCIATED DUCTS AND CONTROLS. WHOLE HOUSE VENTILATION SHALL MEET THE REQUIREMENTS OF SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4 AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF THE WHOLE HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH THE PROPER CONTROLS IN ACCORDANCE WITH SECTION M1505.4.2. . THE SYSTEM SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM OUTDOOR AIRFLOW RATES REQUIRED BE SECTION M1505.4.3 AS MODIFIED BY WHOLE HOUSE VENTILATION COEFFICIENTS IN SECTION M1505.4.3.1 WHERE APPLICABLE. THE WHOLE HOUSE VENTILATION SYSTEM SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATES REQUIRED BY SECTION M1505.4.2. UNLESS CONFIGURED WITH INTERMITTENT OFF CONTROLS IN ACCORDANCE WITH SECTION M14=505.4.3.2.

M1505.4.1.4 BALANCED WHOLE-HOUSE VENTILATION SYSTEM
A BALANCED WHOLE HOUSE VENTILATION SYSTEM SHALL INCLUDE BOTH SUPPLY AND EXHASUT FANS. THE SUPPLY AND EXHAUST FANS SHALL HAVE AIRFLOW THAT IS WITHIN 10% OF EACH OTHER. THE TESTED AND BALANCED TOTAL MECHANICAL EXHAUST AIRFLOW RATE IS WITHIN 10 PERCENT OR 5 CFM, WHICHEVER IS GREATER, OF THE TOTAL MECHANICAL SUPPLY AIR FLOW RATE. THE FLOW RATE TEST RESULTS SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7. THE EXHAUST FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.2. THE SUPPLY FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.3. BALANCED VENTILATION SYSTEMS WITH BOTH SUPPLY AND EXHAUST FANS IN A PACKAGED PRODUCT, SUCH AS AN ERV/HRV SHALL MEET THE REQUIREMENTS OF HVI 920 AS APPLICABLE. LOCAL EXHAUST SYSTEMS THAT ARE NOT A COMPONENT OF THE WHOLE HOUSE MECHANICAL VENTILATION SYSTEM ARE EXEMPT FROM THE BALANCE AIRFLOW CALCULATION.

M1505.4.3 MECHANICAL VENTILATION RATE
THE WHOLE HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1) OR EQUATION 15-1.

TABLE M1505.4.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS	
DWELLING UNIT FLOOR AREA: (SQUARE FEET)	NUMBER OF BEDROOMS
4,501-6,000 SF	4
	AIRFLOW IN CFM
	105 CFM

TABLE M1505.4.4 MINIMUM LOCAL EXHAUST RATES	
AREA TO BE EXHAUSTED	EXHAUST RATES
KITCHENS	IN ACCORDANCE WITH SECTION M1505.4.4.3 100 CFM, 6" SMOOTH DIAMETER, 3 ELBOWS MAXIMUM
BATHROOMS-TOILET ROOMS	50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

FIRE SPRINKLER AND ALARMS

NFPA 13R FIRE SPRINKLERS ARE REQUIRED FOR THIS PROJECT. THEY ARE TO BE DESIGNED UNDER A SEPARATE PERMIT.
SUBMIT SHOP DRAWINGS SHOWING PROPOSED LAYOUT OF FIXTURE HEAD LOCATIONS AND CONTROLS PER ARCHITECTURAL REVIEW AND DESIGN COORDINATION.
NFPA 13R SPRINKLER SYSTEM REQUIRES A 1.5" METER AND 2" SUPPLY LINE OR GREATER, IF REQUIRED BY SPRINKLER DESIGNER.
A NFPA 72 CHAPTER 29 COMPLIANT MONITORED FIRE ALARM SYSTEM IS REQUIRED. HEAT DETECTION THAT IS INTERCONNECTED WITH HOUSEHOLD SMOKE DETECTION IS REQUIRED.
ALL SMOKE DETECTORS/SOUNDERS SHALL MUST ACTIVATE UPON WATER FLOW OF THE SPRINKLER SYSTEM.
FIRE ALARM SYSTEMS MAY TAKE THE PLACE OF A "TYPICAL" LINE VOLTAGE SMOKE DETECTOR SYSTEM WHEN PERMITTED AND INSTALLED PER NFPA 72 - CHAPTER 29 AND CITY OF MERCER ISLAND REQUIREMENTS. IRC 314.7.1 - 314.7.4.

FIRE CODE ALTERNATIVE

TO ALLEVIATE ACCESS DEFICIENCIES THE PROJECT WILL UTILIZE 5/8" TYPE X GWB THROUGHOUT



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MERCER ISLAND RESIDENCE

5238 W MERCER WAY
MERCER ISLAND, WA 98125
SOC1 PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION
01/13/2026	

SOCI STAMP:



PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

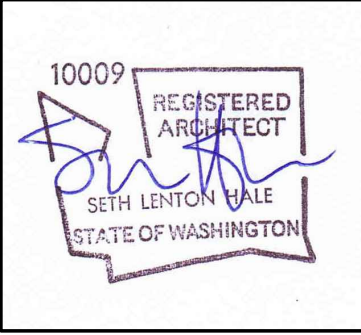
SHEET TITLE:
GENERAL INFORMATION
ENERGY CODE COMPLIANCE

SHEET NUMBER:

A0.02



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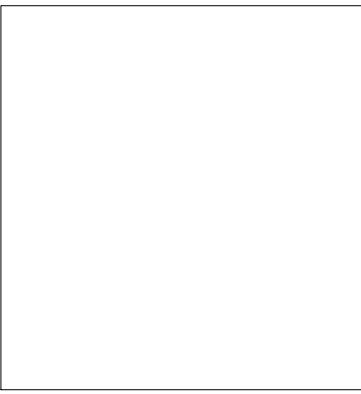
MERCER ISLAND RESIDENCE

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MERCER ISLAND, WA 98125

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DATE	12/12/2024
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CORRECTION	
MARK	

SOCI STAMP:



PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
GENERAL INFORMATION SITE SURVEY

SHEET NUMBER:

A0.03

RECORD LEGAL DESCRIPTION:

LOT 4A OF THE REVISED MILLS LOT LINE REVISION.

REFERENCES:

REVISED MILLS LOT LINE REVISION, MI LLA #SUB08-003. VOL. 265, PG. 020. AF#2009071090001

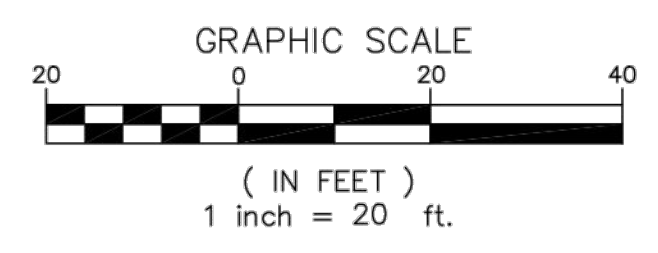
LEGEND

- WATER VALVE
 - HYDRANT
 - SOIL TEST PIT
 - WETLAND FLAG
 - WATER METER
 - MANHOLES (SS/SD)
 - CB
 - POWER/UTILITY POLE
 - GUY ANCHOR
 - POWER TRANSFORMER
 - POWER/TELEPHONE VAULT
 - POWER METER
 - TELEPHONE/TV RISER
 - GAS VALVE
 - JUNCTION BOX
 - GAS METER
 - STREET LIGHT
 - LUMINAIRE
 - SPOT ELEVATION
 - SIGN
 - MAILBOX
 - ROCKERY
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - CASED MONUMENT
 - MAGNETIC NAIL W/ WASHER
 - REBAR AND CAP
 - HUB AND TACK
-
- CENTER LINES
 - PROPERTY LINES
 - RIGHT-OF-WAY LINES
 - LOT LINES
 - DITCH LINE
 - FLOW LINE
 - WATER LINE
 - SANITARY SEWER LINE
 - STORM DRAIN LINE
 - GAS LINE
 - UNDERGROUND POWER LINES
 - UNDERGROUND TELEPHONE LINES
 - UNDERGROUND CABLE TV LINES
 - UNDERGROUND FIBER OPTIC LINES
 - OVERHEAD POWER LINES
 - OHLL
 - CHAIN LINK FENCE
 - WIRE FENCE
 - WOOD FENCE

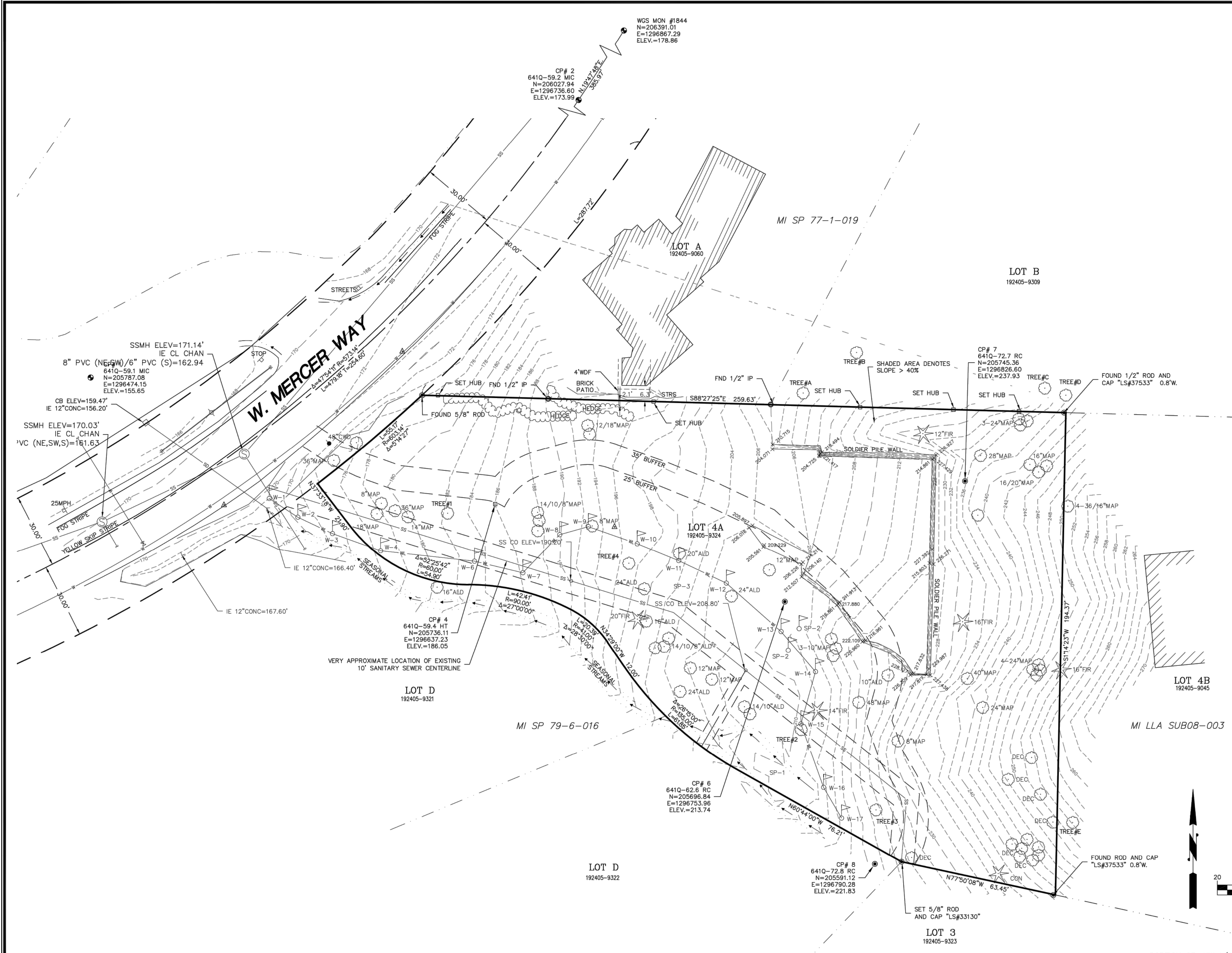
SHADED AREA DENOTES SLOPE > 40%

NOTES:

HORIZONTAL DATUM: NAD 1983/91 BASED ON FOUND MONUMENTS IN WEST MERCER WAY.
 VERTICAL DATUM: NAVD 88 BASED ON FOUND MONUMENTS IN WEST MERCER WAY.
 SITE AREA: 37,350 SQUARE FEET, MORE OR LESS.
 ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS OTHERWISE NOTED.
 THE LOCATION AND DESCRIPTION OF ALL SURVEY MARKERS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS TAKEN IN APRIL, 2017, UNLESS OTHERWISE INDICATED.
 WORK PERFORMED IN CONJUNCTION WITH THIS SURVEY UTILIZED THE FOLLOWING EQUIPMENT AND PROCEDURES: (A) 1" TRIMBLE S6 SERIES ELECTRONIC TOTAL STATION, MAINTAINED TO THE MANUFACTURER'S SPECIFICATIONS PER W.A.C. 332-130-100. (B) FIELD TRAVERSE, EXCEEDING REQUIREMENTS SET FORTH IN W.A.C. 332-130-090.
 THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL EASEMENTS.
 THIS TOPOGRAPHIC SURVEY DRAWING ACCURATELY PRESENTS SURFACE FEATURES LOCATED DURING THE COURSE OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED SOLELY UPON INFORMATION PROVIDED BY OTHERS AND PACE ENGINEERS, INC. DOES NOT ACCEPT RESPONSIBILITY OR ASSUME LIABILITY FOR THEIR ACCURACY OR COMPLETENESS. CONTRACTOR/ENGINEERS SHALL VERIFY EXACT SIZE AND LOCATION PRIOR TO CONSTRUCTION.
 CALL FOR LOCATE: UTILITY LOCATION SERVICE: 811



PORTION OF: NW 1/4, SW 1/4, NW 1/4, SECTION 19, T. 24 N., R. 5 E., W.M.



CAD/CALC	WRH				
DRAWN	CPB				
PLAT CHK	WRH				
SYM					

PACE Engineers
11255 Kirkland Way, Suite 300
Kirkland, WA 98033
p. 425.827.2014
www.paceengrs.com

5236 W MERCER WAY

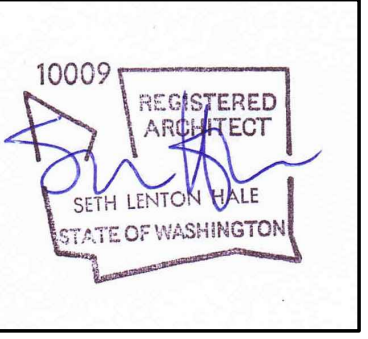
DATE	4/10/2024
SCALE	1" = 20'
SURVEY TEAM	BL/RMC/PA/RD
FIELD BOOK	641Q, 641T
DWG FILE	:FILE

TOPOGRAPHIC SURVEY FOR LEVEL CAPITAL LLC

PROJECT NO.	17387A
SHEET	1 OF 1



2562 DEXTER AVENUE N
SEATTLE, WA 98109 | 206-300-5339
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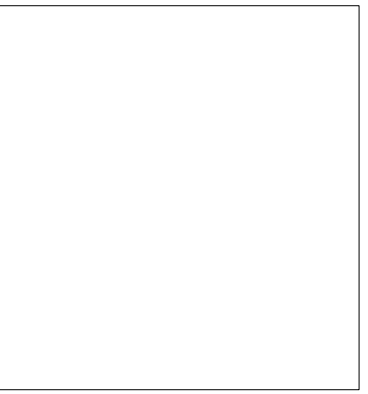


MERCER ISLAND RESIDENCE

5238 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

MARK	REVISION	DATE
	PERMIT	12/12/2024
	CORRECTION1	09/17/2025
	SETBACK DEVIATION	11/10/2025
	CORRECTION2	01/13/2026

SDCI STAMP:



PROJECT TEAM:

SETH HALE

PROJECT NUMBER:

2023.014

SHEET TITLE:

GENERAL
INFORMATION
ARBORIST PLAN
TREE INFO

SHEET NUMBER:

A0.04

SEE CIVIL SHEET C0.2
FOR ARBORIST & TREE
INFORMATION

Call 2 Working Days Before You Dig
1-800-424-5555
 Utilities Underground Location Center
 (ID, MT, ND, OR, WA)
 SAFETY PRECAUTION SHALL BE IMPLEMENTED BY CONTRACTOR(S) AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS
 ELECTRIC-RED SEWER-GREEN GASOLINE-YELLOW SURVEY-PINK TELECOM-ORANGE PROPOSED-WHITE WATER-BLUE

5236 WMW SINGLE FAMILY RESIDENTIAL (SFR)

PROJECT INFORMATION

PROJECT NAME:
5236 WMW SINGLE FAMILY RESIDENCE

TAX PARCEL NUMBER:
192405-9324

CITY PERMIT NUMBER:
CAO 25-004

PROPERTY OWNER:
LEVEL CAPITAL, LLC
11250 KIRKLAND WAY, SUITE 100
KIRKLAND, WA 98033
(425) 605-3104

APPLICANT:
NS ARCHITECTURE
SETH HALE
4200 STONE WAY NORTH
SEATTLE, WA 98103
(206) 300-5339
SETH@NSARCHITECTURE.COM

ARBORIST:
ARTIST TOUCH
ADAM HARKE
9608 WALL STREET
SNOHOMISH, WA 98296
(360) 739-5236

GEOTECHNICAL ENGINEER:
GEOTECH CONSULTANTS INC.
MARC MCGINNIS
2401 10TH AVE EAST
SEATTLE, WA 98102
(425) 747-5618

SITE ADDRESS:
5236 WEST MERCER WAY
MERCER ISLAND, WA 98040

SITE AREA:
37,350 SQUARE FEET / 0.857 ACRES

JURISDICTION:
CITY OF MERCER ISLAND

WETLAND AREA CALCULATIONS:

ONSITE WETLAND AREA
= 6,387 SF

ONSITE 40-FOOT WETLAND BUFFER AREA
= 12,943 SF

ONSITE NON-WETLAND AND NON-BUFFER AREAS
= 18,020 SF

PURPOSE OF MITIGATION IS TO IMPROVE FUNCTIONS AND VALUES OF WETLAND AND WETLAND BUFFER.

SHEET INDEX:

W1.0 WETLAND MITIGATION PLAN WEST
 W2.0 WETLAND MITIGATION PLAN EAST
 W3.0 MITIGATION NOTES AND DETAILS

CIVIL ENGINEER:
PACE ENGINEERS
DAN WESTLEY, P.E.
11255 KIRKLAND WAY, SUITE 300
KIRKLAND, WA 98033
(425) 827-2014

ARCHITECT:
NS ARCHITECTURE
SETH HALE
4200 STONE WAY NORTH
SEATTLE, WA 98103
(206) 300-5339
SETH@NSARCHITECTURE.COM

SURVEYOR:
PACE ENGINEERS, INC.
11255 KIRKLAND WAY, SUITE 300
KIRKLAND, WA 98033
(425) 827-2014

WETLAND BIOLOGIST:
MARK RIGOS, P.E.
440 SE DARST STREET
ISSAQUAH, WA 98027
(425) 652-6013
MARKRIGOS@HOTMAIL.COM

WETLAND LEGEND

WL	WETLAND BOUNDARY	SD	STORM DRAINAGE (PIPE)
W-#	WETLAND FLAG #	W	WATER (PIPE)
WETLAND FLAG		T	TELEPHONE (CONDUIT)
WETLAND		P	POWER (CONDUIT)
WETLAND BUFFER ADDITION AREA		SSCO	SANITARY SEWER CLEANOUT
WETLAND BUFFER SUBTRACTION AREA		MI	MERCER ISLAND
		SP	SHORT PLAT
		SS	STEEP SLOPE
		ROW	RIGHT OF WAY
		WMW	WEST MERCER WAY
		SF	SQUARE FEET
		NTS	NOT TO SCALE
		LLA	LOT LINE ADJUSTMENT
		NGPE	NATIVE GROWTH PROTECTION EASEMENT
		MICC	MERCER ISLAND CITY CODE
		CAO	CRITICAL AREAS ORDINANCE
		SS	SANITARY SEWER (PIPE)
SP-#	SAMPLE POINT FLAG #		
	EXISTING DECIDUOUS TREE		
	EXISTING EVERGREEN TREE		
	TREE TO BE REMOVED		
MAP	MAPLE TREE		
DEC	DECIDUOUS TREE		
ALD	ALDER TREE		
CON	CONIFER TREE		
XX	PROPOSED TREE OR SHRUB		



VICINITY MAP SCALE: NTS

SPECIAL NOTES:

- IN THE YEAR 2017, THE WETLAND WAS ORIGINALLY DELINEATED AND MICC'S REQUIREMENT WAS THEN A 35-FOOT WIDE WETLAND BUFFER. SEVERAL YEARS LATER, MICC WAS AMENDED AND THE NEW WETLAND BUFFER IS 40'.
- TREE DATA FOR EXISTING TREES IS SHOWN ON THE TOPOGRAPHICAL AND BOUNDARY SURVEY MAP PROVIDED BY OTHERS.
- 40' WETLAND BUFFER WAS USED FOR PURPOSES OF CALCULATING REQUIRED MITIGATION.

INVASIVE VEGETATION REMOVAL NOTES:

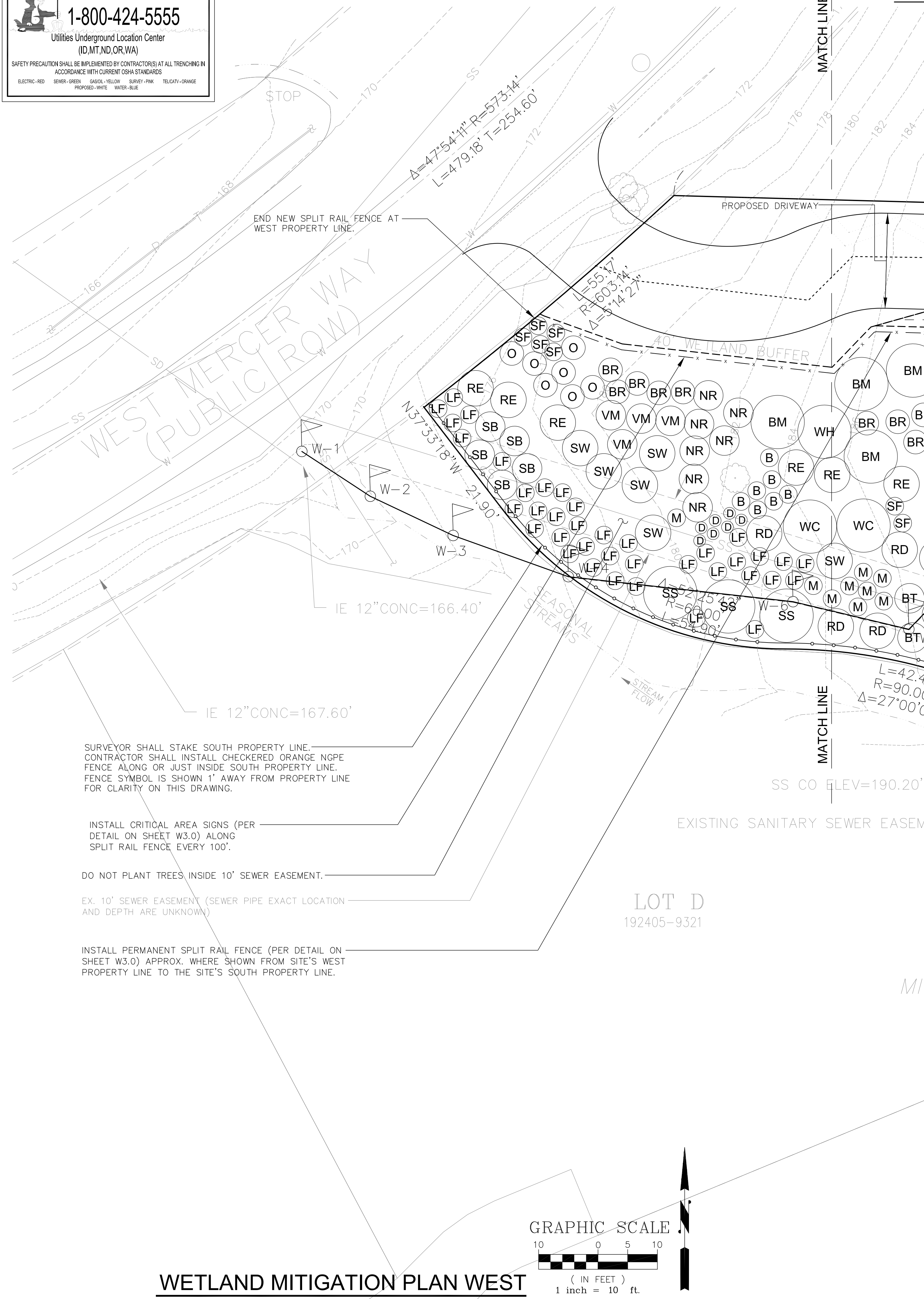
BEFORE INSTALLING PLANTINGS FOR RESTORATION AREAS, TAKE NOTE OF ANY INVASIVE WEED SPECIES FOUND ON-SITE. CONTROL OF THESE SPECIES IS VERY IMPORTANT IN RESTORATION AREAS IN ORDER TO ALLOW FOR THE SUCCESSFUL ESTABLISHMENT OF PLANTINGS THAT MIGHT OTHERWISE HAVE DIFFICULTY COMPETING WITH THESE AGGRESSIVE PLANTS.

WHERE ENCOUNTERED, INVASIVE WEEDS SHOULD BE REMOVED MANUALLY WITHOUT THE USE OF PESTICIDE (INCLUDES HERBICIDE), EXCEPT IN RARE CASES WHEN APPLIED BY A STATE LICENSED PESTICIDE APPLICATOR. MANUAL REMOVAL CAN BE ACCOMPLISHED BY GRUBBING OUT PLANTS AND ROOTS ENTIRELY (INCLUDING SEED PODS, FRUITS AND LEAVES) WITHOUT SIMULTANEOUSLY SPREADING MORE SEEDS. THE IDEAL TIME FOR REMOVAL IS PRIOR TO FLOWERING IN SPRING OR SUMMER. IF REMOVAL IS TO OCCUR AFTER FLOWERING, IT IS RECOMMENDED THAT FLOWERS BE CUT OFF AND DISPOSED OF PRIOR TO GRUBBING. GRUBBED OUT MATERIALS SHOULD BE DISPOSED OF OFF-SITE IMMEDIATELY, SINCE MANY OF THESE SPECIES ARE STILL CAPABLE OF PROPAGATING POST-REMOVAL. DO NOT USE WEED MATERIALS FOR MULCH AND DO NOT PUT INTO COMPOST OR YARD WASTE BINS.

ONCE THE INVASIVE SPECIES HAVE BEEN REMOVED, YOU CAN ASSESS SITE SOIL QUALITY. CERTAIN INVASIVE SPECIES SUCH AS SCOTCH BROOM DISPERSES THOUSANDS OF SEEDS PER PLANT. IN EXTREME CASES, TOPSOIL REMOVAL MAY BE NECESSARY TO EVACUATE THE INVASIVE SEED BANK. DENSE NATIVE PLANTING IS RECOMMENDED AND HAS PROVEN SUCCESSFUL AT PREVENTING WEEDY AND/OR INVASIVE SPECIES FROM REEMERGING.

PLANT MATERIALS FOR WETLAND AND WETLAND BUFFER RESTORATION									
SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	TOTAL NUMBER	STRATUM	SPACING ON CENTER	MAX HEIGHT	SITE PLACEMENT	LIGHT NEEDS
BM	BIG LEAF MAPLE	ACER MACROPHYLLUM	2 GAL.	10	TREE	9'	100'	DRIER BUFFER	SHADE TOLERANT
SP	SHORE PINE	PINUS CONTORTA	2 GAL.	15	TREE	9'	60'	WETTER BUFFER	HIGHLY ADAPTABLE
PY	PACIFIC YEW	TAXUS BREVIFOLIA	2 GAL.	4	TREE	9'	80'	WETTER BUFFER	SHADE TOLERANT
SS	SITKA SPRUCE	PICEA SITCHENSIS	2 GAL.	7	TREE	9'	230'	SATURATED SOILS	SHADE INTOLERANT
WC	WESTERN RED CEDAR	THUJA PLICATA	2 GAL.	13	TREE	9'	230'	SATURATED SOILS	SHADE DEPENDENT
WH	WESTERN HEMLOCK	TSUGA HETEROPHYLLA	2 GAL.	8	TREE	9'	200'	DRIER BUFFER	SHADE DEPENDENT
PW	PACIFIC WILLOW	SALIX LASIANDRA	2 GAL.	3	TREE	9'	50'	SATURATED SOILS	HIGHLY ADAPTABLE
SW	SITKA WILLOW	SALIX SITCHENSIS	2 GAL.	11	SHRUB	6'	20'	SATURATED SOILS	SHADE TOLERANT
RD	RED-OSIER DOGWOOD	CORNUS STOLONIFERA	2 GAL.	31	SHRUB	6'	20'	SATURATED SOILS	SHADE TOLERANT
VM	VINE MAPLE	ACER CIRCINATUM	2 GAL.	8	SHRUB	5'	25'	WETTER BUFFER	SHADE DEPENDENT
SB	SALMONBERRY	RUBUS SPECTABILIS	2 GAL.	48	SHRUB	5'	15'	WETTER BUFFER	HIGHLY ADAPTABLE
RE	RED ELDERBERRY	SAMBUCUS RACEMOSA	2 GAL.	22	SHRUB	6'	20'	WETTER BUFFER	HIGHLY ADAPTABLE
IP	INDIAN PLUM	OEMLERIA CERASIFORMIS	2 GAL.	17	SHRUB	6'	15'	DRIER BUFFER	SHADE DEPENDENT
NR	NOOTKA ROSE	ROSA NUTKANA	2 GAL.	7	SHRUB	5'	10'	WETTER BUFFER	SHADE TOLERANT
BT	BLACK TWINBERRY	LONICERA INVOLUCRATA	2 GAL.	26	SHRUB	5'	10'	SATURATED SOILS	SHADE TOLERANT
BR	BALD-HIP ROSE	ROSA GYMNOCARPA	2 GAL.	13	SHRUB	4'	7'	DRIER BUFFER	SHADE TOLERANT
O	SHORT OREGON GRAPE	BERBERIS NERVOSA	2 GAL.	43	SHRUB	4'	4'	DRIER BUFFER	SHADE TOLERANT
SP	WESTERN SWORD FERN	POLYSTICHUM MUNIUM	2 GAL.	82	FERN	3'	5'	DRIER BUFFER	SHADE TOLERANT
B	SMALL FRUITED BULRUSH	SCIRPUS MICROCARPUS	1 GAL.	27	RUSH	4.5'	3'	SATURATED SOILS	SHADE TOLERANT
LF	LADY FERN	ATHYRIUM FILIX-FEMINA	1 GAL.	145	FERN	3'	4'	WETTER BUFFER	SHADE TOLERANT
M	TALL MANNAGRASS	GLYCERIA ELATA	1 GAL.	51	GRASS	3'	4.5'	WATER'S EDGE	SHADE DEPENDENT
D	DEER FERN	BLECHUM SPICANT	1 GAL.	11	FERN	2'	2'	WETTER BUFFER	SHADE DEPENDENT

A TOTAL OF 60 TREES ARE PROPOSED.



SURVEYOR SHALL STAKE SOUTH PROPERTY LINE. CONTRACTOR SHALL INSTALL CHECKERED ORANGE NGPE FENCE ALONG OR JUST INSIDE SOUTH PROPERTY LINE. FENCE SYMBOL IS SHOWN 1' AWAY FROM PROPERTY LINE FOR CLARITY ON THIS DRAWING.

INSTALL CRITICAL AREA SIGNS (PER DETAIL ON SHEET W3.0) ALONG SPLIT RAIL FENCE EVERY 100'.

DO NOT PLANT TREES INSIDE 10' SEWER EASEMENT.

EX. 10' SEWER EASEMENT (SEWER PIPE EXACT LOCATION AND DEPTH ARE UNKNOWN)

INSTALL PERMANENT SPLIT RAIL FENCE (PER DETAIL ON SHEET W3.0) APPROX. WHERE SHOWN FROM SITE'S WEST PROPERTY LINE TO THE SITE'S SOUTH PROPERTY LINE.

WETLAND MITIGATION PLAN WEST

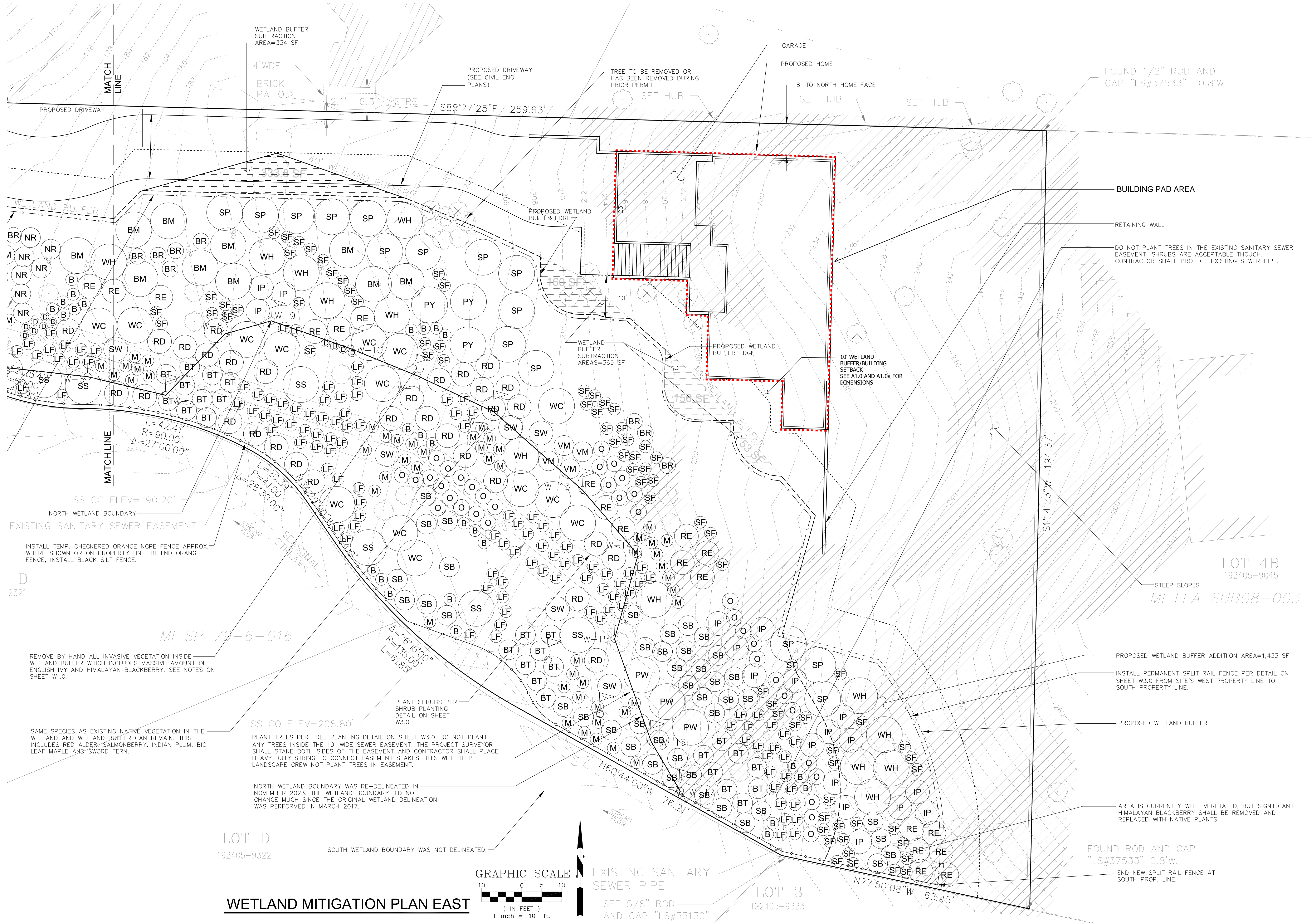
MARK RIGOS
440 SE DARST STREET
ISSAQUAH, WA 98027
(425) 652-6013

5236 WMW
5236 WEST MERCER WAY
MERCER ISLAND, WA 98040

REV.	DATE:
1	09/20/2025

DATE: 01/29/2026

W1.0



MARK RIGOS
 440 SE DARST STREET
 ISSAQUAH, WA 98027
 (425) 652-6013

5236 WMW
 5236 WEST MERCER WAY
 MERCER ISLAND, WA 98040

REV.	DATE:
1	09/20/2025

DATE: 01/29/2026

W2.0

GENERAL NOTES:

1. THE GOAL OF THIS MITIGATION PLAN IS TO PROVIDE EQUIVALENT OR GREATER HABITAT ASSOCIATED WITH STREAM AND WETLAND BUFFER RESTORATION. IT IS A 5-YEAR MONITORING PERIOD.

2. VEGETATION WILL HAVE 100% SURVIVAL RATE AFTER YEAR 1 AND 85% AFTER YEAR 2. VEGETATION WILL HAVE AN 80% SURVIVAL RATE THROUGH THE MONITORING PERIOD. THERE WILL BE LESS THAN 10% AERIAL COVER BY NON-NATIVE INVASIVE SPECIES IN THE MITIGATION AREA DURING THE ENTIRE MONITORING PERIOD.

3. SHRUB COVER WILL BE GREATER THAN 60% AFTER YEAR 1, AND GREATER THAN 60% AFTER YEAR 2, AND GREATER THAN 85% AFTER YEAR 5.

4. NON-NATIVE INVASIVE PLANTS WILL NOT MAKE UP MORE THAN 10% OF COVER IN ANY GROWING SEASON.

5. IF ANY MONITORING REPORT OR CITY INSPECTION SHOWS THAT MITIGATION IS NOT MEETING THESE PERFORMANCE STANDARDS, BOND HOLDER WILL WORK WITH CITY TO PERFORM CORRECTIVE ACTIONS APPROPRIATE TO THE MITIGATION: E.G., FAILING PLANTS WILL BE REPLACED, OTHER PLANT SPECIES WILL BE SUBSTITUTED, NON-NATIVE INVASIVE WILL BE REMOVED BY HAND WITHOUT PESTICIDES, ETC.

6. WHEN IT IS AVAILABLE, CONTACT INFORMATION MUST BE PROVIDED TO CITY FROM THE APPLICANT THAT INCLUDES NAMES, ADDRESSES, AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTING, AND PERFORMING REQUIRED MAINTENANCE AND MONITORING.

7. FOR THE FIRST YEAR FOLLOWING INSTALLATION, WATER THE MITIGATION AREA AT A RATE OF ONE INCH PER WEEK FROM JUNE THROUGH OCTOBER, IN WEEKS WHEN THERE IS LESS THAN ONE INCH OF RAINFALL. ALSO, THE MITIGATION AREA SHALL BE WATERED AS APPROPRIATE DURING THE VARIOUS SEASONS TO ENSURE A HIGH SHRUB SURVIVAL RATE.

8. IMPLEMENTATION OF THE MITIGATION PLAN MUST OCCUR DURING THE FIRST DORMANT SEASON FOLLOWING INSTALLATION. INSTALLATION MUST BE COMPLETED PRIOR TO THE FIRST DORMANT SEASON. THE CONTRACTOR MUST VERIFY THAT SOILS HAVE BEEN DECONSOLIDATED AND AMENDED, PLANTS ARE INSTALLED ACCORDING TO DESIGN AND IN GOOD HEALTH, AREA HAS BEEN SEEDED, AND OTHER CONDITIONS HAVE BEEN MET. NURSERY INVOICES MUST BE PROVIDED TO INSPECTOR. ONCE APPROVED, MONITORING PERIOD BEGINS.

9. MONITORING PERIOD WILL BE FOR FIVE YEARS, WITH RESULTS OF ANNUAL MONITORING EVENTS REPORTED TO THE CITY. MONITORING MAY BE EXTENDED IF FINAL INSPECTION SHOWS RESTORATION HAS NOT ACHIEVED PERFORMANCE STANDARDS, UNTIL SUCH TIME AS PERFORMANCE STANDARDS HAVE BEEN MET.

10. MONITORING MUST INCLUDE DESCRIPTION/DATA FOR:
-PLANT SURVIVAL, VIGOR, AND ESTIMATED AERIAL COVERAGE
-OBSERVED WILDLIFE, INCLUDING AMPHIBIANS, AVIANS, AND OTHERS
-RECEIPTS FOR OFFSITE DISPOSAL OF ANY DUMPING, WEEDS, OR INVASIVE PLANTS
-4"x6" COLOR PHOTOGRAPHS FROM PERMANENT PHOTO-POINTS AS SHOWN ON REVISED MITIGATION PLANS

11. THE MITIGATION AREA/BUFFER MUST BE IDENTIFIED USING PERMANENT SENSITIVE AREA BOUNDARY SIGNS INSTALLED IN TWO LOCATIONS. SIGNS ARE AVAILABLE FOR SALE AT THE KING COUNTY DP&R CASHIER.

12. ANY DEFICIENCY DISCOVERED DURING ANY MONITORING OR INSPECTION VISIT MUST BE CORRECTED WITHIN 60 DAYS.

13. PRIOR TO BEGINNING ANY WORK, THE APPLICANT MUST PROVIDE A RESTORATION BOND OR ASSIGNMENT OF FUNDS PER CITY PROCEDURES. A BOND QUANTITY WORKSHEET WILL NEED TO BE COMPLETED BASED ON ALL ELEMENTS OF THE MITIGATION PLAN. THE TOTAL COST, PLUS CONTINGENCY FEES, WILL BE THE AMOUNT OF THE RESTORATION BOND. THE APPLICANT IS REQUIRED TO PROVIDE. NOTE THAT THE APPROVED BOND WILL INCLUDE REQUIRED START DATE FOR MITIGATION CONSTRUCTION. BONDS ARE ELIGIBLE FOR REDUCTION TO MAINTENANCE STATUS AFTER SUCCESSFUL INSTALLATION INSPECTION, PROVIDING THAT IT ALSO MEETS PERFORMANCE STANDARDS ESTABLISHED IN THE MITIGATION PLAN AND CITY SENSITIVE AREA MITIGATION GUIDELINES (OCTOBER 2000).

14. STANDARDS: ALL WORK AND MATERIALS SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS, AND TO THE SPECIFICATIONS AND DETAILS SHOWN ON THESE PLANS.

15. CONTRACTOR'S QUALIFICATIONS: ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR CITY ECOLOGIST.

16. SITE CONDITIONS: THE APPLICANT SHALL IMMEDIATELY NOTIFY CITY OF ANY DISCREPANCIES BETWEEN THESE PLANS AND THE SITE CONDITIONS. THE LOCATIONS OF PLANTS AND THE QUANTITIES OF PLANTS SHOWN MAY BE MODIFIED IN THE FIELD BY THE LANDSCAPE DESIGNER AND / OR THE WETLAND BIOLOGIST BASED ON FIELD CONDITIONS AT THE TIME OF PLANTING.

17. PLANTS: PLANTS IN NUMBER AND SIZE ARE REQUIRED IN ACCORDANCE WITH APPROVED PLANS.

A. ORIGIN: PLANT MATERIALS SHALL BE NATIVE PLANTS, NURSERY GROWN IN THE PUGET SOUND AREA OF WASHINGTON. DUG PLANTS MAY ONLY BE USED UPON APPROVAL OF THE CITY.

B. HANDLING: PLANTS SHALL BE HANDLED SO AS TO AVOID ALL DAMAGE, INCLUDING BREAKING, BRUISING, ROOT DAMAGE, SUNBURSTING, FROSTING, OR OTHER INJURY. PLANTS MUST BE COVERED DURING TRANSPORT. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE IN A MANNER THAT COULD DAMAGE BRANCHES. PROTECT PLANT ROOTS WITH SHADE AND WET SOIL IN THE TIME PERIOD BETWEEN DELIVERY AND INSTALLATION. DO NOT LIFT CONTAINER STOCK BY TRUNKS, STEMS, OR TOPS. DO NOT REMOVE FROM CONTAINERS UNTIL READY TO PLANT. WATER ALL PLANTS AS NECESSARY TO KEEP MOISTURE LEVELS APPROPRIATE TO THE SPECIES HORTICULTURAL REQUIREMENTS. PLANTS SHALL NOT BE ALLOWED TO DRY OUT. ALL PLANTS SHALL BE WATERED THOROUGHLY IMMEDIATELY UPON INSTALLATION. SOAK ALL CONTAINERIZED PLANTS THOROUGHLY PRIOR TO INSTALLATION. BARE ROOT PLANTS ARE SUBJECT TO THE FOLLOWING SPECIAL REQUIREMENTS, AND SHALL NOT BE USED UNLESS PLANTED BETWEEN NOVEMBER 1 AND MARCH 1, AND ONLY WITH THE PERMISSION OF THE LANDSCAPE DESIGNER AND CITY ECOLOGIST. BARE ROOT PLANTS MUST HAVE ENOUGH FIBROUS ROOT TO INSURE PLANT SURVIVAL. ROOTS MUST BE COVERED AT ALL TIMES WITH MUD AND/OR WET STRAW, MOSS, OR OTHER SUITABLE PACKING MATERIAL UNTIL TIME OF INSTALLATION. PLANTS WHOSE ROOTS HAVE DRIED OUT FROM EXPOSURE WILL NOT BE ACCEPTED AT INSTALLATION INSPECTION.

C. STORAGE: PLANTS STORED BY THE APPLICANT FOR LONGER THAN ONE MONTH PRIOR TO PLANTING SHALL BE PLANTED IN NURSERY ROWS, AND TREATED IN A MANNER SUITABLE TO THAT SPECIES HORTICULTURAL REQUIREMENTS. PLANTS MUST BE REINSPECTED BY THE WETLAND BIOLOGIST AND / OR LANDSCAPE DESIGNER PRIOR TO INSTALLATION.

D. DAMAGED PLANTS: DAMAGED DRIED OUT, OR OTHERWISE MISHANDLED PLANTS WILL BE REJECTED AT INSTALLATION INSPECTION. ALL REJECTED PLANTS SHALL BE IMMEDIATELY REMOVED FROM THE SITE.

E. PLANT NAMES: PLANT NAMES SHALL COMPLY WITH THOSE GENERALLY ACCEPTED IN THE NATIVE PLANT NURSERY TRADE. ANY QUESTION REGARDING PLANT SPECIES OR VARIETY SHALL BE REFERRED TO THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST OR CITY ECOLOGIST. ALL PLANT MATERIALS SHALL BE TRUE TO SPECIES AND VARIETY AND LEGIBLY TAGGED.

F. PLANT SUBSTITUTIONS: PLANT SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE PERMISSION OF THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR CITY ECOLOGIST. SAME SPECIES SUBSTITUTIONS OF LARGER SIZE DO NOT REQUIRE SPECIAL PERMISSION.

G. QUALITY AND CONDITION: PLANTS SHALL BE NORMAL IN PATTERN OF GROWTH, HEALTHY, WELL-BRANCHED, VIGOROUS, WITH WELL-DEVELOPED ROOT SYSTEMS, AND FREE OF PESTS AND DISEASES. DAMAGED, DISEASED, PEST-INFESTED, SCRAPED, BRUISED, DRIED OUT, BURNED, BROKEN, OR DEFECTIVE PLANTS WILL BE REJECTED. PLANTS WITH PRUNING WOUNDS OVER 1" IN DIAMETER WILL BE REJECTED.

H. ROOTS: ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINERIZED, UNLESS EXPLICITLY AUTHORIZED BY THE LANDSCAPE DESIGNER. ROOT BOUND PLANTS OR B&B PLANTS WITH DAMAGED, CRACKED OR LOOSE ROOTBALLS WILL BE REJECTED. BARE ROOT PLANTINGS OF WOODY MATERIAL IS ALLOWED ONLY WITH PERMISSION FROM THE LANDSCAPE DESIGNER.

I. SIZES: PLANT SIZES SHALL BE AT LEAST THE SIZE INDICATED IN THE PLANT SCHEDULE. LARGER STOCK IS ACCEPTABLE PROVIDED THAT IT HAS NOT BEEN CUT BACK TO SIZE SPECIFIED, AND THAT THE ROOT BALL IS PROPORTIONATE TO THE SIZE OF THE PLANT. MEASUREMENTS, CALIPER, BRANCHING AND BALLING AND BURLAPPING SHALL CONFORM TO THE AMERICAN STANDARD OF NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN (LATEST EDITION).

J. FORM: EVERGREEN TREES, IF USED, SHALL HAVE SINGLE TRUNKS AND SYMMETRICAL, WELL-DEVELOPED FORM. DECIDUOUS TREES SHALL BE SINGLE TRUNKED UNLESS SPECIFIED AS MULTI-STEM IN THE PLANT SCHEDULE. SHRUBS SHALL HAVE MULTIPLE STEMS, AND BE WELL-BRANCHED.

K. PLANTING: PLANTING SHALL BE DONE IN ACCORDANCE WITH ILLUSTRATED DETAILS IN THE MITIGATION PLAN SET AND ACCEPTED INDUSTRY STANDARDS.

L. WEEDING: EXISTING AND EXOTIC VEGETATION IN THE MITIGATION AND BUFFER AREAS WILL BE HAND WEEDED FROM AROUND ALL NEWLY INSTALLED PLANTS AT THE TIME OF INSTALLATION. NO CHEMICAL CONTROL OF VEGETATION ON ANY PORTION OF THE SITE IS ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE CITY.

M. COMPOST: ALL LANDSCAPED AREAS DENuded OF VEGETATION AND ALL PLANTING PIT AREAS SHALL RECEIVE NO LESS THAN 2" OF COMPOST AFTER PLANTING. COMPOST SHALL BE KEPT WELL AWAY (AT LEAST 2" FROM THE TRUNKS AND STEMS OF WOODY PLANTS. COMPOST SHALL BE CEDAR GROVE PURE COMPOST OR APPROVED EQUAL. NO BARK PRODUCTS OR SAWDUST WILL BE PERMITTED. WEED-FREE STRAW MAY BE REQUIRED FOR APPLICATION OVER COMPOST FOR EROSION CONTROL (SEE EROSION CONTROL NOTES).

N. SITE CONDITIONS: CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE DESIGNER AND WETLAND BIOLOGIST OF DRAINAGE OR SOIL CONDITIONS LIKELY TO BE DETRIMENTAL TO THE GROWTH OR SURVIVAL OF PLANTS. PLANTING OPERATIONS SHALL NOT BE CONDUCTED UNDER THE FOLLOWING CONDITIONS: FREEZING WEATHER, WHEN THE GROUND IS FROZEN, EXCESSIVELY WET WEATHER, EXCESSIVELY WINDY WEATHER, OR IN EXCESSIVE HEAT.

O. PLANT LOCATIONS: LOCATIONS SHALL BE AS DEPICTED IN THE APPROVED PLAN SET. THE LANDSCAPE DESIGNER AND / OR WETLAND BIOLOGIST MAY CHANGE THE LOCATIONS OF PLANTINGS SHOWN ON PLANS BASED ON FIELD CONDITIONS.

P. PLANTING IN PITS: PLANTING PITS SHALL BE CIRCULAR OR SQUARE WITH VERTICAL SIDES, AND SHALL BE 6" DEEPER AND 12" LARGER IN DIAMETER THAN THE ROOT BALL OF THE PLANT. BREAK UP THE SIDES OF THE PIT IN COMPACTED SOILS. SET PLANTS UPRIGHT IN PITS, WITH CROWN OF ROOT BALL 2"-3" ABOVE FINAL GRADE. BURLAP SHALL BE REMOVED FROM THE PLANTING PIT. BACKFILL SHALL BE TAMPED DOWN FIRMLY.

Q. WATER: PLANTS SHALL BE WATERED MIDWAY THROUGH BACKFILLING, AND AGAIN UPON COMPLETION OF BACKFILLING. A RIM OF EARTH SHALL BE MOUNDDED AROUND THE BASE OF THE TREE OR SHRUB NO CLOSER THAN THE DRIP LINE, EXCEPT ON STEEP SLOPES OR IN HOLLOWES. PLANTS SHALL BE WATERED A SECOND TIME WITHIN 24-48 HOURS AFTER INSTALLATION.

R. INTERMEDIATE INSPECTIONS: ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND /OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. ROOTS OF ANY BARE ROOT PLANTS, IF PERMITTED FOR USE, WILL BE INSPECTED. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL BE INSPECTED AND APPROVED PRIOR TO PLANTING.

18. HAND SEEDING: SEEDING IS REQUIRED AS DESCRIBED IN APPROVED PLANS.

A. TIMING: SEEDING SHALL NOT TAKE PLACE UNTIL MULCHING IS COMPLETE. CONTRACTOR SHALL INSURE THAT AREAS TO RECEIVE SEED ARE CLEAN OF DEBRIS AND THAT FINAL GRADES ARE CORRECT. SEEDING SHALL BE PERFORMED AFTER OTHER PLANT INSTALLATION IS COMPLETE. SEEDING IS THE FINAL STEP OF THE INITIAL INSTALLATION; SITE SHALL BE CLOSED TO ALL VEHICLES AND FOOT TRAFFIC SHALL BE MINIMIZED AFTER SEEDING IS COMPLETE. SEEDING SHALL NOT TAKE PLACE WHEN THE GROUND IS FROZEN OR IN WINDY WEATHER. SEEDS SHALL BE HAND BROADCAST OR BY MECHANICAL HAND POWERED SPREADER, WITH AS EVEN DISTRIBUTION AS FEASIBLE. AREAS WITHIN 6"-12" OF STEMS OF INSTALLED PLANTS SHALL NOT BE SEEDED.

B. SEED MIX: USE WETLAND SEED MIX IN WETLAND AREA AND BUFFER SEED MIX FOR WETLAND BUFFER AREAS. THE MIX SHOULD BE COMPOSED OF WEIGHT PERCENTAGES SPECIFIED IN THE TABLE. ALL SEED MATERIALS SHALL BE FREE OF WEED SEEDS OR OTHER FOREIGN MATTER DETRIMENTAL TO PLANT GROWTH. NOTE: SEED MIX SHOULD BE ORDERED AS EARLY AS POSSIBLE TO INSURE AN ADEQUATE SUPPLY OF SPECIFIED NATIVE SEED. SEED MIX SHALL NOT INCLUDE CLOVER, PERENNIAL GRASS OR TURF GRASS.

C. POST SEEDING EROSION CONTROL: SCATTER 2" OF CERTIFIED WEED-FREE STRAW ON ALL BARE GROUND AFTER SEEDING IS COMPLETE AND INSPECTED, FOR EROSION CONTROL (SEE EROSION CONTROL NOTES).

19. MAINTENANCE: MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH CITY SENSITIVE AREAS MITIGATION GUIDELINES (2000) AND APPROVED PLANS.

A. SURVIVAL: THE APPLICANT SHALL BE RESPONSIBLE FOR THE HEALTH OF 100% OF ALL NEWLY INSTALLED PLANTS FOR ONE GROWING SEASON AFTER INSTALLATION HAS BEEN ACCEPTED BY CITY ECOLOGIST (SEE PERFORMANCE STANDARDS). A GROWING SEASON IS DEFINED AS OCCURRING FROM SPRING (MARCH 15 - MARCH 15, FOLLOWING YEAR). FOR FALL INSTALLATION, THE GROWING SEASON WILL BEGIN THE FOLLOWING SPRING. THE APPLICANT SHALL REPLACE ANY PLANTS THAT ARE FAILING, WEAK, DEFECTIVE IN MANNER OF GROWTH, OR DEAD DURING THIS GROWING SEASON, AS DIRECTED BY THE APPLICANT'S LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST.

B. INSTALLATION TIMING FOR REPLACEMENT PLANTS: THE APPLICANT'S LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST SHALL DETERMINE TIMING OF THE INSTALLATION FOR REPLACEMENT PLANTS.

C. DURATION AND EXTENT: IN ORDER TO ACHIEVE PERFORMANCE STANDARDS, THE APPLICANT SHALL HAVE THE MITIGATION AREA MAINTAINED FOR THE DURATION OF THE MONITORING PERIOD, 5 YEARS. MAINTENANCE WILL INCLUDE WATERING, WEEDING AROUND BASE OF INSTALLED PLANTS, PRUNING, FERTILIZING, REPLACEMENT, REMOVAL OF DEAD MATERIAL (OTHER THAN FALLEN LOGS, LARGE WOODY DEBRIS, ETC), RESTAKING, AND ANY OTHER MEASURES NEEDED TO INSURE PLANT SURVIVAL. ALL MAINTENANCE SHALL BE DIRECTED BY THE LANDSCAPE DESIGNER AND / OR WETLAND BIOLOGIST.

D. STANDARDS FOR REPLACEMENT PLANTS: REPLACEMENT PLANTS SHALL MEET THE SAME STANDARDS FOR SIZE AND TYPE AS THOSE SPECIFIED FOR ORIGINAL INSTALLATION UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST. REPLACEMENT PLANTS SHALL BE INSPECTED AS DESCRIBED ABOVE FOR THE ORIGINAL INSTALLATION.

E. REPLANTING: PLANTS THAT HAVE SETTLED IN THEIR PLANTING PITS TOO DEEP, TOO SHALLOW, LOOSE, OR CROOKED SHALL BE REPLANTED AS DIRECTED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST.

20. MONITORING: MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED MITIGATION / RESTORATION MONITORING PLAN.

A. VEGETATION MONITORING: SAMPLING POINTS OR TRANSECTS WILL BE ESTABLISHED FOR VEGETATION MONITORING, AND PHOTO-POINTS ESTABLISHED FROM WHICH PHOTOS WILL BE TAKEN THROUGHOUT THE MONITORING PERIOD. LINEAR TRANSECTS ARE THE PREFERRED METHOD FOR VEGETATION MONITORING FOR THIS SITE. NO LESS THAN ONE (1) - 25 METER TRANSECTS WILL BE ESTABLISHED IN THE RESTORATION AREA. PERMANENT TRANSECT LOCATIONS MUST BE IDENTIFIED ON RESTORATION SITE PLANS IN THE FIRST MONITORING REPORT (THEY MAY BE DRAWN ON APPROVED RESTORATION PLANS BY HAND). EACH TRANSECT SHALL DETAIL HERB, SHRUB, AND TREE AERIAL COVER AT RADI OF 1M, 5M, AND 10M RESPECTIVELY, USING THE BRAUN-BLANQUET RELEVÉ METHOD OR OTHER ACCEPTABLE FIELD METHOD.

B. PHOTOPOINTS: AT LEAST THREE (3) PHOTOPOINTS WILL BE ESTABLISHED - PHOTOGRAPHS WILL BE TAKEN FROM AT LEAST THREE (3) POINTS WITHIN THE RESTORATION AREA TO VISUALLY DEPICT THE CONDITION OF THE RESTORATION AREA.

C. REPORTS: MONITORING REPORTS SHALL BE SUBMITTED AFTER THE END OF EACH GROWING SEASON (BY NOVEMBER 15) FOR FIVE (5) CONSECUTIVE YEARS FOLLOWING SUCCESSFUL INSTALLATION INSPECTION. MONITORING REPORTS MUST INCLUDE DESCRIPTION / DATA FOR:

- I. PLANT SURVIVAL, VIGOR, AND AERIAL COVERAGE FROM EVERY PLANT COMMUNITY (TRANSECT DATA)
II. SITE HYDROLOGY, INCLUDING EXTENT OF INUNDATION, SATURATION, DEPTH TO GROUNDWATER, FUNCTION OF ANY HYDROLOGIC STRUCTURES, INPUTS, OUTLETS, ETC.
III. SLOPE CONDITION, SITE STABILITY, ANY STRUCTURES OR SPECIAL FEATURES
IV. BUFFER CONDITIONS, E.G. SURROUNDING LAND USE, USE BY HUMANS, WILD AND DOMESTIC CREATURES
V. OBSERVED WILDLIFE, INCLUDING AMPHIBIANS, AVIANS, AND OTHERS
VI. SOILS, INCLUDING TEXTURE, MUNSELL COLOR, ROOTING AND OXIDIZED RHIZOSPHERES
VII. RECEIPTS FOR OFF-SITE DISPOSAL OF ANY DUMPING, WEEDS, OR INVASIVE PLANTS
VIII. RECEIPTS FOR ANY STRUCTURAL REPAIR OR REPLACEMENT
IX. 4" x 6" COLOR PHOTOGRAPHS TAKEN FROM PERMANENT PHOTO-POINTS AS SHOWN ON MONITORING PLAN.

D. CONTINGENCY PLAN: SHOULD ANY MONITORING REPORT REVEAL THE MITIGATION HAS FAILED IN WHOLE OR IN PART, AND SHOULD THAT FAILURE BE BEYOND THE SCOPE OF ROUTINE MAINTENANCE, A CONTINGENCY PLAN WILL BE SUBMITTED. THE CONTINGENCY PLAN MAY RANGE IN COMPLEXITY FROM A LIST OF PLANTS SUBSTITUTED, TO CROSS-SECTIONS OF PROPOSED ENGINEERED STRUCTURES. ONCE APPROVED, IT MAY BE INSTALLED, AND WILL REPLACE THE APPROVED MITIGATION PLAN. IF THE FAILURE IS SUBSTANTIAL, THE CITY MAY EXTEND THE MONITORING PERIOD FOR THAT MITIGATION.

PREPARATION AND PLANTING NOTES:

- 1. ENSURE THAT ALL NON-NATIVE VEGETATION SUCH AS HIMALAYAN BLACKBERRY HAS BEEN REMOVED IN THE MITIGATION AREAS.
2. DECONSOLIDATE DISTURBED SOIL TO A MINIMUM DEPTH OF 12". SPREAD 2" (TWO INCHES) OF VEGETATIVE COMPOST OVER BARE SOILS WITHIN MITIGATION AREA.
3. MIX INTO SOIL TO A DEPTH OF 12" (TWELVE INCHES) USING A ROTOTILLER OR A SHOVEL.
4. PUT PLANTS IN THEIR PLACES ACCORDING TO THE APPROVED BASIC MITIGATION PLAN.
5. DIG SQUARE BOTTOMED HOLES FOR PLANTS, TWICE THE SIZE OF CONTAINER (SEE SHRUB PLANTING DETAIL).
6. SCORE EDGES OF PLANTING HOLE WITH SHOVEL, SO THAT ROOTS CAN TRAVEL OUTSIDE HOLE.
7. LOOSEN PLANT ROOTS SLIGHTLY, AND PLACE IN CENTER OF HOLE, UPRIGHT AND LEVEL WITH GROUND SURFACE.
8. AFTER ALL PLANTS HAVE BEEN PLANTED, HANDSEED OVER THE ENTIRE RESTORATION AREA. USE APPROXIMATELY 1-2 POUNDS OF GRASS SEED MIX PER 1,000 SQ. FT. OF MITIGATION AREA USING THE SEED MIXES NOTED BELOW.
9. WATER THE MITIGATION PLANTS WITH WATER RIGHT AFTER PLANTING. CONTINUE TO WATER AS NECESSARY TO ENSURE PLANT SURVIVAL.
10. PLAN SHOWS PLANTS ARRANGED IN NATURALIZED CLUSTERS. PLAN SHOWS CERTAIN PLANTS IN THE WETTER BUFFER AND DRIER BUFFER, ACCORDING TO THEIR WATER AND LIGHT NEEDS.

5236 WMW SINGLE FAMILY RESIDENTIAL (SFR)



ATTACH SIGN TO POST WITH TWO 5/16 GALVANIZED LAG BOLTS WITH WASHERS

5' TO GRADE

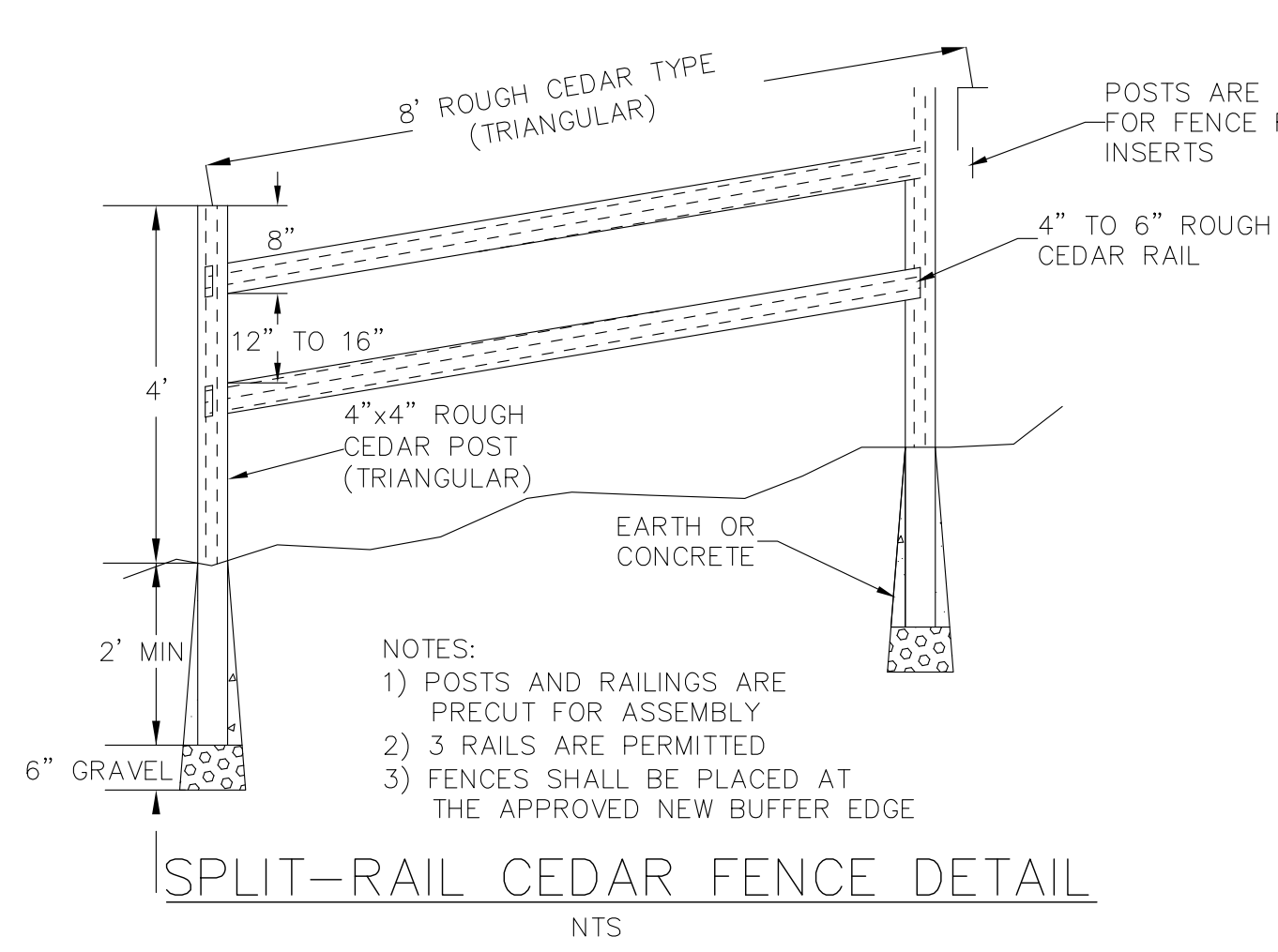
PRE-PRINTED PLASTIC SIGN

8' 4X4 CEDAR OR PRESUAURE-TREATED POST SET 3" INTO HOLE

WETLAND/STREAM SIGN INSTALLATION DETAIL

NTS

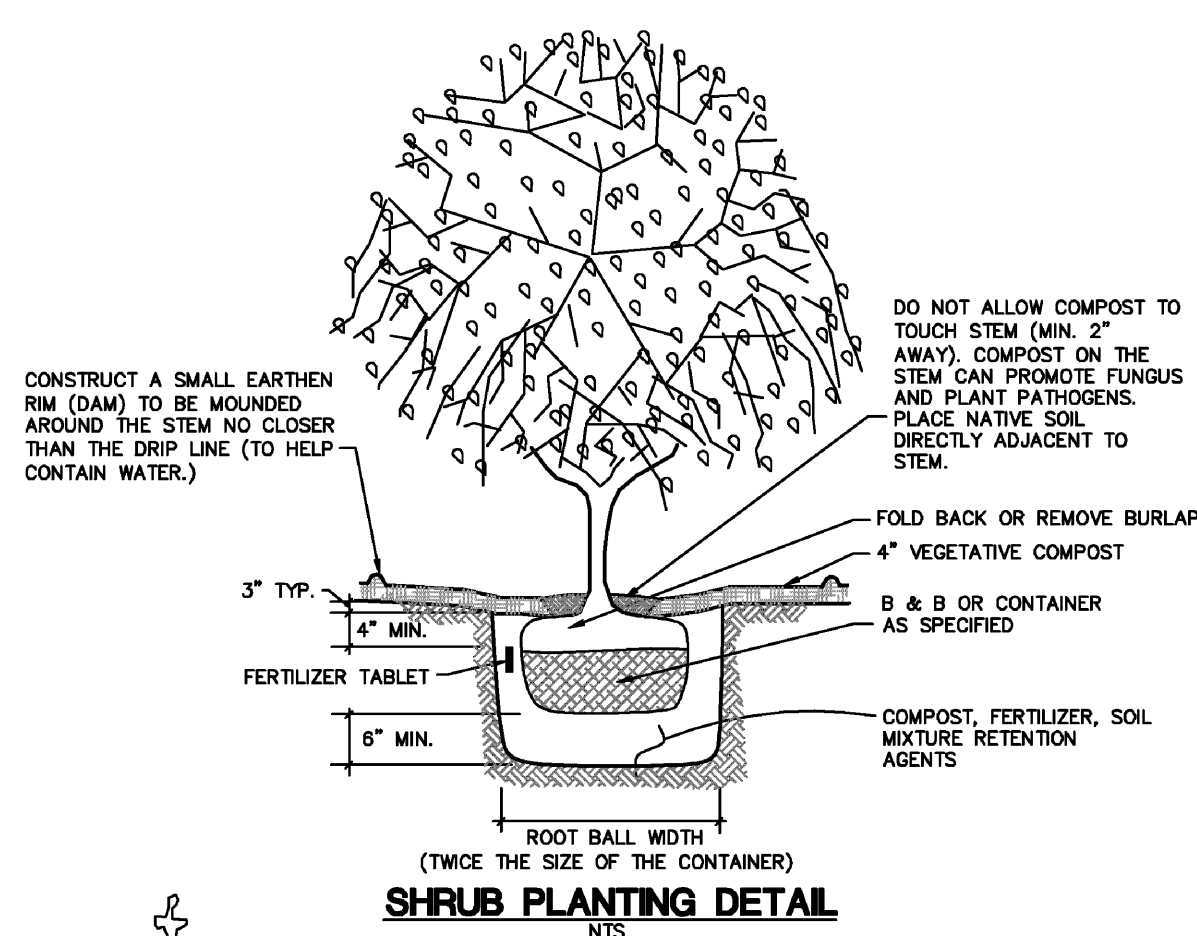
- 1. WETLAND/STREAM SIGN SHALL BE POSTED AT THE NEW WETLAND BUFFER.
2. ONE SIGN SHALL BE POSTED WHERE SHOWN ON THE PLAN. SIGNS MAY ALSO BE ATTACHED TO FENCES.
3. SIGNS SHALL NOT SAY KING COUNTY ON THEM.



- NOTES:
1) POSTS AND RAILINGS ARE PRECUT FOR ASSEMBLY
2) 3 RAILS ARE PERMITTED
3) FENCES SHALL BE PLACED AT THE APPROVED NEW BUFFER EDGE

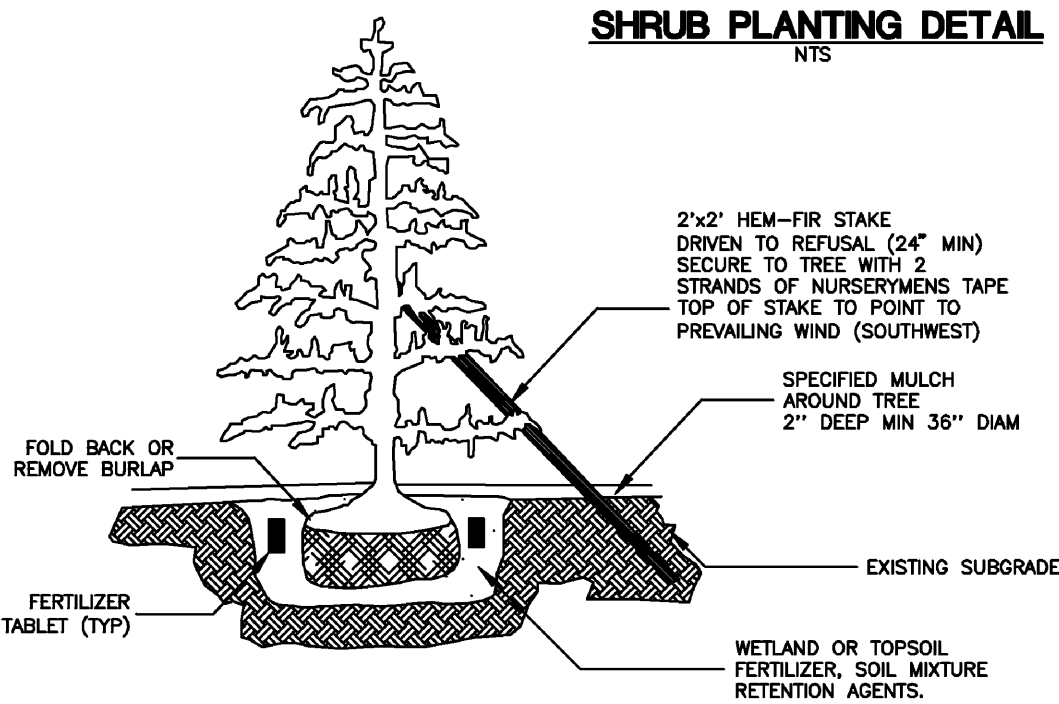
SPLIT-RAIL CEDAR FENCE DETAIL

NTS



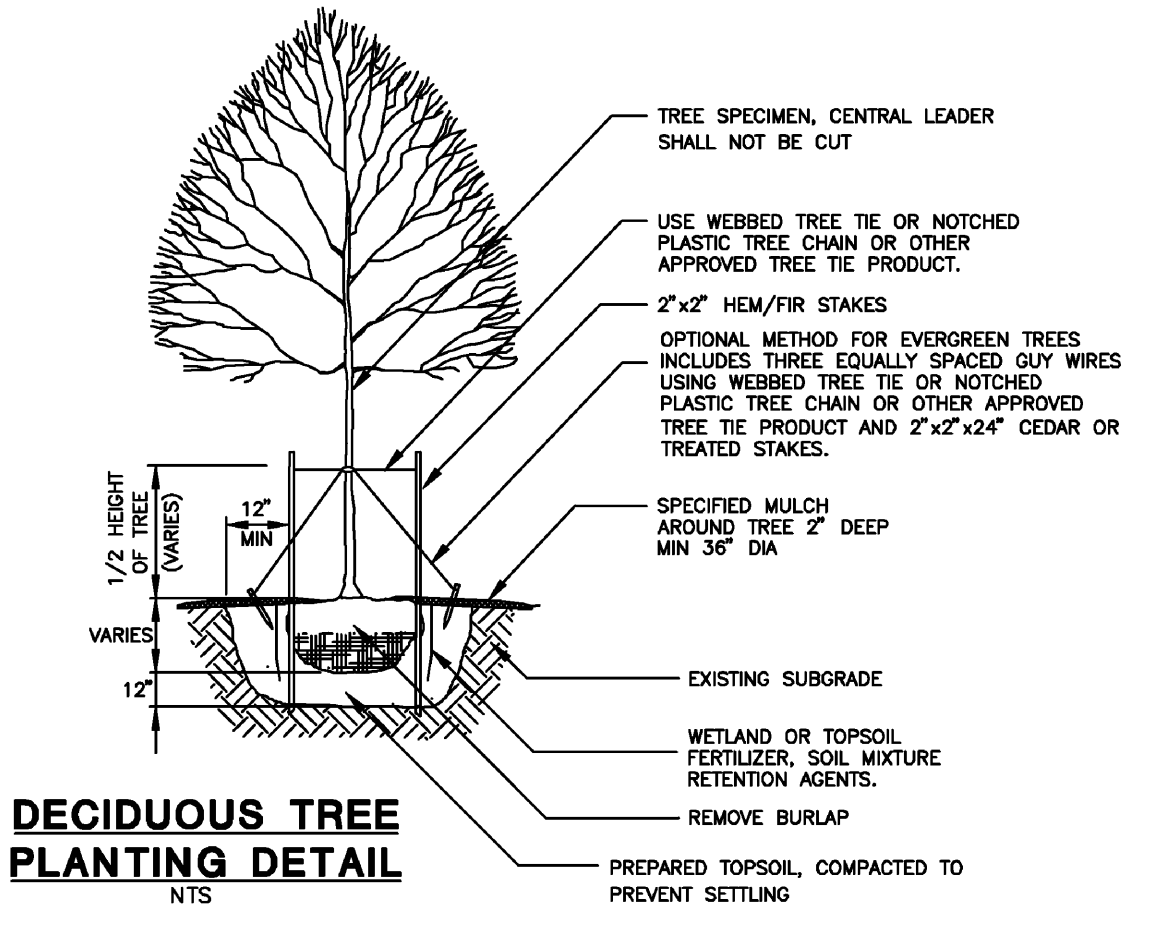
SHRUB PLANTING DETAIL

NTS



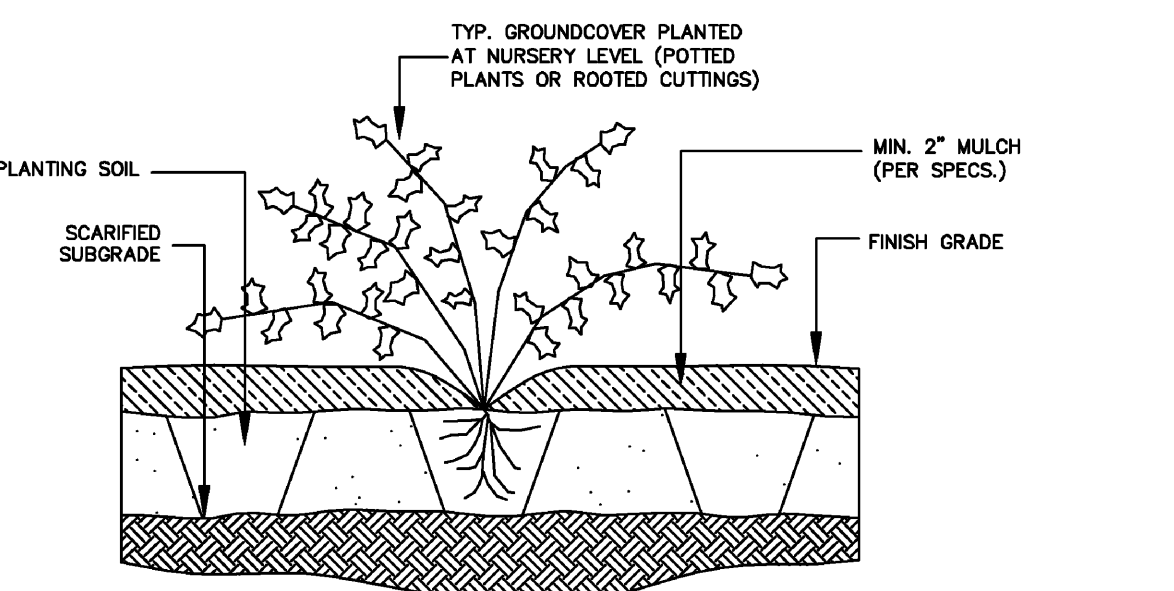
EVERGREEN TREE PLANTING DETAIL

NTS



DECIDUOUS TREE PLANTING DETAIL

NTS



GROUNDCOVER PLANTING DETAIL

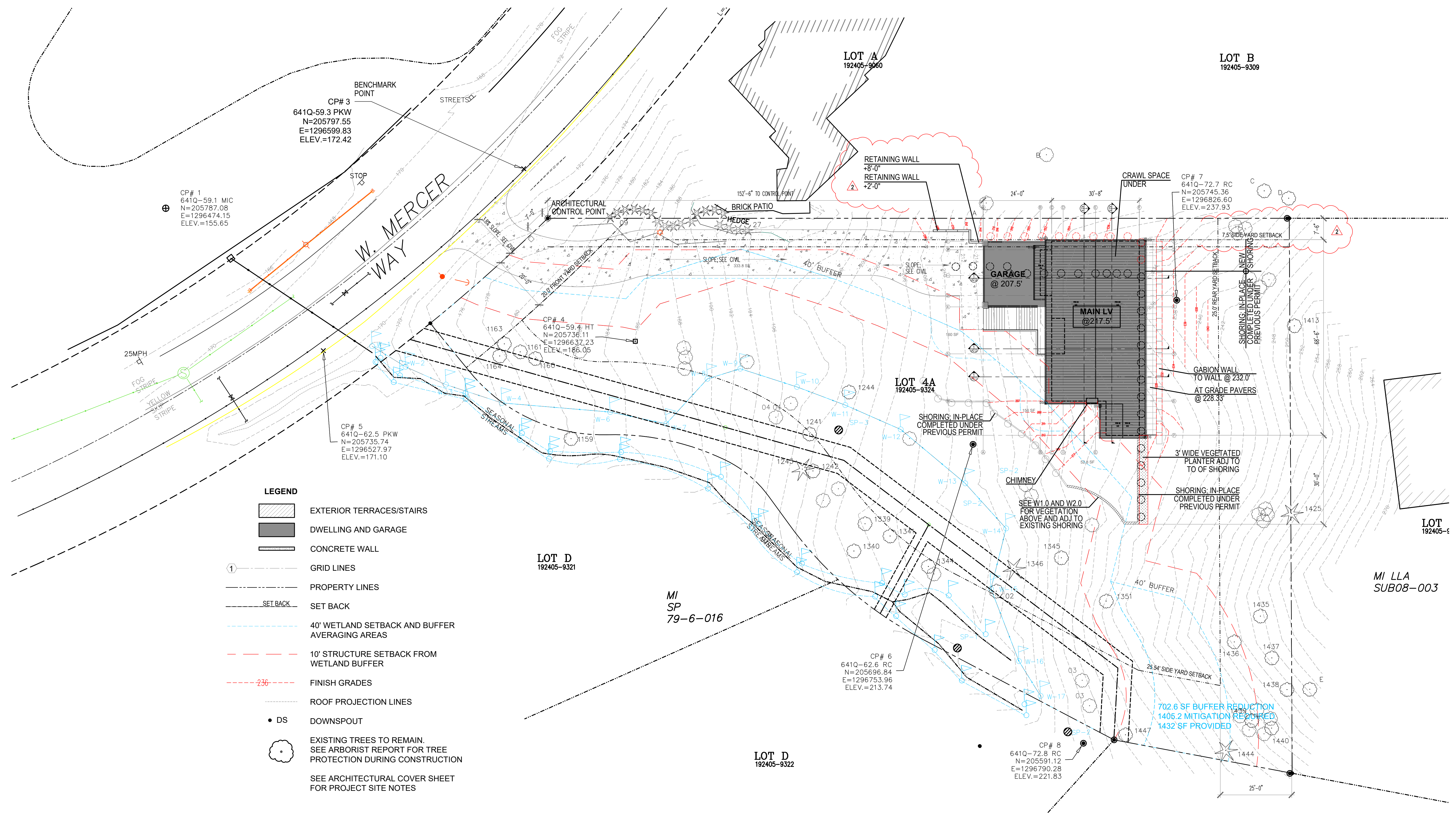
NTS

MARK RIGOS
440 SE DARST STREET
ISSAQUAH, WA 98027
(425) 652-6013

5236 WMW
5236 WEST MERCER WAY
MERCER ISLAND, WA 98040

Table with 2 columns: REV. and DATE. Row 1: 1, 09/20/2025

DATE: 01/29/2026



- LEGEND**
- EXTERIOR TERRACES/STAIRS
 - DWELLING AND GARAGE
 - CONCRETE WALL
 - GRID LINES
 - PROPERTY LINES
 - SET BACK
 - 40' WETLAND SETBACK AND BUFFER AVERAGING AREAS
 - 10' STRUCTURE SETBACK FROM WETLAND BUFFER
 - FINISH GRADES
 - ROOF PROJECTION LINES
 - DS DOWNSPOUT
 - EXISTING TREES TO REMAIN. SEE ARBORIST REPORT FOR TREE PROTECTION DURING CONSTRUCTION
- SEE ARCHITECTURAL COVER SHEET FOR PROJECT SITE NOTES

MINIMUM SIDE YARD SETBACK:

LOTS WITH A WIDTH OF MORE THAN 90 FEET, THE SIDE YARD SETBACKS MUST SUM TO 17% OF THE LOT WIDTH; PROVIDED THAT NO SIDE YARD SHALL BE LESS THAN 33% OF THE REQUIRED SIDE YARD WIDTH.

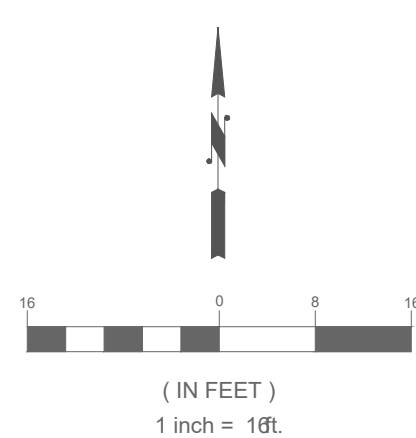
REQUIRED SIDE YARD WIDTH= 194.37' x 17% = 33.04'

▲ NORTH PL SIDE YARD = 7.5'

▲ SOUTH PL SIDE YARD = 25.54'

NOTES

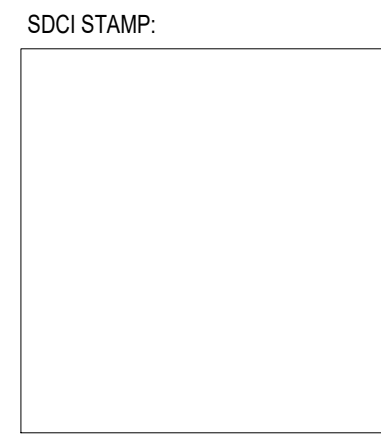
- SEE SITE SURVEY A0.3 FOR EXISTING GRADE
- SEE CIVIL DRAWINGS FOR TREE PROTECTION, SITE GRADING DRIVE WAY & SITE UTILITIES
- SEE WETLAND DRAWING FOR SITE MITIGATION REQUIREMENTS
- SEE CIVIL SHEET C0.2 FOR ARBORIST AND TREE REMOVAL, COMPLETED UNDER PREVIOUS PERMIT
- SEE A1.0a FOR ENLARGED WETLAND BUFFER BUILDING SETBACK
- ▲ - SEE W1.0 AND W2.0 FOR INVASIVE SPECIES REMOVAL AND PLANTING PLANS WITHIN WETLAND AND WETLAND BUFFER.
- ▲ - FOR AREAS OUTSIDE OF WETLAND AND WETLAND BUFFER PROVIDE 4-6 TOPSOIL AND SEED WITH APPROPRIATE GRASSES (RYEGRESS, FESCUE). LOCATIONS INCLUDE NORTH OF DRIVEWAY AND DWELLING AND SOUTH OF DRIVEWAY AND DWELLING TO NORTH EDGE OF WETLAND BUFFER.





DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2



PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

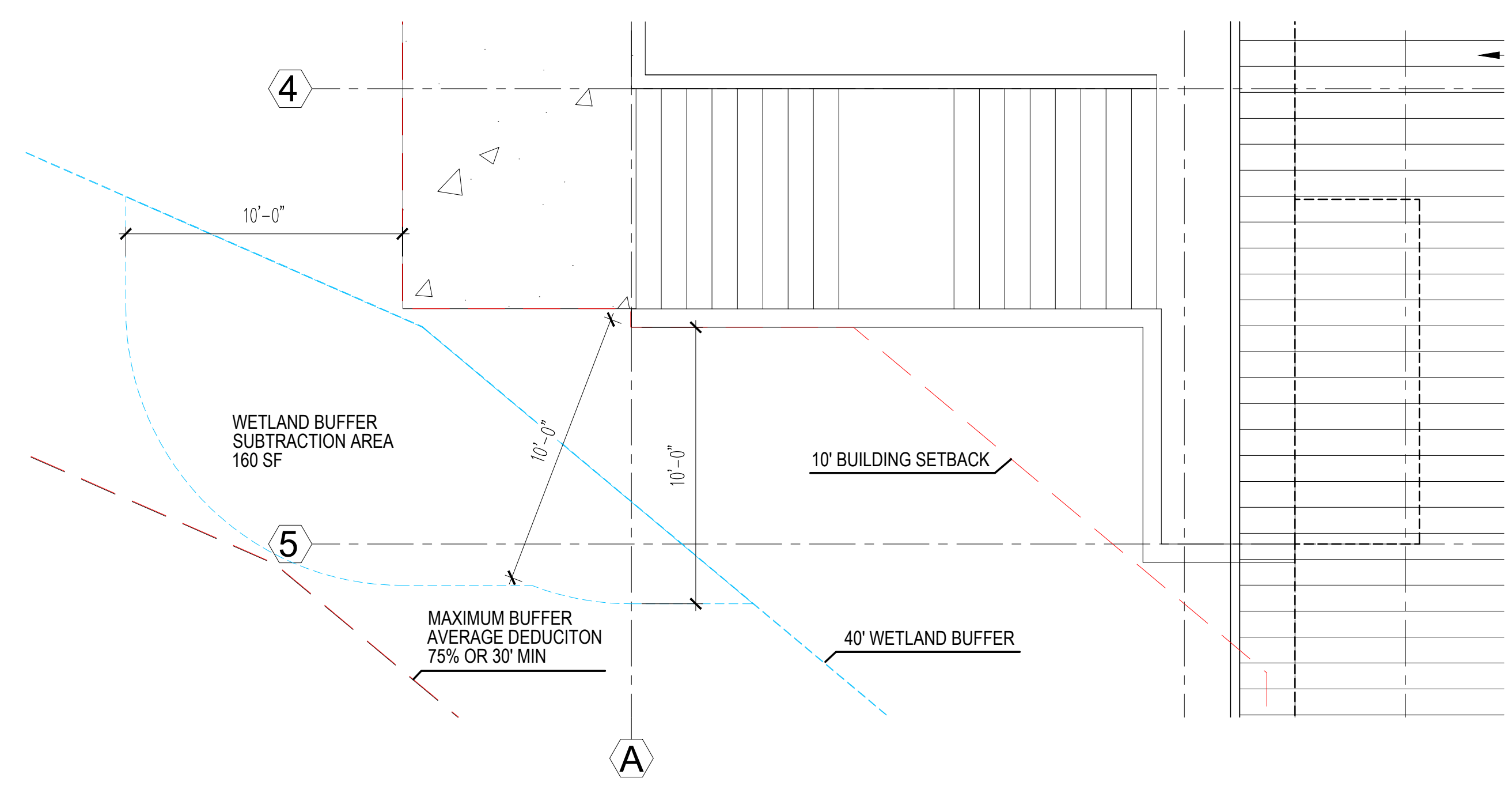
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ARCHITECTURAL
ENLARGED
SITE PLAN

SHEET NUMBER:

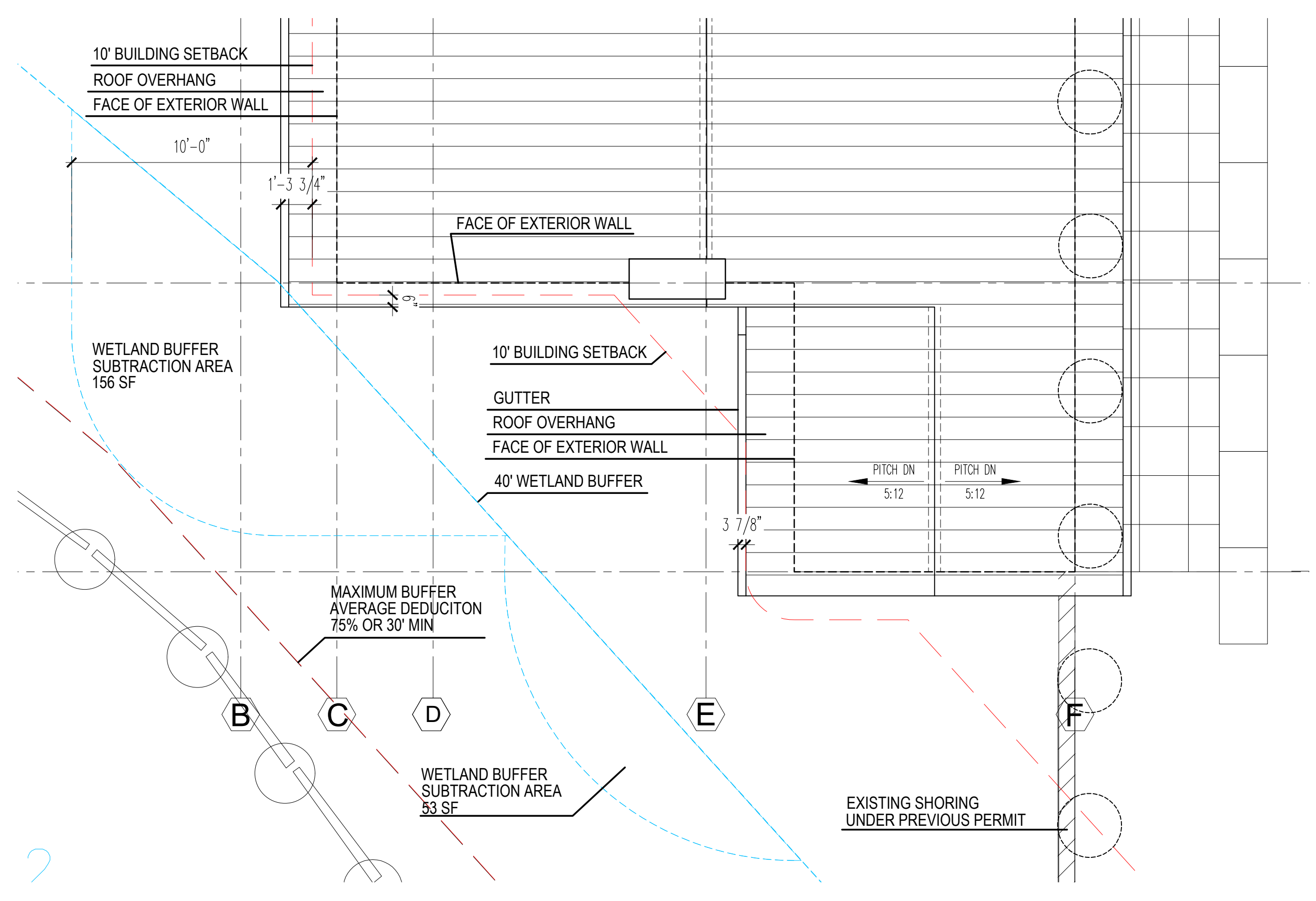
- LEGEND**
- EXTERIOR TERRACES/STAIRS
 - DWELLING AND GARAGE
 - CONCRETE WALL
 - GRID LINES
 - PROPERTY LINES
 - SET BACK
 - 40' WETLAND SETBACK AND BUFFER AVERAGING AREAS
 - 10' STRUCTURE SETBACK FROM WETLAND BUFFER
 - FINISH GRADES
 - ROOF PROJECTION LINES
 - DS DOWNSPOUT
 - EXISTING TREES TO REMAIN. SEE ARBORIST REPORT FOR TREE PROTECTION DURING CONSTRUCTION
 - SEE ARCHITECTURAL COVER SHEET FOR PROJECT SITE NOTES

NOTES

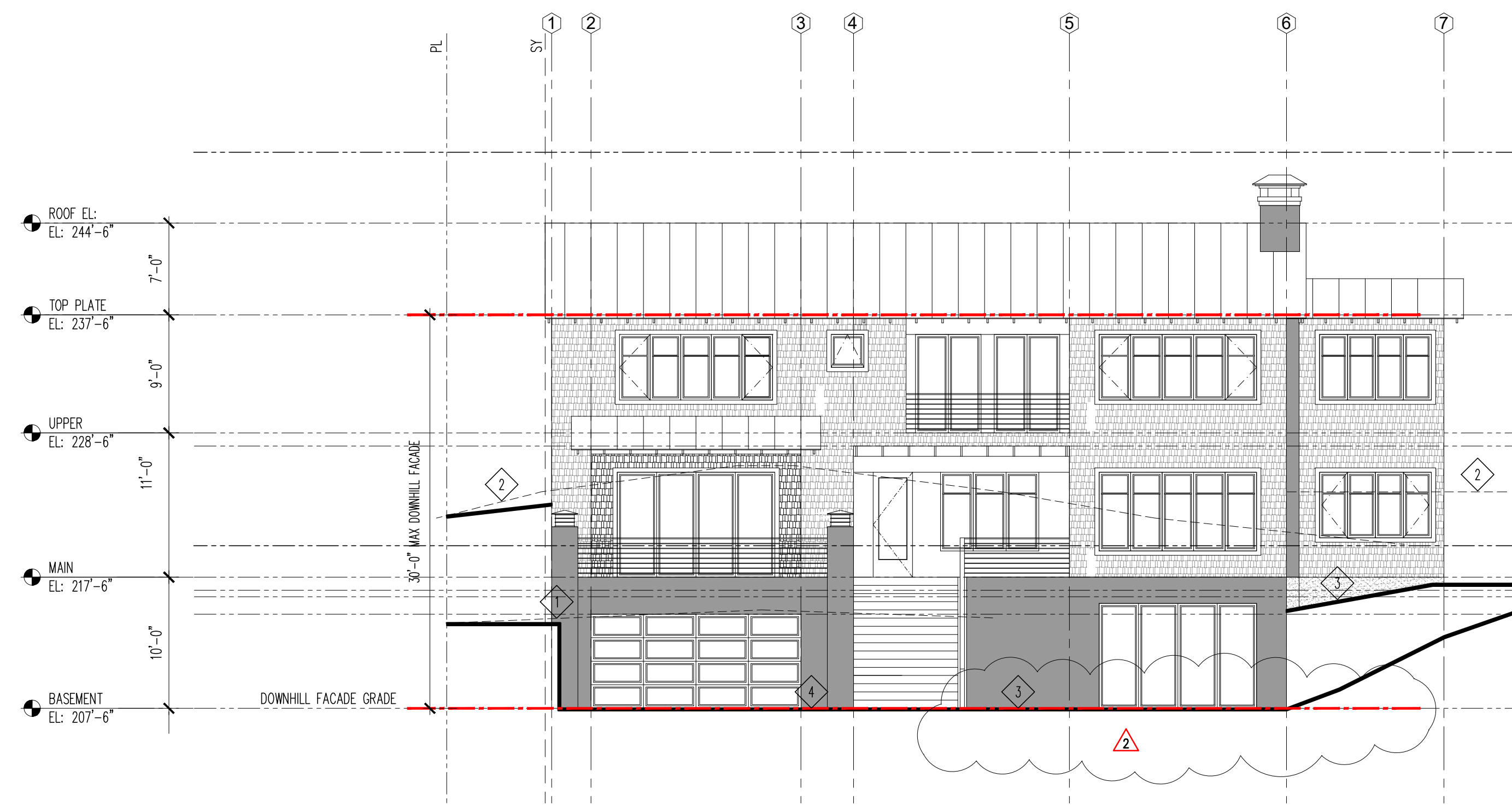
- SEE SITE SURVEY A0.3 FOR EXISTING GRADE
- SEE CIVIL DRAWINGS FOR TREE PROTECTION, SITE GRADING DRIVE WAY & SITE UTILITIES
- SEE WET LAND DRAWING FOR SITE MITTIGATION REQUIREMENTS
- SEE CIVIL SHEET C0.2 FOR ARBORIST AND TREE REMOVAL, COMPLETED UNDER PREVIOUS PERMIT



10' BUILDING SETBACK - FROM BUFFER
SCALE 1/4" = 1'



10' BUILDING SETBACK - FROM BUFFER
SCALE 1/4" = 1'

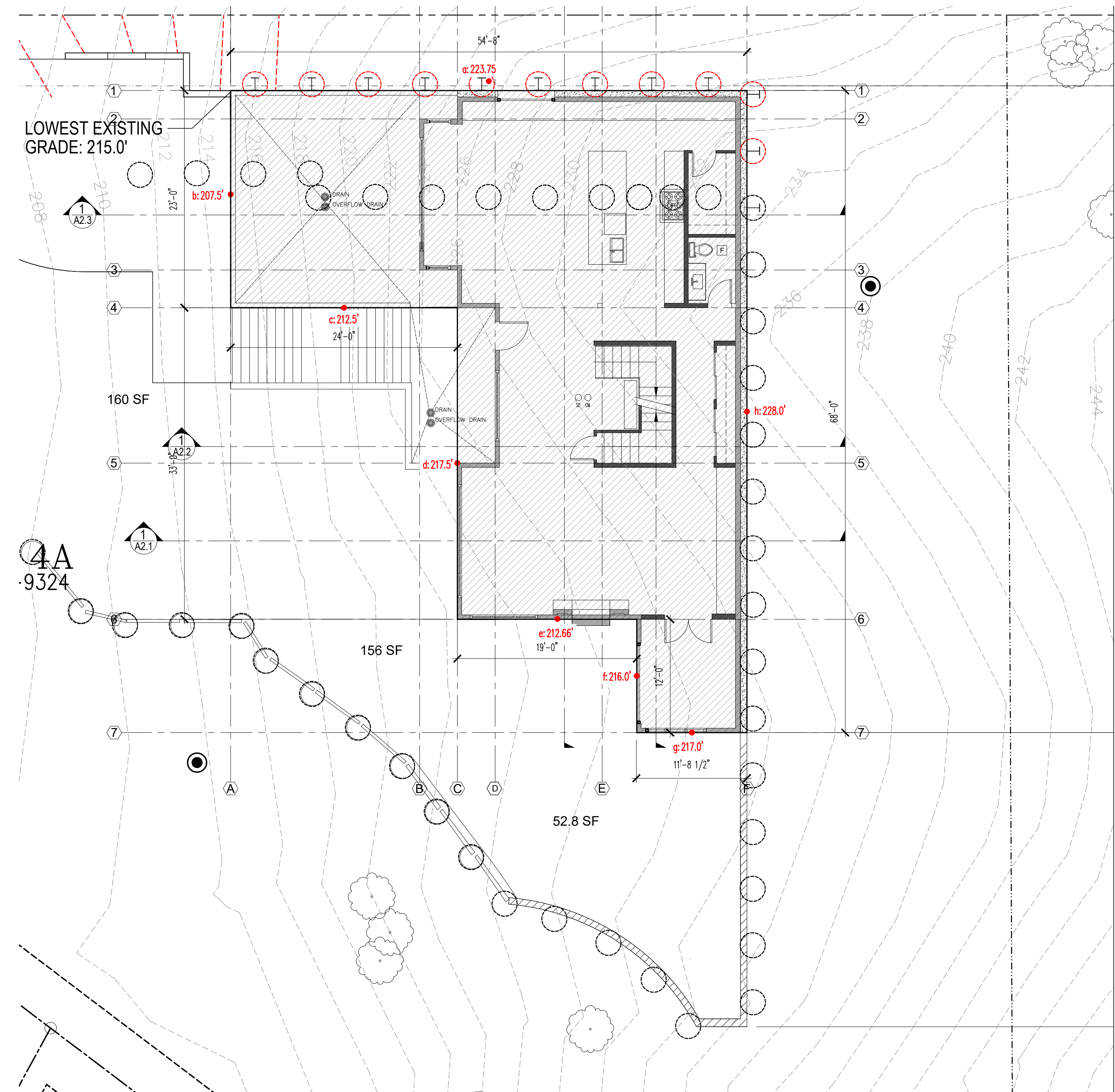


**1 DOWNHILL FACADE ELEVATION
BUILDING FOOTPRINT**

KEY NOTES:

- 1 EXISTING GRADE AT WEST FACADE OF GARAGE
- 2 EXISTING GRADE AT WEST FACADE DWELLING
- 3 FINISH GRADE AT WEST (DOWNHILL FACADE) OF DWELLING
- 4 FINISH GRADE AT WEST (DOWNHILL FACADE) OF GARAGE

BUILDING HEIGHT	
AVERAGE BUILDING ELEVATION	219.90 FEET
ALLOWABLE BUILDING HEIGHT (ABE + 30 FT)	249.90 FEET
PROPOSED BUILDING HEIGHT	244.5'
BENCHMARK ELEVATION	172.42 FEET
BENCHMARK DESCRIPTION	CP #3 AT W MERCER WAY SEE A0.3 SITE SURVEY
MAXIMUM HEIGHT OF TOP EXTERIOR WALL FACADE ABOVE LOWEST EXISTING GRADE (30 FT MAX)	30'-0"
ABE & ALLOWED BUILDING HEIGHT SHOWN ON ELEVATIONS-PLAN SHEET #	A1.0a, A3.1,A3.2, A3.3,A3.4
TOPO SURVEY ACCURACY ATTESTED ON PLAN SHEET #	A0.3



**ABE CALCULATION
BUILDING FOOTPRINT**

AVERAGE BUILDING ELEVATION

$$\frac{223.75(54.66) + 207.5(23.00) + 212.5(24.0) + 217.5(33.00) + 212.66(19.0) + 216.0(12.0) + 217.0(11.71) + 228.0(68.0)}{(54.66) + (23.0) + (24.0) + (33.0) + (19.0) + (12.0) + (11.71) + (68.0)} =$$

$$\frac{12,230.18 + 4,772.5 + 5,100.0 + 7,177.5 + 4,040.5 + 2,592.0 + 2,541.07 + 15,504.0}{245.37} =$$

$$\frac{53,957.75}{245.37} = 219.9'$$

AVG BUILDING ELEVATION = 219.9'
MAX BUILDING HEIGHT = 249.9'



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SEATTLE, WA 98109 | 206-300-5339
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MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION CORRECTION 2
11/10/2025	
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION CORRECTION 2

SDCI STAMP:



PROJECT TEAM:

SETH HALE

PROJECT NUMBER:

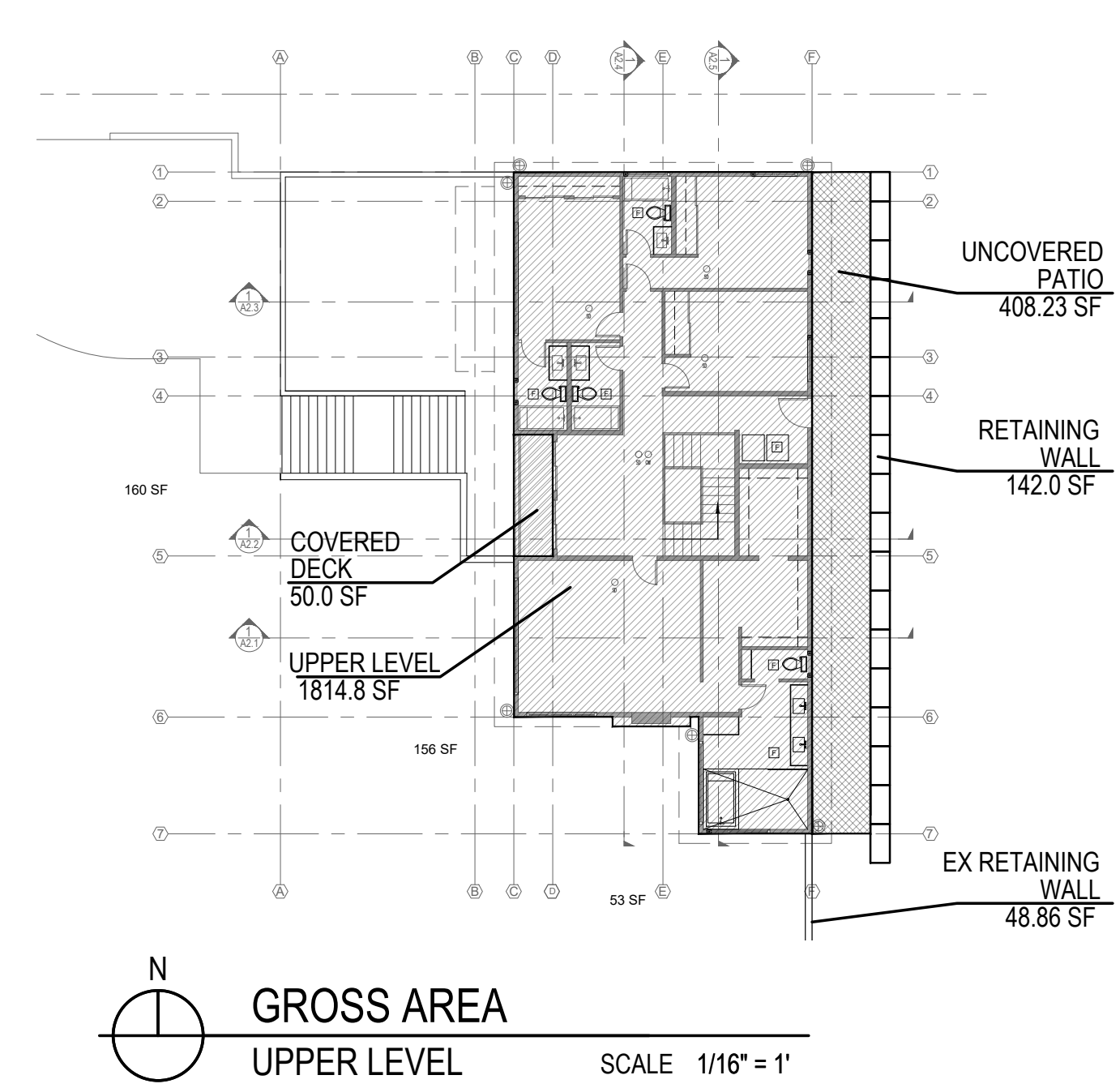
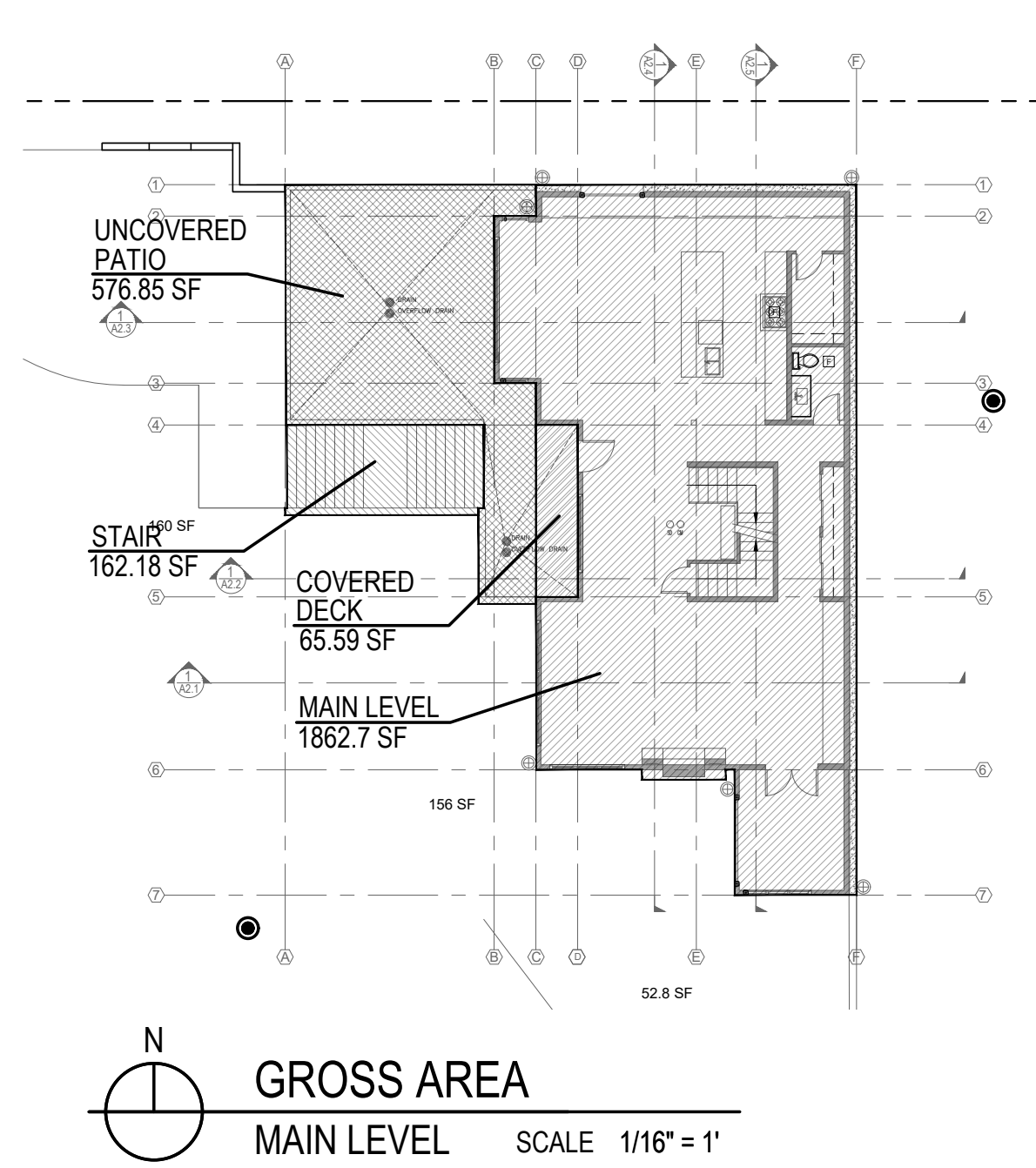
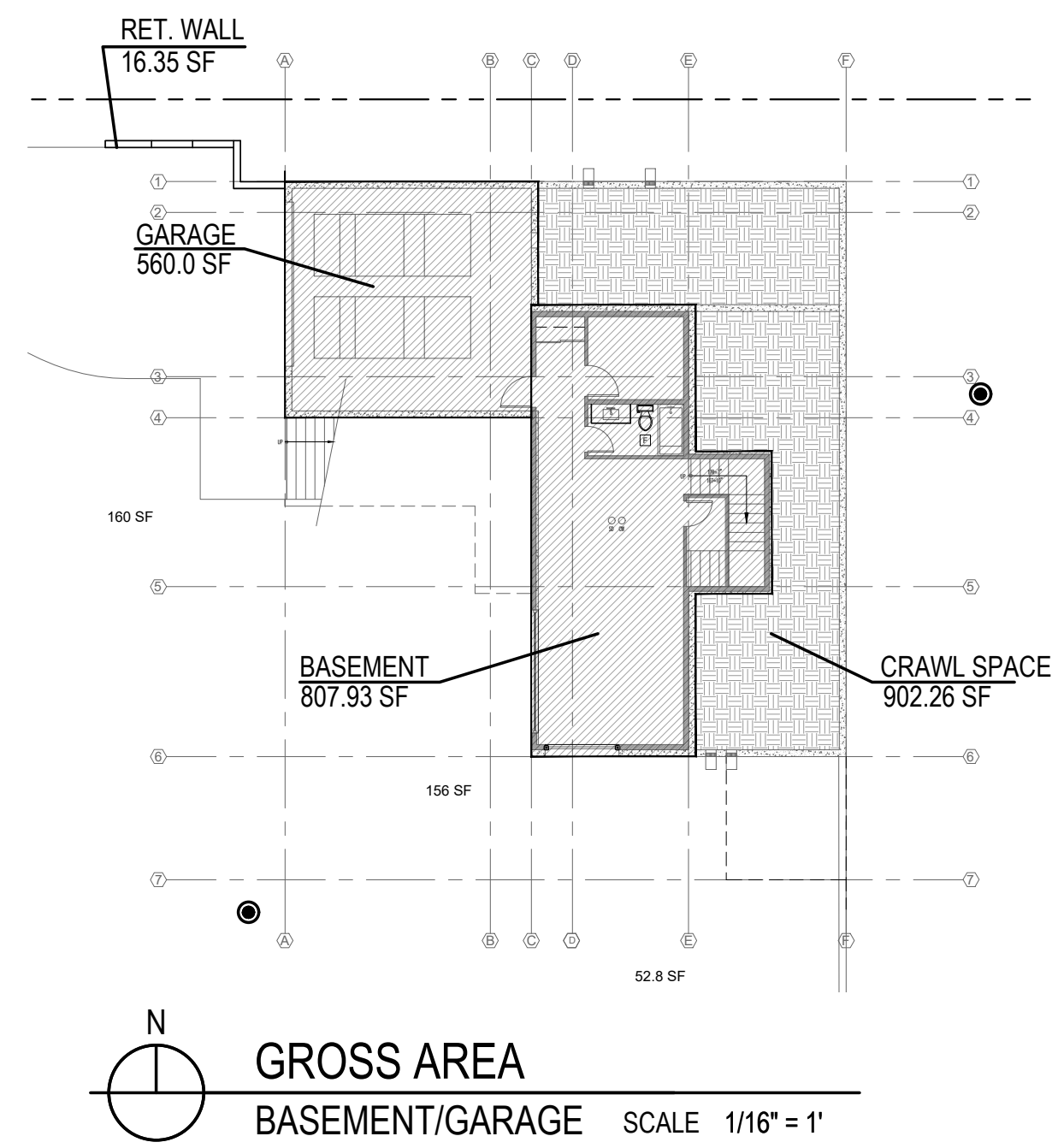
2023.014

SHEET TITLE:

ARCHITECTURAL
AVERAGE
BUILDING
ELEVATION

SHEET NUMBER:

A1.0b



- LEGEND**
- PATIO
 - MAIN BUILDING
 - COVERED DECK
 - STAIR
 - CONCRETE WALL
 - GRID LINES
 - PROPERTY LINES
 - SET BACK
 - ROOF PROJECTION LINES

HARDSCAPE AREA	
FLOOR NAME	FLOOR AREA (SF)
UNCOVERED DECKS	0 SF
UNCOVERED PATIOS	985.08 SF
WALKWAYS	0 SF
STAIRS	162.18 SF
ROCKERIES/ RET. WALLS	207.21 SF
TOTAL HARDSCAPE	1,354.47 SF
TOTAL PERCENTAGE	3.63%

ALLOWABLE HARDSCAPE	
GROSS LOT AREA	37,350 SF
9% OF LOT AREA:	
ALLOWED HARDSCAPE	3,361.5 SF
PROPOSED GROSS FLOOR AREA	1,354.47 SF
PROPOSED % OF LOT AREA	3.63%

GROSS BUILDING AREA	
FLOOR NAME	FLOOR AREA (SF)
ROOF LEVEL	0 SF
UPPER LEVEL	1,795.5 SF
MAIN LEVEL	1,855.4 SF
BASEMENT	806.9 SF
GARAGE	560.0 SF
ROOFED DECK	50.0 SF
TOTAL GROSS FLOOR AREA	5,067.8 GSF

BASEMENT AREA EXCLUDED	0 SF
ACTUAL TOTAL BUILDING AREA	5,067.8 SF
- SEE SHEET A1.0c FOR LOT COVERAGE CALCULATION	

ALLOWABLE GROSS FLOOR AREA	
GROSS LOT AREA	37,350 SF
12,000 SF OR 40% OF LOT AREA:	
ALLOWED GROSS FLOOR AREA	12,000 SF
PROPOSED GROSS FLOOR AREA	5,067.8 SF
PROPOSED % OF LOT AREA	13.57%

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT
09/17/2025	CORRECTION1
11/10/2025	SETBACK DEVIATION
01/13/2026	CORRECTION2

MARK

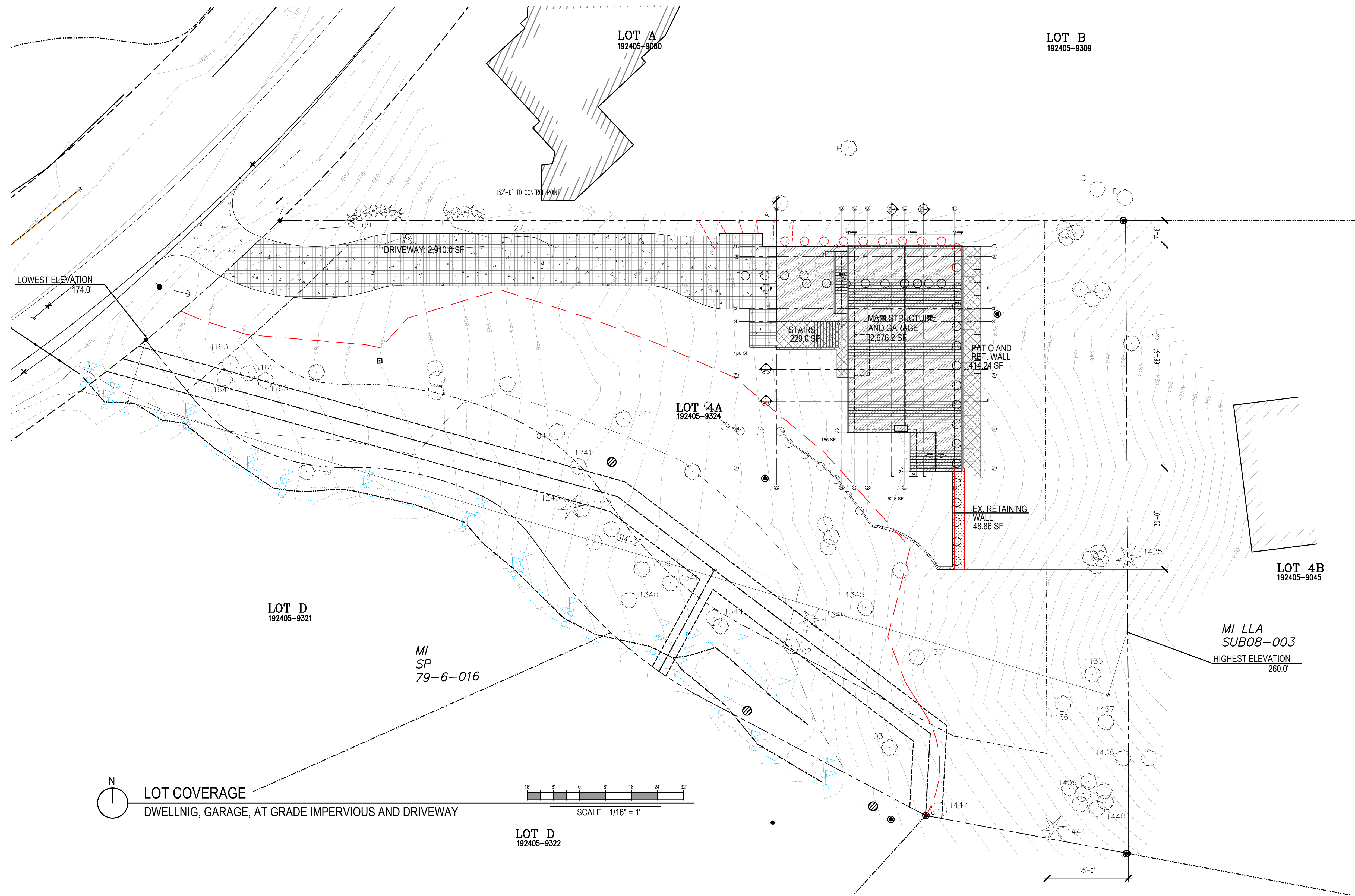
SDCI STAMP:

PROJECT TEAM:
SETH HALE

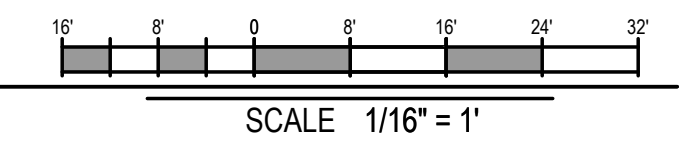
PROJECT NUMBER:
2023.014

SHEET TITLE:
ARCHITECTURAL
BUILDING AREA
GROSS FLOOR
AREA

SHEET NUMBER:



LOT COVERAGE
DWELLING, GARAGE, AT GRADE IMPERVIOUS AND DRIVEWAY



LOT SLOPE	
HIGHEST ELEVATION POINT OF LOT	260 FEET
LOWEST ELEVATION POINT OF LOT	174 FEET
ELEVATION DIFFERENCE	86 FEET
HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS	314.17 FEET
LOT SLOPE	27.4 %

LOT COVERAGE	
GROSS LOT AREA	37,350 SF
ALLOWED LOT COVERAGE (35%)	13,072.5 SF
MAIN STRUCTURE AND GARAGE	2,676.2 SF
PATIOS, DECKS, STAIRS AND RETAINING WALLS	692.1 SF
DRIVEWAY	2,910.0 SF
TOTAL IMPERVIOUS AREA	6,278.3 SF
PROPOSED LOT COVERAGE	16.81%

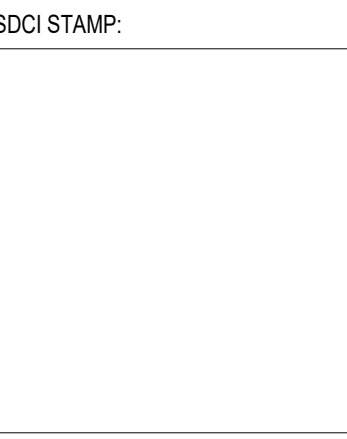
- LEGEND**
- MAIN STRUCTURE AND GARAGE WITH ROOF INCLUDED
 - STAIR, PATIO, RETAINING WALLS
 - DRIVEWAY (IMPERVIOUS)
 - LANDSCAPE AREA
 - GRID LINES
 - PROPERTY LINES
 - SET BACK

MERCER ISLAND RESIDENCE

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MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

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11/10/2025	
01/13/2026	

MI LLA
SUB08-003
HIGHEST ELEVATION
260.0

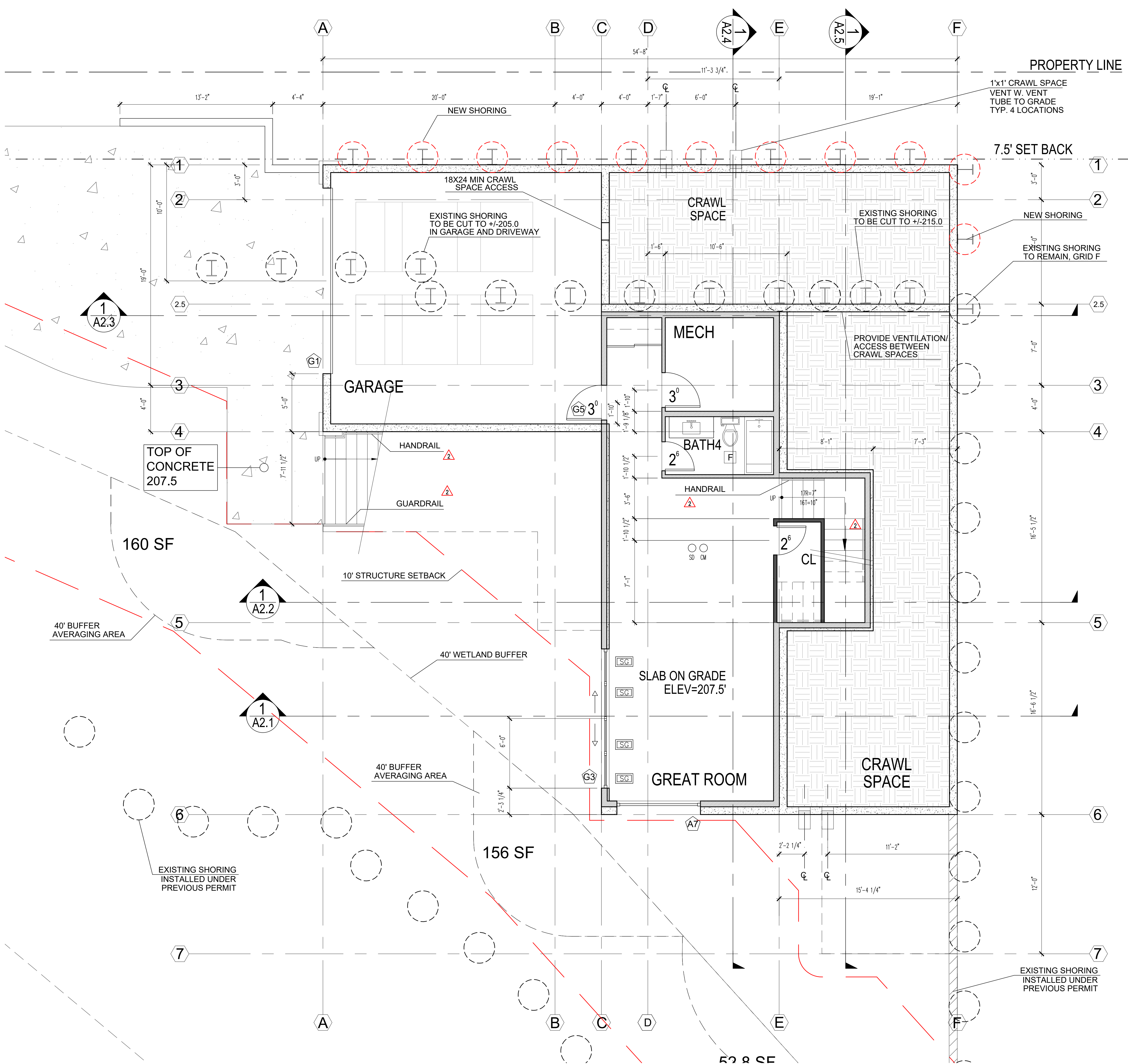
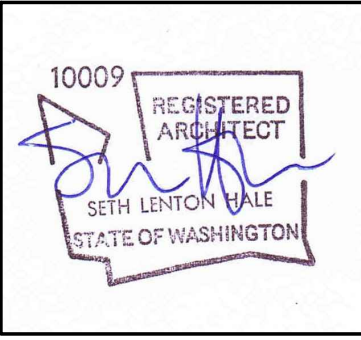


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
ARCHITECTURAL LOT COVERAGE

SHEET NUMBER:



FLOOR PLAN
BASEMENT LEVEL
SCALE 1/4" = 1'

FLOOR AREA 808 SF
GARAGE 560 SF

CRAWL SPACE VENTING
NORTH CRAWL SPACE = 362 SF
362 SF / 300 = 1.2 SF REQUIRED
12"x12" x 2 VENTS PROVIDE = 2 SF

SOUTH CRAWL SPACE = 480 SF
480 SF / 300 = 1.6 SF REQUIRED
12"x12" x 2 VENTS PROVIDE = 2 SF

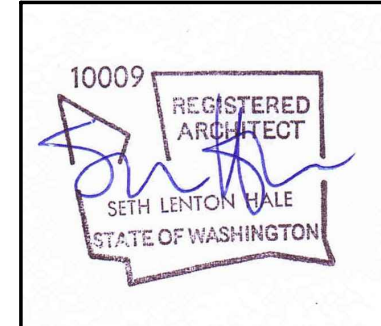
NOTES:

- SEE STRUCTURAL DRAWINGS FOR FRAMING AND FOUNDATION NOTES
- ALL CABINETS DIMENSIONS ARE TO FACE OF CABINET BOX
- VERIFY WITH OWNER HOSEBIB LOCATION
- ▲ - SEE A5.1 FOR HANDRAIL REQUIREMENTS
- ▲ - SEE A5.2 FOR GUARDRAIL REQUIREMENTS

LEGEND:

- 2x6 EXTERIOR FRAMING
- 2x6 INTERIOR FRAMING
- 2x4 INTERIOR FRAMING

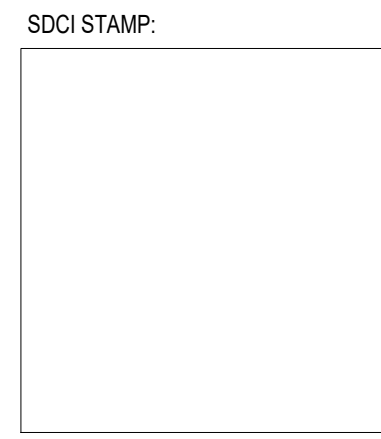
- GRID LINES
- PROPERTY LINES
- SET BACK
- UPPER LV PROJECTION LINES
- SAFETY GLAZING
- HOSE BIB
- DOWNSPOUT
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- VENTILATION FAN



MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION 2
01/13/2026	



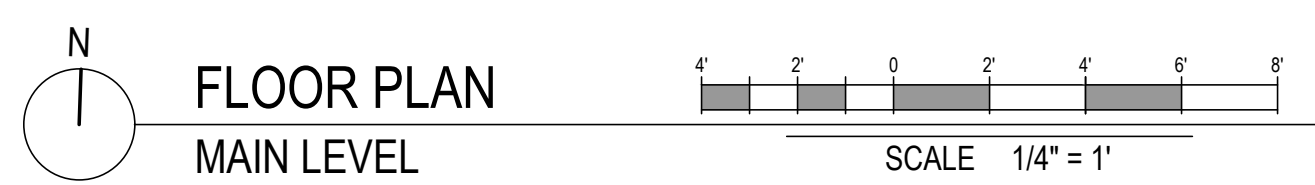
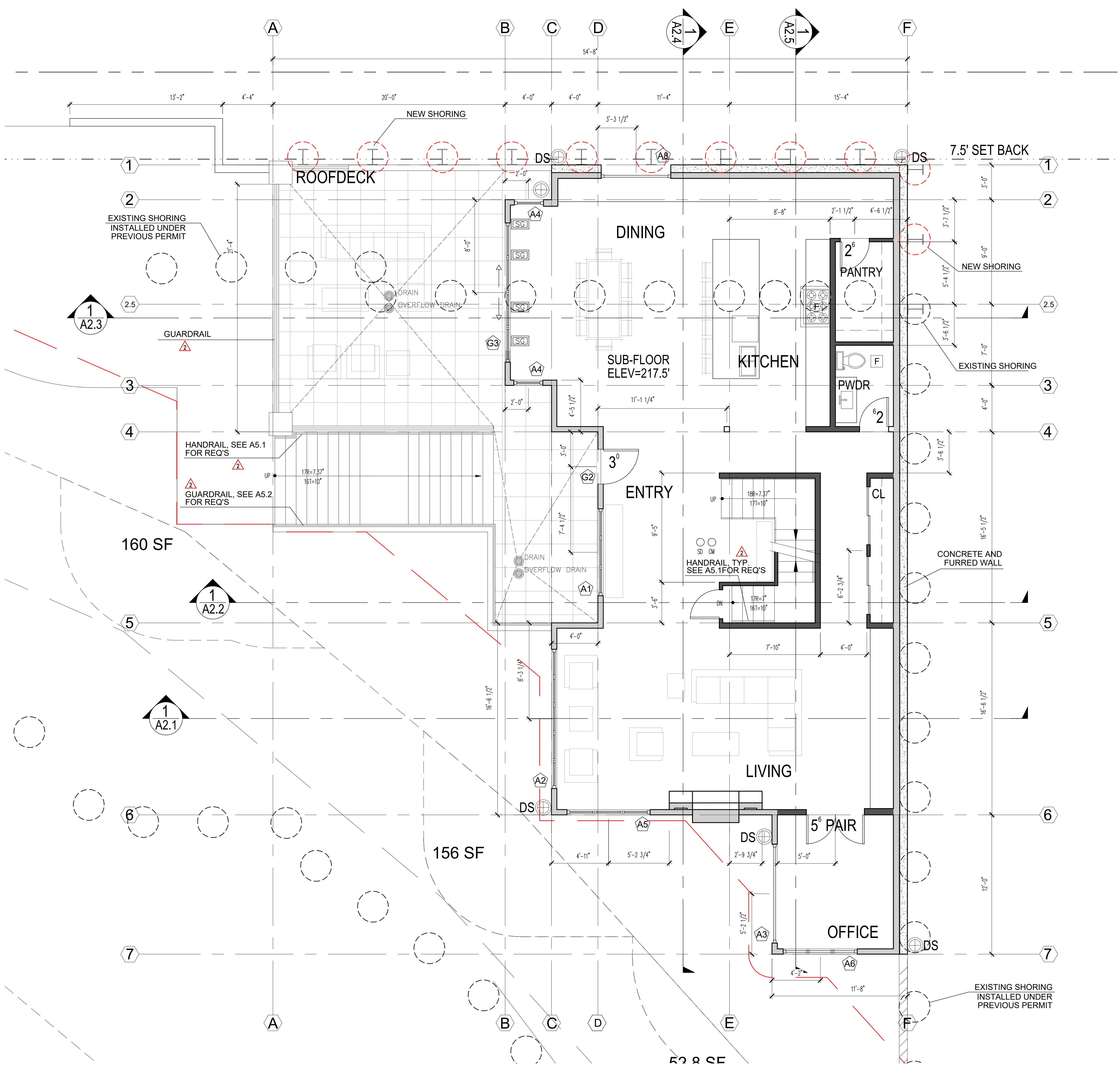
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
MAIN FLOOR PLAN

SHEET NUMBER:

A1.1b



FLOOR AREA 1,855.4 SF

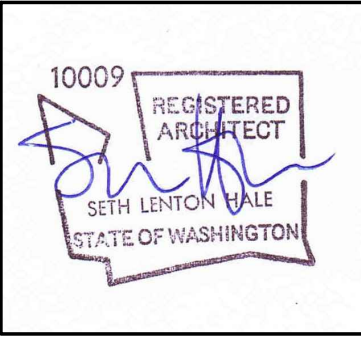
NOTES:

- SEE STRUCTURAL DRAWINGS FOR FRAMING AND FOUNDATION NOTES
- ALL CABINETS DIMENSIONS ARE TO FACE OF CABINET BOX
- VERIFY WITH OWNER HOSEBIB LOCATION
- SEE A5.1 FOR HANDRAIL REQUIREMENTS
- SEE A5.2 FOR GUARDRAIL REQUIREMENTS

LEGEND:

- 2x6 EXTERIOR FRAMING
- 2x6 INTERIOR FRAMING
- 2x4 INTERIOR FRAMING

- GRID LINES
- PROPERTY LINES
- SET BACK
- UPPER LV PROJECTION LINES
- SAFETY GLAZING
- HOSE BIB
- DOWNSPOUT
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- VENTILATION FAN



MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK REVISION
PERMIT CORRECTION 1
SETBACK DEVIATION
CORRECTION 2

SDCI STAMP:

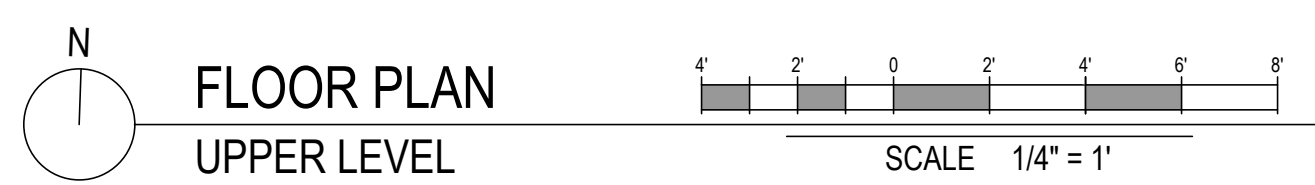
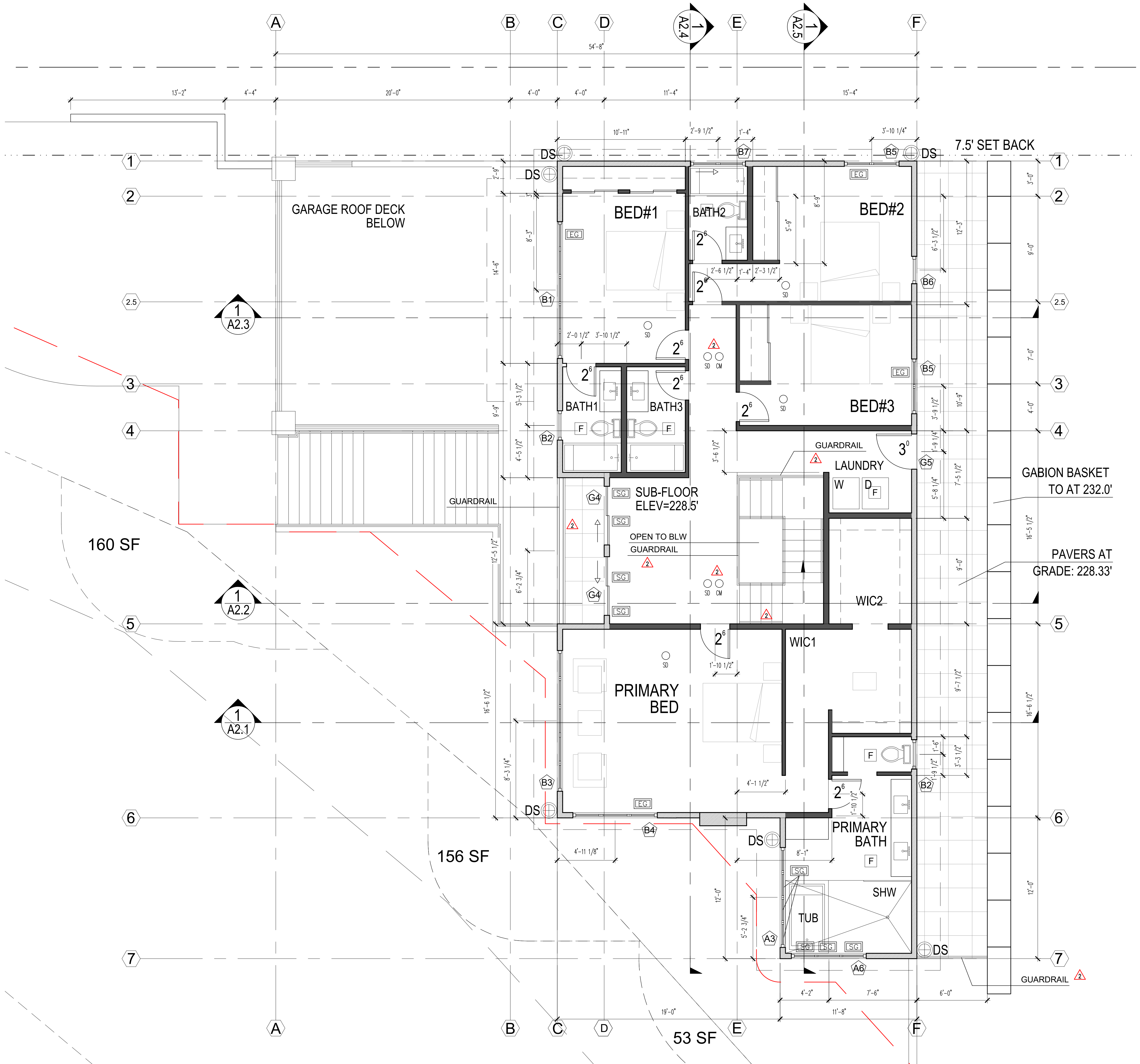
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
UPPER LEVEL
PLAN

SHEET NUMBER:

A1.1c



FLOOR AREA 1,795.5 SF

NOTES:

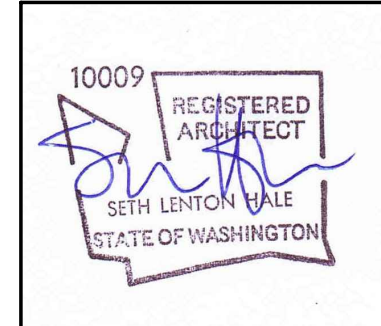
- SEE STRUCTURAL DRAWINGS FOR FRAMING AND FOUNDATION NOTES
- ALL CABINETS DIMENSIONS ARE TO FACE OF CABINET BOX
- VERIFY WITH OWNER HOSEBIB LOCATION
- ▲ - SEE A5.1 FOR HANDRAIL REQUIREMENTS
- ▲ - SEE A5.2 FOR GUARDRAIL REQUIREMENTS

LEGEND:

- 2x6 EXTERIOR FRAMING
- 2x6 INTERIOR FRAMING
- 2x4 INTERIOR FRAMING

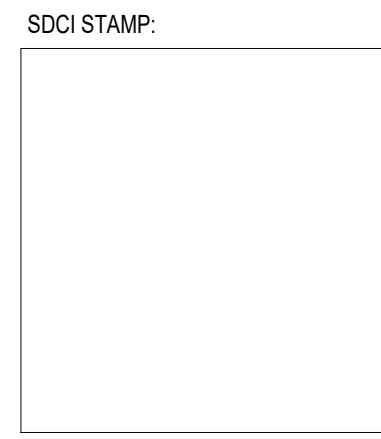
- GRID LINES
- PROPERTY LINES
- SET BACK
- UPPER LV PROJECTION LINES

- SAFETY GLAZING
- HOSE BIB
- DOWNSPOUT
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- VENTILATION FAN



DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK	REVISION
	PERMIT
	CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2



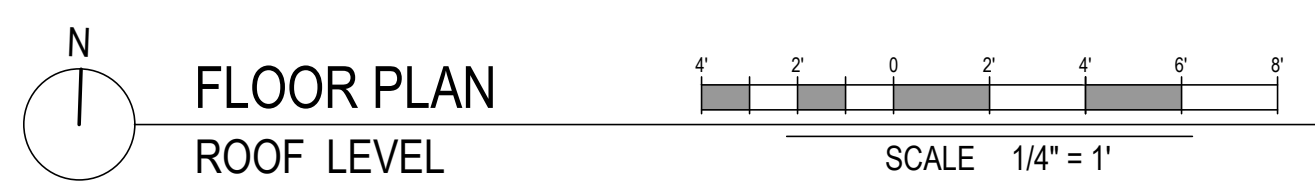
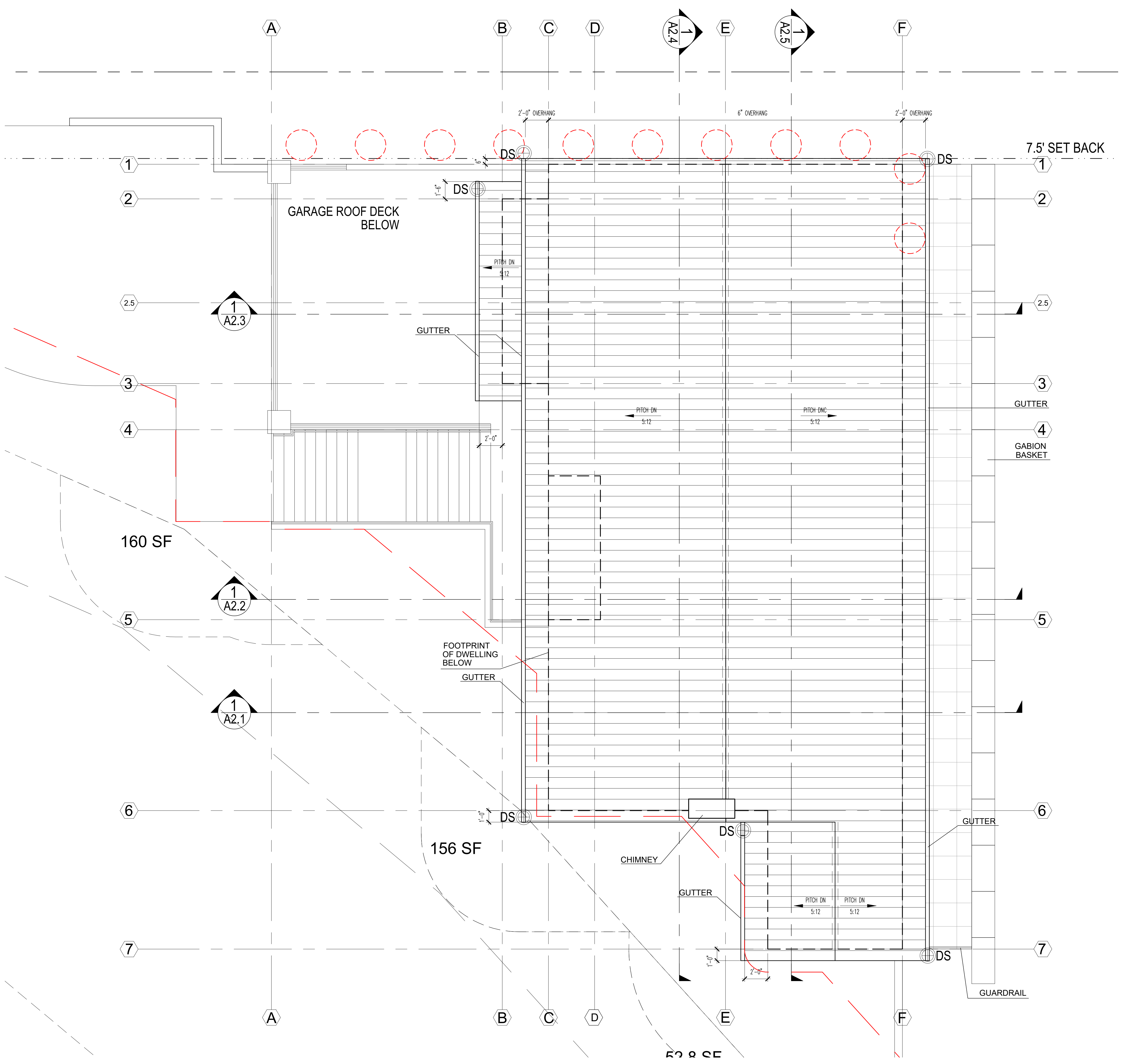
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
ROOF PLAN

SHEET NUMBER:

A1.1d



ROOF AREA 2,274.6 SF

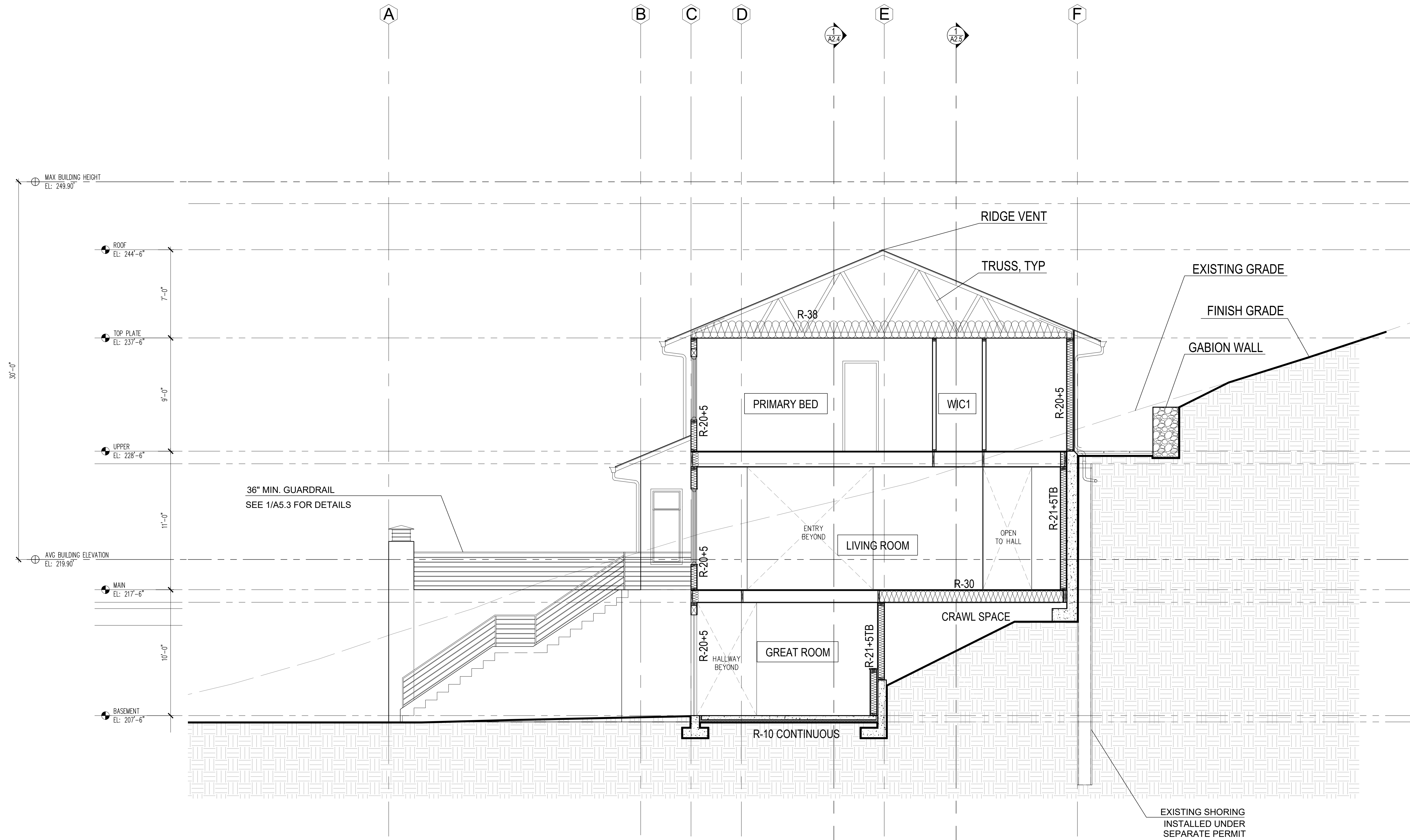
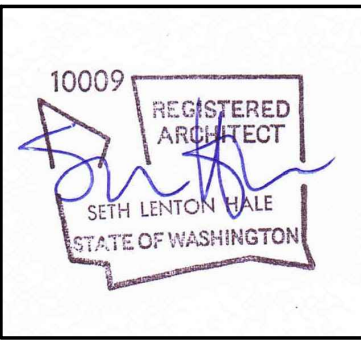
NOTES:

- SEE STRUCTURAL DRAWINGS FOR FRAMING AND FOUNDATION NOTES
- ALL CABINETS DIMENSIONS ARE TO FACE OF CABINET BOX
- VERIFY WITH OWNER HOSEBIB LOCATION
- SEE A5.1 FOR HANDRAIL REQUIREMENTS
- SEE A5.2 FOR GUARDRAIL REQUIREMENTS

LEGEND:

- 2x6 EXTERIOR FRAMING
- 2x6 INTERIOR FRAMING
- 2x4 INTERIOR FRAMING

- GRID LINES
- PROPERTY LINES
- SET BACK
- UPPER LV PROJECTION LINES
- SAFETY GLAZING
- HOSE BIB
- DOWNSPOUT
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- VENTILATION FAN



1 SECTION
SCALE 1/4" = 1'

- NOTES:**
- ALL ROOF EAVES & UNDERSIDE OF ENCLOSED DECKS TO HAVE CONTINUOUS SCREENED VENTING
 - SEE A2.6 FOR ENLARGED WALL SECTION SHOWING LOCATIONS FOR INSULATION VALUES & TYPICAL VENTING LOCATIONS
 - CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD & RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQ'D BY IRC TABLE R301.5

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION 2
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2

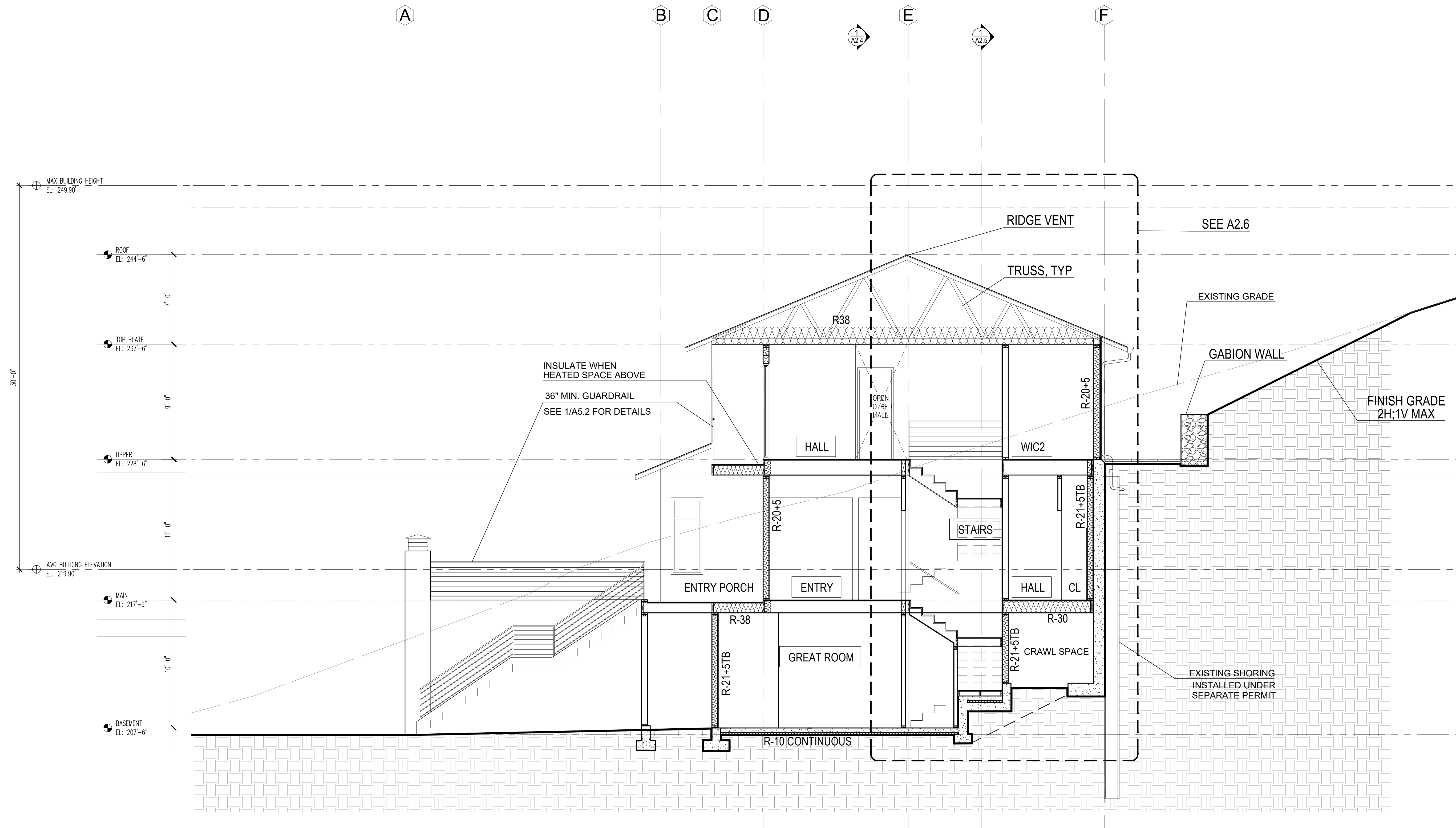
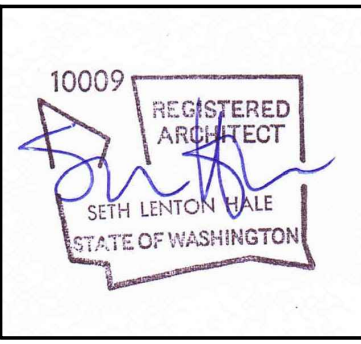
SDCI STAMP:

PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
ARCHITECTURAL SOUTH SECTION

SHEET NUMBER:



MAX BUILDING HEIGHT
EL: 249.90'

ROOF
EL: 244'-6"

7'-0"

TOP PLATE
EL: 237'-6"

9'-0"

UPPER
EL: 228'-6"

11'-0"

AVG BUILDING ELEVATION
EL: 219.90'

MAIN
EL: 217'-6"

10'-0"

BASEMENT
EL: 207'-6"

1 SECTION

SCALE 1/4" = 1'

NOTES:

- ALL ROOF EAVES & UNDERSIDE OF ENCLOSED DECKS TO HAVE CONTINUOUS SCREENED VENTING
- SEE A2.6 FOR ENLARGED WALL SECTION SHOWING LOCATIONS FOR INSULATION VALUES & TYPICAL VENTING LOCATIONS
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MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

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12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION CORRECTION 2
11/10/2025	
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION CORRECTION 2

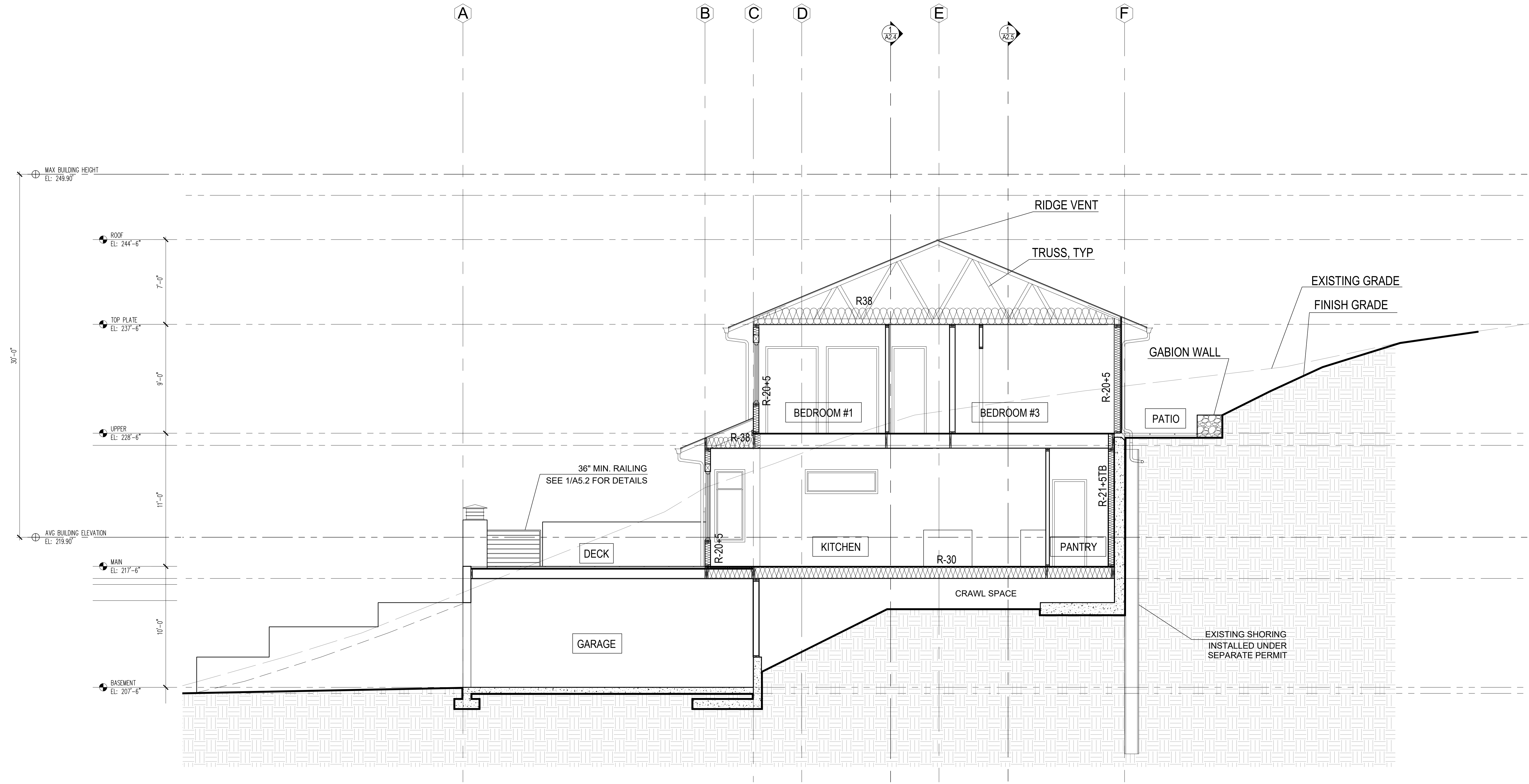
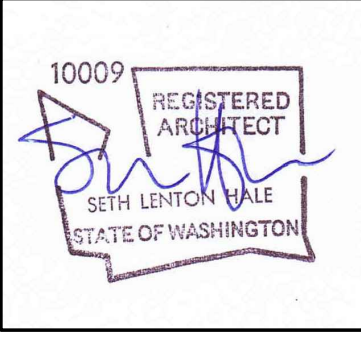
SDCI STAMP:

PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
STAIR SECTION

SHEET NUMBER:



1 SECTION
SCALE 1/4" = 1'

NOTES:

- ALL ROOF EAVES & UNDERSIDE OF ENCLOSED DECKS TO HAVE CONTINUOUS SCREENED VENTING
- SEE A2.6 FOR ENLARGED WALL SECTION SHOWING LOCATIONS FOR INSULATION VALUES & TYPICAL VENTING LOCATIONS
- CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD & RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQ'D BY IRC TABLE R301.5

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION1
09/17/2025	SETBACK DEVIATION CORRECTION2
11/10/2025	
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION1
	SETBACK DEVIATION CORRECTION2

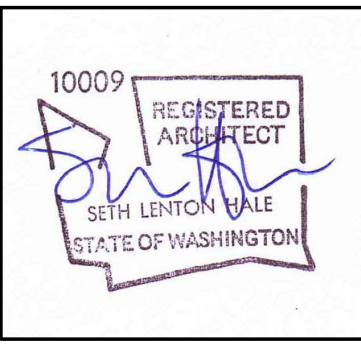


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
NORTH SECTION

SHEET NUMBER:



DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION 2
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2

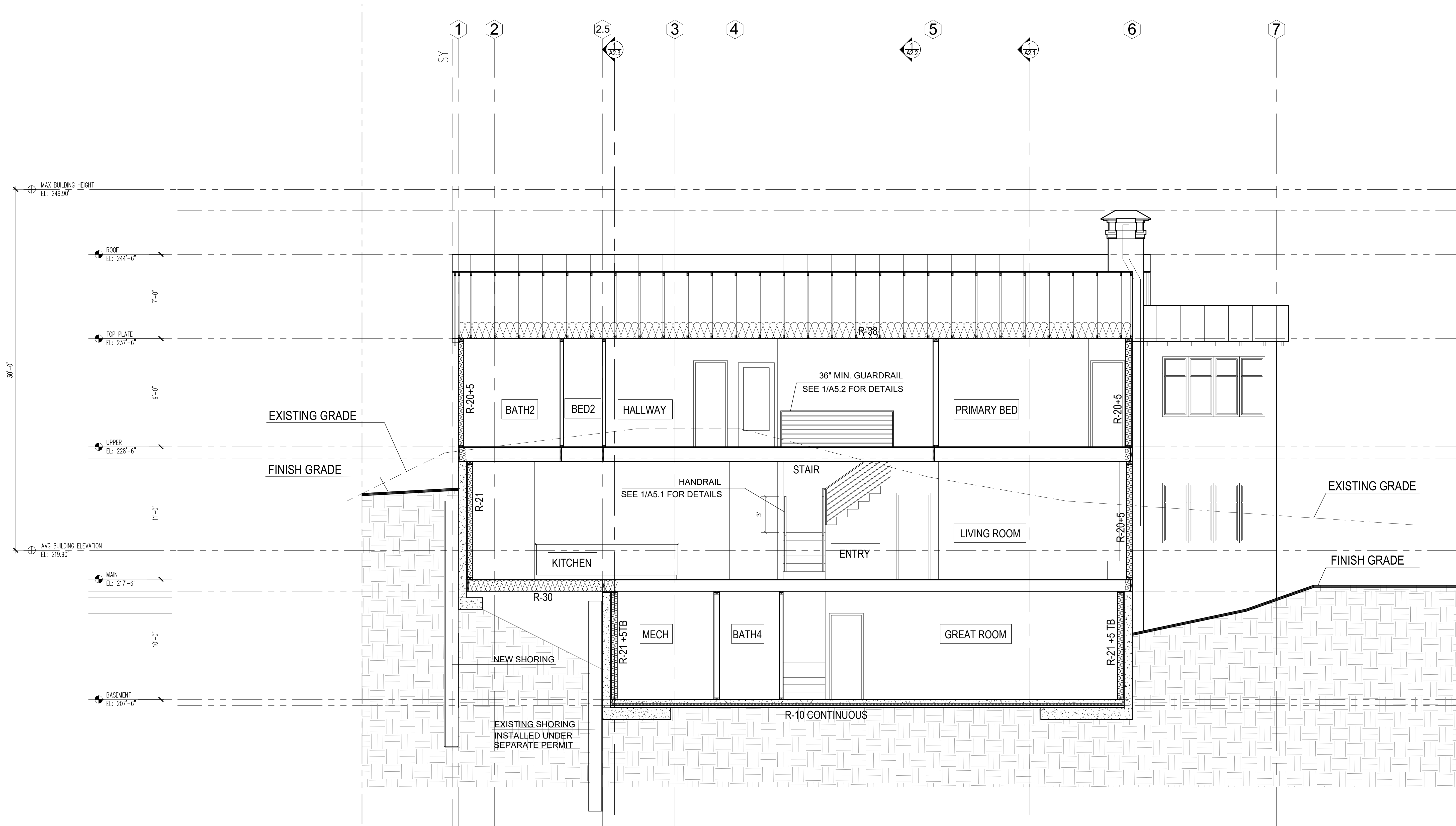


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
WEST SECTION

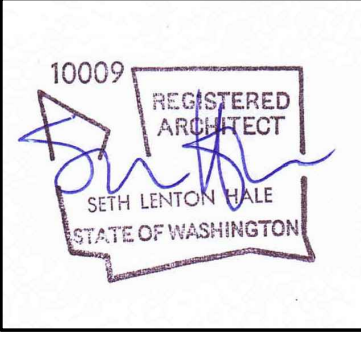
SHEET NUMBER:



1 SECTION
SCALE 1/4" = 1'

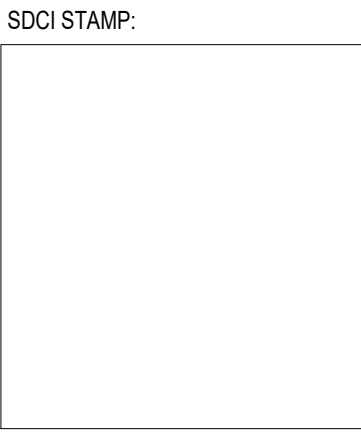
NOTES:

- ALL ROOF EAVES & UNDERSIDE OF ENCLOSED DECKS TO HAVE CONTINUOUS SCREENED VENTING
- SEE A2.6 FOR ENLARGED WALL SECTION SHOWING LOCATIONS FOR INSULATION VALUES & TYPICAL VENTING LOCATIONS
- CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD & RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQ'D BY IRC TABLE R301.5



DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK	REVISION
PERMIT	CORRECTION 1
SETBACK	DEVIATION
CORRECTION 2	CORRECTION 2

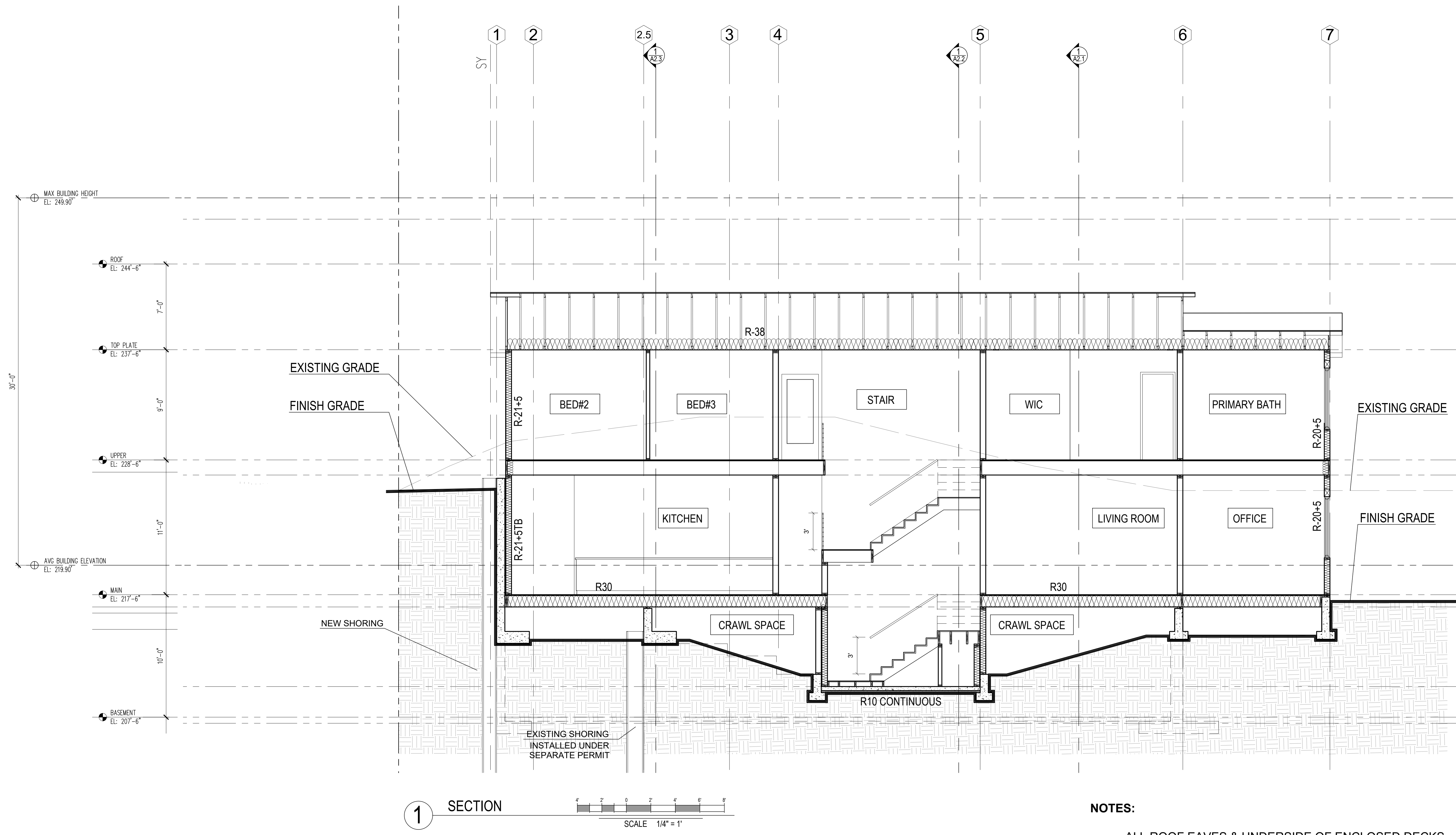


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

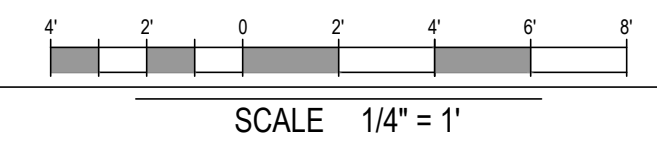
SHEET TITLE:
EAST SECTION

SHEET NUMBER:



1

SECTION



NOTES:

- ALL ROOF EAVES & UNDERSIDE OF ENCLOSED DECKS TO HAVE CONTINUOUS SCREENED VENTING
- SEE A2.6 FOR ENLARGED WALL SECTION SHOWING LOCATIONS FOR INSULATION VALUES & TYPICAL VENTING LOCATIONS
- CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD & RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQ'D BY IRC TABLE R301.5



MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION
09/17/2025	SETBACK DEVIATION CORRECTION
11/10/2025	
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION
	SETBACK DEVIATION CORRECTION

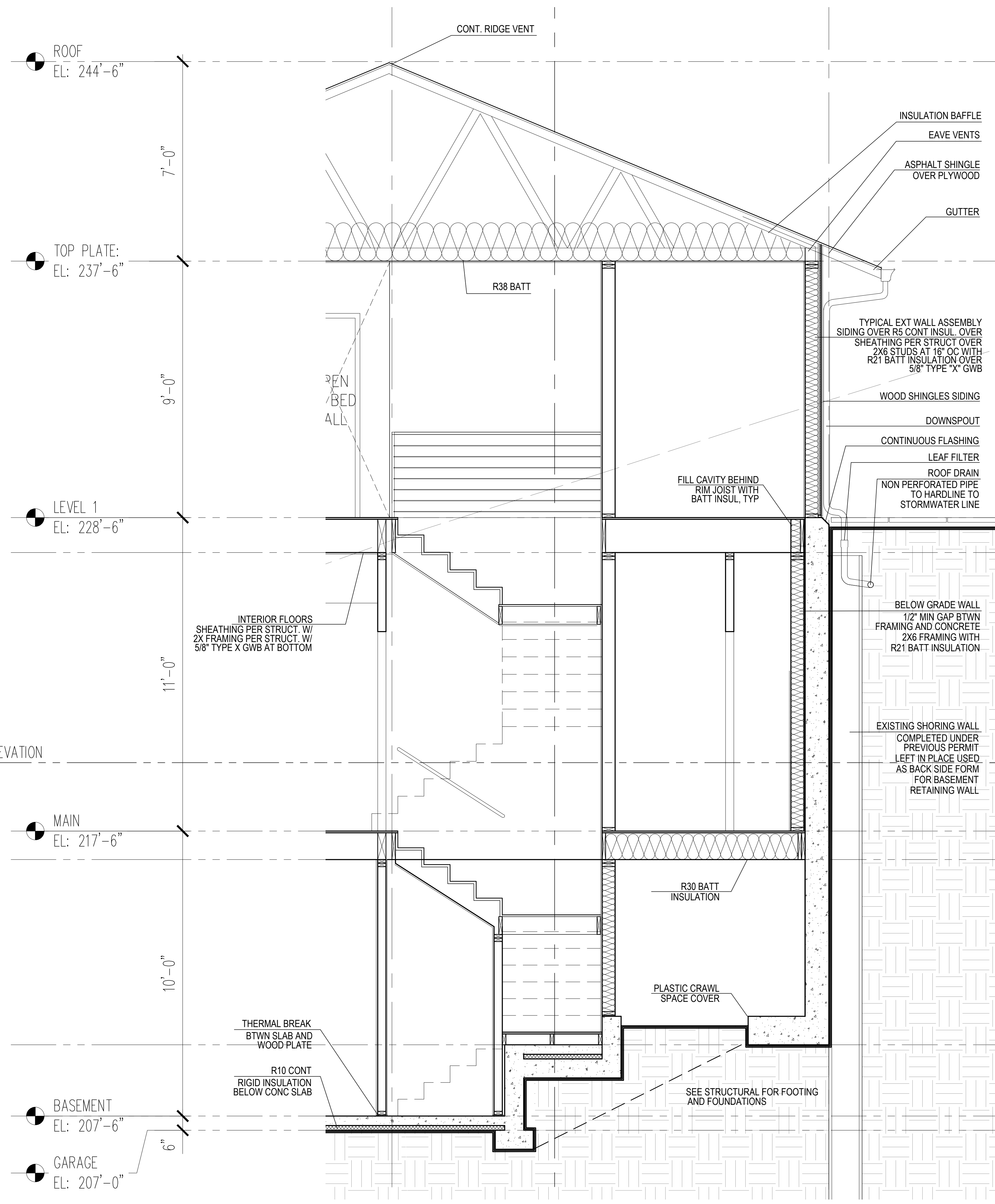
SDCI STAMP:

PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
WALL SECTIONS

SHEET NUMBER:



NOTE:

- VERIFY ALL WATERPROOFING REQUIREMENTS WITH WATERPROOFING ENGINEER TYP.
- PROVIDE 5/8" TYPE X GWB AT ALL SURFACES TO RECEIVE GWB

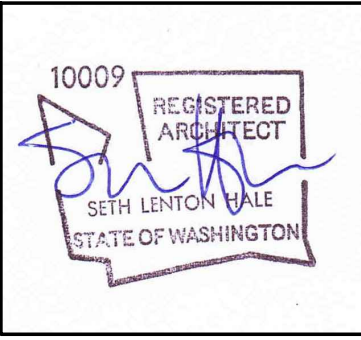
ROOF VENTILATION
REFERENCE IRC R806

EAVE VENTILATION
(4) 2"Ø HOLES PER TRUSS BAY x 35= 439.6/144= 3.05 SF x 2 SIDES= 6.1SF

RIDGE VENTILATION
NORTH ROOF: 55.91 LF x .125 SF/LF= 6.99 SF
SOUTH ROOF: 10 LF x 0.125= 1.25 SF

ROOF AREA: 1,888 SF/150 = **12.58 SF** OF VENTING AREA.
PROVIDED 14.34 SF

1 WALL SECTION EAST WALL
SCALE 1/2" = 1'



DATE	REVISION
12/12/2024	CORRECTION 1
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION 2
01/13/2026	

MARK	REVISION
	CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2

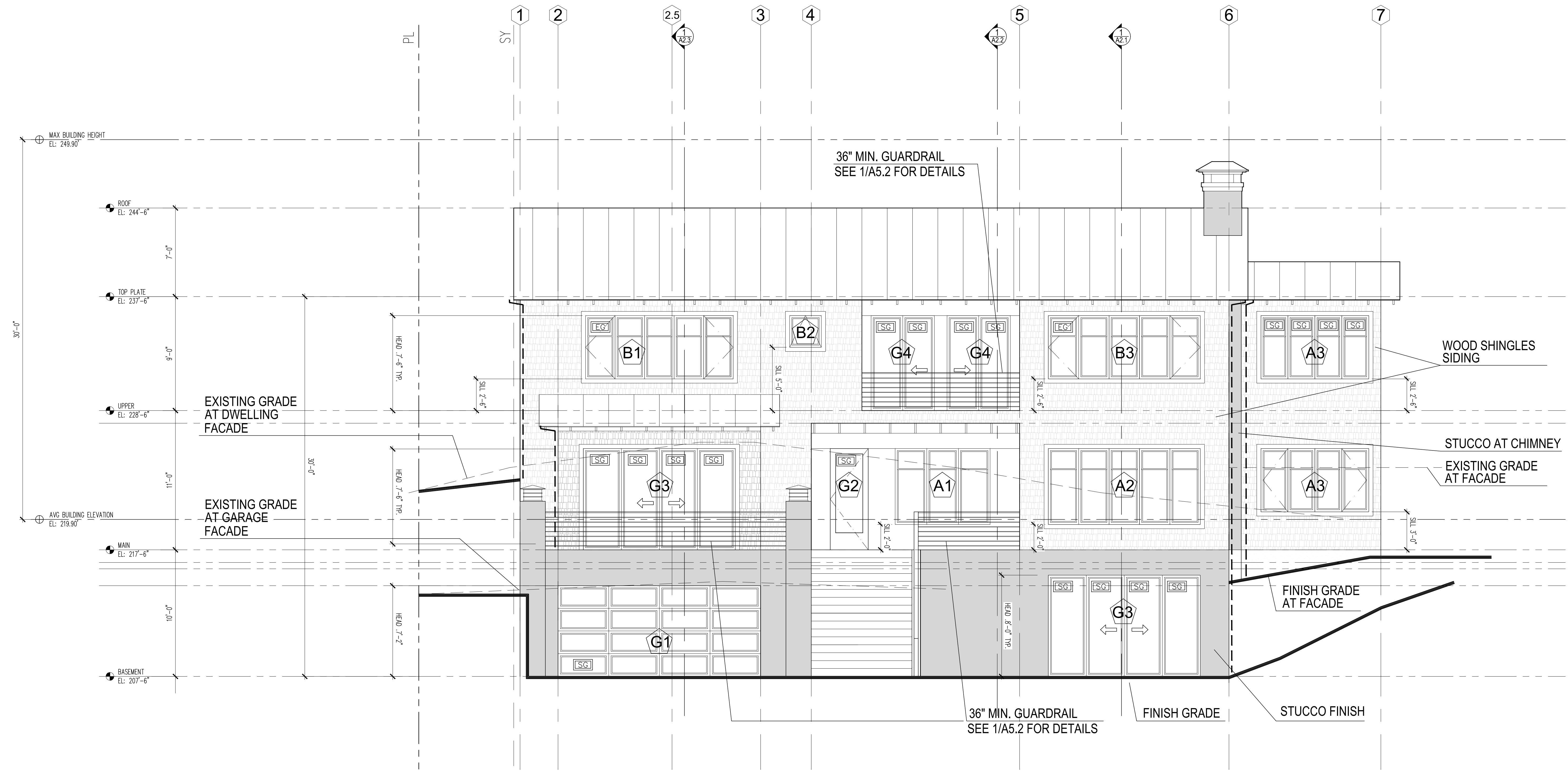
SDCI STAMP:

PROJECT TEAM:
SETH HALE

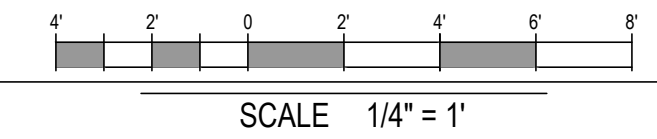
PROJECT NUMBER:
2023.014

SHEET TITLE:
ARCHITECTURAL
WEST ELEVATION

SHEET NUMBER:



1 WEST ELEVATION



2" X 3/8" BLADED STEEL POWDER COATED POST,
1/8" S.S. CABLES, AND S.S. ACORN TENSION NUT

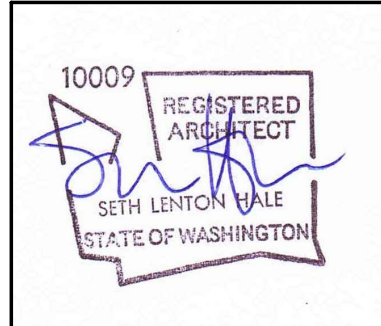


2 CABLE RAILING DESIGN INTENT
NOT TO SCALE

SG - SAFETY GLAZING
EG - EGRESS WINDOW

DS - DOWNSPOUT

NOTE:
- CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD AND RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQ'D BY IRC TABLE R301.5



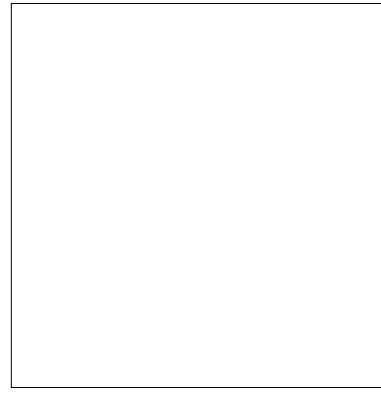
MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION1
09/17/2025	SETBACK DEVIATION CORRECTION2
11/10/2025	
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION1
	SETBACK DEVIATION CORRECTION2

SDCI STAMP:



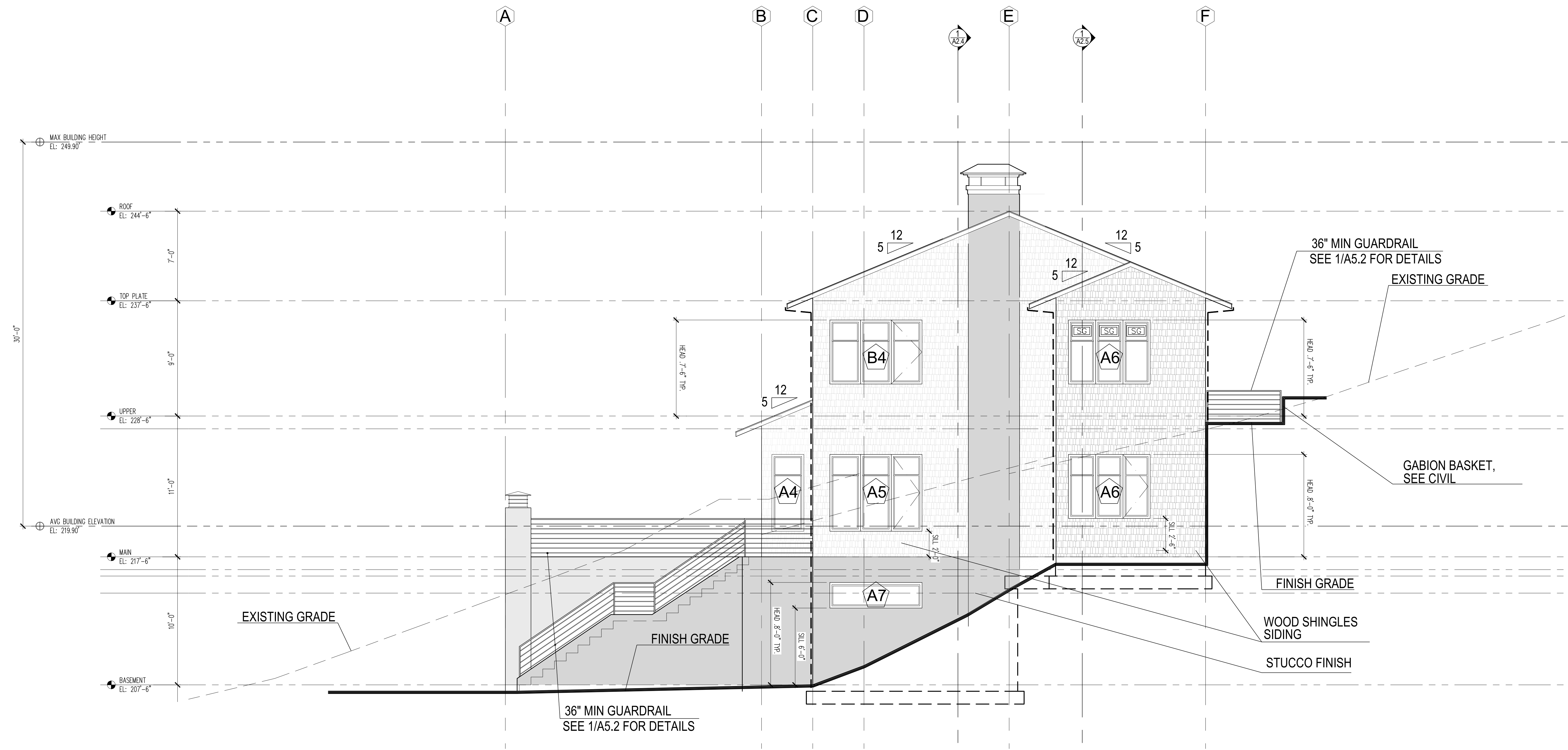
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
SOUTH ELEVATION

SHEET NUMBER:

A3.2

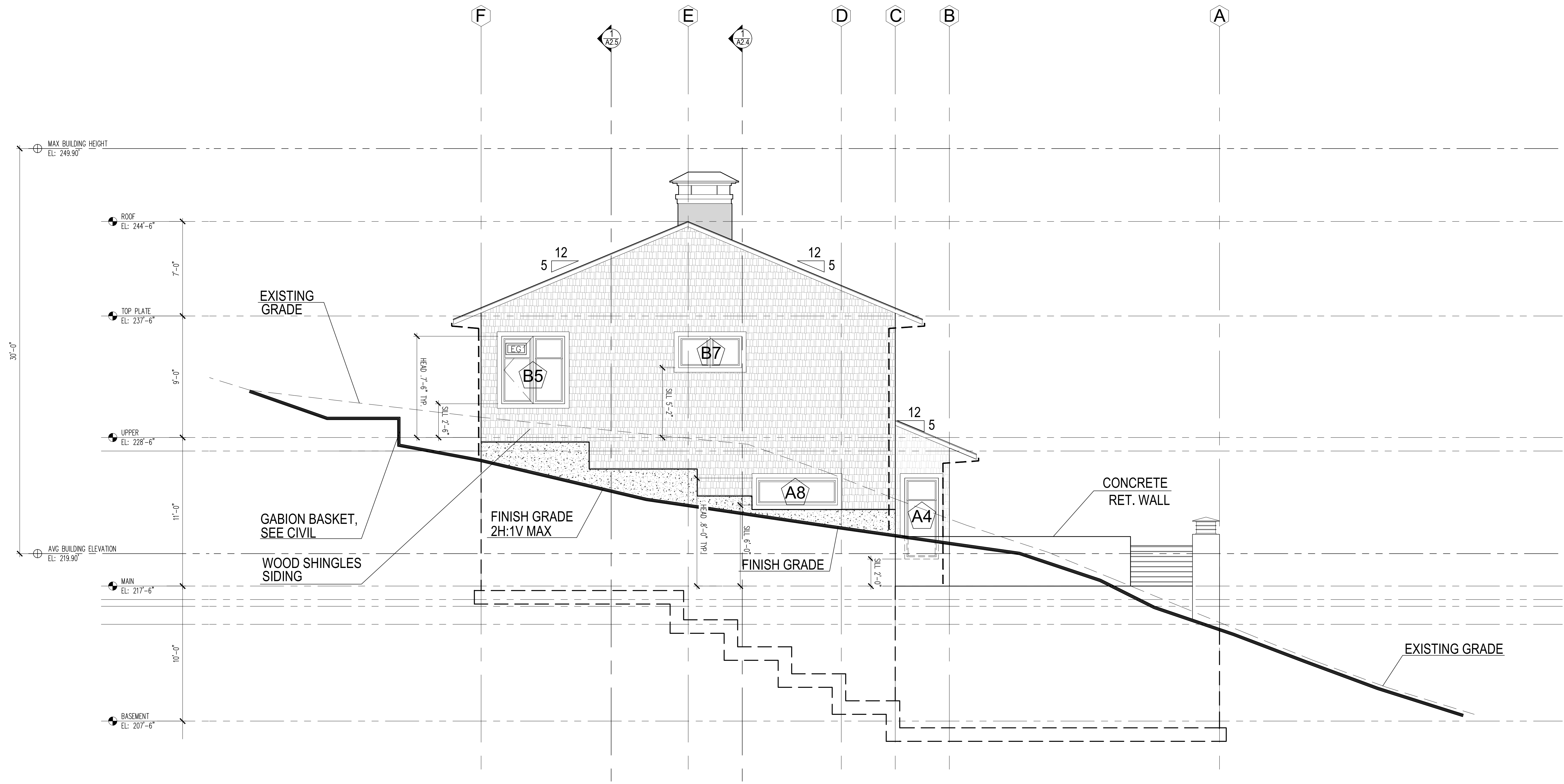
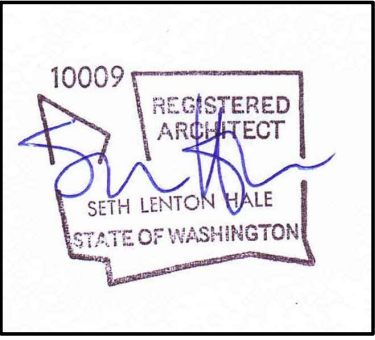


1 SOUTH ELEVATION
SCALE 1/4" = 1'

SG - SAFETY GLAZING
EG - EGRESS WINDOW

DS - DOWNSPOUT

SEE A3.1 FOR EXTERIOR FINISH MATERIALS TYP



1 NORTH ELEVATION
SCALE 1/4" = 1'

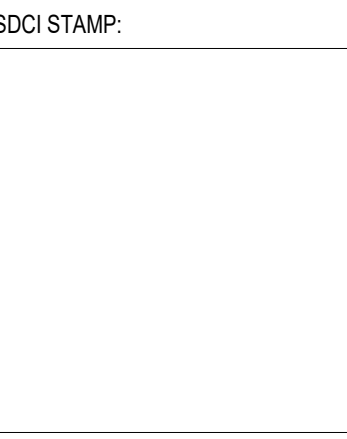
- SG - SAFETY GLAZING
- EG - EGRESS WINDOW
- DS - DOWNSPOUT

SEE A3.1 FOR EXTERIOR FINISH MATERIALS TYP

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION CORRECTION 2
11/10/2025	
01/13/2026	

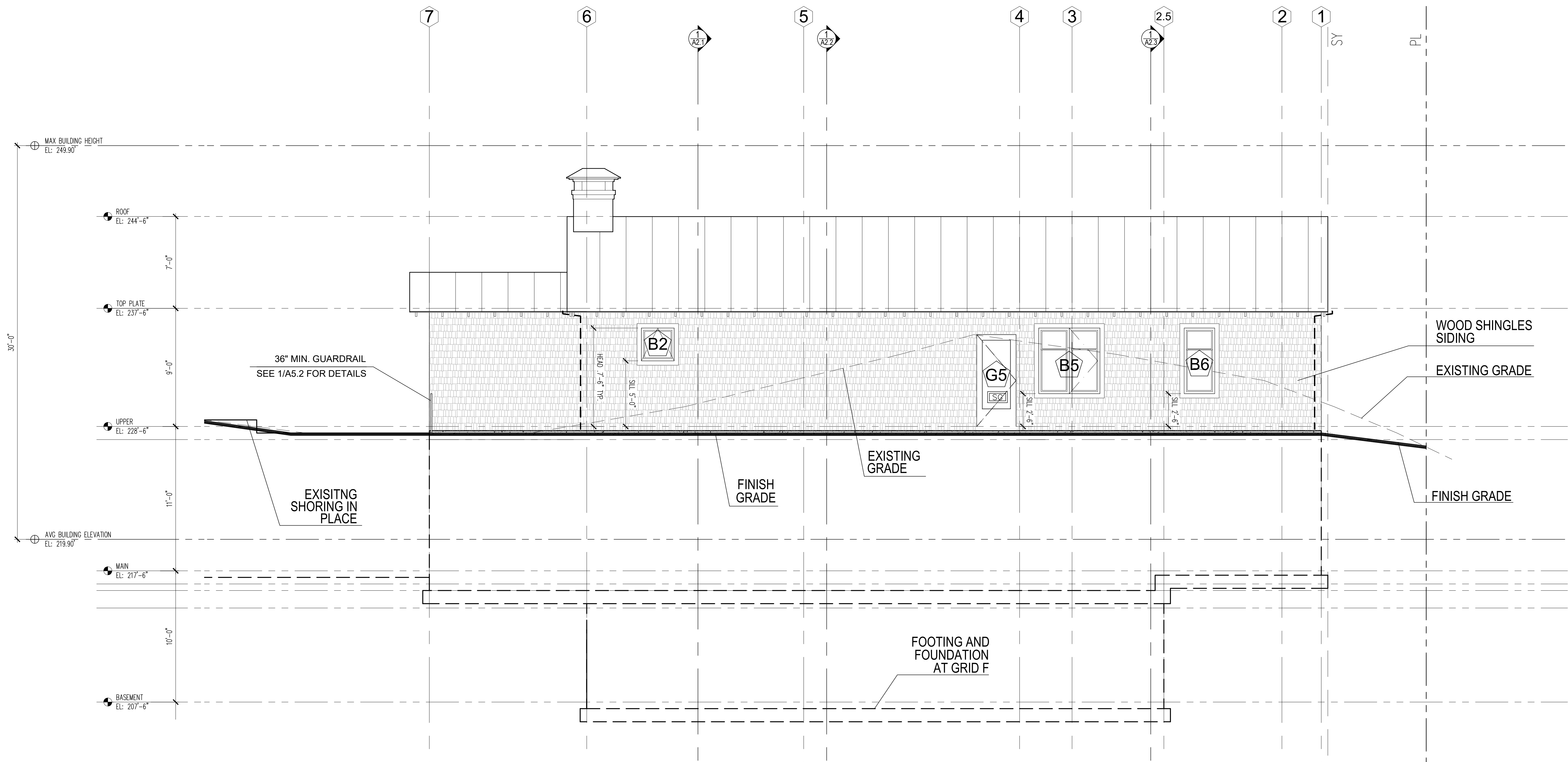
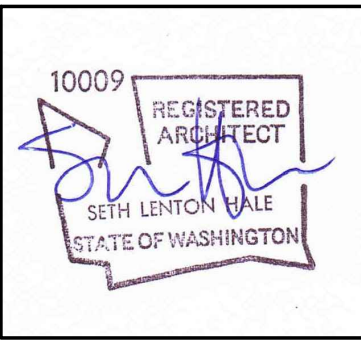


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
NORTH ELEVATION

SHEET NUMBER:



1 EAST ELEVATION
SCALE 1/4" = 1'

- SAFETY GLAZING
- EGRESS WINDOW
- DOWNSPOUT

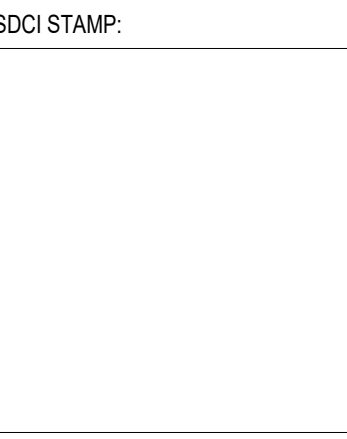
SEE A3.1 FOR EXTERIOR FINISH MATERIALS TYP

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

MARK	REVISION
	PERMIT
	CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2



PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
EAST ELEVATION

SHEET NUMBER:



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SEATTLE, WA 98109 | 206-300-5339
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GLAZING SCHEDULE								
DOOR REFERENCE	WINDOW REFERENCE	QTY	GLAZING EACH	TOTAL AREA SF	-	U FACTOR	UA	NOTES
WEST ELEVATION								
G1		1	16'-0" x 7'-2"	114.4 SF	114.4	N/A	N/A	AUTOMATIC GARAGE DOOR
G2		1	3'-0" x 7'-6"	24 SF	24	0.30	7.2	MAIN DOOR
G3		2	12'-0" x 8'-0"	96 SF	192	0.30	57.6	SIDING DOOR, 4 UNITS (TWO FIXED)
G4		2	5'-0" x 7'-6"	37.5 SF	75	0.30	22.5	SLIDING DOOR, 2 UNITS (1 FIXED)
G5		1	3'-0" X 7'-0"	21.0 SF	-	0.30		20 MINUTE DOOR, SELF CLOSING
	A1	1	7'-6" x 6'-0"	45 SF	45	0.30	13.5	3 FIXED UNITS
	A2	1	12'-0" x 7'-6"	72 SF	72	0.30	21.6	5 FIXED UNITS
	A3	2	8'-6" x 5'-0"	42.5 SF	85	0.30	25.5	4 UNITS (2 FIXED)
	B1	1	11'-8" x 5'-0"	58 SF	58	0.30	17.4	5 UNITS (3 FIXED)
	B2	1	2'-6" x 2'-6"	6.25 SF	6.25	0.30	1.9	
	B3	1	12'-0" x 5'-0"	60 SF	60	0.30	18.0	5 UNITS (3 FIXED)
TOTAL					732		185.2	
SOUTH ELEVATION								
	A4	1	2'-6" x 6'-0"	15 SF	15	0.30	4.5	
	A5	1	7'-2" x 6'-0"	43 SF	43	0.30	12.9	3 UNITS (1 FIXED)
	A6	2	6'-5" x 5'-0"	32 SF	64	0.30	19.2	3 FIXED UNITS
	A7	1	7'-2" x 2'-0"	14.4 SF	14.4	0.30	4.3	
	B4	1	7'-2" x 5'-0"	36 SF	36	0.30	10.8	3 UNITS (1 FIXED)
TOTAL					172		51.7	
NORTH ELEVATION								
	A4	1	2'-6" x 6'-0"	15SF	15	0.30	4.5	
	B5	1	4'-8" x 5'-0"	23 SF	23	0.30	6.9	2 UNITS (1 FIXED)
	B7	1	4'-8" x 2'-4"	11 SF	11	0.30	3.3	
	A8	1	6'-0" x 2'-0"	12 SF	12	0.30	3.6	
TOTAL					61		18.3	
EAST ELEVATION								
	B2	1	2'-6" x 2'-6"	6.25 SF	6.25	0.30	1.9	
	B5	1	4'-8" x 5'-0"	23 SF	23	0.30	6.9	2 UNITS (1 FIXED)
	B6	1	2'-4" x 5'-0"	6.25 SF	6.25	0.30	1.9	
G5		1	3'-0" x 7'-6"	11.6 SF	11.5	0.30	3.5	BACK DOOR AT LAUNDRY
TOTAL					6		1.9	
TOTAL					971		257.1	

NOTE:

- SEE ELEVATION PLANS FOR WINDOW ELEVATIONS
- SEE ELEVATION FOR WINDOW/DOOR FUNCTION
- SEE PLAN AND ELEVATIONS FOR SAFETY GLAZING LOCATIONS
- ALL FENESTRATION WILL BE NFRC CERTIFIED

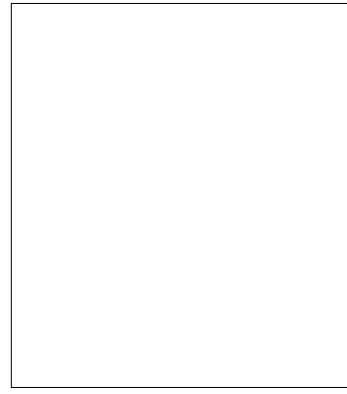
MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE
12/12/2024
09/17/2025
11/10/2025
01/13/2026

REVISION	MARK
PERMIT	
CORRECTION 1	
SETBACK DEVIATION	
CORRECTION 2	

SDCI STAMP:



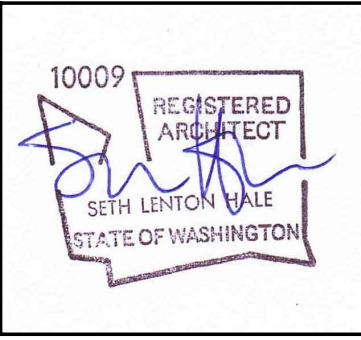
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
DOOR & WINDOW SCHEDULE

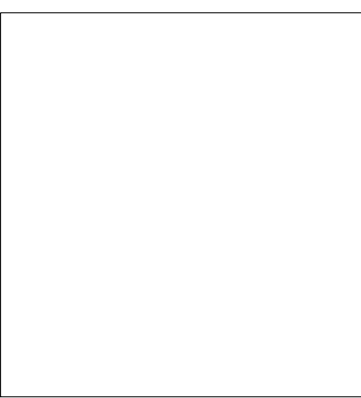
SHEET NUMBER:

A4.1



DATE	12/12/2024
REVISION	09/17/2025
PERMIT	11/10/2025
CORRECTION 1	01/13/2026
SETBACK DEVIATION	
CORRECTION 2	

SDCI STAMP:



PROJECT TEAM:
SETH HALE

PROJECT NUMBER:

2023.014

SHEET TITLE:

CODE REFERENCE
STAIR DETAIL
& SMOKE ALARM

SHEET NUMBER:

Smoke and carbon monoxide alarms must be provided in all required locations and must be:

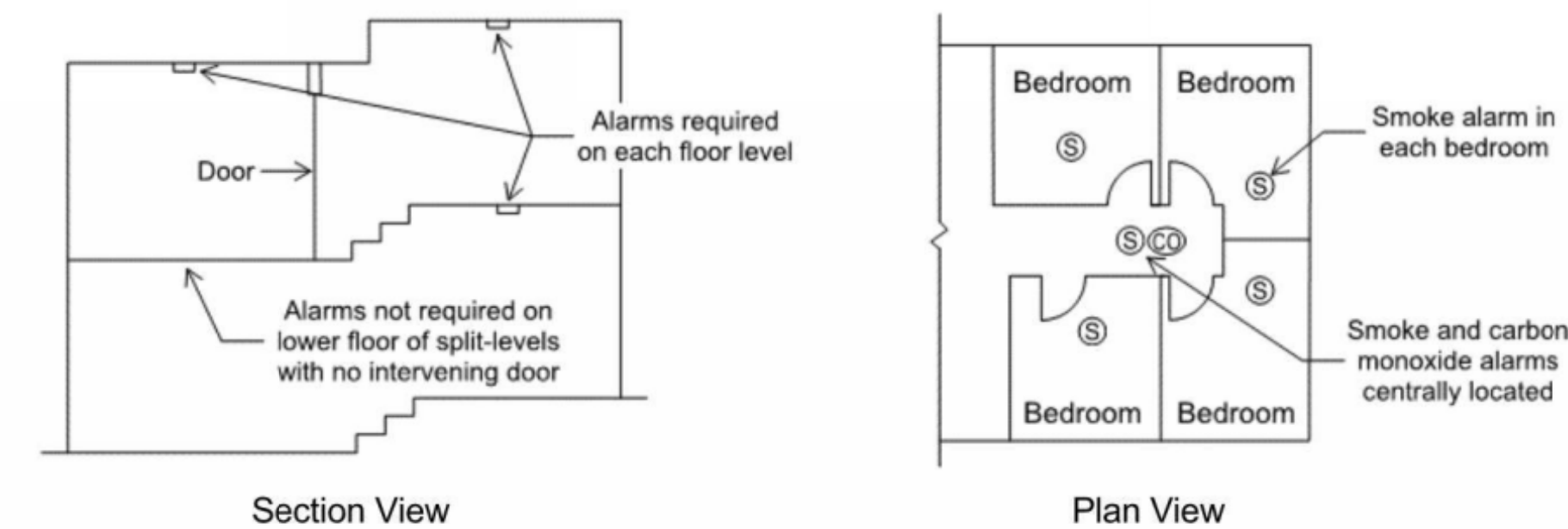
- audible in all parts of the house
- installed per manufacturer's instructions

New Houses (IRC R314 & R315)

Smoke alarms and carbon monoxide alarms are required and must be connected to the main electrical system with battery backup.

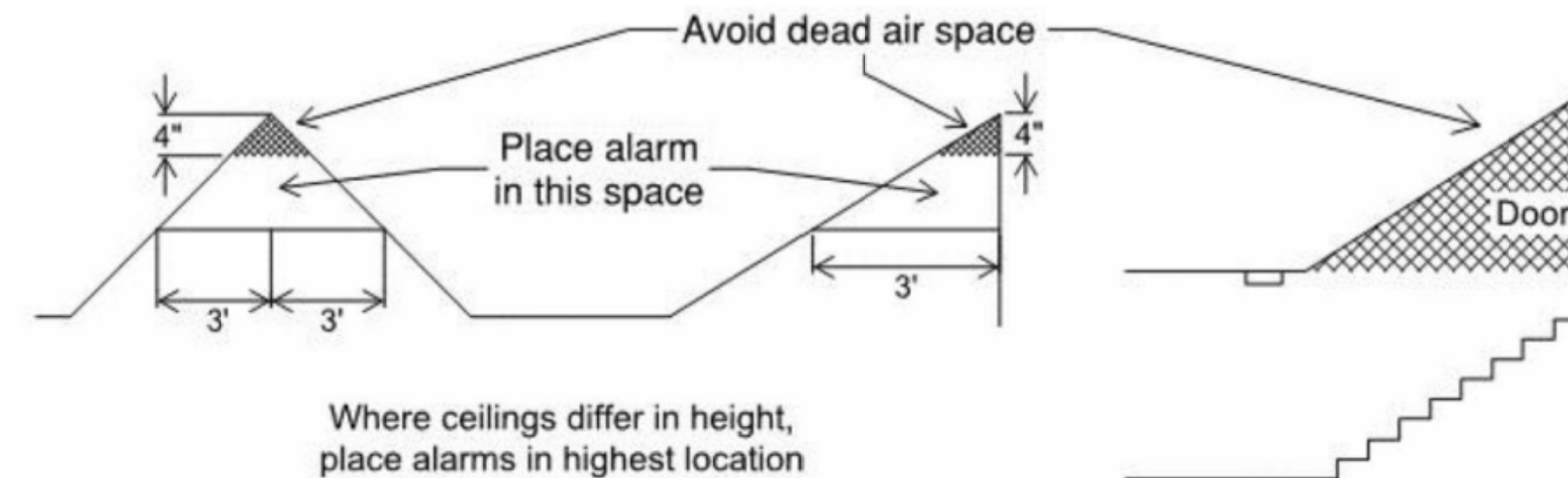
Required Locations

- Smoke alarms shall be located in each sleeping room and in napping areas in a family home child care.
- Smoke alarms and carbon monoxide alarms shall be located outside each sleeping area in the immediate vicinity of the bedrooms.
- Smoke alarms and carbon monoxide alarms shall be located on every floor level, including basements (does not include crawlspace and uninhabitable attics).
- In split level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level
- A carbon monoxide alarm is required in a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom.
- A combination alarm (combined smoke and carbon monoxide alarm) is acceptable in any required location.

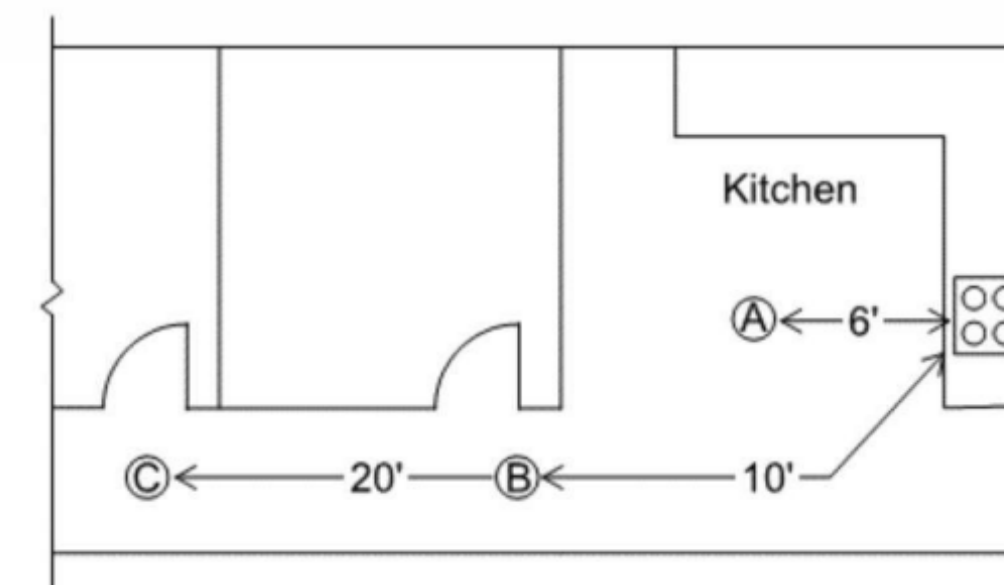


Smoke Alarm Location Limitations

- Wall mounted alarms must be not more than 12 inches from the adjoining ceiling surface.
- Avoid placing alarms less than 3 feet from supply registers of a forced air heating or cooling system and do not place alarms in the direct airflow of the registers.
- Avoid placing alarms within 3 feet horizontally from doors to bathrooms containing a bathtub or shower.
- Do not place alarms in spaces where temperatures may be above or below the alarm's operating temperature range.
- Do not place alarms within 3 feet of the blades of a ceiling fan.
- Alarms in peaked or sloped ceilings must be within 3 feet of the peak, measured horizontally, but not in the highest 4 inches of the ceiling, measured vertically. (See figure below)
- Avoid placing alarms in dead air spaces. (See figure below)



Smoke Alarms near Cooking Appliances



- A. Photoelectric smoke alarms must not be less than 6 feet from a permanent cooking appliance.
- B. Ionization smoke alarms with an alarm-silencing switch must not be less than 10 feet from a permanent cooking appliance.
- C. Ionization smoke alarms without an alarm-silencing switch must not be less than 20 feet from a permanent cooking appliance.

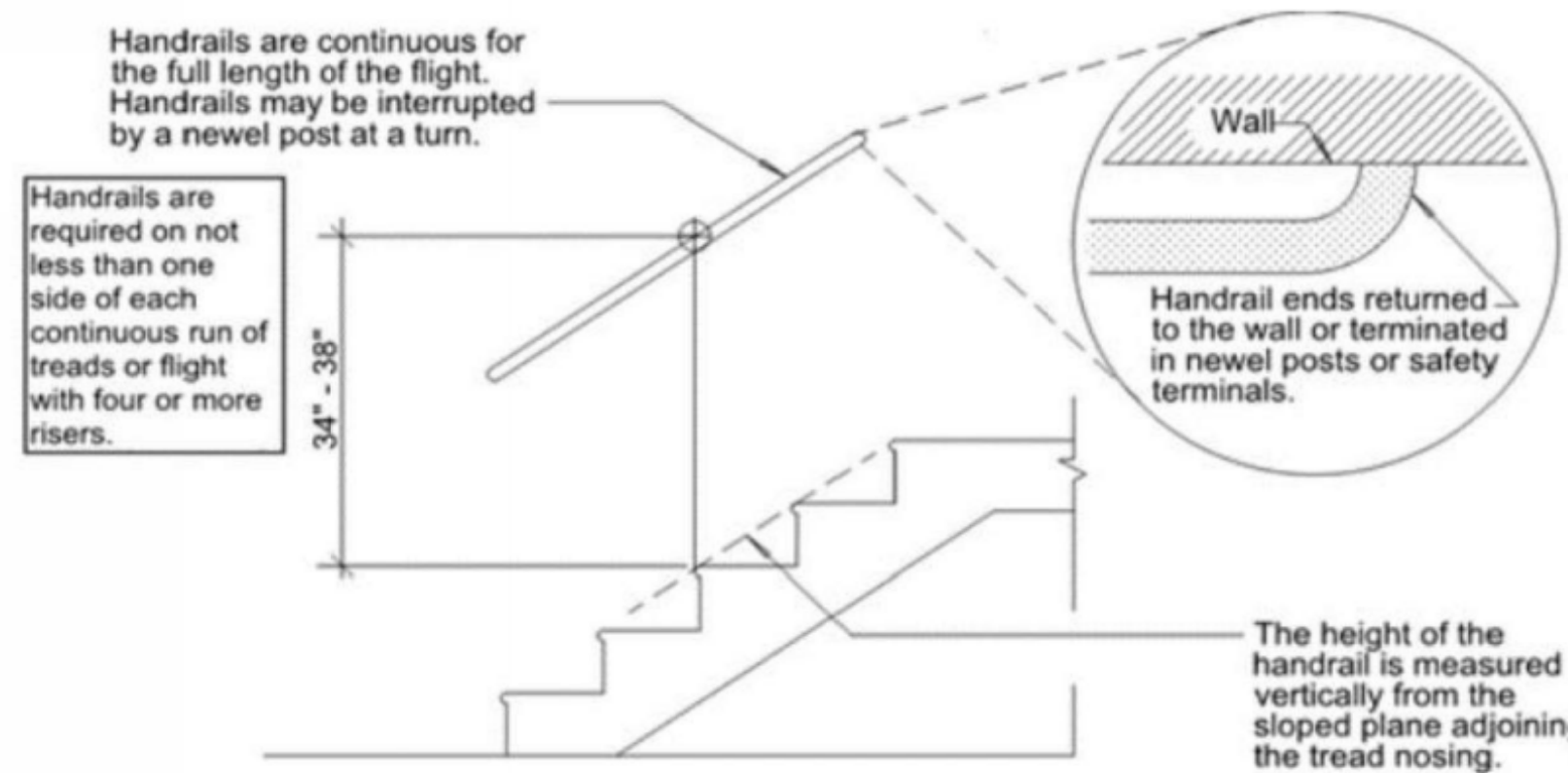
Carbon Monoxide Alarm Location Limitations

- Do not place alarms directly above or beside fuel-burning appliances.
- Do not place alarms in direct sunlight.
- Do not place alarms in low areas where children can reach. Do not place alarms behind curtains or any structure that might prevent carbon monoxide from reaching the sensor.

NOTE

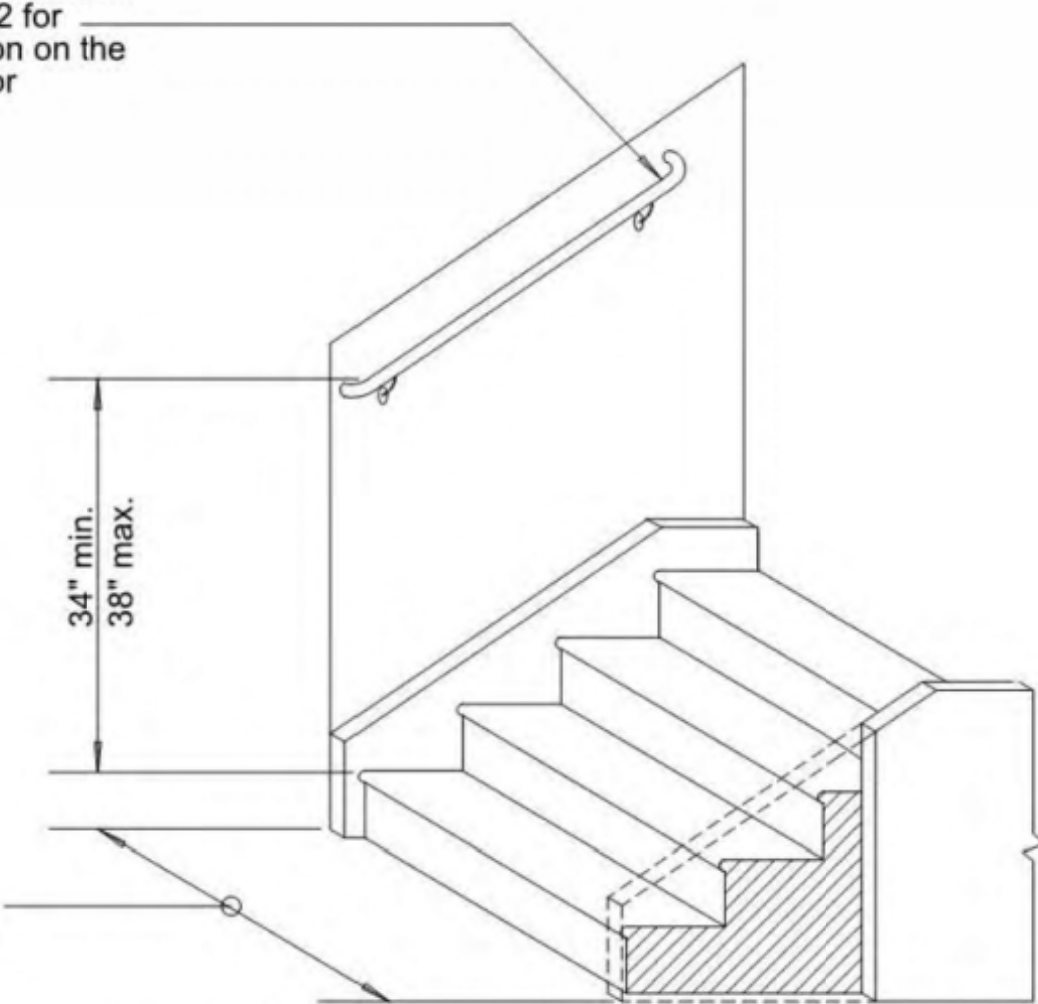
- CONTRACTORS SHALL VERIFY TO INSPECTOR ALL GUARD AND RAILING SHALL BE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5

Handrails are required on at least one side of each continuous run of treads or flight with four or more risers.

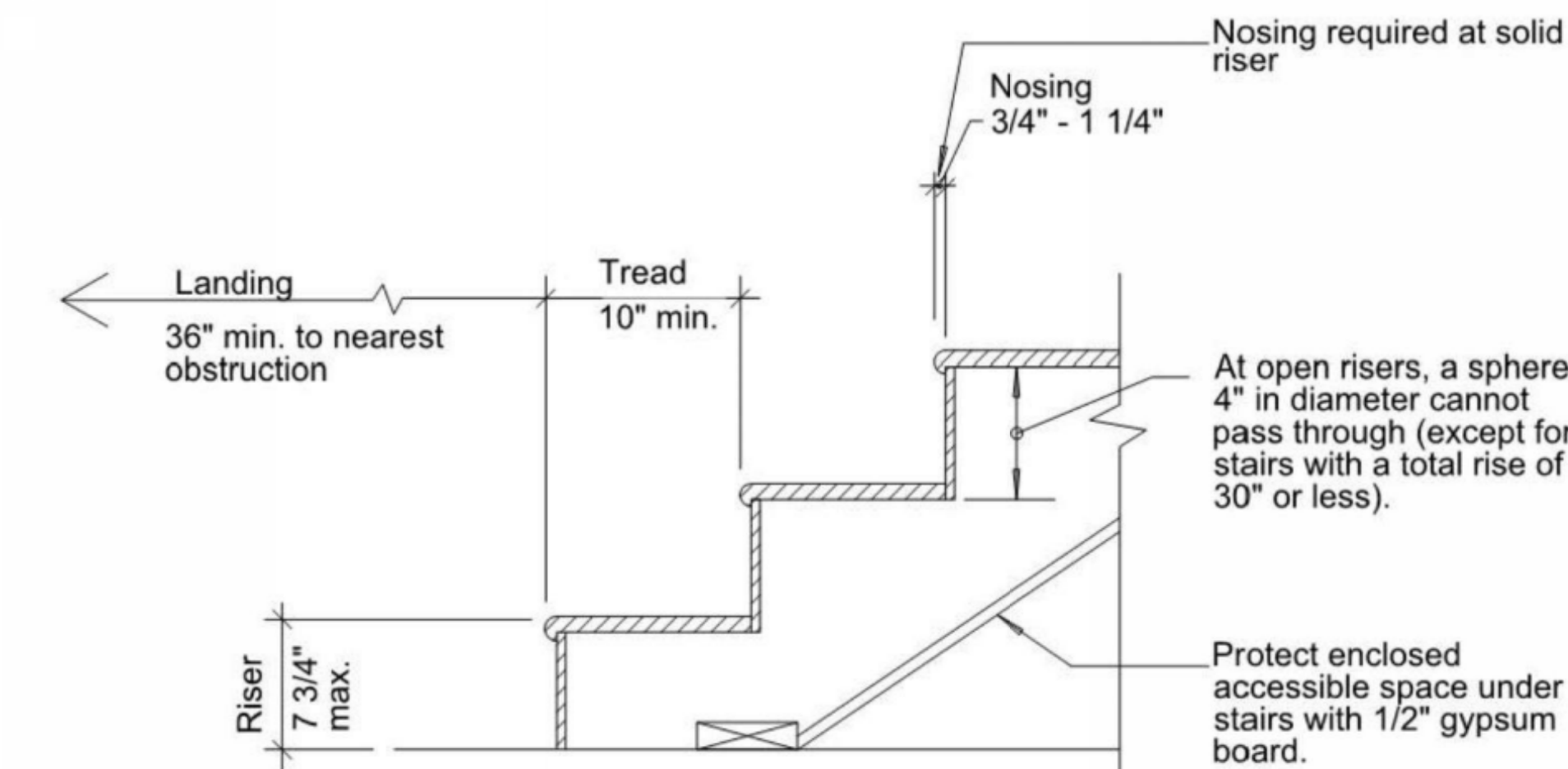
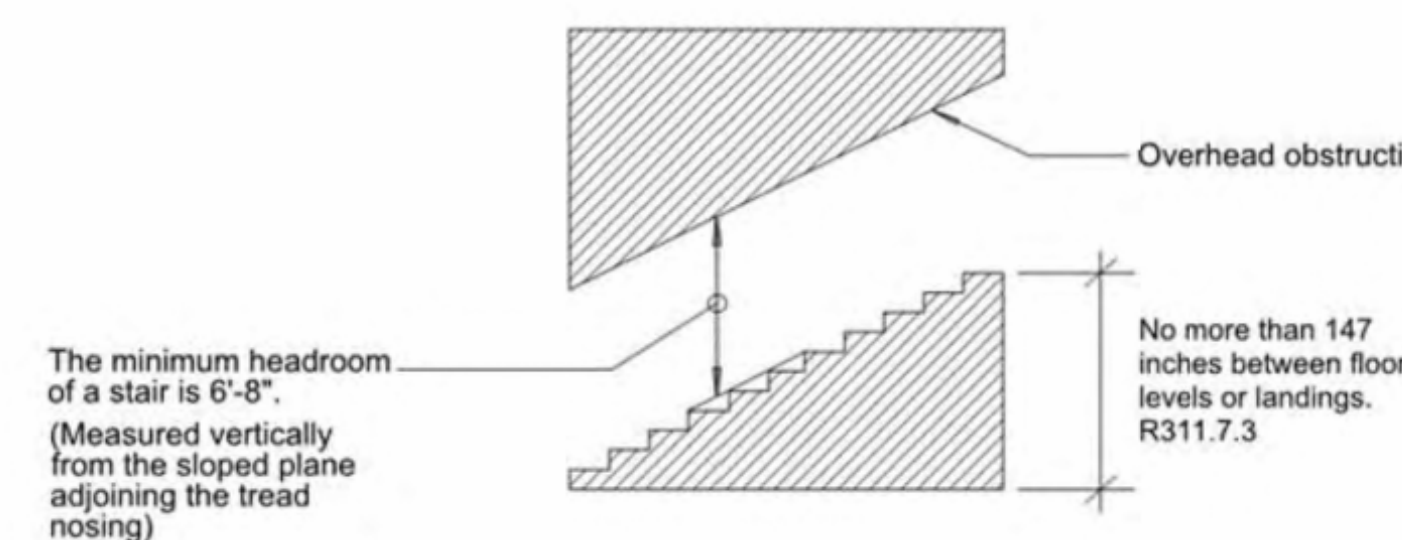


Stair runs with 4 or more risers require a handrail. See Tip Sheet 2 for more information on the requirements for handrails. R311.7.8

Minimum required stairway width is 36". R311.7.1



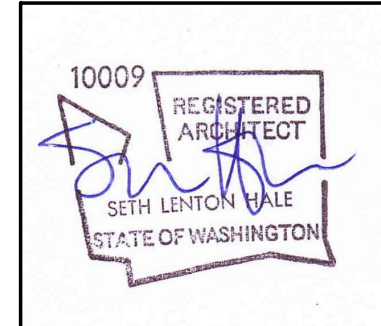
Typical Stair Elevation



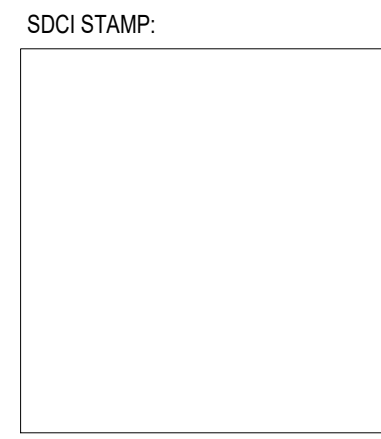
- **Stair treads and risers:** The largest tread or riser within any flight of stairs is not to exceed the smallest by more than 3/8". (R311.7.5)
- **Illumination:**
 - Interior stairways shall be provided with an artificial light source to illuminate landings and treads. There shall be a wall switch at each floor level to control the light source where the stairway has 6 or more risers. (R303.7)
 - Exterior stairways shall be provided with an artificial light source located at the top landing of the stairway, and located at the bottom landing where accessing a basement. (R303.8)
- **Handrails:** Handrails are required on at least one side for stairways with four or more risers. See Tip Sheet 2 for additional information regarding handrails. (R311.7.8)
- **Landings required:** Landings are required at the top and the bottom of stairways. A floor landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs. (R311.7.6)
- **Landing dimensions:** A landing extending the width of the stair and measuring a minimum of 36" in the direction of travel is required at the top and bottom of every stairway. (R311.7.6)
- **Circular, winding or spiral stairways:** For exceptions related to the construction of circular, winding, or spiral stairways. (R311.7.5.2.1 & R311.7.10)

CODE REFERENCE
STAIRS AND RAILING

CODE REFERENCE
SMOKE DETECTORS



DATE	REVISION	MARK
12/12/2024		
09/17/2025	CORRECTION 1	
11/10/2025	SETBACK DEVIATION	
01/13/2026	CORRECTION 2	

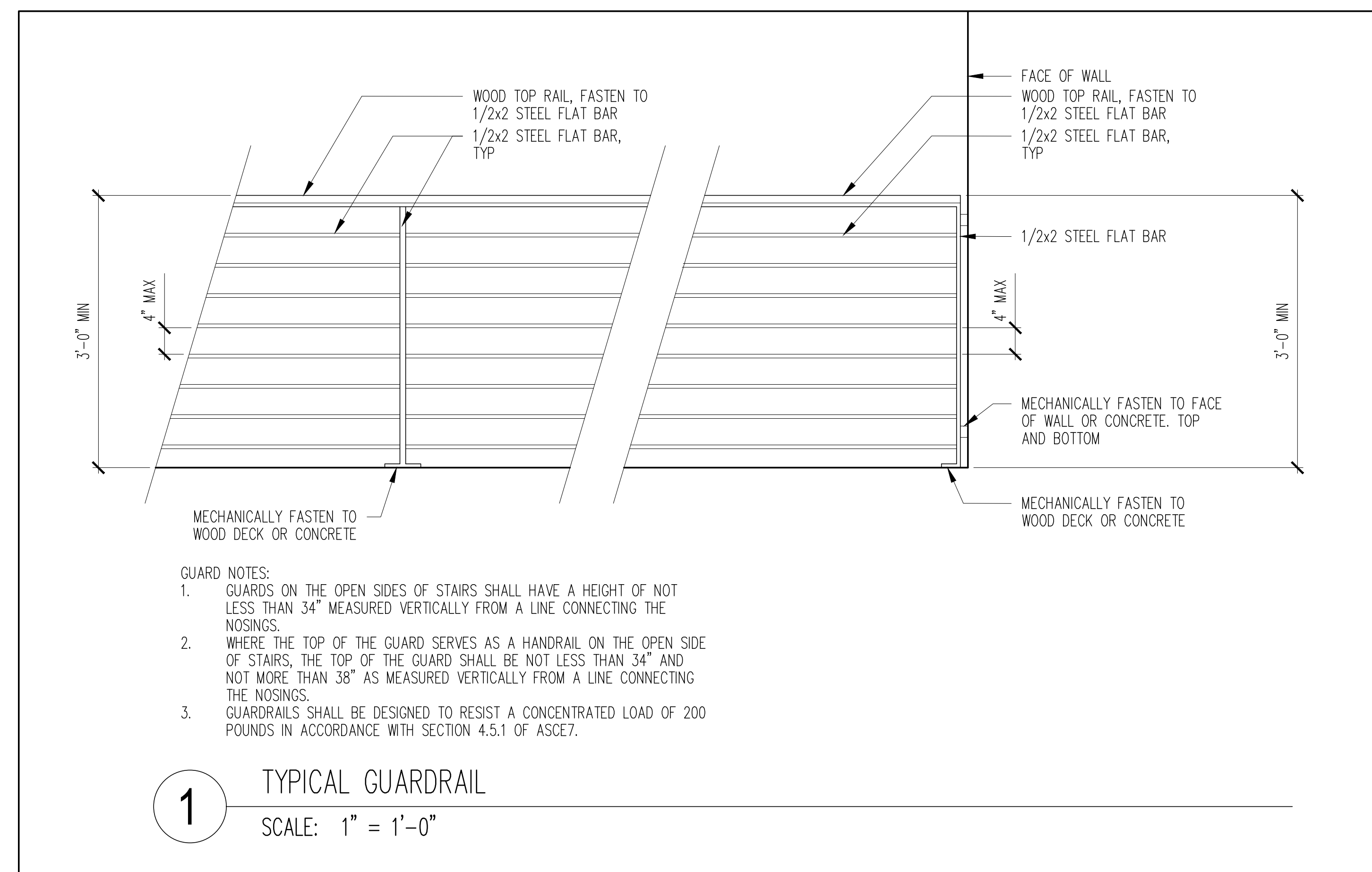


PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

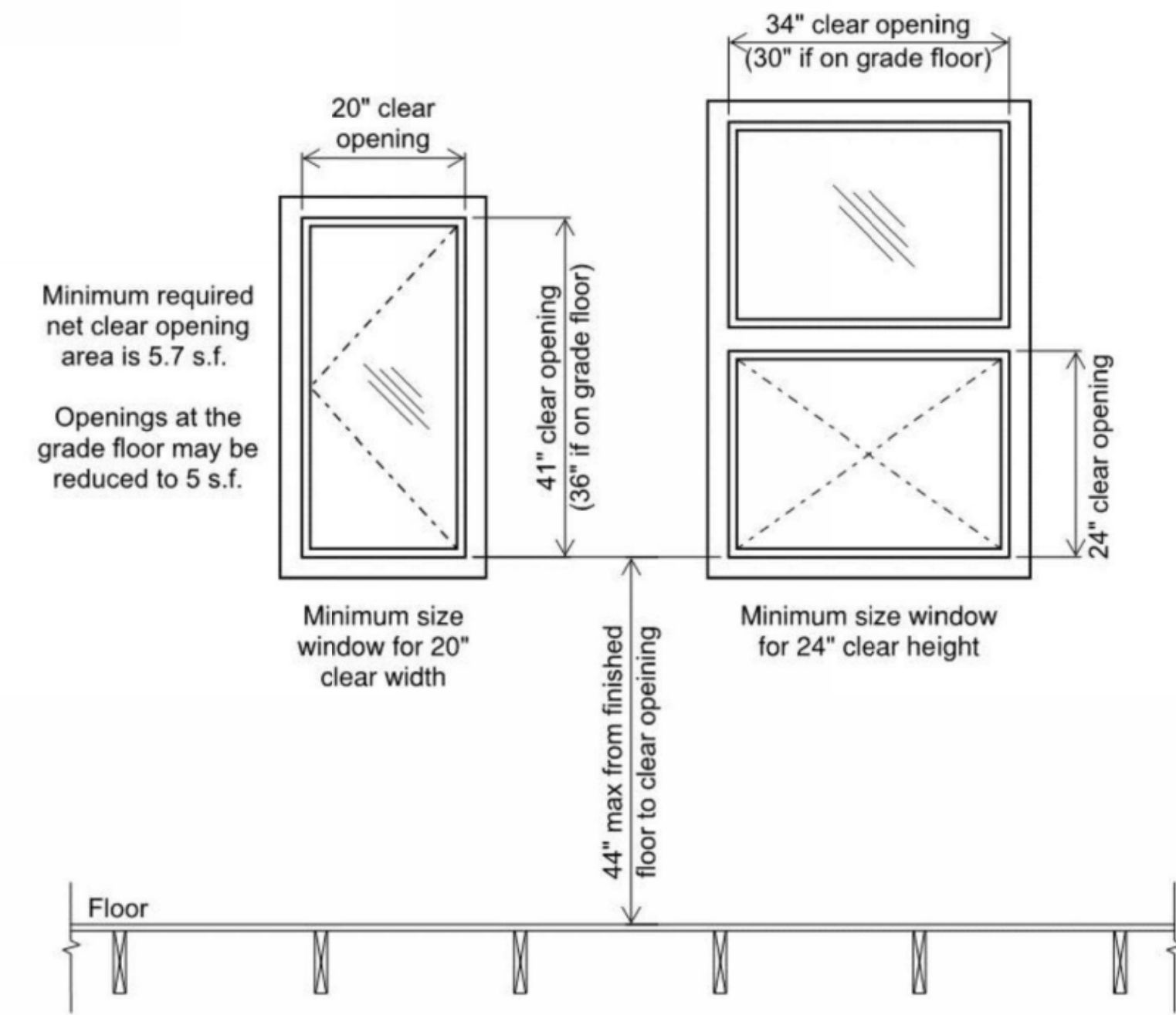
SHEET TITLE:
CODE REFERENCE:
GUARDRAIL,
GLAZING GENERAL,
EGRESS, FRAMING

SHEET NUMBER:



- GUARD NOTES:**
- GUARDS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT OF NOT LESS THAN 34" MEASURED VERTICALLY FROM A LINE CONNECTING THE NOSINGS.
 - WHERE THE TOP OF THE GUARD SERVES AS A HANDRAIL ON THE OPEN SIDE OF STAIRS, THE TOP OF THE GUARD SHALL BE NOT LESS THAN 34" AND NOT MORE THAN 38" AS MEASURED VERTICALLY FROM A LINE CONNECTING THE NOSINGS.
 - GUARDRAILS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 POUNDS IN ACCORDANCE WITH SECTION 4.5.1 OF ASCE7.

Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.



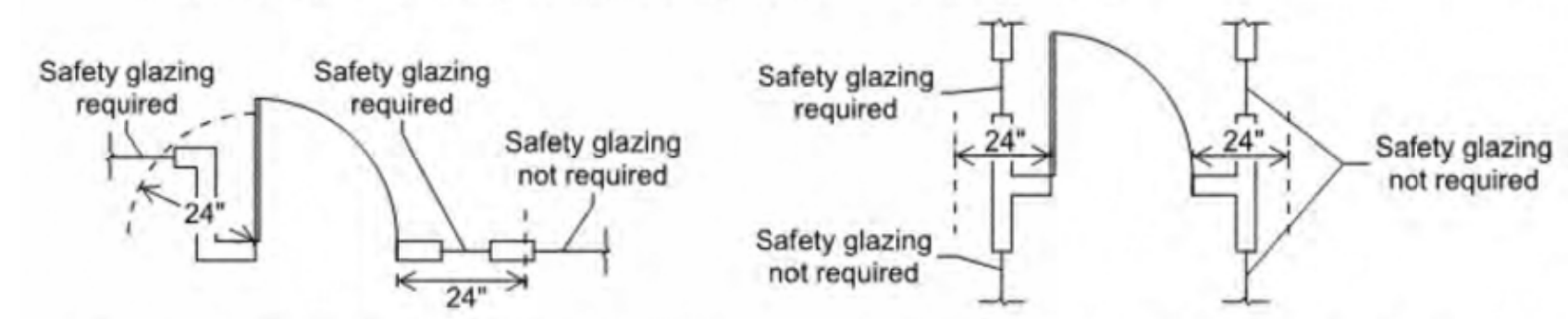
CODE REFERENCE
EGRESS OPENING

Safety Glazing Markings:

Where safety glazing is required, each pane must be provided with a manufacturer's label defining the type of glass and safety glazing standard to which it complies. The label must be permanently etched, fired, or embossed, on the glass or be a type that once applied cannot be removed without being destroyed.

Safety Glazing Required Locations:

- Glazing in Doors:** Safety glazing is required in fixed and operable panels of swinging, sliding, and bifold doors. Safety glazing is not required in a door if the glazed openings do not allow the passage of a 3 inch sphere, or the glazing in the door is decorative.
- Glazing Adjacent to Doors:** Glazing adjacent to doors is required in the following locations if the bottom edge of the glazing is less than 60 inches above the walking surface: Within 24 inches of either side of the door if glazing is in the same plane as the door, or if glazing is in a wall perpendicular to the door within 24 inches on the hinge side of an inswing door. Safety glazing is not required if there is an intervening wall or permanent barrier between the door and the glazing.



3. Glazing in Windows: Safety glazing in windows is required if the individual panel meets all of the following requirements:

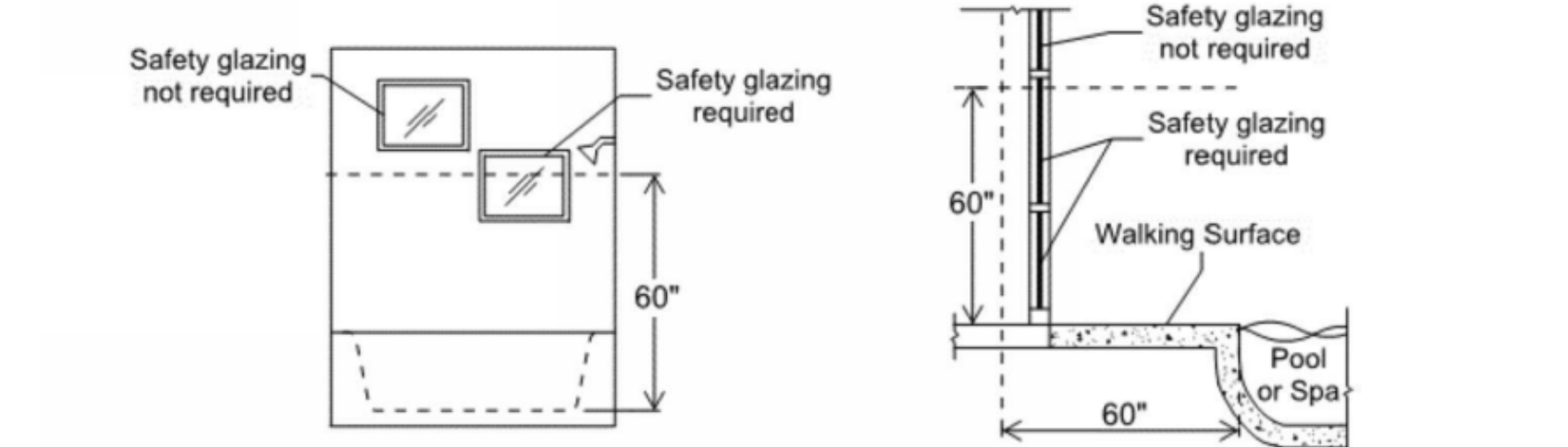
- Exposed area of the individual panel is greater than 9 square feet.
- The bottom edge of the glazing is less than 18 inches from the floor.
- The top edge of the glazing is more than 36 inches above the floor.
- There is a walking surface within 36 inches, measured horizontally, from the glazing.

Exceptions:

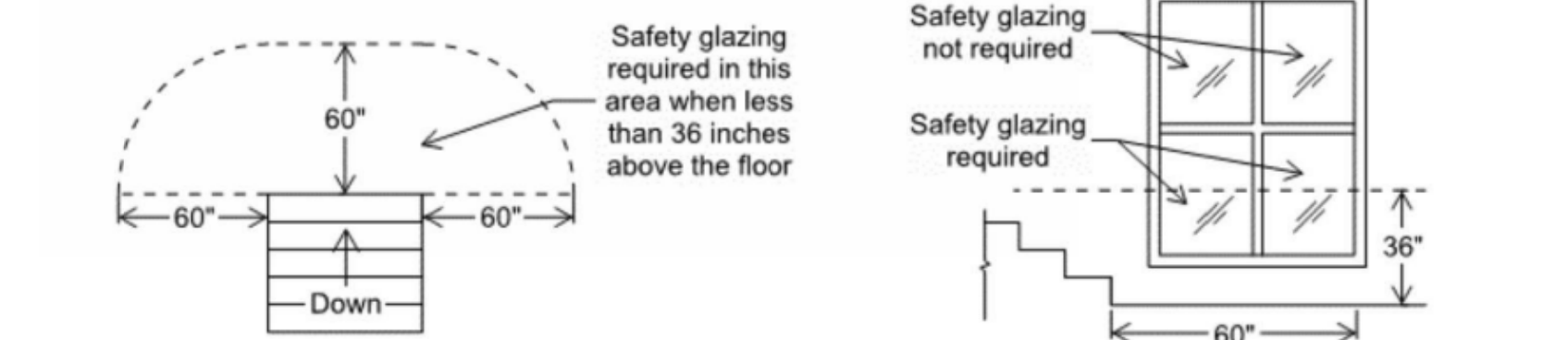
- Decorative glazing.
- Where a horizontal rail capable of resisting 50 pounds per lineal foot of force without making contact with the glass is installed on the accessible side of the glazing 34-38 inches above the walking surface.

4. Glazing in Railings and Guards: All glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, is required to be safety glazing.

5. Glazing and Wet Surfaces: Glazing in walls, enclosures, or fences around showers, bathtubs, pools, hot tubs, spas, saunas, and steam rooms where the bottom edge of the glazing is less than 60 inches from the standing or walking surface is required to be safety glazing. Safety glazing is not required where the glazing is more than 60 inches, horizontally, from the edge of the water.



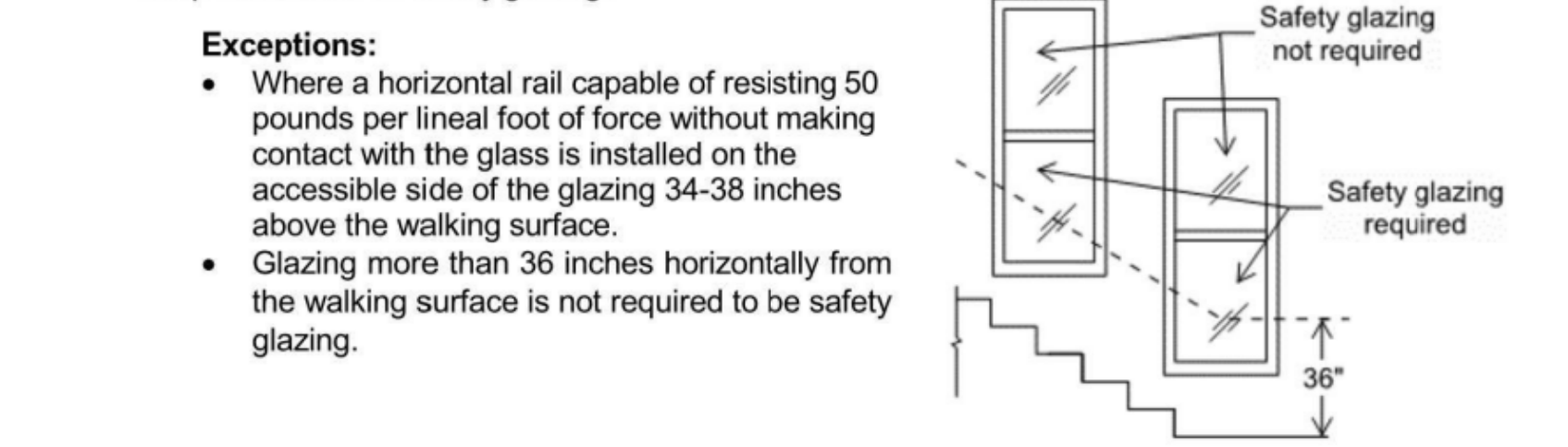
6. Glazing Adjacent to Bottom Stair Landings: Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60 inch horizontal arc from the bottom tread must be safety glazing.



7. Glazing Adjacent to Stairs and Ramps: Glazing where the bottom edge is less than 36 inches above the plane of the adjacent walking surface of stairways, ramps, and landings between stair flights and ramp runs, must be safety glazing.

Exceptions:

- Where a horizontal rail capable of resisting 50 pounds per lineal foot of force without making contact with the glass is installed on the accessible side of the glazing 34-38 inches above the walking surface.
- Glazing more than 36 inches horizontally from the walking surface is not required to be safety glazing.



CODE REFERENCE
GLAZING CODE REQUIREMENTS

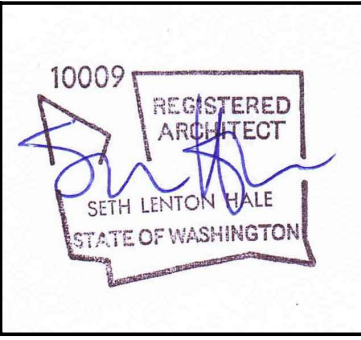
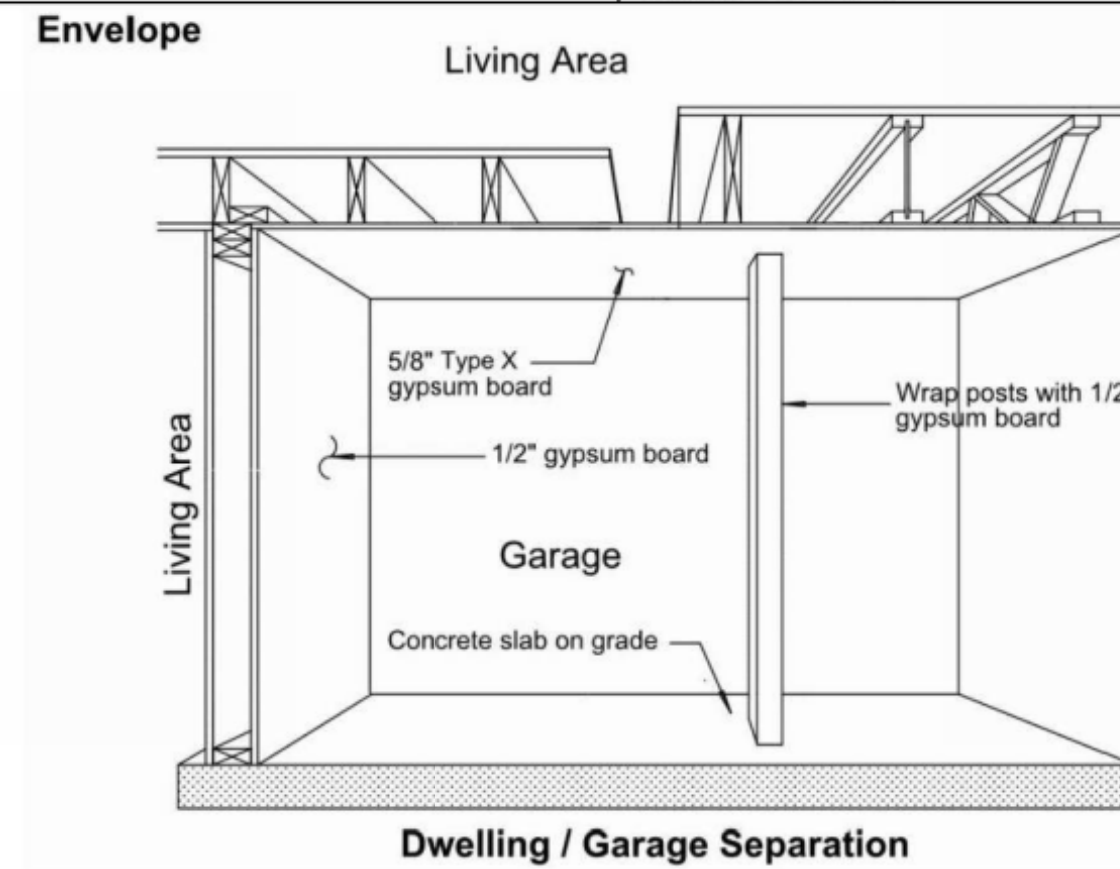


Table R302.6 - Dwelling-Garage Separation

Separation	Material
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the garage side.
From habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent.
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area



Fastening per IRC Table R702.3.5:

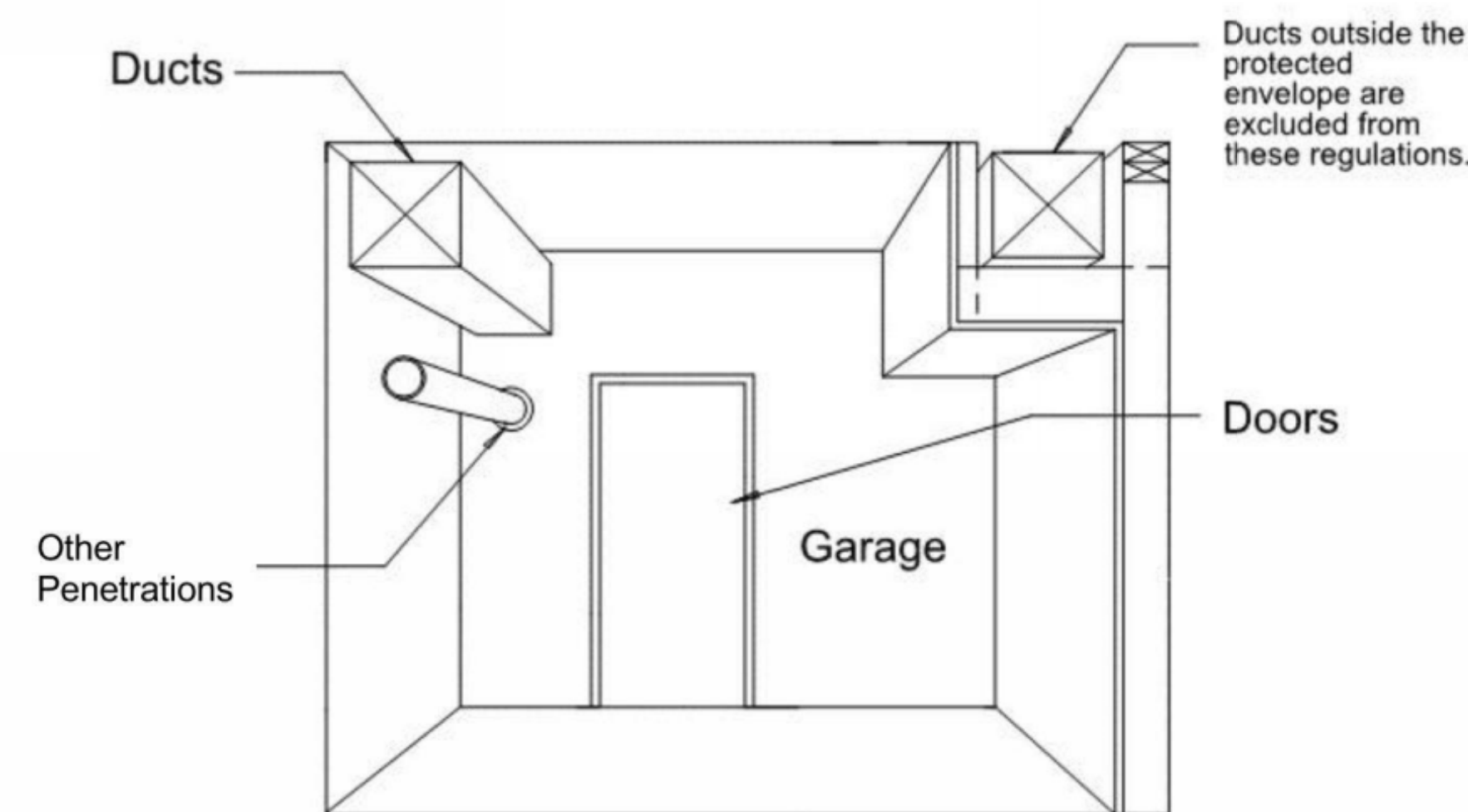
5/8" Type X at Ceiling:

- Fasten with 6d cooler nails @ 6" o.c. or drywall screws @ 6" o.c. when framing is maximum 24" o.c.

1/2" Gypsum Board at Walls:

- Fasten with 5d cooler nails @ 8" o.c. or drywall screws @ 16" o.c. when framing is maximum 16" o.c.
- Fasten with 5d cooler nails @ 8" o.c. or drywall screws @ 12" o.c. when framing is maximum 24" o.c.

Penetrations (of the protected envelope)



Duct Penetrations:

Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage must be a minimum of No. 26 gage sheet metal with no register outlets (openings) into the garage. R302.5.2

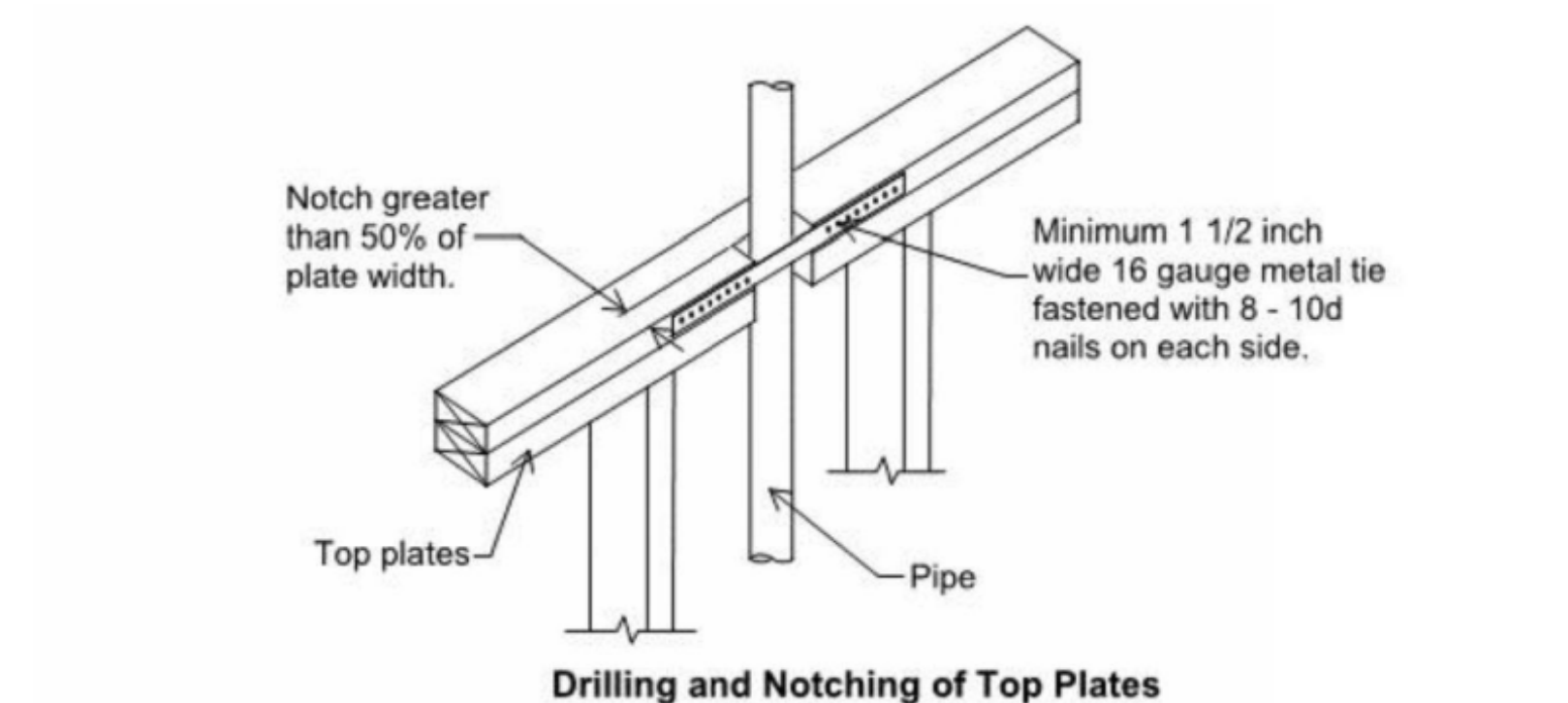
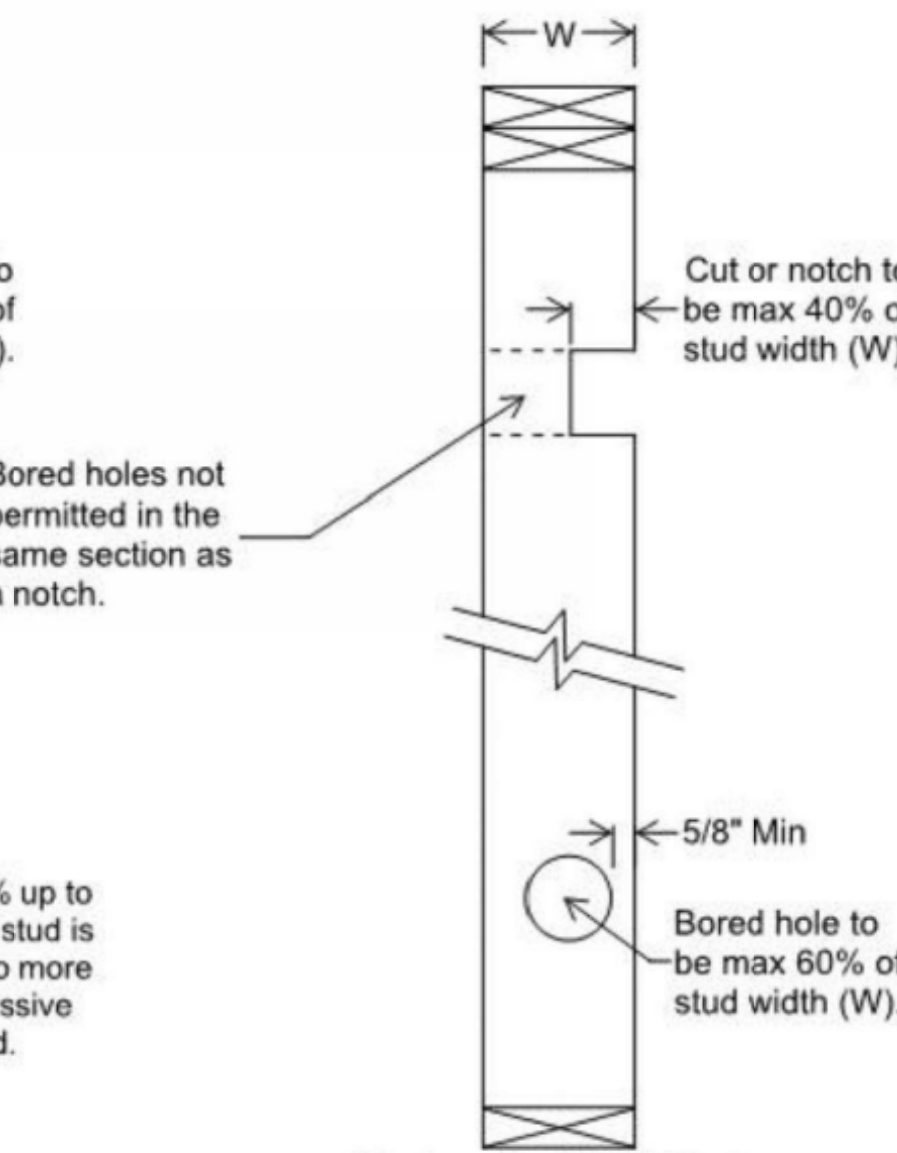
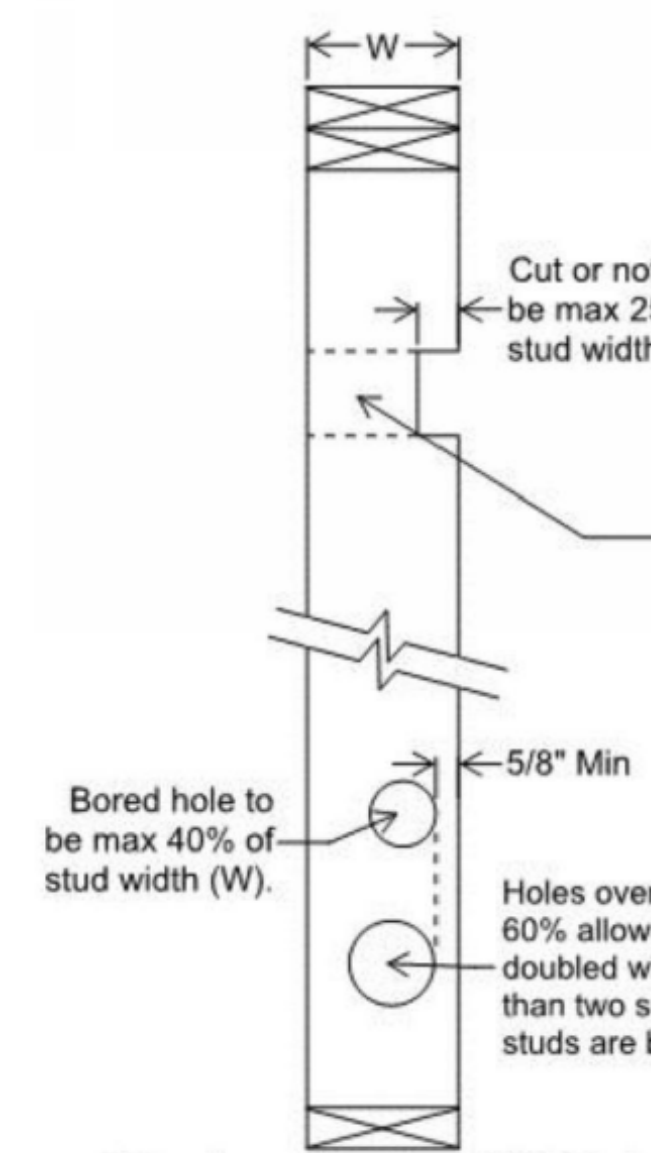
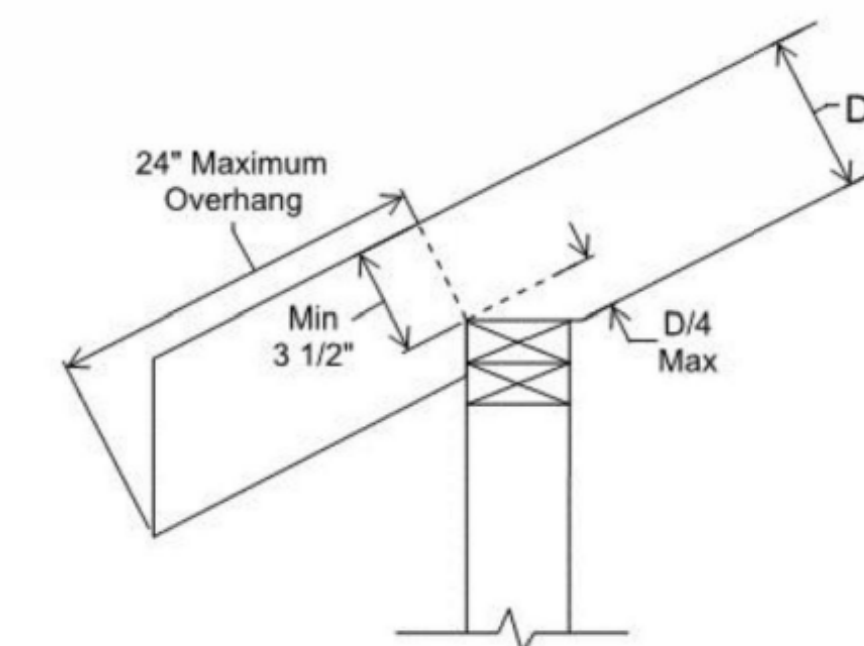
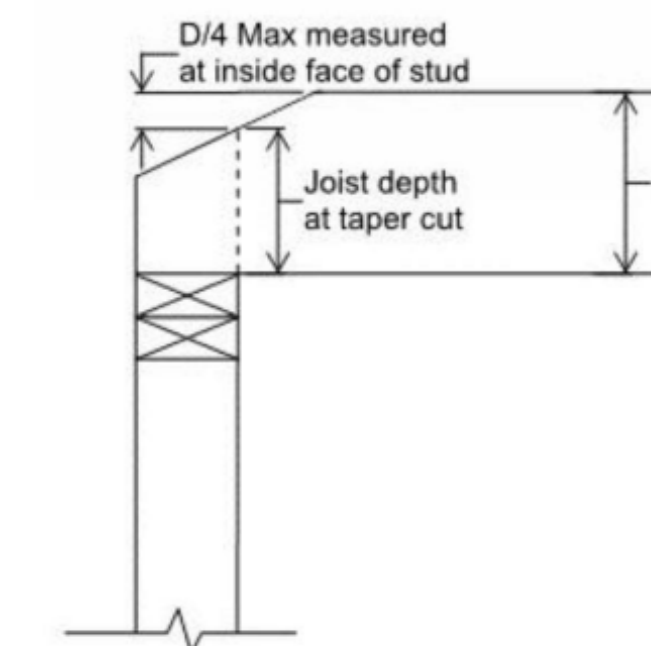
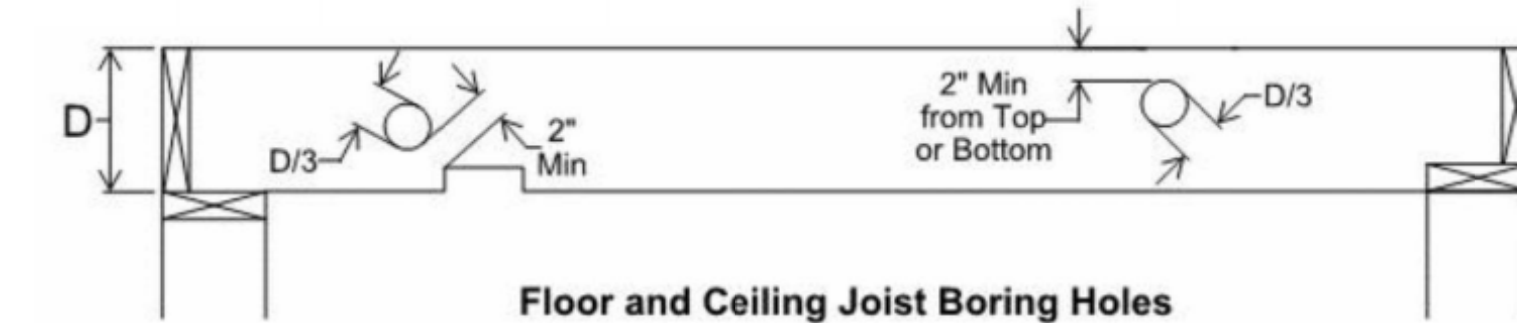
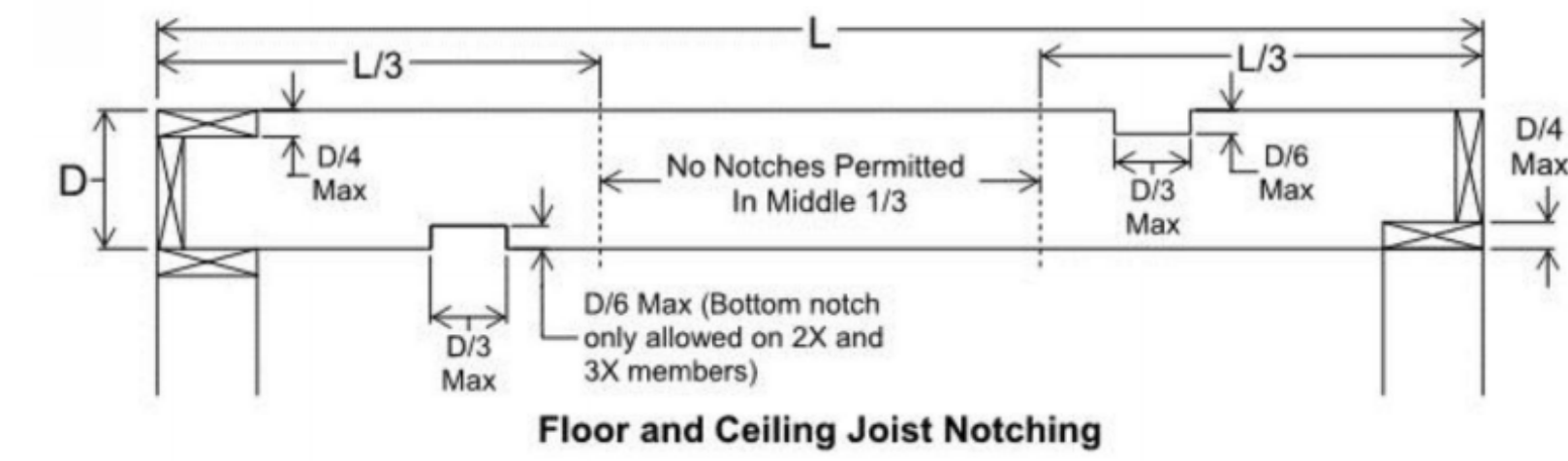
Other Penetrations:

Penetrations through the required separation must be protected at openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E 136 requirements. R302.11 Fireblocking Item 4.

Doors:

Doors separating the garage and living spaces shall be 1-3/8" solid wood, solid or honeycomb core steel doors not less than 1-3/8" thick, or 20-minute rated doors. These doors shall also be equipped with a self-closing device. These doors shall not open into a sleeping room.

1. CODE REFERENCE
GARAGE SEPARATION



2. CODE REFERENCE
NOTCHING OF CONSTRUCTION FRAMING

MERCER ISLAND RESIDENCE

5236 W MERCER WAY
MERCER ISLAND, WA 98125
SDCI PERMIT#: XXX

DATE	REVISION
12/12/2024	PERMIT CORRECTION 1
09/17/2025	SETBACK DEVIATION
11/10/2025	CORRECTION 2
01/13/2026	

MARK	REVISION
	PERMIT CORRECTION 1
	SETBACK DEVIATION
	CORRECTION 2

SDCI STAMP:



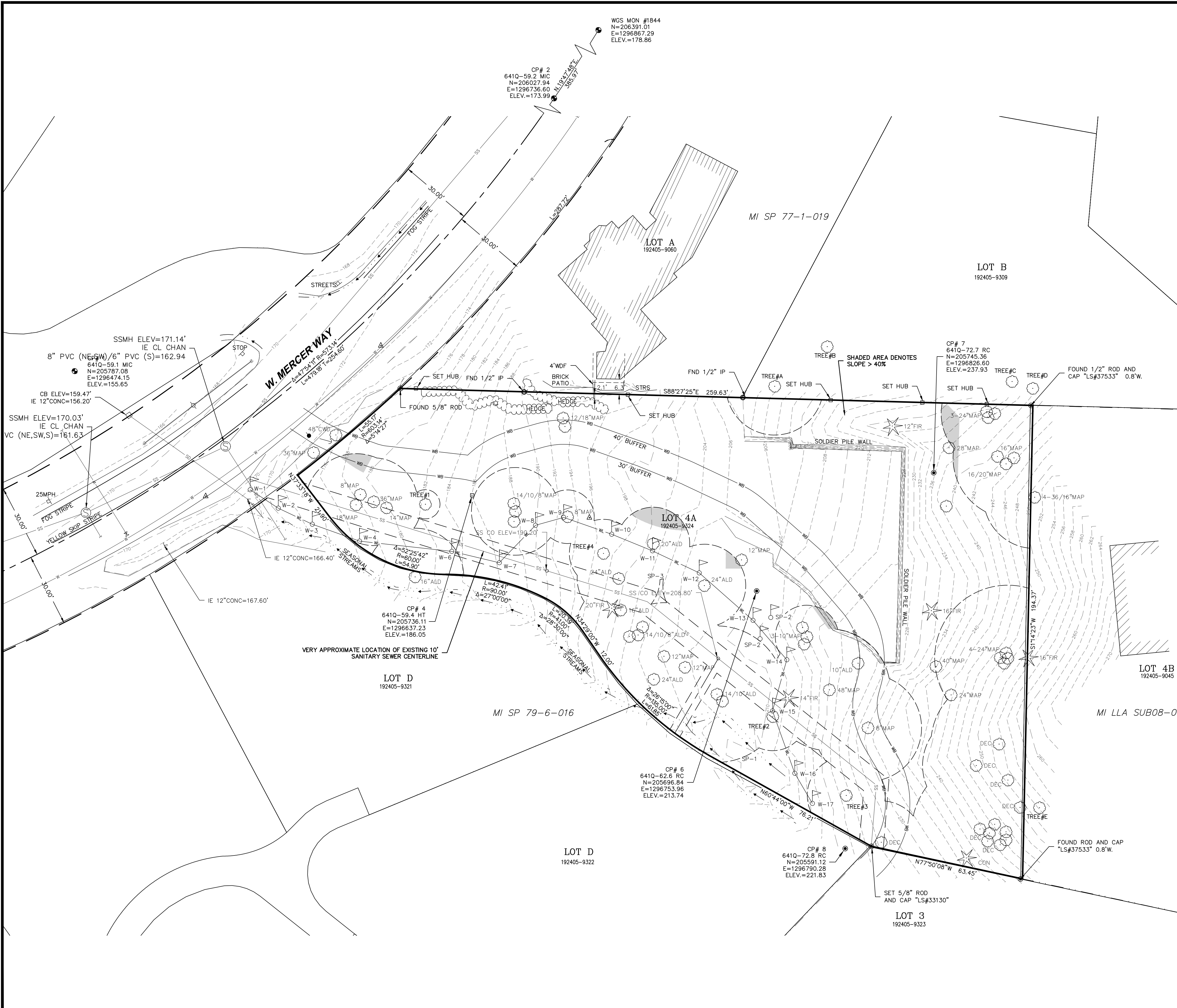
PROJECT TEAM:
SETH HALE

PROJECT NUMBER:
2023.014

SHEET TITLE:
CODE REFERENCE:
GARAGE SEPARATION FRAMING

SHEET NUMBER:

FILE NAME: P:\WORK\17387_5236 WEST MERCER WAY (SFA) CIVIL ENGINEERING SHEETS\17387-EC.DWG
 SAVE TIME: 4/18/2023 8:48:41 AM PLOT TIME: 1/29/2026 10:15 AM
 USER NAME: TYLER CHRISTOFFERSON



RECORD LEGAL DESCRIPTION:
 LOT 4A OF THE REVISED MILLS LOT LINE REVISION.

REFERENCES:
 REVISED MILLS LOT LINE REVISION, MI LLA #SUB08-003. VOL. 265, PG. 020.
 AF#20090710900001

LEGEND:

- WATER VALVE
- HYDRANT
- SOIL TEST PIT
- WETLAND FLAG
- WATER METER
- MANHOLES (SS/SD)
- CB
- POWER/UTILITY POLE
- GUY ANCHOR
- POWER TRANSFORMER
- POWER/TELEPHONE VAULT
- POWER METER
- TELEPHONE/TV RISER
- GAS VALVE
- JUNCTION BOX
- GAS METER
- STREET LIGHT LUMINAIRE
- SPOT ELEVATION
- SIGN
- MAILBOX
- ROCKERY
- CONIFEROUS TREE
- DECIDUOUS TREE
- CASED MONUMENT
- MAGNETIC NAIL W/ WASHER
- REBAR AND CAP
- HUB AND TACK
- CENTER LINES
- PROPERTY LINES
- RIGHT-OF-WAY LINES
- LOT LINES
- DITCH LINE
- FLOW LINE
- WATER LINE
- SS
- SD
- G
- UP
- UT
- LTV
- UFO
- P
- OHL
- CHAIN LINK FENCE
- WIRE FENCE
- WOOD FENCE
- SHADED AREA DENOTES SLOPE > 40%

NOTES:

HORIZONTAL DATUM: NAD 1983/91 BASED ON FOUND MONUMENTS IN WEST MERCER WAY.
 VERTICAL DATUM: NAVD 88 BASED ON FOUND MONUMENTS IN WEST MERCER WAY.
 SITE AREA: 37,350 SQUARE FEET, MORE OR LESS.
 ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS OTHERWISE NOTED.
 THE LOCATION AND DESCRIPTION OF ALL SURVEY MARKERS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS TAKEN IN APRIL, 2017, UNLESS OTHERWISE INDICATED.
 WORK PERFORMED IN CONJUNCTION WITH THIS SURVEY UTILIZED THE FOLLOWING EQUIPMENT AND PROCEDURES: (A) 1" TRIMBLE S6 SERIES ELECTRONIC TOTAL STATION, MAINTAINED TO THE MANUFACTURER'S SPECIFICATIONS PER W.A.C. 332-130-100. (B) FIELD TRAVERSE, EXCEEDING REQUIREMENTS SET FORTH IN W.A.C. 332-130-090.
 THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL EASEMENTS.
 THIS TOPOGRAPHIC SURVEY DRAWING ACCURATELY PRESENTS SURFACE FEATURES LOCATED DURING THE COURSE OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED SOLELY UPON INFORMATION PROVIDED BY OTHERS AND PACE ENGINEERS, INC. DOES NOT ACCEPT RESPONSIBILITY OR ASSUME LIABILITY FOR THEIR ACCURACY OR COMPLETENESS. CONTRACTOR/ENGINEERS SHALL VERIFY EXACT SIZE AND LOCATION PRIOR TO CONSTRUCTION.
 CALL FOR LOCATE: UTILITY LOCATION SERVICE: 811

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: AS SHOWN DATE: 1/29/2026
 DESIGNED BY: JP CHECKED BY: TC
 PACE PROJECT NO. 17387

DATE: _____
 REVISION: _____
 SYM: _____

PACE Engineers
 17255 Kirkland Way, Suite 300
 Kirkland, WA 98033
 P: 425.827.2014
 www.paceengs.com

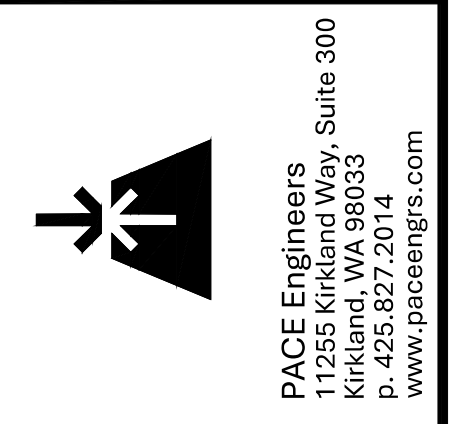
CHRISTOFFERSON
 TYLER CHRISTOFFERSON
 1981
 REGISTERED PROFESSIONAL ENGINEER
 124726

ORIGINAL COPY OF DIGITALLY SIGNED DOCUMENT AVAILABLE UPON REQUEST

N5 ARCHITECTURE
 4200 STONE WAY N
 SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
EXISTING CONDITIONS

C0.1



ORIGINAL COPY OF DIGITALLY SIGNED DOCUMENT AVAILABLE UPON REQUEST

N5 ARCHITECTURE
4200 STONE WAY N
SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
TREE PRESERVATION PLAN

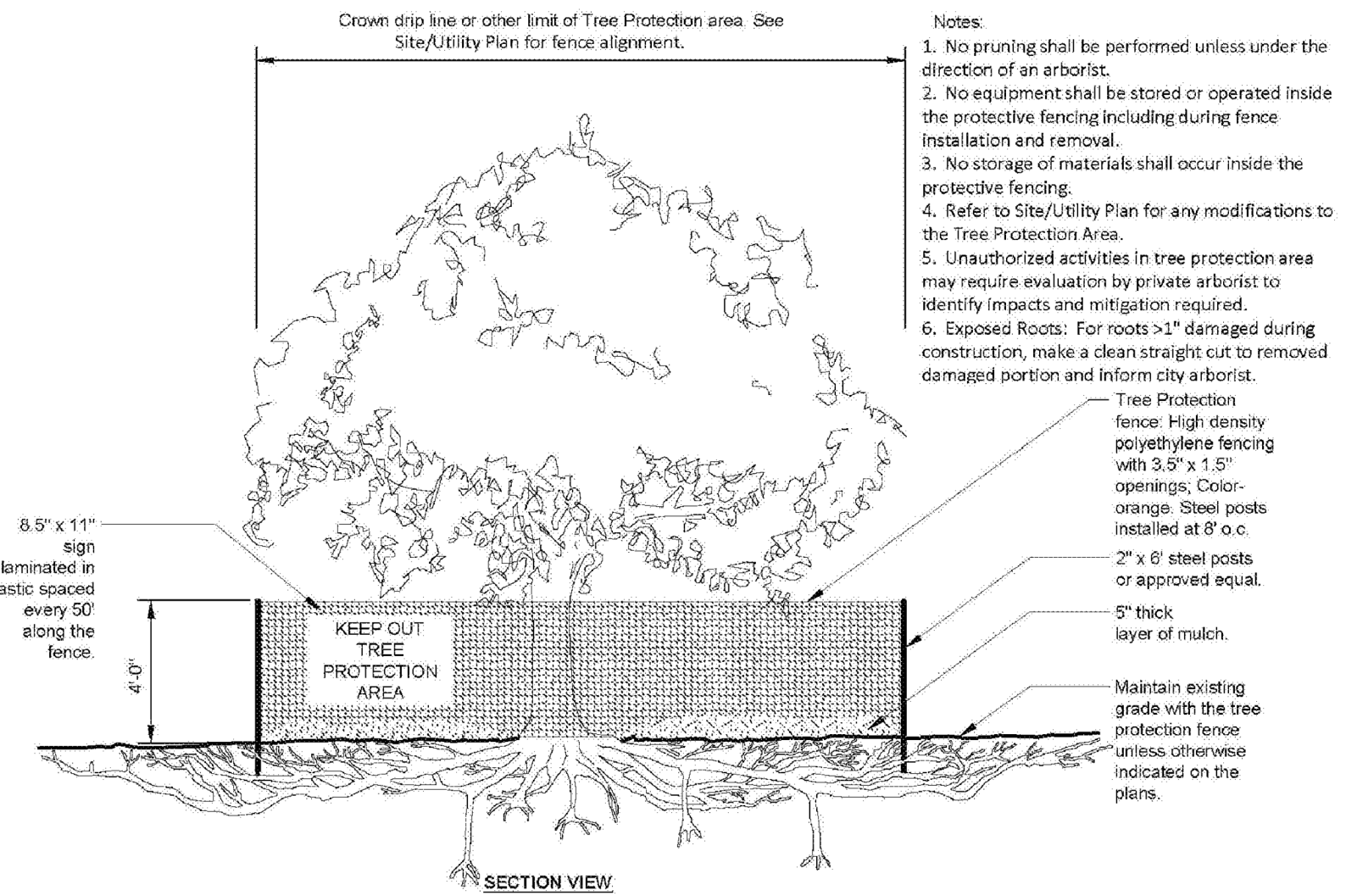
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
SCALE: AS SHOWN DATE: 1/29/2026
DESIGNED BY: JP CHECKED BY: TC
PACE PROJECT NO. 17387

SHEET **C0.2**

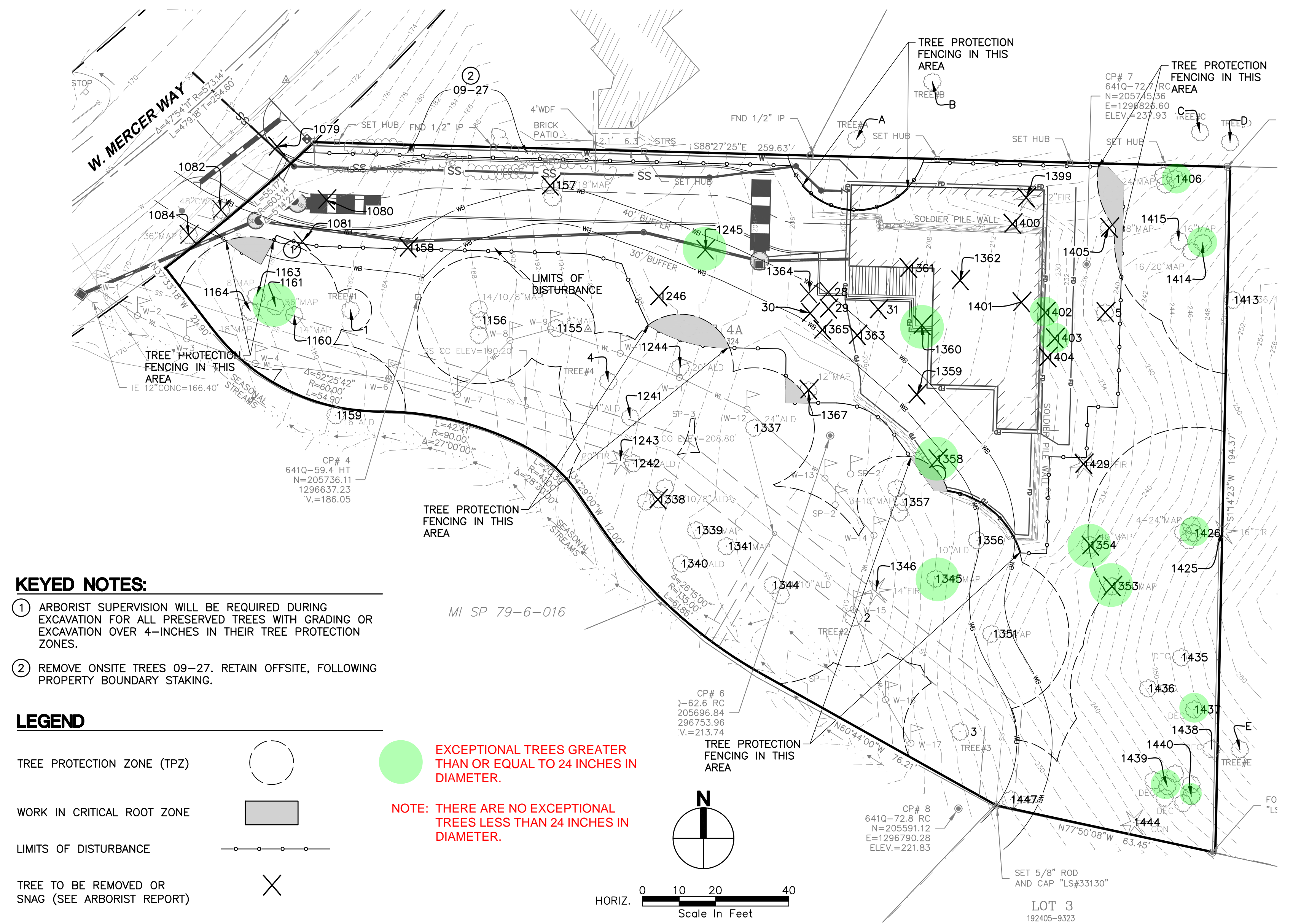
GENERAL NOTES:

- SEE ARBORIST PLAN AND ARBORIST REPORT FOR ADDITIONAL INFORMATION.
- RETAINED TREE #1439 (41.1" BIGLEAF MAPLE, NON-WETLANDS TREE) HAS A LARGE DEAD STEM THAT SHOULD BE REMOVED OR SHORTENED BEFORE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. RETAINED TREE #1156 (23.1" BIGLEAF MAPLE, 35' WETLANDS BUFFER TREE) HAS A LARGE DEAD INTERIOR STEM THAT SHOULD BE REMOVED BEFORE BUILDING OCCUPANCY. ALL RETAINED TREES WITH IVY GROWING UP THE TRUNK SHOULD HAVE THE IVY CUT AT THE BASE OF THE TREE.
- RETAINED TREES #1426 (48.9" BIGLEAF MAPLE, NON-WETLANDS TREE) AND #1415 (11.6" BIGLEAF MAPLE, NON-WETLANDS TREE) HAVE CONDITIONS OR DEFECTS WARRANTING FUTURE ARBORIST INSPECTIONS. THEY SHOULD BE INSPECTED AT 5-YEAR MINIMUM INTERVALS TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE TREES IS STILL INTACT.
- SUBJECT PROPERTY TREES #1158, 1400, 1429, 1354, 1353, 1415, AND ROW TREE #1084 ARE EITHER IN POOR CONDITION WITH LIMITED LIFE SPANS OR ARE HAZARD TREES AND REMOVAL OR CONVERSION INTO WILDLIFE SNAGS IS RECOMMENDED.
- CONSIDER CONVERTING REQUIRED TREE REMOVALS INTO WILDLIFE SNAGS INSTEAD OF COMPLETE REMOVAL OF ALL WOOD, WHERE POSSIBLE.
- ARBORIST SUPERVISION BY A CERTIFIED ARBORIST IS REQUIRED FOR ALL EXCAVATION THAT TAKES PLACE WITHIN

- TREE #1244 AND 1357 (35' WETLANDS BUFFER TREES) ARE TOO CLOSE TO PROPOSED DEVELOPMENT (DRIVEWAY) BUT WE WILL ATTEMPT TO RETAIN THROUGH ARBORIST SUPERVISION/ ROOT PRUNING. IF THE ARBORIST DETERMINES IN THE FIELD DURING EXCAVATION ACTIVITIES THAT THE TREES MAY BE RETAINED, THEY WILL BE RETAINED AND PROTECTED.
 - TREES #06-27 ARE ALL PART OF A LEYLAND CYPRESS HEDGE THAT MEANDERS BETWEEN THE NORTH ADJACENT PROPERTY AND THE SUBJECT PROPERTY. THE TREES ARE LOCATED NEAR THE NORTHWEST CORNER OF THE SUBJECT PROPERTY, AND ARE NUMBERED FROM WEST TO EAST (TREE #6 WESTERNMOST TREE AND TREE #27 EASTERNMOST TREE).
 - PROBABLE LOCATIONS OF LEYLAND CYPRESS HEDGE TREES #6-27 ARE TREES #6-8, 15-19, AND 24-27 LOCATED ON THE SUBJECT PROPERTY; AND TREES #9-14 & 20-23 LOCATED ON THE NORTH ADJACENT PROPERTY. ALL ADJACENT PROPERTY CYPRESS TREES WILL BE RETAINED AND PROTECTED, AND ALL SUBJECT PROPERTY CYPRESS TREES WILL BE REMOVED.
- IF THE CONSTRUCTION STAGING AREA IS LOCATED CLOSER THAN 6 FT. TO THE ADJACENT PROPERTY CYPRESS TREES, A 1/2" MINIMUM THICKNESS STEEL PLATE IS TO BE PLACED ON THE GROUND TO AVOID COMPACTION, AND THE TPZ PROTECTION FENCE MAY BE TEMPORARILY REDUCED TO LESS THAN 6 FT.



1 TREE PROTECTION DETAIL
NTS



KEYED NOTES:

- ARBORIST SUPERVISION WILL BE REQUIRED DURING EXCAVATION FOR ALL PRESERVED TREES WITH GRADING OR EXCAVATION OVER 4-INCHES IN THEIR TREE PROTECTION ZONES.
- REMOVE ONSITE TREES 09-27. RETAIN OFFSITE, FOLLOWING PROPERTY BOUNDARY STAKING.

LEGEND

- TREE PROTECTION ZONE (TPZ)
- WORK IN CRITICAL ROOT ZONE
- LIMITS OF DISTURBANCE
- TREE TO BE REMOVED OR SNAG (SEE ARBORIST REPORT)
- EXCEPTIONAL TREES GREATER THAN OR EQUAL TO 24 INCHES IN DIAMETER.
- NOTE: THERE ARE NO EXCEPTIONAL TREES LESS THAN 24 INCHES IN DIAMETER.

Subject Property Significant Trees

Tree #	Species	DBH (in.)	Drip line Radius (ft.)	TPZ Radius (ft.)	Retain Yes/ No	Arborist Supervision Required During Excavation?
(Non-Wetlands)						
1080	Bigleaf Maple	11.9	18	N/A	No	
1157	Bigleaf Maple	19.1	22	N/A	No	
1245	Bigleaf Maple	47.3	32	N/A	No	
1363	Bigleaf Maple	23.1	34	N/A	No	
1365	Western Red Cedar	6.6	8	N/A	No	
1364	Western Red Cedar	10.1	17	N/A	No	
1361	Douglas Fir	20.7	23	N/A	No	
1360	Bigleaf Maple	43.4	34	N/A	No	
1359	Bigleaf Maple	12.8	17	N/A	No	
1362	Bigleaf Maple	12.1	25	N/A	No	
1400	Western Hemlock	10.5	13	N/A	No	
1399	Western Hemlock	10	13	N/A	No	
1401	Bigleaf Maple	10.8	19	N/A	No	
1402	Bigleaf Maple	37.4	30	N/A	No	
1403	Bigleaf Maple	39.4	29	N/A	No	
1404	Western Hemlock	8	15	N/A	No	
1405	Bigleaf Maple	23.3	30	N/A	No	
1406	Bigleaf Maple	38.6	33	*33/17	Yes	Yes

*Note: Tree Protection Zone radius = *33 ft. (drip line radius) except where the east gabion wall excavation intersects with the dripline 17 ft. southwest of the tree.

1415	Bigleaf Maple	11.6	12	12	Yes	
1414	Bigleaf Maple	28.9	30	25	Yes	
5	Bigleaf Maple	7.6	17	N/A	No	
1429	Western Hemlock	16	16	N/A	No	
1354	Bigleaf Maple	47.3	35	N/A	No	
1353	Bigleaf Maple	34.7	10/20	N/A	No	
1426	Bigleaf Maple	48.9	32	32	Yes	
1425	Western Hemlock	14.6	20	20	Yes	
1435	Bigleaf Maple	26.2	28	28	Yes	
1437	Bigleaf Maple	34.7	29	29	Yes	
1438	Bigleaf Maple	28.5	31	31	Yes	
1436	Bigleaf Maple	10.2	22	22	Yes	
1439	Bigleaf Maple	41.1	32	32	Yes	
1440	Bigleaf Maple	41.5	32	32	Yes	
1444	Western Red Cedar	19.1	18	18	Yes	
06-27	Leyland Cypress	3.5-5	4-7	6	*Yes/No	

*Note: Probable locations of Trees #6-27 are Trees #6-8, 15-19, and 24-27 located on the subject property, and Trees #9-14 & 20-23 located on the north adjacent property. All adjacent property Cypress trees will be retained and protected, and all subject property Cypress trees will be removed.

If the construction staging area is located closer than 6 ft. to the adjacent property Cypress trees, a 1/2" minimum thickness steel plate is to be placed on the ground to avoid compaction, and the TPZ protection fence may be temporarily reduced to less than 6 ft.

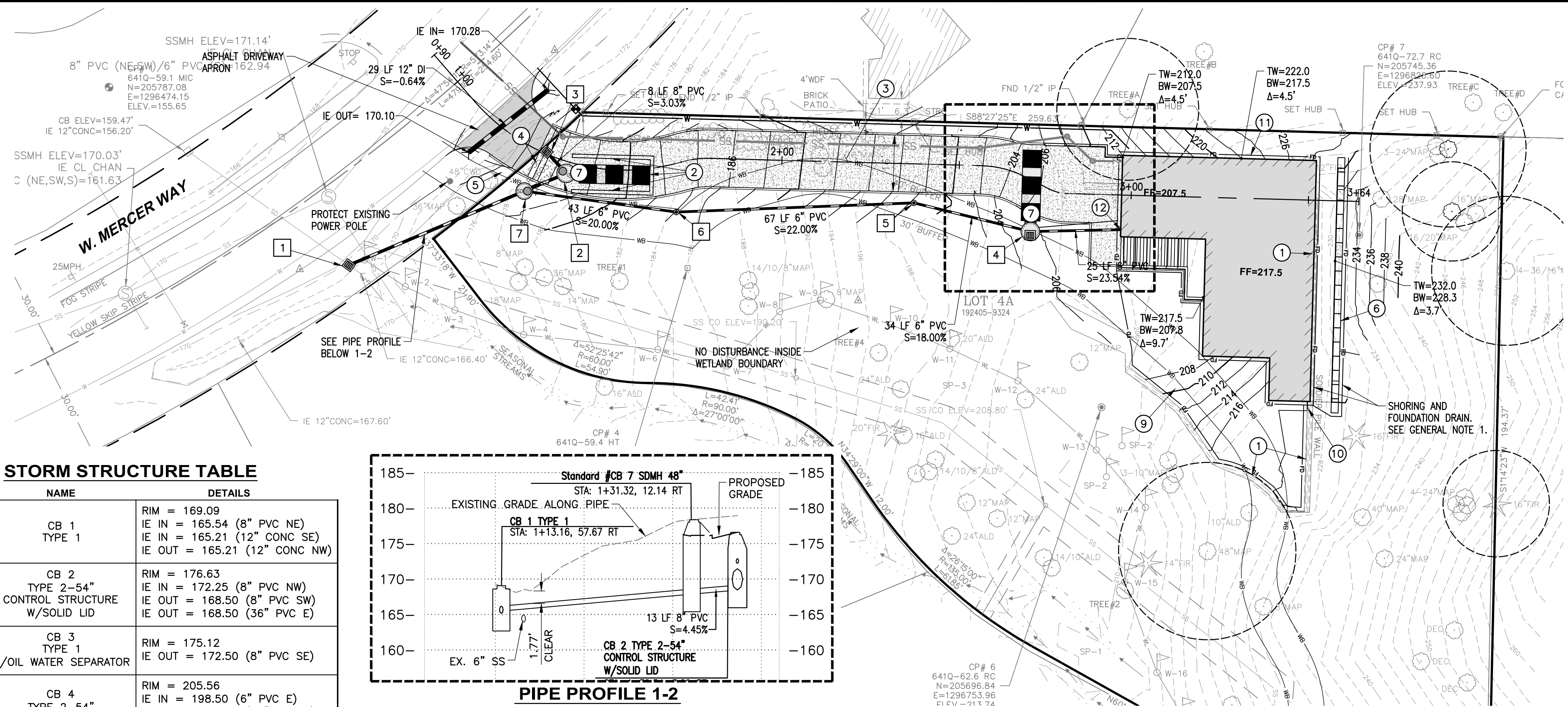
28	Western Red Cedar	5.2	12	N/A	No	
29	Western Red Cedar	2.8	7	N/A	No	
30	Western Red Cedar	1.9	7	N/A	No	
31	Western Red Cedar	2.1	6	N/A	No	

(35 Wetlands Buffer Trees)

1081	Bigleaf Maple	21.7	18	N/A	No	
1161	Bigleaf Maple	33.2	30	18	Yes	Yes
1160	Bigleaf Maple	13.7	26	14	Yes	
1163	Bigleaf Maple	6.4	14	14	Yes	
1164	Bigleaf Maple	20.9	26	21	Yes	
1158	Red Alder	20	21	N/A	No	
1	Bigleaf Maple	6.2	18	6	Yes	
1156	Bigleaf Maple	23.1	22	18	Yes	Yes
1155	Bigleaf Maple	7.6	21	8	Yes	
1246	Bigleaf Maple	9	20	N/A	No	
1244	Red Alder	19.7	16	N/A	No	*Yes
*Tree #1244 is too close to proposed development (driveway) but we will attempt to retain through arborist supervision/ root pruning. If the arborist determines in the field during excavation activities that the tree may be retained, it will be retained and protected.						
1337	Red Alder	23	26	17	Yes	*Yes
*Tree #1357 is too close to proposed development (driveway) but we will attempt to retain through arborist supervision/ root pruning. If the arborist determines in the field during excavation activities that the tree may be retained, it will be retained and protected.						
1367	Bigleaf Maple	10.1	21	N/A	No	
1357	Bigleaf Maple	18.4	30	N/A	No	
1345	Bigleaf Maple	44.3	39	24	Yes	Yes
1346	Western Hemlock	18.1	18	18	Yes	
2	Bigleaf Maple	7.1	14	14	Yes	
1356	Pacific Dogwood	10.6	19	N/A	No	
1351	Bigleaf Maple	9.3	22	22	Yes	
3	Bigleaf Maple	6.7	16	16	Yes	
1447	Bigleaf Maple	10	17	17	Yes	

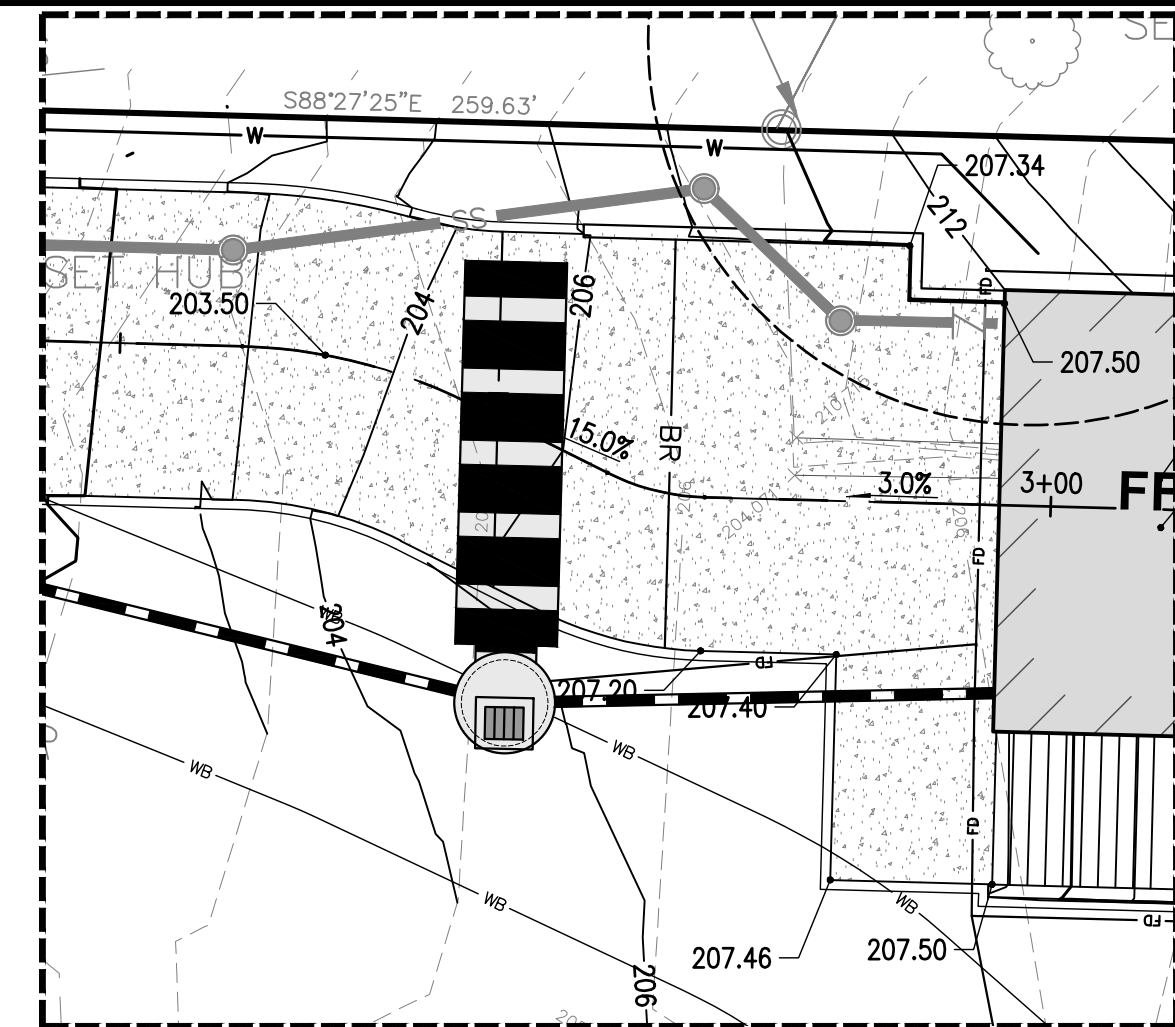
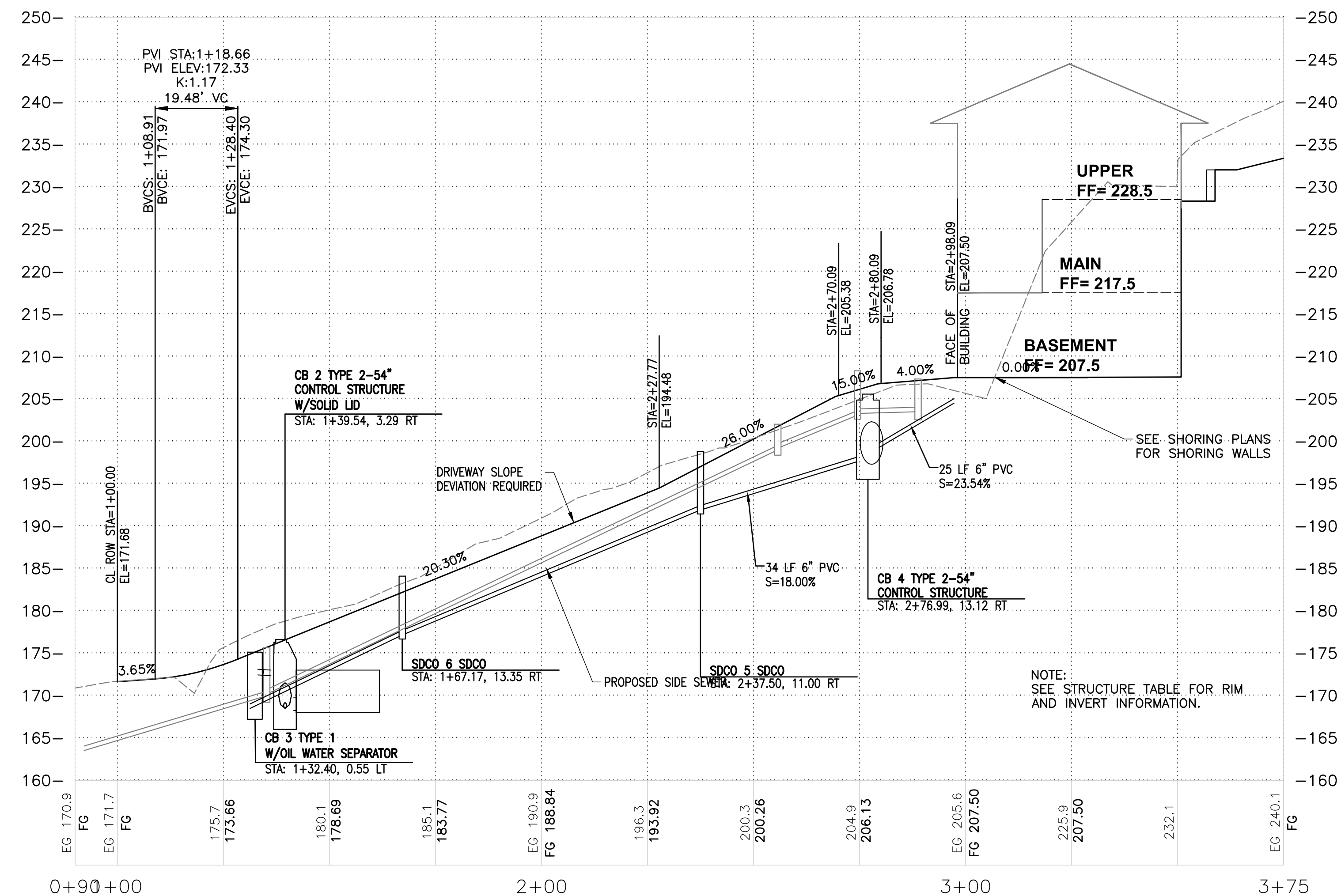
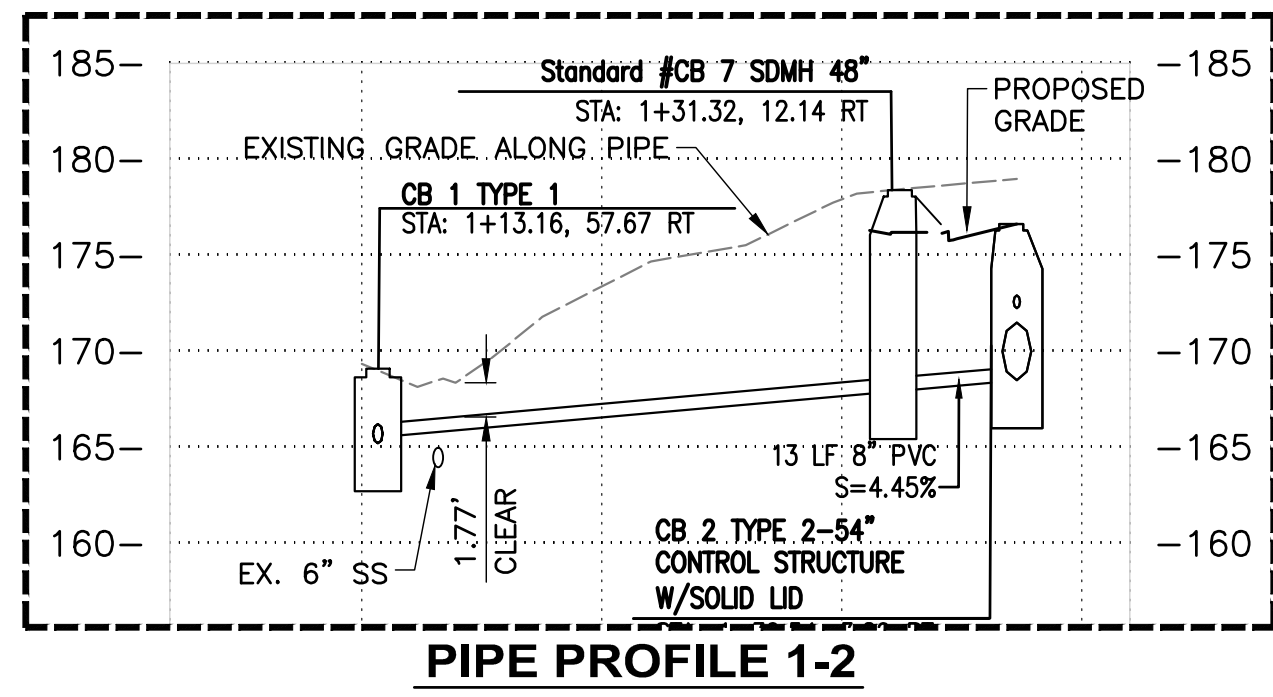
(Wetlands Trees)						
1241	Red Alder	20.5	17	17	Yes	
4	Bigleaf Maple	18.1	26	18	Yes	
1242	Red Alder	13.8	11	11	Yes	
1243	Western Hemlock	15.7	11	11	Yes	
1338	Red Alder	20.2	26	26	Yes	
1339	Bigleaf Maple	12	22	22	Yes	
1340	Red Alder	21.4	24	24	Yes	
1341	Bigleaf Maple	13	22	22	Yes	
1344	Red Alder	17.2	28	28	Yes	
Encroaching Adjacent Property Significant Trees						
A	Western Red Cedar	26	20	20	Yes	
B	Western Hemlock	22	26	26	Yes	
C	Bigleaf Maple	16	24	24	Yes	
D	Bigleaf Maple	17	24	24	Yes	
E	Bigleaf Maple	40	30	30	Yes	
1413	Bigleaf Maple	42	34	34	Yes	
1159	Red Alder	20	20	20	Yes	
R.O.W. (Right-Of-Way) Trees						
1079	Bigleaf Maple	20.1	36	N/A	No	
1082	Black Cottonwood	41.9	29	N/A	No	
1084	Bigleaf Maple	29.5	25	N/A	No	

FILE NAME: P:\WORK\17387_5335_WEST_MERCER_WAY_SFR_CAD_ENGINEERING\DWG\SHEETS\17387-SP.DWG
 SAVE TIME: 1/29/2026 10:06:44 AM
 USER NAME: TYLER CHRISTOFFERSON



STORM STRUCTURE TABLE

NAME	DETAILS
1 CB 1 TYPE 1	RIM = 169.09 IE IN = 165.54 (8" PVC NE) IE IN = 165.21 (12" CONC SE) IE OUT = 165.21 (12" CONC NW)
2 CB 2 TYPE 2-54" CONTROL STRUCTURE W/SOLID LID	RIM = 176.63 IE IN = 172.25 (8" PVC NW) IE OUT = 168.50 (8" PVC SW) IE OUT = 168.50 (36" PVC E)
3 CB 3 TYPE 1 W/OIL WATER SEPARATOR	RIM = 175.12 IE OUT = 172.50 (8" PVC SE)
4 CB 4 TYPE 2-54" CONTROL STRUCTURE	RIM = 205.56 IE IN = 198.50 (6" PVC E) IE OUT = 198.00 (36" PVC N) IE OUT = 198.00 (6" PVC W)
7 CB 7 SDMH 48"	RIM = 178.40 IE IN = 167.93 (8" PVC NE) IE IN = 168.51 (6" PVC E) IE OUT = 167.93 (8" PVC SW)
5 SDCO 5 SDCO	RIM = 198.80 IE IN = 191.92 (6" PVC E) IE OUT = 191.92 (6" PVC W)
6 SDCO 6 SDCO	RIM = 184.09 IE IN = 177.17 (6" PVC E) IE OUT = 177.17 (6" PVC W)



DRIVEWAY GRADING
1"=10'

KEY NOTES

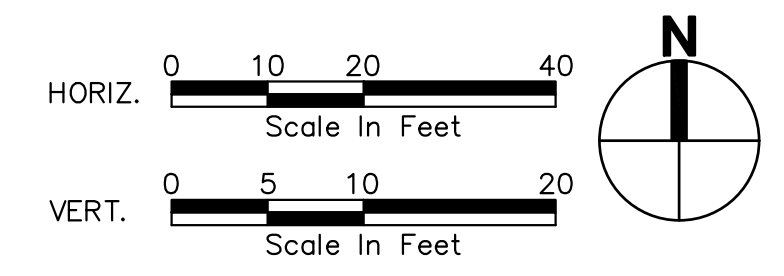
- PERMANENT SHORING WALLS (COMPLETED UNDER PREVIOUS PERMIT)
- TEMPORARY SHORING WALLS
- 6" CONCRETE DRIVEWAY WITH 3/8" TRACTION GROOVES ON SECTIONS WITH SLOPES GREATER THAN 20%, AND VERTICAL CURB AND GUTTER. SEE DETAIL 5, SHEET C2.1.
- VALLEY GUTTER AT EDGE OF ASPHALT. SEE DETAIL 3, SHEET C2.1.
- 1" WATER METER, MINIMUM.
- GABION BASKET WALL (TYP), SEE DETAIL 4, SHEET C2.1.
- CMP DETENTION PIPE, SEE DETAILS ON SHEET C2.1.
- FINAL WALL DESIGN SHALL BE COMPLETED BY THE BLOCK WALL MANUFACTURER, BASED ON GEOTECHNICAL PARAMETERS PRESENTED IN THE GEOTECHNICAL REPORT, SECTION 6.6.
- CONNECT FOOTING DRAIN TO WALL DRAIN.
- CONNECT GABION BASKET WALL FOOTING DRAINS TO SOLDIER PILE SHORING FOOTING DRAIN.
- PROPOSED PERMANENT SHORING WALLS
- 6" ROOF DRAIN OUTLET, S=2.00% MIN.

GENERAL NOTES:

- REFERENCE SHORING AND STRUCTURAL DETAILS FOR SHORING AND FOUNDATION DRAIN OUTLET DETAILS.
- BASEMENT FLOOR SHORING-FOUNDATION DRAIN OUTLET SD @ 2.0% MIN.
- YARD DRAIN OUTLET SD @ 2.0% MIN
- STORM CONVEYANCE PIPE SHALL BE SDR 35 PVC.
- GABION BASKET WALL CONSTRUCTED PRIOR TO PERMANENT SHORING CONSTRUCTION. SEE SHORING AND STRUCTURAL PLANS.
- BMP T5.13 POST CONSTRUCTION SOIL QUALITY AND DEPTH OR BETTER FOR ALL DISTURBED LANDSCAPE AREAS.

LEGEND

- PERMANENT SHORING
- TEMP. SHORING
- SANITARY SIDE SEWER
- SS CLEANOUT
- STORM DRAIN
- TRENCH DRAIN
- FOOTING DRAIN
- WALL DRAIN
- SD CLEANOUT
- YARD DRAIN
- CB TYPE 1
- CB TYPE 2
- CAST-IN-PLACE WALL



NO.	REVISION	DATE

PACE Engineers
 17255 Kirkland Way, Suite 300
 Kirkland, WA 98033
 P: 425.827.2014
 www.paceengs.com



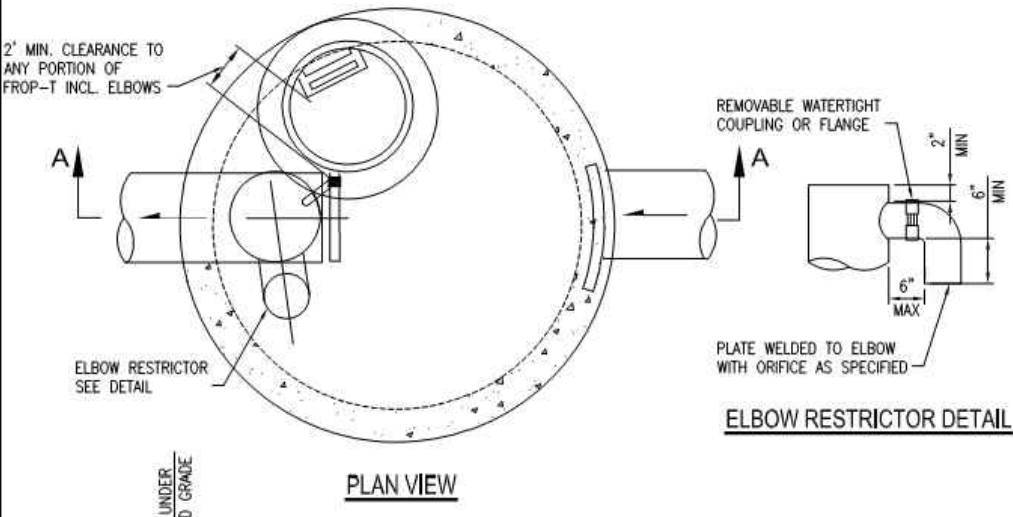
ORIGINAL COPY OF DIGITALLY SIGNED DOCUMENT AVAILABLE UPON REQUEST

N5 ARCHITECTURE
 4200 STONE WAY N
 SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
ROAD, GRADING, AND STORM PLAN

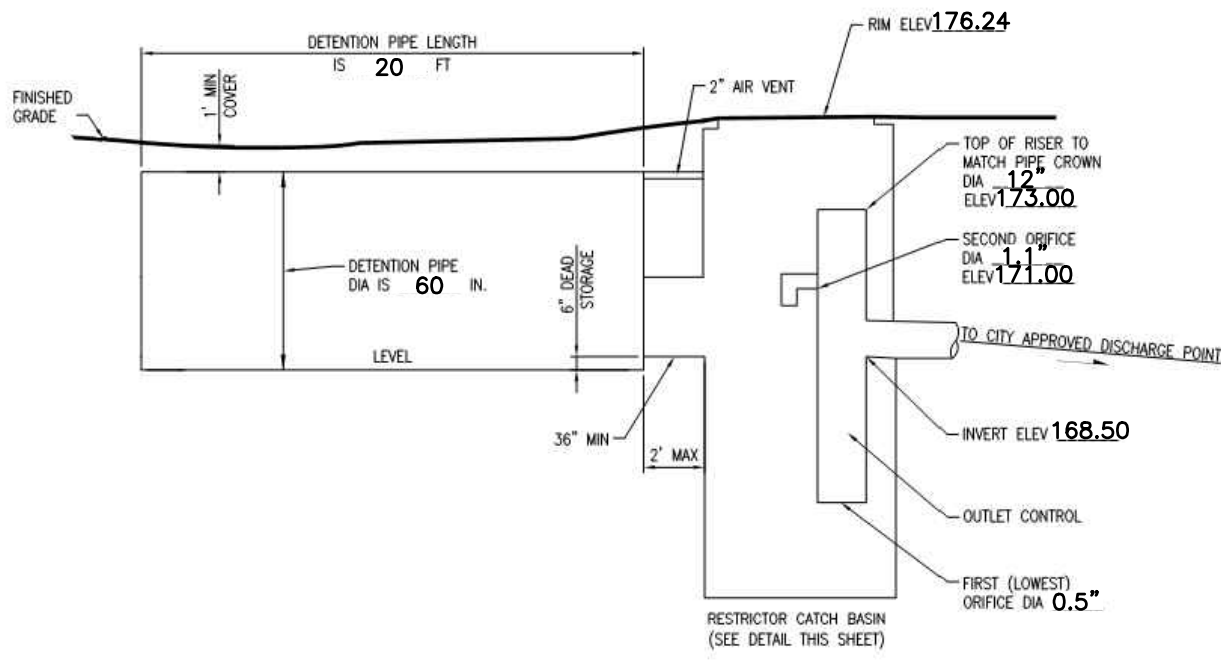
VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: AS SHOWN
 DATE: 1/29/2026
 DESIGNED BY: JP
 CHECKED BY: TC
 PACE PROJECT NO. 17387
SHEET C2.0

Attachment 1
CITY OF MERCER ISLAND
STANDARD DETENTION SYSTEM WORKSHEET
(FOR IMPERVIOUS AREA OF 5,000 SF OR LESS)



OWNER: _____ ADDRESS: **5236 W. MERCER WAY** PREPARED BY: **TYLER CHRISTOFFERSON**
 PERMIT #: _____ **MERCER ISLAND, WA** PHONE: **425.827.2014**
 DATE: **10/24/2024**
 IMPERVIOUS SURFACE AREA (SF): **3,000** DETENTION PIPE LENGTH (FT): **20** ORIFICE #1 DIA: **0.5** INCH, ELEV: **168.50**
 PIPE MATERIAL: **CORRUGATED ALUMINUM PIPE** ORIFICE #2 DIA: **1.1** INCH, ELEV: **171.00**

FOOTING DRAINS SHALL NOT BE CONNECTED TO DETENTION SYSTEM

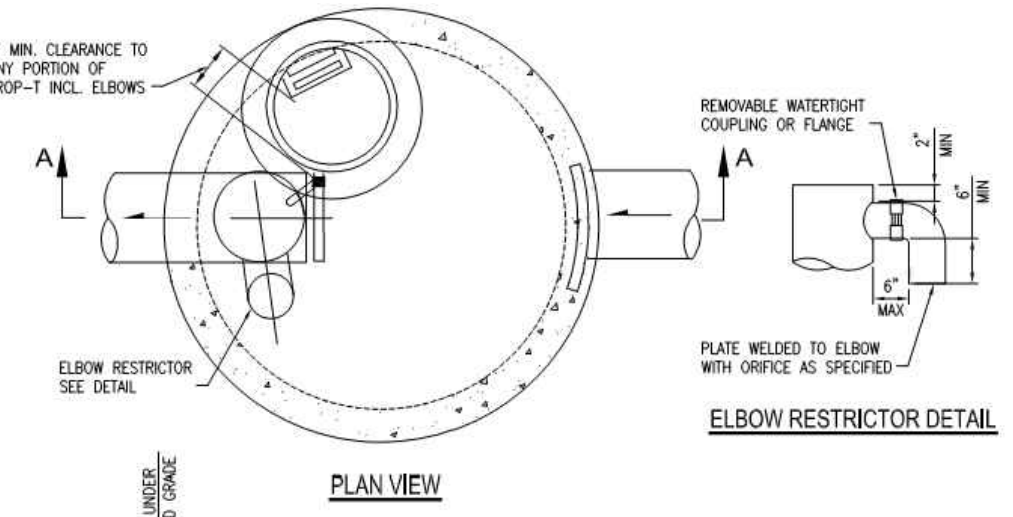


STANDARD PIPE DETENTION SYSTEM
 NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

- RESTRICTOR CATCH BASIN NOTES:**
- USE A MINIMUM OF A 72 IN. DIAM. TYPE 2 CATCH BASIN WHEN CONNECTING PIPE MATERIAL IS CONCRETE OR LOPE. A 54 IN. DIAM. TYPE 2 CATCH BASIN MAY BE USED FOR OTHER CIRCULAR SINGLE WALL PIPE (SUCH AS CORRUGATED ALUMINUM PIPE).
 - OUTLET PIPE: MIN. 6 INCH.
 - METAL PARTS: CORROSION RESISTANT, NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
 - FRAME AND LADDER OR STEPS OFFSET 50:
 - CLEANOUT GATE IS VISIBLE FROM TOP.
 - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - FRAME IS CLEAR OF CURB.
 - IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
 - PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
 - THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 29M AND ASTM B 275, DESIGNATION 2022A, OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LEFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.

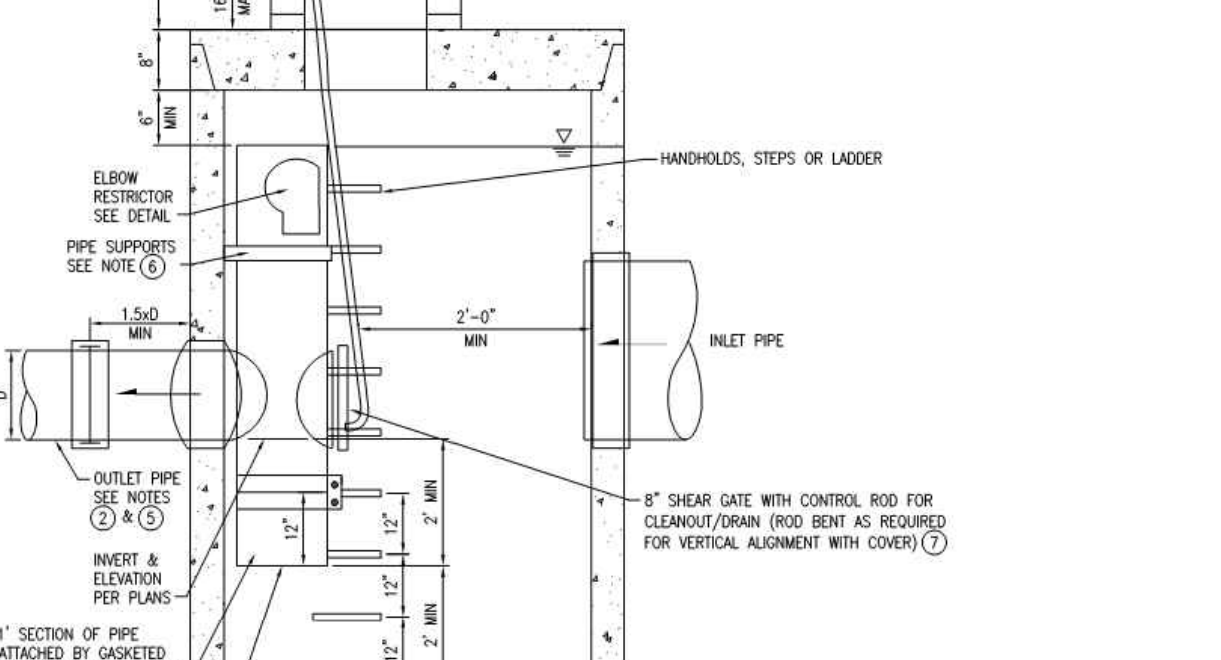
- STANDARD DETENTION SYSTEM NOTES:**
- CALL DEVELOPMENT SERVICES (206-275-7655) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
 - RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
 - PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 8.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LOPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE WHICH MEETS ABOVE DESIGNATIONS WITH AND WITH CORRUGATED OR SPIRAL REINFORCED ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.

Attachment 1
CITY OF MERCER ISLAND
STANDARD DETENTION SYSTEM WORKSHEET
(FOR IMPERVIOUS AREA OF 5,000 SF OR LESS)



OWNER: _____ ADDRESS: **5236 W. MERCER WAY** PREPARED BY: **TYLER CHRISTOFFERSON**
 PERMIT #: _____ **MERCER ISLAND, WA** PHONE: **425.827.2014**
 DATE: **10/24/2024**
 IMPERVIOUS SURFACE AREA (SF): **2,825** DETENTION PIPE LENGTH (FT): **20** ORIFICE #1 DIA: **0.5** INCH, ELEV: **198.0**
 PIPE MATERIAL: **CORRUGATED ALUMINUM PIPE** ORIFICE #2 DIA: **1.1** INCH, ELEV: **200.5**

FOOTING DRAINS SHALL NOT BE CONNECTED TO DETENTION SYSTEM

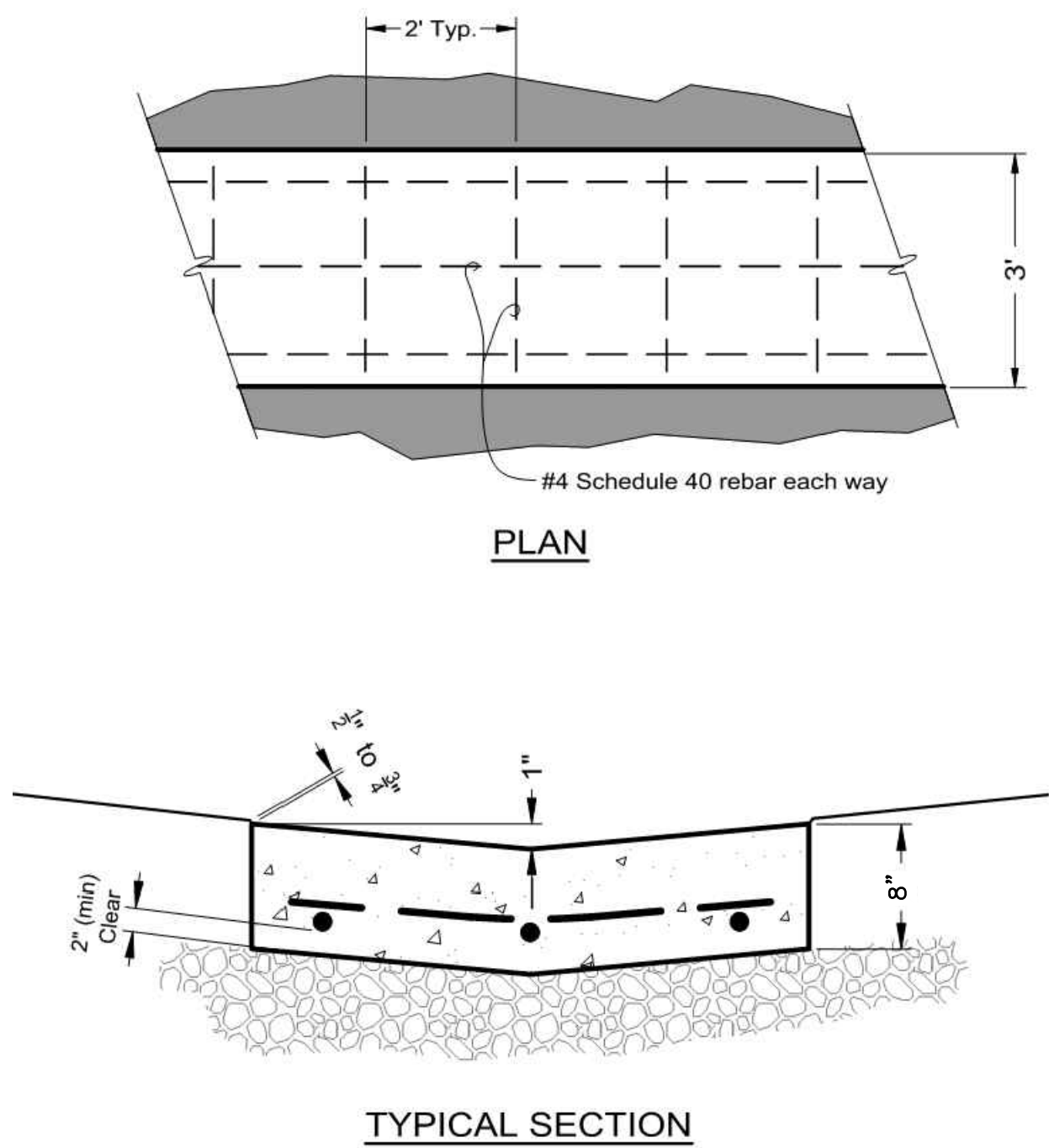


STANDARD PIPE DETENTION SYSTEM
 NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

- RESTRICTOR CATCH BASIN NOTES:**
- USE A MINIMUM OF A 72 IN. DIAM. TYPE 2 CATCH BASIN WHEN CONNECTING PIPE MATERIAL IS CONCRETE OR LOPE. A 54 IN. DIAM. TYPE 2 CATCH BASIN MAY BE USED FOR OTHER CIRCULAR SINGLE WALL PIPE (SUCH AS CORRUGATED ALUMINUM PIPE).
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 - FRAME AND LADDER OR STEPS OFFSET 50:
 - CLEANOUT GATE IS VISIBLE FROM TOP.
 - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - FRAME IS CLEAR OF CURB.
 - IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
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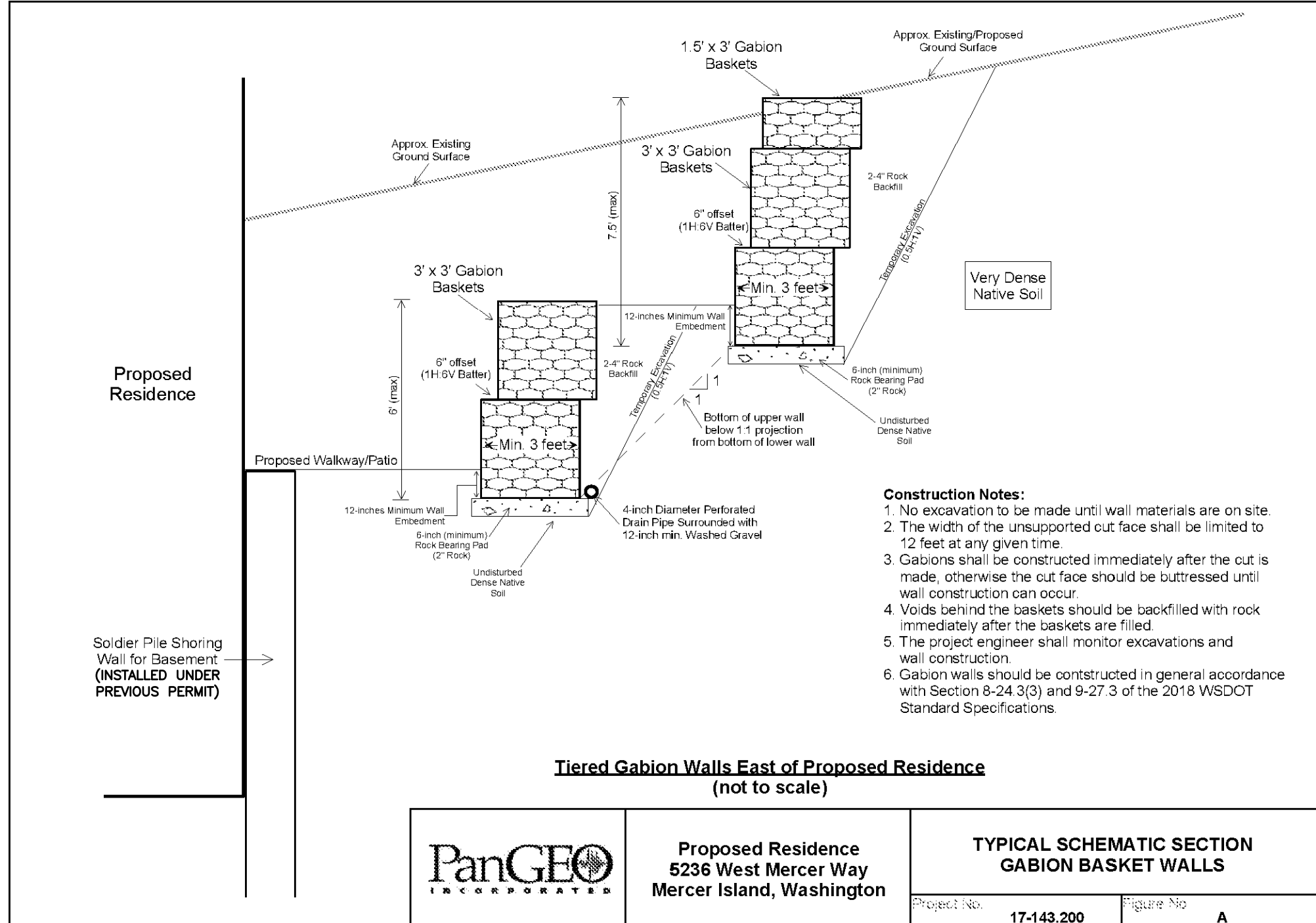
- STANDARD DETENTION SYSTEM NOTES:**
- CALL DEVELOPMENT SERVICES (206-275-7655) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
 - RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
 - PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 8.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LOPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE WHICH MEETS ABOVE DESIGNATIONS WITH AND WITH CORRUGATED OR SPIRAL REINFORCED ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.

1 DETENTION SYSTEM DETAIL (WEST)
 NTS

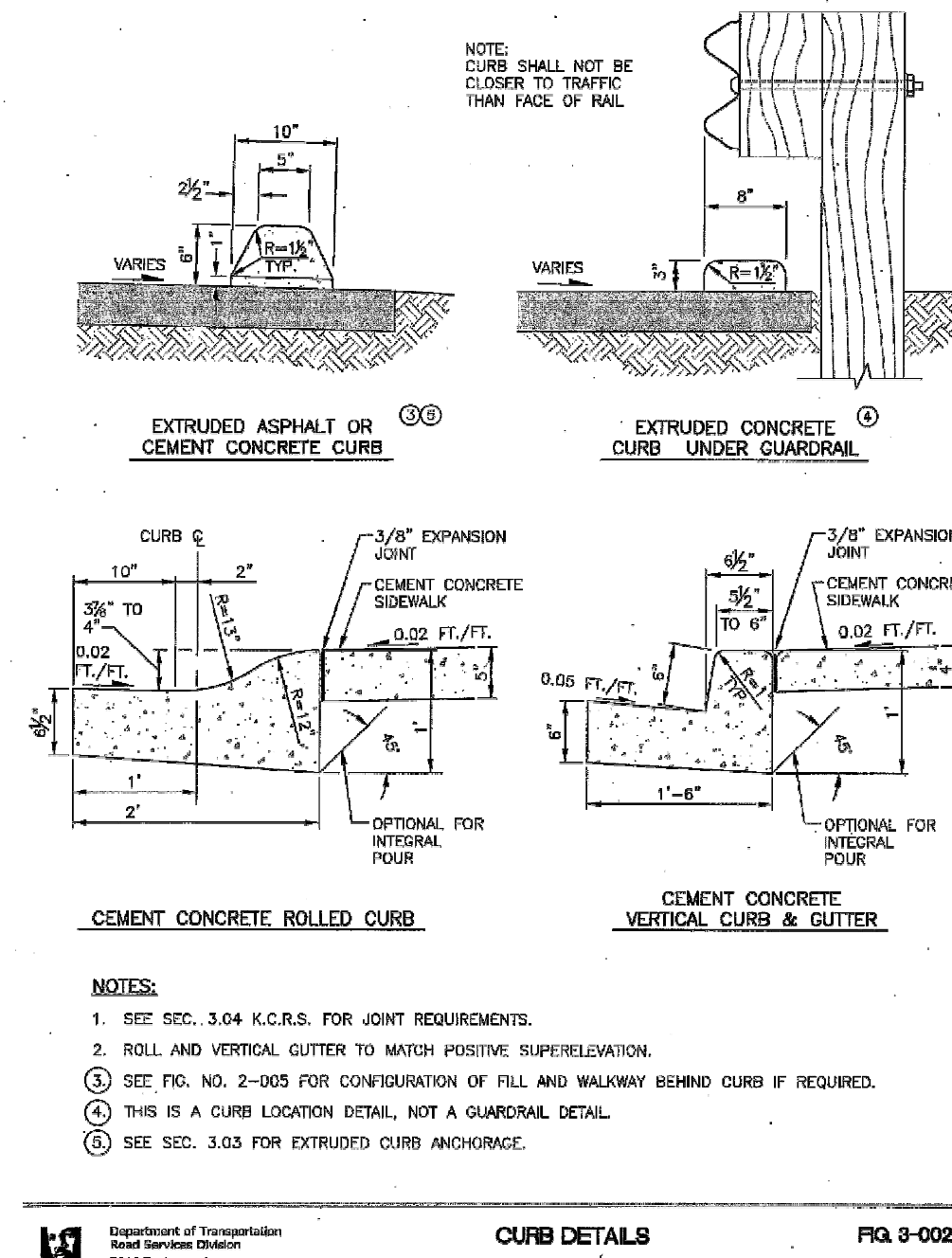


3 VALLEY GUTTER CURB
 NTS

2 DETENTION SYSTEM DETAIL (EAST)
 NTS



4 GABION BASKET WALLS
 NTS



5 VERTICAL CURB
 NTS

FILE NAME: P:\WORK\17387_5236 WEST MERCER WAY (SINGLE FAMILY RESIDENCE) SHEETS\17387-DET.DWG
 SAVE TIME: 6/17/2025 9:42:13 AM
 PLOT TIME: 1/29/2026 10:16 AM
 USER NAME: TYLER CHRISTOFFERSON

PACE Engineers
 17255 Klondike Way, Suite 300
 Kirkland, WA 98033
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N5 ARCHITECTURE
 4200 STONE WAY N
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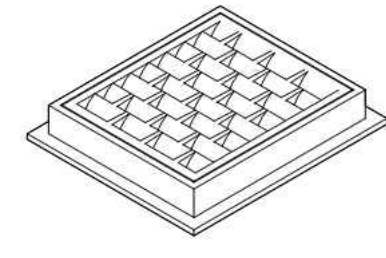
5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
STORM DRAINAGE DETAILS

VERIFY SCALE
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 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

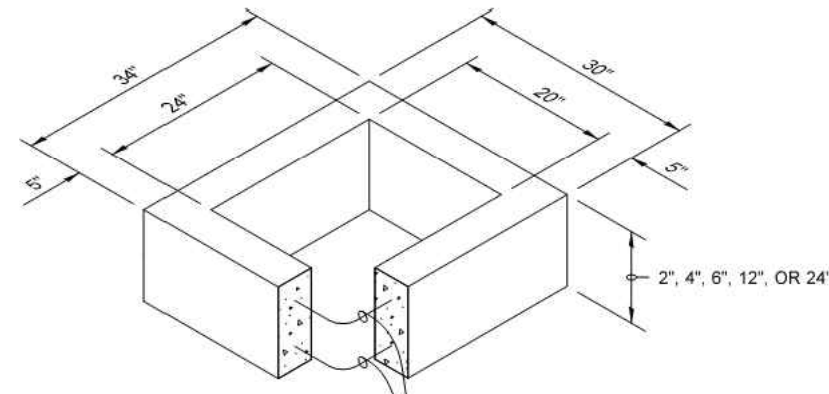
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 DESIGNED BY: JP CHECKED BY: TC
 PACE PROJECT NO. 17387

C2.1

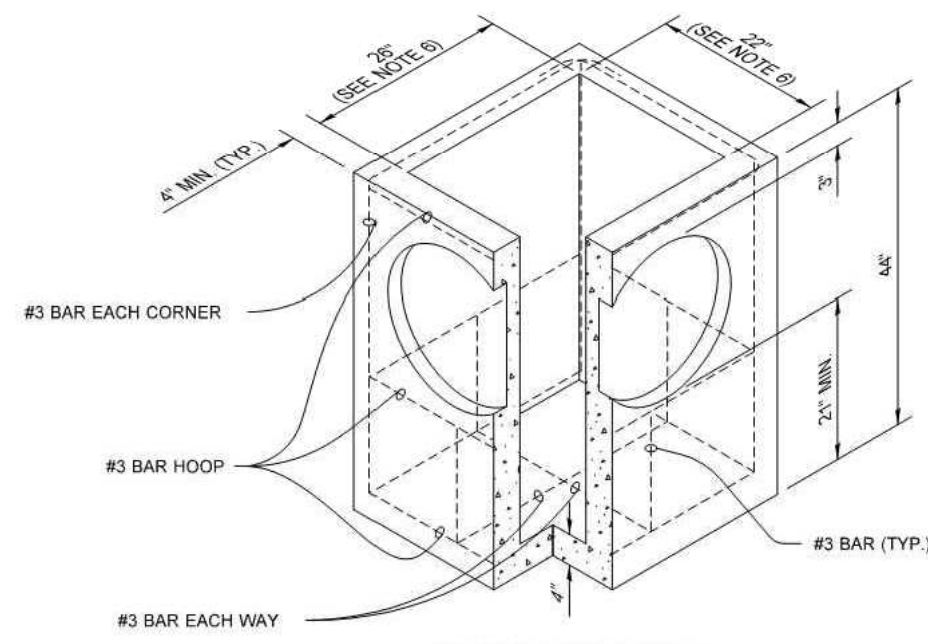
DRAWN BY: LISA CYFORD



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION

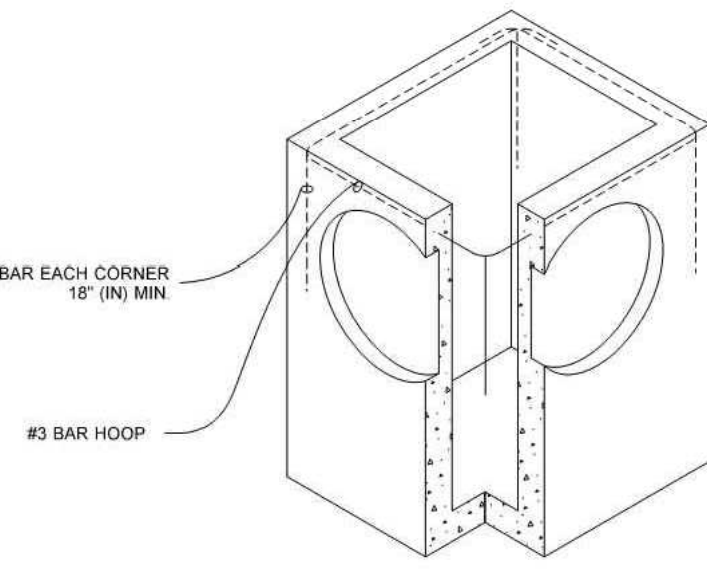


PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP * (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

* CORRUGATED POLYETHYLENE STORM SEWER PIPE

ONE #3 BAR FOR 6" (IN) HEIGHT INCREMENT (SPACED EQUALLY)

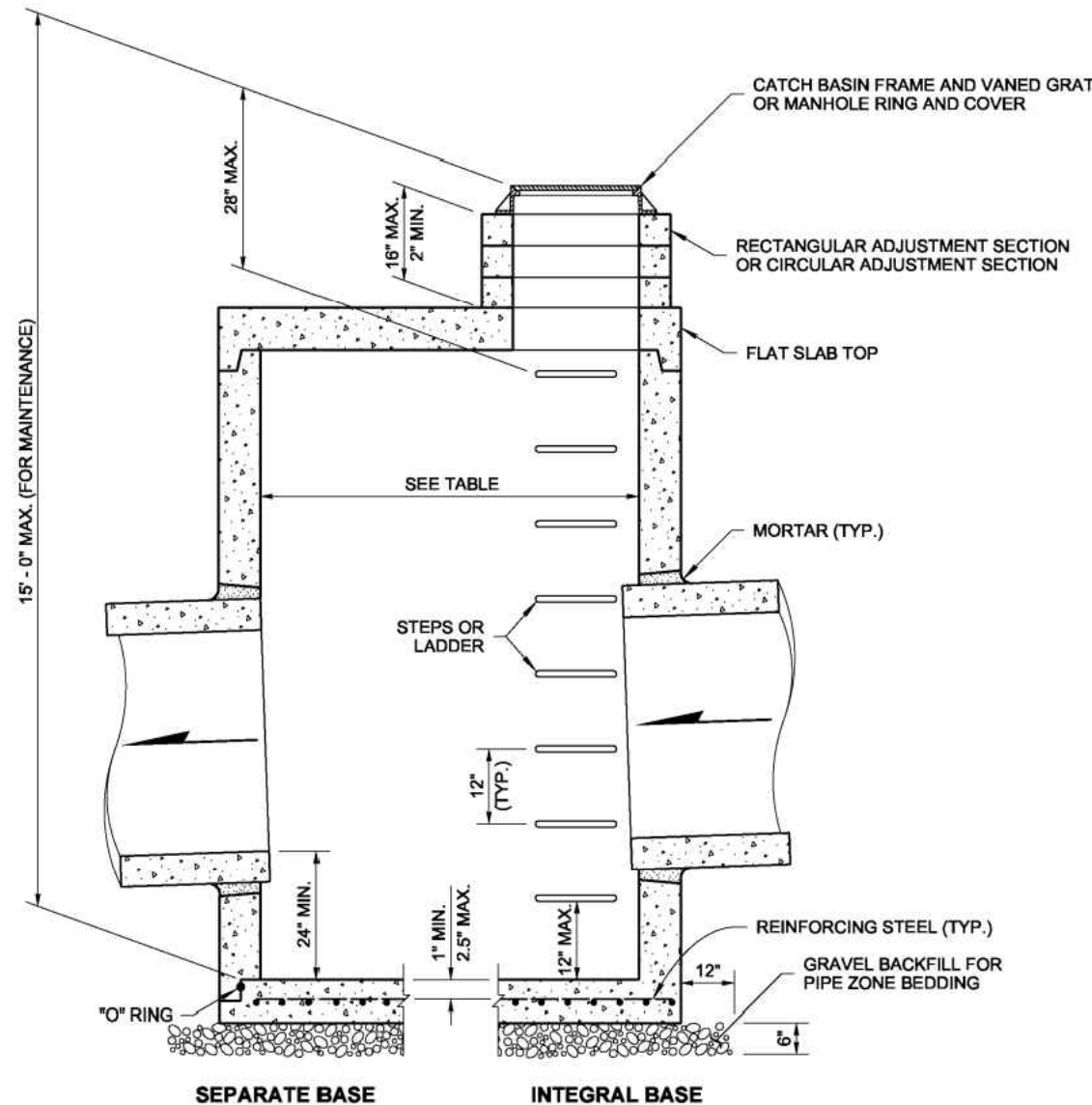


ALTERNATIVE PRECAST BASE SECTION

NOTES

- As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION: fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
- The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification Section 9-04.3.
- The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
- The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
- The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
- The opening shall be measured at the top of the Precast Base Section.
- All pickup holes shall be grouted full after the basin has been placed.

DRAWN BY: LISA CYFORD



CATCH BASIN DIMENSIONS				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES						
CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER	CONCRETE	ALL METAL	CPSSP ①	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	30"	30"	30"
54"	30"	36"	30"	36"	36"	36"
60"	36"	42"	36"	42"	42"	42"
72"	42"	54"	42"	48"	48"	48"
84"	54"	60"	54"	48"	48"	48"
96"	60"	72"	60"	48"	48"	48"
120"	66"	84"	60"	48"	48"	48"
144"	78"	96"	60"	48"	48"	48"

① Corrugated Polyethylene Storm Sewer Pipe (Standard Specification 9-05.20)
 ② Standard Specification 9-05.12(1)
 ③ Standard Specification 9-05.12(2)

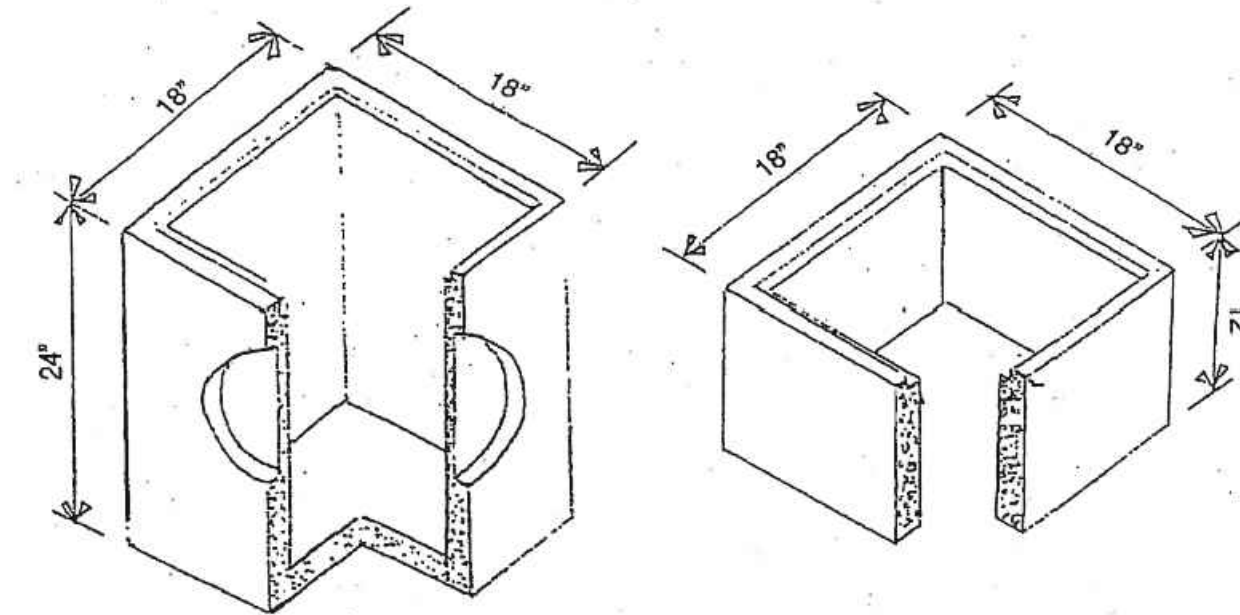


CATCH BASIN TYPE 2
 STANDARD PLAN B-10.20-01

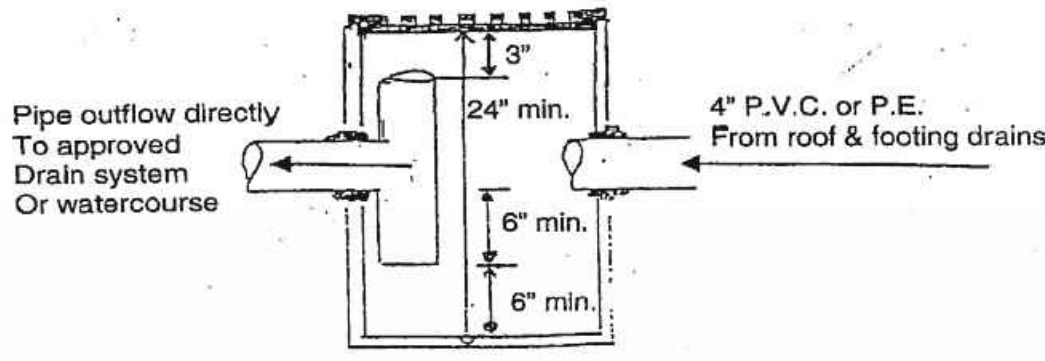
SHEET 1 OF 1 SHEET
 APPROVED FOR PUBLICATION
 Pasco Bakotich III 02-07-12
 STATE DESIGN ENGINEER
 Washington State Department of Transportation

1 TYPE 1 CATCH BASIN
 NTS

2 TYPE 2 CATCH BASIN
 NTS

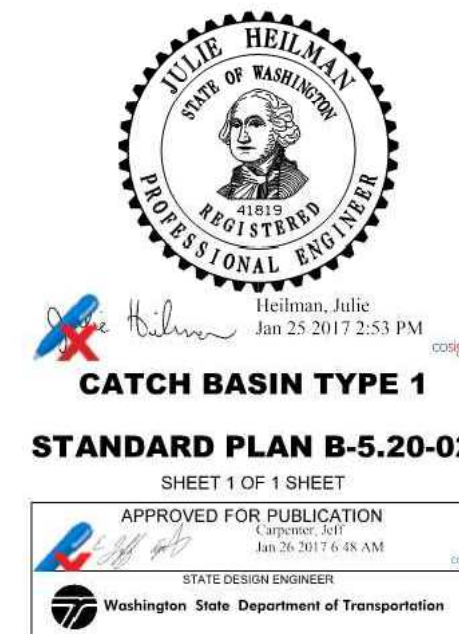


Catch Basin (C.B.)
 Depth & Volume are Minimum Dimensions.
 Minimum Volume = 24 gal.



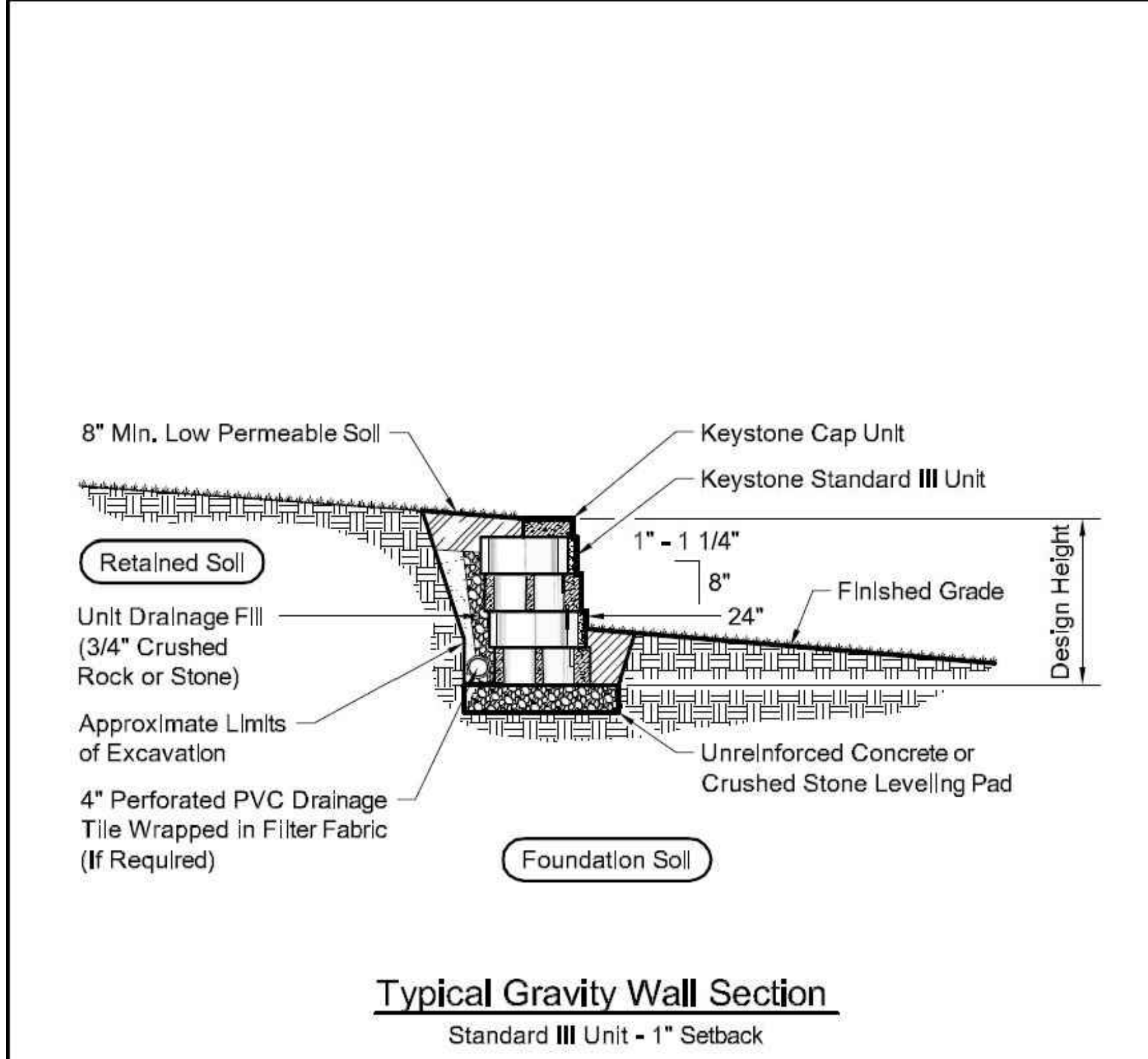
Catch Basin with Oil Separator

3 CATCH BASIN WITH OIL SEPARATOR
 NTS



CATCH BASIN TYPE 1
 STANDARD PLAN B-5.20-02

SHEET 1 OF 1 SHEET
 APPROVED FOR PUBLICATION
 Pasco Bakotich III 02-07-12
 STATE DESIGN ENGINEER
 Washington State Department of Transportation



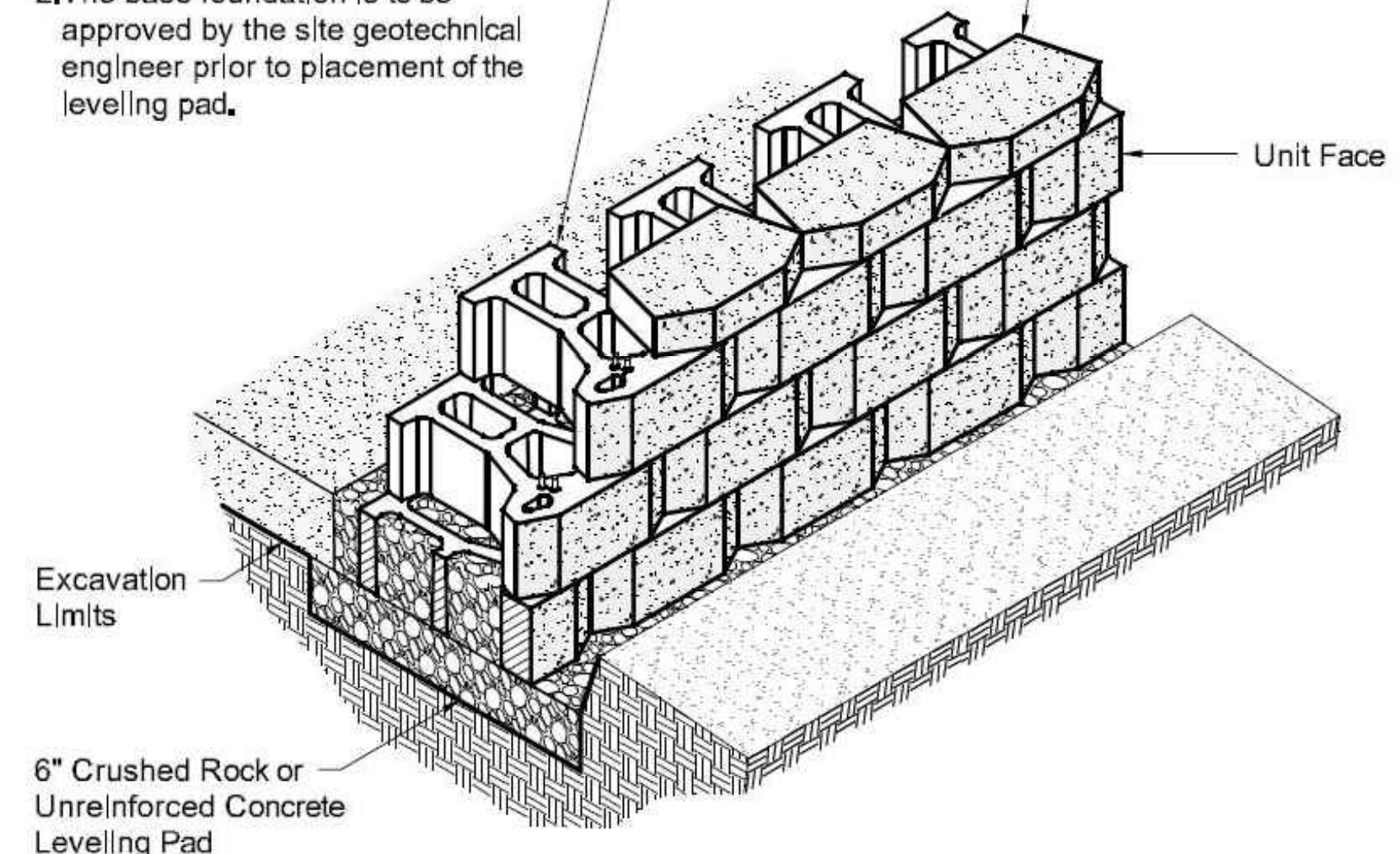
Typical Gravity Wall Section
 Standard III Unit - 1" Setback

1 TYPICAL GRAVITY WALL SECTION
 NTS

Base Leveling Pad Notes:

- The leveling pad is to be constructed of crushed stone or 2,000 ps \pm unreinforced concrete.
- The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard III Unit		Cap Unit	
Width:	18"	Width:	18"
*Depth:	21"	*Depth:	10 1/2"
Height:	8"	Height:	4"
*Weight:	92 lbs	*Weight:	45 lbs



Standard III Unit/Base Pad Isometric Section View
 *Dimensions & Weight May Vary by Region

PACE Engineers
 17255 Kirkland Way, Suite 300
 Kirkland, WA 98033
 P: 425.827.2014
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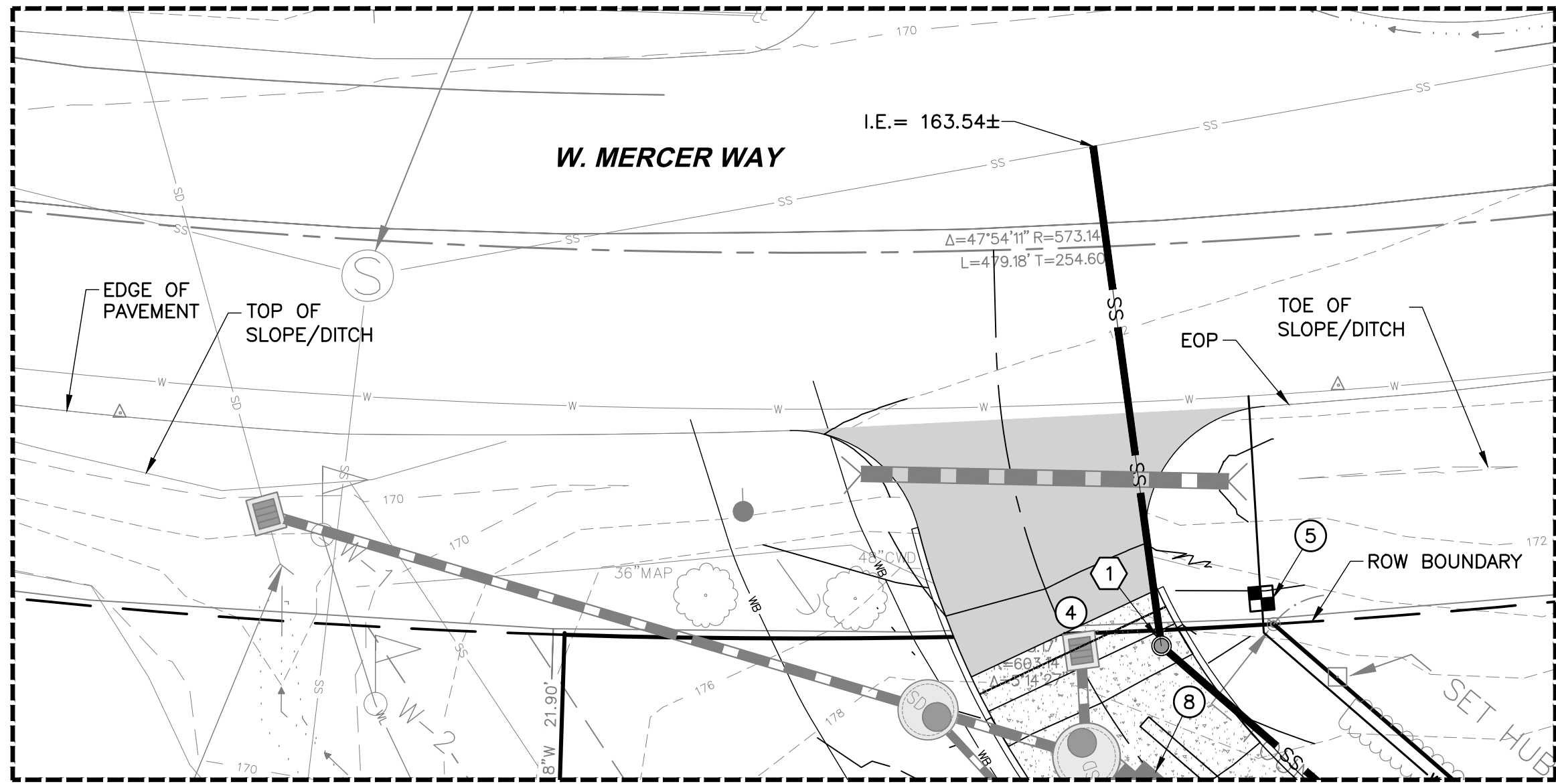
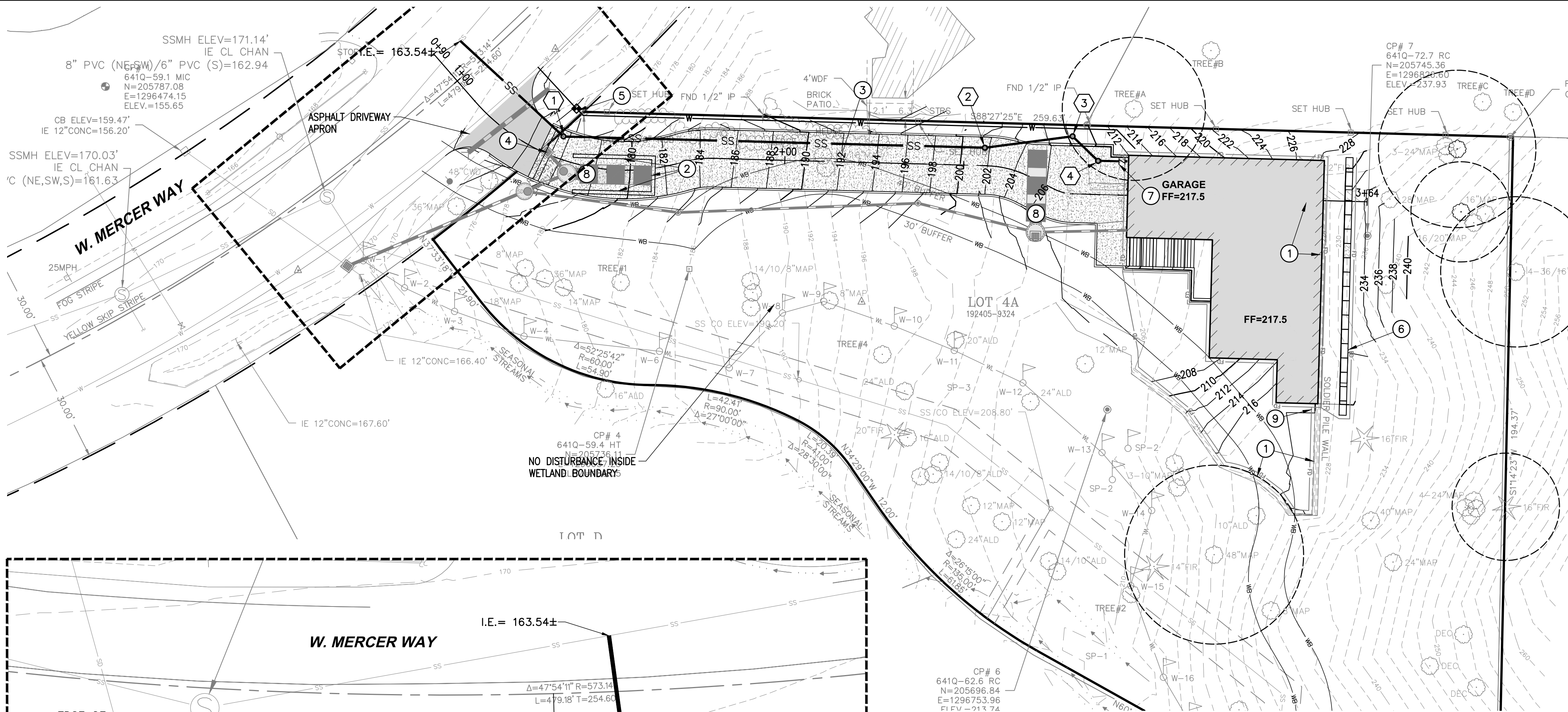
5236 W MERCER WAY
 SINGLE FAMILY RESIDENCE
 STORM DRAINAGE DETAILS

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.
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 SCALE: AS SHOWN
 DATE: 1/29/2026
 DESIGNED BY: JP
 CHECKED BY: TC
 PACE PROJECT NO. 17387

SHEET C2.2

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 USER NAME: TYLER CHRISTOFFERSON

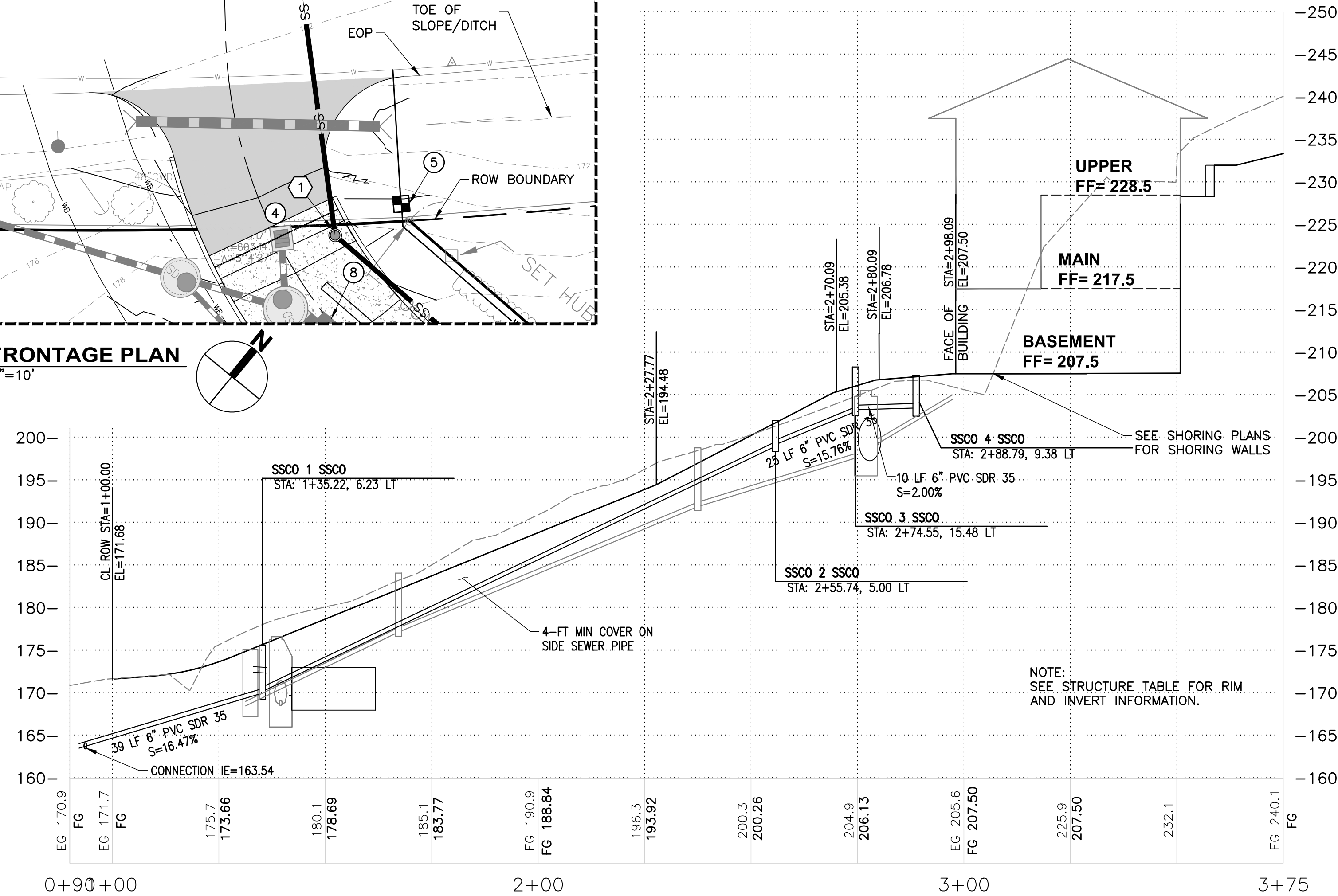
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 SAVE TIME: 1/29/2026 7:29:37 AM PLOT TIME: 1/29/2026 10:16 AM
 USER NAME: TYLER CHRISTOFFERSON



FRONTAGE PLAN
 1"=10'

SEWER STRUCTURE TABLE

NAME	DETAILS
① SSCO 1 SSCO	RIM = 175.64 IE IN = 170.20 (6" PVC SDR 35 E) IE OUT = 170.00 (6" PVC SDR 35 NW)
② SSCO 2 SSCO	RIM = 202.01 IE IN = 199.20 (6" PVC SDR 35 E) IE OUT = 199.00 (6" PVC SDR 35 W)
③ SSCO 3 SSCO	RIM = 208.35 IE IN = 203.30 (6" PVC SDR 35 SE) IE OUT = 203.10 (6" PVC SDR 35 W)
④ SSCO 4 SSCO	RIM = 207.35 IE OUT = 203.50 (6" PVC SDR 35 NW)



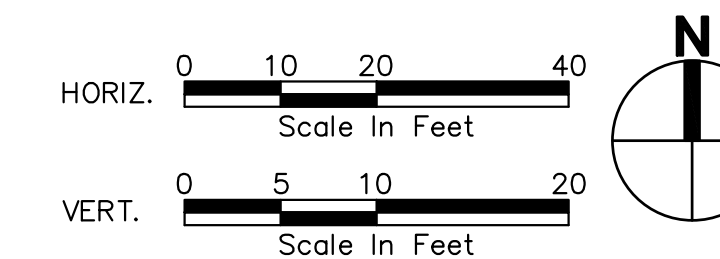
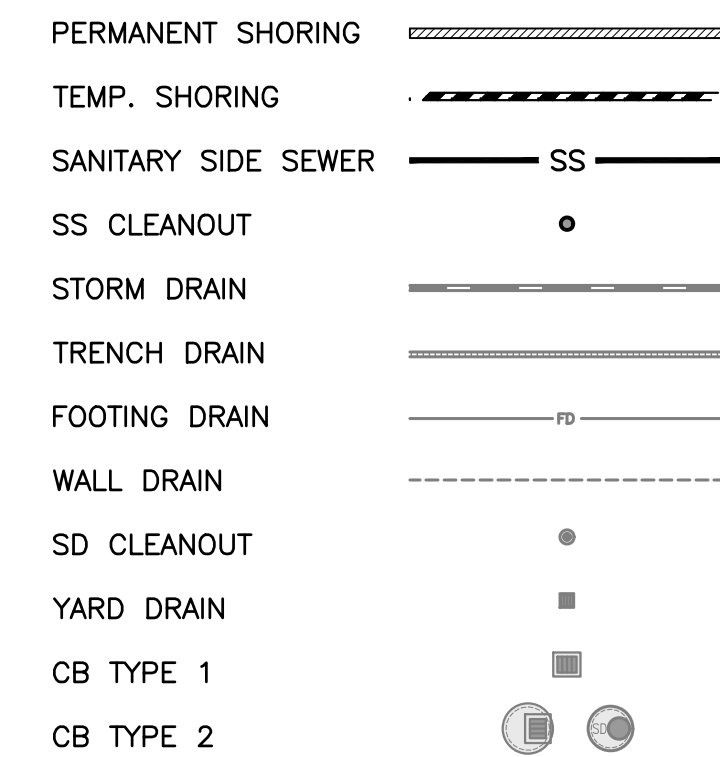
KEY NOTES

- PERMANENT SHORING WALLS
- TEMPORARY SHORING WALLS
- CONCRETE DRIVEWAY WITH VERTICAL CURB AND GUTTER.
- VALLEY GUTTER AT EDGE OF ASPHALT. SEE DETAIL 3, SHEET C2.1.
- 1" WATER METER, MINIMUM.
- GABION BASKET WALL (TYP), SEE DETAIL 4, SHEET C2.1.
- SIDE SEWER BACKFLOW PREVENTION VALVE, SEE DETAIL 5, SHEET C3.1. VERIFY BUILDING SEWER CONNECTION DEPTH PRIOR TO CONSTRUCTION. ADJUST DEPTH IF NECESSARY.
- CMP DETENTION PIPE, SEE DETAILS ON SHEET C2.1.
- CONNECT GABION BASKET WALL FOOTING DRAINS TO SOLDER PILE SHORING FOOTING DRAIN.

GENERAL NOTES:

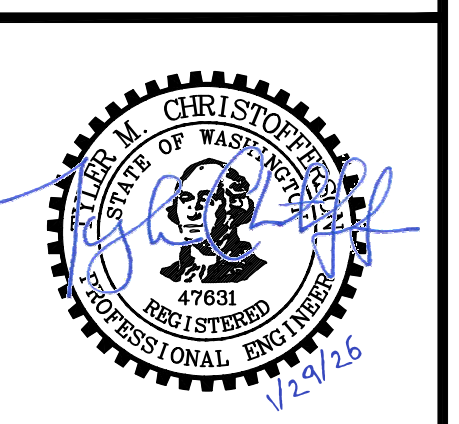
- REFERENCE SHORING AND STRUCTURAL DETAILS FOR SHORING AND FOUNDATION DRAIN OUTLET DETAILS.
- BASEMENT FLOOR SHORING-FOUNDATION DRAIN OUTLET SD @ 2.0% MIN.
- YARD DRAIN OUTLET SD @ 2.0% MIN
- STORM CONVEYANCE PIPE SHALL BE SDR 35 PVC.
- FIRE PROTECTION SYSTEM REQUIRED AND SHALL BE DESIGNED BY A FIRE SPRINKLER DESIGNER.
- GABION BASKET WALL CONSTRUCTED PRIOR TO PERMANENT SHORING CONSTRUCTION. SEE SHORING AND STRUCTURAL PLANS.
- FIRE PROTECTION SYSTEM REQUIRED AND SHALL BE DESIGNED BY A FIRE SPRINKLER DESIGNER.
- CONSULT FIRE SPRINKLER DESIGNER FOR FINAL METER AND SUPPLY LINE SIZING.

LEGEND



NO.	REVISION	DATE

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 17255 Kirkland Way, Suite 900
 Kirkland, WA 98033
 P: 425.827.2014
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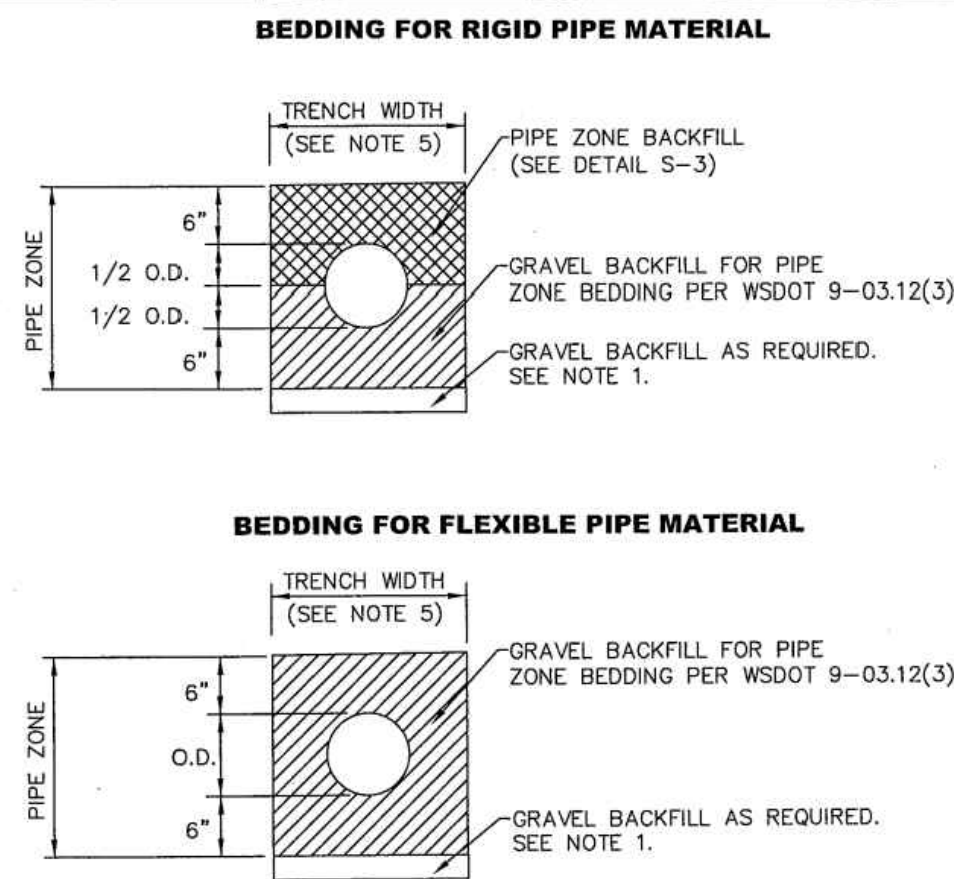
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N5 ARCHITECTURE
 4200 STONE WAY N
 SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
SITE, UTILITY, AND SEWER PLAN

VERIFY SCALE
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 SCALE: AS SHOWN DATE: 1/29/2026
 DESIGNED BY: JP CHECKED BY: TC
 PACE PROJECT NO. 17387

SHEET **C3.0**

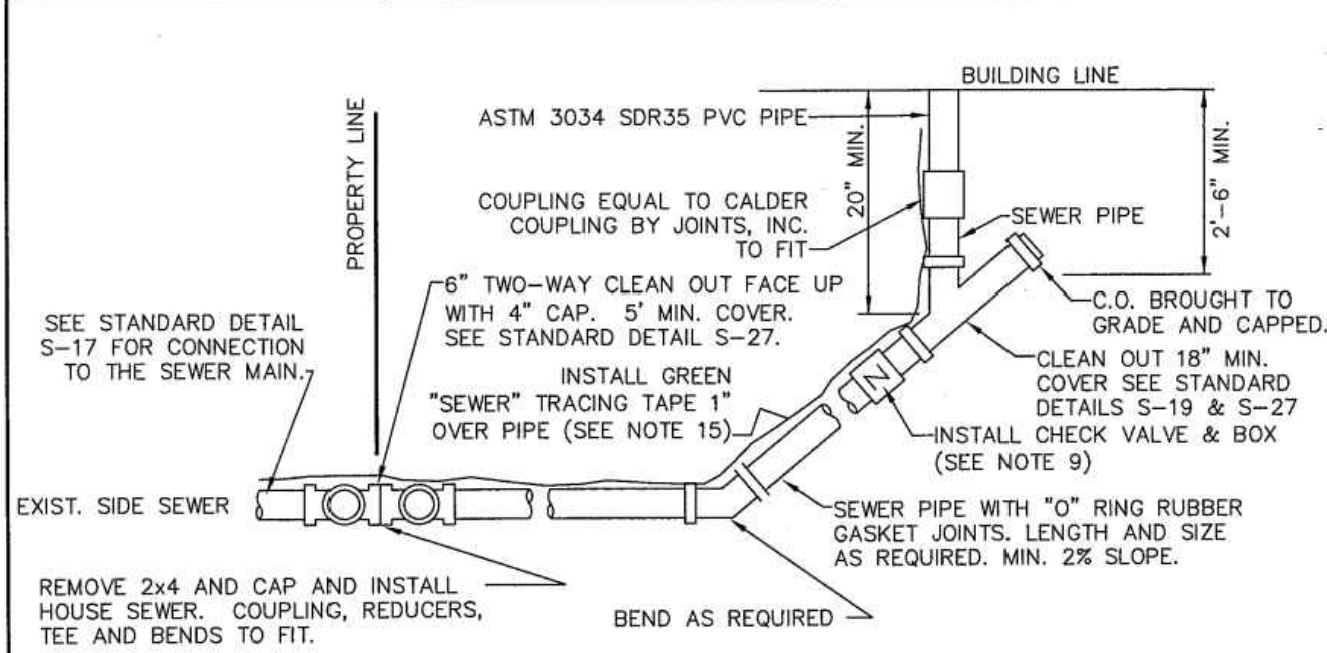


NOTES

- EXCAVATE UNSTABLE MATERIAL DOWN TO FIRM SOIL. REPLACE WITH GRAVEL BACKFILL PER WSDOT 9-03.12(3) AS DIRECTED BY THE CITY ENGINEER.
- PROVIDE UNIFORM SUPPORT UNDER BARREL.
- HAND TAMP UNDER HAUNCHES.
- COMPACT BEDDING AND BACKFILL MATERIAL TO 95% MAX. DENSITY EXCEPT DIRECTLY OVER PIPE. HAND TAMP ONLY UNTIL MINIMUM 6" ABOVE TOP OF PIPE.
- 30" MAXIMUM TRENCH WIDTH FOR PIPE UP TO AND INCLUDING 12", FOR PIPE LARGER THAN 12", USE O.D. PLUS 16".

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
PIPE
BEDDING
6-5-2009 NO SCALE **S-4**

1 PIPE BEDDING
NTS

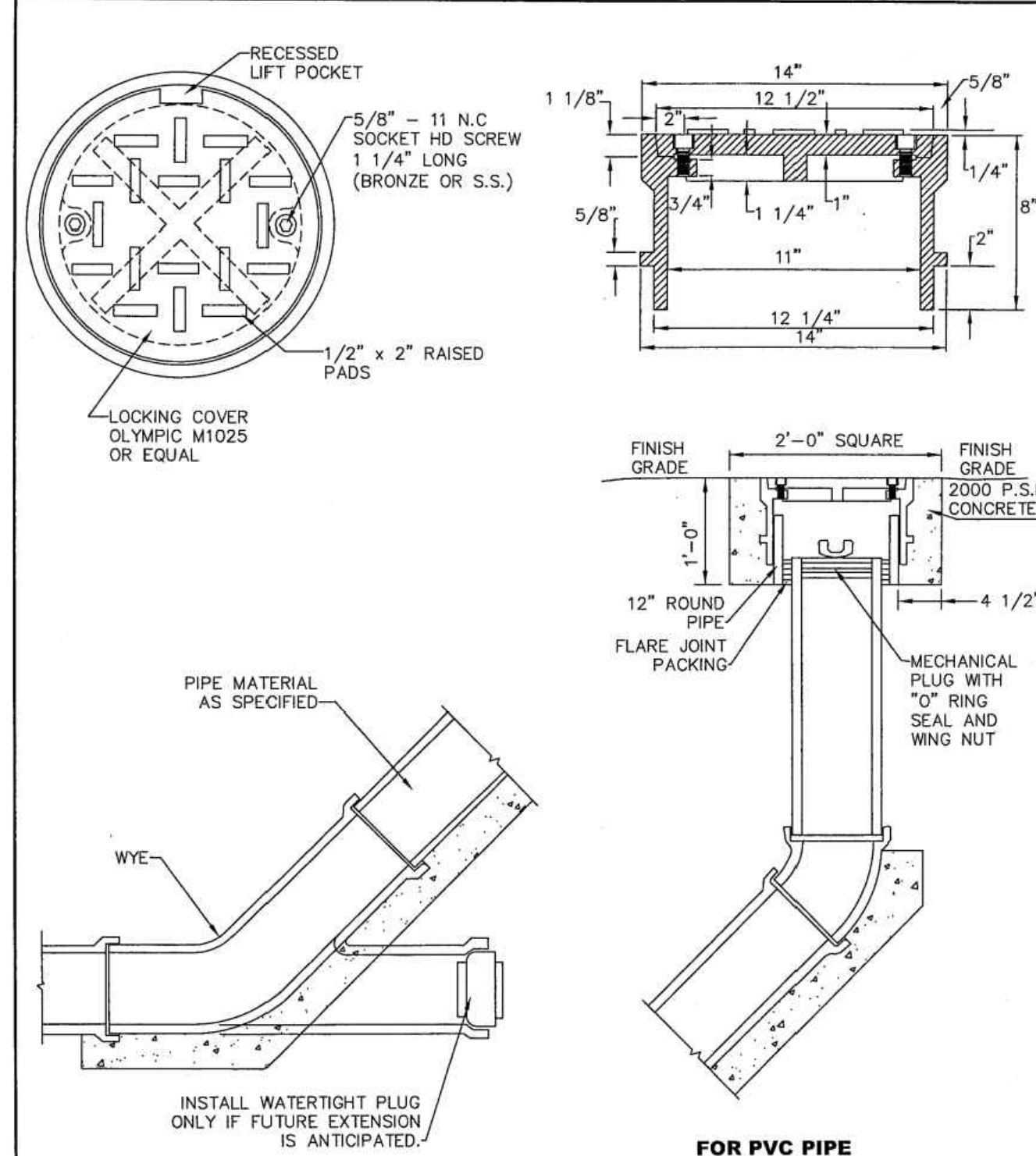


NOTES

- ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
- CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
- ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
- 18" MINIMUM COVERAGE OVER PIPE.
- LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8" BEND OR WYE. 90° CHANGE WITH 1/8" BEND AND WYE.
- 4" SEWER PIPE MINIMUM SIZE ON PROPERTY. 2% MINIMUM GRADE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER ORDINANCES.
- ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
- BACK WATER VALVE (CHECK VALVE) IS REQUIRED:
 - A. IF CONNECTED TO A SHARED SIDE SEWER.
 - B. IF CONNECTION AT HOUSE IS LOWER THAN BOTH UPSTREAM AND DOWNSTREAM MANHOLE.
 - C. SEE S-23 & S-24 FOR LAKE LINE REQUIREMENTS.
- AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER & ALL BENDS, C.O. ETC., IN RELATION TO THE HOUSE IS REQUIRED AFTER INSPECTION & INSTALLATION. SEE STANDARD DETAIL S-38 FOR A TYPICAL "AS BUILT".
- THE MINIMUM PIPE SIZE FOR SIDE SEWERS SHALL BE:
 - 6" - WITHIN THE PUBLIC RIGHT-OF-WAY.
 - 4" - SINGLE FAMILY RESIDENCES.
 - 6" - 2 TO 6 SINGLE FAMILY RESIDENCES.
 - 6" - BUILDINGS OTHER THAN SINGLE FAMILY RESIDENCES.
- UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE. COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
HOUSE SEWER CONNECTION
6-5-2009 NO SCALE **S-18**

2 HOUSE SEWER CONNECTION
NTS

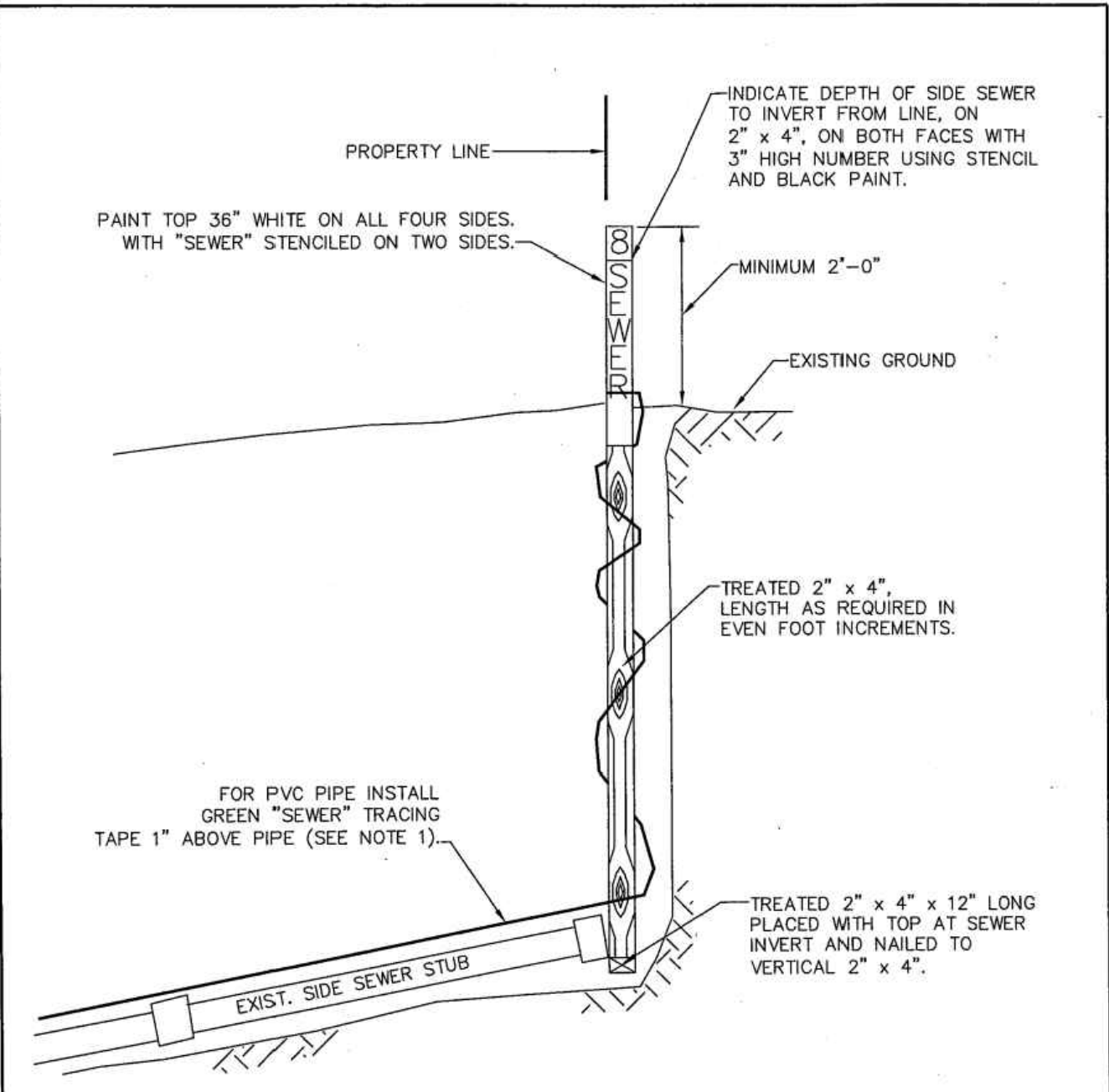


NOTES

- SEE S-27 FOR INSTALLATION DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
CLEAN OUT DETAIL
6-5-2009 NO SCALE **S-19**

3 CLEAN OUT DETAIL
NTS

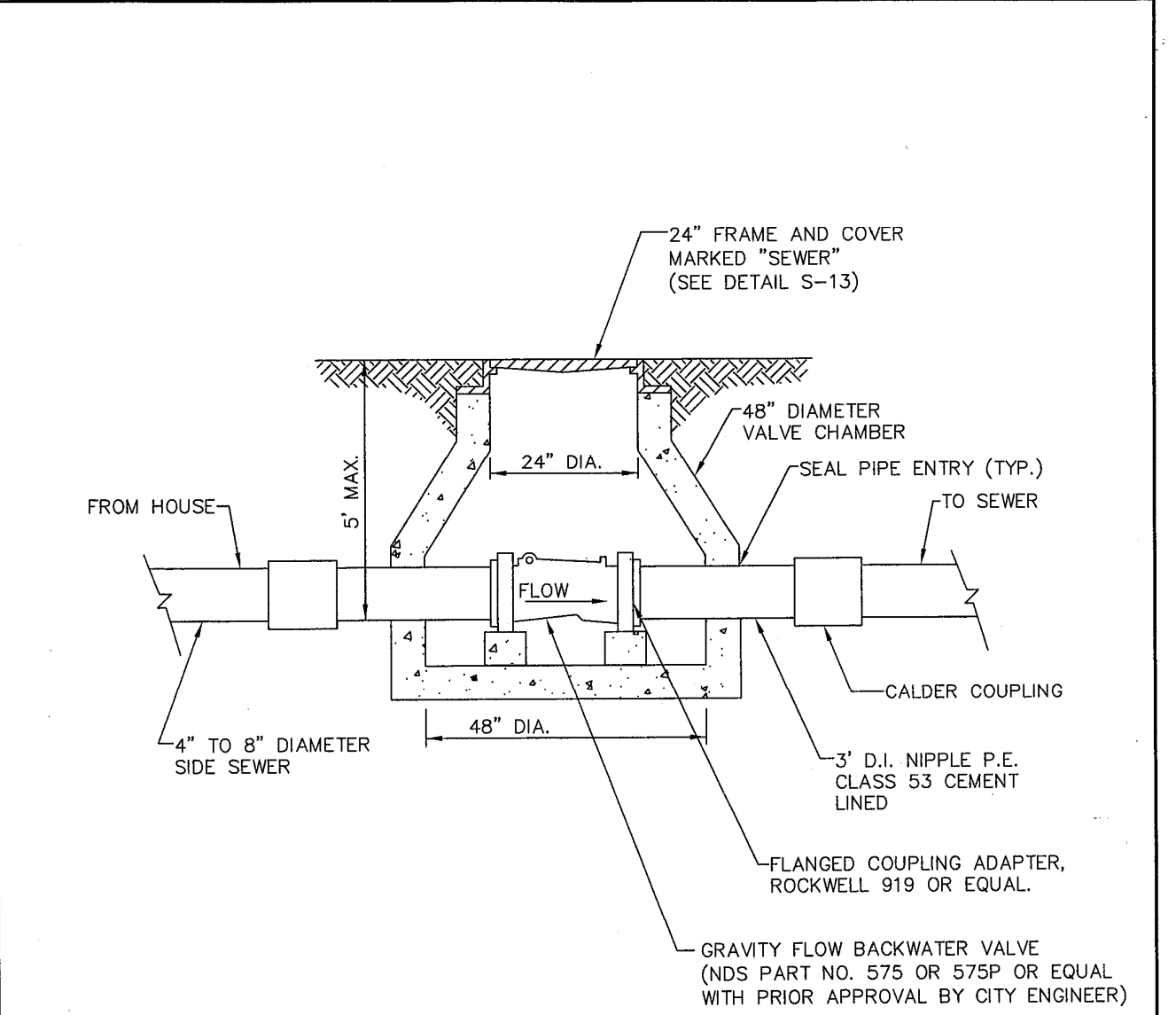


NOTES

- UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

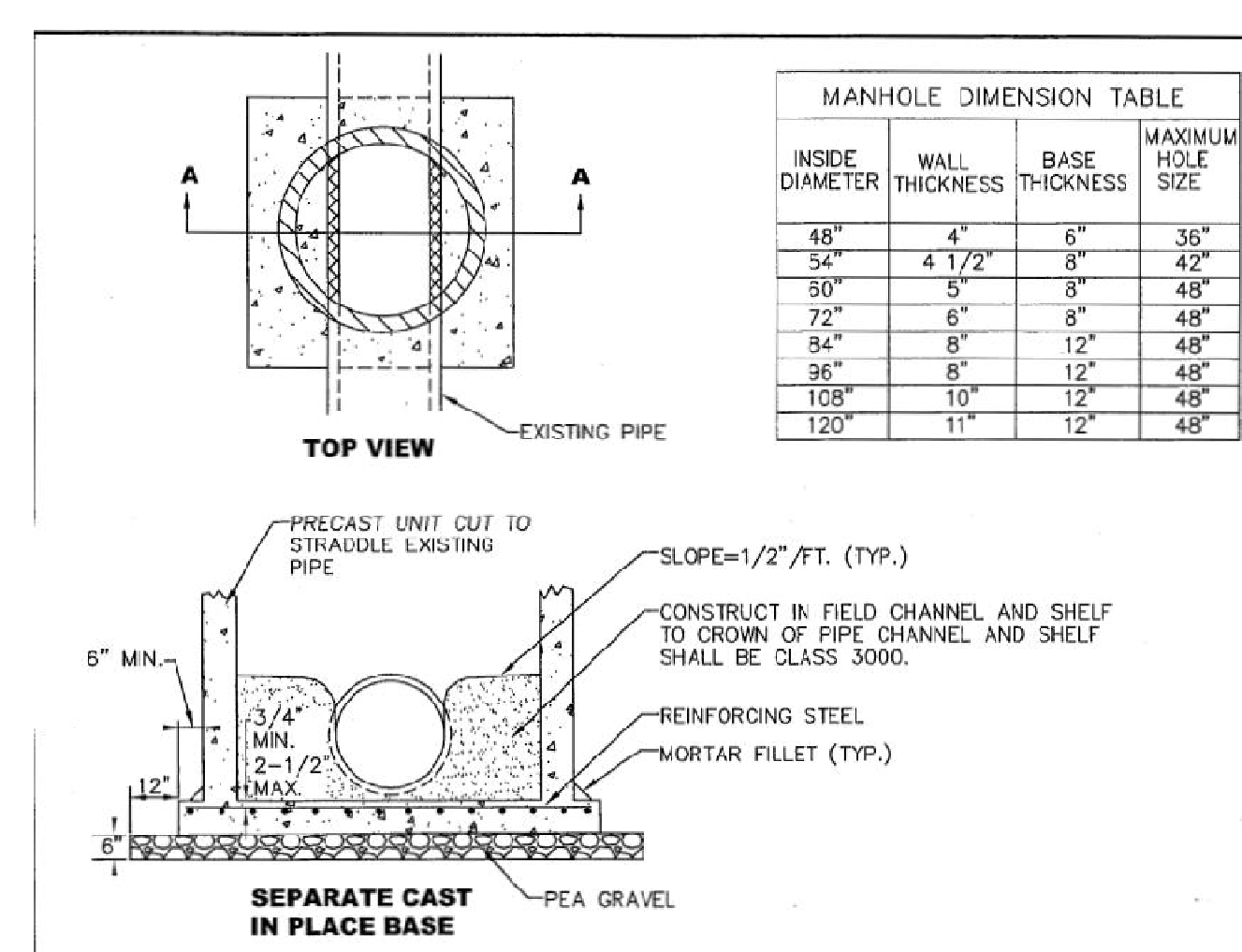
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER MARKER POST
6-5-2009 NO SCALE **S-20**

4 SIDE SEWER MARKER POST
NTS



CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
BACKFLOW PREVENTION VALVE ASSEMBLY FOR JOINT USE SIDE SEWER (4" OR 6" DIAMETER)
6-5-2009 NO SCALE **S-26**

5 BACKFLOW PREVENTION VALVE
NTS



INSIDE DIAMETER	WALL THICKNESS	BASE THICKNESS	MAXIMUM HOLE SIZE
48"	4"	6"	36"
54"	4 1/2"	8"	42"
50"	5"	8"	48"
72"	6"	8"	48"
84"	8"	12"	48"
96"	8"	12"	48"
108"	10"	12"	48"
120"	11"	12"	48"

- EXISTING PIPE SHALL BE SUPPORTED AT ALL TIMES.
- NO WEIGHT OF THE PRECAST UNIT SHALL BEAR ON THE EXISTING PIPE.
- CONCRETE FOR CAST-IN-PLACE BASE SHALL BE CLASS 4000.
- PRECAST MANHOLE SECTION SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD PLAN FOR THE SPECIFIED MANHOLE SIZE AND TYPE.
- MANHOLE SECTIONS SHALL NOT BE INSTALLED UNTIL CONCRETE BASE HAS SET FOR 12 HOURS.
- THE EXISTING MAIN SHALL BE LEFT IN PLACE AND THE TOP PORTION OF THE MAIN SHALL BE REMOVED. THE BOTTOM PORTION OF THE MAIN SHALL BE TIED IN AS THE CHANNEL OF THE NEW MANHOLE.
- GROUT ALL OPENINGS TO ENSURE WATER TIGHT STRUCTURE.
- A FLEXIBLE PIPE-TO MANHOLE CONNECTOR SHALL BE EMPLOYED IN ALL CONNECTIONS OF RIGID AND FLEXIBLE PIPES TO NEW PRECAST CONCRETE MANHOLES. THE CONNECTOR SHALL BE "KOR-N-SEAL" WITH "WEDGE KOR-BAND" MANUFACTURED BY NPC, INC., OR APPROVED EQUAL.
- BASE REINFORCING STEEL SHALL BE PER MANUFACTURER'S RECOMMENDATION.

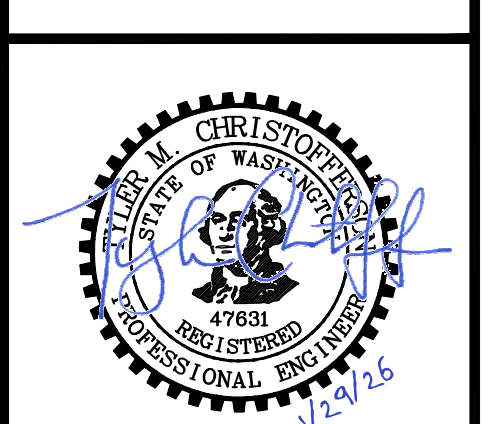
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
NEW MANHOLE OVER AN EXISTING SEWER LINE
6-5-2009 NO SCALE **S-15**

6 NEW MANHOLE OVER AN EXISTING SEWER LINE
NTS

FILE NAME: P:\WORK\17387_5235_WEST_MERCER_WAY_SEW_CAD\ENGINEERING\DWG\17387-DET.DWG
SAVE TIME: 6/17/2008 9:42:13 AM
USER NAME: TYLER CHRISTOFFERSON

NO.	DATE	REVISION	BY

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17255 Kirkland Way, Suite 300
Kirkland, WA 98033
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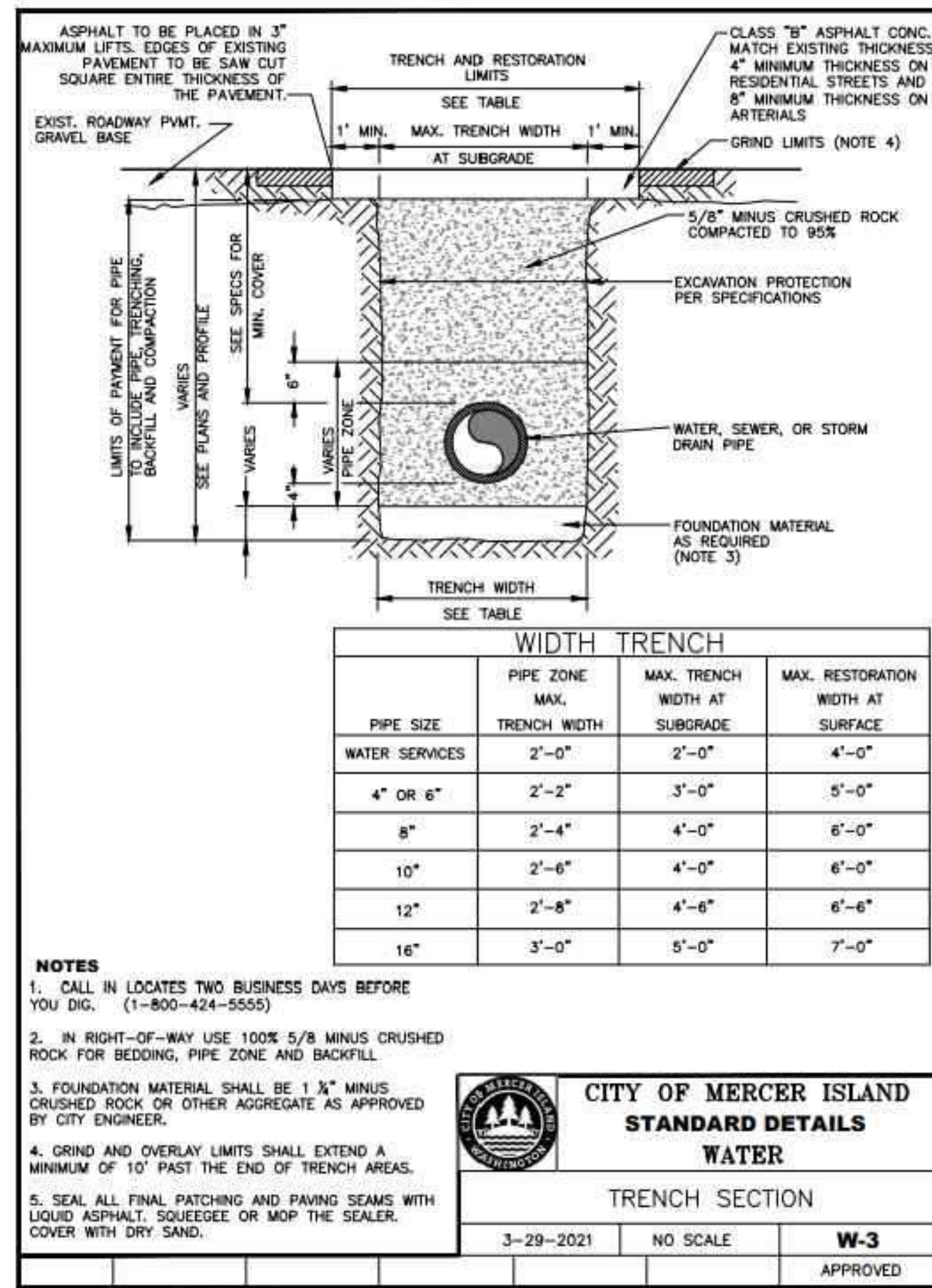
N5 ARCHITECTURE
4200 STONE WAY N
SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
SANITARY SIDE SEWER DETAILS

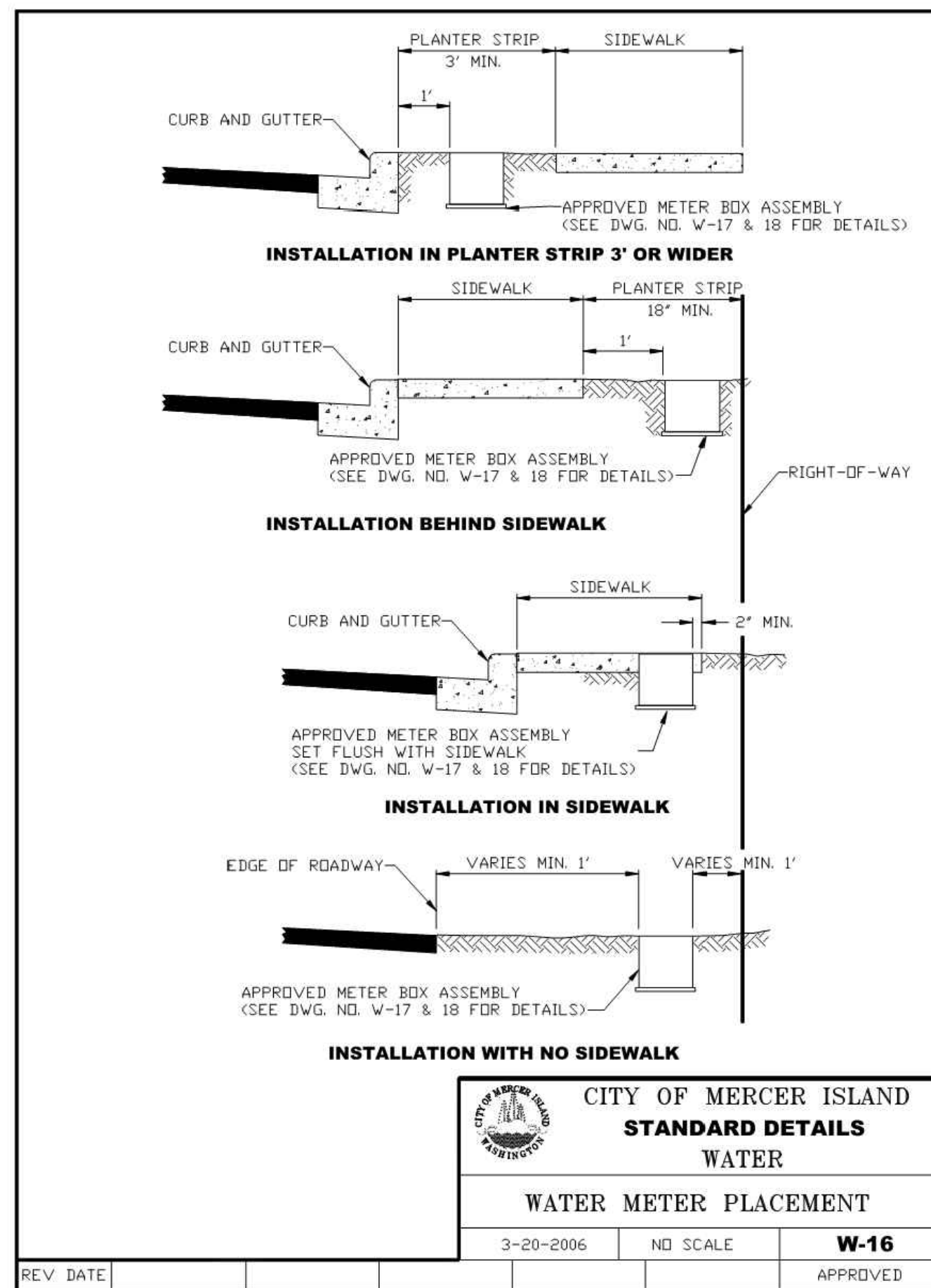
VERIFY SCALE
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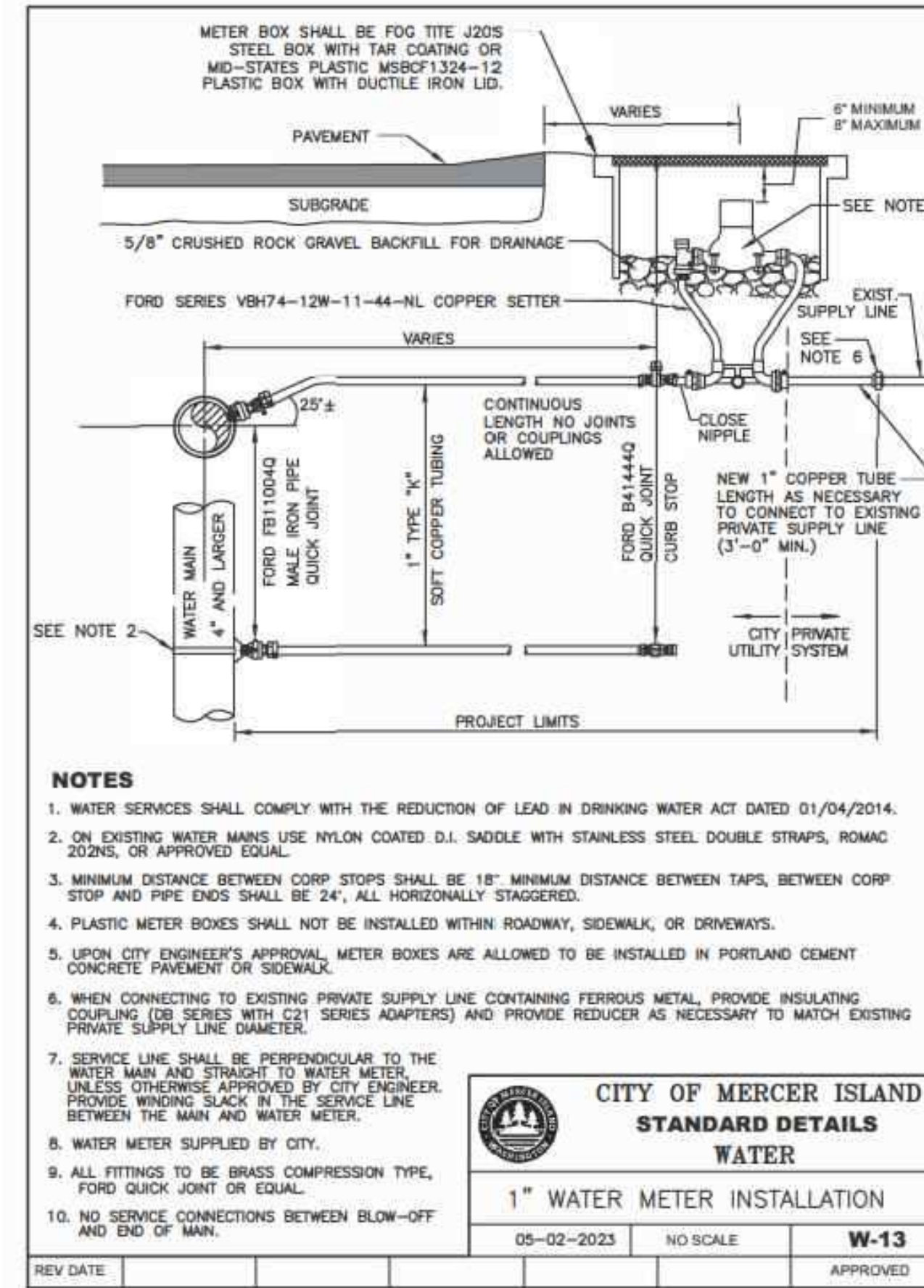
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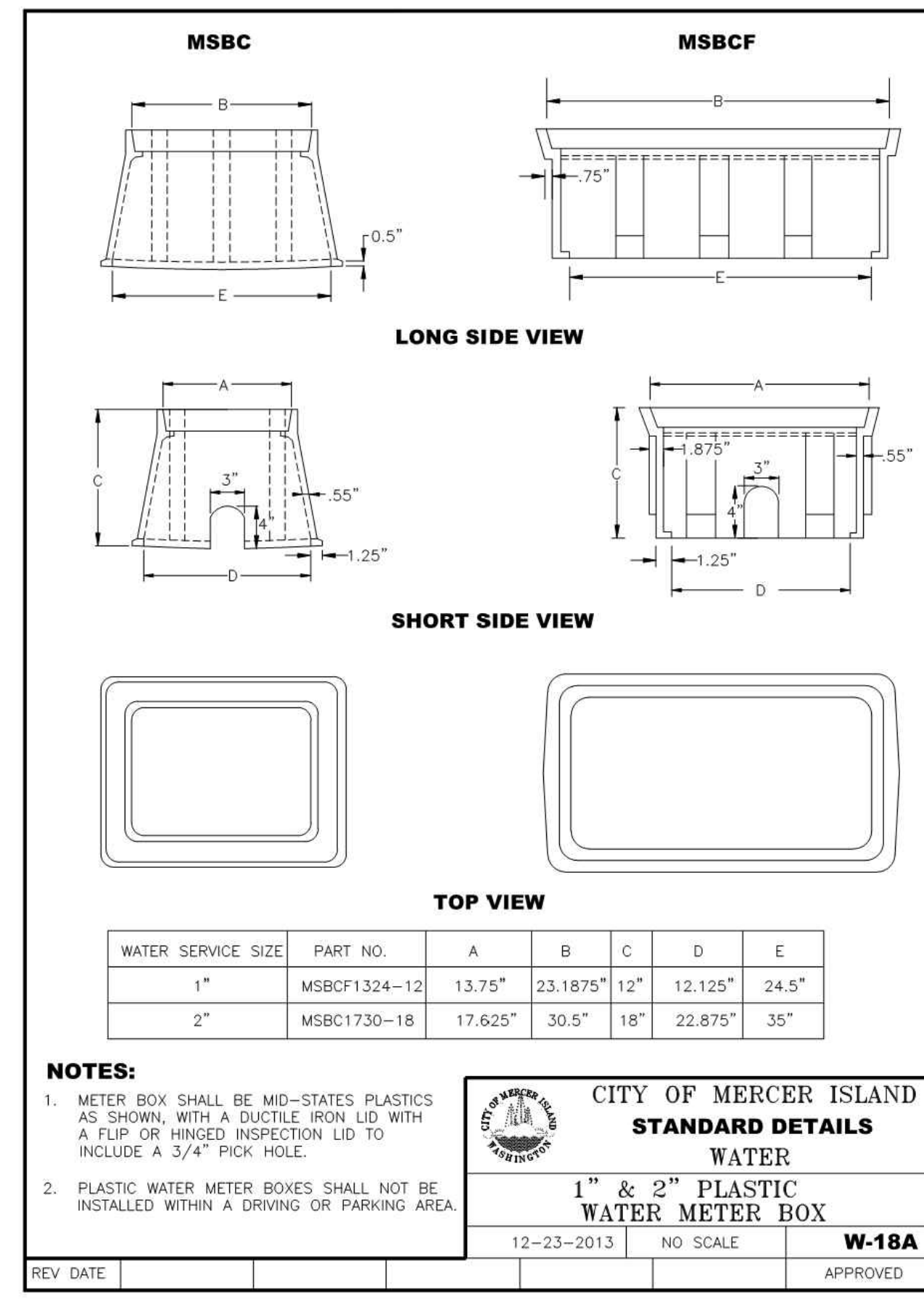
1 TRENCH SECTION
NTS



3 WATER METER PLACEMENT
NTS



2 1" WATER METER INSTALLATION
NTS



4 1" & 2" PLASTIC WATER METER BOX
NTS

FILE NAME: P:\WORK\17387_5236 WEST MERCER WAY (SFA) (CAD) (ENGINEERING SHEETS)\P17387-DET.DWG
SAVE TIME: 6/17/2023 9:42:13 AM
USER NAME: TYLER CHRISTOFFERSON

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Kirkland, WA 98033
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N5 ARCHITECTURE
4200 STONE WAY N
SEATTLE, WA 98103

5236 W MERCER WAY
SINGLE FAMILY RESIDENCE
WATER DETAILS

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SCALE: AS SHOWN
DATE: 1/29/2026

DESIGNED BY: JP
CHECKED BY: TC

PACE PROJECT NO. 17387

SHEET C3.2

General Structural Notes

The Following Apply Unless Noted Otherwise on the Drawings

Criteria

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2021 INTERNATIONAL BUILDING CODE.
- DESIGN LOADING CRITERIA:
 - RESIDENTIAL
 - FLOOR LIVE LOAD 40 PSF
 - FLOOR LIVE LOAD (BALCONIES) 60 PSF
 - ROOF
 - ROOF LIVE LOAD 25 PSF
 - ROOF LIVE LOAD (TENANT ACCESSIBLE) 60 PSF
 - ROOF DEAD LOAD (PHOTO VOLTAIIC PANELS) 5 PSF
 - ENVIRONMENTAL LOADS
 - SNOW Ce=1.0, Is=1.0, Ct=1.1, Pg=25 PSF, Pf=20 PSF
 - WIND I=1.0, Gcpi=0.18, 110 MPH, EXPOSURE "C", Kzt=1.6
 - EARTHQUAKE . . . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
 - LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS. Vs = 14.0 KIPS
 - SITE CLASS=C, Ss=1.45, Sds=1.16, S1=0.50, SD1=0.50, Cs=0.178
 - SDC=B, Te=1.0, R=6.5

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 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 AND NOTES 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. 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.
- ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

Quality Assurance

- 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:

SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY	PER TABLE 1705.6
EXPANSION BOLTS AND THREADED EXPANSION INSERTS	PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS	PER MANUFACTURER

Geotechnical

- 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. 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. 3000 PSF
 - LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) 50 PCF / 25 PCF
 - SEISMIC LATERAL EARTH PRESSURE. 9H PSF
- SOILS REPORT REFERENCE:
 "GEOTECHNICAL REPORT, PROPOSED RESIDENCE, 5236 WEST MERCER WAY, MERCER ISLAND, WASHINGTON", PREPARED BY PANGEQ, INC., DATED OCTOBER 5 - 2017, PROJECT NO. 17-143-200, & "GEOTECHNICAL ADDENDUM NO. 1", DATED JANUARY 22, 2026.

Concrete

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318 CHAPTER 26, AND 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 ACI WEATHER EXPOSURE. DESIGN STRENGTH IS $f'c = 2,500$ PSI.
- THE MINIMUM AMOUNTS OF CEMENT MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318 SECTION 26.12. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION. THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.
- 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 TABLE 19.3.2.1 MODERATE EXPOSURE, F1.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, $f_y = 60,000$ PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, $f_y = 40,000$ PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, $f_y = 60,000$ PSI.
- DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-18 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 4 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 4 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) 2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) 1-1/2"
COLUMN TIES OR SPIRALS AND BEAM STIRRUPS 1-1/2"
SLABS AND WALLS (INT. FACE) GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"
- CONCRETE WALL REINFORCING—PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

6" WALLS #4 @ 16 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN
- 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.

Anchorage

- EXPANSION BOLTS INTO CONCRETE SHALL BE STRONG BOLT WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-1771, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED FOR ALL EXPANSION BOLT INSTALLATION.
- 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. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED.

Wood

- FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W. C. L. B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS:	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, $F_b = 850$ PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, $F_b = 1000$ PSI
BEAMS:	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, $F_b = 1350$ PSI
POSTS:	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, $F_c = 1350$ PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, $F_c = 1000$ PSI
STUDS, PLATES & MISC. FRAMING:		DOUGLAS-FIR-LARCH OR HEM-FIR NO. 2

- GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN A. I. T. C. OR APA-EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A. I. T. C. OR APA-EWS CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, $F_b = 2,400$ PSI, $F_v = 265$ PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, $F_b = 2,400$ PSI, $F_v = 265$ PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 3,000' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.
- MANUFACTURED LUMBER, PSL, LVL, AND LSL, SHALL BE MANUFACTURED UNDER A PROCESS APPROVED BY THE NATIONAL RESEARCH BOARD. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE NATIONAL RESEARCH BOARD NUMBER, AND THE QUALITY CONTROL AGENCY. ALL PSL, LVL, AND LSL LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ICC-ES REPORT ESR-1387 USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. THE MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.2E)	$F_b = 2900$ PSI, $E = 2200$ KSI, $F_v = 290$ PSI
LVL (1.9E)	$F_b = 2600$ PSI, $E = 1900$ KSI, $F_v = 285$ PSI
LSL (1.55E)	$F_b = 2325$ PSI, $E = 1550$ KSI, $F_v = 310$ PSI

DESIGN SHOWN ON PLANS FOR PSL, LVL, AND LSL IS BASED ON LUMBER MANUFACTURED BY THE MEYERHAEUSER CORPORATION. DESIGN SHOWN ON PLANS FOR BIG BEAMS ARE BASED ON LUMBER MANUFACTURED BY ROSBORO. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER, ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

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.

- PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE MEYERHAEUSER CORPORATION. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I. C. B. O. APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

- PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LANDING SHALL BE AS FOLLOWS:

TOP CHORD LIVE LOAD	25 PSF	
TOP CHORD DEAD LOAD	15 PSF	
BOTTOM CHORD DEAD LOAD	5 PSF	
TOTAL LOAD	45 PSF	
WIND UPLIFT (TOP CHORD)	5 PSF	
BOTTOM CHORD LIVE LOAD	10 PSF	
(BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)		

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

- 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.
 REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- 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.

- PRESSURE TREATED WOOD (INCLUDES PRESERVATIVE AND FIRE TREATED) SHALL BE TREATED PER AWPA STANDARD. PRESSURE TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO RETENTION OF 0.25 PCF. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO A RETENTION OF 0.40 PCF. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO A RETENTION OF 0.60 PCF. SODIUM BORATE (SBX) TREATED WOOD SHALL NOT BE USED WHERE EXPOSED TO WEATHER. FASTENERS AND TIMBER CONNECTORS WITHOUT AMMONIA IN DIRECT CONTACT WITH ACQ-A (UP TO A RETENTION LEVEL OF 0.40 PCF), CBA-A (UP TO A RETENTION LEVEL OF 0.41 PCF), CA-B (UP TO A RETENTION LEVEL OF 0.21 PCF), OR SBX TREATED WOOD SHALL BE G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653. FASTENERS AND TIMBER CONNECTORS WITH AMMONIA IN DIRECT CONTACT WITH ACQ-A (OVER A RETENTION LEVEL OF 0.40 PCF), CBA-A (OVER A RETENTION LEVEL OF 0.41 PCF), CA-B (OVER A RETENTION LEVEL OF 0.21 PCF), OR WITH ACZA TREATED WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL.

- TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER 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.

31. 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	3-1/2"	0.131"

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.

- 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 (2005 EDITION) 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.

32. WOOD FRAMING NOTES—THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

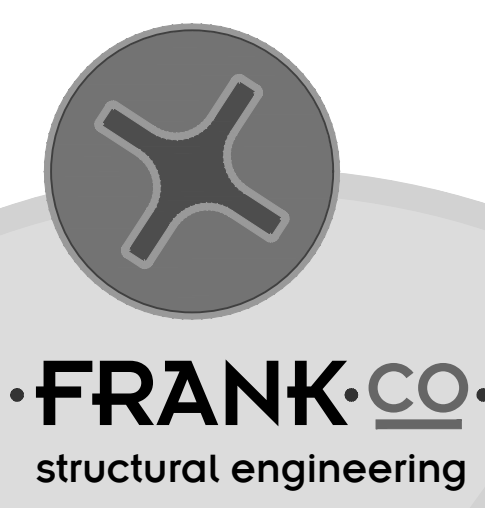
- ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE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

- 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. TOENAIL 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.



4742 42nd ave. sw, #297
seattle, wa 98116

206.579.8160

Project:

Mercer Island Residence
5236 W Mercer Way
Mercer Island, WA



4200 Stone Way N
Seattle, Washington 98103

Frank Co. Project No.: 0031-2025-06

Design: EAF

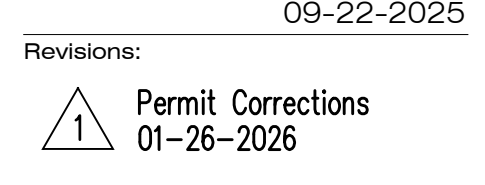
Drawn: JAS

Approved: EAF

Issue: Permit

Date: 09-22-2025

Revisions: Permit Corrections 01-26-2026



For Building Department use:

Sheet Contents:

General Structural Notes

Scale (u.n.o.):
Sheet No.: S1.1

General Structural Notes, cont.
The Following Apply Unless Noted Otherwise on the Drawings

Abbreviations

'	DEGREE	EL	ELEVATION	NO., #	NUMBER
@	AT	ELEC	ELECTRICAL	NS	NEAR SIDE
&	AND	ELEV	ELEVATOR	NTS	NOT TO SCALE
L	ANGLE	EMBED	EMBEDDED, EMBEDMENT	OC	ON CENTER
C	CENTERLINE	ENGR	ENGINEER	OD	OUTSIDE DIAMETER
Ø	DIAMETER	EQ	EARTHQUAKE, EQUAL	OF	OUTSIDE FACE
P	PLATE	EQUIP	EQUIPMENT	OPNG	OPENING
AB	ANCHOR BOLT	ES	EACH SIDE	OPP	OPPOSITE (HAND)
ACI	AMERICAN CONCRETE INSTITUTE	ETC	ET CETERA	OPT	OPTION, OPTIONAL
ADD'L	ADDITIONAL	EW	EACH WAY	OVS	OVER SIZED HOLES
ADJ	ADJACENT	EXT	EXTERIOR	OWJ	OPEN WEB JOIST
AGGR	AGGREGATE	EXTD	EXTEND, EXTENDED	PC	PRECAST
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FB	FLAT BAR, FLUSH BEAM	PCF	POUNDS PER CUBIC FOOT
ALT	ALTERNATE	FD	FLOOR DRAIN	PCP	PRECAST CONCRETE PANEL
ALUM	ALUMINUM	FDN	FOUNDATION	PEN	PENETRATION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FF	FAR FACE	PERP	PERPENDICULAR
APA	AMERICAN PLYWOOD ASSOCIATION	FIN	FINISH	PLF	POUNDS PER LINEAL FOOT
APPD	APPROVED	FL	FLOOR	PLYWD	PLYWOOD
APPROX	APPROXIMATE	FLG	FLANGE	PP	PARTIAL PENETRATION
ARCH	ARCHITECT, ARCHITECTURAL	FOS	FACE OF STUD	PREFAB	PREFABRICATED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FRMG	FRAMING	PS	PRESTRESSED
AWS	AMERICAN WELDING SOCIETY	FT	FOOT, FEET	PSF	POUNDS PER SQUARE FOOT
BOT	BOTTOM	FTG	FOOTING	PSI	POUNDS PER SQUARE INCH
BD	BOARD	GA	GAUGE, GAGE	PT	POST TENSIONED, PRESSURE TREATED
BLDG	BUILDING	GALV	GALVANIZED	PVC	POLYVINYL CHLORIDE
BLK, BLKG	BLOCK, BLOCKING	GT	GIRDER TRUSS	REINF	REINFORCE, REINFORCING, REINFORCEMENT
BM	BEAM	GL	GLUE LAMINATED	REF	REFERENCE
BOS	BOTTOM OF STEEL	GLB	GLUE LAMINATED BEAM	REQD	REQUIRED
BRG	BEARING	GRND	GROUND	REQMTS	REQUIREMENTS
BRKT	BRACKET	H, HORIZ	HORIZONTAL	RND	ROUND
BTWN	BETWEEN	HD	HOLDOWN	S	AMERICAN STANDARD SHAPE
C	STANDARD CHANNEL	HGR	HANGER	SB	SPACE BAR or SUPPORT BAR
CC	CENTER TO CENTER	HP	HP SHAPES, HIGH POINT	SC	SLIP CRITICAL
CFS	COLD FORMED STEEL	HS	HIGH STRENGTH	SCHED	SCHEDULE, SCHEDULED
CG	CENTER OF GRAVITY	HSS	HOLLOW STRUCTURAL SECTION	SECT	SECTION
CIP	CAST IN PLACE	HT	HEIGHT	SER	STRUCTURAL ENGINEER OF RECORD
CJ	CONSTRUCTION JOINT, CONTROL JOINT	IBC	INTERNATIONAL BUILDING CODE	SHT	SHEET
CLR	CLEARANCE, CLEAR	ID	INSIDE DIAMETER	SHTG	SHEATHING
CMU	CONCRETE MASONRY UNIT	IF	INSIDE FACE	SIM	SIMILAR
COL	COLUMN	IN	INCH	SPCG	SPACING
COMP	COMPRESSION	INCL	INCLUDE	SPECS	SPECIFICATIONS
CONC	CONCRETE	INFO	INFORMATION	SQ	SQUARE
CONN	CONNECTION, CONNECT	INSUL	INSULATION	SSL	SHORT SLOTTED HOLES
CONST	CONSTRUCTION	INT	INTERIOR	STD	STANDARD
CONTR	CONTRACTOR	INT	INTERIOR	STIFF	STIFFENER
COORD	COORDINATION, COORDINATE	JT	JOINT	STIRR	STIRRUP
CORR	CORRUGATED	K, KIP	1,000 POUNDS	STL	STEEL
CP	COMPLETE PENETRATION WELD-ULTRASONIC TEST	KO	KNOCK OUT	STR	STRAIGHT
CTR	CENTER	KSI	KIPS PER SQUARE INCH	STRUCT	STRUCTURAL
CTSK	COUNTERSINK, COUNTERSUNK	LB, #	POUND	SW	SHEAR WALL
CU FT	CUBIC FOOT	LF	LINEAL FOOT	SYM	SYMMETRICAL
CU	CUBIC	LIN	LINEAL, LINEAR	T&B	TOP AND BOTTOM
d	PENNY (NAILS)	LL	LIVE LOAD	T&G	TONGUE AND GROOVE
db	BAR DIAMETERS	LLH	LONG LEG HORIZONTAL	TEMP	TEMPERATURE, TEMPORARY
DBAW	DEFORMED BAR ANCHOR WELDED STUD	LLV	LONG LEG VERTICAL	THICK	THICKNESS
DBL	DOUBLE	LONG	LONGITUDINAL	TOC	TOP OF CURB, TOP OF CONCRETE
DEMO	DEMOLISH, DEMOLITION	LP	LOW POINT	TOF	TOP OF FOOTING
DEPT	DEPARTMENT	LSL	LONG SLOTTED HOLES	TOS	TOP OF STEEL
DET	DETAIL	LTL	LIGHT WEIGHT	TOW	TOP OF WALL
DIAG	DIAGONAL	LVL	LEVEL	TRANS	TRANSVERSE
DIAPH	DIAPHRAGM	MAS	MASONRY	TYP	TYPICAL
DIM	DIMENSION	MATL	MATERIAL	UL	UNDERWRITERS LABORATORY INCORPORATED
DISC	DISCONTINUED, DISCONTINUOUS	MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
DL	DEAD LOAD	MB	MACHINE BOLT	UT	ULTRA-SONIC TEST
DN	DOWN	MC	MISCELLANEOUS CHANNEL	V, VERT	VERTICAL
DS	DRAG STRUT	MECH	MECHANICAL	VG	VERTICAL GRAIN
DWG	DRAWING	MEMB	MEMBRANE	w/	WITH
DWL	DOWEL	MEP	MECHANICAL/ ELECTRICAL/ PLUMBING	w/o	WITHOUT
(E)	EXISTING	MF	MOMENT FRAME	WF	WIDE FLANGE
EA	EACH	MFR	MANUFACTURE, MANUFACTURER	WH	WEEP HOLE
EF	EACH FACE	MIN	MINIMUM	WP	WORK POINT
EJ	EXPANSION JOINT	MISC	MISCELLANEOUS	WT	STRUCTURAL TEE CUT FROM W-SHAPE
		ML	MATCH LINE	WTS	WELDED THREADED STUD
		N	NORTH	WWF	WELDED WIRE FABRIC
		NF	NEAR FACE		
		NFPA	NATIONAL FOREST PRODUCTS ASSOCIATION		
		NIC	NOT IN CONTRACT		



4742 42nd ave. sw, #297
seattle, wa 98116

206.579.8160

Project:

Mercer Island Residence

5236 W Mercer Way
Mercer Island, WA



4200 Stone Way N
Seattle, Washington 98103

Frank Co. Project No.:

0031-2025-06

Design:

EAF

Drawn:

JAS

Approved:

EAF

Issue:

Permit

Date:

09-22-2025

Revisions:

1 Permit Corrections
01-26-2026



For Building Department use:

Sheet Contents:

General Structural Notes (cont'd)

Scale (u.n.o.): na

Sheet No.:

S1.2



FRANK CO.
structural engineering

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For Building Department use:

Sheet Contents:

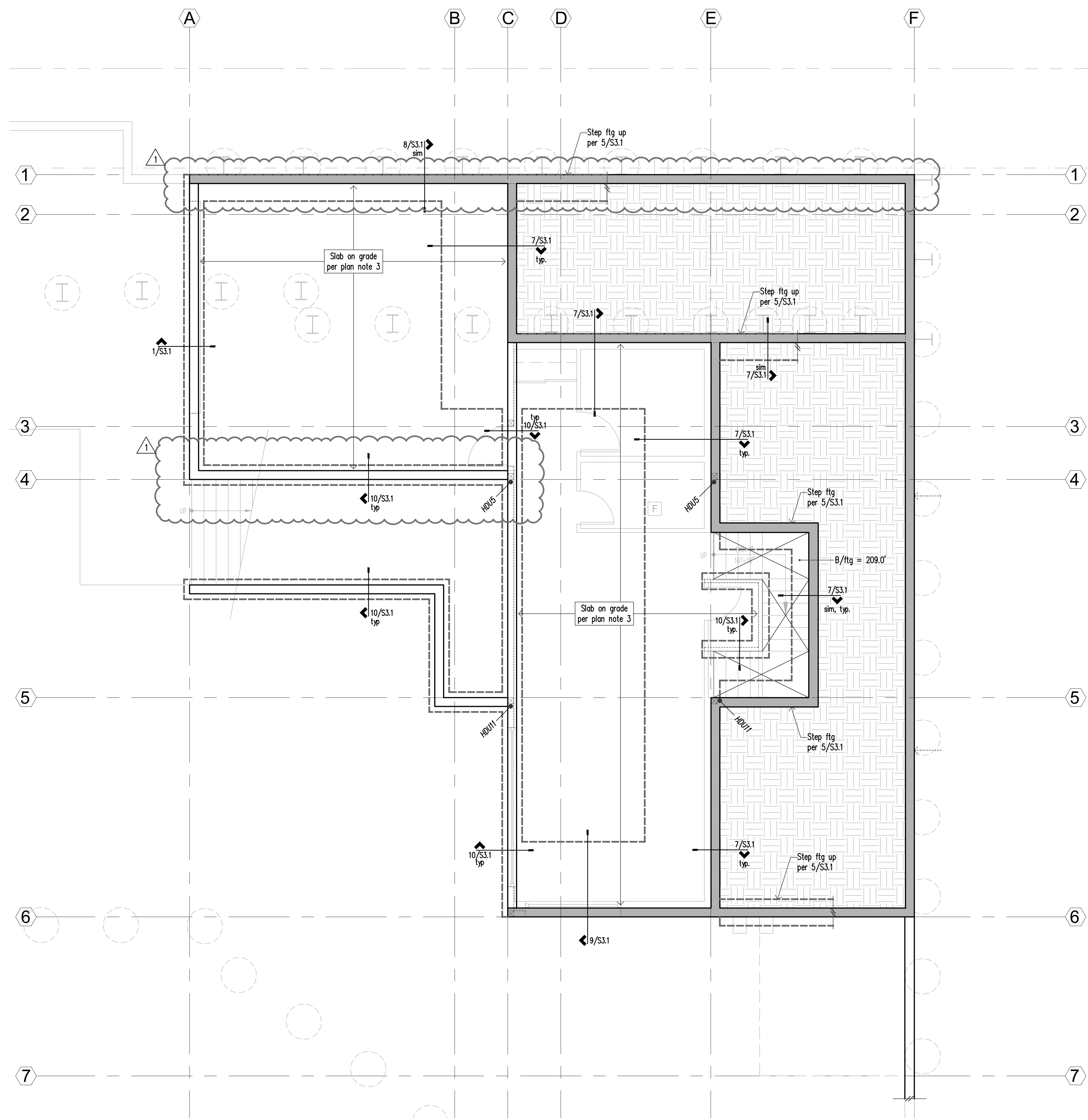
Ground Floor and Foundation Plan

Scale (u.n.o.):

1/4"=1'-0"

Sheet No.:

S2.1

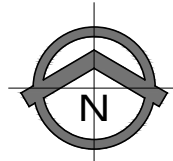


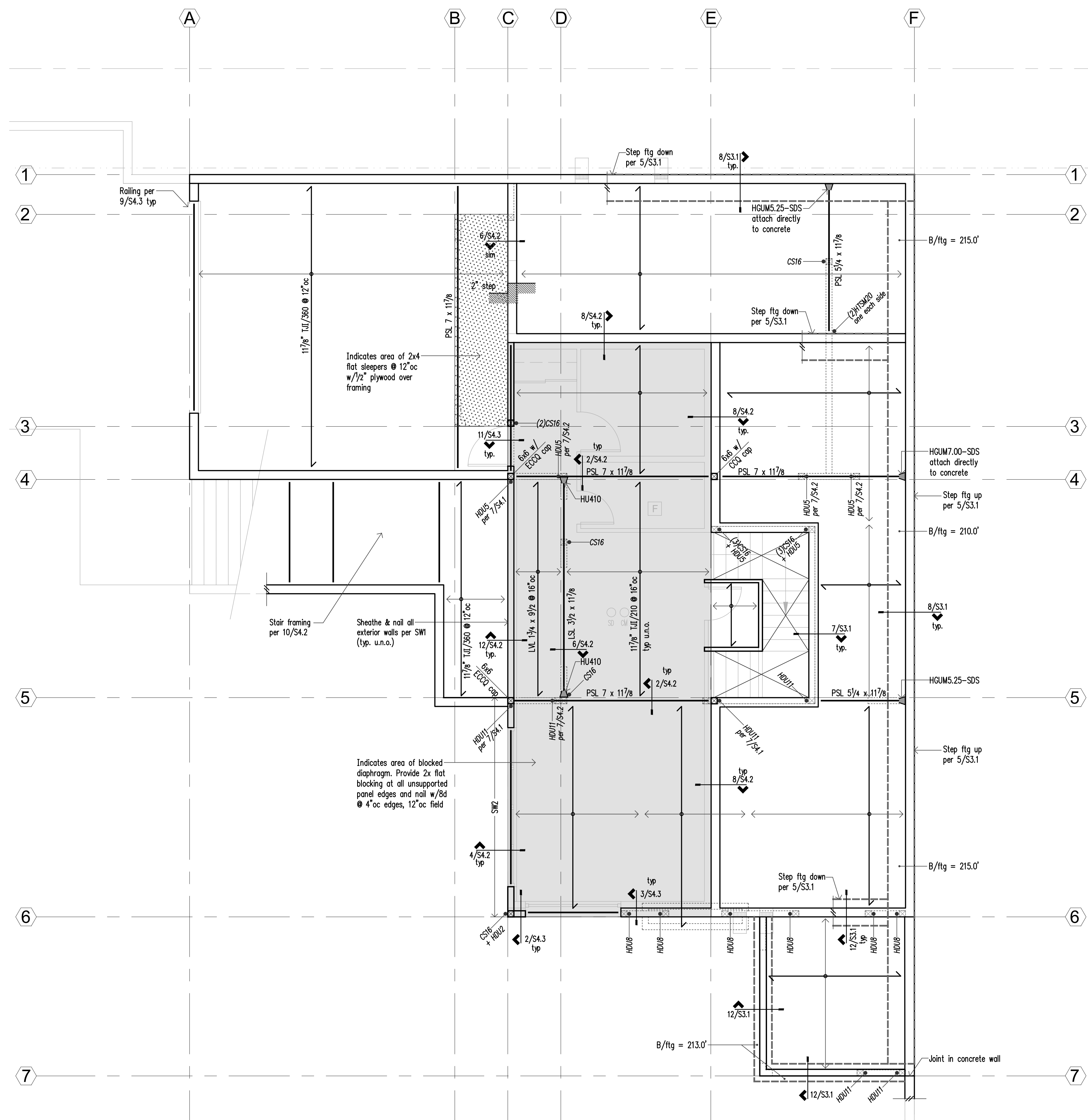
Legend	
	Concrete Wall at this level
	Structural Wood Wall or Post below
	Structural Wood Wall or Post above
	Concrete Footing
	Span Direction
	Extent of Span
	SW_ Shearwall. Refer plan note 5.
	Beam
	Joist or Beam Hanger
	CS16 Holdown. Refer to 6/S4.1
	Abrupt change in top of Slab elevation

- Plan Notes**
- For General Structural Notes refer to S1.1 and S1.2.
 - Dimensions: Verify all dimensions and elevations with architectural drawings. Columns and footings are centered on grid lines u.n.o. All existing dimensions shall be field verified. All dimensions are to centerline of grid, u.n.o.
 - Slab on grade shall be 4" minimum thickness. Reinforce with 6x6 W1.4xW1.4 WMM centered in slab. Provide 10mil vapor barrier below slab over 4" minimum pea gravel capillary break over compacted soils. Provide construction/control joints in slab on grade per 3/S3.1.
 - For subgrade preparation and fill requirements at slabs and footings, refer to General Structural Notes. Bottom of all footings shall be 18" min. below nearest adjacent grade. Refer detail 5/S3.1 for footing step where required.
 - For all ducts, chases, and pipes refer to Mechanical and Electrical drawings. Footings may be lowered to avoid conflicts. Refer to 6/S3.1.
 - For typical corner reinforcing at concrete walls and footings refer to 2/S3.1.
 - "SW" indicates shearwall per schedule 11/S4.1. All exterior walls are SW1, u.n.o.
 - All structural walls shown are bearing walls, min HF#2 studs @ 16"oc, u.n.o. Refer schedule this sheet. Refer to Architectural drawings for additional wall type information.

Ground Floor and Foundation Plan

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



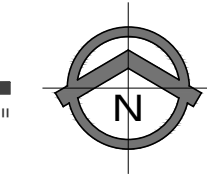


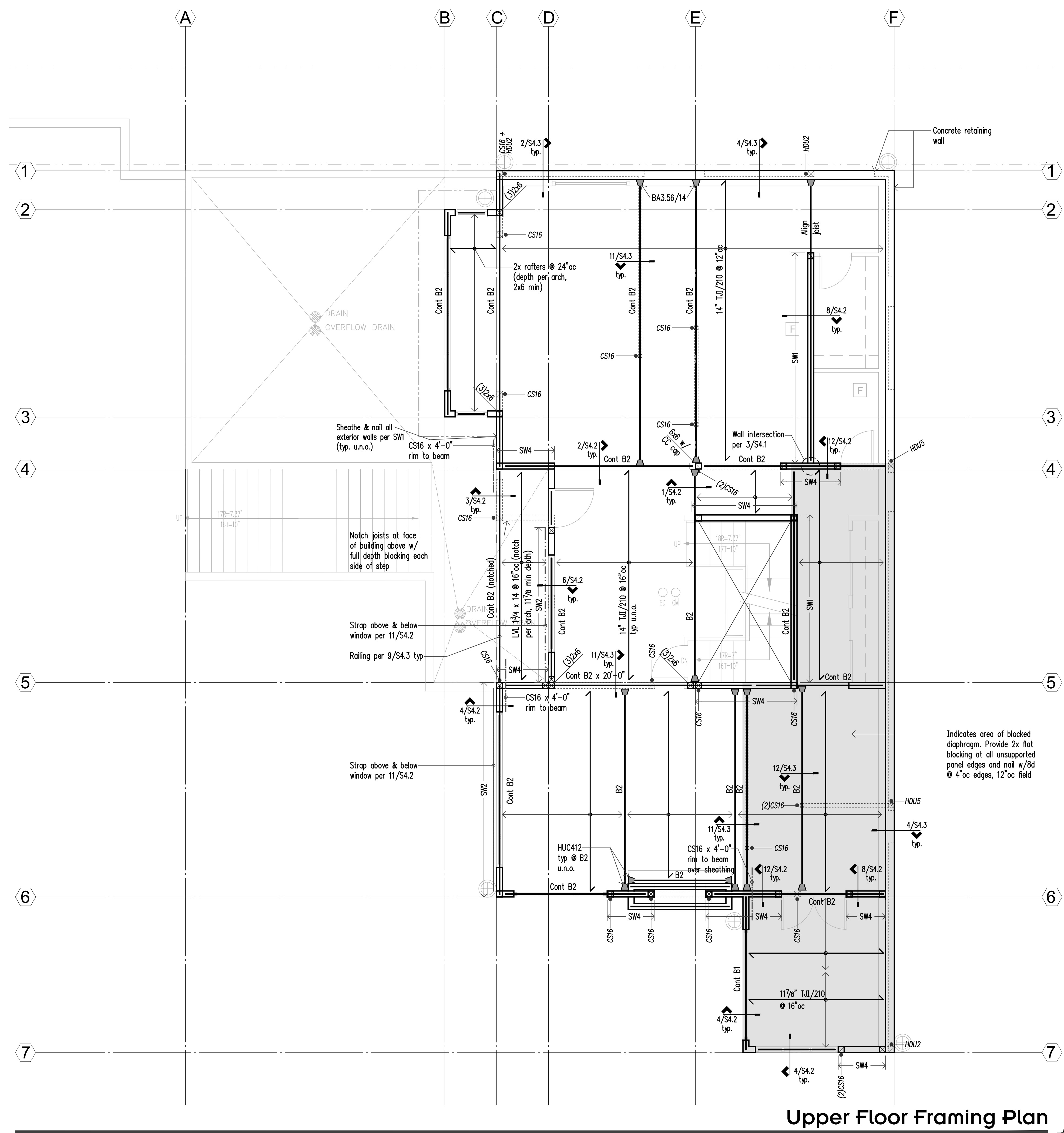
Legend			
	Concrete Wall at this level		Shearwall. Refer plan note 9.
	Structural Wood Wall or Post below		Beam
	Structural Wood Wall or Post above		Joist or Beam Hanger
	Concrete Footing		Holdown. Refer to 9/S4.1
	Span Direction		Abrupt change in top of Slab elevation
	Extent of Span		

- Plan Notes**
- For General Structural Notes refer to S1.1 and S1.2.
 - Dimensions: Verify all dimensions and elevations with Architectural drawings. All dimensions are to centerline of grid, u.n.o.
 - For subgrade preparation and fill requirements at slabs and footings, refer to General Structural Notes. Bottom of all footings shall be 18" min. below nearest adjacent grade. Refer detail 5/S3.1 for footing step where required.
 - For all ducts, chases, and pipes refer to Mechanical and Electrical drawings. Footings may be lowered to avoid conflicts. Refer to 6/S3.1.
 - For typical corner reinforcing at concrete walls and footings refer to 2/S3.1.
 - Typical floor framing consists of 3/4" T&G plywood over TJI joists, direction as shown on plan. Refer to plan for additional spacing requirements.
 - Glue and nail floor sheathing with 8d @ 6" oc edges and over shearwalls, 12" oc field.
 - "SW" indicates shearwall per schedule, 11/S4.1. All exterior walls are SW1, u.n.o.
 - All structural walls shown are bearing walls, min HF#2 studs @ 16" oc, u.n.o. Refer schedule this sheet. Refer to Architectural drawings for additional wall type information.
 - Headers over door and window openings shall be (2)2x8 unless noted otherwise. Refer to 6/S4.1 for additional requirements. Flush headers at exterior walls shall be LSL 3/2x11/8 min. Strap headers to rim per 9/S4.2.
 - Provide (2) bearing studs minimum each end of all headers and flush beams, unless noted otherwise. Refer to plan for additional requirements.
 - For typical stair framing refer to 10/S4.2.

Main Floor Framing Plan

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





Legend

	Structural Wood Wall or Post below	SW_	Shearwall. Refer plan note 5.
	Structural Wood Wall or Post above	—	Beam
	Span Direction	—	Joist or Beam Hanger
	Extent of Span	CS16	Holdown. Refer to 9/S4.1

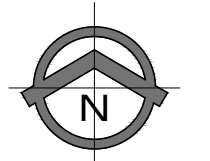
- Plan Notes**
- For General Structural Notes refer to S1.1 and S1.2.
 - Dimensions: Verify all dimensions and elevations with Architectural drawings. All dimensions are to centerline of grid, u.n.o.
 - Typical floor framing consists of 3/4" T&G plywood over TJI joists, direction as shown on plan. Refer to plan for additional spacing requirements.
 - Glue and nail floor sheathing with 8d @ 6"oc edges and over shearwalls, 12"oc field.
 - "SW" indicates shearwall per schedule, 11/S4.1. All exterior walls are SW1, u.n.o.
 - All structural walls shown are bearing walls, min HF#2 studs @ 16"oc, u.n.o. Refer schedule this sheet. Refer to Architectural drawings for additional wall type information.
 - Headers over door and window openings shall be (2)2x8 unless noted otherwise. Refer to 6/S4.1 for additional requirements. Flush headers at exterior walls shall be LSL 3/2x14 min. Strap headers to rim per 9/S4.2.
 - Provide (2) bearing studs minimum each end of all headers and flush beams, unless noted otherwise. Refer to plan for additional requirements.
 - For typical stair framing refer to 10/S4.2.

Flush Beam Schedule

Mark	Beam Type
B1	LSL 1 3/4 x 14
B2	LSL 3/2 x 14

Upper Floor Framing Plan

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





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structural engineering

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01-26-2026



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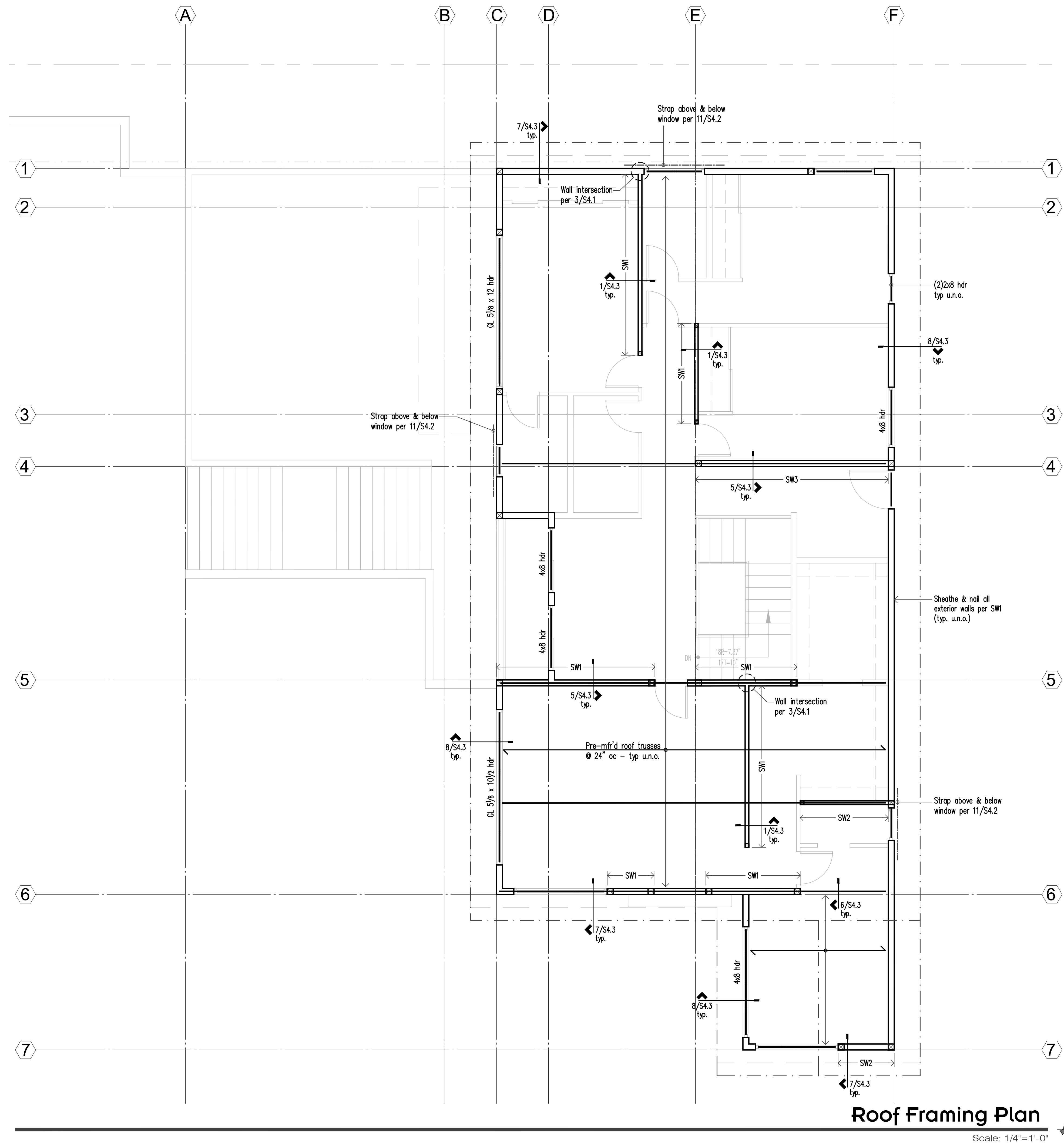
Sheet Contents:

Roof Framing Plan

Scale (u.n.o.): 1/4"=1'-0"

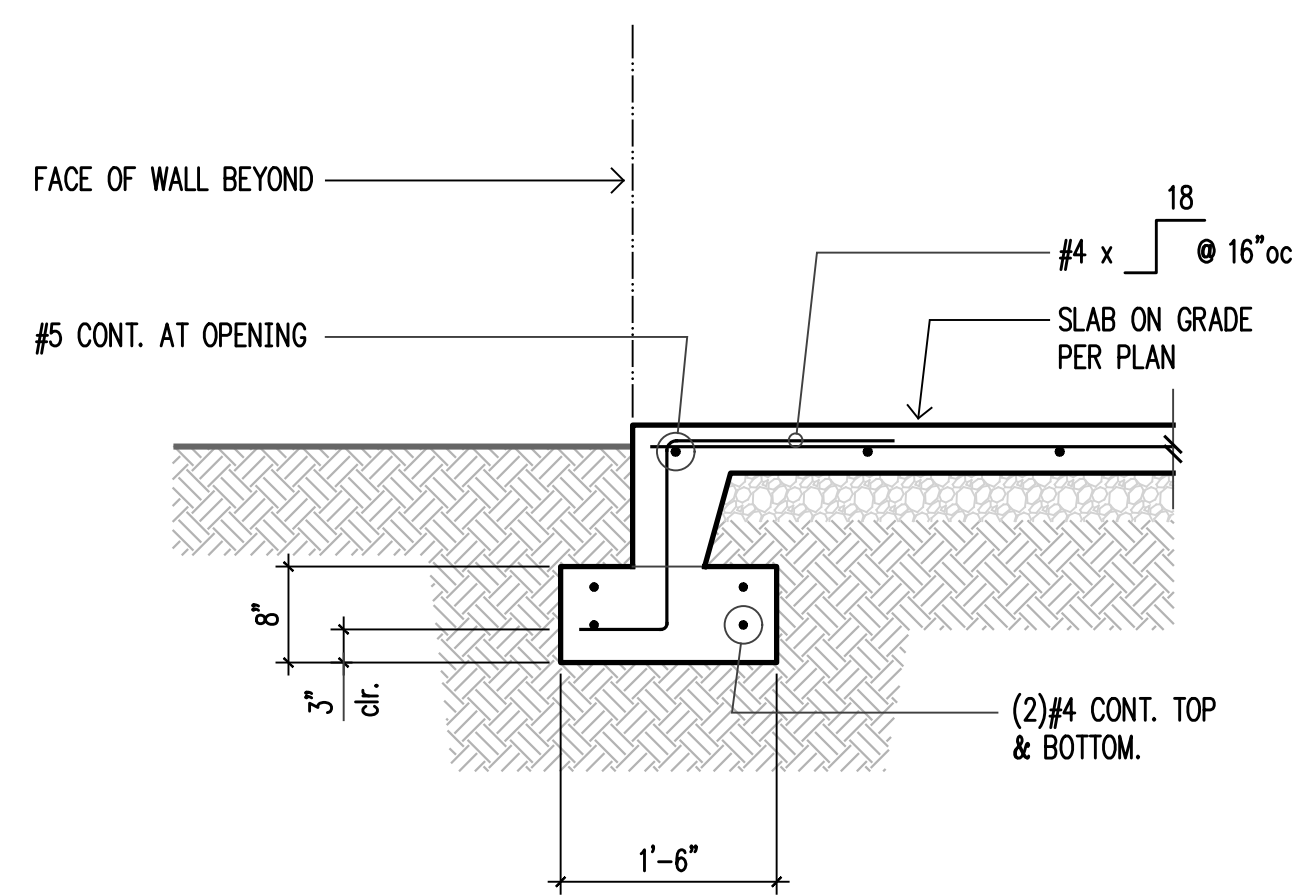
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S2.4

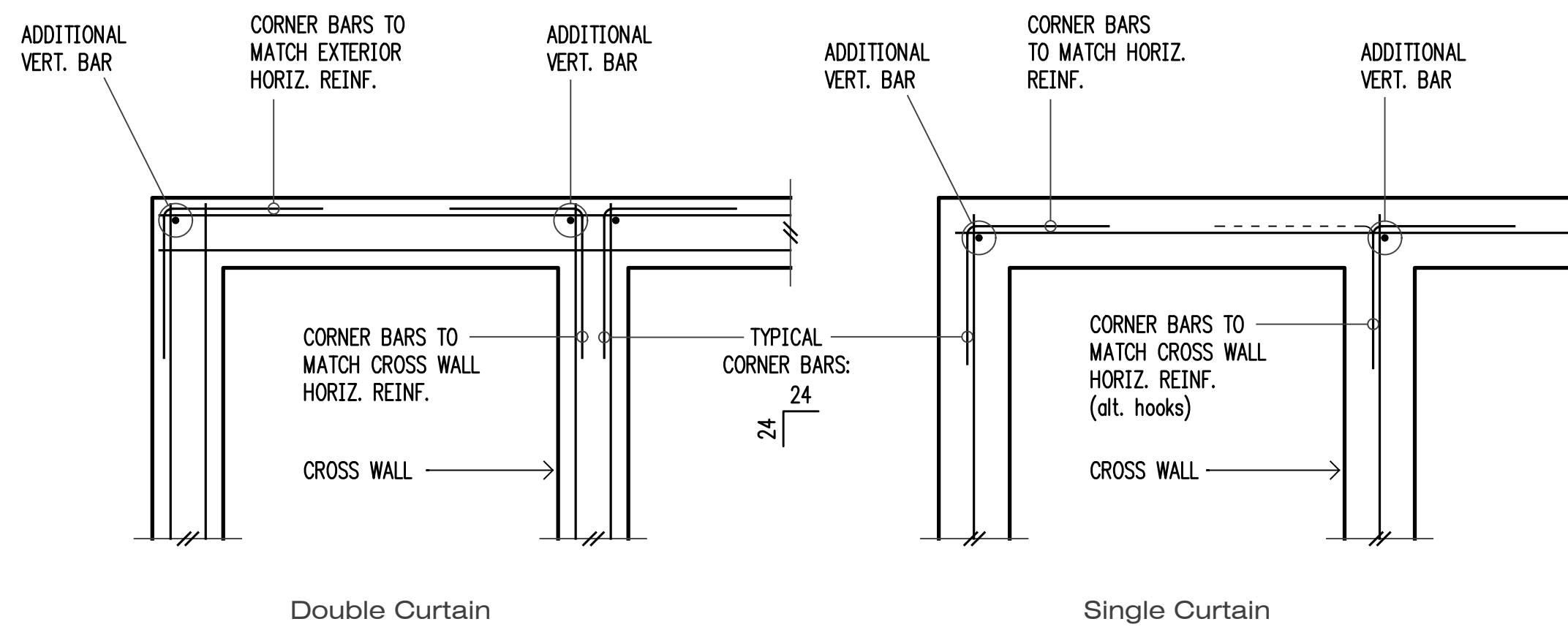


Legend		
	Structural Wood Wall or Post below	SW_ Shearwall. Refer plan note 6.
	Structural Wood Wall or Post above	Beam
	Span Direction	Joist or Beam Hanger
	Extent of Span	CS16 Holdown. Refer to 9/S4.1

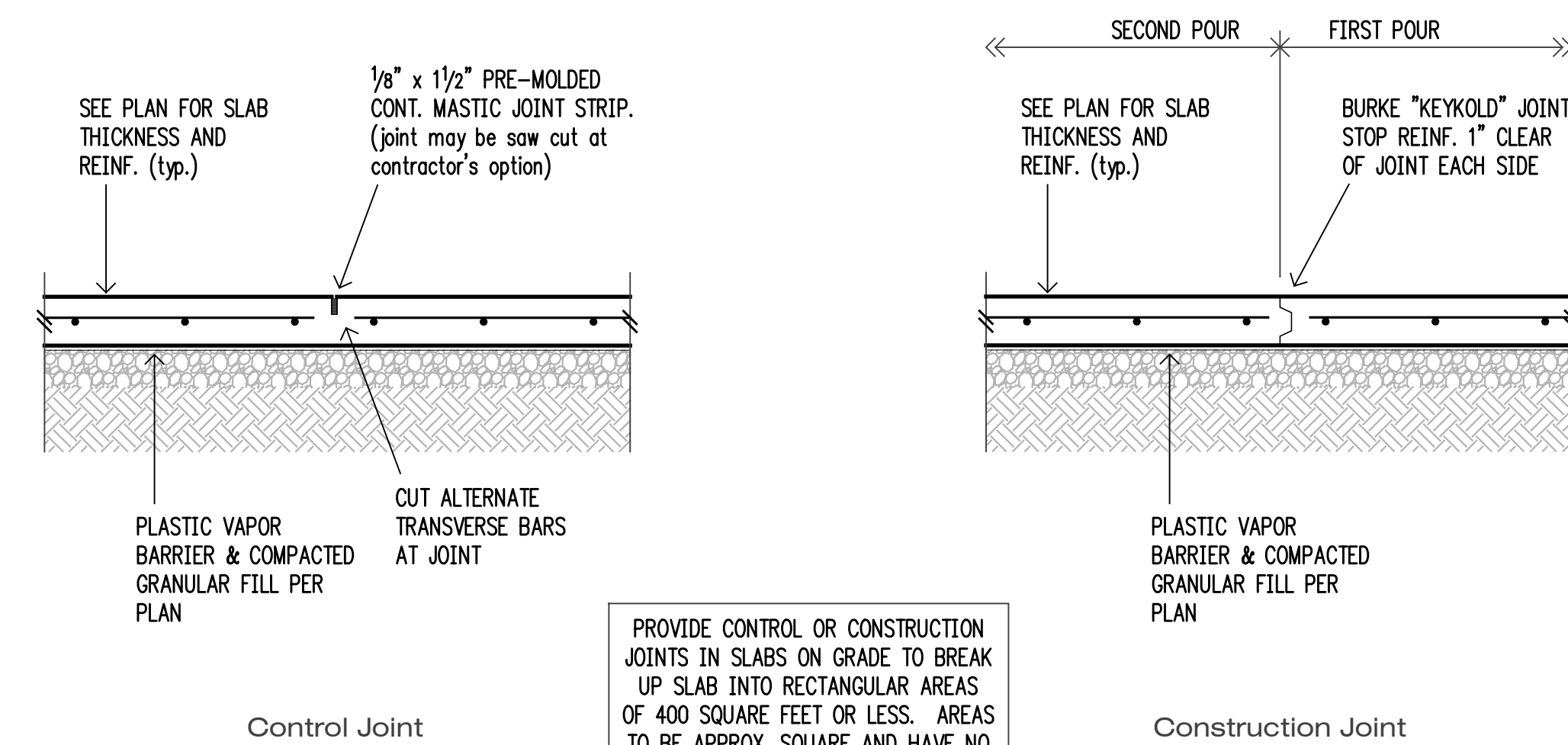
- Plan Notes**
- For General Structural Notes refer to S1.1 and S1.2.
 - Dimensions: Verify all dimensions and elevations with Architectural drawings. All dimensions are to centerline of grid, u.n.o.
 - Typical roof framing consists of 1/2" APA rated sheathing (span rating 32/16) over trusses per plan, u.n.o. Provide H1 at each end of all trusses, u.n.o.
 - Nail roof sheathing with 8d @ 6"oc edges and over shearwalls, 12"oc field.
 - *SW* indicates shearwall per schedule 11/S4.1. All exterior walls are SW1, u.n.o.
 - All structural walls shown are bearing walls, min HF#2 studs @ 16"oc, u.n.o. Refer schedule this sheet. Refer to Architectural drawings for additional wall type information.
 - Headers over door and window openings shall be (2)2x8 unless noted otherwise. Refer to 6/S4.1 for additional requirements.
 - Provide (2) bearing studs minimum each end of all girder trusses, headers and flush beams, unless noted otherwise. Refer to plan for additional requirements.
 - For typical stair framing refer to 10/S4.2.



1

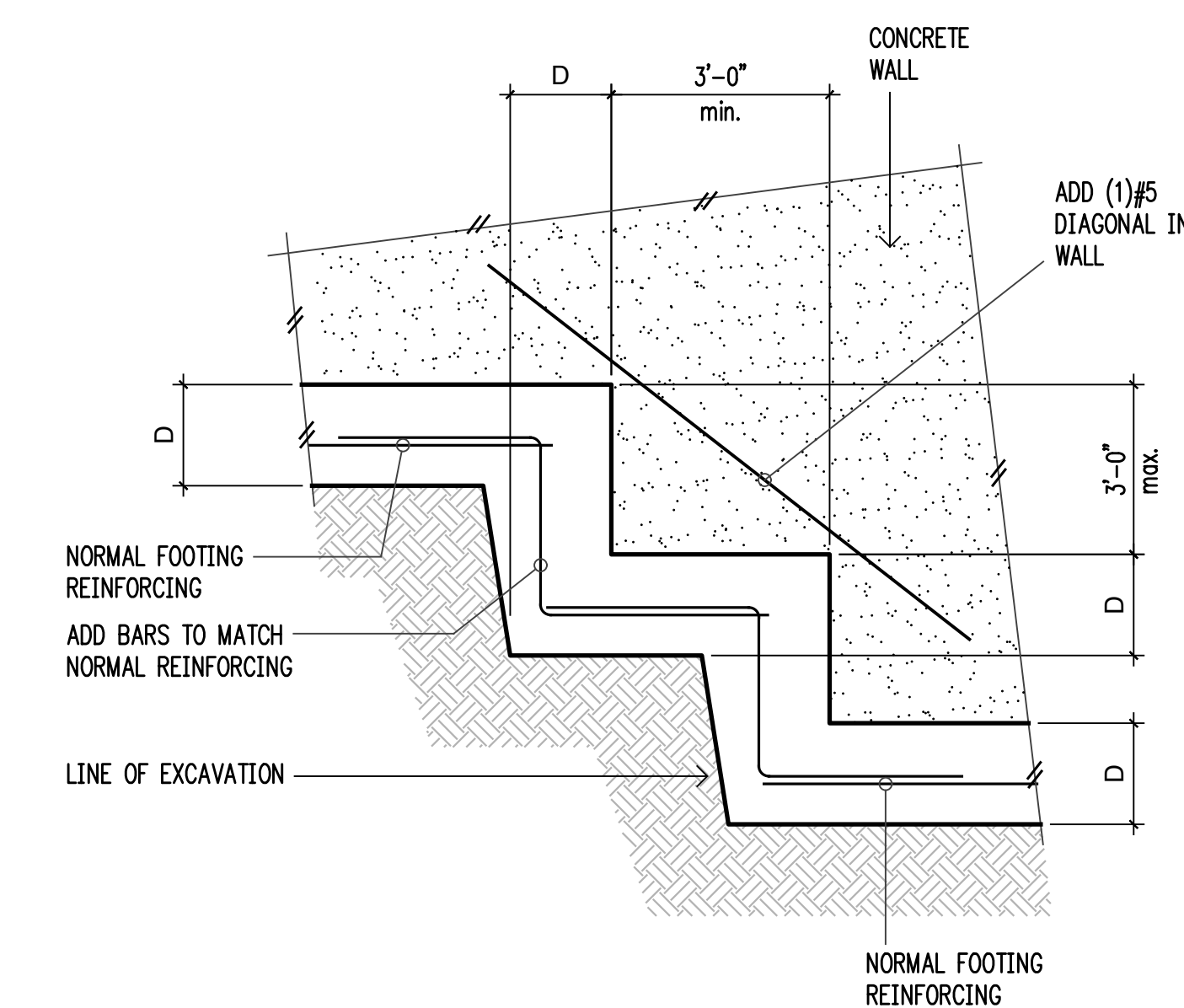


2 n.t.s. Typical Corner Bars at Concrete Walls and Footings

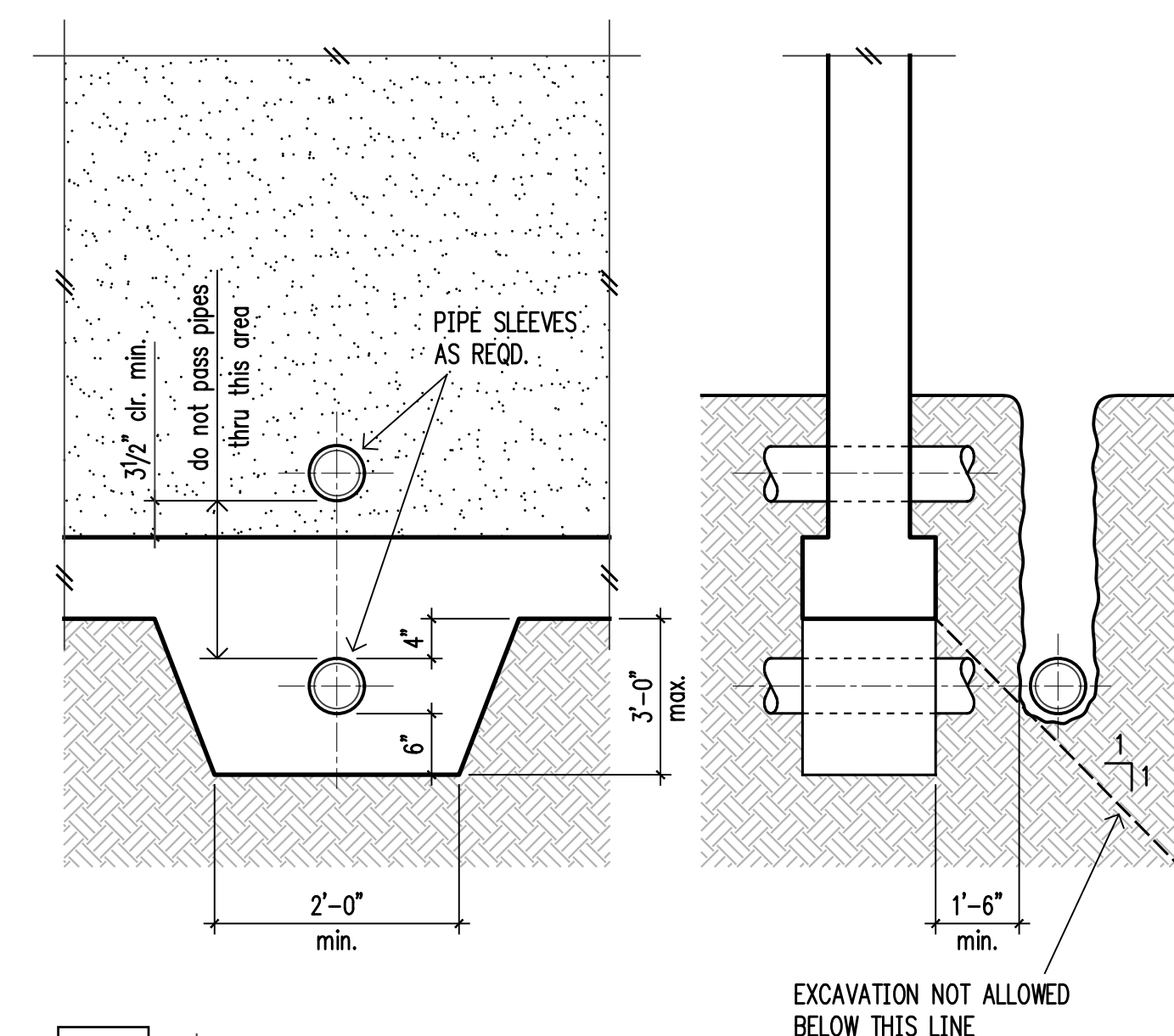


3 n.t.s. Typical Slab Joints

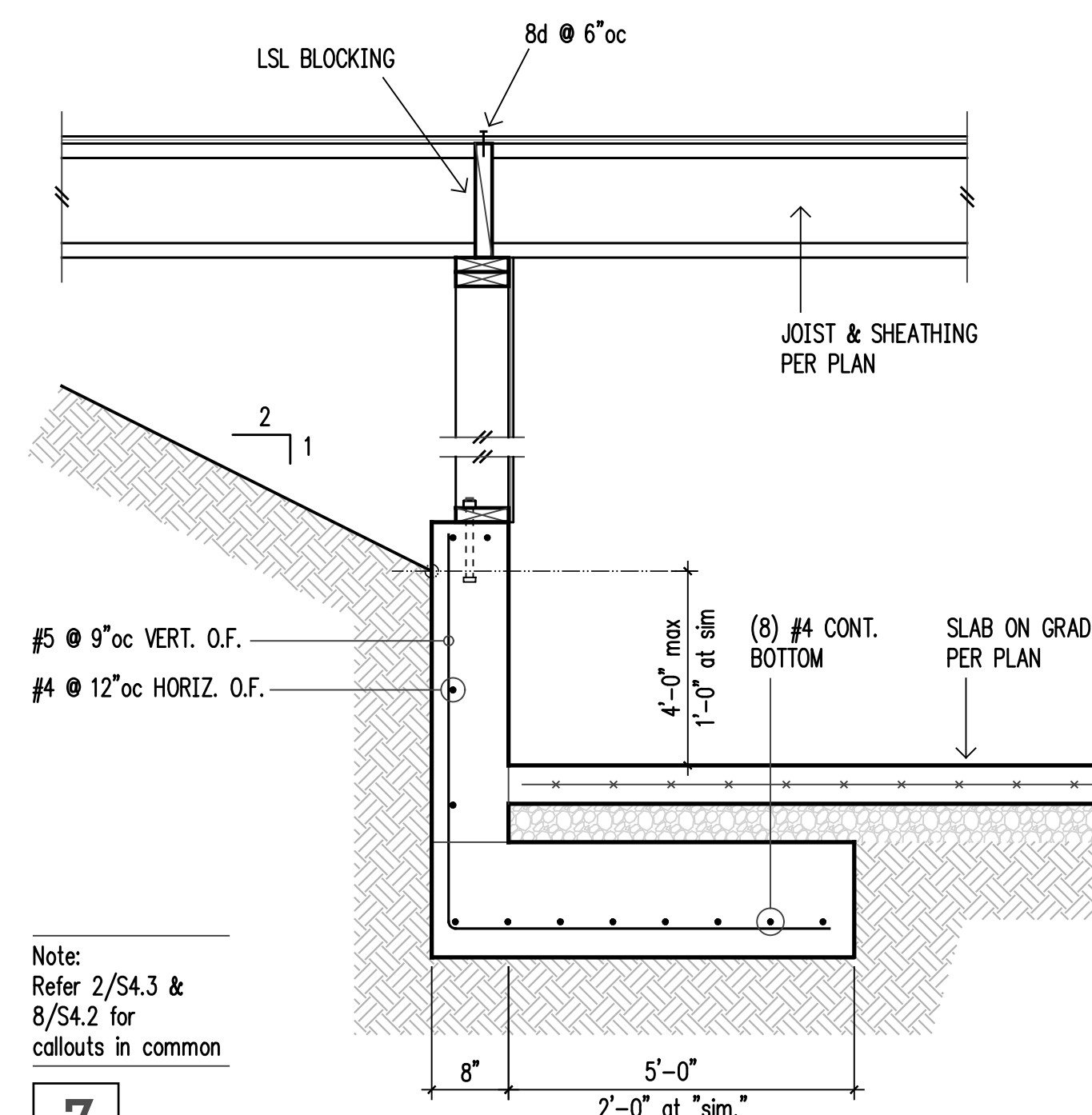
PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 400 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.



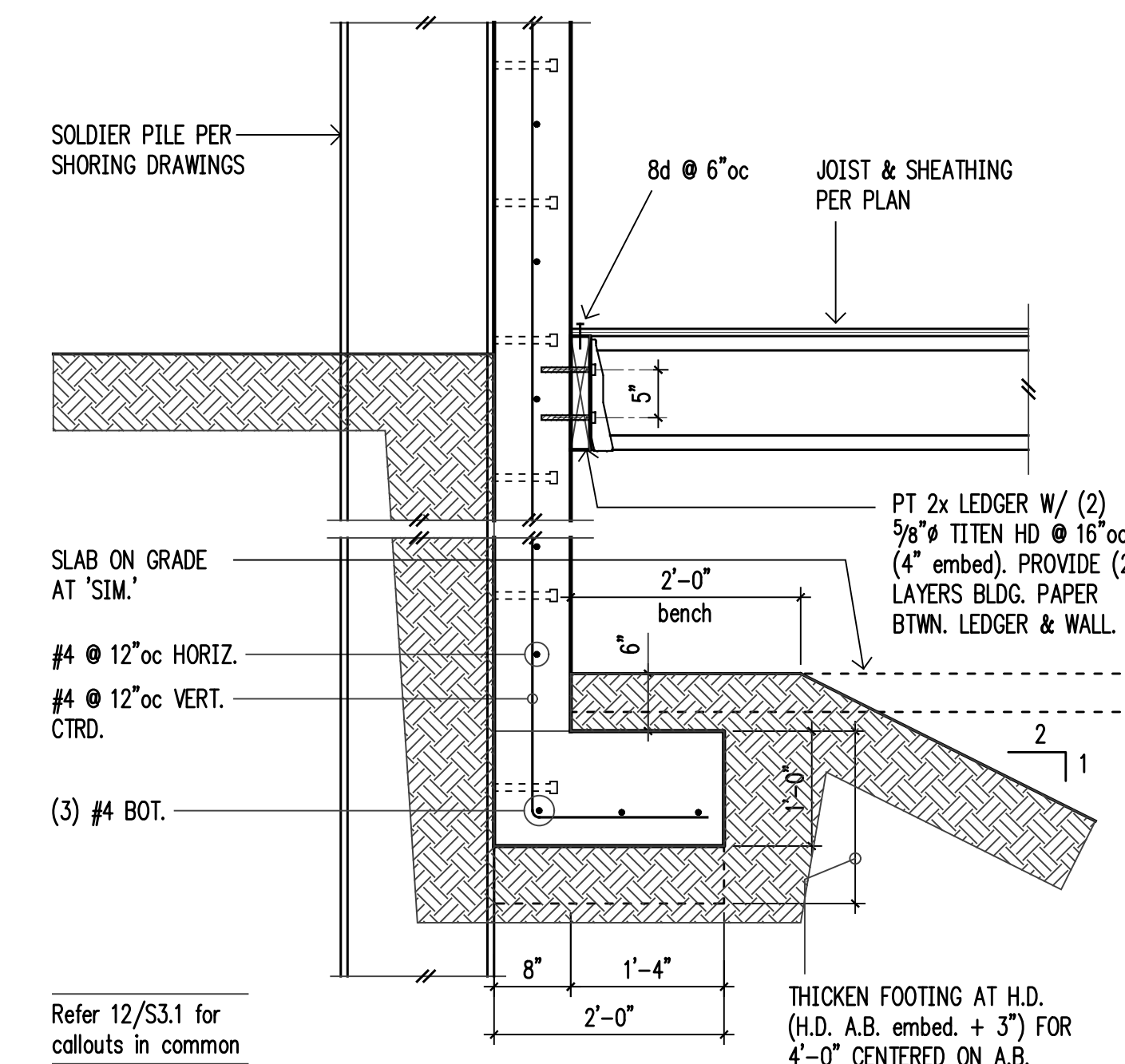
5 n.t.s. Typical Stepped Footing



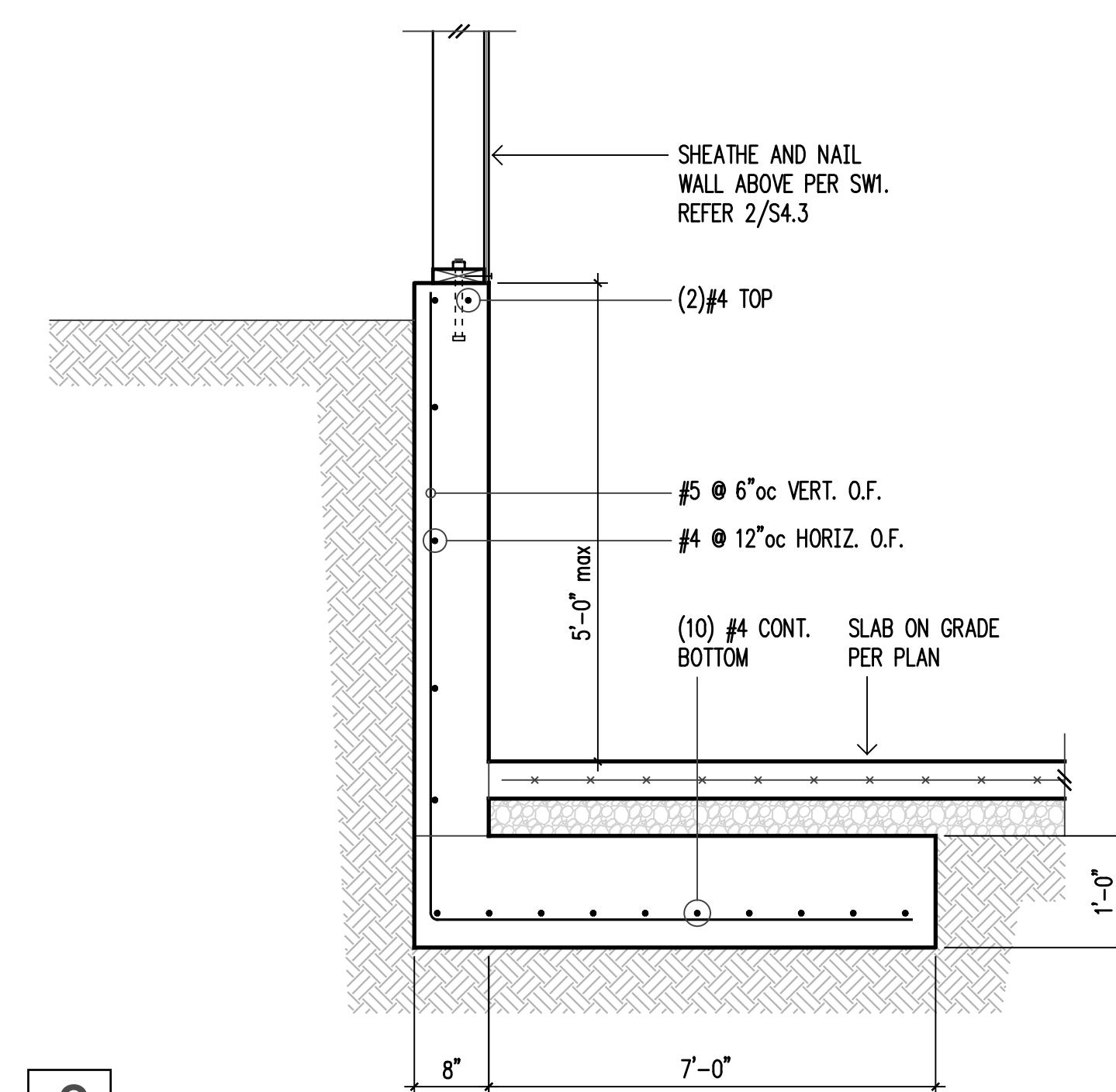
6 n.t.s. Pipe and Trench Locations



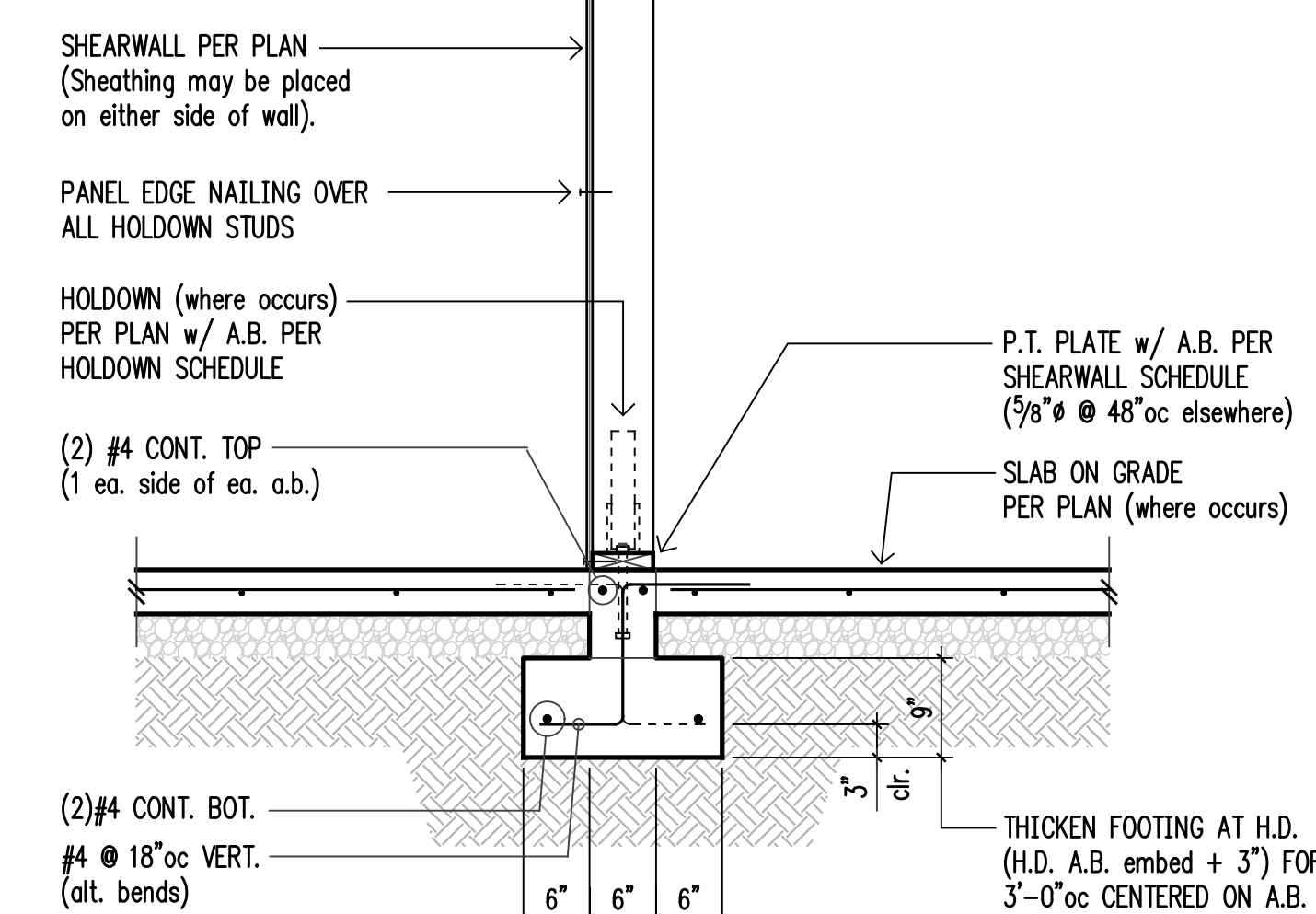
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8

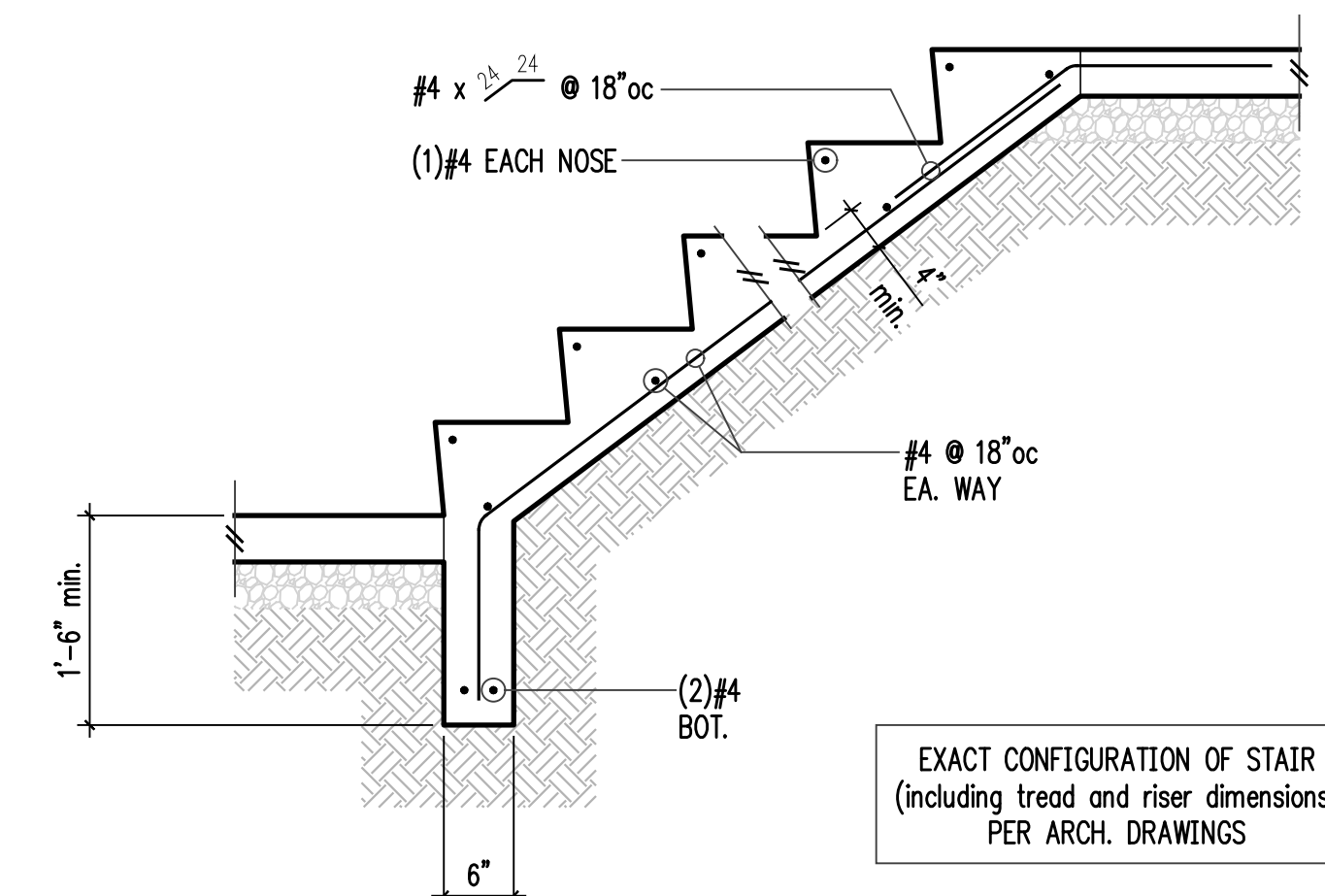


9

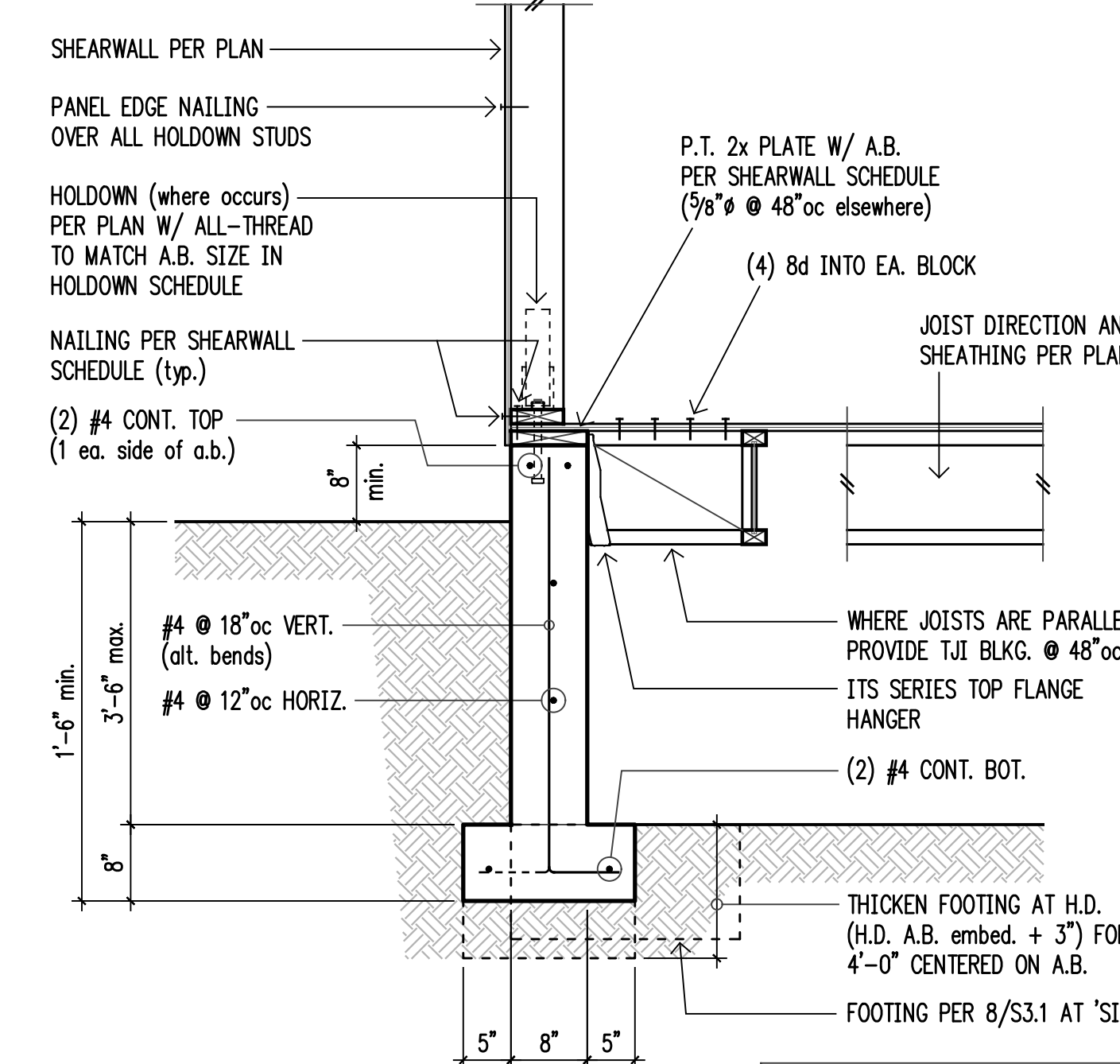


10

All fasteners into pressure treated wood shall be galvanized or stainless steel per General Notes.

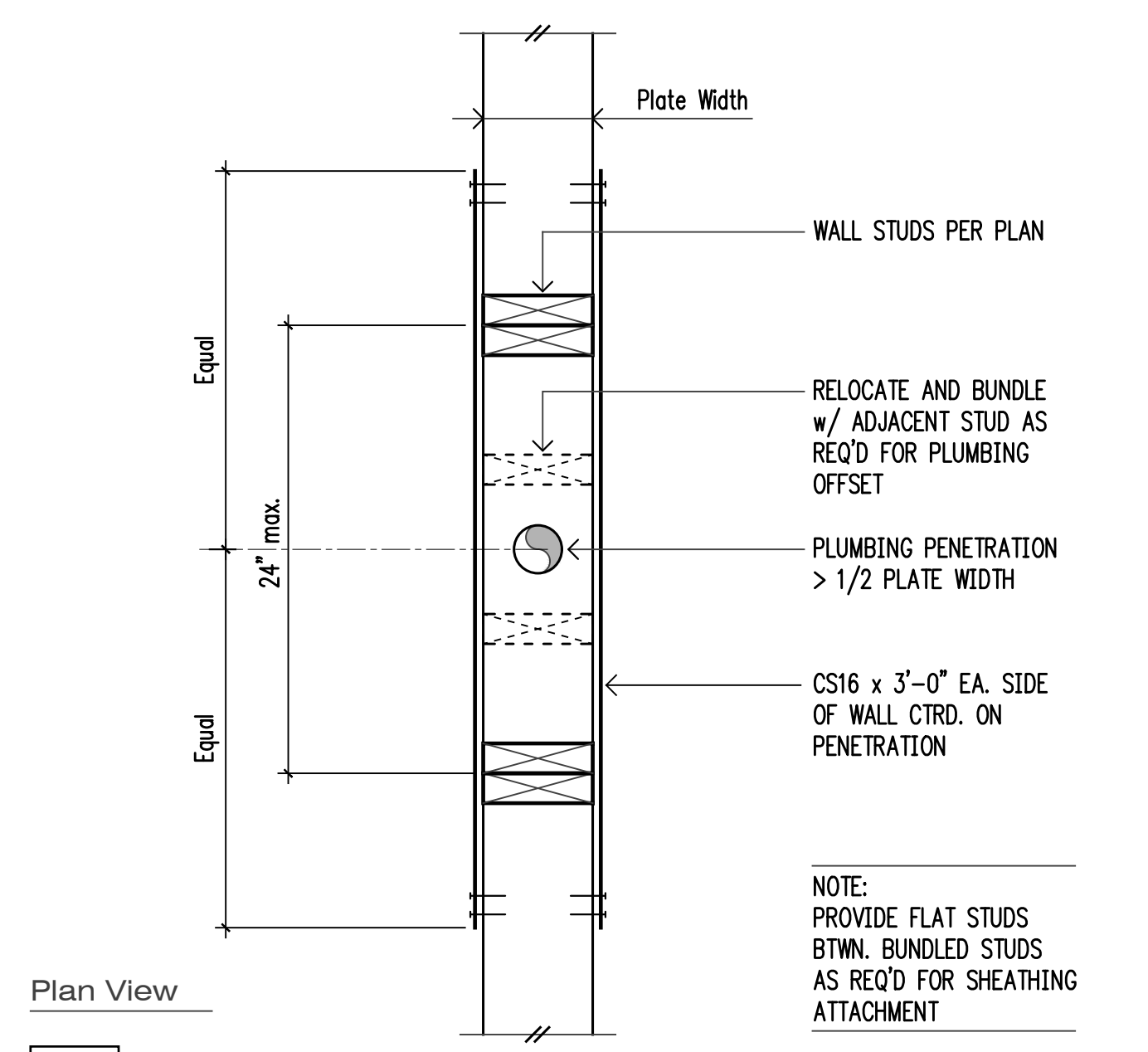


11 n.t.s. Stair on Grade

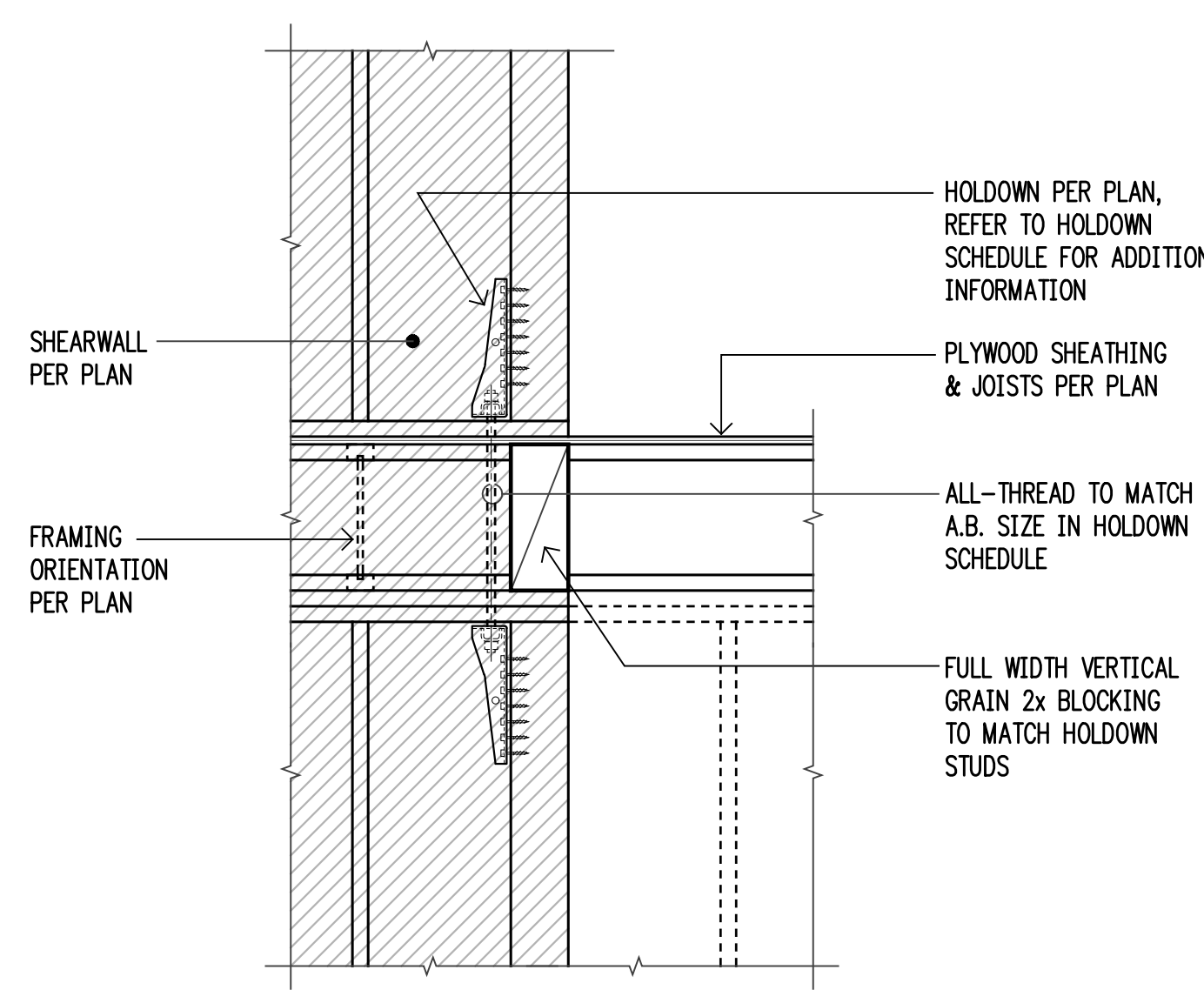


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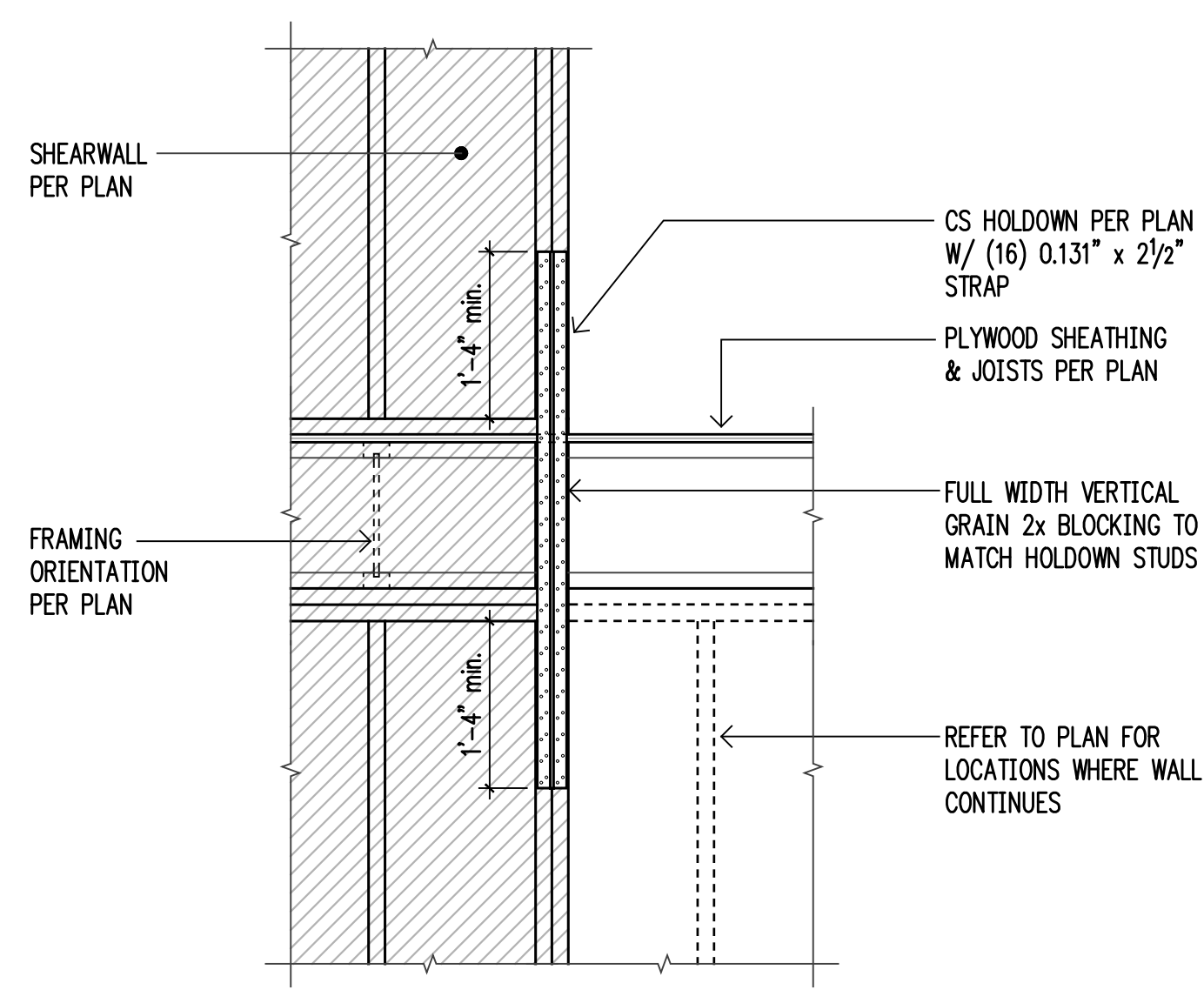
All fasteners into pressure treated wood shall be galvanized or stainless steel per General Notes.



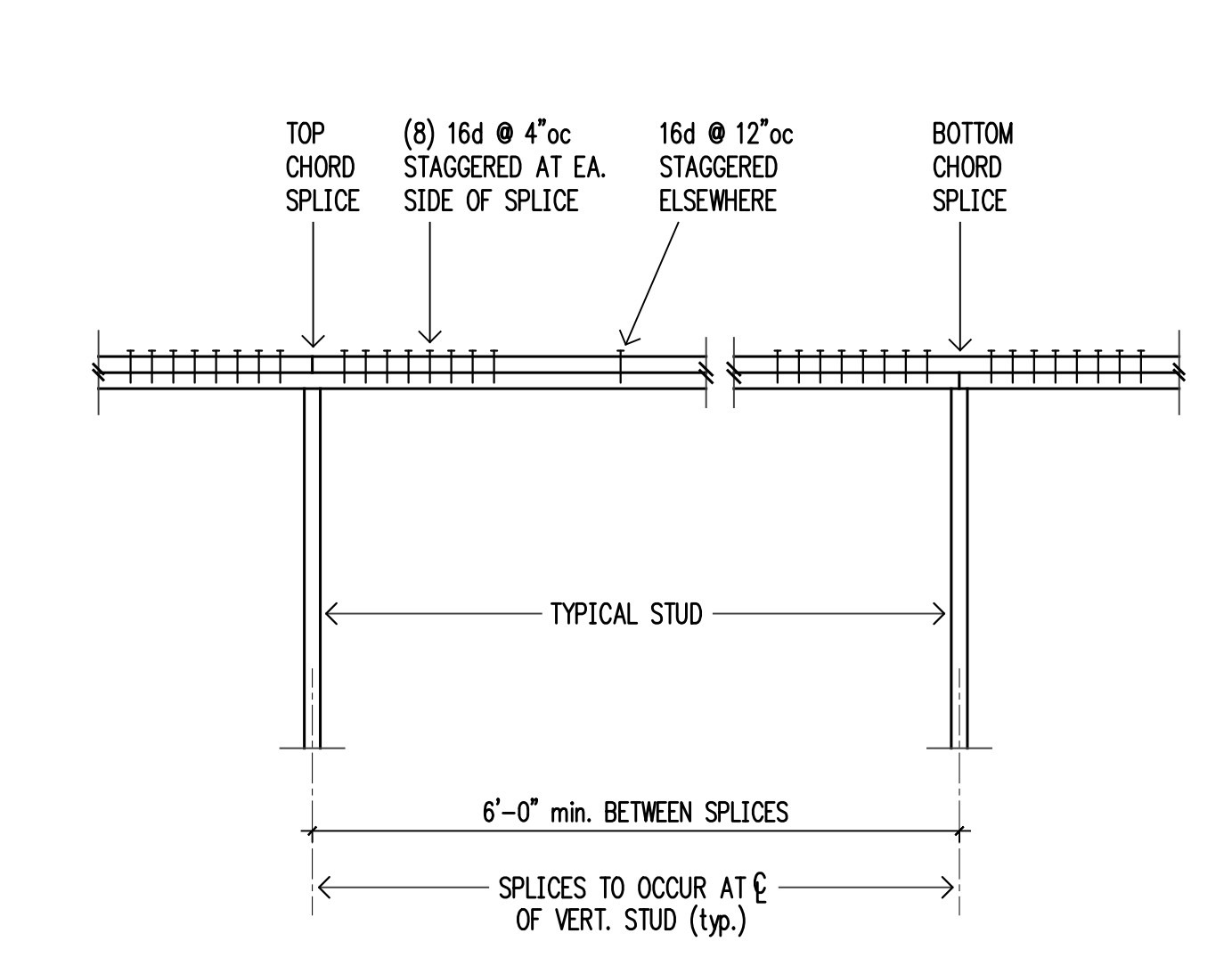
1 n.t.s. Typical Penetration Thru Wall Plate



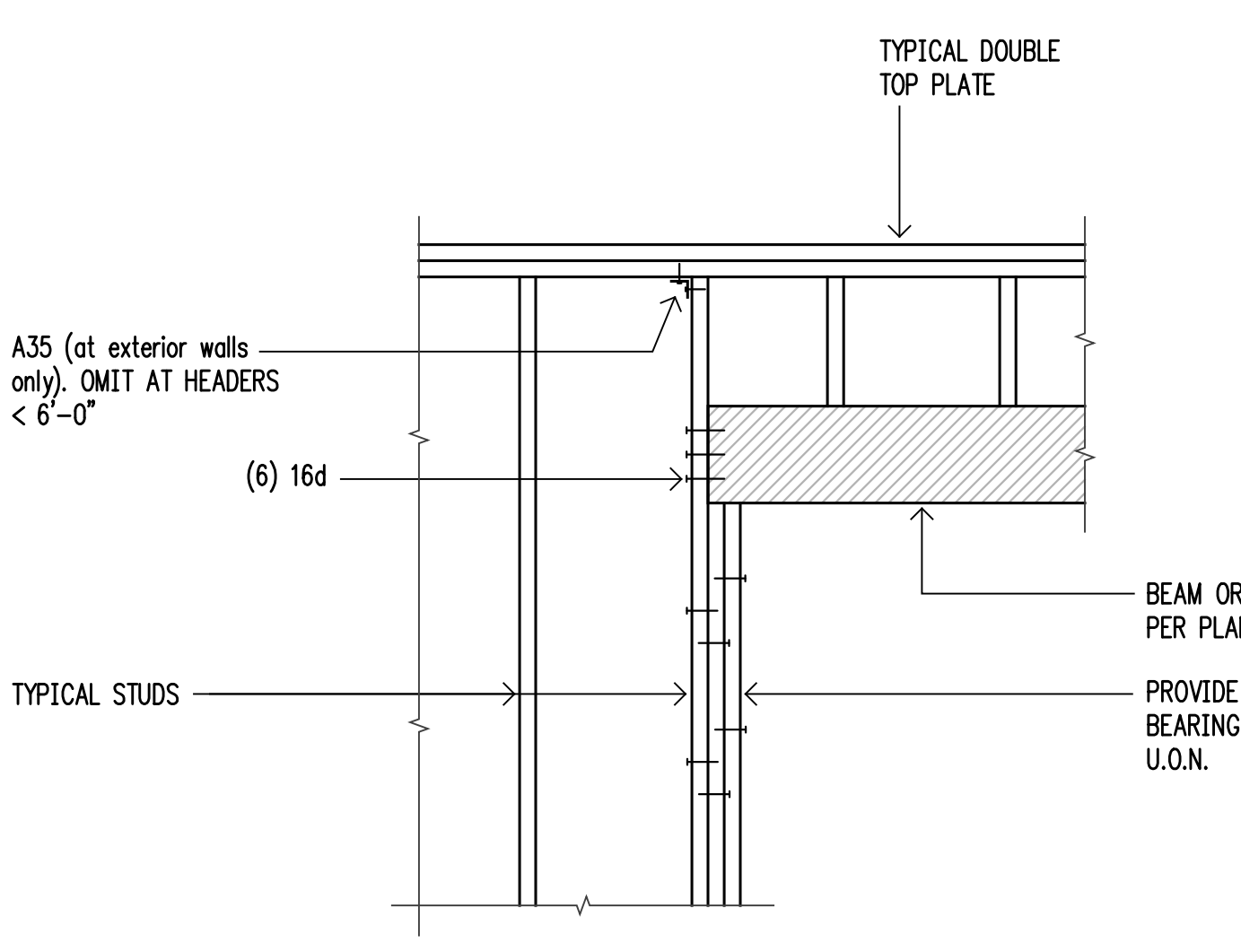
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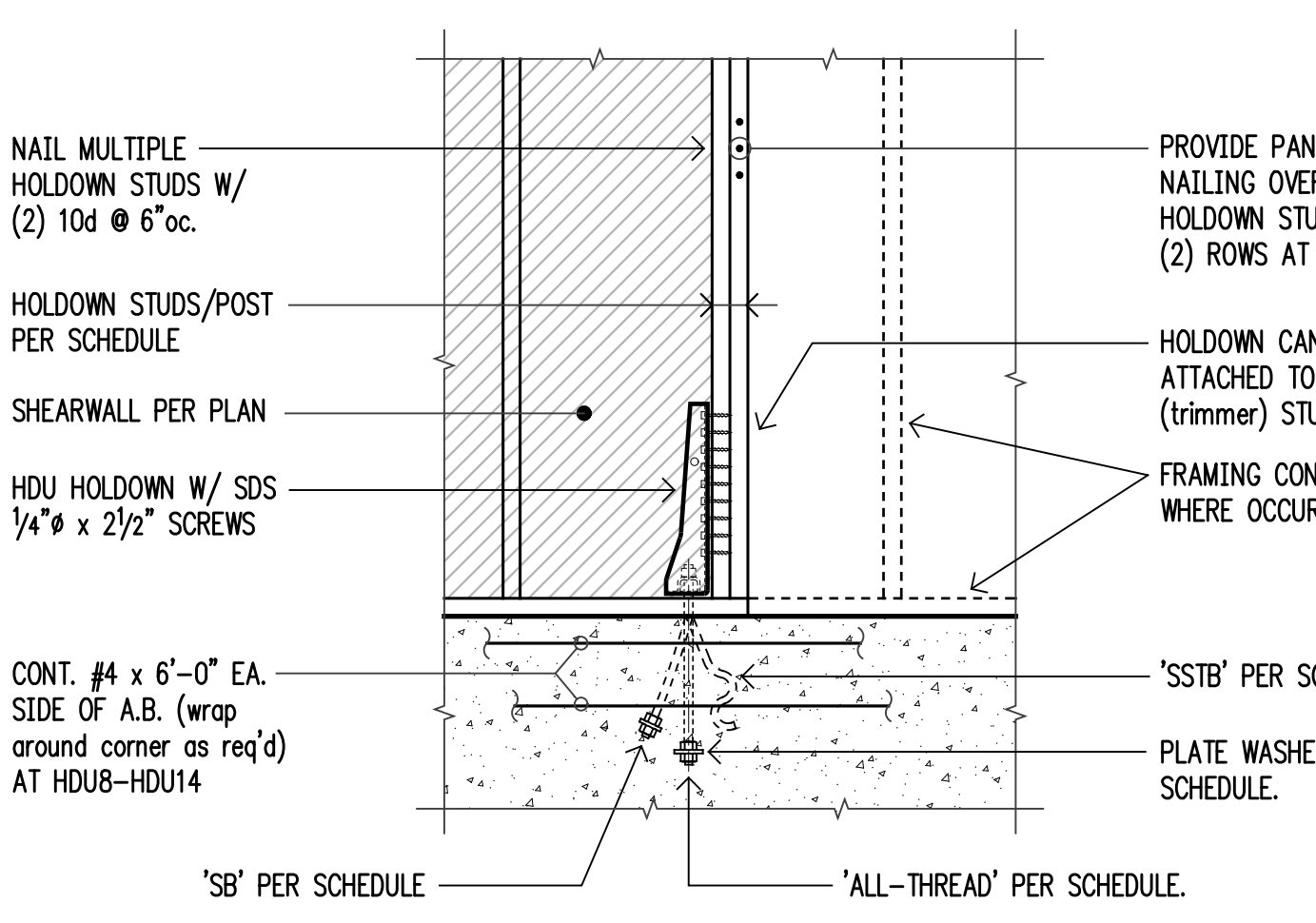
9 n.t.s. Typical CS Holdown



2 n.t.s. Typical Top Plate Splice



6 n.t.s. Typical Header Support

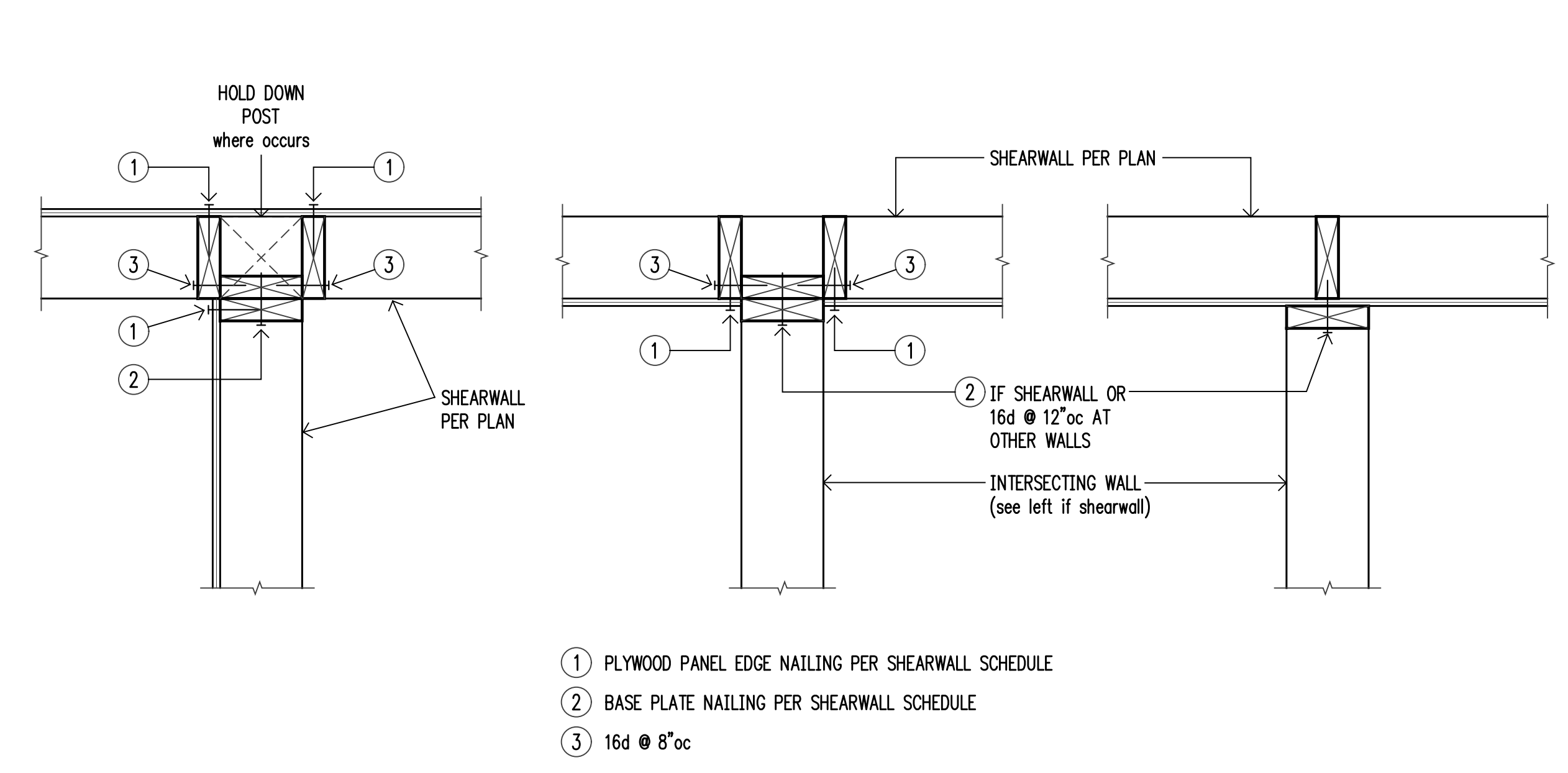


HDU Holdown Schedule

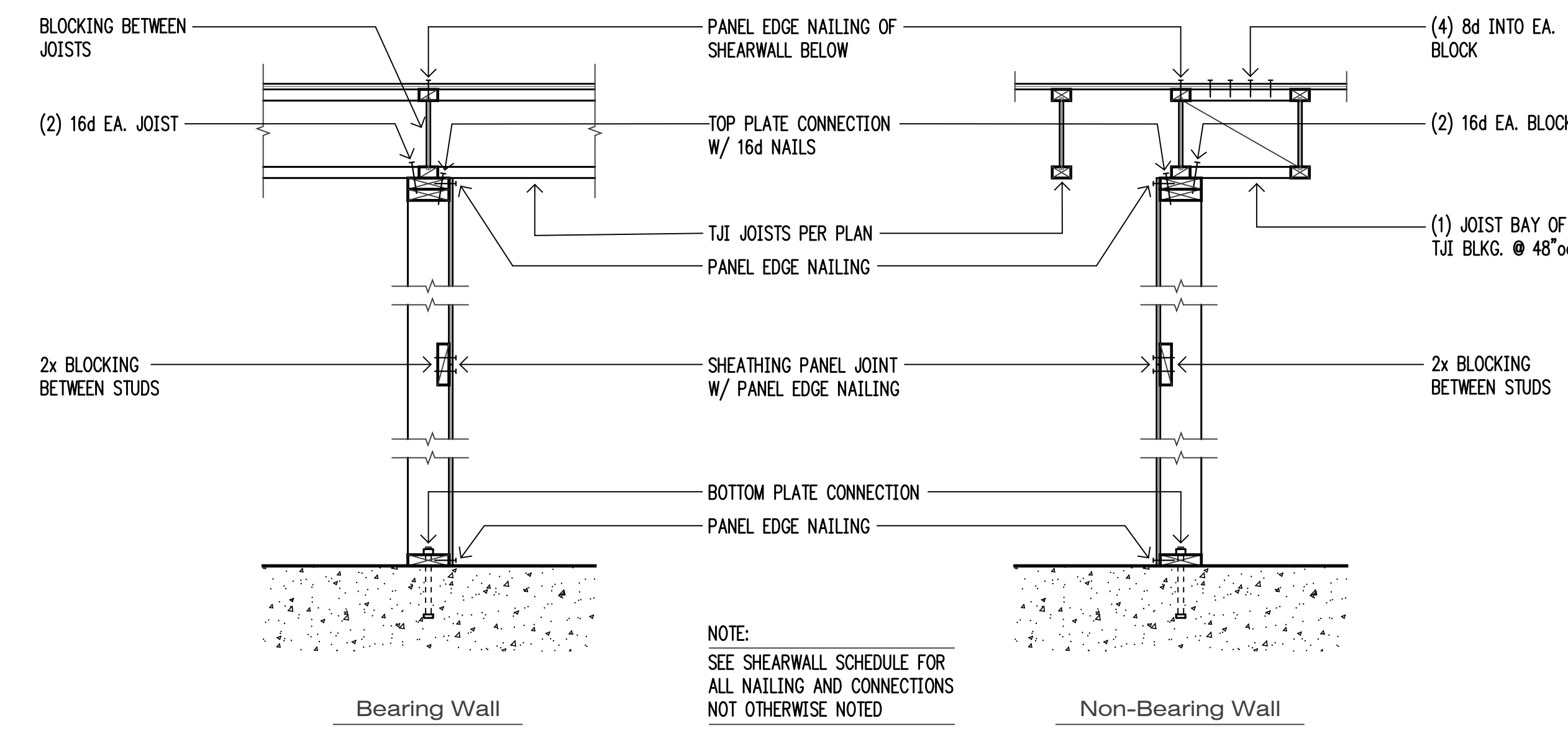
Plan Mark	Stemwall		Footing Anchor Bolt ①			HD Post ②	
	A.B.	Embed	All-thread	Washer	Embed	4x Wall	6x Wall
HDU2	5/8" - SSTB16(L)	12 3/8"	5/8"	1/2 x 1 3/4" sq.	9"	(2)2x4	(2)2x6
HDU5	5/8" - SB 7/8 x 24	18"	5/8"	1/2 x 1 3/4" sq.	9"	4x6	6x6
HDU8	7/8" - SB 7/8 x 24	18"	7/8"	1/2 x 2 1/2" sq.	12"	4x6	6x6
HDU11	1" - SB1 x 30 ③	24"	1"	5/8 x 2 3/4" sq.	12"	4x8	6x6

HDU Schedule Notes:
 ① A307 ALL-THREAD W/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOTTOM OR EQUIVALENT SIMPSON PAB.
 ② MINIMUM SIZE OF POST, UNLESS NOTED OTHERWISE ON FRAMING PLANS.
 ③ REQUIRES MINIMUM 8" THICK CONCRETE WALL.

10 n.t.s. HDU Holdown



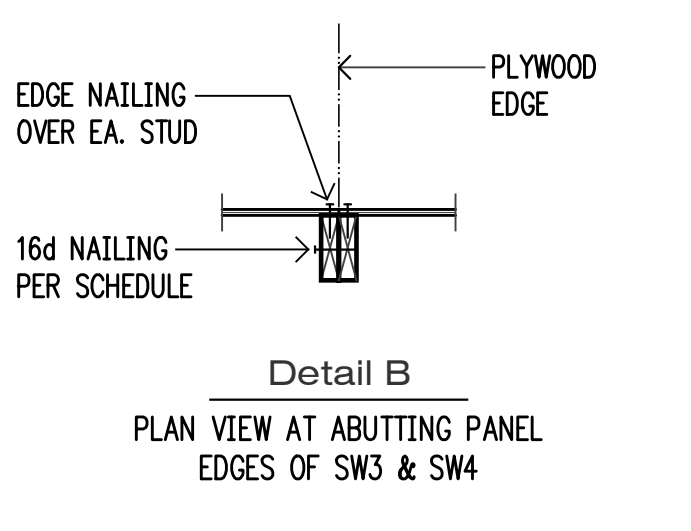
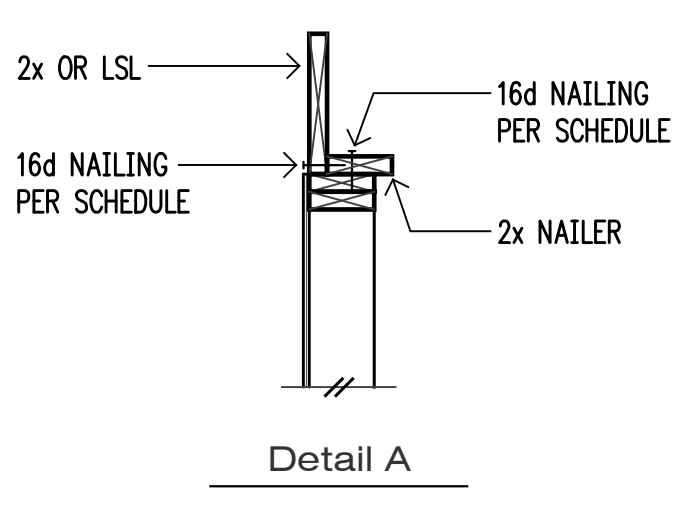
3 n.t.s. Typical Shearwall Intersections



7 n.t.s. Typical Shearwall Construction

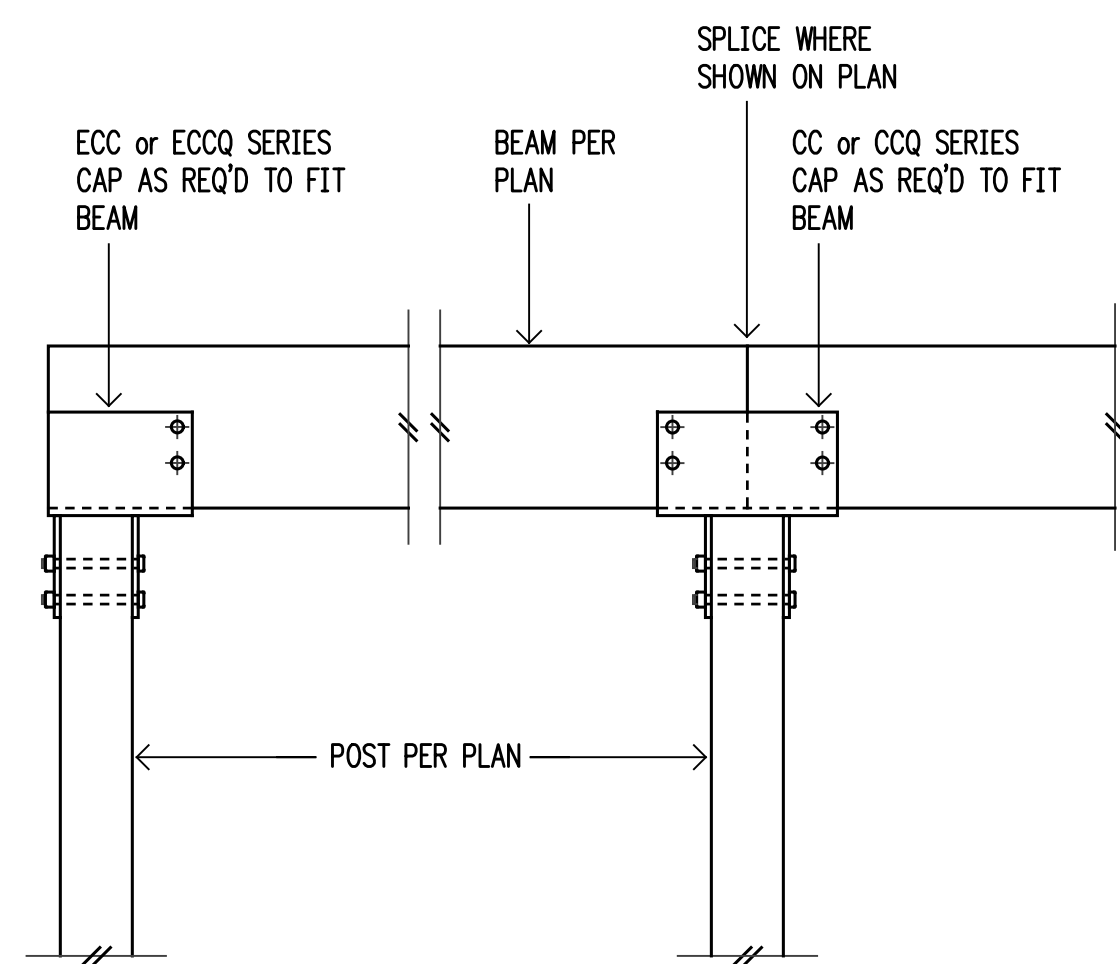
Shearwall Schedule ①②③④⑤⑥⑦⑧

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if 2x or LSL ⑨	at Wood	at Concrete
SW1	1/2" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc ⑩	16d @ 6"oc	5/8" A.B. @ 48"oc
SW2	1/2" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc ⑩	16d @ 4"oc	5/8" A.B. @ 32"oc
SW3 ④	1/2" CDX PLYWOOD	8d @ 3"oc	(2) rows 16d @ 6"oc	A35 @ 12"oc ⑩	16d @ 3"oc	5/8" A.B. @ 16"oc
SW4 ④	1/2" CDX PLYWOOD	8d @ 2"oc	(2) rows 16d @ 4 1/2"oc	A35 @ 9"oc ⑩	(2) rows 16d @ 4 1/2"oc	5/8" A.B. @ 12"oc
SW5 ⑤	1/2" CDX PLYWD. EA. SIDE	8d @ 3"oc EA. SIDE	n/a	A35 @ 6"oc	(2) rows 16d @ 3"oc	5/8" A.B. @ 16"oc
SW6 ⑤	1/2" CDX PLYWD. EA. SIDE	8d @ 2"oc EA. SIDE	n/a	HGA10 @ 8"oc	(2) rows 16d @ 2"oc	5/8" A.B. @ 12"oc

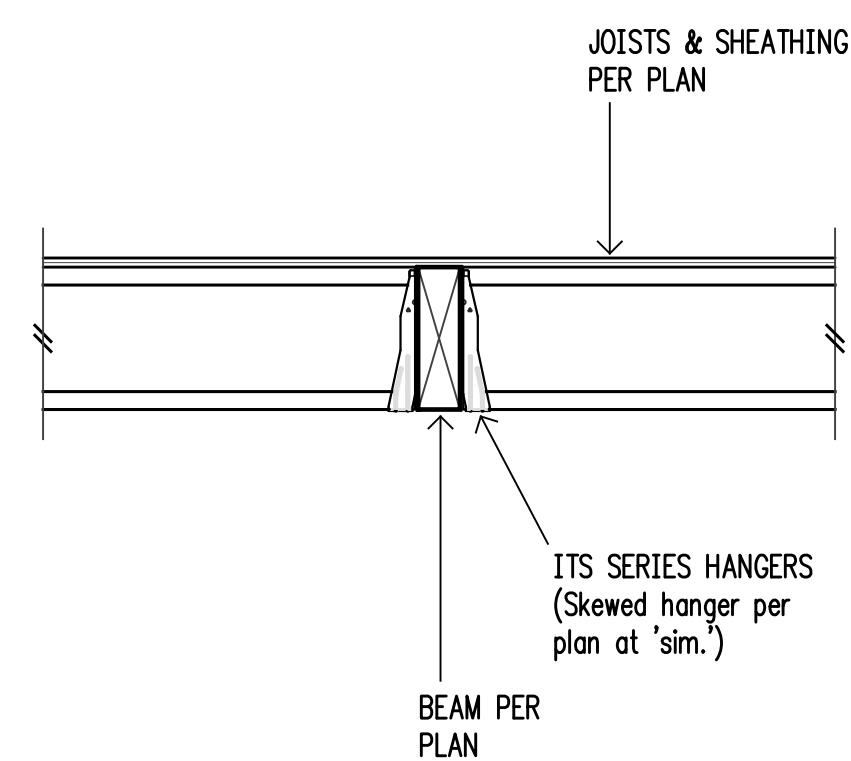


11 n.t.s. Shearwall Schedule

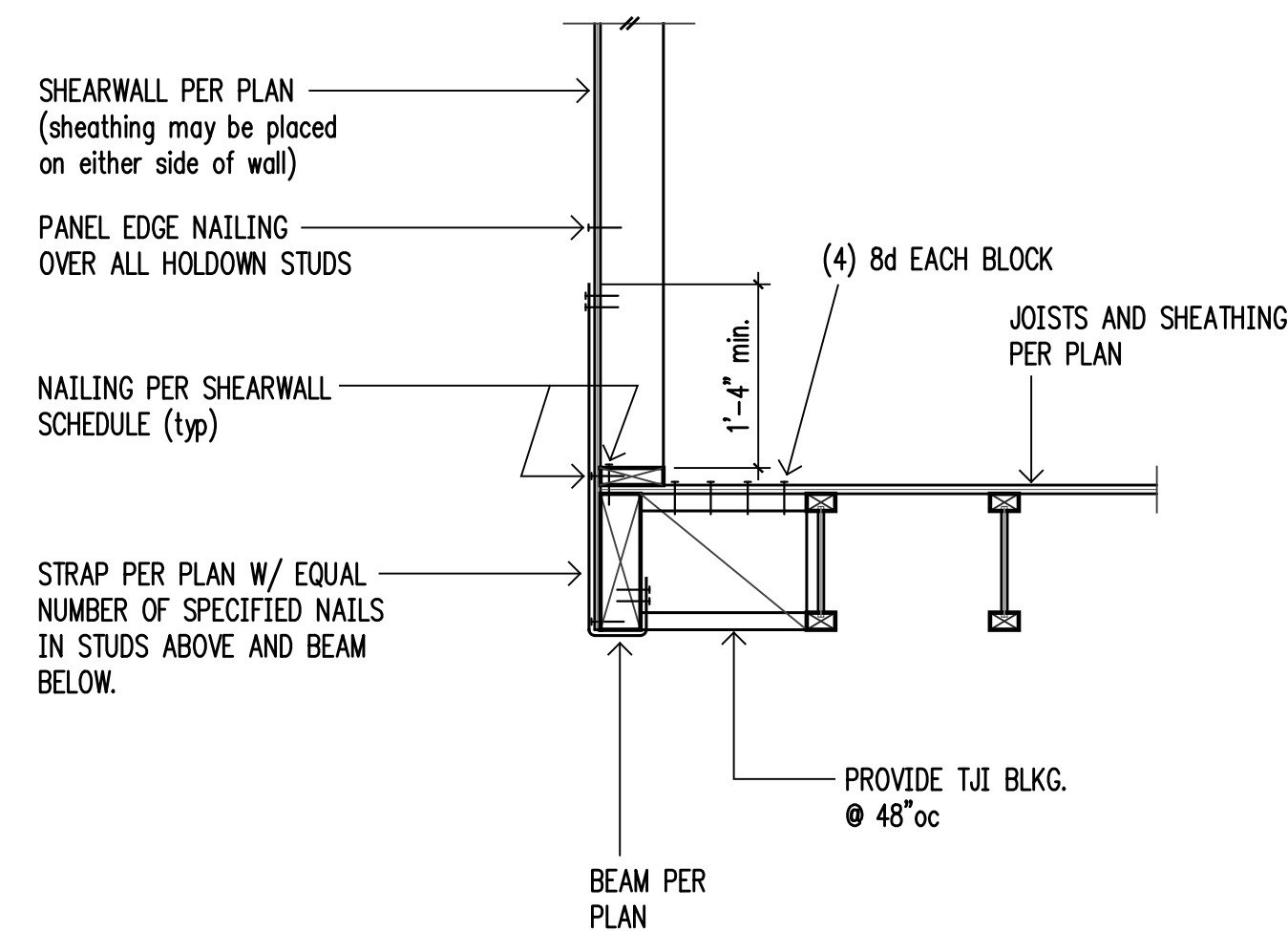
- ① BLOCK PANEL EDGES WITH 2x LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"oc.
- ② 8d NAILS SHALL BE 0.131" x 2 1/2" (common) - 16d NAILS SHALL BE 0.135" x 3 1/2" (box)
- ③ EMBED ANCHOR BOLTS AT LEAST 7". EXPANSION BOLTS MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" PLATE WASHERS. LOCATE EDGE OF PLATE WASHER WITHIN 1/2" OF THE SHEATHED EDGE OF WALL BOTTOM PLATE.
- ④ 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF SW3 AND SW4. REFER TO DETAIL B. WHERE 3x STUDS ARE USED FOR SW4, STAGGER NAILS AT ADJOINING PANEL EDGES.
- ⑤ 3x FOUNDATION SILL PLATES AND 3x STUDS ARE REQUIRED FOR SW5 AND SW6. ABUTTING PANEL EDGES SHALL BE OFFSET EACH SIDE OF WALL STAGGER NAILS AT ADJOINING PANEL EDGES.
- ⑥ TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING.
- ⑦ ALL EXTERIOR WALLS ARE SHEARWALLS, UNLESS NOTED OTHERWISE.
- ⑧ 7/16" O.S.B. MAY BE SUBSTITUTED FOR 1/2" CDX.
- ⑨ LTP4's MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- ⑩ A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.



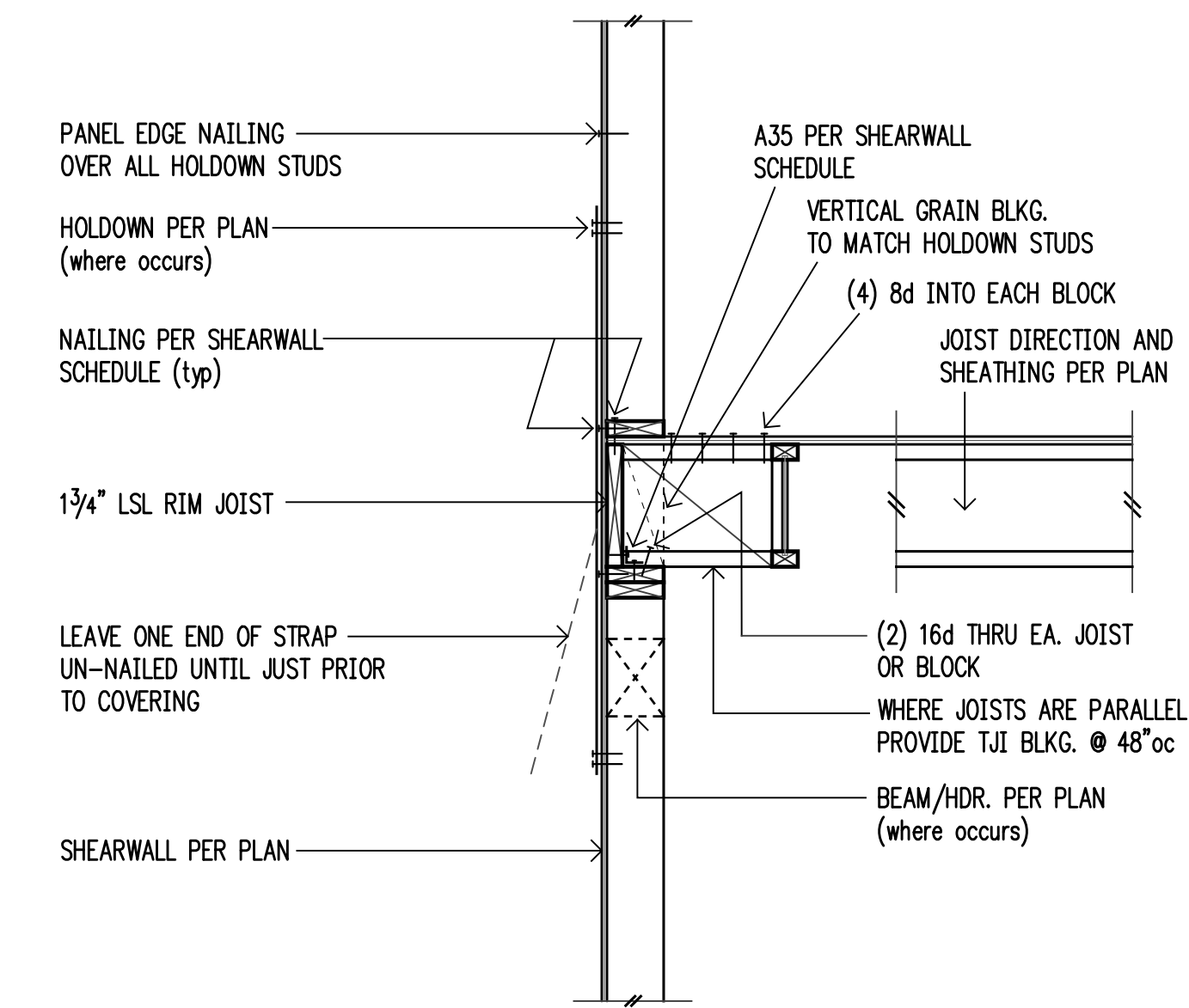
1 n.t.s.
CC/CCQ Series Connection



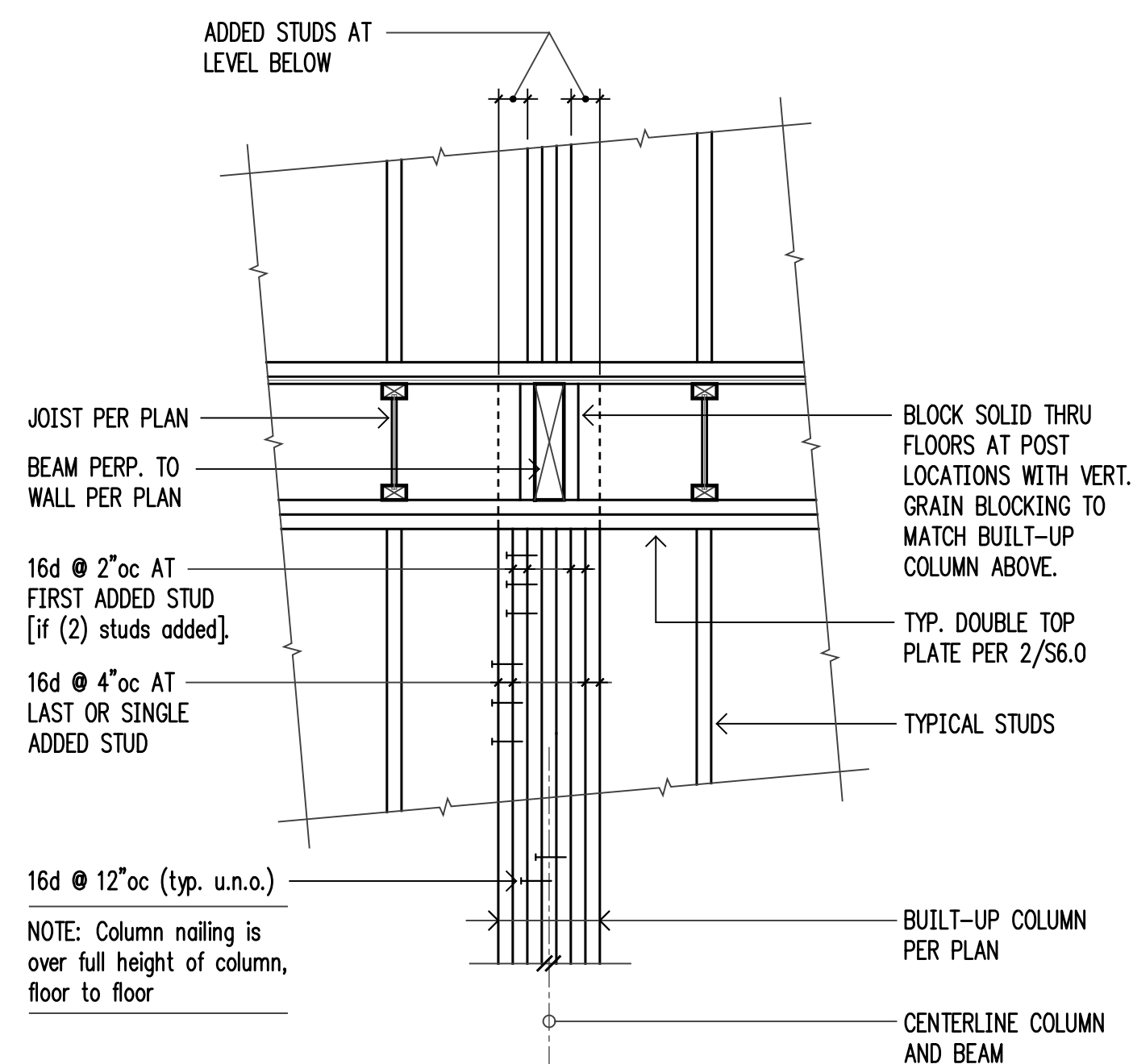
2 n.t.s.
Flush Beam



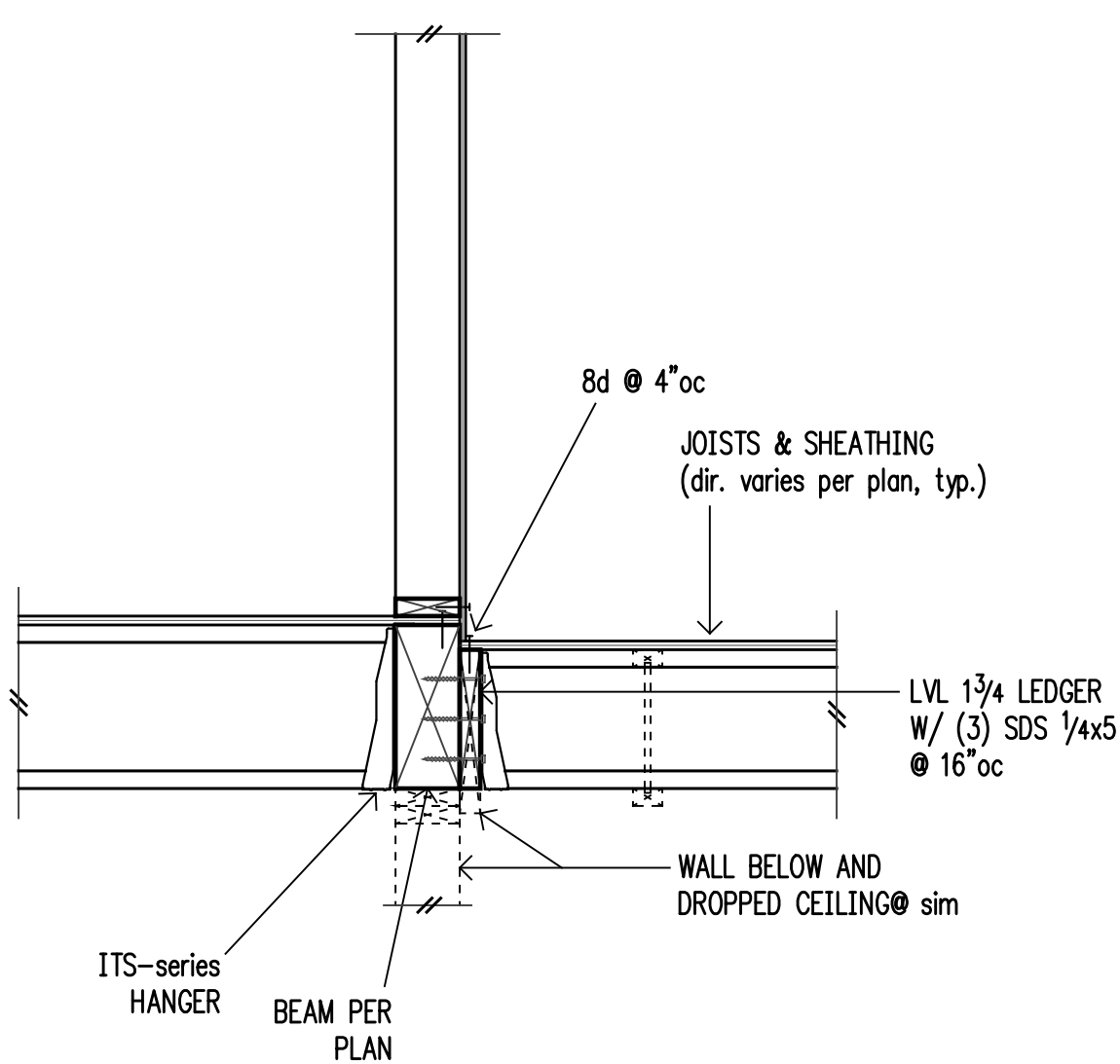
3 Exterior Floor Beam (w/TJI's)



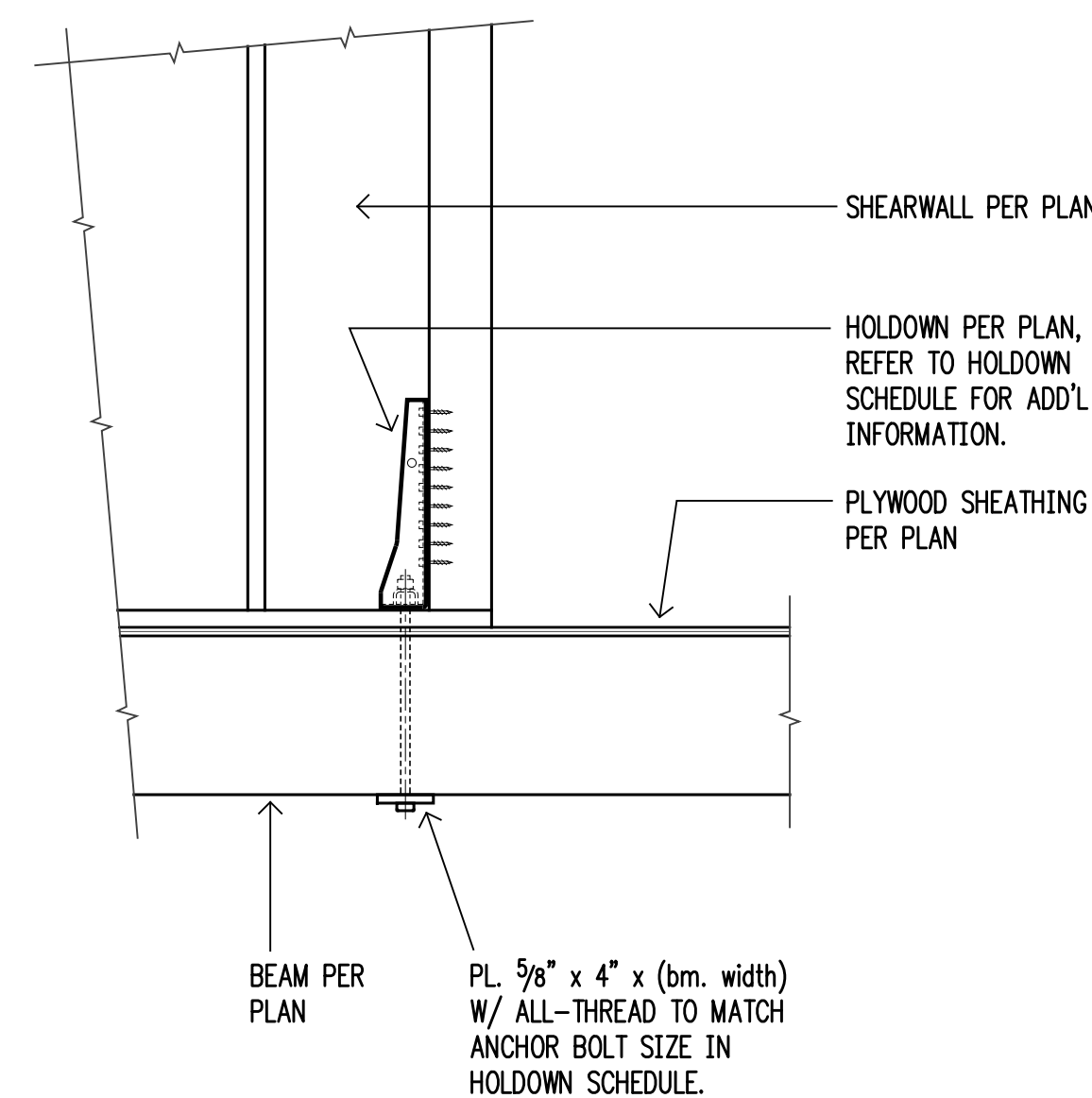
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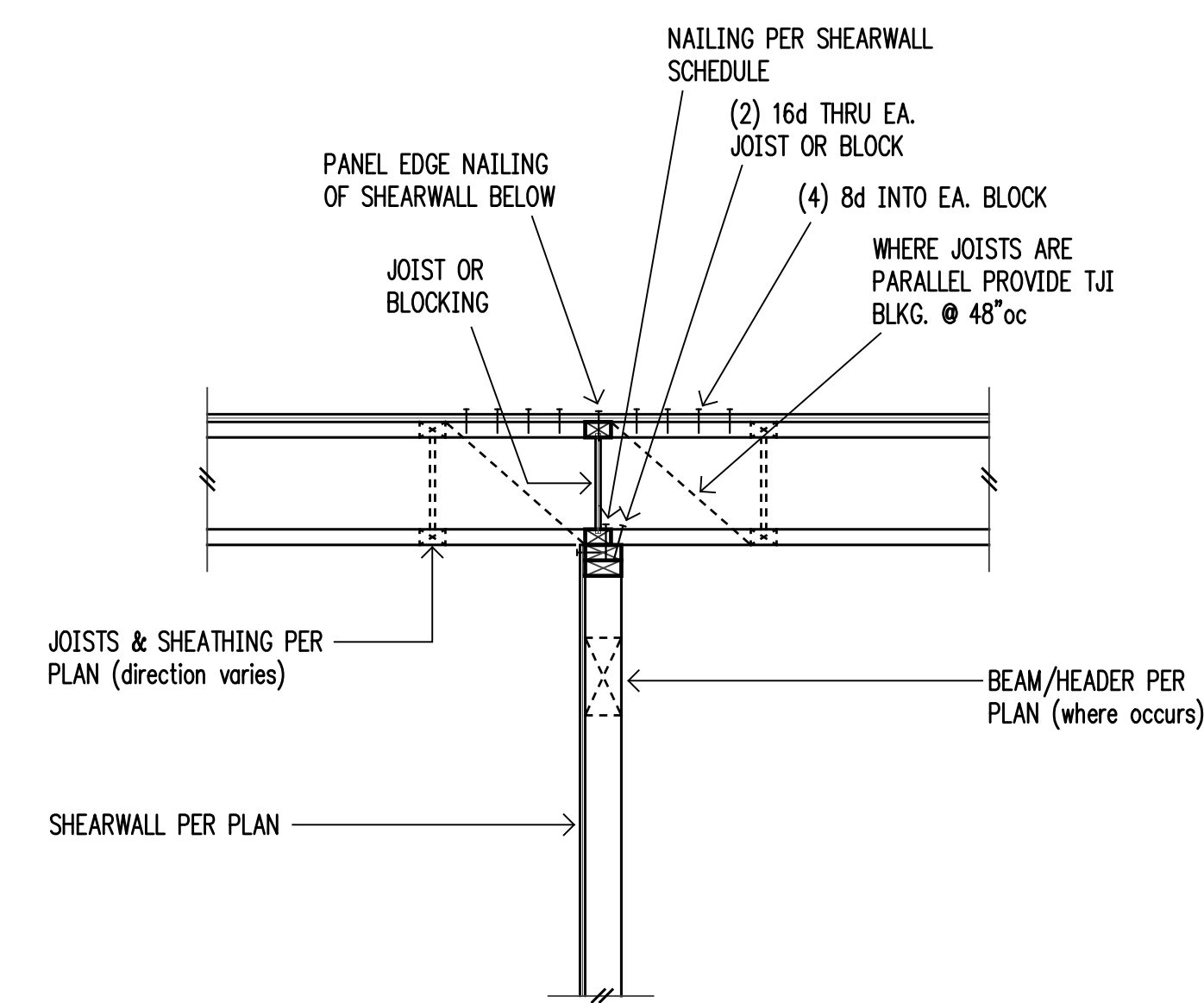
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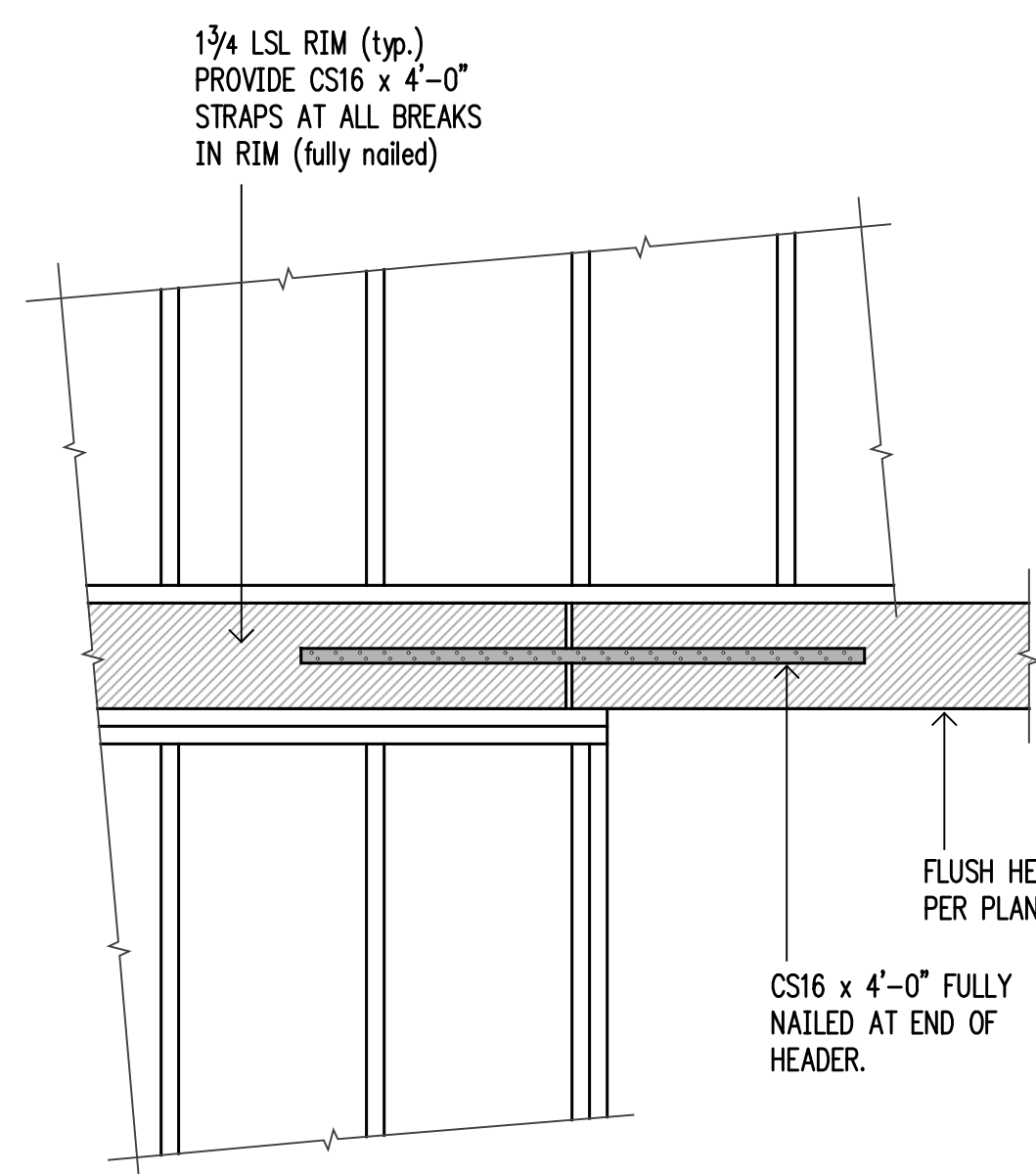
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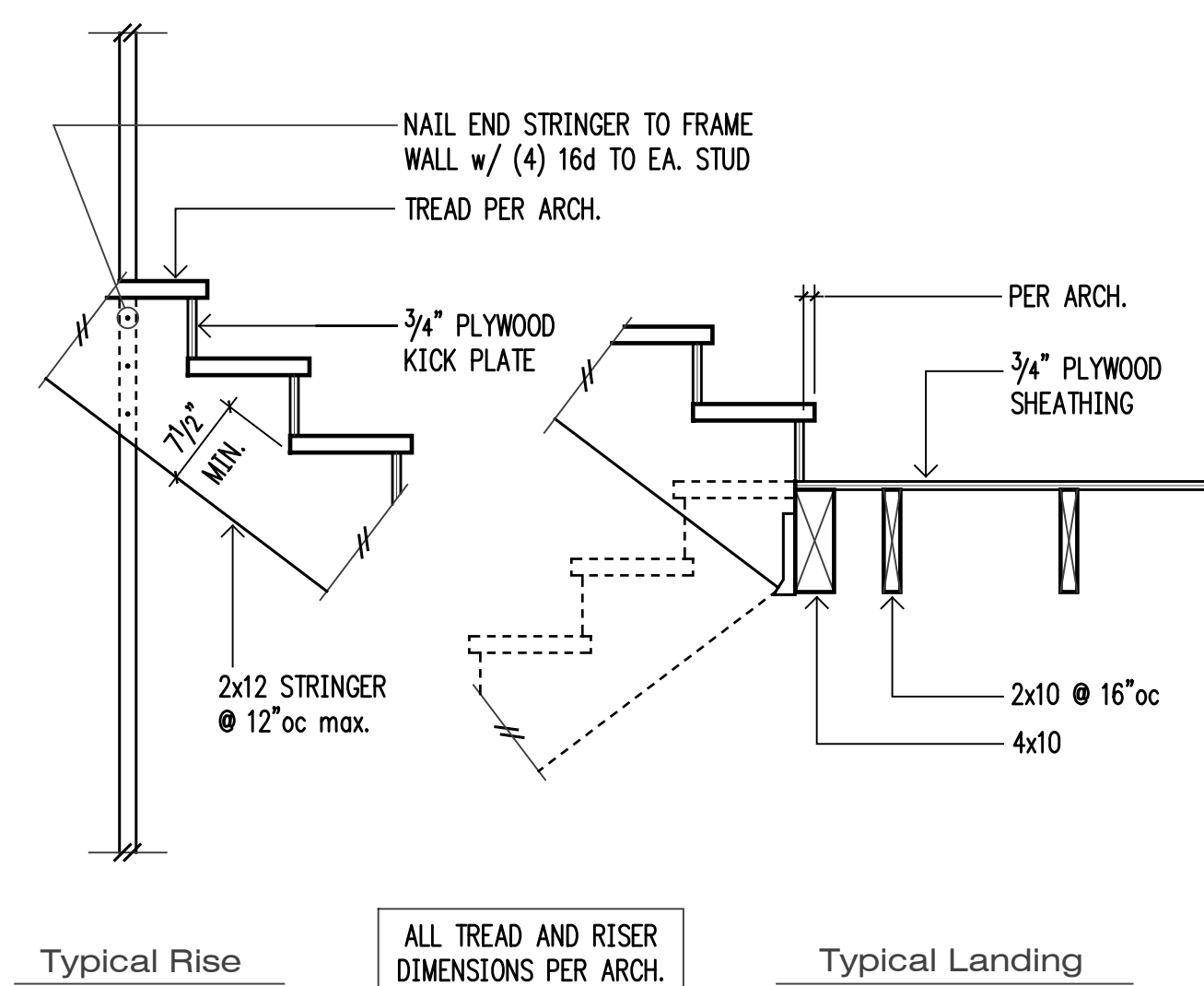
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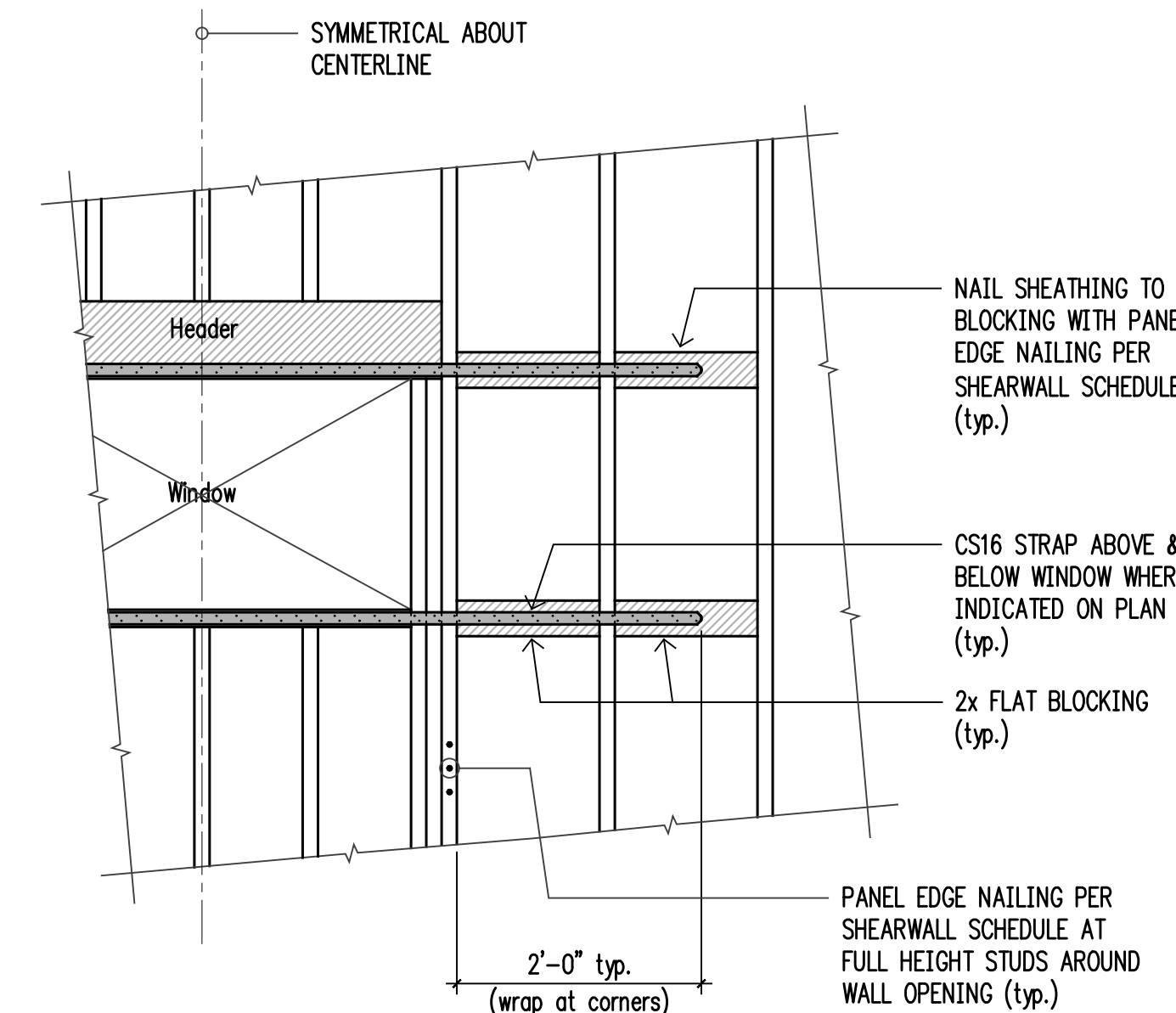
8 Interior Shearwall Below



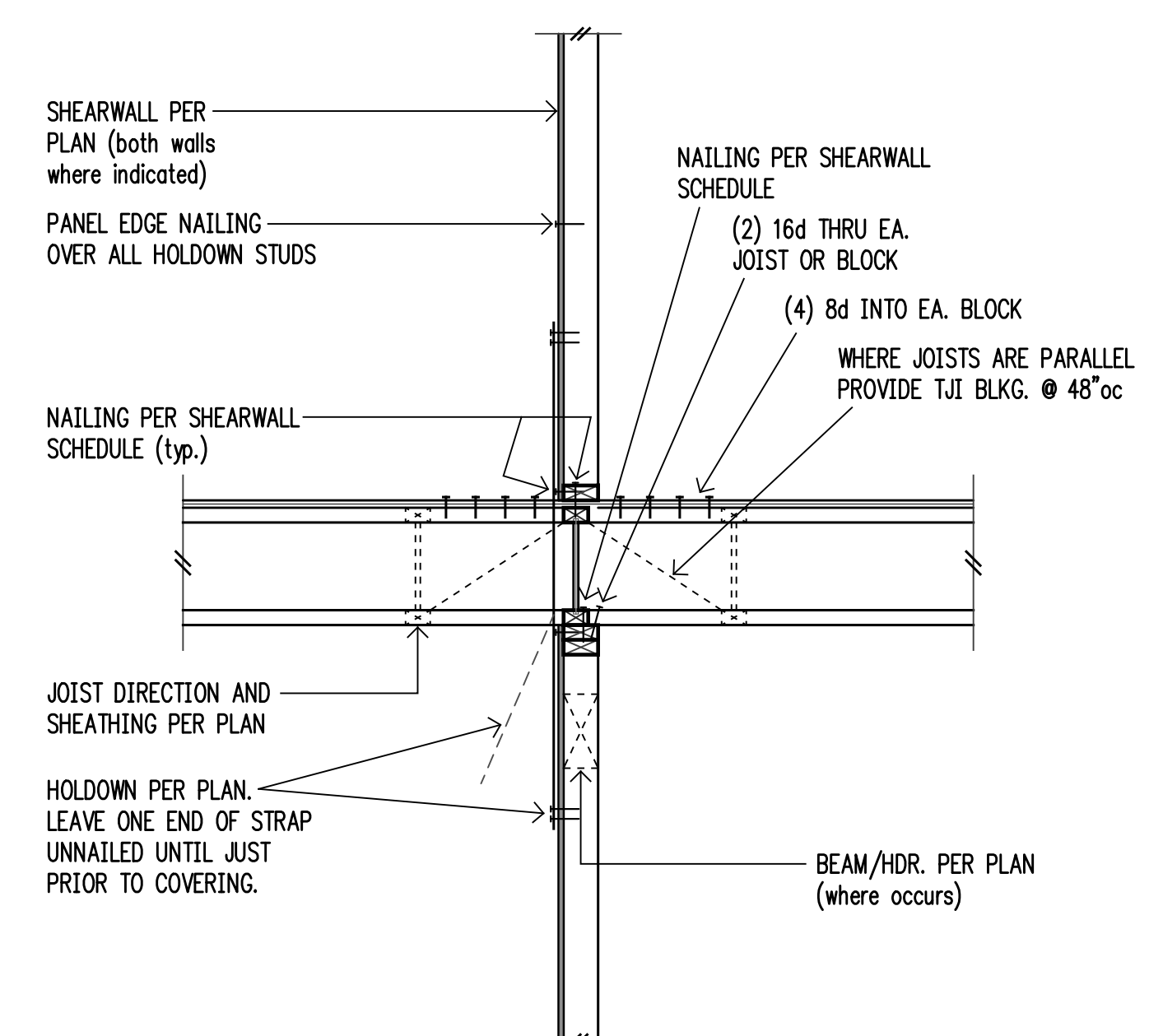
9 n.t.s.
Typical Header / Rim Splice



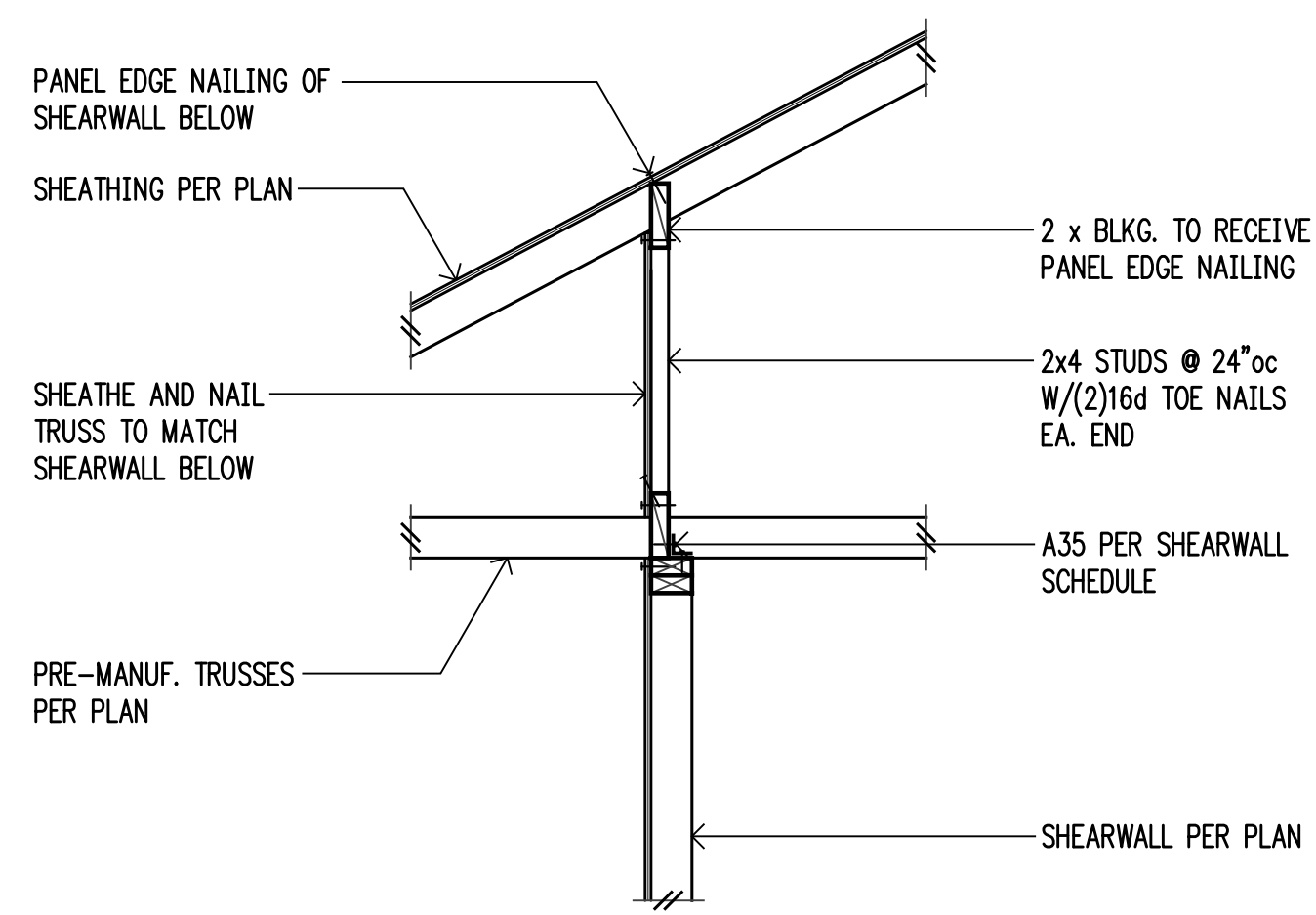
10 n.t.s.
Typical Stair and Landing Detail



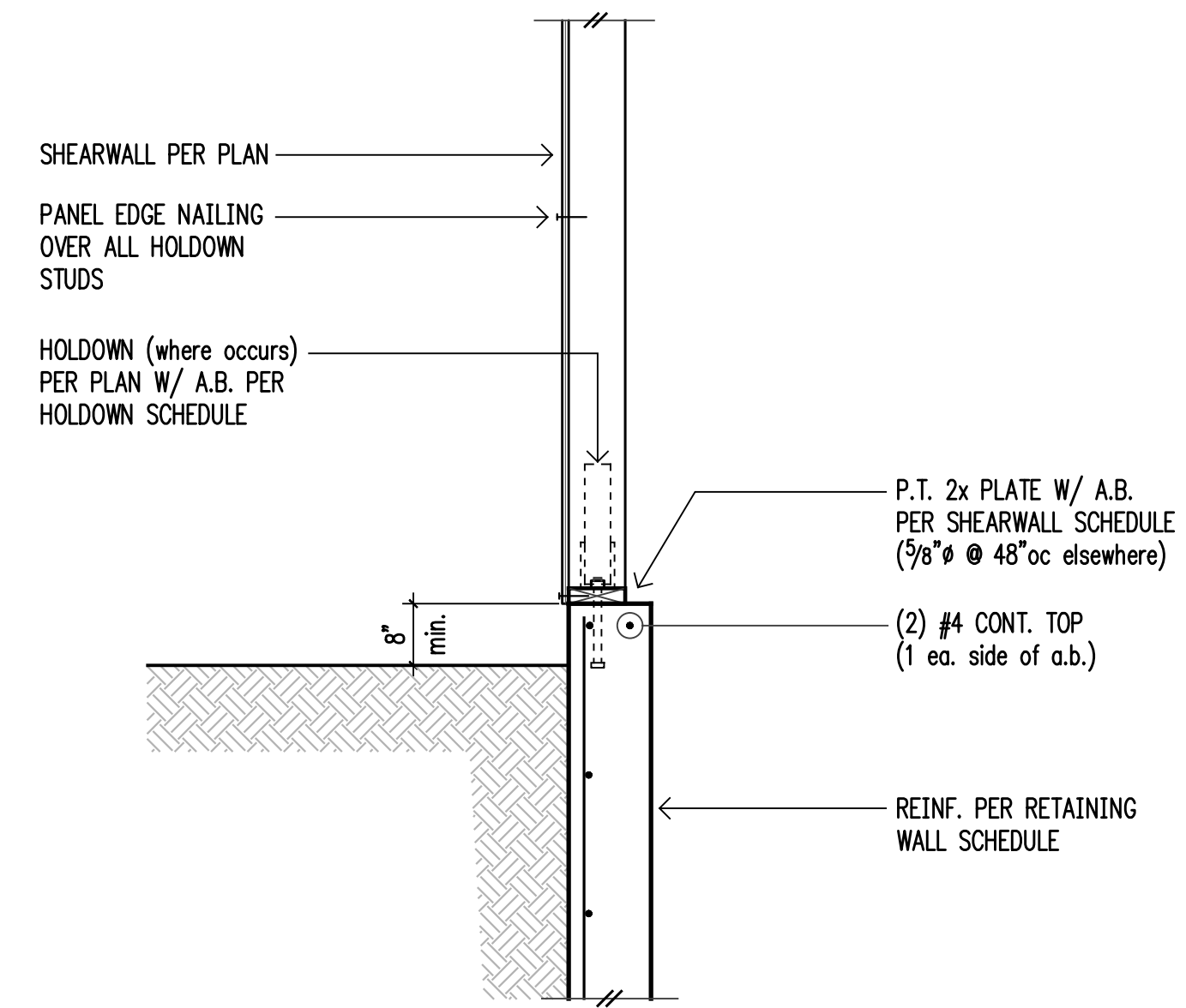
11 n.t.s.
Straps at Wall Opening (above & below)



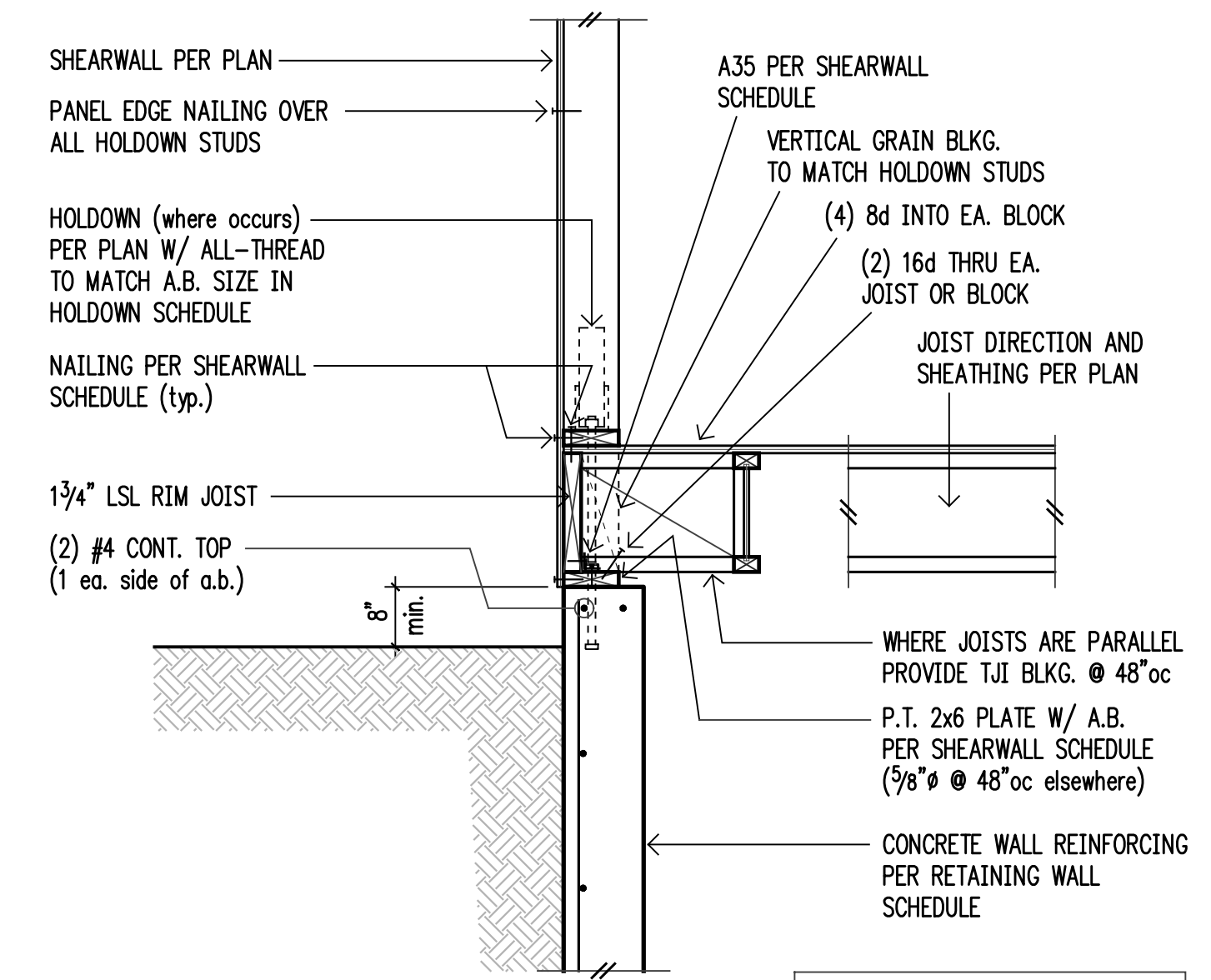
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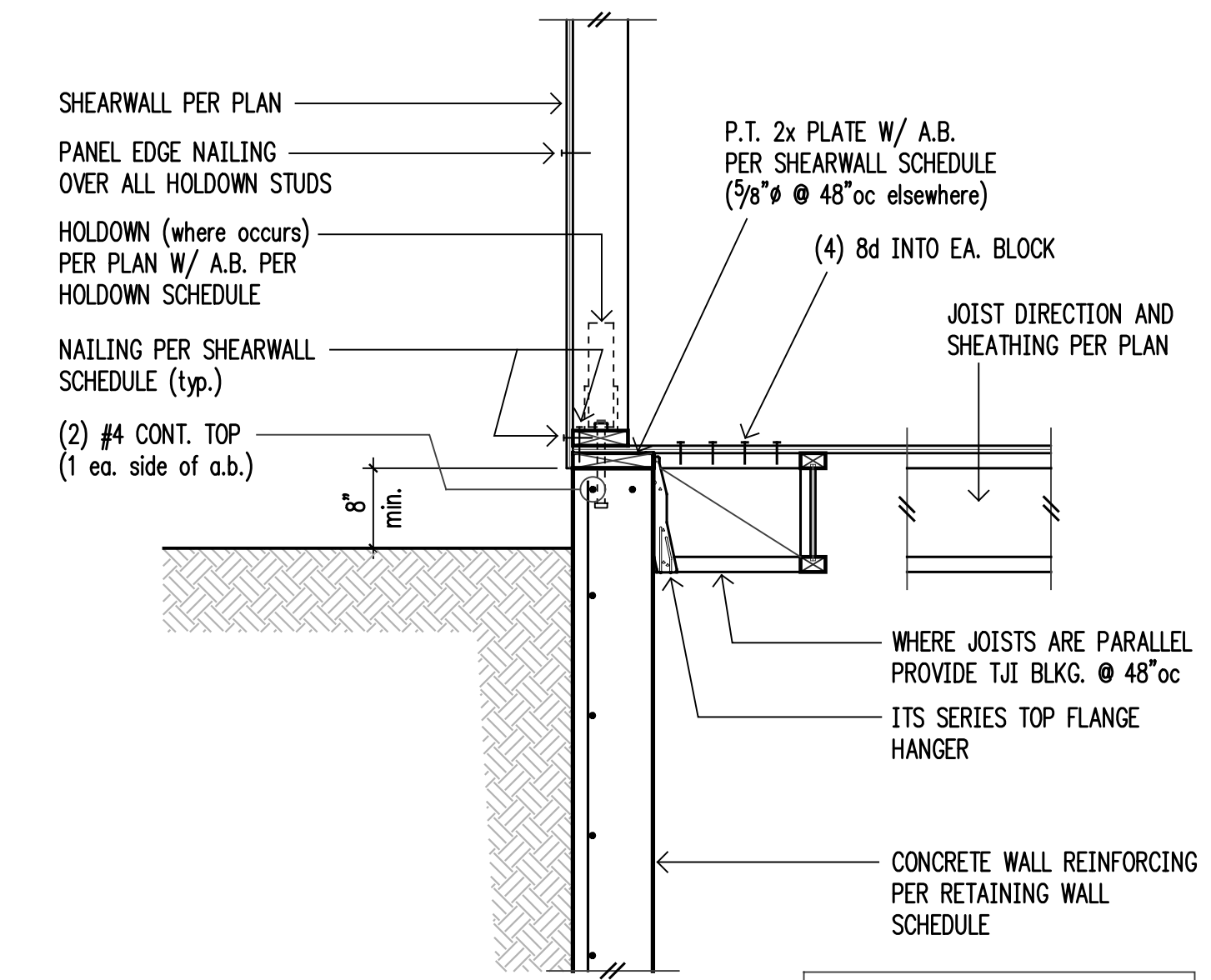


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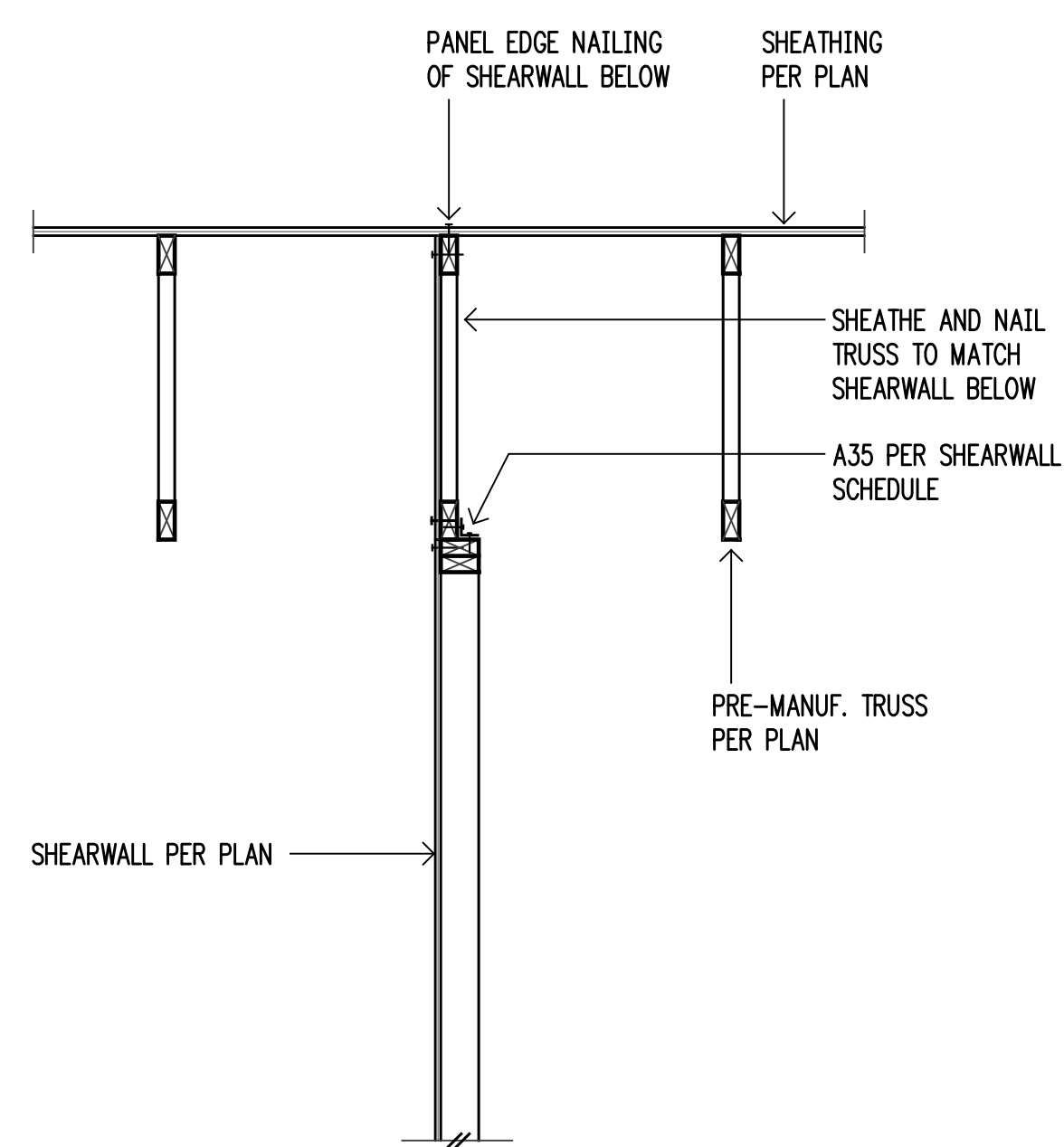
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All fasteners into pressure treated wood shall be galvanized or stainless steel per General Notes.

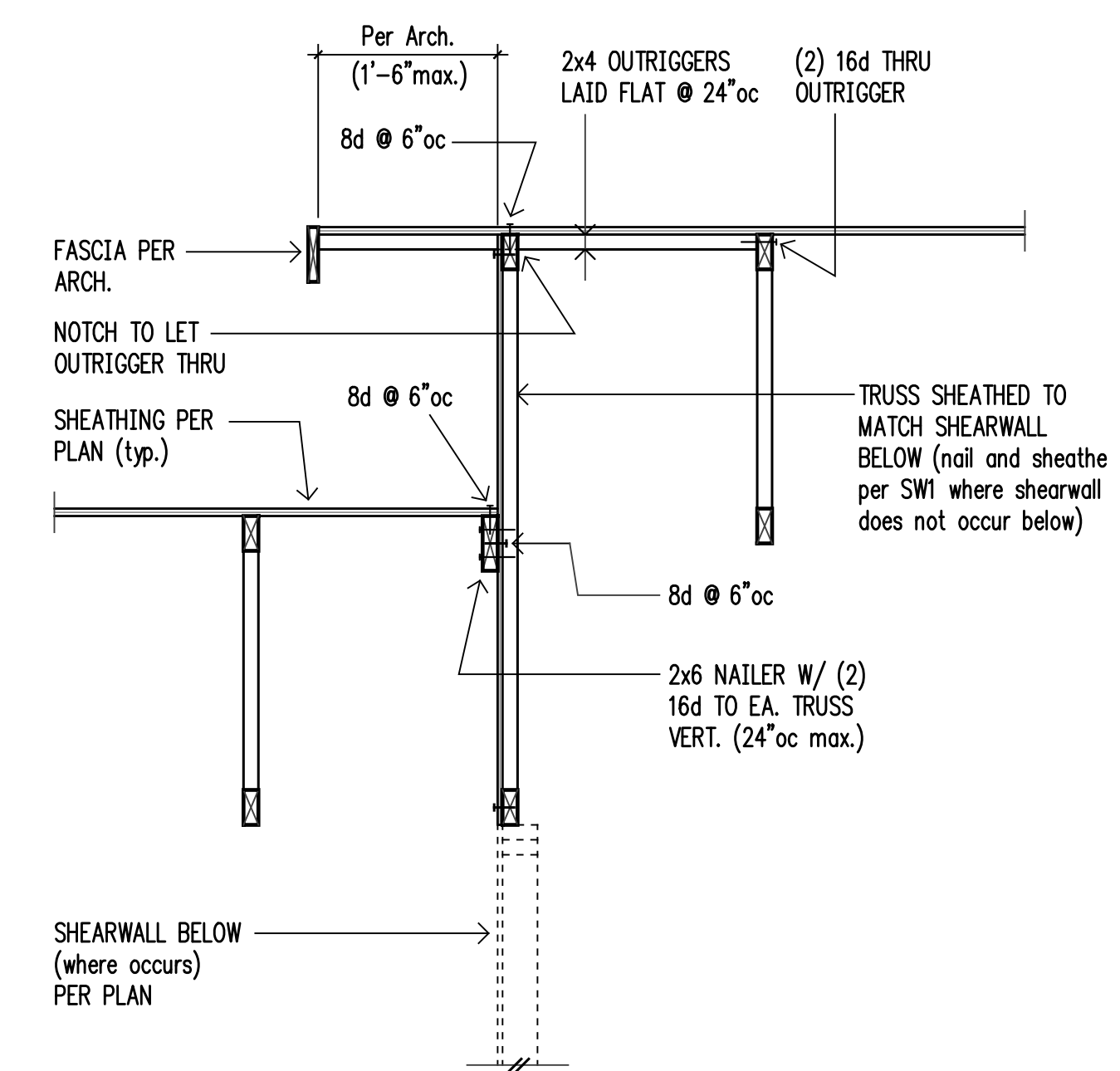


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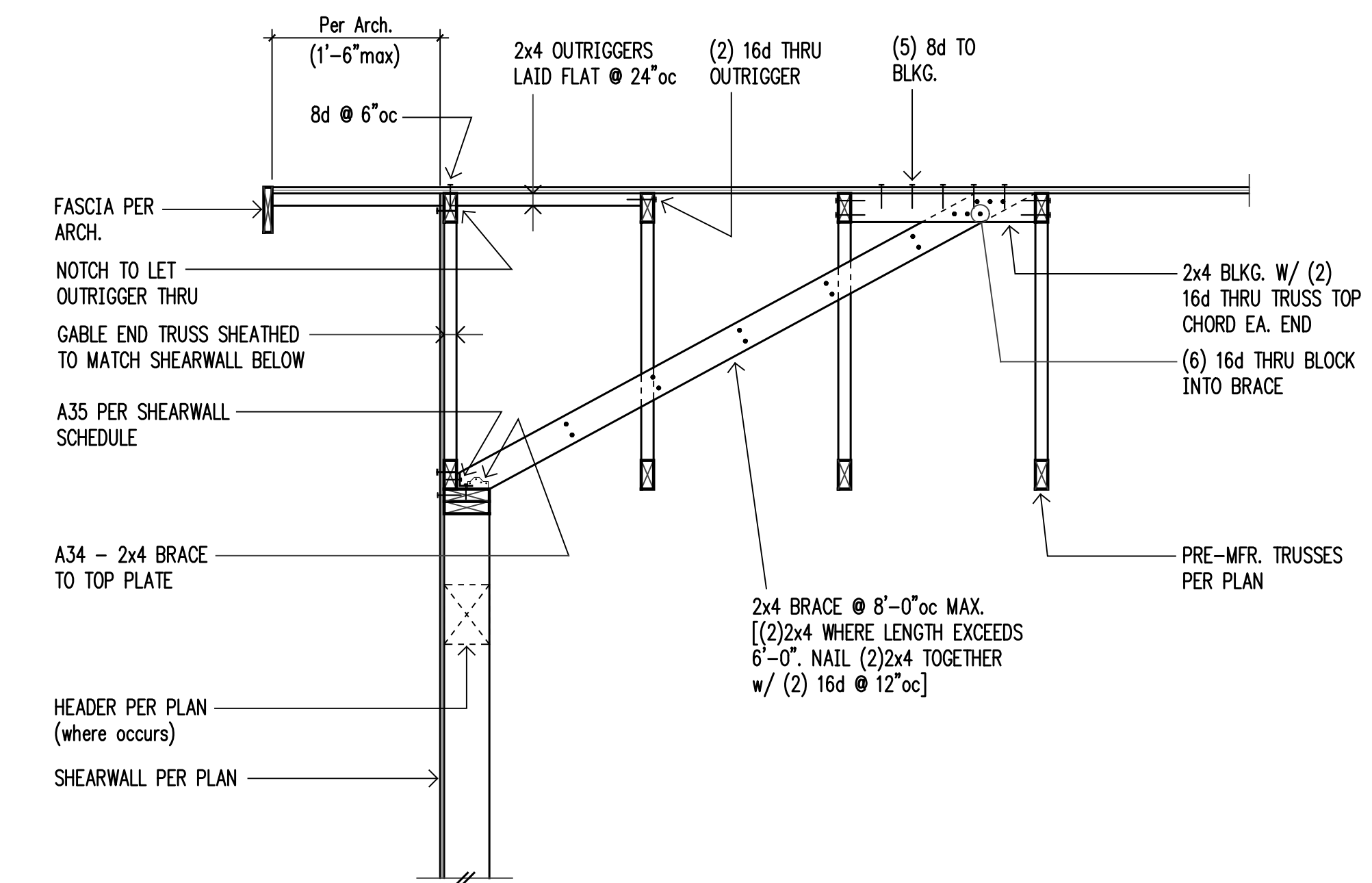
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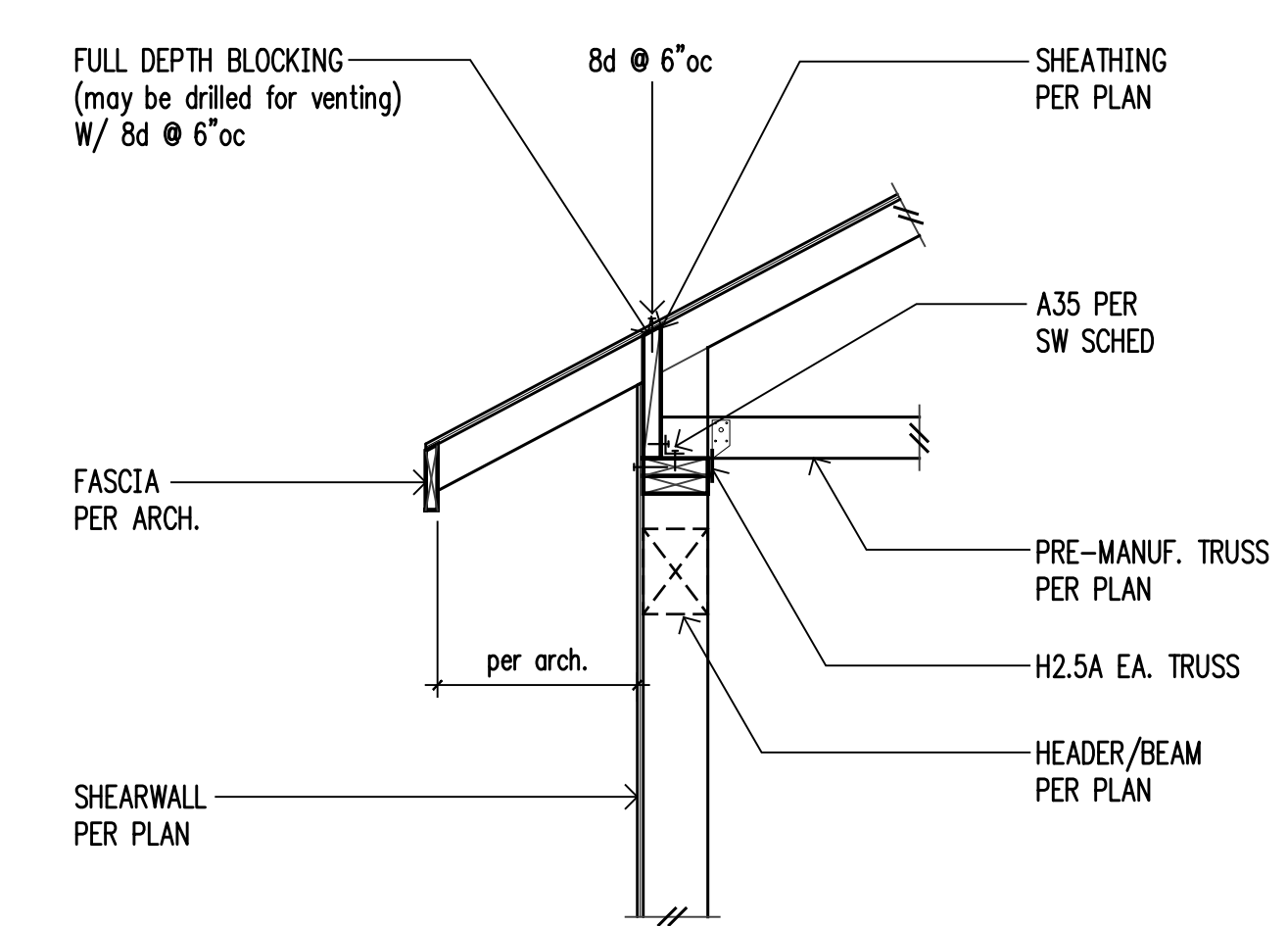
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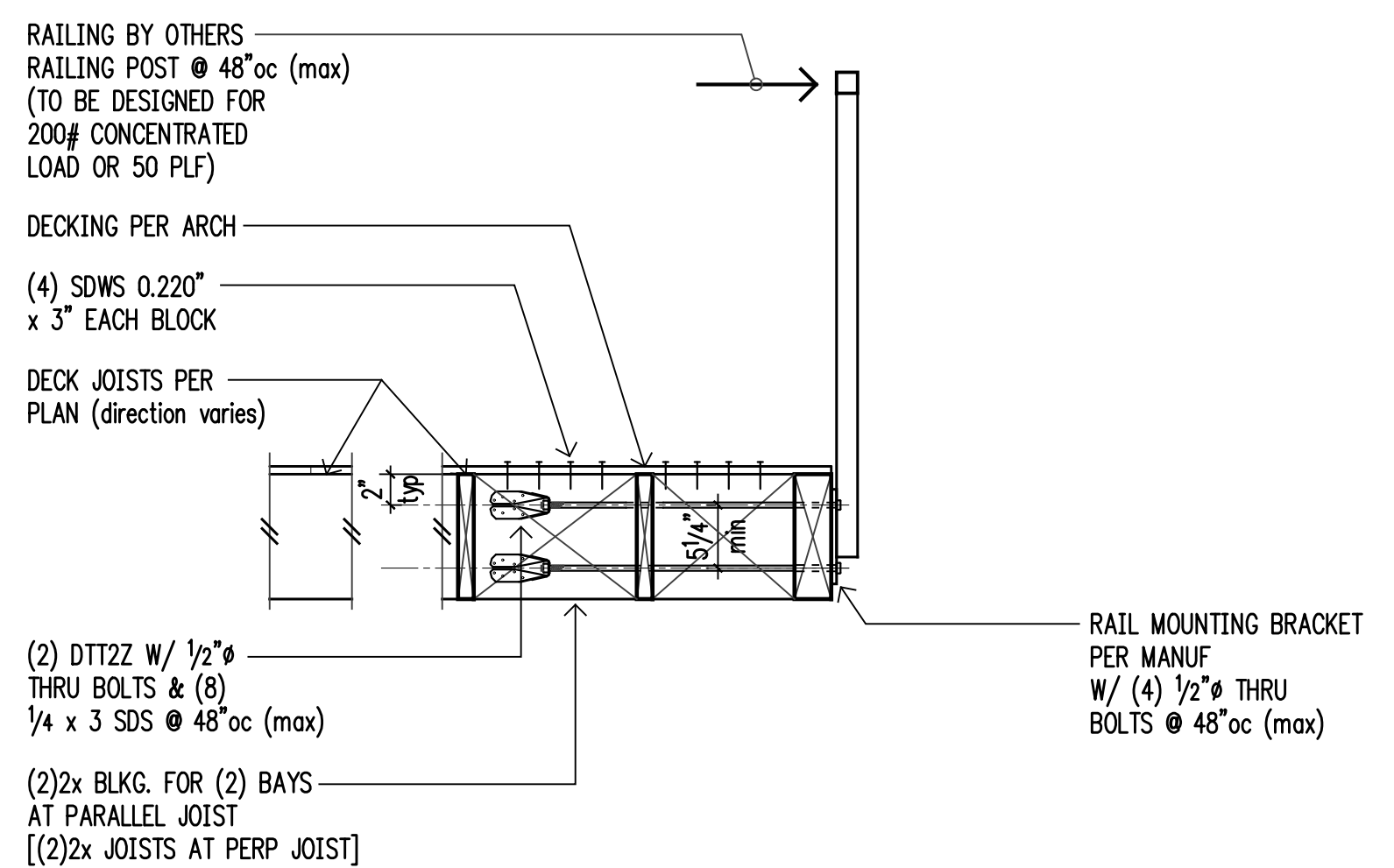
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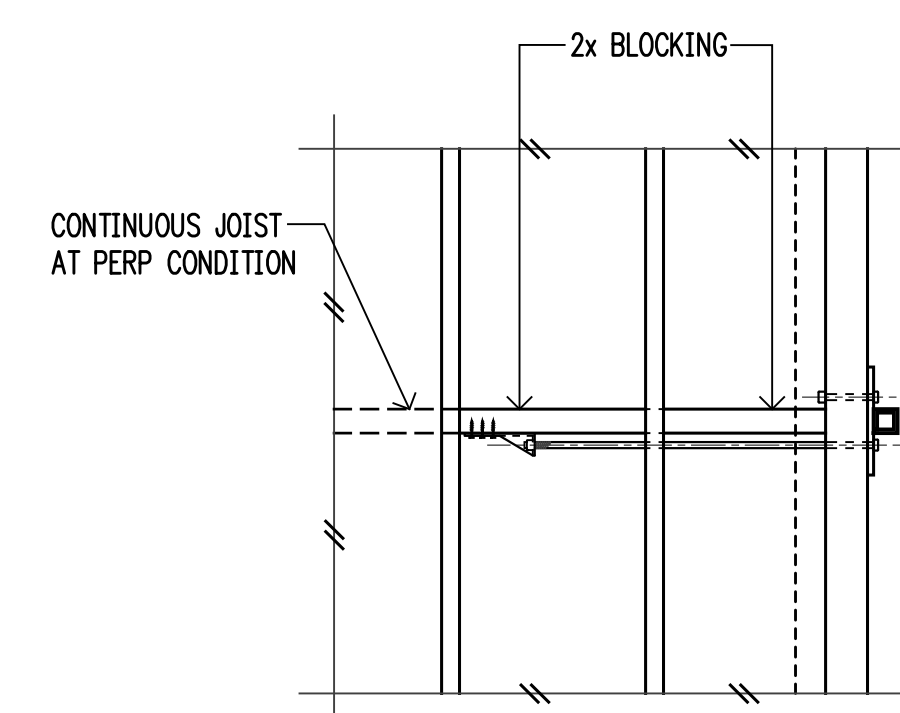
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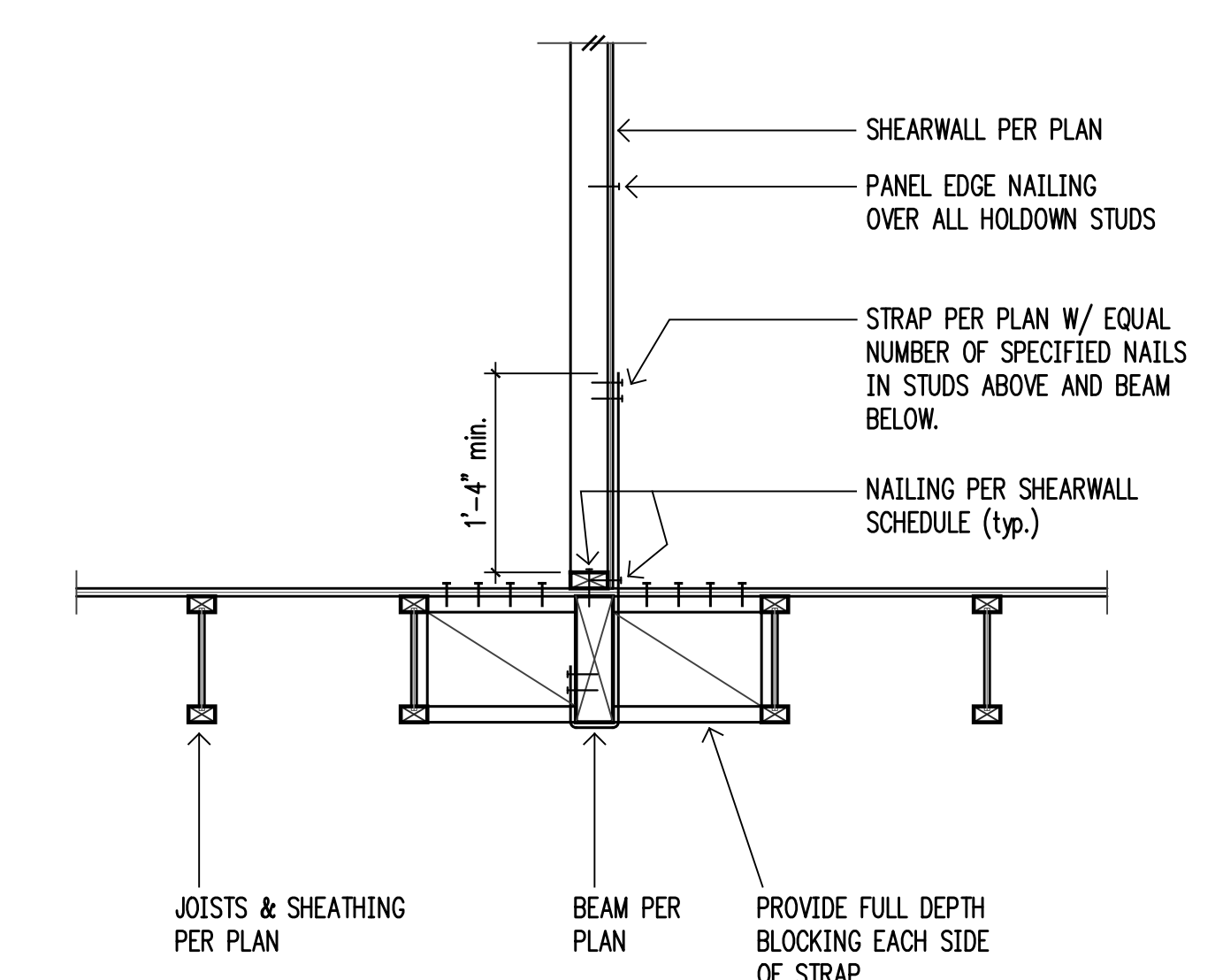


Section

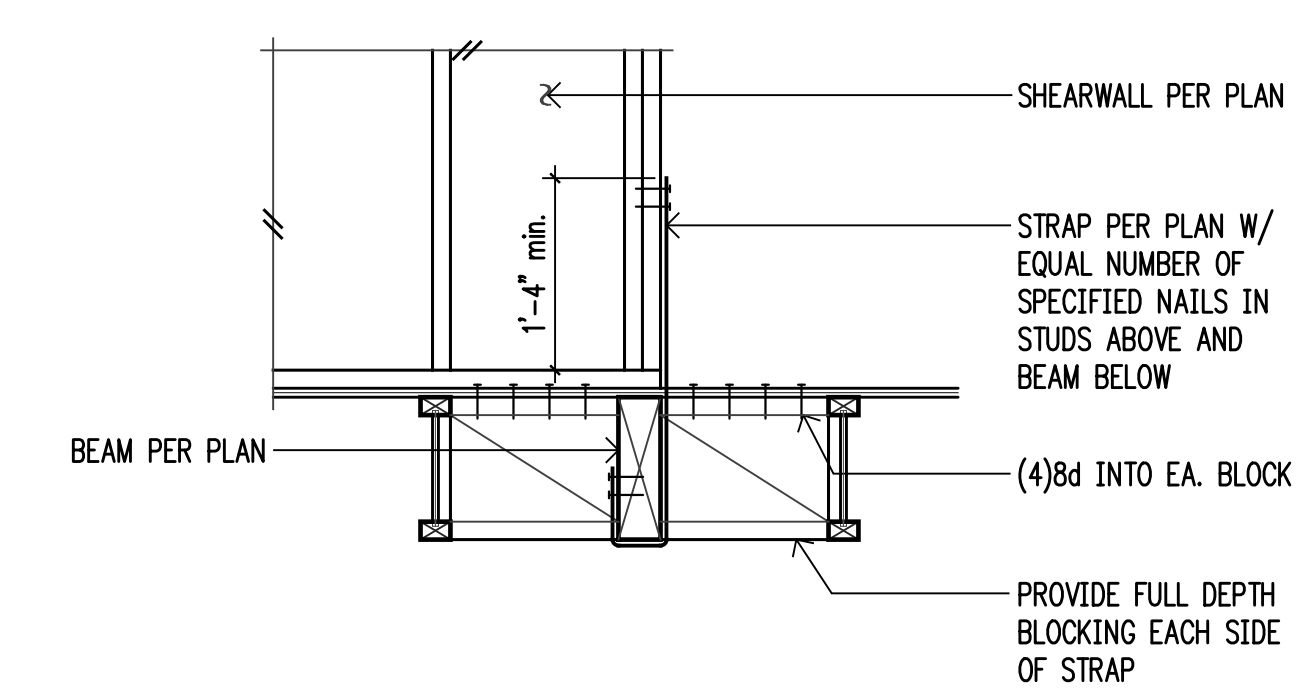


Plan View

9



11



12



4742 42nd ave. sw, #297
seattle, wa 98116
206.579.8160

Project:

Mercer Island Residence
5236 W Mercer Way
Mercer Island, WA



4200 Stone Way N
Seattle, Washington 98103

Frank Co. Project No.:

0031-2025-06

Design:

EAF

Drawn:

JAS

Approved:

EAF

Issue:

Permit

Date:

09-22-2025

Revisions:

1 Permit Corrections
01-26-2026



For Building Department use:

Sheet Contents:

Wood Framing Details

Scale (u.n.o.): 3/4"=1'-0"

Sheet No.:

S4.3

General Shoring Notes

The Following Apply Unless Noted Otherwise on the Drawings

General

- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING DIMENSIONS AND SITE CONDITIONS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATIONS OR ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS AND THOSE UTILITIES OR UNDERGROUND OBSTRUCTIONS NOT SHOWN ON THE PLANS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL ABANDONED UTILITIES, OR OTHER UNDERGROUND OBSTRUCTIONS THAT INTERFERE WITH THE NEW CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING APPROPRIATE CLEARANCES FROM UTILITIES. DURING CONSTRUCTION PROJECTS, INSTALLATIONS OF SHORING, SHORING PILES AND SHORING LAGGING SHALL MAINTAIN A SEPARATION FROM CONDUITS, DUCT BANKS, VAULTS AND MANHOLES OF NO LESS THAN ONE FOOT FOR THE DURATION OF CONSTRUCTION.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR THE CONSTRUCTION PROCESS AND THE SAFETY OF THE WORKERS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE CONSTRUCTION SEQUENCE, TEMPORARY HANDRAILS, EXCAVATION ACCESS, AND BARRIERS. IT ALSO INCLUDES LIFTING OF MATERIALS AND CONSTRUCTION EQUIPMENT INTO AND OUT OF THE EXCAVATION, TEMPORARY BRACING OF SINGLE-SIDED FORMWORK, TEMPORARY SHORING OF EXCAVATIONS, AND STABILITY OF ALL CUT SLOPES.
- A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF THE WORK AND SHALL BE ATTENDED BY THE OWNER'S REPRESENTATIVES, THE ENGINEER, THE GENERAL CONTRACTOR, THE EXCAVATION SUBCONTRACTOR, THE SHORING SPECIALTY SUBCONTRACTOR, THE GEOTECHNICAL SPECIAL INSPECTOR, THE SDOT REPRESENTATIVE, AND THE CITY REPRESENTATIVE. THE PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED TO CLARIFY THE REQUIREMENTS FOR THE WORK, COORDINATE THE CONSTRUCTION ACTIVITIES, AND TO IDENTIFY CONTRACTUAL RELATIONSHIPS AND RESPONSIBILITIES.
- A PRE-CONSTRUCTION MEETING, SEPARATE FROM ANY PRE-CONSTRUCTION MEETING WITH THE CITY SHALL BE HELD PRIOR TO THE START OF EXCAVATIONS ADJACENT TO THE PUBLIC RIGHT-OF-WAY, AND SHALL BE ATTENDED BY THE OWNER'S REPRESENTATIVES, THE GENERAL CONTRACTOR, THE EXCAVATION SUBCONTRACTOR, THE SHORING SPECIALTY SUBCONTRACTOR, THE GEOTECHNICAL SPECIAL INSPECTOR, PROJECT SURVEYORS, AND INSPECTION PERSONNEL. THE MEETING SHALL BE CONDUCTED TO CLARIFY THE REQUIREMENTS FOR THE WORK, TO COORDINATE CONSTRUCTION ACTIVITIES, AND TO IDENTIFY CONTRACTUAL RELATIONSHIPS AND RESPONSIBILITIES.

Criteria

- CODE REQUIREMENTS: ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2021 EDITION.
- REFERENCE DOCUMENTS:
 - TOPOGRAPHIC AND BOUNDARY SURVEY;
 - SOILS REPORT: "GEOTECHNICAL REPORT, PROPOSED RESIDENCE, 5236 WEST MERCER WAY, MERCER ISLAND, WASHINGTON", PREPARED BY PANGELO, INC., DATED OCTOBER 5, 2017, PROJECT NO. 17-143.200, & "GEOTECHNICAL ADDENDUM NO. 1", DATED JANUARY 22, 2026.
- DESIGN LOADS: ALL SUBSURFACE DESIGN PARAMETERS USED IN THE SHORING DESIGN ARE BASED ON THE SUBSURFACE CHARACTERIZATION PRESENTED IN THE GEOTECHNICAL REPORT REFERENCED ABOVE. THE SOIL PRESSURE USED FOR DESIGN IS INDICATED ON THE SOIL PRESSURE DIAGRAM IN THE PLANS, IN ADDITION TO THE DEAD AND LIVE LOADS.
- SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO ANY FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING: STRUCTURAL STEEL, MISCELLANEOUS METAL, TENDONS, ANCHORS, REINFORCING STEEL, GROUTS, AND CONCRETES. PROPOSED DEMOLITION AND SHORING SEQUENCE SHALL ALSO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- SOILS INSPECTION: INSPECTION BY THE SOILS ENGINEER SHALL BE PERFORMED FOR PILE PLACEMENT AND TIEBACK PLACING AND STRESSING. ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF PILE. SOIL COMPACTION SHALL BE SUPERVISED BY AN APPROVED TESTING LAB.

- SPECIAL INSPECTION: SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 108 AND 1705 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.

CONCRETE CONSTRUCTION
STRUCTURAL STEEL FABRICATION AND ERECTION (INCLUDING FIELD WELDING AND HIGH-STRENGTH FIELD BOLTING)
AUGERCAST PILE, CAISSON, OR DRIVEN PILE INSTALLATION

- UTILITY LOCATION: THE SHORING CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING PILE HOLES, TIEBACK ANCHORS, 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.

- CONCRETE: CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF CHAPTER 19 OF THE INTERNATIONAL BUILDING CODE, AND ACI 318. 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
3,000	1-1/2 Sacks 6 Sacks	6 Gallons	Pile lean concrete Pile struct. grout

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 CHAPTER 26.

- SAWN LUMBER: SAWN LUMBER SHALL CONFORM TO "GRADING AND DRESSING RULES," WEST COAST LUMBER INSPECTION BUREAU (WCLB), LATEST EDITION. LUMBER SHALL BE THE SPECIES AND GRADE NOTED BELOW.

Use	Grade	F _b (psi, single use)
4X12 TIMBER LAGGING	DOUGLAS FIR-LARCH NO. 2 HEM-FIR NO. 1	875 950

TIMBER LAGGING SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWWA STANDARD U1-05 (FOR END USE CLASSIFICATION UC4), TO A MINIMUM RETENTION OF 0.40LBS/CU.FT., USING THE CCA PROCESS (COMMERCIAL PRODUCT NAME OSMOSE OR APPROVED EQUAL). LAGGING SHALL BE 4X12 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)

- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	F _y
PLATES, ANGLES, AND RODS	A36	36 KSI
SHAPES	A992	50 KSI
STRUCTURAL BOLTS	A325-N	
WOOD CONNECTION BOLTS	A307	
ANCHOR BOLTS	A307	
WELDING ELECTRODES	E70XX	
HEADED SHEAR STUDS	A108	

- WATERPROOFING: THE SHORING SYSTEM IS TEMPORARY IN NATURE, IS CONSTRUCTED EXTERNAL TO THE BUILDING ENVELOPE OF THE PERMANENT STRUCTURE, AND SHOULD NOT BE CONSTRUED AS CONTRIBUTING ANY THE LONG-TERM UTILITY OF THE PERMANENT STRUCTURE, UNLESS NOTED OTHERWISE ON THE PLANS. THIS INCLUDES ISSUES RELATING TO DRAINAGE/WATERPROOFING OF THE PERMANENT BASEMENT WALLS. IF THE STRUCTURAL ENGINEER INTENDS TO INCORPORATE ANY ELEMENTS OF THE SHORING SYSTEM INTO THE PERMANENT BUILDING DESIGN (INCLUDING DRAINAGE/WATERPROOFING COMPONENTS), THEY SHOULD BE INDEPENDENTLY EVALUATED FOR THEIR UTILITY FOR INCLUSION AS PART OF THE PERMANENT DESIGN.

Pile and Lagging Construction

- LAYOUT OF THE SHORING ELEMENTS PERPENDICULAR TO THE BUILDING WALLS SHALL BE BASED ON THE ARCHITECTURAL PLANS TAKING INTO ACCOUNT PERTINENT BUILDING ELEMENTS (E.G. WATERPROOFING) NOT SHOWN ON THESE PLANS.

- 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.

- HOLE DIGGING: SHAFTS SHALL BE EXCAVATED TO THE REQUIRED DEPTH AS SHOWN ON THE PLANS. THE EXCAVATION SHALL BE COMPLETED IN A CONTINUOUS OPERATION USING EQUIPMENT CAPABLE OF EXCAVATION THROUGH THE TYPE OF MATERIAL EXPECTED TO BE ENCOUNTERED.

IF THE SHAFT EXCAVATION IS STOPPED WITH THE APPROVAL OF THE ENGINEER, THE SHAFT SHALL BE SECURED BY INSTALLATION OF A SAFETY COVER. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THE SAFETY OF THE SHAFT AND SURROUNDING SOIL AND THE STABILITY OF THE SIDE WALLS. A TEMPORARY CASING SHOULD BE USED IF NECESSARY TO ENSURE SUCH SAFETY AND STABILITY.

PILE AND ANCHOR HOLES SHALL BE DRILLED WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED PILES AND ANCHORS. THIS MAY INVOLVE CASING THE HOLES OR OTHER METHODS OF PROTECTION FROM CAVING. REFER TO REPORT OF GEOTECHNICAL INVESTIGATION FOR RECOMMENDED HOLE DIGGING PROCEDURE.

- PILE PLACEMENT: ALTERNATE PILES SHALL BE PLACED AND COMPLETED SO THAT AT LEAST 24 HOURS IS ALLOWED FOR THE CONCRETE TO SET PRIOR TO DRILLING ADJACENT PILES.

- THE MINIMUM REQUIRED STRUCTURAL STEEL SHAPES FOR THE SOLDIER PILES ARE INDICATED IN THE SCHEDULES. ALTERNATIVE STEEL SECTIONS MAY BE USED PROVIDED THAT THE CROSS-SECTIONAL AREA AND SECTION MODULUS OF EACH ALTERNATIVE STEEL SECTION ARE EQUAL TO OR GREATER THAN THE CROSS-SECTIONAL AREA AND SECTION MODULUS OF THE CORRESPONDING STEEL SECTION SHOWN ON THE PLANS. ALTERNATES SHALL BE REVIEWED BY THE SHORING ENGINEER OF RECORD PRIOR TO INSTALLATION.

- STEEL PILE PLACEMENT TOLERANCES:

1" INSIDE PERPENDICULAR TO SHORING WALL
1" OUTSIDE PERPENDICULAR TO SHORING WALL
3" LATERALLY.

- LAGGING: THE CONTRACTOR SHALL EXCAVATE THE WALL FACE AND INSTALL LAGGING IN SUCH A MANNER AS TO MAINTAIN A SAFE WORKPLACE AND AVOID EXCESSIVE SLOUGHING AND OVERBREAK. AS A MINIMUM, PRIOR TO PLACING THE SUBSEQUENT SET OF TIMBER LAGGING, DO NOT EXCAVATE MORE THAN FOUR (4) FEET BELOW THE CURRENT DEPTH OF LAGGED WALL FACE. IF FACE STABILITY CONDITIONS REQUIRE, THIS HEIGHT MUST BE REDUCED.

TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS. LAGGING SHALL BE INSTALLED FROM THE TOP OF THE PILE, PROCEEDING DOWNWARD. THE LAGGING SHALL MAKE DIRECT CONTACT WITH THE SOIL. VOIDS BETWEEN LAGGING AND SOIL SHALL BE BACKFILLED WITH FREE-DRAINING FILL. DRAINAGE BEHIND THE WALL MUST BE MAINTAINED.

- 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. ADDITIONAL INFORMATION REGARDING SHORING MONITORING IS PROVIDED ON THE PLANS.

Concrete Wall

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318 CHAPTER 26, AND 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 ACI WEATHER EXPOSURE. DESIGN STRENGTH IS F_c = 2,500 PSI.

- THE MINIMUM AMOUNTS OF CEMENT MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318 SECTION 26.12. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

- 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 TABLE 19.3.2.1 MODERATE EXPOSURE, F1.

- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, F_y = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, F_y = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, F_y = 60,000 PSI.

- DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-18 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

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

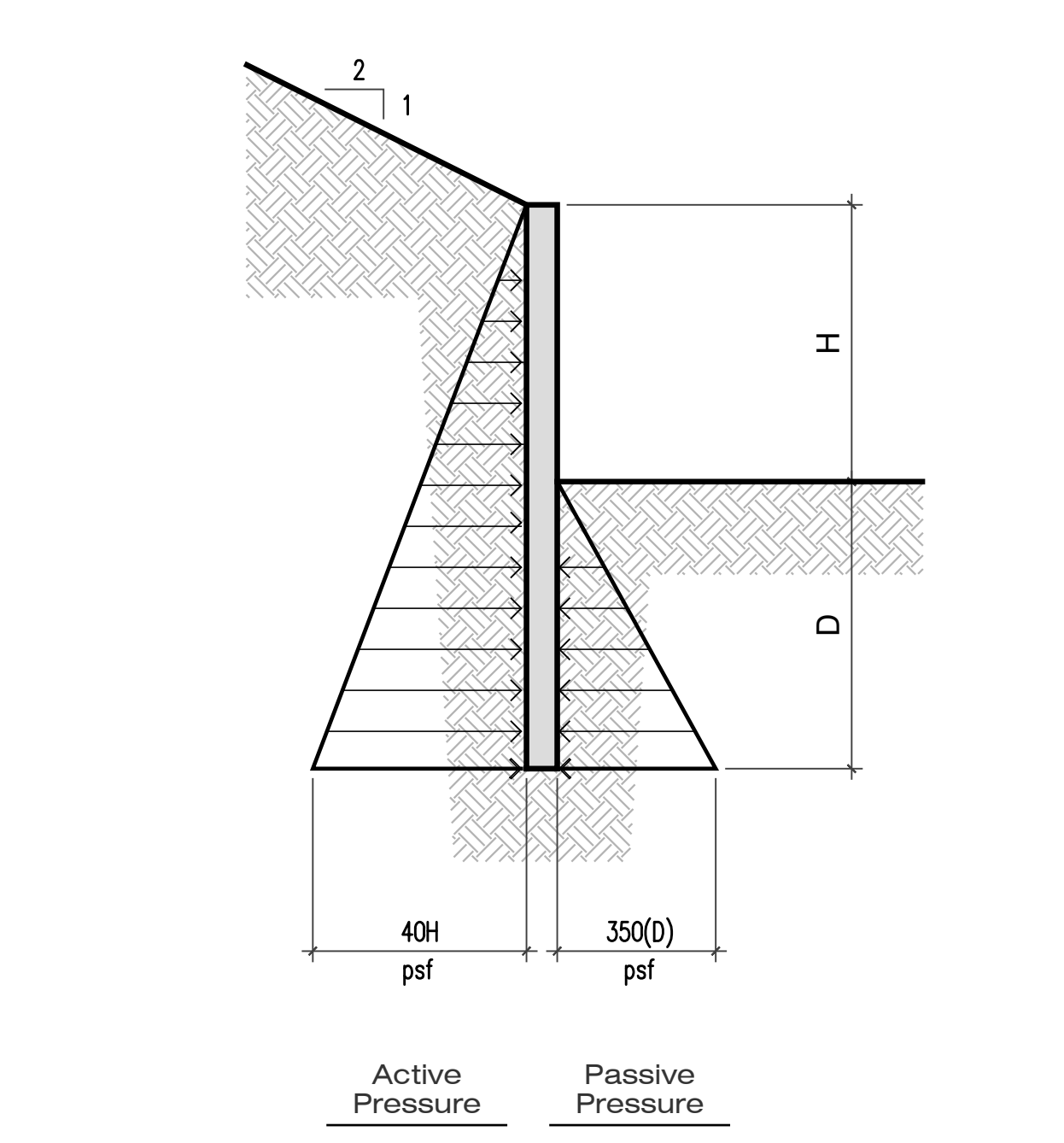
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) 1-1/2"
SLABS AND WALLS (INT. FACE) GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

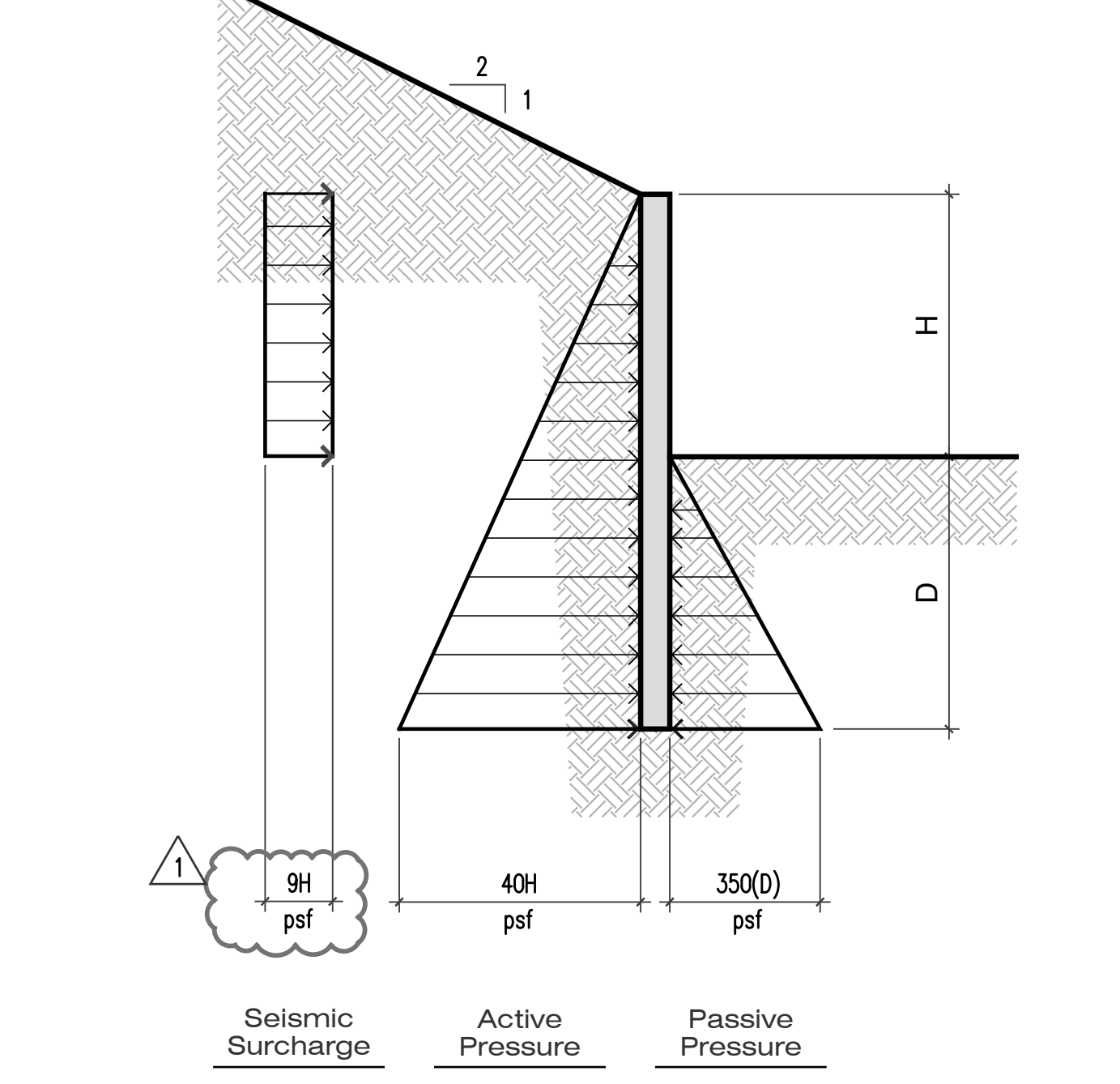
- CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

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

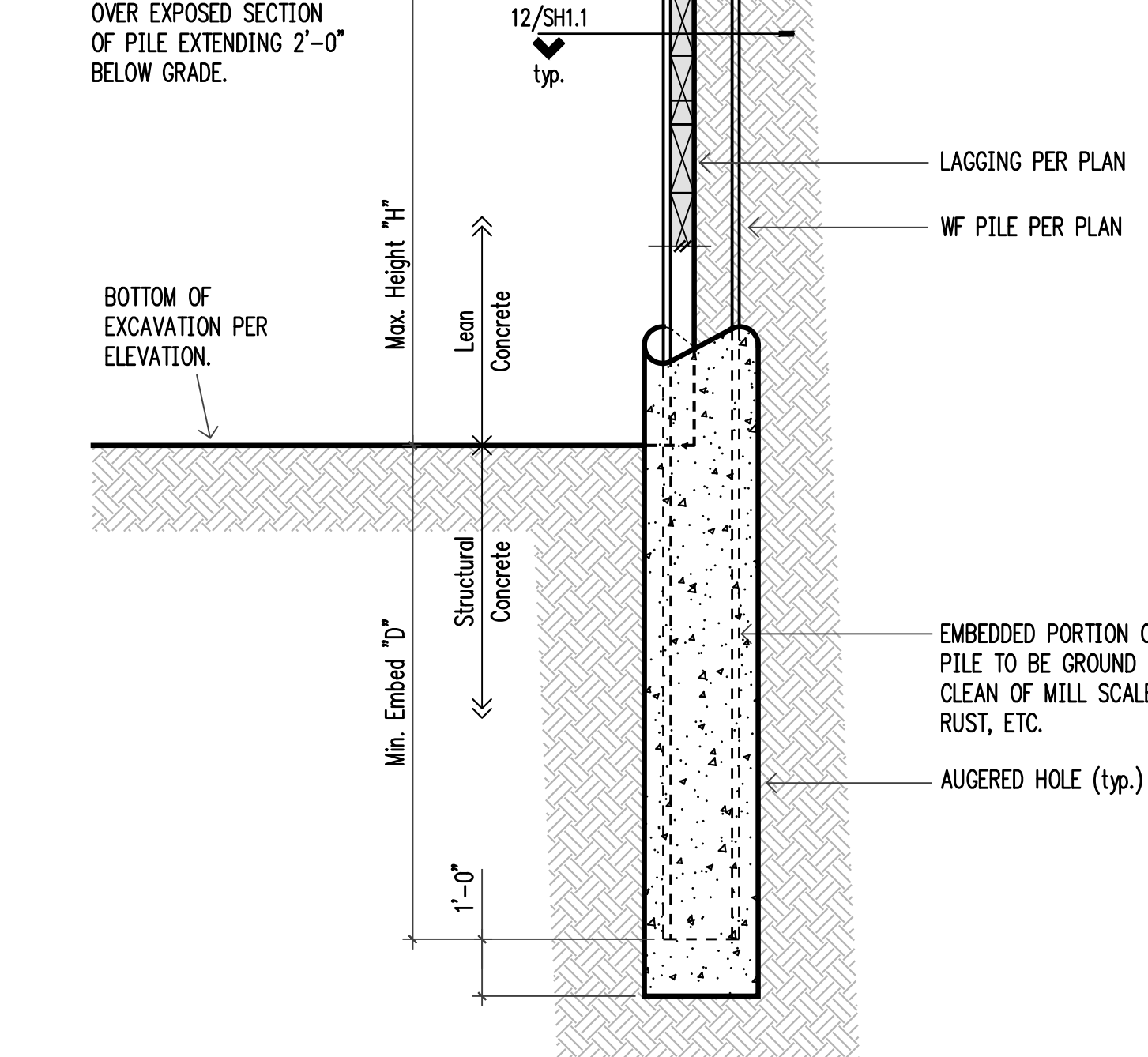
- HEADED STUDS FOR COMPOSITE CONNECTION OF STRUCTURAL STEEL TO CAST-IN-PLACE CONCRETE SHALL BE MANUFACTURED FROM MATERIAL CONFORMING TO ASTM A-108 AND SHALL BE WELDED IN CONFORMANCE WITH A.W.S. REQUIREMENTS.



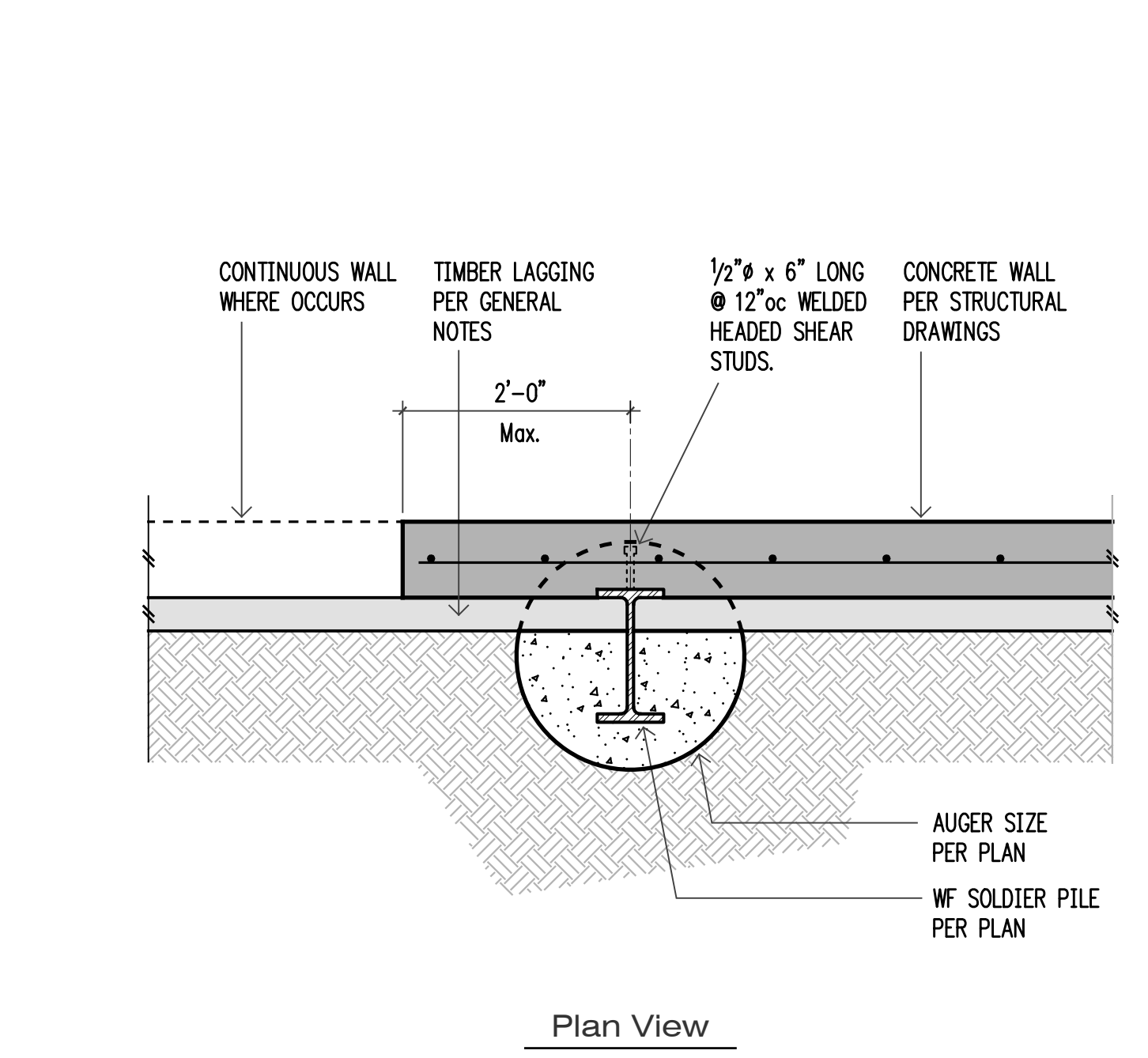
9 Typical Pile Loading Diagram (Temporary)



10 Typical Pile Loading Diagram (Permanent)



11 Cantilever Soldier Pile Section



12 n.t.s. Typical Augercast Pile

4742 42nd ave. sw, #297
seattle, wa 98116

206.579.8160

Project:

Mercer Island Residence
5236 W Mercer Way
Mercer Island, WA

N5

4200 Stone Way N
Seattle, Washington 98103

Frank Co. Project No.:
0031-2025-06

Design: EAF

Drawn: JAS

Approved: EAF

Issue: Permit

Date: 09-22-2025

Revisions:
1 Permit Corrections
01-26-2026

For Building Department use:

Sheet Contents:
General Shoring Notes & Details

Scale (u.n.o.): N/A

Sheet No.: SH1.1



Project:

Merger Residence
5236 W Mercer Way
Mercer Island, WA



4200 Stone Way N
Seattle, Washington 98103

Frank Co. Project No.:

0031-2025-06

Design:

EAF

Drawn:

JAS

Approved:

EAF

Issue:

Permit

Date:

09-22-2025

Revisions:

1 Permit Corrections
01-26-2026



For Building Department use:

Sheet Contents:

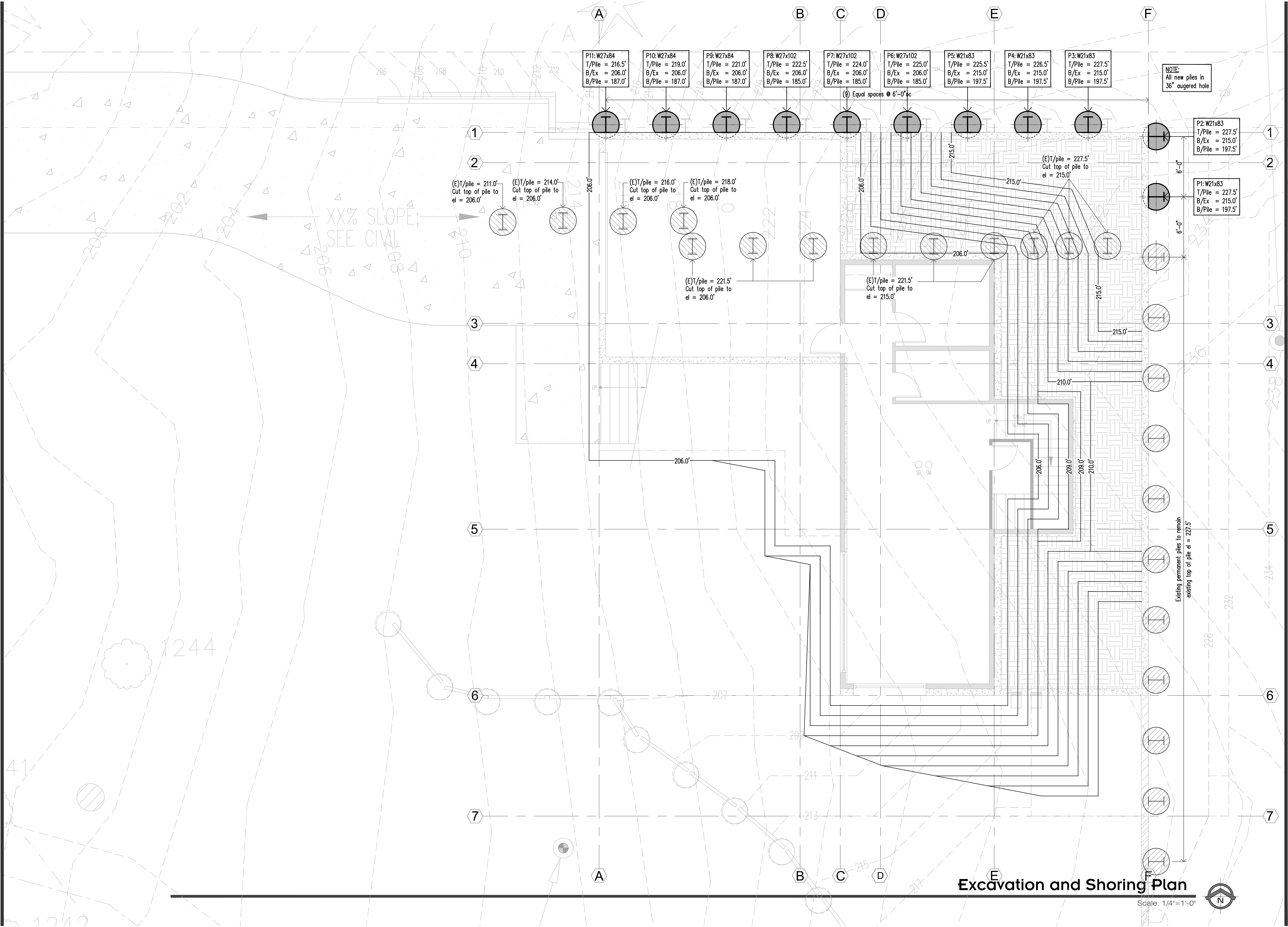
**Shoring
Plan**

Scale (u.n.o.):

1/4"=1'-0"

Sheet No.:

SH2.1



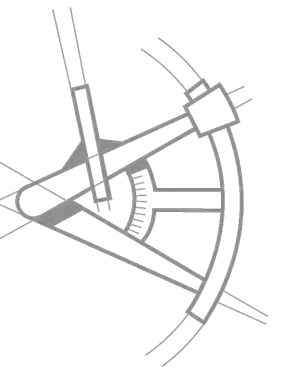
Excavation and Shoring Plan

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





LONGITUDE
ONE TWENTY
ENGINEERING & DESIGN



REVISIONS

DESCRIPTION	DATE	BY
1. PERMIT REVISION	4/20/18	
2. PERMIT REVISION	12/12/18	

PROJECT NAME

MERCER ISLAND RESIDENCE

PROJECT NUMBER

S180115

DRAWN BY - MR

CHECKED BY - MT

SHEET DATE - 12/12/18

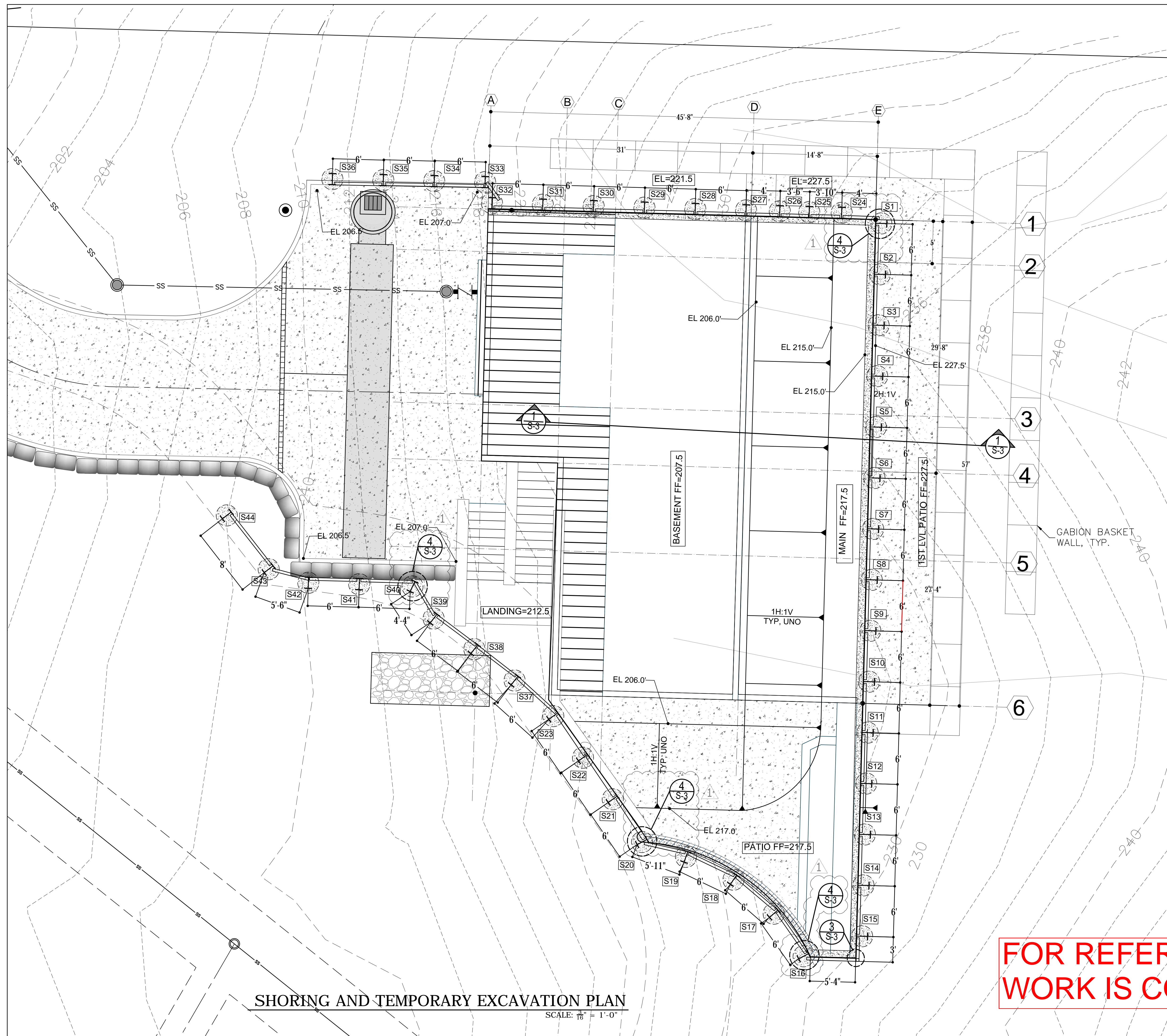
SCALE

24X36 SHEET: 3/16" = 1'-0"

SHORING AND TEMPORARY
EXCAVATION PLAN

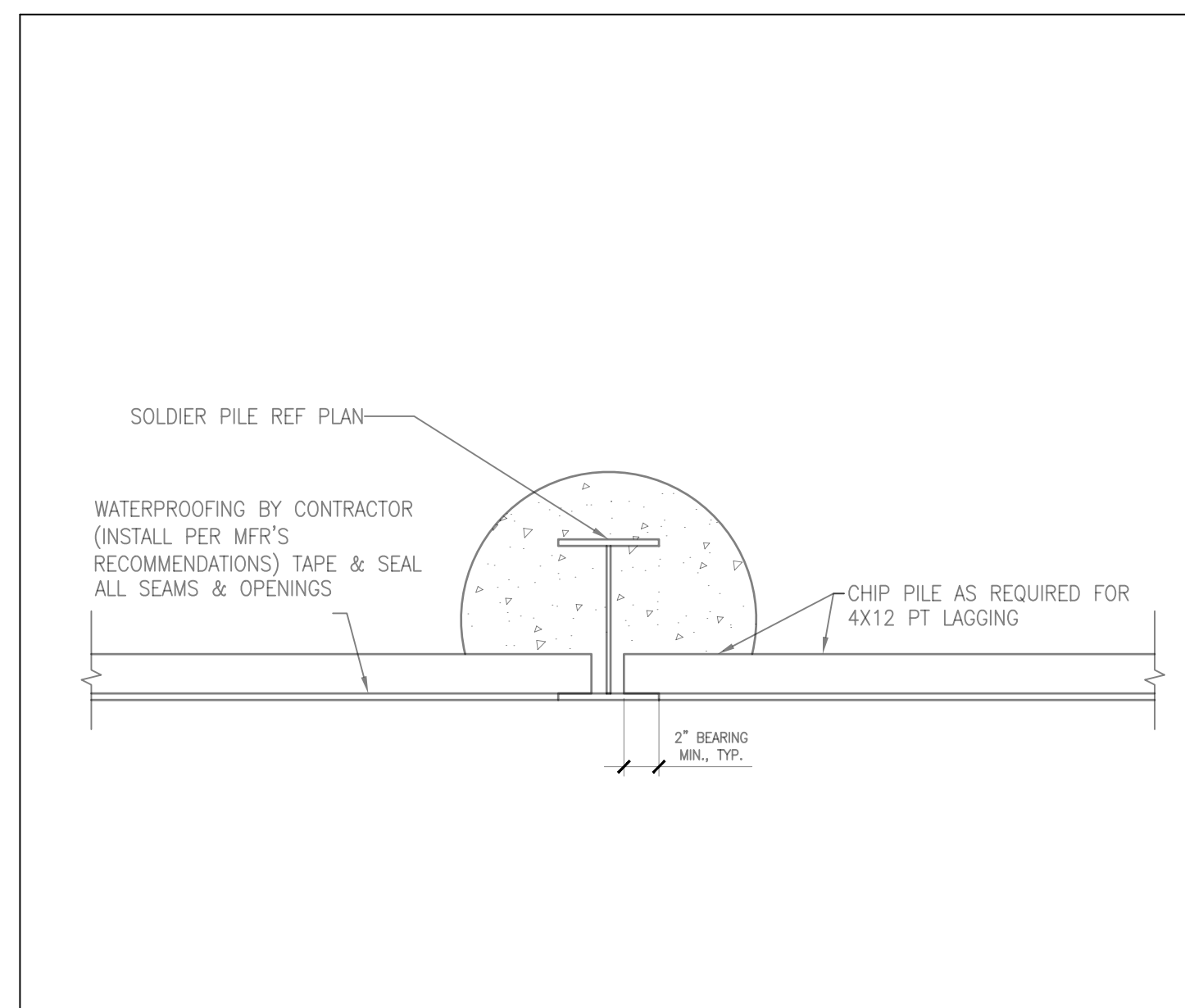
S-2

SHEET



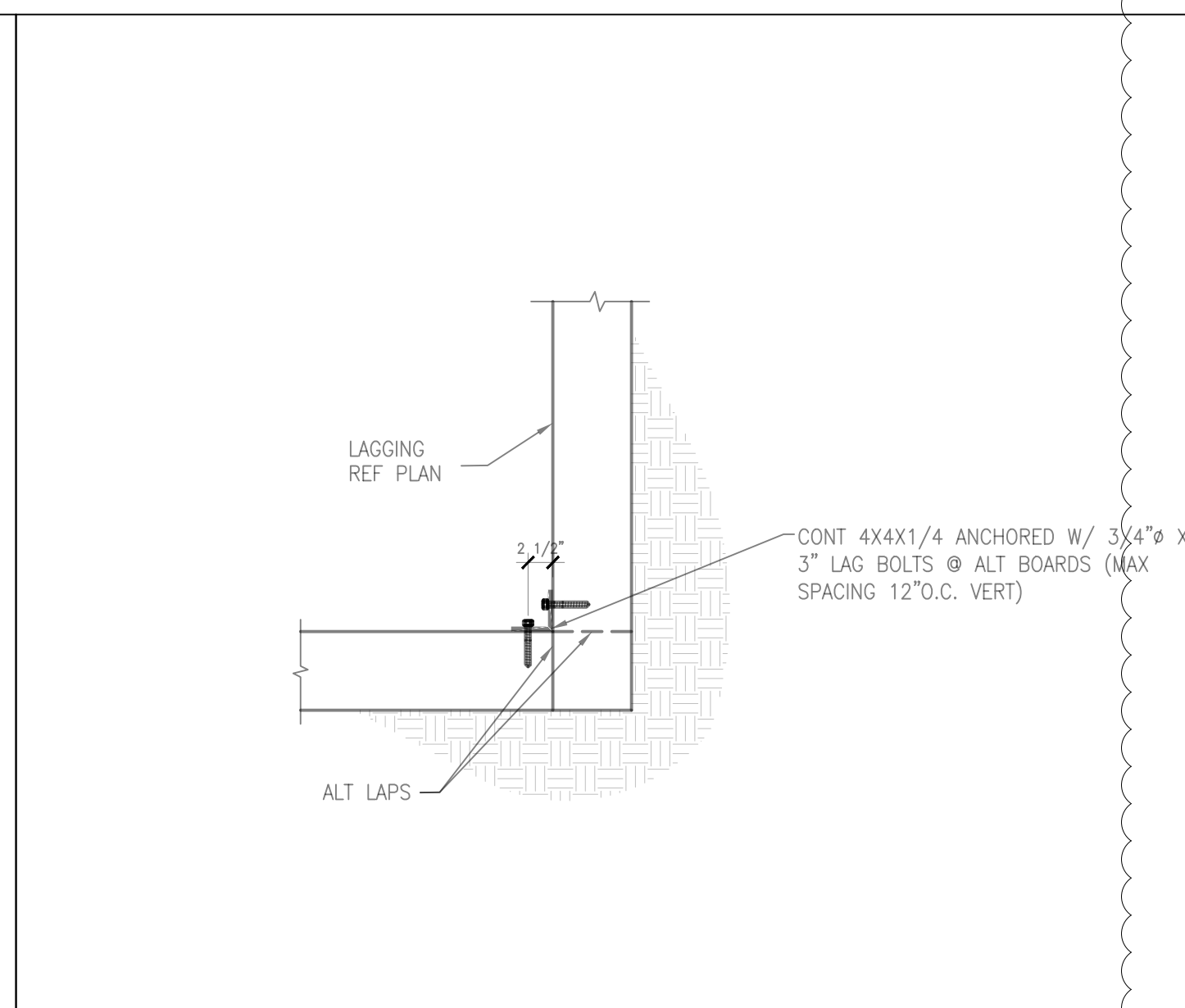
SHORING AND TEMPORARY EXCAVATION PLAN
SCALE: 3/16" = 1'-0"

FOR REFERENCE -
WORK IS COMPLETE



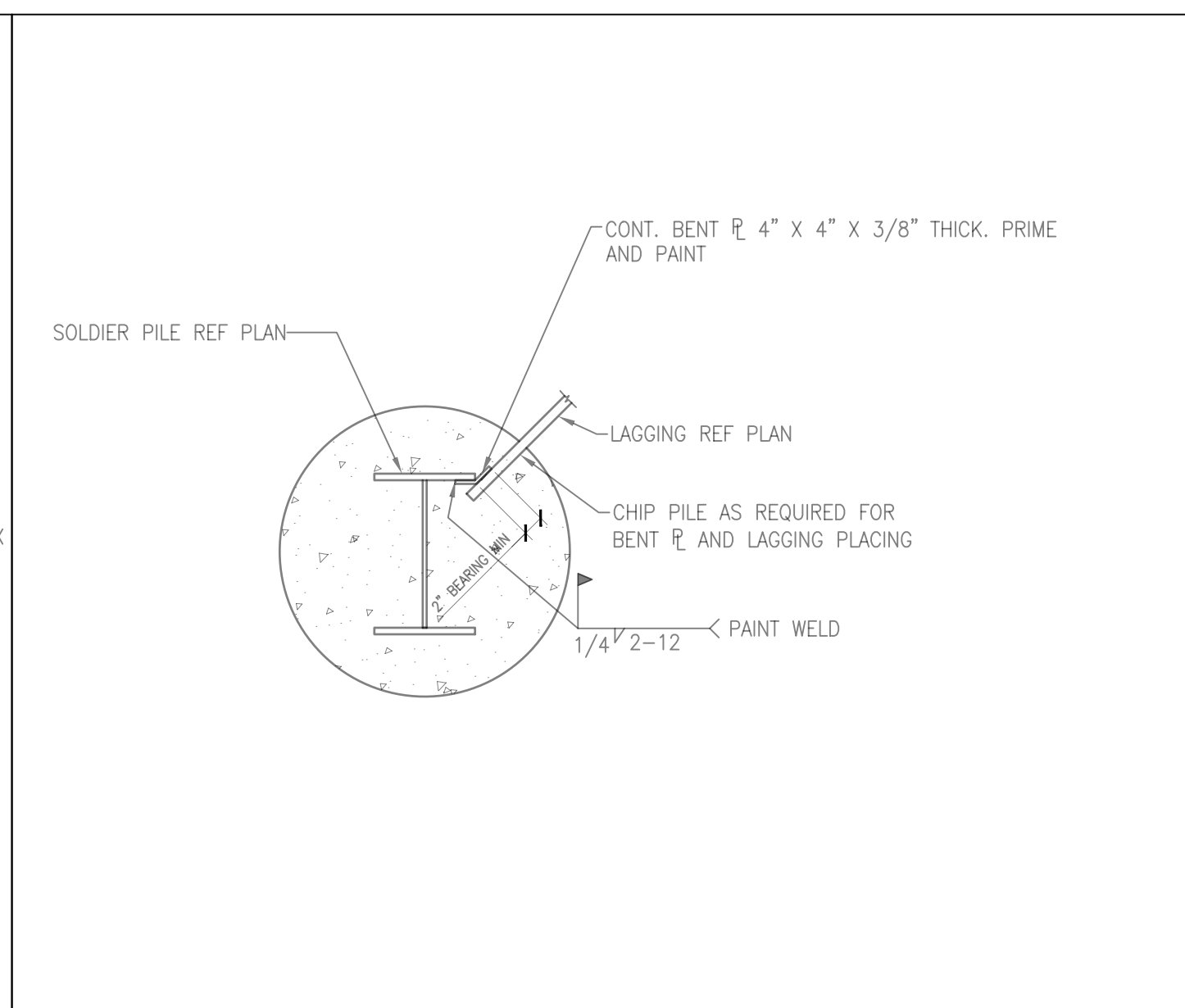
2 **SOLDIER PILE SHORING DETAIL**

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



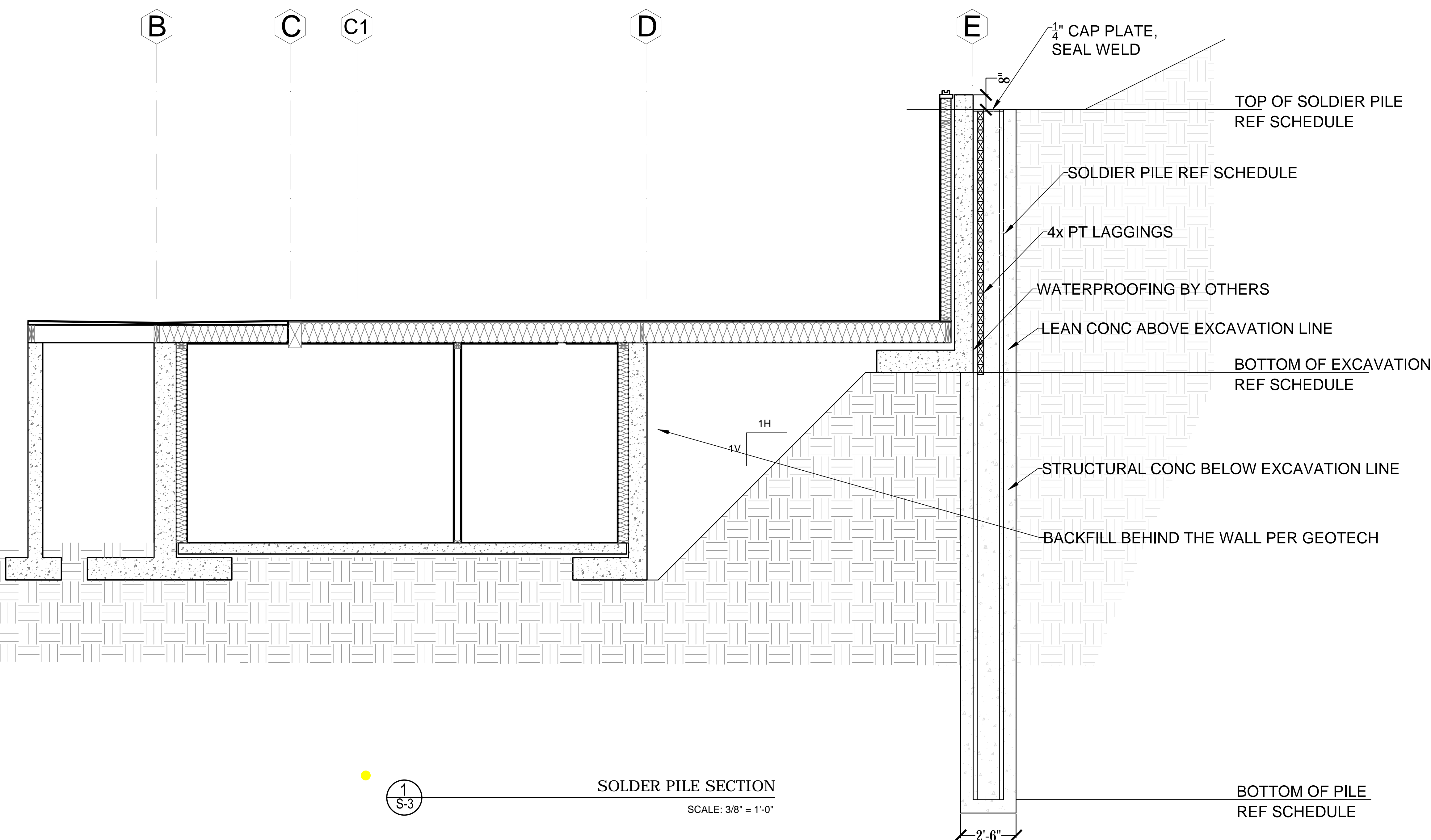
3 **CORNER LAGGING DETAIL**

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



4 **CORNER LAGGING DETAIL**

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

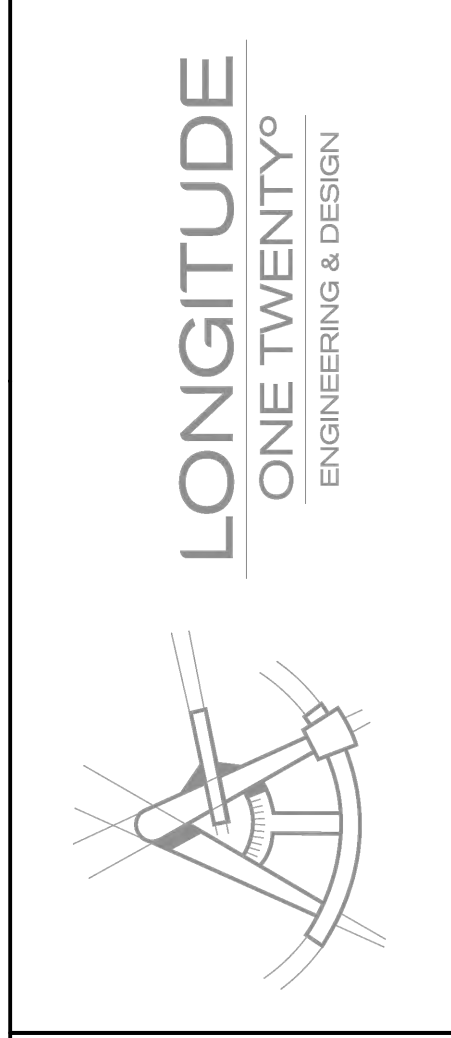
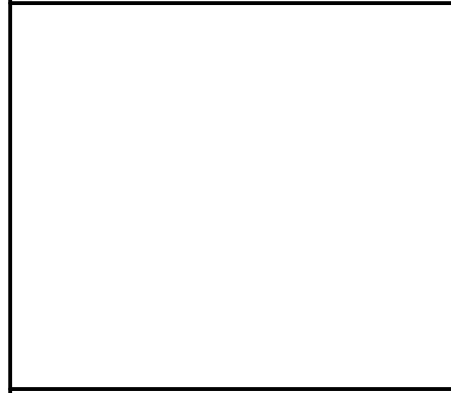


1
S-3

SOLDER PILE SECTION

SCALE: 3/8" = 1'-0"

SOLDIER PILE SCHEDULE					
MARK	PILE SIZE	TOP OF PILE ELEVATION	BOTTOM OF EXCAVATION	BOT OF PILE ELEVATION	PILE LENGTH (ft)
S1	W16X67	227.5'	215.0'	198.5'	29
S2	W16X67	227.5'	215.0'	198.5'	29
S3	W16X67	227.5'	215.0'	198.5'	29
S4	W16X67	227.5'	215.0'	198.5'	29
S5	W16X67	227.5'	215.0'	198.5'	29
S6	W16X67	227.5'	215.0'	198.5'	29
S7	W16X67	227.5'	215.0'	198.5'	29
S8	W16X67	227.5'	215.0'	198.5'	29
S9	W16X67	227.5'	215.0'	198.5'	29
S10	W16X67	227.5'	215.0'	198.5'	29
S11	W16X67	227.5'	215.0'	198.5'	29
S12	W16X67	228.0'	217.0'	199.0'	29
S13	W16X67	229.0'	217.0'	200.0'	29
S14	W16X67	230.0'	217.0'	203.0'	27
S15	W16X67	230.0'	217.0'	203.0'	27
S16	W16X67	228.0'	217.0'	201.0'	27
S17	W16X67	227.0'	217.0'	200.0'	27
S18	W16X67	225.0'	217.0'	198.0'	27
S19	W16X67	224.0'	217.0'	197.0'	27
S20	W16X67	222.0'	217.0'	195.0'	27
S21	W16X67	221.0'	209.0'	194.0'	27
S22	W16X67	220.0'	207.0'	193.0'	27
S23	W16X67	218.0'	206.0'	192.0'	26
S24	W21X211	227.5'	215.0'	183.5'	44
S25	W21X211	227.5'	212.0'	183.5'	44
S26	W21X211	227.5'	209.0'	183.5'	44
S27	W16X89	221.5'	206.0'	188.5'	33
S28	W16X89	221.5'	206.0'	188.5'	33
S29	W16X89	221.5'	206.0'	188.5'	33
S30	W16X89	221.5'	206.0'	188.5'	33
S31	W16X89	221.5'	206.0'	188.5'	33
S32	W16X89	221.5'	206.0'	188.5'	33
S33	W16X89	218.0'	207.0'	185.0'	33
S34	W21x211	216.0'	201.0'	172.0'	44
S35	W21x211	214.0'	196.0'	170.0'	44
S36	W21x211	211.0'	200.0'	167.0'	44
S37	W16X50	217.0'	212.5'	197.0'	20
S38	W16X50	216.0'	212.5'	196.0'	20
S39	W16X50	214.0'	207.0'	194.0'	20
S40	W16X50	214.0'	207.0'	194.0'	20
S41	W16X50	212.0'	200.0'	185.0'	27
S42	W16X50	210.0'	206.5'	190.0'	20
S43	W16X50	209.0'	206.5'	189.0'	20
S44	W16X50	208.0'	206.5'	188.0'	20



REVISIONS		
DESCRIPTION	DATE	BY
1. PERMIT REVISION	4/20/18	
2. PERMIT REVISION	12/12/18	

PROJECT NAME
MERCER ISLAND RESIDENCE

PROJECT NUMBER
S180115

DRAWN BY: **MR**

CHECKED BY: **MT**

SHEET DATE: **12/12/18**

SCALE
24X36 SHEET

DESCRIPTION
SOLDIER PILE SECTION AND SCHEDULE

SHEET
S-3

FOR REFERENCE - WORK IS COMPLETE