GENERAL NOTES

1. CODE COMPLIANCE:
ALL WORK SHALL COMPLY WITH THE 2021 WSEC, 2021 IRC, 2021 IMC, 2021 IFGC, 2021 UPC, 2021 IFC, 2021 IPMC, 2020 NEC, 2021 IECC WITH WA STATE AMENDMENTS, 2009 ICC A117.1, AND ALL LOCAL CODES AND ORDINANCES.

2. DIMENSIONS:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF DISCREPANCIES. IF WORK IS STARTED PRIOR TO NOTIFICATION, THE GENERAL AND SUBCONTRACTOR PROCEED AT THEIR OWN RISK.
UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO FACE OF STUDS OR FACE OF CONCRETE WALLS. FACE OF STONE VENEER LIES 6" +\- OUTSIDE THE FACE OF FRAMING. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED. VERIFY ALL ROUGH-IN DIMENSIONS FOR WINDOWS, DOORS, PLUMBING, ELECTRICAL FIXTURES AND APPLIANCES PRIOR TO COMMITMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OF DIMENSIONAL TOLERANCES REQUIRED.

3. DOCUMENT REVIEW/VERIFICATION:
CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK

4. ROUGH OPENINGS/BACKING:
VERIFY SIZE AND LOCATION, AS WELL AS PROVIDE ALL OPENINGS THROUGH FLOORS AND WALLS, FURRING, CURBS, ANCHORS, INSERTS, EQUIPMENT BASES AND ROUGH BUCKS/BACKING FOR SURFACE-MOUNTED ITEMS.

5. FURRING:
PROVIDE FURRING AS REQUIRED TO CONCEAL MECHANICAL AND/OR ELECTRICAL EQUIPMENT IN FINISHED AREAS. FURRING NOT SHOWN ON PLANS SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTION.

6. GRADES:
VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).

7. FLOOR LINES:
FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.

8. REPETITIVE FEATURES:
OFTEN DRAWN ONLY ONCE AND SHALL BE PROVIDED AS IF FULLY DRAWN.

9. DOORS:
DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR, ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.

10. WOOD MEMBERS IN CONTACT WITH CONCRETE, AND/OR EXPOSED TO WEATHER:
TO BE PRESSURE TREATED, TYPICAL. PROVIDE PRESSURE TREATED SILL PLATE IF FINISH GRADE IS WITHIN 8", TYPICAL.

11. FRAMING:
ALL NEW INTERIOR FRAME PARTITIONS TO BE 2X4 @ 16" O.C., & ALL NEW EXTERIOR FRAME PARTITIONS TO BE 2X6 @ 16" O.C., UNLESS OTHERWISE NOTED. VERIFY W/ STRUCTURAL DRAWINGS. EXISTING EXTERIOR WALLS ARE 2X4 STUDS @ 16" O.C., AND ARE TO REMAIN. NEW INTERMEDIATE FRAMING AT EXTERIOR WOOD WALLS REQUIRES HEADERS INSULATED WITH A MIN. R-10 INSULATION.

12. VENTILATION:
VENT ALL BATHROOM FANS, LAUNDRY FANS, RANGE HOODS AND DRYERS TO OUTSIDE ATMOSPHERE. BATHROOM/UTILITY ROOM FANS SHALL BE CAPABLE OF 5 AIR CHANGES PER HOUR AND SHALL BE VENTED DIRECTLY TO THE OUTSIDE THROUGH SMOOTH, RIGID, NON-CORROSIVE METAL, 24 GA. DUCTWORK. FLEX DUCTING IS NOT ALLOWED. WSEC R402.4.1.2 REQUIRES THE DWELLING UNIT TO BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 1.5 AIR CHANGES PER HOUR. TESTING MUST BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2. NEW CONSTRUCTION MAY BE ISOLATED FROM EXISTING STRUCTURE FOR TESTING.

13. FLUES:
FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.

14. DOWNSPOUTS:
LOCATE NEW DOWNSPOUTS AS SHOWN ON ROOF PLAN, FLOOR PLANS & ELEVATIONS.

15. OTHER DOCUMENTATION:
REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES, AND SYMBOLS.

16. PROTECTION:
PROTECT ALL EXISTING FINISHES AND SURFACES. ANY DAMAGE WILL BE REPAIRED WITHOUT ADDITIONAL COST TO OWNER.

17. PERMITS:
SEPARATE ELECTRICAL, MECHANICAL, AND PLUMBING PERMITS ARE REQUIRED IN ADDITION TO THE BASIC BUILDING PERMIT

18. ROOFING:
PROVIDE NEW ROOFING TO MATCH EXISTING.

19. EXHAUST DUCTS:
PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST DUCTS. PROVIDE COMBUSTION AIR OPENINGS INTO FURNACE ROOM PER UMC 703.

20. APPLIANCES:
CLEARANCES OF UL LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS SPECIFIED IN UL LISTING.

21. WATER FLOW:
SHOWER SHALL BE EQUIPPED WITH FLOW CONTROL DEVICE TO LIMIT WATER FLOW TO 1.8 GALLONS PER MINUTE.

22. SMOKE DETECTORS:
SMOKE & CARBON MONOXIDE THROUGHOUT NEW CONSTRUCTION. TO BE MONITORED PER FIRE DEPARTMENT REQUIREMENTS. NFPA 72 CHAPTER 29 MONITORED FIRE ALARM SYSTEM PER CoMI STANDARDS. SEPARATE PERMIT REQUIRED.

23. FIREBLOCKING:
FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAMED CONSTRUCTION PER 2021 IRC SECTION R302.11: 1) IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, SPECIFICALLY VERTICALLY @ CEILING AND FLOOR LEVELS; AND HORIZONTALLY @ INTERVALS NOT EXCEEDING 10 FEET. 2) AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES. 3) IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT T.O. & B.O. RUN. 4) AT OPENINGS AROUND VENTS, PIPES, ETC. AT CEILING AND FLOOR LEVEL.

ENERGY NOTES

CLIMATIC ZONE: ZONE #4C -MARINE

THERMAL STANDARDS FOR OPENINGS: UNLIMITED OPTION

CODE: 2021 W.S.E.C. & 2021 IRC, WAC 51-11R

SPACE HEAT TYPE: ELECTRIC AIR SOURCE HEAT PUMP

INSULATION VALUES: PRESCRIPTIVE METHOD

WALLS:	R-21+R-5 ci
FLAT ATTICS/CEILINGS:	R-60
VAULTED CEILINGS:	R-38
FLOORS (OVER UNHEATED SPACES):	R-38
SLAB-ON-GRADE:	R-10

PER WSEC R401.3, A CERTIFICATE IS REQUIRED TO BE POSTED IN AN APPROVED LOCATION. IT MUST INCLUDE THE FOLLOWING: PREDOMINATE R-VALUES, U-VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, THE EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT AND THE CODE EDITION UNDER WHICH THE STRUCTURE WAS PERMITTED.

AIR INFILTRATION:
MANUFACTURED DOORS/WINDOWS: CONFORM TO SECTION R402.4.2 OF THE WASHINGTON STATE ENERGY CODE

EXTERIOR JOINTS/OPENINGS: SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.

MOISTURE CONTROL:
WALLS: VAPOR RETARDER BONDED TO BATT INSULATION; INSTALL WITH STAPLES NOT MORE THAN 8 INCHES ON CENTER AND WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR, VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE).

ATTICS/CEILINGS: VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE). INSTALL CONTINUOUSLY.

CRAWL SPACE: 6 MIL POLYETHELENE.

VENTILATION:
ATTICS WITH LOOSE FILL: N.A. BAFFLE VENT OPENINGS TO DEFLECT AIR ABOVE INSULATION SURFACE.
ENCLOSED JOIST OR RAFTER SPACES: PROVIDE MINIMUM OF ONE INCH CLEAR VENTED AIR SPACE ABOVE INSULATION. TAPER OR COMPRESS INSULATION AT PERIMETER TO INSURE PROPER VENTILATION, MAINTAINING MINIMUM OF R-38.

HEATING & COOLING:
ELECTRIC AIR SOURCE HEAT PUMP.

TEMP. CONTROL:
FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF BEING SET FROM 55-85 DEGREES FAHRENHEIT AND OF OPERATING THE HEATING/COOLING SYSTEM IN SEQUENCE. THERMOSTAT TO BE AUTOMATIC DAY/NIGHT SETBACK TYPE AND 7-DAY PROGRAMMABLE.

DUCT INSULATION:
THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH SECTION R403.3 OF THE 2021 WSEC.

a. ALL HEATING DUCTS OUTSIDE THE BUILDING THERMAL ENVELOPE SHALL BE INSULATED WITH A MIN. OF R-8. ALL SEAM JOINTS SHALL BE TAPED, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER WSEC.
b. DUCTS WITHIN A CONCRETE SLAB OR IN THE GROUND SHALL BE INSULATED TO R-10 WITH INSULATION DESIGNED TO BE USED BELOW GRADE.

LIGHTING:
RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE IC LISTED. ALL PERMANENTLY INSTALLED LAMPS IN INTERIOR AND EXTERIOR LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, MUST BE HIGH-EFFICACY LAMPS, PER 2021 WSEC R404.1, AND MUST BE CONTROLLED PER 2021 WSEC R404.2.

PIPE INSULATION:
ALL HOT WATER PIPES AND NON-RECIRCULATING COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE SHALL BE INSULATED TO R-6 MIN. PLUMBING OR MECHANICAL CANNOT DISPLACE THE REQUIRED INSULATION.

PLUMBING FIXTURES:
ALL PLUMBING FIXTURES SHALL CONFORM TO WAC 51-56-0400
ALL TOILETS 1.28 GPM MAX — URINALS 1.0 GPF MAX
SHOWERHEADS <1.8 GPM — KITCHEN FAUCETS <1.8 GPM
LAVATORIES < 1.2 GPM

WHOLE HOUSE VENTILATION

a. WHOLE HOUSE VENTILATION SHALL BE PROVIDED BY ERV/HRV W/ INTEGRAL FANS, PROVIDING MIN. 88 CFM RUNNING CONTINUOUSLY PER 2021 IRC TABLES M1505.4.3 (1&2). FAN SHALL BE LESS THAN .35 WATT PER CFM AND RUN CONTINUOUSLY, AND HAVE A SONE RATING OF LESS THAN 1.0. VENTILATION SHALL BE ABLE TO OPERATE INDEPENDENTLY OF HEATING SYSTEM.

b. SYSTEM SHALL HAVE A 5"Ø SMOOTH FRESH AIR DUCT W/ LOUVER & SCREEN CONNECTED TO THE RETURN AIR STREAM 4' UPSTREAM OF THE AIR HANDLER AND SOUND INSULATED. ALL SUPPLY AND RETURN DUCTS IN INTERIOR SPACES SHALL ALSO BE INSULATED FOR SOUND.

c. SHALL HAVE A FILTER WITH A MERV OF AT LEAST 6 INSTALLED IN AN EASILY ACCESSIBLE LOCATION.

d. FRESH AIR VENT SHALL BE LOCATED AWAY FROM SOURCES OF ODORS OR FUMES, MIN 10' FROM PLUMBING OR APPLIANCE VENTS, AWAY FROM ROOMS W/ FUEL BURNING APPLIANCES, AND OUT OF ATTICS, CRAWL SPACES, AND GARAGES.

e. AIRFLOW FOR WHOLE HOUSE VENTILATION SHALL BE PROVIDED BY UNDERCUTTING INTERIOR DOORS 1/2" ABOVE FINISHED FLOOR, TYP.

f. WHOLE HOUSE VENTILATION SHALL BE TESTED, BALANCED AND VERIFIED AND A WRITTEN REPORT SHALL BE POSTED AND PROVIDED THE BUILDING OFFICIAL AND CERTIFICATION COMPLETED PER WSEC R403.6.2.

g. AN EXHAUST FAN WHOLE HOUSE VENTILATION IS NOT ALLOWED WITH AN ERV SYSTEM.

BEDROOMS	5
HEATED SQUARE FOOTAGE	4326 SF
AIRFLOW (CFM)	88 CFM MIN.

PROJECT DATA

PROJECT ADDRESS:	5222 FOREST AVE SE MERCER ISLAND 98040
PROPERTY TAX ID NUMBER:	141030-0057
SCOPE OF WORK:	CONSTRUCTION OF NEW TWO-STORY SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE
ZONING:	R-15
CONSTRUCTION TYPE:	TYPE V B
SEISMIC ZONE:	3
NUMBER OF STORIES:	2 STORIES
FIRE PROTECTION:	NFPA 13R FIRE SPRINKLERS
BUILDING HEIGHT	MAX. 30 FT ABOVE AVERAGE BUILDING ELEV.
GROSS FLOOR AREA	12,000 SF OR 40 % LOT AREA, WHICHEVER IS LESS
LOT AREA:	15,001 SF
SETBACKS:	FRONT: 20' SIDE: 15' TOTAL, MIN. 5' REAR: 10' FROM 60' NGPA BUFFER

PROJECT TEAM

OWNER:
SEASCAPE HOMES, LLC
PO BOX 40568
BELLEVUE, WA 98015
PHONE: 206.972.9950
CONTACT: JON TELLEFSON

ARCHITECT:
STURMAN ARCHITECTS, INC.
9 - 103RD AVE NE SUITE 203
BELLEVUE, WA 98004
PHONE: 425.451.7003
CONTACT: BRAD STURMAN

CIVIL ENGINEER:
PATRICK HARRON & ASSOCIATES, LLC
14900 INTERURBAN AVE S., SET. 279
SEATTLE, WA 98168
PHONE: 206.674.4659
CONTACT: SCHWIN CHAOSILAPAKUL

CONTRACTOR:
SEASCAPE HOMES, LLC
PO BOX 40568
BELLEVUE, WA 98015
PHONE: 206.972.9950
CONTACT: JON TELLEFSON

GEOTECHNICAL ENGINEER:
GEOTECH CONSULTANTS, INC.
2401 10TH AVE EAST
SEATTLE, WA 98102
PHONE: 425.747.5618
CONTACT: JAMES STRANGE

STRUCTURAL ENGINEER:
LONGITUDE120 ENGINEERING
-
-
PHONE: 206.790.9502
CONTACT: MANS THURFJELL

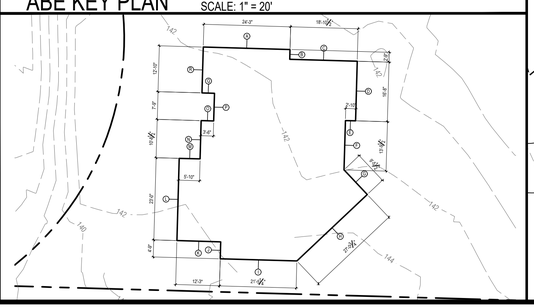
AVERAGE BUILDING ELEV.

AVERAGE BUILDING ELEVATION

	Wall Length	Elevation Pt.	Wall Length X Elev. Pt.
A	24.58	141.5	3478.07
B	2.75	141.0	387.75
C	18.875	140.5	2651.9375
D	16.67	140.5	2342.135
E	2.83	141.5	400.445
F	13.79	141.5	1951.285
G	9.46	142.0	1343.32
H	27.08	144.0	3899.52
I	21.42	142.5	3052.35
J	4.75	142.0	674.5
K	12.25	142.0	1739.5
L	23	142.0	3266
M	5.5	142.0	781
N	10.71	142.0	1520.82
O	3.5	142.0	497
P	7.75	142.0	1100.5
Q	3.5	142.0	497
R	12.83	142.0	1821.86
	221.245	**2553.0**	**31404.99**
31404.99	**141.95**	**Average Building Elevation**	
221.245			

ABE KEY PLAN

SCALE: 1" = 20'



SHEET INDEX

A1.0 COVER SHEET - GENERAL & ENERGY NOTES, LEGAL, PROJECT DATA, CUT-FILL CALC, INDEX, SITE PLAN
A1.1 FULL SITE PLAN
A1.2 REPLACEMENT TREE PLAN
SURVEY
C1.0 COVER SHEET AND SITE PLAN
C2.0 DEMO & TESC PLAN
C2.1 TESC DETAILS
C3.0 GRADING, STORM, DRAINAGE & UTILITY PLAN
C3.1 STORM DRAINAGE DETAILS FOR LOT 2
C3.2 UTILITY DETAILS
A2.0 MAIN FLOOR PLAN
A2.1 UPPER FLOOR
A2.2 ROOF PLAN
A3.0 EXTERIOR ELEVATIONS
A3.1 EXTERIOR ELEVATIONS
A4.0 BUILDING SECTIONS
A4.1 BUILDING SECTIONS
A4.2 BUILDING SECTIONS
A5.0 WALL SECTIONS
A6.0 ARCHITECTURAL DETAILS
S-0 COVER SHEET
S-1 STRUCTURAL GENERAL NOTES
S-2 FOUNDATION PLAN
S-3 FIRST FLOOR FRAMING PLAN
S-4 FIRST FLOOR WALL FRAMING & SHEAR WALL PLAN
S-5 SECOND FLOOR FRAMING PLAN
S-6 SECOND FLOOR WALL FRAMING & SHEAR WALL PLAN
S-7 ROOF FRAMING PLAN
SD-1 STRUCTURAL DETAILS
SD-2 STRUCTURAL DETAILS

2021 WSEC CREDITS

PROJECT IS A NEW RESIDENCE GREATER THAN 1500 SQ FT OF CONDITIONED AREA & LESS THAN 5000 SQ FT OF CONDITIONED AREA, AND SO IS A MEDIUM DWELLING UNIT REQUIRING 8.0 CREDITS

OPTION	CREDITS	DESCRIPTION
4	3.0	-HEAT PUMP EFFICIENCY (AIR COOLED) 14.3 SEER2, HSPF2 8.5
1.2	1.0	-VERTICAL FENESTRATION U = .28, FLOOR=R-38 -R-10 RIGID INSULATION ENTIRE PERIMETER AND UNDER ENTIRE SLAB
2.2	1.5	-REDUCE TESTED AIR LEAKAGE TO 1.5 AIR CHANGES PER HOUR MAX. AT 50 PASCALS -WHOLE HOUSE VENTILATION REQS MET W/ HEAT RECOVERY SYSTEM W/ MIN. EFFICIENCY OF 0.75, MIN. 88 CFM
3.3	0.5	-AIR SOURCE, CENTRALLY DUCTED HEAT PUMP W/ MIN. HSPF OF 9.5, HSPF2 8.5.
3.11	0.5	-CONNECTED THERMOSTAT MEETING ENERGY STAR CERTIFIED SMART THERMOSTATS/EPA ENERGY STAR SPECIFICATIONS.
5.4	1.0	-ENERGY STAR RATED GAS OR PROPANE WATER HEATER W/ A MIN. UEF OF 0.91
7.1	0.5	-ENERGY STAR RATED REFRIGERATOR, DISHWASHER, WASHING MACHINE, DRYER.

TOTAL CREDITS
8

*PLEASE NOTE: ALL APPLIANCES SHALL BE INSTALLED WITH SUPPORTING DOCUMENTATION ON SITE PRIOR TO FINAL INSPECTION. NO DRYER DUCTS OR DRYER VENT CAPS SHALL NOT BE INSTALLED

LEGEND

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- SILT FENCE
- TREE PROTECTION FENCING
- POWER LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- AREA OF LOT COVERAGE
- AREA OF HARDSCAPE
- AREA OF NGPA

LEGAL DESCRIPTION

LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO SUB07-003 AS RECORDED UNDER REC. NO. 20071210900010.

CARRS LAKE SIDE ADD "LOT 2" MERCER ISLAND SHORT PLAT NO SUB07-003 REC NO 20071210900010 SD SHORT PLAT DAF -- LOTS 12,13,14,15,16,17 AND 18 OF CARR'S LAKE SIDE ADDITION PLAT LESS THE EAST 72.00 FT OF LOTS 12,13,14 AND 15 & ALSO LESS POR LY SOUTH OF A LN DRWN PLW AND 50.00 FT SOUTH OF WHEN MEAS AT R/A TO NORTH LN OF LOTS 15-16-17 AND 18

TREE PROTECTION

A TREE PROTECTION INSPECTION IS REQUIRED BEFORE START OF WORK

DUTY OF COOPERATION

RELEASE AND ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, CONTRACTOR, AND STURMAN ARCHITECTS. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED IN THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO STURMAN ARCHITECTS. FAILURE TO DO SO WILL RELIEVE STURMAN ARCHITECTS FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES.

ANY DEVIATION FROM THESE DOCUMENTS WITHOUT THE CONSENT OF STURMAN ARCHITECTS IS UNAUTHORIZED. FAILURE TO OBSERVE THESE PROCEDURES SHALL RELIEVE STURMAN ARCHITECTS OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING FROM SUCH ACTIONS.

GEOTECH ENGINEER

GEOTECHNICAL ENGINEER REQUIRED TO BE PRESENT ON SITE DURING EXCAVATION AND AT REGULAR INTERVALS DURING CONSTRUCTION TO MONITOR THE STABILITY OF THE TEMPORARY OPEN CUT EXCAVATIONS PROPOSED FOR SITE RETAINING WALLS AND RESIDENTIAL STRUCTURE EXCAVATIONS.

NOXIOUS WEEDS

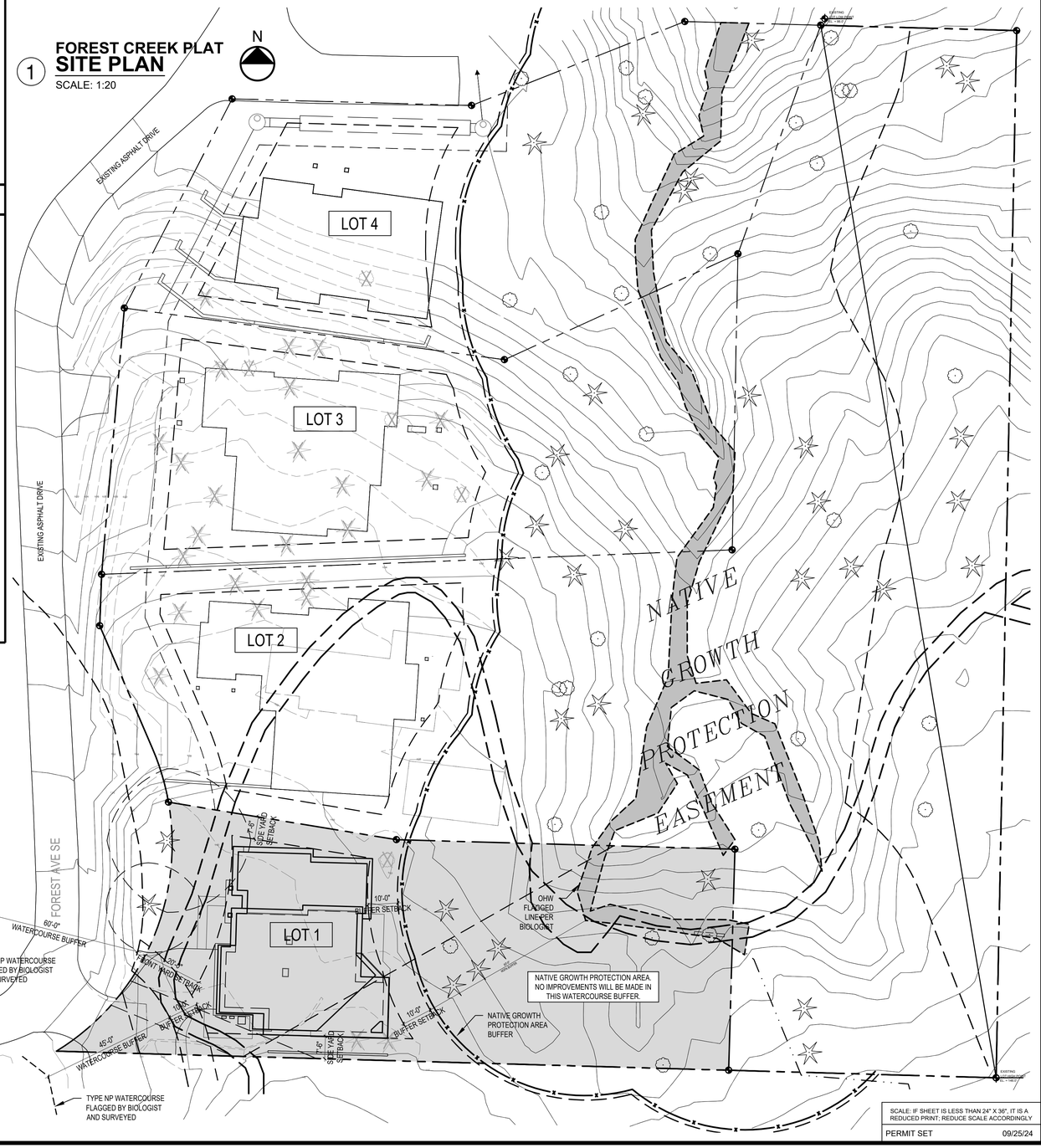
DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION 19.02.020(F)(3)(A). NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

VICINITY MAP



1 FOREST CREEK PLAT SITE PLAN

SCALE: 1:20



SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

PERMIT SET 09/25/24

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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

LOT 1 SITE PLAN GENERAL NOTES

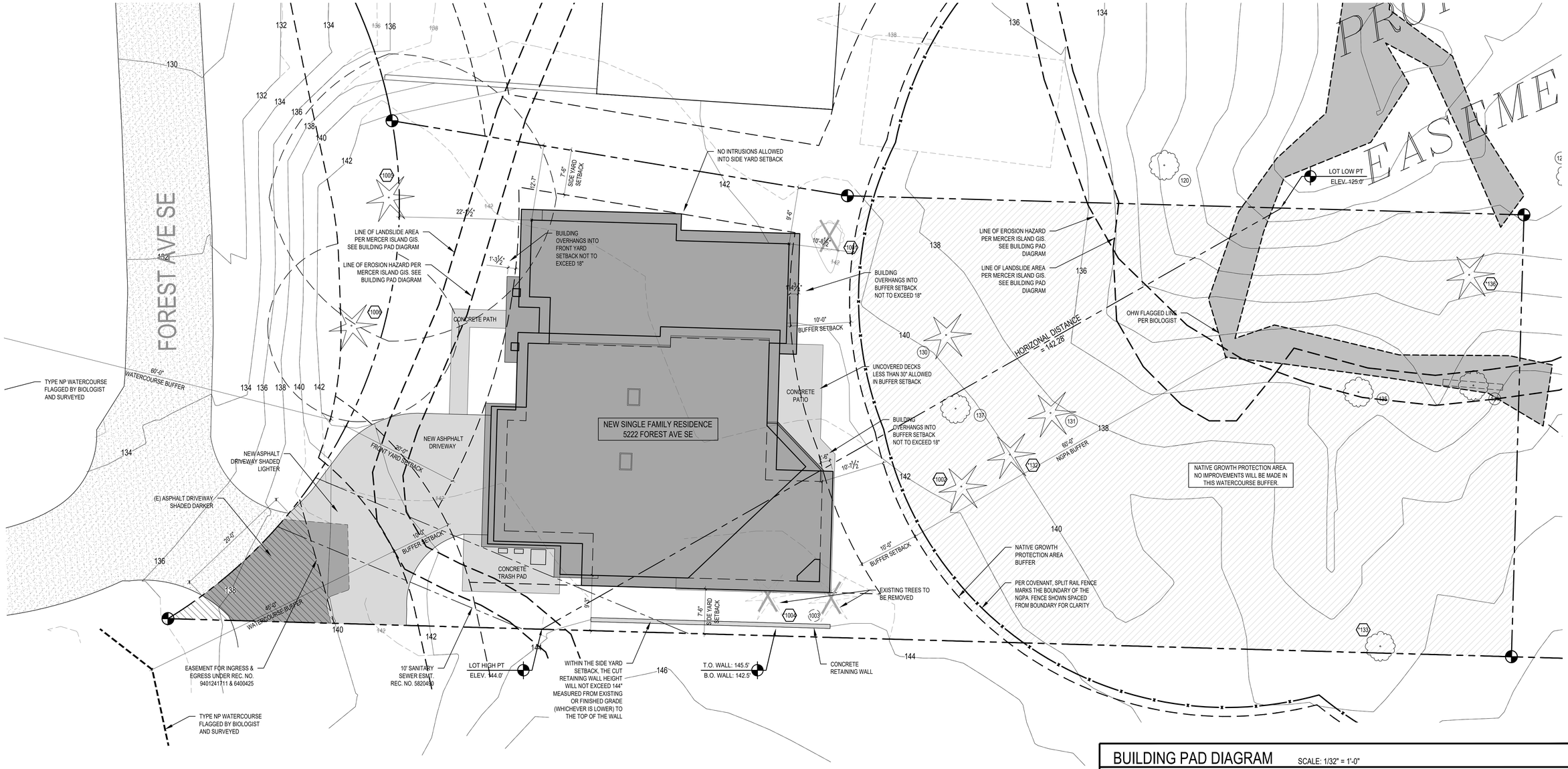
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET
A1.0

PLOT DATE: 9/25/2024



LEGEND:

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- SILT FENCE
- TREE PROTECTION FENCING
- P — POWER LINE
- GAS — GAS LINE
- W — WATER LINE
- SS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE
- AREA OF LOT COVERAGE
- AREA OF HARDSCAPE
- AREA OF NGPA

BUILDING AREA

		MAIN FLOOR	UPPER FLOOR		HEATED SUB-TOTAL	GARAGE/ WORKSHOP	GRAND TOTAL	UNHEATED PATIO	UNHEATED DECK
PROPOSED HOUSE:		1837 SF	2489 SF		4326 SF	588 SF	4914 SF	506 SF	61 SF

LOT COVERAGE AND HARDSCAPE

	GROSS LOT S.F.	MAIN ROOF STRUCT	DRIVES/ PARKING	TOTAL LOT COVERAGE	% LOT COVERAGE
EXISTING LOT COVERAGE AREA	15,001 SF	0 SF	291 SF	0 SF	0 %
PROPOSED LOT COVERAGE AREA		3077 SF	991 SF	4068 SF	27.1 %
NET GAIN/LOSS IMPERVIOUS AREA		+3077 SF	+700 SF	+4068 SF	+27.1 %
% ALLOWED IMPERVIOUS AREA				6000.4 SF ALLOWABLE	40 %

FRONT WALK	TRASH/ SIDEWALK	PATIO	RETAINING WALLS	TOTAL HARDSCAPE	% HARDSCAPE
0 SF	0 SF	0 SF	0 SF	0 SF	0 %
71 SF	123 SF	138 SF	27 SF	359 SF	2.4 %
+71 SF	+123 SF	+138 SF	+27 SF	+359 SF	+2.4 %
				1350 SF ALLOWABLE	9 %

HIGHEST EL: 144.0'
LOWEST EL: 125.0'
ELEVATION DIFFERENCE= 19.0'
19.0' DIVIDED BY 142.28' (HORIZ. DIST. BTWN. HIGHEST & LOWEST ELEV.) = .133

LOT SLOPE IS 13.3%, WHICH IS LESS THAN 15% SO LOT COVERAGE ALLOWED IS 40%.

ADDITIONAL 9% OF LOT SIZE WILL DETERMINE ALLOWABLE HARDSCAPE SURFACE

1 LOT 1 SITE PLAN

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

N

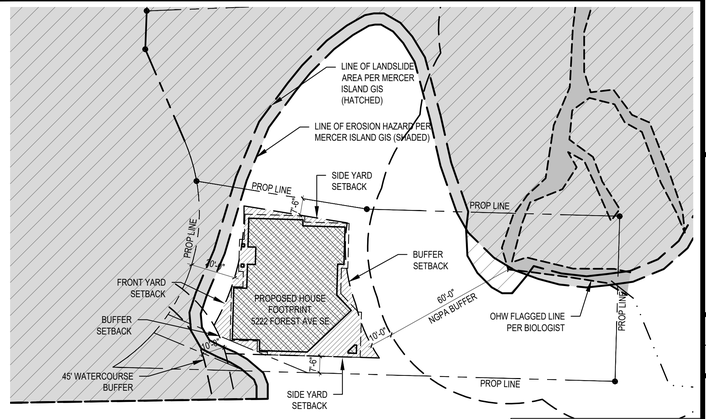
GROSS FLOOR AREA

	BASEMENT EXCLUSION	NEW FLOOR AREA
MAIN FLOOR		1837 SF
SECOND FLOOR		2489 SF
GARAGE		588 SF
GROSS FLOOR AREA		4914 SF

NET LOT AREA	15,001 SF
ALLOWED MAX. % GFA COVERAGE	40.0 % OR 12,000 SF
ALLOWED GROSS FLOOR AREA	6,000.4 SF
PROPOSED GROSS FLOOR AREA	4914 SF
12'+ CEILING OF ENTRY/STAIRS	+82.5 SF
12'+ CEILING OF BEDROOM-3	+84 SF
12'+ CEILING OF REC ROOM	+43.5 SF
12'+ CEILING OF PRIMARY BATH	+58 SF
TOTAL GFA COVERAGE	5182 SF
PROPOSED % GFA COVERAGE	34.5 %

BUILDING PAD DIAGRAM

SCALE: 1/32" = 1'-0"



SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

PERMIT SET 09/25/24

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REGISTERED ARCHITECT BRADLEY J. STURMAN STATE OF WASHINGTON 5962

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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

SITE PLAN
SITE CALCULATIONS

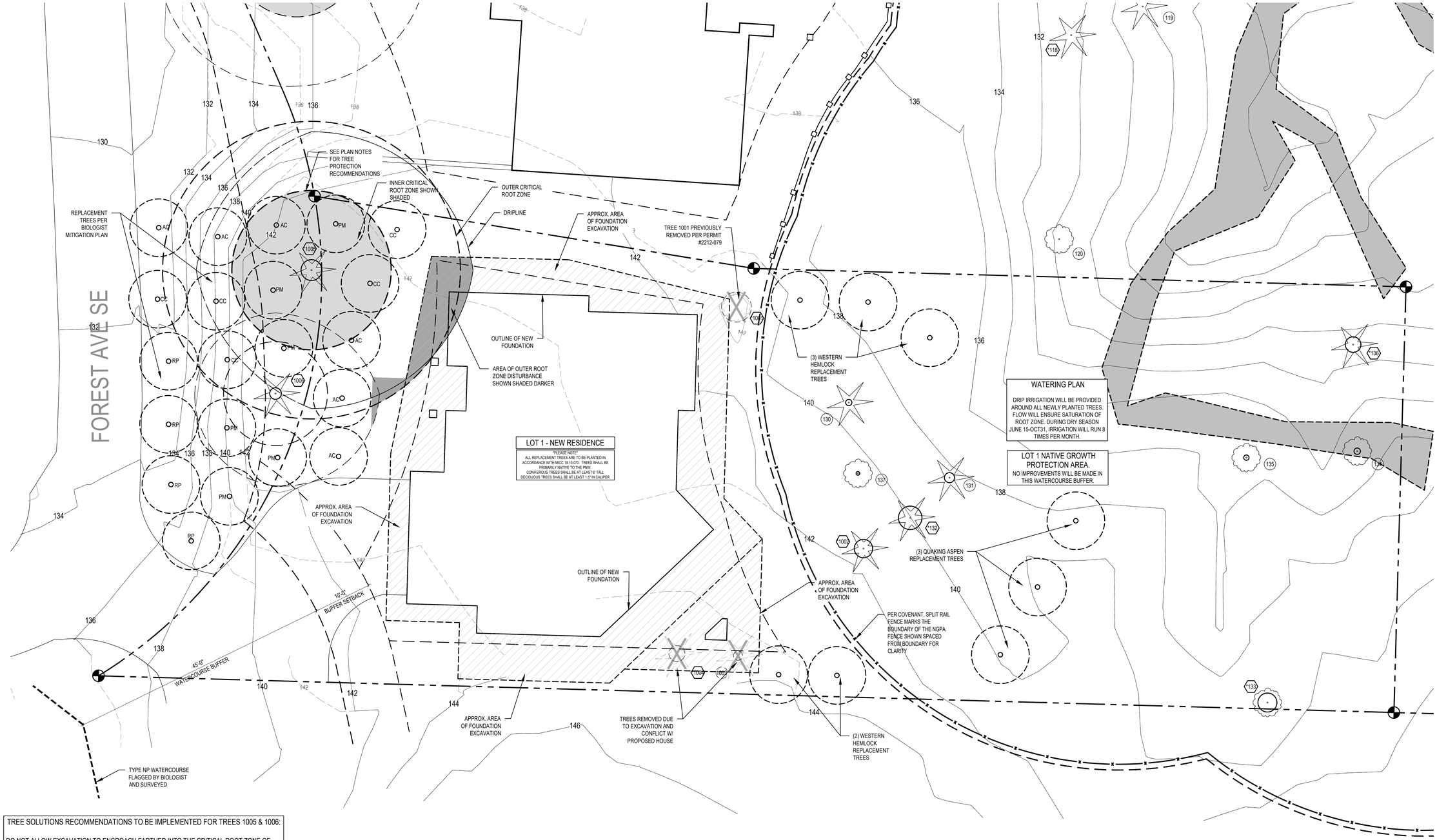
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET A1.1

PLOT DATE: 9/25/2024



TREE SOLUTIONS RECOMMENDATIONS TO BE IMPLEMENTED FOR TREES 1005 & 1006:

DO NOT ALLOW EXCAVATION TO ENCROACH FARTHER INTO THE CRITICAL ROOT ZONE OF TREE 1005 AS WHAT IS CURRENTLY PROPOSED ON THE MOST RECENT PLANS.

INSTALL TREE PROTECTION FENCING CONSISTING OF 6-FOOT-TALL CHAIN-LINK FENCING AT THE PROPOSED LIMITS OF EXCAVATION.

CUT ANY ROOTS EXPOSED BY EXCAVATION CLEANLY AND IMMEDIATELY BACKFILL TO PREVENT DESICCATION.

NOTIFY THE PROJECT ARBORIST IF ANY ROOTS IN EXCESS OF 2-INCHES ARE EXPOSED BY EXCAVATION SO THAT IMPACTS MAY BE REASSESSED.

CONSIDER INSTALLING A 4-INCH LAYER OF COARSE WOODY MULCH (ARBORIST WOODCHIPS) TO THE CRITICAL ROOT ZONE OF TREE 1005 TO MITIGATE CONSTRUCTION STRESS AND IMPROVE SOIL STRUCTURE.

1 **LOT 1**
REPLACEMENT TREE PLAN
SCALE: 1/8" = 1'-0"

N

REPLACEMENT TREES:

ON-SITE:
WESTERN HEMLOCK = 5
QUAKING ASPEN = 3
(PM) DOUGLAS FIR= 1
(CC) WESTERN HAZELNUT= 2
(AC) VINE MAPLE= 3

TOTAL REQUIRED
REPLACEMENT TREES = 14

ROW MITIGATION TREES:
(PM) DOUGLAS FIR= 5
(CC) WESTERN HAZELNUT= 4
(AC) VINE MAPLE= 3
(RP) CASCARA= 4

TOTAL ADDITIONAL
MITIGATION TREES = 16

PLEASE NOTE
FOR THE DEVELOPMENT OF PARCEL 1410300059 ("LOT 2"), TREE 1001 WAS REMOVED AS PART OF BUILDING PERMIT 2212-079. REPLACEMENT TREES FOR TREE 1001 WILL BE INCLUDED IN THE TOTAL REQUIRED AFTER THE REMOVAL OF TREES 1003 & 1004 FOR THE DEVELOPMENT OF PARCEL 141030-0057 ("LOT 1").

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

PERMIT SET 09/25/24

STURMAN ARCHITECTS
9- 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.457.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
9962

www.sturmanarchitects.com
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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

LOT 1 REPLACEMENT TREE PLAN

REVISIONS:

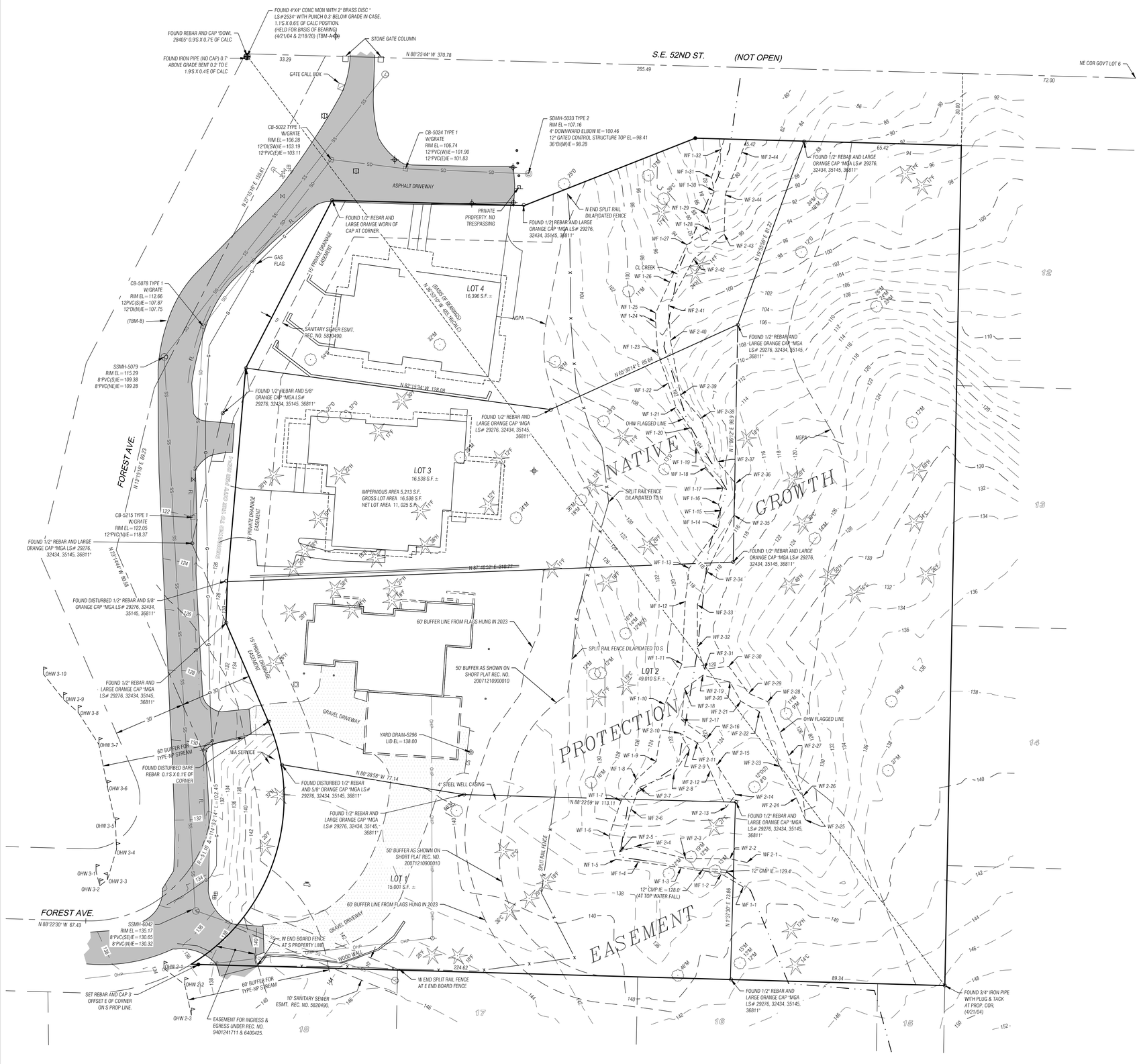
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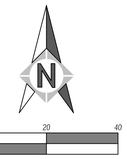
CHECKED BY: BJS

SHEET
A1.2

PLOT DATE: 9/25/2024

SE1/4, NE1/4, SEC. 24, TWP. 24 N., RGE. 4 E., W.M.





MERIDIAN

STATE PLANE COORDINATE SYSTEM - NORTH ZONE NAD83 (2011)
BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

VERTICAL DATUM

NAVD 88 (GEOID 18)
BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

BENCHMARKS

TBM-A
FOUND 4"X4" CONC MON WITH 2" BRASS DISC " LS#2534" WITH PUNCH 0.3' BELOW GRADE IN CASE 69.6' NW OF NW PROP CORNER.
ELEV. = 104.53'

TBM-B
FOUND 1/2" REBAR AND MGA CONTROL CAP AT W SIDE FOREST DRIVE , 0.5W OF WEST EDGE ASPHALT PAVEMENT AND 15.5W OF CB-5078 .
ELEV. = 113.94'

NOTES

1. A 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. ALL EQUIPMENT HAS BEEN MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES. ACCURACY MEETS OR EXCEEDS W.A.C. 332-130-090.
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT.
3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME. ALL CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN FEBRUARY 18, 2020. UNLESS OTHERWISE NOTED.
4. UNDERGROUND UTILITIES WERE LOCATED BASED ON SURFACE EVIDENCE (I.E. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS, ETC.). THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. TREE SIZES AND SPECIES WERE DETERMINED TO THE BEST OF OUR ABILITY. MEAD GILMAN AND ASSOCIATES DOES NOT WARRANT THE ACCURACY OF THE SIZE AND SPECIES OF ANY TREES SHOWN HEREON. ALL TREE SIZES SHOULD BE VERIFIED BY A TRAINED ARBORIST.
6. THIS MAP DOES NOT TO INTEND SHOW ALL EASEMENTS OF RECORD.
7. ALL CONTOUR INFORMATION EAST OF THE NATIVE GROWTH PROTECTION AREA BOUNDARY WAS GENERATED FROM PUBLIC LIDAR DATA.
8. FLAGS AT OHW ARE SET BY ALTMANN OLIVER ASSOCIATES, LLC IN JANUARY OF 2023
9. THIS UPDATE TO THE TOPOGRAPHIC SURVEY IS INTENDED TO JUST SHOW THE NEW BUFFER AND ORDINARY HIGH WATER FLAGS. NO ATTEMPT TO UPDATE ANY OTHER ASPECT OF THE MAP HAS BEEN DONE.

LEGAL DESCRIPTION

LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO SUB07-003 AS RECORDED UNDER REC. NO. 20071210900010.

REFERENCES

1. ROS REC. NO. 20071210001864, VOL. 236, PG. 232.
2. MERCER ISLAND SHORT PLAT NO SUB07-003, REC. NO. 20071210900001.

LEGEND

- SET 1/2" X 24" REBAR WITH YELLOW PLASTIC CAP STAMPED "MGA 35145 48383"
- FOUND CORNER
- FOUND MONUMENT
- TEMPORARY BENCHMARK
- GAS VALVE
- ELECTRICAL JUNCTION BOX
- UTILITY POLE
- CATCH BASIN - TYPE I
- CATCH BASIN - TYPE II
- STORM CLEANOUT
- YARD DRAIN
- SEWER MANHOLE
- FIRE HYDRANT
- HOSE BIB
- WATER METER
- WATER VALVE
- BOLLARD
- SIGN
- SOIL TEST PIT
- CONIFEROUS TREE
- DECIDUOUS TREE
- ASPHALT
- FENCE LINE
- OVERHEAD POWER LINES
- SANITARY SEWER LINE
- STORM DRAIN LINE
- GAS LINE
- WATER MAIN
- ASPHALT HATCH
- CONCRETE HATCH
- DECK HATCH
- GRAVEL HATCH

C	CEDAR
D	DECIDUOUS
E	ELM
H	HEMLOCK
M	MAPLE
CS	CONC SLAB
FF	FINISH FLOOR
FL	FLOW LINE/ ASPH THICKENED EDGE
ST	STAIRS
WF#	WETLAND FLAG NUMBER
OHW	FLAGED OVERHEAD WATER LINE

#	REVISIONS
1.	NEW CONSTRUCTION AND STREAM/WETLANDS AND BUFFER ADDED.

CHRISTOPHER SHANE JAMES — STATE OF WASHINGTON — 35145 — REGISTERED PROFESSIONAL LAND SURVEYOR

9/12/2024

MEAD GILMAN LAND SURVEYORS
P.O. BOX 289, WOODINVILLE, WA 98072 | PHONE: (425) 486-1252 | WWW.MEADGILMAN.COM

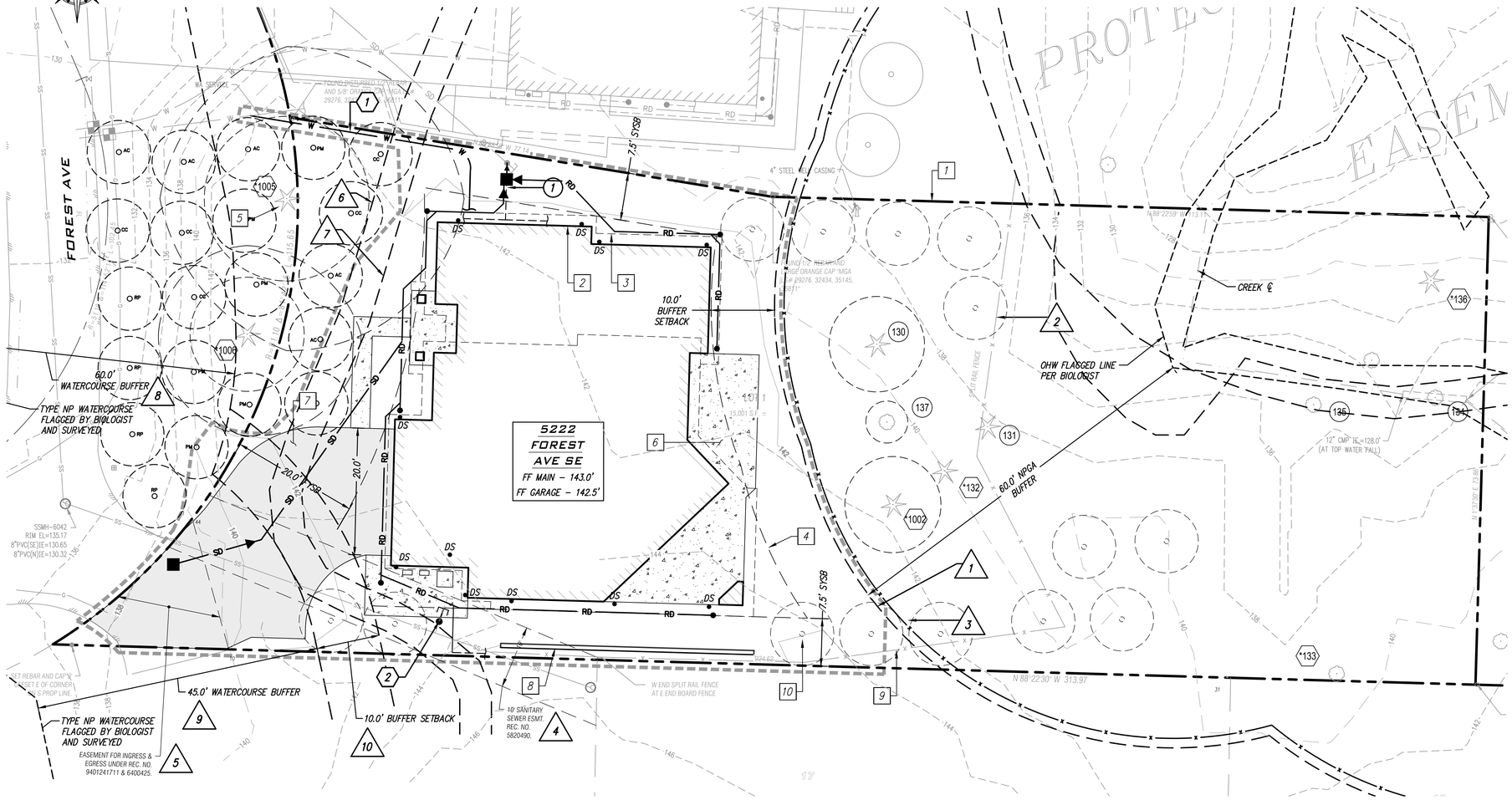
FOREST AVE LOTS
BOUNDARY & TOPOGRAPHIC SURVEY

SEASCAPE HOMES
PO BOX 40568
BELLEVUE WA 98015

DRAWN BY:	LSD
REVIEWED BY:	CSB
DATE:	03-11-2020
JOB NO.	20011
SHEET	1 OF 1

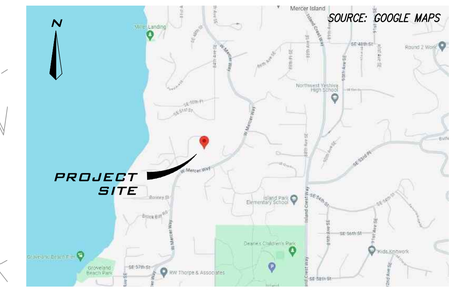
FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



SITE PLAN

SCALE: 1"=10'



VICINITY MAP

SCALE: NTS

SHEET LIST

SHEET #	NAME	DESCRIPTION
1	C1.0	COVER SHEET & SITE PLAN
2	C2.0	DEMOLITION & TESC PLAN
3	C2.1	TESC DETAILS
4	C3.0	GRADING, STORM DRAINAGE & UTILITY PLAN
5	C3.1	STORM DRAINAGE DETAILS LOT 2
6	C3.2	UTILITY DETAILS

SITE CALLOUTS:

1. PROPERTY BOUNDARY, TYP.
2. PROPOSED BUILDING FOOTPRINT, TYP.
3. PROPOSED BUILDING ROOFLINE, TYP.
4. BUILDING SETBACK LINE, TYP. SEE DEVELOPMENT DATA NOTES FOR MINIMUM SETBACKS.
5. EXISTING TREES TO BE PROTECTED-IN-PLACE UNLESS OTHERWISE NOTED, TYP (SEE ARBORIST REPORT AND SHEET C2.0 FOR LIMITS OF DISTURBANCE AND TREE PROTECTION).
6. PROPOSED ON-SITE HARDSCAPES, TYP.
7. INSTALL 20.0' WIDE ASPHALT DRIVEWAY (WIDTH VARIES).
8. PROPOSED RETAINING WALL (BY OTHERS) (SEE SHEET C3.0 FOR GRADING PLAN).
9. PROTECT EX. FENCE, TYP.
10. PROPOSED REPLACEMENT TREE, TYP. (SEE ARCHITECTURAL PLANS).

STORM CALLOUTS:

1. PROPOSED STORM DRAINAGE SYSTEM, TYP (SEE SHEET C3.0 FOR DRAINAGE PLAN).

UTILITY CALLOUTS:

1. PROPOSED DOMESTIC WATER SYSTEM, TYP (SEE SHEET C3.0 FOR WATER PLAN).
2. PROPOSED SANITARY SEWER SYSTEM, TYP (SEE SHEET C3.0 FOR SEWER PLAN).

CRITICAL AREAS & EASEMENT CALLOUTS:

1. 60' NATIVE GROWTH PROTECTION AREA (NGPA) BUFFER.
2. EXISTING NGPA SPLIT-RAIL FENCE WITH SIGNAGE. FENCE TO BE REPAIRED IF REQUIRED.
3. PER COVENANT, SPLIT RAIL FENCE MARKS THE BOUNDARY OF THE NGPA. FENCE SHOWN SPACED FROM THE BOUNDARY FOR CLARITY (TYP).
4. 10' SANITARY SEWER ESMT REC NO 4820490
5. EASEMENT FOR INGRESS AND EGRESS UNDER REC NO 9401241711 & 6400425
6. LINE OF LANDSLIDE AREA PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
7. LINE OF EROSION HAZARD PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
8. 60' WATERCOURSE BUFFER.
9. 45' WATERCOURSE BUFFER.
10. 10' BUFFER SETBACK.

PROJECT TEAM:

OWNER:
SEASCAPE HOMES LLC
JON TELLEFSON
PO BOX 40568
BELLEVUE, WA 98015
PH: 206.972.9950
EMAIL: JMT1231@GMAIL.COM

PROJECT ARCHITECT:
STURMAN ARCHITECTS
BRAD STURMAN
9 - 103RD AVENUE NE SUITE 203
BELLEVUE, WA 98004
PH. 425.451.7003
EMAIL: BRADS@STURMANARCHITECTS.COM

PROJECT CIVIL ENGINEER:
PATRICK HARRON & ASSOCIATES, LLC
SCHWIN CHAOSILAPAKUL, PE
14900 INTERURBAN AVENUE S #279
SEATTLE, WA 98168
PH: 206.674.4659
EMAIL: SCHWIN@PATRICKHARRON.COM

PROJECT SURVEYOR:
MEAD GILMAN LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH. 425.486.1252
EMAIL: WWW.MEADGILMAN.COM

PROJECT GEOTECHNICAL ENGINEER:
GEOTECH CONSULTANTS INC
JIM STRANGE, P.E.
2401 10TH AVE E, SEATTLE, WA 98102
PH: 425.747.5618
EMAIL: JAMESS@GEOTECHNW.COM

PROJECT ARBORIST:
ARBOR INFO, LLC
THOMAS M. HANSON, CF, RCA
2406 N CASTLE WAY
BRIER, WA 98036
PH: 206.300.9711
EMAIL: TOM.HANSON@ARBORINFO.COM

PROJECT INFORMATION:

DEVELOPMENT DATA:

SITE AREA	49,010 SF (1.12 AC)
SITE ADDRESS	5222 FOREST AVE SE MERCER ISLAND, WA 98040
PARCEL NUMBER	1410300-0057

LEGAL DESCRIPTION:

LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO SUB07-003 AS RECORDED UNDER REC. NO. 20071210900010.

VERTICAL DATUM:

NAVD 88 (GEOID 18) BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

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ELEV. = 113.94'

REFERENCES:

1. ARCHITECTURAL PLANS BY STURMAN ARCHITECTS.
2. BOUNDARY AND TOPOGRAPHIC SURVEY BY MEAD GILMAN LAND SURVEYORS.
3. GEOTECH REPORT BY GEOTECH CONSULTANTS, INC.
4. ARBORIST REPORT BY ARBOR INFO, LLC.

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

SCHWIN CHAOSILAPAKUL 19168 REGISTERED PROFESSIONAL ENGINEER
9/5/24

CITY OF MERCER ISLAND BUILDING PERMIT

COVER SHEET & SITE PLAN

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98168
Phone: 206.674.4659
Web.: patrickharron.com

PROJ. NO.	DSN. BY:
20113	CC
DWN. BY:	CHK. BY:
CC	SC

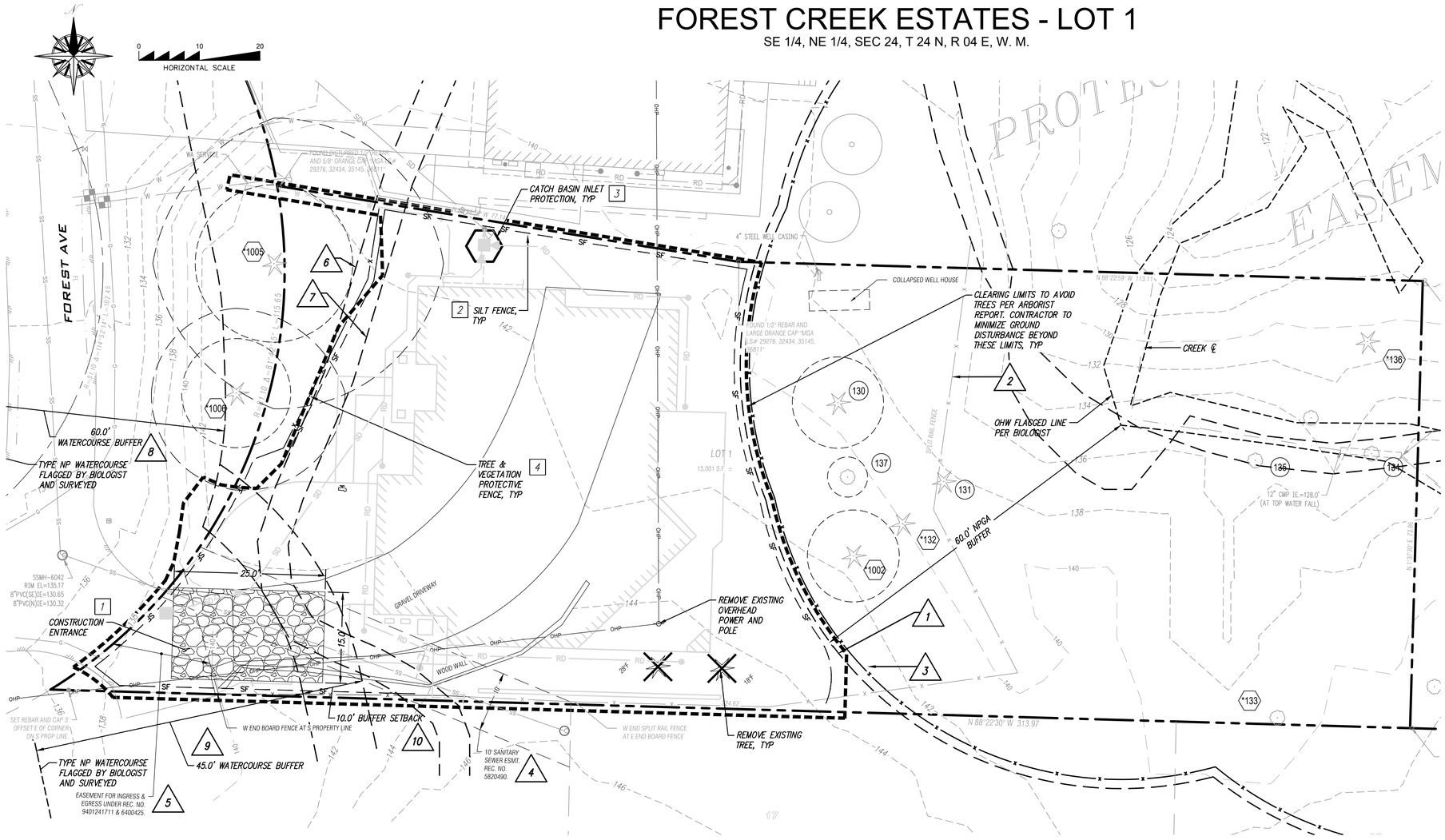
FOREST CREEK ESTATES
LOT 1
5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE:	9/5/24
SCALE:	AS SHOWN
DRAWING NO.	C1.0
	1 OF 6

Sep 05, 2024 7:47:35AM - User: Sherl Stark
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FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



DEMOLITION & TESC PLAN

SCALE: 1"=10'

TESC LEGEND

- CATCH BASIN INLET PROTECTION
- TREE REMOVAL
- 201 201 — TREE NUMBER
- CLEARING LIMITS (ENTIRE PROPERTY OUTSIDE OF TREE PROTECTION AREA)
- SF — SILT FENCE
- x — TREE & VEGETATION PROTECTIVE FENCE
- CONSTRUCTION ENTRANCE

DEMOLITION & TESC CALLOUTS:

1. CONSTRUCTION ENTRANCE (SEE DETAIL 1, SHEET C2.1).
2. SILT FENCE, TYP (SEE DETAIL 2, SHEET C2.1).
3. CATCH BASIN INLET PROTECTION, TYP (SEE DETAIL 3, SHEET C2.1).
4. TREE & VEGETATION PROTECTIVE FENCE (SEE DETAIL 4, SHEET C2.1). SEE DEMOLITION & TESC NOTES, THIS SHEET, FOR ADDITIONAL TREE PROTECTION GUIDELINES.

TESC NOTES:

1. CLEARING LIMITS SHOWN ARE APPROXIMATE AND REPRESENT THE MINIMUM REQUIRED TO INSTALL PROPOSED IMPROVEMENTS. CLEARING LIMITS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BUT SHALL NOT ENCROACH WITHIN CRITICAL ROOT ZONES OF TREES TO BE RETAINED; COORDINATE WITH PROJECT ARBORIST TO DETERMINE CRITICAL ROOT ZONES FOR DISTURBANCE WITHIN TREE DRIP LINES.
2. SILT FENCING TO BE INSTALLED ALONG DOWN-SLOPE OF AREAS TO BE DISTURBED WITHIN THE PROPERTY. ADJUST AS REQUIRED WITH CHANGES TO CLEARING LIMITS.
3. THIS TESC PLAN IS PROVIDED TO SHOW THE MINIMUM MEASURES REQUIRED TO CONTROL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING APPROPRIATE MEASURES FOR CHANGING SITE CONDITIONS.
4. REFER TO ARCHITECTURAL TREE PLANS FOR ADDITIONAL TREE REMOVAL AND REPLACEMENT DETAILS.
5. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDATIONS ON EXCAVATION AND SLOPES.
6. GEOTECHNICAL ENGINEER SHALL BE ON-SITE DURING EXCAVATION AND AT REGULAR INTERVALS DURING CONSTRUCTION TO MONITOR THE STABILITY OF THE TEMPORARY OPEN CUT EXCAVATIONS PROPOSED FOR SITE RETAINING WALLS AND RESIDENTIAL STRUCTURE EXCAVATIONS.
7. SOILS OF DISTURBED PERVIOUS AREAS THROUGHOUT THE DURATION OF THE PROJECT ARE TO BE AMENDED.

CRITICAL AREAS & EASEMENT CALLOUTS:

1. 60' NATIVE GROWTH PROTECTION AREA (NGPA) BUFFER.
2. EXISTING NGPA SPLIT-RAIL FENCE WITH SIGNAGE. FENCE TO BE REPAIRED IF REQUIRED.
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R#	DATE	DESCRIPTION	BY

CHRISTOPHER J. LAPAKUL — EXPIRES: 12/31/2025 — PROFESSIONAL ENGINEER — 9/5/24

CITY OF MERCER ISLAND
BUILDING PERMIT

DEMOLITION & TESC PLAN

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98168
Phone: 206.744.9656
Web: patrickharron.com

PROJ. NO.	DSN. BY:
20113	CC
DWN. BY:	CHK. BY:
CC	SC

FOREST CREEK ESTATES
LOT 1

5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE: 9/5/24

SCALE: AS SHOWN

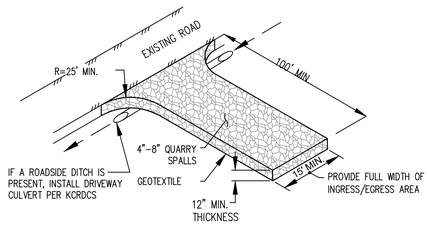
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2 OF 6

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FOREST CREEK ESTATES - LOT 1

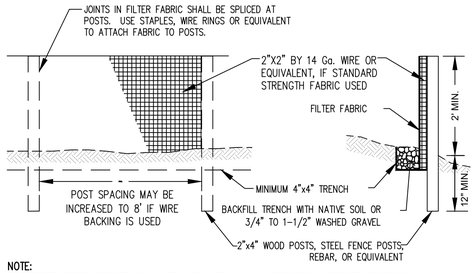
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NOTES:

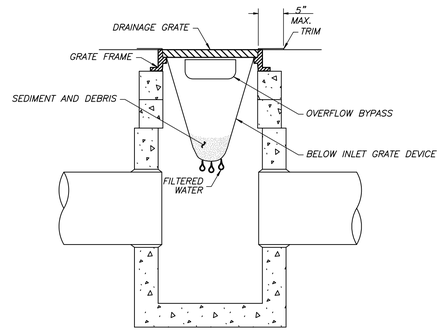
1. PER KING COUNTY ROAD DESIGN AND CONSTRUCTION STANDARDS (KCRDCS), DRIVEWAYS SHALL BE PAVED TO EDGE OF R-O-W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING OF THE ROADWAY.
2. IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD.

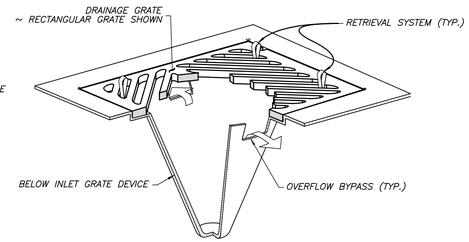
1 / C2.0 **CONSTRUCTION ENTRANCE**
SCALE: NTS



NOTE:
SILT FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOURS WHENEVER POSSIBLE

2 / C2.0 **SILT FENCE**
SCALE: NTS

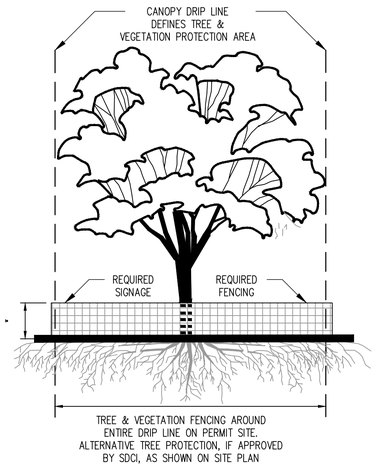




NOTES:

1. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
2. THE BIGD SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
3. THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION 8-01.3(15).

3 / C2.0 **CATCH BASIN INLET PROTECTION**
SCALE: NTS



TREE PROTECTION FENCING AND SIGN

1. CHAIN LINK, WIRE MESH, OR SIMILAR OPEN RIGID MATERIAL (NO PLYWOOD)
2. MUST BE INSTALLED PRIOR TO DEMOLITION OR GROUND DISTURBANCE
3. KEPT IN PLACE FOR THE DURATION OF CONSTRUCTION
4. NO SOIL DISTURBANCE OR ACTIVITY ALLOWED WITHIN FENCED AREA: MATERIAL STORAGE/STOCKPILING, PARKING, EXCAVATION, DUMPING, OR WASHING
5. MODIFICATIONS OF THESE REQUIREMENTS BY APPROVAL OF SDCI PLANNER ONLY
6. IF ROOTS GREATER THAN 2 INCH FOUND OUTSIDE OF FENCING, PROTECT BY HAND EXCAVATION AND, IF NECESSARY, CUT CLEANLY AND KEEP MOIST
7. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

VEGETATION PROTECTION

1. ORANGE MESH OR SIMILAR OPEN MATERIAL
2. MINIMIZE CONSTRUCTION ZONE
3. PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE WITH FENCING AS SHOWN
4. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

4 / C2.0 **TREE & VEGETATION PROTECTIVE FENCE**
SCALE: NTS

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

CHRISTOPHER J. CAPAKUL — PROFESSIONAL ENGINEER — 9/5/24

CITY OF MERCER ISLAND
BUILDING PERMIT

TESC DETAILS

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98168
Phone: 206.241.4656
Web: patrickharron.com

PROJ. NO.	DSN. BY:
20113	CC
DWN. BY:	CHK. BY:
CC	SC

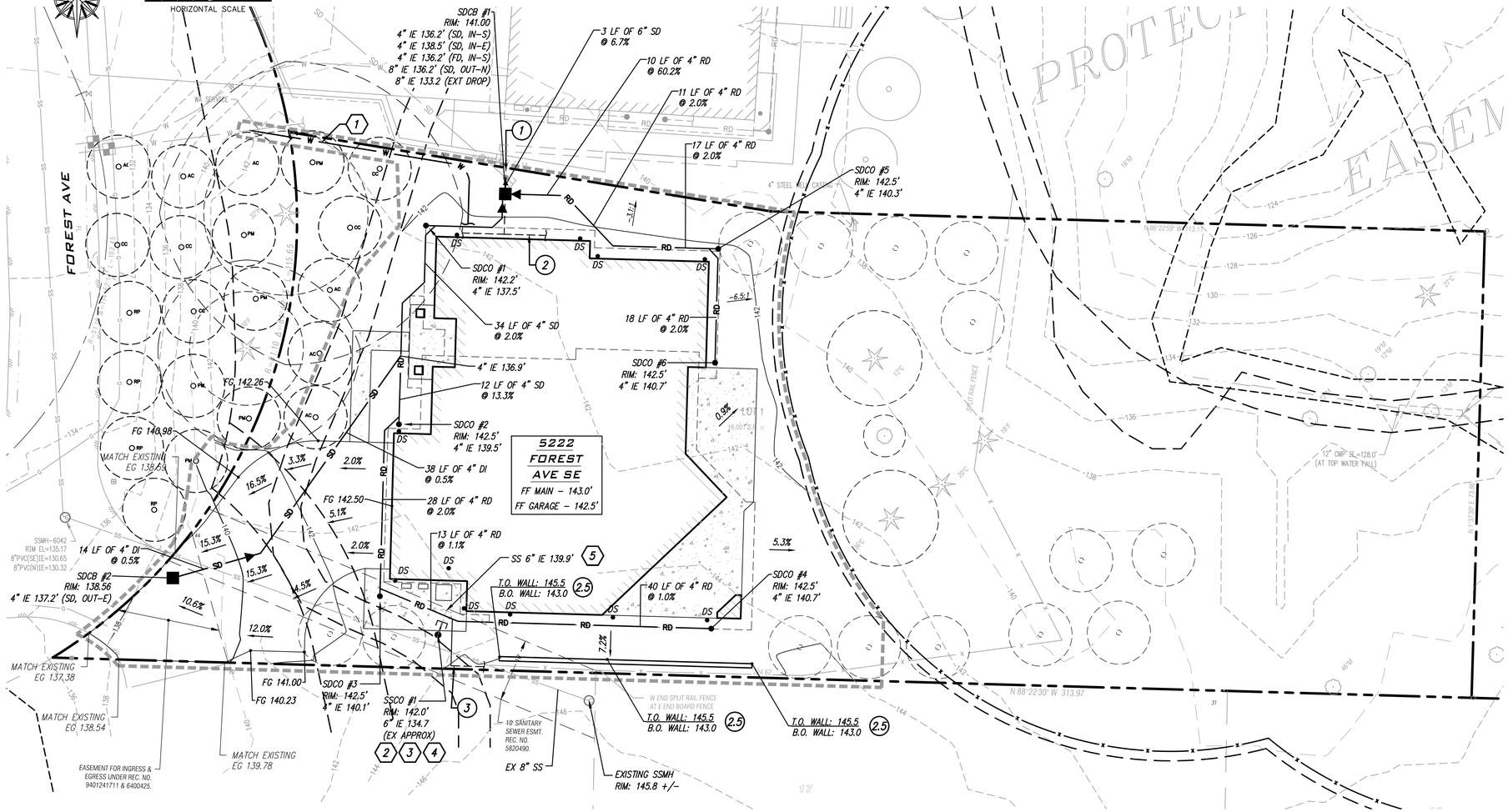
FOREST CREEK ESTATES
LOT 1
5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE: 9/5/24
SCALE: AS SHOWN
DRAWING NO: C2.1
3 OF 6

Sep. 05, 2024 - 7:47:54AM - User Sheri Stark
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FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



GRADING, STORM DRAINAGE & UTILITY PLAN

SCALE: 1"=10'

STORM CALLOUTS:

1. CONNECT TO EXISTING LOT 2 STORM SYSTEM, VIA EXISTING CLEANOUT AT PROPERTY LINE (8" IE 133.0').
2. 4" FOOTING DRAIN SYSTEM TO EXTEND AROUND BUILDING PERIMETER. CONNECT TO SDCB #1 (PER PLAN) @ 2.0% (MIN) (4" IE 139.4'). INSTALL CLEANOUTS AT BUILDING CORNERS, TYP. REFER TO STRUCTURAL PLANS FOR FOOTING DRAIN DETAILS.
3. 4" WALL FOOTING DRAIN SYSTEM TO CONNECT TO STORM SYSTEM (4" IE 140.2'). REFER TO STRUCTURAL PLANS FOR WALL FOOTING DRAIN DETAILS.

UTILITY CALLOUTS:

1. FIELD LOCATE EX WATER STUB AND INSTALL NEW 2" WATER METER FOR DOMESTIC AND FIRE SYSTEM, PER CITY OF MERCER ISLAND STD. PLAN NO. W-14A (SEE DETAIL 2, SHEET C3.1). IF NEW SERVICE CONNECTION TO THE MAIN IS REQUIRED, NEAT LINE SAW-CUT FOR WATER LINE TRENCHING AND RESTORE PAVEMENT, PER CITY OF MERCER ISLAND STD. PLAN NO. W-3 (SEE DETAIL 1, SHEET C3.1).
2. CONNECT NEW 6" SEWER LINE TO EX. 6" SEWER STUB (APPROX. IE TBD±). PROVIDE MINIMUM OF 2.0% SLOPE AND CONNECT TO RESIDENCE (APPROX. IE 140.0±), PER CITY OF MERCER ISLAND STD. PLANS. COORDINATE WITH PUBLIC WORKS INSPECTOR FOR SCOPE AND RE-USE OF EXISTING LINE. THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN MUST BE VIDEO INSPECTED AND REPAIRED/REPLACED AS NEEDED.
3. INSTALL 6" PVC SANITARY SEWER SERVICE @ 2.0% (MIN), PER CITY OF MERCER ISLAND STD. PLAN NO. S-3 AND S-18 (SEE DETAILS 3 AND 4, SHEET C3.1).
4. INSTALL SANITARY SEWER CLEANOUT, PER CITY OF MERCER ISLAND STD. PLAN NO. S-19, TYP (SEE DETAIL 5, SHEET C3.1).
5. CONNECT TO EX 6" STUB IE 134.7' (APPROX FROM AS-BUILT).

STORM NOTE:

1. REFER TO C2.0 FOR TEMPORARY EXCAVATION PLAN FOR STORM SYSTEM.

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

CHRISTOPHER J. APAKUL — 24009 — REGISTERED PROFESSIONAL ENGINEER — STATE OF WASHINGTON — 9/5/24

CITY OF MERCER ISLAND BUILDING PERMIT

GRADING, STORM DRAINAGE & UTILITY PLAN

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98168
Phone: (206) 914-4659
Web: patrickharron.com

PROJ. NO.	DSN. BY:
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DWN. BY:	CHK. BY:
CC	SC

FOREST CREEK ESTATES
LOT 1

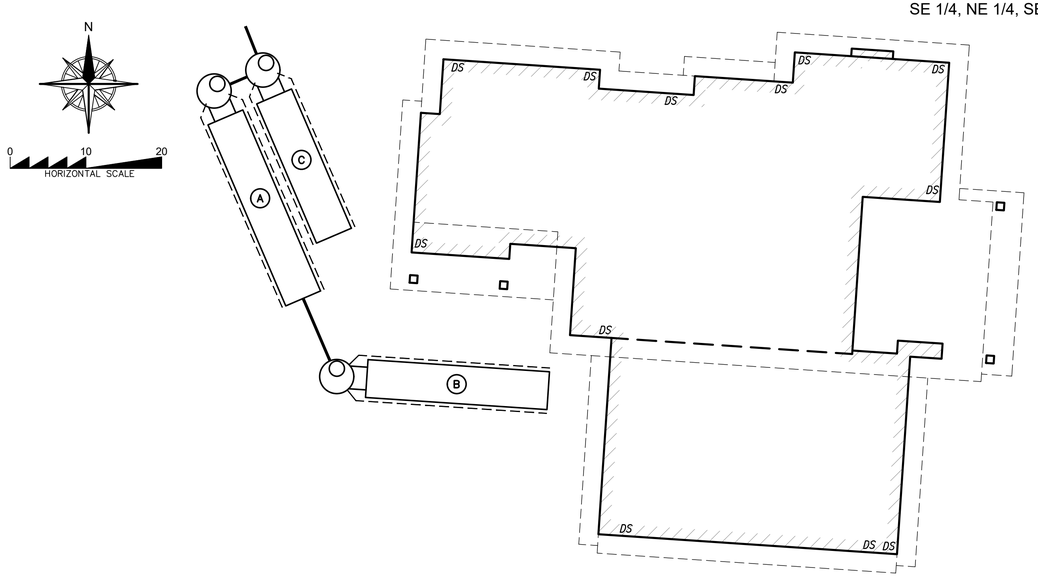
5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE:	9/5/24
SCALE:	AS SHOWN
DRAWING NO.	C3.0
	4 OF 6

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FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



DETENTION PIPE DIAGRAM

SCALE: 1"=10'

LOT 2 DETENTION SYSTEM (FOR REFERENCE ONLY)

Table 1

ON-SITE DETENTION DESIGN FOR PROJECTS BETWEEN 500 SF AND 9,500 SF NEW PLUS REPLACED IMPERVIOUS SURFACE AREA

New and Replaced Impervious Surface Area (sf)	Detention Pipe Diameter (in)	Detention Pipe Length (ft)		Lowest Orifice Diameter (in)[3]		Distance from Outlet Invert to Second Orifice (ft)		Second Orifice Diameter (in)	
		B soils	C soils	B soils	C soils	B soils	C soils	B soils	C soils
500 to 1,000 sf	36"	30	22	0.5	0.5	2.2	2.0	0.5	0.8
	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
1,001 to 2,000 sf	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	60"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
2,001 to 3,000 sf	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
3,001 to 4,000 sf	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
4,001 to 5,000 sf	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5
	48"	73	49	0.5	0.5	3.6	2.9	1.6	1.5
	60"	46	31	0.5	0.5	4.6	3.5	1.6	1.3
5,001 to 6,000 sf	36"	162	109	0.5	0.5	2.7	2.2	1.8	1.6
	48"	90	59	0.5	0.5	3.5	2.9	1.7	1.5
	60"	54	37	0.5	0.5	4.6	3.6	1.6	1.4
6,001 to 7,000 sf	36"	192	128	0.5	0.5	2.7	2.2	1.9	1.8
	48"	102	68	0.5	0.5	3.7	2.9	1.9	1.6
	60"	64	43	0.5	0.5	4.6	3.6	1.8	1.5
7,001 to 8,000 sf	36"	216	146	0.5	0.5	2.8	2.2	2.0	1.9
	48"	119	79	0.5	0.5	3.8	2.9	2.2	1.7
	60"	73	49	0.5	0.5	4.5	3.6	2.0	1.6
8,001 to 8,500 sf[1]	36"	228	155	0.5	0.5	2.8	2.2	2.1	1.9
	48"	124	84	0.5	0.5	3.7	2.9	1.9	1.8
	60"	77	53	0.5	0.5	4.6	3.6	2.0	1.6
8,501 to 9,000 sf	36"	NA [3]	164	0.5	0.5	NA [1]	2.2	NA [1]	1.9
	48"	NA [3]	89	0.5	0.5	NA [1]	2.9	NA [1]	1.9
	60"	NA [3]	55	0.5	0.5	NA [1]	3.6	NA [1]	1.7
9,001 to 9,500 sf[2] **	36"	NA [3]	174	0.5	0.5	NA [1]	2.2	NA [1]	2.1
	48"	NA [3]	94	0.5	0.5	NA [1]	2.9	NA [1]	2.0
	60"	NA [3]	58	0.5	0.5	NA [1]	3.7	NA [1]	1.7

Notes:

- Minimum Requirement #7 (Flow Control) is required when the 100-year flow frequency causes a 0.15 cubic feet per second increase (when modeled in WWHM with a 15-minute timestep). Breakpoints shown in this table are based on a flat slope (0-5%). The 100-year flow frequency will need to be evaluated on a site-specific basis for projects on moderate (5-15%) or steep (> 15%) slopes.
- Soil type to be determined by geotechnical analysis or soil map.
- Sizing includes a Volume Correction Factor of 120%.
- Upper bound contributing area used for sizing.

[1] On Type B soils, new plus replaced impervious surface areas exceeding 8,500 sf trigger Minimum Requirement #7 (Flow Control)

[2] On Type C soils, new plus replaced impervious surface areas exceeding 9,500 sf trigger Minimum Requirement #7 (Flow Control)

[3] Minimum orifice diameter = 0.5 inches

in = inch

ft = feet

sf = square feet

Basis of Sizing Assumptions:

Sized per MRM5 in the Stormwater Management Manual for Puget Sound Basin (1992 Ecology Manual)

SBUH, Type 1A, 24-hour hydrograph

2-year, 24-hour storm = 2 in; 10-year, 24-hour storm = 3 in; 100-year, 24-hour storm = 4 in

Predeveloped = second growth forest (CN = 72 for Type B soils, CN = 81 for Type C soils)

Developed = impervious (CN = 98)

0.5 foot of sediment storage in detention pipe

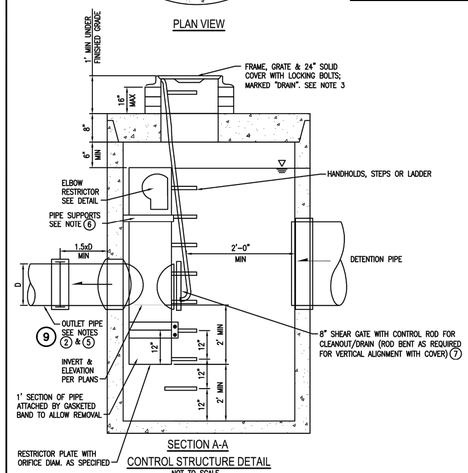
Overland slope = 5%

*** THE PROPOSED DETENTION PIPE SYSTEM ON LOT 2 IS SIZED TO ACCOMMODATE FUTURE IMPROVEMENTS FOR LOTS 1 & 2. THE FOLLOWING PARAMETERS WERE USED IN SIZING THE PROPOSED DETENTION PIPE:*

- *IMPERVIOUS AREA OF FUTURE LOT 1 & LOT 2 – 4,900 SF +6,500 SF (INCLUDES OFFSITE) = 11,400 SF.*
- *SIZING PER STANDARD TABLE 1 (THIS SHEET) FOR 60" DIAM. PIPE WITH IMPERVIOUS AREAS BETWEEN 9,001 SF – 9,500 SF ==> 9,500 SF / 58 LF = 164 SF / 1 LF.*
- *LOTS 1 & 2 REQUIRED DETENTION PIPE LENGTH = 11,400 SF / 164 SF/LF = 70 LF.*

ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS AREA OF 9,500 SF OR LESS)

OWNER: JON TELLEFSON
ADDRESS: 5214 FOREST AVE SE
MERCER ISLAND, WA 98040
PREPARED BY: SCHMIN CHAOSILAPAKUL, PE
PHONE: 206.384.7539
DATE: 8/28/23
PERMIT #: TBD
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 11,399 SF
SOIL TYPE: C
DETENTION PIPE DIA (INCH): 60
PIPE MATERIAL: CMP
DETENTION PIPE LENGTH (FT): A=26.0, B=24.0, C=20.0, TOTAL=70.0
ORIFICE #1 DIA 0.5" INCH, ELEV 126.3'
ORIFICE #2 DIA 1.7" INCH, ELEV 132.0'



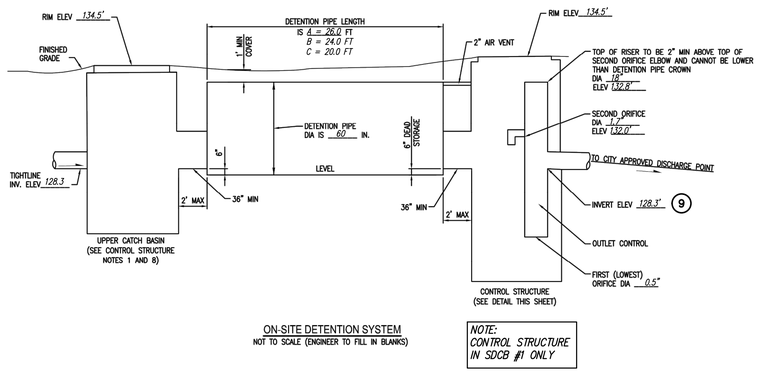
ELBOW RESTRICTOR DETAIL

PLAN VIEW

SECTION A-A

CONTROL STRUCTURE DETAIL

NOT TO SCALE



ON-SITE DETENTION SYSTEM

NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

NOTE: CONTROL STRUCTURE IN SDCB #1 ONLY

CONTROL STRUCTURE NOTES:

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
   A. CLEANOUT GATE IS VISIBLE FROM TOP;
   B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
   C. FRAME IS CLEAR OF CURB.
5. 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.
6. 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).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION 20132A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT 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.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.
9. *INSTALL EXTERNAL DROP CONNECTION AT 8" OUTLET FROM THE CONTROL STRUCTURE (SDCB #1 ONLY).*

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE 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.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

SCHMIN CHAOSILAPAKUL — REGISTERED PROFESSIONAL ENGINEER — 9/5/24

CITY OF MERCER ISLAND BUILDING PERMIT

STORM DRAINAGE DETAILS LOT 2

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S. Suite 279, Seattle, WA 98168
Phone: 206.486.1256
Web: patrickharron.com

PROJ. NO.	DSN. BY:
20113	CC
DWN. BY:	CHK. BY:
CC	SC

FOREST CREEK ESTATES
LOT 1

5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE: 9/5/24

SCALE: AS SHOWN

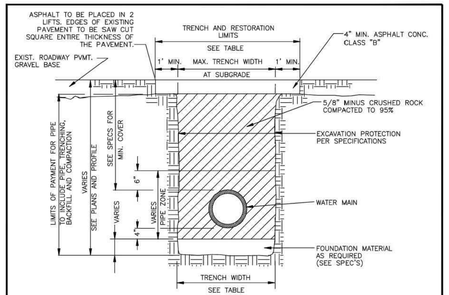
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FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



TRENCH WIDTH			
PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
WATER SERVICES	2'-0"	2'-0"	4'-0"
4" OR 6"	2'-2"	3'-0"	5'-0"
8"	2'-4"	4'-0"	6'-0"
10"	2'-6"	4'-0"	6'-0"
12"	2'-8"	4'-6"	6'-6"
16"	3'-0"	5'-0"	7'-0"

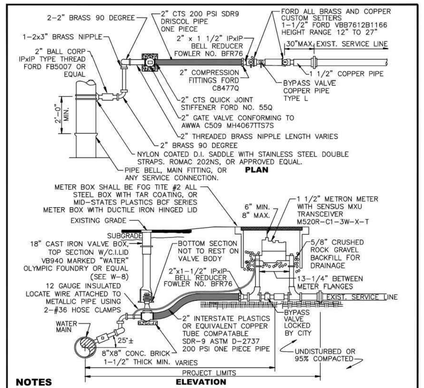
NOTES

1. CALL TWO BUSINESS DAYS BEFORE YOU DIG. (1-800-424-5555)
2. ALL TRENCH BACKFILL MATERIAL SHALL BE 100% 5/8" MINUS CRUSHED ROCK PER WSDOT 9-03.9(3) UNLESS DIRECTED OTHERWISE BY CITY ENGINEER.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
TRENCH SECTION

12-23-2013	NO SCALE	W-3
REV DATE		APPROVED

1 W-3 C3.0 SCALE: NTS



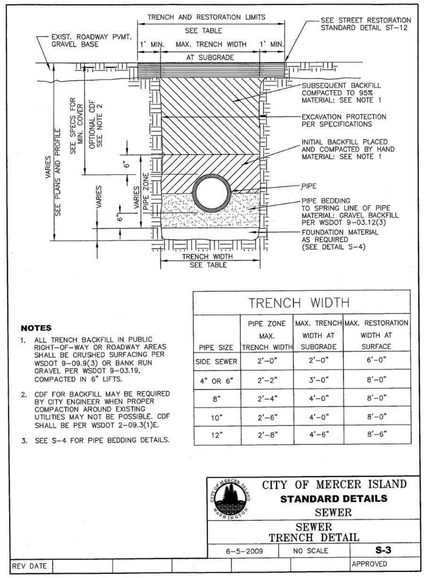
NOTES

1. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18". MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24". ALL HORIZONALLY STAGGERED.
2. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
3. WHEN METER BOXES ARE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK, CONTINUOUS FELT EXPANSION MATERIAL SURROUNDING THE PERIMETER OF THE METER BOX SHALL BE PROVIDED.
4. WHEN CONNECTING TO EXISTING SERVICE LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DI SERIES WITH C21 CTS SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING SERVICE LINE DIAMETER.
5. SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO METER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
6. WATER METER SUPPLIED BY CITY.
7. ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
8. NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
1-1/2" WATER METER INSTALLATION

10-16-2013	NO SCALE	W-14
REV DATE		APPROVED

2 W-14 C3.0 SCALE: NTS



TRENCH WIDTH			
PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
SIDE SEWER	2'-0"	2'-0"	6'-0"
4" OR 6"	2'-2"	3'-0"	8'-0"
8"	2'-4"	4'-0"	8'-0"
10"	2'-6"	4'-0"	8'-0"
12"	2'-8"	4'-6"	8'-6"

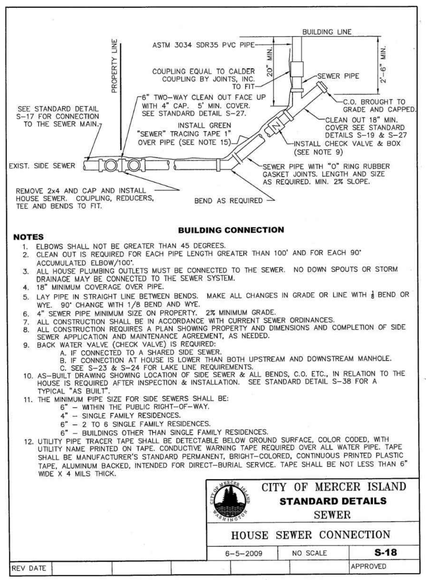
NOTES

1. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS.
2. CDF FOR BACKFILL MAY BE REQUIRED BY CITY ENGINEER WHEN PROPER COMPACTION AROUND EXISTING UTILITIES MAY NOT BE POSSIBLE. CDF SHALL BE PER WSDOT 2-09.3(1)E.
3. SEE S-4 FOR PIPE BEDDING DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SEWER TRENCH DETAIL

6-5-2009	NO SCALE	S-3
REV DATE		APPROVED

3 S-3 C3.0 SCALE: NTS



BUILDING CONNECTION

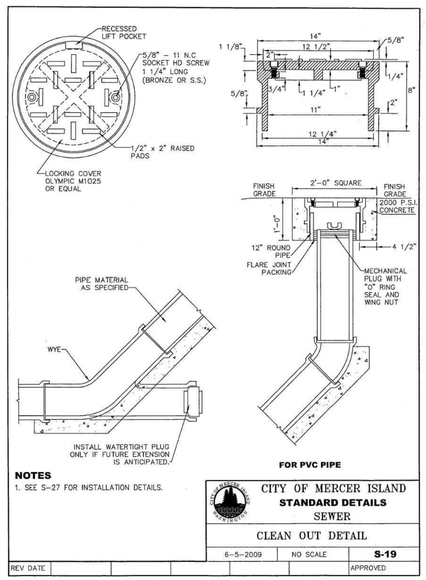
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
4. 18" MINIMUM COVERAGE OVER PIPE.
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH ⅛ BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 4" SEWER PIPE MINIMUM SIZE ON PROPERTY. 2% MINIMUM GRADE.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER ORDINANCES.
8. ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
9. 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.
10. 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".
11. 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.
12. 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
REV DATE		APPROVED

4 S-18 C3.0 SCALE: NTS



NOTES

1. SEE S-27 FOR INSTALLATION DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
CLEAN OUT DETAIL

6-5-2009	NO SCALE	S-19
REV DATE		APPROVED

6 S-19 C3.0 SCALE: NTS

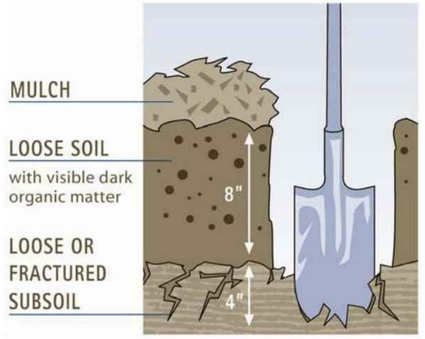


Figure 5.3.3 – Planting bed Cross-Section

5 C3.0 SOIL AMENDMENT DETAIL BMP T5.13 SCALE: NTS

DESIGN GUIDELINES:

- SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
- SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:

1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
   a. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
   b. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.

THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:

1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

MAINTENANCE:

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

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

BY	DESCRIPTION	DATE	R#

JOSH LAPAKUL — EXPIRES: 10/5/2025 — PROFESSIONAL ENGINEER — 9/5/24

CITY OF MERCER ISLAND BUILDING PERMIT

UTILITY DETAILS

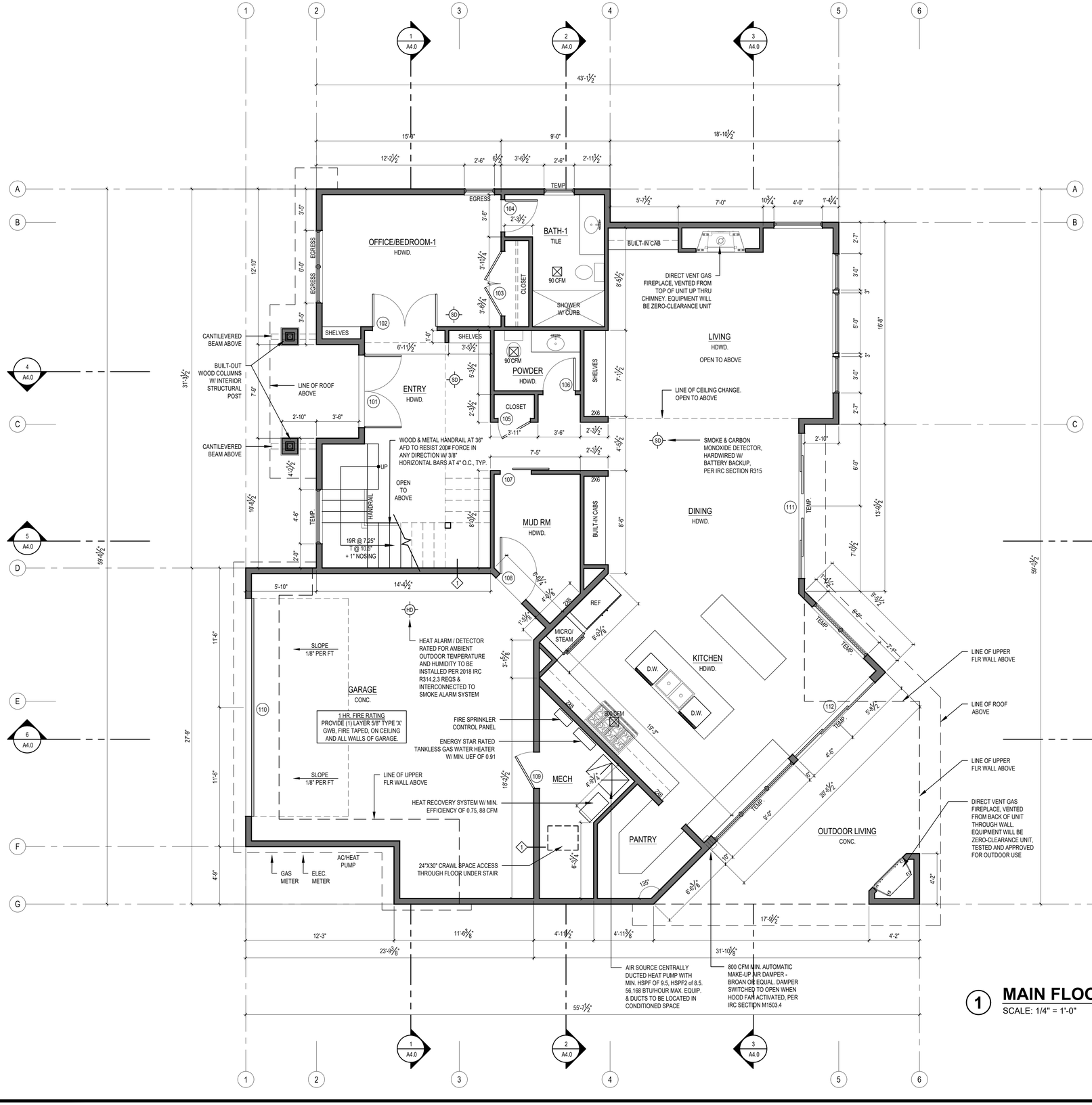
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Civil Engineering & Planning
14900 Interurban Ave. S. Suite 279, Seattle, WA 98168
Phone: (206) 467-6468
Web: patrickharron.com

PROJ. NO.	DSN. BY:
20113	CC
DWN. BY:	CHK. BY:
CC	SC

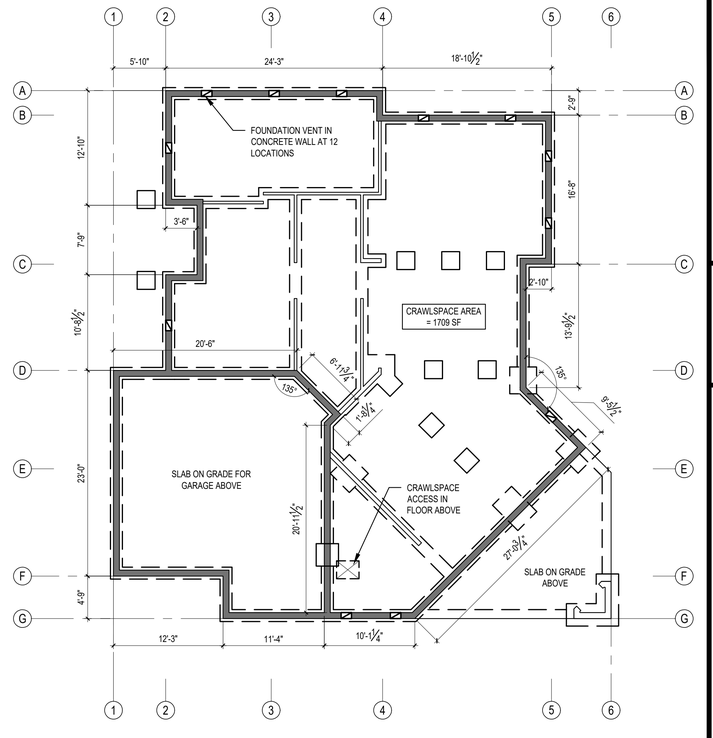
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LOT 1
5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE: 9/5/24
SCALE: AS SHOWN
DRAWING NO. C3.2
6 OF 6

Sep. 05, 2024 - 7:48:23AM - User: Sheri Stark
P:\2020\20113_Forest Avenue Building Permits - Mercer Island\Drawing\Working\Sheets\Lot 1\20113_C3.2-UTILITY DETAILS.dwg



1 MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 CRAWLSPACE VENTING PLAN
SCALE: 1/8" = 1'-0"

CRAWLSPACE VENTING:

(AREA) 1709 SF / 300 = 5.7 SF VENTING REQ'D.
5.7 SF X 144 = 820.8 SQ. IN.
68 SQ. IN. STND. VENT.
820.8 / 68 = 12 VENTS REQ.
12 VENTS WILL BE PROVIDED

USE APPROVED CLASS I VAPOR RETARDER PER IBC R408.2, EXCEPTION.

WALL PARTITION TYPES:
N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS.

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ CONTINUOUS R-5 RIGID INSULATION o/ (2) LAYERS 60# BLDG. PAPER OR WRB o/ SHEATHING PER STRUCT o/ 2x6 WOOD STUDS AT 16" O.C. w/ 5/8" w/ GYPSUM WALLBOARD AT INTERIOR & R-21 BATT INSULATION EXCEPT EXT. OF GARAGE

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 5/8" GYPSUM WALLBOARD EACH SIDE.

1HR. FIRE RATED GARAGE WALL
5/8" GYPSUM WALLBOARD @ INTERIOR o/ 2X6 WOOD STUDS @ 16" O.C. w/ R-21 BATT INSULATION w/ CONTINUOUS R-5 RIGID INSULATION w/ (1) LAYER 5/8" TYPE 'X' GWB PANEL NAILED 7" O.C.-1 7/8" CEM CTD NAILS- JOINTS EXP OR FIN - PERIM CAULKED- UL DES U305 & U314- JOINTS FIN

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

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MAIN FLOOR PLAN

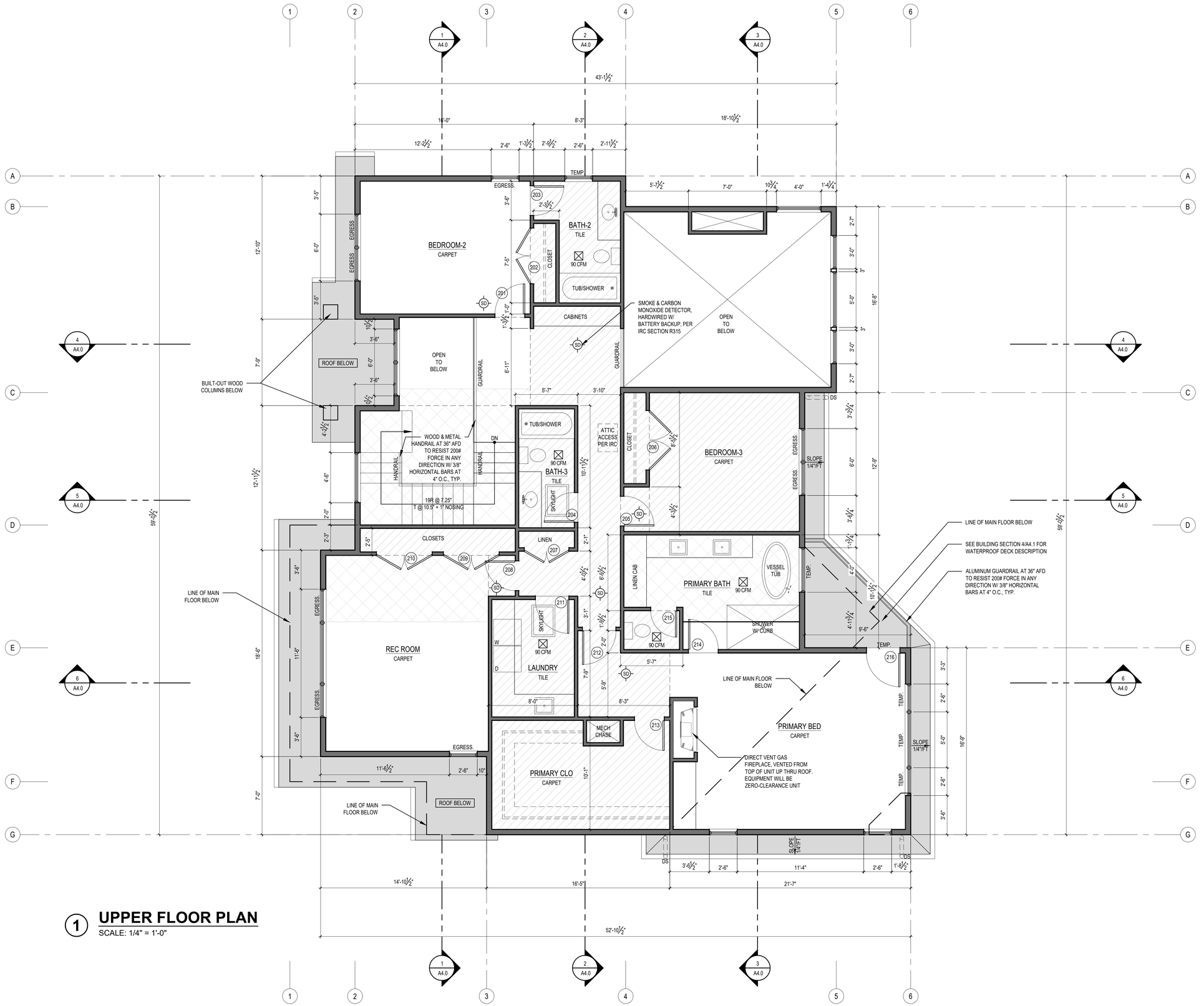
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DRAWN BY: KE

CHECKED BY: BJS

SHEET A2.0

PLOT DATE: 9/26/2024



1 UPPER FLOOR PLAN

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

POCHE LEGEND:

- AREA OF ROOF BELOW
- AREA OF FURRED DOWN FLAT CEILING
- AREA OF CEILING TALLER THAN 12'

WALL PARTITION TYPES:

N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS.

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ CONTINUOUS R-5 RIGID INSULATION o/ (2) LAYERS 60# BLDG. PAPER OR WRB o/ SHEATHING PER STRUCT o/ 2x6 WOOD STUDS AT 16" O.C. w/ 5/8" w/ GYPSUM WALLBOARD AT INTERIOR & R-21 BATT INSULATION EXCEPT EXT. OF GARAGE

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UPPER FLOOR PLAN

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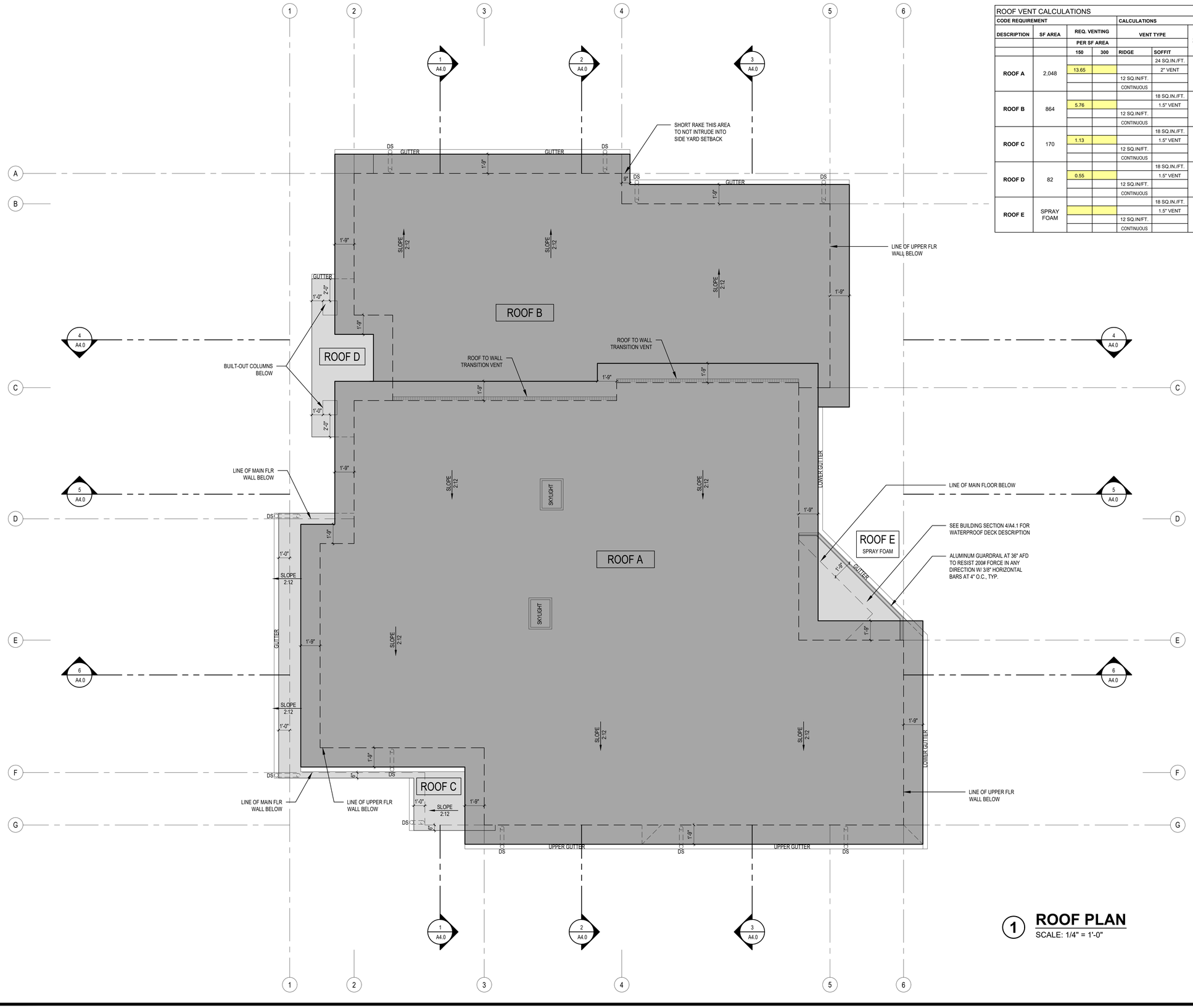
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SHEET A2.1

PLOT DATE: 9/25/2024

ROOF VENT CALCULATIONS

CODE REQUIREMENT				CALCULATIONS								ACTUAL	
DESCRIPTION	SF AREA	REQ. VENTING PER SF AREA		VENT TYPE		X	VENT L.F.	=	TOTAL VENT AREA SQ. IN.	X	SF CONVERT. 1/144	X	80% EFF FACTOR	TOTAL
		150	300	RIDGE	SOFFIT									
ROOF A	2,048				24 SQ.IN./FT.		116.75		2802		19.46		15.57	15.57
		13.65			2" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										
ROOF B	864				18 SQ.IN./FT.		80		1440		10.00		8.00	8.00
		5.76			1.5" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										
ROOF C	170				18 SQ.IN./FT.		28		504		3.50		2.80	2.80
		1.13			1.5" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										
ROOF D	82				18 SQ.IN./FT.		7.5		135		0.94		0.75	0.75
		0.55			1.5" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										
ROOF E	SPRAY FOAM				18 SQ.IN./FT.						0.00		0.00	0.00
					1.5" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										



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

POCHE LEGEND:

MAIN FLOOR ROOF

UPPER FLOOR ROOF

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

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ROOF PLAN

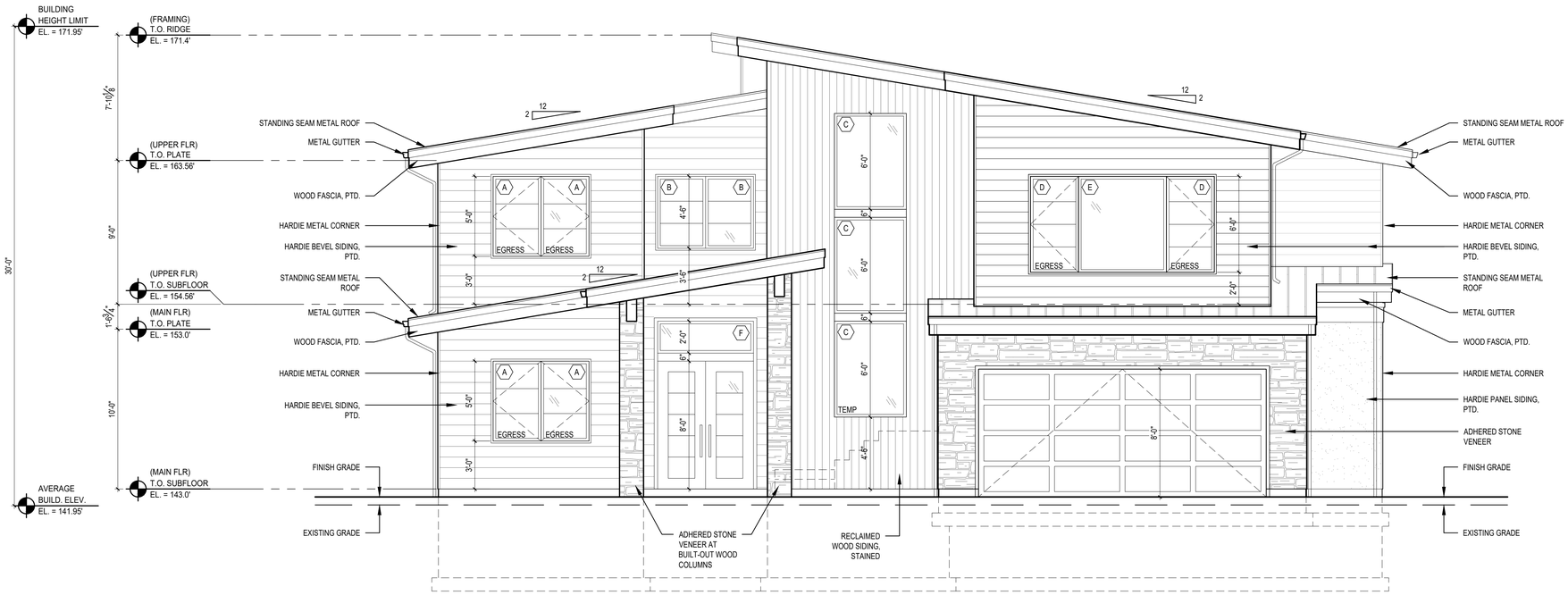
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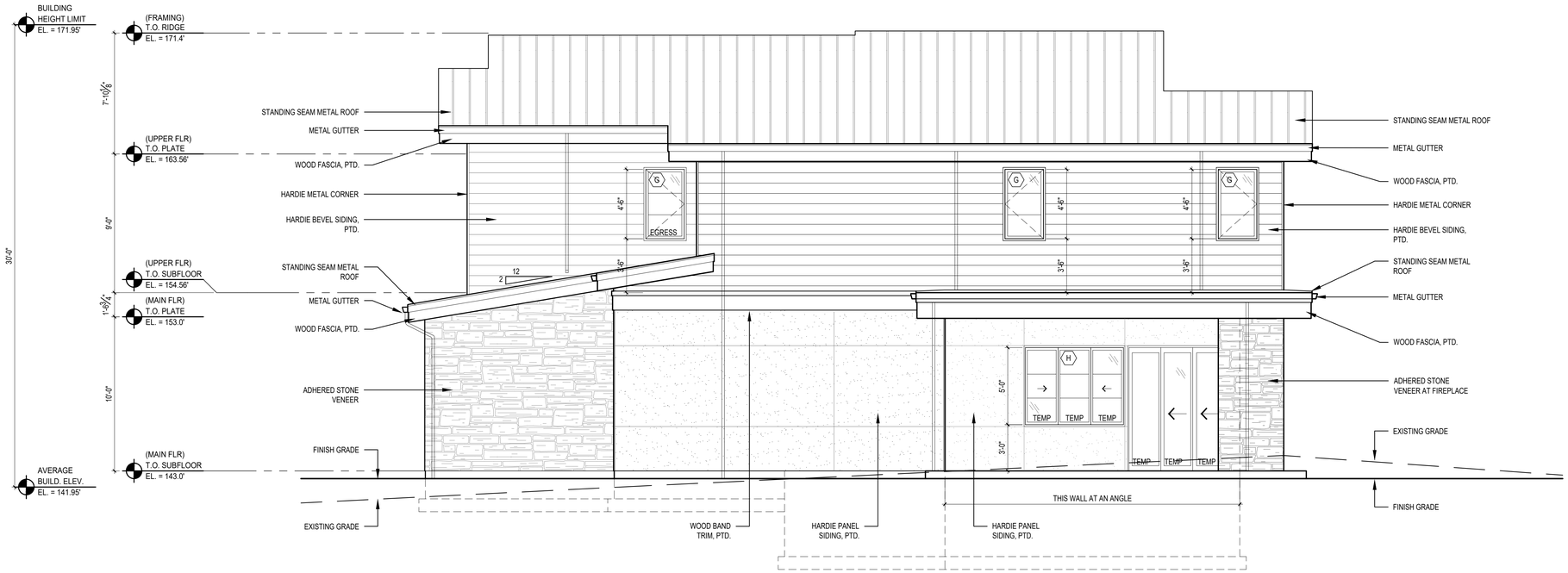
SHEET
A2.2

PLOT DATE: 9/26/2024



1 FRONT ELEVATION

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



2 SOUTH ELEVATION

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

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EXTERIOR ELEVATIONS

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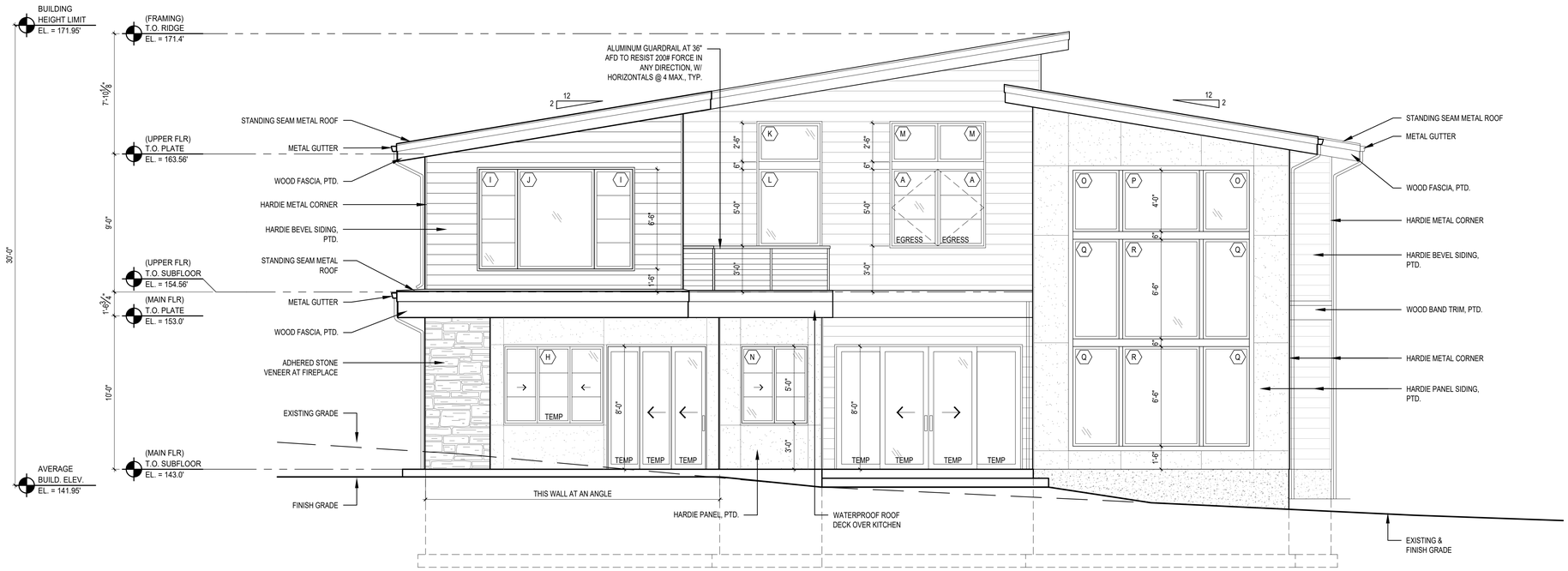
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PLOT DATE: 9/26/2024

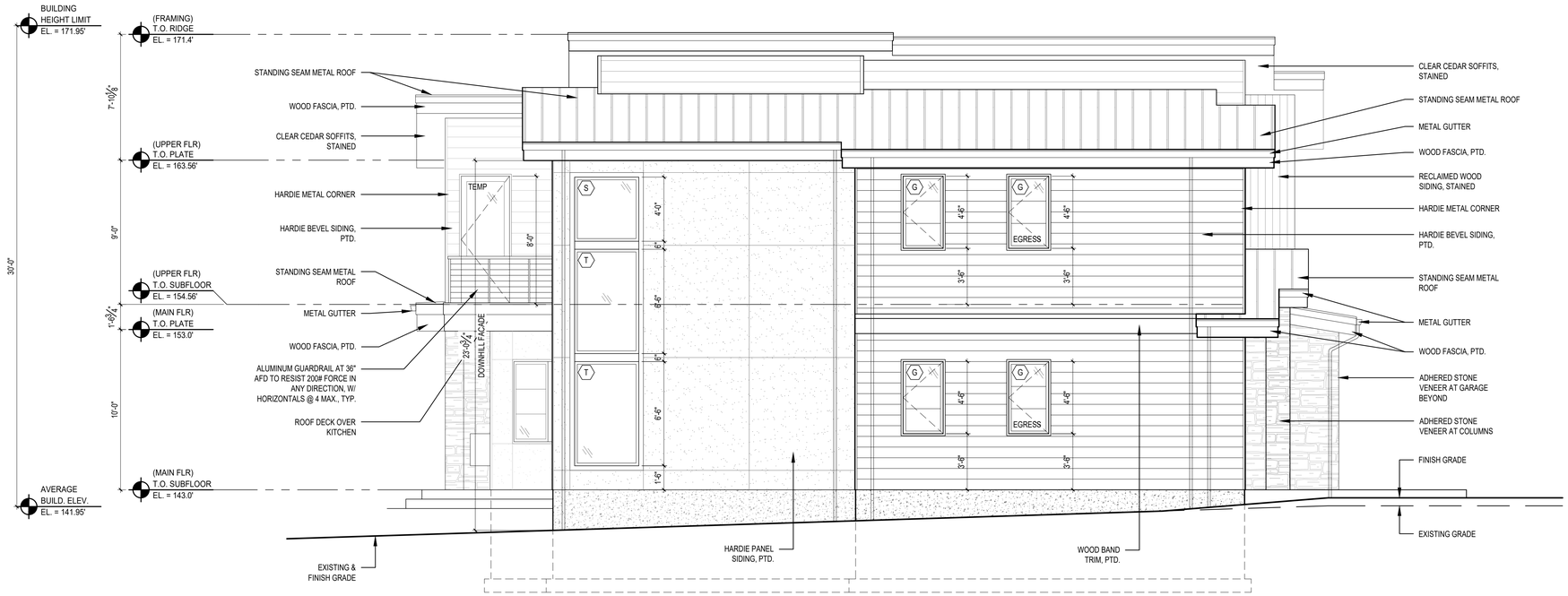
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3 EAST ELEVATION

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



4 NORTH ELEVATION

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

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EXTERIOR ELEVATIONS

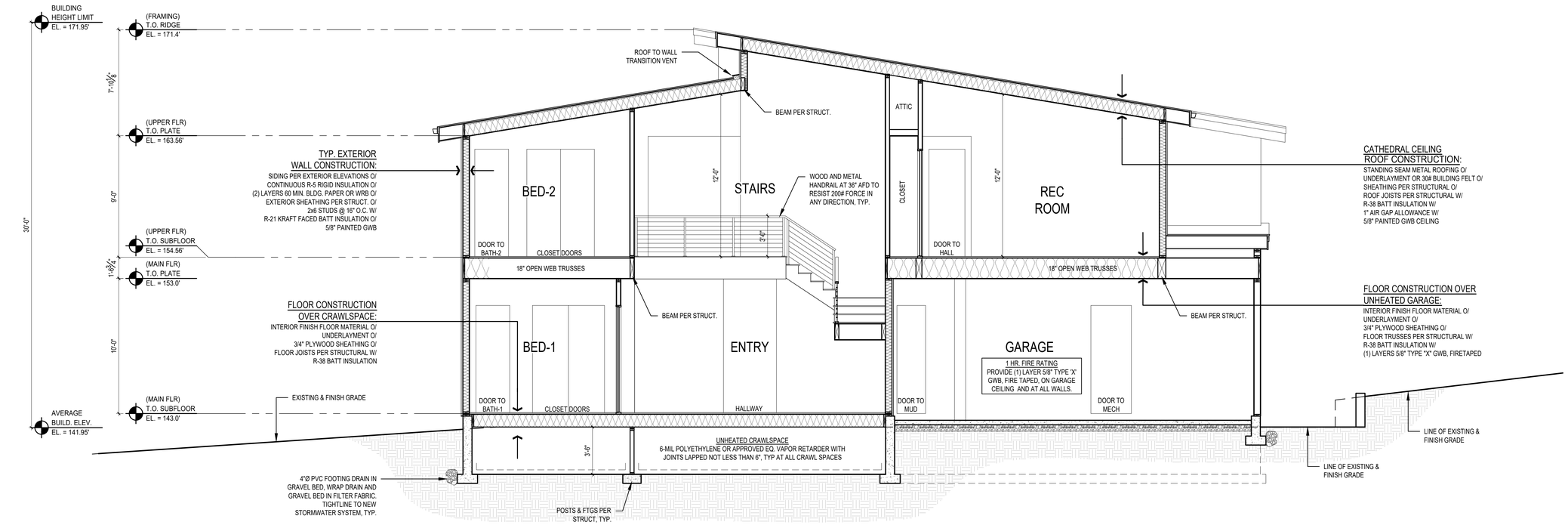
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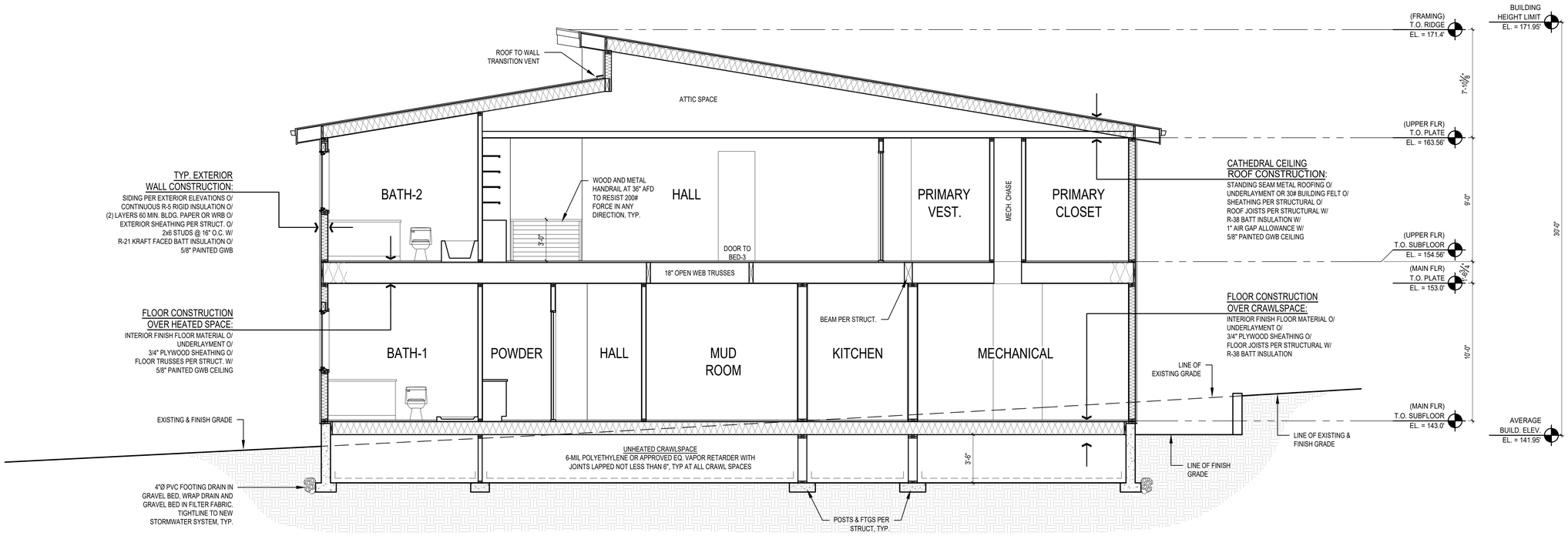
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PLOT DATE: 9/26/2024



1 BUILDING SECTION

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



2 BUILDING SECTION

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

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BUILDING SECTIONS

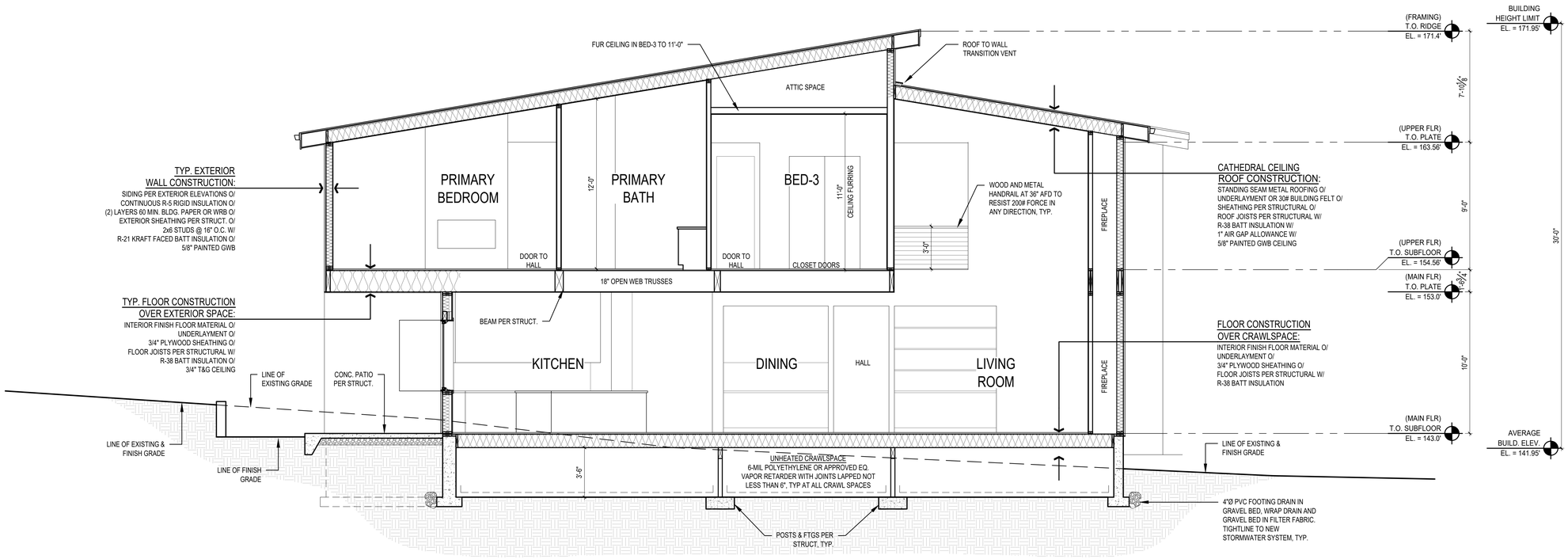
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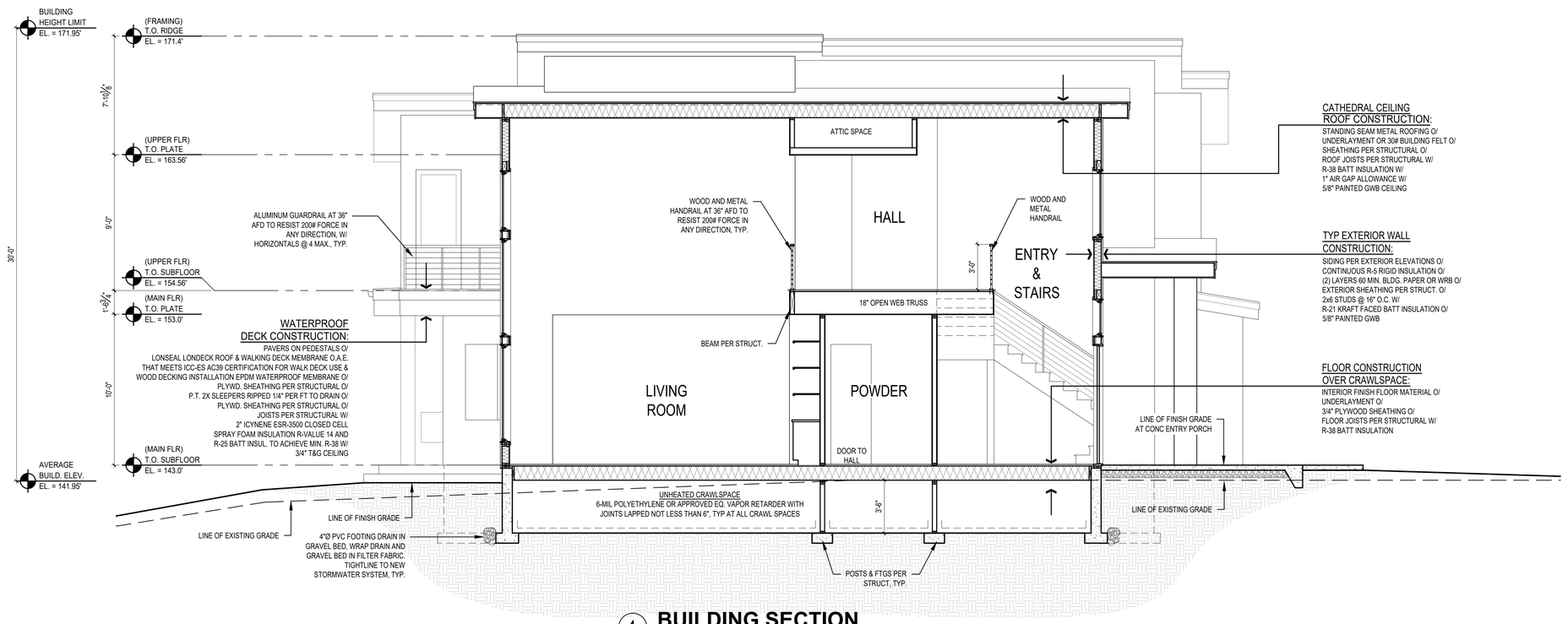
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PLOT DATE: 9/26/2024



3 BUILDING SECTION

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



4 BUILDING SECTION

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

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

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BUILDING SECTIONS

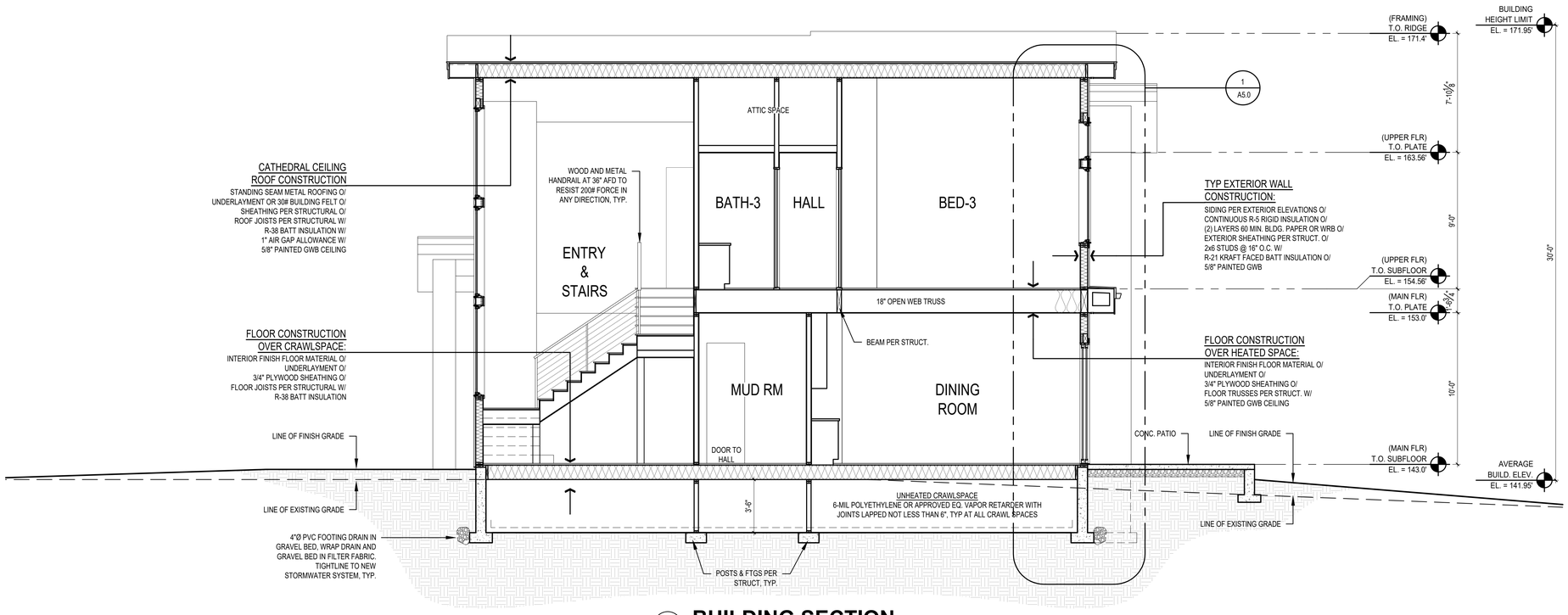
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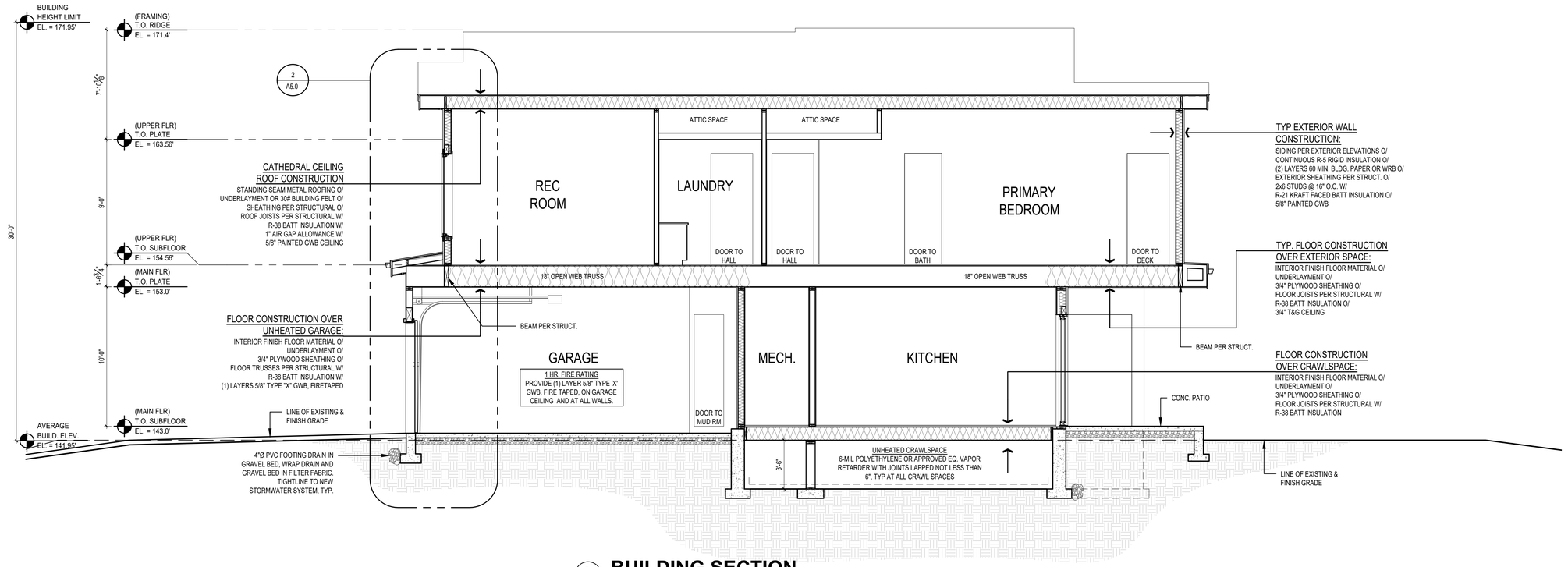
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PLOT DATE: 9/26/2024



5 BUILDING SECTION

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



6 BUILDING SECTION

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

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BUILDING SECTIONS

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PLOT DATE: 9/26/2024

WINDOW SCHEDULE LOT 1

TAG.	DESCRIPTION	R.O. SIZE		TEMP.	QTY.	AREA (SF)	U-VAL (MIN.)	GLAZING	REMARKS & NOTES
		WIDTH	HEIGHT						
A	CASEMENT	3' - 0"	5' - 0"		6		0.28	LOW E / CLEAR	EGRESS
B	FIXED	3' - 0"	4' - 6"		2		0.28	LOW E / CLEAR	
C	FIXED	4' - 6"	6' - 0"	Y	3		0.28	LOW E / CLEAR	TEMP GLASS
D	CASEMENT	3' - 0"	6' - 0"		2		0.28	LOW E / CLEAR	EGRESS
E	FIXED	5' - 6"	6' - 0"		1		0.28	LOW E / CLEAR	
F	FIXED	6' - 0"	2' - 6"		1		0.28	LOW E / CLEAR	TRANSOM
G	CASEMENT	2' - 6"	4' - 6"		7		0.28	LOW E / CLEAR	EGRESS
H	SLIDER	9' - 0"	5' - 0"	Y	1		0.28	LOW E / CLEAR	TEMP GLASS
I	FIXED	2' - 6"	6' - 6"		2		0.28	LOW E / CLEAR	
J	FIXED	5' - 0"	6' - 6"		1		0.28	LOW E / CLEAR	
K	FIXED	4' - 0"	2' - 6"		1		0.28	LOW E / CLEAR	TRANSOM
L	FIXED	4' - 0"	5' - 0"		1		0.28	LOW E / CLEAR	
M	FIXED	3' - 0"	2' - 6"		2		0.28	LOW E / CLEAR	TRANSOM
N	SLIDER	6' - 0"	5' - 0"		1		0.28	LOW E / CLEAR	
O	FIXED	3' - 0"	4' - 0"		2		0.28	LOW E / CLEAR	
P	FIXED	5' - 0"	4' - 0"		1		0.28	LOW E / CLEAR	
Q	FIXED	3' - 0"	6' - 6"		4		0.28	LOW E / CLEAR	
R	FIXED	5' - 0"	6' - 6"		2		0.28	LOW E / CLEAR	
S	FIXED	4' - 0"	4' - 0"		1		0.28	LOW E / CLEAR	
T	FIXED	4' - 0"	6' - 6"		2		0.28	LOW E / CLEAR	

DOOR SCHEDULE LOT 1

DOOR NO.	LOCATION	SIZE WIDTH	SIZE HEIGHT	DOOR TYPE	TEMP. GLASS	DOOR THK.	U-VAL (MIN.)	REMARKS
MAIN FLOOR								
101	ENTRY	PR 3' - 0"	8' - 0"	B	Y	1-3/4"	0.28	TEMP GLASS
102	OFFICE/BEDROOM-1	PR 2' - 8"	8' - 0"	B		1-3/4"		
103	OFFICE CLOSET	PR 2' - 8"	8' - 0"	B		1-3/4"		
104	BATH-1	2' - 8"	8' - 0"	A		1-3/4"		
105	ENTRY CLOSET	2' - 8"	8' - 0"	A		1-3/4"		
106	POWDER	2' - 8"	8' - 0"	A		1-3/4"		
107	MUD ROOM	2' - 8"	8' - 0"	F		1-3/4"		
108	GARAGE	3' - 0"	8' - 0"	A		1-3/4"		20 MIN FIRE-RATED, SELF-CLOSING
109	MECHANICAL	3' - 0"	8' - 0"	A		1-3/4"		20 MIN FIRE-RATED, SELF-CLOSING
110	GARAGE	18' - 0"	8' - 0"	E		1-3/4"		
111	DINING	12' - 0"	8' - 0"	D	Y	1-3/4"	0.28	TEMP GLASS
112	KITCHEN	9' - 0"	8' - 0"	G	Y	1-3/4"	0.28	TEMP GLASS
UPPER FLOOR								
201	BEDROOM-2	2' - 8"	8' - 0"	A		1-3/4"		
202	BEDROOM-2 CLOSET	PR 2' - 6"	8' - 0"	B		1-3/4"		
203	BATH-2	2' - 6"	8' - 0"	A		1-3/4"		
204	BATH-3	2' - 8"	8' - 0"	A		1-3/4"		
205	BEDROOM-3	2' - 8"	8' - 0"	A		1-3/4"		
206	BEDROOM-3 CLOSET	PR 2' - 8"	8' - 0"	B		1-3/4"		
207	HALL CLOSET	PR 2' - 0"	8' - 0"	B		1-3/4"		
208	REC ROOM	2' - 8"	8' - 0"	A		1-3/4"		
209	REC ROOM CLOSET	PR 2' - 6"	8' - 0"	B		1-3/4"		
210	REC ROOM CLOSET	PR 2' - 6"	8' - 0"	B		1-3/4"		
211	LAUNDRY	3' - 0"	8' - 0"	A		1-3/4"		
212	PRIMARY BEDROOM	3' - 0"	8' - 0"	A		1-3/4"		
213	PRIMARY CLOSET	2' - 8"	8' - 0"	A		1-3/4"		
214	PRIMARY BATH	2' - 8"	8' - 0"	A		1-3/4"		
215	PRIMARY BATH	2' - 4"	8' - 0"	A		1-3/4"		
216	PRIMARY BAEDROOM	3' - 0"	8' - 0"	C	Y	1-3/4"	0.28	TEMP GLASS
217								

WINDOW & DOOR SCHEDULE NOTES:

1.) CONTRACTOR TO VERIFY ALL GLAZING SIZING, AND DOOR DIMENSIONS IN FIELD PRIOR TO ROUGH FRAMING & ORDERING OF GLAZING/WINDOW/DOOR MATERIALS. REVIEW SIZES AND ANY DISCREPANCIES W/ ARCHITECT.

2.) ALL GLAZING TO BE "LOW E", INSULATED GLASS UNLESS NOTED OTHERWISE.

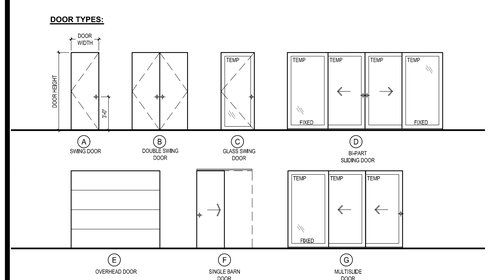
3.) ALL OPERABLE WINDOWS TO HAVE SCREENS.

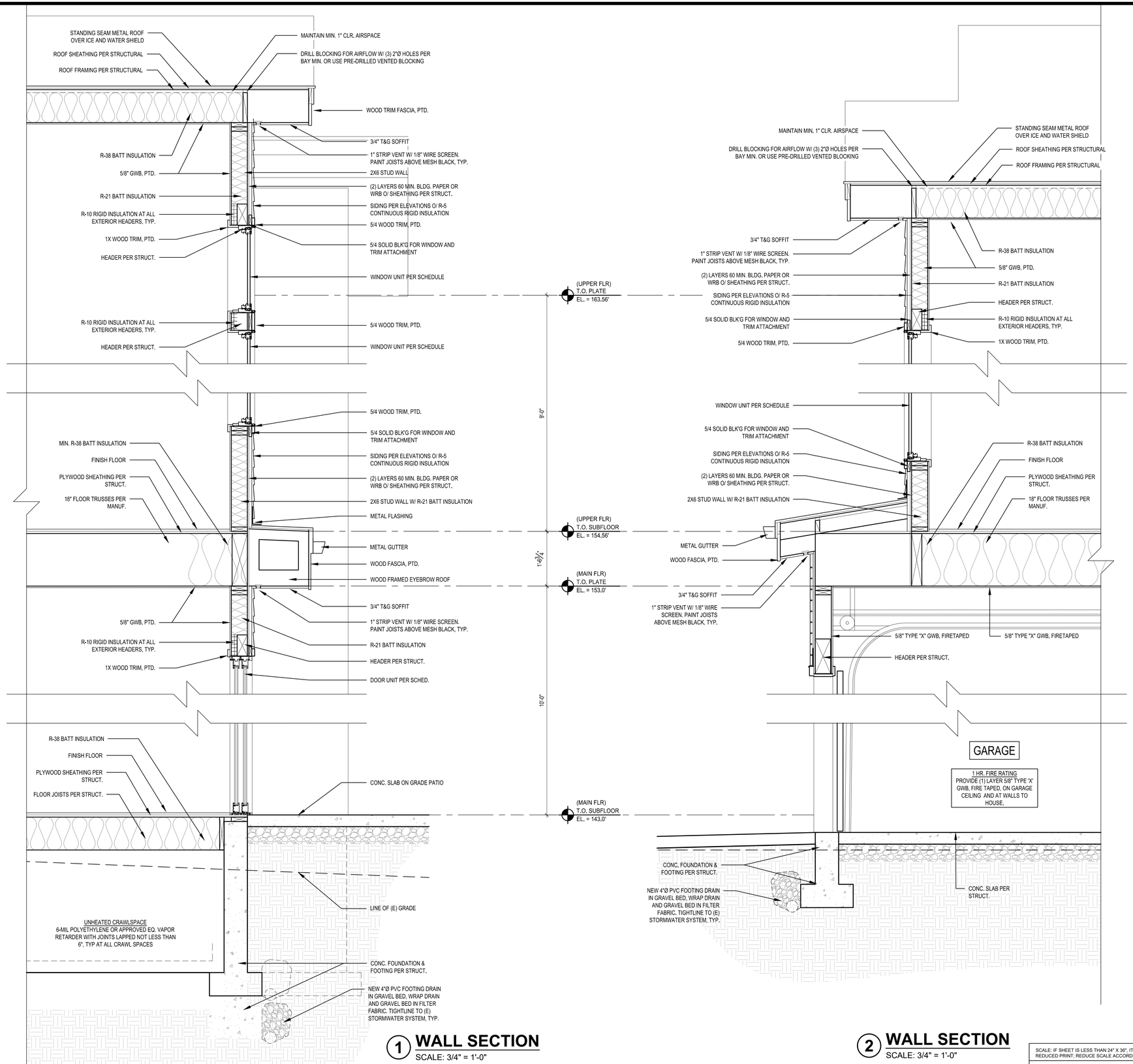
4.) GLAZING INDOORS AND/OR WITHIN 24" OF A DOOR TO BE TEMPERED. SEE EXTERIOR ELEVATION FOR TEMP. GLASS LOCATION & EGRESS WINDOWS.

5.) 2018 WSEC & VIAQ RESIDENTIAL PRESCRIPTIVE OPTION 3 ADOPTED. GLAZING AREA INDICATED UNLIMITED. SEE ENERGY NOTE AT A1.0 SHEET FOR DETAILS.

6.) ALL WINDOWS AND DOORS WITHOUT A BUG ARE EXISTING TO REMAIN.

DOOR TYPES:





1 **WALL SECTION**
SCALE: 3/4" = 1'-0"

2 **WALL SECTION**
SCALE: 3/4" = 1'-0"

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

PERMIT SET 09/25/24

STURMAN ARCHITECTS
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REGISTERED ARCHITECT
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STATE OF WASHINGTON
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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

WALL SECTIONS
DOOR & WINDOW SCHEDULES

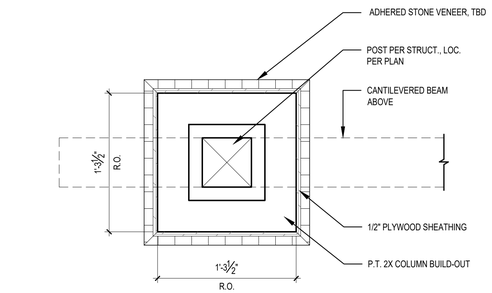
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

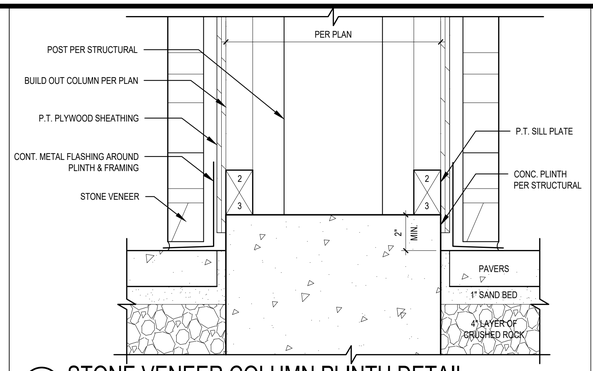
SHEET **A5.0**

PLOT DATE: 9/26/2024



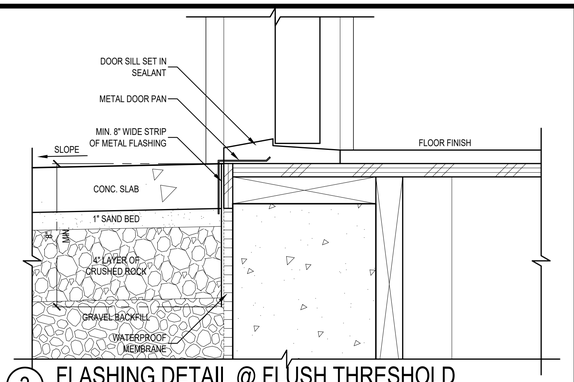
1 BUILT-OUT WOOD COLUMN PLAN DETAIL

SCALE: 1-1/2" = 1'-0"



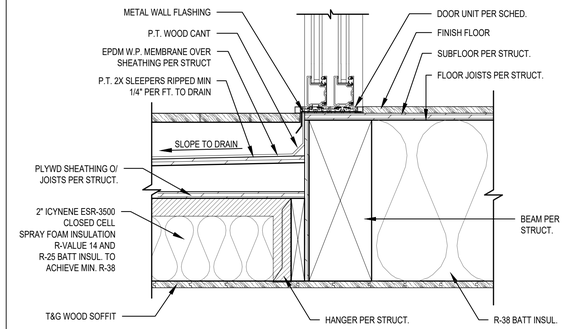
2 STONE VENEER COLUMN PLINTH DETAIL

SCALE: 3" = 1'-0"



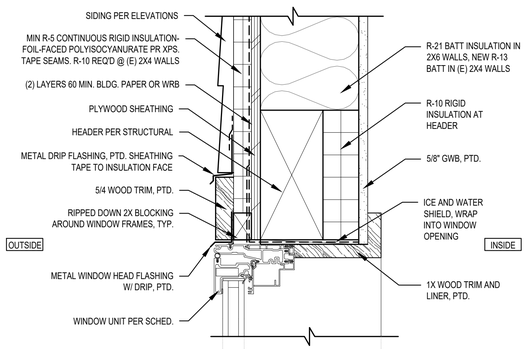
3 FLASHING DETAIL @ FLUSH THRESHOLD

SCALE: 3" = 1'-0"



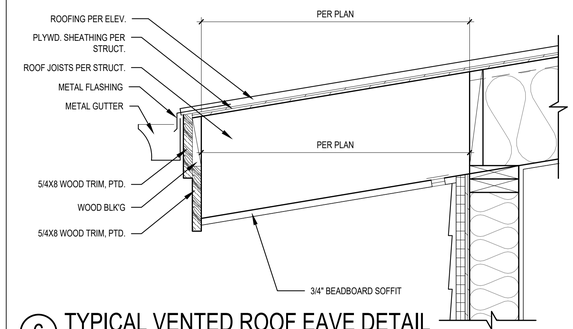
4 THRESHOLD @ DECK SECTION DETAIL

SCALE: 1-1/2" = 1'-0"



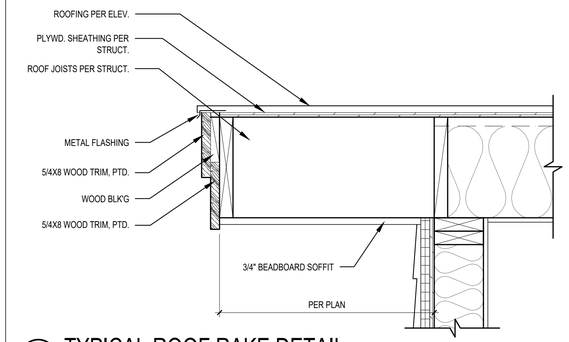
5 TYPICAL WINDOW HEAD DETAIL

SCALE: 3" = 1'-0" SIM. AT WINDOW JAMB



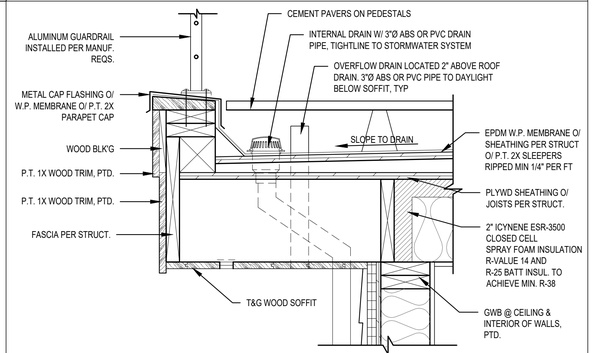
6 TYPICAL VENTED ROOF EAVE DETAIL

SCALE: 1-1/2" = 1'-0"



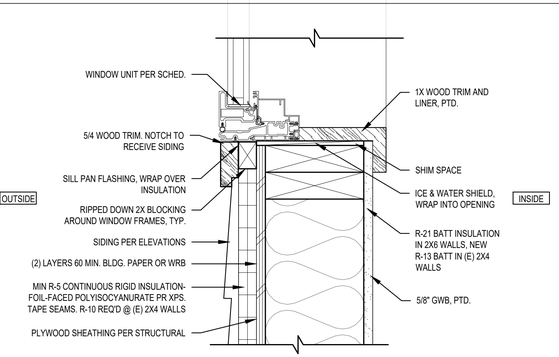
7 TYPICAL ROOF RAKE DETAIL

SCALE: 1-1/2" = 1'-0"



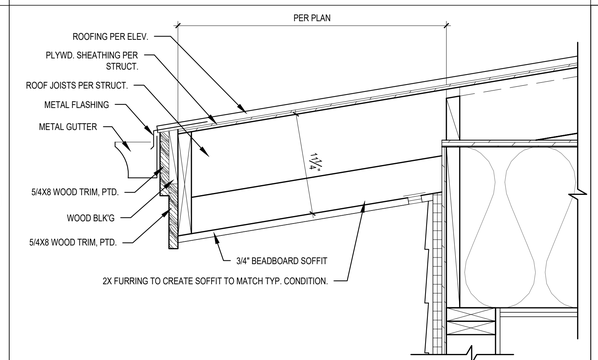
8 GUARDRAIL @ DECK SECTION DETAIL

SCALE: 1-1/2" = 1'-0"



9 TYPICAL WINDOW SILL DETAIL

SCALE: 3" = 1'-0"

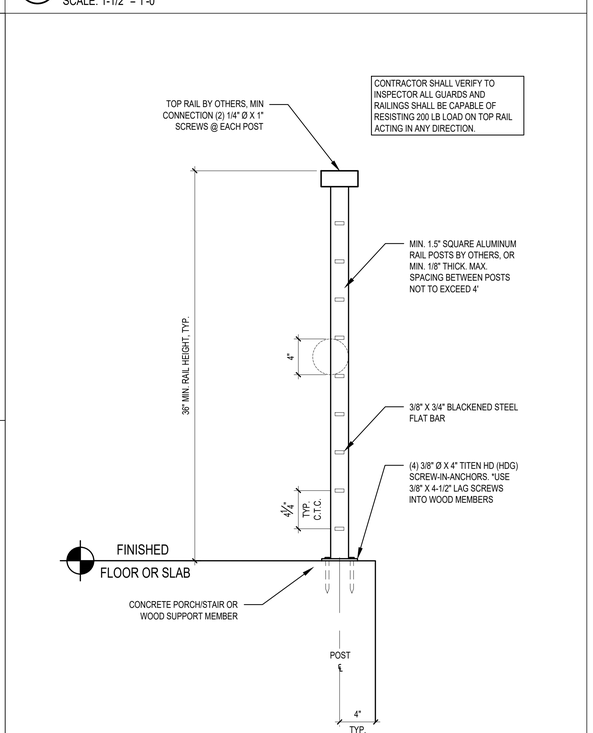


10 TYPICAL FURRED ROOF EAVE DETAIL

SCALE: 1-1/2" = 1'-0"

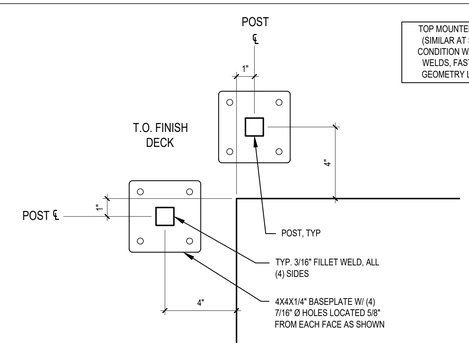
11 NOT USED

SCALE: 1-1/2" = 1'-0"



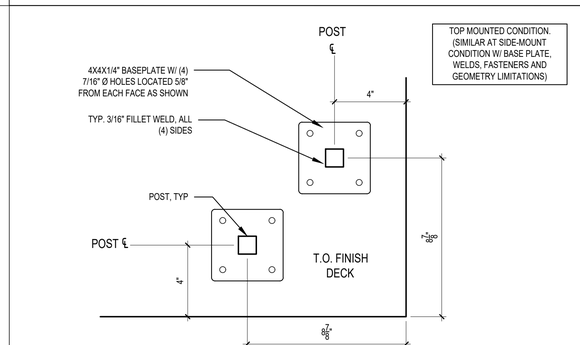
15 RAILING ATTACHMENT -TOP-MOUNT

SCALE: 1-1/2" = 1'-0"



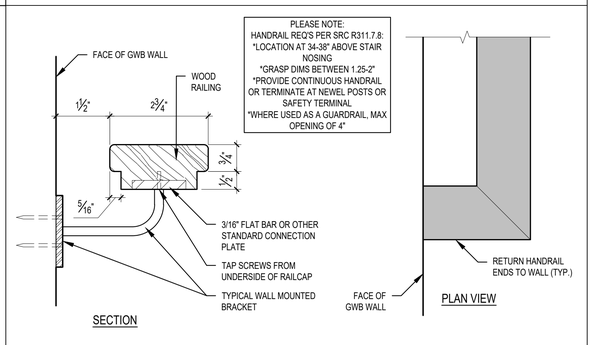
12 GUARDRAIL PLATE ATTACHMENT

SCALE: 3" = 1'-0" SIM. AT SIDE-MOUNTED



13 GUARDRAIL PLATE ATTACHMENT

SCALE: 3" = 1'-0" SIM. AT SIDE-MOUNTED



14 TYPICAL HANDRAIL DETAIL

SCALE: 6" = 1'-0"

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT; REDUCE SCALE ACCORDINGLY

PERMIT SET 09/25/24

STURMAN ARCHITECTS
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STATE OF WASHINGTON
5982

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FOREST CREEK ESTATES LOT 1

PERMIT SET

5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

ARCH DETAILS

REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET

A6.0

PLOT DATE: 9/26/2024

FOREST CREEK ESTATES LOT 1

S240325-1

PROJECT INFORMATION

CLIENT
SEASCAPE HOMES, LLC
PO BOX 40568
BELLEVUE, WA 98015
PHONE: (206) 972-9950

PROJECT ADDRESS
5222 FOREST AVE SE
MERCER ISLAND 98040

ARCHITECT
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CONTACT: BRAD STURMAN

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L120 ENGINEERING & DESIGN
13150 91ST PL NE
KIRKLAND, WA 98034
PHONE: (425) 636-3313
EMAIL: MTHURFJELL@L120ENGINEERING.COM
CONTACT: MANS THURFJELL, PE

CODES

ENGINEERED PER:
2018 (IRC) INTERNATIONAL RESIDENTIAL CODE
2018 (IBC) INTERNATIONAL BUILDING CODE

SHEET INDEX

COVER SHEET...S-0
STRUCTURAL GENERAL NOTES...S-1
FOUNDATION PLAN...S-2
FIRST FLOOR FRAMING PLAN...S-3
FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN...S-4
SECOND FLOOR FRAMING PLAN...S-5
SECOND FLOOR WALL FRAMING AND SHEAR WALL PLAN...S-6
ROOF FRAMING PLAN...S-7

STRUCTURAL DETAILS...SD-1
STRUCTURAL DETAILS...SD-2

MANS R. THURFJELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY° ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER
S240325-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
COVER SHEET

SHEET
S-0

GENERAL STRUCTURAL NOTES

DESIGN CRITERIA

CODE: 2021 IBC/IRC & AMENDMENTS AS ADOPTED BY THE REVIEWING AGENCY/COUNTY.

ROOF .....25 PSF SNOW (GROUND)

FLOORS

RESIDENTIAL.....40 PSF

BALCONY/DECK.....60 PSF

BASIC WIND SPEED .....100 MPH, EXPOSURE B

SEISMIC

MAPPED SPECTRAL ACCELERATION, Ss..... 1.45

MAPPED SPECTRAL ACCELERATION, S1..... 0.503

SOIL SITE CLASS.....D

GENERAL CONDITIONS

1. THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL DRAWINGS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES HE MAY FIND BEFORE PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT/ENGINEER SHALL IMMEDIATELY BE NOTIFIED IN WRITING OF ANY DISCREPANCIES.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
4. IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETAILS".
5. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
6. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THESE DRAWINGS.
7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY CONDITION WHICH IN HIS OPINION MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS TO THE STRUCTURE.
8. THE CONTRACTOR SHALL SUPERVISE AND DIRECT HIS WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION.
9. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE, AND ALL OTHER REGULATING AGENCIES EXERCISING AUTHORITY OVER ANY PORTION OF THE WORK.
10. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE THE NOTES, DRAWINGS, AND/OR SPECIFICATIONS DIFFER, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
11. REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE STRUCTURAL DRAWINGS.
12. NOTIFY ENGINEER OF ALL FIELD CHANGES PRIOR TO INSTALLATION.
13. DISCREPANCIES FOUND BETWEEN STRUCTURAL DRAWINGS AND OTHER DOCUMENTS ARE TO BE NOTED IN WRITING TO THE ENGINEER PRIOR TO CONSTRUCTION.
14. ALL CONSTRUCTION SHALL BE DONE WITH MATERIALS, METHODS, AND WORKMANSHIP ACCEPTED AS GOOD PRACTICE BY THE CONSTRUCTION INDUSTRY IN CONFORMANCE TO THE PROVISIONS OF THE "INTERNATIONAL BUILDING CODE" (IBC), AND STANDARDS REFERENCED THEREIN.

FOUNDATION

1. FOUNDATION DESIGN PARAMETERS PER REPORT PROVIDED BY GEOTECH CONSULTANTS DATED 3/18/2020, WITH LETTER DATED 12/06/2022:
   FOOTING BEARING PRESSURE: 2000 PSF
   LATERAL EARTH PRESSURE:
   ACTIVE: 35 PCF (FREE) 50 PCF (RESTRAINED)
   PASSIVE: 300 PCF
   COEFFICIENT OF BASE FRICTION: 0.45
2. SUBGRADE PREPARATION, DRAINAGE PROVISIONS, AND OTHER RELEVANT SOIL CONSIDERATIONS ARE TO BE IN ACCORDANCE WITH THE JURISDICTIONAL REQUIREMENTS.
3. ALL FOUNDATIONS ARE TO BEAR ON COMPETENT NATIVE SOILS OR STRUCTURAL FILL. STRUCTURAL FILL IS TO BE COMPACTED TO 95% DENSITY PER ASTM D-1557.
4. OVER-EXCAVATION MAY BE REQUIRED TO ACHIEVE COMPETENT SOIL BEARING, AS RECOMMENDED PER GEO REPORT (NOTED ABOVE).

CONCRETE

1. REFERENCE STANDARDS: ACI-301, ACI-318, IBC.
   MINIMUM CONCRETE STRENGTH (28 DAYS):
   FOOTINGS AND STEM WALLS.....2,500 PSI - 5 SACK MIX
   BASEMENT FOUNDATION RETAINING WALLS.....2,500 PSI - 5.5 SACK MIX
   SLAB-ON-GRADE.....2,500 PSI - 5 SACK MIX
   SLAB-ON-GRADE.....EXPOSED WEATHERING SURFACES.....3,000 PSI - 5.5 SACK MIX
   AIR-ENTRAINMENT 2.5% TO 5.5% FOR EXPOSED CONCRETE.
2. MIXING: COMPLY WITH ACI-301. DO NOT EXCEED THE AMOUNT OF WATER SPECIFIED IN THE APPROVED MIX. PROPORTIONS OF AGGREGATE TO CEMENT SHALL BE SUCH AS TO PRODUCE A DENSE WORKABLE MIX WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER
3. PLACING: COMPLY WITH ACI-301. PROVIDE A 3/4 INCH CHAMFER ALL EXPOSED CONCRETE EDGES, UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS.
4. SLUMP: 4" PLUS OR MINUS ONE INCH. DO NOT ADD WATER TO MIX TO INCREASE SLUMP. GREATER SLUMP, ACCELERATED SET, OR HIGH EARLY STRENGTH MAY BE ACHIEVED BY USING APPROVED ADMIXTURES.
5. CURING: COMPLY WITH ACI-301. KEEP CONCRETE MOIST FOR SEVEN DAYS MINIMUM.
6. JOINTING: PROVIDE ADEQUATE JOINTING TO MINIMIZE EFFECTS OF VOLUME CHANGE. JOINTS SHOWN MAY BE ADJUSTED AT CONTRACTOR'S OPTION, WITH PRIOR APPROVAL FROM ENGINEER.
7. WEATHER EXTREMES: COMPLY WITH ACI 305R FOR HOT WEATHER. COMPLY WITH ACI 306R FOR COLD WEATHER.
8. WATER/CEMENT RATIO SHALL NOT EXCEED 0.50 (BY WEIGHT), TYPICAL.

REINFORCING STEEL

1. REFERENCE STANDARDS: ACI "DETAILING MANUAL" (SP-66); CRSI MANUAL OF STANDARD PRACTICE (MSP-1)
2. MATERIALS:
   REINFORCING STEEL: ASTM A615, GRADE 60
3. SPLICES:
   LAP CONTINUOUS REINFORCING BARS 48 BAR DIAMETERS, UNLESS OTHERWISE NOTED. PROVIDE CORNER BARS FOR ALL HORIZONTAL REINFORCEMENT.
4. COVER:
   FOOTINGS .....3 INCHES
   SLABS.....2 INCHES
5. FORMED SURFACES:
   WEATHER FACE ...1-1/2 INCHES, #5 BARS AND SMALLER 2 INCHES, # 6 BARS AND LARGER
   INTERIOR FACE ...3/4 INCH FOR SLABS AND WALLS 1-1/2 INCHES FOR BEAMS AND COLUMNS

STRUCTURAL AND MISC. STEEL

1. REFERENCE STANDARDS: DESIGN, FABRICATION AND ERECTION ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
2. MATERIALS:
   BOLTS - ASTM A307, UNLESS OTHERWISE NOTED
   WF BEAMS - ASTM A572-50 (Fy = 50,000 PSI)
   HSS ROUND COLUMNS - ASTM A500 Gr. B (Fy = 42,000 PSI)
   HSS RECTANGULAR COLUMNS - ASTM A500 Gr. B (Fy = 46,000 PSI)
   ALL OTHER STEEL - ASTM A36 (Fy = 36,000 PSI)

STRUCTURAL STEEL WELDING

1. CONFORM TO THE AWS CODES D1.1 AND D1.3. ALL WELDING TO BE DONE ONLY BY WABO CERTIFIED WELDERS AND HAVE SPECIAL INSPECTION BY WABO CERTIFIED INSPECTION AGENCY OR BE DONE BY WABO CERTIFIED FABRICATION SHOP. EITHER SPECIAL INSPECTION REPORT OR WABO FABRICATION SHOP CERTIFICATION SHOULD BE AVAILABLE ON SITE FOR THE BUILDING INSPECTOR. WELDS NOT SPECIFIED ARE TO BE 1/4" CONTINUOUS FILLET MINIMUM. USE DRY E70 ELECTRODES.

DIMENSIONAL LUMBER

1. MEET REQUIREMENTS OF PS 20-70 AND NATIONAL GRADING RULES FOR SOFTWOOD DIMENSIONAL LUMBER. BEAR STAMP OF WWPA.
2. MINIMUM DIMENSIONAL LUMBER GRADES TO BE:

WALL STUDS:	2x, HF STUD GRADE, 3x HF #2
WALL PLATES:	2x HF STANDARD GRADE
	2x, 3x PRESSURE TREATED HF STANDARD GRADE AT FOUNDATION
JOISTS:	2x6 HF STUD GRADE
	2x8 AND UP HF #2
BEAMS, HEADERS:	6x DF#2; 4x DF#2, WWPA GRADING.
POSTS:	4x, 6x, DF #2

   LUMBER NOT NOTED TO BE HF #2.
3. PROVIDE STANDARD CUT WASHERS FOR NUTS BEARING AGAINST WOOD, AND 1/4"x3" HOT-DIPPED GALVANIZED SQUARE PLATE WASHERS FOR ALL ANCHOR BOLTS.
4. ALL SILLS OR PLATES RESTING ON CONCRETE OR MASONRY, WHICH IS IN CONTACT WITH OR RESTING ON FOUNDATIONS, SHALL BE PRESSURE TREATED HEM FIR OR BETTER. ALL BEARING WALL PLATES SHALL HAVE 5/8"Ø ANCHOR BOLTS PLACED A MAXIMUM 9" FROM THE END OF A PLATE AND SPACED AT INTERVALS SHOWN ON THE SHEARWALL SCHEDULE (MAXIMUM 4'-0" O.C. SPACING). ALL TREATED PRESSURE TREATED WOOD MEMBERS SHALL COMPLY WITH AWP4 U1 AND AWP4 M4 STANDARDS.
5. CAST-IN-PLACE ANCHOR BOLTS SHALL HAVE A MINIMUM 7" EMBEDMENT. ALTERNATE 5/8"Ø EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT II ANCHORS EMBED 7", OR APPROVED ALTERNATE.
6. BOLTS IN WOOD BEAMS SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE OF THE MEMBER.
7. NAILS: NAILING IN ACCORDANCE WITH IBC TABLE 2304.10.1. 16D NAILS MAY BE 16D SINKERS (0.148 x 3-1/4") UNLESS NOTED OTHERWISE.
8. PRESURE TREATED WOOD: ALL NAILS INTO PT WOOD SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 OR STAINLESS STEEL. ALL METAL CONNECTORS IN CONTACT WITH PT WOOD SHALL BE HOT DIPPED GALVANIZED AND MEET ASTM A653 CLASS G185 (1.85 oz OF ZINC PER SQ FT MINIMUM) OR TYPE 304 / 316 STAINLESS STEEL. SIMPSON Z-MAX CONNECTORS MEET THIS REQUIREMENT. FASTENERS AND CONNECTORS USED TOGETHER SHALL BE OF THE SAME TYPE (E.G. HOT DIPPED NAILS WITH HOT DIPPED HANGERS)

MANUFACTURED TIMBER

PRODUCT	APPLICATION	WIDTHS
LSL RIMBOARD (1.3E)	RIMBOARD OR STAIR STRINGER	1 ¼"
TIMBERSTRAND LSL (1.3E)	HEADER, BEAM, OR COLUMN < 9" DEPTH	3 ½"
TIMBERSTRAND LSL (1.55E)	RIMBOARD, HEADER, OR < 9" DEPTH BEAM	1 ¾",3 ½"
TIMBERSTRAND LSL (1.3E)	WALL STUD 2X4 & 2X6	1 ½"
(1.5E)	WALL STUD > 2X6	1 ½"
MICROLLAM LVL (2.0E)	HEADER, BEAM	1 ¾"
PARALLAM PSL (2.2E)	HEADER, BEAM	3 ½", 5 ¼", 7"
PARALLAM PSL (1.8E)	COLUMN	3 ½", 5 ¼", 7"

WOOD STRUCTURAL CONNECTIONS

1. ALL FRAMING ANCHORS, POST CAPS, BASES, HANGERS, STRAPS, ETC., SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY OR ENGINEER APPROVED EQUAL.

BRICK VENEER ANCHORAGE

1. D/A 2135 SEISMIC VENEER ANCHORS BY HOHMANN & BARNARD OR APPROVED EQUAL AT WOOD STUD WALL.
2. D/A 5213 SEISMIC VENEER ANCHORS BY HOHMANN & BARNARD OR APPROVED EQUAL AT CONCRETE WALL.
3. PLACE ANCHORS AT 16" O.C. VERTICAL AND 16" HORIZONTAL. PROVIDE #9 GA HORIZONTAL JOINT REINFORCING WIRE . ATTACH TO WOOD STUDS WITH #8 CORROSION RESISTANT SCREWS AND TO CONCRETE WITH 1/4"Ø EXPANSION ANCHORS.
4. AT ALL OPENINGS LARGER THAN 16" IN EITHER DIRECTION, ANCHORS TO BE SPACED WITHIN 12" OF THE OPENING AT ALL SIDES.
5. USE TYPE N MORTAR COMPLYING WITH ASTM C270

GLU-LAMINATED TIMBER

1. GLU-LAMINATED WOOD BEAMS, DOUGLAS FIR COAST REGION, KILN DRIED, AITC SPECIFICATION 24F-V4 FOR SIMPLE SPANS (TYPICAL), AND 24F-V8 FOR CANTILEVER-SPANS (WHERE SPECIFIED). PROVIDE AITC STAMP ON TIMBER AND SUBMIT CERTIFICATE TO ARCHITECT AND ENGINEER. MATERIALS MUST BE OBTAINED FROM AN AITC APPROVED FABRICATOR. ALL GLU-LAM BEAMS SHALL FIT SNUG AND TIGHT IN THEIR CONNECTIONS AND DEVELOP FULL BEARING AS INDICATED. NO SUBSTITUTION OF OTHER SPECIES. GLU-LAM ADHESIVE TO BE "WET- USE" TYPE. PROVIDE 2000 FT RADIUS CAMBER, U.N.O.
2. MANUFACTURER'S CERTIFICATE SHALL BE PRESENTED TO THE BUILDING INSPECTOR PRIOR TO INSTALLATION.

WOOD SHEATHING

1. ROOF SHEATHING: 7/16" MINIMUM THICKNESS APA RATED PRP-108 PERFORMANCE STANDARD, EDGE SEALED PANELS DESIGNED TO SPAN 24 INCHES EITHER PARALLEL OR PERPENDICULAR TO LONG AXIS OF PANEL WITH 35 PSF LIVE LOAD. LAY UP WITH MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL 6 INCHES ON CENTER ALONG EDGES, AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. USE 10D COMMON NAILS, U.N.O. PROVIDE EXP-1 RATING.
2. FLOOR SHEATHING: 3/4" NOMINAL APA RATED PANELS, PRP-108 PERFORMANCE STANDARD, NAILED AND GLUED. CONFORM TO IBC IDENTIFICATION INDEX 40/20 FOR SUPPORTS TO 20 INCHES ON CENTER. ADHESIVES ARE TO CONFORM TO APA SPECIFICATION AFG-01. PROVIDE T&G EDGES AT LONG PANEL EDGES. LAY UP WITH MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL 6 INCHES ON CENTER AT END SUPPORTS AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. USE 10D COMMON NAILS. PROVIDE EXP-1 RATING.
3. WOOD SHEARWALL SHEATHING: PLYWOOD OR OSB APA RATED PRP-108 PERFORMANCE STANDARD PER IBC STD 23-2 OR 23-3 TYPE C-C OR C-D. USE EXTERIOR ADHESIVES. USE 8d COMMON NAILS. PROVIDE EXP-1 RATING. ALL VERTICAL JOINTS OF PANEL SHEATHING SHALL OCCUR OVER STUDS. HORIZONTAL JOINTS SHALL OCCUR OVER BLOCKING EQUAL IN SIZE TO THE STUDDING. REFER TO SHEAR WALL SCHEDULE FOR PANEL THICKNESS.
4. NAILING SPECIFICATIONS: CONFORM TO IBC SECTION 2304.10 "CONNECTIONS AND FASTENERS." UNO ON PLANS, NAILING PER TABLE 2304.10.1, AND FOR ROOF/FLOOR DIAPHRAGMS AND SHEARWALLS SHALL BE PER DRAWINGS. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING. ALTERNATE NAILS MAY BE USED BUT ARE SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. SUBSTITUTION OF STAPLES FOR THE NAILING OF RATED SHEATHING IS SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

SHOP DRAWINGS AND SUBMITTALS

1. SUBMIT 2 SETS OF PRINTS AND 1 SET OF REPRODUCIBLES FOR REVIEW FOR:
   A) REINFORCING STEEL C) GLU-LAMINATED BEAMS
   B) MISCELLANEOUS STEEL D) PRE-MANUFACTURED WOOD TRUSSES
2. SUBMIT 3 COPIES FOR REVIEW PRIOR TO FABRICATION FOR:
   A) CONCRETE DESIGN MIX
   B) CONCRETE INSERTS
   C) EPOXY ADHESIVES

INSPECTIONS

1. REFERENCE STANDARDS: IBC 110.
   INSPECTIONS ARE TO BE PERFORMED BY THE BUILDING OFFICIAL. INSPECTIONS REQUIRED ARE AS FOLLOWS:
2. SOIL: VERIFY SUBGRADE IS DRY DENSE AND DOES NOT HAVE STANDING WATER PRIOR TO POURING FOOTINGS.
3. CONCRETE: INSPECTIONS REQUIRED ONLY FOR DESIGN MIXES SPECIFIED GREATER THAN 2500 PSI.
   TAKE CONCRETE CYLINDERS AS REQUIRED. VERIFY SLUMP AND STRENGTH.
4. REINFORCING: VERIFY ALL REINFORCING IS PLACED IN ACCORDANCE WITH APPROVED PLANS. CHECK FOR REQUIRED COVER, SIZE AND GRADE.
5. WOOD: DIAPHRAGM NAILING, BLOCKING AND HOLD-DOWN CONNECTIONS.

ALTERNATES:

1. ALTERNATE ASSEMBLIES AND MATERIALS WILL BE CONSIDERED FOR REVIEW. ENGINEER MAY REQUEST PAYMENT FOR REVIEW; CONTRACTOR WILL BEAR BURDEN FOR ADDITIONAL PAYMENT AT NO ADDITIONAL COST TO OWNER.

SETTLEMENT SHRINKAGE:

1. DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 3/8 INCH PER STORY. ALL PLUMBING AND MECHANICAL DUCTS SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHERS MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE DEPTH OF THE FLOOR PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.

JOBSITE SAFETY:

1. THE ENGINEER AND/OR ARCHITECT HAVE NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM HIS WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER AND/OR ARCHITECT SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE HIM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, SUPPLIERS OR THEIR EMPLOYEES, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL, OR OCCUPANCY BY ANY PERSON.

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
AYC	ALASKAN YELLOW CEDAR
BB	BOX BEAM
BF	BOTTOM FLUSH
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BP	BOTTOM PLATE
BRG	BEARING
BTWN	BETWEEN
BSMT	BASEMENT
B/W	BOTTOM OF WALL
CANT	CANTILEVER
CJ	CONTROL JOINT
CLG.	CEILING
CLJ	CEILING JOIST
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
DET	DETAIL
DF	DOUGLAS FIR (SOUTH)
DFL	DOUGLAS FIR LARCH
DIM	DIMENSION
DJ	DOUBLE JOIST
DIA	DIAMETER
DN	DOWN
DS	DOWN SPOUT
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	EDGE NAILING (PANEL)
EOR	ENGINEER OF RECORD
EQ	EQUAL
ES	EACH SIDE
EW	EACH WAY
FB	FLUSH BEAM
FIN	FINISH
FL	FLOOR
FLSHG	FLASHING
FND	FOUNDATION
FP	FIREPLACE
FT	FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GLB	GLULAM BEAM
GR	GRADE
GYP	GYPSUM WALL BOARD
HDG	HOT-DIPPED GALVANIZED
HDR	HEADER
HF	HEM FIR
HGT	HEIGHT
HT	HEIGHT
IN	INCH
JT	JOINT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
NB	NON-BEARING
NO	NUMBER
OC	ON CENTER
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
RAF	RAFTER
REF	REFERENCE
REINF	REINFORCEMENT
REQD	REQUIRED
REQS	REQUIREMENTS
SF	SQUARE FOOT
SHTG	SHEATHING
SIM	SIMILAR
SPF	SPRUCE PINE FIR
STD	STANDARD
SYP	SOUTHERN YELLOW PINE
T/	TOP OF
T/BM	TOP OF BEAM
T/CONC	TOP OF CONCRETE
T/PL	TOP OF PLATE
T/SLAB	TOP OF SLAB
T/ST	TOP OF STEEL
T/W	TOP OF WALL
TF	TOP FLUSH
TJ	TRIPLE JOIST
TP	TOP PLATE
TR	THREADED ROD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UPA	UNDER POST ABOVE
UWA	UNDER WALL ABOVE
VCB (V.C.B.)	VERTICAL CRUSH BLOCKING
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
WC	WESTERN CEDAR
WP	WATERPROOF
WWF	WELDED WIRE FABRIC

MANS R. THURTJELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME

FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER

S240325-1

DRAWN BY - MR

CHECKED BY - MRT

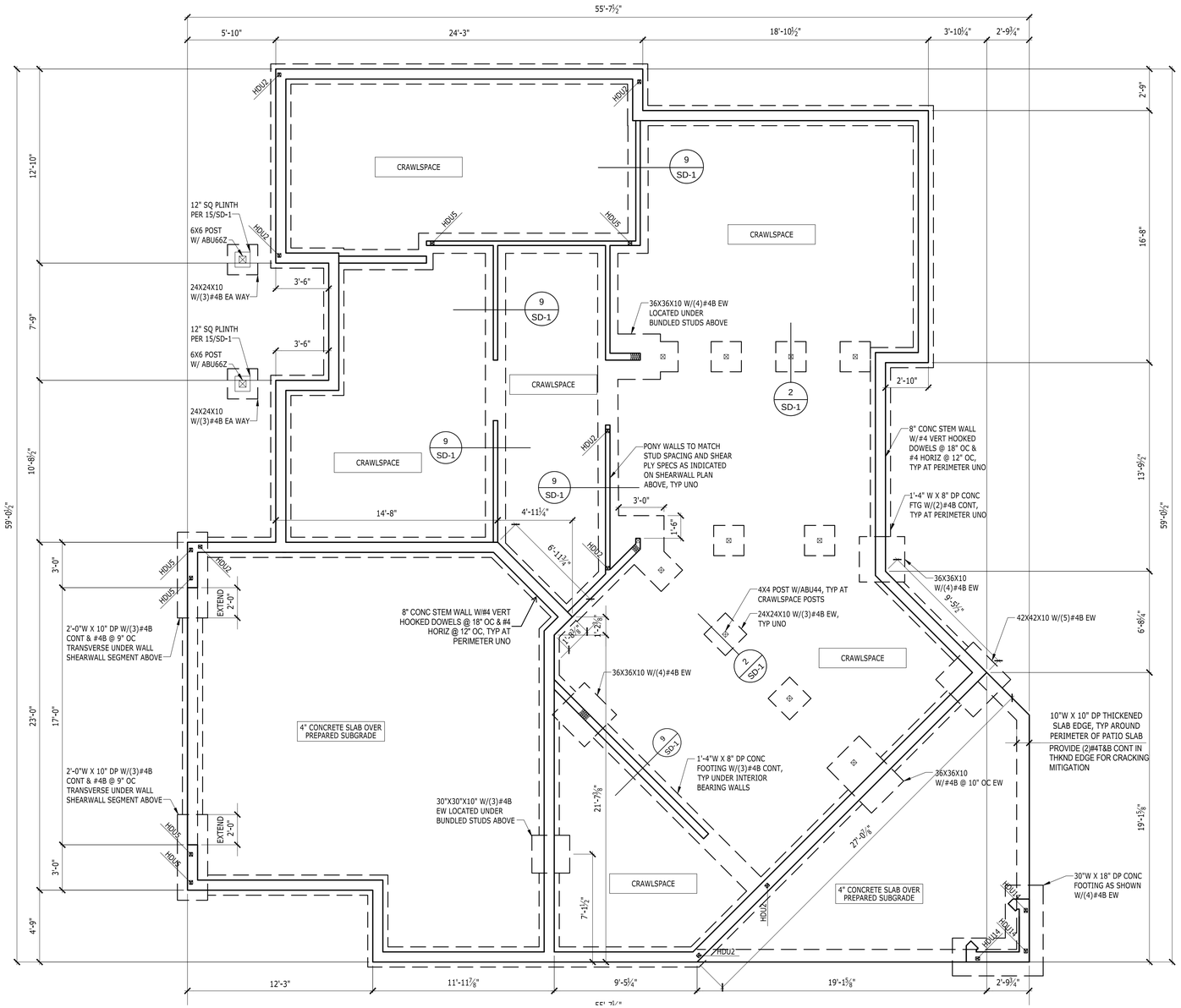
SHEET DATE - 05/16/2024

SCALE

24X36 SHEET:1/4"=1'-0"

DESCRIPTION: STRUCTURAL GENERAL NOTES

SHEET: S-1



FOUNDATION PLAN

FOUNDATION NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH. PROVIDED DIMENSIONS ARE TO FACE OF CONCRETE STEM WALL OR CENTER OF INDIVIDUAL FOOTING. OUTSIDE FACE OF STEM WALL ALIGNS WITH OUTSIDE FACE OF STUD WALL UNO. STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD/HTT HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
3. VERIFY ALL T/CONC ELEVATIONS ON ALL CONCRETE INCLUDING PARTIAL HEIGHT RETAINING WALLS. CONCRETE TO EXTEND MIN 8" ABOVE FINISHED GRADE. PROVIDE 1" RECESS AT DOUBLE SIDED SHEARWALLS TO ACCOMODATE 3X SILL PLATE.
4. FOOTINGS ARE TO BEAR ON COMPETENT NATIVE SOIL OR STRUCTURAL FILL CAPABLE OF SUPPORTING THE ASSUMED BEARING PRESSURE PER GENERAL NOTES. REFERENCE GEOTECHNICAL REPORT (IF AVAILABLE) FOR SUBGRADE PREPARATION, FILL REQUIREMENTS, FOOTING DRAINS, AND OTHER REQUIREMENTS. REFERENCE ARCH SET (OR OTHERS IF APPLICABLE) FOR FOOTING DRAINS AROUND PERIMETER OF BUILDING.
5. PRIOR TO POURING CONCRETE CONTRACTOR SHALL LOCATE AND VERIFY LOCATIONS OF ALL FOUNDATION OPENINGS, PENETRATIONS, AND SLOPES.
6. ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDG OR SIM).
7. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 (36KSI) HDG OR SIM. ANCHOR BOLTS TO BE 5/8"Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (72" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HDG NUT AND WASHER INSTALLED OVER 3"X3"X1/4" HDG PLATE WASHER WITH AND EDGE OF THE PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS W/ 2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF THE WALL.
8. HOLDOWNS BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER SPECIFICATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. HOLDOWN THREADED RODS SHALL BE ASTM F1554 (36KSI) HDG UNO. EMBEDDED END OF THREADED ROD TO HAVE 3"X3"X1/4" HDG PLATE WASHER BETWEEN TWO HAND-TIGHTENED HDG STANDARD NUTS.
9. CJ INDICATES CONTROL JOINT.
10. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
11. EXTERIOR STAIRS AND STEEL-FRAMED STAIRS BY OTHERS.
12. TYPICAL DETAILS:
    - 1/SD-1 TYP STEMWALL
    - 2/SD-1 TYP INTERIOR FOOTING
    - 3/SD-1 TYP CRAWLSPACE VENT
    - 4/SD-1 TYP FOOTING STEP
    - 5/SD-1 TYP CORNER BARS REQ'T
    - 7/SD-1 TYP CONSTRUCTION JOINT
    - 8/SD-1 TYP BAR BEND AND HOOK DETAIL
    - 11/SD-1 TYP HOLDOWN INSTALLATION
    - 12/SD-1 TYP PONY WALL DETAIL

HOLDOWN SCHEDULE			
MODEL	ANCHOR	EMBEDMENT	MIN END POST
CS16/CS14	-	-	1-2X EA
MST#	-	-	2-2X OR 3X
STHD14/STHD14RJ	-	-	2-2X OR 3X
HDU2	5/8" TR	12"	2-2X OR 3X
HDU5	5/8" TR	12"	2-2X
HDU8	7/8" TR	12"	3-2X
HDU11	1" TR	12"	6X6
HDU14	1" TR	15"	6X6
HD19	1 1/4" TR	15"	6X6

FOUNDATION LEGEND

- INDICATES STEP AT T/FOUNDATION
- INDICATES STEP AT B/FOUNDATION
- TANK WALL (TOP OF WALL NOT TO STEP WITHIN HATCHED REGION)
- HOLDOWN BY SIMPSON (STHD/HDU/HD/HTT, TYP) — STHD14 (EXAMPLE)
- FOOTING CENTERED ON POST (L X W X T) — 24 X 24 X 10 (EXAMPLE)

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ENGINEERING & DESIGN

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-			

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LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

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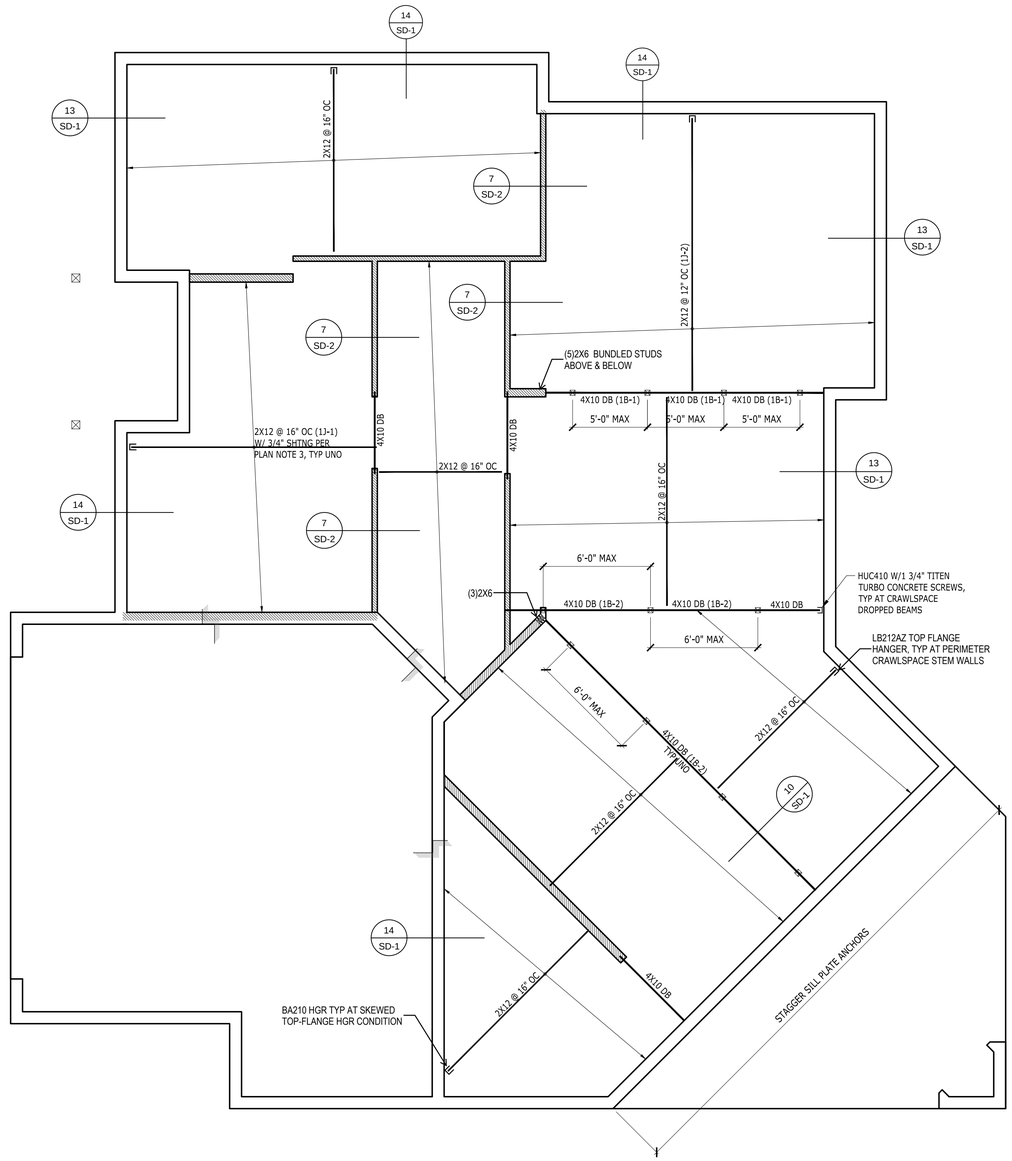
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SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION: FOUNDATION PLAN

SHEET: S-2



FIRST FLOOR FRAMING PLAN

FLOOR FRAMING NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. FLOOR SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 8d COMMON NAILS (0.131" X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED "WITH EDGE NAILING" OR "W/EN", AND 12" O.C. IN THE FIELD, UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
4. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING. MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
5. ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDG OR SIM).
6. ALL BEAMS SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
7. ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
8. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
9. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
10. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
11. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
12. ENGINEERED FLOOR JOISTS AND FLOOR TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
14. TYPICAL DETAILS:
    - 9/SD-1 PONY WALL AT CRAWLSPACE
    - 10/SD-1 DROPPED BEAM AND POST AT CRAWLSPACE
    - 12/SD-1 OVERLAP STRAP AT PONY WALL

FRAMING LEGEND

- BLOCKED FLOOR DIAPHRAGM
- W10X15 - STEEL BEAM (EXAMPLE)
- GT - GIRDER TRUSS
- FLOOR BEAM
- INTERIOR BEARING WALL
- STRAP
- LOW ROOF
- 3 1/8" X 9" GLB (FH-5) - BEAM/HEADER CALL OUT (EXAMPLE)
  REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
  BEAM OR TRUSS MEMBER
- HANGER AS REQD

JOIST SPAN DIRECTION
FLOOR/ROOF TRUSS
EXTENTS OF SIMILAR JOISTS OR TRUSSES

TYPICAL JOIST HANGER SCHEDULE			
TJI210			
11 7/8"	2-PLY 11 7/8"	14"	2-PLY 14"
IUS2.06/11.88	MIU4.28/11	IUS2.06/14	MIU4.28/14
2X10			
1-PLY		2-PLY	
LUS210		LUS210-2	

TYPICAL BEAM HANGER SCHEDULE				
LVL / LSL / PSL				
	1 3/4"	3 1/2"	5 1/4"	7"
11 7/8"	HUS1.81/10	HHUS410	HGUS5.50/12	HGUS7.25/12
14"	HUS1.81/10	HHUS410	HGUS5.50/14	HGUS7.25/14

MARK R. THURTELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

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MERCER ISLAND, WA 98040

PROJECT NUMBER
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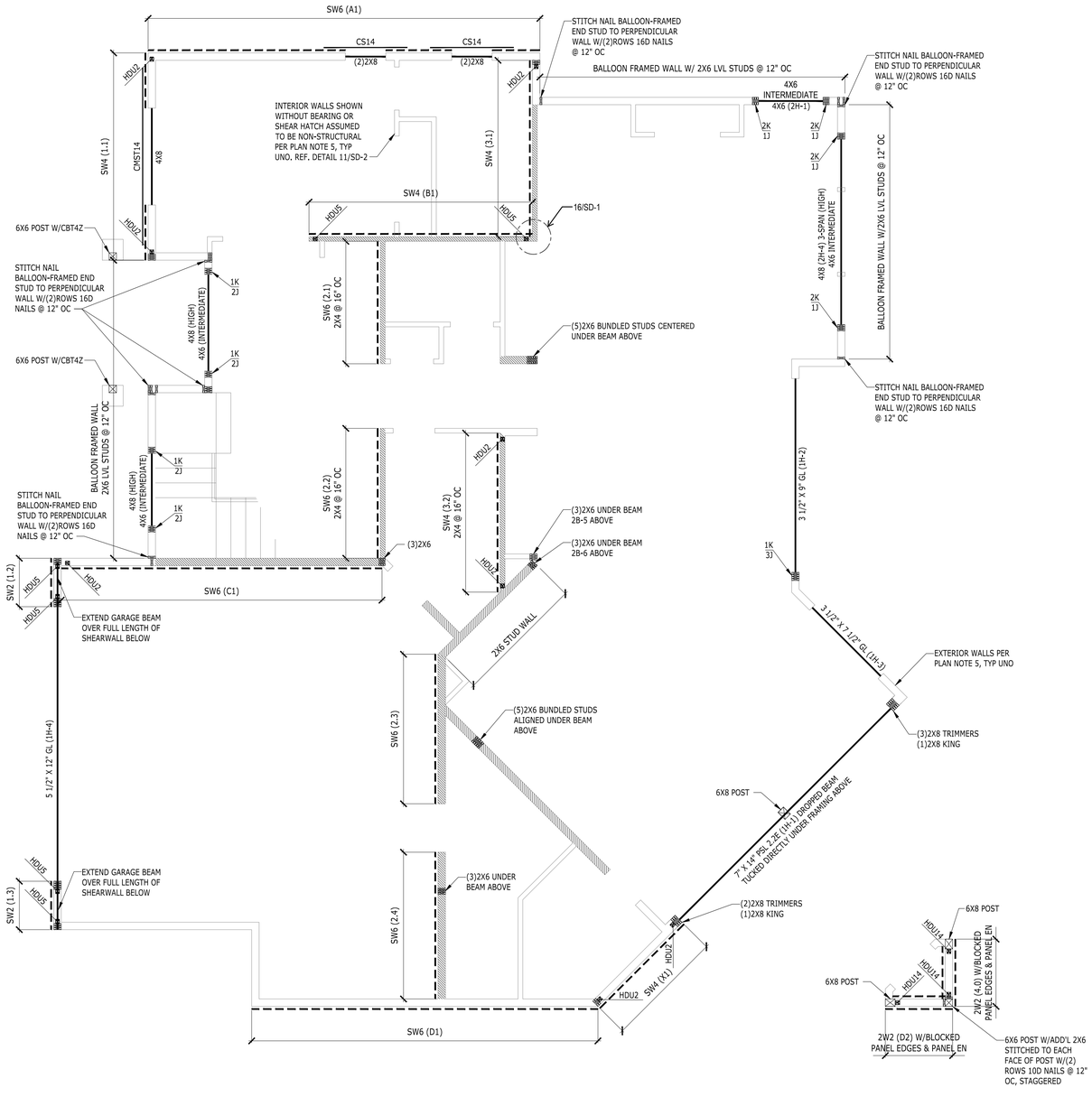
DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
FIRST FLOOR FRAMING PLAN
SHEET
S-3



FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEAR WALL SCHEDULE

WALL	SHEATHING	PANEL EDGE NAILING (COMMON (GALV) NAILS)	PANEL EDGE STUDS	ANCHOR BOLTS 5/8"Ø EMBED 7"	RIM CONNECTION		
					AT MUD SILL/ PLATE	AT ROOF EAVE TOP PLATE	AT SILL PLATE (SINKER NAIL .148Ø x 3 1/4")
SW6	7/16" APA PLY ONE SIDE	8d AT 6" O.C.	2x	48" O.C. IN 2x PLATE	LTP4 AT 24" O.C.	RBC AT 16" O.C.	16d AT 6" O.C.
SW4	7/16" APA PLY ONE SIDE	8d AT 4" O.C.	2x	32" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 12" O.C.	16d AT 4" O.C.
SW3	7/16" APA PLY ONE SIDE	8d AT 3" O.C.	3x	16" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 8" O.C.	16d AT 3" O.C.
SW2	7/16" APA PLY ONE SIDE	8d AT 2" O.C.	3x	12" O.C. IN 2x PLATE	LTP4 AT 12" O.C.	RBC AT 8" O.C.	16d AT 2" O.C.
2W4	7/16" APA PLY TWO SIDES	8d AT 4" O.C. EA SIDE	3x	24" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 4" O.C.
2W3	7/16" APA PLY TWO SIDES	8d AT 3" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 3" O.C.
2W2	7/16" APA PLY TWO SIDES	8d AT 2" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 12" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 2" O.C.

NOTES: 1) FOR NON-SHEAR WALL, PROVIDE ANCHOR BOLTS @ 72" O.C.

WALL FRAMING AND SHEAR WALL NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6"O.C.
5. EXTERIOR WALL STUDS SHALL BE 2X6 @ 16"O.C. (≤10'), 2X6 @ 12"O.C. (>10') UNO. INTERIOR WALL STUDS SHALL BE 2X4 @ 16"O.C. UNO. REFER TO ARCH SET FOR WALL THICKNESS REQUIREMENTS AT PLUMBING STACKS. ALL INTERIOR NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
6. PROVIDE ONE KING STUD AND ONE JACK STUD MINIMUM AT EVERY HEADER UNO. JACK STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE VERTICAL CRUSH BLOCKING WITHIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK STUDS.
7. SHEARWALL SHEATHING AND NAILING REQUIREMENTS PER SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE SW6 UNO.
8. ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE, FIELD NAILING AT 12" O.C. UNO.
9. PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
10. SHEARWALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C (4" O.C. @ SW2 AND 2W2). AT DOUBLE SIDED SHEARWALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEARWALL.
11. LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (.131Ø X 2.5") LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (.131X 1.5") RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (.148X 1.5").
12. WINDOW STRAP INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
13. STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
14. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 (36KSI) HDG OR SIM. ANCHOR BOLTS TO BE 5/8"Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (72" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HDG NUT AND WASHER INSTALLED OVER 3"X3"X1/4" HDG PLATE WASHER WITH AND EDGE OF THE PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS W/ 2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF THE WALL.
15. ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
16. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
17. TYPICAL DETAILS:

- 11/SD-1 TYP HOLDOWN INSTALLATION
- 12/SD-1 TYP PONY WALL DETAIL
- 16/SD-1 HOLDOWN AT CORNER WALLS
- 17/SD-1 HDU HOLDOWN FLOOR-TO-FLOOR
- 11/SD-2 FRAMING OVER NON-BEARING WALL
- 16/SD-2 WALL TOP PLATES SPLICE

- 1/SD-2 TYP NOTCHES AND HOLES IN WOOD STUDS
- 2/SD-2 FORCE-TRANSFER AROUND WINDOWS DETAIL
- 3/SD-2 TYP HEADER FRAMING

FRAMING AND SHEATHING LEGEND

- STHD14 (EXAMPLE) - HOLDOWN BY SIMPSON (STHD/MST/HDU/HD, TYP)
- INTERIOR BEARING WALL
- #K / #J - INDICATES THE NUMBER OF KING AND JACK STUDS
- INDICATES SHEARWALL LOCATION (SW# - SHEAR WALL MARK)
- CS16 - HORIZONTAL STRAP (EXAMPLE)
- HEADER
- SW6 (A.1) - SHEAR WALL CALLOUT
  - REFERENCE TO WALL DESIGNATION IN THE CALCULATION PACKAGE
  - REFERENCE TO SHEAR WALL TYPE PER SHEAR WALL SCHEDULE
- 3 1/8" X 9" GLB (FH-5) - EXAMPLE
  - REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
  - BEAM OR TRUSS MEMBER

MARK R. THURTELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER
S240325-1

DRAWN BY - MR

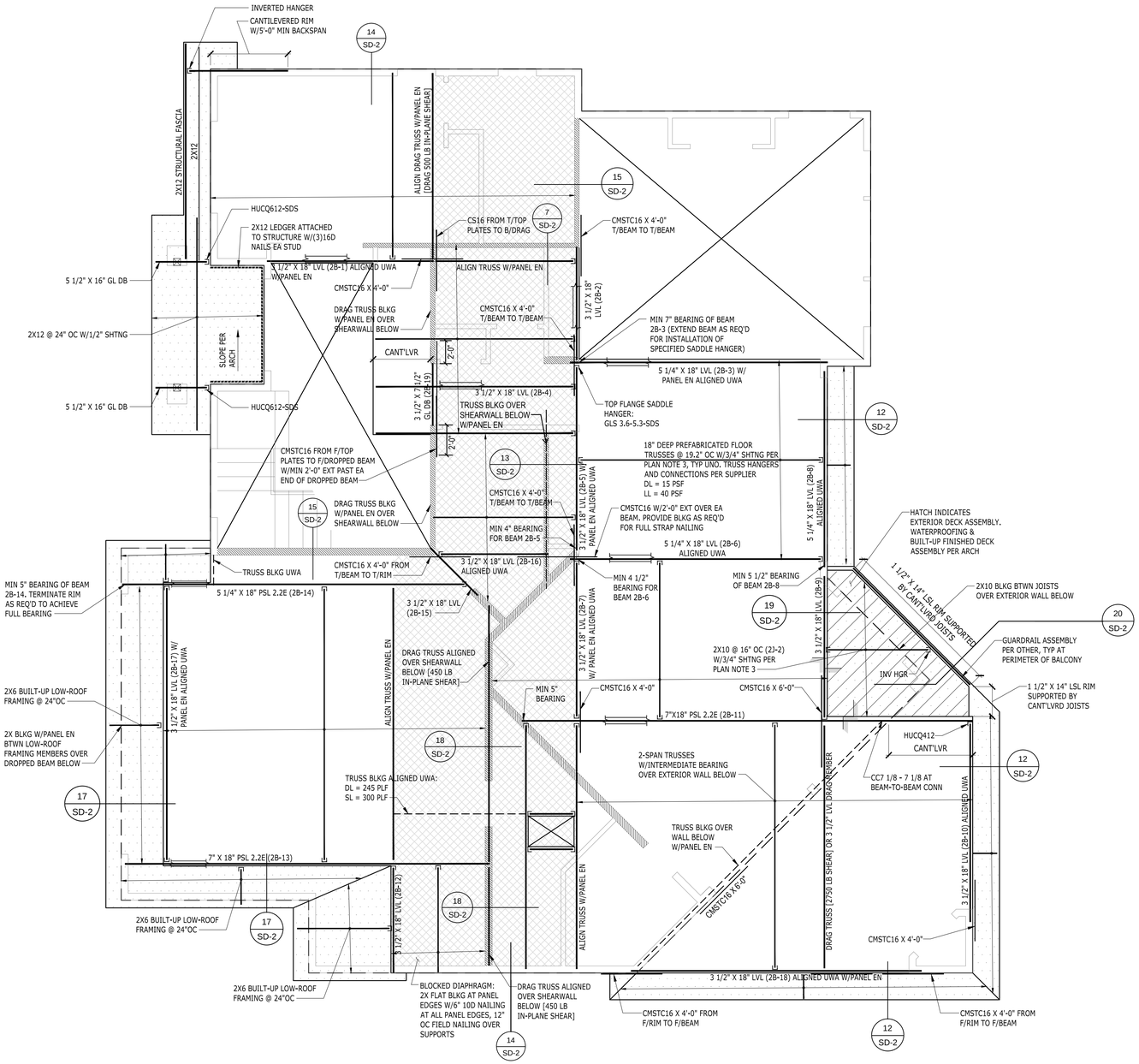
CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEET
S-4



SECOND FLOOR FRAMING PLAN

FLOOR FRAMING NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. FLOOR SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 8d COMMON NAILS (0.131" X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED "WITH EDGE NAILING" OR "W/EN", AND 12" O.C. IN THE FIELD, UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
4. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING. MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
5. ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDG OR SIM).
6. ALL BEAMS SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
7. ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
8. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
9. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
10. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
11. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
12. ENGINEERED FLOOR JOISTS AND FLOOR TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
14. TYPICAL DETAILS:
    - 7/SD-2 FLOOR FRAMING AT INTERIOR BEARING WALL

FRAMING LEGEND

- BLOCKED FLOOR DIAPHRAGM
- W10X15 - STEEL BEAM (EXAMPLE)
- GT - GIRDER TRUSS
- FLOOR BEAM
- INTERIOR BEARING WALL
- STRAP
- LOW ROOF
- 3 1/8" X 9" GLB (FH-5) - BEAM/HEADER CALL OUT (EXAMPLE)
  - REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
  - BEAM OR TRUSS MEMBER
- HANGER AS REQD
- JOIST SPAN DIRECTION
- FLOOR/ROOF TRUSS
- EXTENTS OF SIMILAR JOISTS OR TRUSSES

TYPICAL JOIST HANGER SCHEDULE			
TJI210			
11 7/8"	2-PLY 11 7/8"	14"	2-PLY 14"
IUS2.06/11.88	MIU4.28/11	IUS2.06/14	MIU4.28/14
2X10			
1-PLY		2-PLY	
LUS210		LUS210-2	

TYPICAL BEAM HANGER SCHEDULE				
LVL / LSL / PSL				
	1 3/4"	3 1/2"	5 1/4"	7"
11 7/8"	HUS1.81/10	HHUS410	HGUS5.50/12	HGUS7.25/12
14"	HUS1.81/10	HHUS410	HGUS5.50/14	HGUS7.25/14

MARK R. THURTELL
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REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
FOREST CREEK ESTATES
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5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER
S240325-1

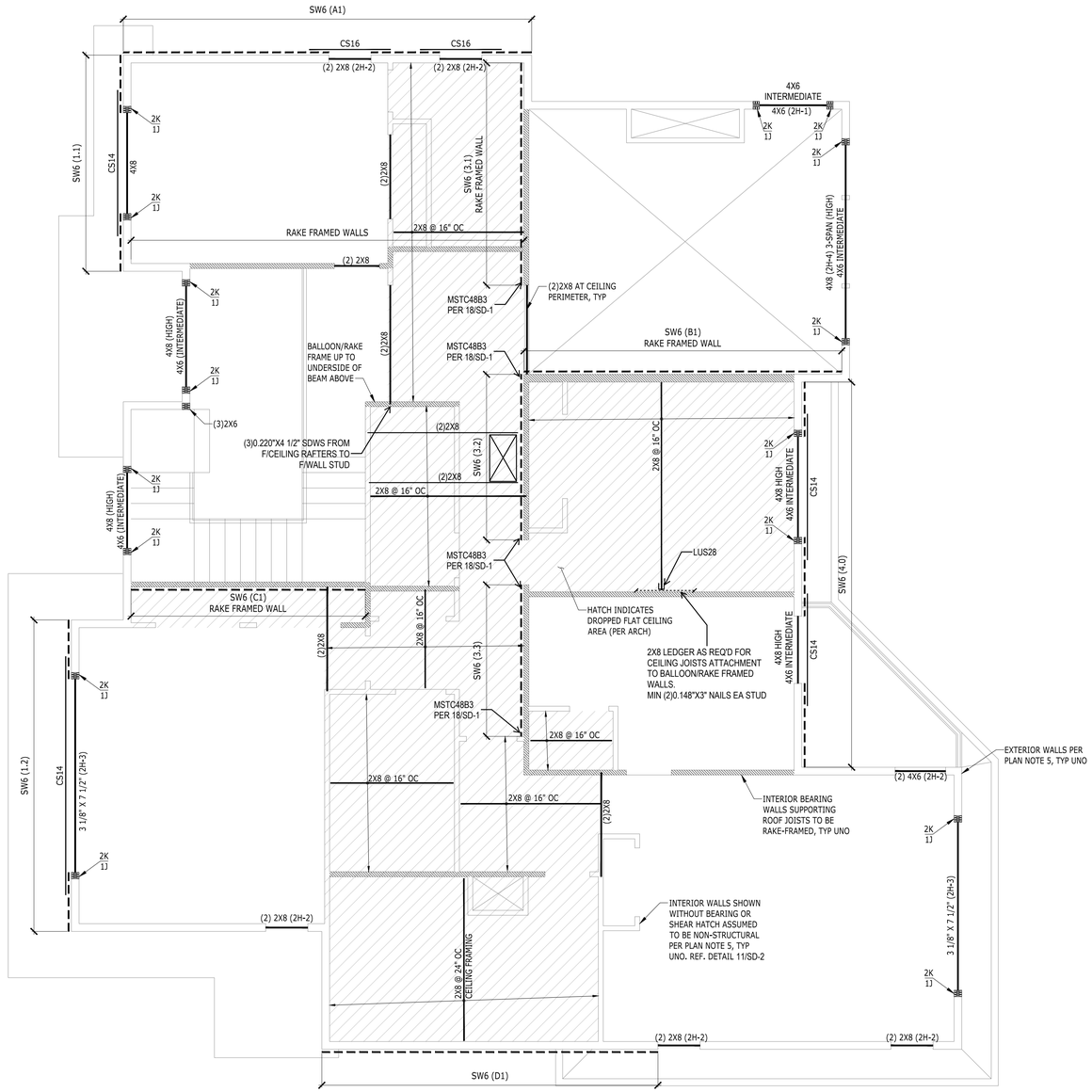
DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
SECOND FLOOR FRAMING PLAN
S-5
SHEET



SECOND FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEAR WALL SCHEDULE

WALL	SHEATHING	PANEL EDGE NAILING (COMMON (GALV) NAILS)	PANEL EDGE STUDS	ANCHOR BOLTS 5/8"Ø EMBED 7"	RIM CONNECTION		
					AT MUD SILL/ PLATE	AT ROOF EAVE TOP PLATE	AT SILL PLATE (SINKER NAIL .148Ø x 3 1/4")
SW6	7/16" APA PLY ONE SIDE	8d AT 6" O.C.	2x	48" O.C. IN 2x PLATE	LTP4 AT 24" O.C.	RBC AT 16" O.C.	16d AT 6" O.C.
SW4	7/16" APA PLY ONE SIDE	8d AT 4" O.C.	2x	32" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 12" O.C.	16d AT 4" O.C.
SW3	7/16" APA PLY ONE SIDE	8d AT 3" O.C.	3x	16" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 8" O.C.	16d AT 3" O.C.
SW2	7/16" APA PLY ONE SIDE	8d AT 2" O.C.	3x	12" O.C. IN 2x PLATE	LTP4 AT 12" O.C.	RBC AT 8" O.C.	16d AT 2" O.C.
2W4	7/16" APA PLY TWO SIDES	8d AT 4" O.C. EA SIDE	3x	24" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 4" O.C.
2W3	7/16" APA PLY TWO SIDES	8d AT 3" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 3" O.C.
2W2	7/16" APA PLY TWO SIDES	8d AT 2" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 12" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 2" O.C.

NOTES: 1) FOR NON-SHEAR WALL, PROVIDE ANCHOR BOLTS @ 72" O.C.

WALL FRAMING AND SHEAR WALL NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6"O.C.
5. EXTERIOR WALL STUDS SHALL BE 2X6 @ 16"O.C. (≤10'), 2X6 @ 12"O.C. (>10') UNO. INTERIOR WALL STUDS SHALL BE 2X4 @ 16"O.C. UNO. REFER TO ARCH SET FOR WALL THICKNESS REQUIREMENTS AT PLUMBING STACKS. ALL INTERIOR NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
6. PROVIDE ONE KING STUD AND ONE JACK STUD MINIMUM AT EVERY HEADER UNO. JACK STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE VERTICAL CRUSH BLOCKING WITHIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK STUDS.
7. SHEARWALL SHEATHING AND NAILING REQUIREMENTS PER SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE SW6 UNO.
8. ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE, FIELD NAILING AT 12" O.C. UNO.
9. PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
10. SHEARWALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C (4" O.C. @ SW2 AND 2W2). AT DOUBLE SIDED SHEARWALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEARWALL.
11. LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (.131Ø X 2.5") LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (.131X 1.5") RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (.148X 1.5").
12. WINDOW STRAP INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
13. STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
14. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 (36KSI) HDG OR SIM. ANCHOR BOLTS TO BE 5/8"Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (72" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HDG NUT AND WASHER INSTALLED OVER 3"X3"X1/4" HDG PLATE WASHER WITH AND EDGE OF THE PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS W/ 2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF THE WALL.
15. ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
16. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
17. TYPICAL DETAILS:

- 11/SD-1 TYP HOLDOWN INSTALLATION
- 12/SD-1 TYP PONY WALL DETAIL
- 16/SD-1 HOLDOWN AT CORNER WALLS
- 17/SD-1 HDU HOLDOWN FLOOR-TO-FLOOR
- 11/SD-2 FRAMING OVER NON-BEARING WALL
- 16/SD-2 WALL TOP PLATES SPLICE

- 1/SD-2 TYP NOTCHES AND HOLES IN WOOD STUDS
- 2/SD-2 FORCE-TRANSFER AROUND WINDOWS DETAIL
- 3/SD-2 TYP HEADER FRAMING

FRAMING AND SHEATHING LEGEND

- STHD14 (EXAMPLE) - HOLDOWN BY SIMPSON (STHD/MST/HDU/HD, TYP)
- INTERIOR BEARING WALL
- #K / #J - INDICATES THE NUMBER OF KING AND JACK STUDS
- INDICATES SHEARWALL LOCATION (SW# - SHEAR WALL MARK)
- CS16 - HORIZONTAL STRAP (EXAMPLE)
- HEADER
- SW6 (A.1) - SHEAR WALL CALLOUT
  - REFERENCE TO WALL DESIGNATION IN THE CALCULATION PACKAGE
  - REFERENCE TO SHEAR WALL TYPE PER SHEAR WALL SCHEDULE
- 3 1/8" X 9" GLB (FH-5) - EXAMPLE
  - REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
  - BEAM OR TRUSS MEMBER

MARK R. THURTELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER
S240325-1

DRAWN BY - MR

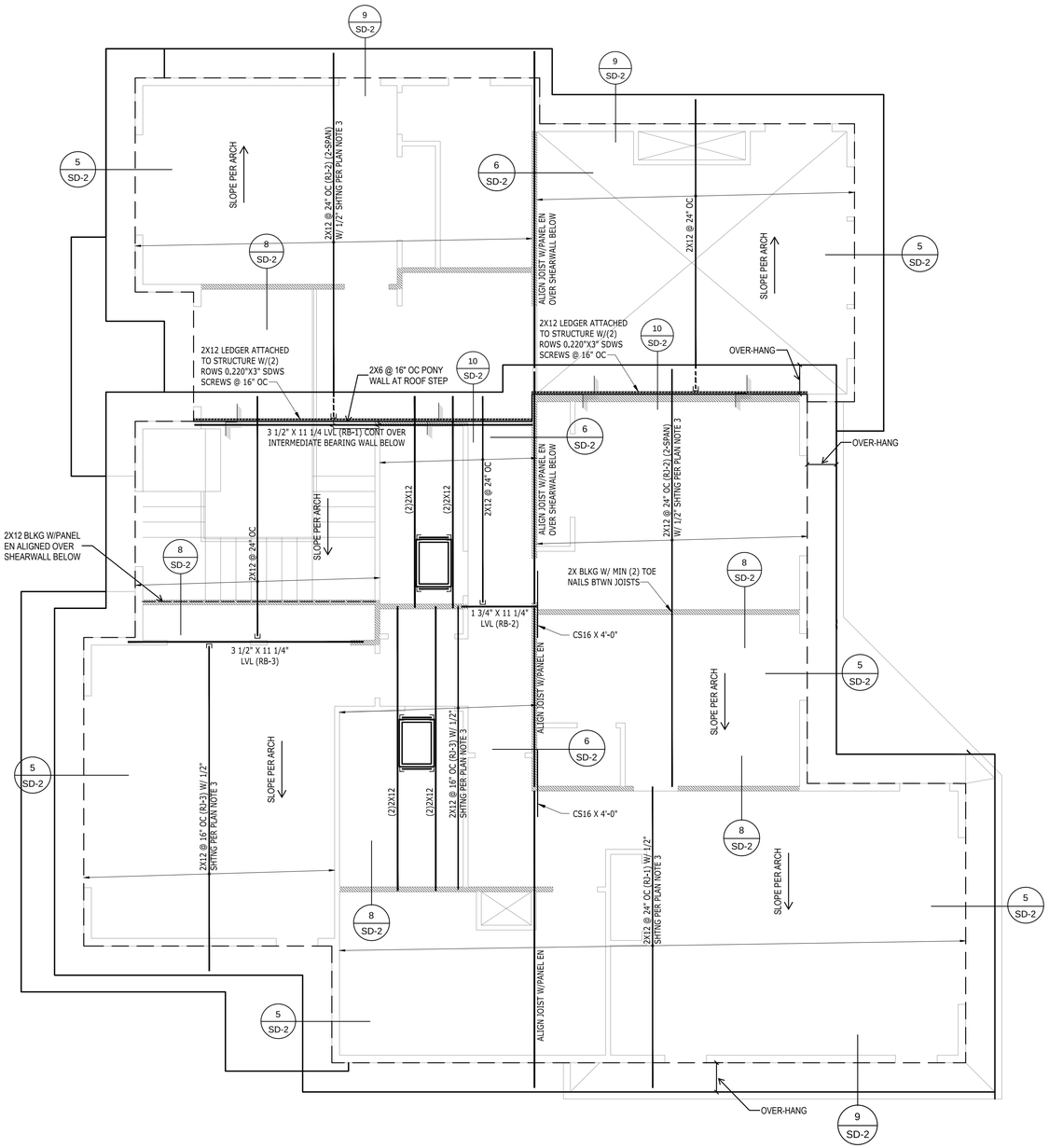
CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
SECOND FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEET
S-6



ROOF FRAMING PLAN

ROOF FRAMING NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. ROOF SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 8d COMMON NAILS (0.131" X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED "WITH EDGE NAILING" OR "W/EN", AND 12" O.C. IN THE FIELD, UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
4. ALL ROOF TRUSSES SHALL BE SPACED NO FURTHER APART THAN 24" O.C. AND SHALL BE CONNECTED TO TOP PLATE WITH H2.5 TIE UNO.
5. ALL GIRDER TRUSSES SHALL BE CONNECTED TO TOP PLATE WITH TWO H6 TIES UNO.
6. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH ROOF FRAMING. MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
7. ALL BEAMS AND GIRDER TRUSSES SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
8. ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
9. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
10. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN UNO.
11. ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS. HANGERS FOR ROOF TRUSSES BY OTHERS.
12. ENGINEERED ROOF JOISTS AND ROOF TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
    - 12.1. STANDARD DEAD AND LIVE LOADS SHALL BE USED FOR TRUSS DESIGN. REFERENCE STRUCTURAL GENERAL NOTES FOR MORE INFORMATION.
    - 12.2. CHANGES TO LAYOUT MUST BE SUBMITTED TO THE ARCHITECT AND EOR FOR REVIEW AND APPROVAL.
    - 12.3. TRUSS SUBMITTAL PACKAGE TO BE PROVIDED TO EOR FOR REVIEW. REFERENCE STRUCTURAL GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
    - 12.4. (XXX LBS SHEAR/DRAG) INDICATES SHEAR TRANSFER LOAD. SHEAR TRUSS SHALL BE DESIGNED TO BE ABLE TO TRANSFER SPECIFIED LATERAL LOAD APPLIED AT THE TOP CHORD TO THE BOTTOM CHORD AND INTO SHEARWALL BELOW.
    - 12.5. ROOF TRUSSES SHOULD BE DESIGNED FOR ADDITIONAL LOADS WHERE APPLICABLE AS SPECIFIED BY THE ARCHITECT (I.E. MECHANICAL UNITS, ROOF DECKS AND PATIOS, GREEN ROOFS, SOLAR UNITS AND ETC).
    - 12.6. TRUSS DESIGN FOR BEARING AT TOP PLATES TO BE DESIGNED FOR COMPRESSION PERPENDICULAR TO GRAIN.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
14. ROOF COVERINGS AND ROOFING MATERIAL BY OTHERS.
15. ROOF DRAINAGE BY OTHERS.
16. ATTIC VENTILATION BY OTHERS.
17. FOR TYPICAL INSTALLATION DETAILS REFERENCE TO:

FRAMING LEGEND

- GIRDER OR GABLE END TRUSS
- INTERIOR BEARING WALL
- ROOF OVERFRAMING
- 3 1/8" X 9" GLB (FH-5) - EXAMPLE
  - REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
  - BEAM OR TRUSS MEMBER
- HANGER AS REQD
- FLOOR/ROOF TRUSS OR JOIST SPAN DIRECTION
- EXTENTS OF SIMILAR JOISTS OR TRUSSES

MARK R. THURTELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER
S240325-1

DRAWN BY - MR

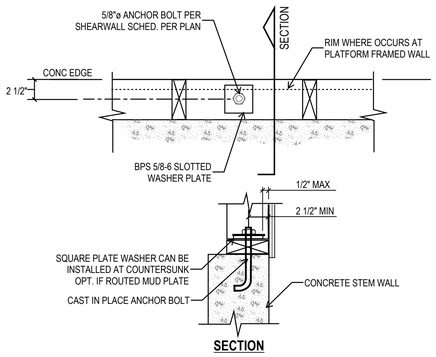
CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION: ROOF FRAMING PLAN

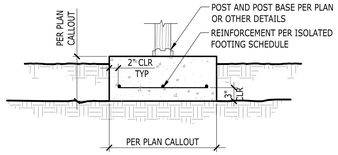
SHEET: S-7



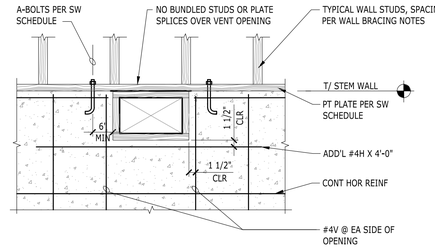
1 SILL PLATE ANCHORS

ISOLATED FOOTING SCHEDULE

FOOTING SIZE PER PLAN	REINFORCEMENT
24" X 24" X 10"	(3)#4, EA WAY, BTM
30" X 30" X 10"	(4)#4, EA WAY, BTM
36" X 36" X 12"	(5)#4, EA WAY, BTM
42" X 42" X 12"	(5)#4, EA WAY, BTM
48" X 48" X 12"	(6)#4, EA WAY, BTM

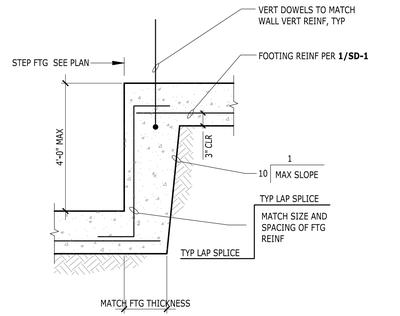


2 ISOLATED INTERIOR FOOTING



NOTES
1. CRAWLSPACE VENTILATION PER ARCHITECTURAL SHEETS
2. DO NOT LOCATE VENT WITHIN TANK WALL WITHOUT REVIEW BY EOR
3. CONTRACTOR TO LOCATE/VENTS TO AVOID BUNDLED STUDS/POSTS/POINT LOADS FROM ABOVE PER PLAN OR CONFLICT W/HOLDOWNS PER PLAN.

3 CRAWL SPACE VENTILATION

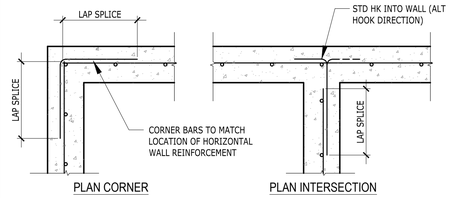


4 STEP AT WALL FOOTING

LAP SPLICE AND STANDARD HOOK LENGTH FOR CORNER BARS

BAR SIZE PER WALL	LAP SPLICE LENGTH	STD HOOK LENGTH
#4	2'-6"	0'-8"
#5	3'-0"	0'-10"
#6	3'-8"	1'-0"
#8	5'-0"	1'-3"

IF INTERSECTING WALLS HAVE DIFFERENT SIZE OF HORIZONTAL REINFORCEMENT, CORNER BARS MATCHING LARGER REINFORCEMENT SIZE AND SPACING TO BE USED



5 CORNER BARS AT CONCRETE WALLS

11 HOLDOWN DETAIL

NOTES:
1. PROVIDE CONSTRUCTION / CONTROL JOINT TO ENCLOSE APPROXIMATE SQUARE AREAS OF 225 SF MAX, WITH A MAXIMUM PANEL RATIO OF 1.3 TO 1.0.
2. USE EARLY-ENTRY DRY-CUT SAW AS SOON AS PRACTICAL. SAWCUT ALONG SHORT DIRECTION OF POUR FIRST.

7 CONSTRUCTION/CONTROL JOINT DETAILS

D = BAR DIAMETER

8 BAR BEND AND HOOK DETAILS

NOTE: PROVIDE (2) ROWS BLKG AT DBL SIDED SHEARWALLS

9 PONY WALL AT CRAWLSPACE

10 DROPPED BEAM AND POST AT CRAWL SPACE

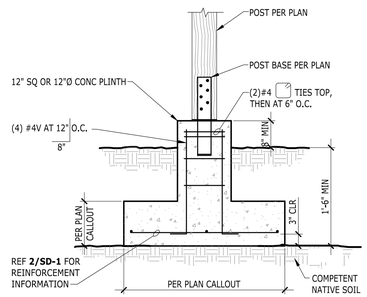
16 CORNER FRAMING

17 HOLDOWN HDU FLOOR-TO-FLOOR

18 MSTC HOLDOWN AT BEAM

19 JOISTS TO FLUSH BEAM CONNECTION

20 ELEVATION TOP PLATE SPLICE



15 ISOLATED EXTERIOR FOOTING

MARK R. THURTELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY° ENGINEERING & DESIGN

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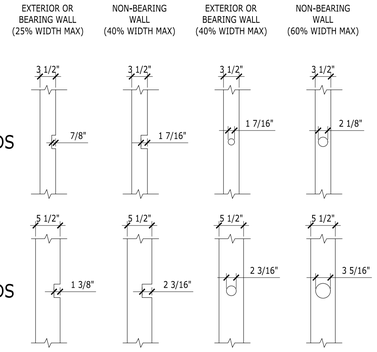
CHECKED BY - MRT

SHEET DATE - 05/16/2024

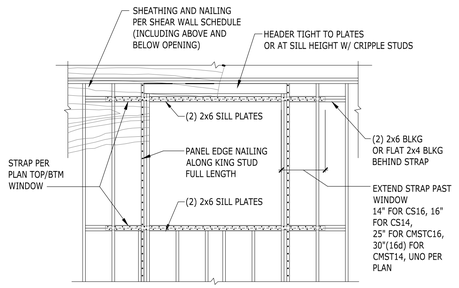
SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION: STRUCTURAL DETAILS

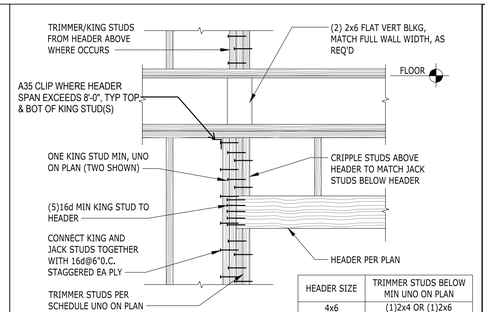
SHEET: SD-1



1 ALLOWABLE STUD NOTCHING AND BORING



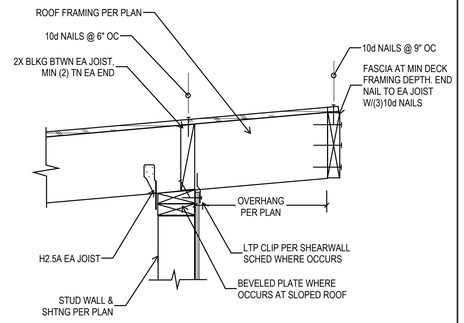
2 STRAPS AROUND WINDOWS



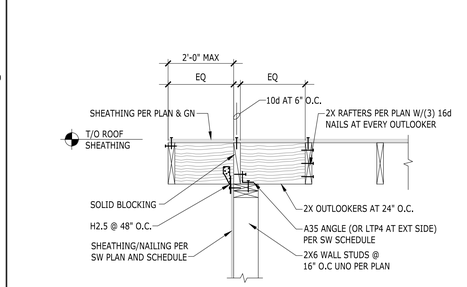
NOTES:
1). PROVIDE MIN (3)16d SDWS SCREW INTO EA PLY OF HEADER AT MULTI-PLY 2X HEADERS PER PLAN
2). WHERE HEADER SPAN EXCEEDS 8'-0", REPLACE THE 16d NAILS FROM KING STUD(S) WITH 0.220"X4 1/2" SDWS SCREWS

HEADER SIZE	TRIMMER STUDS BELOW MIN UNO ON PLAN
4x6	(1)2x4 OR (1)2x6
4x8	(2)2x4 OR (1)2x6
4x10	(3)2x4 OR (2)2x6
3 1/8 GLB	(3)2x4 OR (2)2x6
5 1/8 GLB	(3)2x6

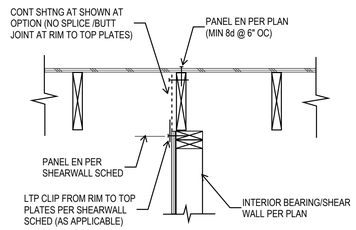
3 TYPICAL HEADER FRAMING



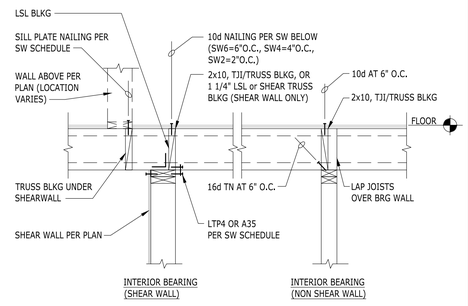
4 SLOPED ROOF FRAMING OVER EXT. WALL



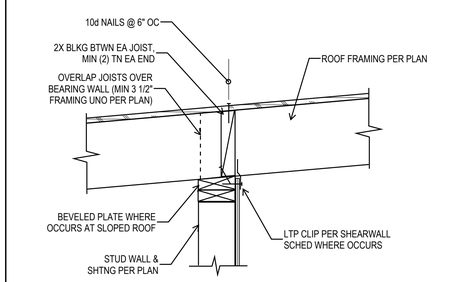
5 GABLE END FRAMING



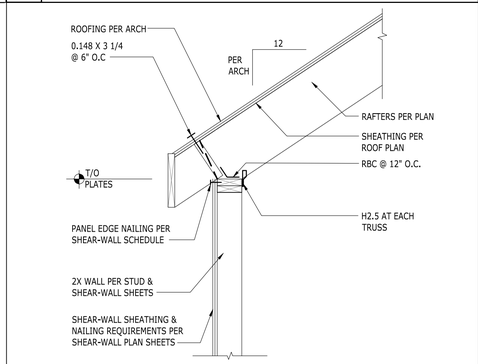
6 PARALLEL ROOF FRMNG OVER SHEARWALL



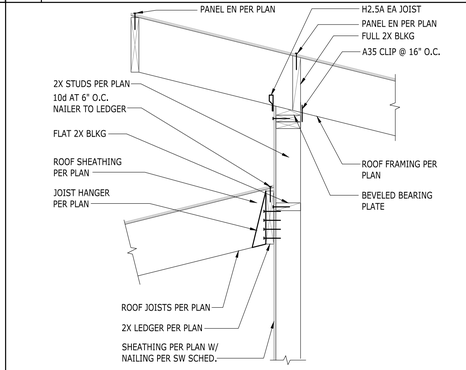
7 FLOOR FRAMING AT INTERIOR BEARING WALL



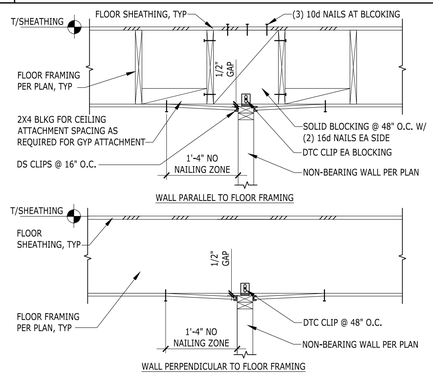
8 JOIST OVER INTERIOR BEARING WALL



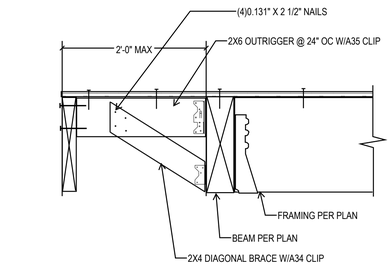
9 HIP ROOF FRAMING



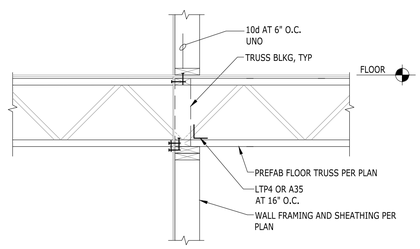
10 LOW ROOF FRAMING (PERP)



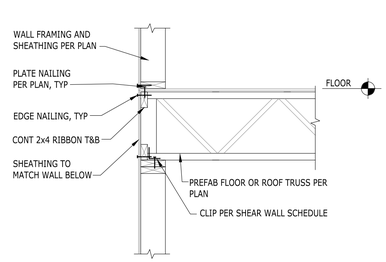
11 CEILING FRAMING AT NON-BEARING WALL



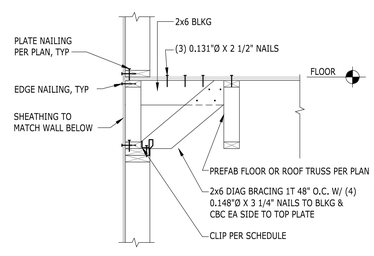
12 LOW ROOF BROW EXTENSION



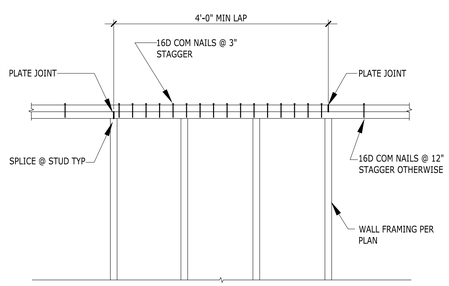
13 INTERIOR SHEAR WALL CONNECTION



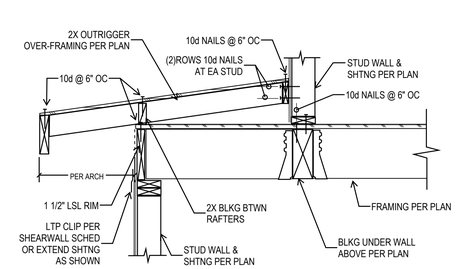
14 SHEAR TRANSFER AT EXTERIOR WALL



15 SHEAR TRANSFER AT EXTERIOR WALL

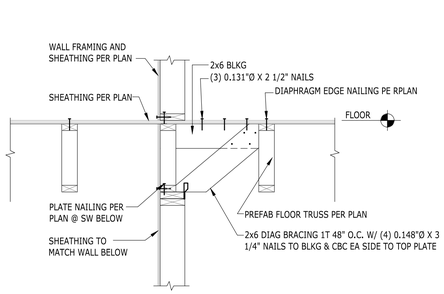


16 ELEVATION TOP PLATE SPLICE

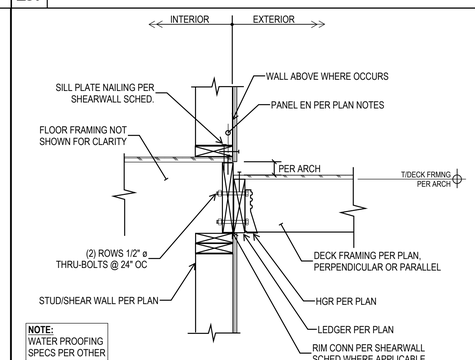


NOTE:
WATER PROOFING SPECS PER OTHER

17 FLAT LOW ROOF PROJECTION

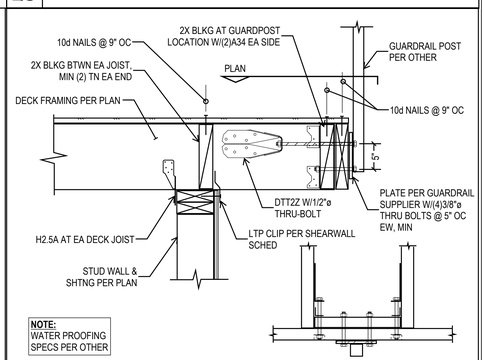


18 INTERIOR SHEAR WALL CONNECTION



NOTE:
WATER PROOFING SPECS PER OTHER

19 DECK FRAMING AT PLATFORM STUD WALL



NOTE:
WATER PROOFING SPECS PER OTHER

20 DECK FRAMING AT GUARDRAIL POST

MANS R. THURTELL
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