

LOT 3 7418 - 78th AVENUE SE • MERCER ISLAND • WASHINGTON • 98040

GENERAL NOTES

- ALL WORK SHALL CONFORM TO APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO THE 2021 INTERNATIONAL BUILDING CODE, INTERNATIONAL RESIDENTIAL CODE, THE CURRENT WASHINGTON STATE ENERGY CODE, THE WASHINGTON STATE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AND ALL RULES, REGULATIONS AND ORDINANCES OF THE GOVERNING AUTHORITY.
- ENGINEERED DESIGN IN ACCORDANCE WITH THE IBC IS PERMITTED.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND SITE CONDITIONS, AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ANY DISCREPANCIES, ERRORS, OR OMISSIONS PRIOR TO PROCEEDING WITH THE WORK.
- DO NOT SCALE THE DRAWINGS FOR CRITICAL DIMENSIONS. DIMENSIONS ARE SHOWN TO FACE OF STUDS, POSTS AND CONCRETE UNLESS INDICATED OTHERWISE.
- THE PROJECT SHALL BE SCHEDULED AND INSTALLATION OF ELEMENTS COORDINATED AS NECESSARY BY THE CONTRACTOR TO PERMIT WORK BETWEEN DIFFERENT TRADES TO PROCEED WITHOUT UPSETTING PROPER CONSTRUCTION SEQUENCES OR DELAYING THE PROJECT SCHEDULE.
- CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL DOOR AND WINDOW ROUGH-OPENING DIMENSIONS WITH THE DOOR AND WINDOW MANUFACTURERS.
- PLUMBING, ELECTRICAL AND MECHANICAL CONTRACTORS SHALL VERIFY ALL REQUIREMENTS FOR THIS PROJECT AND COMPLY WITH ALL LOCAL CODES, SUBMIT PLANS FOR APPROVAL AND OBTAIN PERMIT BEFORE STARTING WORK.
- SHOWN ONLY ONCE, TYPICAL DETAILS ARE NOT REFERENCED AT ALL LOCATIONS; THE INTENT IS THAT THEY APPLY THROUGHOUT THE PROJECT UNLESS OTHERWISE NOTED.
- ALL REQUIRED SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- ALL SHOP DRAWING DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED BY HIMSELF OR OTHER TRADES.
- INSPECTIONS ARE TO BE PER IRC SECTION R109.
- ADDRESS MUST BE POSTED AND VISIBLE AT CONSTRUCTION SITE PER IRC SEC R319; BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
- ANY DEVIATION IN CONSTRUCTION FROM APPROVED PLANS REQUIRES PRIOR REVIEW AND APPROVAL FROM THE CITY OF MERCER ISLAND, PLANNING AND BUILDING DEPARTMENT.

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

ROOF SNOW LOAD:	25 PSF
WIND SPEED:	98 MPH
SEISMIC DESIGN CATEGORY:	D2
WEATHERING:	MODERATE
FROST LINE DEPTH:	12 INCHES
TERMITE:	SLIGHT TO MODERATE
DECAY:	SLIGHT TO MODERATE
WINTER DESIGN TEMP:	24 DEGREES FAHRENHEIT
ICE SHIELD UNDERLAYMENT REQUIRED:	NO
FLOOD HAZARDS:	NA
AIR FREEZING INDEX:	113
MEAN ANNUAL TEMP:	53 DEGREES FAHRENHEIT
ASSUMED SOIL BEARING:	3000 PSF STATIC (PER SOILS REPORT DATED 4/17/24)

AUTOMATIC FIRE SPRINKLER SYSTEMS

FIRE SPRINKLERS ☒ ARE ☐ ARE NOT REQUIRED FOR THIS PROJECT. AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

SECTION M1501 EXHAUST SYSTEMS

M1501.1 OUTDOOR DISCHARGE
THE AIR REMOVED BY EVERY MECHANICAL EXHAUST SYSTEM SHALL BE DISCHARGED TO THE OUTDOORS IN ACCORDANCE WITH SECTION M1504.3. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE...

M1502 CLOTHES DRYER EXHAUST
M1502.1 GENERAL
CLOTHES DRYERS SHALL BE EXHAUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

M1502.2 INDEPENDENT EXHAUST SYSTEMS
DRYER EXHAUST SYSTEMS SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS AND SHALL CONVEY THE MOISTURE TO THE OUTDOORS.
EXCEPTION: THIS SECTION SHALL NOT APPLY TO LISTED AND LABELED CONDENSING (DUCTLESS) CLOTHES DRYERS.

M1502.3 DUCT TERMINATION
EXHAUST DUCTS SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING. EXHAUST DUCT TERMINATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. IF THE MANUFACTURER'S INSTRUCTIONS DO NOT SPECIFY A TERMINATION LOCATION, THE EXHAUST DUCT SHALL TERMINATE NOT LESS THAN 3 FEET IN ANY DIRECTION FROM OPENINGS INTO BUILDINGS, INCLUDING OPENINGS IN VENTILATED SOFFITS, EXHAUST DUCT TERMINATIONS SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION.

M1502.4 DRYER EXHAUST DUCTS
DRYER EXHAUST DUCTS SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS M1502.4.1 THROUGH M1502.4.8.

M1502.4.1 MATERIAL AND SIZE
EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND SHALL BE CONSTRUCTED OF METAL NOT LESS THAN 0.0157 INCH IN THICKNESS (NO. 28 GAGE). THE DUCT SHALL BE 4 INCHES NOMINAL IN DIAMETER.

M1502.4.2 DUCT INSTALLATION
EXHAUST DUCTS SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 12 FEET AND SHALL BE SECURED IN PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING DUCT OR FITTING IN THE DIRECTION OF AIRFLOW. EXHAUST DUCT JOINTS SHALL BE SEALED IN ACCORDANCE WITH SECTION M1505.4.1 AND SHALL BE MECHANICALLY FASTENED. DUCTS SHALL NOT BE JOINED WITH SCREWS OR SIMILAR FASTENERS THAT PROTRUDE MORE THAN 1/8 INCH INTO THE INSIDE OF THE DUCT. WHERE DRYER EXHAUST DUCTS ARE ENCLOSED IN WALL OR CEILING CAVITIES, SUCH CAVITIES SHALL ALLOW THE INSTALLATION OF THE DUCT WITHOUT DEFORMATION.

M1502.4.3 TRANSITION DUCT
TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE A SINGLE LENGTH THAT IS LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL BE NOT GREATER THAN 8 FEET IN LENGTH. TRANSITION DUCTS SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.

M1502.4.4 DRYER EXHAUST DUCT POWER VENTILATORS
DOMESTIC DRYER EXHAUST DUCT POWER VENTILATORS SHALL CONFORM TO UL 705 FOR USE IN DRYER EXHAUST DUCT SYSTEMS. THE DRYER EXHAUST DUCT POWER VENTILATOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

M1502.4.6 DUCT LENGTH
THE MAXIMUM ALLOWABLE EXHAUST DUCT LENGTH SHALL BE DETERMINED BY ONE OF THE METHODS SPECIFIED IN SECTIONS M1502.4.6.1 THROUGH M1502.4.6.3.

M1502.4.6.1 SPECIFIED LENGTH
THE MAXIMUM LENGTH OF THE EXHAUST DUCT SHALL BE 35 FEET FROM THE CONNECTION TO THE TRANSITION DUCT FROM THE DRYER TO THE OUTLET TERMINAL. WHERE FITTINGS ARE USED, THE MAXIMUM LENGTH OF THE EXHAUST DUCT SHALL BE REDUCED IN ACCORDANCE WITH TABLE M1502.4.6.1. THE MAXIMUM LENGTH OF THE EXHAUST DUCT DOES NOT INCLUDE THE TRANSITION DUCT.

TABLE M1502.4.6.1 DRYER EXHAUST DUCT FITTING TYPE EQUIVALENT LENGTH	
DRYER EXHAUST DUCT FITTING TYPE	EQUIVALENT LENGTH
4-INCH RADIUS MITERED 45-DEGREE ELBOW	2 FEET 6 INCHES
4-INCH RADIUS MITERED 90-DEGREE ELBOW	5 FEET
6-INCH RADIUS MITERED 45-DEGREE ELBOW	1 FOOT
6-INCH RADIUS MITERED 90-DEGREE ELBOW	1 FOOT 9 INCHES
8-INCH RADIUS MITERED 45-DEGREE ELBOW	1 FOOT
8-INCH RADIUS MITERED 90-DEGREE ELBOW	1 FOOT 7 INCHES
10-INCH RADIUS MITERED 45-DEGREE ELBOW	9 INCHES
10-INCH RADIUS MITERED 90-DEGREE ELBOW	1 FOOT 6 INCHES

M1503 DOMESTIC COOKING EXHAUST EQUIPMENT

M1503.2 DOMESTIC COOKING EXHAUST
WHERE DOMESTIC COOKING EXHAUST EQUIPMENT IS PROVIDED, IT SHALL COMPLY WITH ONE OF THE FOLLOWING:
1. THE FAN FOR OVERHEAD RANGE HOODS AND DOWNDRAFT EXHAUST EQUIPMENT NOT INTEGRAL WITH THE COOKING APPLIANCE SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 507.
2. OVERHEAD RANGE HOODS AND DOWNDRAFT EXHAUST EQUIPMENT WITH INTEGRAL FANS SHALL COMPLY WITH UL 507.
3. DOMESTIC COOKING APPLIANCES WITH INTEGRAL DOWNDRAFT EXHAUST EQUIPMENT SHALL BE LISTED AND LABELED IN ACCORDANCE WITH ANSI Z21.1 OR UL 858.
4. MICROWAVE OVENS WITH INTEGRAL EXHAUST FOR INSTALLATION OVER THE COOKING SURFACE SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 923.

M1503.6 MAKEUP AIR REQUIRED
WHERE ONE OR MORE GAS, LIQUID OR SOLID FUEL-BURNING APPLIANCE THAT IS NEITHER DIRECT-VENT NOR USES A MECHANICAL DRAFT VENTING SYSTEM IS LOCATED WITHIN A DWELLING UNIT'S AIR BARRIER, EACH EXHAUST SYSTEM CAPABLE OF EXHAUSTING IN EXCESS OF 400 CUBIC FEET PER MINUTE SHALL BE MECHANICALLY OR PASSIVELY PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH NOT FEWER THAN ONE DAMPER COMPLYING WITH SECTION M1503.6.2.
EXCEPTION: MAKEUP AIR IS NOT REQUIRED FOR EXHAUST SYSTEMS INSTALLED FOR THE EXCLUSIVE PURPOSE OF SPACE COOLING AND INTENDED TO BE OPERATED ONLY WHEN WINDOWS OR OTHER AIR INLETS ARE OPEN.
M1503.6.1 LOCATION
KITCHEN EXHAUST MAKEUP AIR SHALL BE DISCHARGED INTO THE SAME ROOM IN WHICH THE EXHAUST SYSTEM IS LOCATED OR INTO ROOMS OR DUCT SYSTEMS THAT COMMUNICATE THROUGH ONE OR MORE PERMANENT OPENINGS WITH THE ROOM IN WHICH SUCH EXHAUST SYSTEM IS LOCATED. SUCH PERMANENT OPENINGS SHALL HAVE A NET CROSS-SECTIONAL AREA NOT LESS THAN THE REQUIRED AREA OF THE MAKEUP AIR SUPPLY OPENINGS.
M1503.6.2 MAKEUP AIR DAMPERS
WHERE MAKEUP AIR IS REQUIRED BY SECTION M1503.6, MAKEUP AIR DAMPERS SHALL COMPLY WITH THIS SECTION. EACH DAMPER SHALL HAVE A GRAVITY DAMPER OR AN ELECTRICALLY OPERATED DAMPER THAT AUTOMATICALLY OPENS WHEN THE EXHAUST SYSTEM OPERATES. DAMPERS SHALL BE LOCATED TO ALLOW ACCESS FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION OR ANY OTHER DUCTS NOT CONNECTED TO THE DAMPER BEING INSPECTED, SERVICED, REPAIRED OR REPLACED. GRAVITY OR BAROMETRIC DAMPERS SHALL NOT BE USED IN PASSIVE MAKEUP AIR SYSTEMS WHERE THE DAMPERS ARE RATED TO PROVIDE THE DESIGN MAKEUP AIRFLOW AT A PRESSURE DIFFERENTIAL OF 0.01 IN. W.C. OR LESS.

M1504 EXHAUST DUCTS AND EXHAUST OPENINGS

M1504.2 DUCT LENGTH
THE LENGTH OF EXHAUST AND SUPPLY DUCTS USED WITH VENTILATING EQUIPMENT SHALL NOT EXCEED THE LENGTHS DETERMINED IN ACCORDANCE WITH TABLE M1504.2.
EXCEPTION: DUCT LENGTH SHALL NOT BE LIMITED WHERE THE DUCT SYSTEM COMPLIES WITH THE MANUFACTURER'S DESIGN CRITERIA OR WHERE THE FLOW RATE OF THE INSTALLED VENTILATING EQUIPMENT IS VERIFIED BY THE INSTALLER OR APPROVED THIRD PARTY USING A FLOW HOOD, FLOW GRID OR OTHER AIRFLOW MEASURING DEVICE.

TABLE M1504.2 DUCT LENGTH																
DUCT TYPE	FLEX DUCT							SMOOTH-WALL DUCT								
FAN AIRFLOW RATING	50	80	100	125	150	200	250	300	50	80	100	125	150	200	250	300
DIAMETER (INCHES)	MAXIMUM LENGTH (FEET)															
3	X	X	X	X	X	X	X	X	5	X	X	X	X	X	X	X
4	56	4	X	X	X	X	X	X	114	31	10	X	X	X	X	X
5	NL	81	42	16	2	X	X	X	NL	152	91	51	28	4	X	X
6	NL	NL	158	91	55	18	1	X	NL	NL	NL	168	112	53	25	9
7	NL	NL	NL	NL	161	78	40	19	NL	NL	NL	NL	NL	148	88	54
8 AND ABOVE	NL	NL	NL	NL	NL	189	111	69	NL	NL	NL	NL	NL	NL	198	133

- FAN AIRFLOW RATING SHALL BE IN ACCORDANCE WITH ANSI/AMCA 210-ANSI/ASHRAE 51.
- FOR NONCIRCULAR DUCTS, CALCULATE THE DIAMETER AS FOUR TIMES THE CROSS-SECTIONAL AREA DIVIDED BY THE PERIMETER.
- THIS TABLE ASSUMES THAT ELBOWS ARE NOT USED. FIFTEEN FEET OF ALLOWABLE DUCT LENGTH SHALL BE DEDUCTED FOR EACH ELBOW INSTALLED IN THE DUCT RUN.
- NL = NO LIMIT ON DUCT LENGTH OF THIS SIZE.
- X = NOT ALLOWED, ANY LENGTH OF DUCT OF THIS SIZE WITH ASSUMED TURNS AND FITTINGS WILL EXCEED THE RATED PRESSURE DROP.

M1504.3 EXHAUST OPENINGS

AIR EXHAUST OPENINGS SHALL TERMINATE AS FOLLOWS:

- NOT LESS THAN 3 FEET FROM PROPERTY LINES.
- NOT LESS THAN 3 FEET FROM GRAVITY AIR INTAKE OPENINGS, OPERABLE WINDOWS AND DOORS.
- NOT LESS THAN 10 FEET FROM MECHANICAL AIR INTAKE OPENINGS EXCEPT WHERE EITHER OF THE FOLLOWING APPLY:
3.1 THE EXHAUST OPENING IS LOCATED NOT LESS THAN 3 FEET ABOVE THE AIR INTAKE OPENING.
3.2 THE EXHAUST OPENING IS PART OF A FACTORY-BUILT INTAKE/EXHAUST COMBINATION TERMINATION FITTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, AND THE EXHAUST AIR IS DRAWN FROM A LIVING SPACE.
- OPENINGS SHALL COMPLY WITH SECTIONS R303.5.2 AND R303.6.

M1505 MECHANICAL VENTILATION

M1505.1 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM

M1505.1.1 SYSTEM DESIGN
THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY FANS, ONE OR MORE EXHAUST FANS, OR AN ERV/HRV WITH INTEGRAL FANS, ASSOCIATED DUCTS AND CONTROLS. WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM WITH SUPPLY AND EXHAUST FANS PER SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4, AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF THE WHOLE-HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH CONTROLS PER SECTION M1505.4.2. THE SYSTEMS SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM OUTDOOR AIRFLOW RATES PER SECTION M1505.4.3 AS MODIFIED BY THE WHOLE-HOUSE VENTILATION SYSTEM COEFFICIENTS IN SECTION M1504.5.3.1 WHERE APPLICABLE. THE WHOLE-HOUSE VENTILATION SYSTEM SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATE DETERMINED PER SECTION M1505.4.2 UNLESS CONFIGURED WITH INTERMITTENT OFF CONTROLS PER SECTION M1505.4.3.2.

M1505.4.1.1 WHOLE-HOUSE SYSTEM COMPONENT REQUIREMENTS
WHOLE-HOUSE VENTILATION SUPPLY AND EXHAUST FANS SPECIFIED IN THIS SECTION SHALL HAVE A MINIMUM EFFICACY AS PRESCRIBED IN THE WASHINGTON STATE ENERGY CODE. DESIGN AND INSTALLATION OF THE SYSTEM OR EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHOLE-HOUSE VENTILATION FANS SHALL BE RATED FOR SOUND AT NO LESS THAN THE MINIMUM AIRFLOW RATE REQUIRED BY SECTION M1505.4.3.1. VENTILATION FANS SHALL BE RATED FOR SOUND AT A MAXIMUM OF 1.0 SONE. THIS SOUND RATING SHALL BE AT A MINIMUM OF 0.1 IN. W.C. (25 PA) STATIC PRESSURE IN ACCORDANCE WITH HVI PROCEDURES SPECIFIED IN SECTIONS M1505.4.1.2 AND M1505.4.1.3.
EXCEPTION: HVAC AIR HANDLERS, ERV/HRV UNITS, AND REMOTE-MOUNTED FANS NEED NOT MEET THE SOUND REQUIREMENTS, TO BE CONSIDERED, A REMOTE-MOUNTED FAN MUST BE MOUNTED OUTSIDE THE HABITABLE SPACES, BATHROOMS, TOILETS, AND HALLWAYS, AND THERE MUST BE AT LEAST 4 FEET (1219 MM) OF DUCTWORK BETWEEN THE FAN AND THE INTAKE GRILLE.
THE WHOLE-HOUSE SUPPLY FAN SHALL PROVIDE DUCTED OUTDOOR VENTILATION AIR TO EACH HABITABLE SPACE WITHIN THE RESIDENTIAL UNIT.

EXCEPTION: INTERIOR JOINING SPACES PROVIDED WITH A 30 CFM (0.0141 M3/S) WHOLE-HOUSE TRANSFER FAN OR A PERMANENT OPENING WITH AN AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF THE INTERIOR ADJOINING SPACE BUT NOT LESS THAN 25 SQUARE FEET (2.3 M2) DO NOT REQUIRE DUCTED OUTDOOR VENTILATION AIR TO BE SUPPLIED DIRECTLY TO THE SPACE. WHOLE-HOUSE TRANSFER FANS SHALL MEET THE SONE RATING OF SECTION M1505.4.1.1 AND SHALL HAVE WHOLE-HOUSE VENTILATION CONTROLS THAT COMPLY WITH SECTION M1505.4.2.

M1505.4.1.2 EXHAUST FANS
EXHAUST FANS REQUIRED SHALL BE DUCTED DIRECTLY TO THE OUTSIDE. EXHAUST AIR OUTLETS SHALL BE DESIGNED TO LIMIT THE PRESSURE DIFFERENCE TO THE OUTSIDE AND EQUIPPED WITH BACKDRAFT DAMPERS OR MOTORIZED DAMPERS IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE. EXHAUST FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE (HVI 915, HVI LOUDNESS TESTING AND RATING PROCEDURE, AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE, AS APPLICABLE). EXHAUST FANS REQUIRED IN THIS SECTION MAY BE USED TO PROVIDE LOCAL VENTILATION. BATHROOM EXHAUST FANS THAT ARE DESIGNED FOR INTERMITTENT EXHAUST AIRFLOW RATES HIGHER THAN THE CONTINUOUS EXHAUST AIRFLOW RATES IN TABLE R1505.4.3(3) SHALL BE PROVIDED WITH OCCUPANCY SENSORS OR HUMIDITY SENSORS TO AUTOMATICALLY OVERRIDE THE FAN TO THE HIGH SPEED AIRFLOW RATE. THE EXHAUST FANS SHALL BE TESTED AND THE TESTING RESULTS SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.6.
M1505.4.1.3 SUPPLY FANS
SUPPLY FANS USED IN MEETING THE REQUIREMENTS OF THIS SECTION SHALL SUPPLY OUTDOOR AIR FROM INTAKE OPENINGS IN ACCORDANCE WITH INTERNATIONAL MECHANICAL CODE SECTIONS 401.4 AND 401.5, WHEN DESIGNED FOR

INTERMITTENT OFF OPERATION, SUPPLY SYSTEMS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS IN ACCORDANCE WITH THE WASHINGTON STATE ENERGY CODE. SUPPLY FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE (HVI 915, HVI LOUDNESS TESTING AND RATING PROCEDURE, AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE, AS APPLICABLE). WHERE OUTDOOR AIR IS PROVIDED TO EACH HABITABLE DWELLING UNIT OR SLEEPING UNIT BY SUPPLY FAN SYSTEMS, THE OUTDOOR AIR SHALL BE FILTERED. THE FILTER SHALL BE ACCESSIBLE FOR REGULAR MAINTENANCE AND REPLACEMENT. THE FILTER SHALL HAVE A MINIMUM EFFICIENCY RATING VALUE (MERV) OF AT LEAST 8.

M1505.4.1.4 BALANCED WHOLE-HOUSE VENTILATION SYSTEM

A BALANCED WHOLE-HOUSE VENTILATION SYSTEM SHALL INCLUDE BOTH SUPPLY AND EXHAUST FANS. THE SUPPLY AND EXHAUST FANS SHALL HAVE AIRFLOW THAT IS WITHIN 10% OF EACH OTHER. THE TESTED AND BALANCED TOTAL MECHANICAL EXHAUST AIRFLOW RATE IS WITHIN 10% OR 5 CFM, WHICHEVER IS GREATER, OF THE TOTAL MECHANICAL SUPPLY AIRFLOW RATE. THE FLOW RATE TEST RESULTS SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7. THE EXHAUST FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.2. THE SUPPLY FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.3. BALANCED VENTILATION SYSTEMS WITH BOTH SUPPLY AND EXHAUST FANS IN A PACKAGED PRODUCT, SUCH AS AN ERV/HRV, SHALL MEET THE REQUIREMENTS OF HVI 920, AS APPLICABLE. INTERMITTENT DRYER EXHAUST, INTERMITTENT RANGE HOOD EXHAUST, AND INTERMITTENT TOILET ROOM EXHAUST AIRFLOW RATES ABOVE THE RESIDENTIAL DWELLING OR SLEEPING UNIT MINIMUM VENTILATION RATE ARE EXEMPT FROM THE BALANCED AIRFLOW CALCULATION.

M1505.4.1.5 FURNACE INTEGRATED SUPPLY

SYSTEMS USING SPACE HEATING AND/OR COOLING AIR HANDLER FANS FOR OUTDOOR AIR SUPPLY DISTRIBUTION ARE NOT PERMITTED.

EXCEPTION: AIR HANDLER FANS SHALL HAVE MULTI-SPEED OR VARIABLE SPEED SUPPLY AIRFLOW CONTROL CAPABILITY WITH A LOW SPEED OPERATION NOT GREATER THAN 25% OF THE RATED SUPPLY AIRFLOW CAPACITY DURING VENTILATION ONLY OPERATION. OUTDOOR AIR INTAKE OPENINGS MUST MEET THE PROVISIONS OF SECTIONS R303.5 AND R303.6 AND MUST INCLUDE A MOTORIZED DAMPER THAT IS ACTIVATED BY THE WHOLE-HOUSE VENTILATION SYSTEM CONTROLLER. THE MOTORIZED DAMPER MUST BE CONTROLLED TO MAINTAIN THE OUTDOOR AIRFLOW INTAKE AIRFLOW WITHIN 10% OF THE WHOLE-HOUSE MECHANICAL EXHAUST AIRFLOW RATE. THE FLOW RATE FOR THE OUTDOOR AIR INTAKE MUST BE TESTED AND VERIFIED AT THE MINIMUM VENTILATION FAN SPEED AND THE MAXIMUM HEATING OR COOLING FAN SPEED. THE RESULTS OF THE TEST SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7.

M1505.4.1.6 TESTING

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE TESTED, BALANCED AND VERIFIED TO PROVIDE A FLOW RATE NOT LESS THAN THE MINIMUM REQUIRED BY SECTIONS M1505.4.3 AND M1505.4.4. TESTING SHALL BE PERFORMED ACCORDING TO THE VENTILATION EQUIPMENT MANUFACTURER'S INSTRUCTIONS, OR BY USING A FLOW HOOD, FLOW GRID, OR OTHER AIRFLOW MEASURING DEVICE AT THE MECHANICAL VENTILATION FAN INLET TERMINALS, OUTLET TERMINALS OR GRILLES OR IN THE CONNECTED VENTILATION DUCTS, WHERE REQUIRED BY THE BUILDING OFFICIAL. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING OFFICIAL AND BE POSTED IN THE DWELLING UNIT PER SECTION M1505.4.1.7.

M1505.4.1.7 CERTIFICATE

A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE MECHANICAL CONTRACTOR, TEST AND BALANCE CONTRACTOR OR OTHER APPROVED PARTY AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING, WHEN LOCATED ON AN ELECTRICAL PANEL. THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL, OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL LIST THE FLOW RATE DETERMINED FROM THE DELIVERED AIRFLOW OF THE WHOLEHOUSE MECHANICAL VENTILATION SYSTEM AS INSTALLED AND THE TYPE OF MECHANICAL WHOLE-HOUSE VENTILATION SYSTEM USED TO COMPLY WITH SECTION M1505.4.3.1.

M1505.4.2 SYSTEM CONTROLS

THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT COMPLY WITH THE FOLLOWING:

THE WHOLE-HOUSE VENTILATION SYSTEM SHALL BE CONTROLLED WITH MANUAL SWITCHES, TIMERS OR OTHER MEANS THAT PROVIDE FOR AUTOMATIC OPERATION OF THE VENTILATION SYSTEM THAT ARE READILY ACCESSIBLE BY THE OCCUPANT;

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE OFF OF THE SYSTEM BY THE OCCUPANT DURING PERIODS OF POOR OUTDOOR AIR QUALITY. CONTROLS SHALL INCLUDE PERMANENT TEXT OR A SYMBOL INDICATING THEIR FUNCTION. RECOMMENDED CONTROL PERMANENT LABELING TO INCLUDE TEXT SIMILAR TO THE FOLLOWING: "LEAVE ON UNLESS OUTDOOR AIR QUALITY IS VERY POOR;" MANUAL CONTROLS SHALL BE READILY ACCESSIBLE BY THE OCCUPANT;

WHOLE-HOUSE VENTILATION SYSTEMS SHALL BE CONFIGURED TO OPERATE CONTINUOUSLY EXCEPT WHERE INTERMITTENT OFF CONTROLS AND SIZING ARE PROVIDED PER SECTION M1505.4.3.2.

TABLE M1505.4.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS	
DWELLING UNIT FLOOR AREA	NUMBER OF BEDROOMS
	0 — 1 2-3 4-5 6-7 >7
	AIRFLOW IN CFM
< 1,500	30 45 60 75 90
1,501 — 3,000	45 60 75 90 105
3,001 — 4,500	60 75 90 105 120
4,501 — 6,000	75 90 105 120 135
6,001 — 7,500	90 105 120 135 150
> 7,500	105 120 135 150 165

TABLE M1505.4.3(2) INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS**

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25% 33% 50% 66% 75% 100%
FACTOR (a)	4 3 2 1.5 1.3 1.0

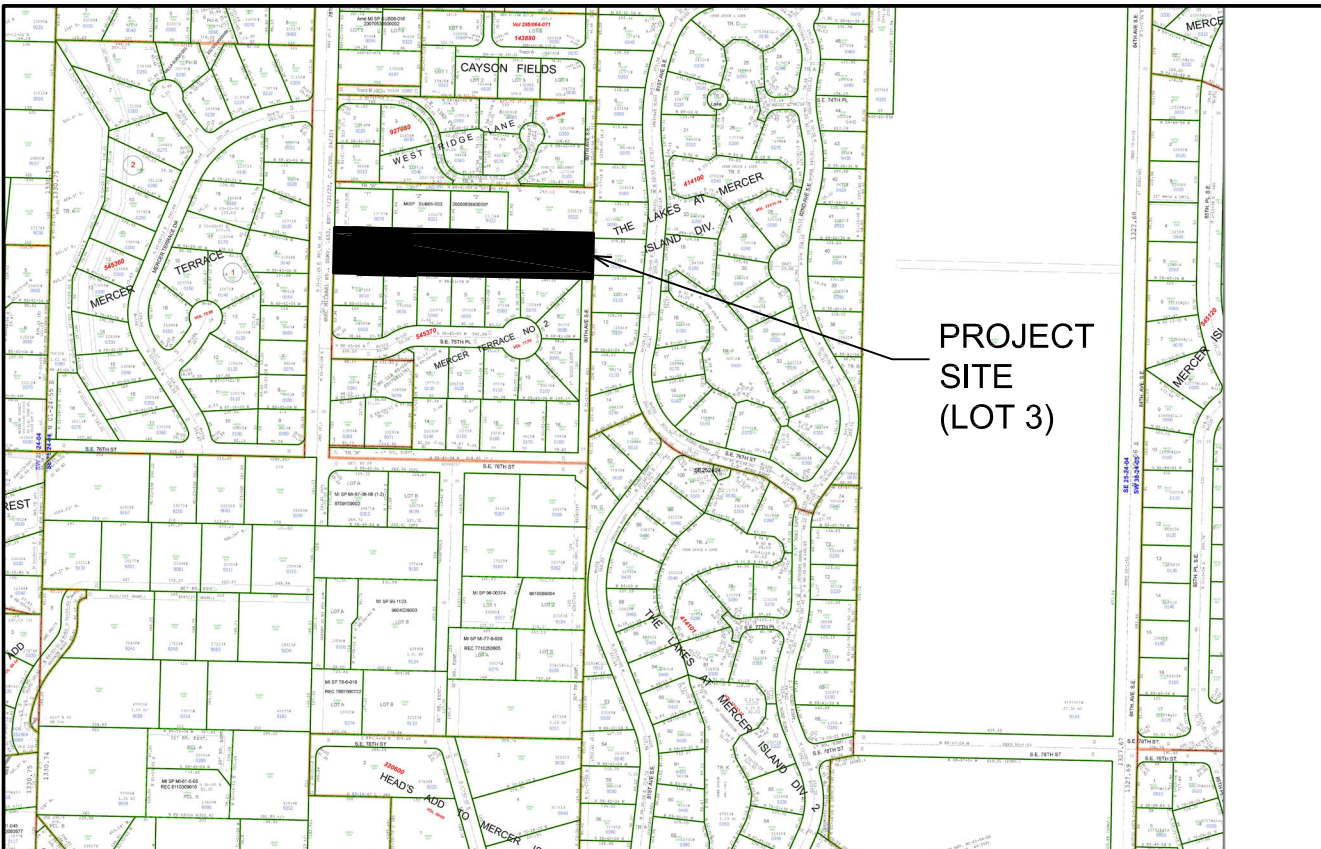
- FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE DETERMINED BY INTERPOLATION.
- EXTRAPOLATION BEYOND THE TABLE IS PROHIBITED.

WHOLE HOUSE VENTILATION OPTIONS (CHOOSE ONE):

- ☒ 1. WHOLE HOUSE VENTILATION USING EXHAUST FANS
☐ 2. WHOLE HOUSE VENTILATION USING SUPPLY AND FORCED-AIR SYSTEM
☐ 3. WHOLE HOUSE VENTILATION USING A SUPPLY FAN
☐ 4. WHOLE-HOUSE VENTILATION USING A HEAT RECOVERY VENTILATION SYSTEM.

VICINITY MAP

N.T.S.



ASSOCIATED LAND USE APPLICATIONS:
SUBDIVISIONS/PLATTING APPLICATION #20311129

DRAWING INDEX:

ARCHITECTURAL

- A0.1 COVER SHEET
- A0.2 WSEC - BUILDING THERMAL ENVELOPE
- A1.0 SITE PLAN
- A1.1 SITE CALCULATIONS
- A2.1 FDN. & MISC. DETAILS
- A2.2 ROOF & FLOOR DETAILS
- A2.3 STAIR DETAILS
- A3 FOUNDATION PLAN
- A4 MAIN FLOOR FRAMING PLAN
- A5 MAIN FLOOR PLAN
- A6 UPPER FLOOR FRAMING PLAN
- A7 UPPER FLOOR PLAN
- A8 ROOF FRAMING PLAN
- A9 EXTERIOR ELEVATIONS
- A10 EXTERIOR ELEVATIONS
- A11 BUILDING SECTIONS

STRUCTURAL

- S-0.0 STRUCTURAL NOTES
- SD-1 STRUCTURAL DETAILS
- SD-2 STRUCTURAL DETAILS
- SD-3 STRUCTURAL DETAILS
- SD.01 FOUNDATION DETAILS
- SD.02 FOUNDATION DETAILS

CIVIL

- C4.01 LOT 3 GRADING AND DRAINAGE PLAN
- C8 LOT 3 OVERALL PLAN

PROJECT TEAM

ARCHITECT/APPLICANT
McCULLOUGH ARCHITECTS
5601 - 6th AVE S, SUITE 317
SEATTLE, WA 98108
TRACY BRINK
tracy@mccullougharchitects.com
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DEVELOPER/APPLICANT
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P.O. BOX 791
MERCER ISLAND, WA 98040
WES GIESBRECHT
wes.atlin@outlook.com
206.749.9600

STRUCTURAL ENGINEER
MULHERN + KULP
7220 TRADE STREET, SUITE 350
SAN DIEGO, CA 92121
RYAN CHAN
rchan@mulhernkulp.com
619.650.0010x188

CIVIL ENGINEER
LANGAN / NAVIX
11235 NE 6th ST, SUITE 150
BELLEVUE, WA 98004
JOE TAFLIN, PE, LEEP AP
jotaflin@langan.com
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GEOTECHNICAL
TERRA ASSOCIATES, INC.
12220 - 113th AVENUE NE, STE. 130
KIRKLAND, WA 98034
CAROLYN S. DECKER
(425) 821-4334

ARBORIST
CREATIVE LANDSCAPE SOLUTIONS
—
SULTAN, WA 98294
SUSAN PRINCE
info@creativelandscapewa.com
425.870.5403

BUILDING AREA SUMMARY:

HEATED MAIN LEVEL: 2,053 SF
HEATED UPPER LEVEL: 2,282 SF

TOTAL HEATED FLOOR AREA: 4,335 SF

GARAGE AREA: 659 S.F.

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Revisions

Date: 2025.10.22
Job No: 24-008

Project No:
Drawn:
Approved:

Owner

SAINTFIELD2 LLC

SEARS PLAT - LOT 3

Mercer Island
Washington
98040

PERMIT SUBMITTAL

Cover Sheet

A0.1

PROPERTY LINE	
SETBACK / BUFFER	
EXISTING TOPO. (MJR.)	
EXISTING TOPO. (MNR.)	
PROPOSED TOPO.	
SILT FENCE	
TREE PROTECTION	
STRUCTURE (DEMO)	
EDGE OF PAVING	
LINE OF STRUCTURE	
LINE OF ROOF O.H.	
CRITICAL AREA	
CONCRETE PAVING	
CONCRETE PAVERS	



A.D.	AREA DRAIN
C.B.	CATCHBASIN
C.O.	CLEANOUT
D.S.	DOWNSPOUT
Y.D.	YARD DRAIN

SITE DATA : 7418 - 78th AVE. SE , MERCER ISLAND WA 98040

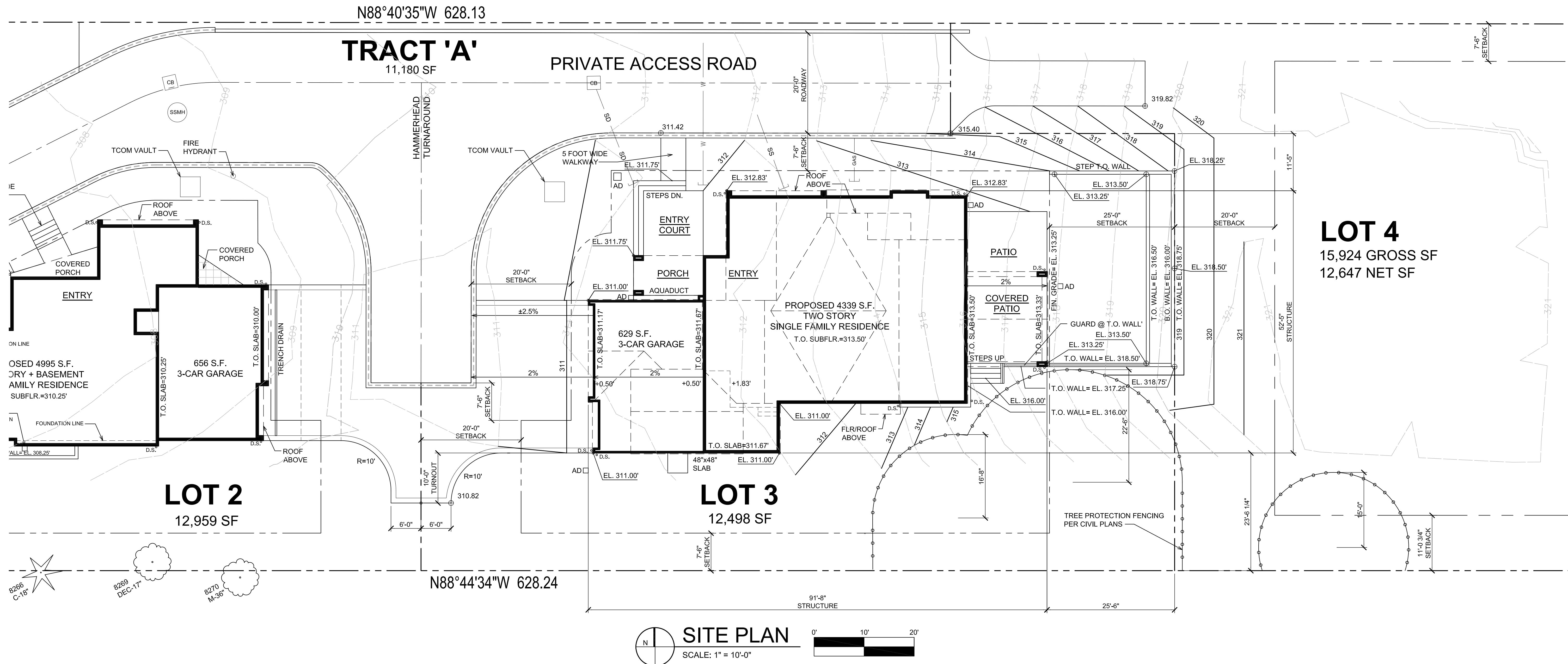
	TPN	252404-9075
	QSTR	SE-25-24N-4E
	ZONING	R-9.6
19.02.020.A.	LOT AREA - MIN. 9,600 S.F.	12,498 [±] sq.ft.
19.02.020.B.	STREET FRONTAGE	PER STREET STANDARDS
19.02.020.C.	FRONT SETBACK	20'
	SIDE SETBACK	7.5' (15' TOTAL)
	REAR SETBACK	25'
19.02.020.D.	GROSS FLOOR AREA ALLOWED	4,999 S.F. (40%)
	CALCULATED G.F.A.	4,999 S.F. (40%)
19.02.020.E.	MAX. BUILDING HEIGHT	30 ft. above A.B.E.
	CALCULATED A.B.E.=	EL. 312.59'
	MAX. ALLOWED BLDG. HT.=	EL. 342.59'
	MAX. PROPOSED BLDG. HT.=	EL. 341.79'
19.02.020.F.	LOT SLOPE = 5.67% < 15%	
	LOT COVERAGE ALLOWED (40%)	4,999 S.F.
	LOT COVERAGE PROPOSED (34.6%)	4,329 S.F.
19.02.020.F.3	MIN. LANDSCAPE AREA (60%)	7,499 S.F.
	LANDSCAPE AREA PROPOSED (60%)	7,515 S.F.
19.02.020.G.	PARKING - SFR +3000 S.F.	3 SPACES

LEGAL DESCRIPTION:

LOT 3
E 1/2 OF NW 1/4 OF SE 1/4 LESS N 769.98 FT & LESS S 450 FT LESS
CO RD

GEODETTIC DATUM

MAX. PROPOSED ROOF HEIGHT= EL. 341.79'
UPPER UPR. SUBFLOOR LEVEL= EL. 326.0625'
MAIN FLR. SUBFLOOR LEVEL= 313.50'
GARAGE SLAB (FRONT)= EL. 311.17'



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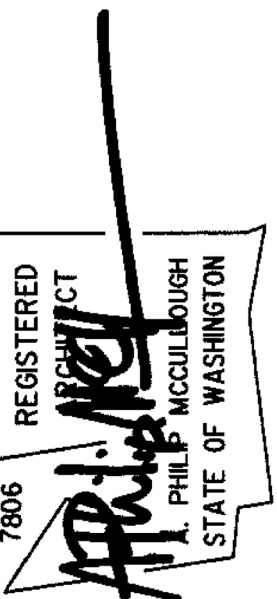
Comment

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24-008

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Approved:

Owner
SAINTFIELD2 LLC



7414 - 78th Ave. SE

Mercer Island
Washington
98040

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Site Plan

A1.0

GROSS FLOOR AREA

STAIR:	130 SF
MAIN LEVEL:	2,812 SF
UPPER LEVEL:	2,053 SF
TOTAL PROPOSED :	4,995 SF
TOTAL ALLOWED:	4,999 SF

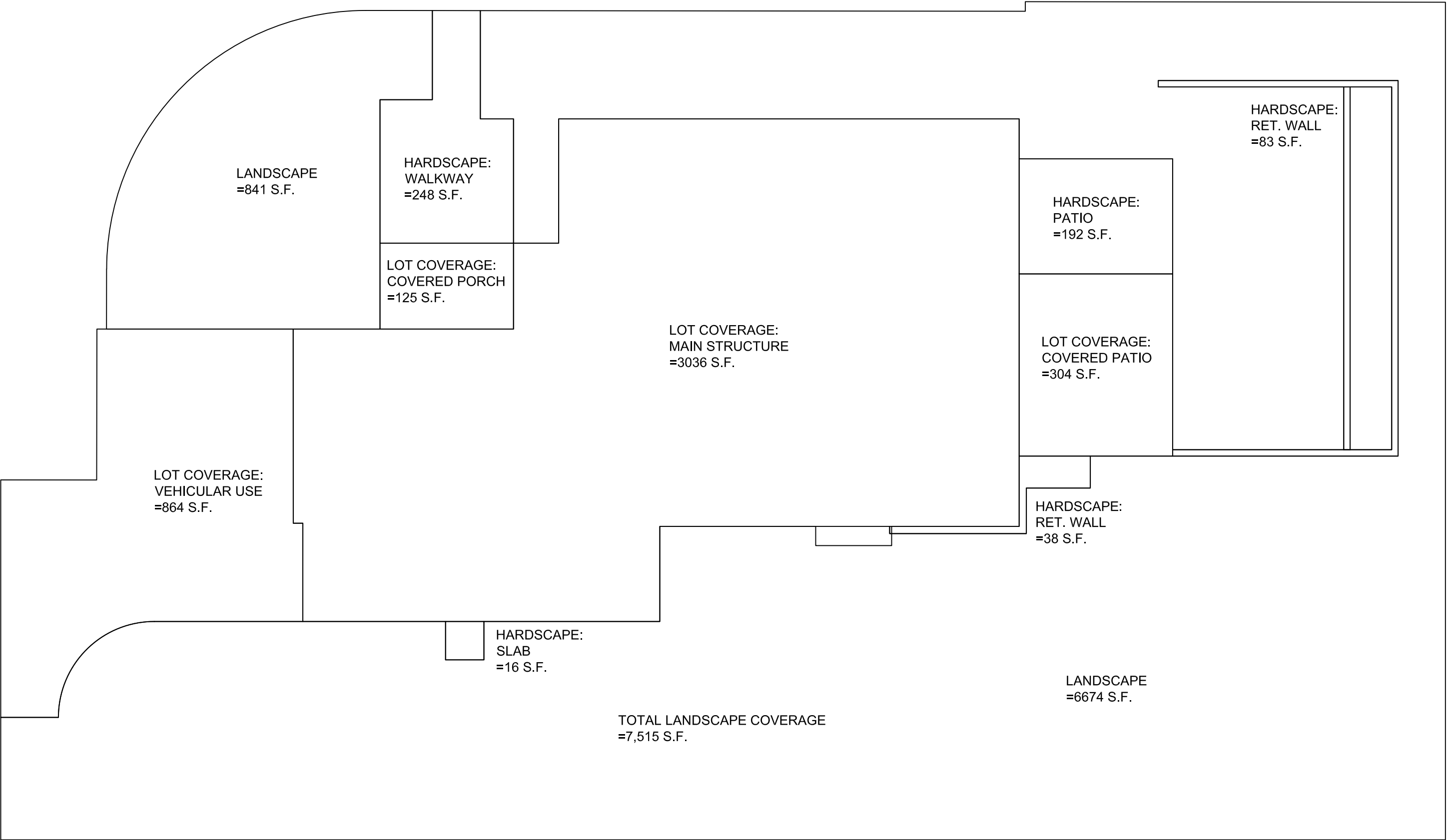
LOT COVERAGE

MAIN STRUCTURE ROOF AREA= 3,036 S.F.
ACCESSORY STRUCTURE ROOF AREA= 0 S.F.
VEHICULAR USE= 864 S.F.
COVERED PATIOS AND DECKS= 429 S.F.
TOTAL NEW LOT COVERAGE AREA 4,329 S.F.

ALLOWED= 12,498 S.F. (0.40)= 4,999 S.F.

Sears Lot 2 Average Building Elevation Calculation						
Point	Length	Height	LxH			
A	9	311.33	2801.97			
B	18.67	311.75	5820.3725			
C	32.67	312.83	10220.1561			
D	7.75	312.83	2424.4325			
E	7.67	312.83	2399.4061			
F	16	313.33	5013.28			
G	1.25	312.83	391.0375			
H	15	313.5	4702.5			
I	19	313.25	5951.75			
J	7.5	316	2370			
K	9.92	311	3085.12			
L	16	316	5056			
M	37.5	312.5	11718.75			
N	37.17	311.67	11584.7739			
O	1	311.17	311.17			
P	10.25	311.17	3189.4925			
Q	20.25	311.17	6301.1925			
R	9	311.58	2804.22			
S	13	312.83	4066.79			
T			0			
U			0			
totals	288.6		90212.4136			

ABE:	312.5863257
Max Ht:	342.5863257



PROPOSED HARDSCAPE:

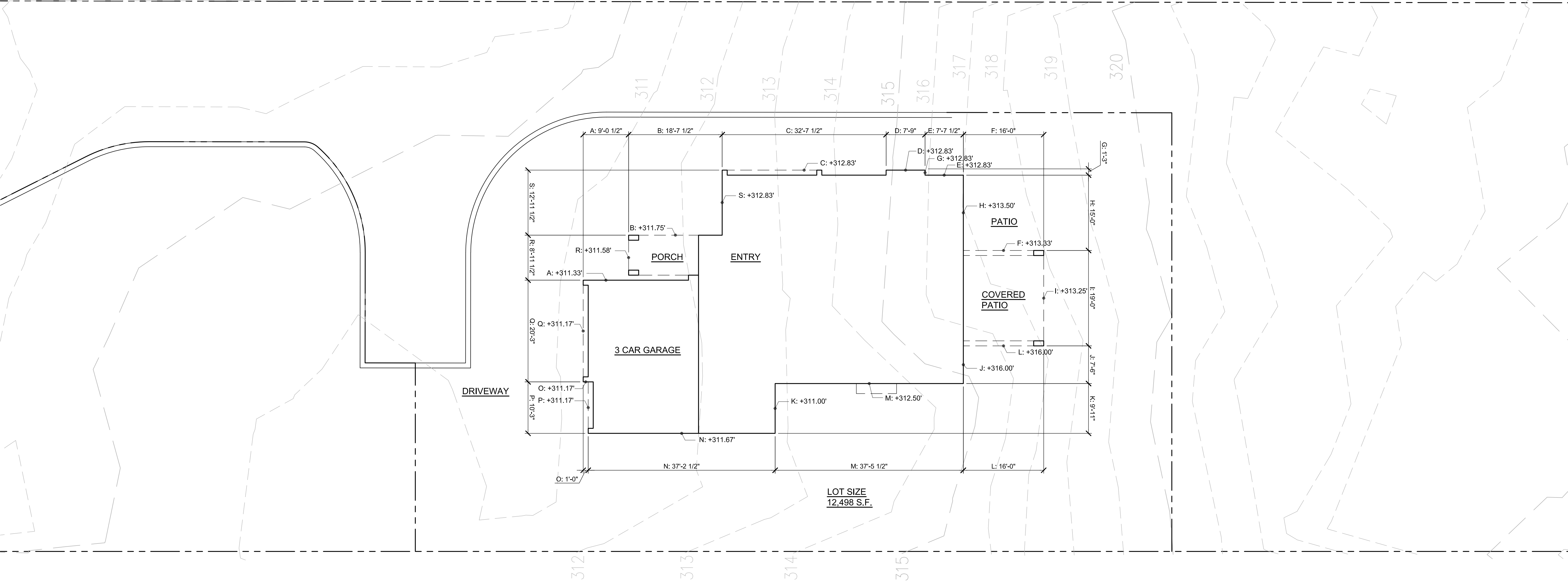
WALKWAY= 248 S.F.
PATIO= 192 S.F.
SLAB= 16 S.F.
RET. WALL= 38 S.F.
RET. WALL= 83 S.F.
TOTAL PROPOSED= 577 S.F.

ALLOWED= 12,498(0.09)= 1,125 S.F.

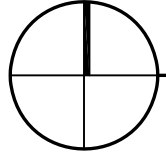
LOT SLOPE:

HIGHEST ELEVATION POINT: 320.0'
LOWEST ELEVATION POINT: 311.0'
ELEVATION DIFFERENCE: 9.0'
HORIZONTAL DISTANCE: 158.7'
LOT SLOPE= 5.67%

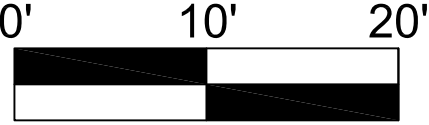
(SEE BOUNDARY PLAN ON SHT A1.0 FOR DATA POINTS)



NORTH



A.B.E. / G.F.A. / LOT COVERAGE
SCALE: 1" = 10'-0"



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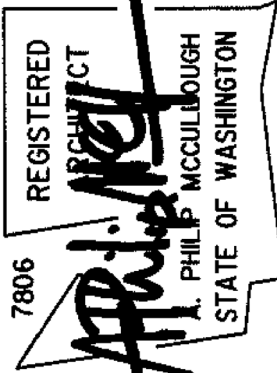
Comment

Revisions

Date: 2025.10.22
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Project No:
Drawn:
Approved:

Owner
SAINTFIELD2 LLC



7414 - 78th Ave. SE

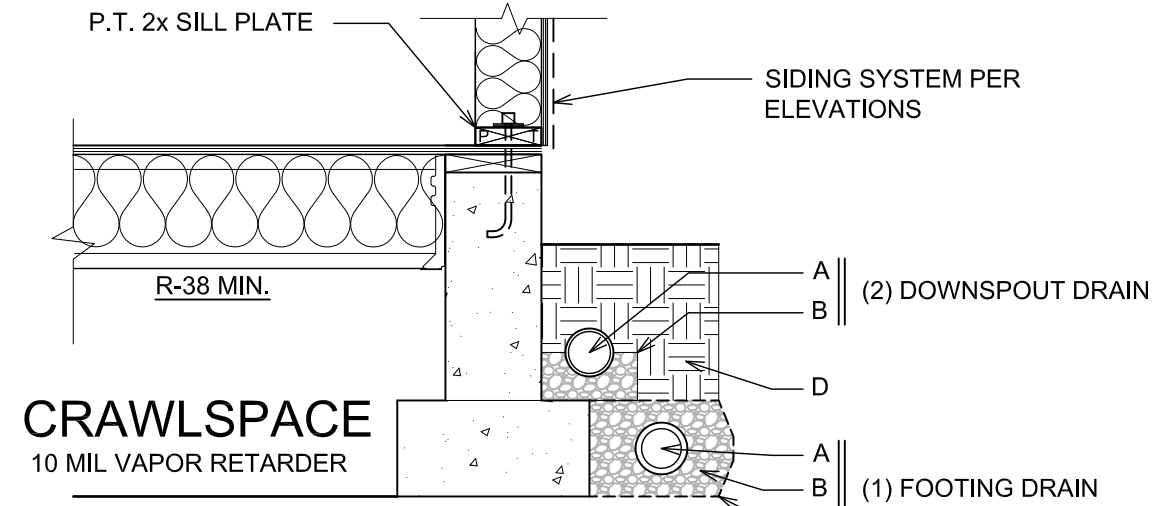
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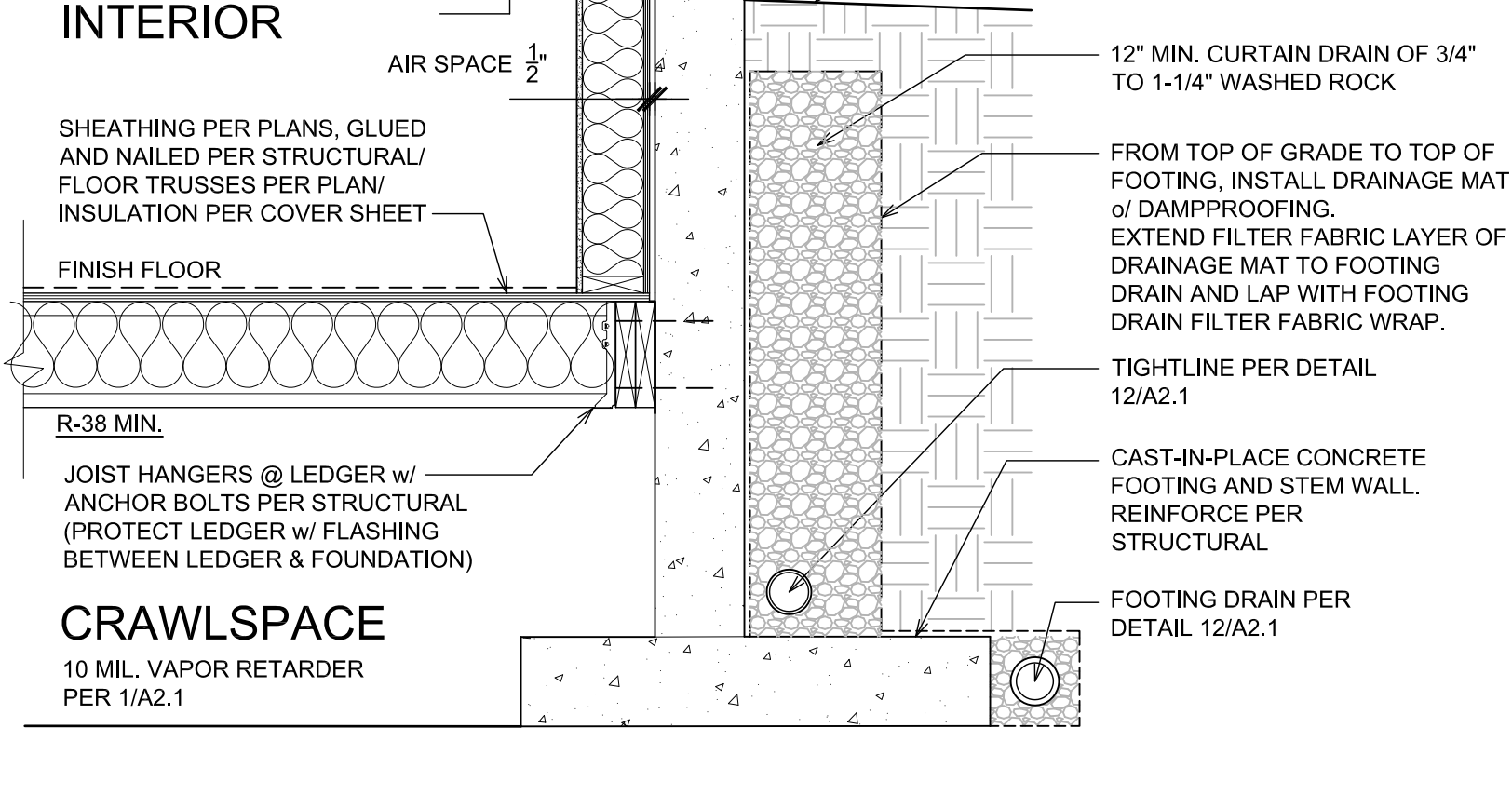
Site
Calculations

A1.1

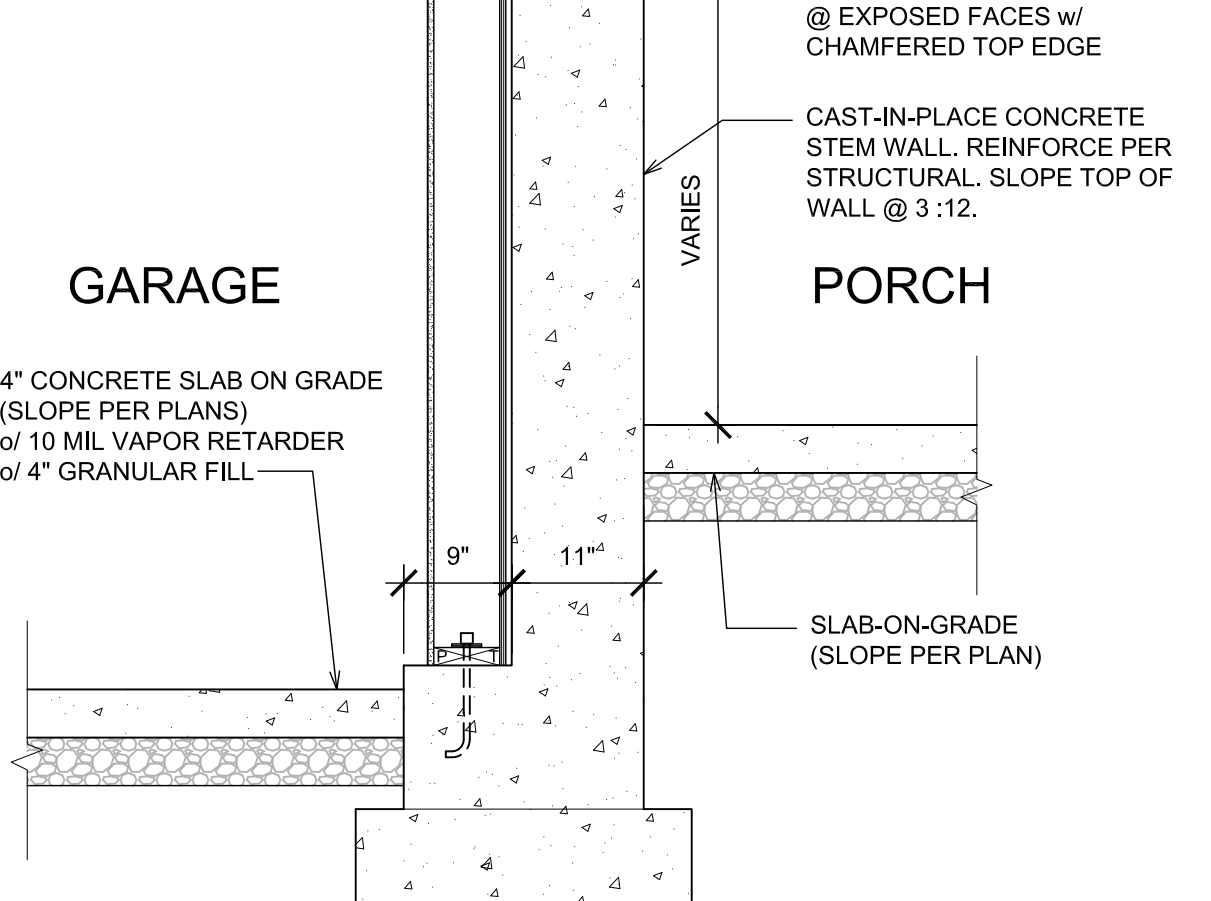
- (1) FOOTING DRAINS:
A. PIPE: SMOOTH WALL PERF PIPE, MIN. 4" DIAMETER (PERFS. DOWN.) INSTALL CLEANOUTS AT MAXIMUM 50 FOOT SPACING. INVERT AT LEAST 6" BELOW SLAB OR CRAWLSPACE. SLOPE TO DRAIN TO APPROPRIATE OUTFALL. 4" DIAMETER TIGHTLINE ROOF DRAIN. SMOOTH WALL. DO NOT CONNECT TO FOOTING DRAIN.
B. BEDDING: CLEAN, WASHED, ROUNDED GRAVEL W/ UNIFORM DIA. BETWEEN 3/4" & 1-1/4". PROVIDE AT LEAST 6-INCHES OF BEDDING ABOVE AND BESIDE FOOTING DRAIN PIPE.
C. FILTER FABRIC: NON-WOVEN GEOTEXTILE EQUIVALENT TO MIRAFI 140N. INSTALLED TO FULLY ENCAPSULATE CLEAN, WASHED ROUNDED GRAVEL (7/8" MIN.)
D. BACKFILL: IMPORTED OR NATIVE SOIL W/ MAX. PARTICLE SIZE OF 4".



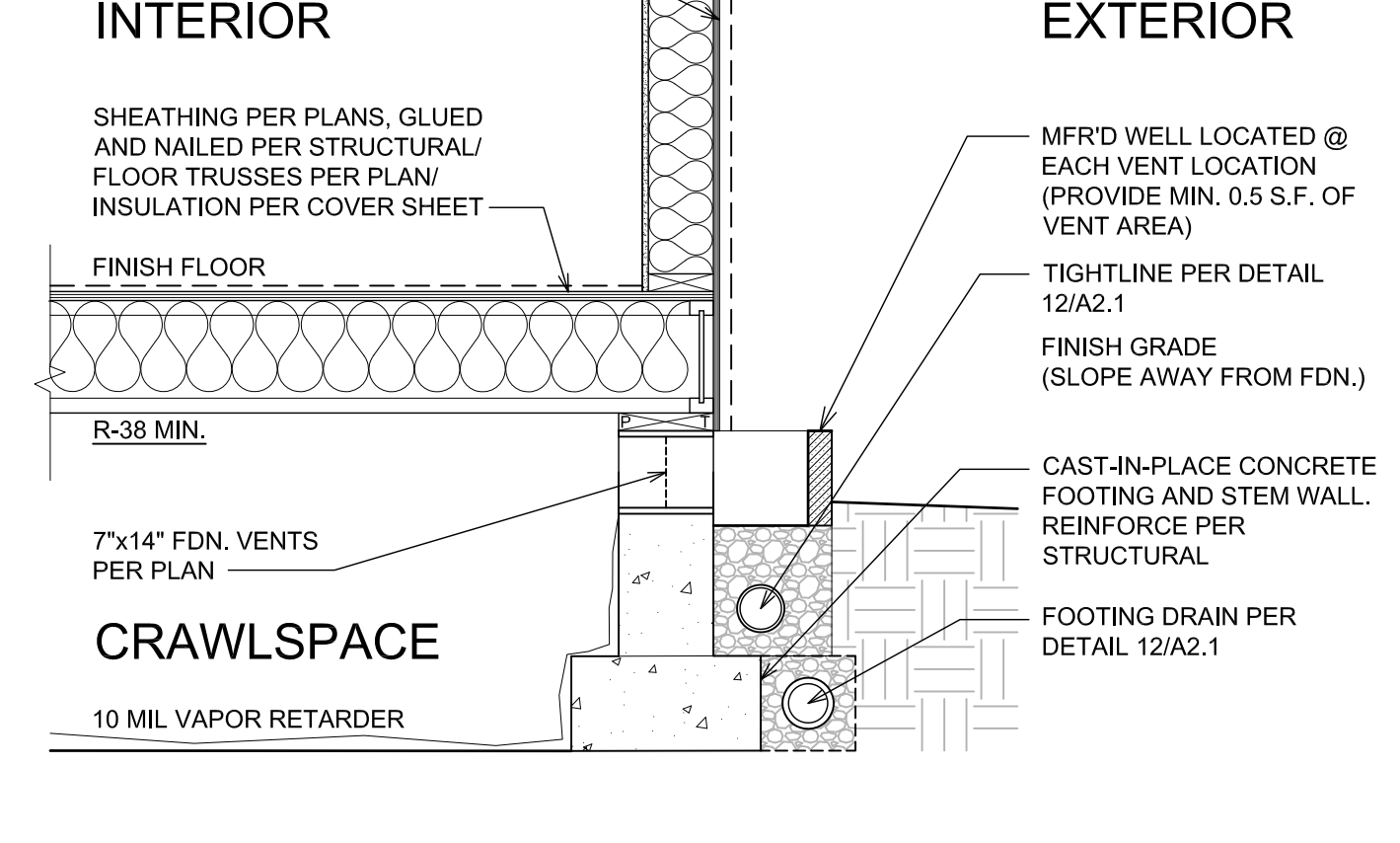
DRAINAGE NOTES
SCALE: 3/4" = 1'-0"
SLAB ON GRADE (A2.1) 12



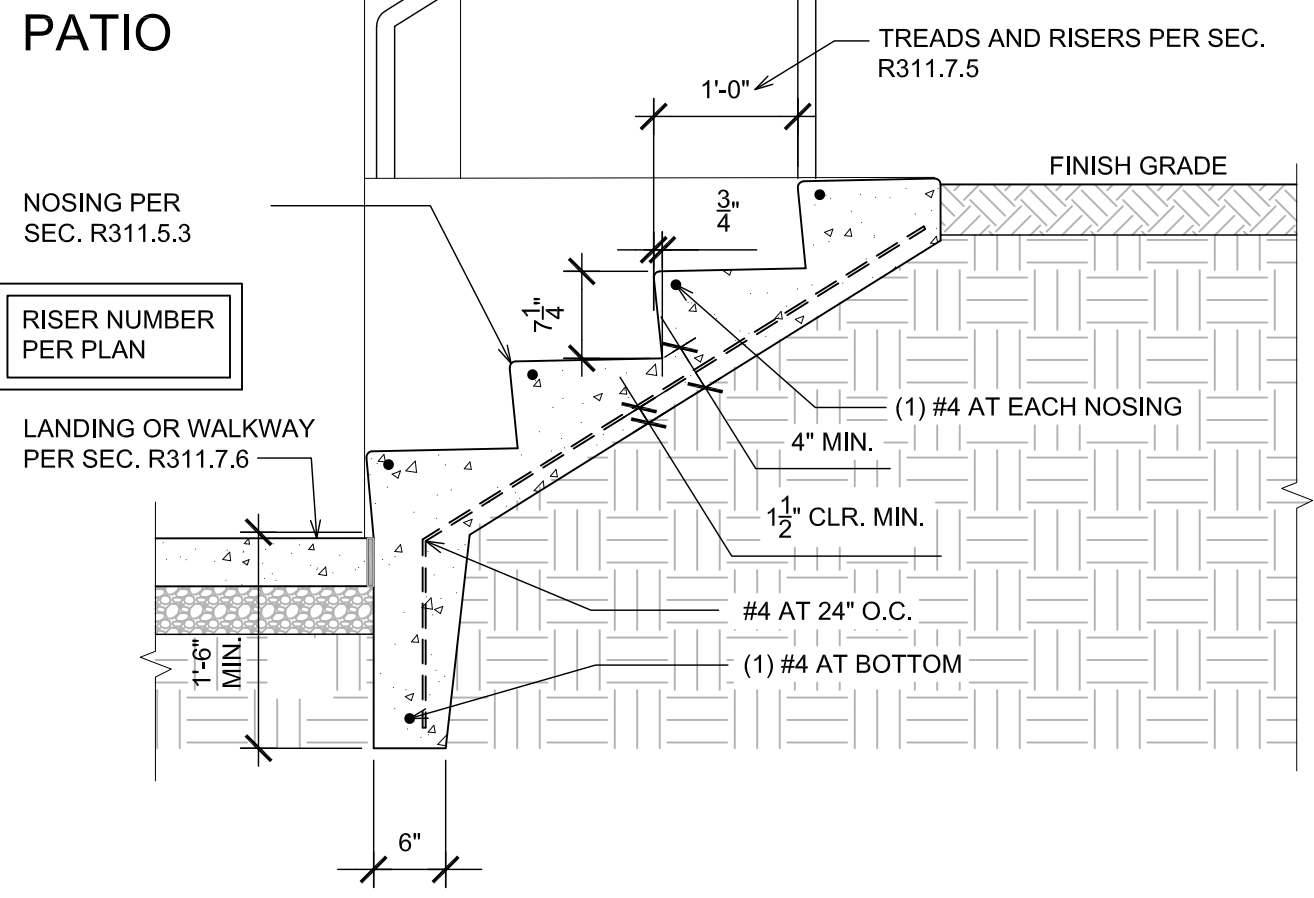
FOUNDATION - RAISED FDN. WALL
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 11



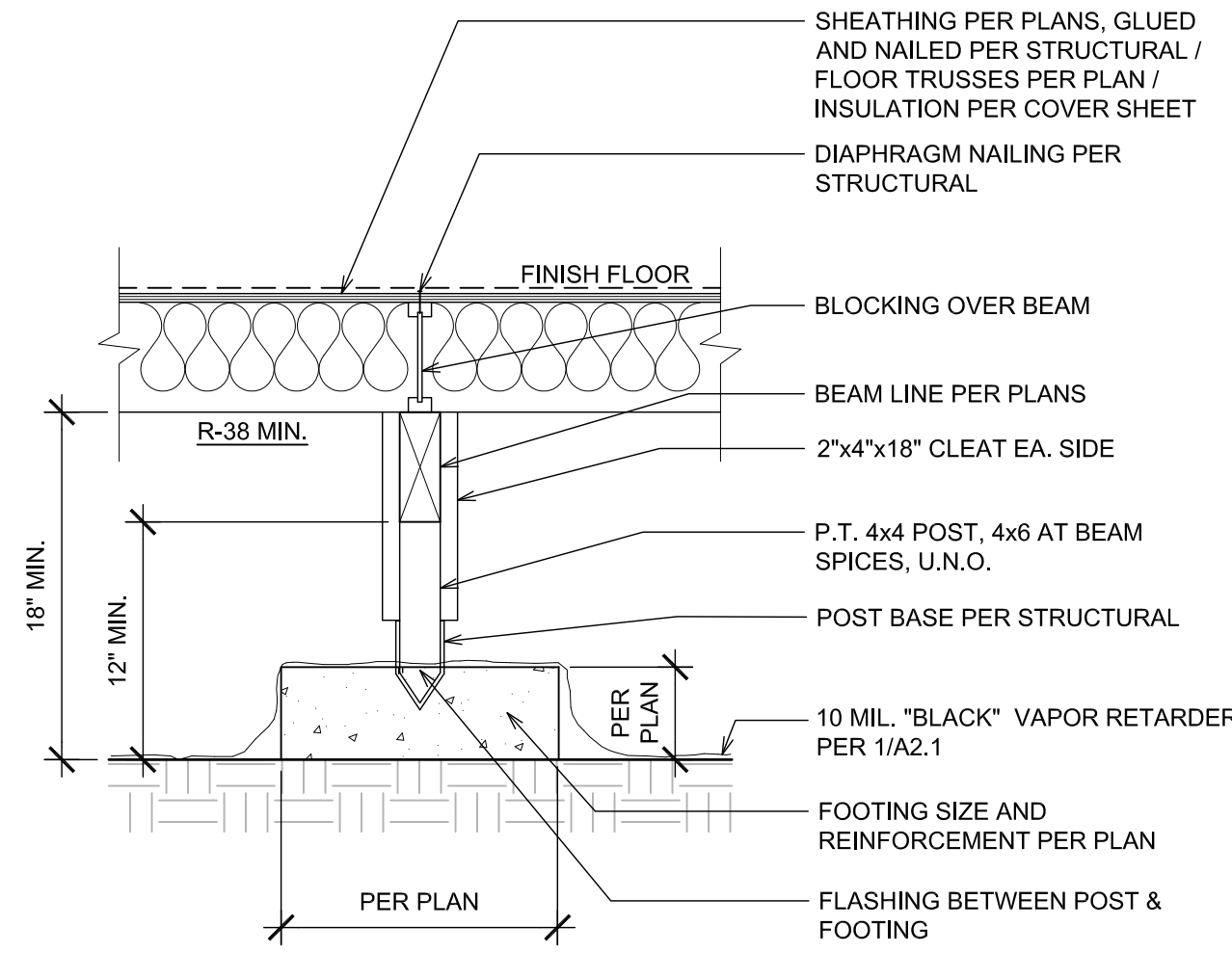
SLOPED AQUADUCT
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 10



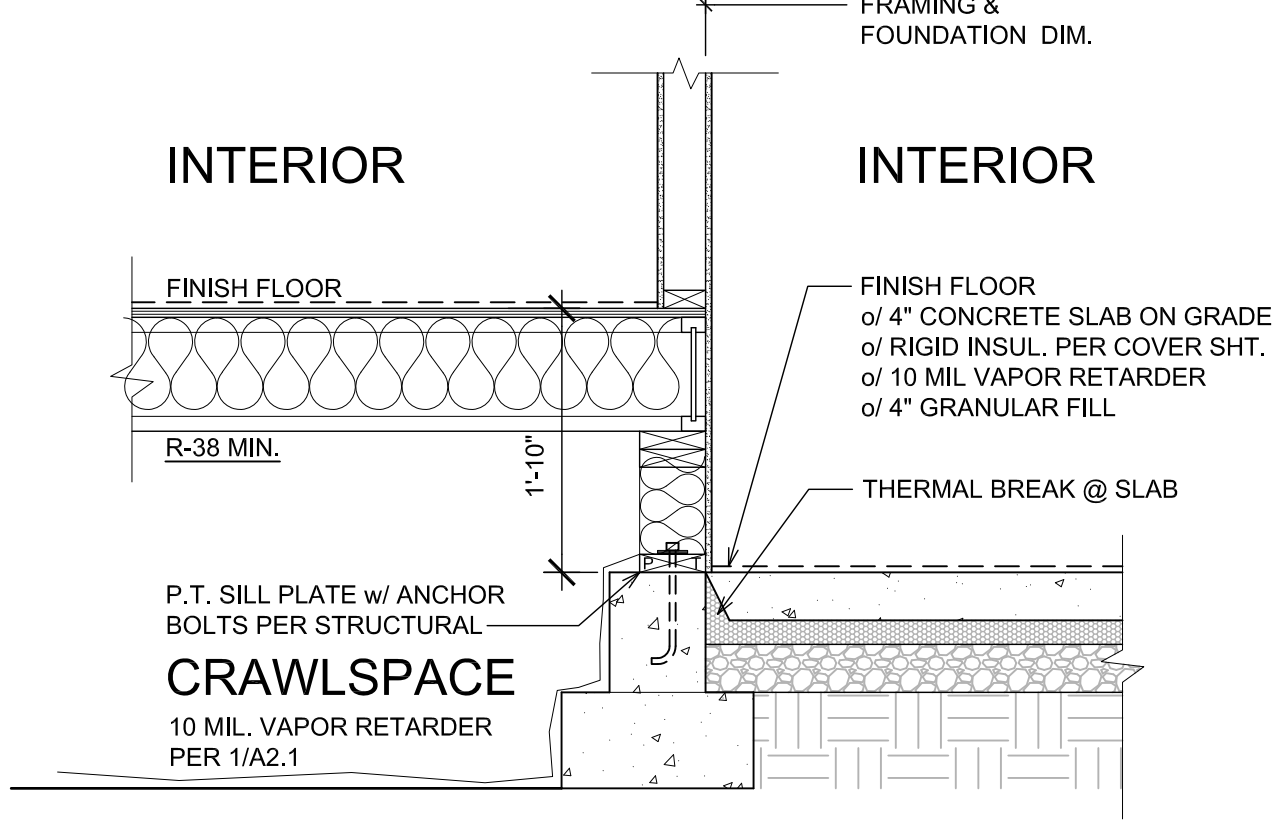
FOUNDATION - CRAWLSPACE VENT
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 9



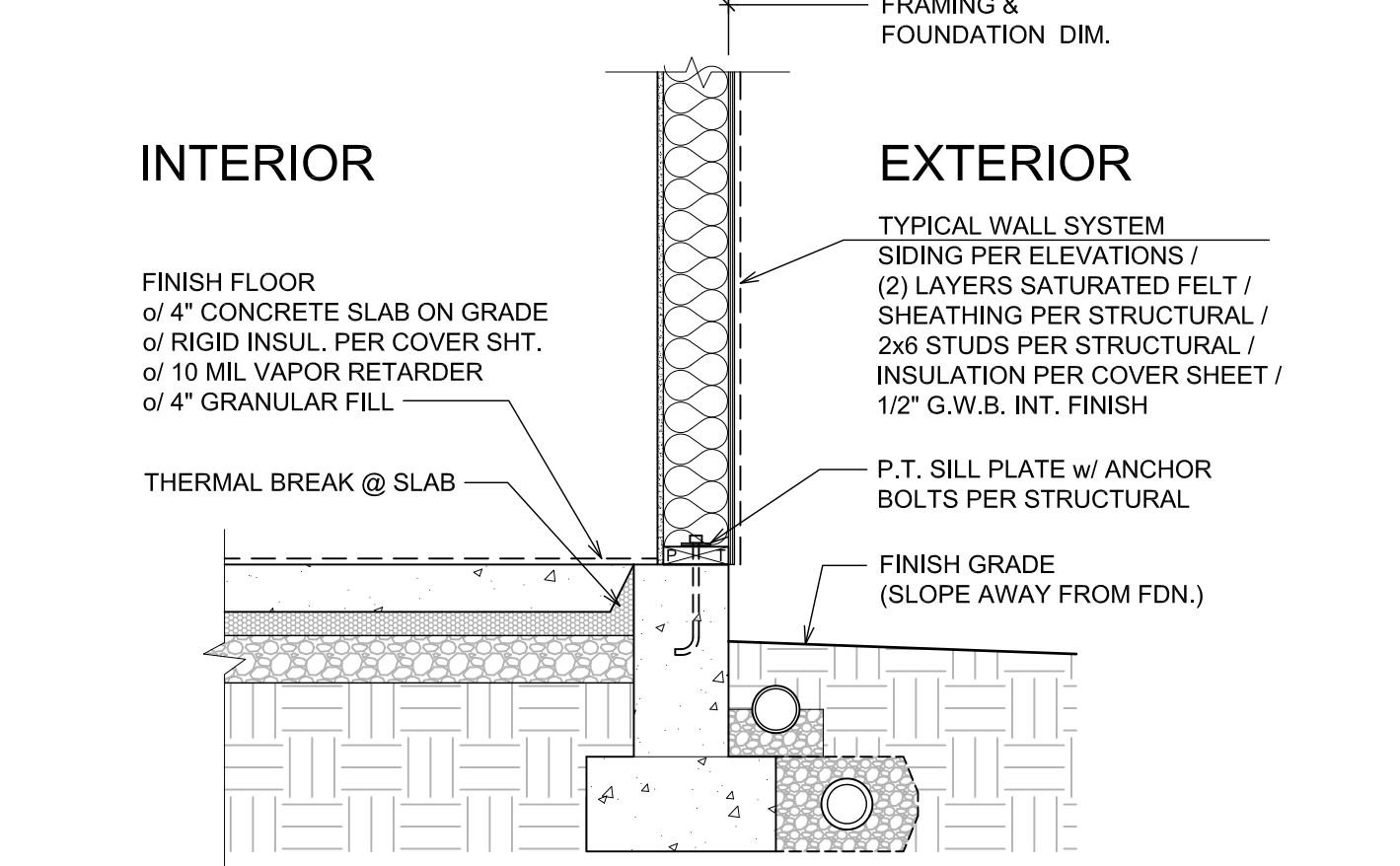
CONC. STEPS ON GRADE
SCALE: 3/4" = 1'-0"
SLAB ON GRADE (A2.1) 8



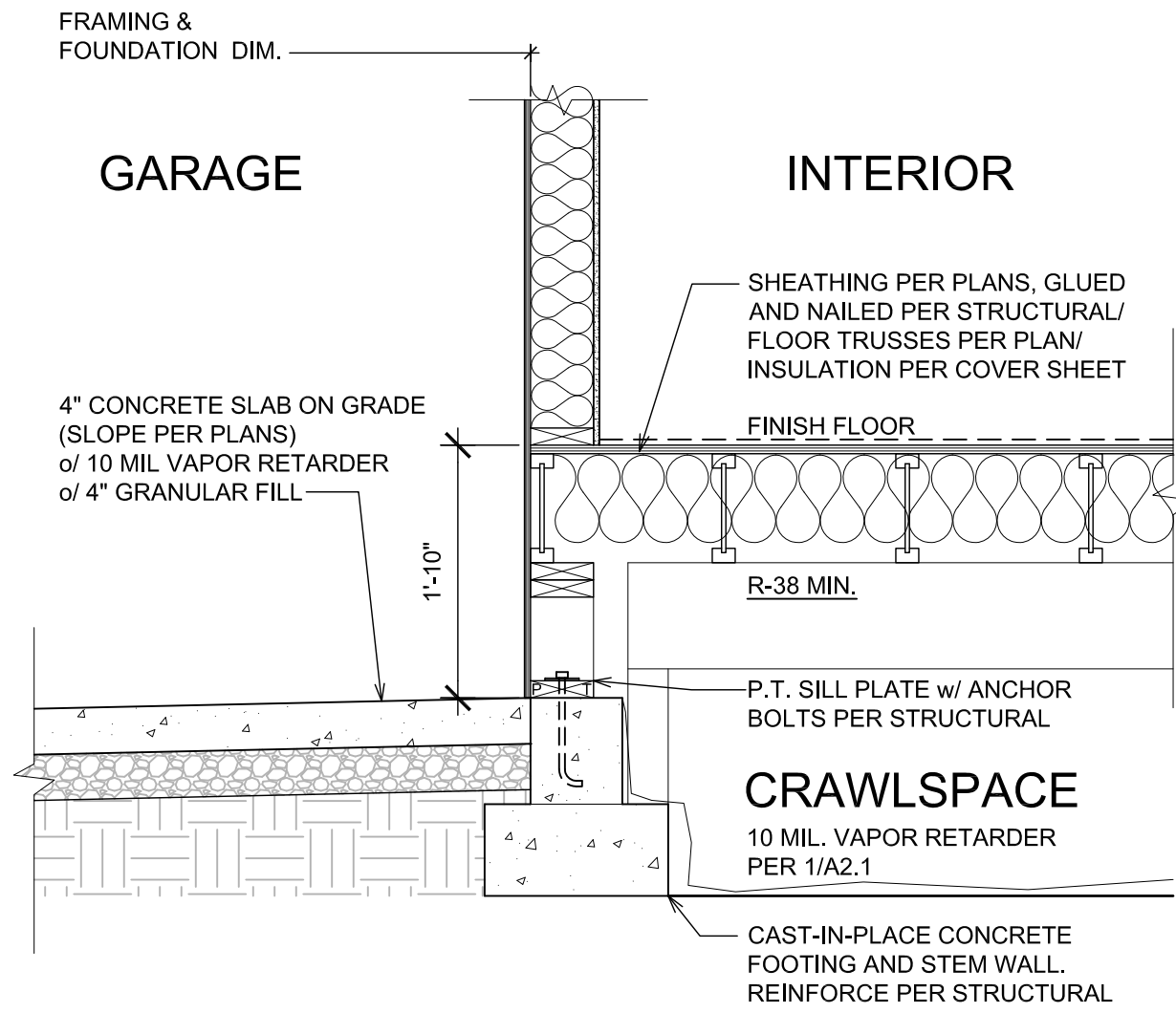
FOUNDATION - ISOLATED PAD FOOTING
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 7



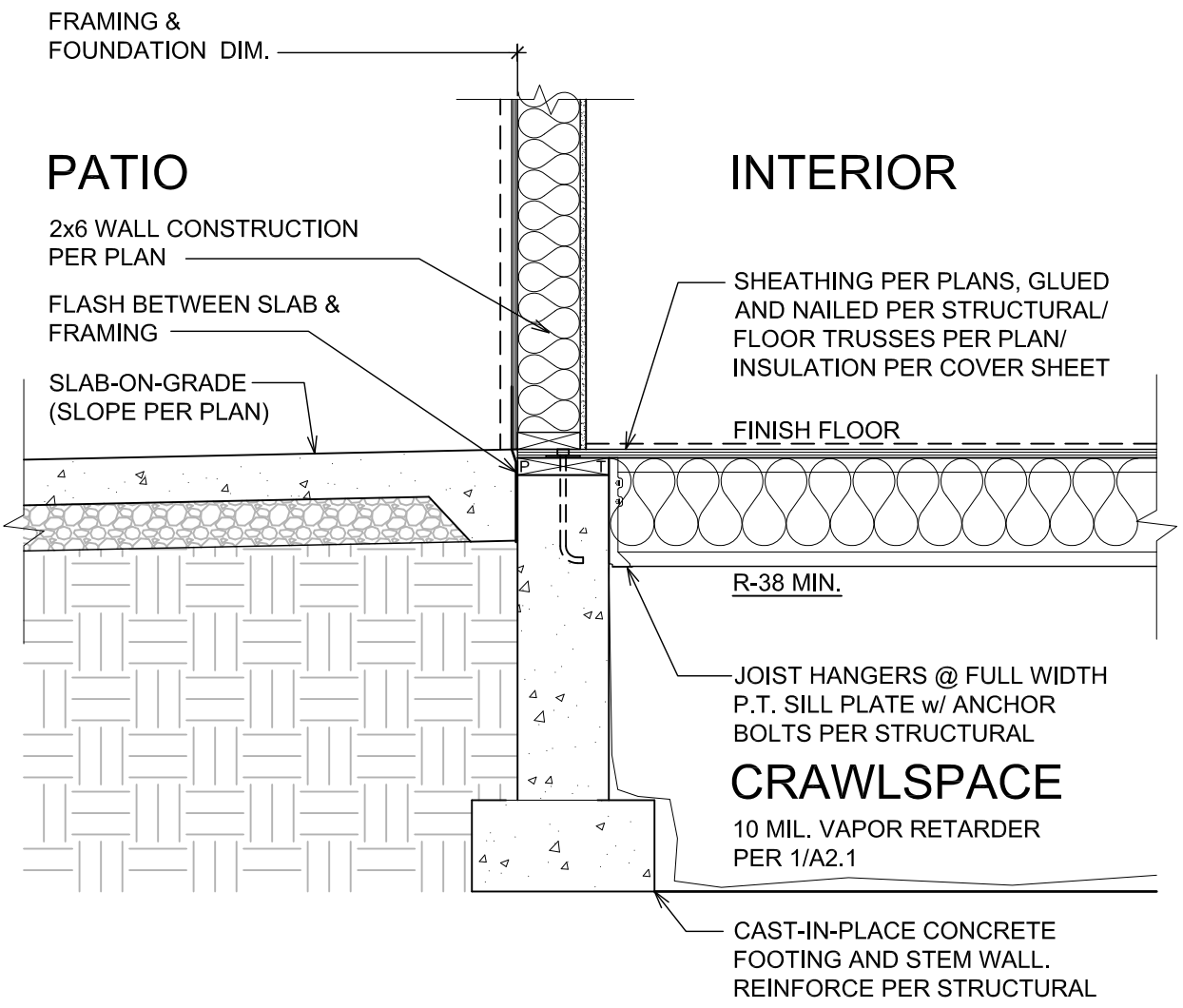
FOUNDATION - CRAWLSPACE - S.O.G.
SCALE: 3/4" = 1'-0"
SLAB ON GRADE / CRAWLSPACE (A2.1) 6



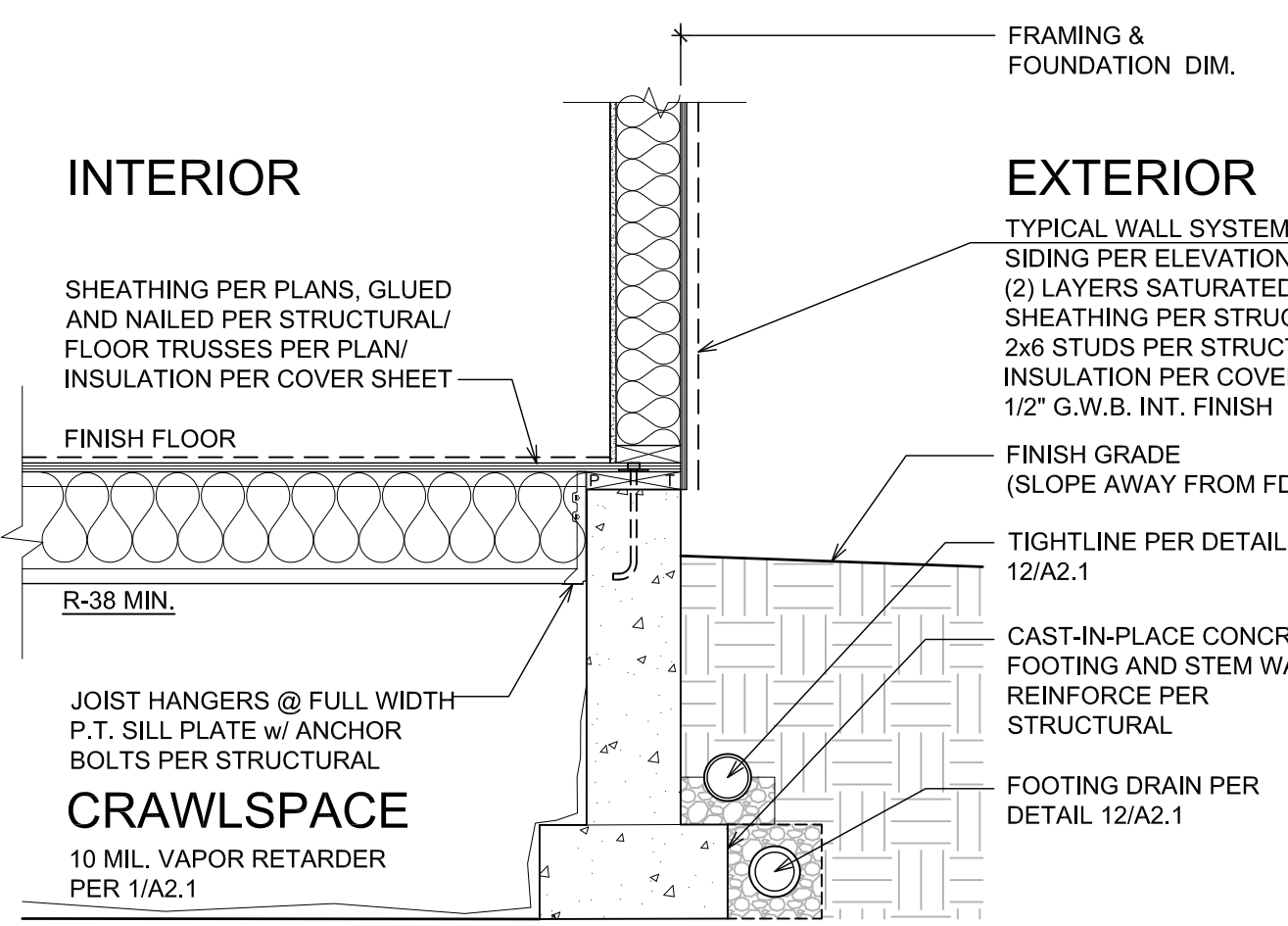
FOUNDATION - SLAB ON GRADE
SCALE: 3/4" = 1'-0"
SLAB ON GRADE (A2.1) 5



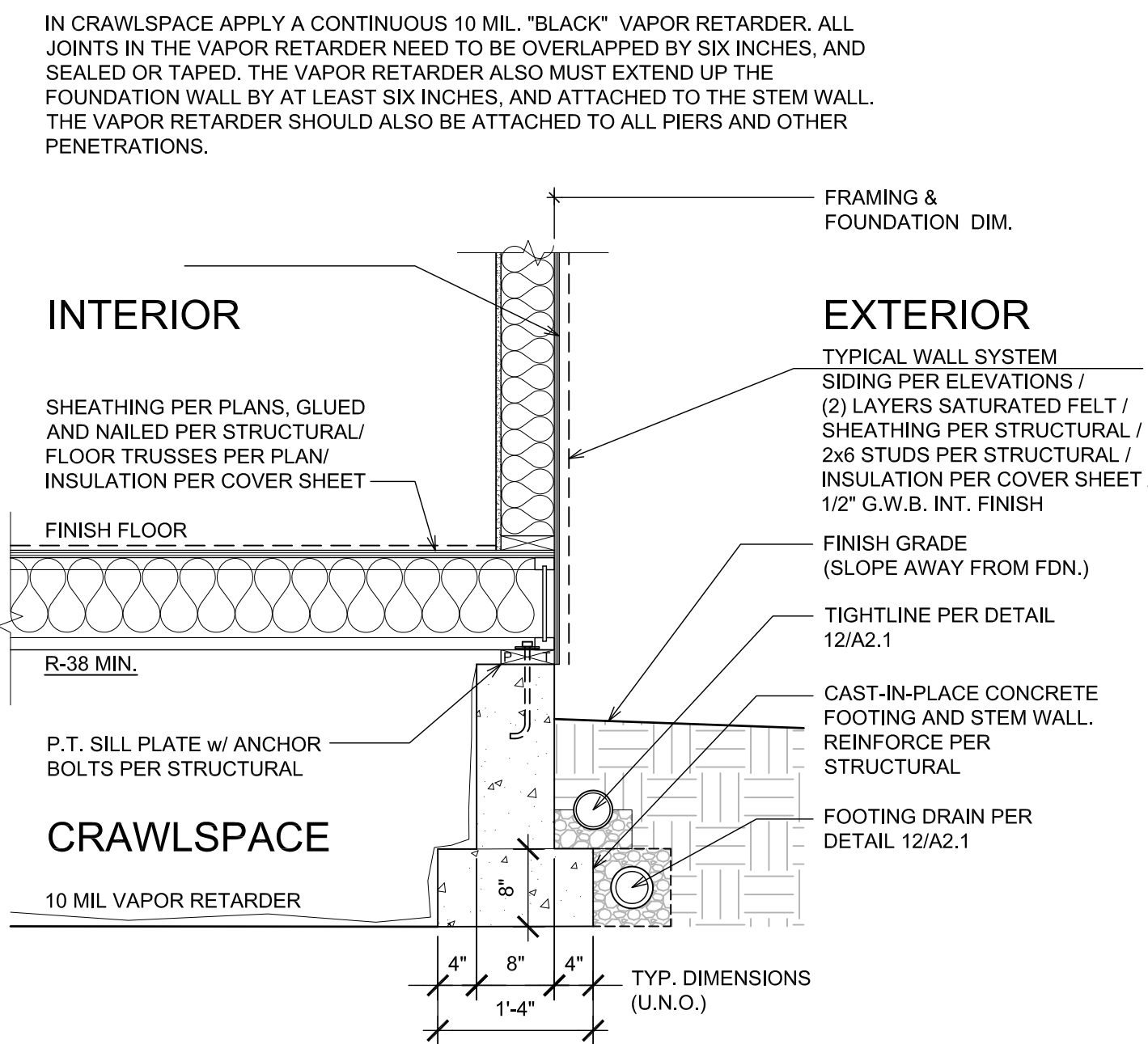
FOUNDATION @ GARAGE - CRAWLSPACE
SCALE: 3/4" = 1'-0"
SLAB ON GRADE / CRAWLSPACE (A2.1) 4



FDN - RAISED WALL @ PATIO
SCALE: 3/4" = 1'-0"
SLAB ON GRADE / CRAWLSPACE (A2.1) 3



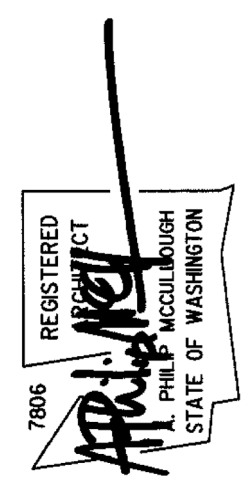
FDN - RAISED WALL @ CRAWLSPACE
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 2



FOUNDATION - CRAWLSPACE
SCALE: 3/4" = 1'-0"
CRAWLSPACE (A2.1) 1

Comment
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Revisions
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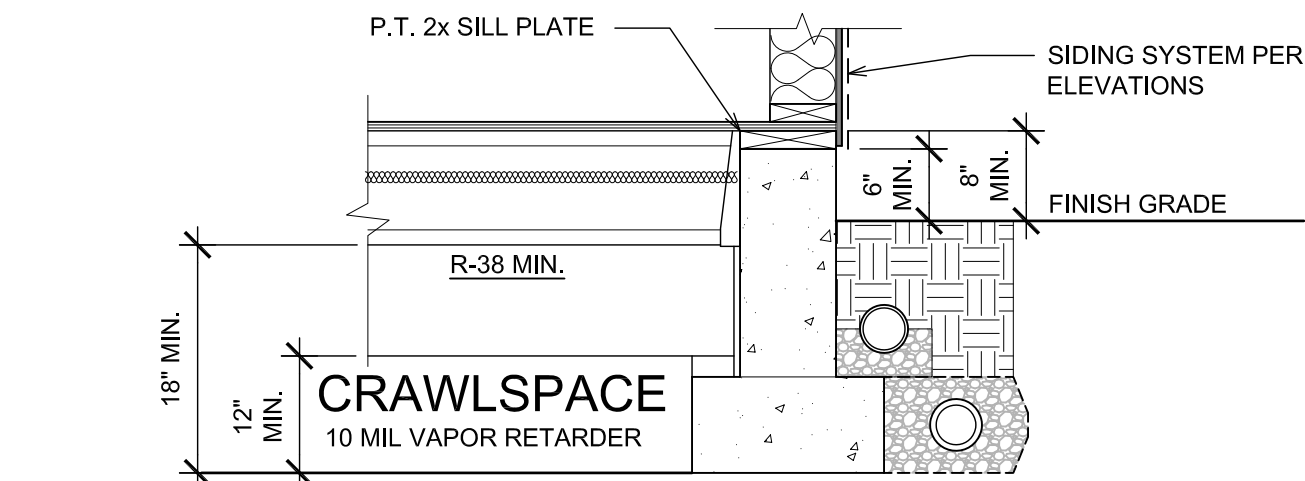
Date: 2025.10.22
Job No: 24-008
Project No:
Drawn:
Approved:
Owner: SAINTFIELD2 LLC



SEARS PLAT - LOT 3
Mercer Island
Washington
98040

SECTION R317 PROTECTION OF WOOD AND WOOD-BASED PRODUCTS AGAINST DECAY
Protection of wood and wood-based products from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1.

1. Wood joists or the bottom of a wood structural floor where closer than 18 inches or wood girders where closer than 12 inches to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
2. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from the exposed ground.
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 1/2 inch on tops, sides and ends.
5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches from the ground or less than 2 inches measured vertically from concrete steps, porch slabs, patio slabs and similar horizontal surfaces exposed to the weather.
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.
7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below grade except where an approved vapor retarder is applied between the wall and the furring strips or framing members.
8. Portions of wood structural members that form the structural supports of buildings, balconies, porches or similar permanent building appurtenances where those members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering that would prevent moisture or water accumulation on the surface or at joints between members.
9. Wood columns in contact with basement floor slabs unless supported by concrete piers or metal pedestals projecting not less than 1 inch above the concrete floor and separated from the concrete pier by an impervious moisture barrier.



FOUNDATION - PROTECTION OF WOOD
SCALE: 3/4" = 1'-0"

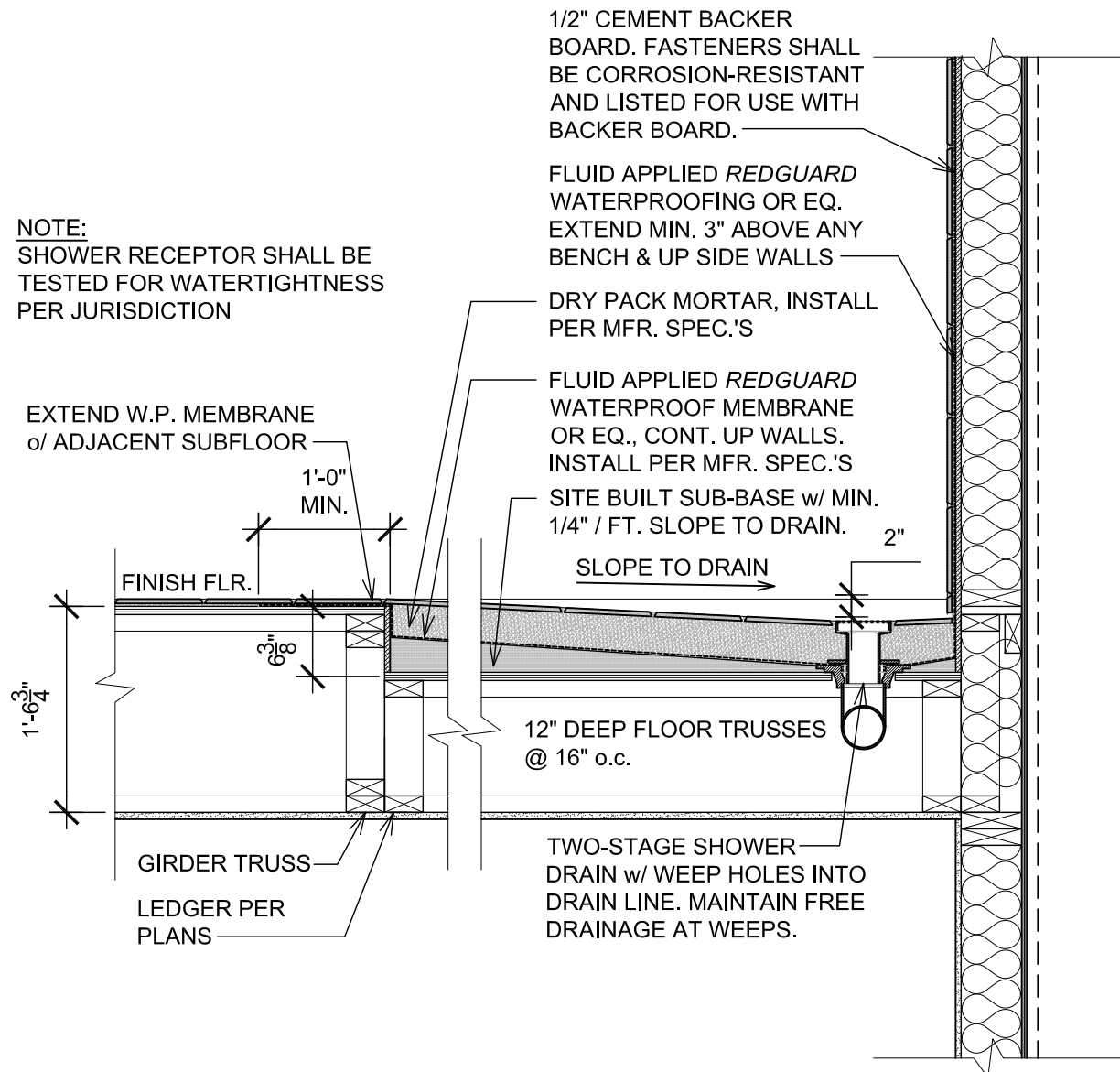
12
A2.2

WINDOW INSTALLATION SEQUENCE
1. STRUCTURAL SHEATHING INSTALLED OVER FRAME WALL
2. INSTALL FLASHING AT SILL
3. INSTALL WINDOW PLUMB, LEVEL AND SQUARE
4. INSTALL FLASHING AT JAMBS
5. INSTALL FLASHING AT HEAD
6. AIR SEAL INT. OF WINDOW AROUND ENTIRE PERIMETER W/ SEALANT AND BACK ROD

TYPICAL ASSEMBLY INSULATION VALUES:
ATTIC INSULATION R-60 BLOWN-IN
VAULTED CL'G INSULATION N.A.
FLOOR INSULATION R-38 BATT
ABV. GRADE EXT. WALL INSUL. R-21 BATT
BELOW GRADE EXT. WALL INSUL. N.A.
SLAB INSULATION R-10 (ENTIRE SLAB)

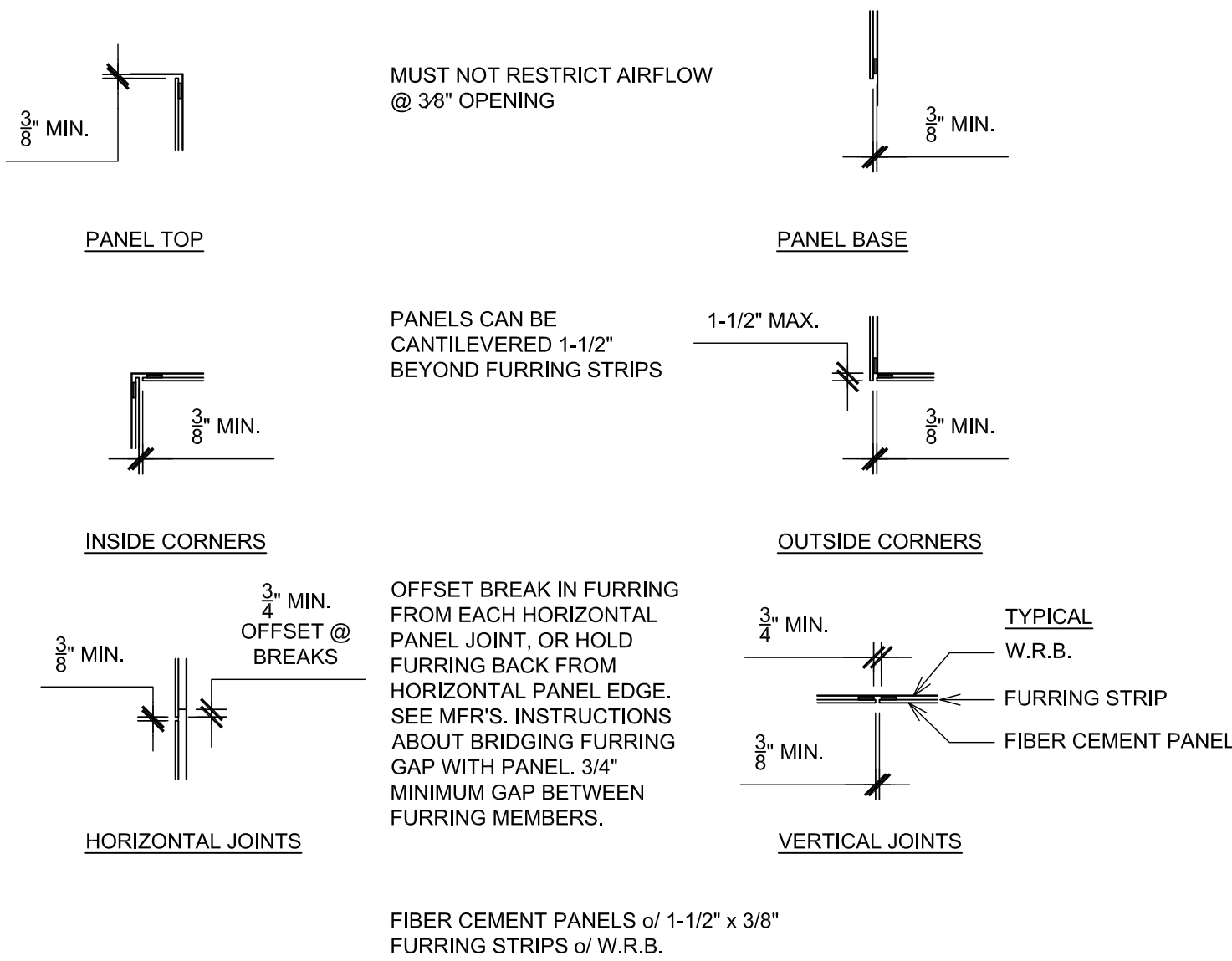
TYPICAL ASSEMBLY INSULATION VALUES
SCALE: 3/4" = 1'-0"

11
A2.2



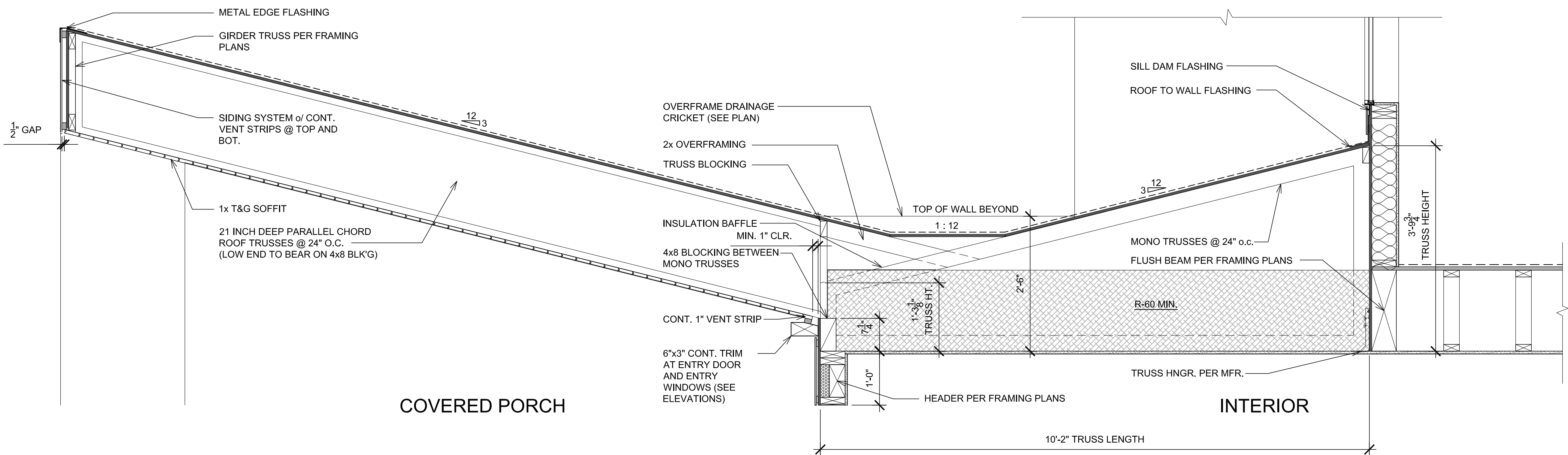
RECESSED MUD SET SHOWER
SCALE: 3/4" = 1'-0"

10
A2.2



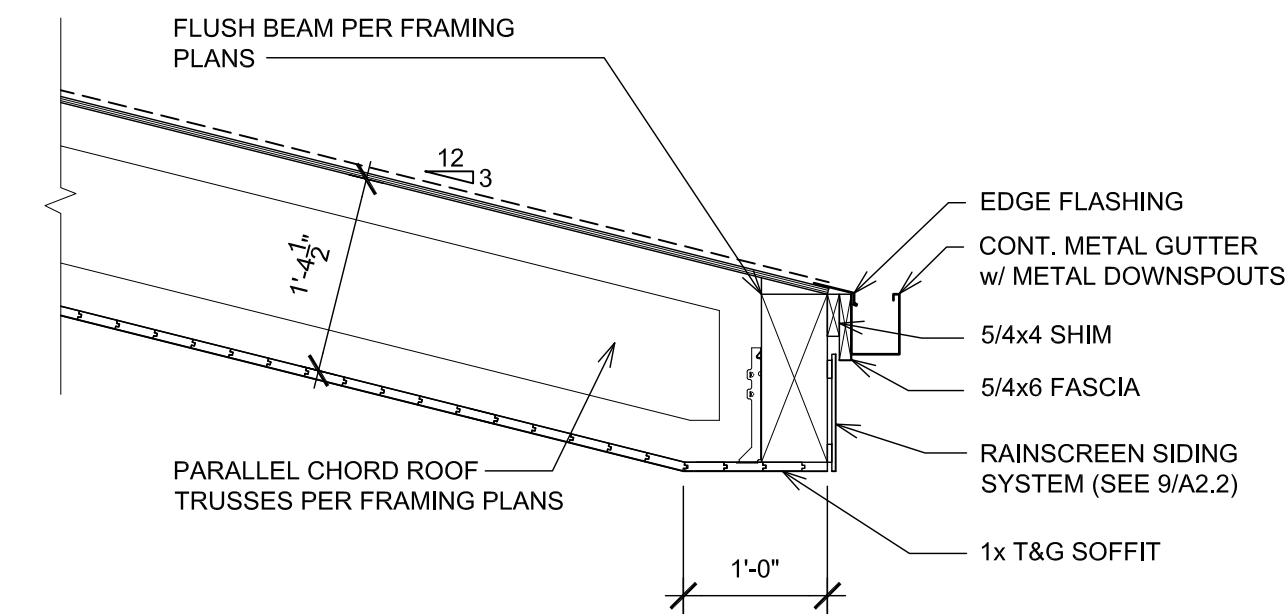
TYPICAL - RAINSCREEN SIDING DETAILS
SCALE: 3/4" = 1'-0"

9
A2.2



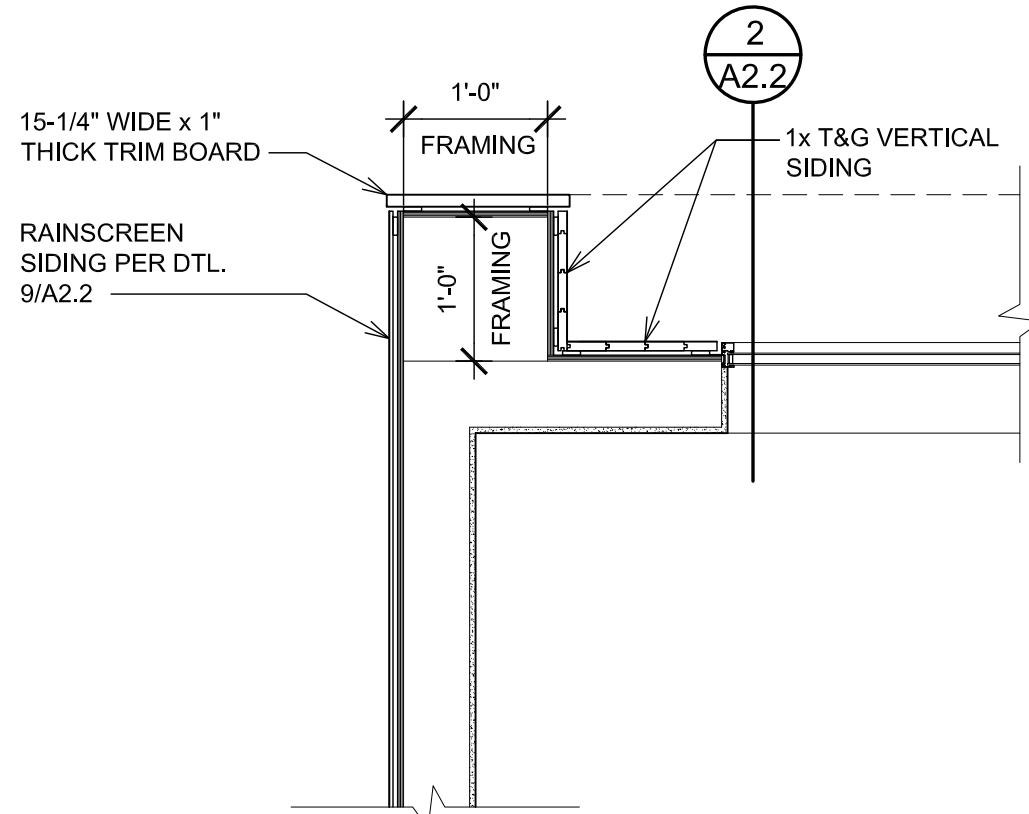
ROOF @ COVERED ENTRY
SCALE: 3/4" = 1'-0"

6
A2.2



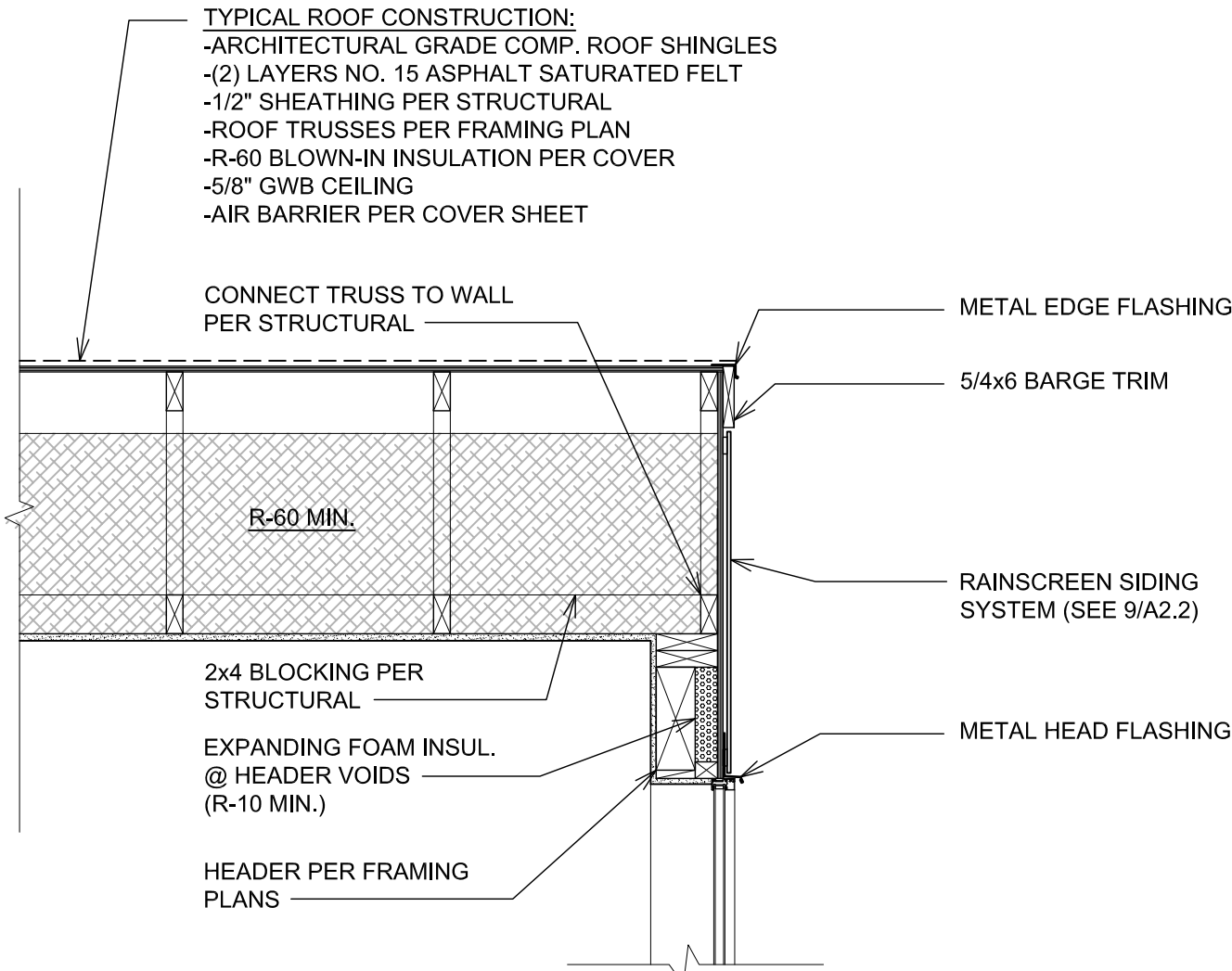
ROOF @ COVERED PATIO
SCALE: 3/4" = 1'-0"

5
A2.2



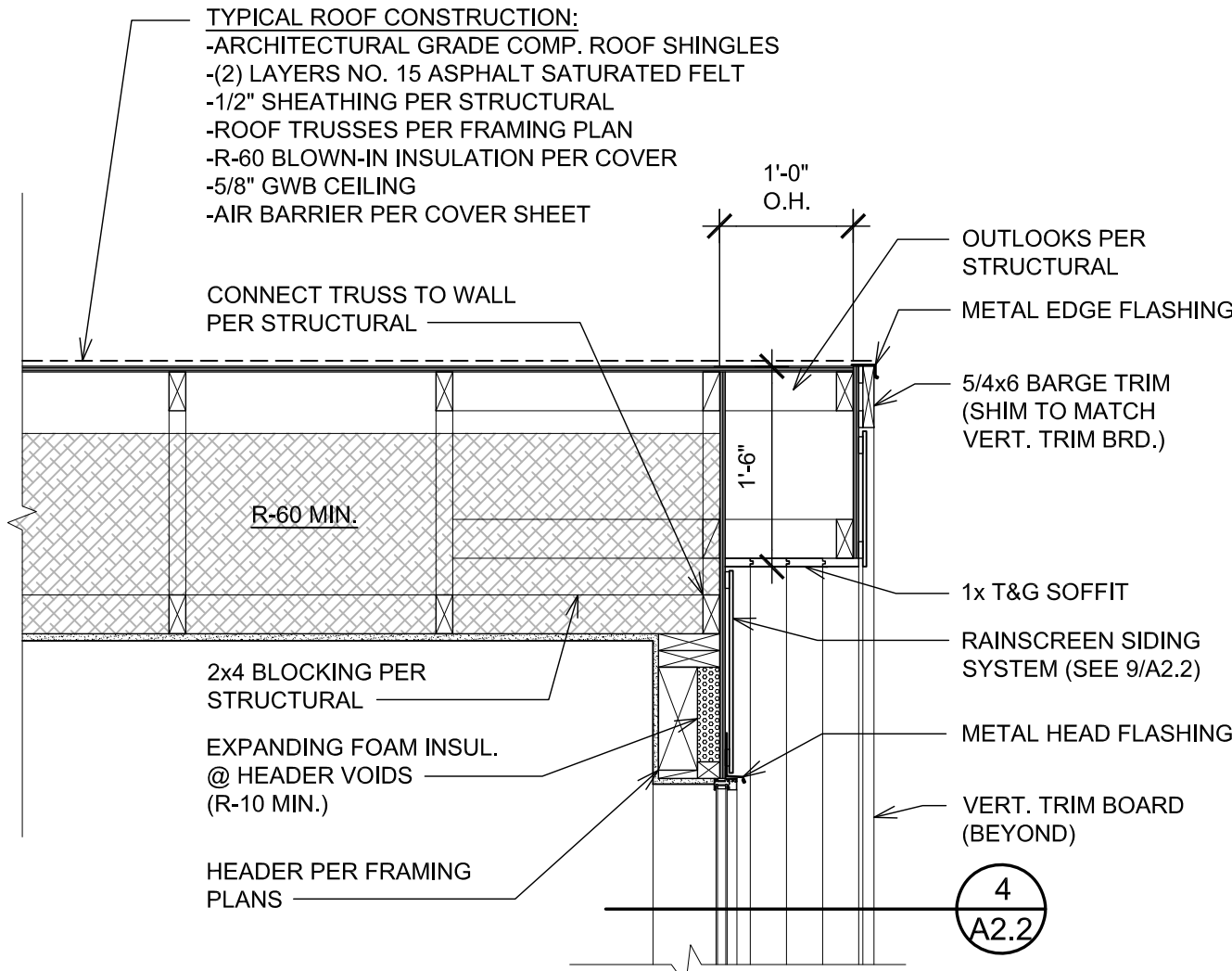
SIDING DETAIL @ GABLE O.H.
SCALE: 3/4" = 1'-0"

4
A2.2



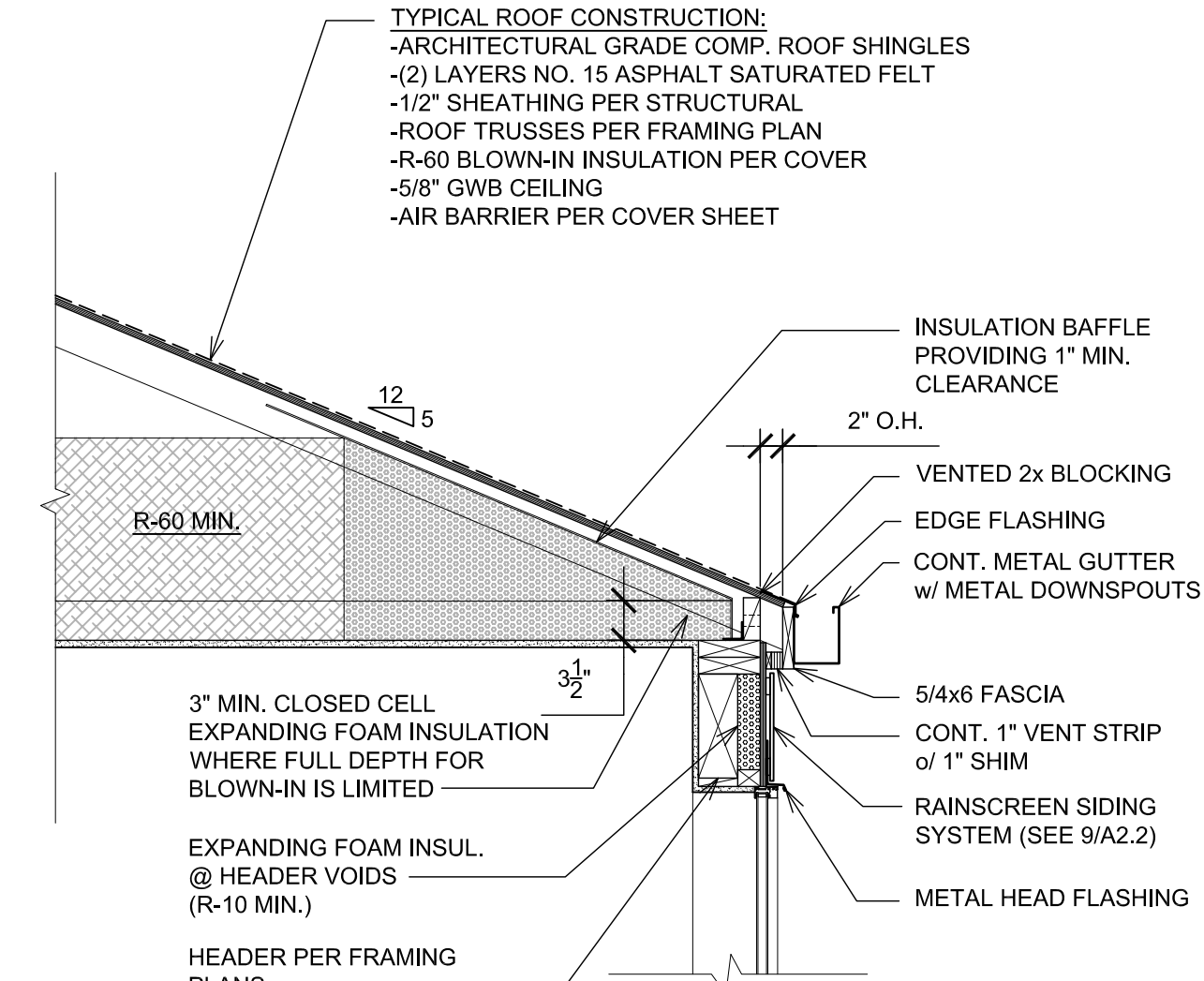
TYPICAL RAKE w/ 0" O.H.
SCALE: 3/4" = 1'-0"

3
A2.2



TYPICAL RAKE w/ O.H.
SCALE: 3/4" = 1'-0"

2
A2.2



TYPICAL - 5:12 ROOF EAVE O.H.
SCALE: 3/4" = 1'-0"

1
A2.2

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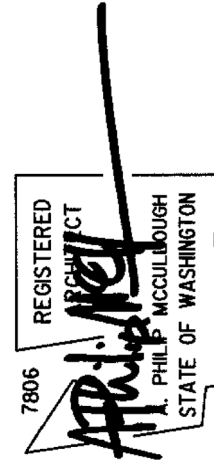
Comment

Revisions

2025.10.22
24-008

Date:
Job No:
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Approved:

Owner
SAINTFIELD2 LLC



SEARS PLAT - LOT 3

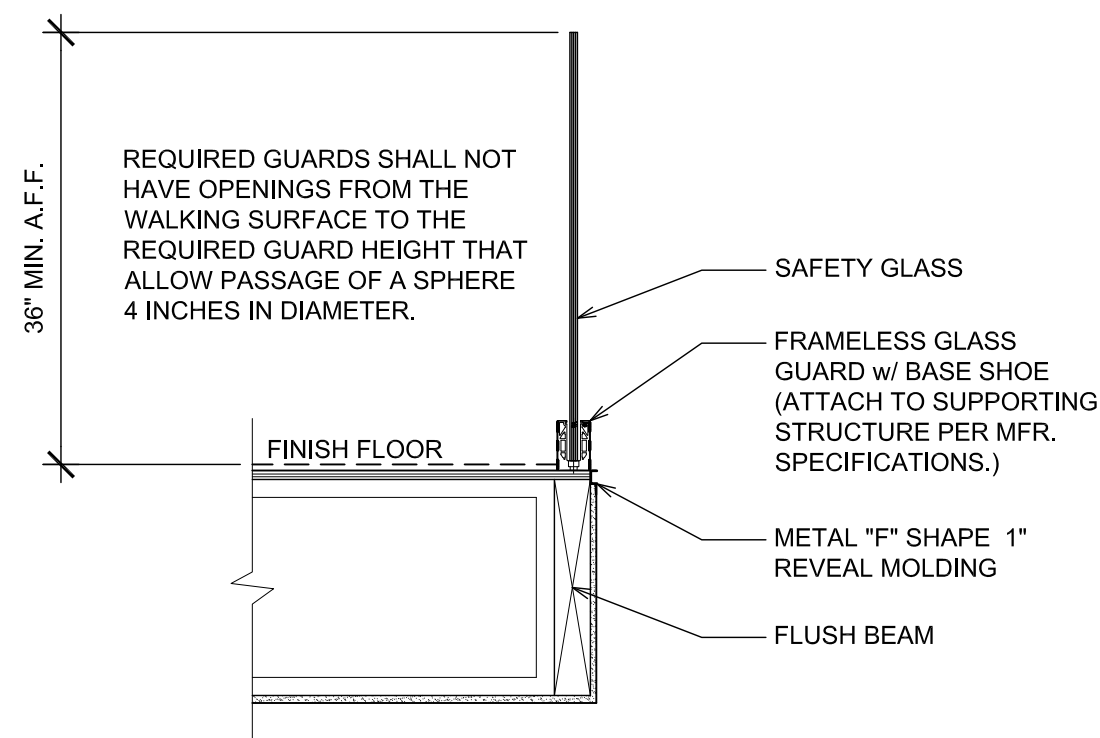
Mercer Island
Washington
98040

PERMIT SUBMITTAL

Wall Sections &
Roof Details

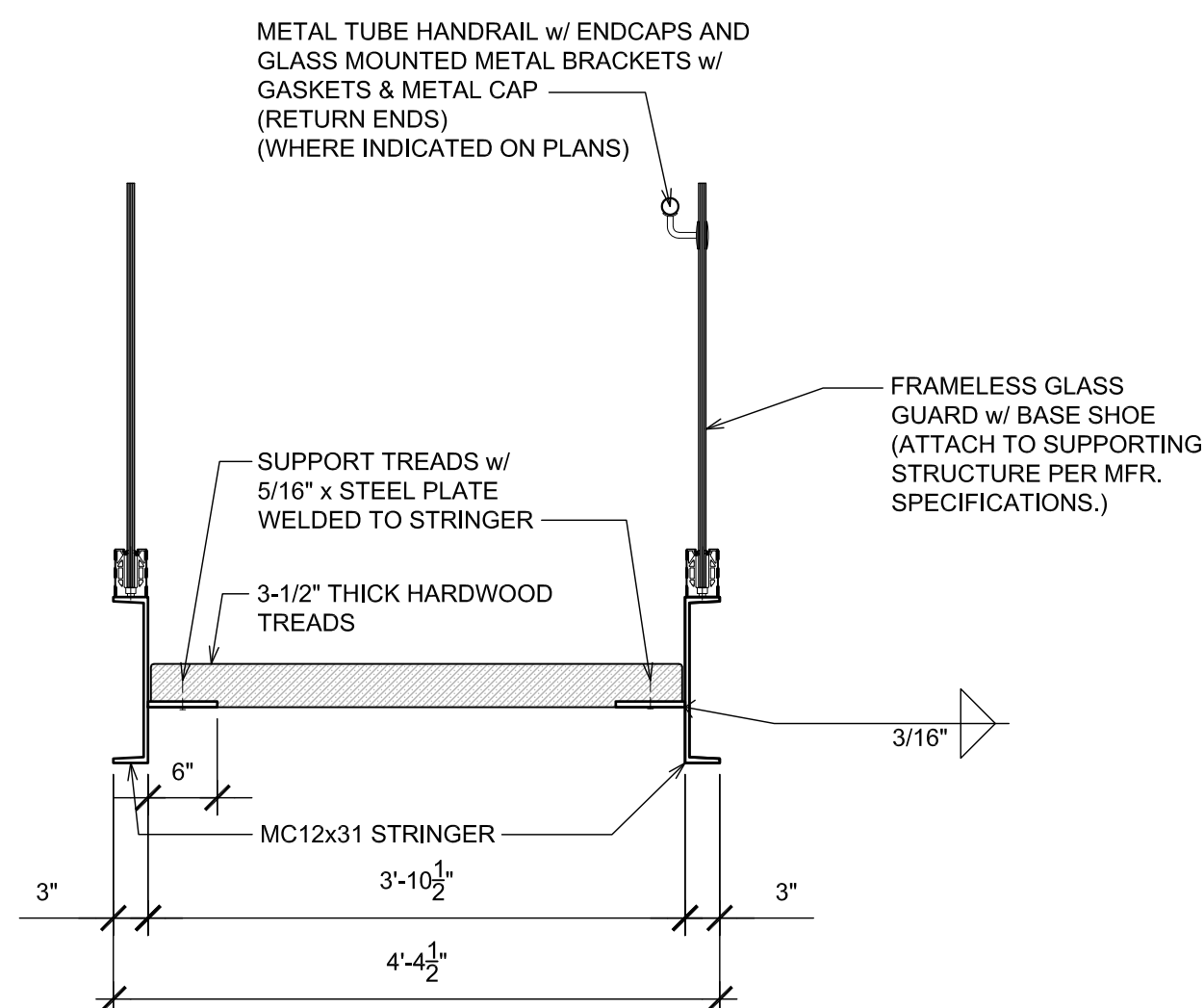
A2.2

GUARDS R30.1.5 LIVE LOADS
CONCENTRATED LOAD=200 LBS
GLAZING USED IN HANDRAIL ASSEMBLIES AND
GUARDS SHALL BE DESIGNED WITH A LOAD
ADJUSTMENT FACTOR OF 1.5. THE LOAD
ADJUSTMENT FACTOR SHALL BE APPLIED TO
EACH OF THE CONCENTRATED LOADS APPLIED
TO THE TOP OF THE RAIL, AND TO THE LOAD ON
THE IN-FILL COMPONENTS. THESE LOADS SHALL
BE DETERMINED BY THE FOLLOWING:
ONE, AND LOADS ARE ASSUMED NOT
TO OCCUR WITH ANY OTHER LIVE LOAD.
WHERE THE TOP OF A GUARD SYSTEM IS NOT
REQUIRED TO SERVE AS A HANDRAIL, THE
SINGLE CONCENTRATED LOAD SHALL BE
APPLIED AT A POINT IN THE RAIL IN THE
VERTICAL DOWNWARD DIRECTION AND IN THE
HORIZONTAL DIRECTION AWAY FROM THE
WALKING SURFACE. WHERE THE TOP OF A
GUARD IS ALSO SERVING AS THE HANDRAIL, A
SINGLE CONCENTRATED LOAD SHALL BE
APPLIED IN A DIRECTION AT THAT POINT
ALONG THE TOP. CONCENTRATED LOADS SHALL
NOT BE APPLIED CONCURRENTLY.



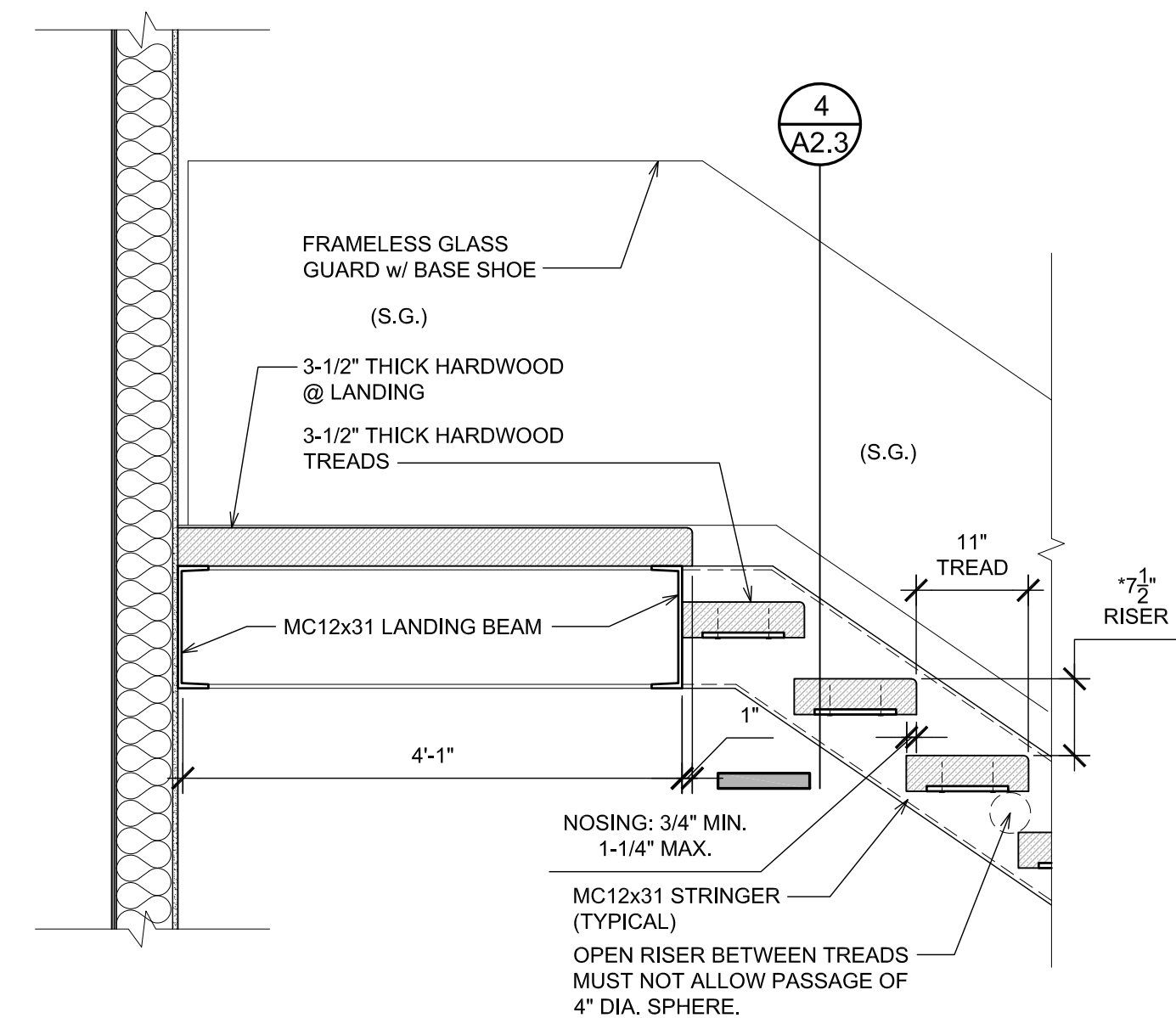
GLASS GUARD DETAIL

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



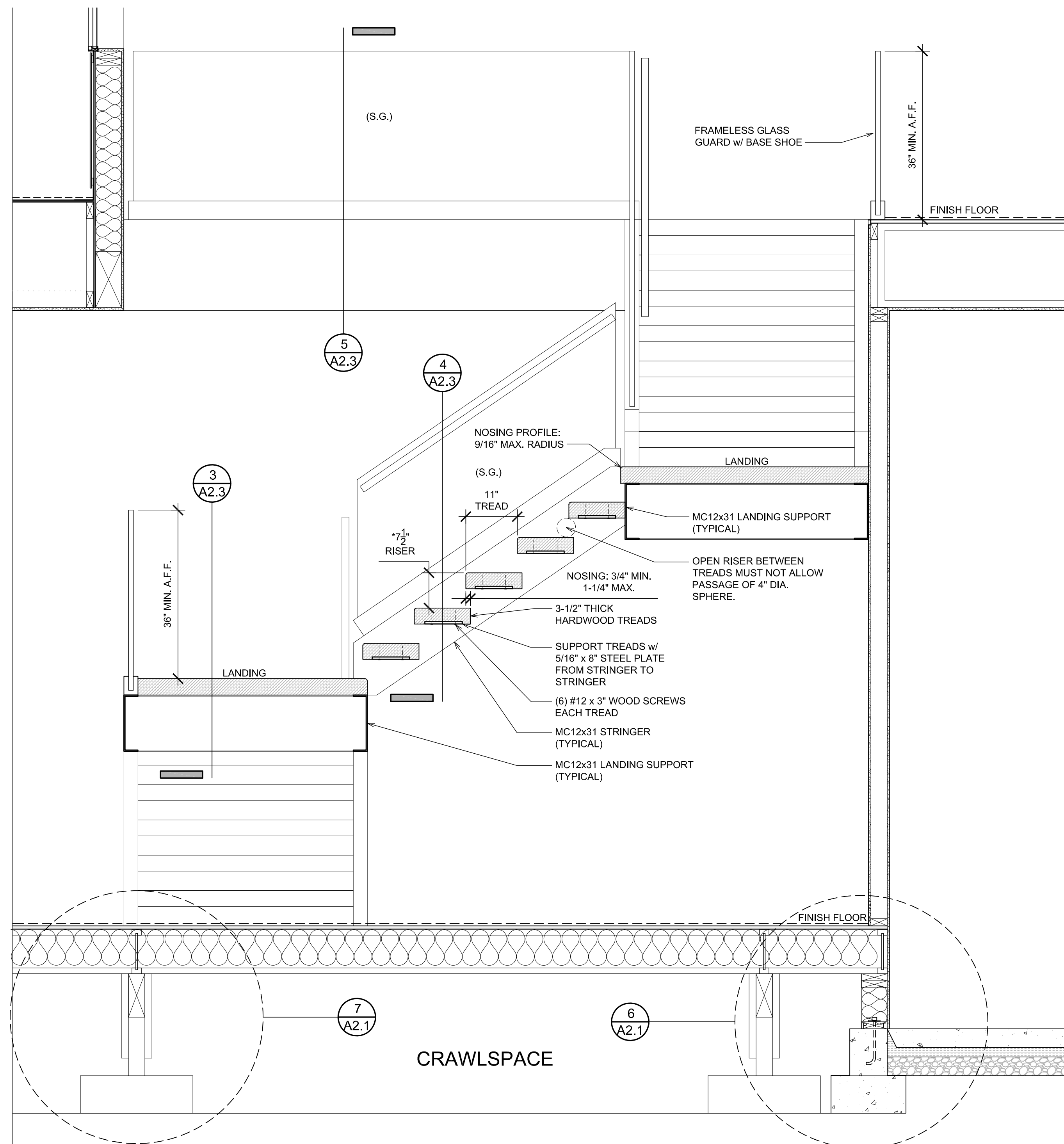
STAIR STRINGER DETAIL

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

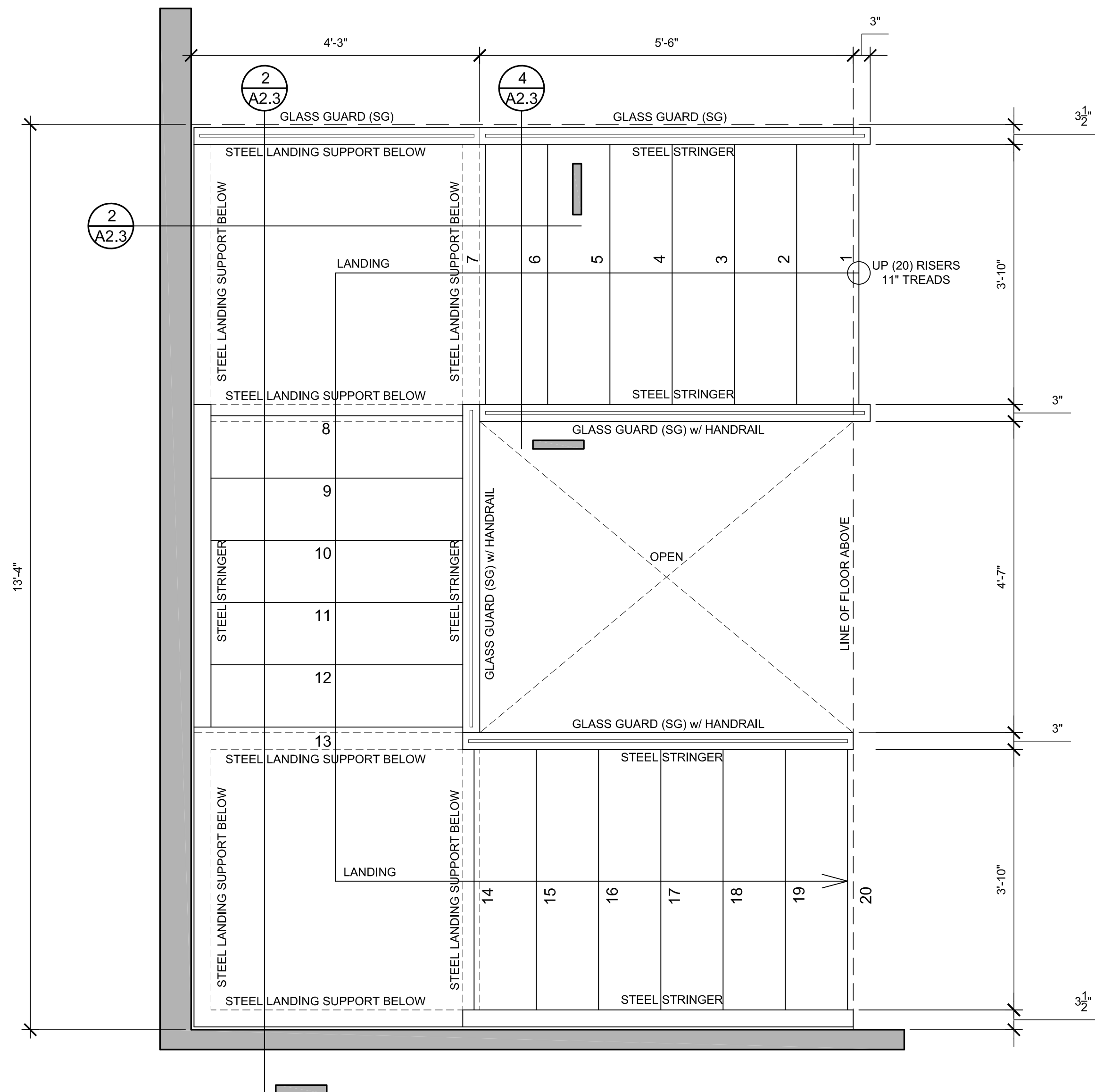


STAIR LANDING DETAIL

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



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



STAIR - MAIN FLOOR PLAN

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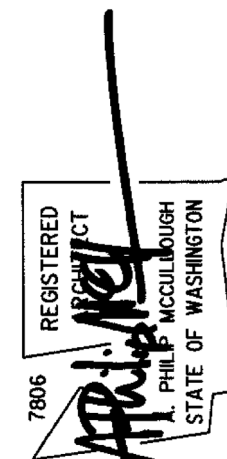
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Revisions

2025.10.22
24-008

Date:
Job No:
Project No:
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Approved:

Owner
SAINTFIELD2 LLC



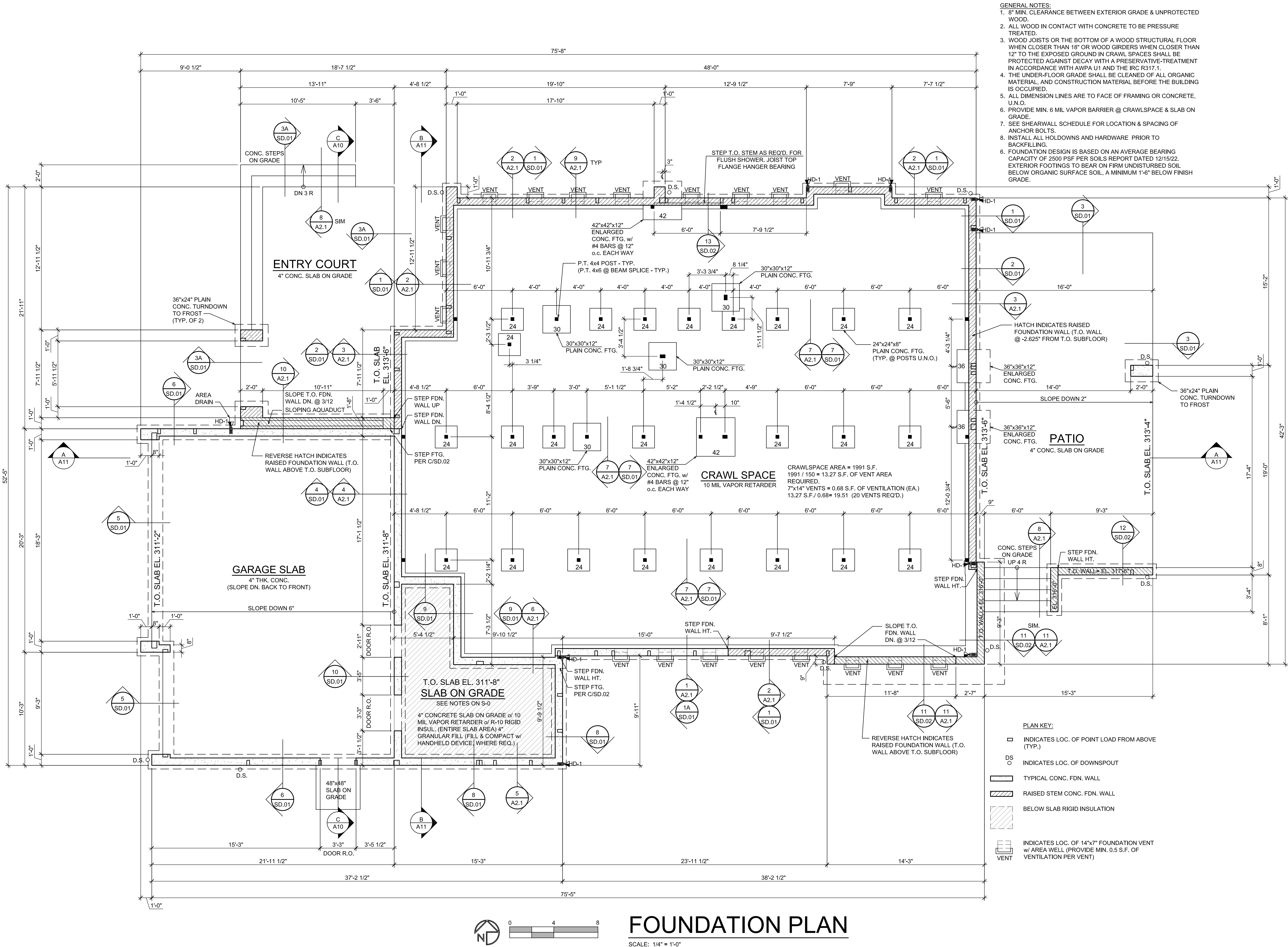
SEARS PLAT - LOT 3

Mercer Island
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98040

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Stair Details

A2.3



- GENERAL NOTES:
1. 8" MIN. CLEARANCE BETWEEN EXTERIOR GRADE & UNPROTECTED WOOD.
 2. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
 3. WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18" OR WOOD GIRDERS WHEN CLOSER THAN 12" TO THE EXPOSED GROUND IN CRAWL SPACES SHALL BE PROTECTED AGAINST DECAY WITH A PRESERVATIVE-TREATMENT IN ACCORDANCE WITH AWPA U1 AND THE IRC R317.1.
 4. THE UNDER-FLOOR GRADE SHALL BE CLEANED OF ALL ORGANIC MATERIAL AND CONSTRUCTION MATERIAL BEFORE THE BUILDING IS OCCUPIED.
 5. ALL DIMENSION LINES ARE TO FACE OF FRAMING OR CONCRETE, U.N.O.
 6. PROVIDE MIN. 6 MIL VAPOR BARRIER @ CRAWLSPACE & SLAB ON GRADE.
 7. SEE SHEARWALL SCHEDULE FOR LOCATION & SPACING OF ANCHOR BOLTS.
 8. INSTALL ALL HOLDDOWNS AND HARDWARE PRIOR TO BACKFILLING.
 6. FOUNDATION DESIGN IS BASED ON AN AVERAGE BEARING CAPACITY OF 2500 PSF PER SOILS REPORT DATED 12/15/22. EXTERIOR FOOTINGS TO BEAR ON FIRM UNDISTURBED SOIL. BELOW ORGANIC SURFACE SOIL, A MINIMUM 1'-6" BELOW FINISH GRADE.

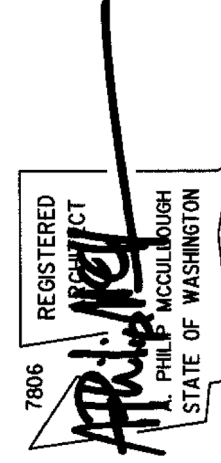
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Foundation
Plan

A3

FOUNDATION PLAN

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



A4

<u>BUILDING AREA SUMMARY</u>	
HEATED MAIN LEVEL:	2,282 SF
HEATED UPPER LEVEL:	2,053 SF
TOTAL HEATED FLOOR AREA:	4,335 SF
GARAGE AREA:	659 S.F.

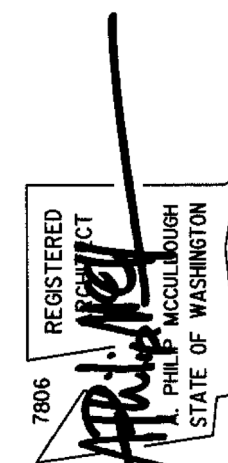
1. PLATE HEIGHT @ MAIN FLOOR IS 11'-0", U.N.O.
2. DIMENSION LINES ARE TO FACE OF STUD U.N.O.
3. WINDOW SIZES & ROUGH OPENINGS TO BE VERIFIED BY CONTRACTOR.
4. WINDOW HEAD HEIGHT AT MAIN FLOOR IS 10'-0" ABOVE SUBFLOOR, U.N.O. IF NOMINAL DOOR AND WINDOW HEIGHTS ARE SIMILAR, COORDINATE WITH DOOR AND WINDOW SPECS TO LOCATE FINAL ELEVATION OF THE HEAD HEIGHTS SO THAT ALL DOOR AND WINDOW TRIM ALIGN.
5. WINDOW AND DOOR SIZES ARE DIMENSIONED IN FEET AND INCHES (E.G. 2'8 1/2"X2'8" = 2'-8 1/2" X 2'-8")
6. EXTERIOR WALLS TO BE 2x6 STUDS AT 16" o.c., INTERIOR WALLS TO BE 2x4 STUDS AT 16" o.c., U.N.O.
7. FIREBLOCK ALL PLUMBING PENETRATIONS AND STAIR RISERS PER I.R.C. SECTION R308.4.
8. SAFETY GLAZING PER I.R.C. SEC. R308.4.
9. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED PER I.R.C. SEC. R317.1.
10. PER I.R.C. SEC R311.7.5, MAX. RISER HEIGHT SHALL BE 7-3/4" MIN. TREAD DEPTH SHALL BE 10" MIN. STAIR NOSINGS: 3/4" MIN. 1-1/4" MAX. RADIUS @ LEADING EDGE OF TREAD; 9/16" MAX.
11. PROVIDE HANDRAILS PER I.R.C. SEC. R311.7.8. TOP OF

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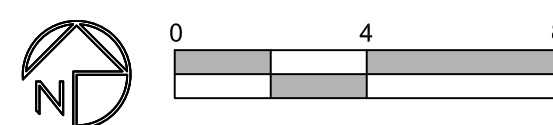


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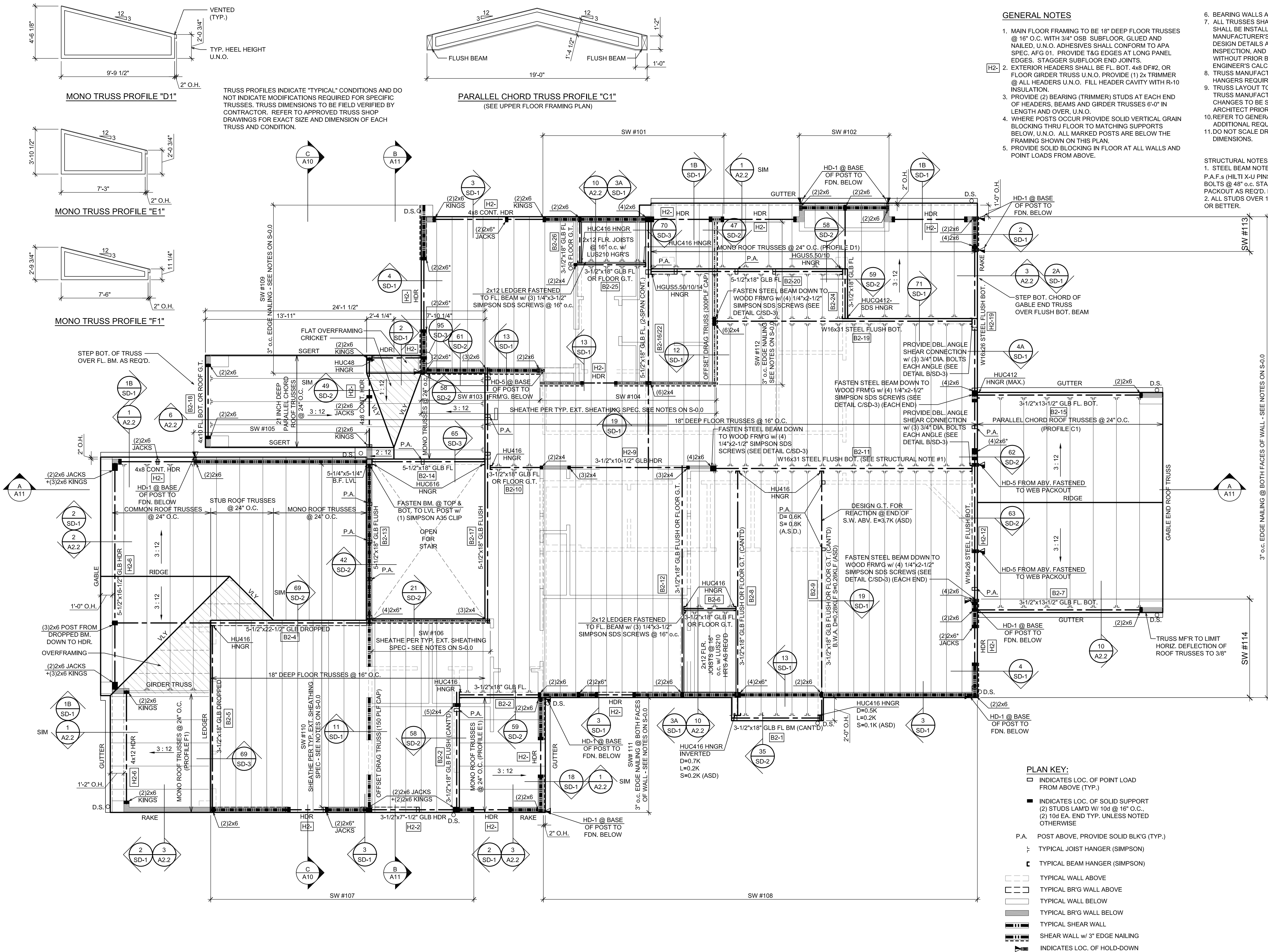
Main Floor Plan

A5



MAIN FLOOR PLAN

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



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Upper Floor Plan

A6

SEARS PLAT - LOT 3

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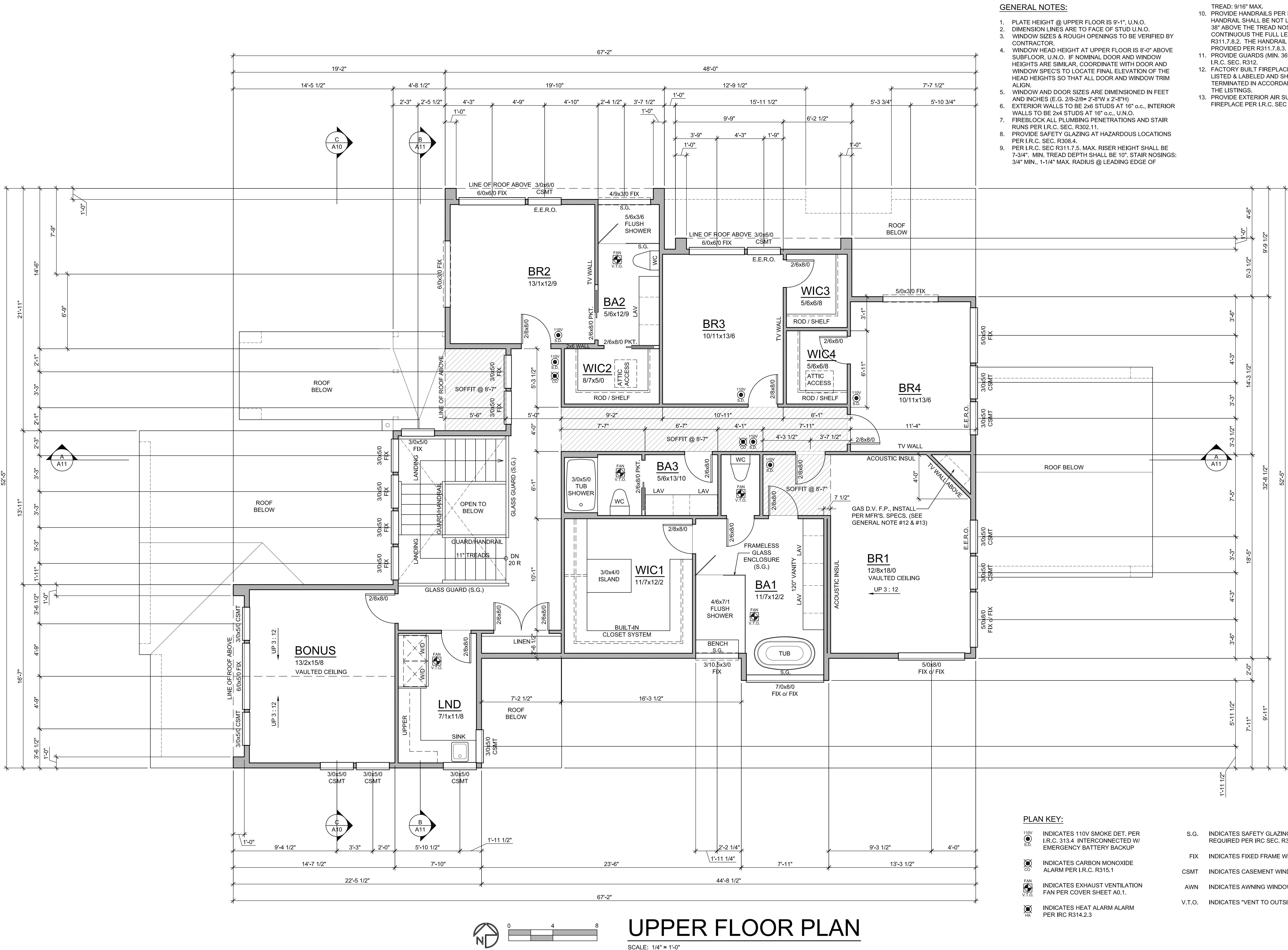
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GENERAL NOTES:

1. PLATE HEIGHT @ UPPER FLOOR IS 9'-1", U.N.O.
2. DIMENSION LINES ARE TO FACE OF STUD U.N.O.
3. WINDOW SIZES & ROUGH OPENINGS TO BE VERIFIED BY CONTRACTOR.
4. WINDOW HEAD HEIGHT AT UPPER FLOOR IS 8'-0" ABOVE SUBFLOOR, U.N.O. IF NOMINAL DOOR AND WINDOW HEIGHTS ARE SIMILAR, COORDINATE WITH DOOR AND WINDOW SPECS TO LOCATE FINAL ELEVATION OF THE HEAD HEIGHTS SO THAT ALL DOOR AND WINDOW TRIM ALIGN.
5. WINDOW AND DOOR SIZES ARE DIMENSIONED IN FEET AND INCHES (E.G. 218-218" 2'-8"W x 2'-8"H)
6. EXTERIOR WALLS TO BE 2x6 STUDS AT 16" o.c., INTERIOR WALLS TO BE 2x4 STUDS AT 16" o.c., U.N.O.
7. FIREBLOCK ALL PLUMBING PENETRATIONS AND STAIR RUNS PER I.R.C. SEC. R302.11.
8. PROVIDE SAFETY GLAZING AT HAZARDOUS LOCATIONS PER I.R.C. SEC. R308.4.
9. PER I.R.C. SEC R311.7.5, MAX. RISER HEIGHT SHALL BE 7-3/4". MIN. TREAD DEPTH SHALL BE 10". STAIR NOSINGS: 3/4" MIN., 1-1/4" MAX. RADIUS @ LEADING EDGE OF

10. TREAD: 9/16" MAX.
11. PROVIDE HANDRAILS PER I.R.C. SEC. R311.7.8, TOP OF HANDRAIL SHALL BE NOT LESS THAN 34" OR MORE THAN 38" ABOVE THE TREAD NOSINGS. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE FLIGHT PER R311.7.8.2. THE HANDRAIL GRIP-SIZE SHALL BE PROVIDED PER R311.7.8.3.
12. PROVIDE GUARDS (MIN. 36" HEIGHT) IN LOCATIONS PER I.R.C. SEC. R312.
13. FACTORY BUILT FIREPLACES & CHIMNEYS SHALL BE LISTED & LABELED AND SHALL BE INSTALLED & TERMINATED IN ACCORDANCE TO THE CONDITIONS OF THE LISTINGS.
14. PROVIDE EXTERIOR AIR SUPPLY TO ANY FACTORY-BUILT FIREPLACE PER I.R.C. SEC R1006.

PLAN KEY:

- 110V S.D. INDICATES 110V SMOKE DET. PER I.R.C. 313.4 INTERCONNECTED W/ EMERGENCY BATTERY BACKUP
- CO INDICATES CARBON MONOXIDE ALARM PER I.R.C. R315.1
- FAN V.T.O. INDICATES EXHAUST VENTILATION FAN PER COVER SHEET A0.1.
- HA INDICATES HEAT ALARM ALARM PER IRC R314.2.3

- S.G. INDICATES SAFETY GLAZING REQUIRED PER IRC SEC. R308.4
- FIX INDICATES FIXED FRAME WINDOW
- CSMT INDICATES CASEMENT WINDOW
- AWN INDICATES AWNING WINDOW
- V.T.O. INDICATES "VENT TO OUTSIDE"

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Upper Floor
Plan

A7

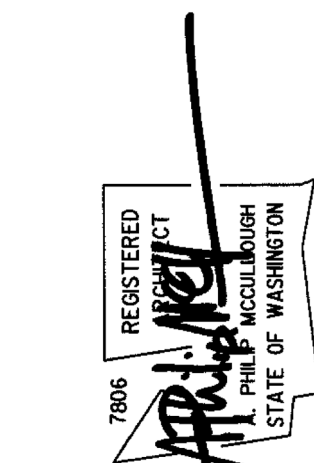
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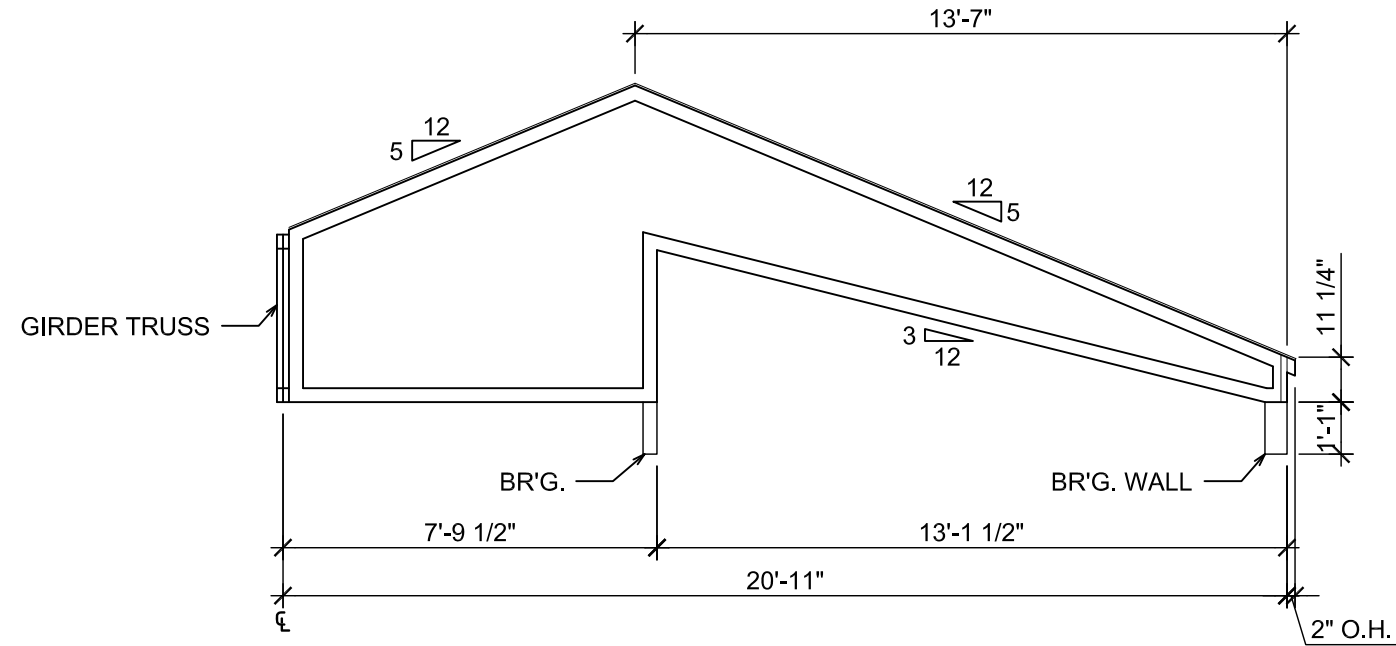
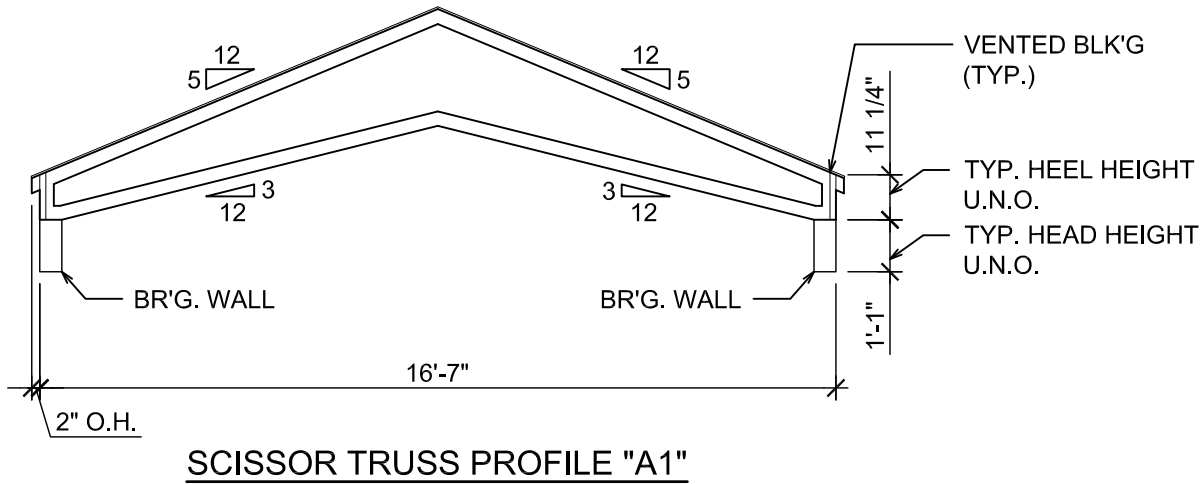
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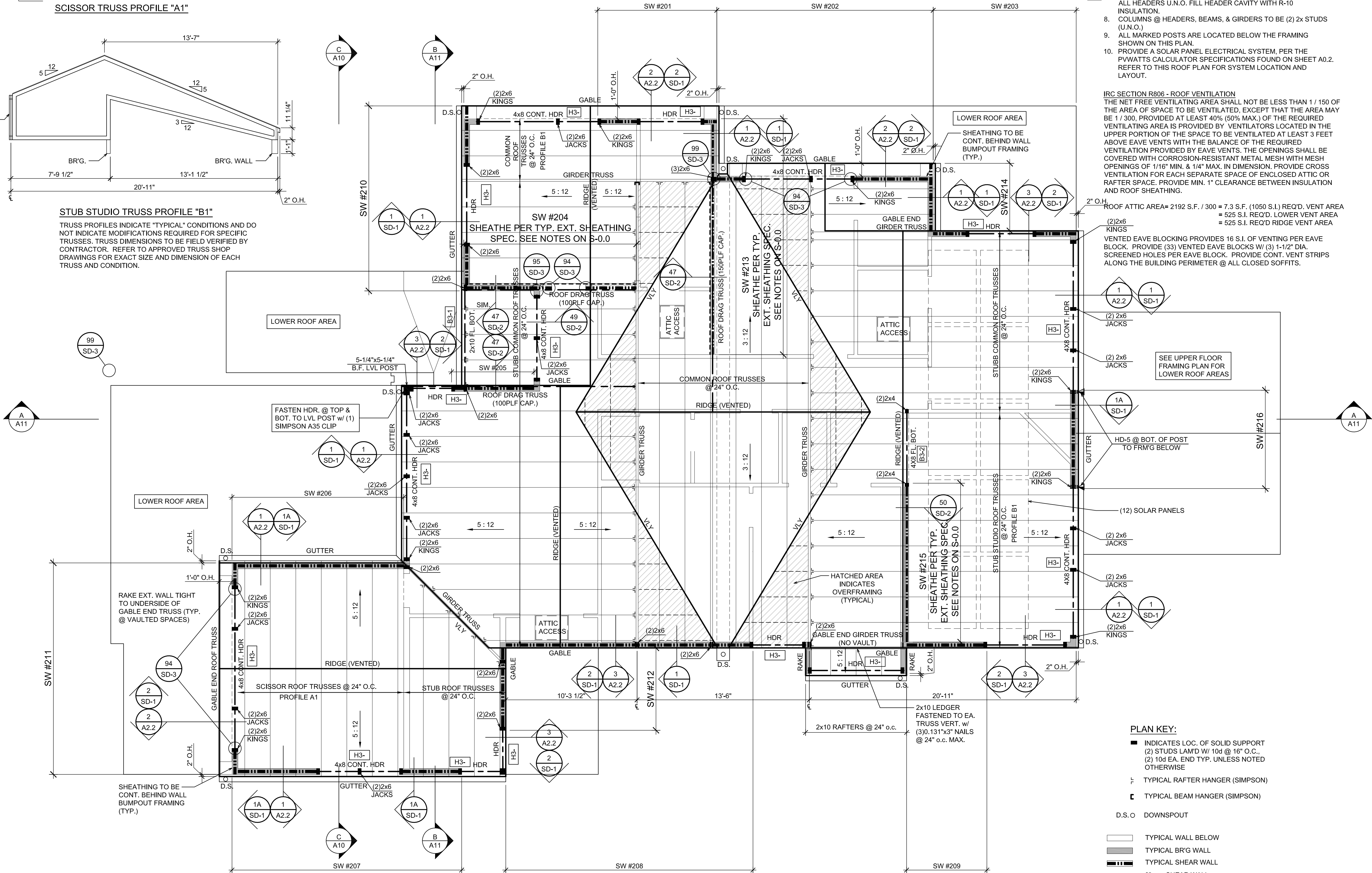
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TRUSS PROFILES INDICATE "TYPICAL" CONDITIONS AND DO NOT INDICATE MODIFICATIONS REQUIRED FOR SPECIFIC TRUSSES. TRUSS DIMENSIONS TO BE FIELD VERIFIED BY CONTRACTOR. REFER TO APPROVED TRUSS SHOP DRAWINGS FOR EXACT SIZE AND DIMENSION OF EACH TRUSS AND CONDITION.



GENERAL NOTES:

1. BEARING WALLS ARE SHADED.
2. 5/12 ROOF PITCH, U.N.O.
3. EAVE OVERHANG TO BE 2", GABLE OVERHANG TO BE 0", U.N.O.
4. APPLY ROOF UNDERLAYMENT IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. ICE BARRIER IS REQUIRED FOR LOW SLOPE ROOFS.
5. APPLY SINGLE PLY ROOFING MEMBRANE IN ACCORDANCE WITH I.R.C. SEC. 905.12.
6. ROOF FRAMING TO BE MANUFACTURED TRUSSES @ 24" O.C., U.N.O.
7. 4x8 AT ALL EXT. OPENINGS U.N.O. PROVIDE (1) 2x TRIMMER @ ALL HEADERS U.N.O. FILL HEADER CAVITY WITH R-10 INSULATION.
8. COLUMNS @ HEADERS, BEAMS, & GIRDERS TO BE (2) 2x STUDS (U.N.O.)
9. ALL MARKED POSTS ARE LOCATED BELOW THE FRAMING SHOWN ON THIS PLAN.
10. PROVIDE A SOLAR PANEL ELECTRICAL SYSTEM, PER THE PVWATTS CALCULATOR SPECIFICATIONS FOUND ON SHEET A0.2. REFER TO THIS ROOF PLAN FOR SYSTEM LOCATION AND LAYOUT.

IRC SECTION R806 - ROOF VENTILATION

THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1 / 150 OF THE AREA OF SPACE TO BE VENTILATED, EXCEPT THAT THE AREA MAY BE 1 / 300 PROVIDED AT LEAST 40% (50% MAX.) OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE VENTS. THE OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH MESH OPENINGS OF 1/16" MIN. & 1/4" MAX. IN DIMENSION. PROVIDE CROSS VENTILATION FOR EACH SEPARATE SPACE OF ENCLOSED ATTIC OR RAFTER SPACE. PROVIDE MIN. 1" CLEARANCE BETWEEN INSULATION AND ROOF SHEATHING.

ROOF ATTIC AREA= 2192 S.F. / 300 = 7.3 S.F. (1050 S.I.) REQ'D VENT AREA
= 525 S.I. REQ'D. LOWER VENT AREA
= 525 S.I. REQ'D RIDGE VENT AREA

VENTED EAVE BLOCKING PROVIDES 16 S.I. OF VENTING PER EAVE BLOCK. PROVIDE (33) VENTED EAVE BLOCKS W/ (3) 1-1/2" DIA. SCREENED HOLES PER EAVE BLOCK. PROVIDE CONT. VENT STRIPS ALONG THE BUILDING PERIMETER @ ALL CLOSED SOFFITS.

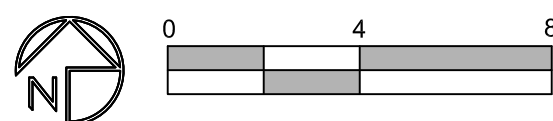
PLAN KEY:

- INDICATES LOC. OF SOLID SUPPORT
- (2) STUDS L&M'D W/ 10d @ 16" O.C.,
- (2) 10d EA. END TYP. UNLESS NOTED OTHERWISE
- TYPICAL RAFTER HANGER (SIMPSON)
- TYPICAL BEAM HANGER (SIMPSON)
- D.S.O DOWNSPOUT

- TYPICAL WALL BELOW
- TYPICAL BR'G WALL
- TYPICAL SHEAR WALL
- 3" o.c. SHEAR WALL
- INDICATES LOC. OF HOLD-DOWN

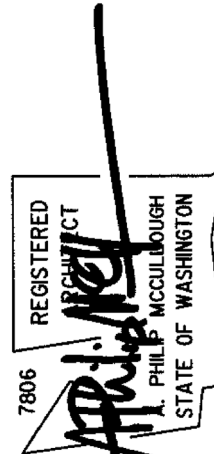
HATCHED AREA REPRESENTS OVERFRAMING

LOWER ROOF AREA (SEE UPPER FLOOR FRAMING PLAN)



ROOF FRAMING PLAN

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

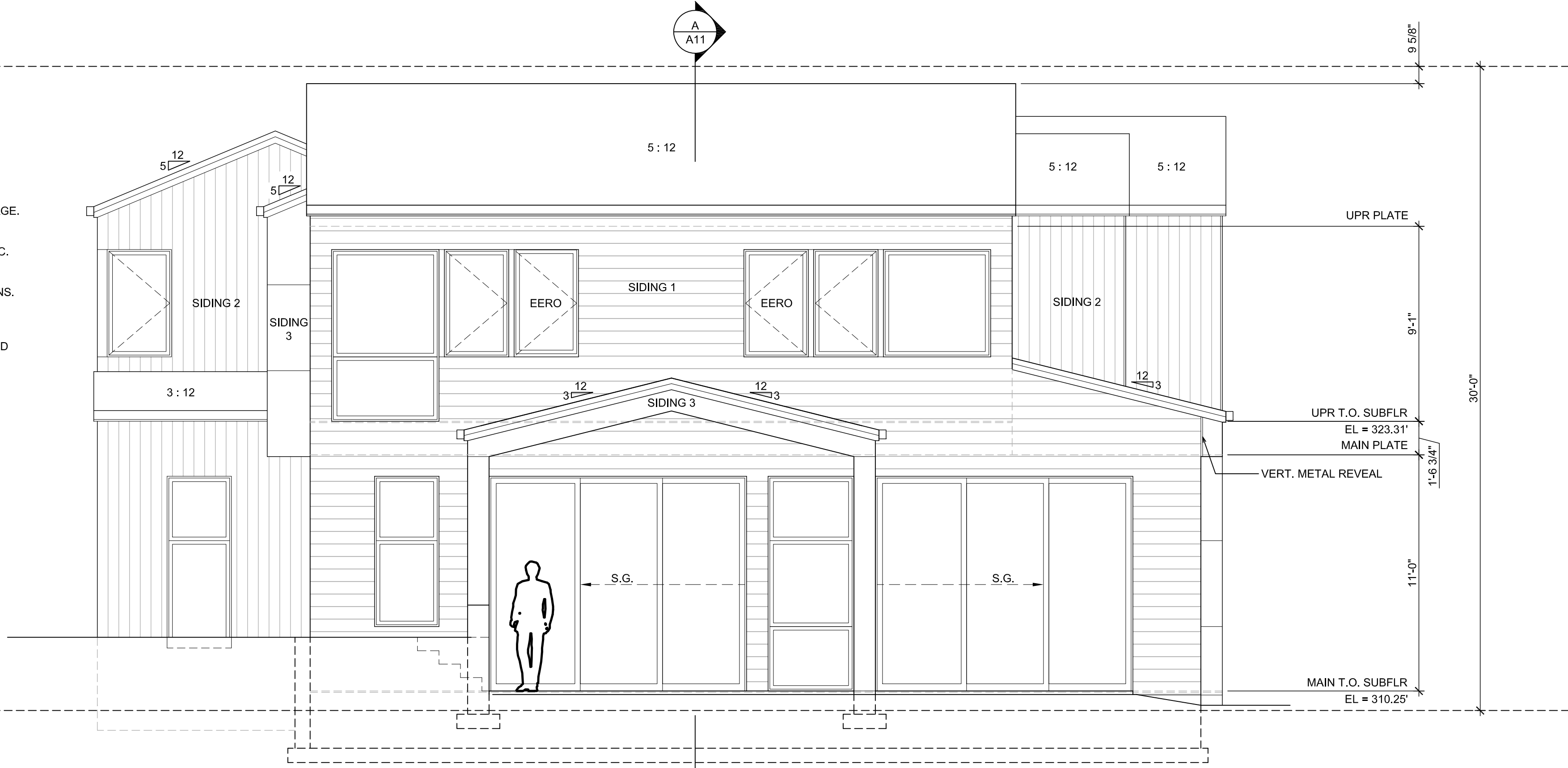


EXTERIOR ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING AND HOLDDOWNS PER STRUCTURAL PLANS AND SCHEDULES PRIOR TO INSTALLING SIDING
2. THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, AND WEATHERSTRIPPED TO LIMIT AIR LEAKAGE.
3. PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING AND COUNTERFLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, AND SKYLIGHTS PER IRC SEC. R703.4.
4. PROVIDE ROOF COVERINGS PER IRC SECTION R905. INSTALL PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
5. PROVIDE EXTERIOR WALL COVERINGS PER IRC SECTION R703. INSTALL PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
6. A SURVEY, MEASURED TO FINISHES, WILL BE CONDUCTED TO VERIFY STRUCTURE AREA AND HEIGHT)
7. (ABE)= AVERAGE BUILDING ELEVATION

WINDOW & DOOR NOTES:

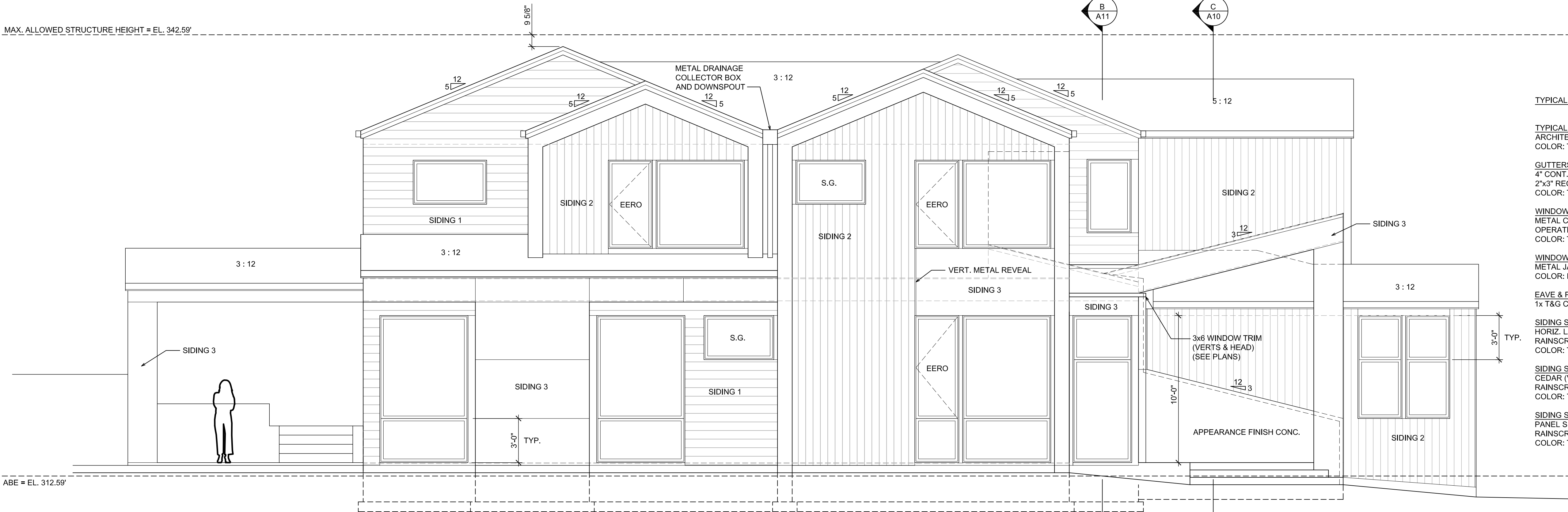
1. UNIT FRAMES TO BE METAL CLAD, U.N.O.
2. "U" VALUES FOR WINDOWS TO BE NFRC CERTIFIED.
3. GLAZING UNITS TO HAVE 1/2" INSULATED GLASS, U.N.O.
4. USE SAFETY GLASS WHERE REQUIRED PER IRC SEC. R308.4 (LABELED; S.G.)
5. USE OBSURED GLASS WHERE NOTED ON THE PLANS (LABELED; O.G.)
6. WINDOWS & DOORS SHALL LIMIT INFILTRATION PER ASTM 32873.
7. SITE VERIFY ALL ROUGH OPENING DIMENSIONS PRIOR TO FABRICATION.



EAST ELEVATION

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

MAX. ALLOWED STRUCTURE HEIGHT = EL. 342.59'



TYPICAL EXTERIOR FINISH MATERIALS

TYPICAL SLOPED ROOF:
ARCHITECTURAL GRADE COMP. SHINGLES
COLOR: TBD (DARK)

GUTTERS & DOWNSPOUTS:
4" CONT. METAL GUTTER
2"x3" REC. METAL DOWNSPOUT
COLOR: TBD (DARK)

WINDOWS & PATIO SLIDERS:
METAL CLAD FRAMES w/ INSUL. GLASS
OPERATION AS INDICATED
COLOR: TBD

WINDOW / DOOR & TRIM:
METAL JAMB INFILL
COLOR: MATCH WINDOW FRAME

EAVE & PORCH & SOFFIT:
1x T&G CEDAR

SIDING SYSTEM (1):
HORIZ. LAP SIDING w/ 7" EXPOSURE
RAINSCREEN SYSTEM
COLOR: TBD (LIGHT)

SIDING SYSTEM (2):
CEDAR (VERT. T&G)
RAINSCREEN SYSTEM
COLOR: TBD (MEDIUM)

SIDING SYSTEM (3):
PANEL SIDING
RAINSCREEN SYSTEM
COLOR: TBD (DARK)

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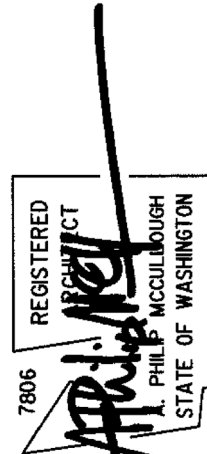
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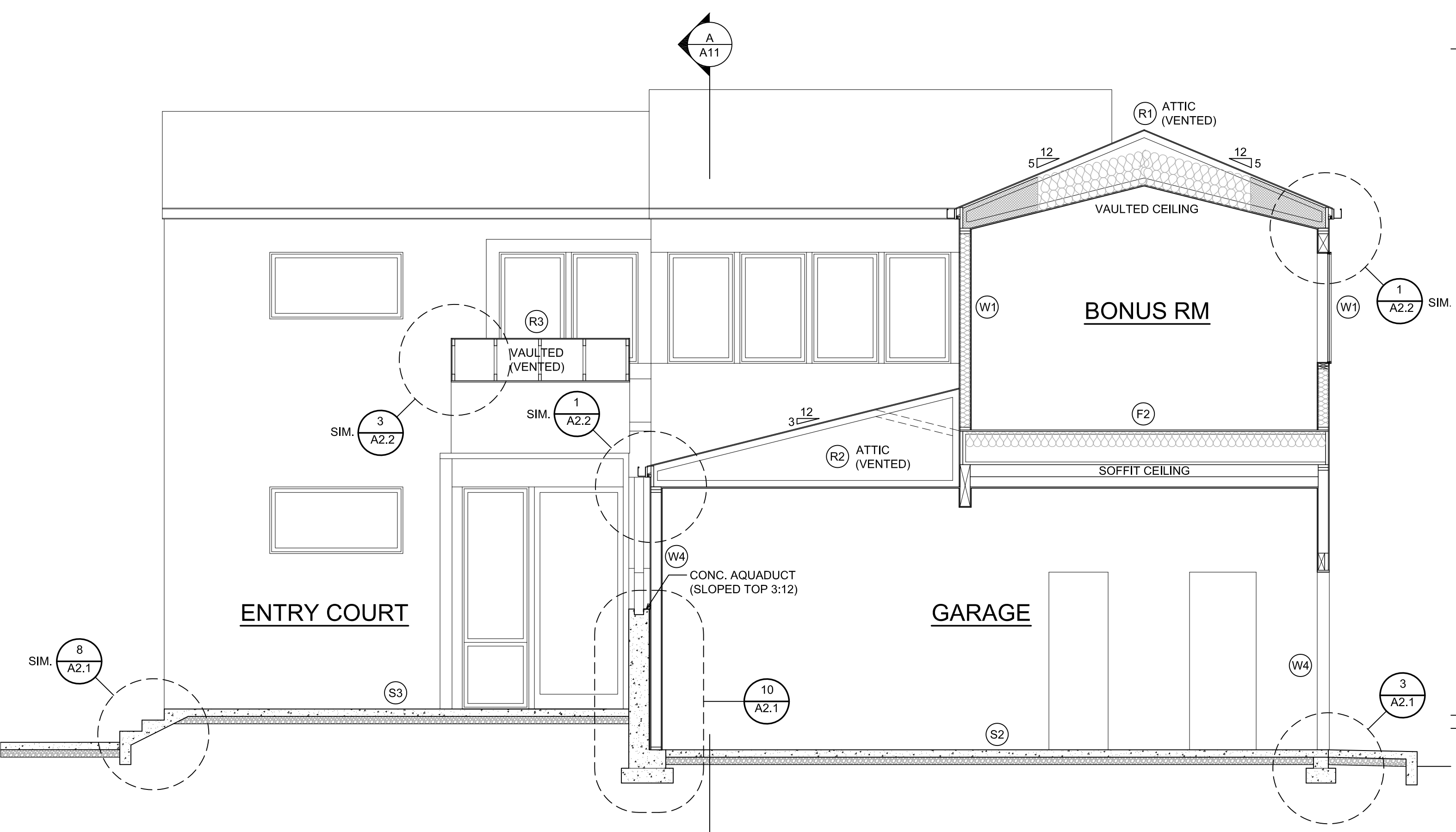
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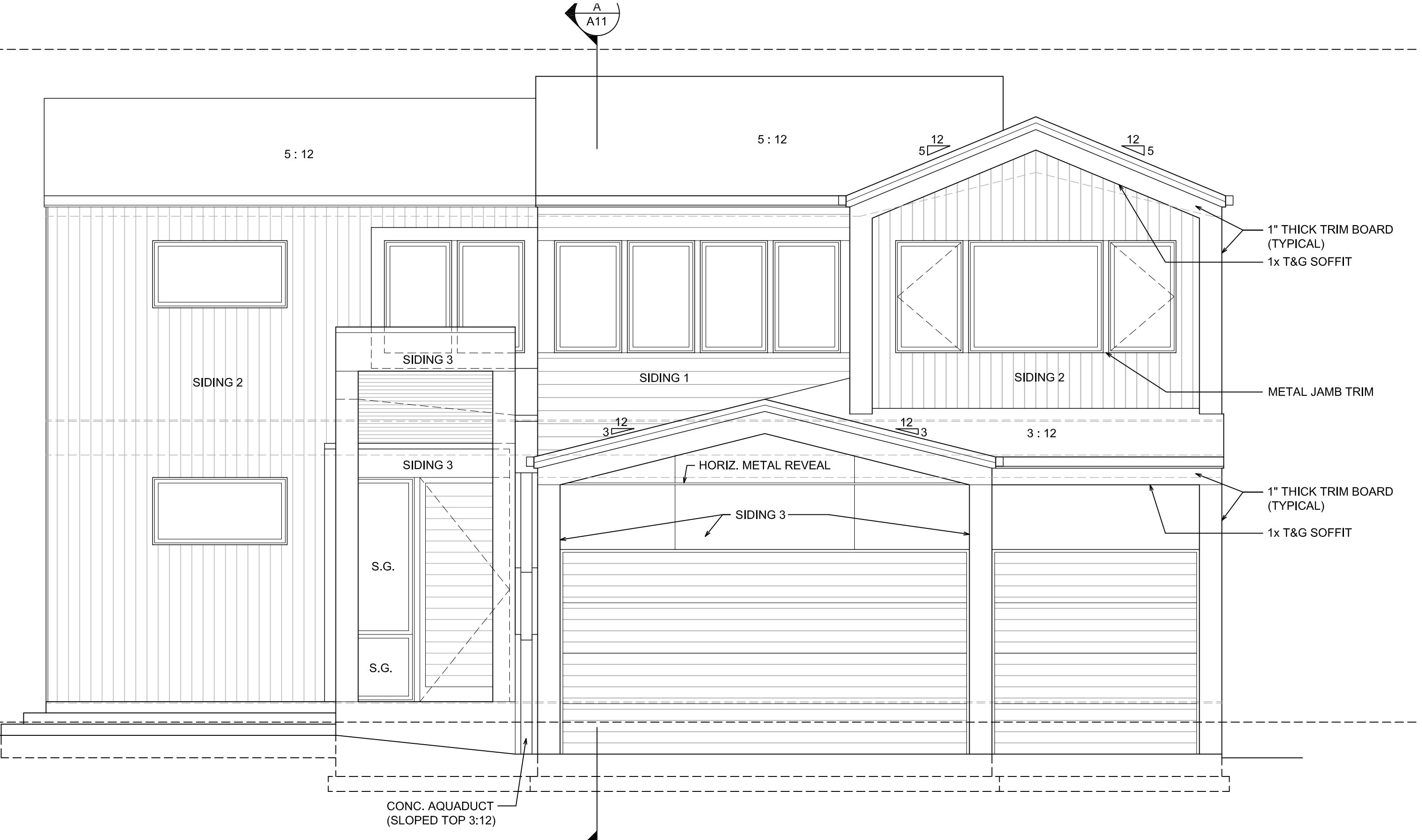
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Elevations

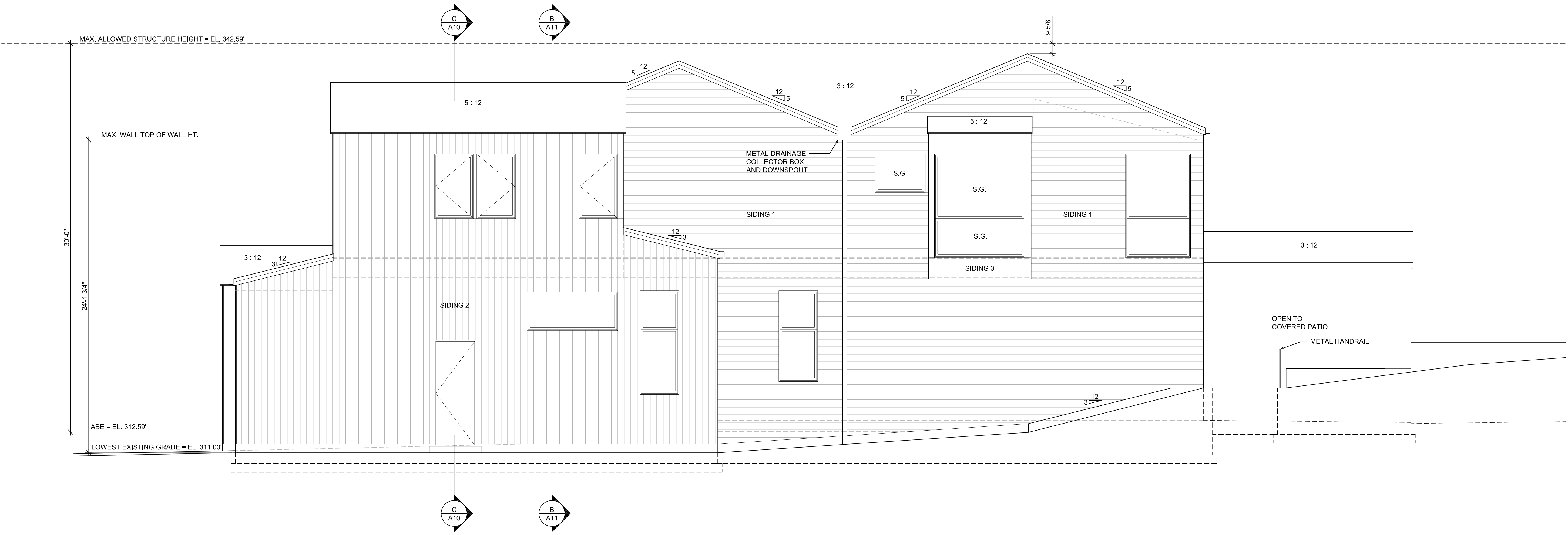
A9



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

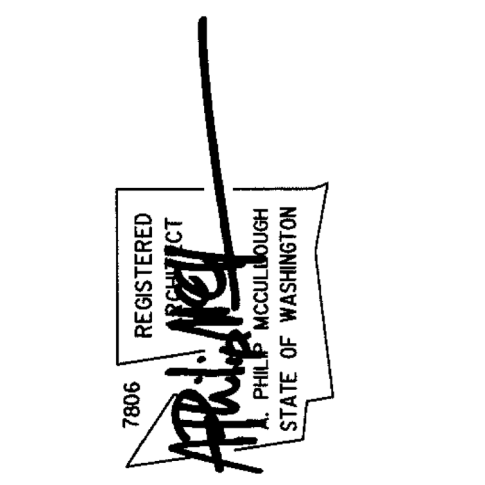


WEST ELEVATION
SCALE: 1/4" = 1'-0"



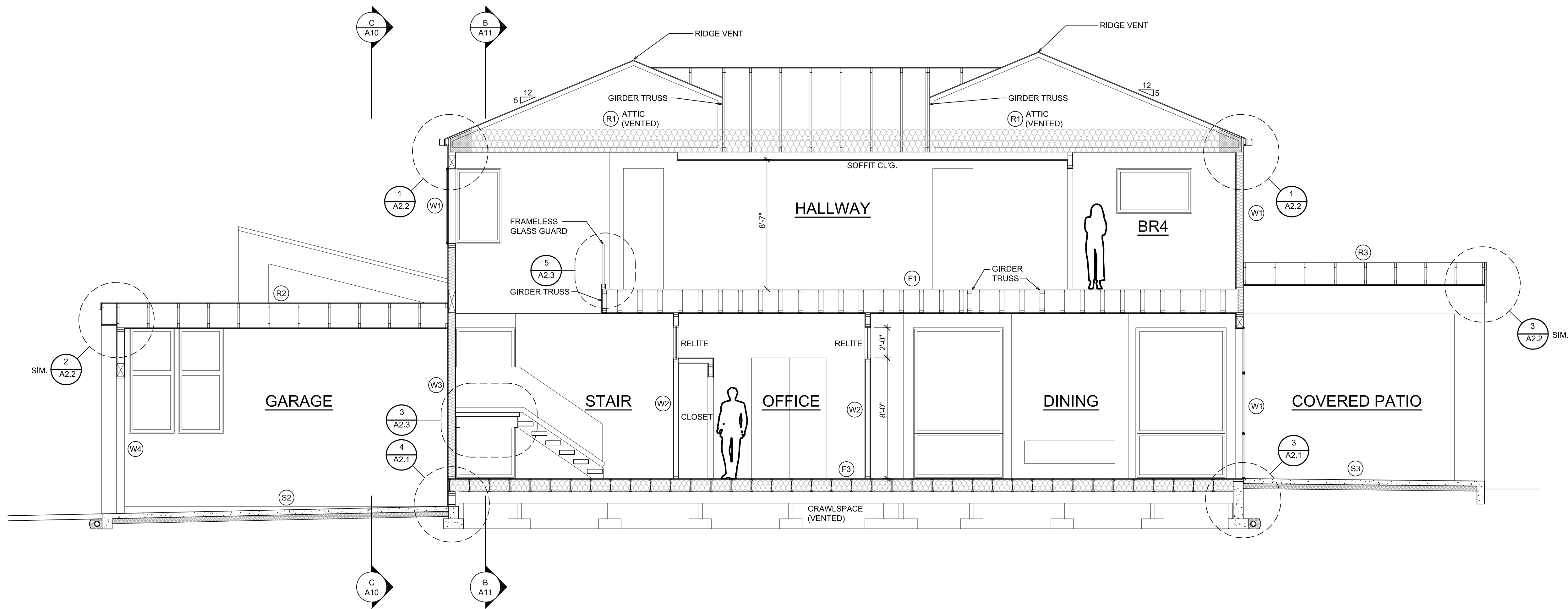
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

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

- (W1) TYPICAL ABOVE GRADE EXTERIOR WALL:
-SIDING SYSTEM PER ELEVATIONS
-NO. 15 ASPHALT SATURATED FELT (WRB)
-1/2" SHEATHING PER STRUCTURAL
-2x6 STUDS PER STRUCTURAL
-R-21 BATT INSULATION PER COVER SHEET
-1/2" G.W.B. INTERIOR FINISH
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (W2) TYPICAL INTERIOR WALL:
-1/2" G.W.B. INTERIOR FINISH
-2x4 STUDS PER STRUCTURAL (2x6 WHERE NOTED ON PLANS)
-1/2" G.W.B. INTERIOR FINISH

- (W3) TYPICAL HOUSE/GARAGE WALL:
-1/2" G.W.B. INTERIOR FINISH
-2x6 STUDS PER STRUCTURAL
-R-21 BATT INSULATION PER COVER SHEET
-1/2" SHEATHING PER STRUCTURAL
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (W4) TYPICAL GARAGE EXTERIOR WALL:
-SIDING SYSTEM PER ELEVATIONS
-NO. 15 ASPHALT SATURATED FELT (WRB)
-2x6 STUDS PER STRUCTURAL
-1/2" G.W.B. INTERIOR FINISH
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (S) TYPICAL SLAB-ON-GRADE (INTERIOR):
-FINISH FLOOR PER PLAN
-4" CAST-IN-PLACE CONCRETE
-10 MIL VAPOR RETARDER
-R-10 RIGID INSULATION PER COVER SHEET
-4" GRANULAR FILL

- (S2) GARAGE SLAB-ON-GRADE (GARAGE):
-4" CAST-IN-PLACE CONCRETE (SLOPE PER PLAN)
-10 MIL VAPOR RETARDER
-4" GRANULAR FILL

- (S3) PATIO SLAB-ON-GRADE:
-4" CAST-IN-PLACE CONCRETE (SLOPE PER PLAN)
-4" GRANULAR FILL

- (F1) TYPICAL FLOOR of HEATED SPACE:
-FINISH FLOOR PER PLAN
-3/4" T&G SHEATHING PER STRUCTURAL (GLUE & NAIL TO JOISTS)
-FLOOR JOISTS OR TRUSSES PER FRAMING PLAN
-5/8" G.W.B. CEILING

- (F2) TYPICAL FLOOR of GARAGE:
-FINISH FLOOR PER PLAN
-3/4" T&G SHEATHING PER STRUCTURAL (GLUE & NAIL TO JOISTS)
-FLOOR JOISTS OR TRUSSES PER FRAMING PLAN
-R-30 BATT INSULATION PER COVER
-5/8" G.W.B. CEILING (TYPE 'X' WHERE INDICATED)
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

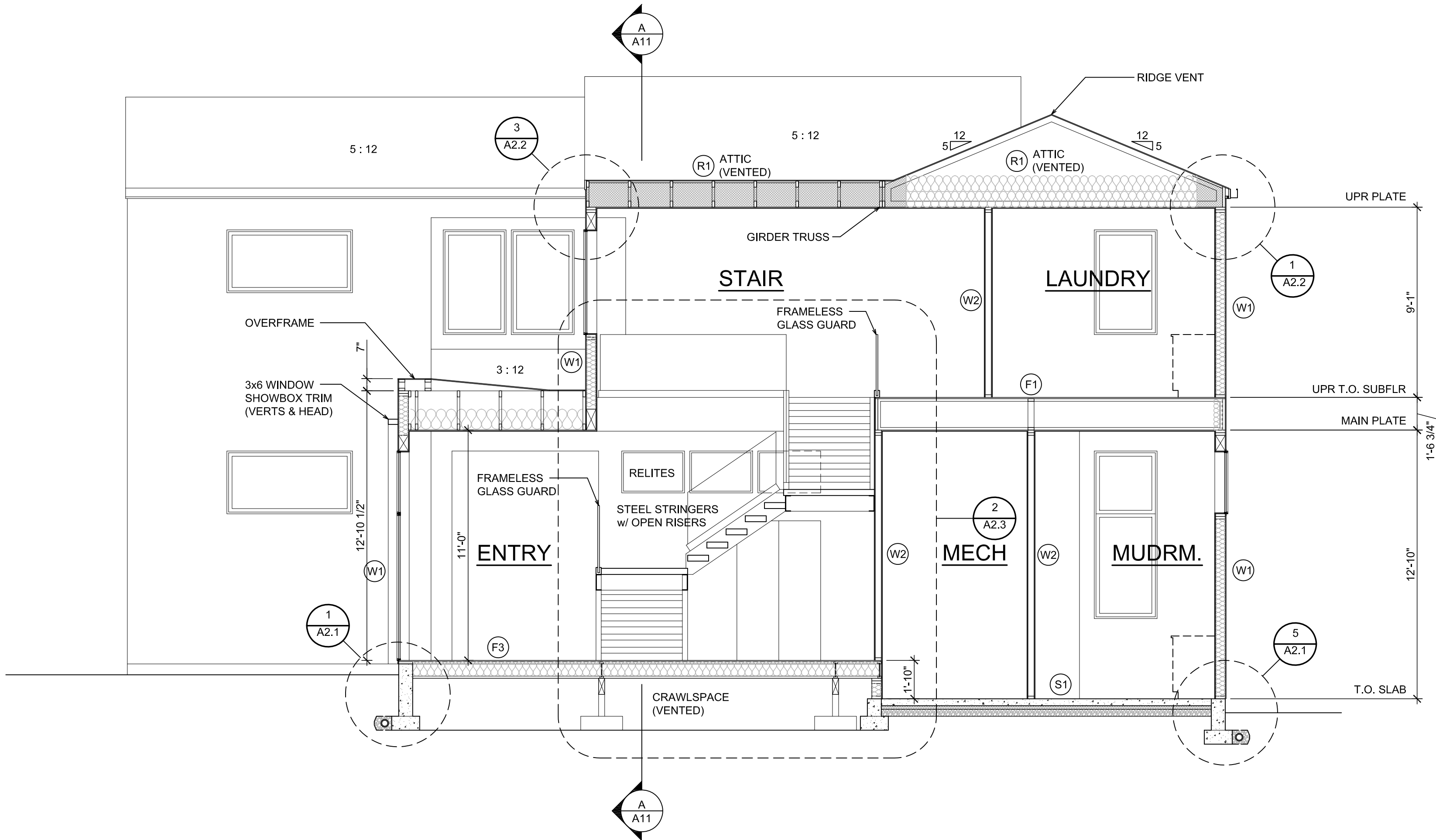
- (F3) TYPICAL FLOOR of CRAWLSPACE:
-FINISH FLOOR PER PLAN
-3/4" T&G SHEATHING PER STRUCTURAL (GLUE & NAIL TO JOISTS)
-FLOOR JOISTS OR TRUSSES PER FRAMING PLAN
-R-38 BATT INSULATION PER COVER
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (F4) TYPICAL FLOOR of EXTERIOR SPACE:
-FINISH FLOOR PER PLAN
-3/4" T&G SHEATHING PER STRUCTURAL (GLUE & NAIL TO JOISTS)
-FLOOR JOISTS OR TRUSSES PER FRAMING PLAN
-R-30 BATT INSULATION PER COVER
-VENTED 1x T&G CEDAR
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (R1) TYPICAL ROOF CONSTRUCTION of HEATED (VENTED):
-ARCHITECTURAL GRADE COMPOSITION ROOF SHINGLES (SLOPE TO GUTTER)
-1/2" SHEATHING PER STRUCTURAL
-ROOF TRUSSES PER FRAMING PLAN
-R-60 BATT INSULATION PER COVER
-5/8" G.W.B. CEILING
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (R2) TYPICAL ROOF CONSTRUCTION of UNHEATED (VENTED):
-ARCHITECTURAL GRADE COMPOSITION ROOF SHINGLES (SLOPE TO GUTTER)
-1/2" SHEATHING PER STRUCTURAL
-ROOF TRUSSES PER FRAMING PLAN
-5/8" TYPE 'X' G.W.B. CEILING
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL

- (R3) TYPICAL ROOF CONSTRUCTION of UNHEATED (VENTED):
-ARCHITECTURAL GRADE COMPOSITION ROOF SHINGLES (SLOPE TO GUTTER)
-1/2" SHEATHING PER STRUCTURAL
-ROOF TRUSSES PER FRAMING PLAN
-5/8" TYPE 'X' G.W.B. CEILING
-AIR BARRIER PER COVER SHEET: MOISTURE CONTROL



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

Comment

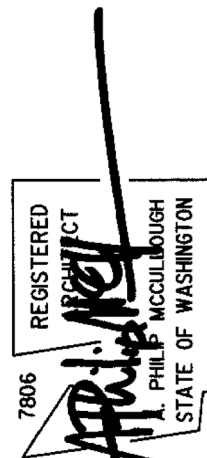
Revisions

2025.10.22
24-008

Date:
Job No:
Project No:

Drawn:
Approved:

Owner



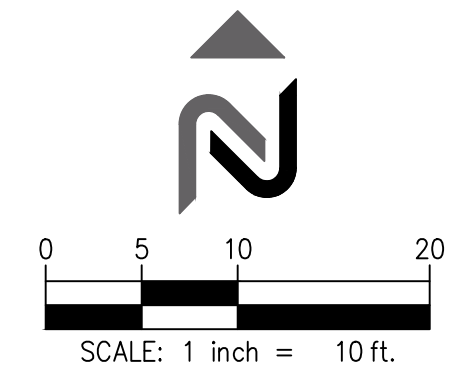
SEARS PLAT - LOT 3

Mercer Island
Washington
98040

PERMIT SUBMITTAL

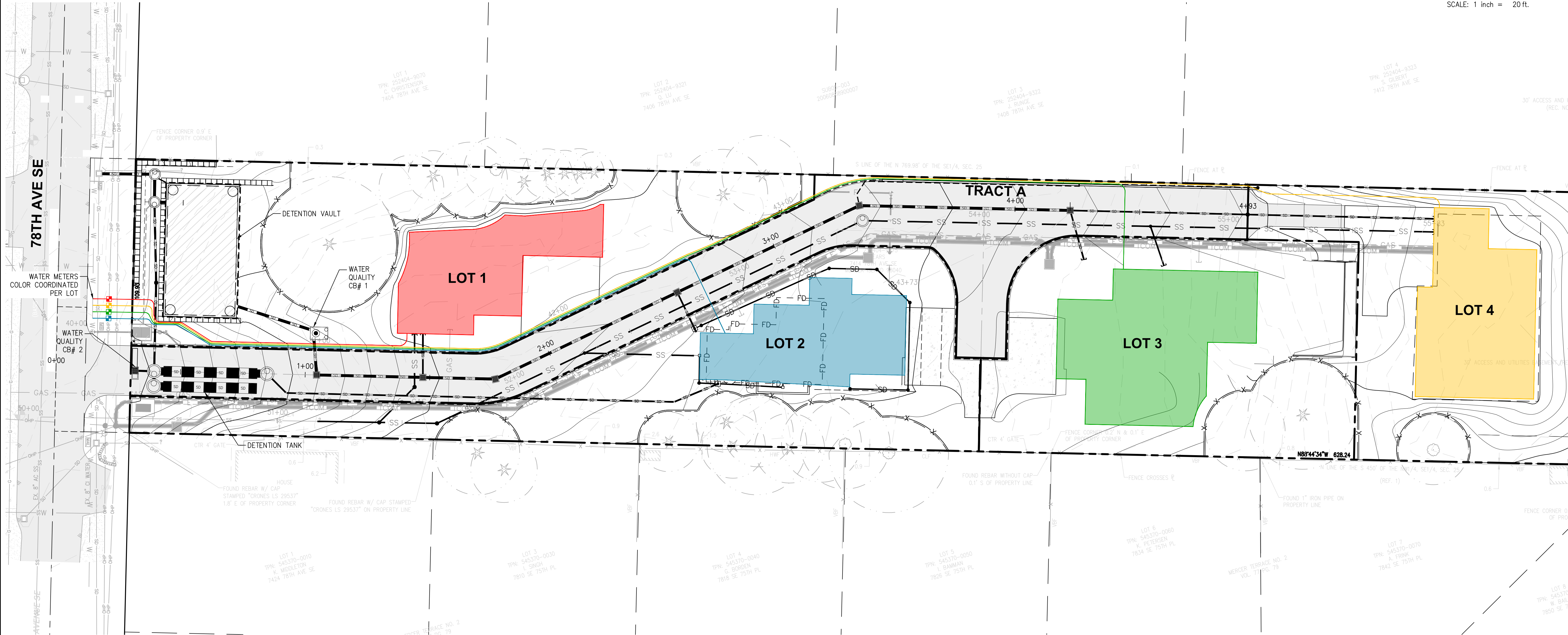
Sections

A11



	PROPERTY LINE
	BUILDING LINE
	401 MINOR CONTOUR
	400 MAJOR CONTOUR
	RIDGE
	RIDGE LINE
	SPOT ELEVATION
	SLOPE ARROWS
	ROCKERY
	CIP CONCRETE WALL
	ASPHALT
	CONCRETE DRIVEWAY
	LANDSCAPE
	4" PERF PVC FOUNDATION DRAIN LINE
	6" PVC ROOF STORM DRAIN LINE
	FOUNDATION DRAIN
	STORM CLEANOUT
	NYOPLAST DRAIN PER DETAIL 1 THIS SHEET

C4.3



LEGEND:

- — — — — LIMIT OF DISTURBANCE
- X—X— TREE PROTECTION FENCE
- SS— SANITARY PIPE
- SS— 6" PVC SANITARY LOT STUB
- SD— STORM DRAIN PIPE
- SD— 6" PVC STORM LOT STUB
- — — — — ZURN Z886 TRENCH DRAIN OR APPROVED EQUAL, WITH SLOTTED HEEL-PROOF GRATE
- 4" FOUNDATION DRAINAGE
- CLEANOUT
- CATCH BASIN, TYPE 1
- ⊙ MH/CATCH BASIN, TYPE 2
- ⊙⊙ WATER QUALITY VAULT
- ⊞ WATER QUALITY CATCH BASIN
- ▨ STORM DRAINAGE VAULT

NAVIX

SITE | CIVIL

11235 s.e. 6th street | suite 150 bellevue, wa 98004

t: 425.453.9501 | f: 425-453-8208

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CLIENT/OWNER

SAINTFIELD2 LLC

PROJECT NAME

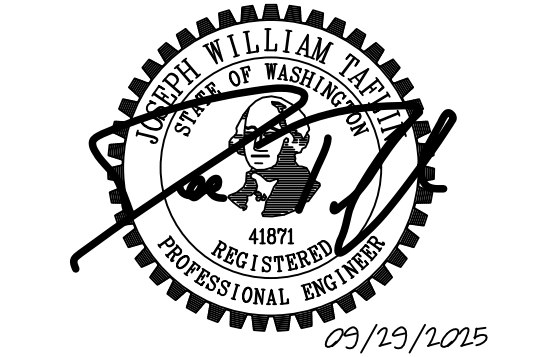
SEARS

NAVIX PROJECT NUMBER: 50-215-004

PROJECT ADDRESS

7414 78TH AVE SE
MERCER ISLAND, WA 98004

STAMP



REVISIONS		
REV	ISSUED FOR:	DATE
	LOT 2 BP SUBMITTAL	06/30/25
	LOT 2 BP RESUBMITTAL	09/29/25

SECTION, TOWNSHIP, RANGE:

SECTION 25, TOWNSHIP 24 NORTH,
RANGE 4 EAST, W.M.

PROJECT TEAM

REVIEWED BY: J. TAFLIN

DESIGNED BY: B. MCMURTRY

SHEET NAME

LOT 2
OVERALL
PLAN

SHEET NUMBER

C8.0

BASEMENT SLAB

4" CONC. SLAB ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GARAGE SLAB

4" CONC. SLAB ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

PORCH SLAB

4" CONC. SLAB ON GRADE ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- DESIGN LOADS:
 - SOIL: 1500 PSF ALLOWABLE BEARING PRESSURE
- CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, UNO:
 - $f_c = 3000$ psi: FOUNDATION WALLS
 - 3000 psi: FOOTINGS
 - 2500 psi: INTERIOR SLABS ON GRADE
 - 3500 psi: GARAGE & EXT. SLABS ON GRADE
 - $f_y = 60,000$ psi
- * ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 1% AIR ENTRAINMENT.
- FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT-REST, 35 PCF ACTIVE & 7th SEISMIC SURCHARGE.
- TYPICAL REINFORCEMENT DETAILS: LAP ALL REBAR 24" MIN, BEND BARS AND LAP AT CORNERS; PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT; PROVIDE 3" MINIMUM COVER AT THE BOTTOM BARS AND 1 1/2" COVER AT THE SIDES.
- FOUNDATION WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/ LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP (15'-0" O.C.)
- FASTEN SILL PLATES TO FOUNDATION WALLS WITH 3/8" DIA. ANCHOR BOLTS w/ MIN. 3"x3"x 1/4" PLATE WASHERS (EDGE OF WASHER TO BE LOCATED WITHIN 1/8" OF EXTERIOR EDGE OF SILL PLATE) PROVIDE A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAXIMUM FROM PLATE ENDS, UNO. (SEE FND. DETAILS).
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED HEM FIR #2.
- ARCH/BUILDER TO VERIFY ALL DIMENSIONS

1-288-801-129-2021

HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
	SIMPSON STDH14 (RJ) HOLD-DOWN
	SIMPSON CSI6 STRAP TIE (14" END LENGTH)
	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)
	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN DETAIL AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSSES, FLOOR TRUSSES AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MKF FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:

A. ROOF TRUSSES:
1/4" DEAD LOAD
B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
1/8" DEAD LOAD
C. FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:
LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)

LOADING AND DESIGN PARAMETERS

GRAVITY DESIGN LOADS:

DEAD LOAD (PSF):

ROOF TRUSSES TOP CHORD :

10

ROOF TRUSSES BOTTOM CHORD :

7

ROOF RAFTERS :

10

FLOOR (TRUSSES) :

15

FLOOR (JOISTS) :

10

TILE FLOORS :

10

SOLAR PANELS :

4

LIVE LOAD (PSF):

ROOF :

20

RESIDENTIAL LIVING AREAS :

40

RESIDENTIAL SLEEPING AREAS :

30

RESIDENTIAL WOOD DECKS :

60

GARAGE :

50

SNOW LOAD:

GROUND SNOW LOAD (P_g) (PSF) :

25

FLAT ROOF SNOW LOAD (P_f) (PSF) :

25

SNOW EXPOSURE FACTOR (C_e) :

1.2

SNOW LOAD IMPORTANCE FACTOR (I_s) :

1.0

THERMAL FACTOR (C_t) :

1.2

LATERAL DESIGN LOADS:

WIND LOAD: (IBC 1609)

SPEED (V_w) (MPH) :

100

WIND RISK CATEGORY :

II

IMPORTANCE FACTOR (I_w) :

1.0

EXPOSURE CATEGORY :

B

INTERNAL PRESSURE COEFF. (GC_w) :

0.18

TOPOGRAPHIC FACTOR (K_{zt}) :

1.0

SEISMIC LOAD: (IBC 1613)

SEISMIC RISK CATEGORY :

II

SEISMIC IMPORTANCE FACTOR (I_s) :

1.0

MAPPED SPECTRAL RESPONSE:

S_{ms} 1.171

S_{ms} 0.508

SITE CLASS :

D (DEFAULT)

SPECTRAL RESPONSE COEFF. :

S_m 0.601

SEISMIC DESIGN CATEGORY:

D

BASIC SEISMIC-FORCE-RESISTING SYS.:

LIGHT FRAMED WALLS

w/ WOOD STRUCTURAL PANELS

ULTIMATE BASE SHEAR:

TRANS: 20k

LONG: 20k

SEISMIC RESPONSE COEFF. (C_w) :

TRANS: 0.01

LONG: 0.01

RESPONSE MODIFICATION FACTOR (R_s) :

TRANS: 6.5

LONG: 6.5

ANALYSIS PROCEDURE USED:

EQUIVALENT LATERAL FORCE

LATERAL BRACING NOTES

THIS HOME HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM: 100 MPH WIND SPEED, EXP. B (ASCE 7-16 WIND MAP, PER IRC R301.2.1.1) RISK CAT. 2 & SEISMIC CAT. D2.

100 MPH WIND IN 2021 IRC MAP ENGINEERED DESIGN WAS COMPLETED PER 2021 IBC (SECTION 1609 & 1613) & ASCE 7-16, AS PERMITTED BY R301.1.3 OF THE 2021 IRC. ACCORDINGLY, THIS HOME, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.

STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS

(INTERIOR WALL SPECIFICATION WHERE NOTED ON PLANS)

- 3/16" OSB OR 15/32" PLYWOOD:

FASTEN SHEATHING w/ 2 1/2"x0.131" NAILS @ 6" o.c. AT ALL SUPPORTED PANEL EDGES AND 12" o.c. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION UNO. ON PLANS.

3" o.c. EDGE NAILING

(WHERE NOTED ON PLANS)

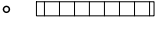
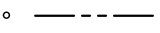
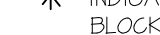
- 3/16" OSB OR 15/32" PLYWOOD:

ONLY AT LOCATIONS INDICATED ON PLANS - SHEATH WALL SHOWN WITH 3/16" OSB. FASTEN SHEATHING w/ 2 1/2"x0.131" NAILS @ 3" o.c. AT EDGES AND 12" o.c. AT CENTER. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE AND 3" o.c. FASTENING.

NOTES:

- LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" o.c.
- ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER w/ 3"x0.131" NAILS @ 8" o.c. USE (12) 3/8"x0.131" NAILS AT EACH LAP SPLICE, (6) EACH SIDE OF JOINT (TYP. UNO.)
- ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
- ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.

LEGEND

-  INTERIOR BEARING WALL
-  BEARING WALL ABOVE (B.W.A.) OR SHEAR WALL ABOVE (S.W.A.)
-  BEAM / HEADER
-  INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
-  AREA OF OVERFRAMING
-  J.L. METAL HANGER
-  * INDICATES POST ABOVE (P.A.). PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
-   INDICATES HOLD-DOWN.

GENERAL STRUCTURAL NOTES

DESIGN PARAMETERS

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - LATEST EDITION.

GENERAL FRAMING

- EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" o.c. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" o.c. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" o.c. (MAX.)
- ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (HF) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO.
- BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. & SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPT) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (HF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.
- ALL FRAMING LUMBER SHALL BE KILN DRIED TO 19% MC (KD-15).
- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS, w/ (4) 3"x0.131" TOENAILS (MIN), TYP. UNO.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARING. BLOCKING TO MATCH POST ABOVE.
- ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - Fd=2925 PSI; Fv=310 PSI; E=1,55x10⁶ PSI
 - LVL MEMBERS - Fd=2400 PSI; Fv=285 PSI; E=1,2x10⁶ PSI
 - GLB MEMBERS - Fd=2400 PSI; Fv=285 PSI; E=1,8x10⁶ PSI; Fv=285 PSI; E=1,8x10⁶ PSI; DF/DF, 24F-V4 (UNO)
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - Fd=2400 PSI; Fc=12500 PSI; E=1,8x10⁶ PSI
- FACE NAIL MULTI-PLY 2x BEAMS & HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MIN) @ 12" o.c. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- TRUSS SHOP DWGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PROPOSED CONSTRUCTION SHALL BE SUBMITTED TO BUILDING DESIGNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY IN ACCORDANCE WITH TPI-1 2.3.2.3 & 2.3.4.3.
- REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.
- BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653, TYPE G95 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA AND SHALL RUN CONTINUOUS OVER SUPPORTS WHEREVER POSSIBLE. ALL LOADS SHOWN ON PLAN FOR MANUF. DESIGNS ARE ASD LEVEL LOADS, UNO. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT MKF FOR EXCLUDED DESIGNS).
- ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- 2x FLOOR JOISTS HAVE BEEN DESIGNED TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA.
- TYPICAL 2x JOIST HANGERS UNO. ON PLANS:
 - SINGLE PLY: SIMPSON LUS210
 - DOUBLES: SIMPSON LUS210-2
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED "STURD-I-FLOOR" 24" o.c. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND 2 1/2" x 0.131" NAILS @ 6" o.c. @ PANEL EDGES & @ 12" o.c. FIELD.
- ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE, UNO.
- FASTEN HANGERS TO SINGLE PLY FLUSH BEAMS w/ 1/2" LONG NAILS.

ROOF FRAMING

- FASTEN EACH ROOF TRUSS TO TOP PLATE W/ (4) 3"x0.131" TOENAILS (MIN) & (1) SIMPSON H25T CLIP @ ALL BEARING POINTS. PROVIDE (2) SIMPSON H25T CLIPS AT 2-PLY GIRDER TRUSSES, (3) SIMPSON H25T CLIPS AT 3-PLY GIRDER TRUSSES AT ALL BEARING POINTS.
- FASTEN EACH ROOF RAFTER TO TOP PLATE WITH (1) SIMPSON H25T CLIP. PROVIDE (2) SIMPSON H25T CLIPS AT FLUSH BEAMS IN THE ROOF - AT ALL BEARING POINTS.
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS w/ 2 1/2" x 0.131" NAILS @ 6" o.c. AT PANEL EDGES & @ 6" o.c. AT INTERMEDIATE SUPPORTS. ROOF SHEATHING SHALL EXTEND BELOW ALL INSTANCES OF OVERFRAMING. BLOCKING SHALL BE INSTALLED AS REQUIRED TO LIMIT ROOF SHEATHING SPANS TO 24" MAX.
- ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- ROOF TRUSS SHOP DRAWINGS & CALCULATIONS SHALL BE DESIGNED FOR UNBALANCED SNOW LOADINGS PER ASCE 7-16, SECTION 1.6.
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BC51 I-08. "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES".
- FASTEN OVER-FRAMED TRUSS SETS TO TRUSSES BELOW w/ (2) 3"x0.131" TOENAILS AT EA. TRUSS.
- FASTEN ALL INTERIOR NON-BEARING PARTITION WALLS TO TRUSS BOTTOM CHORD ABOVE WITH SIMPSON STC CLIPS AT 24" o.c. MAX. PROVIDE BLOCKING BETWEEN THE TRUSS BOTTOM CHORDS AS REQUIRED FOR THE PARALLEL CONDITIONS.

seal:



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RESIDENTIAL STRUCTURAL ENGINEERING

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M&K project number:

244-25015

project mgr:

NJM

drawn by:

AJC

issue date:

09-05-25

REVISIONS:

date:

initial:

MCCULLOUGH ARCHITECTS

5801 6th Ave South, Suite 371
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STRUCTURAL NOTES

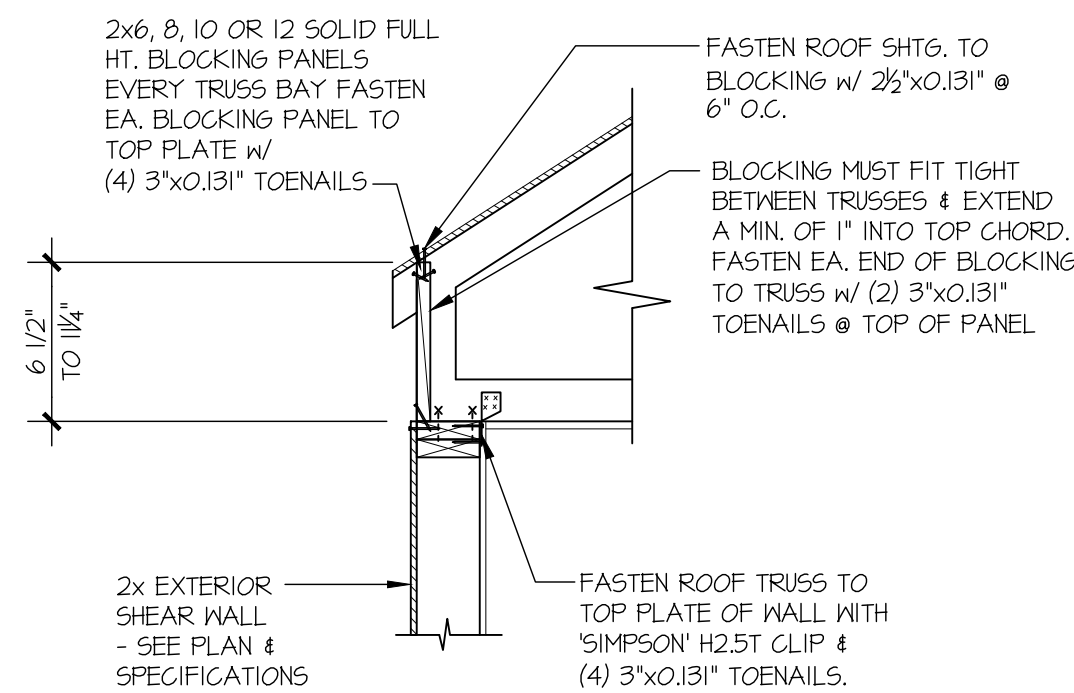
SEARS PLAT

LOT 3

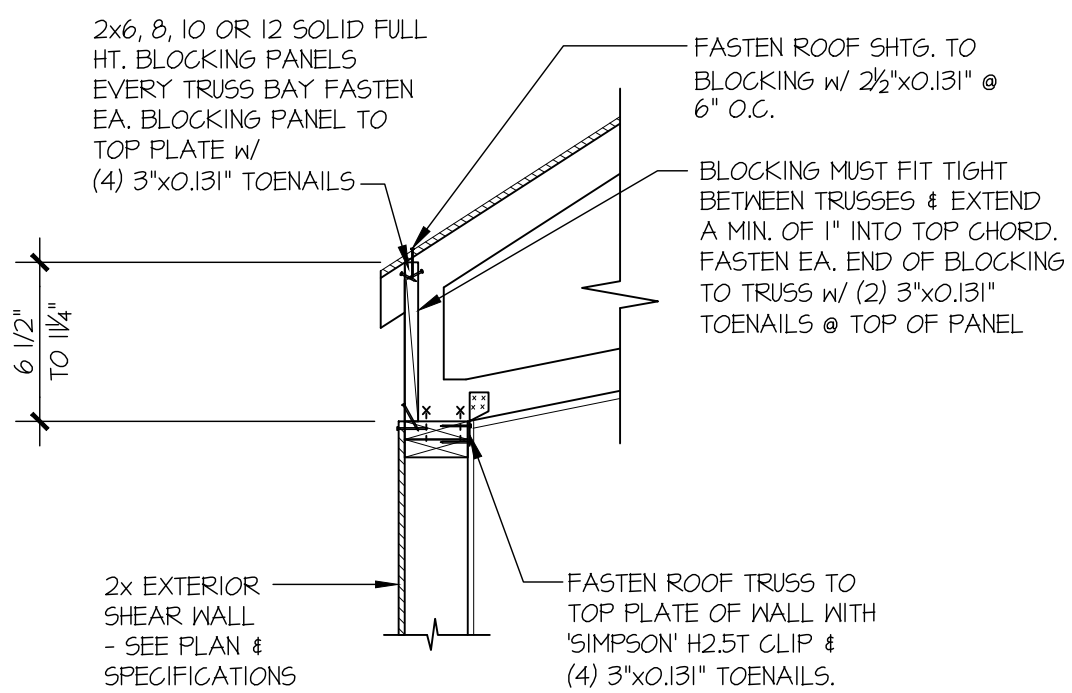
MERCER ISLAND, WASHINGTON

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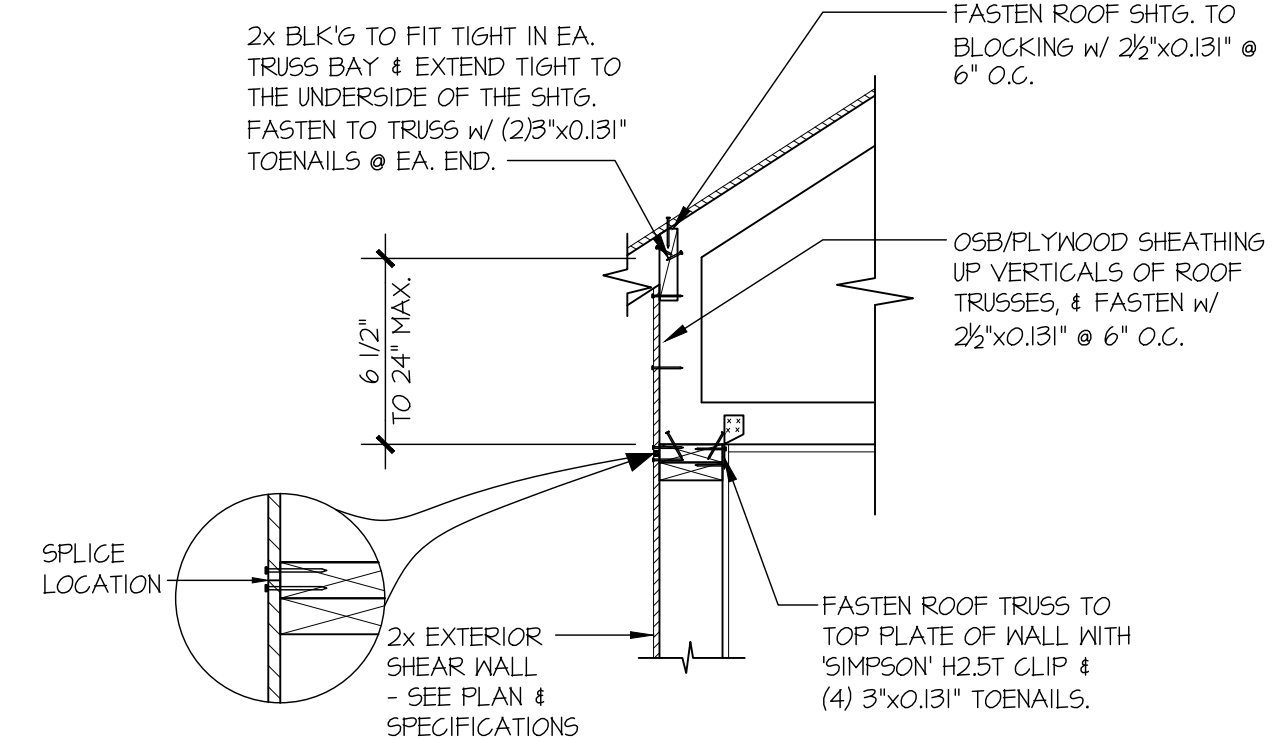
S-O.O



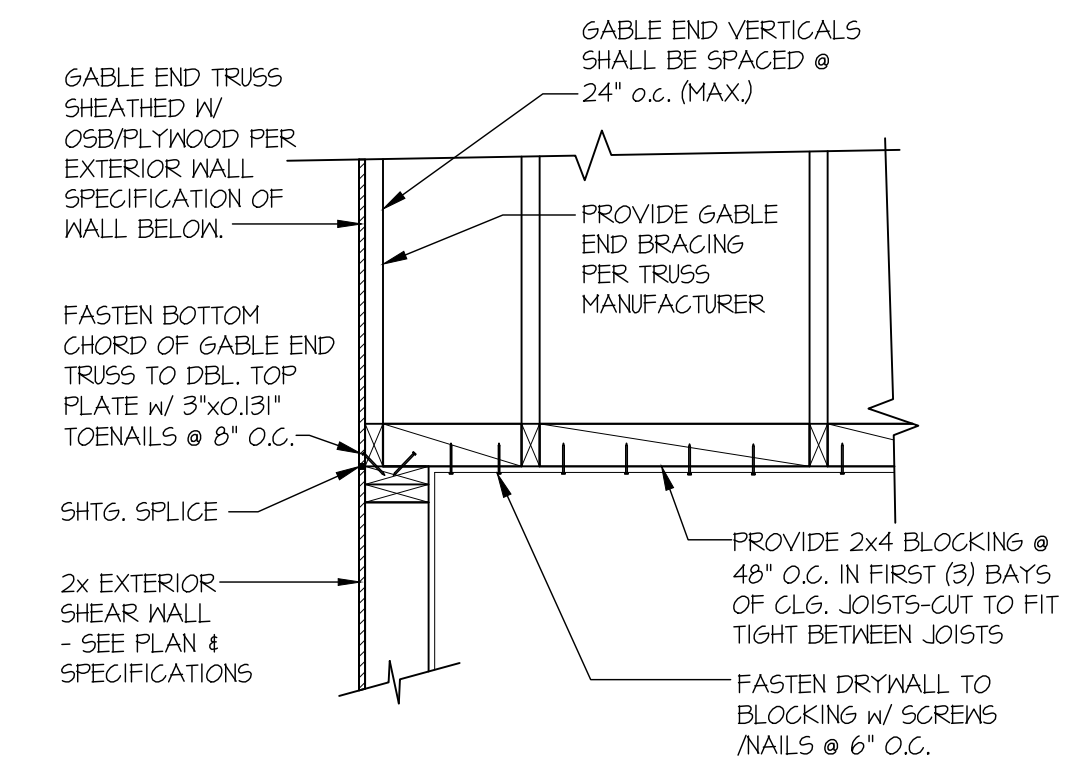
1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/4"=1'-0" HEEL HEIGHT BETWEEN 6 1/2" - 11/4"



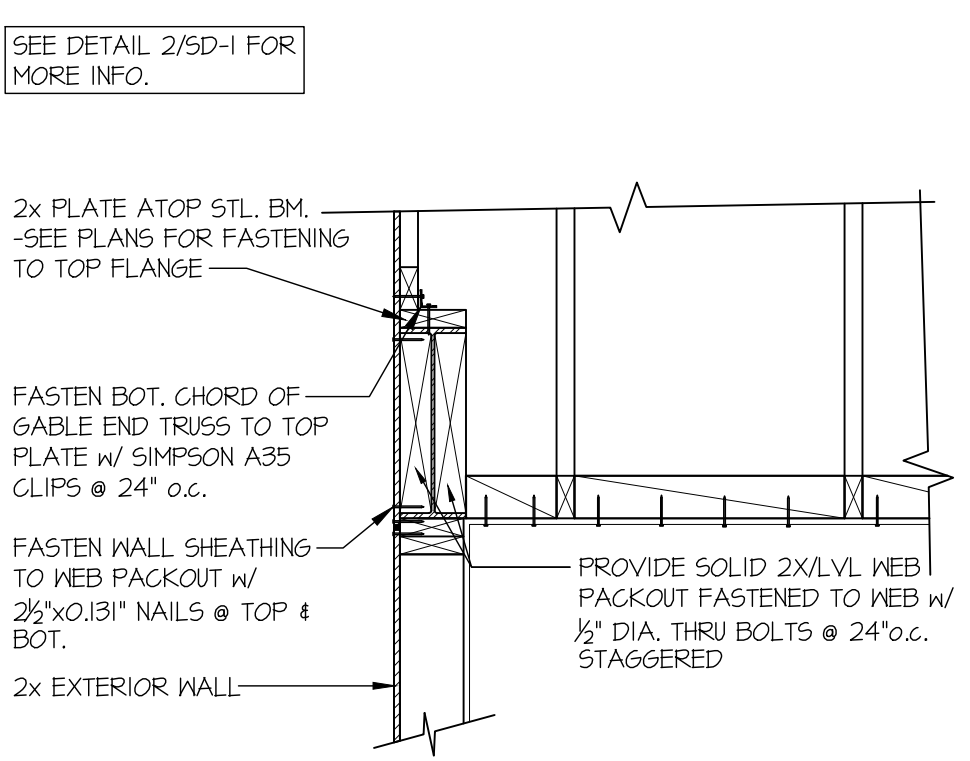
1A TYPICAL SHEAR TRANSFER DETAIL @ VAULTED CEILING
SCALE: 3/4"=1'-0" HEEL HEIGHT BETWEEN 6 1/2" - 11/4"



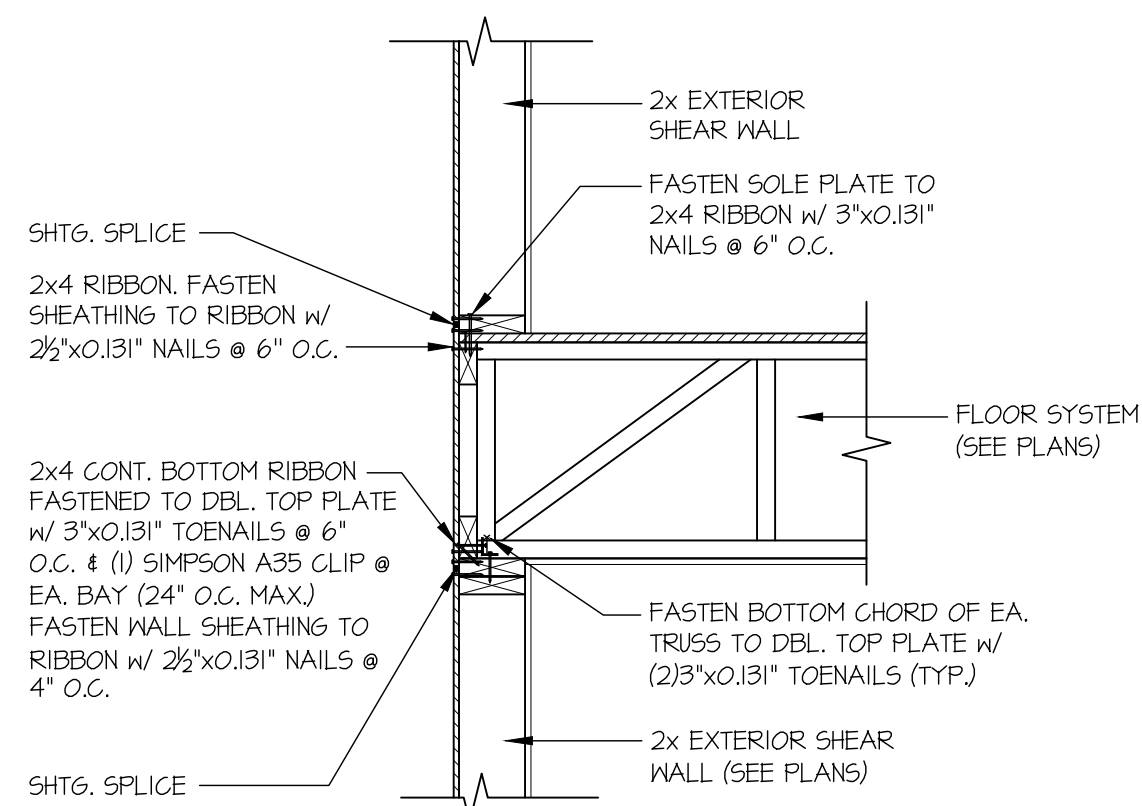
1B TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/4"=1'-0" HEEL HEIGHT UP TO 24" MAX.



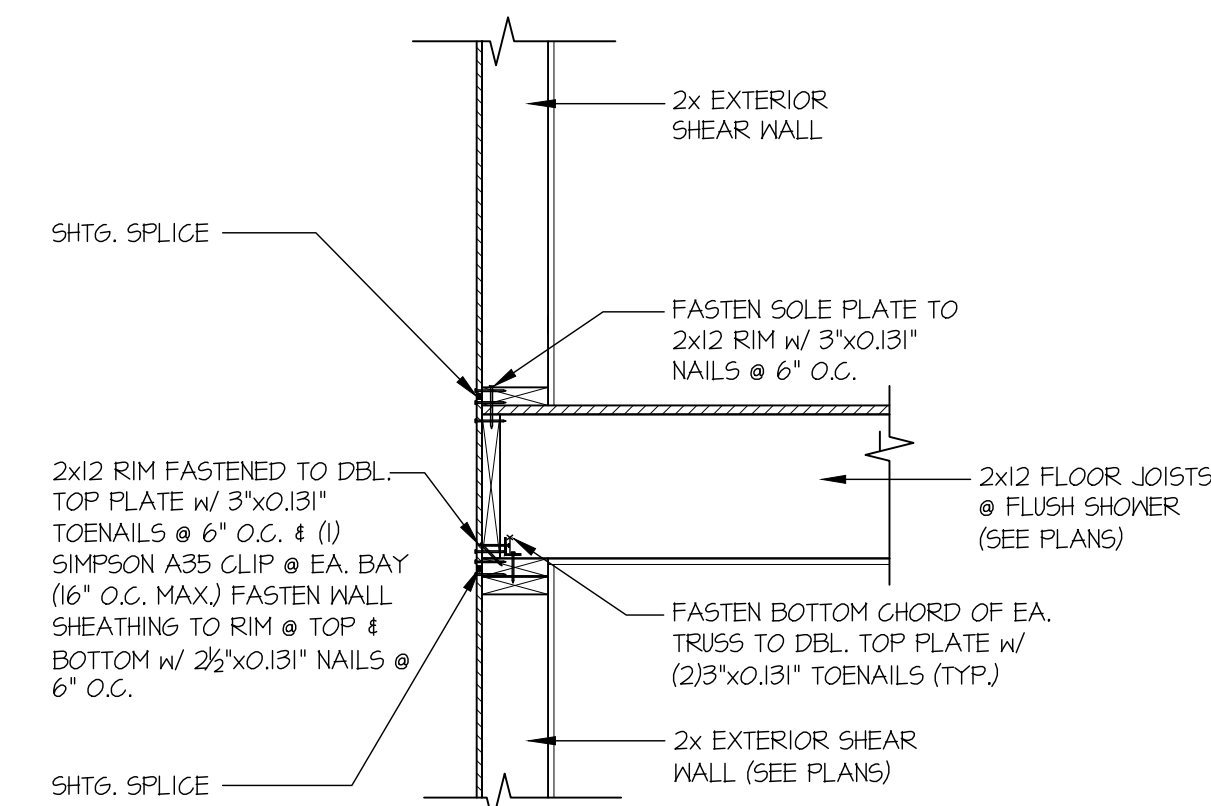
2 TYPICAL GABLE END DETAIL
SCALE: 3/4"=1'-0"



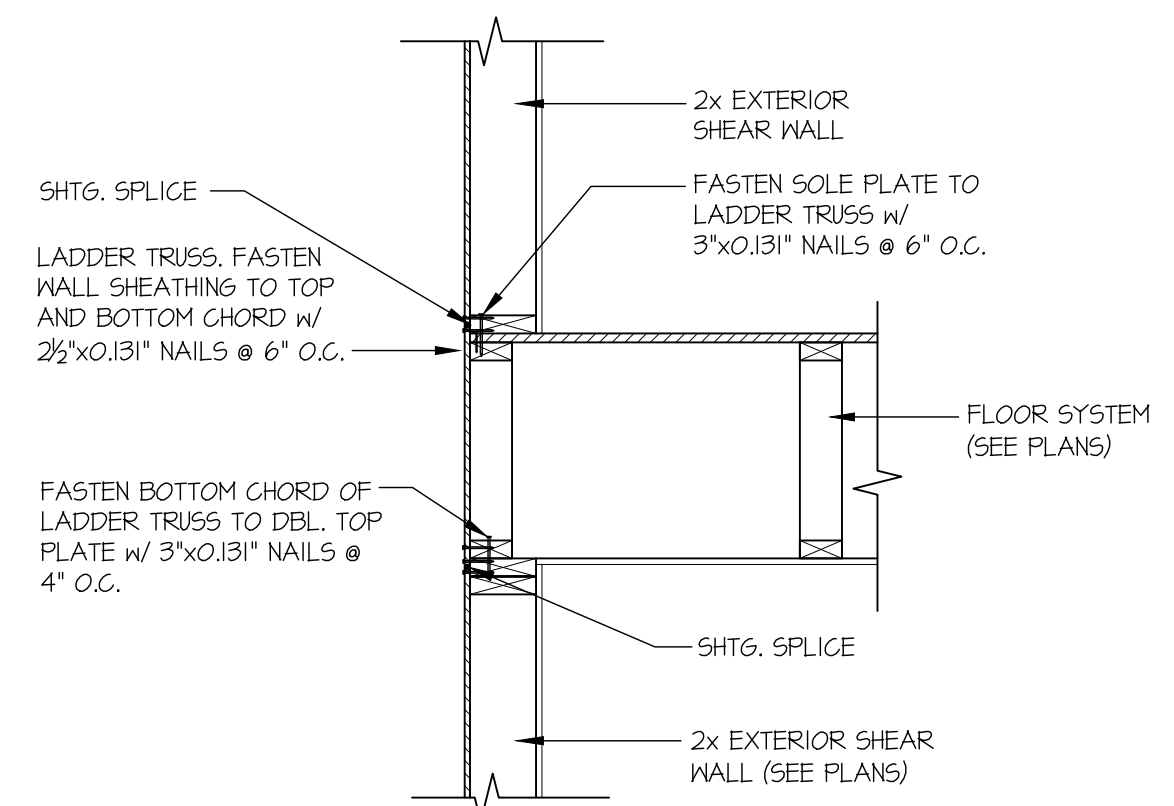
2A GABLE END DETAIL
SCALE: 3/4"=1'-0"



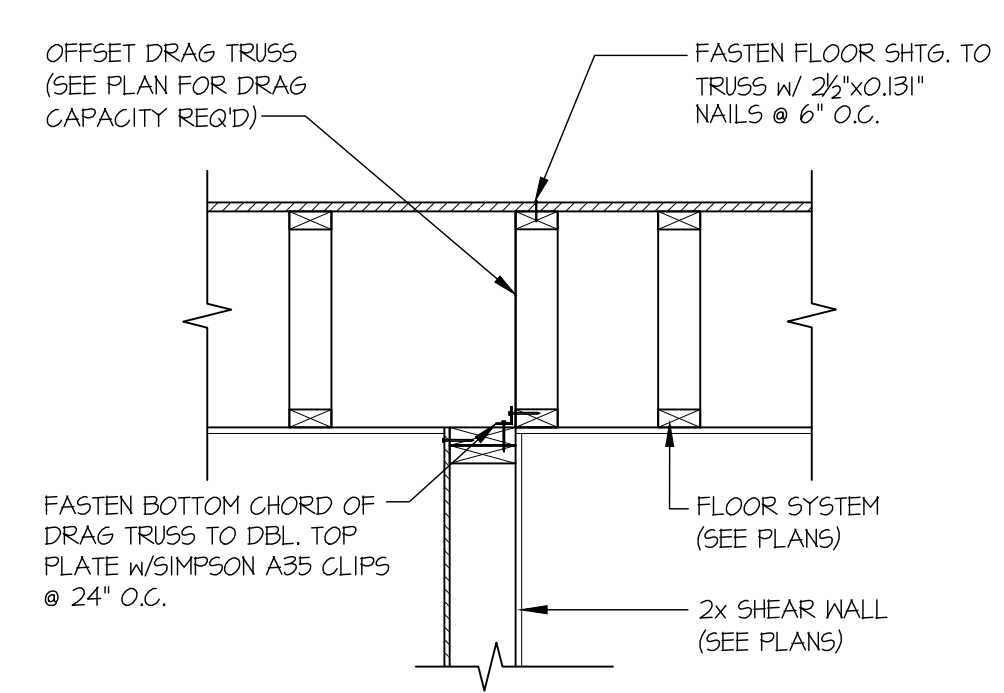
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



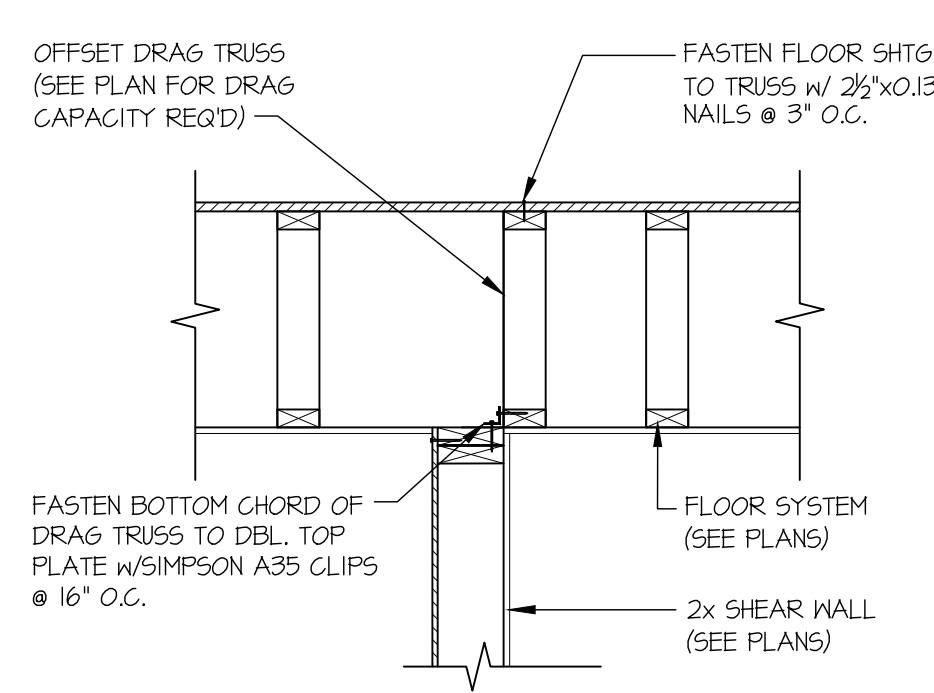
3A SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



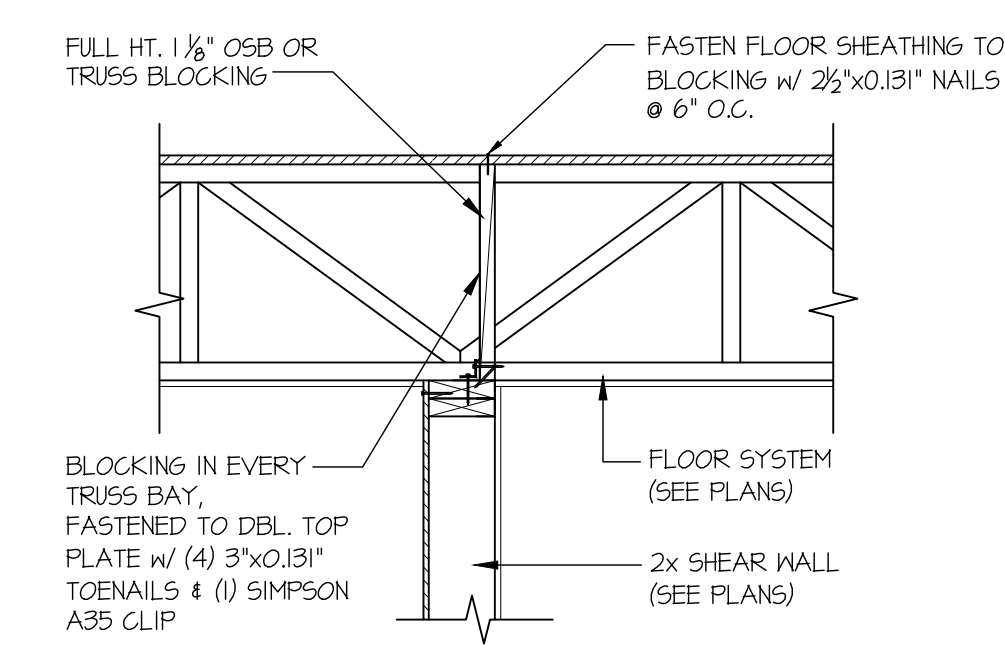
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PARALLEL FRAMING



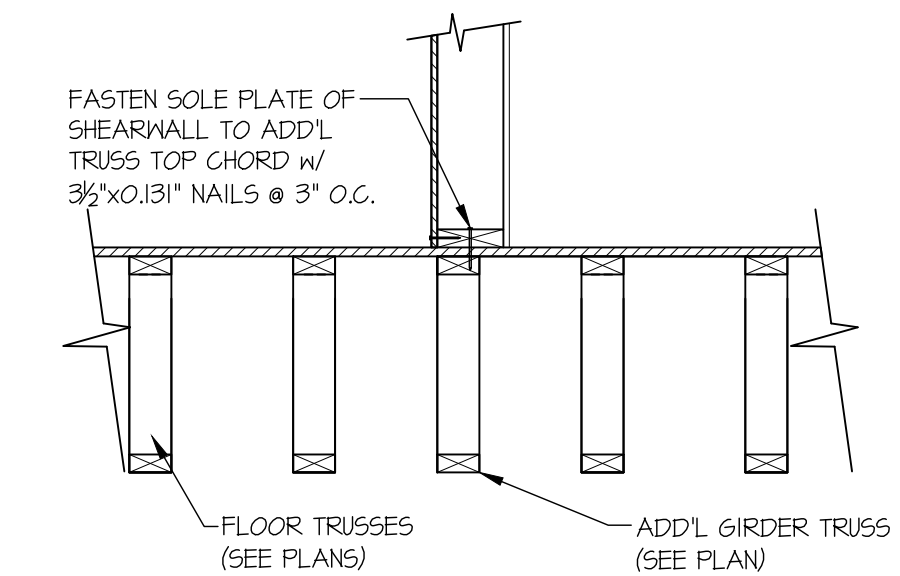
11 SHEAR TRANSFER DETAIL @ SHEAR WALL BELOW
SCALE: 3/4"=1'-0"



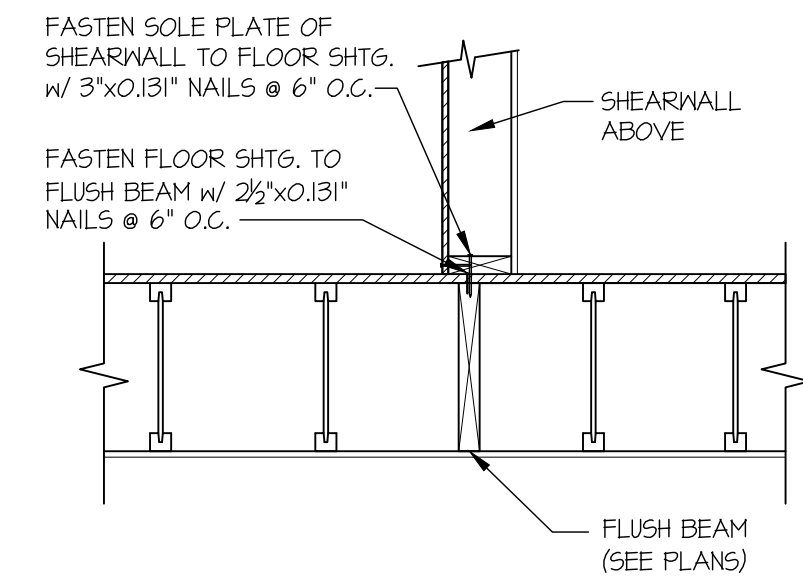
12 SHEAR TRANSFER DETAIL @ SHEAR WALL BELOW
SCALE: 3/4"=1'-0"



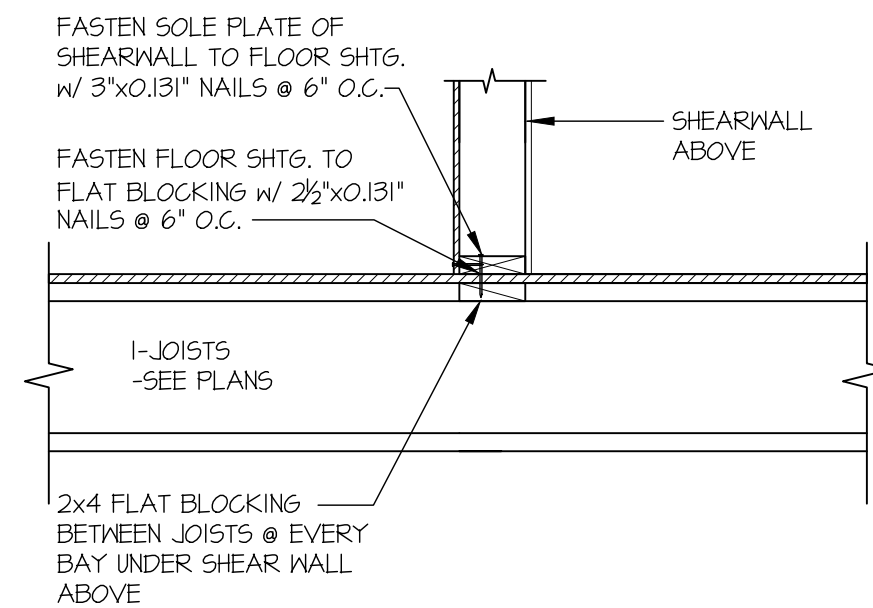
13 SHEAR TRANSFER DETAIL @ SHEAR WALL BELOW
SCALE: 3/4"=1'-0"



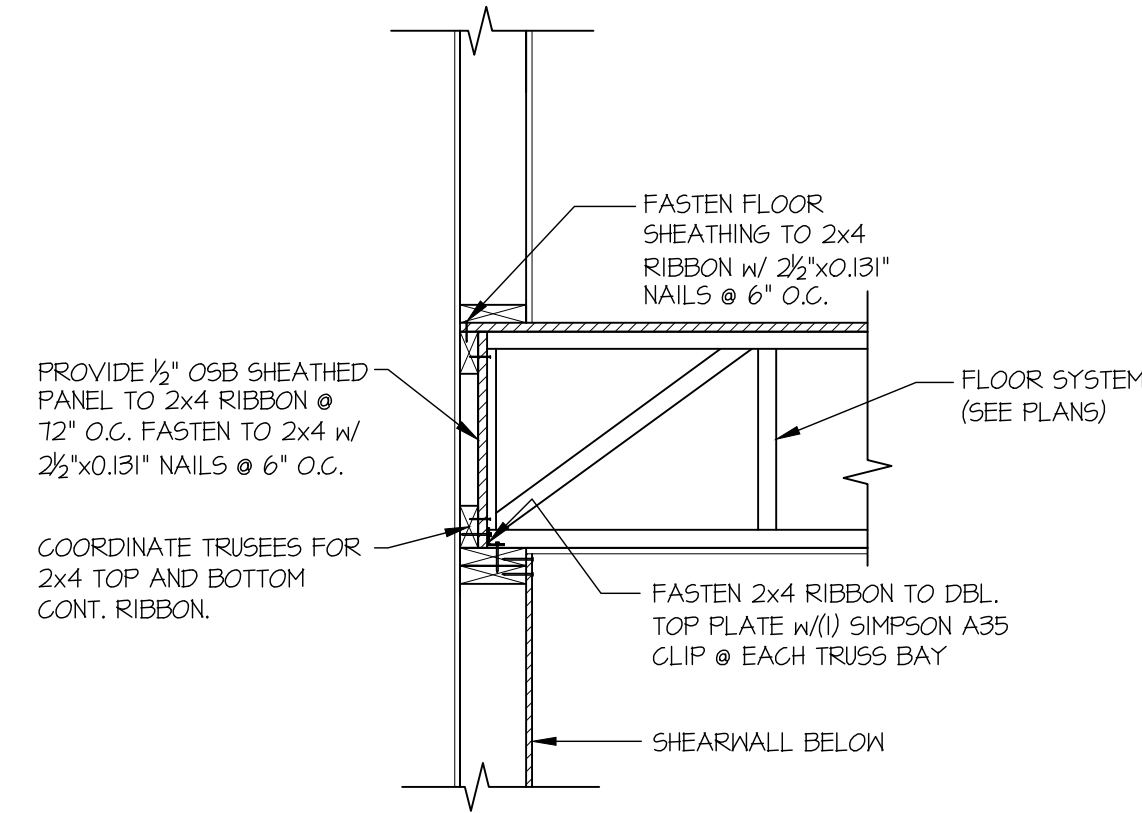
19 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0" PARALLEL FRAMING



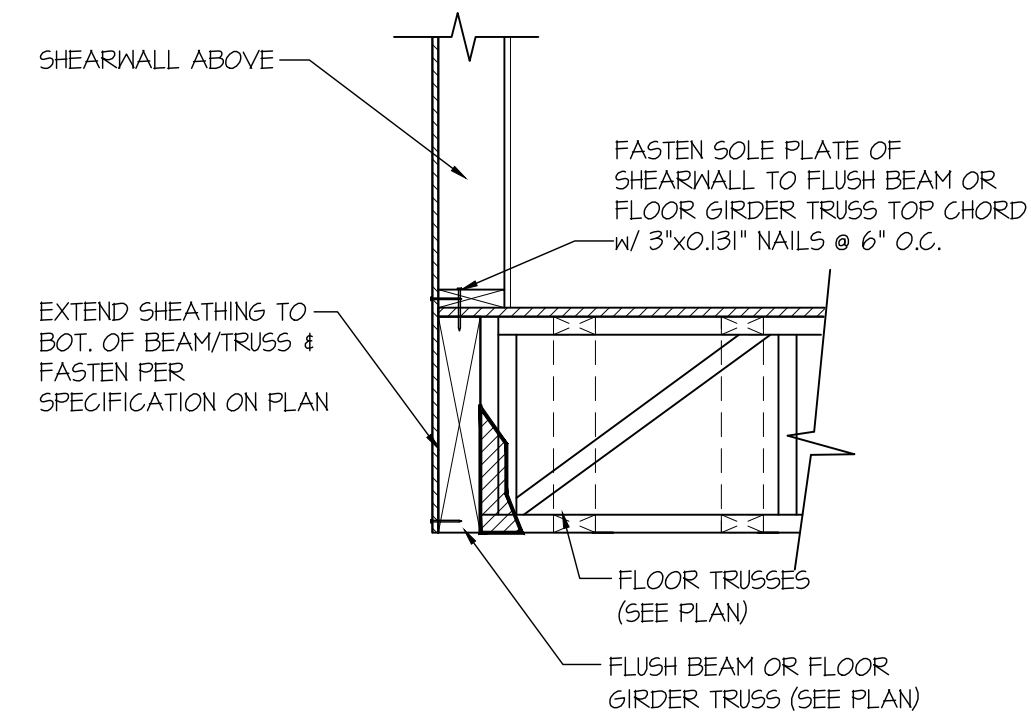
19A SHEAR TRANSFER DETAIL @
INTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0" PARALLEL FRAMING



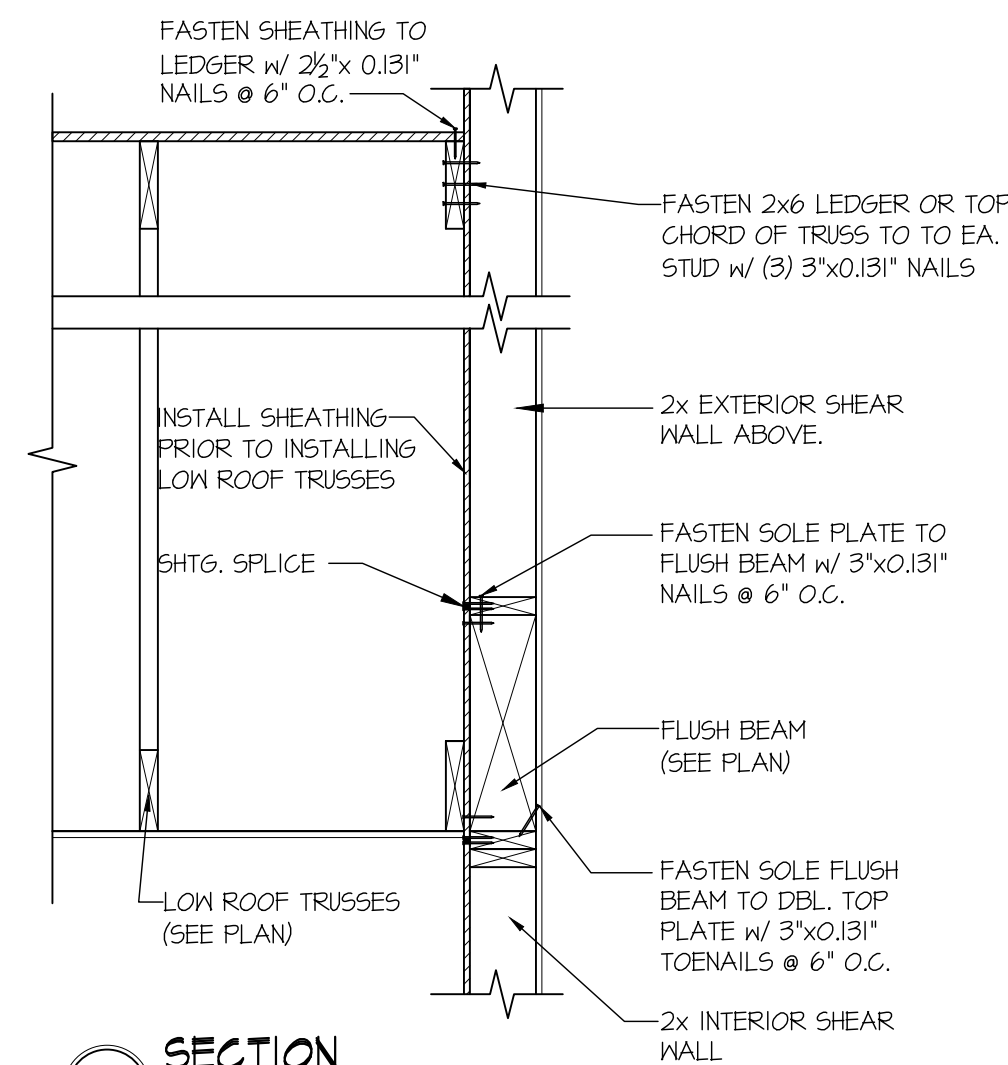
20 SHEAR TRANSFER DETAIL
@ INT. SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



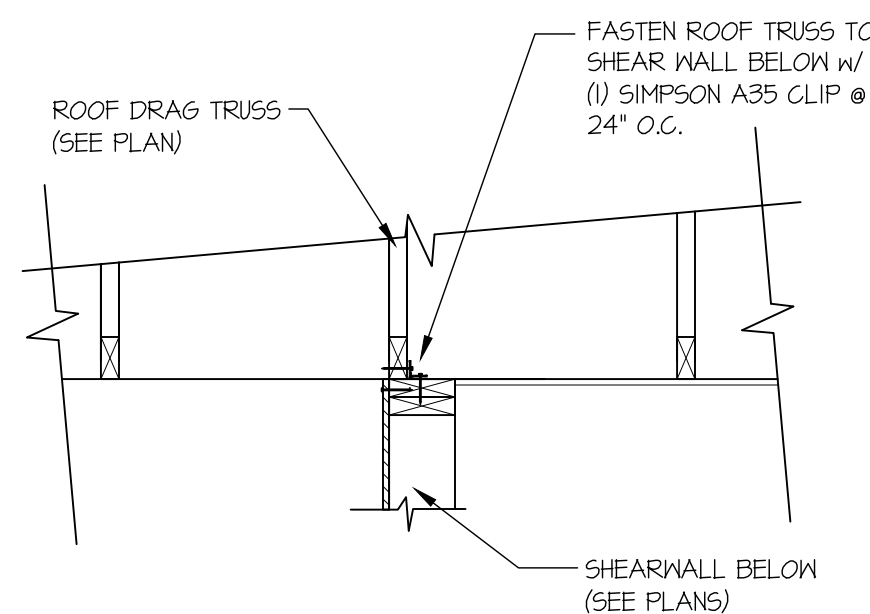
21 SHEAR TRANSFER DETAIL
@ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0"



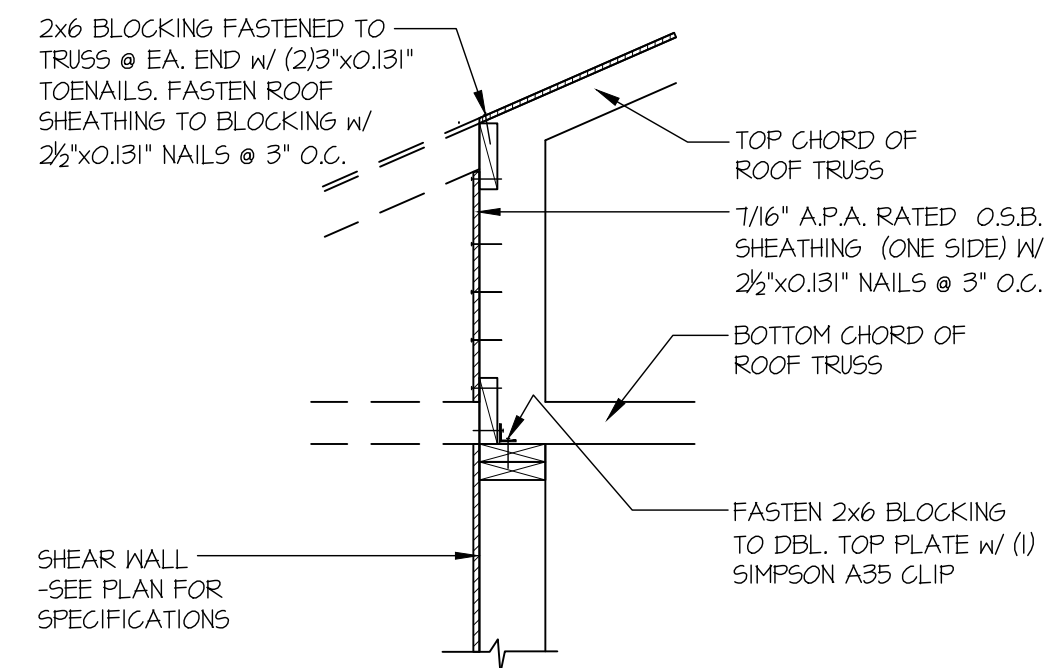
35 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



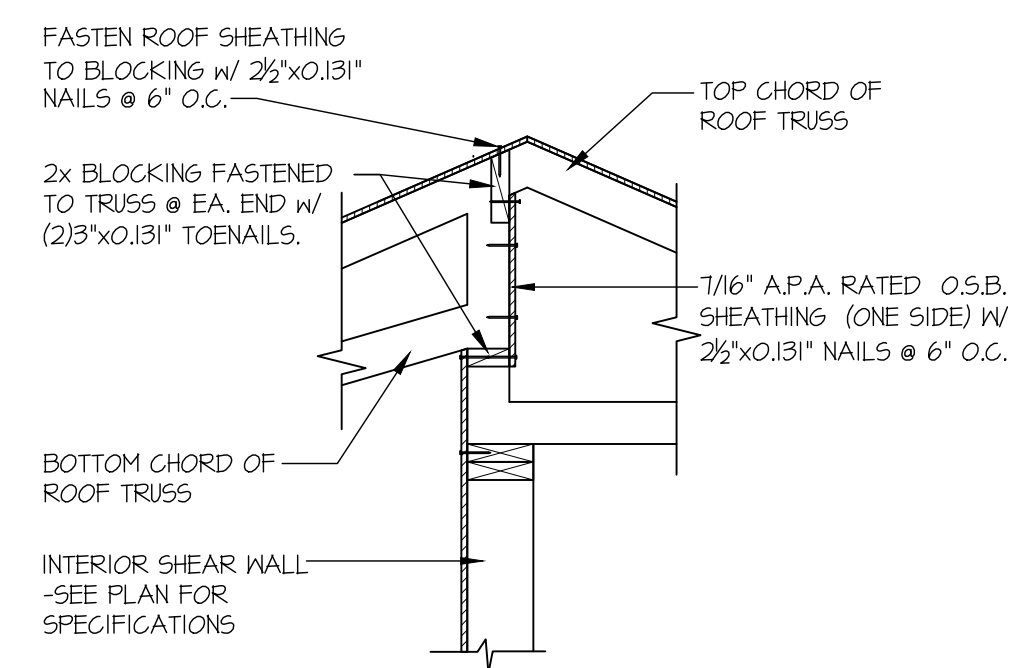
42 SECTION
SCALE: 3/4"=1'-0"



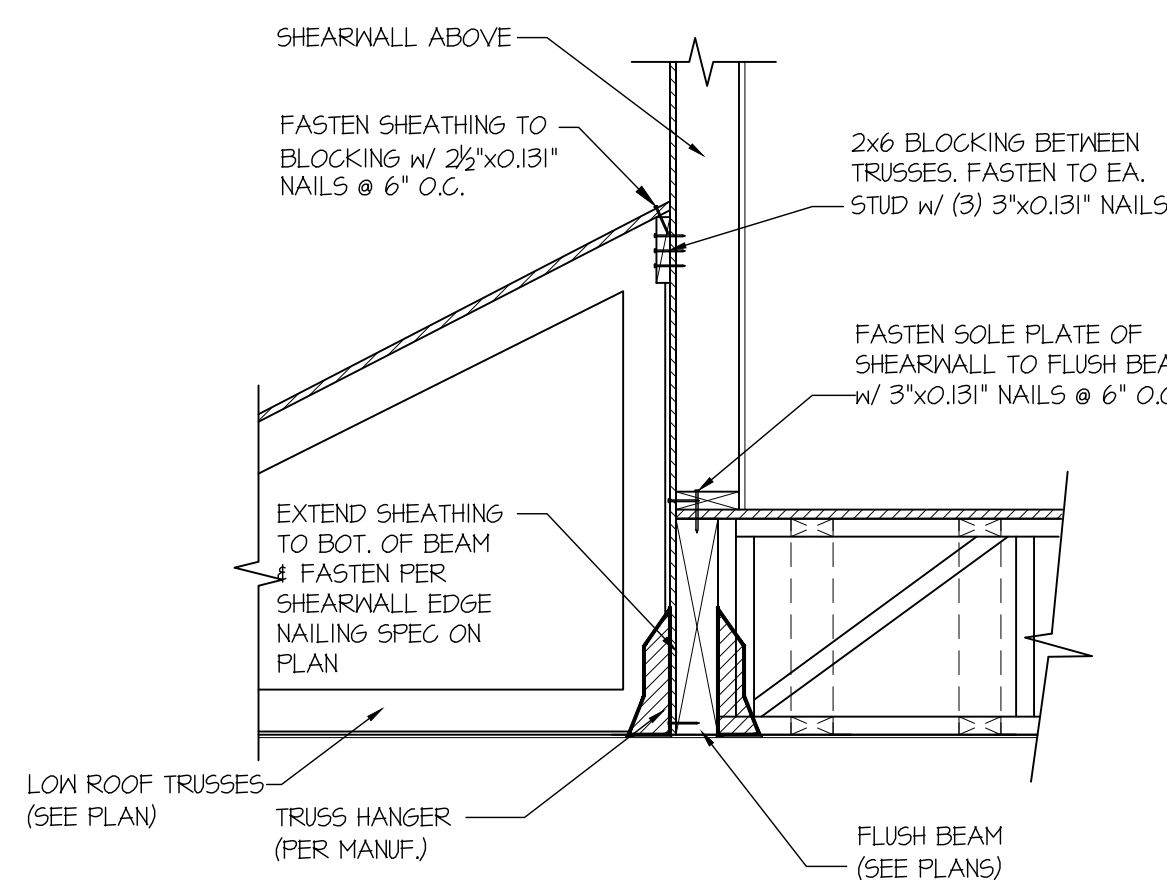
47 SHEAR TRANSFER DETAIL @
INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"



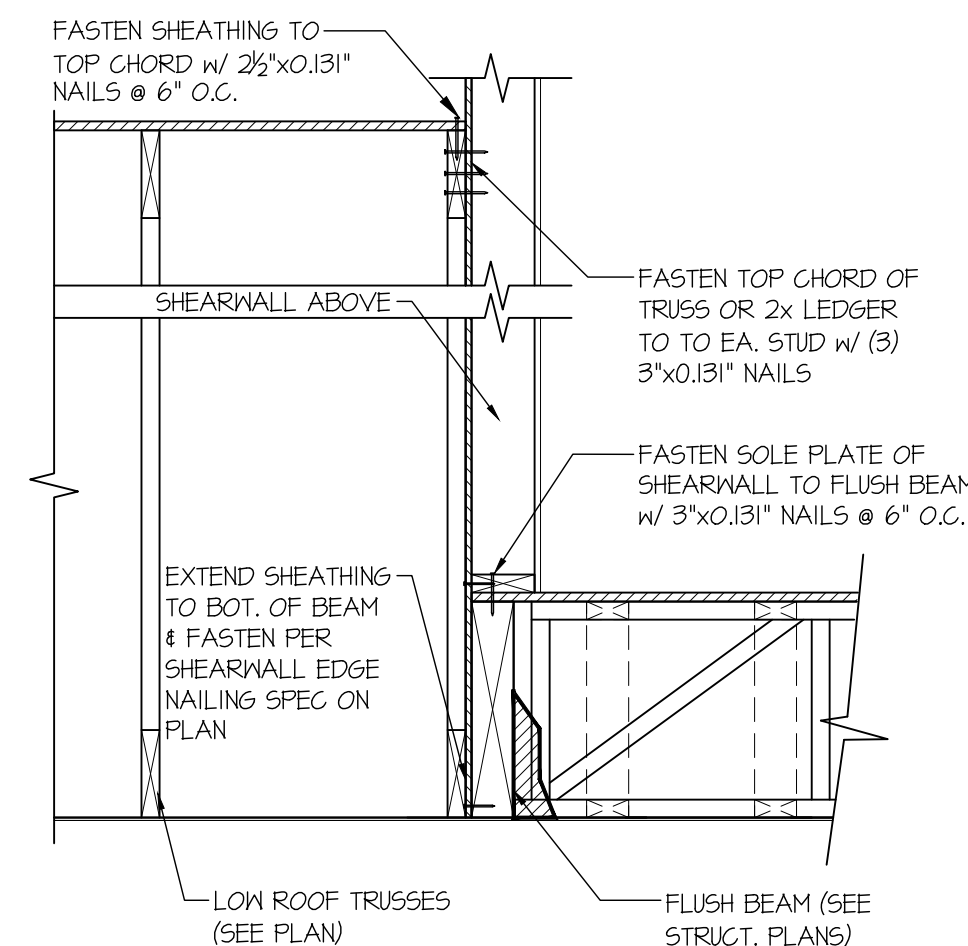
49 SHEAR TRANSFER DETAIL @
SHEARWALL BELOW
SCALE: 3/4"=1'-0"



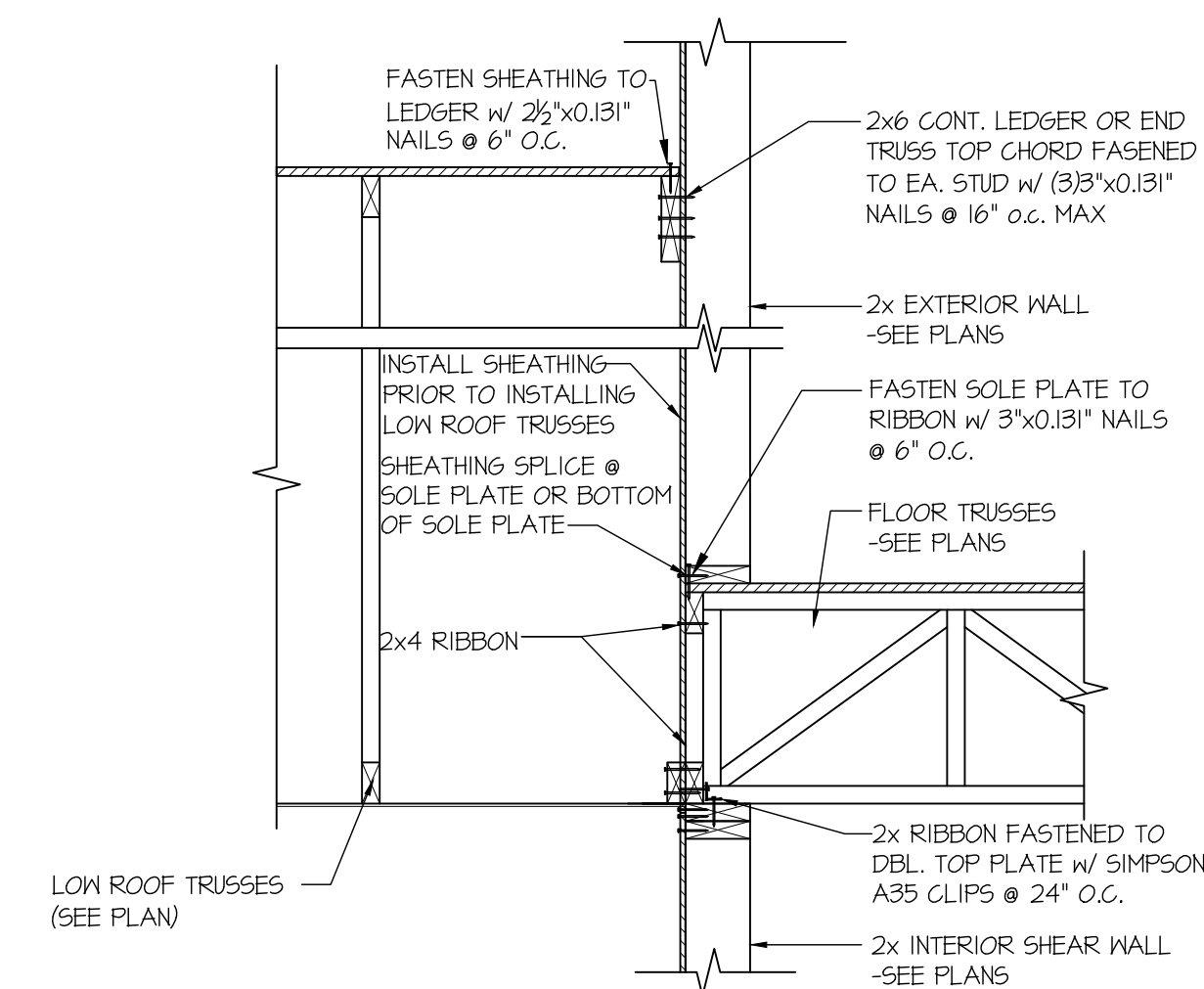
50 SHEAR TRANSFER DETAIL @
SHEARWALL BELOW
SCALE: 3/4"=1'-0"



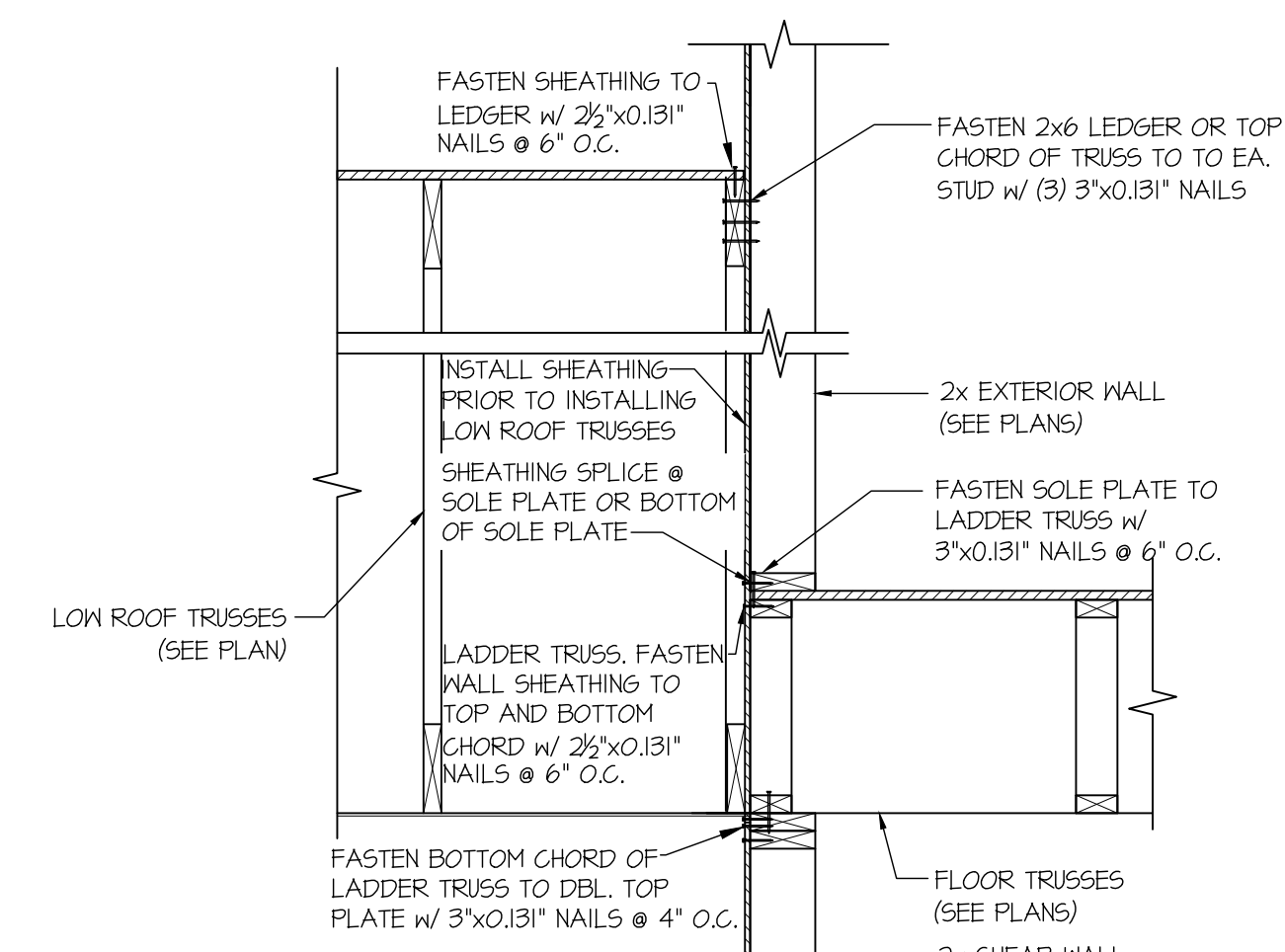
58 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



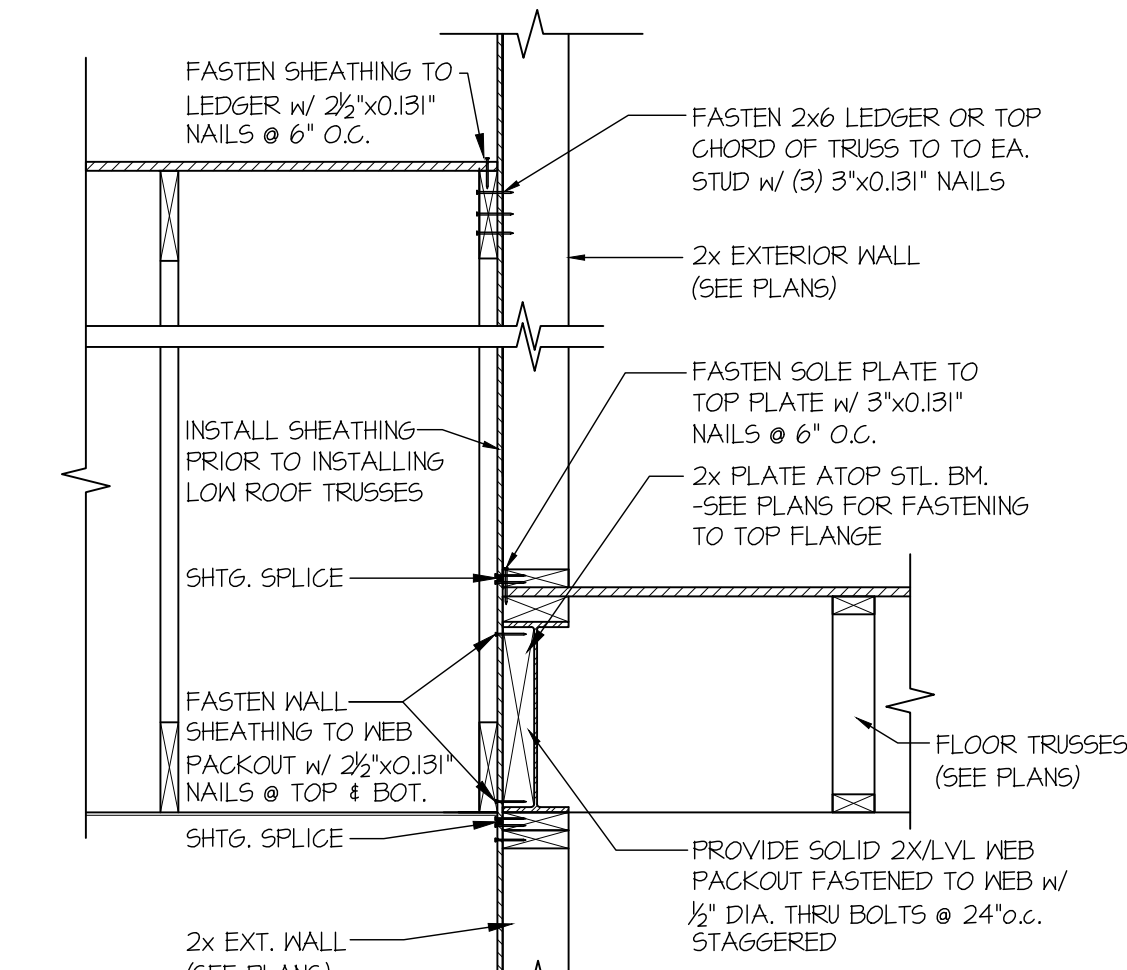
59 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



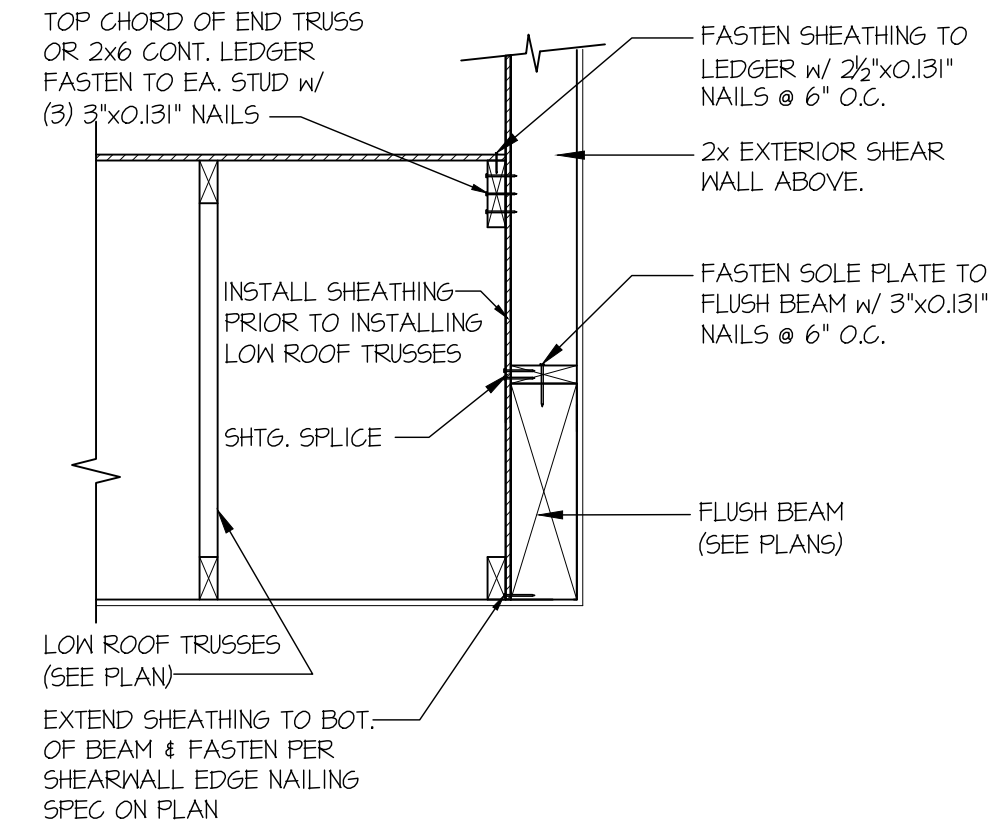
61 TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



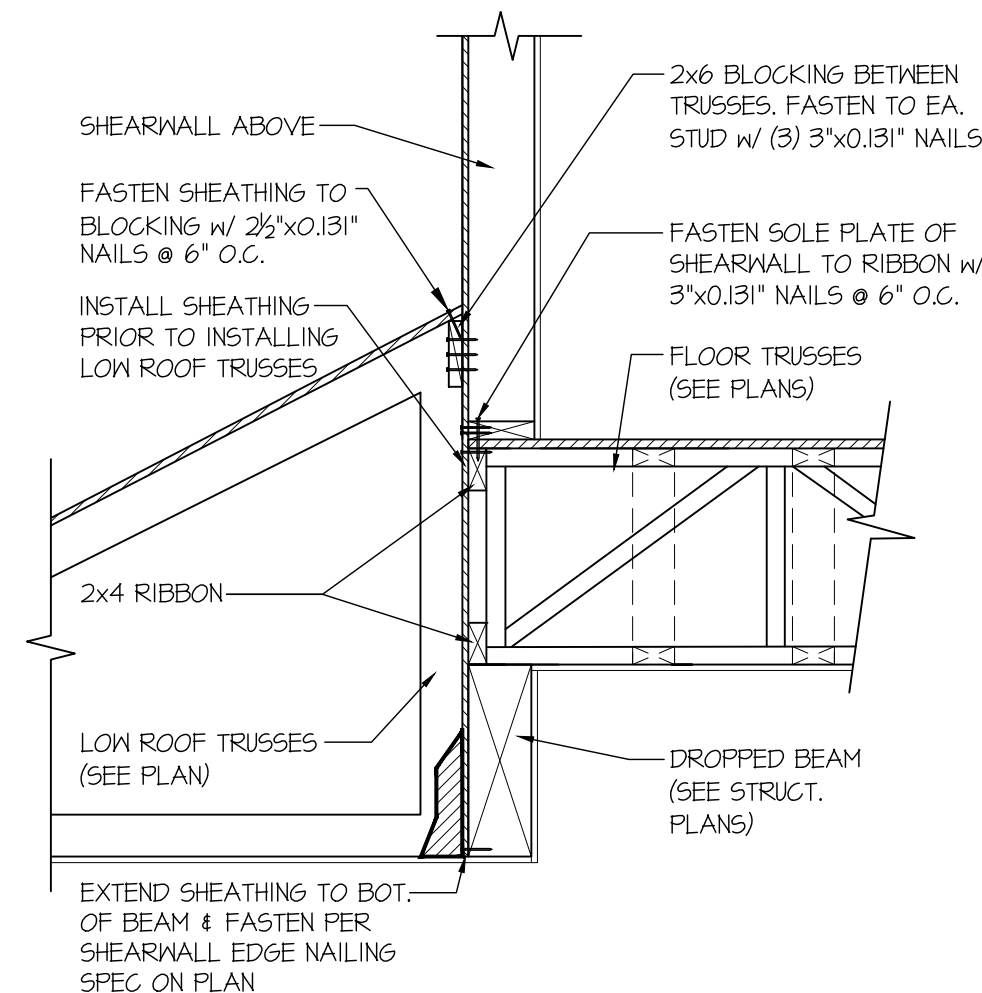
62 TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



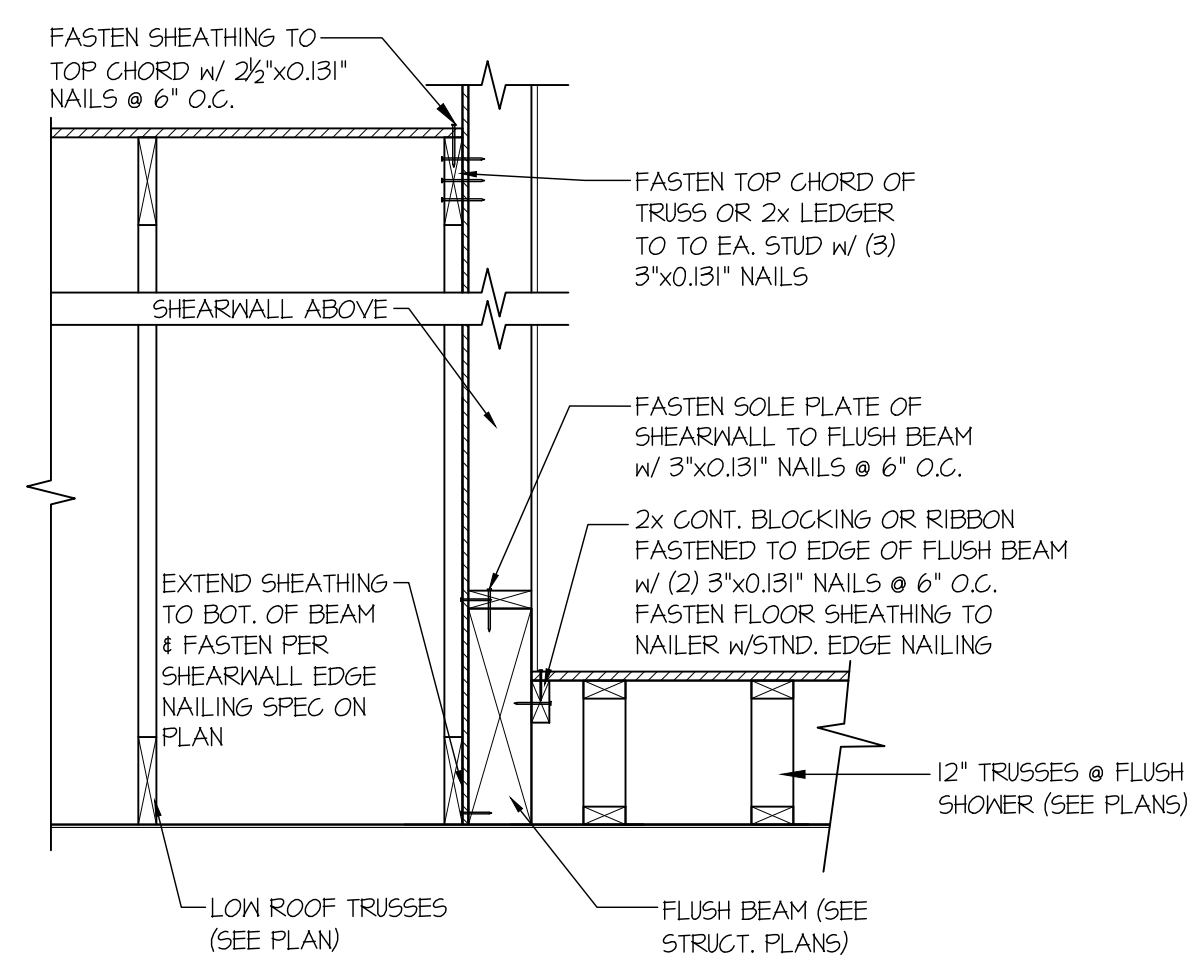
**63 TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL**
SCALE: 3/4"=1'-0"



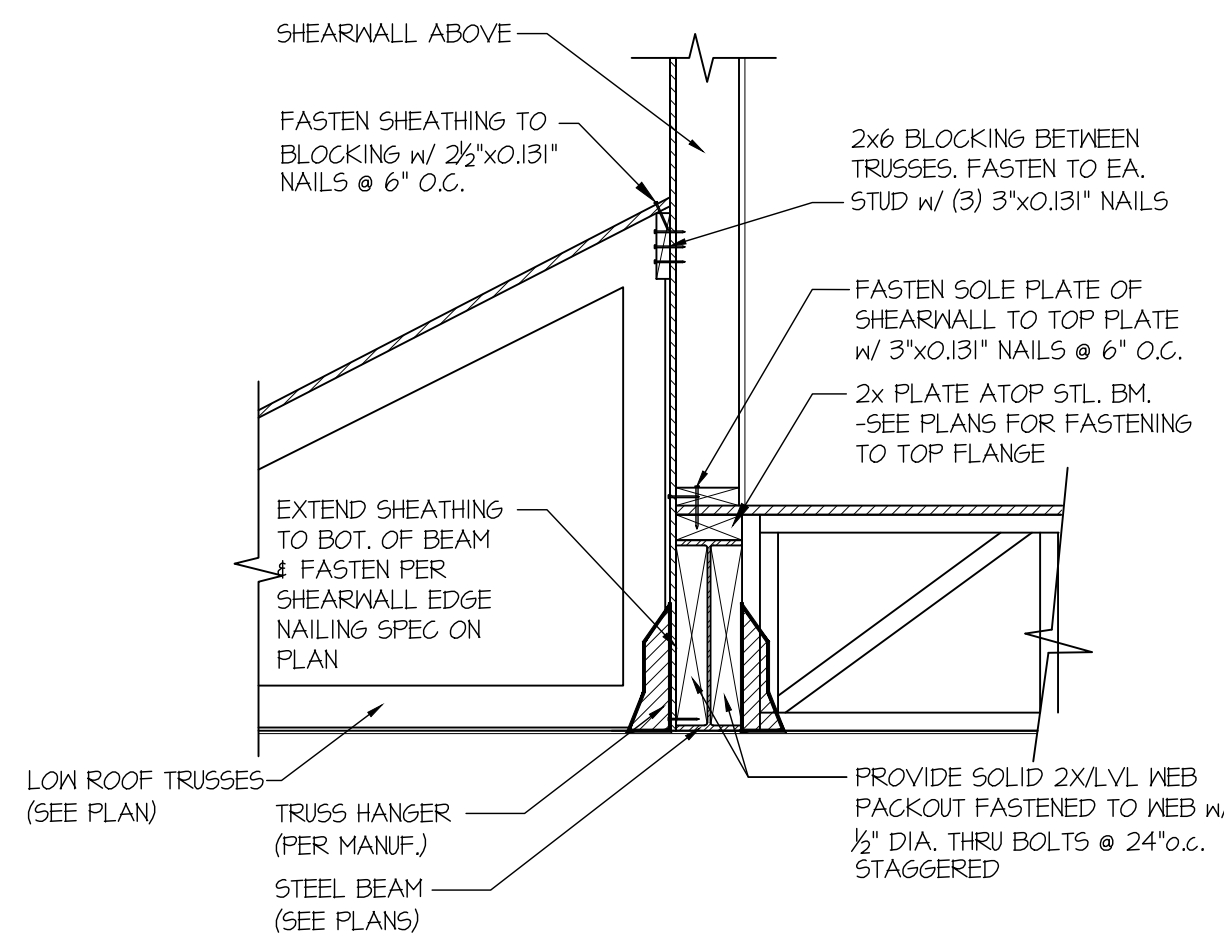
**65 SHEAR TRANSFER DETAIL
@ LOW ROOF**
SCALE: 3/4"=1'-0"



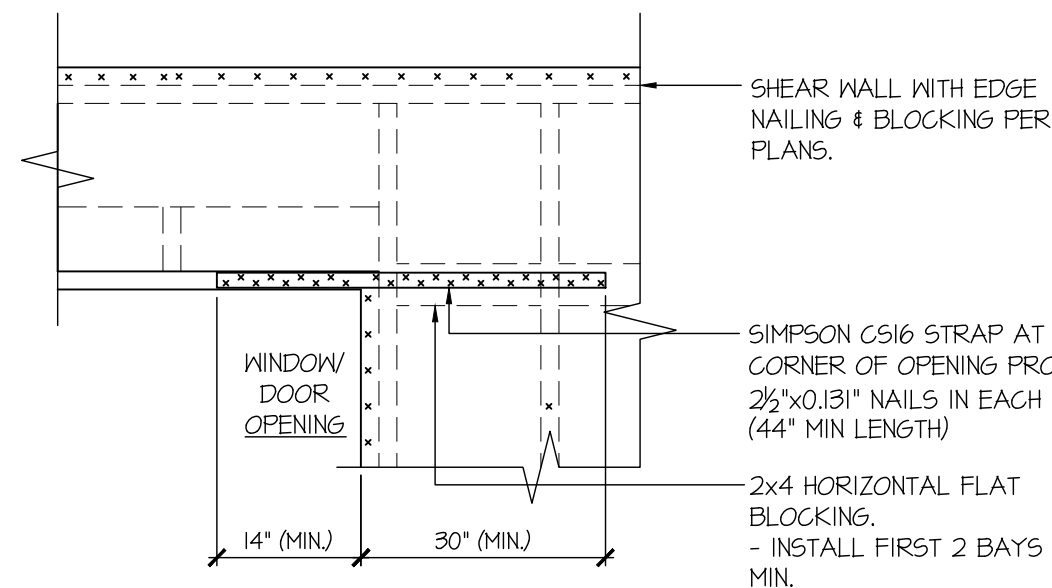
**69 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE**
SCALE: 3/4"=1'-0"



**70 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE**
SCALE: 3/4"=1'-0"

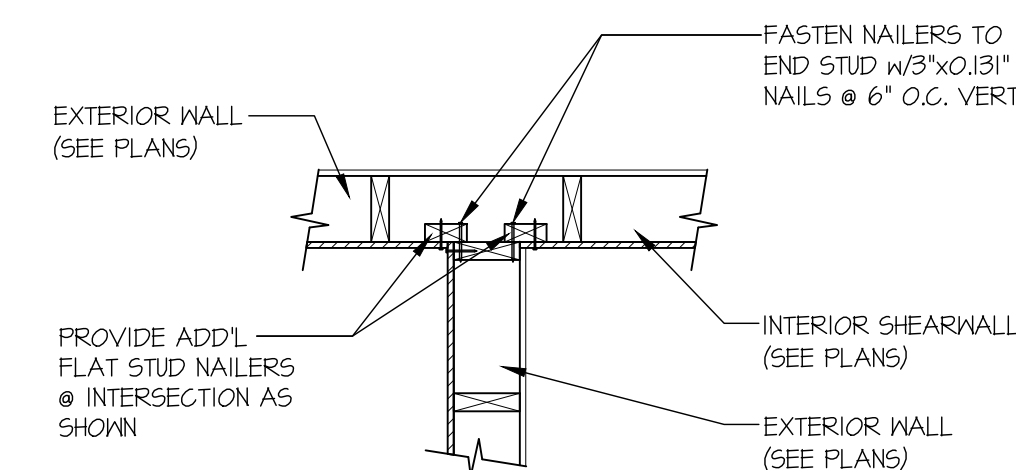


**71 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE**
SCALE: 3/4"=1'-0"

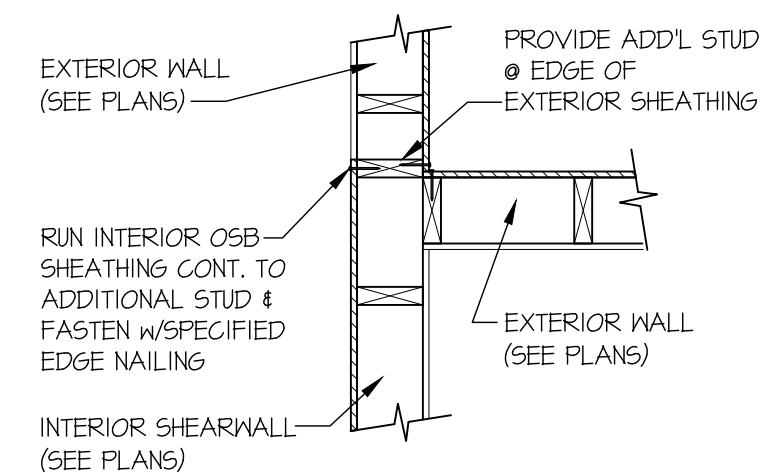


- DETAIL SIMILAR AT BOTTOM CORNERS OF WINDOWS.
- ONLY REQUIRED WHERE SPECIFIED ON STRUCTURAL PLANS
- IF MIN LENGTH IS NOT PROVIDED RUN STRAP TO END OF WALL

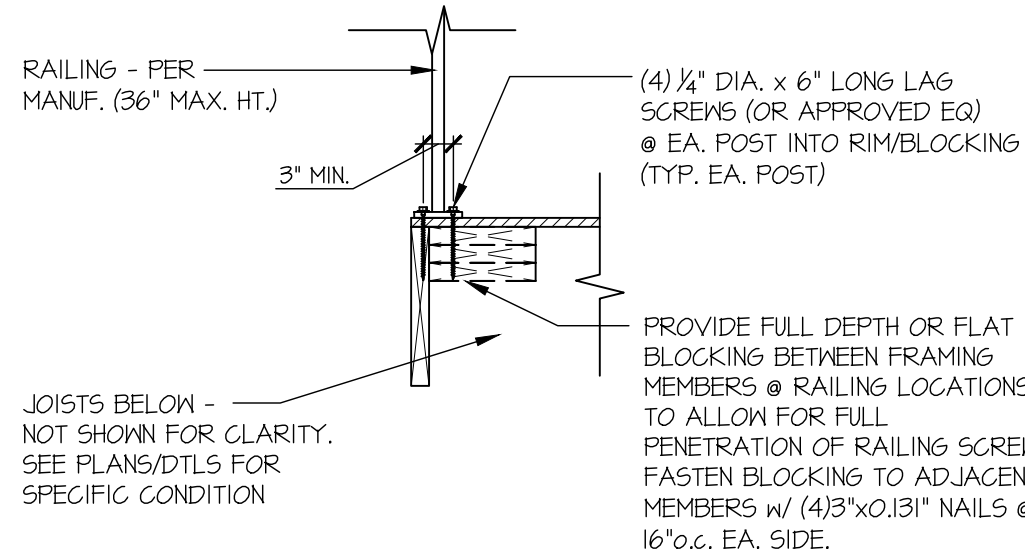
**94 EXT. WALL & INT. SHEARWALL
OPENING ELEVATION**
SCALE: NTS



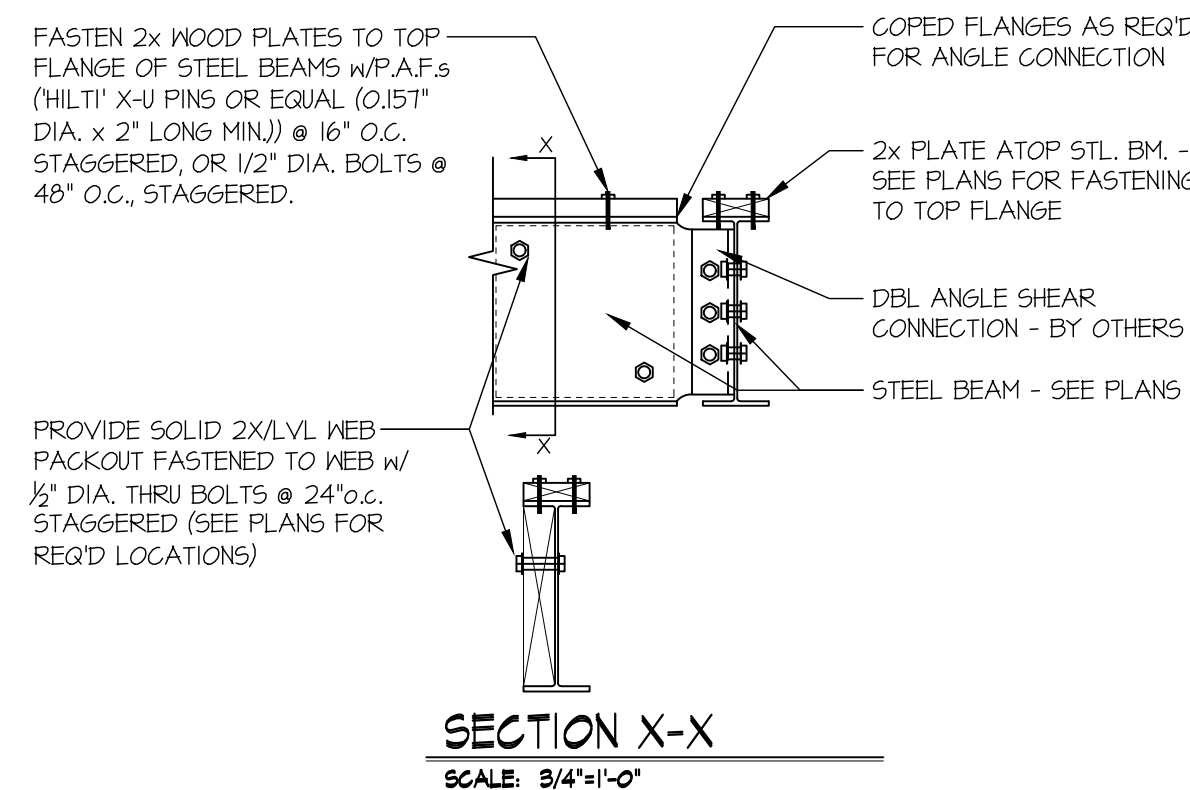
**95 SHEAR TRANSFER DETAIL @
INTERSECTING INT. SHEARWALL**
SCALE: 3/4"=1'-0" SHTG. ON SAME FACE



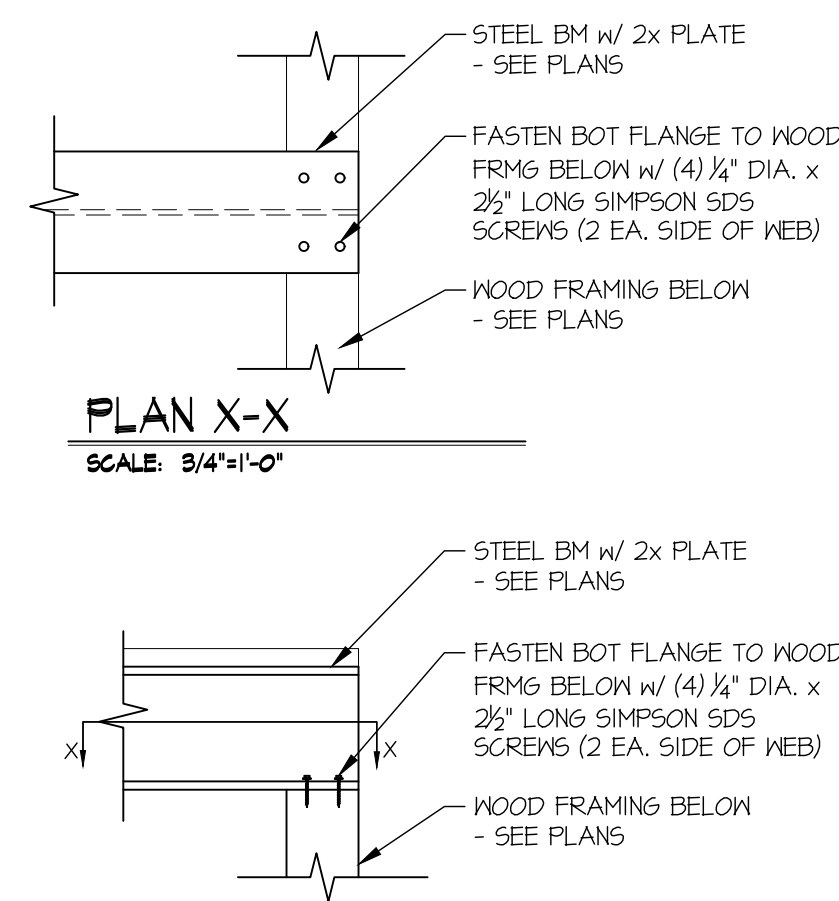
**99 SHEAR TRANSFER DETAIL @
INTERSECTING INT. SHEARWALL**
SCALE: 3/4"=1'-0" SHTG. OPPOSITE FACES



A TYP. RAILING CONNECTION
SCALE: 3/4"=1'-0" WOOD FRMG BELOW



B DOUBLE ANGLE STEEL CONNECTION
SCALE: 3/4"=1'-0"



C STL BM TO WOOD FRMG CONNECTION
SCALE: 3/4"=1'-0"



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M&K project number:
244-25015

project mgr: NJM
drawn by: AJC
issue date: 09-05-25

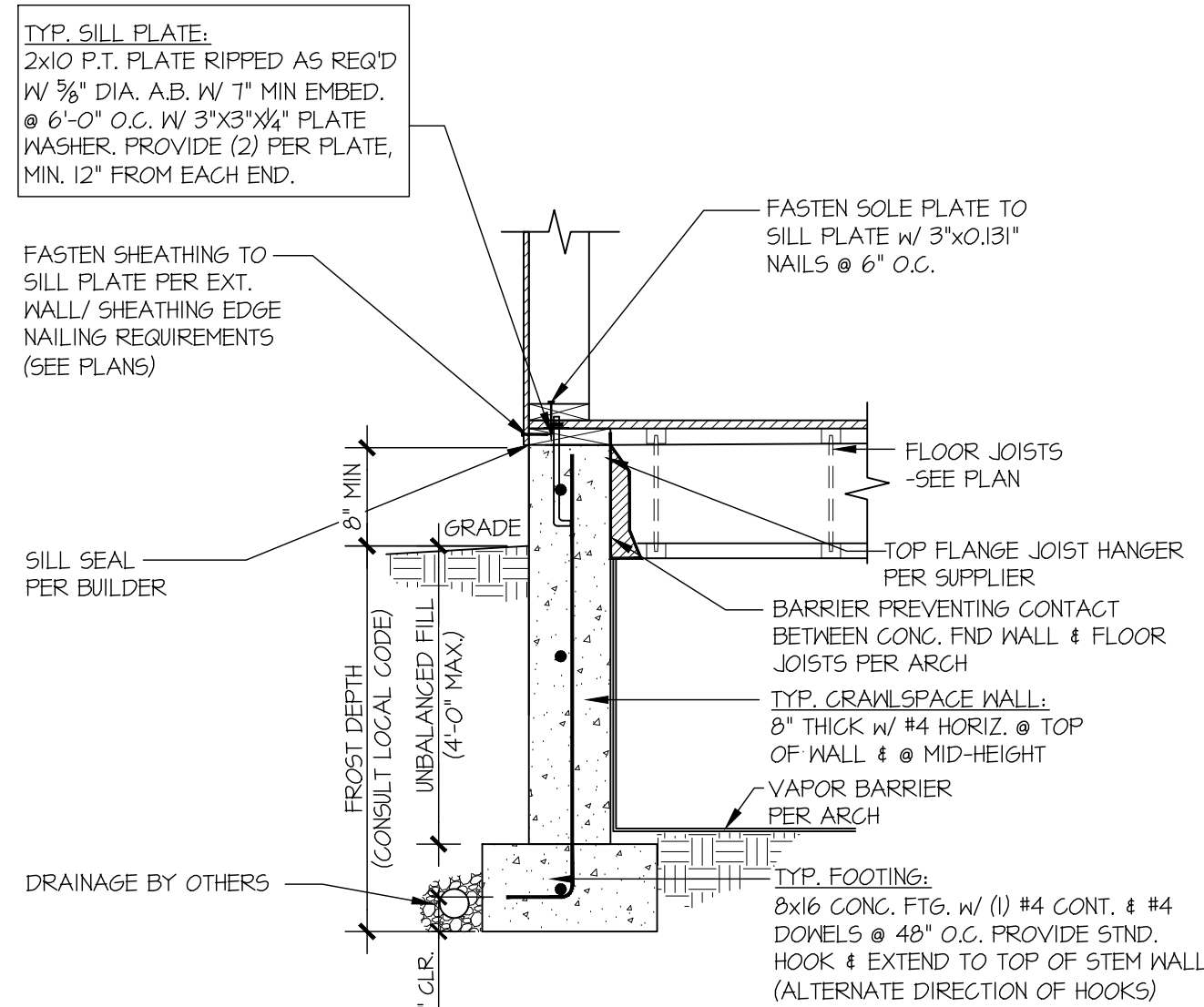
REVISIONS:
date: initial:

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5801 6th Ave South, Suite 371
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mccullougharchitects.com

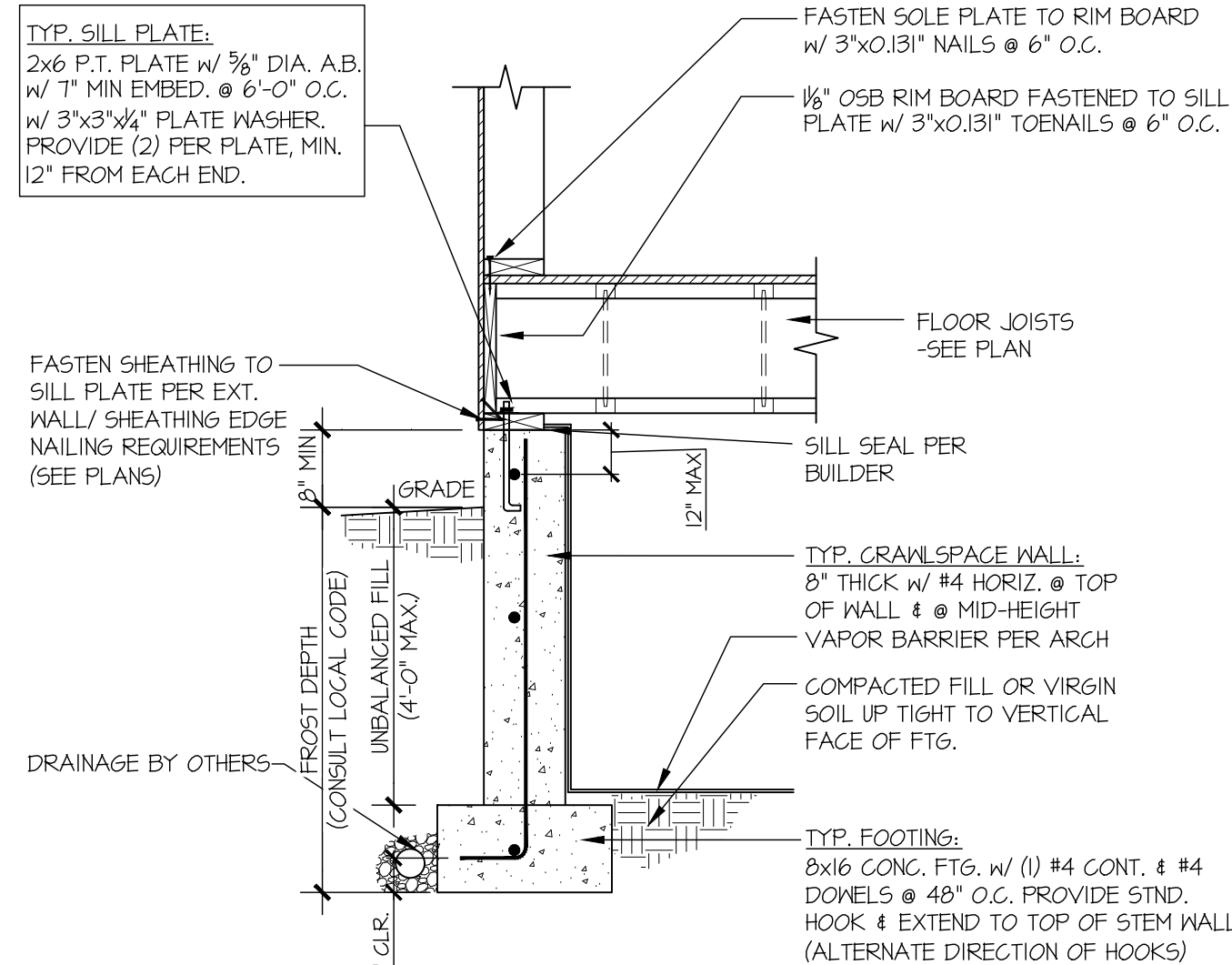
STRUCTURAL DETAILS
SEARS PLAT
LOT 3
MERCER ISLAND, WASHINGTON

sheet:

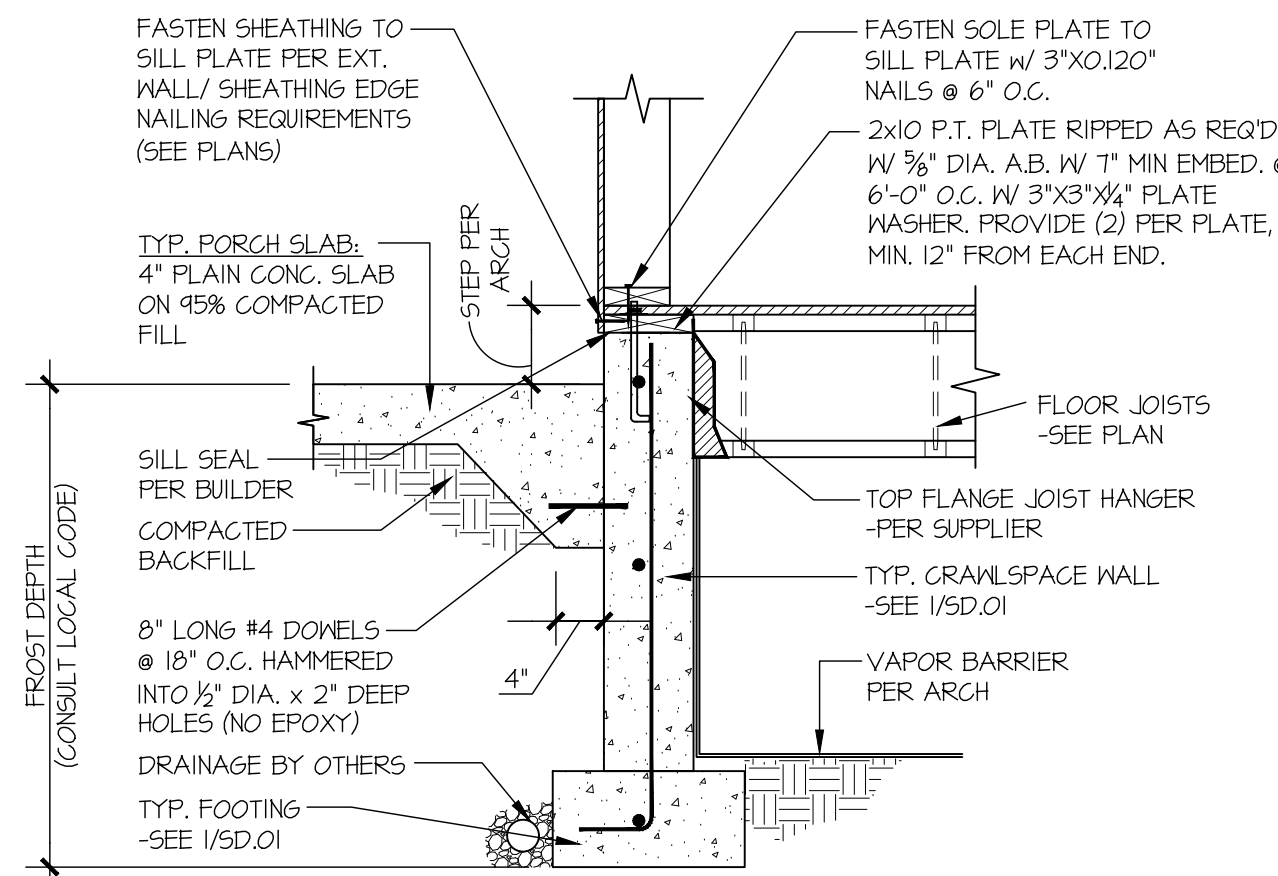
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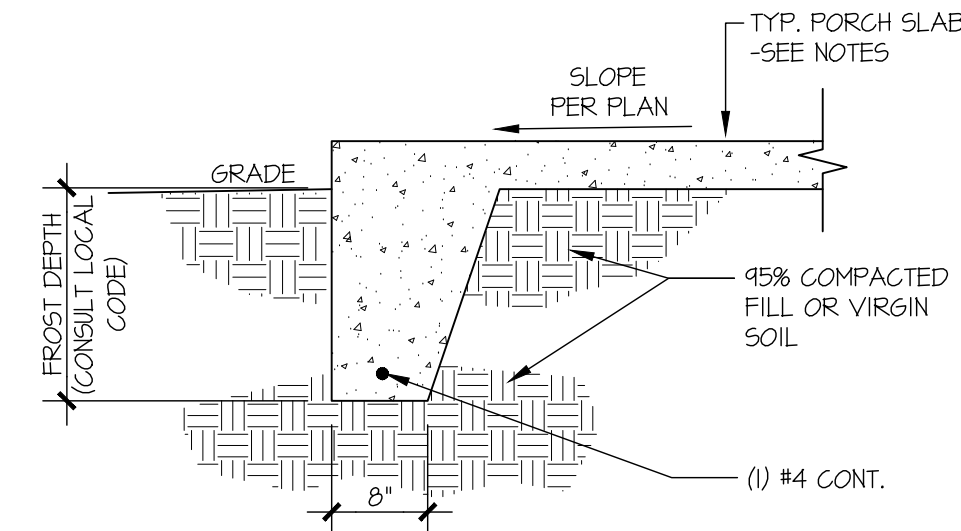
1 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/4"=1'-0"



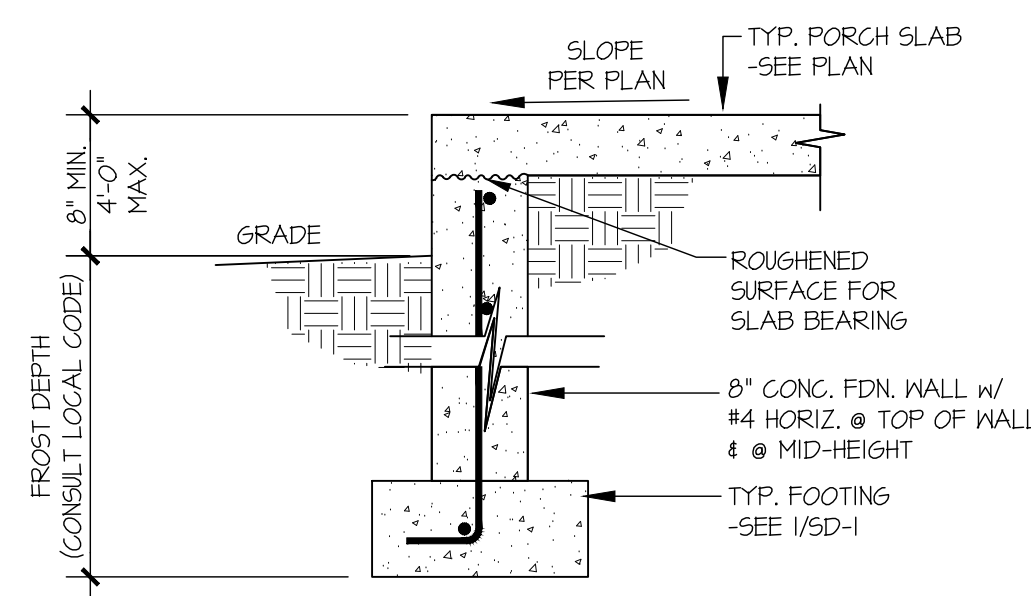
1A TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/4"=1'-0"



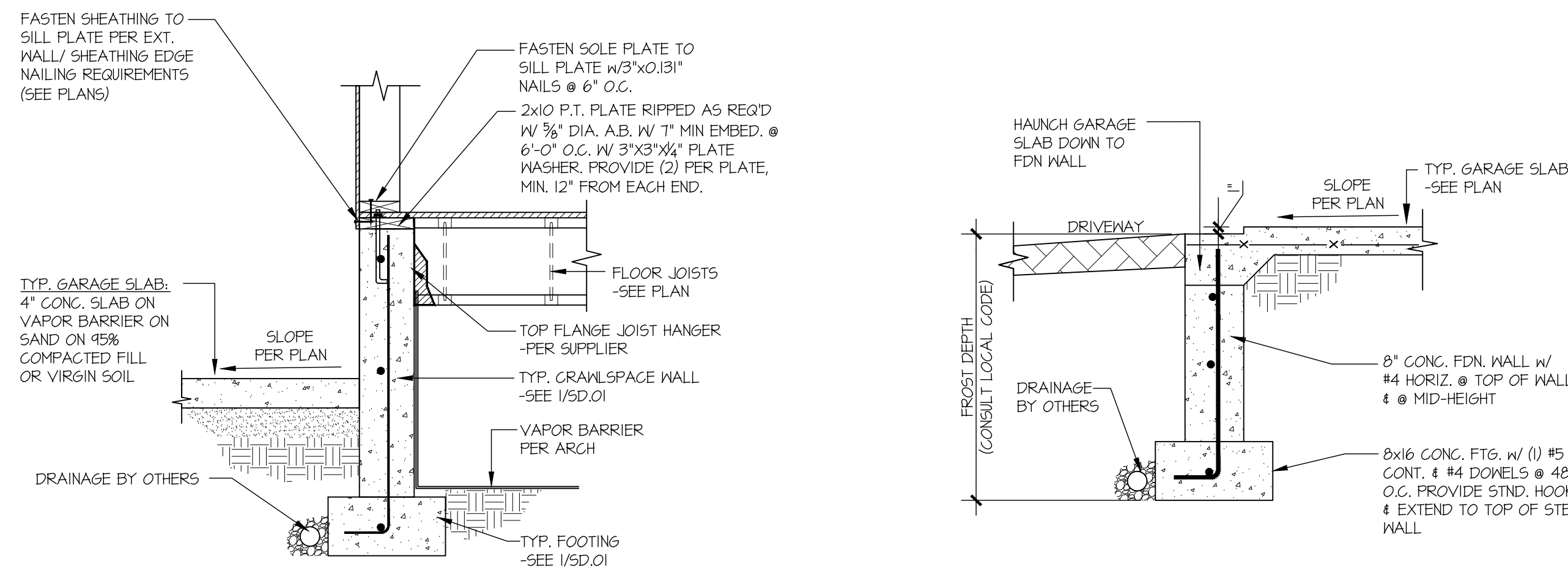
2 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/4"=1'-0" @ PORCH SLAB



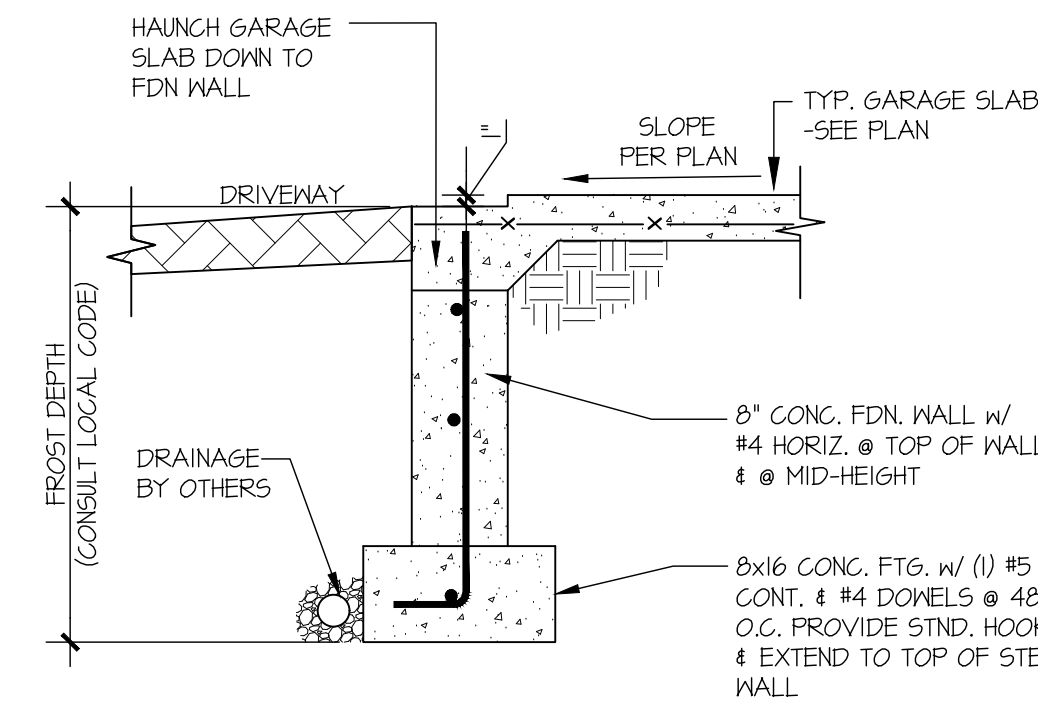
3 TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/4"=1'-0"



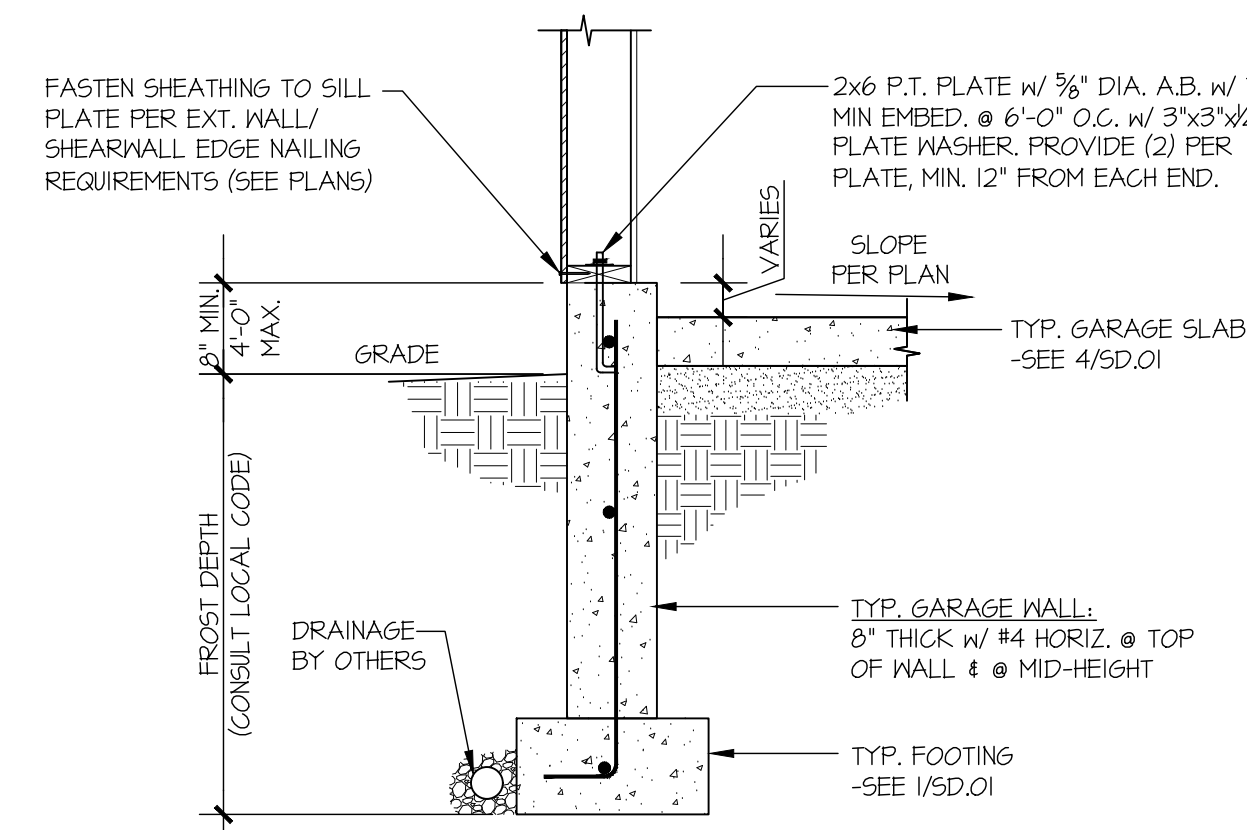
3A TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/4"=1'-0"



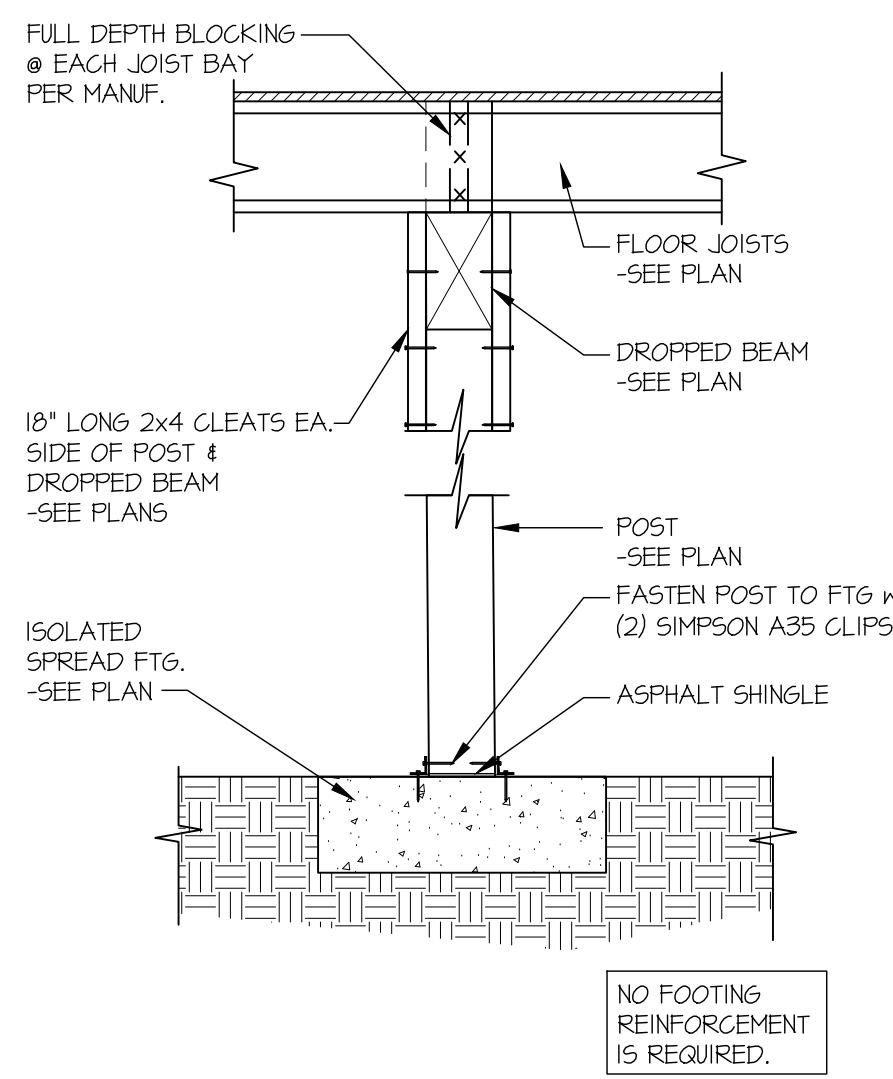
4 TYPICAL CRAWLSPACE FOUNDATION @ GARAGE
SCALE: 3/4"=1'-0"



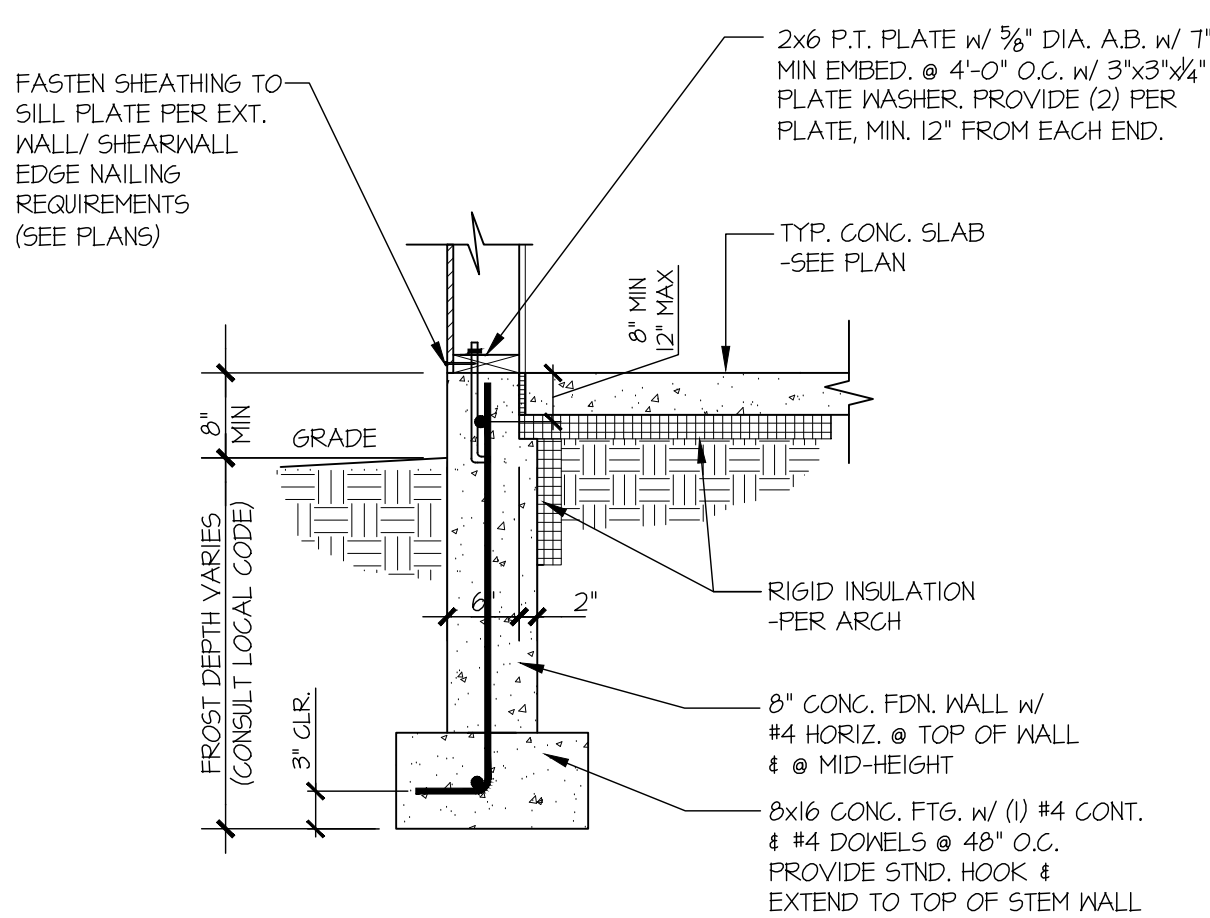
5 TYPICAL CONCRETE FOOTING @ GARAGE DOOR OPENING
SCALE: 3/4"=1'-0"



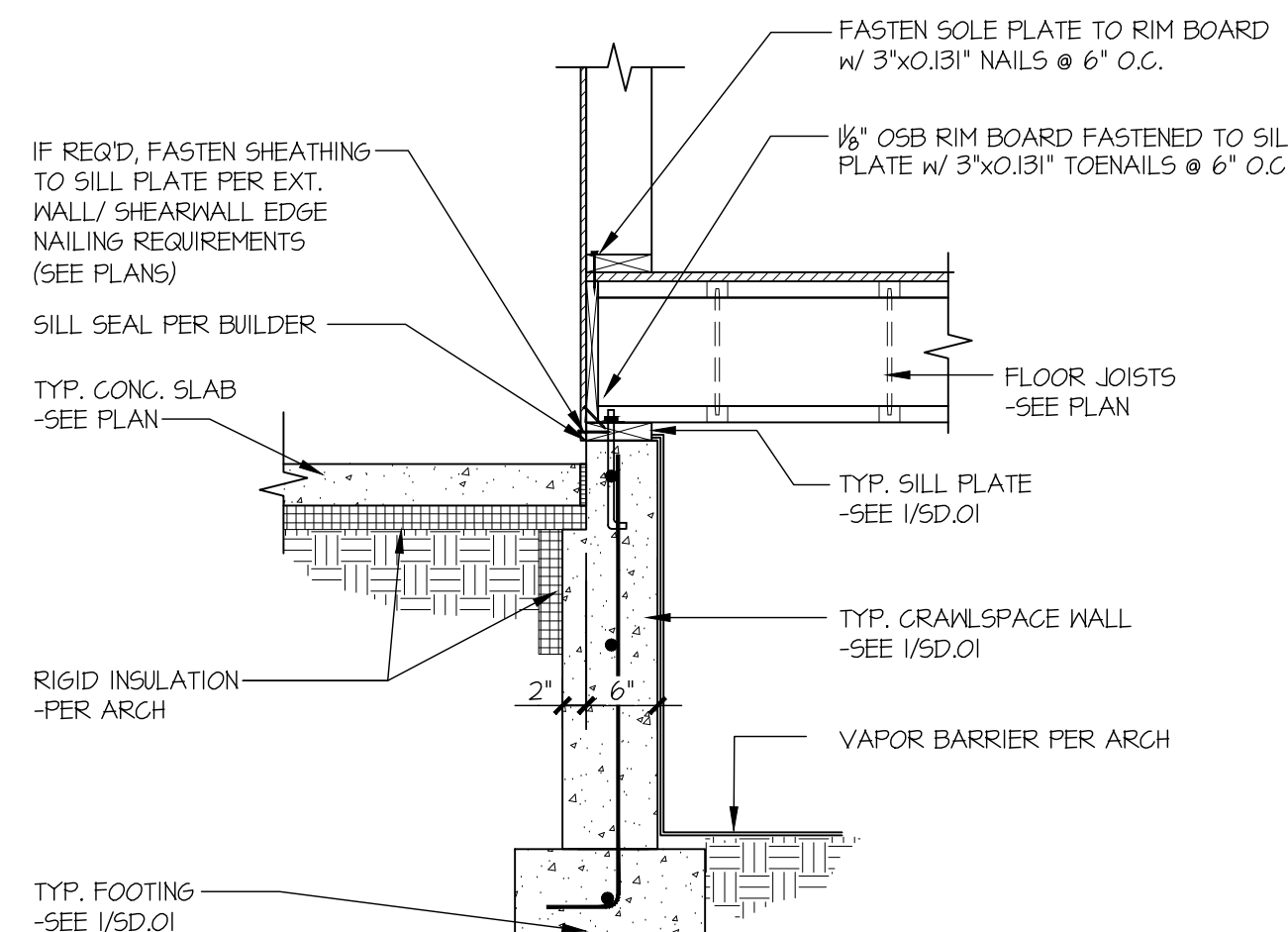
6 TYPICAL EXT. GARAGE FOUNDATION
SCALE: 3/4"=1'-0"



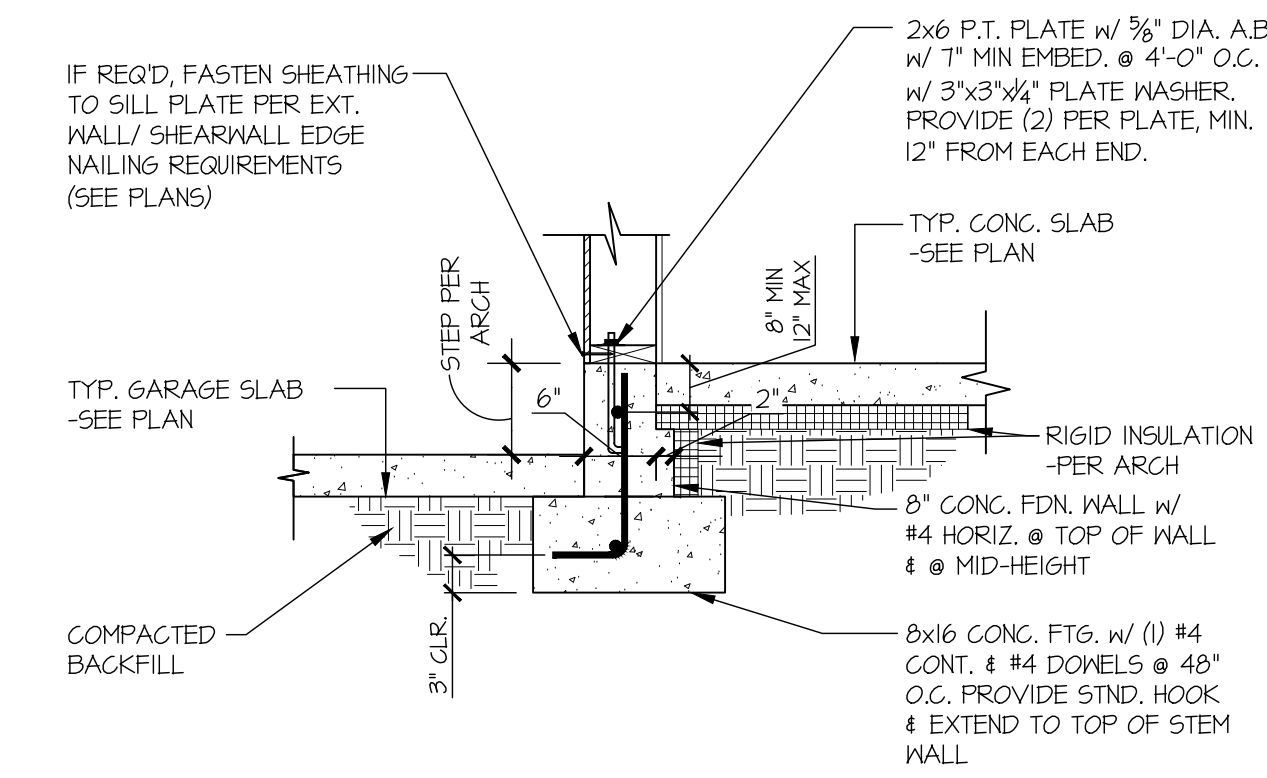
7 TYPICAL CRAWL SPACE FOOTING DETAIL
SCALE: 3/4"=1'-0"



8 TYPICAL FOOTING @ SLAB ON GRADE
SCALE: 3/4"=1'-0"



9 TYPICAL CRAWLSPACE FOUNDATION @ MUD/MECH.
SCALE: 3/4"=1'-0"



10 TYPICAL SLAB ON GRADE FOOTING @ GARAGE
SCALE: 3/4"=1'-0"



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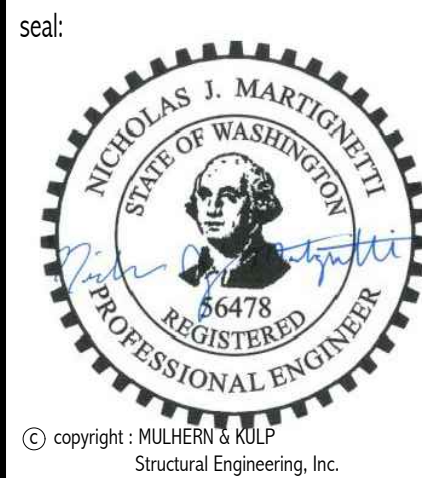
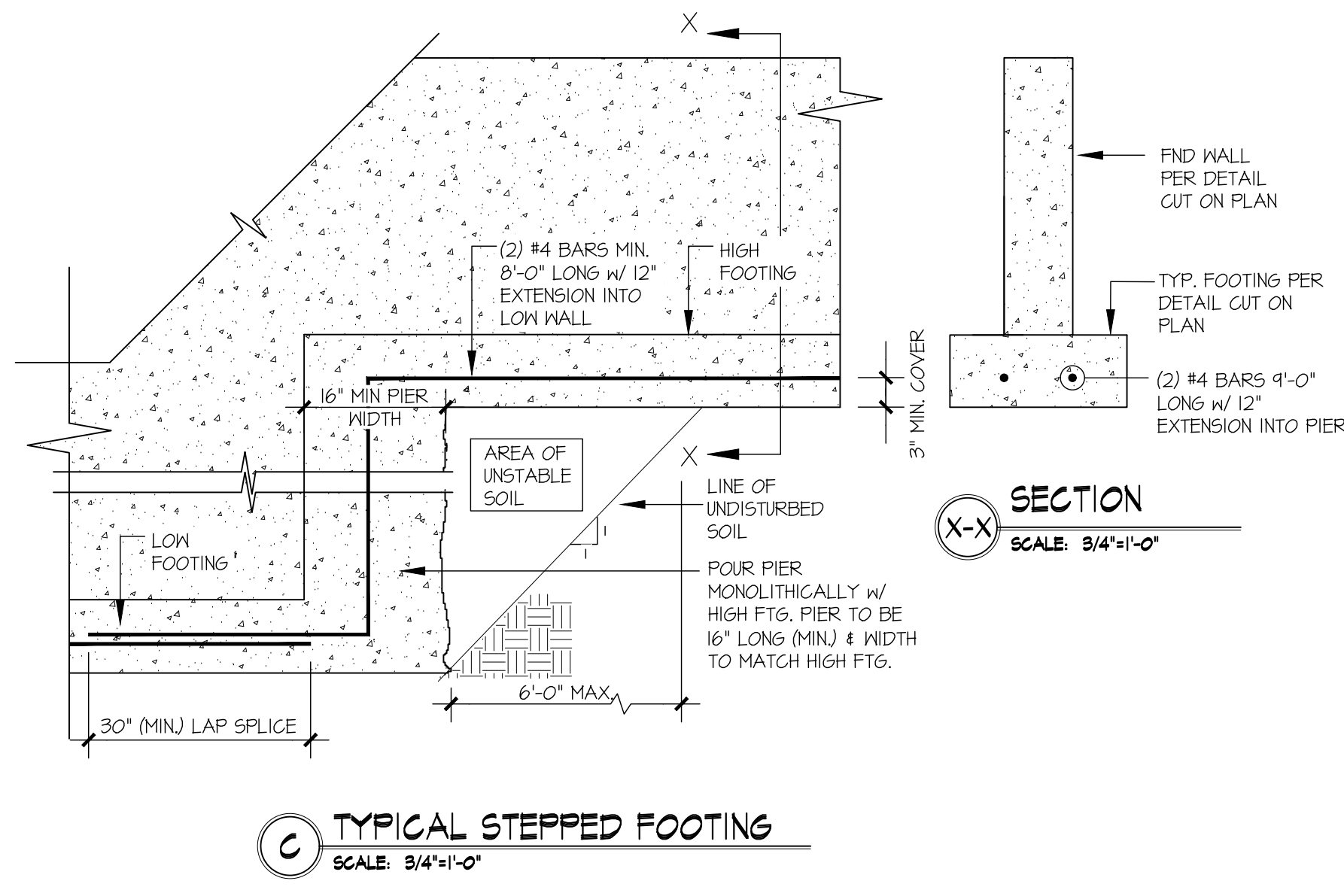
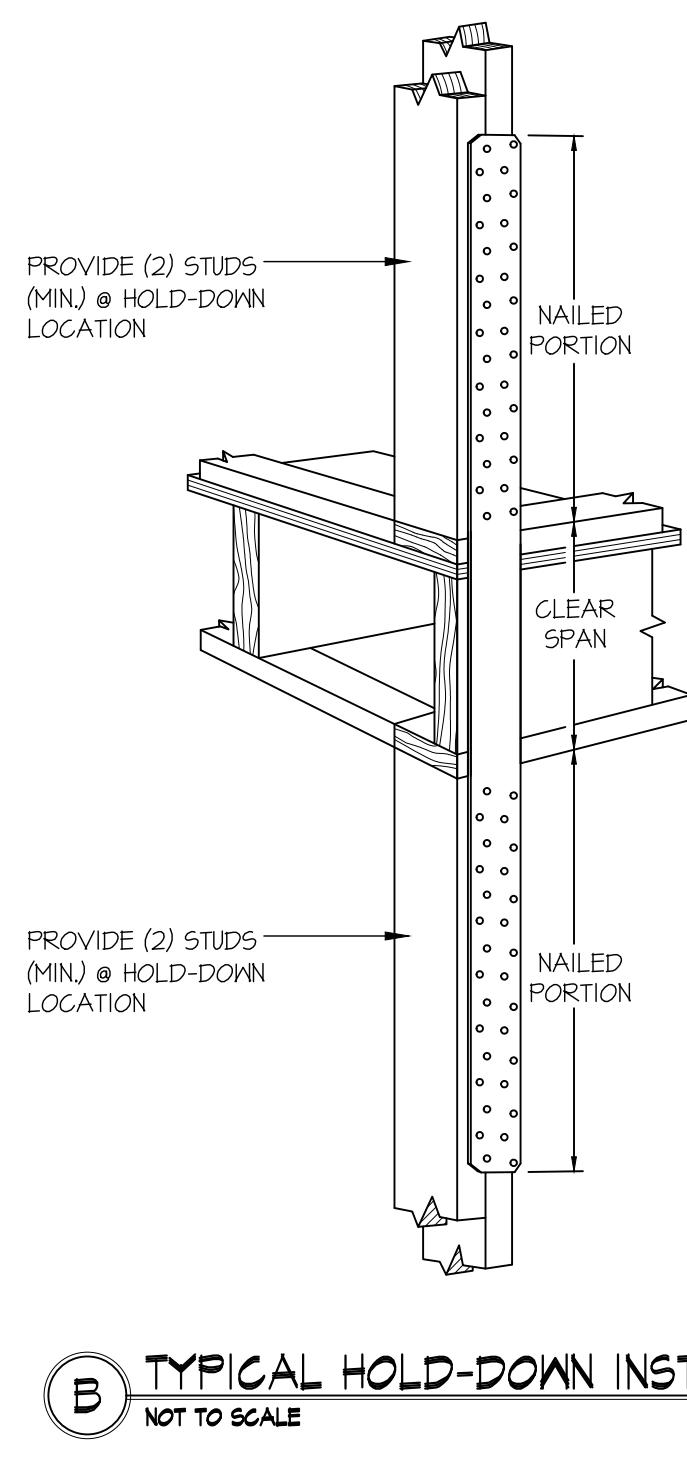
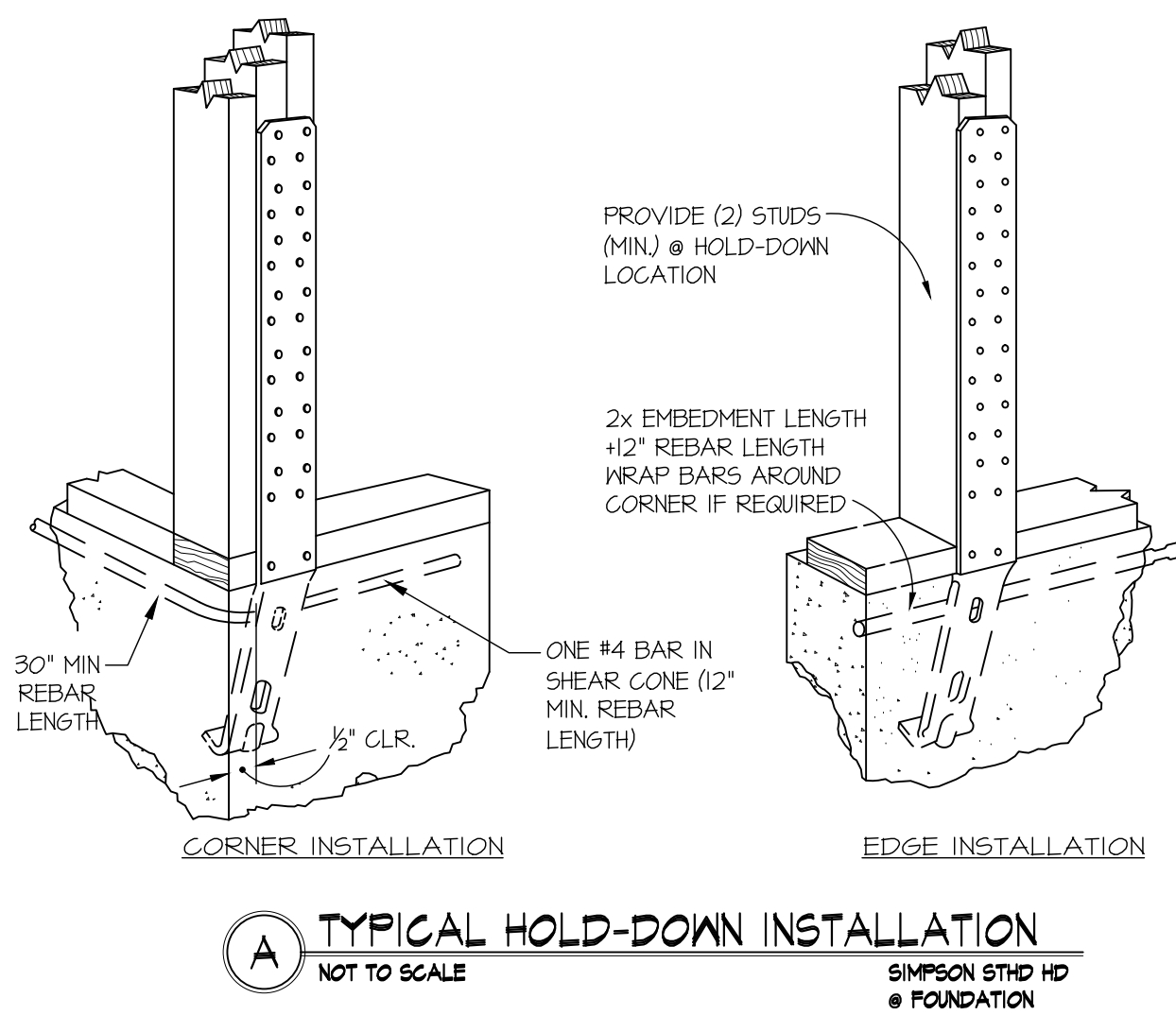
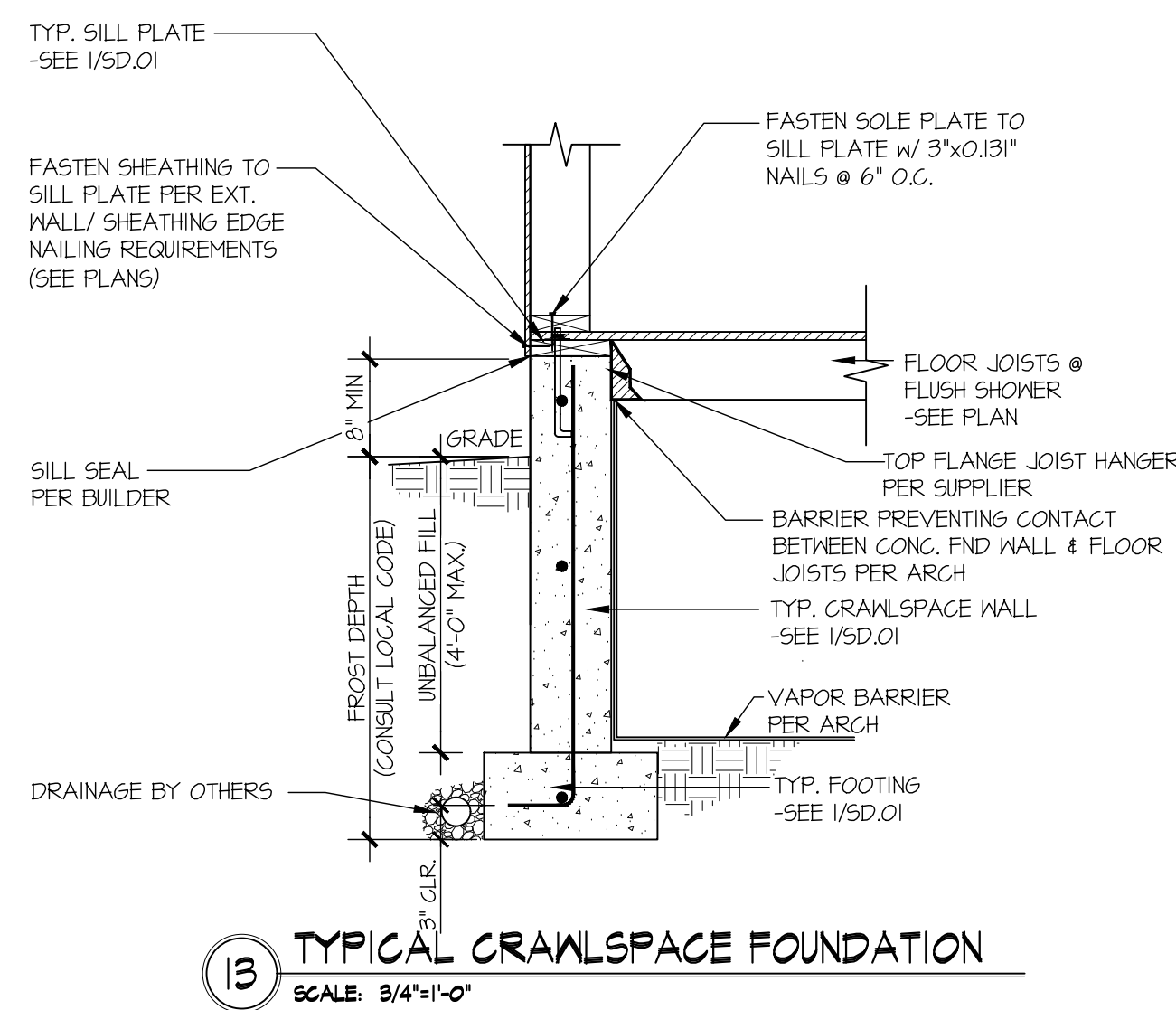
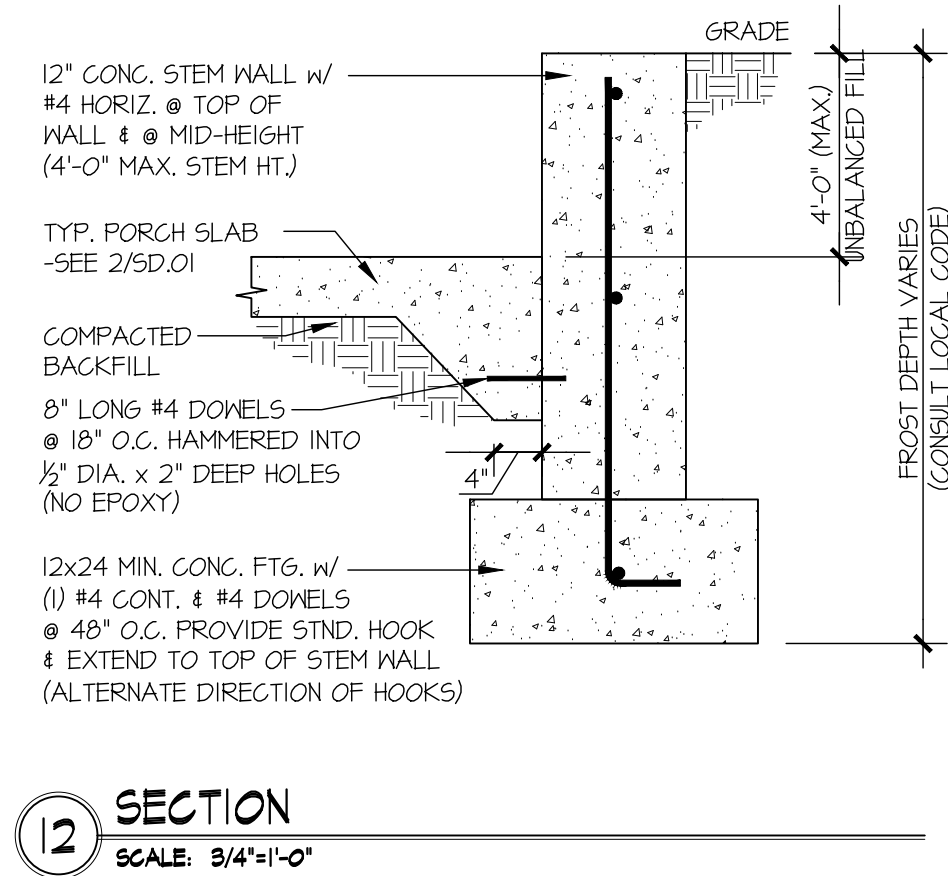
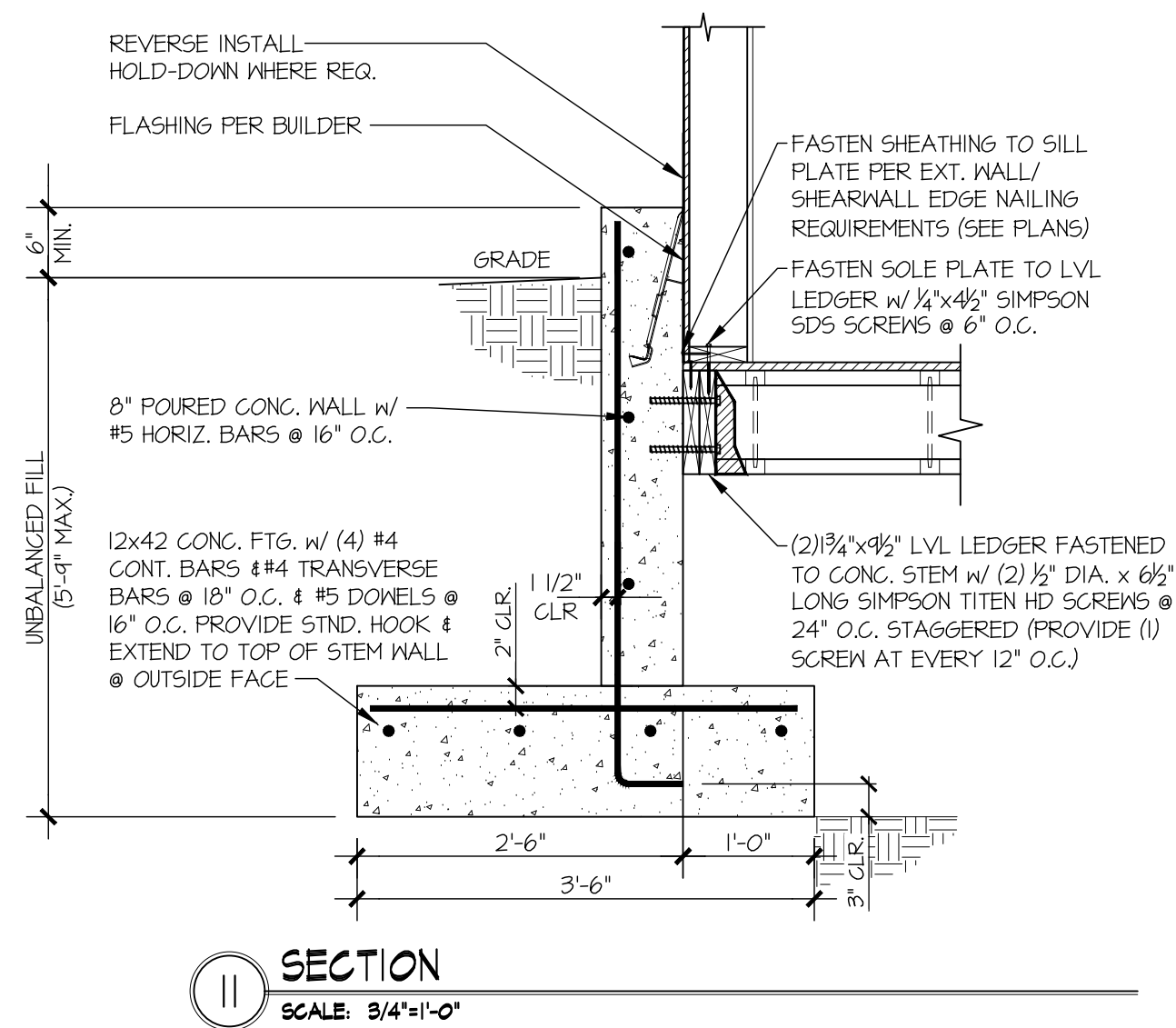
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FOUNDATION DETAILS
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sheet:
SD.01



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FOUNDATION DETAILS

SEARS PLAT

LOT 3

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sheet:

SD.02