

GENERAL NOTES

- CODE COMPLIANCE**
ALL WORK SHALL COMPLY WITH THE 2018 IRC, 2018 IMC, 2018 IFGC, 2018 UPC, 2018 IPCM, 2020 NEC, 2015 INTERNATIONAL ENERGY CONSERVATION CODE WITH WASHINGTON STATE AMENDMENTS, 2009 ICC A117.1, AND WITH ALL LOCAL CODES AND ORDINANCES.
- 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.
- DOCUMENT REVIEW/VERIFICATION**
CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK.
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.
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.
GRADES: VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).
FLOOR LINES: "FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.
REPETITIVE FEATURES: OFTEN DRAWN ONLY ONCE AND SHALL BE PROVIDED AS IF FULLY DRAWN.
DOORS:
DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR, ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.
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 6", TYPICAL.
- 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.
- 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.
ALL EXHAUST FANS/VENT HOODS OVER 400CFM SHALL HAVE A MAKE-UP AIR DEVICE W/ DAMPER STARTING AUTOMATICALLY AND RUNNING CONTINUOUSLY WITH THE FAN CAPABLE OF SUPPLYING AN EQUIVALENT AMOUNT OF AIR.
- FLUES: FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.**
- DOWNSPOUTS: LOCATE NEW DOWNSPOUTS AS SHOWN ON ROOF PLAN, FLOOR PLANS & ELEVATIONS.**
- OTHER DOCUMENTATION**
REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES, AND SYMBOLS.
- PROTECTION**
PROTECT ALL EXISTING FINISHES AND SURFACES. ANY DAMAGE WILL BE REPAIRED WITHOUT ADDITIONAL COST TO OWNER.
- PERMITS**
SEPARATE ELECTRICAL, MECHANICAL, AND PLUMBING PERMITS ARE REQUIRED IN ADDITION TO THE BASIC BUILDING PERMIT.
ROOFING: PROVIDE NEW ROOFING TO MATCH EXISTING.
- EXHAUST DUCTS: PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST DUCTS.**
- PROVIDE COMBUSTION AIR OPENINGS INTO FURNACE ROOM PER UMC 703.**
- APPLIANCES**
CLEARANCES OF UL LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS SPECIFIED IN UL LISTING.
- WATER FLOW**
SHOWER SHALL BE EQUIPPED WITH FLOW CONTROL DEVICE TO LIMIT WATER FLOW TO 2.5 GALLONS PER MINUTE.
- SMOKE DETECTORS**
NFPA 72 CHAPTER 29 MONITORED FIRE ALARM SYSTEM REQUIRED THROUGHOUT RESIDENCE. THIS SHALL BE INSTALLED PER NFPA AND COMI STANDARDS. A SEPARATE FIRE PERMIT IS REQUIRED.
- FIRE BLOCKING**
FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS AND FORM A VERTICAL AND HORIZONTAL FIRE BARRIER BETWEEN STORIES AND THE TOP STORY TO ROOF SPACE PER IRC R302.11 AND R302.7

PROJECT DATA

PROJECT ADDRESS: 7847 SE 40TH ST
MERCER ISLAND, WA 98040

PROPERTY TAX ID NUMBER: 132404-9024

SCOPE OF WORK: NEW 503 SF GARAGE ADDITION OVER EXISTING CARPORT WITH A NEW ENTRY ROOF OVER EXISTING ENTRY DECK

ZONING: R-9.6

CONSTRUCTION TYPE: TYPE V B

SEISMIC ZONE: 3

NUMBER OF STORIES: 1 + BASEMENT

FIRE PROTECTION: -

BUILDING HEIGHT: 30 FT FROM AVERAGE FINISH GRADE

LOT AREA: 14,464 SF (14,443 SF NET)

SETBACKS:
FRONT LOT LINE =20 FT
REAR LOT LINE =25 FT
SIDE LOT LINES =17% OF TOTAL LOT WIDTH (18.7 FT TOTAL W/ 6.23FT MIN)

LOT COVERAGE: 40% (5,777.2 SF)

PROJECT TEAM

OWNER:
7847 SE 40TH ST
MERCER ISLAND, WA 98040
CONTACT: BOGDAN MAKSIMCHUK

ARCHITECT:
STURMAN ARCHITECTS, INC.
9 - 103RD AVE NE, SUITE 203
BELLEVUE, WA 98004
PHONE: 425-451-7003
CONTACT: BRAD STURMAN

STRUCTURAL:
L120 ENGINEERING AND DESIGN
13150 91ST PL NE
KIRKLAND, WA 98034
PHONE: 425-636-3313
CONTACT: MANS THURF-JELL

LOT COVERAGE AND HARDSCAPE

GROSS LOT AREA IS 14,464 SF
NET LOT AREA IS 14,443 SF

LOT COVERAGE	MAIN STRUCT. & ROOF S.F.	TOTAL LOT COVERAGE	% LOT COVERAGE	
EXISTING LOT COVERAGE	1,882.5 SF	2,617.4 SF	28.8 %	
PROPOSED LOT COVERAGE	2,372.9 SF	2,100.3 SF	30.9 %	
CHANGE	+ 690.4 SF	- 517.1 SF	+ 173.3 SF	+ 1.1 %
% ALLOWED LOT COVERAGE		5,777.2 SF ALLOWABLE	40 %	

HIGHEST EL: +203.8'
LOWEST EL: +188.5'
ELEVATION DIFFERENCE= 15.3'

15.3' DIVIDED BY 169.7' (HORIZ. DIST. BTWN. HIGHEST & LOWEST ELEV.) = .090

LOT SLOPE IS 9.0%, WHICH IS LESS THAN 15% THUS LOT COVERAGE ALLOWED IS 40%.

NOTE:
CONTOURS TAKEN FROM MERCER ISLAND GIS

HARDSCAPE	EXISTING HARDSCAPE	PROPOSED HARDSCAPE	CHANGE	% ALLOWED HARDSCAPE
	208.6 SF	169.1 SF	30.4 SF	73.8 SF
	481.9 SF	417.7 SF	64.2 SF	1,299.9 SF ALLOWABLE
	3.3 %	2.9 %	-0.4 %	9 %

GROSS FLOOR AREA

LOT SIZE = 14,464 SF
GFA THRESHOLD = 8,000 SF OR 40% (5,785.6 SF) WHICHEVER IS LESS

EXISTING RESIDENCE GFA:
MAIN FLOOR = 1,312.9 SF
BASEMENT = 1,312.9 SF
ATTACHED GARAGE = 0 SF

TOTAL EXISTING:
EXISTING GFA IS 2,625.8 SF OR 18.2%

PROPOSED RESIDENCE GFA:
MAIN FLOOR = 1,312.9 SF
BASEMENT = 1,312.9 SF
ATTACHED GARAGE = 503.5 SF

TOTAL PROPOSED:
PROPOSED GFA IS 3,129.3 SF OR 21.6%

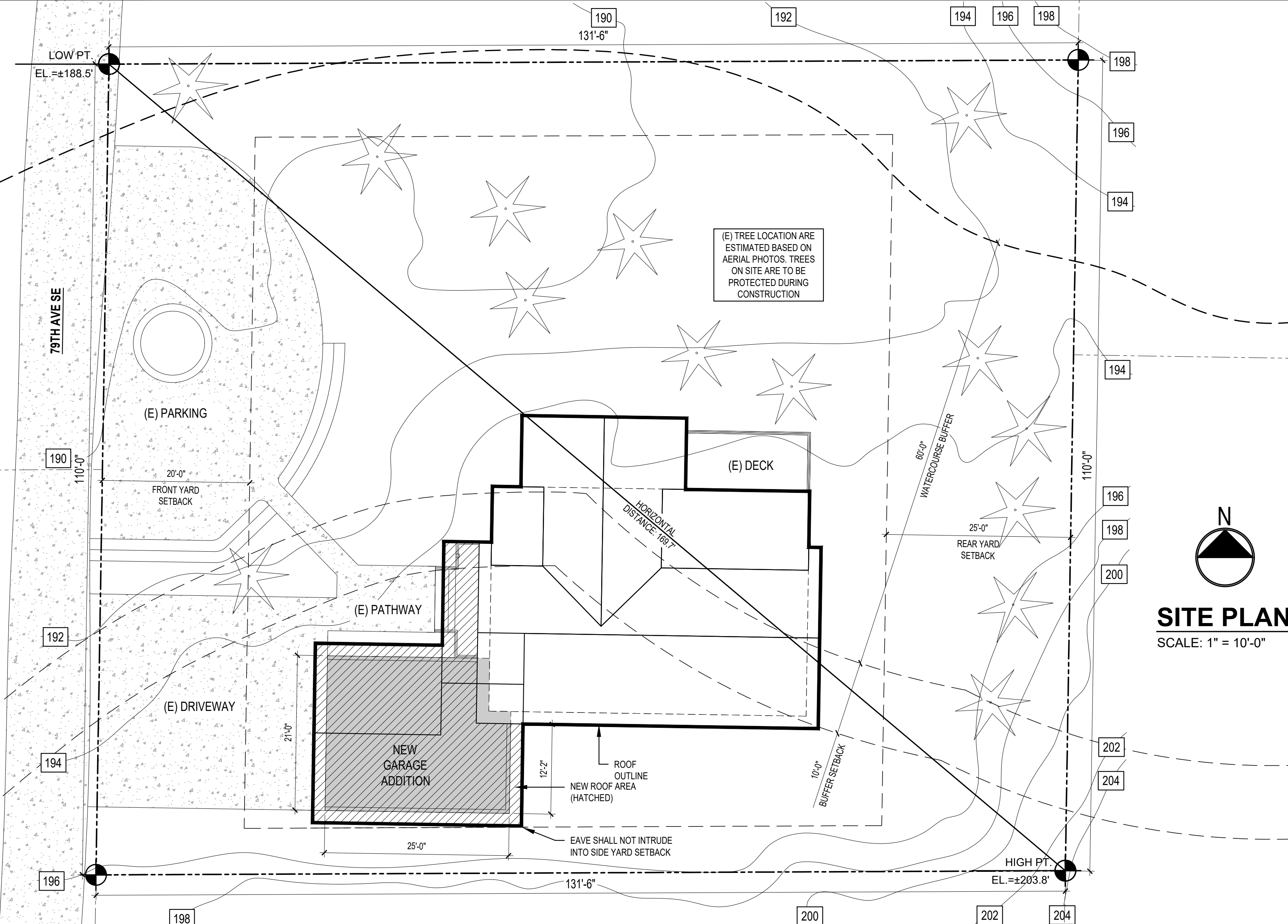
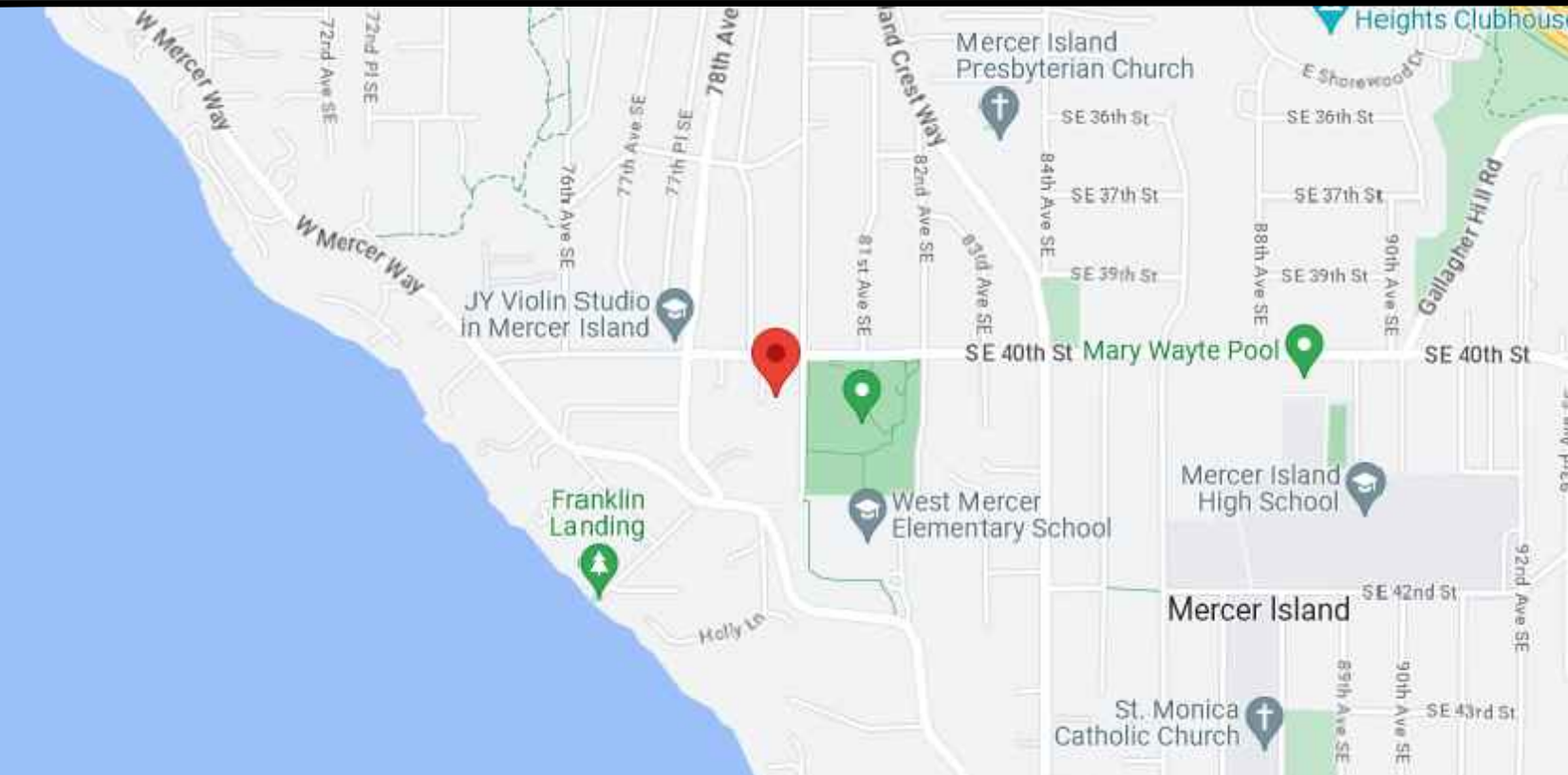
2018 WSEC CREDITS

NO NEW CONDITIONED SPACE ADDED. NO CREDITS NEEDED

SHEET INDEX

- A1.0 PROJECT DATA AND SITE PLAN
- A2.0 MAIN FLOOR PLAN / ROOF PLAN / DOOR SCHEDULE / ROOF VENT CALCULATIONS
- A3.0 BUILDING ELEVATIONS AND BUILDING SECTIONS
- A6.0 DETAILS
- S-0 STRUCTURAL COVER SHEET
- S-1 STRUCTURAL GENERAL NOTES
- S-2 FOUNDATION PLAN
- S-3 FIRST FLOOR FRAMING AND SHEAR WALL PLAN
- S-4 ROOF FRAMING PLAN
- SD-1 STRUCTURAL DETAILS

VICINITY MAP



DUTY OF COOPERATION

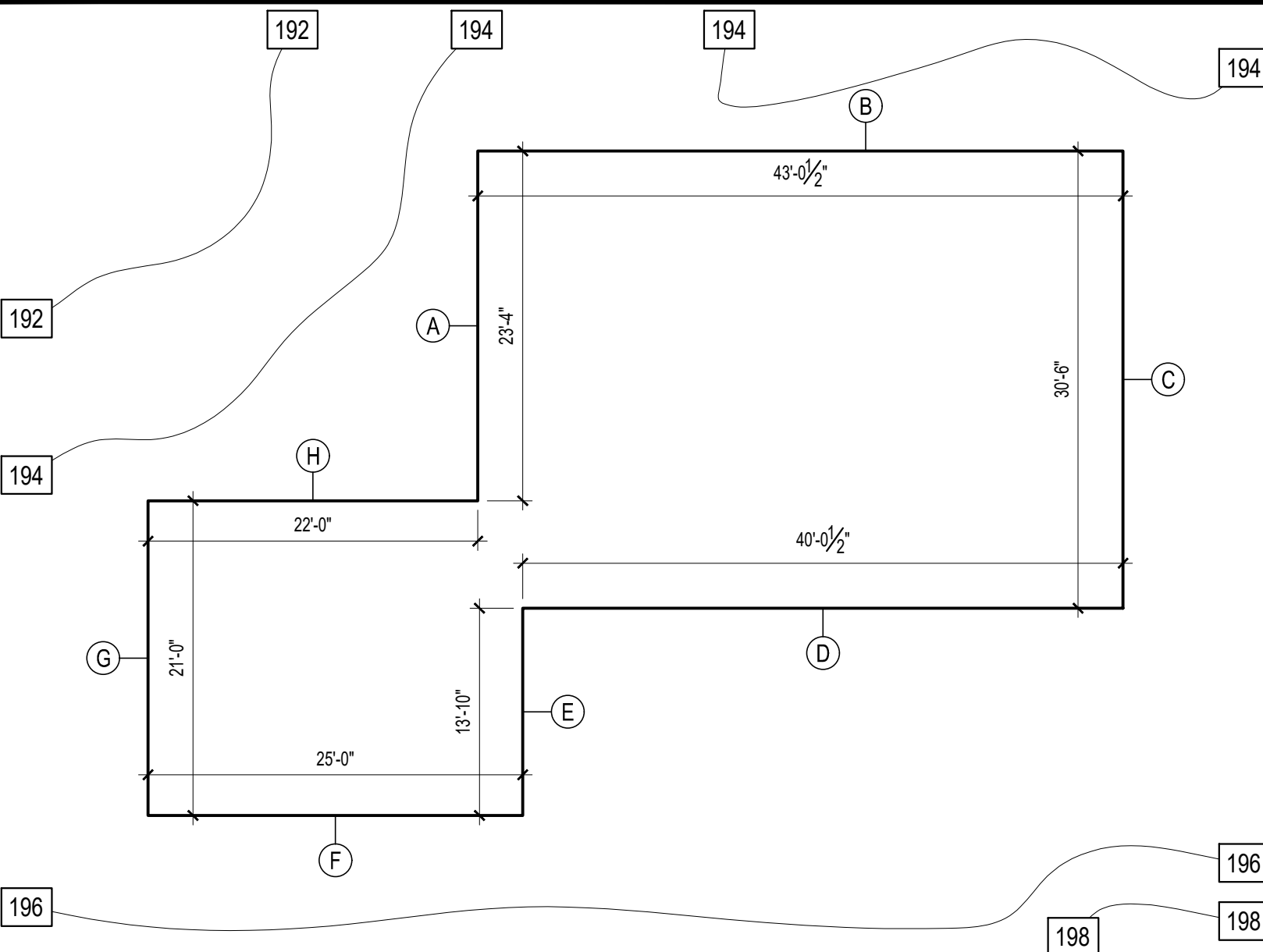
RELEASE AND ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, CONTRACTOR, AND STURMAN ARCHITECTS. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED IN THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO STURMAN ARCHITECTS. FAILURE TO DO SO SHALL RELIEVE STURMAN ARCHITECTS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

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

LEGAL DESCRIPTION

W 131.49 FT OF E 231.49 FT OF S 110.00 FT OF N 250.00 FT OF GL 2
Plat Block:
Plat Lot:

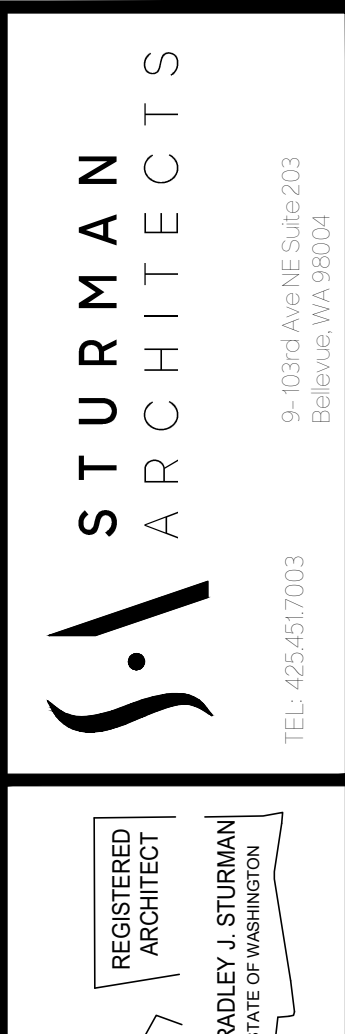
ABE CALCULATIONS



AVERAGE BUILDING ELEVATION			
	Wall Length	Elevation Pt.	Wall Length X Elev. Pt.
A	23.30	194.30	4527.19
B	43.04	194.20	8358.37
C	30.50	194.80	5941.40
D	40.04	195.30	7819.81
E	13.83	195.50	2703.77
F	25.00	195.70	4892.50
G	21.00	194.90	4092.90
H	22.00	194.60	4281.20
	218.71	194.86	42617.14
	42617.14	194.86	Average Building Elevation

BUILDING AREA

	LOWER FLOOR	MAIN FLOOR	HEATED SUB-TOTAL	ATTACHED GARAGES	UNHEATED DECKS	GRAND TOTAL
EXISTING HOUSE:	1,312.9 SF	1,312.9 SF	2,625.8 SF	0 SF	375.5 SF	2,963.3 SF
PROPOSED HOUSE:	1,312.9 SF	1,312.9 SF	2,625.8 SF	503.5 SF	375.5 SF	3,504.8 SF
CHANGE:	0 SF	0 SF	0 SF	+ 503.5 SF	0 SF	+ 503.5 SF



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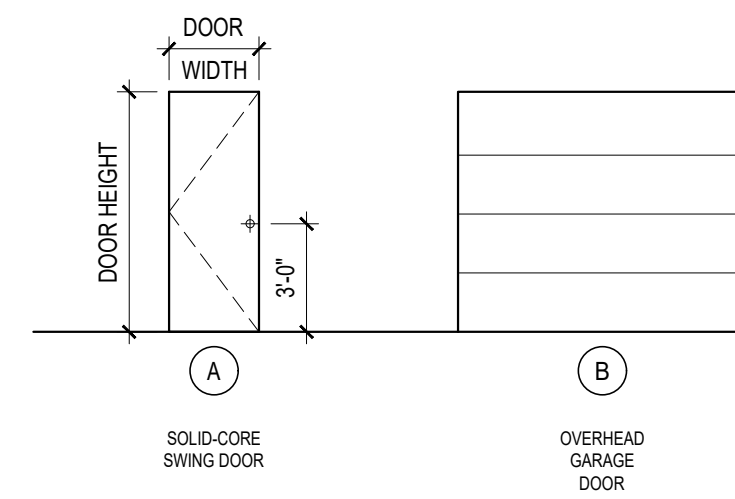
MAKSIMCHUK GARAGE
7847 SE 40TH ST
MERCER ISLAND, WA 98040

SITE PLAN
SCALE: 1" = 10'-0"

REVISIONS:
PLOT DATE: 10/27/2023
DRAWN BY: JM
CHECKED BY: BJS
SHEET
A1.0

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY
PERMIT SET 10/26/2023

DOOR TYPES:

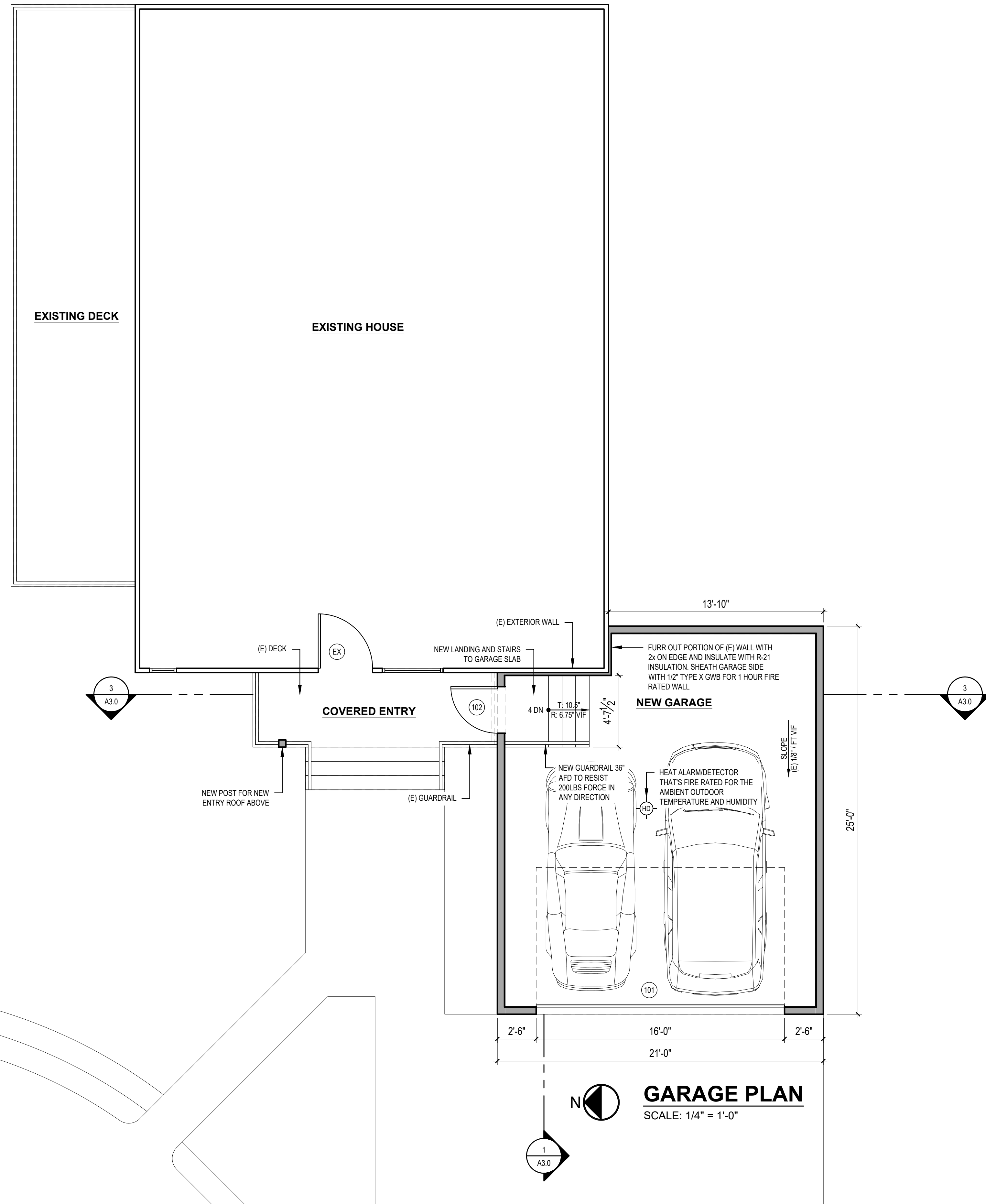


DOOR SCHEDULE

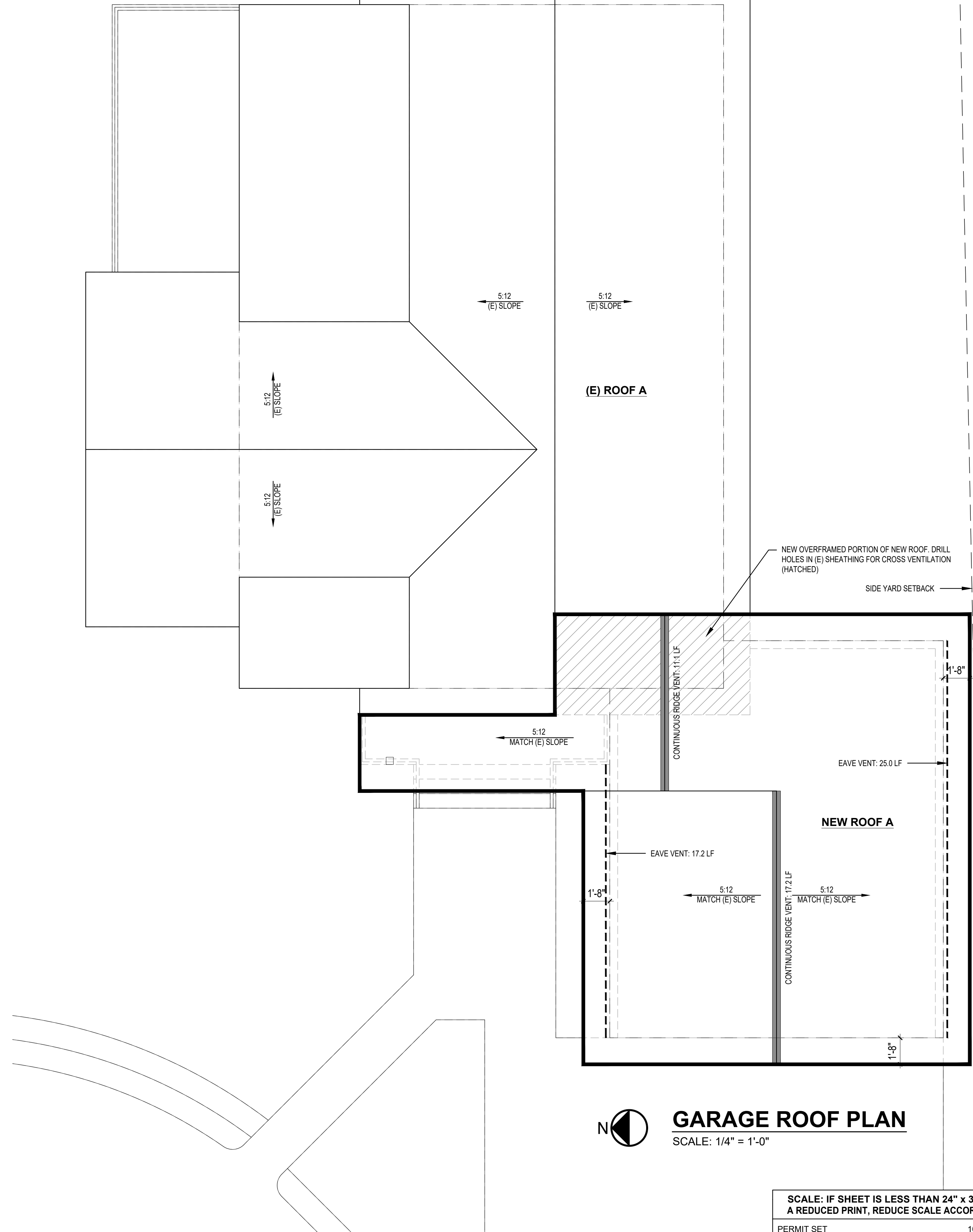
DOOR NO.	LOCATION	SIZE WIDTH	SIZE HEIGHT	DOOR TYPE	TEMP. GLASS	DOOR THK.	U-VAL (MIN.)	REMARKS
MAIN FLOOR								
101	GARAGE	16' - 0"	8' - 0"	B	N	1-3/4"	-	
102	GARAGE	3' - 0"	6' - 8"	A	N	1-3/4"	-	

ROOF VENT CALCULATIONS

CODE REQUIREMENT	SF AREA	REQ. VENTING		CALCULATIONS				ACTUAL			
		PER SF AREA	300	VENT TYPE	X	VENT L.F.	TOTAL VENT AREA SQ. IN.	SF CONVERT. 1/144	80% EFF FACTOR	TOTAL	
ROOF A NEW	768	5.12		RIDGE		42.2	759.6	5.28	4.22	6.11	
				EAVE	10 SQ. IN./FT.						
					1.5x1.0" VENT						
					12 SQ. IN./FT.	28.3	339.6	2.36	1.89		
				CONTINUOUS			0	0.00	0.00		



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



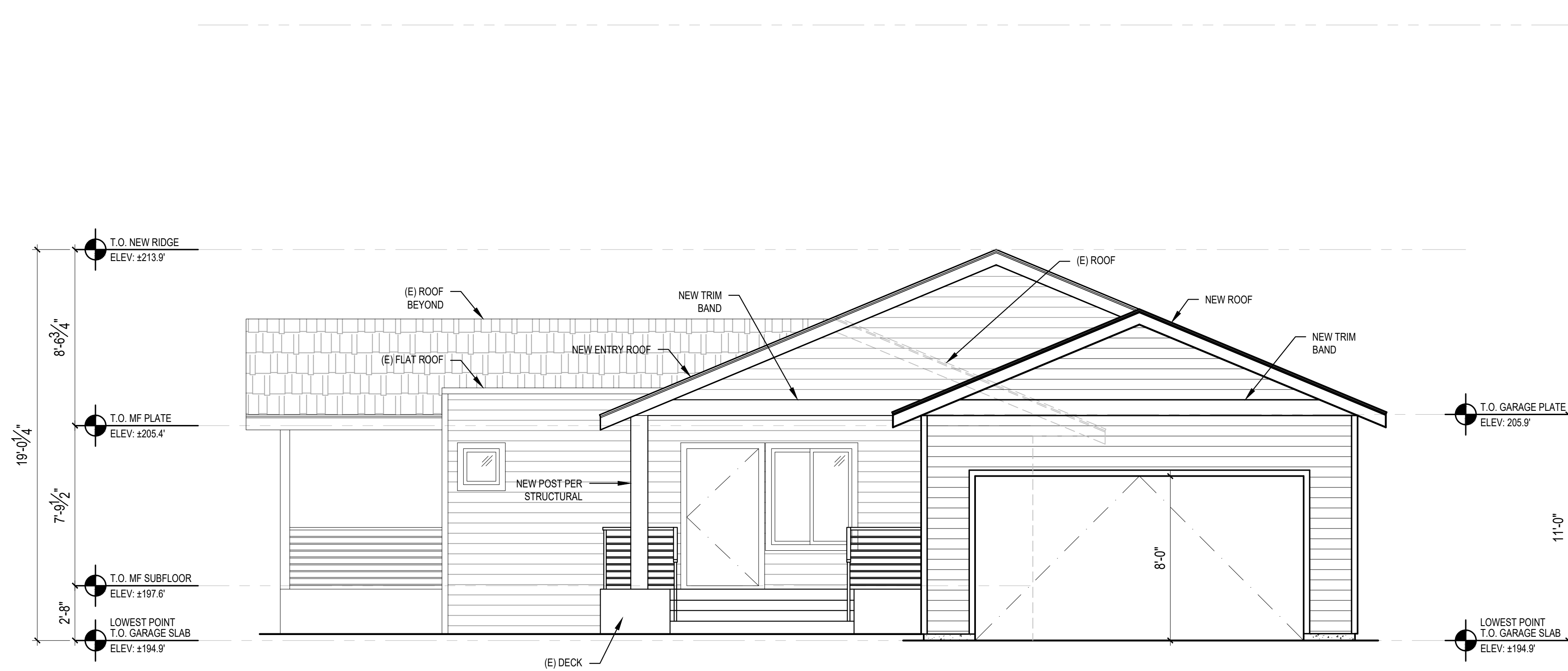
GARAGE ROOF PLAN
SCALE: 1/4" = 1'-0"

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PERMIT SET 10/26/2023

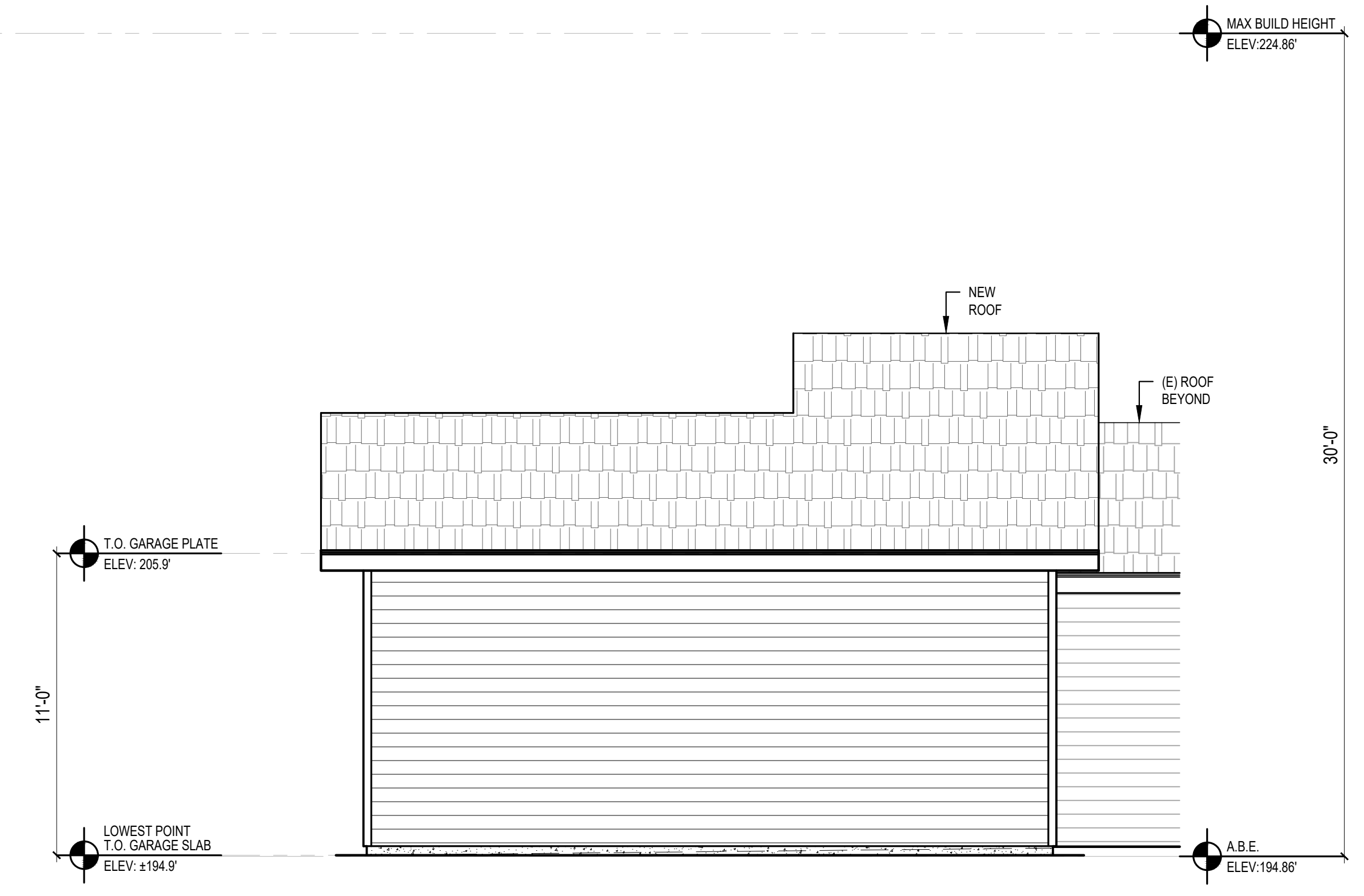
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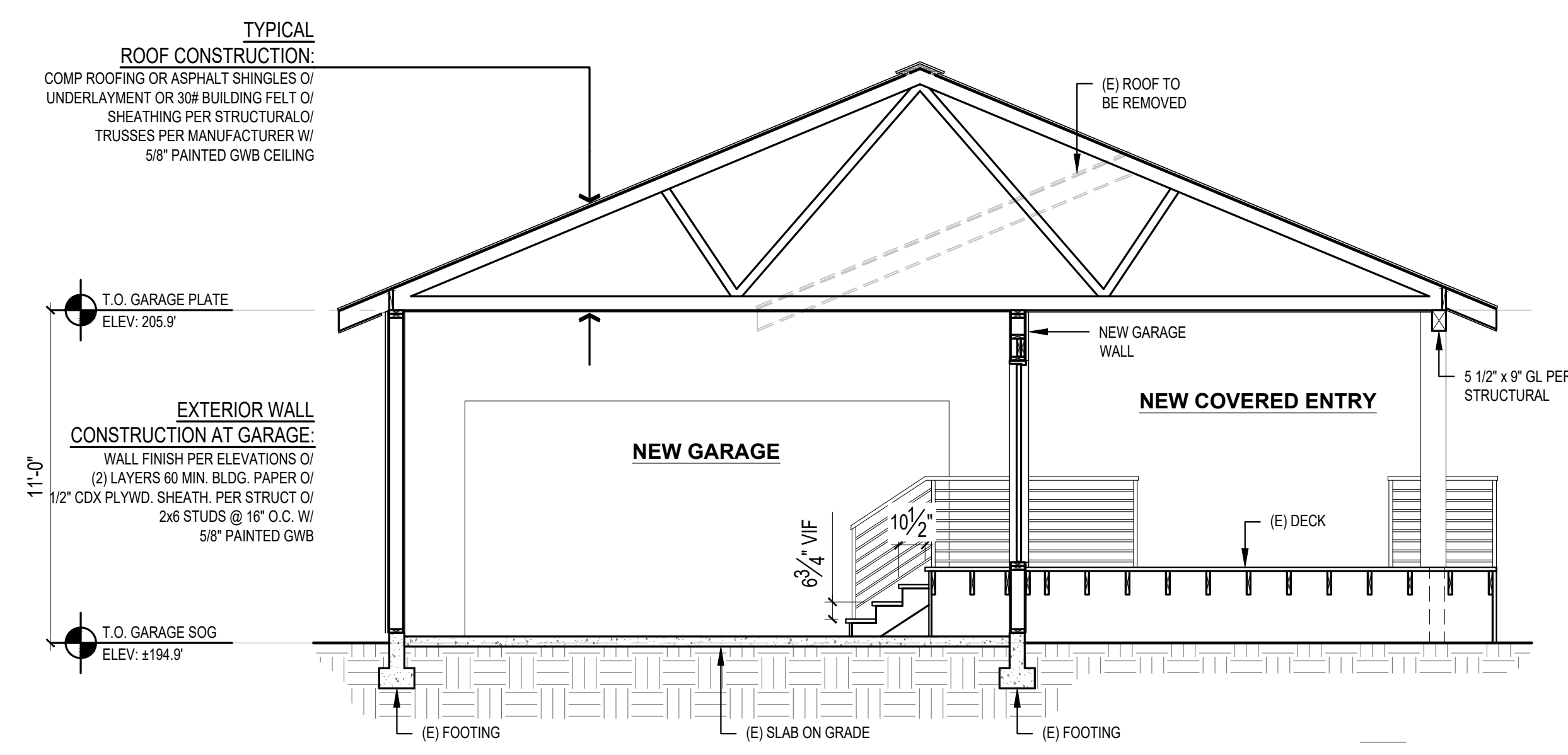
PLOT DATE: 10/27/2023
DRAWN BY: JM
CHECKED BY: BJS



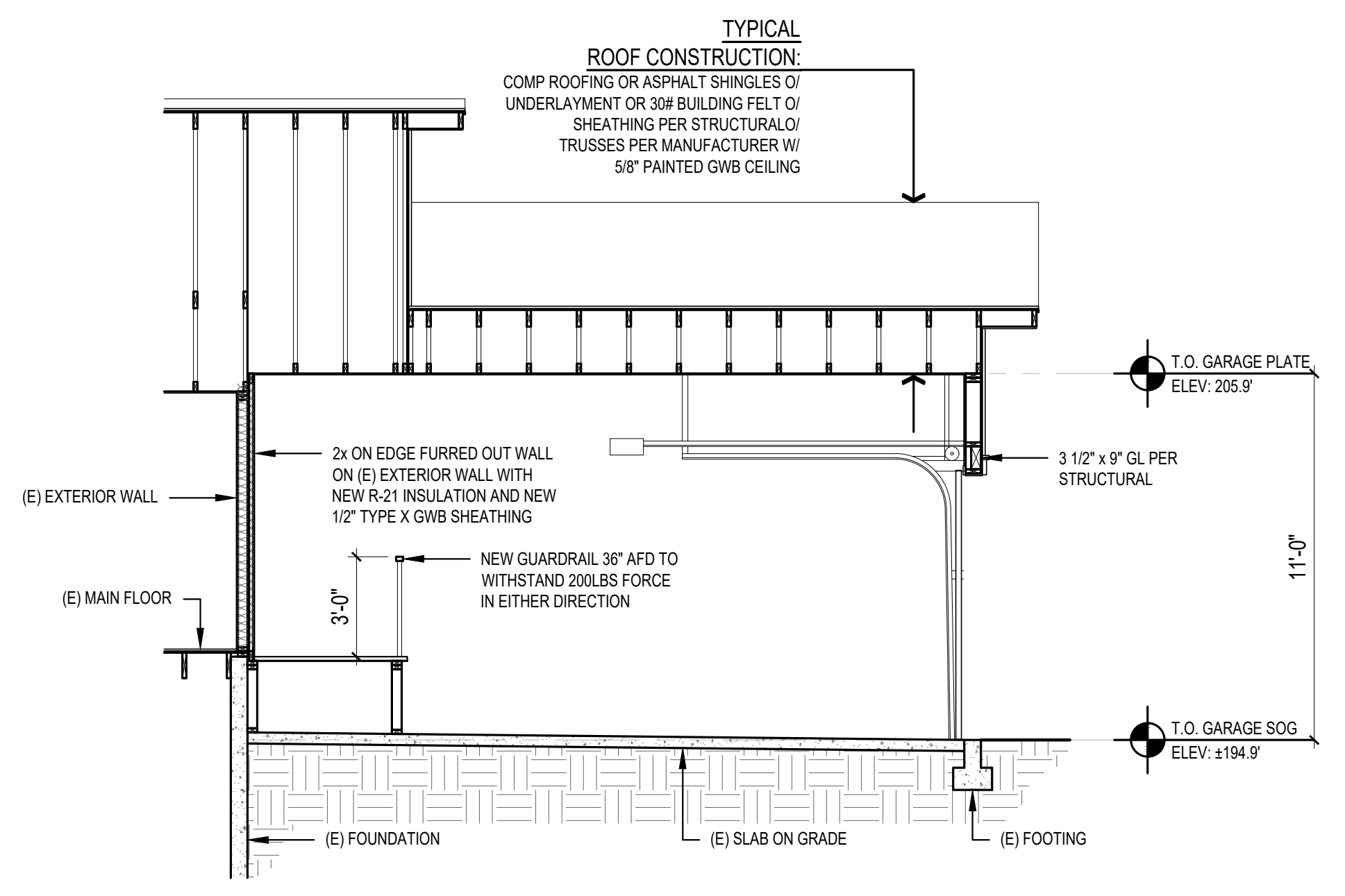
1 WEST ELEVATION
SCALE: 1/4" = 1'



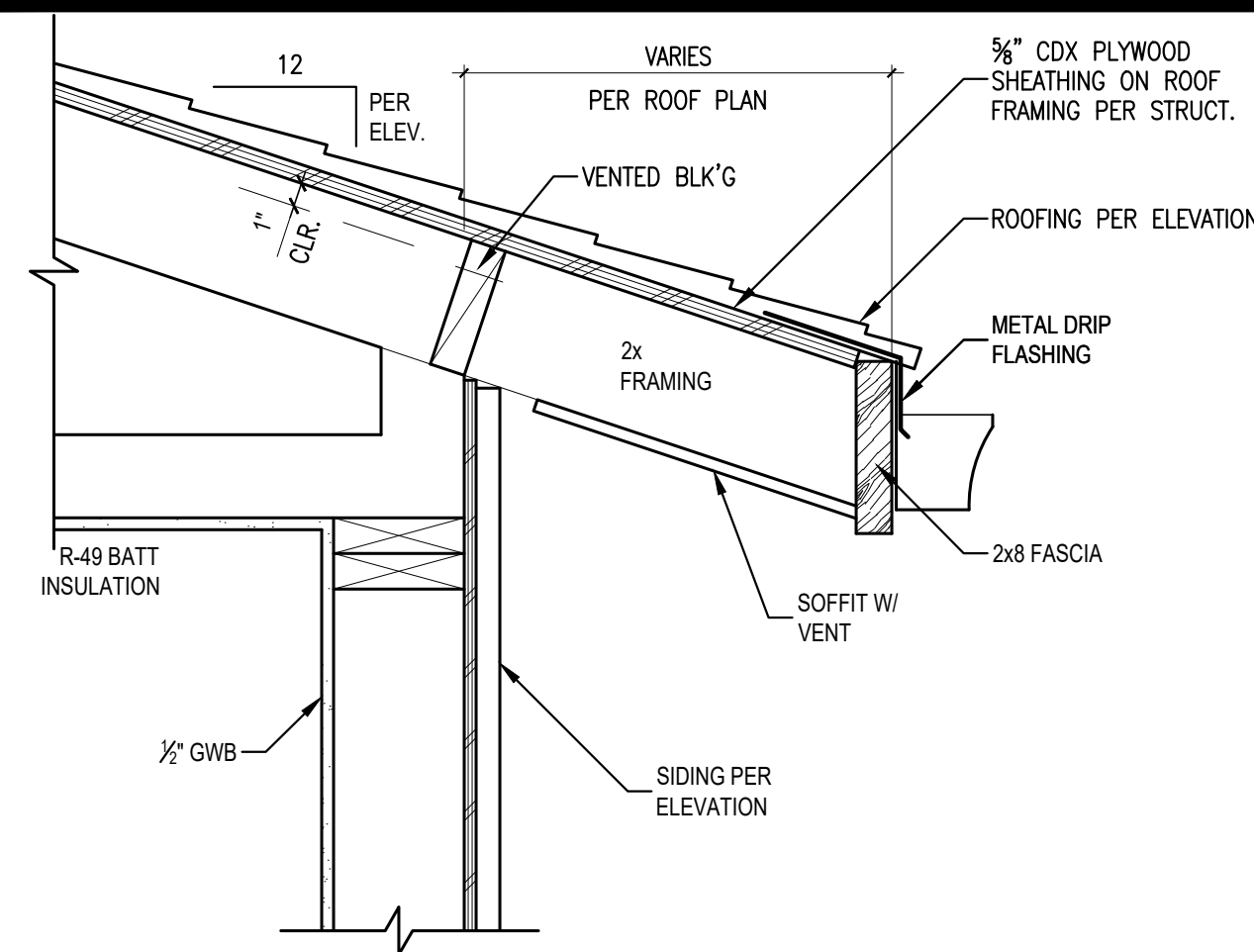
2 PARTIAL SOUTH ELEVATION
SCALE: 1/4" = 1'



3 BUILDING SECTION
SCALE: 1/4" = 1'

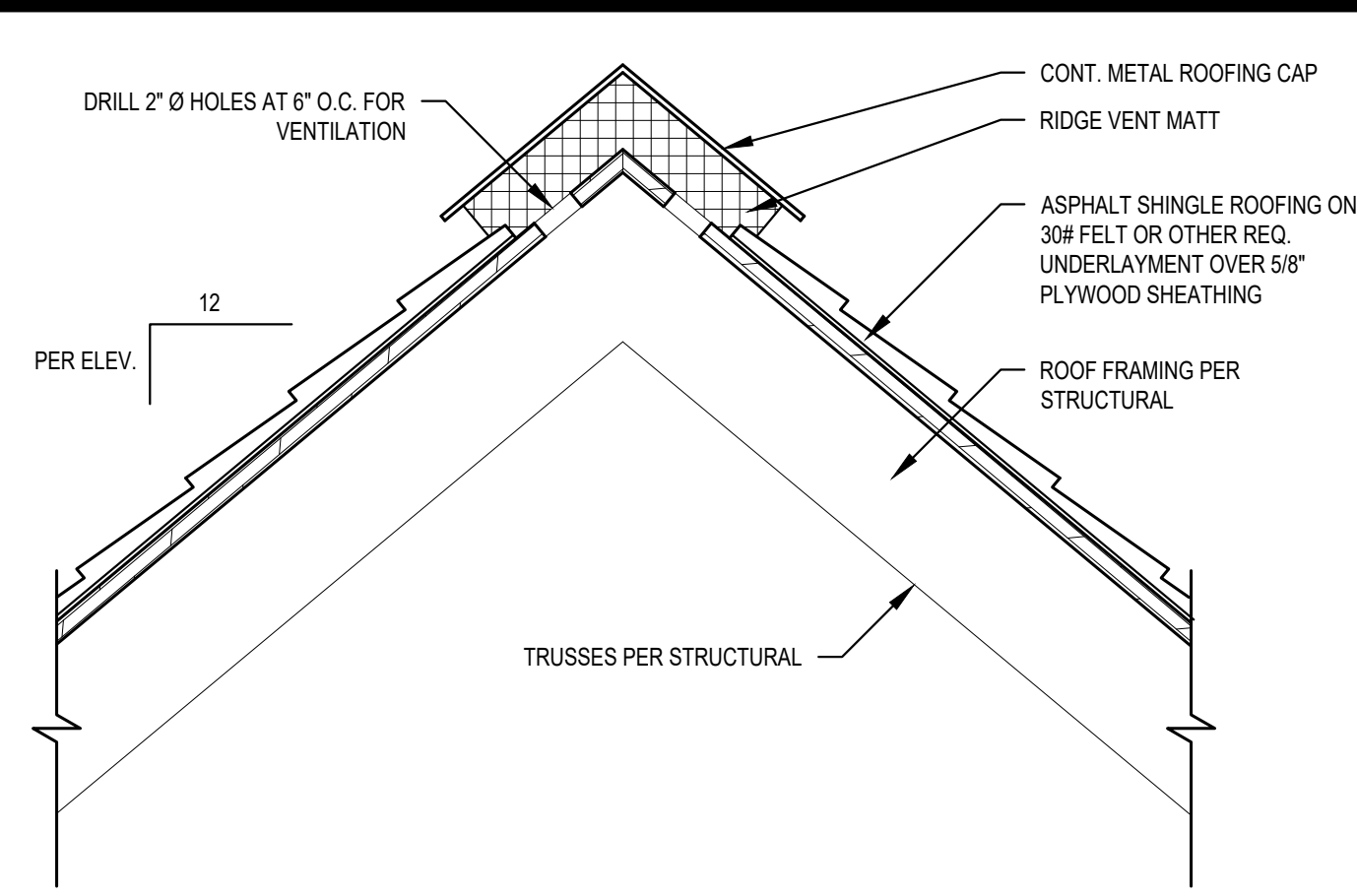


4 BUILDING SECTION
SCALE: 1/4" = 1'



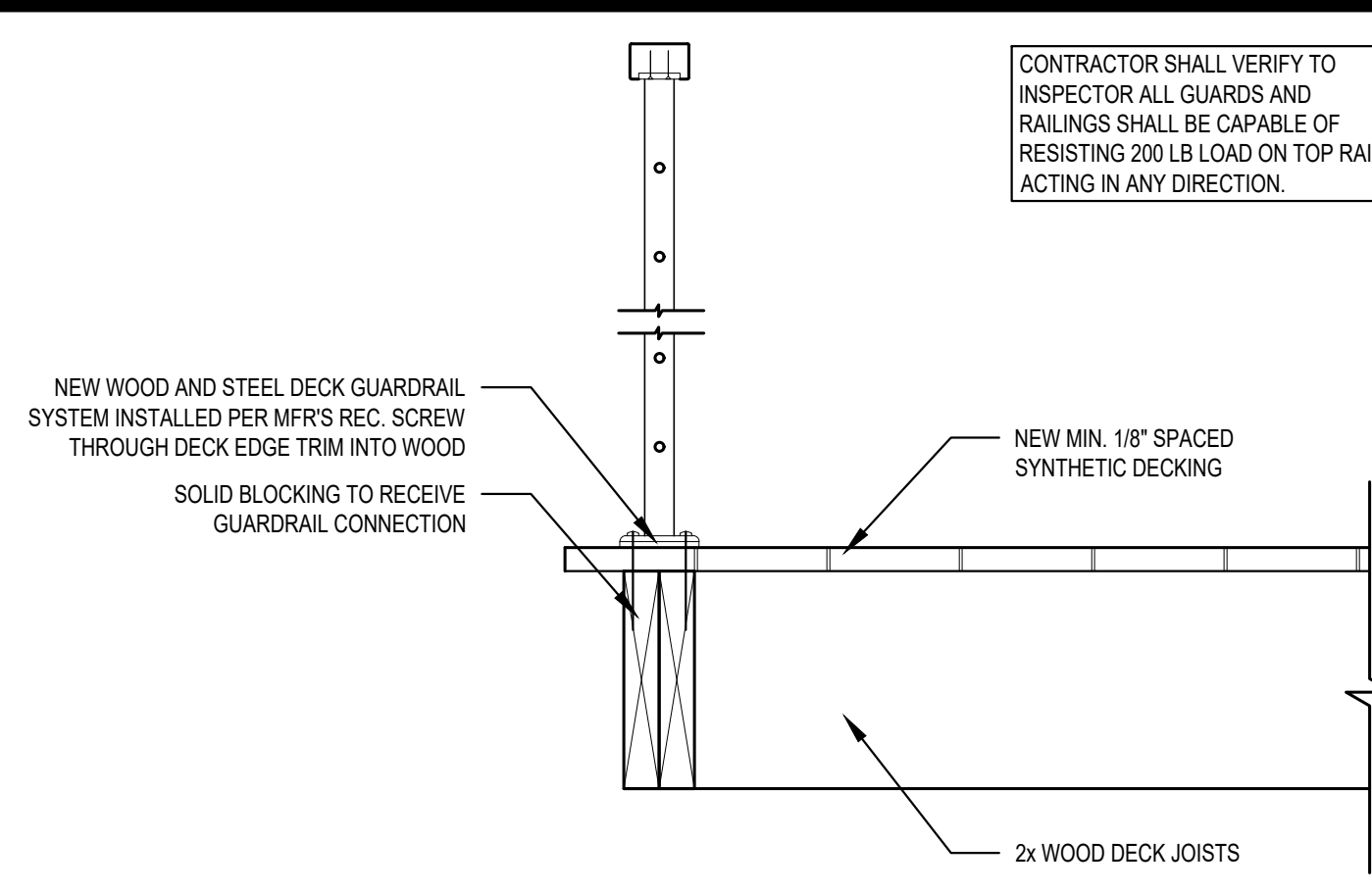
1 TYPICAL ROOF EAVE DETAIL

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



2 TYPICAL ROOF RIDGE VENT DETAIL

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



3 DECK RAILING ATTACHEMENT

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

DETAILS

REVISIONS:

PLOT DATE: 10/27/2023

DRAWN BY: JM

CHECKED BY: BJS

SHEET

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY
 PERMIT SET 10/26/2023

A6.0

MAKSIMCHUK GARAGE

S230918-1

PROJECT INFORMATION

CLIENT
MAKSIMCHUK FAMILY

PROJECT ADDRESS
7847 SE 40TH ST
MERCER ISLAND, WA 98040

ARCHITECT
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9-103RD AVE NE, SUITE 203
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CONTACT: BRAD STURMAN

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

CODES

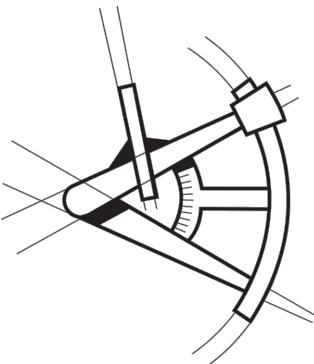
ENGINEERED PER:
2018 (IRC) INTERNATIONAL RESIDENTIAL CODE
2018 (IBC) INTERNATIONAL BUILDING CODE

SHEET INDEX

- COVER SHEET...S-0
- STRUCTURAL GENERAL NOTES...S-1
- FOUNDATION PLAN...S-2
- FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN...S-3
- ROOF FRAMING PLAN...S-4
- STRUCTURAL DETAILS...SD-1



LONGITUDE
ONE TWENTY^o
ENGINEERING & DESIGN



REVISIONS

△ DESCRIPTION DATE BY

.

PROJECT NAME

MAKSIMCHUK GARAGE
7847 SE 40TH ST
MERCER ISLAND, WA 98040

PROJECT NUMBER

S230918-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 10/19/2023

SCALE

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

DESCRIPTION

COVER SHEET

SHEET S-0

GENERAL STRUCTURAL NOTES

DESIGN CRITERIA

CODE: 2018 IBC/IRC & AMENDMENTS AS ADOPTED BY THE REVIEWING AGENCY/COUNTY.

ROOF25 PSF SNOW (GROUND)

FLOORS

RESIDENTIAL.....40 PSF
BALCONY/DECK.....60 PSF

BASIC WIND SPEED100 MPH, EXPOSURE B, K_e = 1.60

SEISMIC

MAPPED SPECTRAL ACCELERATION, S_s..... 1.58
MAPPED SPECTRAL ACCELERATION, S₁..... 0.64
SOIL SITE CLASS.....D

GENERAL CONDITIONS

- THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL DRAWINGS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES HE MAY FIND BEFORE PROCEEDING WITH THE WORK.
- 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.
- 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.
- IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETAILS".
- IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
- WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THESE DRAWINGS.
- 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.
- 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.
- 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.
- 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.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE STRUCTURAL DRAWINGS.
- NOTIFY ENGINEER OF ALL FIELD CHANGES PRIOR TO INSTALLATION.
- DISCREPANCIES FOUND BETWEEN STRUCTURAL DRAWINGS AND OTHER DOCUMENTS ARE TO BE NOTED IN WRITING TO THE ENGINEER PRIOR TO CONSTRUCTION.
- 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

- FOUNDATION DESIGN PARAMETERS ASSUMED PER IRC/IBC VALUES:

FOOTING BEARING PRESSURE: 1500 PSF
LATERAL EARTH PRESSURE:
ACTIVE: 35 PCF (FREE) 50 PCF (RESTRAINED)
PASSIVE: 250 PCF
COEFFICIENT OF BASE FRICTION: 0.35

- SUBGRADE PREPARATION, DRAINAGE PROVISIONS, AND OTHER RELEVANT SOIL CONSIDERATIONS ARE TO BE IN ACCORDANCE WITH THE JURISDICTIONAL REQUIREMENTS.
- 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.

CONCRETE

- 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.
- 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
- PLACING: COMPLY WITH ACI-301. PROVIDE A 3/4 INCH CHAMFER ALL EXPOSED CONCRETE EDGES, UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS.
- 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.
- CURING: COMPLY WITH ACI-301. KEEP CONCRETE MOIST FOR SEVEN DAYS MINIMUM.
- JOINTING: PROVIDE ADEQUATE JOINTING TO MINIMIZE EFFECTS OF VOLUME CHANGE. JOINTS SHOWN MAY BE ADJUSTED AT CONTRACTOR'S OPTION, WITH PRIOR APPROVAL FROM ENGINEER.
- WEATHER EXTREMES: COMPLY WITH ACI 305R FOR HOT WEATHER. COMPLY WITH ACI 306R FOR COLD WEATHER.
- WATER/CEMENT RATIO SHALL NOT EXCEED 0.50 (BY WEIGHT), TYPICAL.

REINFORCING STEEL

- REFERENCE STANDARDS: ACI "DETAILING MANUAL" (SP-66); CRSI MANUAL OF STANDARD PRACTICE (MSP-1)
- MATERIALS:
REINFORCING STEEL: ASTM A615, GRADE 60
- SPLICES:
LAP CONTINUOUS REINFORCING BARS 48 BAR DIAMETERS, UNLESS OTHERWISE NOTED. PROVIDE CORNER BARS FOR ALL HORIZONTAL REINFORCEMENT.
- COVER:
FOOTINGS3 INCHES
SLABS.....2 INCHES
- 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

- 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".
- 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

- 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

- MEET REQUIREMENTS OF PS 20-70 AND NATIONAL GRADING RULES FOR SOFTWOOD DIMENSIONAL LUMBER. BEAR STAMP OF WPPA.
- 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, WPPA GRADING.
POSTS: 4x, 6x, DF #2
LUMBER NOT NOTED TO BE HF #2.
- PROVIDE STANDARD CUT WASHERS FOR NUTS BEARING AGAINST WOOD, AND 1/4"x3" HOT-DIPPED GALVANIZED SQUARE PLATE WASHERS FOR ALL ANCHOR BOLTS.
- 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.
- 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.
- BOLTS IN WOOD BEAMS SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE OF THE MEMBER.
- 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.
- 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 1/4"
TIMBERSTRAND LSL (1.3E)	HEADER, BEAM, OR COLUMN < 9" DEPTH	3 1/2"
TIMBERSTRAND LSL (1.55E)	RIMBOARD, HEADER, OR < 9" DEPTH BEAM	1 3/4", 3 1/2"
TIMBERSTRAND LSL (1.3E)	WALL STUD 2X4 & 2X61	1/2"
(1.5E)	WALL STUD > 2X6	1 1/2"
MICROLLAM LVL (1.9E)	HEADER, BEAM	1 3/4"
PARALLAM PSL (2.2E)	HEADER, BEAM	3 1/2", 5 1/4", 7"
PARALLAM PSL (1.8E)	COLUMN	3 1/2", 5 1/4", 7"

WOOD STRUCTURAL CONNECTIONS

- 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

- D/A 2135 SEISMIC VENEER ANCHORS BY DUR-O-WAL OR APPROVED EQUAL AT WOOD STUD WALL.
- D/A 5213 SEISMIC VENEER ANCHORS BY DUR-O-WAL OR APPROVED EQUAL AT CONCRETE WALL.
- 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.
- AT ALL OPENINGS LARGER THAN 16" IN EITHER DIRECTION, ANCHORS TO BE SPACED WITHIN 12" OF THE OPENING AT ALL SIDES.
- USE TYPE N MORTAR COMPLYING WITH ASTM C270

GLU-LAMINATED TIMBER

- 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.
- MANUFACTURER'S CERTIFICATE SHALL BE PRESENTED TO THE BUILDING INSPECTOR PRIOR TO INSTALLATION.

WOOD SHEATHING

- 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.
- 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.
- 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.
- 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

- 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
- SUBMIT 3 COPIES FOR REVIEW PRIOR TO FABRICATION FOR:
A) CONCRETE DESIGN MIX
B) CONCRETE INSERTS
C) EPOXY ADHESIVES

INSPECTIONS

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

ALTERNATES:

- 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:

- 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:

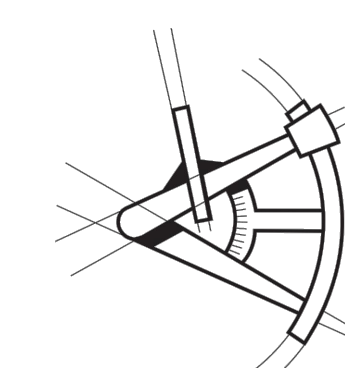
- THE ENGINEER AND/OR ARCHITECT HAVE NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM HIS WORK. THE UNDERTAKING OF PERIODIC SITE 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	GLB	GLULAM BEAM
ABV	ABOVE	GR	GRADE
AFF	ABOVE FINISH FLOOR	GYP	GYPSUM WALL BOARD
ALT	ALTERNATE	HDG	HOT-DIPPED GALVANIZED
ALUM	ALUMINUM	HDR	HEADER
APPROX	APPROXIMATE	HF	HEM FIR
AYC	ALASKAN YELLOW CEDAR	HGT	HEIGHT
BB	BOX BEAM	HT	HEIGHT
BF	BOTTOM FLUSH	IN	INCH
BLDG	BUILDING	JT	JOINT
BLKG	BLOCKING	MAX	MAXIMUM
BM	BEAM	MIN	MINIMUM
BOT	BOTTOM	MISC	MISCELLANEOUS
BP	BOTTOM PLATE	NB	NON-BEARING
BRG	BEARING	NO	NUMBER
BTWN	BETWEEN	OC	ON CENTER
BSMT	BASEMENT	PL	PLATE
B/W	BOTTOM OF WALL	PSF	POUNDS PER SQUARE FOOT
CANT	CANTILEVER	PSI	POUNDS PER SQUARE INCH
CJ	CONTROL JOINT	PT	PRESSURE TREATED
CLG.	CEILING	RAF	RAFTER
CLJ	CEILING JOIST	REF	REFERENCE
CLR	CLEAR	REINF	REINFORCEMENT
CMU	CONCRETE MASONRY UNIT	REQD	REQUIRED
COL	COLUMN	REQS	REQUIREMENTS
CONC	CONCRETE	SF	SQUARE FOOT
CONN	CONNECTION	SHTG	SHEATHING
CONST	CONSTRUCTION	SIM	SIMILAR
CONT	CONTINUOUS	SPF	SPRUCE PINE FIR
CTR	CENTER	STD	STANDARD
DET	DETAIL	SYP	SOUTHERN YELLOW PINE
DF	DOUGLAS FIR (SOUTH)	T/	TOP OF
DFL	DOUGLAS FIR LARCH	T/BM	TOP OF BEAM
DIM	DIMENSION	T/CONC	TOP OF CONCRETE
DJ	DOUBLE JOIST	T/PL	TOP OF PLATE
DIA	DIAMETER	T/SLAB	TOP OF SLAB
DN	DOWN	T/ST	TOP OF STEEL
DS	DOWN SPOUT	T/W	TOP OF WALL
EA	EACH	TF	TOP FLUSH
EF	EACH FACE	TJ	TRIPLE JOIST
EJ	EXPANSION JOINT	TP	TOP PLATE
ELEV	ELEVATION	TR	THREADED ROD
EN	EDGE NAILING (PANEL)	TYP	TYPICAL
EOR	ENGINEER OF RECORD	UNO	UNLESS NOTED OTHERWISE
EQ	EQUAL	UPA	UNDER POST ABOVE
ES	EACH SIDE	UWA	UNDER WALL ABOVE
EW	EACH WAY	VCB (V.C.B.)	VERTICAL CRUSH BLOCKING
FB	FLUSH BEAM	VERT	VERTICAL
FIN	FINISH	VIF	VERIFY IN FIELD
FL	FLOOR	W/	WITH
FLSHG	FLASHING	WC	WESTERN CEDAR
FND	FOUNDATION	WP	WATERPROOF
FP	FIREPLACE	WWF	WELDED WIRE FABRIC
FT	FOOT		
FTG	FOOTING		
GA	GAUGE		
GALV	GALVANIZED		



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REVISIONS

DESCRIPTION	DATE	BY

PROJECT NAME

MAKSIMCHUK GARAGE
7847 SE 40TH ST
MERCER ISLAND, WA 98040

PROJECT NUMBER

S230918-1

DRAWN BY - MR

CHECKED BY - MRT

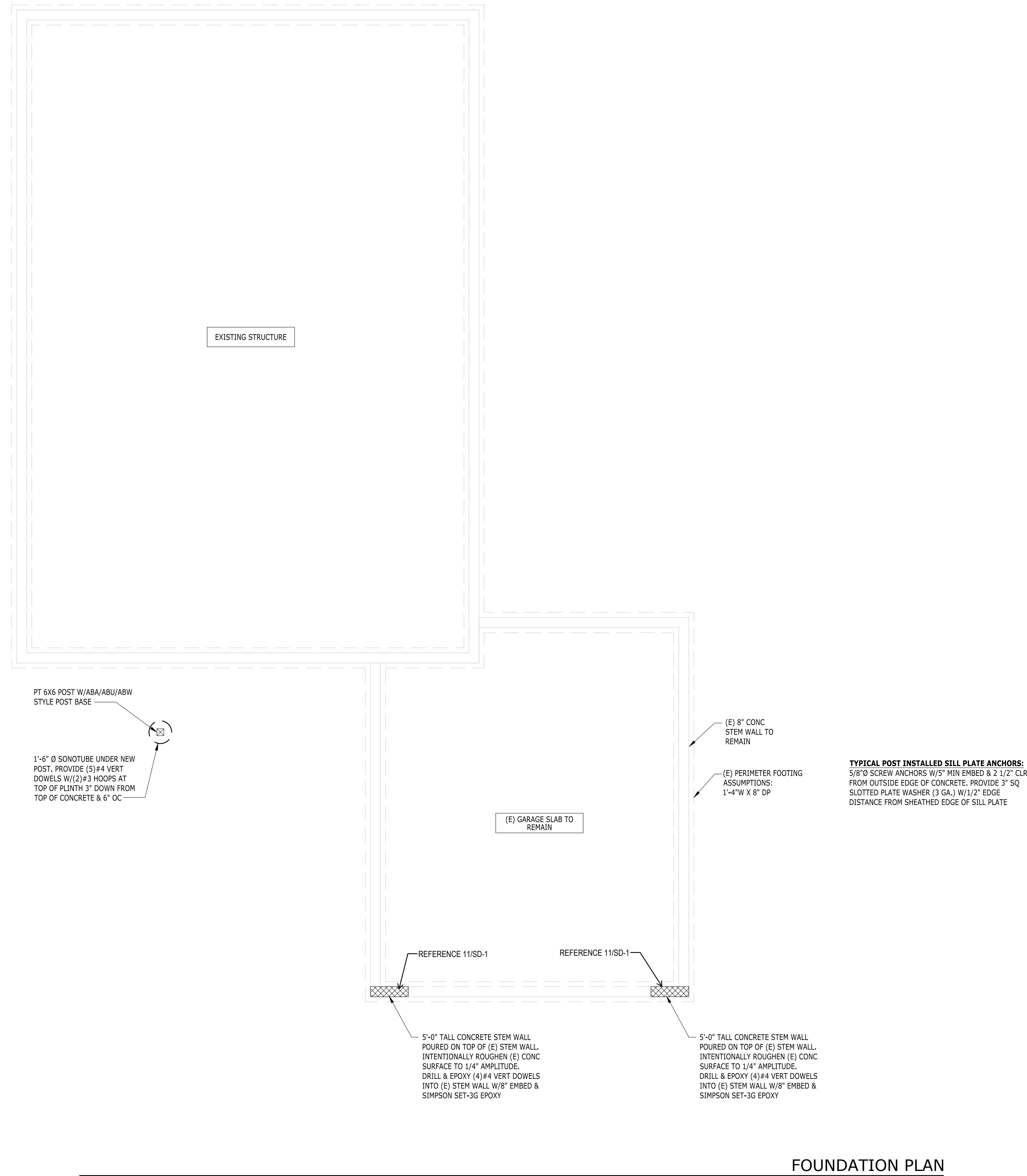
SHEET DATE - 10/19/2023

SCALE

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

STRUCTURAL GENERAL NOTES

DESCRIPTION SHEET **S-1**



FOUNDATION PLAN

FOUNDATION NOTES

- GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
- 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.
- 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.
- 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.
- PRIOR TO POURING CONCRETE CONTRACTOR SHALL LOCATE AND VERIFY LOCATIONS OF ALL FOUNDATION OPENINGS, PENETRATIONS, AND SLOPES.
- 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).
- 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.
- 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.
- CJ INDICATES CONTROL JOINT.
- FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
- EXTERIOR STAIRS AND STEEL-FRAMED STAIRS BY OTHERS.
- TYPICAL DETAILS:
 - 4/SD-1 TYP FOOTING STEP
 - 5/SD-1 TYP CORNER BARS REQ'T
 - 3/SD-1 TYP CONSTRUCTION JOINT
 - 10/SD-1 TYP BAR BEND AND HOOK DETAIL

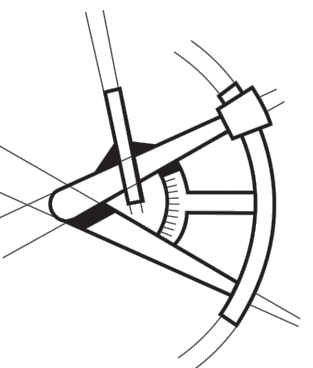
HOLDOWN SCHEDULE			
MODEL	ANCHOR	EMBEDMENT	MIN END POST
CS16/CS14	-	-	1-2X EA
MST#	-	-	2-2X OR 3X
STHD14/STHD14RJ	-	-	2-2X OR 3X
HDU2	5/8" TR	12"	2-2X OR 3X
HDU5	5/8" TR	12"	2-2X
HDU8	7/8" TR	12"	3-2X
HDU11	1" TR	12"	6X6
HDU14	1" TR	15"	6X6
HD19	1 1/4" TR	15"	6X6

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)
- FOOTING CENTERED ON POST (L X W X T)



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REVISIONS

Δ	DESCRIPTION	DATE	BY
-			

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MERCER ISLAND, WA 98040

PROJECT NUMBER

S230918-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 10/19/2023

SCALE

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

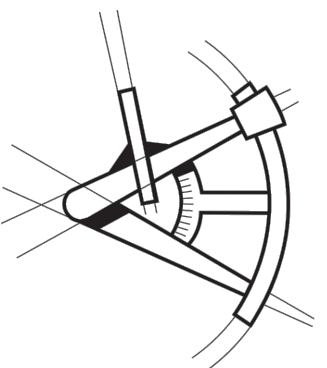
DESCRIPTION
FOUNDATION PLAN
SHEET **S-2**

WALL FRAMING AND SHEAR WALL NOTES

- GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
- LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
- ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6" O.C.
- EXTERIOR WALL STUDS SHALL BE 2X6 @ 16" O.C. ($\leq 10'$), 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.
- 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.
- SHEARWALL SHEATHING AND NAILING REQUIREMENTS PER SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE SW6 UNO.
- 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.
- PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
- 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. @ SW2 AND 2W2). AT DOUBLE SIDED SHEARWALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEARWALL.
- LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (.1310 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").
- WINDOW STRAP INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
- STHD HOLD-DOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLD-DOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
- 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 AN 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.
- 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.
- FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
- TYPICAL DETAILS:
 - 18/SD-1 TYP TOP PLATE SPLICE
 - 20/SD-1 TYP NOTCHES AND HOLES IN WOOD STUDS
 - 12/SD-1 FORCE-TRANSFER AROUND WINDOWS DETAIL
 - 13/SD-1 TYP HEADER FRAMING



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PROJECT NAME

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PROJECT NUMBER

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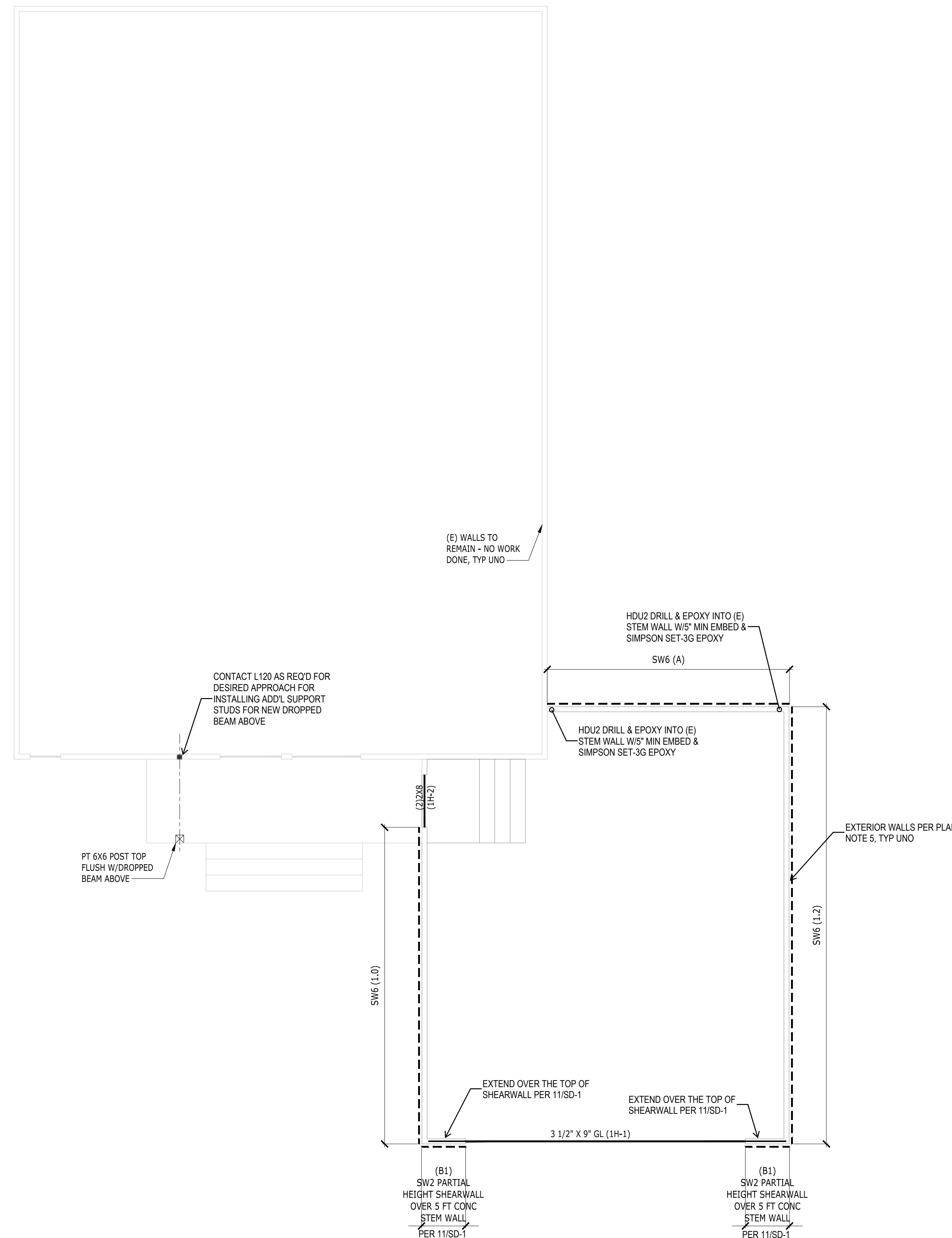
CHECKED BY - MRT

SHEET DATE - 10/19/2023

SCALE

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

DESCRIPTION
FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN
SHEET
S-3



FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN

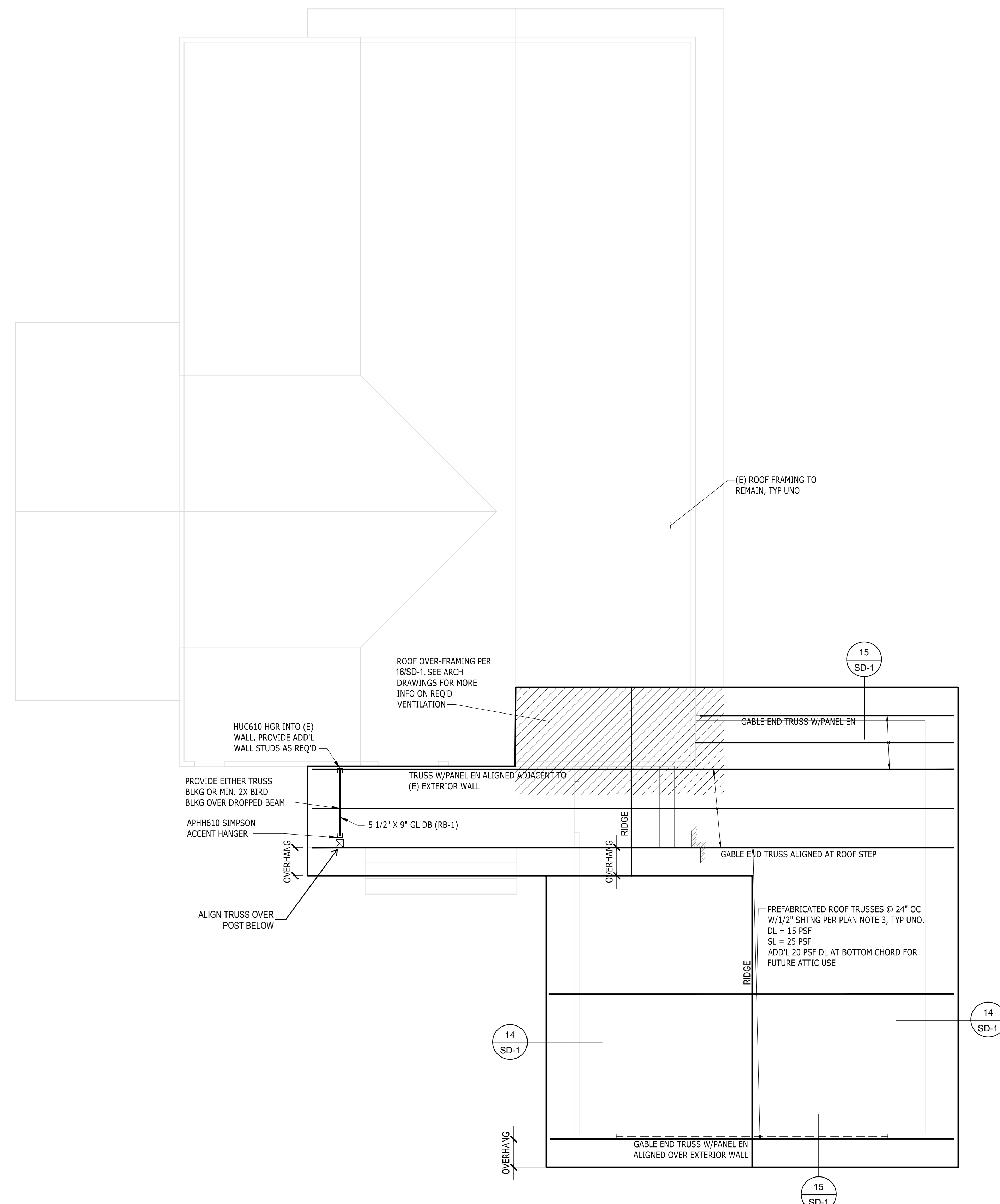
FRAMING AND SHEATHING LEGEND

- STHD (EXAMPLE)** - HOLD-DOWN BY SIMPSON (STHD/MST/HDU/HD, TYP)
- #K** - INTERIOR BEARING WALL
- #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
- - EXAMPLE
- REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
- BEAM OR TRUSS MEMBER

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 .1480 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.

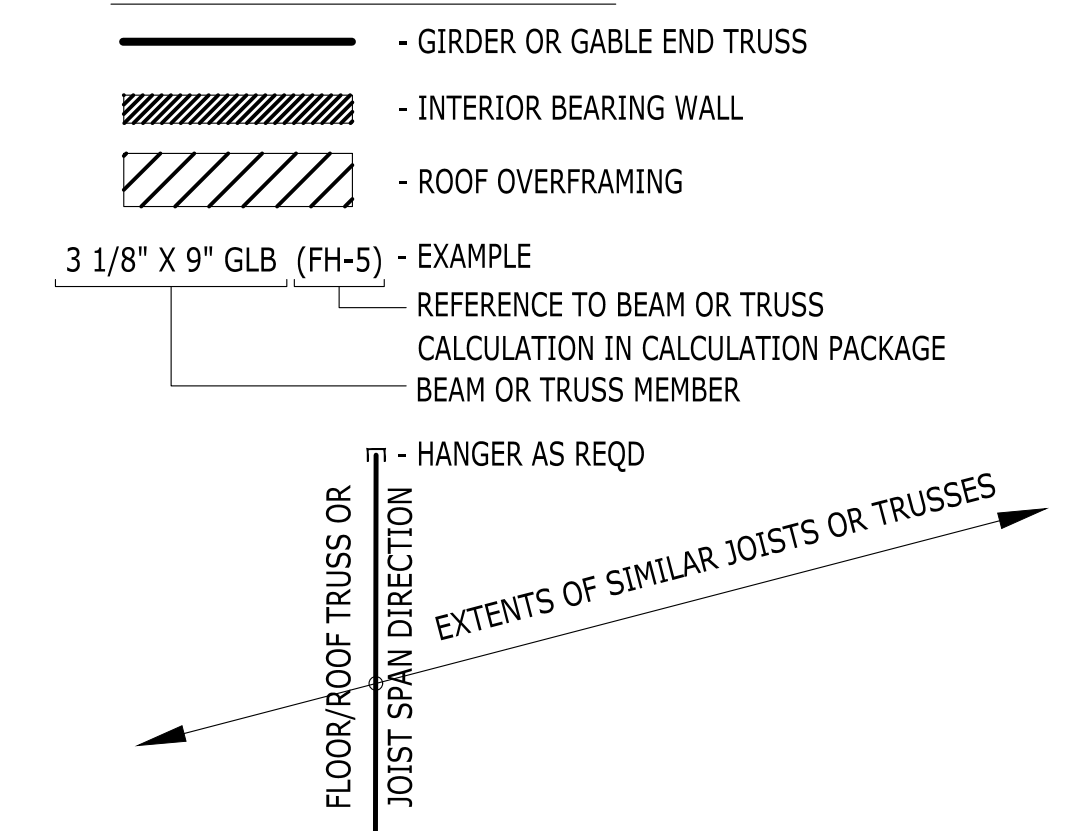


ROOF FRAMING PLAN

ROOF FRAMING NOTES

- GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
- 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).
- 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.
- ALL GIRDER TRUSSES SHALL BE CONNECTED TO TOP PLATE WITH TWO H6 TIES UNO.
- LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH ROOF FRAMING, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
- 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/BAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BAM EQUAL T/JOISTS AND B/BAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BAM EQUAL B/JOISTS AND T/BAM EXTENDING ABOVE T/JOISTS.
- ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
- STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
- HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN UNO.
- 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.
- ENGINEERED ROOF JOISTS AND ROOF TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
 - STANDARD DEAD AND LIVE LOADS SHALL BE USED FOR TRUSS DESIGN. REFERENCE STRUCTURAL GENERAL NOTES FOR MORE INFORMATION.
 - CHANGES TO LAYOUT MUST BE SUBMITTED TO THE ARCHITECT AND EOR FOR REVIEW AND APPROVAL.
 - TRUSS SUBMITTAL PACKAGE TO BE PROVIDED TO EOR FOR REVIEW. REFERENCE STRUCTURAL GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
 - (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.
 - 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).
 - TRUSS DESIGN FOR BEARING AT TOP PLATES TO BE DESIGNED FOR COMPRESSION PERPENDICULAR TO GRAIN.
- FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
- ROOF COVERINGS AND ROOFING MATERIAL BY OTHERS.
- ROOF DRAINAGE BY OTHERS.
- ATTIC VENTILATION BY OTHERS.
- FOR TYPICAL INSTALLATION DETAILS REFERENCE TO:
 - 16/SD-1 TYP ROOF OVER-FRAMING
 - 19/SD-1 TYP ROOF TRUSS BLKG

FRAMING LEGEND



REVISIONS		
DESCRIPTION	DATE	BY

PROJECT NAME
MAKSIMCHUK GARAGE
 7847 SE 40TH ST
 MERCER ISLAND, WA 98040

PROJECT NUMBER
S230918-1

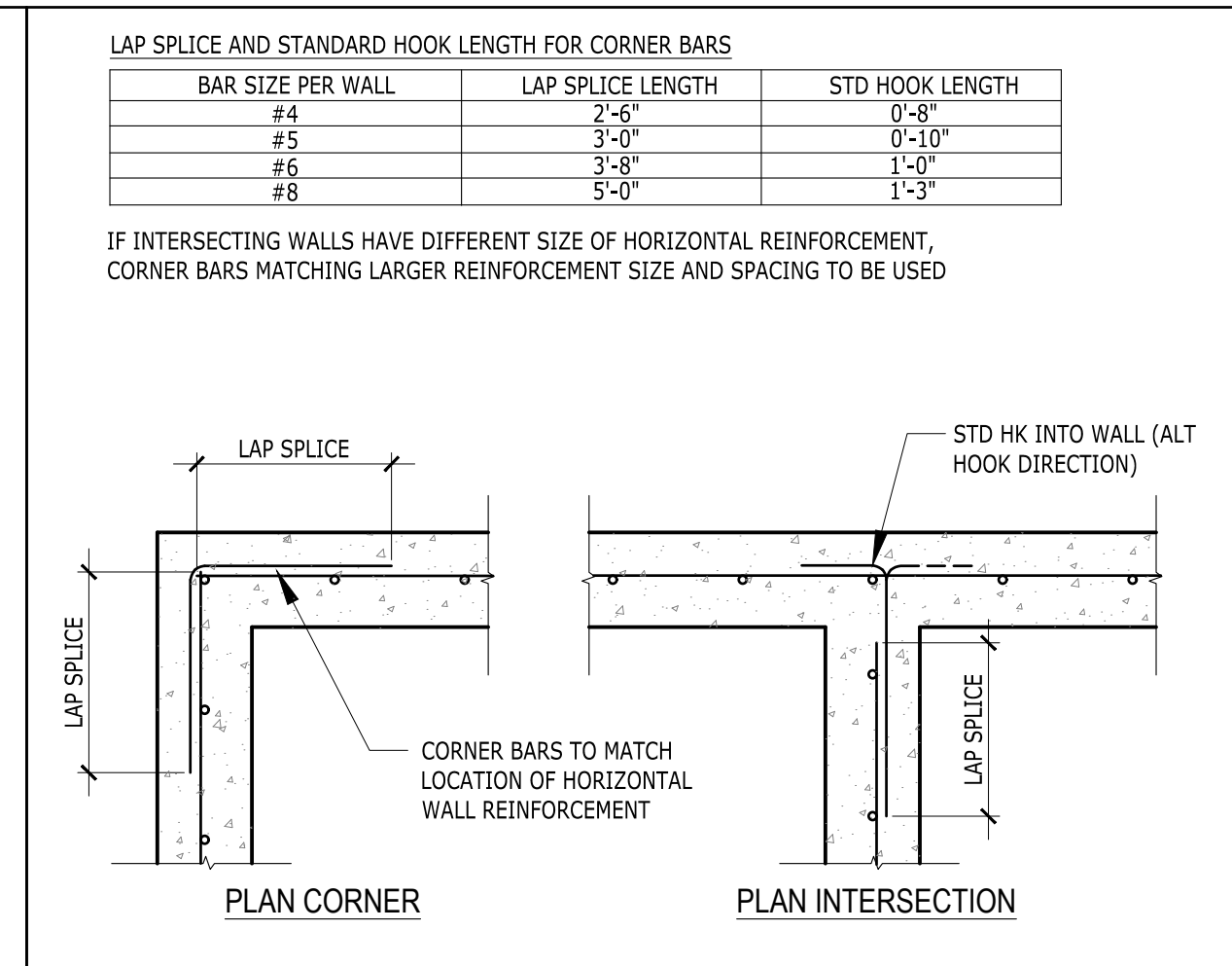
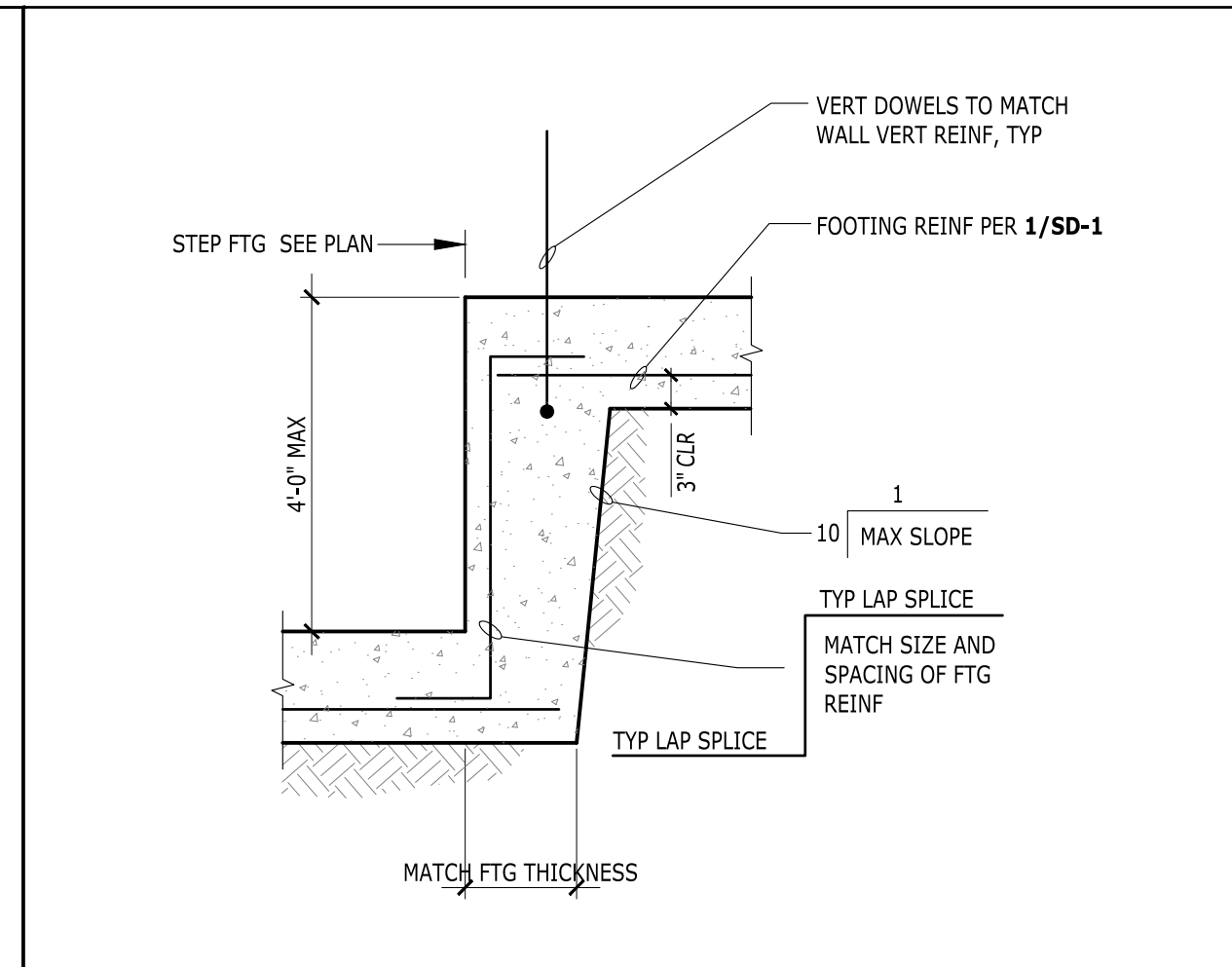
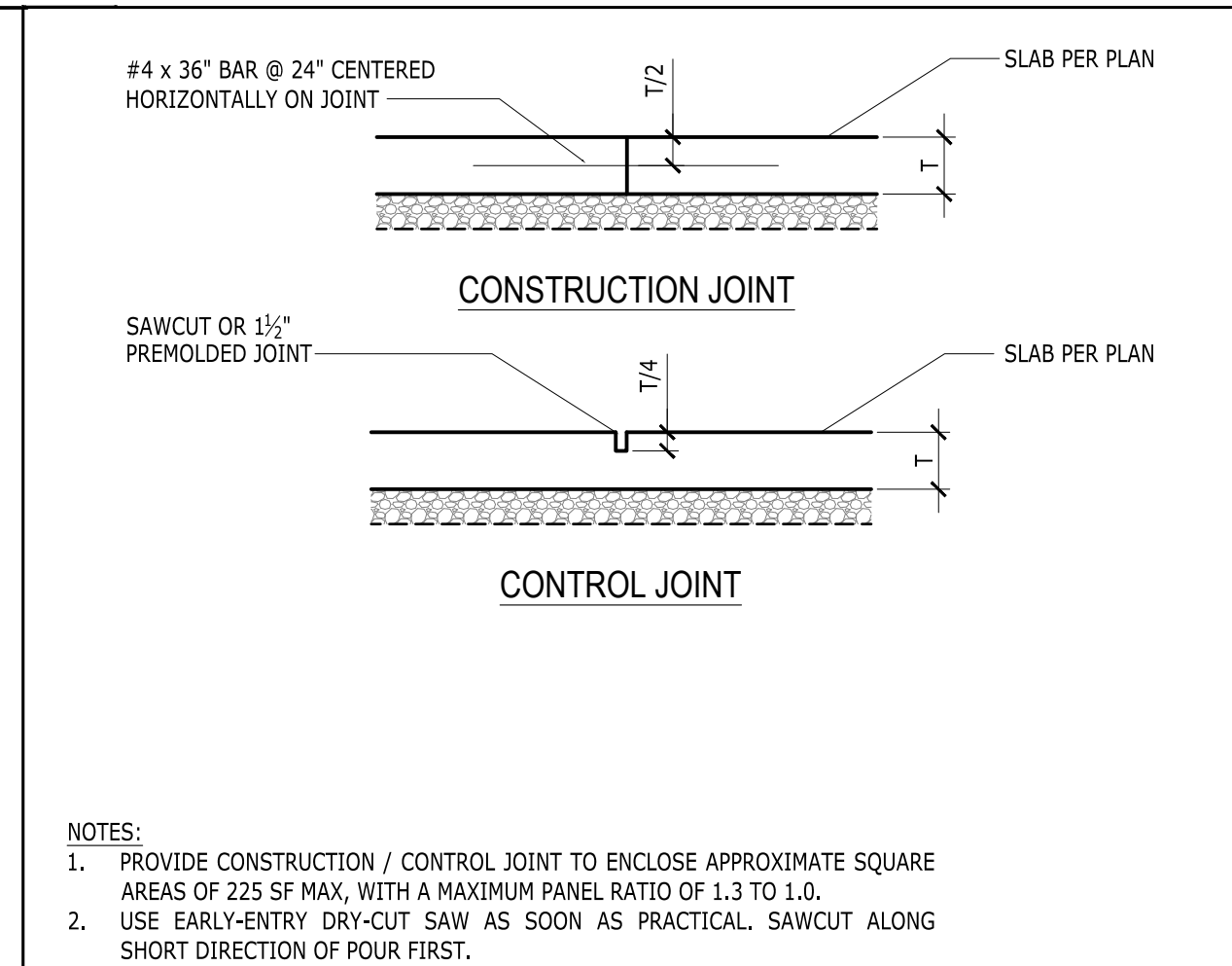
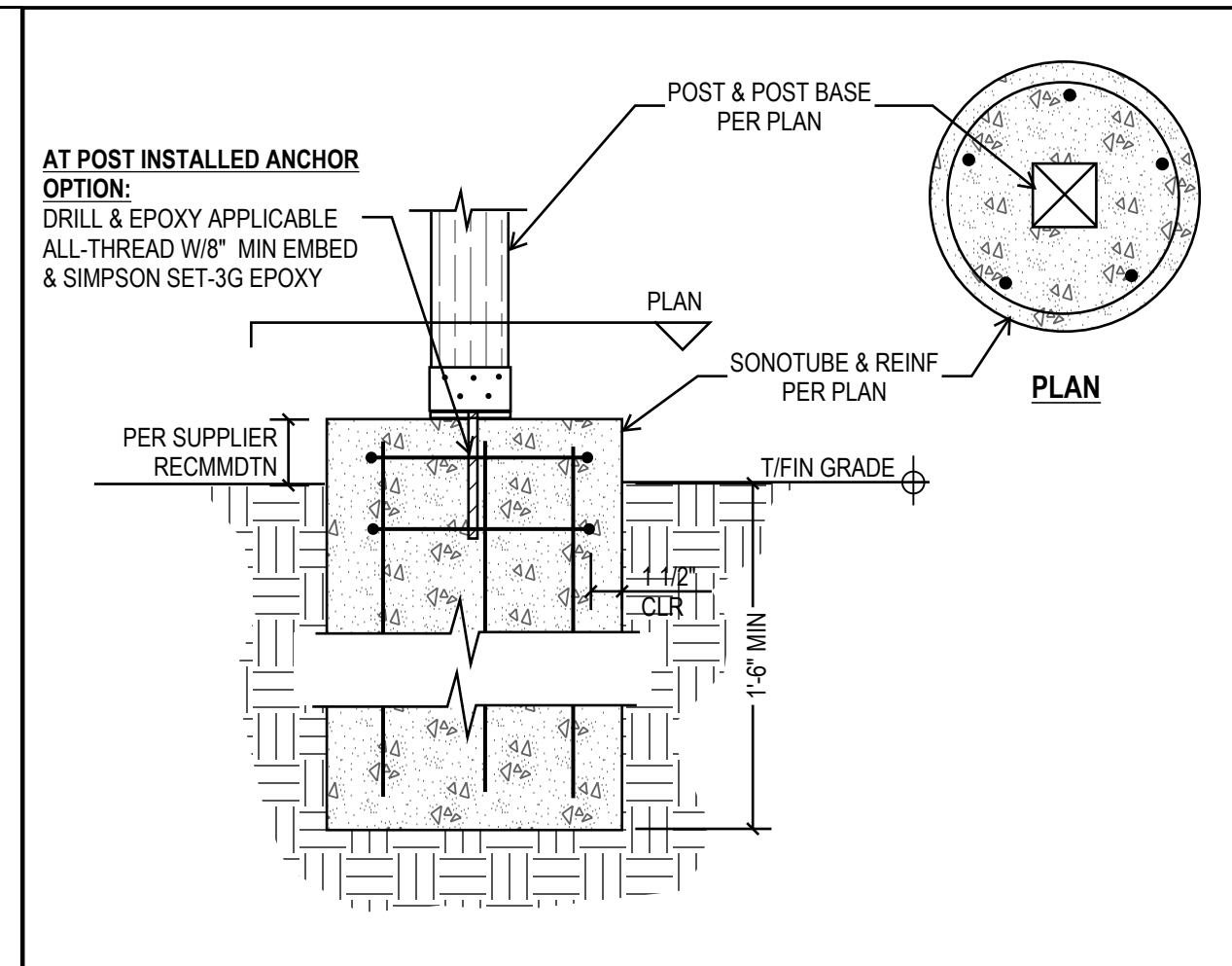
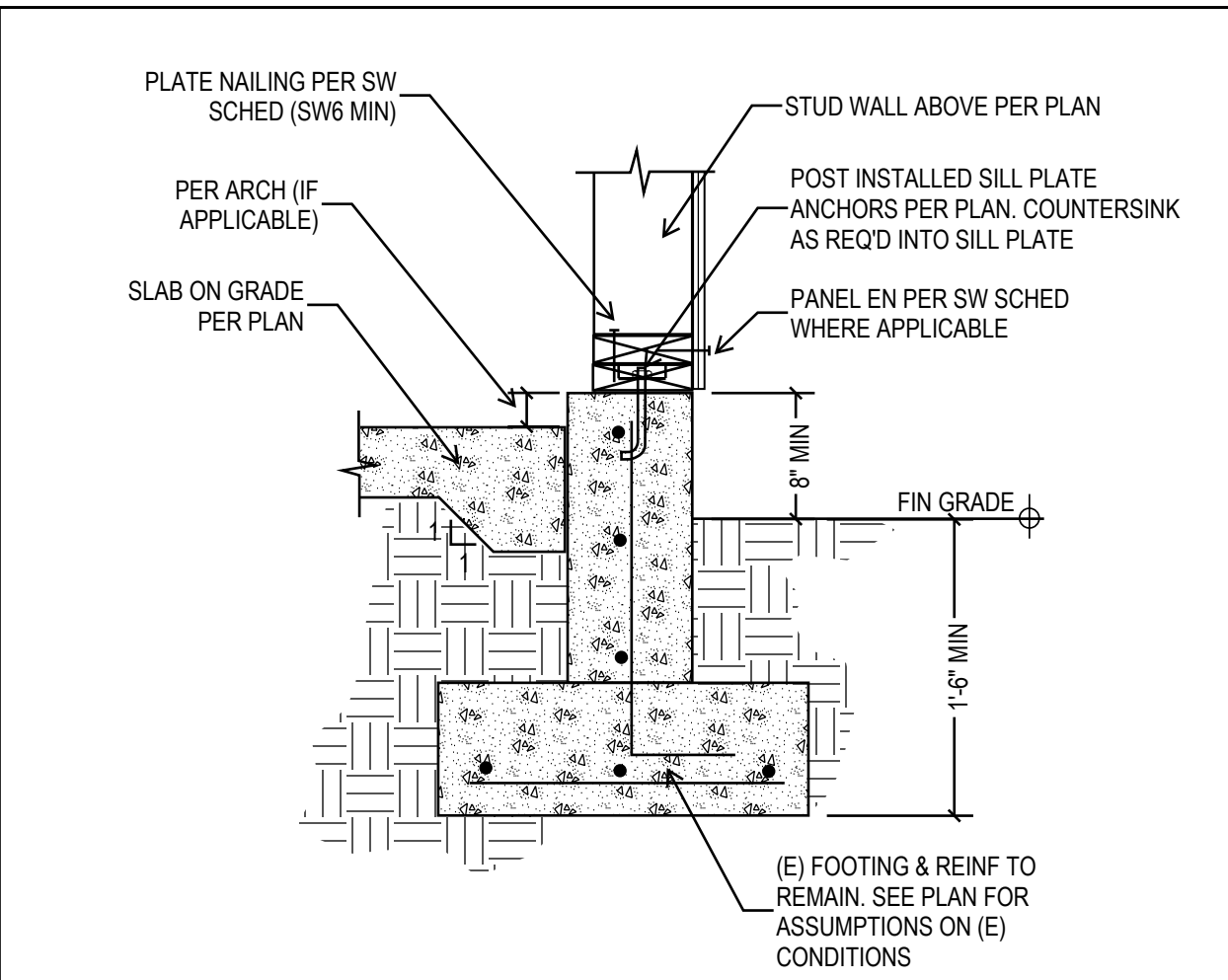
DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 10/19/2023

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

DESCRIPTION	ROOF FRAMING PLAN	SHEET S-4
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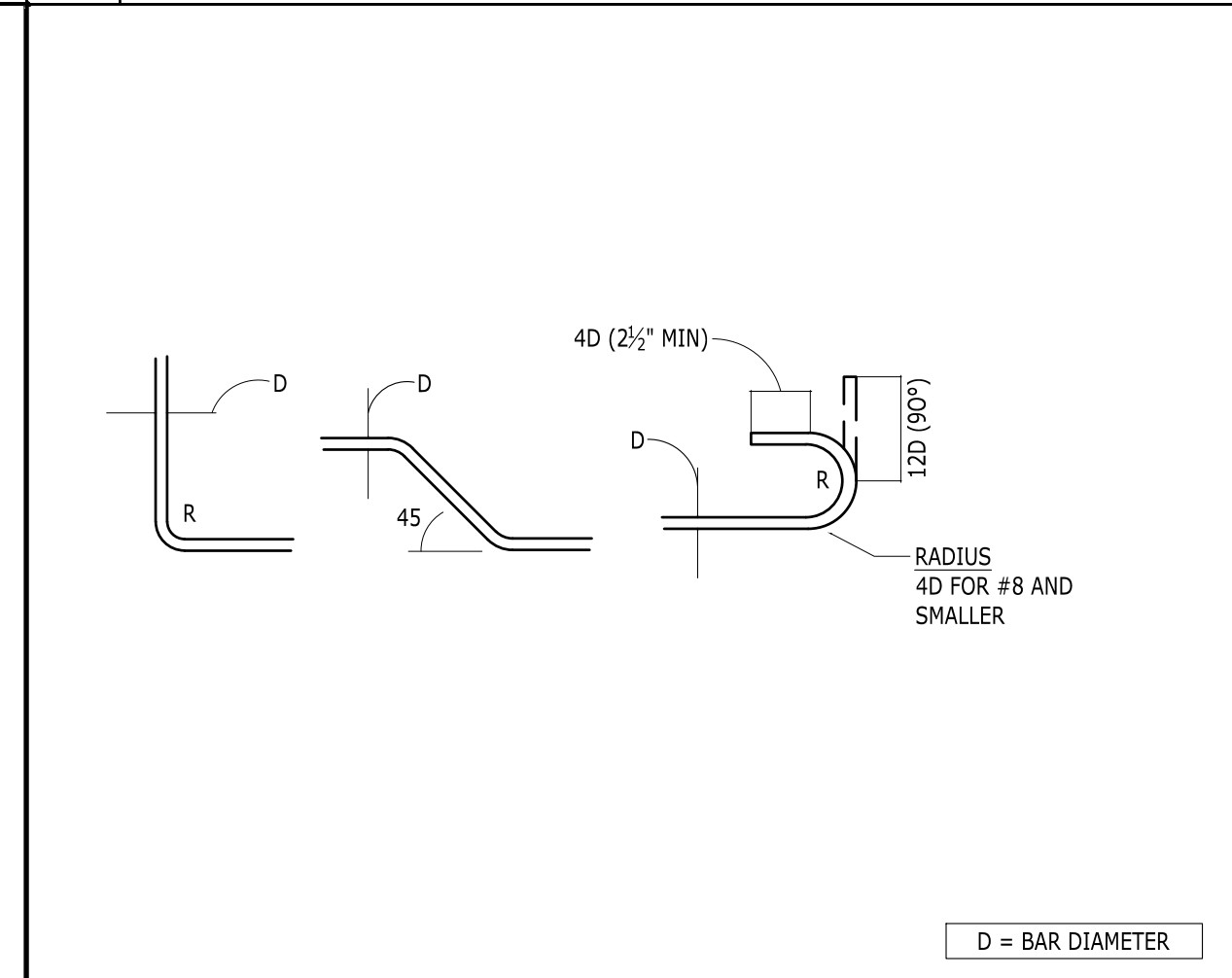
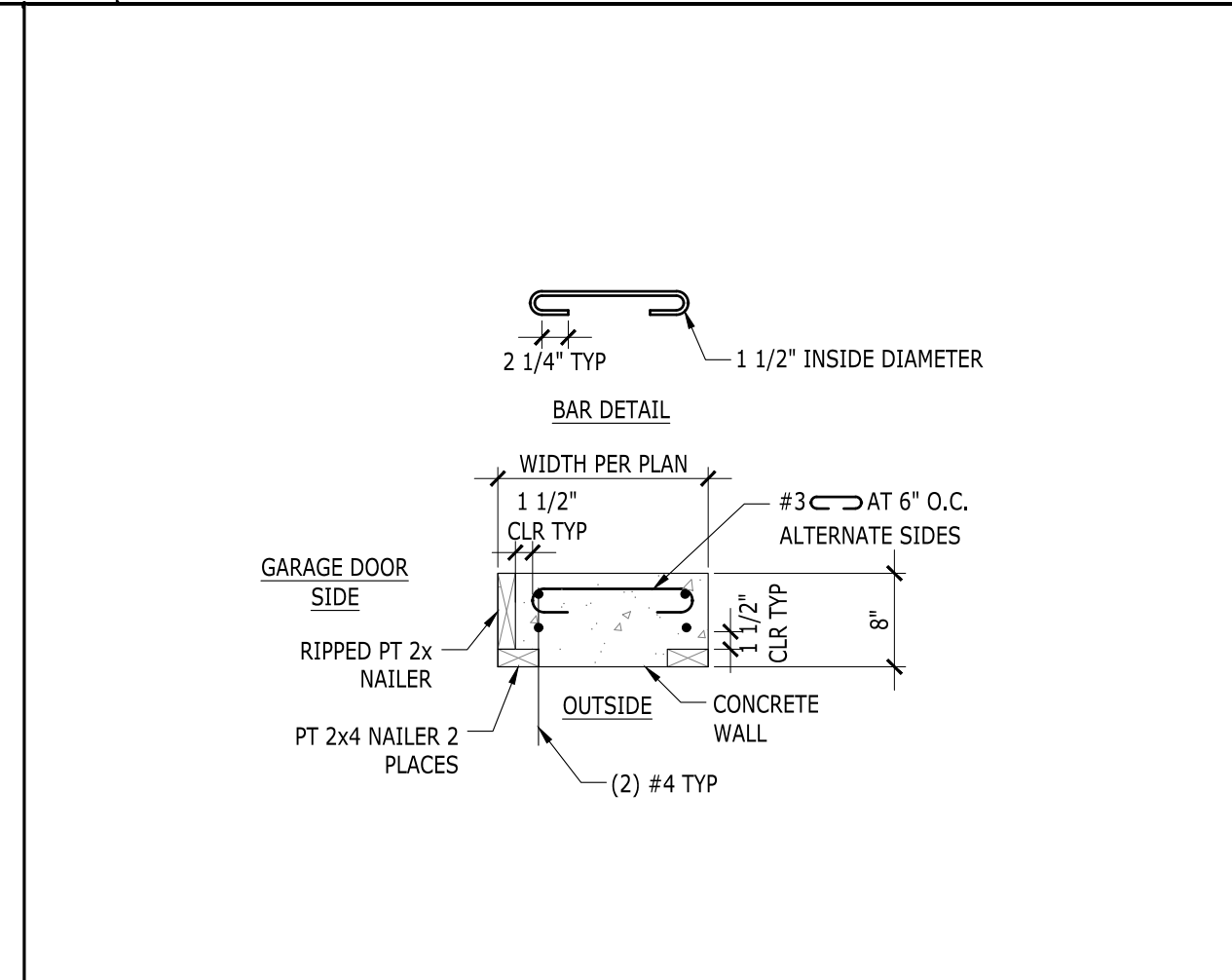
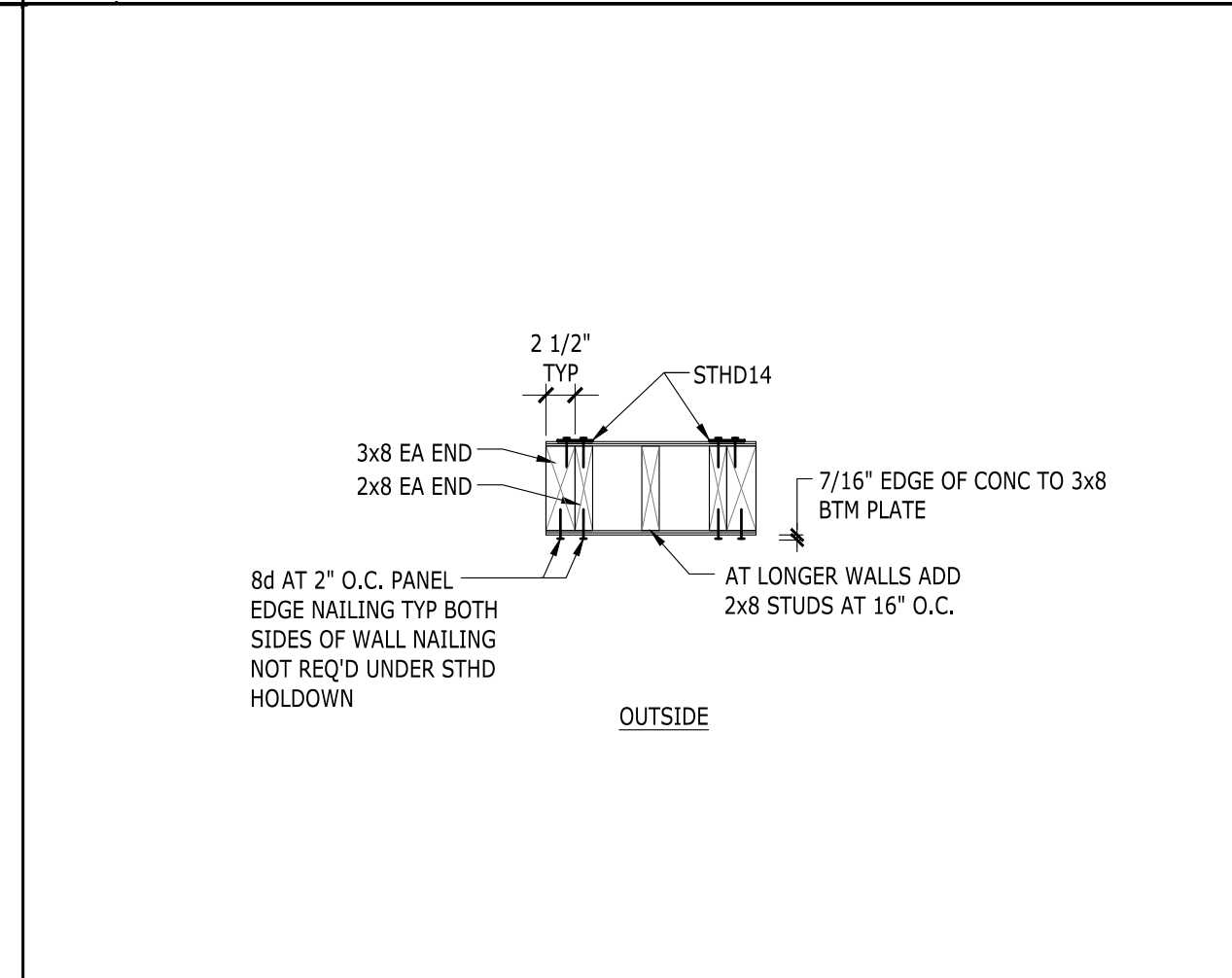
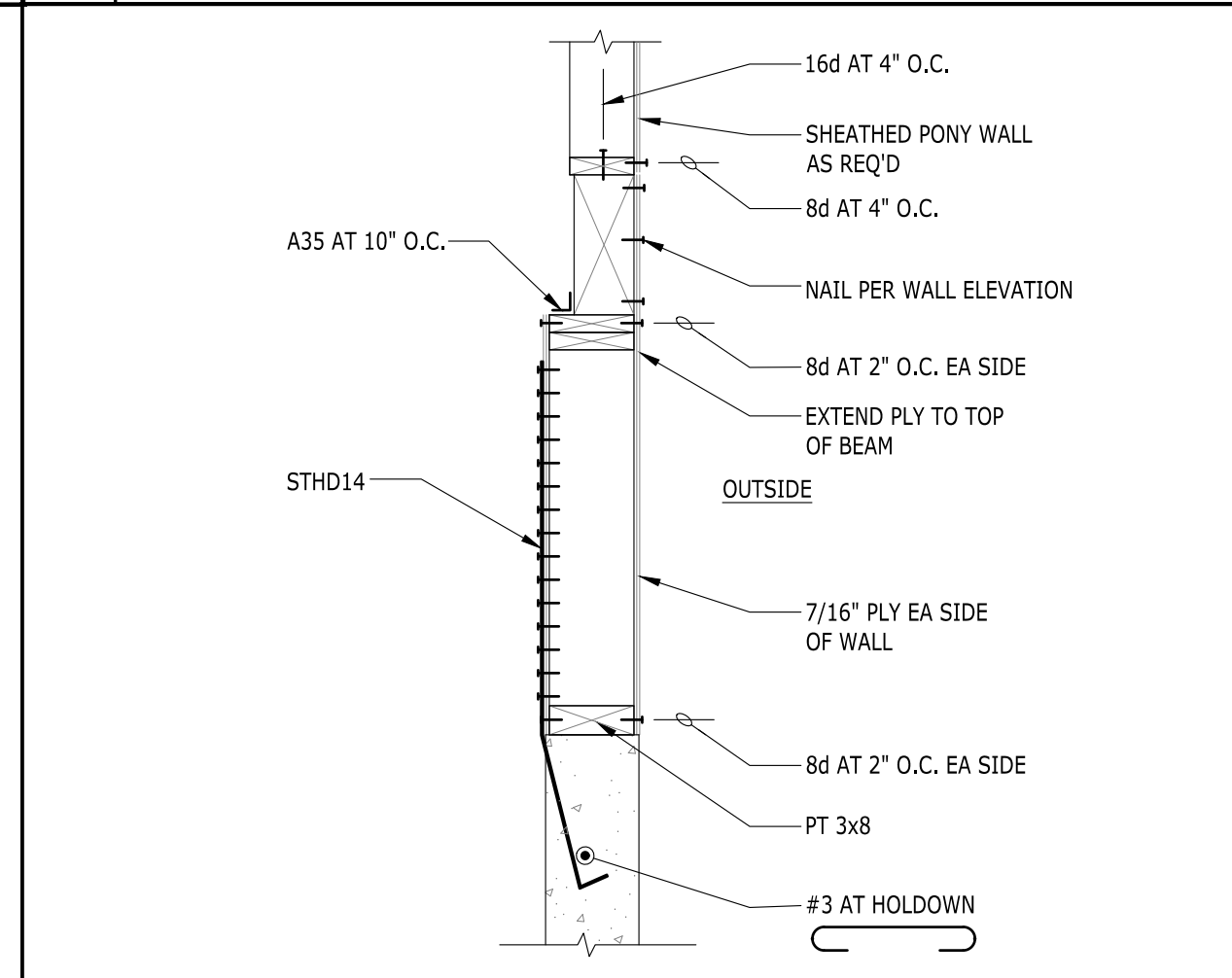
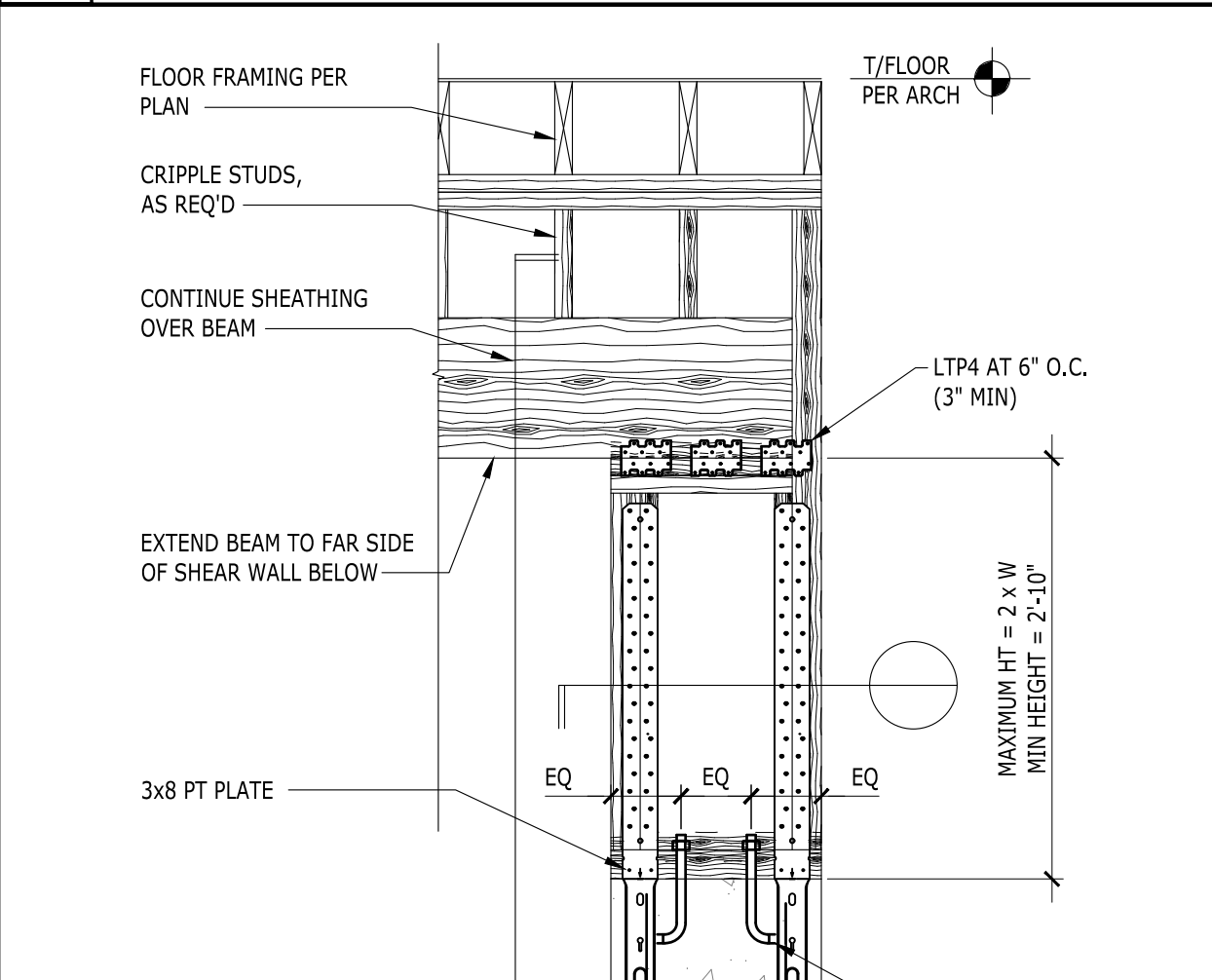
1 PERIMETER FOOTING WITH SLAB ON GRADE

2 SONOTUBE FOOTING

3 CONSTRUCTION/CONTROL JOINT DETAILS

4 STEP AT WALL FOOTING

5 CORNER BARS AT CONCRETE WALLS



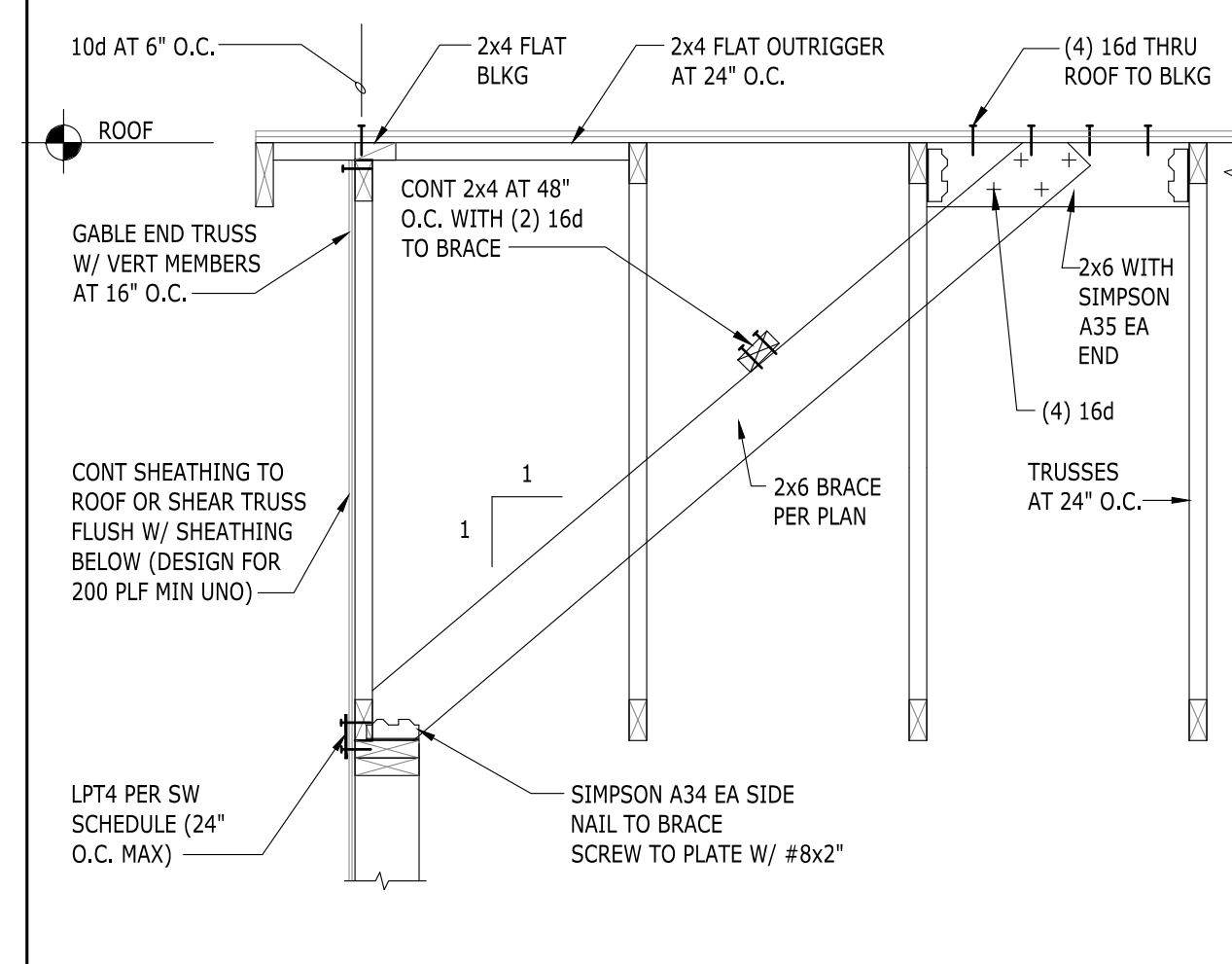
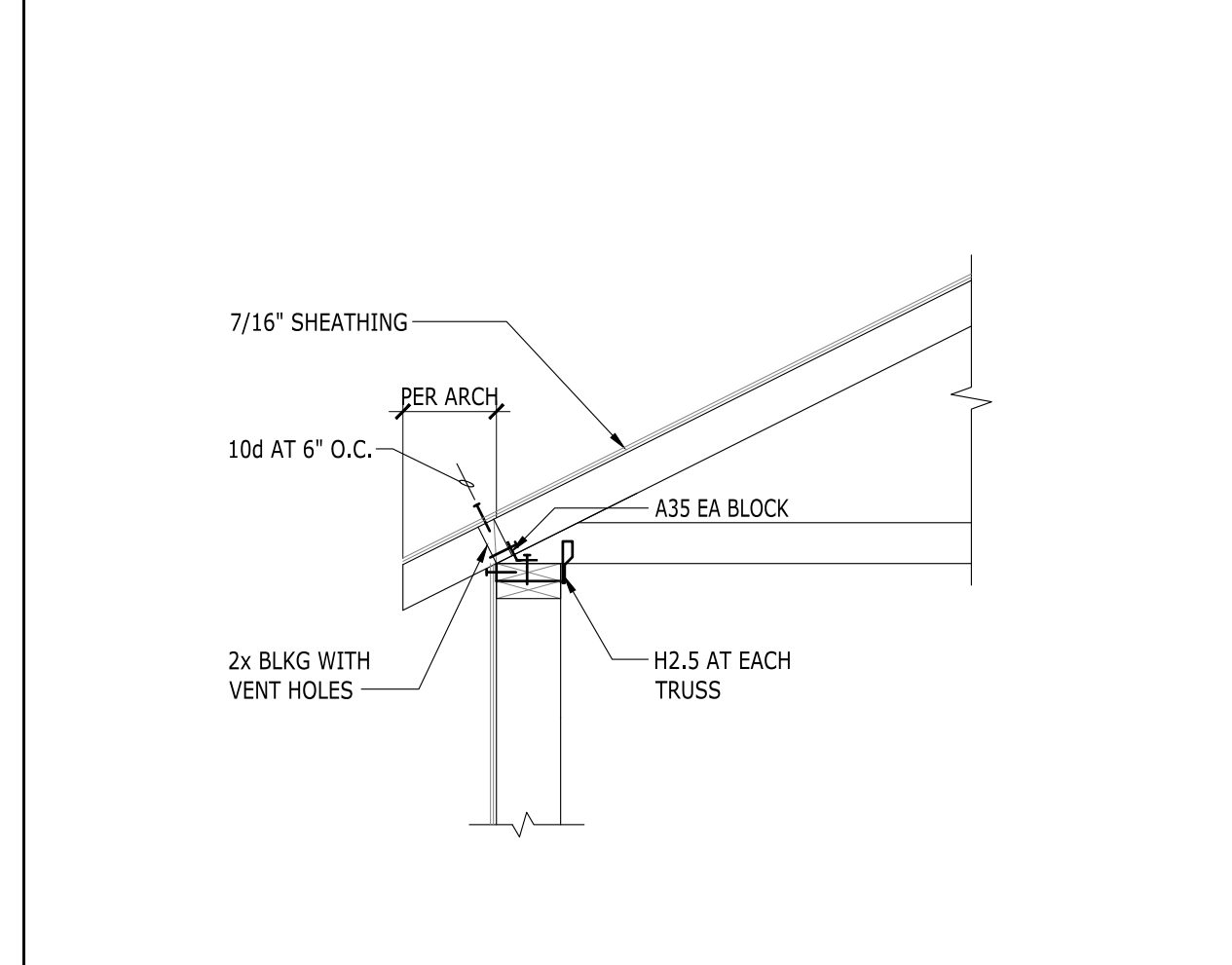
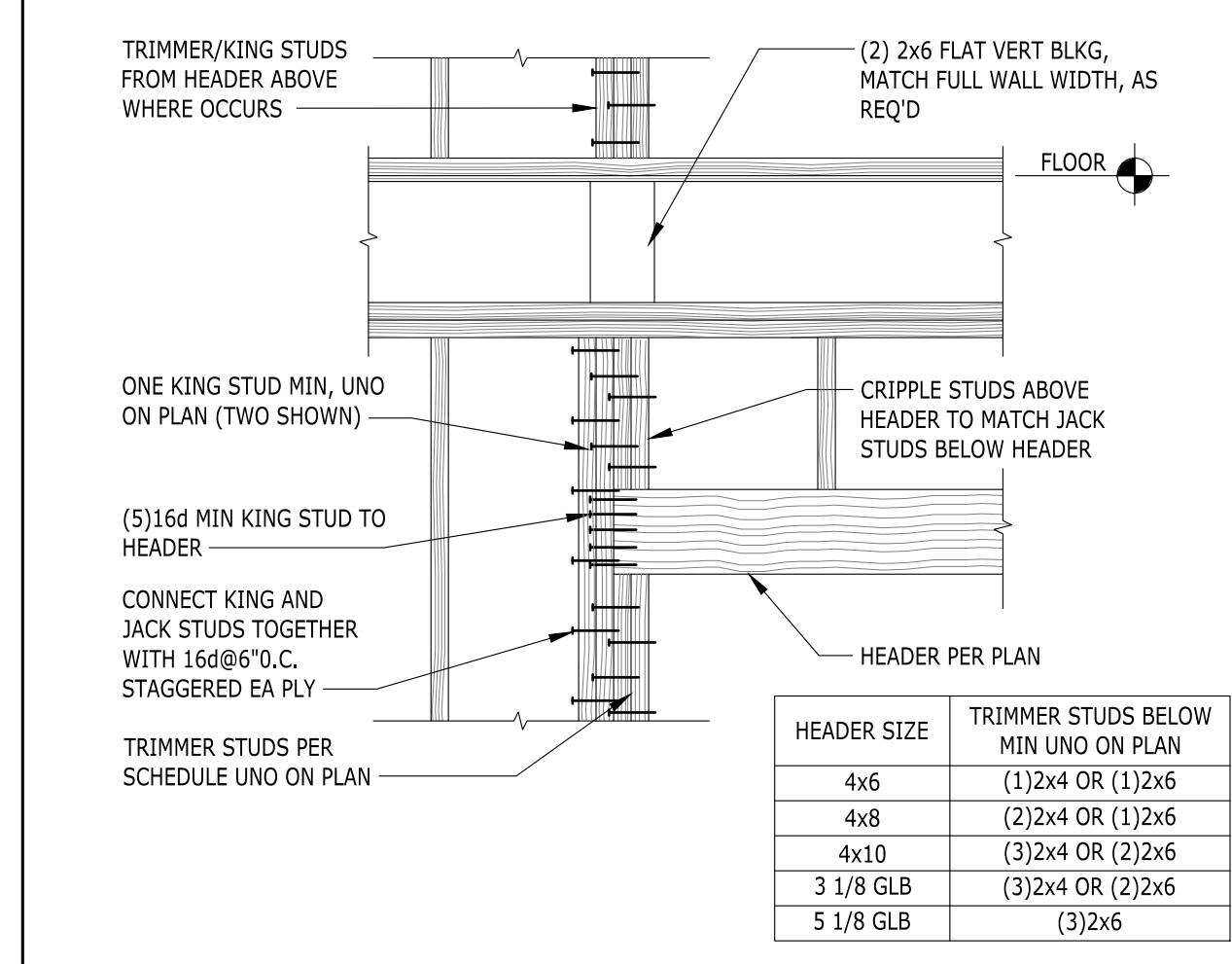
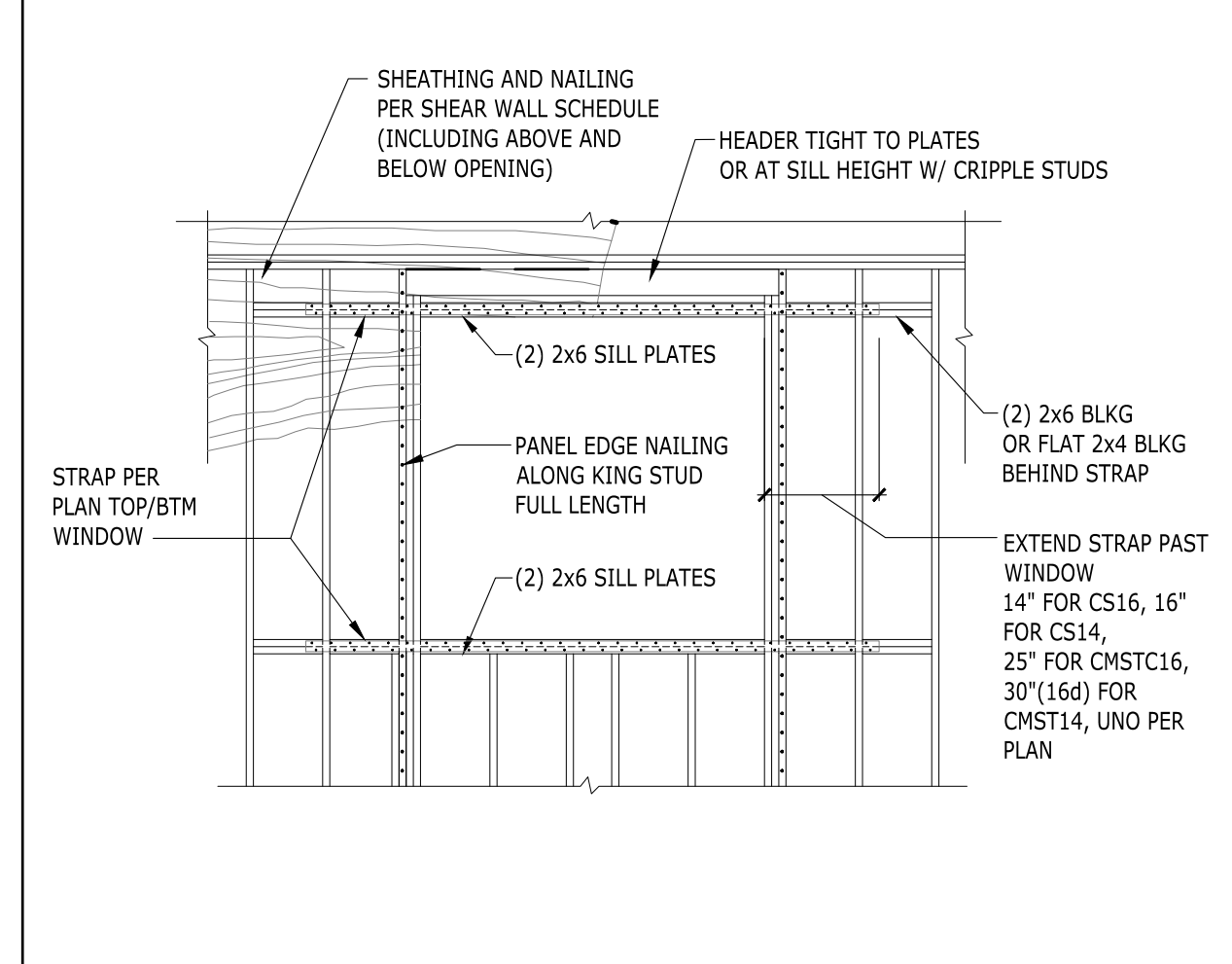
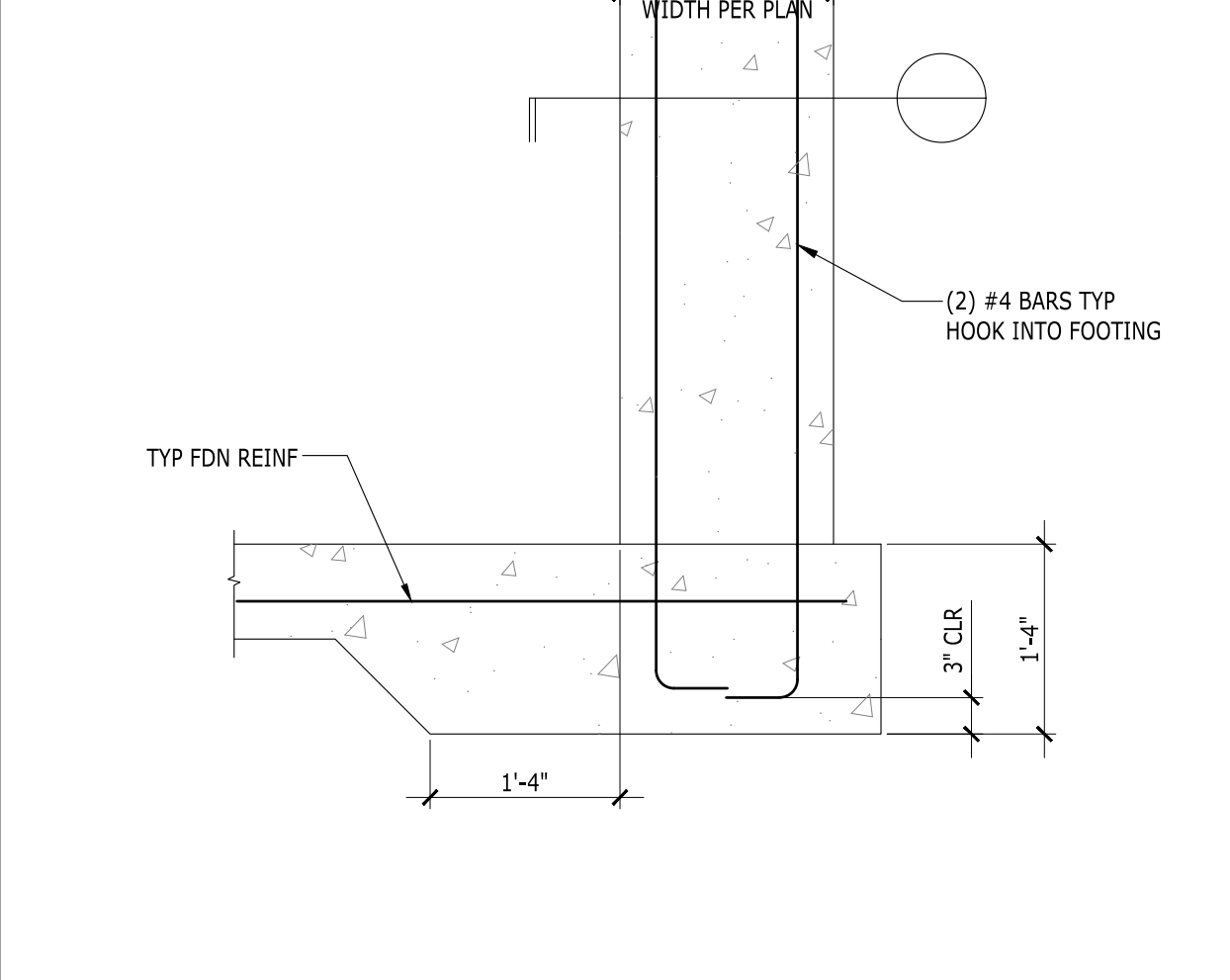
6 HALF-HEIGHT CONCRETE WALL SECTION

7 HALF-HEIGHT CONCRETE WALL FRAMING

8 HALF-HEIGHT CONCRETE WALL FRAMING

9 HALF-HEIGHT CONCRETE WALL REINF

10 BAR BEND AND HOOK DETAILS



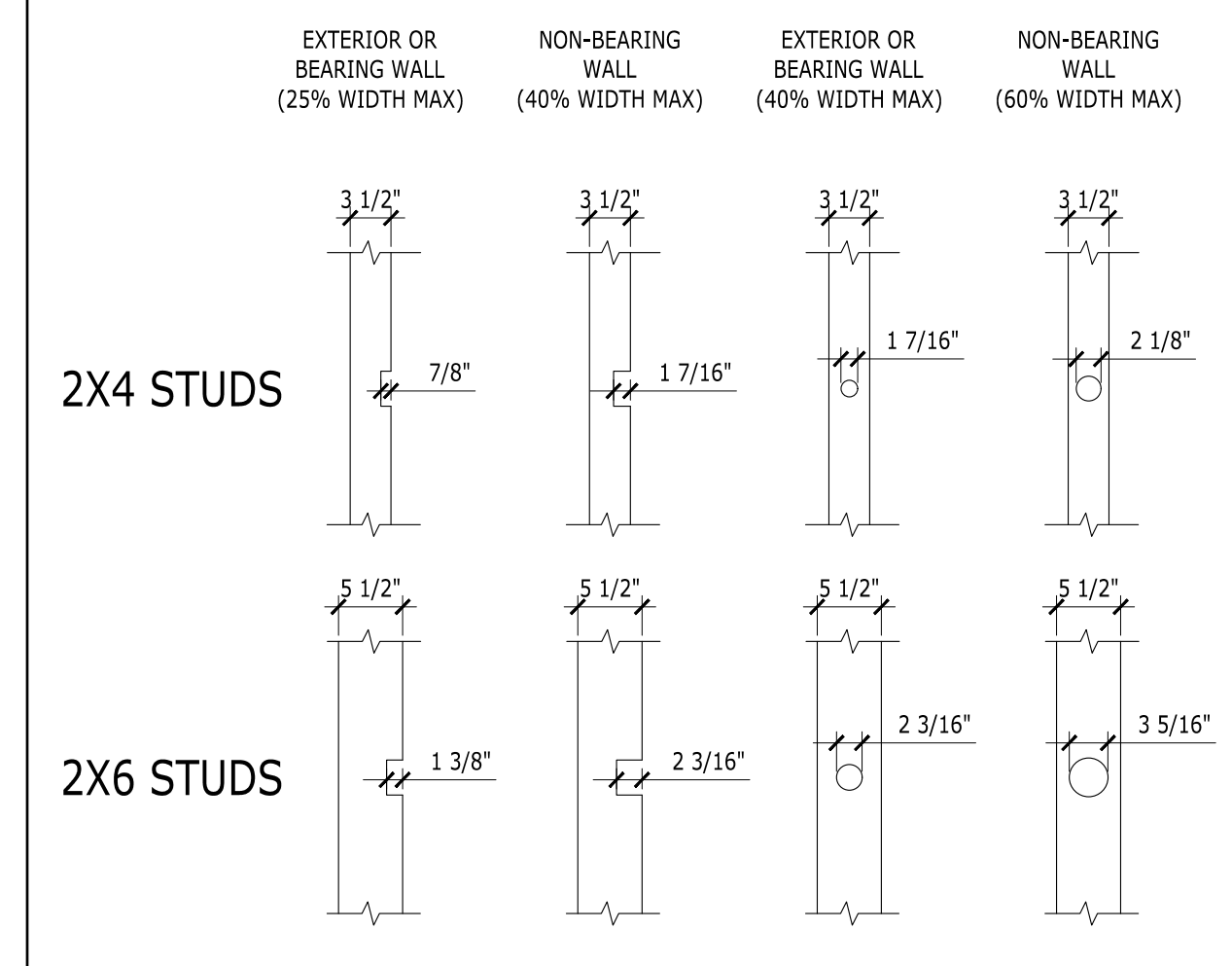
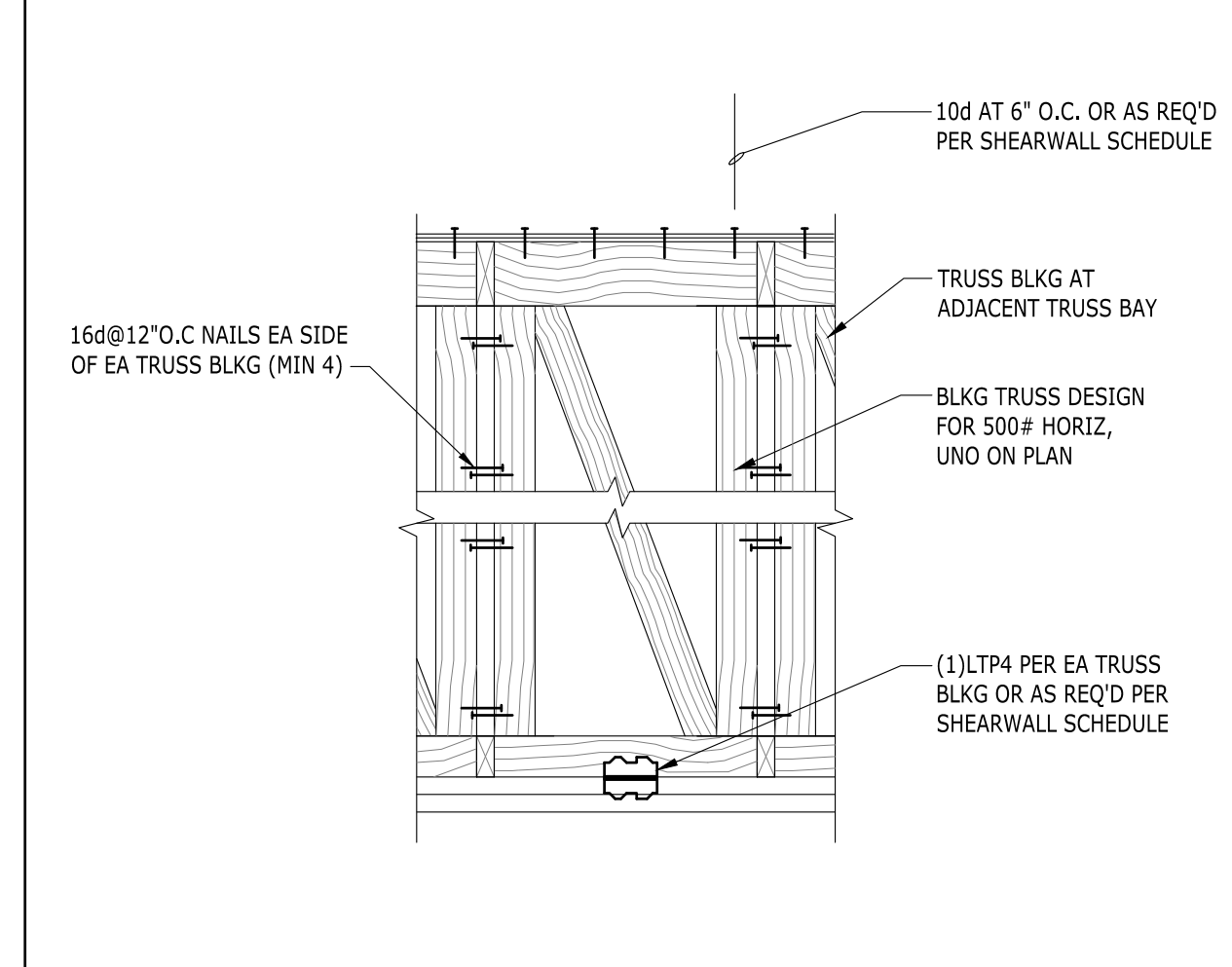
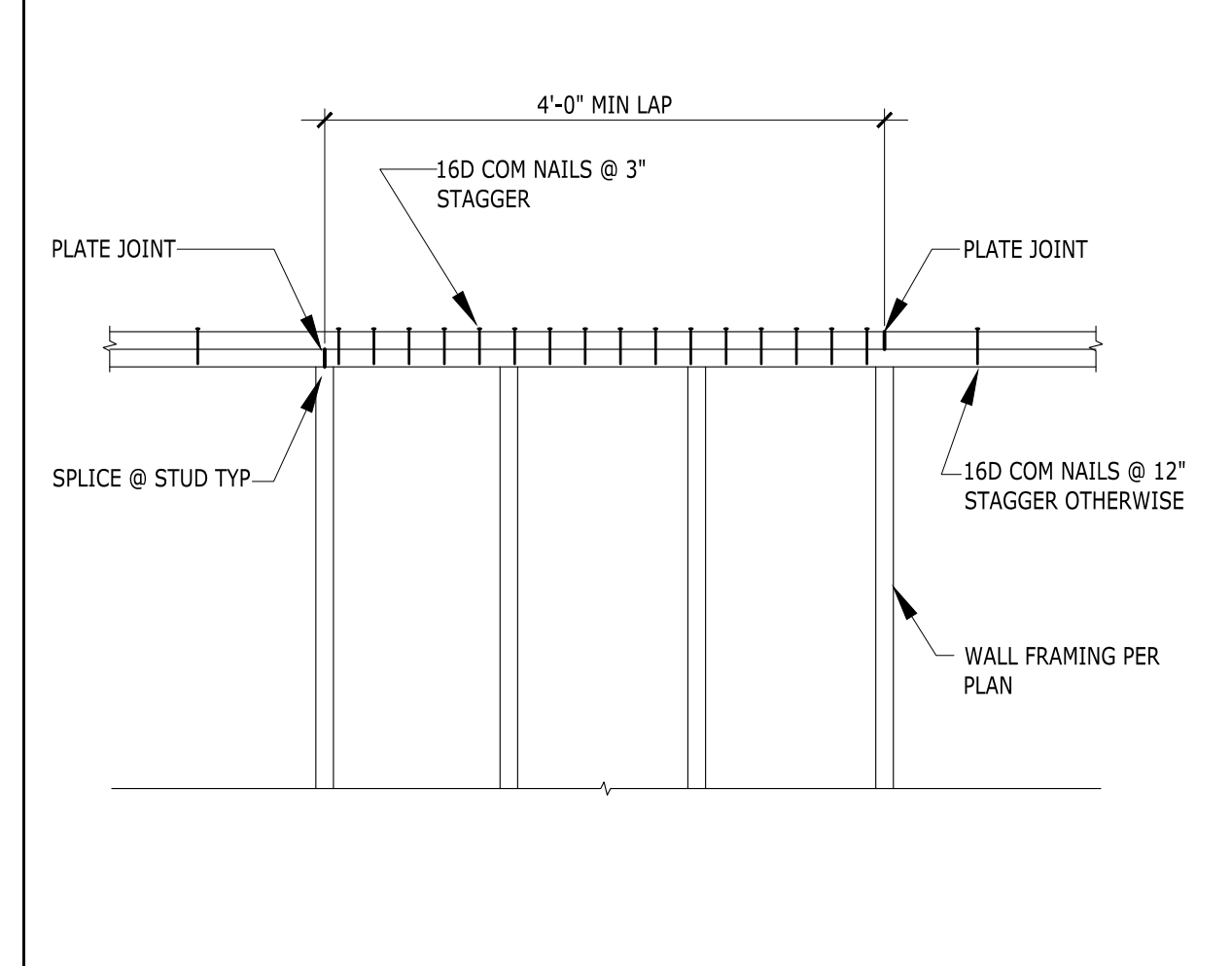
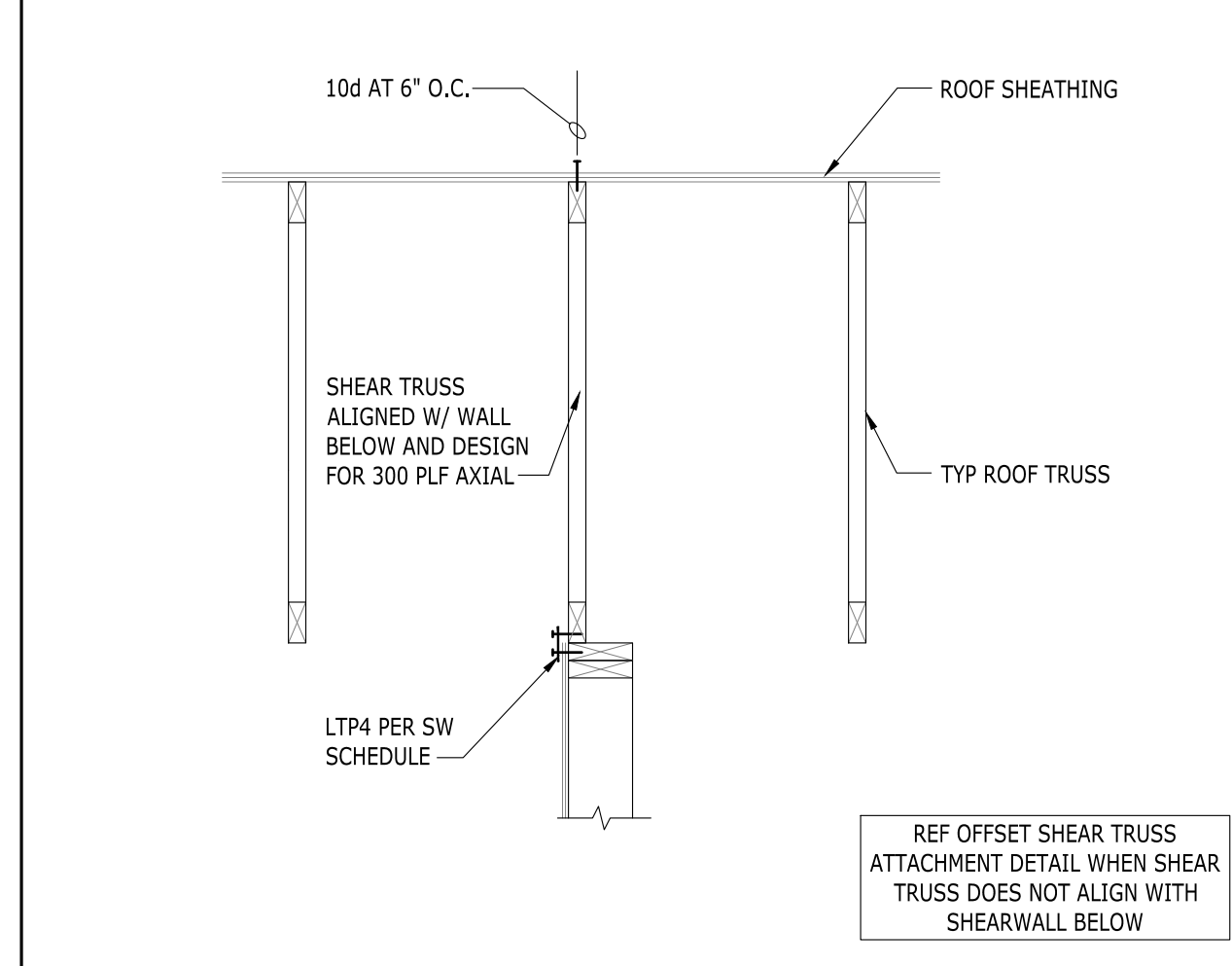
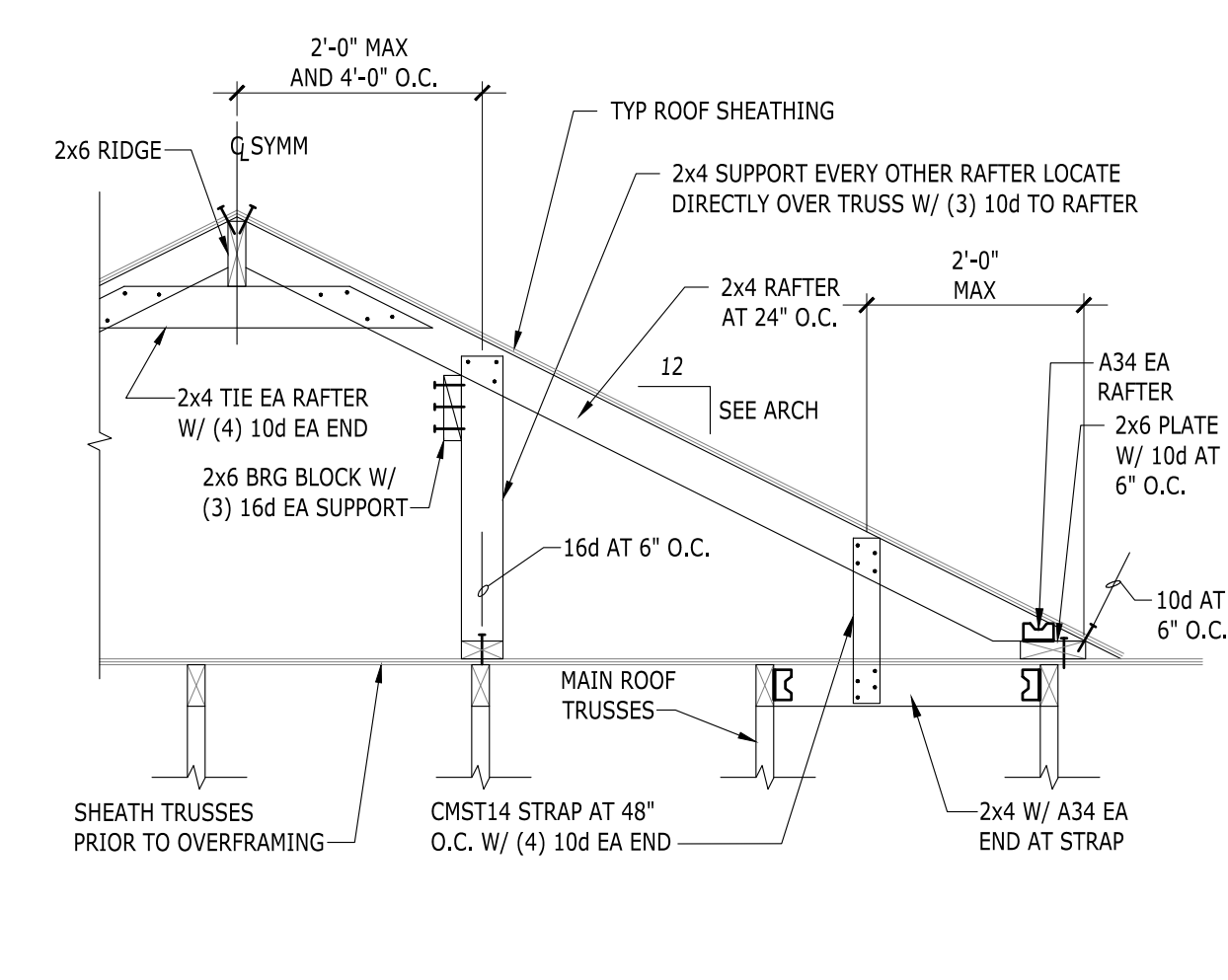
11 HALF-HEIGHT CONCRETE WALL

12 STRAPS AROUND WINDOWS

13 TYPICAL HEADER FRAMING

14 HIP ROOF FRAMING

15 GABLE END FRAMING



16 ROOF OVERFRAMING

17 PARALLEL TRUSS AT SHEAR WALL

18 ELEVATION TOP PLATE SPLICE

19 TYPICAL TRUSS BLOCKING

20 ALLOWABLE STUD NOTCHING AND BORING



LONGITUDE
ONE TWENTY
ENGINEERING & DESIGN

REVISIONS	DESCRIPTION	DATE	BY

PROJECT NAME
MAKSIMCHUK GARAGE
7847 SE 40TH ST
MERCER ISLAND, WA 98040

PROJECT NUMBER
S230918-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 10/19/2023

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

STRUCTURAL DETAILS

SHEET SD-1