GENERAL STRUCTURAL NOTES

(THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE PLANS.)

A. GENERAL

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, AS AMENDED BY LOCAL JURISDICTION.

2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM HIS WORK. STRUCTURAL DESIGN OF THE BUILDING IS BASED ON RESISTANCE TO DEAD LOADS. CODE SPECIFIED LATERAL LOADS, AND MAXIMUM EXPECTED SERVICE LOADS. NO CONSIDERATION HAS BEEN GIVEN TO LOADS WHICH WILL BE INDUCED BY ERECTION PROCEDURES. THE CONTRACTOR SHALL VERIFY, TO THE SATISFACTION OF HIMSELF AND THE OWNER, THE ABILITY OF THE STRUCTURE TO RESIST ALL ERECTION LOADS WITHOUT EXCEEDING THE ALLOWABLE STRESSES OF THE MATERIALS USED. WHERE ERECTION LOADS WOULD OVERSTRESS THE STRUCTURE, THE CONTRACTOR SHALL SUBMIT DESIGN DOCUMENTS FOR TEMPORARY BRACING AND STRENGTHENING, INCLUDING FABRICATION AND ERECTION DRAWINGS, TO THE ARCHITECT FOR REVIEW. THESE DOCUMENTS SHALL BEAR THE SEAL AND SIGNATURE OF A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF WASHINGTON. THE CONTRACTOR SHALL PROVIDE, INSTALL AND IF NECESSARY, REMOVE SUCH TEMPORARY WORK AS REQUIRED.

4. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

6. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

7. INSPECTIONS: INSPECTIONS OF THE WOOD FRAMING, THE STEEL REBAR AND WOOD FORMS FOR CONCRETE FOOTINGS & FOUNDATIONS, AND CONCRETE SLABS ARE REQUIRED PER IBC SECTION 109.3.

8. PRE-MANUFACTURED, PRE-ENGINEERED STRUCTURAL COMPONENTS SHALL BE DESIGNED BASED ON THE CRITERIA PRESENTED IN THE CONTRACT DOCUMENTS. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE, TEMPORARY AND PERMANENT BRACING AND ALL NECESSARY CONNECTIONS, INCLUDING CONNECTIONS TO THE PRIMARY STRUCTURE, NOT SPECIFICALLY CALLED OUT ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL INDICATE THE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON THE PRIMARY STRUCTURE. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED AS NOTED PREVIOUSLY.

B. DESIGN CRITERIA

 DESIGN LOADS ROOF SNOW LOAD RESIDENTIAL FLOOR LIVE LOAD BEDROOM FLOOR LIVE LOAD EXTERIOR BALCONY & DECK LIVE LOAD 	25 PSF 40 PSF 30 PSF 60 PSF
- WIND (IBC)	110 MPH (LRFD) EXPOSURE B, Kzt = 1.0
- EARTHQUAKE (ASCE7)	SITE CLASS D SEISMIC USE GROUP 1 (Ie = 1.0) SEISMIC DESIGN CATEGORY D Ss = 1.435 g, S1 = 0.498 g Sds = 1.148 g EQUIVALENT LATERAL FORCE PROCEDURE
 ALLOWABLE SOIL PRESSURE ALLOWABLE LATERAL PRESSURE ALLOWABLE PASSIVE PRESSURE COEFFICIENT OF FRICTION TRAFFIC SURCHARGE PRESSURE SEISMIC SURCHARGE PRESSURE 	300 PCF (F.S. OF 1.5 INCLUDED) 0.4 (F.S. OF 1.5 INLCUDED) 70 PSF (AS APPLICABLE)

FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE E.O.R. FOR POSSIBLE FOUNDATION REDESIGN.

2. LATERAL FORCE RESISTANCE SYSTEM LIGHT-FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS, R = 6.5

С.	FOUNDATION
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1. FOUNDATION EXCAVATION, BACKFILL AND COMPACTION SHALL CONFORM TO SPECIFICATION REQUIREMENTS. THIS CONSTRUCTION WORK, INCLUDING DRAINAGE, SHORING AND SUCH OTHER RELATED WORK AS REQUIRED, SHALL BE CONDUCTED BY THE CONTRACTOR UNDER THE OBSERVATION AND DIRECTION OF THE GEOTECHNICAL ENGINEER.

2. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. MATERIAL TO BE COMPACTED TO 95% MINIMUM OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.

3. FOOTINGS MAY BE POURED IN NEAT EXCAVATIONS PROVIDED SIZE IS INCREASED 3" AT EACH INTERFACE WITH SOIL.

4. ALL FOOTING EXCAVATIONS SHALL BE HAND CLEANED PRIOR TO PLACING CONCRETE.

5. ALL ABANDONED FOOTINGS, UTILITIES, ETC. THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.

6. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, AND SHORING REQUIRED TO SAFELY RETAIN EXCAVATIONS.

7. BACKFILL BEHIND ALL WALLS WITH WELL DRAINING, GRANULAR FILL MATERIAL, AND PROVIDE PERFORATED PIPE DRAINS AS DESCRIBED IN THE SOILS REPORT. BACKFILL BEHIND WALLS SHALL NOT BE PLACED BEFORE THE WALL IS PROPERLY SUPPORTED BY THE FLOOR SLAB, OR TEMPORARY BRACING. ALL FOOTINGS SHALL BE CENTERED BELOW CENTERLINE OF COLUMNS OR WALLS ABOVE, UNLESS NOTED OTHERWISE.

D. CONCRETE

1. ULTIMATE STRENGTH DESIGN PER INTERNATIONAL BUILDING CODE AND ACI 318-14

3. MANUFACTURED LUMBER SHALL BE AS MANUFACTURED BY TRUS JOIST MacMILLAN OR APPROVED EQUAL. REQUESTS FOR APPROVAL AS EQUAL WILL REQUIRE SUBMITTAL OF ICC-ES 2. CONCRETE FOR FOOTINGS AND SLABS-ON-GRADE SHALL CONFORM TO A 28- DAY STRENGTH OF EVALUATION REPORT EQUIVALENT TO ESR-1387 FOR PARALLEL STRAND LUMBER (PSL), LAMINATED f'c = 2500 PSI, SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD, AND STRAND LUMBER (LSL), AND LAMINATED VENEER LUMBER (LVL). THE MINIMUM ALLOWABLE DESIGN SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. CONCRETE EXPOSED TO EARTH OR WEATHER SHALL HAVE A 28-DAY STRENGTH OF f'c = 3000 psi. THE MINIMUM AMOUNTS OF VALUES ARE AS FOLLOWS: CEMENT AND MAXIMUM AMOUNTS OF WATER MAY BE CHANGED IF A CONCRETE DESIGN MIX IS SUBMITTED TO THE ENGINEER AND THE BUILDING OFFICIAL FOR APPROVAL TWO WEEKS PRIOR TO PLACEMENT OF CONCRETE. THE CONCRETE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATES, WATER AND ADMIXTURES AS WELL AS THE WATER-CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318, SECTION 5.3. CONTRACTOR MAINTAINS RESPONSIBILITY FOR SPECIFIED PERFORMANCE OF CONCRETE PRODUCTS. ALL CONCRETE EXPOSED TO FREEZING TEMPERATURES 4. SHEATHING SHALL BE APA PERFORMANCE RATED PANELS PER APA "PLYWOOD DESIGN WHILE CURING AND ALL CONCRETE PERMANENTLY EXPOSED TO WEATHER SHALL BE SPECIFICATION", INCLUDING APPLICABLE SUPPLEMENTS, UNLESS NOTED OTHERWISE. PLYWOOD AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO IBC SECTION 1904.2. TOTAL AIR PANELS SHALL BE GRADE C-D AND ALSO CONFORM TO DOC PS-1 OR PS-2. ALL PANELS SHALL BE CONTENT SHALL BE IN ACCORDANCE WITH TABLE 1904.2.1 OF THE INTERNATIONAL BUILDING CODE. IDENTIFIED AS EXPOSURE 1 UNLESS NOTED OTHERWISE. PANEL RATING TO BE AS FOLLOWS NO ADMIXTURES, OTHER THAN FOR AIR-ENTRAINMENT AS NOTED ABOVE, SHALL BE USED WITHOUT UNLESS NOTED OTHERWISE: PRIOR REVIEW BY THE STRUCTURAL ENGINEER. ALL CONCRETE IN ELEVATED STRUCTURAL SLABS AND BEAMS SHALL BE POURED MONOLITHICALLY UNLESS SHOWN OTHERWISE OR APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

3. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY NOTED ON THE DRAWINGS AS GRADE 40, fy = 40,000 PSI. WELDED WIRE FABRIC: ASTM A82 AND ASTM A185, SPLICE WITH AT LEAST ONE FULL MESH. PLACE AT MID-DEPTH, OR SLIGHTLY ABOVE, OF SLAB. MATERIAL TO BE SUPPLIED IN FLAT SHEETS.

4. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315-18. LAP ALL CONTINUOUS REINFORCEMENT PER NOTE D.5. PROVIDE CORNER BARS AT ALL WALL INTERSECTIONS. LAP CORNER BARS PER NOTE D.5. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

5. REINFORCING STEEL LAPS AND EMBEDMENT SHALL BE AS NOTED BELOW, UNLESS NOTED OTHERWISE, ALL HOOKS SHALL BE "STANDARD" IN ACCORDANCE WITH ACI 318. REINFORCING SHALL NOT BE TACK WELDED:

- DEVELOPMENT LENGTH	48 B
- DEVELOPMENT LENGTH, top bar*	64 B
- LAP SPLICE LENGTH	64 B
- LAP SPLICE LENGTH, top bar*	80 B

*TOP BARS ARE HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

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

- FOOTING AND OTHER UNFORMED SURFACE - FORMED SURFACE EXPOSED TO EARTH (i.e. WALL BELOW GROUND) OR WEATHE
- SLAB AND WALL (INTERIOR FACE) - CONCRETE NOT EXPOSED TO WEATHER OR
- PRIMARY REINFORCEMENT, TIES, STIRRUP,

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

- 6" WALLS #4 @ 16" HORIZ. #4 @ 18" VERTICAL 1 CURTAIN @ CENTER - 8" WALLS #5 @ 18" HORIZ. #5 @ 18" VERTICAL 1 CURTAIN @ CENTER

8. EPOXY GROUTED ITEMS SPECIFIED ON THE DRAWINGS SHALL BE GROUTED WITH SIMPSON SET-XP ADHESIVE BY SIMPSON STRONG TIE, PER ESR-2508, FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

(THIS IS A	A COMPREHENSIVE LIST OF ABBREVIATIONS, SOME OF	WHICH MAY	Y NOT APPEAR ON THESE DRAWING	S.)	
AB	ANCHOR BOLT	CL	CENTERLINE	(E)	EXISTING
ACI	AMERICAN CONCRETE INSTITUTE	CLR	CLEAR	ÈÁ	EACH
ADDL	ADDITIONAL	CMU	CONCRETE MASONRY UNIT	EF	EACH FACE
ADJ	ADJACENT	COL	COLUMN	EL	ELEVATION
AFF	ABOVE FINISHED FLOOR	CONC	CONCRETE	ELEC	ELECTRICAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	CONN	CONNECTION, CONNECT	ELEV	ELEVATOR
ALT	ALTERNATE	CONSTR		EMB	EMBED, EMBEDDED, EMBEDMENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CONT	CONTINUOUS	ENGR	ENGINEER
APA	AMERICAN PLYWOOD ASSOCIATION	CONTR	CONTRACTOR	EQ	EQUAL
APPROX	APPROXIMATE; APPROXIMATELY	COORD	COORDINATE	EQUIP	EQUIPMENT
ARCH	ARCHITECT; ARCHITECTURAL	CP	COMPLETE PENETRATION	ES	EACH SIDE
ASSY		CSK	COUNTERSINK; COUNTERSUNK	EW	EACH WAY
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	CTR	CENTER	EXP	EXPANSION; EXPOSED
AWS	AMERICAN WELDING SOCIETY	CU FT	CUBIC FOOT	EXP JT	EXPANSION JOINT
		CU IN	CUBIC INCH	EXT	EXTERIOR
BD		CY	CUBIC YARD		
BLDG	BUILDING			FD	FLOOR DRAIN
BLKG	BLOCKING	d	PENNY (NAILS)	FDN	FOUNDATION
BM		DBL	DOUBLE	FF	FAR FACE, FINISHED FLOOR
BMU	BRICK MASONRY UNIT(S)	DEPT	DEPARTMENT	FLR	FLOOR; FLOOR LINE
BOF	BOTTOM OF SLAB	DET	DETAIL	FLG	FLANGE
BOS		DIA	DIAMETER (SEE SYMBOLS)	FOC	FACE OF CONCRETE
BOT	BOTTOM	DIAG	DIAGONAL	FOM	FACE OF MASONRY
BRG	BEARING	DIAPH	DIAPHRAGM	FOS	FACE OF STUD
	BEAM	DICA	DRILLED-IN CONCRETE ANCHOR	FS	FULL SIZE; FAR SIDE
С	STANDARD CHANNEL	DIM	DIMENSION	FT	FEET; FOOT
CG	CENTER OF GRAVITY	DN	DOWN	FTG	FOOTING
CGS	CENTER OF GRAVITY OF STRANDS	DO	DITTO		
CIP	CAST-IN-PLACE	DWG	DRAWING	GA	GAUGE
CJ	CONSTRUCTION JOINT/CONTROL JOINT	DWL	DOWELS	GALV	GALVANIZED

BAR DIAM. BAR DIAM. BAR DIAM. BAR DIAM.

E, EARTH FACE	3"
IER	2" 1-1/2"
R EARTH	3/4"
, SPIRALS	1-1/2"

E. CARPENTRY

1. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ANSI STANDARD A190.1. EACH MEMBER SHALL BEAR AN AITC OR APA EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA EWS CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4. Fb = 2.400 PSI. Fv = 240 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI. CAMBER ALL GLULAM BEAMS TO 2,000' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

2. FRAMING LUMBER SHALL BE GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

MEMBER	SIZE	SPECIES GRADE	MIN. BASIC DESIGN STRESS	
- JOISTS AND RAFTERS	2x, 3x	DF#2	Fb = 875 PSI	
- BEAMS AND STRINGERS	4x	DF#1	Fb = 1000 PSI	
	6x/LARGER	DF#1	Fb = 1350 PSI	- DEFLECTION LIMIT
- POSTS AND TIMBERS	4x	DF#2	Fc = 1350 PSI	- OTHER LOADS SPECIFIED
	6x/LARGER	DF#1	Fc = 1000 PSI	
- TOP AND BOTTOM PLATE @				TRUSS SUPPLIERS NOTE: SHOWN ON THE DRAWING
SHEAR AND BEARING WALLS	2x, 3x	DF#1	Fb = 1000 PSI	COMPLIED WITH WHERE P
- STUDS, PLATES & MISC.				REQUIREMENTS SPECIFIEI
LIGHT FRAMING	ALL SIZES	DF#2	Fb = 875 PSI	WRITTEN NOTICE TO THAT

ALL LUMBER WITH A LEAST DIMENSION OF 2" (NOMINAL) SHALL BE STAMPED SURFACE-DRY AND SHALL HAVE A MOISTURE CONTENT WHEN SURFACED AND WHEN INSTALLED OF NOT MORE THAN 19 PERCENT. LUMBER WITH A LEAST DIMENSION OF 4" (NOMINAL) OR GREATER SHALL BE STAMPED SURFACE-GREEN AND AIR-DRIED TO A MOISTURE CONTENT OF NOT MORE THAN 19 PERCENT PRIOR TO ITS USE IN FRAMING THE STRUCTURE.

- PSL (2.0E)	Fb = 2,900 PSI; Fv = 290 PSI; E = 2,200,000 PSI
- LVL (2.0E)	Fb = 2,600 PSI; Fv = 285 PSI; E = 2,000,000 PSI
- LSL (1.55E)	Fb = 2,325 PSI; Fv = 310 PSI; E = 1,550,000 PSI

- ROOF	19/32" THICK, 32/16, (OR 5/8" THICK), 32/16
- WALLS	15/32" THICK, 32/16, (OR 1/2" THICK), 24/0
- FLOORS	23/32" (OR 3/4") THICK, TONGUE & GROOVE, 48/24

UNLESS NOTED OTHERWISE ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH 10d NAILS @ 6"oc TO FRAMED PANEL EDGES AND OVER STUD WALLS SHOWN ON PLANS AND @ 12"oc (10"oc AT FLOORS) TO INTERMEDIATE SUPPORTS, PROVIDE APPROVED SHEATHING EDGE CLIPS @ 16"oc AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS, UNLESS NOTED OTHERWISE.

UNLESS NOTED OTHERWISE ON THE PLANS, WALL SHEATHING MAY BE LAID UP HORIZONTALLY OR VERTICALLY, UNSUPPORTED EDGES SHALL BE BLOCKED AND ALL EDGES SHALL BE NAILED WITH 8d @ 6"oc, NAIL WITH 8d @ 12"oc AT INTERMEDIATE SUPPORTS. NAIL SHEAR WALL SHEATHING TO ALL HOLDOWN STUDS USING EDGE NAIL SPACING WHEN HOLDOWN STUD DOES NOT OCCUR AT PANEL EDGES.

SHEATHING NAILS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING.

5. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE. PROVIDE TWO LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC., AND CONCRETE OR MASONRY. ALL METAL CONNECTORS TO PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED, INCLUDING WASHERS, NAILS, SCREWS, AND SIMPSON STRONG-TIE HANGERS, STRAPS, AND PLATES, AND BOLTS LESS THAN 1/2" DIAMETER. FIELD-CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE TREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.

6. NOTATIONS ON DRAWINGS RELATING TO FRAMING CLIPS, JOIST HANGERS AND OTHER CONNECTING DEVICES REFER TO CATALOG NUMBERS OF CONNECTORS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CALIFORNIA. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. SUBMIT MANUFACTURER'S CATALOG AND ICC REPORTS TO ARCHITECT AND ENGINEER FOR REVIEW WHEN REQUESTING SUBSTITUTIONS. ALL SPECIFIED FASTENERS MUST BE USED AND PROPER INSTALLATION PROCEDURES MUST BE OBSERVED IN ORDER TO OBTAIN ICC APPROVED LOAD CAPACITIES. VERIFY THAT THE DIMENSIONS OF THE SUPPORTING MEMBER ARE SUFFICIENT TO RECEIVE THE SPECIFIED FASTENERS.

7. STRUCTURAL CONNECTORS

ALL STRUCTURAL CONNECTORS TO BE BY SIMPSON STRONG TIE OR EQUAL. USE ZMAX/HDG HOT DIPPED GALVANIZED OR STAINLESS-STEEL CONNECTORS AS A MINIMUM. USE FASTENERS GALVANIZED PER ASTM A153. ALL PRESSURE TREATED LUMBER USED SHALL BE COMPATIBLE WITH ZMAX GALV. CONNECTORS, RE: SIMPSON STRONG-TIE CORROSION INFORMATION.

								LEGEND			
GL	GLUE-LAMINATED	LOC	LOCATION	OPP	OPPOSITE	STL	STEEL				
GWB	GYPSUM WALL BOARD	LONGIT	LONGITUDINAL	OSB	ORIENTED STRAND BOARD	STRUCT	STRUCTURAL				
GYP	GYPSUM	LSL	LONG SLOTTED HOLE			SYM	SYMMETRICAL		CONCRETE WALL		DRAG STRUT- NAIL THRU
		LVL	LAMINATED VENEER LUMBER	PAR	PARALLEL			·········	CONSILETE WALL	(DS)	SHEATHING w/ 8d @ 4"oc FOR
HDR	HEADER	LWC	LIGHT WEIGHT CONCRETE	PERP	PERPENDICULAR	Т	TOP			(03)	ENTIRE LENGTH OF MEMBER
HNG	HANGER			PL	PLATE	T&B	TOP AND BOTTOM		INTERIOR STUD WALL BELOW;		
HORIZ	HORIZONTAL	М	MISC SHAPE	PLWD	PLYWOOD	T&G	TONGUE AND GROOVE		EXTERIOR BEARING STUD		
HP	HP SHAPE	MAS	MASONRY	PREFAB	PREFABRICATED	TEMP	TEMPERATURE		WALL BELOW		(2) SIMPSON CS16 x 30"
HS	HIGH STRENGTH	MATL	MATERIAL	PROP	PROPERTY	THK	THICKNESS		WALL DELOW	(2) CS16	DRAG STRAP, U.N.O.
HT	HEIGHT	MAX	MAXIMUM	PSF	POUNDS PER SQUARE FOOT	THRU	THROUGH				
		MECH	MECHANICAL	PSI	POUNDS PER SQUARE INCH	TOB	TOP OF BEAM		STUD WALL ABOVE		
ID	INSIDE DIAMETER	MFR	MANUFACTURER	PSL	PARALLEL STRAND LUMBER	TOC	TOP OF CONCRETE; TOP OF CURB				HEADER, BEAM OR JOIST END HANGER
IF	INSIDE FACE	MIN	MINIMUM; MINUTE	PT	POST TENSION	TOF	TOP OF FOOTING			·	
IN	INCH	MISC	MISCELLANEOUS			TOL	TOP OF LEDGER		COLUMN CONTINUOUS		
INCL	INCLUDE; INCLUDING; INCLUSIVE	MO	MASONRY OPENING	RD	ROOF DRAIN	TOM	TOP OF MASONRY				
INFO	INFORMATION			REF	REFERENCE	TOS	TOP OF STEEL, TOP OF STRUCTURE				PROVIDE 2x BLOCKING AT
INT	INTERIOR	(N)	NEW	REINF	REINFORCE; REINFORCING	TOW	TOP OF WALL	\boxtimes	COLUMN BELOW FRAMING LEVEL	$V///\lambda$	ALL PLYWOOD DIAPHRAGM
		N	NORTH	REQ'D	REQUIRED	TS	TUBING, STRUCTURAL				EDGES w/ EDGE NAILING
JT	JOINT	NF	NEAR FACE	RO	ROUGH OPENING	TYP	TYPICAL				
		NFPA	NATIONAL FOREST PRODUCTS ASSOC								
К	KIP = 1000 POUNDS	NIC	NOT IN CONTRACT	SCHED	SCHEDULE	UBC	UNIFORM BUILDING CODE		COLUMN ABOVE FRAMING LEVEL	<i>\</i>]////,	FLOOR STEP PER ARCH.
KO	KNOCK-OUT	NOM	NOMINAL	SEC	SECTION	UL	UNDERWRITER'S LABORATORY, INC.			77777///	
KSI	KIPS PER SQUARE INCH	NS	NEAR SIDE	SHT	SHEET	UNO	UNLESS NOTED OTHERWISE				
		NTS	NOT TO SCALE	SHTG	SHEATHING; SHEETING	URM	UNREINFORCED MASONRY	/	COLUMN SIZE / SIMPSON CAP	•	
LAB	LABORATORY			SIM	SIMILAR	UT	ULTRA-SONIC TEST	4	*NOTE, PROVIDE SIMPSON PC		SHEAR WALL ABOVE
LB	POUND	OC	ON CENTER	SPA	SPACING, SPACE, SPACES			4	POST CAP, TYP. U.N.O.	WX	FRAMING LEVEL
LF	LINEAL FOOT	OD	OUTSIDE DIAMETER	SPEC	SPECIFICATION	VERT	VERTICAL	·			
LLBB	LONG LEGS BACK-TO-BACK	OF	OUTSIDE FACE	SQ	SQUARE			/			
LLH	LONG LEGS HORIZONTAL	OH	OPPOSITE HAND	STD	STANDARD	W	WIDE FLANGE	t	SHEAR WALL HOLDOWN AT		
LLV	LONG LEGS VERTICAL	OPNG	OPENING	STIFF	STIFFENER	WP	WORK POINT	I I	FRAMING LEVEL		

WELDED WIRE FABRIC

WWF

8. WOOD TRUSSES TRUSSES ARE TO BE METAL PLATED CONNECTED WOOD TRUSSES FABRICATED IN ACCORDANCE WITH THE IBC. TRUSS FABRICATOR TO PROVIDE ALL REQUIRED BRIDGING AND BLOCKING, BOTH FOR ERECTION AND PERMANENT LOADING. SHOP DRAWINGS STAMPED BY A WASHINGTON STATE LICENSED PROFESSIONAL ENGINEER SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION. DESIGN CRITERIA SHALL MEET OF EXCEED THE FOLLOWING:

- ROOF TRUSSES

: THE TRUSS CONFIGURATIONS, INCLUDING DEPTHS AND MEMBER SIZES, GS INDICATE THE DESIRED TRUSS CONFIGURATIONS AND ARE TO BE POSSIBLE. IF A TRUSS MANUFACTURER IS UNABLE TO MEET THE LOAD FIED WITH THE TRUSS CONFIGURATION INDICATED, HE IS TO SUBMIT IAT EFFECT TO THE ARCHITECT. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND TRUSS MANUFACTURER TO VERIFY THE WEIGHT AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW. THE DESIGN LOADS LISTED ABOVE SHALL BE APPLIED SIMULTANEOUSLY.

9. WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

DRAWINGS

WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2x4 STUDS @ 16"oc AT INTERIOR WALLS AND 2x6 STUDS @ 16"oc AT EXTERIOR WALLS. 2x6 STUDS @ 12"oc AT EXTERIOR BALLOON FRAMED WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS AND UNDER THE ENDS OF ALL BEAMS. UNLESS NOTED OTHERWISE A (2) 2x8 HEADER SHALL BE PROVIDED OVER ALL OPENINGS IN 2x4 STUD WALLS AND A (2) 2x10 HEADER OVER ALL OPENINGS IN 2x6 WALLS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORT BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 8' IN HEIGHT. ALL STUD WALLS SHOWN ON STRUCTURAL DRAWINGS SHALL HAVE THEIR LOWER PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" oc STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS AT 4'-0"oc, EMBEDED 7", UNO REFER TO THE STRUCTURAL PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING.

FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE BRIDGING @ 8'-0"oc AND SOLID BLOCKING AT ALL BEARING POINTS. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. TOENAIL JOISTS TO BEARING SUPPORTS WITH 16d NAILS. UNLESS NOTED OTHERWISE.

JOIST, BEAM AND HEADER SHALL BE CONNECTED TO FLUSH MEMBER WITH THE FOLLOWING SIMPSON SERIES HANGER, U.N.O. ON PLAN, SKEW AND SLOPE ALL CONNECTORS AS REQUIRED:

- 2x JOIST, "LUS" SERIES; DOUBLE 2x JOIST/HEADER, "HU"/"HUS" SERIES - TJI JOIST, "ITS" SERIES; DOUBLE TJI JOIST, "MIT" SERIES - 4x MEMBER, "HU" SERIES; 6x MEMBER, "HWP"/"HWPH" SERIES

- 3-1/2"GLB, "HB" SERIES; 5-1/2"GLB, "HWPH" SERIES, 6-3/4"GLB, "HGLTV" SERIES - 1-3/4"SCL, "IUS" SERIES; 3-1/2"SCL, "HB" SERIES, 5-1/4"SCL, "HWPH" SERIES, 7"SCL, "HGLTV" SERIES

FACE-NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH 16d SPIKES @ 24"oc STAGGERED.

NAILS SHALL BE MANUFACTURED IN CANADA OR THE UNITED STATES IN SIZES AND TYPES AS FOLLOWS, UNLESS NOTED OTHERWISE:

PNEUMATIC NAILING - PLAIN SHANK, COATED OR GALVANIZED - 8d .131 DIAMETER x 2-1/2" MINIMUM LENGTH - 10d .131 DIAMETER x 3" MINIMUM LENGTH - 16d .131 DIAMETER x 3-1/2" MINIMUM LENGTH

F. SPECIAL CONDITIONS

CONTRACTOR TO COORDINATE ALL TRADES AND VERIFY DIMENSIONS IN THE FIELD. OBTAIN OWNERS APPROVAL PRIOR TO ALL FIELD CHANGES. SEE ARCHITECTURAL DRAWINGS FOR ALL FLOOR AND WALL OPENING DIMENSIONS AND LOCATIONS, FLOOR AND WALL FINISHES, ETC.

DEFLECTION OF CANTILEVERS SHALL BE CLOSELY MONITORED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR TO VERIFY AND CONFIRM ALL POST CAPS AND POST BEARING CONNECTIONS ARE INSTALLED IN STRICT CONFORMANCE TO THE STRUCTURAL DRAWING. CANTILEVERS IN WOOD FRAMING CAN DEFLECT UP TO 1/8" PER FOOT (I.E. 6' CANTILEVER MAY DEFLECT 3/4"). IF DEFLECTION EXCEEDS 1/8" PER FOOT NOTIFY STRUCTURAL ENGINEER IMMEDIATELY. BEFORE FINISHES ARE INSTALLED, FLOORS AT OR ABOVE CANTILEVERS MAY REQUIRE LEVELING COMPOUND AND SOFFITS FURRED TO MAKE THEM LEVEL.

TOP CHORD = 25 PSF LIVE LOAD, 10 PSF DEAD LOAD, 5 PSF WIND UPLIFT

BOTTOM CHORD = 10 PSF LIVE LOAD, 5 PSF DEAD LOAD (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)

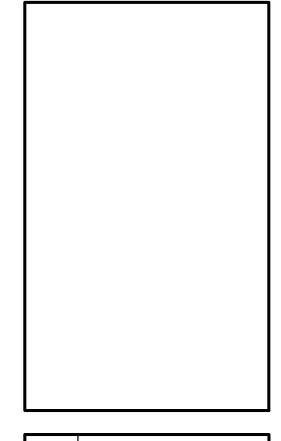
TOTAL LOAD = 40 PSF TOTAL LOAD L/240, LIVE LOAD L/360

D ON DRAWINGS

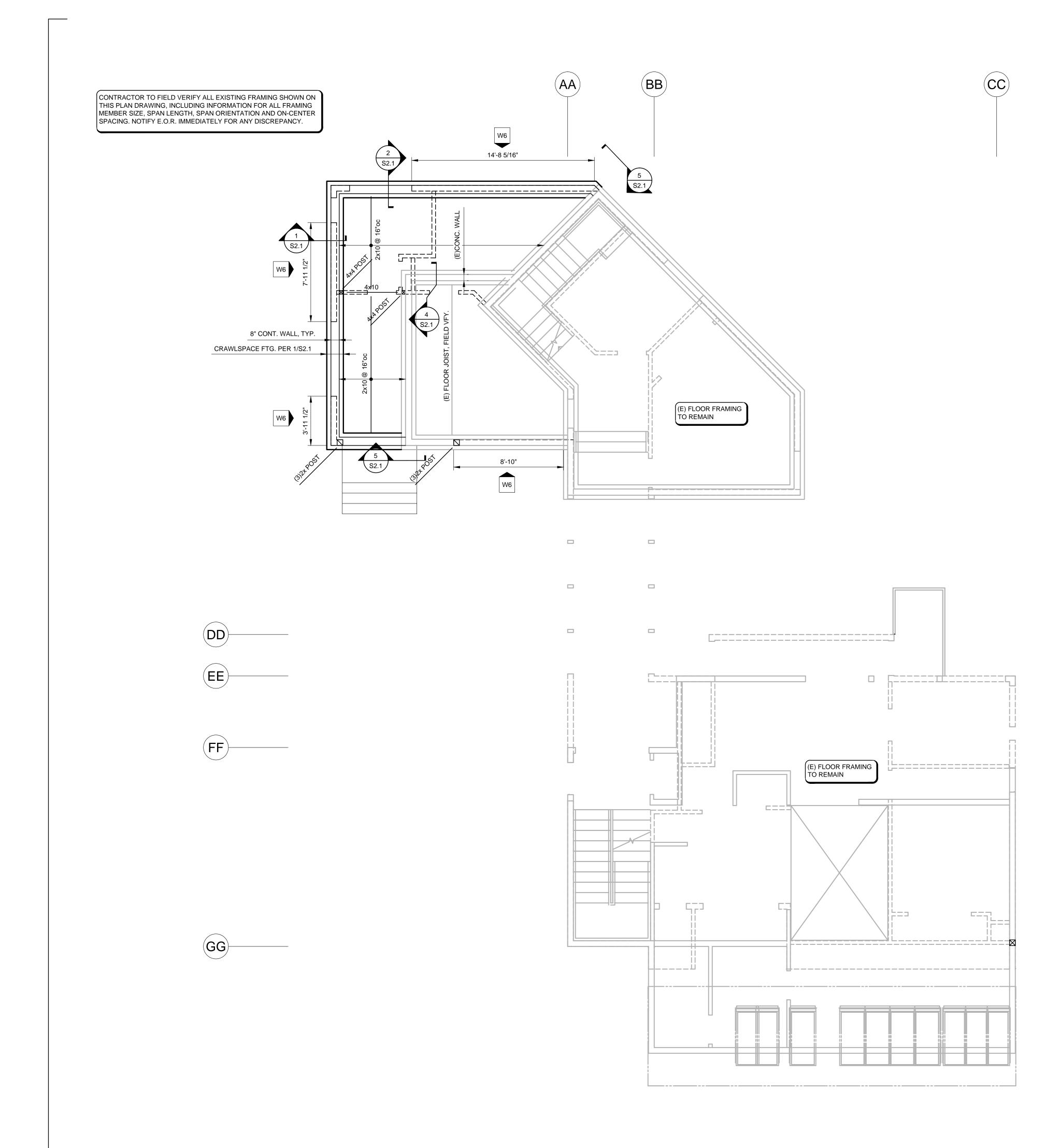
ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL

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	SUBMIT FOR PERMIT	11-30-2023
	SUBMIT FOR BID	
	SUBMIT FOR CONSTRUCTION	





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DATE:	11-07-2023				
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- SCHEDULE, U.N.O.

	SHEET	LEVEL 2 FRAMING PLAN		NO. DRAWING SUBMITTALS / REVISIONS DATE	DATE
-CKEI	CONTENTS:		WAI CHA	SUBMIT FOR PERMIT	11-30-2023
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		MERCER ISLAND, WA 98040			
			DATE SIGNED: 11-30-2023		

1/4" = 1'-0"

LEVEL 2 FRAMING PLAN

2. VERIFY ALL DIMENSIONS IN FIELD. REFER TO ARCHITECTURAL PLAN FOR WALL LAYOUT. 3. TYPICAL FLOOR FRAMING CONSISTS OF 3/4" T&G PLYWOOD SHEATHING ON FLOOR JOISTS. NAIL ALL SUPPORTED PANEL EDGES WITH 10d NAILS @ 6"oc & ALL INTERMEDIATE SUPPORTS WITH 10d NAILS @ 12"oc, PROVIDE BLOCKING FOR ALL EDGES.

4. TYPICAL EXTERIOR WALL SHALL BE FRAMED WITH 2x6 DF STUDS @ 16"oc, U.N.O. TYPICAL INTERIOR WALL SHALL BE FRAMED WITH 2x4 DF STUDS @ 16"oc U.N.O. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION PERTAINING TO WALL THICKNESS.

5. TYPICAL EXTERIOR WALL HEADERS SHALL BE FRAMED WITH (2) PILES OF 2x10 DF#2, TYPICAL INTERIOR WALL HEADERS SHALL BE FRAMED WITH (2) PILES OF 2x8 DF#2, U.N.O.

6. FOOTINGS SHALL BE PLACED ON UNDISTURBED NATIVE SOIL OR STRUCTURAL FILL COMPACTED TO 95% MAXIMUM WET DENSITY PLACED IN MAX. 12" LIFTS. 7. BOTTOM OF ALL FOOTINGS SHALL BE 18" MINIMUM BELOW LOWEST ADJACENT GRADE, U.N.O.

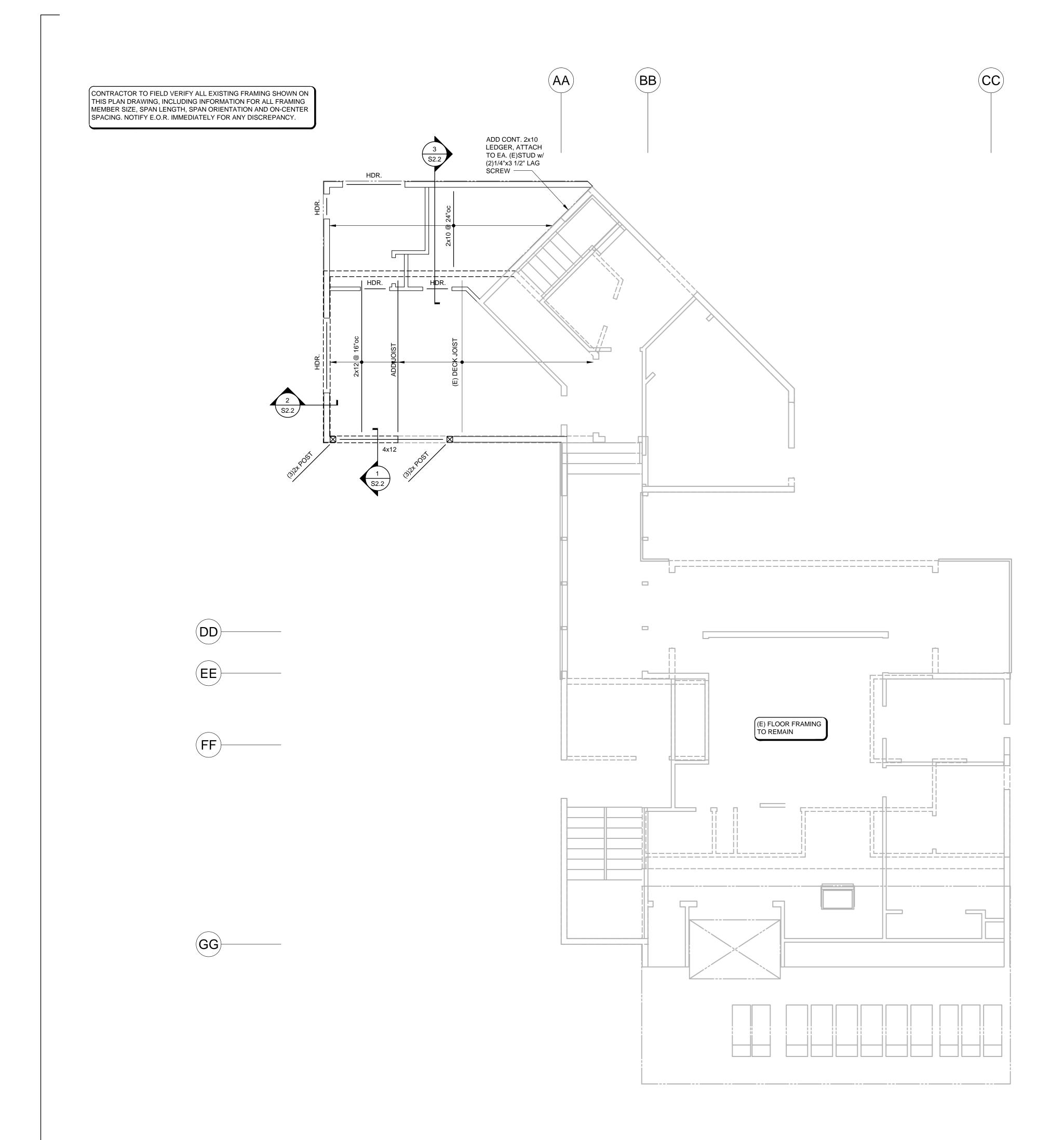
8. TYPICAL EXTERIOR WALL TO BE DETAILED AS SHEAR WALL TYPE W6 PER SHEAR WALL 9. SEE SHEAR WALL FOUNDATION HOLDOWN SCHEDULE FOR MINIMUM HOLDOWN EMBEDMENT

DEPTH AND MINIMUM FOOTING SIZE AROUND HOLDOWN ANCHOR REQUIREMENTS IN ADDITION TO FOOTING SIZE SPECIFIED ON THIS PLAN.

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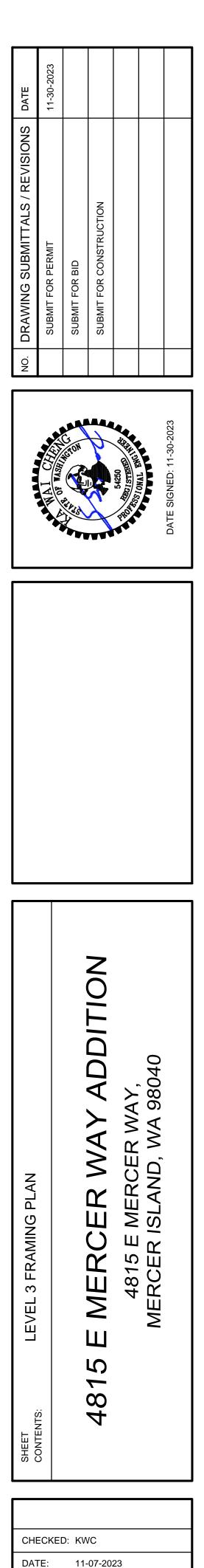
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- SUPPORTS WITH 10d NAILS @ 12"oc
- THICKNESS.

- SCHEDULE, U.N.O.
- SHALL BE PRESSURE TREATED.



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2. VERIFY ALL DIMENSIONS IN FIELD. REFER TO ARCHITECTURAL PLAN FOR WALL LAYOUT. 3. TYPICAL ROOF FRAMING CONSISTS OF 5/8" PLYWOOD ON ENGINEERED WOOD TRUSSES OR RAFTERS. NAIL ALL SUPPORTED PANEL EDGES WITH 10d NAILS @ 6"oc & ALL INTERMEDIATE 4. TYPICAL EXTERIOR WALL SHALL BE FRAMED WITH 2x6 DF STUDS @ 16"oc, U.N.O. TYPICAL INTERIOR WALL SHALL BE FRAMED WITH 2x4 DF STUDS @ 16"oc U.N.O. REFER TO

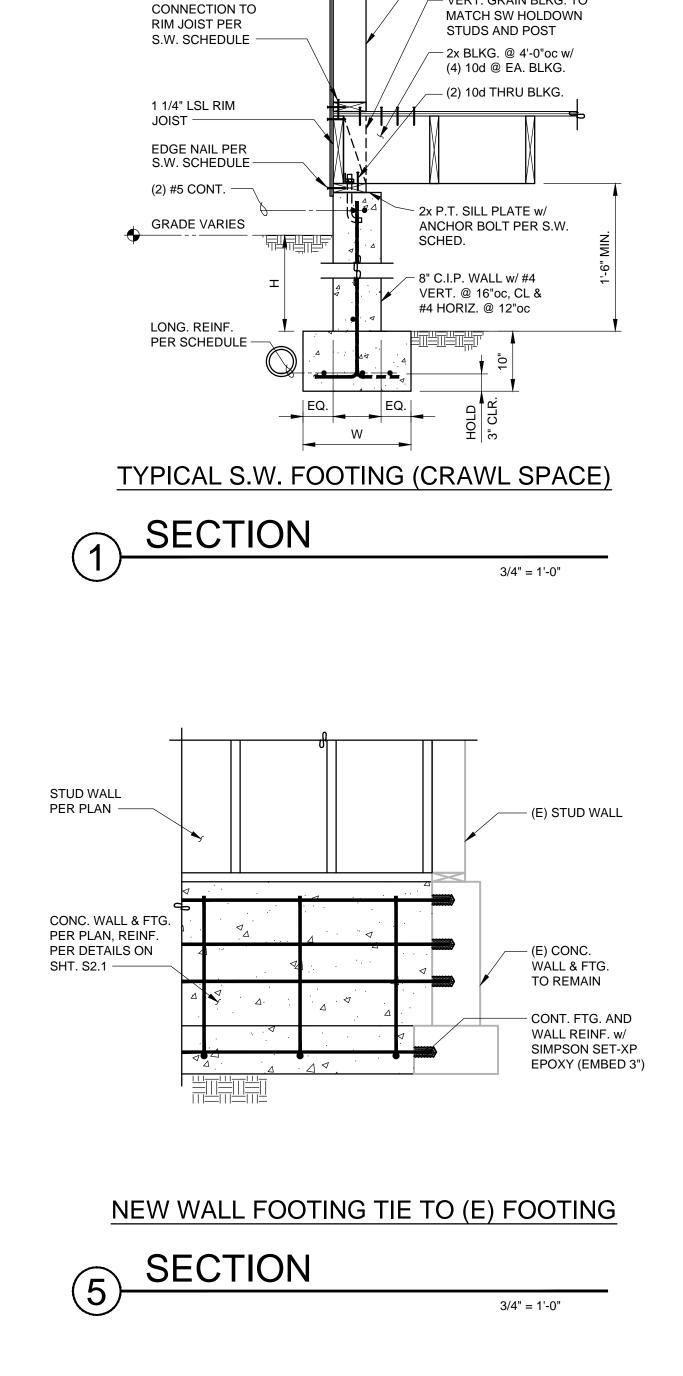
ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION PERTAINING TO WALL

5. TYPICAL EXTERIOR WALL HEADERS SHALL BE FRAMED WITH (2) PILES OF 2x10 DF#2, TYPICAL INTERIOR WALL HEADERS SHALL BE FRAMED WITH (2) PILES OF 2x8 DF#2, U.N.O. 6. TYPICAL EXTERIOR WALL TO BE DETAILED AS SHEAR WALL TYPE W6 PER SHEAR WALL

7. ALL WOOD FRAMING USED IN EXTERIOR APPLICATIONS AND EXPOSE TO THE WEATHER

1/4" = 1'-0"

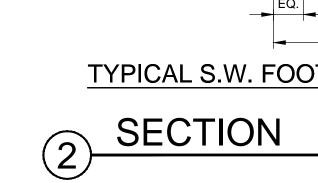
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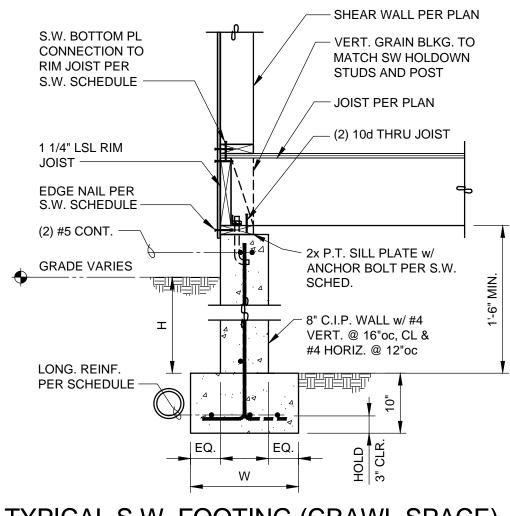


S.W. BOTTOM PL

- SHEAR WALL PER PLAN

- VERT. GRAIN BLKG. TO





TYPICAL S.W. FOOTING (CRAWL SPACE)

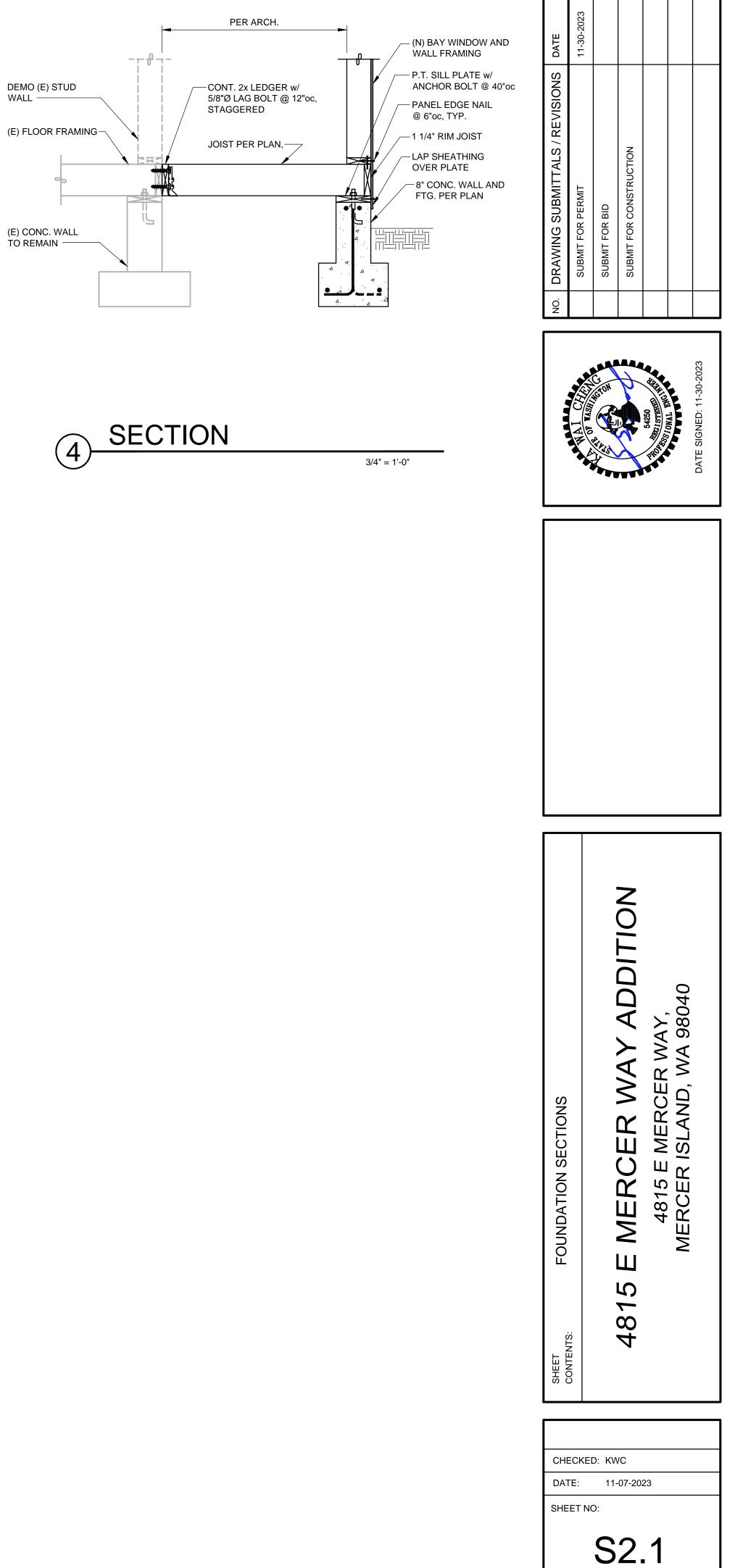
3/4" = 1'-0"

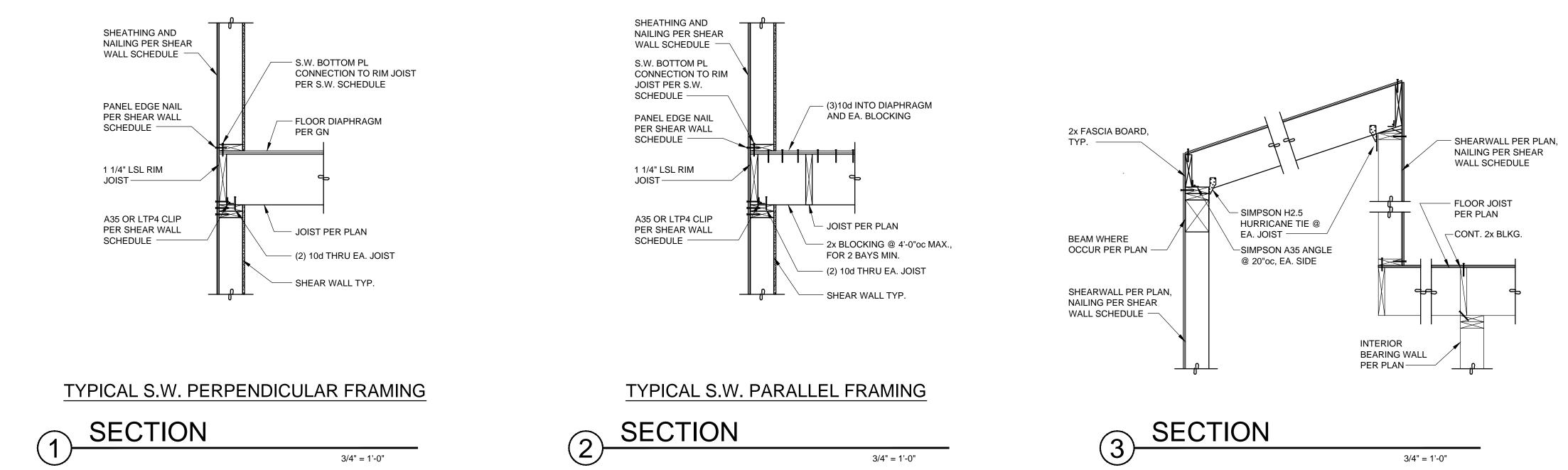
8" CRAWLSPACE WALL SCHEDULE

DIMEN	SIONS	STEM WALL REINF.		FOOTING REINF.
Н	W	VERT.	HORIZ	LONG.
2'-0"	1'-6"	#4 @ 16"oc	#4 @ 12"oc	(3)#4
3'-0"	2'-2"	#4 @ 16"oc	#4 @ 12"oc	(4)#4
4'-0"	3'-8"	#4 @ 16"oc	#4 @ 12"oc	(5)#4
5'-0"	5'-2"	#4 @ 16"oc	#4 @ 12"oc	(7)#4
NOTE:				·

1. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED PER SOILS ENGINEER RECOMMENDATIONS. MINIMUM 12" WIDE LAYER OF FREE DRAINING MATERIAL FROM COURSE TO MEDIUM (1 3/4" TO 3/8"). PROVIDE 4" PERFORATED PVC DRAINPIPE w/ HOLES DOWNWARD SLOPE TO STORM DRAIN DISCHARGE, SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION ON APPROVED DISCHARGE DESIGN. 2. RETAINING WALL SHALL BE IN STRENGTH, MINIMUM 14 DAYS CURING, PRIOR BACKFILLING BEHIND ALL RETAINING WALL. BACKFILL SHALL BE DONE IN 4'-0" LIFT MAXIMUM, DISTRIBUTED EVENLY ALONG WALL LINE.

WALL ·





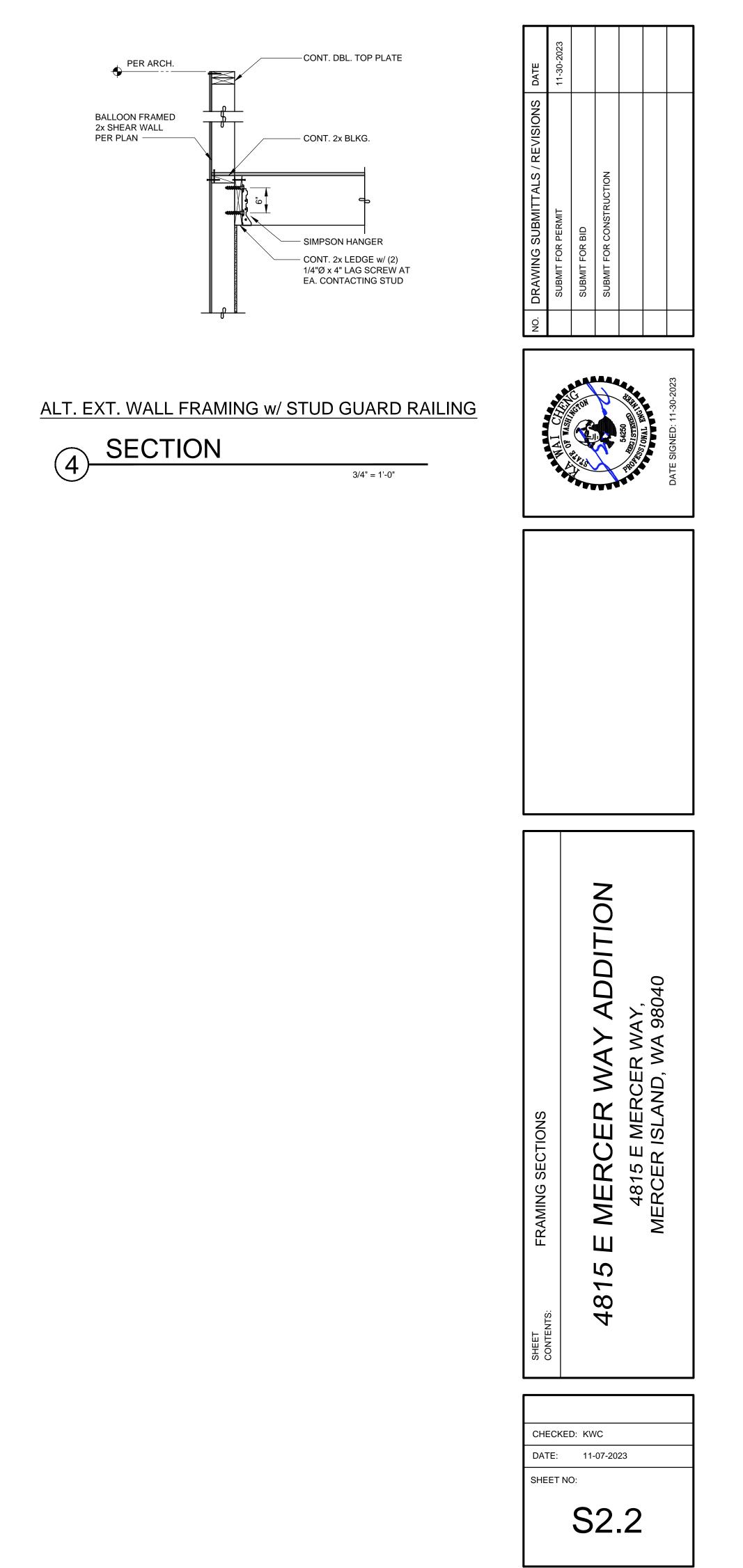
3/4" = 1'-0"

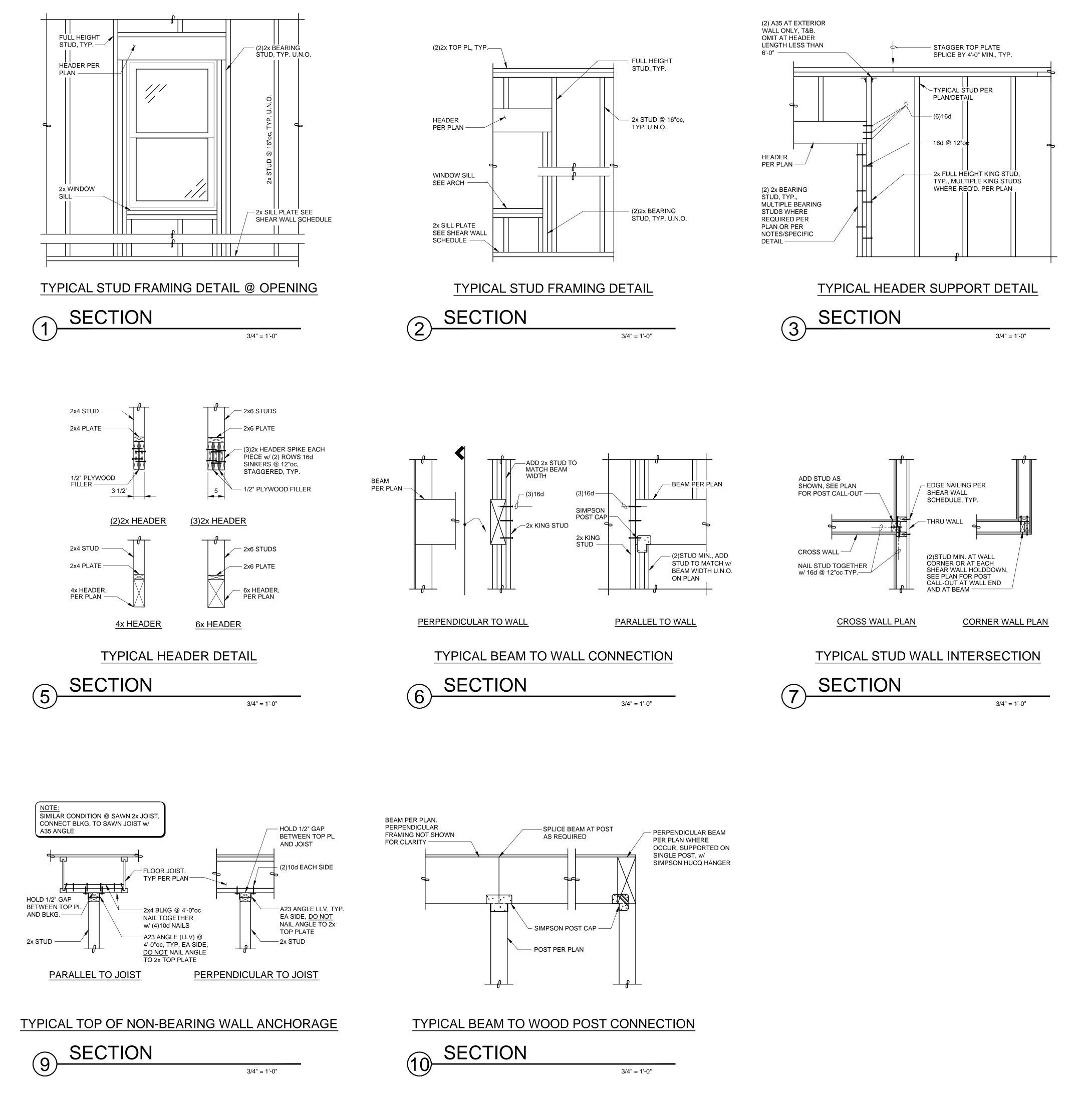
3/4" = 1'-0"

SECTION $\widehat{(1)}$

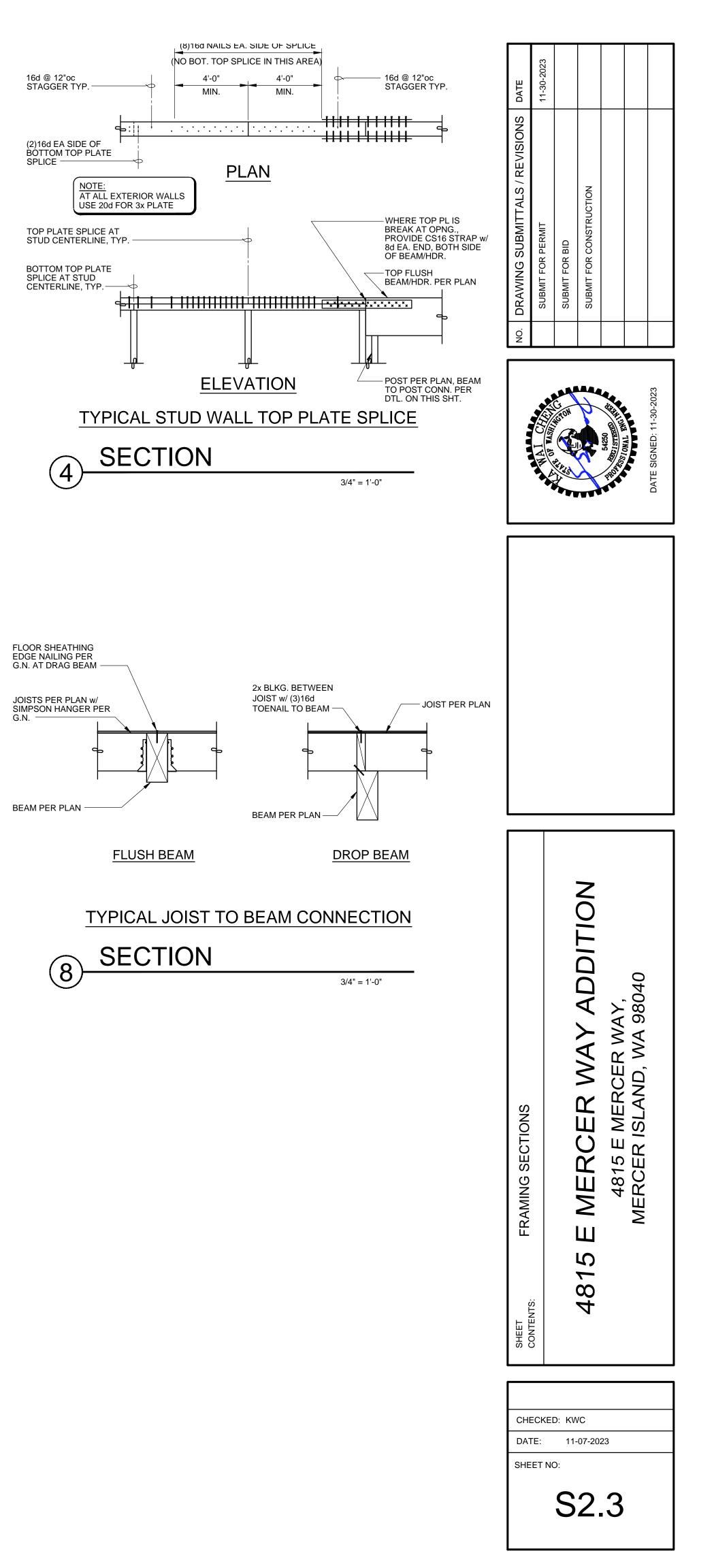
3/4" = 1'-0"

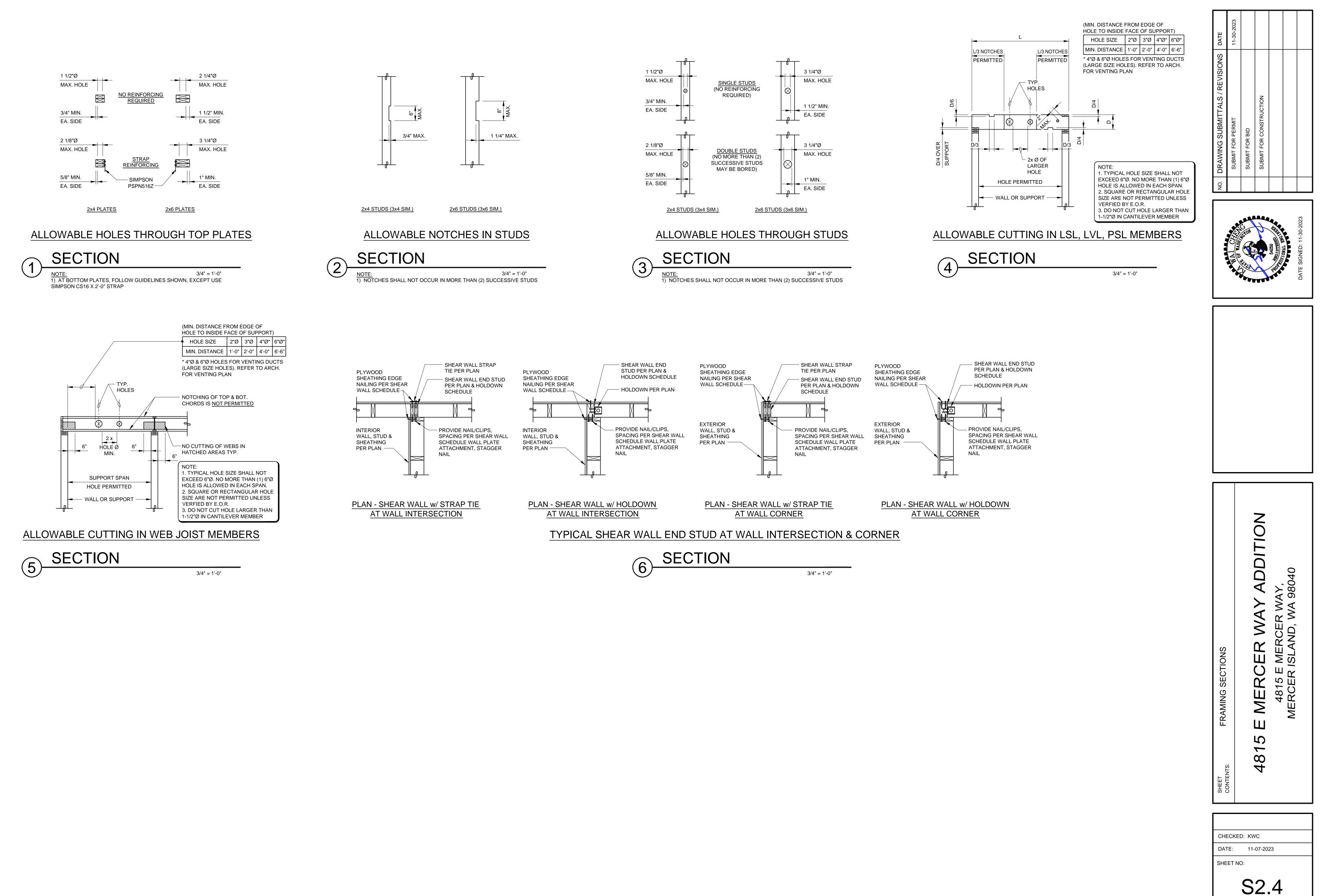


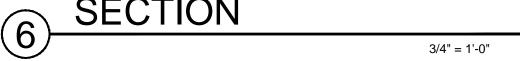


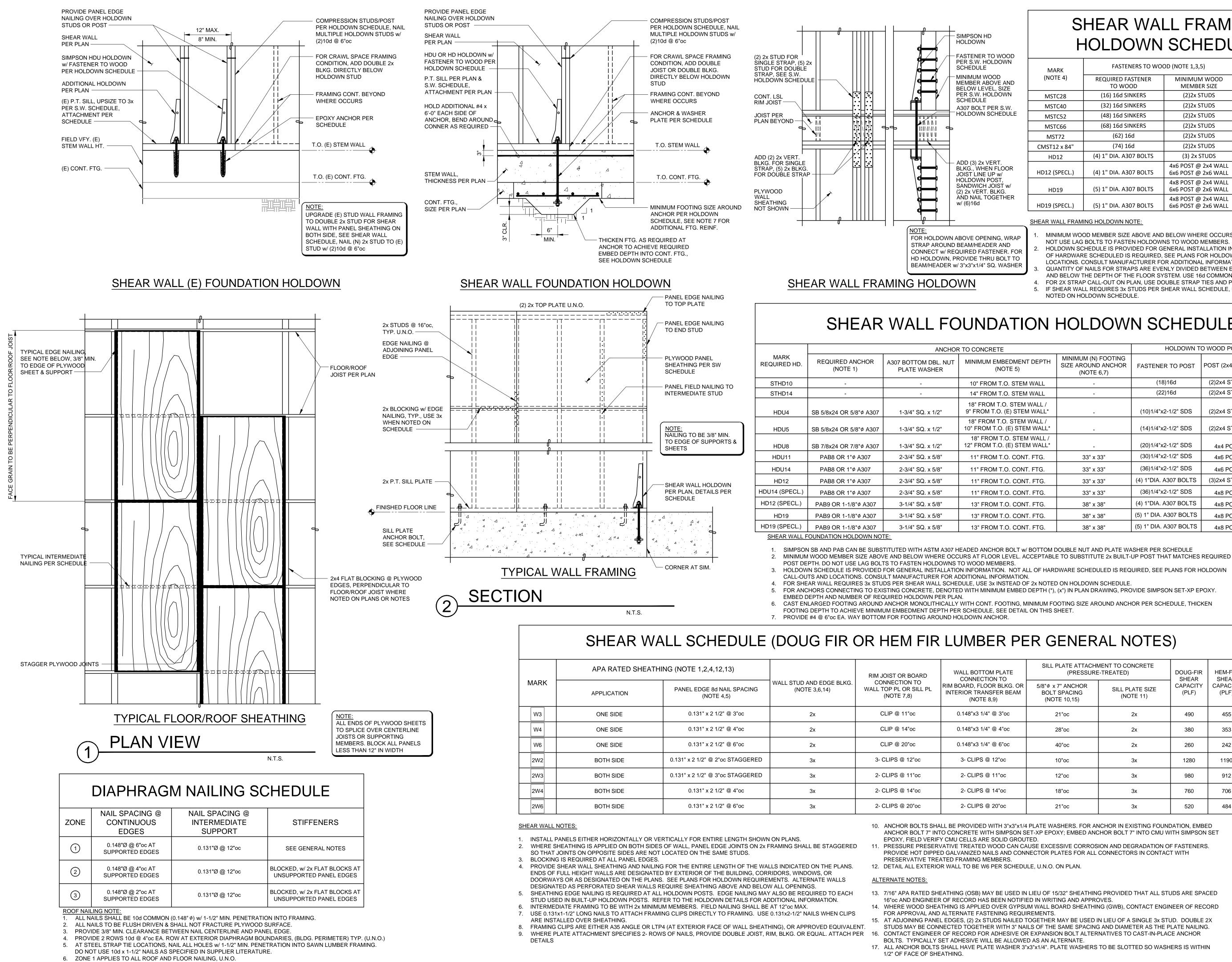


3/4"	=	1'-0"	









SHEAR WALL SCHEDULE (DOUG FIR OR HEM FIR LUMBER PER GENERAL NOTES)

	APA RATED SHEATHING (NOTE 1,2,4,12,13)		RIM JOIST OR BOARD	WALL BOTTOM PLATE CONNECTION TO	SILL PLATE ATTACHMENT TO CONCRETE (PRESSURE-TREATED)		DOUG-FIR SHEAR	HEM-FIR SHEAR	
MARK	APPLICATION	PANEL EDGE 8d NAIL SPACING (NOTE 4,5)		CONNECTION TO WALL TOP PL OR SILL PL (NOTE 7,8)	RIM BOARD, FLOOR BLKG. OR INTERIOR TRANSFER BEAM (NOTE 8,9)	5/8"ø x 7" ANCHOR BOLT SPACING (NOTE 10,15)	SILL PLATE SIZE (NOTE 11)		CAPACITY (PLF)
W3	ONE SIDE	0.131" x 2 1/2" @ 3"oc	2x	CLIP @ 11"oc	0.148"x3 1/4" @ 3"oc	21"oc	2x	490	455
W4	ONE SIDE	0.131" x 2 1/2" @ 4"oc	2x	CLIP @ 14"oc	0.148"x3 1/4" @ 4"oc	28"oc	2x	380	353
W6	ONE SIDE	0.131" x 2 1/2" @ 6"oc	2x	CLIP @ 20"oc	0.148"x3 1/4" @ 6"oc	40"oc	2x	260	242
2W2	BOTH SIDE	0.131" x 2 1/2" @ 2"oc STAGGERED	Зх	3- CLIPS @ 12"oc	3- CLIPS @ 12"oc	10"oc	Зx	1280	1190
2W3	BOTH SIDE	0.131" x 2 1/2" @ 3"oc STAGGERED	Зх	2- CLIPS @ 11"oc	2- CLIPS @ 11"oc	12"oc	Зx	980	912
2W4	BOTH SIDE	0.131" x 2 1/2" @ 4"oc	3x	2- CLIPS @ 14"oc	2- CLIPS @ 14"oc	18"oc	Зx	760	706
2W6	BOTH SIDE	0.131" x 2 1/2" @ 6"oc	Зх	2- CLIPS @ 20"oc	2- CLIPS @ 20"oc	21"oc	Зх	520	484

SHEAR WALL FOUNDATION HOLDOWN SCHEDULE

		ANCHOR	TO CONCRETE		HOLDOWN T	O WOOD POST (NC	DTE 2,4)
MARK REQUIRED HD.	REQUIRED ANCHOR (NOTE 1)	A307 BOTTOM DBL. NUT PLATE WASHER	MINIMUM EMBEDMENT DEPTH (NOTE 5)	MINIMUM (N) FOOTING SIZE AROUND ANCHOR (NOTE 6,7)	FASTENER TO POST	POST (2x4 WALL)	POST (2x6 WALL)
STHD10	-	-	10" FROM T.O. STEM WALL	-	(18)16d	(2)2x4 STUDS	(2)2x6 STUDS
STHD14	-	-	14" FROM T.O. STEM WALL	-	(22)16d	(2)2x4 STUDS	(2)2x6 STUDS
HDU4	SB 5/8x24 OR 5/8"Ø A307	1-3/4" SQ. x 1/2"	18" FROM T.O. STEM WALL / 9" FROM T.O. (E) STEM WALL*	-	(10)1/4"x2-1/2" SDS	(2)2x4 STUDS	(2)2x6 STUDS
HDU5	SB 5/8x24 OR 5/8"ø A307	1-3/4" SQ. x 1/2"	18" FROM T.O. STEM WALL / 10" FROM T.O. (E) STEM WALL*	-	(14)1/4"x2-1/2" SDS	(2)2x4 STUDS	(2)2x6 STUDS
HDU8	SB 7/8x24 OR 7/8"Ø A307	1-3/4" SQ. x 1/2"	18" FROM T.O. STEM WALL / 12" FROM T.O. (E) STEM WALL*	-	(20)1/4"x2-1/2" SDS	4x4 POST	(3) 2x6 STUDS
HDU11	PAB8 OR 1"Ø A307	2-3/4" SQ. x 5/8"	11" FROM T.O. CONT. FTG.	33" x 33"	(30)1/4"x2-1/2" SDS	4x6 POST	6x6 POST
HDU14	PAB8 OR 1"Ø A307	2-3/4" SQ. x 5/8"	11" FROM T.O. CONT. FTG.	33" x 33"	(36)1/4"x2-1/2" SDS	4x6 POST	4x6 POST
HD12	PAB8 OR 1"¢ A307	2-3/4" SQ. x 5/8"	11" FROM T.O. CONT. FTG.	33" x 33"	(4) 1"DIA. A307 BOLTS	(3)2x4 STUDS	(3)2x6 STUDS
HDU14 (SPECL.)	PAB8 OR 1"¢ A307	2-3/4" SQ. x 5/8"	11" FROM T.O. CONT. FTG.	33" x 33"	(36)1/4"x2-1/2" SDS	4x8 POST	6x6 POST
HD12 (SPECL.)	PAB9 OR 1-1/8"Ø A307	3-1/4" SQ. x 5/8"	13" FROM T.O. CONT. FTG.	38" x 38"	(4) 1"DIA. A307 BOLTS	4x8 POST	6x6 POST
HD19	PAB9 OR 1-1/8"Ø A307	3-1/4" SQ. x 5/8"	13" FROM T.O. CONT. FTG.	38" x 38"	(5) 1" DIA. A307 BOLTS	4x8 POST	6x6 POST
HD19 (SPECL.)	PAB9 OR 1-1/8"Ø A307	3-1/4" SQ. x 5/8"	13" FROM T.O. CONT. FTG.	38" x 38"	(5) 1" DIA. A307 BOLTS	4x8 POST	6x6 POST

- EPOXY, FIELD VERIFY CMU CELLS ARE SOLID GROUTED.

- FOR APPROVAL AND ALTERNATE FASTENING REQUIREMENTS.
- BOLTS. TYPICALLY SET ADHESIVE WILL BE ALLOWED AS AN ALTERNATE.

SHEAR WALL FRAMING HOLDOWN SCHEDULE

MARK	FASTENERS TO WO	OD (NOTE 1,3,5)	
(NOTE 4)	REQUIRED FASTENER TO WOOD	MINIMUM WOOD MEMBER SIZE	ANCHOR
MSTC28	(16) 16d SINKERS	(2)2x STUDS	-
MSTC40	(32) 16d SINKERS	(2)2x STUDS	-
MSTC52	(48) 16d SINKERS	(2)2x STUDS	-
MSTC66	(68) 16d SINKERS	(2)2x STUDS	-
MST72	(62) 16d	(2)2x STUDS	-
CMST12 x 84"	(74) 16d	(2)2x STUDS	-
HD12	(4) 1" DIA. A307 BOLTS	(3) 2x STUDS	1"ø A307 BOLT
HD12 (SPECL.)	(4) 1" DIA. A307 BOLTS	4x6 POST @ 2x4 WALL 6x6 POST @ 2x6 WALL	1"ø A307 BOLT
HD19	(5) 1" DIA. A307 BOLTS	4x8 POST @ 2x4 WALL 6x6 POST @ 2x6 WALL	1-1/8"ø A307 BOLT
HD19 (SPECL.)	(5) 1" DIA. A307 BOLTS	4x8 POST @ 2x4 WALL 6x6 POST @ 2x6 WALL	1-1/4"ø A307 BOLT

SHEAR WALL FRAMING HOLDOWN NOTE:

- MINIMUM WOOD MEMBER SIZE ABOVE AND BELOW WHERE OCCURS AT FLOOR LEVEL. DO NOT USE LAG BOLTS TO FASTEN HOLDOWNS TO WOOD MEMBERS.
- HOLDOWN SCHEDULE IS PROVIDED FOR GENERAL INSTALLATION INFORMATION. NOT ALL OF HARDWARE SCHEDULED IS REQUIRED, SEE PLANS FOR HOLDOWN CALL-OUTS AND LOCATIONS, CONSULT MANUFACTURER FOR ADDITIONAL INFORMATION.
- QUANTITY OF NAILS FOR STRAPS ARE EVENLY DIVIDED BETWEEN ENDS OF STRAPS ABOVE AND BELOW THE DEPTH OF THE FLOOR SYSTEM. USE 16d COMMON NAILS, U.N.O.
- 4. FOR 2X STRAP CALL-OUT ON PLAN, USE DOUBLE STRAP TIES AND PROVIDE (5) 2x STUDS 5. IF SHEAR WALL REQUIRES 3x STUDS PER SHEAR WALL SCHEDULE. USE 3x INSTEAD OF 2x NOTED ON HOLDOWN SCHEDULE.

10. ANCHOR BOLTS SHALL BE PROVIDED WITH 3"x3"x1/4 PLATE WASHERS. FOR ANCHOR IN EXISTING FOUNDATION, EMBED ANCHOR BOLT 7" INTO CONCRETE WITH SIMPSON SET-XP EPOXY; EMBED ANCHOR BOLT 7" INTO CMU WITH SIMPSON SET

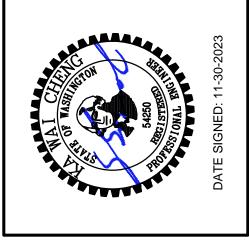
11. PRESSURE PRESERVATIVE TREATED WOOD CAN CAUSE EXCESSIVE CORROSION AND DEGRADATION OF FASTENERS. PROVIDE HOT DIPPED GALVANIZED NAILS AND CONNECTOR PLATES FOR ALL CONNECTORS IN CONTACT WITH

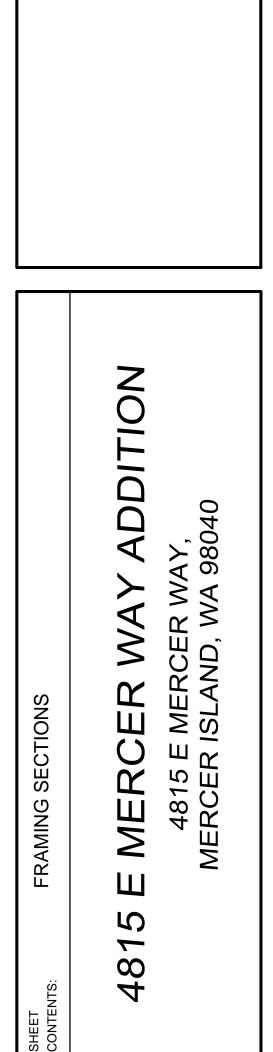
13. 7/16" APA RATED SHEATHING (OSB) MAY BE USED IN LIEU OF 15/32" SHEATHING PROVIDED THAT ALL STUDS ARE SPACED 14. WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM WALL BOARD SHEATHING (GWB), CONTACT ENGINEER OF RECORD 15. AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN LIEU OF A SINGLE 3x STUD. DOUBLE 2X

STUDS MAY BE CONNECTED TOGETHER WITH 3" NAILS OF THE SAME SPACING AND DIAMETER AS THE PLATE NAILING. CONTACT ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVES TO CAST-IN-PLACE ANCHOR

17. ALL ANCHOR BOLTS SHALL HAVE PLATE WASHER 3"x3"x1/4". PLATE WASHERS TO BE SLOTTED SO WASHERS IS WITHIN

	11-30-2023				
NO. DRAWING SUBMITTALS / REVISIONS DATE	SUBMIT FOR PERMIT	SUBMIT FOR BID	SUBMIT FOR CONSTRUCTION		
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