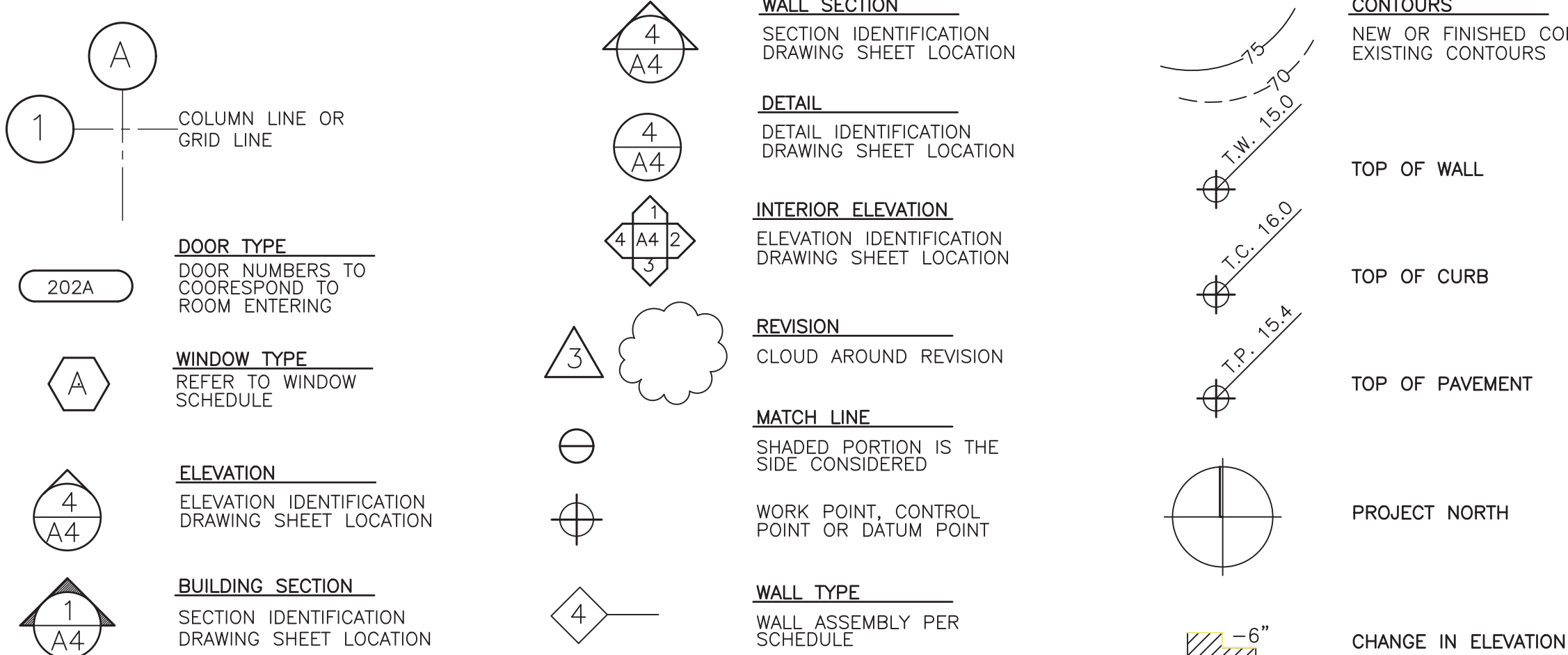


ABBREVIATIONS

ANGLE	CEILING	EXTERIOR INSULATED FINISH SYSTEM	EIFS	KITCHEN	KS	SOUTH	S
CENTERLINE	CHANNEL	ELEVATION	EL	KNEE SPACE	KIT	SOLID CORE	SC
DIAMETER OR ROUND NUMBER OR POUND PENNY	PERPENDICULAR	ELECTRIC	ELEC	LABORATORY	LAB	SEAT COVER DISPENSER SCHEDULE	SCHD
PLATE	ANCHOR BOLT	ELECTRIC WATER COOLER ELEVATOR	EWC	LAMINATE	LM	SOAP DISPENSER SECTION	SD
ACOUSTICAL AIR CONDITIONING	ACOUSTICAL TILE	EMERGENCY ENCLOSURE OR ENCLOSED ELECTRIC PANEL BOARD	EMER ENCL	LANDSCAPE	LAV	SQUARE FEET	SQ
AREA DRAIN	ADDITIVE	EPOXY	EP	LAVATORY	LB	SHOWER SHEET	SHR
ADHESIVE	ADJACENT	EQUAL	EQ	LAG BOLT LENGTH	LG	SHEATHING	SHT
ADJUSTABLE	ADJUST FLOOR	EQUIPMENT	EQPT	LEFT HAND LOCKER	LH	SOLAR INSULATED GLAZING	SIG
ACCESS FLOOR	ABOVE FINISH FLOOR	EMERGENCY SHOWER/EYE WASH	ESEW	LIQUID MARKING SURFACE	LMS	SIMILAR	SIM
AGGREGATE	ALUMINUM	ESTIMATE	EST	LIGHT	LT	SINK	SK
ALUMINUM CLAD WOOD	ALTERNATE	EXHAUST	EXH	LIGHT WEIGHT CONCRETE	LWC	SEALER	SLR
APPROXIMATE	ARCHITECTURAL	EXPANSION	EX	MACHINE	MACH	SANITARY NAPKIN DISPENSER	SNR
ASPHALT	ACOUSTICAL WALL FABRIC	EXISTING	EX	MASONRY	MAS	SANITARY NAPKIN RECEPTACLE	SNR
ACOUSTICAL WALL PANEL	BOARD	EMERGENCY EYE WASH EXTERIOR	EXT	MATERIAL	MATL	SEALANT	SNT
	BETWEEN	EXTERIOR	EXT	MAXIMUM	MAX	STAND PIPE	SP
	BUILDING	FIRE ALARM	FA	MEDIUM DENSITY OVERLAY MECHANICAL	MDO	SPECIFICATION	SPEC
	BLOCK	FLAT BAR	FB	MEMBRANE	MEMB	SQUARE	SQ
	BLOCKING	FIBER BOARD	FBD	METAL	MTL	STEEL	ST
	BEAM	FURNISHED BY OTHERS	FBO	MEZZANINE	MEZZ	STAINLESS STEEL	SST
	BEARING	FURNISHED BY CONTRACTOR	FCIC	MANUFACTURER	MFR	SERVICE SINK	SSK
	BOTTOM	INSTALL BY CONTRACTOR	IC	MANHOLE	MH	SOUND TRANSMISSION CLASS	STD
	BEDROCK	FLOOR DRAIN	FD	MINIMUM	MIN	SELECT TIGHT KNOT	STK
	BRICK	FOUNDATION	FNDN	MIRROR	MIR	STEEL STORAGE	STL
	BASEMENT	FIRE EXTINGUISHER	FE	MISCELLANEOUS	MISC	STRUCTURAL	STR
	BUILT-UP ROOF	FIRE EXTINGUISHER CABINET	FEC	MOISTURE BARRIER	MB	SUSPENDED	SUSP
		FIBERGLASS	FGL	MOLDING	MD	SHEET VINYL OR SEAMLESS VINYL	SV
		FIRE HOSE CABINET	FHC	MASONRY OPENING	MFO	SERVICE SYMMETRICAL SWITCHBOARD	SVCE SYM
		FLOOR	FL	MOUNTED	MTO	TOILET PARTITION	TPTN
		FLASHING	FLG	MULLION	MULL	TELEVISION	TV
		FLUORESCENT	FLUOR	NORTH	N	TYPICAL	TYT
		FACE OF CONCRETE	FOC	NEW	NEW	UL	UL
		FACE OF FINISH	FOF	NON-FROST SUSCEPTIBLE	NFS	UNDERWRITERS LABORATORY	UL
		FURNISH BY OWNER	FOIO	NOT IN CONTRACT	NIC	UNFINISHED	UNF
		INSTALL BY CONTRACTOR	IC	NUMBER	NO	UNLESS OTHERWISE NOTED	UNOT
		FURNISH BY OWNER	FOIO	NOISE REDUCTION COEFFICIENT	NRC	URINAL	UR
		INSTALL BY OWNER	IO	NOT TO SCALE	NTS	VARIES	VAR
		CABINET	CB	OVERALL	OA	VINYL BASE	VB
		CATCH BASIN	CB	OBSURE	OBS	VINYL COMPOSITION TILE	VCT
		CEMENT	CEM	ON CENTER	OC	VAPOR RETARDER	VR
		CERAMIC	CER	OUTSIDE DIAMETER	OD	VENTILATOR	VENT
		CUBIC FEET PER MINUTE	CFM	(DIMENSION)	OD	VERTICAL	VERT
		CONDUCTIVE FLOOR TILE	CF	OFFICE	OFF	VESTIBULE	VEST
		CHALK BOARD	CHBD	OVERHEAD	OH	VINYL	VIN
		CORNER GUARD	CG	FUTURE	FUT	VENEER	VNR
		CAST IRON	CI	FUTURE ROUGH-IN ONLY	FUT-RI	VINYL TILE	VT
		CONTROL JOINT	CJT	FIXED	FX	VINYL WALL COVERING	VWC
		CEILING	CLG	GUAGE OR GAGE	GA	WEST	W
		CONSTRUCTION JOINT	CJ	GALVANIZED	GALV	WITH	W
		CUP SINK	CS	GRAB BAR	GB	WITHOUT	W/O
		CAULKING	CLK	GENERAL	GC	WATER CLOSET	WC
		CLOSET	CL	CONTRACTOR	GC	WATER FOUNTAIN	WF
		CLEAR	CLR	GLASS OR GLAZING	GL	WOOD OR WIDTH	WD
		CERAMIC MOSAIC TILE	CMT	GLU-LAM BEAM	GLM	WINDOW	WDW
		CONCRETE MASONRY UNIT	CMU	GLASS MESH MORTAR UNIT	GMMU	WIRE GLASS	WG
		FOUNTER	FNTR	GROUND	GND	WIRE MESH	WM
		CLEANOUT	CO	GRADE	GR	WATER PROOF	WP
		COLUMN	COL	GYPSPUM WALL BOARD	GWB	WORKING POINT	WPT
		CONCRETE CONNECTION	CONC	GYPSPUM	GYP	WATER RESISTANT	WR
		CONSTRUCTION CONTINUOUS	CONSTR	HOSE BIB	HB	WATER RESISTANT BARRIER	WRB
		CORRIDOR	CORR	HARD BOARD	HB	WAINSCOT	WCSCT
		CARPET	CPT	HOLLOW CORE	HOC	WEIGHT	WT
		CASEMENT	CSMT	HAND DRYER	HD	WELED WIRE FABRIC	WWF
		CERAMIC TILE	CT	HEADER	HDR	TRANSFORMER	XFMR
		CENTER	CTR	HARDWOOD	HDWD	WEST	W
		COUNTER SINK	CTSK	HARDWARE	HDWE	WITH	W
		CUBIC YARD	CY	HOLLOW METAL	HM	WITHOUT	W/O
				HORIZONTAL	HORIZ	WATER CLOSET	WC
				HEIGHT	HT	WATER FOUNTAIN	WF
				HEATING	HTG	WOOD OR WIDTH	WD
				HEATING, VENTILATING, AIR CONDITIONING	HVAC	WINDOW	WDW
				HOT WATER HEATER	HWH	WIRE GLASS	WG
				INSIDE DIAMETER	ID	WIRE MESH	WM
				(DIMENSION)	ID	WATER PROOF	WP
				INSULATED GLAZING	IG	WORKING POINT	WPT
				INSULATED HOLLOW	IHM	WATER RESISTANT	WR
				JAMPER	JMPR	WATER RESISTANT BARRIER	WRB
				DOWNSPOUT	DS	WAINSCOT	WCSCT
				DISHWASHER	DW	WEIGHT	WT
				DRAWING	DWG	WELED WIRE FABRIC	WWF
				EAST	E	TRANSFORMER	XFMR
				EXISTING	(E)	WEST	W
				EACH	EA	WITH	W
				EXPANSION BOLT	EB	WITHOUT	W/O
				EXPANSION JOINT	EJ	WATER CLOSET	WC

TYPICAL SYMBOLS



GENERAL NOTES

- DRAWINGS ARE INTENDED TO BE DIAGRAMS ONLY FOR THE CONTRACTOR'S USE. DIMENSIONS ARE NOTED AS REQUIRED. CONTACT ARCHITECT IF DIMENSIONS DO NOT MEET FIELD CONDITIONS. DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS AND RELATIONSHIPS TO EXISTING CONDITIONS AS FIELD CONDITIONS MAY VARY FROM AVAILABLE SITE INFORMATION.
- ALL DIMENSIONS ARE TO FACE OF FRAMING, MASONRY OR CONCRETE UNLESS OTHERWISE NOTED.
- ALL MATERIALS LISTED ARE PROVIDED UNDER THIS CONTRACT UNLESS INDICATED AS 'EXISTING' OR PROVIDED BY OWNER.
- SUBSTRATES AND FINISHES ARE PROVIDED TO DESCRIBE SCOPE OF WORK. EVERY RETURN EDGE OR WALL TRANSITION IS NOT LABELED IF SIMILAR TO ADJACENT CONDITION OR SIMILAR TO CONDITION NOTED AS 'TYPICAL.'
- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
- GENERAL CONTRACTOR TO COORDINATE REQUIRED HOLES AND BLOCKING FOR MECHANICAL AND ELECTRICAL WORK.
- THESE DRAWINGS ARE NOT INTENDED TO IDENTIFY EVERY ITEM OR MISCELLANEOUS ACCESSORY TO BE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERSTANDING THE SCOPE OF DEMOLITION AND EXCAVATION.

ENERGY NOTES

CLIMATIC ZONE:	4C MARINE
THERMAL STANDARDS FOR OPENINGS CODES:	UNLIMITED OPTION
CODES:	2021 W.S.E.C. 2021 I.R.C. W.A.C. 51-11R
HEAT TYPE:	AIR SOURCED HEAT PUMP, FORCED AIR SYSTEM

PER WSEC R406.3, A CERTIFICATE IS REQUIRED TO BE POSTED WITHIN 3 FT OF THE ELECTRICAL PANEL; IT MUST INCLUDE THE FOLLOWING: PREDOMINANT R-VALUES, U-VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT.

AIR LEAKAGE	MANUFACTURED DOORS/WINDOWS: CONFORM TO SECTION R402.4.2 OF THE WASHINGTON STATE ENERGY CODE.
EXTERIOR JOINTS/OPENINGS: SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.	
MOISTURE CONTROL	WALLS: VAPOR RETARDER BONDED TO BATT INSULATION; INSTALL WITH STAPLES NOT MORE THAN 8 INCHES ON CENTER AND END WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR, VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE)
ATTIC/CELLINGS: VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE). INSTALL CONTINUOUSLY.	
CRAWL SPACE: 6 MIL POLYETHYLENE	
VENTILATION	ATTICS WITH LOOSE FILL: Baffle Vent Openings to Deflect Air Above Insulation Surface Enclosed Joist or Rafter Spaces: PROVIDE MINIMUM OF ONE INCH CLEAR VENTED AIR SPACE ABOVE INSULATION. TAPE OR COMPRESS INSULATION AT PERIMETER TO INSURE PROPER VENTILATION, MAINTAINING MINIMUM OF R-38.
HEATING & COOLING	AIR SOURCE HEAT PUMP
TEMP. CONTROL	FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF BEING SET FROM 55-85 DEGREES FAHRENHEIT AND OF OPERATING THE HEATING/COOLING SYSTEM IN SEQUENCE. THERMOSTAT TO BE AUTOMATIC DAY/NIGHT SETBACK TYPE.
DUCT ISULATION	THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH SECTION R403.3 OF THE WASHINGTON STATE ENERGY CODE. a. ALL HEATING DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED WITH A MIN. OF R-8 OR AS PER WSEC 403.3.1. ALL SEAM JOINTS SHALL BE TAPE, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER WSEC. b. DUCTS WITHIN A CONCRETE SLAB OR IN THE GROUND SHALL BE INSULATED TO R-10, WITH INSULATION DESIGNED TO BE USED BELOW GRADE.
LIGHTING	ALL PERMANENTLY INSTALLED LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL CONTAIN ONLY HIGH-EFFICACY LIGHTING SOURCES, PER WSEC 404.1. PERMANENTLY INSTALLED INTERIOR LIGHTING FIXTURES SHALL BE CONTROLLED WITH EITHER A DIMMER, OCCUPANT SENSOR CONTROL, OR OTHER CONTROL THAT IS INSTALLED OR BUILT INTO THE FIXTURE. NOT REQUIRED FOR BATHROOMS, HALLWAYS, OR LIGHTING DESIGNED FOR SAFETY OR SECURITY, PER WSEC 404.2. PERMANENTLY INSTALLED EXTERIOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON/OFF SWITCH WHICH PERMITS AUTOMATIC SHUT-OFF ACTIONS AND AUTOMATICALLY SHUTS OFF WHEN DAYLIGHT IS PRESENT TO SATISFY THE LIGHTING NEEDS. OVERRIDE CONTROLS SHALL NOT BE ALLOWED UNLESS OVERRIDE AUTOMATICALLY RETURNS AUTOMATIC CONTROL TO NORMAL OPERATION WITHIN 24 HOURS.
PIPE INSULATION	ALL HOT WATER PIPES, AND NON-REGULATING COLD WATER PIPES LOCATED IN UNCONDITIONED SPACES, SHALL BE INSULATED TO R-3 MIN. PLUMBING OR MECHANICAL CANNOT DISPLACE THE REQUIRED INSULATION.
WHOLE-HOUSE VENTILATION	WHOLE-HOUSE VENTILATION SYSTEM: a. WHOLE-HOUSE VENTILATION SHALL BE PROVIDED BY EXHAUST FAN PROVIDING 315 CFM RUNNING INTERMITTENTLY (33%) PER 2021 IRC TABLES M505.4.3 (1&2), 90 CFM EXHAUST FANS SHALL BE LESS THAN .35 WATT PER CFM AND CONNECTED TO A 24 HOUR CLOCK TIMER AND HAVE A SONE RATING OF LESS THAN 1.0. VENTILATION SHALL BE ABLE TO OPERATE INDEPENDENTLY OF HEATING SYSTEM. b. SYSTEM SHALL HAVE A 5"Ø SMOOTH FRESH AIR DUCT W/ LOUVER & SCREEN CONNECTED TO THE RETURN AIR STREAM 4' UPSTREAM OF THE AIR HANDLER AND INSULATED W/ R-4 MIN IN HEATED AREAS. c. SHALL HAVE A FILTER WITH A MERV OF AT LEAST 6 INSTALLED IN AN EASILY ACCESSIBLE LOCATION. d. FRESH AIR VENT SHALL BE LOCATED AWAY FROM SOURCES OF ODORS OR FLAMES, MIN 10' FROM PLUMBING OR APPLIANCE VENTS, AWAY FROM ROOMS W/ FUEL BURNING APPLIANCES, AND OUT OF ATTICS, CRAWL SPACES, AND GARAGES. e. AIRFLOW FOR WHOLE-HOUSE EXHAUST FAN SHALL BE PROVIDED BY UNDERCUTTING INTERIOR DOORS 1/2" ABOVE FINISHED FLOOR, TYP.
PLUMBING FIXTURES	PLUMBING FIXTURES PER WAC 51-56-0400 ALL TOILETS 1.28 GPF MAX URINALS 1.0 GPF MAX SHOWERHEADS <1.8 GPM KITCHEN FAUCETS <1.8 GPM LAVATORIES <1.2 GPM

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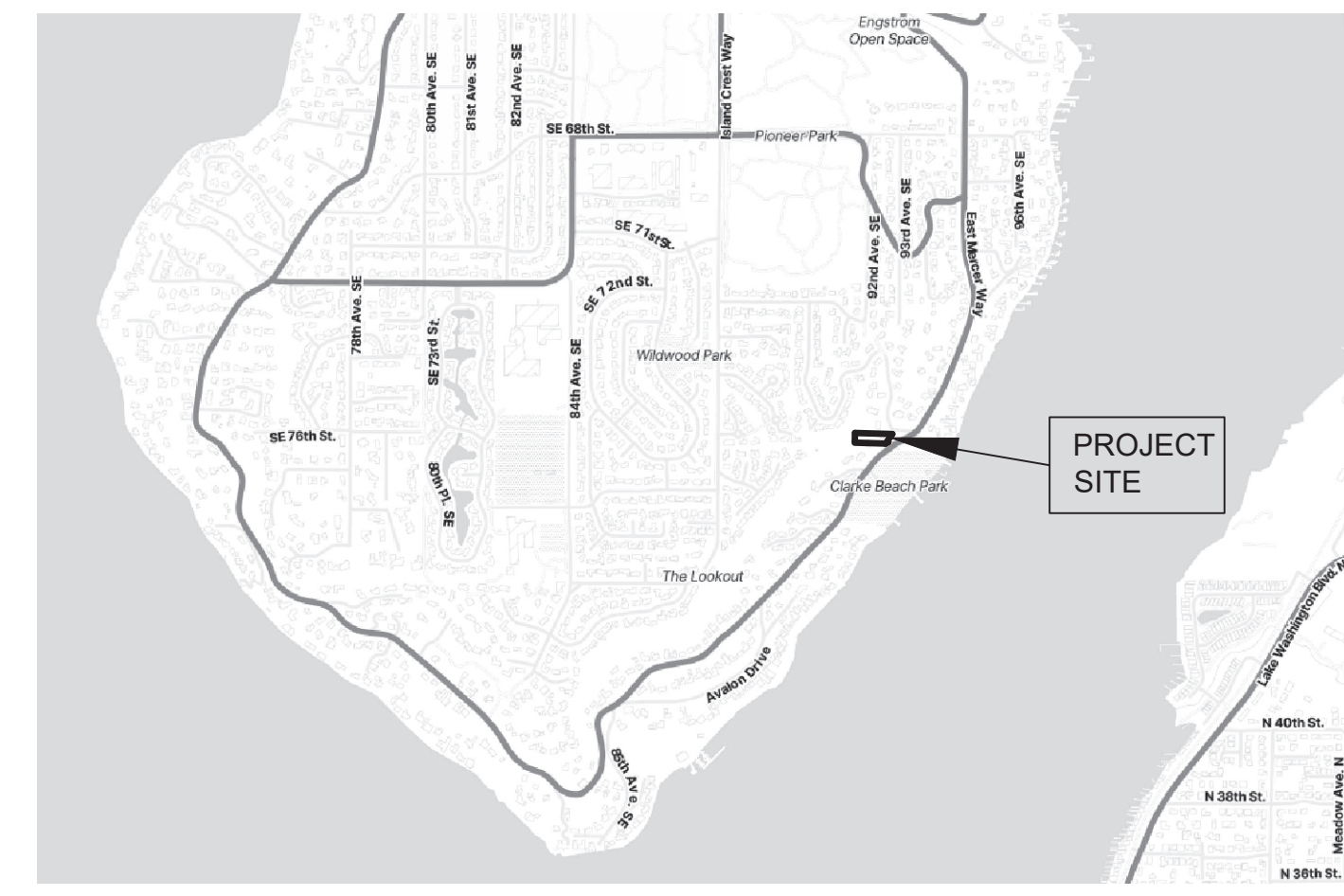
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PROJECT DESCRIPTION

DEMOLITION OF EXISTING AND CONSTRUCTION OF NEW SINGLE-FAMILY RESIDENCE WITH ASSOCIATED SITE WORK, SUBSTANTIALLY IN THE SAME PLACE. SITE WORK INCLUDES LANDSCAPING AND HARDSCAPING, INCLUDING REGRADING EXISTING DRIVEWAY TO MEET WITH NEW HOME ENTRY DRIVEWAY TO BE REPLACED IN SAME LOCATION AS EXISTING. BUILDING PAD AND CRITICAL AREA SETBACKS PREVIOUSLY APPROVED UNDER FINAL SHORT PLAT (SUB20-002). MITIGATION FOR ALL WORK WITHIN CRITICAL AREA BUFFERS WAS COMPLETED UNDER CA016-003, INCLUDING LANDSCAPING AND HARDSCAPING CURRENTLY PROPOSED.

LEGAL DESCRIPTION

LOT 2, CITY OF MERCER ISLAND SHORT PLAT NO. SUB20-002, RECORDED ON JUNE 27, 2022 UNDER RECORDING NO. 20220627900011, RECORDS OF KING COUNTY, WASHINGTON; SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

DRAWING INDEX

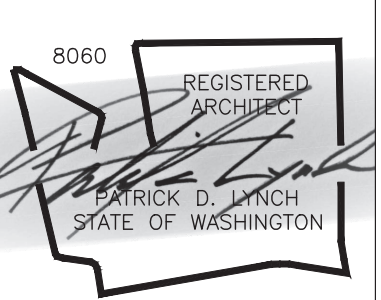
A0.0	GENERAL NOTES, DRAWING INDEX, VICINITY MAP
A1.0	SITE PLAN & SITE AREA CALCULATIONS
A1.1	SITE PLAN 1.96 (LOCAL TO HOUSE)
A1.2	A.B.E. CALCULATIONS
SURVEY	
C1.0	TESC AND DEMOLITION PLAN
C1.1	TESC AND DEMOLITION DETAILS AND NOTES
C2.0	GRADING PLAN
C2.1	DRAINAGE PLAN
C2.2	GRADING AND DRAINAGE DETAILS
C3.0	UTILITIES AND PAVING PLAN
C3.1	UTILITIES AND PAVING DETAILS
L-1.0	LAYOUT AND MATERIALS PLAN
L-1.1	LAYOUT AND MATERIALS PLAN

A2.0	FIRST FLOOR PLAN
A2.1	SECOND FLOOR PLAN
A2.2	PERGOLA PLAN
A2.3	PERGOLA PLAN & ELEVATIONS
A3.0	WINDOW SCHEDULE & EAST + SOUTH ELEVATIONS
A3.1	EXTERIOR DOOR SCHEDULE & WEST + NORTH ELEVATIONS
A4.0	BUILDING SECTIONS
A4.1	BUILDING SECTIONS & DOOR SCHEDULE

S1.0	GENERAL STRUCTURAL NOTES
S2.0	FOUNDATION PLAN
S2.1	SECOND FLOOR FRAMING PLAN
S2.2	ROOF FRAMING PLAN
S2.3	SHEAR WALL KEY PLAN
S3.0	HOUSE FOUNDATION DETAILS
S4.0	HOUSE FRAMING DETAILS
S4.1	HOUSE FRAMING DETAILS

S1.1	SSF PERGOLA GENERAL NOTES
S2.1	SSF PERGOLA FRAMING PLANS
S3.1	SSF PERGOLA DETAILS

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REVISIONS		
6-9-25	SITE & PERGOLA	
6-9-25	SECTION 2 / A4.0	
8-8-25	CATCHMENT/PLUMBING	

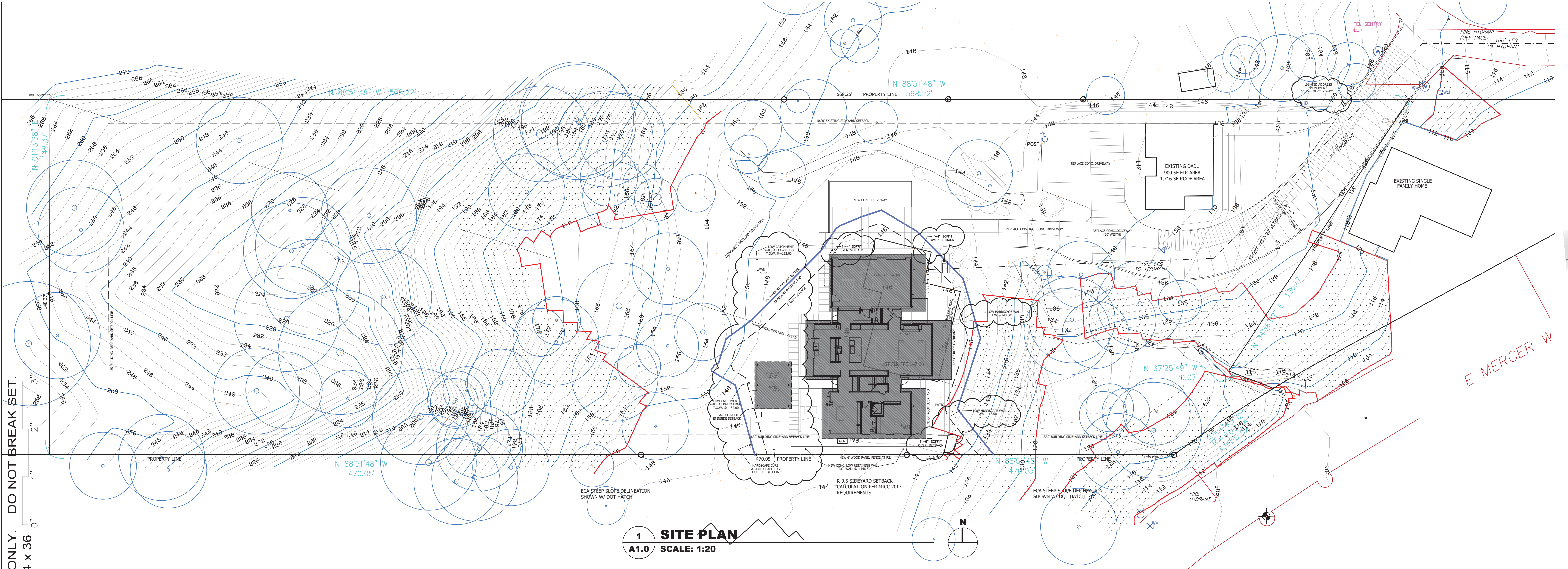
Permit Set

Date:	MAR. 14, 2025
Job Number:	
Drafting:	-
Approval:	PDL

Project info & Drawing Index

Sheet Number:
A0.0

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



1 SITE PLAN
A1.0 SCALE: 1:20

LOT SLOPE CALCULATION	
HIGHEST ELEVATION	268'
LOWEST ELEVATION	120'
ELEVATION DIFFERENCE	148'
HORIZONTAL DISTANCE	492'
148/492 =	0.3008
LOT SLOPE	30.08%
LOT COVERAGE ALLOWED	30%

LOT COVERAGE CALCULATIONS	
A. GROSS & NET LOT AREA	77,384 SF
C. ALLOWED LOT COVERAGE AREA	23,215 SF
D. ALLOWED LOT COVERAGE	30% OF LOT
E. EXISTING LOT COVERAGE:	
1. MAIN STRUCTURE ROOF AREA	1,850 SF
2. ACCESSORY BLDG ROOF AREA	1,716 SF
3. VEHICULAR USE	7,040 SF
4. COVERED PATIOS & DECKS	0 SF
5. TOTAL E1 THRU E4:	10,606 SF
F. TOTAL LOT COVERAGE AREA REMOVED	(4,026 SF)
G. SINGLE STORY ADJUSTMENT	0
H. FLAG LOT ADJUSTMENT	0
I. NEW LOT COVERAGE AREA:	
1. MAIN STRUCTURE ROOF AREA	3,575 SF
2. ACCESSORY STRUCTURE ROOF AREA	0
3. VEHICULAR USE	1,466 SF
4. COVERED PATIOS & DECKS	300 SF
5. TOTAL I1 THRU I4:	5,341 SF
J. TOTAL PROJECT LOT COVERAGE (E5-F)+I5	12,806 SF
K. PROPOSED LOT COVERAGE AREA (I/B)x100	16.55% OF LOT

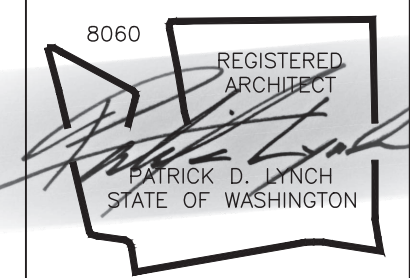
HARDSCAPE CALCULATIONS	
A. GROSS & NET LOT AREA	77,384 SF
C. AREA BORROWED FROM LOT COVERAGE	0
D. ALLOWED HARDSCAPE AREA = 9% OF LOT AREA + C	9% OF LOT
E. ALLOWED HARDSCAPE AREA	6,964 SF
F. TOTAL EXISTING HARDSCAPE AREAS:	
1. UNCOVERED DECKS	100 SF
2. UNCOVERED PATIOS	0
3. WALKWAYS	200 SF
4. STAIRS	75 SF
5. ROCKERIES AND RETAINING WALLS	0
6. OTHER	0
7. TOTAL F1 THRU F6:	375 SF
G. TOTAL HARDSCAPE AREA REMOVED	(375 SF)
H. TOTAL NEW HARDSCAPE AREAS:	
1. UNCOVERED DECKS	0
2. UNCOVERED PATIOS	577 SF
3. WALKWAYS	1,227 SF
4. STAIRS	0
5. ROCKERIES AND RETAINING WALLS	395 SF
6. OTHER	0
7. TOTAL NEW HARDSCAPE AREA H1 THRU H6:	2,199 SF
I. TOTAL PROJECT HARDSCAPE AREA (F7-G)+H7	2,199 SF
J. TOTAL PROJECT HARDSCAPE AREA (I/B)x100	2.84%

GROSS FLOOR AREA CALCULATIONS				
BUILDING AREA	EXISTING	REMOVED	NEW	TOTAL
UPPER FLOOR	0	0	2,772 SF	2,772 SF
MAIN FLOOR	1,490 SF	1,490 SF	2,068 SF	2,068 SF
GROSS BASEMENT	1,115 SF	1,115 SF	0	0
GARAGE	450 SF	450 SF	704 SF	704 SF
TOTAL FLOOR AREA:	3,055 SF	3,055 SF	5,544 SF	5,544 SF
ACCESSORY BUILDING	0	0	0	0
ACCESSORY DWELLING	900 SF	0	0	900 SF
2ND & 3RD STORY DECKS	0	0	0	0
BASEMENT AREA EXCLUDED	0	0	0	0
150% GFA MODIFIER	0	0	0	0
200% GFA MODIFIER	0	0	0	0
STAIRCASE GFA MODIFIER	0	0	0	0
TOTAL BUILDING AREA:	3,955 SF	3,055 SF	5,544 SF	6,444 SF

A. LOT AREA	77,384 SF
B. ZONE	R-9.5
C. ALLOWED GROSS FLOOR AREA	8,000 SF
D. ALLOWED GROSS FLOOR AREA	40% OF LOT
E. PROPOSED GROSS FLOOR AREA	6,444 SF
F. PROPOSED GROSS FLOOR AREA	8.33% OF LOT

BUILDING HEIGHT CALCULATIONS	
B. AVERAGE BUILDING HEIGHT (A.B.E. + 30 FT)	177.3'
C. PROPOSED BUILDING HEIGHT	171.3'
D. BENCHMARK ELEVATION	
E. BENCHMARK LOCATION	
F. SLOPING LOT - MAX. HT. OF WALL ABOVE LOWEST EXISTING GRADE	175'
G. A.B.E. AND BUILDING HEIGHT SHOWN ON PLAN SHEETS #:	A3.0 & A3.1
H. TOPO-SURVEY ACCURACY ATTESTATION ON SHEET #:	

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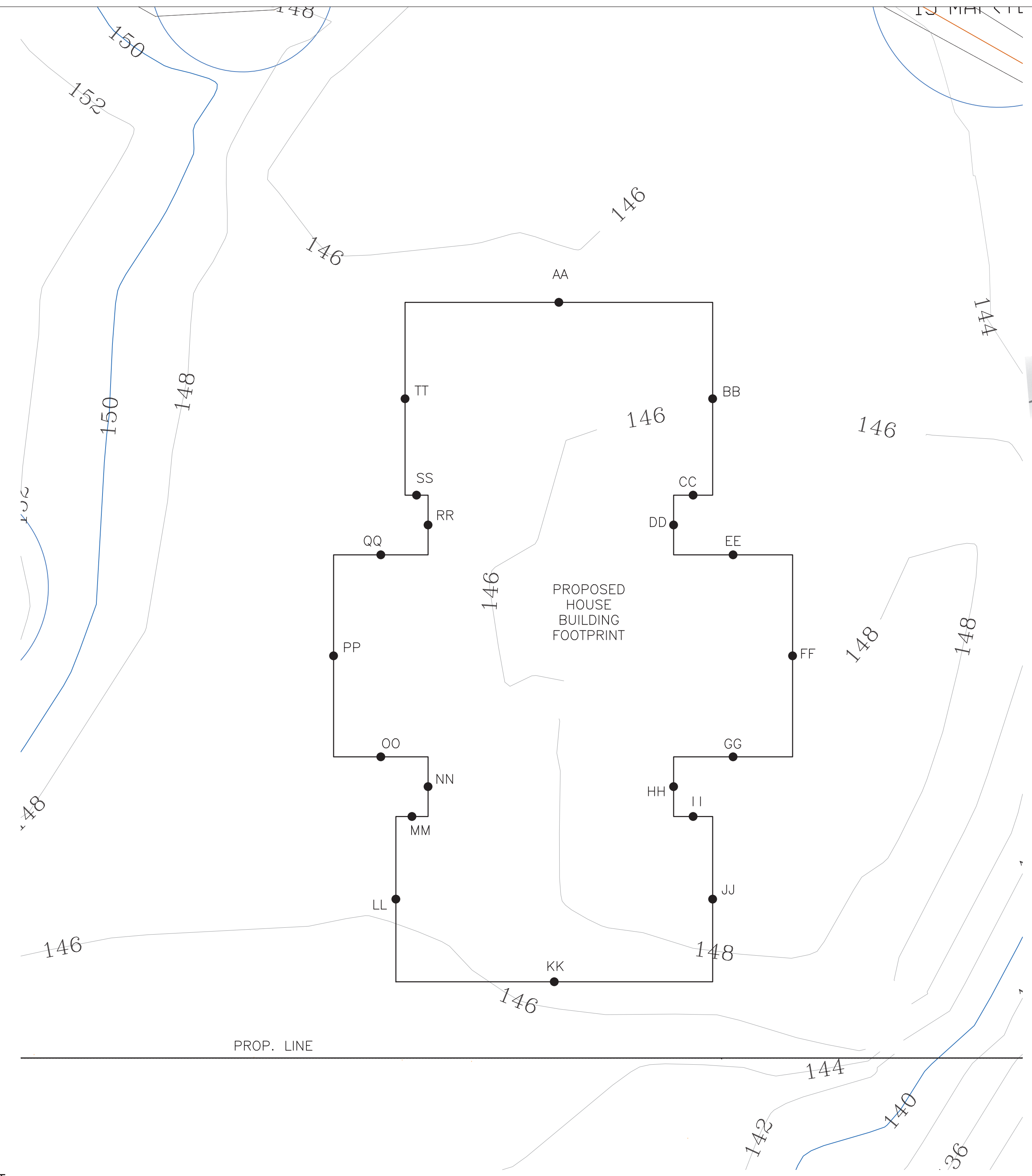
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Site Plan & Site Area Calculations

Sheet Number:
A1.0

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MIDPOINT ELEV.	WALL SEGMENT
AA = 145.9	aa = 33.5
BB = 145.9	bb = 21.0
CC = 146.9	cc = 4.3
DD = 147.0	dd = 6.5
EE = 147.3	ee = 13.0
FF = 148.8	ff = 22.0
GG = 149.8	gg = 13.0
HH = 150.1	hh = 6.5
II = 150.3	ii = 4.3
JJ = 150.1	jj = 18.0
KK = 146.5	kk = 34.5
LL = 145.8	ll = 18.0
MM = 147.0	mm = 3.5
NN = 147.2	nn = 6.5
OO = 147.0	oo = 10.3
PP = 147.0	pp = 22.0
QQ = 147.0	qq = 10.3
RR = 147.0	rr = 6.5
SS = 147.0	ss = 2.5
TT = 147.3	tt = 21.0

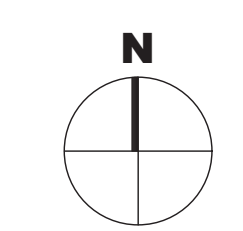
A.B.E. CALCULATION FOR PROPOSED NEW RESIDENCE

$$\frac{(145.9 \times 33.5) + (145.9 \times 21.0) + (146.9 \times 4.3) + (147.0 \times 6.5) + (147.3 \times 13.0) + (148.8 \times 22.0) + (149.8 \times 13.0) + (150.1 \times 6.5) + (150.3 \times 4.3) + (150.1 \times 18.0) + (146.5 \times 34.5) + (145.8 \times 18.0) + (147.0 \times 3.5) + (147.2 \times 6.5) + (147.0 \times 10.3) + (147.0 \times 22.0) + (147.0 \times 10.3) + (147.0 \times 6.5) + (147.0 \times 2.5) + (147.3 \times 21.0)}{33.5 + 21.0 + 4.3 + 6.5 + 13.0 + 22.0 + 13.0 + 6.5 + 4.3 + 18.0 + 34.5 + 18.0 + 3.5 + 6.5 + 10.3 + 22.0 + 10.3 + 6.5 + 2.5 + 21.0}$$

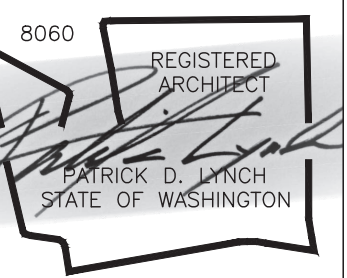
$$\frac{40826.81}{277.2} = 147.3 \text{ ' AVERAGE BUILDING ELEVATION (A.B.E.)}$$

REFER TO ELEVATION SHEET A3.0 & A3.1 FOR A.B.E. HEIGHTS ON PROPOSED STRUCTURE

1 BLDG FOOTPRINT & A.B.E. CALCS
A1.2 SCALE: 1/8"=1'-0"



PATRICK D LYNCH LLC
711 West Washington Street
South Bend, IN 46601
574.286.0816
plyncharchitect@gmail.com



CHESHIRE HOUSE
7615 E. MERCER WAY
MERCER ISLAND, WA 98040

REVISIONS	DATE	DESCRIPTION
6-9-25		SITE & PERGOLA
6-9-25		SECTION 2 / A4.0
8-8-25		CATCHMENT/PLINGS

Permit Set

Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

ABE Calculations

Sheet Number:
A1.2

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

LOT 2, CITY OF MERCER ISLAND SHORT PLAT NO. SUB20-002, RECORDED ON JUNE 27, 2022 UNDER RECORDING NO. 20220627900011, RECORDS OF KING COUNTY, WASHINGTON, SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

ACCEPTED THE BEARING OF N 50°21'13" E BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF E MERCER WAY, PER REFERENCE NO. 1.

VERTICAL DATUM

NAVD 88 PER GPS OBSERVATIONS

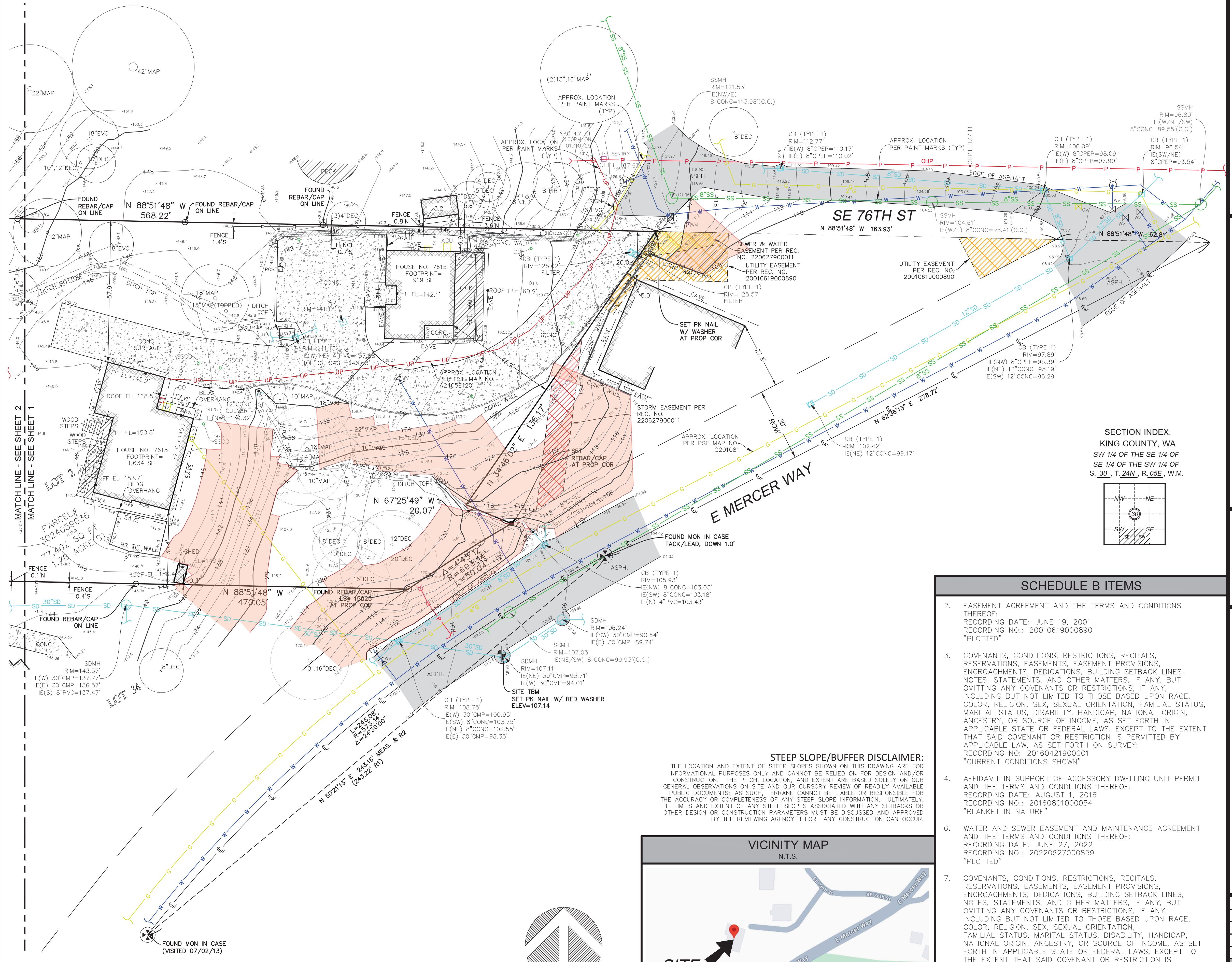
SITE TEMP. BENCHMARK DESCRIPTION: PK NAIL W/ RED WASHER LOCATION: 26.5'S & 38.2'E OF THE SE PROP COR ELEVATION: 107.14'

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN JANUARY OF 2013 AND JANUARY OF 2025. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 3024059036
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 77,402 S.F. (1.78 ACRES)
6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM CHICAGO TITLE OF WASHINGTON COMPANY'S "SUBDIVISION GUARANTEE", GUARANTEE NO. 0284748-ETU, DATED JANUARY 02, 2025. IN PREPARING THIS MAP, TERRANE, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS TERRANE, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED "SUBDIVISION GUARANTEE". TERRANE, INC. HAS RELIED WHOLLY ON CHICAGO TITLE OF WASHINGTON COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND TERRANE, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE NOTED.
8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 3-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND

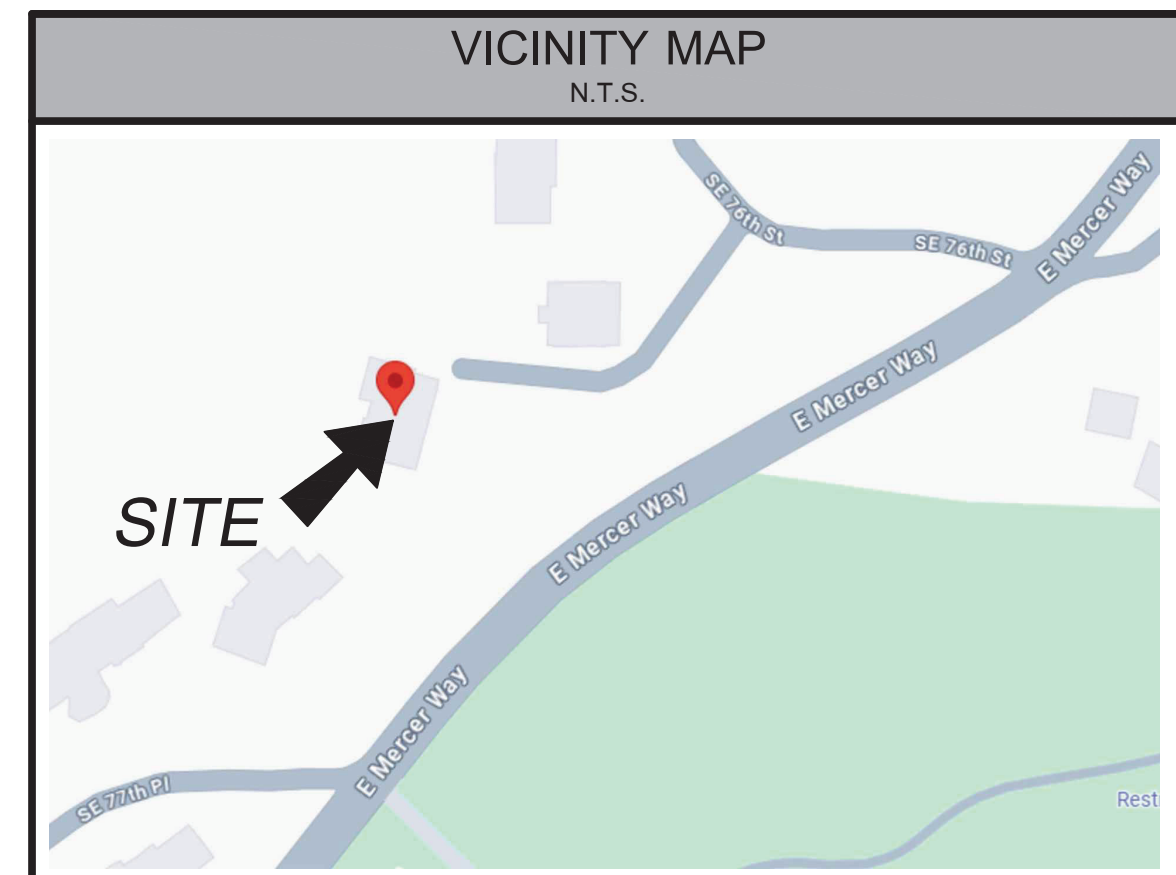
	BENCHMARK		SEWER LINE
	CENTERLINE ROW		FIRE HYDRANT
	FENCE LINE (CHAIN LINK)		WATER METER
	FENCE LINE (WOOD)		WATER VALVE
	IRON PIPE (FOUND)		WATER LINE
	MONUMENT (IN CASE, FOUND)		AIR CONDITION UNIT
	PROPERTY LINE (SUBJECT)		AREA DRAIN
	NAIL AS NOTED		AUDITOR'S FILE
	REBAR & CAP (SET)		AWNING
	REBAR AS NOTED (FOUND)		BUILDING
	RETAINING WALL		C.C. CENTER CHANNEL
	RIGHT-OF-WAY LINES		CALC'D CALCULATED
	BUILDING		CATCH BASIN
	BOLLARD		CLEANOUT
	POST		COLUMN
	SIGN (AS NOTED)		CONCRETE
	TREE (AS NOTED)		CORNER
	DITCH (FLOWLINE)		DECIDUOUS
	ASPHALT SURFACE		ELEVATION
	CONCRETE SURFACE		EVERGREEN
	DECK		FINISH FLOOR
	GRAVEL SURFACE		GAS
	ROCKERY		LAND SURVEYOR NUMBER
	STEEP SLOPE AREA		MEASURED
	GAS METER		MONUMENT
	GAS VALVE		OVERHEAD POWER
	GAS LINE		PROPERTY
	GUY ANCHOR		RECORD DATA
	POWER HAND HOLE		RECORD OF SURVEY
	POWER METER		RIGHT OF WAY
	POWER POLE		SERVICE DRAIN
	POWER POLE W/ LIGHT		SERVICE DRAIN MANHOLE
	POWER (OVERHEAD)		SQUARE FEET
	POWER (UNDERGROUND)		SANITARY SEWER MANHOLE
	CULVERT PIPE		SQUARE FEET
	INLET (TYPE 1)		GAS EASEMENT PER REC. NO. 619000890
	STORM MANHOLE		STORM EASEMENT PER REC. NO. 220627900011
	STORM DRAIN LINE		SEWER & WATER EASEMENT PER REC. NO. 20220627900011
	CLEANOUT		
	SEWER MANHOLE		



REFERENCES

- R1. TARYWOOD PARK, VOL. 127 OF PLATS, PG. 46-49, RECORDS OF KING COUNTY, WASHINGTON.
- R2. CITY OF MERCER ISLAND SHORT PLAT NO. SUB 20-002, VOL. 468, PGS. 128-130, RECORDS OF KING COUNTY, WASHINGTON.

STEEP SLOPE/BUFFER DISCLAIMER:
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS, AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.



SCHEDULE B ITEMS

2. EASEMENT AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: JUNE 19, 2001
RECORDING NO.: 20010619000890
"PLOTTED"
3. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, ENCROACHMENTS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON SURVEY:
RECORDING NO.: 20160421900001
"CURRENT CONDITIONS SHOWN"
4. AFFIDAVIT IN SUPPORT OF ACCESSORY DWELLING UNIT PERMIT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: AUGUST 1, 2016
RECORDING NO.: 20160801000054
"BLANKET IN NATURE"
6. WATER AND SEWER EASEMENT AND MAINTENANCE AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: JUNE 27, 2022
RECORDING NO.: 20220627000859
"PLOTTED"
7. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, ENCROACHMENTS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON CITY OF MERCER ISLAND SHORT PLAT NO. SUB20-002:
RECORDING NO.: 20220627900011
"PLOTTED"
8. TEMPORARY TIEBACK EASEMENT AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: JANUARY 8, 2024
RECORDING NO.: 20240108000595
"EXPIRED"

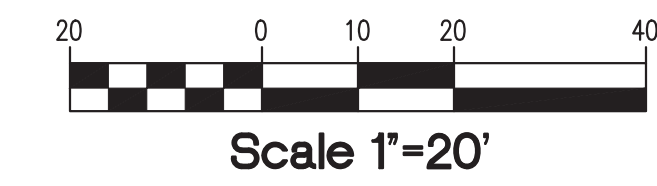
We are the measure | terrane.net

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 3024059036
7615 E MERCER WAY
7615 EAST MERCERY WAY
MERCER ISLAND, WA 98040

TERRANE
11235 SE 6th St, Suite 130
Bellevue, WA 98004
p: 425-458-4488 | e: info@terrane.net

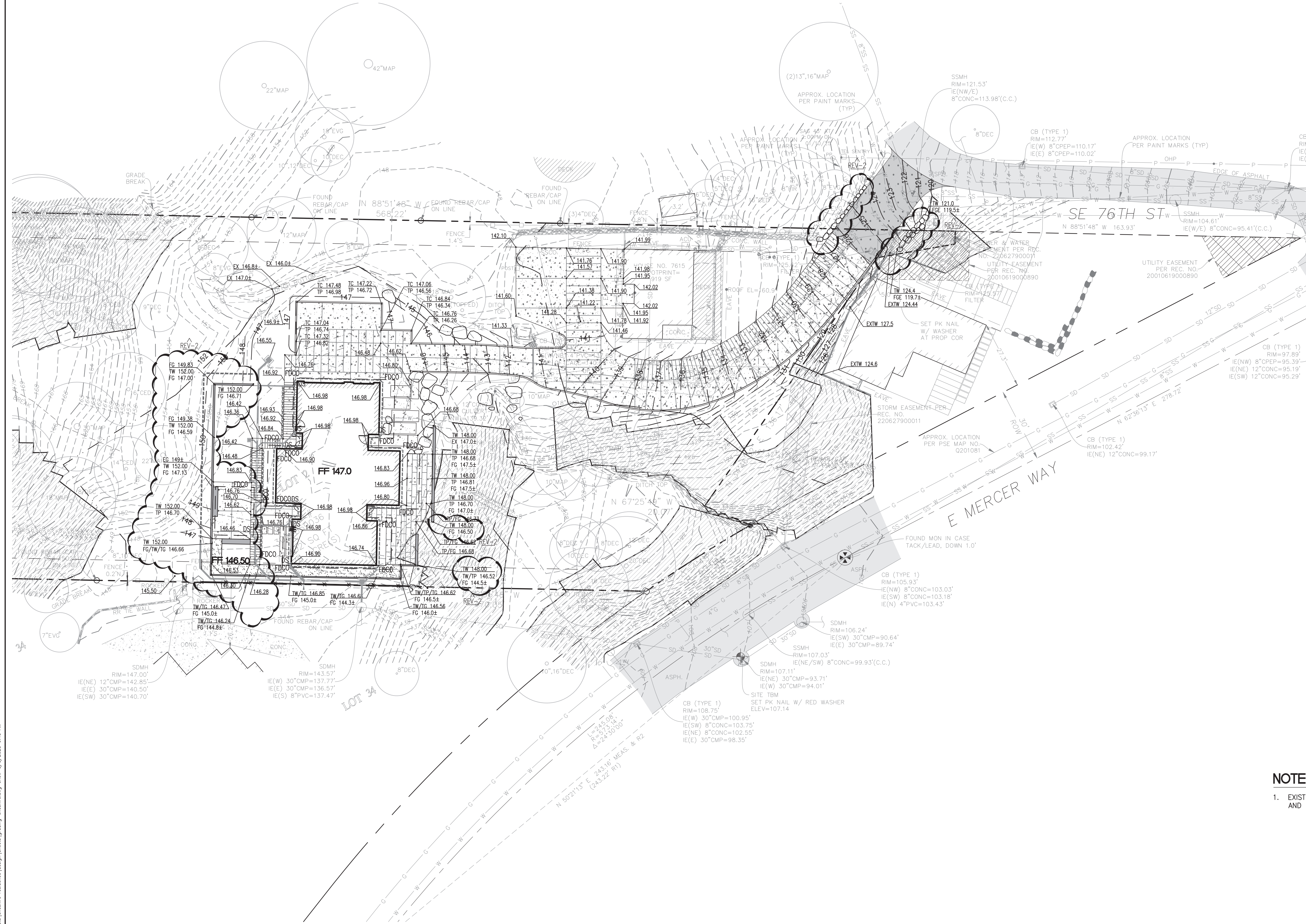
JOB NUMBER: 13507
DATE: 01/27/25
DRAFTED BY: MEB
CHECKED BY: CAS
SCALE: 1" = 20'
REVISION HISTORY
SHEET NUMBER
1 OF 2

Section 30, Township 24N, range 5E W.M.



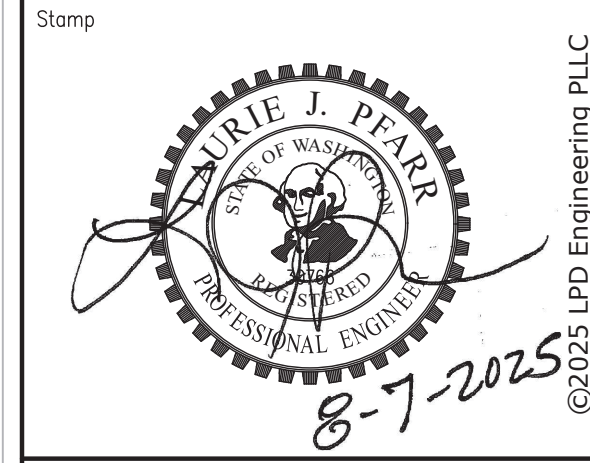
LEGEND

- PROPERTY LINE
- - - 230 EX CONTOUR (INDEX)
- - - 231 EX CONTOUR
- - - 230 PROPOSED CONTOUR (INDEX)
- - - 231 PROPOSED CONTOUR
- XXX SPOT ELEVATION
- FF 78.0** FINISHED FLOOR ELEVATION
- [Hatched Box] EX BUILDING
- [Hatched Box] PROPOSED BUILDING
- [Dotted Box] CONCRETE PAVEMENT
- [Dotted Box] HEAVY DUTY CONCRETE PAVEMENT
- [Dotted Box] SCORED CONCRETE
- [Dotted Box] ASPHALT (AC) PAVEMENT
- [Dotted Box] GRAVEL SURFACING
- [Solid Line] SITE WALL
- [Dashed Line] VERTICAL CURB
- [Dashed Line] ROCKERY
- [Square] AREA DRAIN
- [Square] TRENCH DRAIN
- [Square] CATCH BASIN TYPE 1
- [Square] STORM DRAINAGE PIPE
- [Dashed Line] FOOTING/SUBSURFACE DRAIN
- [Square] SDCO STORM DRAIN CLEANOUT
- [Square] FDCO FOOTING DRAIN CLEANOUT
- [Square] DS DOWNSPOUTS
- [Line] SIDE SEWER PIPE
- [Line] SEWER CLEANOUT
- [Line] SIDE SEWER CONNECTION
- [Line] WATER FITTINGS
- [Line] WATER SERVICE LINES
- [Line] WATER METER
- [Line] WATER SERVICE LINES

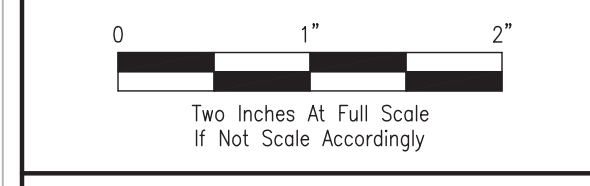


NOTES

1. EXISTING CUT MATERIAL SHALL NOT BE REUSED AS FILL ONSITE AND SHALL BE DISPOSED OFFSITE.



No.	Revisions	Date
REV2	BUILDING PERMIT CITY CORRECTIONS	2025-08-07



Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY
 City of Mercer Island, Washington

Project No.	
Issue Date	MARCH 07, 2025
Scale	As Noted
Designed	ACW Checked LJP
Drawn	SBR Approved LJP

GRADING PLAN

PERMIT SET

Sheet

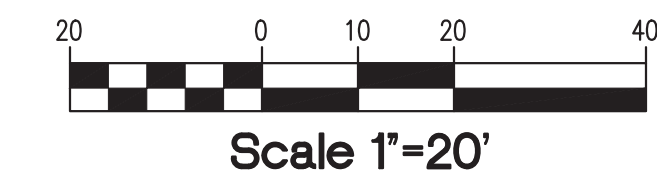
C2.0

Call 3 Working Days Before You Dig!

1-800-424-5555

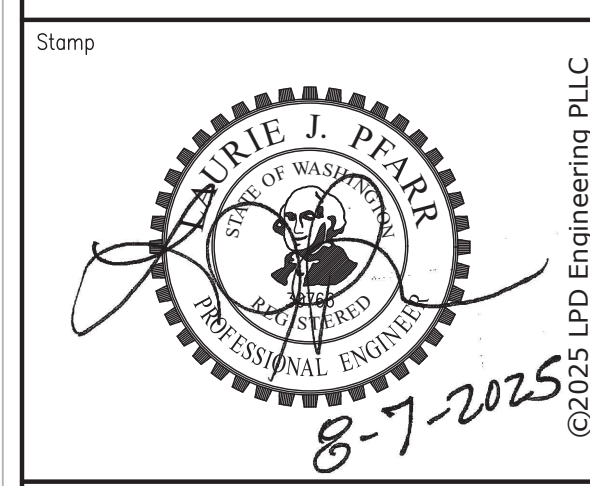
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Section 30, Township 24N, range 5E W.M.

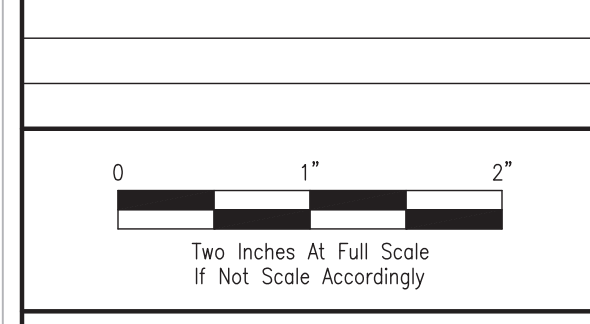


LEGEND

- PROPERTY LINE
- - - - EX CONTOUR (INDEX)
- - - - EX CONTOUR
- - - - PROPOSED CONTOUR (INDEX)
- - - - PROPOSED CONTOUR
- FF 78.0** FINISHED FLOOR ELEVATION
- [Hatched] EX BUILDING
- [Hatched] PROPOSED BUILDING
- [Dotted] CONCRETE PAVEMENT
- [Dotted] HEAVY DUTY CONCRETE PAVEMENT
- [Dotted] SCORED CONCRETE
- [Dotted] ASPHALT (AC) PAVEMENT
- [Dotted] GRAVEL SURFACING
- [Dotted] SITE WALL
- [Dotted] VERTICAL CURB
- [Dotted] ROCKERY
- [Dotted] AREA DRAIN
- [Dotted] TRENCH DRAIN
- [Dotted] CATCH BASIN TYPE 1
- [Dotted] STORM DRAINAGE PIPE
- [Dotted] FOOTING/SUBSURFACE DRAIN
- SDCO • STORM DRAIN CLEANOUT
- FDCO • FOOTING DRAIN CLEANOUT
- DS • DOWNSPOUTS
- SS --- SIDE SEWER PIPE
- SEWER CLEANOUT
- SIDE SEWER CONNECTION
- WATER FITTINGS
- WATER SERVICE LINES
- WATER METER
- WATER SERVICE LINES

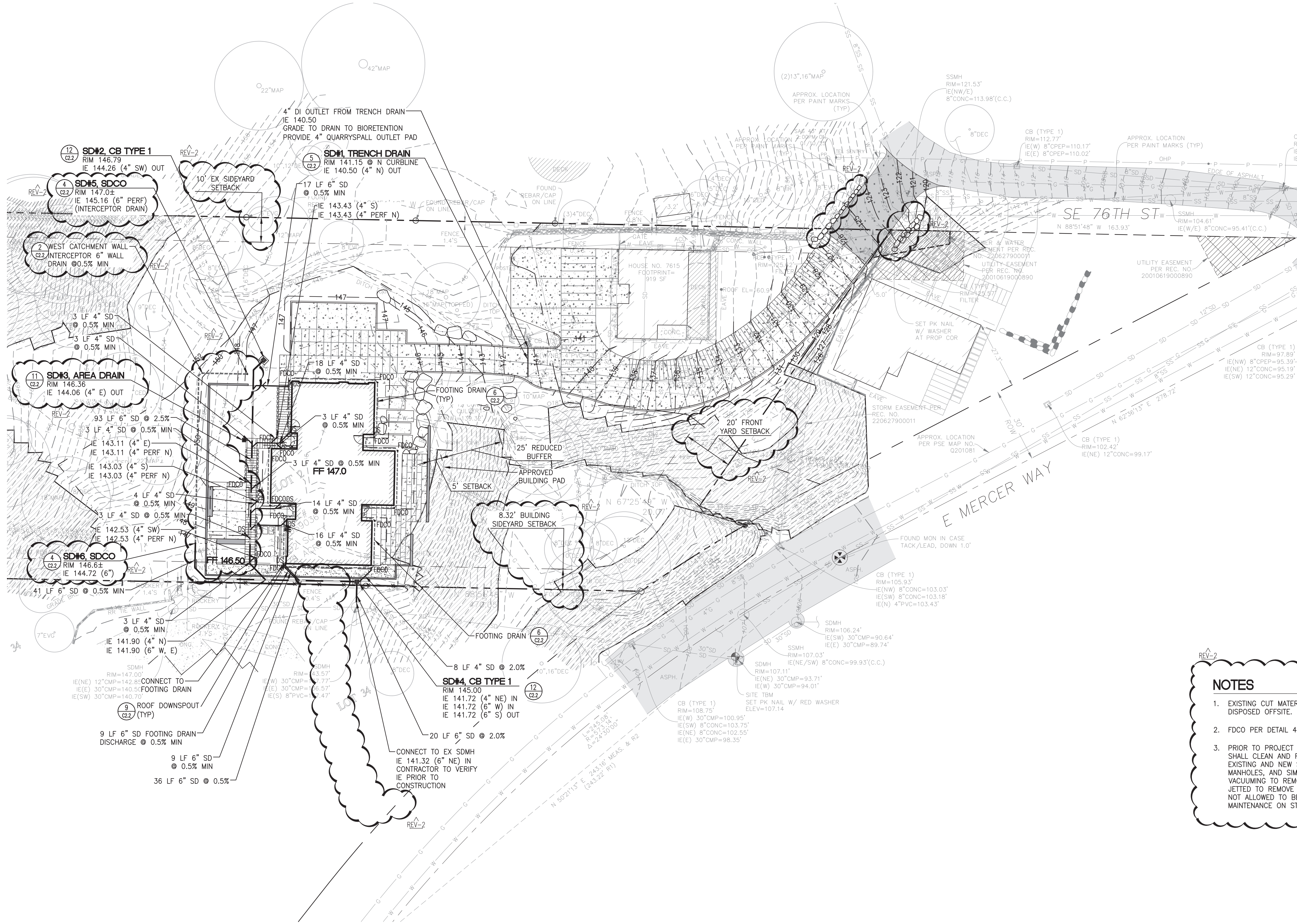


No.	Revisions	Date
REV2	BUILDING PERMIT CITY CORRECTIONS	2025-08-07



Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY
 City of Mercer Island, Washington



- NOTES**
- EXISTING CUT MATERIAL SHALL NOT BE REUSED AS FILL ONSITE AND SHALL BE DISPOSED OFFSITE.
 - FDCO PER DETAIL 4 SHEET C2.2
 - PRIOR TO PROJECT COMPLETION AND AFTER SITE IS STABILIZED, THE CONTRACTOR SHALL CLEAN AND REMOVE ALL SEDIMENT AND DEBRIS FROM ENTIRE ONSITE EXISTING AND NEW STORMWATER SYSTEMS. ALL AREA DRAINS, CATCH BASINS, MANHOLES, AND SIMILAR STRUCTURES SHALL BE CLEANED BY RINSING AND VACUUMING TO REMOVE VISIBLE SEDIMENTS. ALL STORMWATER PIPES SHALL BE JETTED TO REMOVE VISIBLE SEDIMENTS. WASH WATER SHALL BE VACTORED AND NOT ALLOWED TO BE FLUSHED DOWNSTREAM. CONTRACTOR SHALL PROVIDE MAINTENANCE ON STORMFILTER PER MANUFACTURER RECOMMENDATIONS.

Call 3 Working Days Before You Dig!
 1-800-424-5555

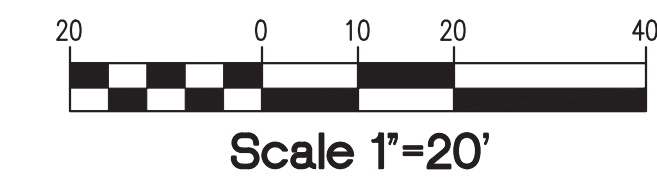
Project No.	
Issue Date	MARCH 07, 2025
Scale	As Noted
Designed	ACW Checked LJP
Drawn	SBR Approved LJP

DRAINAGE PLAN

PERMIT SET
 Sheet **C2.1**

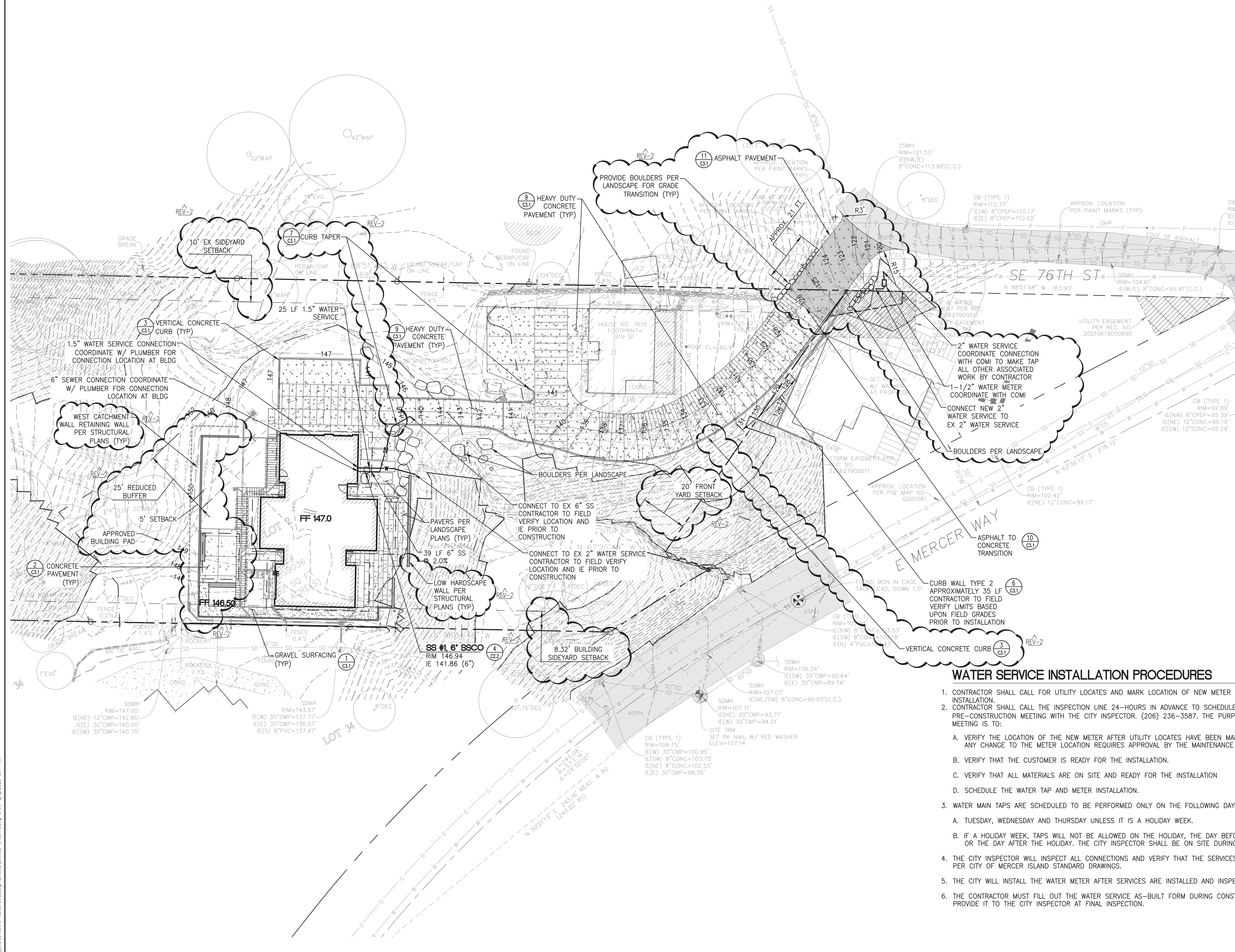
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Section 30, Township 24N, range 5E W.M.



LEGEND

- PROPERTY LINE
- - - EX CONTOUR (INDEX)
- - - EX CONTOUR
- - - 230 PROPOSED CONTOUR (INDEX)
- - - 231 PROPOSED CONTOUR
- FF 78.0 FINISHED FLOOR ELEVATION
- ▭ EX BUILDING
- ▭ PROPOSED BUILDING
- ▭ CONCRETE PAVEMENT
- ▭ HEAVY DUTY CONCRETE PAVEMENT
- ▭ SCORED CONCRETE
- ▭ ASPHALT (AC) PAVEMENT
- ▭ GRAVEL SURFACING
- ▭ SITE WALL
- ▭ VERTICAL CURB
- ▭ ROCKERY
- ▭ AREA DRAIN
- ▭ TRENCH DRAIN
- ▭ CATCH BASIN TYPE 1
- ▭ STORM DRAINAGE PIPE
- ▭ FOOTING/SUBSURFACE DRAIN
- ▭ STORM DRAIN CLEANOUT
- ▭ FOOTING DRAIN CLEANOUT
- ▭ DOWNSPOUTS
- ▭ SIDE SEWER PIPE
- ▭ SEWER CLEANOUT
- ▭ SIDE SEWER CONNECTION
- ▭ WATER FITTINGS
- ▭ WATER SERVICE LINES
- ▭ WATER METER
- ▭ WATER SERVICE LINES

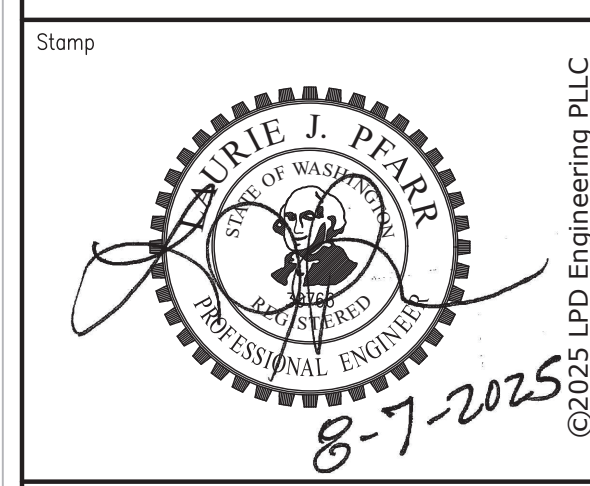


WATER SERVICE INSTALLATION PROCEDURES

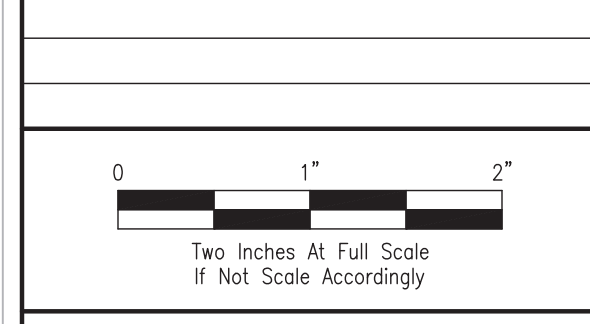
1. CONTRACTOR SHALL CALL FOR UTILITY LOCATES AND MARK LOCATION OF NEW METER INSTALLATION.
2. CONTRACTOR SHALL CALL THE INSPECTION LINE 24-HOURS IN ADVANCE TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY INSPECTOR. (206) 236-3587. THE PURPOSE OF THE MEETING IS TO:
 - A. VERIFY THE LOCATION OF THE NEW METER AFTER UTILITY LOCATES HAVE BEEN MARKED. ANY CHANGE TO THE METER LOCATION REQUIRES APPROVAL BY THE MAINTENANCE DEPARTMENT.
 - B. VERIFY THAT THE CUSTOMER IS READY FOR THE INSTALLATION.
 - C. VERIFY THAT ALL MATERIALS ARE ON SITE AND READY FOR THE INSTALLATION
 - D. SCHEDULE THE WATER TAP AND METER INSTALLATION.
3. WATER MAIN TAPS ARE SCHEDULED TO BE PERFORMED ONLY ON THE FOLLOWING DAYS:
 - A. TUESDAY, WEDNESDAY AND THURSDAY UNLESS IT IS A HOLIDAY WEEK.
 - B. IF A HOLIDAY WEEK, TAPS WILL NOT BE ALLOWED ON THE HOLIDAY, THE DAY BEFORE OR THE DAY AFTER THE HOLIDAY. THE CITY INSPECTOR SHALL BE ON SITE DURING ALL WATER TAPS.
4. THE CITY INSPECTOR WILL INSPECT ALL CONNECTIONS AND VERIFY THAT THE SERVICES ARE INSTALLED PER CITY OF MERCER ISLAND STANDARD DRAWINGS.
5. THE CITY WILL INSTALL THE WATER METER AFTER SERVICES ARE INSTALLED AND INSPECTED.
6. THE CONTRACTOR MUST FILL OUT THE WATER SERVICE AS-BUILT FORM DURING CONSTRUCTION AND PROVIDE IT TO THE CITY INSPECTOR AT FINAL INSPECTION.

Call 3 Working Days Before You DIG!

1-800-424-5555



No.	Revisions	Date
REV2	BUILDING PERMIT CITY CORRECTIONS	2025-08-07



Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY

City of Mercer Island, Washington

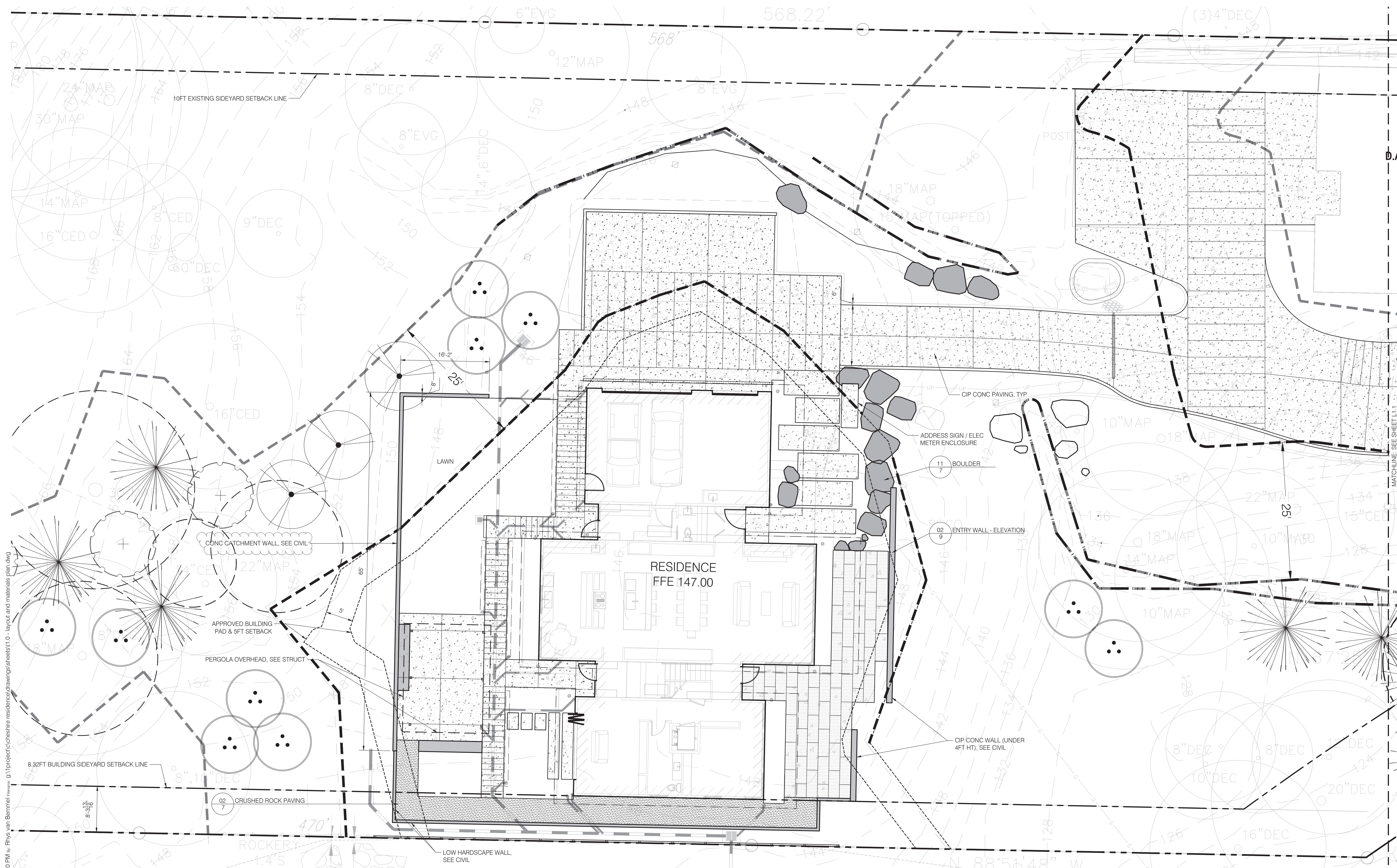
Project No.	
Issue Date	MARCH 07, 2025
Scale	As Noted
Designed	ACW Checked LJP
Drawn	SBR Approved LJP

UTILITIES AND PAVING PLAN

Sheet
C3.0

PERMIT SET

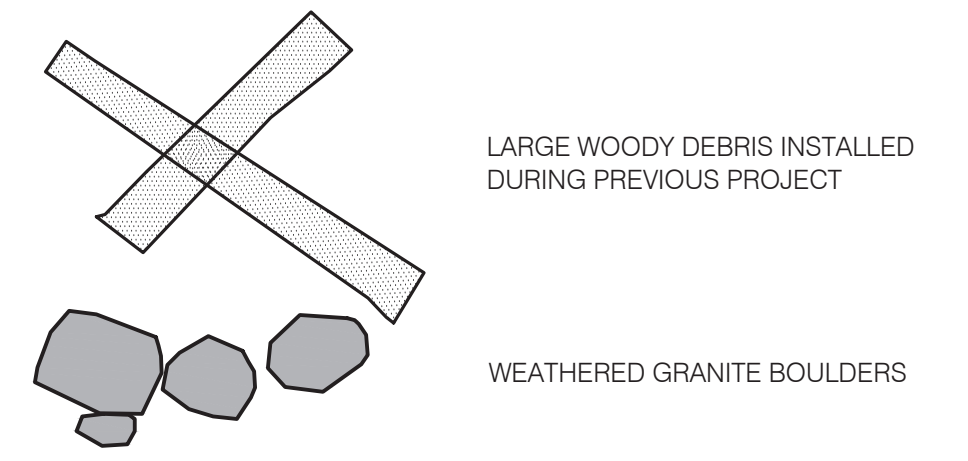
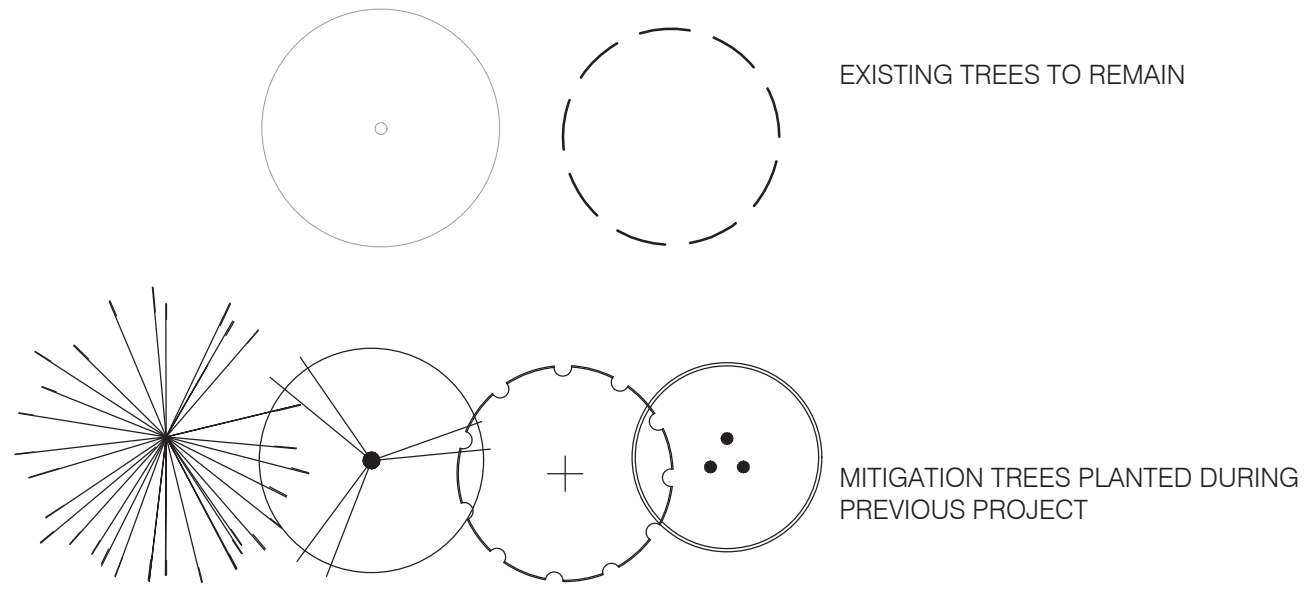
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LEGEND:

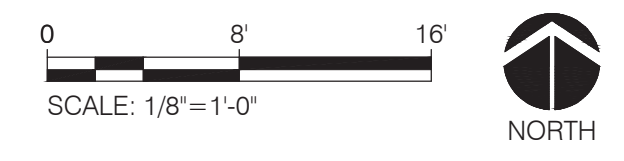
- | | | | |
|--|---------------------------------------|--|------------------------------|
| | PROPERTY LINE | | EXPANSION JOINT |
| | WATERCOURSE | | COLD JOINT |
| | WETLAND BOUNDARY | | SAWCUT JOINT |
| | REDUCED BUFFER | | TRENCH DRAIN |
| | APPROVED BUILDING PAD & 5FT OFFSET | | WALLS |
| | 8.32FT BUILDING SIDEYARD SETBACK LINE | | STRUCTURE OVERHANG, SEE ARCH |
| | 50' STANDARD BUFFER (PER SURVEY) | | |



PAVING SCHEDULE

- | | |
|--|-----------------------------------------|
| | CIP CONCRETE |
| | CRUSHED ROCK PAVING |
| | PRECAST CONCRETE PAVING OR STONE PAVERS |

NOTE:
 CURRENT BUFFER IMPACTS OF 2451SF
 SHOWN ON THE CURRENT PLAN ARE 2715SF
 LESS THAN MITIGATED AS PART OF PERMIT
 #CA016-003



SET TYPE
BUILDING PERMIT SET

SET ISSUE DATE
08.07.2025

REVISIONS:
 Value engineering 09.27.2017

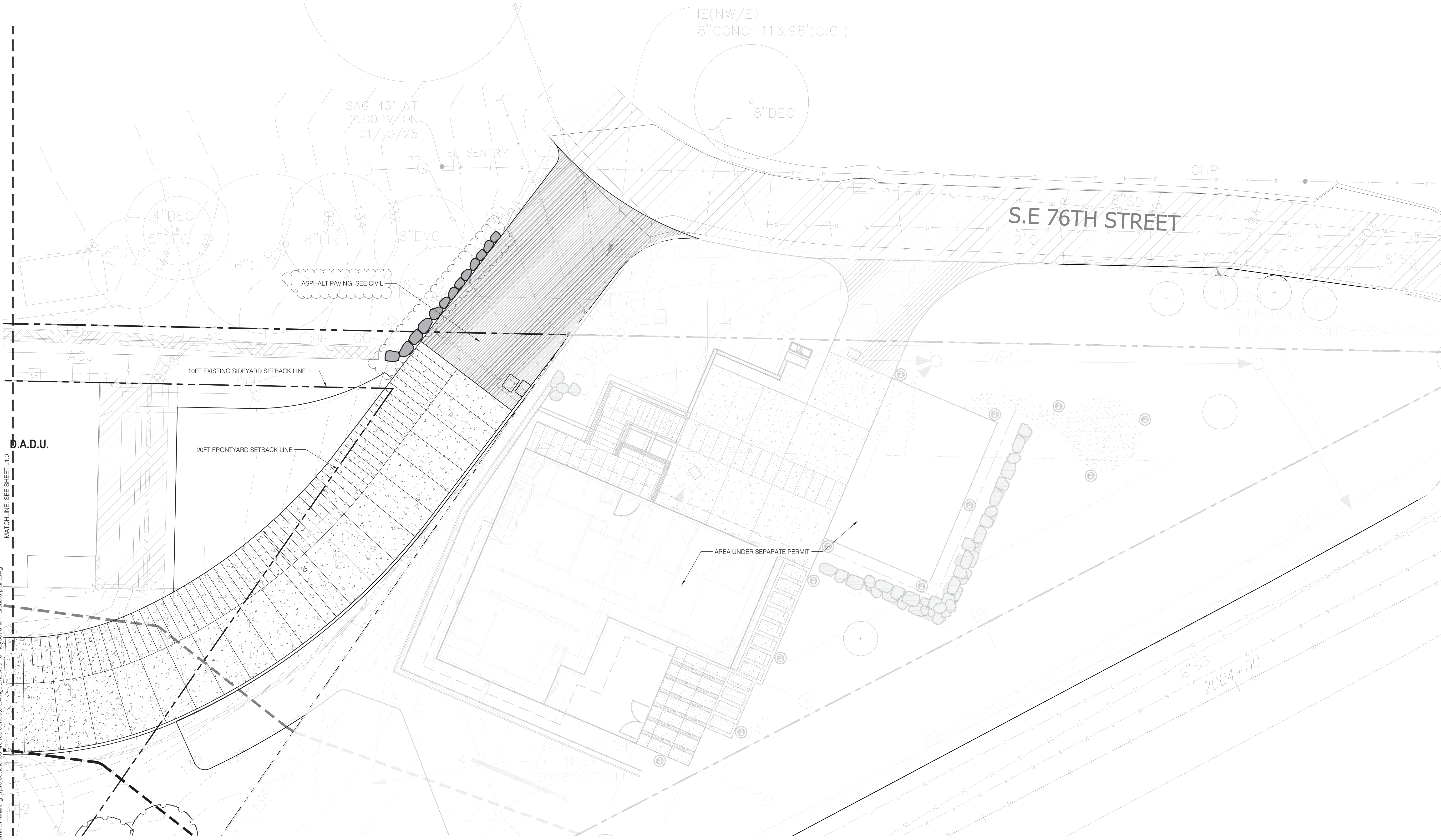
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 JMJ/JH

SHEET NAME
LAYOUT AND MATERIALS PLAN

SHEET NUMBER

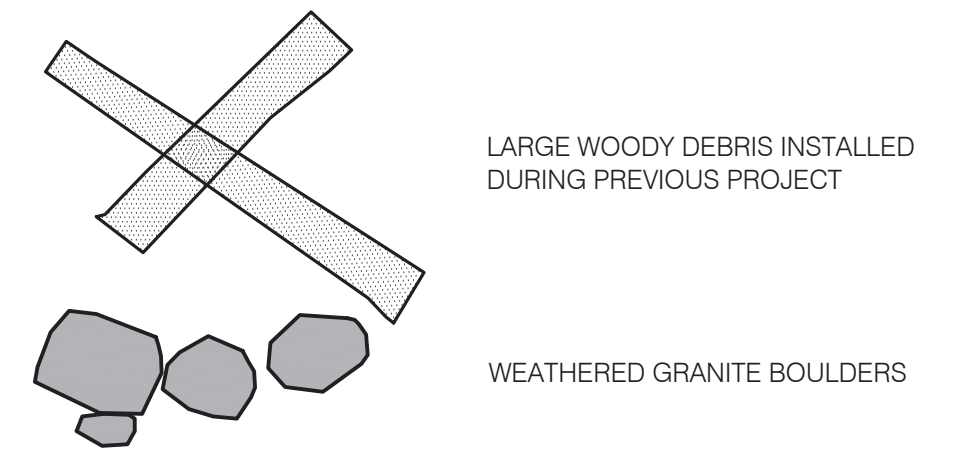
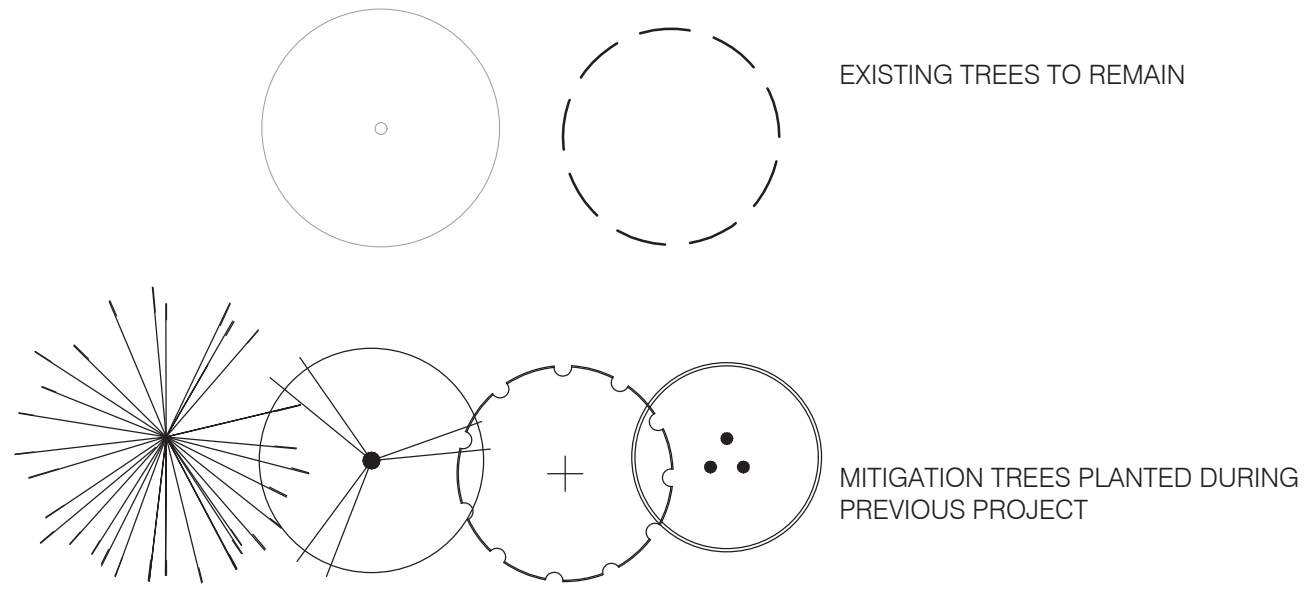
L1.0

Berger Partnership Project Number: XXXXXXXX.XX Revised: 08.07.2025 10:20 PM by: Rhys van Bemmelen (Home: g:\project\cheshire residence\drawings\sheets\1.0 - layout and materials plan.dwg)



LEGEND:

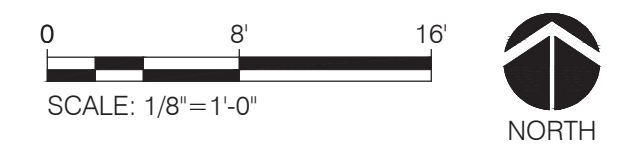
	PROPERTY LINE		EXPANSION JOINT
	WATERCOURSE		COLD JOINT
	WETLAND BOUNDARY		SAWCUT JOINT
	REDUCED BUFFER		TRENCH DRAIN
	APPROVED BUILDING PAD & 5FT OFFSET		WALLS
	8.32FT BUILDING SIDEYARD SETBACK LINE		STRUCTURE OVERHANG, SEE ARCH
	50' STANDARD BUFFER (PER SURVEY)		



PAVING SCHEDULE

	CIP CONCRETE
	CRUSHED ROCK PAVING
	PRECAST CONCRETE PAVING OR STONE PAVERS

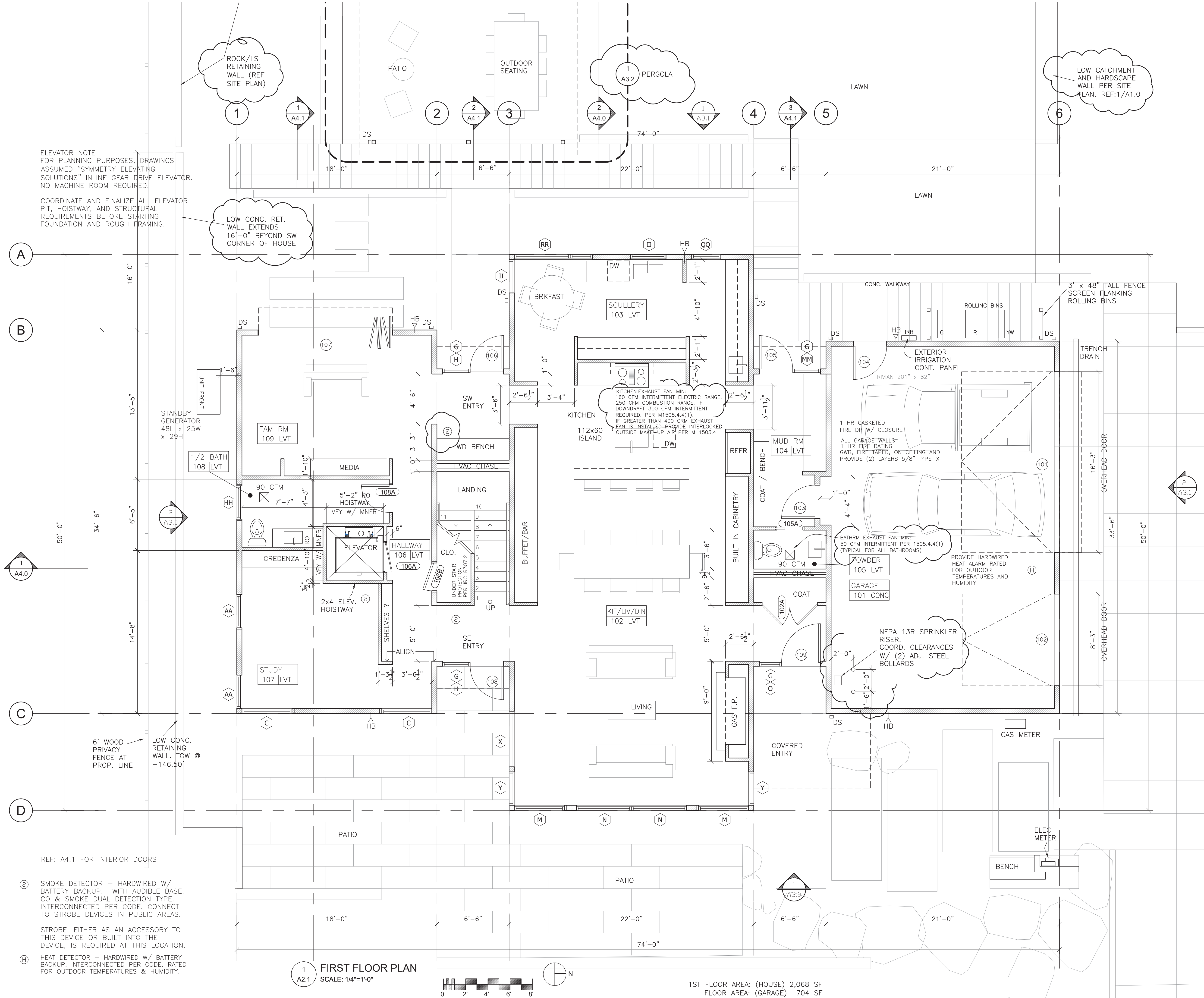
NOTE:
CURRENT BUFFER IMPACTS OF 2451SF SHOWN ON THE CURRENT PLAN ARE 271SF LESS THAN MITIGATED AS PART OF PERMIT #CA016-003



SET TYPE
BUILDING PERMIT SET
SET ISSUE DATE
08.07.2025
REVISIONS:
Value engineering 09.27.2017

DRAWN/CHECKED:
JMJ/H
SHEET NAME
LAYOUT AND MATERIALS PLAN
SHEET NUMBER
L1.1

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



ELEVATOR NOTE
FOR PLANNING PURPOSES, DRAWINGS ASSUMED "SYMMETRY ELEVATING SOLUTIONS" INLINE GEAR DRIVE ELEVATOR. NO MACHINE ROOM REQUIRED.
COORDINATE AND FINALIZE ALL ELEVATOR PIT, HOISTWAY, AND STRUCTURAL REQUIREMENTS BEFORE STARTING FOUNDATION AND ROUGH FRAMING.

LOW CONC. RET. WALL EXTENDS 16'-0" BEYOND SW CORNER OF HOUSE

ROCK/LS RETAINING WALL (REF SITE PLAN)

LOW CATCHMENT AND HARDSCAPE WALL PER SITE PLAN. REF: 1/A1.0

KITCHEN EXHAUST FAN MIN: 160 CFM INTERMITTENT ELECTRIC RANGE, 250 CFM COMBUSTION RANGE, F DOWNDRAFT 300 CFM INTERMITTENT REQUIRED. PER M1505.4.4(1). IF GREATER THAN 400 CFM EXHAUST FAN IS INSTALLED-PROVIDE INTERLOCKED OUTSIDE MAKE-UP AIR PER M 1503.4

1 HR GASKETED FIRE DR W/ CLOSURE
ALL GARAGE WALLS- 1 HR FIRE RATING
GWB, FIRE TAPED, ON CEILING AND PROVIDE (2) LAYERS 5/8" TYPE-X

BATHRM EXHAUST FAN MIN: 90 CFM INTERMITTENT PER 1505.4.4(1) (TYPICAL FOR ALL BATHROOMS)

NFPA 13R SPRINKLER RISER. COORD. CLEARANCES W/ (2) ADJ. STEEL BOLLARDS

1 A4.0

2 A3.0

2 A3.1

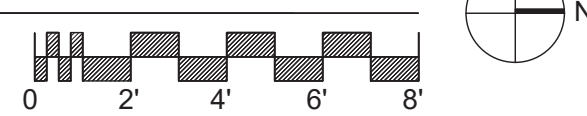
REF: A4.1 FOR INTERIOR DOORS

Ⓢ SMOKE DETECTOR - HARDWIRED W/ BATTERY BACKUP. WITH AUDIBLE BASE. CO & SMOKE DUAL DETECTION TYPE. INTERCONNECTED PER CODE. CONNECT TO STROBE DEVICES IN PUBLIC AREAS.

STROBE, EITHER AS AN ACCESSORY TO THIS DEVICE OR BUILT INTO THE DEVICE, IS REQUIRED AT THIS LOCATION.

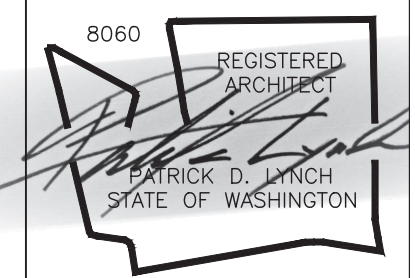
Ⓜ HEAT DETECTOR - HARDWIRED W/ BATTERY BACKUP. INTERCONNECTED PER CODE. RATED FOR OUTDOOR TEMPERATURES & HUMIDITY.

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



1ST FLOOR AREA: (HOUSE) 2,068 SF
FLOOR AREA: (GARAGE) 704 SF

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CHESHIRE HOUSE
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REVISIONS	DATE	DESCRIPTION
6-9-25		SITE & PERGOLA
6-9-25		SECTION 2 / A4.0
8-8-25		CATCHMENT/PILING

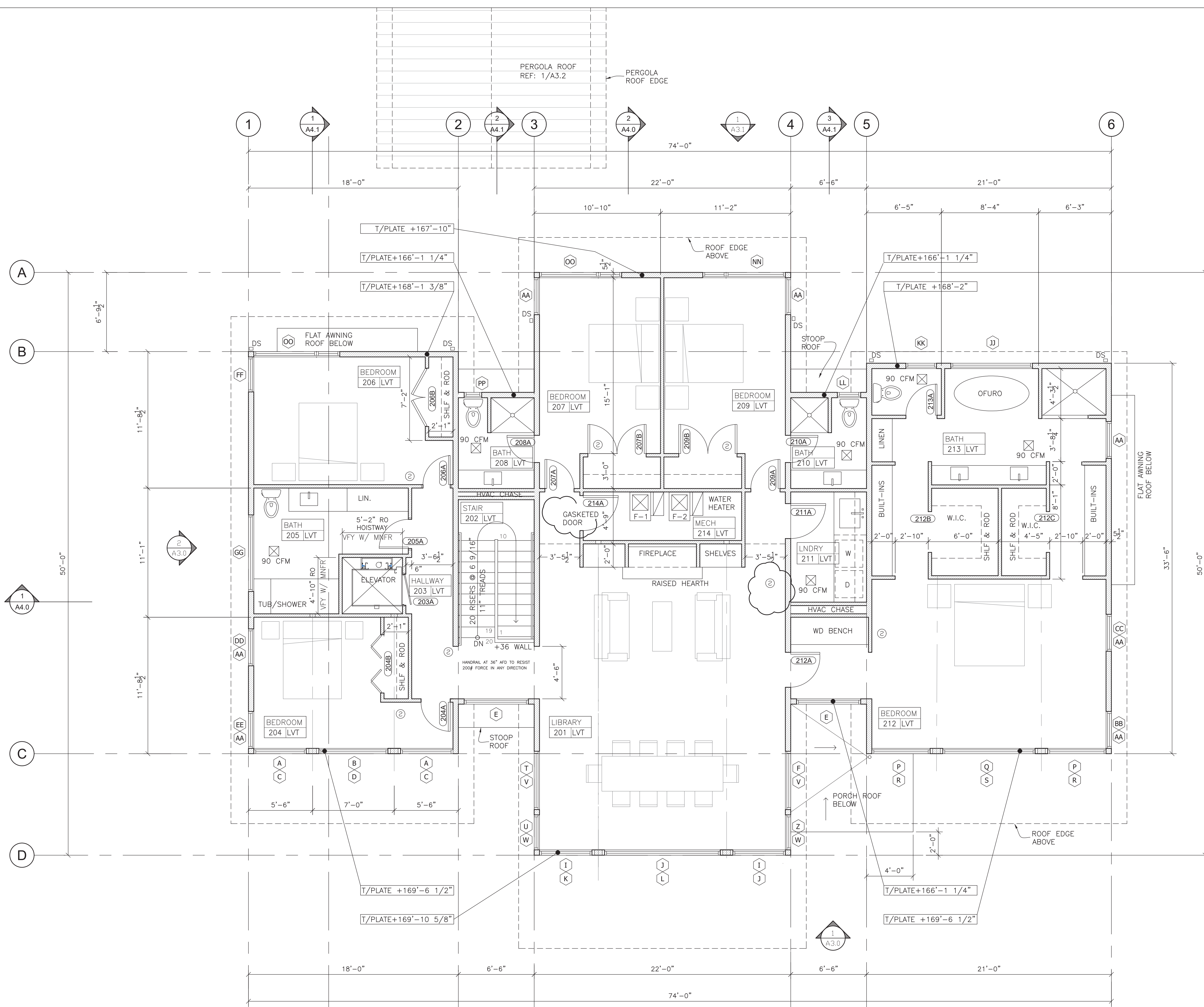
Permit Set

Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

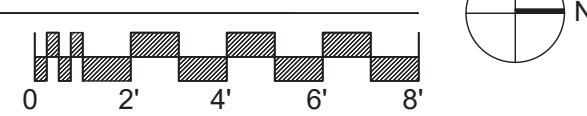
First Floor Plan

Sheet Number:
A2.0

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36

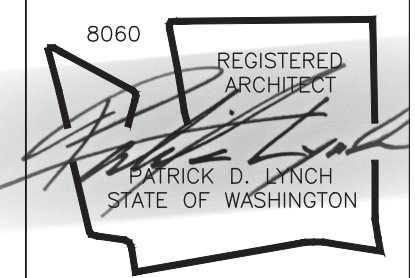


1 SECOND FLOOR PLAN
A2.2 SCALE: 1/4"=1'-0"



2ND FLOOR AREA: 2,772 SF

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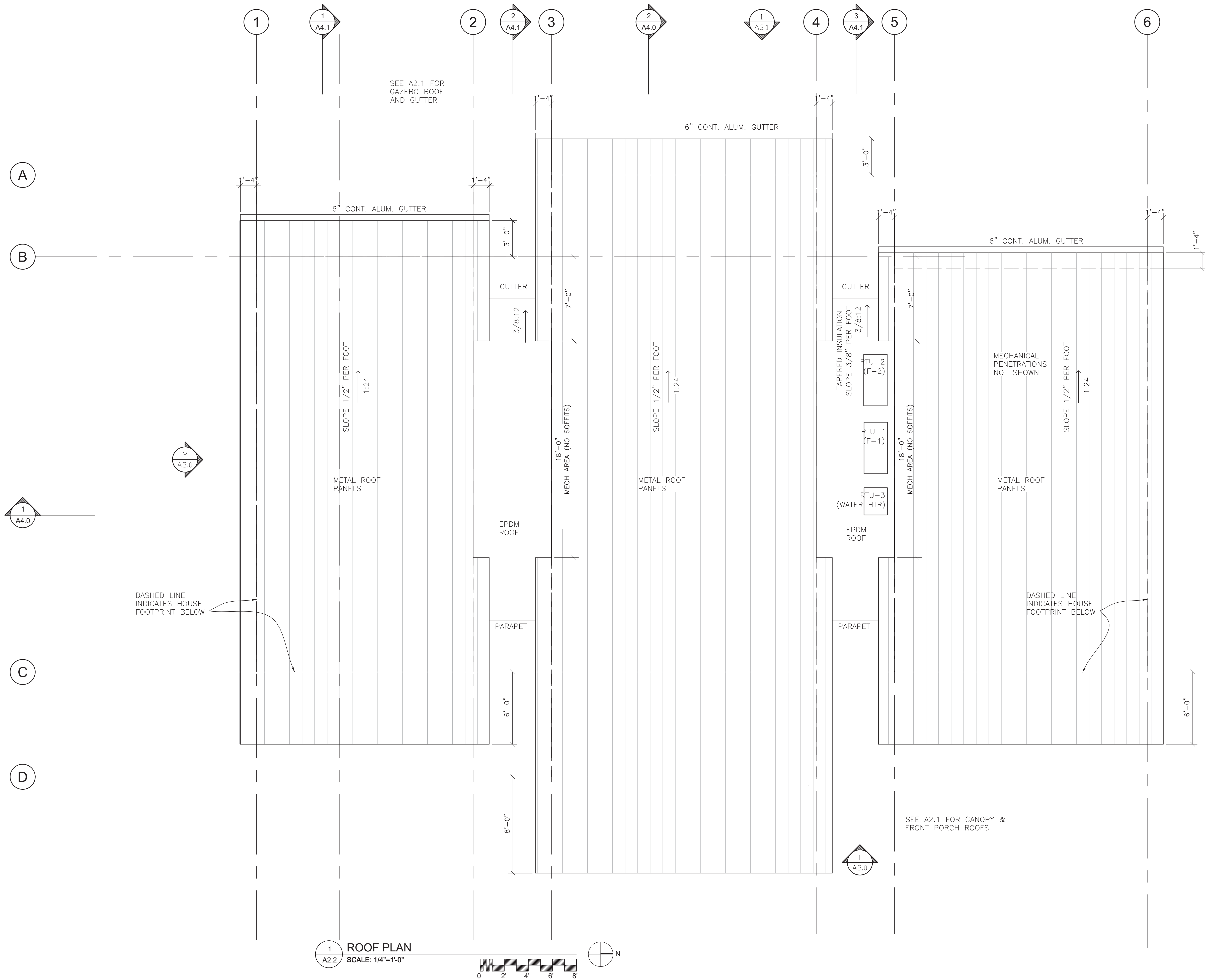
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6-9-25	SITE & PERGOLA
6-9-25	SECTION 2 / A4.0
8-8-25	CATCHMENT/PILING

Permit Set
Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

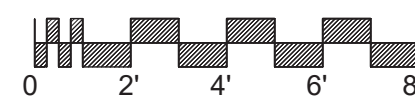
Second Floor Plan

Sheet Number:
A2.1

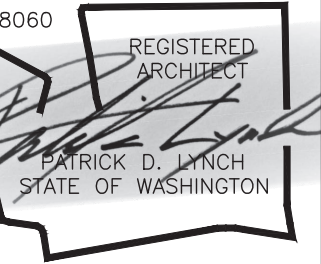
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



1 ROOF PLAN
A2.2 SCALE: 1/4"=1'-0"



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REVISIONS	
6-9-25	SITE & PERGOLA
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8-8-25	CATCHMENT/PILING

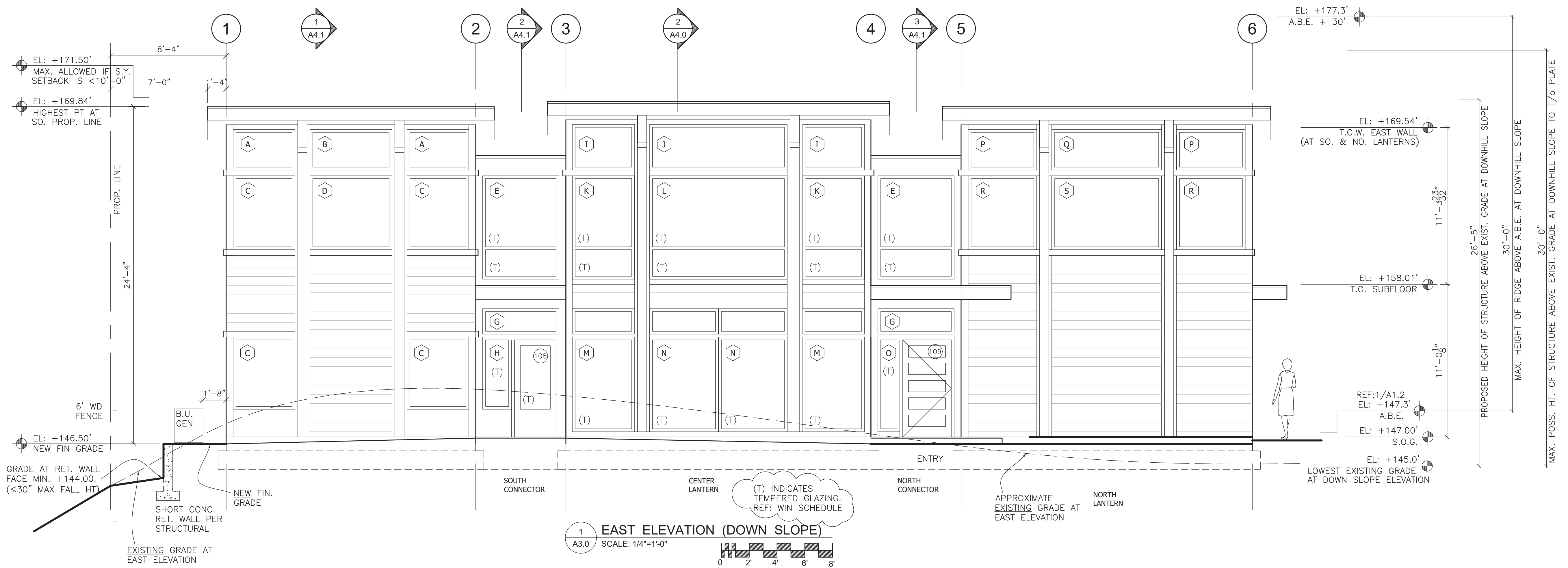
Permit Set

Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

Roof Plan

Sheet Number:
A2.2

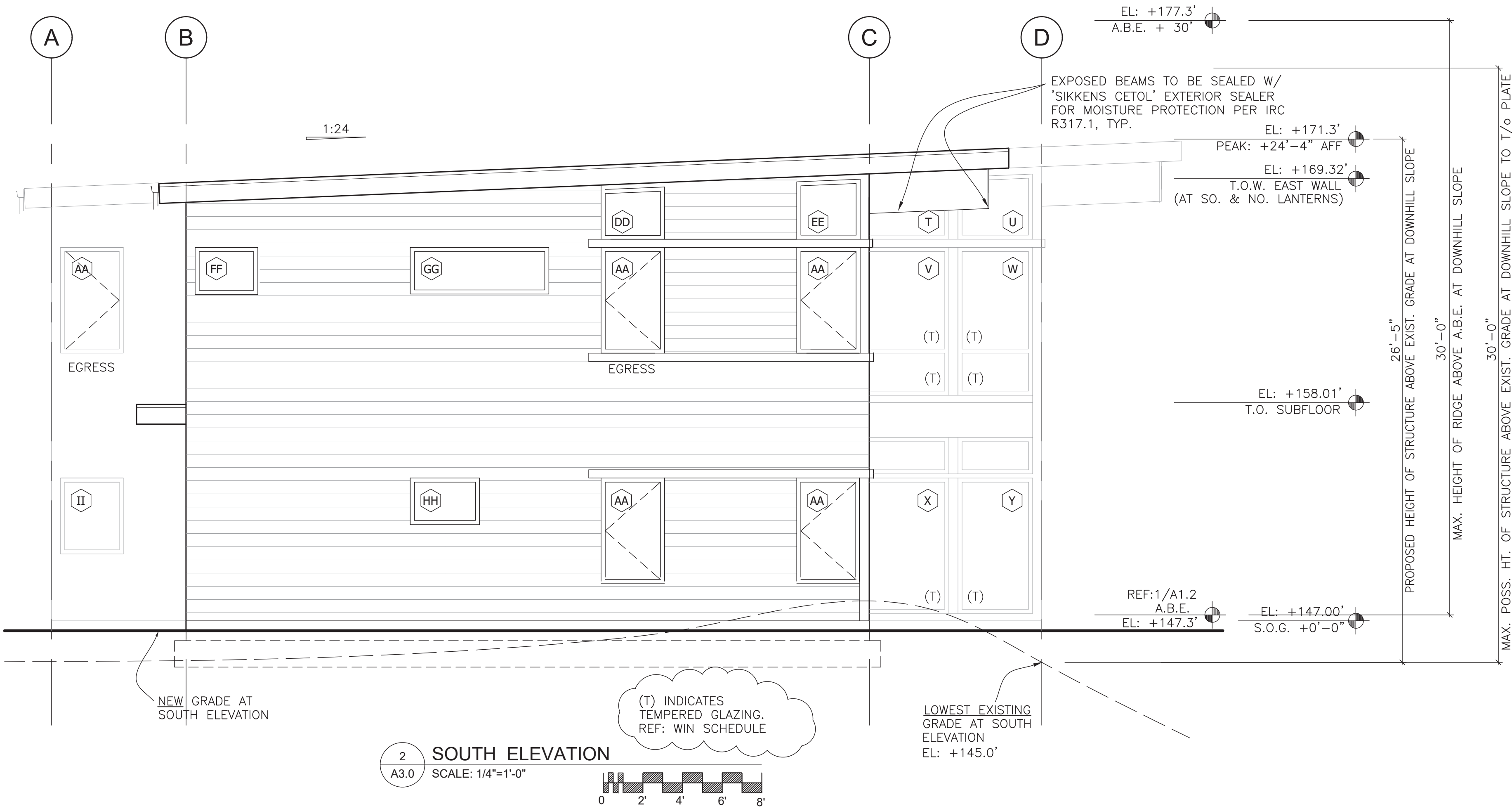
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



1 EAST ELEVATION (DOWN SLOPE)
SCALE: 1/4"=1'-0"

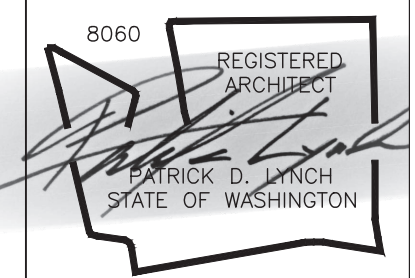
NOTE: REFER TO A3.0 & A3.1 FOR WINDOW ELEVATIONS. TEMPER PER IRC REQUIREMENTS.

TAG	DESCRIPTION	MNFR.	TYPE	QTY.	WIDTH (RO)	HEIGHT (RO)	SILL HEIGHT	U-VALUE	NOTES
A	CLAD	TBD	PICTURE	2	4'-5.5"	2'-11"		.25	
B			PICTURE	1	5'-11"	2'-11"		.25	
C			PICTURE	4	4'-5.5"	5'-4"	2'-6"	.25	
D			PICTURE	1	5'-11"	5'-4"	2'-6"	.25	
E			PICTURE	2	5'-6"	7'-5.5"	4.5"	.25	TEMPERED GLAZING
F			PICTURE	1	5'-0"	3'-0"+/-		.25	TRAPEZOID
G			PICTURE	4	5'-6"	1'-10"		.25	TRANSOM
H			PICTURE	2	2'-1"	5'-4"	4.5"	.25	TEMPERED GLAZING
I			PICTURE	2	4'-6"	3'-3"		.25	
J			PICTURE	1	9'-11"	3'-3"		.25	
K			PICTURE	2	4'-6"	7'-5.5"	4.5"	.25	TEMPERED GLAZING
L			PICTURE	1	2'-0"	7'-5.5"	4.5"	.25	TEMPERED GLAZING
M			PICTURE	2	4'-5"	8'-10.5"	4.5"	.25	TEMPERED GLAZING
N			PICTURE	2	4'-11.5"	8'-10.5"	4.5"	.25	TEMPERED GLAZING
O			PICTURE	1	1'-7"	6'-10"		.25	TEMPERED GLAZING
P			PICTURE	2	4'-11.5"	2'-11"		.25	
Q			PICTURE	1	7'-11"	2'-11"		.25	
R			PICTURE	2	4'-11.5"	5'-4"	2'-6"	.25	
S			PICTURE	1	7'-11"	5'-4"	2'-6"	.25	
T			PICTURE	1	5'-0"	3'-0"+/-		.25	TRAPEZOID
U			PICTURE	1	3'-0"	3'-4"+/-		.25	TRAPEZOID
V			PICTURE	2	5'-0"	7'-5.5"	4.5"	.25	TEMPERED GLAZING
W			PICTURE	2	3'-0"	7'-5.5"	4.5"	.25	TEMPERED GLAZING
X			PICTURE	1	5'-0"	8'-10.5"	4.5"	.25	TEMPERED GLAZING
Y			PICTURE	2	3'-0"	8'-10.5"	4.5"	.25	TEMPERED GLAZING
Z			PICTURE	1	3'-0"	3'-4"+/-		.25	TRAPEZOID
AA	CASEMENT		CASEMENT	8	3'-2"	5'-4"	2'-6"	.25	
AA-T	CASEMENT		CASEMENT	1	3'-2"	5'-4"	2'-6"	.25	TEMPERED GLAZING IN BATHROOM
BB	PICTURE		PICTURE	1	3'-2"	3'-0"+/-		.25	TRAPEZOID
CC	PICTURE		PICTURE	1	3'-2"	2'-8"+/-		.25	TRAPEZOID
DD	PICTURE		PICTURE	1	3'-2"	2'-8"+/-		.25	TRAPEZOID
EE	PICTURE		PICTURE	1	3'-2"	3'-0"+/-		.25	TRAPEZOID
FF	PICTURE		PICTURE	1	3'-2"	2'-4"	5'-6"	.25	
GG	PICTURE		PICTURE	1	7'-0"	2'-4"	5'-6"	.25	
HH	PICTURE		PICTURE	1	3'-6"	2'-4"	4'-10"	.25	
II	PICTURE		PICTURE	2	3'-2"	3'-10"	3'-4.5"	.25	
JJ	PICTURE		PICTURE	1	7'-0"	2'-4"	5'-6"	.25	
KK	CASEMENT		CASEMENT	1	2'-8"	5'-4"	2'-6"	.25	TEMPERED IN TOILET CLOSET
LL	CASEMENT		CASEMENT	1	2'-6"	3'-4"	4'-6"	.25	TEMPERED GLAZING
MM	PICTURE		PICTURE	1	2'-1"	3'-10"	3'-4.5"	.25	TEMPERED GLAZING
NN	CASEMENT + PICTURE		CASEMENT + PICTURE	1	7'-0"	5'-4"	2'-6"	.25	KK + PICTURE = MULLED UNIT
OO	CASEMENT + PICTURE		CASEMENT + PICTURE	2	7'-0"	5'-4"	2'-6"	.25	KK + PICTURE = MULLED UNIT
PP	CASEMENT		CASEMENT	1	2'-6"	3'-4"	4'-6"	.25	TEMPERED GLAZING
QQ	CASEMENT		CASEMENT	1	2'-0"	3'-10"	3'-4.5"	.25	
RR	CASEMENT + PICTURE		CASEMENT + PICTURE	1	7'-0"	3'-10"	3'-4.5"	.25	QQ + PICTURE = MULLED UNIT



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

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REVISIONS

NO.	DATE	DESCRIPTION
6-9-25		SITE & PERGOLA
6-9-25		SECTION 2 / A4.0
8-8-25		CATCHMENT/PILING

Permit Set
Date: MAR 14, 2025
Job Number:
Drafting:
Approval: PDL

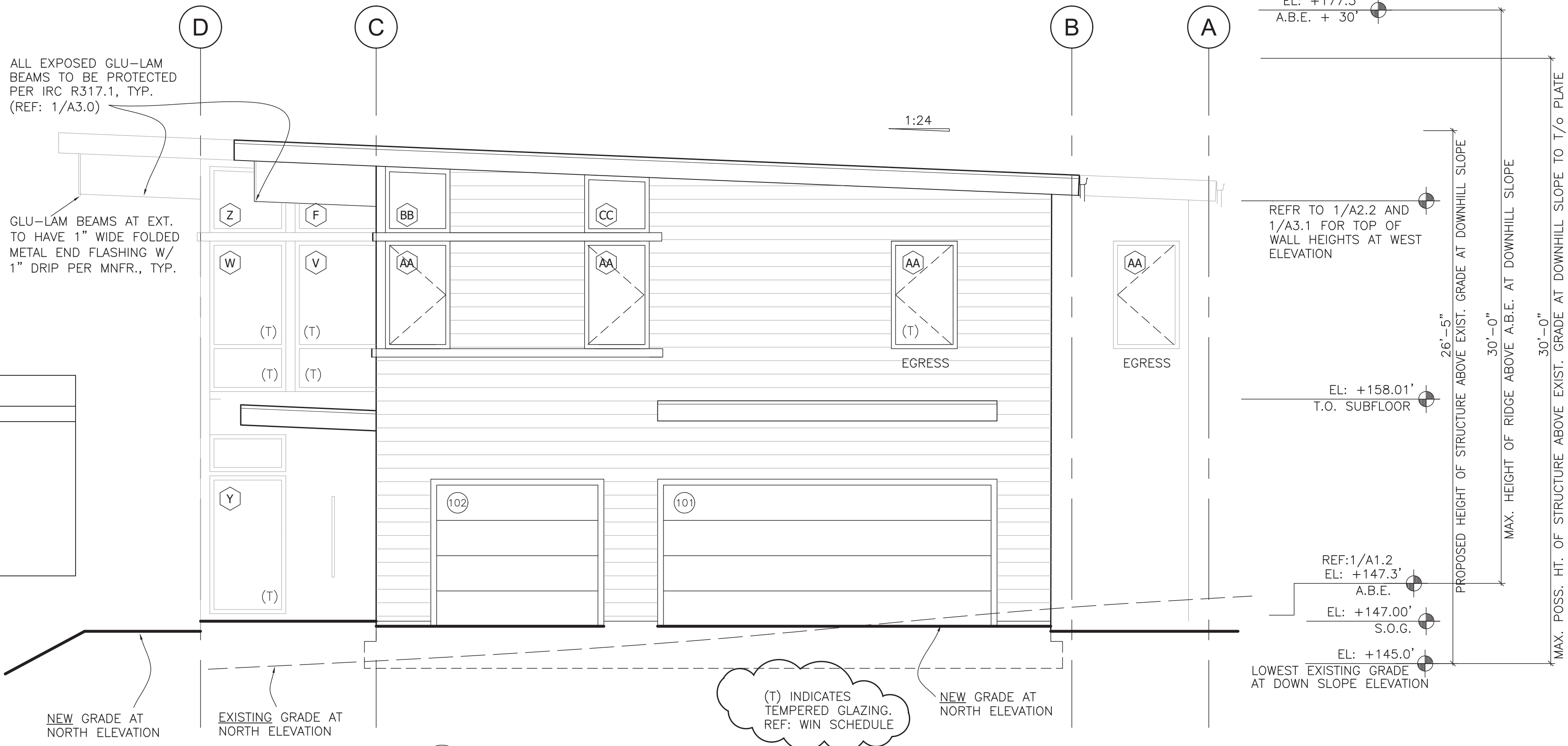
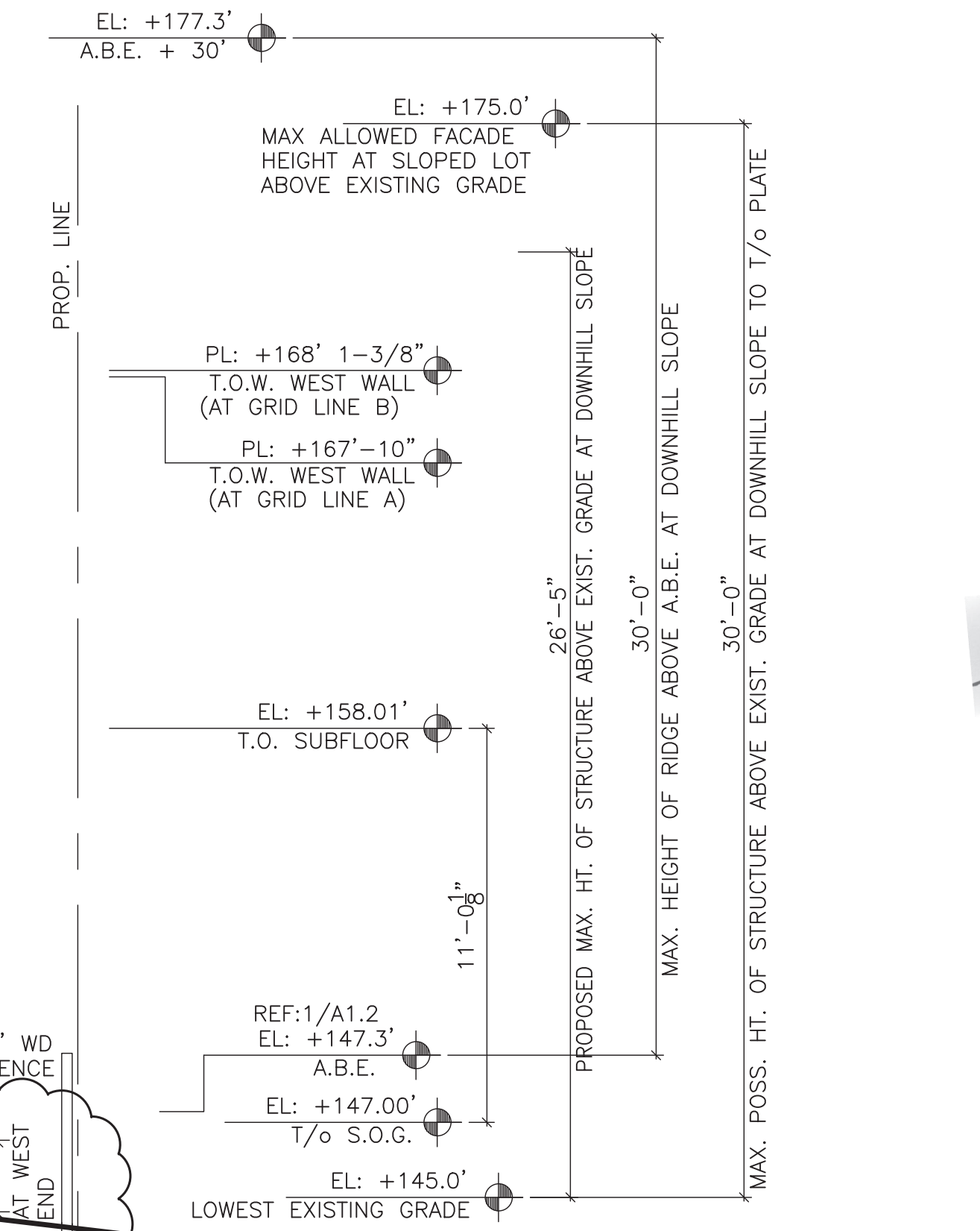
Window Sched & East + South Elevations

Sheet Number:
A3.0

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



1 WEST ELEVATION (UP SLOPE)
A3.1 SCALE: 1/4"=1'-0"

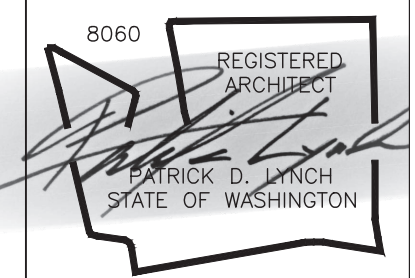


2 NORTH ELEVATION
A3.1 SCALE: 1/4"=1'-0"

72.00

EXTERIOR DOOR SCHEDULE									
NOTE: REFER TO A3.0 & A3.1 FOR EXTERIOR DOOR ELEVATIONS									
TAG	DESCRIPTION	MNFR.	TYPE	QTY.	WIDTH (RO)	HEIGHT (RO)	SILL	HRWR	NOTES
101	GARAGE OHD		16'x7' OHD	1	16'-3"	7'-0"	S.O.G.		INCL. OPERATOR. INSULATED.
102	GARAGE OHD		8'x7' OHD	1	8'-3"	7'-0"	S.O.G.		INCL. OPERATOR. INSULATED.
103	36 x 84		ENTRY FROM GARAGE	1	3'-3"	7'-2"	ALUM.	ENTRY 3	FIRE RATED DOOR - 20 MINUTES
104	36 x 84		SOLID ENTRY	1	3'-3"	7'-2"	ALUM.	ENTRY 2	
105	36 x 84		ENTRY W/ GLASS	1	3'-3"	7'-2"	ALUM.	ENTRY 1	TEMPERED GLAZING
106	36 x 84		ENTRY W/ GLASS	1	3'-3"	7'-2"	ALUM.	ENTRY 1	TEMPERED GLAZING
107	12' x 7'		MULTI-FOLD	1	TBD	TBD			TEMPERED GLAZING
108	36 x 84		ENTRY W/ GLASS	1	3'-3"	7'-2"	ALUM.	ENTRY 1	TEMPERED GLAZING
109	42 x 84		MAIN ENTRY	1					TEMPERED GLAZING IF GLASS

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REVISIONS	
6-9-25	SITE & PERGOLA
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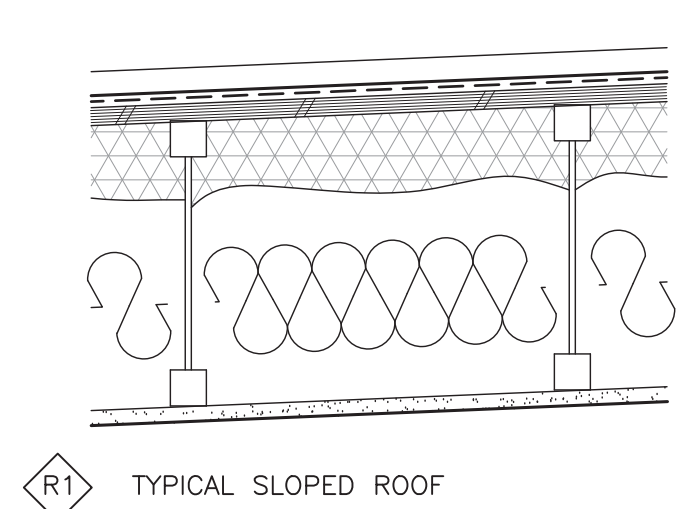
Permit Set

Date: MAR 14, 2025
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Drafting:
Approval: PDL

Ext. Dr. Sched & West + North Elevations

Sheet Number:
A3.1

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
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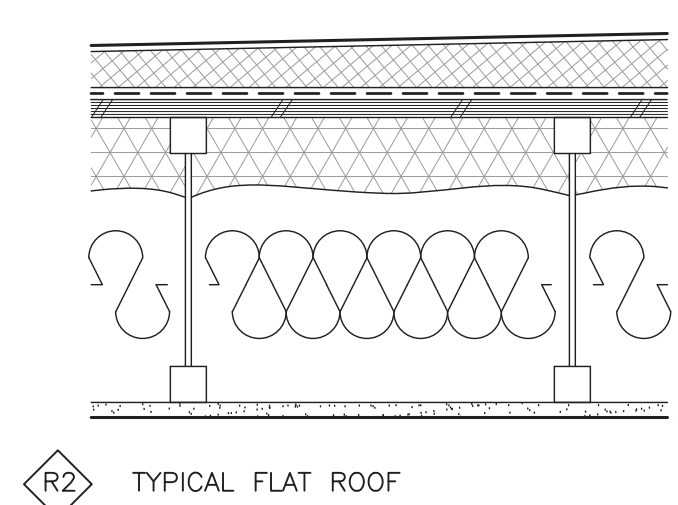


STANDING SEAM METAL ROOFING OVER ROOFING MEMBRANE (AIR BARRIER) OVER SHEATHING & ROOF JOISTS PER STRUCTURAL PITCH 1:24.

3" (R15) CLOSED CELL SPRAY FOAM AND R25 NET AND BLOW CELLULOSE INSULATION (MINIMUM R49 COMBINED)

5/8" TYPE-X GWB TAPE AND FINISH SMOOTH

ADDITIONAL FRAMED SOFFIT AND FINISH CEILING WHERE OCCURS. REFER TO REFL. CLG. PLAN.

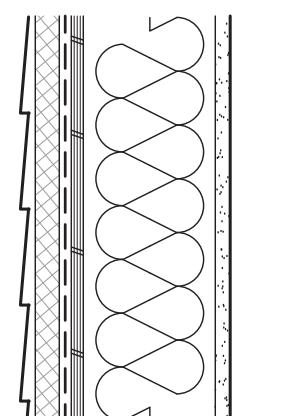


FULLY ADHERED ROOFING MEMBRANE OVER 3/8:12 TAPERED POLYISO INSUL. SYSTEM OVER AIR BARRIER OVER FLAT SHEATHING & ROOF JOISTS PER STRUCTURAL.

3" (R15) CLOSED CELL SPRAY FOAM AND R25 NET AND BLOW CELLULOSE INSULATION (MINIMUM R40 COMBINED SPRAY FOAM + CELLULOSE)

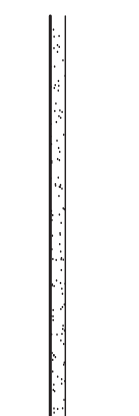
5/8" TYPE-X GWB TAPE AND FINISH SMOOTH

ADDITIONAL FRAMED SOFFIT AND FINISH CEILING WHERE OCCURS. REFER TO REFL. CLG. PLAN.



WALL FINISH PER ELEVATIONS OVER 1" (R5) CONTINUOUS INSULATION OVER TYVEK WRB INSTALLED PER DUPONT SPECIFICATIONS WITH CAP NAILS. SHEATHING PER STRUCTURAL OVER 2x6 STUDS @ 16" O.C.; R-21 BLOWN IN PLACE CELLULOSE INSULATION; 5/8" GWB; DRAFTSTOPPING PER CODE. BLOCKING WHERE REQUIRED. TYVEK FLASHING TO WINDOW FLANGES PER DUPONT SPECIFICATIONS

W1 TYPICAL EXTERIOR WALL (20+5)



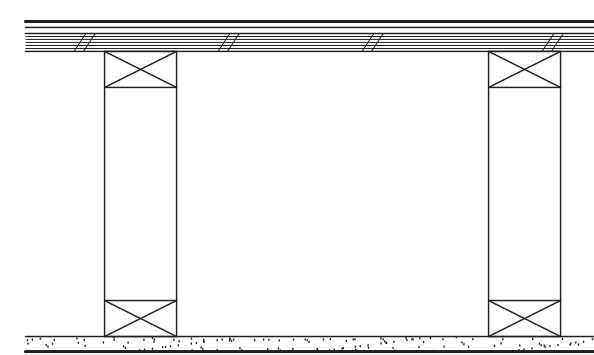
2x4 OR 2x6 PER PLAN @ 16" OC WALL FRAMING W/ 1 LAYER 5/8" GWB EACH SIDE.

COORDINATE 2x BLOCKING AS REQUIRED FOR ANY EQUIPMENT, CABINERY, FIXTURES, HARDWARE ETC.

SOUND ATTENUATION BATTING AT ALL BATHROOM, BEDROOM, & ELEVATOR WALLS

W2 TYPICAL INTERIOR WALL

W3 WALL BTW GARAGE AND HOUSE



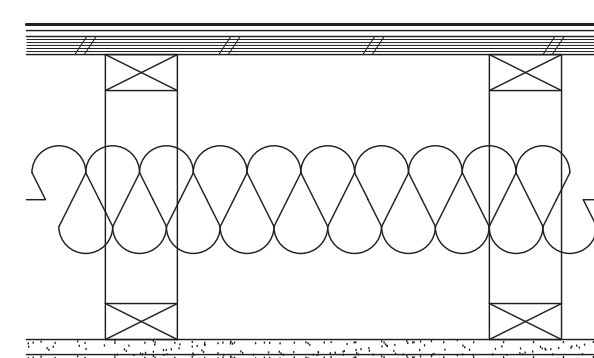
FINISH FLOOR PER PLANS OVER UNDERLAYMENT IF REQUIRED.

3/4" PLYWOOD SUB-FLOOR OVER WEB TRUSS FLOOR JOISTS PER STRUCTURAL.

5/8" TYPE-X GWB TAPE AND FINISH SMOOTH

ADDITIONAL FRAMED SOFFIT AND FINISH CEILING WHERE OCCURS. REFER TO REFL. CLG. PLAN.

F2 FLOOR OVER HEATED SPACE



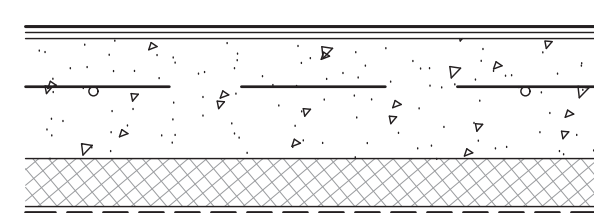
FINISH FLOOR PER PLANS OVER UNDERLAYMENT IF REQUIRED.

3/4" PLYWOOD SUB-FLOOR OVER WEB TRUSS FLOOR JOISTS PER STRUCTURAL.

NET AND BLOW CELLULOSE INSULATION TO FULL CAVITY DEPTH. (MIN. R38) (2) LAYERS 5/8" GWB TAPE AND FINISH SMOOTH, PTD.

SEAL AND DRAFT STOP ALL PENETRATIONS

F3 FLOOR OVER GARAGE (HORZ. FIRE BARRIER PER IRC)

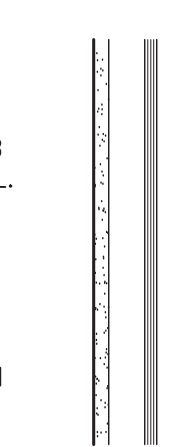


FINISH FLOOR PER PLANS OVER UNDERLAYMENT IF REQUIRED. SELF LEVELING AS REQUIRED.

CONCRETE SLAB PER STRUCTURAL OVER 2" (R10) RIGID INSULATION UNDER ENTIRE SLAB.

MIN. 10 MIL CONT. VAPOR BARRIER OVER MIN. 6" FREE DRAINAGE MATERIAL

F1 TYPICAL SLAB ON GRADE FLOOR



CONFIRM SHAFT DIMENSIONS WITH ELEVATOR MANUFACTURER. 2x4 @ 16" OC WALL FRAMING W/ CONT. SOLID BLK'G PER ELEV. MNFR. SPECIFICATION. ADDITIONAL LAYER 1/2" PLYWD ON CAB SIDE.

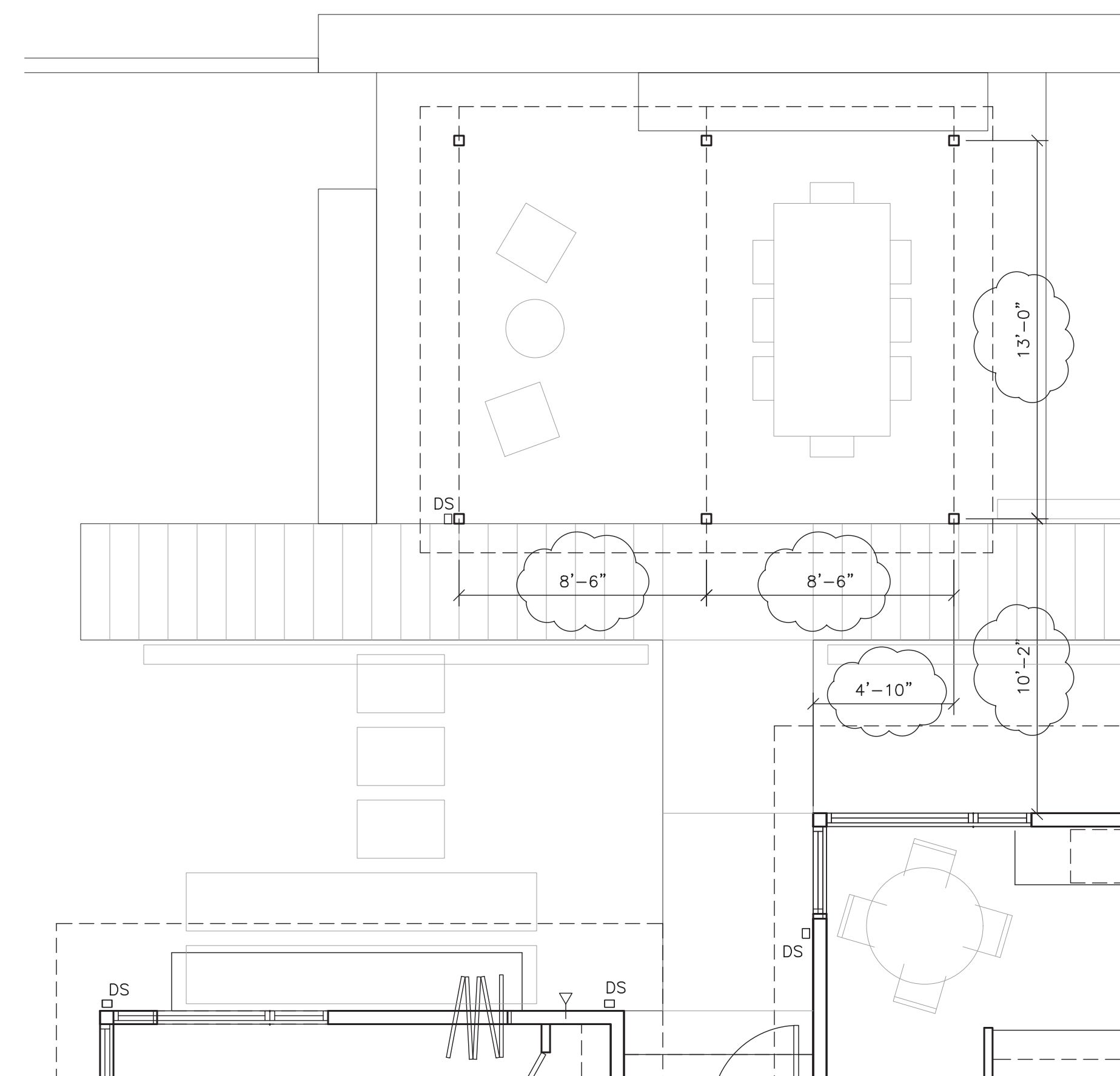
1 LAYER 5/8" GWB EACH SIDE, FINISHED SMOOTH AND PAINTED.

ELEVATOR TRACK ASS'Y.

SOUND ATTENUATION BATTING AT ALL OPEN STUD CAVITIES.

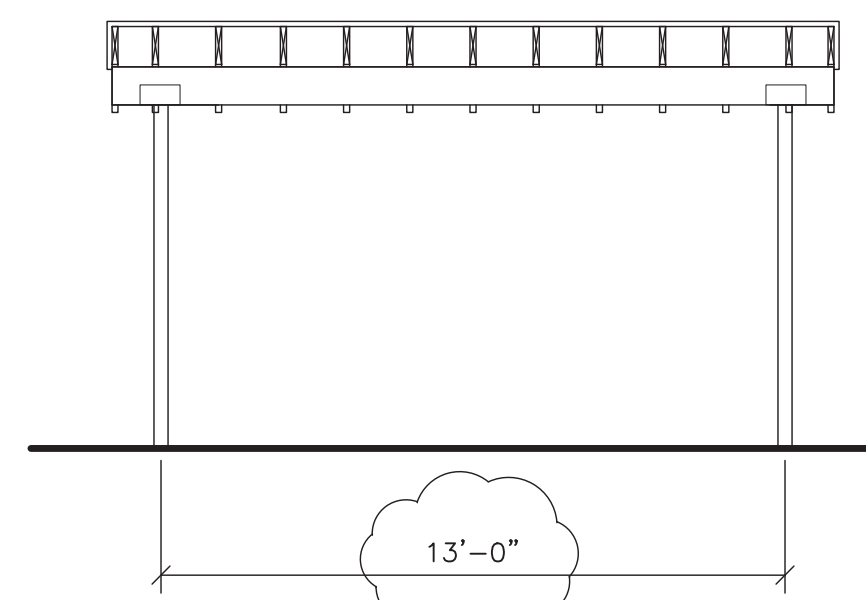
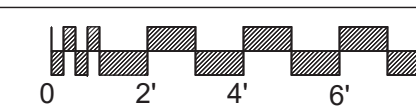
W4 STRUCT. ELEVATOR WALL

ALL GWB REVISED TO 5/8"



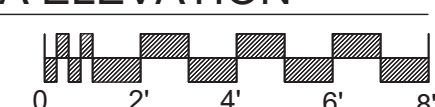
1 PERGOLA PLAN

A3.2 SCALE: 1/4"=1'-0"

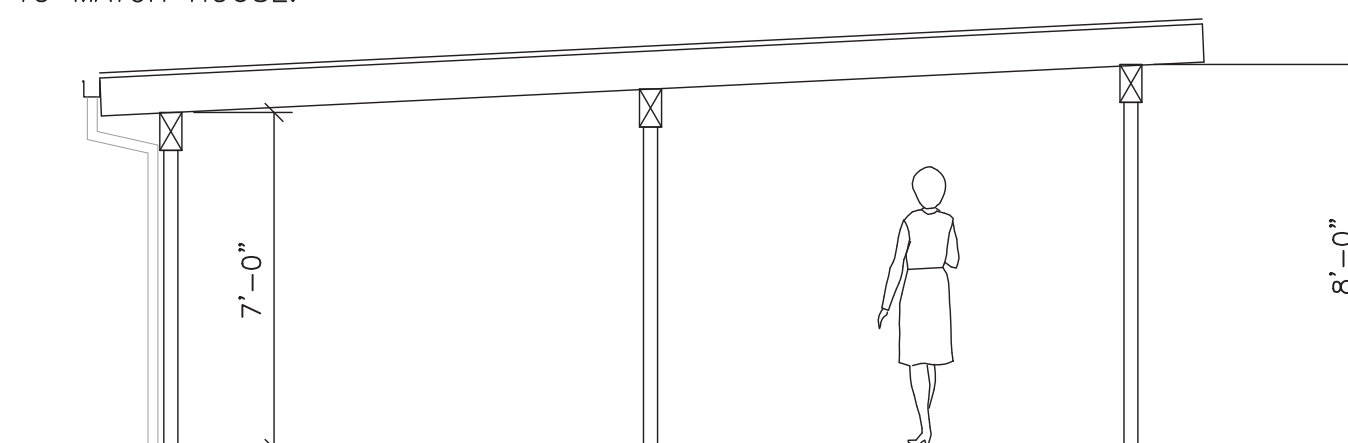


3 NORTH PERGOLA ELEVATION

A3.2 SCALE: 1/4"=1'-0"



STANDING SEAM METAL ROOF TO MATCH HOUSE.



2 EAST PERGOLA ELEVATION

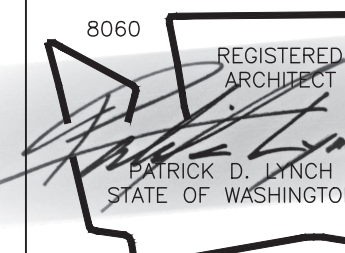
A3.2 SCALE: 1/4"=1'-0"



FRAMING AND FNDN PER STRUCTURAL

EL: +146.50'
1/8" S.O.G.

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CHESHIRE HOUSE
7615 E. MERCER WAY
MERCER ISLAND, WA 98040

REVISIONS

6-9-25	SITE & PERGOLA
6-9-25	SECTION 2 / A4.0
8-8-25	CATCHMENT/PLUMB

Permit Set

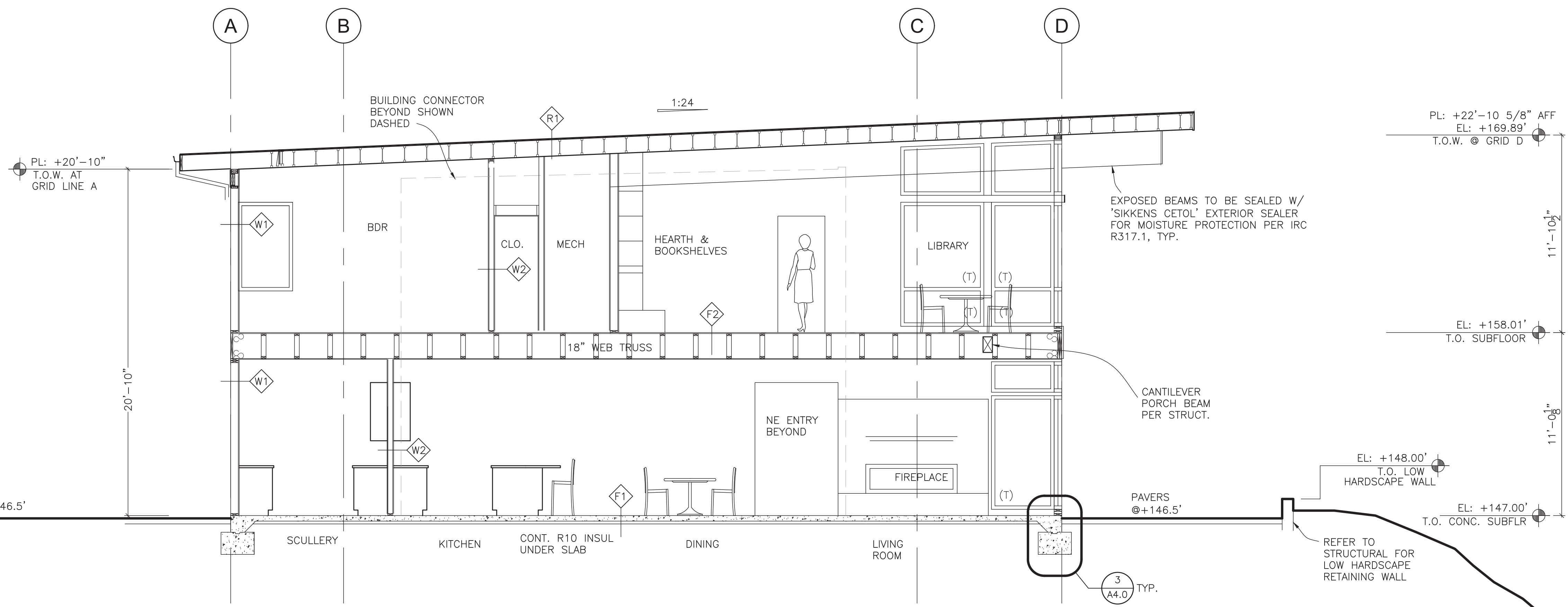
Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

Pergola & Wall Types

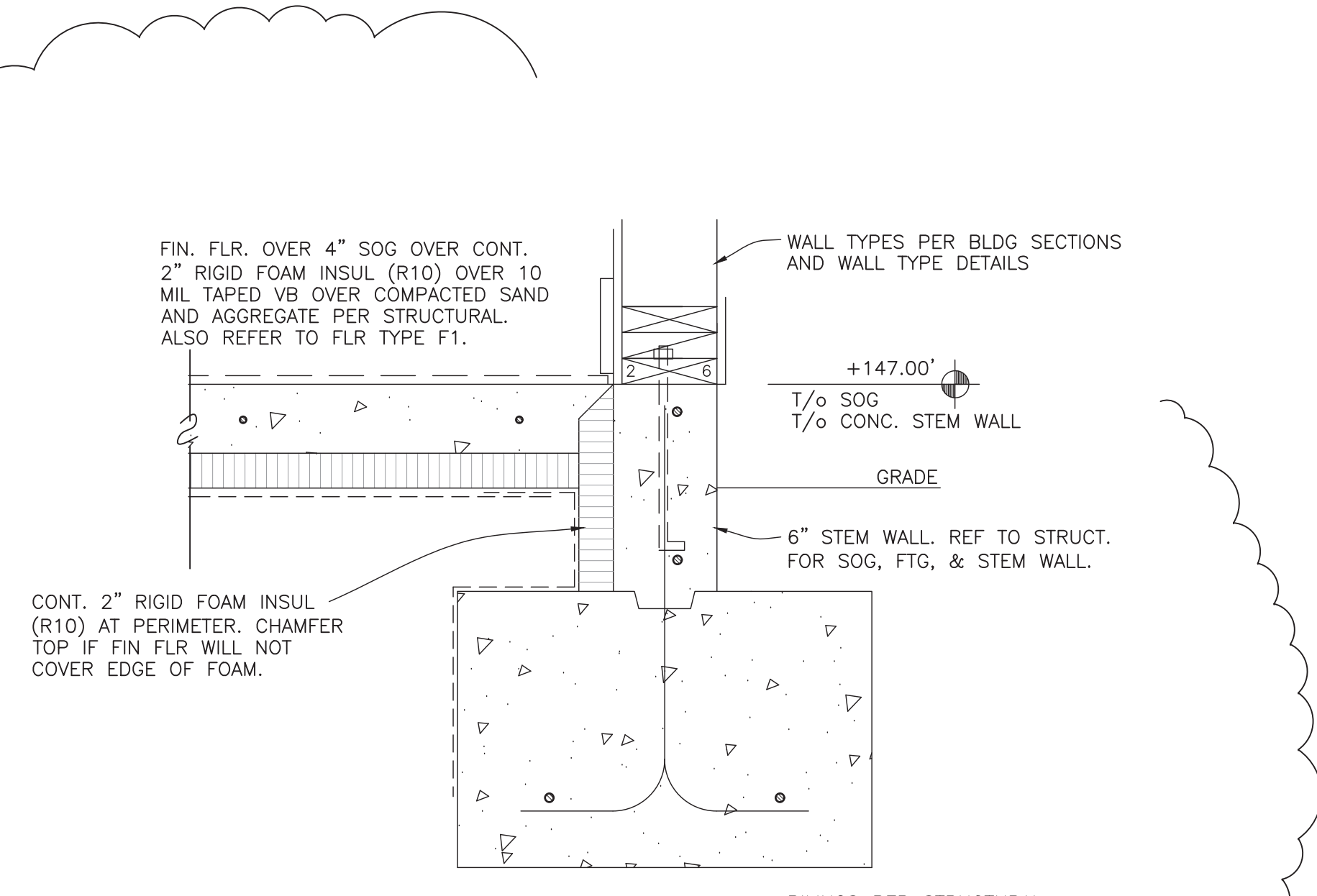
Sheet Number:

A3.2

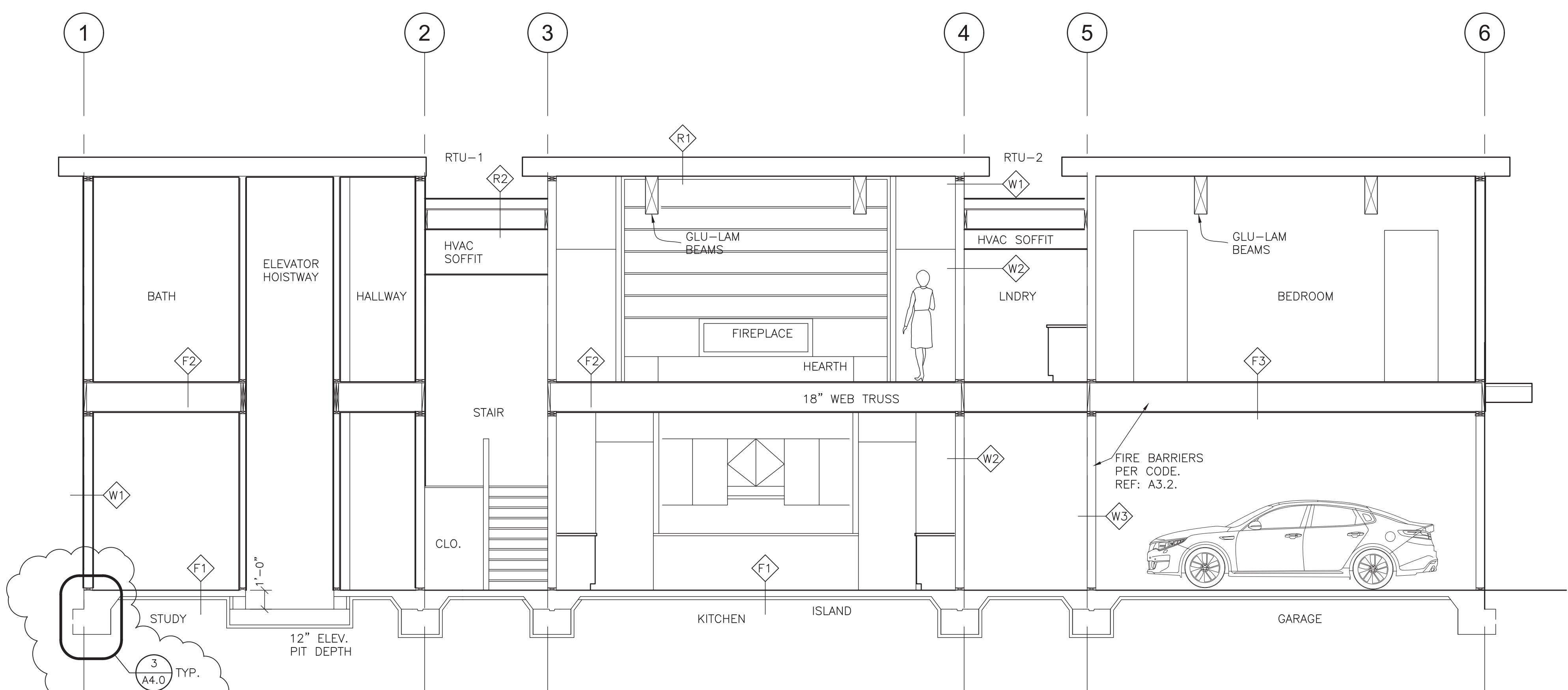
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



2 BLDG SECTION AT CENTER LANTERN
SCALE: 1/4"=1'-0"

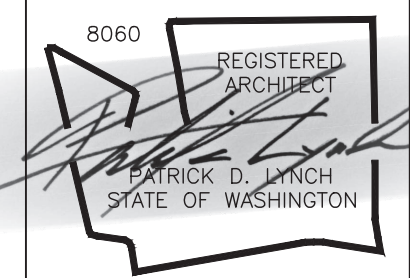


3 TYPICAL EXT. STEM WALL & FOOTING
SCALE: 1 1/2"=1'-0"



1 N-S BUILDING SECTION
SCALE: 1/4"=1'-0"

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REVISIONS	
6-9-25	SITE & PERGOLA
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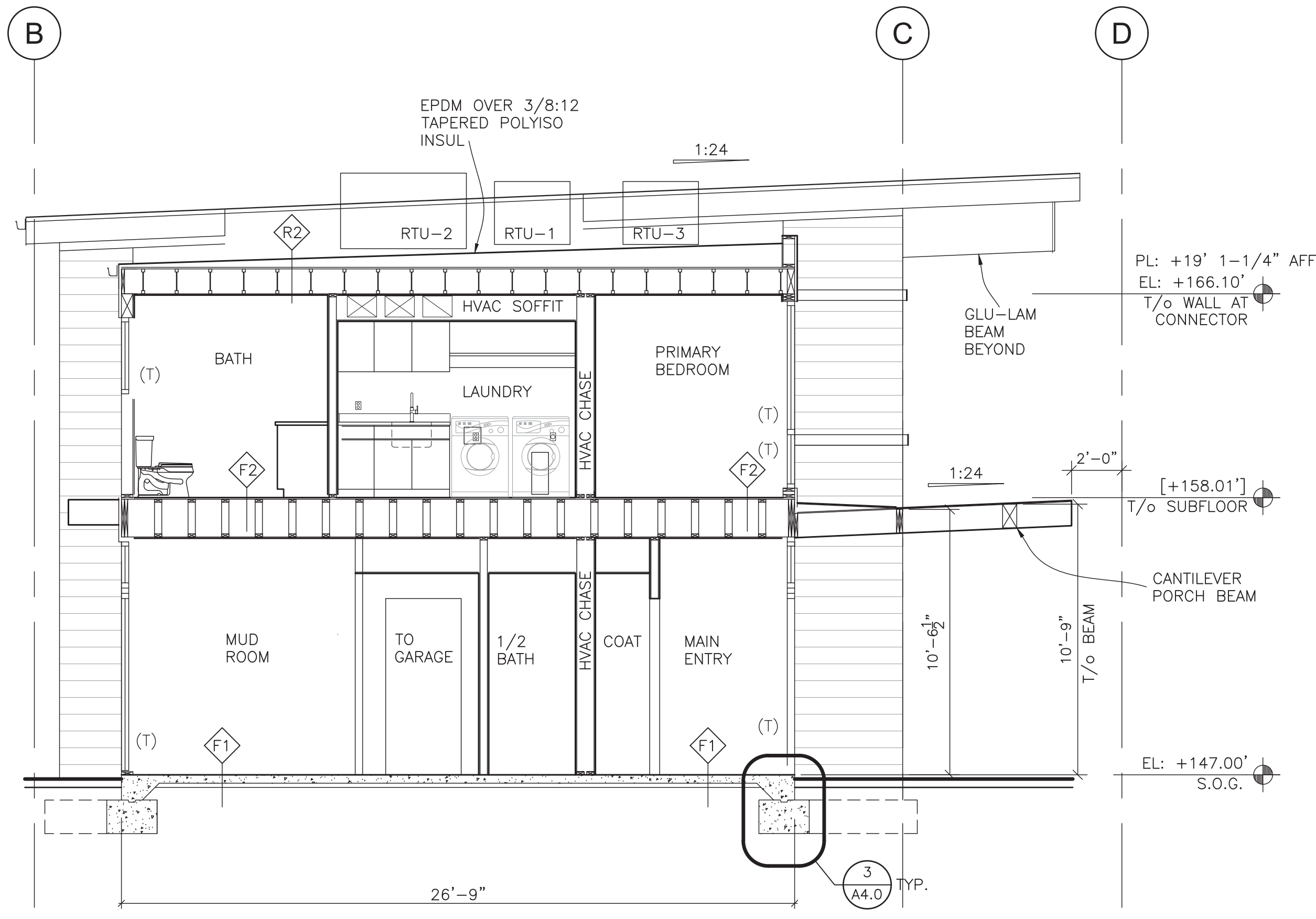
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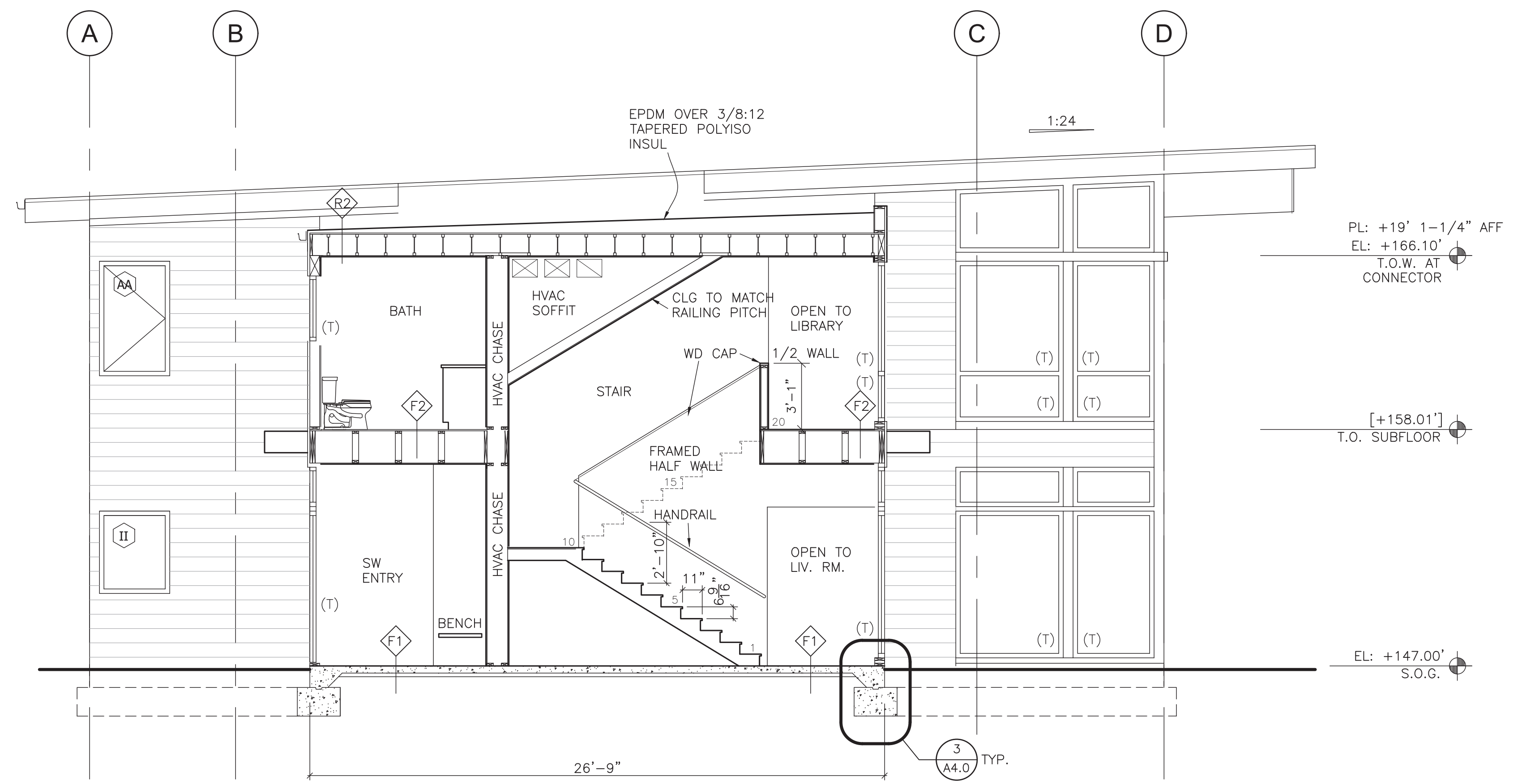
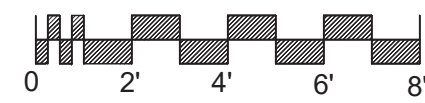
Building Sections

Sheet Number:
A4.0

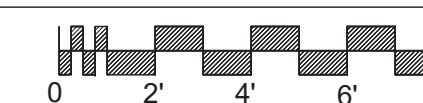
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36



3 BLDG SECTION AT NORTH CONNECTOR
SCALE: 1/4"=1'-0"



2 BLDG SECTION AT SO. CONNECTOR & STAIR
SCALE: 1/4"=1'-0"



FIRST FLOOR INTERIOR DOORS, FRAMES, AND HARDWARE SCHEDULE

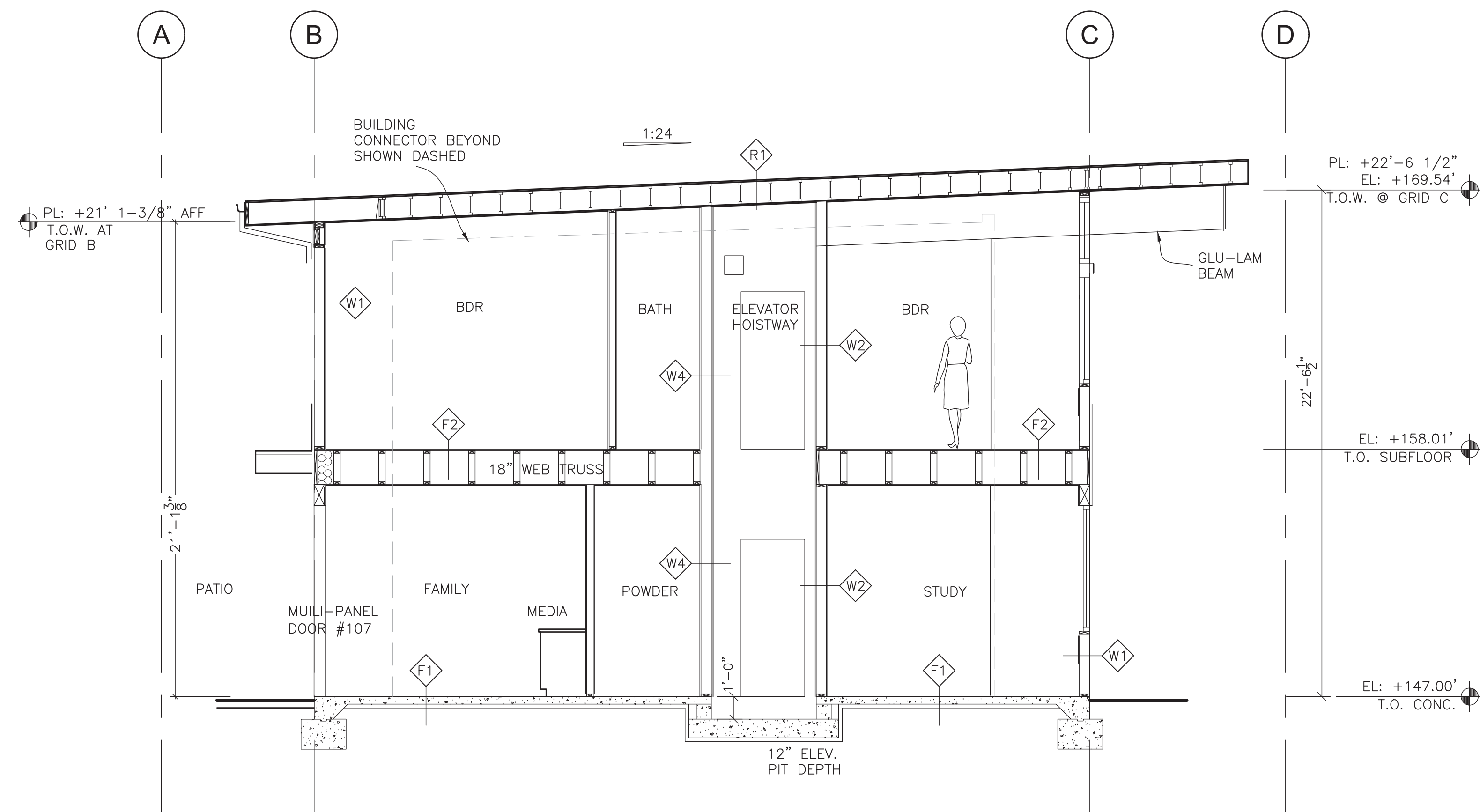
DOOR TAG	TYPE	SIZE	MAT'L	FINISH	HDWR	FIRE LABEL	FRAME TYPE	MAT'L	FINISH	THR	NOTES
102A		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				CLOSET DOORS
105A		2-6 X 7-0	WD SC		PRIVACY	-	POCKET				BATHROOM POCKET DOOR
106A		TBD			PER ELEV.						HOISTWAY. VERIFY & COORD. W/ ELEV. CLEARANCES
106B		2-6 X 7-0	WD SC		CLOSET	-	WD				CLOSET DOOR
108A		2-10 X 7-0	WD SC		PRIVACY	-	WD				BATHROOM DOOR

ALL INTERIOR DOORS ARE WOOD (WD) SOLID CORE (SC)
COORDINATE DOOR 1/2" UNDERCUT FOR RETURN AIR W/ HVAC CONTRACTOR

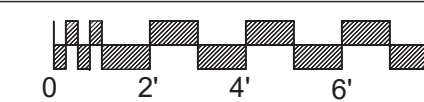
SECOND FLOOR INTERIOR DOORS, FRAMES, AND HARDWARE SCHEDULE

DOOR TAG	TYPE	SIZE	MAT'L	FINISH	HDWR	FIRE LABEL	FRAME TYPE	MAT'L	FINISH	THR	NOTES
203A		TBD			PER ELEV.		TBD				HOISTWAY. VERIFY & COORD. W/ ELEV. CLEARANCES
204A		2-8 X 7-0	WD SC		PASSAGE	-	WD				BEDROOM DOOR
204B		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				FRENCH CLOSET DOORS W/ BALL CATCHES
205A		2-10 X 7-0	WD SC		PRIVACY	-	WD				BATHROOM DOOR
206A		2-8 X 7-0	WD SC		PASSAGE	-	WD				BEDROOM DOOR
206B		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				FRENCH CLOSET DOORS W/ BALL CATCHES
207A		2-8 X 7-0	WD SC		PASSAGE	-	WD				BEDROOM DOOR
207B		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				FRENCH CLOSET DOORS W/ BALL CATCHES
208A		2-8 X 7-0	WD SC		PRIVACY	-	WD				BATHROOM DOOR
209A		2-8 X 7-0	WD SC		PASSAGE	-	WD				BEDROOM DOOR
209B		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				FRENCH CLOSET DOORS W/ BALL CATCHES
210A		2-8 X 7-0	WD SC		PRIVACY	-	WD				BATHROOM DOOR
211A		2-10 X 7-0	WD SC		PASSAGE	-	WD				
212A		2-8 X 7-0	WD SC		PASSAGE	-	WD				BEDROOM DOOR
212B		-			-		WD				4-0 X 7-0 CASSED OPENING
212C		-			-		WD				4-0 X 7-0 CASSED OPENING
213A		2-8 X 7-0	WD SC		PRIVACY	-	WD				TOILET COMPARTMENT DOOR
214A		3-0 X 7-0	WD SC		CLOSET	-	WD			GASKET	MECH. ROOM. FULLY GASKETED FRAME & THRESHOLD

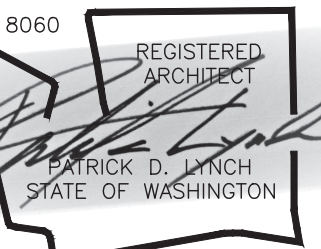
ALL INTERIOR DOORS ARE WOOD (WD) SOLID CORE (SC)
COORDINATE DOOR 1/2" UNDERCUT FOR RETURN AIR W/ HVAC CONTRACTOR
COORDINATE ELEVATOR HOISTWAY DOOR & FRAME WITH ELEVATOR MFR. COORDINATE WITH INTERIOR FINISHES.



1 BLDG. SECTION AT SOUTH LANTERN
SCALE: 1/4"=1'-0"



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REVISIONS	DATE	DESCRIPTION
6-9-25		SITE & PERGOLA
6-9-25		SECTION 2 / A4.0
8-8-25		CATCHMENT/PILING

Permit Set

Date: MAR. 14, 2025
Job Number:
Drafting:
Approval: PDL

Interior Door Schedule & Bldg Sections

Sheet Number:

A4.1

ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
APPROX	APPROXIMATE
APB	ANTHONY POWER BEAM
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
@	AT
BLDG	BUILDING
BUC	BUILT UP COLUMN
CANT	CANTILEVER
CLR	CLEAR, CLEARANCE
CMU	CONCRETE MASONRY UNIT
CNCR	CONCRETE
COL	COLUMN
CL	CENTER LINE
CJ	CONSTRUCTION JOINT
db	NOMINAL DIAMETER OF BAR
DBL	DOUBLED
DBA	DEFORMED BAR ANCHOR
DIA, Ø	DIAMETER
DIM	DIMENSION
DL	DEAD LOAD
EF	EACH FACE
ENGR	ENGINEER
ELEV	ELEVATION
EW	EACH WAY
EXP AB	EXPANSION ANCHOR BOLT
FB	FLITCH BEAM
FDN	FOUNDATION
FF	FINISHED FLOOR
FL	FLOOR
FLN	FLANGE
FT	FOOT OR FEET
GALV	GALVANIZED (HOT DIP)
HORIZ	HORIZONTAL
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
INSUL	INSULATION
JT	JOINT
KIP(S)	THOUSAND POUNDS
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE OR L-SHAPE
LWR	LOWER
LB(S)	POUND(S), FORCE
LD	DEVELOPMENT LENGTH
LG	LONG
LL	LIVE LOAD
LONG	LONGITUDINAL
MATL	MATERIAL
MAX	MAXIMUM
MISC	MISCELLANEOUS
MFR	MANUFACTURER
NTS	NOT TO SCALE
O TO O	OUT TO OUT
OC	ON CENTER
OD	OUTSIDE DIAMETER
PLF	POUNDS FORCE PER LINEAR FOOT
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
STD	STANDARD
SW	SHEAR WALL
TOC	TOP OF CONCRETE
T/	TOP OF
TYP	TYPICAL
T&B	TOP AND BOTTOM
UNO	UNLESS NOTED OTHERWISE
UWA	UNDER WALL ABOVE
W/	WITH

DESIGN CRITERIA

DESIGN CODE	2018	INTERNATIONAL BUILDING CODE
BUILDING RISK CATEGORY	INTERNATIONAL BUILDING CODE	CATEGORY II
DEAD LOAD		
FLOOR	30 PSF	
ROOF	15 PSF	
LIVE LOAD		
RESIDENTIAL	40 PSF	
ROOF LIVE LOAD		
ROOF	20 PSF	
ROOF SNOW LOAD DATA		
FLAT-ROOF SNOW LOAD, Pf	25 PSF	
RAIN ON SNOW SURCHARGE	5 PSF	
SNOW LOAD EXPOSURE FACTOR, Ce	B	
SNOW LOAD IMPORTANCE FACTOR, Is	1.0	
THERMAL FACTOR, Ct	1.0	
SNOW DRIFTS	NO	
WIND DESIGN DATA		
DESIGN WIND SPEED, Vdes (3-sec gust)	110 MPH	
WIND EXPOSURE CATEGORY	C	
WIND IMPORTANCE FACTOR, Iw	1.0	
TOPOGRAPHIC FACTOR, Ktz	B	
INTERNAL PRESSURE COEF (GCPI)	0.18/-0.18	
MWFRS	SIMPLIFIED METHOD - CH 26	
EARTHQUAKE DESIGN DATA		
SEISMIC DESIGN CATEGORY	D	
SITE CLASS	D (STIFF SOIL)	
MAPPED SPECTRAL RESPONSE ACCELERATION	Ss=0.147 S1=0.566	
DESIGN SPECTRAL RESPONSE ACCELERATION	Sds=0.981 Sd1=0.667	
RESPONSE MODIFICATION FACTOR, R	6.5	
OVERSTRENGTH FACTOR, OMEGA	2.5	
REDUNDANCY FACTOR, RHO	1.0	
SEISMIC RESPONSE COEFFICIENT, Cs	0.167	
GEOTECHNICAL INFORMATION (EARTH SOLUTIONS NW, LLC: ES-9607.1 DATED 10/23/24)		
ALLOWABLE BEARING PRESSURE	2000 PSF	
ALLOWABLE PASSIVE PRESSURE	250 PSF	
ALLOWABLE COEFFICIENT OF SLIDING (FRICTION)	0.30	
SLOPING GRADE SURCHARGE AT RETAINING WALLS	49 PCF	

DESIGN CRITERIA (CONT.)

CONTAINMENT WALL:		
LANDSIDE APPLIED LOAD	1200 PLF @ TOP OF WALL (ALONG SLOPE)	
ALLOWABLE BEARING	2667 PSF	
OVERTURNING FOS	1.5	
SLIDING FOS	1.2	
ESTIMATED LIQUEFACTION SETTLEMENT	3 TO 6 INCHES	
ESTIMATED LATERAL DEFORMATION	NEGIGIBLE	
*NOTE: THE BUILDING DESIGN IS CAPABLE OF TOLERATING THE ABOVE ESTIMATED DEFORMATION WITHOUT COLLAPSE.		

GENERAL NOTES - STRUCTURAL DESIGN

- PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND FABRICATOR SHALL VERIFY ALL QUANTITIES, DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT / ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- VERIFY REQUIREMENTS OF OTHER TRADES, (CIVIL, MECHANICAL, ELECTRICAL, ETC.), PRIOR TO PROCEEDING WITH FABRICATION OR INSTALLATION OF MATERIALS.
- THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE, AND EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR AND THEIR SUB-CONTRACTORS SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCES AND SAFETY MEASURES INCLUDING, BUT NOT LIMITED TO, ADHERENCES TO ALL OSHA GUIDELINES. THE ENGINEER SHALL NOT HAVE CONTROL OF, AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSON PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THESE PERSONS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. ANY PROPOSED APPLICATIONS OF CONSTRUCTION LOADS OR OF ANY LOADS TO THE PARTIALLY COMPLETED STRUCTURE WHICH EXCEED THE DESIGN LOADS WILL REQUIRE REANALYSIS AND POSSIBLE REDESIGN.

FOUNDATION

- FOUNDATION DESIGN IS BASED UPON RECOMMENDATIONS AND ASSUMPTIONS FROM EARTH SOLUTIONS NW, LLC DATED 4/22/24.
- ALL SUBGRADE AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.
- ALL FOUNDATIONS AND SLAB ON GRADE SHALL BE PLACED ON BEARING MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. REFER TO GEOTECHNICAL REPORT FOR STRUCTURAL FILL AND SUBGRADE PREPARATION.
- ALL EXTERIOR FOOTINGS SHALL BEAR AT OR BELOW FROST DEPTH OF 12 INCHES. ALL INTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 12 INCHES BELOW TOP OF GRADE OR TOP OF SLAB.

REINFORCED CONCRETE

- CONCRETE CONSTRUCTION STANDARDS
 - IBC CHAPTER 19: CONCRETE
 - ACI 318 - LATEST EDITION
 - ACI 117 - LATEST EDITION
 - ACI 301 - LATEST EDITION
- MAINTAIN THE FOLLOWING MIX REQUIREMENTS UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER:

STRUCTURAL CONCRETE			
DESCRIPTION	F'c	MAX W/C RATIO	AIR CONTENT
FOOTINGS AND STEM WALLS	3,000	0.50	--
INTERIOR SLABS ON GRADE	3,500	0.50	--
EXTERIOR SLABS ON GRADE	4,500	0.45	5-7%
- CEMENT SHALL BE PORTLAND CEMENT PER ASTM C150, TYPE I/II.
- AGGREGATE SHALL BE PER ASTM C33. PROVIDE MAX AGGREGATE SIZE OF 1 INCH FOR ALL CLASSES UNLESS NOTED OTHERWISE.
- MAXIMUM ALLOWABLE FLY ASH CONTENT SHALL BE 20%. FLY ASH SHALL BE PER ASTM C618, TYPE C OR F.
- MAINTAIN SLUMP RANGE OF 5-7 WITHIN TOLERANCES PER ACI 301.
- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND STANDARDS: IBC CHAPTER 19, ACI 318-14, ACI 301-05, ACI 117-10.
- REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 UNO.
- REINFORCING PROTECTION FOR CAST-IN-PLACE CONCRETE AS PER ACI 318 UNLESS NOTED.
 - CAST AGAINST AND PERMANENTLY EXPOSED 3" TO EARTH, ALL REINFORCING.
 - FORMED SURFACES EXPOSED TO EARTH OR WEATHER.

NO. 6 THRU NO. 18 BARS	2"
NO. 5 BAR, W32 OR D31 WIRE AND SMALLER	1 1/2"
 - SURFACES NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.
 - BEAMS, COLUMNS, PRIMARY REINFORCEMENT, TIES

STIRRUPS OR SPIRALS	1 1/2"
---------------------	--------
 - SLABS, WALLS & JOISTS

-NO. 14 AND NO. 18 BARS	1 1/2"
-NO. 11 BAR AND SMALLER	1 1/2"
- BAR SPLICES SHALL BE CLASS "B" UNLESS NOTED OTHERWISE.
- HORIZONTAL REINFORCING BARS SHALL BE LAPPED AROUND CORNERS OF INTERSECTING WALLS AND BEAMS. STANDARD ACI HOOKS AND BENDS SHALL BE USED.
- FINISH CONCRETE SURFACES IN ACCORDANCE WITH THE FOLLOWING:
 - INTERIOR SLABS ON GRADE: FINISH TO FLATNESS AND LEVELNESS OF F(1) = 30 AND F(1) = 20 IN ACCORDANCE WITH ACI 117.
 - INTERIOR FLOOR AREAS TO RECEIVE CARPET, RESILIENT FLOOR COVERING, OR REMAIN EXPOSED: SMOOTH TROWEL FINISH.
 - INTERIOR FLOOR AREAS TO RECEIVE QUARRY TILE OR CERAMIC TILE: FLOAT FINISH.
 - EXTERIOR SLABS: BROOM FINISH.

TIMBER

- TIMBER CONSTRUCTION STANDARDS
 - IBC CHAPTER 23: WOOD
 - NDS 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS)
 - CPA PDS-99 PLYWOOD DESIGN SPECIFICATION
 - ANSI/TP 1 NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSSES
 - TR1 D58 RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED TRUSSES
 - BCSI GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, & BRACING OF METAL PLATE CONNECTED TRUSSES
 - APA REPORT TT-0458 MINIMUM NAIL PENETRATION FOR WOOD STRUCTURAL PANEL CONNECTIONS SUBJECT TO LATERAL LOADS
- MATERIALS:

ALL SAWN LUMBER SHALL CONFORM TO GRADING RULES OF WWPA, NLGA OR WCLIB. GLULAMS SHALL CONFORM TO AITC 117-2004 AND ANSI/AITC A190.1. ALL GLULAM BEAMS, EXCEPT CONTINUOUS MULTISPAN BEAMS, SHALL BE CAMBERED TO 3000 FT RADIUS UNLESS NOTED OTHERWISE. ALL WOOD MATERIALS SHALL HAVE MINIMUM MOISTURE CONTENT OF 19% EXCEPT FOR PRESSURE TREATED SILL PLATES. ALL PRESSURE TREATED MEMBERS SHALL BE TREATED PER IBC SECTION 2304.12.

LUMBER GRADE TABLE		
MEMBER	SIZE	SPECIES & GRADE
WALL STUDS	2x, 3x	Doug Fir Larch, No. 2
SILL PLATES	2x, 3x	PT Doug Fir Larch, No 2
POSTS	4x, 6x, 8x	Doug Fir Larch, No 2
FLOOR AND ROOF JOISTS	2x, 3x	Doug Fir Larch, No. 2
BEAMS	4x and up	Doug Fir Larch, No 1
GLULAMS- SINGLE SPAN	ALL	24F-V4
GLULAMEN-MULTI SPAN	ALL	24F-V8
GLULAM COLS	ALL	L2
TIMPERSTRAND LSL	ALL	1.5E, Fb=1700,Fv=400, Fc_parallel=1400
MICROLAM LVL	ALL	1.9E, Fb=2600,Fv=285, Fc_parallel=2510

- STUD FRAMED WALLS
 - ALL EXTERIOR WALLS WITH 10 FT HEIGHT OR LESS SHALL BE 2X6 @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLANS. REFER TO PLANS FOR WALLS GREATER THAN 10 FT HEIGHT.
 - ALL INTERIOR BEARING WALLS SHALL BE MINIMUM 2X6 @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLANS.
 - AT ALL EXTERIOR AND LOAD BEARING WALL OPENINGS PROVIDE BUNDLED STUDS OF TWO TRIMMER AND ONE KING STUD AT EACH SIDE OF OPENING UNLESS NOTED OTHERWISE ON DRAWINGS.
- BEAMS AND HEADERS
 - THE CENTERLINE OF EACH BEAM SHALL ALIGN WITH THE CENTERLINE OF WALL AND STUDS BELOW.
 - BEAMS MADE UP OF MULTIPLES OF 2xLUMBER SHALL BE BUILT AS FOLLOWS:
 - 2-2x 16d NAILS @ 12" O.C. TOP AND BOTTOM- STAGGER EACH FACE
 - 3-2x 20d NAILS @ 12" O.C. TOP AND BOTTOM- STAGGER EACH FACE
 - 4-2x (OR MORE) 3/4"Ø BOLTS @ 12" O.C. TOP & BOTTOM, STAGGER -USE STD. WASHERS (EA. FACE).
 - PROVIDE STANDARD NUTS & WASHERS AT 3/4"Ø BOLTS (GALV. IF EXPOSED TO WEATHER)
 - PROVIDE 2" EDGE DISTANCE FROM CENTERLINE OF BOLTS TO EDGE OF WOOD (TYPICAL)
 - ALL BEAMS AND HEADERS SHALL BE SUPPORTED WITH EITHER BUNDLED STUDS PER SECTION 4 ABOVE OR WITH POST AND POST CAP CONNECTION PER THE PLANS. REFER TO SECTION 7 BELOW FOR MINIMUM POST CAP SIZES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- JOISTS
 - BRIDGING: PROVIDE BRIDGING AT ALL FLOOR JOISTS NOT TO EXCEED 8'-0" MAXIMUM OR IN COMPLIANCE WITH JOINT MANUFACTURER RECOMMENDATIONS FOR ENGINEERED JOISTS.
 - DO NOT NOTCH OR CUT HOLES IN JOISTS WITHOUT ENGINEER APPROVAL.
 - BLOCKING: AT BEARING WALLS PROVIDE 2-2x SOLID BLOCKING UNDER BEARING WALLS PERPENDICULAR AND PARALLEL TO THE JOIST DIRECTION.
 - BLOCKING (TO MATCH JOIST DEPTH) SHALL BE PROVIDED AT EA END & AT EACH SUPPORT OF JOIST, EXCEPT WHERE THE ENDS OF JOISTS ARE FASTENED TO A HEADER, RIM JOIST, OR AN ADJOINING STUD. SOLID BLOCKING SHALL BE A MIN. OF 2-2x MEMBERS.
- ATTACHMENTS
 - THRU BOLTS SHALL BE ASTM A-307 OR ASTM A-325. PROVIDE STANDARD WASHERS AT EACH FACE.
 - FASTENERS, INCLUDING BOLTS, NUT, WASHERS, AND OTHER CONNECTORS SHALL BE HOT-DIPPED GALVANIZED WHERE EXPOSED TO WEATHER.
 - CONNECTORS TO BE PROVIDED BY "SIMPSON" STRONG-TIE COMPANY, INC., SAN LEANDRO, CALIFORNIA, OR EQUAL. APPLY NAIL AT EACH NAIL HOLE WITH SIZE AND TYPE PER CONNECTOR MANUFACTURER.
 - AT COLUMNS 4" SQUARE AND LARGER, PROVIDE CAP & BASE CONNECTORS AS BELOW:
 - COLUMN CAP CONNECTOR: PC SERIES (OR EPC AT BM ENDS). COLUMN BASE CONNECTOR: CB SERIES.
 - USE RECOMMENDED COLUMN/BEAM MODEL NUMBERS.
- HURRICANE CLIPS
 - PROVIDE MINIMUM H2.5A AT EACH END OF EACH ROOF JOIST OR RAFTER WITH SPAN LESS THAN 20 FEET.
 - PROVIDE MINIMUM H6 OR (2) H2.5A AT EACH END OF EACH ROOF JOIST OR RAFTER WITH SPAN GREATER THAN 20 FEET.
- FLOOR AND ROOF DECK
 - FLOOR AND ROOF DECK SHALL BE APA RATED PLYWOOD OR OSB WITH THICKNESS AND NAIL SIZE AND SPACING PER THE PLANS.
 - PLACE PANELS IN A STAGGERED PATTERN. GLUE & NAIL TO FRAMING MEMBERS. GLUE SHALL CONFORM TO APA SPEC. AF6-01, AND APPLIED PER MANUF. SPECIFICATIONS.
 - ORIENT SHEATHING PANELS WITH THE LONG DIMENSION PERPENDICULAR TO RAFTERS.
 - PLYWOOD CLIPS SHALL BE INSTALLED @ ROOF DECKING TO RESULT IN A 1/8" GAP BETWEEN PANEL EDGES. PROVIDE 1 CLIP PER JOIST SPACING SPAN. USE "SIMPSON" PSCl, OR APPROVED EQUAL. MATCH CORRESPONDING PLYWOOD THICKNESS.
- MISCELLANEOUS
 - ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED LUMBER.
- PREFABRICATED WOOD FRAMING MEMBERS
 - PREFABRICATED WOOD FRAMING MEMBERS INCLUDE WOOD TRUSSES, TJI'S, ASI'S OR OTHER SIMILAR PREFABRICATED MEMBERS USED IN LIEU OF SAWN WOOD JOISTS, OR RAFTERS.
 - PRODUCT DESIGN SHALL BE BASED UPON ACTUAL BUILDING DEAD LOADS, CODE SPECIFIED LIVE LOADS, AND STANDARDS OUTLINED IN THE BUILDING CODE FOR WINDSTORM RESISTANT CONSTRUCTION. TRUSSES SHALL BE DETAILED AND DESIGNED BY THE MANUFACTURER, UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. UPON REQUEST, THE MANUFACTURER SHALL SUBMIT CALCULATIONS AND/OR SHOP DRAWINGS TO THE ARCHITECT/ENGINEER OF RECORD FOR REVIEW.
 - CONTRACTOR SHALL PROVIDE TEMPORARY AND PERMANENT LATERAL BRACING OF ALL FABRICATED TRUSS MEMBERS PER THE DETAILING AND DESIGN OF THE TRUSS MANUFACTURER. TRUSSES SHALL BE DETAILED AND DESIGNED BY THE MANUFACTURER.
 - PROVIDE TEMPORARY SHORING WHERE SHEET ROCK AND OTHER CONSTRUCTION MATERIALS ARE BEING TEMPORARILY STORED. IF TJI'S ARE BEING UTILIZED, KEEP THE MEMBERS ABSOLUTELY DRY.

TIMBER (CONT.)

- WOOD CONNECTORS, FASTENERS, NAILS, AND BOTS
 - ALL WOOD CONNECTORS, HANGERS, CLIPS, HOLD-DOWN, POST CAPS AND OTHER WOOD CONNECTIONS SHALL BE SIMPSON STRONG TIE AS SPECIFIED IN THEIR LATEST WOOD CONNECTORS CATALOG. ALTERNATE CONNECTORS BY OTHER MANUFACTURERS MAY BE USED IF SUBMITTED FOR APPROVAL TO EOR. ALL CONNECTORS SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS WITH ALL INDICATED FASTENERS. WHERE MULTIPLE OPTIONS OR SIZES EXIST FOR FASTENERS USE THE LARGEST NUMBER OF FASTENERS AND THE LARGEST SIZE OF FASTENERS UNLESS NOTED OTHERWISE ON THE PLANS. ALL CONNECTORS EXPOSED TO WEATHER SHALL BE GALVANIZED OR FINISHED WITH SIMPSON ZMAX FINISH.
 - NAILS, SCREWS, AND BOLTS SHALL CONFORM TO IBC SECTION 2304.10 CONNECTORS AND FASTENERS. ALL FASTENERS ATTACHED TO PRESSURE TREATED LUMBER SHALL HAVE SIMILAR CORROSION PROTECTION MATCHING THE WOOD TREATMENT. PROVIDE WASHERS AT ALL BOLT HEADS AND NUTS. ALL NAILS SHALL BE FULL LENGTH COMMON UNLESS NOTED OTHERWISE EXCEPT 16D SHALL BE SINKERS.
 - ALL LAG BOLTS SHALL BE ASTM A307.

SHEET LIST

\$1.0	GENERAL NOTES	\$3.0	FOUNDATION DETAILS
\$2.0	FOUNDATION PLAN	\$4.0	FRAMING DETAILS
\$2.1	SECOND FLOOR FRAMING PLAN	\$4.1	FRAMING DETAILS - CONT.
\$2.2	ROOF FRAMING PLAN		
\$2.3	SHEAR WALL KEY PLAN		

STRUCTURAL STEEL PILES

- SUBMITTALS:
 - SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW IN ACCORDANCE WITH AISC 360 SECTION M.1 AND AISC 303 SECTION 4.
 - SUBMIT WELDERS CERTIFICATES SHOWING QUALIFICATION WITHIN PAST 12 MONTHS.
 - SUBMIT WELDING PROCEDURE SPECIFICATIONS.
 - PROVIDE MILL TEST REPORTS (MTR) OR AFFIDAVIT INDICATING THE STEEL MEETS THE REQUIREMENTS OF THE GRADES SPECIFIED.
 - SUBMIT ICC REPORTS FOR ALL POST INSTALLED STEEL ANCHORS.
 - SUBMIT FABRICATION SHOP QA/QC PLAN FOR APPROVAL.
- STEEL CONSTRUCTION STANDARDS:
 - IBC CHAPTER 22 "STEEL"
 - AISC MANUAL OF STEEL CONSTRUCTION FIFTEENTH EDITION
 - AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BRIDGES
 - AISC 303-16 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
 - AISC 348-14 SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS
 - AWS D1.1-2020 STRUCTURAL WELDING CODE
- MATERIALS:
 - STRUCTURAL BARS AND PLATES "PL" ASTM A572, Fy=50ksi
 - STRUCTURAL PIPE PILES "P" ASTM A53, Fy=35ksi
- ALL CONSTRUCTION, FABRICATION, AND ERECTION SHALL CONFORM TO AISC SPECIFICATION SECTION M2, FABRICATION AND M4, ERECTION, AND AISC CODE SECTIONS 6 AND 8 FOR FABRICATION & DELIVERY AND QUALITY CONTROL, RESPECTIVELY.
- WEATHER PROOFING: ALL STEEL PILES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123. WELD JOINTS SHALL BE COLD GALVANIZED IN ACCORDANCE WITH ASTM A780 MATERIALS AND PROCEDURES.
- ALL BOLTS SHALL BE INSTALLED TO SNUG TIGHT CONDITION PER RCSC, UNLESS NOTED OTHERWISE ON THE PLANS.
- WELDING SHALL CONFORM TO AWS D1.1 AND WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS. USE E70XX ELECTRODES UNLESS NOTED OTHERWISE.
- BRACING AND SAFETY: ALL FRAMING AND CONSTRUCTION SHALL BE TEMPORARILY BRACED AND SAFETY PROTECTION PROVIDED AS REQUIRED BY AISC SPECIFICATION SECTION M4.2 AND IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE.



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PROJECT:
CHESHIRE UPPER LOT

JOB SITE ADDRESS:
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ARCHITECT:
PATRICK LYNCH

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JOB#
23-067

SHEET TITLE:
GENERAL NOTES

SHEET#:	S1.0	SCALE:	AS SHOWN
DRAWN:	DATE:	CHECKED:	DATE:
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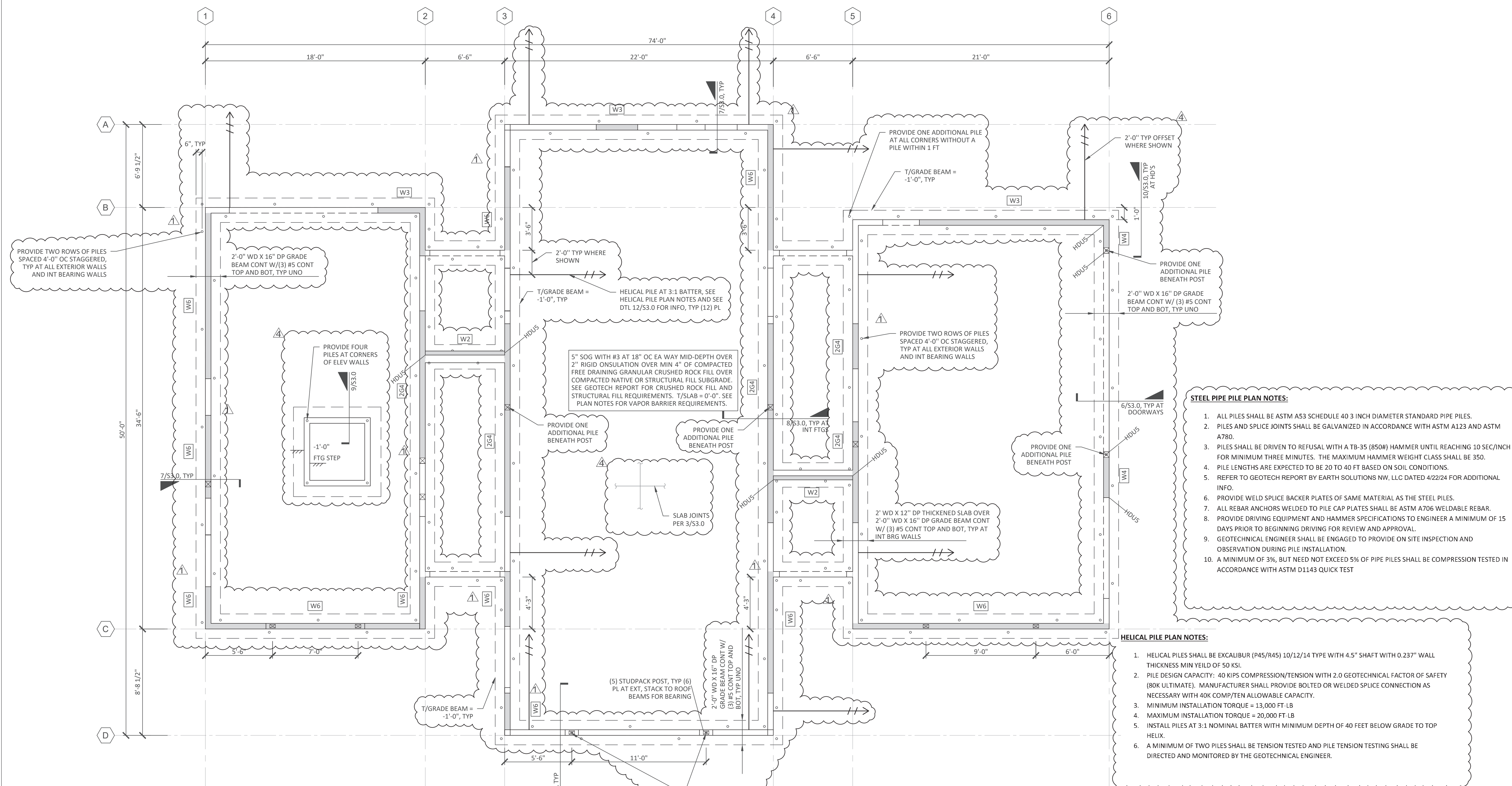
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SHEET TITLE:
FOUNDATION PLAN

SHEET#: **S2.0** SCALE:
AS SHOWN

DRAWN: DATE: CHECKED: DATE:
SG 08/04/2025 KJH 08/04/2025



- STEEL PIPE PILE PLAN NOTES:**
1. ALL PILES SHALL BE ASTM A53 SCHEDULE 40 3 INCH DIAMETER STANDARD PIPE PILES.
 2. PILES AND SPICE JOINTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 AND ASTM A780.
 3. PILES SHALL BE DRIVEN TO REFUSAL WITH A TB-35 (850#) HAMMER UNTIL REACHING 10 SEC/INCH FOR MINIMUM THREE MINUTES. THE MAXIMUM HAMMER WEIGHT CLASS SHALL BE 350.
 4. PILE LENGTHS ARE EXPECTED TO BE 20 TO 40 FT BASED ON SOIL CONDITIONS.
 5. REFER TO GEOTECH REPORT BY EARTH SOLUTIONS NW, LLC DATED 4/22/24 FOR ADDITIONAL INFO.
 6. PROVIDE WELD SPICE BACKER PLATES OF SAME MATERIAL AS THE STEEL PILES.
 7. ALL REBAR ANCHORS WELDED TO PILE CAP PLATES SHALL BE ASTM A706 WELDABLE REBAR.
 8. PROVIDE DRIVING EQUIPMENT AND HAMMER SPECIFICATIONS TO ENGINEER A MINIMUM OF 15 DAYS PRIOR TO BEGINNING DRIVING FOR REVIEW AND APPROVAL.
 9. GEOTECHNICAL ENGINEER SHALL BE ENGAGED TO PROVIDE ON SITE INSPECTION AND OBSERVATION DURING PILE INSTALLATION.
 10. A MINIMUM OF 3%, BUT NEED NOT EXCEED 5% OF PIPE PILES SHALL BE COMPRESSION TESTED IN ACCORDANCE WITH ASTM D1143 QUICK TEST

- HELICAL PILE PLAN NOTES:**
1. HELICAL PILES SHALL BE EXCALIBUR (P45/R45) 10/12/14 TYPE WITH 4.5" SHAFT WITH 0.237" WALL THICKNESS MIN YIELD OF 50 KSI.
 2. PILE DESIGN CAPACITY: 40 KIPS COMPRESSION/TENSION WITH 2.0 GEOTECHNICAL FACTOR OF SAFETY (80K ULTIMATE). MANUFACTURER SHALL PROVIDE BOLTED OR WELDED SPICE CONNECTION AS NECESSARY WITH 40K COMP/TEN ALLOWABLE CAPACITY.
 3. MINIMUM INSTALLATION TORQUE = 13,000 FT-LB
 4. MAXIMUM INSTALLATION TORQUE = 20,000 FT-LB
 5. INSTALL PILES AT 3:1 NOMINAL BATTER WITH MINIMUM DEPTH OF 40 FEET BELOW GRADE TO TOP HELIX.
 6. A MINIMUM OF TWO PILES SHALL BE TENSION TESTED AND PILE TENSION TESTING SHALL BE DIRECTED AND MONITORED BY THE GEOTECHNICAL ENGINEER.

- FOUNDATION PLAN NOTES:**
1. VERIFY LOCATIONS OF NEW COLUMNS, WALLS, OPENINGS, ETC. WITH ARCHITECTURAL DRAWINGS BEFORE PLACING FOUNDATIONS. PROVIDE BLOCKOUTS FOR PLUMBING, HVAC, AND SPECIAL EQUIPMENT AS SHOWN ON ARCHITECTURAL AND MEP PLANS.
 2. TOP OF SLAB ELEVATION ASSUMED AT 0'-0" EXCEPT AS NOTED. REFERENCE CIVIL AND ARCHITECTURAL PLANS FOR ACTUAL TOP OF SLAB ELEVATION. SLABS SHALL BE SUPPORTED ON COMPETENT NATIVE SOIL OR AT LEAST 12 INCHES OF NEW STRUCTURAL FILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. REFERENCE ARCHITECTURAL DRAWINGS FOR DAMPPROOFING AND WATERPROOFING REQUIREMENTS FOR SLAB AND BASEMENT WALLS. PROVIDE MINIMUM 6 MIL VAPOR BARRIER BENEATH ALL SLABS UNLESS OTHERWISE RECOMMENDED BY ARCHITECTURAL DRAWINGS OR GEOTECHNICAL ENGINEER RECOMMENDATIONS.
 3. DESIGN SOIL BEARING PRESSURE OF 2000 PSF BASED ON EARTH SOLUTIONS NW, LLC GEOTECH REPORT DATED APRIL 22, 2024. THE DESIGN BEARING CAPACITY SHALL BE FIELD VERIFIED BY A EARTH SOLUTIONS REPRESENTATIVE OR AN INDEPENDANT TESTING AGENCY SPECIALIZING IN SOILS INVESTIGATIONS.
 4. ALL EXTERIOR FOOTINGS SHALL BEAR AT OR BELOW THE MINIMUM FROST DEPTH OF 12" BELOW FINISHED GRADE. ALL INTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 12 INCHES BELOW TOP OF SLAB.
 5. ALL FOOTINGS AND SLABS SHALL BEAR ON A MINIMUM TWO FEET OF COMPACTED CRUSHED ROCK FILL OVERLYING A WOVEN GEOTEXTILE SUCH AS MIRAFI 500X. REFERENCE THE GEOTECH REPORT FOR ADDITIONAL INFO INCLUDING STRUCTURAL FILL AND SUBGRADE PREPARATION REQUIREMENTS.
 6. PROVIDE PRESSURE TREATED WOOD AT ALL LOCATIONS WHERE IN CONTACT WITH CONCRETE, WITHIN 8" OF EXPOSED GRADE, OR NOT OTHERWISE WEATHERPROOFED.
 7. REFERENCE HOLD-DOWN SCHEDULE AND SHEAR WALL SCHEDULE FOR HOLD-DOWN ANCHOR AND SILL PLATE ANCHORAGE REQUIREMENTS.
 8. REFERENCE THE STRUCTURAL GENERAL NOTES FOR DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS.

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



PROJECT:
CHESHIRE UPPER LOT

JOB SITE ADDRESS:
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Mercer Island, WA 98040

ARCHITECT:
PATRICK LYNCH

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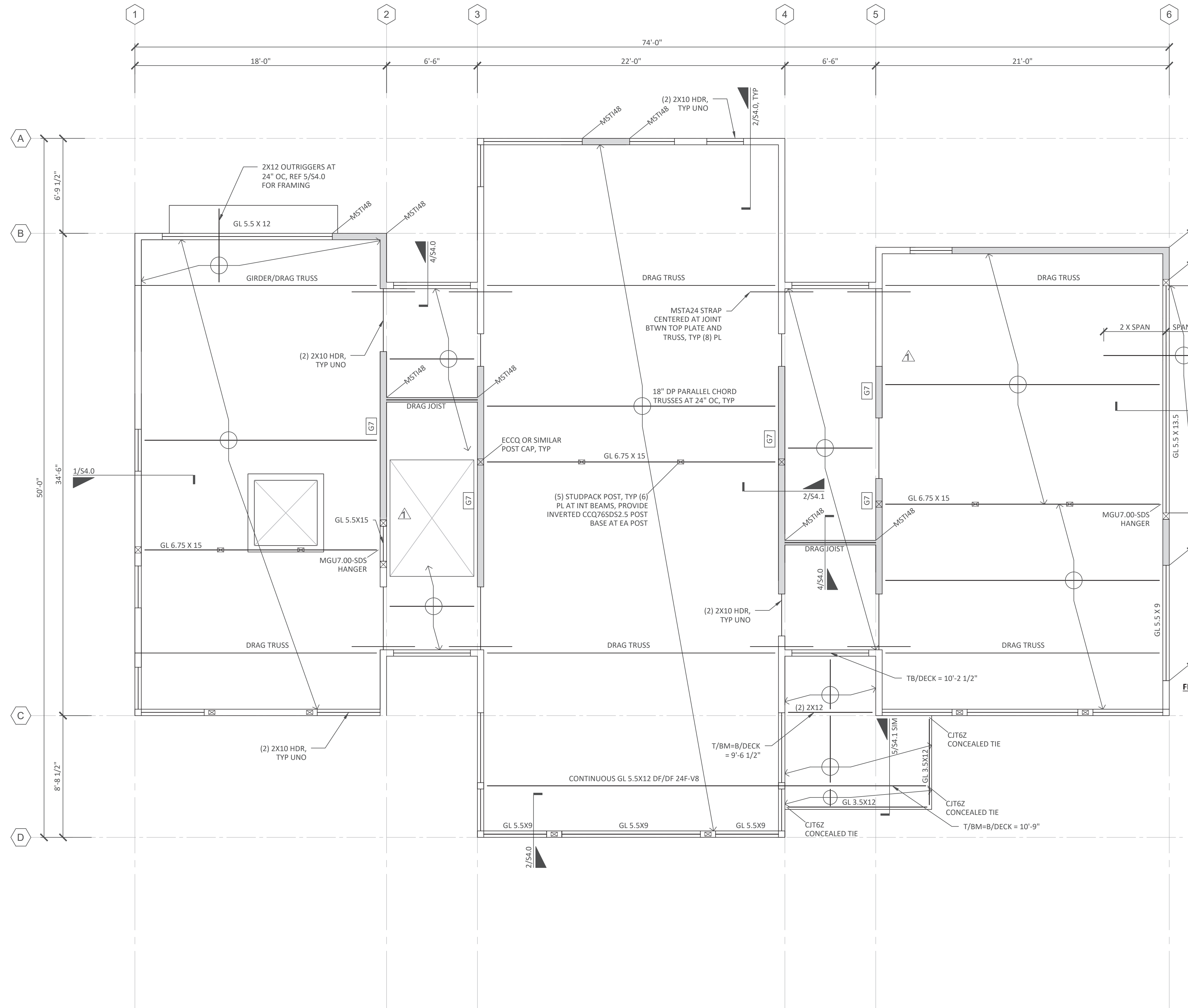
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23-067

SHEET TITLE:
SECOND FLR FRAMING PLAN

SHEET#: **S2.1** SCALE:
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FLOOR FRAMING PLAN NOTES:

- VERIFY LOCATIONS OF NEW COLUMNS, WALLS, OPENINGS, ETC. WITH ARCHITECTURAL DRAWINGS. VERIFY ALL WALL, FLOOR, AND ROOF ELEVATIONS WITH ARCHITECTS DRAWINGS.
- COORDINATE FRAMING WITH ALL MECHANICAL, HVAC, SPRINKLER, PLUMBING, AND ELECTRICAL DRAWINGS.
- ALL WOOD EXPOSED TO WEATHER, OR IN CONTACT WITH CONCRETE, OR WITHIN 8" OF GRADE SHALL BE PRESSURE TREATED.
- PROVIDE SOLID BLOCKING BETWEEN FLOOR JOISTS/TRUSSES OVER ALL BEARING WALLS AND SHEAR WALLS.
- ALL HORIZONTAL STRAP TIES INDICATED ON PLAN SHALL BE ALIGNED WITH TOP PLATE OR BEAM AND BE CENTERED OVER THE JOINT BETWEEN ADJOINING ELEMENTS. REFERENCE THE STRAP MANUFACTURER FOR FASTENER SIZE AND SPACING.
- ALL VERTICAL HOLD-DOWN STRAPS SHALL BE CENTERED AT JOINT BETWEEN SILL PLATE AND TOP PLATES OR ON RIMBOARD WITH HALF OF ALL FASTENERS EACH SIDE OF THE JOINT.
- ALL JOIST HANGERS SHALL BE SIMPSON TOP FLANGE BEARING JB TYPE OR FACE MOUNT LUS TYPE. GLULAM HANGERS SHALL BE HGLTV UNLESS NOTED OTHERWISE ON PLAN. ENGINEERED "I" JOIST HANGERS SHALL BE DESIGNED AND SUPPLIED BY THE JOIST SUPPLIER.
- ALL HEADERS SHALL BE MINIMUM (2) 2X10 FOR SPANS UP TO 3 FEET AND MINIMUM 3 1/8 X 12 GLULAM FOR SPANS UP TO 6 FEET, UNLESS INDICATED OTHERWISE. ALL HEADERS AND BEAMS SHALL BE SUPPORTED BY A MINIMUM OF (2) TRIMMER AND (1) KING STUD. REFERENCE THE PLANS FOR LARGER POSTS OR ADDITIONAL TRIMMERS WHERE REQUIRED. TRIMMER STUDS OR POSTS SHALL BE CONTINUOUS TO THE FOUNDATION UNLESS SUPPORTED BY TRANSFER BEAM.
- REFERENCE SHEAR WALL SCHEDULE FOR SHEAR WALL TYPES AND CONSTRUCTION REQUIREMENTS.
- REFERENCE THE STRUCTURAL GENERAL NOTES FOR DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS.
- PROVIDE JOIST/TRUSS BRIDGING PER MANUFACTURERS REQUIREMENTS FOR ALL ENGINEERED JOISTS AND TRUSSES.
- PROVIDE DOUBLE JOISTS OR DOUBLE BLOCKING AROUND ENTIRE PERIMETER OF OPENINGS GREATER THAN ONE JOIST BAY. PROVIDE DOUBLE JOIST HANGER AT ENDS OF BLOCKING.
- WHERE JOIST OR TRUSSES ARE INDICATED AS "DRAG JOIST/TRUSS" THE JOIST/TRUSS SHALL BE DESIGNED FOR TRANSFER OF 3800 LBS ASD LOAD FROM TOP CHORD TO BOTTOM CHORD.
- FLOOR SHEATHING SHALL BE 23/32" APA RATED STURD-I-FLOOR WITH A SPAN RATING OF 24 OR BETTER WITH .131" X 2.5" @ 6" OC AT EDGES AND 12" OC IN THE FIELD. PROVIDE 1/8" GAP AT ALL PANEL EDGES. LAY ALL SHEATHING WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND STAGGER ALL SHEATHING PANEL END JOINTS. PROVIDE 1/8" GAP BETWEEN PANEL ENDS AND EDGES.
- ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS SHALL BE 2X6 @ 16" OC UNLESS NOTED OTHERWISE. STUDS SHALL ALIGN NOMINALLY FLOOR TO FLOOR WITH STUDS, JOISTS, AND TRUSSES. ATTACH SILL PLATES TO CONCRETE, RIM BOARD, OR TOP PLATE PER SCHEDULE, UNO IN SHEAR WALL SCHEDULE.
- PROVIDE MINIMUM BLOCKING AT 5'-0" OC MAX FOR ALL BEARING AND EXTERIOR WALLS. REFER TO SHEAR WALL SCHEDULE FOR ADDITIONAL BLOCKING REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE CONSTRUCTED AS TYPE W6 SHEAR WALLS EXCEPT WHERE NOTED OTHERWISE ON THE PLANS AS INTERIOR GYP SHEAR WALL OR WOOD SHEAR WALL WITH TIGHTER SPACING.
- PROVIDE MINIMUM SILL ANCHORAGE OF 5/8" X 7" EMBED BOLTS AT 48" OC UNLESS NOTED OTHERWISE ON SHEARWALL SCHEDULE. BOLTS SHALL BE GALVANIZED AT PRESSURE TREATED SILL PLATES.
- FOR SHEAR WALL STRAPS AND ATTACHMENT REQUIREMENTS, REFERENCE THE SHEAR WALL SCHEDULE.
- SEE PLAN FOR HOLD-DOWN LOCATIONS AND SIZES AND REFER TO HOLD-DOWN SCHEDULE FOR ANCHORS AND ATTACHMENT REQUIREMENTS.

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



PROJECT:
CHESHIRE UPPER LOT

JOB SITE ADDRESS:
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Mercer Island, WA 98040

ARCHITECT:
PATRICK LYNCH

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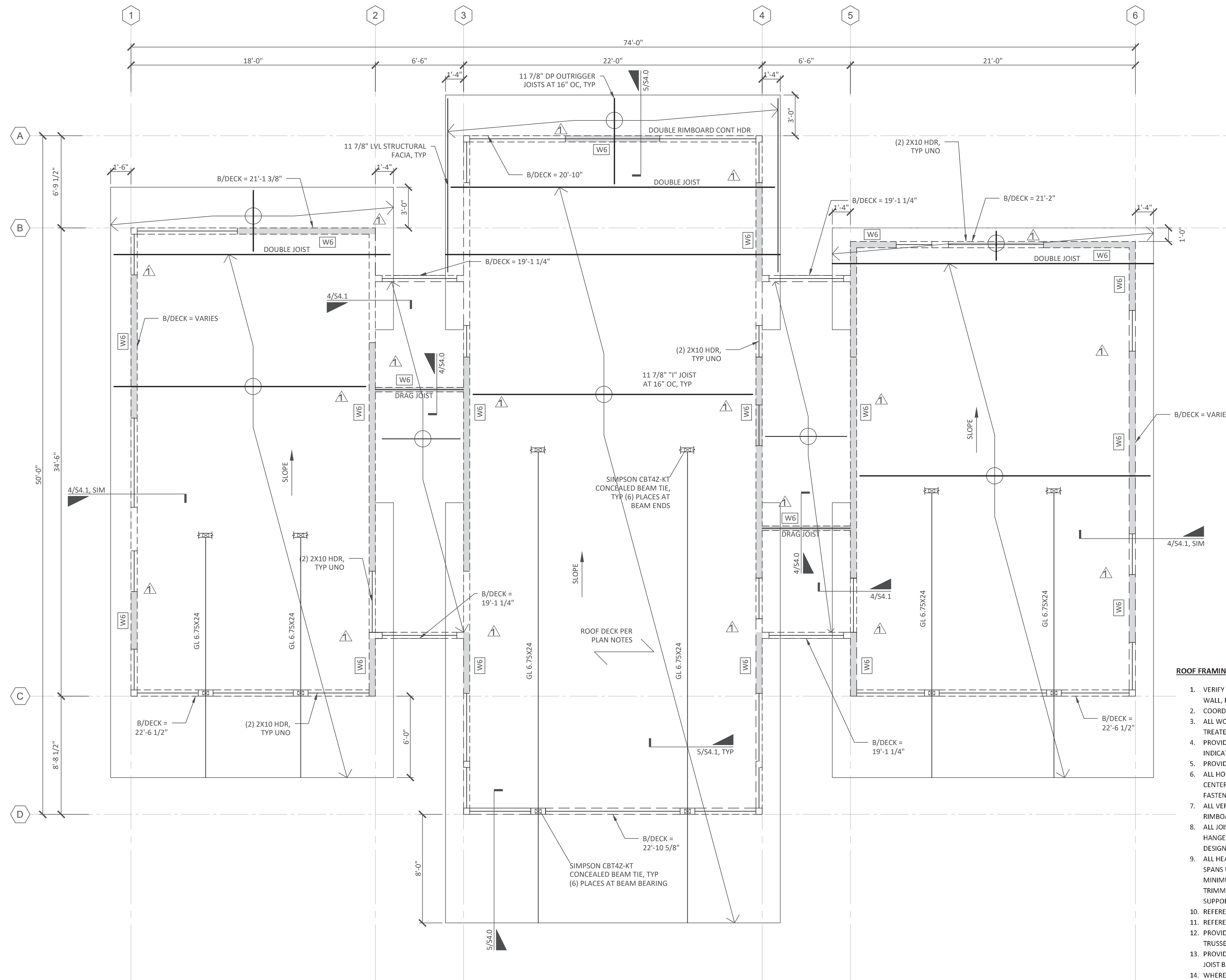
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SHEET TITLE:
ROOF FRAMING PLAN

SHEET#:
S2.2

SCALE:
AS SHOWN

DRAWN: DATE: CHECKED: DATE:
SG 08/04/2025 KJH 08/04/2025



ROOF FRAMING PLAN NOTES:

- VERIFY LOCATIONS OF NEW COLUMNS, WALLS, OPENINGS, ETC. WITH ARCHITECTURAL DRAWINGS. VERIFY ALL WALL, FLOOR, AND ROOF ELEVATIONS WITH ARCHITECTS DRAWINGS.
- COORDINATE FRAMING WITH ALL MECHANICAL, HVAC, SPRINKLER, PLUMBING, AND ELECTRICAL DRAWINGS.
- ALL WOOD EXPOSED TO WEATHER, OR IN CONTACT WITH CONCRETE, OR WITHIN 8" OF GRADE SHALL BE PRESSURE TREATED.
- PROVIDE MINIMUM SIMPSON H2.5A HURRICANE TIES AT ALL ROOF JOISTS/TRUSSES UNLESS HEAVIER TIES ARE INDICATED ON PLAN.
- PROVIDE SOLID BLOCKING BETWEEN FLOOR JOISTS/TRUSSES OVER ALL BEARING WALLS AND SHEAR WALLS.
- ALL HORIZONTAL STRAP TIES INDICATED ON PLAN SHALL BE ALIGNED WITH TOP PLATE OR BEAM AND BE CENTERED OVER THE JOINT BETWEEN ADJOINING ELEMENTS. REFERENCE THE STRAP MANUFACTURER FOR FASTENER SIZE AND SPACING.
- ALL VERTICAL HOLD-DOWN STRAPS SHALL BE CENTERED AT JOINT BETWEEN SILL PLATE AND TOP PLATES OR ON RIMBOARD WITH HALF OF ALL FASTENERS EACH SIDE OF THE JOINT.
- ALL JOIST HANGERS SHALL BE SIMPSON TOP FLANGE BEARING JB TYPE OR FACE MOUNT LUS TYPE. GLULAM HANGERS SHALL BE HGLTV UNLESS NOTED OTHERWISE ON PLAN. ENGINEERED "I" JOIST HANGERS SHALL BE DESIGNED AND SUPPLIED BY THE JOIST SUPPLIER.
- ALL HEADERS SHALL BE MINIMUM (2) 2X10 FOR SPANS UP TO 3 FEET AND MINIMUM 3 1/8 X 12 GLULAM FOR SPANS UP TO 6 FEET, UNLESS INDICATED OTHERWISE. ALL HEADERS AND BEAMS SHALL BE SUPPORTED BY A MINIMUM OF (2) TRIMMER AND (1) KING STUD. REFERENCE THE PLANS FOR LARGER POSTS OR ADDITIONAL TRIMMERS WHERE REQUIRED. TRIMMER STUDS OR POSTS SHALL BE CONTINUOUS TO THE FOUNDATION UNLESS SUPPORTED BY TRANSFER BEAM.
- REFERENCE SHEAR WALL SCHEDULE FOR SHEAR WALL TYPES AND CONSTRUCTION REQUIREMENTS.
- REFERENCE THE STRUCTURAL GENERAL NOTES FOR DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS.
- PROVIDE JOIST/TRUSS BRIDGING PER MANUFACTURERS REQUIREMENTS FOR ALL ENGINEERED JOISTS AND TRUSSES.
- PROVIDE DOUBLE JOISTS OR DOUBLE BLOCKING AROUND ENTIRE PERIMETER OF OPENINGS GREATER THAN ONE JOIST BAY. PROVIDE DOUBLE JOIST HANGER AT ENDS OF BLOCKING.
- WHERE JOIST OR TRUSSES ARE INDICATED AS "DRAG JOIST/TRUSS" THE JOIST/TRUSS SHALL BE DESIGNED FOR TRANSFER OF 3800 LBS ASD LOAD FROM TOP CHORD TO BOTTOM CHORD.
- ROOF SHEATHING SHALL BE 19/32" APA RATED C-D GRADE WITH A SPAN RATING OF 32/16 OR BETTER WITH .131" X 2.5" @ 6" OC AT EDGES AND 12" OC IN THE FIELD. PROVIDE 1/8" GAP AT ALL PANEL EDGES. LAY ALL SHEATHING WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND STAGGER ALL SHEATHING PANEL END JOINTS. PROVIDE 1/8" GAP BETWEEN PANEL ENDS AND EDGES.
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- PROVIDE MINIMUM BLOCKING AT 5'-0" OC MAX FOR ALL BEARING AND EXTERIOR WALLS. REFER TO SHEAR WALL SCHEDULE FOR ADDITIONAL BLOCKING REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE CONSTRUCTED AS TYPE W6 SHEAR WALLS EXCEPT WHERE NOTED OTHERWISE ON THE PLANS AS INTERIOR GYP SHEAR WALL OR WOOD SHEAR WALL WITH TIGHTER SPACING.
- FOR SHEAR WALL STRAPS AND ATTACHMENT REQUIREMENTS, REFERENCE THE SHEAR WALL SCHEDULE.

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





Merrell Design Services
Practical Structural Solutions

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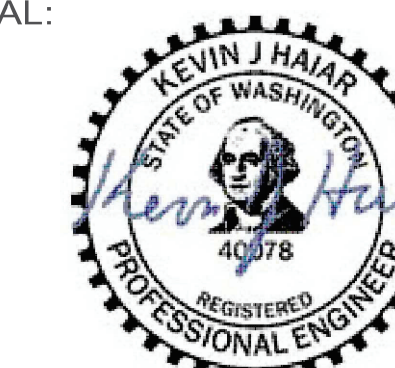
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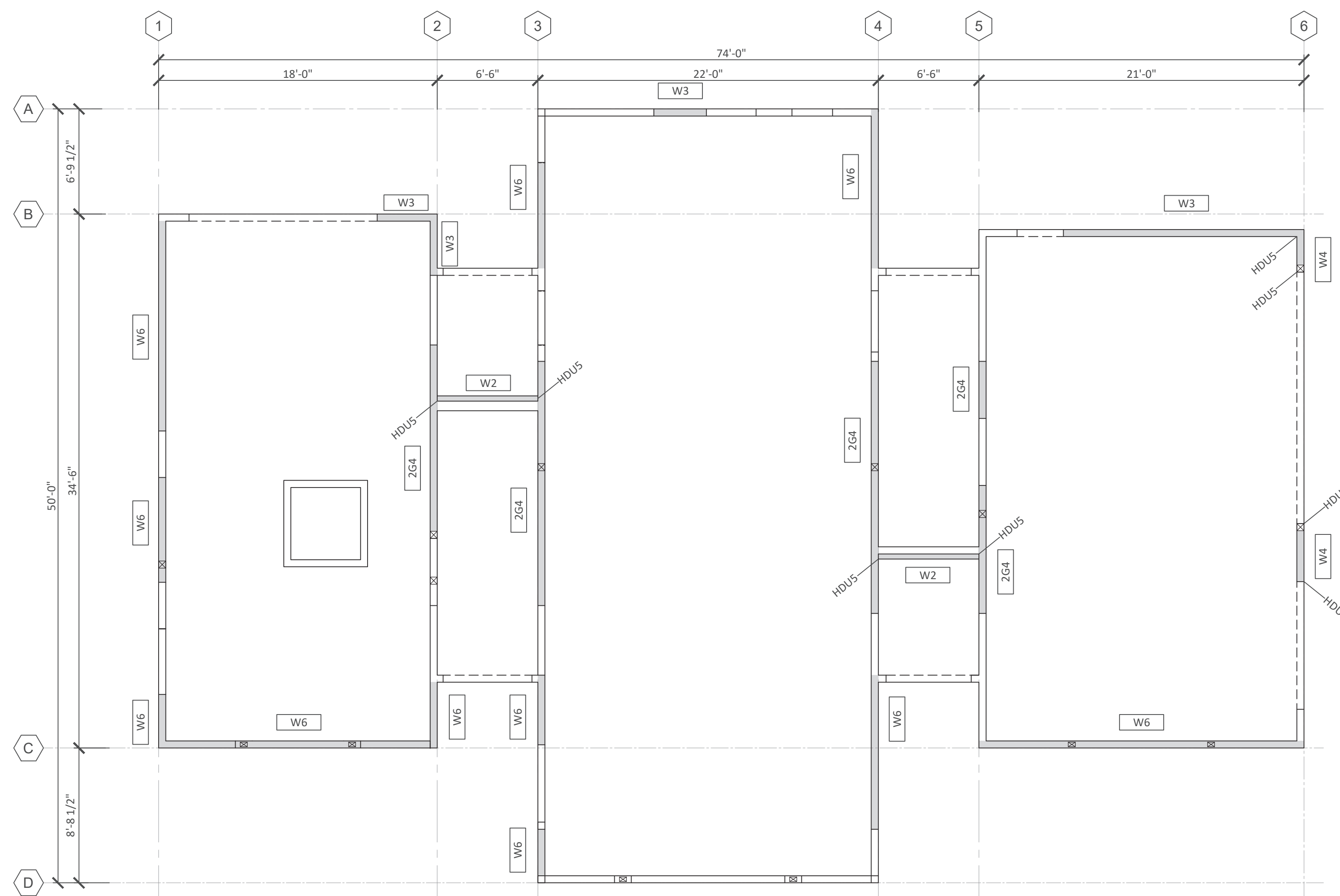
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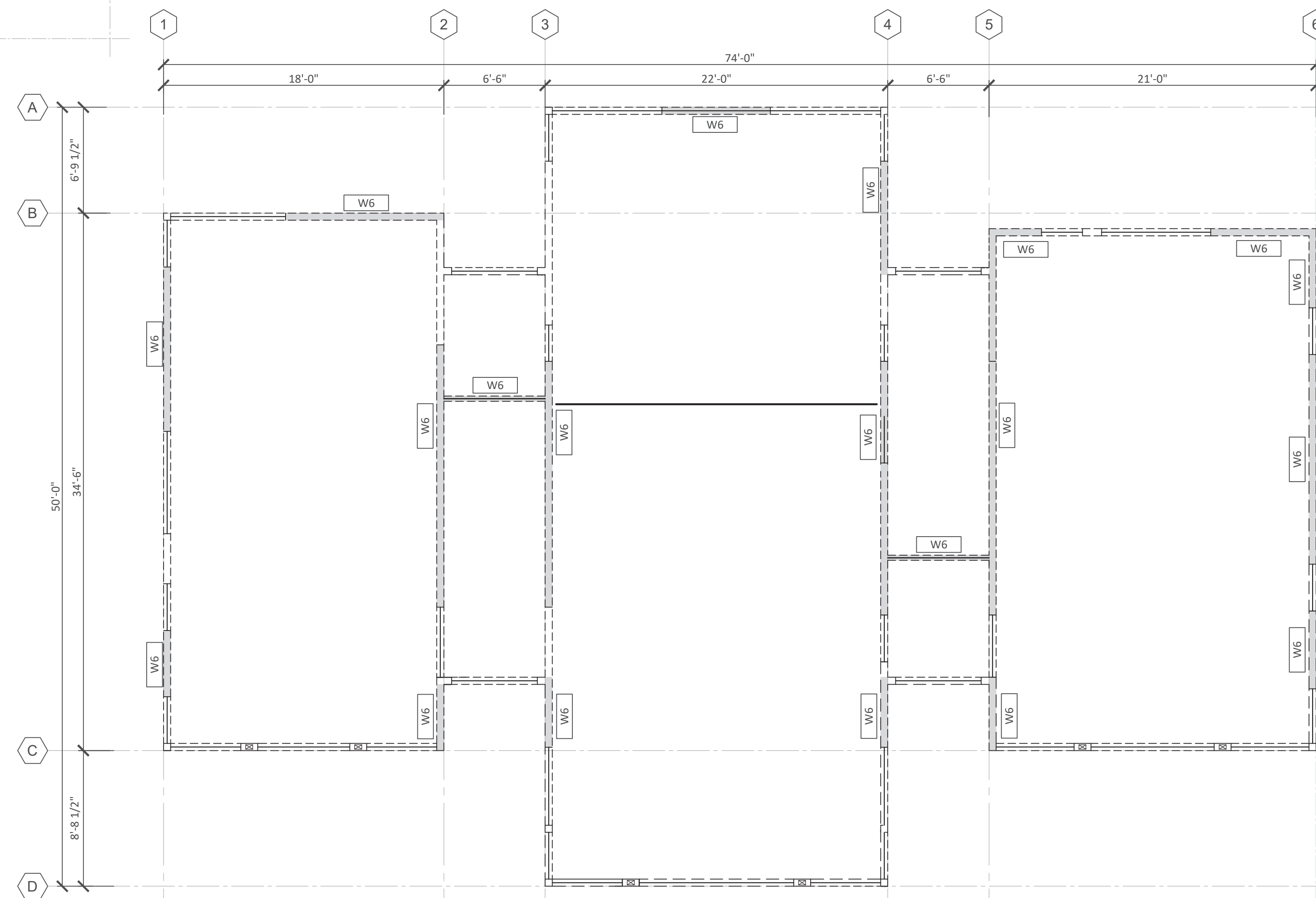
SHEET TITLE:
SHEAR WALL KEY PLAN

SHEET#:
S2.3 SCALE: AS SHOWN

DRAWN:	DATE:	CHECKED:	DATE:
SG	08/04/2025	KJH	08/04/2025



1 FIRST FLOOR SHEAR WALL KEY PLAN
SCALE: 3/16" = 1'-0"



2 SECOND FLOOR SHEAR WALL KEY PLAN
SCALE: 3/16" = 1'-0"



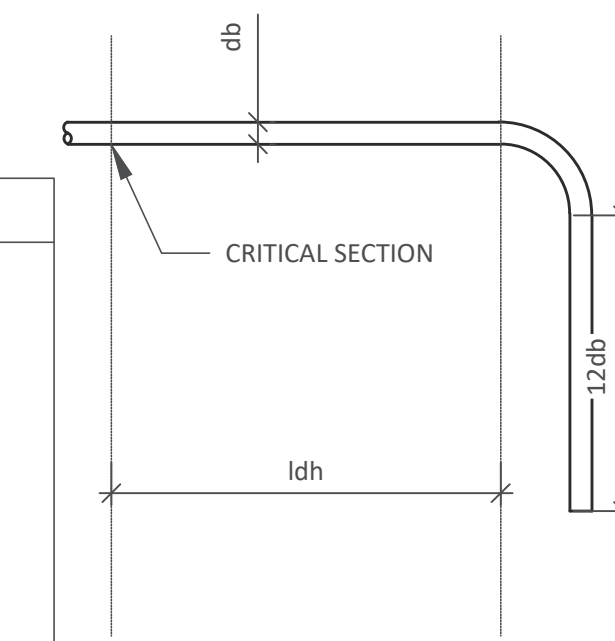
NO.	STATUS	DATE
	FOR PERMIT	01/03/25

REV.	BY:	DESCRIPTION	DATE
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2		REVISION 2	06/13/25
3			
4		REVISION 4	08/04/25
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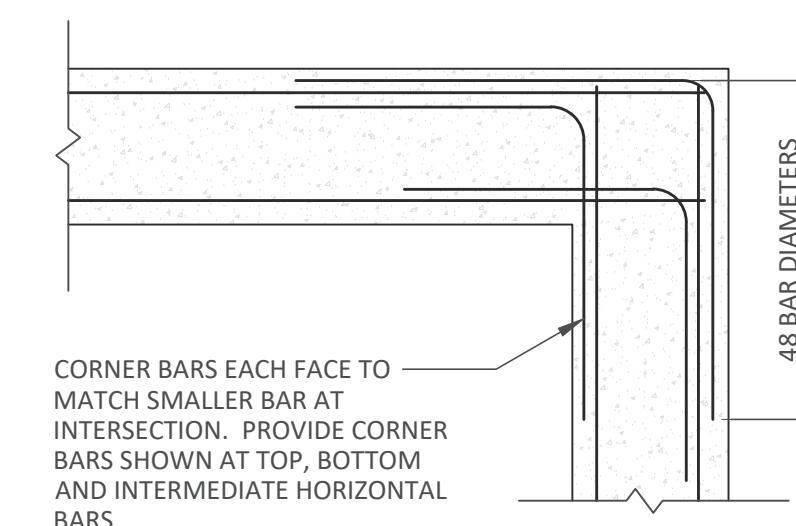
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BAR SIZE	ldh	12db
#3	9"	4 1/2"
#4	11"	6"
#5	14"	7 1/2"
#6	17"	9"
#7	20"	10 1/2"
#8	22"	12"
#9	25"	13 1/2"
#10	28"	15"



90° HOOK DIMENSIONS GRADE 60 BARS AND 3000 PSI CONCRETE

NOT TO SCALE

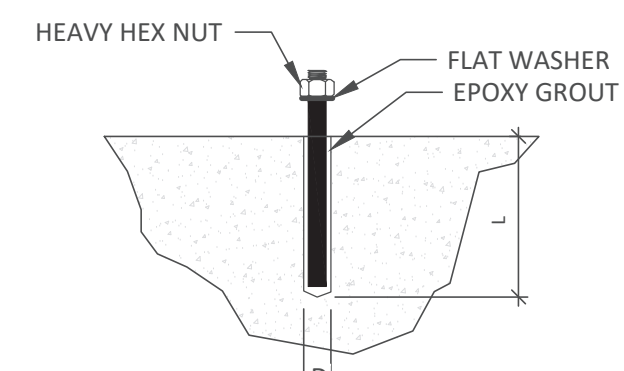


- NOTES:
- WHERE 90 DEGREE HOOKS ARE SCHEDULED OR DETAILED FOR TOP BARS, CORNER BARS MAY BE OMITTED.
 - MATCH SIZE, LOCATION AND NUMBER OF HORIZONTAL BEAM AND WALL BARS, EXCEPT THAT WHERE THERE ARE MORE THAN 2 TOP OR BOTTOM BARS, ONLY THE INSIDE AND OUTSIDE BARS MUST BE MATCHED.
 - STOP DETAILED REINFORCEMENT 2" SHORT OF FORM.

TYPICAL CORNER BARS AT INTERSECTION DETAIL

NOT TO SCALE

BAR SIZE	HOLE DIAMETER "D"	HOLE LENGTH "L"
1/2"	5/8"	5"
5/8"	3/4"	6"
3/4"	7/8"	8"
7/8"	1"	9"
1"	1 1/8"	10"

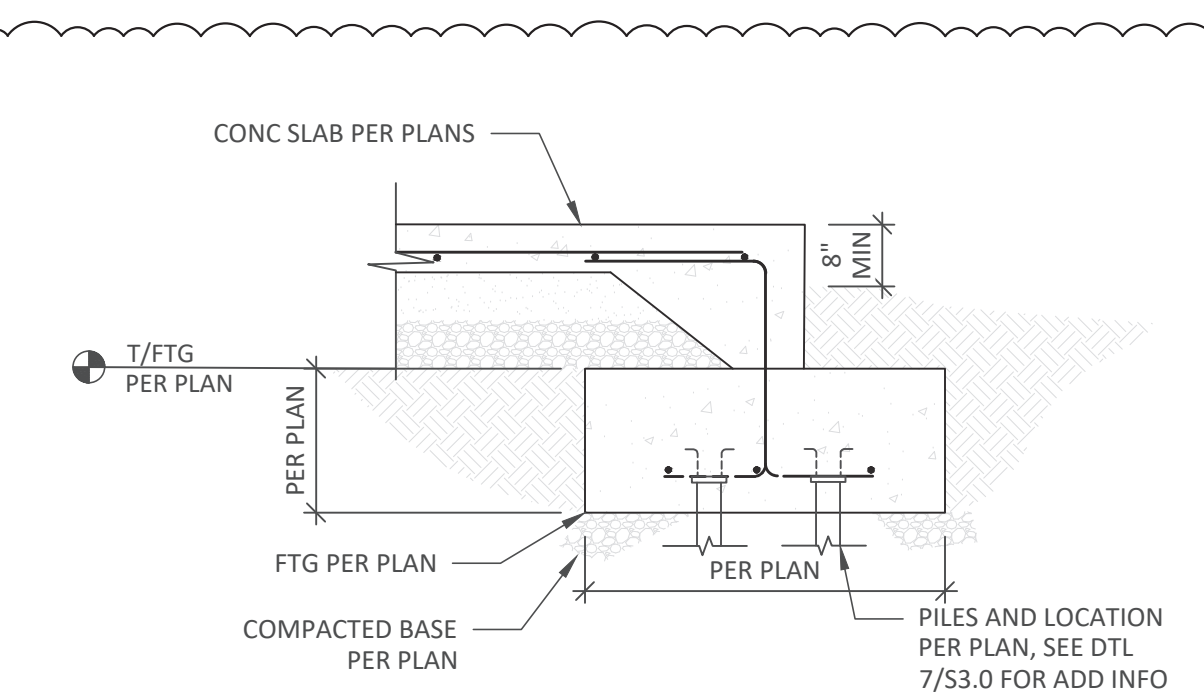


- NOTES:
- THREADED ROD SHALL BE A36 ROD, NUT & WASHER SHALL BE GALVANIZED AS PER ASTM A153
 - HOLE SHALL BE DRILLED USING ROTARY PERCUSSION DRILL TO FORM ROUGH SURFACE. IF CORE DRILLED, ROUGHEN HOLE SURFACE USING DRILL BIT.
 - HOLE MUST BE THOROUGHLY CLEAN, FREE OF DUST, DEBRIS & STANDING WATER.
 - FOR TEMPERATURES BELOW 70 DEGREES F, EPOXY MAY TAKE 24 HOURS OR LONGER TO CURE. SEE MANUFACTURER'S RECOMMENDATIONS FOR EXACT CURE TIMES. 5. THE EPOXY SHALL BE INJECTED USING THE DUAL COMPONENT CARTRIDGE SYSTEM AS PER INSTRUCTIONS OF THE MANUFACTURER. FOR VERTICAL AND HORIZONTAL APPLICATIONS USE MANUFACTURER'S RECOMMENDED CORRESPONDING PRODUCT.

NUMBER OF THREADED RODS
SIZE OF THREADED RODS
LENGTH OF THREADED RODS
NOMENCLATURE: 1/2" DIA X 7" LG TR

CONCRETE STD THREADED ROD ANCHOR

NOT TO SCALE



SECTION AT SLAB THICKENED EDGE (TYP)

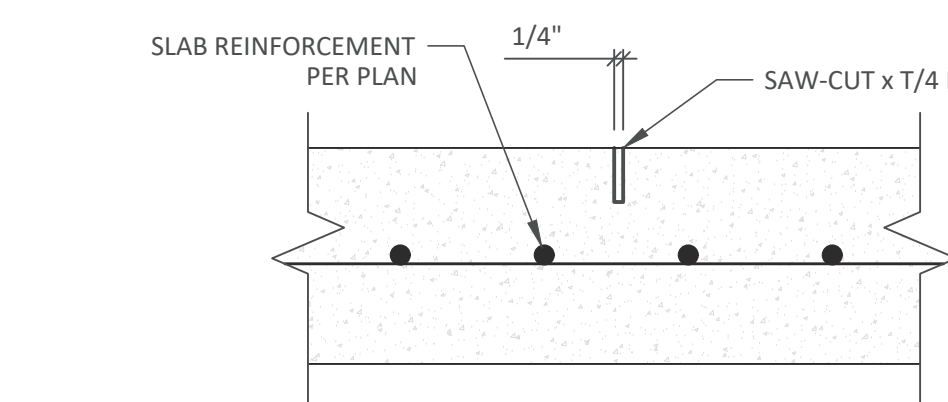
NOT TO SCALE

BAR SIZE	TOP BARS		OTHERS THAN TOP BARS	
	ld	1.3ld	ld	1.3ld
#3	13"	17"	10"	13"
#4	18"	24"	14"	19"
#5	22"	29"	17"	23"
#6	26"	34"	20"	26"
#7	38"	50"	29"	38"
#8	43"	56"	33"	43"
#9	49"	64"	37"	49"
#10	54"	71"	42"	55"

ld= DEVELOPMENT LENGTH
1.3ld= TENSION LAP SPLICE

DEVELOPMENT LENGTH AND TENSION LAP SLICE LENGTH GRADE 60 BARS AND 3000 PSI CONCRETE

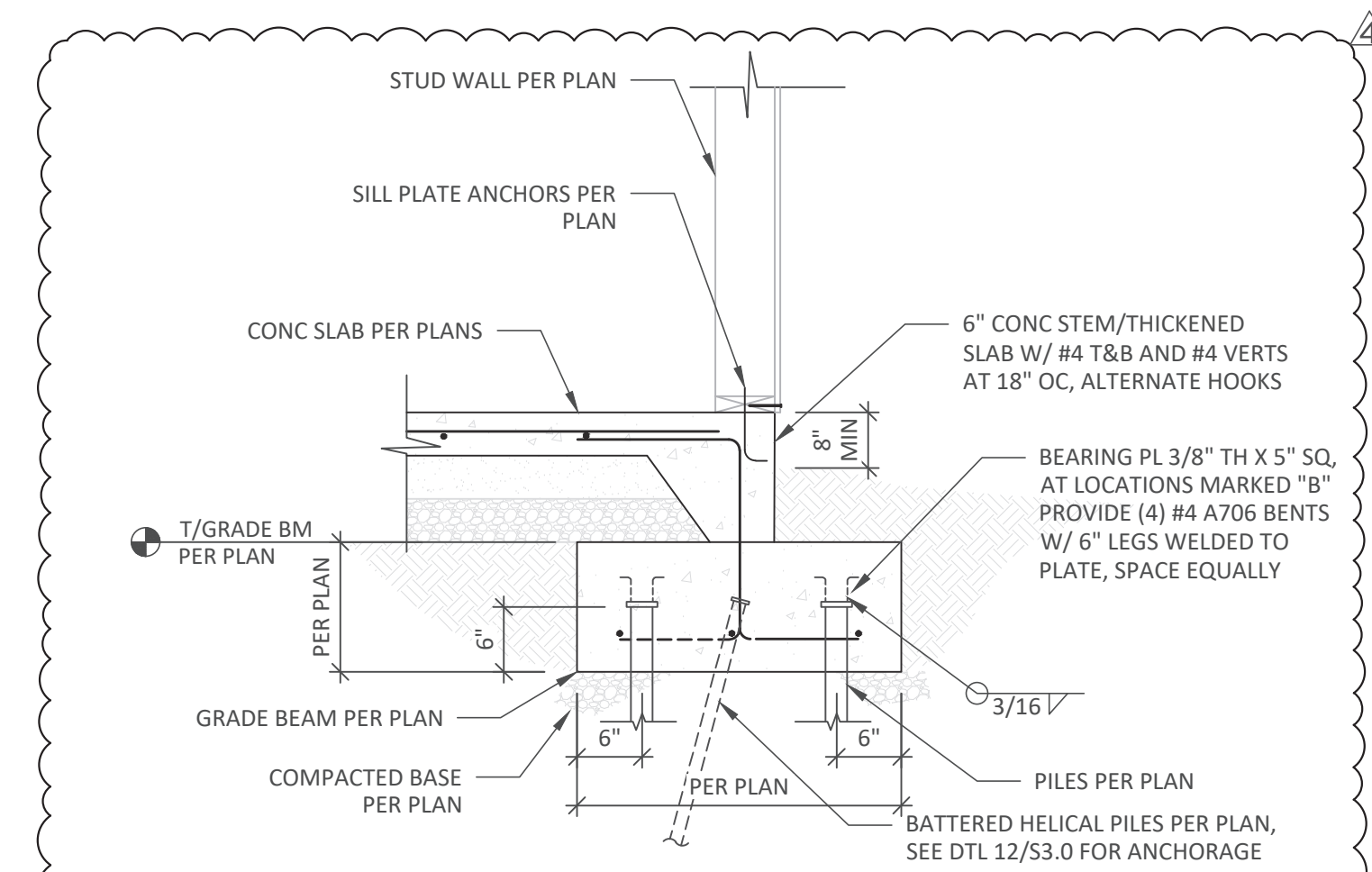
NOT TO SCALE



- NOTES:
- SAW-CUT SHALL BE PERFORMED IN ACCORDANCE WITH ACI 360 AND SHALL BE MADE AS SOON AS POSSIBLE AFTER CONCRETE SETS UP. EARLY ENTRY SOFF-CUT TYPE SAWS SHOULD BE UTILIZED IF POSSIBLE.
 - MAKE INITIAL SAW CUTS ALONG THE SHORT DIRECTION OF THE SLAB FIRST.
 - MAINTAIN MAXIMUM JOINT SPACING OF 10 FEET AND MAXIMUM PANEL ASPECT RATIO OF 1.3 TO 1.0.

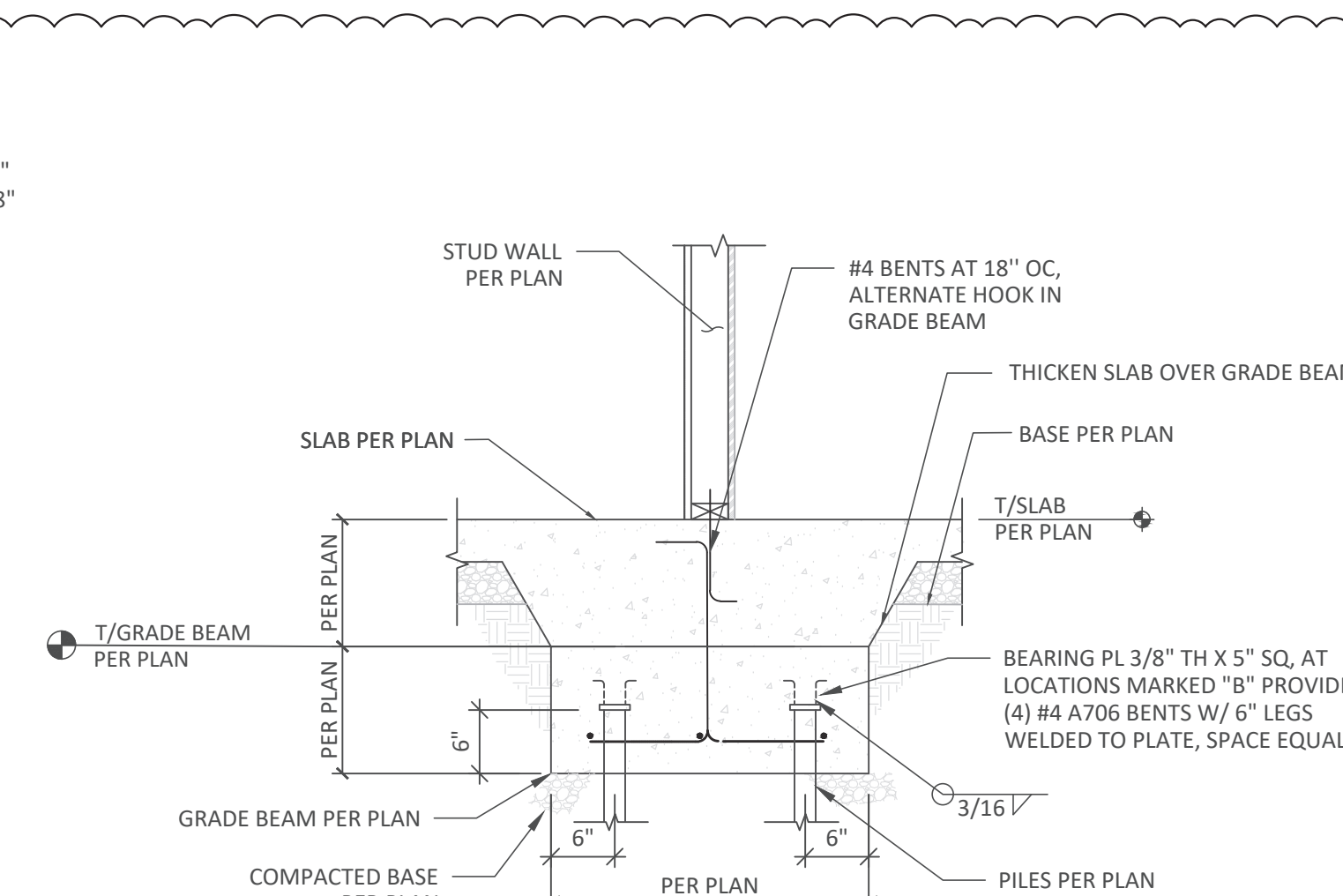
CONTROL JOINT

NOT TO SCALE



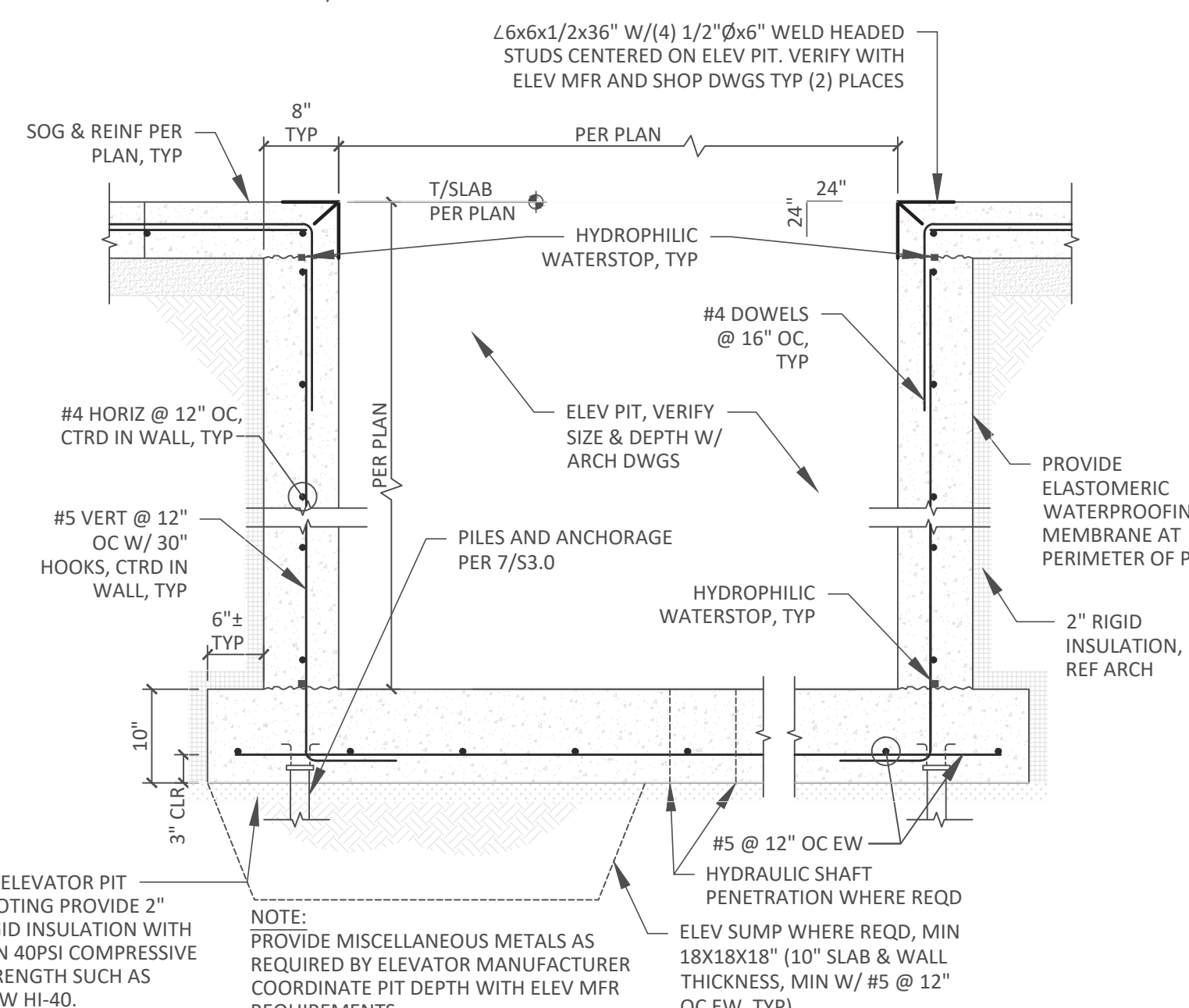
TYPICAL EXTERIOR GRADE BEAM

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



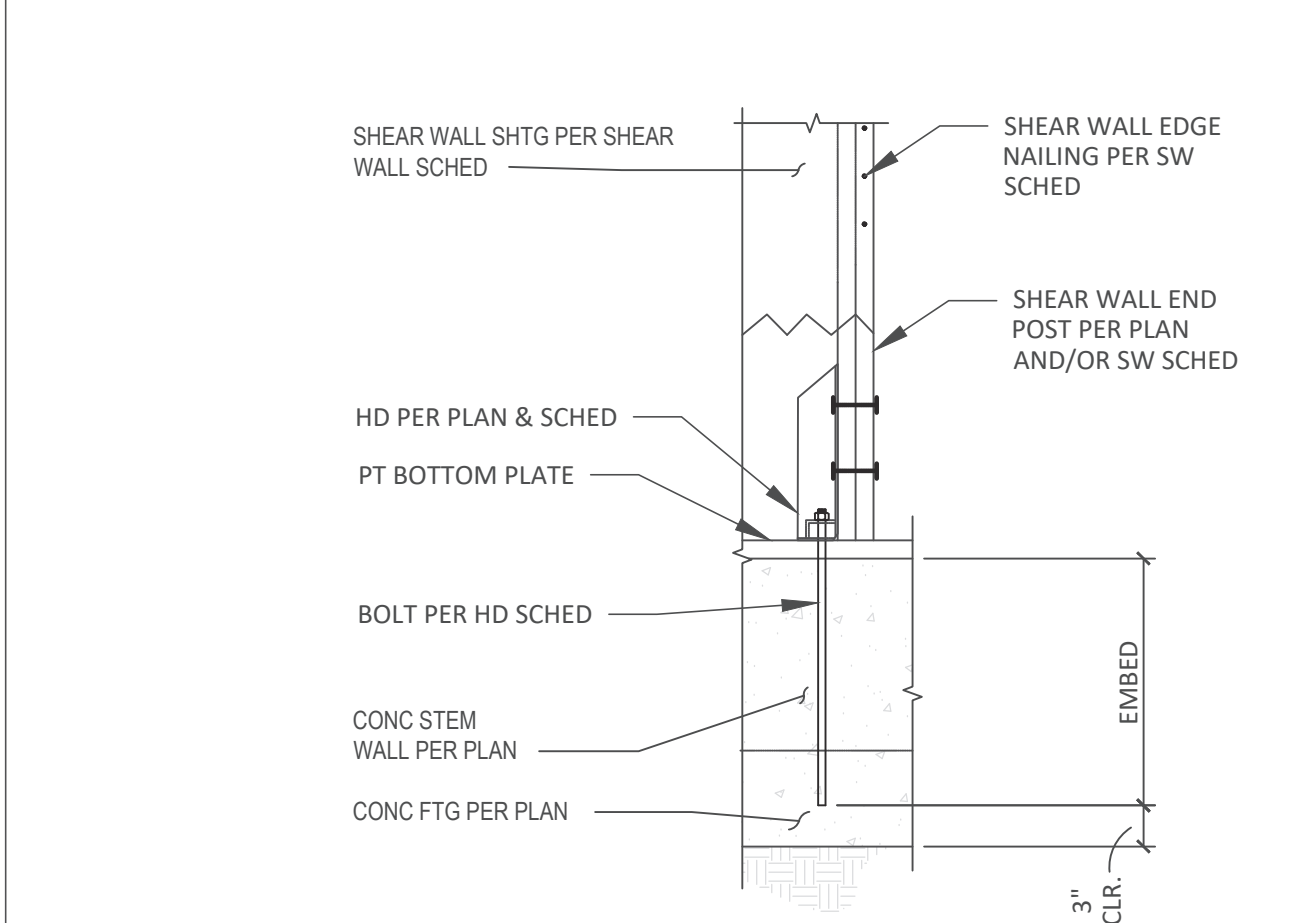
INTERIOR THICKENED OVER GRADE BEAM

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



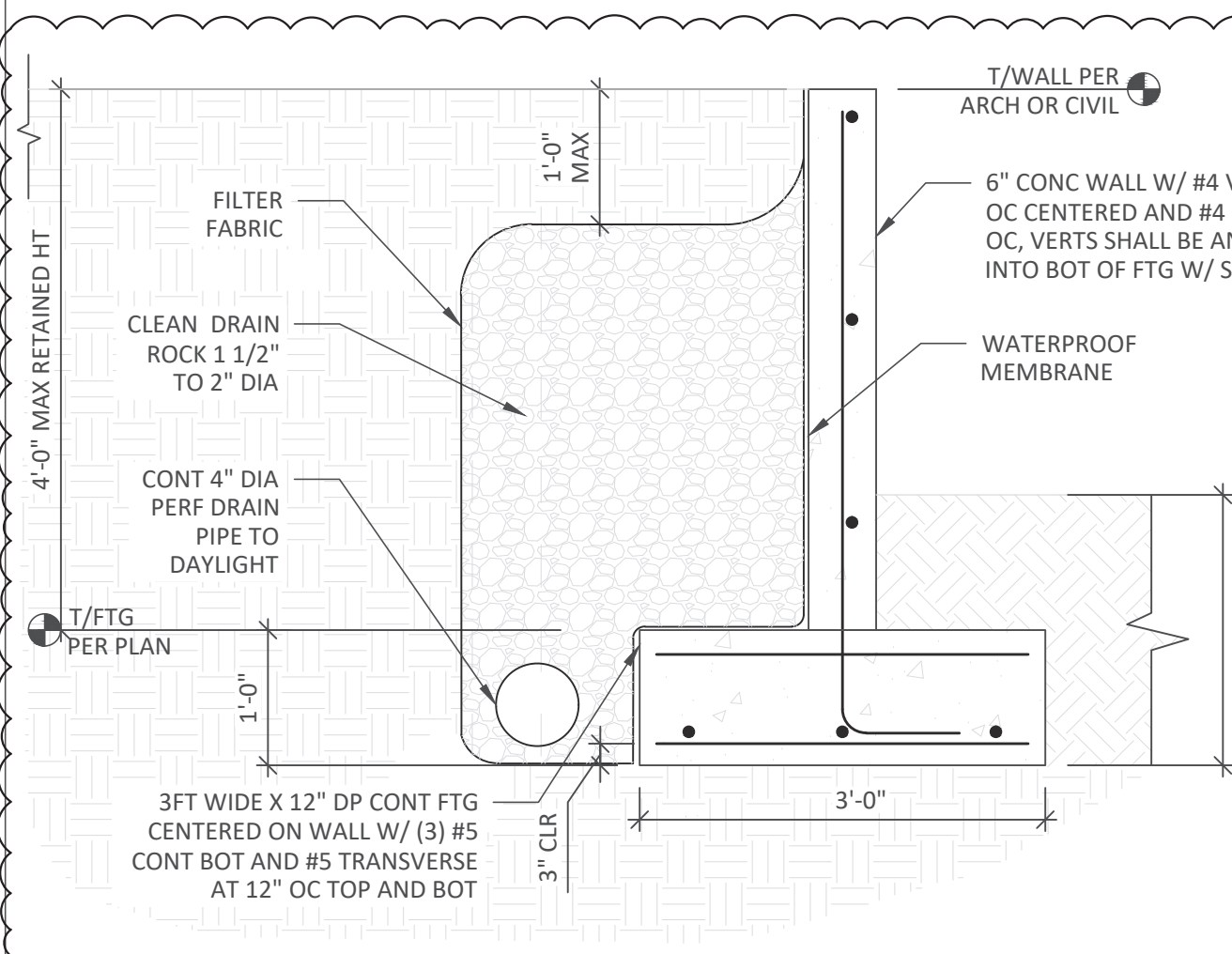
ELEVATOR PIT SECTION

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



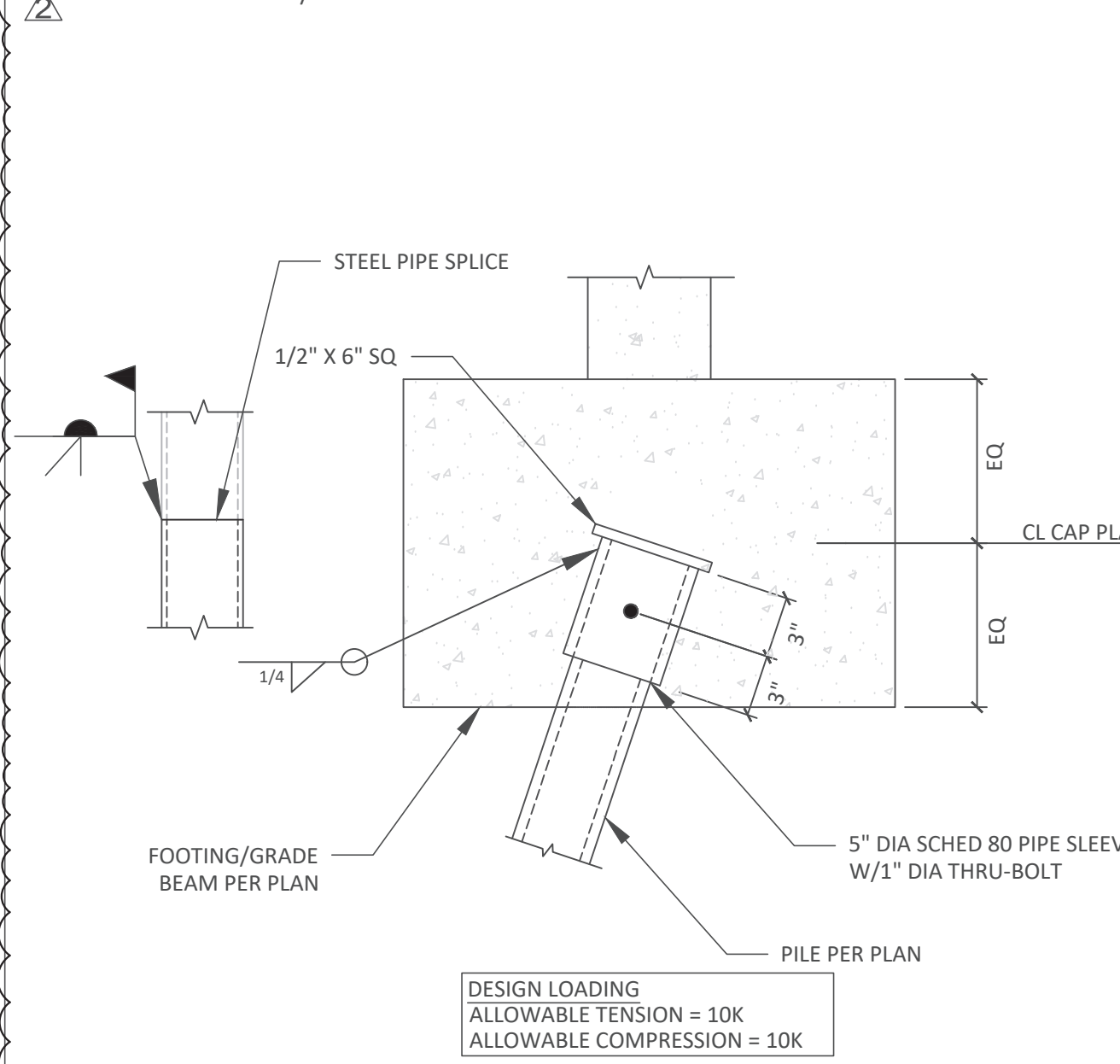
TYPICAL HOLD DOWN AT FOUNDATION/CONCRETE STEM WALL

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



FREE STANDING CONCRETE RETAINING WALL

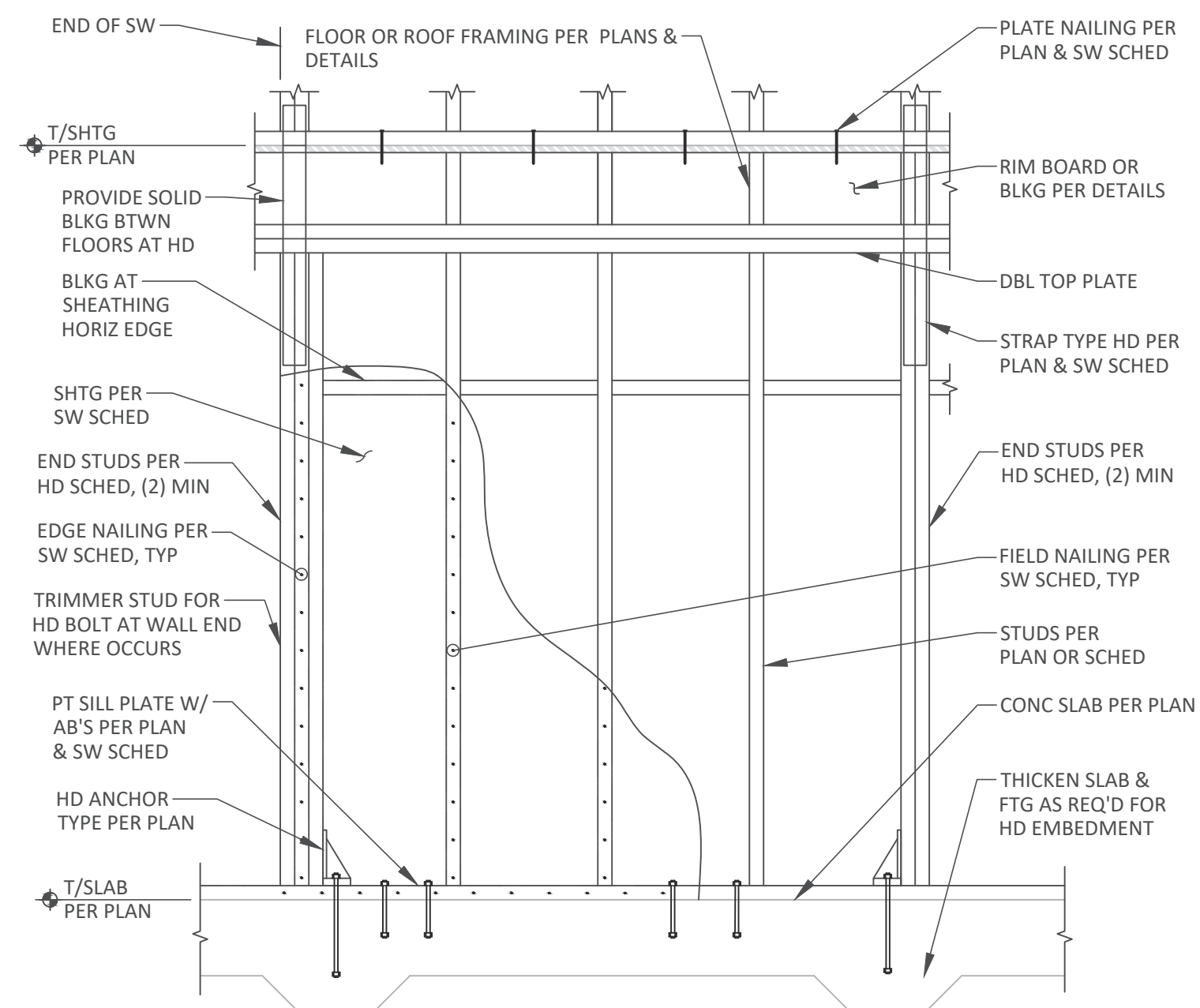
SCALE: 3/4" = 1'-0"



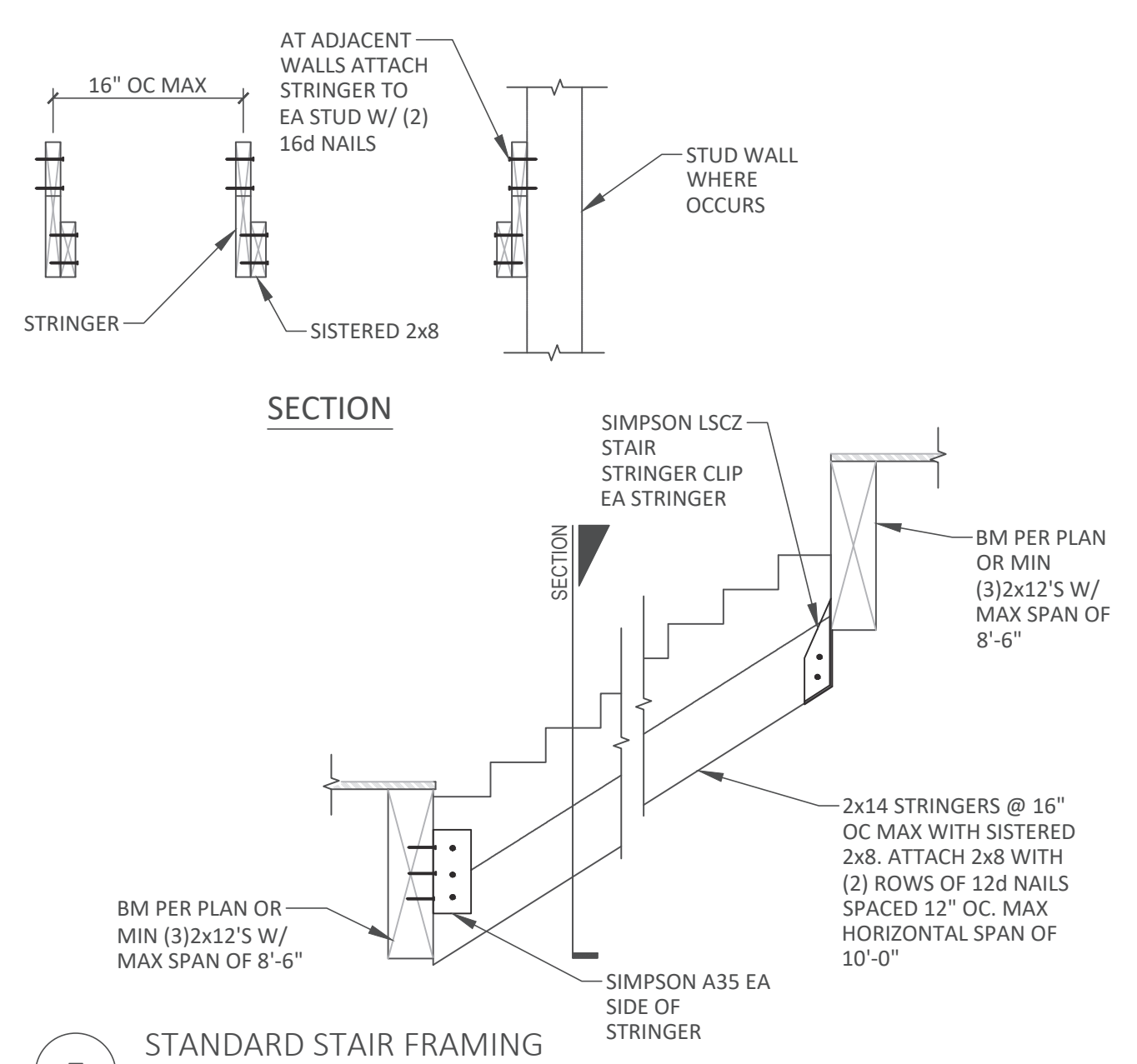
HELICAL PILE ANCHORAGE DETAIL

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

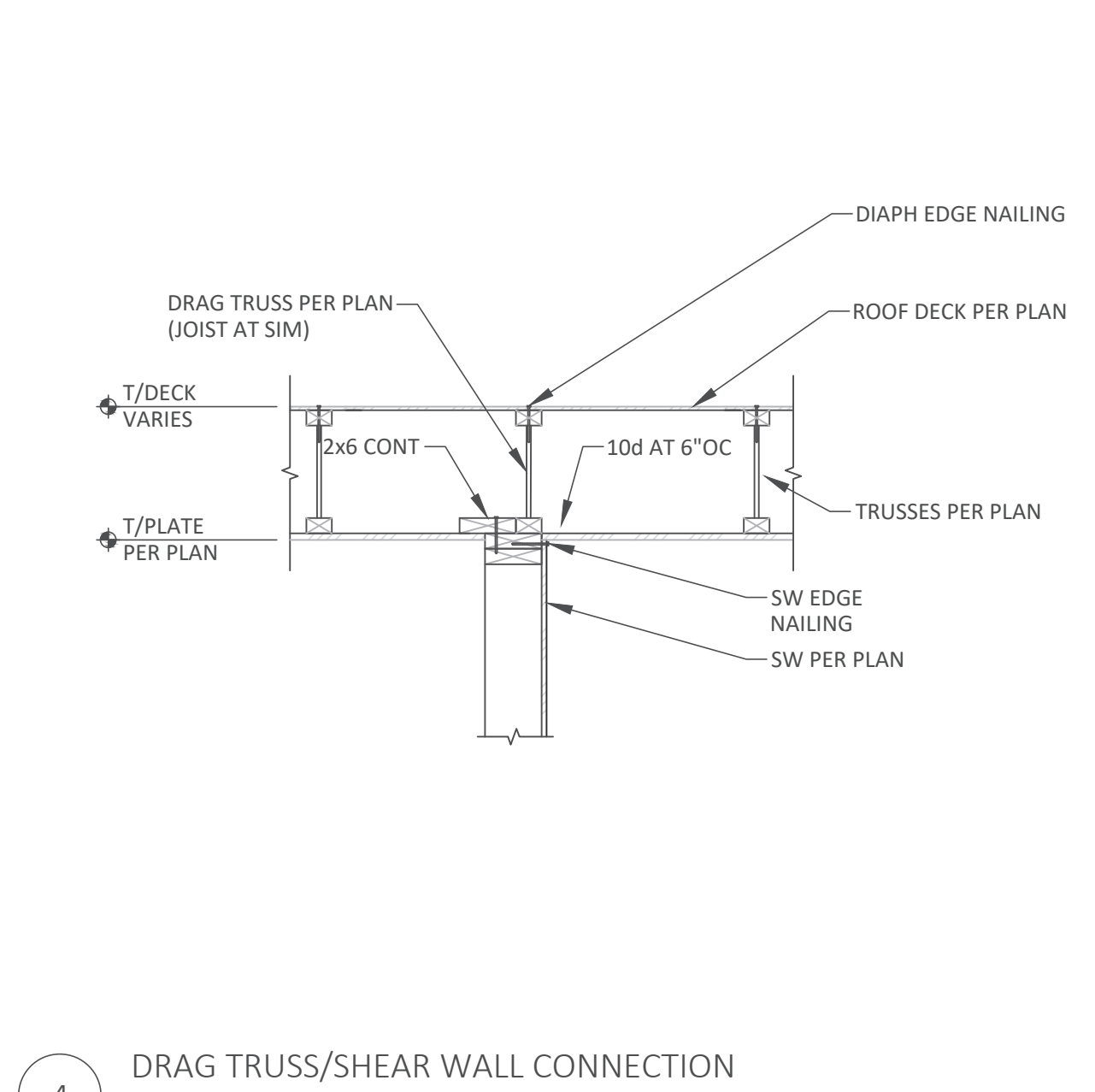
DESIGN LOADING
ALLOWABLE TENSION = 10K
ALLOWABLE COMPRESSION = 10K



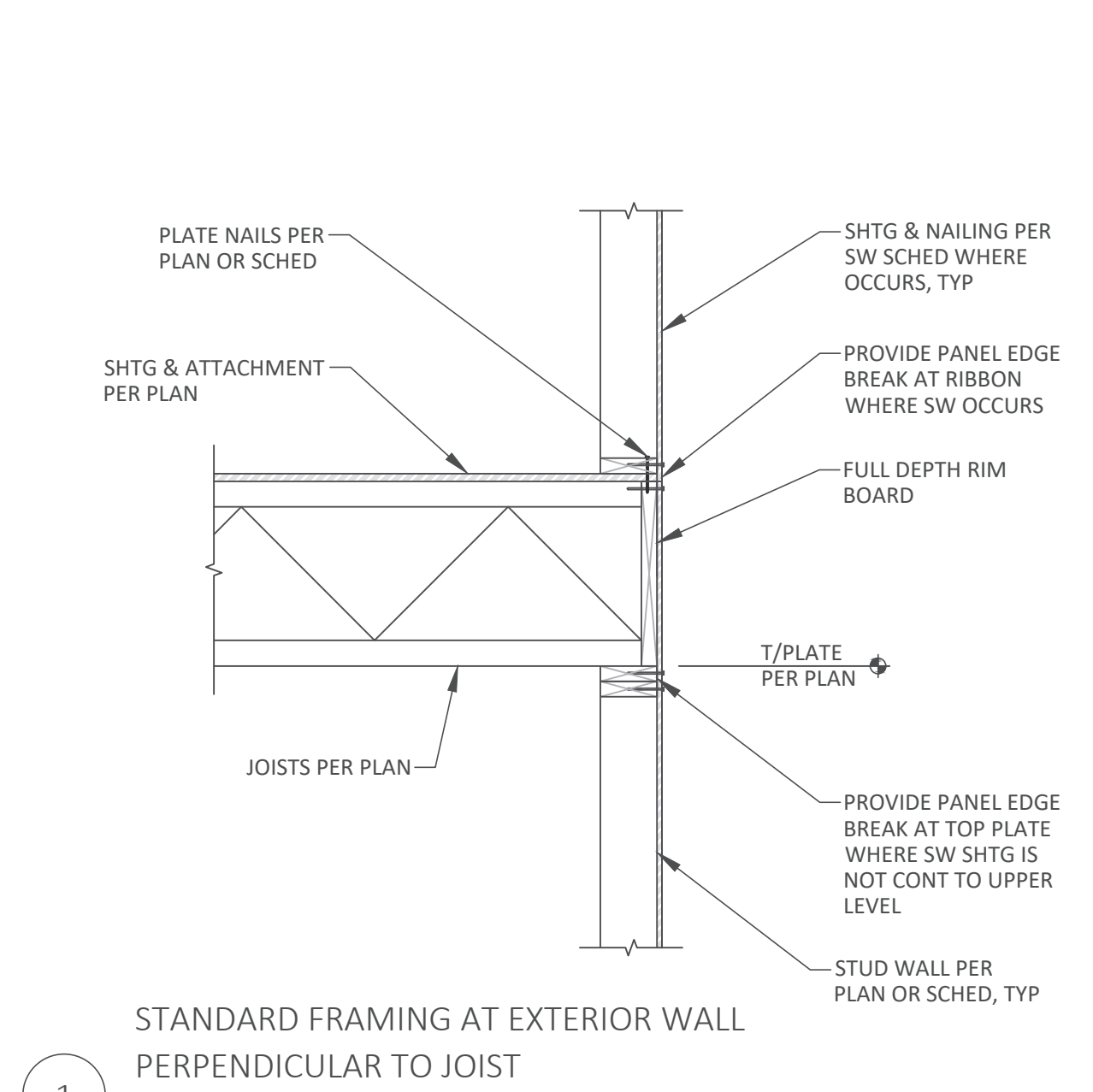
9 STANDARD SHEAR WALL CONSTRUCTION
NOT TO SCALE



7 STANDARD STAIR FRAMING
NOT TO SCALE



4 DRAG TRUSS/SHEAR WALL CONNECTION
SCALE: 3/4" = 1'-0"

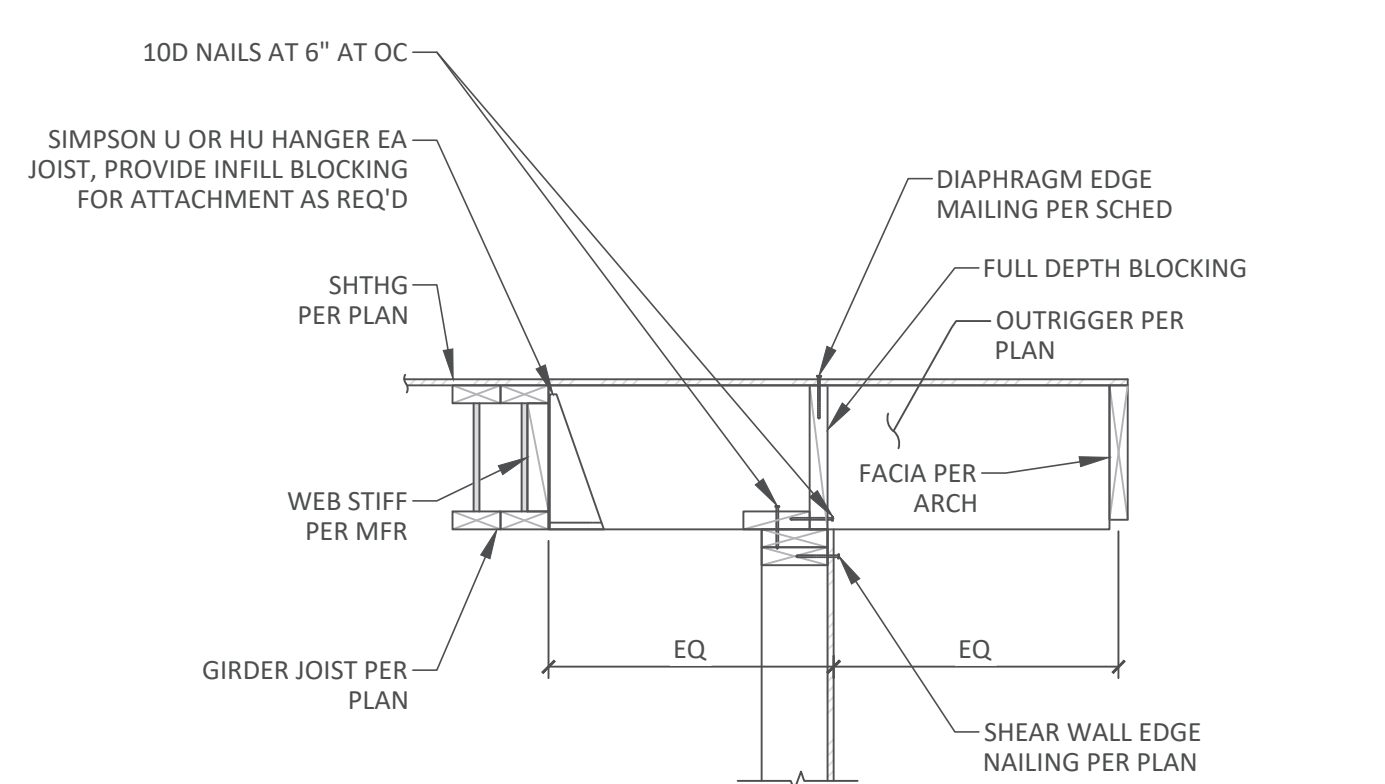


1 STANDARD FRAMING AT EXTERIOR WALL PERPENDICULAR TO JOIST
SCALE: 3/4" = 1'-0"

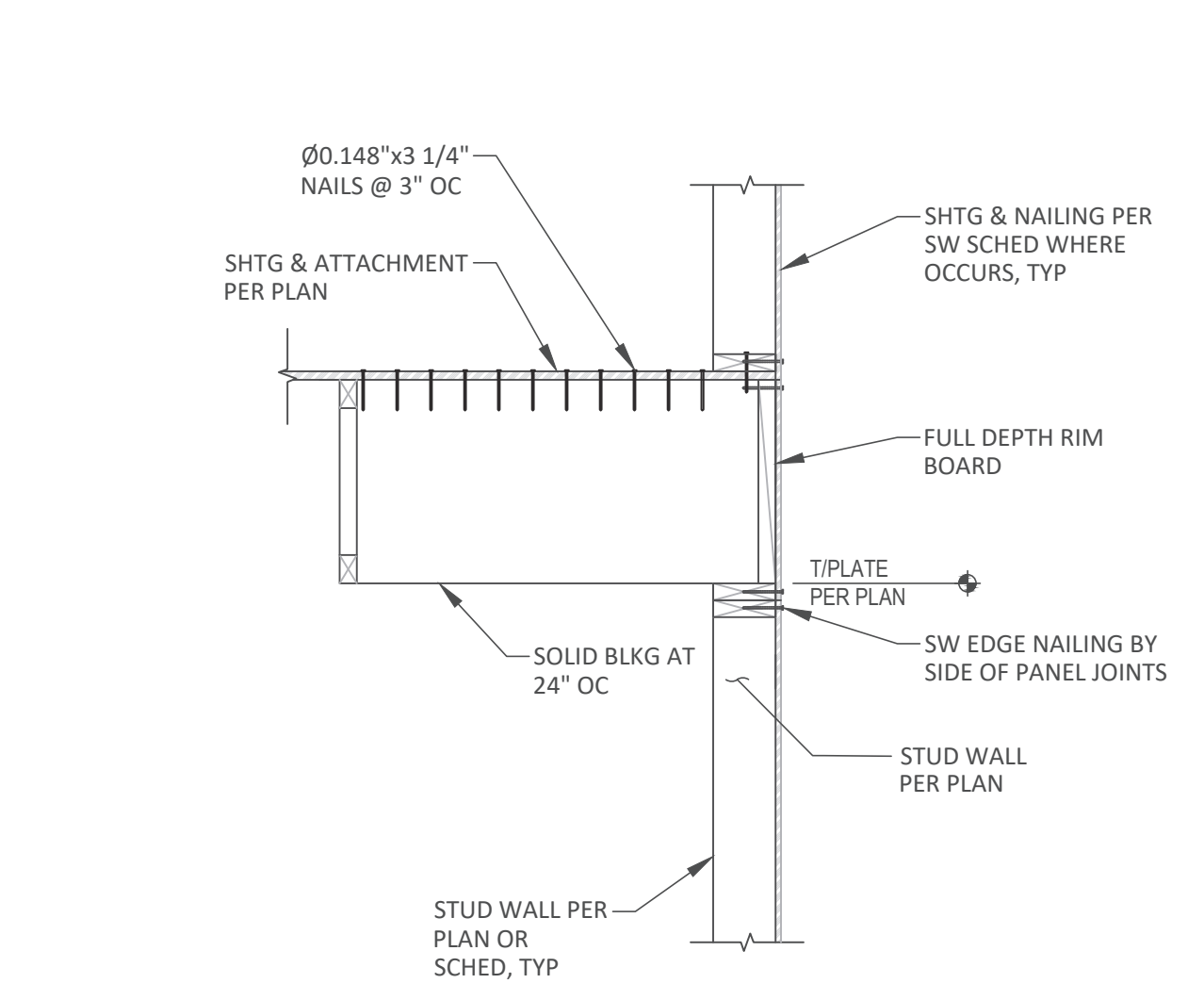
HOLD-DOWN/STRAP SCHEDULE - DOUG-FIR STUDS									
TYPE	NUMBER OF STUDS/POST	NAILS, SCREWS, OR BOLTS	ANCHOR				CAPACITY, LBS	NOTES	
			CONCRETE EMBEDMENT		DIAMETER				
			STEM WALL	SPREAD FOOTING					
CIP	ADHESIVE	CIP OR ADHESIVE							
WOOD TO CONCRETE	HDU2	(2) 2X	(6) SDS 1/4x2 1/2	5/8"	10"	10"	7"	3075	
	HDU4	(2) 2X	(10) SDS 1/4x2 1/2	5/8"	10"	10"	7"	4565	
	HDU5	(2) 2X	(14) SDS 1/4x2 1/2	5/8"	12"	15"	9"	5645	
	HDU8	6X	(20) SDS 1/4x2 1/2	7/8"	18"	-	11"	7870	
	HDU11	5.5"	(30) SDS 1/4x2 1/2	1	18"	-	11"	9535	
WOOD TO WOOD	LSTA30	(2) 2X	(22) 10d	-	-	-	-	1640	
	MSTA30	(2) 2X	(22) 10d	-	-	-	-	2050	
	MST27	(2) 2X	(30) 16d	-	-	-	-	3700	
	MST148	(2) 2X	(48) 16d	-	-	-	-	5070	
	MSTC66	(2) 2X	(76) 16d	-	-	-	-	5860	

- NOTES:**
1. PROVIDE SHEAR WALL EDGE NAILING AT AT HOLD-DOWN STUDS/POST.
 2. CAPACITY BASED ON 2,500 PSI CONCRETE STRENGTH.
 3. STEM WALL SHALL BE MINIMUM 6 INCHES WIDE FOR 5/8" ANCHOR BOLTS AND 8" MINIMUM FOR 7/8" AND LARGER BOLTS.
 4. ALL HOLD-DOWNS AND STRAPS ARE BY SIMPSON STRONG TIE. CONTACT ENGINEER FOR ALTERNATE SUPPLIERS.
 5. CAST IN PLACE ANCHORS SHALL BE HEX HEAD OR A STANDARD "J" BOLT.
 6. ADHESIVE ANCHORS SHALL BE SIMPSON SET OR HILTI HY-150 ADHESIVE.
 7. PLACE 1/2 OF NAILS ABOVE FLOOR JOIST AND 1/2 BELOW FLOOR JOIST. NO NAILS IN CLEAR SPAN.

8 HOLD DOWN STRAP SCHEDULE
NOT TO SCALE



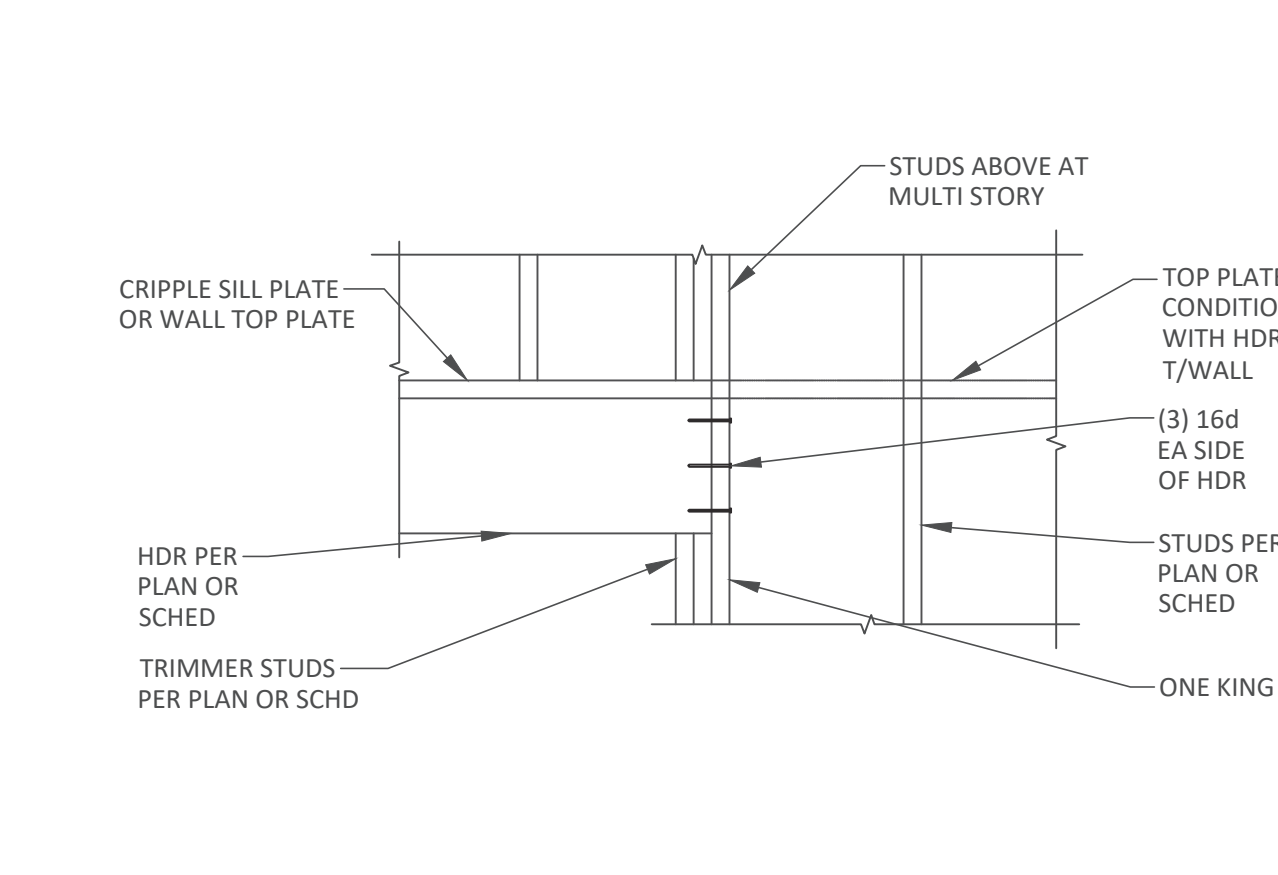
5 ROOF JOIST PARALLEL TO EXTERIOR WALL
SCALE: 3/4" = 1'-0"



2 TYPICAL FRAMING AT EXTERIOR WALL PARALLEL TO JOIST
SCALE: 3/4" = 1'-0"

SHEAR WALL SCHEDULE - DOUG-FIR LARCH 8D COMMON (0.131 X 2 1/2") NAILS									
TYPE	WALL SHEATHING (APA RATED)	EDGE NAILING	FIELD NAILING	BLOCKING AT PANEL EDGES	FASTENERS (WHERE APPLICABLE)			SILL PLATE SIZE	CAPACITY, lbs/ft
					RIM JOIST TO PLATE BELOW	SILL PLATE TO RIM OR TOP PLATE BELOW	SILL ANCHORS		
W6	15/32"	8d AT 6" OC	8d AT 12" OC	2x	A35 OR LTP5 AT 16" OC	16d SINKER AT 8" OC	5/8" DIA AT 48" OC	2x	260
W4	15/32"	8d AT 6" OC	8d AT 12" OC	2x	A35 OR LTP5 AT 12" OC	16d SINKER AT 6" OC	5/8" DIA AT 48" OC	2x	380
W3	15/32"	8d AT 3" OC STAGGERED	8d AT 12" OC	3x OR (2) 2x	A35 OR LTP5 AT 10" OC	16d SINKER AT 4" OC	5/8" DIA AT 16" OC	2x	490
W2	15/32"	8d AT 2" OC STAGGERED	8d AT 12" OC	3x OR (2) 2x	A35 OR LTP5 AT 8" OC	(2) ROWS 16d SINKER AT 6" OC	5/8" DIA AT 32" OC	3x OR (2) 2x	640
2W4	15/32" BOTH SIDES	8d AT 4" OC STAGGERED	8d AT 12" OC	3x OR (2) 2x	A35 OR LTP5 AT 12" OC EACH SIDE	(2) ROWS 16d SINKER AT 6" OC	5/8" DIA AT 24" OC	3x OR (2) 2x	760
2W3	15/32" BOTH SIDES	8d AT 3" OC STAGGERED	8d AT 12" OC	3x OR (2) 2x	A35 OR LTP5 AT 10" OC EACH SIDE	(2) ROWS 16d SINKER AT 4" OC	5/8" DIA AT 24" OC	3x OR (2) 2x	980
2W2	15/32" BOTH SIDES	8d AT 2" OC STAGGERED	8d AT 12" OC	3x OR (2) 2x	A35 OR LTP5 AT 8" OC EACH SIDE	A35 OR LTP5 AT 8" OC EACH SIDE	5/8" DIA AT 16" OC	3x OR (2) 2x	1280
G7	1/2" GYP BOARD	5d COOLER @ 7" OC	5d COOLER @ 7" OC	2x	A35 OR LTP5 AT 24" OC	16d SINKER AT 8" OC	5/8" DIA AT 48" OC	2x	75
G4	1/2" GYP BOARD	5d COOLER @ 4" OC	5d COOLER @ 4" OC	2x	A35 OR LTP5 AT 24" OC	16d SINKER AT 8" OC	5/8" DIA AT 48" OC	2x	110

6 SHEAR WALL SCHEDULE
NOT TO SCALE



3 STANDARD HEADER PERPENDICULAR TO FLOOR FRAMING
SCALE: 3/4" = 1'-0"



MERRELL DESIGN SERVICES PLLC
1703 N Normandie, Spokane, WA 99205
509-998-7410
TJ@MDSstructural.com

PROJECT:
CHESHIRE UPPER LOT

JOB SITE ADDRESS:
7615 East Mercer Way
Mercer Island, WA 98040

ARCHITECT:
PATRICK LYNCH

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	FOR PERMIT	01/03/25

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JOB#
23-067

SHEET TITLE:
FRAMING DETAILS

SHEET#: **S4.0** SCALE: AS SHOWN

DRAWN:	DATE:	CHECKED:	DATE:
SG	08/04/2025	KJH	08/04/2025

PROJECT:
CHESHIRE UPPER LOT

JOB SITE ADDRESS:
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Mercer Island, WA 98040

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SEAL:



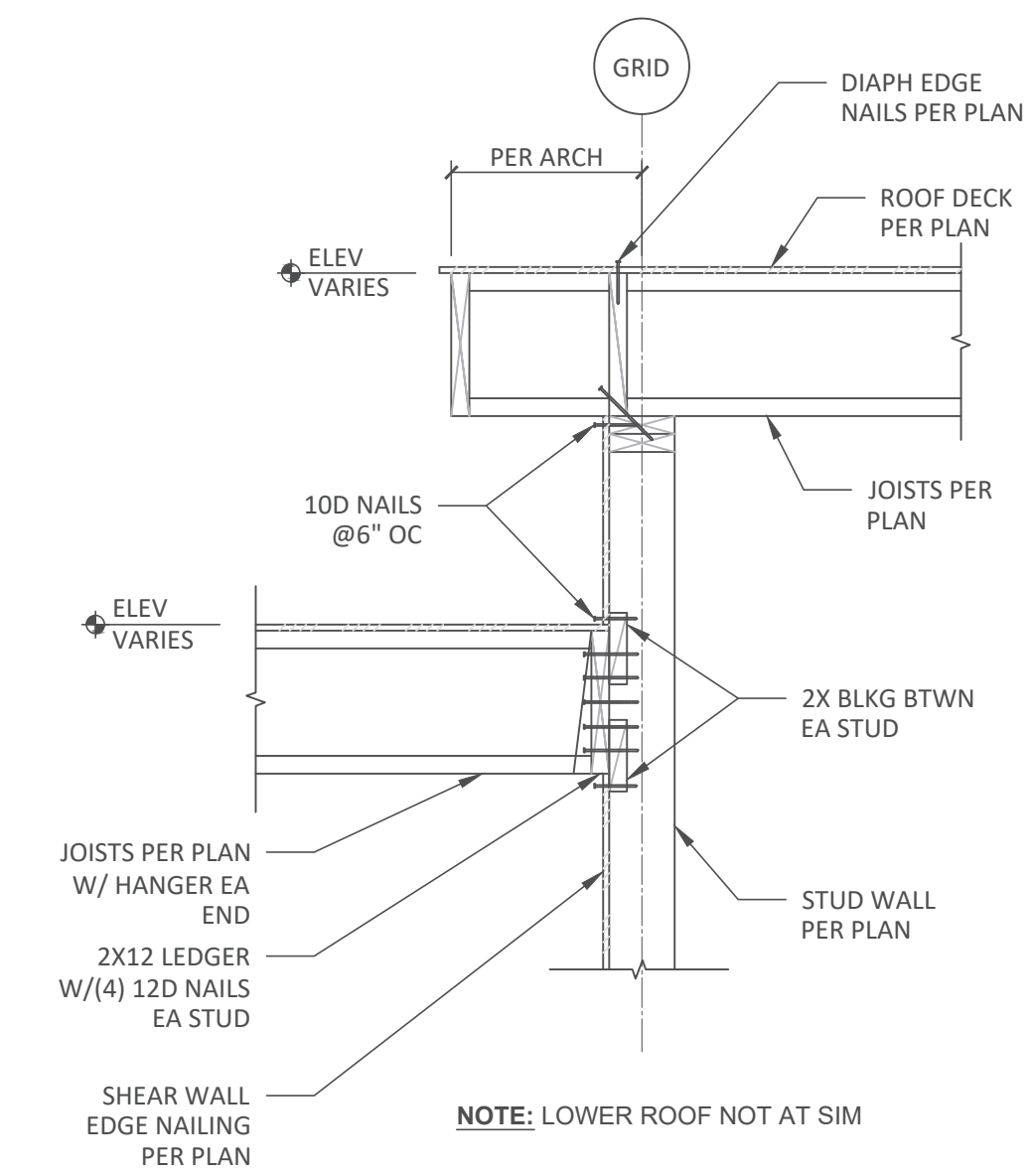
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JOB#
23-067

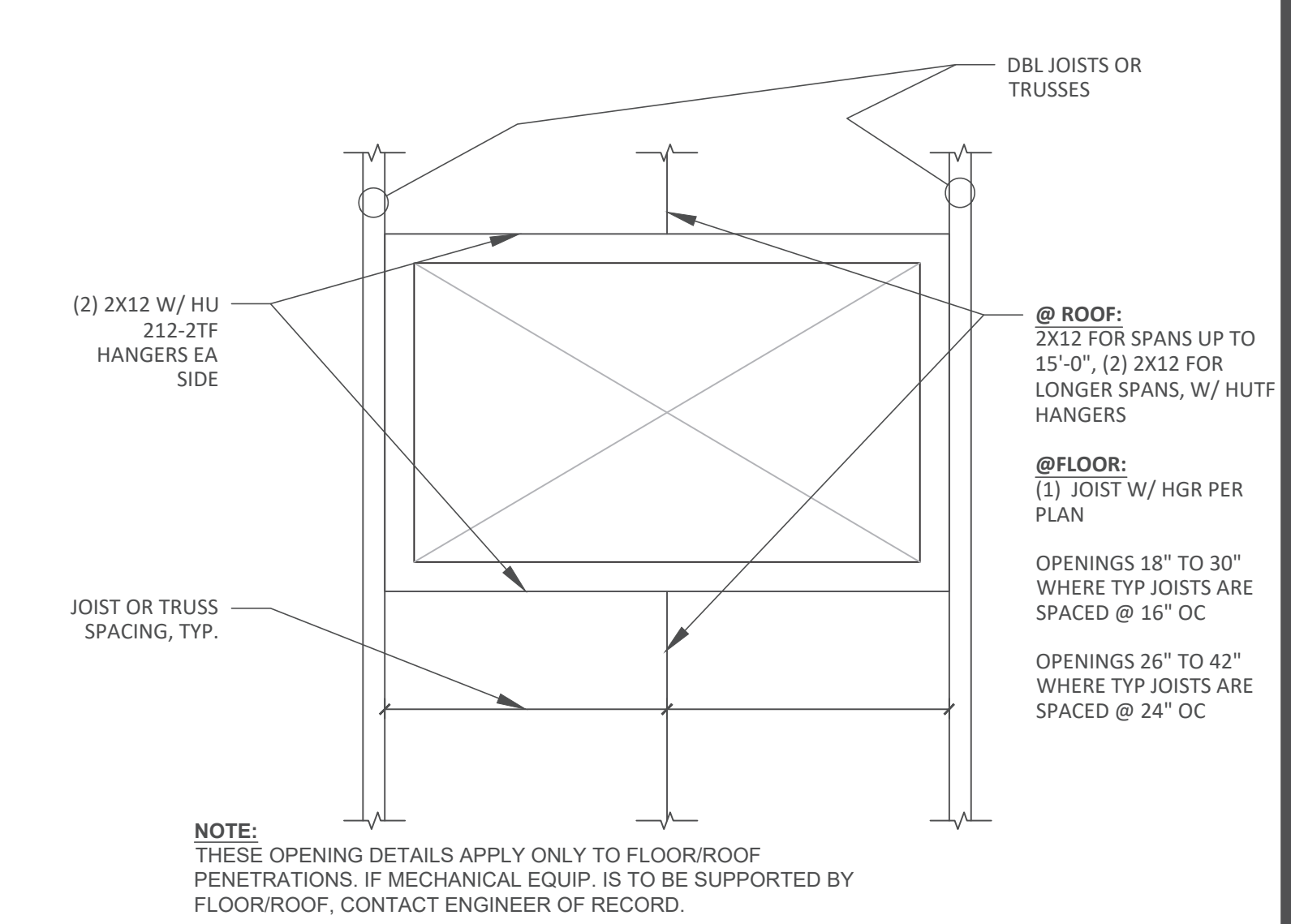
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FRAMING DETAILS

SHEET#: **S4.1** SCALE: AS SHOWN

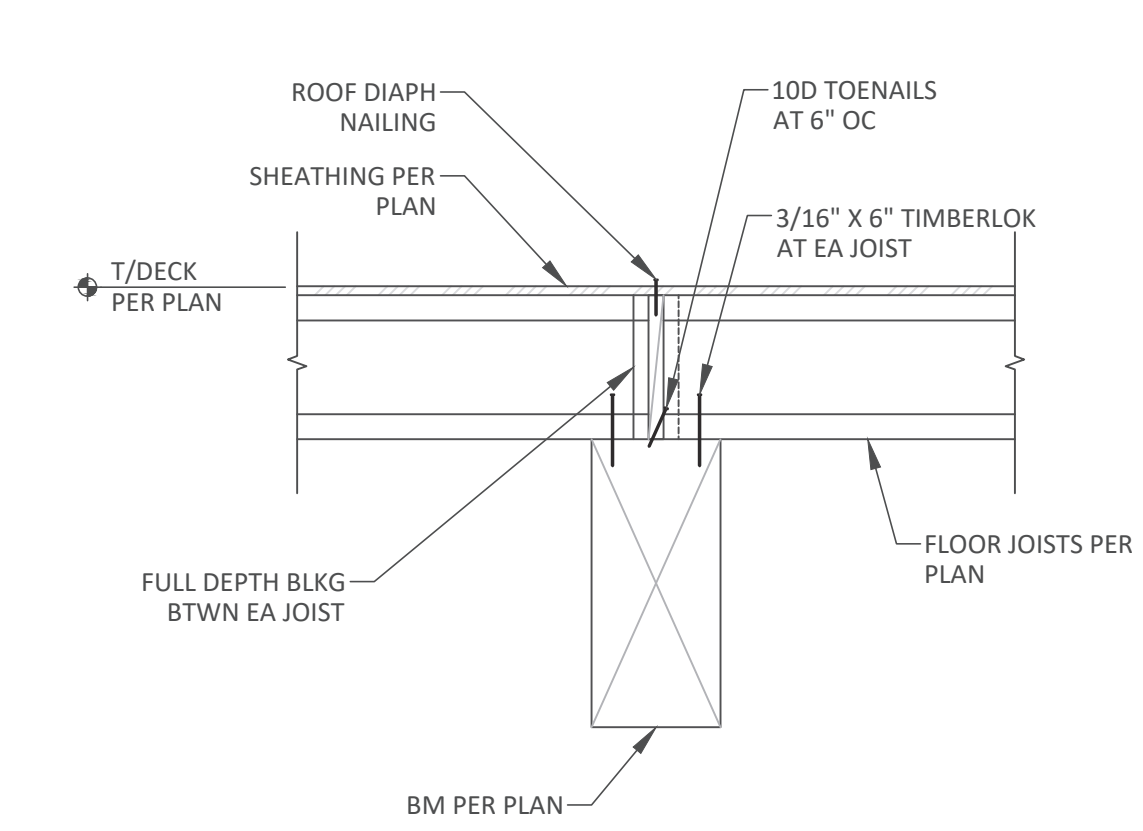
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SG	08/04/2025	KJH	08/04/2025



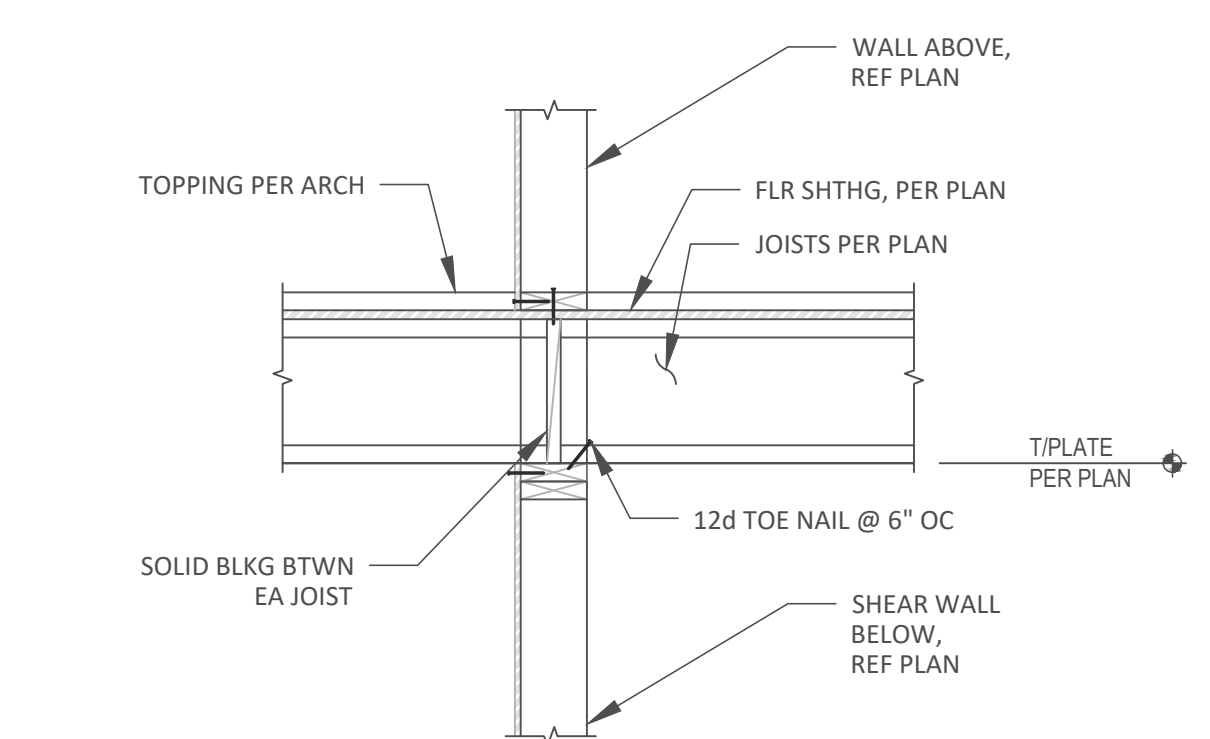
4 ROOF TRANSITION FRAMING
SCALE: 3/4" = 1'-0"



1 TYPICAL FLOOR AND ROOF PENETRATIONS
NOT TO SCALE

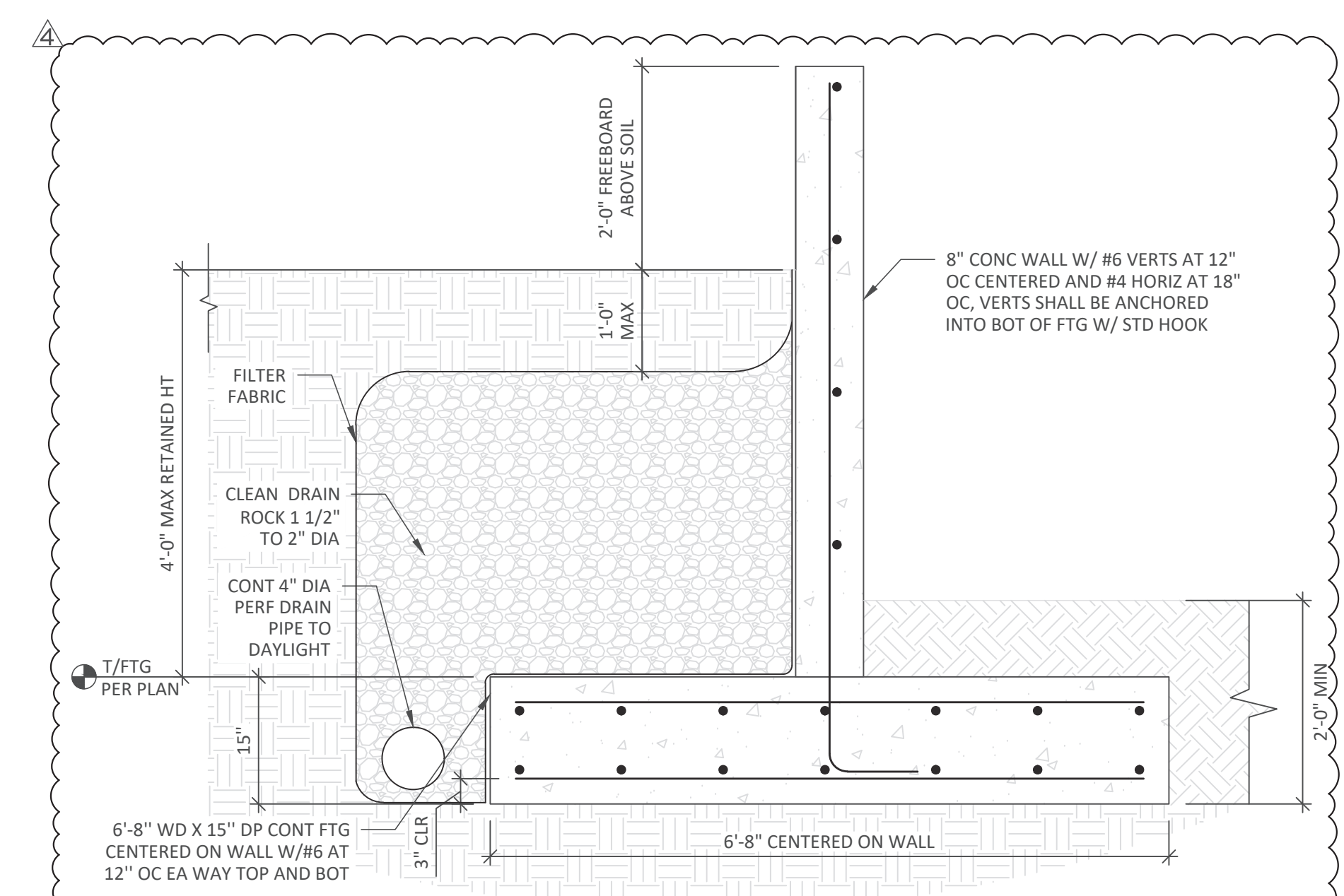


5 FLOOR/ROOF JOIST BEARING AT BEAM
SCALE 3/4"=1'-0"

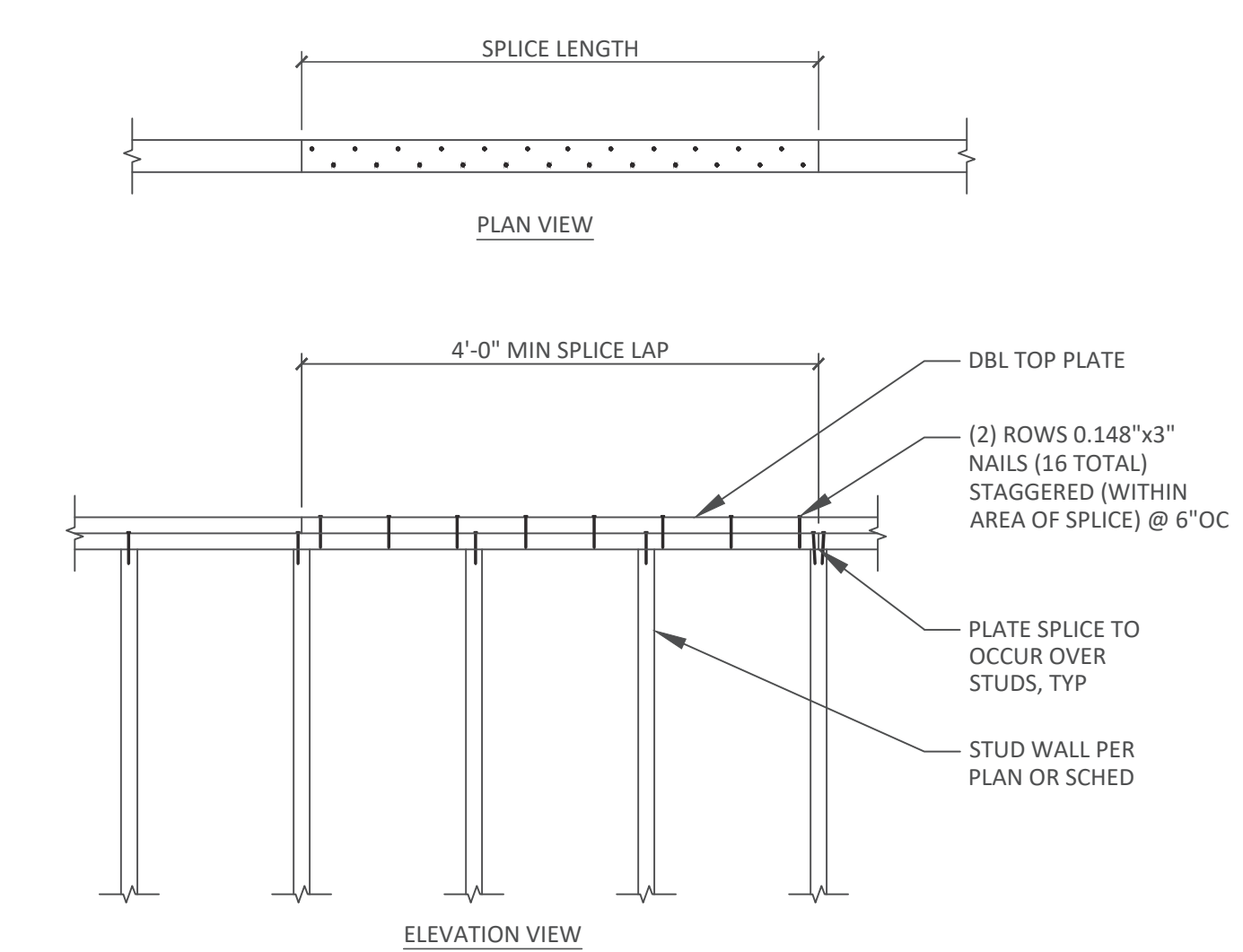


NOTE:
AT SIMILAR JOISTS PARALLEL ONE SIDE OF WALL.

2 JOIST BEARING AT INTERIOR WALL
SCALE 3/4"=1'-0"



6 WEST CATCHMENT WALL RETAINING WALL DETAIL
SCALE: 3/4" = 1'-0"



NOTE:
FLOOR/ROOF FRAMING NOT SHOWN FOR CLARITY.

3 TYPICAL PLATE SPLICE DETAIL
SCALE: 3/4" = 1'-0"

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2021 EDITION).
- DESIGN LOADING CRITERIA:
 ROOF
 ROOF LIVE LOAD 25 PSF
 DEFLECTION CRITERIA
 LIVE LOAD DEFLECTION L/360
 TOTAL LOAD DEFLECTION L/240
 ENVIRONMENTAL LOADS
 RISK CATEGORY II
 RAIN 1.5 IN/HR
 SNOW . . . Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=25 PSF, Ps=25 PSF
 WIND Gcpi=0.18, 98 MPH, EXPOSURE "C"
 EARTHQUAKE:
 ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
 LATERAL SYSTEM: CANTILEVERED COLUMN SYSTEMS
 SITE CLASS=E, Ss=1.456, Sds=1.165, S1=0.503,
 Sd1=0.671, Cs=0.932, SDC D, Ie=1.0, R=6.5
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.
- ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

QUALITY ASSURANCE

- SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER, THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL FABRICATION AND ERECTION	PER AISC 360
CONCRETE CONSTRUCTION	PER TABLE 1705.3

PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.

CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

GEOTECHNICAL

- FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

 ALLOWABLE SOIL PRESSURE (NATIVE SOILS / STRUCTURAL FILL). 1500 PSF
 LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED). 65 PCF/45 PCF
 ALLOWABLE PASSIVE EARTH PRESSURE (FS OF 1.5 INCLUDED). 250 PCF
 COEFFICIENT OF FRICTION (FS OF 1.5 INCLUDED). 0.3

 SOILS REPORT REFERENCE: ES-9607.01 FOR DEREK AND EILEEN CHESHIRE BY EARTH SOLUTIONS NW, LLC ON APRIL 22, 2024.

CONCRETE

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF $f_c = 3,000$ PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS $f_c = 2,500$ PSI.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, $F_y = 60,000$ PSI.
- DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 318R-18 AND 318-19. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-19, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

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

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

ANCHORAGE

- EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037 FOR CONCRETE AND IAPMO ER-240 FO MASONRY, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.
- CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

STEEL

- STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:
 A. AISC 360-16 AND SECTION 2205 OF THE INTERNATIONAL BUILDING CODE.
 B. JUNE 15, 2016 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES (AISC 303-16) AMENDED AS FOLLOWS: AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3.1.
 C. SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS.
- WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, $F_y = 50$ KSI. OTHER ROLLED SHAPES INCLUDING PLATES, SHALL CONFORM TO ASTM A36, $F_y = 36$ KSI. STEEL PIPE SHALL CONFORM TO ASTM A-53, TYPE E OR S, GRADE B, $F_y = 35$ KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE C, $F_y = 46$ KSI (ROUND), $F_y = 50$ KSI (SQUARE AND RECTANGULAR). CONNECTION BOLTS SHALL CONFORM TO ASTM A307.
- ALL STEEL EXPOSED TO THE WEATHER OR IN CONTACT WITH GROUND SHALL BE CORROSION PROTECTED BY GALVANIZATION OR PROVIDED WITH AN EXTERIOR PAINT SYSTEM, REFER TO LANDSCAPE ARCHITECTURAL DRAWINGS FOR FINISH AND PROTECTION.
- ALL A-325N CONNECTION BOLTS NEED ONLY BE TIGHTENED TO A SNUG TIGHT CONDITION, DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH.
- ALL ANCHORS EMBEDDED IN CONCRETE SHALL BE A307 HEADED BOLTS OR F1554 GRADE 36 THREADED ROD WITH AN ASTM 563 HEAVY HEX NUT TACK WELDED ON THE EMBEDDED END.
- ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES F AND 40 FT - LBS AT 70 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

WOOD

- FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WMPA STANDARD, WESTERN LUMBER GRADING RULES 2021. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

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

- GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, $F_b = 2,400$ PSI, $F_v = 265$ PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, $F_b = 2,400$ PSI, $F_v = 265$ PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS, WITH SPANS OVER 30', TO 3,500' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

- PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
- FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER	INTERIOR DRY	G90 GALVANIZED
CONTAINS AMMONIA CARRIER	INTERIOR DRY	G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER	INTERIOR WET	TYPE 304 OR 316 STAINLESS
CONTAINS AMMONIA CARRIER	EXTERIOR	TYPE 304 OR 316 STAINLESS
AZCA	ANY	TYPE 304 OR 316 STAINLESS

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19% WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19% CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

- TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2021. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL T1J JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "T1S" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM)AS MEMBERS CONNECTED.

- WOOD FASTENERS

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
8d	2-1/2"	0.131"
16d BOX	3-1/2"	0.135"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

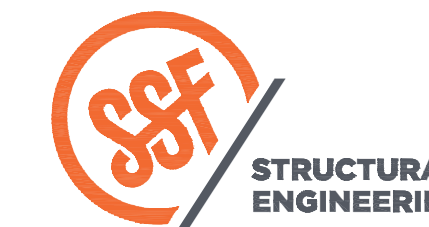
NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

- ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

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

A. ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BETWEEN RAFTERS AND JOISTS AT ALL BEARING POINTS WITH A MINIMUM OF (3) 16d TOE NAILS EACH END. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER, MINIMUM TWO NAILS PER BLOCK, UNLESS OTHERWISE NOTED.



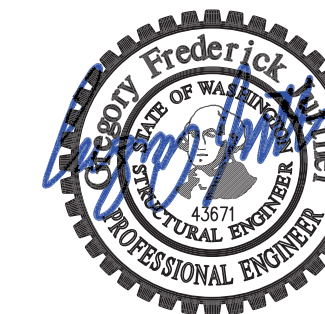
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DESIGN:	AD
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REVISIONS:	

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PROJECT TITLE:

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MERCER ISLAND, WA 98040

ARCHITECT:

Berger Partnership
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Seattle, WA 98109
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bergerpartnership.com

ISSUE:

Permit

SHEET TITLE:

**General
Structural
Notes**

SCALE:

DATE: February 7, 2025

PROJECT NO: 00586-2025-01

SHEET NO:

S1.1



DRAWN:	SRK
DESIGN:	AD
CHECKED:	GFJ
APPROVED:	GFJ

REVISIONS:

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SHEET TITLE:

Pergola Framing & Foundation Plans

SCALE: 1/4" = 1'-0" U.N.O.
 DATE: February 7, 2025
 PROJECT NO: 00586-2025-01
 SHEET NO:

S2.1

Foundation Plan Notes (TYPICAL, UNLESS NOTED OTHERWISE)

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- THE BOTTOM OF ALL EXTERIOR PAD FOOTINGS SHALL BE 2'-4" MINIMUM BELOW GRADE. REFER DETAIL 8/S3.1.
- 4" CONCRETE SLAB OVER 6 MIL VAPOR BARRIER ON 4" OF GRAVEL OR CRUSHED ROCK OVER FIRM UNDISTURBED SOIL OR ENGINEERED COMPACTED BACK-FILL. REINFORCE WITH #3 @ 16" O.C. EACH WAY CENTERED IN SLAB DEPTH. PROVIDE CONSTRUCTION/CONTROL JOINTS PER DETAIL 12/S3.1.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

- NEW PAD FOOTING PER PLAN
- COLUMN ABOVE

4'-6"sq x 2'-0"dp CONC.
 FTC. W/ #4 @ 12"oc EA.
 WAY, TOP & BOT.

7/S3.1
 8/S3.1

EXISTING MAIN RESIDENCE
 TO REMAIN. REFER TO
 ARCHITECTURAL DRAWINGS

SLAB ON GRADE
 PER PLAN NOTE #3

Pergola Foundation Plan

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



Framing Plan Notes (TYPICAL, UNLESS NOTED OTHERWISE)

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- ROOF SHEATHING SHALL BE 1/2" A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 32/16), FACE GRAIN PERPENDICULAR TO ROOF FRAMING PER PLAN. NAIL SHEATHING AT ALL FRAMED PANEL EDGES WITH 8D AT 6"O.C. AND TO ALL INTERMEDIATE FRAMING AT 12" O.C.
- PERGOLA FRAMING SHALL BE 2X10 HEMFIR NO. 2 AT 24" O.C.
- MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

- SPAN DIRECTION
- EXTENT OF JOISTS
- COLUMN BELOW
- BEAM PER PLAN

HSS 4x4x1/4"
 COLUMN, TYP.

EXISTING MAIN RESIDENCE
 TO REMAIN. REFER TO
 ARCHITECTURAL DRAWINGS

GL 5/2x12
 P.T. 2x10 @ 24"oc,
 TYP. U.N.O.

4/S3.1

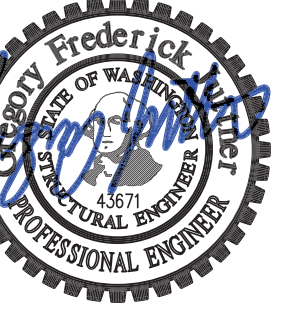
P.T. 2x10 @ 24"oc,
 TYP. U.N.O.

4/S3.1

Pergola Framing Plan

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





DRAWN: SRK
DESIGN: AD
CHECKED: GFJ
APPROVED: GFJ

REVISIONS:

JURISDICTIONAL APPROVAL STAMP:

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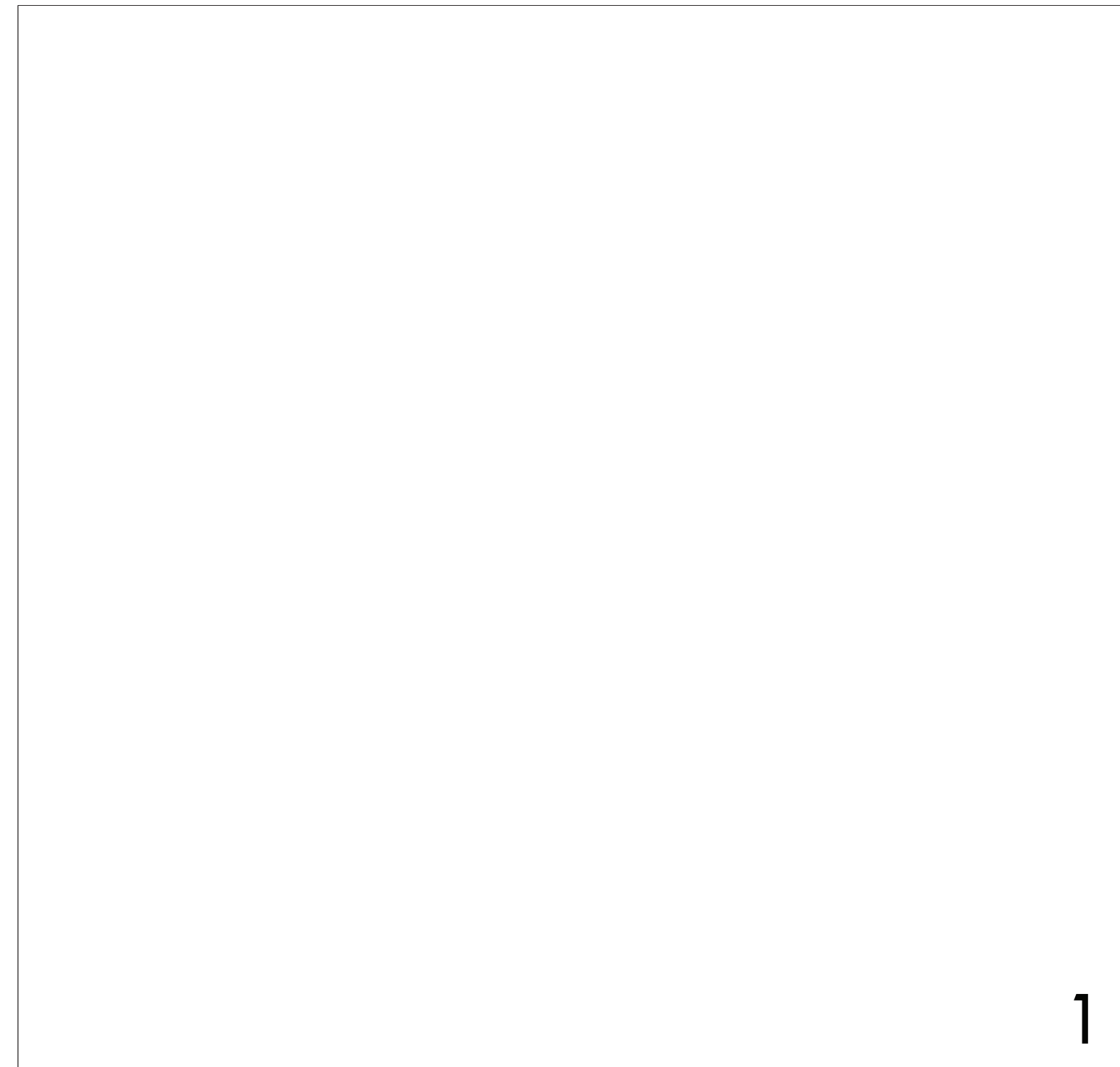
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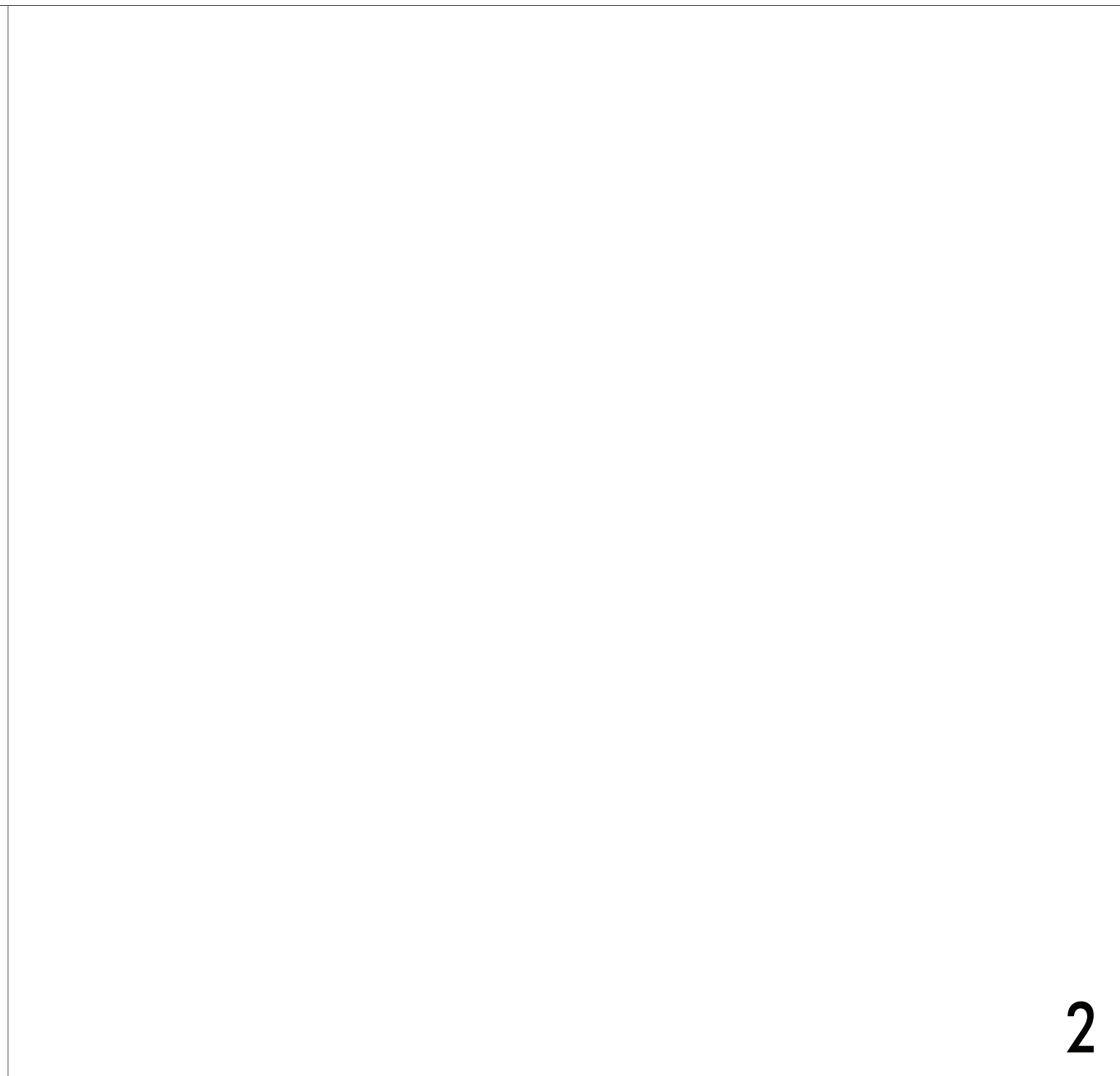
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Details

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DATE: February 7, 2025
PROJECT NO: 00586-2025-01
SHEET NO:



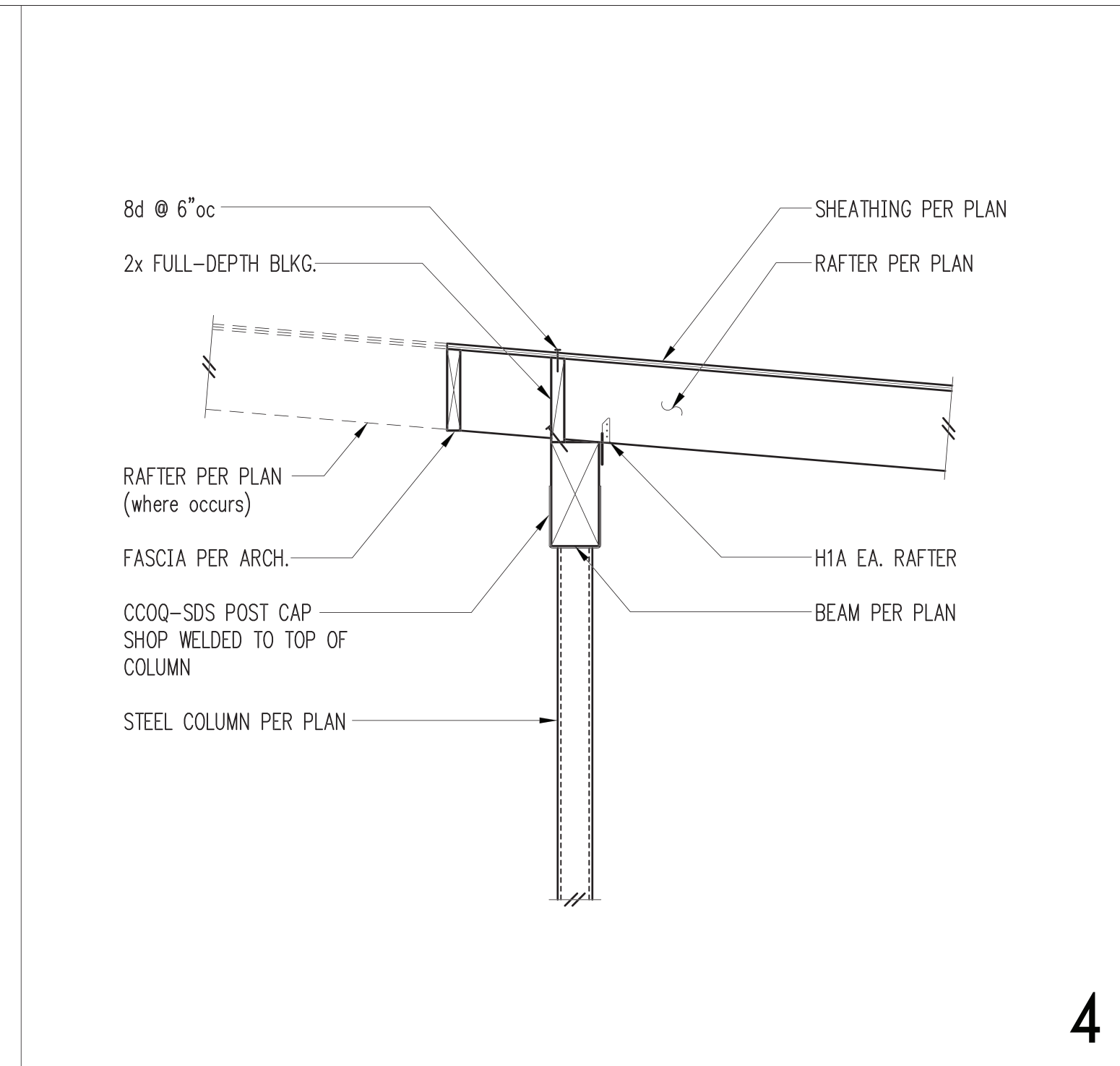
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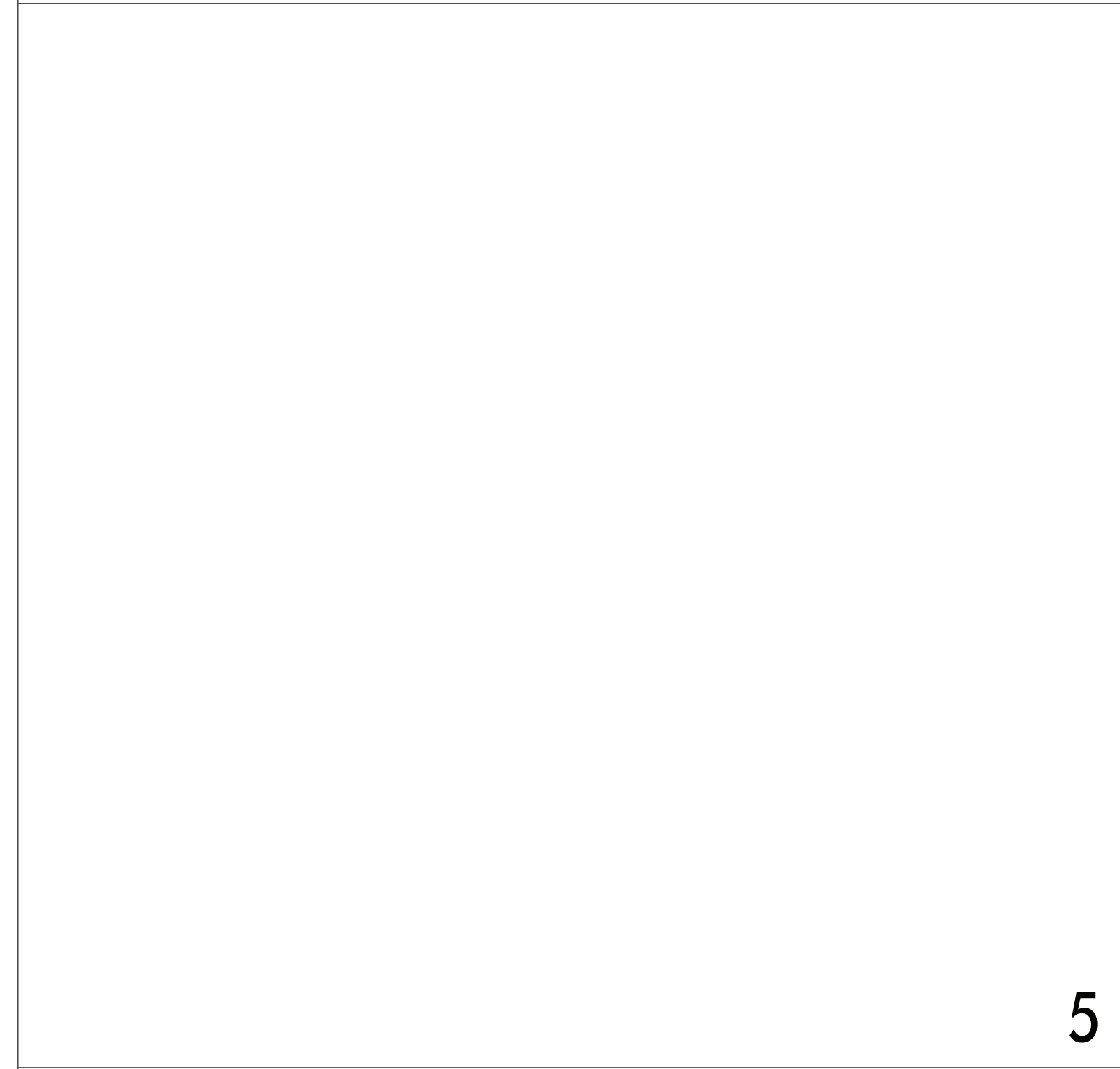
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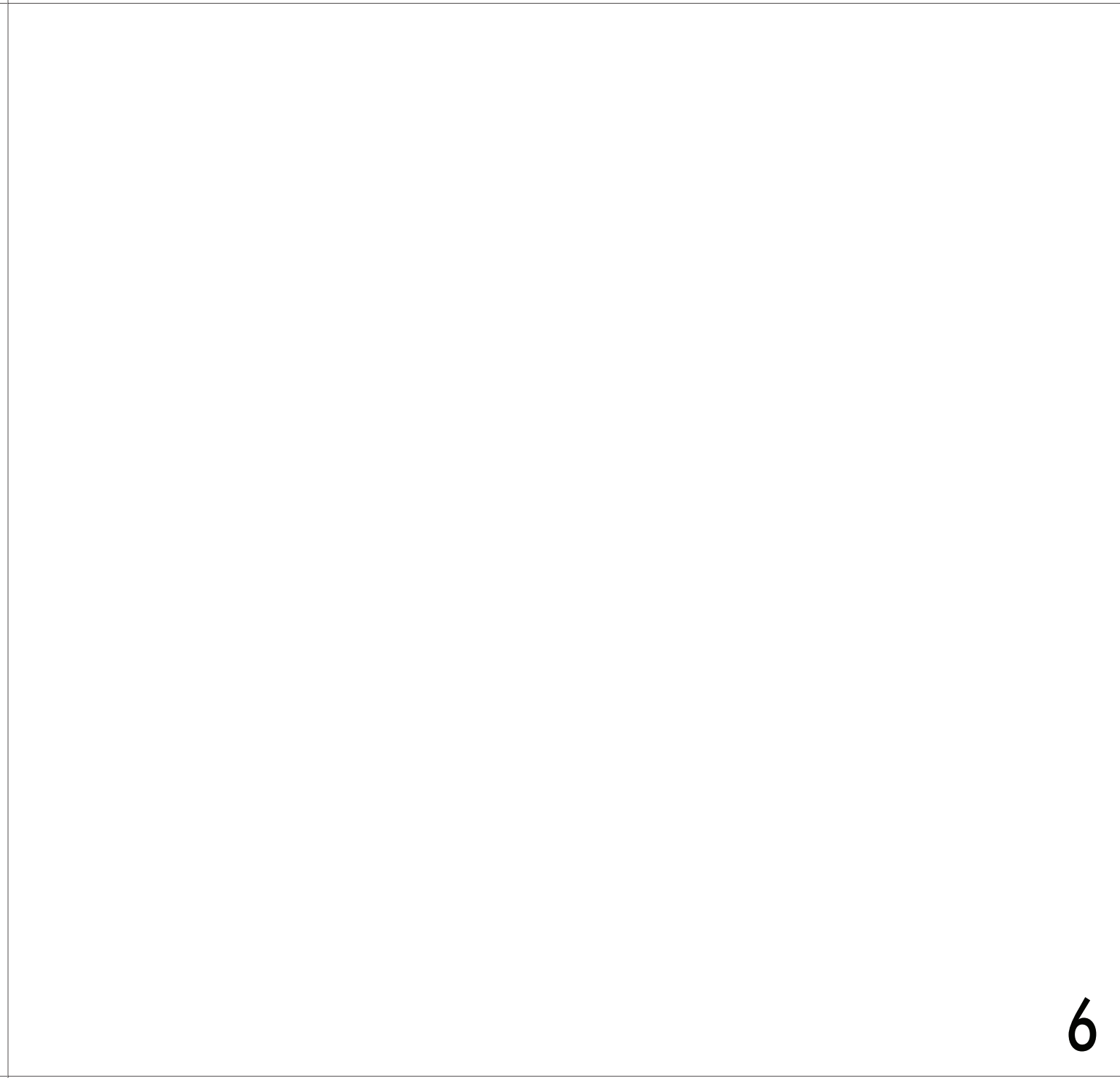
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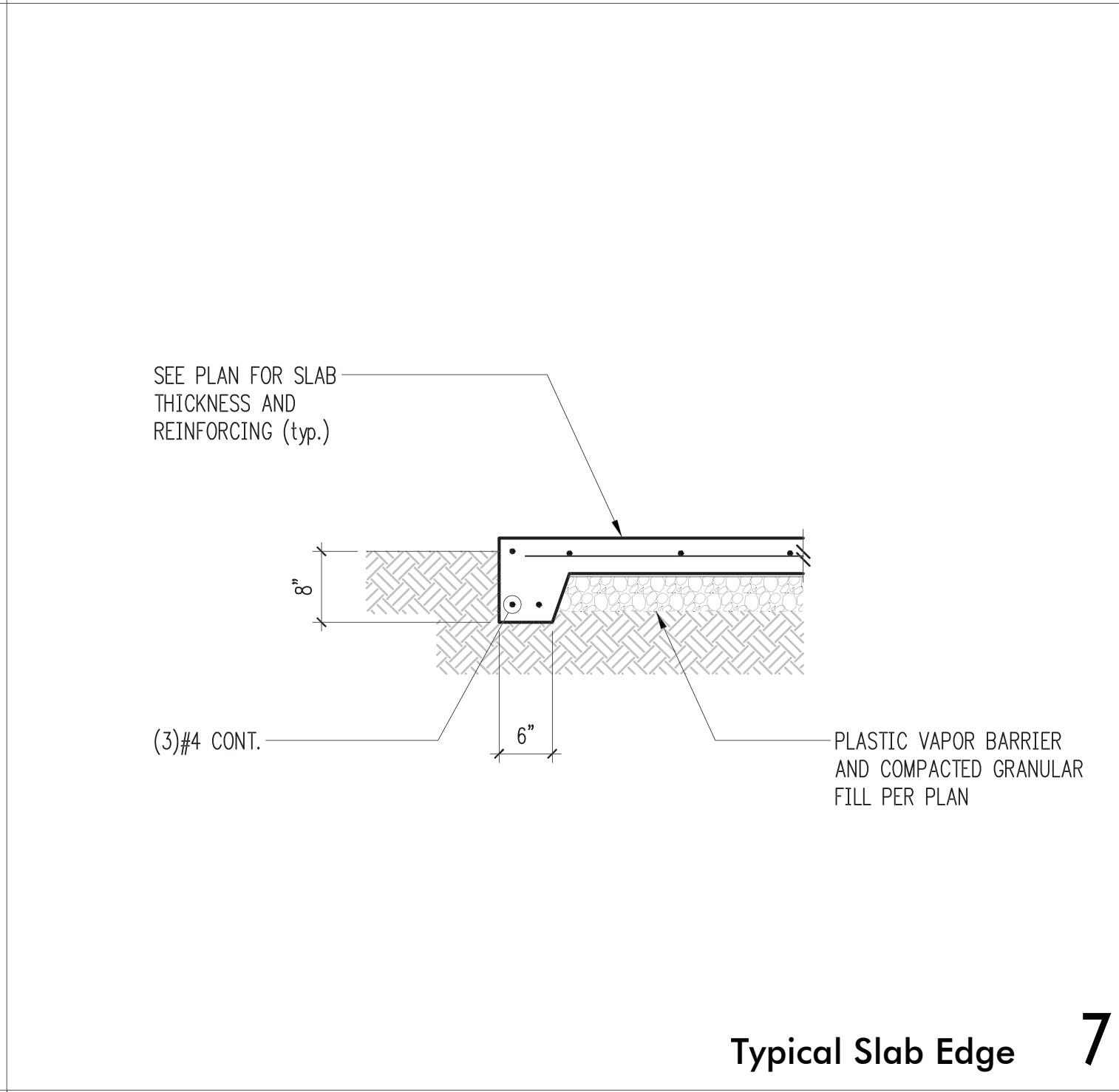
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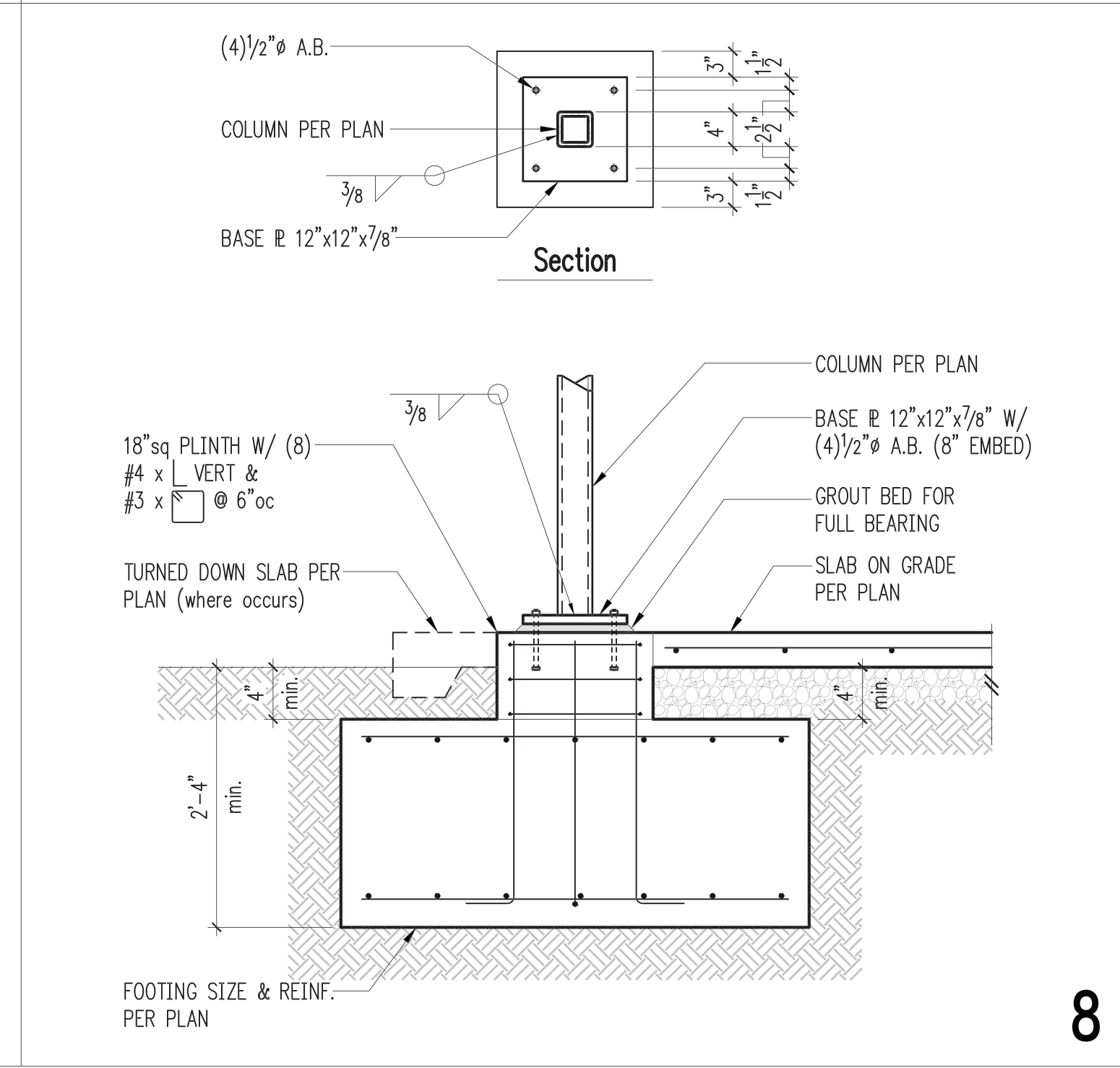
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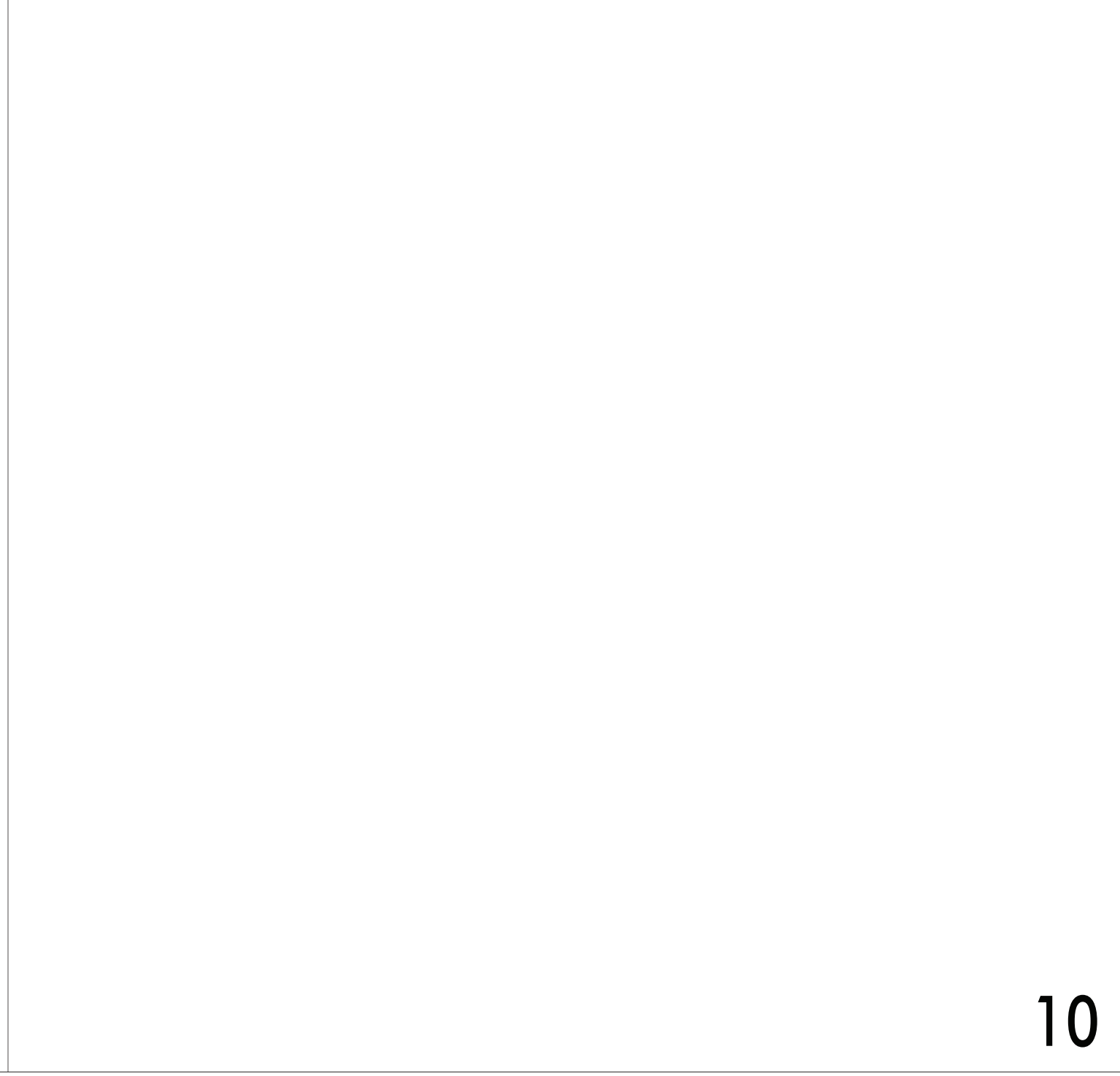
Typical Slab Edge 7



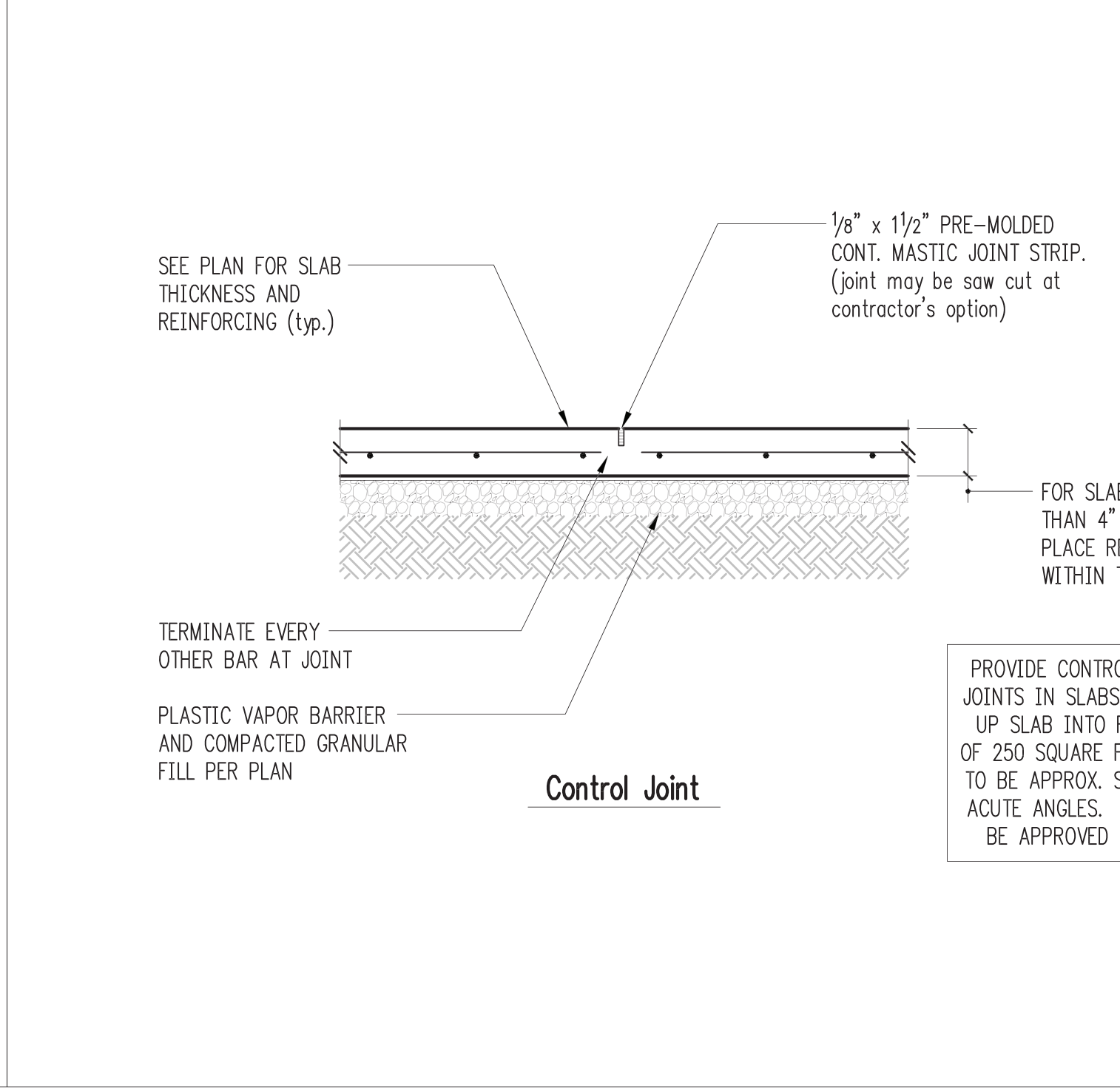
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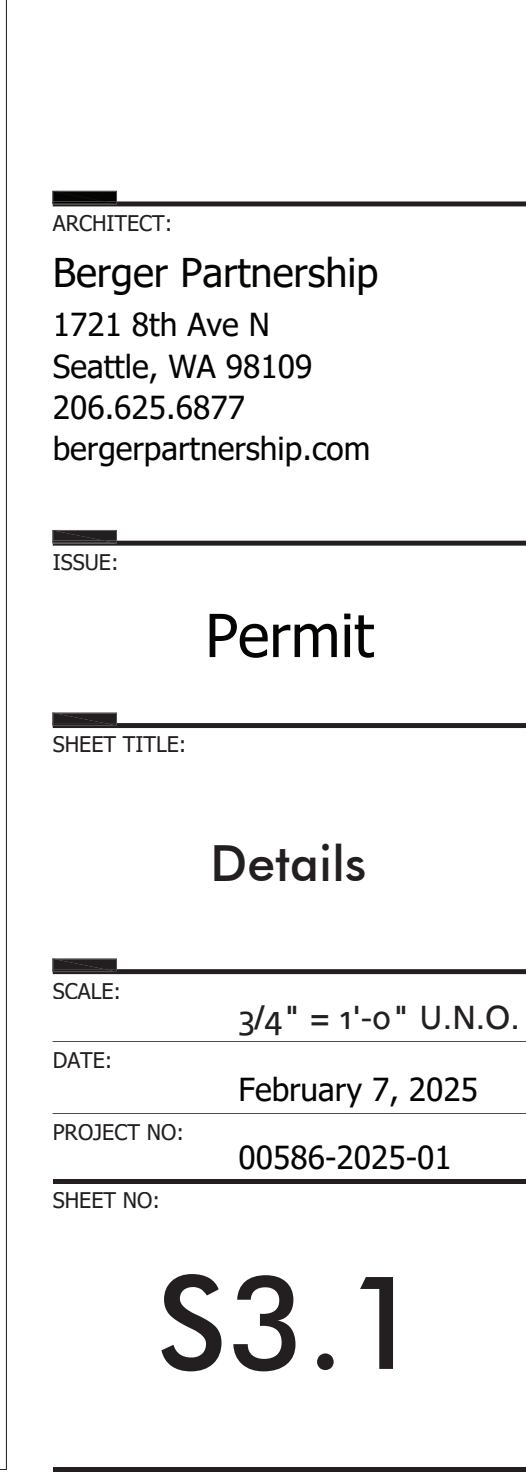
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FOR SLABS GREATER THAN 4" IN THICKNESS, PLACE REINFORCING WITHIN TOP 2" OF SLAB

PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 250 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

Typical Slab Joints 12



12