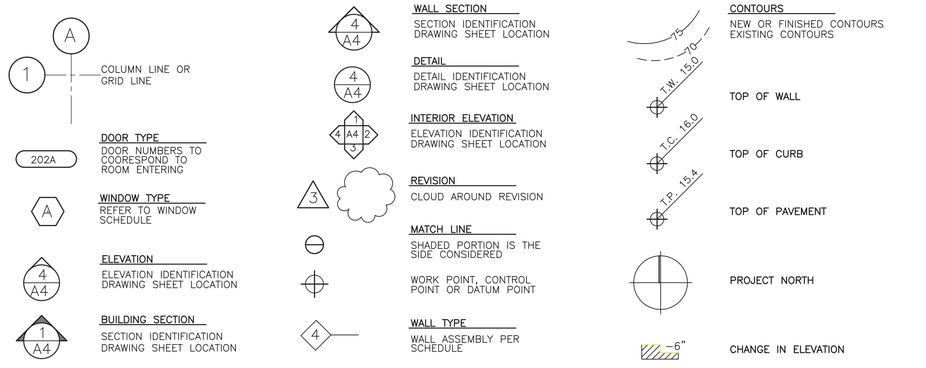
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 X 36

ABBREVIATIONS

ANGLE	∠
CENTERLINE	℄
CHANNEL	⊏
DIAMETER OR ROUND	ø
NUMBER OR POUND	#
PENNY	d
PERPENDICULAR	⊥
PLATE	℗
ANCHOR BOLT	AB
ACOUSTICAL	AC
AIR CONDITIONING	A/C
ACOUSTICAL TILE	ACT
AREA DRAIN	AD
ADDITIVE	ADD
ADHESIVE	ADH
ADJACENT	ADJ
ADJUSTABLE	ADJT
ACCESS FLOOR	AF
ABOVE FINISH FLOOR	AFF
AGGREGATE	AGG
ALUMINUM	AL
ALUMINUM CLAD WOOD	ACW
ALTERNATE	ALT
ACCESS PANEL	AP
APPROXIMATE	APPROX
ARCHITECTURAL	ARCH
ASPHALT	ASPH
ACOUSTICAL WALL FABRIC	AWF
ACOUSTICAL WALL PANEL	AWP
BOARD	BD
BETWEEN	BETW
BITUMINOUS	BITUM
BUILDING	BLDG
BLOCK	BLK
BLOCKING	BLKG
BEAM	BM
BEARING	BRG
BOTTOM	BOT
BEDROCK	BR
BRICK	BRK
BASEMENT	BSMT
BUILT–UP ROOF	BUR
CABINET	CAB
CATCH BASIN	CB
CEMENT	CEM
CERAMIC	CER
CUBIC FEET PER MINUTE	CFM
CONDUCTIVE FLOOR TILE	CFT
CHALK BOARD	CG
CORNER GUARD	CHBD
CAST IRON	CI
CONTROL JOINT	CJT
CEILING	CLG
CONSTRUCTION JOINT	CJ
CUP SINK	CS
CAULKING	CLK
CLOSET	CLO
CLEAR	CLR
CERAMIC MOSAIC TILE	CMT
CONCRETE MASONRY UNIT	CMU
COUNTER	CNTR
CLEANOUT	CO
COLUMN	COL
CONCRETE	CONC
CONNECTION	CONN
CONSTRUCTION	CONSTR
CONTINUOUS	CONT
CORRIDOR	CORR
CARPET	CPT
CASEMENT	CSMT
CERAMIC TILE	CT
CENTER	CTR
COUNTER SINK	CTSK
CUBIC YARD	CY
DOUBLE	DBL
DEPARTMENT	DEPT
DETAIL	DET
DRINKING FOUNTAIN	DF
DEIONIZED WATER	DI
DIAMETER	DIA
DIAGONAL	DIAG
DIMENSION	DIM
DISPENSER	DISP
DAMPPROOFING	DMPF
DOWN	DN
DAMPER	DPR
DOWNSPOUT	DS
DISHWASHER	DW
DRAWING	DWG
EAST	E
EXISTING	(E)
EACH	EA
EXPANSION BOLT	EB
EXPANSION JOINT	EJ
EXTERIOR INSULATED FINISH SYSTEM	EIFS
ELEVATION	EL
ELECTRIC	ELEC
ELECTRIC WATER COOLER	EWC
ELEVATOR	ELEV
ENTRY MAT	EM
EMERGENCY	EMER
ENCLOSURE OR ENCLOSED	ENCL
ELECTRIC PANEL BOARD	EP
EPOXY	EPX
EQUAL	EQ
EQUIPMENT	EQPT
EMERGENCY SHOWER/ EYE WASH	ESEW
ESTIMATE	EST
EXHAUST	EXH
EXPANSION	EX
EXISTING	(E)
EMERGENCY EYE WASH	EW
EXTERIOR	EXT
FIRE ALARM	FA
FLAT BAR	FB
FIBER BOARD	FBD
FURNISHED BY OTHERS	FBO
FURNISHED BY CONTRACTOR INSTALL BY CONTRACTOR	FCIC
FACTORY	FCTY
FLOOR DRAIN	FD
FOUNDATION	FNDN
FIRE EXTINGUISHER	FE
FIRE EXTINGUISHER CABINET	FEC
FIBERGLASS	FGL
FIRE HOSE CABINET	FHC
FINISH	FIN
FLOOR	FL
FLASHING	FLG
FLUORESCENT	FLUOR
FACE OF CONCRETE	FOC
FACE OF FINISH	FOF
FURNISH BY OWNER INSTALL BY CONTRACTOR	FOIC
FURNISH BY OWNER INSTALL BY OWNER	FOIO
FACE OF STUD	FOS
FIREPLACE	FP
FULL SIZE	FS
FEET	FT
FIRE PROOFING	FPRF
FOOTING	FTG
FURRING	FURR
FUTURE	FUT
FUTURE ROUGH–IN ONLY	FUT–RIO
FIXED	FX
GAUGE OR GAGE	GA
GALVANIZED	GALV
GRAB BAR	GB
GENERAL CONTRACTOR	GC
GLASS OR GLAZING	GL
GLU–LAM BEAM	GLBM
GLASS MESH MORTAR UNIT	GMMU
GROUND	GND
GRADE	GR
GYPSUM WALL BOARD	GWB
GYPSUM	GYP
HOSE BIB	HB
HARD BOARD	HBD
HOLLOW CORE	HC
HAND DRYER	HD
HEADER	HDR
HARDWOOD	HDWD
HARDWARE	HDWE
HOLLOW METAL	HM
HORIZONTAL	HORIZ
HOUR	HR
HEIGHT	HT
HEATING	HTG
HEATING, VENTILATING, AIR CONDITIONING	HVAC
HOT WATER HEATER	HWH
INSIDE DIAMETER (DIMENSION)	ID
INSULATED GLAZING	IG
INSULATED HOLLOW METAL	IHM
INCLUDE	INCL
INSULATION	INSUL
INTERIOR	INT
JANITOR	JAN
JOIST	JST
JOINT	JT
KITCHEN	KIT
KNEE SPACE	KS
LABORATORY	LAB
LAMINATE	LAM
LANDSCAPE	LS
LAVATORY	LAV
LAG BOLT	LB
LENGTH	LG
LEFT HAND	LH
LOCKER	LKR
LIQUID MARKING SURFACE	LMS
LIGHT	LT
LIGHT WEIGHT CONCRETE	LWC
MACHINE	MACH
MASONRY	MAS
MATERIAL	MATL
MAXIMUM	MAX
MEDICINE CABINET	MC
MEDIUM DENSITY OVERLAY	MDO
MECHANICAL	MECH
MEMBRANE	MEMB
METAL	MET OR MTL
MEZZANINE	MEZZ
MANUFACTURER	MFR
MANHOLE	MH
MINIMUM	MIN
MIRROR	MIR
MISCELLANEOUS	MISC
MOISTURE BARRIER	MB
MOLDING	MLD
MASONRY OPENING	MO
MOUNTED	MTD
MULLION	MULL
NORTH	N
NEW	(N)
NON–FROST SUSCEPTIBLE	NFS
NOT IN CONTRACT	NIC
NUMBER	NO
NOMINAL	NOM
NOISE REDUCTION COEFFICIENT	NRC
NOT TO SCALE	NTS
OVERALL	OA
OBSCURE	OBS
ON CENTER	OC
OUTSIDE DIAMETER (DIMENSION)	OD
OFFICE	OFF
OVERHEAD	OH
OPPOSITE HAND	OPH
OPENING	OPNG
OPPOSITE	OPP
PARTICLE BOARD	PBD
PREFABRICATED	PFB
PREFINISHED	PFHB
PLATE OR PROPERTY LINE	PL
PLASTIC LAMINATE	P LAM
PLYWOOD	PLYWD
PANEL	PNL
PAINT	PNT
POLISH	POL
PAIR	PR
PRE–CAST	PRCST
PRESSURE TREATED	PT
PAPER TOWEL DISPENSER	PTD
PAPER TOWEL DISPENSER AND RECEPTACLE	PTD/R
POLYVINYL CHLORIDE	PVC
PARTITION	PTN
PAVEMENT	PVMT
QUARRY TILE	QT
RISER	R
RETURN AIR	RA
RADIUS	RAD
RUBBER BASE	RB
ROD & SHELF	R&S
ROOF DRAIN	RD
ROOF DRAIN, OVERFLOW	RD/O
REINFORCING BAR	REBAR
REFERENCE	REF
REFRIGERATOR	REFR
REINFORCED	REINF
REQUIRED	REQ
RESILIENT	RESIL
REGISTER	RGTR
RIGHT HAND OR ROBE HOOK	RH
ROOM	RM
ROUGH OPENING OR REVERSE OSMOSIS WATER	RO
ROUGH SAWN	RS
REVERSE	RVS
RUBBER	RUB
SOUTH	S
SOLID CORE	SC
SEAT COVER DISPENSER	SCD
SCHEDULE	SCHD
SOAP DISPENSER	SD
SECTION	SECT
SQUARE FEET	SF
SHOWER	SHR
SHEET	SHT
SHEATHING	SHTH
SOLAR INSULATED GLAZING	SIG
SIMILAR	SIM
SINK	SK
SEALER	SLR
SANITARY NAPKIN DISPENSER	SND
SANITARY NAPKIN RECEPTACLE	SNR
SEALANT	SNT
STAND PIPE	SP
SPECIFICATION	SPEC
SQUARE	SQ
STAINLESS STEEL	SST
SERVICE SINK	SSK
SOUND TRANSMISSION CLASS	STC
STANDARD	STD
SELECT TIGHT KNOT	STK
STEEL	STL
STORAGE	STOR
STRUCTURAL	STRL
SUSPENDED	SUSP
SHEET VINYL OR SEAMLESS VINYL	SV
SERVICE	SVCE
SYMMETRICAL	SYM
SWITCHBOARD	SWBD
SPECIAL WALL COVERING	SWC
TREAD	T
TOWEL BAR	TB
TERRAZZO	TER
TELEPHONE	TEL
TOP AND BOTTOM	T & B
TONGUE AND GROOVE	
TEMPERED GLAZING	TG
THRESHOLD	THR
TEMPERED INSULATED GLAZING	TIG
TACKBOARD	TKBD
TOP OF	TO
TOP OF CURB	TOC
TOP OF PAVEMENT	TOP
TOP OF STEEL	TOS
TOP OF SLAB	TOSL
TOP OF WALL	TOW
TOILET PAPER DISPENSER	TPD
TOILET PARTITION	TPTN
TELEVISION	TV
TYPICAL	TYP
UNDERWRITERS LABORATORY	UL
UNFINISHED	UNF
UNLESS OTHERWISE NOTED	UON
URINAL	UR
VARIES	VAR
VINYL BASE	VB
VINYL COMPOSITION TILE	VCT
VAPOR RETARDER	VR
VENTILATOR	VENT
VERTICAL	VERT
VESTIBULE	VEST
VINYL	VIN
VENEER	VNR
VINYL TILE	VT
VINYL WALL COVERING	VWC
WEST	W
WITH	W/
WITHOUT	W/O
WATER CLOSET	WC
WATER FOUNTAIN	WF
WOOD OR WIDTH	WD
WINDOW	WDW
WIRE GLASS	WG
WIRE MESH	WM
WATER PROOF	WP
WORKING POINT	WPT
WATER RESISTANT	WR
WATER RESISTANT BARRIER	WRB
WAINSCOT	WSCT
WEIGHT	WT
WELDED WIRE FABRIC	WWF
TRANSFORMER	XFMR

TYPICAL SYMBOLS



GENERAL NOTES

1. 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.
2. VERIFY ALL DIMENSIONS AND RELATIONSHIPS TO EXISTING CONDITIONS AS FIELD CONDITIONS MAY VARY FROM AVAILABLE SITE INFORMATION.
3. ALL DIMENSIONS ARE TO FACE OF FRAMING, MASONRY OR CONCRETE UNLESS OTHERWISE NOTED.
4. ALL MATERIALS LISTED ARE PROVIDED UNDER THIS CONTRACT UNLESS INDICATED AS 'EXISTING' OR PROVIDED BY OWNER.
5. 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.'
6. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
7. GENERAL CONTRACTOR TO COORDINATE REQUIRED HOLES AND BLOCKING FOR MECHANICAL AND ELECTRICAL WORK.
8. 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 R401.3, A CERTIFICATE IS REQUIRED TO BE POSTED WITHIN 3 FT OF THE ELECTRICAL PANEL; IT MUST INCLUDE THE FOLLOW: PREDOMINATE 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 AND WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR, VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE) ATTIC/CEILINGS: VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE). INSTALL CONTINUOUSLY. CRAWL SPACE: 6 MIL POLYETHELENE
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. TAPER 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 TAPED, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER WSEC. b. DUCTS WITHIN A CONCRETE SLAB OR IN THE GROUND SHALL BE INSULATED TO R-10, WITH INSULATION DESIGNED TO BE USED BELOW GRADE.
LIGHTING	RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE IC LISTED. A MIN. OF 75% OF PERMANENTLY INSTALLED LAMPS IN INTERIOR AND EXTERIOR LIGHTING FIXTURES MUST BE HIGH-EFFICACY LAMPS, PER WSEC R404.1.
PIPE INSULATION	ALL HOT WATER PIPES, AND NON-RECIRCULATING COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE, 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 M1505.4.3 (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"ØSMOOTH 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 FUMES, MIN 10' FROM PLUMBING OR APPLIANCE VENTS, AWAY FROM ROOMS W/ FUEL BURNING APPLIANCES, AND OUT OF ATTICS, CRAWL SPACES, AND GARAGES. e. AIRFLOW FOR WHOLE HOUSE 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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ENERGY CREDITS

LARGE DWELLING UNIT : 9 CREDITS REQUIRED

TABLE 403.2

OPTION	DESCRIPTION	CREDITS
4	FOR A HEATING SYSTEM USING A HEAT PUMP THAT MEETS FEDERAL STANDARDS FOR THE EQUIPMENT LISTED IN TABLE C403.3.2(2) OR C403.3.2(9) OR AIR TO WATER HEAT PUMP UNITS THAT ARE CONFIGURED TO PROVIDE BOTH HEATING AND COOLING AND ARE RATED IN	3.0

TABLE 403.3

OPTION	DESCRIPTION	CREDITS
1.2	EFFICIENT BUILDING ENVELOPE: VERTICAL FENESTRATION U=0.25; FLOOR R-38; SLAB ON GRADE/BELOW GRADE SLAB R-10 PERIMETER + UNDER	1.0
2.1	REDUCE TESTED AIR LEAKAGE TO 1.5 AIR CHANGES PER HOUR MAX. @ 50	1.0
3.6	AIR SOURCE, CENTRALLY DUCTED HEAT PUMP WITH MIN. HSPF OF 10	1.0
4.1	ALL HVAC DUCTS AND COMPONENTS TO BE LOCATED IN CONDITIONED SPACE PER R403.3.2	0.5
5.6	EFFICIENT WATER HEATING: ELECTRIC HEAT PUMP WATER HEATER TO MEET TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION	2.0
7.1	APPLIANCE PACKAGE; ENERGY STAR RATED DISHWASHER, REFRIG., WASHING MACHINE & DRYER (VENTLESS)	0.5
	TOTAL CREDITS:	9.0

NOXIOUS WEEDS

DEVELOPMENT PROPOSALS FOR NEW SINGLE-FAMILY HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUTANT TO SUBSECTION 19-02-020.F.3.A. NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

TREE PROTECTION

A TREE PROTECTION INSPECTION IS REQUIRED BEFORE START OF WORK.

FIRE SPRINKLER AND MONITORING

HOUSE SHALLBE EQUIPPED WITH AN NFPA 13R SPRINKLER SYSTEM AND A MONITORIED NFPA 72 FIRE ALARM SYSTEM UNDER SEPARATE PERMIT. SYSTEM MUST BE INSTALLED, INSPECTED, AND FINALLED PRIOR TO OCCUPANCY.

VENTILATION & AIR QUALITY

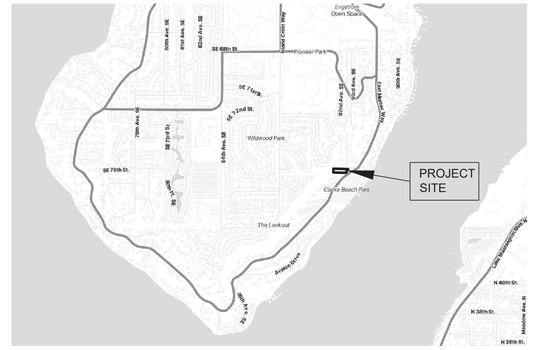
VENT ALL BATHROOM FANS, LAUNDARY FANS, RANGE HOODS AND DRYERS TO OUTSIDE ATMOSPHERE. BATHROOM/UTILITY ROOM FANS SHALL BE CAPABLE OF 5 AIR CHANGES PER HOUR AND SHALL BE VENTED DIRECTLY TO THE OUTSIDE THROUGH SMOOTH, RIDGID, NON-CORROSIVE METAL, 24 GA. DUCTWORK. FLEX DUCTING IS NOT ALLOWED. WSREC R402.4.1.2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

FIREBLOCKING & DRAFTSTOPPING

PROVIDE HORIZONTAL AND VERTICAL FIREBLOCKING AND DRAFTSTOPPING AS REQUIRED PER IRC R302.11 AND R302.12

CODES USED

2024 MERCER ISLAND CITY CODES
2021 WASHINGTON ADMINISTRATIVE CODE CH. 51-50
2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 UNIFORM PLUMBING CODE (UPC)
2021 INTERNATIONAL FIRE CODE (IFC)
2021 WASHINGTON STATE ENERGY CODE (WSEC)



1 A0.0 VICINITY MAP
NOT TO SCALE

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 CAO16–003, 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	ROOF 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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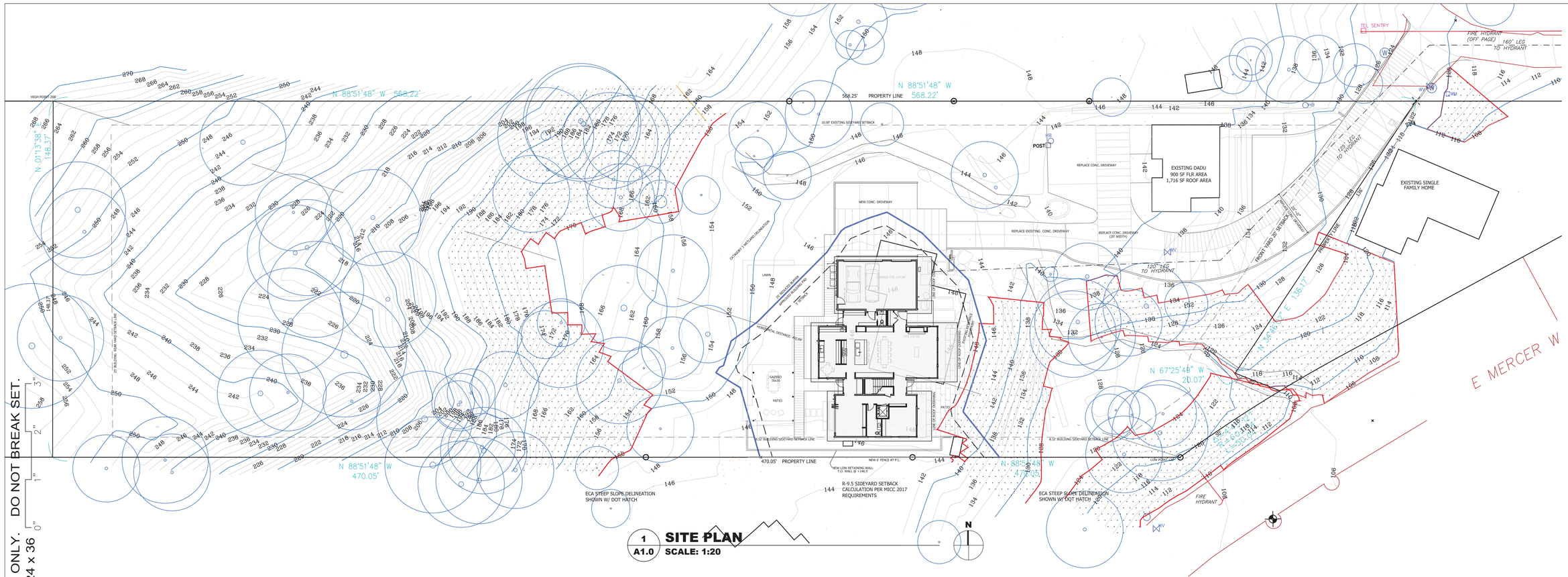
REVISIONS

Permit Set

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

Project info & Drawing Index

Sheet Number: A0.0



1 **SITE PLAN**
A1.0 SCALE: 1:20

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

3" 2" 1" 0"

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. VEHICLULAR USE	7,040 SF
	4. COVERED PATIOS & DECKS	O 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 STRUCT 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 (J/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		
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 #:	

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

8060 REGISTERED ARCHITECT PATRICK D. LYNCH STATE OF WASHINGTON

CHESHIRE HOUSE

7615 E. MERCER WAY
MERCER ISLAND, WA 98040

REVISIONS

Permit Set

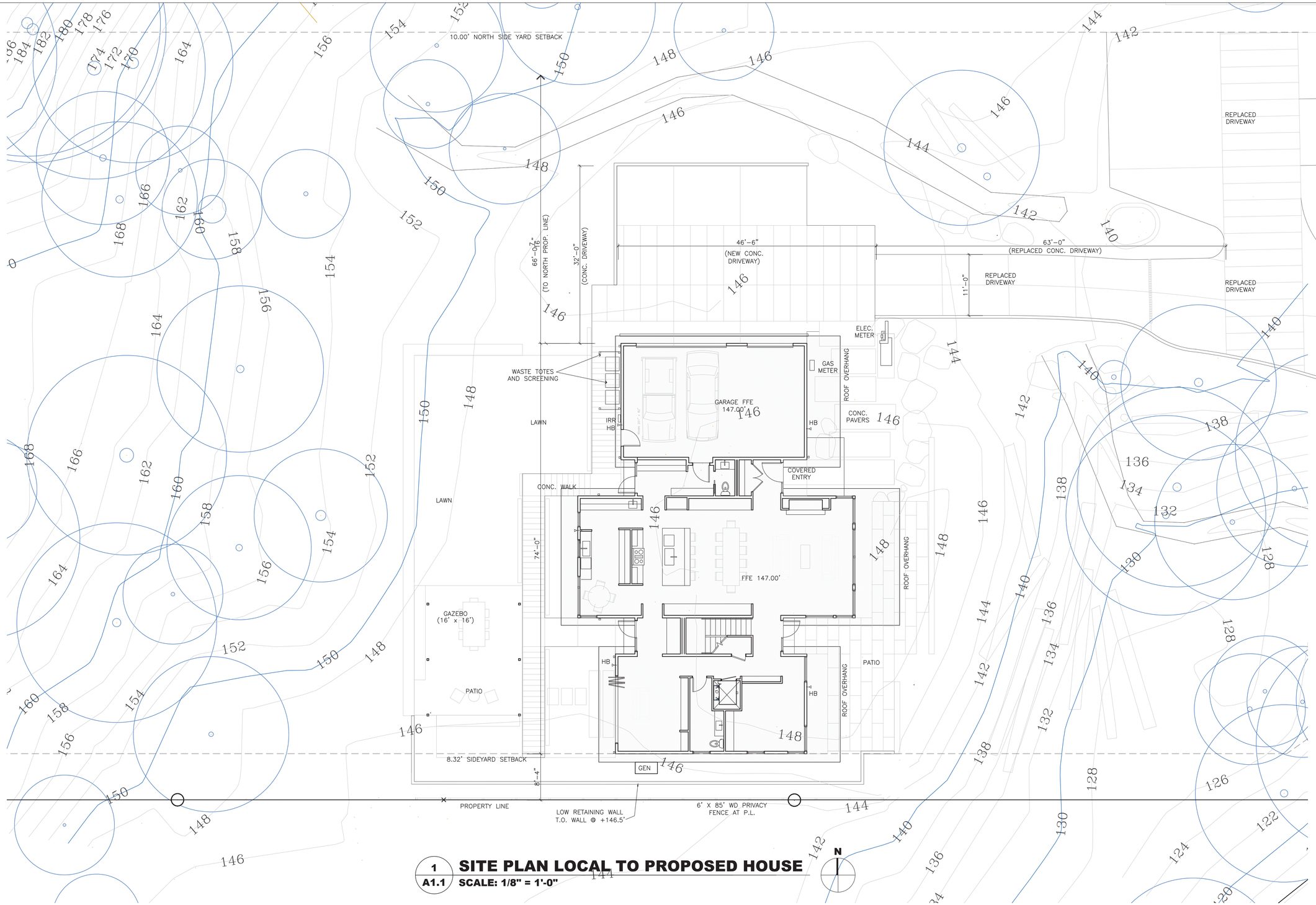
Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

Site Plan & Site Area Calculations

Sheet Number:
A1.0

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

0" 1" 2" 3"



1 A1.1 **SITE PLAN LOCAL TO PROPOSED HOUSE**
SCALE: 1/8" = 1'-0"

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711 West Washington Street
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plyncharchitect@gmail.com

8060 REGISTERED ARCHITECT PATRICK D. LYNCH STATE OF WASHINGTON

CHESHIRE HOUSE

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MERCER ISLAND, WA 98040

REVISIONS

Permit Set

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

Local Site Plan 1:96

Sheet Number:
A1.1

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

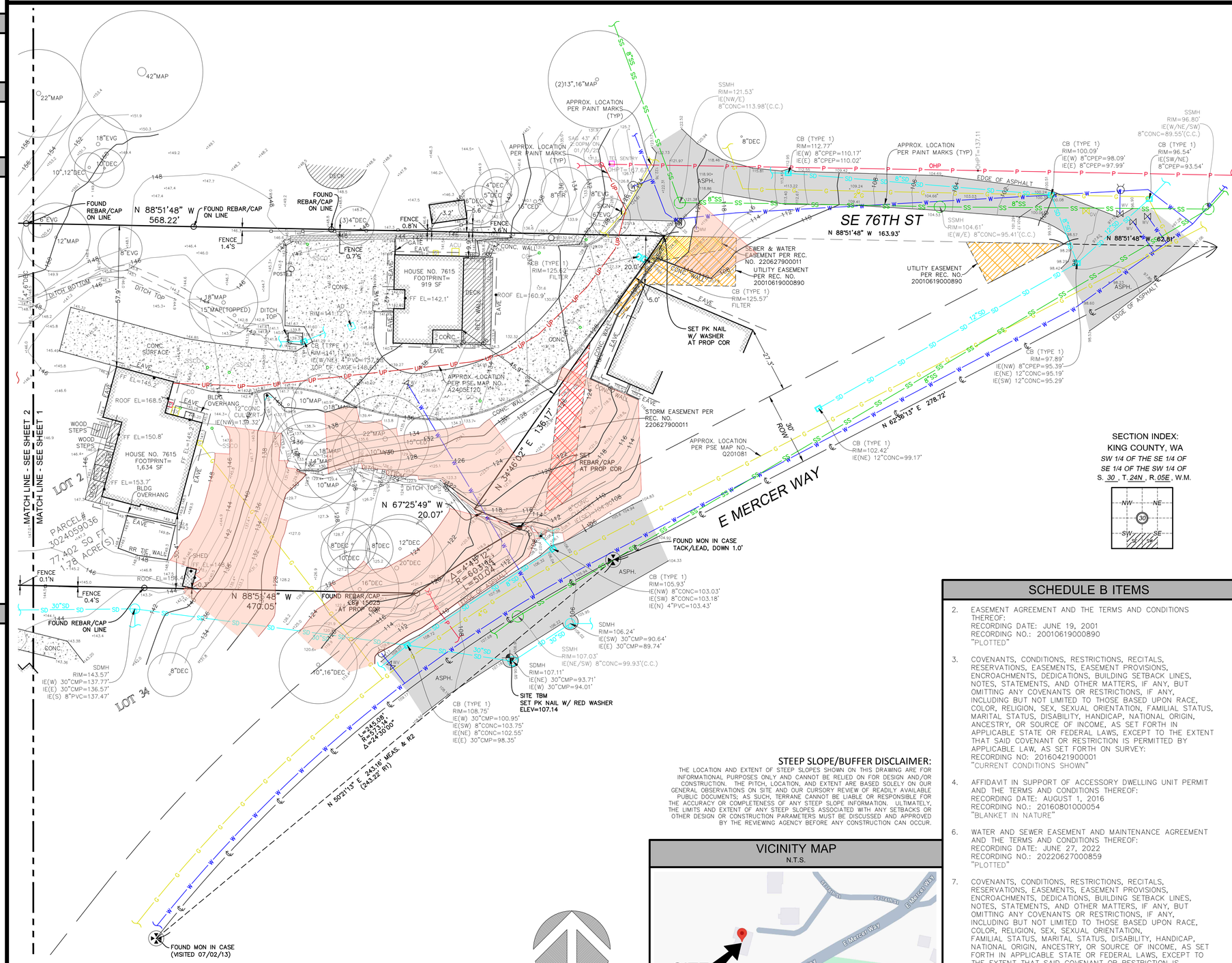
SITE TEMP. BENCHMARK
DESCRIPTION: PK NAIL W/ RED WASHER
LOCATION: 26.5'S & 38.2'E OF THE SE PROP COR
ELEVATION: 107.14'

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.
6. 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)	WM	WATER METER	
FENCE LINE (WOOD)	WV	WATER VALVE	
IRON PIPE (FOUND)	IP	WATER LINE	
MONUMENT (IN CASE, FOUND)	ACU	AIR CONDITION UNIT	
PROPERTY LINE (SUBJECT)	AD	AREA DRAIN	
NAIL AS NOTED	AF	AUDITOR'S FILE	
REBAR & CAP (SET)	AWN	AWNING	
REBAR AS NOTED (FOUND)	BLDG	BUILDING	
RETAINING WALL	C.C.	CENTER CHANNEL	
RIGHT–OF–WAY LINES	CALC'D	CALCULATED	
BUILDING	CB	CATCH BASIN	
BOLLARD	CO	CLEANOUT	
POST	COL	COLUMN	
SIGN (AS NOTED)	CONC	CONCRETE	
TREE (AS NOTED)	COR	CORNER	
DITCH (FLOWLINE)	DEC	DECIDUOUS	
ASPHALT SURFACE	ELEV	ELEVATION	
CONCRETE SURFACE	EVG	EVERGREEN	
DECK	FF	FINISH FLOOR	
GRAVEL SURFACE	G	GAS	
ROCKERY	LS#	LAND SURVEYOR NUMBER	
STEEP SLOPE AREA	MEAS	MEASURED	
GAS METER	MON	MONUMENT	
GAS VALVE	OHP	OVERHEAD POWER	
GAS LINE	PROP	PROPERTY	
GUY ANCHOR	(R)	RECORD DATA	
POWER HAND HOLE	ROS	RECORD OF SURVEY	
POWER METER	ROW	RIGHT OF WAY	
POWER POLE	SD	SERVICE DRAIN	
POWER POLE W/ LIGHT	SDMH	SERVICE DRAIN MANHOLE	
POWER (OVERHEAD)	SQ FT	SQUARE FEET	
POWER (UNDERGROUND)	SSMH	SANITARY SEWER MANHOLE	
AREA DRAIN	SF	SQUARE FEET	
CULVERT PIPE			
INLET (TYPE 1)		GAS EASEMENT PER REC. NO. 619009890	
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.

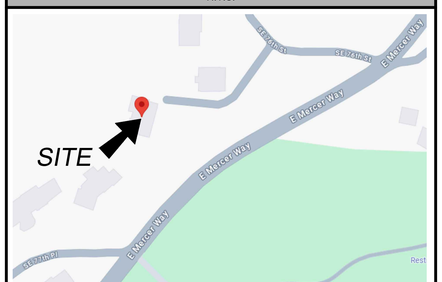
R2. CITY OF MERCER ISLAND SHORT PLAT NO. SUB 20–002, VOL. 468, PGS. 128–130, RECORDS OF KING COUNTY, WASHINGTON.

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.

VICINITY MAP

N.T.S.



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"

SECTION INDEX:
KING COUNTY, WA
SW 1/4 OF THE SE 1/4 OF SE 1/4 OF THE SW 1/4 OF
S. 30 , T. 24N , R. 05E , W.M.

We are the measure | terrane.net

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 3024059036

7615 E MERCER WAY
7615 EAST MERCERY WAY
MERCER ISLAND, WA 98040

GOODMAN MILLER JEREMIAH — STATE OF WASHINGTON — LAND SURVEYOR — 21 — REGISTERED PROFESSIONAL
1/27/25

TERRANE
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Bellevue, WA 98004
p: 425-458-4488 | e: info@terrane.net

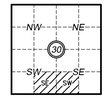
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CHECKED BY:	CAS
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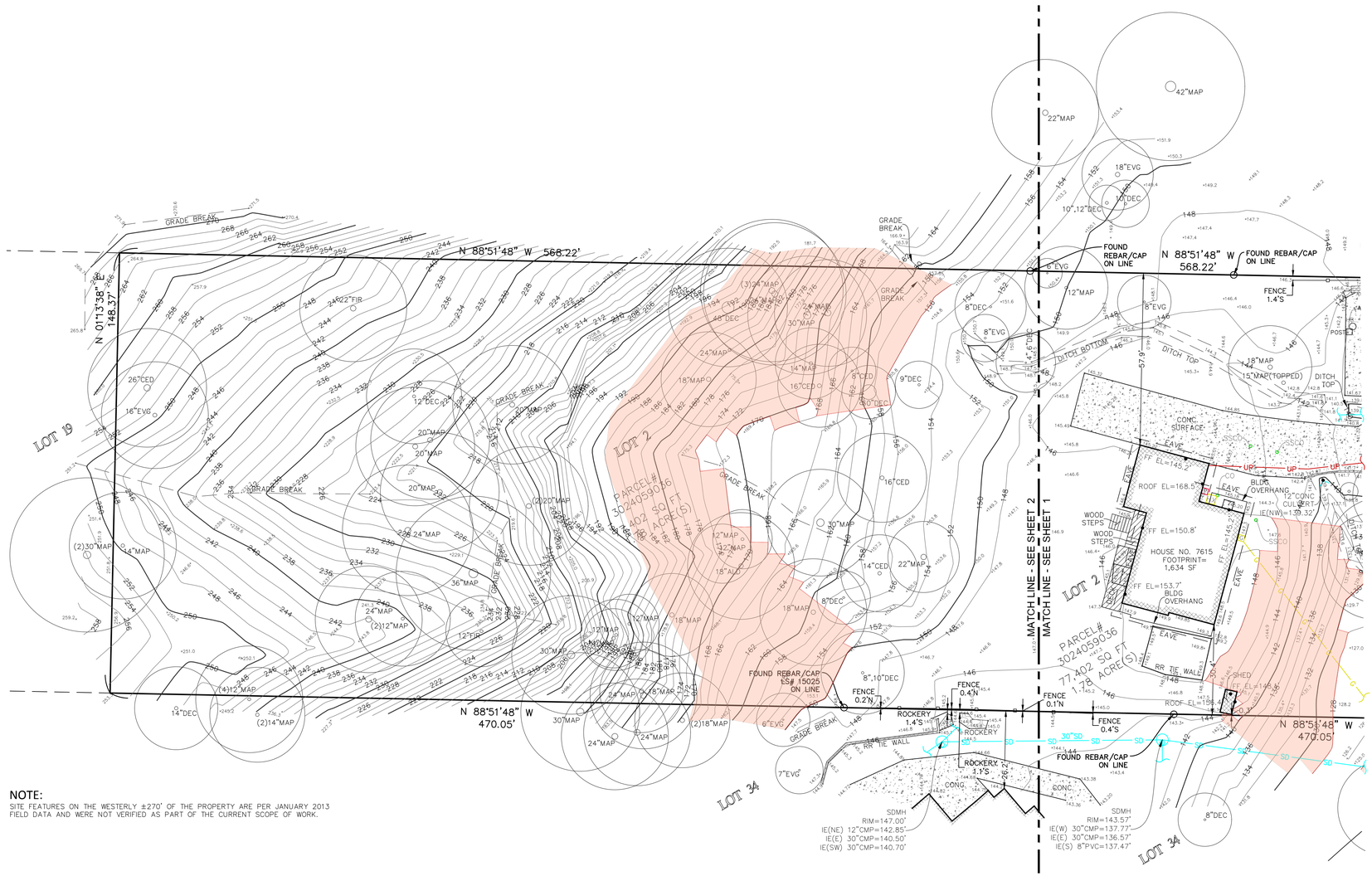
REVISION HISTORY

SHEET NUMBER
1 OF 2

TOPOGRAPHIC & BOUNDARY SURVEY

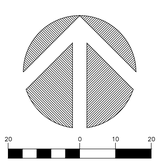
SECTION INDEX:
KING COUNTY, WA
SW 1/4 OF THE SE 1/4 OF
SE 1/4 OF THE SW 1/4 OF
S. 30 , T. 24N , R. 05E , W.M.





NOTE:
SITE FEATURES ON THE WESTERLY ±270' OF THE PROPERTY ARE PER JANUARY 2013 FIELD DATA AND WERE NOT VERIFIED AS PART OF THE CURRENT SCOPE OF WORK.

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.



(IN FEET)
1 INCH = 20 FT.

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TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 3024059036

7615 E MERCER WAY

7615 EAST MERCERY WAY
MERCER ISLAND, WA 98040

GOODMAN MILLER — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON — 17705 — 1/27/25

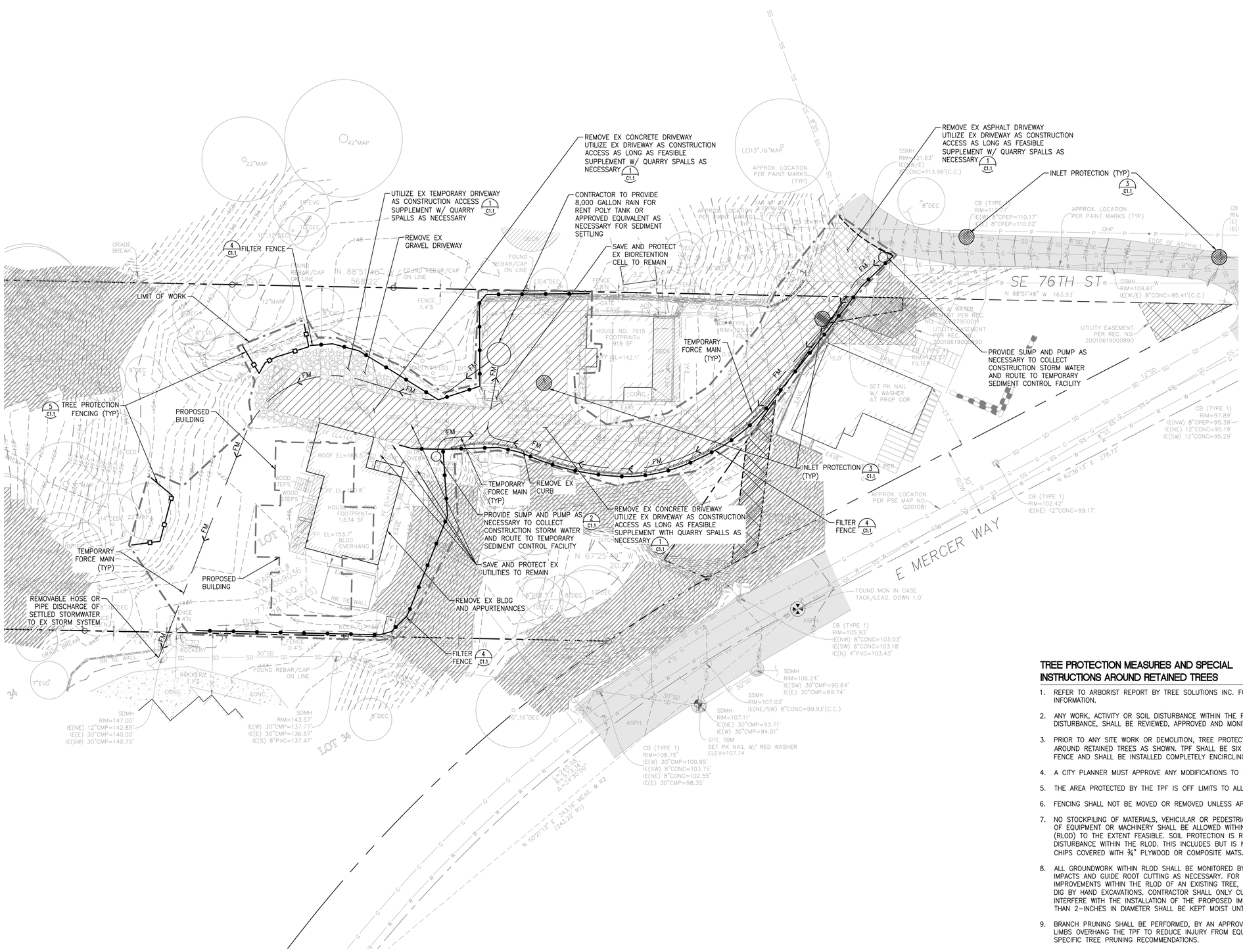
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Bellevue, WA 98004
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DATE:	01/27/25
DRAFTED BY:	MEB
CHECKED BY:	CAS
SCALE:	1"= 20'

REVISION HISTORY

SHEET NUMBER
2 OF 2

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



LEGEND

- PROPERTY LINE
- EX CONTOUR (INDEX)
- EX CONTOUR
- EX BUILDING
- PROPOSED BUILDING OUTLINE
- BUILDING/STRUCTURE REMOVAL
- SAWCUT LINE
- CONCRETE REMOVAL
- SAWCUT LINE
- ASPHALT REMOVAL
- STABILIZED CONSTRUCTION ENTRANCE
- FILTER FENCE
- EX TREE TO REMAIN
- TREE PROTECTION
- INLET PROTECTION
- LIMITS OF WORK
- TEMP FORCE MAIN

TREE PROTECTION MEASURES AND SPECIAL INSTRUCTIONS AROUND RETAINED TREES

1. REFER TO ARBORIST REPORT BY TREE SOLUTIONS INC. FOR TREE PROTECTION AND MANAGEMENT INFORMATION.
2. ANY WORK, ACTIVITY OR SOIL DISTURBANCE WITHIN THE PROTECTION FENCING, OR LIMIT OF DISTURBANCE, SHALL BE REVIEWED, APPROVED AND MONITORED BY THE PROJECT ARBORIST.
3. PRIOR TO ANY SITE WORK OR DEMOLITION, TREE PROTECTION FENCING (TPF) SHALL BE ERECTED AROUND RETAINED TREES AS SHOWN. TPF SHALL BE SIX (6) FOOT TEMPORARY CHAIN-LINK FENCE AND SHALL BE INSTALLED COMPLETELY ENCIRCLING THE RETAINED TREES.
4. A CITY PLANNER MUST APPROVE ANY MODIFICATIONS TO THE FENCING MATERIAL AND LOCATION.
5. THE AREA PROTECTED BY THE TPF IS OFF LIMITS TO ALL CONSTRUCTION RELATED ACTIVITY.
6. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY A CITY PLANNER.
7. NO STOCKPILING OF MATERIALS, VEHICULAR OR PEDESTRIAN TRAFFIC, MATERIAL STORAGE OR USE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN RECOMMENDED LIMIT OF DISTURBANCE (RLOD) TO THE EXTENT FEASIBLE. SOIL PROTECTION IS REQUIRED FOR CONSTRUCTION DISTURBANCE WITHIN THE RLOD. THIS INCLUDES BUT IS NOT LIMITED TO 6-INCHES OF WOOD CHIPS COVERED WITH ¾" PLYWOOD OR COMPOSITE MATS.
8. ALL GROUNDWORK WITHIN RLOD SHALL BE MONITORED BY PROJECT ARBORIST TO ASSESS ROOT IMPACTS AND GUIDE ROOT CUTTING AS NECESSARY. FOR ANY UTILITY TRENCHES OR OTHER IMPROVEMENTS WITHIN THE RLOD OF AN EXISTING TREE, THE CONTRACTOR SHALL AIR SPADE OR DIG BY HAND EXCAVATIONS. CONTRACTOR SHALL ONLY CUT REQ'D ROOTS LESS THAN 2"ø THAT INTERFERE WITH THE INSTALLATION OF THE PROPOSED IMPROVEMENTS. EXPOSED ROOTS GREATER THAN 2-INCHES IN DIAMETER SHALL BE KEPT MOIST UNTIL BACKFILLED.
9. BRANCH PRUNING SHALL BE PERFORMED, BY AN APPROVED ISA CERTIFIED ARBORIST, WHERE LIMBS OVERHANG THE TPF TO REDUCE INJURY FROM EQUIPMENT. SEE ARBORIST REPORT FOR SPECIFIC TREE PRUNING RECOMMENDATIONS.

Call 3 Working Days Before You DIG!

1-800-424-5555

LPD engineering pllc
1932 First Ave, Suite 500, Seattle, WA 98101
p. 206.725.1211
f. 206.973.5344
www.lpdengineering.com

Stamp

LAURIE J. PEARR — STATE OF WASHINGTON — 30186 — REGISTERED PROFESSIONAL ENGINEER

3/7/2025

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No.	Revisions	Date

0 1" 2"
Two Inches At Full Scale
If Not Scale Accordingly

Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY

City of Mercer Island, Washington

PERMIT SET

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

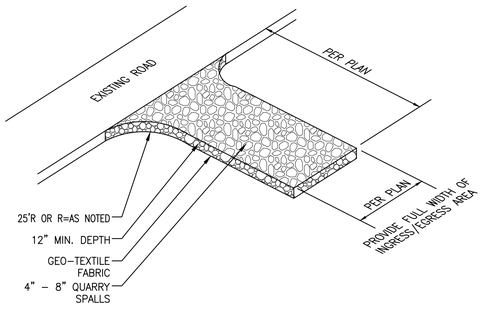
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TESC AND DEMOLITION PLAN

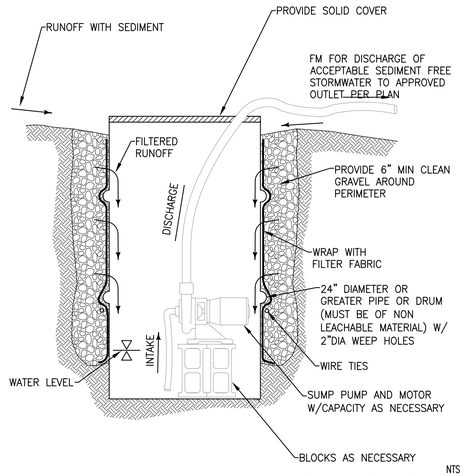
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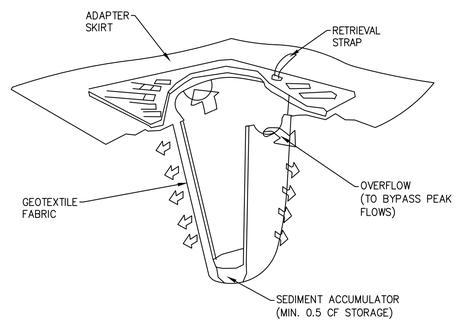
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NTS
CONSTRUCTION ENTRANCE 1



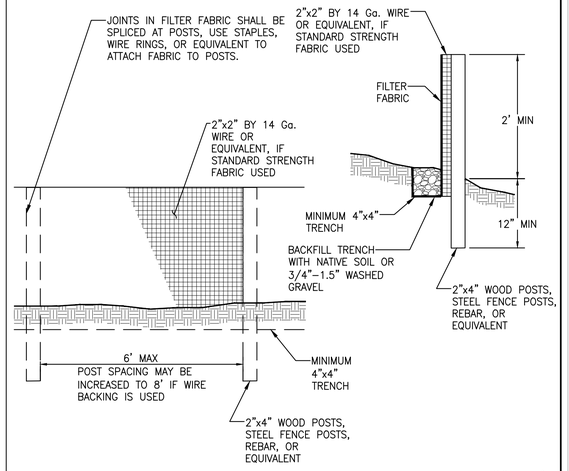
NTS
MOVEABLE SUMP & PUMP 2



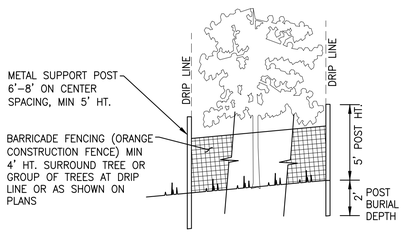
SCHEMATIC DETAIL

PROVIDE "STREAMGUARD SEDIMENT CATCH BASIN INSERT" OR APPROVED EQUAL
MANUFACTURER INFORMATION:
BOWHEAD ENVIRONMENTAL & SAFETY
P.O. BOX 375
PRESTON, WA 98050
(800) 909-3677
WWW.SHOPBOWHEAD.COM

NTS
INLET PROTECTION 3



NTS
FILTER FENCE 4



NOTES:

1. A 4 FOOT HIGH TEMPORARY FENCE MUST BE PLACED AT THE DRIP LINE OF TREES PRIOR TO THE COMMENCEMENT OF CLEARING OR EARTHWORK. NOTIFY THE CLEARING AND GRADING INSPECTOR TO GET BOTH THE INSPECTION AND WRITTEN APPROVAL OF FLAGGED TREES AND TEMPORARY PROTECTION FENCING AROUND TREES TO BE SAVED PER THE APPROVED CLEARING AND GRADING PLAN.
2. NO STOCKPILING OF MATERIAL AND NO VEHICULAR TRAFFIC ARE ALLOWED WITHIN THE LIMITS OF THE DRIPLINE, THE TEMPORARY FENCING, UNLESS APPROVED BY THE ARBORIST. FILLING, EXCAVATION, AND CLEARING MUST BE ACCOMPLISHED BY HAND METHODS ONLY UNLESS APPROVED BY ARBORIST.
3. ROOTS OF TREES TO BE SAVED WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE TREATED IN THE FOLLOWING WAY: FOR DAMAGED ROOTS OVER 1" IN DIAMETER, MAKE A CLEAN, STRAIGHT CUT TO REMOVE THE DAMAGED PORTION OF THE ROOT ALL EXPOSED ROOTS WILL BE TEMPORARILY COVERED WITH DAMP BURLAP OR WOOD SHAVINGS TO PREVENT DRYING AND COVERED WITH EARTH AS SOON AS POSSIBLE.

NTS
TREE PROTECTION 5

NTS
NOT USED 6

NTS
NOT USED 9

NTS
NOT USED 10

GENERAL NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
3. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASIN/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITIES.
5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.425.5555.
6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED.
7. EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE.
8. PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIO NGINEERED SWALES.
9. CONSTRUCTION ACCESS TO SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.
10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
11. ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.
12. INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.
13. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
14. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
17. SILT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.
18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.
19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
20. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.
21. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.
22. THE LIMITS AND EXTENTS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZING THE PROJECT.
23. TREE PROTECTION INSPECTION REQUIRED BEFORE ANY WORK BEGINS, CALL 206-275-7713.

NTS
GENERAL NOTES 11

EROSION CONTROL NOTES

1. THE IMPLEMENTATION OF THESE EROSION SEDIMENTATION CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO INSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS, AND MUST BE COMPLETED PRIOR TO ALL OTHER CONSTRUCTION.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES), AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THEIR ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.
4. THE ESC FACILITIES SHALL BE INSPECTED DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT AND AT THE END OF EVERY RAINFALL BY THE PERMIT HOLDER/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMP. SILTATION PONDS AND ALL TEMP. SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED.
5. ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF SEVEN (7) DAYS, SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G. SEEDING, MULCHING, NETTING, EROSION, BLANKETS, ETC.).
6. ANY AREAS NEEDING ESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
7. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT.
8. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO DOWNSTREAM SYSTEM.
9. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (E.G. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
10. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF THREE INCHES.
11. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF MERCER ISLAND STANDARDS AND SPECIFICATIONS.
12. EROSION/SEDIMENTATION CONTROL FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS IN DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
13. A COPY OF THE APPROVED EROSION CONTROL PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
14. TEMPORARY EROSION/SEDIMENTATION CONTROLS SHALL BE INSTALLED & OPERATING PRIOR TO ANY GRADING OR LAND CLEARING.
15. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
16. ALL CUT AND FILL SLOPES 5:1 (5 FEET HORIZONTAL TO 1 FOOT VERTICAL) OR STEEPER THAT WILL BE LEFT EXPOSED FOR MORE THAN 7 DAYS SHALL BE PROTECTED BY JUTE MATTING, PLASTIC SHEETING, MULCH, OR OTHER APPROVED STABILIZATION METHOD AND PROVIDED WITH ADEQUATE RUNOFF CONVEYANCE TO INTERCEPT RUNOFF AND CONVEY IT TO AN APPROVED STORM DRAIN.
17. OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET, THE STREET SHALL BE CLEANED. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION VEHICLE ENTRANCE AND SHALL BE CLEANED OF MUD PRIOR TO EXITING ONTO THE STREET. SILT SHALL BE CLEANED FROM ALL CATCH BASINS WHEN THE BOTTOM HALF BECOMES FILLED WITH SILT.
18. ANY CATCH BASIN COLLECTING WATER FROM THE SITE, WHETHER THEY ARE ON OR OFF OF THE SITE, SHALL HAVE THEIR GRATES COVERED WITH FILTER FABRIC DURING CONSTRUCTION.
19. IF ANY PORTION OF THE EROSION/SEDIMENTATION CONTROL ELEMENTS ARE DAMAGED OR NOT FUNCTIONING, OR IF THE CLEARING LIMIT BOUNDARY BECOMES NON-DEFINED, IT SHALL BE REPAIRED IMMEDIATELY.

NTS
EROSION CONTROL NOTES 12

PERMIT SET

LPD engineering pllc
1932 First Ave, Suite 500, Seattle, WA 98101
p. 206.725.1211
f. 206.973.5344
www.lpdengineering.com

Stamp

LAURIE J. PEARR
STATE OF WASHINGTON
30186
REGISTERED
PROFESSIONAL ENGINEER
3/7/2025

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No.	Revisions	Date

0 1" 2"
Two Inches At Full Scale
If Not Scale Accordingly

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

Description

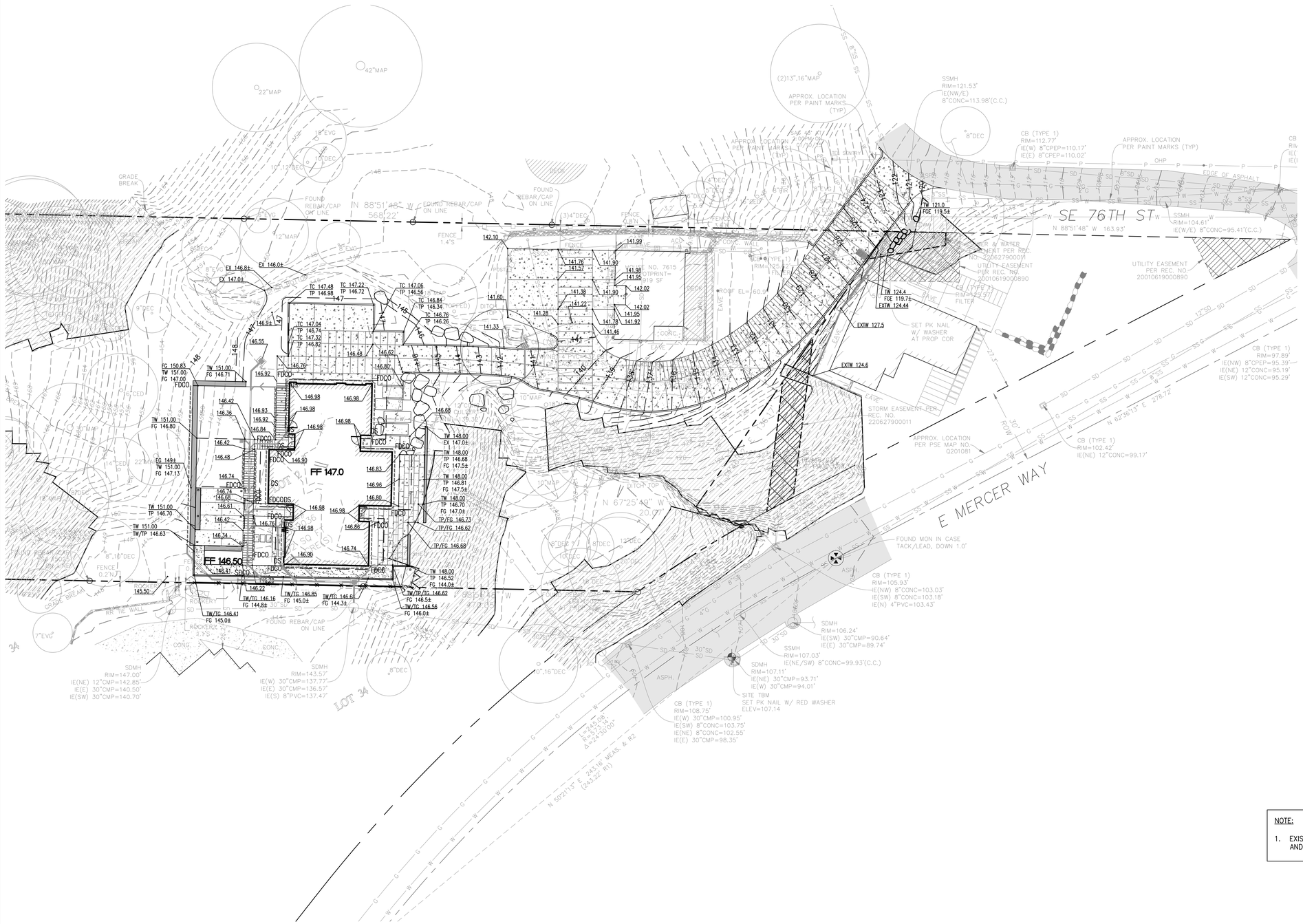
TESC AND DEMOLITION DETAILS AND NOTES

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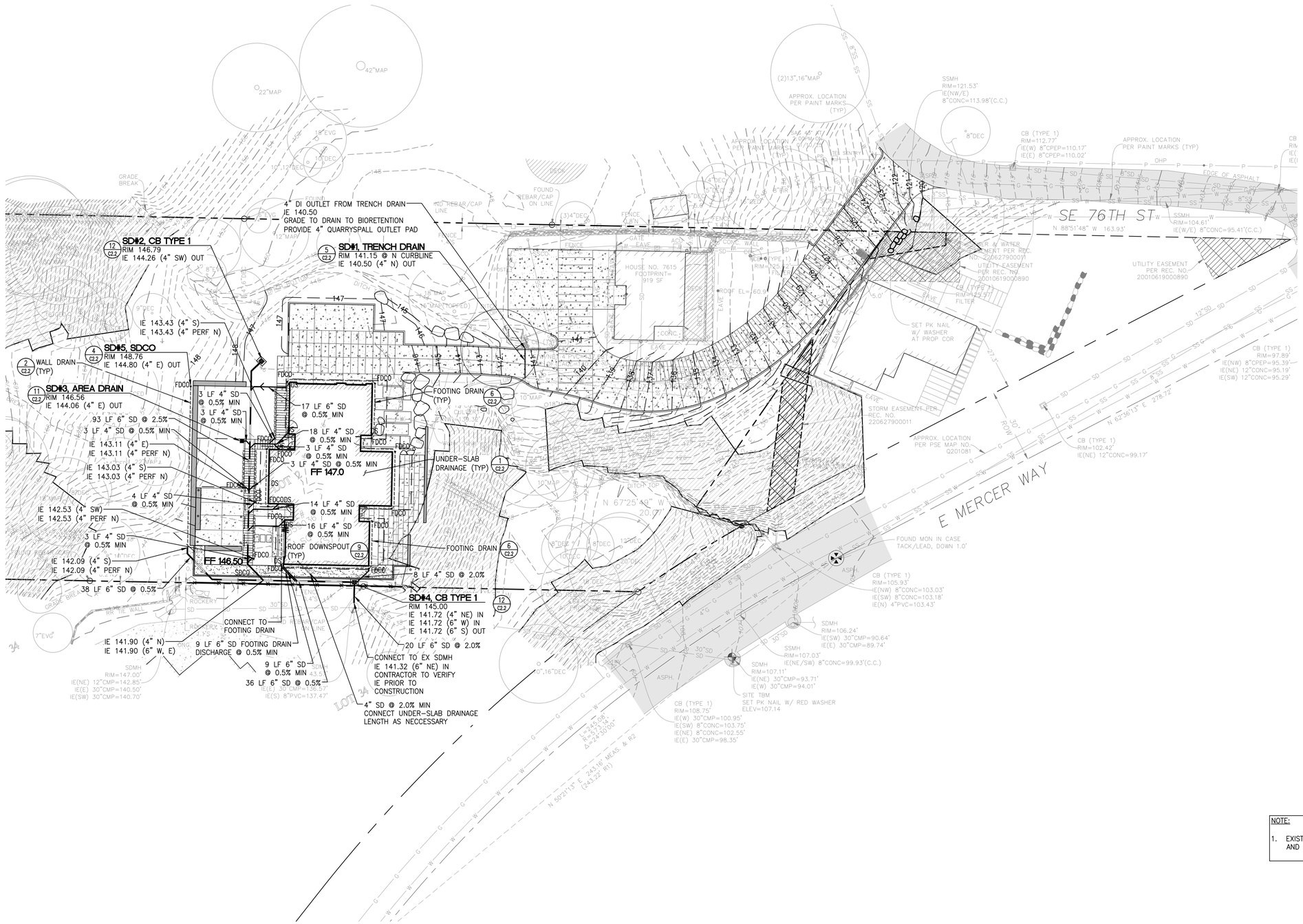
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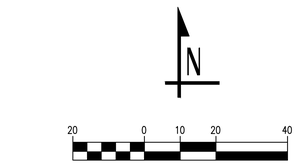
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Section 30, Township 24N, range 5E W.M.


SE 76TH ST
N 88°51'48" W 163.93'
FOUND REBAR/CAP ON LINE
IN 88°51'48" W 568.22'
E MERCER WAY
N 67°25'49" W 20.7'
N 62°36'13" E 276.72'
N 50°21'13" E 243.16' MEAS. & R2 (243.22' R1)
LOT 34
FF 147.0
FF 146.50
APPROX. LOCATION PER PAINT MARKS (TYP)
SSMH RIM=121.53' IE(NW/E) 8"CONC=113.98'(C.C.)
CB (TYPE 1) RIM=112.77' IE(W) 8"CPEP=110.17' IE(E) 8"CPEP=110.02'
SSMH RIM=104.61' IE(W/E) 8"CONC=95.41'(C.C.)
CB (TYPE 1) RIM=97.89' IE(NW) 8"CPEP=95.39' IE(NE) 12"CONC=95.19' IE(SW) 12"CONC=95.29'
CB (TYPE 1) RIM=102.42' IE(NE) 12"CONC=99.17'
FOUND MON IN CASE TACK/LEAD, DOWN 1.0'
CB (TYPE 1) RIM=105.93' IE(NW) 8"CONC=103.03' IE(SW) 8"CONC=103.18' IE(N) 4"PVC=103.43'
SDMH RIM=106.24' IE(SW) 30"CMP=90.64' IE(E) 30"CMP=89.74'
SSMH RIM=107.03' IE(NE/SW) 8"CONC=99.93'(C.C.)
SDMH RIM=107.11' IE(NE) 30"CMP=93.71' IE(W) 30"CMP=94.01'
SITE TBM SET PK NAIL W/ RED WASHER ELEV=107.14
CB (TYPE 1) RIM=108.75' IE(W) 30"CMP=100.95' IE(SW) 8"CONC=103.75' IE(NE) 8"CONC=102.55' IE(E) 30"CMP=98.35'
SDMH RIM=147.00' IE(NE) 12"CMP=142.85' IE(E) 30"CMP=140.50' IE(SW) 30"CMP=140.70'
SDMH RIM=143.57' IE(W) 30"CMP=137.77' IE(E) 30"CMP=136.57' IE(S) 8"PVC=137.47'
CB (TYPE 1) RIM=125.77' FINISH GRATE
SET PK NAIL W/ WASHER AT PROP COR
APPROX. LOCATION PER PSE MAP NO. Q201081
STORM EASEMENT PER REC. NO. 220627900011
UTILITY EASEMENT PER REC. NO. 200106190008900
UTILITY EASEMENT PER REC. NO. 200106190008900
WATER EASEMENT PER REC. NO. 200627900011
SEE SHEET C2.1 FOR FOOTPRINT=2,919 SF
ROOF EL=60.9
EXTW 127.5
EXTW 124.6
TW 121.0 FGE 119.54
TW 124.4 FGE 119.74 EXTW 124.44
STORM EASEMENT PER REC. NO. 220627900011
APPROX. LOCATION PER PSE MAP NO. Q201081
DITCH TOP
DITCH BOTTOM
ROCKERY
RETAINING WALL
GRADE BREAK
FENCE 1.4'S
FENCE 1.2'S
FENCE 1.3'S
CONC.
ASPH.
EDGE OF ASPHALT
30' ROW
10" MAP
22" MAP
42" MAP
(2)13",16" MAP
(3)4" DEC
8" DEC
12" MAP
18" EVG
10",12" DEC
7" EVG
9" DEC
8",10" DEC
0",16" DEC
12" DEC
14" DEC
22" MAP
7" DEC
8" EVG
8" MAP
8" DEC
12" EVG
FOUND REBAR/CAP ON LINE
FOUND REBAR/CAP OK LINE
FOUND REBAR/CAP ON LINE
FOUND REBAR/CAP ON LINE
FOUND REBAR/CAP ON

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
- 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
- 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

NOTE:

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

Call 3 Working Days Before You DIG!

1-800-424-5555

PERMIT SET

LPD engineering pllc
1932 First Ave, Suite 500, Seattle, WA 98101
p. 206.725.1211
f. 206.973.5344
www.lpdengineering.com

Stamp

LAURIE J. PEARR — STATE OF WASHINGTON — 30186 — REGISTERED PROFESSIONAL ENGINEER
3/7/2025

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No.	Revisions	Date

0 1" 2"
Two Inches At Full Scale
If Not Scale Accordingly

Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY

City of Mercer Island, Washington

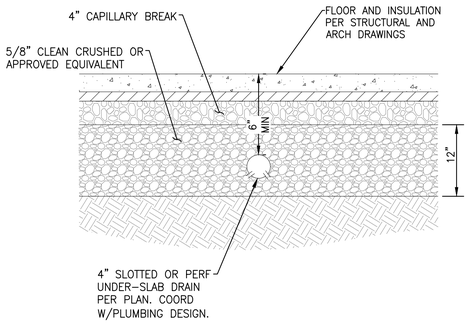
Project No. -
Issue Date MARCH 07, 2025
Scale As Noted
Designed ACW Checked LJP
Drawn SBR Approved LJP

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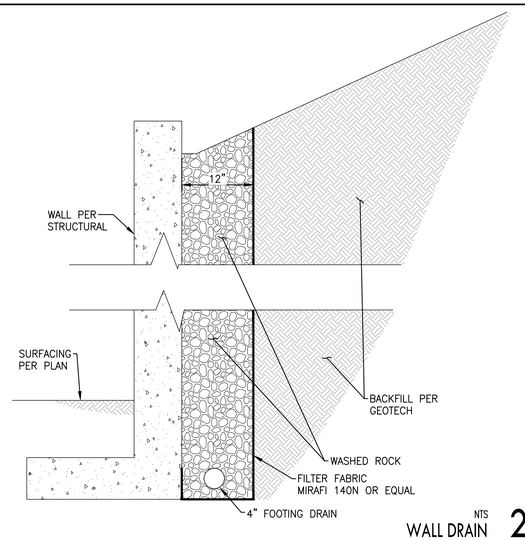
DRAINAGE PLAN

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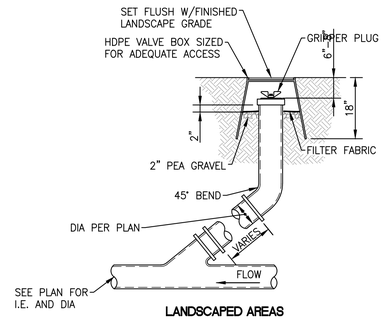
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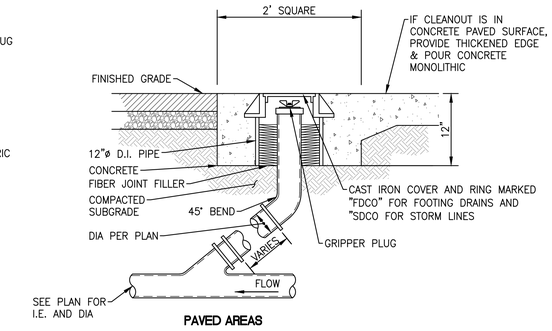
NTS
UNDER SLAB DRAINAGE 1



NTS
WALL DRAIN 2

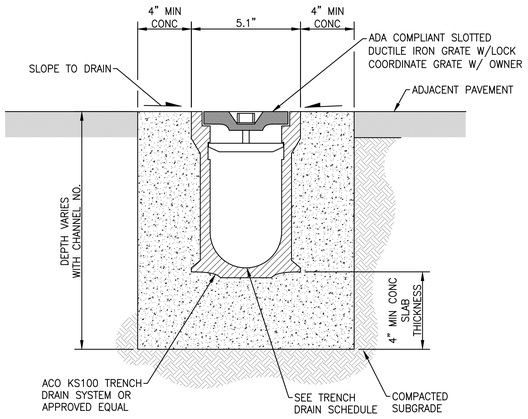


LANDSCAPED AREAS



PAVED AREAS

NTS
CLEANOUT 4

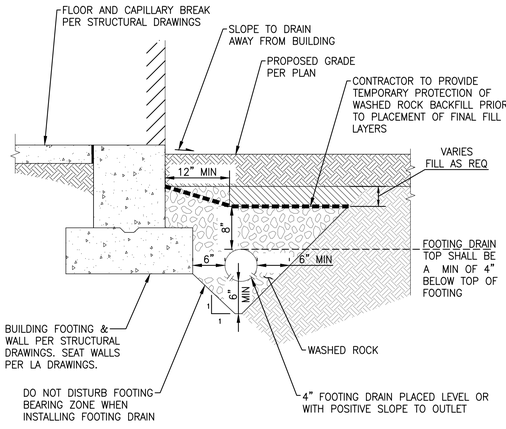


TRENCH DRAIN SCHEDULE

SD#1: K1-020 THROUGH K-0203 (NEUTRAL) CHANNELS SLOPE W/ PAVEMENT.

TRENCH NUMBERS LISTED ABOVE ARE PER ACO KS100 TRENCH DRAIN.

NTS
TRENCH DRAIN 5



NTS
FOOTING DRAIN 6

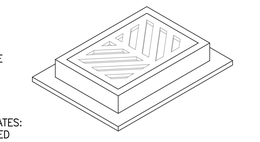
NOTES:

1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO M 199) & C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE WSDOT/APWA STANDARD SPECIFICATIONS.
2. AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.
3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
5. ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES, WITH MAX. DIA. OF 20". KNOCKOUTS MAY BE EITHER ROUND OR "D" SHAPE.
6. KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIA. PLUS CATCH BASIN WALL THICKNESS.
7. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
8. THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2"/FT.
9. CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-621D. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
10. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.
11. FOR CATCH BASINS IN PARKING LOTS REFER TO WSDOT STD PLAN B-5.60-01.
12. EDGE OF RISER OR BRICK SHALL NOT BE MORE THAN 2" FROM VERTICAL EDGE OF CATCH BASIN WALL.
13. CATCH BASIN INSTALLATION SHALL BE PER CONTRACT DOCUMENTS AND DETAILS.

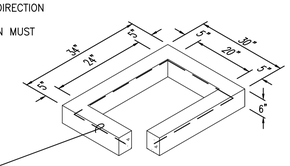
FRAME AND GRATE SEE APPLICABLE DWGS.

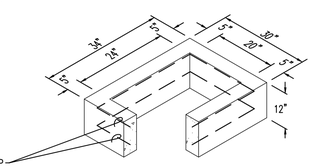
GRATES IN WALKWAYS AND PEDESTRIAN AREAS SHALL BE ACCESSIBLE INSTALL GRATE PER WSDOT STD PLAN B-30.15.00. SEE PLAN FOR ALTERNATES.

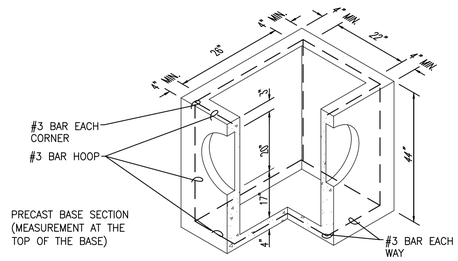
ADA REQUIREMENTS FOR GRATES: OPENINGS MUST NOT EXCEED 1/2" IN WIDTH IN THE DIRECTION OF TRAVEL. COEFFICIENT OF FRICTION MUST BE AT LEAST 0.6



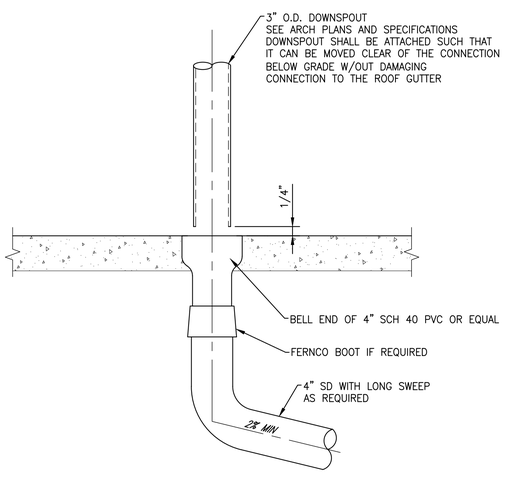
6" RISER SECTION





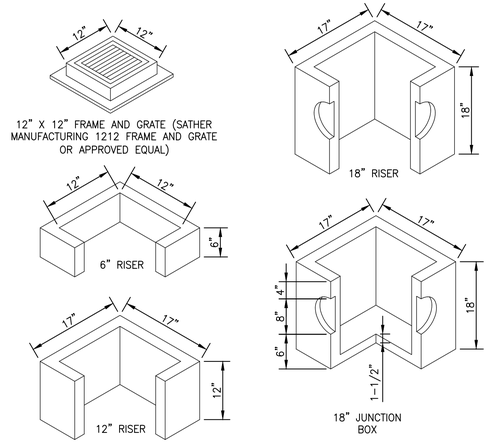


NTS
CATCH BASIN TYPE 1 12



NTS
RESIDENTIAL ROOF DOWNSPOUT 9

NTS
NOT USED 10



17" X 17" AREA DRAIN BY CUZ CONCRETE PRODUCTS OR EQUAL

NTS
AREA DRAIN 11

LPD
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engineering pllc www.lpdengineering.com

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No.	Revisions	Date

0 1" 2"
Two Inches At Full Scale
If Not Scale Accordingly

Project Name

CHESHIRE RESIDENCE
7615 E. MERCER WAY

City of Mercer Island, Washington

PERMIT SET

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

Description

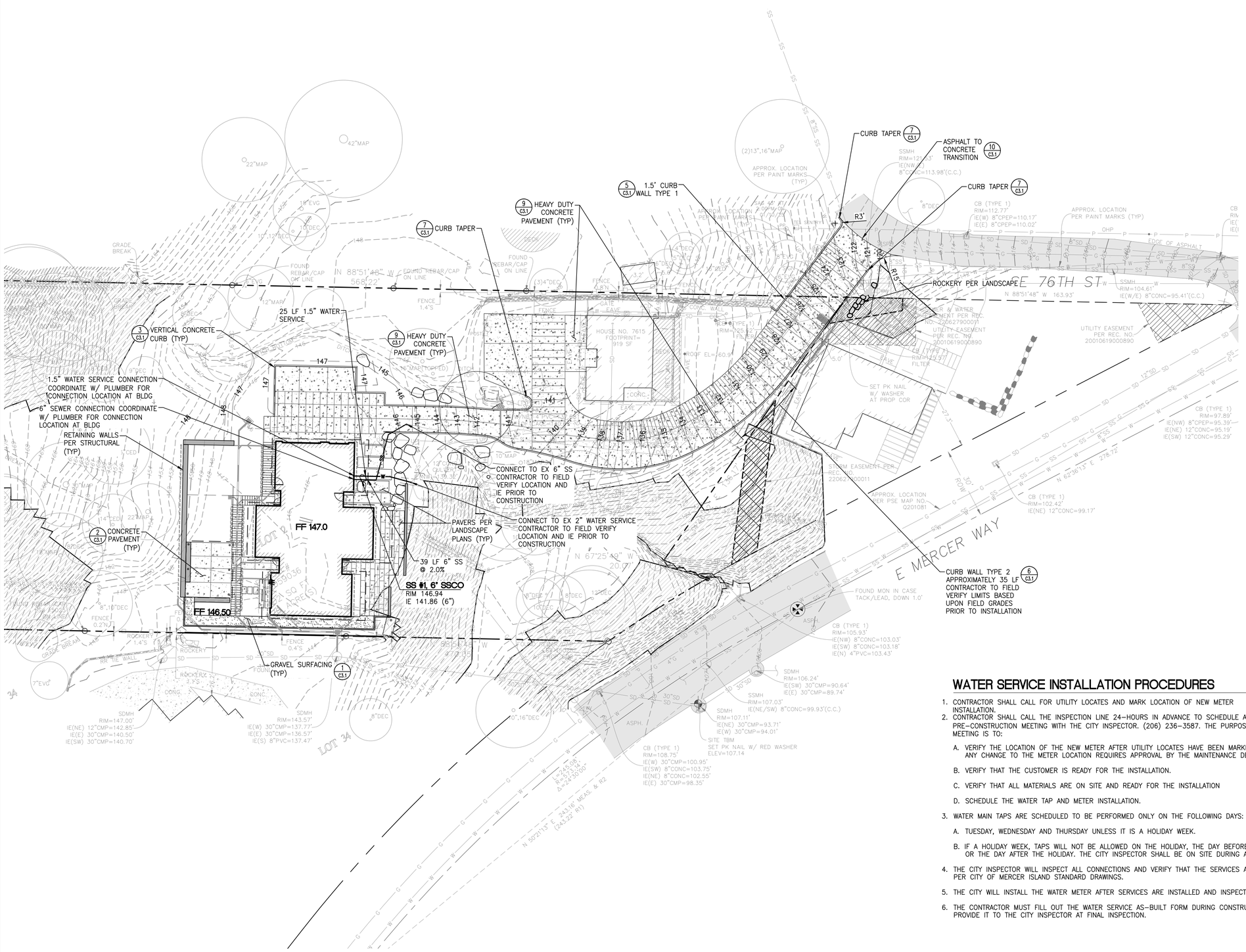
GRADING AND DRAINAGE DETAILS

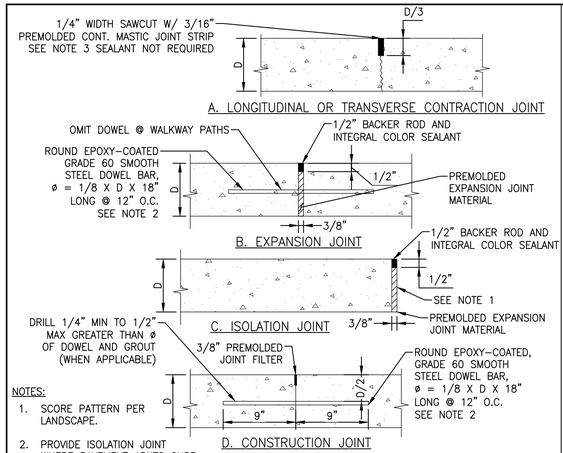
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C2.2

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

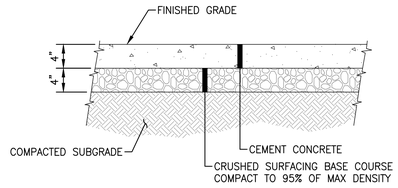

CURB TAPER 7/C3.1
ASPHALT TO CONCRETE TRANSITION 10/C3.1
CURB TAPER 7/C3.1
5/C3.1 1.5' CURB WALL TYPE 1
9/C3.1 HEAVY DUTY CONCRETE PAVEMENT (TYP)
7/C3.1 CURB TAPER
3/C3.1 VERTICAL CONCRETE CURB (TYP)
25 LF 1.5" WATER SERVICE
9/C3.1 HEAVY DUTY CONCRETE PAVEMENT (TYP)
1.5" WATER SERVICE CONNECTION COORDINATE W/ PLUMBER FOR CONNECTION LOCATION AT BLDG
6" SEWER CONNECTION COORDINATE W/ PLUMBER FOR CONNECTION LOCATION AT BLDG
RETAINING WALLS PER STRUCTURAL (TYP)
CONNECT TO EX 6" SS CONTRACTOR TO FIELD VERIFY LOCATION AND IE PRIOR TO CONSTRUCTION
PAVERS PER LANDSCAPE PLANS (TYP)
CONNECT TO EX 2" WATER SERVICE CONTRACTOR TO FIELD VERIFY LOCATION AND IE PRIOR TO CONSTRUCTION
2/C3.1 CONCRETE PAVEMENT (TYP)
FF 147.0
39 LF 6" SS @ 2.0%
SS #1, 6" SSCO
RIM 146.94
IE 141.86 (6")
FF 146.50
GRAVEL SURFACING (TYP) 1/C3.1
ROCKERY PER LANDSCAPE
CURB WALL TYPE 2 APPROXIMATELY 35 LF 6/C3.1 CONTRACTOR TO FIELD VERIFY LIMITS BASED UPON FIELD GRADES PRIOR TO INSTALLATION
HOUSE NO. 7615 FOOTPRINT= 919 SF
ROOF EL=60.9
SE 76TH ST
N 88°51'48" W 163.93'
E MERCER WAY
N 67°25'49" W 20.07'
N 62°36'13" E 278.72'
N 50°21'13" E 243.16' MEAS. & R2 (243.22' R1)
L=248.08'
R=573.00'
Δ=24°48'00"
S 88°51'48" E 568.22'
LOT 35
LOT 34
SET PK NAIL W/ WASHER AT PROP COR
SITE TBM SET PK NAIL W/ RED WASHER ELEV=107.14
STORM EASEMENT PER REC. NO. 20060300011
UTILITY EASEMENT PER REC. NO. 20010619000890
UTILITY EASEMENT PER REC. NO. 20062790001
FOUND MON IN CASE TACK/LEAD, DOWN 1.0'
APPROX. LOCATION PER PAINT MARKS (TYP)
APPROX. LOCATION PER PSE MAP NO. Q201081
SSMH RIM=124.13' IE(NW) 8"CONC=113.98'(C.C.)
SSMH RIM=104.61' IE(W/E) 8"CONC=95.41'(C.C.)
SSMH RIM=107.03' IE(NE/SW) 8"CONC=99.93'(C.C.)
CB (TYPE 1) RIM=112.77' IE(W) 8"CPEP=110.17' IE(E) 8"CPEP=110.02'
CB (TYPE 1) RIM=125.57' FILTER
CB (TYPE 1) RIM=97.89' IE(NW) 8"CPEP=95.39' IE(NE) 12"CONC=95.19' IE(SW) 12"CONC=95.29'
CB (TYPE 1) RIM=102.42' IE(NE) 12"CONC=99.17'
CB (TYPE 1) RIM=105.93' IE(NW) 8"CONC=103.03' IE(SW) 8"CONC=103.18' IE(N) 4"PVC=103.43'
CB (TYPE 1) RIM=108.75' IE(W) 30"CMP=100.95' IE(SW) 8"CONC=103.75' IE(NE) 8"CONC=102.55' IE(E) 30"CMP=98.35'
SDMH RIM=106.24' IE(SW) 30"CMP=90.64' IE(E) 30"CMP=89.74'
SDMH RIM=107.11' IE(NE) 30"CMP=93.71' IE(W) 30"CMP=94.01'
SDMH RIM=147.00' IE(NE) 12"CMP=142.85' IE(E) 30"CMP=140.50' IE(SW) 30"CMP=140.70'
SDMH RIM=143.57' IE(W) 30"CMP=137.77' IE(E) 30"CMP=136.57' IE(S) 8"PVC=137.47'
HOUSE NO. 7615 FOOTPRINT= 919 SF
FOUND REBAR/CAP ON LINE
FOUND REBAR/CAP ON LINE
FOUND REBAR/CAP OR LINE
IN 88°51'48" W 568.22'
GRADE BREAK
FENCE 1.4'S
FENCE 0.2'N
FENCE 0.4'S
ROCKERY 1.1'S
CONC. WALL
CONC.
ASPH.
SD
SS
W
G
OHP
8"SD
12"SD
10"DEC
8"DEC
12"DEC
22"MAP
42"MAP
(2)13",16"MAP
(3)4"DEC
7"EVG
18"EVG
14"DEC
22"MAP
10"MAP
(2)8"DEC
(3)8"DEC
(2)10"DEC
(2)12"DEC
(2)18"DEC
(2)22"DEC
(2)24"DEC
(2)30"DEC
(2)36"DEC
(2)42"DEC
(2)48"DEC
(2)54"DEC
(2)60"DEC
(2)72"DEC
(2)84"DEC
(2)96"DEC
(2)108"DEC
(2)120"DEC
(2)132"DEC
(2)144"DEC
(2)156"DEC
(2)168"DEC
(2)180"DEC
(2)192"DEC
(2)204"DEC
(2)216"DEC
(2)228"DEC
(2)240"DEC
(2)252"DEC
(2)264"DEC
(2)276"DEC
(2)288"DEC
(2)300"DEC
(2)312"DEC
(2)324"DEC
(2)336"DEC
(2)348"DEC
(2)360"DEC
(2)372"DEC
(2)384"DEC
(2)396"DEC
(2)408"DEC
(2)420"DEC
(2)432"DEC
(2)444"DEC
(2)456"DEC
(2)468"DEC
(2)480"DEC
(2)492"DEC
(2)504"DEC
(2)516"DEC
(2)528"DEC



NOTES:

1. SCORE PATTERN PER LANDSCAPE.
2. PROVIDE ISOLATION JOINT WHERE PAVEMENT ABUTS CURB, DRAINAGE STRUCTURE, ACCESS VAULTS, FOUNDATIONS, OR OTHER FIXED OBJECTS.
3. SET DOWEL BARS AT 90° FROM ALL POINTS OF THE FACE OF THE CONCRETE PAVEMENT PANELS.
4. TOOL JOINT WITH 3/8" RADIUS MINIMUM TO 1/2" RADIUS MAXIMUM MAY BE USED IN CONCRETE WALKWAYS.

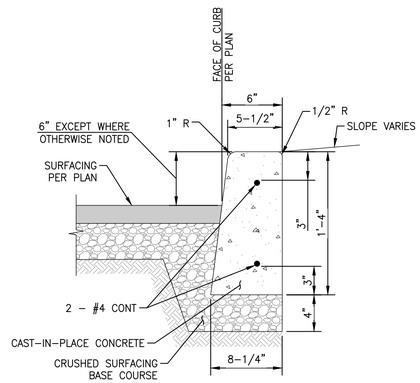
NTS CONCRETE JOINTS 1



NOTE:

1. MINIMUM CONCRETE 3000 P.S.I..
2. PLACE EXPANSION JOINTS @ 10' O.C. TYPICAL ON WALKWAY PATHS UNLESS OTHERWISE NOTED ON ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.
3. PLACE CONTRACTION JOINTS @ 5' O.C. TYPICAL ON WALKWAY PATHS UNLESS OTHERWISE NOTED ON ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.
4. IF WALKWAY PATH IS OVER 7' WIDE, PLACE LONGITUDINAL CONTRACTION JOINT. AT CENTER OF PATH UNLESS OTHERWISE NOTED IN ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.
5. WHERE MEETING OR MATCHING EXISTING WALKWAY PATH, START NEW WALKWAY AT EXISTING JOINT. MATCH EXISTING SCORING PATTERN & CONCRETE FINISH.
6. FOR PLAZA CONCRETE, PLACE CONTRACTION JOINTS AT A MAXIMUM SPACING OF 12' O.C. AND A MAXIMUM LENGTH TO WIDTH RATIO 1.25' UNLESS OTHERWISE NOTED ON ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.
7. COLOR AND FINISH PER ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.

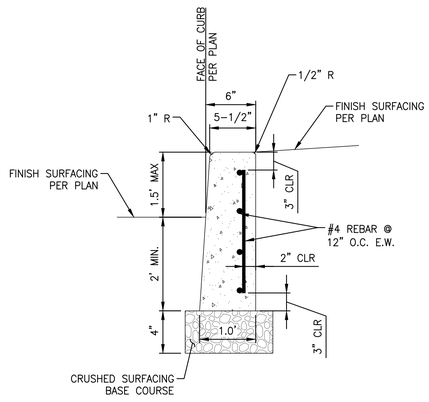
NTS CONCRETE PAVEMENT 2



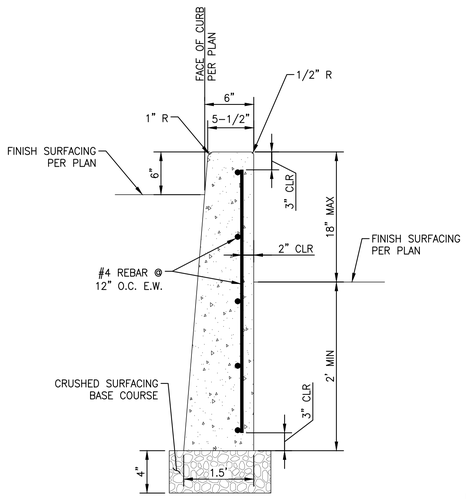
NTS VERTICAL CONCRETE CURB 3

CITY OF MERCER ISLAND UTILITY NOTES

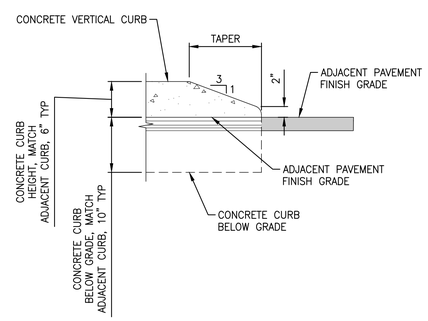
1. ALL STAGING AND STORAGE SHALL OCCUR ON SITE.
2. A REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) INSTALLATION SHALL BE REQUIRED AND INSTALLED 12 INCHES ABOVE GRADE BEHIND THE WATER METER FOR ALL NEW AND DEMO REBUILD SINGLE FAMILY, LAKEFRONT PROJECTS. THE RPBA SHALL BE INSPECTED AT TIME OF INSTALLATION AND AT BUILDING FINAL. (A HOT BOX TO PROTECT THE RPBA ASSEMBLY IS OPTIONAL.) A DOUBLE CHECK VALVE ASSEMBLY (DCVA) IS REQUIRED ON ALL FIRE SPRINKLER SYSTEMS.
3. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6'' OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
4. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT OF WAY. ALL MATERIAL MUST BE IMPORTED.
5. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
6. THE EXISTING WATER SERVICE MUST BE ABANDONED AT THE CITY WATER MAIN WHEN A NEW SERVICE IS INSTALLED. THE HOMEOWNER IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE ABANDONMENT OF THE EXISTING WATER SERVICE.
7. NO ADS FLEXIBLE PIPE SHALL BE ALLOWED.
8. SAND COLLARS ARE REQUIRED FOR GROUTING PVC PIPE TO CONCRETE STRUCTURES. THIS ALSO APPLIES TO ADS N-12 PIPES AND HDPE PIPES.
9. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THE PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
10. THE CONTRACTOR MUST POT HOLE ALL UTILITIES PRIOR TO MAKING CONNECTIONS TO VERIFY MATERIAL, DIAMETER, ALIGNMENTS, ETC. PRIOR TO MAKING CONNECTIONS, CONTRACTOR SHALL HAVE ALL NECESSARY PARTS, MATERIALS AND EQUIPMENT ON SITE. CONTACT SITE & UTILITIES INSPECTOR TO VERIFY.
11. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
12. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED.
13. INFORM THE MERCER ISLAND CITY SITE/UTILITY INSPECTOR AT 206.275-7714 OF THE ANTICIPATED START DATE OF IN-WATER WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. FIELD LOCATE THE SEWER MAIN (LAKELINE) UNDERLYING THE LAKEBED AND MARK CLEARLY PRIOR TO THE START OF CONSTRUCTION. CONTACT THE MERCER ISLAND SITE/UTILITY INSPECTOR AT (206)275-7714 FOR AVAILABLE INFORMATION ABOUT THE LAKELINE AND ASSISTANCE WHERE POSSIBLE WITH IDENTIFYING THE GENERAL LOCATION OF THE LAKELINE PRIOR TO CONSTRUCTION. GIS MAPPING MAY BE AVAILABLE BY CALLING (206)236-3471. THE APPLICANT SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SAID SEWER MAIN RESULTING FROM CONSTRUCTION.
15. ALL WATER LINES SHALL HAVE A MINIMUM 42" OF COVER FROM FINISHED GRADE.



NTS CONCRETE CURB WALL TYPE 1 5

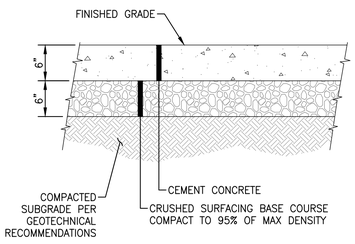


NTS CONCRETE CURB WALL TYPE 2 6



NTS CURB TAPER 7

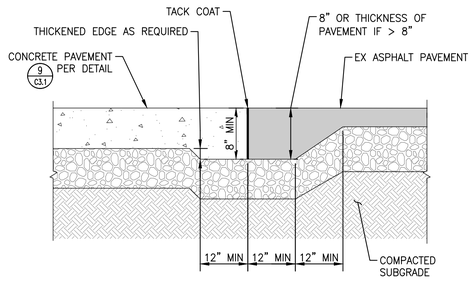
NTS CITY OF MERCER ISLAND UTILITY NOTES 8



NOTES:

1. MINIMUM 4,000 P.S.I., AIR ENTRAINED.
2. PROVIDE CONTRACTION JOINTS AT A MAXIMUM SPACING OF 18' O.C. AND A LENGTH TO WIDTH RATIO NO LONGER THAN 1.25, NO ACUTE ANGLES, UNLESS OTHERWISE NOTED.
3. WHERE MEETING AND MATCHING EXIST CONCRETE START NEW CONCRETE AT EXISTING JOINT. MATCH EXISTING SCORING PATTERN AND CONCRETE FINISH.
4. PROOF ROLL EXISTING SUBGRADE TO REMOVE AND SOFT SPOTS.
5. COLOR AND FINISH PER ARCHITECTURAL OR LANDSCAPE ARCHITECTURAL DRAWINGS.

NTS HEAVY DUTY CONCRETE 9



NTS ASPHALT TO CONCRETE TRANSITION 10

NTS NOT USED 11

NTS NOT USED 12

LPD engineering pllc
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f. 206.973.5344
www.lpdengineering.com

Stamp

LAURIE J. PEARR STATE OF WASHINGTON 30186 REGISTERED PROFESSIONAL ENGINEER
3/7/2025

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No.	Revisions	Date

0 1" 2"
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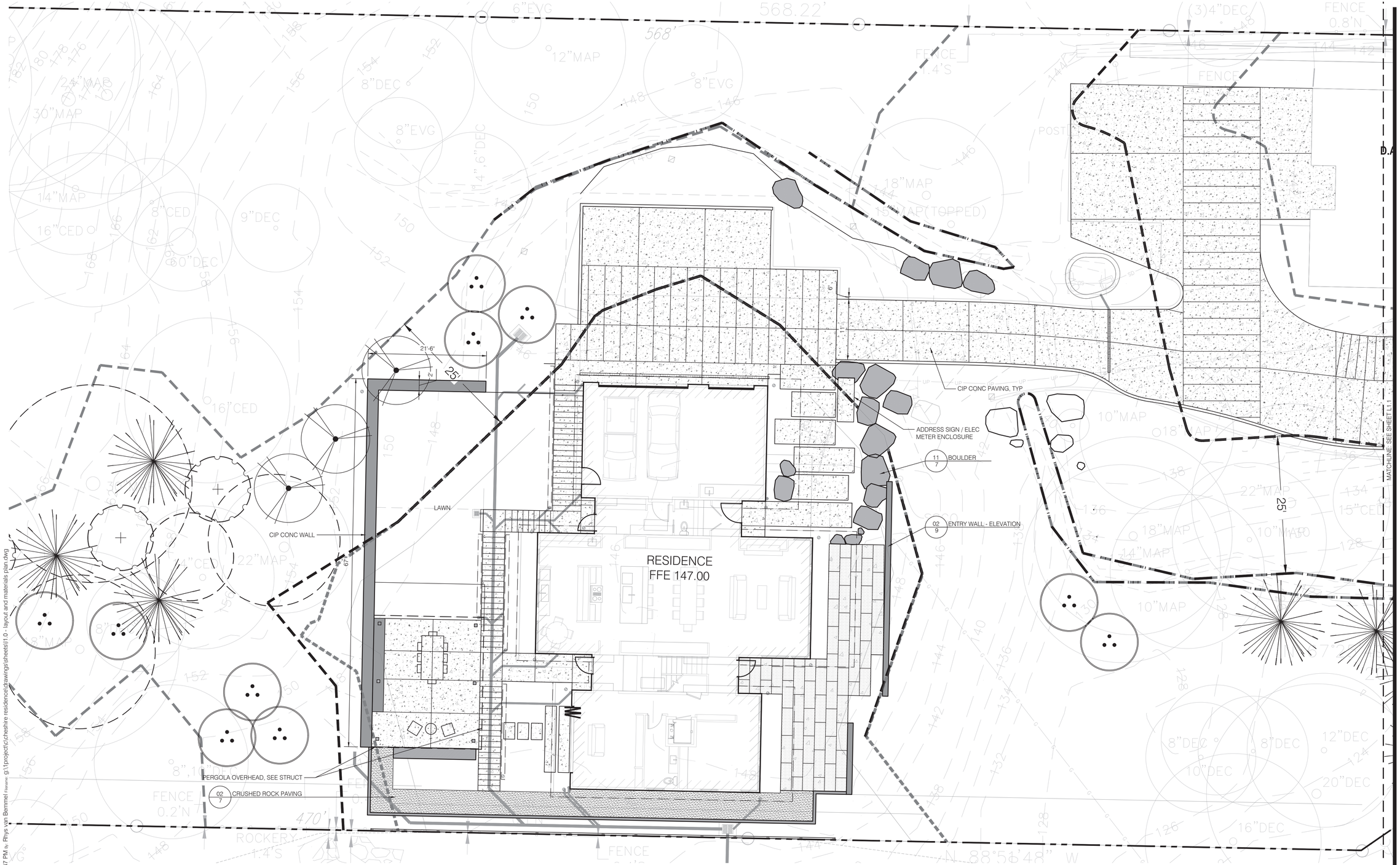
Description

UTILITIES AND PAVING DETAILS

Sheet

C3.1

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LEGEND:

- PROPERTY LINE
- WATERCOURSE
- WETLAND BOUNDARY
- REDUCED BUFFER
- 50' STANDARD BUFFER (PER SURVEY)
- EXPANSION JOINT
- COLD JOINT
- SAWCUT JOINT
- TRENCH DRAIN
- WALLS
- STRUCTURE OVERHANG, SEE ARCH

EXISTING TREES TO REMAIN

MITIGATION TREES PLANTED DURING PREVIOUS PROJECT

LARGE WOODY DEBRIS INSTALLED DURING PREVIOUS PROJECT

WEATHERED GRANITE BOULDERS

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 #CAO16-003

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

NORTH

PARTNERSHIP berger
1721 8th Ave N
Seattle, WA 98109
206 325 6877
bergerpartnership.com

Cheshire Residence

7615 E Mercer Way, Mercer Island, WA

STATE OF WASHINGTON · JASON K. HENRY · NO. 923 EXP. 4/9/2026 · LANDSCAPE ARCHITECT

SET TYPE:
BUILDING PERMIT SET

SET ISSUE DATE:
03.20.2025

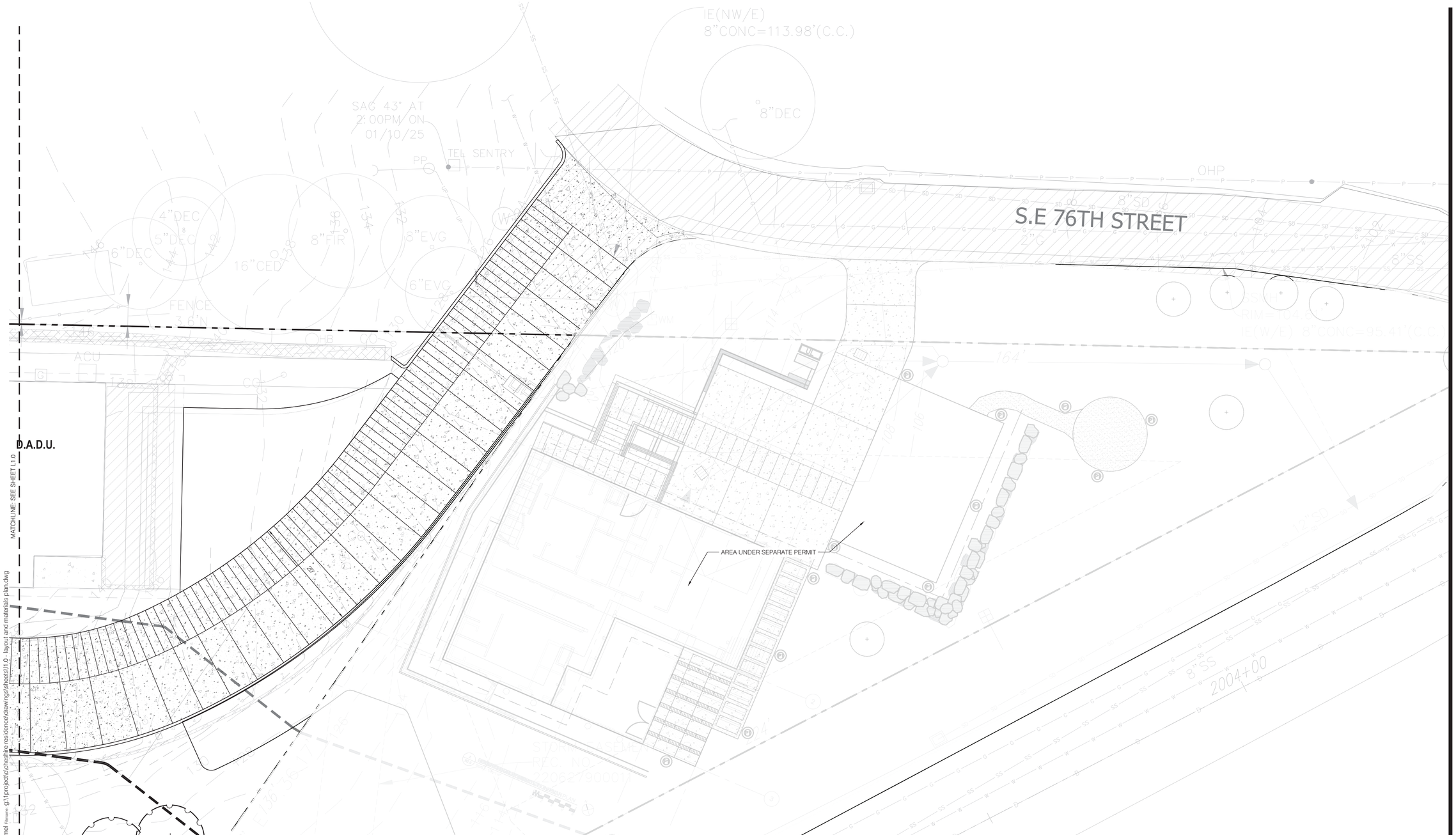
REVISIONS:
Value engineering 09.27.2017

DRAWN/CHECKED:
JM/JH

SHEET NAME:
LAYOUT AND MATERIALS PLAN

SHEET NUMBER:
L1.0

Berger Partnership Project Number XXXXXXXX.XX Printed 03.20.2025 2:47 PM By Rhys van Bemmel Filename: g:\1project\c\cheshire residence\drawings\sheets\l1.0 - layout and materials plan.dwg



LEGEND:

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- EXPANSION JOINT
- COLD JOINT
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- STRUCTURE OVERHANG, SEE ARCH

EXISTING TREES TO REMAIN

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1721 8th Ave N
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bergerpartnership.com

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7615 E Mercer Way, Mercer Island, WA

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JASON K. HENRY
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REVISIONS:
Value engineering **09.27.2017**

DRAWN/CHECKED:
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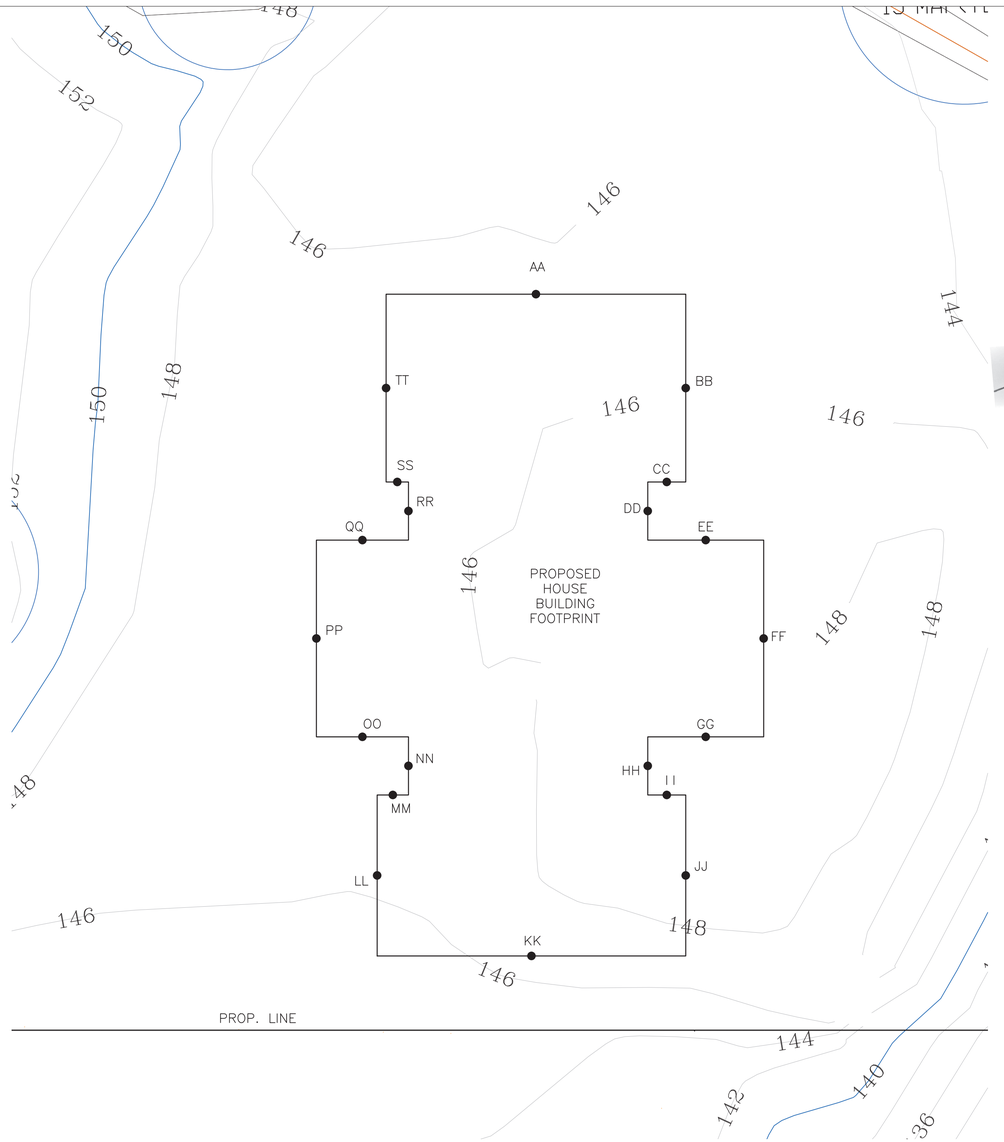
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LAYOUT AND MATERIALS PLAN

SHEET NUMBER:
L1.1

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

0" 1" 2" 3"
36



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
I I =	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

(145.9 X 33.5) + (145.9 X 21.0) + (146.9 X 4.3) + (147.0 X 6.5) + (147.3 X 13.0) + (148.8 X 22.0) + (149.8 X 13.0) + (150.1 X 6.5) + (150.3 X 4.3) + (150.1 X 18.0) + (146.5 X 34.5) + (145.8 X 18.0) + (147.0 X 3.5) + (147.2 X 6.5) + (147.0 X 10.3) + (147.0 X 22.0) + (147.0 X 10.3) + (147.0 X 6.5) + (147.0 X 2.5) + (147.3 X 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)

40826.81 / 277.2 = 147.3 ' AVERAGE BUILDING ELEVATION (A.B.E.)

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

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

N

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8060 REGISTERED ARCHITECT PATRICK D. LYNCH STATE OF WASHINGTON

CHESHIRE HOUSE

7615 E. MERCER WAY
MERCER ISLAND, WA 98040

REVISIONS

Permit Set

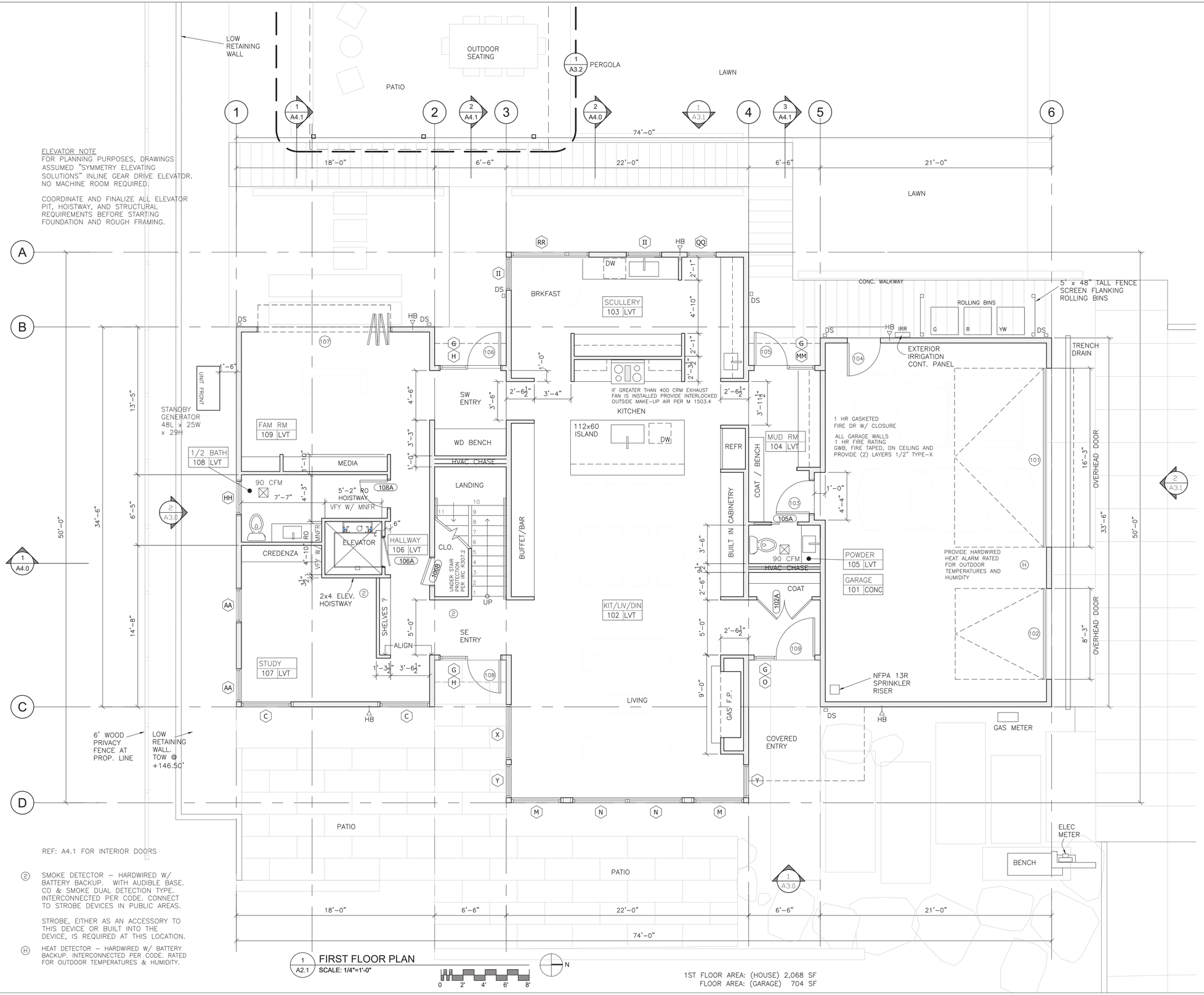
Date:	MAR. 14, 2025
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Approval:	PDL

ABE Calculations

Sheet Number: **A1.2**

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

0" 1" 2" 3"



REF: A4.1 FOR INTERIOR DOORS

(2) 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.

(H) HEAT DETECTOR – HARDWIRED W/ BATTERY BACKUP. INTERCONNECTED PER CODE. RATED FOR OUTDOOR TEMPERATURES & HUMIDITY.

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

0 2' 4' 6' 8'

N

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

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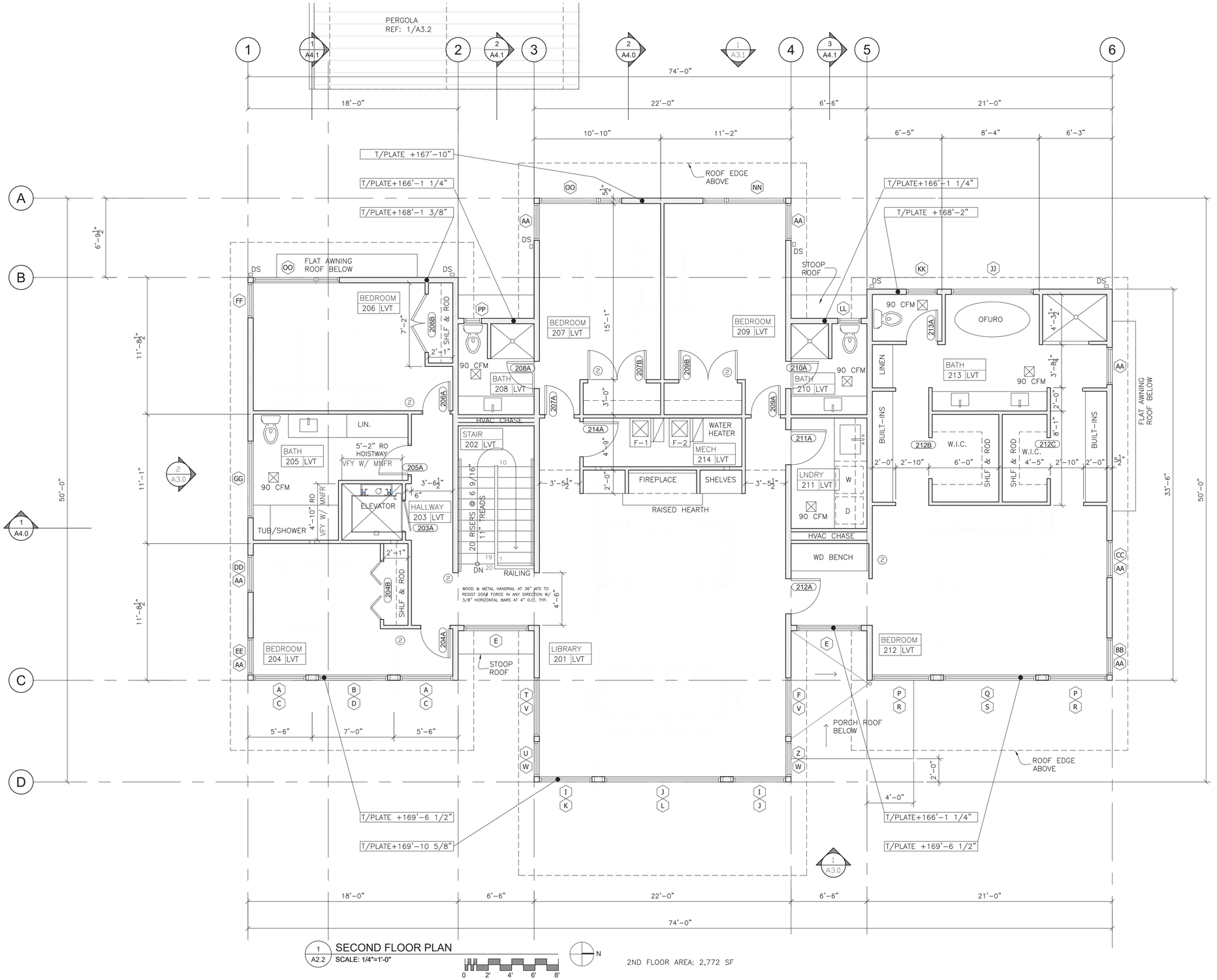
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Approval:	PDL

First Floor Plan

Sheet Number: A2.0

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



1 A4.1 1 A4.1 2 A4.1 2 A4.0 1 A3.1 3 A4.1 2 A3.1 2 A3.0 1 A4.0 1 A3.0

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

0 2' 4' 6' 8'

N

2ND FLOOR AREA: 2,772 SF

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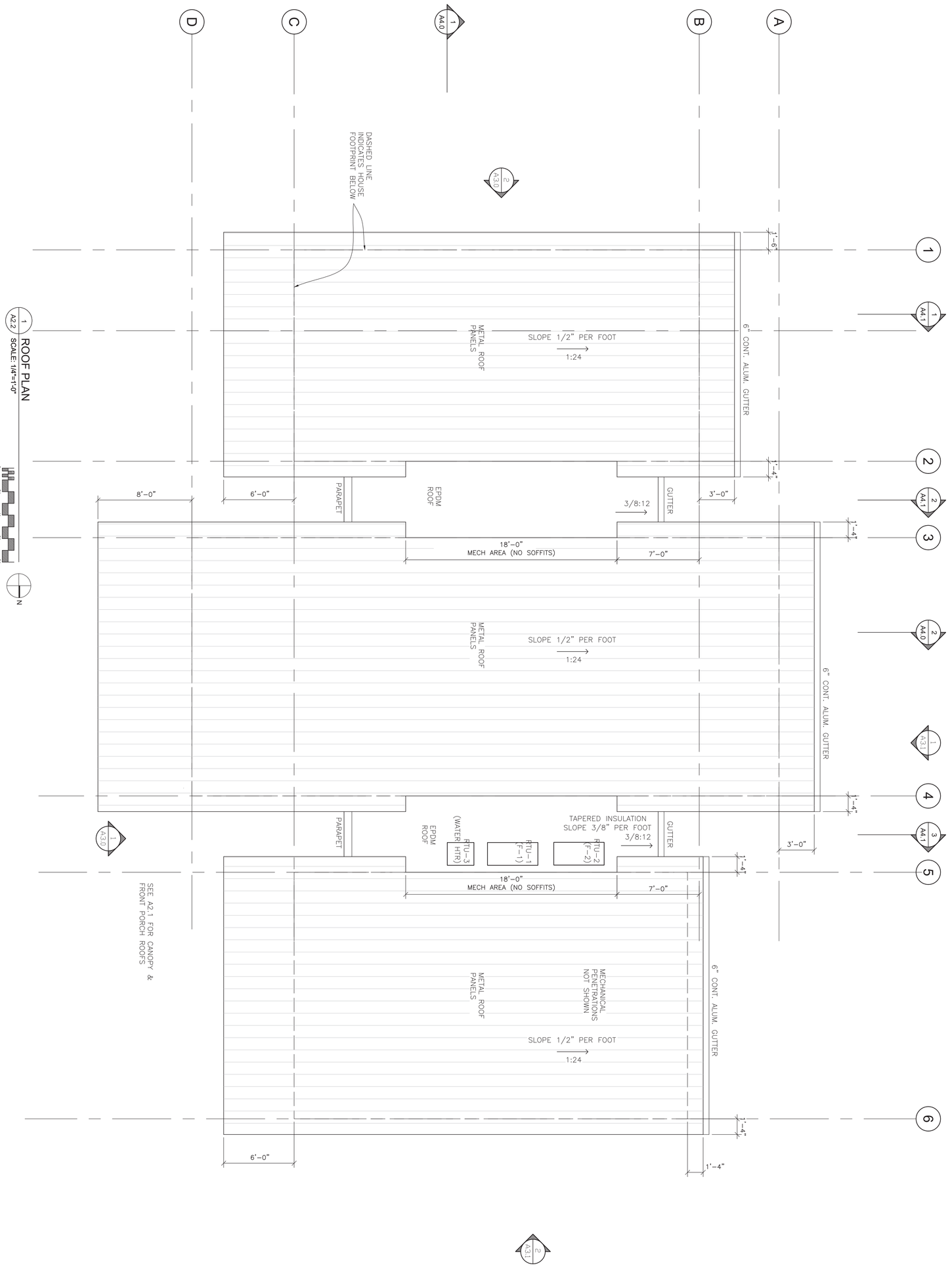
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Date:	MAR. 14, 2025
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Approval:	PDL

. Second Floor Plan

Sheet Number:
A2.1

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36 0" 1" 2" 3"



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

0 2' 4' 6' 8'

N

2 A3.0

Roof Plan

Sheet Number: A2.2

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Date: MAR. 14, 2025
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Approval: PDL

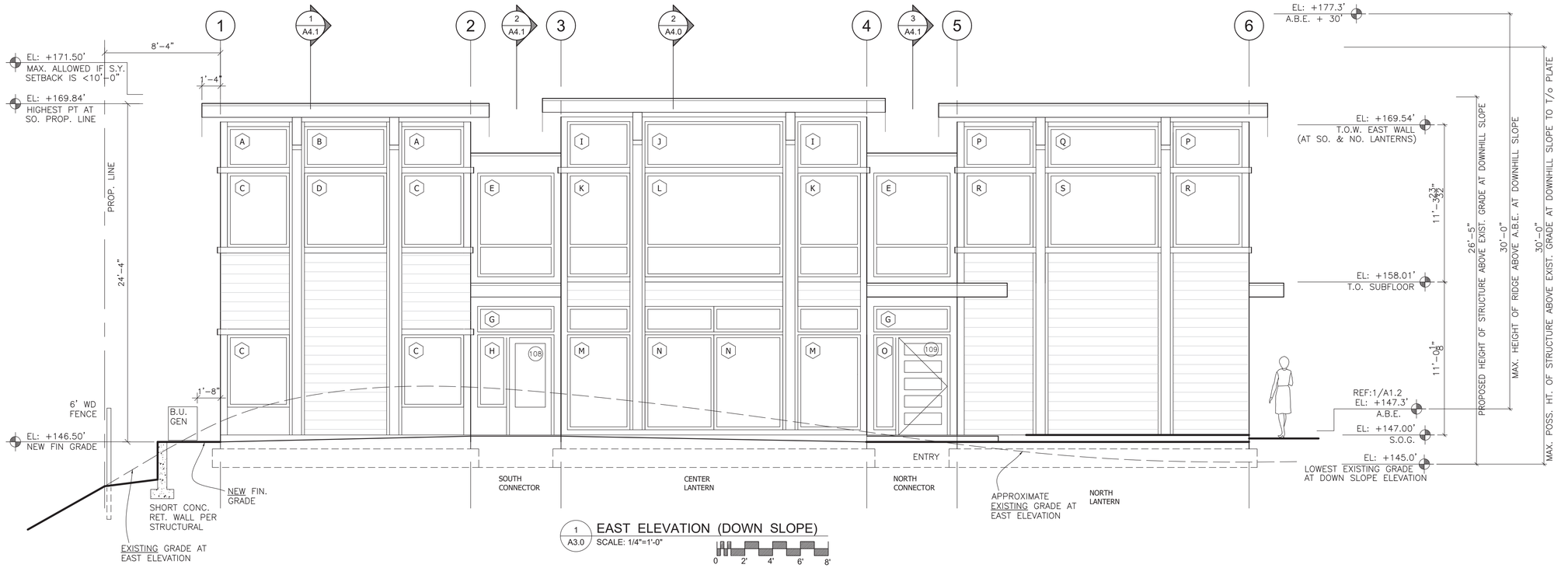
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1 A3.0 EAST ELEVATION (DOWN SLOPE)
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'

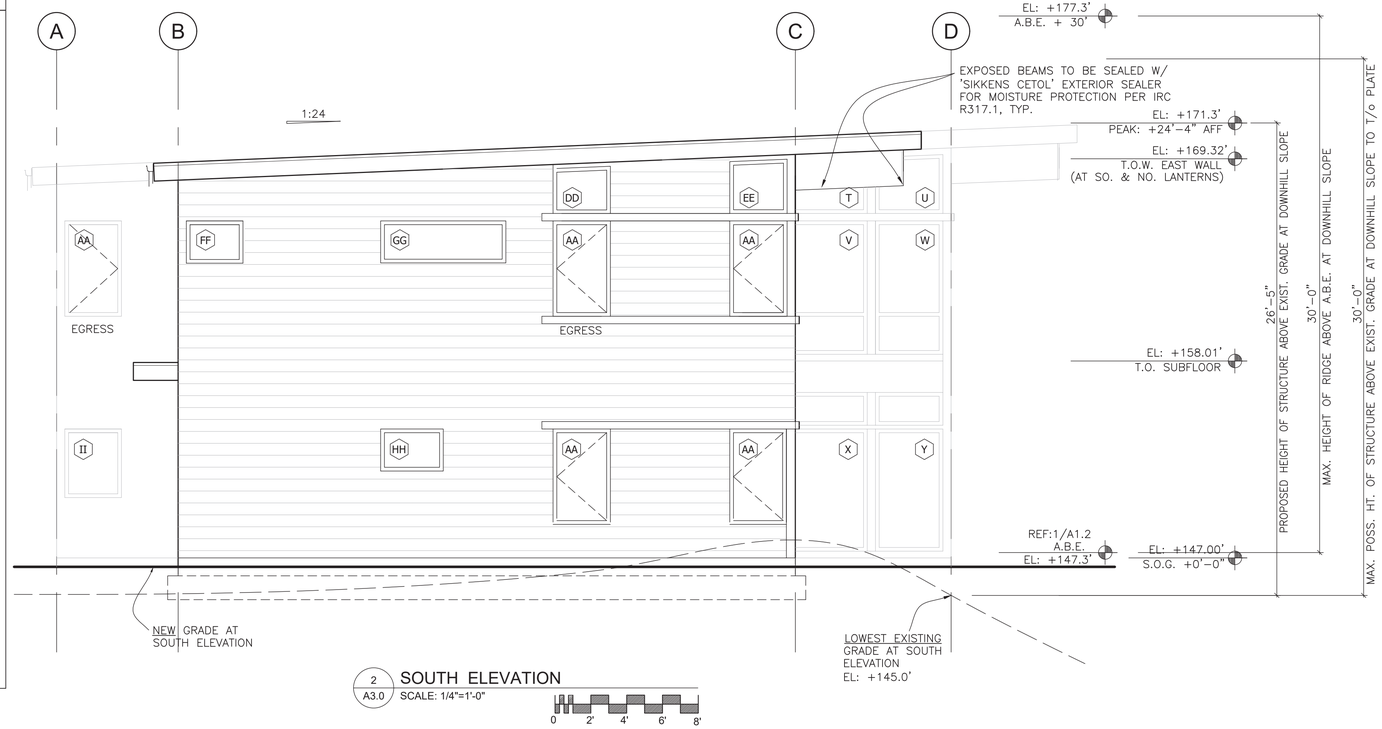
DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36

0" 1" 2" 3"

WINDOW SCHEDULE 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	
F			PICTURE	1	5'-0"	3'-0"+/-		.25	TRAPEZOID
G			PICTURE	4	5'-6"	1'-10"	TRANSOM	.25	
H			PICTURE	2	2'-1"	5'-4"	4.5"	.25	
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	
L			PICTURE	1	2'-0"	7'-5.5"	4.5"	.25	
M			PICTURE	2	4'-6"	8'-10.5"	4.5"	.25	
N			PICTURE	2	4'-11.5"	8'-10.5"	4.5"	.25	
O			PICTURE	1	1'-7"	6'-10"	4.5"	.25	
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	
W			PICTURE	2	3'-0"	7'-5.5"	4.5"	.25	
X			PICTURE	1	5'-0"	8'-10.5"	4.5"	.25	
Y			PICTURE	2	3'-0"	8'-10.5"	4.5"	.25	
Z			PICTURE	1	3'-0"	3'-4"+/-		.25	TRAPEZOID
AA			CASEMENT	9	3'-2"	5'-4"	2'-6"	.25	
BB			PICTURE	1	3'-2"	3'-0"+/-		.25	TRAPEZOID
CC			PICTURE	1	3'-2"	2'-8"+/-		.25	TRAPEZOID
DD			PICTURE	1	3'-2"	2'-8"+/-		.25	TRAPEZOID
EE			PICTURE	1	3'-2"	3'-0"+/-		.25	TRAPEZOID
FF			PICTURE	1	3'-2"	2'-4"	5'-6"	.25	
GG			PICTURE	1	7'-0"	2'-4"	5'-6"	.25	
HH			PICTURE	1	3'-6"	2'-4"	4'-10"	.25	
II			PICTURE	2	3'-2"	3'-10"	3'-4.5"	.25	
JJ			PICTURE	1	7'-0"	2'-4"	5'-6"	.25	
KK			CASEMENT	1	2'-8"	5'-4"	2'-6"	.25	
LL			CASEMENT	1	2'-6"	3'-4"	4'-6"	.25	
MM			PICTURE	1	2'-1"	3'-10"	3'-4.5"	.25	
NN			CASEMENT + PICTURE	1	7'-0"	5'-4"	2'-6"	.25	KK + PICTURE = MULLED UNIT
OO			CASEMENT + PICTURE	2	7'-0"	5'-4"	2'-6"	.25	KK + PICTURE = MULLED UNIT
PP			CASEMENT	1	2'-6"	3'-4"	4'-6"	.25	
QQ			CASEMENT	1	2'-0"	3'-10"	3'-4.5"	.25	
RR			CASEMENT + PICTURE	1	7'-0"	3'-10"	3'-4.5"	.25	QQ + PICTURE = MULLED UNIT

72.00



2 A3.0 SOUTH ELEVATION
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'

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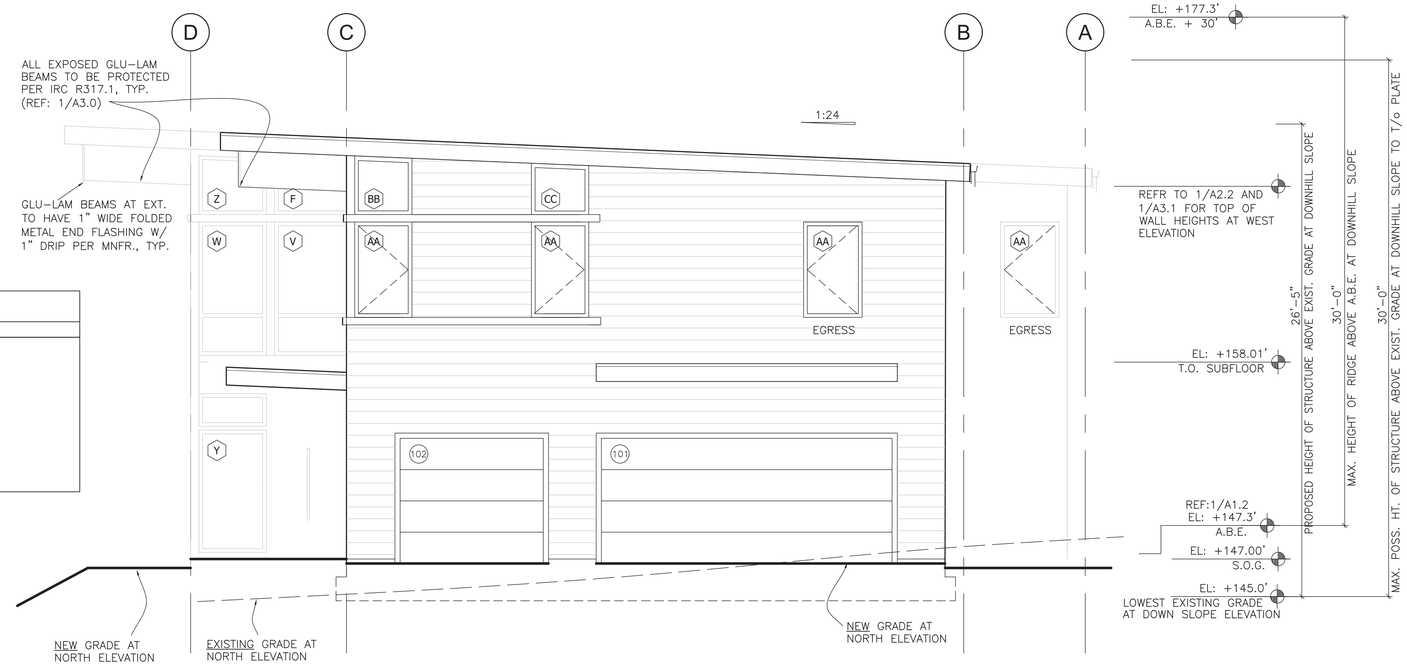
Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

Window Sched & East + South Elevations

Sheet Number:
A3.0



1 A3.1 WEST ELEVATION (UP SLOPE)
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'



2 A3.1 NORTH ELEVATION
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'

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
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	
106	36 x 84		ENTRY W/ GLASS	1	3'-3"	7'-2"	ALUM.	ENTRY 1	
107	12' x 7'		MULTI-FOLD	1	TBD	TBD			
108	36 x 84		ENTRY W/ GLASS	1	3'-3"	7'-2"	ALUM.	ENTRY 1	
109	42 x 84		MAIN ENTRY	1					

DISTRIBUTE WHOLE SETS ONLY. DO NOT BREAK SET.
ORIGINAL SHEET SIZE IS 24 x 36
0" 1" 2" 3"

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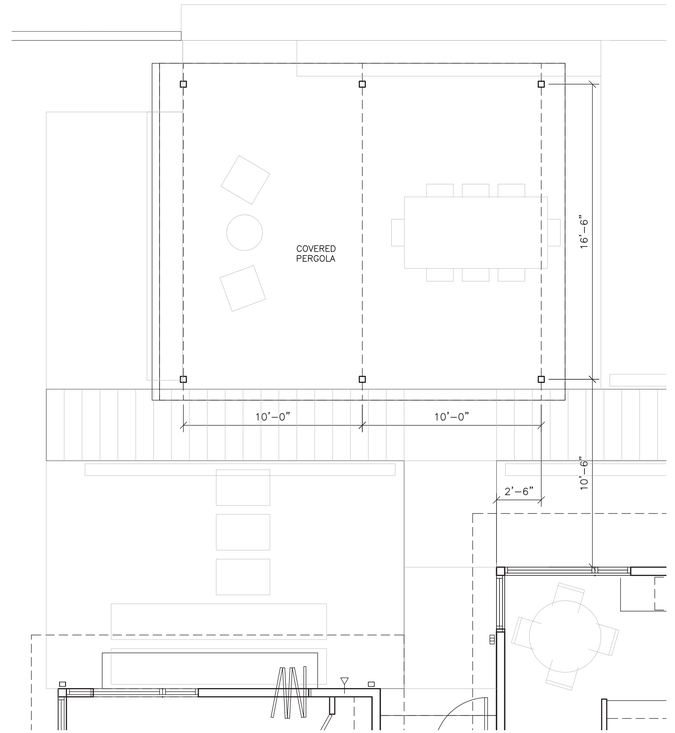
Date:	MAR. 14, 2025
Job Number:	
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Approval:	PDL

Ext. Dr. Sched & West + North Elevations

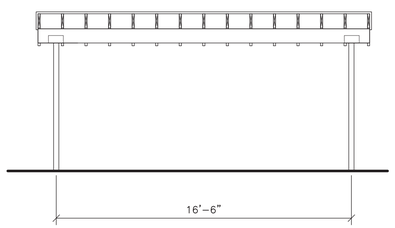
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A3.1

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

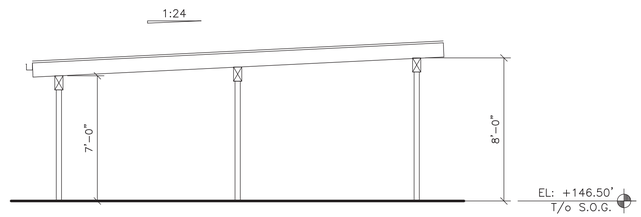
0" 1" 2" 3"



1 A3.2 PERGOLA PLAN
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'



3 A3.2 NORTH PERGOLA ELEVATION
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'



2 A3.2 EAST PERGOLA ELEVATION
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'

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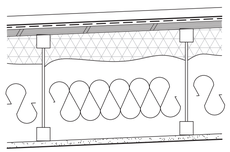
Date: MAR. 14, 2025
Job Number:
Drafting: -
Approval: PDL

Pergola

Sheet Number:
A3.2

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

0" 1" 2" 3"



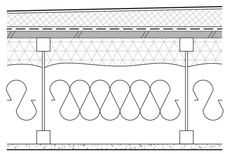
R1 TYPICAL SLOPED ROOF

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.



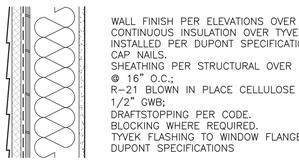
R2 TYPICAL FLAT ROOF

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)

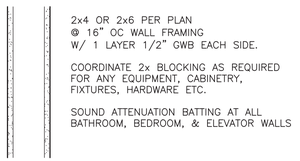
5/8" TYPE-X GWB
TAPE AND FINISH SMOOTH

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



W1 TYPICAL EXTERIOR WALL (20+5)

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;
1/2" GWB;
DRAFTSTOPPING PER CODE.
BLOCKING WHERE REQUIRED.
TYVEK FLASHING TO WINDOW FLANGES PER DUPONT SPECIFICATIONS



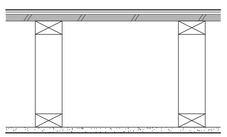
W2 TYPICAL INTERIOR WALL

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

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

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

W3 WALL BTW GARAGE AND HOUSE



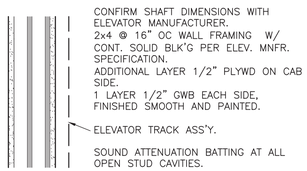
F2 FLOOR OVER HEATED SPACE

FINISH FLOOR PER PLANS OVER UNDERLAYMENT IF REQUIRED.

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

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

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

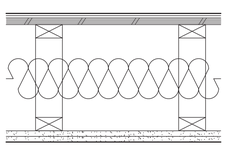


W4 STRUCT. ELEVATOR WALL

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 1/2" GWB EACH SIDE, FINISHED SMOOTH AND PAINTED.

ELEVATOR TRACK ASS'Y.

SOUND ATTENUATION BATTING AT ALL OPEN STUD CAVITIES.



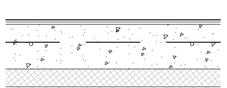
F3 FLOOR OVER GARAGE
(HORZ. FIRE BARRIER PER IRC)

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 1/2" GWB
TAPE AND FINISH SMOOTH, PTD.

SEAL AND DRAFT STOP ALL PENETRATIONS

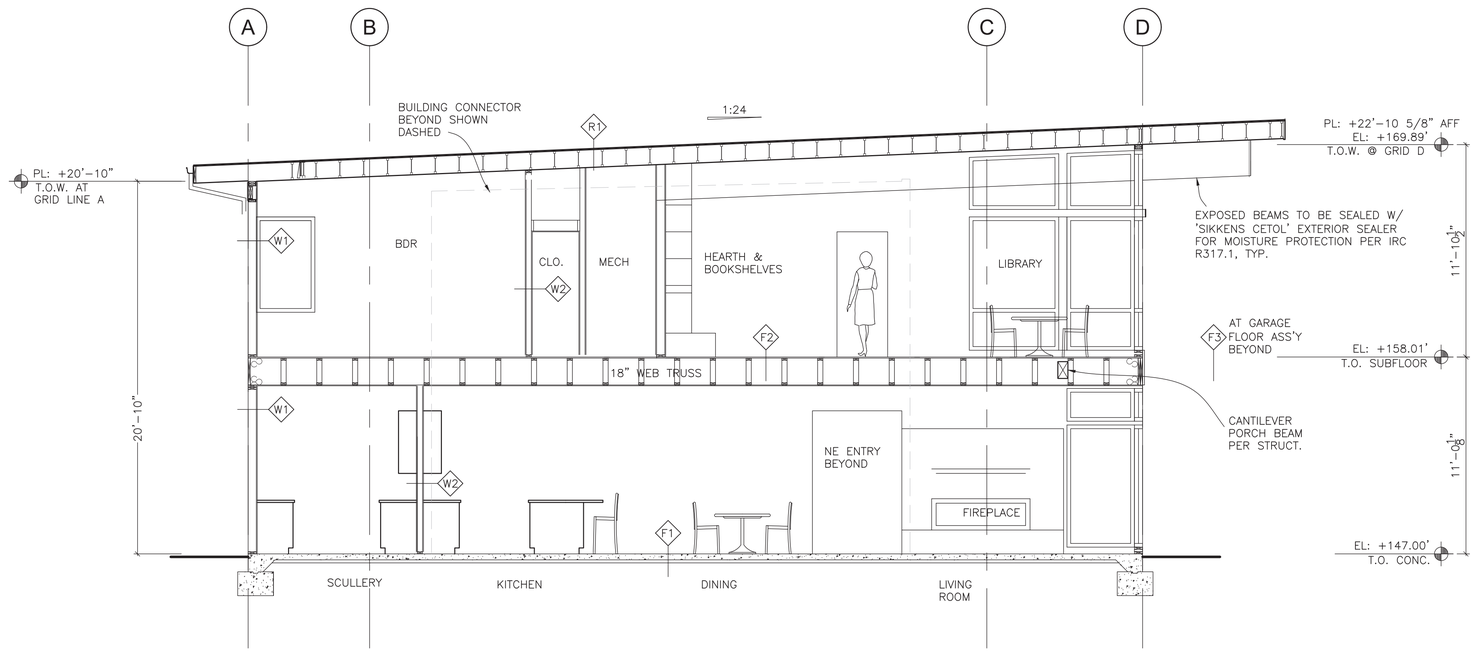


F1 TYPICAL SLAB ON GRADE FLOOR

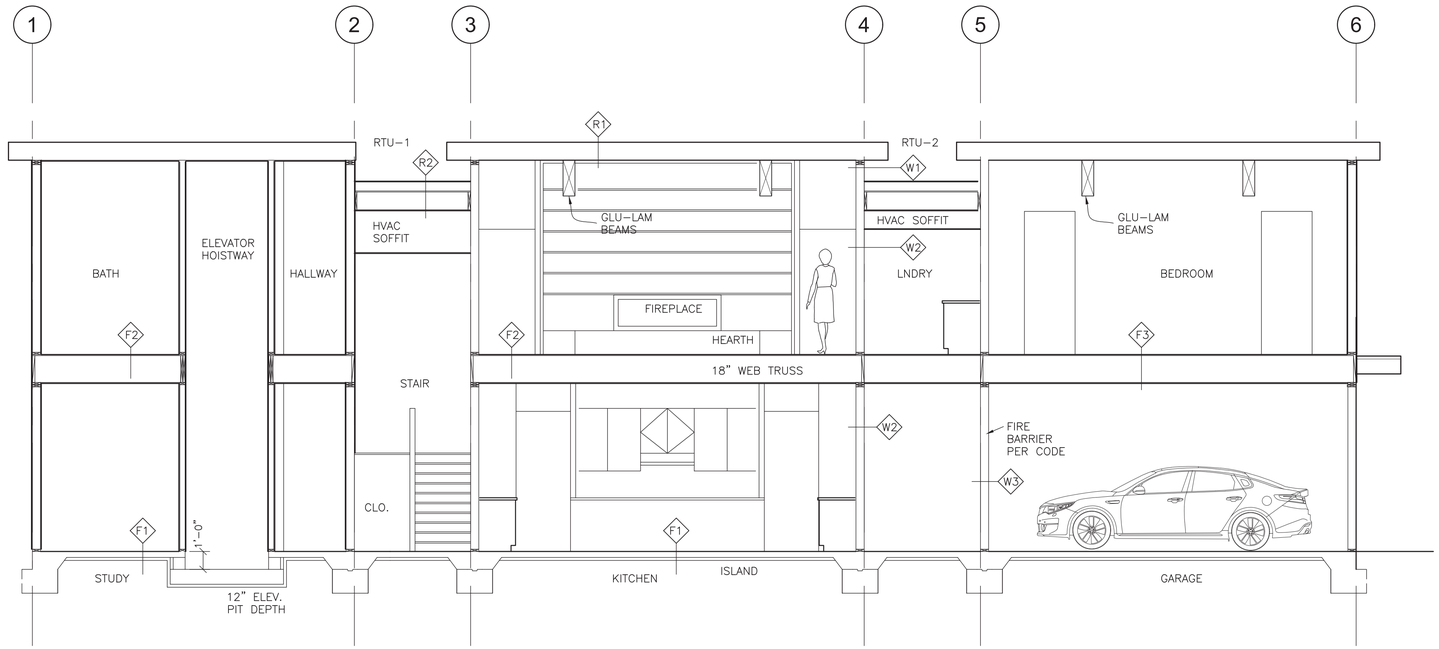
FINISH FLOOR PER PLANS OVER UNDERLAYMENT IF REQUIRED. SELF LEVELING AS REQUIRED.

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

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



2 A4.0 BLDG SECTION AT CENTER LANTERN
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'



1 A4.0 N-S BUILDING SECTION
SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'

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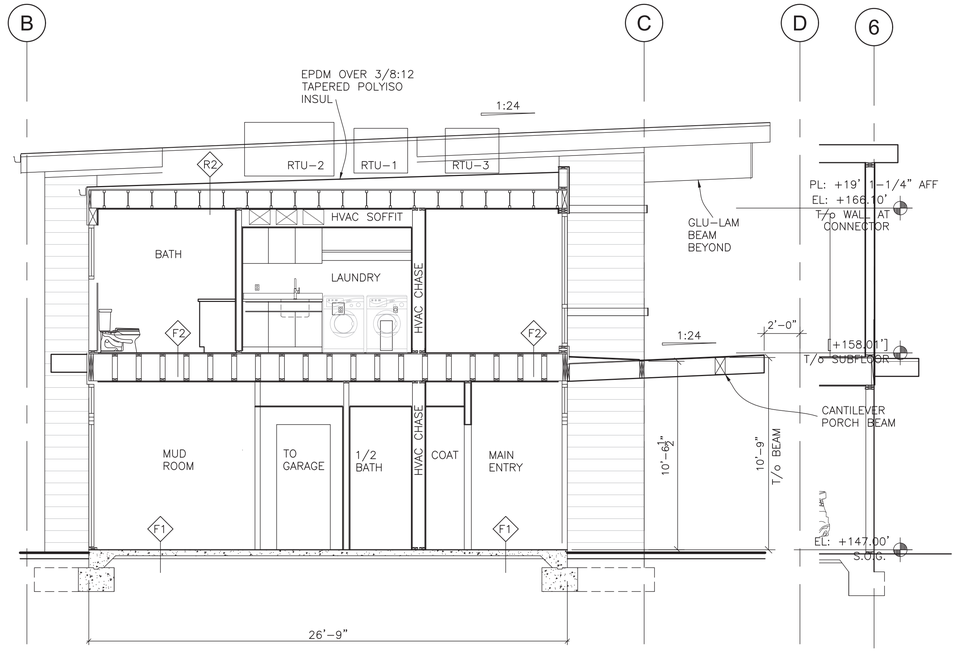
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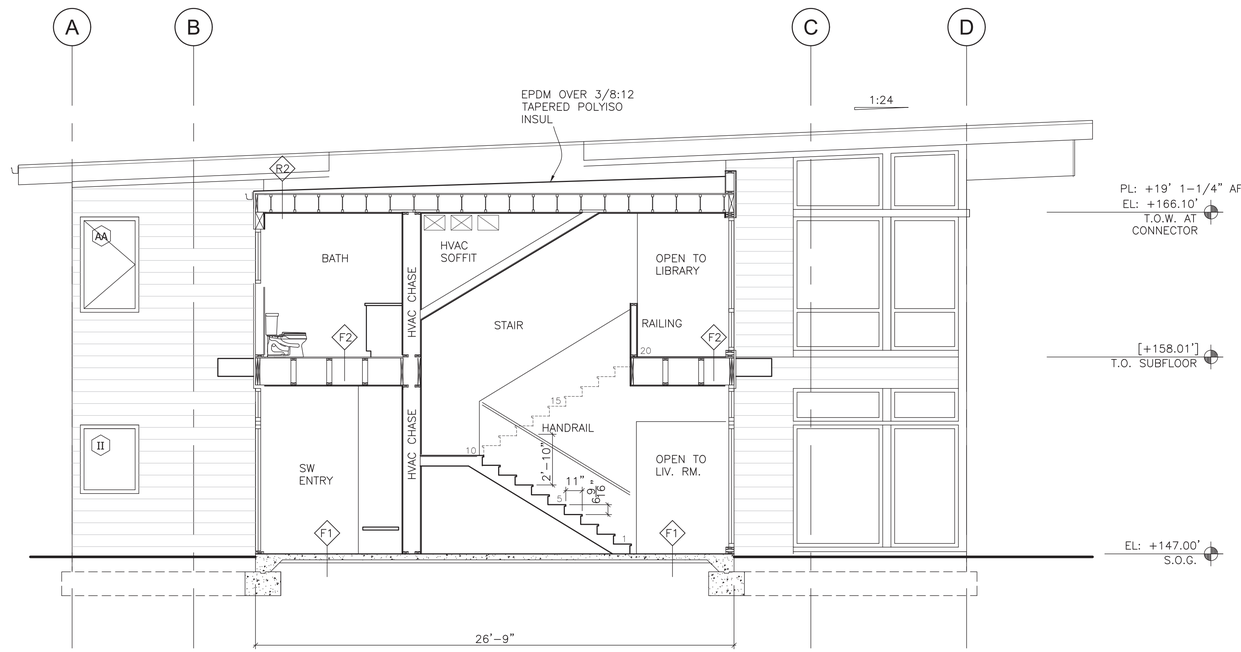
Building Sections

Sheet Number:
A4.0



3 A4.1 BLDG SECTION AT NORTH CONNECTOR
SCALE: 1/4"=1'-0"

0 2' 4' 6' 8'



2 A4.1 BLDG SECTION AT SO. CONNECTOR & STAIR
SCALE: 1/4"=1'-0"

0 2' 4' 6' 8'

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

0" 1" 2" 3"

FIRST FLOOR INTERIOR DOORS, FRAMES, AND HARDWARE SCHEDULE

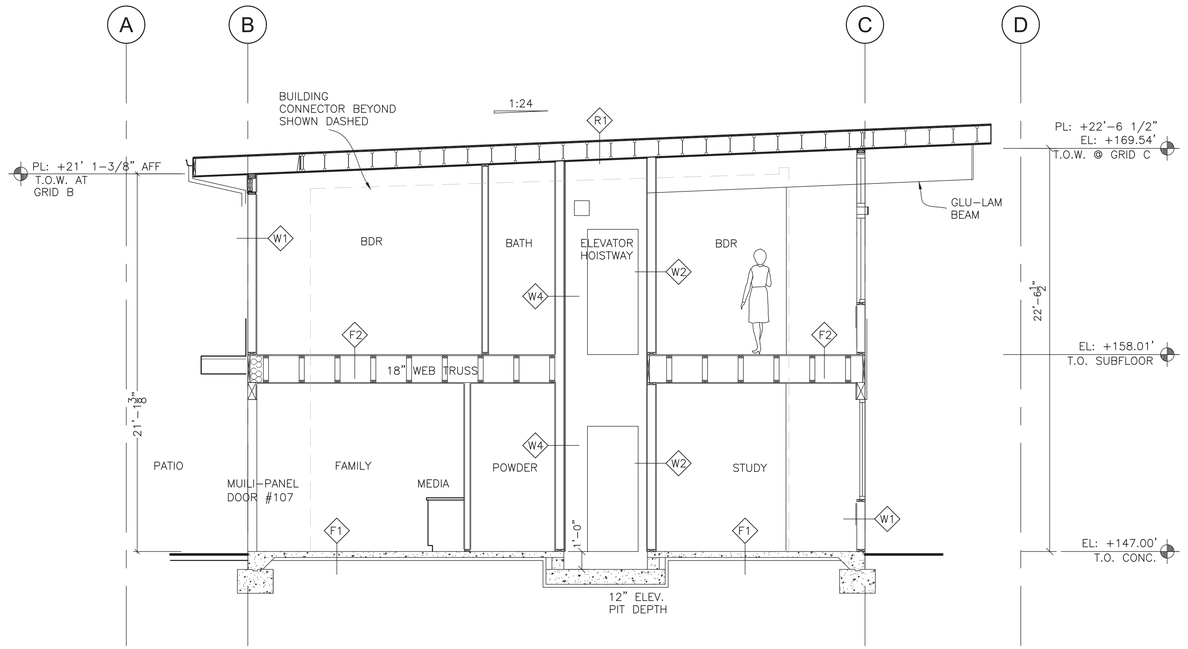
DOOR						FIRE	FRAME				NOTES
TAG	TYPE	SIZE	MAT'L	FINISH	HDWR	LABEL	TYPE	MAT'L	FINISH	THR	
102A		PR 2-6 X 7-0	WD SC		CLOSET	-	WD				CLOSET DOORS
105A		2-6 X 7-0	WD SC		PRIVACY	-	POCKET				BATHROOM POCKET DOOR
106A		TBD	TBD		PER ELEV.		TBD				HOISTWAY. VERIFY & COORD. W/ ELEV. CLEARANCES
106B		2-6 X 7-0	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						FIRE	FRAME				NOTES
TAG	TYPE	SIZE	MAT'L	FINISH	HDWR	LABEL	TYPE	MAT'L	FINISH	THR	
203A		TBD	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 CASED OPENING
212C		-	-	-	-	-	WD				4-0 X 7-0 CASED OPENING
213A		2-8 X 7-0	WD SC		PRIVACY	-	WD				TOILET COMPARTMENT DOOR
214A		3-0 X 7-0	WD SC		CLOSET	-	WD				MECHANICAL ROOM DOOR

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 MNFR. COORDINATE WITH INTERIOR FINISHES.



1 A4.1 BLDG. SECTION AT SOUTH LANTERN
SCALE: 1/4"=1'-0"

0 2' 4' 6' 8'

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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
CI	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 (HOP 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	MISCELLANEUS
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	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	
ALLOWABLE BEARING PRESSURE	2000 PSF
ALLOWABLE PASSIVE PRESSURE	250 PSF
ALLOWABLE COEFFICIENT OF SLIDING (FRICTION)	0.30

1

GENERAL NOTES - STRUCTURAL DESIGN

1. 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.

2. VERIFY REQUIREMENTS OF OTHER TRADES, (CIVIL, MECHANICAL, ELECTRICAL, ETC.), PRIOR TO PROCEEDING WITH FABRICATION OR INSTALLATION OF MATERIALS.

3. 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.

4. 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

1. FOUNDATION DESIGN IS BASED UPON RECOMMENDATIONS AND ASSUMPTIONS FROM EARTH SOLUTIONS NW, LLC DATED 4/22/24.

2. ALL SUBGRADE AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.

3. 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.

4. 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

1. CONCRETE CONSTRUCTION STANDARDS
   - A. IBC CHAPTER 19: CONCRETE
   - B. ACI 318 - LATEST EDITION
   - C. ACI 117 - LATEST EDITION
   - D. ACI 301 - LATEST EDITION

2. MANTAIN 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%

3. CEMENT SHALL BE PORTLAND CEMENT PER ASTM C150, TYPE I/II.

4. AGGREGATE SHALL BE PER ASTM C33. PROVIDE MAX AGGREGATE SIZE OF 1 INCH FOR ALL CLASSES UNLESS NOTED OTHERWISE.

5. MAXIMUM ALLOWABLE FLY ASH CONTENT SHALL BE 20%. FLY ASH SHALL BE PER ASTM C618, TYPE C OR F.

6. MAINTAIN SLUMP RANGE OF 5-7 WITHIN TOLERANCES PER ACI 301.

7. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND STANDARDS: IBC CHAPTER 19, ACI 318-14, ACI 301-05, ACI 117-10.

8. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 UNO.

9. REINFORCING PROTECTION FOR CAST-IN-PLACE CONCRETE AS PER ACI 318 UNLESS NOTED.
   - A. CAST AGAINST AND PERMANENTLY EXPOSED — 3" TO EARTH, ALL REINFORCING.
   - B. 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"
   - C. SURFACES NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.
     1. BEAMS, COLUMNS, PRIMARY REINFORCEMENT, TIES
        - STIRRUPS OR SPIRALS — 1 1/2"
     2. SLABS, WALLS & JOISTS
        - -NO. 14 AND NO. 18 BARS — 1 1/2"
        - -NO. 11 BAR AND SMALLER — 1 1/2"

10. BAR SPLICES SHALL BE CLASS "B" UNLESS NOTED OTHERWISE.

11. HORIZONTAL REINFORCING BARS SHALL BE LAPPED AROUND CORNERS OF INTERSECTING WALLS AND BEAMS. STANDARD ACI HOOKS AND BENDS SHALL BE USED.

12. FINISH CONCRETE SURFACES IN ACCORDANCE WITH THE FOLLOWING:
   - A. INTERIOR SLABS ON GRADE: FINISH TO FLATNESS AND LEVELNESS OF F(f) = 30 AND F(1) = 20 IN ACCORDANCE WITH ACI 117.
   - B. INTERIOR FLOOR AREAS TO RECEIVE CARPET, RESILIENT FLOOR COVERING, OR REMAIN EXPOSED: SMOOTH TROWEL FINISH.
   - C. INTERIOR FLOOR AREAS TO RECEIVE QUARRY TILE OR CERAMIC TILE: FLOAT FINISH.
   - D. EXTERIOR SLABS: BROOM FINISH.

TIMBER

1. TIMBER CONSTRUCTION STANDARDS
   - A. IBC CHAPTER 23: WOOD
   - B. NDS 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS)
   - C. APA PDS-99 PLYWOOD DESIGN SPECIFICATION
   - D. ANSI/TPI 1 NATIONAL DEISGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSSES
   - E. TRI DSB RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED TRUSSES
   - F. BCSI GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, & BRACING OF METAL PLATE CONNECTED TRUSSES
   - G. APA REPORT TT-045B MINIMUM NAIL PENETRATION FOR WOOD STRUCTURAL PANEL CONNECTIONS SUBJECT TO LATERAL LOADS

2. 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_paralell=2510

3. STUD FRAMED WALLS
   - A. 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.
   - B. ALL INTERIOR BEARING WALLS SHALL BE MINIMUM 2X6 @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLANS.
   - C. 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.

4. BEAMS AND HEADERS
   - A. THE CENTERLINE OF EACH BEAM SHALL ALIGN WITH THE CENTERLINE OF WALL AND STUDS BELOW.
   - B. 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).
       - a. PROVIDE STANDARD NUTS & WASHERS AT 3/4"Ø BOLTS (GALV. IF EXPOSED TO WEATHER)
       - b. PROVIDE 2" EDGE DISTANCE FROM CENTERLINE OF BOLTS TO EDGE OF WOOD (TYPICAL)
   - C. 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.

5. JOISTS
   - A. BRIDGING: PROVIDE BRIDGING AT ALL FLOOR JOISTS NOT TO EXCEED 8'-0" MAXIMUM OR IN COMPLIANCE WITH JOINT MANUFACTURER RECOMMENDATIONS FOR ENGINEERED JOISTS.
   - B. DO NOT NOTCH OR CUT HOLES IN JOISTS WITHOUT ENGINEER APPROVAL.
   - C. BLOCKING: AT BEARING WALLS PROVIDE 2-2x SOLID BLOCKING UNDER BEARING WALLS PERPENDICULAR AND PARALLEL TO THE JOIST DIRECTION.
   - D. 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.

6. ATTACHMENTS
   - A. THRU BOLTS SHALL BE ASTM A-307 OR ASTM A-325. PROVIDE STANDARD WASHERS AT EACH FACE.
   - B. FASTENERS, INCLUDING BOLTS, NUT, WASHERS, AND OTHER CONNECTORS SHALL BE HOT-DIPPED GALVANIZED WHERE EXPOSED TO WEATHER.
   - C. 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.
   - D. AT COLUMNS 4" SQUARE AND LARGER, PROVIDE CAP & BASE CONNECTORS AS BELOW:
   - E. COLUMN CAP CONNECTOR: PC SERIES (OR EPC AT BM ENDS). COLUMN BASE CONNECTOR: CB SERIES.
   - F. USE RECOMMENDED COLUMN/BEAM MODEL NUMBERS.

7. HURRICANE CLIPS
   - A. PROVIDE MINIMUM H2.5A AT EACH END OF EACH ROOF JOIST OR RAFTER WITH SPAN LESS THAN 20 FEET.
   - B. PROVIDE MINIMUM H6 OR (2) H2.5A AT EACH END OF EACH ROOF JOIST OR RAFTER WITH SPAN GREATER THAN 20 FEET.

8. FLOOR AND ROOF DECK
   - A. FLOOR AND ROOF DECK SHALL BE APA RATED PLYWOOD OR OSB WITH THICKNESS AND NAIL SIZE AND SPACING PER THE PLANS.
   - B. PLACE PANELS IN A STAGGERED PATTERN. GLUE & NAIL TO FRAMING MEMBERS. GLUE SHALL CONFORM TO APA SPEC. AF6-01, AND APPLIED PER MANUF. SPECIFICATIONS.
   - C. ORIENT SHEATHING PANELS WITH THE LONG DIMENSION PERPENDICULAR TO RAFTERS.
   - D. 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.

9. MISCELLANEOUS
   - A. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED LUMBER.

10. PREFABRICATED WOOD FRAMING MEMBERS
   - A. 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.
   - B. 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.
   - C. CONTRACTOR SHALL PROVIDE TEMPORARY AND PERMANENT LATERAL BRACING OF ALL FABRICATED TRUSSED MEMBERS PER THE DETAILING AND DESIGN OF THE TRUSS MANUFACTURER. TRUSSES SHALL BE DETAILED AND DESIGNED BY THE MANUFACTURER.
   - D. 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.)

11. WOOD CONNECTORS, FASTENERS, NAILS, AND BOTS
   - A. 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 MANUFACTUERS 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.
   - B. NAILS, SCREWS, AND BOLTS SHALL CONFORM TO IBC SECTION 2304.10 CONNECTORS AND FASTERNERS. 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.
   - C. ALL LAG BOLTS SHALL BE ASTM A307.

SHEET LIST

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

Merrell Design Services
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PROJECT:
CHESHIRE UPPER LOT
-

JOBSITE ADDRESS:
7615 East Mercer Way
Mercer Island, WA 98040

ARCHITECT:
PATRICK LYNCH

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KEVIN J HAIAR — STATE OF WASHINGTON — 40078 — REGISTERED PROFESSIONAL ENGINEER

03/28/2025

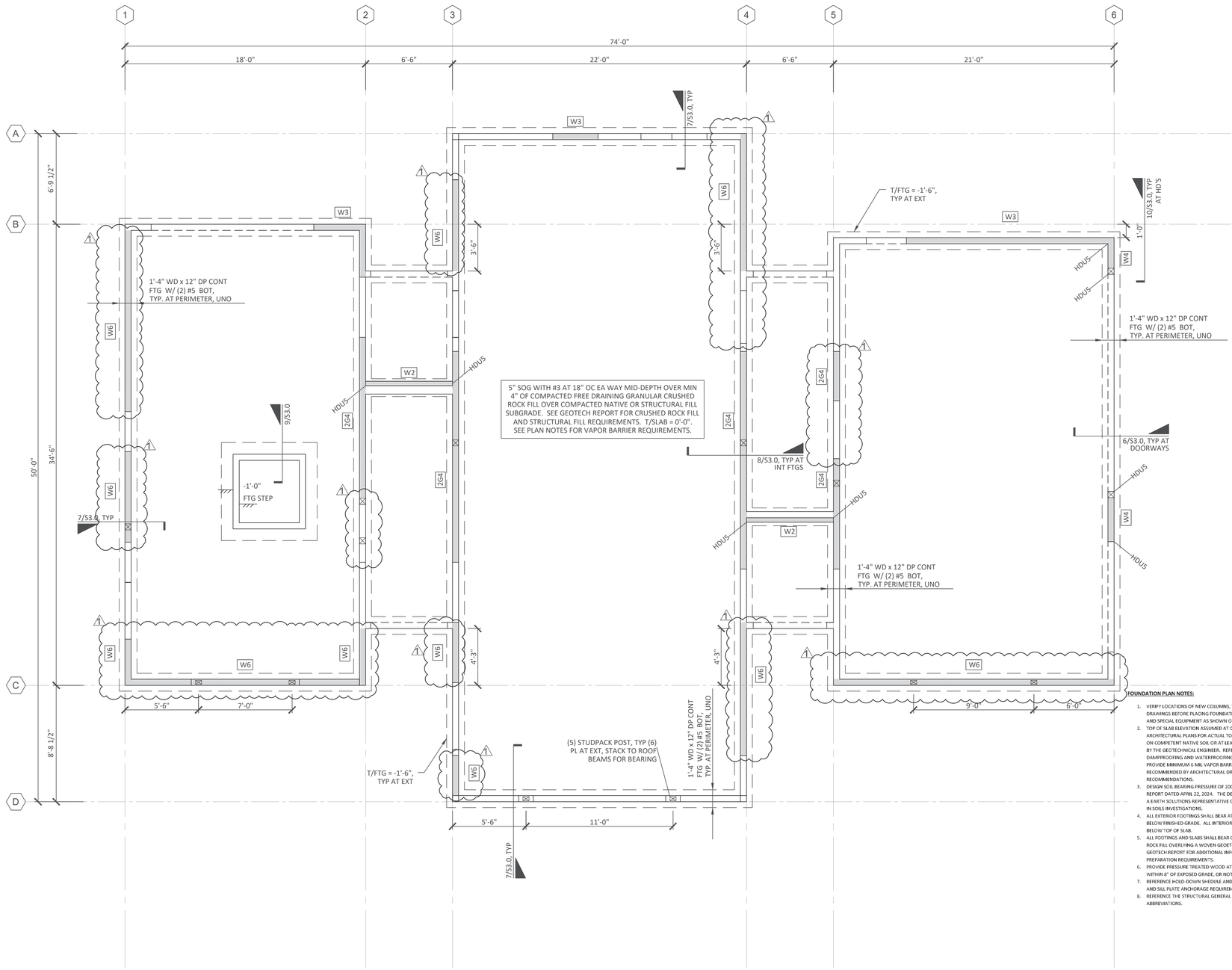
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SHEET TITLE:
GENERAL NOTES

SHEET#: S1.0 SCALE: AS SHOWN

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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 GEOTECHNINAL 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 GEOETEXTILE 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 SHEDULE 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"

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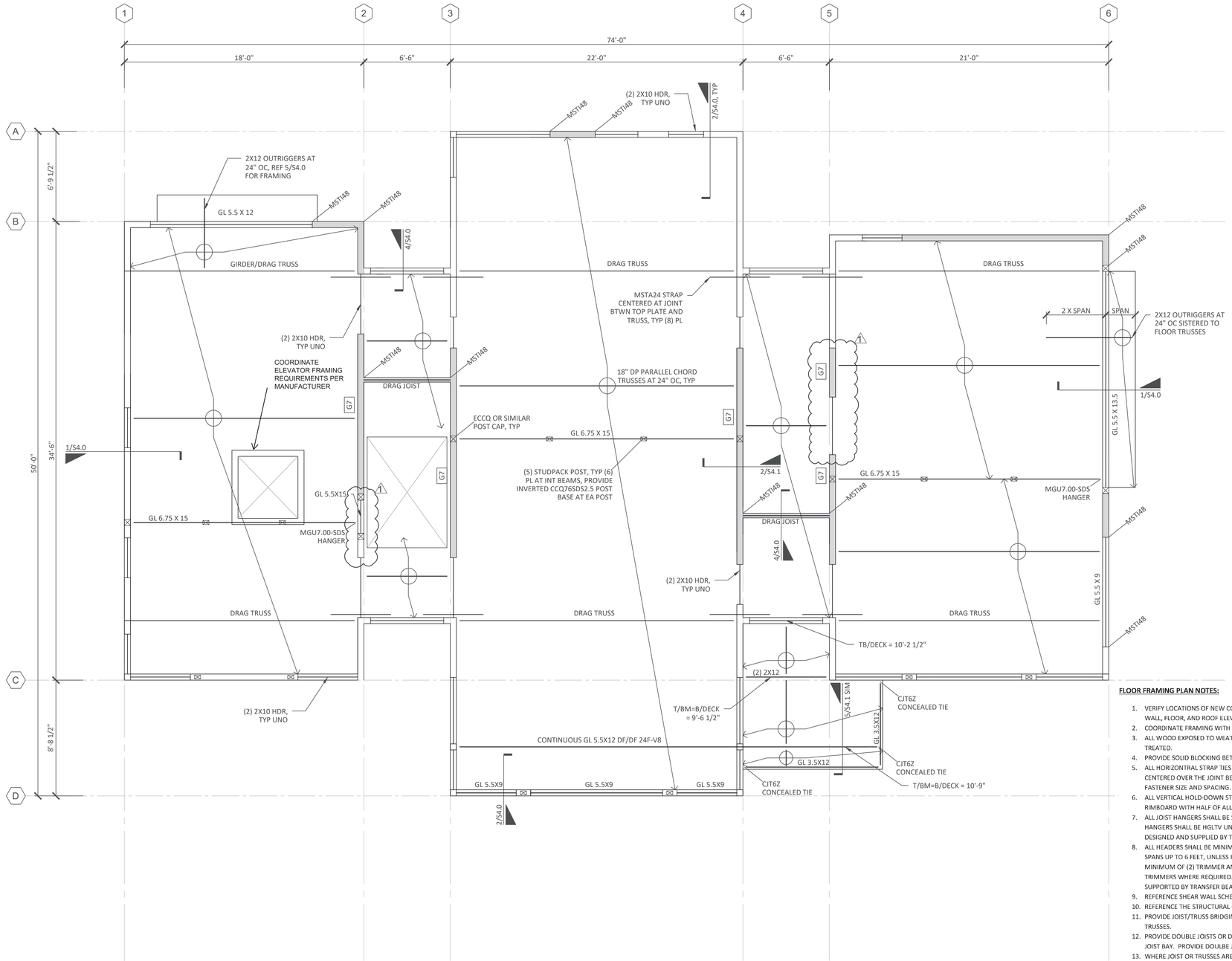
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23-067

SHEET TITLE:
FOUNDATION PLAN

SHEET#: S2.0

SCALE: AS SHOWN

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1 SECOND FLOOR FRAMING PLAN

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

FLOOR FRAMING PLAN NOTES:

1. VERIFY LOCATIONS OF NEW COLUMNS, WALLS, OPENINGS, ETC. WITH ARCHITECTURAL DRAWINGS. VERIFY ALL WALL, FLOOR, AND ROOF ELEVATIONS WITH ARCHITECTS DRAWINGS.
2. COORDINATE FRAMING WITH ALL MECHANICAL, HVAC, SPRINKLER, PLUMBING, AND ELECTRICAL DRAWINGS.
3. ALL WOOD EXPOSED TO WEATHER, OR IN CONTACT WITH CONCRETE, OR WITHIN 8" OF GRADE SHALL BE PRESSURE TREATED.
4. PROVIDE SOLID BLOCKING BETWEEN FLOOR JOISTS/TRUSSES OVER ALL BEARING WALLS AND SHEAR WALLS.
5. ALL HORIZONTRAL STRAP TIES INDICATED ON PLAN SHALL BE ALINGED WITH TOP PLATE OR BEAM AND BE CENTERED OVER THE JOINT BETWEEN ADJOINING ELEMENTS. REFERENCE THE STRAP MANUFACURER FOR FASTENER SIZE AND SPACING.
6. 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.
7. 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.
8. 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.
9. REFERENCE SHEAR WALL SCHEDULE FOR SHEAR WALL TYPES AND CONSTRUCTION REQUIREMENTS.
10. REFERENCE THE STRUCTURAL GENERAL NOTES FOR DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS.
11. PROVIDE JOIST/TRUSS BRIDGING PER MANUFACTURERS REQUIREMENTS FOR ALL ENGINEERED JOISTS AND TRUSSES.
12. PROVIDE DOUBLE JOISTS OR DOUBLE BLOCKING AROUND ENTIRE PERIMETER OF OPENINGS GREATER THAN ONE JOIST BAY. PROVIDE DOULBE JOIST HANGER AT ENDS OF BLOCKING.
13. 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.
14. 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.
15. 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.
16. PROVIDE MINIMUM BLOCKING AT 5'-0" OC MAX FOR ALL BEARING AND EXTERIOR WALLS. REFER TO SHEAR WALL SCHEDULE FOR ADDITIONAL BLOCKING REQUIREMENTS.
17. 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.
18. 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.
19. FOR SHEAR WALL STRAPS AND ATTACHMENT REQUIREMENTS, REFERENCE THE SHEAR WALL SCHEDULE.
20. SEE PLAN FOR HOLD-DOWN LOCATIONS AND SIZES AND REFER TO HOLD-DOWN SCHEDULE FOR ANCHORS AND ATTACHMENT REQUIREMENTS.

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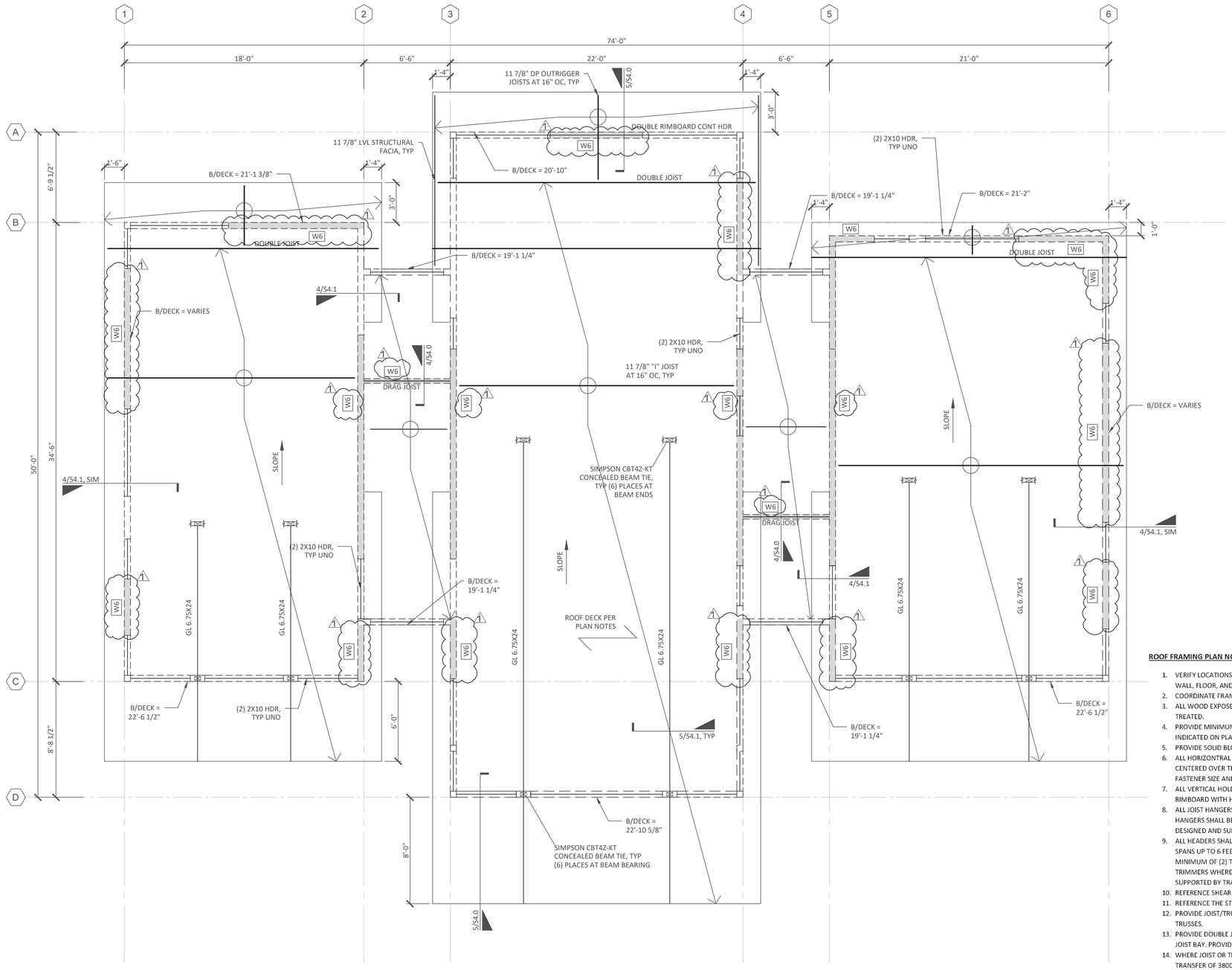
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23-067

SHEET TITLE:
SECOND FLR FRAMING PLAN

SHEET#: S2.1

SCALE: AS SHOWN

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1 ROOF FRAMING PLAN

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

ROOF FRAMING PLAN NOTES:

1. VERIFY LOCATIONS OF NEW COLUMNS, WALLS, OPENINGS, ETC. WITH ARCHITECTURAL DRAWINGS. VERIFY ALL WALL, FLOOR, AND ROOF ELEVATIONS WITH ARCHITECTS DRAWINGS.
2. COORDINATE FRAMING WITH ALL MECHANICAL, HVAC, SPRINKLER, PLUMBING, AND ELECTRICAL DRAWINGS.
3. ALL WOOD EXPOSED TO WEATHER, OR IN CONTACT WITH CONCRETE, OR WITHIN 8" OF GRADE SHALL BE PRESSURE TREATED.
4. PROVIDE MINIMUM SIMPSON H2.5A HURRICANE TIES AT ALL ROOF JOISTS/TRUSSES UNLESS HEAVIER TIES ARE INDICATED ON PLAN.
5. PROVIDE SOLID BLOCKING BETWEEN FLOOR JOISTS/TRUSSES OVER ALL BEARING WALLS AND SHEAR WALLS.
6. ALL HORIZONTRAL STRAP TIES INDICATED ON PLAN SHALL BE ALINGED WITH TOP PLATE OR BEAM AND BE CENTERED OVER THE JOINT BETWEEN ADJOINING ELEMENTS. REFERENCE THE STRAP MANUFACURER FOR FASTENER SIZE AND SPACING.
7. ALL VERTICAL HOLD-DOWN STRAPS SHAL BE CENTERED AT JOINT BETWEEN SILL PLATE AND TOP PLATES OR ON RIMBOARD WITH HALF OF ALL FASTENERS EACH SIDE OF THE JOINT.
8. 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.
9. 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.
10. REFERENCE SHEAR WALL SCHEDULE FOR SHEAR WALL TYPES AND CONSTRUCTION REQUIREMENTS.
11. REFERENCE THE STRUCTURAL GENERAL NOTES FOR DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS.
12. PROVIDE JOIST/TRUSS BRIDGING PER MANUFACTURERS REQUIREMENTS FOR ALL ENGINEERED JOISTS AND TRUSSES.
13. PROVIDE DOUBLE JOISTS OR DOUBLE BLOCKING AROUND ENTIRE PERIMETER OF OPENINGS GREATER THAN ONE JOIST BAY. PROVIDE DOULBE JOIST HANGER AT ENDS OF BLOCKING.
14. 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.
15. 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.
16. 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.
17. PROVIDE MINIMUM BLOCKING AT 5'-0" OC MAX FOR ALL BEARING AND EXTERIOR WALLS. REFER TO SHEAR WALL SCHEDULE FOR ADDITIONAL BLOCKING REQUIREMENTS.
18. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED AS TYPE W6 SHEAR WALLS EXCPET WHERE NOTED OTHERWISE ON THE PLANS AS INTERIOR GYP SHEAR WALL OR WOOD SHEAR WALL WITH TIGHTER SPACING.
19. FOR SHEAR WALL STRAPS AND ATTACHMENT REQUIREMENTS, REFERENCE THE SHEAR WALL SCHEDULE.

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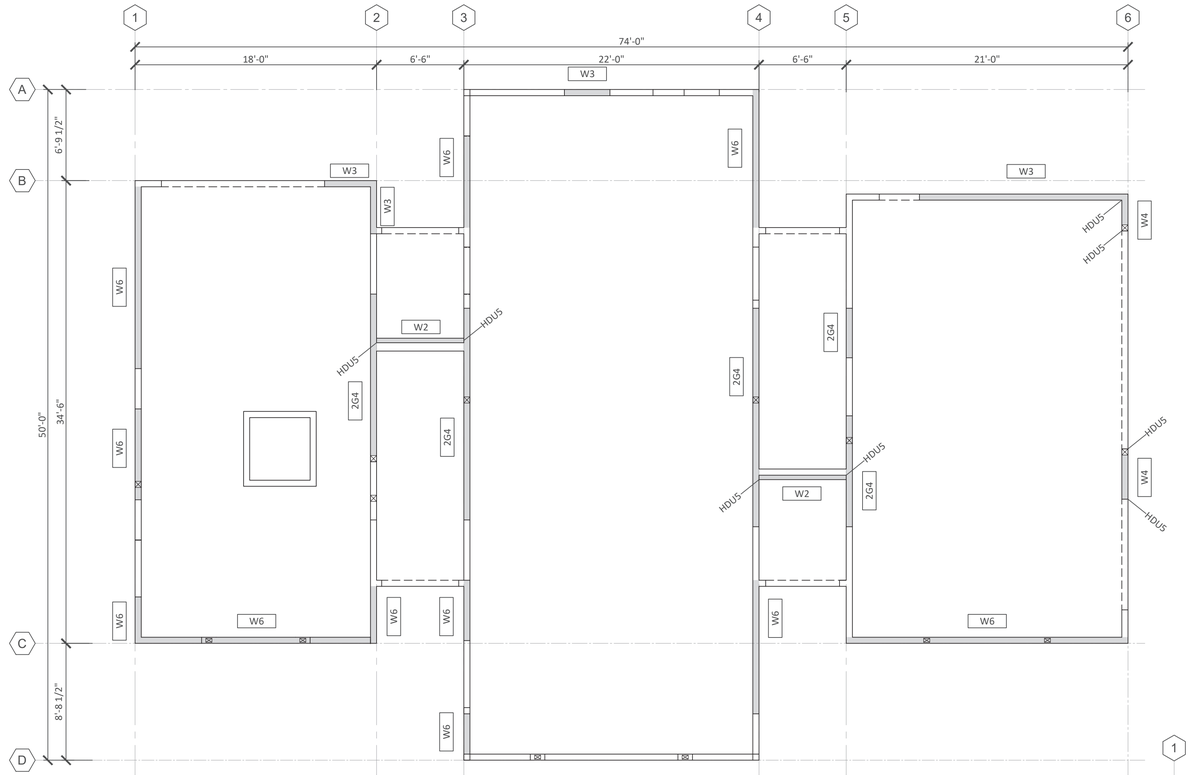
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SHEET TITLE:
ROOF FRAMING PLAN

SHEET#: S2.2

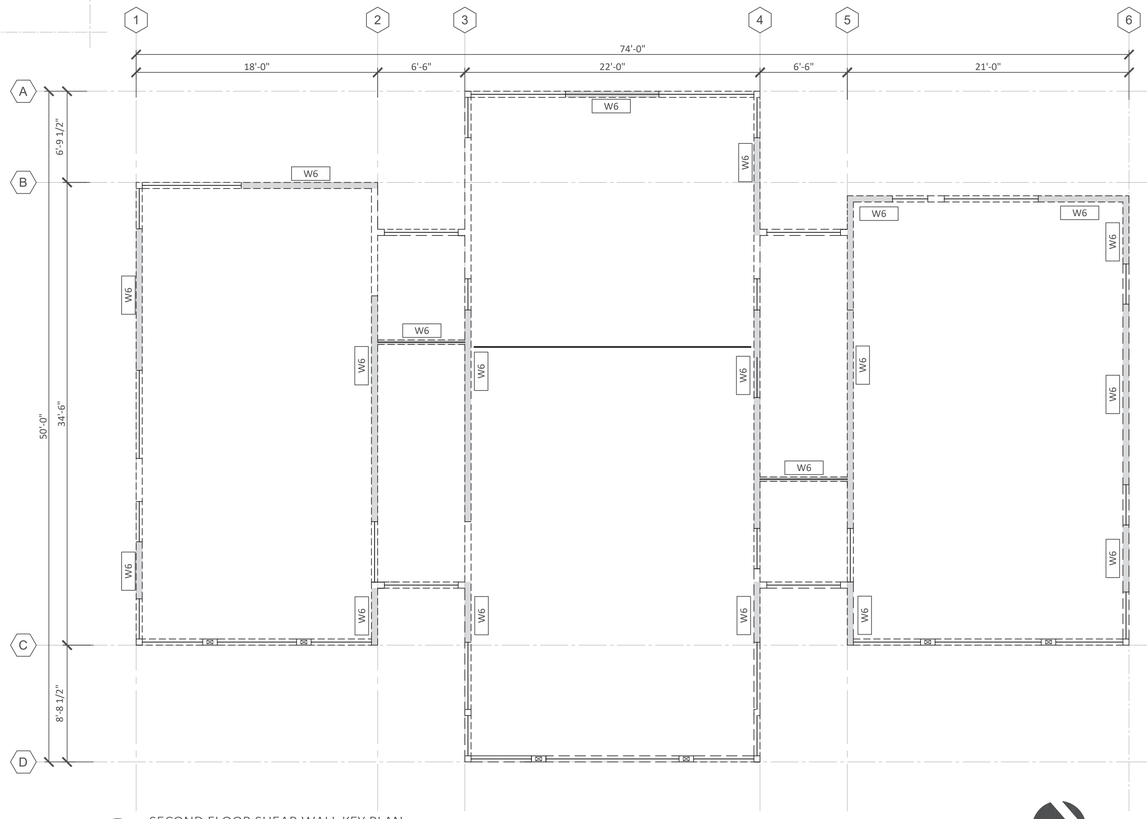
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1 FIRST FLOOR SHEAR WALL KEY PLAN

SCALE: 3/16" = 1'-0"



2 SECOND FLOOR SHEAR WALL KEY PLAN

SCALE: 3/16" = 1'-0"

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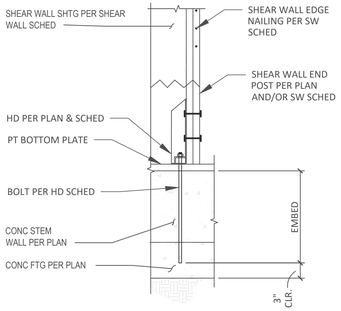
SHEET TITLE:

SHEAR WALL KEY PLAN

SHEET#: S2.3

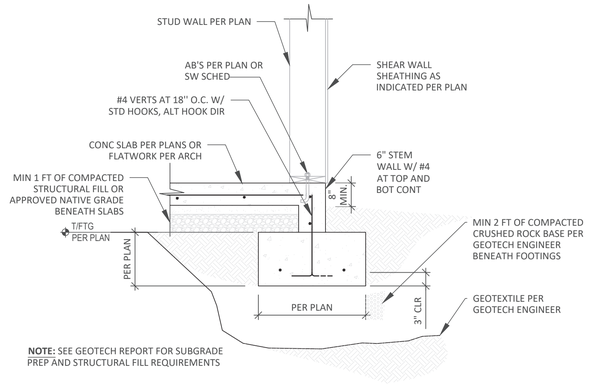
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TYPICAL HOLD DOWN AT FOUNDATION/CONCRETE STEM WALL

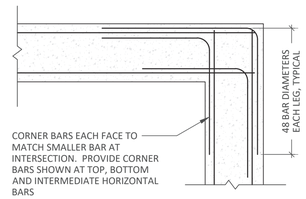
10 SCALE: 3/4" = 1'-0"



NOTE: SEE GEOTECH REPORT FOR SUBGRADE PREP AND STRUCTURAL FILL REQUIREMENTS

TYPICAL EXTERIOR FOOTING

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

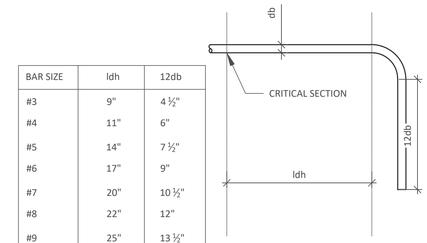


NOTES:

1. WHERE 90 DEGREE HOOKS ARE SCHEDULED OR DETAILED FOR TOP BARS, CORNER BARS MAY BE OMITTED.
2. 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.
3. STOP DETAILED REINFORCEMENT 2" SHORT OF FORM.

TYPICAL CORNER BARS AT INTERSECTION DETAIL

4 NOT TO SCALE



BAR SIZE	ldh	12db
#3	9"	4 ½"
#4	11"	6"
#5	14"	7 ½"
#6	17"	9"
#7	20"	10 ½"
#8	22"	12"
#9	25"	13 ½"
#10	28"	15"

90° HOOK DIMENSIONS GRADE 60 BARS AND 3000 PSI CONCRETE

1 NOT TO SCALE

FREE STANDING CONCRETE RETAINING WALL

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

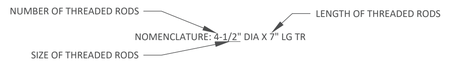
INTERIOR CONTINUOUS FOOTING

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

BAR SIZE	HOLE DIAMETER "D"	HOLE LENGHT "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:

1. THREADED ROD SHALL BE A36 ROD,NUT & WASHER SHALL BE GALVANIZED AS PER ASTM A153
2. HOLE SHALL BE DRILLED USING ROTARY PERCUSSION DRILL TO FORM ROUGH SURFACE. IF CORE DRILLED, ROUGHEN HOLE SURFACE USING DRILL BIT.
3. HOLE MUST BE THOROUGHLY CLEAN, FREE OF DUST, DEBRIS & STANDING WATER.
4. FOR TEMPERATURES BELOW 70 DEGREES F. EPOXY MAY TAKE 24 HOURS OR LONGER TO CURE. SEE MANUFACTURERS'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.



CONCRETE STD THREADED ROD ANCHOR

5 NOT TO SCALE

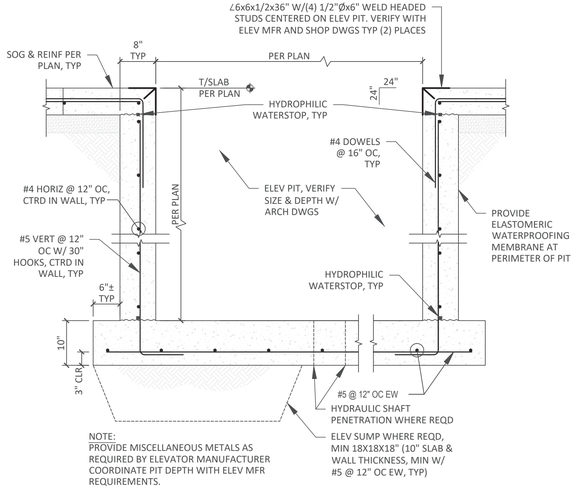
BAR SIZE	TOP BARS		OTHERS THAN TOP BARS	
	ld	1.3ld	ld	1.3ld
#3	13"	17"	10"	13"
#4	18"	24"	14"	19"
#5	22"	29"	17"	23"
#6	26"	34"	20"	26"
#7	38"	50"	29"	38"
#8	43"	56"	33"	43"
#9	49"	64"	37"	49"
#10	54"	71"	42"	55"

ld= DEVELOPMENT LENGTH

1.3ld= TENSION LAP SPLICE

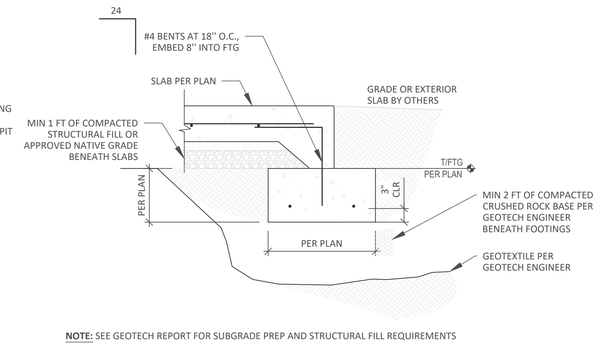
DEVELOPMENT LENGTH AND TENSION LAP SLICE LENGTH GRADE 60 BARS AND 3000 PSI CONCRETE

2 NOT TO SCALE



ELEVATOR PIT SECTION

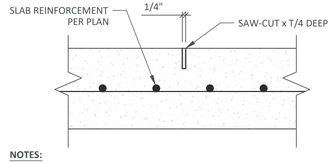
9 SCALE: 3/4" = 1'-0"



NOTE: SEE GEOTECH REPORT FOR SUBGRADE PREP AND STRUCTURAL FILL REQUIREMENTS

TYPICAL EXTERIOR SLAB POUR OVER AT DOORWAY

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



NOTES:

1. 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.
2. MAKE INITIAL SAW CUTS ALONG THE SHORT DIRECTION OF THE SLAB FIRST.
3. MAINTAIN MAXIMUM JOINT SPACING OF 10 FEET AND MAXIMUM PANEL ASPECT RATIO OF 1.3 TO 1.0.

CONTROL JOINT

3 NOT TO SCALE

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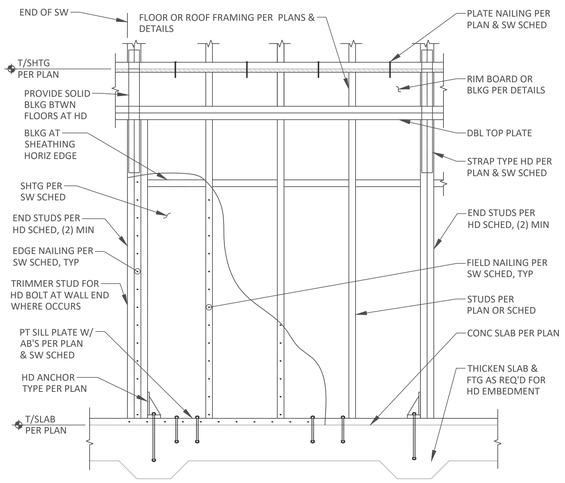
JOB#
23-067

SHEET TITLE:
FOUNDATION DETAILS

SHEET#: S3.0

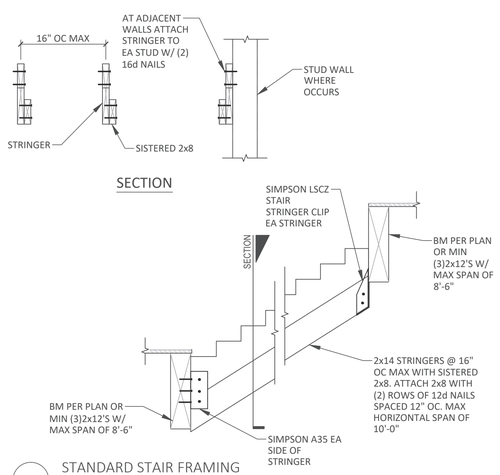
SCALE: AS SHOWN

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SG	03/28/2025	KJH	03/28/2025



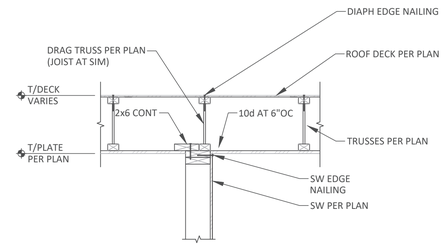
9 STANDARD SHEAR WALL CONSTRUCTION

NOT TO SCALE



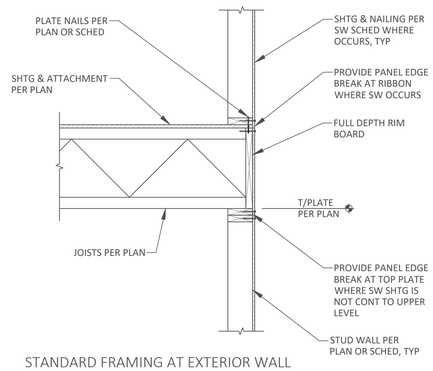
7 STANDARD STAIR FRAMING

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"

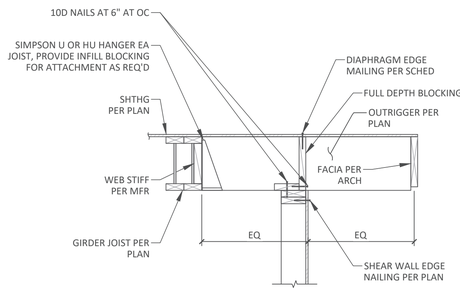
HOLD-DOWN/STRAP SCHEDULE - DOUG-FIR STUDS									
	TYPE	NUMBER OF STUDS/POST	NAILS, SCREWS, OR BOLTS	ANCHOR				CAPACITY, LBS	NOTES
				DIAMETER	CONCRETE EMBEDMENT				
					STEM WALL		SPREAD FOOTING		
					CIP	ADHESIVE	CIP OR ADHESIVE		
WOOD TO CONCRETE									
	HDU2	(2) 2X	(6) SDS 1/4x2 1/2	5/8"	10"	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	
		7.25"	(30) SDS 1/4x2 1/2	1	18"	-	11"	11175	
WOOD TO WOOD	LSTA30	(2) 2X	(22) 10d	-	-	-	-	1640	
	MSTA30	(2) 2X	(22) 10d	-	-	-	-	2050	
	MST27	(2) 2X	(30) 16d	-	-	-	-	3700	
	MSTI48	(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.

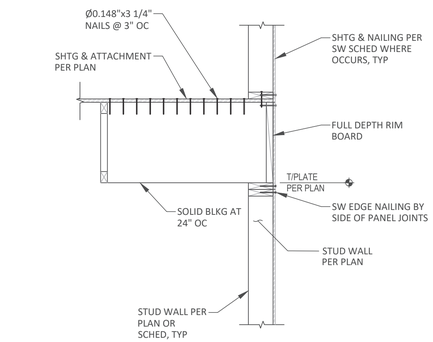
8 HOLD DOWN STRAP SCHEDULE

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"

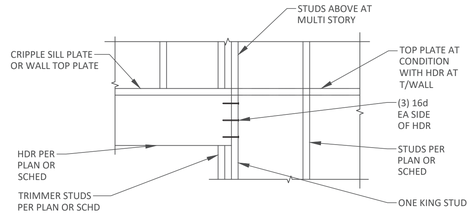
NOTES:

1. STUDS SHALL BE SPACED A MAXIMUM OF 16" ON CENTER EXCEPT GYP WALLS MAY BE SPACED AT 24" ON CENTER.
2. BLOCKING IS REQUIRED AT ALL PANEL EDGES.
3. ALL SHEAR PANELS SHALL BE CONTINUOUS BETWEEN HORIZONTAL DIAPHRAGMS SW'S (ROOF TO FLOOR, FLOOR TO FLOOR, FLOOR TO FOUNDATION).
4. REFERENCE GENERAL NOTES ON SHEET S1.0 FOR ADDITIONAL INFO.
5. SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLD-DOWN POST LOCATIONS. PROVIDE MIN (2) STUDS AT ENDS OF ALL. SEE HOLD-DOWN SCHEDULE FOR LARGER END STUDS AT HOLD-DOWNS.
6. ALL NAILING WITH TWO ROWS SHALL HAVE 1 1/2" SPACING BETWEEN ROWS.
7. NO. 6 X 1 1/4" DRYWALL SCREWS MAY BE USED IN LIEU OF 5D COOLER NAILS FOR GYPSUM SHEAR WALLS.
8. 3X BLOCKING AT PANEL EDGES MAY BE SUBSTITUTED WITH (2) 2X BLOCKING NAILED TOGETHER WITH NAIL SIZE AND SPACING TO MATCH SILL NAILING
9. A35 AND LTP5 CLIPS ARE SIMPSON PRODUCTS, BUT MAY BE SUBSTITUTED WITH APPROVED EQUIVALENTS.
10. SOME SHEAR WALL TYPES MAY NOT BE USED ON THIS PROJECT.

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) ROWS16d 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"

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PROJECT:
CHESHIRE UPPER LOT

-

JOBSITE ADDRESS:
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Mercer Island, WA 98040

ARCHITECT:
PATRICK LYNCH

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SEAL:

KEVIN J HAIR — STATE OF WASHINGTON — 40078 — REGISTERED PROFESSIONAL ENGINEER

03/28/2025

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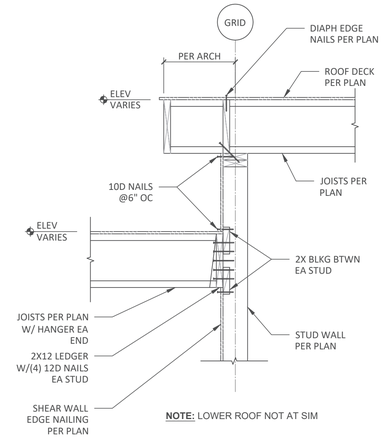
JOB#
23-067

SHEET TITLE:
FRAMING DETAILS

SHEET#: S4.0

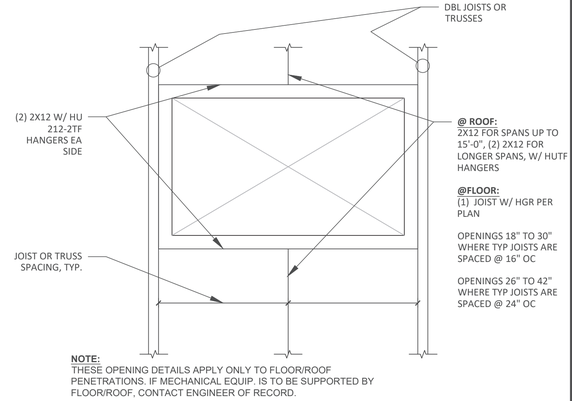
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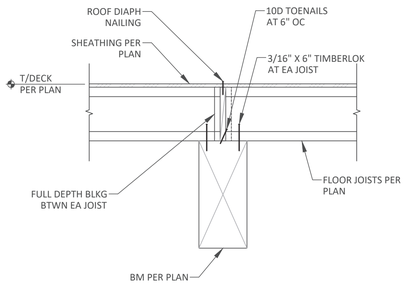
4 ROOF TRANSITION FRAMING

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



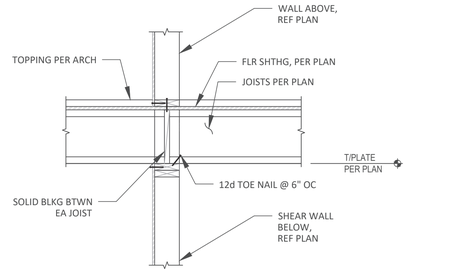
1 TYPICAL FLOOR AND ROOF PENETRATIONS

NOT TO SCALE



5 FLOOR/ROOF JOIST BEARING AT BEAM

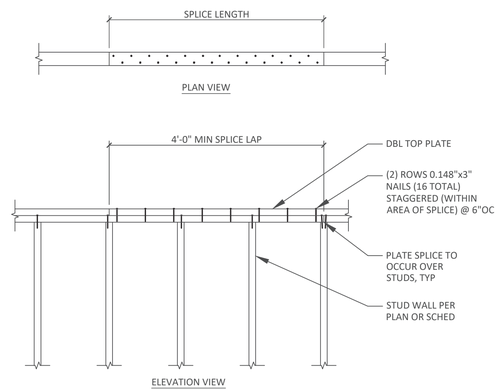
SCALE 3/4"=1'-0"



NOTE:
AT SIMILAR JOISTS PARALLEL ONE SIDE OF WALL.

2 JOIST BEARING AT INTERIOR WALL

SCALE 3/4"=1'-0"



NOTE:
FLOOR/ROOF FRAMING NOT SHOWN FOR CLARITY.

3 TYPICAL PLATE SPLICE DETAIL

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

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SHEET#: S4.1

SCALE: AS SHOWN

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General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2021 EDITION).

2. 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

3. 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.

4. 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.

5. 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.

6. 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".

7. 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.

8. 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.

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

QUALITY ASSURANCE

10. 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

11. 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

12. 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.

13. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI.

14. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-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.

15. 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"

16. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3000 PSI MINIMUM).

ANCHORAGE

17. 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.

18. 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

19. 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.

20. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, FY = 50 KSI. OTHER ROLLED SHAPES INCLUDING PLATES, SHALL CONFORM TO ASTM A36, FY = 36 KSI. STEEL PIPE SHALL CONFORM TO ASTM A-53, TYPE E OR S, GRADE B, Fy = 35 KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE C, FY = 46 KSI (ROUND), FY = 50 KSI (SQUARE AND RECTANGULAR). CONNECTION BOLTS SHALL CONFORM TO ASTM A307.

21. 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.

22. 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.

23. 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.

24. 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

25. 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 WWPA STANDARD, WESTERN LUMBER GRADING RULES 2021. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

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

26. 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, Fb = 2,400 PSI, Fv = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS, WITH SPANS OVER 30', TO 3,500' RADIUS, UNLESS SHOWN OTHERWISE ON THE PLANS.

27. 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.

28. 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.

29. 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.

30. 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 TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITS" 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.

31. 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.

    B. 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.

32. 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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DREW FREDERICK JOHNSON — STATE OF WASHINGTON — 22014 — REGISTERED STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

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APPROVED: GFJ

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General Structural Notes

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DATE: February 7, 2025
PROJECT NO: 00586-2025-01
SHEET NO:
S1.1

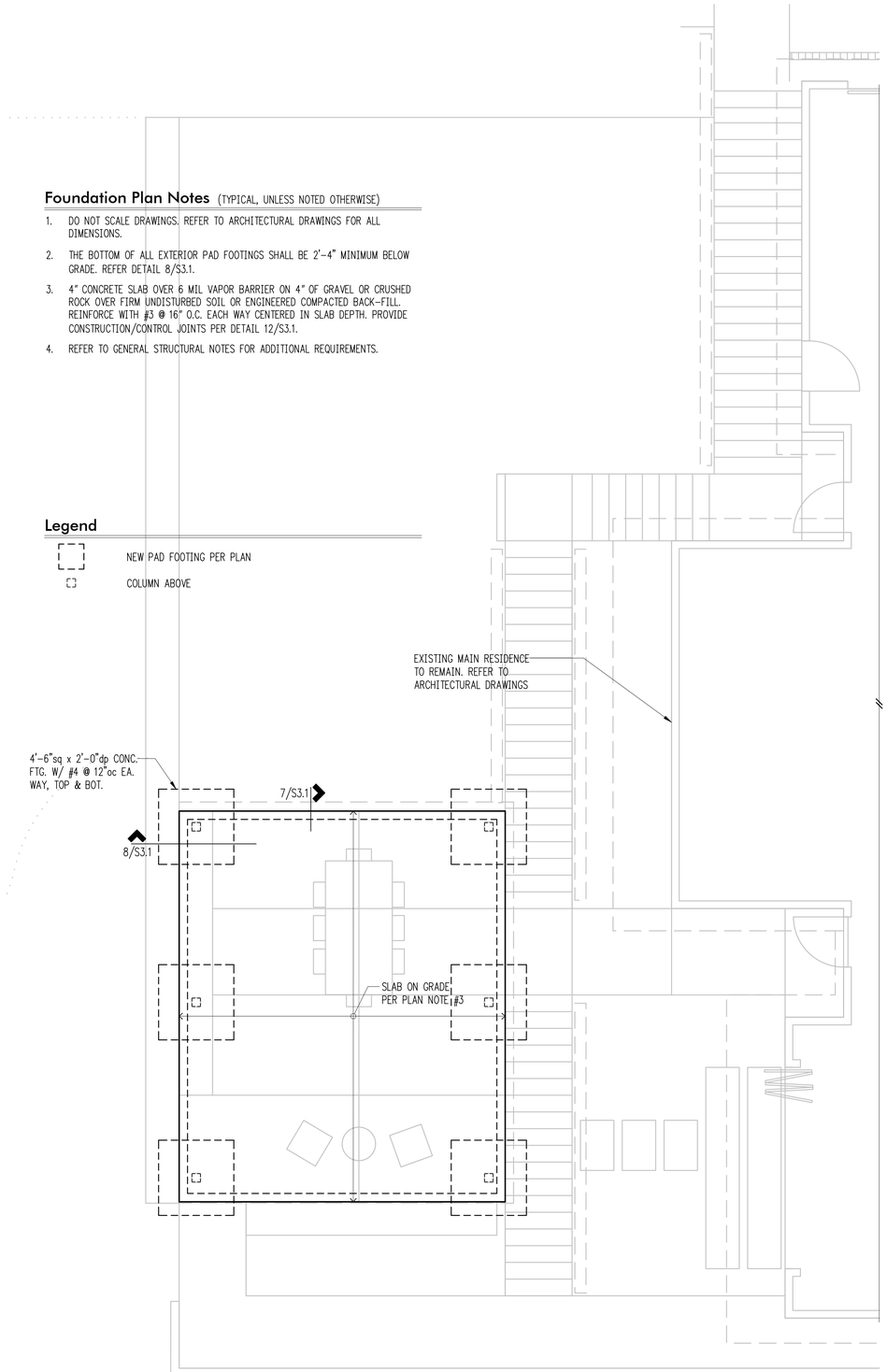
Foundation Plan Notes (TYPICAL, UNLESS NOTED OTHERWISE)

1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. THE BOTTOM OF ALL EXTERIOR PAD FOOTINGS SHALL BE 2'-4" MINIMUM BELOW GRADE. REFER DETAIL 8/S3.1.
3. 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.
4. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

NEW PAD FOOTING PER PLAN

COLUMN ABOVE



Pergola Foundation Plan

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

Framing Plan Notes (TYPICAL, UNLESS NOTED OTHERWISE)

1. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. 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.
3. PERGOLA FRAMING SHALL BE 2X10 HEMFIR NO. 2 AT 24" O.C.
4. 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%.
5. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

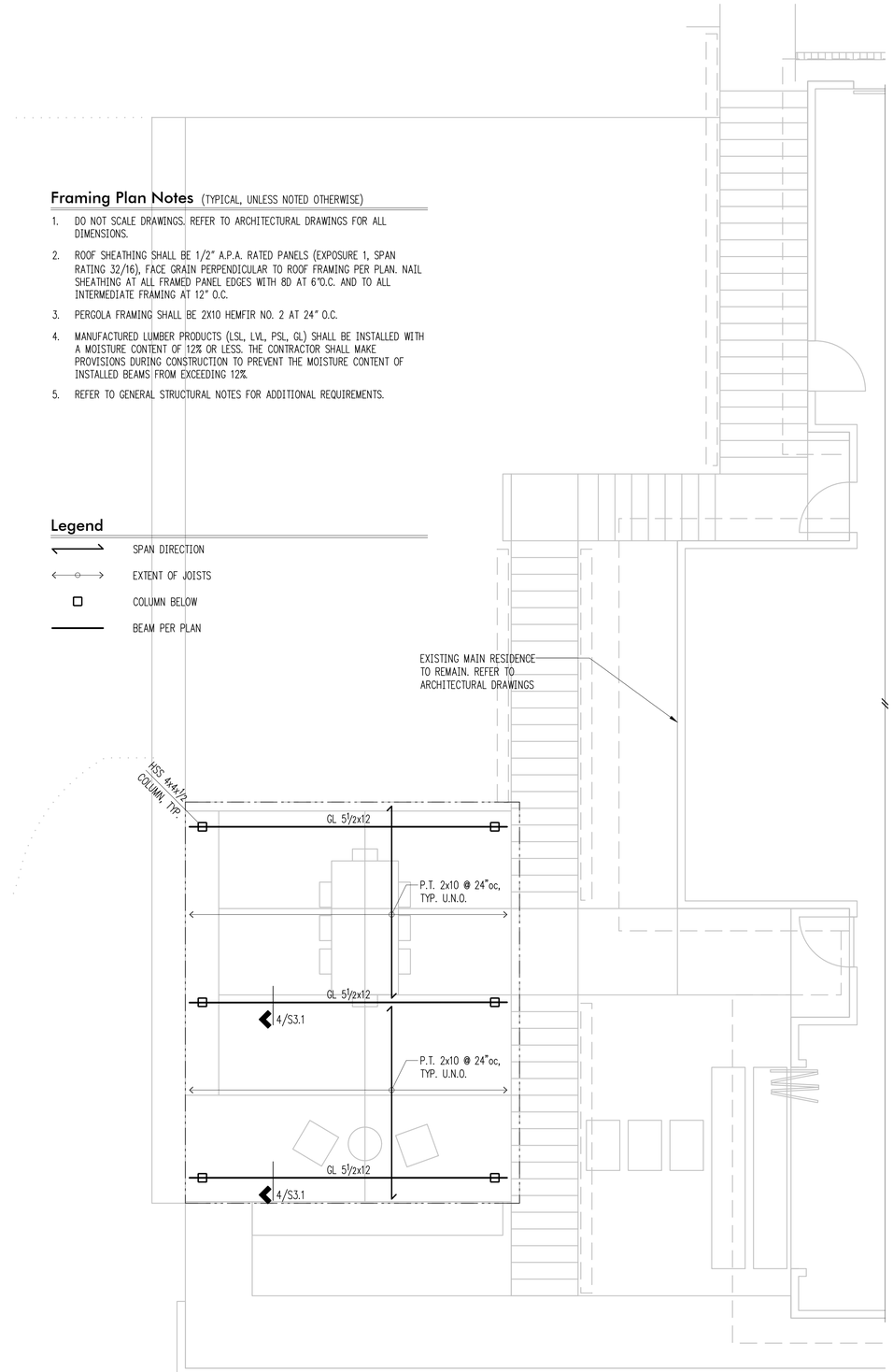
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SPAN DIRECTION

EXTENT OF JOISTS

COLUMN BELOW

BEAM PER PLAN



Pergola Framing Plan

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

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Pergola Framing & Foundation Plans

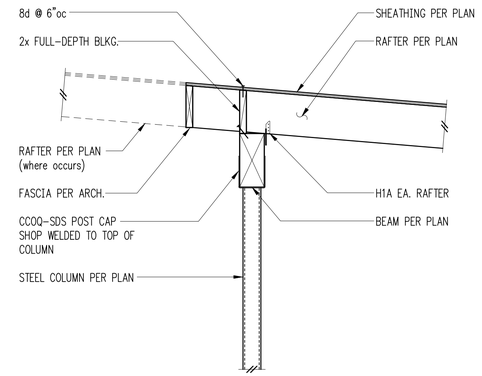
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SHEET NO:

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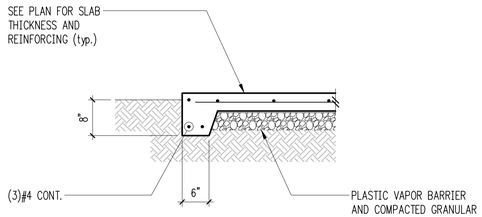
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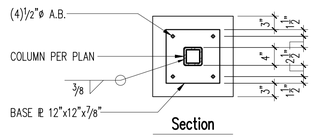
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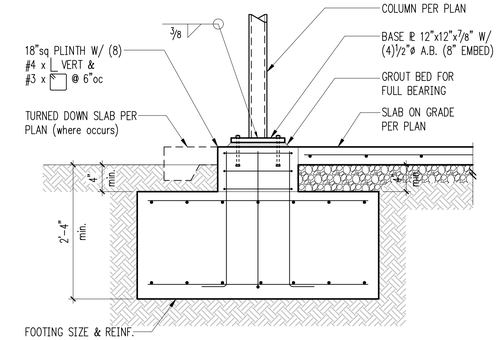
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Typical Slab Edge 7



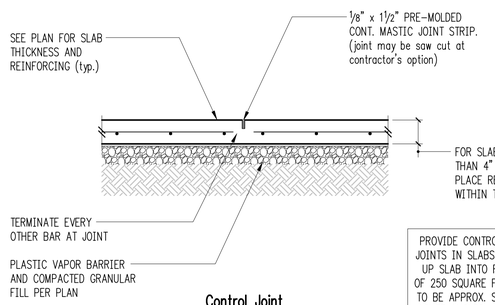
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8

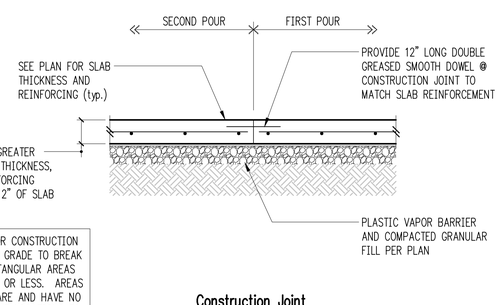
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Control Joint

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.



Construction Joint

Typical Slab Joints 12

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