STANDARD A	BBRE\	/IATIONS AND	SYME	BOLS	
ANGLE CENTERLINE CHANNEL	<u></u>	FIBERGLASS FIRE HOSE CABINET FINISH	FGL FHC FIN	PAIR PRE-CAST PRESSURE TREATED	PR PRCST PT
DIAMETER OR ROUND NUMBER OR POUND PENNY	ф # d	FLOOR FLUORESCENT	FL FLG FLUOR	PAPER TOWEL DISPENSER PAPER TOWEL DISPENSER AND RECEPTACLE PARTITION	PTD/R PTN/
PERPENDICULAR PLATE ANCHOR BOLT	_ <u> </u> P2 AB	FACE OF CONCRETE FACE OF FINISH FURNISH BY OWNER	FOC FOF FOIC	PARTITION  PAPER TOWEL RECEPTACLE  POLYVINYL CLORIDE	PTR PVC
ACOUSTICAL AIR CONDITIONING	AC A/C	INSTALL BY CONTRACTO FURNISH BY OWNER		PAVEMENT QUARRY TILE	PVMT QT
ACOUSTICAL TILE AREA DRAIN	ACT AD	INSTALL BY OWNER FACE OF STUD	FOS	RISER	R
ADDITIVE ADHESIVE ADJACENT	ADD ADH ADJ	FIREPLACE FULL SIZE	FP FS	RETURN AIR RADIUS RUBBER BASE	RA RAD RB
ADJUSTABLE ACCESS FLOOR	ADJT AF	FEET FIRE PROOFING FOOTING	FT FPRF FTG	ROBBER BASE ROD & SHELF ROOF DRAIN	R&S RD
ABOVE FINISH FLOOR AGGREGATE	AFF AGG	FURRING FUTURE	FURR FUT	ROOF DRAIN, OVERFLOW REINFORCING BAR	RD/O REBAR
ALUMINUM ALTERNATE ACCESS PANEL	AL ALT AP	FUTURE ROUGH-IN ONLY FIXED	FUT-RIO FX	REFERENCE REFIGERATOR REINFORCED	REF REFR REINF
APPROXIMATE ARCHITECTURAL	APPROX ARCH	GAUGE OR GAGE GALVANIZED	GA GALV	REQUIRED RESILIENT	REQ RESIL
ASPHALT ATTENUATION ACOUSTICAL WALL FABRIC	ASPH ATT AWF	GRAB BAR GENERAL GEN	GB N CONTR	REGISTER RIGHT HAND OR ROBE HOOK ROOM	RGTR K RH RM
ACOUSTICAL WALL PANEL	AWP	CONTRACTOR GLASS OR GLAZING GLU-LAM BEAM	GL GLBM	ROUGH OPENING OR REVERS OSMOSIS WATER	
BOARD BETWEEN	BD BETW	GLASS MESH MORTAR UNIT GROUND		ROUGH SAWN RUBBER	RS RUB
BITUMINOUS BUILDING BLOCK	BITUM BLDG BLK	GRADE GYPSUM WALL BOARD	GR GWB	REVERSE SOUTH	RVS S
BLOCKING BEAM	BLKG BM	GYPSUM HOSE BIB	GYP HB	SOLID CORE SEAT COVER DISPENSER	SC SCD
BEARING BOTTOM	BRG BOT	HARD BOARD HOLOW CORE	HBD HC	SCHEDULE SOAP DISPENSER	SCHD SD
BEDROCK BRICK BASEMENT	BR BRK BSMT	HAND DRYER HEADER HARDWOOD	HD HDR	SECTION SQUARE FEET	SECT SF SG
BUILT-UP ROOF	BUR	HARDWARE HOLLOW METAL	HDWD HDWE HM	SAFETY GLAZING SHOWER SHEET	SHR SHT
CABINET CATCH BASIN CEMENT	CAB CB CEM	HORIZONTAL HOUR	HORIZ HR	SHEATHING SOLAR INSULATED GLAZING	SHTH SIG
CERAMIC CUBIC FEET PER MINUTE	CER CFM	HEIGHT HEATING HEATING, VENTILATING,	HT HTG HVAC	SIMILAR SINK SEALER	SIM SK SLR
CONDUCTIVE FLOOR TILE CORNER GUARD	CFT CG	AIR CONDITIONING HOT WATER HEATER	HWH	SANITARY NAPKIN DISPENSER	SND
CHALK BOARD CAST IRON CONTROL JOINT	CHBD CI CJT	INSIDE DIAMETER	ID	SANITARY NAPKIN RECEPTACLE	SNR
CEILING CONSTRUCTION JOINT	CLG CJ	(DIMENSION) INSULATED GLAZING INSULATED HOLLOW	IG IHM	SEALANT STAND PIPE SPECIFICATION	SNT SP SPEC
CUP SINK CAULKING CLOSET	CS CLK CLO	METAL INCLUDE	INCL	SQUARE STAINLESS STEEL	SQ SST
CLEAR CERAMIC MOSIAC TILE	CLR CMT	INSULATION INTERIOR	INSUL INT	SERVICE SINK SOUND TRANSMISSION CLASS	SSK STC
CONCRETE MASONRY UNIT	CNTR	JANITOR JOIST	JAN JST	STANDARD STEEL	STD STL
CLEANOUT COLUMN CONCRETE	CO COL CONC	JOINT	JT KIT	STORAGE STRUCTURAL	STOR STRL
CONNECTION CONSTRUCTION	CONN CONSTR	KNEE SPACE	KS	SUSPENDED SHEET VINYL OR SEAMLESS VINYL	SUSP SV
CONTINUOUS CORRIDOR CARPET	CONT CORR CPT	LABORATORY LAMINATE	LAB LAM	SERVICE SYMMETRICAL	SVCE SYM
CASEMENT CERAMIC TILE	CSMT CT	LAVATORY LAG BOLT LENGTH	LAV LB LG	SWITCHBOARD SPECIAL WALL COVERING	SWBD SWC
CENTER COUNTER SINK CUBIC YARD	CTR CTSK CY	LEFT HAND LOCKER	LH LKR	TREAD TOWEL BAR	T TB
DOUBLE	DBL	LIQUID MARKING SURFACE LIGHT LIGHT WEIGHT CONCRETE	LMS LT LWC	TERRAZZO TELEPHONE TOP AND BOTTOM	TER TEL
DEPARTMENT DETAIL DRINKING FOUNTAIN	DEPT DET DF	MACHINE	MACH	TONGUE AND GROOVE TEMPERED GLAZING	T&B T&G TG
DIONIZED WATER DIAMETER	DI DIA	MASONRY MATERIAL	MAS MATL	THRESHOLD TEMPERED INSULATED	THR TIG
DIAGONAL DIMENSION	DIAG DIM	MAXIMUM MEDICINE CABINET MEDIUM DENSITY OVERLA	MAX MC Y MDO	GLAZING TACKBOARD TOP OF	TKBD TO
DISPENSER DAMPPROOFING DOWN	DISP DMPF DN	MECHANICAL MEMBRANE	MECH MEMB	TOP OF CURB TOP OF FOOTING	TOC TOF
DAMPER DOWNSPOUT	DPR DS	METAL MET MEZZANINE MANUFACTURER	OR MTL MEZZ MFR	TOP OF PAVEMENT TOP OF STEEL TOP OF SLAB	TOP TOS TOSL
DISHWASHER DRAWING	DW DWG	MANHOLE MINIMUM	MH MIN	TOP OF WALL TOILET PAPER DISPENSER	TOW
EAST EACH	E EA	MIRROR MISCELLANEOUS MOLDING	MIR MISC MLD	TOILET PARTITION TELEVISION TYPICAL	TPTN TV TYP
EXPANSION BOLT EXPANSION JOINT EXTERIOR INSULATED	EB EJ EIFS	MASONRY OPENING MOUNTED	MO MTD	UNDERWRITERS	UL
FINISH SYSTEM ELEVATION	EL	MULLION NORTH	MULL	LABORATORY UNFINISHED UNLESS OTHERWISE NOTED	UNF UON
ELECTRIC ELEVATOR	ELEC ELEV	NON-FROST SUSCEPTIBLE NOT IN CONTRACT	N NFS NIC	URINAL	UR
ENTRY MAT EMERGENCY ENCLOSURE OR ENCLOSED	EM EMER ENCL	NUMBER NOMINAL	NO NOM	VARIES VINYL BASE	VAR VB
ELECTRIC PANEL BOARD EPOXY	EP EPX	NOISE REDUCTION COEFFICIENT NOT TO SCALE	NRC NTS	VINYL CONPOSITION TILE VAPOR RETARDER VENTILATOR	VCT VR VENT
EQUAL EQUIPMENT EMERGENCY SHOWER/	EQ EQPT ESEW	OVERALL	ОА	VERTICAL VESTIBULE	VERT VEST
EYE WASH ESTIMATE	EST	OBSURE ON CENTER OUTSIDE DIAMETER	OBS OC OD	VINYL VENEER VINYL TILE	VIN VNR
EXHAUST EXPANSION EXISTING	EXH EX (E)	(DIMENSION) OFFICE	OFF	VINYL WALL COVERING	VT VWC
EXISTING EMERGENCY EYE WASH EXTERIOR	EW EXT	OVERHEAD OPPOSITE HAND	OH OPH	WEST WITH WITHOUT	W W/ W/O
FIRE ALARM	FA	OPENING OPPOSITE	OPNG OPP	WATER CLOSET WOOD OR WIDTH	WC WD
FLAT BAR FIBER BOARD FURNISHED BY OTHERS	FB FBD FBO	PARTICLE BOARD PREFABRICATED	PBD PFB	WINDOW WIRE GLASS	WDW WG
FURNISHED BY CONTRACTO INSTALL BY CONTRAC	OR FCIC TOR	PREFINISHED PLATE OR PROPERTY LINE PLASTIC LAMINATE	PFHB PL P LAM	WIRE MESH WATER PROOF WORKING POINT	WM WP WPT
FACTORY FLOOR DRAIN	FCTY FD	PLYWOOD PANEL	PLYWD PNL	WATER RESISTENT WAINSCOT	WR WSCT
FOUNDATION FIRE EXTINGUISHER	FDN FE	PAINT POLISH	PNT POI	WEIGHT WELDED WIRE FABRIC	WT WWF

FIRE EXTINGUISHER CABINET FEC

G 2.0 BUILDING CODE COMPLIANCE FIRE & LIFE SAFETY, AREA DIAGRAMS & PLUBMING CALCULATIONS O ANSI GUIDELINES ACCESSIBLITY NOTES O SURVEY	CORR. 1	AL	5 / CIVIL PERMIT SUBMITTAL
NUMBER NAME CONTENTS  GENERAL  G 0.0 COVERSHEET PROJECT IFORMATION, SHEET INDEX, ABBREVIATIONS, SYMBOLS & GENERAL NOTES OG 2.0 BUILDING CODE COMPLIANCE FIRE & LIFE SAFETY, AREA DIAGRAMS & PLUBMING CALCULATIONS OG 3.0 ANSI GUIDELINES ACCESSIBLITY NOTES		AL	3 / CIVIL PERMIT SUBMITTA
G 0.0 COVERSHEET PROJECT IFORMATION, SHEET INDEX, ABBREVIATIONS, SYMBOLS & GENERAL NOTES O G 2.0 BUILDING CODE COMPLIANCE FIRE & LIFE SAFETY, AREA DIAGRAMS & PLUBMING CALCULATIONS O G 3.0 ANSI GUIDELINES ACCESSIBLITY NOTES O  SURVEY	CUP C	CUP FINAL	BUILDING /
G 2.0 BUILDING CODE COMPLIANCE FIRE & LIFE SAFETY, AREA DIAGRAMS & PLUBMING CALCULATIONS O G 3.0 ANSI GUIDELINES ACCESSIBLITY NOTES O SURVEY			
G 2.0 BUILDING CODE COMPLIANCE FIRE & LIFE SAFETY, AREA DIAGRAMS & PLUBMING CALCULATIONS O ANSI GUIDELINES ACCESSIBLITY NOTES O SURVEY	0	0	•
SURVEY	0	0	
	0	0	•
1 of 1 SURVEY			
1011	0	0	•
CIVIL			
C1 COVERSHEET TESC PLAN	•	•	•
C2 UTILITY SITE PLAN 0	•	•	•
C3 UTILITY EXTENSION 0	•	•	•
C4 UTILITY EXTENSION NOTES			•
C5 DETAILS 1		<u> </u>	•
C6 DETAILS 2			•
LANDSCAPE			
EN-04 PRELIMINARY LANDSCAPE PLAN	•	•	•

A 1.0	SITE PLAN & ZONING COMPLIANCE	SITE PLAN, ZONING NOTES	0	•	•	•
A 2.0	FOUNDATION PLAN & EXCAVATION NOTES		0	0	0	
A 2.1	LEVEL 1 - FLOOR PLAN	GROUND LEVEL PLAN, FLOOR PLAN NOTES	0	•	•	•
A 2.2	LEVEL 2 - FLOOR PLAN	SECOND LEVEL PLAN	0	•	•	•
A 2.3	ROOF PLAN	ROOF PLAN, SRC R806 COMPLIANCE NOTES, VENTING	0	0	0	•
A 2.4	ENLARGED STAIR PLANS AND SECTIONS	STANDARD DETAILS, GUARD OVERTURNING DTL	0	0	0	•
A 3.0	ELEVATIONS	SOUTH ELEV, WEST ELEV, DETAILS	0	0	0	•
A 3.1	ELEVATIONS	NORTH ELEV, EAST ELEV, NOTES, DETAILS	0	0	0	•
A 3.2	ELEVATIONS - COLORED	SOUTH ELEV, WEST ELEV, DETAILS	•	•	•	
A 3.3	ELEVATIONS - COLORED	NORTH ELEV, EAST ELEV, NOTES, DETAILS	•	•	•	(
A 4.0	SECTIONS	BUILDING SECTIONS, DETAILS	0	0	0	•
A 4.1	SECTIONS	BUILDING SECTIONS, DETAILS	0	0	0	•
A 4.8	WALL SECTIONS		0	0	0	•
A 5.0	DETAILS	STANDARD DETAILS, GUARD OVERTURNING DTL	0	0	0	•
A 9.0	WINDOW & DOOR SCHEDULES, ASSEMBLIES		0	0	0	•

S1	GENERAL NOTES	0	0	)	)
S1.1	GENERAL NOTES	0	0	,	)
S2	FOUNDATION PLAN	0	0	,	)
S3	SECOND FLOOR FRAMING PLAN	0	0	,	)
S4	ROOF FRAMING PLAN	0	0	,	)
S5	FIRST FLOOR SHEARWALL PLAN	0	0	,	)
S5.1	SECOND FLOOR SHEARWALL PLAN	0	0	,	)
S6	CMU WALL ELEVATION	0	0	,	)
S7	FOUNDATION, CMU, SHEARWALL DETAILS	0	0	,	)
S8	FRAMING DETAILS	0	0	,	)

	T	$\tau$	I	$\tau$	$\Box$
M001	NOTES AND LOAD SUMMARY	0	0	0	
M101	L1 HEATING AND COOLING PLAN	0	0	0	
M102	MEZZANINE HEATING AND COOLING PLAN	0	0	0	
M201	VENTILATION PLAN	0	0	0	
M202	MEZZANINIE VENTILATION PLAN	0	0	0	
M601	HEAT PUMP SYSTEM DETAILS	0	0	0	
M602	MANUAL S COMPLIANCE REPORTS	0	0	0	
ELECTRICAL					
E1	FIXTURE SCHEDULE AND SYMBOLS LEGEND	0	0	0	
			1	1	1 =

E2	LEVEL 1 LIGHTING FLOOR PLAN	0	0	0
E3	MEZZANINE LIGHTING FLOOR PLAN	0	0	0
PLUMBING	3			
P0.01	PLUMBING COVER SHEET	0	0	0
P0.02	PLUMBING SCHEDULES AND CALCULATIONS	0	0	0
P0.03	PLUMBING DETAILS	0	0	0
P1.00	PLUMBING PLAN - UNDERGROUND	0	0	0
P2.01	PLUMBING PLAN - LEVEL 1	0	0	0
P2.02	PLUMBING PLAN - LEVEL 2 MEZZANINE	0	0	0
P2.03	PLUMBING PLAN - ROOF	0	0	0
P4.01	PLUMBING RISER DIAGRAM	0	0	0

#### GENERAL NOTES READ BEFORE BEGINNING ANY WORK

WITH A SIMILAR CORROSION-RESISTANT COATING.

#### GENERAL

- 1. THESE DRAWINGS AND THE INFORMATION THEY DEPICT ARE INSTRUMENTS OF SERVICE FOR THE ARCHITECT AND ARE PROTECTED FULLY BY COPYRIGHT LAW. UNDER NO CIRCUMSTANCES SHALL THESE DRAWINGS BE REPRODUCED AND USED IN ANY CAPACITY WHATSOEVER TO CONSTRUCT ANY BUILDINGS OR PORTIONS OF BUILDINGS AT LOCATIONS OTHER THAN THOSE WHICH ARE DEPICTED EXPLICITLY HEREIN. IT IS THE FULL INTENTION OF THE ARCHITECT TO DEPICT A BUILDING WHICH IS COMPLIANT TO EVERY ASPECT OF CURRENT LOCAL BUILDING CODES.
- 2. ENERGY, MECHANICAL AND LAND USE CODE. UNDER NO CIRCUMSTANCES HAVE ANY VIOLATIONS OF SAID CODES BEEN REPRESENTED INTENTIONALLY, AND UNDER NO CIRCUMSTANCES SHOULD THESE DRAWINGS BE INTERPRETED AS SUCH. IF VIOLATIONS OF CODE ARISE THROUGH THE REVIEW AND CONSTRUCTION OF THE BUILDING(S) CONTAINED IN THIS DRAWING SET, CONTACT THE ARCHITECT IMMEDIATELY BEFORE BEGINNING OR CONTINUING WORK.
- 3. DO NOT SCALE DRAWINGS. CONTACT ARCHITECT IMMEDIATELY BEFORE SUBMITTING PROPOSALS, BIDS, OR PROCEEDING WITH ANY WORK IF AMBIGUITIES, DISCREPANCIES, OR A LACK OF INFORMATION EXIST IN
- 4. ALL DIMENSIONS ARE TO FACE OF ROUGH FRAMING MEMBER OR FACE OF CONCRETE UON. 5. THIS PLAN SET DOES NOT CONSTITUTE A FINAL CONSTRUCTION SET UNLESS STAMPED AND FINALED BY A CITY MUNICIPALITY.

XFMR

POL WELDED WIRE FABRIC

TRANSFORMER

1. RESPONSIBILITY FOR THE SAFETY OF ALL INDIVIDUALS PERFORMING FIELD WORK TO CONSTRUCT THE BUILDING DELINEATED IN THIS DRAWING SET RESTS SOLELY ON THE CONTRACTOR. BY INTENT, THESE DRAWINGS CONTAIN NO INFORMATION REGARDING THE SAFETY OF THE INDIVIDUALS PERFORMING SAID WORK AS THE CONSIDERATION OF SUCH LIES FULLY WITHIN THE DUTIES AND EXPERTISE OF THE CONTRACTOR.

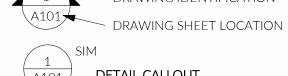
- 1. PRIOR TO SUBMITTING SHOP DRAWINGS, FABRICATORS SHALL VERIFY ALL CONDITIONS IN THE FIELD AND PROVIDE DRAWINGS USING ON SITE FIELD MEASUREMENTS TO CONSTRUCTED FRAMING AND STRUCTURAL
- 2. ALL PRODUCTS, MATERIALS, AND APPLIANCES SHALL BE INSTALLED DIRECTLY ACCORDING TO THE MANUFACTURERS WRITTEN INSTRUCTIONS. IF SAID INSTRUCTIONS CALL FOR A LICENSED PERSON OF A SPECIFIC TRADE TO PERFORM INSTALLATION, WORK SHALL BE DONE AS SUCH.

3. ALL FASTENERS USED TO SECURE PRESSURE TREATED WOOD MATERIALS SHALL BE GALVANIZED OR TREATED

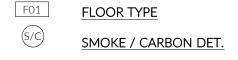
**VICINITY MAP** 

# \_REFERENCE GRID











<u>REVISION</u>



PROJECT NORTH



SPOT ELEVATION MARKER

SG <u>SAFETY GLAZING</u> (ELEVATION VIEW)

#### **VICINITY MAP**





OWNER SAMANTHA KEIMIG JACKSON CASTANEDA 360.631.6019

ARCHITECT/APPLICANT FIRST LAMP, LLC MARK DORSEY, AIA 206.573.0775

mark@firstlamp.net

GENERAL CONTRACTOR JACKSON CASTANEDA OWNER

STRUCTURAL ENGINEER **FACET NW** 

JORDAN JANICKI, PE, SE 360.770.0101 jjanicki@facetnw.com

LANDSCAPE ARCHITECT

LEANNE KUHLMAN, LA

253.838.6113

CONTACT: JOHN EVERETT

john.everett@esmcivil.com

ESM CONSULTING ENGINEERS, LLC

ENGINEERED PROJECTS CONSULTING, LLC WESLEY VAN RITE, PE CONTACT: AARON BARNETT 206.409.4948 aaron@buildwithbalance.com

ELECTRICAL ENGINEER CROSS ENGINEERS, INC STEVEN HUBBS, PE CONTACT: SCOTT KELLY 253.759.0118 EMAIL: scottk@crossengineers.com

PLUMBING ENGINEER HV ENGINEERING, INC DUSTIN JOHNSON, CPD 206.706.9669 dustin@hvengineering.biz

## PROJECT INFORMATION

OWNER SAMANTHA KEIMIG, JACKSON CASTANEDA

SITE ADDRESS 111 5TH ST SE, PUYALLUP, WA 98372

LEGAL DESCRIPTION LOT 2, CITY OF PUYALLUP SP NO.P-`3-0085, REC. 201405145001, PIERCE COUNTY

PARCEL NUMBER 7285000112

**CURRENT ZONING** CG - GENERAL COMMERCIAL **GROSS LOT AREA** 10,000 SF = 0.23 AC

APPLICABLE CODES PUYALLUP MUNICIPAL CODE

WASHINGTON STATE BUILDING CODE WITH LOCAL AMENDMENTS 2021 INTERNATIONAL BUILDING CODE 2017 ICC/ANSI A117.1 ACCESSIBILITY STANDARDS 2021 INTERNATIONAL MECHANICAL CODE 2021 INTERNATIONAL FIRE CODE 2021 WILDLAND-URBAN INTERFACE CODE

2021 UNIFORM PLUMBING CODE 2021 WASHINGTON STATE ENERGY CODE 2023 NATIONAL ELECTRICAL CODE NFPA-70

PROJECT DESCRIPTION THE PROPOSED PROJECT IS TO CONSTRUCT A NEW 4,122.36 SF SELF STORAGE FACILITY. UNIT 1 AND UNIT 2 INCLUDE A MEZZANINE OFFICE OCCUPANCY.

> THE PROJECT INCLUDES SITE DEVELOPMENT TO PROVIDE UTILITIES, ACCESS, AND PARKING

#### PROJECT SUBMITTALS

**BUILDING PERMIT** 

**CONDITIONAL USE PERMIT** PLCUP2022162

MUNICIPAL APPROVAL STAMPS

 $\circ$  $\square$ 

 $\simeq$  $\triangleleft$   $\square$ 

206.414.9884

 $\bigcirc$ 

SEATTLE, WA 98118

INFO@FIRSTLAMP.NET

4915 RAINIER AVE S, STE 202

PERMIT SUBMITTAL | 02.13.2025

REVISIONS DESCRIPTION

DRAWN BY:

COVERSHEET





389.90 SF 408.64 SF

**GROSS FLOOR AREA (IBC)** AREA NAME

**GRAND TOTAL** 

STORAGE 1 750.44 SF STORAGE 2 793.13 SF STORAGE 3 793.13 SF 750.44 SF STORAGE 4 3087.13 SF

LEVEL 2 OFFICE 1 389.90 SF OFFICE 2 408.64 SF 798.54 SF

793.13 SF

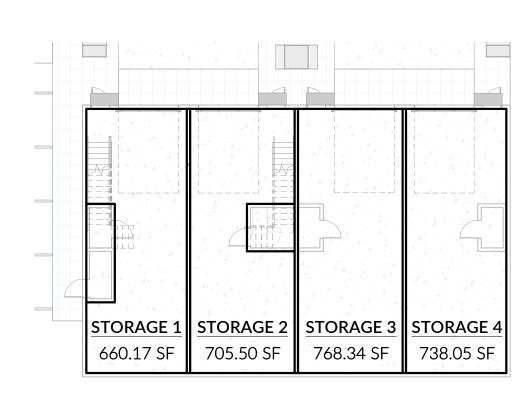
750.44 SF

STORAGE 1 | STORAGE 2 | STORAGE 3 | STORAGE 4

#### MEZZANINE NET FLOOR AREA CALCULATION IBC NET FLOOR AREA DEFINITION

793.13 SF

750.44 SF





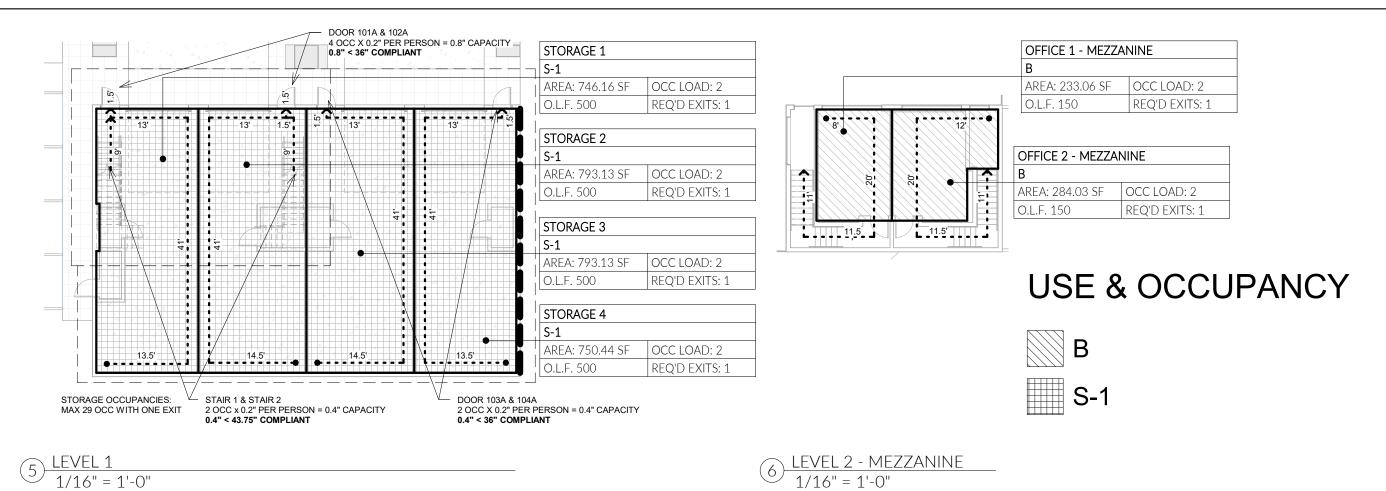
MEZZANINE AREA CALCULATION MEZZANINE NET FLOOR AREA < 1/3 OF ROOM NET FLOOR AREA

UNIT 1 - LEVEL 1: OPEN ROOM NET FLOOR AREA 660.17 SF MAX ALLOWED MEZZANINE NET FLOOR AREA 660.17 / 3 = 220.06 SF PROPOSED MEZZANINE NET FLOOR AREA 219.98 SF 219.98 SF < 220.06 SF COMPLIANT 705.50 SF

UNIT 2 - LEVEL 1: OPEN ROOM NET FLOOR AREA MAX ALLOWED MEZZANINE NET FLOOR AREA 705.50 / 3 = 235.17 SF PROPOSED MEZZANINE NET FLOOR AREA 227.09 SF < 235.17 SF COMPLIANT

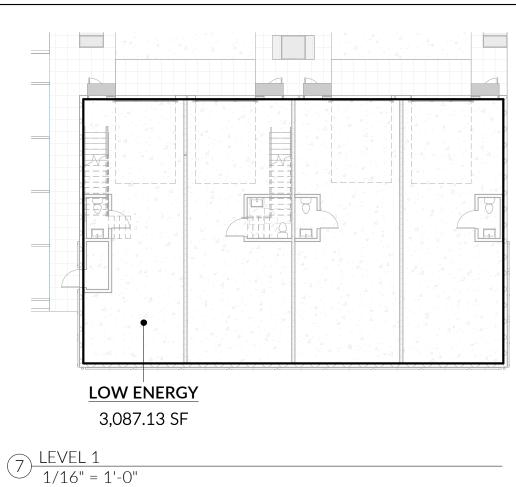
1. IBC 505.2.3 EX. 1 MEZZANINE OR PORTIONS THEREOF ARE NOT REQUIRED TO BE OPEN TO THE ROOM IN WHICH THE MEZZANINES ARE LOCATED, PROVIDED THAT THE OCCUPANT LOAD OF THE AGGREGATE AREA OF THE ENCLOSED SPACE IS NOT GREATER THAN 10

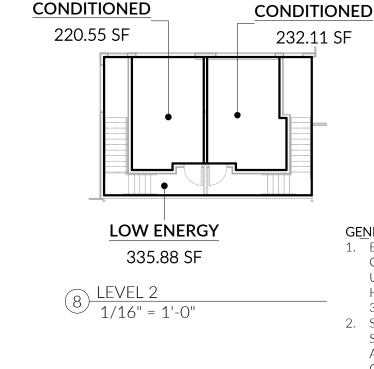
#### FIRE & LIFE SAFETY - OCCUPANCY DIAGRAMS



4 LEVEL 2 1/16" = 1'-0"

#### **ENERGY COMPLIANCE - FLOOR AREA DIAGRAMS**





CON	DITIONED SPACE AREAS
Level	AREA
CONDITIONED	
LEVEL 2	452.66 SF
	452.66 SF
LOW ENERGY	
LEVEL 1	3087.13 SF
LEVEL 2	335.88 SF
	3423.01 SF
GRAND TOTAL	3875.68 SF

1. ENCLOSED SEMI-HEATED SPACE WITHIN A BUILDING, INCLUDING ADJACENT CONNECTED SPACES SEPARATED BY AN UNINSULATED COMPONENT (BASEMENTS, UTILITY ROOMS, GARAGES, COORDIFORS), WHICH IS HEATED BUT NOT COOLED AND HAS AN INSTALLED HEATING SYSTEM OUTPUT CAPACITY GREATER THAN OR EQUAL TO 3.4 BTU/(H-FT2) BUT NOT GREATER THAN 8 BTU/(H-FT2). 2. SPACE CONDITIONING CATEGORY. CATEGORIES ARE BASED ON THE ALLOWED PEAK

SPACE CONDITIONING OUTPUT CAPACITY PER SOUARE FOOT OF CONDITIONED FLOOR AREA, OR THE DESIGN SET POINT TEMPERATURE, FOR A BUILDING OR SPACE. SPACE CONDITIONING CATEGORIES FROM LOWEST TO HIGHEST INCLUDE: LOW ENERGY, SEMI-HEATED, CONDITIONED, REFRIGERATED WALK-IN AND WAREHOUSE COOLERS, AND REFRIGERATED WALK-IN AND WAREHOUSE FREEZERS. 3. UNCONDITIONED SPACE. AN ENCLOSED SPACE WITHIN A BUILDING THAT IS NOT A

CONDITIONED SPACE AND THAT IS NOT CATEGORIZED UNDER SECTION C402.1.1. CRAWLSPACES, ATTICS AND PARKING GARAGES WITH NATURAL OR MECHANICAL

VENTILATION ARE NOT CONSIDERED ENCLOSED SPACES.

#### **FIRE & LIFE SAFETY NOTES**

#### **GENERAL NOTES** ← · ← · ← COMMON PATH 1. IBC 906 PORTABLE FIRE EXTINGUISHERS TO BE CLASS •-----

2-A; LOCATE EVERY 75'-0" MAX. EXTENGUISHERS WEIGHING LESS THAN 40LBS GROSS WEIGHT TO BE ACCESS SHALL BE ARRANGED SUCH THAT DEAD-END

INSTALLED AT 5'-0" MAX TO TOP AFF (906.7) 2. 1020.5 DEAD ENDS. WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT CORRIDORS DO NOT EXCEED 20 FEET IN LENGTH. COMMON PATH OF EGRESS TRAVEL (IBC TABLE

DISTANCE OF TRAVEL BEFORE CHOICE OF TWO EXITS WITHOUT SPRINKLER FOR PRIMARY USES IN PROJECT MAX OCC LOAD OF 30 OR LESS B, S = 100'EXIT ACCESS TRAVEL DISTANCE (IBC TABLE 1017.2) WITHOUT SPRINKLER FOR PRIMARY USES IN PROJECT

B, S-1 = 200'

3885.67 SF

227.09 SF

1006.2.1)

## **EGRESS STAIR CAPACITY CALCULATIONS**

STAIRWAY UNIT 1 & UNIT 2 - EGRESS CAPACITY CALCULATION PER SBC 1005.3.1 OFFICE MEZZANINE OCC COUNT = 2 2 x 0.2" PER PERSON = 0.4" CAPACITY PROPOSED STAIR WIDTH = 42.75"

#### **EGRESS DOOR CAPACITY CALCULATIONS**

DOORS 101A & 102A - EGRESS CAPACITY CALCULATION DOORS 103A & 104A - EGRESS CAPACITY CALCULATION OFFICE MEZZANINE OCC COUNT = 2 STORAGE OCC COUNT = 2 4 x 0.2" PER PERSON = 0.8" CAPACITY PROPOSED DOOR WIDTH = 36"

0.8" < 36" WIDE DOOR PROVIDED (COMPLIANT)

0.4" < 42.75" WIDE STAIR PROVIDED (COMPLIANT)

STORAGE OCC COUNT = 2 2 x 0.2" PER PERSON = 0.4" CAPACITY PROPOSED DOOR WIDTH = 36" 0.4" < 36" WIDE DOOR PROVIDED (COMPLIANT)

NR SEPARATION

OCCUPANCY AREAS					
AREA NAME	USE & OCCUPANCY CLASSIFICATION	SF PER PERSON	AREA	TOTAL OCCUPANT LOAD	# OF EXITS
UNIT 1					
OFFICE 1 - MEZZANINE	В	150	233.06 SF	2	1
STORAGE 1	S-1	500	746.16 SF	2	1
			979.22 SF		
UNIT 2					
OFFICE 2 - MEZZANINE	В	150	284.03 SF	2	1
STORAGE 2	S-1	500	793.13 SF	2	1
		•	1,077.16 SF		
UNIT 3					
STORAGE 3	S-1	500	793.13 SF	2	1
			793.13 SF		•
UNIT 4					
STORAGE 4	S-1	500	750.44 SF	2	1
			750.44 SF	,	

### **BUILDING CODE COMPLIANCE**

PER IBC 2021

• • • • • • • • • • • • • • • • • • •	OCCUPANCY GROUP/USE:	IBC 311.3 STORAGE GROUP S-1 / SELF SERVICE STORAGE FACILITY IBC 304.1 BUSINESS GROUP B / OFFICE ACCESSORY OCCUPANCY
	CONSTRUCTION TYPE:	V-B
FIRE SEPARATION - IBC 508.4	FIRE PROTECTION:	NO AUTOMATIC SPRINKLER SYSTEM (IBC 903.2.9)
3 HOUR SEPARATION	FIRE ALARM SYSTEM:	AUTOMATIC SMOKE DETECTION SYSTEM (907.2.15 HIGH-PILED STORAGE AREAS
2 HOUR SEPARATION	ALLOWABLE BUILDING HEIGHTS AND AREAS:	ALLOWABLE BUILDING HEIGHT ABOVE GRADE PLANE = 40' (504.3, S-1)
1 HOUR SEPARATION	HEIGHTS AND AREAS.	ALLOWABLE NUMBER OF STORIES = 1 STORY (504.4, S-1)  MAX BUILDING AREA FACTOR = 9,000 SF (508.3.2, S-1)

PROPOSED BUILDING TOTAL BUILDING HEIGHT = 23' - 8 1/4" HEIGHT AND AREAS: TOTAL BUILDING AREA = 3,885.67 SF (GROSS FLOOR AREA) FIRE RESISTANCE: FIRE RESISTANCE RATING BY CONSTRUCTION TYPE (IBC TABLE 601) STRUCTURAL FRAME

BEARING WALLS: EXTERIOR INTERIOR NON-BEARING WALLS & PARTITIONS: EXTERIOR (SEE TABLE 705.5) INTERIOR FLOOR AND ASSOC. SECONDARY MEMBERS ROOF AND ASSOC. SECONDARY MEMBERS

HEIGHT MEASURED IN FEET ABOVE AVERAGE GRADE PLANE PER IBC DEFINITION

FIRE RESISTANCE RATING BASED ON SEPARATION DISTANCE (IBC TABLE 705.5) CONSTRUCTION TYPE VB, OCCUPANCY S-1 FIRE SEPARATION DISTANCE:

= 2 HR 5' ≤ X < 10' = 1 HR 10' ≤ X < 30' = () X ≥ 30'

SEPARATED OCCUPANCIES: OCCUPANCY SEPARATION REQUIREMENTS - SBC TABLE 508.4 NO SEPARATION

X ≥ 30'

UNPROTECTED OPENINGS: FOR UNPROTECTED, NONSPRINKLERED BUILDINGS NOT PERMITTED NOT PERMITTED  $3' \le X < 5'$ 5' ≤ X < 10' 10% MAX OPENING 10' ≤ X < 15' 15% MAX OPENING 15' ≤ X < 20' 25% MAX OPENING  $20' \le X < 25'$ 45% MAX OPENING 70% MAX OPENING  $25' \le X < 30'$ 

ALLOWABLE UNPROTECTED OPENINGS (IBC TABLE 705.8)

ACCESSIBILITY: IBC 1104.4 EX1 AN ACCESSIBLE ROUTE IS NOT REQUIRED TO STORIES, MEZZANINES AND OCCUPED ROOFS THAT HAVE AN AGGREGATE AREA OF NOT MORE THAN

NO LIMIT

1109.3 SELF-SERVICE STORAGE FACILITIES. SELF-SERVICE STORAGE FACILITIES SHALL PROVIDE ACCESSIBLE INDIVIDUAL SELF-STORAGE SPACES IN ACCORDANCE WITH TABLE 1109.3

PLUMBING FIXTURE TABULATION BY LEVEL AND OCCUPANCY - UNIT 1, UNIT 2 FIXTURE COUNT RATIOS LAVATORIES WATER CLOSETS LAVATORIES (1/2 total occup.) WATER CLOSETS BUILDING TOTAL LEVEL NAME OCCUPANCY FEMALE OCCUPANTS MALE FEMALE MALE FEMALE MALE FEMALE LEVEL 1 STORAGE 1/100 LEVLE 2 OFFICE 1/25 1/25 1/40 1.00 1.00 0.04 0.025 0.025 0.04 TOTAL SUBTOTAL 0.05 0.05 0.035 0.035 TOTAL FIXTURE COUNT

ALLOWABLE AREA OF

FOOTNOTES: (1) TOTAL OCCUPANTS PER 2021 IBC TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

(1) TOTAL OCCUPANTS PER 2021 IBC TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

			FIX	KTURE COUNT RA	TIOS		OCCUPA	NT LOAD				
BUILDING			WATER	CLOSETS	LAVATORIES	TOTAL	(1/2 tota	al occup.)	WATER	CLOSETS	LAVA	TORIES
LEVEL	NAME	OCCUPANCY	MALE	FEMALE		OCCUPANTS (1)	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
LEVEL 1	STORAGE	S-1	1/100	1/100	1/100	2	1.00	1.00	0.01	0.01	0.01	0.01
<u> </u>			•	•	TOTAL	2		SUBTOTAL	0.01	0.01	0.035	0.035
							TOTAL F	IXTURE COUNT	1	1	1	1

MUNICIPAL APPROVAL STAMPS

 $\cup$   $\cup$ 

 $\square$ 

 $\simeq$ 

 $\triangleleft$   $\square$ 

206.414.9884

 $\mathcal{C}$ 

0

SEATTLE, WA 98118

INFO@FIRSTLAMP.NET

4915 RAINIER AVE S, STE 202

PERMIT SUBMITTAL | 01.24.2025

REVISIONS DESCRIPTION

DRAWN BY:

**BUILDING CODE COMPLIANCE** 

PROJECT NORTH



MUNICIPAL APPROVAL STAMPS

2203 PERMIT SUBMITTAL | 01.24.2025

NO. DESCRIPTION

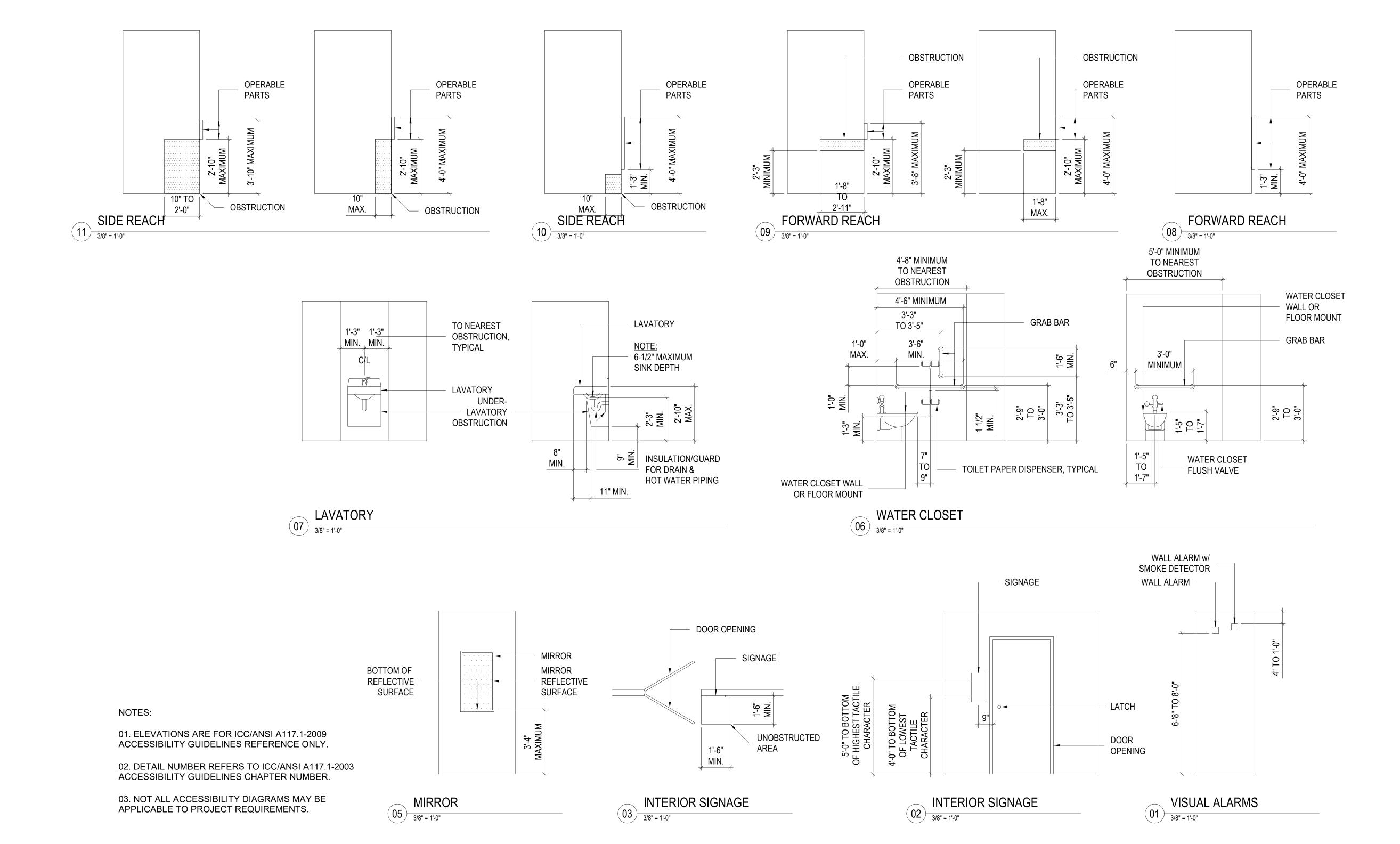
REVISIONS

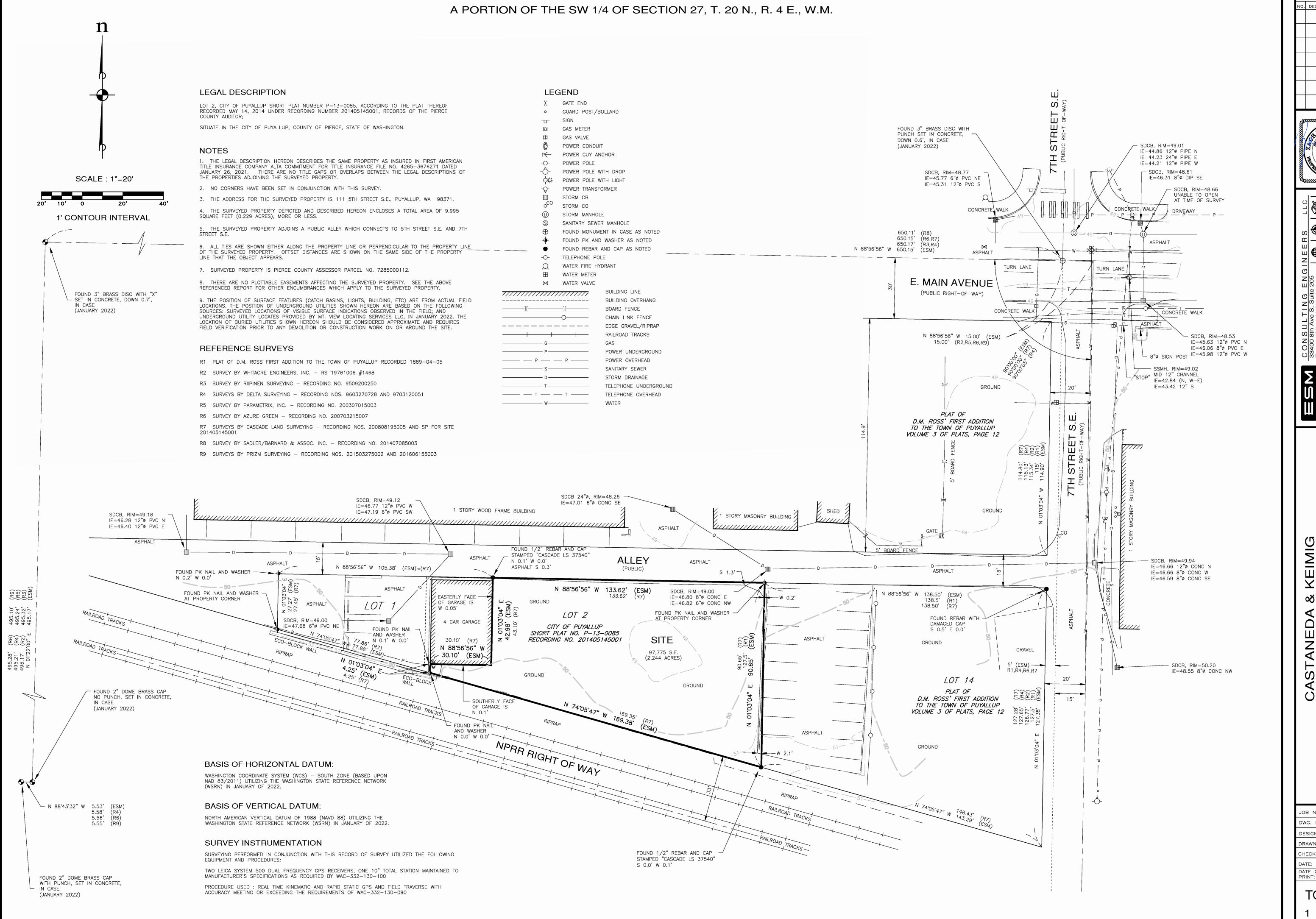
DRAWN BY:

ANSI GUIDELINES

G 3.0

MD





NO. DESCRIPTION/DATE BY



FEDERAL WAY (253) 838—6113
EVERETT (425) 297—9900
Land Planning
Landscape Architecture

esmcivil.com

9 Land Surveying
Project Management

www.esm Civil Engineering Public Works

TREET S.E. CUP

JOB NO.: 2218-001-02
DWG. NAME: TOPO-0

DWG. NAME: TOPO-01
DESIGNED BY:
DRAWN BY: CF/RG
CHECKED BY:

CHECKED BY:

DATE: 2022-03-30

DATE OF PRINT:

TOPO-01

1 of 1 SHEETS

## A PORTION OF THE SE $\frac{1}{4}$ OF SEC 27, TWP 20 N, RGE 04 E **5TH STREET CONDITIONAL USE PERMIT**

TO E MAIN AVE

CATCH BASIN INSERT

Applicant: Samantha Keimig

Permit No.: PLCUP20220162 Interlaken Project No.: SEA-24-068

PER COP 02.03.05

ASPHALT

STORY MASONRY BUILD

Seattle, WA | (206) 470-9572

www.interlakenengineering.com

PRELIMINARY SITE PLAN

SDCB 24"ø, RIM=48.26

IE=47.01 6"Ø CONC SE

#### **SITE DATA**

OFFSITE: 338 SF REPLACED: TOTAL (OFFSITE): 338 SF

**IMPERVIOUS SURFACING** 

NEW (PLAZA/WALK): NEW (PARKING): 4,028 SF NEW (BUILDING):

TOTAL (ON-SITE): 6,944 SF TOTAL IMPERVIOUS: 7,282 SF

#### **BUILDING DATA**

FAR - GROSS FLOOR AREA - ZONING CODE LEVEL 1 = 3,233.78 SFLEVEL 2 - MEZZANINE = 888.59 SF TOTAL = 4,122.36 SF

OCCUPANCY - GROSS FLOOR AREA - BUILDING CODE TOTAL = 3,599.94 SFGROUND LEVEL: 3,082.85 SF OF S-1 OCCUPANCY MEZZANAINE: 517.09 SF OF B OCCUPANCY

SDCB, RIM=49.12

IE=46.77 12"Ø PVC W

TYPE OF CONSTRUTION

PER IBC:

**PARKING** 

SITE ADDRESS:

PARCEL NUMBER:

SITE AREA GROSS:

**ZONING:** 

111 5TH ST SE

7285000112

PUYALLUP WA, 98372

10,000 SF = 0.23 AC

CG - GENERAL COMMERCIAL

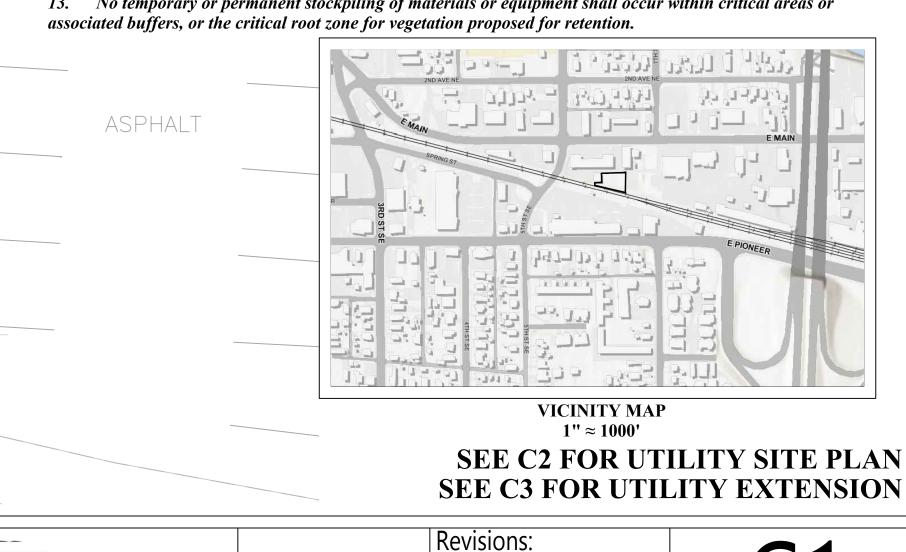
EMPLOYEE WORK AREA (NET): 563.75 SF STORAGE AREA (NET):

PARKING PROVIDED: 4 SPACES

PARKING STALLS REQUIRED PER PMC 20.55.010(16) MANUFACTURING (563.75 SF) X (1 SPACE/500 SF OF EMPLOYEE WORK AREA) = 1.13 = 1 SPACÉ (2,811.27 SF) X (1 SPACE/1000 SF OF STORAGE) = 2.81 = 3 SPACES

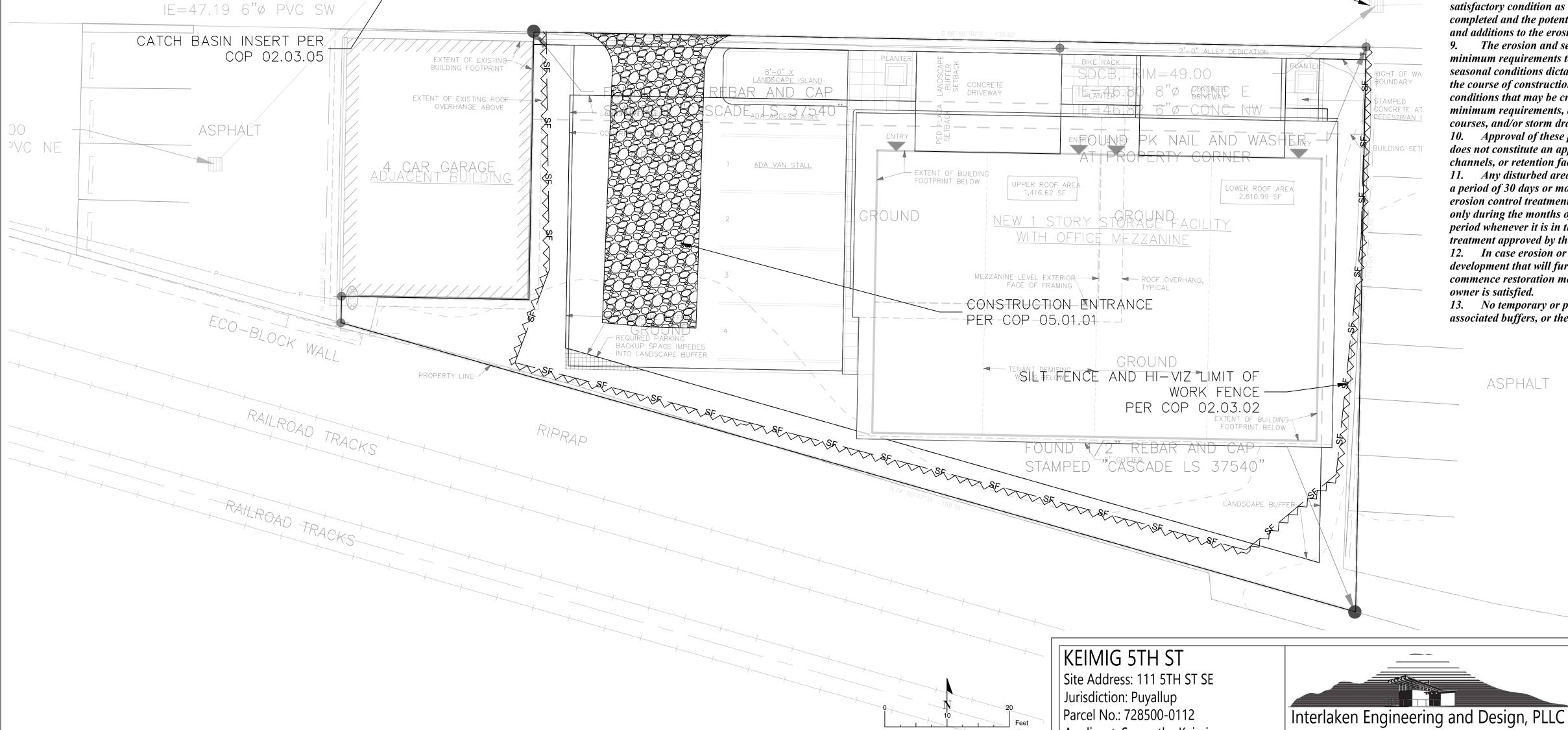
#### **CITY OF PUYALLUP** STANDARD NOTES FOR GRADING EROSION AND SEDIMENT CONTROL

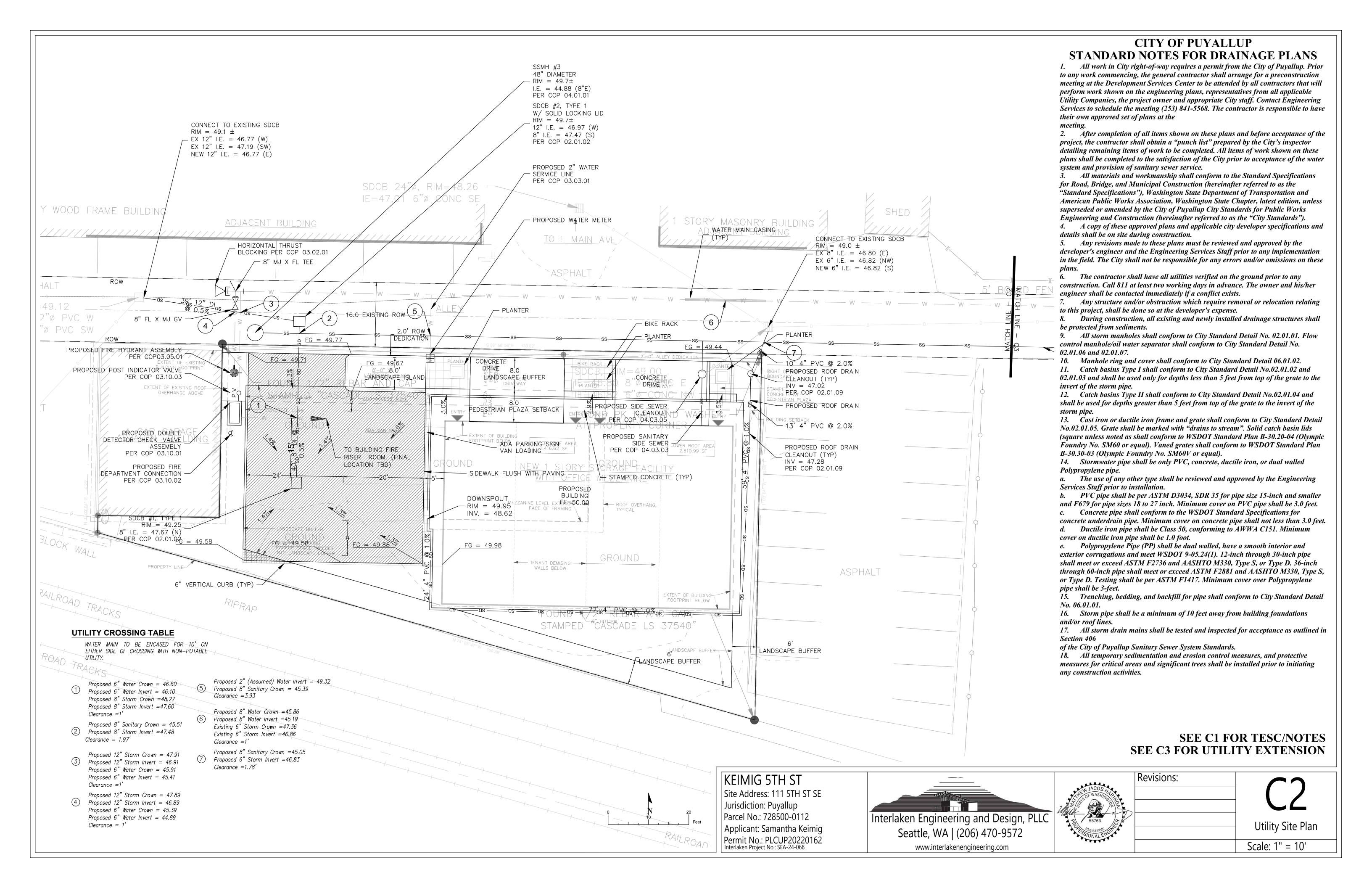
- 1. All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the engineering plans, representatives from all applicable Utility Companies, the project owner and appropriate City staff. Contact Engineering Services to schedule the meeting 841-5568. The contractor is responsible to have their own approved set of plans at the meeting.
- 2. After completion of all items shown on these plans and before acceptance of the project, the contractor shall obtain a "punch list" prepared by the City's inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the water system and provision of sanitary sewer service.
- All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the "Standard Specifications"), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puvallup City Standards for Public Works Engineering and Construction (herinafter referred to as the "City Standards").
- 4. A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.
- 5. Any revisions made to these plans must be reviewed and approved by the developer's engineer and the city engineer prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.
- 6. The contractor shall have all utilities verified on the ground prior to any construction. Call at least two working days hours in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.
- All limits of clearing and areas of vegetation preservation as prescribed on the plans shall be clearly flagged in the field and observed during construction.
- 8. All required sedimentation and erosion control facilities must be constructed and in operation prior to any land clearing and/or other construction to ensure that sediment laden water does not enter the natural drainage system. The contractor shall schedule an inspection of the erosion control facilities PRIOR to any land clearing and/or other construction. All erosion and sediment facilities shall be maintained in a satisfactory condition as determined by the City, until such time that clearing and/or construction is completed and the potential for on-site erosion has passed. The implementation, maintenance, replacement, and additions to the erosion and sedimentation control systems shall be the responsibility of the permittee.
- 9. The erosion and sedimentation control system facilities depicted on these plans are intended to be minimum requirements to meet anticipated site conditions. As construction progresses and unexpected or seasonal conditions dictate, facilities will be necessary to ensure complete siltation control on the site. During the course of construction, it shall be the obligation and responsibility of the permittee to address any new conditions that may be created by his activities and to provide additional facilities, over and above the minimum requirements, as may be needed to protect adjacent properties, sensitive areas, natural water courses, and/or storm drainage systems.
- 10. Approval of these plans is for grading, temporary drainage, erosion and sedimentation control only. It does not constitute an approval of permanent storm drainage design, size or location of pipes, restrictors, channels, or retention facilities.
- 11. Any disturbed area which has been stripped of vegetation and where no further work is anticipated for a period of 30 days or more, must be immediately stabilized with mulching, grass planting, or other approved erosion control treatment applicable to the time of year in question. Grass seeding alone will be acceptable only during the months of April through September inclusive. Seeding may proceed outside the specified time period whenever it is in the interest of the permittee but must be augmented with mulching, netting, or other treatment approved by the City.
- 12. In case erosion or sedimentation occurs to adjacent properties, all construction work within the development that will further aggravate the situation must cease, and the owner/contractor will immediately commence restoration methods. Restoration activity will continue until such time as the affected property
- 13. No temporary or permanent stockpiling of materials or equipment shall occur within critical areas or

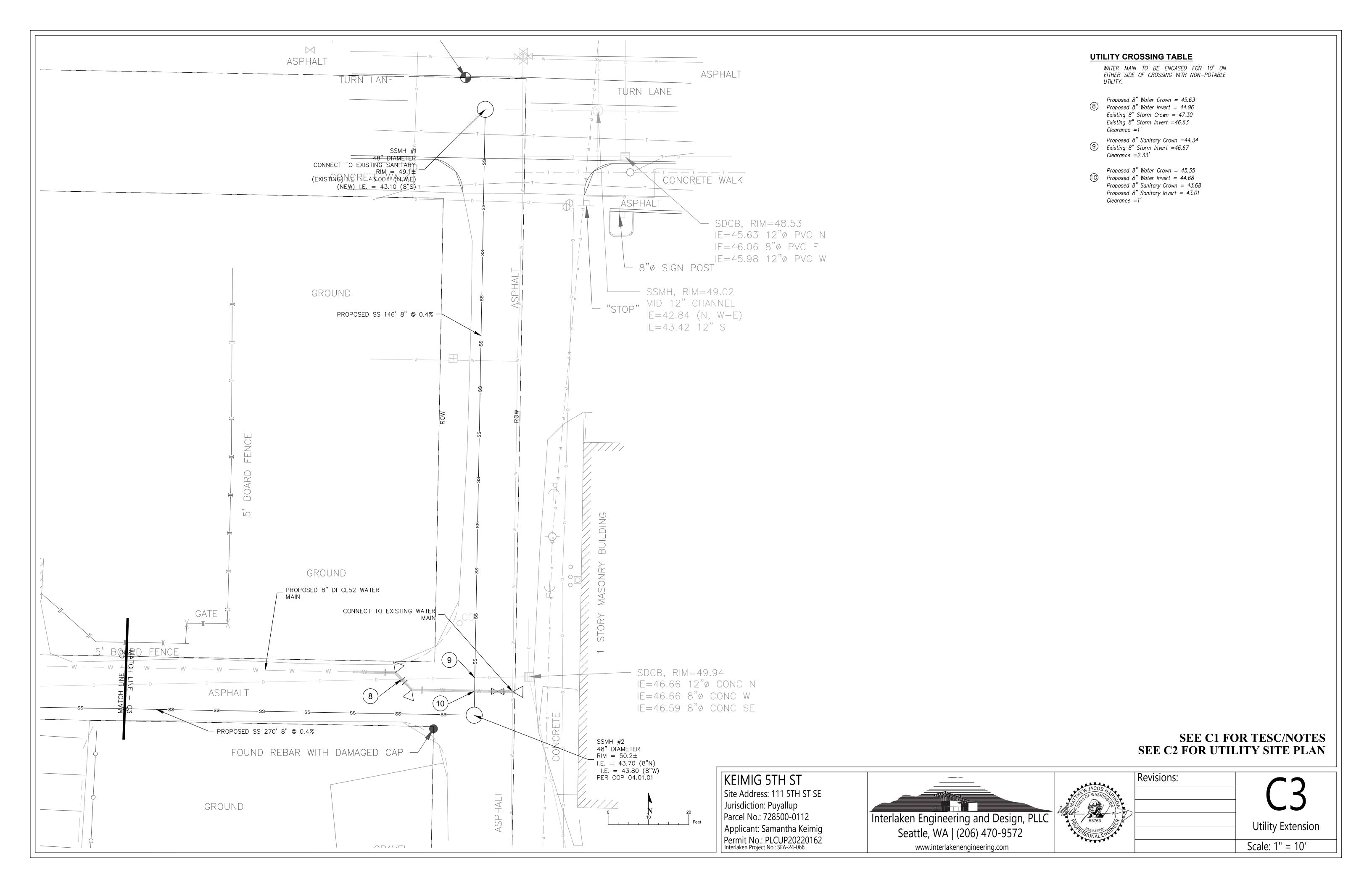


COVER/TESC

Scale: 1" = 10'







#### CITY OF PUYALLUP STANDARD NOTES FOR WATER SYSTEM PLANS

General Notes:

- 1. All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the engineering plans, representatives from all applicable Utility Companies, the Project owner and appropriate City staff. Contact Engineering Services to schedule the meeting (253) 841-5568. The contractor is responsible to have their own approved set of plans at the meeting.

  2. After completion of all items shown on these plans and before acceptance of the project, the
- contractor shall obtain a "punch list" prepared by the City's inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the water system and provision of sanitary sewer service.
- 3. All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the "Standard Specifications"), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puyallup City Standards for Public Works Engineering and Construction (hereinafter referred to as the "City Standards"), or as directed by Fruitland Mutual Water Company (FMWC), Valley Water (VW), or Tacoma City Water (TCW) is the purveyor.
- 4. A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.
- 5. Any revisions made to these plans must be reviewed and approved by the developer's engineer, the Engineering Services Staff, and the FMWC, VW or TCW when served by that purveyor, prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.
- 6. The contractor shall have all utilities verified on the ground prior to any construction. Call (811) at least two working days in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.
- 7. Any structure and/or obstruction which requires removal or relocation relating to this project shall be done so at the developer's expense.
- 8. Bacteriological (Coliform and Iron Bacteria) test samples will be taken by the City (or FMWC, VW or TCW when served by that purveyor) and paid for by the contractor, except for Capital Improvement Projects (CIP) which shall be paid for by the City.
- 9. Water mains shall have a minimum cover of 36 inches from paved final grade in improved right-of-way and improved easements, and a minimum of 48 inches in unimproved right-ofway and unimproved easements.

  10. Pipe for water mains shall be ductile iron conforming to Section 7-09 of the Standard Specifications, Class 52
- 10. Pipe for water mains shall be ductile iron conforming to Section 7-09 of the Standard Specifications, Class 52 with tyton or approved equal joints. Pipe shall be cement lined in accordance with A.S.A. Specification A 21.4-1964.
- 11. Connections to existing water mains typically shall be wet taps through a tapping tee and tapping valve and shall be made by a city approved contractor. The tapping sleeve shall be Romac SST all stainless steel tapping sleeve or approved equal. A two-piece epoxy coated or ductile iron tapping sleeve may be used on ductile iron pipe, when the tap is smaller than the water main size i.e. 6-inch tap on 8-inch pipe. The City (or FMWC, VW or TCW when served by that purveyor) shall approve the time and location for these connections.
- 12. All water mains and appurtenances shall be hydrostatically tested at 200 psi in accordance with Standard Specification 7-09.3(23). Pressure testing shall not be performed until satisfactory purity samples have been received, except when new water mains are installed independently from the water system piping.
- 13. Fire hydrants shall be installed in accordance with City Standard Detail 03.05.01 and as directed by the City of Puyallup Fire Code Official.14. Valve marker posts shall be installed where valve boxes are hidden from view or in unpaved The installation
- shall be in accordance with City Standard Detail 03.01.02.

  15. Resilient seated wedge gate valves shall be used for 10-inch mains and smaller. Butterfly valves shall be used
- for mains greater than 10 inches.

  16. Pipe fitting for water mains shall be ductile iron and shall be mechanical joint conforming to AWWA
- Specification C111-72.

  17. Water main pipe and service connections shall be a minimum of 10 feet away from building foundations and/or roof lines.
- 18. Where a water main crosses the Northwest Gas pipeline, the water line shall be cased with PVC pipe a minimum of 10 feet beyond each side of the gas line easement. Contact Williams Northwest Pipeline before the crossing is made.
- 19. Trenching, bedding, and backfill for water mains shall be installed in accordance with City Standard Detail 06.01.01.
- 20. All commercial and industrial developments, irrigation systems, and multi-family water service connections shall be protected by a double check valve assembly or a reduced pressure backflow assembly as directed by the City (or FMWC, VW or TCW when served by that purveyor) conforming to City Standard Details 03.04.01, 03.04.02, and 03.04.03.
- 21. Any lead joint fitting disturbed during construction shall be replaced with a mechanical joint fitting at the contractor's expense.
- 22. Hydraulic fire flow modeling shall be required for formal plats within or to be annexed into the City of Puyallup's water service area. The developer shall be responsible to apply for a hydraulic model permit prior to plat review. The hydraulic modeling criteria is based on the projected water demand while maintaining a minimum system pressure of 20 pounds per square inch (PSI) and a maximum velocity of 10 feet per second.
- 23. When using a fire hydrant for non-firefighting purposes, a city hydrant meter must be used. Coordinate the acquisition of the hydrant meter with the City's Utility Billing Division at Puyallup City Hall. A city approved backflow protection assembly shall be installed by the person requesting use of a fire hydrant. The assembly shall be accompanied by a current backflow assembly test report. The test report shall be available at the site for the duration of the hydrant use.
- 24. Should a break occur on any City water main, the Contractor shall follow the City's adopted "Water Main Break Procedure" issued to them at the Pre-Construction Meeting and notify those connected to the system in the impacted area as outlined in the Procedure.

- 25. Water Main Repairs (References: AWWA C651-14 and WSDOT Standard Specification
- Section 7-09) (Note: A planned water main repair shall be approved by the City Inspector and/or Water Division Supervisor prior to commencing work.)
  - a. Repair without depressurization Small leaks shall be repaired using repair bands while maintaining positive pressure in the water main. Valves surrounding the leak will be partially shut by the City Water Department to reduce the flow and pressure to the area. Blowoffs and hydrants in the reduced pressure area may be opened as needed to further reduce the pressure. The water main trench shall be over-excavated to allow water in the trench to be pumped out and maintained below the level of the water main. The repair shall be completed with the water main pressure remaining positive. After the repair is made, the system shall be fully pressurized and a visual leak inspection will be completed. The water main in the affected area shall be flushed to achieve three pipe volumes pulled from the pipe (distance measured from valve opened for flushing to the exit hydrant or blowoff).
  - b. Repair/cut-in with depressurization Trench shall be over excavated and dewatered below the water main. Flush water from pipe from each direction until it runs clear. Immediately prior to installation of a new pipe section for repair or cut in tee, all new fittings and pipe spools shall be swabbed with a five percent (5%) chlorine solution (minimum). The interior of the existing pipe shall be swabbed with a five percent (5%) chlorine solution at least 6 feet in each direction from exposed cut ends. The water main in the affected area shall be flushed to achieve three pipe volumes pulled from the pipe (distance measured from the valve opened for flushing to the exit hydrant or blowoff). Customers shall be notified after the water main is flushed and repairs have been completed, as outlined in the "Water Main Break Procedure."
- 26. New Water Main Installation:
  - a. Each new water main section shall be delivered, stacked and stored onsite with ends plugged. The plugs shall remain in the pipe until each particular section is installed. National Sanitation Foundation (NSF) approved sixty-five percent (65%) calcium hypochlorite shall be added to the upstream end of each pipe section, and at each hydrant tee in the amount given in the table below (or per approved manufacturer specifications). The minimum amount of calcium hypochlorite added should be sufficient to achieve a 50 mg/L concentration within the impacted area.

#### 65% Calcium Hypochlorite Addition per Pipe Section

	Pipe Volume	5-gram	Hypochlori	te Granules	Maximum
Pipe Diameter (Inches)	per 18 feet (gal)	tablets per pipe section	Ounces per 500 feet	Teaspoons per 18 feet	Fill Rate (gpm)_
4	35	1	1.7	0.2	40
6	53	1	3.8	0.4	90
8	70	2	6.7	0.7	150
12	106	4	15.1	1.4	350
16	141	6	27	2.5	600

- b. New water mains shall be filled using an approved backflow prevention assembly. The water main shall be filled from the lower elevation end so that as the water main is filled, the chorine is contacted, dissolved and spread relatively uniform through the length of the new water main. The fill rate shall be minimized so that the velocity of the water is less than 1 ft/sec (see table above). Successful pressure test and bacteriological tests shall be completed and provided to the City prior to any new mater main connection to the existing water system.
- c. The chlorinated water will be allowed to remain in contact with the new water main system for 24 to 72 hours. After 24 hours, water may be added to the water main for the purposes of pressure testing. The water in the main used for pressure testing must remain in the water main until pressure test is completed. If necessary, liquid chlorine shall be injected into the water main with fill water to maintain a concentration in the water main above 50 mg/L. Under no circumstance shall "super" chlorinated water be allowed to sit within a new water main for more than 5 days.
- d. Pressure testing includes testing against new valves and hydrants. Each valve shall be tested by closing each in turn and reducing the pressure beyond the valve. The pressure on the back side of the valve should not be eliminated. Care must be taken that, during this process, positive pressure remains throughout the system being tested at all times. All hydrant foot valves shall be open during pressure testing so that the pressure test is against the hydrant valve. Pressure testing will not be allowed against any existing valves.
- e. After successful pressure testing, the water main shall be thoroughly flushed to remove all "super" chlorinated water from the new water main. Flushing of new or extended water mains shall be conducted per WSDOT Specification 7-09.3(24)A with a minimum velocity developed within the pipe while flushing of 2.5 feet per second (fps). All flushed water shall be dechlorinated prior to disposal. The Contractor shall be responsible for disposal of all chlorinated water flushed from mains. The City shall approve the disposal method prior to implementation in the field. The Contractor shall utilize onsite disposal methods, if available. Disposal of flush water to the sanitary sewer system shall not be allowed without written permission from the Water Pollution Control Plant Supervisor. Any planned discharge to a stormwater system shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted (if necessary) to be between 6.5 and 8.5, and volumetrically and velocity controlled to prevent any resuspension of sediments. The City will require independent testing throughout the water discharge process to ensure compliance of these standards are met.
- Samples for bacteriological analysis shall be collected after flushing and again 24 hours after the first set of samples.
- g. All closure/final connection fittings shall be sprayed clean and then swabbed with a five percent (5%) chlorine solution immediately prior to installation per AWWA Standard C651. Additional samples for bacteriological analysis shall be collected from the immediate vicinity of the new or replaced water main and analyzed after the final connections are made. If necessary, additional flushing shall be conducted and additional samples shall be collected until satisfactory results are obtained.

#### CITY OF PUYALLUP STANDARD NOTES FOR SEWER PLANS

- 1. All work in City right-of-way requires a permit from the City of Puyallup. Prior to any work commencing, the general contractor shall arrange for a preconstruction meeting at the Development Services Center to be attended by all contractors that will perform work shown on the engineering plans, representatives from all applicable Utility Companies, the project owner and appropriate City staff. Contact Engineering Services to schedule the meeting 841-5568. The contractor is responsible to have their own approved set of plans at the meeting.
- 2. After completion of all items shown on these plans and before acceptance of the project, the contractor shall obtain a "punch list" prepared by the City's inspector detailing remaining items of work to be completed. All items of work shown on these plans shall be completed to the satisfaction of the City prior to acceptance of the sewer system and provision of sanitary sewer service.
- 3. All materials and workmanship shall conform to the Standard Specifications for Road, Bridge, and Municipal Construction (hereinafter referred to as the "Standard Specifications"), Washington State Department of Transportation and American Public Works Association, Washington State Chapter, latest edition, unless superseded or amended by the City of Puyallup City Standards for Public Works Engineering and Construction (hereinafter referred to as the "City Standards").
- 4. A copy of these approved plans and applicable city developer specifications and details shall be on site during construction.
- 5. Any revisions made to these plans must be reviewed and approved by the developer's engineer and the Engineering Services Staff prior to any implementation in the field. The City shall not be responsible for any errors and/or omissions on these plans.
- 6. The contractor shall have all utilities verified on the ground prior to any construction. Call at least two working days in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.
- working days in advance. The owner and his/her engineer shall be contacted immediately if a conflict exists.

  7. Any structure and/or obstruction which require removal or relocation relating to this project shall be done so at the developer's expense.
- 8. Minimum grade on all 4 inch residential side sewers shall be 2 percent and 6 inch commercial side sewers shall be 1 percent; maximum shall be 8 percent. All side sewers shall be 6 inches within City right-of-way.
- 9. Side sewers shall be installed in accordance with City Standard Nos. 04.03.01, 04.03.02, 04.03.03 and 04.03.04. Side sewer installation work shall be done in accordance with the Washington Industrial Safety and Health Act (WISHA).
- 10. All sewer pipe shall be PVC, Polypropylene, or Ductile Iron. PVC sewer pipe shall conform to ASTM D-3034, SDR35 for pipe sizes 15-inch and smaller and ASTM F679 for pipe sizes 18- to 27-inch, ductile iron pipe shall be Class 51 or greater, lined with Protecto 401TM epoxy lining or equivalent, unless otherwise noted. 12-inch through 30-inch Polypropylene Pipe (PP) shall be dual walled, have a smooth interior and exterior corrugations and meet WSDOT 9-05.24(2). It shall meet or exceed ASTM F2764. 36-inch through 60-inch PP pipe shall be triple walled and meet WSDOT 9-05.24(2). It shall meet or exceed ASTM F2764. PP shall have a minimum pipe stiffness of 46 pii when tested in accordance with ASTM D2412. Testing shall be per ASTM F1417. Trenching, bedding, and backfill shall be in accordance with City Standard No. 06.01.01. Minimum cover on PVC and PP pipe shall be 3.0 feet. Minimum cover on ductile iron pipe shall be 1.0 foot.
- 11. Sanitary sewer manhole frames and covers shall conform to City Standard No. 06.01.02.
- 12. Sanitary sewer manholes shall conform to City Standard Nos. 04.01.01, 04.01.02, 04.01.03 and 04.01.04. All manholes shall be channeled for future lines as specified on these plans. Manhole steps and ladder shall conform to Standard No. 06.01.03.
- 13. Sanitary sewer pipe and side sewers shall be 10 feet away from building foundations and/or roof lines with the exception of side sewers that provide service to a single-family residence. At the discretion of the review engineer, a Licensed Professional Engineer will be required to stamp the design to account for depth or proximity to foundation, steep slopes, or other factors.
- 14. No side sewers shall be connected to any house or building until all manholes are adjusted to the finished grade of the completed asphalt roadway and the asphalt patch and seal around the ring are accepted.
- 15. For commercial developments in which sources of grease and/or oils may be introduced to the City sanitary sewer system, a City approved grease interceptor shall be installed downstream from the source.
- 16. Once sewer and all other utility construction is completed, all sanitary sewer mains and side sewers shall be tested per Section 406 of the City Standards.

SEE C1 FOR TESC/NOTES
SEE C2 FOR UTILITY SITE PLAN
SEE C3 FOR UTILITY EXTENSION PLAN

KEIMIG 5TH ST
Site Address: 111 5TH ST SE
Jurisdiction: Puyallup
Parcel No.: 728500-0112
Applicant: Samantha Keimig
Permit No.: PLCUP20220162
Interlaken Project No.: SEA-24-068

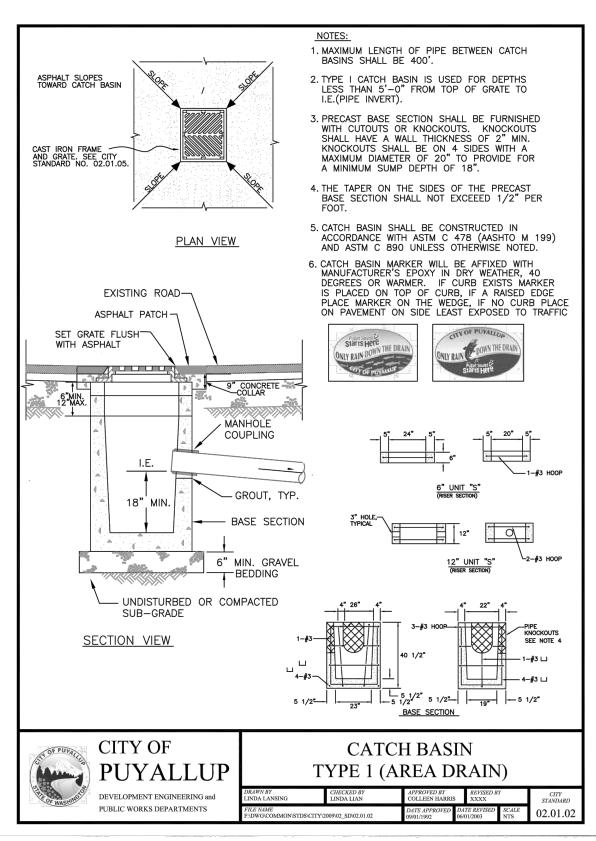


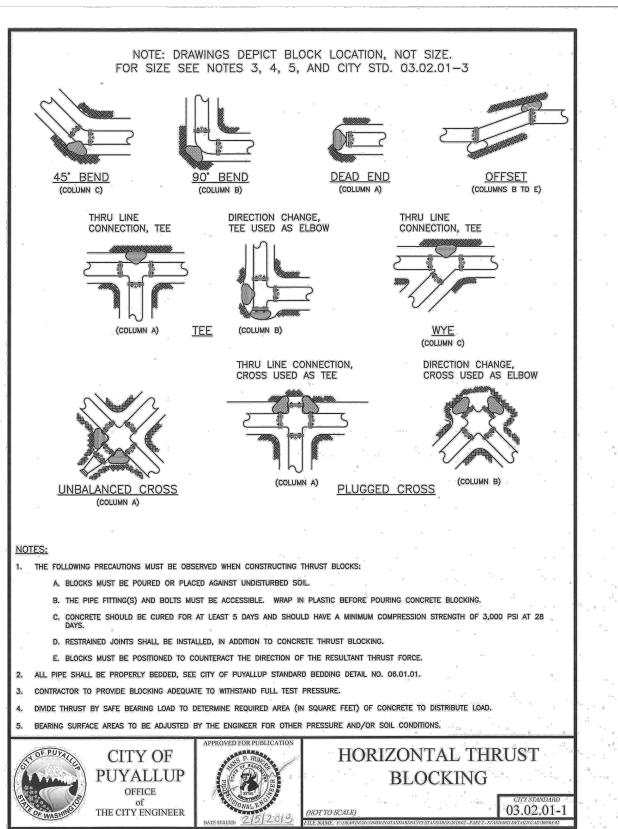


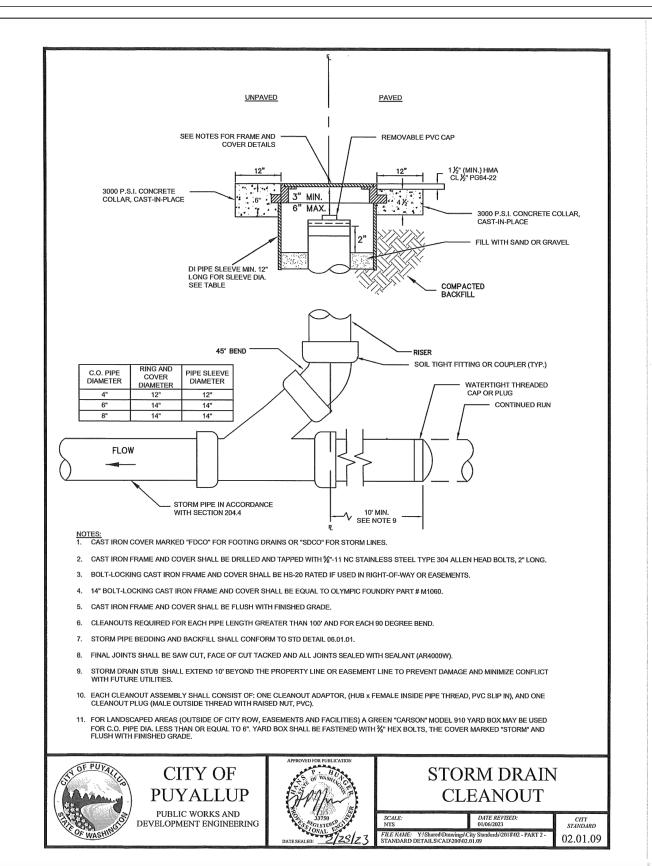
Revisions:

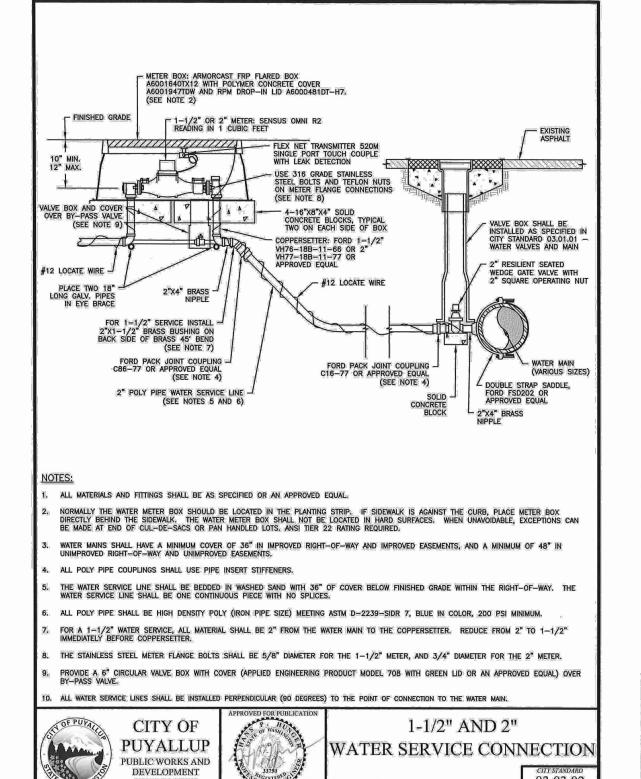
Utility Extension Notes

Scale: Not to Scale

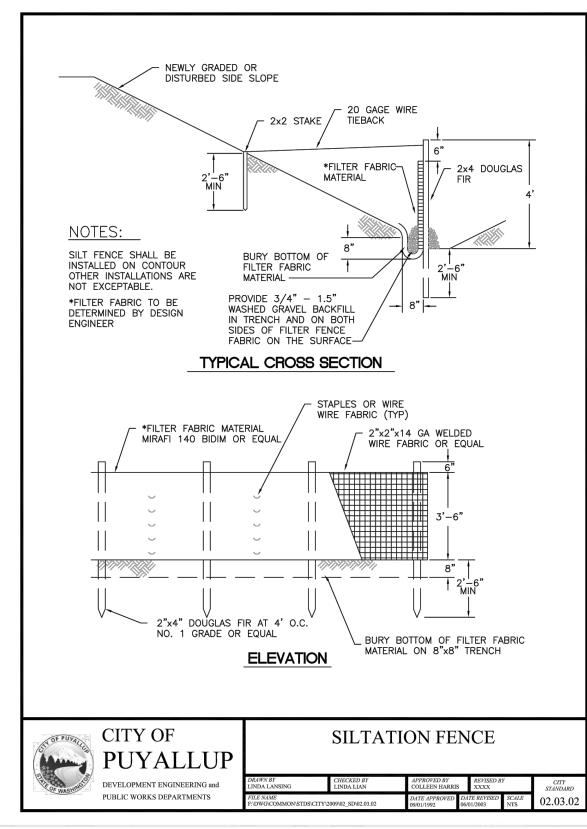


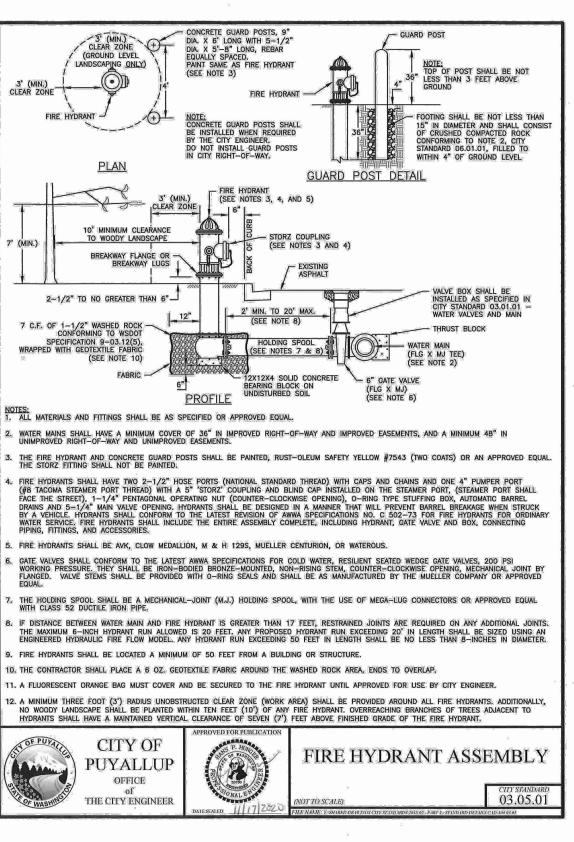


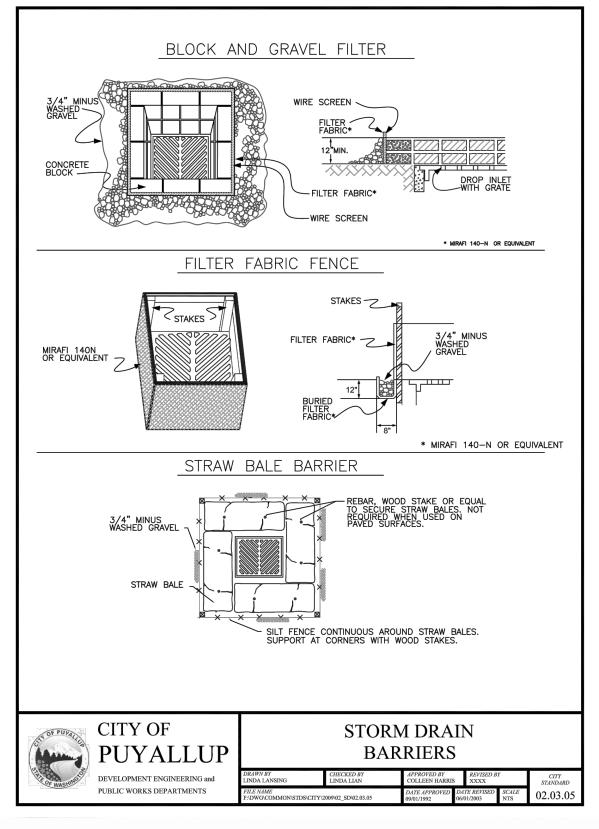


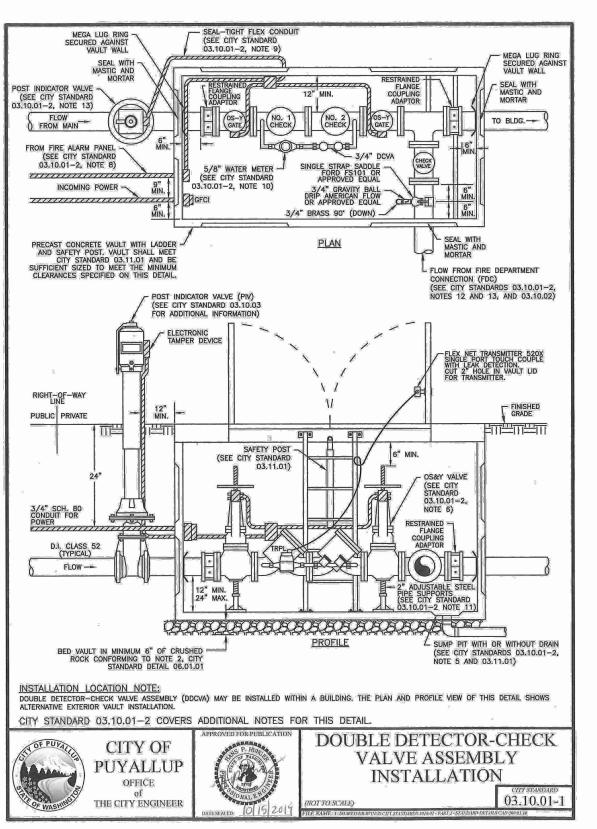


03.03.02







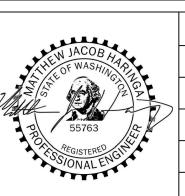


SEE C1 FOR TESC/NOTES SEE C2 FOR UTILITY SITE PLAN

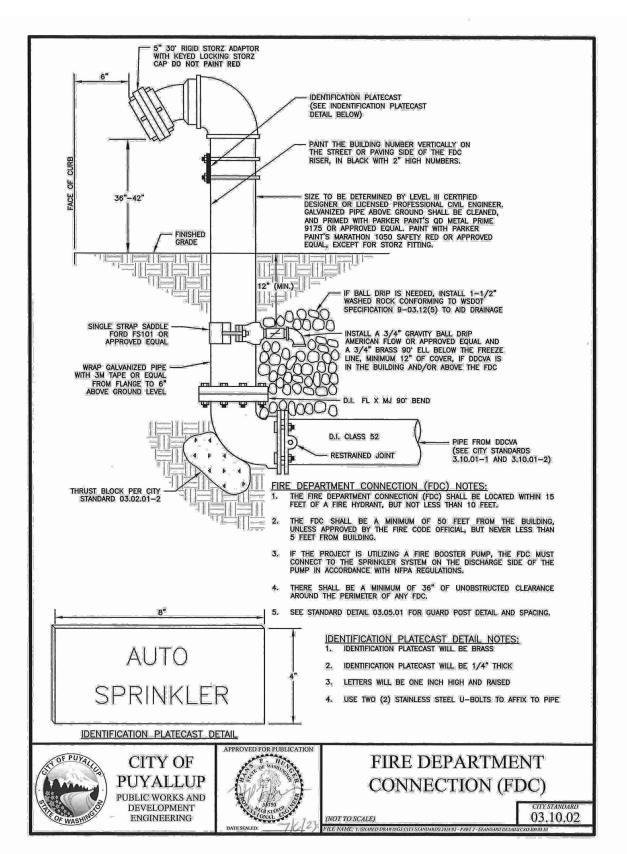
KEIMIG 5TH ST

Site Address: 111 5TH ST SE Jurisdiction: Puyallup Parcel No.: 728500-0112 Applicant: Samantha Keimig Permit No.: PLCUP20220162 Interlaken Project No.: SEA-24-068





Revisions: Details 1 Scale: As Noted



. . . 

SCALE 1:1

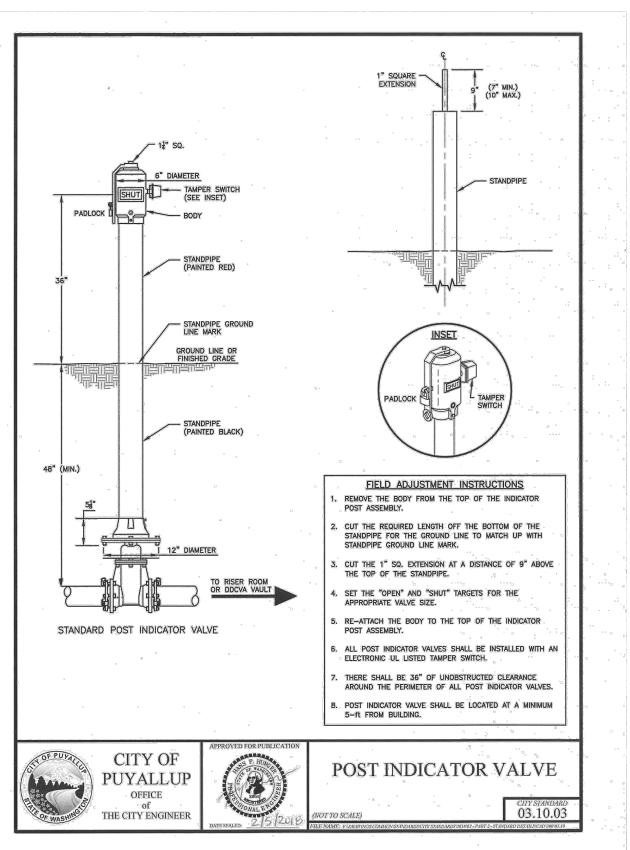
NOTES

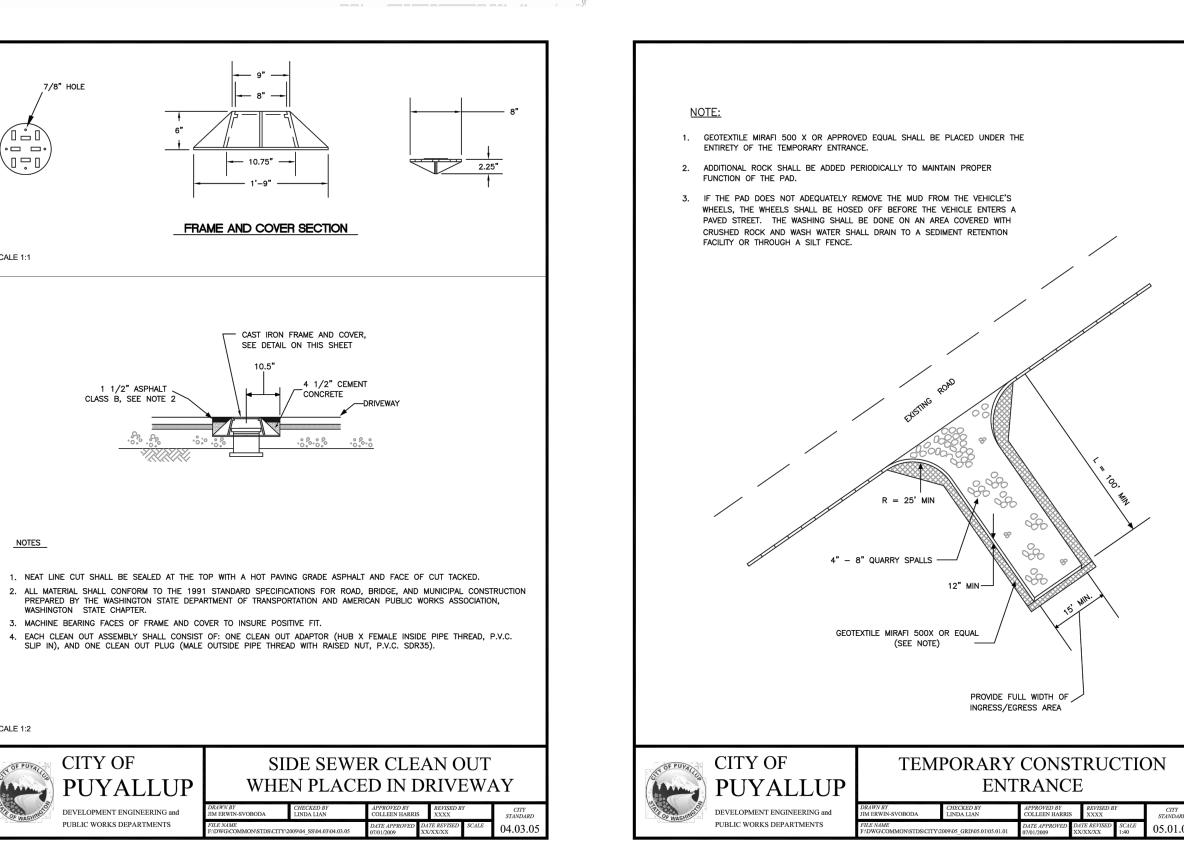
SCALE 1:2

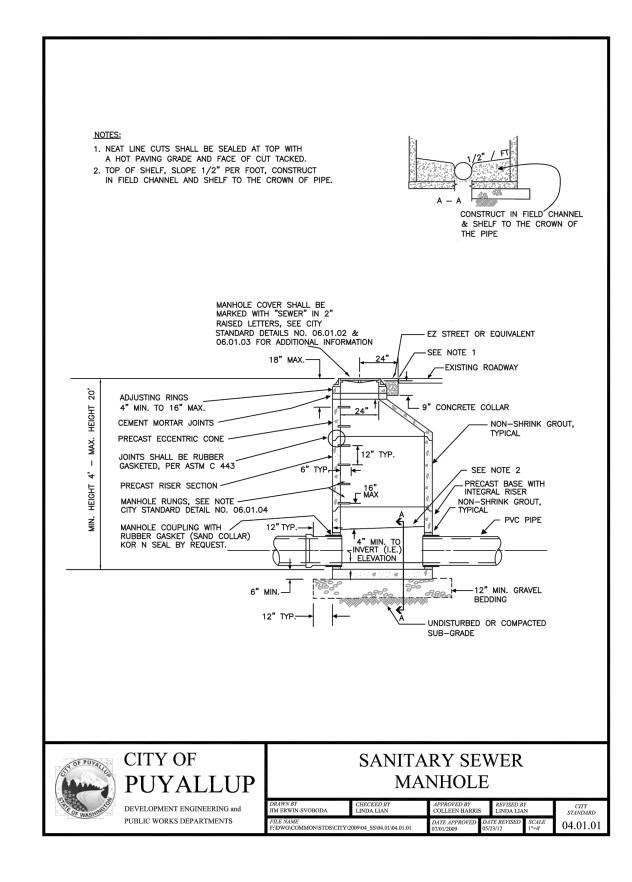
1 1/2" ASPHALT

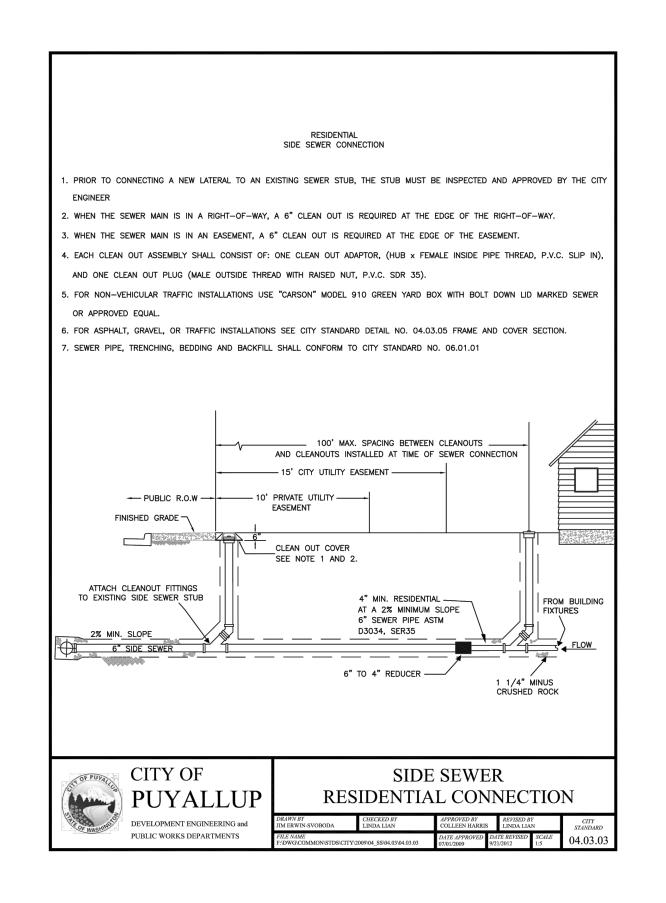
DEVELOPMENT ENGINEERING and

PUBLIC WORKS DEPARTMENTS









SEE C1 FOR TESC/NOTES SEE C2 FOR UTILITY SITE PLAN

KEIMIG 5TH ST Site Address: 111 5TH ST SE Jurisdiction: Puyallup Interlaken Engineering and Design, PLLC Parcel No.: 728500-0112 Applicant: Samantha Keimig Seattle, WA | (206) 470-9572

www.interlakenengineering.com

Permit No.: PLCUP20220162 Interlaken Project No.: SEA-24-068

Revisions: Details 2

Scale: As Noted

CONIFEROUS TREE PLANTING & STAKING DETAIL

NOT TO SCALE

DECIDUOUS TREE PLANTING & STAKING DETAIL

NOT TO SCALE

THOROUGHLY

SHRUB AND GROUNDCOVER

SPACING DETAIL NOT TO SCALE

2× ROOTBALL WIDTH

SHRUB PLANTING DETAIL

NOT TO SCALE

'21/2023 COMMENT PER CITY COMMENTS 02/09/2023

EVISED PER CITY

LANDSCAPE ARCHITECT Hanne Pkuhlman LEANNE D. KUHLMAN

CERTIFICATE No. 743

CONSULTING E 33400 8th Ave S, Suite 2 Federal Way, WA 98003

Σ

MIG

OB NO.: 2218-001-0 WG. NAME: ESIGNED BY:

RAWN BY:

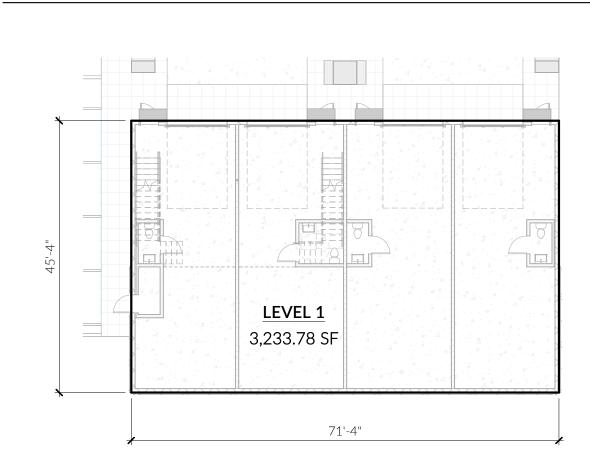
of 3 sheet

AREA

3,233.78 SF

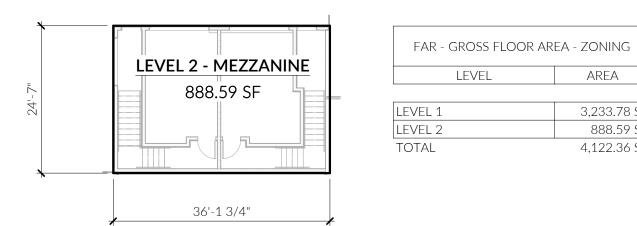
888.59 SF

4,122.36 SF

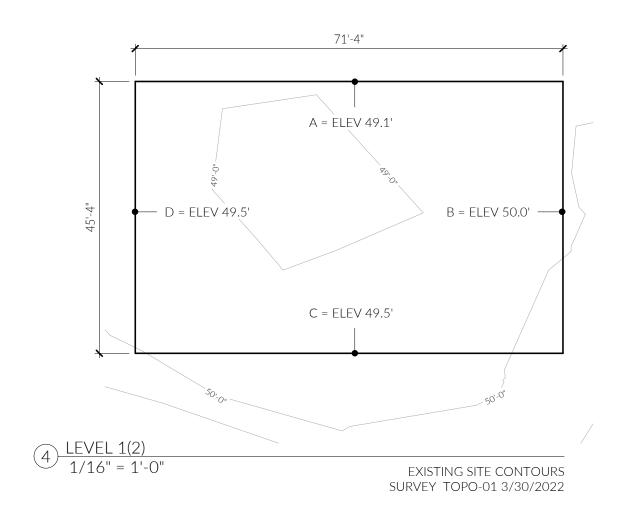




3 LEVEL 2 1/16" = 1'-0"

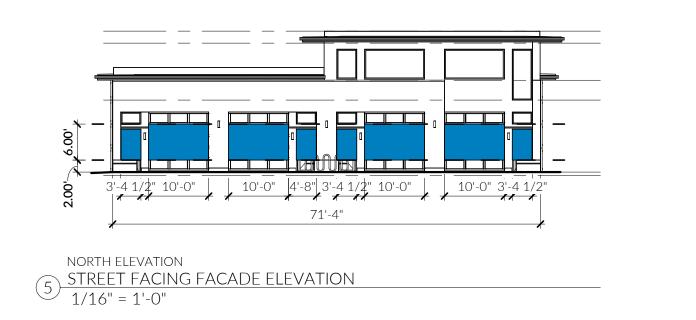


## **AVERAGE ADJOINING GRADE CALCULATION**



SEGMENTS	MID-POINT ELEVATION	SEGMENT LENGTH	ELEVATION x LENGTH
Α	49.10	71.33	3,502.303
В	50.00	45.33	2266.500
С	49.50	71.33	3530.835
D	49.50	45.33	2243.835
Total		233.32	11543.473
			11543.473 / 233.3
AVERAGE GRA	ADE LEVEL ELEVATION		49.4

#### TRANSPARENCY DIAGRAMS - PMC 20.26.300 2. (d)



PMC 20.26.300 2. (d) 60% OF TOTAL HORIZONTAL WALL AREA BETWEEN TWO AND EIGHT FEET ABOVE THE EXTERIOR GRADE, SHALL CONSIST OF WINDOWS AND/OR TRANSPARENT DOORWAYS.

WINDOWS AND/OR TRANSPARENT DOORWAYS AREA = 309.13 SF WALL AREA = 71.33 FT X 6.00 FT = 427.98 SF 309.13 / 424.02 = 0.7290 (72.23%) 72.23% > 60% COMPLIANT

PROJECT INFORMATION PEDESTRIAN PLAZA AMENITIES LEGEND SAMANTHA KEIMIG, JACKSON CASTANEDA (PA-1) PRE-CAST CONCRETE PLANTER WITH 18" DEEP WOOD BENCH OWNER FINISH: NATURAL CONCRETE, MEDIUM GRAY SITE ADDRESS 111 5TH ST SE, (PA-2) BIKE RACK WITH 4 SPACES MINIMUM PUYALLUP, WA 98372 FINISH: STAINLESS STEEL AND BLACK

**LEGAL DESCRIPTION** LOT 2, CITY OF PUYALLUP SP NO.P-`3-0085, REC. 201405145001, PIERCE COUNTY

> PARCEL NUMBER 7285000112 **CURRENT ZONING** CG - GENERAL COMMERCIAL **GROSS LOT AREA** 10,000 SF = 0.23 AC

APPLICABLE CODES PUYALLUP MUNICIPAL CODE WASHINGTON STATE BUILDING CODE WITH LOCAL AMENDMENTS

2021 INTERNATIONAL BUILDING CODE 2017 ICC/ANSI A117.1 ACCESSIBILITY STANDARDS 2021 INTERNATIONAL MECHANICAL CODE 2021 INTERNATIONAL FIRE CODE 2021 WILDLAND-URBAN INTERFACE CODE 2021 UNIFORM PLUMBING CODE 2021 WASHINGTON STATE ENERGY CODE 2023 NATIONAL ELECTRICAL CODE NFPA-70

PROJECT DESCRIPTION THE PROPOSED PROJECT IS TO CONSTRUCT A NEW 4,122.36 SF SELF STORAGE FACILITY. UNIT 1 AND UNIT 2 INCLUDE A MEZZANINE OFFICE OCCUPANCY.

> THE PROJECT INCLUDES SITE DEVELOPMENT TO PROVIDE UTILITIES, ACCESS, AND PARKING

PUYALLUP MUNICIPAL CODE CG - GENERAL COMMERCIAL SITE ZONE: SITE AREA: 10,000 SF LOT COVERAGE PMC TABLE 20.30.030 LOT COVERAGE ALLOWED .75 X 10,000 SF = 7,500 SF LOT COVERAGE PROPOSED 4,027.61 SF < 7,500 SF COMPLIANT FLOOR AREA RATIO PMC TABLE 20.30.030 4.0 FAR FLOOR AREA ALLOWED 4 x 10,000 = 40,000 SF LEVEL 1 3,233.78 SF LEVEL 2 - MEZZANINE 888.59 SF TOTAL = 4,122.36 SF FLOOR AREA PROPOSED 4,122.36 SF < 40,000 SF COMPLIANT STRUCTURE HEIGHT MAXIMUM ALLOWED PMC TABLE 20.30.030 50.00 FT STRUCTURE HEIGHT PROPOSED 22.50 FT 22.50 FT < 50.00 FT COMPLIANT REQUIRED YARD SETBACK PMC 20.30.037 FRONT AND STREET SIDE 12FT MIN / 20FT MAX INTERIOR SIDE STREET FRONTAGE MINIMUM PMC TABLE 20.30.030 35FT MIN

**ADJACENT BUILDING** 

**ADJACENT BUILDING** 

(PA-3) DECORATIVE STAMPED CONCRETE AT PEDESTRIAN PLAZA WALKWAY AND DRIVEWAY

PA-5 DECORATIVE PEDESTRIAN SCALE LIGHTING AT SWING DOOR ENTRIES, SEE BUILDING ELEVATION 1/A3.0

PA-4 DECORATIVE PEDESTRIAN SCALE BENT STEEL AWNING AT UNIT ENTRIES

FINISH: PAINTED BLACK

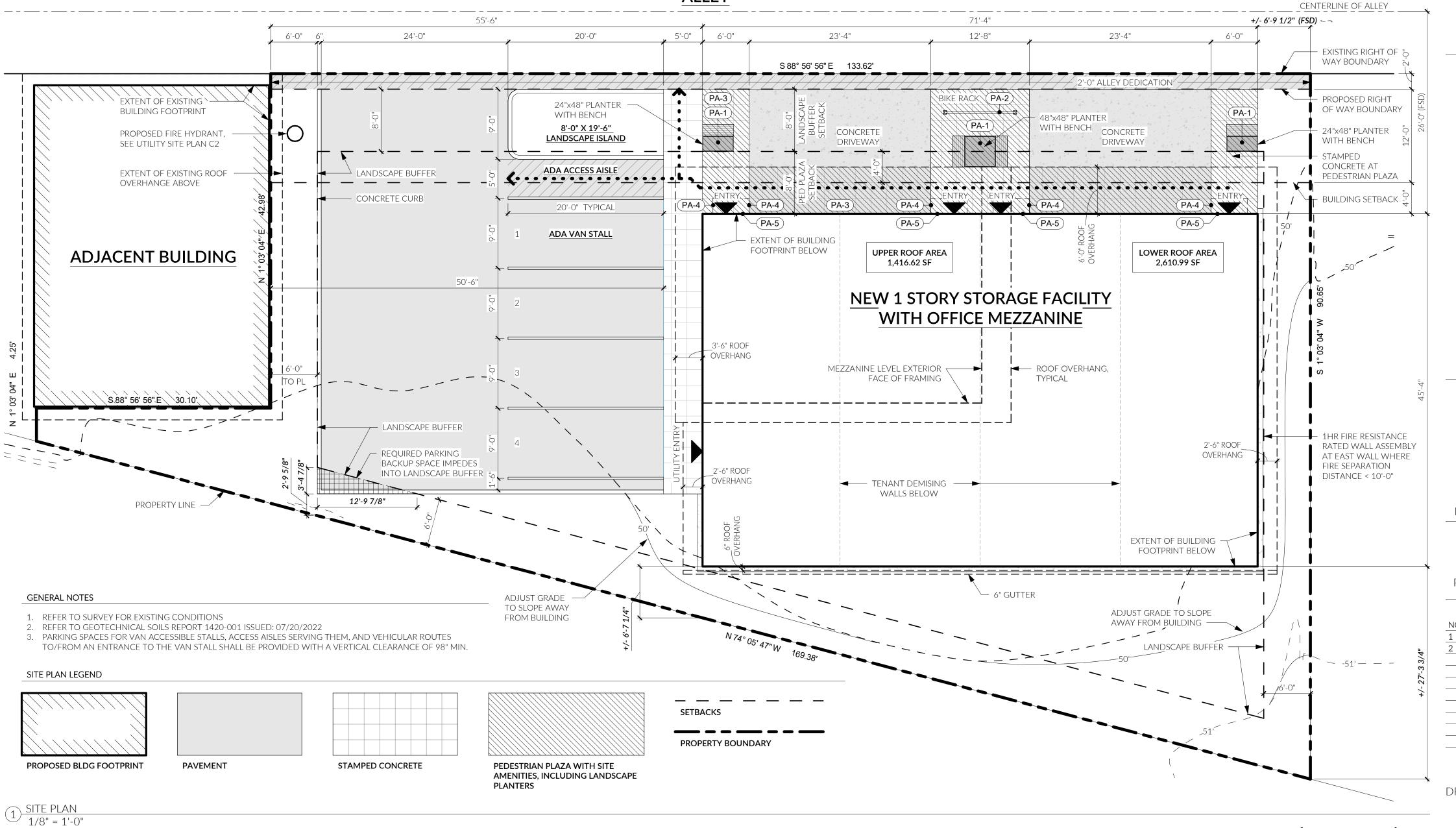
FIXTURE TBD, FINISH BLACK

TO E MAIN AVE

206.414.9884 4915 RAINIER AVE S, STE 202 SEATTLE, WA 98118

INFO@FIRSTLAMP.NET

 $\mathcal{C}$ 



MUNICIPAL APPROVAL STAMPS

PERMIT SUBMITTAL | 01.24.2025

	REVISIONS
DESCRIPTION	DATE
DRT CORR. 1	9/27/2023
DRT FINAL	11/16/2023

DRAWN BY:

SITE PLAN & ZONING COMPLIANCE

TRUE NORTH

PROJECT NORTH

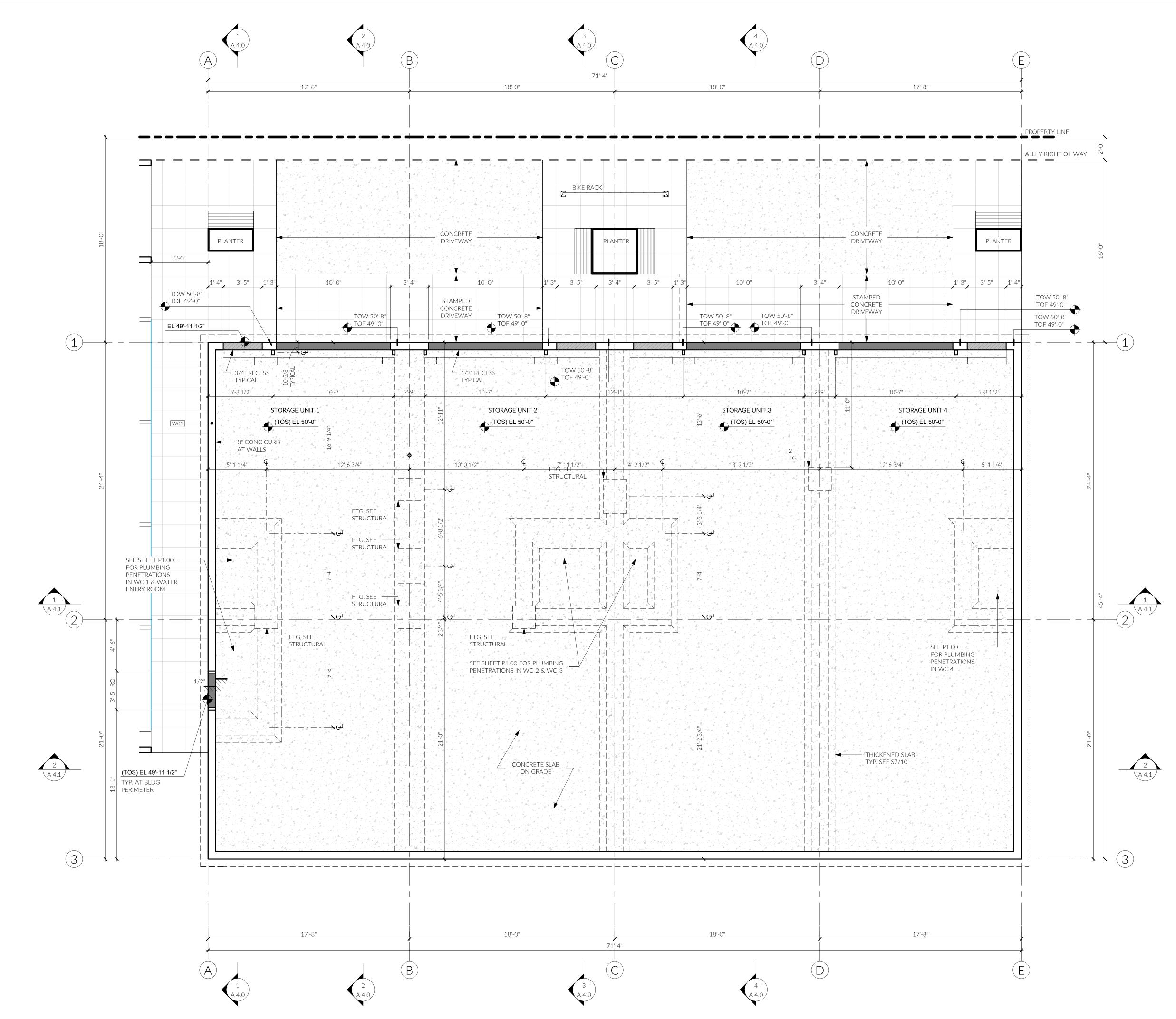
REVISIONS O. DESCRIPTION DATE

DRAWN BY:

PROJECT NORTH

FOUNDATION PLAN & EXCAVATION NOTES

A 2.



1 LEVEL 1 - FLOOR PLAN 1/4" = 1'-0" FOUNDATION PLAN NOTES

- 1. REFER TO STRUCTURAL GENERAL NOTES, PLANS, AND DETAILS FOR SIZING AND SPACING OF ALL FOOTINGS, STEM WALLS, AND STRUCTURAL REINFORCING
- 2. ALL DIMENSIONS TO FACE OF ROUGH FRAMING OR FACE OF CONCRETE UON. ALL DIMENSIONS ON THIS PLAN SHALL BE REFERENCED WITH ARCHITECTURAL AND STRUCTURAL PLANS. PLEASE CONTACT ARCHITECT IMMEDIATELY IF THERE ARE DISCREPANCIES.
- 3. PLEASE REFER TO LOCAL GOVERNING AUTHORITY RECOMMENDATIONS FOR EXCAVATION, FILL, & SITE PREPERATION FOR FOUNDATIONS PRIOR TO BREAKING GROUND. ARCHITECT AND STRUCTURAL ENGINEER REQUIRED TO BE CONSULTED ON ANY DISCREPANCIES IN EXCAVATION AND SOIL INFORMATION. LOCAL GOVERNING AUTHORITY MAY BE REQUIRED TO BE PRESENT DURING EXCAVATION.
- 4. BOTTOM OF WALL CALLOUTS ARE ESTIMATES BASED OFF SURVEY TOPOGRAPHICAL DATA. THE CONTRACTOR AND EXCAVATOR ARE REQUIREDTO VERIFY FINAL EXCAVATION NEEDED AND FINAL FOOTING ELEVATIONS PER MEANS AND METHODS AND SOIL CONDITIONS. NOTIFY ARCTHIECT AND STRUCTURAL ENGINEER TO ANY CHANGES TO FOOTING ELEVATIONS BASED ON
- 5. ALL DIMENSIONS TO FACE OF FINISH U.N.O.

SOIL CONDITIONS.

- 6. ALL INTERIOR PARTIONS TO BE FULL HEIGHT TO BOTTOM OF STRUCTURE ABOVE
- 7. ALL DOORS TO BE LOCATED 4" FROM ADJACENT WALL U.N.O.

## **EXCAVATION & GRADING NOTES**

- 1. IT IS THE INTENT OF THE ARCHITECTURAL DRAWINGS TO COMPLY WITH ALL STANDARDS IN THE LOCAL GOVERNING AUTHORITY MUNICIPAL CODE DEVELOPMENT STANDARDS. PLEASE NOTIFY THE ARCHITECT IMMEDIATELY IF THERE IS A DISCREPANCY OR CONFLICT WITH COMPLIANCE IN THE DRAWINGS.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW, PLAN, AND IMPLETMENT EXCAVATION AND SITE WORK BASED ON SITE CONDITIONS AND GEOTECHNICAL RECOMMENDATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND DETERMINE THE EXACT EXCAVATION NEEDED. NOTIFY ARCHITECT IMMEDIATELY IF DEVIATIONS IN THE DRAWINGS ARE REQUIRED OR HAVE OCCURED. DEVIATIONS MAY REQUIRE ADDITIONAL REVIEW AND PERMITTING.
- 3. THE GEOTECHNICAL, STRUCTURAL, AND CIVIL ENGINEERS SHALL REVIEW AND APPROVE ALL PLANS, METHODS, AND DEVELOPMENT IN THIS PROJECT PRIOR TO ANY EXCAVATION, GRADING, AND SITE WORK BEGINS.
- 4. ALL TEMPORARY GRADE CUTS SHALL BE 1V: 1H PER LOCAL GOVERNING AUTHORITY RECOMMENDAITONS. STEEPER EXCAVATION CUTS MAY BE USED WITH PRIOR REVIEW & APPROVAL FROM LOCAL GOVERNING AUTHORITY.
- 5. EXCAVATION DIAGRAM DEPICTS THE EXCAVATION NEEDED BASED ON THE ARCHITECTURE DRAWINGS AND SURVEY. CONTRACTOR AND SUB CONTRACTORS TO VERIFY AND DETERMINE EXACT EXCAVATION NEEDED FOR THE FOUNDATION BASED ON FIELD CONDIITONS. NOTIFY THE ARCHITECT IMMEDIATELY IF DEVIATIONS IN THE DRAWINGS ARE REQUIRED OR HAVE OCCURED.
- 6. NO TEMPORARY GRADE CUTS SHALL BE ALLOWED TO CROSS ANY PROPERTY LINE.
- 7. SLOPES FOR PERMANENT EXCAVATIONS OR FILLS WITHOUT RETAINING WALLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL UNLESS EXPLICIT APPROVAL FROM LOCAL GOVERNING AUTHORITY.
- 8. DURING DEVELOPMENT, IMPROVEMENT, USE OR CONSTRUCTION ALL NATURAL CONTOURS SHALL BE MAINTAINED TO THE EXTENT THAT NATURAL DRAINAGE FLOW FROM OR ONTO ADJACENT PUBLIC OR PRIVATE PROPERTY SHALL NOT BE DISRUPTED, BLOCKED, INCREASED, REDIRECTED, OR OTHERWISE MADE DETRIMENTAL TO THE USE OR MAINTENANCE OF ADJACENT PROPERTIES.

#### FOUNDATION LEGEND

1/2" RECESS AT CONCRETE DOOR SILL

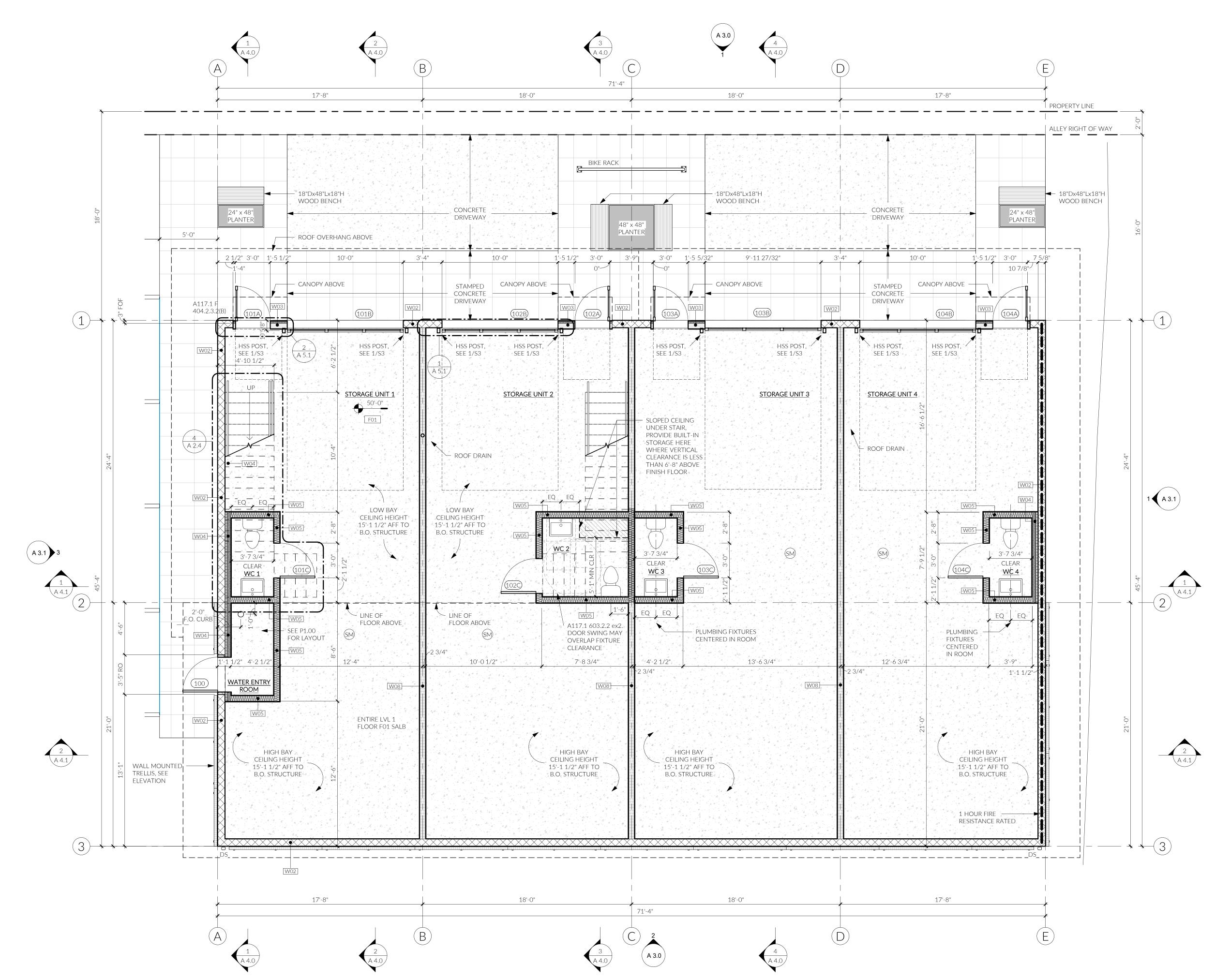
3/4" RECESS AT CONCRETE DOOR SILL

		REVISIONS
NO.	DESCRIPTION	DATE
1	DRT CORR. 1	9/27/2023
2	DRT FINAL	11/16/2023

DRAWN BY:

LEVEL 1 - FLOOR PLAN





1 LEVEL 1 - FLOOR PLAN 1/4" = 1'-0"

**FLOOR PLAN NOTES** 

1. SEE SHEET G 0.0 FOR ADDITIONAL GENERAL NOTES.

2. ALL DIMENSIONS TO FACE OF STRUCTURE U.N.O. 3. SEE ARCHITECTURAL SLAB PLANS FOR DRAIN SLOPES AND LOCATIONS.

4. ALL DOORS TO BE LOCATED 4" FROM ADJACENT WALL U.N.O.

5. CONTRACTOR MUST ACCOUNT FOR CONSTRUCTION TOLERANCES TO ENSURE PROPER MINIMUM AND MAXIMUM CLEARANCES REQUIRED BY ICC/ANSI A117.1-2017. REFER TO SHEETS G 3.0 FOR ADDITIONAL REQUIREMENTS.

6. ALL SPOT ELEVATIONS IN PARENTHESIS ARE REFERENCED TO THE CIVIL DRAWINGS. SEE CIVIL.

#### **SHEET NOTES**

1. NEW STOREFRONT SECURE DOOR WITH MULTI-POINT LOCKING MECHANCISM

TO PREVENT FORCED ENTRY 2. SOUND SEPARATION STC RATED PARTITIONS

3. 1-1/2" ROUND METAL HANDRAIL, BOTH SIDE, WITH 12" LEVEL EXTENSIONS AND WALL RETURNS AT TOP AND BOTTOM OF RAMP, PROIVDE 1-1/2" GAP FROM HANDRAIL TO WALL FINISH FACE. MOUNT HANDRAIL AT 36" ABOVE WALKING SURFACE, FINISH TBD, PER ANSI 117.1 SECTION 505

4. BUILDING EXTERIOR LIGHTING SHALL BE SHIELDED AND DIRECTED AWAY FROM ADJACENT USES.

- 5. ALL EXPOSED STEEL TO BE PRIMED, TYPICAL
- 6. PROVIDE GWB AT ALL CORE AND SHELL AND WHERE FIRE RATING IS REQUIRED.

#### **GRAPHIC WALL LEGEND**

(P) CEILING - PENDANT (R) CEILING - RECESSED (S) CEILING - SURFACE (E) WALL - END (W) WALL

> FINAL APPROVED LOCATIONS TO BE DETERMINED BY THE FIELD INSPECTOR

#### FIRE PROTECTION NOTES

1. PROVIDE MAX. OCCUPANT LOAD SIGNAGE AS REQ'D PER 2018 SFC, SECTION 1004.9.

2. NO STORAGE OR USE OF FLAMMABLE OR COMBUSTIBLE LIQUIDS, TORCH CUTTING OR WELDING OPERATIONS, OPEN FLAME WORK, GRINDING PRODUCING SPARKS, ROOFING OPERATIONS, OR USE OF FLAMMABLE GAS FOR TEMPORARY HEATING OR DRYING SHALL BE CONDUCTED ON ANY CONSTRUCTION SITE WITHOUT FIRST HAVING OBTAINED SPECIFIC PERMIT FROM THE LOCAL JURISDICTION FIRE DEPARTMENT FOR THESE HAZARDOUS ACTIVITIES,

INCLUDING DEMOLITION. 3. DURING CONSTRUCTION, CONTRACTOR TO MAINTAIN EGRESS FIRE PROTECTION SYSTEMS AND EMERGENCY ACCESS FOR THIS SPACE AND ADJACENT AREAS, AS REQ'D PER 2021 IFC, CHAPTER 33.

#### FIRE SEPARATION - SBC 508.4

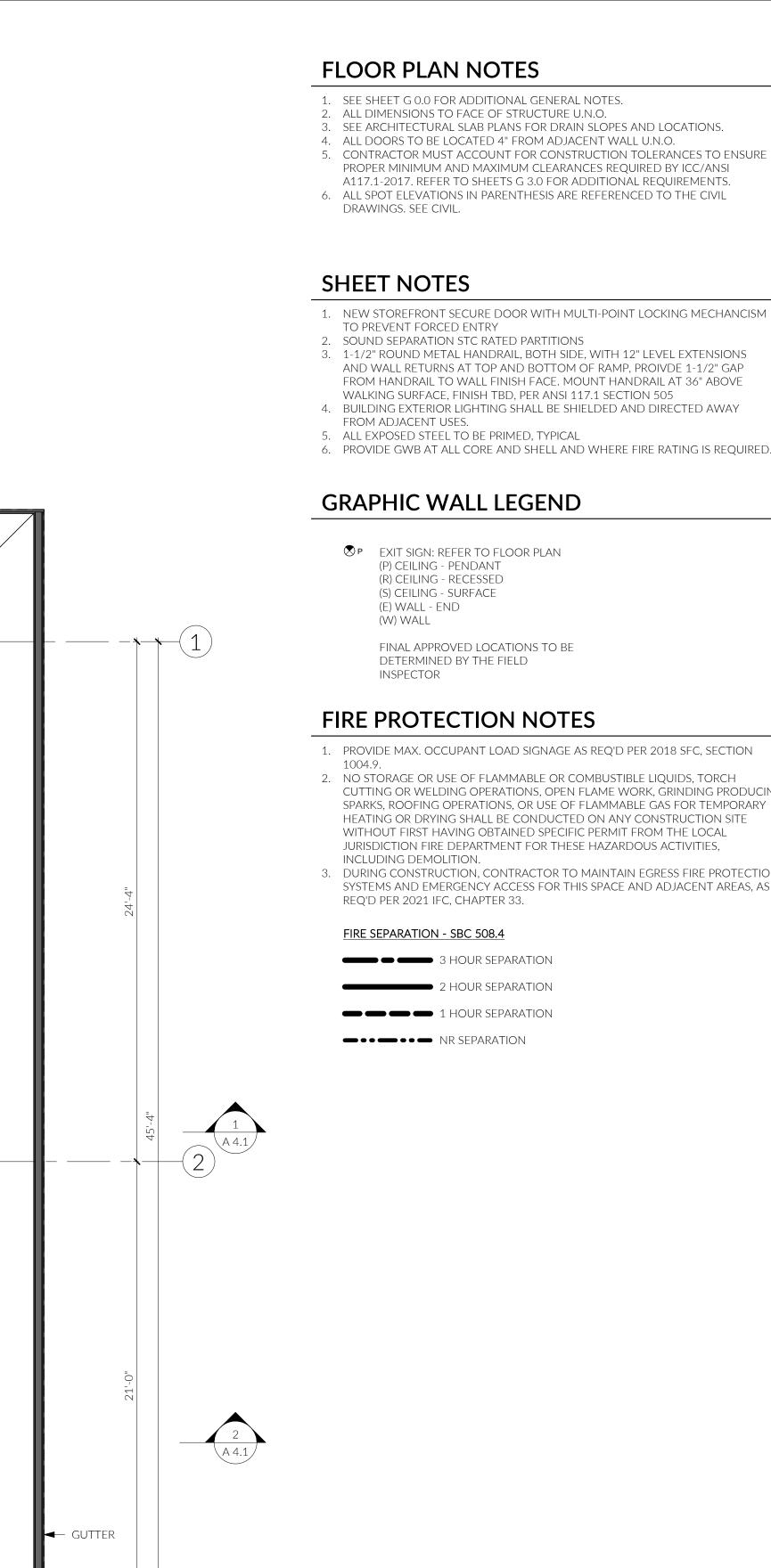
3 HOUR SEPARATION 2 HOUR SEPARATION ■■■ 1 HOUR SEPARATION ■●●■●●■ NR SEPARATION

PERMIT SUBMITTAL | 01.24.2025

		INE VISIONS
NO.	DESCRIPTION	DATE
1	DRT CORR. 1	9/27/2023
2	DRT FINAL	11/16/2023

DRAWN BY:

LEVEL 2 - FLOOR PLAN



17'-8"

EXTERIOR FACE OF CMU BELOW —

1/4" / 12"

SLOPE TO DRAIN

1/4" / 12"

SLOPE TO GUTTER

SHEET P2.02, P2.03

└ GUTTER

17'-8"

18'-0"

A 1.0

1/4" / 12" SLOPE TO DRAIN

> — WOOD CURB AT SLOPE TRANSITION, TYPICAL

> > 18'-0"

- 1. NEW STOREFRONT SECURE DOOR WITH MULTI-POINT LOCKING MECHANCISM
- TO PREVENT FORCED ENTRY 2. SOUND SEPARATION STC RATED PARTITIONS
- 3. 1-1/2" ROUND METAL HANDRAIL, BOTH SIDE, WITH 12" LEVEL EXTENSIONS AND WALL RETURNS AT TOP AND BOTTOM OF RAMP, PROIVDE 1-1/2" GAP FROM HANDRAIL TO WALL FINISH FACE. MOUNT HANDRAIL AT 36" ABOVE WALKING SURFACE, FINISH TBD, PER ANSI 117.1 SECTION 505
- 4. BUILDING EXTERIOR LIGHTING SHALL BE SHIELDED AND DIRECTED AWAY FROM ADJACENT USES.
- 5. ALL EXPOSED STEEL TO BE PRIMED, TYPICAL6. PROVIDE GWB AT ALL CORE AND SHELL AND WHERE FIRE RATING IS REQUIRED.

#### **GRAPHIC WALL LEGEND**

(P) CEILING - PENDANT (R) CEILING - RECESSED (S) CEILING - SURFACE (E) WALL - END (W) WALL

> FINAL APPROVED LOCATIONS TO BE DETERMINED BY THE FIELD INSPECTOR

#### FIRE PROTECTION NOTES

- 1. PROVIDE MAX. OCCUPANT LOAD SIGNAGE AS REQ'D PER 2018 SFC, SECTION
- 2. NO STORAGE OR USE OF FLAMMABLE OR COMBUSTIBLE LIQUIDS, TORCH CUTTING OR WELDING OPERATIONS, OPEN FLAME WORK, GRINDING PRODUCING SPARKS, ROOFING OPERATIONS, OR USE OF FLAMMABLE GAS FOR TEMPORARY HEATING OR DRYING SHALL BE CONDUCTED ON ANY CONSTRUCTION SITE WITHOUT FIRST HAVING OBTAINED SPECIFIC PERMIT FROM THE LOCAL JURISDICTION FIRE DEPARTMENT FOR THESE HAZARDOUS ACTIVITIES,
- 3. DURING CONSTRUCTION, CONTRACTOR TO MAINTAIN EGRESS FIRE PROTECTION SYSTEMS AND EMERGENCY ACCESS FOR THIS SPACE AND ADJACENT AREAS, AS REQ'D PER 2021 IFC, CHAPTER 33.

#### FIRE SEPARATION - SBC 508.4

3 HOUR SEPARATION 2 HOUR SEPARATION — — 1 HOUR SEPARATION

1 LEVEL 2 - FLOOR PLAN 1/4" = 1'-0"

17'-8"

18'-0"

INSULATED FURRING —

WALL AT CMU BELOW

WINDOW

OFFICE 2

F03

3" PIPE FROM

3/4" 12'-7 1/4"

ROOF DRAIN

OFFICE 1

F03

STAIR 1

DOWNSPOUT FROM ROOF ABOVE

- EXTERIOR FACE OF CMU BELOW

17'-8"

1/4" / 12"

GUTTER →

3

SLOPE TO GUTTER

2 3/4" 1'-8 1/2" 2 3/4" 2 3/4"

1'-2 1/4"

DOWNSPOUT FROM — ROOF ABOVE

— ROOF OVERHANG ABOVE

18'-0"

3'-11 3/4" 2 3/4"

71'-4"

W03

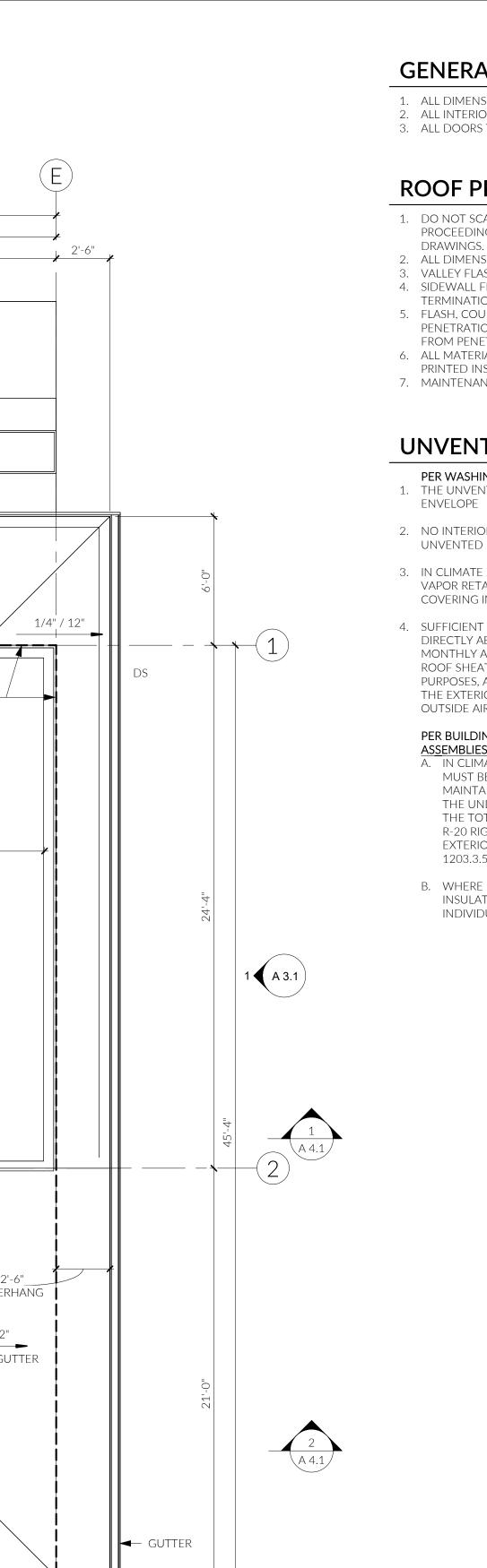
PROJECT NORTH

REVISIONS

DRAWN BY:

PROJECT NORTH

ROOF PLAN



## **GENERAL NOTES**

1. ALL DIMENSIONS TO FACE OF FINISH U.N.O.

2. ALL INTERIOR PARTIONS TO BE FULL HEIGHT TO BOTTOM OF STRUCTURE ABOVE 3. ALL DOORS TO BE LOCATED 4" FROM ADJACENT WALL U.N.O.

#### **ROOF PLAN NOTES**

- 1. DO NOT SCALE DRAWINGS. CONTACT ARCHITECT IMMEDIATELY BEFORE PROCEEDING WITH ANY WORK IF AMBIGUITIES OR DISCREPANCIES EXIST IN
- ALL DIMENSIONS REFER TO FACE OF ROUGH FRAMING MEMBER UON.
   VALLEY FLASHING SHALL EXTEND 24" BEYOND EITHER SIDE OF VALLEY LINES UON.
- 4. SIDEWALL FLASHING SHALL EXTEND 24" ABOVE ALL ROOF-TO-WALL TERMINATIONS UON.
- 5. FLASH, COUNTER FLASH, CAULK AND SEAL ALL PLUMBING AND MECHANICAL PENETRATIONS THROUGH ROOF MEMBRANES. WATERPROOFING SHALL EXTEND FROM PENETRATION FLANGE 24" IN ALL DIRECTIONS BEYOND PENETRATION EDGE.
- 6. ALL MATERIALS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS
- PRINTED INSTALLATION INSTRUCTIONS.
- 7. MAINTENANCE ROOF ACCESS FROM GROUND WITH LADDER.

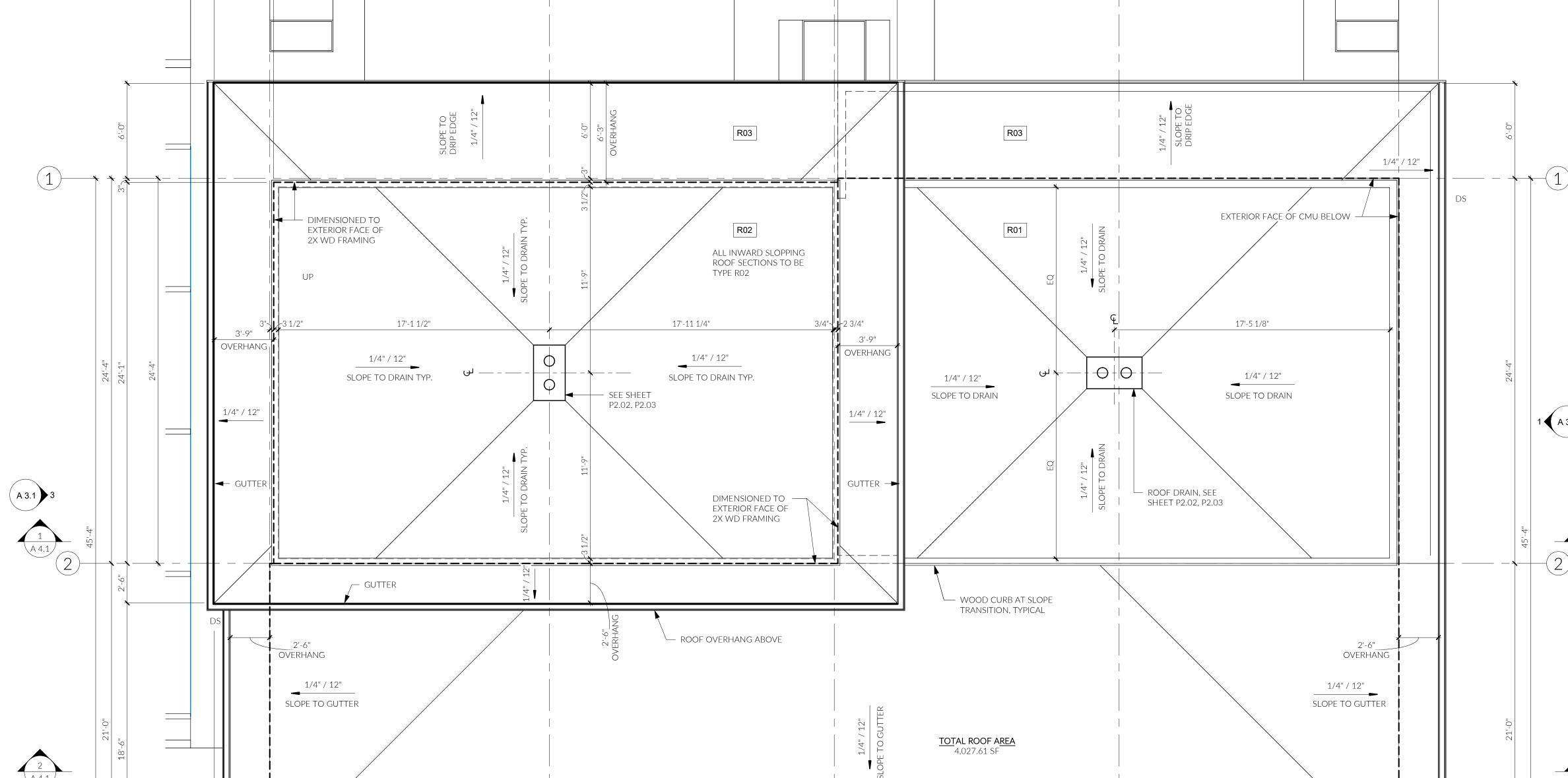
#### **UNVENTED ROOF ASSEMBLY**

#### PER WASHINGTON STATE BUILDING CODE 1203.3

- 1. THE UNVENTED ATTIC SPACE IS COMPLETELY WITHIN THE BUILDING THERMAL
- 2. NO INTERIOR VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE OF THE UNVENTED ENCLOSED ROOF FRAMING ASSEMBLY.
- 3. IN CLIMATE ZONE 5B, ANY AIR-IMPERMEABLE INSULATION SHALL BE A CLASS II VAPOR RETARDER, OR SHALL HAVE A CLASS II VAPOR RETARDER COATING OR COVERING IN DIRECT CONTACT WITH THE UNDERSIDE OF THE INSULATION.
- 4. SUFFICIENT RIGID BOARD OR SHEET INSULATION SHALL BE INSTALLED DIRECTLY ABOVE THE STRUCTURAL ROOF SHEATHING TO MAINTAIN A MONTHLY AVERAGE TEMPERATURE OF THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING ABOVE 45 DEGREES FAHRENHEIT. FOR CALCULATION PURPOSES. AN INTERIOR AIR TEMPERATURE OF 68 DEGREES IS ASSUMED AND THE EXTERIOR AIR TEMPERATURE IS ASSUMED TO BE THE MONTHLY AVERAGE OUTSIDE AIR TEMPERATURE OF THE THREE COLDEST MONTHS.

#### PER BUILDING SCIENCE CORPORATION'S ARTICLE 'BSI-100: HYBRID

- A. IN CLIMATE 4C, A RIGID INSULATION RATIO OF 20% TO THE TOTAL R-VALUE MUST BE INSTALLED ABOVE THE STRUCTURAL ROOF SHEATHING TO MAINTAIN AN AVERAGE TEMPERATURE GREATER THAN 45 DEGREES ON THE UNDERSIDE OF THE STRUCTURAL SHEATHING. (TABLE 1 IN BSI-100). THE TOTAL R-VALUE OF ASSEMBLY RO2 IS R-58 (R-38 BATT INSULATION & R-20 RIGID). 20% OF R-58 IS R-11.6. R-20 RIGID INSULATION ON THE EXTERIOR OF THE STRUCTURAL SHEATHING MEETS THE REQUIREMENTS OF 1203.3.5.1.4.
- B. WHERE PREFORMED INSULATION BOARD IS USED AS THE AIR-PERMEABLE INSULATION LAYER, IT SHALL BE SEALED AT THE PERIMETER OF EACH INDIVIDUAL SHEET INTERIOR SURFACE TO FORM A CONTINUOUS LAYER.



18'-0"

71'-4"

18'-0"

35'-5"

18'-0"

A 1.0

2 3/4" 3'-9"

17'-8"

31'-8 1/4"

└ GUTTER

1 A - ROOF 1/4" = 1'-0"

GUTTER -

- EXTERIOR FACE OF CMU BELOW

17'-8"

17'-8"

 $\circ$  $\square$  $\simeq$  $\triangleleft$   $\square$ 

206.414.9884 4915 RAINIER AVE S, STE 202 SEATTLE, WA 98118 INFO@FIRSTLAMP.NET

ENLARGED STAIR PLANS AND

PERIMETER OF THE BUILDING.

ADJACENT PROPERTIES.

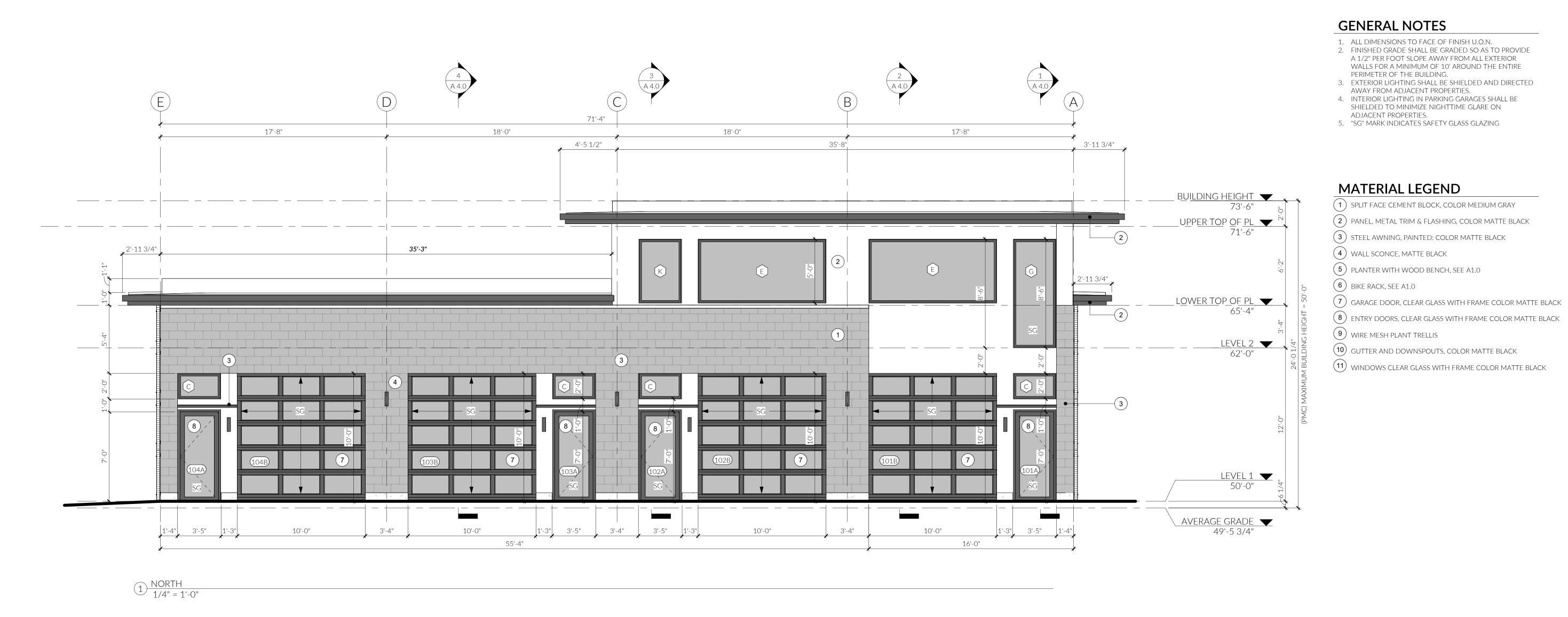
AWAY FROM ADJACENT PROPERTIES.

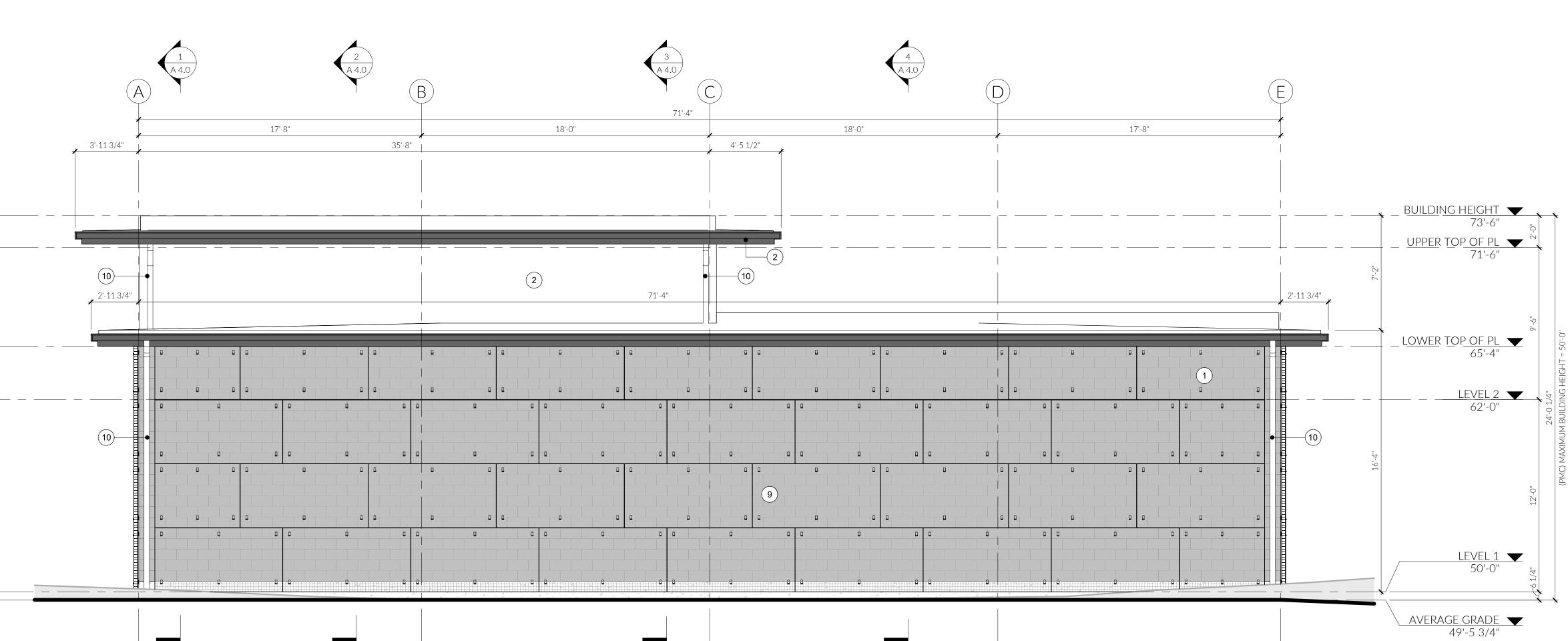
206.414.9884

REVISIONS

DRAWN BY:

ELEVATIONS





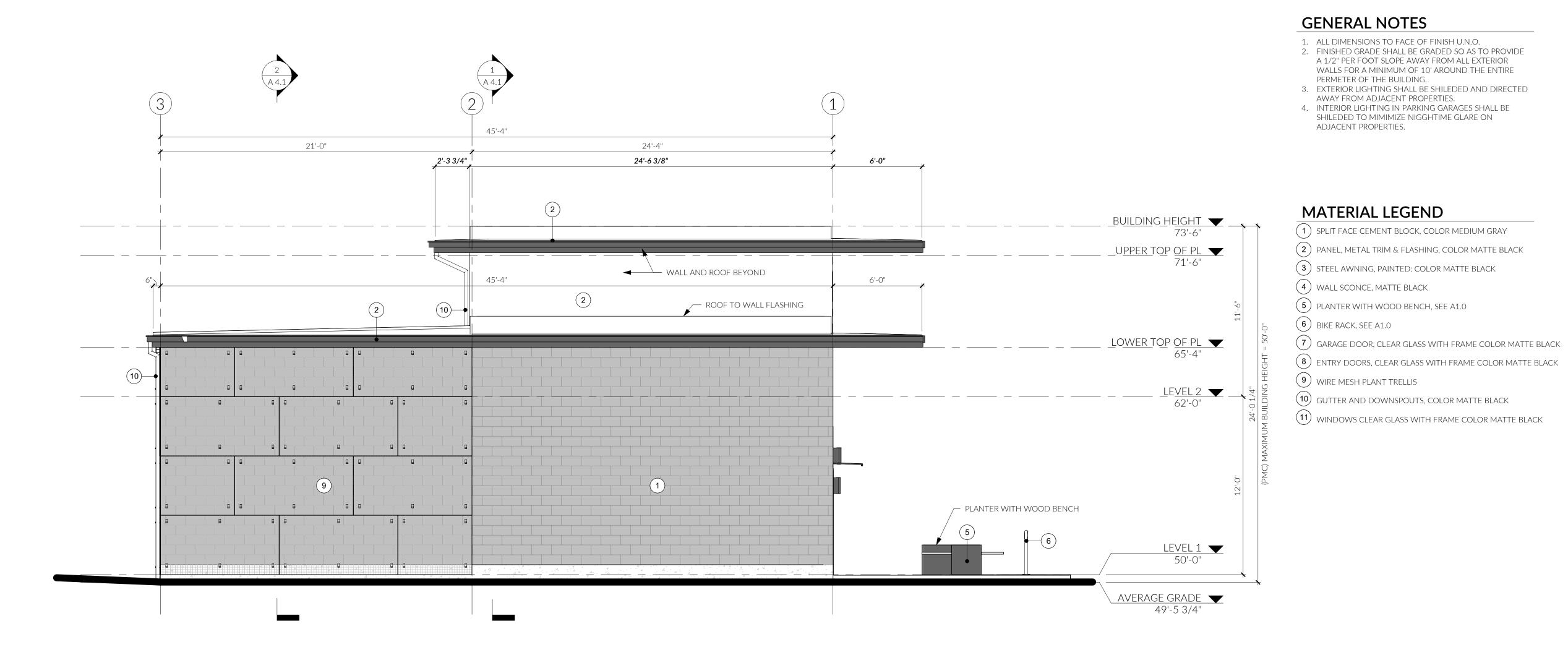
2 SOUTH 1/4" = 1'-0"

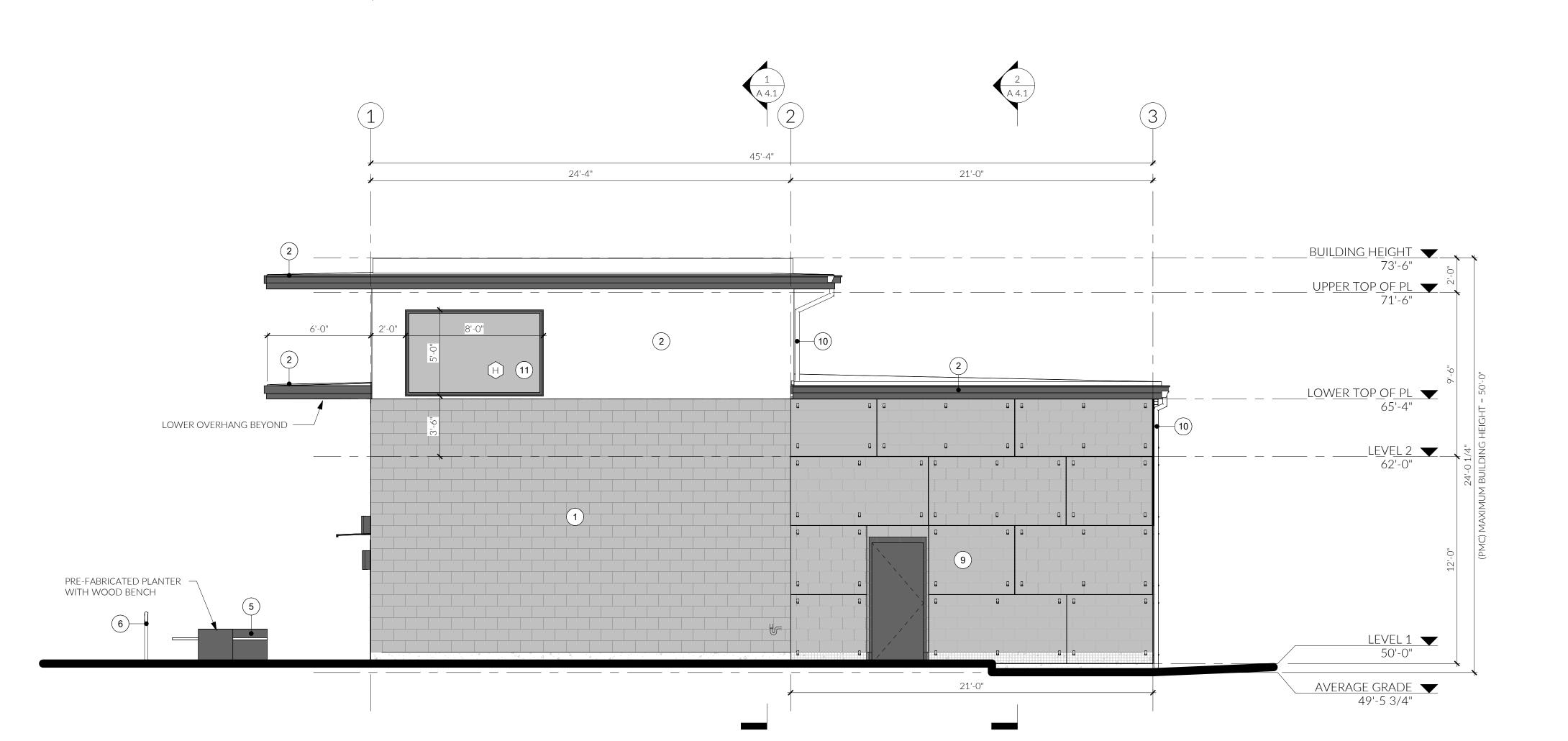
REVISIONS NO. DESCRIPTION DATE

DRAWN BY:

ELEVATIONS

A 3.1





A 4.0

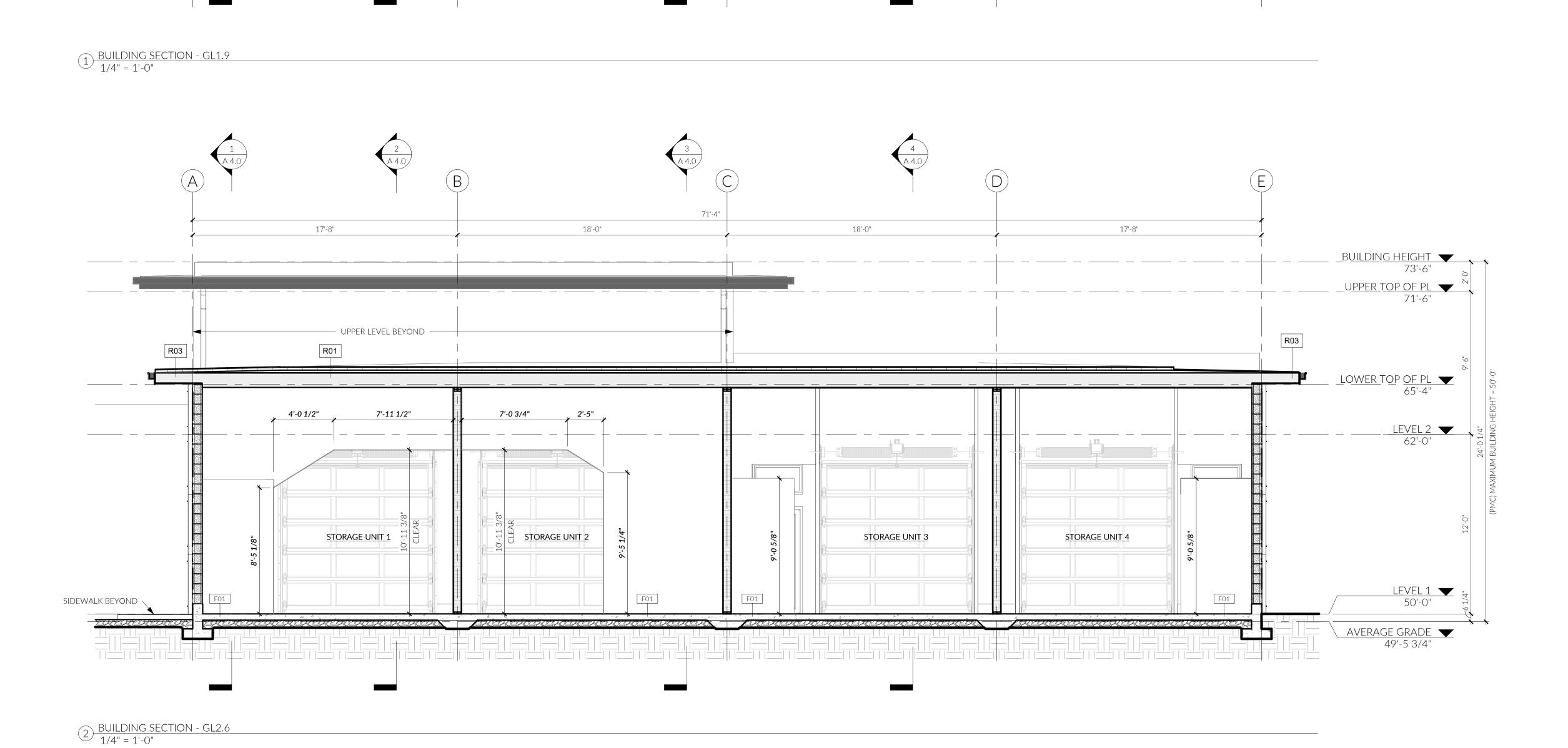
SECTIONS

NO. DESCRIPTION

DRAWN BY:

SECTIONS

A 4.1



18'-0"

R01

STORAGE UNIT 3

17'-8"

STORAGE UNIT 4

BUILDING HEIGHT 🔻 73'-6"

LOWER TOP OF PL

LEVEL 2 **Contract** 62'-0"

LEVEL 1 50'-0"

AVERAGE GRADE 49'-5 3/4"

FIRE TREATED WD BLOCKING, ALONG WEST FACADE, TYP.

NON-COMBUSTIBLE SOFFIT PANEL

R03

PARAPET CAP —

WC 4

17'-8"

■ WINDOW BEYOND

STAIR 1

STORAGE UNIT 1

1 HOUR FIRE RESISTANCE RATED

ASSEMBLY BENEATH STAIRS

R01

STAIR 2

F03

STORAGE UNIT 2

1 HOUR FIRE RESISTANCE RATED ASSEMBLY BENEATH STAIRS

PARAPET CAP —

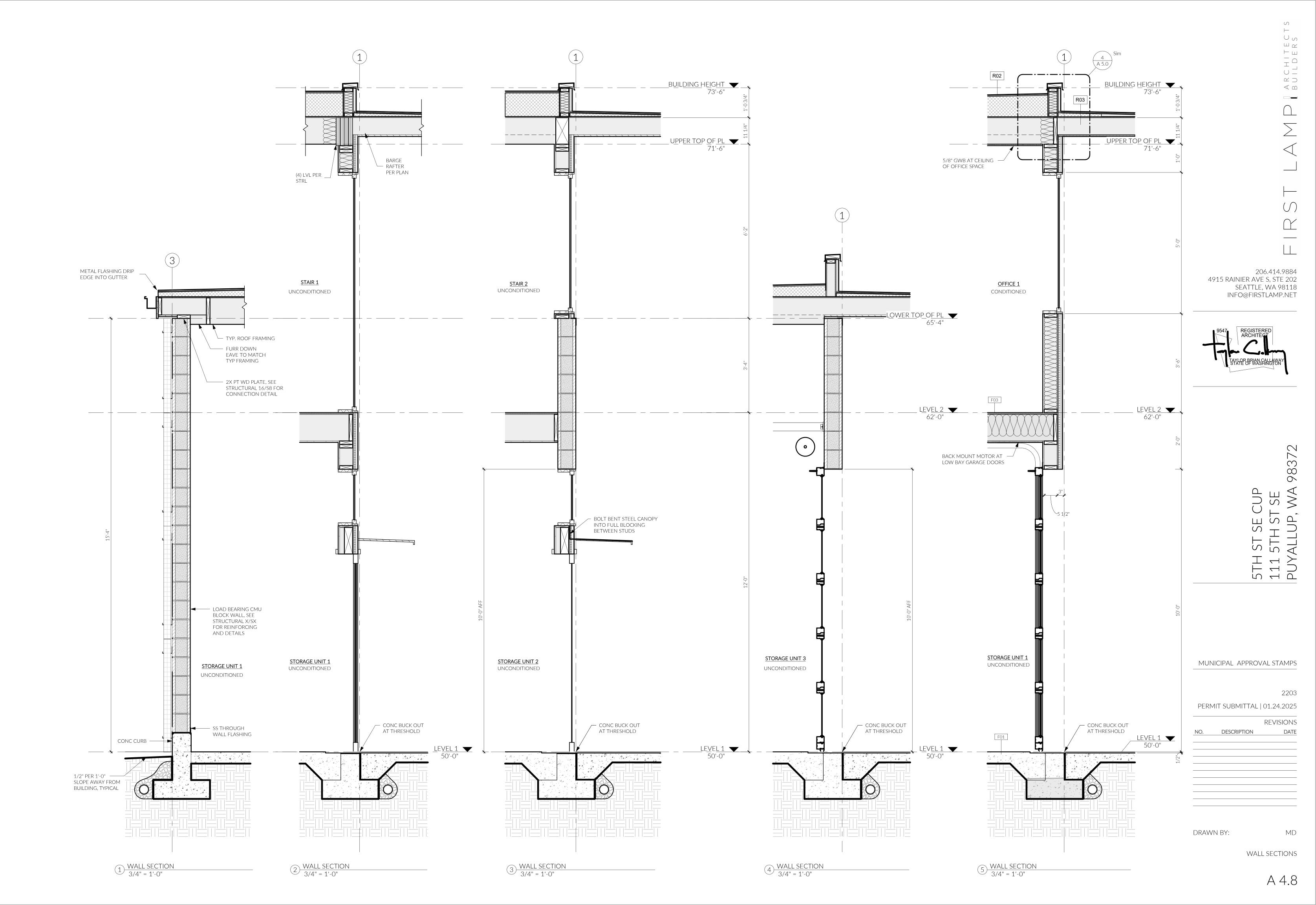
WINDOW BEYOND ──►

<u>WC 2</u> /

<u>WC 3</u>

R03

PARAPET CAP





CUT OUT HOLES FOR REINFORCING, SET

PENETRATIONS THROUGH FLASHING

- WEEP TUBES @36" OC, TYPCAL

- EXTERIOR SLAB ON GRADE OR FINISH GRADE PER PLAN

- DRAINAGE MAT O/

PERFORATED FOOTING DRAINS,

PERFORATIONS FACING DOWN

WATERPROOFING @ FOUNDATION, TYPICAL

FLUID APPLIED

- CONTINUOUS SS THROUGH WALL

FLASHING AT BASE OF CMU, TYPICAL



MUNICIPAL APPROVAL STAMPS

2203 PERMIT SUBMITTAL | 01.24.2025

NO. DESCRIPTION DATE

DRAWN BY:

DETAILS

MD

A 5.0

PVC ROOF MEMBRANE.
UNDERLAYMENT PER MFR.

CANT STRIP @ PARAPET EDGE, TYPICAL
PVC ROOF MEMBRANE, UNDERLAYMENT PER MFR.

2X BLOCKING

VENTED SOFFIT PANEL
PERFORATED METAL RAINSCREEN VENT, FINISH BLACK
RAINSCREEN CLADDING PER ELEVATION WRB
AT RIM JOIST

PLYWOOD SHEATHING

ROOF PARAPET AT CONDITION SPACE
1 1/2" = 1'-0"

SEE STRUCTURAL DETAIL —

1/S7 FOR REINFORCING

10 MIL POLY ---

SLAB ON GRADE

R-10 RIGID -

INSULATION, 24"

OF FOOTING

VERTICAL FROM TOP OF SLAB OR TO TOP

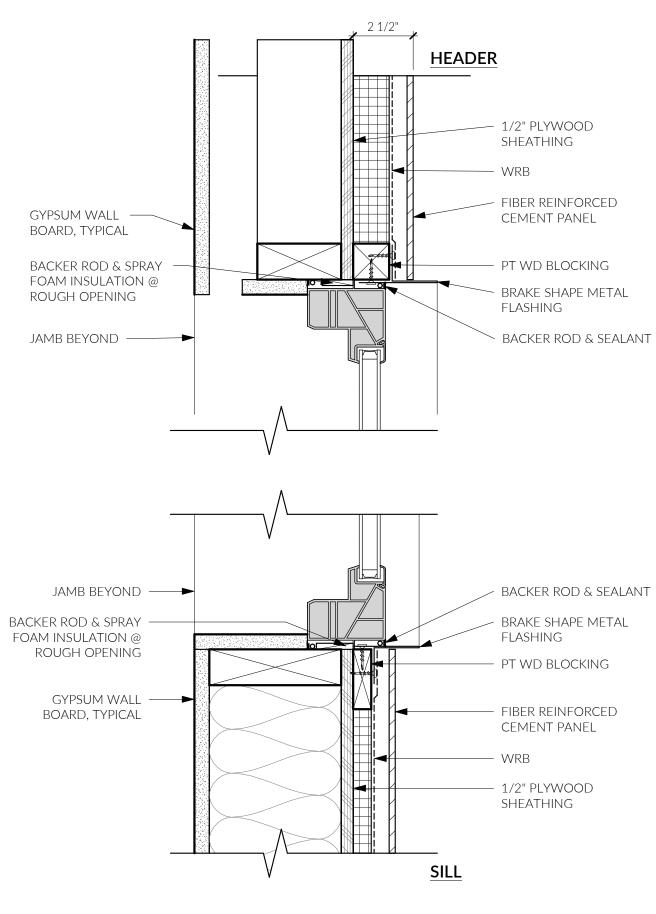
4" CRUSHED ROCK

CAPILLARY BREAK

12 TYPICAL FOUNDATION DETAIL
1 1/2" = 1'-0"

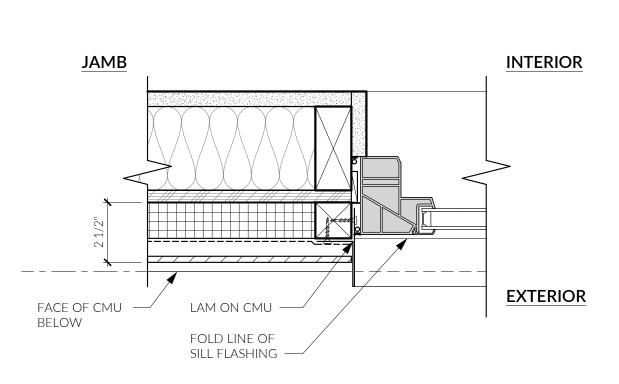
MEMBRANE BELOW

2" VERTICAL AT BACK DAM

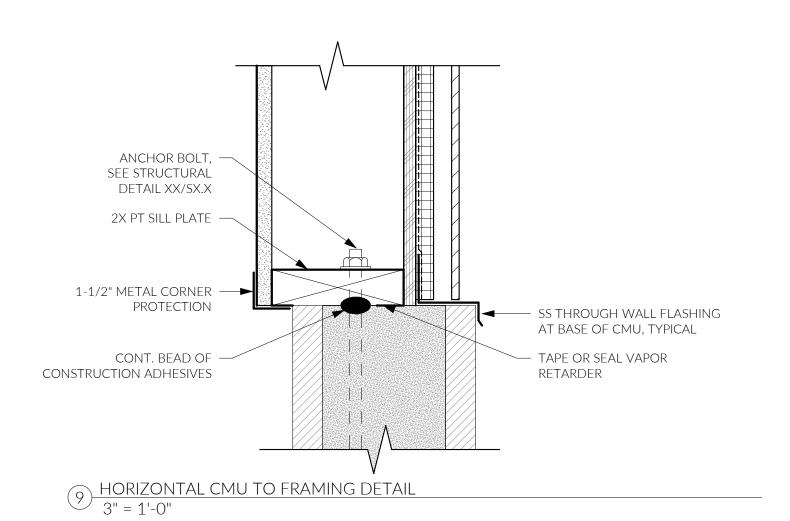


WINDOW HEADER / SILL DETAIL

3" = 1'-0"



10 WINDOW JAMB DETAIL
3" = 1'-0"



7

DRAWN BY:

WINDOW & DOOR SCHEDULES,

**ASSEMBLIES** 

PROJECT NORTH



#### DOOR NOTES

- . REFERENCE A2.1 & A2.2 FLOOR PLANS FOR DOOR OPERATION AND SWING DIRECTION. REFERENCE A3.0 & A3.1 ELEVATIONS FOR SAFETY GLAZING LOCATIONS.
- ALL DOORS IN PLANE WITH ADJACENT DOORS OR WINDOWS ARE INTENDED TO HAVE THE HEADERS ALIGNED; UON. PLEASE NOTIFY ARCHITECT IF THERE IS A DISCREPENCY IN HEADER HEIGHTS OR ALIGNMENTS. 3. PROVIDE COMPRESSION SEALS AT ALL OPERABLE DOORS TO MAINTAIN ACOUSTICAL SEPARATION.

STEEL TROWEL FINISH

6" CRUSHED ROCK

**EXTERIOR** 

LIQUID APPLIED WRB,

APPLIED BELOW

GRADE BEFORE

BACKFILLING

CAST-IN-PLACE

STRUCTURAL

FOUNDATION

PLAN 1/S2

DRAIN MAT

FASTENED TO

BACKFILLING

W01

CAST-IN-PLACE CONCRETE STEM WALL

CONCRETE BEFORE

CONC WALL, SEE

10-MIL CLASS A VAPOR RETARDER

FLOOR LEGEND

INTERIOR

✓ 1" = 1'-0"

SEE A5.0 FOR

BELOW GRADE

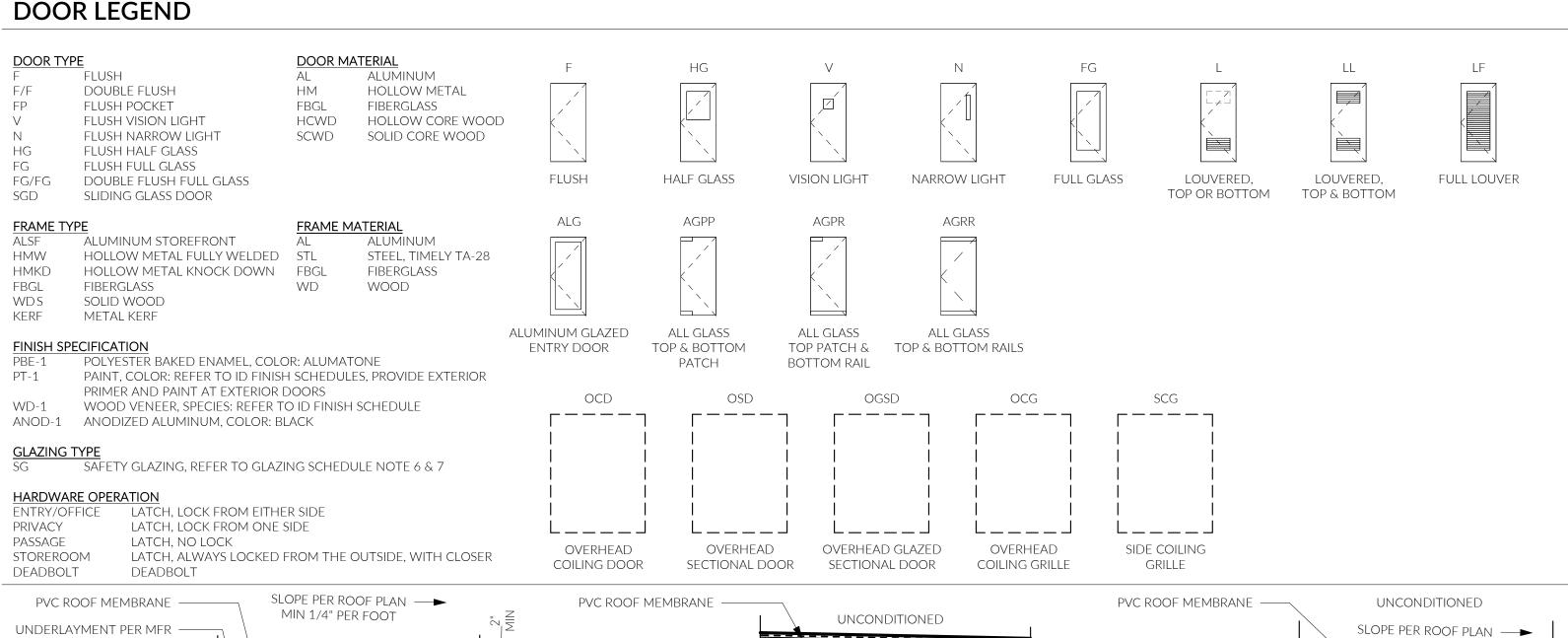
INSULATION AT

✓ 1" = 1'-0"

BUILDING

PERIMETER

SUBSTRATE PER GEO REPORT



MIN 1/4" PER FOOT UNCONDITIONED UNDERLAYMENT PER MFR — 1/2" COVERBOARD -UNDERLAYMENT PER MFR -TAPERED INSULATION — ✓MIN 1/4" PER FOOT✓ INSUL-4 (R-12, 2" MINIMUM) TYPE 4, PLYWOOD SHEATHING -CONTINUOUS INSULATION PER STRUCTURAL PLYWOOD SHEATHING PLYWOOD SHEATHING / PER STRUCTURAL PER STRUCTURAL 2X12 WOOD RAFTERS, 2X12 WOOD RAFTERS, JOISTS PER STRL UNCONDITIONED SEE STRUCTURAL SEE STRUCTURAL PLANS FOR SPACING PLANS FOR SPACING SOFFIT BOARD, TYP. LOW ENERGY SPACE CONDITIONED TAPERED INSULATION 5/8" GWB, AT CONDITIONED INSUL-4 (R-38 MINIMUM) SPACE ONLY CONTINUOUS INSULATION

MEMBRANE ROOF O/ CONDITIONED SPACE MEMBRANE ROOF O/ UNCONDITIONED SPACE ROOF LEGEND

1" = 1'-0" SHEATHING PER STRL -CONCRETE SLAB ON GRADE PER STRUCTURAL

INTERIOR

2X12 WD JOISTS, SEE STRUCTURAL S3 **BATT INSULATION** 5/8" TYPE X GWB

**INTERIOR** 

5/8" GWB →

VAPOR BARRIER

INSUL-1 (R-21)

FILL CAVITY

PER CONTRACTOR

BATT INSULATION,

2X6 WOOD STUDS,

SEE STRUCTURAL

PLANS FOR SPACING

W/ DBL TOP PLATE,

**CONCRETE SLAB ON GRADE** SEE A5.0 FOR BELOW GRADE INSULATION AT BUILDING PERIMETER

**EXTERIOR** 

◄── 8" CMU BLOCK,

- LIQUID

APPLIED AIR

AND WATER

BARRIER,

TYPICAL

**EXTERIOR CMU BEARING WALL** 

**FULLY GROUTED** 

CONDITIONED FINISH FLOORING PER INTERIOR DESIGNER UNCONDITIONED

1011.7.3 ENCLOSURES UNDER INTERIOR STAIRS SHALL BE PROTECTED BY A 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2X12 FLOOR O/ UNCONDITIONED SPACE

**EXTERIOR** 

FRCP PANEL, INSTALL PER

BATTENS @ 2'-0" O.C.

IT OR SIMILAR. INSTALL

INSUL-2: (R-4.2, 1" THICK)

MINERAL FIBER BOARD

CONTINUOUS AT CMU WALL

· 1X WD VERTICAL

WRB(S) O/ RIGID

STRUCTURAL

EXTERIOR 2X6 RAINSCREEN WALL

BATT INSULATION OMITTED AT

UNCONDITIONED SPACE

MFR RECOMMENDATIONS

ABOVE DECK

INTERIOR **EXTERIOR UNCONDITIONED** 5/8" GWB ■ 8" CMU BLOCK, **FULLY GROUTED** VAPOR BARRIER PER CONTRACTOR 2X4 WOOD STUDS, 16" O.C., SINGLE TOP AND BOTTOM PLATES INSULATION- REVEALSHIELD INSUL-1 (R-13) -BATT INSULATION, FILL CAVITY LIQUID APPLIED INSUL-3 AIR AND WATER (R-10, 2" THICK)

**INTERIOR 2X4 FURRING WALL** 

SEE PLANS AND SECTIONS FOR

FURRING WALL LOCATION

**EXTERNAL 2X8 DEPTH EAVE** 

1" STRIP VENT AT SOFFIT, TYPICAL

NOTE: GRIDLINES AND PLAN DIMENSIONS REFER TO FACE OF FRAMING MEMBER UON.

– 5/8" GWB, **BOTH SIDES** PLYWOOD SHEATHING WHERE NOTED ON PLANS, SEE STRUCTURAL PLANS FOR SHEAR INSUL-1 (R-21) BATT INSULATION, WALL LOCATIONS WALL LOCATIONS FILL CAVITY 2X6 WOOD STUDS SEE STRUCTURAL BARRIER, TYPICAL

**INTERIOR 2X6 PARTITION** 

W/ DBL TOP PLATE, PLANS FOR SPACING

- 2x4 WOOD STUDS, W/ DBL TOP PLATE,

**CONDITIONED** 

SHEATHING WHERE

NOTED ON PLANS,

SEE STRUCTURAL

PLANS FOR SHEAR

**PLYWOOD** 

PLANS FOR SPACING **INTERIOR 2X4 PARTITION** 

SEE STRUCTURAL

CONDITIONED

- 5/8" GWB,

**BOTH SIDES** 

- INSUL-1 (R-13)

FILL CAVITY

BATT INSULATION,

WINDOW SCHEDULE

**WINDOW** 

GLAZING TYPE U-VALUE SILL HEIGHT HEAD HEIGHT

0.65 8'-0"

3'-6"

3'-6"

3'-6"

0.65

0.65

LOCATION

**ENERGY CODE COMPLIANCE** 

LOW ENERGY, UNCONDITIONED

R-38 | 6.5" MINIMUM CONTINUOUS ABOVE DECK AT ROOF OVER HEATED SPACE

R-12 | 2" MINIMUM CONTINUOUS ABOVE DECK OVER LOW ENERGY SPACE

APPLICABLE CODE: 2021 WSEC-C

**COMPLIANCE PATH:** PRESCRIPTIVE

B OFFICE MEZZANINE HEATED

TOTAL GROSS FLOOR AREA

TOTAL AREA OF SKYLIGHTS

TOTAL GROSS FLOOR AREA

TOTAL AREA OF SKYLIGHTS

ENTRANCE DOOR, U-FACTOR

OPAQUE DOOR, U-FACTOR

SLAB ON GRADE UNHEATED

ADDITIONAL ENERGY NOTES

NFRC RATING CERTIFICATES.

WALL - ABOVE GRADE

INSPECTIONS.

WALL MASS

GLAZING PERCENT

GLAZING PERCENT

SPACE CONDITIONING CATEGORIES

TOTAL AREA OF ABOVE GRADE WALLS

TOTAL AREA OF ABOVE GRADE WALLS

VERTICAL GLAZING FIXED, U-FACTOR

TOTAL AREA OF GLAZING IN WALLS

HEATED (CONDITIONED) SPACE PER R402.1

THERMAL ENVELOPE MINIMUM REQUIREMENTS

ROOF CONTINOUS INSULATION ABOVE DECK

ROOF INSULATION ABOVE AND BELOW DECK

FLOOR CONDITIONED OVER UNCONDITIONED SPACE

TOTAL AREA OF GLAZING IN WALLS

SPACE CATEGORIES

S-1 STORAGE

**CLIMATE ZONE:** 4C - PIERCE COUNTY

S-1 STORAGE UTILITY SEMI-CONDITIONED

LOW ENERGY (UNCONDITIONED) SPACE R402.1.1

0.65

SAFETY GLAZING 0.65

10'-0"

8'-6"

8'-6"

8'-6"

8'-6"

FINISH

ROUGH OPENING DIM

HEIGHT

2'-0"

5'-0"

8'-6"

5'-0"

5'-0"

1. PLEASE REFER TO ELEVATIONS ON SHEET A3.0 & A3.1 FOR OPERATION, MULLING, SAFETY GLAZING, & SIMULATED DIVDED LITES.

R-VALUE

(PER INCH)

2. ALL WINDOWS IN PLANE WITH ADJACENT DOORS OR WINDOWS ARE INTENDED TO HAVE THE HEADERS ALIGNED; UON. PLEASE NOTIFY ARCHITECT

**INSULATION TYPE LEGEND** 

R-13 3 1/2" STUD R-21 | 5 1/2" STUD

R-4 R-3.8 MIN 1" CONTINUOUS AT INTERIOR

FLOOR ABOVE UNCONDITIONED SPACE

R-10 CONTINUOUS AT CMU MASS WALLS

R-10 2" AT PERIMETER TO 24" BELOW T.O. SLAB

R-4.2 CONTINUOUS EXTERIOR AT RAIN SCREEN CLADDING

R-VALUE

1. WHERE TWO OR MORE LAYERS OF RIGID INSULATION WILL BE USED STAGGER EDGE JOINTS, EXCEPT WHERE INSULATION TAPERS TO THE ROOF

2. INSULATION MATERIALS THAT ARE PROVIDED WITH AN R-VALUE IDENTIFICATION MARK SHALL BE INSTALLED SO THAT THE MARK IS READILY

IMMEDIATELY AFTER INSTALLATION IN A CONSPICUOUS LOCATION IN THE BUILDING SO IT IS READILY AVAILABLE DURING INSPECTION.

3. INSULATION MATERIALS THAT ARE NOT INSTALLED WITH AN R-VALUE IDENTIFICAITON MARK, PROVIDE AN INSULATION CERTIFICATE

WIDTH

3'-4"

10'-0"

3'-4"

8'-0"

3'-4"

IF THERE IS A DISCREPENCY IN HEADER HEIGHTS OR ALIGNMENTS.

DESCRIPTION

INSUL-1 UNFACED FIBERGLASS BATT

INSUL-2 | RIGID STONE WOOL BOARD

INSUL-3 RIGID EXTRUDED POLYSTYRENE - XPS

INSUL-4 | RIGID POLYISOCYANURATE BOARD - POLYISO |

DECK AT A GUTTER EDGE, ROOF DRAIN, OR SCUPPER.

1. CONTRACTOR TO FIELD VERIFY ROUGH OPENINGS PRIOR TO ORDERING

PROVIDE GLAZING TO MEET ADJACENT WALL STC RATINGS, TYPICAL.

HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING PER IBC 2406.4.

DOORS. SHOP DRAWINGS TO BE SUBMITTED FOR APPROVAL BY ARCHITECT.

B. GLAZING ADJACENT TO DOORS WITH THE EXPOSED EDGE WITHIN A 24"

BOTTOM EDGE IS LESS THAN 60" ABOVE THE WALKING SURFACE.

ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION, &

C. GLAZING IN WINDOWS MEETING THE FOLLOWING CONDITIONS: GREATER

FLOOR, EXPOSED TOP EDGE IS GREATER THAN 36" ABOVE THE FINISH

HORIZONTALLY AND IN A STRAIGHT LINE OF THE PLANE OF GLAZING.

D. GLAZING IN GUARDRAILS AND RAILINGS, REGARDLESS OF AREA OR HEIGHT

STEAM ROOMS, BATHTUBS, SHOWERS AND ANY PORTION OF A BUILDING

EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE STANDING OR

SWIMMING POOLS, HOT TUBS AND SPAS WHEN THE BOTTOM EDGE OF

HORIZONTALLY OF A WALKING SURFACE, WHEN THE EXPOSED SURFACE

OF THE GLASS IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT

GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE AND

E. GLAZING IN ENCLOSURES FOR HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS,

WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM

F. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR

G. GLAZING ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36"

H. GLAZING ADJACENT TO THE BOTTOM STAIRWAY LANDING WHERE THE

GLAZING IS LESS THAN 60" ABOVE THE LANDING AND WITHIN A 60"

I. ANY OTHER REQUIRED AREAS OR REQUIREMENTS AS LISTED IN THE IBC

5. FENESTRATION PRODUCTS INCLUDING WINDOWS, DOORS, AND SKYLIGHTS

SHALL BE LABELED WITH U-FACTOR, SHGC, VT AND LEAKAGE RATING IN

HORIZONTAL ARC FROM THE BOTTOM TREAD NOSING.

4. PROVIDE SAFETY GLAZING IDENTIFICATION PER IBC SECTION 2406.3.

6. GARAGE DOORS AND ROLLING DOORS, U-FACTOR RATINGS SHALL BE

DETERMINED IN ACCORDANCE WITH NFRC OR ANSI/DASMA 105.

FLOOR, AND ONE OR MORE WALKING SURFACES WITHIN 36" MEASURED

THAN 9 S.F., EXPOSED BOTTOM EDGE IS LESS THAN 18" ABOVE FINISHED

INSUL-5 | RIGID HD EXPANDED POLYSTYRENE - EPS

EXCEPTIONS APPLY PER IBC 2406.4.1 - 2406.4.7.

ABOVE WALKING SURFACE,

WALKING SURFACE.

WALKING SURFACE.

2021, SECTION 2406.

ACCORDANCE WITH NFRC 100.

CONDITIONED

A. GLAZING IN SWINGING, SLIDING AND BIFOLD DOORS

INSUL-6 | RIGID EXPANDED POLYSTYRENE - EPS

OBSERVABLE DURING INSPECTION.

**GENERAL NOTES** 

QUANTITY

EVEL 2

WINDOW NOTES

ID

INSULATION NOTES

**INTIERIOR TENANT DEMISING PARTITION** 

STAGGERED STUDS

5/8" GWB -- 2X6 WD STUDS, SEE STRUCTURAL FOR SPACING (R-20 MINIMUM) SHEATHING FILL CAVITY

**INTERIOR 2X6 PARTITION** THERMAL ENVELOPE

1. NET FLOOR AREA IS THE ACTUAL OCCUPIED AREA NOT INCLUDING UNOCCUPIED ACCESSORY AREAS SUCH AS

INSULATION, THERMAL ENVELOPE, PLUMBING SYSTEM, MECHANICAL SYSTEM, ELECTRICAL SYSTEM AND FINAL

3. REQUIRED INSPECTIONS PER C105.2 TO INCLUDE BUT NOT LIMITED TO FOOTING AND FOUNDATION

5. LOW ENERGY SPACES SERVED BY SPACE HEATING SYSTEMS SHALL COMPLY WITH SUFFICIENT MEASURES FROM TABLE C406.2(1) OR TABLE C406.2(2) TO ACHIEVE A MINIMUM 50% OF THE EFFICIENCY CREDITS

6. WALL ASSEMBLIES ENCLOSING A SEMI-HEATED SPACE ARE EXEMPT FROM THE OPAQUE WALL INSULATION

ALL OTHER ENVELOPE ASSEMBLIES SHALL COMPLY WITH THE THERMAL ENVELOPE PROVISIONS AS WELL.

DOCUMENTS, APPLICABLE CALCULATIONS, WSEC ENVELOPE COMPLIANCE REPORTS, AND FENESTRATION

3. A THERMAL ENVELOPE CERTIFICATE IS REQUIRED AT PROJECT CLOSE OUT AND SHALL INCLUDE THE RATED R-

VALUES OF ALL OPAQUE ASSEMBLY INSULATION, U-FACTORS & SHGCS FOR ALL FENESTRATION ASSEMBLIES.

1. AT PROJECT CLOSEOUT DOCUMENTATION IS REQUIRED INCLUDING ENVELOPE RECORD CONSTRUCTION

CORRIDORS, STAIRWAYS, TOILET ROOMS, MECHANICAL ROOMS AND CLOSETS.

REQUIREMENTS IN SECTION C402 PROVIDED THE FOLLOWING CONDITIONS ARE MET:

CONDITIONED

B. OUTPUT CAPACITY OF HEATING SYSTEM DOES NOT EXCEED 8 BTU/H PER SF.

2. OPAQUE DOOR IS A DOOR WITH LESS THAN 50% GLAZED AREA.

4. LOW ENERGY SPACES ARE EXEMPT FROM SECTION C402.

A. NO MECHANICAL COOLING IS INSTALLED.

C. HEATING SYSTEM IS OF A QUALIFYING TYPE

2X4 WOOD STUDS,

2X6 DBL TOP PLATE,

STAGGERED 8" O.C.

5/8" TYPE 'X' GWB,

**BOTH SIDES** 

2X6 SGL BOTTOM PLATE,

REQUIRED FOR NEW CONSTRUCTION BY TABLE C401.3.3.

3,423.01 SF

4237.46 SF

452.66 SF

277.60 SF

100.00 SF

0.34

0.60

0.37

R-38CI

R-9.5CI

R-30

R-20 + R-3.8CI

R-10 FOR 24" DEPTH

567.22 + 40.00 = 607.22 SF

607.22 / 4237.46 = (0.143) 14.3 %

100.00 / 277.60 = (0.360) 36.0 %

(R-29 BELOW + R-20CI ABOVE) R-49

**UNCONDITIONED** 

→ FRCP PANEL, FACE FASTENED

CONTINUOUS INSULATION,

1" RIGID FOAM BOARD

TAPE SEAMS AND SEAL

PERIMETER TO ACHIEVE A

CONTINUOUS AIR BARRIER

## GENERAL CONDITIONS

REDUNDANCY FACTOR

RESPONSE MODIFICATION FACTOR, R

- 1. THE CONTRACTOR SHALL VERIFY AND REVIEW ALL ITEMS WITHIN THE DRAWINGS PRIOR TO PROCEEDING WITH THE WORK. NOTIFY THE ENGINEER/ARCHITECT IMMEDIATELY WITH ANY DISCREPANCIES.
- 2. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.

6.5 (BRG WALL/SHEATHED WALLS)

5.0 (SPECIAL CMU SHEARWALLS)

1.3

- DIMENSIONS ARE NOT TO BE SCALED FROM THE PLANS, SECTIONS, OR DETAILS WITHIN THE DRAWINGS.
- 4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE, AND PROCEDURES.
- 5. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE REFERENCED BUILDING AND ALL OTHER REGULATING AGENCIES EXERCISING AUTHORITY OVER ANY PORTION OF THE WORK.
- 6. SPECIFIC NOTES AND DETAILS IN THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND SPECIFICATIONS.
- 7. NOTIFY THE ENGINEER OF ALL CHANGES MADE IN THE FIELD PRIOR TO INSTALLATION.

#### FOUNDATION

- 1. FOUNDATION DESIGN PARAMETERS ASSUMED BY OWNER:
  - A. IBC SOIL SITE CLASSIFICATION......D
  - B. FOOTING BEARING PRESSURE......1,500 PSF
  - C. LATERAL EARTH PRESSURE: ACTIVE.. .35 PCF PASSIVE... .250 PCF
- 2. SUBGRADE PREPARATION, DRAINAGE PROVISIONS AND OTHER RELEVANT SOIL CONSIDERATIONS ARE TO BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 3. ALL FOUNDATIONS ARE TO BEAR ON COMPETENT NATIVE SOILS OR COMPACTED STRUCTURAL FILL. STRUCTURAL FILL IS TO BE COMPACTED TO 95% DENSITY PER ASTM D-1557.

#### CONCRETE

- 1. REFERENCE STANDARDS: ACI-301 AND ACI-318.
- 2. MINIMUM CONCRETE STRENGTH AT 28 DAYS: 2,500 PSI (5½ SACK MIX)
- 3. THE WATER/CEMENT RATIO SHALL NOT EXCEED: 0.5 (BY WEIGHT)
- 4. AGGREGATE GRADING SHALL COMPLY WITH AASHTO #57 GRADATION OR BETTER. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II.
- COMPLY WITH ACI-301 FOR MIXING. DO NOT EXCEED THE AMOUNT OF WATER SPECIFIED IN THE APPROVED MIX. PROPORTIONS OF AGGREGATE TO CEMENT SHALL BE SUCH AS TO PRODUCE A DENSE WORKABLE MIX WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESSIVE FREE SURFACE WATER.
- COMPLY WITH ACI-301 FOR PLACEMENT. PROVIDE A  $\frac{3}{4}$  INCH CHAMFER AT ALL EXPOSED CONCRETE EDGES, UNLESS INDICATED OTHERWISE IN THE DRAWINGS.
- MAXIMUM SLUMP TO BE 4"  $\pm$  1", TYPICAL. DO NOT ADD WATER TO THE MIX TO INCREASE SLUMP. MAXIMUM SLUMP MAY BE INCREASED BY 1" IF THE SLUMP IS TESTED DIRECTLY FROM THE TRUCK PRIOR TO BEING PUMPED INTO PLACE.
- 8. ACCELERATED SET OR HIGH EARLY STRENGTH MAY BE ACHIEVED BY USING APPROVED ADMIXTURES.
- COMPLY WITH ACI-305R FOR PLACEMENT IN HOT WEATHER AND ACI-306R FOR PLACEMENT IN COLD WEATHER.
- 10. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISH. ALL EXPOSED CONCRETE IS TO HAVE A CLASS A FINISH.
- 11. PROVIDE AIR ENTRAINMENT OF  $5\% \pm 1.5\%$  FOR ALL CONCRETE EXPOSED TO WEATHER.

#### CONCRETE MASONRY UNITS

- 1. REFERENCE STANDARDS: ACI 530-02 AND ACI 530.1-02.
- MINIMUM CONCRETE MASONRY UNITS (CMU) DESIGN STRENGTH: A. NET COMPRESSIVE STRENGTH, fm 2,000 PSI B. MORTAR TYPE
- ALL MASONRY TO BE CONSTRUCTED IN RUNNING BOND OF NORMAL WEIGHT MASONRY UNITS. CONSTRUCTION LIFTS ARE NOT TO EXCEED 5'-0".
- SOLID GROUT ALL CELLS UNLESS NOTED OTHERWISE.

#### REINFORCING STEEL

- 1. REFERENCE STANDARDS: ACI "DETAIL MANUAL" AND CRSI MANUAL OF STANDARD PRACTICE.
- 2. MATERIALS: A. REINFORCING STEEL: ASTM A615, GRADE 60 B.WELDED WIRE REINFORCING: ASTM A82 AND A185, Fy = 75 KS/
- 3. LAP CONTINUOUS REINFORCING BARS PER REQUIREMENTS LISTED BELOW, UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS OR HOOKS BARS (90 OR 180 DEGREE) AT THE END OF ALL HORIZONTAL REINFORCEMENT IN WALLS. REFER TO NOTE 6 FOR BEND REQUIREMENTS.

BAR SIZE	MIN. LAP LENGTH
#4	2'-6"
#5	3'-0"
#6	4'-6"

4. REINFORCEMENT COVER **FOOTINGS** 

SLABS

*3 INCHES TO EARTH* 2 INCHES TO FORMED SURFACE 2 INCHES TO EARTH

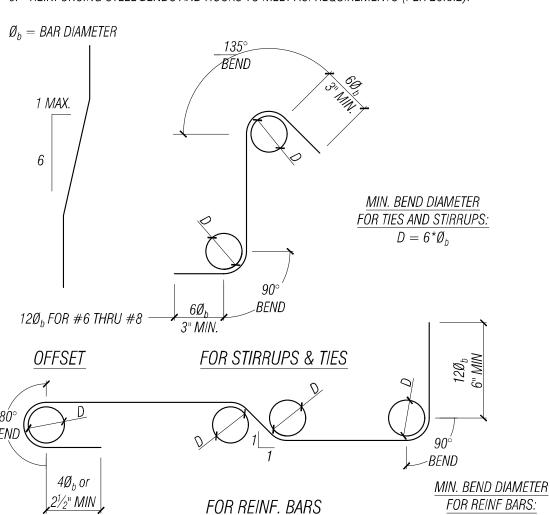
FORMED SURFACE: EXTERIOR FACE 1½ INCHES, #5 BAR AND SMALLER 2 INCHES, #6 BAR AND LARGER

5. REINFORCING STEEL A615 MAY NOT BE WELDED TO OTHER STEEL ELEMENTS. (ACI 318-14 26.6.4.1)

11/2 INCHES FOR BEAMS AND COLUMNS

6. REINFORCING STEEL BENDS AND HOOKS TO MEET ACI REQUIREMENTS (PER 25.3.2).

INTERIOR FACE  $\frac{3}{4}$  INCHES FOR SLABS AND WALLS



#### STRUCTURAL STEEL

1. REFERENCE STANDARDS: LATEST EDITION OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

 $D = 6 * \emptyset_b$ 

2. MATERIALS: - ASTM A307 STEEL TO WOOD - ASTM A325 STEEL TO STEEL STEEL TO CONCRETE - HEAVY HEX HEAD ASTM F1554 GR. 36 WOOD TO CONCRETE - ASTM F1554 GR. 36 ASTM A992 (Fy = 50,000 PSI)W SHAPES: SQ/RECT - ASTM A500-10, GRADE B (Fy = 46,000 PSI MIN)ROUND - ASTM A500-10, GRADE B (Fy = 42,000 PSI MIN)

#### STRUCTURAL STEEL WELDING

1. CONFORM TO THE AWS CODES D1.1 AND D1.3. USE ONLY STATE CERTIFIED WELDERS.

ALL OTHER STEEL: ASTM A36 (Fy = 36,000 PSI)

- 2. USE DRY E70 ELECTRODES.
- 3. WELDS ARE TO BE  $\frac{1}{4}$  INCH CONTINUOUS FILLET WELDS UNLESS NOTED OTHERWISE IN THE

#### CONCRETE OR MASONRY ANCHORS

- 1. MECHANICAL ANCHORS ARE TO BE EITHER HILTI KWIK BOLT-TZ ANCHORS, SIMPSON STRONG-BOLT OR SIMPSON TITEN HD ANCHORS. ANCHOR SIZE AND EMBEDMENT IS AS SPECIFIED ON THE DRAWINGS OR IN THE FIELD.
- 2. EPOXY FOR THREADED RODS OR REBAR INTO CONCRETE OR SOLID GROUTED MASONRY IS TO BE SIMPSON SET-3G. COLD WEATHER INSTALLATION (BELOW 40°F), USE SIMPSON AT-3G. ROD OR REBAR SIZE AND EMBEDMENT IS AS SPECIFIED ON THE DRAWINGS OR IN THE FIELD.
- 3. EPOXY FOR THREADED RODS OR REBAR INTO HOLLOW CELL MASONRY IS TO BE EITHER HILTI HIT HY 70 WITH SCREEN TUBE, SIMPSON SET-3G WITH OPTI-MESH SCREEN TUBE OR APPROVED ALTERNATE. ROD OR REBAR SIZE AND EMBEDMENT IS AS SPECIFIED ON THE DRAWINGS OR IN THE FIELD.

#### DIMENSIONAL LUMBER

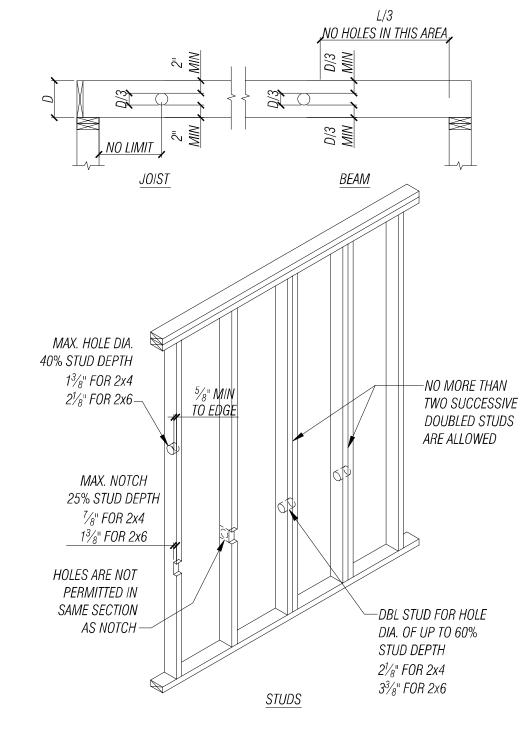
- 1. MEET THE REQUIREMENTS OF PS 20-70 AND NATIONAL GRADING RULES FOR SOFTWOOD DIMENSIONAL LUMBER. ALL MEMBERS ARE TO BEAR THE STAMP OF THE WWPA. MOISTURE CONTENT AT THE TIME OF FRAMING IS TO BE 19% OR LESS.
- 2. MINIMUM DIMENSIONAL LUMBER GRADES ARE TO BE: 2x DF STUD GRADE WALL STUDS 2x DF STANDARD GRADE WALL PLATES 2x PT DF STANDARD GRADE PER PLAN AT CONCRETE
  - JOISTS 2x DF #2 HEADERS/BEAMS 4x, 6x DF #2 **POSTS** 4x, 6x DF #2
- 3. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED LUMBER. NAILS AND PLATE WASHERS IN CONTACT WITH TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED. ANCHOR BOLTS AND LAG SCREWS IN TREATED LUMBER SHALL BE HDG OR ZINC COATED. PLAIN CARBON STEEL FASTENERS MAY BE USED WITH ZINC-BORATE TREATED LUMBER.
- 4. FOUNDATION SILL PLATES ARE TO BE BOLTED TO THE CONCRETE FOUNDATION WITH  $\frac{5}{8}$  Ø ANCHOR BOLTS EMBED A MINIMUM 7" OR  $\frac{5}{8}$ "Ø MECHANICAL ANCHORS EMBED AS SPECIFIED ON DRAWINGS. PROVIDE A MINIMUM OF TWO BOLTS PER PLATE SECTION A MAXIMUM OF 9" FROM THE PLATE END. MAXIMUM SPACING OF ANCHORS IS TO BE 4'-0". PROVIDE 0.229"x3" SQ. WASHERS AT ALL ANCHOR BOLTS. WASHER EDGES MUST BE WITHIN 1/2" OF WALL SHEATHING.
- 5. SHOT PIN ATTACHMENTS FOR SILL PLATES ARE TO BE SIMPSON FASTENERS OR APPROVED ALTERNATE. SHOT PIN SIZES ARE AS FOLLOWS:

PLATE THICKNESS	EMBED MATERIAL	SHOT PIN
2x	CONC	PDPWL-250MG
2x	STEEL	PDPAW-200

- 6. BOLTS IN WOOD BEAMS SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE MEMBER EDGE. PROVIDE STANDARD WASHERS FOR ALL NUTS BEARING AGAINST WOOD.
- 7. FASTEN ALL MEMBERS IN ACCORDANCE WITH IBC TABLE 2304.10.1, UNLESS NOTED OTHERWISE. PROVIDE MINIMUM  $1\frac{1}{2}$ " EMBED FOR ALL NAILS. NAIL SIZES ARE AS FOLLOWS:

NAIL	MIN. SHANK DIA.
8d	0.131"
10d	0.148"
16d	0.162"

8. HOLES AND NOTCHES IN WOOD MEMBERS ARE TO BE LIMITED AS FOLLOWS.



#### GLU-LAMINATED MEMBERS

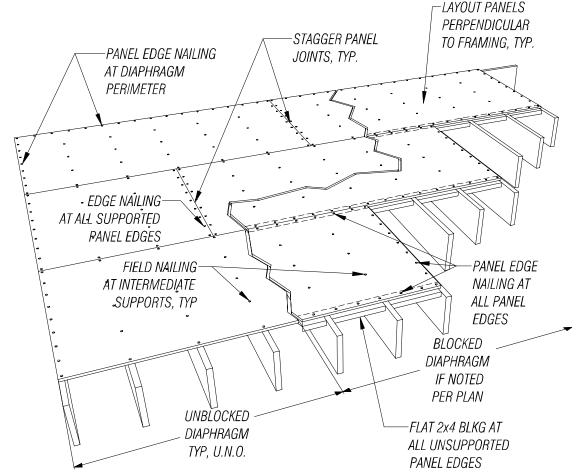
- 1. SINGLE-SPAN GLU-LAMINATED WOOD MEMBERS ARE TO BE DOUGLAS FIR, KILN DRIED AND AITC SPECIFICATION 24F-V4, UNLESS NOTED OTHERWISE. MULTI-SPAN OR CANTILEVERED GLU-LAMINATED WOOD MEMBERS TO BE AITC SPECIFICATION 24F-V8, UNLESS OTHERWISE NOTED. BEAMS ARE HAVE A 2,000 FT RADIUS CAMBER, UNLESS NOTED OTHERWISE.
- 2. MATERIALS MUST BE OBTAINED FROM AN AITC APPROVED FABRICATOR AND BEAR THE AITC STAMP.
- 3. THE GLUE IS TO BE A "WET-USE" ADHESIVE.

#### MANUFACTURED LUMBER

- 1. PARALLEL STRAND LUMBER (PSL) IS TO BE 2.0E PARALLAM MANUFACTURED BY TRUSJOIST BY WEYERHAUESER OR ENGINEER APPROVED EQUAL.
- 2. LAMINATED VENEER LUMBER (LVL) IS TO BE 2.0E MICROLLAM MANUFACTURED BY TRUSJOIST BY WEYERHAUESER OR ENGINEER APPROVED EQUAL.
- 3. LAMINATED STRAND LUMBER (LSL) IS TO BE:
- 1½" WIDE LSL 1.3E OR BETTER
- 3½" WIDE LSL 1.55E OR BETTER
- MANUFACTURED BY TRUSJOIST BY WEYERHAUESER OR ENGINEER APPROVED EQUAL
- 4. MANUFACTURED I-JOISTS ARE TO BE TJI SERIES MEMBERS AND SPECIFIED IN THE DRAWINGS MANUFACTURED BY TRUSJOIST BY WEYERHAUESER OR ENGINEER APPROVED EQUAL.

#### **WOOD SHEATHING**

- 1. ROOF SHEATHING. MINIMUM THICKNESS PER PLAN. APA RATED, EXP-1 RATING, EDGE SEALED PANELS CONFORMING TO INDENTIFICATION INDEX 32/16 FOR SLOPES GREATER THAN 3/12 AND 40/20 FOR SLOPES 3/12 AND LESS. PROVIDE MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL 6 INCHES ON CENTER ALONG EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE. USE 8d COMMON NAILS.
- FLOOR SHEATHING. MINIMUM THICKNESS PER PLAN. APA RATED STURD-I-FLOOR. EXP-1 RATING. TONGUE AND GROOVE EDGES CONFORMING TO IDENTIFICATION INDEX 48/24. PROVIDE MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL AND GLUE TO SUPPORTS. GLUE ADHESIVE IS TO CONFORM TO APA SPECIFICATION AFG-01. NAIL 6 INCHES ON CENTER ALONG EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE. USE 10d COMMON



ROOF/FLOOR DIAPHRAGM NAILING

3. WOOD SHEARWALL SHEATHING. MINIMUM THICKNESS PER PLAN. PLYWOOD OR OSB APA RATED, EXP-1 RATING. NAILING PER DRAWINGS.

#### MECHANICAL HARDWARE CONNECTORS

- ALL MECHANICAL HARDWARE USED FOR CONNECTIONS ARE TO BE MANUFACTURED BY SIMPSON STRONG TIE OR EQUIVALENT HAVING A CAPACITY GREATER THAN OR EQUAL.
- ALL MECHANICAL CONNECTORS USED WITH PRESSURE TREATED WOOD ARE TO HAVE A ZINC FINISH UNLESS NOTED OTHERWISE ON THE PLANS.
- FASTENERS ARE TO MATCH MANUFACTURER'S SPECIFICATION, ALWAYS USE HIGHEST CAPACITY REQUIREMENTS. FASTENERS USED WITH ZINC COAT FINISH CONNECTORS ARE TO BE DO NOT OVER DRIVE.
- THROUGH BOLT FASTENERS ARE TO BE MACHINE BOLTS CONFORMING TO ASTM STANDARD A307. GRADE A. NUTS USED WITH THROUGH BOLTS, THREADED RODS AND ANCHOR BOLTS SHALL BE AT LEAST FLUSH WITH THE TOP OF NUT.
- JOISTS AND BEAMS SHALL BEAR FULLY ON THE CONNECTOR SEAT AND THE GAP BETWEEN MEMBERS SHALL NOT EXCEED 1/8".

#### ABBREVIATIONS:

A. BOLT

*ADD'L* 

A.F.F

*APPROX* 

ARCH

BLKG

B.O.O.

BTM

BRG

BTW

ANCHOR BOLT **ADDITIONAL** ABOVE FINISH FLOOR ALTERNATE **APPROXIMATE ARCHITECTURAL** BLOCKING BEAM BOTTOM OF OPENING **BOTTOM** BEARING BETWEEN CLEAR CONCRETE MASONRY UNIT

CLRCMUCOLCOLUMN CONC CONCRETE COND CONDITION CONN CONNECTION CONST CONSTRUCTION CONT CONTINUOUS

DOUBLE DIAMETER DIMENSION DEAD LOAD

EACH EACH FACE ELEVATION EDGE NAILING EQUAL *EQUIP* **EQUIPMENT** 

EACH SIDE EXIST EXISTING **EXTERIOR** 

FLOOR DRAIN FOUNDATION FINISH FLOOR FINISH GRADE FLUSH FRAMED FL00R FEET

FTG FOOTING FIRE RETARDANT TREATED FAR SIDE *GAUGE* 

GALVGALVANIZED GLBGLUE LAMINATED BEAM HDRHEADER HGR HANGER HORIZ HORIZONTAL HEIGHT

INSIDE FACE INCH LIVE LOAD MAX MAXIMUM MECH **MECHANICAL** 

MFR **MANUFACTURER** MIN MINIMUM MISCELLANEOUS NEAR SIDE NTS NOT TO SCALE

PRESSURE TREATED

SECTION SQUARE FEET

SIMILAR

STANDARD

STRUCTURAL

SHEARWALL

THROUGH

TOP OF CONCRETE

TOP OF FOOTING

TOP OF OPENING

TOP OF STEEL

TOP OF WALL

TUBE STEEL

UNLESS NOTED OTHERWISE

WELDED HEADED STUD

WELDED THREADED STUD

WELDED WIRE REINFORCING

TYPICAL

VERTICAL

WIDE FLANGE

WITH

WEIGHT

STEEL

**SPECIFICATIONS** 

ON CENTER PARALLEL PERPENDICULAR POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH

RAMMED AGGREGATE PIER REINF REINFORCING *REQ*'D REQUIRED SCHD SCHEDULE

STRUCT

THRU

T.O.O.

TOS

TOW

U.N.O.

WTS

SHEET INDEX:

S1 - GENERAL NOTES S1.1 - GENERAL NOTES (CONT.)

S2 - FOUNDATION PLAN

S4 - ROOF FRAMING PLAN

S6 - CMU WALL ELEVATION

S8 - FRAMING DETAILS

S3 - SECOND FLOOR FRAMING PLAN

S5 - FIRST FLOOR SHEARWALL PLAN S5.1 - SECOND FLOOR SHEARWALL PLAN

S7 - FOUNDATION, CMU, AND SHEARWALL DETAILS

HOT-DIPPED GALVANIZED CONFORMING TO ASTM A153. FILL ALL HOLES WITH FASTENERS AND

IRM, ANY (DED



SSIONAL ENGINE

BUILDING

TORAGI

S

**ALLUP** 

PERMIT SUBMITTAL

**GENERAL NOTES** 

DATE: 10/17/2024

PLAN NUMBER:

**S**1

#### SHOP DRAWINGS AND SUBMITTALS

- 1. SUBMIT LAYOUT DRAWINGS IN PDF FORMAT FOR REVIEW OF: A. REINFORCING STEEL
- 2. SUBMIT SPECIFICATIONS IN PDF FORMAT FOR REVIEW OF:
- A. CONCRETE INSERTS
- B. CONCRETE MIX DESIGN

#### DEFERRED SUBMITTALS

- 1. PLANS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED IN A TIMELY MANNER THAT ALLOWS A MINIMUM OF 10 WORKING DAYS FOR THE ENGINEER PLUS AN ADDITIONAL 30 WORKING DAYS FOR INITIAL PLAN REVIEW FROM THE CITY. ALL COMMENTS RELATED TO THE DEFERRED SUBMITTAL MUST BE ADDRESSED TO THE SATISFACTION OF THE PLAN CHECK DIVISION PRIOR TO APPROVAL OF THE SUBMITTED ITEMS.
- 2. THE DEFERRED SUBMITTAL ITEMS INCLUDE THE FOLLOWING:
- A. AWNINGS

#### SPECIAL INSPECTIONS

- 1. SPECIAL INSPECTIONS ARE TO BE PERFORMED BY INDEPENDENT, JURISDICTIONALLY APPROVED AGENCY IN ACCORDANCE WITH IBC SECTION 1703 AND PROVIDE THE DUTIES AND RESPONSIBILITIES AS INDICATED IN SECTION 1704.
- 2. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE BUILDING OFFICIAL UPON COMPLETION OF PROJECT.
- 3. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A JURISDICTIONAL INSPECTOR.
- 4. THE SPECIAL INSPECTIONS REQUIRED FOR THIS PROJECT ARE AS NOTED IN THE SUMMARY OF SPECIAL INSPECTION.

#### JOB SITE SAFETY

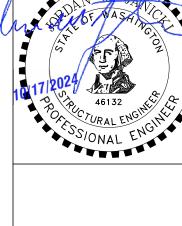
THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM THE WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE HIM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF THE WORK BY THE CONTRACTOR, SUB-CONTRACTOR OR ANY PERSON ON THE SITE.

## SUMMARY OF SPECIAL INSPECTION

ITEM	INSPECTION REQUIRED	REMARK
	VERIFY MIX DESIGN SUPPLIED MEETS APPROVED MIX DESIGN; PERIODIC INSPECTION	REFER TO STAMPED MIX DESIGN BY DCG
CONCRETE	PLACEMENT OF CONCRETE, INCLUDES VERIFYING SLUMP AND AIR CONTENT TESTS; CONTINUOUS INSPECTION	REFER TO DRAWINGS; NOT REQUIRED FOR SITE-WORK CONCRETE
	VERIFY ANCHOR BOLTS ARE PLACED AND TIED PROPERLY; CONTINUOUS INSPECTION	REFER TO DRAWINGS
		PERIODIC REVIEW OF SITE-PREPARED GROUT PROPORTIONS OR APPROVED MIX DESIGN CERTIFICATE FROM SUPPLIER
	PRIOR TO GROUT PLACEMENT	PERIODIC REVIEW OF REINFORCING, INCLUDING SIZE AND SPACING
STRUCTURAL MASONRY		PERIODIC REVIEW OF TYPE, SIZING AND LOCATION OF ANCHOR BOLTS
	ODOLUT DI AOSMENT	PERIODIC INSPECTION THAT GROUT SPACE IS CLEAN
	GROUT PLACEMENT	CONTINUOUS INSPECTION DURING GROUT PLACEMENT
DEINEODOINO OTEEI	VERIFY PLACEMENT, COVER AND BAR SIZE; PERIODIC INSPECTION	REFER TO DRAWINGS
REINFORCING STEEL	VERIFY GRADE; PERIODIC INSPECTION	ASTM A615, GRADE 60
EPOXY OR MECHANICAL ANCHORS	VERIFY INSTALLATION SIZE AND DEPTH; CONTINUOUS INSPECTION	REFER TO DRAWINGS OR FIELD DIRECTIVES
	VERIFY NAIL SIZE, SPACING, SHEATHING TYPE AND BLOCKING FOR ALL WALLS; PERIODIC INSPECTION	REFER TO DRAWINGS
WOOD FLOOR/WALL DIAPHRAGMS	VERIFY NAIL SIZE, SPACING, SHEATHING TYPE AND BLOCKING FOR ALL FLOOR/ROOF DIAHRAGMS; PERIODIC INSPECTION	REFER TO DRAWINGS
	VERIFY INSTALLATION OF HOLDOWNS; PERIODIC INSPECTION	REFER TO DRAWINGS





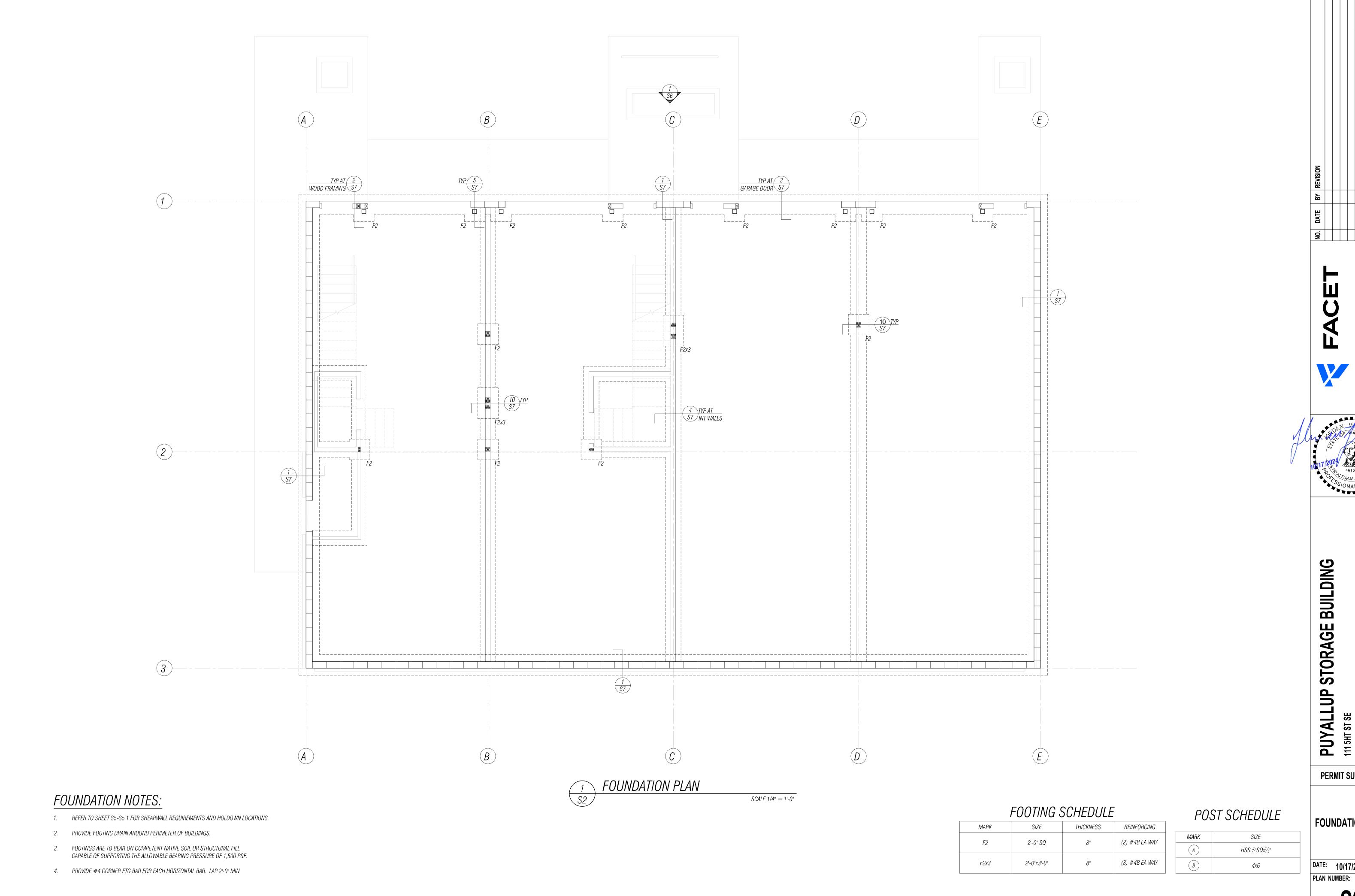


PUYALLUP STORAGE BUILDING
111 5HT ST SE
PUYALLUP, WA 98372
PROJECT NUMBER: 2401.0362

PERMIT SUBMITTAL

**GENERAL NOTES** 

DATE: 10/17/2024

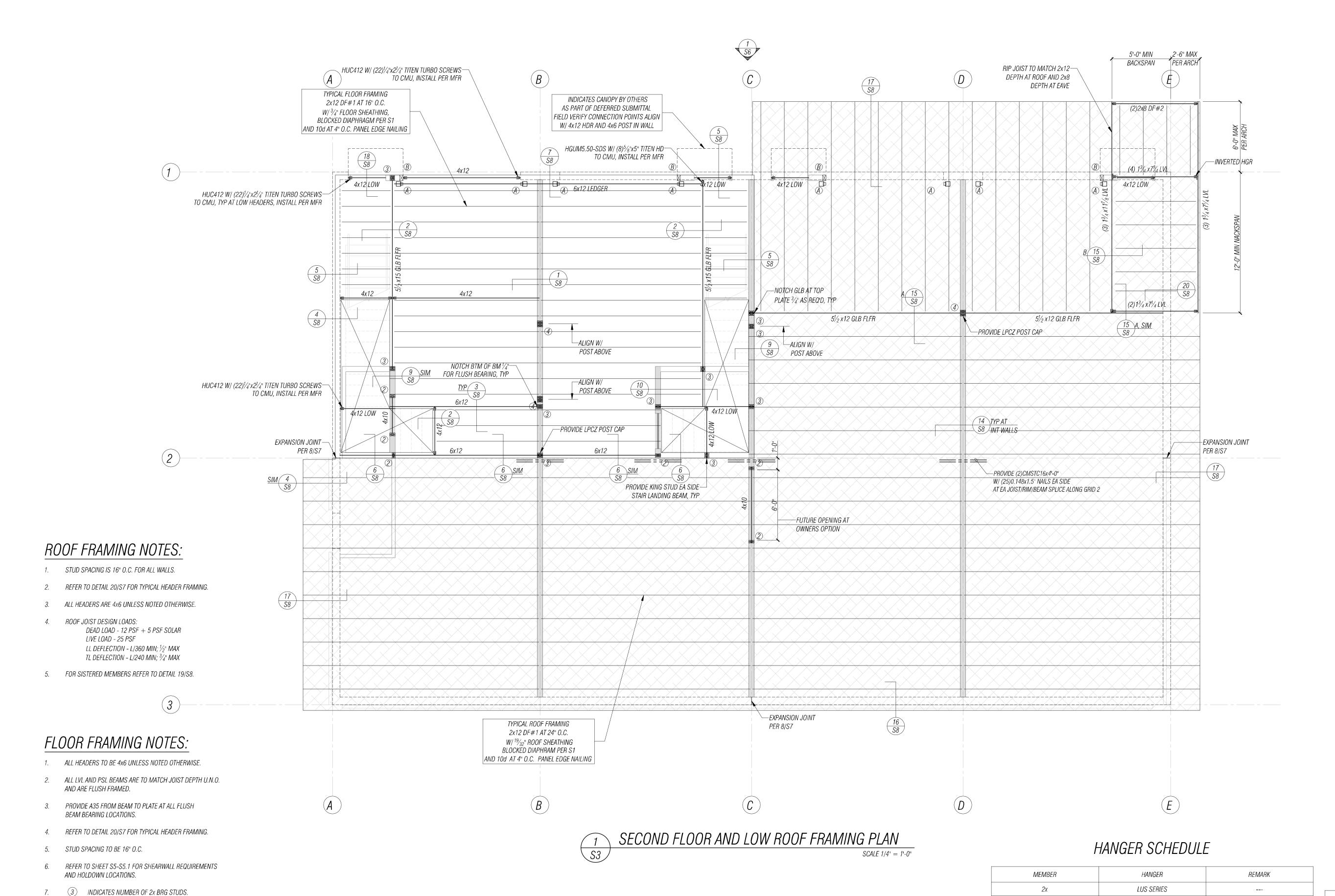




PERMIT SUBMITTAL

**FOUNDATION PLAN** 

DATE: 10/17/2024



PROVIDE SOLID BLOCKING IN FLOOR SPACE BELOW ALL 4x, 6x AND

MULTI-STUD POSTS THAT DO NOT BEAR ON FLUSH BEAMS.

9. REFER TO DETAIL 16/S7 FOR TYPICAL STAIR FRAMING REQUIREMENTS.

10. FOR SISTERED MEMBERS REFER TO DETAIL 19/S8.

PERMIT SUBMITTAL

BUILDING

STORAGE

**PUYALLUP** 

FIRM, ANY NDED

SECOND FLOOR AND LOW ROOF FRAMING PLAN

DATE: 10/17/2024
PLAN NUMBER:

**S**3

POST SCHEDULE

 MARK
 SIZE

 A
 HSS 5"SQx<sup>1</sup>/<sub>4</sub>"

 B
 4x6

----SHIM AS REQ'D
SHIM AS REQ'D

(2)2x

4x

(2) 1<sup>3</sup>/<sub>4</sub> LVL

(3) 1¾ LVL

(4) 1¾ LVL

\*HANGER SIZE TO MATCH JOIST/BEAM DEPTH

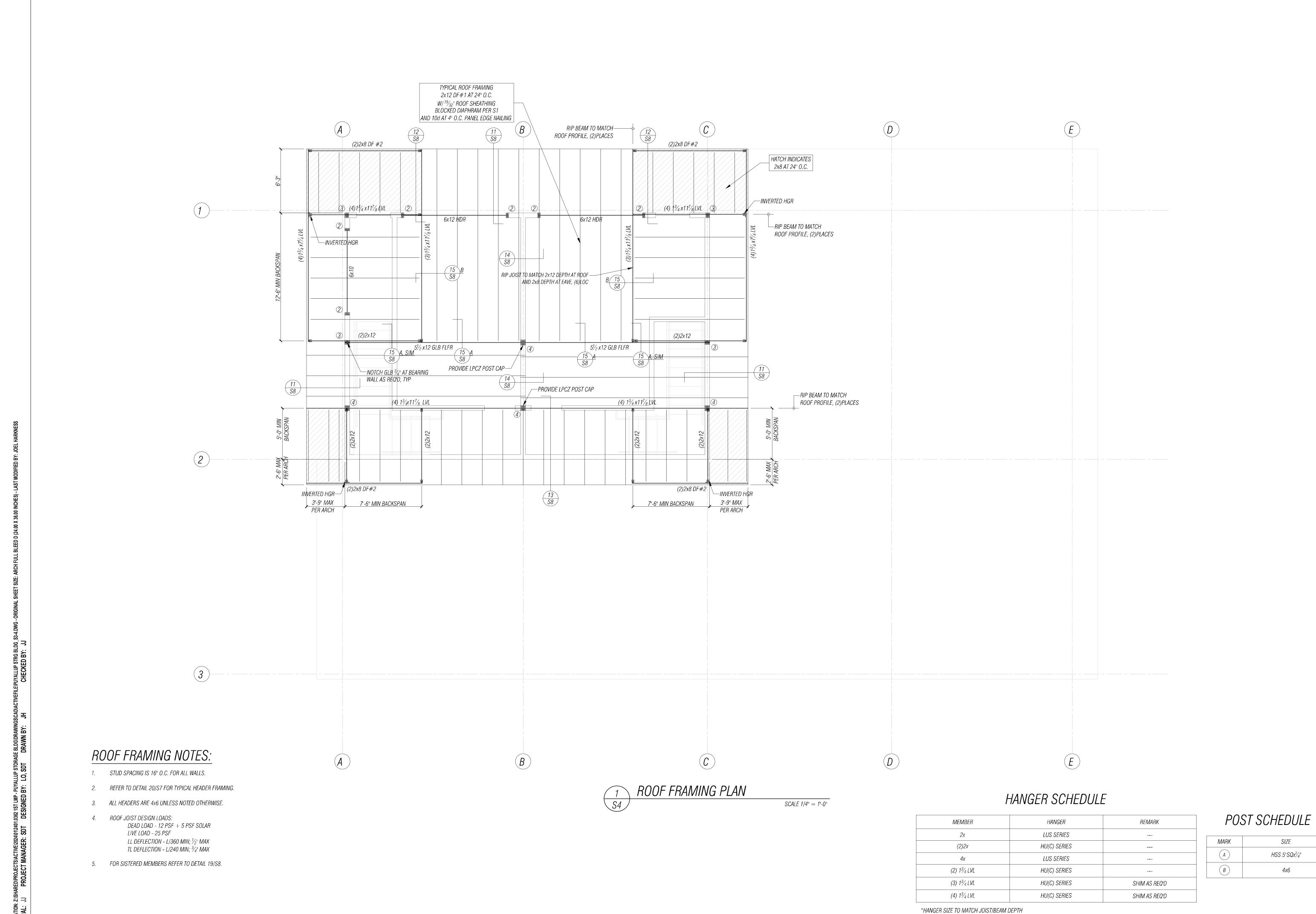
HU(C) SERIES

LUS SERIES

HU(C) SERIES

HU(C) SERIES

HU(C) SERIES





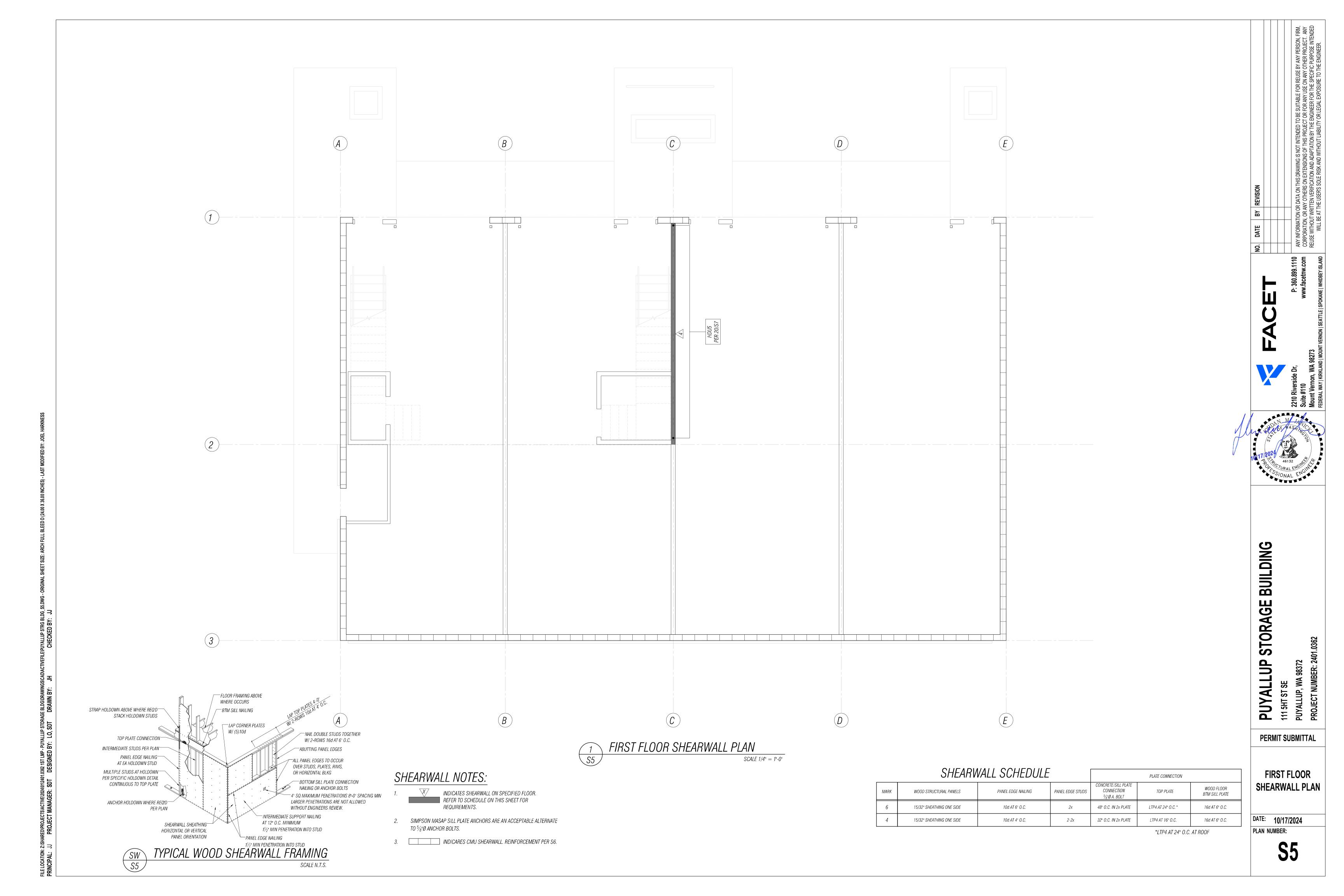
STORAGE BUILDING

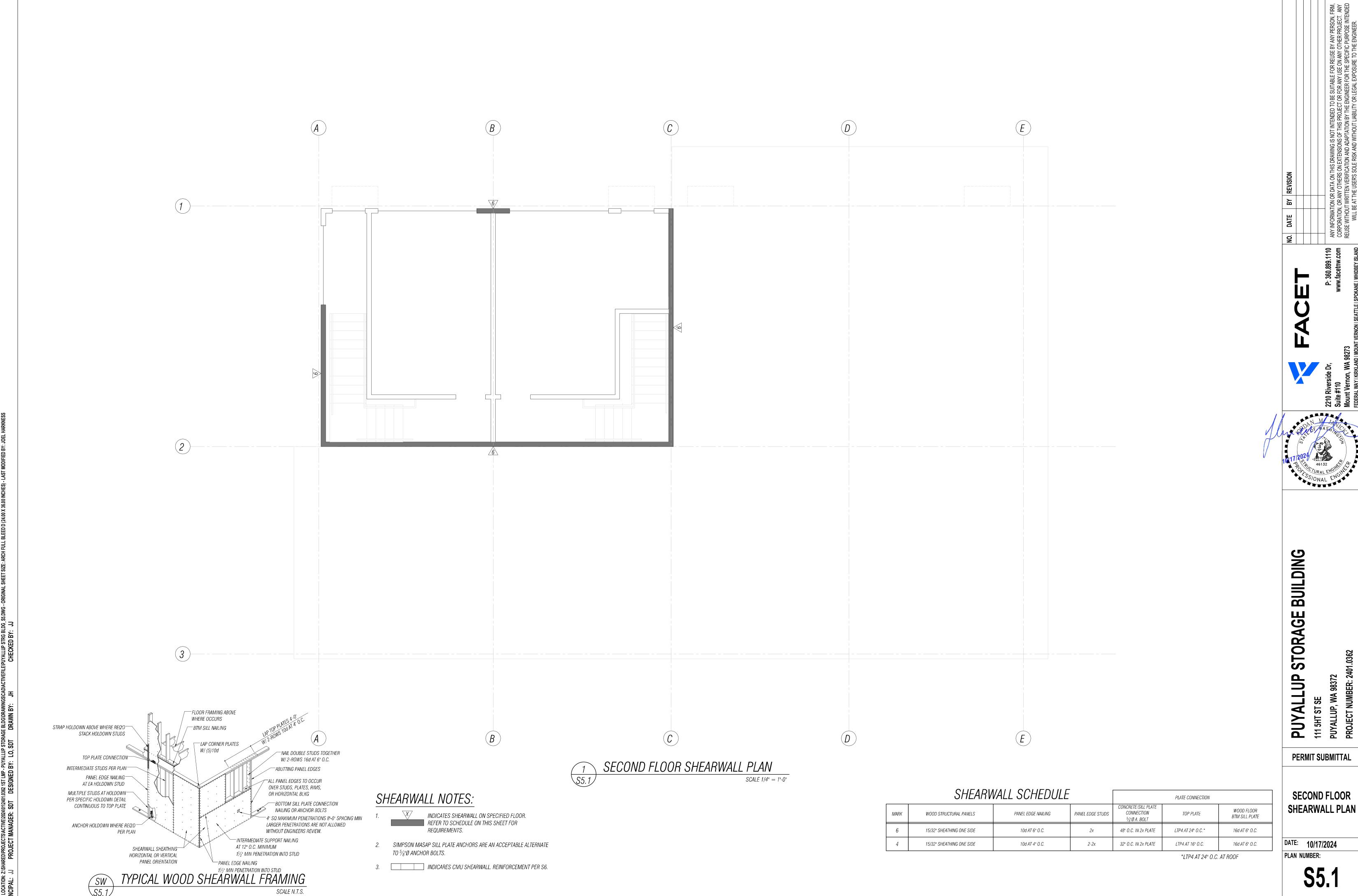
PUYALLUP 9
111 5HT ST SE
PUYALLUP, WA 98372
PROJECT NUMBER: 240

PERMIT SUBMITTAL

**ROOF FRAMING PLAN** 

DATE: 10/17/2024 PLAN NUMBER:





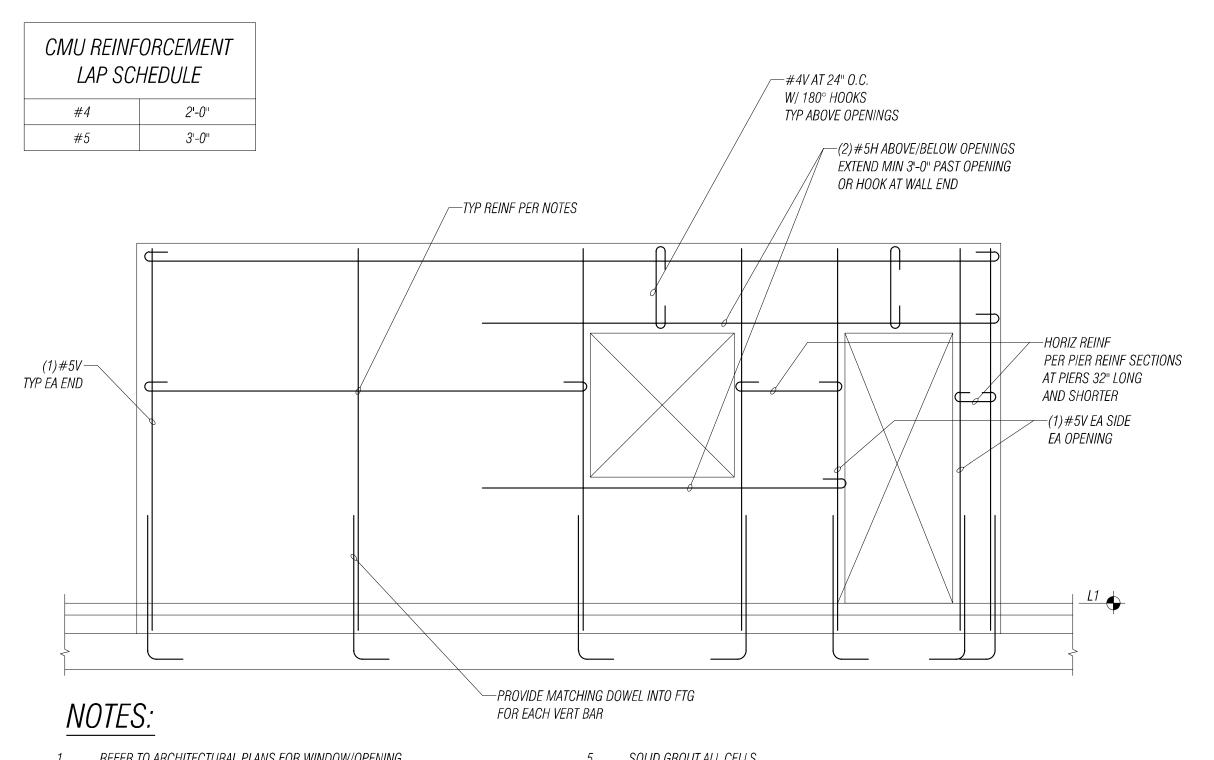


PERMIT SUBMITTAL

SECOND FLOOR SHEARWALL PLAN

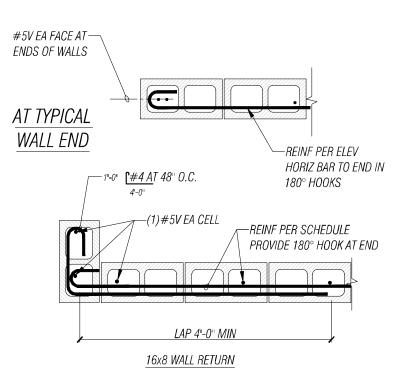
DATE: 10/17/2024





1. REFER TO ARCHITECTURAL PLANS FOR WINDOW/OPENING SIZES AND LOCATIONS.

- 2. ALL CMU BLOCKS ARE TO BE 8", UNO.
- 3. CMU BLOCKS ARE TO BE PLACED IN HORIZONTAL RUNNING BOND COURSES AND ARE TO HAVE CONCAVE MORTAR JOINTS.
- 4. TOLERANCES FOR CMU PLACEMENT ARE AS FOLLOWS: • VARIATION FROM PLANE OF WALL:  $\frac{1}{4}$ " MAX IN 10FT AND  $\frac{1}{2}$ " MAX IN 20FT OR MORE.
  - VARIATION FROM PLUMB: 1/4" MAX PER STORY. • VARIATION FROM LEVEL COURSING:  $\frac{1}{8}$ " MAX IN 3FT,  $\frac{1}{4}$ " MAX IN 10FT AND  $\frac{1}{2}$ " MAX IN 30FT.
- 5. SOLID GROUT ALL CELLS
- ALL HORIZONTAL REINFORCING IS TO END IN 180° HOOKS WHICH ARE HOOKED AROUND THE OUTERMOST VERTICAL BAR. AT PERPENDICULAR WALL INTERSECTIONS, CORNER REINFORCING MAY BE USED IN LIEU OF 180° HOOKS.
- 7. ALL VERTICAL SPANDRAL REINFORCING TO HAVE 180° HOOKS EA END.
- REFER TO PLAN FOR TYPICAL CMU REINF SPACING. MAXIMUM REINFORCING SPACING TO BE #5 AT 48" O.C. EA WAY.
- 9. COORDINATE MECHANICAL BLOCKOUT SIZES AND LOCATIONS WITH MECHANICAL DRAWINGS.



TYPICAL CMU WALL REINFORCING SCALE 3/8" = 1'-0"

SSIONAL ENGINE

BUILDING STORAGE

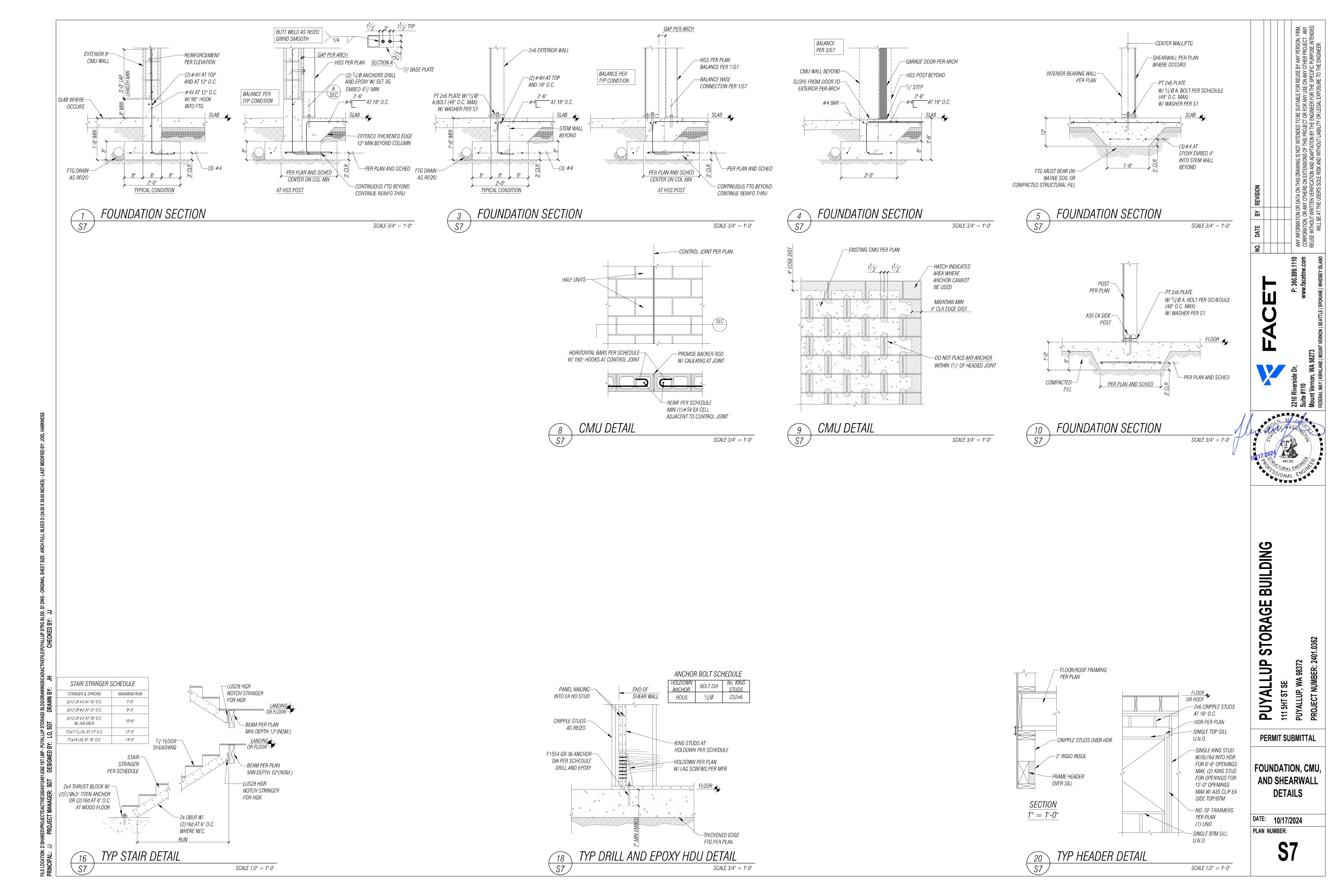
PUYALLUP (1115HT ST SE PUYALLUP, WA 98372 PROJECT NUMBER: 240

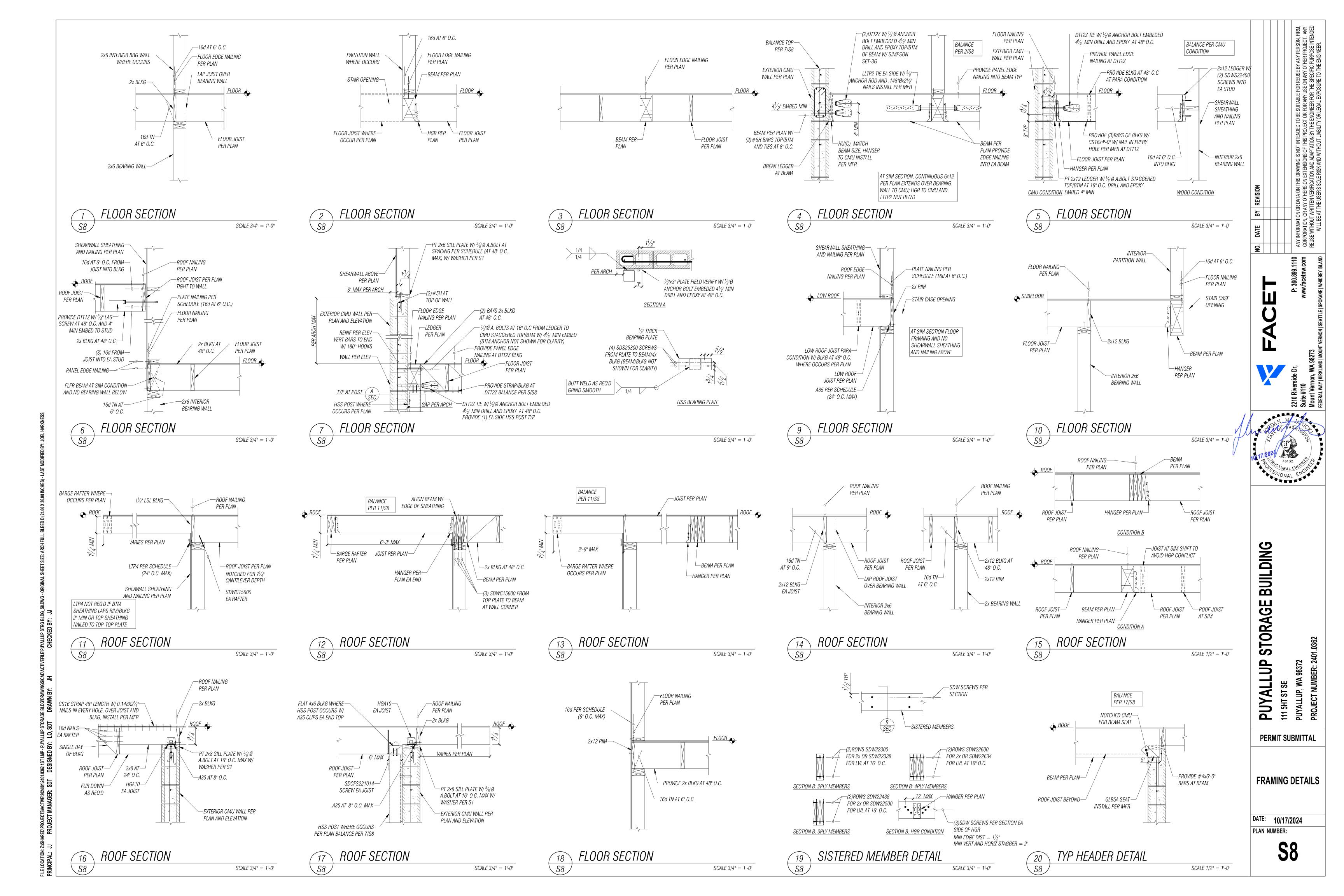
PERMIT SUBMITTAL

**CMU ELEVATION** 

DATE: 10/17/2024

PLAN NUMBER:





#### **GENERAL HVAC NOTES**

- 1. MECHANICAL DESIGN, INSTALLATION & COORDINATION SHALL COMPLY WITH THE FOLLOWING CODES:
  - 2021 INTERNATIONAL BUILDING CODE (IBC)
  - 2021 INTERNATIONAL EXISTING BUILDING CODE
  - 2021 INTERNATIONAL MECHANICAL CORE (IMC)
  - 2021 INTERNATIONAL MECHANICAL CODE (IMC) 2021 WASHINGTON STATE ENERGY CODE (WSEC)

LOCATIONS, CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC.

- 2021 WASHINGTON STATE AMENDMENTS
- THE FOLLOWING NOTES APPLY TO ALL MECHANICAL DRAWINGS. ADDITIONAL MECHANICAL NOTES MAY BE
- INDICATED ON EACH MECHANICAL DRAWING.

  DO NOT SCALE OFF OF MECHANICAL DRAWINGS. CONSULT ARCHITECTURAL PLANS FOR LAYOUT AND DIMENSION
- DO NOT SCALE OFF OF MECHANICAL DRAWINGS. CONSULT ARCHITECTURAL PLANS FOR LAYOUT AND DIMENSIONS. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING HEAT PUMP
- REFER TO ARCHITECTURAL DRAWING FOR ELEVATIONS. LOCATE MECHANICAL DEVICES SUCH AS
- SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION NOR WITH ELECTRICAL SYSTEM.

  MECHANICAL DRAWINGS SHOW APPROXIMATE LOCATIONS FOR GRILLS AND DIFFUSERS. FIELD

  COORDINATE ACTUAL LOCATIONS BY REFERRING TO ARCHITECTURAL DRAWINGS, REFLECTED CEILING
- PLANS, AND OTHER CEILING OR SURFACE MOUNTED DEVICES PLANS. INSTALL EQUIPMENT IN CONFORMANCE WITH ARCHITECTURAL FEATURES, OR WHERE INDICATED ON ARCHITECTURAL DRAWINGS. WHERE EQUIPMENT IS NOT INDICATED ON ARCHITECTURAL DRAWINGS, OBTAIN DIRECTION FROM ARCHITECT OR BUILDER PRIOR TO INSTALLATION.
- COORDINATE LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND SERVICE ACCESS DUE TO EQUIPMENT MAINTENANCE.
- 8. ARRANGE HVAC EQUIPMENT SO THAT ACCESS CLEARANCES INDICATED BY DRAWINGS, REQUIRED BY CODES, AND RECOMMENDED BY MANUFACTURER ARE PROVIDED.
- 9. WHERE NECESSARY, PROVIDE ACCESS PANELS/DOORS IN DUCTWORK AS INDICATED FOR INSPECTION AND MAINTENANCE FOR ALL EQUIPMENT, SMOKE/FIRE DAMPERS, AND OTHER EQUIPMENT.
- GENERAL CONTRACTOR SHALL PROVIDE ACCESS TO FIRE AND/OR COMBINATION FIRE/SMOKE DAMPERS THROUGH
  ACCESS DOORS IN HARD CEILINGS AND WALLS. WHERE ACCESS DOORS PENETRATE FIRE RATED SYSTEMS THEY
  SHALL BE RATED IN ACCORDANCE WITH IBC REQUIREMENTS.
   ELECTRICAL CHARACTERISTICS OF LISTED EQUIPMENT SHALL BE VERIFIED BY CONTRACTOR DURING
- SUBMITTAL PROCESS. ANY ELECTRICAL CHARACTERISTICS THAT DEVIATE FROM THOSE LISTED SHALL BE IDENTIFIED BY THE CONTRACTOR, SUBMITTED TO THE ENGINEER FOR APPROVAL AND COORDINATED WITH OTHER TRADES AS REQUIRED.
- OFFSETS AS REQUIRED AT NO ADDITIONAL COST.

  DUCTS AND PIPES INDICATED WITHOUT DIMENSIONS SHALL BE SIZED PER PRECEDING UPSTREAM DUCT AND PIPE

DRAWINGS ARE SCHEMATIC IN SOME AREAS AND MAY NOT SHOW OFFSETS WHICH MAY BE REQUIRED. PROVIDE

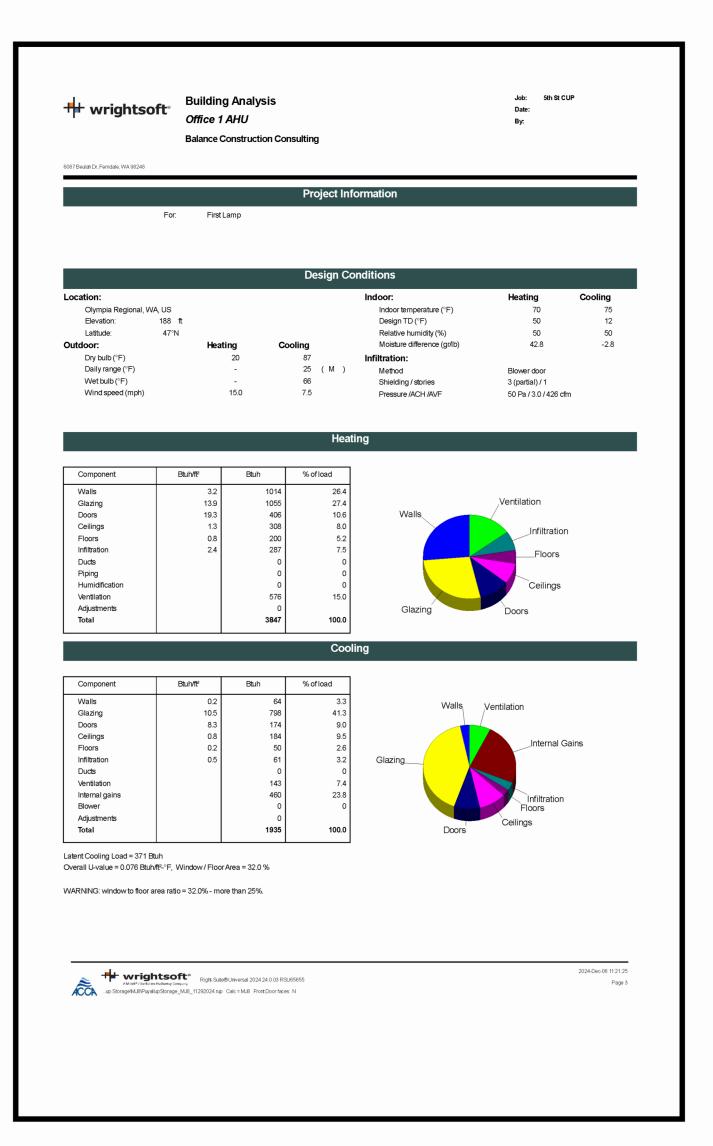
- SECTIONS.

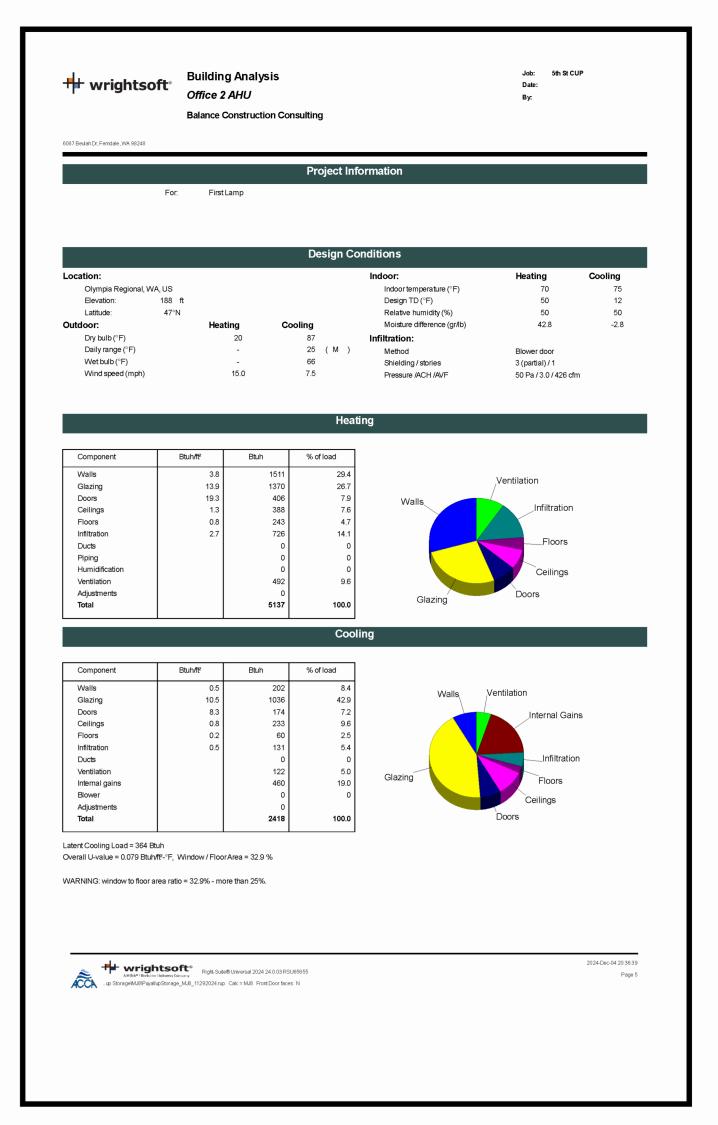
  14. DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSION.
- 15. WHERE A GIVEN SIZE OF ROUND DUCT IS NOT READILY AVAILABLE, THE NEXT LARGER READILY AVAILABLE SIZE IS ACCEPTABLE.
- 16. PROVIDE FABRICATED STEEL MEMBER SUPPORTS AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS, AS INDICATED ON DRAWINGS, OR IN SPECIFICATIONS FOR INSTALLATION OF EQUIPMENT. REQUIRED STRUCTURAL MEMBERS, BOLTS, AND WELDS SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL.
- 17. IF REQUIRED FOR INSTALLATION OF PIPES, DUCTS, AND EQUIPMENT, PROVIDE ADDITIONAL STRUCTURAL MEMBERS BETWEEN COLUMNS, JOISTS, AND STRUCTURAL FRAME TO MEET SUPPORT REACTIONS (FORCES, MOMENTS, AND DEFLECTIONS). STRUCTURAL MEMBERS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
- 18. DO NOT CORE DRILL OR DRILL THROUGH BEAMS, COLUMNS, AND SHEAR WALLS, UNLESS INDICATED ON STRUCTURAL DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER.
- DUCTWORK STATIC PRESSURE AND SEAL CLASS, BASED ON SMACNA STANDARDS.
- 20. INSULATE ALL HRV INTAKE AND EXHAUST DUCTS TO MINIMUM R-8 AND AIRSEAL THEM WHEREVER THEY PASS THROUGH CONDITIONED SPACE.
- 21. ENSURE WORK ACCESS CLEARANCE FOR ALL MECHANICAL ELECTRICAL PANELS AND DISCONNECTS IN ACCORDANCE WITH THE NEC.

#### FOR PROJECTS LOCATED IN WASHINGTON STATE ONLY:

- 22. REFER TO WASHINGTON STATE NREC COMPLIANCE REQUIREMENTS ON DRAWING SCHEDULE SHEETS FOR ADDITIONAL MECHANICAL PROVISIONS.
- SEAL DUCT AND PLENUM IN ACCORDANCE WITH WSEC.BALANCE HVAC SYSTEM IN ACCORDANCE WITH WSEC.
- COMMISSION AND COMPLETE MECHANICAL SYSTEMS IN ACCORDANCE WITH WSEC.
   INSULATE DUCT AND PLENUM IN ACCORDANCE WITH WSEC.
- 27. INSULATE PIPING IN ACCORDANCE WITH WSEC.28. ENSURE VENTILATION IN ACCORDANCE WITH WSEC.

First Lamp Location: Olympia Regional, WA, US Indoor temperature (°F) Elevation: Design TD (°F) Latitude: Relative humidity (%) Moisture difference (gr/lb) Dry bulb (°F) Daily range (°F) Blower door Wet bulb (°F) Shielding / stories Pressure /ACH /AVF Internal gains Latent Cooling Load = 772 Btuh Overall U-value = 0.192 Btuh/ft²-°F, Window/Floor Area = 6.1 % Data entries checked wrightsoft\*
Right-Suite®Universal 2024 24 0.03 RSU65655 ...up StorageWJ8VPuyallupStorage\_MJ8\_11292024.rup Calc=MJ8 Front Door faces: N









**5TH ST SE CUP**111 5th St SE
Puyallup, WA 9837

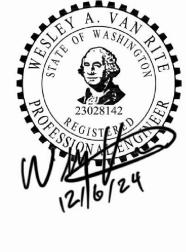
Jotes & Load Summa

Drawn By:
Aaron Barnett
12/4/2024
Reviewed By:
Josh Taylor
12/5/2024

M001

r Permit Only





5TH ST SE CUP

111 5th St SE yallup, WA 98372

Heating and Cooling Plan

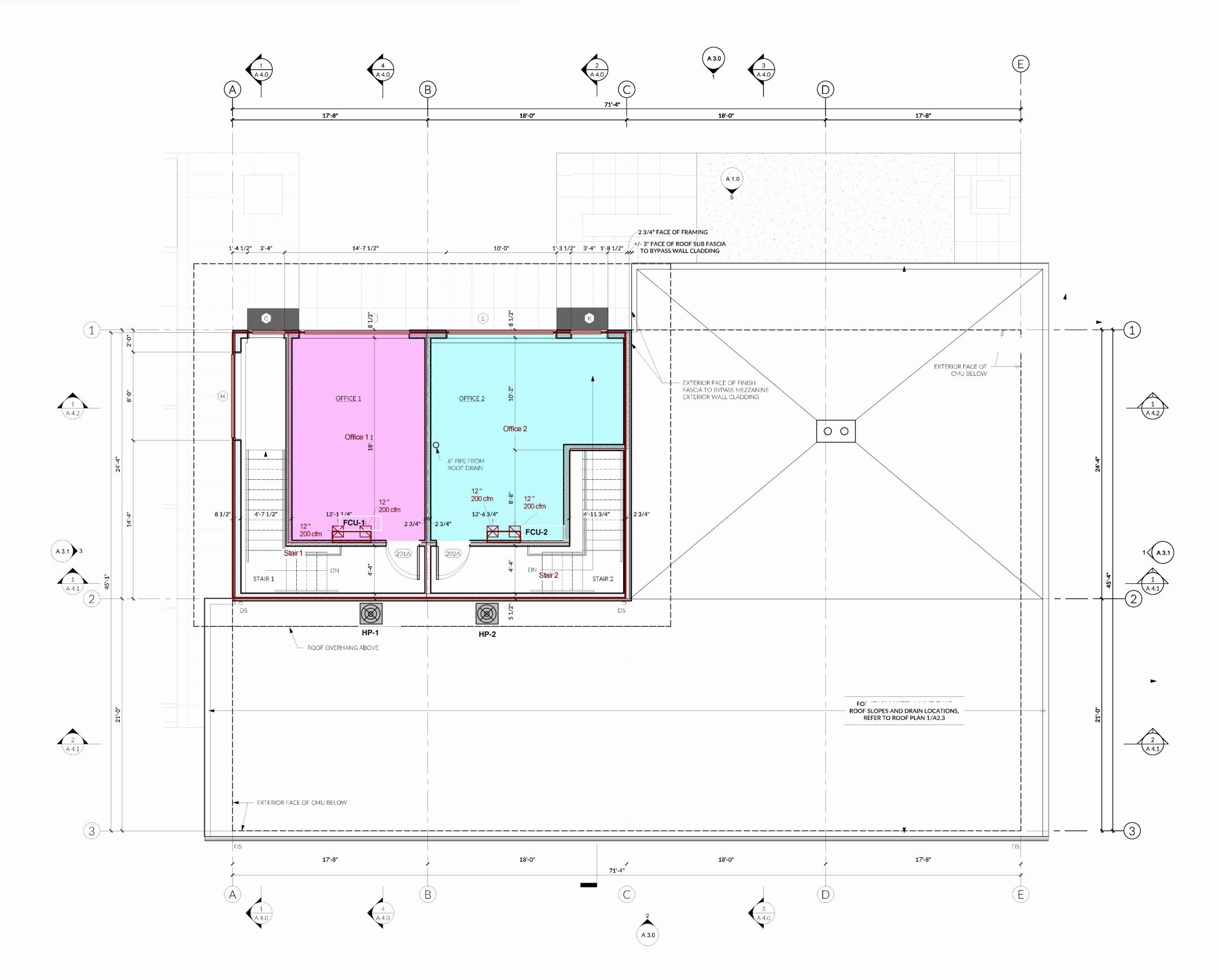
Drawn By:
Aaron Barnett
12/4/2024
Reviewed By:
Josh Taylor
12/5/2024

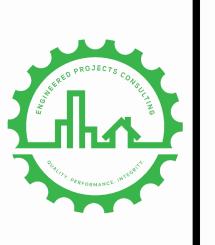
**(1)** 

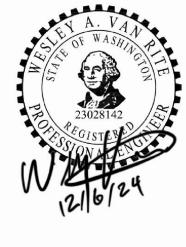
9

M101

	Fan Coil Schedule							
Designation	Manufacturer	Model	Airflow (cfm)	Maximum External SP (in. WG)	Outdoor Unit	Reference Page		
FCU-1	Mitsubishi	MSZ-FH06NA	200	N/A	MUZ-FH06NA	M601		
FCU-2	Mitsubishi	MSZ-FH06NA	200	N/A	MUZ-FH06NA	M601		







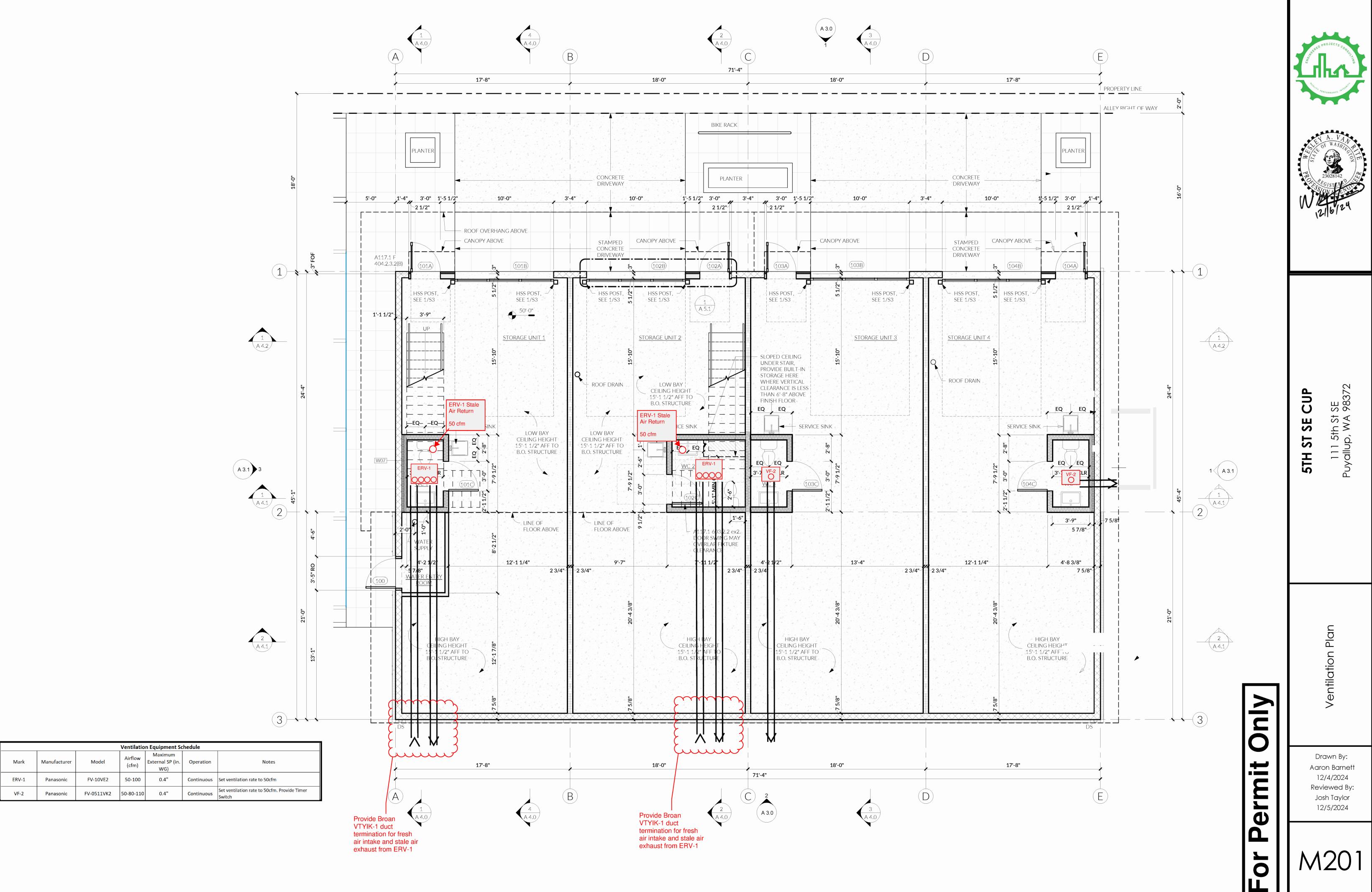
5TH ST SE CUP

111 5th St SE

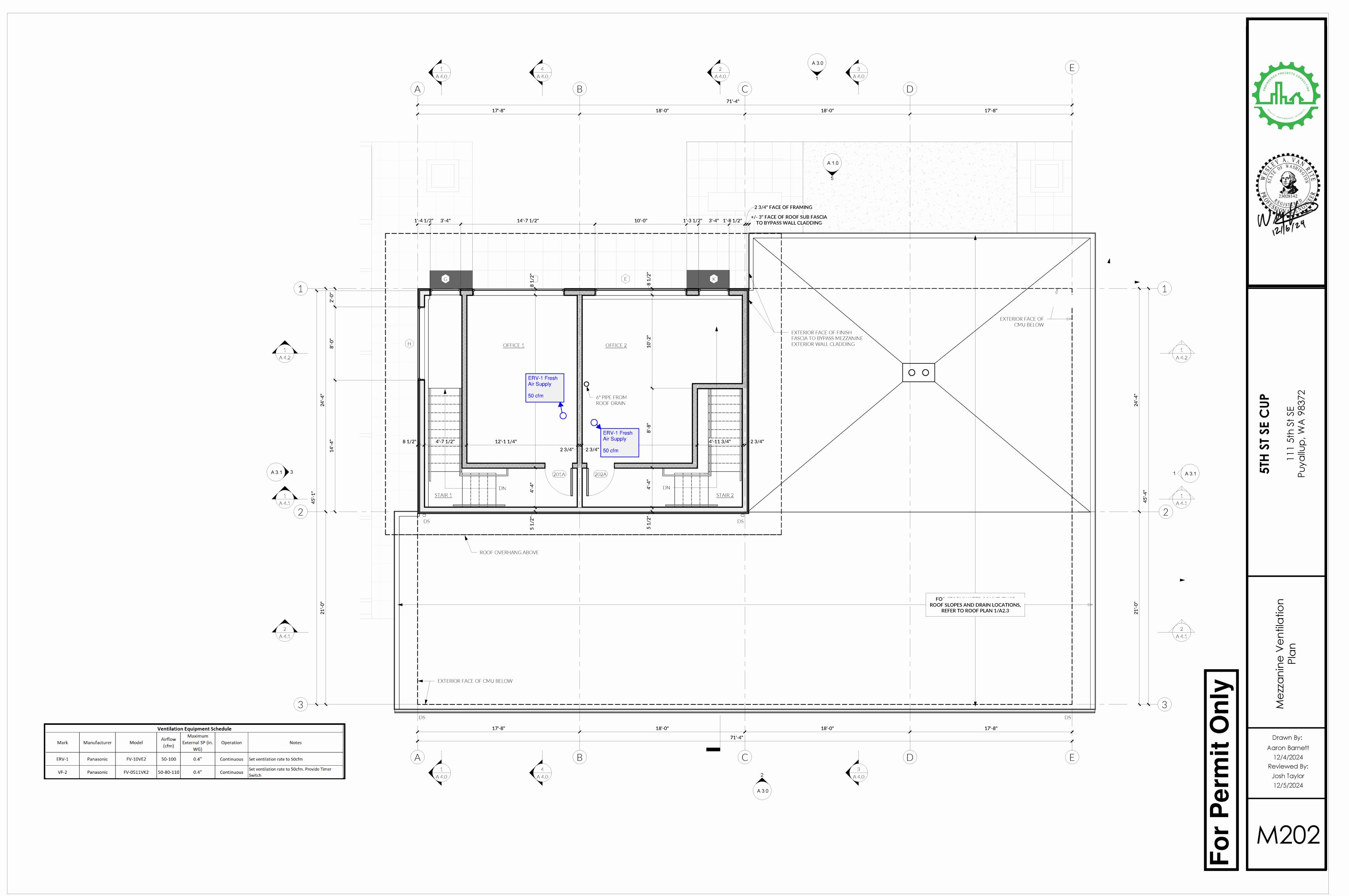
zanine Heating and Coolina Plan

Drawn By:
Aaron Barnett
12/4/2024
Reviewed By:
Josh Taylor
12/5/2024

M102







Pipe Dia: Liquid / Gas Model Number Elevation Clg. Total (Sens.) MUZ-FH06NA 25.0 ft Pipe Length (Elbows) Address/Group / Room / Tag Ref.

MSZ-FH06NA 15.0 ft 1/4 / 3/8

55.0ft (2)

System 1

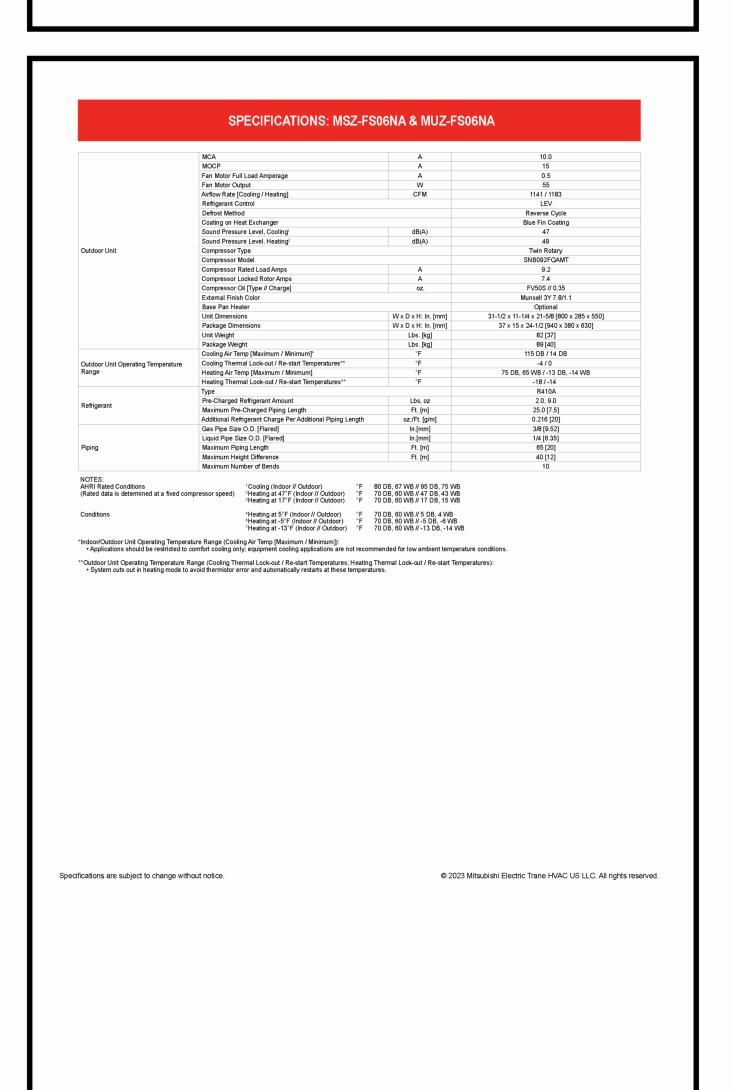
6,305 BTU/h (5,870 BTU/h) 8,276 BTU/h N/A / 1 / Office 1 (FCU-1)

Est. Cooling Discharge Air Temp: 67.3 Est. Heating Discharge Air Temp: 87.6

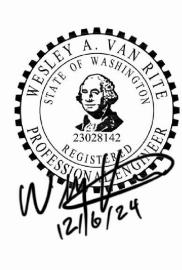
	Maximum Capacity	BTU/H	9,000
	Rated Capacity	BTU/H	6,000
	Minimum Capacity	BTU/H	1,700
Cooling at 95°F1	Maximum Power Input         W           Rated Power Input         W		560
Cooling at 33 1			315
	Moisture Removal	Pints/h	0.2
	Sensible Heat Factor		0.96
	Power Factor [208V / 230V]	%	79.0 / 80.0
	Maximum Capacity	BTU/H	14,000
	Rated Capacity	BTU/H	8,700
Heating at 47°F2	Minimum Capacity	BTU/H	1,600
	Maximum Power Input Rated Power Input	W	1,270 545
	Power Factor [208V / 230V]	%	90.0 / 91.0
	Maximum Capacity	BTU/H	12,840
	Rated Capacity	BTU/H	5,900
Heating at 17°F³	Maximum Power Input	W	1,400
	Rated Power Input	W	390
11	Maximum Capacity	BTU/H	10,500
Heating at 5°F4	Maximum Power Input	W	1,250
Heating at -5°F <sup>6</sup>	Maximum Capacity	BTU/H	8,700
Heating at -13°F7	Maximum Capacity	BTU/H	7,250
	SEER2		32.2
	EER21		19.0
	HSPF2 [IV]		11.9
	COP at 47°F2		4.68
Efficiency	COP at 17°F at Maximum Capacity³		2.69
	COP at 5°F at Maximum Capacity <sup>4</sup>		2.46
	COP at -5°F at Maximum Capacity <sup>6</sup> COP at -13°F at Maximum Capacity <sup>7</sup>		2.25 1.93
	ENERGY STAR® Certified		Yes
	Voltage, Phase, Frequency		208/230, 1, 60
	Guaranteed Voltage Range	VAC	187 - 253
	Voltage: Indoor - Outdoor, S1-S2	VAC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
Electrical	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Oudoor)	A	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Power Supply		Indoor unit is powered by the outdoor unit
	MCA	A	1.0
	Fan Motor Full Load Amperage	Α	0.65
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	137–167–221–304–381
	Airflow Rate at Cooling, Wet	CFM	117–143–190–261–328
	Airflow Rate at Heating, Dry	CFM	140–167–225–325–437
Indoor Unit	Sound Pressure Level [Cooling] Sound Pressure Level [Heating]	dB[A] dB[A]	20–23–29–36–40 20–24–29–39–42
indodr Gint	Drain Pipe Size	In. [mm]	5/8 [15.88]
	Coating on Heat Exchanger	III. [riiii]	Dual Barrier Coating
	External Finish Color		Munsell 1.0Y 9.2/0.2
	Unit Dimensions	Wx Dx H: In. [mm]	36-7/16 x 9-3/16 x 12 (+11/16) [925 x 234 x 305 (+17)]
	Package Dimensions	W x D x H: In. [mm]	39 x 12-1/4 x 15-1/2 [990 x 310 x 400]
	Unit Weight	Lbs. [kg]	29 [13.5]
	Package Weight	Lbs. [kg]	34 [15.4]
Indoor Unit Operating Temperature	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 73 WB / 67 DB, 57 WB
Range	Heating Intake Air Temp [Maximum / Minimum]	°F	80 DB / 70 DB
NOTES: AHRI Rated Conditions (Rated data is determined at a fixed cor Conditions	Meating at 47°F (Indoor // Outdoor)	DB, 67 WB // 95 DB, 75 WI DB, 60 WB // 47 DB, 43 WI DB, 60 WB // 17 DB, 15 WI DB, 60 WB // 5 DB, 4 WB DB, 60 WB // 5 DB, -6 WB DB, 60 WB // -13 DB, -14 V	B B
*Indoor/Outdoor Unit Operating Tempera • Applications should be restricted to	ature Range (Cooling Air Temp [Maximum / Minimum]): comfort cooling only; equipment cooling applications are not recommen		
	Range (Cooling Thermal Lock-out / Re-start Temperatures: Heating Then avoid thermistor error and automatically restarts at these temperatures		mperatures):
ifications are subject to change with			23 Mitsubishi Electric Trane HVAC US LLC. All rights reserv
incations are subject to change with	rout notice.	⊕ 20.	23 MILSUDISIII Electric Traffe HVAC 03 ELC. Air rights reserve

1/1 to 1 Indoor Units: 6/3 to 6 (100.0%) Capacity: \* Connectable capacity is not actual capacity. Total Pipe Length: 47.0 / 65.0 feet Correction Factors Temperature: 1.08 1.00 Piping Length: 0.98 1.00 Defrosting: - 0.96 User Derate: 1.00 1.00 Total Derate: 1.06 0.95 Additional Refrigerant: 0.27 lb Total Refrigerant Amount: 2.83 lb Conditions (°F) Cooling Indoor DB 80.0 Humidity 51.8% Indoor WB 67.0 Outdoor DB 86.0 Heating Indoor DB 70.0 Outdoor DB 19.0 Humidity 75.6% Outdoor WB 17.5

Pipe Dia. Liquid / Gas Model Number Elevation Clg.Total (Sens.) MUZ-FH06NA 25.0 ft Pipe Length (Elbows) Address/Group / Room / Tag Ref. MSZ-FH06NA 25.0 ft 6,358 BTU/h (5,890 BTU/h) Est. Cooling Discharge Air Temp: 67.3 1/4 / 3/8 8,291 BTU/h Est. Heating Discharge Air Temp: 87.6 45.0ft (2) System 2 N/A / 2 / Office 2 (FCU-2)







CUP SE ST **5TH**  SE 98372

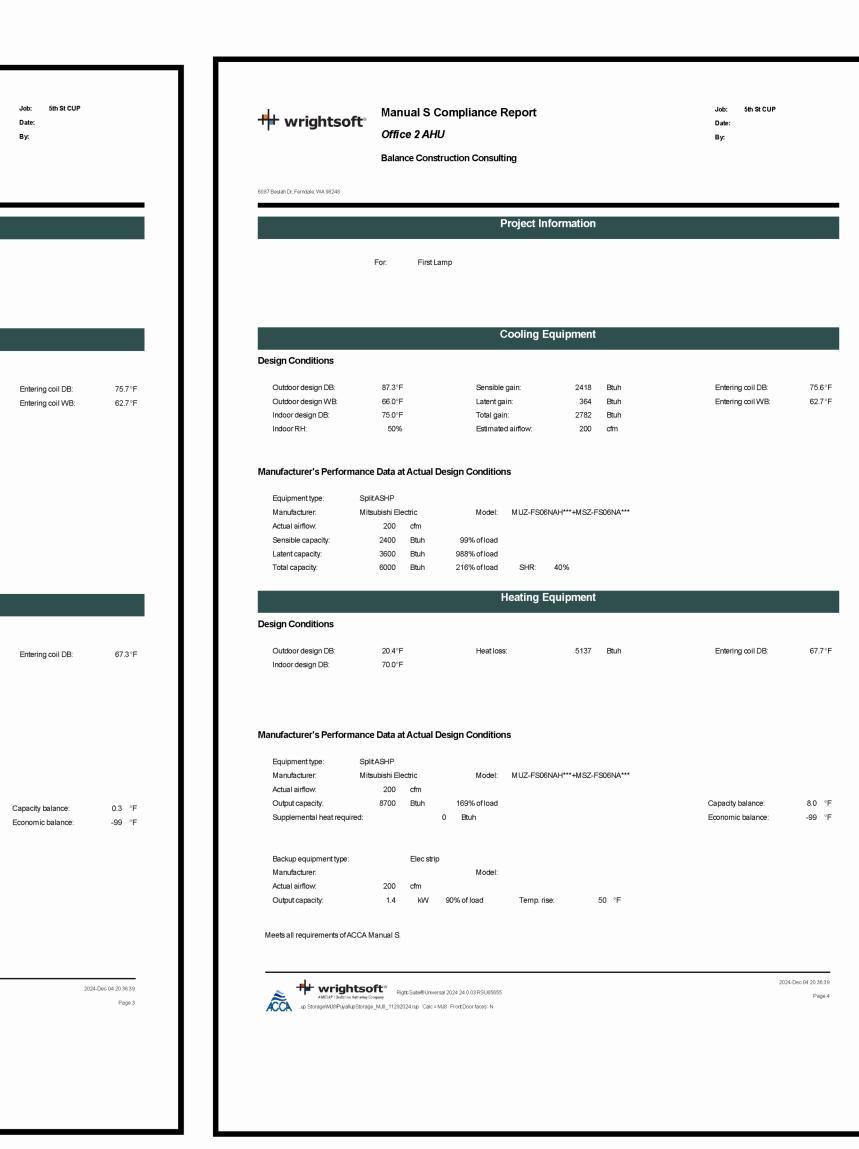
111 5th St 3 vallup, WA

Drawn By: Aaron Barnett 12/4/2024 Reviewed By: Josh Taylor 12/5/2024

**(1)** 

0

M601



Date:

Balance Construction Consulting

For: First Lamp

66.0°F

75.0°F

200 cfm

6000 Btuh 260% of load SHR: 30%

Manufacturer: Mitsubishi Electric Model: MUZ-FS06NAH\*\*\*+MSZ-FS06NA\*\*\*

Output capacity: 1.0 kW 85% of load Temp. rise: 50 °F

Sensible capacity: 1800 Btuh 93% of load

Latent capacity: 4200 Btuh 1131% of load

Outdoor design WB:

Manufacturer: Mitsubishi Electric

Outdoor design DB: 20.4°F

Indoor design DB: 70.0°F

Actual airflow: 200 cfm

Output capacity: 8700 Btuh 224% of load

Supplemental heat required: 0 Btuh

Actual airflow: 200 cfm

Indoor design DB:

Indoor RH:

Actual airflow:

Total capacity:

Project Information

Latent gain: 372 Btuh

Estimated airflow: 200 cfm

Model: MUZ-FS06NAH\*\*\*+MSZ-FS06NA\*\*\*

Heat loss: 3883 Btuh

2303 Btuh

Total gain:

Drawn By:

Aaron Barnett 12/4/2024 Reviewed By: Josh Taylor 12/5/2024

Manual S Compliance Reports





SE 98372

111 5th St S Puyallup, WA S

CUP

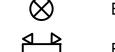
SE

5TH ST

### LIGHTING FIXTURE SCHEDULE

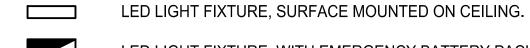
<u>TYPE</u>	MANUFACTURER_	<u>LAMPS</u>	WATTS	MOUNTING
A1	METALUX 8SLTPSLC-UNV OR EQUAL	LED	88	SURFACE
A2	METALUX 4SLTPSLC-UNV OR EQUAL	LED	30	SURFACE
A3	METALUX 2BCLED-LD4-16SL-F-UNV- L835-CD-1 OR EQUAL	LED	13	WALL
A4	TRULY GREEN SOLUTIONS 88-14-WS-C-T-F-SK OR EQUAL	LED	40	SURFACE
B1	HALO PR6-FS12-D010-PR6M-12-MD-8FS- MW OR EQUAL (SET FOR 1500 LUMENS)	LED	15	RECESSED
B1X	SAME AS TYPE B1 WITH EMERGENCY BATTERY PACK			
B2	HALO SMD4R-6-9S-WH OR EQUAL	LED	9	SURFACE
E1	SENSO LET11W-WM-15-30K-F30-DL- BK-BK-010S OR EQUAL	LED	14	WALL
E1X	SAME AS TYPE E1 WITH REMOTE EMERGENCY BATTERY PACK			
E2	SENSO LET11W-WM-1010-30K-F30-F17-DL- BK-BK-010S OR EQUAL	LED	18	WALL
X1	EMERGI-LITE ELXN400G-2LED OR EQUAL	INCLUDED	3	UNIVERSA
X2	EMERGI-LITE EL-2LED OR EQUAL	INCLUDED	3	WALL

### **ELECTRICAL SYMBOLS LEGEND**



EXIT LIGHT WITH BATTERY, UNIVERSAL MOUNTING.

EMERGENCY FLOODLIGHT WITH BATTERY.



LED LIGHT FIXTURE, WITH EMERGENCY BATTERY PACK.

LED LIGHT FIXTURE, WALL MOUNTED.

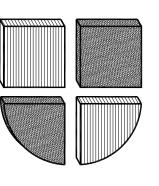
O LED DOWNLIGHT FIXTURE.

LIGHT FIXTURE TYPE. A1 = SPECIFIC LIGHTING FIXTURE REFERENCED ON LIGHTING FIXTURE SCHEDULE.

- S LIGHT SWITCH TOGGLE TYPE, SINGLE POLE, SUBSCRIPTS; 3 = THREE WAY, 4 = FOUR WAY, D = DIMMER CONTROL, K = KEY OPERATED, P = PILOT LIGHT, a, b, c, ETC = NUMBER OF SWITCHES AT THE LOCATION AND SPECIFIC FIXTURES CONTROLLED. MOUNT AT 42 INCHES AFF.
- SY AUTOMATIC/MANUAL OCCUPANCY SENSOR AND SINGLE POLE TOGGLE SWITCH. SENSORWORX #SWX-123 OR EQUAL. SWITCH SHALL BE PROGRAMMED FOR MANUAL ON, AUTOMATIC OFF.
- SM WIRELESS NETWORKED LIGHT SWITCH. D=DIMMER, 3=THREE WAY, 4=FOUR WAY.
- WIRELESS INPUT/ OUTPUT POWER PACK MODULE FOR LIGHT CONTROLS.
- DIS DUAL TECHNOLOGY AUTOMATIC OCCUPANCY SENSOR DEVICE.
- DAYLIGHT PHOTOSENSOR

CROSS ENGINEERS, INC

923 Martin Luther I Tacoma, WA 98406 info@crossengine



TH STREET STORAGE 111 5TH STREET SE PUYALLUP, WA 98372

REVISIONS:

O029060

SOISTERE STATE OF WASHING BY THE STATE OF WASHING BY THE STATE OF WASHING BY THE STATE OF THE STATE

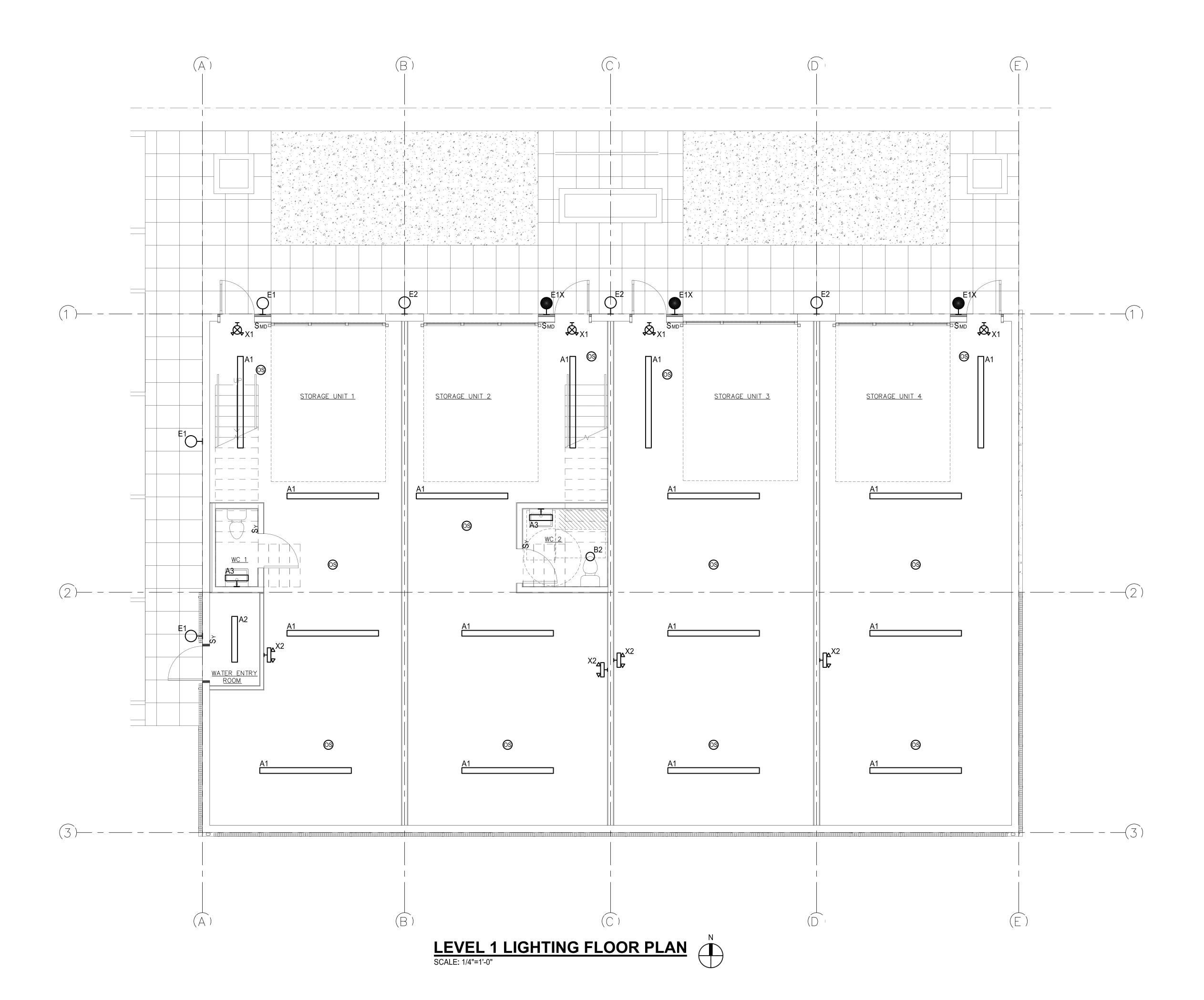
CALE: AS NOTED

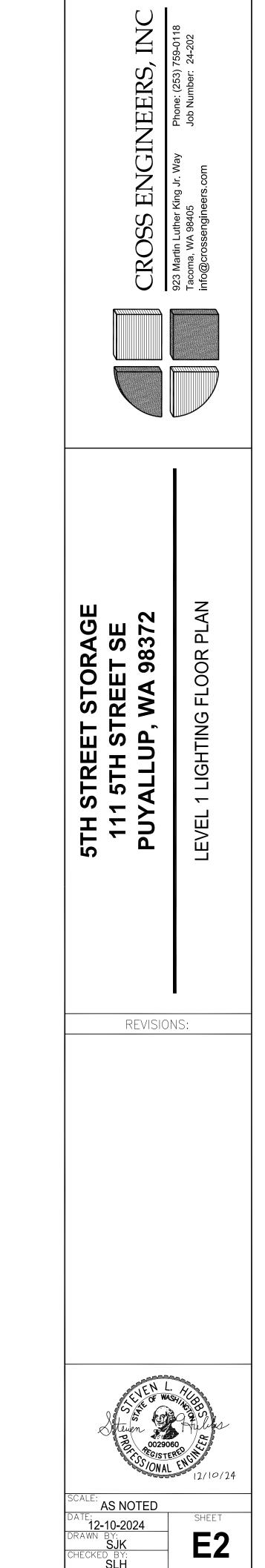
ATE: 12-10-2024

RAWN BY: SJK

HECKED BY: SLH

DB NO.: OF







O029060

O02

SCALE:
AS NOTED

DATE:
12-10-2024

DRAWN BY:
SJK
CHECKED BY:
SLH

JOB NO.:

OF

- 1. THE FOLLOWING NOTES APPLY TO ALL PLUMBING DRAWINGS. ADDITIONAL PLUMBING NOTES MAY BE INDICATED ON EACH PLUMBING DRAWING. SEE SPECIFICATIONS FOR ADDITIONAL
- INSTALLATION SHALL COMPLY WITH ALL GOVERNING CODES AND REGULATIONS (LOCAL AND STATE). NOTHING ON THE DRAWINGS OR SPECIFICATIONS SHALL BE CONSTRUED AS ALLOWING DEVIATION FROM THIS REQUIREMENT. IF A CONFLICT SHOULD OCCUR BETWEEN DRAWINGS AND REGULATIONS, THE REGULATIONS SHALL TAKE PRECEDENT AND CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF SUCH CONFLICT PRIOR TO
- PROCEEDING WITH INSTALLATION. INSTALL ALL WASTE LINE CLEANOUTS IN ACCORDANCE WITH CHAPTER SEVEN OF THE
- UNIFORM PLUMBING CODE: A. 3" WASTE PIPE - 3" CLEANOUT WITH 2.5" PLUG
- B. 4" WASTE PIPE 4" CLEANOUT WITH 3.5" PLUG C. 6" WASTE PIPE - 4" CLEANOUT WITH 3.5" PLUG
- WASTE, VENT AND SUPPLY PIPING SIZES TO INDIVIDUAL PLUMBING FIXTURES SHALL BE AS SHOWN ON PLUMBING FIXTURE SCHEDULES. BELOW GRADE SANITARY WASTE PIPING SIZES SHALL BE AS SHOWN ON PLANS AND FIXTURE SCHEDULES AND SHALL NOT BE LESS THAN 2"
- ALL SANITARY SEWER PIPING BELOW SLAB SHALL BE INSTALLED AT A MINIMUM OF 1/4" PER FT SLOPE UNLESS APPROVAL IS PROVIDED BY THE "ADMINISTRATIVE AUTHORITY" IN WRITING FOR A SHALLOWER IN NO CASES SHALL SEWER PIPING BE INSTALLED AT LESS THAN 1/8" PER FT SLOPE. IN NO CASES WILL PIPING SMALLER THAN 4" BE INSTALLED AT SLOPES SHALLOWER THAN 1/4" PER FOOT. PIPING INSTALLED AT 1/8"/FT SHALL BE RESIZED PER CHAPTER 7 OF THE UNIFORM PLUMBING CODE AND SUPPORTING CALCULATION SUBMITTED TO ENGINEER FOR
- PROVIDE STOPS PRIOR TO ALL PLUMBING EQUIPMENT. THIS SHALL ALSO INCLUDE PROVIDING INTEGRAL STOPS ON ALL SHOWER AND TUB/SHOWER VALVES (WHETHER SPECIFIED OR NOT). PROVIDE WASTE TRAPS AT ALL DIRECT CONNECTED EQUIPMENT IN ACCORDANCE WITH CODE AND THE SPECIFICATIONS.
- PROVIDE TRAP PRIMERS AT ALL FLOOR DRAINS UNLESS NOTED OTHERWISE. PROVIDE UNION ON UPSTREAM AND DOWNSTREAM SIDE OF ALL TRAP PRIMERS. TRAP PRIMER BRANCH TAKEOFF SHALL BE FROM TOP OF MAIN DISTRIBUTION PIPE.
- INSULATE P-TRAPS EXPOSED IN UNHEATED SPACES. SEE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE ROUGH-IN DIMENSIONS AND OTHER DETAILS. ALSO SEE ARCHITECTURAL DRAWINGS FOR FINISH REQUIREMENTS OF ALL PLUMBING FIXTURES INCLUDING REQUIREMENTS FOR FLUSH LEVER LOCATION AT ADA COMPLIANT TOILETS AND VALVE LOCATIONS OF ADA SHOWERS. REPORT ALL DISCREPANCIES
- TO ENGINEER PRIOR TO ANY WORK. 10. REFER TO ARCHITECTURAL DRAWING FOR ROOM ELEVATIONS. LOCATE PLUMBING FIXTURES AT HEIGHTS SHOWN ON ARCHITECTURAL ROOM ELEVATIONS.
- 11. PLUMBING DRAWINGS SHOW APPROXIMATE LOCATIONS OF PLUMBING FIXTURES. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS. COORDINATE FLOOR DRAINS FOR
- MECHANICAL SPACES WITH MECHANICAL EQUIPMENT BEING SERVED. 12. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION
- INCLUDING CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC. 13. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL ELECTRICAL CHARACTERISTICS OF
- PLUMBING EQUIPMENT (VOLTAGES, ETC.). 14. ELECTRICAL CHARACTERISTICS OF LISTED EQUIPMENT SHALL BE VERIFIED BY CONTRACTOR DURING SUBMITTAL PROCESS. ANY ELECTRICAL CHARACTERISTICS THAT DEVIATE FROM THOSE LISTED SHALL BE IDENTIFIED BY THE CONTRACTOR, SUBMITTED TO THE ENGINEER FOR
- APPROVAL AND COORDINATED WITH DIVISION 26 ELECTRICAL PRIOR TO INSTALLATION OF EQUIPMENT AS REQUIRED TO PROPERLY SERVE EQUIPMENT. SECURE WATER HEATERS AND STORAGE TANKS AND PLUMBING EQUIPMENT TO STRUCTURE AS REQUIRED BY CODE. REFER TO THE STRUCTURAL DRAWINGS FOR ADDITIONAL SPECIAL
- REQUIREMENTS RELATED TO THE PLUMBING INSTALLATION. 16. PROVIDE PLUMBING ANCHORAGE AND EXPANSION EVERY 100' PIPE LENGTH PER CODE. ACCESS PANELS ARE REQUIRED AT ALL CONCEALED VALVES AND EQUIPMENT. COORDINATE
- LOCATION AND SIZE WITH ARCHITECT. 18. STUB OUT TO SITE SERVICES 5' OUTSIDE BUILDING FOUNDATION. PIPE SIZE, FIXTURE UNITS, AREA DRAINED INVERT ELEVATION, SIZES, AND SQUARE FOOTAGES AS INDICATED. NOTIFY
- ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. INSULATE HORIZONTAL RAIN WATER LEADER PIPING FROM ROOF DRAIN TO VERTICAL RISER. INSULATE PIPING PER WSEC C404.6 AND PER DIVISION 22 SPECIFICATIONS (WHICHEVER IS
- GENERALLY DUCTWORK PLANNED TO BE TIGHT TO STRUCTURE WITH PIPING BELOW
- DUCTWORK AND BETWEEN LIGHT FIXTURES. ADJUST AS NECESSARY. PIPING INSTALLED ADJACENT TO ELECTRICAL CABLE TRAYS SHALL ALLOW MINIMUM ACCESS OF 6" IF RUNNING PARALLEL AND ABOVE CABLE TRAYS, ALLOW 18" TO THE SIDE OF CABLE
- COORDINATE LOCATIONS OF PLUMBING EQUIPMENT TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND SERVICE ACCESS DUE TO EQUIPMENT MAINTENANCE.
- 24. REFER TO PIPING DIAGRAMS AND DETAILS FOR REQUIRED FITTINGS, VALVES, ETC. FLOOR PLANS AND SECTIONS INDICATE EQUIPMENT LOCATIONS AND GENERAL PIPE ROUTING ONLY. 25. PROVIDE FABRICATED STEEL MEMBER SUPPORTS AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS, AS INDICATED ON DRAWINGS, OR IN SPECIFICATIONS FOR
- INSTALLATION OF EQUIPMENT. REQUIRED STRUCTURAL MEMBERS, BOLTS, AND WELDS SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL. 26. IF REQUIRED FOR INSTALLATION OF PIPES AND EQUIPMENT, PROVIDE ADDITIONAL
- STRUCTURAL MEMBERS BETWEEN COLUMNS, JOISTS, AND STRUCTURAL FRAME TO MEET SUPPORT REACTIONS (FORCES, MOMENTS, DEFLECTIONS). STRUCTURAL MEMBERS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
- 27. DO NOT CORE DRILL OR DRILL THROUGH BEAMS, COLUMNS, AND SHEAR WALLS, UNLESS INDICATED ON STRUCTURAL DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER. 28. PIPES INDICATED WITHOUT DIMENSIONS SHALL BE SIZED PER PRECEDING UPSTREAM PIPE
- 29. DRAWINGS ARE SCHEMATIC IN SOME AREAS AND MAY NOT SHOW PIPING OFFSETS WHICH MAY BE REQUIRED.

30. WHERE PIPE SIZES ARE NOT SHOWN ON DRAWINGS, SIZE PIPING PER THE UNIFORM PLUMBING

- 31. PRIOR TO SUBMITTING ALL PLUMBING FIXTURES THE CONTRACTOR SHALL VERIFY COMPATIBILITY OF THE SPECIFIED FIXTURE WITH THE SIZES OF FINISH CABINETRY AS
- IDENTIFIED IN GENERAL CONTRACTOR'S SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN THE SIZE OF THE FIXTURES SPECIFIED AND THE FINISH CABINETRY SIZES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE SUBMITTAL. 32. PLUMBING VENTS SHALL TERMINATE MINIMUM 10' FROM FRESH AIR INTAKES PER CODE.
- LABEL ALL PIPING SYSTEMS PER THE IMC AND UPC.
- 34. SUPPORT AND BRACE PIPING SYSTEMS IN ACCORDANCE WITH UPC AND AS REQUIRED IN THE
- 35. ALL MATERIALS IN CONTACT WITH PIPING SYSTEMS SHALL BE COMPATIBLE FOR USE WITH AND FOR CONTACT WITH THE PIPING MATERIAL. CONTRACTORS AND TRADES SHALL VERIFY COMPATIBILITY OF THEIR PRODUCTS WITH THE PIPING SYSTEMS. THIS INCLUDES, BUT IS NOT LIMITED TO, FIRE STOPPING SEALANTS, FIRE STOPPING COLLARS, VIBRATION ISOLATION ELEMENTS, THERMAL INSULATION, EXPANSION JOINTS AND ANY MATERIAL IN CONTACT WITH
- 36. ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL
- 37. ROOF MOUNTED PIPING SHALL BE INSTALLED ON FREE FLOATING, PREFABRICATED SUPPORTS SIMILAR TO MIRO MODEL 24-R OR ROOF TOP BLOX ON WALKWAY TREAD PADS. THE USE OF WOOD FOR SUPPORTS IS PROHIBITED.
- 38. ALL ITEMS IN CONTACT WITH POTABLE WATER SHALL COMPLY WITH THE NATIONAL
- "REDUCTION OF LEAD IN DRINKING WATER ACT" S.3874.
- WHERE MANUFACTURERS HAVE RECOMMENDED OR REQUIRED TRAINING PROGRAMS FOR THE INSTALLATION OF THEIR PRODUCT, THEN ALL CONTRACTOR EMPLOYEES INSTALLING THAT PRODUCT SHALL BE TRAINED AND HAVE WRITTEN DOCUMENTATION CONFIRMING THAT TRAINING, AND SHALL FURNISH A COPY OF THE TRAINING DOCUMENTATION WITHIN THE PROJECT SUBMITTAL FOR EACH INSTALLING INDIVIDUAL SHOWING CURRENT INSTALLATION TRAINING WITHIN TWO (2) YEARS OF START OF THIS PROJECT.

#### **ABBREVIATIONS**

AIR ADMITTANCE VALVE	MA	MEDICAL GAS
AIR CONDITIONING		MIXED AIR
ABOVE	MAT	MIXED AIR TEMPERATURE
ACCESS DOOR	MATL	MATERIAL
ABOVE FINISHED CEILING	MAX	MAXIMUM
ABOVE FINISHED FLOOR	MBH	THOUSAND BRITISH THERMAL
ABOVE FINISHED GRADE		UNITS PER HOUR
ANNUALIZED FUEL EFFICIENCY	MCA	MAXIMUM CIRCUIT AMPS
AIR HANDLING UNIT	MCC	MOTOR CONTROL CENTER
ALUMINUM	MECH	MECHANICAL
APPROXIMATELY	MED	MEDIUM
ARCHITECTURAL	MFR	MANUFACTURER
ATMOSPHERE	MH	MANHOLE
	MIN	MINIMUM, MINUTE
BATTERY	MISC	MISCELLANEOUS
BACK DRAFT DAMPER	MPG	MEDIUM PRESSURE GAS
BLIND FLANGE	MV	MEDICAL VACUUM
BELOW FINISHED CEILING		
BRAKE HORSE POWER	N	NORTH, NEUTRAL
	AIR CONDITIONING ABOVE ACCESS DOOR ABOVE FINISHED CEILING ABOVE FINISHED FLOOR ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ANNUALIZED FUEL EFFICIENCY AIR HANDLING UNIT ALUMINUM APPROXIMATELY ARCHITECTURAL ATMOSPHERE  BATTERY BACK DRAFT DAMPER BLIND FLANGE BELOW FINISHED CEILING	AIR CONDITIONING  ABOVE MAT  ACCESS DOOR MATL  ABOVE FINISHED CEILING MAX  ABOVE FINISHED FLOOR MBH  ABOVE FINISHED GRADE  ANNUALIZED FUEL EFFICIENCY MCA  AIR HANDLING UNIT MCC  ALUMINUM MECH  APPROXIMATELY MED  ARCHITECTURAL MFR  ATMOSPHERE MH  MIN  BATTERY MISC  BACK DRAFT DAMPER MPG  BLIND FLANGE MV

BLDG

BOD

CLG CO

CRL

CS

CSC

CSO

CW

DET

DFU

DIA

DIM

DMPR

DN

DR

EAT

ECC

**ECON** 

EER

EFF

EG

ELEC

FLGD

FLR

FLTR

FOF

FPTU

FW

GEN

GPM

GR

GV

GW

HR

HVAC

HWC

HWS

INST

INSUL

IRR

JAN

LBS

LF

LOC

LVG

CHWR CHILLED WATER RETURN

CONN CONNECT OR CONNECTION

CARBON STEEL

COLD WATER

DFTAII

DISCH DISCHARGE

DWG DRAWING

FACH

**ECCENTRIC** 

**ECONOMIZER** 

EXHAUST FAN

ELEVATION

ELECTRICAL

EXHAUST

EQUIP EQUIPMENT

EXIST(E) EXISTING

EXT EXTERIOR

**EXHAUST GRILLE** 

ELECTRIC TRACED

FLOOR CLEAN OUT

FINISHED FLOOR

FACE OF FLANGE

FEET PER MINUTE

FOIL SKRIM KRAFT LINED

DUCT (SPUNSTRAND)

FINS PER INCH

FFFT, FOOT

FEED WATER

GENERATOR

GRILLE

HOUR

HEIGHT

HOT WATER

INSTRUMENT AIR

INSIDE DIMENSION

INVERT ELEVATION

INSULATE, INSULATION

IRRIGATION (NON POTABLE)

LEAVING AIR TEMPERATURE

INSULATION HOT

INCH, INCHES

INFORMATION

INSTRUMENT

INDOOR UNIT

INVERT

JANITOR

KWH KILOWATT HOUR

POUND

LOCKED CLOSED

**INEAL FEET** 

LANDLORD

LOCATION

LEAVING

KW KILOWATT

HTG HEATING

GATE VALVE

GWR GLYCOL WATER RETURN

GWS GLYCOL WATER SUPPLY

HORSE POWER

HEATING, VENTILATION

AND AIR CONDITIONING

HOT WATER CIRCULATING

HOT WATER HEATING SUPPLY

HOT WATER HEATING RETURN

GROUND FAULT

CIRCUIT INTERRUPTER

GRAY WATER (NON POTABLE)

GALLONS PER MINUTE

GALV GALVANIZED

FIXTURE UNITS

FACE VELOCITY

FI ANGED

FLOOR

FILTER

FIRE DAMPER OR FLOOR DRAIN

FAN POWERED TERMINAL UNIT STAT THERMOSTAT

STD

DIAMETER

DAMPER

DOWN

DIMENSION

DUCTILE IRON

CARSEALED CLOSED

CARSEALED OPEN

CONSTANT VOLUME

CEILING RADIATION DAMPER

COMBINED RAIN LEADER

DRAINAGE FIXTURE UNITS

DIFFERENTIAL PRESSURE

ENTERING AIR TEMPERATURE

ENERGY EFFICIENCY RATIO

EFFICIENT, EFFICIENCY

CEILING

CONC CONCRETE

CPLG COUPLING

CLEAN OUT

NORTH, NEUTRAL BRAKE HORSE POWER NOT APPLICABLE **BACKWARD INCLINED** BUILDING NORMALLY CLOSED **BOTTOM OF DUCT** NATURAL GAS NOT IN CONTRACT BRITISH THERMAL UNIT BTUH BRITISH THERMAL UNIT NUMBER OR NORMALLY OPEN NTS NOT TO SCALE PFR HOUR CFM CUBIC FEET PER MINUTE 02 OXYGEN OUTSIDE AIR TEMPERATURE CHAR CHARACTERISTICS CHEM CHEMICAL INJECTION OUTSIDE AIR CHWS CHILLED WATER SUPPLY ON CENTER

OCP

OPP

OD

OV

PERF

POC

RET

RR

PLCS PLACES

QTY QUANTITY

REQD REQUIRED

SA SUPPLY AIR

SCHED SCHEDULE

SECT SECTION

SHT SHEET

RELIEF

RETURN AIR

RETURN GRILLE

RWL RAINWATER LEADER

SUPPLY FAN

SFD SMOKE/FIRE DAMPER

S.I.O. SUPPLIED & INSTALLED BY

OWNER/OTHER

SOUND LINING

SPEC SPECIFICATION

SQUARE

STATION

STANDARD

SVC SERVICE

SYS SYSTEM

SW SOCKET WELD

TEMP TEMPERATURE

THRU THROUGH

TSTAT THERMOSTAT

VOI T

VAC VOLTS AC

VOL VOLUME

WITH

WITHOUT

WASTE

WCO WALL CLEAN OUT

WT WATER TANK

WT WEIGHT

WTR, W WATER

WET BULB

WATER CLOSET

WATER GAUGE

WHA WATER HAMMER ARRESTER

TYP TYPICAL

HIGH POINT FINISHED SURFACE UNO UNLESS NOTED OTHERWISE

UP

VAV

VDC

VEL

**TEMPORARY** 

TRU TERMINAL REHEAT UNIT

UBC UNIFORM BUILDING CODE

UNDERGROUND

UMC UNIFORM MECHANICAL CODE

UPC UNIFORM PLUMBING CODE

UNIT VENTILATOR

V/PH/HZ VOLTS/PHASE/HERTZ

VARIABLE AIR VOLUME

VOLUME DAMPER

VENTILATION FAN

VTR VENT THROUGH ROOF

VFD VARIABLE FREQUENCY DRIVE

VACUUM

VOLTS DC

VELOCITY

UNIFORM PLUMBING CODE

STATIC PRESSURE

SUPPLY REGISTER

SANITARY SEWER

STAINLESS STEEL

SOLENOID VALVE

TEMPERATURE DIFFERENTIAL

UNDERWRITER'S LABORATORY

TOTAL DYNAMIC HEAD

TENANT IMPROVEMENT

RESTRAINED JOINTS

SMOKE DETECTOR

SEER SEASONAL ENERGY EFF. RATIO

REMOVE AND RELOCATE

REVOLUTIONS PER MINUTE

REDUCER

RETURN

PANEL

PUSH ON JOINTS

PIPE SUPPORT

POINT OF CONNECTION

PRESSURE REDUCING VALVE

PRESSURE SAFETY (RELIEF)

— FLOW ARROW I CAP OR CLEANOUT PIPE UP OR TEE UP AND DOWN PIPE TEE DOWN 45° DEGREE ELBOW OVER CURRENT PROTECTION OUTSIDE DIMENSION 90° DEGREE ELBOW OPPOSITE OUTSIDE AIR 4 WAY TEE OUTLET VELOCITY OUTDOOR UNIT PUMP PRESSURE DROP ——— PIPE BREAK PERFORATED PRE FILTER PHASE

 $\overline{\phantom{a}}$ 

<del>----</del>

PIPIN	NG SPECIALTIES
<u> </u>	PRESSURE GAGE
	THERMOMETER
—— <u> </u>	SIGHT GLASS
VFM-1	VENTURI FLOW METER
——	ORIFICE FLOW METER
	MANUAL AIR VENT (MAV)
<del>V</del> AV	AUTOMATIC AIR VENT
<u></u>	GAS PRESSURE REGULATOR
M	WATER METER
	WYE STAINER
	WYE STAINER WITH CAPPED HOSE END BLOWDOWN VALVE
> <u></u>	CONCENTRIC REDUCER
<del></del>	FLANGE
	UNION
	ECCENTRIC REDUCER
——⊗ F&T	STEAM TRAP, INDICATE TYPE
	HOSE BIB
<u> </u>	HOSE BIBB/WALL HYDRANT
×	PIPE ANCHOR

ALIGNMENT GUIDE

FLEXIBLE CONNECTION IN PIPING

EXPANSION JOINT

TEMPERATURE/PRESSURE TEST PORT

STORM PIPING SYSTEMS

RAIN LEADER (RL)

OVERFLOW LEADER (OL)

ST STORM (BELOW FLOOR)

**ROOF DRAIN** 

OVERFLOW DRAIN

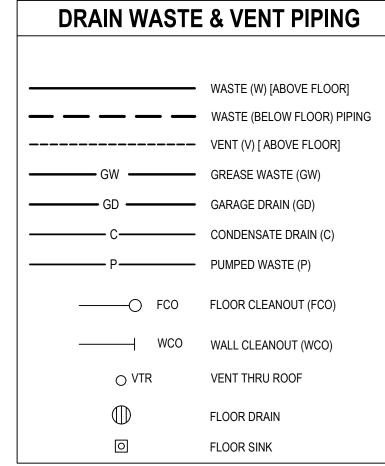
**PIPING** 

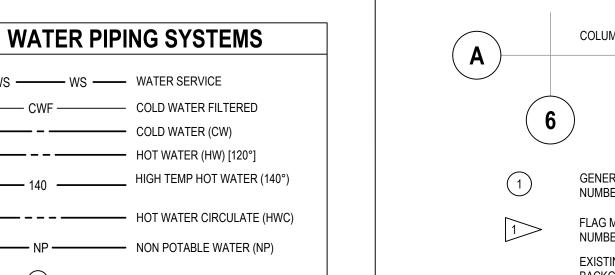
OVERFLOW SCUPPER

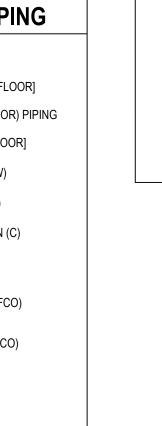
## **VALVES** —— AUTOMATIC BALANCING VALVE PRESSURE REGULATING VALVE PRESSURE REDUCING VALVE (PRV) AUTOMATIC CONTROL VALVE -TWO WAY (ELECTRIC OPERATOR AUTOMATIC CONTROL VALVE -THREE WAY (ELECTRIC OPERATOR SHOWN) GATE VALVE BUTTERFLY VALVE REDUCED PRESSURE --MANUAL BALANCING/ MEASURING VALVE

## WATER PIPING SYSTEMS — CWF — COLD WATER FILTERED — – COLD WATER (CW) - - - HOT WATER (HW) [120°] —— 140 ———— HIGH TEMP HOT WATER (140°) — – – – HOT WATER CIRCULATE (HWC) - NP ---- NON POTABLE WATER (NP) ─(M)──── WATER METER

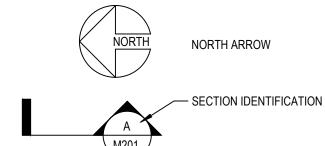
ANGLE VALVE







## PLUMBING LEGEND SYMBOL DESCRIPTION



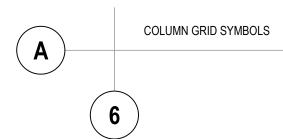
- SHEET IDENTIFICATION SHEET NOTES **W&V RISER CALLOUT** 

DW RISER CALLOUT PLUMBING FIXTURE TAG

PLUMBING EQUIPMENT TAG

- SHEET IDENTIFICATION

REVISION CALLOUT REVISION BUBBLE — DETAIL NUMBER



GENERAL MECHANICAL NOTES NUMBER IDENTIFICATION FLAG MECHANICAL NOTES NUMBER IDENTIFICATION EXISTING WORK OR

> BACKGROUND INFORMATION (LIGHT LINE)

> > NEW WORK (HEAVY LINE)

POINT OF CONNECTION TO EXISTING

TYPICAL EQUIPMENT DESIGNATION

## PROJECT INFORMATION

STREET ADDRESS: 111 5TH ST SE PUYALLUP, WA 98372

**REFERENCE CODES - WA** INTERNATIONAL BUILDING CODE - 2021 INTERNATIONAL MECHANICAL CODE - 2021 UPC UNIFORM PLUMBING CODE - 2021 IFGC INTERNATIONAL FUEL GAS CODE - 2021 IFC INTERNATIONAL FIRE CODE - 2021 INTERNATIONAL ELECTRICAL CODE - 2021 WSEC WASHINGTON STATE ENERGY CODE - 2021 ADA AMERICAN DISABILITY ACT STANDARDS - 2010 AMERICAN SOCIETY OF MECHANICAL ENGINEERS ASME A17.1 - 2007 W/ 2008 ADDENDA SAFETY CODE FOR **ELEVATORS AND ESCALATORS** 

### SCOPE NARRATIVE

13D, 13R, OR 13 (AS APPLICABLE) - 2016

NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS

**BUILDING NARRATIVE:** NEW 4,122 SF SELF STORAGE FACILITY WITH 4 UNITS.

SCOPE NARRATIVE: PLUMBING DESIGN CONSISTS OF (4) RESTROOMS EACH WITH WATER CLOSET AND LAVATORY SINK, (2) INTERNAL ROOF DRAINS WITH OVERFLOW DRAINS. WATER SERVICE ROOM WITH BACKFLOW PREVENTER, HUB DRAIN AND FLOOR DRAIN. HOSE BIBS WILL BE LOCATED PER OWNER PREFERENCES.

INCLUDED SYSTEMS: DOMESTIC WATER WASTE & VENT RAIN LEADERS

#### **PLUMBING SHEET INDEX** SHEET NUMBER SHEET TITLE P0.01 PLUMBING COVER SHEET P0.02 PLUMBING SCHEDULES AND CALCULATIONS PLUMBING DETAILS P0.03 PLUMBING PLAN - UNDERGROUND P1.00 P2.01 PLUMBING PLAN - LEVEL 1 PLUMBING PLAN - LEVEL 2 - MEZZANINE P2.02 P2.03 PLUMBING PLAN - ROOF PLUMBING RISER DIAGRAMS P4.01







HV Engineering, Inc

Consulting Engineers Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043

Phone: (206) 706-9669 www.hvengineering.biz

## Project -PUYALLUP

**STORAGE** 

Location — 111 5TH ST SE PUYALLUP, WA 98372

Prepared For — SAMANTHA KEIMIG

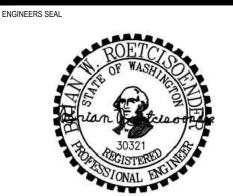
1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY SAMANTHA KEIMIG ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTHA

PARTNER IN CHARGE PROJECT MANAGER

PROJECT ENGINEER BWR PROJECT TEAM MEMBERS

CEY, DJ



PLUMBING COVER SHEET

PROJECT NO 2024-126

RM

SHEET NUMBER

**DECEMBER 16, 2024** 

	COMMERCIAL ENERGY EFFICIENCY						
		TABLE C403.10	).3				
	MINIMUM PIPE INSULATION THICKNESS (in.) [a]						
FLUID OPERATING TEMPERATURE	INSULATION C	CONDUCTIVITY		NOM	INAL PIPE OR	TUBE SIZE (in.	)
RANGE AND USAGE (°F)	CONDUCTIVITY Btu*in/(h*ft^2*°F) [b]	MEAN RATING TEMPERATURE, °F	<1	1 TO < 1 ½	1½ TO < 4	4 TO < 8	>=8
> 350	0.32 - 0.34	250	4.5	5.0	5.0	5.0	5.0
251 - 350	0.29 - 0.32	200	3.0	4.0	4.5	4.5	4.5
201 - 250	0.27 - 0.30	150	2.5	2.5	2.5	3.0	3.0
141 - 200	0.25 - 0.29	125	1.5	1.5	2.0	2.0	2.0
105 - 140	0.21 - 0.28	100	1.0	1.0	1.5	1.5	1.5
40 - 60	0.21 - 0.27	75	0.5	0.5	1.0	1.0	1.0
< 40	0.20 - 0.26	50	0.5	1.0	1.0	1.0	1.5

[a] FOR PIPING SMALLER THAN 1-1/2 INCHES AND LOCATED IN PARTITIONS WITHIN CONDITIONED SPACES. REDUCTION OF THESE THICKNESSES SHALL BE PERMITTED (BEFORE THICKNESS ADJUSTMENT REQUIRED IN FOOTNOTE [b] BUT NOT TO A THICKNESS LESS THAN 1 INCH.

[b] FOR INSULATION OUTSIDE THE SLATED CONDUCTIVITY RANGE, THE MINIMUM THICKNESS (T) SHALL BE DETERMINED AS FOLLOWS:

 $T = r\{(1 + t/r)^{k}/(K/k) - 1\}$ 

T = MINIMUM INSULATION THICKNESS

r = ACTUAL OUTSIDE RADIUS OF PIPE t = INSULATION THICKNESS LISTED IN THE TABLE FOR APPLICABLE FLUID TEMPERATURE AND PIPE SIZE K = CONDUCTIVITY OF ALTERNATE MATERIAL AT MEAN RATING TEMPERATURE INDICATED FOR THE

APPLICABLE FLUID TEMPERATURE (Btu\*in/h\*ft^2\*°F) k = THE UPPER VALUE OF THE CONDUCTIVITY RANGE LISTED IN THE TABLE FOR THE APPLICABLE FLUID

[c] FOR DIRECT-BURIED HEATING AND HOT WATER SYSTEM PIPING, REDUCTION OF THESE THICKNESSES BY 1-1/2 INCHES (38mm) SHALL BE PERMITTED (BEFORE THICKNESS ADJUSTMENT REQUIRED IN FOOTNOTE [b] BUT NOT TO THICKNESSES LESS THAN 1 INCH (25mm)).

NOTE: PER WSEC 404.7.3.1, PIPE INSULATION FOR HEATED WATER CIRCULATION SYSTEMS, BOTH SUPPLY AND RETURN PIPE INSULATION SHALL BE AT MINIMUM 1.0 INCHES THICKER THAN THAT REQUIRED BY TABLE C403.10.3

REUSE OF DOCUMENTS VERIFY SCALE THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT BAR MEASURES ONE INCH ON OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE ORIGINAL DRAWING USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING IF NOT ONE INCH ON THIS DRAWING COPYRIGHT, HV ENGINEERING, INC. ADJUST SCALES ACCORDINGLY.

#### PLUMBING CALCULATIONS

2021 UPC PLUMBING CODE	PER TABLE 702.1 AND TABLE A-103.1							
BUILDING SUMMARY	MIN. SIZE		DOMES	TIC WATE	R WSFU		SEWER D	FU
	TRAP/ARM		PER		HW PER	TOTAL	PER	
FIXTURE TYPE	IN.	QTY	FIXTURE	TOTAL	FIXTURE	HW	FIXTURE	TOTAL
HOSE BIBB		1	2.5	2.5				
HOSE BIBB (EACH ADDITIONAL)	-	1	1	1	-			
LAVATORY, SINGLE	1.25	4	1	4	0.75	3	1	4
WATER CLOSETS								
1.6 GPF GRAVITY & FLUSHOMETER TANK, PUBLIC	3	4	2.5	10			4	16
	TOTALS	15		17.5		3		20
TOTAL BUILDING FIXTURE CALCULATIONS				17.5		3		20
USE 3/4" METER WITH 1-1/4" BUILDING SUPPLY								

#### 2021 UPC APPENDIX A WATER SERVICE CALCULATIONS

Cold Water Piping to be Sized Base	ed on a <b>FT</b>	System (FV	=Flush Valve, FT	= Flush Tank)		
PIPE MAINS	FIX UNIT	GPM	SIZE			
BUILDING SUPPLY	18	12	1-1/4"			
		1				
STATIC WATER PRESSURE (PSI)	60.0	4		MINED BY GC. NOTIFY ENGINEER I	F LOWER	
PIPE LOSS BETWEEN MAIN AND METER (PSI)	3.6	16.00	FT OF	0.75 IN DIA. PIPE I.D.	22.4	PSI/100' LOS
WATER PRESSURE AT METER (PSI)	56.4					
METER LOSS (PSI)	1.4	0.75	DIAMETER MET	ER		
PIPE LOSS BETWEEN METER AND BLDG (PSI)	0.9	50.00	FT OF	1.25 IN DIA. PIPE	1.9	PSI/100' LOS
BACKFLOW PRESSURE LOSS	14.0					
WATER PRESSURE AT BUILDING (PSI)	40.0	If meter pres	ssure less BFP lo	oss exceeds 80PSI, PRV required		
BLDG SUPPLY PRESSURE FOR PIPE SIZING:	40.0	]				
	1010	J				
COLD WATER PRESSURE LOSS:	4.3		10	FEET AT 0.433 PSI/FT		
COLD WATER PRESSURE LOSS: ELEVATION CHANGE (PSI)		L		FEET AT 0.433 PSI/FT PSIG + 5 PSIG FOR TXV)		
COLD WATER PRESSURE LOSS: ELEVATION CHANGE (PSI) MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)	4.3	TYPICALL		1		
COLD WATER PRESSURE LOSS: ELEVATION CHANGE (PSI) MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)	4.3	TYPICALL		1	_	
COLD WATER PRESSURE LOSS: ELEVATION CHANGE (PSI) MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)	4.3 30.0 34.3 40.0	_ (TYPICALL		1		
COLD WATER PRESSURE LOSS:  ELEVATION CHANGE (PSI)  MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)  TOTAL PRESSURE LOSS:	4.3 30.0 34.3	_ (TYPICALL		1		
COLD WATER PRESSURE LOSS:  ELEVATION CHANGE (PSI)  MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)  TOTAL PRESSURE LOSS:  AVAILABLE PRESSURE (PSI)	4.3 30.0 34.3 40.0 - 34.3 5.7	TYPICALL	Y PROVIDE 25	PSIG + 5 PSIG FOR TXV)		
COLD WATER PRESSURE LOSS:  ELEVATION CHANGE (PSI)  MIN. RESIDUAL PRESS. AT REMOTE FIXT. (PSI)  TOTAL PRESSURE LOSS:	4.3 30.0 34.3 40.0 - 34.3	TYPICALL		1		

Size All Piping Based on a Friction loss of:	6	PSI/100FT LOS
and max velocity based on installation standard.		-

#### DOMESTIC WATER PIPE SIZING TABLE

WSFU BASED ON 2021 UPC CHART A10	<u>)3.1</u> (1)
PIPE MATERIAL	
PEX	
FLUSH TANK	
VELOCITY <= 8 FPS	CW + HW

PSI/100 FT	6	
WSFU RANGE	MIN	MAX
PIPE SIZE (")		
1/2	0	2
3/4	3	6
1	7	13
1 1/4	14	22
1 1/2	23	40
_		

COPYRIGHT HV ENGINEERING

El El	CTRIC WATER HEATER SCHEDULI	
ELE	JIRIC WATER HEATER SCHEDULI	<u>-</u>
EQUIPN	 Ment number	EWH-1
SERVIC	E	
	LOCATION	POINT-OF-USE LAVATORIES
	SYSTEM	DOMESTIC HOT WATER
	FUNCTION	DOMESTIC WATER HEATING
	SCOPE	COMMERCIAL
CAPAC	ITY	
	TEMPERATURE RISE @ 0.3 GPM	80°F
	TEMPERATURE RISE @ 0.5 GPM	48 °F
SERVIC	E CONDITIONS	
	LVG WATER TEMP-DEG F	105 °F
ELECTI	RICAL	
	TOTAL KW	3.5
	VOLTAGE	120
MANUF	ACTURER / DESIGN BASIS	
	MAKE	ACCUMIX II
	MODEL	AM004120T
	SHIPPING WEIGHT (LBS)	5.5
	INLET/OUTLET (INCHES)	3/8"
	DIMENSIONS (INCHES)	14.5"H X 5.25"W X 4"D
NOTES		COORDINATE WITH ELECTRIC OF POWER REQUIREMENTS PRIOR T PROCUREMENT

SYMBOL	ITEM	MAKE/MODEL	REMARKS	
RAINS		·		
FD-1	FLOOR DRAIN (FD) (SIZE PER PLANS)	SEE CONTRACTOR SUBMITTAL	MEDIUM DUTY. 8-1/2" ROUND CAST IRON GRATE. SIZE PER PLAN.	
HD-1	HUB DRAIN	FIELD FABRICATE	SIZE PER PLANS.	
RD-1	PRIMARY ROOF DRAIN	SEE CONTRACTOR SUBMITTAL	3" ALUMINUM DOME GRATE	
OD-1	OVERFLOW DRAIN	SEE CONTRACTOR SUBMITTAL	SET RIM 2" ABOVE PRIMARY DRAIN RIM	
DN-1	DOWNSPOUT NOZZLE	SEE CONTRACTOR SUBMITTAL	STORM OUTLET	
IOSE BIBS AND HY	DRANTS			
HB-1	HOSE BIB	SEE CONTRACTOR SUBMITTAL	FROST FREE	
BACKFLOW PREVE	 NTERS			
RPBP-1	1-1/4" REDUCED PRESSURE ZONE BACKFLOW PREVENTER	ZURN 375XL	NSF 61 CERTIFIED	

PLUMBING FIXTURE SCHEDULE							
SYMBOL	ITEM	WASTE	VENT	CW	HW	SPECIFICATION	REMARKS
REIDENTIAL FIXTURES:							
L-1	LAVATORY	1-1/2	1-1/2	1/2	1/2	SEE CONTRACTOR SUBMITTAL	0.5 GPM MAX.
L-2A	LAVATORY (ADA)	1-1/2	1-1/2	1/2	1/2	SEE CONTRACTOR SUBMITTAL	0.5 GPM MAX.
							INSTALL PER ADA
WC-1	WATER CLOSET	3	2	1/2	-	SEE CONTRACTOR SUBMITTAL	1.28 GPF MAX; FLUSH TANK
							WATER SENSE
WC-2A	WATER CLOSET (ADA)	3	2	1/2	-	SEE CONTRACTOR SUBMITTAL	1.28 GPF MAX; FLUSH TANK
							WATER SENSE; INSTALL PER ADA

**NOTE**: BIDDING CONTRACTOR TO PROVIDE FIXTURE SELECTION FOR OWNER DETERMINATION. VERIFY ALL FIXTURES TO OWNER/ARCH

PRIOR TO PROCUREMENT.

SYSTEM	ABOVE GROUND	BELOW GROUND	JOINT METHOD	REMARKS/PIPE INSULATION
SOIL WASTE	SCH. 40 PVC	SCH. 40 PVC (SOLID CORE)	SOLVENT WELD	COORDINATE WITH OWNER ON SPECIFIC PREFERENCES ON PIPE
	CAST IRON		NO HUB	MATERIAL
SOIL VENT	ABS	SCH. 40 PVC (SOLID CORE)	SOLVENT WELD	CAST IRON IN PLENUM AREAS; COORDINATE WITH OWNER ON SPECIFIC
	CAST IRON		NO HUB	PREFERENCES ON PIPE MATERIAL
STORM/ RAIN LEADERS	SCH. 40 PVC	SCH. 40 PVC (SOLID CORE)	SOLVENT WELD	COORDINATE WITH OWNER ON SPECIFIC PREFERENCES ON PIPE
	CAST IRON		NO HUB	MATERIAL
				1" INSULATION OF ALL HORIZONTAL PIPES IN CONDITIONED SPACES
				OVERFLOW PIPING IS ALLOWED TO BE ABS.
STORM OVERFLOW	SCH. 40 PVC/ABS	SCH. 40 PVC (SOLID CORE)	SOLVENT WELD	COORDINATE WITH OWNER ON SPECIFIC PREFERENCES ON PIPE
EADERS	CAST IRON		NO HUB	MATERIAL
				1" INSULATION OF ALL HORIZONTAL PIPES IN CONDITIONED SPACES
COLD WATER 2" AND SMALLER	PEX	PEX	COLD EXPANSION FITTINGS	

[1] SOLVENT CEMENT JOINTS IN ACCORDANCE WITH 2021 UPC SECTION 705.6.2, ASTM F656 FOR PRIMER AND ASTM D2846 FOR SOLVENT CEMENTS.

[2] PEX ALLOWED IN PLENUM IF INSTALLED PER MFR INSTALLION INSTRUCTIONS AS REQUIRED TO COMPLY WITH ASTM E84 FOR A 25/50 FLAME SMOKE RATING.

[3] NSF 61 LISTING COMPLIANCE FOR ALL DOMESTIC WATER PIPE AND FITTINGS.

REUSE OF DOCUMENTS	VERIFY SCALE
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING.	BAR MEASURES ONE INCH ON ORIGINAL DRAWING  0" 1"
COPYRIGHT, HV ENGINEERING, INC.	IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.







### HV Engineering, Inc.

Consulting Engineers
Hall Creek Office Park
6912 220th St. SW, Suite 303
Mountlake Terrace, WA 98043
Phone: (206) 706-9669

www.hvengineering.biz

#### Project

## PUYALLUP

## STORAGE

Location 111 5TH ST SE

## 

PUYALLUP, WA 98372

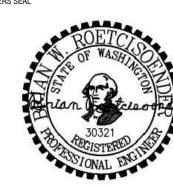
1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF <u>SAMANTHA KEIMIG</u>. FOR INFORMATION CONTACT: <u>SAMANTHA KEIMIG</u>.

CEY, DJ CHECK BWR

ENGINEERS SEA

PROJECT TEAM MEMBERS

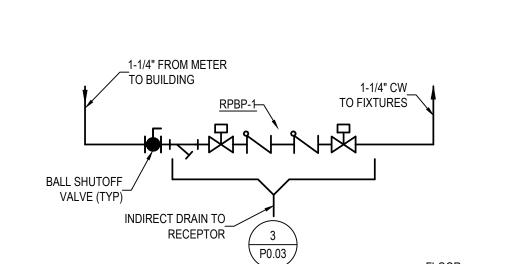


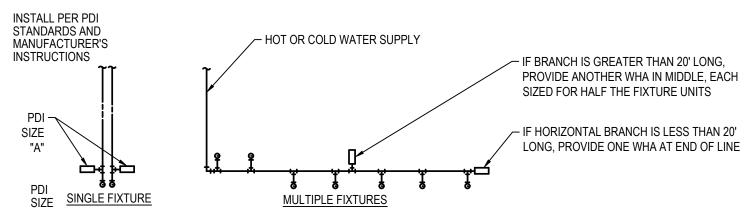
PLUMBING SCHEDULES
AND CALCULATIONS

ROJECT NO. **2024-126** 

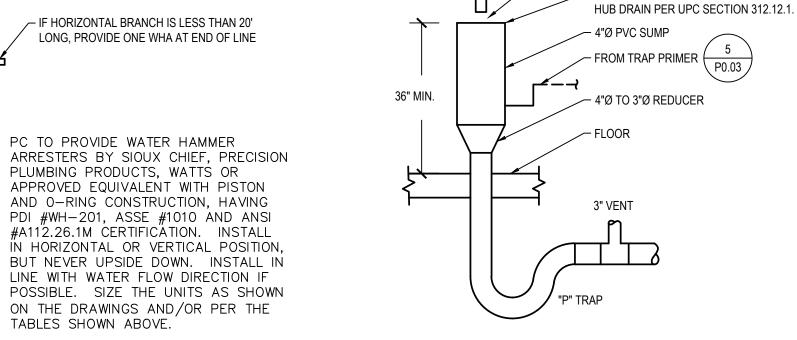
DECEMBER 16, 2024

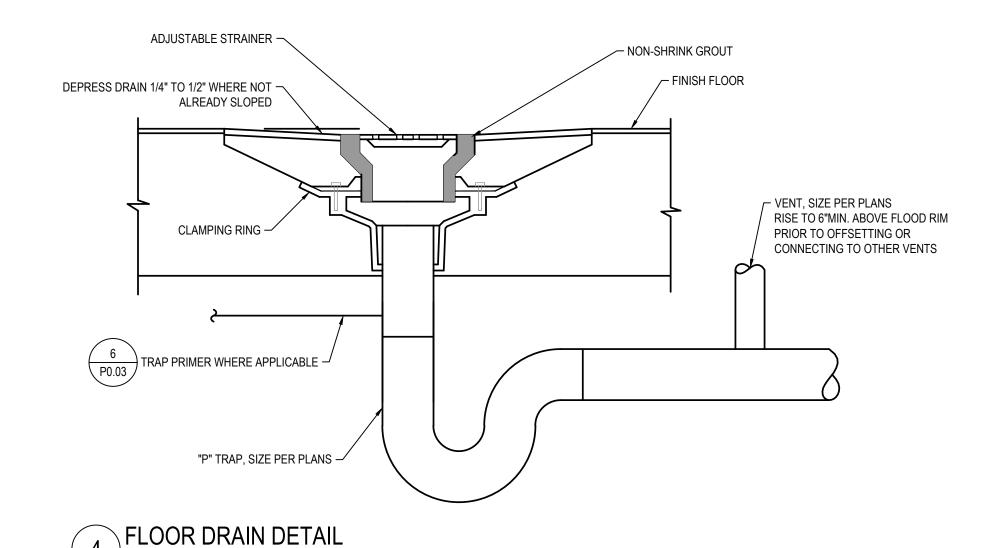
**20.02** 





	PIPE FI	FIXTURE		FIXTURE UNIT TABULATION			
	SIZE UNIT LOAD		FIXTURE	COLD	HO		
Α	1/2"	1-3		WATER CLOSET	8		
В	3/4"	4-12		LAVATORY/HAND SINK	1	1	
С	1"	13-25		KITCHEN SINKS	1.5	1.5	
D	1-1/4"	26-50		MOP BASIN	3	3	
Е	1-1/2"	51-85		URINAL	5		
			-				









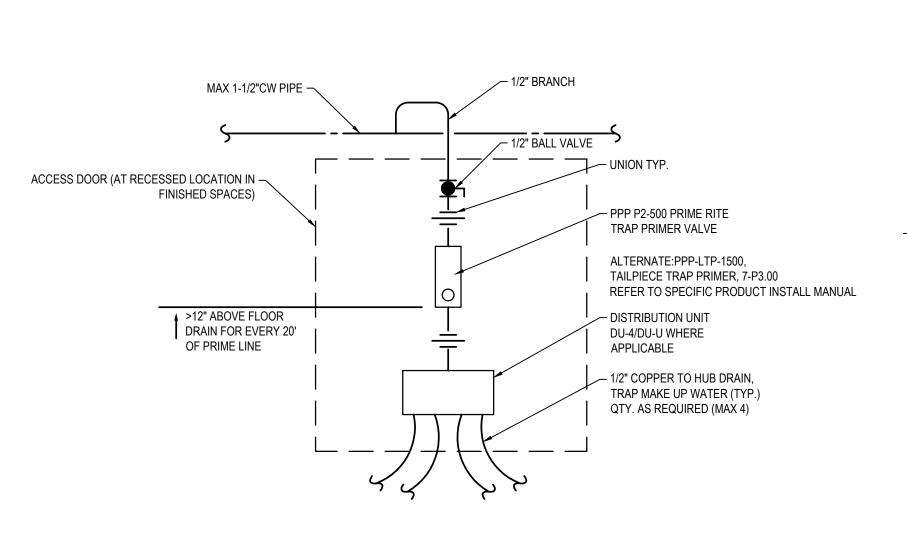


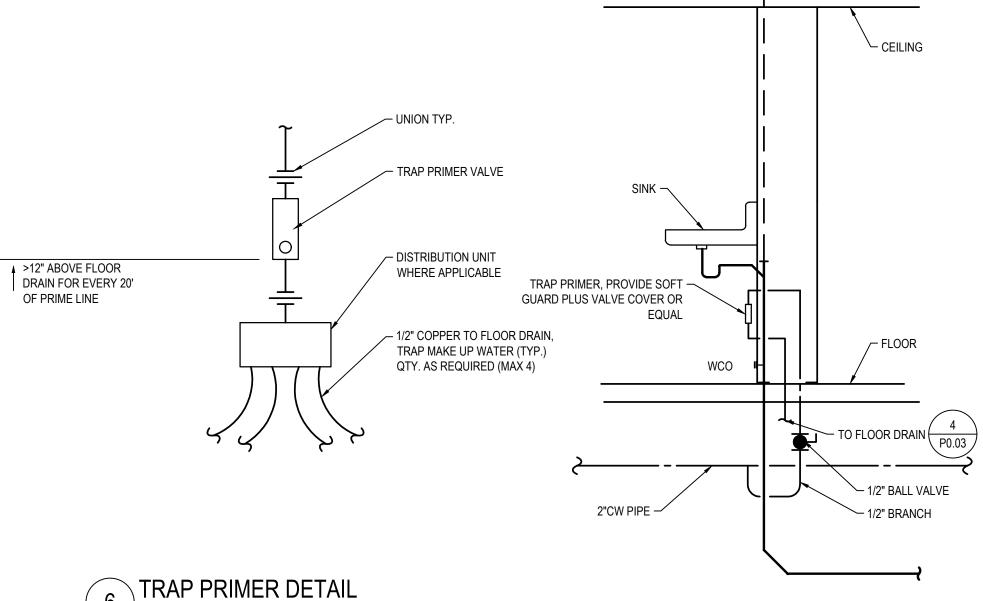
∠ 2" RPBP DISCHARGE

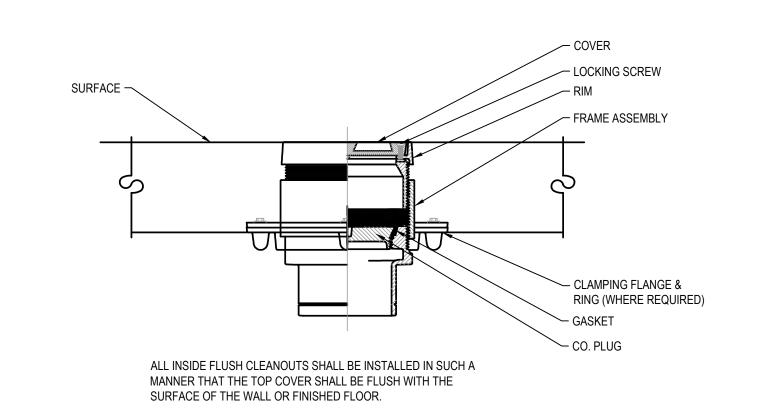
∠ 2" AIR GAP BETWEEN TEST VALVE & TOP OF

PVC SUMP BELOW FOR UPC SECTION 801 &

- 1/2"MAX RAT PROOFING MESH ON TOP OF

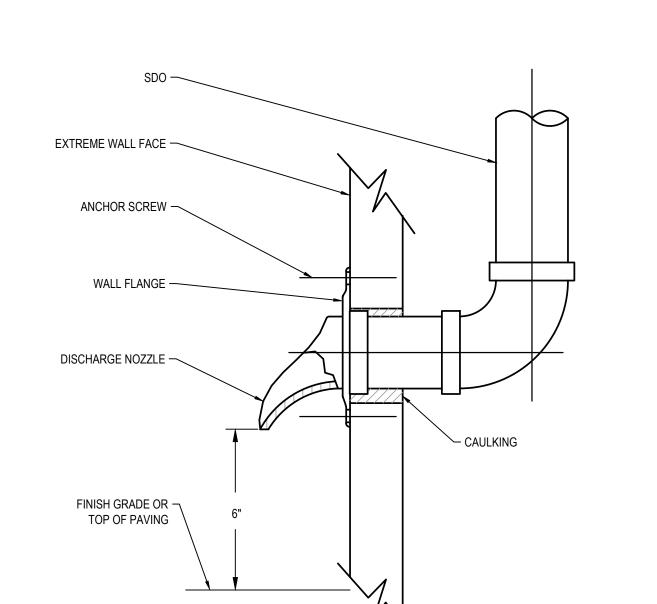






INTERIOR CLEANOUT DETAIL





14 GA. METAL DRAIN PAN - (BELOW ROOFING)			- ROOF DRAIN
INSULATION AND ROOF MEMBRANE - SEE ARCH. DETAILS			OVERFLOW DRAIN W/ INTERNAL DAM
PLYWOOD DECKING AND BLOCKING BY GC			- CONNECTION TO
UNDERDECK CLAMPING SYSTEM			OVERFLOW LEADER PIPING, SIZED AT 2" RAINFALL PER HR PER
SLOPE 1/8" PER FOOT (TYPICAL) UNLESS	∕II		TABLE 1103.1, 2021 UPC
OTHERWISE NOTED			- CONNECTION TO RAIN LEADER PIPING, SIZED AT 1" RAINFALL PER HR PER TABLE 1103.1, 2021 UPC
11001			- ROUTE OVERFLOW DRAIN TO EXTERIOR OF BUILDING TO DOWNSPOUT NOZZLE
		STORM DRAIN	P0.03

8 ROOF AND OVERFLOW DRAIN DETAIL
SCALE: NONE



SCALE: NONE

REUSE OF DOCUMENTS **VERIFY SCALE** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT
OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE
USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING.

**PERMI** COPYRIGHT, HV ENGINEERING, INC. IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.







HV Engineering, Inc.

Consulting Engineers
Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043 Phone: (206) 706-9669

www.hvengineering.biz

Project -

## PUYALLUP

STORAGE

Location -111 5TH ST SE PUYALLUP, WA 98372

Prepared For -SAMANTHA KEIMIG

1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTHA

-	-		-
-	-		-
-	-		-
PARTNER IN CHARGE			
DJ			
PROJECT MANAGER			
DJ			
PROJECT ENGINEER			
BWR			

PROJECT TEAM MEMBERS

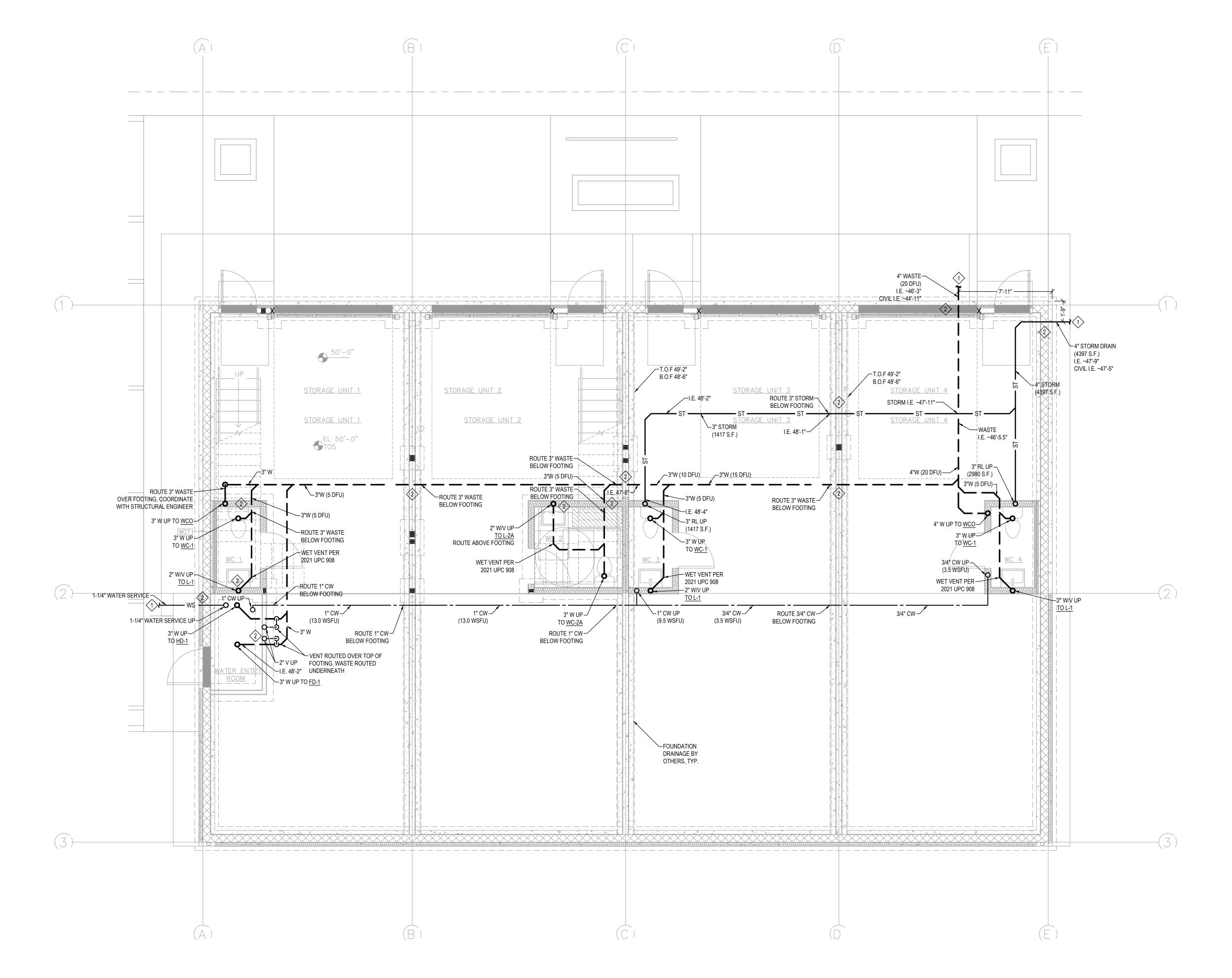


**PLUMBING DETAILS** 

2024-126

**DECEMBER 16, 2024** 

P0.03





- 1. UPSTREAM MH RIM ELEVATION = 49.7'. ALL PLUMBING FIXTURES BELOW THAT ELEVATION ARE REQUIRED TO FLOW THROUGH A BACK WATER VALVE. LEVEL 1 FFE = 50.0'. NO FIXTURES EXIST BELOW UPSTREAM MH RIM ELEVATION, NO BACK WATER VALVE REQUIRED ON SANITARY MAIN.
- 2. PROVIDE CLEANOUTS PER UPC 707.0.
- 3. FREEZE PROTECT PIPING AS REQUIRED PER 2021 UPC 312.6. ALL WATER (INCLUDING PUMPED) NOT ON THE WARM SIDE OF INSULATION SHALL BE HEAT TRACED AND INSULATED.
- 4. ALL SANITARY PIPING SLOPED AT 1/4" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 703.2.
- 5. ALL STORM PIPING SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 1103.2.

#### SHEET NOTES:

- COORDINATE FINAL CONNECTIONS WITH CIVIL DRAWINGS FIVE FEET OUTSIDE THE BUILDING FOUNDATION. PIPE SIZE, INVERT DEPTH, FIXTURE UNITS, AND DRAINED AREA AS NOTED. IDENTIFY ANY DISCREPANCIES TO ENGINEER BEFORE COMMENCING WORK.
- COORDINATE PLUMBING CROSSINGS AND PENETRATIONS WITH STRUCTURAL AT FOOTINGS. PER STRUCTURAL ENGINEER PREFERENCE IS TO ROUTE BELOW WHERE POSSIBLE, AND SLEEVE WHERE NOT POSSIBLE. COORDINATE WITH STRUCTURAL ENGINEER ON REQUIREMENTS.

REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT
OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE
USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN

COPYRIGHT, HV ENGINEERING, INC. IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.







HV Engineering, Inc.

Consulting Engineers Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043

Phone: (206) 706-9669

www.hvengineering.biz

Project -PUYALLUP

STORAGE Location—

111 5TH ST SE PUYALLUP, WA 98372

**Prepared For-**SAMANTHA KEIMIG

1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

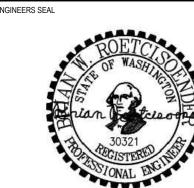
THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTH

	-	-
	-	-
	-	-
	-	-
PARTNER IN CHARGE		

PROJECT MANAGER

PROJECT ENGINEER BWR

CEY, DJ

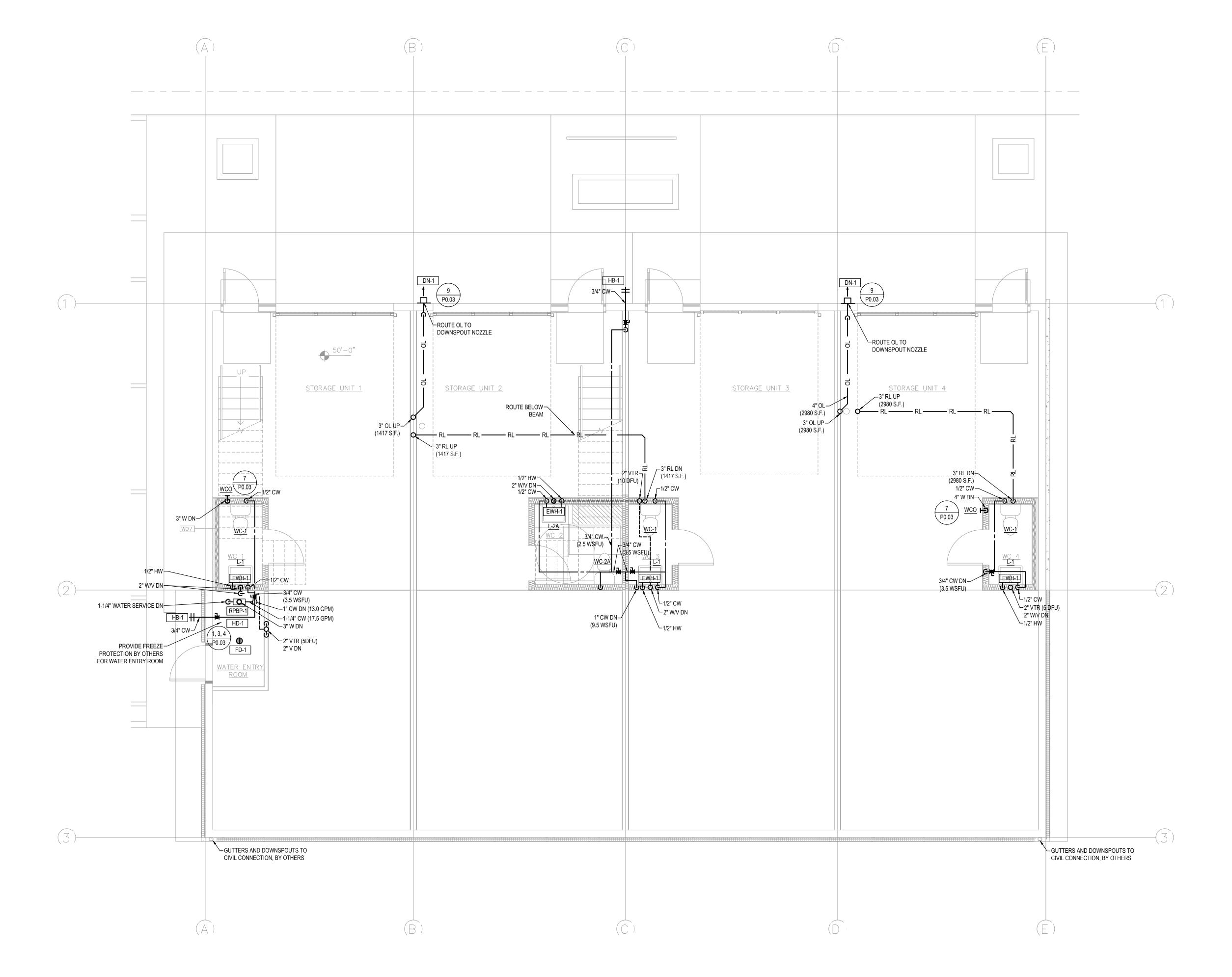


**PLUMBING PLAN -**UNDERGROUND

**PERMI** 

**VERIFY SCALE** 

2024-126 **DECEMBER 16, 2024** 





- 1. UPSTREAM MH RIM ELEVATION = 49.7'. ALL PLUMBING FIXTURES BELOW THAT ELEVATION ARE REQUIRED TO FLOW THROUGH A BACK WATER VALVE. LEVEL 1 FFE = 50.0'. NO FIXTURES EXIST BELOW UPSTREAM MH RIM ELEVATION, NO BACK WATER VALVE REQUIRED ON SANITARY MAIN.
- 2. PROVIDE CLEANOUTS PER UPC 707.0.
- 3. FREEZE PROTECT PIPING AS REQUIRED PER 2021 UPC 312.6. ALL WATER (INCLUDING PUMPED) NOT ON THE WARM SIDE OF INSULATION SHALL BE HEAT TRACED AND INSULATED.
- 4. ALL SANITARY PIPING SLOPED AT 1/4" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 703.2.
- 5. ALL STORM PIPING SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 1103.2.

### SHEET NOTES:

COORDINATE FINAL CONNECTIONS WITH CIVIL DRAWINGS FIVE FEET OUTSIDE THE BUILDING FOUNDATION. PIPE SIZE, INVERT DEPTH, FIXTURE UNITS, AND DRAINED AREA AS NOTED. IDENTIFY ANY DISCREPANCIES TO ENGINEER BEFORE COMMENCING WORK.







HV Engineering, Inc.

Consulting Engineers
Hall Creek Office Park
6912 220th St. SW, Suite 303
Mountlake Terrace, WA 98043

Phone: (206) 706-9669 www.hvengineering.biz

Project —

## PUYALLUP STORAGE

Location—

STORAGE

111 5TH ST SE PUYALLUP, WA 98372

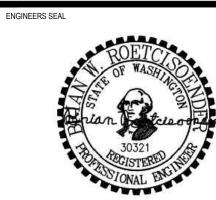
1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF <u>SAMANTHA KEIMIG</u>. FOR INFORMATION CONTACT: <u>SAMANTHA</u>

	-	-
	-	-
	-	-
ARTNER IN CHARGE		
OJ		
ROJECT MANAGER		
OJ		
ROJECT ENGINEER		

CEY, DJ

**PERMI** 



TITLE
PLUMBING PLAN - LEVEL 1

DECT NO. 2024-126

DECEMBER 16, 2024

P2.01

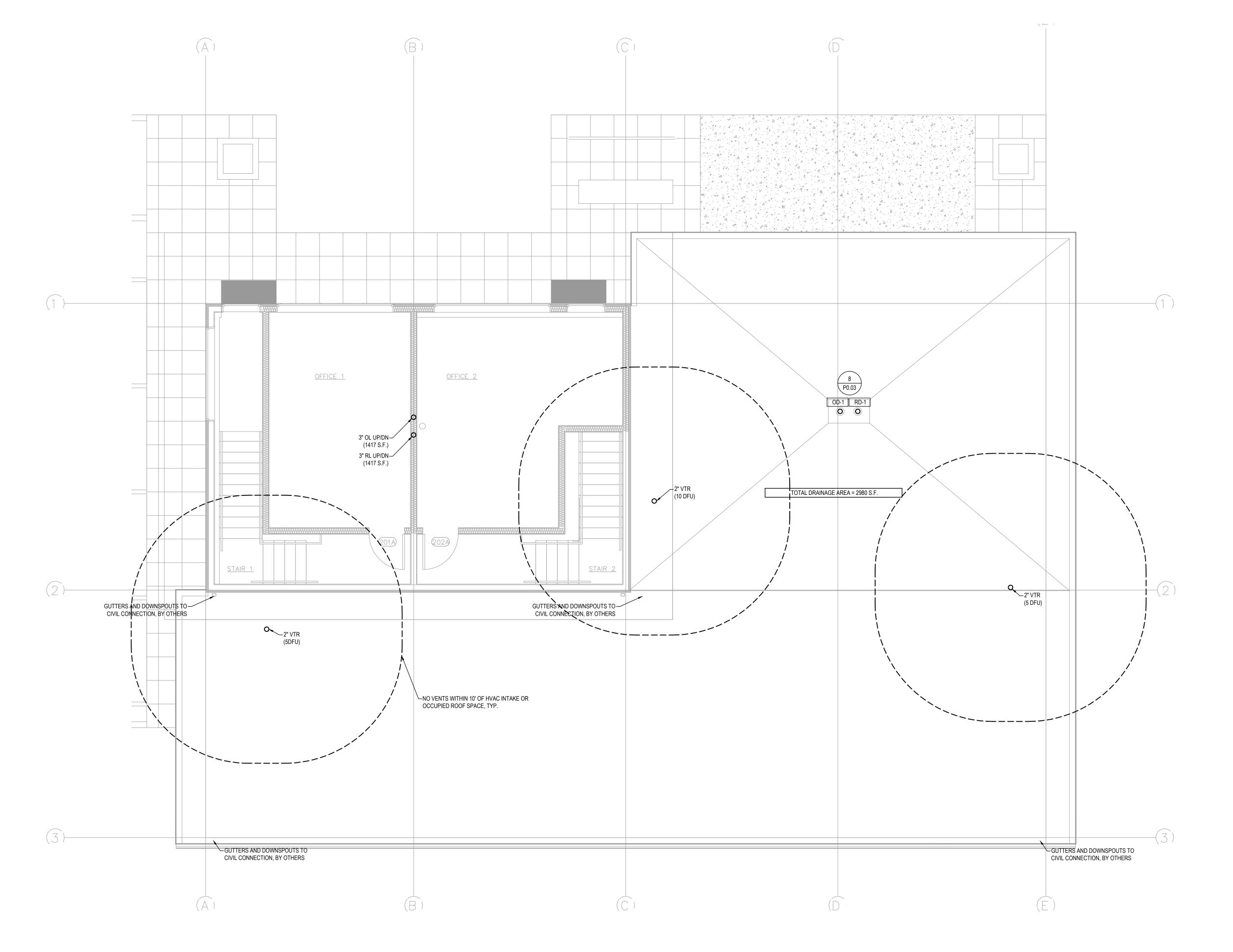
REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING.

COPYRIGHT, HV ENGINEERING, INC.

WERIFY SCALE

BAR MEASURES ONE INCH ON ORIGINAL DRAWING
O" 1"
IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.





- 1. FREEZE PROTECT PIPING AS REQUIRED PER 2021 UPC 312.6. ALL WATER (INCLUDING PUMPED) NOT ON THE WARM SIDE OF INSULATION SHALL BE HEAT TRACED AND INSULATED.
- 2. ALL STORM PIPING SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 1103.2.







## HV Engineering, Inc.

Consulting Engineers Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043 Phone: (206) 706-9669

www.hvengineering.biz

## Project -

## PUYALLUP STORAGE

Location—

111 5TH ST SE PUYALLUP, WA 98372

## Prepared For — SAMANTHA KEIMIG

1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

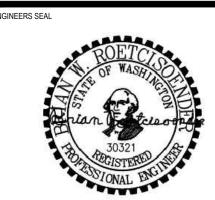
THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTHA

DATE	REVISION
-	-
-	-
-	-
-	-
-	-

## PROJECT MANAGER

PROJECT ENGINEER BWR

CEY, DJ



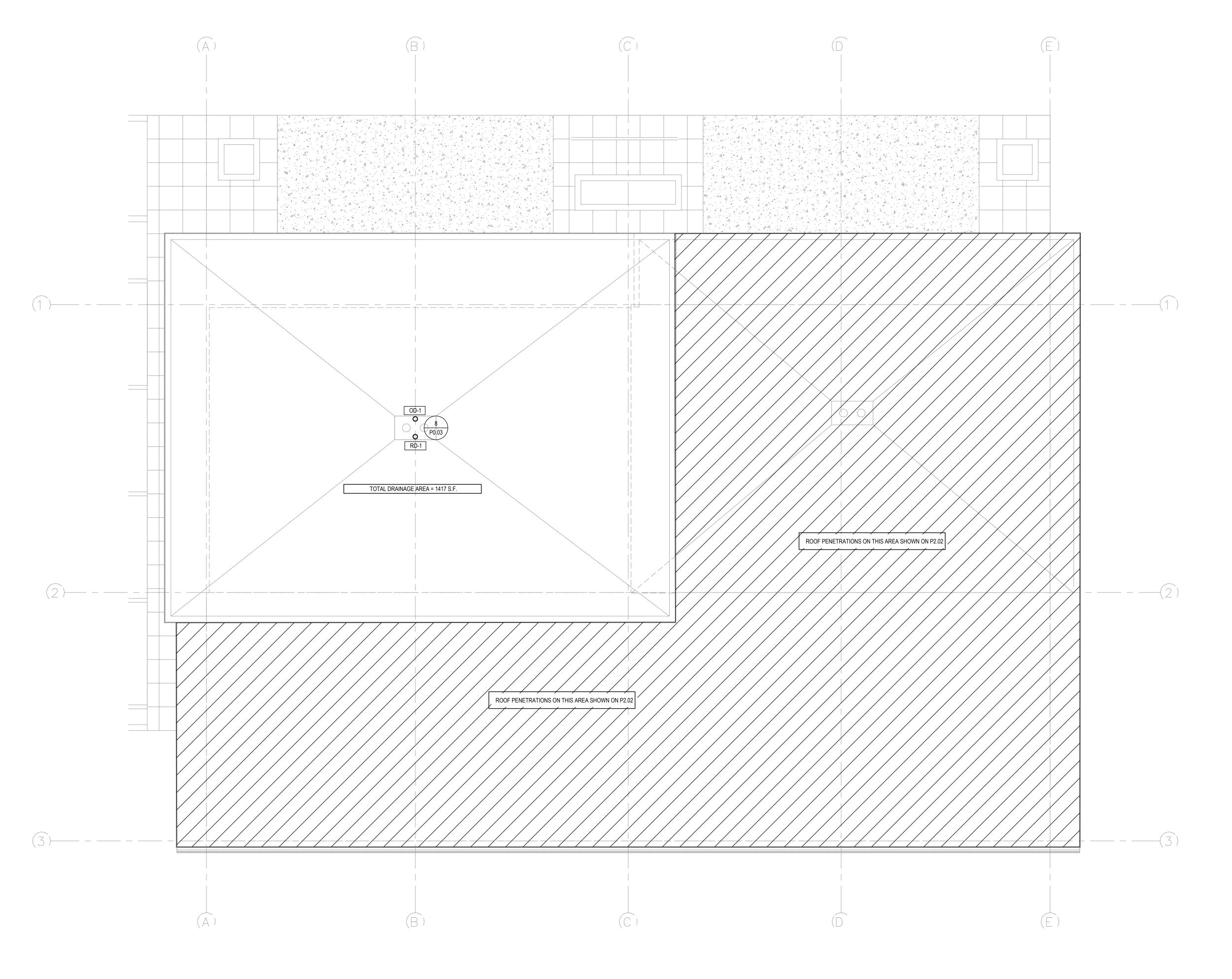
PLUMBING PLAN - LEVEL 2

- MEZZANINE

**PERMI** 

**DECEMBER 16, 2024** 

2024-126





- 1. FREEZE PROTECT PIPING AS REQUIRED PER 2021 UPC 312.6. ALL WATER (INCLUDING PUMPED) NOT ON THE WARM SIDE OF INSULATION SHALL BE HEAT TRACED AND INSULATED.
- 2. ALL STORM PIPING SLOPED AT 1/8" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 1103.2.







### HV Engineering, Inc.

Consulting Engineers Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043

Phone: (206) 706-9669 www.hvengineering.biz

### Project -

# PUYALLUP

## STORAGE

Location -

Prepared For -

## 111 5TH ST SE PUYALLUP, WA 98372

SAMANTHA KEIMIG 1113 27th St PI NW

Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY SAMANTHA KEIMIG ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTHA

PROJECT MANAGER

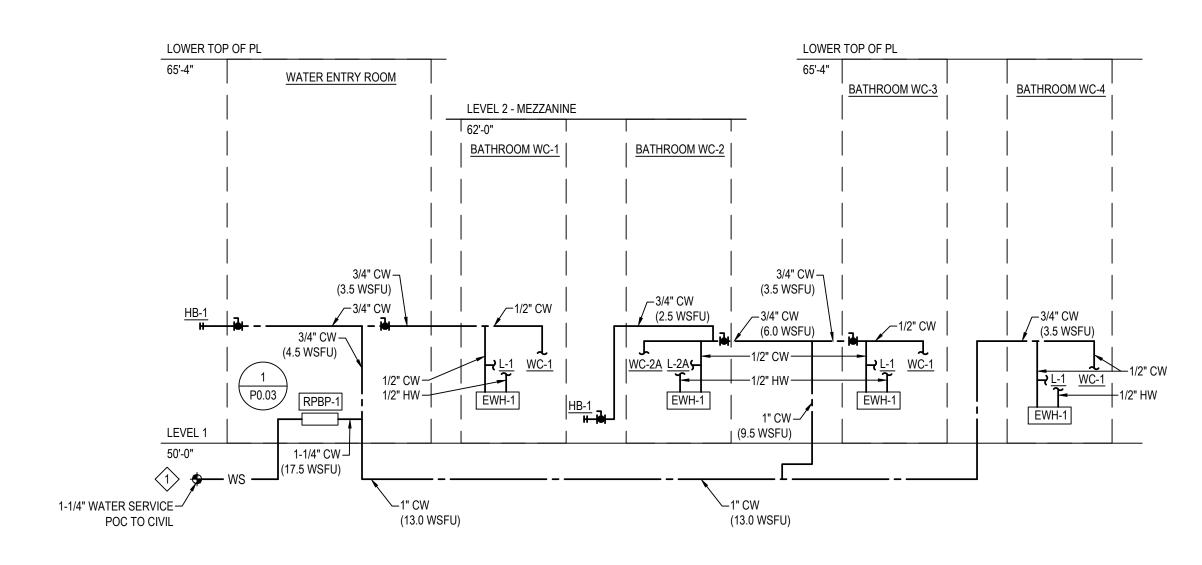
PROJECT ENGINEER BWR

CEY, DJ



PLUMBING PLAN - ROOF

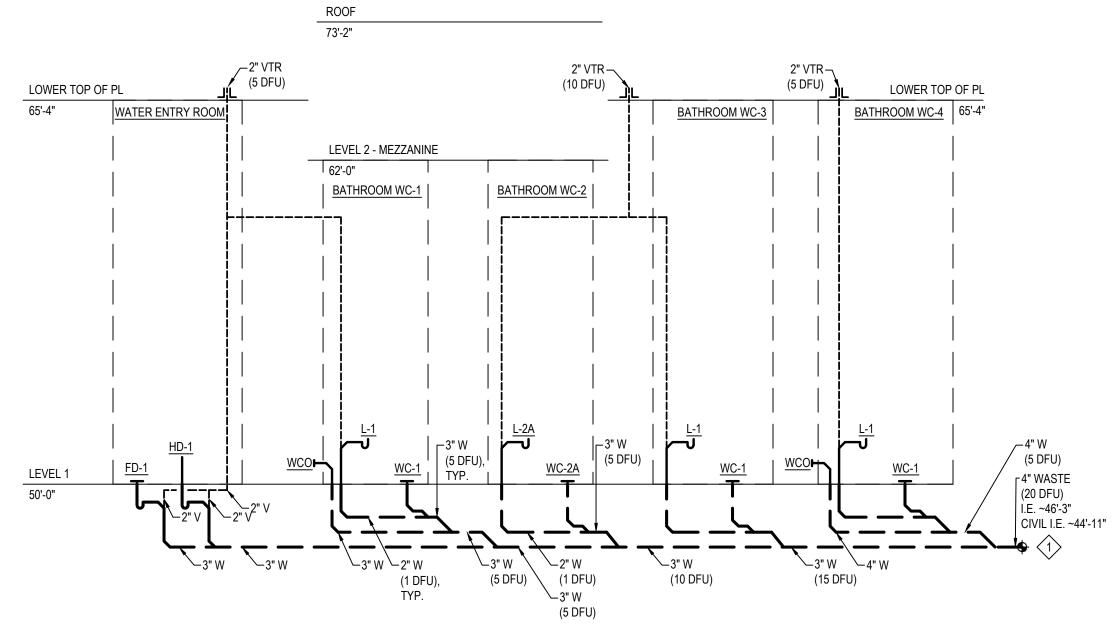
2024-126 **DECEMBER 16, 2024** 



WATER RISER DIAGRAM SCALE: NONE

### **GENERAL NOTES:**

- 1. DOMESTIC WATER PIPE SIZED 2" AND SMALLER IS TO BE PEX UNLESS NOTED OTHERWISE.
- 2. DOMESTIC WATER PIPE SIZED PER SIZING TABLES SHOWN ON
- 3. AT TRANSITIONS FROM VERTICAL TO HORIZONTAL AT THE BASE OF A WASTE STACK PROVIDE 10 PIPE DIAMETERS OF LENGTH BETWEEN ELBOW AND NEXT FIXTURE CONNECTION TO ABATE HYDRAULIC JUMP.
- 4. PROVIDE CLEANOUTS PER SPC 7.7.0.
- 5. MAX 5 WATER CLOSETS ON VERTICAL OR HORIZONTAL 3" WASTE AND 3 WATER CLOSETS ON HORIZONTAL 3" W PER 2021 UPC 703.4 NOTE 4.
- 6. ALL SANITARY PIPING SLOPED AT 1/4" PER FOOT UNLESS NOTED OTHERWISE PER 2021 UPC 703.2.
- 7. ALL WASTE AND VENT SIZED PER 2021 SPC CH.7.

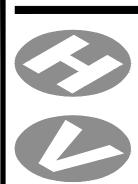


WASTE AND VENT RISER DIAGRAM 2 SCALE: NONE

#### SHEET NOTES:

COORDINATE FINAL CONNECTIONS WITH CIVIL DRAWINGS FIVE FEET OUTSIDE THE BUILDING FOUNDATION. PIPE SIZE, INVERT DEPTH, FIXTURE UNITS, AND DRAINED AREA AS NOTED. IDENTIFY ANY DISCREPANCIES TO ENGINEER BEFORE COMMENCING WORK.

> PERMI REUSE OF DOCUMENTS **VERIFY SCALE** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT
> OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE
> USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING. COPYRIGHT, HV ENGINEERING, INC. IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.





HV Engineering, Inc.

Consulting Engineers Hall Creek Office Park 6912 220th St. SW, Suite 303 Mountlake Terrace, WA 98043

> Phone: (206) 706-9669 www.hvengineering.biz

Project -

# PUYALLUP

STORAGE

Location -

111 5TH ST SE PUYALLUP, WA 98372

Prepared For -SAMANTHA KEIMIG

1113 27th St PI NW Puyallup, WA 98371 (360) 631-6019 samantha.n.keimig@gmail.com

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY <u>SAMANTHA KEIMIG</u> ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF SAMANTHA KEIMIG. FOR INFORMATION CONTACT: SAMANTHA

-	-	-
-	-	-
-	-	-
PARTNER IN CHARGE		
DJ		
PROJECT MANAGER		
DJ		
PROJECT ENGINEER		
BWR		
PROJECT TEAM MEMBER	RS	

CEY, DJ



PLUMBING RISER DIAGRAMS

**DECEMBER 16, 2024** 

2024-126