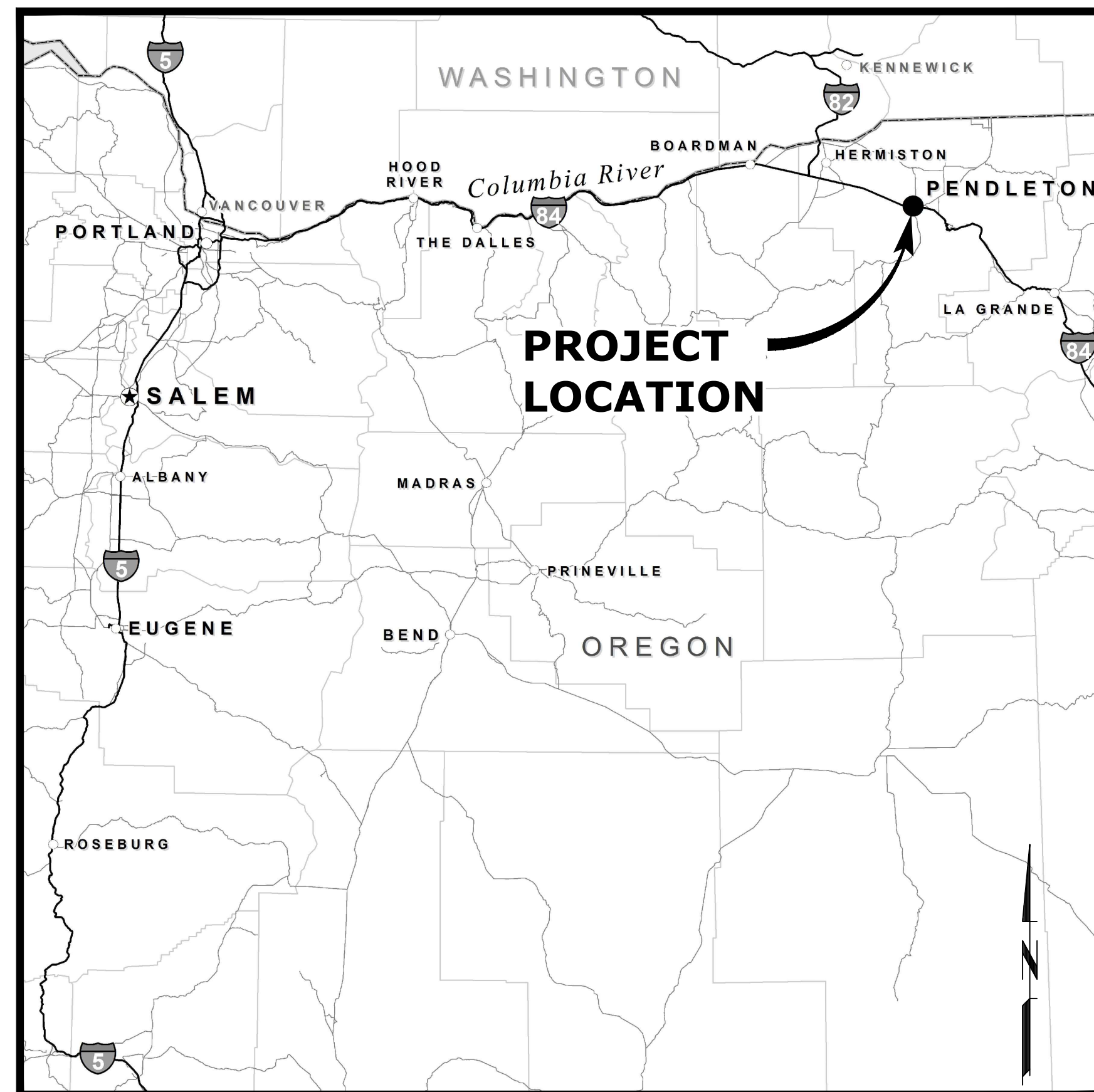




CITY OF PENDLETON

WELL 11-11B

MARCH 2024



VICINITY MAP
SCALE: NTS

INDEX OF DRAWINGS

GENERAL

- 1 G-1 COVER SHEET, INDEX OF DRAWINGS, VICINITY AND LOCATION MAPS
- 2 G-2 SYMBOLS AND LEGEND
- 3 G-3 ABBREVIATIONS
- 4 G-4 GENERAL NOTES

EROSION AND SEDIMENT CONTROL

- 5 ESC-1 OVERVIEW
- 6 ESC-2 SITE PLAN
- 7 ESC-3 DETAILS

CIVIL

- 8 C-1 SITE MAPPING AND GENERAL PROJECT OVERVIEW
- 9 C-2 SITE LAYOUT AND HORIZONTAL CONTROL PLAN
- 10 C-3 SITE GRADING PLAN
- 11 C-4 SITE PIPING PLAN
- 12 C-5 SITE PIPING PLAN CONT.
- 13 C-6 CITY OF PENDLETON STANDARD DETAILS
- 14 C-7 MISCELLANEOUS CIVIL DETAILS

ARCHITECTURAL

- 15 A-101 WELL 11B COVER SHEET
- 16 A-102 WELL 11B FLOOR PLAN
- 17 A-103 WELL 11B EXTERIOR ELEVATIONS
- 18 A-201 WELL 11 COVER SHEET
- 19 A-202 WELL 11 FLOOR PLAN
- 20 A-203 WELL 11 EXTERIOR ELEVATIONS
- 21 AD-001 TYPICAL DETAILS
- 22 AD-002 MISCELLANEOUS ARCHITECTURAL DETAILS

STRUCTURAL

- 23 S-001 GENERAL STRUCTURAL NOTES
- 24 S-002 QUALITY ASSURANCE PLAN (1)
- 25 S-003 QUALITY ASSURANCE PLAN (2)
- 26 S-101 WELL 11B FOUNDATION & FLOOR PLANS
- 27 S-102 WELL 11B ROOF PLAN, CEILING PLAN & BUILDING SECTION
- 28 S-103 WELL 11B BUILDING SECTION & STRUCTURAL DETAILS
- 29 S-104 WELL 11-11B STRUCTURAL DETAILS
- 30 S-201 WELL 11 FOUNDATION, FLOOR & ROOF FRAMING PLAN
- 31 S-202 WELL 11 BUILDING SECTIONS
- 32 SD-001 CMU DETAILS

HVAC

- 33 H-101 WELL 11B FLOOR PLAN, SCHEDULES, AND DETAILS
- 34 H-202 WELL 11 FLOOR PLAN, SCHEDULES, AND DETAILS

PLUMBING

- 35 P-101 WELL 11B DRAIN PLAN
- 36 P-202 WELL 11 DRAIN PLAN

MECHANICAL

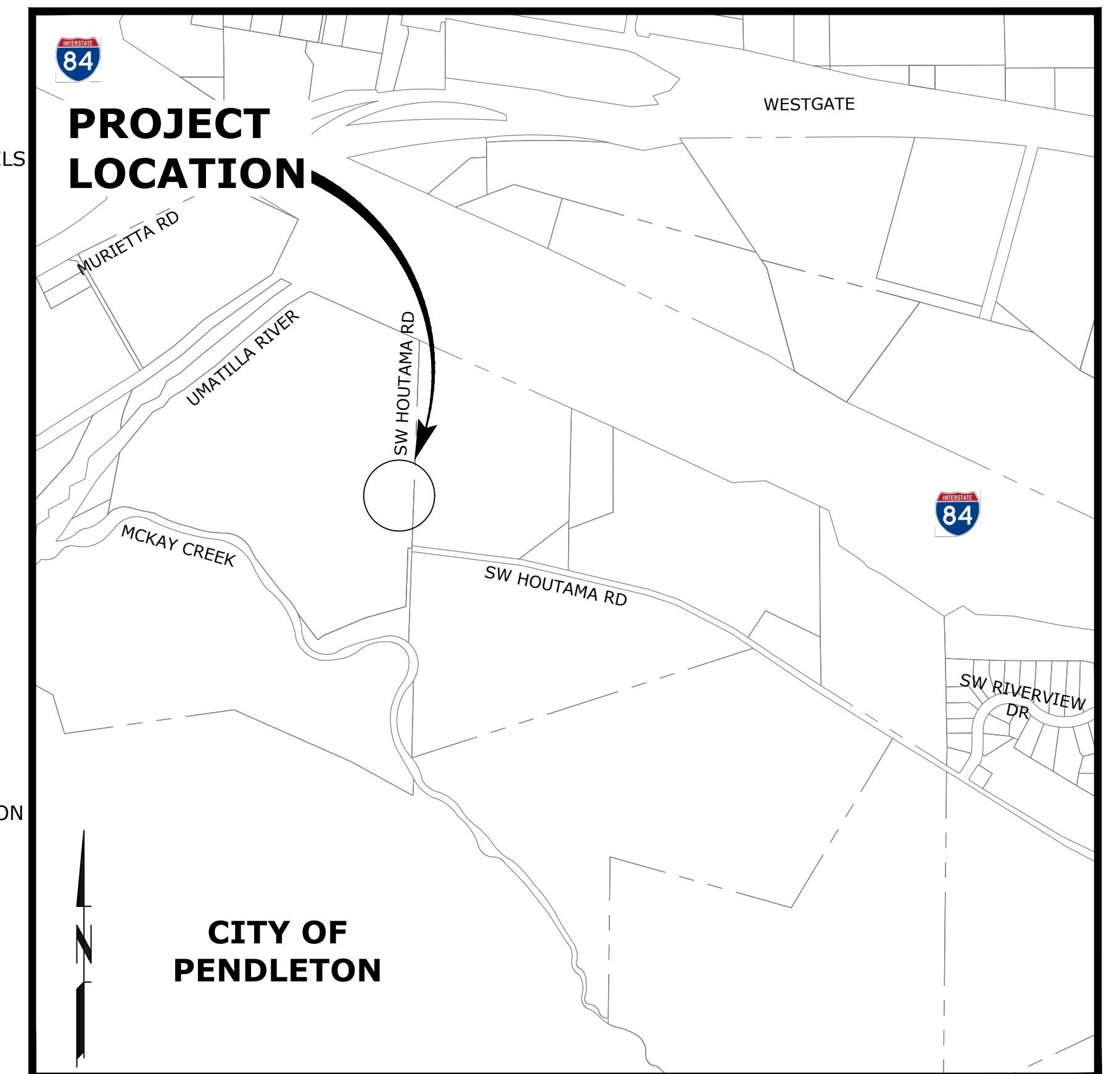
- 37 M-001 MECHANICAL SCHEDULES
- 38 M-101 WELL 11B PERSPECTIVE
- 39 M-102 WELL 11B FLOOR PLAN
- 40 M-103 WELL 11B SECTIONS
- 41 M-104 WELL 11B FLOW METER VAULT PLAN AND SECTION
- 42 M-105 WELL 11B CHLORINE AND WATER QUALITY DETAILS
- 43 M-106 WELL 11B PUMP PEDESTAL DETAILS
- 44 M-107 WELL 11B FUTURE ASR FLOOR PLAN
- 45 M-201 WELL 11 PERSPECTIVE
- 46 M-202 WELL 11 FLOOR PLAN
- 47 M-203 WELL 11 SECTIONS
- 48 M-204 WELL 11 FLOW METER VAULT PLAN AND SECTION
- 49 M-205 WELL 11 PUMP PEDESTAL DETAILS
- 50 MD-001 TYPICAL DETAILS

ELECTRICAL

- 51 E-001 GENERAL NOTES AND ABBREVIATIONS
- 52 E-002 SYMBOLS
- 53 E-003 SITE PLAN - WELL 11 & 11B
- 54 E-004 ONE-LINE DIAGRAM AND LOAD SUMMARY - WELL 11 & 11B
- 55 E-005 CIRCUIT SCHEDULE
- 56 E-005A PANELBOARD SCHEDULES
- 57 E-006 POWER AND CONTROLS PLAN - WELL 11 & 11B
- 58 E-007 LIGHTING AND HVAC PLAN - WELL 11 & 11B
- 59 E-008 GROUNDING PLAN - WELL 11 & 11B
- 60 ED-001 DETAILS
- 61 ED-002 DETAILS - TYPICAL VFD WIRING DIAGRAM

INSTRUMENTATION

- 62 I-001 LEGEND, SYMBOLS AND ABBREVIATIONS 1
- 63 I-002 LEGEND, SYMBOLS AND ABBREVIATIONS 2
- 64 I-101 P&ID WELL 11B SYSTEM
- 65 I-201 P&ID WELL 11 SYSTEM



LOCATION MAP
SCALE: 1"=600'



Know what's below.
Call before you dig.

ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)

PIPE & FITTING SYMBOLS

PLANT	SCHEMATIC	DESCRIPTION
		WELDED JOINT
		FLANGED JOINT
		GROOVED END JOINT
		MECHANICAL JOINT
		PUSH-ON JOINT (RUBBER GASKET)
		FLANGED COUPLING ADAPTER
		DOUBLE BALL FLEXIBLE EXTENSION COUPLING
		FLEXIBLE COUPLING W/ THRUST RING
		90° BEND UP
		90° BEND DOWN
		TEE UP
		TEE DOWN
		LATERAL UP
		LATERAL DOWN
		CONCENTRIC REDUCER
		ECCENTRIC REDUCER
		UNION
		BLIND FLANGE
		CAP
		LONG SLEEVE
		FLEXIBLE COUPLING
		FITTING (45°)

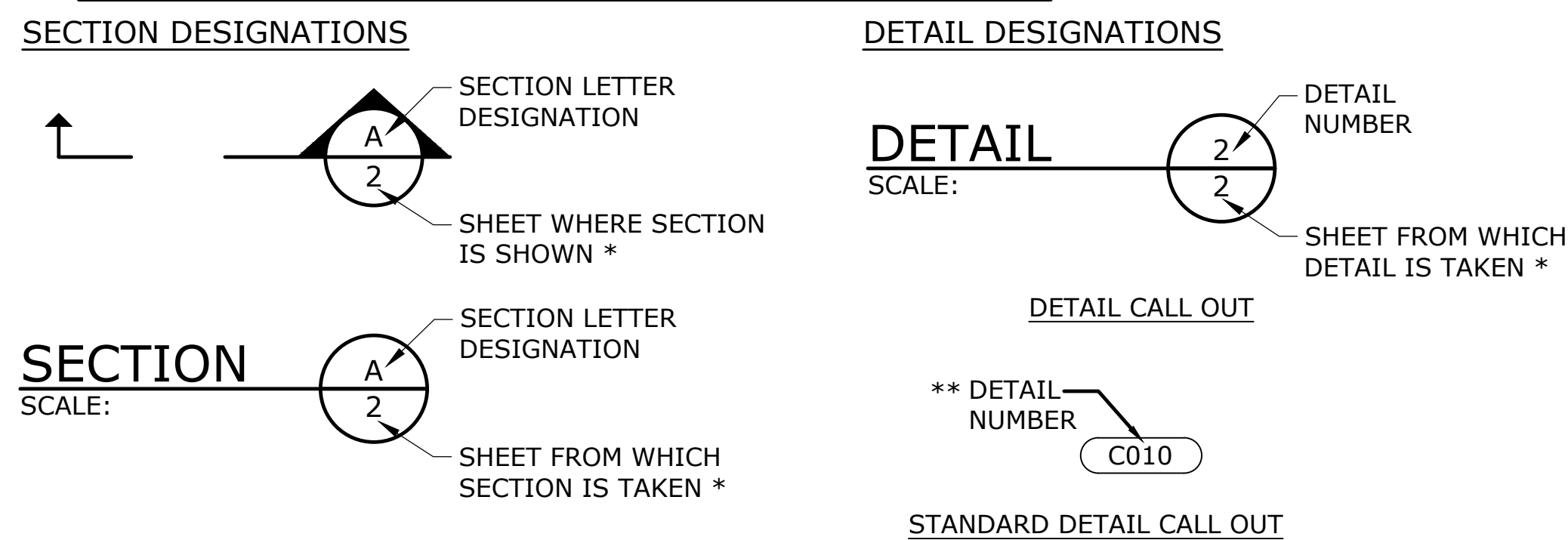
VALVE SYMBOLS

SCHEMATIC	DESCRIPTION	VALVE NUMBER
	BUTTERFLY VALVE	V-100
	BALL VALVE	V-200
	PLUG VALVE (TOP)	V-300
	PLUG VALVE (SIDE)	V-300
	SWING CHECK VALVE	V-400
	BALL CHECK	V-401
	GATE VALVE	V-500
	KNIFE GATE VALVE	V-501
	NEEDLE VALVE	V-600
	GLOBE VALVE	V-700
	RELIEF VALVE	V-800
	REDUCED PRESSURE BACKFLOW PREVENTER W/ GATE VALVES	V-900
	HOSE VALVE	V-1000
	PRESSURE REDUCING VALVE	V-1100
	SOLENOID VALVE	V-1200
	HOSE BIBB	

TOPOGRAPHIC LEGEND

	EXISTING	PROPOSED
WATERLINE		
ELECTRICITY		
GAS		
TELEPHONE/TELEMETRY		
CABLE TELEVISION		
SANITARY SEWER LINE		
SANITARY SEWER FORCE MAIN		
STORM DRAIN		
CULVERT		
ABANDON PIPE		
DRAINAGE DITCH		
BARBWIRE FENCE		
CHAIN LINK FENCE		
TEMPORARY SILT FENCE		
GUARDRAIL		
ROCK WALL		
TREE/BUSH LINE		
CENTERLINE		
EASEMENT/PROPERTY LINE		
RIGHT-OF-WAY		
EDGE OF PAVEMENT/AC		
EDGE OF GRAVEL		
CURB		
SIDEWALK		
STRUCTURE OR FACILITY		
CONTOUR MINOR		
CONTOUR MAJOR		
MANHOLE		
CLEAN-OUT		
CATCH BASIN/FIELD INLET		
THRUST BLOCK		
VALVE		
AIR INJECTION ASSEMBLY		
BLOW-OFF ASSEMBLY		
AIR RELEASE ASSEMBLY		
FIRE HYDRANT ASSEMBLY		
WATER METER		
PULL BOX/JUNCTION BOX		
UTILITY POLE		
GUY WIRE		
LIGHT POST		
MAILBOX		
SIGN		
BENCHMARK		
TREE DECIDUOUS		
TREE CONIFEROUS		
TREE TO BE REMOVED		
SURFACE ELEVATION		

SECTION AND DETAIL DESIGNATIONS



* NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED WITH A DASH.
 ** NOTE: STANDARD DETAILS ARE ON DETAIL SHEETS.

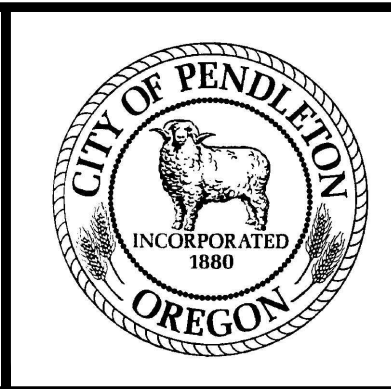
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-G.dwg G-2 3/14/2024 1:30 PM JEFFRY.ORLANDO 24.1s (LMS Tech)

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
 BB DRAWN
 DG CHECKED



CITY OF PENDLETON
WELL 11-11B

GENERAL			
SYMBOLS AND LEGEND			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
G-2
 2 of 65

I:\VOL Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-G.dwg G-3 3/14/2024 1:30 PM JEFFRY. ORLANDO 24-1s (LMS Tech)

@	AT	CND	CONDUIT	FOF	FACE OF FINISH	L	LENGTH	PSPT	PIPE SUPPORT	THK	THICK / THICKNESS
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS	CO	CLEANOUT	FOM	FACE OF MASONRY	LAB	LABORATORY	PT	POINT OF TANGENCY	THRD	THREAD (ED)
AB	ANCHOR BOLT	COL	COLUMN	FOS	FACE OF STUDS	LAV	LAVATORY	PTVC	POINT OF TANGENCY ON VERTICAL CURVE	THRU	THROUGH
ABAN(D)	ABANDON(ED)	COMB	COMBINATION	FPM	FEET PER MINUTE	LB	POUND			TP	TEST PIT / TOP OF PAVEMENT / TURNING POINT
ABS	ACRYLONITRILE BUTADIENE STYRENE	CONC	CONCRETE	FPS	FEET PER SECOND	LF	LINEAR FOOT	PTW	PUMP TO WASTE	TRANS	TRANSITION
ABV	ABOVE / ALCOHOL BY VOLUME	CONN	CONNECTION	FRN	FIBERGLASS REINFORCED PLASTIC	LIN	LINEAL	PV	PLUG VALVE	TSP	TRI-SODIUM PHOSPHATE
AC	ASPHALTIC CONCRETE	CONST	CONSTRUCTION	FT	FEET / FOOT	LN	LANE	PVC	POLYVINYL CHLORIDE	TST	TOP OF STEEL
ACP	ASPHALTIC CONCRETE PAVING	CONT	CONTINUOUS / CONTINUATION	FTG	FOOTING	LOC	LOCATION	PVMT	PAVEMENT	TW	TOP OF WALL
ADJ	ADJUSTABLE	CONTR	CONTRACT(OR)	FUT	FUTURE	LONG	LONGITUDINAL	PW	POTABLE WATER	TYP	TYPICAL
ADJC	ADJACENT	COORD	COORDINATE	FXTR	FIXTURE	LP	LOW PRESSURE	PWR	POWER		
AFF	ABOVE FINISHED FLOOR	COP	COPPER			LPT	LOW POINT			UG	UNDERGROUND
AFG	ABOVE FINISHED GRADE	CORP	CORPORATION	G	GAS	LRG	LARGE	QTY	QUANTITY	UH	UNIT HEATER
AHR	ANCHOR	CORR	CORRUGATED	GA	GAUGE	LS	LONG SLEEVE / LUMP SUM			UN	UNION
AL	ALUMINUM	CP	CONTROL POINT	GAL	GALLON	LT	LEFT	RAD	RADIUS	UON	UNLESS OTHERWISE NOTED
ALT	ALTERNATE	CPLG	COUPLING	GALV	GALVANIZED	LVL	LEVEL	RC	REINFORCED CONCRETE	USGS	UNITED STATES GEOLOGIC SURVEY
AMP	AMPERE	CPVC	CHLORINATED POLYVINYL CHLORIDE	GC	GROOVED COUPLING	LWL	LOW WATER LINE	RCP	REINFORCED CONCRETE PIPE		
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CR	CRUSHED ROCK	GEN	GENERATOR / GENERAL			RD	ROAD / ROOF DRAIN		
APPROX	APPROXIMATE	CS	COMBINED SEWER	GFA	GROOVED FLANGE ADAPTER	MAN	MANUAL	RDCR	REDUCER	V	VENT / VOLT
APPVD	APPROVED	CSP	CONCRETE SEWER PIPE	GI	GALVANIZED IRON	MAT	MATERIAL	RECIRC	RECIRCULATION	VAC	VACUUM
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	CT	COURT	GIP	GALVANIZED IRON PIPE	MAX	MAXIMUM	REF	REFERENCE	VB	VACUUM BREAKER
ARCH	ARCHITECTURAL	CTR	CENTER	GJ	GRIP JOINT	MCC	MOTOR CONTROL CENTER	REIN	REINFORCE(D)(ING)(MENT)	VBOX	VALVE BOX
ARV	AIR RELEASE VALVE	CU	CUBIC	GL	GLASS	MCP	MASTER CONTROL PANEL	REQ'D	REQUIRED	VC	VERTICAL CURVE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	CULV	CULVERT	GLV	GLOBE VALVE	MECH	MECHANICAL	RES	RESERVOIR	VERT	VERTICAL
ASSN	ASSOCIATION	CV	CONTROL VALVE	GND	GROUND	MET	METAL	RESTR	RESTRAINED	VFD	VARIABLE FREQUENCY DRIVE
ASSY	ASSEMBLY	CW	CLOCKWISE / COLD WATER	GPD	GALLONS PER DAY	MFR	MANUFACTURER	RFC	RESTRAINED FLANGE COUPLING	VOL	VOLUME
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	CY	CUBIC YARDS	GPH	GALLONS PER HOUR	MGD	MILLION GALLONS PER DAY	RM	ROOM	VCP	VITRIFIED CLAY PIPE
ATM	ATMOSPHERE	CYL	CYLINDER LOCK	GPM	GALLONS PER MINUTE	MH	MANHOLE	RND	ROUND	VTR	VENT THROUGH ROOF
AUTO	AUTOMATIC	D	DRAIN	GPS	GALLONS PER SECOND	MIN	MINIMUM	RO	ROUGH OPENING	W	WATER
AUX	AUXILIARY	DC	DIRECT CURRENT	GR	GRADE	MIPT	MALE IRON PIPE THREAD	R/W	RIGHT-OF-WAY	W/	WITH
AVE	AVENUE	DEFL	DEFLECTION	GR LN	GRADE LINE	MISC	MISCELLANEOUS	R/PBD	REDUCED PRESSURE BACKFLOW PREVENTION DEVICE	W/IN	WITHIN
AVG	AVERAGE	DET	DETAIL	GRTG	GRATING	MJ	MECHANICAL JOINT			W/O	WITHOUT
AWWA	AMERICAN WATER WORKS ASSOCIATION	DI	DUCTILE IRON	GV	GATE VALVE	MON	MONUMENT / MONOLITHIC			W/W	WALL TO WALL
B&S	BELL & SPIGOT	DIA	DIAMETER	GRVL	GRAVEL	MOT	MOTOR			WD	WOOD
BC	BOLT CIRCLE	DIM	DIMENSION	GYP	GYP SUM	MP	MILEPOST			WF	WIDE FLANGE
BD	BOARD	DIR	DIRECTION			MSL	MEAN SEAL LEVEL			WH	WATER HEATER
BETW	BETWEEN	DIST	DISTANCE	HB	HOSE BIBB	MTD	MOUNTED			WI	WROUGHT IRON
BF	BOTH FACE	DN	DOWN	HC	HOLLOW CORE					WM	WATER METER
BFD	BACKFLOW PREVENTION DEVICE	DR	DRIVE	HDPE	HIGH DENSITY POLYETHYLENE	NA	NOT APPLICABLE	SALV	SALVAGE	WP	WORKING POINT / WATERPROOFING
BFILL	BACKFILL	DS	DOWNSPOUT	HDR	HEADER	NC	NORMALLY CLOSED	SC	SOLID CORE	WS	WATER SERVICE
BFV	BUTTERFLY VALVE	DWG	DRAWING	HDWE	HARDWARE	NF	NEAR FACE	SCHED	SCHEDULE	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
BHP	BRAKE HORSEPOWER	DWL	DWEL	HGR	HANGER	NIC	NOT IN CONTRACT	SD	SCHEDULE		
BKGD	BACKGROUND	DWY	DRAIN WASTE AND VENT DRIVEWAY	HGT	HEIGHT	NO / NO.	NORMALLY OPEN / NUMBER	SDI	STORM DRAIN		
BLDG	BUILDING	E OR ELEC	ELECTRICAL	HH	HANDHOLD	NOM	NOMINAL	SDL	SADDLE	WT	WEIGHT
BLK	BLOCK	EA	EACH	HM	HOLLOW METAL	NORM	NORMAL	SDR	STANDARD DIMENSION RATIO	WTP	WATER TREATMENT PLANT
BLVD	BOULEVARD	ECC	ECCENTRIC	HMAC	HOT MIX ASPHALT CONCRETE	NRS	NON-RISING STEM	SECT	SECTION	WTRT	WATERTIGHT
BM	BENCHMARK / BEAM	EF	EACH FACE	HNDRL	HANDRAIL	NTS	NOT TO SCALE	SHLDR	SHOULDER	WWF	WELDED WIRE FABRIC
BMP	BEST MANAGEMENT PRACTICES	EL	ELEVATION	HOA	HAND-OFF-AUTO			SHT	SHEET	WWTF	WASTEWATER TREATMENT FACILITY
BO	BLOW-OFF	ELB	ELBOW	HOR	HAND-OFF-REMOTE			SIM	SIMILAR	WWTP	WASTEWATER TREATMENT PLANT
BOC	BACK OF CURB	ENCL	ENCLOSURE	HORIZ	HORIZONTAL			SLP	SLOPE		
BS	BOTH SIDES	EOP	EDGE OF PAVEMENT	HP	HIGH PRESSURE / HORSEPOWER			SLV	SLEEVE	X SECT	CROSS SECTION
BSMT	BASEMENT	EQ	EQUAL	HPT	HIGH PRESSURE GAS			SOLN	SOLUTION	XFMR	TRANSFORMER
BT	BOTTOM FACE	EQL SP	EQUALLY SPACED	HR	HOUR			SP	SOIL PIPE / SEWER PIPE		
BTU	BRITISH THERMAL UNIT	EQUIP	EQUIPMENT	HSB	HIGH STRENGTH BOLT			SPCL	SPECIAL	YD	YARD DRAIN / YARD
BV	BALL VALVE	ESEMT	EASEMENT	HV	HOSE VALVE			SPC(S)	SPECIFICATION(S)	YH	YARD HYDRANT
BW	BOTH WAYS	EW	EACH WAY	HVAC	HEATING, VENTILATION, AIR CONDITIONING			SPG	SPACING	YR	YEAR
C	CELSIUS	EXC	EXCAVATE/EXCAVATION	HWL	HIGH WATER LINE			SPL	SPOOL		
C TO C	CENTER TO CENTER	EXIST	EXISTING	HWY	HIGHWAY			SPRT	SUPPORT		
CARV	COMBINATION AIR RELEASE VALVE	EXP	EXPANSION	HYD	HYDRANT			SQ	SQUARE		
CATV	CABLE TELEVISION	EXP BT	EXPANSION BOLT	HYDR	HYDRAULIC			SQ FT	SQUARE FOOT		
CB	CATCH BASIN	EXP JT	EXPANSION JOINT					SQ IN	SQUARE INCH		
CCP	CONCRETE CYLINDER PIPE	EXT	EXTERIOR	I&C	INSTRUMENTATION & CONTROL			SQ YD	SQUARE YARD		
CCW	COUNTER CLOCKWISE	F	FAHRENHEIT	IAW	IN ACCORDANCE WITH			SS	SANITARY SEWER		
CFM	CUBIC FEET PER MINUTE	F TO F	FACE TO FACE	ID	INSIDE DIAMETER			SST	STAINLESS STEEL		
CFS	CUBIC FEET PER SECOND	FAB	FABRICATE	IE	INVERT ELEVATION			ST	STREET		
CHAN	CHANNEL	FB	FLAT BAR	IF	INSIDE FACE			STA	STATION		
CHEM	CHEMICAL	FCA	FLANGED COUPLING ADAPTER	IMPVT	IMPROVEMENT			STD	STANDARD		
CHFR	CHAMFER	FCO	FLOOR CLEANOUT	IN	INCH			STL	STEEL		
CHKV	CHECK VALVE	FD	FLOOR DRAIN	INCC	INCLUDE(D)(ING)			STOR	STORAGE		
CI	CAST IRON	FDN	FOUNDATION	INFL	INFLUENT			STR	STRAIGHT		
CIP	CAST IRON PIPE	FEXT	FIRE EXTINGUISHER	INJ	INJECTION			STRUCT	STRUCTURE / STRUCTURAL		
CIPC	CAST IN PLACE CONCRETE	FF	FAR FACE	INSTL	INSTALLATION / INSTALL			SUBMG	SUBMERGED		
CISP	CAST IRON SOIL PIPE	FGL	FIBERGLASS	INSUL	INSULATION			SUCT	SUCTION		
CJ	CONSTRUCTION JOINT	FH	FIRE HYDRANT	INTER	INTERCEPTOR			SV	SOLENOID VALVE		
CJP	COMPLETE JOINT PENETRATION	FIN	FINISHED(ED)	INTR	INTERIOR			S/W	SIDEWALK		
CL OR C/L	CENTER LINE	FIN GR	FINISHED GRADE	INV	INVERT			SWD	SIDEWATER DEPTH		
CL2	CHLORINE	FIPT	FEMALE IRON PIPE THREAD	IP	IRON PIPE			SWGR	SWITCH GEAR		
CLG	CEILING	FITG	FITTING	IPT	IRON PIPE THREAD			SYMM	SYMMETRICAL		
CLJ	CONTROL JOINT	FL	FLOOR LINE	IR	IRON ROD			SYS	SYSTEM		
CLR	CLEAR	FLEX	FLEXIBLE	IRRIG	IRRIGATION					T OR TEL	TELEPHONE
CLSM	CONTROLLED LOW STRENGTH MATERIAL	FLG	FLANGE					T&B	TOP & BOTTOM		
CMP	CORRUGATED METAL PIPE	FLR	FLOOR	JT	JOINT			TAN	TANGENCY		
CMU	CONCRETE MASONRY UNIT	FM	FLOOR MAIN	JUNC	JUNCTION			TB	THRUST BLOCK		
		FO	FIBER OPTIC					TBM	TEMPORARY BENCHMARK		
		FOC	FACE OF CONCRETE					TC	TOP OF CONCRETE / TOP OF CURB		
								TCE	TEMPORARY CONSTRUCTION EASEMENT		
								TDH	TOTAL DYNAMIC HEAD		
								TEMP	TEMPERATURE / TEMPORARY		
								T&G	TONGUE & GROOVE		

NO.	DATE	BY	REVISION
03/13/2024	WRK	BID SET	

NOTICE

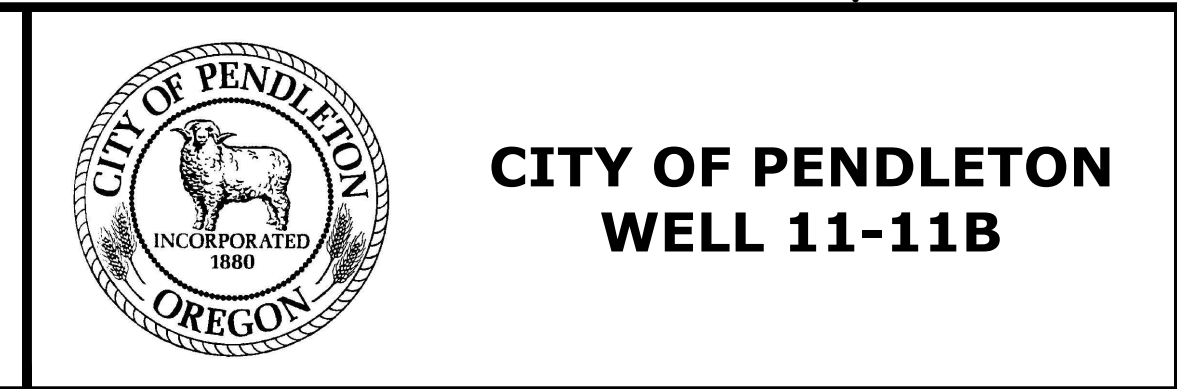
0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED

BB DRAWN

DG CHECKED



GENERAL		SHEET G-3			
ABBREVIATIONS					
PROJECT NO.:	21-3133	SCALE:	AS SHOWN	DATE:	MARCH 2024

GENERAL NOTES:

1. THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, ELEVATIONS, TYPES AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING NEW PIPING FAR ENOUGH IN ADVANCE TO ALLOW NECESSARY ADJUSTMENTS IN GRADE AND SHALL NOTIFY OWNER'S REPRESENTATIVE OF NEED TO ADJUST PIPING INSTALLATION ACCORDINGLY. POTHOLING SHALL SUFFICIENTLY PRECEDE LAYING OF PIPE TO ALLOW REQUIRED ELEVATION ADJUSTMENTS TO BE ACCOMPLISHED WITHOUT REWORK. ELEVATION ADJUSTMENTS SHALL BE EXPECTED AND ARE INCIDENTAL TO THE WORK. DEFLECT PIPE AS REQUIRED AND WITHIN SPECIFIED TOLERANCES TO AVOID EXISTING UTILITIES AND COMPLETE TIE-INS.
2. LOCATIONS OF EXISTING UTILITIES ARE BASED ON INFORMATION SUPPLIED BY THE UTILITIES AND CONSIDERED APPROXIMATE ONLY. AS REQUIRED BY STATE LAW, THE CONTRACTOR SHALL OBTAIN UTILITY LOCATES PRIOR TO COMMENCING CONSTRUCTION.
3. CONTRACTOR SHALL PROVIDE OWNER'S REPRESENTATIVE WITH MINIMUM 24 HOURS NOTICE WHEN POTHOLING WILL BE COMPLETE. COORDINATE WITH OWNER'S REPRESENTATIVE TO REVIEW UTILITY INVESTIGATIONS AND TO MAKE APPROPRIATE ADJUSTMENTS FOR ANY ALIGNMENT CONFLICTS WHERE CONNECTING TO EXISTING UTILITIES.
4. OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)
5. NUMEROUS EXISTING OVERHEAD POWER LINES OCCUR IN THE VICINITY OF THE PROJECT. CONTRACTOR TO CONFORM TO CONDITIONS IN VICINITY OF OVERHEAD LINES AND COORDINATE ALL CONSTRUCTION ACTIVITIES WITH PACIFIC LIGHT AND POWER REPRESENTATIVES.
6. PROVIDE "AS CONSTRUCTED" DRAWINGS INDICATING ALL CHANGES IN GRADE, ALIGNMENT, FITTINGS AND MATERIALS INSTALLED AND ANY OTHER UTILITIES OR OBSTACLES NOT SO INDICATED ON THESE PLANS.
7. AT THE END OF EACH WORK DAY, ALL OPEN TRENCHES SHALL BE BACKFILLED AND ALL TRENCHES SHALL EITHER BE TEMPORARILY PAVED OR FILLED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
8. CONTRACTOR SHALL PROTECT ALL PROPERTY CORNERS, SURVEY MONUMENTS, AND CONTROL SURVEY MONUMENTS. ALL ITEMS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AT CONTRACTOR'S EXPENSE, WITH APPROPRIATE SURVEY FILED WITH COUNTY SURVEYOR.
9. CONTRACTOR SHALL SUPPORT AND PROTECT AS NECESSARY ANY PIPE OR CONDUIT EXPOSED AS PART OF THE NEW PIPE TRENCH EXCAVATION. CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES AND SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES TO MAINTAIN AND PROTECT SERVICES.
10. ALL WORK SHALL BE CONFINED TO RIGHT-OF-WAY OR CITY PROPERTY, AS GENERALLY SHOWN IN THE DRAWINGS AS AREA OF PROJECT IMPROVEMENTS.
11. ALL EXISTING FEATURES INCLUDING, BUT NOT LIMITED TO, ROADWAYS, STRUCTURES, LOTS, CURBS, SIDEWALKS, FENCES, WALLS, PLANTING, DITCHES, MAILBOXES, SIGNS, PIPING AND UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO AS GOOD OR BETTER THAN EXISTING CONDITION UNLESS OTHERWISE SPECIFIED. IF A UTILITY IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT OWNER OF UTILITY FOR INSPECTION OF DAMAGE PRIOR TO REPAIRS. CONTRACTOR SHALL REPAIR ALL UTILITY SERVICES DAMAGED DURING CONSTRUCTION AND SUCH REPAIR SHALL BE CONSIDERED INCIDENTAL.
12. CONTRACTOR TO OBTAIN AND COMPLY WITH APPLICABLE CITY OF PENDLETON PERMITS AND REQUIREMENTS FOR WORK IN, AND RESTORATION OF CITY ROADWAYS.
13. DO NOT REMOVE TREES UNLESS THEY HAVE BEEN PREVIOUSLY IDENTIFIED IN THE FIELD FOR REMOVAL PER OWNER'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE REMOVAL OF IMPACTED TREES WITH ADJACENT HOMEOWNER WITH REGARDS TO TREE CUTTING, REMOVAL, FIREWOOD RETENTION AND TREE REPLACEMENT.

WATER NOTES:

1. RESTRAIN ALL VALVES, TEES, BENDS, AND FITTINGS UNLESS OTHERWISE NOTED. ALL BURIED FITTINGS TO BE MECHANICAL JOINT UNLESS OTHERWISE NOTED.
2. ALL FLANGED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AWWA C115 AND C207, LATEST EDITION.
3. PROVIDE POLYETHYLENE ENCASEMENT FOR ALL DUCTILE IRON PIPING ACCORDING TO ANSI/AWWA C105/A21.5 AND WHEN NEW PIPING IS WITHIN 10' HORIZONTALLY OF EXISTING GAS LINES.
4. ALL COATINGS AND MATERIALS SPECIFIED HEREIN THAT COME IN CONTACT WITH POTABLE WATER SHALL BE NATIONAL SANITATION FOUNDATION (NSF) APPROVED.
5. ALL PIPING SHALL BE TESTED UNDER A HYDROSTATIC TEST PRESSURE AS STATED IN THE SPECIFICATIONS, MEASURED FROM THE LOWEST POINT ALONG THE TEST SECTION OR AS SHOWN ON THE PLANS. ALL VALVES, FITTINGS, AND PIPING SHALL BE SUITABLE FOR TEST PRESSURES.
6. WHERE VERTICAL BENDS ARE NOT SHOWN, CONTRACTOR IS TO DEFLECT PIPE TO ACHIEVE VERTICAL ADJUSTMENTS AS NEEDED. THE MAXIMUM ALLOWABLE DEFLECTION SHALL NOT EXCEED ONE-HALF OF THE MAXIMUM INSTALL DEFLECTION SPECIFIED.
7. CONTRACTOR SHALL PROVIDE TEMPORARY TAPS, BLOW-OFFS, AND THRUST BLOCKING AS REQUIRED TO FACILITATE FLUSHING, TESTING, AND DISINFECTION OF WATERLINES. REMOVE TEMPORARY TEST TAPS UPON COMPLETION OF DISINFECTION, AND REPLACE WITH STERILIZED TEMPORARY PLUGS. TEMPORARY PLUGS SHALL BE REMOVED TO MAKE FINAL CONNECTIONS TO SERVICE LINES.
8. CONNECTIONS TO CITY WATERLINES MAY REQUIRE TEMPORARY SHUTDOWNS OF CITY FACILITIES. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE CITY AND PROVIDE A MINIMUM OF 72 HOURS ADVANCE NOTICE PRIOR TO PERFORMING WATERLINE TIE-IN WORK. CONTRACTOR TO VERIFY WITH THE CITY IF CITY WATER LINES ARE TO BE TAKEN OUT OF SERVICE PRIOR TO PERFORMING THIS WORK. OPERATION OF VALVES SHALL BE BY CITY PERSONNEL ONLY.
9. WHERE A WATERLINE CROSSES A SANITARY SEWER LINE, ONE PIPE LENGTH OF THE WATERLINE MUST BE CENTERED AT THE CROSSING.

TOPOGRAPHIC SURVEY NOTES:

1. SURVEY WAS COMPLETED BY THE CITY OF PENDLETON. ELEVATIONS ARE BASED ON NGVD 1929 DATUM. HORIZONTAL COORDINATES ARE LOCAL CITY OF PENDLETON GRID SYSTEM.
2. UTILITY INFORMATION SHOWN HEREIN IS COMPILED FROM FIELD OBSERVED SURFACE FEATURES, AND FIELD LOCATED PAINT MARK "LOCATES" PERFORMED BY OTHERS. SURVEYOR MAKES NO GUARANTEE THAT UTILITIES SHOWN HEREIN COMPRISE ALL POSSIBLE UTILITIES IN THE AREA NOR WARRANTS THAT UTILITIES ARE IN THE EXACT LOCATIONS INDICATED.
3. THIS TOPOGRAPHIC SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT, AND THEREFORE DOES NOT PURPORT TO TO SHOW ALL EASEMENTS, ENCUMBRANCES, OR RESTRICTIONS OF RECORD, IF ANY.

PROJECT CONTACTS:

OWNER:
CITY OF PENDLETON, DEPT OF PUBLIC WORKS
500 SW DORION AVENUE
PENDLETON, OR 97801

OWNER'S REPRESENTATIVE:
BOB PATTERSON, P.E.
E: BOB.PATTERSON@PENDLETONOR.GOV
P: 541-966-0202
F: 541-966-0251

OWNER'S PROJECT SUPERINTENDENT:
TIM SMITH
E: TIM.SMITH@PENDLETONOR.GOV
P: 541-379-1195
F: 541-966-0251

CIVIL ENGINEER:
CONSOR
345 BOBWHITE COURT, SUITE 230
BOISE, ID 83706
CONTACT: WILL KIRBY, P.E.
E: WILL.KIRBY@CONSORENG.COM
P: 208-947-9033

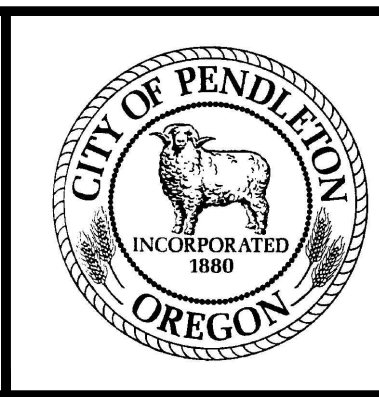
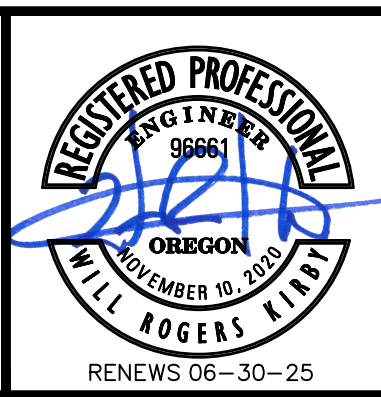
SURVEYOR:
CITY OF PENDLETON, DEPT OF PUBLIC WORKS
500 SW DORION AVENUE
PENDLETON, OR 97801
CONTACT: WAYNE GREEN
E: WAYNE.GREEN@PENDLETONOR.GOV
P: 541-966-0243
F: 541-966-0251

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-G.dwg G-4 3/14/2024 1:30 PM JEFFRY ORLANDO 24-1s (LMS Tech)

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK
DESIGNED
BB
DRAWN
DG
CHECKED



**CITY OF PENDLETON
WELL 11-11B**




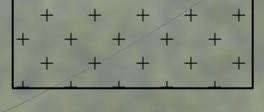
GENERAL			
GENERAL NOTES			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
G-4
4 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-ESC.dwg ESC-1 3/1/2024 4:56 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



LEGEND

-  AREA OF PROJECT IMPROVEMENTS
-  COMMERCIAL CONST ENTRANCE
SEE DET DWG 4-13, SHT ESC-3
-  CONSTRUCTION STAGING AND STOCKPILING AREA
-  PRESERVE NATURAL VEGETATION AND TEMPORARY SEEDING AREA

EROSION AND SEDIMENT CONTROL GENERAL NOTES:

1. CONTRACTOR SHALL PREPARE, SUBMIT, AND ACQUIRE AN OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) 1200-C EROSION CONTROL PLAN AND PERMIT PRIOR TO BEGINNING ANY SITE DISTURBING ACTIVITY. IF DISTURBING GREATER THAN ONE ACRE OF LAND AS PART OF THIS PROJECT, CONTRACTOR SHALL PROVIDE PAYMENT FOR ALL PERMIT FEES.
2. EMERGENCY EROSION CONTROL MATERIALS MUST BE KEPT ON SITE AT ALL TIMES.
3. INSTALL, INSPECT, CLEAN, AND MAINTAIN SEDIMENT FENCE TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE THROUGHOUT CONSTRUCTION. SEDIMENT FENCE SHALL BE INSTALLED PARALLEL TO SLOPE CONTOURS. ADDITIONAL SEDIMENT FENCE MAY BE REQUIRED BASED ON SITE CONDITIONS AND MEANS AND METHODS DEVELOPED BY CONTRACTOR. OVERLAY SEDIMENT FENCE 6" MINIMUM AND TURN LAST 6 FEET OF FENCE UPSLOPE (TYPICAL).
4. INSPECT, CLEAN, AND MAINTAIN GRAVEL CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT AND SEDIMENT LADEN WATER FROM LEAVING THE SITE THROUGHOUT CONSTRUCTION.
5. ADDITIONAL TRACKING CONTROL MEASURES SUCH AS A WHEEL WASH MAY BE NECESSARY IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT.
6. ON-SITE RUNOFF ACCUMULATION INTO LOW POINTS SHALL BE PUMPED BY THE CONTRACTOR TO A SUITABLE LOCATION, IF REQUIRED.
7. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROL DURING CONSTRUCTION (ANY TIME OF YEAR) IN ACCORDANCE WITH THE DEQ EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS, THE STANDARD CONSTRUCTION SPECIFICATIONS FOR THIS PROJECT AND THE EROSION CONTROL NOTES INCLUDED BELOW AND WITHIN THESE PLANS. IF DISCREPANCIES BETWEEN STANDARDS OCCUR, THE MORE STRINGENT REGULATION SHALL APPLY.
8. THE IMPLEMENTATION OF EROSION/SEDIMENTATION CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
9. THE BOUNDARIES OF THE LIMITS OF WORK SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED LIMITS OF WORK SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
10. ESC FACILITIES MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
11. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONALITY.
12. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
13. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
14. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED.
15. SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1 FOR EACH PHASE OF CONSTRUCTION. ROUGHEN AND SEED ALL DISTURBED SURFACES OUTSIDE OF CRUSHED ROCK SURFACING TOP DRESSING.
16. IF THERE ARE EXPOSED SOILS OR SOILS NOT FULLY STABILIZED FROM NOVEMBER 1 THROUGH APRIL 30, THE WET WEATHER EROSION CONTROL MEASURES WILL BE IN EFFECT ACCORDING TO THE OREGON DEQ TECHNICAL GUIDANCE HANDBOOK.
17. ESC MEASURES SHALL BE REMOVED BY THE CONTRACTOR WHEN VEGETATION IS FULLY ESTABLISHED.
18. CONTRACTOR SHALL PREPARE AND SUBMIT A DE-WATERING PLAN FOR PROPER DISPOSAL OF ALL WATER RESULTING FROM EXCAVATION AT THE PROJECT SITE. SEE SPECIFICATION FOR DE-WATERING REQUIREMENTS.
19. COMPLY WITH APPLICABLE OREGON DEQ DUST RULES (DIVISION 208) DURING EXCAVATION AND/OR DEMOLITION WORK.

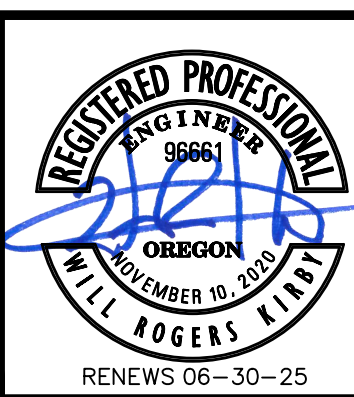
<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1533>
20. THE OWNER AND OPERATOR OF THE ROCK CRUSHER AND ASPHALT PLANT THAT PROVIDES MATERIAL FOR THE PROJECT SHALL OPERATE UNDER AN AIR QUALITY PERMIT.

PLAN
SCALE: 1"=20'

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DG
DESIGNED
BAW
DRAWN
WRK
CHECKED



CITY OF PENDLETON
WELL 11-11B

EROSION AND SEDIMENT CONTROL			
OVERVIEW			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
ESC-1
5 of 65

LEGEND

- EXISTING CONTOURS (1') 289
- EXISTING CONTOURS (5') 290
- PROPOSED CONTOURS (1')
- PROPOSED CONTOURS (5') 280
- DRAINAGE FLOW DIRECTION
- SEDIMENT FENCING W/ PLASTIC MESH FENCE
- STRAW WATTLES PER DETAIL ON SHT ESC-3
- PRESERVE NATURAL VEGETATION AND TEMPORARY SEEDING AREA

EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC). MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. "STOCK PILE AREA" SHALL BE DESIGNATED PRIOR TO EXCAVATION CUT ACTIVITIES. ALL EXCAVATED MATERIALS SHALL BE HAULED OFFSITE.
3. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
4. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING SEEDING, JUTE MATTING, WATTLES, AND ROCK CHECK DAMS" SHALL BE IN-PLACE OVER ALL EXPOSED SOILS BY OCTOBER 1.

GRADING, UTILITY EROSION, AND SEDIMENT CONSTRUCTION NOTES:

1. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
 - A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
 - B. DWARF GRASS MIX (MINIMUM 100 LB/AC)
 - a. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
 - b. CREEPING RED FESCUE (20% BY WEIGHT)
 - C. STANDARD HEIGHT GRASS MIX (MINIMUM 100 LB/AC)
 - a. ANNUAL RYEGRASS (40% BY WEIGHT)
 - b. TURF-TYPE FESCUE (60% BY WEIGHT)
2. SLOPES AND DISTURBED AREA TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
3. LONG TERM SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE. SEE SPECIFICATIONS. IN ADDITION, ALL SLOPES OF 2:1 OR GREATER SHALL RECEIVE MATTING.
4. SEEDING SHALL BE PERFORMED NO LATER THAN SEPTEMBER 1 FOR EACH PHASE OF CONSTRUCTION. ROUGHEN AND SEED ALL DISTURBED SURFACES OUTSIDE OF CRUSHED ROCK SURFACING TOP DRESSING.
5. TEMPORARY SLOPE AND DISTURBED AREA STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES, IN ACCORDANCE WITH SECTION 31 22 13, ROUGH GRADING.
6. STOCKPILED SOIL OR STRIPPINGS SHALL BE HAULED OFFSITE. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
7. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
8. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
9. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS IN THE VICINITY OF THE SITE USED FOR HAULING SOIL ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERM OR TEMPORARY SETTLING PITTS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.



PLAN

SCALE: 1"=10'

TYPICAL EROSION CONTROL MEASURES

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
 BB DRAWN
 DG CHECKED



**CITY OF PENDLETON
 WELL 11-11B**

EROSION AND SEDIMENT CONTROL

SITE PLAN

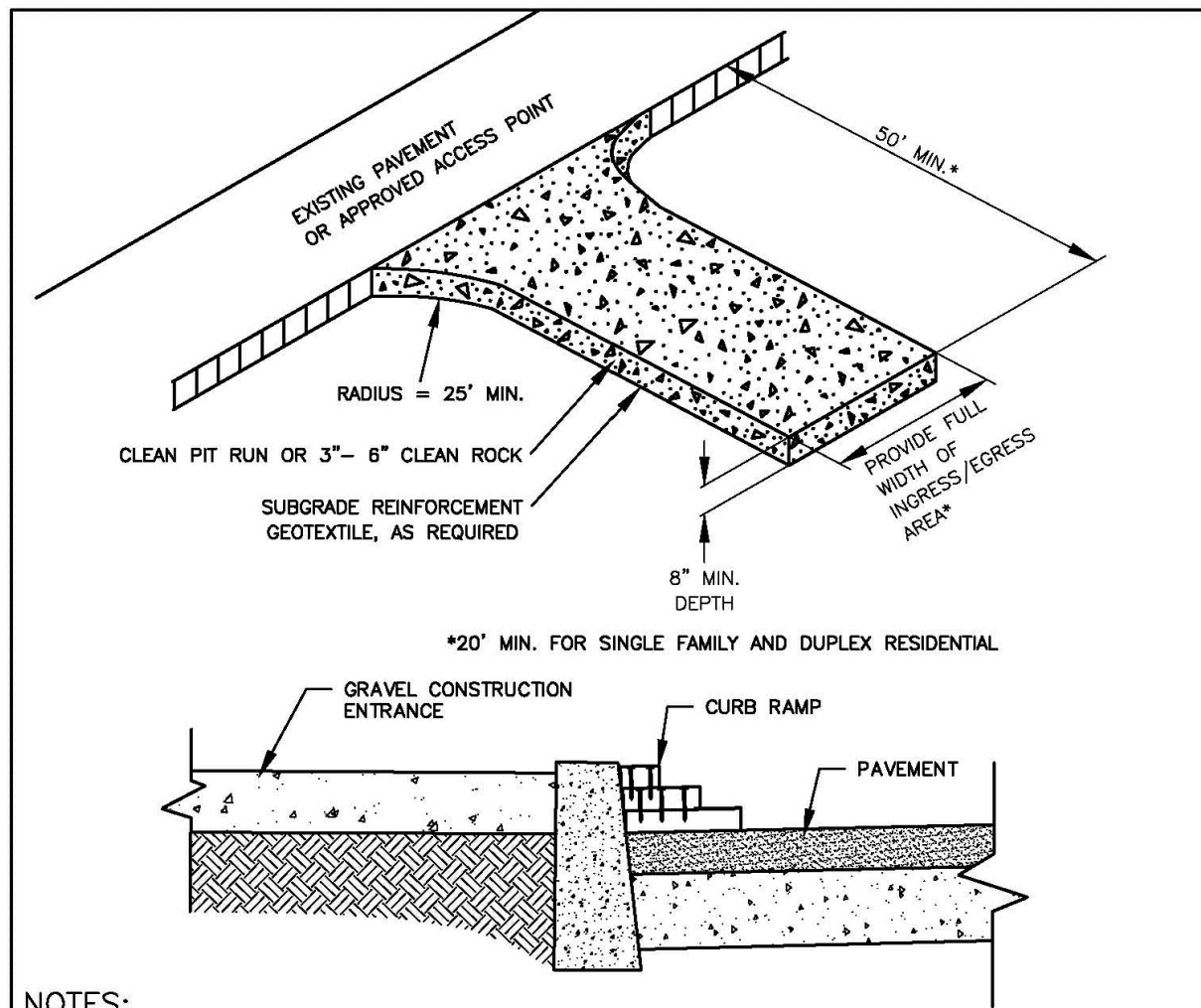
SHEET

ESC-2

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-ESC.dwg ESC-2 3/1/2024 4:56 PM JEFFRY.ORLANDO 24.1s (LMS Tech)

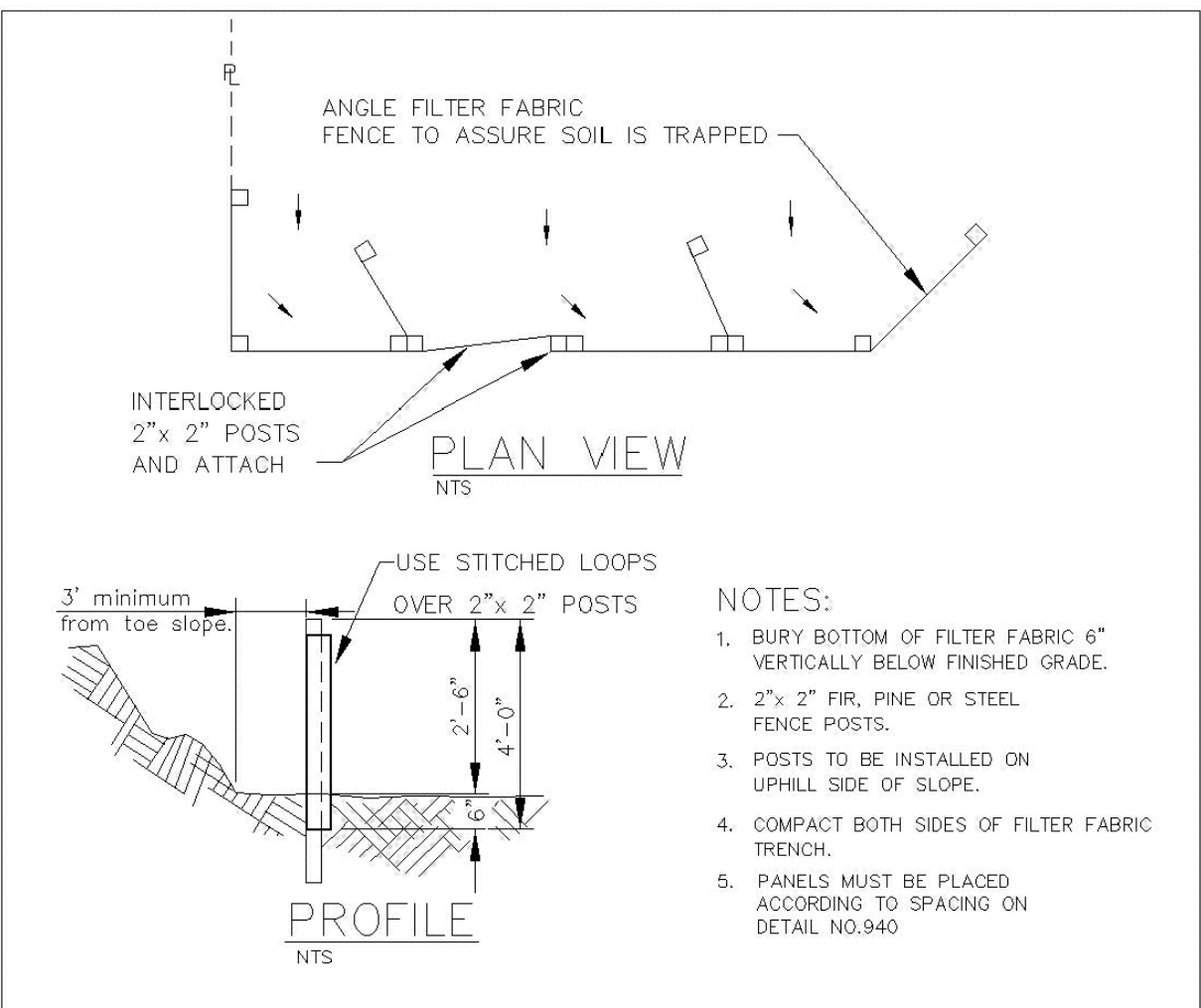
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-ESC.dwg ESC-3 3/1/2024 4:56 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
 5. **DIMENSIONS**
SINGLE FAMILY
 20' LONG BY 20' WIDE 8" DEEP OF 3/4" MINUS CLEAN ROCK.
COMMERCIAL
 50' LONG BY 20' WIDE 3-6" CLEAN ROCK.
 GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

CONSTRUCTION ENTRANCE

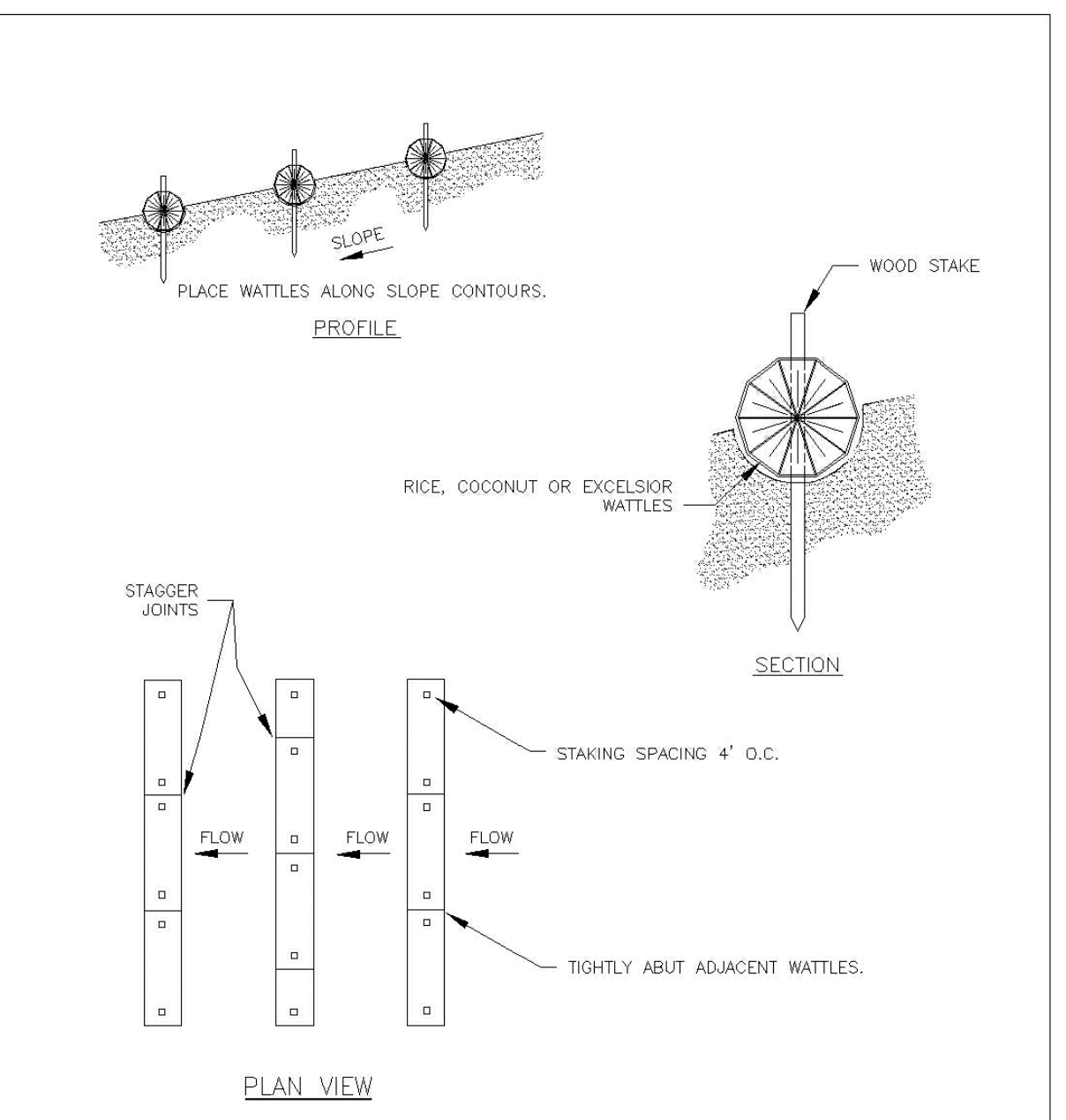
DETAIL DRAWING 4-13 REVISED 01-09



- NOTES:**
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
 2. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
 3. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
 4. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
 5. PANELS MUST BE PLACED ACCORDING TO SPACING ON DETAIL NO.940.

SEDIMENT FENCE

DETAIL DRAWING 4-23 REVISED 01-09



- NOTES:**
1. STAKING SPECIFICATIONS:
 a. 1"x2" WOODEN STAKES
 b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY ERODIVE SOILS.
 2. SPACING IN ACCORDANCE WITH DETAIL 940.

WATTLES

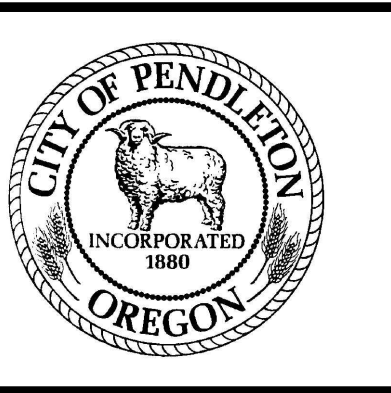
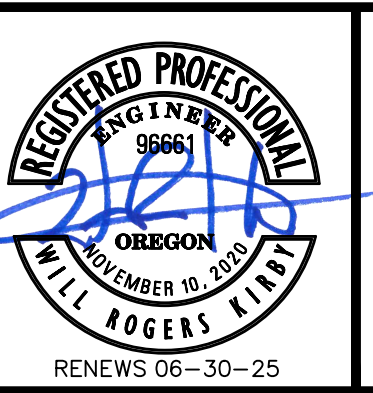
DETAIL DRAWING 4-27 REVISED 01-09

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
 BB DRAWN
 DG CHECKED



CITY OF PENDLETON
WELL 11-11B

EROSION AND SEDIMENT CONTROL			
DETAILS			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
ESC-3
 7 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-C.dwg C-1 3/1/2024 3:36 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



PLAN
SCALE: 1"=80'

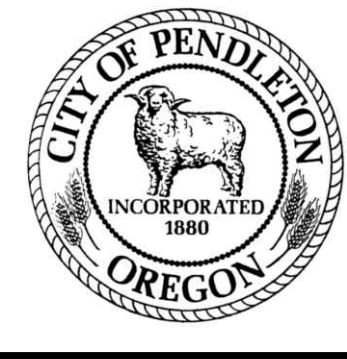
NOTES:

1. THIS SHEET FOR INFORMATIONAL PURPOSES ONLY TO PROVIDE OVERVIEW OF EXISTING ROADWAYS, EASEMENTS, AND PROPOSED WELL SITE IN RELATION TO PROJECT AREA AND DOES NOT IDENTIFY WORK OR MATERIALS REQUIRED FOR CONSTRUCTION.
2. NO CONSTRUCTION TRUCK STAGING OR PARKING SHALL BE ALLOWED ON SW HOUTAMA RD.
3. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE PROJECT SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING AND IN RELATION TO PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING PROJECT CONSTRUCTION AREAS CLEAN OF DEBRIS, SAFE & SECURE AT ALL TIMES. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
4. COORDINATE WITH WWTRRF STAFF TO LOCATE UTILITIES IN PASTURE
5. FOR SITE GRADING PLAN, SEE SHEET C-3
6. FOR SITE PIPING PLAN, SEE SHEETS C-4 AND C-5
7. FOR SITE ESC AND PROJECT BOUNDARY, SEE SHEET ESC-1

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK
DESIGNED
BB
DRAWN
DG
CHECKED



**CITY OF PENDLETON
WELL 11-11B**

CIVIL SITE MAPPING AND GENERAL PROJECT OVERVIEW			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
C-1
8 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-C.dwg C-2 3/1/2024 3:36 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



NOTES:

1. CONCRETE PADS SHALL BE MIN. 6" THICK WITH #4 @ 12" O.C. EA WAY. SLOPE AWAY FROM WELL HOUSE A MIN. OF 2 %. WIDTH OF PADS SHALL EXTEND 4'-0" FROM WELL HOUSE AND BE 3" WIDER THAN DOORWAYS. PROVIDE 6" THICK ¾"-0 CRUSHED ROCK, COMPACTED PER SPECIFICATIONS.
2. WELDED PIPE FENCE CORNERS SHALL MATCH EXISTING CORNERS AT THE SOUTH END OF THE PROJECT. PAINT SHALL BE SELECTED TO CLOSELY MATCH EXISTING CORNERS. INSTALLATION SHALL INCLUDE CONCRETE EMBEDMENT OF POSTS, PER MANUFACTURERS RECOMMENDATION.
3. NEW FENCE SHALL MATCH EXISTING FOUR-WIRE FENCE. FENCE SHALL INCLUDE 7' GREEN T-POSTS PLACED APPROXIMATELY 8' O.C. EVERY 4TH POST SHALL BE A 4" x 4" x 8½' WOODEN POST, 2½' MIN. EMBEDDED IN CONC. WIRE SHALL BE 9-GAUGE MIN. GALVANIZED WIRE AT 1' O.C. VERTICALLY. ALL COMPONENTS TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
4. FINISHED SURFACE SHALL BE IMPORTED STRUCTURAL FILL, TYPE A1, ¾"-0", 12" THICK, OVER 160N MIRAFI GEOTEXTILE, OR EQUAL.
5. FURNISH PERMANENT SEEDING OUTSIDE GRAVEL AREAS TO THE EXISTING GRADE PER ESC SHEETS
6. SEE DETAIL 4, SHT C-7 FOR BUILDING FOUNDATION REQUIREMENTS.

FACILITY LAYOUT POINTS				
PT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	WELL 11B WELL HEAD (BY OTHERS)	N:50126.95	E:35457.38	1004.80
2	S CORNER OF WELL 11B	N:50096.89	E:35469.30	1004.80
3	N CORNER OF WELL 11B	N:50133.94	E:35453.47	1004.80
4	E CORNER OF WELL 11B FM VAULT	N:50102.32	E:35486.09	1004.72
5	W CORNER OF WELL 11B FM VAULT	N:50098.27	E:35475.93	1004.72
6	S CORNER OF WELL 11	N:50153.22	E:35495.96	1005.00
7	N CORNER OF WELL 11	N:50169.94	E:35478.52	1005.12
8	S CORNER OF WELL 11 FM VAULT	N:50147.82	E:35479.23	1004.89
9	N CORNER OF WELL 11 FM VAULT	N:50153.69	E:35475.96	1004.89

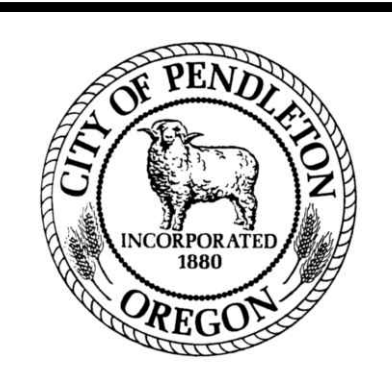
FENCE LAYOUT POINTS		
PT #	NORTHING	EASTING
①	N:50162.44	E:35463.40
②	N:50164.56	E:35455.89
③	N:50090.04	E:35434.80
④	N:50075.14	E:35487.37
⑤	N:50074.34	E:35494.76

SITE PLAN
SCALE: 1"=10'

NO.	DATE	BY	REVISION

NOTICE
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
BB DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

CIVIL
SITE LAYOUT AND
HORIZONTAL CONTROL PLAN

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
C-2
9 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-C.dwg C-3 3/1/2024 3:36 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



- NOTES:**
1. GRADING SHOWN IS APPROXIMATE. CONTRACTOR SHALL TRANSITION GRADING FROM THE SLOPES SHOWN AS REQUIRED. WHERE PROPOSED GRADE AND EXISTING GRADE CONFLICT AND RESULTS IN THE POTENTIAL PONDING OF WATER ON THE SITE IMPROVEMENTS, CONTRACTOR SHALL GRADE TO ENSURE WATER CAN DRAIN TO THE WEST AND SOUTH OF THE SITE.
 2. CONTRACTOR SHALL VERIFY SPOT ELEVATIONS AND GRADING WILL PROMOTE DRAINAGE AS SHOWN. IF DEVIATIONS EXIST CONTRACTOR SHALL NOTIFY ENGINEER.
 3. STRIP AND GRUB ALL AREAS TO BE EXCAVATED OR THAT WILL RECEIVE FILL AS PART OF THE OS PROJECT. FINAL FILL AND CUT SLOPES SHALL NOT EXCEED 1V:3H.

SITE PLAN
SCALE: 1"=10'



NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
JWO DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

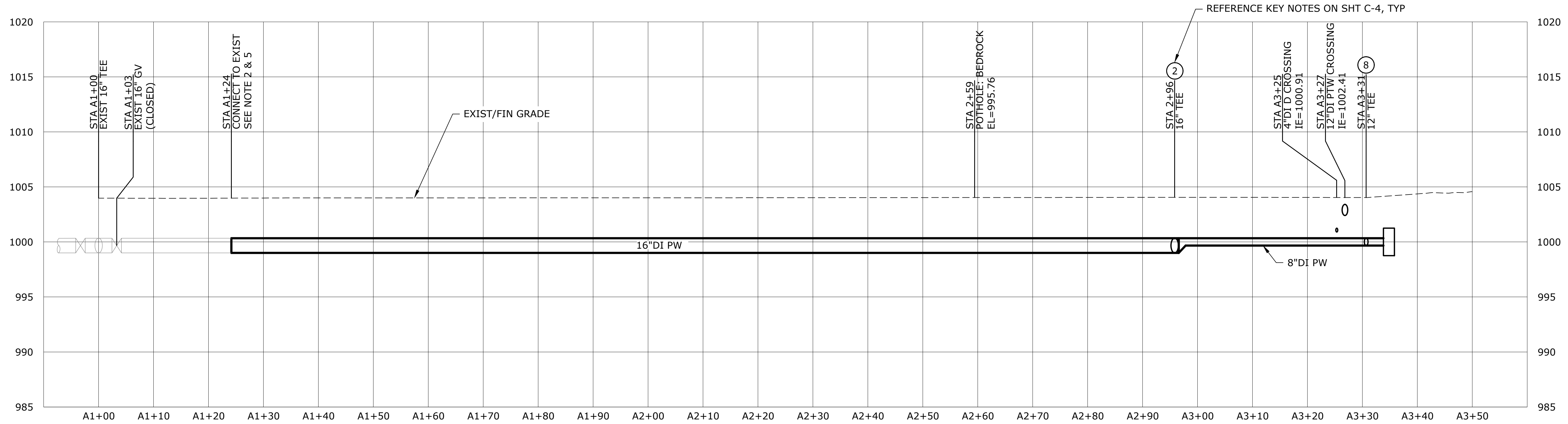
CIVIL
SITE GRADING PLAN
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
C-3
10 of 65



- NOTES:**
1. SW HOUTAMA ROAD WATERLINE PROJECT DATUM IS 68.09' LOWER THAN WELL 11B DATUM.
 2. CONTRACTOR SHALL FIELD VERIFY LOCATION OF THE EXISTING 16" CAP FROM SW HOUTAMA ROAD PROJECT.
 3. CONTRACTOR SHALL RESTRAIN ALL PIPE, VALVES AND FITTINGS.
 4. POTABLE WATERLINE SHALL HAVE A MIN. OF 3'-6" COVER.
 5. PREVIOUS WORK INCLUDED ONE (1) PIPE LENGTH OF 16" DI PIPE. CONTRACTOR SHALL CONNECT TO THE EXISTING 16" DI PIPE AS SHOWN. THE EXISTING PIPE LENGTH IS UNTESTED AND HAS NOT BEEN DISINFECTED. CONTRACTOR SHALL TEST AND DISINFECT AGAINST THE EXISTING 16" GATE VALVE INCLUDING THE EXISTING PIPE LENGTH PRIOR TO PLACING WATERLINE IN SERVICE. DEPTH TO THE EXISTING PIPE IS UNKNOWN, CONTRACTOR SHALL POTHOLE TO VERIFY DEPTH AND TRANSITION AS REQUIRED.
 6. TRENCH SURFACE RESTORATION SHALL BE IMPORTED STRUCTURAL FILL, TYPE A1, ¾"-0", 4" THICK.

PLAN
SCALE: 1"=10'



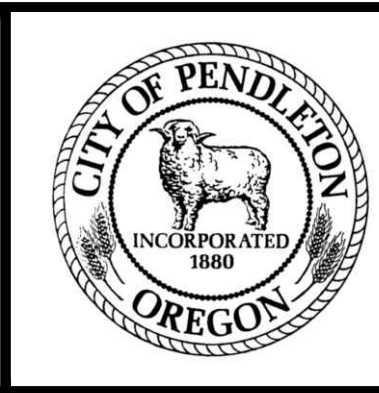
PROFILE - 'A'
SCALE: 1"=10' HORIZ, 1"=5' VERT

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-C.dwg C-5 3/1/2024 3:36 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)

NO.	DATE	WRK BY	BID SET	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
BB DRAWN
DG CHECKED

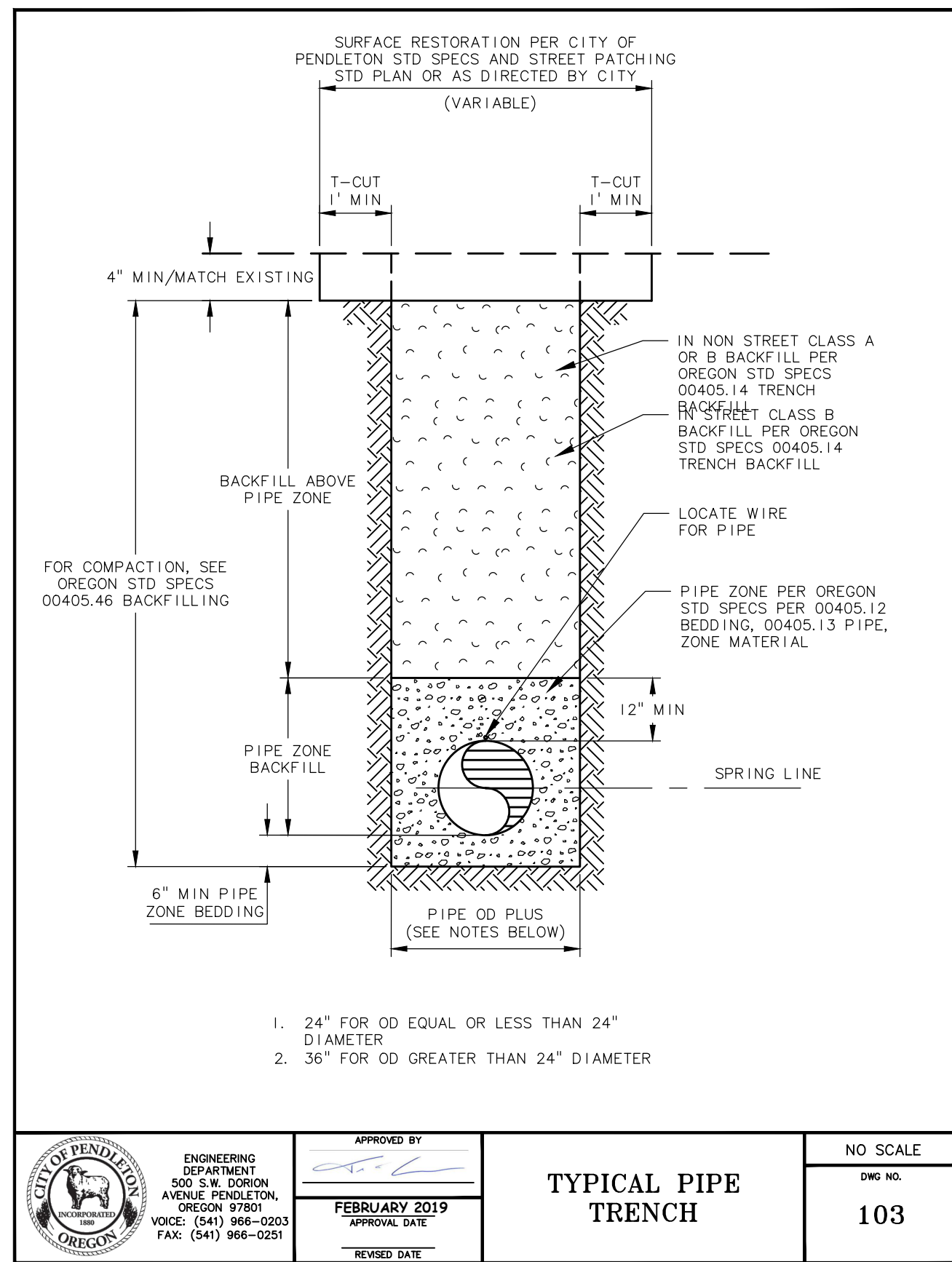


CITY OF PENDLETON
WELL 11-11B

CIVIL
SITE PIPING PLAN CONT.
PROJECT NO.: 21-31133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
C-5
12 of 65

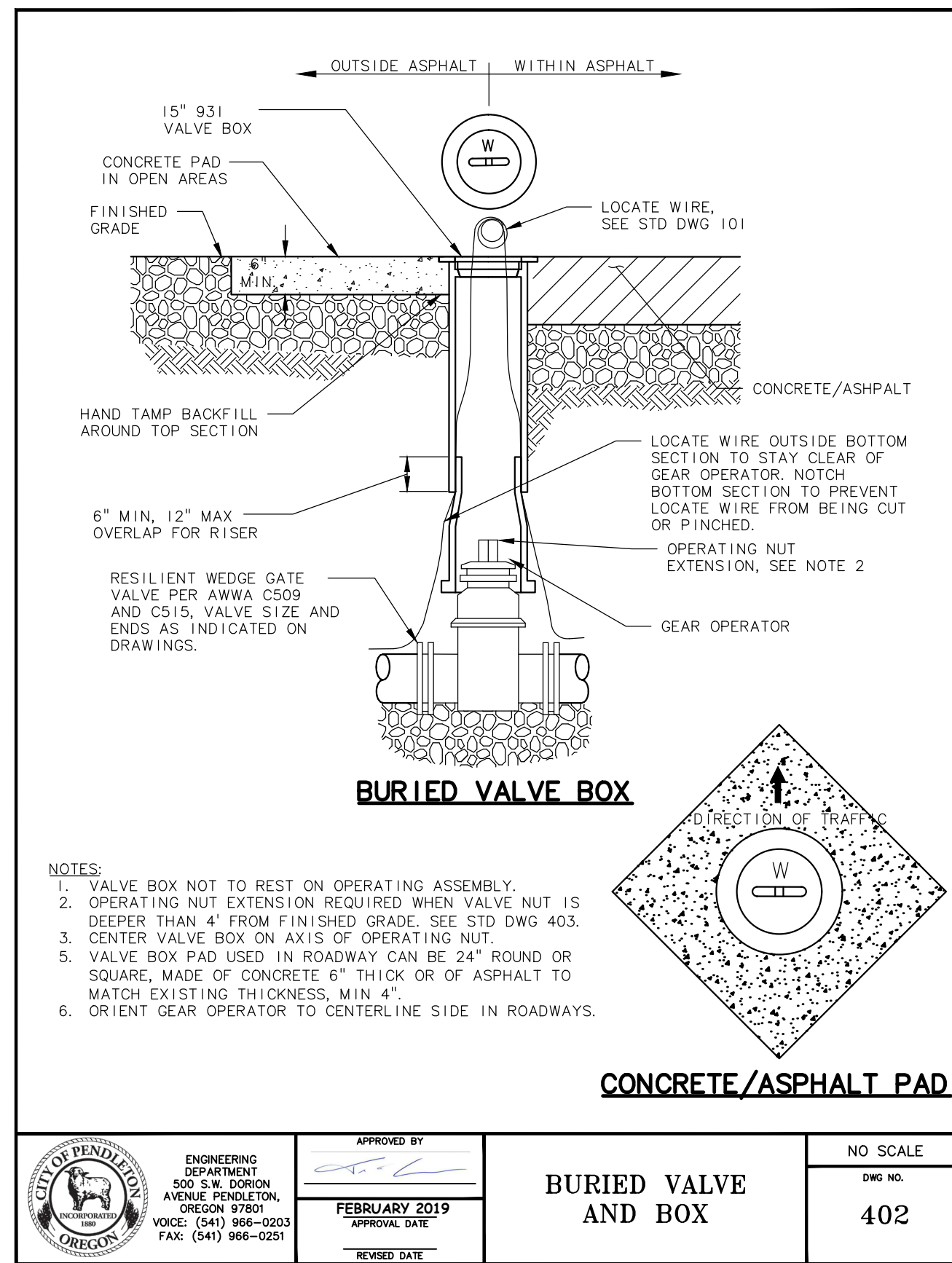
I:\VOL_P\Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-C-DETS.dwg C-6 2/21/2024 2:53 PM JEFFERY. ORLANDO 24-1s (LMS Tech)



APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

TYPICAL PIPE TRENCH

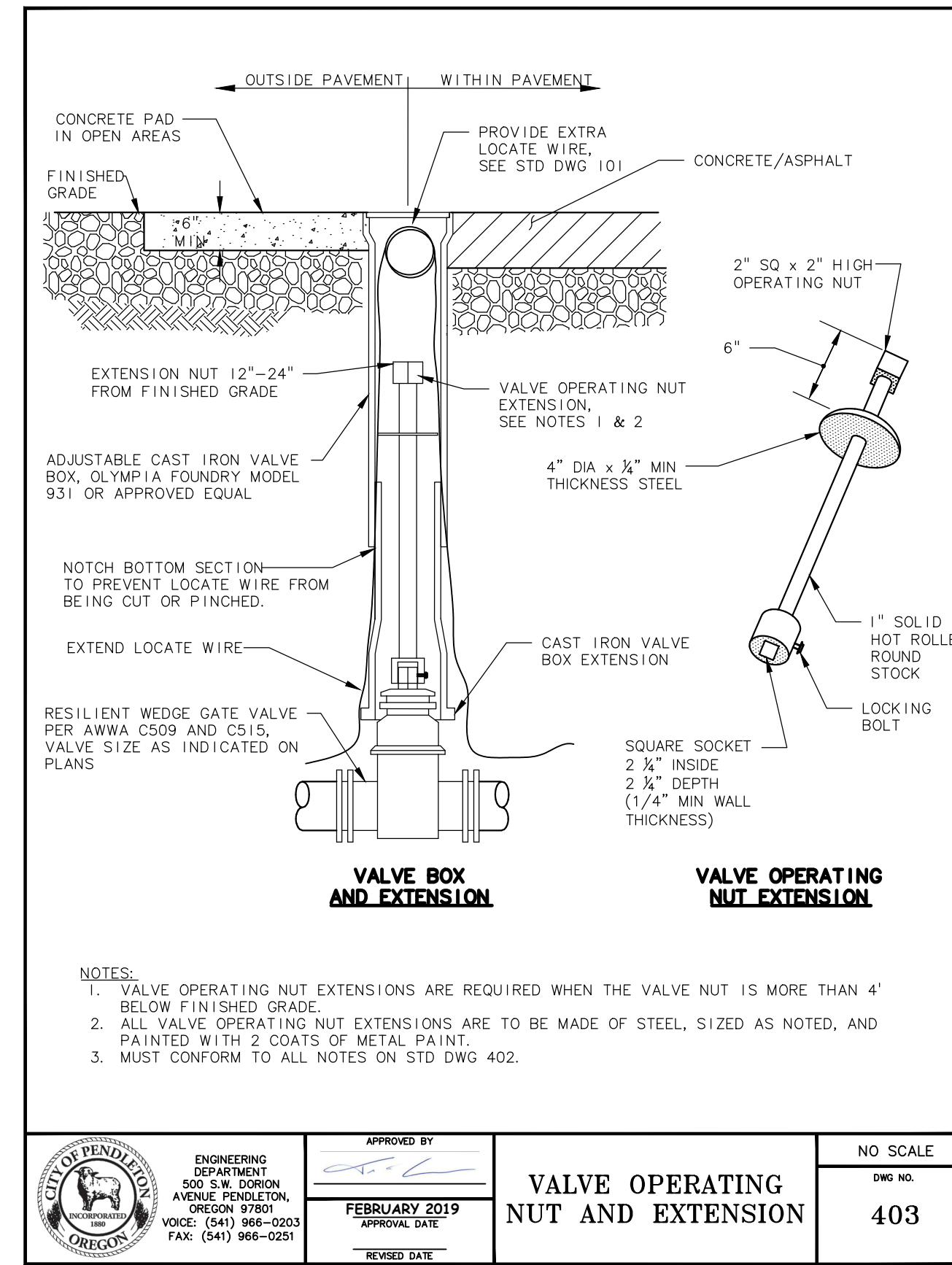
NO SCALE
 DWG NO. 103



APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

BURIED VALVE AND BOX

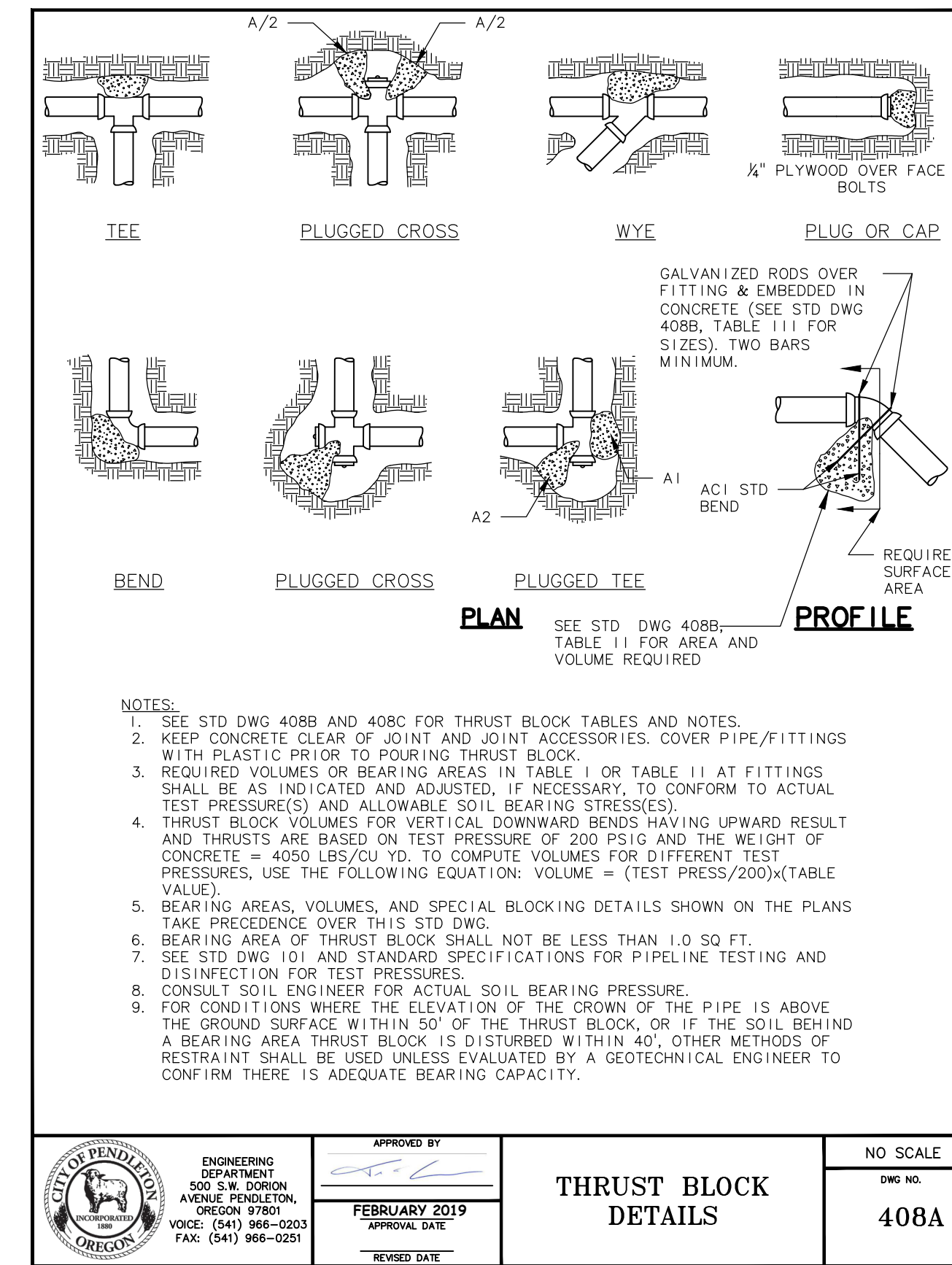
NO SCALE
 DWG NO. 402



APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

VALVE OPERATING NUT AND EXTENSION

NO SCALE
 DWG NO. 403



APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

THRUST BLOCK DETAILS

NO SCALE
 DWG NO. 408A

TABLE I - HORIZONTAL FITTINGS

FITTING SIZE (INCH.)	SAFETY FACTOR	BEARING AREA, "A", OF THRUST BLOCKS IN SQUARE FEET							
		TEE, WYE, PLUG, OR CAP	90° BEND, PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22.5° BEND	11.25° BEND	
4	2.125	2.7	3.8	3.9	2.5	2.0	1.0	1.0	
6	2.000	5.7	8.0	8.3	5.3	4.3	2.2	1.1	
8	1.925	9.7	13.7	14.2	9.1	7.4	3.8	1.9	
10	1.850	14.5	20.5	21.4	13.7	11.1	5.7	2.8	
12	1.825	20.6	29.2	30.4	19.5	15.8	8.1	4.0	
16	1.775	35.7	50.5	52.5	33.6	27.3	13.9	7.0	
18	1.750	44.5	63.0	65.5	42.0	34.1	17.4	8.7	

BEARING AREAS BASED UPON PEAK OPERATING PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 1500 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:
 BEARING AREA = (TEST PRESSURE/200) X (1500/SOIL BEARING STRESS) X (TABLE VALUE)

TABLE II - VERTICAL DOWNWARD BEND

FITTING SIZE	90°		45°		22.5°		11.25°	
	VOL (CY)	MIN AREA (SF)	VOL (CY)	MIN AREA (SF)	VOL (CY)	MIN AREA (SF)	VOL (CY)	MIN AREA (SF)
4	0.9	2.5	0.7	1.0	0.4	1.0	0.2	1.0
6	*	*	1.5	1.7	0.8	1.0	0.4	1.0
8	*	*	*	*	1.4	1.0	0.7	1.0
10	*	*	*	*	*	*	1.1	1.0
12	*	*	*	*	*	*	1.6	1.0
16	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*

BEARING AREAS BASED UPON TEST PRESSURE OF 200 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 1500 POUNDS PER SQUARE FOOT.
 *THRUST BLOCK WITH VOLUME OVER 2 CY NOT ALLOWED FOR VERTICAL DOWNWARD BEND. SEE STD DWG 408A, PROFILE DIAGRAM. USE RESTRAINED JOINT PIPE, SEE STD DWG 407A AND 407B.

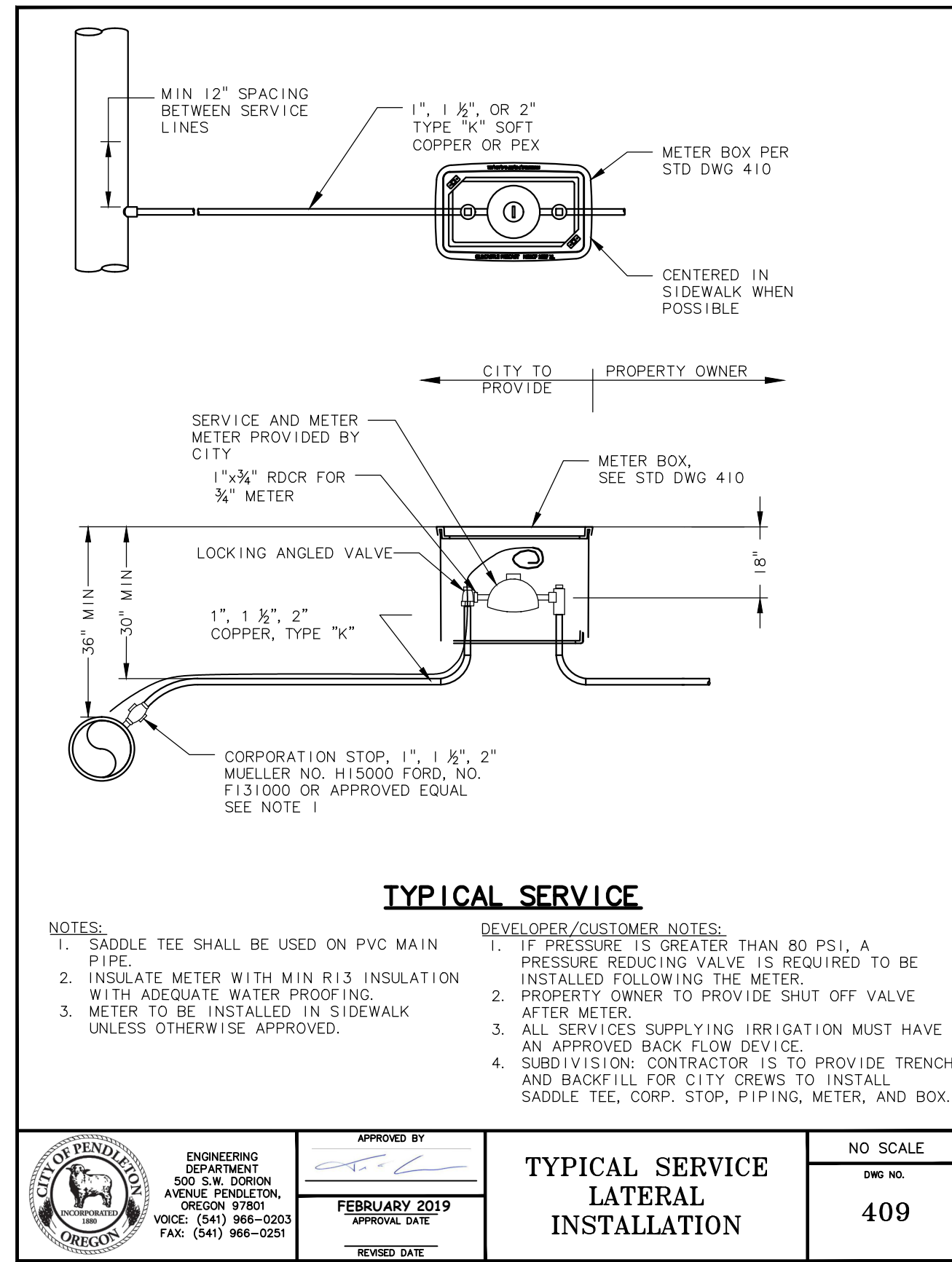
TABLE III

FITTING SIZE	ROD SIZE	EMBEDMENT
6" OR LESS	1/2"	16"
8" - 12"	3/8"	20"
12" - 14"	1/2"	24"
16" - 18"	1"	28"

APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

THRUST BLOCK TABLES

NO SCALE
 DWG NO. 408B



APPROVED BY: [Signature]
 ENGINEERING DEPARTMENT
 500 S.W. DORRIN AVENUE, PENDLETON, OREGON 97801
 VOICE: (541) 966-0203
 FAX: (541) 966-0251
 FEBRUARY 2019
 APPROVAL DATE
 REVISED DATE

TYPICAL SERVICE LATERAL INSTALLATION

NO SCALE
 DWG NO. 409

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

NO.	DATE	BY	REVISION
3	03/13/2024	WRK	BID SET

WRK DESIGNED
 BB DRAWN
 DG CHECKED



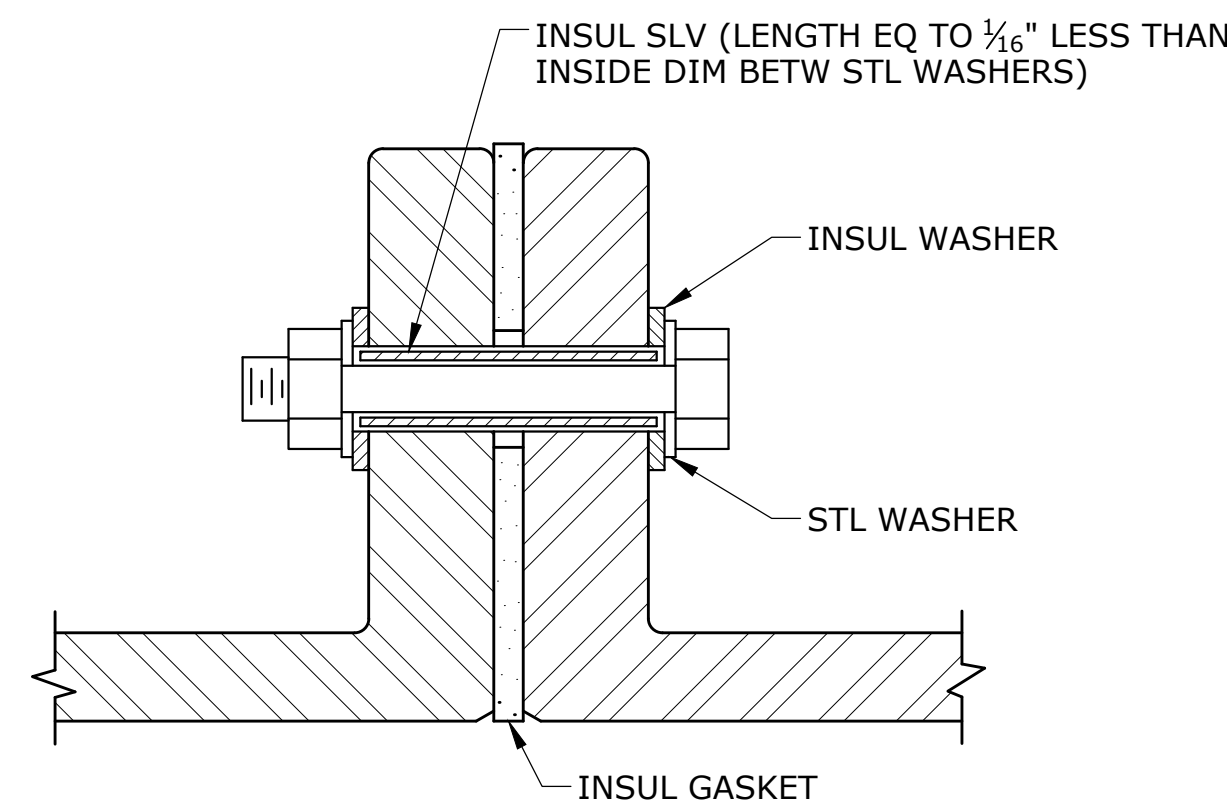
CIVIL

CITY OF PENDLETON STANDARD DETAILS

SHEET C-6

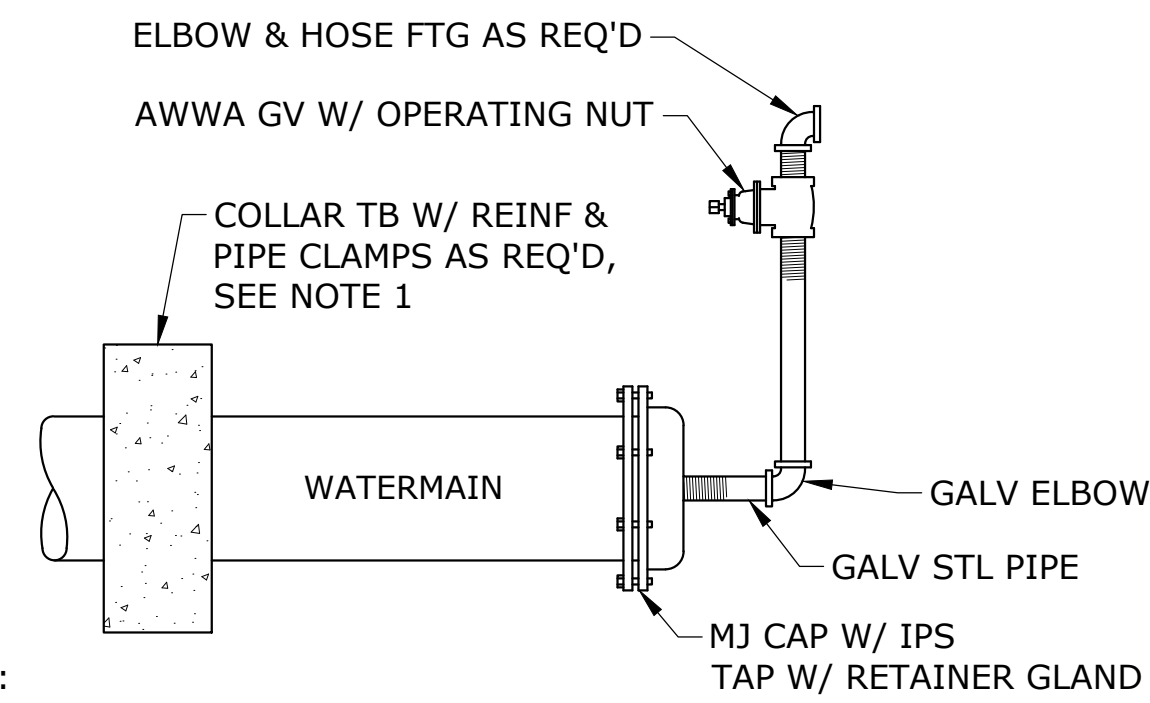
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

13 of 65



INSULATED FLANGE JOINT DETAIL
SCALE: NTS

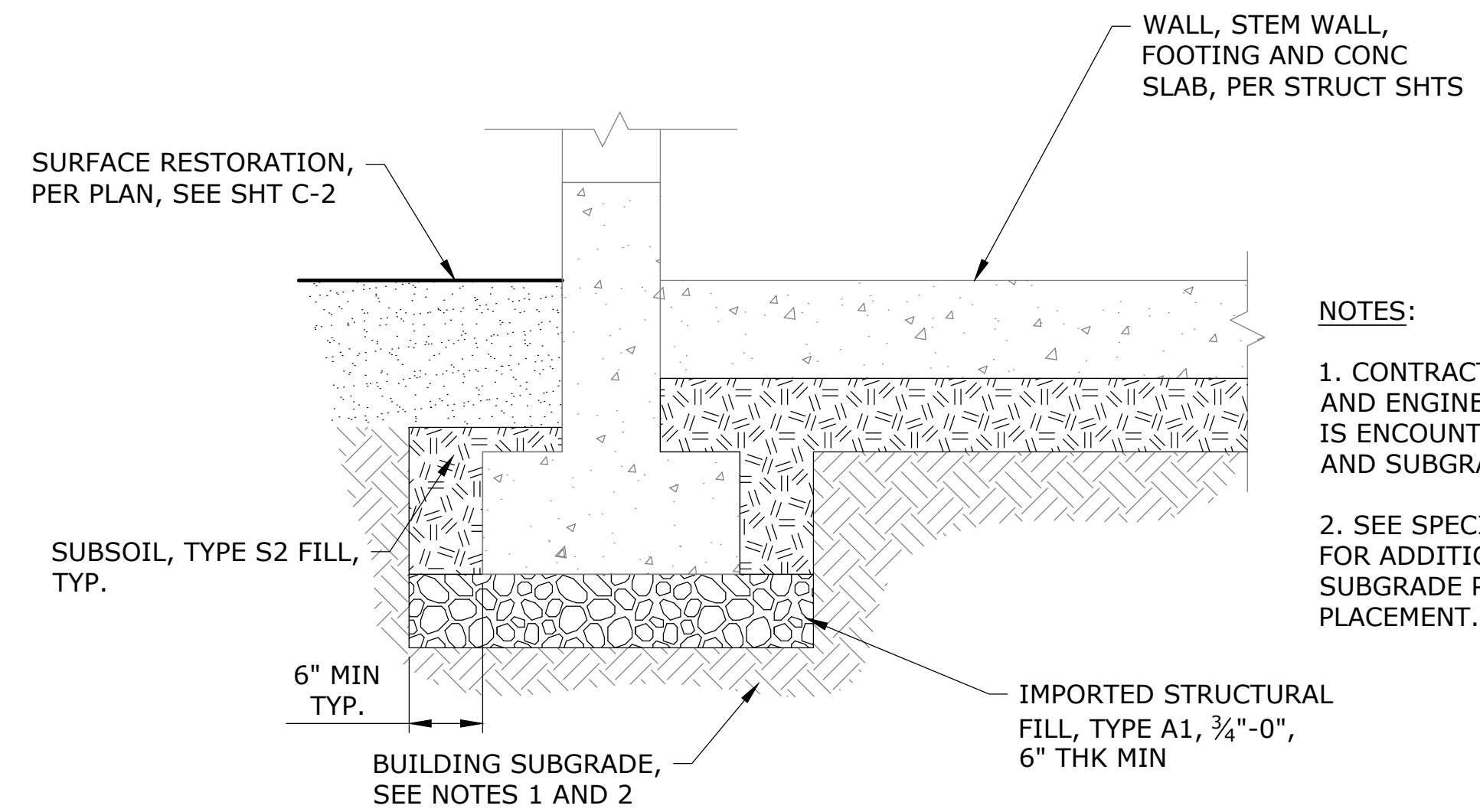
1
-



- NOTES:
1. FOR TEMPORARY BLOW-OFFS, CONTRACTOR TO PROVIDE TEMPORARY THRUST RESTRAINT AS REQUIRED.
 2. SEE SPECIFICATIONS REGARDING DISPOSAL/DECHLORINATION FOR SUPERCHLORINATED WATER.
 3. PROVIDE LARGER BLOW-OFF PIPING MATERIALS AT CONTRACTOR OPTION.
 4. FOR CONCRETE CYLINDER PIPE OR STEEL PIPE, PROVIDE SIMILAR ASSEMBLY AT TEST HEADS.
 5. PROVIDE PIPING TO ACHIEVE 2.5 FTS IN WATERMAIN FOR FLUSHING, 2" MINIMUM.

TEMPORARY BLOW-OFF ASSEMBLY
SCALE: NTS

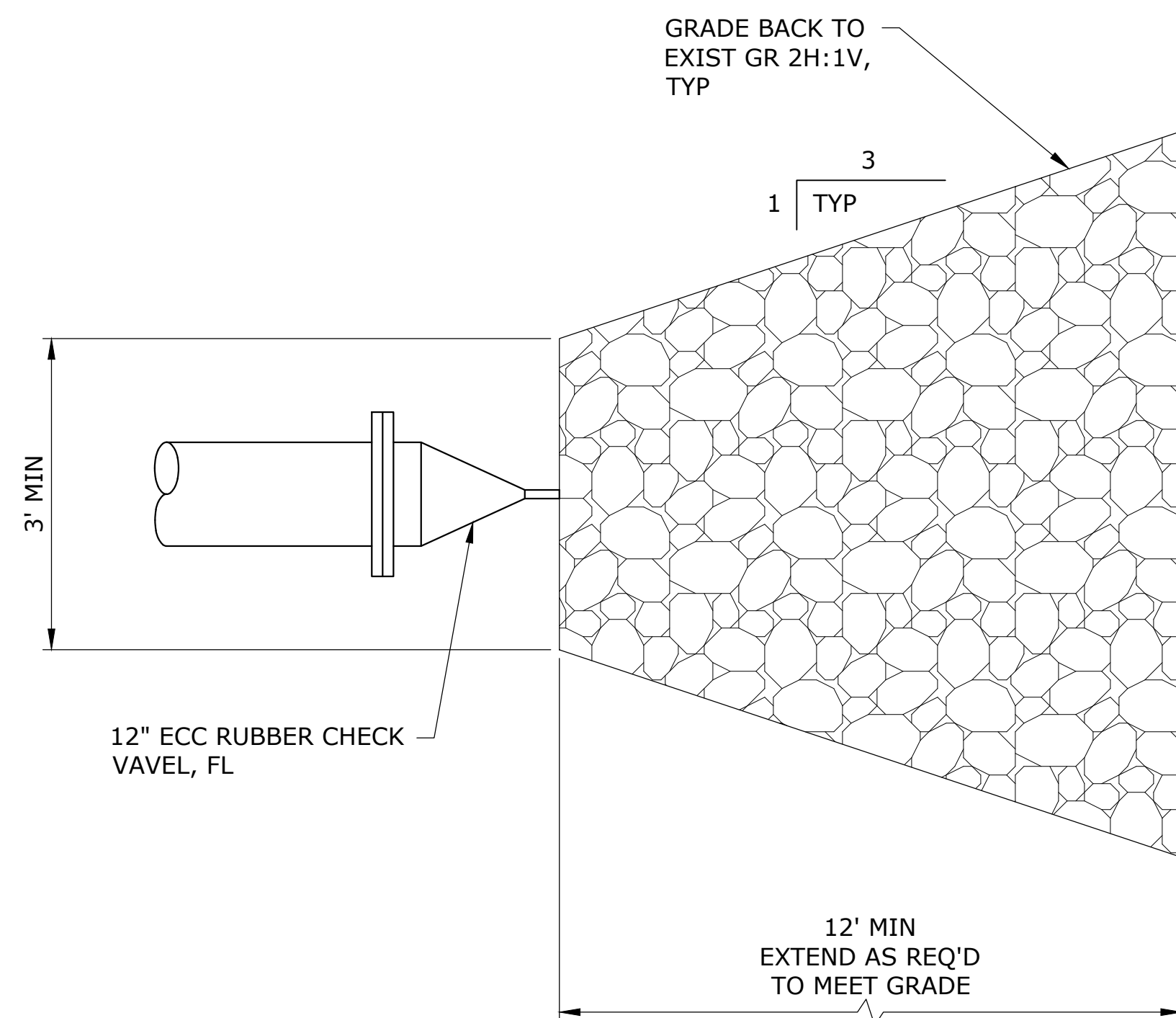
2
-



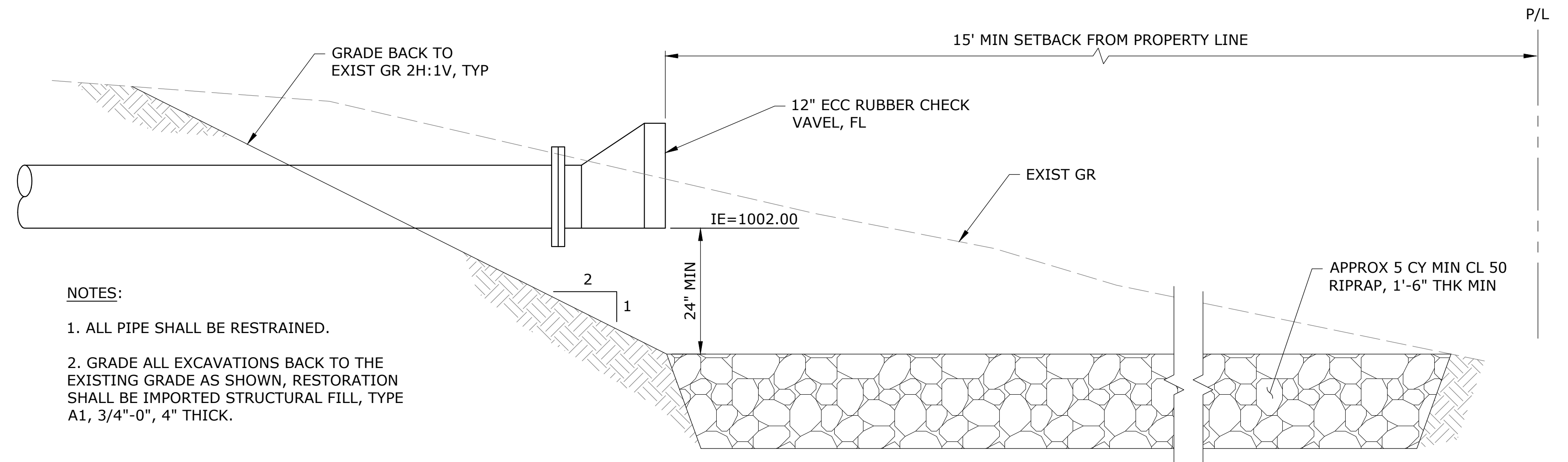
- NOTES:
1. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER, IF UNCONSOLIDATED FILL IS ENCOUNTERED DURING EXCAVATION AND SUBGRADE PREPARATION.
 2. SEE SPECIFICATION 31 23 23 - FILL FOR ADDITIONAL REQUIREMENTS FOR SUBGRADE PREPARATION AND FILL PLACEMENT.

BUILDING FOUNDATION DETAIL
SCALE: NTS

4
-



PLAN



- NOTES:
1. ALL PIPE SHALL BE RESTRAINED.
 2. GRADE ALL EXCAVATIONS BACK TO THE EXISTING GRADE AS SHOWN, RESTORATION SHALL BE IMPORTED STRUCTURAL FILL, TYPE A1, 3/4\"/>

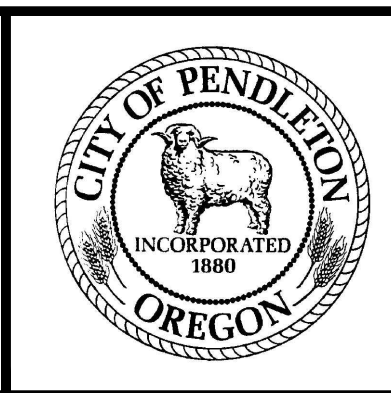
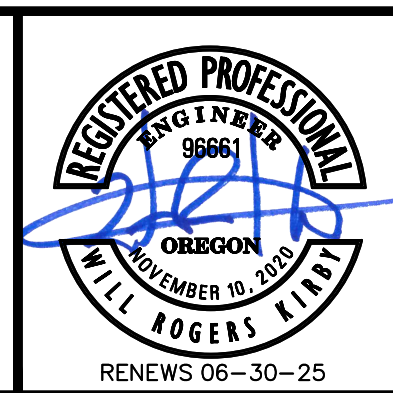
PUMP-TO-WASTE DISCHARGE
SCALE: NTS

3
C-4

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-C-DETS.dwg C-7 2/21/2024 2:53 PM JEFFERY. ORLANDO 24-1s (LMS Tech)

NO.	DATE	BY	REVISION

NOTICE	WRK
0 1/2 1	DESIGNED
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	BB
	DRAWN
	DG
	CHECKED



CITY OF PENDLETON
WELL 11-11B

CIVIL			
MISCELLANEOUS CIVIL DETAILS			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
C-7
14 of 65

ZONING CODE INFORMATION

M-2 HEAVY INDUSTRIAL

BUILDING CODE INFORMATION
APPLICABLE CODES

2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
2021 OREGON ENERGY EFFICIENCY CODE (OEESC)
2021 OREGON ELECTRICAL SPECIALTY CODE (OESC)

HEIGHTS AND AREAS PERMISSIBLE OSSC

FOR F-1/H-4 OCCUPANCY, TYPE VB CONSTRUCTION, NON-SPRINKLERED
PER TABLE 504.3, 40-FT HEIGHT
PER TABLE 504.4, 1-STORY ALLOWED
PER TABLE 506.2, 6,500 SQFT
PER TABLE 601, FIRE RESISTANCE RATING 0 HOURS

BUILDING SUMMARY

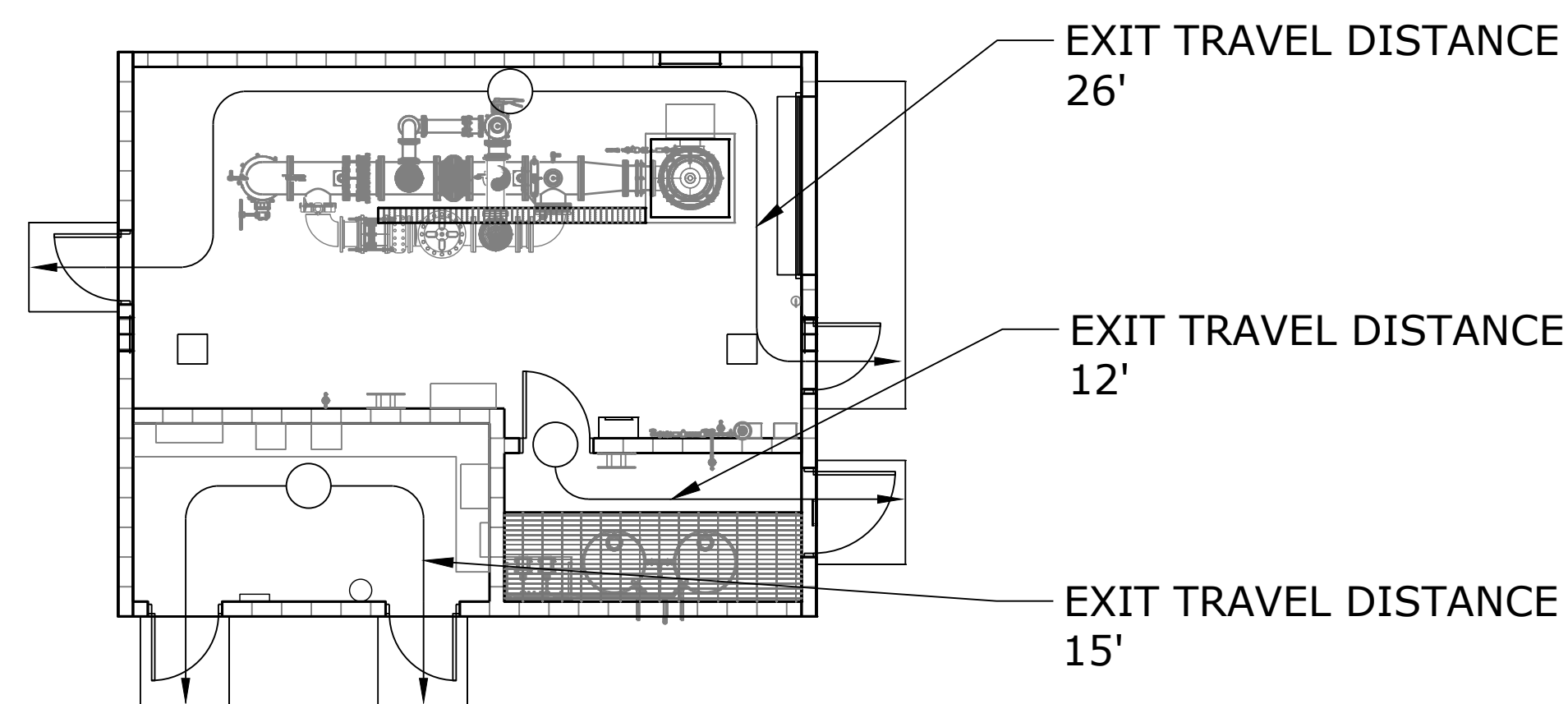
BULDING	OVERALL DIMENSIONS	GROSS AREA	OCCUPANCY	CONSTRUCTION TYPE	HEIGHT	STORIES
WELL 11B	3'-4" x 25'-4"	794 SF	F-1/H-4	VB	18 FT	1

FIRE PROTECTION AND LIFE SAFETY SYSTEM

SPACE/ROOM	OCC. CLASS	REQUIREMENT	PROVIDED SYSTEM
PUMP ROOM	F-1	NA	NA
ELECTRICAL ROOM	F-1	NA	NA
SODIUM HYPOCHLORITE ROOM	H-4	VARIES	2HR MIN. FIRE-RATED INT. WALLS/CEILING, OSSC TABLE 706.4 1-1/2HR MIN. FIRE-RATED DOOR, OSSC TABLE 716.1(2) 1-HR FIRE-RATED DOORS/WALLS AT WALLS INTERSECTING FIRE WALLS, OSSC 706.5.1

OCCUPANT LOAD

SPACE/ROOM	OCC. CLASS	SF/OCC.	AREA	OCCS.
PUMP ROOM	F-1	300	480	2
ELECTRICAL ROOM	F-1	300	128	1
SODIUM HYPOCHLORITE ROOM	H-4	300	90	1



THERMAL ENVELOP AND OEESC

SEMIHEATED SPACE (HEATING OUTPUT >3.4 BTU/H-FT2 BUT <12 BTU/H-FT2)

ROOF INSULATION ENTIRELY ABOVE DECK R-15 REQUIRED, PROVIDING R-24

WALLS ABOVE GRADE MASS R-5.7C.I. REQUIRED, PROVIDING 8-INCH CMU W/ UNREINFORCED CELLS INSULATED RU 6.62 TO 5.32 PER ASHRAE 90.1-2019, TABLE A3.1-3

SLAB ON GRADE UNHEATED INSULATION NOT REQUIRED

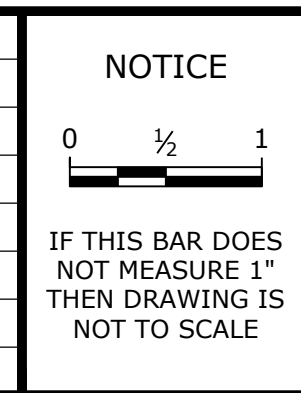
ENTRANCE DOORS: MAX U 0.77

NO.	DOOR SIZE	OPEN	HARDWARE	FRAME		REMARKS
				HEAD	JAMB	
1	3'-0"x7'-10"	LHR	GROUP 2	2"	2"	
2	3'-0"x7'-10"	RHR	GROUP 2	2"	2"	3/4-HOUR FIRE-RATED DOOR.
3	4'-0"x7'-10"	RHR	GROUP 2	2"	2"	3/4-HOUR FIRE-RATED DOOR WITH FACTORY INSTALLED 12" X 12" LOUVER. LOUVER TO HAVE A SLOT INSIDE FOR CONTRACTOR/OR FACTORY-PROVIDED SLIDING METAL PANEL TO SEAL LOUVER. LABEL DOOR WITH 7.5" NFPA 704 12.5% SODIUM HYPOCHLORITE FIRE DIAMOND.
4	3'-0"x7'-10"	RHR	GROUP 2	2"	2"	
5	3'-0"x7'-10"	LHR	GROUP 2	2"	2"	
6	8'-0"x8'-0"	OVERHEAD	NA	-	-	CHAIN ON RIGHT
7	5'-0"x6'-0" HATCH	NORTH/SOUTH	NA	MFR	MFR	DOUBLE LEAF, ALUMINUM EQUIPMENT ROOF HATCH
8	3'-0"X7'-10"	RHR	GROUP 1	2"	2"	1-1/2 HR MIN. FIRE-RATED DOOR WITH FACTORY INSTALLED 10"x10" WINDOW. LABEL DOOR WITH 5" NFPA 704 12.5% SODIUM HYPOCHLORITE FIRE DIAMOND.

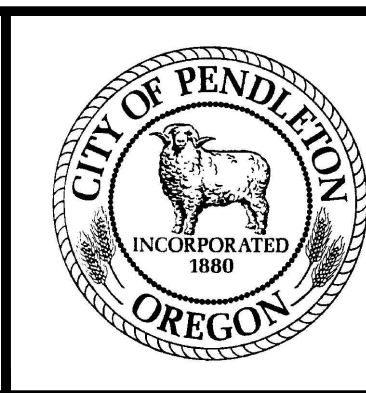
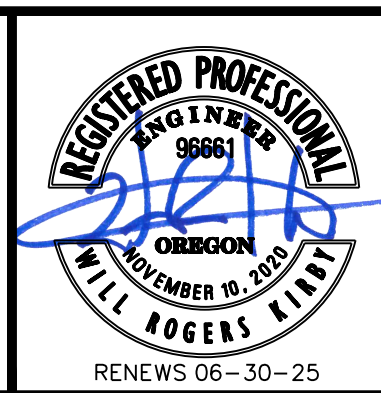
MATERIAL FINISH SCHEDULE				
ITEM	MATERIAL	COATING SYSTEM	COLOR	REMARKS
EXTERIOR WALLS	CMU			SPLIT & SMOOTH FACE CMU BLOCK, PER ELEVATIONS
ROOFING	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
GUTTERS, FASCIA AND STEEL ARCHITECTURAL FEATURES	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
BLOCKOUT SOFFIT & TRIM	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
LOUVERS	METAL	COATING SYSTEM 101	TO BE SELECTED BY OWNER	FACTORY PRIME
DOORS	METAL	COATING SYSTEM 101	TO BE SELECTED BY OWNER	FACTORY PRIME
PUMP AND ELECTRICAL ROOM INTERIOR WALLS	CMU	COATING SYSTEM 302	TO BE SELECTED BY OWNER	
CHLORINE ROOM INTERIOR WALLS	CMU	POLYMER PANELING	WHITE	
PUMP, ELECTRICAL, AND CHLORINE ROOM INTERIOR CEILING	GYPSUM	COATING SYSTEM 304	WHITE	
CONCRETE FLOORS	CONC.			
EXPOSED METALLIC PIPING	DUCTILE IRON	COATING SYSTEM 101	TO BE SELECTED BY OWNER	
EXPOSED PVC PIPING	PVC	COATING SYSTEM 104	TO BE SELECTED BY OWNER	

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A.dwg A-101 3/1/2024 5:05 PM JEFFRY. ORLANDO 24.1s (LMS Tech)

NO.	DATE	WRK BY	BID SET	REVISION



WRK DESIGNED
TMB DRAWN
DG CHECKED



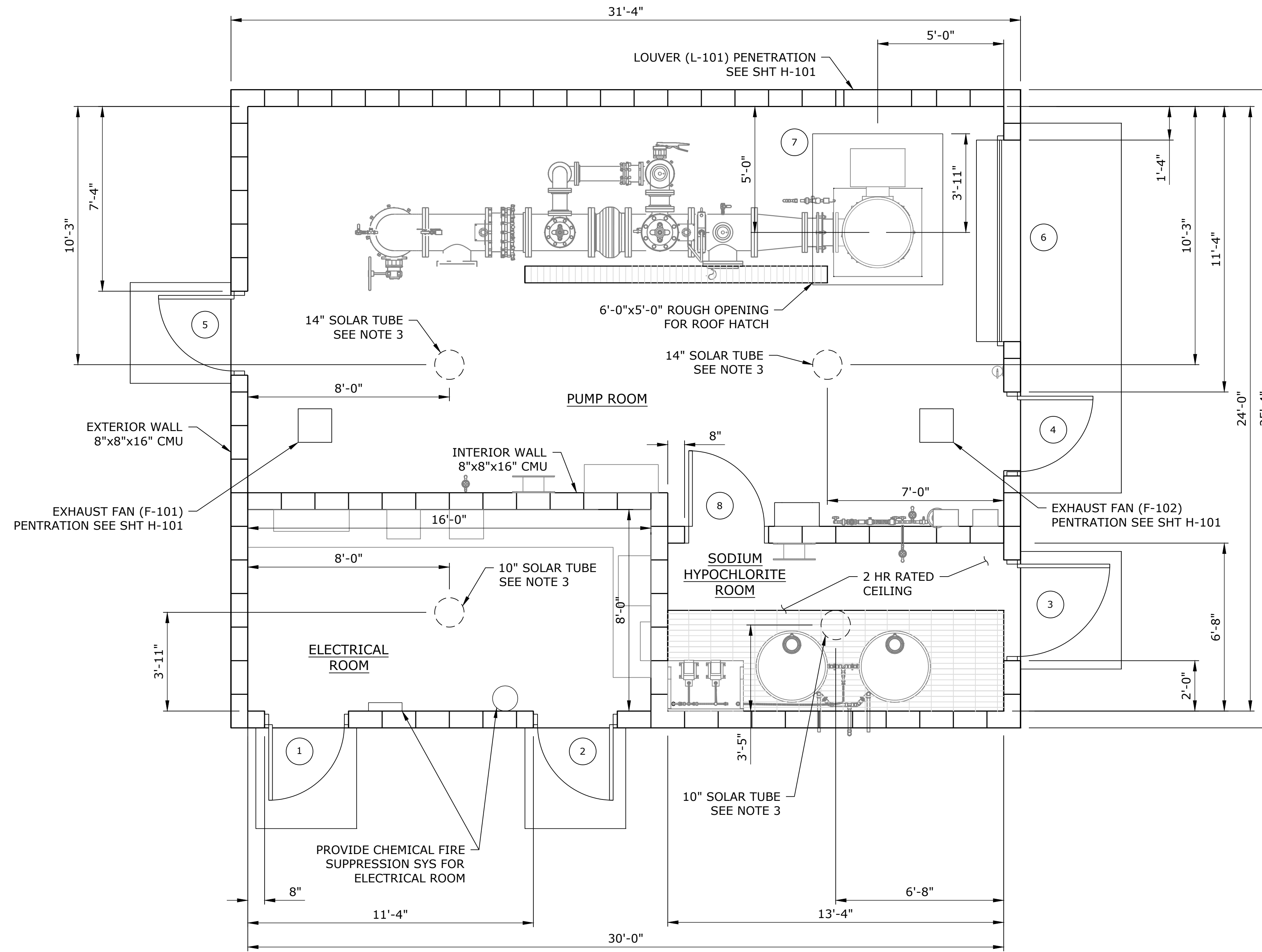
CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
WELL 11B
COVER SHEET

PROJECT NO.: 21-3133 SCALE: AS NOTED DATE: MARCH 2024

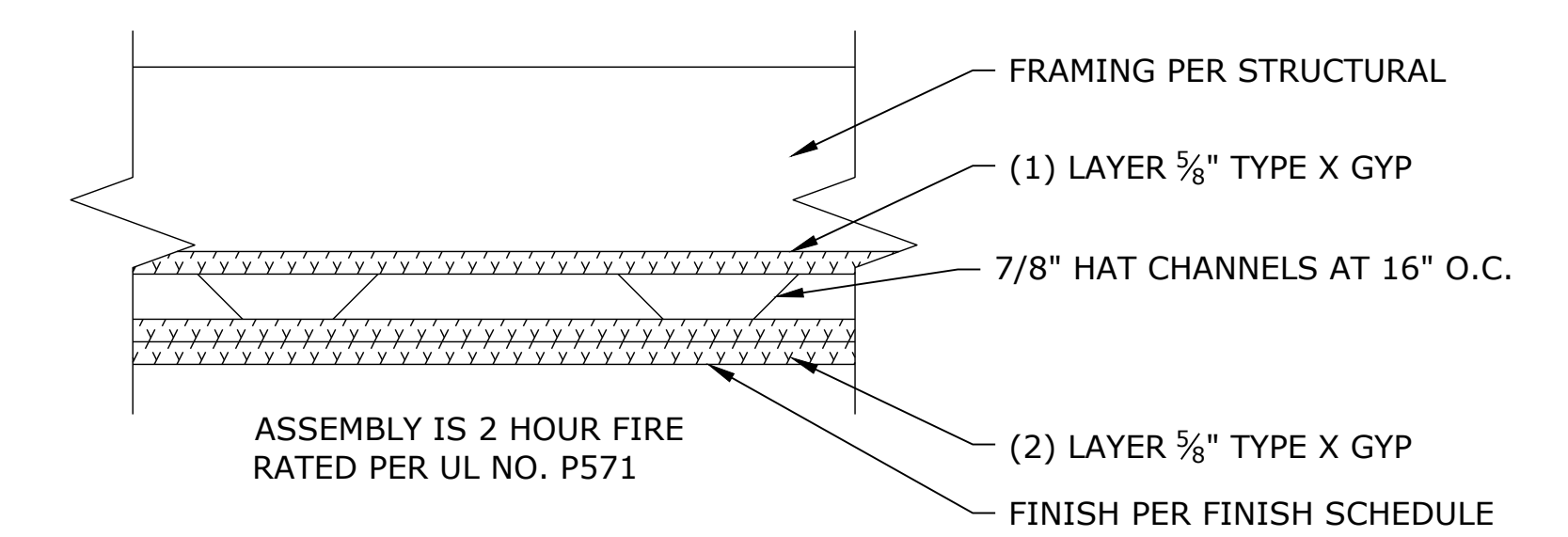
SHEET
A-101
15 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A.dwg A-102 3/1/2024 5:05 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



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

- NOTES:**
1. SEE DOOR SCHEDULE ON SHEET A-101 FOR ADDITIONAL DOOR INFORMATION.
 2. ALL CMU CELLS NOT REQUIRED BY THE STRUCTURAL DRAWINGS TO BE GROUTED SHALL BE FILLED WITH FOAM INSULATION.
 3. SOLAR TUBE LOCATION SHALL BE ADJUSTED AS REQUIRED TO FIT WITHIN ROOF RAFTERS AND CEILING JOISTS. ANNULAR SPACE BETWEEN SOLARTUBE AND CEILING SHALL BE SEALED WITH FIRE-RATED SEALANT MEETING OR EXCEEDING THE FIRE-RESISTANCE RATING OF THE CEILING SECTION.
 4. FIRE SUPPRESSION SYSTEM SHOWN AS SCHEMATIC, CONTRACTOR SHALL PROVIDE FUNCTIONING SYSTEM PER SPECIFICATIONS. NOT ALL FIRE SUPPRESSION SYSTEM COMPONENTS SHOWN, CONTRACTOR SHALL COORDINATE PLACEMENT OF SYSTEM COMPONENTS WITH OTHER DISCIPLINES.



2HR RATED CEILING SECTION
SCALE: NTS

NO.	DATE	BY	BID SET	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



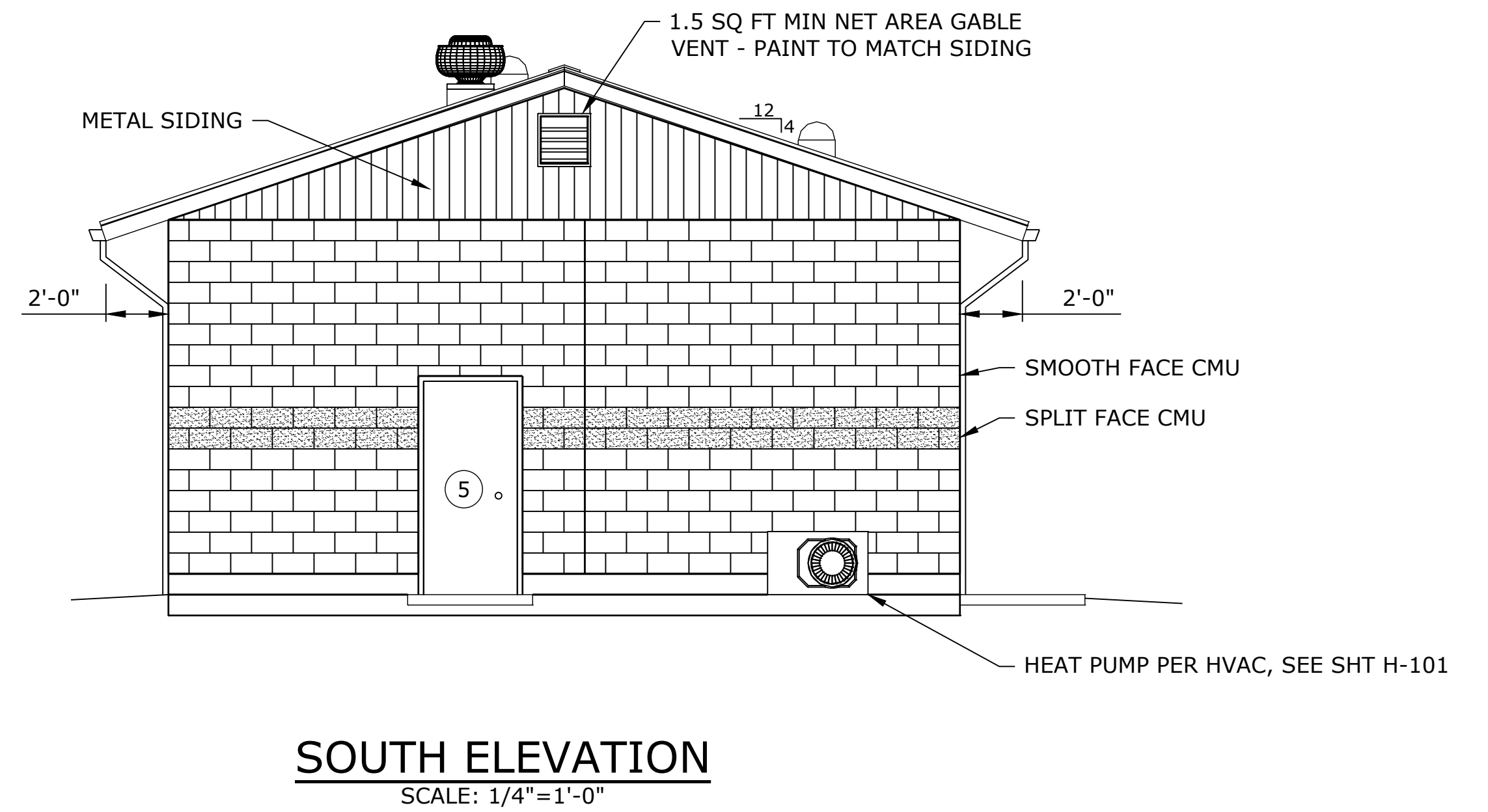
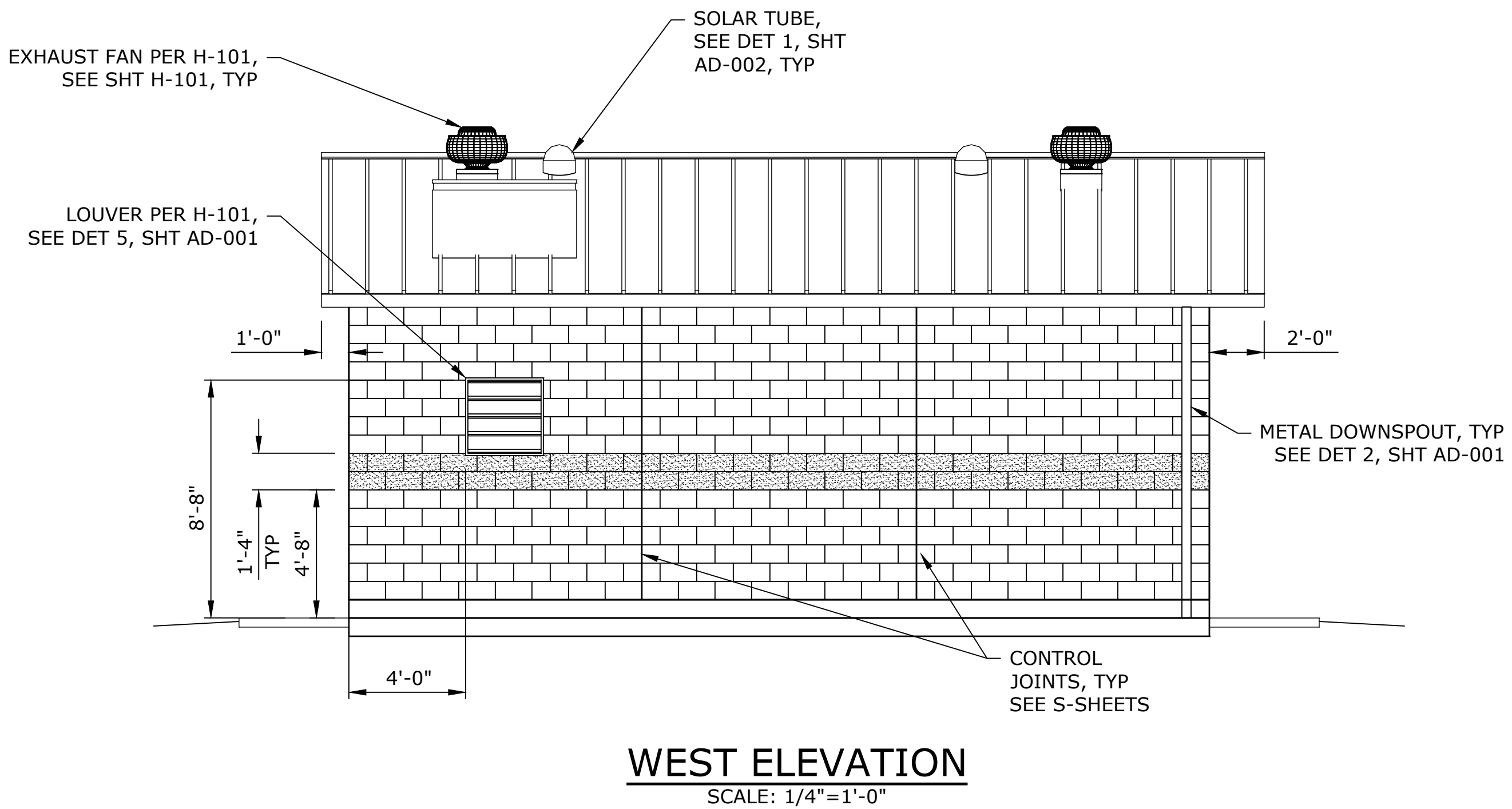
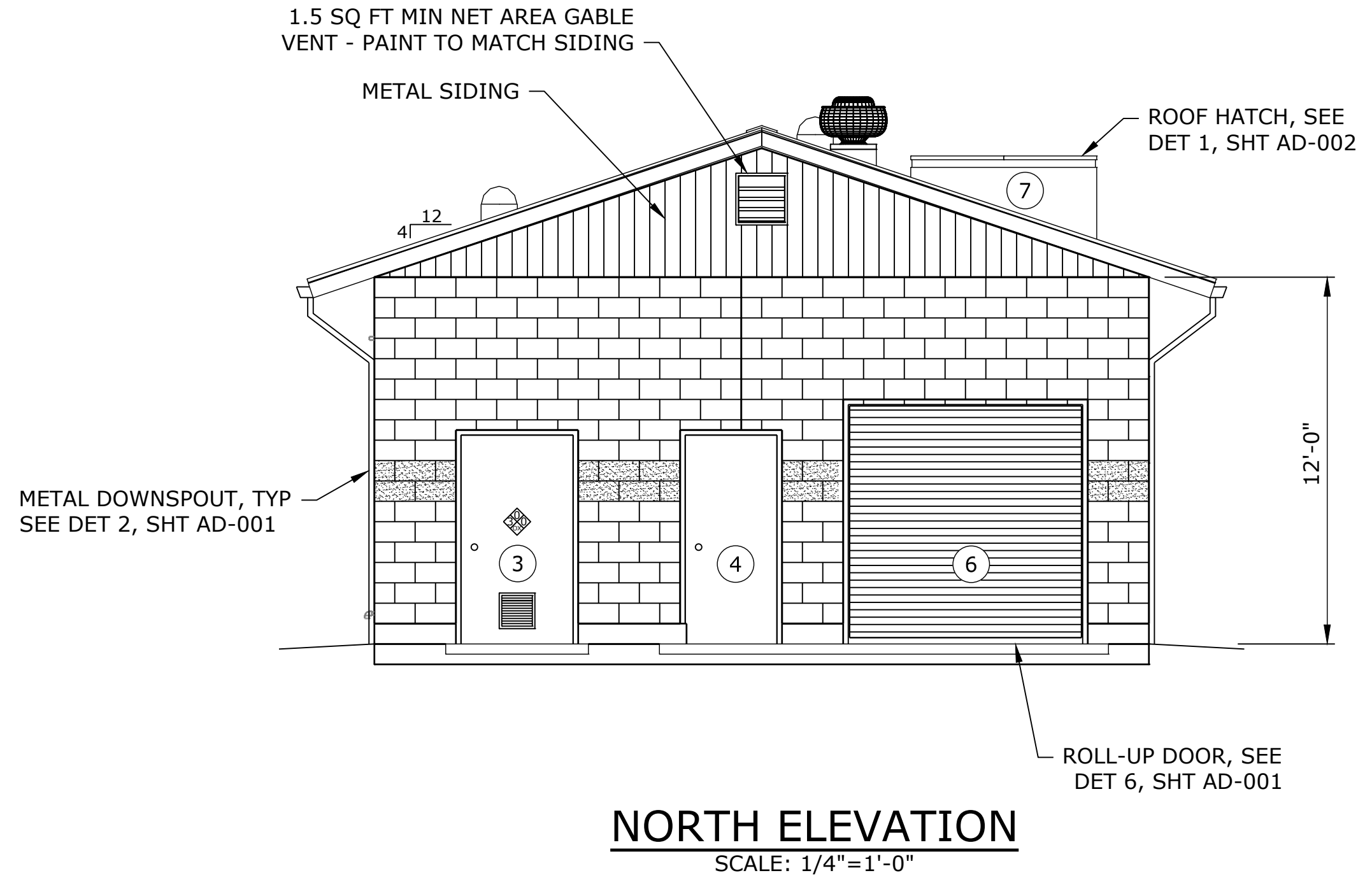
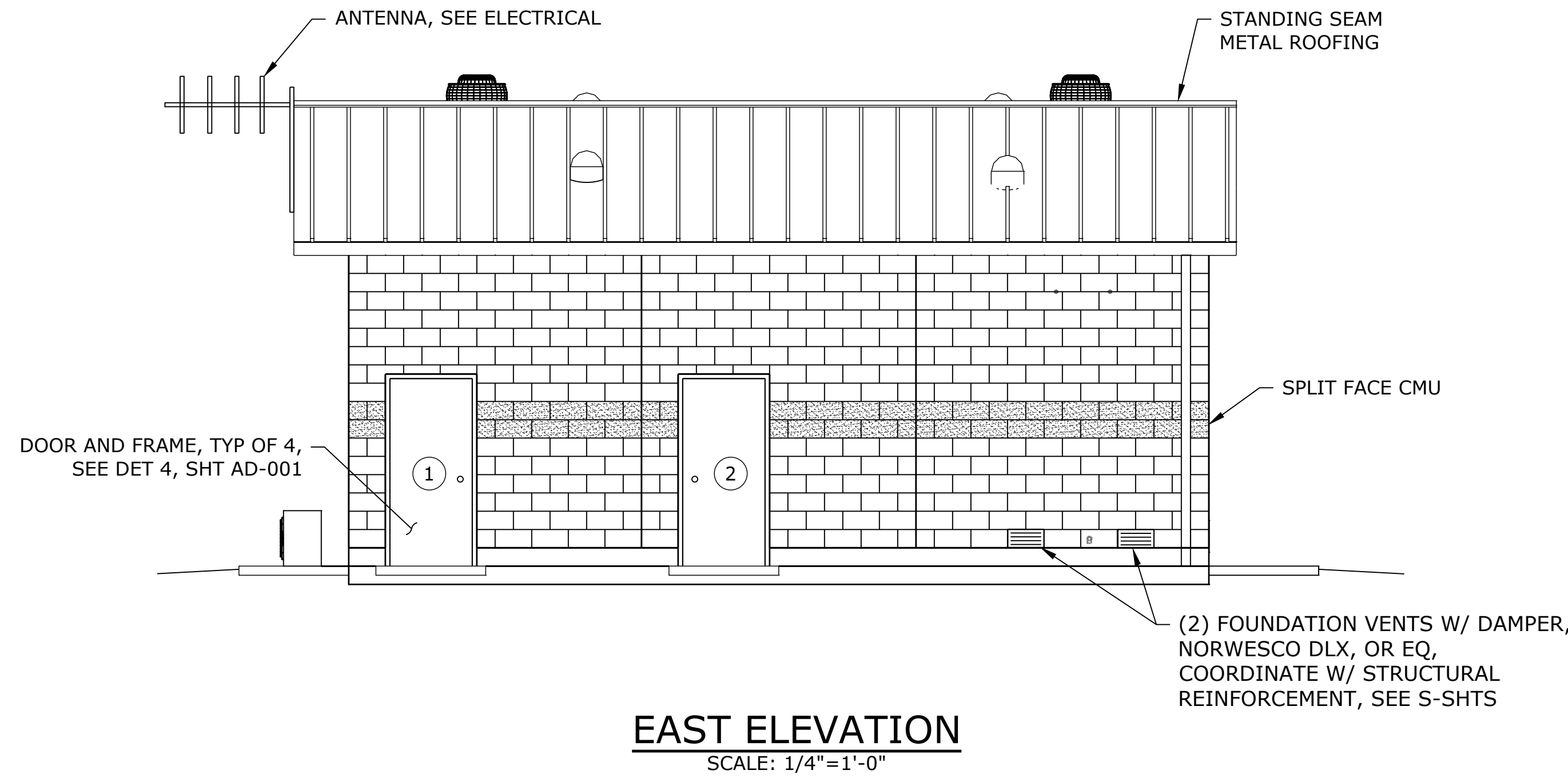
CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
WELL 11B
FLOOR PLAN

PROJECT NO.: 21-31133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
A-102
16 of 65

- NOTES:
- SOLAR TUBES TO BE ADJUSTED TO FIT WITHIN RAFTERS AND CEILING JOISTS AND TO MEET MINIMUM TUBE LENGTHS.
 - HVAC SHOWN AS SCHEMATIC. SEE H-SHEETS.



I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A.dwg A-103 3/1/2024 5:05 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)

NO.	DATE	BY	BID SET	REVISION

NOTICE

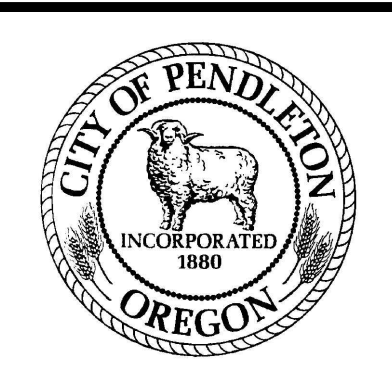
0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED

TMB DRAWN

DG CHECKED



CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
WELL 11B
EXTERIOR ELEVATIONS

PROJECT NO.: 21-3133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
A-103
17 of 65

ZONING CODE INFORMATION

M-2 HEAVY INDUSTRIAL

BUILDING CODE INFORMATION
APPLICABLE CODES

2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
2021 OREGON ENERGY EFFICIENCY CODE (OEESC)
2021 OREGON ELECTRICAL SPECIALTY CODE (OESC)

HEIGHTS AND AREAS PERMISSIBLE OSSC

FOR F-1/H-4 OCCUPANCY, TYPE VB CONSTRUCTION, NON-SPRINKLERED
PER TABLE 504.3, 40-FT HEIGHT
PER TABLE 504.4, 1-STORY ALLOWED
PER TABLE 506.2, 6,500 SQFT
PER TABLE 601, FIRE RESISTANCE RATING 0 HOURS

BUILDING SUMMARY

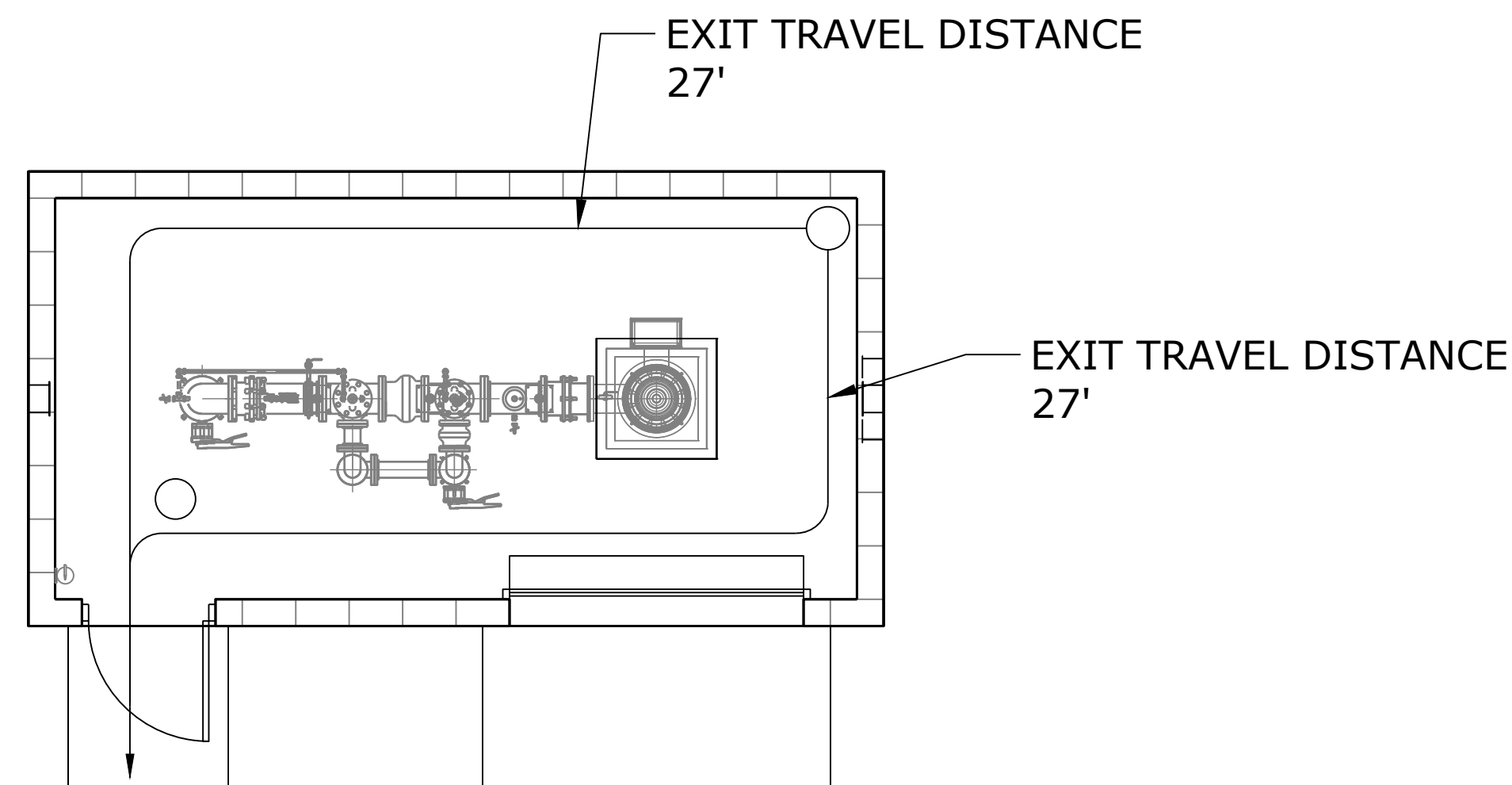
BULDING	OVERALL DIMENSIONS	GROSS AREA	OCCUPANCY	CONSTRUCTION TYPE	HEIGHT	STORIES
WELL 11	21'-4" x 11'-4"	231 SF	F-1/H-4	VB	12 FT	1

FIRE PROTECTION AND LIFE SAFETY SYSTEM

SPACE/ROOM	OCC. CLASS	REQUIREMENT	PROVIDED SYSTEM
PUMP ROOM	F-1	NA	NA

OCCUPANT LOAD

SPACE/ROOM	OCC. CLASS	SF/OCC.	AREA	OCCS.
PUMP ROOM	F-1	300	480	2



THERMAL ENVELOP AND OEESC

SEMIHEATED SPACE (HEATING OUTPUT >3.4 BTU/H-FT2 BUT <12 BTU/H-FT2)

ROOF INSULATION ENTIRELY ABOVE DECK R-15 REQUIRED, PROVIDING R-24

WALLS ABOVE GRADE MASS R-5.7C.I. REQUIRED, PROVIDING 8-INCH CMU W/ UNREINFORCED CELLS INSULATED RU 6.62 TO 5.32 PER ASHRAE 90.1-2019, TABLE A3.1-3

SLAB ON GRADE UNHEATED INSULATION NOT REQUIRED

ENTRANCE DOORS: MAX U 0.77

NO.	DOOR SIZE	OPEN	HARDWARE	FRAME		REMARKS
				HEAD	JAMB	
1	3'-0"x7'-10"	RHR	GROUP 2	2"	2"	
2	8'-0"x8'-0"	OVERHEAD	NA	-	-	CHAIN ON RIGHT
3	4'-0"x4'-0" HATCH	EAST	NA	MFR	MFR	SINGLE LEAF, ALUMINUM EQUIPMENT ROOF HATCH

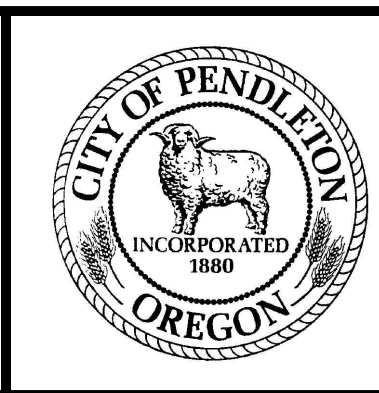
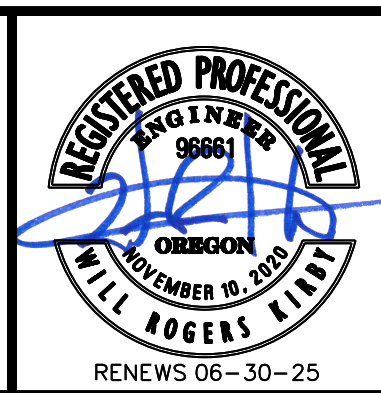
MATERIAL FINISH SCHEDULE				
ITEM	MATERIAL	COATING SYSTEM	COLOR	REMARKS
EXTERIOR WALLS	CMU			SPLIT & SMOOTH FACE CMU BLOCK, PER ELEVATIONS
ROOFING	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
GUTTERS, FASCIA AND STEEL ARCHITECTURAL FEATURES	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
BLOCKOUT SOFFIT & TRIM	METAL	FACTORY COATING	TO BE SELECTED BY OWNER	
LOUVERS	METAL	COATING SYSTEM 101	TO BE SELECTED BY OWNER	FACTORY PRIME
DOORS	METAL	COATING SYSTEM 101	TO BE SELECTED BY OWNER	FACTORY PRIME
PUMP AND ELECTRICAL ROOM INTERIOR WALLS	CMU	COATING SYSTEM 302	TO BE SELECTED BY OWNER	
CHLORINE ROOM INTERIOR WALLS	CMU	POLYMER PANELING	WHITE	
PUMP, ELECTRICAL, AND CHLORINE ROOM INTERIOR CEILING	GYPSON	COATING SYSTEM 304	WHITE	
CONCRETE FLOORS	CONC.			
EXPOSED METALLIC PIPING	DUCTILE IRON	COATING SYSTEM 101	TO BE SELECTED BY OWNER	
EXPOSED PVC PIPING	PVC	COATING SYSTEM 104	TO BE SELECTED BY OWNER	

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A-WELL 11.dwg A-201 3/1/2024 5:42 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



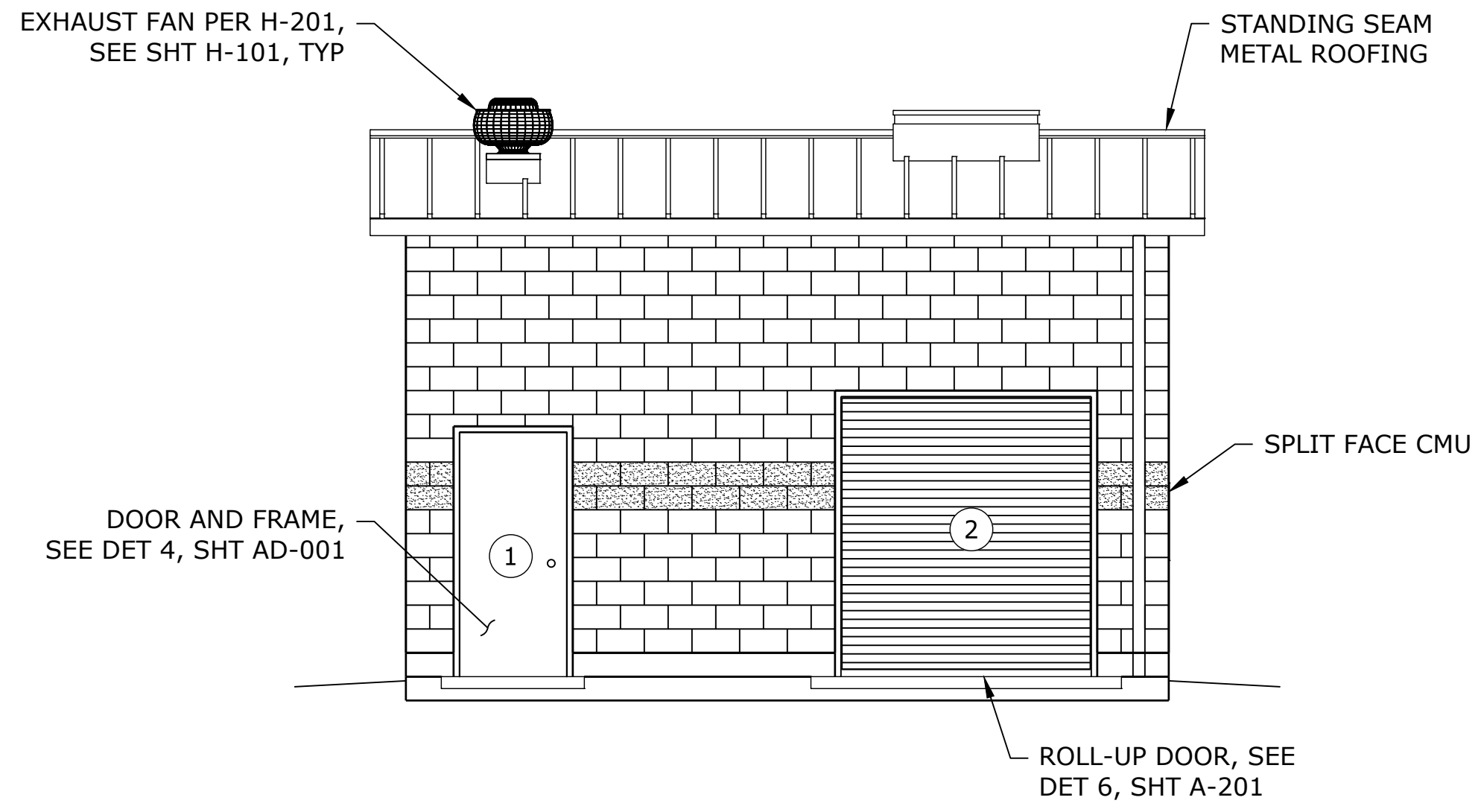
CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
WELL 11
COVER SHEET

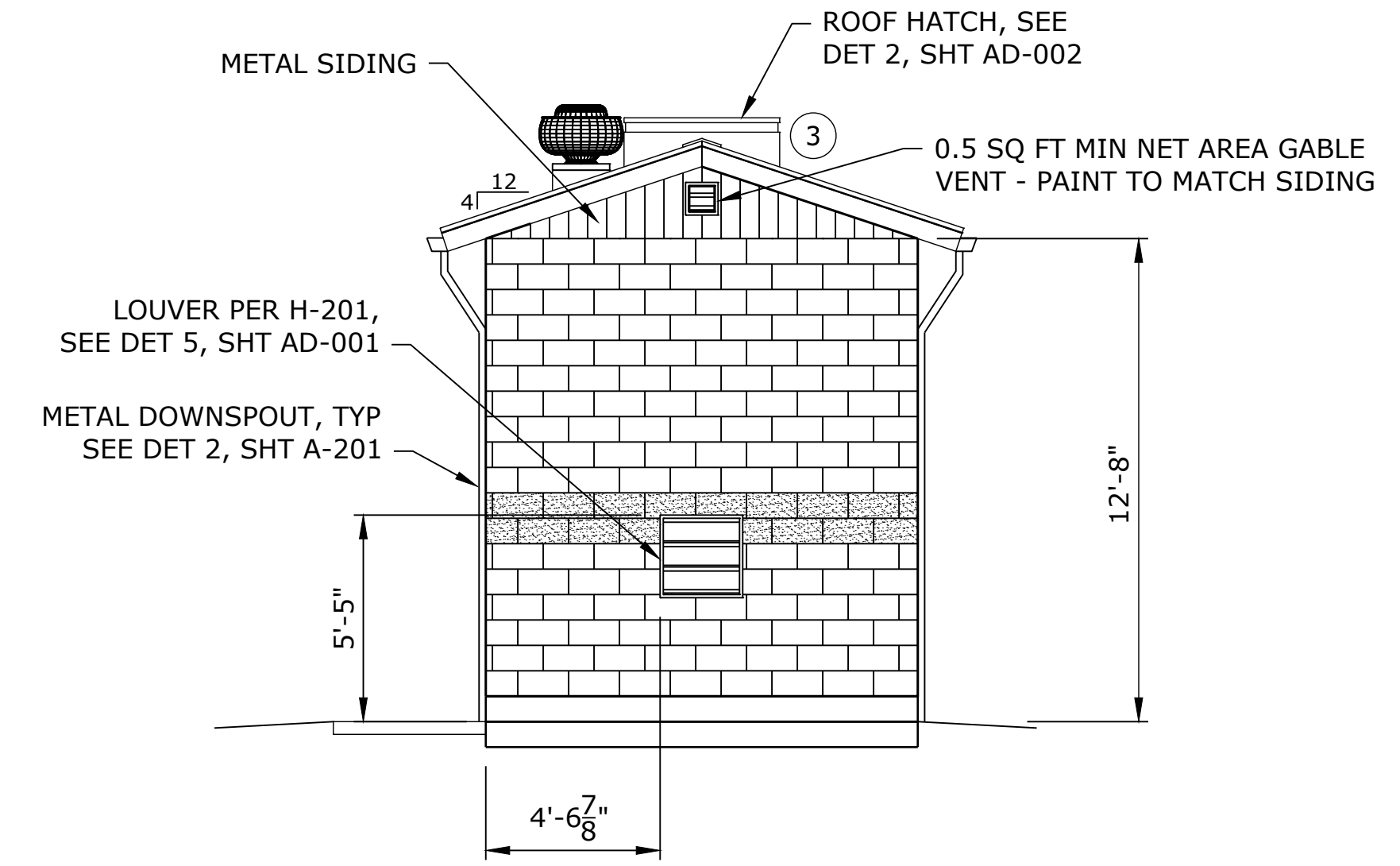
PROJECT NO.: 21-3133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
A-201
18 of 65

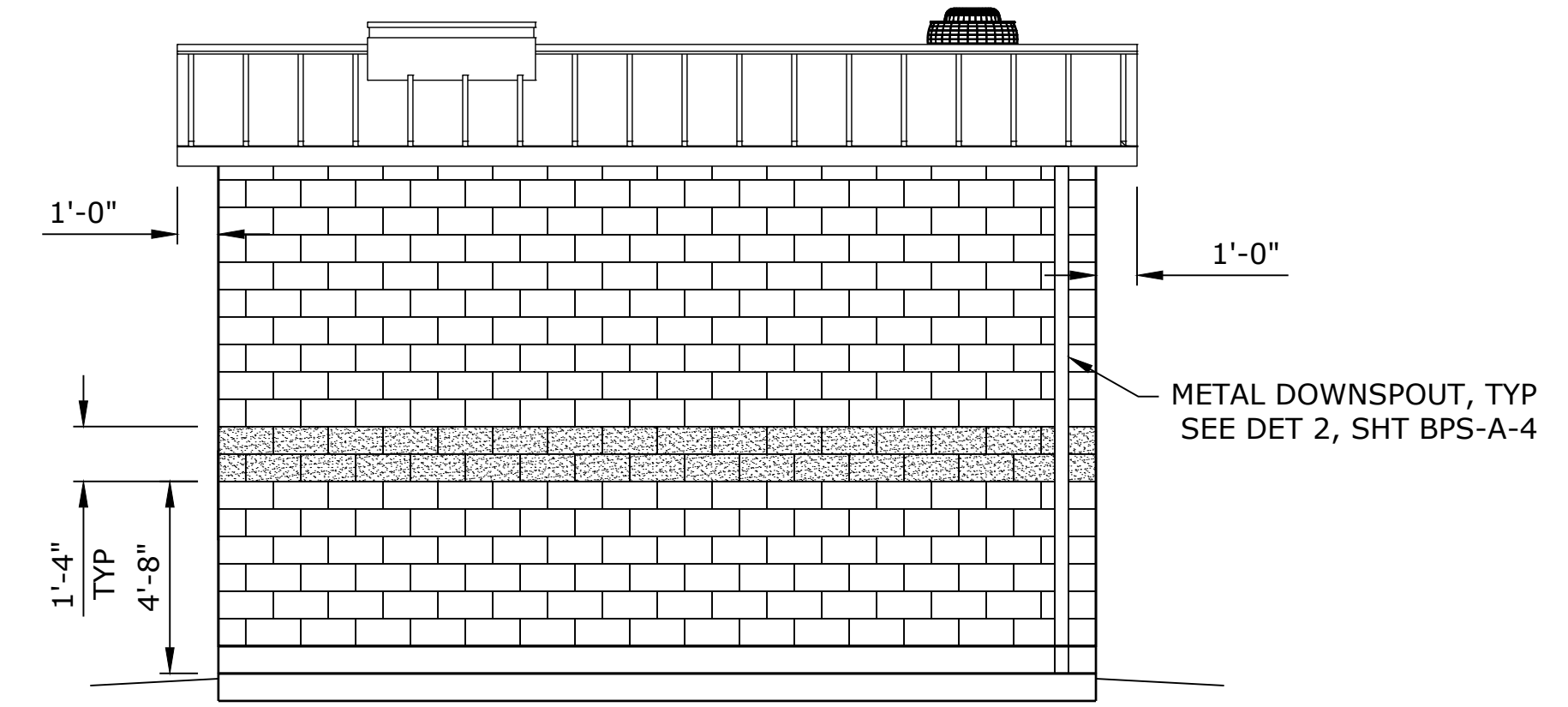
NOTES:
 1. HVAC SHOWN AS SCHEMATIC. SEE H-SHEETS.



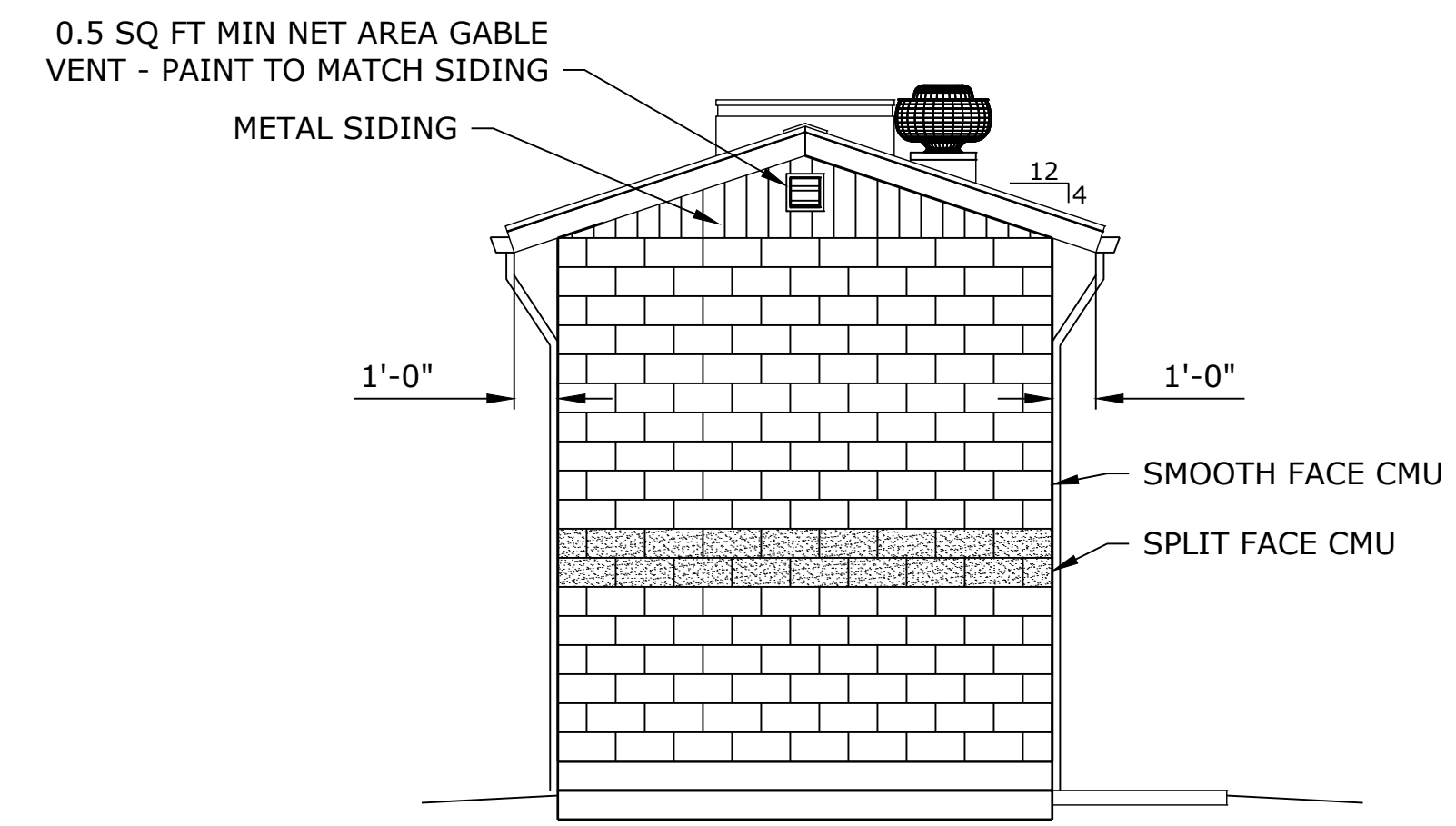
SOUTH ELEVATION
 SCALE: 1/4"=1'-0"



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



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



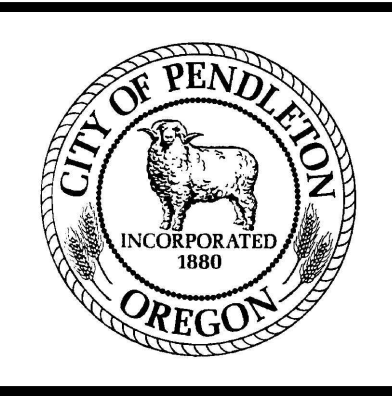
WEST ELEVATION
 SCALE: 1/4"=1'-0"

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-A-Well 11.dwg A-203 3/1/2024 5:42 PM JEFFRY.ORLANDO 24.1s (LMS Tech)

NO.	DATE	BY	BID SET	REVISION

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
 TMB DRAWN
 DG CHECKED



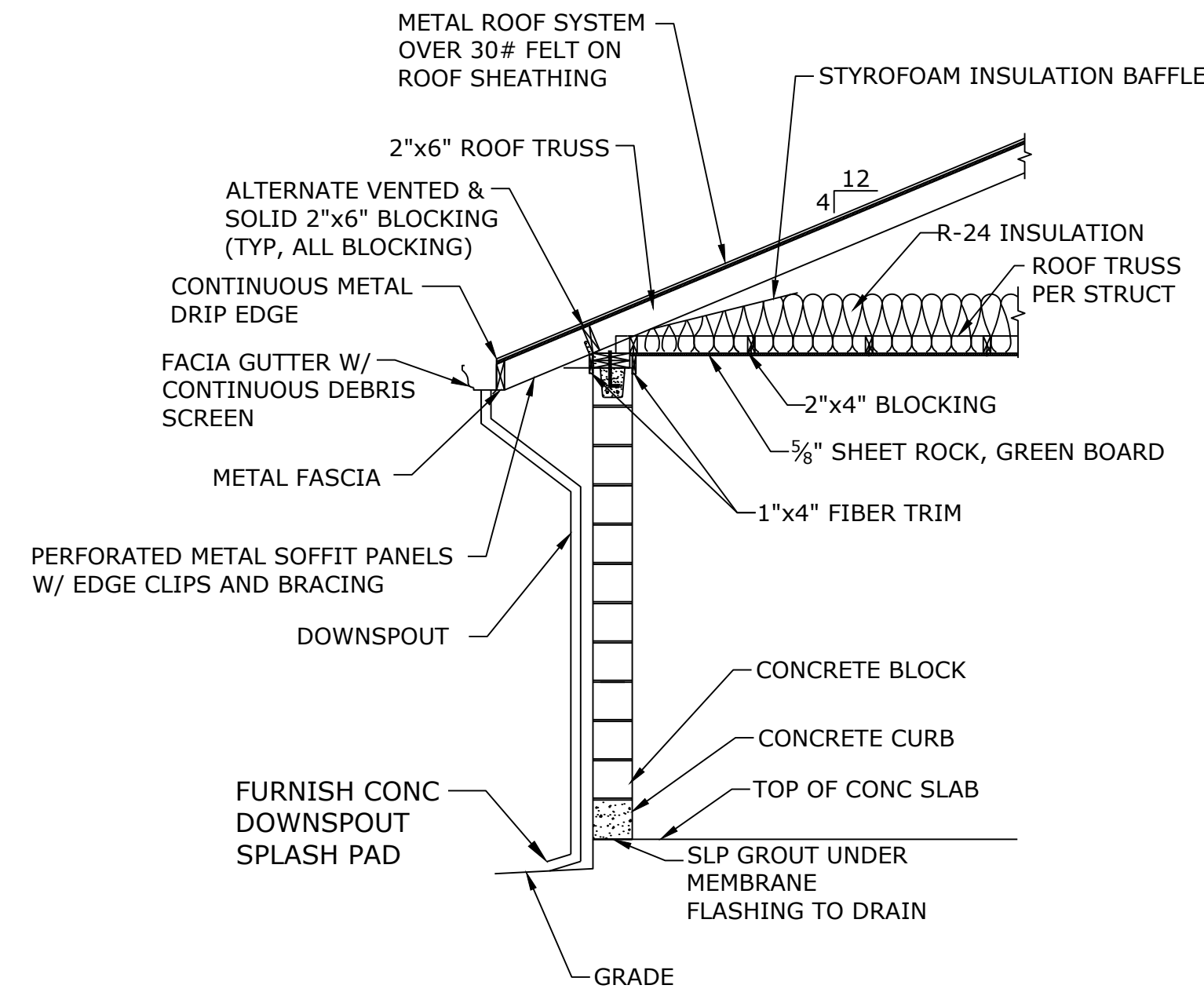
CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
WELL 11
EXTERIOR ELEVATIONS

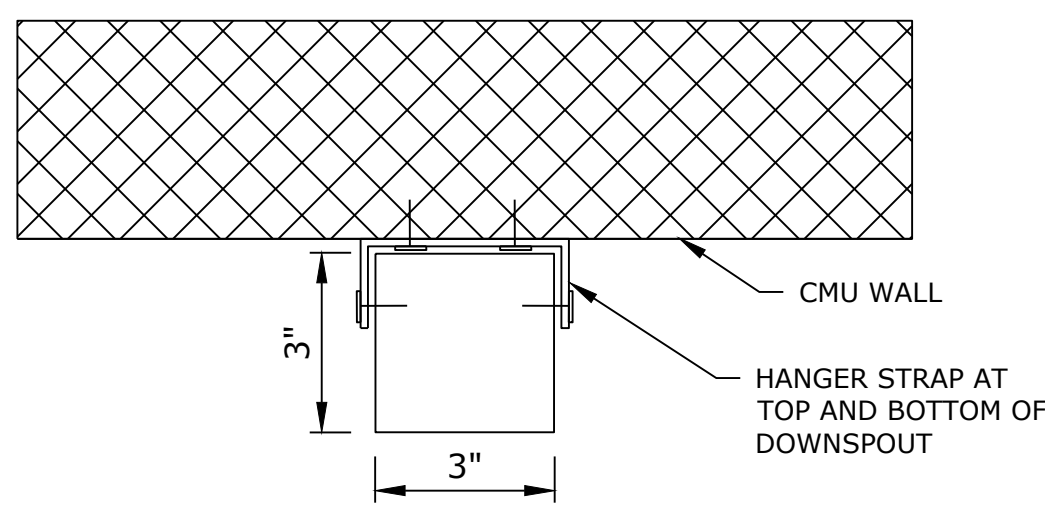
PROJECT NO.: 21-3133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
A-203
 20 of 65

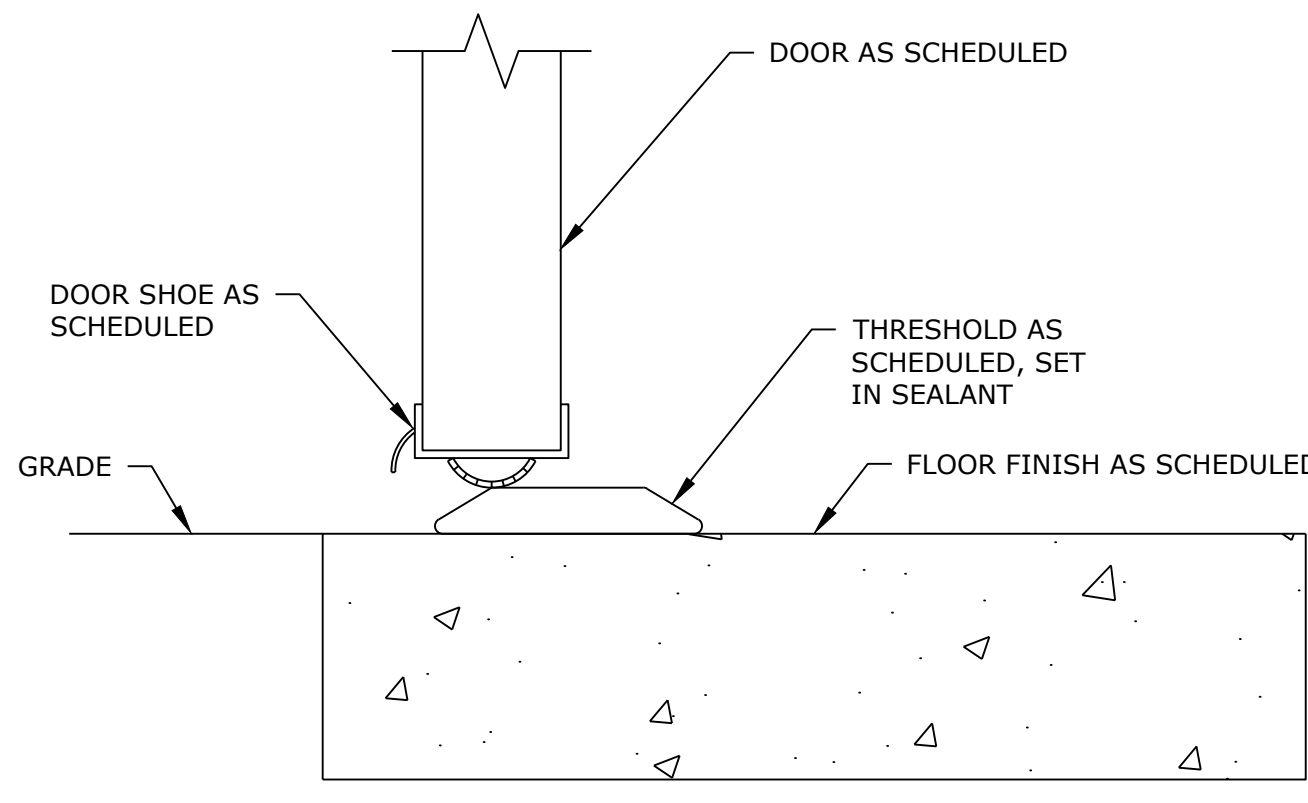
I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A-Well 11.dwg AD-001 3/1/2024 5:42 PM JEFFRY. ORLANDO 24-1s (LMS Tech)



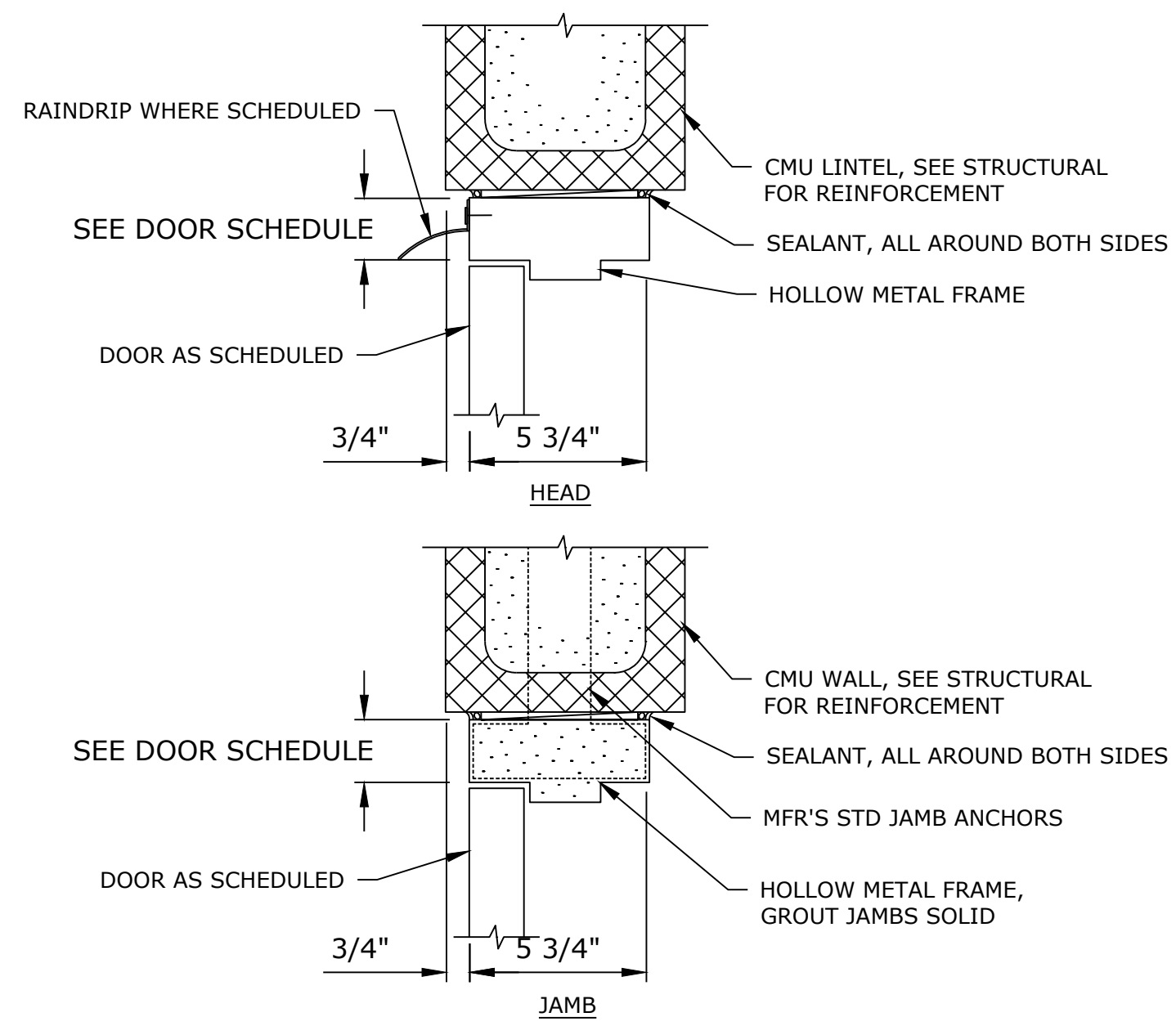
TYP WALL SECTION 1
SCALE: NTS



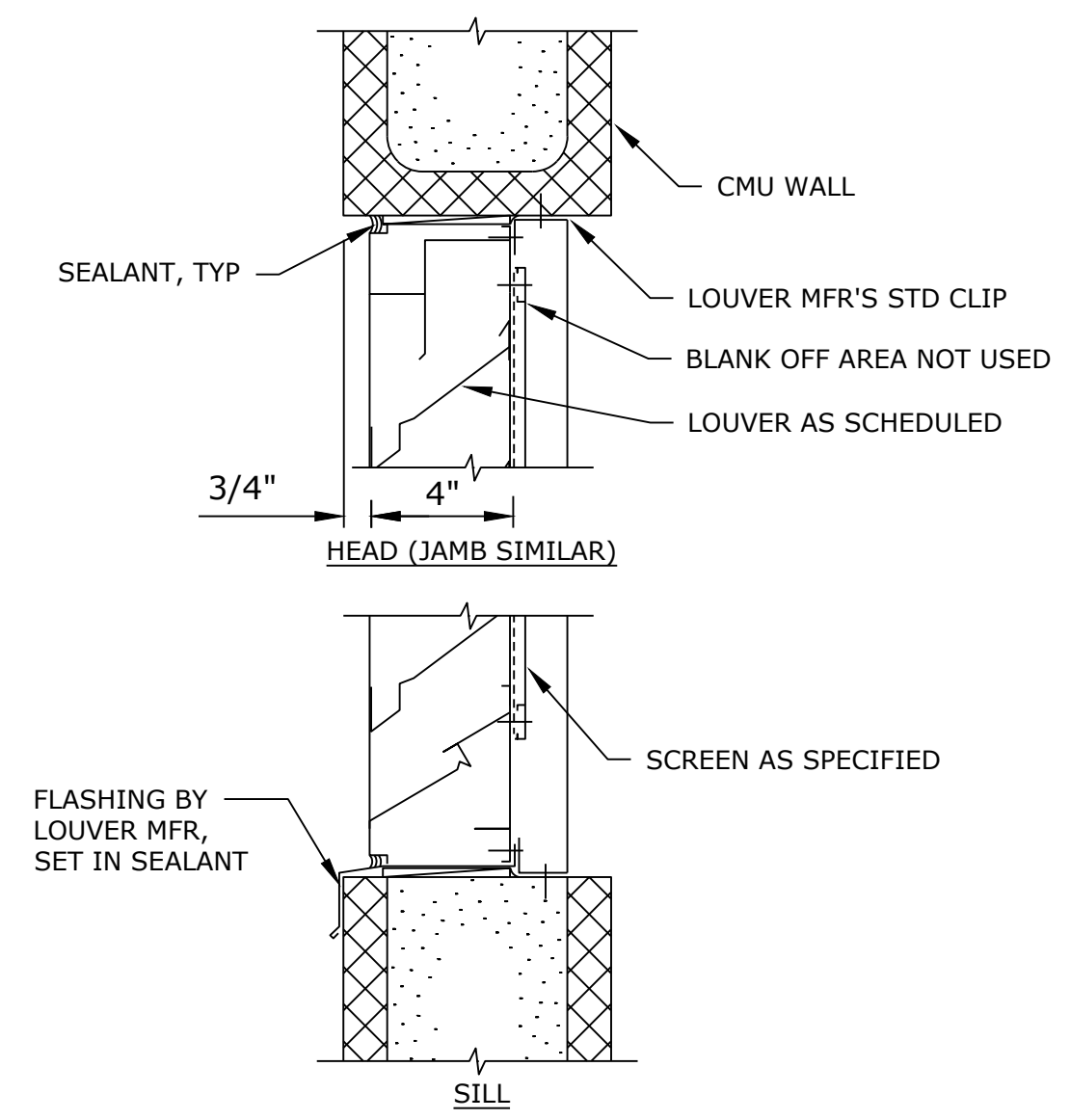
DOWNSPOUT 2
SCALE: NTS



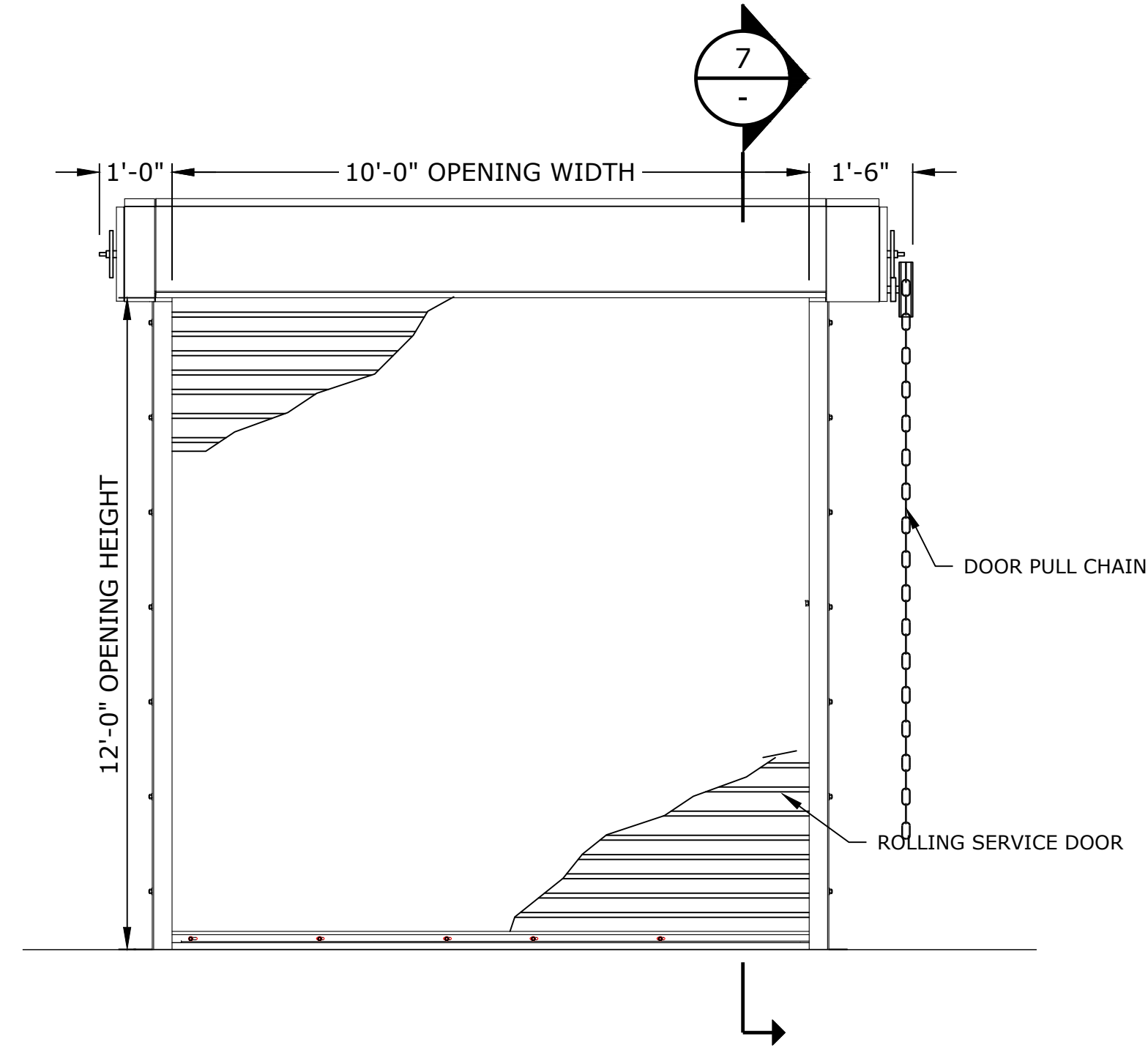
DOOR SILL 3
SCALE: NTS



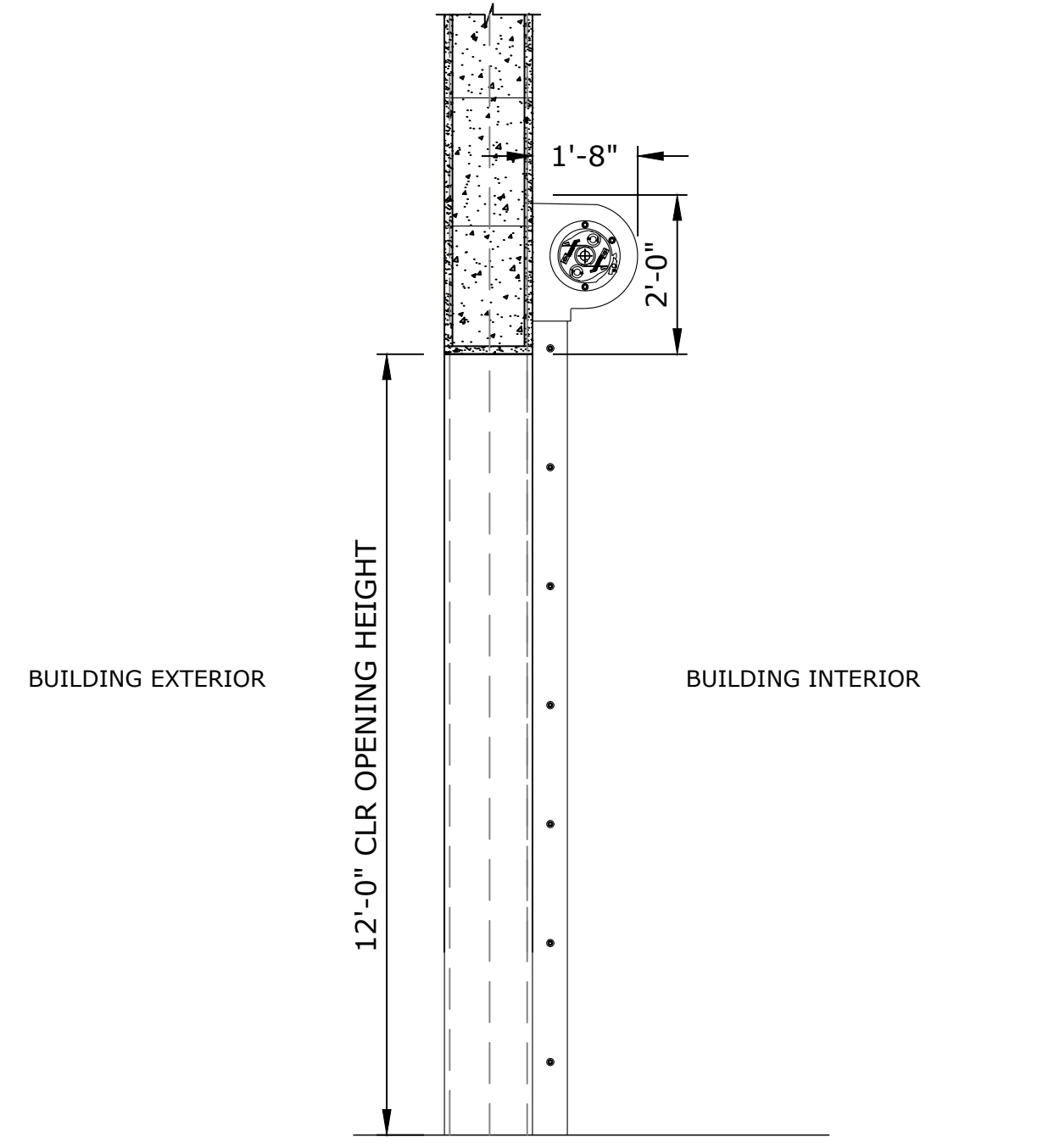
DOOR HEAD AND JAMB 4
SCALE: NTS



LOUVER HEAD & SILL 5
SCALE: NTS



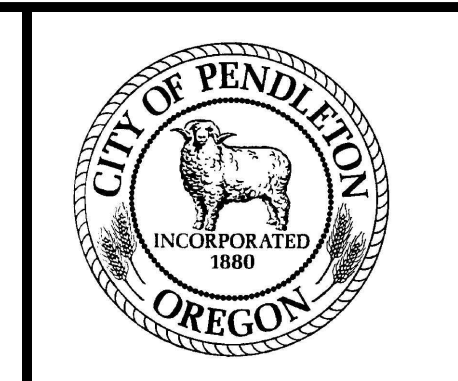
OVERHEAD DOOR INTERIOR ELEVATION 6
SCALE: NTS



ROLL-UP DOOR SECTION 7
SCALE: NTS

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

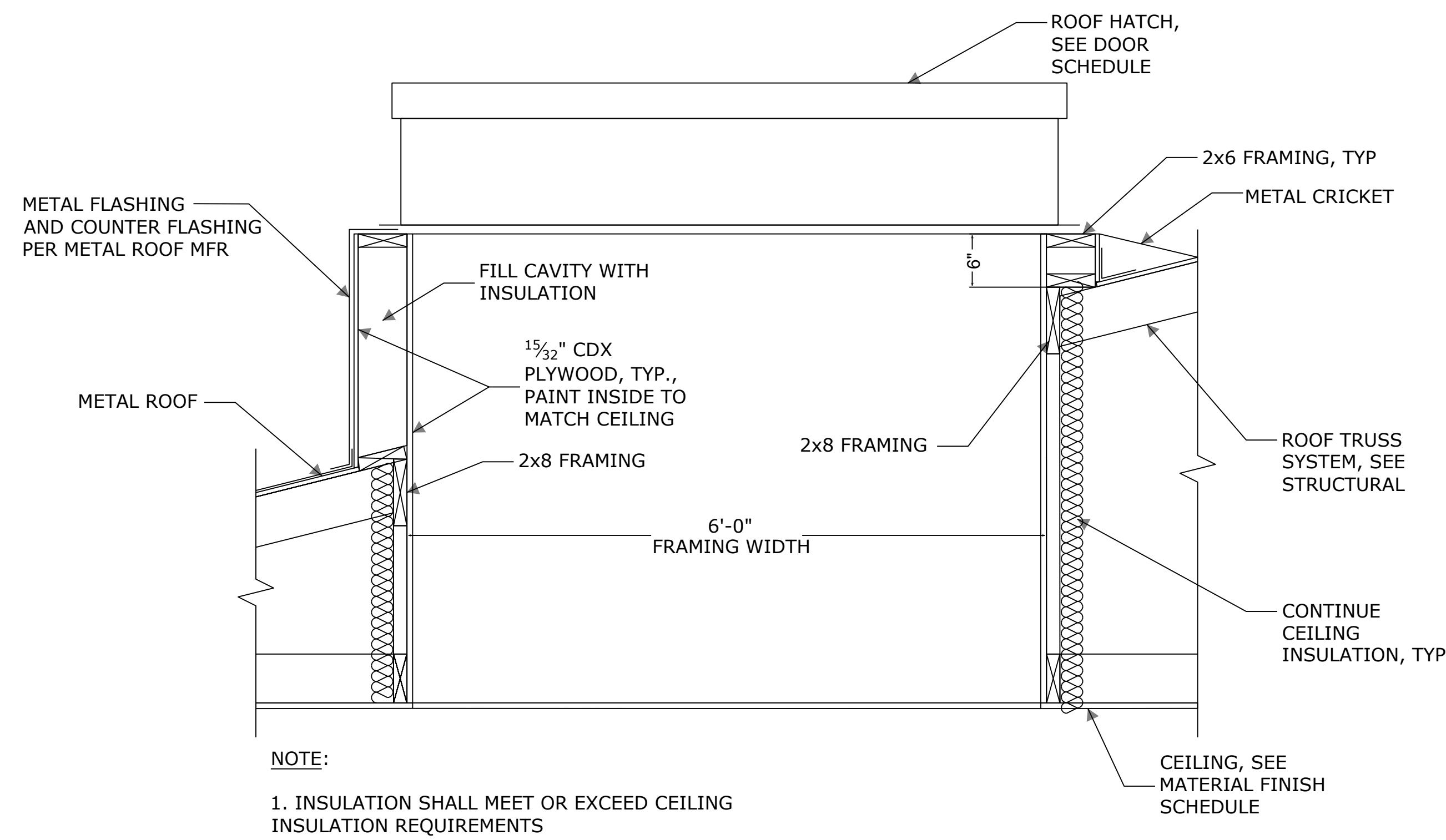


CITY OF PENDLETON
WELL 11-11B

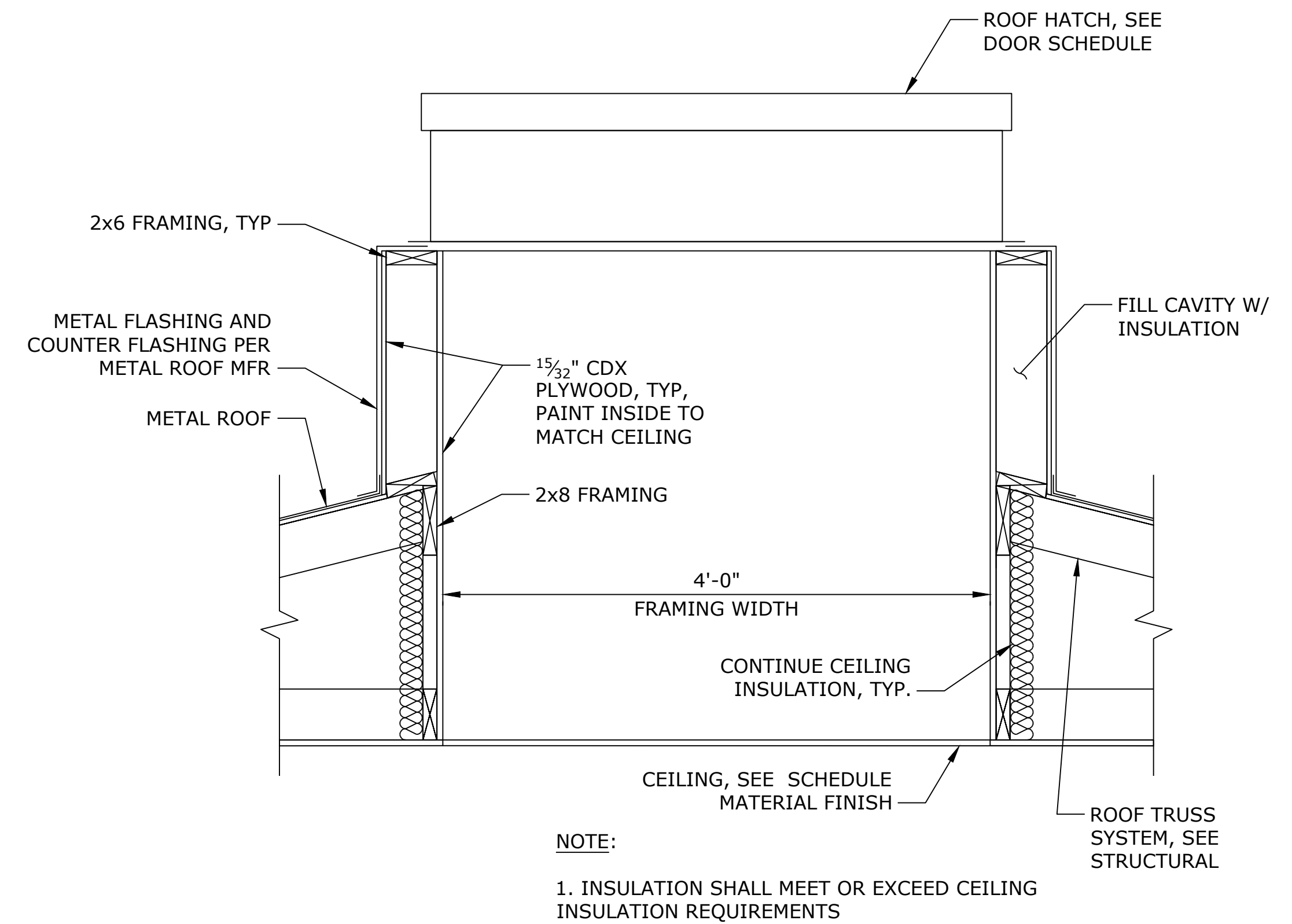
ARCHITECTURAL
TYPICAL DETAILS
PROJECT NO.: 21-31133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
AD-001
21 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-A-Well 11.dwg AD-002 3/1/2024 5:42 PM JEFFRY. ORLANDO 24-1s (LMS Tech)



WELL 11B ROOF HATCH DETAIL 1
SCALE: NTS



WELL 11 ROOF HATCH DETAIL 2
SCALE: NTS

NO.	DATE	BY	BID SET	REVISION
1	03/13/2024	WRK	BID SET	

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

ARCHITECTURAL
MISCELLANEOUS ARCHITECTURAL
DETAILS

PROJECT NO.: 21-31133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
AD-002
22 of 65

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Well 11 & 11B Drawings 2001-0223.dwg S-001 3/1/2024 10:04 AM #

EQUIPMENT STORAGE BUILDING GENERAL NOTES

STRUCTURAL SHEETS:

- S-001 GENERAL STRUCTURAL NOTES
- S-002 QUALITY ASSURANCE PLAN (1)
- S-003 QUALITY ASSURANCE PLAN (2)
- S-101 STRUCTURAL WELL 11B FOUNDATION & FLOOR PLANS
- S-102 STRUCTURAL WELL 11B ROOF PLAN, CEILING PLAN & BUILDING SECTION
- S-103 STRUCTURAL WELL 11B BUILDING SECTION & STRUCTURAL DETAILS
- S-104 STRUCTURAL WELL 11-11B STRUCTURAL DETAILS
- S-201 STRUCTURAL WELL 11 FOUNDATION, FLOOR & ROOF FRAMING PLAN
- S-202 STRUCTURAL WELL 11 BUILDING SECTIONS
- SD-001 STRUCTURAL WELL 11-11B CMU DETAILS

GENERAL STRUCTURAL NOTES:

1. THESE NOTES ARE GENERAL IN NATURE AND ARE INTENDED TO SET MINIMUM STANDARDS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH THE CONTRACT DOCUMENTS AND HAVE A COPY OF THEM ON SITE AT ALL TIMES.
2. FOR ANY PORTION OF THE CONSTRUCTION WHICH THE CONTRACTOR IS UNABLE TO ASCERTAIN THE REQUIRED CONSTRUCTION OR WHERE CONFLICTS EXIST, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST ADDITIONAL INFORMATION (RFIs) AND/OR CLARIFICATIONS BEFORE CONSTRUCTION.
3. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE 2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC).
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
5. THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS SHALL ENSURE COORDINATION OF CONTRACTOR SUPPLIED/DESIGNED ELEMENTS AND DEFERRED SUBMITTALS WITH ALL DESIGN DISCIPLINES WITHIN THE CONSTRUCTION SET. COORDINATION SHALL IDENTIFY AND RECONCILE CONFLICTS BETWEEN THE CONTRACTOR SUPPLIED/DESIGNED ELEMENTS AND THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION AND DELIVERY TO THE PROJECT SITE. THE PROJECT ENGINEER SHALL BE NOTIFIED IF CONFLICTS EXIST.
6. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. METHODS, PROCEDURES, AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
7. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE. PROVIDE SHORING AND/OR BRACING WHERE LOADS EXCEED DESIGN CAPACITY AND WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.
8. CLADDING, WATERPROOFING, AND ARCHITECTURAL FEATURES ARE OUTSIDE THE STRUCTURAL SCOPE OF WORK. ANY DEPICTION OF SUCH FEATURES ON THE STRUCTURAL DRAWINGS ARE NOT INTENDED TO BE USED FOR CONSTRUCTION. REPRESENTATION OF SUCH FEATURES ON THESE DRAWINGS MAY OR MAY NOT BE ACCURATE. REFER TO ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS.

DESIGN LOADS: PER 2021 IBC & 2022 OSSC

1603.1.1 – FLOOR LOADS:	
LIVE LOAD	250 PSF
1603.1.2 – ROOF LOADS:	
DEAD LOAD	15 PSF
LIVE LOAD	20 PSF
1603.1.3 – SNOW LOADS:	
GROUND SNOW LOAD, P _g	30 PSF
FLAT ROOF SNOW LOAD, P _f	25 PSF
OREGON MINIMUM SNOW LOAD	20 PSF (2022 OSSC)
DESIGN ROOF SNOW LOAD	36 PSF
SNOW EXPOSURE FACTOR, C _e	1.0
SNOW LOAD IMPORTANCE FACTOR, I _s	1.2
THERMAL FACTOR, C _t	1.0
1603.1.4 – WIND DESIGN CRITERIA:	
ULTIMATE DESIGN WIND SPEED, V _{ult}	113 MPH
RISK CATEGORY	IV
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	SIMPLIFIED METHOD PER ASCE CH 28 PART 2 (+/-)
COMPONENTS & CLADDING: DESIGN WIND PRESSURES	
WALL ELEMENTS (A _{trib} = 10ft ²)	27.83/-37.24 PSF
OVERHANG ELEMENTS (A _{trib} = 10ft ²)	NA/-41.26 PSF
ROOF ELEMENTS (A _{trib} = 10ft ²)	16.84/-89.06 PSF
1603.1.5 – EARTHQUAKE DESIGN CRITERIA:	
RISK CATEGORY	IV
SEISMIC IMPORTANCE FACTOR, I _e	1.50
SPECTRAL ACCELERATION, S _s	0.361 g
SPECTRAL ACCELERATION, S ₁	0.136 g
SOIL SITE CLASS	C
SPECTRAL RESPONSE COEFFICIENT, S _{ps}	0.364 g
SPECTRAL RESPONSE COEFFICIENT, S _{p1}	0.211 g
SEISMIC DESIGN CATEGORY	CATEGORY D
SEISMIC FORCE RESISTING SYSTEM(S)	SPECIAL REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR(S), R	5.0
SEISMIC RESPONSE COEFFICIENT(S), C _s	0.109
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE, PER ASCE-7

SHEATHING:

1. WOOD STRUCTURAL PANELS SHALL BE APA RATED EXPOSURE 1 PLYWOOD, AND COVERED IN DOC PS 1 AND PS 2, UNLESS NOTED OTHERWISE.
2. MINIMUM PANEL THICKNESS SHALL BE 1 5/8", OR AS INDICATED IN THESE PLANS. PARTICLEBOARD IS NOT PERMITTED.
3. MINIMUM NAILING IS 8d@6" AT PANEL EDGES AND 8d@12" IN THE FIELD. ALL NAILS SHALL BE COMMON OR GALVANIZED BOX NAILS. BLOCKING IS REQUIRED WHERE NOTED ON THE PLANS.

MANUFACTURED ROOF TRUSSES:

1. MANUFACTURED ROOF TRUSSES SHALL BE AT 24" CENTERS AND SHALL HAVE A MINIMUM OF A 2x6 TOP CHORDS FOR WOOD TRUSSES.
2. TRUSSES SHALL BE DESIGNED FOR SPECIFIED ROOF LOADS. STRUCTURAL CALCULATIONS SHALL BE SEALED BY AN OREGON LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
3. MANUFACTURER SHALL DESIGN AND PROVIDE BRACING, BLOCKING, HOLDDOWNS, AND ALL ACCESSORIES REQUIRED FOR PROPER INSTALLATION.
4. SHOP DRAWINGS SHALL PROVIDE PLACING AND ERECTION DIRECTION TO INSTALLER. CALCULATIONS AND SHOP DRAWINGS SHALL USE COMMON IDENTIFYING MARKS TO FACILITATE SHOP DRAWING REVIEW.

SOLID SAWN LUMBER:

1. STRUCTURAL LUMBER SHALL BE DOUGLAS FIR CONFORMING TO WWPA GRADING RULES.
2. MINIMUM GRADES ARE, EXCEPT AS NOTED OTHERWISE:

TOP PLATES – #2

3. DOUBLE JOISTS BENEATH ALL PARALLEL WALLS AND/OR PARTITIONS.
4. NOTCHING IS NOT PERMITTED IN JOISTS, RAFTERS, BEAMS, LINTELS, COLUMNS, TRUSSES, AND BRACING MEMBERS.
5. PRESSURE TREATED LUMBER SHALL CONFORM TO THE AWPA AND SHALL BEAR THE QUALITY MARK OF AN ACCREDITED ALSO INSPECTION AGENCY. MINIMUM TREATING STANDARDS (RETENTION LBS./CU. FT) SHALL BE AS FOLLOWS:

APPLICATION	ACQ/ACZA	CA-B
ABOVE GROUND	0.25	0.10
GROUND CONTACT	0.40	0.21
FRESH WATER IMMERSION	0.40	0.21
IN GROUND (STRUCTURAL)	0.60	0.31
SILL PLATES	0.25	0.10

6. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH ACZA TO A MINIMUM RETENTION OF 0.25 POUNDS PER CUBIC FOOT BY ASSAY.
7. NAILING SHALL BE IN CONFORMANCE WITH THE 2021 IBC AS AMENDED BY THE 2022 OSSC UNLESS NOTED OTHERWISE. FASTENERS FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A-153. 5/8-INCH DIAMETER STEEL ANCHOR BOLTS & LARGER NEED NOT BE GALVANIZED, UNLESS NOTED OTHERWISE.

PREMANUFACTURED CONNECTION HARDWARE:

1. CONNECTION HARDWARE IS BY THE SIMPSON COMPANY OF SAN LEANDRO, CA. ALL STEEL CONNECTORS SHALL BE GALVANIZED OR BY SOME METHOD MADE CORROSION RESISTANT, UNLESS OTHERWISE INDICATED.
2. PROVIDE BOLTED OR NAILED CONNECTIONS FOR THE MAXIMUM CAPACITY UNLESS NOTED OTHERWISE.
3. CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE EITHER POST HOT-DIP GALVANIZED OR STAINLESS STEEL. FASTENERS SHALL BE OF THE SAME MATERIAL OR PROTECTIVE COATING AS THE CONNECTORS, DO NOT MIX DIFFERING METALS IN THE SAME CONNECTION.
4. ALL HARDWARE SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, UNLESS NOTED OTHERWISE.

CONCRETE MASONRY (CMU):

1. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90. THEY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI. CONTRACTOR TO VERIFY PER UNIT STRENGTH METHOD.
2. MORTAR SHALL BE TYPE M OR S WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
3. GROUT SHALL CONFORM TO ASTM C476 AND SHALL BE EQUAL TO 2,500 PSI MIN.
4. FOR GROUT LIFTS EXCEEDING FIVE (5) FEET, CLEAN OUTS SHALL BE PROVIDED AT THE BOTTOM OF EACH CELL AND AT NO MORE THAN 32" APART. GROUT SHALL BE INSTALLED IN ALL CELLS CONTAINING (E.G. SOLID GROUTING).
5. UNIT STRENGTH METHOD SHALL BE USED TO VERIFY MINIMUM COMPRESSIVE STRENGTH OF MASONRY f_m = 2,000 PSI.
6. MASONRY SHALL BE LAID IN RUNNING BOND.

FOUNDATIONS:

1. SOIL CHARACTERISTICS HAVE BEEN ASSUMED PER THE 2021 IBC AS AMENDED BY THE 2022 OSSC SECTION 1806 PRESUMPTIVE LOAD-BEARING VALUES OF SOILS CONSISTENT WITH SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL (SW, SP, SM, SC, GM AND GC) SOIL TYPES. THE CONTRACTOR SHALL VERIFY THE PRESUMED SOIL TYPES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER AND ARCHITECT OF NON-CONFORMING IN-SITU CONDITIONS IF PRESENT BEFORE PROCEEDING.
2. ALL FOUNDATIONS TO BEAR ON UNDISTURBED NATIVE MATERIAL, OR GRANULAR COMPACTED FILL.
3. SOIL DESIGN CRITERIA, PER 2022 OSSC SECTION 1806:
 - 3.1. SOIL BEARING – 1,500 PSF
 - 3.2. 1/2 INCREASE ALLOWED FOR SHORT TERM LOADS
 - 3.3. SOIL PROFILE – D
 - 3.4. FRICTION COEFFICIENT – 0.25
 - 3.5. EMBEDDED POLES, PASSIVE – 150 PCF

CONCRETE:

1. ALL CONCRETE SHALL BE HARD ROCK CONCRETE MEETING REQUIREMENTS OF ACI-301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". MIX PROPORTIONS SHALL BE PER ACI-301, METHOD 2 OR THE ALTERNATE PROCEDURE. SUBMIT MIX DESIGN FOR REVIEW BY STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
2. STRUCTURAL CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

MINIMUM COMPRESSIVE STRENGTH	4,500 PSI
% AIR ENTRAINMENT (±1%)	6%
MAXIMUM WATER CONTENT (GALLON PER 94LB. SACK OF CEMENT)	4.5 GALLONS
MIN. CEMENT CONTENT (94LB. SACK OF CEMENT PER CUBIC YARD OF SOLID CONCRETE)	6.5 SACKS
NOMINAL AGGREGATE SIZE (** SEE 1 1/2" GRADING SCHEDULE IN SPECIFICATIONS)	3/4"
INSTALLATION LOCATION(S)	SLABS AND FOOTINGS

3. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (±) 1% AIR ENTRAINMENT BY VOLUME. AIR ENTRAINMENT SHALL BE IN CONFORMANCE WITH ASTM C260.
4. COLD WEATHER PLACEMENT SHALL CONFORM TO ACI-306. HOT WEATHER PLACEMENT SHALL CONFORM TO ACI-305. MECHANICALLY VIBRATE ALL FORMED CONCRETE. DO NOT OVER-VIBRATE. PLACE CONCRETE MONOLITHICALLY BETWEEN CONSTRUCTION OR CONTROL JOINTS. PROTECT ALL CONCRETE FROM PREMATURE DRYING.
5. CHAMFER ALL EXTERIOR CORNERS 1/2" UNLESS SHOWN OTHERWISE.
6. SLUMP LIMITS MAY BE INCREASED BY ADDITION OF ADMIXTURES PROVIDED THAT THE WATER/CEMENT RATIO OF THE ORIGINAL MIX DESIGN IS NOT EXCEEDED. WATER REDUCING ADMIXTURE SHALL BE IN CONFORMANCE WITH ASTM494, USED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. SUBMIT ADMIXTURES TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
7. CEMENT SHALL BE TYPE I OR II IN CONFORMANCE WITH ASTM C150. AGGREGATES SHALL BE IN CONFORMANCE WITH ASTM C33 AND USE CRUSHED (NOT ROUND) GRAVEL OR STONE. COARSE AGGREGATES SHALL NOT EXCEED 3/4". WATER SHALL BE CLEAN AND POTABLE.
8. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. GRADE 40 MAY BE USED FOR #3 AND SMALLER TIES AND STIRRUPS. DETAIL AND PLACE ACCORDING TO ACI MANUAL SP-66. BENDING OF REINFORCING STEEL IN THE FIELD IS NOT PERMITTED WITHOUT APPROVAL BY EOR. REBENDING OR STRAIGHTENING OF REINFORCING OR BENDING OF REINFORCING STEEL CAST INTO CONCRETE IS NOT ALLOWED.
9. UNLESS OTHERWISE NOTED, MINIMUM COVER SHALL BE 1 1/2" FOR #5 AND SMALLER BARS, 2" FOR #6 AND LARGER BARS AND 3" WHEN POURED AGAINST EARTH. SUPPORT REINFORCEMENT WITH APPROVED CHAIRS, SPACERS, OR TIES.
10. PROVIDE MINIMUM 4B BAR DIAMETERS AT SPLICES. NO MORE THAN 50% OF REINFORCING SHALL BE SPLICED AT ANY LOCATION. UNLESS OTHERWISE NOTED, BEND ALL HORIZONTAL REINFORCING A MINIMUM OF 2'-0" AT CORNERS AND WALL/FOOTING INTERSECTIONS WITH MIN. EMBEDMENT BEYOND INTERFACE PER DEVELOPMENT LENGTH SPECIFIED IN ACI 318.
11. FORMWORK SHALL BE IN ACCORDANCE WITH ACI-347 "GUIDE TO FORMWORK FOR CONCRETE". FORMS SHALL BE DESIGNED BY THE CONTRACTOR. BRACING SHALL BE PROVIDED AS REQUIRED OR UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED 28-DAY STRENGTH. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMWORK, SUPPORTS, AND SHORING SHALL PROVIDE FINISHED CONCRETE SURFACES AT ALL FACES: LEVEL, PLUMB, AND TRUE TO DIMENSIONS AND ELEVATIONS SHOWN IN THE DRAWINGS.

JOB SITE CONDITIONS AND SAFETY:

1. CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ENGINEER AND IT'S REPRESENTATIVE HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE ENGINEER.

9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635

PSE Project #: 2001-0223

Date: 3/1/2024

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
DESIGNED
KTK
DRAWN
RAH
CHECKED

EXPIRES 12/31/25

CITY OF PENDLETON
WELL 11-11B

GENERAL STRUCTURAL NOTES

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
S-001

23 of 65

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01_100% Well 11 & 11B Drawings 2001-0223.dwg 5-002 3/1/2024 10:04 AM #

QUALITY ASSURANCE PLAN:

QUALITY ASSURANCE AND CONTROL PLAN:

QUALITY ASSURANCE FOR THE STRUCTURE'S SEISMIC RESISTANCE SHALL BE ENSURED BY THE REVIEW OF THE FOLLOWING SUBMITTALS, PERFORMING THE LISTED STRUCTURAL OBSERVATION AND IMPLEMENTATION OF THE LISTED SPECIAL INSPECTION AND MATERIAL TESTING OF THE FOLLOWING:

QUALITY ASSURANCE FOR THE STRUCTURE'S MAIN LATERAL FORCE RESISTING SYSTEM SHALL BE PROVIDED BY SPECIAL INSPECTION AND MATERIAL TESTING OF THE FOLLOWING:

SHOP DRAWINGS & SUBMITTALS:

SHOP DRAWINGS, CALCULATIONS, SUBMITTALS AND/OR MILL CERTIFICATES FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER OF RECORD FOR REVIEW A MINIMUM OF 21 DAYS PRIOR TO FABRICATION:

1. CONCRETE MIX DESIGN AND PROPOSED ADMIXTURES
2. CMU REINFORCING SHOP DRAWINGS
3. CMU BLOCK
4. GROUT AND MORTAR MIX DESIGNS
5. ROOF TRUSS SHOP DRAWINGS & CALCULATIONS
6. CONCRETE REINFORCING SHOP DRAWINGS

STRUCTURAL OBSERVATION REQUIREMENTS:

1. THE OWNER SHALL EMPLOY THE ENGINEER OF RECORD OR AN ALTERNATE OREGON LICENSED PROFESSIONAL ENGINEER, APPROVED BY THE ENGINEER OF RECORD, TO PERFORM STRUCTURAL OBSERVATIONS IN ACCORDANCE WITH SECTION 1704.6 OF THE INTERNATIONAL BUILDING CODE.
2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY OTHER INSPECTION CRITERIA, INCLUDING SPECIAL INSPECTION, AS REQUIRED BY THE BUILDING OFFICIAL OR AS INDICATED WITHIN THE INTERNATIONAL BUILDING CODE.
3. DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER AND THE BUILDING OFFICIAL (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION). AT THE CONCLUSION OF THE STRUCTURAL WORK INCLUDED WITHIN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL AND THE OWNER (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION) A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
4. THE CONTRACTOR SHALL MAKE AVAILABLE ALL MEANS AND METHODS NECESSARY FOR THE STRUCTURAL OBSERVER TO PERFORM THE REQUIRED STRUCTURAL OBSERVATIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND STRUCTURAL OBSERVER A MINIMUM OF 48 HOURS BEFORE THE TIME AT WHICH THE SPECIFIED STRUCTURAL OBSERVATIONS MAY BE PERFORMED. IN ADDITION THE CONTRACTOR SHALL UPDATE THE STRUCTURAL OBSERVER OF THE CONSTRUCTION PROGRESS.
5. STRUCTURAL OBSERVATIONS SHALL BE PERFORMED FOR THE FOLLOWING AREAS OF WORK:
 - 5.1. WELL 11B
 - 5.1.1. FORMING AND REINFORCING OF THE FLOOR SLAB AND FOOTINGS PRIOR TO FORM ENCLOSURE AND CONCRETE POUR
 - 5.1.2. CMU WALL CONSTRUCTION AND REINFORCING PRIOR TO THE FIRST GROUT POUR
 - 5.1.3. CONSTRUCTION OF CMU LINTELS, PRIOR TO GROUT POUR
 - 5.1.4. INSTALLATION OF THE ROOF FRAMING PRIOR TO SHEATHING INSTALLATION
 - 5.1.5. FOLLOWING COMPLETION OF ALL STRUCTURAL ELEMENTS CONTAINED HEREIN.
 - 5.1. WELL 11
 - 5.1.1. FORMING AND REINFORCING OF THE FLOOR SLAB AND FOOTINGS PRIOR TO FORM ENCLOSURE AND CONCRETE POUR
 - 5.1.2. CMU WALL CONSTRUCTION AND REINFORCING PRIOR TO THE FIRST GROUT POUR
 - 5.1.3. CONSTRUCTION OF CMU LINTELS, PRIOR TO GROUT POUR
 - 5.1.4. INSTALLATION OF THE ROOF FRAMING PRIOR TO SHEATHING INSTALLATION
 - 5.1.5. FOLLOWING COMPLETION OF ALL STRUCTURAL ELEMENTS CONTAINED HEREIN.

SPECIAL INSPECTIONS:

1. AN INDEPENDENT TESTING LABORATORY CHOSEN BY THE OWNER SHALL PROVIDE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE FOR THE STRUCTURAL SYSTEMS OUTLINED HEREIN. ALL OTHER ELEMENTS SHALL COMPLY WITH THE SPECIAL INSPECTION & TESTING REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE. REQUIRED SPECIAL INSPECTION OF STRUCTURAL SYSTEMS OUTLINED IN THESE CONSTRUCTION DOCUMENTS INCLUDE THE FOLLOWING AREAS OF WORK:

GENERAL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)		REMARKS
			CONTINUOUS	PERIODIC	
DEFERRED SUBMITTALS				X	SPECIAL INSPECTION REQUIREMENTS FOR DEFERRED SUBMITTAL ITEMS, INCLUDING REQUIREMENTS FOR DESIGNATED SEISMIC SYSTEMS IN ACCORDANCE WITH OSSC SECTION 1705.12.4 IF APPLICABLE, TO BE SPECIFIED BY THE SYSTEM ENGINEER AND INCLUDED WITH DEFERRED SUBMITTAL DOCUMENTS.
SUBMITTALS TO THE BUILDING OFFICIAL	1704.5			X	CERTIFICATES OF COMPLIANCE, REPORTS OF PRE-CONSTRUCTION TESTS, OR REPORTS OF MATERIAL PROPERTIES SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.
POST INSTALLED MECHANICAL ANCHORS AND ADHESIVE ANCHORS (EXCLUDING CONDITIONS NOTED ABOVE) IN HARDENED CONCRETE AND COMPLETED MASONRY				X	

SOILS/GEOTECHNICAL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARDS REFERENCE	FREQUENCY (NOTE 7)		REMARKS
			CONTINUOUS	PERIODIC	
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	1705.6			X	
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL				X	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS				X	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL			X		
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY				X	

SOILS/GEOTECHNICAL - TESTING					
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)		REMARKS
			CONTINUOUS	PERIODIC	
FILL IN-PLACE DENSITY OR PREPARED SUBGRADE DENSITY	1705.6	VARIABLES; GEOTECHNICAL REPORT OR MINIMUM PER OSSC APPENDIX J107.5, WHICHEVER IS GREATER		X	BY THE GEOTECHNICAL ENGINEER
MATERIAL VERIFICATION		VARIABLES; CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X	BY THE GEOTECHNICAL ENGINEER
TEST ELEMENTS	1705.6 1705.7				REFERENCE SPECIFICATIONS FOR PERFORMANCE VARIATION AND PROOF LOAD TESTING REQUIREMENTS BY THE GEOTECHNICAL ENGINEER

CONCRETE - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)		REMARKS
			CONTINUOUS	PERIODIC	
GENERAL	1705.3 1901.6	ACI 318: 26.13			SPECIAL INSPECTIONS OF CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1705.3 OF THE IBC AND SECTION 26.13 OF ACI 318.
REINFORCING STEEL PLACEMENT	1901.5.2	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3, 26.13.3.3		X	REINFORCING TO COMPLY WITH ALL CODE PROTECTION, SPACING AND TOLERANCE LIMITS.
INSPECT ANCHORS/BOLTS CAST IN CONCRETE	-	ACI 318: 17.8.2		X	ALL CAST-IN-PLACE ANCHORS/BOLTS SHALL BE VISUALLY INSPECTED. REFERENCE STEEL INSPECTIONS FOR ADDITIONAL INSTALLATION, MATERIAL AND WELDING INSPECTIONS OF STEEL ITEMS EMBEDDED IN CONCRETE (HEADED STUDS, DBA's, ETC.)
VERIFYING USE OF REQUIRED MIX DESIGN(S)	1904.1 1904.2	ACI 318: CH. 19, 26.4.3, 26.4.4		X	
CONCRETE SPECIMENS FOR TESTING		ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	X		PRIOR TO CONCRETE PLACEMENT, FABRICATE CONCRETE SPECIMENS FOR TESTING. SEE THE CONCRETE TESTING TABLE FOR ADDITIONAL INFORMATION.
CONCRETE PLACEMENT		ACI 318: 26.5, 26.13.3.2(a)	X		
CONCRETE CURING		ACI 318: 26.5.3 - 26.5.5, 26.13.3.3		X	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES
VERIFICATION OF FORMWORK		ACI 318: 26.11.1.2(b), 26.13.3.3		X	SPECIAL INSPECTIONS APPLY TO SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED

CONCRETE - TESTING				
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS
CONCRETE STRENGTH	1705.3 ASTM C172 ASTM C 31 ACI 318 26.12, ACI 318 26.5	ASTM C39	EACH 150 CY NOR LESS THAN EACH 5000 SF OF SLAB OR WALL PLACED EACH SHIFT	FABRICATE SPECIMENS AT TIME FRESH CONCRETE IS PLACED
CONCRETE SLUMP		ASTM C143		
CONCRETE AIR CONTENT		ASTM C231		
CONCRETE TEMPERATURE		ASTM C1064		

PSE
PETERSON STRUCTURAL ENGINEERS

9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635

PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
DESIGNED
KTK
DRAWN
RAH
CHECKED



**CITY OF PENDLETON
WELL 11-11B**

QUALITY ASSURANCE PLAN (1)

SHEET

S-002

24 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01_100% Well 11 & 11B Drawings 2001-0223.dwg 5-003 3/1/2024 10:04 AM #

MASONRY MINIMUM VERIFICATION REQUIREMENTS				
MINIMUM VERIFICATION	QUALITY ASSURANCE LEVEL 3	CODE REFERENCE		REMARKS
		TMS 602-16 Table 3 (S-0025)		
PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS.	R	ART. 1.5		
PRIOR TO CONSTRUCTION VERIFICATION OF f'm AND f'AC, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE.	R	ART. 1.4 B		
DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.	R	ART. 1.5 & 1.6.3		
DURING CONSTRUCTION, VERIFICATION OF f'm AND f'AC FOR EVERY 5,000 SQ. FT.	R	ART 1.4 B		
DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.	R	ART 1.4 B		
NOTE: R=REQUIRED, NR=NOT REQUIRED (SEE NOTE 6)				

MASONRY MINIMUM SPECIAL INSPECTION REQUIREMENTS				
INSPECTION TASK	QUALITY ASSURANCE LEVEL 3	CODE REFERENCE		REMARKS
		TMS 402-16	TMS 602-16 TBL 4 (S-0026)	
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR	P		ART. 2.1, 2.6 A, & 2.6 C	
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS	P			
C. SAMPLE PANEL CONSTRUCTION	C		ART. 1.6 D	
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE	C		ART. 3.2 D & 3.2 F	
B. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	C	SEC. 6.1, 6.3.1, 6.3.6 & 6.3.7	ART. 3.2 E & 3.4	REFERENCE THE GENERAL TABLE FOR SPECIAL INSPECTION REQUIRED FOR POST INSTALLED ANCHORS INTO COMPLETED MASONRY.
C. PROPORTIONS OF SITE-PREPARED GROUT	P		ART. 2.6 B & 2.4 G.1.b	
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	P		ART. 1.5	
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	P		ART. 3.3 B	
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	P		ART. 3.3 F	
D. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	C	SEC. 1.2.1 (e), 6.2.1 & 6.3.1		
E. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 F) OR HOT WEATHER (TEMPERATURE ABOVE 90 F)	P		ART. 1.8 C & 1.8 D	
4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/ OR PRISMS	C		ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4	
NOTE: R=REQUIRED, NR=NOT REQUIRED, P=PERIODIC, C=CONTINUOUS (NOTE 6)				

MASONRY- REQUIRED TESTING		
SYSTEM OR MATERIAL	IBC CODE REFERENCE OR REFERENCED STANDARD	REMARKS
UNIT STRENGTH METHOD-MASONRY UNIT	IBC 1705.4, TMS 602 1.4.B, TMS 602.2.3, TMS 602 2.3 E, ASTM REFERENCES PER REMARKS	CONCRETE MASONRY (ASTM C90) CONCRETE MASONRY UNIT MATERIALS TO CONFORM TO ASTM C55, C73, C90, C129, C744, OR C1634 AS SPECIFIED
UNIT STRENGTH METHOD-COMPRESSIVE STRENGTH OF MORTAR	IBC 1705.4, TMS 602 2.1, ASTM C270	MORTAR SHALL COMPLY WITH ASTM C270
UNIT STRENGTH METHOD-COMPRESSIVE STRENGTH OF GROUT	IBC 1705.4, TMS 602 2.2, ASTM C476	GROUT SHALL COMPLY WITH ASTM C476. WHEN f'm EXCEEDS 2,000 PSI PROVIDE COMPRESSIVE STRENGTH THAT EQUALS OR EXCEEDS f'm. DETERMINE COMPRESSIVE STRENGTH OF GROUT IN ACCORDANCE WITH ASTM C1019. DO NOT USE ADMIXTURES UNLESS ACCEPTABLE. FIELD ADDITION OF ADMIXTURES IS NOT PERMITTED IN SELF-CONSOLIDATING GROUT.
PRISM TEST METHOD	IBC 1705.4, TMS 602 1.4 B.2.3, 1.4 B.4, ASTM C1314	FOR CONCRETE MASONRY, TEST IN ACCORDANCE WITH ASTM C1314. DETERMINE LENGTH, WIDTH AND HEIGHT DIMENSIONS OF THE PRISM AND TEST PRISMS WHEN AT LEAST 28 DAYS OLD IN ACCORDANCE WITH ASTM C1314.
TESTING PRISMS FROM CONSTRUCTED MASONRY	IBC 1705.4, TMS 602 1.4 B 4.a, 1.4 B 4.b, 1.4 B 4.c, ASTM C1532	PRISM SAMPLING AND REMOVAL- FOR EACH 5000 SQUARE FEET OF WALL AREA IN QUESTION, SAW-CUT A MINIMUM OF THREE PRISMS FROM COMPLETED MASONRY. SELECT, REMOVE, AND TRANSPORT PRISMS PER ASTM C1532/C1532M.
GENERAL NOTES: 1.4 B.1 OR 1.4 B.2 EITHER THE UNIT STRENGTH METHOD OR THE PRISM TEST METHOD MAY BE CHOSEN TO SATISFY SPECIAL INSPECTIONS COMPRESSIVE STRENGTH FOR EACH WYTHE.		

WOOD - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)		REMARKS
			CONTINUOUS	PERIODIC	
FABRICATION OF PREFABRICATED STRUCTURAL ELEMENTS	1705.5			X	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS

- SPECIAL INSPECTION NOTES:**
- SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1705 OF THE 2022 OSSC, CONTRACT DOCUMENTS AND APPROVED SUBMITTALS. REFER TO SPECIAL INSPECTION AND TESTING TABLES FOR PROJECT REQUIREMENTS.
 - SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E329 (MATERIALS). THE INSPECTION AND TESTING AGENCY SHALL FURNISH TO THE STRUCTURAL ENGINEER A COPY OF THEIR SCOPE OF ACCREDITATION. SPECIAL INSPECTORS SHALL BE APPROVED BY THE BUILDING OFFICIAL. WELDING INSPECTORS SHALL BE QUALIFIED PER SECTION 6.1.4.1(1) OF AWS D1.1.
 - THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS.
 - THE SPECIAL INSPECTOR AND GEOTECHNICAL ENGINEER SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, CONTRACTOR, AND OWNER. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THAT ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.
 - AN INDEPENDENT TESTING LABORATORY, SELECTED AND ENGAGED BY THE CONTRACTOR, SHALL PROVIDE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE OSSC AND OF THE TYPE AND FREQUENCY OUTLINED IN THE QUALITY CONTROL SECTION OF THESE GENERAL NOTES.
 - THE CONTRACTOR SHALL MAKE AVAILABLE ALL MEANS AND METHODS NECESSARY FOR THE SPECIAL INSPECTOR TO PERFORM THE REQUIRED INSPECTIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND SPECIAL INSPECTOR A MINIMUM OF 48 HOURS BEFORE THE TIME AT WHICH THE SPECIFIED SPECIAL INSPECTIONS MAY BE PERFORMED.
 - INSPECTION TYPES:
 - CONTINUOUS: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
 - PERIODIC: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
 - OBSERVE: OBSERVE THESE FUNCTIONS ON A RANDOM, DAILY BASIS. OPERATIONS NEED NOT BE DELAYED PENDING OBSERVATIONS.
 - PERFORM: INSPECTIONS SHALL BE PERFORMED PRIOR TO THE FINAL ACCEPTANCE OF THE ITEM.
 - PERFORM INSPECTION PRIOR TO FINAL ACCEPTANCE OF THE ITEM FOR TEN WELDS TO BE MADE BY A GIVEN WELDER, WITH THE WELDER DEMONSTRATING UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF SKILLS AND TOOLS TO VERIFY THESE ITEMS, THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THAT THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THAT THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED.
 - SPECIAL INSPECTION OF MECHANICAL POST INSTALLED ANCHORS SHALL BE IN STRICT CONFORMANCE WITH THE ICC REPORT AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ANCHOR INSTALLERS SHALL BE QUALIFIED AS REQUIRED BY JURISDICTION REQUIREMENTS.
 - INSPECTION REPORTS SHALL IDENTIFY NAMES OF INSTALLERS.
 - SPECIAL INSPECTOR SHALL PROVIDE DOCUMENTATION AT THE END OF ANCHOR INSTALLATIONS STATING THAT THE ANCHORS WERE INSPECTED PER APPROVED ANCHOR EVALUATION REPORT.

PSE
PETERSON STRUCTURAL ENGINEERS

9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635

PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE

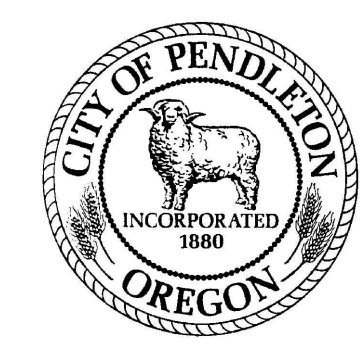
0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
DESIGNED

KTK
DRAWN

RAH
CHECKED



**CITY OF PENDLETON
WELL 11-11B**

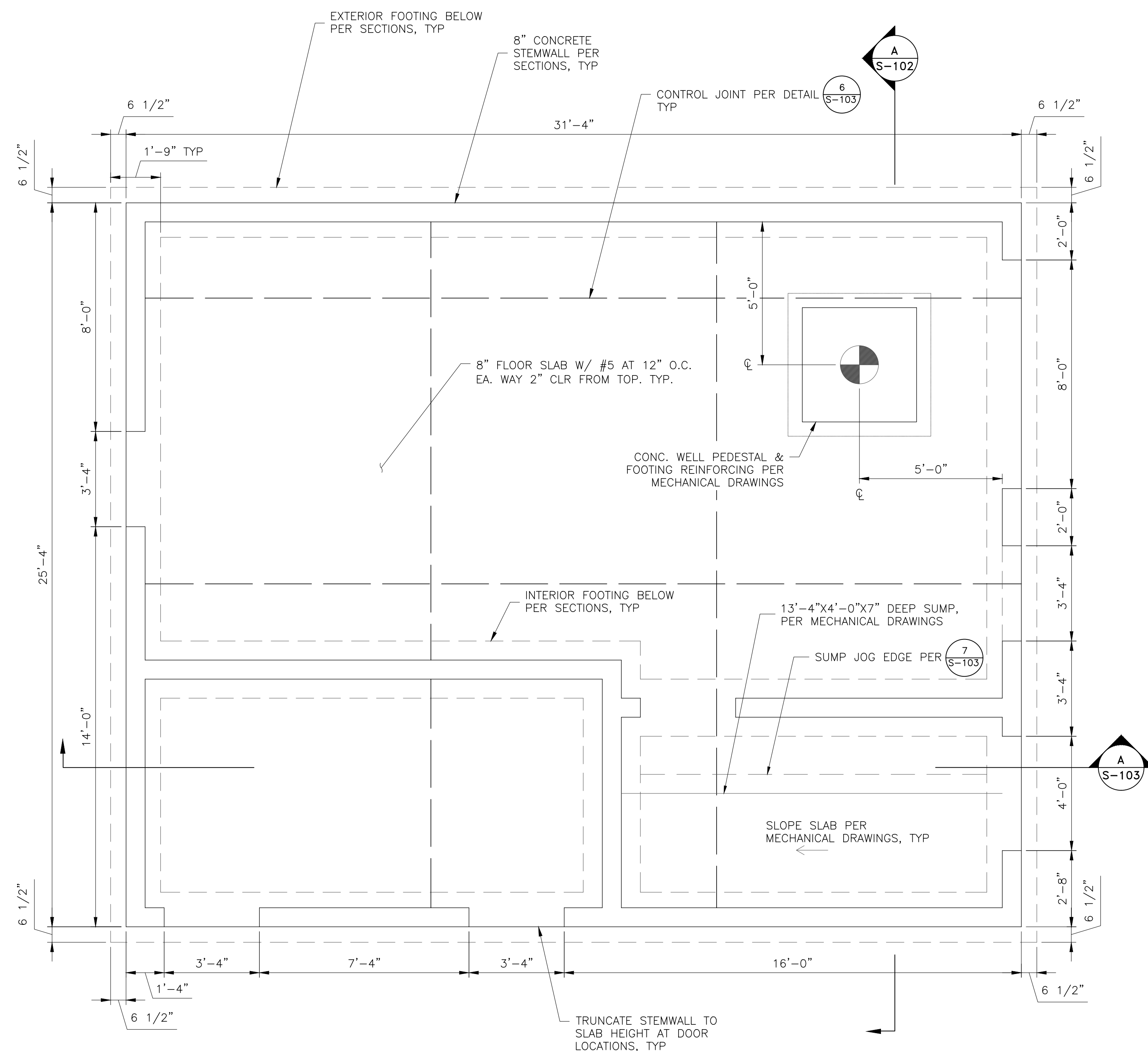
QUALITY ASSURANCE PLAN (2)

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

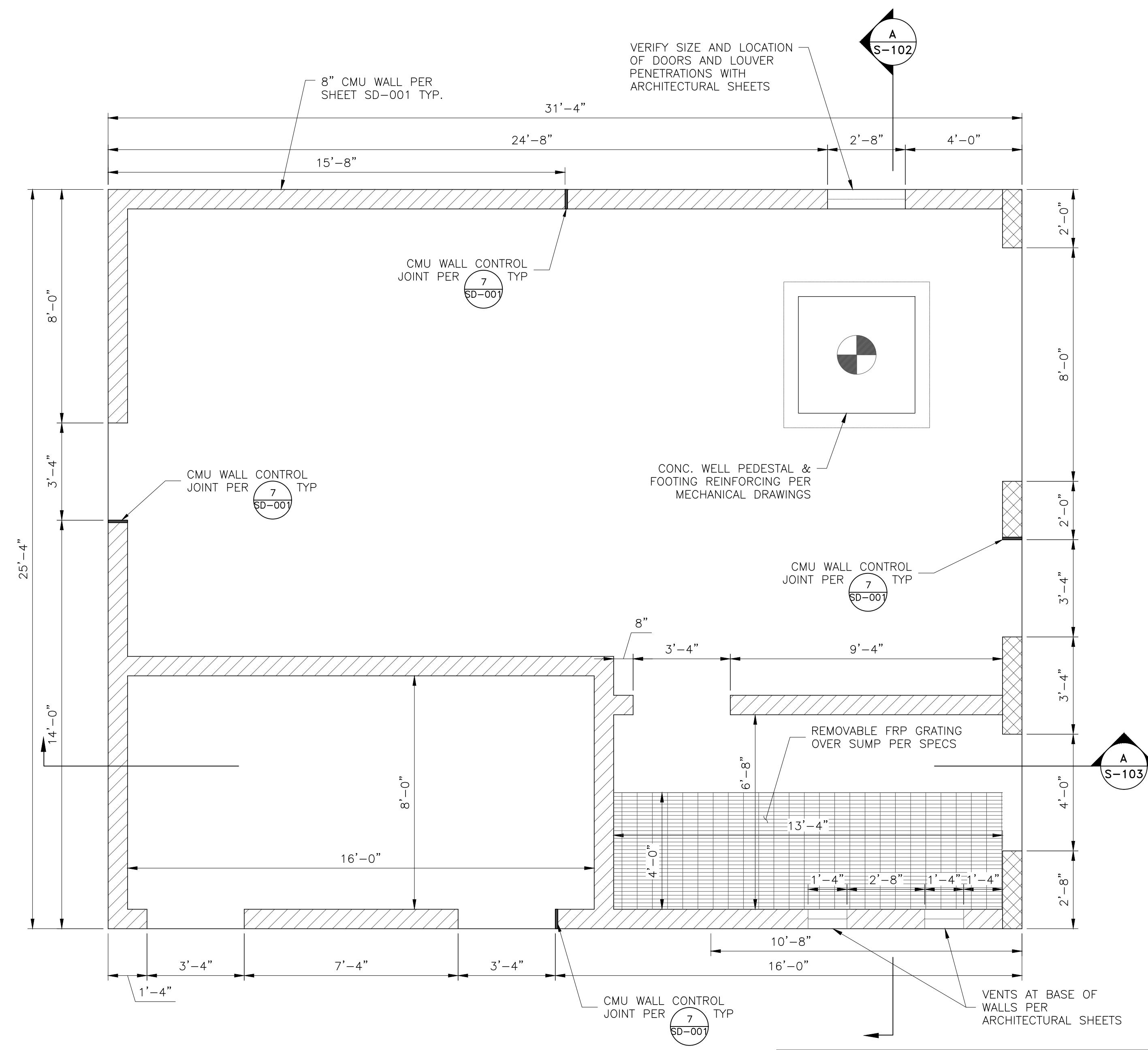
SHEET
S-003
25 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

K:\01-PDX\2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Well 11 & 11B Drawings 2001-0223.dwg S-101 3/1/2024 10:04 AM #####



FOUNDATION PLAN (1)
3/8" = 1'-0"

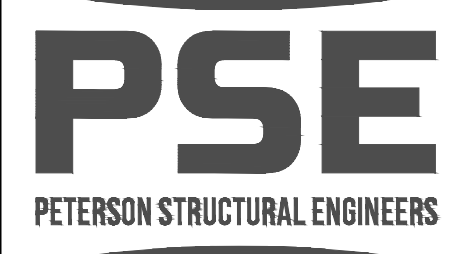


FLOOR PLAN (2)
3/8" = 1'-0"

LEGEND:

- TYPE 1 SPECIAL REINFORCED MASONRY SHEAR WALL. SEE DETAIL 1 ON SHEET SD-001
- TYPE 3 SPECIAL REINFORCED MASONRY SHEAR WALL. SEE DETAIL 1 ON SHEET SD-001

NOTE: WALLS ABOVE PENETRATIONS SHALL BE REINFORCED SIM TO PIERS EACH SIDE.



9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635

PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK DESIGNED
KTK DRAWN
RAH CHECKED



**CITY OF PENDLETON
WELL 11-11B**

**STRUCTURAL WELL 11B
FOUNDATION & FLOOR PLANS**

SHEET
S-101
26 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Well 11 & 11B Drawings 2001-0223.dwg 5-102 3/1/2024 10:04 AM #

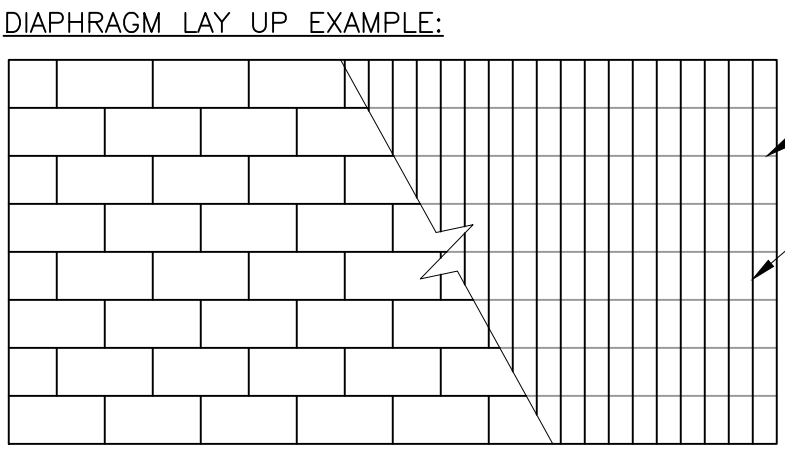
ROOF SHEATHING:
 15/32" CDX SHEATHING W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE FIELD W/ 2X BLOCKING AT 24" O.C.

CEILING SHEATHING:
 15/32" CDX SHEATHING W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN THE FIELD W/ 2X BLOCKING AT 24" O.C. SEE DETAIL 2 S-102 FOR DIAPHRAGM STRAPPING REQUIREMENTS

NOTE: BLOCKING NOT SHOWN FOR CLARITY

DIAPHRAGM NOTES:

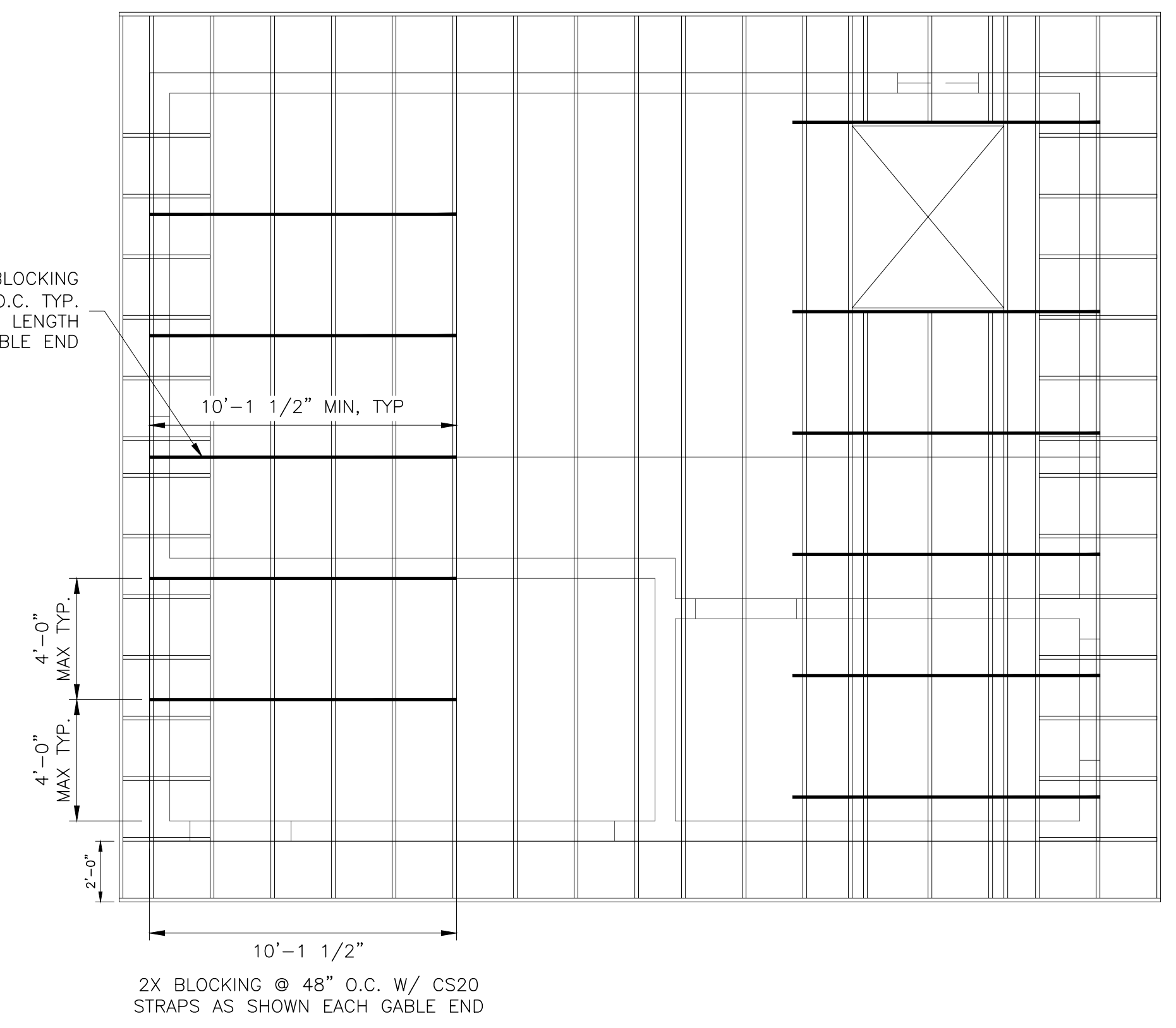
1. FIELD NAILING TO BE AT 12" O.C.
2. SHEATHING TO BE SUPPORTED BY FRAMING 24" O.C. MAX.
3. NAILS TO BE COMMON OR GALVANIZED BOX NAILS. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED. NAILS TO BE 3/8" FROM PANEL EDGE.
4. PANELS TO BE PLACED PER LAY UP EXAMPLE BELOW.



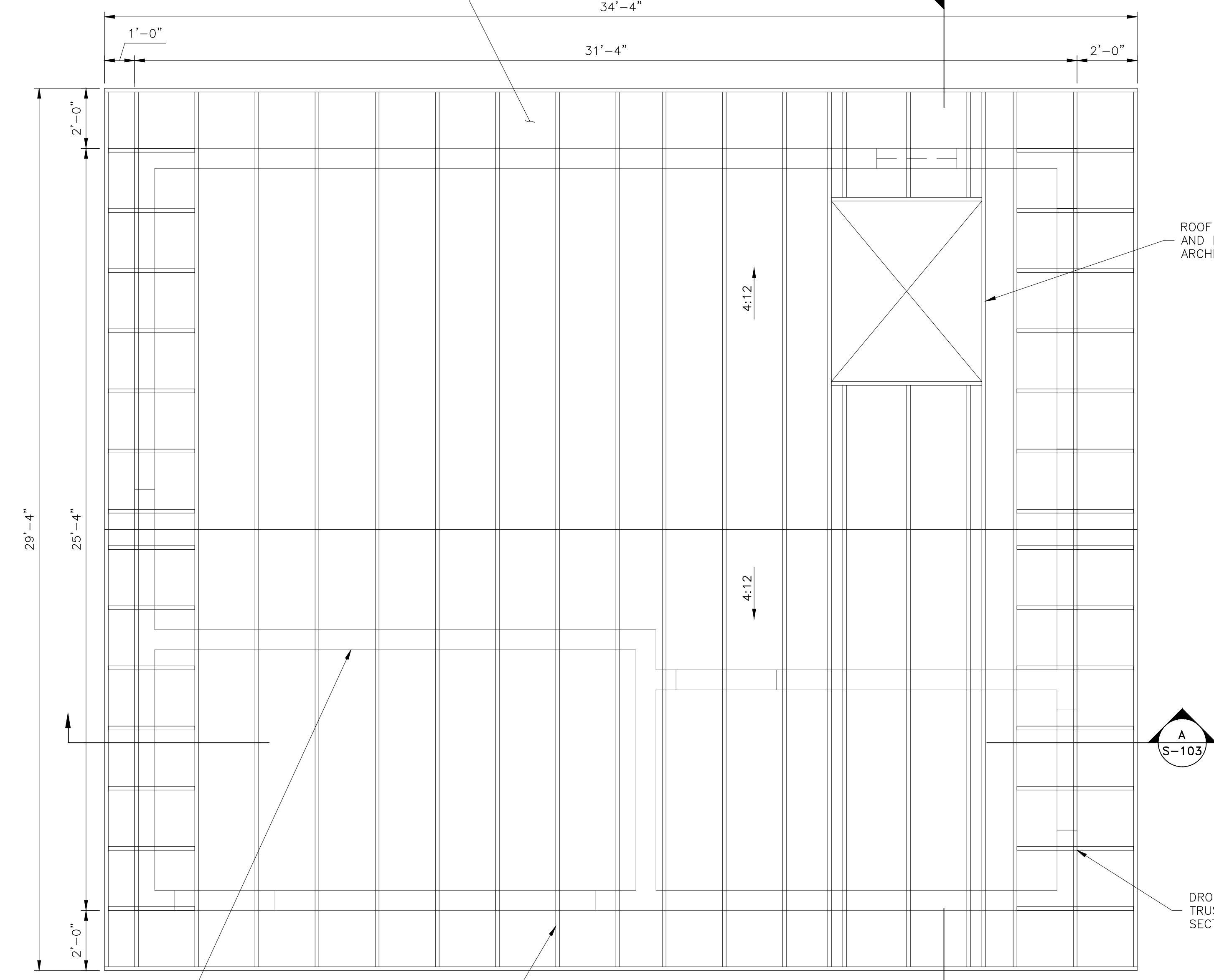
BLOCKING AS REQUIRED

FRAMING PER PLAN

SIMPSON CS20 STRAP TO BLOCKING AT 4'-0" O.C. TYP. INSTALL EA. STRAP TO LENGTH SHOWN ON PLAN, EACH GABLE END

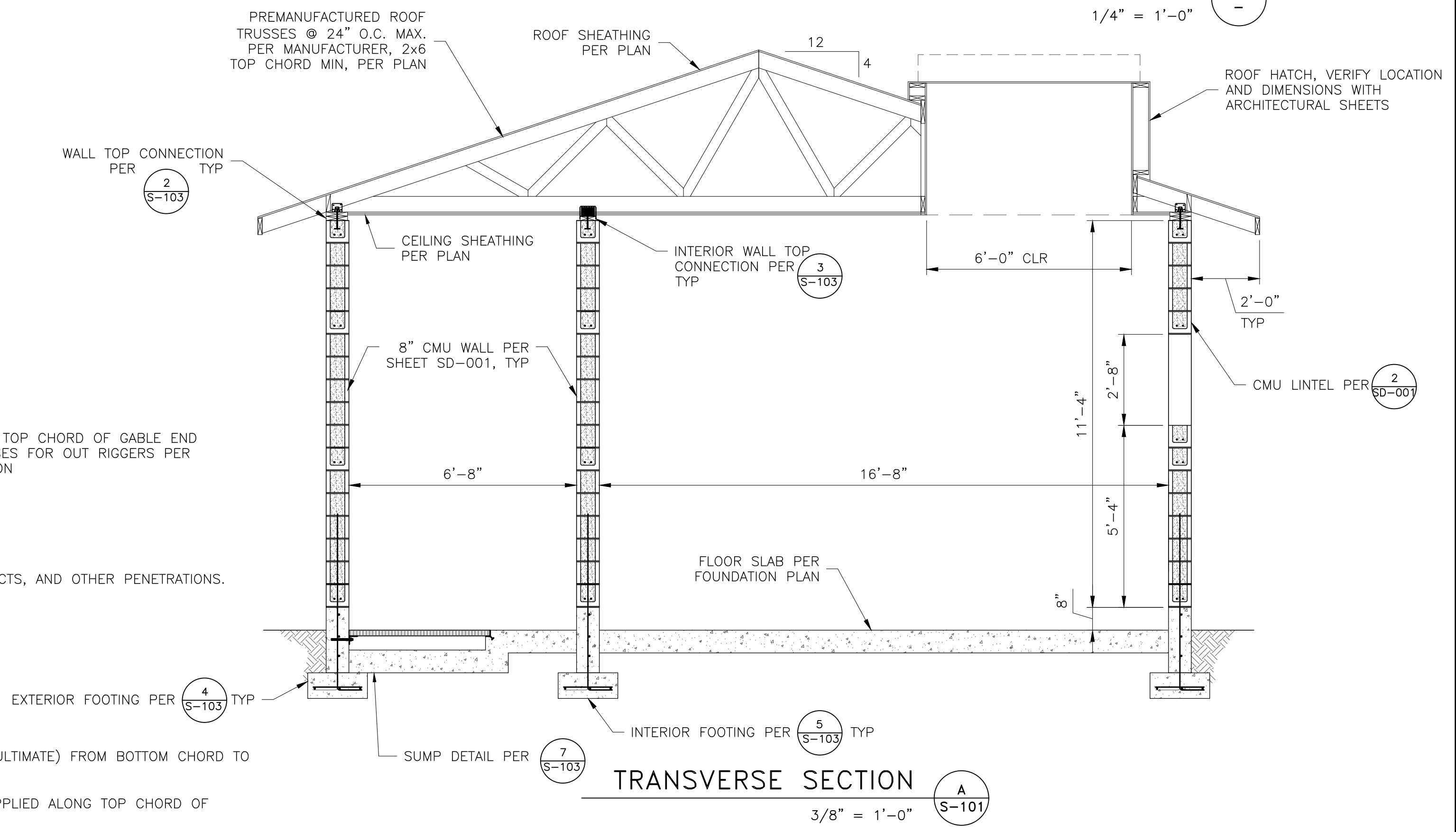


CEILING DIAPHRAGM STRAPPING PLAN 2
 1/4" = 1'-0"



ROOF FRAMING PLAN 1
 3/8" = 1'-0"

- NOTES:**
1. TRUSS MANUFACTURER TO COORDINATE TRUSSES WITH MECHANICAL DRAWINGS FOR LOUVER, DUCTS, AND OTHER PENETRATIONS.
 2. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING CRITERIA
 - 2.1. DISTRIBUTED DEAD LOAD = 10 PSF (TOP CHORD), 5 PSF (BOT CHORD)
 - 2.2. DISTRIBUTED LIVE LOAD = 20 PSF
 - 2.3. DISTRIBUTED SNOW LOAD = 36 PSF
 - 2.4. EQUIPMENT POINT LOAD = 500 LB (AT WORST CASE LOCATION)
 - 2.5. AXIAL WIND LOAD IN TOP CHORD = 747 LB (ULTIMATE)
 - 2.6. AXIAL SEISMIC LOAD IN TOP CHORD = 369 LB (ULTIMATE)
 - 2.7. ALLOWABLE DEFLECTION = 1/2" MAX
 3. TRUSS MANUFACTURER TO DESIGN TRUSS TO TRANSFER LATERAL SEISMIC LOAD OF ±369 LB (ULTIMATE) FROM BOTTOM CHORD TO TOP CHORD. LOAD ACTS ALONG LENGTH OF TRUSS.
 4. TRUSS MANUFACTURER TO DESIGN TRUSS FOR ADDITIONAL ±200 PLF (ULTIMATE) WIND LOAD APPLIED ALONG TOP CHORD OF TRUSS FROM OUTRIGGER.
 5. INTERIOR WALLS SHALL NOT BE TREATED AS BEARING WALLS. SEE DETAIL 3 S-103 FOR DEFLECTION GAP



TRANSVERSE SECTION A
 3/8" = 1'-0"

PSE
 PETERSON STRUCTURAL ENGINEERS

9400 SW Barnes Rd., Suite 100
 Portland, Oregon 97225
 (503) 292-1635

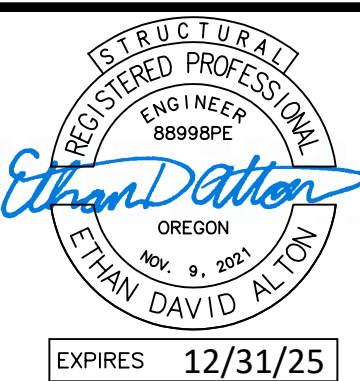
PSE Project #: 2001-0223
 Date: 3/1/2024

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
 DESIGNED
 KTK
 DRAWN
 RAH
 CHECKED



CITY OF PENDLETON
WELL 11-11B

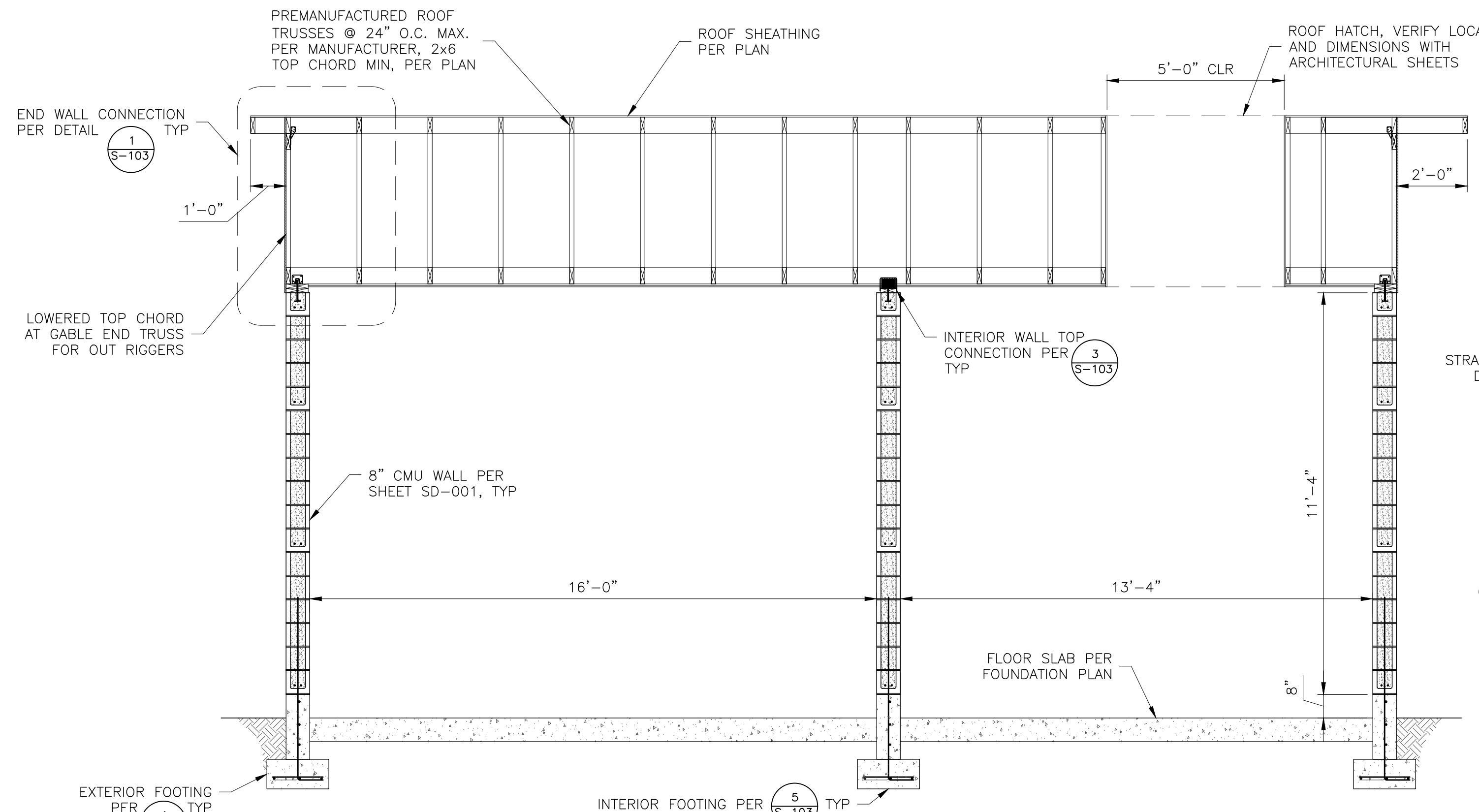
STRUCTURAL WELL 11B
ROOF PLAN, CEILING PLAN
& BUILDING SECTION

SHEET
S-102
 27 of 65

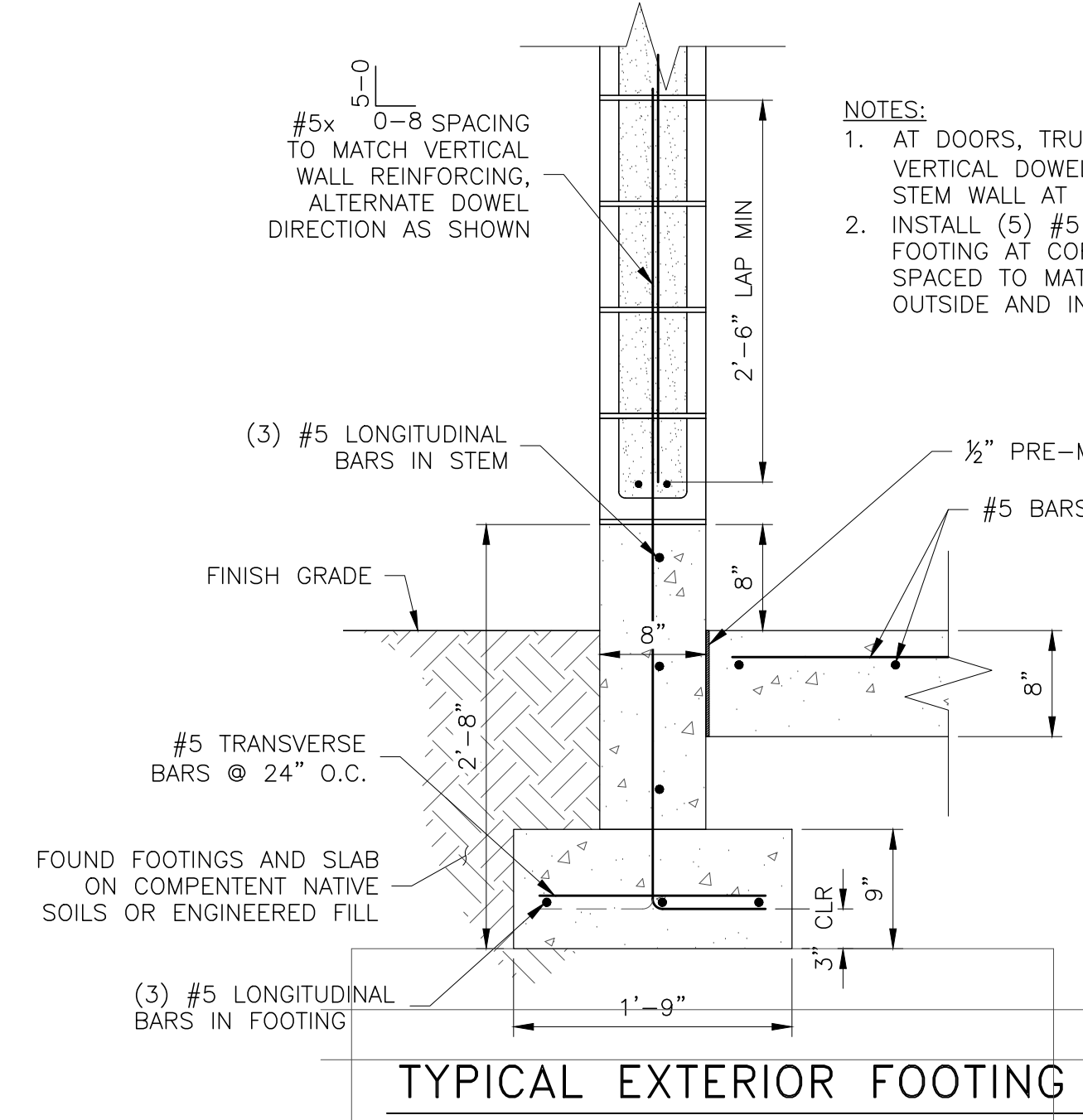
NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

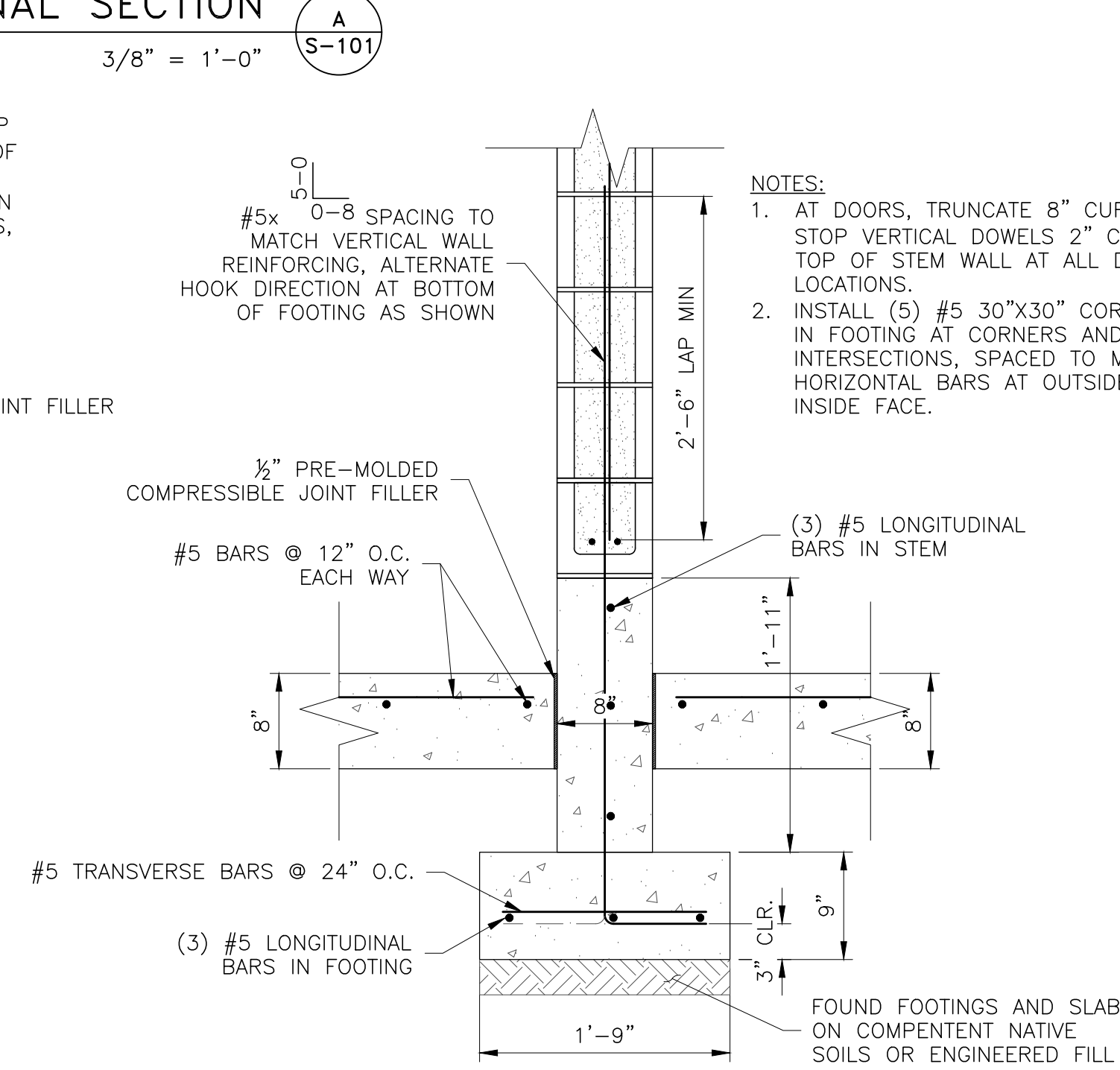
K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01_100% Well 11 & 11B Drawings 2001-0223.dwg S-103 3/1/2024 10:04 AM #



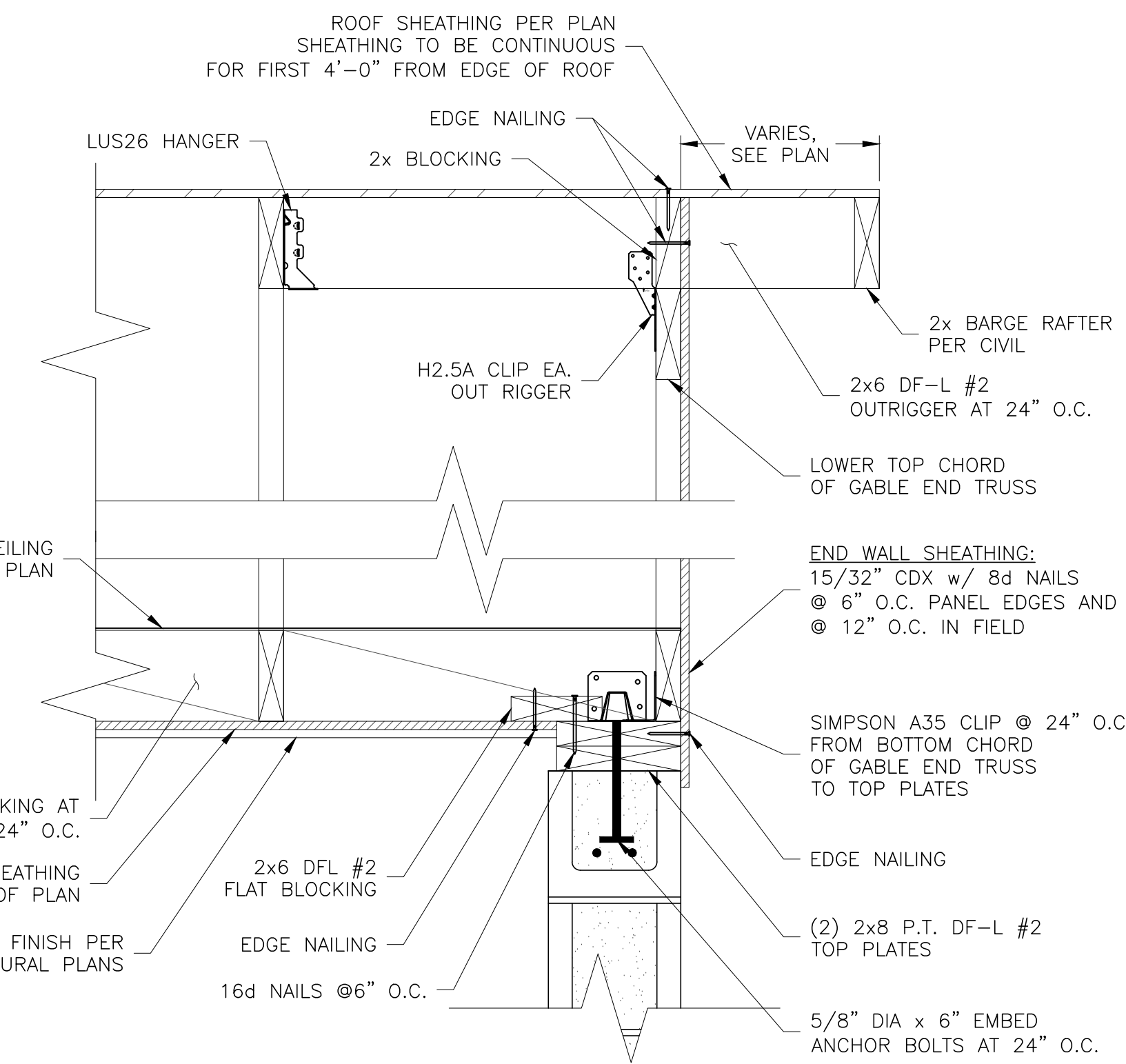
LONGITUDINAL SECTION
A
3/8" = 1'-0" S-101



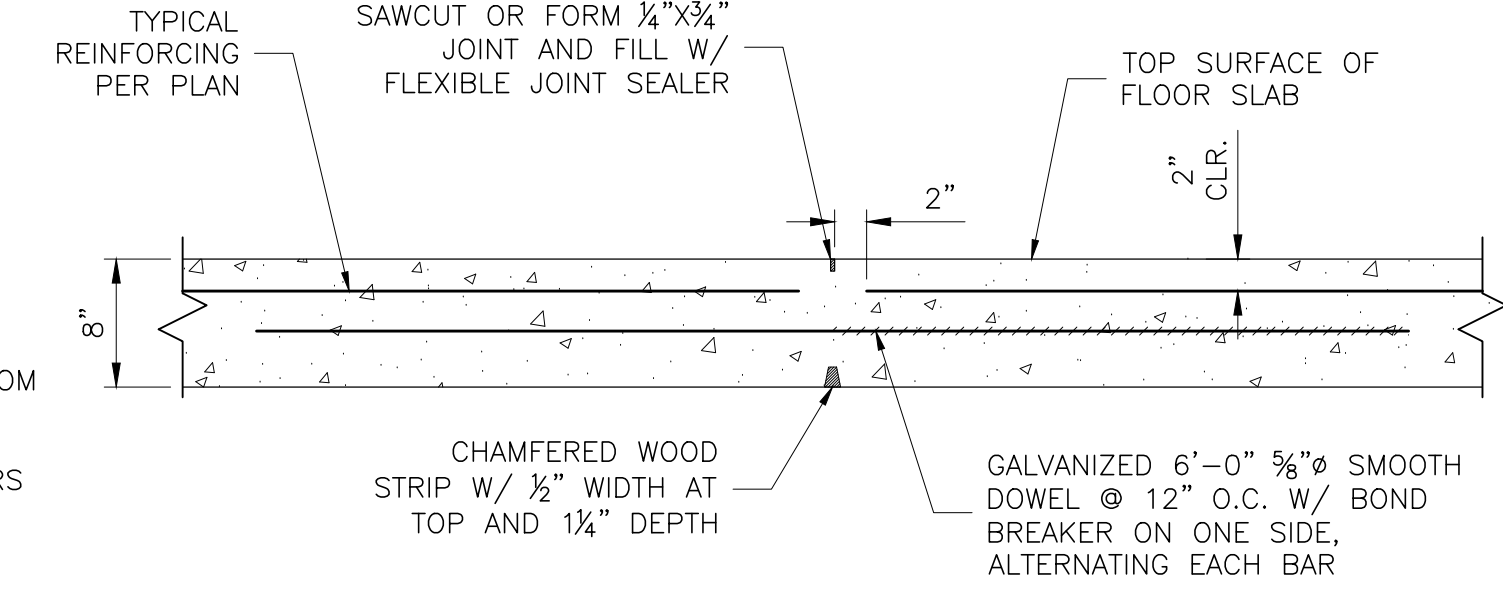
TYPICAL EXTERIOR FOOTING DETAIL
4
1" = 1'-0" S-102



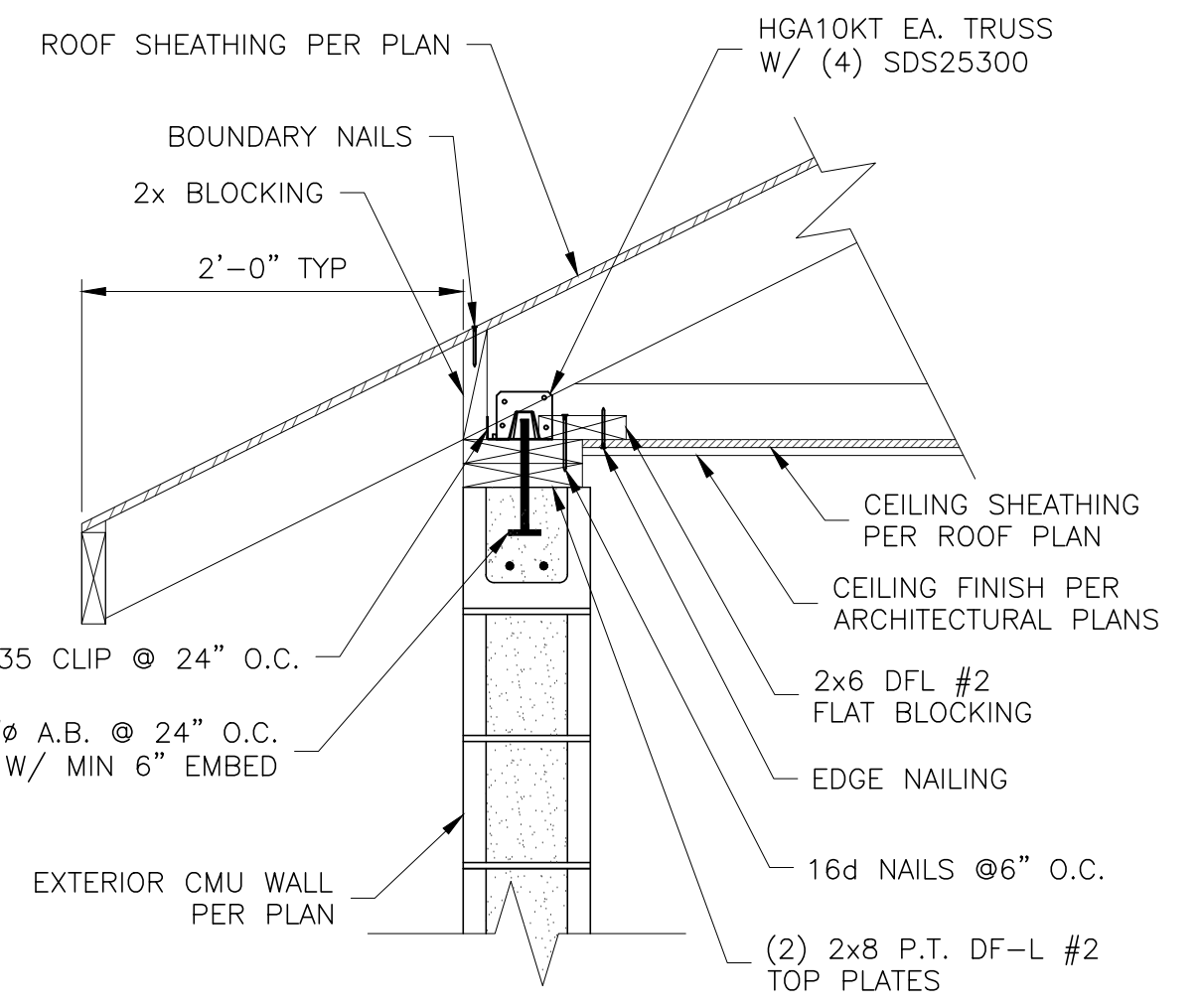
TYPICAL INTERIOR FOOTING DETAIL
5
1" = 1'-0" S-102



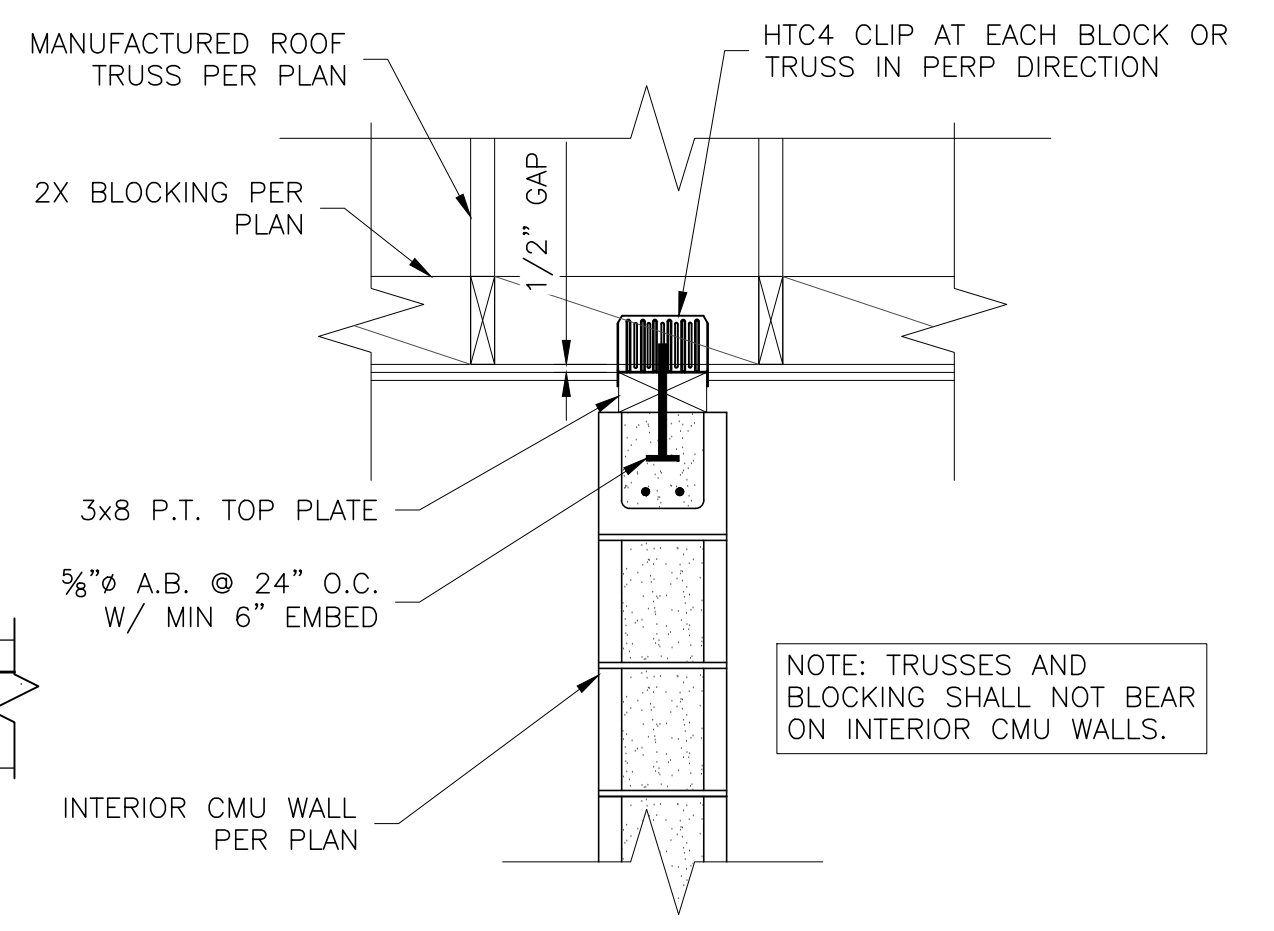
GABLE END WALL TOP DETAIL
1
1 1/2" = 1'-0" S-103



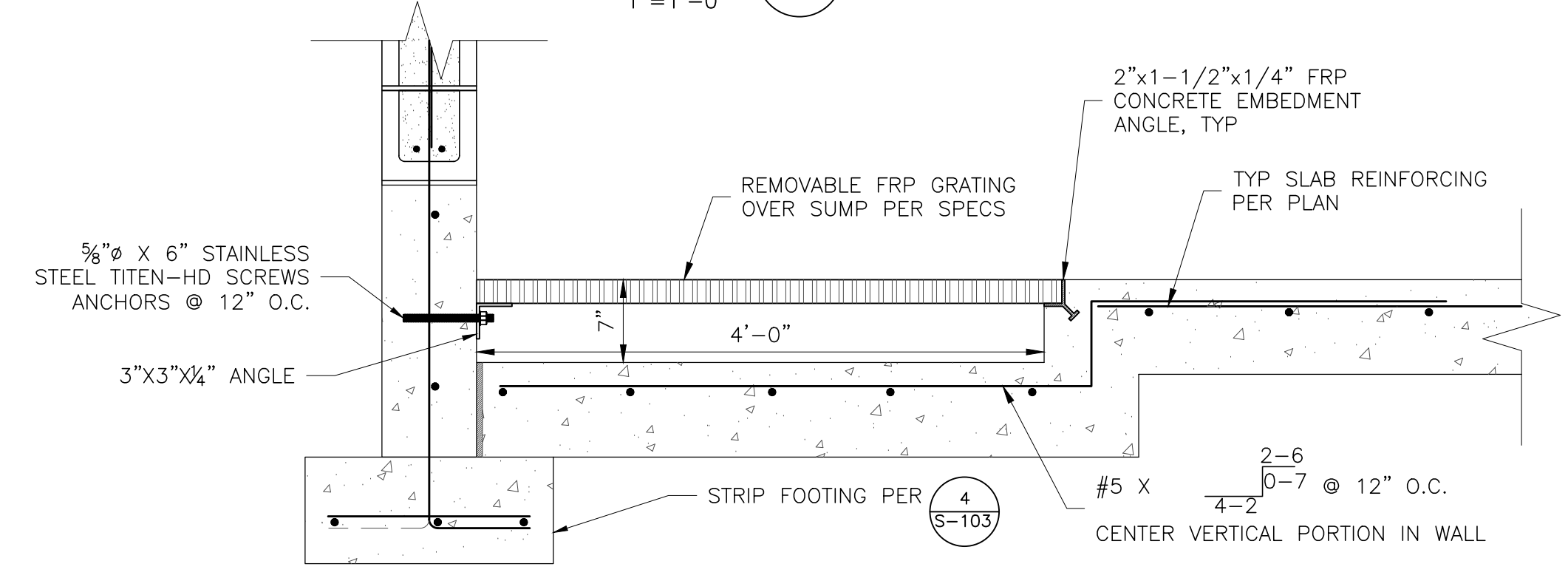
SLAB CONTROL JOINT DETAIL
6
1" = 1'-0" S-101



EXTERIOR WALL TOP DETAIL
2
1" = 1'-0" S-102



INTERIOR WALL TOP DETAIL
3
1" = 1'-0" S-102



TRENCH REINFORCING DETAIL
7
1/2" = 1'-0" S-101

PSE
PETERSON STRUCTURAL ENGINEERS
9400 SW Barnes Rd., Suite 100
Portland, Oregon 97225
(503) 292-1635
PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK DESIGNED
KTK DRAWN
RAH CHECKED

REGISTERED PROFESSIONAL ENGINEER
ETHAN DATHEN
EXPIRES 12/31/25



CITY OF PENDLETON WELL 11-11B

STRUCTURAL WELL 11B BUILDING SECTION & STRUCTURAL DETAILS

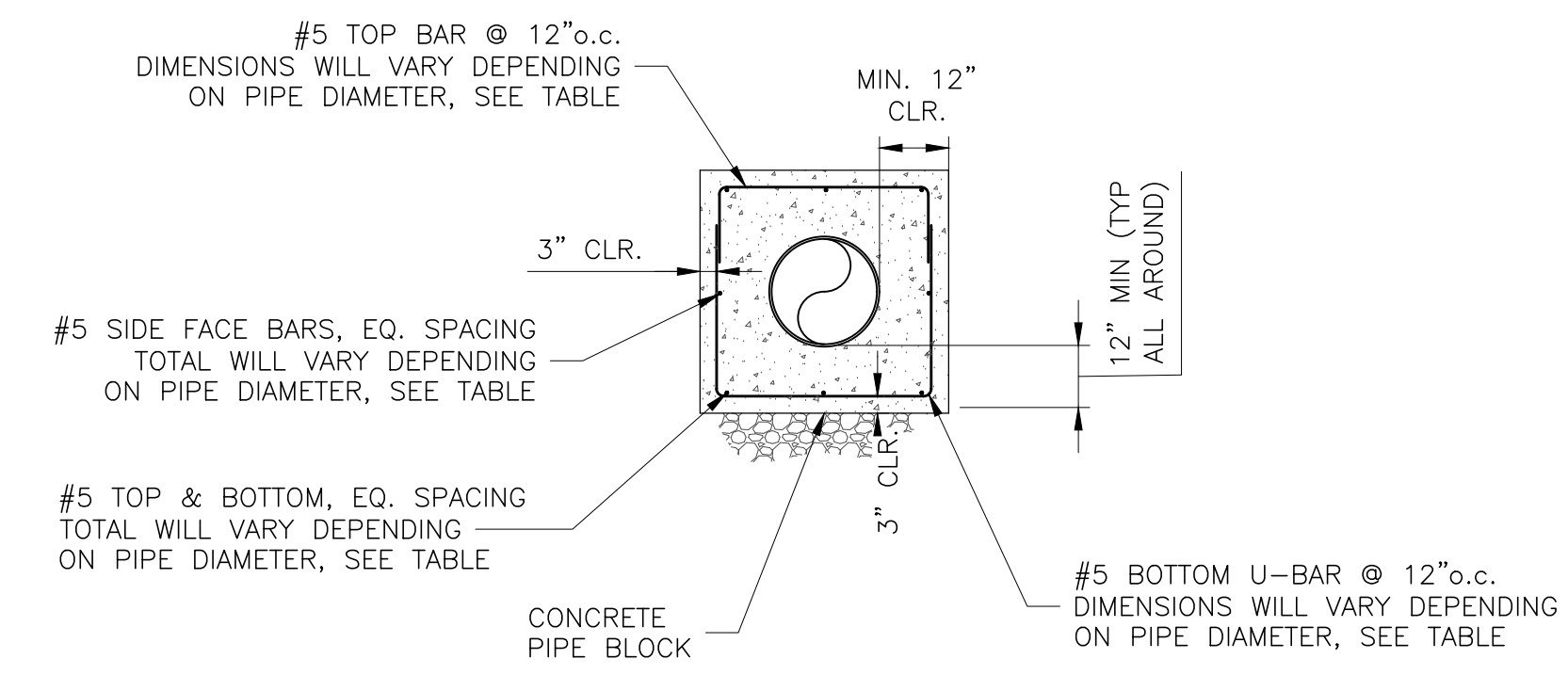
SHEET
S-103
28 of 65

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Well 11 & 11B Drawings 2001-0223.dwg 5-104 3/1/2024 10:04 AM #

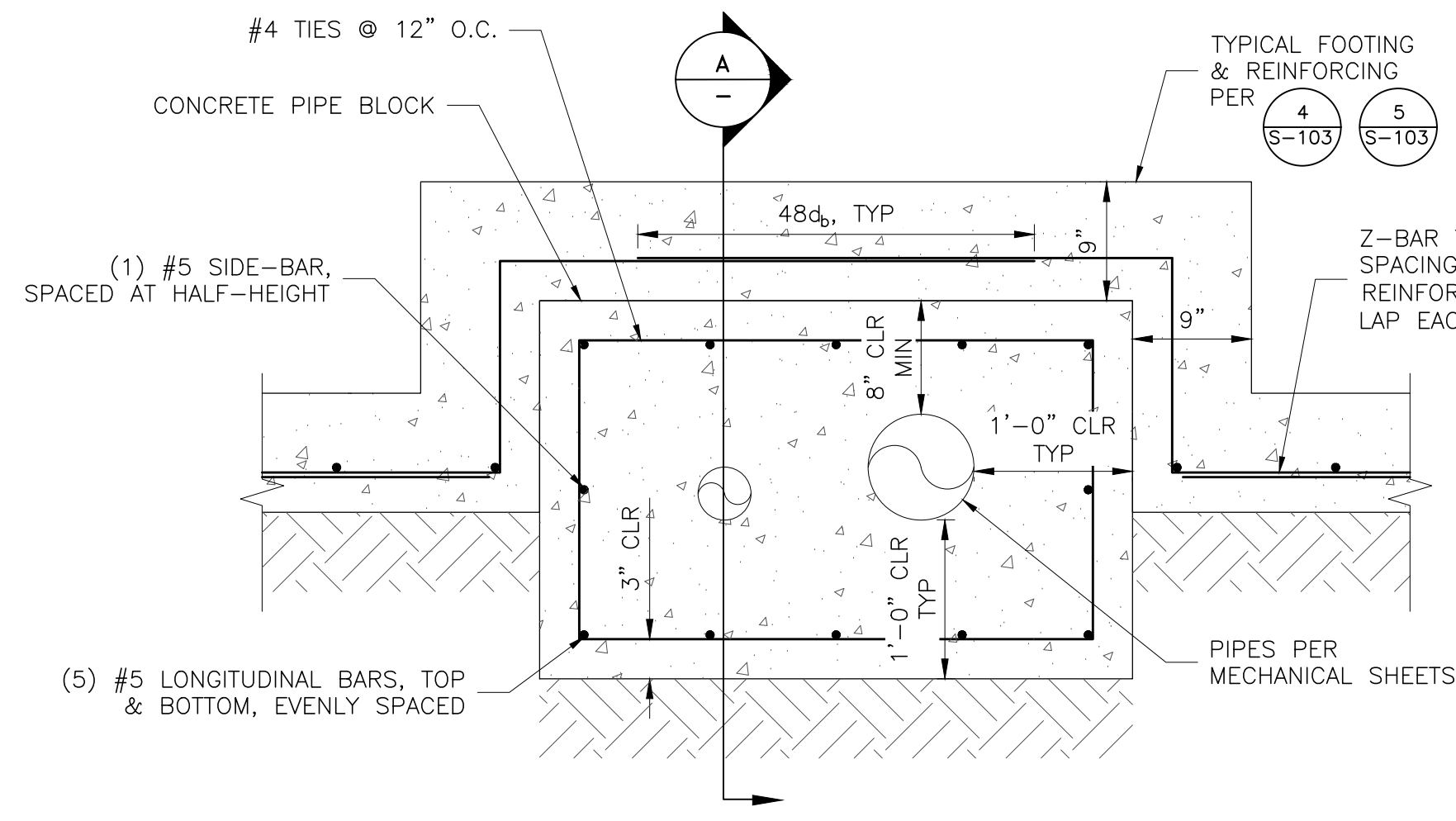
PIPE BLOCK DETAIL NOTES:

PIPE DIAMETER	T&B BARS	SIDE FACE BARS	TOP U-BAR MAIN	TOP U-BAR LEG	BOTTOM U-BAR MAIN	BOTTOM U-BAR LEG
4"	3	1	1'-10"	12"	1'-10"	1'-8"
8"	3	1	2'-2"	12"	2'-2"	1'-10"
12"	3	1	2'-6"	12"	2'-6"	2'-0"
16"	3	1	2'-10"	12"	2'-10"	2'-6"

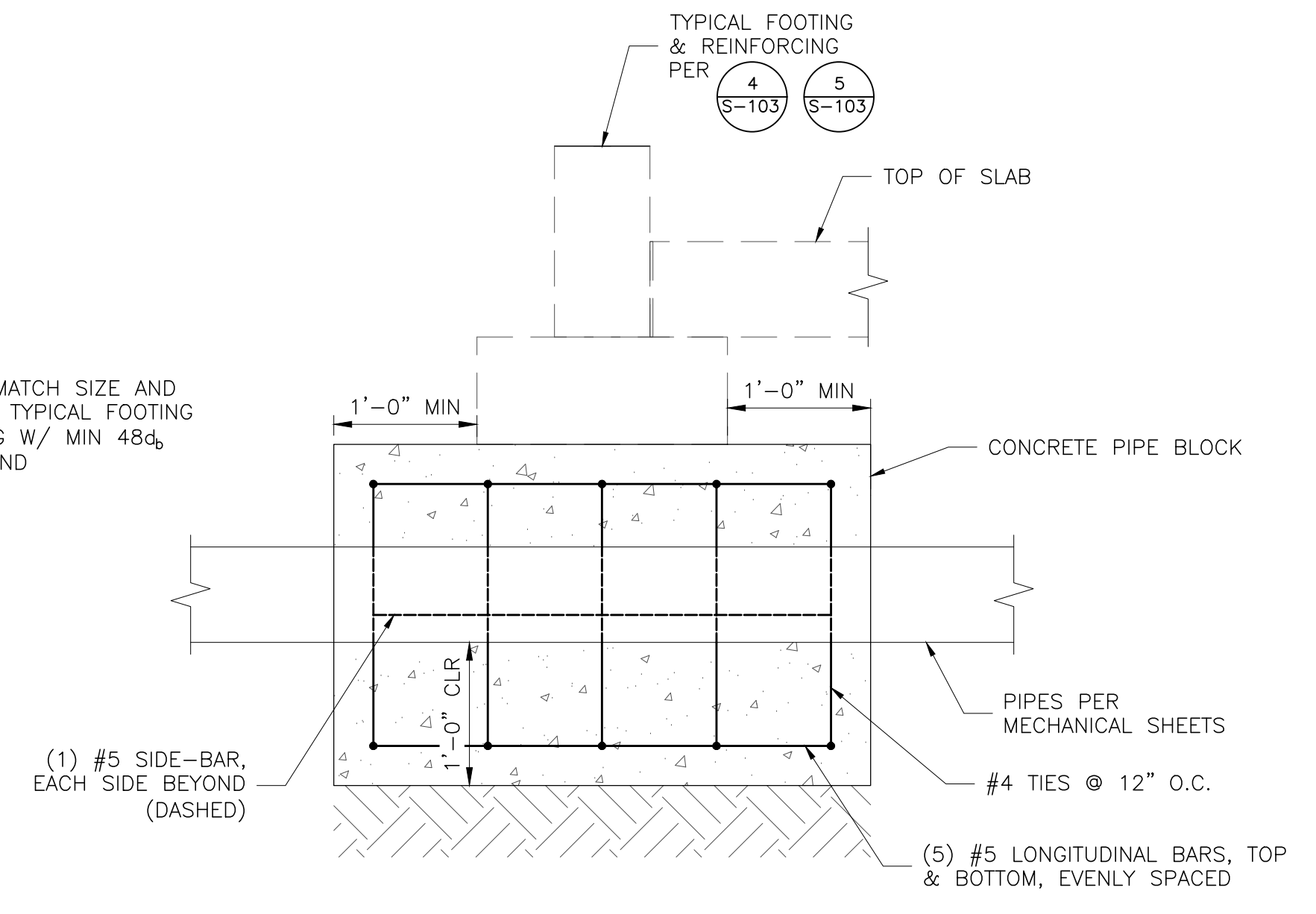


TYPICAL PIPE BLOCK SECTION
3/8" = 1'-0" 1
S-104

NOTES:
1. LOCATE PIPE BLOCKS PER CIVIL/MECHANICAL SHEETS
2. JOG STRIP FOOTING UP OVER PIPE BLOCK PER DETAIL 2, AS REQUIRED BY PIPE ELEVATION



PIPES BELOW FOOTING DETAIL
1" = 1'-0" 2
S-104



SECTION A
1" = 1'-0" A

PSE
PETERSON STRUCTURAL ENGINEERS
9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635
PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
DESIGNED
KTK
DRAWN
RAH
CHECKED

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 88998PE
Ethan Dutton
OREGON NOV. 9, 2011
ETHAN DUTTON DAVID ALTON
EXPIRES 12/31/25



CITY OF PENDLETON
WELL 11-11B

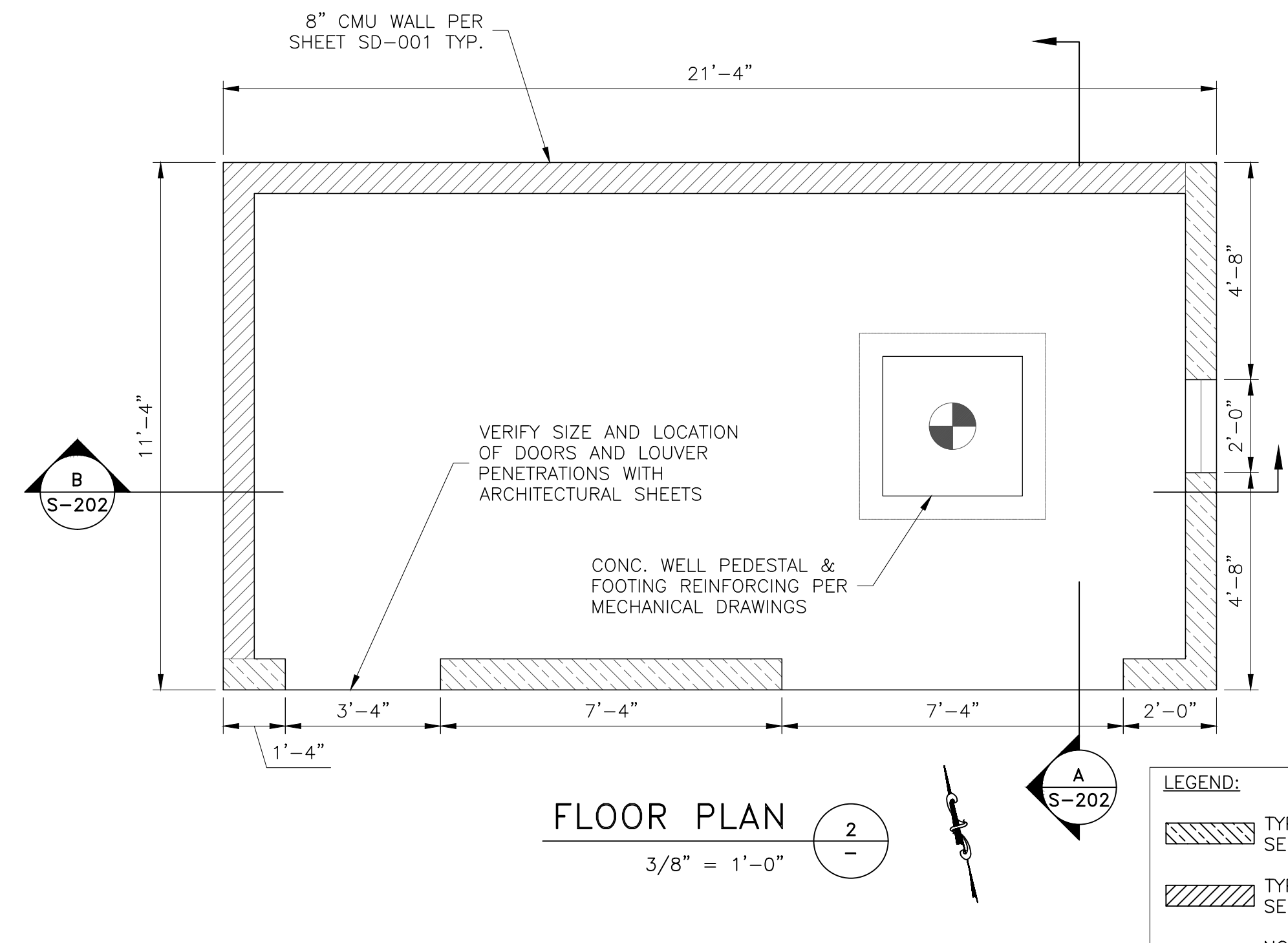
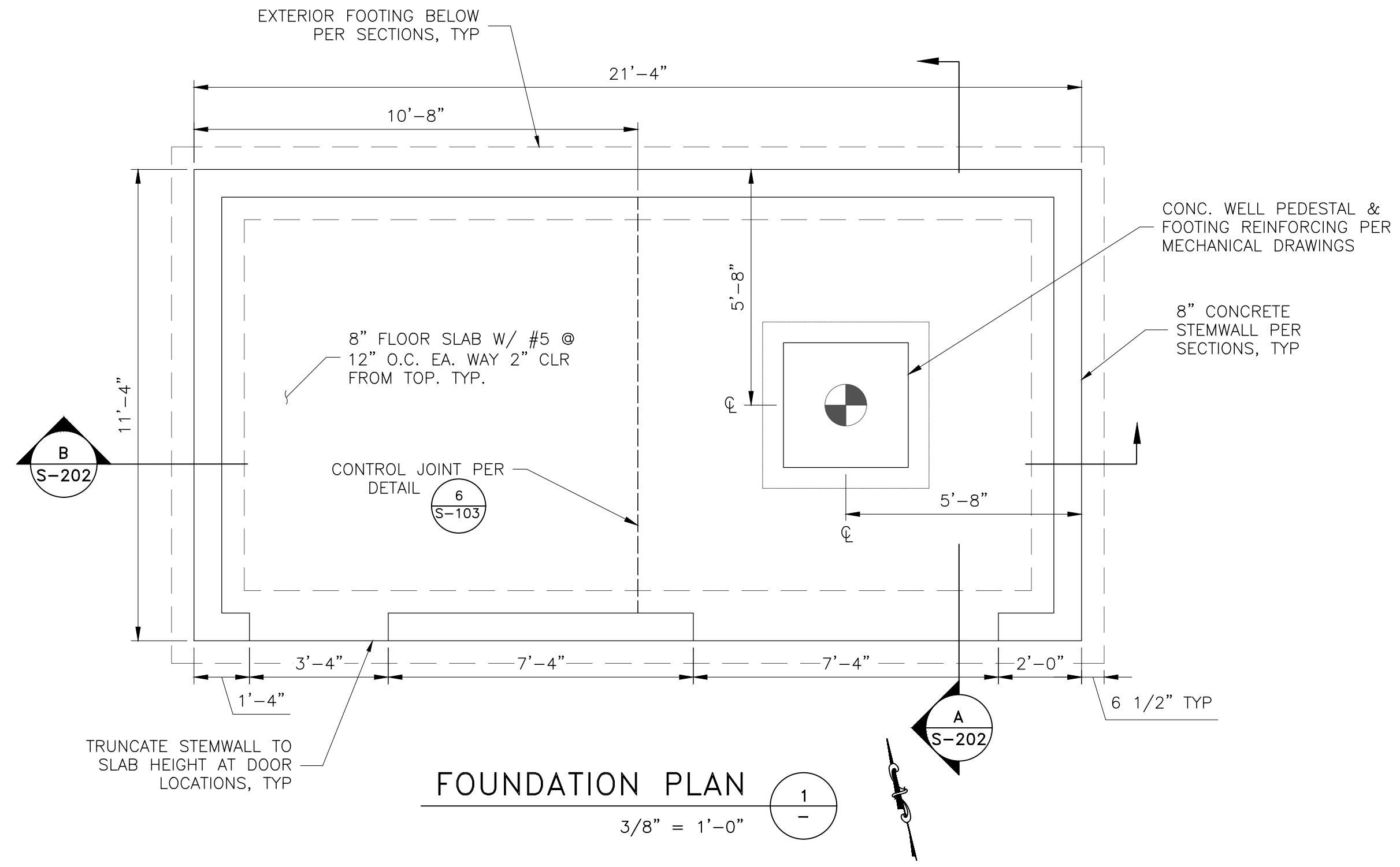
STRUCTURAL WELL 11-11B
STRUCTURAL DETAILS

SHEET
S-104
29 of 65

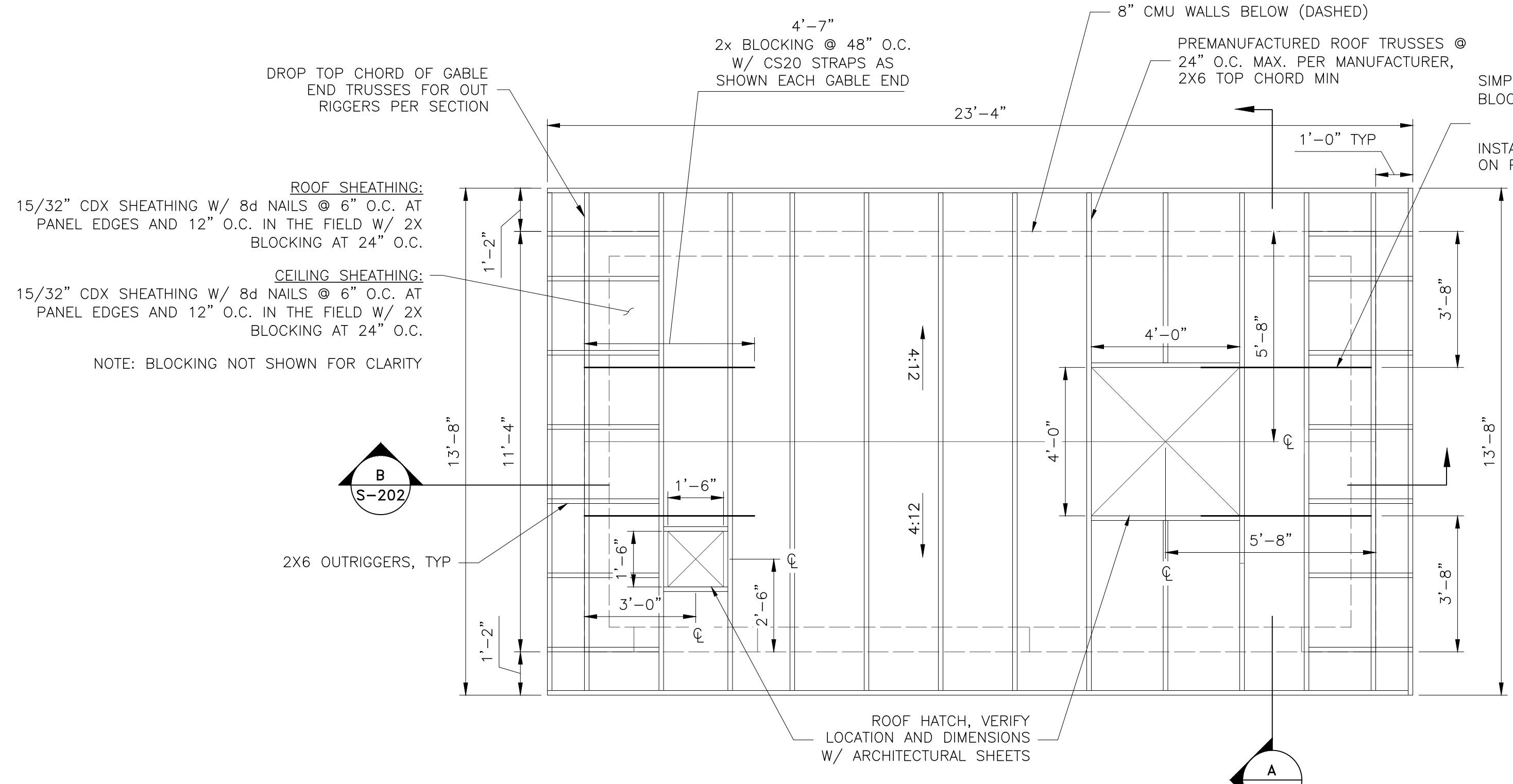
NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Well 11 & 11B Drawings 2001-0223.dwg S-201 3/1/2024 10:04 AM #####



LEGEND:
 TYPE 2 SPECIAL REINFORCED MASONRY SHEAR WALL. SEE DETAIL 1 ON SHEET SD-001
 TYPE 3 SPECIAL REINFORCED MASONRY SHEAR WALL. SEE DETAIL 1 ON SHEET SD-001
 NOTE: WALLS ABOVE PENETRATIONS SHALL BE REINFORCED SIM TO PIERS EACH SIDE.



DIAPHRAGM LAY UP EXAMPLE:

 BLOCKING AS REQUIRED
 FRAMING PER PLAN

DIAPHRAGM NOTES:
 1. FIELD NAILING TO BE AT 12" O.C.
 2. SHEATHING TO BE SUPPORTED BY FRAMING 24" O.C. MAX.
 3. NAILS TO BE COMMON OR GALVANIZED BOX NAILS. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED. NAILS TO BE 3/8" FROM PANEL EDGE.
 4. PANELS TO BE PLACED PER LAY UP EXAMPLE BELOW.

NOTES:
 1. TRUSS MANUFACTURER TO COORDINATE TRUSSES WITH MECHANICAL DRAWINGS FOR LOUVER, DUCTS, AND OTHER PENETRATIONS.
 2. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING CRITERIA
 2.1. DISTRIBUTED DEAD LOAD = 10 PSF (TOP CHORD), 5 PSF (BOT CHORD)
 2.2. DISTRIBUTED LIVE LOAD = 20 PSF
 2.3. DISTRIBUTED SNOW LOAD = 36 PSF
 2.4. EQUIPMENT POINT LOAD = 500 LB (AT WORST CASE LOCATION)
 2.5. AXIAL WIND LOAD IN TOP CHORD = 440 LB (ULTIMATE)
 2.6. AXIAL SEISMIC LOAD IN TOP CHORD = 346 LB (ULTIMATE)
 2.7. ALLOWABLE DEFLECTION = 1/2" MAX
 3. TRUSS MANUFACTURER TO DESIGN TRUSS TO TRANSFER LATERAL SEISMIC LOAD OF ±369 LB (ULTIMATE) FROM BOTTOM CHORD TO TOP CHORD. LOAD ACTS ALONG LENGTH OF TRUSS.
 4. TRUSS MANUFACTURER TO DESIGN TRUSS FOR ADDITIONAL ±200 PLF (ULTIMATE) WIND LOAD APPLIED ALONG TOP CHORD OF TRUSS FROM OUTRIGGER.

PSE
 PETERSON STRUCTURAL ENGINEERS
 9400 SW Barnes Rd., Suite 100
 Portland, Oregon 97225
 (503) 292-1635
 PSE Project #: 2001-0223
 Date: 3/1/2024

NOTICE

 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK DESIGNED
 KTK DRAWN
 RAH CHECKED

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER

 ETHAN DUTTON
 OREGON NOV. 9, 2011
 EXPIRES 12/31/25



CITY OF PENDLETON WELL 11-11B

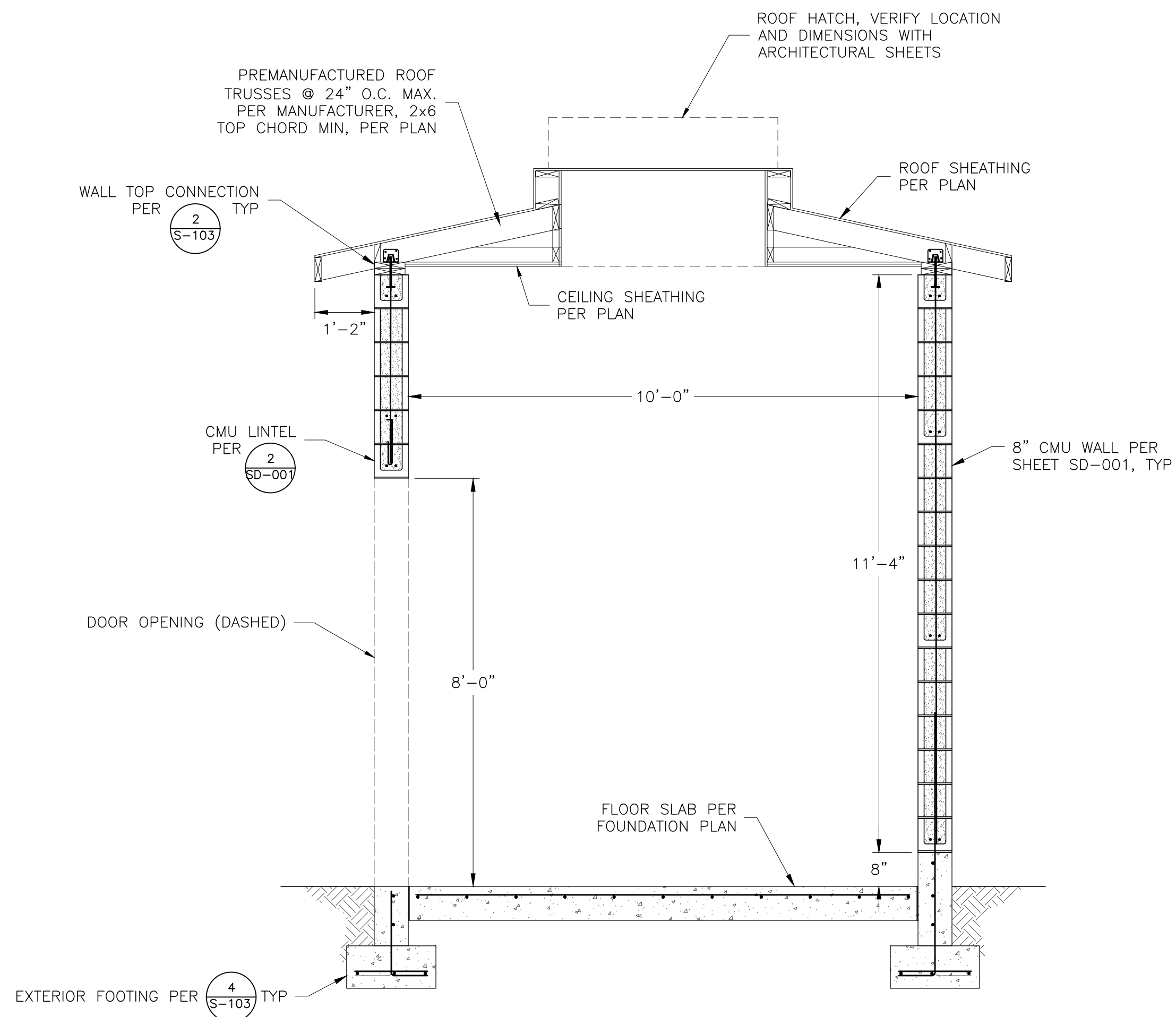
STRUCTURAL WELL 11 FOUNDATION, FLOOR & ROOF FRAMING PLAN

SHEET
S-201
 30 of 65

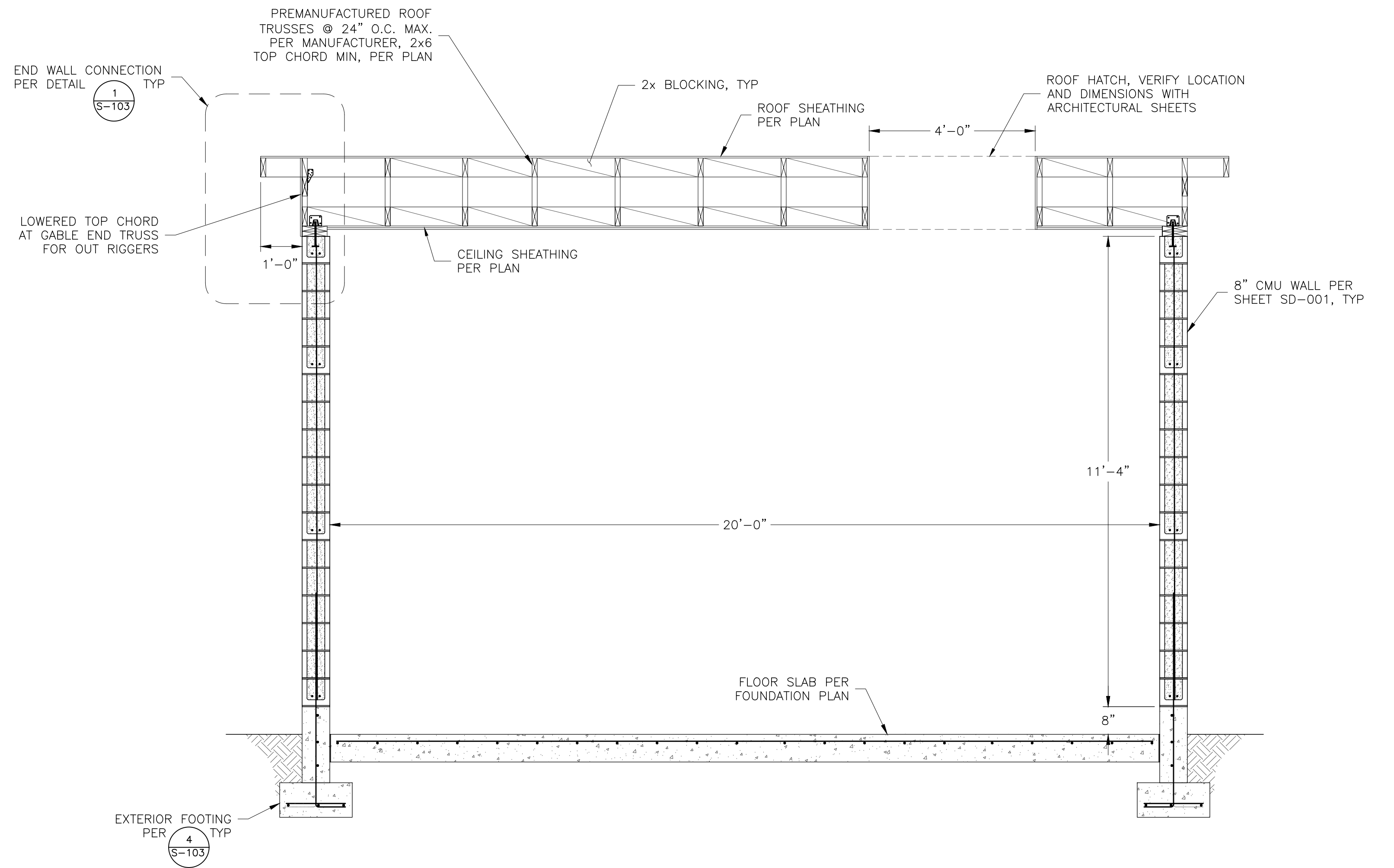
NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

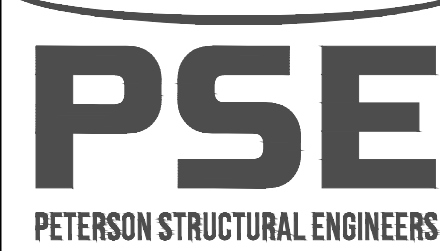
K:\01-PDX\2001-0223\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01 100% Drawings - Well 11 & 11B Drawings 2001-0223.dwg S-202 3/1/2024 10:04 AM #####



TRANSVERSE SECTION **A**
1/2" = 1'-0" S-202

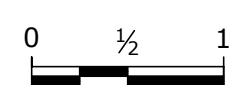


LONGITUDINAL SECTION **B**
1/2" = 1'-0" S-202



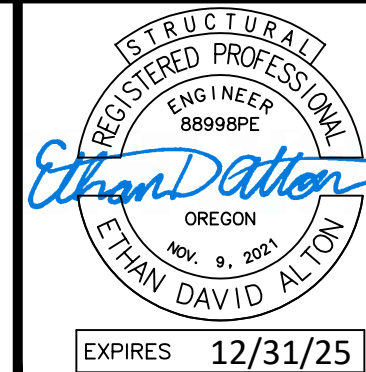
9400 SW Barnes Rd.,
Suite 100
Portland, Oregon 97225
(503) 292-1635
PSE Project #: 2001-0223
Date: 3/1/2024

NOTICE



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK
DESIGNED
KTK
DRAWN
RAH
CHECKED



CITY OF PENDLETON
WELL 11-11B

STRUCTURAL WELL 11
BUILDING SECTIONS

SHEET

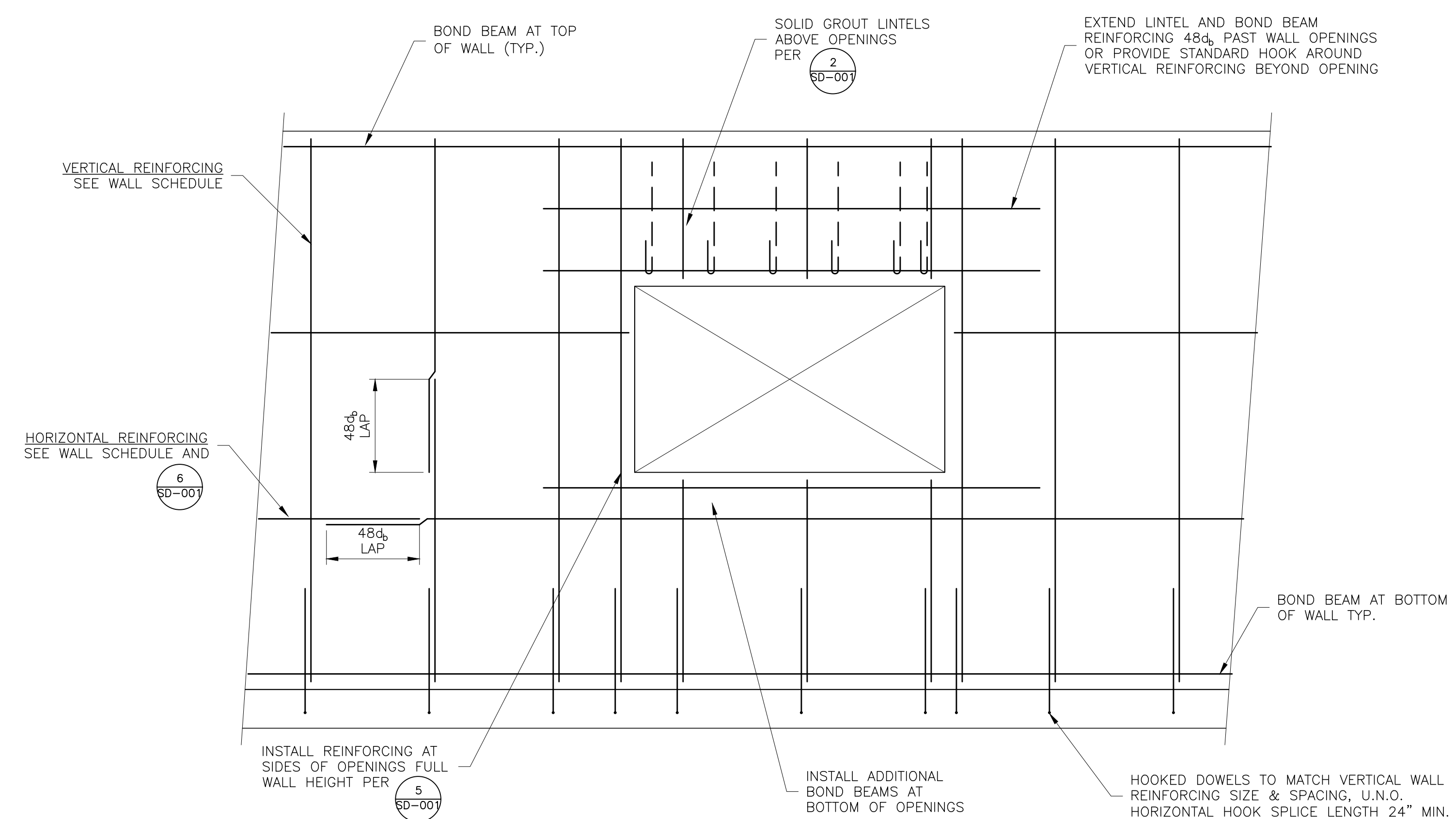
S-202

31 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

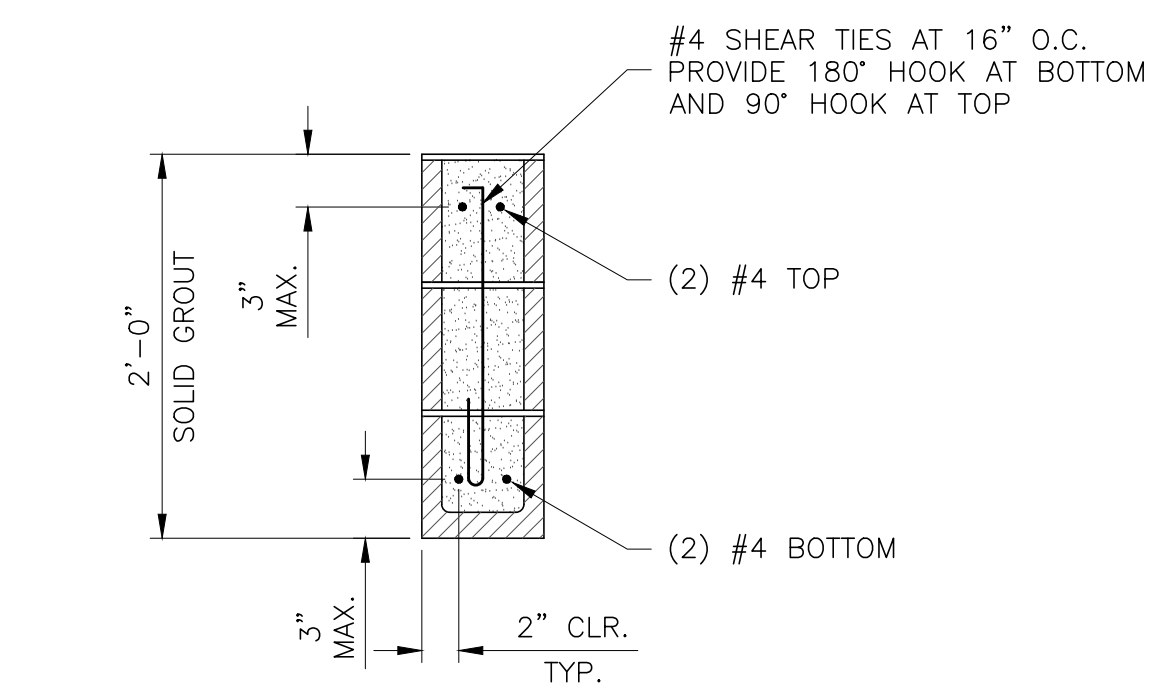
K:\01-PDX\2001-0201 To 2001-0225\2001-0223\1 - Project Data Files\6 - 100% Drawings - Well 11B & 95% Well 11 (Amendment)\2024_03_01_100% Well 11 & 11B Drawings 2001-0223.dwg SD-001 3/1/2024 10:04 AM



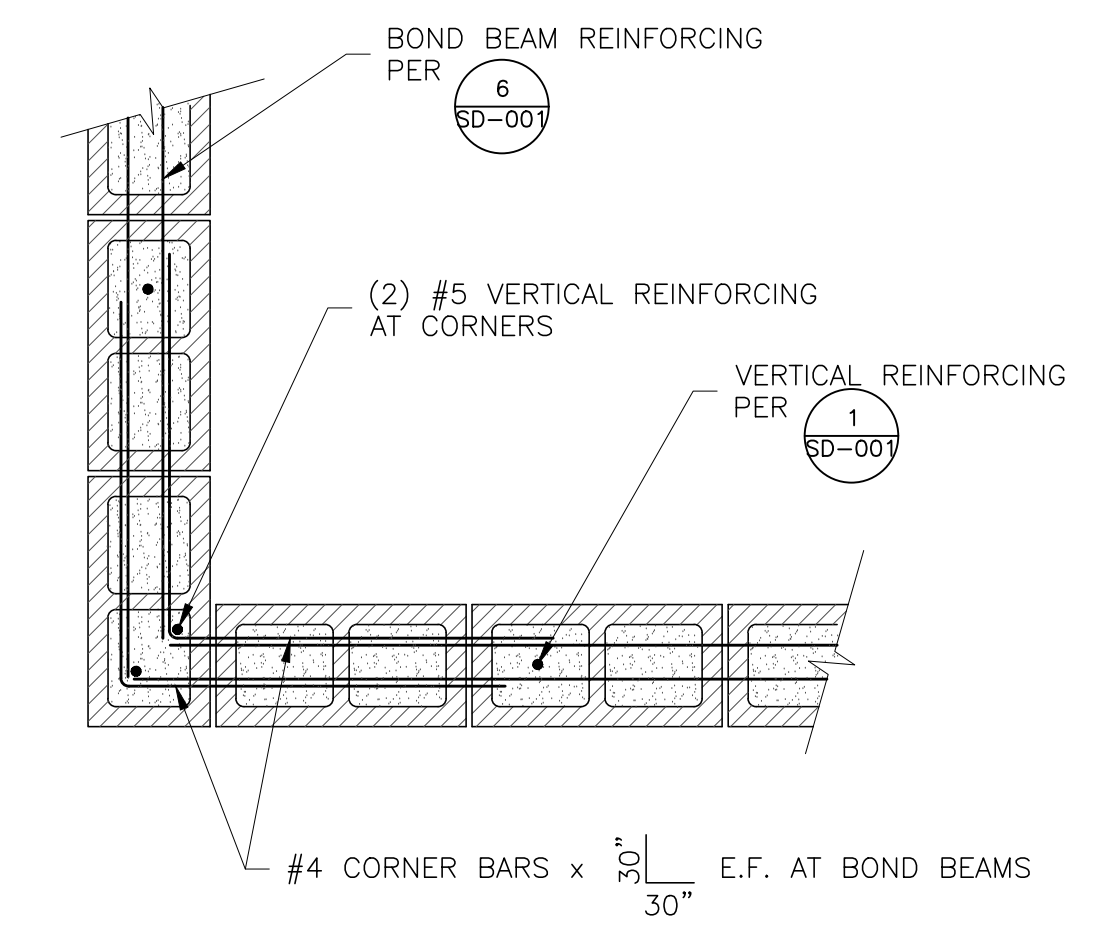
CMU WALL SCHEDULE			
TYPE	WALL THICKNESS	VERTICAL REINFORCING	HORIZONTAL REINFORCING
1	8"	#5 @ 8"	(2) #4 @ 8"
2	8"	#5 @ 16"	(2) #4 @ 16"
3	8"	#5 @ 24"	(2) #4 @ 24"

TYPICAL CMU WALL SECTION (1) 1" = 1'-0" S-101 NOT TO SCALE

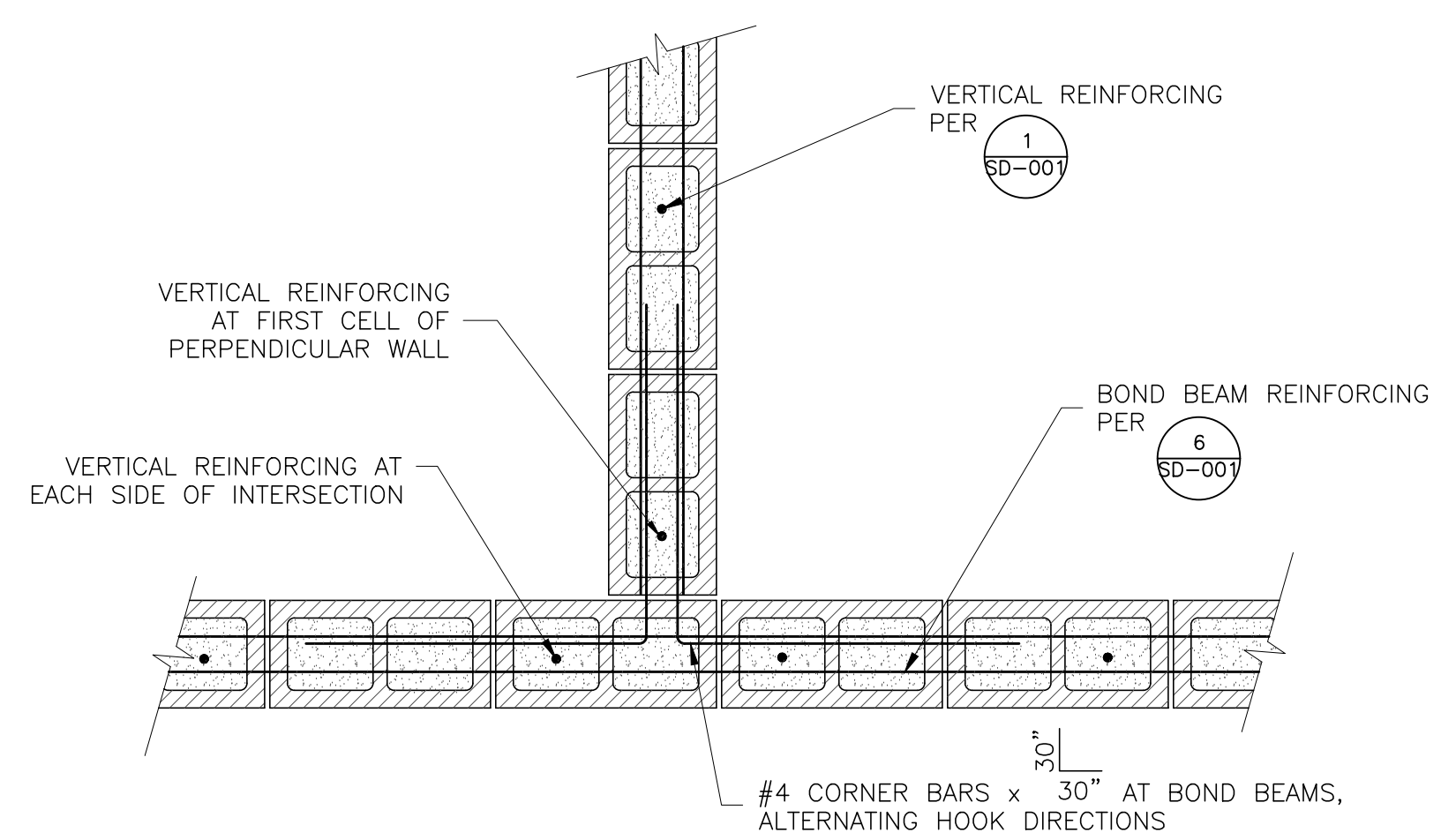
CMU NOTES:
 1. ALL CELLS SHALL BE SOLID GROUTED.
 2. HOOK ALL REINFORCING THAT CANNOT BE EXTENDED.
 3. TYPICAL REINFORCING IS SHOWN. REFER TO DETAILS FOR SPECIFIC OR ADDITIONAL REINFORCING.
 4. LAP ALL REINFORCING A MINIMUM OF 48 BAR DIAMETERS.



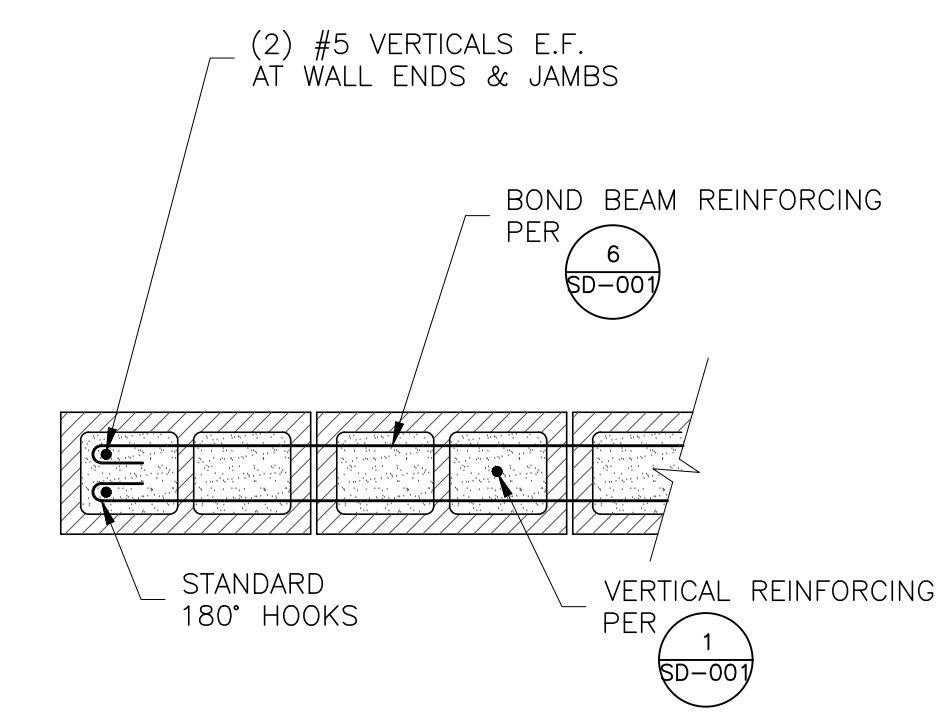
CMU LINTEL DETAIL (2) 1" = 1'-0" S-101



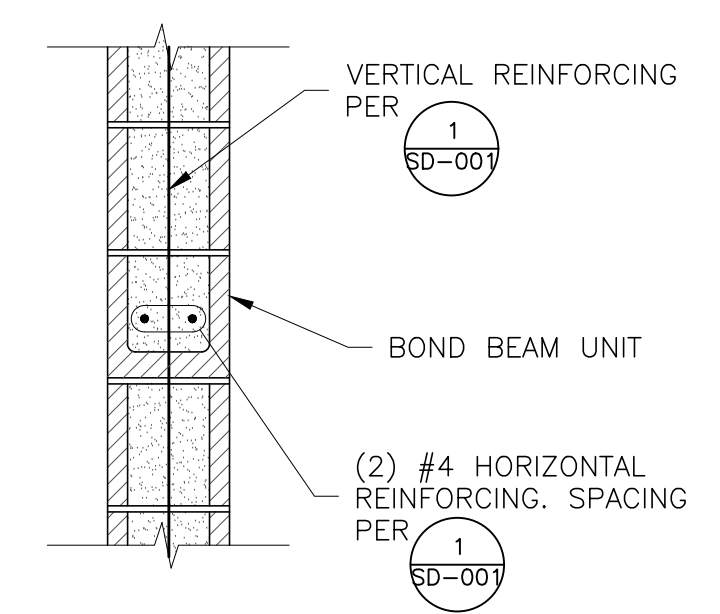
CMU WALL CORNER DETAIL (3) 1" = 1'-0" S-101



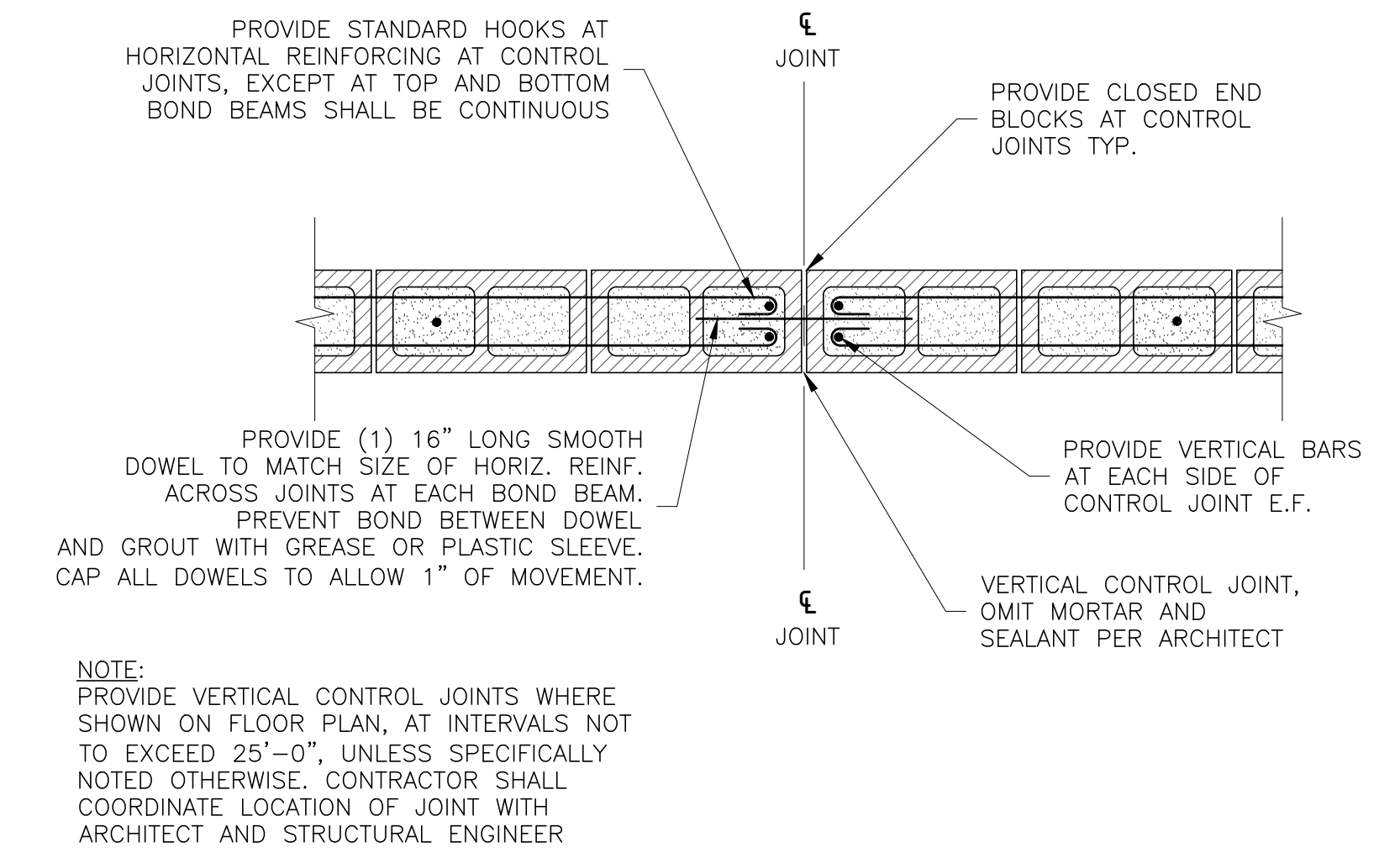
TYPICAL CMU WALL INTERSECTION (4) 1" = 1'-0" S-101



JAMB OR END OF WALL DETAIL (5) 1" = 1'-0" S-101



BOND BEAM DETAIL (6) 1" = 1'-0" S-101



CMU VERTICAL CONTROL JOINT (7) 1" = 1'-0" S-101

PSE
 PETERSON STRUCTURAL ENGINEERS
 9400 SW Barnes Rd., Suite 100
 Portland, Oregon 97225
 (503) 292-1635
 PSE Project #: 2001-0223
 Date: 3/1/2024

NO.	DATE	BY	REVISION
1	3/1/2024	KTK	PERMIT SET

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

KTK DESIGNED
 KTK DRAWN
 RAH CHECKED

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 89998PE
 Ethan Dutton
 OREGON NOV. 9, 2011
 ETHAN DAVID ALTON
 EXPIRES 12/31/25

consor

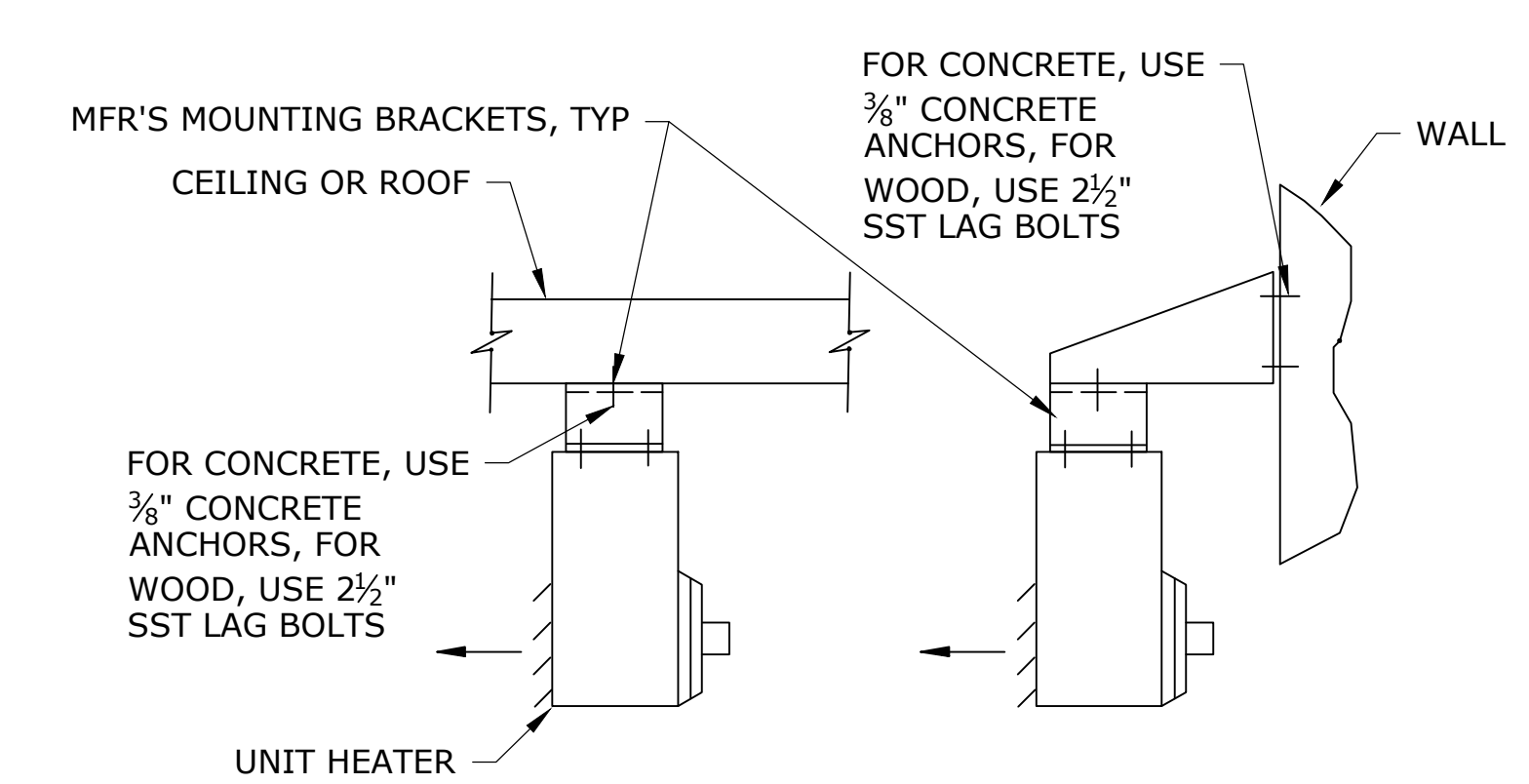
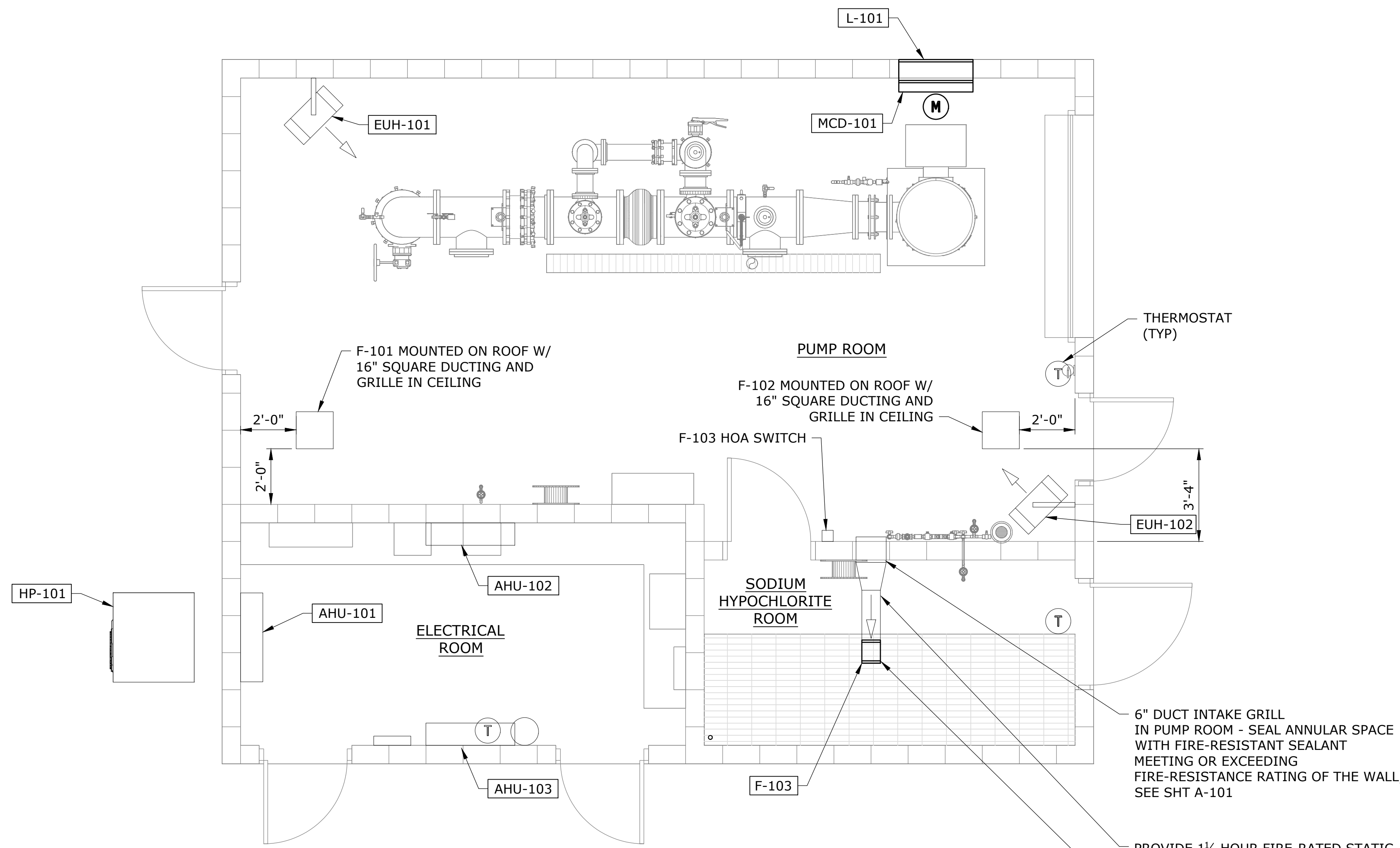
CITY OF PENDLETON INCORPORATED 1880 OREGON

CITY OF PENDLETON WELL 11-11B

STRUCTURAL WELL 11-11B CMU DETAILS
 PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET SD-001 32 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-H.dwg H-101 3/1/2024 5:41 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



NOTE: USE THREADED HANGER RODS ONLY WHERE MANUFACTURER'S MOUNTING BRACKETS ARE NOT PRACTICAL.

UNIT HEATER MOUNTING
SCALE: NTS

FAN SCHEDULE						
SYMBOL	MODEL	DRIVE TYPE	VOLUME (CFM)	FAN RPM	HP	V/C/P
F-103	GB-140	BELT	1500	963	0.2500	115/60/1
F-102	GB-140	BELT	1500	963	0.2500	115/60/1
F-103	FANTECH FG 6	EXHAUST	150	2703	0.1000	115/60/1

LOUVER/DAMPER SCHEDULE						
SYMBOL	MODEL	APPLICATION	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	VOLUME (CFM)
L-101	ESD-635	INTAKE	32	32	6	1750
MCD-101	VCD-43	INTAKE	32	32	5	

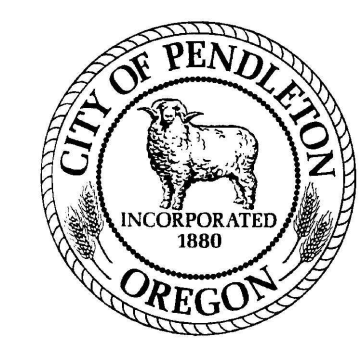
HEAT & AC SCHEDULE					
NUMBER	DESCRIPTION	COOLING CAPACITY	HEATING CAPACITY	AIRFLOW (CFM)	POWER REQ'D (V/Hz/PH)
EUH-101	ELECTRIC UNIT HEATER	-	3 KW	350	480/60/3
EUH-102	ELECTRIC UNIT HEATER	-	3 KW	350	480/60/3
AHU-101	SPLIT-TYPE HEAT PUMP A/C UNIT	24000 BTU/HR	27000 BTU/HR	635	208/60/1
AHU-102	SPLIT-TYPE HEAT PUMP A/C UNIT	24000 BTU/HR	27000 BTU/HR	635	208/60/1
AHU-103	SPLIT-TYPE HEAT PUMP A/C UNIT	24000 BTU/HR	27000 BTU/HR	635	208/60/1
HP-101	HEAT PUMP	72000 BTU/HR	81000 BTU/HR	5500	480/60/3

- NOTES:
- EXHAUST FAN LOCATIONS SHALL BE ADJUSTED AS REQUIRED TO FIT WITHIN ROOF RAFTERS AND CEILING JOISTS.
 - ALL DIFFUSERS/GRILLES SHALL INCLUDE AN ADJUSTABLE MANUAL DAMPER TO CONTROL AIR FLOW.
 - INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
 - HP-1 SHALL BE MOUNTED PER MANUFACTURERS RECOMMENDATIONS ON A 4" THICK CONCRETE PAD, EITHER CAST-IN-PLACE OR PRECAST SLAB.
 - ALL AHU SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS USING THE MANUFACTURERS PROVIDED MOUNTING SYSTEM.
 - ROUTE ALL CONDENSATE DRAIN LINES TO NEAREST EXTERIOR WALL AND DOWN TO 18" AFF AND OUT TO THE EXTERIOR. TERMINATE WITH 1/8 BEND.
 - COORDINATE HVAC SYSTEM WITH FIRE SUPPRESSION CONTROL SYSTEM AS REQUIRED.

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

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

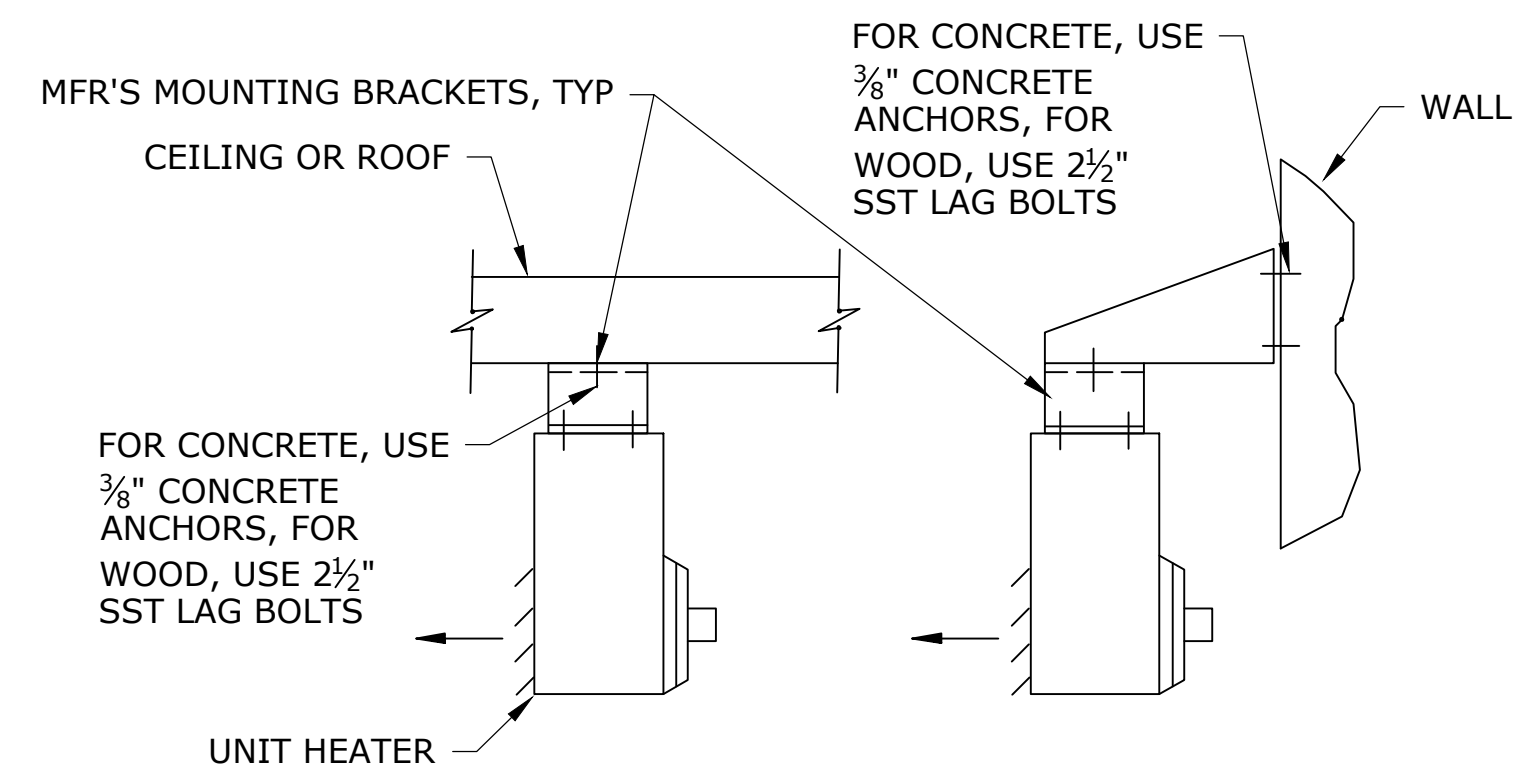
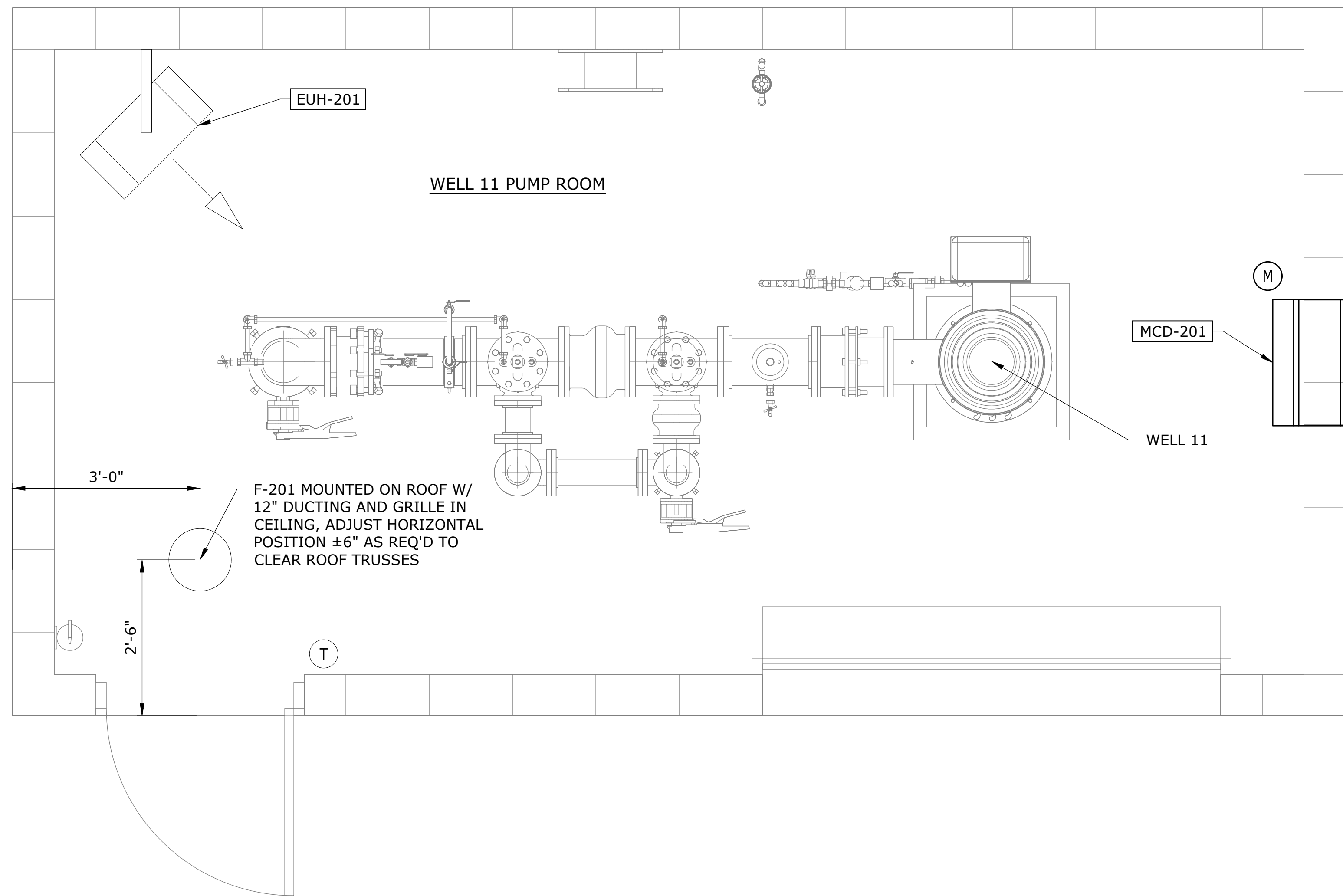
HVAC
WELL 11B
FLOOR PLAN, SCHEDULES, AND DETAILS

SHEET
H-101

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

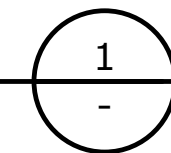
PROJECT NO.: 21-31133 SCALE: AS NOTED DATE: MARCH 2024

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-H-Well 11.dwg H-202 3/1/2024 5:40 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



NOTE: USE THREADED HANGER RODS ONLY WHERE MANUFACTURER'S MOUNTING BRACKETS ARE NOT PRACTICAL.

UNIT HEATER MOUNTING
SCALE: NTS



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



FAN SCHEDULE						
SYMBOL	MODEL	DRIVE TYPE	VOLUME (CFM)	FAN RPM	HP	V/C/P
F-201	GB-130	BELT	1200	1009	0.2500	115/60/1

LOUVER/DAMPER SCHEDULE						
SYMBOL	MODEL	APPLICATION	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	VOLUME (CFM)
L-201	ESD-635	INTAKE	24	24	6	1200
MCD-201	VCD-43	INTAKE	24	24	5	

HEAT & AC SCHEDULE					
NUMBER	DESCRIPTION	COOLING CAPACITY	HEATING CAPACITY	AIRFLOW (CFM)	POWER REQ'D (V/HZ/PH)
EUH-1	ELECTRIC UNIT HEATER	-	3 kW	350	208-240V/60/1

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



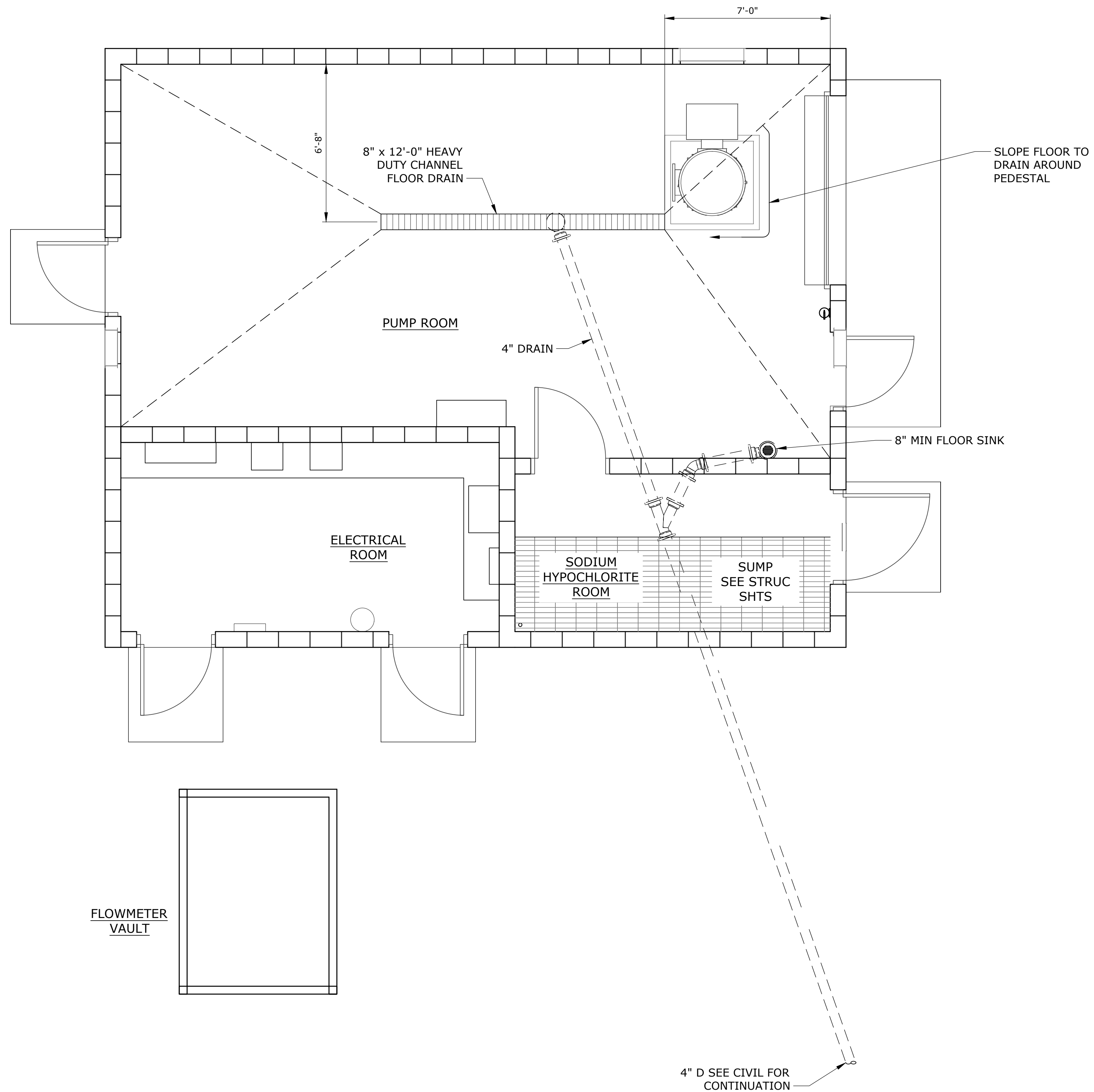
CITY OF PENDLETON
WELL 11-11B

HVAC
WELL 11
FLOOR PLAN, SCHEDULES, AND DETAILS

PROJECT NO.: 21-3133 SCALE: AS NOTED DATE: MARCH 2024

SHEET
H-202
34 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-M.dwg P-101 3/1/2024 5:38 PM JEFFRY. ORLANDO 24.1s (LMS Tech)



- NOTES:**
1. FITTINGS AND PIPE OUTSIDE BUILDING ENVELOPE SHOWN FOR REFERENCE ONLY. SEE CIVIL SHEETS FOR FITTING, PIPE, AND DETAIL CALLOUTS.
 2. ROUTE AIR-VAC OUTLETS TO FLOOR DRAINS
 3. SLOPE CONCRETE SLAB FLOORS TO FLOOR DRAINS AND PIPE CHASES AT 1% MIN. SLOPE AS SHOWN
 4. SLOPE ALL DRAINS AT 2% MIN.
 5. OTHER PIPING SHOWN FOR CONTRACTORS REFERENCE, SEE VARIOUS C, AND M SHEETS FOR ACTUAL PIPE ROUTING. CONTRACTOR SHALL ADJUST ROUTING AS REQUIRED FOR CONFLICTS.
 6. SLOPE SUMP TO SOUTH SIDE.

FLOWMETER
VAULT

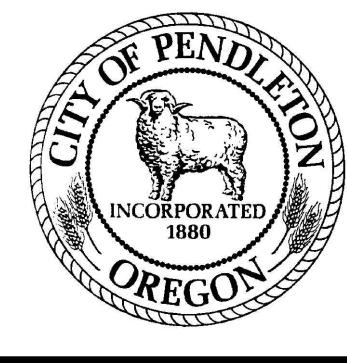


PLAN
SCALE: 3/8"=1'-0"

NO.	DATE	BY	BID SET	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK
DESIGNED
TMB
DRAWN
DG
CHECKED

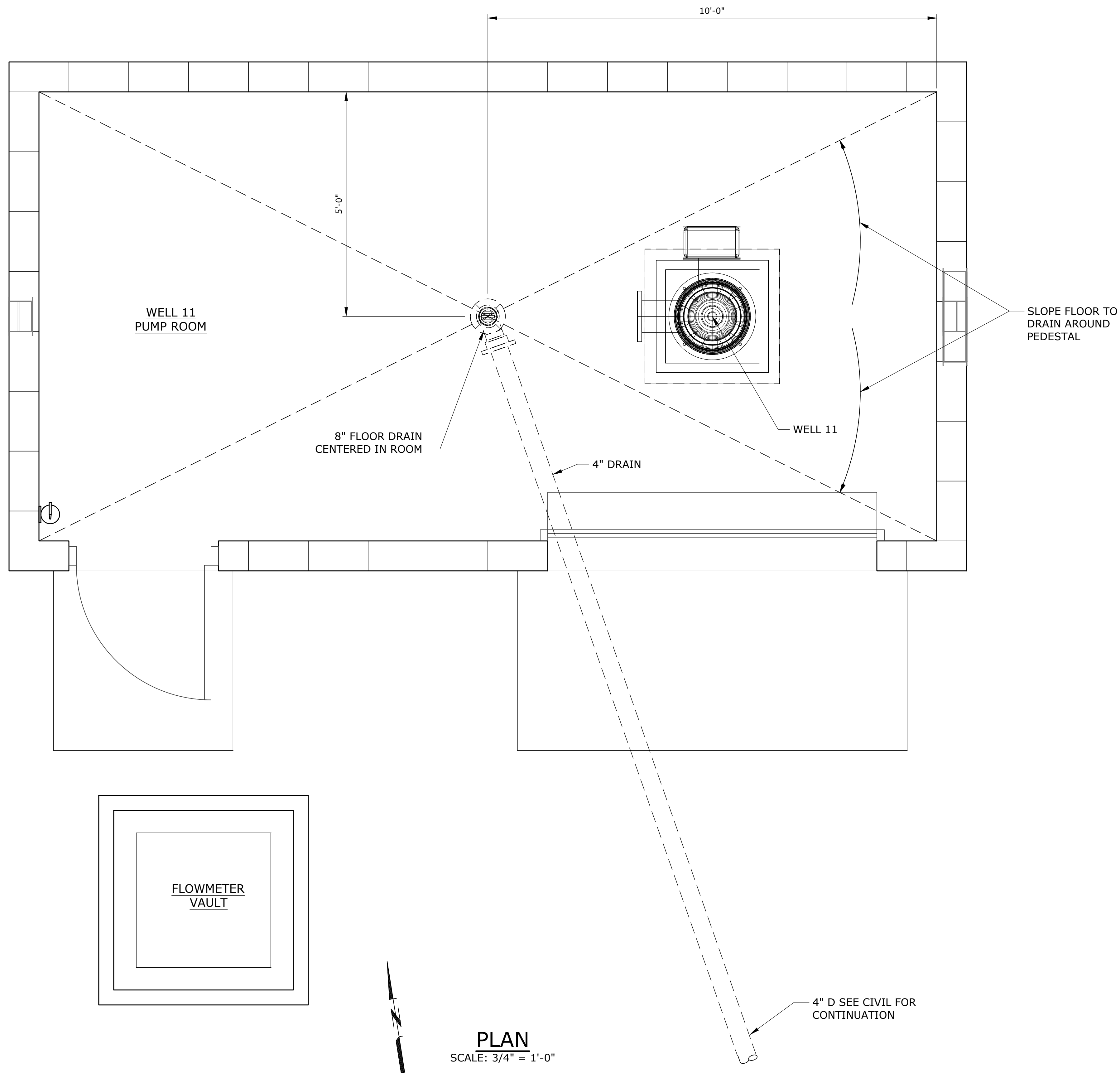


**CITY OF PENDLETON
WELL 11-11B**

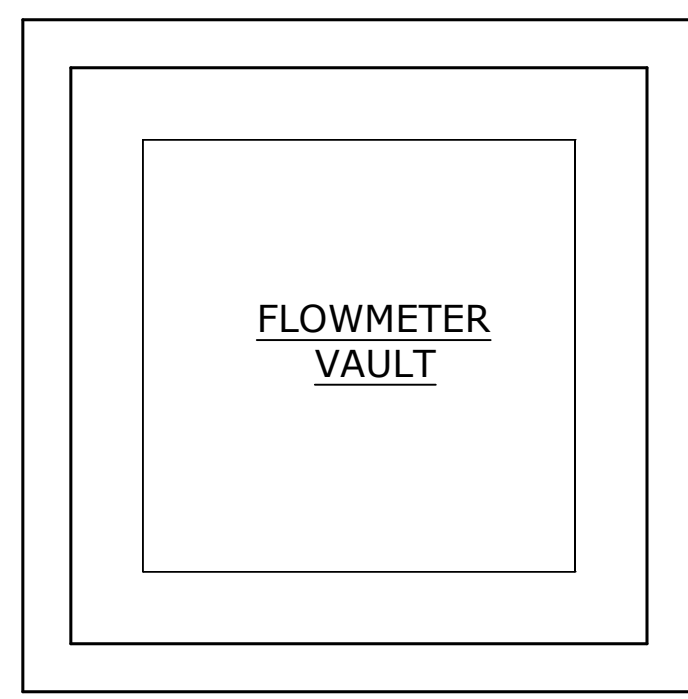
MECHANICAL WELL 11B DRAIN PLAN			
PROJECT NO.:	21-31133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
P-101
35 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-M-WELL 11.dwg P-202 3/1/2024 5:37 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



- NOTES:**
1. FITTINGS AND PIPE OUTSIDE BUILDING ENVELOPE SHOWN FOR REFERENCE ONLY. SEE CIVIL SHEETS FOR FITTING, PIPE, AND DETAIL CALLOUTS.
 2. ROUTE AIR-VAC OUTLETS TO FLOOR DRAINS
 3. SLOPE CONCRETE SLAB FLOORS TO FLOOR DRAINS AND PIPE CHASES AT 1% MIN. SLOPE AS SHOWN
 4. SLOPE ALL DRAINS AT 2% MIN.
 5. OTHER PIPING SHOWN FOR CONTRACTORS REFERENCE, SEE VARIOUS C, AND M SHEETS FOR ACTUAL PIPE ROUTING. CONTRACTOR SHALL ADJUST ROUTING AS REQUIRED FOR CONFLICTS.
 6. SLOPE SUMP TO SOUTH SIDE.



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

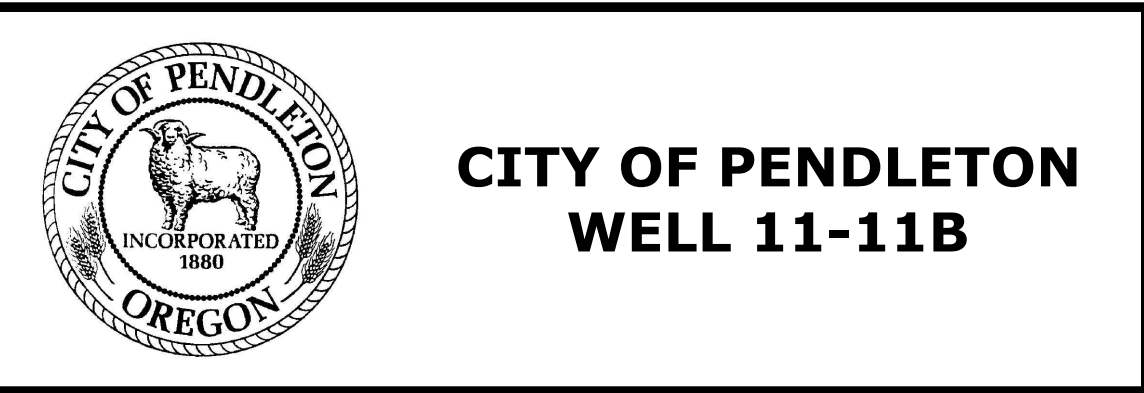
NO.	DATE	BY	REVISION
	03/13/2024	WRK	BID SET

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



PLUMBING WELL 11 DRAIN PLAN			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

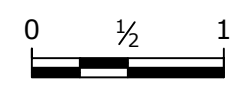
SHEET
P-202
36 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-001 3/1/2024 5:38 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)

VALVE SCHEDULE				
VALVE NO.	VALVE TYPE	LOCATION	OPERATOR	SPECIFICATION
V-100	BUTTERFLY	INTERIOR	HANDWHEEL	40 05 23
V-400	BALL	INTERIOR	LEVER	22 05 23
V-403	SILENT CHECK	INTERIOR	NONE	40 05 23
V-700	PRESSURE RELIEF/SURGE ANTICIPATOR CONTROL VALVE	INTERIOR	NONE	40 05 23.17
V-701	DEEP WELL CONTROL VALVE	INTERIOR	NONE	40 05 23.17
V-800	COMBINATION AIR/VACUUM VALVE	INTERIOR	NONE	40 05 23
V-801	WELL SERVICE AIR VALVE	INTERIOR	NONE	40 05 23
V-1200	SOLENOID VALVE	INTERIOR	NONE	40 05 23

PIPE SCHEDULE					
SERVICE	LABEL	LOCATION	MATERIAL	JOINT TYPE	TESTING
WATER	W	INTERIOR	DUCTILE IRON (DI)	FLANGE	SECTION 40 05 13
		BURIED WITHIN 5' OF BLDG ENVELOPE	DUCTILE IRON (DI)	RSTR MECHANICAL/FLANGE	SECTION 40 05 13
SODIUM HYPOCHLORITE	CL	INTERIOR/BURIED	1/2" BRAIDED TUBING IN 1 1/2" PVC CONDUIT	BARBED TUBING, THREADED CONDUIT, GLUED	
POTABLE WATER <2 1/2"	PW	INTERIOR	COPPER TYPE L	SOLDER/THREADED	SECTION 22 10 00
		BURIED	COPPER TYPE K	BRAZED	
VENT	V	INTERIOR	COPPER TYPE L	SOLDER/THREADED	NONE
DRAINS	D	BURIED	ABS	THREADED, GLUED	SECTION 22 10 00
PUMP TO WASTE DRAIN	PTW	INTERIOR	DUCTILE IRON (DI)	FLANGE	FOLLOW TESTING REQUIREMENTS FOR PRESSURE PIPE SEE SECTION 40 05 13
		BURIED	DUCTILE IRON (DI)	RSTR MECHANICAL	

NO.	DATE	BY	REVISION
	03/13/2024	WRK	BID SET

NOTICE

 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
 TMB DRAWN
 DG CHECKED



CITY OF PENDLETON
WELL 11-11B

MECHANICAL
MECHANICAL SCHEDULES
 PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
M-001
 37 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-M.dwg M-101 3/1/2024 5:38 PM JEFFRY.ORLANDO 24.1s (LMS Techn)



PERSPECTIVE
SCALE: NTS

NOTE:
PERSPECTIVE VIEW ARE FOR GENERAL REFERENCE ONLY. DO NOT USE FOR CONSTRUCTION. NOT ALL WORK ELEMENTS SHOWN.

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED

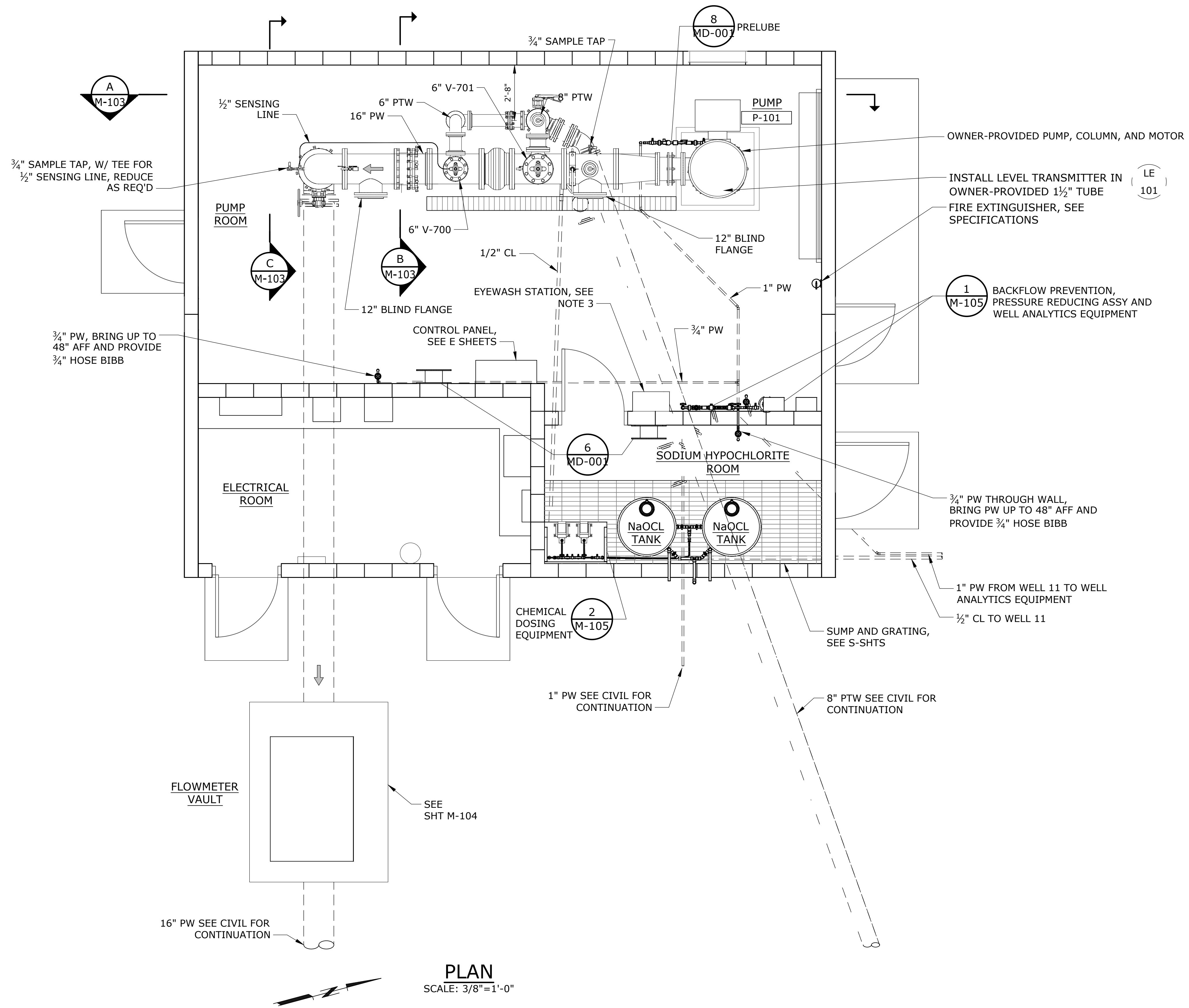


CITY OF PENDLETON
WELL 11-11B

MECHANICAL			
WELL 11B			
PERSPECTIVE			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
M-101
38 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-102 3/1/2024 5:38 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



- NOTES:**
1. FITTINGS AND PIPE OUTSIDE BUILDING ENVELOPE SHOWN FOR REFERENCE ONLY. SEE CIVIL SHEETS FOR FITTING, PIPE, AND DETAIL CALLOUTS.
 2. COORDINATE WITH ELECTRICAL DRAWINGS FOR LOCATION OF MOTOR TERMINAL BOX LOCATIONS.
 3. PORTABLE, SELF-CONTAINED, GRAVITY-FED EYEWASH STATION WITH HEATED JACKET, MOUNTED TO WALL PER MANUFACTURERS RECOMMENDATIONS, HUGHES-SAFETY 16GEW, OR EQUAL.

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

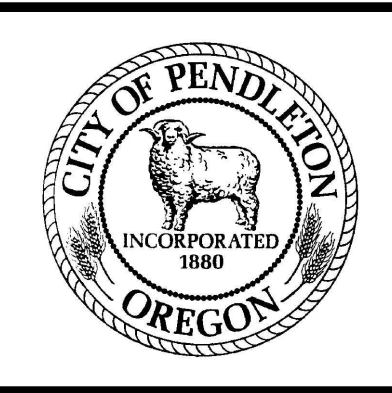
NO.	DATE	BY	REVISION

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



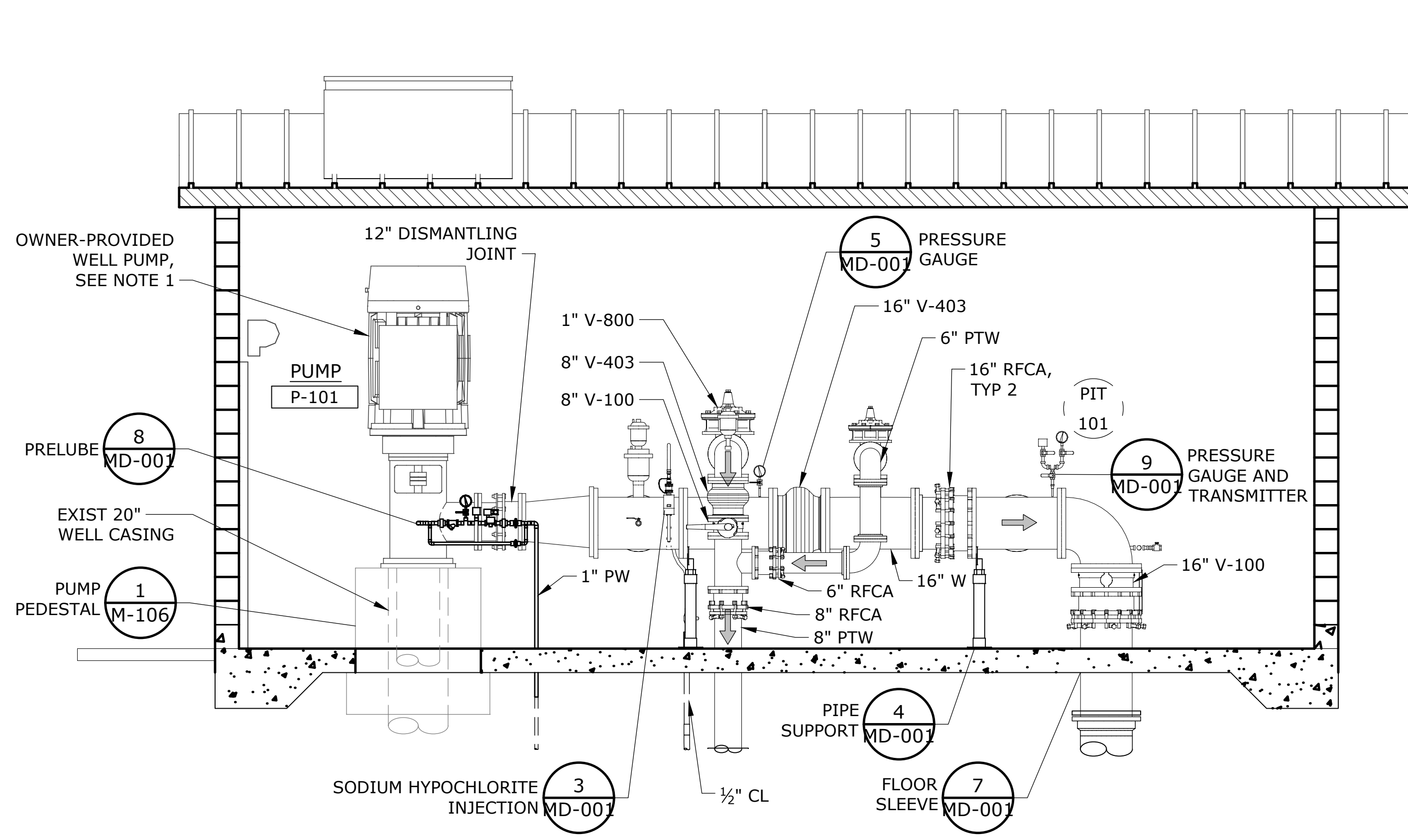
CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11B
FLOOR PLAN

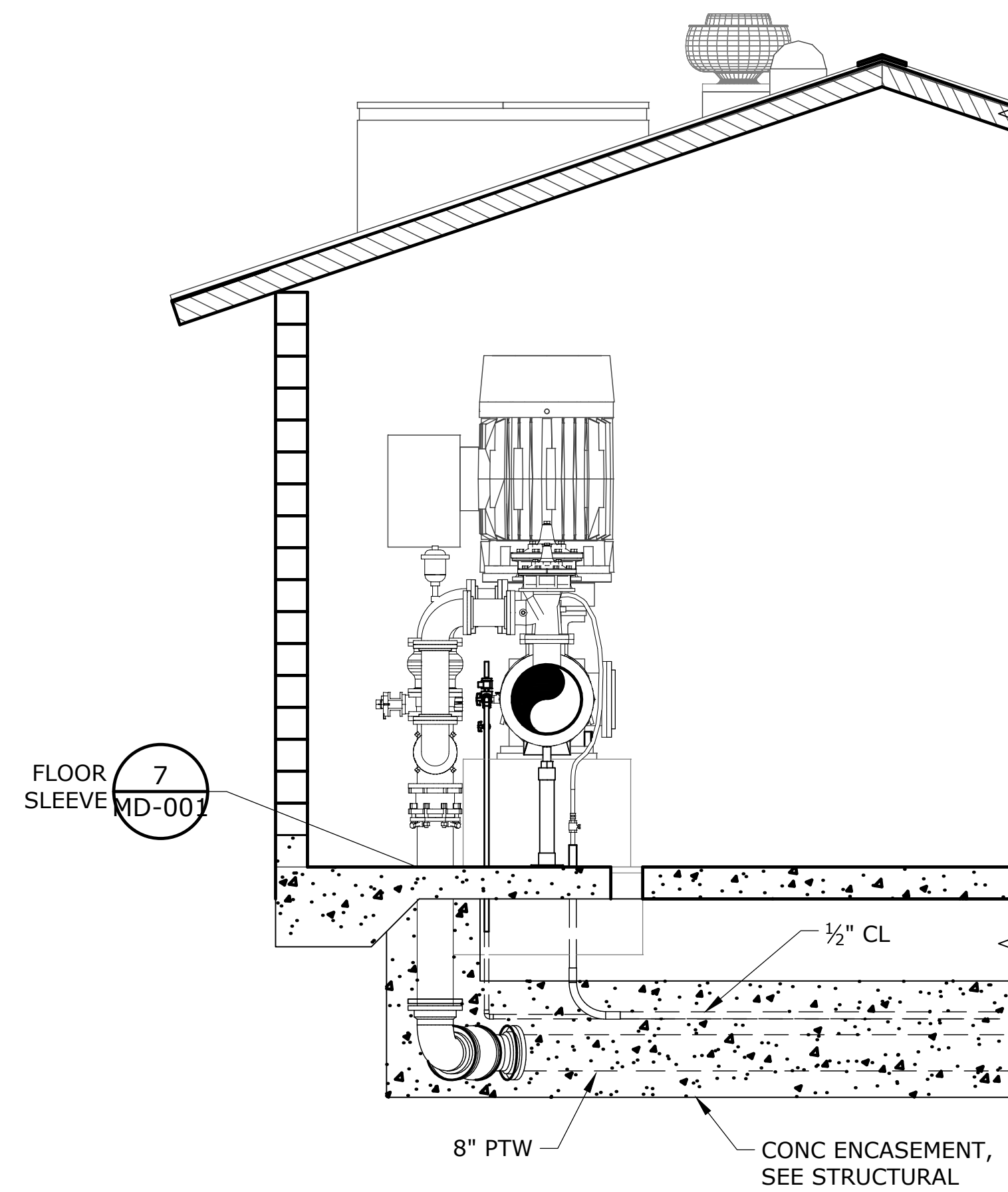
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
M-102
39 of 65

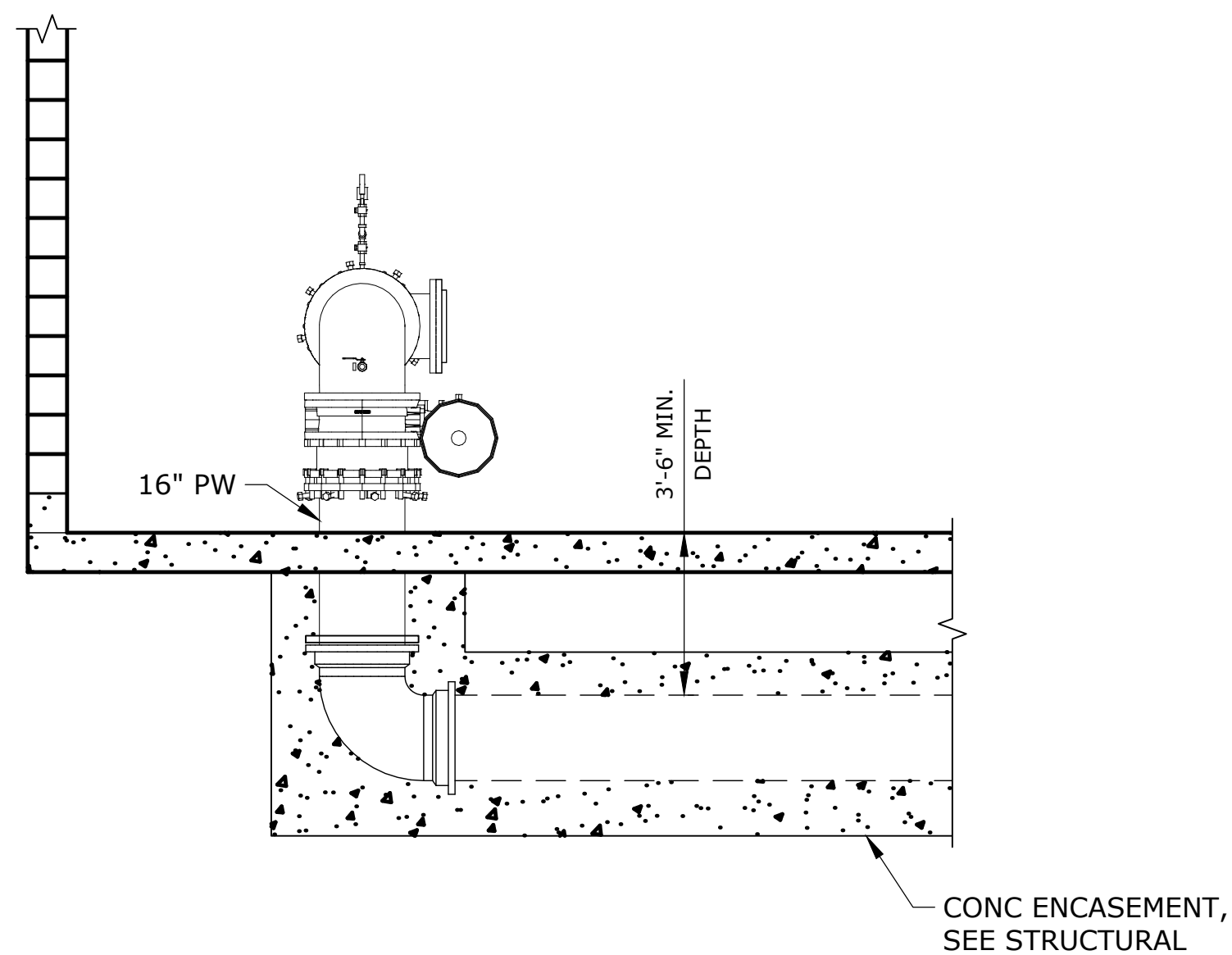
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-103 3/1/2024 5:38 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



SECTION A
SCALE: 3/8"=1'-0"
M-3



SECTION B
SCALE: 3/8"=1'-0"
M-3



SECTION C
SCALE: 3/8"=1'-0"
M-3

NOTES:

1. OWNER-PROVIDED WELL PUMP, MOTOR, COLUMN PIPING, SOUNDING TUBES, AND DISCHARGE HEAD. TO BE INSTALLED BY OWNER, COORDINATE WORK WITH OWNER AND OWNER'S PUMP INSTALLER.
2. CONNECT PRELUBE WATER LINE TO MFR-PROVIDED CONNECTION ON PUMP DISCHARGE HEAD. LOCATION SHOWN AS APPROXIMATE, COORDINATE CONNECTION TYPE, AND LOCATION WITH OWNER.
3. ALL DUCTILE IRON PIPE, FITTINGS, AND VALVES SHALL BE RESTRAINED.

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11B
SECTIONS

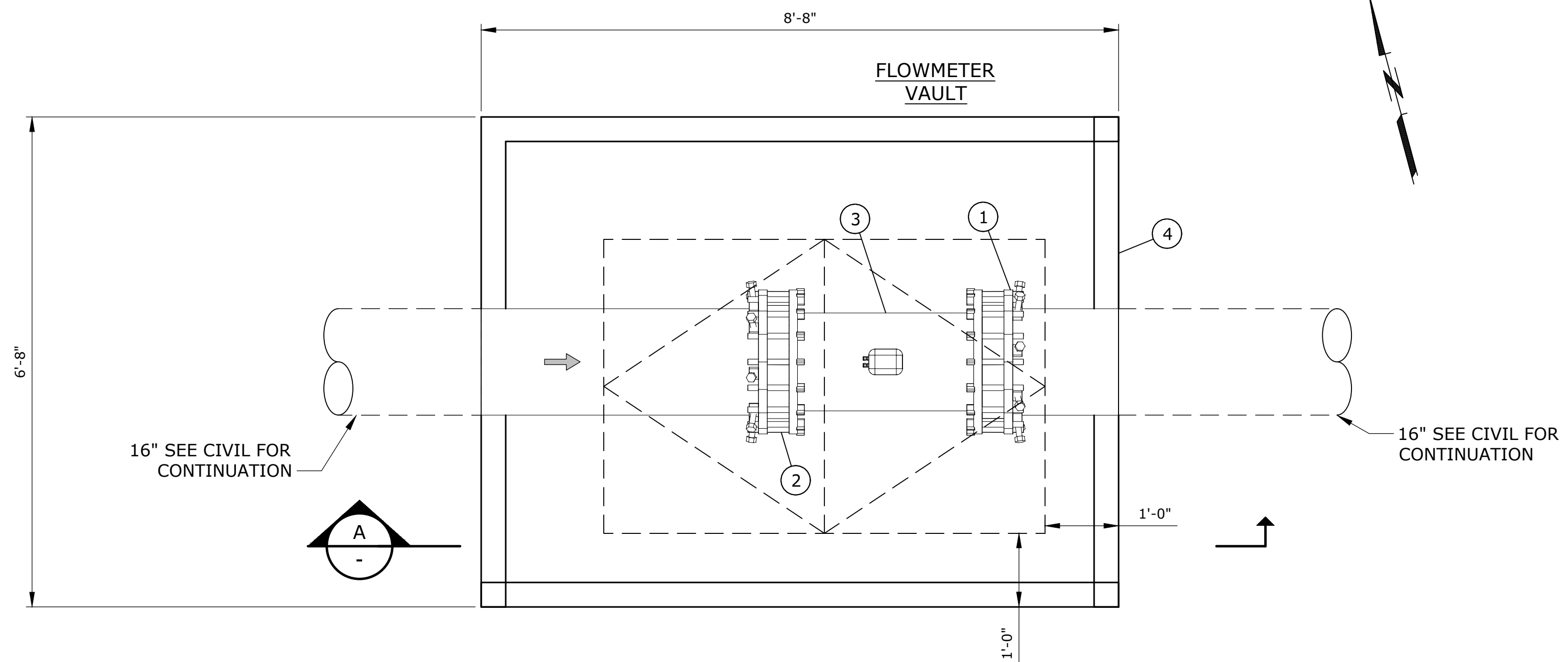
SHEET

M-103

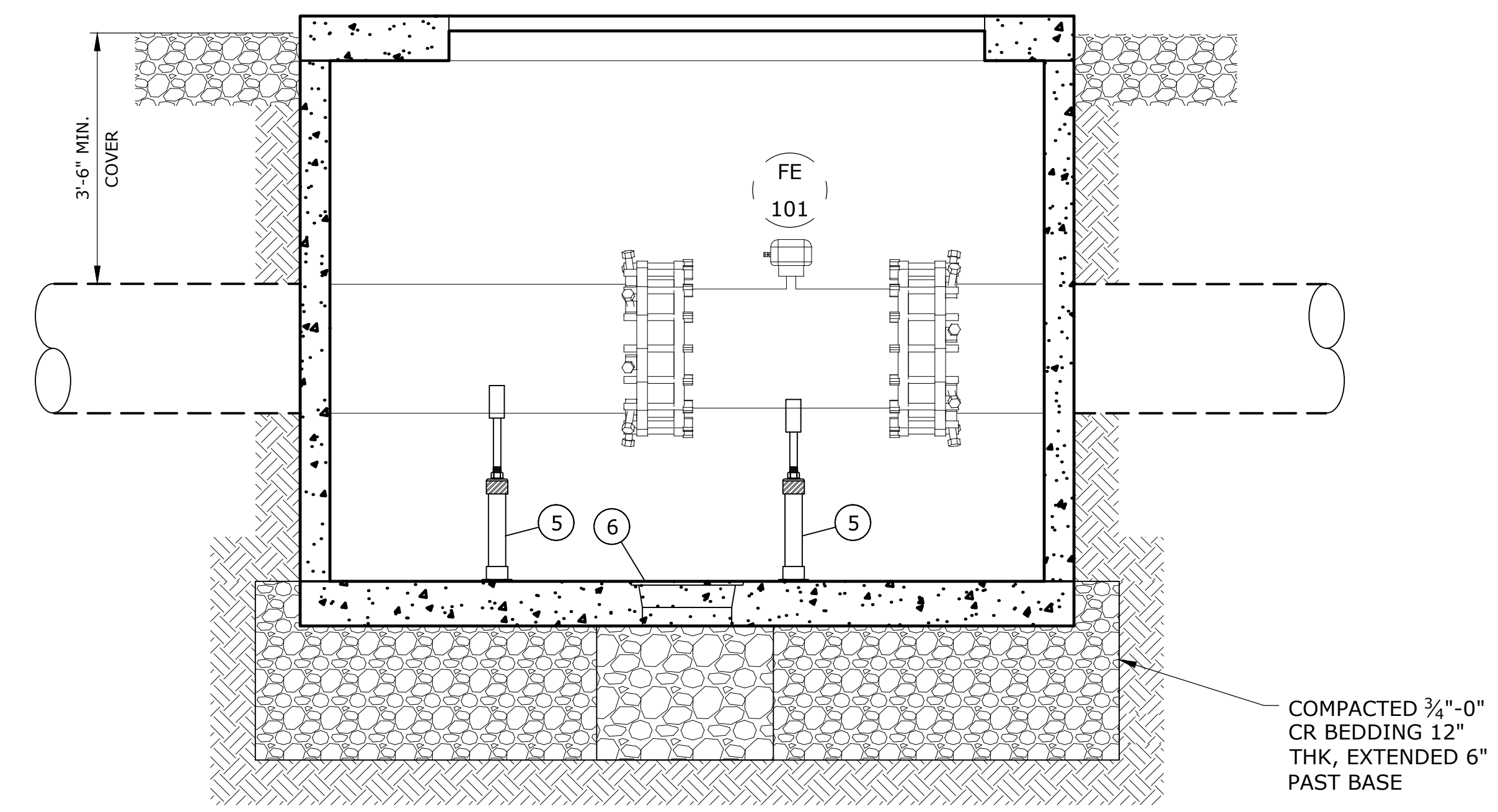
40 of 65

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-104 3/1/2024 5:38 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)



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



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

- SHEET NOTES:**
1. PROVIDE RESTRAINED JOINTS ON PIPING, 2' FROM OUTSIDE EDGE OF VAULTS, TYPICAL. SEE SHEET C-6 FOR SITE PIPING PLAN.
 2. WALL PENETRATIONS FOR PIPING TO BE PRECAST IN VAULTS, PROVIDE NON-SHRINK GROUT SEAL AROUND PIPE.
 3. ROUTE HATCH DRAIN TO FLOOR DRAIN
 4. FOR ALL FLANGES NEAR WALL PENETRATIONS FOR WHICH NO DIMENSION IS GIVEN, FLANGE FACE MUST BE 6" MINIMUM FROM WALL.

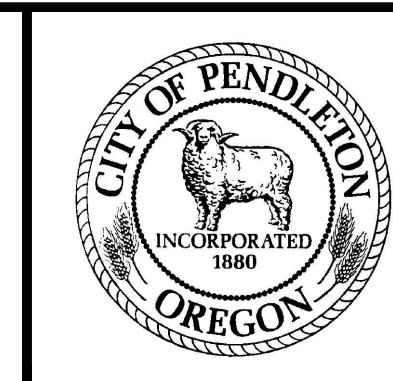
MATERIAL LIST

- 1 16" RESTRAINED FLANGE ADAPTER, EBAA IRON SERIES 2100 MEGAFLANGE, OR EQUAL
- 2 16" RESTRAINED FLANGE COUPLING ADAPTER
- 3 16" FLOWMETER
- 4 OLDCASTLE PRECAST 687, OR EQUAL W/ H-20 RATED 72"x48" DUAL LEAF COVER AND FALL PROTECTION, ROUTE HATCH DRAINAGE TO FLOOR DRAIN
- 5 STANDON MODEL 92 ADJUSTABLE PIPE SUPPORT, OR EQUAL
- 6 VAULT FLOOR SUMP W/ GRATE PROVIDE 1'x1'x1' DRAIN POCKET DIRECTLY BENEATH DRAIN, W/ 2" MINUS DRAIN ROCK, WRAPPED IN MIRAFI 160N OR EQUAL

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



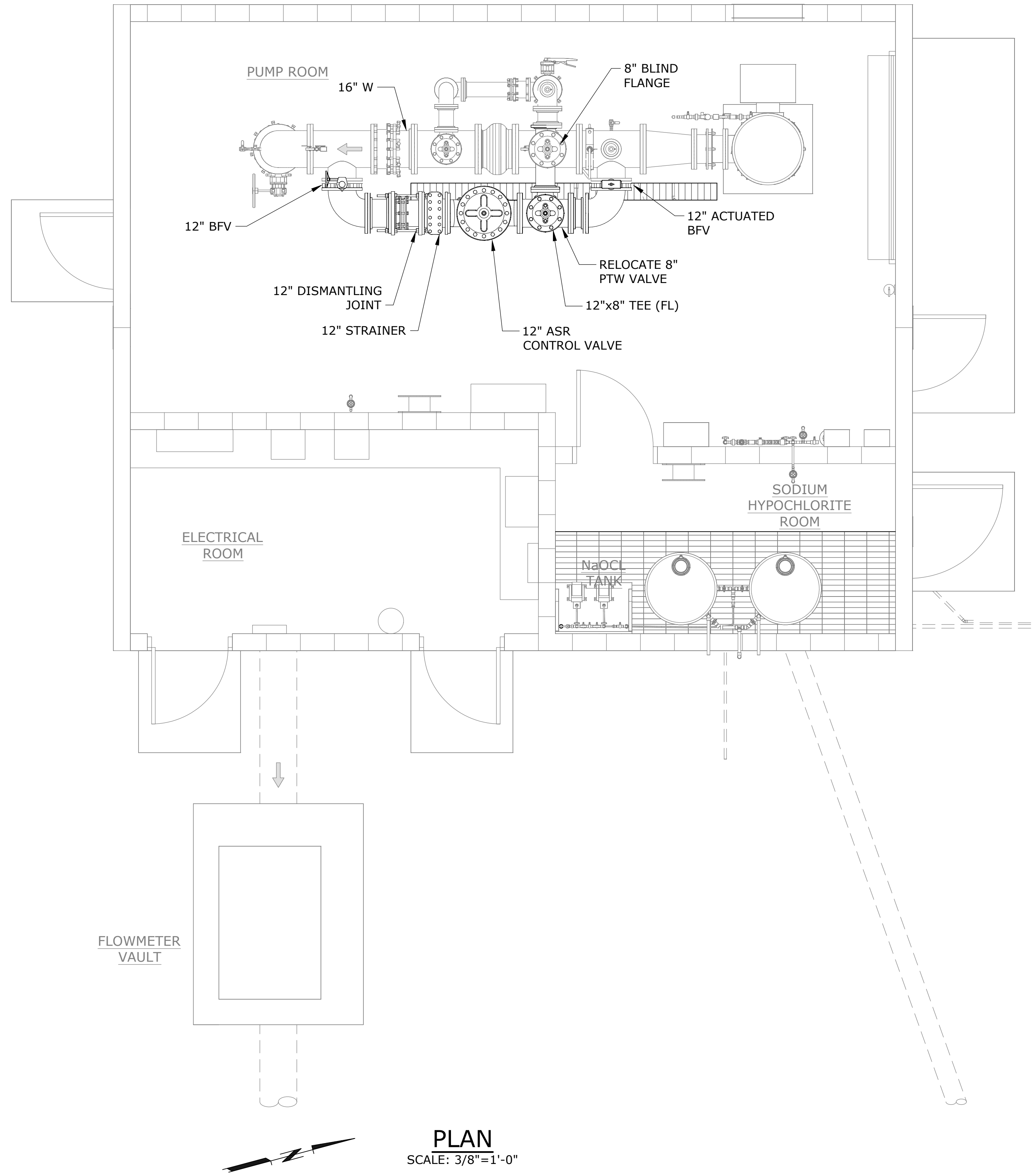
CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11B
FLOW METER VAULT PLAN AND SECTION

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
M-104
41 of 65

- NOTE:**
- IMPROVEMENTS ON THIS SHEET ARE FOR REFERENCE ONLY AND ARE NOT A PART OF THIS CONTRACT.



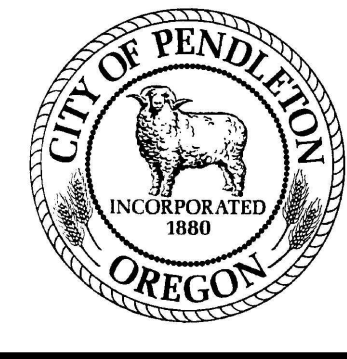
PLAN
SCALE: 3/8"=1'-0"

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-107 3/1/2024 5:38 PM JEFFRY.ORLANDO 24.1s (LMS Tech)

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED

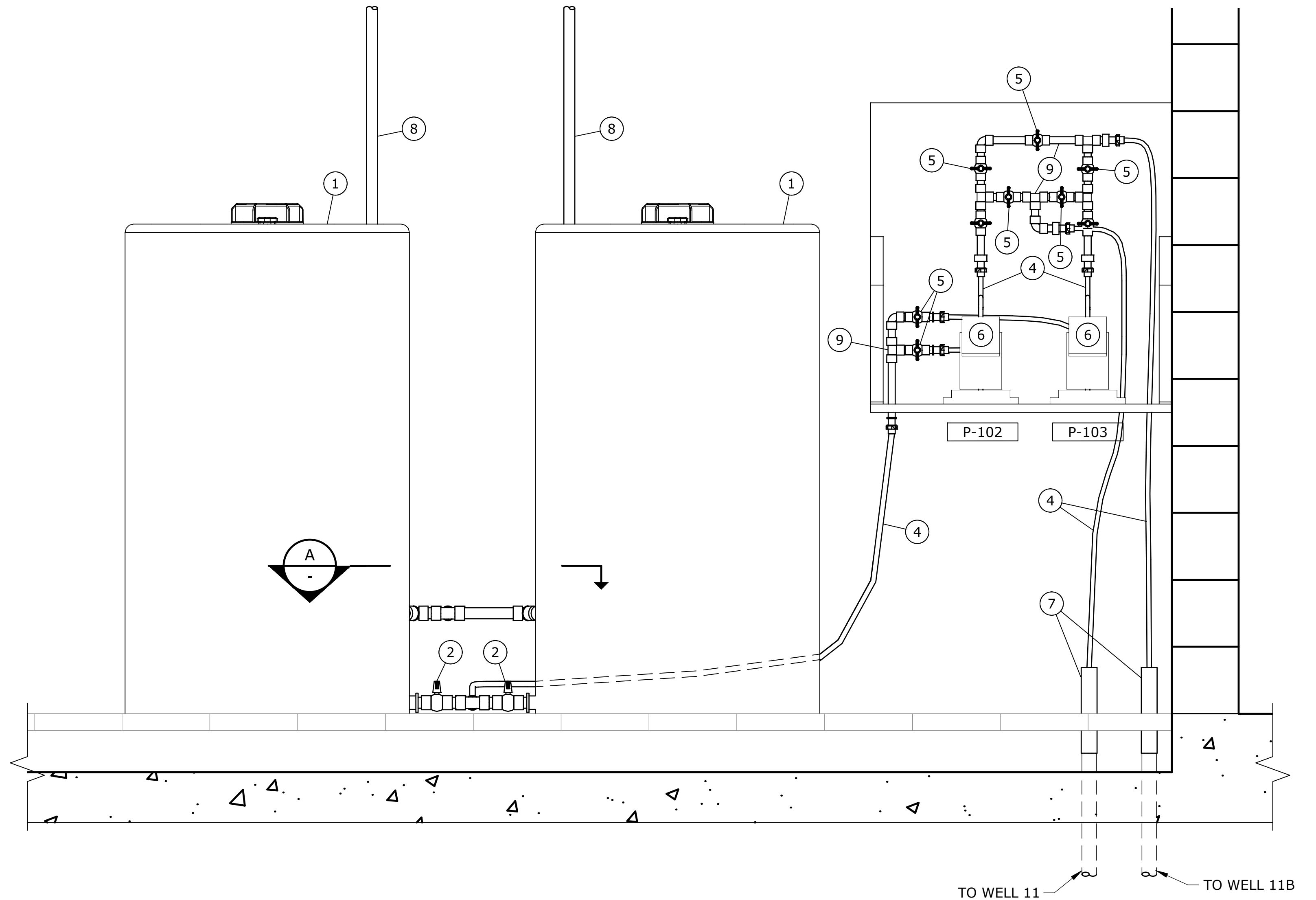
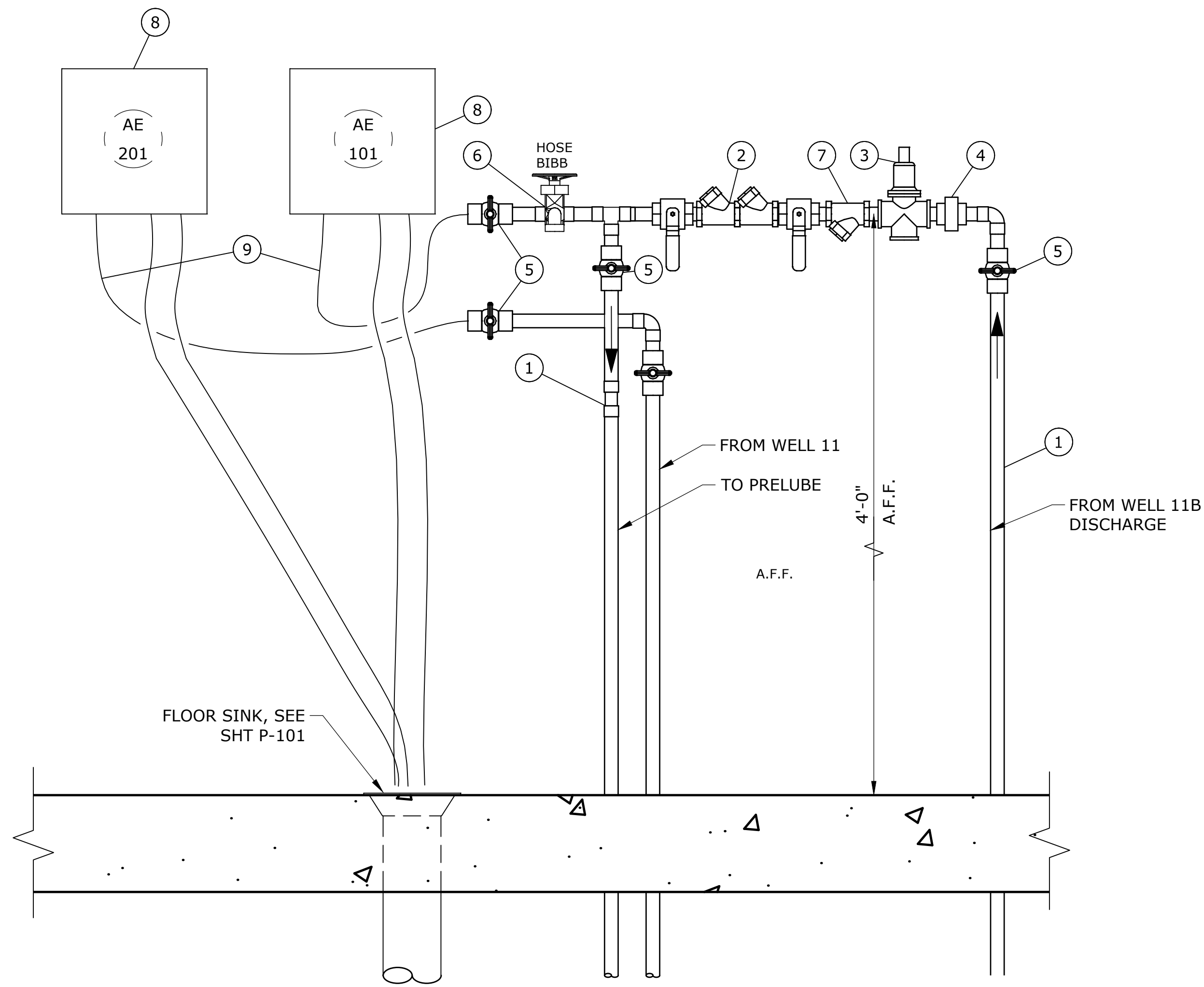


**CITY OF PENDLETON
WELL 11-11B**

MECHANICAL WELL 11B FUTURE ASR FLOOR PLAN			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
M-107
44 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg M-105 3/1/2024 5:38 PM JEFFRY.ORTLANDO 24.1s (LMS Tech)

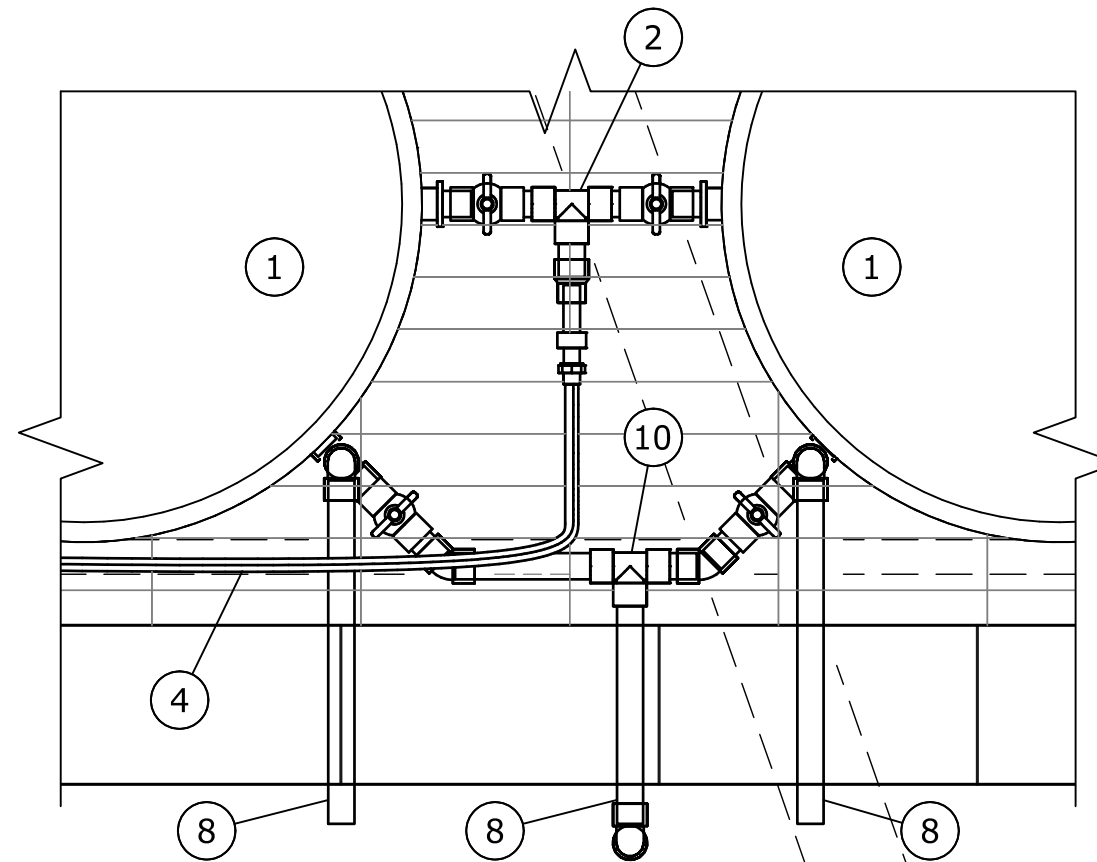


MATERIAL LIST

- ① 1" PW
- ② 1" DOUBLE CHECK VALVE ASSEMBLY, WATTS 719QT, OR EQUAL
- ③ 1" PRV 150 PSI TO 60 PSI, CLA-VAL CRD-L OR EQUAL
- ④ 1" UNION
- ⑤ 1" BALL VALVE
- ⑥ 1" CROSS, THROUGH WALL, SEE SHT M-3, 3/4" HOSE BIBB, REDUCE, AS REQ'D
- ⑦ 1" STRAINER
- ⑧ CHLORINE ANALYZER SYSTEM
- ⑨ 3/4" FLEX TUBING

NOTES:

1. ALL FITTINGS TO MAKE SYSTEM COMPLETE ARE NOT SHOWN OR LABELED. CONTRACTOR TO FIELD ROUTE PIPE AND PROVIDE FITTINGS AS NECESSARY TO MAKE COMPLETE SYSTEM.
2. CONTRACTOR TO SUPPORT INSTRUMENTS AND PIPING WITH UNISTRUT SYSTEM.
3. PIPE AND FITTINGS TO BE THREADED BRASS INSIDE BUILDING.



SECTION
SCALE: NTS

MATERIAL LIST

- ① 150 GAL VERTICAL LIQUID STORAGE TANK, SUITABLE FOR 12% NAOCL, SNYDER INDUSTRIES 150 GAL ASTM TANK, OR EQUAL
- ② (2) 1" PVC BALL VALVE, 1" TEE, 1"x1/2" RDCR AND TRANSITION FITTINGS TO 1/2" TUBING
- ③ 1"x 1/2" RDCR
- ④ 1/2" TUBING
- ⑤ 1/2" PVC BALL VALVE
- ⑥ NAOCL METERING PUMP; P-102, P-103
- ⑦ 1 1/2" PVC CND W/ 1/2" TUBING
- ⑧ 1" SCHED 80 PVC, DRAIN, OVERFLOW, AND VENT FOR TANK, VENT THROUGH WALL 120" AFF, OVERFLOW THROUGH WALL 12" AFF

- ⑨ 1/2" SCH 80 PVC
- ⑩ (2) 1" PVC BALL VALVE, 1" TEE, (2) 1" 45° BENDS, CONNECT TO OVERFLOW AND DRAIN PIPING

NOTES:

1. ALL FITTINGS TO MAKE SYSTEM COMPLETE ARE NOT SHOWN OR LABELED. CONTRACTOR TO FIELD ROUTE PIPE AND PROVIDE FITTINGS AS NECESSARY TO MAKE COMPLETE SYSTEM.
2. CONTRACTOR TO PROVIDE A STAINLESS STEEL UNISTRUT SYSTEM TO SUPPORT PIPING AND PUMPS SECURED TO WALL.

CHEMICAL DOSING EQUIPMENT DETAIL
SCALE: NTS

BACKFLOW PREVENTION, PRESSURE REDUCING ASSEMBLY AND WELL ANALYTICS EQUIPMENT DETAIL
SCALE: NTS

1
M-3

A
-

2
M-3

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



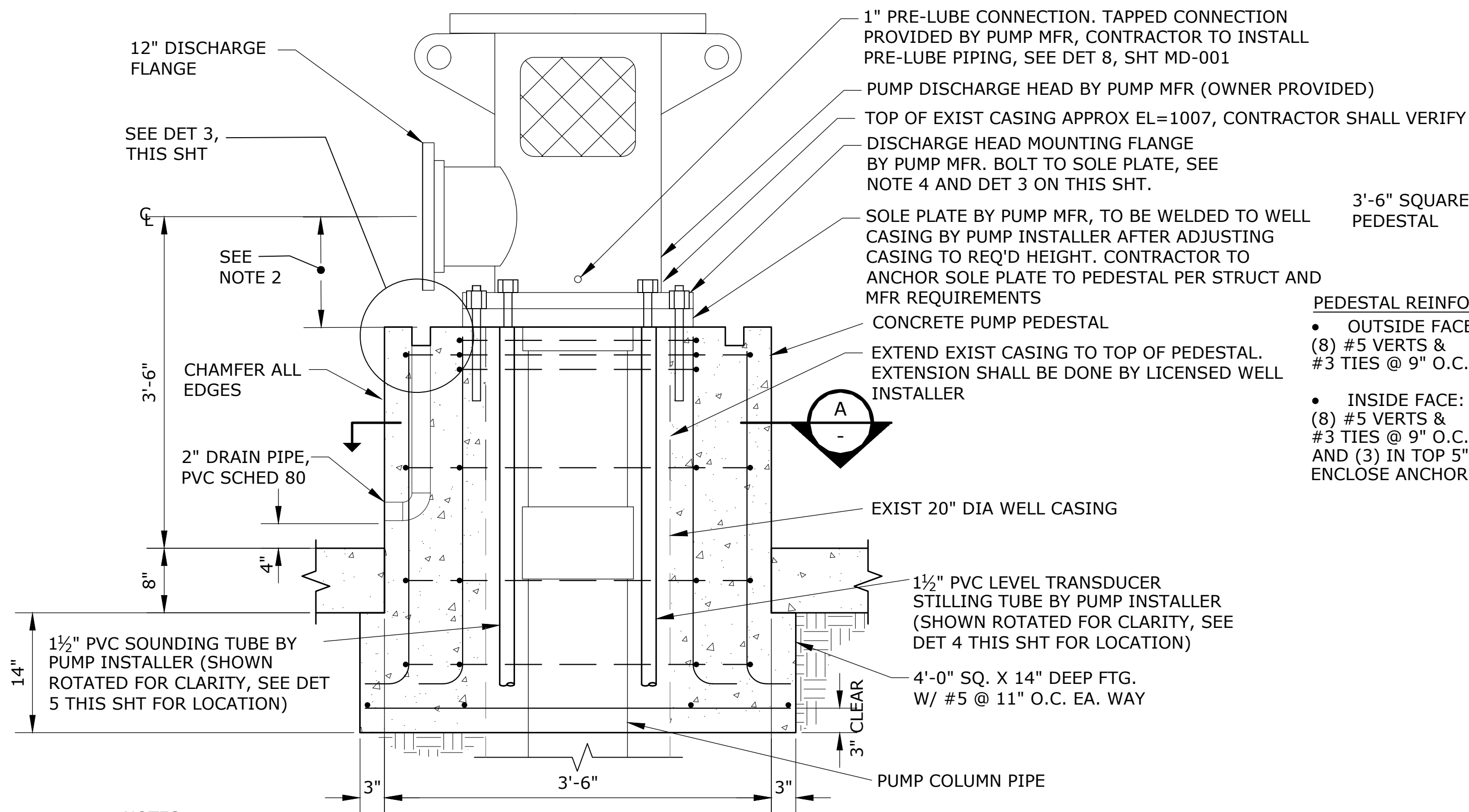
**CITY OF PENDLETON
WELL 11-11B**

**MECHANICAL
WELL 11B
CHLORINE AND WATER QUALITY DETAILS**

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

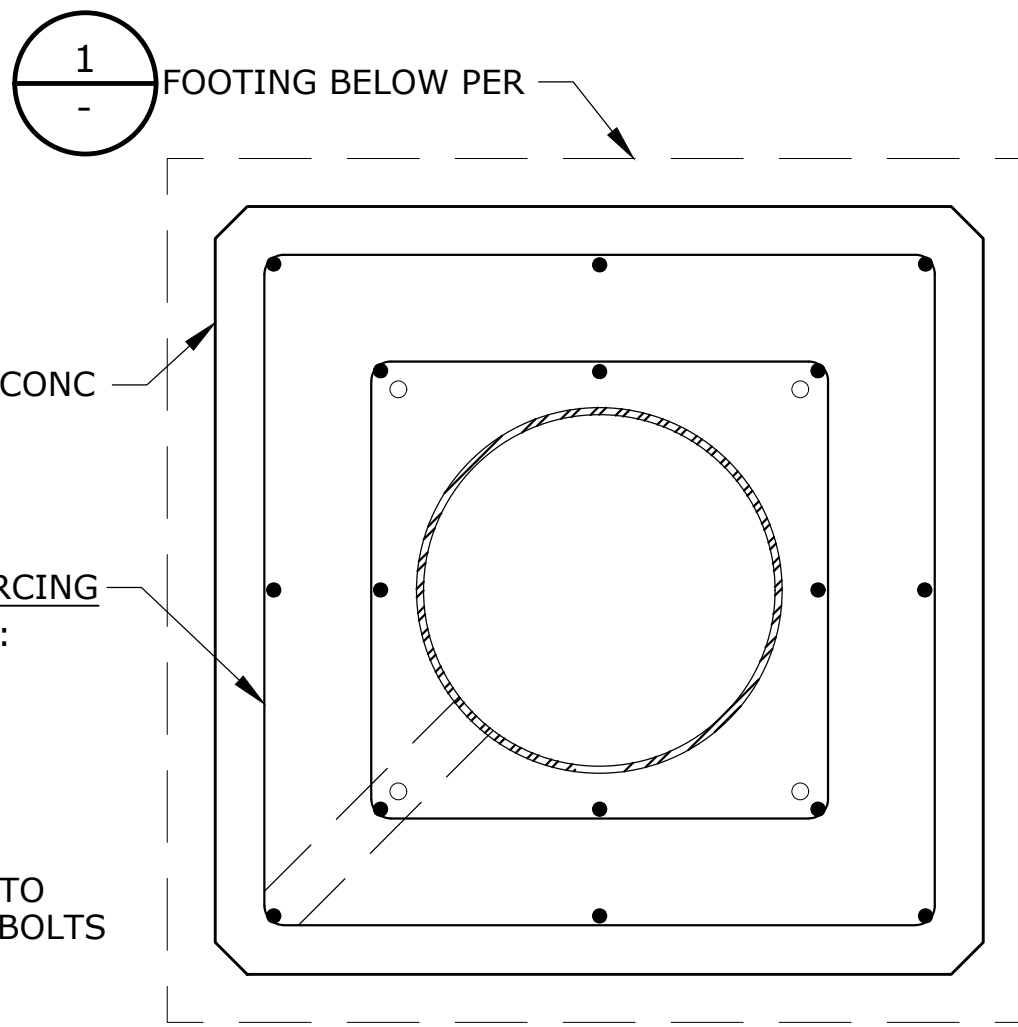
SHEET
M-105
42 of 65

I:\BOI_Projects\21\31133 - Pendleton - Well 11\CAD\Sheets\21-31133-OR-M.dwg M-106 3/1/2024 5:38 PM JEFFRY.ORLANDO 24.1s (LMS Tech)

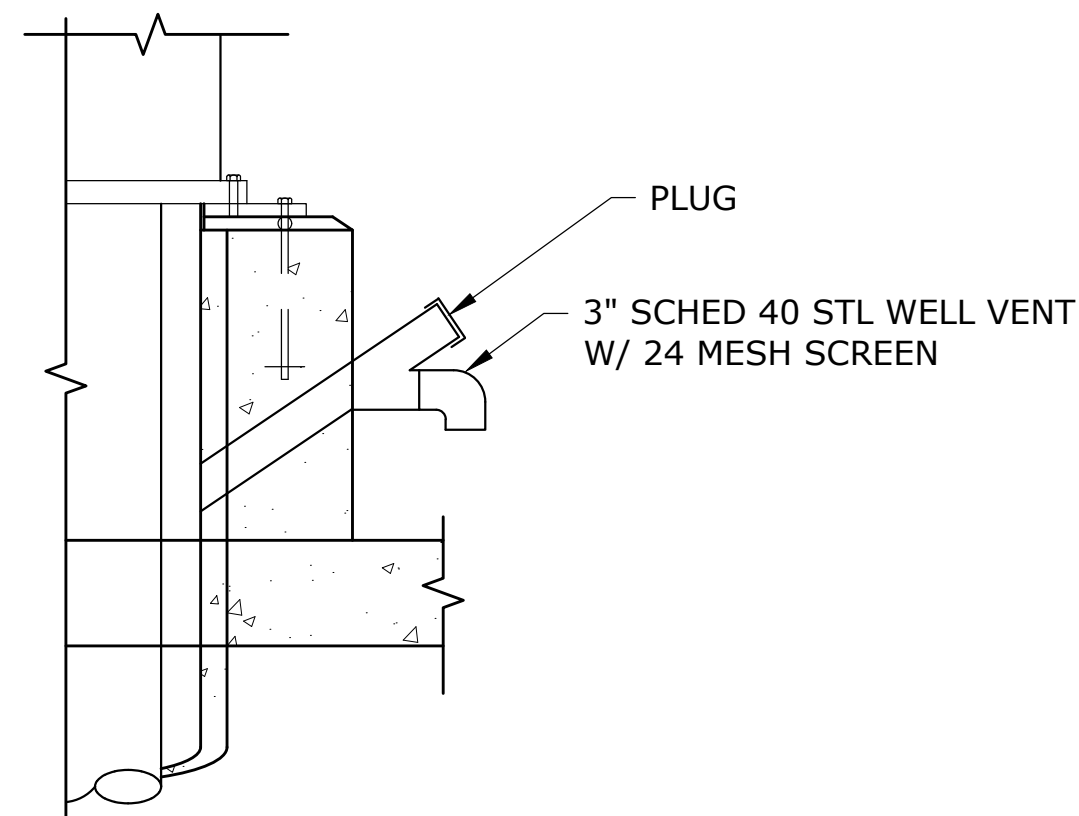


NOTES:

1. COMPLY WITH ALL REQUIREMENTS OF OREGON WATER RESOURCES DEPARTMENT.
2. DIMENSIONS MAY VARY DEPENDING ON ACTUAL PUMP PROVIDED. CONTRACTOR SHALL VERIFY DIMENSIONS WITH PUMP MFR AND ADJUST PEDESTAL HEIGHT AS REQUIRED TO MAINTAIN PIPE CL HEIGHT AFF.
3. ANCHOR BOLTS SHALL BE OF SIZE, TYPE AND EMBEDMENT AS SHOWN AND PER MANUFACTURER REQUIREMENTS.
4. PUMP MOUNTING BASE BOLTS TO BE HEX HEAD BOLTS WITH LOCK WASHER, LENGTH AS REQUIRED.
5. WELL VENT AND WELL ACCESS PORTS NOT SHOWN FOR CLARITY. SEE DETAIL 2, THIS SHEET.

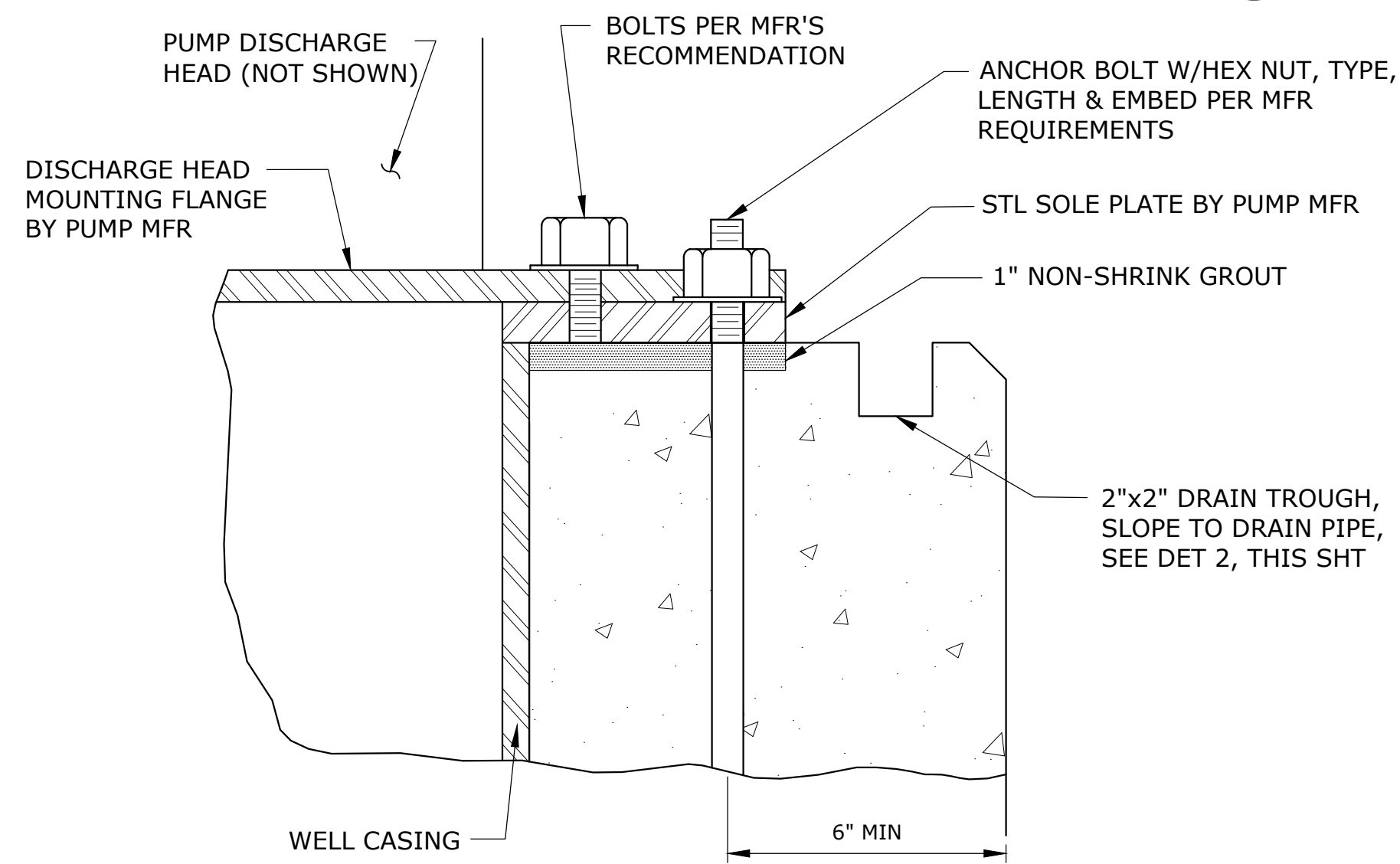


SECTION
SCALE: NTS

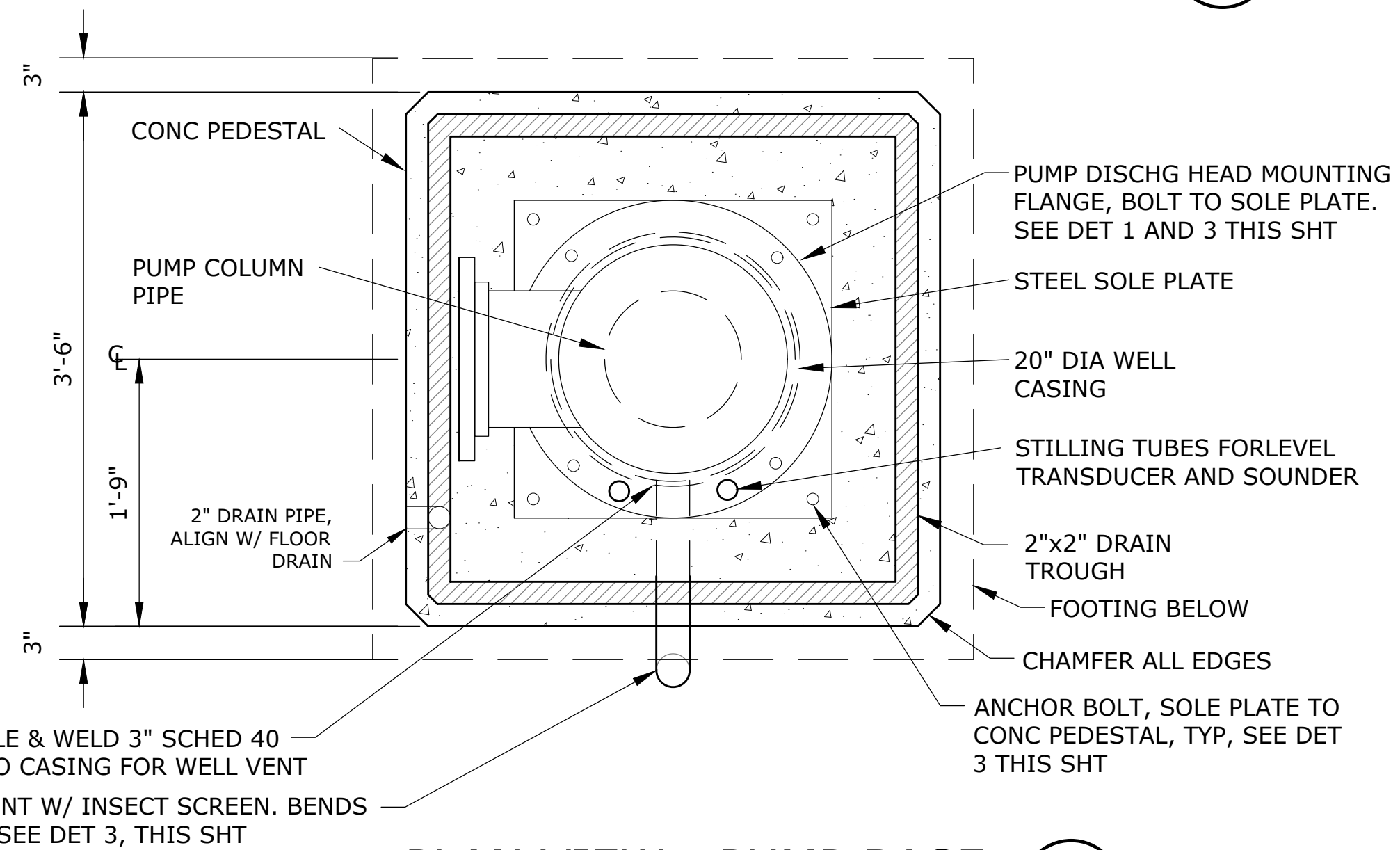


WELL VENT WITH INSECT SCREEN
SCALE: NTS

DEEP WELL VERTICAL TURBINE PUMP BASE DETAIL
SCALE: NTS

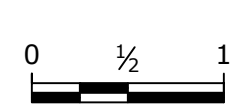


PUMP BASE EDGE DETAIL
SCALE: NTS



PLAN VIEW - PUMP BASE
SCALE: NTS

NOTICE

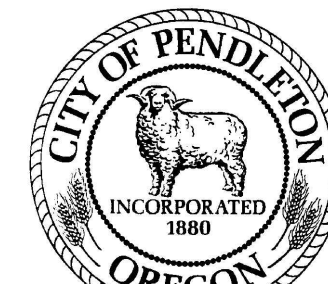


IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



RENEWS 06-30-25



CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11B
PUMP PEDESTAL DETAILS

SHEET

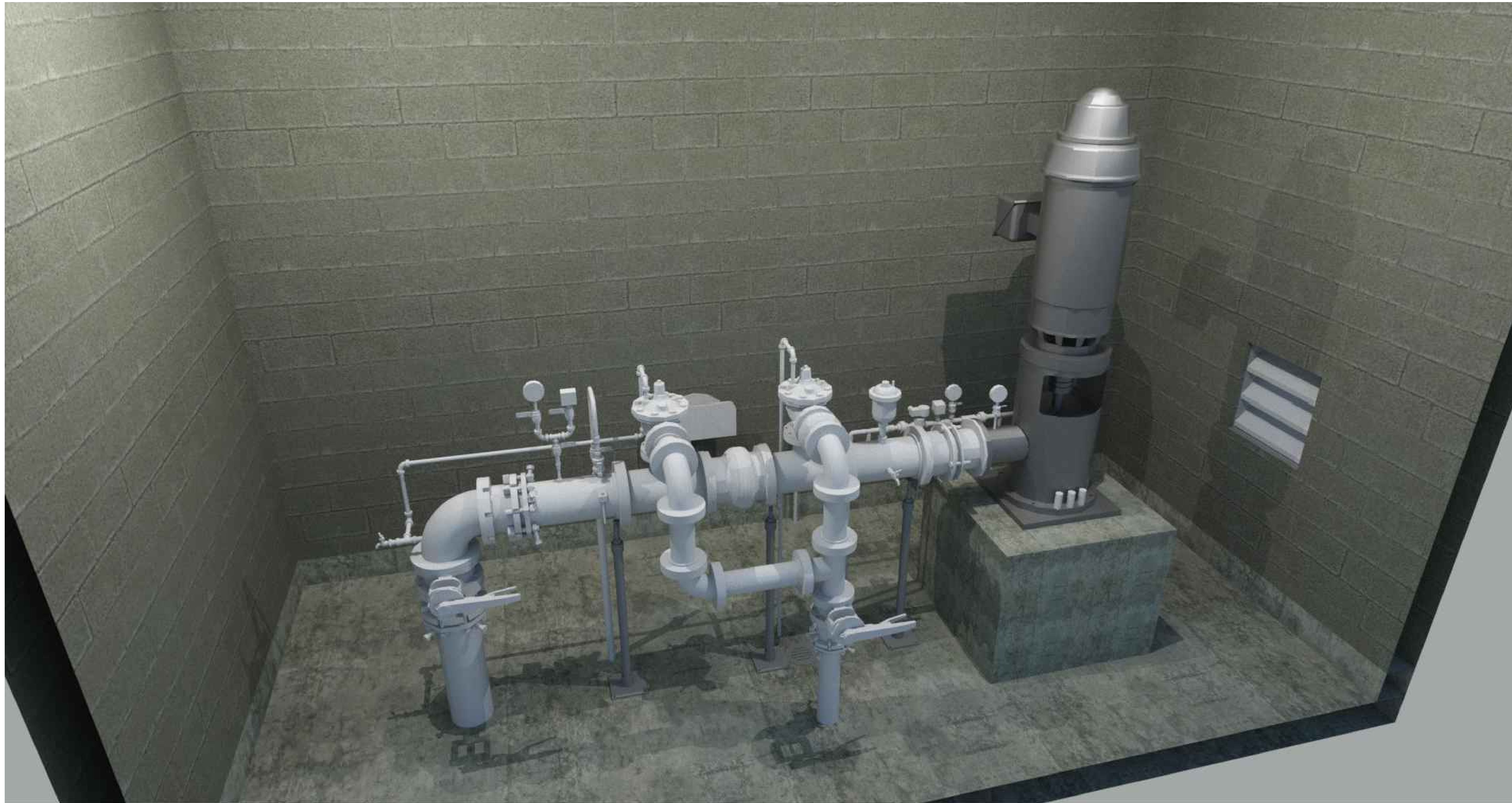
M-106

43 of 65

NO.	DATE	BY	REVISION
Δ	03/13/2024	WRK	BID SET

PROJECT NO.: 21-31133 SCALE: AS SHOWN DATE: MARCH 2024

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M-WELL 11.dwg M-201 3/1/2024 5:37 PM JEFFRY.ORLANDO 24.1s (LMS Tech)



NOTE:

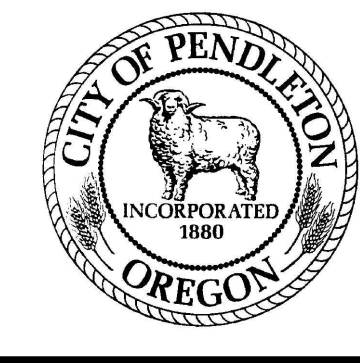
PERSPECTIVE VIEW ARE FOR GENERAL REFERENCE ONLY. DO NOT USE FOR CONSTRUCTION. NOT ALL WORK ELEMENTS SHOWN.

PERSPECTIVE
SCALE: NTS

NO.	DATE	WRK BY	BID SET	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED

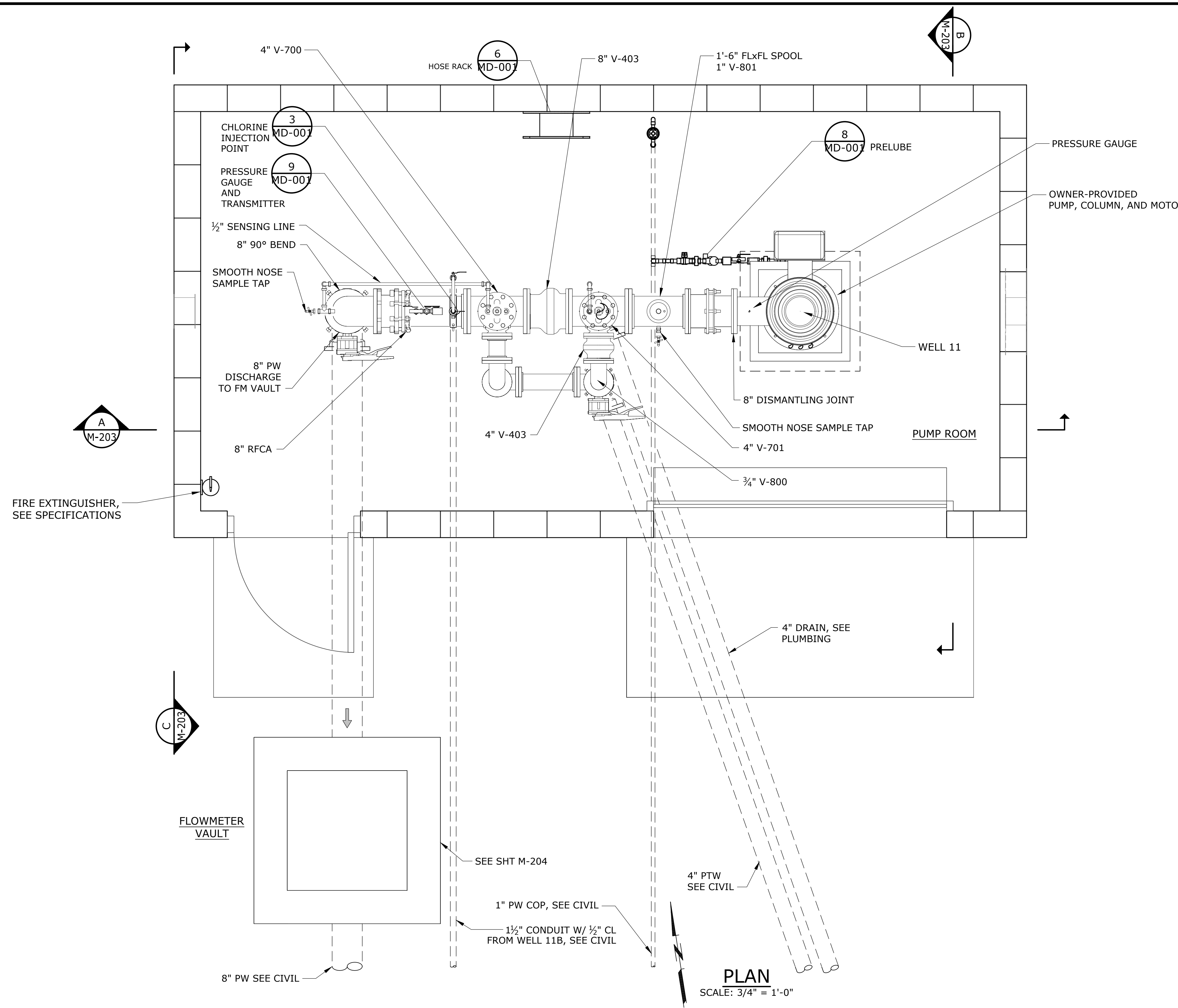


**CITY OF PENDLETON
WELL 11-11B**

MECHANICAL WELL 11 PERSPECTIVE			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
M-201
45 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M-WELL 11.dwg M-202 3/1/2024 5:37 PM JEFFRY. ORLANDO 24.1s (LMS Tech)



- NOTES:**
1. FITTINGS AND PIPE OUTSIDE BUILDING ENVELOPE SHOWN FOR REFERENCE ONLY. SEE CIVIL SHEETS FOR FITTING, PIPE, AND DETAIL CALLOUTS.
 2. COORDINATE WITH ELECTRICAL DRAWINGS FOR LOCATION OF MOTOR TERMINAL BOX LOCATIONS.

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

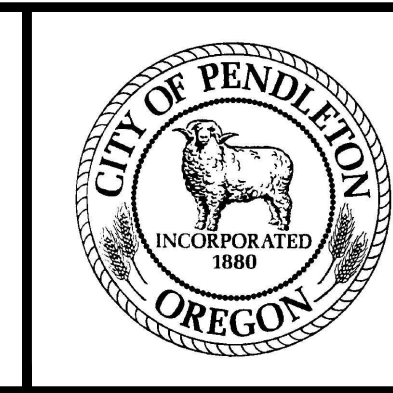
NO.	DATE	BY	BID SET	REVISION

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



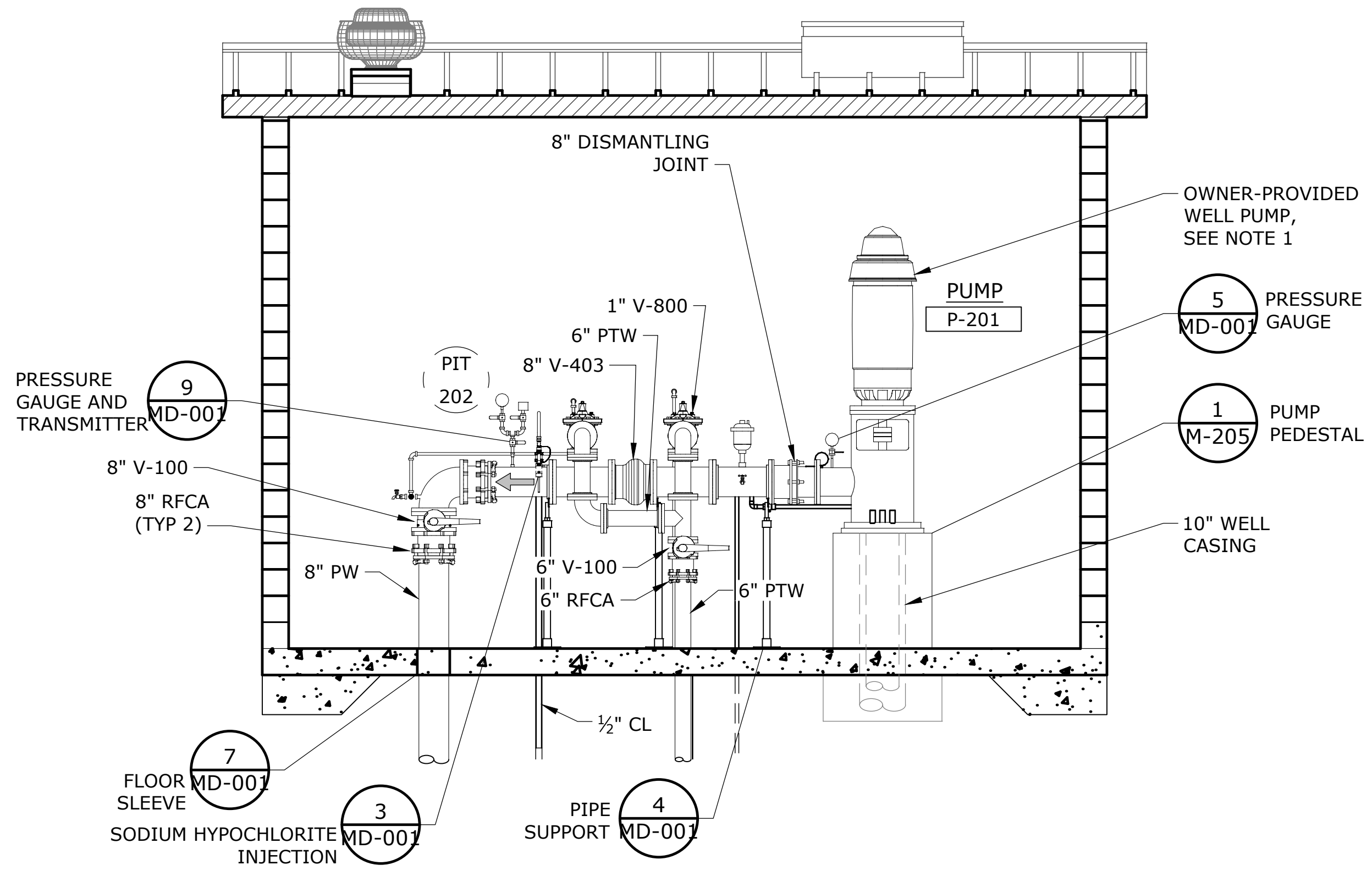
CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11
FLOOR PLAN

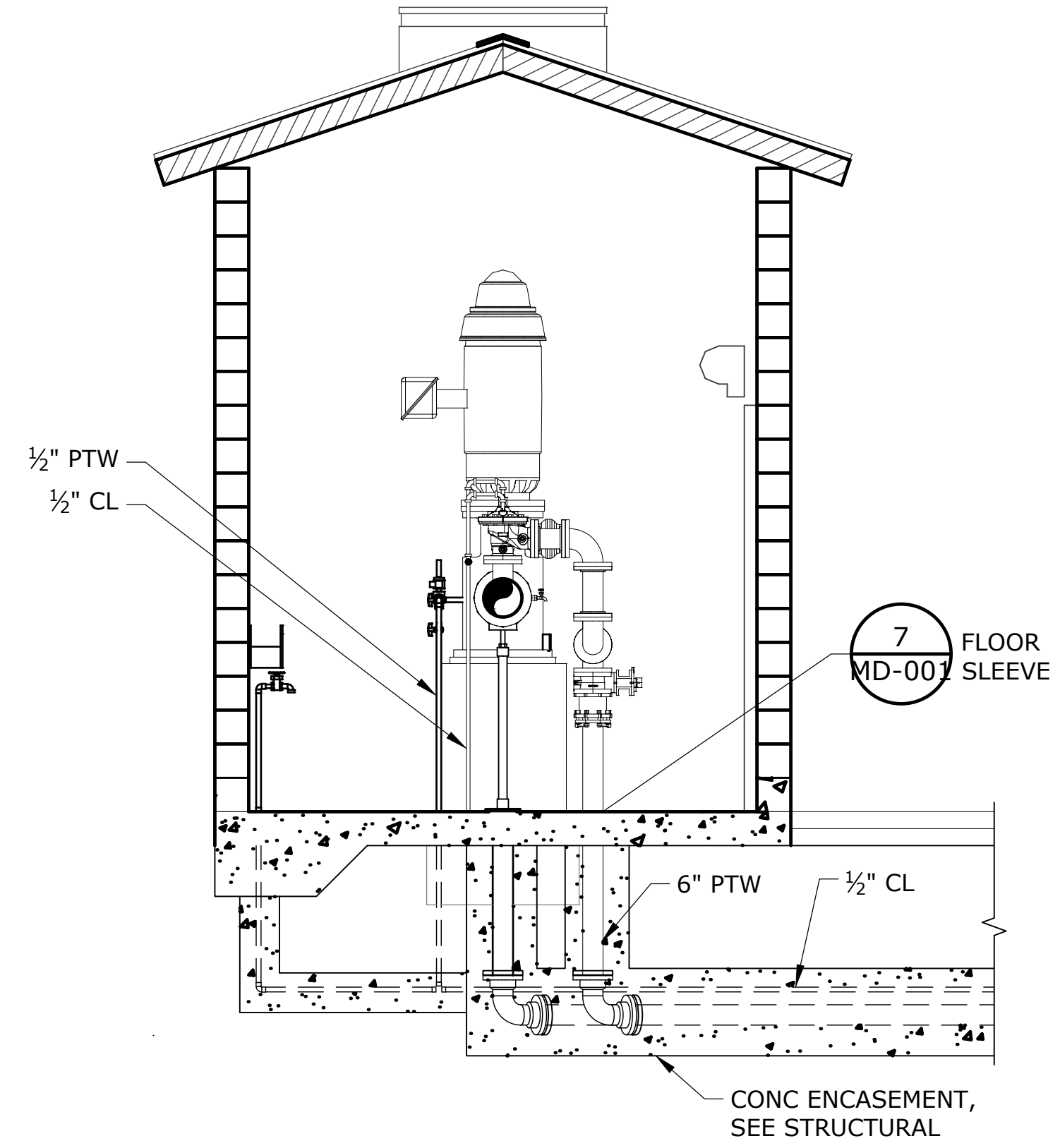
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
M-202
46 of 65

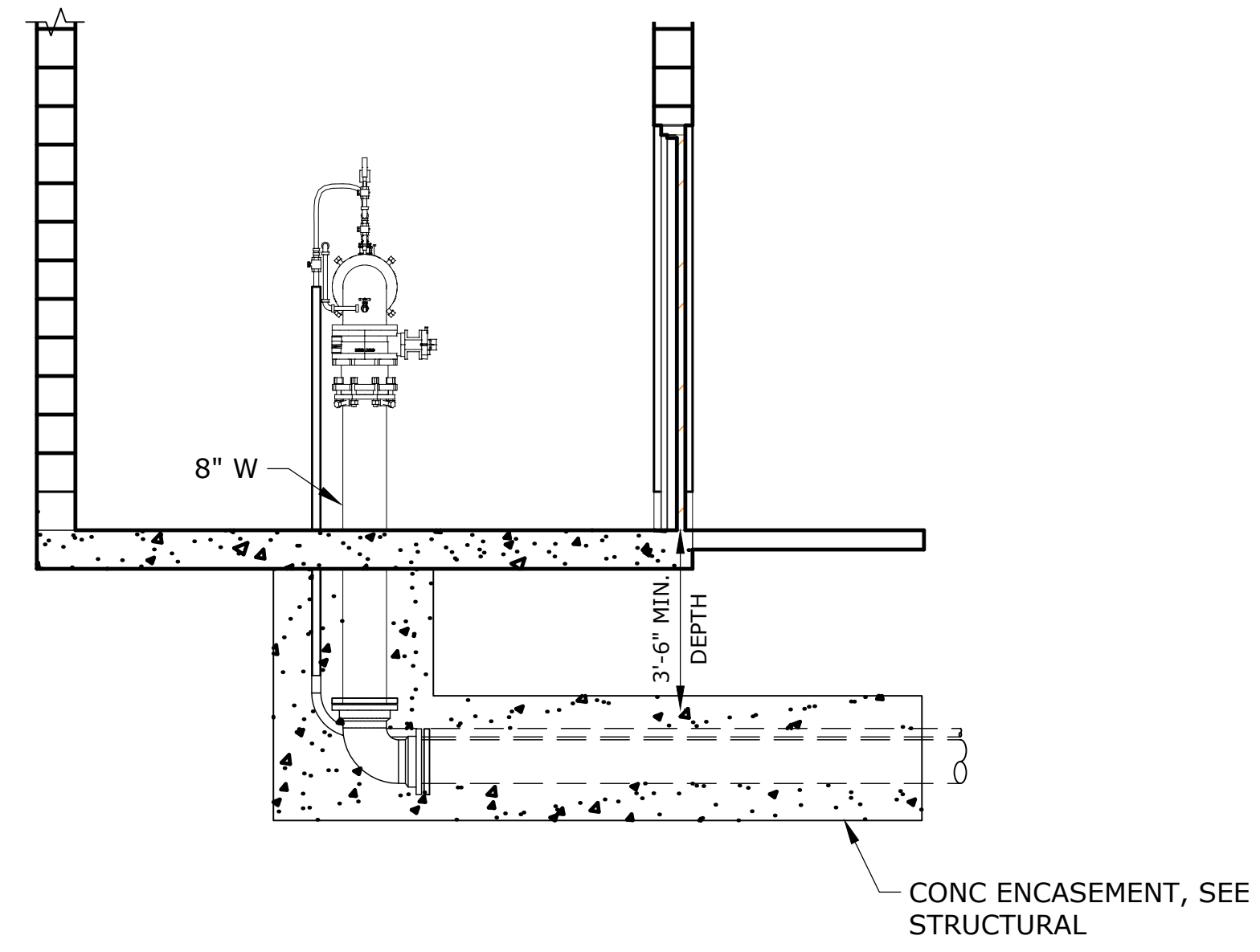
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M-WELL 11.dwg M-203 3/1/2024 5:37 PM JEFFRY. ORLANDO 24.1s (LMS Tech)



SECTION A
SCALE: 3/8"=1'-0"
M-202



SECTION B
SCALE: 3/8"=1'-0"
M-202



SECTION C
SCALE: 3/8"=1'-0"
M-202

NOTES:

1. OWNER-PROVIDED WELL PUMP, MOTOR, COLUMN PIPING, SOUNDING TUBES, AND DISCHARGE HEAD. TO BE INSTALLED BY OWNER, COORDINATE WORK WITH OWNER AND OWNER'S PUMP INSTALLER.
2. CONNECT PRELUBE WATER LINE TO MFR-PROVIDED CONNECTION ON PUMP DISCHARGE HEAD. LOCATION SHOWN AS APPROXIMATE, COORDINATE CONNECTION TYPE, AND LOCATION WITH OWNER.
3. ALL DUCTILE IRON PIPE, FITTINGS, AND VALVES SHALL BE RESTRAINED.

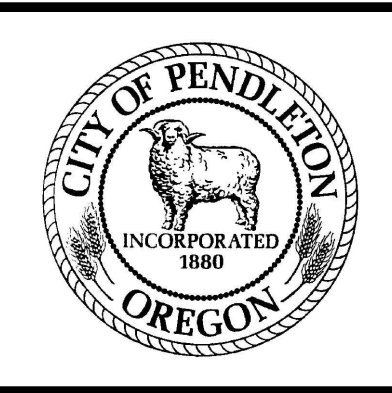
NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



CITY OF PENDLETON
WELL 11-11B

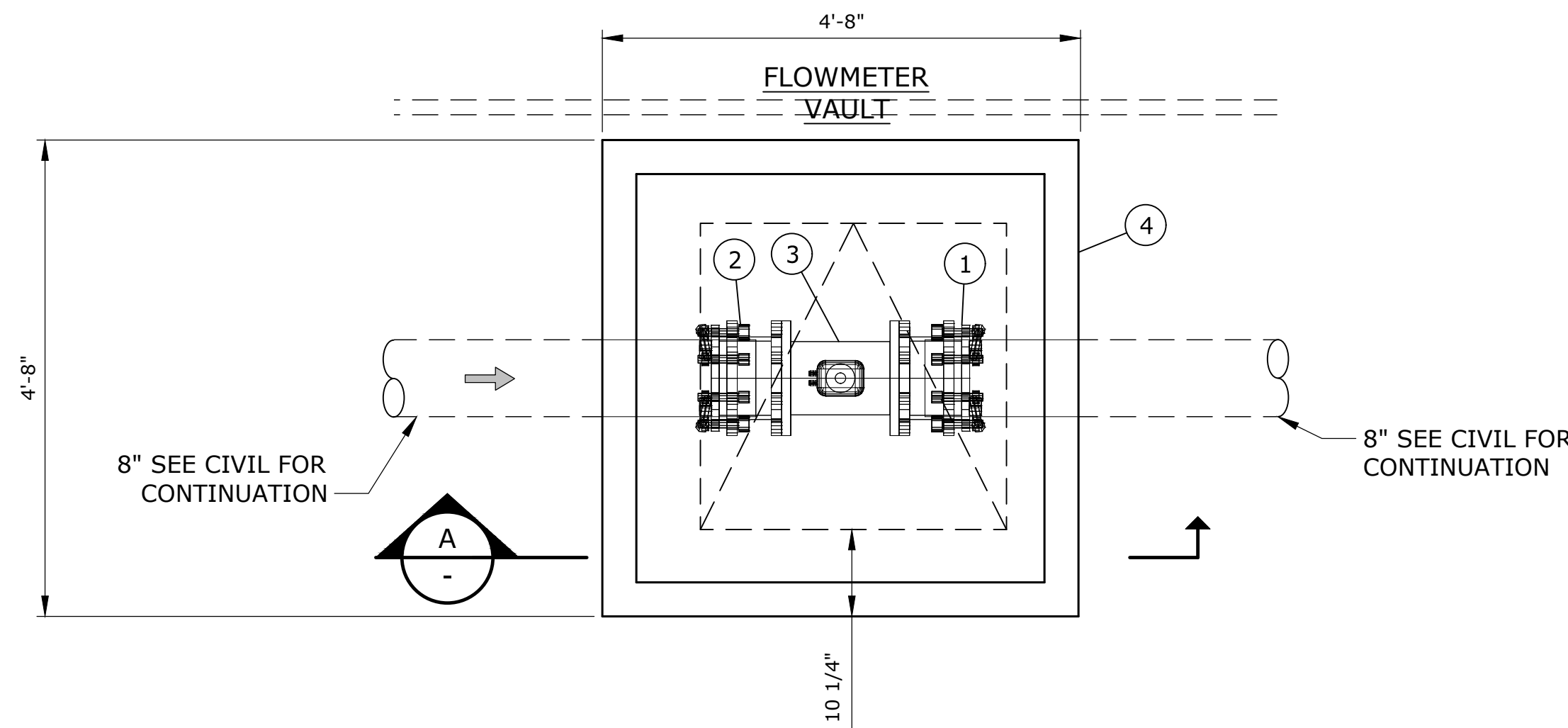
MECHANICAL			
WELL 11			
SECTIONS			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

SHEET
M-203
47 of 65

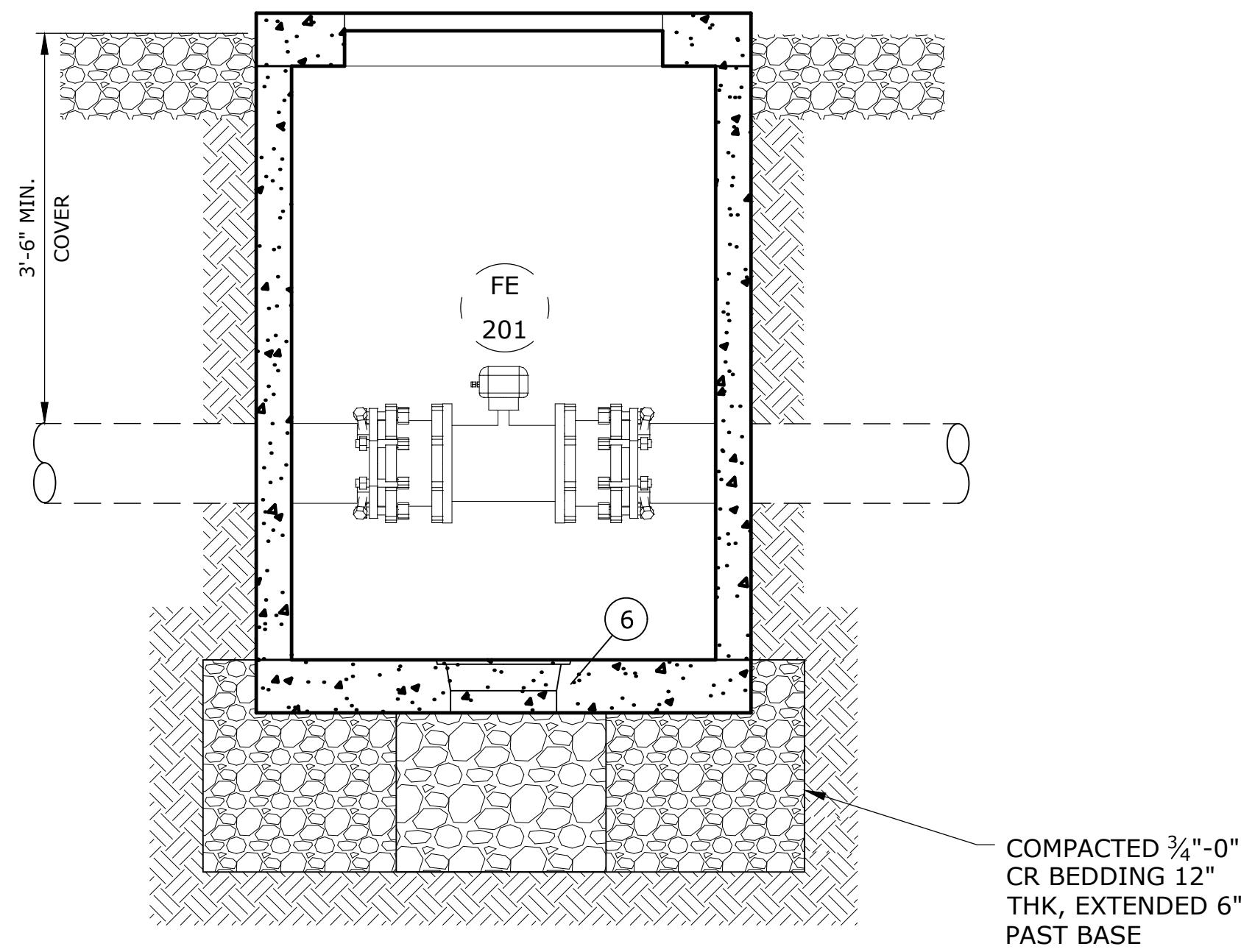
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M-WELL 11.dwg M-204 3/1/2024 5:37 PM JEFFRY. ORLANDO 24.1s (LMS Tech)

SHEET NOTES:

1. PROVIDE RESTRAINED JOINTS ON PIPING, 2' FROM OUTSIDE EDGE OF VAULTS, TYPICAL. SEE SHEET C-6 FOR SITE PIPING PLAN.
2. WALL PENETRATIONS FOR PIPING TO BE PRECAST IN VAULTS, PROVIDE NON-SHRINK GROUT SEAL AROUND PIPE.
3. ROUTE HATCH DRAIN TO FLOOR DRAIN
4. FOR ALL FLANGES NEAR WALL PENETRATIONS FOR WHICH NO DIMENSION IS GIVEN, FLANGE FACE MUST BE 6" MINIMUM FROM WALL.



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



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

MATERIAL LIST

- ① 8" RESTRAINED FLANGE ADAPTER, EBAA IRON SERIES 2100 MEGAFLANGE, OR EQUAL
- ② 8" RESTRAINED FLANGE COUPLING ADAPTER
- ③ 8" FLOWMETER
- ④ OLDCASTLE PRECAST 687, OR EQUAL W/ H-20 RATED 72"x48" DUAL LEAF COVER AND FALL PROTECTION, ROUTE HATCH DRAINAGE TO FLOOR DRAIN
- ⑤ STANDON MODEL 92 ADJUSTABLE PIPE SUPPORT, OR EQUAL
- ⑥ VAULT FLOOR SUMP W/ GRATE PROVIDE 1'x1'x1' DRAIN POCKET DIRECTLY BENEATH DRAIN, W/ 2" MINUS DRAIN ROCK, WRAPPED IN MIRAFI 160N OR EQUAL

NO.	DATE	BY	REVISION
1	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED

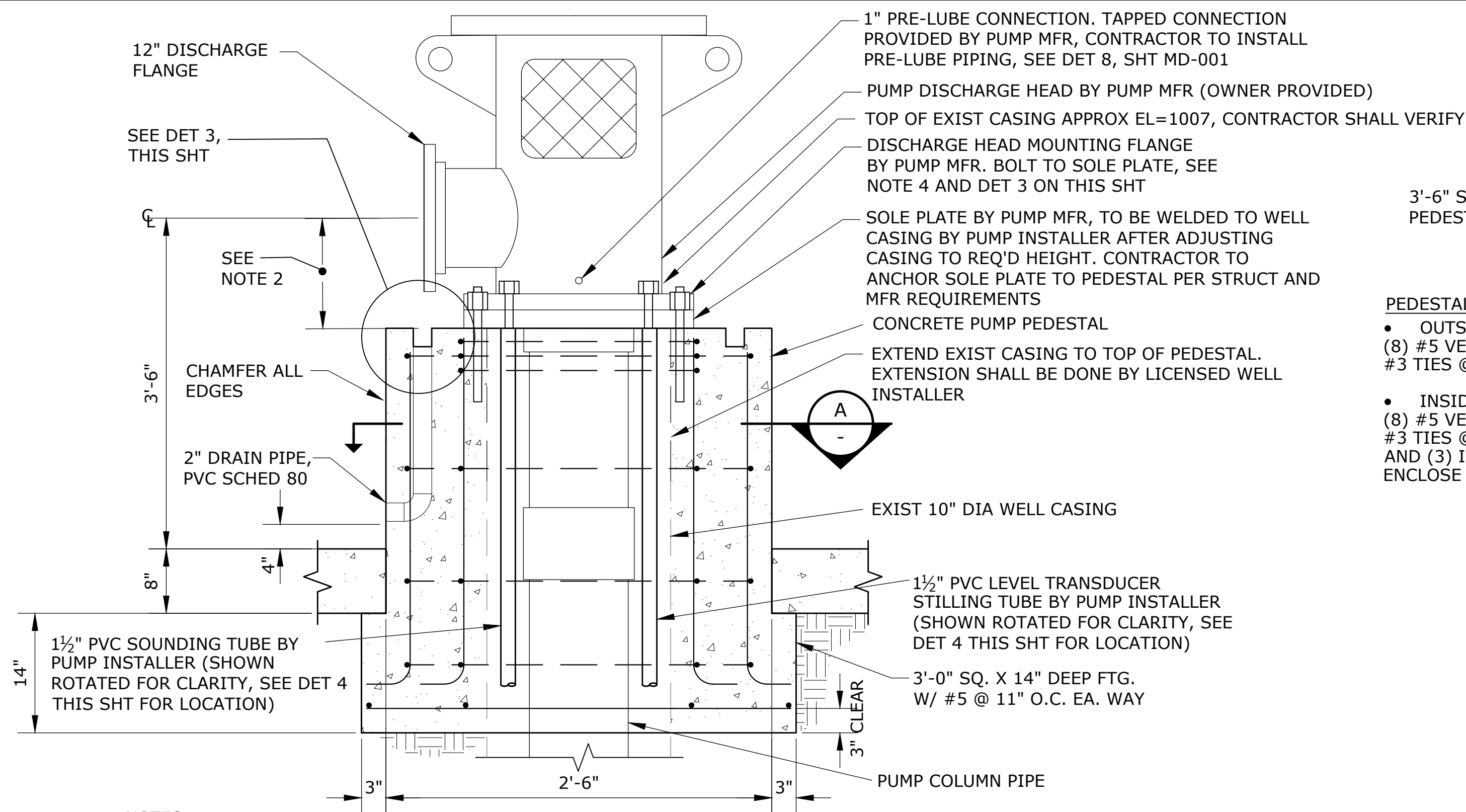


**CITY OF PENDLETON
WELL 11-11B**

MECHANICAL WELL 11 FLOW METER VAULT PLAN AND SECTION			
PROJECT NO.:	21-3133	SCALE:	AS SHOWN
DATE:	MARCH 2024		

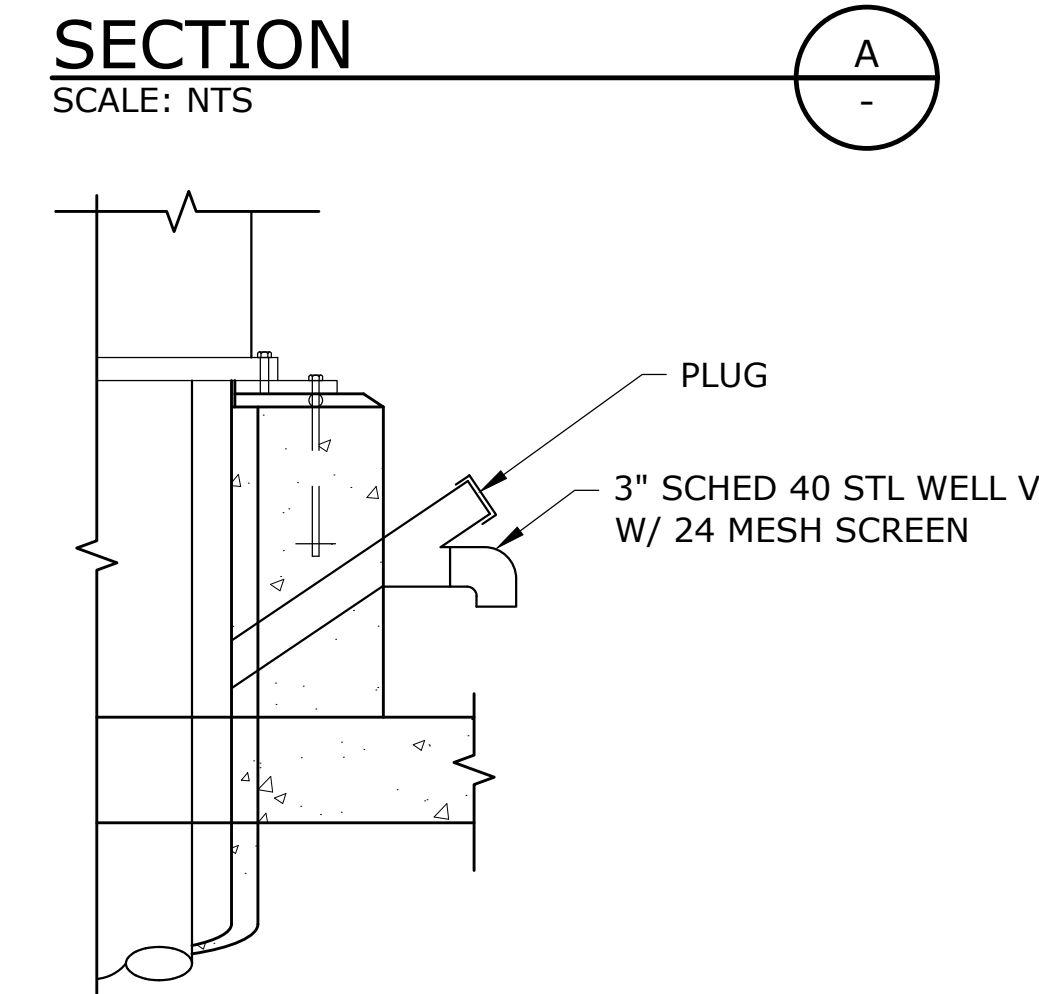
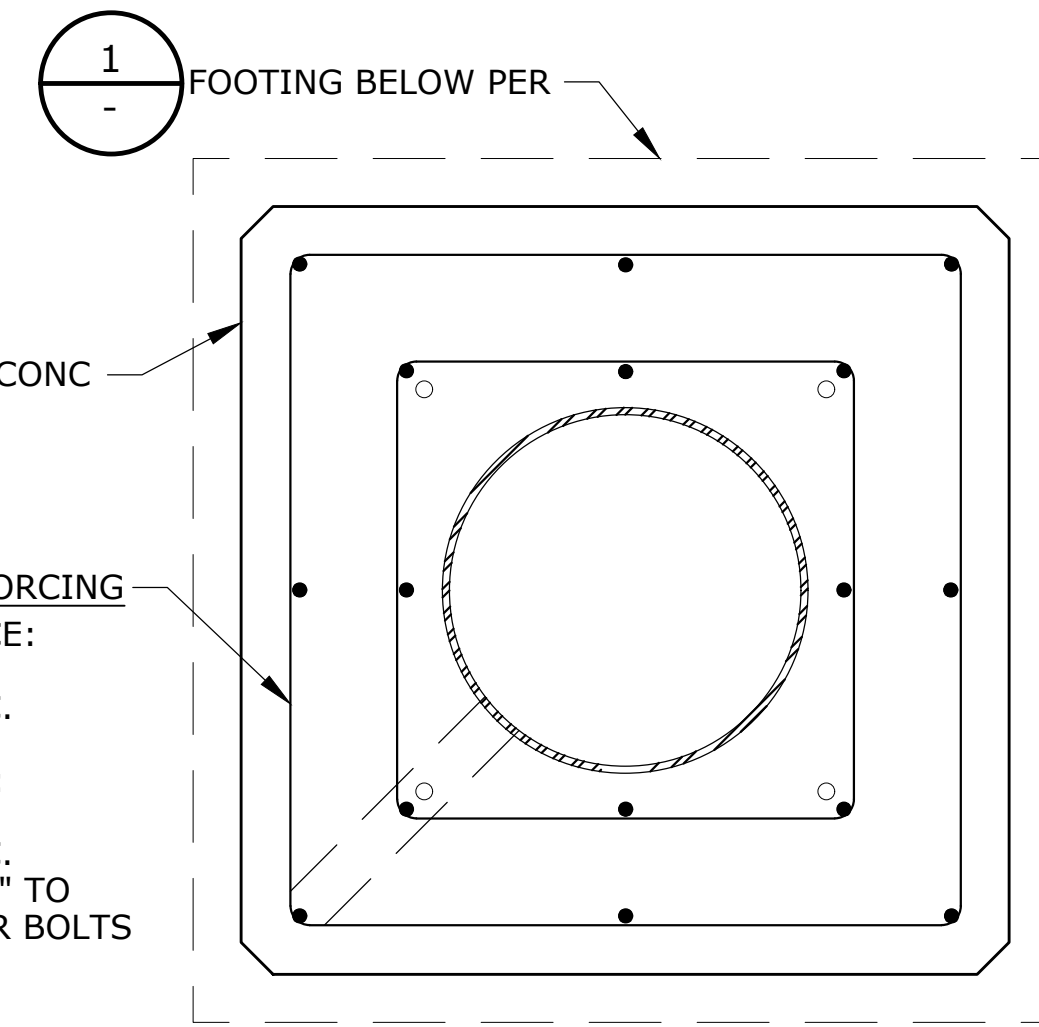
SHEET
M-204
48 of 65

I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M-WELL 11.dwg M-205 3/1/2024 5:37 PM JEFFRY. ORLANDO 24.1s (LMS Tech)

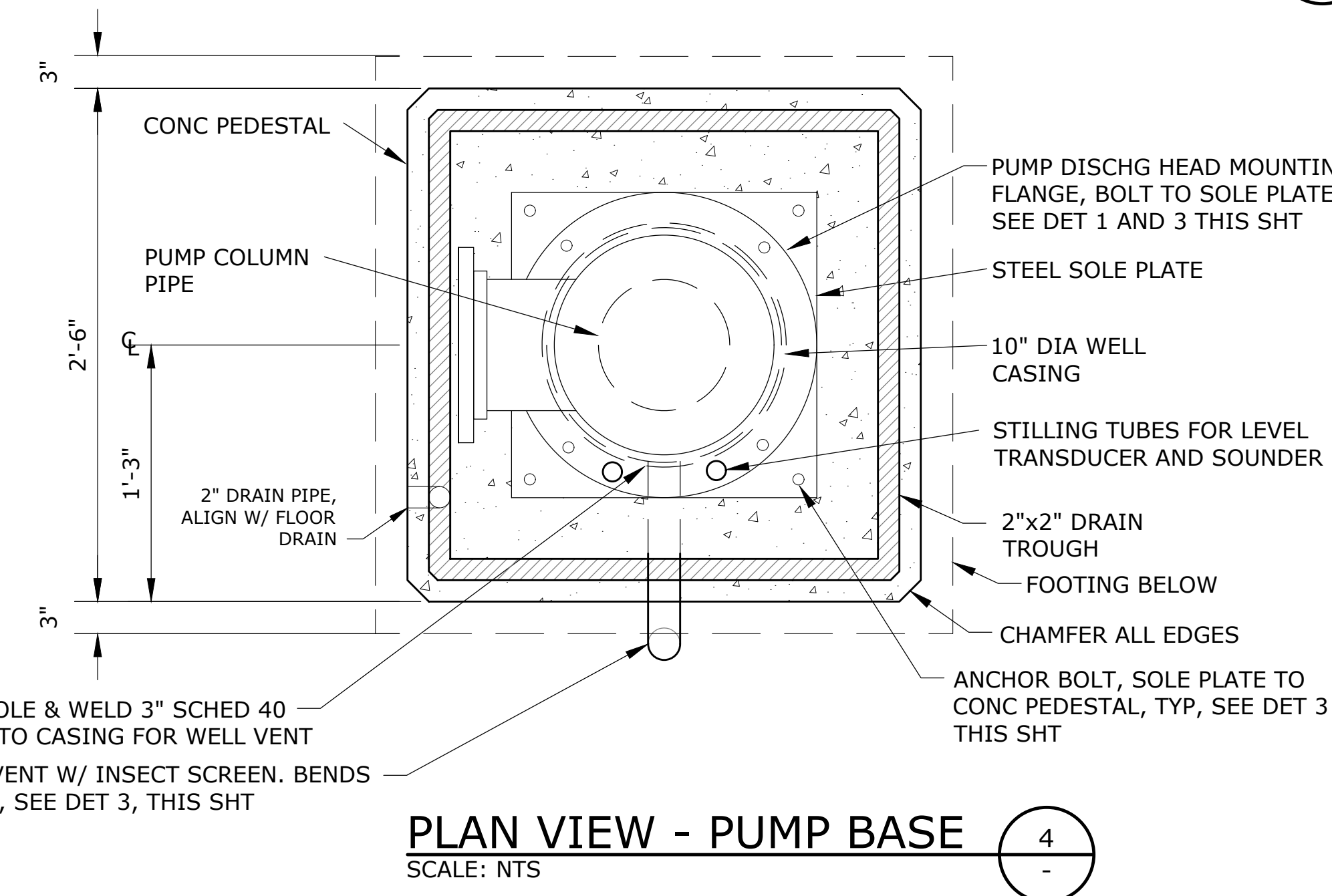
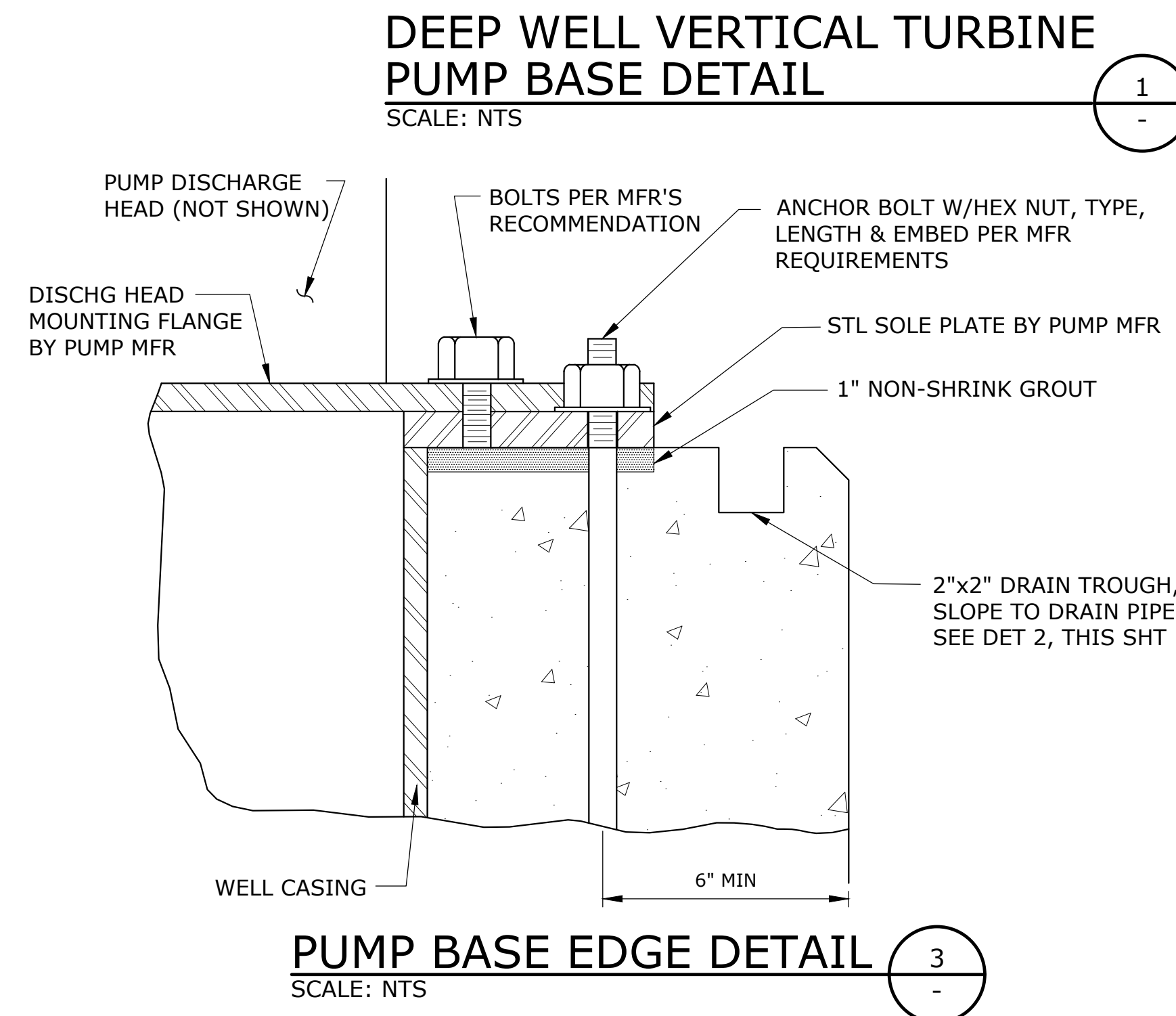


NOTES:

1. COMPLY WITH ALL REQUIREMENTS OF OREGON WATER RESOURCES DEPARTMENT.
2. DIMENSIONS MAY VARY DEPENDING ON ACTUAL PUMP PROVIDED. CONTRACTOR SHALL VERIFY DIMENSIONS WITH PUMP MFR AND ADJUST PEDESTAL HEIGHT AS REQUIRED TO MAINTAIN PIPE CL HEIGHT AFF.
3. ANCHOR BOLTS SHALL BE OF SIZE, TYPE AND EMBEDMENT AS SHOWN AND PER MANUFACTURER REQUIREMENTS.
4. PUMP MOUNTING BASE BOLTS TO BE HEX HEAD BOLTS WITH LOCK WASHER, LENGTH AS REQUIRED.
5. WELL VENT AND WELL ACCESS PORTS NOT SHOWN FOR CLARITY. SEE DETAIL 2, THIS SHEET.



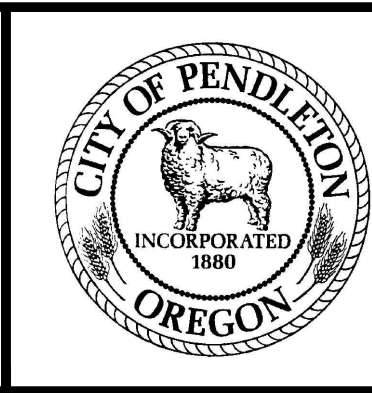
WELL VENT WITH INSECT SCREEN
SCALE: NTS



NO.	DATE	WRK BY	BID SET	REVISION

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



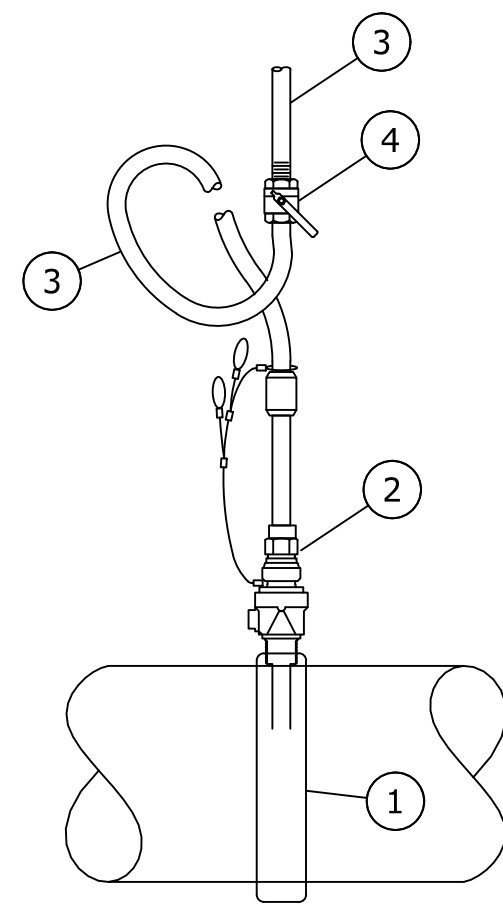
CITY OF PENDLETON
WELL 11-11B

MECHANICAL
WELL 11
PUMP PEDESTAL DETAILS

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
M-205
49 of 65

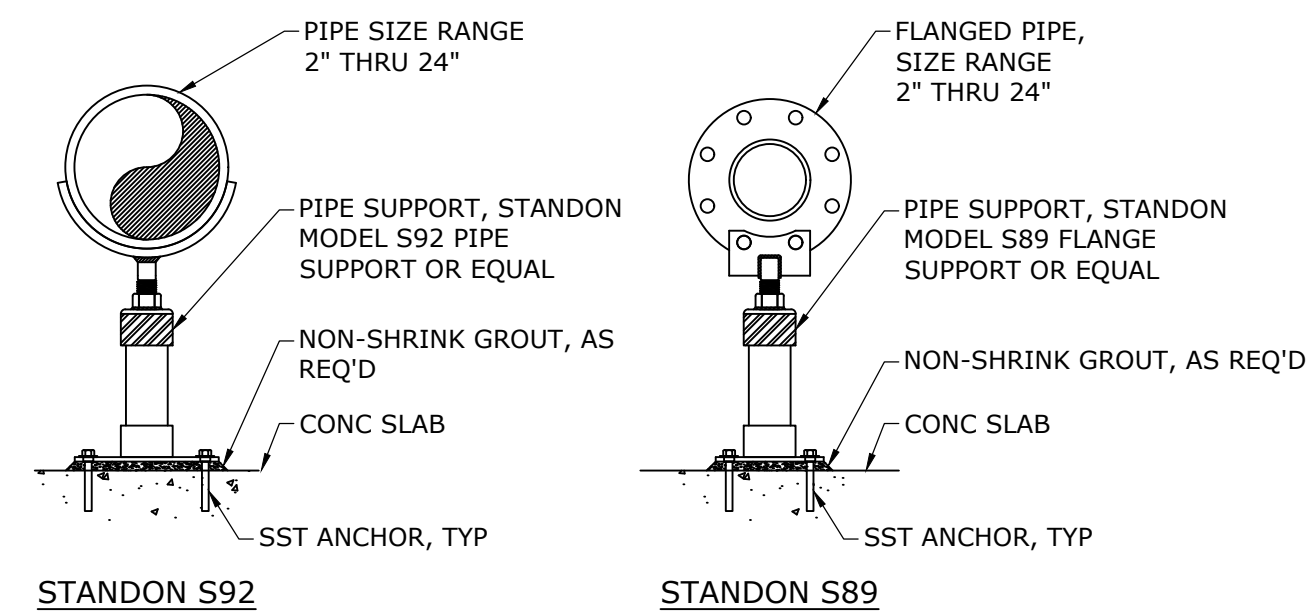
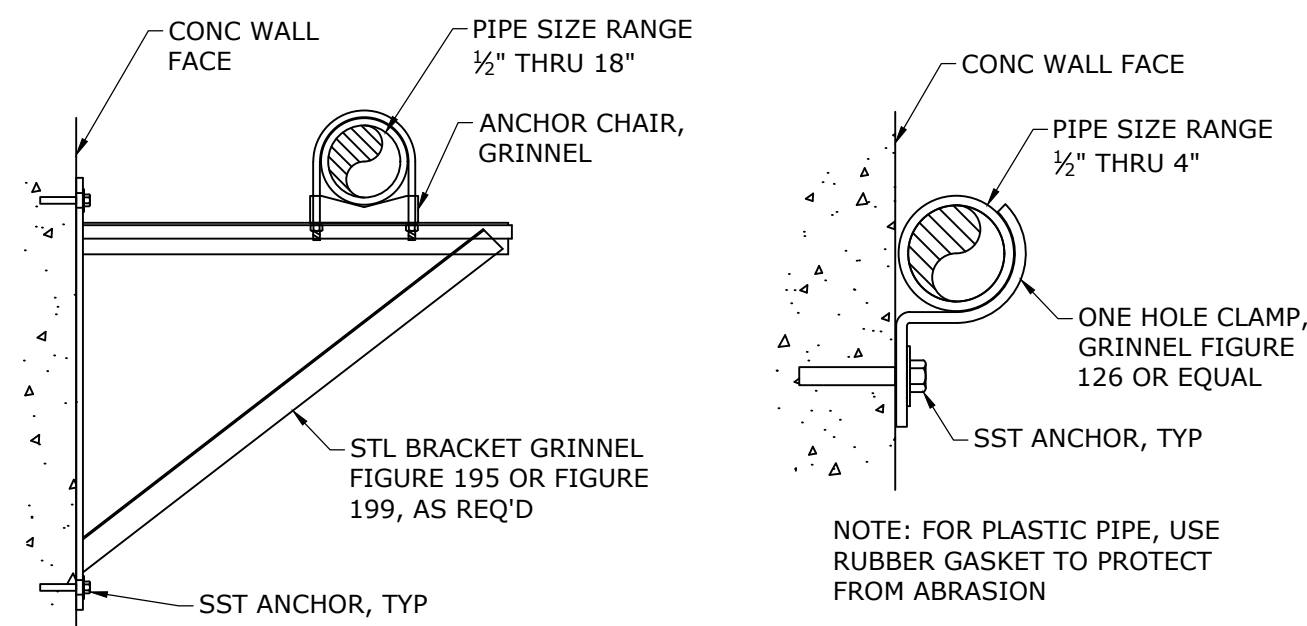
I:\BOI_Projects\21\3133 - Pendleton - Well 11\CAD\Sheets\21-3133-OR-M.dwg MD-001 3/1/2024 5:38 PM JEFFRY. ORLANDO 24.1s (LMS Tech)



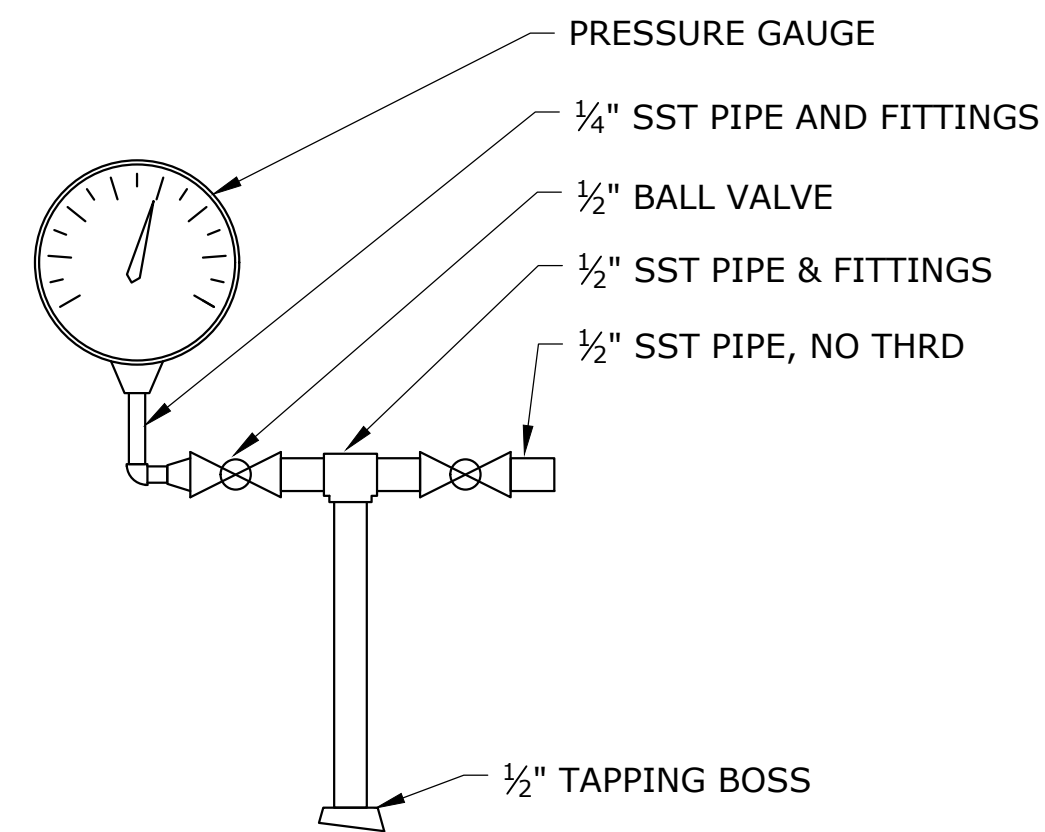
MATERIAL LIST

- ① 3/4" TAPPING SADDLE OR TAPPING BOSS
- ② SAF-T-FLO MODEL HC-075 CHEMICAL INJECTION ASSY W/ CHECK VALVE
- ③ 1/2" TUBING FROM CHLORINE ROOM W/ FITTINGS AS NEEDED, MAINTAIN ENOUGH SLACK FOR REMOVAL
- ④ 1/2" BALL VALVE

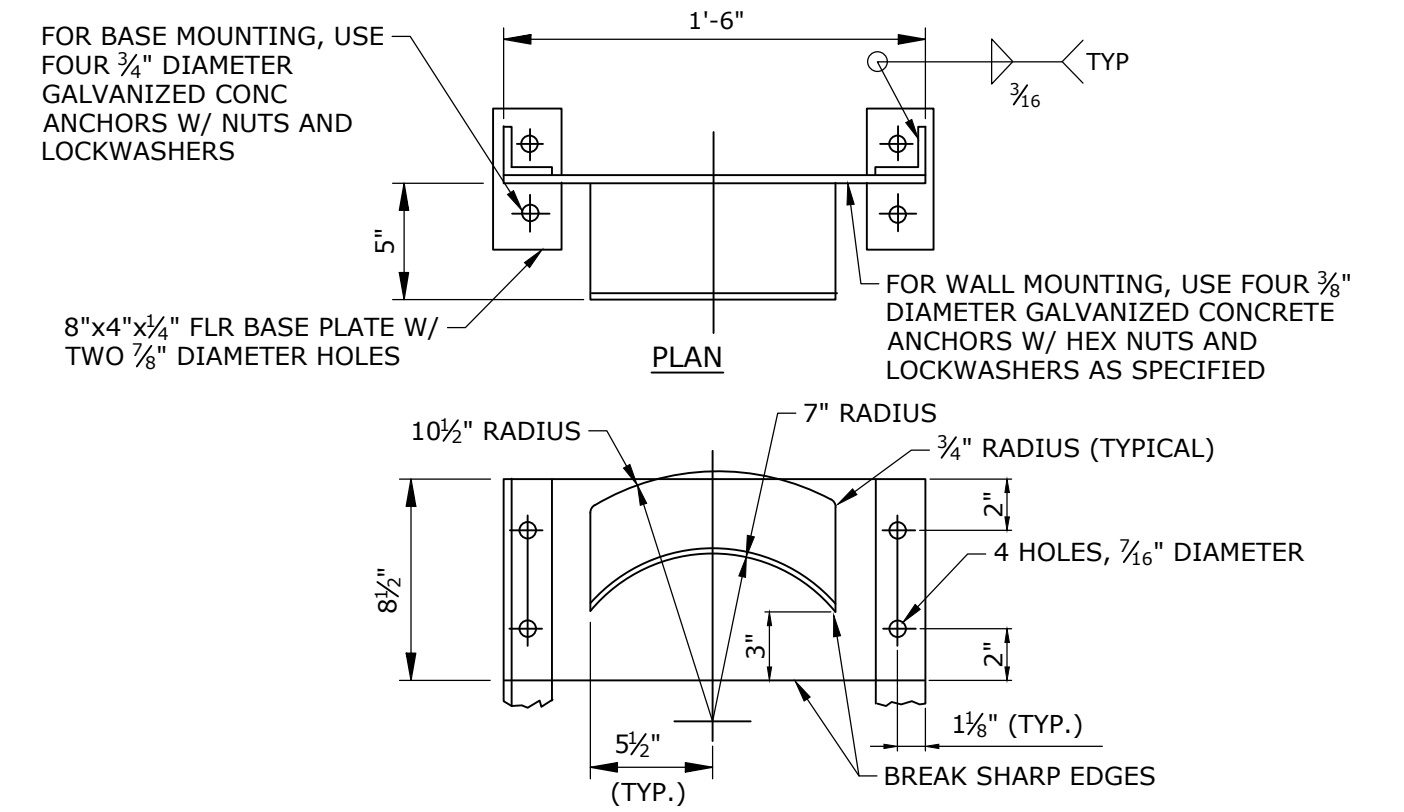
SODIUM HYPOCHLORITE INJECTION
SCALE: NTS



PIPE SUPPORTS AND HANGERS
SCALE: NTS

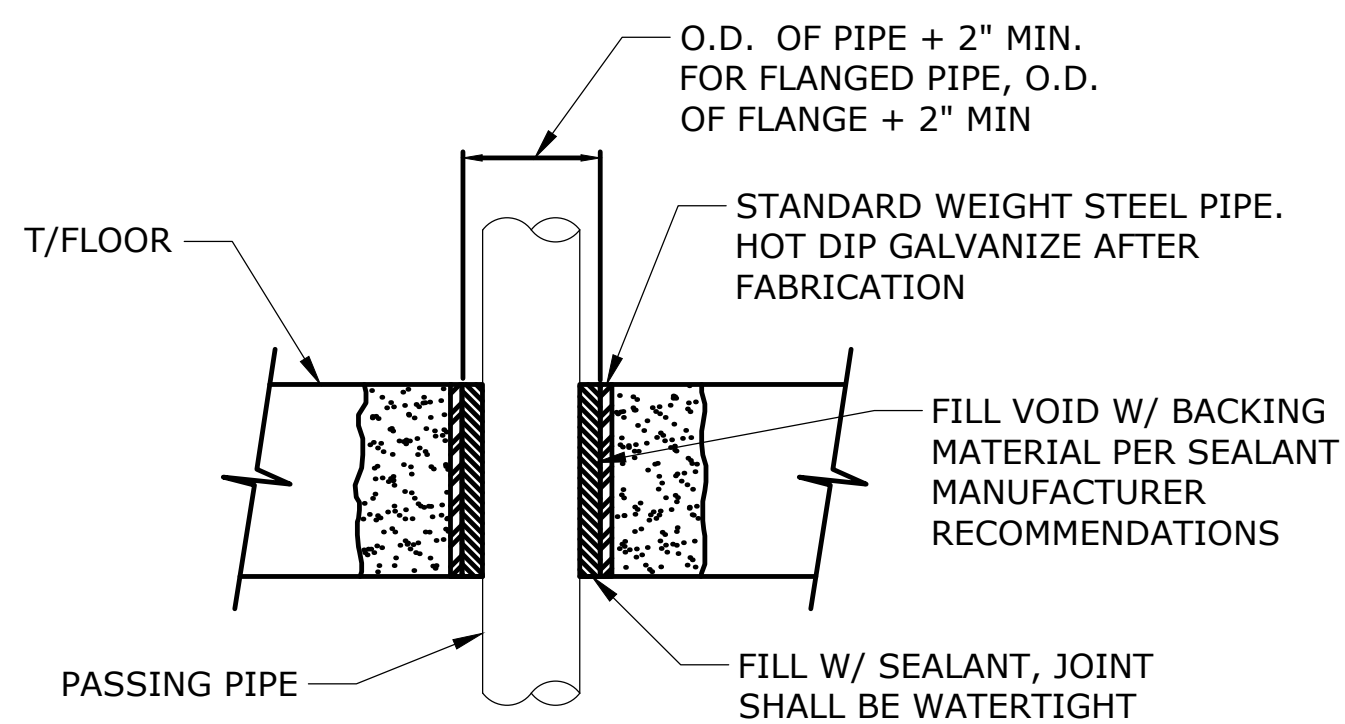


PRESSURE GAUGE DETAIL
SCALE: NTS

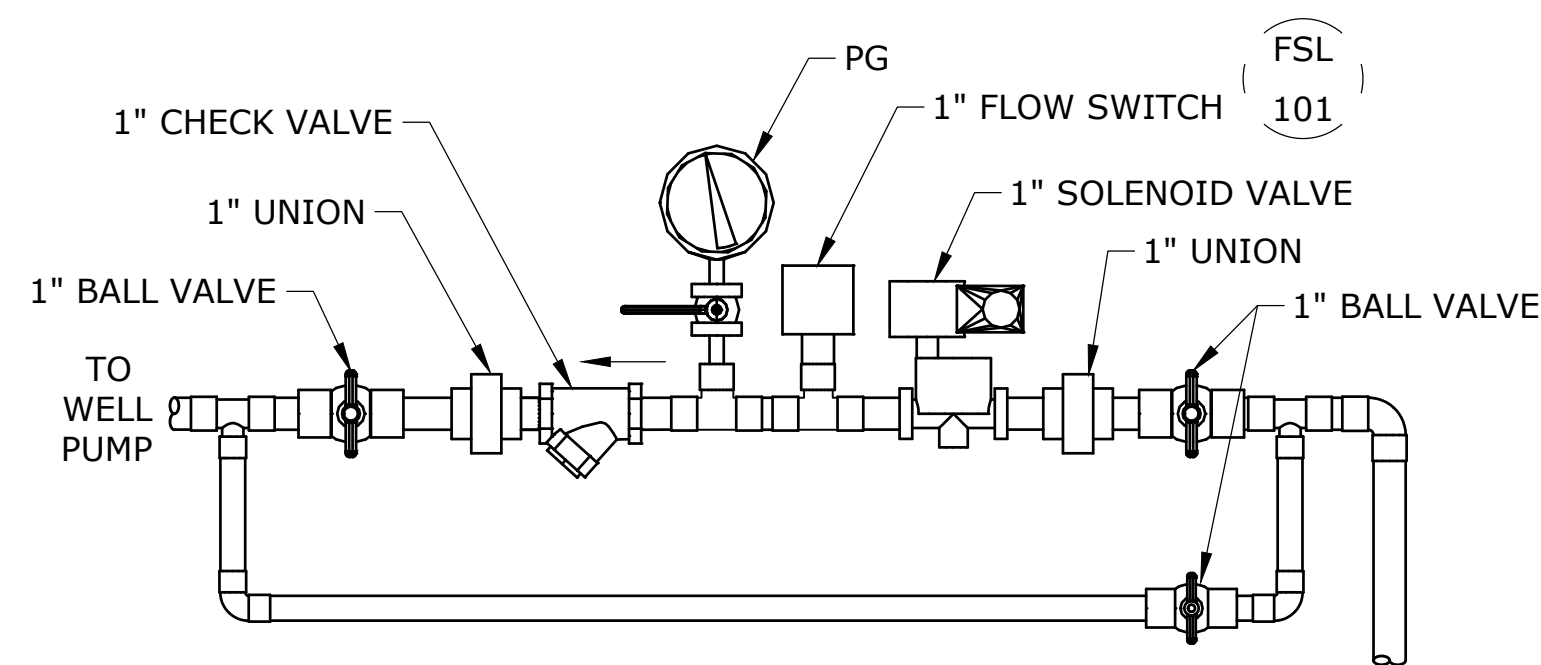


- NOTE:**
- WHERE HOSE RACK IS FREE-STANDING, PROVIDE TWO STEEL ANGLES 2x2x1/4 W/ BASE PLATES (OMIT BASE PLATES WHERE ANGLES CAN BE SET IN CONCRETE) ALL WELDED CONSTRUCTION.
 - 8 GAUGE STEEL SHEET GALVANIZED AFTER FABRICATION.

HOSE RACK
SCALE: NTS

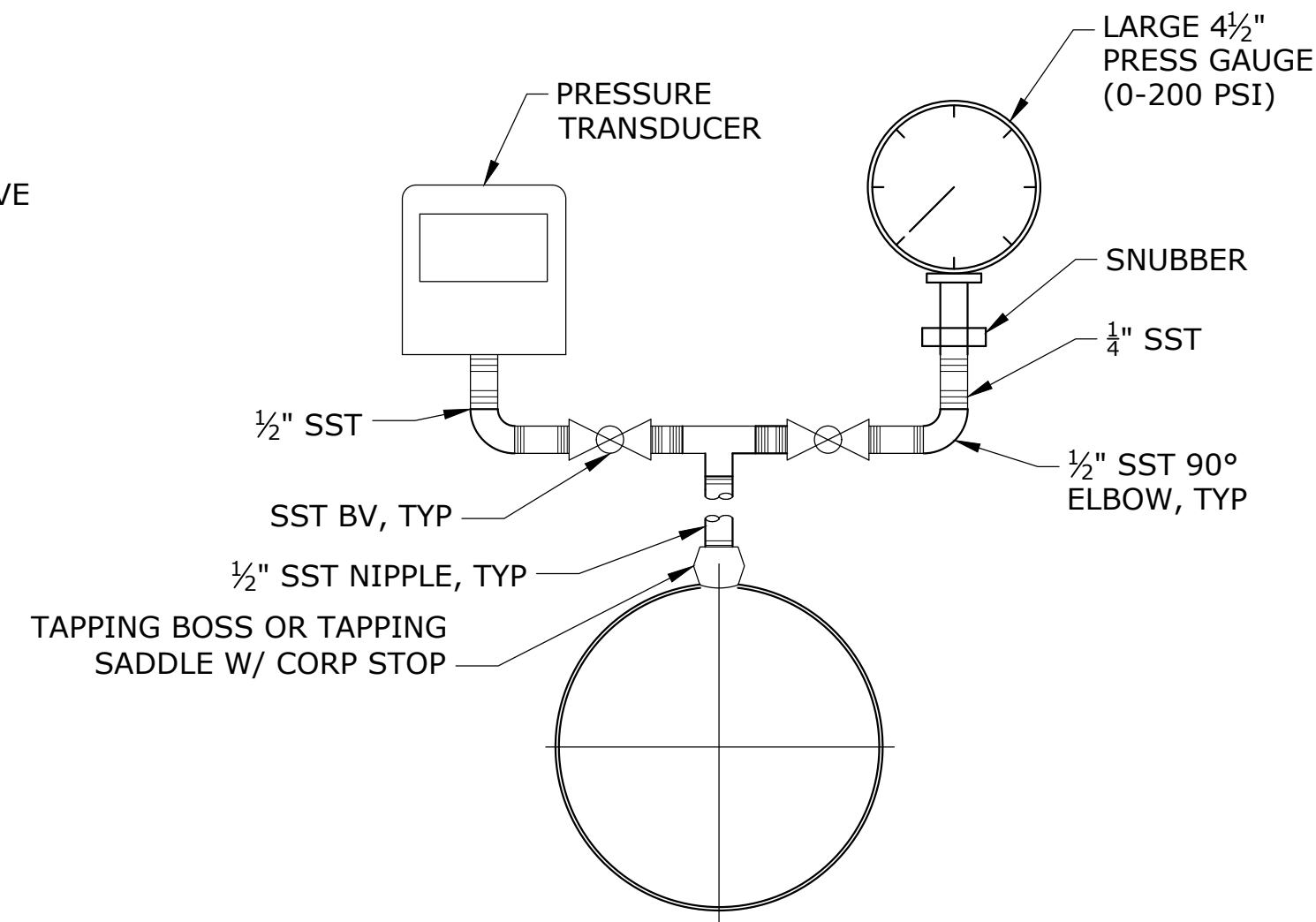


FLOOR SLEEVE DETAIL
SCALE: NTS



- NOTES:**
- PRESSURE GAUGE SHALL FACE TOWARDS CENTER OF ROOM.
 - CONTRACTOR TO SUPPORT INSTRUMENTS AND PIPING WITH UNISTRUT SYSTEM.

PRELUBE DETAIL
SCALE: NTS



PRESSURE GAUGE AND TRANSMITTER DETAIL
SCALE: NTS

NO.	DATE	BY	REVISION
△	03/13/2024	WRK	BID SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WRK DESIGNED
TMB DRAWN
DG CHECKED



CITY OF PENDLETON WELL 11-11B

MECHANICAL		SHEET
TYPICAL DETAILS		MD-001
PROJECT NO.:	21-3133	SCALE: AS SHOWN
DATE:	MARCH 2024	50 of 65

GENERAL NOTES

1. ALL MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE. INSTALLATION DRAWINGS, CONSTRUCTION SPECIFICATIONS AND LOCAL CODES. ALL MATERIALS SHALL BE NEW AND LISTED BY THE UNDERWRITERS' LABORATORY INC. (UL). ALL ELECTRICAL WORK SHALL BE INSTALLED IN A GOOD AND WORKMANLIKE MANNER.

2. REFER TO THE ELECTRICAL CABLE SCHEDULE FOR CIRCUITS IDENTIFICATIONS, ROUTING, WIRE SIZES, ETC.

3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES AS REQUIRED TO MITIGATE INTERFERENCES.

4. CONDUIT TYPE AND MATERIALS OF CONSTRUCTION SHOWN ON THE ELECTRICAL PLANS ARE SPECIFIC FOR THE LOCATION WHERE THE CONDUIT STARTS. CONTRACTOR IS RESPONSIBLE FOR TRANSITIONING TO APPROVED CONDUIT TYPE BASED ON ALL LOCATIONS CONDUIT TRANSITIONS THROUGH AND IN ACCORDANCE TO ELECTRICAL SPECIFICATIONS.

ABBREVIATIONS

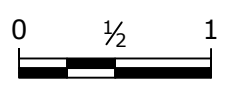
a	CIRCUIT BREAKER AUXILIARY CONTACT, CLOSED WHEN BREAKER IS CLOSED	GA	GAUGE	PH	PHASE
A	AMMETER, AMPERES	GEN	GENERATOR	PLC	PROGRAMMABLE LOGIC CONTROLLER
AC	ALTERNATING CURRENT	GFI	GROUND FAULT INTERRUPTER	PM	POWER MONITOR
A/D	ANALOG TO DIGITAL	GND	GROUND	PNL	PANEL
AF	AMPERE FRAME	HMI	HUMAN MACHINE INTERFACE	PNLBD	PANELBOARD
AFD	ADJUSTABLE FREQUENCY DRIVE	HOA	HAND-OFF-AUTOMATIC	PRI	PRIMARY
AIC	AMPERES INTERRUPTING CAPACITY	HOR	HAND-OFF-REMOTE	PS	PRESSURE SWITCH
ALT	ALTERNATOR	HP	HORSEPOWER	PTZ	PAN TILT ZOOM
A/M	AUTO/MANUAL CONTROLLER	HTR	HEATER	PVC	POLYVINYL CHLORIDE
ANN	ANNUNCIATOR	HV	HIGH VOLTAGE	PWR	POWER
AS	AMMETER SWITCH	HZ	HERTZ (CYCLES PER SECOND)	RCPT	RECEPTACLE
AT	AMMETER TRIP	INSTR	INSTRUMENT, INSTRUMENTATION	RCT	REPEAT CYCLE TIMER
ATS	AUTOMATIC TRANSFER SWITCH	IP	INTERNET PROTOCOL	RGS	RIGID GALVANIZED STEEL
AWG	AMERICAN WIRE GAGE	I/O	INPUT/OUTPUT	RPM	REVOLUTIONS PER MINUTE
b	CIRCUIT BREAKER AUX. CONTACT, CLOSED WHEN BREAKER IS OPEN	JB	JUNCTION BOX	RT	RESET TIMER
B	BLACK	KA	KILOAMPERES	SCR	SILICON CONTROLLED RECTIFIER
BCG	BARE COPPER GROUND	KCMIL	THOUSANDS OF CIRCULAR MILS	SD	SMOKE DETECTOR
C	CONDUIT, CONTACTOR	KV	KILOVOLTS	SDBC	SOFT-DRAWN BARE COPPER
CAB	CABINET	KVA	KILOVOLT AMPERES	SEC	SECONDS, SECONDARY
CAP	CAPACITOR	KVAR	KILOVOLT AMPERES REACTIVE	SF	SUPPLY FAN
CB	CIRCUIT BREAKER	KVARH	KILOVOLT AMPERES REACTIVE HOURS	SIG	SIGNAL
CC	CONTROL CABLE, CLOSING COIL	KW	KILOWATTS	SN	SOLID NEUTRAL SPECIFICATIONS
CHH	COMMUNICATION HANDHOLE	KWH	KILOWATT HOURS	SPECS	SURGE PROTECTIVE DEVICE
CKT	CIRCUIT	LCP	LIGHTING CONTROL PANEL	SPDT	SINGLE POLE, DOUBLE THROW
COND	CONDUCTOR	LP	LIGHTING PANEL	SS	SOLID STATE
CPT	CONTROL POWER TRANSFORMER	LTG	LIGHTING	STOS	SHIELDED TRIAD OVERALL SHIELD
CP	CONTROL PANEL	M	MOTOR	SW	SWITCH
CR	CONTROL RELAY	mA	MILLIAMPERES	SWBD	SWITCHBOARD
CS	CONTROL SWITCH	MCC	MOTOR CONTROL CENTER	SWGR	SWITCHGEAR
CT	CURRENT TRANSFORMER	MCP	MOTOR CIRCUIT PROTECTOR	SYNC	SYNCHRONIZING
DC	DIRECT CURRENT	MFR	MANUFACTURER	TB	TERMINAL BLOCK
DSC	DISCONNECT	MOV	MOTOR OPERATED VALVE	TC	TELEPHONE CABINET
DISTR	DISTRIBUTION	MTG	MOUNTING	TEMP	TEMPERATURE
DP	DISTRIBUTION PANEL	MTS	MANUAL TRANSFER SWITCH	TSP	TWISTED SHIELDED PAIR
DPDT	DOUBLE POLE, DOUBLE THROW	NC	NORMALLY CLOSED	TSOS	TWISTED SHIELDED TRIAD OVERALL SHIELD
DPST	DOUBLE POLE, SINGLE THROW	NEC	NATIONAL ELECTRICAL CODE	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
E / ELEC	ELECTRICAL	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.	UG	UNDERGROUND
EF	EXHAUST FAN	NEUT	NEUTRAL	UH	UNIT HEATER
EHH	ELECTRICAL HANDHOLE	NO	NORMALLY OPEN, NUMBER	UV	ULTRA VIOLET
EMERG	EMERGENCY	OVHD	OVERHEAD	V	VOLTS
ENCL	ENCLOSURE	OL	THERMAL OVERLOAD RELAY	VA	VOLT-AMPERES
EQPT	EQUIPMENT	OT	OVER TEMPERATURE	VFD	VARIABLE FREQUENCY DRIVE
ETM	ELAPSED TIME METER	P	PUMP	VAR	VOLT AMPERES REACTIVE
FACP	FIRE ALARM CONTROL PANEL	PB	PULLBOX, PUSHBUTTON	VH	VAR-HOUR
FDR	FEEDER	PE	PHOTOELECTRIC	VS	VOLTMETER SWITCH
FLEX	FLEXIBLE	PEC	PHOTOELECTRIC CELL	W	WHITE
FLUOR	FLUORESCENT	PF	POWER FACTOR	WHM	WATTHOUR METER
FO	FIBER OPTIC	pH	MEASURE OF ACIDITY OR ALKALINITY	WHDM	WATTHOUR DEMAND METER
FREQ	FREQUENCY			WP	WEATHERPROOF
FU	FUSE			XFMR	TRANSFORMER
FVNR	FULL VOLTAGE, NON REVERSING				
FVR	FULL VOLTAGE, REVERSING				
FWD	FORWARD				

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&.15\DWG\E-001.dwg E-001 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)



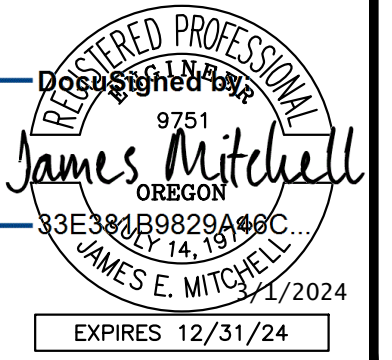
12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR CCB #198597 WA #INDUSSI880K9
AK #1018436
PROJECT#: 21.37.01

NOTICE



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED



CITY OF PENDLETON
WELL 11-11B

ELECTRICAL
GENERAL NOTES AND ABBREVIATIONS

SHEET

E-001

51 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

ELECTRICAL PLAN SYMBOLS

- SINGLE RECEPTACLE, 240V
- NONFUSED DISCONNECT SWITCH, AMPERAGE INDICATED
- FUSED DISCONNECT SWITCH (40/60 40=FUSE AMPERAGE, 60=SWITCH AMPERAGE)
- MANUAL MOTOR STARTER
- COMBINATION MOTOR STARTER
- ELECTRIC UNIT HEATER
- FLAME DETECTOR
- GAS DETECTOR
- CONDUIT TURNING DOWN FROM KEY ELEVATION
- CONDUIT TURNING UP FROM KEY ELEVATION
- CONDUIT CAP
- BELOW GRADE CONDUIT
- ABOVE GRADE CONDUIT
- CONDUIT RUN, BROKEN AND CONTINUED ON SAME SHEET OR AS NOTED
- INDICATES REMOVAL OR DEMOLITION
- WELDING RECEPTACLE
- RECEPTACLE, 480V
- CONTROL / HAND STATION
- MOTOR
- POWER POLE WITH GUY WIRE
- FLEXIBLE CONDUIT
- CONDUIT SEAL
- TRANSFORMER
- JUNCTION BOX
- FAN (SUPPLY/EXHAUST)
- THERMOSTAT

ONE-LINE SYMBOLS

- CIRCUIT BREAKER, MAGNETIC TRIP ONLY (MOTOR CIRCUIT PROTECTOR) FRAME SIZE SHOWN, 3 POLE UNLESS UNLESS INDICATED OTHERWISE
- CIRCUIT BREAKER, THERMAL MAGNETIC OR SOLID STATE TRIP OR TRIP/FRAME SHOWN, 3 POLE UNLESS INDICATED OTHERWISE
- FUSED DISCONNECT SWITCH, SWITCH CURRENT RATING INDICATED, 3 POLE UNLESS INDICATED OTHERWISE
- CIRCUIT BREAKER, RATING INDICATED, SOLID STATE TRIP, DRAW-OUT TYPE
- FUSED SWITCH
- FUSE, RATING INDICATED
- NON-FUSED DISCONNECT, RATING INDICATED
- VFD VARIABLE FREQUENCY DRIVE
- SSRV SOFT START REDUCED VOLTAGE
- XFMR NAME
KVA
VOLTAGE(120V-240V-480V-4160V-12.247V)
PHASE(1Ø/3Ø), 3W/4W
Z%=XXX
A FAULT= XXXA
- UNGROUNDED DELTA
- GROUNDED DELTA
- OPEN DELTA
- GROUNDED WYE
- PLUG
- POWER MONITOR
- EMERGENCY STANDBY ENGINE GENERATOR, RATING AS INDICATED ON ONE-LINE DIAGRAM
- MOTOR
X: SIZE IN HP
- PILOT LIGHT
SUBSCRIPT INDICATES COLOR
- PUSH-TO-TEST INDICATING LIGHT
SUBSCRIPT INDICATES COLOR
- EARTH GROUND
- LOAD
- CURRENT TRANSFORMER
- VOLTAGE TRANSFORMER
- AUTOMATIC TRANSFER SWITCH
- CONTACTOR (BYPASS)

A=AMBER R=RED
B=BLUE N=NEON
C=CLEAR W=WHITE
G=GREEN Y=YELLOW

GROUNDING PLAN SYMBOLS

- GROUND ROD
- GROUND TEST WELL
- GROUND CONNECTION TO EQUIPMENT
DETAIL CALLOUT SHOWN ON PLAN DWG.
- GROUND CONNECTION, DETAIL CALLOUT SHOWN ON PLAN DWG.
- GROUND CONNECTION TO REBAR,
DETAIL CALLOUT SHOWN ON PLAN DWG.
- BELOW GRADE #4/0 AWG BARE COPPER FOR MAIN PLANT GROUND
- BELOW GRADE #2/0 AWG INSULATED COPPER FOR GROUND TAP.
- ABOVE GRADE #2/0 AWG INSULATED GROUND TAP
- CONDUIT STUB UP

CONDUIT / DUCT SYMBOLS

- CONDUIT ABOVE GROUND
- CONDUIT UNDERGROUND U/G
- DUCT BANK OUTLINE AREA

MISCELLANEOUS SYMBOLS

- BELL
- BUZZER
- HORN
- METER
SUBSCRIPT INDICATES TYPE
A=AMP V=VOLT
W=WATT VAR=VOLT-AMP REACTIVE
- BATTERY
- CHASSIS GROUND
- RECEPTACLE
- PHONE OUTLET (RJ12)
- DATA COMPUTER (RJ45)
- HEATER / HEAT PUMP
- DAMPER ACTUATOR
SPRING OPEN ON POWER LOSS
- GO NO-GO ALARM
- SCADA/YAGI ANTENNA
- IP CAMERA (PTZ OR OTHER)

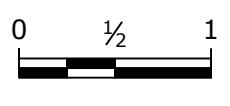
LIGHTING PLAN SYMBOLS

- EXIT SIGN - WALL MOUNTED
 - EXIT SIGN - 2 SIDED CEILING MOUNTED
 - PHOTOCELL
 - MOTION SENSOR
 - STANCHION FIXTURE - POLE MOUNT
 - STANCHION FIXTURE - WALL MOUNT
 - POLE MOUNT AREA SITE LIGHT
 - BUILDING INTERIOR LIGHT, LOW BAY, LED FIXTURE T8 SURFACE MOUNT
 - BUILDING INTERIOR LIGHT, BATTERY BACKED, LOW BAY LED LIGHT FIXTURE T4 (NEMA 4X)
 - HIGH BAY LIGHT LED FIXTURE T8 SURFACE MOUNT
 - WALL MOUNT LUMINAIRE LED TYPE INTERIOR & EXTERIOR FIXTURE
 - EMERGENCY EXIT LIGHT
 - FLOOD LIGHT
- WALL SWITCH, SUBSCRIPT INDICATES TYPE
- 2=DOUBLE POLE
 - 3=THREE WAY
 - 4=FOUR WAY
 - D=DIMMER
 - TH=THERMAL SWITCH
 - T=TIMED SWITCH
 - LV=LOW VOLTAGE
 - P=PILOT LIGHT
 - K=KEY OPERATED
 - WP=WEATHER PROOF
 - M=MANUAL MOTOR STARTER SWITCH
- RECEPTACLE, SUBSCRIPT INDICATES TYPE
- WP = WEATHER PROOF
 - GFCI = GROUND FAULT CIRCUIT INTERRUPTER
 - IG = ISOLATED GROUND
 - AFC = ARC FAULT CIRCUIT INTERRUPTER
 - GFPE = GROUND FAULT EQUIPMENT PROTECTION

Industrial Systems INC

12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR# CCB #198597 WA#INDUSIS1880K9
AK #1018436
PROJECT#: 21.37.01

NOTICE



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH DESIGNED
AAB DRAWN
JEM CHECKED



CITY OF PENDLETON
WELL 11-11B

ELECTRICAL

SYMBOLS

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

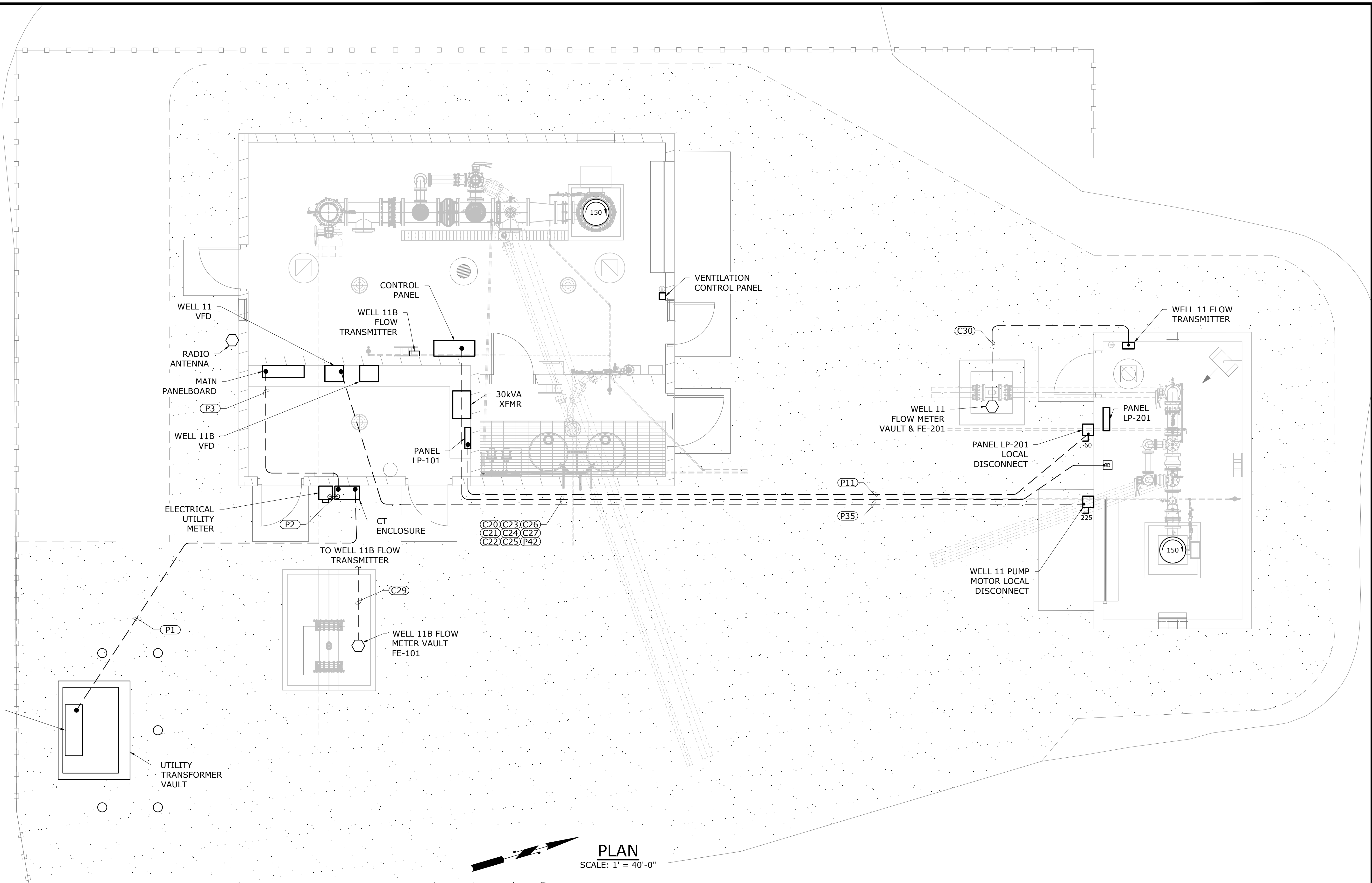
SHEET

E-002

52 of 65

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&.15\DWG\E-002_3/1/2024_11:37 AM AVIB 23.1s (LMS Tech)

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&_15\DWG\E-003_3/17/2024_11:37 AM AVIB 23.1s (LMS Tech)



Industrial Systems INC

12119 NE 99th Street
 Suite #2090
 Vancouver, Washington 98682
 Phone: (360) 718-7267
 Fax: (360) 952-8958
 e-mail: is@industrialsystems-inc.com
 CR# CCB #198597 WA#INDUSIS1890K9
 AK #1018436
 PROJECT#: 21.37.01

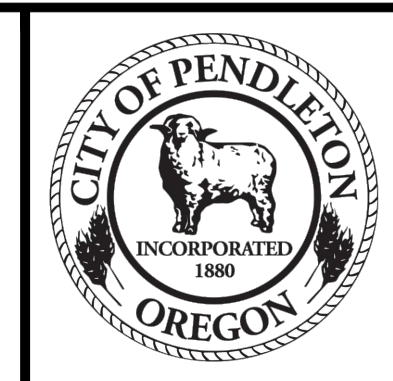
PLAN
 SCALE: 1" = 40'-0"

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
 DESIGNED
 AAB
 DRAWN
 JEM
 CHECKED

REGISTERED PROFESSIONAL
 9751
 James Mitchell
 33E 381B 8820A 95C
 3/1/2024
 EXPIRES 12/31/24



CITY OF PENDLETON
WELL 11-11B

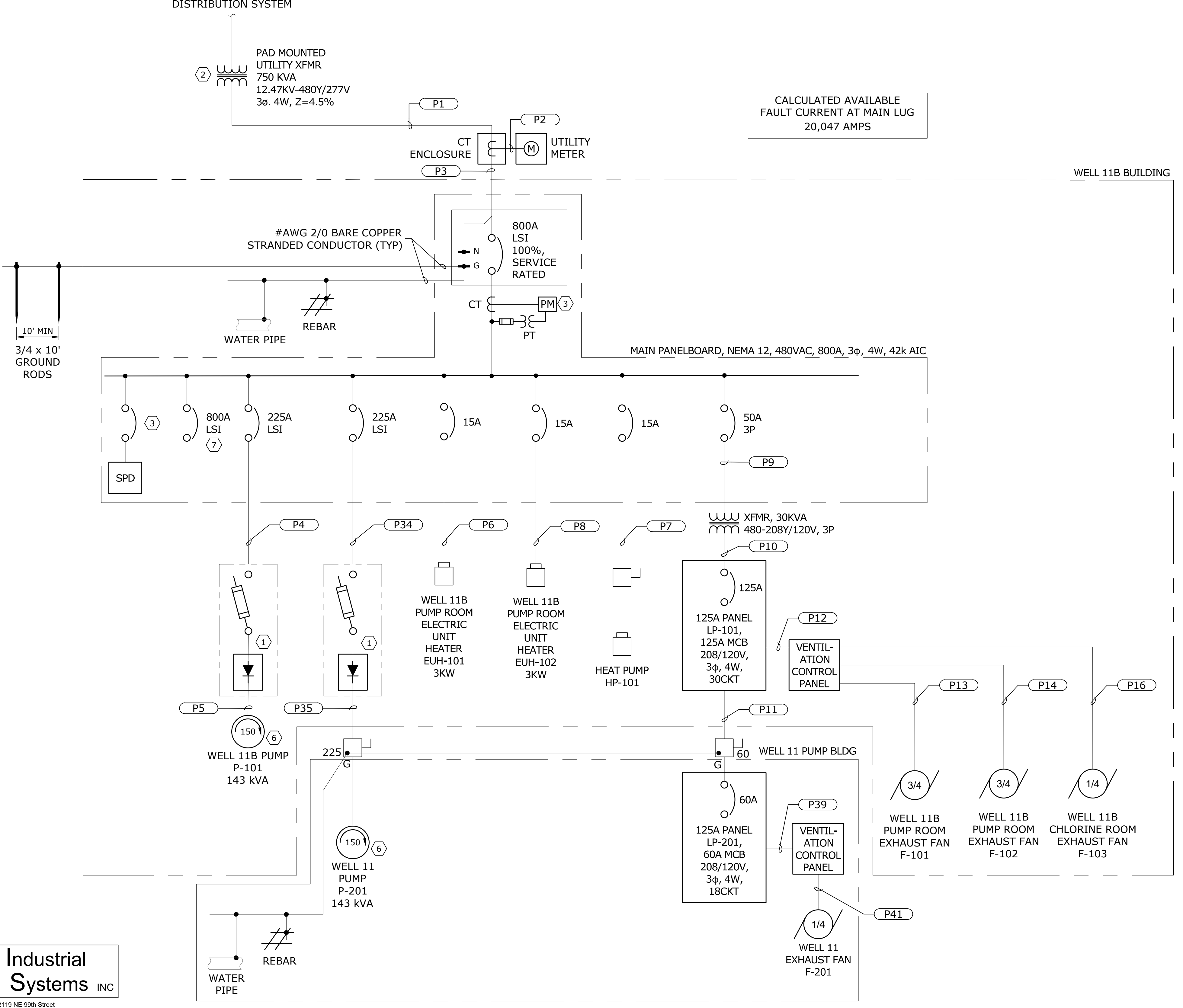
ELECTRICAL
SITE PLAN - WELL 11 & 11B
 PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
E-003
 53 of 65

TO PACIFIC POWER DISTRIBUTION SYSTEM

PAD MOUNTED UTILITY XFMR
750 KVA
12.47KV-480Y/277V
3ø, 4W, Z=4.5%

CALCULATED AVAILABLE FAULT CURRENT AT MAIN LUG
20,047 AMPS



ONE-LINE DIAGRAM
SCALE: NONE

GENERAL NOTES

- ① WELL PUMP VFD'S SHALL BE IGBT BASED ACTIVE FRONT END WITH HIGH-SPEED FUSES. INCLUDE LOADSIDE SINE WAVE AND dv/dt FILTERS AS REQUIRED FOR IEEE 519 COMPLIANCE.
- ② CONTRACTOR TO COMPLY WITH ALL THE REQUIREMENTS OF SERVING UTILITY, PACIFIC POWER. REFERENCE THE LATEST EDITION OF PACIFICORP'S "ELECTRICAL SERVICE REQUIREMENTS MANUAL". REVIEW THIS DOCUMENT PRIOR TO BID AND INCLUDE ALL ASSOCIATED COSTS IN BID PRICE FOR A COMPLETE OPERABLE SYSTEM.

PACIFIC POWER CONTACT:
DOUG TRIEBELHORN (541) 278-2957
E-MAIL: DOUGLAS.TRIEBELHORN@PACIFICORP.COM
- ③ OVERCURRENT PROTECTIVE DEVICES FOR SURGE PROTECTION DEVICE (SPD) AND POWER MONITORING (PM) SHALL BE SIZED BY PANELBOARD MANUFACTURER.
- ④ NOT USED.
- ⑤ ONE-LINE DIAGRAM IS STRICTLY DIAGRAMMATIC. ARRANGEMENT OF EQUIPMENT IN MAIN PANELBOARD IS PER THE MANUFACTURER'S RECOMMENDATIONS.
- ⑥ PUMPS TO BE FURNISHED AND INSTALLED BY OWNER.
- ⑦ PROVIDE SPARE BREAKER FOR FUTURE UPGRADE FROM 150 HP TO 500 HP FOR WELL 11B.

LOAD SUMMARY				
QTY.	DESCRIPTION	480	3 Phase	4 Wire
		LOAD KVA	LOAD HP	AMPS
1	WELL 11B PUMP	143.41	150.00	180.0
1	WELL 11B PUMP ROOM HTR EUH - 101	3		3.6
1	WELL 11B PUMP ROOM HTR EUH - 102	3		3.6
1	WELL 11B BLDG HEAT PUMP HP-101	6	7.50	7.1
1	30 KVA 480/208V DISTRIBUTION XFMR	8.2		9.9
1	WELL 11 PUMP	143.41	150.00	180.0
SUBTOTAL			307.5	384.2
LARGEST MOTOR X 25%				45.0
NON-MOTOR LOADS X 25%				6.0
SPARE CAPACITY X 10%				38.4
TOTAL			307.5	473.8

LOAD SUMMARY
SCALE: NONE

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&.15\DWG\E-004.dwg E-004 3/1/2024 11:37 AM AVIB 23.1s (LMS Tech)

Industrial Systems INC

12119 NE 99th Street
Suite #2090
Vancouver, Washington 98662
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: ig@industrialsystems-inc.com
CR CCB #198597 WA #INDUSSI890K9
AK #1018436
PROJECT#: 21.37.01

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED

REGISTERED PROFESSIONAL
DESIGNED BY
James Mitchell
9751
OREGON
33E38189829A6C...
JULY 14, 19...
JAMES E. MITCHELL
EXPIRES 12/31/24



CITY OF PENDLETON
WELL 11-11B

ELECTRICAL
ONE-LINE DIAGRAM AND LOAD SUMMARY - WELL 11 & 11B

SHEET
E-004
54 of 65

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&_15\DWG\E-005.dwg E-005 3/17/2024 11:37 AM AVIB 23.1s (LMS Tech)

Table with columns: ID, Description, Equipment, Cable/Wire, Size, Notes. Rows P1-P22.

Table with columns: ID, Description, Equipment, Cable/Wire, Size, Notes. Rows P23-P44.

Table with columns: ID, Description, Equipment, Cable/Wire, Size, Notes. Rows C5-C30.

Industrial Systems INC

12119 NE 99th Street Suite #2090 Vancouver, Washington 98682 Phone: (360) 718-7267 Fax: (360) 952-8958 e-mail: ig@industrialsystems-inc.com OR CC# #198597 WA #INDUSIS8009 AK #1018436 PROJECT#: 21.37.01

CIRCUIT SCHEDULE SCALE: NONE

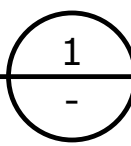
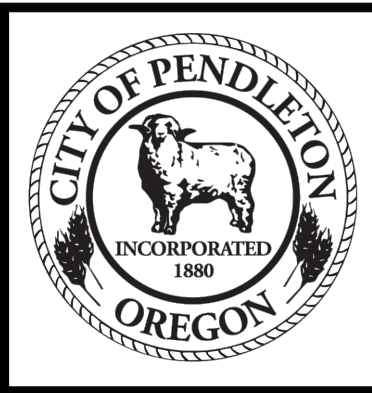
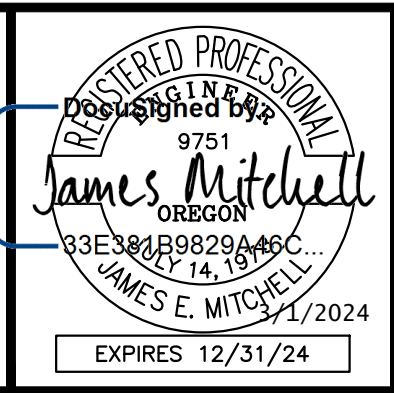


Table with columns: NO., DATE, BY, REVISION. Row 1: 3/1/2024, WRK, PERMIT SET.

NOTICE 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH DESIGNED AAB DRAWN JEM CHECKED



CITY OF PENDLETON WELL 11-11B

ELECTRICAL CIRCUIT SCHEDULE PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET E-005 55 of 65

PANEL: LP-101		VOLTAGE: 208/120V, 3PH, 4 WIRE				MOUNTING: WALL					
LOCATION: WELL 11B PUMP BLDG		BUS: 125A COPPER				AIC: 10,000					
FEEDER: MAIN PANELBOARD		MAIN: 125A MAIN BREAKER									
CKT NO	CIRCUIT DESCRIPTION	BREAKER POLES	AMPS	VA	PHASE	LOAD VA	BREAKER POLES	AMPS	CIRCUIT DESCRIPTION	CKT NO	
1	RECEPTACLES, ELECTRICAL ROOM - WP, GFCI	1	20	180	A	540	1	20	RECEPTACLES, CHLORINE ROOM - WP, GFCI	2	
3	NOT USED				B				NOT USED	4	
5	INTERIOR & EXTERIOR LIGHTING - ELECTRICAL ROOM	1	15	86	C	200	1	15	WELL 11B FLOW METER	6	
7	RECEPTACLES, BUILDING EXTERIOR - WP, GFCI	1	20	540	A	70	1	15	VCP-101 CHLORINE ROOM EXHAUST FAN	8	
9	VCP-101 WELL 11B PUMP ROOM EXHAUST FANS & DAMPE	1	40	3660	B	22	2	15	AIR HANDLING UNIT AHU-101, ELECTRICAL ROOM SOUTH	10	
11	RECEPTACLES, PUMP ROOM - WP, GFCI	1	20	360	C	22				12	
13	CONTROL PANEL	1	20	1000	A	182	1	15	INTERIOR & EXTERIOR LIGHTING - PUMP ROOM	14	
15	AIR HANDLING UNIT AHU-102, ELECTRICAL ROOM WEST	2	15	22	B	67	1	15	INTERIOR & EXTERIOR LIGHTING - CHLORINE ROOM	16	
17				22	C	612	1	15	FUTURE ASR CONTROL VALVE	18	
19	AIR HANDLING UNIT AHU-103, ELECTRICAL ROOM EAST	2	15	22	A	300	1	15	FIRE SUPPRESSION CONTROL PANEL	20	
21				22	B				NOT USED	22	
23	RECEPTACLE, CHLORINE METERING PUMP - VIA PLC	1	15	180	C	60	1	15	RECEPTACLE, HEAT JACKETED EYEWASH, GFCI	24	
25	WELL 11 BLDG LP-201 FEEDER	3	60	1200	A					26	
27				1200	B						28
29				1000	C						30

LOAD PER PHASE		
PHASE A	4.0	KVA
PHASE B	5.0	KVA
PHASE C	2.5	KVA
TOTAL LOAD		
	11.6	KVA
TOTAL AMPS		
	32	AMPS

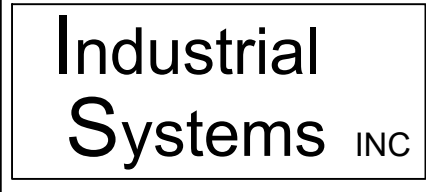
PANEL LP-101 SCHEDULE 1
SCALE: NONE

PANEL: LP-201		VOLTAGE: 208/120V, 3PH, 4 WIRE				MOUNTING: WALL				
LOCATION: WELL 11 PUMP BLDG		BUS: 125A COPPER				AIC: 10,000				
FEEDER: LP-101		MAIN: 60A MAIN BREAKER								
CKT NO	CIRCUIT DESCRIPTION	BREAKER POLES	AMPS	VA	PHASE	LOAD VA	BREAKER POLES	AMPS	CIRCUIT DESCRIPTION	CKT NO
1	WELL 11 FLOW METER	1	15	30	A	1100	2	15	HEATER	2
3	INTERIOR LIGHTING	1	15	86	B	1100				4
5	VCP-201 EXHAUST FANS & DAMPER	1	20	800	C	180	1	20	RECEPTACLES - GFCI	6
7	EXTERIOR LIGHTING	1	15	86	A					8
9					B			15		10
11					C			15		12

LOAD PER PHASE		
PHASE A	1.2	KVA
PHASE B	1.2	KVA
PHASE C	1.0	KVA
TOTAL LOAD		
	3.4	KVA
TOTAL AMPS		
	9	AMPS

PANEL LP-201 SCHEDULE 2
SCALE: NONE

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&.15\DWG\E-005A.dwg E-005A 3/1/2024 11:37 AM AVIB 23.1s (LMS Tech)

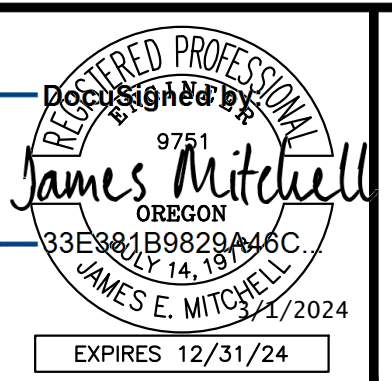


12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR# CCB #198597 WA #INDUSSI880K9
AK #1018436
PROJECT#: 21.37.01

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED

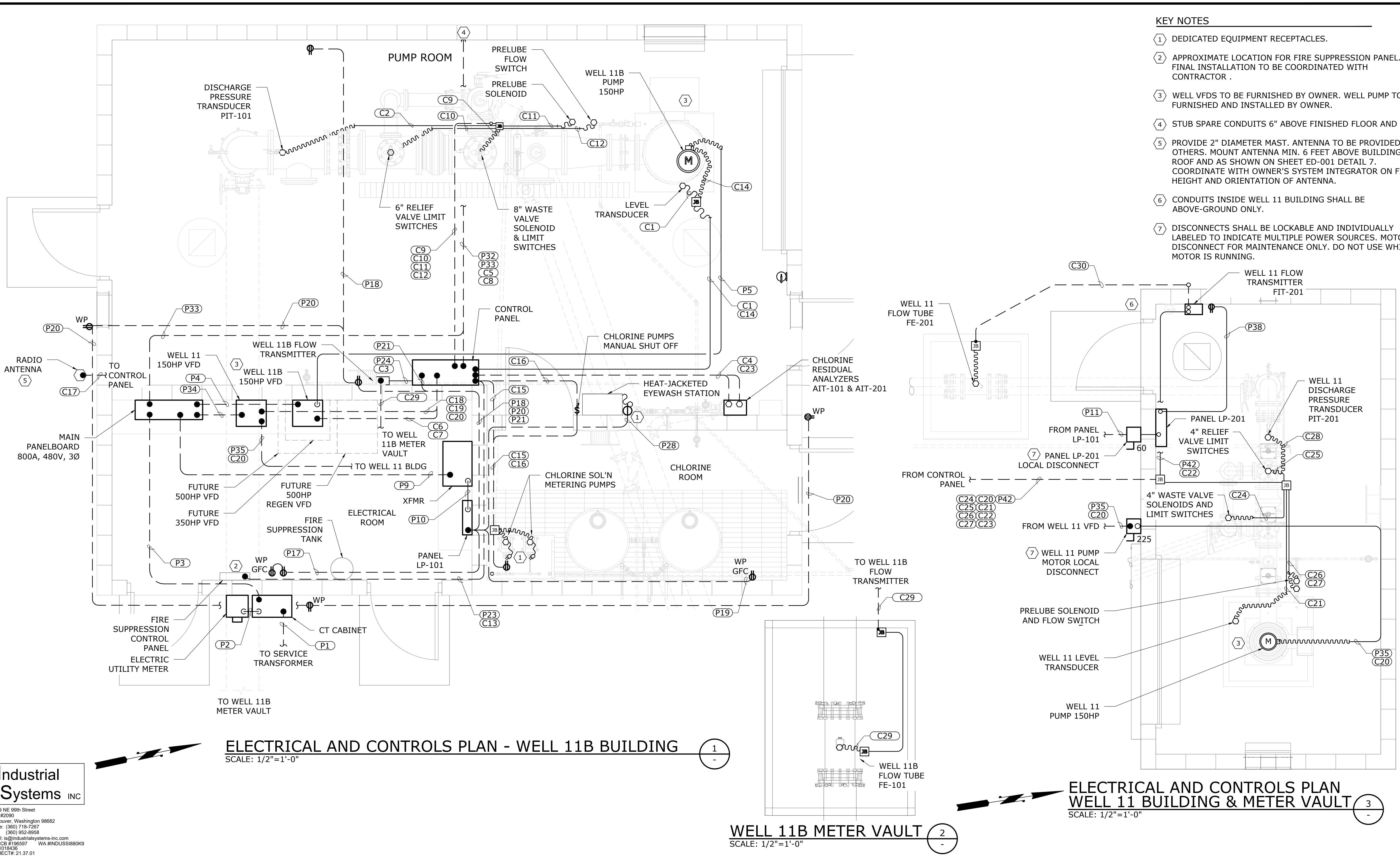


CITY OF PENDLETON
WELL 11-11B

ELECTRICAL
PANELBOARD SCHEDULES
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
E-005A
56 of 65

P:\Projects\21.37.01_MSA_Pendleton_Well_11_15\DWG\E-006 3/17/2024 11:37 AM AVIB 23.1s (LMS Tech)



- KEY NOTES**
- ① DEDICATED EQUIPMENT RECEPTACLES.
 - ② APPROXIMATE LOCATION FOR FIRE SUPPRESSION PANEL. FINAL INSTALLATION TO BE COORDINATED WITH CONTRACTOR .
 - ③ WELL VFDS TO BE FURNISHED BY OWNER. WELL PUMP TO BE FURNISHED AND INSTALLED BY OWNER.
 - ④ STUB SPARE CONDUITS 6" ABOVE FINISHED FLOOR AND CAP.
 - ⑤ PROVIDE 2" DIAMETER MAST. ANTENNA TO BE PROVIDED BY OTHERS. MOUNT ANTENNA MIN. 6 FEET ABOVE BUILDING ROOF AND AS SHOWN ON SHEET ED-001 DETAIL 7. COORDINATE WITH OWNER'S SYSTEM INTEGRATOR ON FINAL HEIGHT AND ORIENTATION OF ANTENNA.
 - ⑥ CONDUITS INSIDE WELL 11 BUILDING SHALL BE ABOVE-GROUND ONLY.
 - ⑦ DISCONNECTS SHALL BE LOCKABLE AND INDIVIDUALLY LABELED TO INDICATE MULTIPLE POWER SOURCES. MOTOR DISCONNECT FOR MAINTENANCE ONLY. DO NOT USE WHILE MOTOR IS RUNNING.

ELECTRICAL AND CONTROLS PLAN - WELL 11B BUILDING
SCALE: 1/2"=1'-0"

ELECTRICAL AND CONTROLS PLAN WELL 11 BUILDING & METER VAULT
SCALE: 1/2"=1'-0"

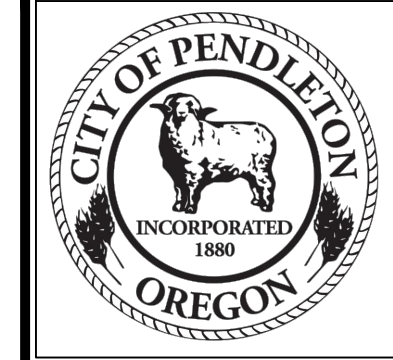


12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR# CCB #198597 WA#INDUSIS8809
AK #1018436
PROJECT#: 21.37.01

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED

REGISTERED PROFESSIONAL
DESIGNED BY
James Mitchell
9751
OREGON
33E38489829A46C
JULY 14, 19
JAMES E. MITCHELL
EXPIRES 12/31/24



CITY OF PENDLETON
WELL 11-11B

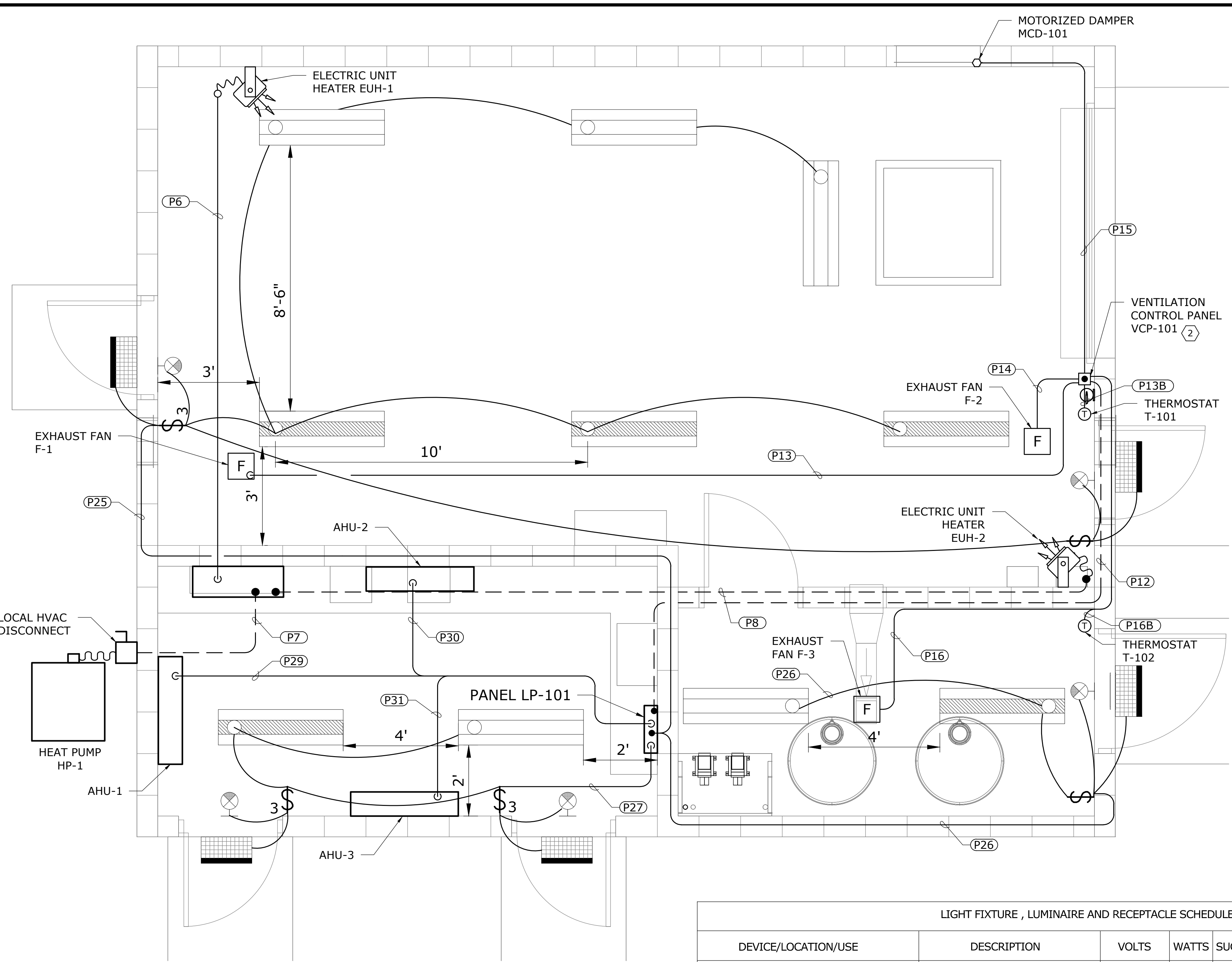
ELECTRICAL
POWER AND CONTROLS PLAN - WELL 11 & 11B

SHEET
E-006
57 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

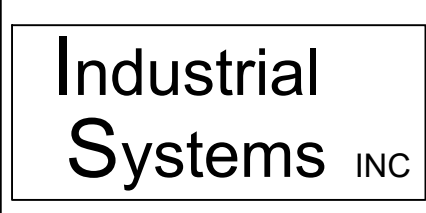
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

P:\Projects\21.37.01_MSA_Pendleton_Well_11_15.DWG\E-007.dwg E-007 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)



ELECTRICAL LIGHTING AND HVAC PLAN
WELL 11B BUILDING
 SCALE: 1/2"=1'-0"

1
-



12119 NE 99th Street
 Suite #2090
 Vancouver, Washington 98682
 Phone: (360) 718-7267
 Fax: (360) 952-8958
 e-mail: is@industrialsystems-inc.com
 CR CCB #198597 WA #INDUSIS18009
 AK #1018436
 PROJECT#: 21.37.01

LIGHT FIXTURE, LUMINAIRE AND RECEPTACLE SCHEDULE				
DEVICE/LOCATION/USE	DESCRIPTION	VOLTS	WATTS	SUGGESTED MANUFACTURER & CATALOG NUMBER
BUILDING INTERIOR LIGHT	4009 LUMEN LED LUMINAIRE FEM SERIES 48"	120-277V	24	LITHONIA FEM L48 4000LM LPAFL MD MVOLT GZ10 40K 80CRI OR EQUAL
BUILDING INTERIOR LIGHT, BATTERY BACKED	4009 LUMEN LED LUMINAIRE FEM SERIES 48" WITH BUILT IN BATTERY BACKUP	120V	24	LITHONIA FEM L48 4000LM LPAFL MD MVOLT GZ10 40K 80CRI BE6WCP OR EQUAL
WALL MOUNT LUMINAIRE LED TYPE INTERIOR/EXTERIOR	3,132 LUMEN LED LUMINAIRE WALL PACK DESIGN WITH PHOTOCCELL	120V	18	LITHONIA WDGE2 LED P3 40K 80CRI T2M MVOLT SRM PE E10WH DBLXD OR EQUAL
WALL MOUNTED EXIT SIGN	SELF-CONTAINED BATTERY EMERGENCY EXIT LIGHT FIXTURE RED EXIT SIGN WALL MOUNT	120V	1.0	LITHONIA EXR LED EL M6 OR EQUAL

LIGHTING AND RECEPTACLE SHEDULE
 SCALE: NONE

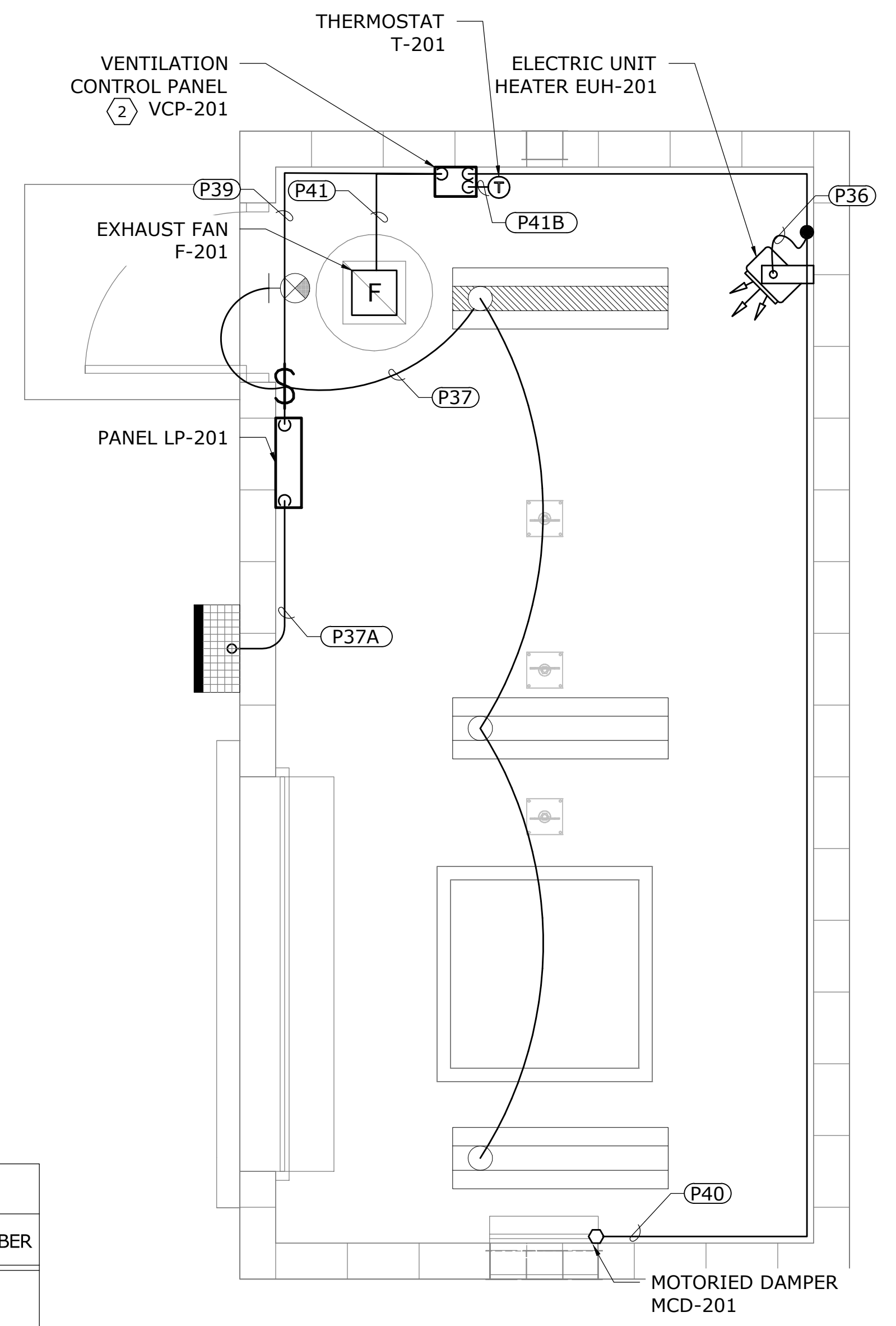
2
-

GENERAL NOTES

- TOTAL LIGHTING LOAD CALCULATED TO BE 359.4 WATTS.

KEY NOTES

- POWER CONDUCTORS, COMMUNICATION CABLE, AND CONDENSATE LINES TO BE ROUTED BY CONTRACTOR PER EQUIPMENT MANUFACTURER'S INSTALLATION GUIDELINES.
- PROVIDE AND INSTALL 16"X16"X8" NEMA 4 SS ENCLOSURE, LABELED "VENTILATION CONTROL PANEL". SEE SHEET ED-001 DETAIL 6 FOR WIRING INFORMATION.



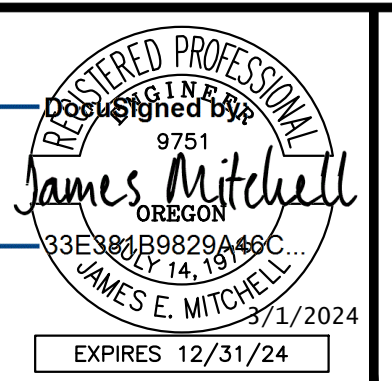
ELECTRICAL LIGHTING AND HVAC PLAN
WELL 11 BUILDING
 SCALE: 1/2"=1'-0"

3
-

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
 DESIGNED
 AAB
 DRAWN
 JEM
 CHECKED



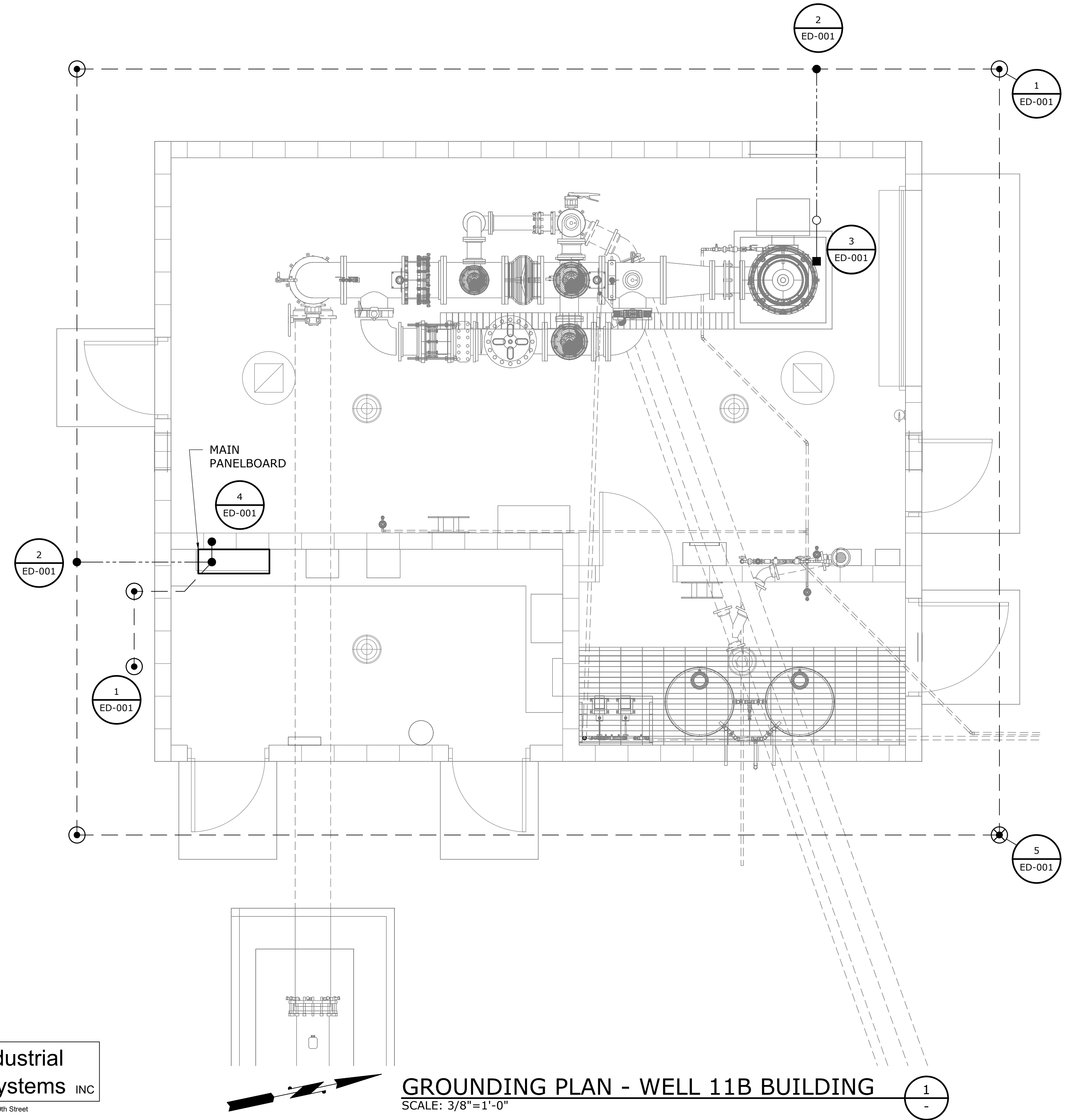
CITY OF PENDLETON
WELL 11-11B

ELECTRICAL
LIGHTING AND HVAC PLAN - WELL 11 & 11B

SHEET
E-007
 58 of 65

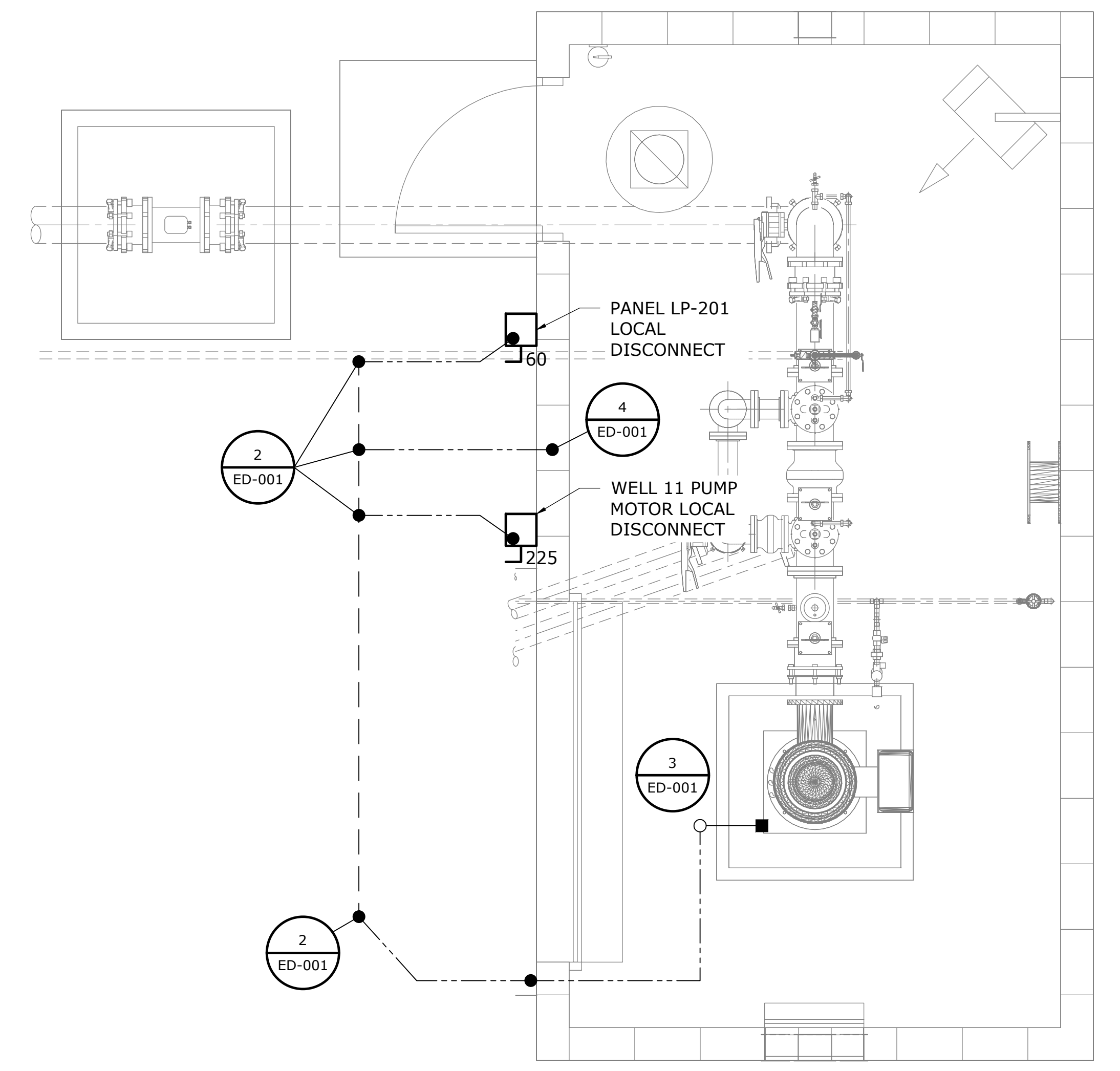
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&_15\DWG\E-008.dwg E-008 3/17/2024 11:38 AM AVIB 23.1s (LMS Tech)



GROUNDING PLAN - WELL 11B BUILDING
SCALE: 3/8"=1'-0"

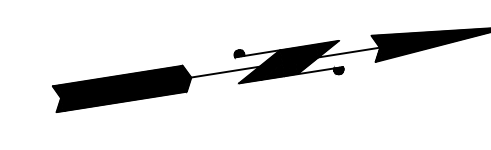
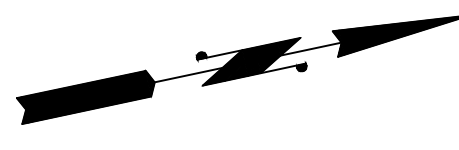
- GROUNDING NOTES**
1. ALL GROUND CONNECTIONS SHALL BE "BURNDY" COMPRESSION TYPE CONNECTORS OR EQUAL.
 2. CLEAN ALL METAL SURFACES TO BARE METAL WHEN GROUNDING DETAIL CALLS FOR GROUND LUG. COAT BARE CONTACT SURFACE WITH AN OXIDATION INHIBITING COMPOUND.
 3. THE COMPLETE GROUNDING SYSTEM SHALL BE TESTED TO VERIFY THAT A RECOMMENDED RESISTANCE OF 5 OHMS OR LESS IS ATTAINED. FINAL GROUNDING TEST REPORT PROVIDED TO CLIENT.
 4. ALL GROUND CONDUCTORS TRANSITIONING THROUGH FOUNDATION OR CONCRETE CONTAINMENT SLAB SHALL BE INSULATED OR COATED TO PREVENT PREMATURE CORROSION. SEE DETAIL 5 ON E-03.
 5. CONTRACTOR TO EXERCISE EXTREME CARE AND CONFIRM THE EXISTENCE OF ANY POTENTIAL UNDERGROUND HAZARDS WHEN EXCAVATING FOR GROUNDING.
 6. CONNECT SENSOR FLANGES, PIPE FLANGES AND TRANSMITTER GROUND TERMINALS TO GROUND ACCORDING TO FLOWMETER MANUFACTURERS RECOMMENDATIONS.



GROUNDING PLAN - WELL 11 BUILDING
SCALE: 1/2"=1'-0"

Industrial Systems INC

12119 NE 99th Street
Suite #2090
Vancouver, Washington 98662
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR# CCB #198597 WA#INDUS1880K9
AK #1018436
PROJECT#: 21.37.01

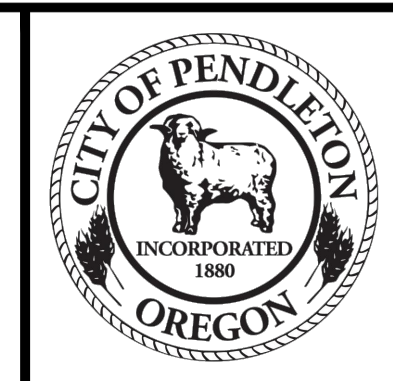


NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED

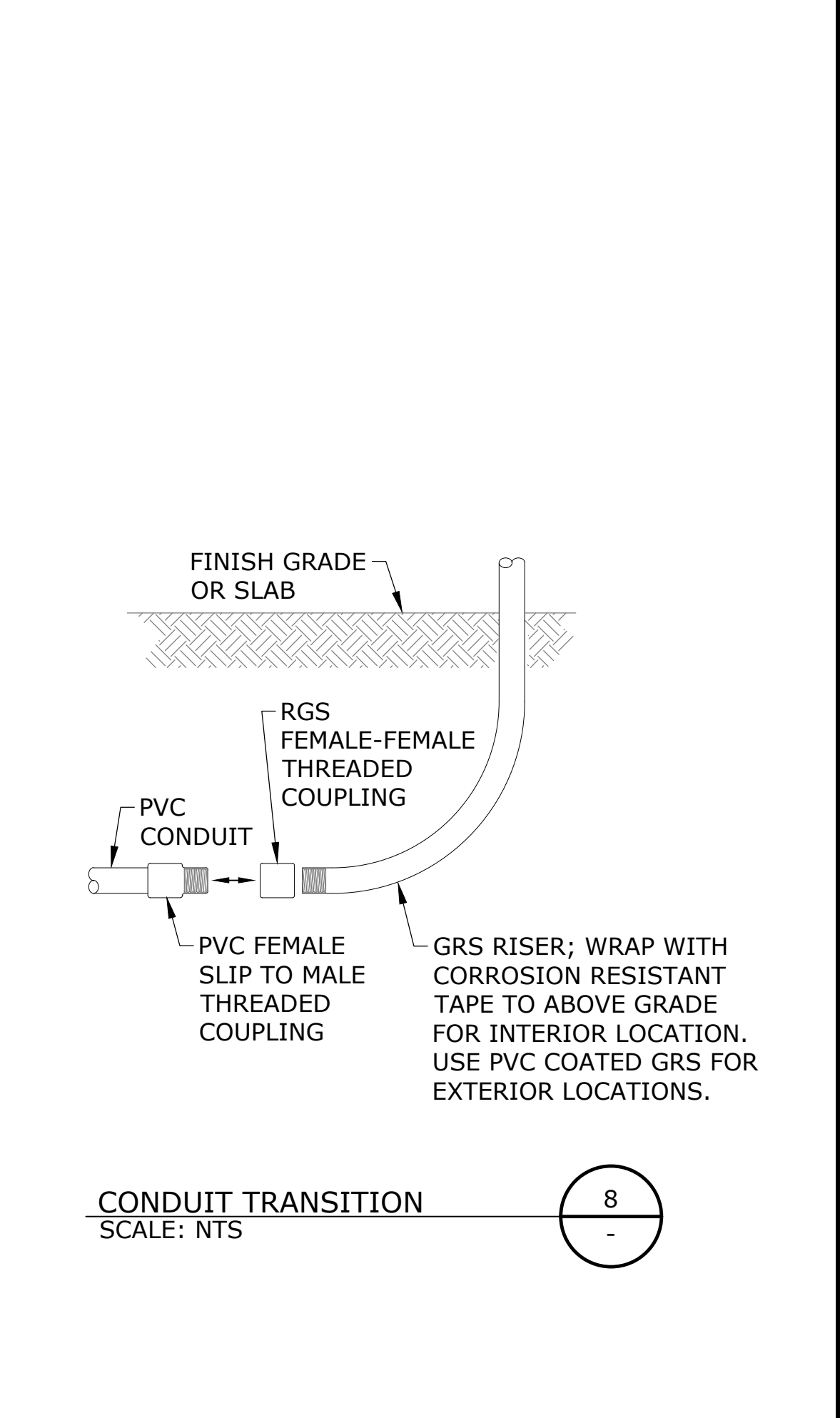
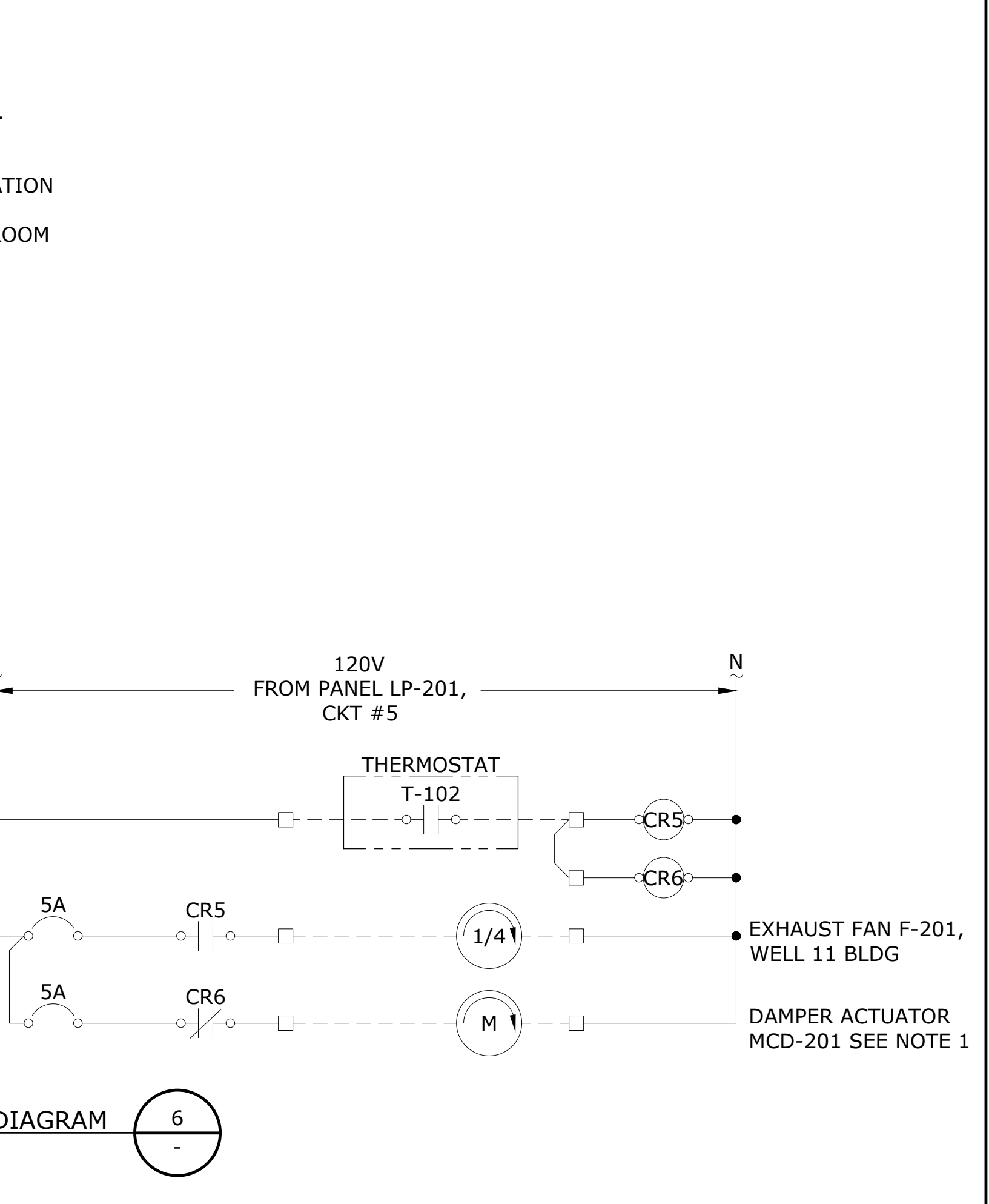
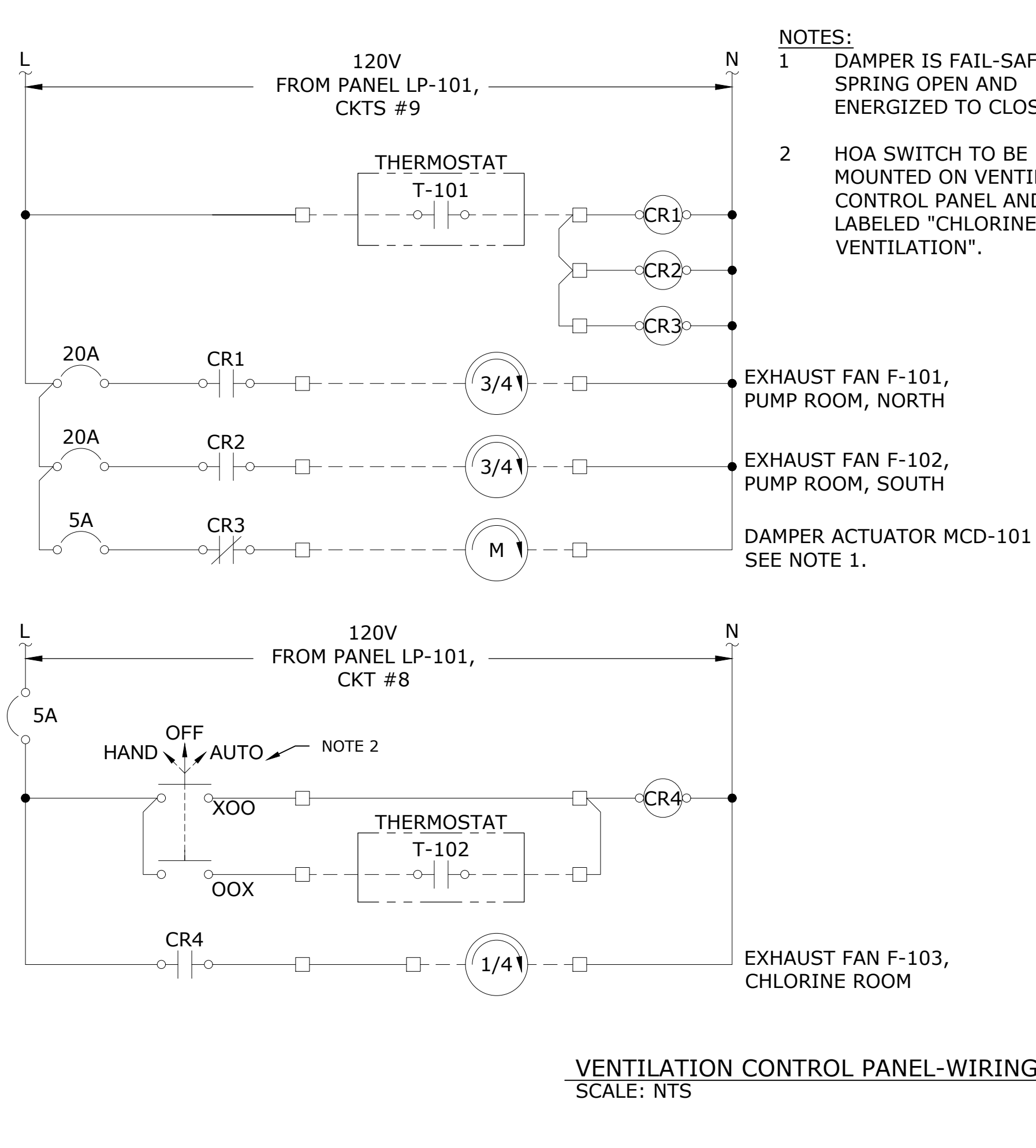
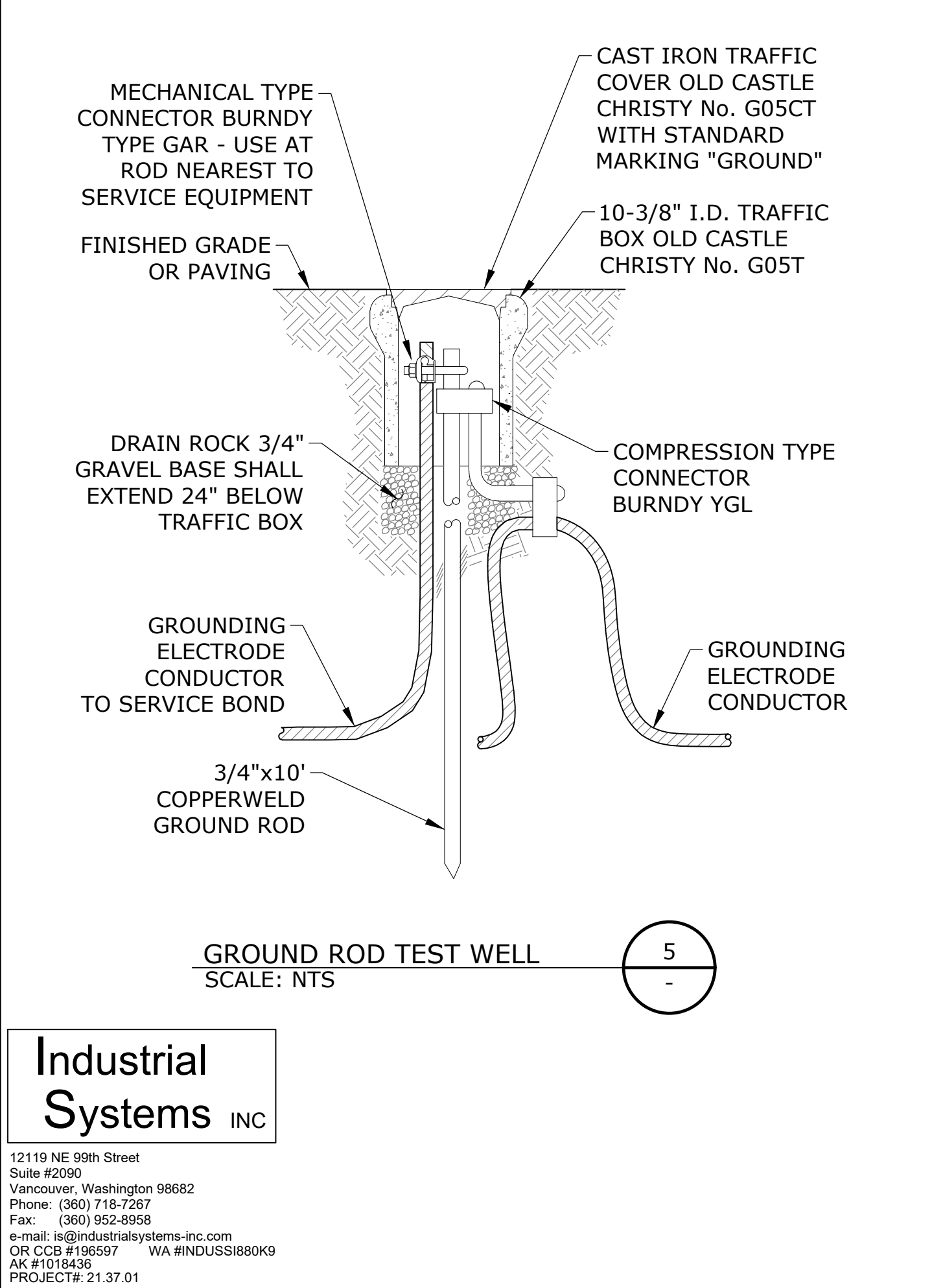
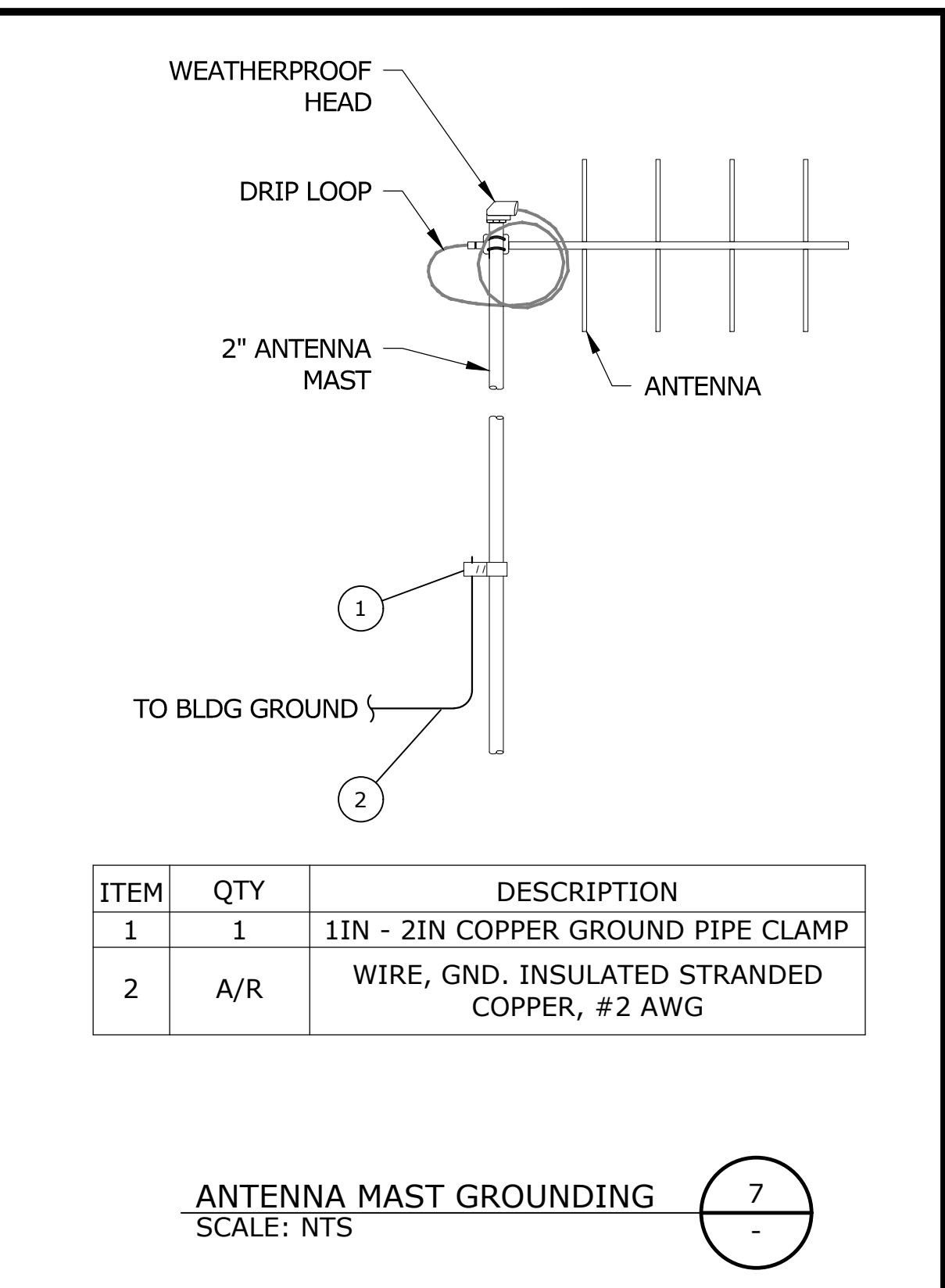
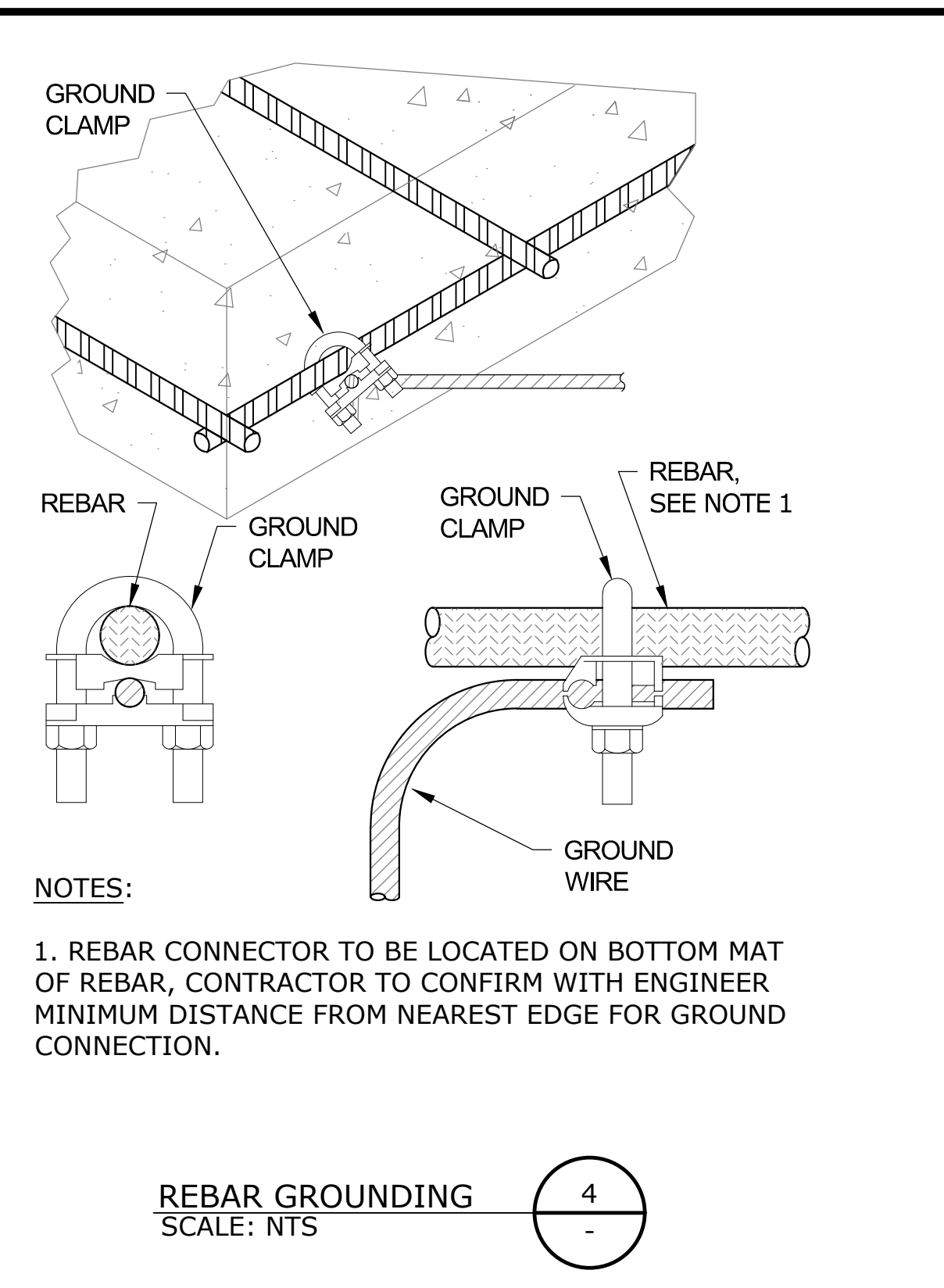
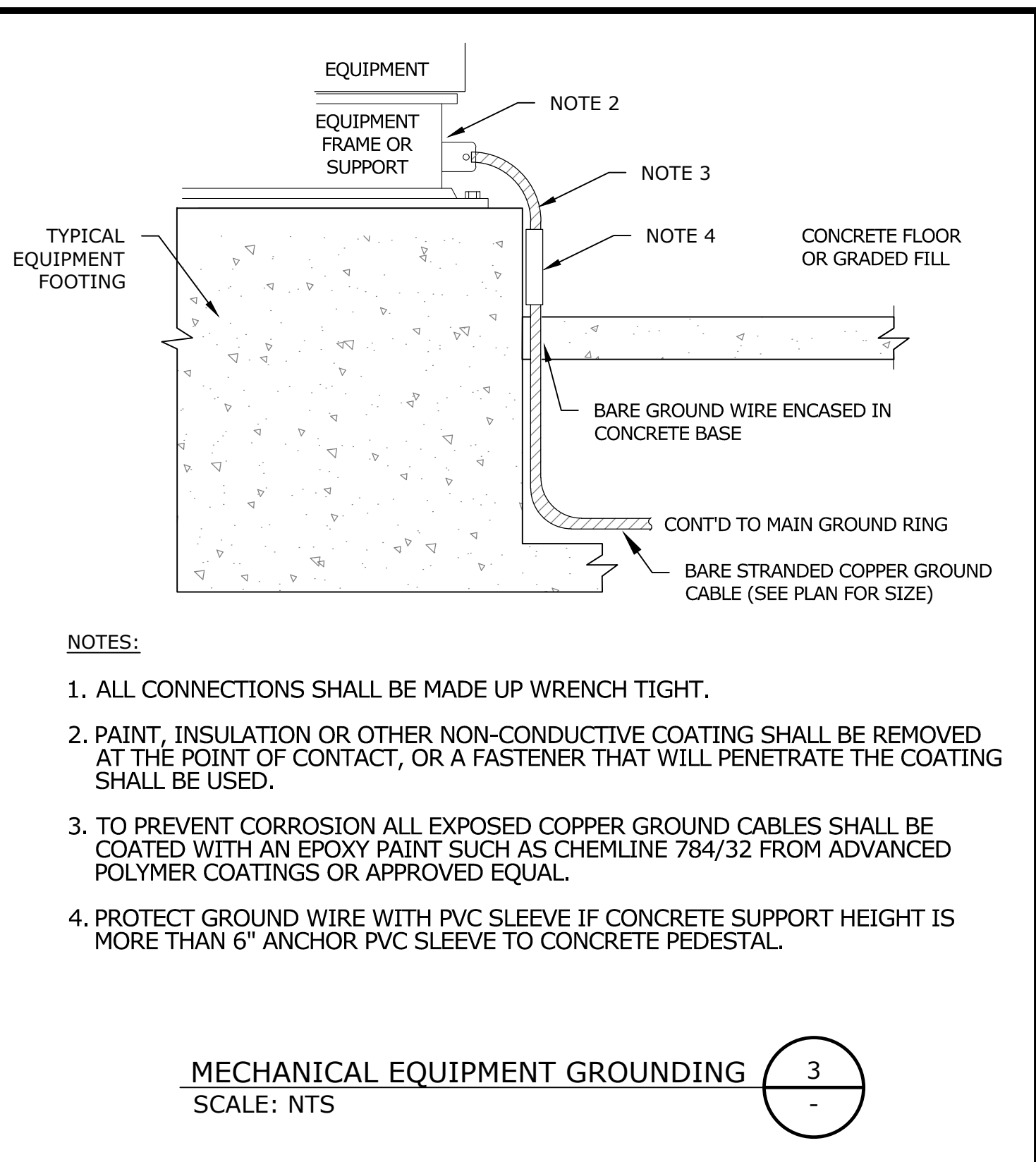
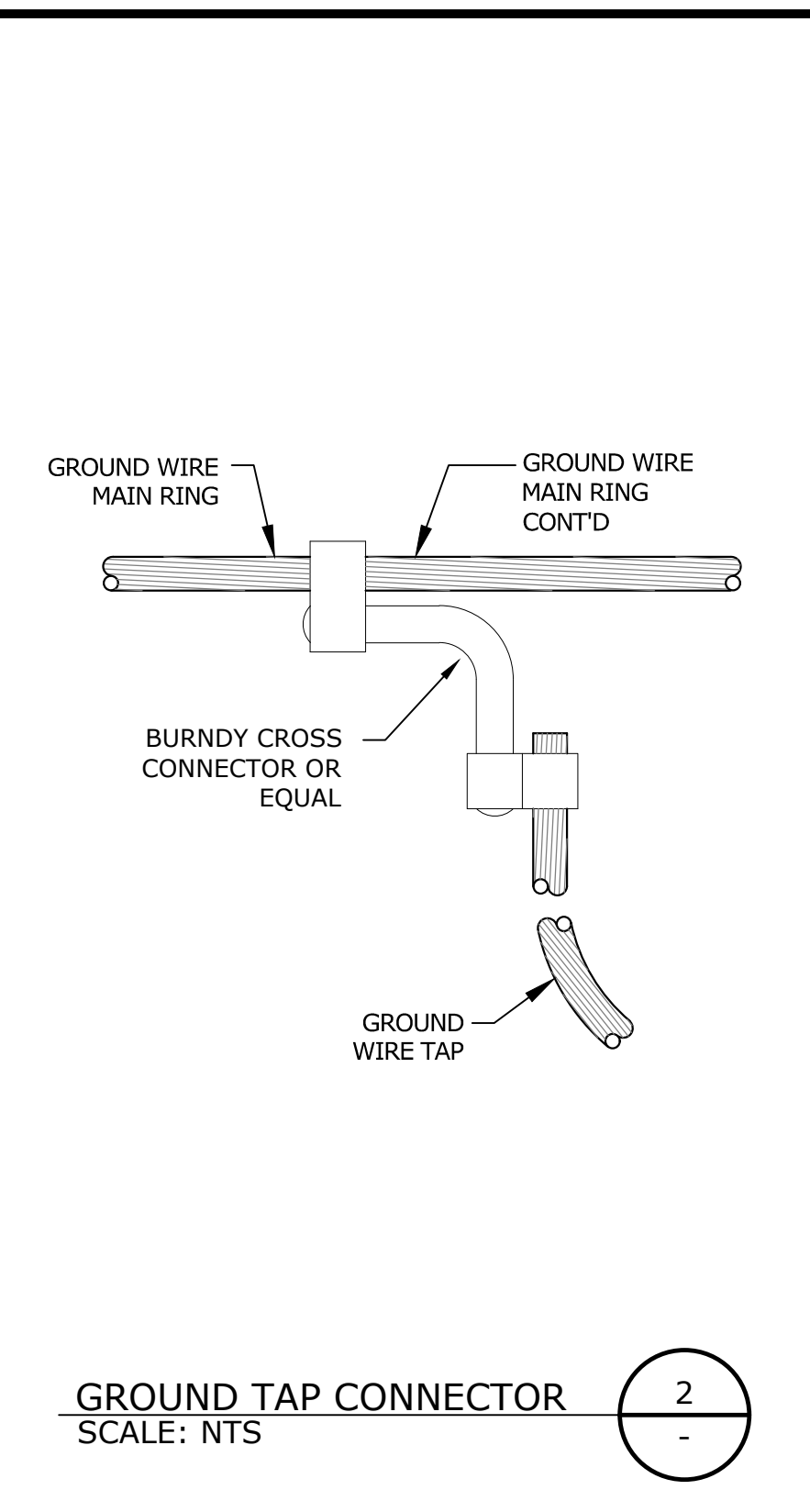
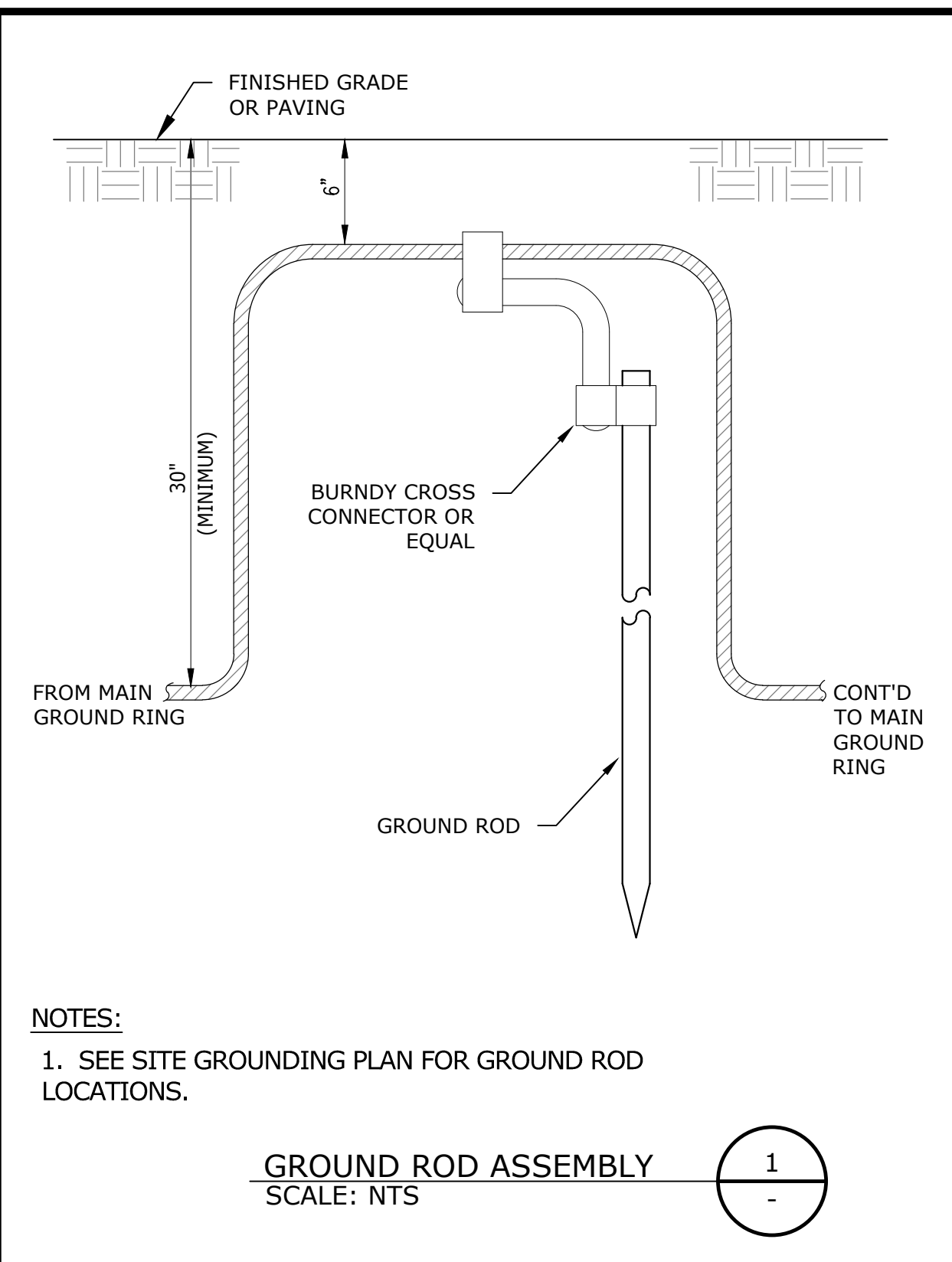
REGISTERED PROFESSIONAL
DESIGNED FOR
James Mitchell
OREGON
33E00189829A00C
JAMES E. MITCHELL
EXPIRES 12/31/24



CITY OF PENDLETON
WELL 11-11B

ELECTRICAL
GROUNDING PLAN - WELL 11 & 11B
PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
E-008
59 of 65



P:\Projects\21.37.01_MSA_Pendleton_Well_11_15\DWG\ED-001.dwg ED-001 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)

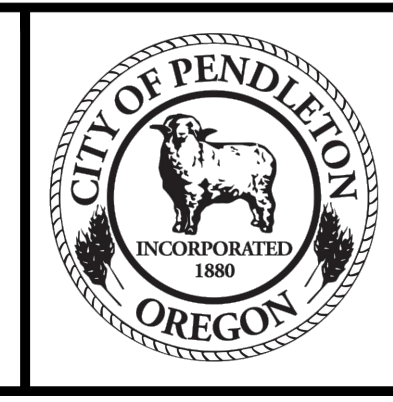
Industrial Systems INC
12119 NE 99th Street
Suite #2090
Vancouver, Washington 98662
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR CCB #198597 WA #INDUSIS180K9
AK #1018436
PROJECT#: 21.37.01

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH DESIGNED
AAB DRAWN
JEM CHECKED

REGISTERED PROFESSIONAL
DESIGNED BY
9751
James Mitchell
OREGON
33E3689829A96C
APR 14 2024
JAMES E. MITCHELL
EXPIRES 12/31/24

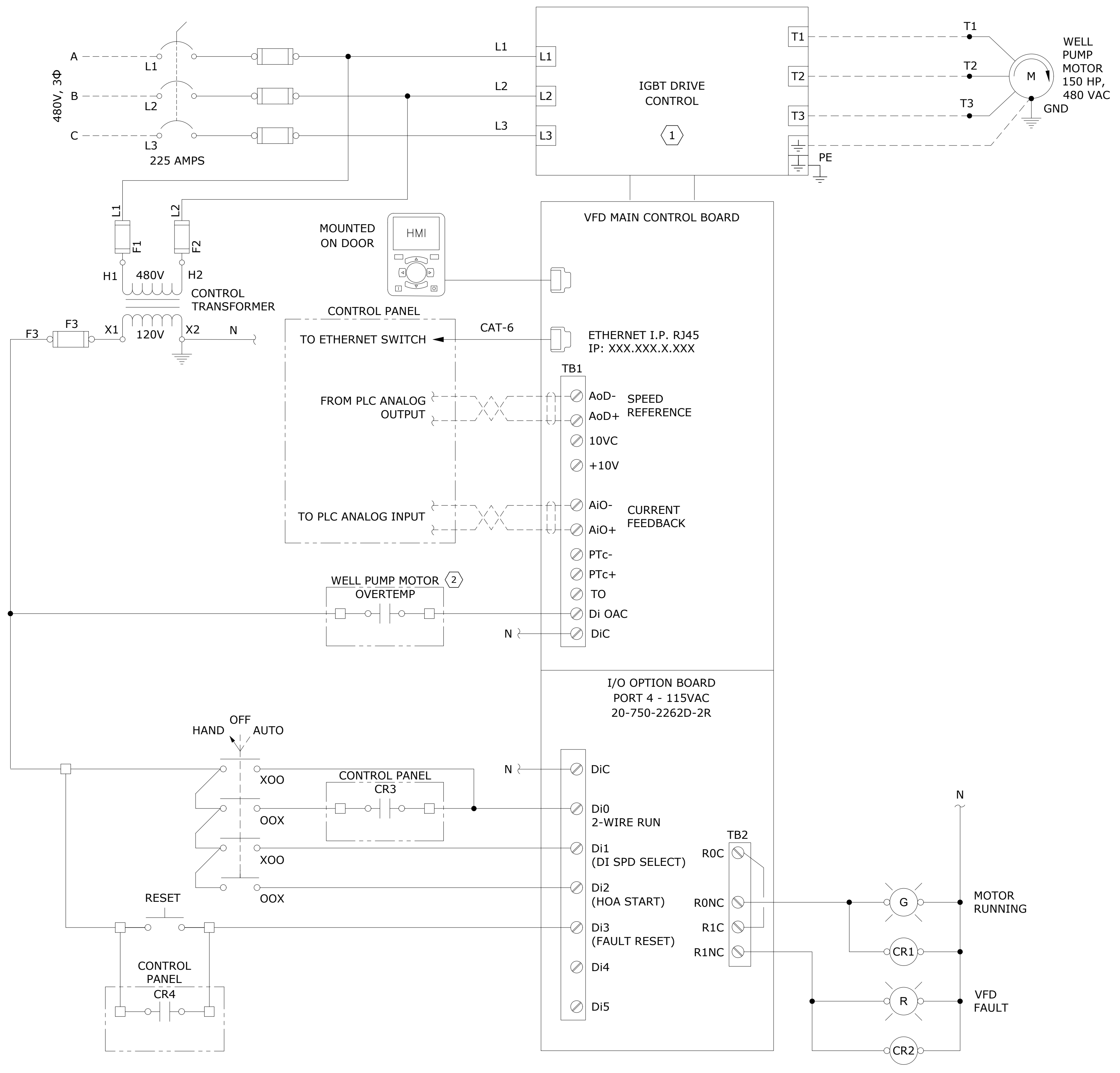


CITY OF PENDLETON
WELL 11-11B

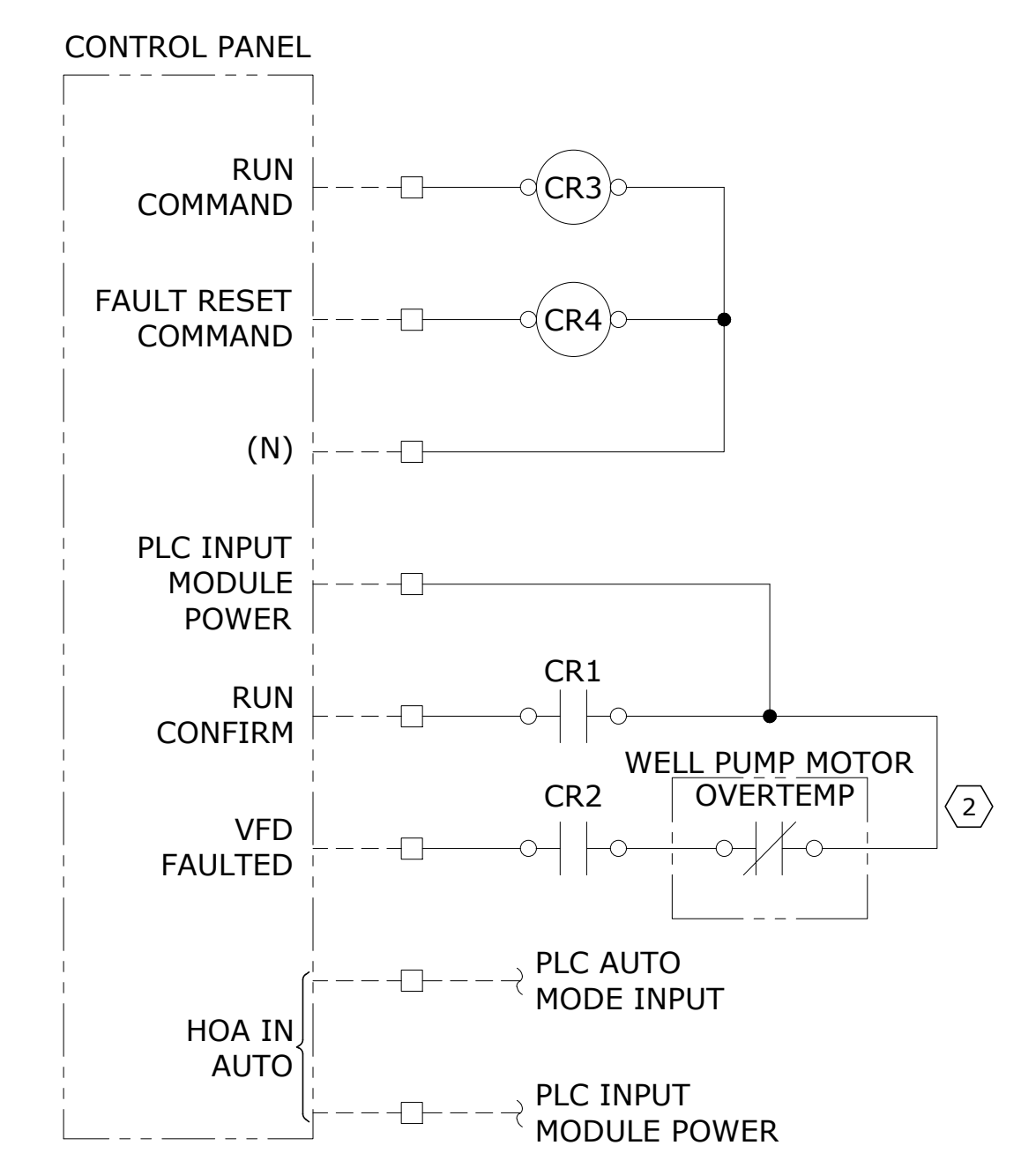
ELECTRICAL
DETAILS

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET ED-001
60 of 65



- KEY NOTES**
- ① MOV AND CM CAPACITOR JUMPERS SHIP INSTALLED. DAMAGE TO THE VFD CAN OCCUR IN UNGROUNDED SYSTEMS. REVIEW INSTALLATION MANUAL TO DETERMINE FINAL INSTALLATION.
 - ② PUMP MOTOR THERMOSTAT CONTACTS FOR MOTOR OVERTEMP SHUTDOWN AND ALARMING.



VFD WIRING DIAGRAM - 150 HP WELL PUMP, TYPICAL
SCALE: NONE

Industrial Systems INC

12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR# CC# #198597 WA#INDUSIS180K9
AK #1018436
PROJECT#: 21.37.01

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&.15\DWG\ED-002.dwg ED-002 3/1/2024 11:38 AM AVIB 23:1s (LMS Tech)

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH DESIGNED
AAB DRAWN
JEM CHECKED

REGISTERED PROFESSIONAL
DESIGNED BY
James Mitchell
9751
OREGON
33E30180829416C
MAY 14 1997
JAMES E. MITCHELL
EXPIRES 12/31/24

CITY OF PENDLETON
WELL 11-11B

ELECTRICAL

DETAILS-TYPICAL VFD WIRING DIAGRAM

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
ED-002
61 of 65

GENERAL INSTRUMENT SYMBOLS

LOCATION/ACCESSIBILITY	DISCRETE INSTRUMENTS	SHARED DISPLAY AND CONTROL (DCS)	PLC	DISCRETE HARDWARE INTERLOCK
FIELD MOUNTED 1. FIELD OR LOCALLY MOUNTED. 2. ACCESSIBLE TO AN OPERATOR AT DEVICE.				
PRIMARY LOCATION NORMALLY ACCESSIBLE TO AN OPERATOR 1. CENTRAL OR MAIN CONTROL ROOM. 2. FRONT OF MAIN PANEL OR CONSOLE MOUNTED. 3. VISIBLE ON VIDEO DISPLAY. 4. ACCESSIBLE TO AN OPERATOR AT DEVICE OR CONSOLE.				
PRIMARY LOCATION NORMALLY INACCESSIBLE TO AN OPERATOR 1. CENTRAL OR MAIN CONTROL ROOM. 2. REAR OF PANEL OR CABINET MOUNTED. 3. NOT VISIBLE ON VIDEO DISPLAY. 4. NOT NORMALLY ACCESSIBLE TO AN OPERATOR AT DEVICE OR CONSOLE.				
AUXILIARY LOCATION NORMALLY ACCESSIBLE TO AN OPERATOR 1. SECONDARY OR LOCAL CONTROL ROOM. 2. FIELD OR LOCAL CONTROL PANEL. 3. FRONT OF SECONDARY OR LOCAL PANEL MOUNTED. 4. VISIBLE ON VIDEO DISPLAY.				
AUXILIARY LOCATION NORMALLY INACCESSIBLE TO AN OPERATOR 1. SECONDARY OR LOCAL CONTROL ROOM. 2. REAR OF SECONDARY OR LOCAL PANEL OR CABINET MOUNTED. 4. NOT VISIBLE ON VIDEO DISPLAY. 5. NOT NORMALLY ACCESSIBLE TO AN OPERATOR AT DEVICE OR CONSOLE.				

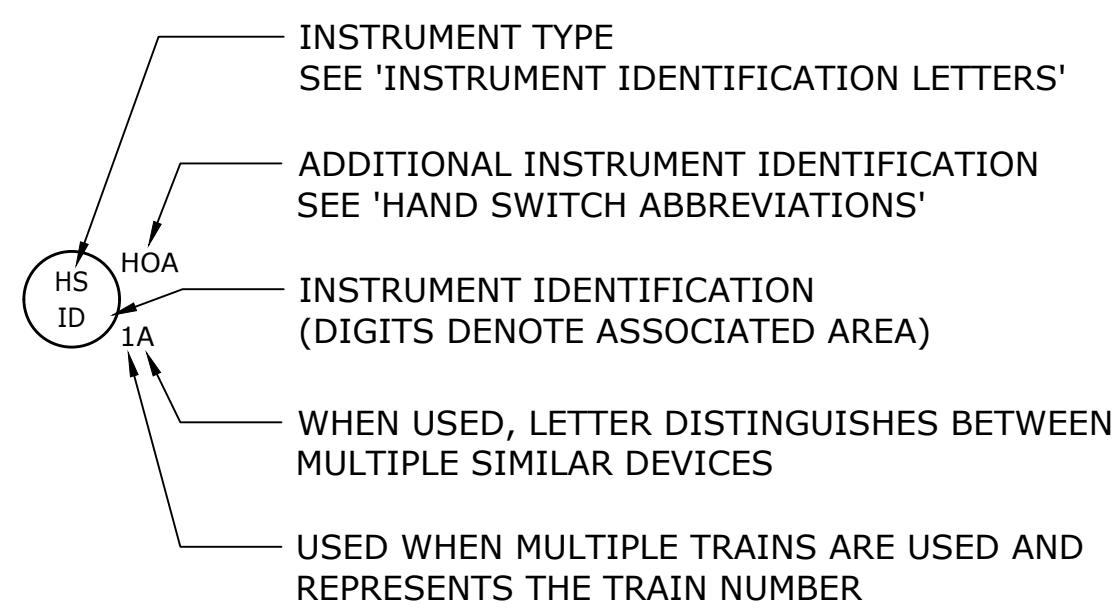
ABBREVIATIONS

AG ABOVE GROUND	LO LOCKED OPEN
ATM ATMOSPHERE	LP LOW PRESSURE
BYP BYPASS	LPT LOW POINT
CC CHEMICAL CLEANOUT	MTL MATERIAL
CL CENTERLINE	MAX MAXIMUM
CO CLEANOUT	MCC MOTOR CONTROL CENTER
CONN CONNECTION	MCP MAIN CONTROL PANEL
CVLS CHECK VALVE LIMIT SWITCH	MIN MINIMUM
CTR CENTER	MOV MOTOR OPERATED VALVE
DCS DISTRIBUTED CONTROL SYSTEM	MW MANWAY
DES DESIGN	NC NORMALLY CLOSED
DIA DIAMETER	NNF NORMALLY NO FLOW
DP DESIGN PRESSURE	NO NORMALLY OPEN
D/P DIFFERENTIAL PRESSURE	NOZ NOZZLE
DRN DRAIN	O/C OPEN/CLOSE
DT DESIGN TEMPERATURE	O/O ON/OFF
DWG DRAWING	OIT OPERATOR INTERFACE TERMINAL
(E) EXISTING	OP OUTPUT
EL ELEVATION	OVHD OVERHEAD
ESD EMERGENCY SHUTDOWN	PLC PROGRAMMABLE LOGIC CONTROLLER
FOF FACE OF FLANGE	PRESS PRESSURE
(F) FURNISHED	PV PROCESS VARIABLE
FC FAIL CLOSED	(R) RELOCATED
FI FAIL INDETERMINATE	REQD REQUIRED
FL FAIL LOCKED (LAST POSITION)	RIO REMOTE I/O PANEL
FLG FLANGE	RTD RESISTANCE TEMPERATURE DETECTOR
FO FAIL OPEN	SC SAMPLE CONNECTION
FP FULL PORT	SCADA SUPERVISORY CONTROL AND DATA ACQUISITION
FV FULL VACUUM	SCH SCHEDULE
GO GEAR OPERATED	SD SHUTDOWN
GR GRADE	SG SPECIFIC GRAVITY
HC HOSE CONNECTION	SIS SAFETY INSTRUMENTED SYSTEM
HDR HEADER	SO STEAM OUT
HH HAND HOLE	SP SET POINT
HOA HAND/OFF/AUTOMATIC	SS STAINLESS STEEL S/S or START/STOP
HP HIGH PRESSURE	STD STANDARD
HPT HIGH POINT	T/C THERMOCOUPLE
IAS INSTRUMENT AIR SUPPLY	TDH TOTAL DIFFERENTIAL HEAD
LC LOCKED CLOSED	TEMP TEMPERATURE
LCP LOCAL CONTROL PANEL	THRD THREADED
	TSO TIGHT SHUT-OFF
	TYP TYPICAL
	UG UNDERGROUND
	VNT VENT
	VAC VACUUM
	VB VORTEX BREAKER
	VFD VARIABLE FREQUENCY DRIVE
	W/ WITH
	W/O WITHOUT

INSTRUMENT IDENTIFICATION LETTERS

	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, FLAME, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE (TYPICALLY CONDUCTIVITY - ELECTRICAL)			CONTROL, COMMAND	CLOSED
D	USER'S CHOICE (TYPICALLY DENSITY OR SPECIFIC GRAVITY)	DIFFERENTIAL			DIVERT
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			
G	USER'S CHOICE OR GAUGING (DIMENSIONAL)		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	USER'S CHOICE (TYPICALLY MOISTURE OR HUMIDITY)	MOMENTARY			MIDDLE, INTERMEDIATE
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY OR HEAT DUTY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	THROUGH
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE, TORQUE		WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

TYPICAL INSTRUMENT TAG NUMBERS & DESIGNATION



HAND SWITCH ABBREVIATIONS

AO = AUTO/OFF	LOS = LOCKOUT/STOP
AM = AUTO/MANUAL	LA = LOCAL/AUTO
CM = COMPUTER/MANUAL	LR = LOCAL/REMOTE
CL = COMPUTER LOCAL	OC = OPEN/CLOSE
ES = EMERGENCY STOP	OCA = OPEN/CLOSE/AUTO
FR = FORWARD/REVERSE	OO = ON/OFF
FOR = FORWARD/OFF/REVERSE	OOA = ON/OFF/AUTO
FS = FAST/SLOW	OSC = OPEN/STOP/CLOSE
FOS = FAST/OFF/SLOW	RES = RESET
HA = HAND/AUTO	RF = RUN/FAULT
HIM = HUMAN INTERFACE MODULE	RSL = RAISE/STOP/LOWER
HOA = HAND/OFF/AUTOMATIC	SS = START/STOP
LLS = LEAD/LAG/STANDBY	SOR = START/OFF/RESET
LOC = LOCAL/OFF/COMPUTER	V/B = VFD/BYPASS
LOR = LOCAL/OFF/REMOTE	

PIPING LINE SYMBOLS

PRIMARY (AG & UG)	
SECONDARY / UTILITY (AG & UG)	
FUTURE OR EXISTING ON NEW P&IDs	
JACKETED OR DOUBLE CONTAINMENT	

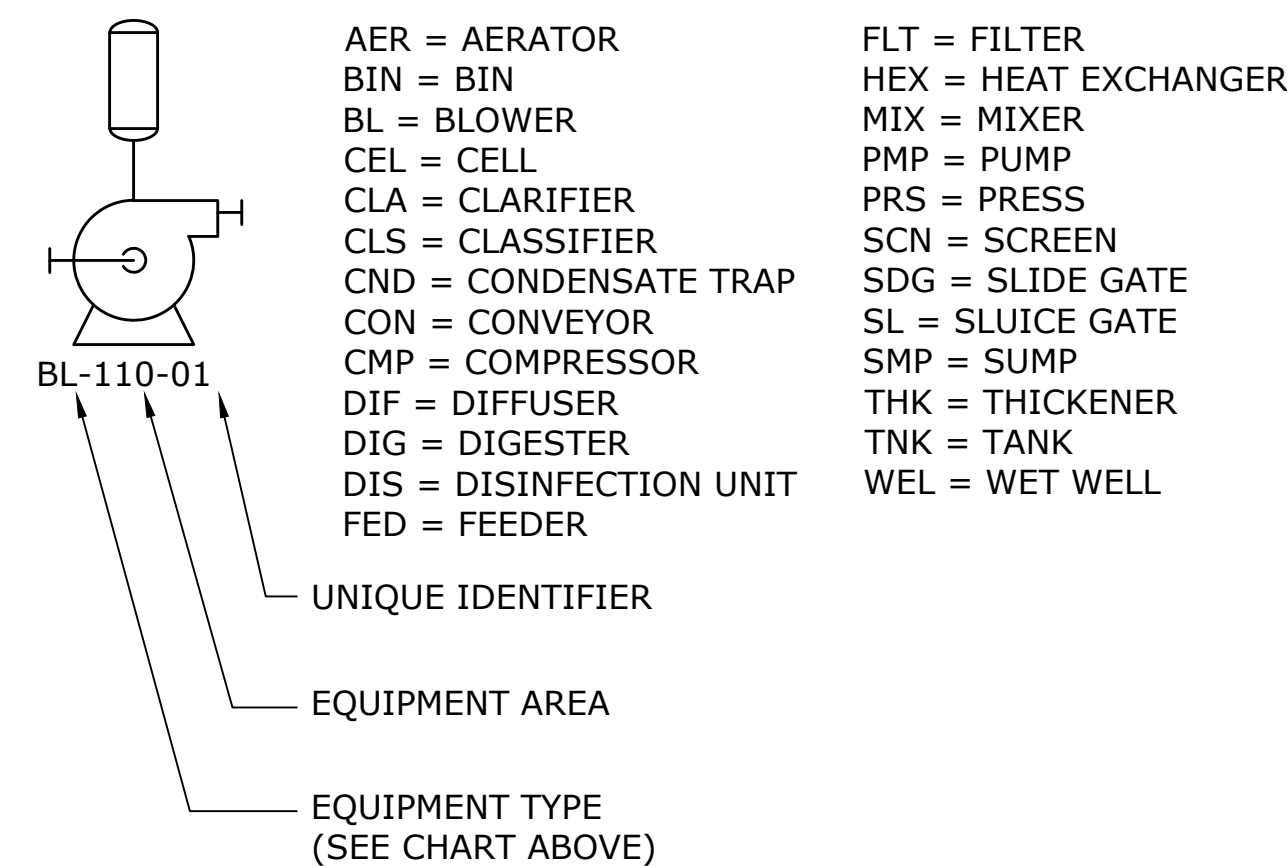
INSTRUMENT LINE SYMBOLS

INSTRUMENT SUPPLY OR CONNECTION TO PROCESS	
PNEUMATIC SIGNAL	
ELECTRIC SIGNAL (ANALOG)	
ELECTRIC SIGNAL (DISCRETE)	
HYDRAULIC SIGNAL	
CAPILLARY TUBE	
ELECTROMAGNETIC, SONIC, OPTICAL, OR NUCLEAR SIGNAL	
SOFTWARE OR DATA LINK	
MECHANICAL LINK	

FLOW STREAM IDENTIFIERS

ABE = AERATION BASIN EFFLUENT	PI = PRIMARY INFLUENT
BD = BASIN DRAIN	PLE = PLANT EFFLUENT
CS = COMBINED SLAG	PS = PRIMARY SLUDGE
CAS = CAUSTIC SODA	RAS = RETURN ACTIVATED SLUDGE
DR = DRAIN	RS = RAW SEWAGE
DS = DIGESTER SOLIDS	SSL = SECONDARY SLUDGE
FBW = FILTER BACKWASH	SCM = SCUM
FE = FINAL EFFLUENT	SSCM = SECONDARY SCUM
GR = GRIT	SCRN = SCREENINGS
ICE = INTERMEDIATE CLARIFIER EFFLUENT	SE = SECONDARY EFFLUENT
LPA = LOW PRESSURE AIR	TE = TERTIARY EFFLUENT
ML = MIXED LIQUOR	TWAS = THICKENED WASTE ACTIVATED SLUDGE
NPW = NON POTABLE WATER	UW = UTILITY WATER
PE = PRIMARY EFFLUENT	WAS = WASTE ACTIVATED SLUDGE

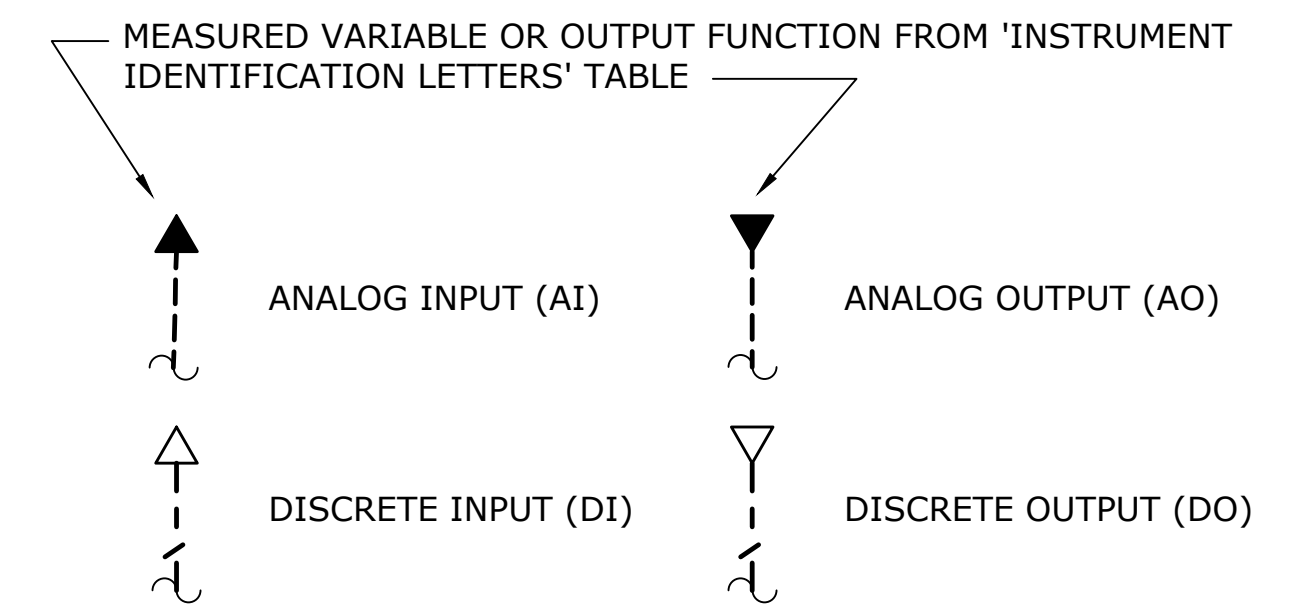
TYPICAL EQUIPMENT TAG NUMBERS & DESIGNATION



OFF-PAGE CONNECTORS AND TIE-IN SYMBOL

A. OFF-PLOT CONNECTOR	
B. PRIMARY/SECONDARY LINES AND INSTRUMENT SIGNAL CONNECTOR	
C. UTILITY CONNECTOR	
D. TIE-IN SYMBOL	

INPUT / OUTPUT SIGNALS



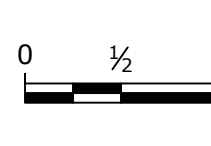
DRAIN CONNECTORS

CLOSED DRAIN		OPEN DRAIN	
CLOSED DRAIN (NO P&ID)		OPEN DRAIN (NO P&ID)	

Industrial Systems INC

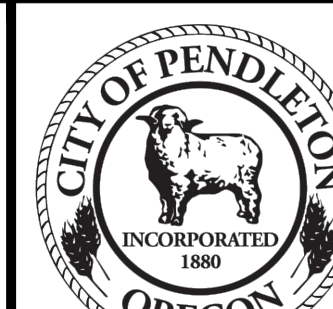
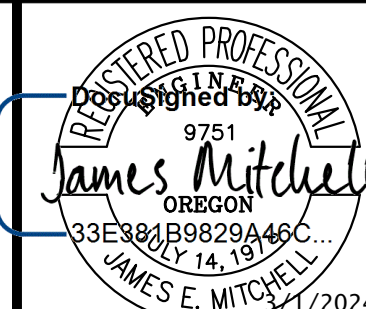
12119 NE 99th Street
Suite #2050
Vancouver, Washington 98662
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR CCB #198597 WA #INDUS18009
AK #1018436
PROJECT#: 21.37.01

NOTICE



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED



CITY OF PENDLETON
WELL 11-11B

INSTRUMENTATION
LEGEND, SYMBOLS AND
ABBREVIATIONS 1

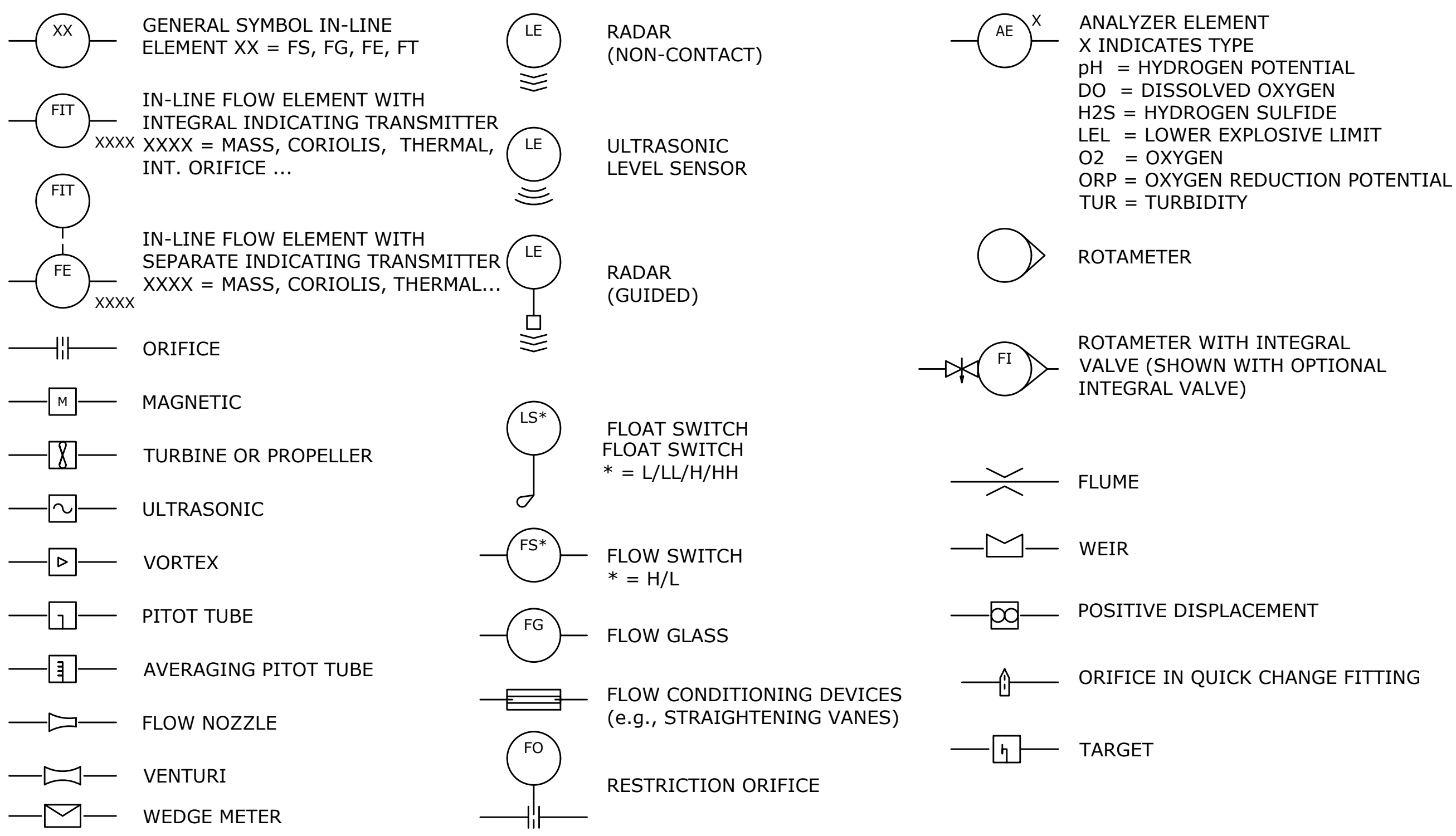
SHEET

I-001

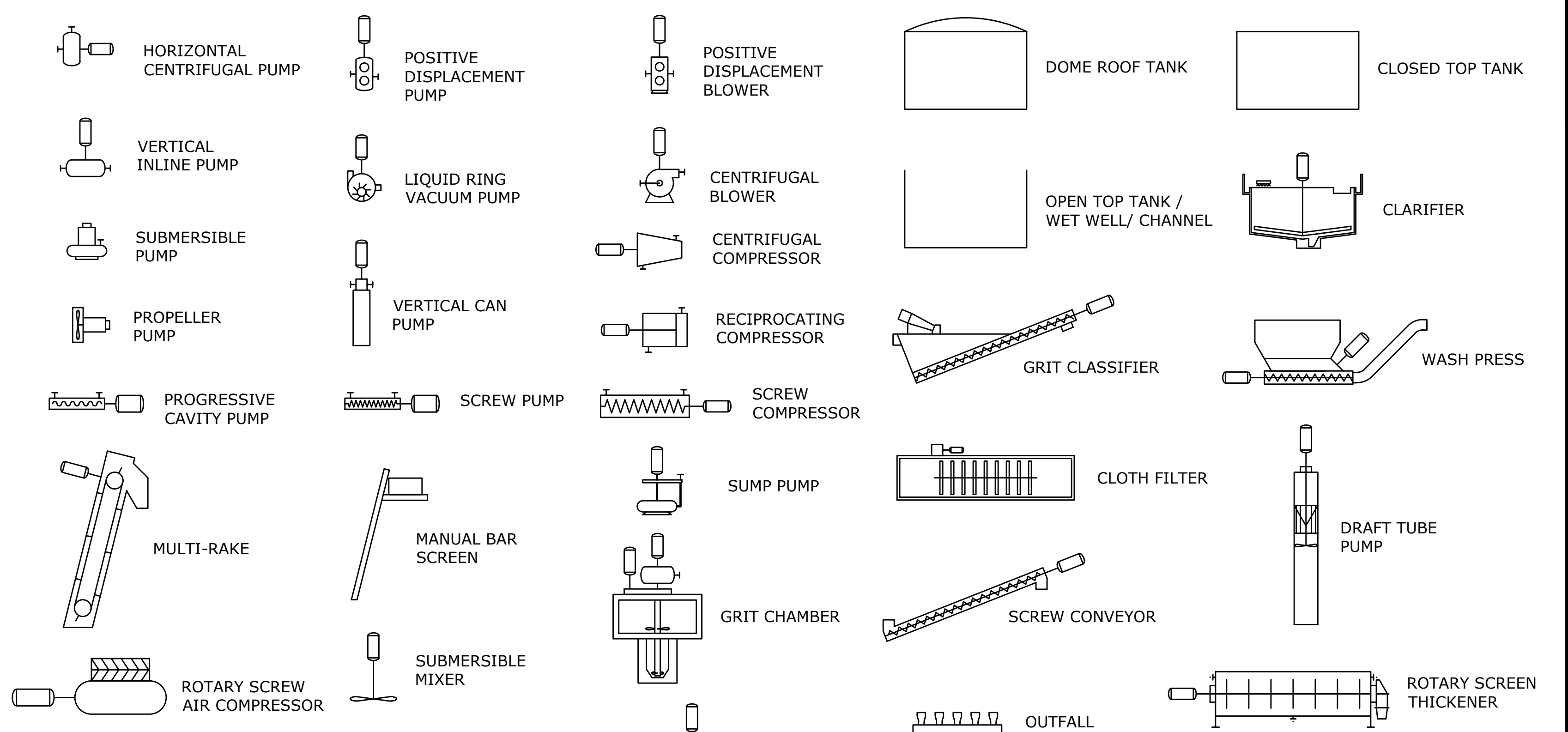
62 of 65

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

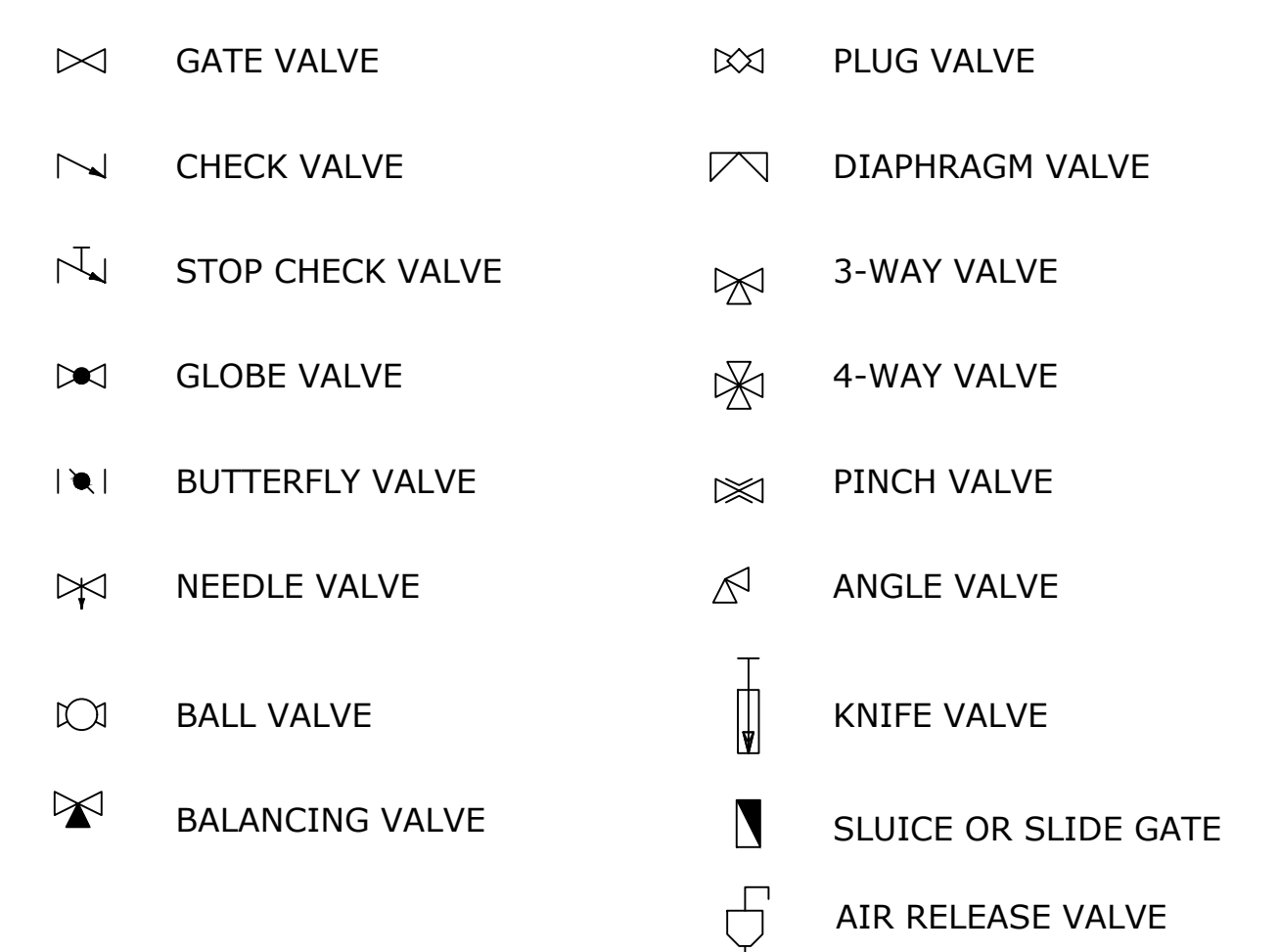
PRIMARY ELEMENT SYMBOLS



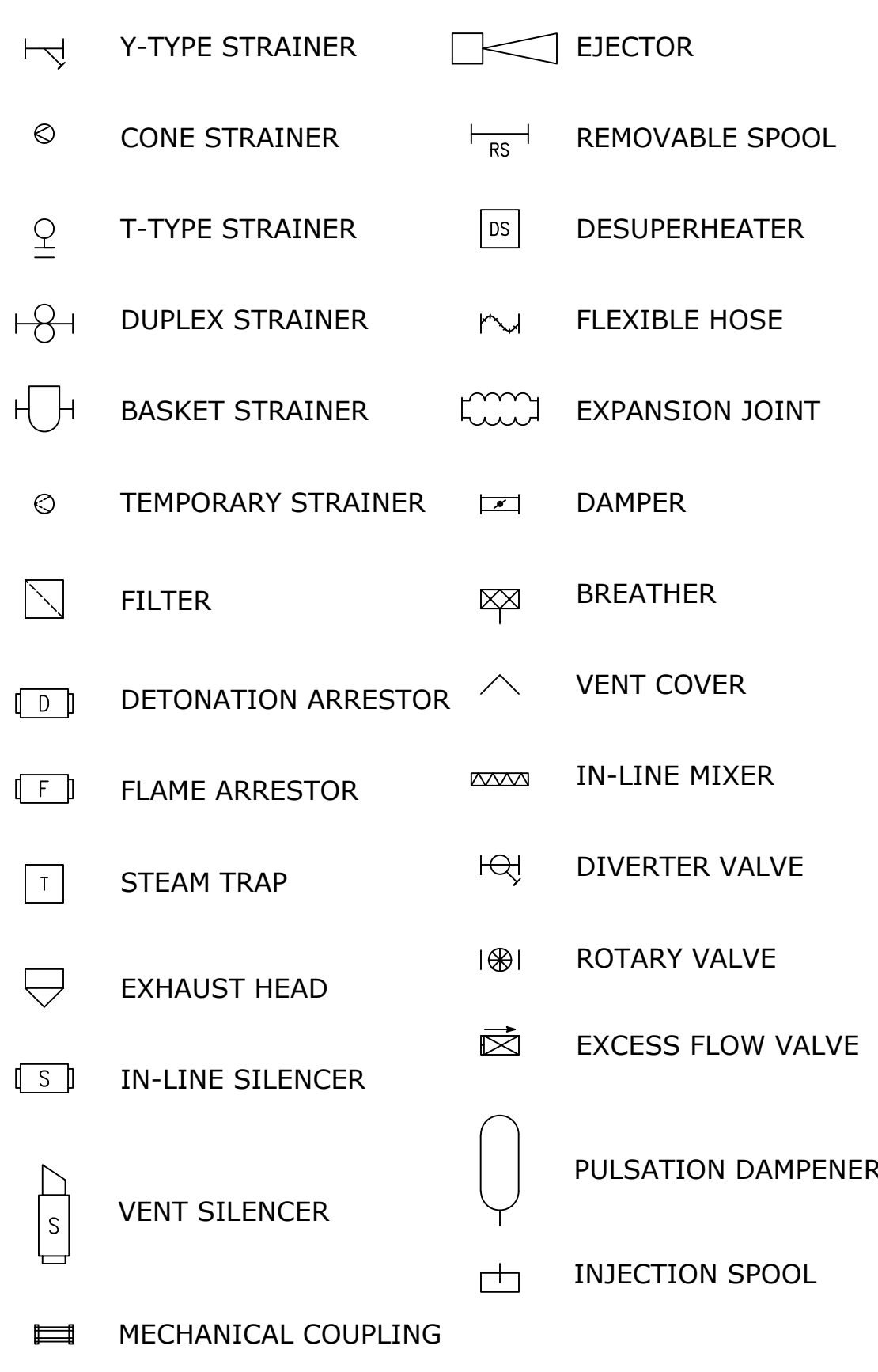
PROCESS EQUIPMENT



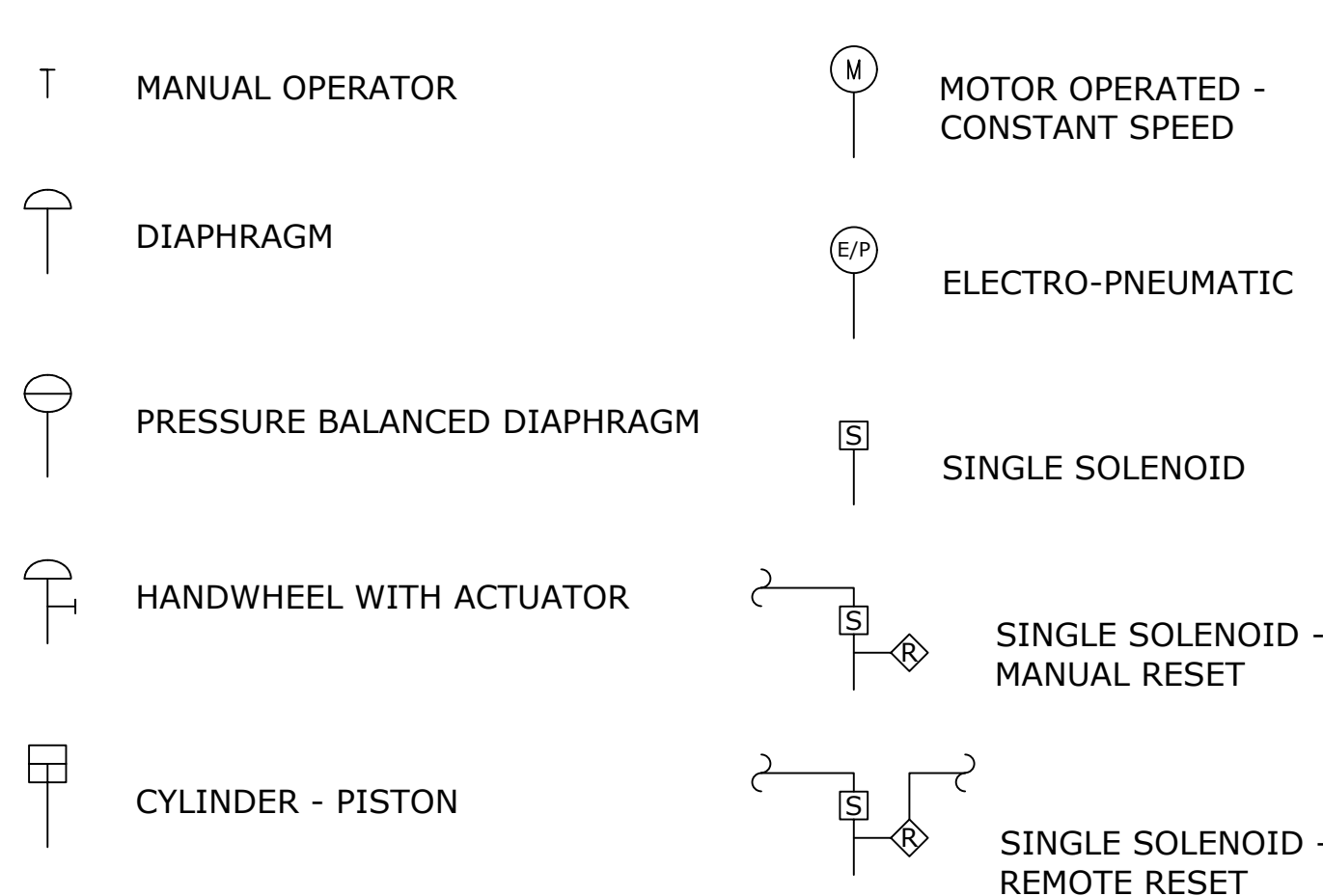
VALVE SYMBOLS (N.C. WHEN SHADED)



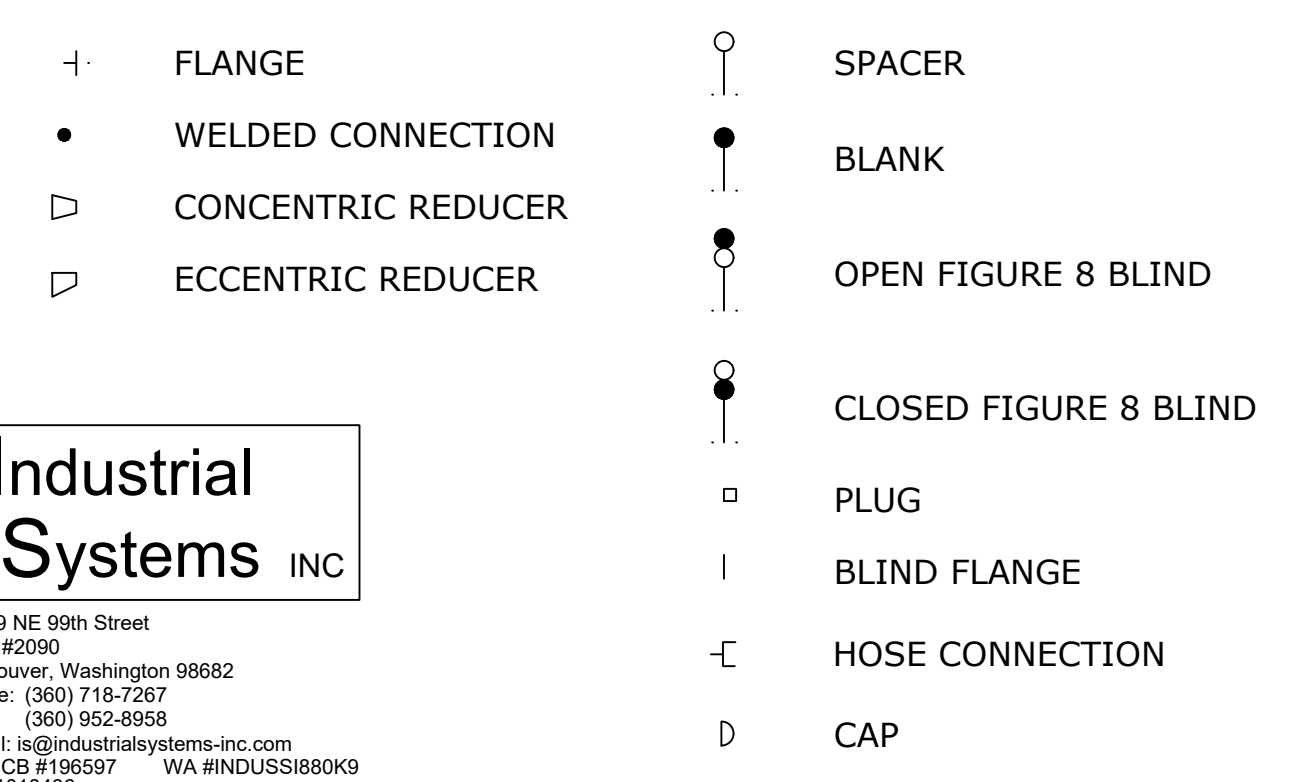
PIPING SPECIALTY ITEMS



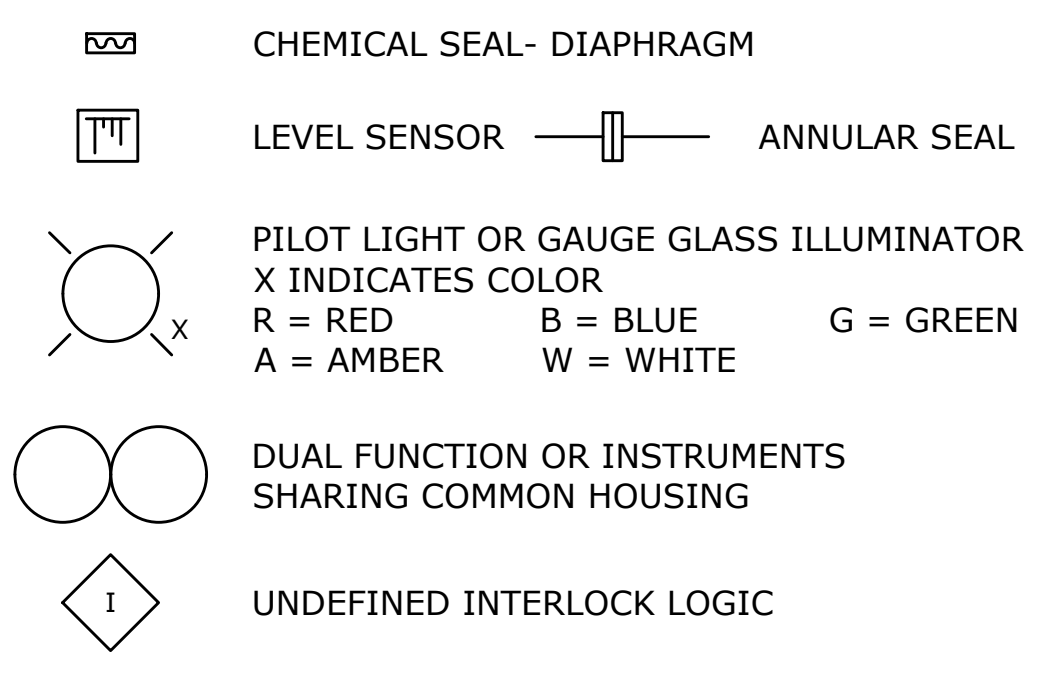
CONTROL VALVE ACTUATOR SYMBOLS



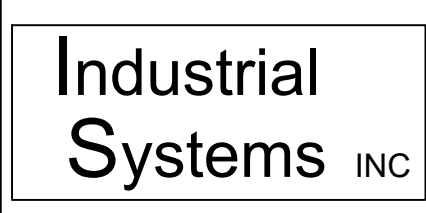
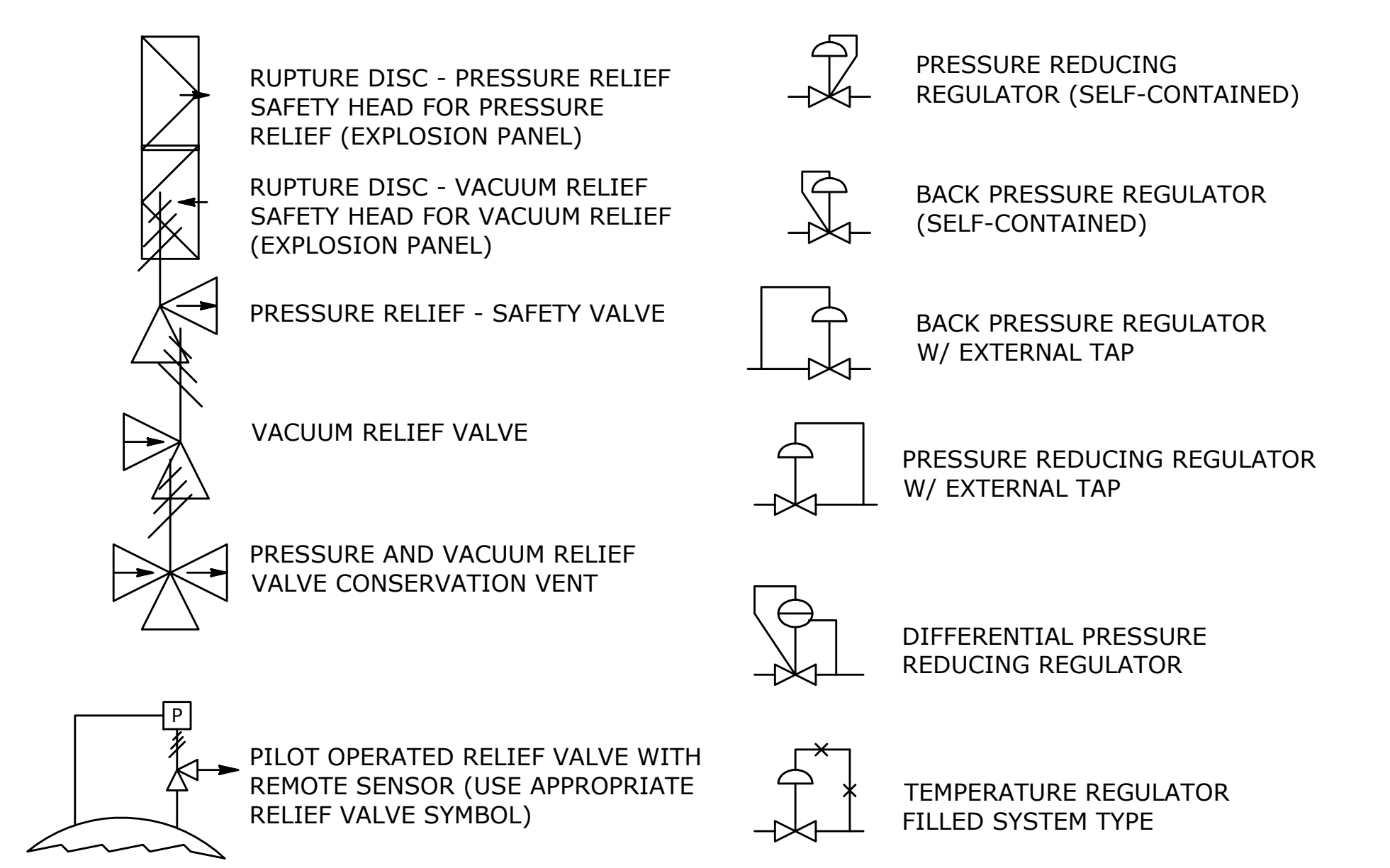
PIPING FITTINGS



MISCELLANEOUS INSTRUMENT SYMBOLS

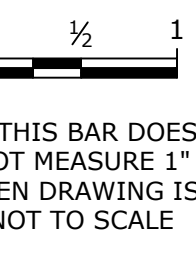


SELF-ACTUATED DEVICES

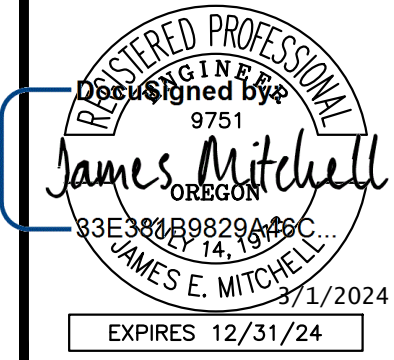


12119 NE 99th Street
Suite #2090
Vancouver, Washington 98682
Phone: (360) 718-7267
Fax: (360) 952-8958
e-mail: is@industrialsystems-inc.com
CR CCB #198597 WA #INDUSIS800K9
AK #1018436
PROJECT#: 21.37.01

NOTICE



MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED



CITY OF PENDLETON
WELL 11-11B

INSTRUMENTATION LEGEND, SYMBOLS AND ABBREVIATIONS 2

SHEET

I-002

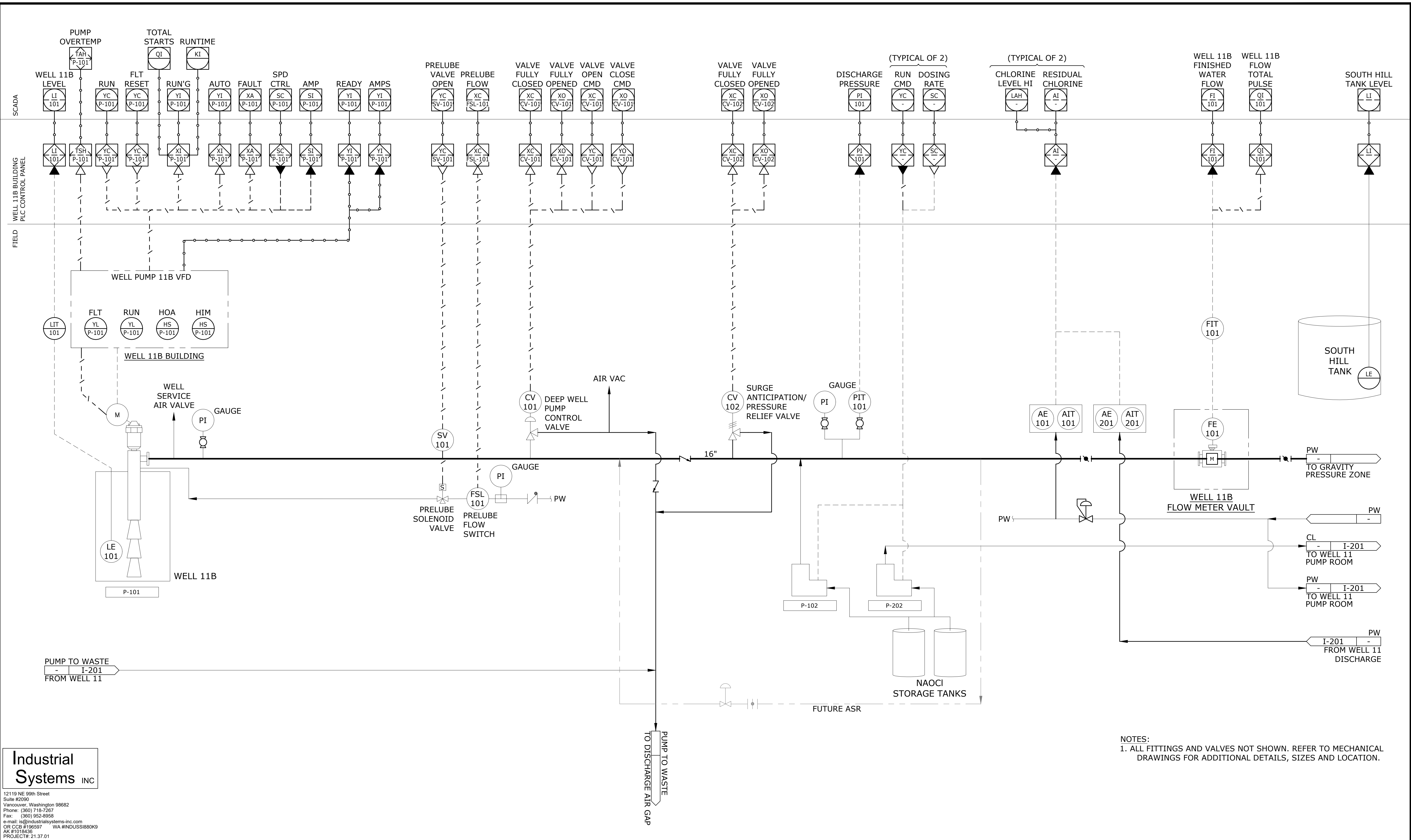
63 of 65

P:\Projects\21.37.01_MSA_Pendleton_Well_11_15\DWG\I-002.dwg I-002 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&_15\DWG\I-101.dwg I-101 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)



NOTES:
 1. ALL FITTINGS AND VALVES NOT SHOWN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS, SIZES AND LOCATION.

Industrial Systems INC

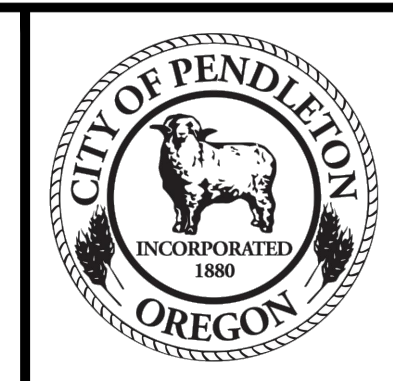
12119 NE 99th Street
 Suite #2090
 Vancouver, Washington 98682
 Phone: (360) 718-7267
 Fax: (360) 952-8958
 e-mail: is@industrialsystems-inc.com
 CR CCB #198597 WA #INDUS180K9
 AK #1018436
 PROJECT#: 21.37.01

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

NOTICE
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
 DESIGNED
 AAB
 DRAWN
 JEM
 CHECKED

REGISTERED PROFESSIONAL ENGINEER
 9751
 James Mitchell
 OREGON
 33E38489829A96C
 JAMES E. MITCHELL
 3/1/2024
 EXPIRES 12/31/24

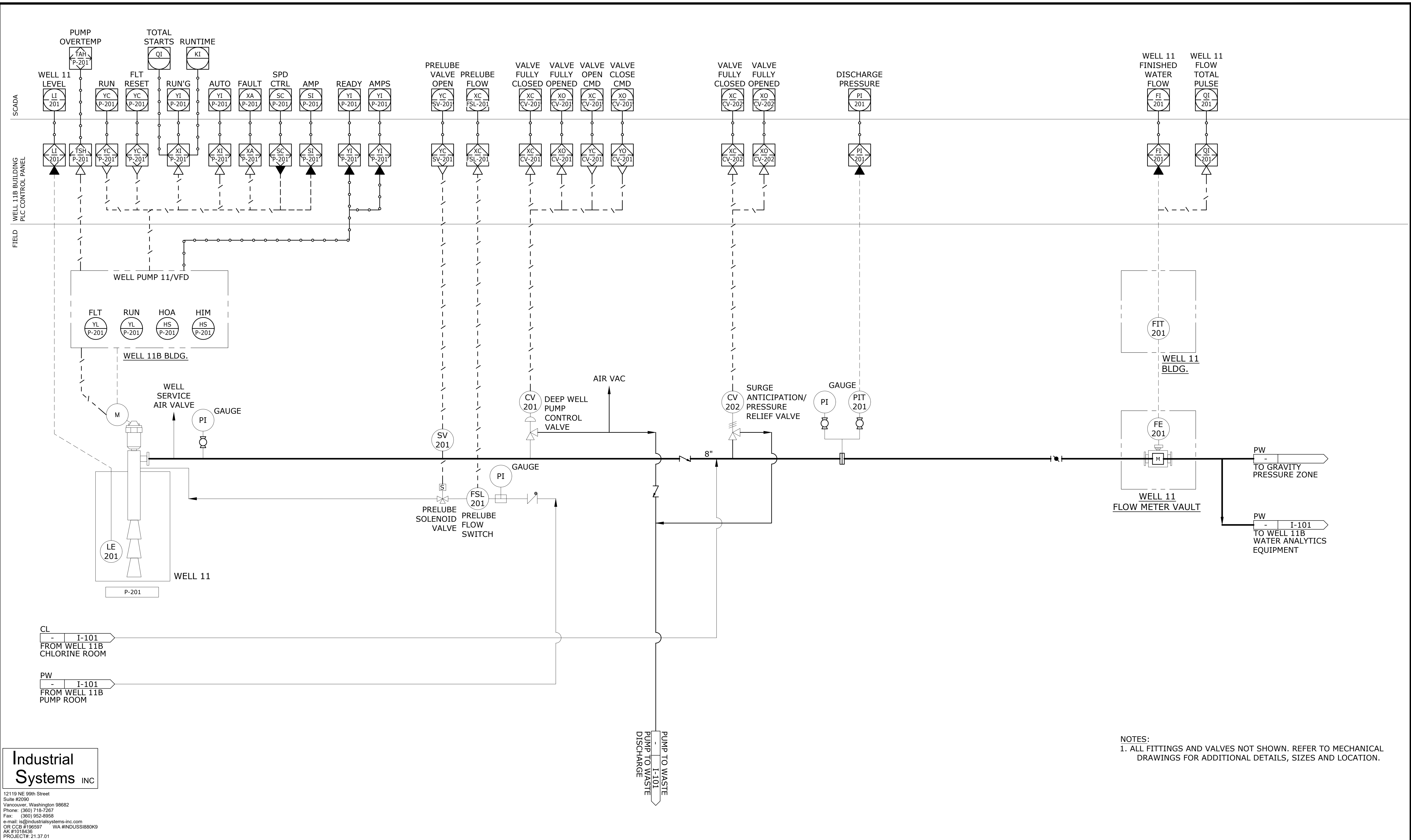


CITY OF PENDLETON
WELL 11-11B

INSTRUMENTATION
P&ID WELL 11B SYSTEM
 PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
I-101
 64 of 65

P:\Projects\21.37.01_MSA_Pendleton_Well_11_&_15\DWG\F-201.dwg I-201 3/1/2024 11:38 AM AVIB 23.1s (LMS Tech)



Industrial Systems INC

12119 NE 99th Street
 Suite #2090
 Vancouver, Washington 98682
 Phone: (360) 718-7267
 Fax: (360) 952-8958
 e-mail: is@industrialsystems-inc.com
 CR CCB #198597 WA #INDUSIS180K9
 AK #1018436
 PROJECT#: 21.37.01

NO.	DATE	BY	REVISION
1	3/1/2024	WRK	PERMIT SET

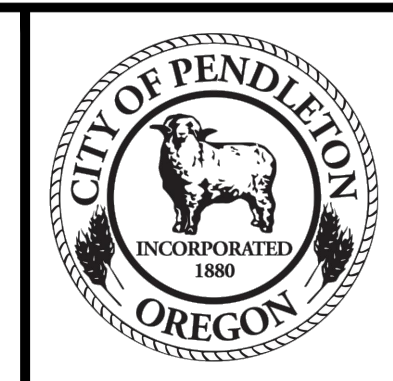
NOTICE

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MQH
DESIGNED
AAB
DRAWN
JEM
CHECKED

REGISTERED PROFESSIONAL
 9751
 James Mitchell
 OREGON
 33E381B9829A6C
 JULY 14, 1991
 JAMES E. MITCHELL
 3/1/2024
 EXPIRES 12/31/24



CITY OF PENDLETON
WELL 11-11B

INSTRUMENTATION
P&ID WELL 11 SYSTEM

PROJECT NO.: 21-3133 SCALE: AS SHOWN DATE: MARCH 2024

SHEET
 I-201
 65 of 65