

CITY OF TUALATIN

SW 108TH AVE WATER RESERVOIR

AND PUMP STATION

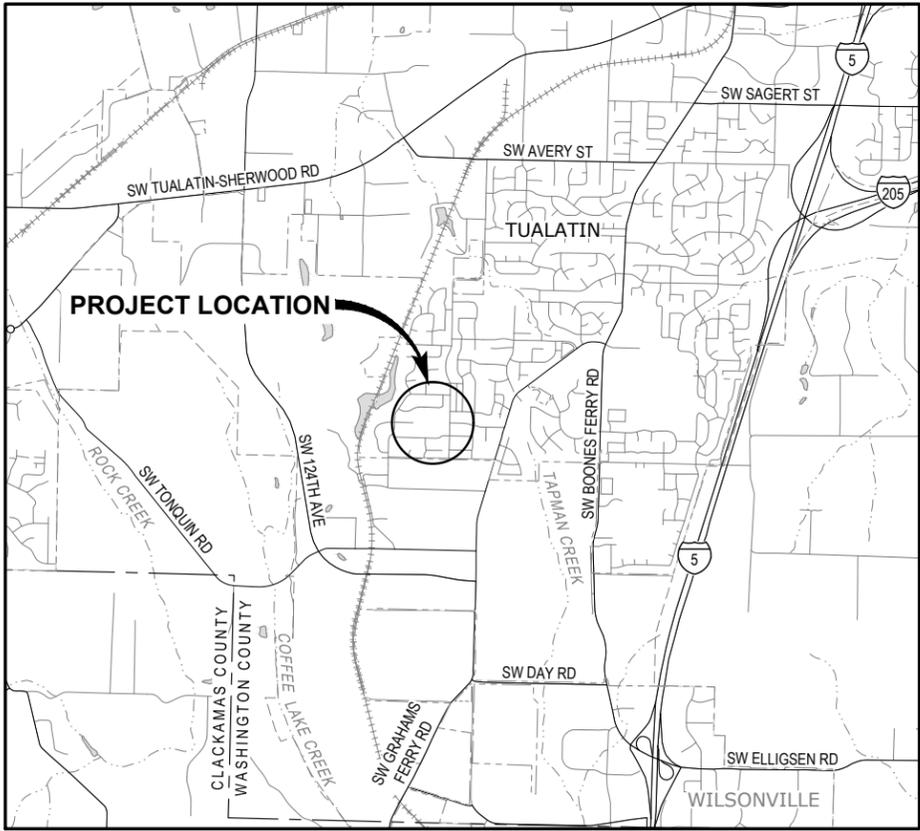


CONDITIONAL USE PERMIT APPLICATION

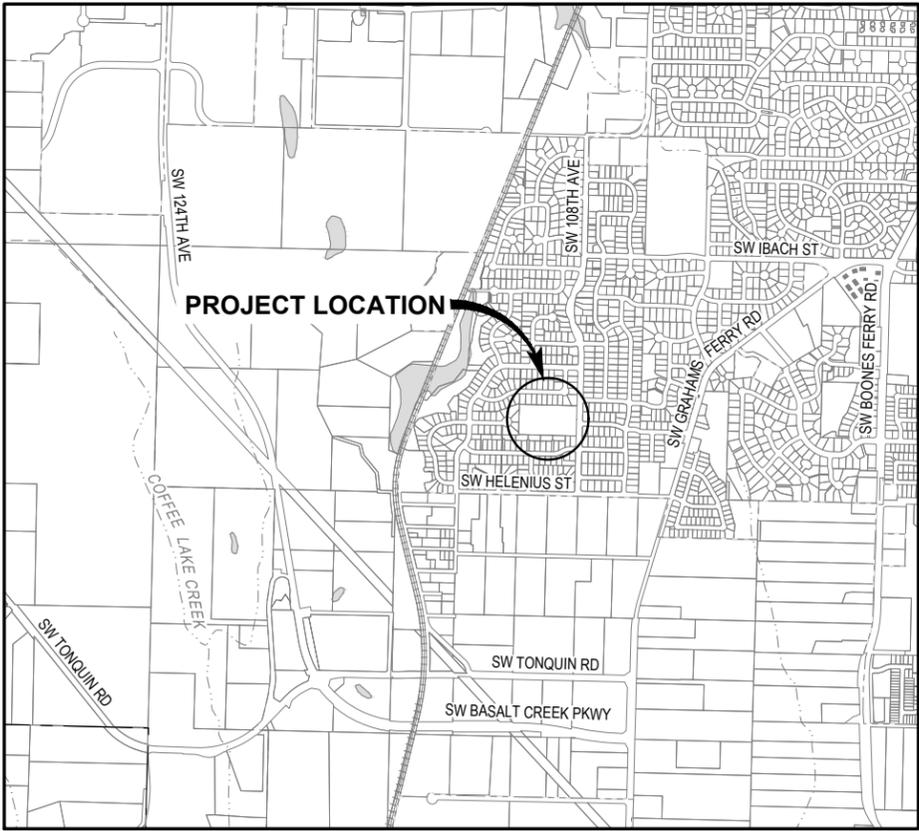
PROJECT NO: W240758OR
APRIL 2025



1 SW COLUMBIA STREET, SUITE 1700
PORTLAND, OREGON 97204
P 503.225.9010



VICINITY MAP
SCALE: 1" = 2000'



LOCATION MAP
SCALE: 1" = 1000'

PROJECT CONTACTS

- CITY PROJECT MANAGER**
ABBY MCFETRIDGE
CITY OF TUALATIN
- CIVIL ENGINEER AND DESIGN PROJECT MANAGER**
ADAM BLAIR, PE
CONSOR
- STRUCTURAL ENGINEER**
ETHAN ALTON, PE, SE
PETERSON STRUCTURAL ENGINEERS
- ELECTRICAL ENGINEER**
JEFFREY HOWARD, PE
R&W
- INSTRUMENTATION & CONTROL**
JEFFREY HOWARD, PE
R&W
- GEOTECHNICAL ENGINEER**
KEVIN WOOD, PE
SHANNON & WILSON

**PRELIMINARY
NOT FOR
CONSTRUCTION**



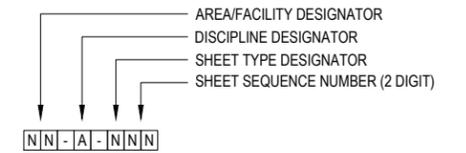
Know what's below.
Call before you dig.

SHEET INDEX

DWG NO	DRAWING TITLE
01 - GENERAL	
01-G-000	COVER SHEET
01-G-001	SHEET INDEX
01-G-002	GENERAL SYMBOLS AND LEGEND
01-G-003	GENERAL ABBREVIATIONS
01-G-004	GENERAL NOTES
01-G-501	CITY OF TUALATIN STANDARD DETAILS - 1
01-G-502	CITY OF TUALATIN STANDARD DETAILS - 2
01-G-503	CWS STANDARD DETAILS - 1
01-G-504	CWS STANDARD DETAILS - 2
01-C - CIVIL	
01-C-001	CIVIL SYMBOLS AND LEGENDS
01-D-001	PROCESS LEGEND AND NOTES
01-D-501	GENERAL PROCESS DETAILS
01-M-001	MECHANICAL LEGENDS AND NOTES
01-E-001	ELECTRICAL LEGEND AND ABBREVIATIONS
01-I-001	INSTRUMENTATION LEGEND AND NOTES
05 - CIVIL	
05-C-010	EXISTING CONDITIONS PLAN AND SURVEY CONTROL - 1
05-C-011	EXISTING CONDITIONS PLAN AND SURVEY CONTROL - 2
05-C-020	TREE PROTECTION PLAN
05-C-050	ESC PLAN COVER SHEET
05-C-051	ESC PLAN PHASE 1 - CLEARING, GRUBBING, AND DEMOLITION
05-C-052	ESC PLAN PHASE 2 - MASS EXCAVATION AND CONSTRUCTION
05-C-053	ESC PLAN PHASE 3 - FINAL GRADING, RUNOFF CONTROL, AND STABILIZATION
05-C-054	ESC NOTES
05-C-055	ESC CWS STANDARD DETAILS - 1
05-C-056	ESC CWS STANDARD DETAILS - 2
05-C-100	SITE LAYOUT PLAN
05-C-110	CONCEPTUAL EXCAVATION PLAN
05-C-111	SITE GRADING PLAN
05-C-120	SITE WATER PIPING PLAN
05-C-121	SITE DRAINAGE PIPING PLAN
05-C-201	RESERVOIR SECTION AND DETAILS
05-C-202	SITE GRADING SECTIONS
05-C-301	SITE ACCESS ROAD PROFILE AND DETAILS
05-C-302	SITE WATER PIPING PROFILES
05-C-303	SITE DRAINAGE PIPING PROFILES
05-C-501	DRAINAGE DETAILS - 1
05-C-502	DRAINAGE DETAILS - 2
05-C-503	CIVIL DETAILS - 1
05-C-504	CIVIL DETAILS - 2
05-C-505	CIVIL DETAILS - 3
05-L-001	LANDSCAPING LEGEND, NOTES, AND PLANT LIST
05-L-100	LANDSCAPING PLAN - 1
05-L-101	LANDSCAPING PLAN - 2
05-L-501	LANDSCAPING DETAILS
10 - RESERVOIR	
10-S-001	RESERVOIR GENERAL STRUCTURAL NOTES - 1
10-S-002	RESERVOIR GENERAL STRUCTURAL NOTES - 2
10-S-003	RESERVOIR STRUCTURAL QUALITY ASSURANCE PLAN
10-S-101	RESERVOIR FLOOR SLAB AND DOME PLANS
10-S-201	RESERVOIR SECTION
10-S-401	RESERVOIR WALL SECTION AND ELEVATION
10-S-501	FLOOR SLAB DETAILS
10-S-502	COREWALL DETAILS
10-S-503	SEISMIC RESTRAINT CABLE DETAILS

10-S-504	PRESTRESSING DETAILS AND NOTES
10-S-505	DOMES AND HATCH REINFORCING DETAILS
10-S-506	WATERSTOP SCHEDULE AND DETAILS
10-S-507	PIPE BLOCK DETAILS
10-S-508	HATCH AND INTERIOR LADDER DETAILS
10-S-509	EXTERIOR GUARD RAIL DETAILS
10-S-510	EXTERIOR LADDER DETAILS
10-D-101	RESERVOIR FLOOR PLAN
10-D-501	SEISMIC VALVE VAULT PLAN AND SECTION
10-D-502	RESERVOIR PIPING PLANS AND SECTIONS - 1
10-D-503	RESERVOIR PIPING PLANS AND SECTIONS - 2
10-D-504	RESERVOIR PIPING PLANS AND SECTIONS - 3
10-D-505	RESERVOIR ROOF VENT DETAILS
10-D-506	RESERVOIR PROCESS DETAILS - 1
10-D-507	RESERVOIR PROCESS DETAILS - 2
10-E-101	ELECTRICAL SITE PLAN
10-E-102	RESERVOIR ROOF PLAN
10-E-103	RESERVOIR SITE GROUNDING PLAN
10-E-501	RESERVOIR SITE GROUNDING DETAILS
10-E-502	RESERVOIR ELECTRICAL DETAILS
10-E-601	RESERVOIR ONE-LINE DIAGRAM
10-E-602	RESERVOIR CONDUIT AND CONDUCTOR SCHEDULES
10-I-501	INSTRUMENTATION DETAILS - 1
10-I-502	INSTRUMENTATION DETAILS - 2
10-I-503	INSTRUMENTATION DETAILS - 3
10-I-601	RESERVOIR SITE PROCESS & INSTRUMENTATION DIAGRAM
20 - PUMP STATION	
20-A-001	PUMP STATION CODE COMPLIANCE AND SCHEDULES
20-A-101	PUMP STATION FLOOR PLAN
20-A-201	PUMP STATION ELEVATIONS - 1
20-A-202	PUMP STATION ELEVATIONS - 2
20-A-210	PUMP STATION SECTIONS
20-A-501	ARCHITECTURAL DETAILS
20-S-001	PUMP STATION GENERAL STRUCTURAL NOTES
20-S-002	PUMP STATION STRUCTURAL QUALITY ASSURANCE PLAN
20-S-101	FOUNDATION PLAN
20-S-102	WALL PLAN
20-S-103	ROOF FRAMING PLAN
20-S-201	STRUCTURAL SECTIONS
20-S-501	STRUCTURAL DETAILS
20-S-502	CMU WALL DETAILS
20-S-503	GENERATOR ENCLOSURE DETAILS
20-D-001	PUMP STATION DESIGN CRITERIA AND MECHANICAL SCHEDULES
20-D-101	PUMP STATION FLOOR PLAN
20-D-301	PUMP STATION SECTIONS
20-D-501	PUMP STATION PROCESS DETAILS
20-M-101	PUMP STATION MECHANICAL FLOOR PLAN
20-M-501	HVAC & PLUMBING SECTION, SCHEDULES, AND DETAILS
20-E-101	PUMP STATION POWER PLAN
20-E-102	PUMP STATION SIGNAL PLAN
20-E-103	PUMP STATION FACILITIES PLAN
20-E-501	PUMP STATION ELECTRICAL DETAILS - 1
20-E-502	PUMP STATION ELECTRICAL DETAILS - 2
20-E-601	PUMP STATION AND ASR ONE-LINE DIAGRAM
20-E-602	PUMP STATION CIRCUIT AND PANEL SCHEDULES - 1
20-E-603	PUMP STATION CIRCUIT AND PANEL SCHEDULES - 2
20-I-601	PUMP STATION PROCESS & INSTRUMENTATION DIAGRAM
30 - EXISTING ASR WELL HOUSE	
30-E-101	ASR ELECTRICAL PLAN

SHEET INDEX DESIGNATIONS



AREA/FACILITY DESIGNATORS

- 01 GENERAL
- 05 CIVIL
- 10 RESERVOIR
- 20 PUMP STATION
- 30 EXISTING ASR WELL HOUSE

DISCIPLINE DESIGNATORS

- G GENERAL
- C CIVIL
- L LANDSCAPE
- A ARCHITECTURAL
- S STRUCTURAL
- D PROCESS
- P PLUMBING
- M MECHANICAL (HVAC)
- F FIRE PROTECTION
- E ELECTRICAL
- I INSTRUMENTATION AND P&IDS

SHEET TYPE DESIGNATORS

- 0 GENERAL
- 1 PLAN VIEWS
- 2 ELEVATIONS
- 3 SECTIONS
- 4 LARGE SCALE VIEWS
- 5 DETAILS
- 6 SCHEDULES AND DIAGRAMS
- 7 USER DEFINED
- 8 USER DEFINED
- 9 3D REPRESENTATION

Consultant:

This document, ideas, and designs incorporated herein, are an instrument of professional service, and is not to be used, in whole or in part, for any other project without the written authorization of CONSOR.

Sub Consultant:

CONDITIONAL USE PERMIT APPLICATION

Engineer's Seal:



Client / Owner:

Project Title:

**CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION**

PERMIT

SHEET INDEX

Designed By: TMS	Consor Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 01-G-001
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

A

B

C

D

MATERIAL PATTERNS

EARTH 	CONCRETE 	CRUSHED ROCK 	GRAVEL / GROUT 	STEEL 	ASPHALT CONCRETE 	CMU (SMOOTH) 	CMU (SPLITFACE)
					SECTION	ELEVATION	ELEVATION
EARTH (PACKED) 	GRATING 	DIAMOND PLATE 	TRENCH DRAIN 		PLAN	PLAN	PLAN
	PLAN	PLAN	PLAN			SECTION	SECTION
	SECTION	SECTION	SECTION				

VIEW TITLE DESIGNATIONS

PLAN AND PROFILE	ELEVATION	SECTION	DETAIL
PLAN SCALE: 1/4"=1'-0"			
	ELEVATION LETTER DESIGNATION	SECTION LETTER DESIGNATION	DETAIL NUMBER
	SHEET WHERE ELEVATION IS SHOWN *	SHEET WHERE SECTION IS SHOWN *	SHEET FROM WHICH DETAIL IS TAKEN *
PROFILE SCALE: 1"=X' HORIZ, 1"=X' VERT			
	ELEVATION LETTER DESIGNATION	SECTION LETTER DESIGNATION	DETAIL NUMBER
	SHEET FROM WHICH ELEVATION IS TAKEN *	SHEET FROM WHICH SECTION IS TAKEN *	SHEET FROM WHICH DETAIL IS TAKEN *
	ADDITIONAL SHEETS (IF APPLICABLE)	ADDITIONAL SHEETS (IF APPLICABLE)	ADDITIONAL SHEETS (IF APPLICABLE)

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

NORTH ARROW AND SCALE BAR

GENERAL NOTE:
1. THIS IS A STANDARD GENERAL SHEET, NOT ALL OF THE INFORMATION SHOWN MAY BE USED ON THIS PROJECT.

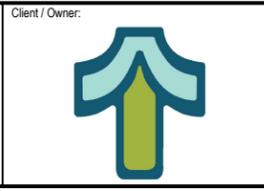
Consultant:

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Sub Consultant:

CONDITIONAL USE PERMIT APPLICATION

Engineer's Seal:



Client / Owner:
**CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION**

Project Title:
**01 - GENERAL
GENERAL SYMBOLS AND LEGENDS**

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 01-G-002
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

1	2	3	4	5	6	7
<p>@ AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS</p> <p>AB ANCHOR BOLT</p> <p>ABAN(D) ABANDON(ED)</p> <p>ABS ACRYLONITRILE BUTADIENE STYRENE</p> <p>ABV ABOVE / ALCOHOL BY VOLUME</p> <p>AC ASPHALTIC CONCRETE</p> <p>ACI AMERICAN CONCRETE INSTITUTE</p> <p>ACP ASPHALTIC CONCRETE PAVING</p> <p>ADJ ADJUSTABLE</p> <p>ADJC ADJACENT</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AFG ABOVE FINISHED GRADE</p> <p>AHR ANCHOR</p> <p>AL ALUMINUM</p> <p>ALT ALTERNATE</p> <p>AMP AMPERE</p> <p>ANSI AMERICAN NATIONAL STANDARDS INSTITUTE</p> <p>APPROX APPROXIMATE</p> <p>APPVD APPROVED</p> <p>APWA AMERICAN PUBLIC WORKS ASSOCIATION</p> <p>ARCH ARCHITECTURAL</p> <p>ARV AIR RELEASE VALVE</p> <p>ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS</p> <p>ASR AQUIFER STORAGE & RECOVERY</p> <p>ASSN ASSOCIATION</p> <p>ASSY ASSEMBLY</p> <p>ASTM AMERICAN SOCIETY FOR TESTING & MATERIALS</p> <p>ATM ATMOSPHERE</p> <p>AUTO AUTOMATIC</p> <p>AUX AUXILIARY</p> <p>AVE AVENUE</p> <p>AVG AVERAGE</p> <p>AWWA AMERICAN WATER WORKS ASSOCIATION</p> <p>B&S BELL & SPIGOT</p> <p>BC BOLT CIRCLE</p> <p>BD BOARD</p> <p>BETW BETWEEN</p> <p>BF BOTH FACE</p> <p>BFD BACKFLOW PREVENTION DEVICE</p> <p>BFILL BACKFILL</p> <p>BFV BUTTERFLY VALVE</p> <p>BHP BRAKE HORSEPOWER</p> <p>BKGD BACKGROUND</p> <p>BLDG BUILDING</p> <p>BLK BLOCK</p> <p>BLVD BOULEVARD</p> <p>BM BENCHMARK / BEAM</p> <p>BMP BEST MANAGEMENT PRACTICES</p> <p>BO BLOW-OFF</p> <p>BOC BACK OF CURB</p> <p>BS BOTH SIDES</p> <p>BSMT BASEMENT</p> <p>BTF BOTTOM FACE</p> <p>BTU BRITISH THERMAL UNIT</p> <p>BV BALL VALVE</p> <p>BW BOTH WAYS</p> <p>C CELSIUS</p> <p>C TO C CENTER TO CENTER</p> <p>CARV COMBINATION AIR RELEASE VALVE</p> <p>CATV CABLE TELEVISION</p> <p>CB CATCH BASIN</p> <p>CCP CONCRETE CYLINDER PIPE</p> <p>CCW COUNTER CLOCKWISE</p> <p>CDOT COLORADO DEPARTMENT OF TRANSPORTATION</p> <p>CFM CUBIC FEET PER MINUTE</p> <p>CFS CUBIC FEET PER SECOND</p> <p>CHAN CHANNEL</p> <p>CHEM CHEMICAL</p> <p>CHFR CHAMFER</p> <p>CHKV CHECK VALVE</p> <p>CI CAST IRON</p> <p>CIP CAST IRON PIPE</p> <p>CIPC CAST IN PLACE CONCRETE</p> <p>CISP CAST IRON SOIL PIPE</p> <p>CJ CONSTRUCTION JOINT</p> <p>CL OR C/L CENTER LINE</p> <p>CL2 CHLORINE</p> <p>CLG CEILING</p> <p>CLJ CONTROL JOINT</p> <p>CLR CLEAR</p> <p>CLSM CONTROLLED LOW STRENGTH MATERIAL</p> <p>CMP CORRUGATED METAL PIPE</p> <p>CMU CONCRETE MASONRY UNIT</p> <p>CND CONDUIT</p> <p>CO CLEANOUT</p> <p>COL COLUMN</p> <p>COMB COMBINATION</p> <p>CONC CONCRETE</p> <p>CONN CONNECTION</p> <p>CONST CONSTRUCTION</p> <p>CONT CONTINUOUS / CONTINUATION</p> <p>CONTR CONTRACT(OR)</p> <p>COORD COORDINATE</p> <p>COP COPPER</p> <p>CORP CORPORATION</p> <p>CORR CORRUGATED</p> <p>CP CONTROL POINT</p> <p>CPLG COUPLING</p> <p>CPVC CHLORINATED POLYVINYL CHLORIDE</p> <p>CR CRUSHED ROCK</p> <p>CS CARBON STEEL</p> <p>CSP CONCRETE SEWER PIPE</p> <p>CT COURT</p> <p>CTR CENTER</p> <p>CU CUBIC</p> <p>CULV CULVERT</p> <p>CV CONTROL VALVE</p> <p>CW CLOCKWISE / COLD WATER</p> <p>CY CUBIC YARDS</p> <p>CYL CYLINDER LOCK</p> <p>D DRAIN</p> <p>DC DIRECT CURRENT</p> <p>DEFL DEFLECTION</p> <p>DEQ DEPARTMENT OF ENVIRONMENTAL QUALITY</p> <p>DET DETAIL</p> <p>DI DUCTILE IRON</p> <p>DIA DIAMETER</p> <p>DIM DIMENSION</p> <p>DIR DIRECTION</p> <p>DIST DISTANCE</p> <p>DN DOWN</p> <p>DR DRIVE</p> <p>DS DOWNSPOUT</p> <p>DWG DRAWING</p> <p>DWL DOWEL</p> <p>DWV DRAIN WASTE AND VENT</p> <p>DWY DRIVEWAY</p> <p>E / ELEC ELECTRICAL</p> <p>EA EACH</p> <p>ECC ECCENTRIC</p> <p>EF EACH FACE</p> <p>EL ELEVATION</p> <p>ELB ELBOW</p> <p>ENCL ENCLOSURE</p> <p>EOP EDGE OF PAVEMENT</p> <p>EQ EQUAL</p> <p>EQL SP EQUALLY SPACED</p> <p>EQUIP EQUIPMENT</p> <p>ESMT EASEMENT</p> <p>EW EACH WAY</p> <p>EXC EXCAVATE</p> <p>EXIST EXISTING</p> <p>EXP EXPANSION</p> <p>EXP BT EXPANSION BOLT</p> <p>EXP JT EXPANSION JOINT</p> <p>EXT EXTERIOR</p> <p>F FAHRENHEIT</p> <p>F TO F FACE TO FACE</p> <p>FAB FABRICATE</p> <p>FB FLAT BAR</p> <p>FCA FLANGED COUPLING ADAPTER</p> <p>FCO FLOOR CLEANOUT</p> <p>FD FLOOR DRAIN</p> <p>FDN FOUNDATION</p> <p>FEXT FIRE EXTINGUISHER</p> <p>FF FINISHED FLOOR / FAR FACE</p> <p>FGL FIBERGLASS</p> <p>FH FIRE HYDRANT</p> <p>FIN FINISH(ED)</p> <p>FIPT FEMALE IRON PIPE THREAD</p> <p>FITG FITTING</p> <p>FL FLOOR LINE</p> <p>FLEX FLEXIBLE</p> <p>FLG FLANGE</p> <p>FLL FLOW LINE</p> <p>FLR FLOOR</p> <p>FM FORCE MAIN</p> <p>FO FIBER OPTIC</p> <p>FOC FACE OF CONCRETE</p> <p>FOF FACE OF FINISH</p> <p>FOM FACE OF MASONRY</p> <p>FOS FACE OF STUDS</p> <p>FPM FEET PER MINUTE</p> <p>FPS FEET PER SECOND</p> <p>FRP FIBERGLASS REINFORCED PLASTIC</p> <p>FT FEET / FOOT</p> <p>FTG FOOTING</p> <p>FUT FUTURE</p> <p>FXTR FIXTURE</p> <p>G GAS</p> <p>GA GAUGE</p> <p>GAL GALLON</p> <p>GALV GALVANIZED</p> <p>GC GROOVED COUPLING</p> <p>GFA GROOVED FLANGE ADAPTER</p> <p>GI GALVANIZED IRON</p> <p>GIP GALVANIZED IRON PIPE</p> <p>GJ GRIP JOINT</p> <p>GL GLASS</p> <p>GLV GLOBE VALVE</p> <p>GND GROUND</p> <p>GPD GALLONS PER DAY</p> <p>GPH GALLONS PER HOUR</p> <p>GPM GALLONS PER MINUTE</p> <p>GPS GALLONS PER SECOND</p> <p>GR GRADE</p> <p>GR LN GRADE LINE</p> <p>GRTG GRATING</p> <p>GV GATE VALVE</p> <p>GRVL GRAVEL</p> <p>GYP GYPSUM</p> <p>HB HOSE BIBB</p> <p>HC HOLLOW CORE</p> <p>HDPE HIGH DENSITY POLYETHYLENE</p> <p>HDR HEADER</p> <p>HDWE HARDWARE</p> <p>HGR HANGER</p> <p>HGT HEIGHT</p> <p>HH HANDHOLD</p> <p>HM HOLLOW METAL</p> <p>HMAC HOT MIX ASPHALT CONCRETE</p> <p>HNDRL HANDRAIL</p> <p>HOA HAND-OFF-AUTO</p> <p>HOR HAND-OFF-REMOTE</p> <p>HORIZ HORIZONTAL</p> <p>HP HIGH PRESSURE / HORSEPOWER</p> <p>HPG HIGH PRESSURE GAS</p> <p>HPT HIGH POINT</p> <p>HR HOUR</p> <p>HSB HIGH STRENGTH BOLT</p> <p>HV HOSE VALVE</p> <p>HVAC HEATING, VENTILATION, AIR CONDITIONING</p> <p>HWL HIGH WATER LINE</p> <p>HWY HIGHWAY</p> <p>HYD HYDRANT</p> <p>HYDR HYDRAULIC</p> <p>I&C INSTRUMENTATION & CONTROL</p> <p>IAW IN ACCORDANCE WITH</p> <p>ID INSIDE DIAMETER</p> <p>IE INVERT ELEVATION</p> <p>IF INSIDE FACE</p> <p>IMPVIT IMPROVEMENT</p> <p>IN INCH</p> <p>INCC INCLUDE(D)(ING)</p> <p>INFL INFLENT</p> <p>INJ INJECTION</p> <p>INSTL INSTALLATION</p> <p>INSUL INSULATION</p> <p>INTER INTERCEPTOR</p> <p>INTR INTERIOR</p> <p>INV INVERT</p> <p>IP IRON PIPE</p> <p>IPR IRON PIPE THREAD</p> <p>IR IRON ROD</p> <p>IRRIG IRRIGATION</p> <p>JT JOINT</p> <p>JUNC JUNCTION</p> <p>KPL KICK PLATE</p> <p>KVA KILOVOLT AMPERE</p> <p>KW KILOWATT</p> <p>KWY KEYWAY</p> <p>L LENGTH</p> <p>LAB LABORATORY</p> <p>LAV LAVATORY</p> <p>LB POUND</p> <p>LF LINEAR FOOT</p> <p>LIN LINEAL</p> <p>LN LANE</p> <p>LOC LOCATION</p> <p>LONG LONGITUDINAL</p> <p>LP LOW PRESSURE</p> <p>LPT LOW POINT</p> <p>LRG LARGE</p> <p>LS LONG SLEEVE / LUMP SUM</p> <p>LT LEFT</p> <p>LVL LEVEL</p> <p>LWL LOW WATER LINE</p> <p>MAN MANUAL</p> <p>MAT MATERIAL</p> <p>MAX MAXIMUM</p> <p>MCC MOTOR CONTROL CENTER</p> <p>MCP MASTER CONTROL PANEL</p> <p>MECH MECHANICAL</p> <p>MET METAL</p> <p>MFR MANUFACTURER</p> <p>MGD MILLION GALLONS PER DAY</p> <p>MH MANHOLE</p> <p>MIN MINIMUM</p> <p>MIPT MALE IRON PIPE THREAD</p> <p>MISC MISCELLANEOUS</p> <p>MJ MECHANICAL JOINT</p> <p>MON MONUMENT / MONOLITHIC</p> <p>MOT MOTOR</p> <p>MP MILEPOST</p> <p>MSL MEAN SEAL LEVEL</p> <p>MTD MOUNTED</p> <p>NA NOT APPLICABLE</p> <p>NAVD NORTH AMERICAN VERTICAL DATUM</p> <p>NC NORMALLY CLOSED</p> <p>NF NEAR FACE</p> <p>NIC NOT IN CONTRACT</p> <p>NO / NO. NORMALLY OPEN / NUMBER</p> <p>NOM NOMINAL</p> <p>NORM NORMAL</p> <p>NRS NON-RISING STEM</p> <p>NTS NOT TO SCALE</p> <p>O TO O OUT TO OUT</p> <p>OC ON CENTER</p> <p>OD OUTSIDE DIAMETER</p> <p>OF OVERFLOW / OUTSIDE FACE</p> <p>OPNG OPENING</p> <p>OPP OPPOSITE</p> <p>ORIG ORIGINAL</p> <p>OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION</p> <p>OVHD OVERHEAD</p> <p>P&ID PROCESS & INSTRUMENTATION DIAGRAM</p> <p>PC POINT OF CURVE</p> <p>PCC POINT OF COMPOUND CURVE</p> <p>PCVC POINT OF CURVATURE ON VERTICAL CURVE</p> <p>PE PLAIN END</p> <p>PERF PERFORATED</p> <p>PERM PERMANENT</p> <p>PERP PERPENDICULAR</p> <p>PG PRESSURE GAUGE</p> <p>PH PIPE HANGER</p> <p>PI POINT OF INTERSECTION</p> <p>PVC POINT OF INTERSECTION ON VERTICAL CURVE</p> <p>PL OR P/L PROPERTY LINE / PLATE / PLASTIC</p> <p>PLBG PLUMBING</p> <p>PNL PANEL</p> <p>POC POINT OF CURVATURE</p> <p>POLY POLYETHYLENE</p> <p>PP POWER POLE / PURPLE PIPE</p> <p>PRC POINT OF REVERSE CURVATURE</p> <p>PRCST PRECAST</p> <p>PREP PREPARATION</p> <p>PRESS PRESSURE</p> <p>PRKG PARKING</p> <p>PROP PROPERTY</p> <p>PRV PRESSURE REDUCING VALVE</p> <p>PS PUMP STATION</p> <p>PSIG POUNDS PER SQUARE INCH GAUGE</p> <p>PSL PIPE SLEEVE</p> <p>PSPT PIPE SUPPORT</p> <p>PT POINT OF TANGENCY</p> <p>PTVC POINT OF TANGENCY ON VERTICAL CURVE</p> <p>PTW PUMP TO WASTE</p> <p>PV PLUG VALVE</p> <p>PVC POLYVINYL CHLORIDE</p> <p>PVMT PAVEMENT</p> <p>PW POTABLE WATER</p> <p>PWR POWER</p> <p>QTY QUANTITY</p> <p>RAD RADIUS</p> <p>RC REINFORCED CONCRETE</p> <p>RCP REINFORCED CONCRETE PIPE</p> <p>RD ROAD / ROOF DRAIN</p> <p>RDCR REDUCER</p> <p>REF REFERENCE</p> <p>REINF REINFORCE(D)(ING)(MENT)</p> <p>REQ'D REQUIRED</p> <p>RES RESERVOIR</p> <p>RESTR RESTRAINED</p> <p>RFA RESTRAINED FLANGE COUPLING ADAPTER</p> <p>RM ROOM</p> <p>RND ROUND</p> <p>RO ROUGH OPENING</p> <p>R/W RIGHT-OF-WAY</p> <p>RPBPD REDUCED PRESSURE BACKFLOW PREVENTION DEVICE</p> <p>RPM REVOLUTIONS PER MINUTE</p> <p>RR RAILROAD</p> <p>RST REINFORCED STEEL</p> <p>RT RIGHT</p> <p>SALV SALVAGE</p> <p>SAN SANITARY</p> <p>SC SOLID CORE</p> <p>SCHED SCHEDULE</p> <p>SD STORM DRAIN</p> <p>SDL SADDLE</p> <p>SDR STANDARD DIMENSION RATIO</p> <p>SECT SECTION</p> <p>SHLDR SHOULDER</p> <p>SHT SHEET</p> <p>SIM SIMILAR</p> <p>SLP SLOPE</p> <p>SLV SLEEVE</p> <p>SOLN SOLUTION</p> <p>SP SOIL PIPE / SEWER PIPE</p> <p>SPCL SPECIAL</p> <p>SPEC(S) SPECIFICATION(S)</p> <p>SPG SPACING</p> <p>SPL SPOOL</p> <p>SPRT SUPPORT</p> <p>SQ SQUARE</p> <p>SQ FT SQUARE FOOT</p> <p>SQ IN SQUARE INCH</p> <p>SQ YD SQUARE YARD</p> <p>SS SANITARY SEWER</p> <p>SST STAINLESS STEEL</p> <p>ST STREET</p> <p>STA STATION</p> <p>STD STANDARD</p> <p>STL STEEL</p> <p>STOR STORAGE</p> <p>STR STRAIGHT</p> <p>STRUCT STRUCTURE / STRUCTURAL</p> <p>SUBMG SUBMERGED</p> <p>SUCT SUCTION</p> <p>SV SOLENOID VALVE</p> <p>SW SIDEWALK</p> <p>SWD SIDEWATER DEPTH</p> <p>SWGR SWITCH GEAR</p> <p>SYMM SYMMETRICAL</p> <p>SYS SYSTEM</p> <p>T OR TEL TELEPHONE</p> <p>T&B TOP & BOTTOM</p> <p>TAN TANGENCY</p> <p>TB THRUST BLOCK</p> <p>TBM TEMPORARY BENCHMARK</p> <p>TC TOP OF CONCRETE / TOP OF CURB</p> <p>TCE TEMPORARY CONSTRUCTION EASEMENT</p> <p>TDH TOTAL DYNAMIC HEAD</p> <p>TEMP TEMPERATURE / TEMPORARY</p> <p>T&G TONGUE & GROOVE</p> <p>THK THICK / THICKNESS</p> <p>THRD THREAD (ED)</p> <p>THRU THROUGH</p> <p>TP TEST PIT / TOP OF PAVEMENT / TURNING POINT</p> <p>TRANS TRANSITION</p> <p>TSP TRI-SODIUM PHOSPHATE</p> <p>TST TOP OF STEEL</p> <p>TW TOP OF WALL</p> <p>TYP TYPICAL</p> <p>UG UNDERGROUND</p> <p>UH UNIT HEATER</p> <p>UN UNION</p> <p>UON UNLESS OTHERWISE NOTED</p> <p>USGS UNITED STATES GEOLOGIC SURVEY</p> <p>V VENT / VOLT</p> <p>VAC VACUUM</p> <p>VB VACUUM BREAKER</p> <p>VBOX VALVE BOX</p> <p>VC VERTICAL CURVE</p> <p>VERT VERTICAL</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>VOL VOLUME</p> <p>VCP VITRIFIED CLAY PIPE</p> <p>VTR VENT THROUGH ROOF</p> <p>W WATER</p> <p>W/ WITH</p> <p>W/IN WITHIN</p> <p>W/O WITHOUT</p> <p>WW WALL TO WALL</p> <p>WD WOOD</p> <p>WF WIDE FLANGE</p> <p>WH WATER HEATER</p> <p>WI WROUGHT IRON</p> <p>WM WATER METER</p> <p>WP WORKING POINT / WATERPROOFING</p> <p>WQ WATER QUALITY</p> <p>WS WATER SERVICE</p> <p>WT WEIGHT</p> <p>WTP WATER TREATMENT PLANT</p> <p>WTRT WATERTIGHT</p> <p>WWF WELDED WIRE FABRIC</p> <p>WWTF WASTEWATER TREATMENT FACILITY</p> <p>WWTP WASTEWATER TREATMENT PLANT</p> <p>X SECT CROSS SECTION</p> <p>XFMR TRANSFORMER</p> <p>YD YARD DRAIN / YARD</p> <p>YH YARD HYDRANT</p> <p>YR YEAR</p> <p>ZN ZINC</p>						

GENERAL NOTE:
1. THESE ARE STANDARD ABBREVIATIONS, NOT ALL OF THESE MAY BE USED ON THIS PROJECT.

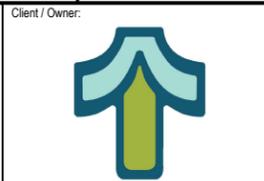
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Sub Consultant:

CONDITIONAL USE PERMIT APPLICATION

Engineer's Seal:



Client / Owner:
**CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION**

Project Title:
**01 - GENERAL
GENERAL ABBREVIATIONS**

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	01-G-003
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

TOPOGRAPHIC LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED		SCHMATIC	SCHMATIC
WATERLINE	--- 10"W ---	— 12"DI W —	MANHOLE	⊙	⊙		— —	— — BUTTERFLY VALVE
ELECTRICITY (UNDERGROUND)	--- E ---	— E —	CLEAN-OUT	⊙	⊙		— —	— — GATE VALVE
OVERHEAD UTILITY	--- OVHD ---	— OVHD —	CATCH BASIN/FIELD INLET	⊞	⊞		— —	— — GLOBE VALVE
GAS	--- 4"G ---	— 4"G —	THRUST BLOCK	△	▲		— —	— — BALL VALVE
TELEPHONE/TELEMETRY	--- T ---	— T —	VALVE	⊗	⊗		— —	— — BALANCING VALVE
CABLE TELEVISION	--- CATV ---	— CATV —	AIR INJECTION ASSEMBLY	⊞	⊞		— —	— — PLUG VALVE (TOP)
COMMUNICATION	--- COM ---	— COM —	BLOW-OFF ASSEMBLY (PERMANENT)	⊞	⊞		— —	— — PLUG VALVE (SIDE)
FIBER OPTIC	--- FO ---	— FO —	BLOW-OFF ASSEMBLY (TEMPORARY)	⊞	⊞		— —	— — 3-WAY PLUG VALVE
SANITARY SEWER LINE	--- 8"SS ---	— 8"SS —	AIR RELEASE ASSEMBLY	⊞	⊞		— —	— — CHECK VALVE
SANITARY SEWER FORCE MAIN	--- 6"SSFM ---	— 6"FM —	FIRE HYDRANT ASSEMBLY	⊞	⊞		— —	— — SWING CHECK VALVE
STORM DRAIN	--- 8"SD ---	— 8"SD —	WATER METER	⊞	⊞		— —	— — DOUBLE CHECK ASSEMBLY
DRAIN	--- D ---	— D —	FIRE DEPARTMENT CONNECTION	⊞	⊞		— —	— — BALL SWING CHECK
CULVERT	— 18"SD —	— 18"SD —	WATER IRRIGATION VALVE	⊞	⊞		— —	— — SILENT CHECK VALVE
ABANDONED PIPE	--- 10"W (ABAND) ---	— 10"W (ABAND) —	PULL BOX/JUNCTION BOX	⊞	⊞		— —	— — PRESSURE REDUCING VALVE
DEMOLISH/ REMOVE	---	--- x x x x x x x x x x ---	COM RISER	⊞	⊞		— —	— — ALTITUDE CONTROL VALVE
DRAINAGE DITCH	---	---	UTILITY POLE	⊞	⊞		— —	— — SOLENOID VALVE
TOP OF SLOPE TOP	— TOP —	GUY WIRE	⊞	⊞		— —	— — RELIEF VALVE
TOE OF SLOPE TOE	— TOE —	LIGHT POST	⊞	⊞		— —	— — NEEDLE VALVE
CUT	---	— C —	STREET LIGHT	⊞	⊞		— —	— — HOSE VALVE
FILL	---	— F —	TRANSFORMER	⊞	⊞		— —	— — REDUCED PRESSURE BACKFLOW PREVENTER W/ GATE VALVES
BARBWIRE FENCE	— x x x x x x x x x x —	— x x x x x x x x x x —	ELECTRICAL METER	⊞	⊞		— —	— — HOSE BIBB
CHAIN LINK FENCE	— o o o o o o o o o o —	— o o o o o o o o o o —	ELECTRICAL CABINET	⊞	⊞		— —	
WOOD FENCE	— □ □ □ □ □ □ □ □ —	— □ □ □ □ □ □ □ □ —	GAS METER	⊞	⊞		— —	
TEMPORARY SILT FENCE	— o o o o o o o o o o —	— □ □ □ □ □ □ □ □ —	GAS VALVE	⊞	⊞		— —	
GUARDRAIL	— o o o o o o o o o o —	— □ □ □ □ □ □ □ □ —	MAILBOX	⊞	⊞		— —	
ROCK WALL	— o o o o o o o o o o —	— □ □ □ □ □ □ □ □ —	SIGN	⊞	⊞		— —	
TREE/BUSH LINE	— w w w w w w w w w w —	— □ □ □ □ □ □ □ □ —	TREE DECIDUOUS	⊞	⊞		— —	
WETLAND	— w w w w w w w w w w —	— □ □ □ □ □ □ □ □ —	TREE CONIFEROUS	⊞	⊞		— —	
CENTERLINE	— C —	— C —	TREE TO BE REMOVED	⊞	⊞		— —	
RIGHT-OF-WAY	— RW —	— RW —	SURFACE ELEVATION	+ 176.63	+ 176.63		— —	
PROPERTY LINE	— P —	— P —	WETLAND FLAG	⊞	⊞		— —	
EASEMENT	— E —	— E —	BENCHMARK	⊞	⊞		— —	
EDGE OF PAVEMENT/AC	— P —	— P —	IRON ROD	⊞	⊞		— —	
PAVEMENT STRIPING	— P —	— P —	MONUMENT	⊞	⊞		— —	
EDGE OF GRAVEL	— P —	— P —	BORE/ POTHOLE	⊞	⊞		— —	
CURB	— P —	— P —	TEST PIT	⊞	⊞		— —	
SIDEWALK	— P —	— P —	BOLLARD	⊞	⊞		— —	
STRUCTURE OR FACILITY	— P —	— P —					— —	
CONTOUR MINOR	— 200 —	— 200 —					— —	
CONTOUR MAJOR	— 200 —	— 200 —					— —	

GENERAL NOTE:
 1. THIS IS A STANDARD CIVIL LEGEND, NOT ALL OF THE INFORMATION SHOWN MAY BE USED ON THIS PROJECT.



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 Sub Consultant:

CONDITIONAL USE PERMIT APPLICATION

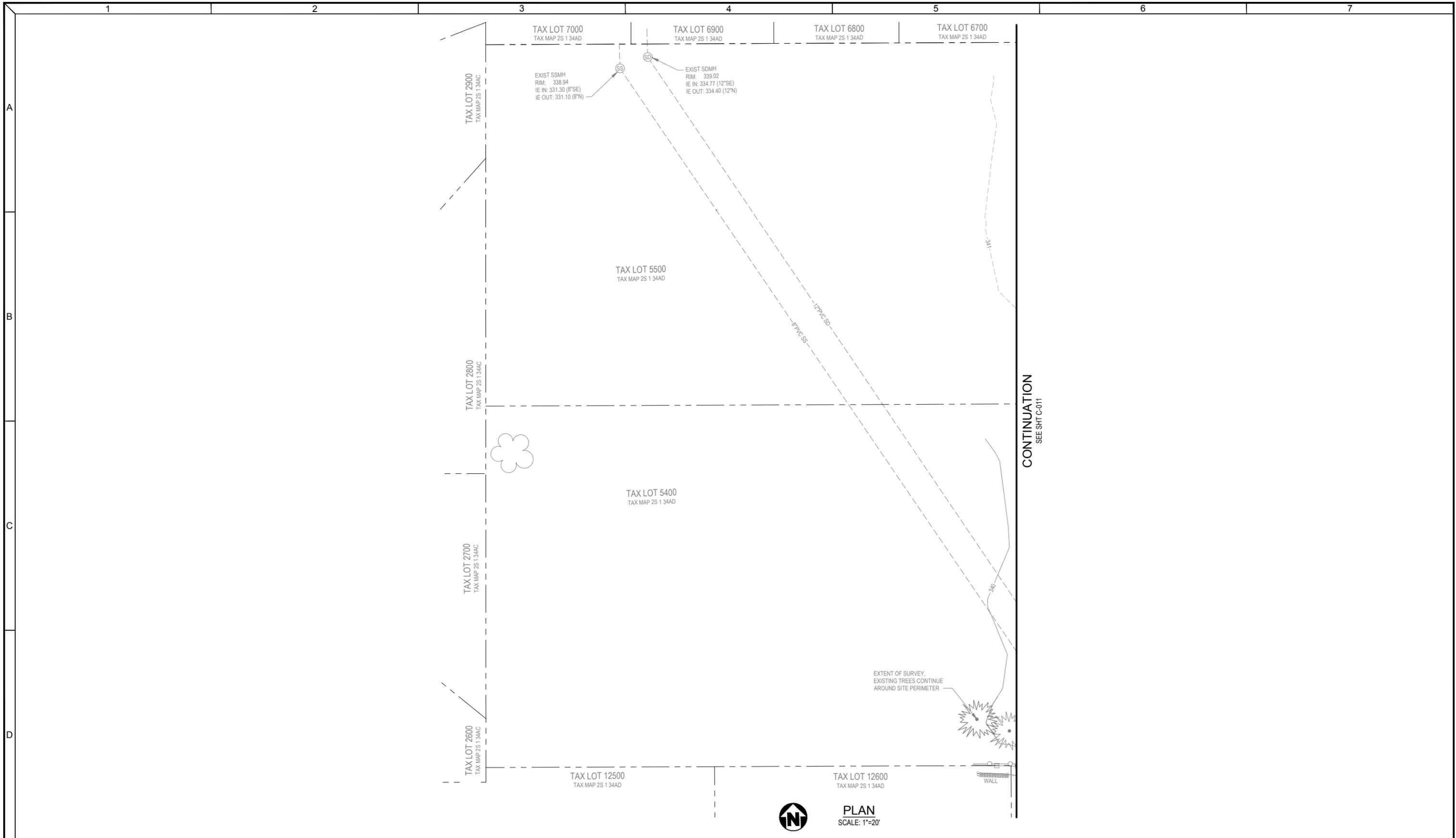
Engineer's Seal:



Client / Owner:
 Project Title:
 CITY OF TUALATIN
 SW 108TH AVE WATER RESERVOIR
 AND PUMP STATION

01 - GENERAL
 CIVIL SYMBOLS AND LEGENDS

Designed By: TMS	Consor Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 01-C-001
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE



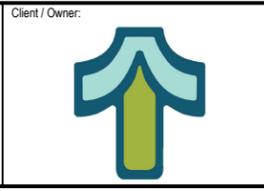
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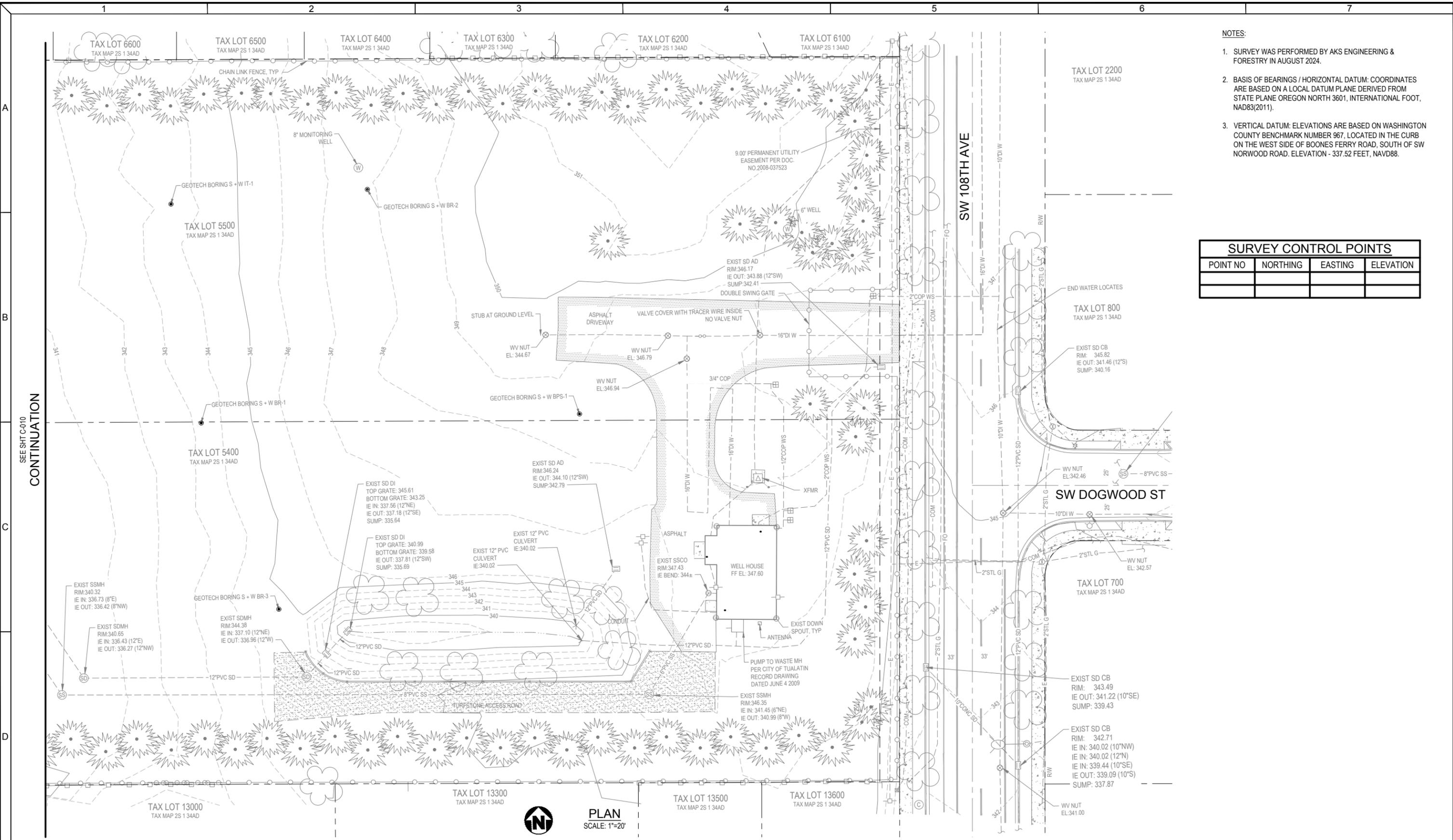
Project Title:

CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION

05 - CIVIL

EXISTING CONDITIONS PLAN
AND SURVEY CONTROL - 1

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 05-C-010
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE



- NOTES:**
1. SURVEY WAS PERFORMED BY AKS ENGINEERING & FORESTRY IN AUGUST 2024.
 2. BASIS OF BEARINGS / HORIZONTAL DATUM: COORDINATES ARE BASED ON A LOCAL DATUM DERIVED FROM STATE PLANE OREGON NORTH 3601, INTERNATIONAL FOOT, NAD83(2011).
 3. VERTICAL DATUM: ELEVATIONS ARE BASED ON WASHINGTON COUNTY BENCHMARK NUMBER 967, LOCATED IN THE CURB ON THE WEST SIDE OF BOONES FERRY ROAD, SOUTH OF SW NORWOOD ROAD. ELEVATION - 337.52 FEET, NAVD88.

SURVEY CONTROL POINTS			
POINT NO	NORTHING	EASTING	ELEVATION

SEE SHT C-010 CONTINUATION

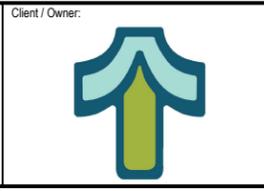
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Engineer's Seal:



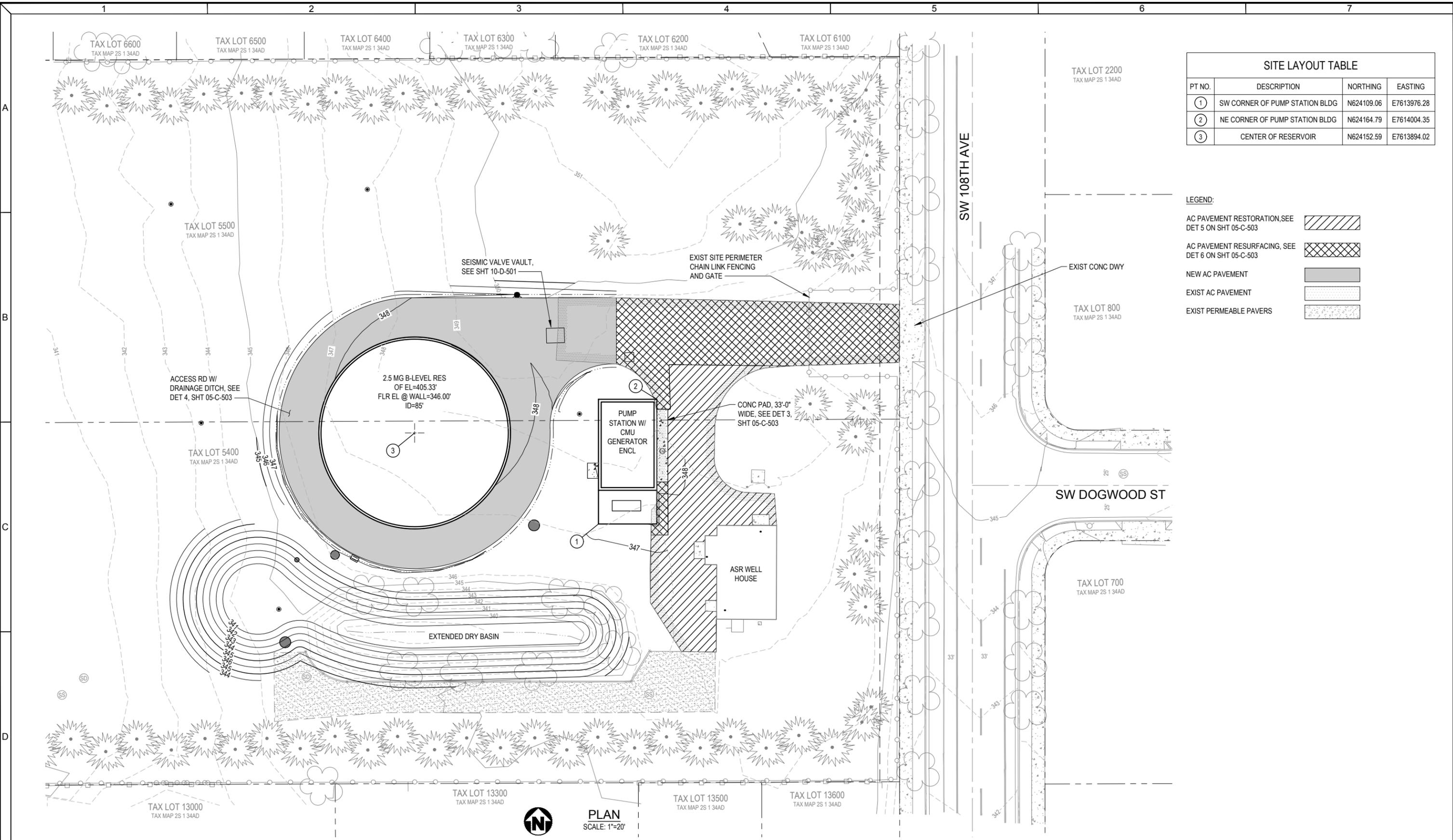
Client / Owner:

**CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION**

Project Title:

**05 - CIVIL
EXISTING CONDITIONS PLAN
AND SURVEY CONTROL - 2**

Designed By:	TMS	Consort Project No.:	W240758OR
Drawn By:	MBE	Issued On:	APRIL 2025
Checked By:	ANB	Sheet:	05-C-011
Approved By:	TMS	1" IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE	



SITE LAYOUT TABLE			
PT NO.	DESCRIPTION	NORTHING	EASTING
①	SW CORNER OF PUMP STATION BLDG	N624109.06	E7613976.28
②	NE CORNER OF PUMP STATION BLDG	N624164.79	E7614004.35
③	CENTER OF RESERVOIR	N624152.59	E7613894.02

LEGEND:

AC PAVEMENT RESTORATION, SEE DET 5 ON SHT 05-C-503	
AC PAVEMENT RESURFACING, SEE DET 6 ON SHT 05-C-503	
NEW AC PAVEMENT	
EXIST AC PAVEMENT	
EXIST PERMEABLE PAVERS	

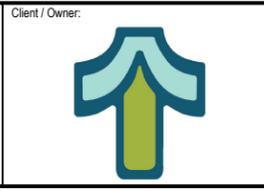
PLAN
SCALE: 1"=20'

Consultant:

Sub Consultant:

CONDITIONAL USE PERMIT APPLICATION

Engineer's Seal:

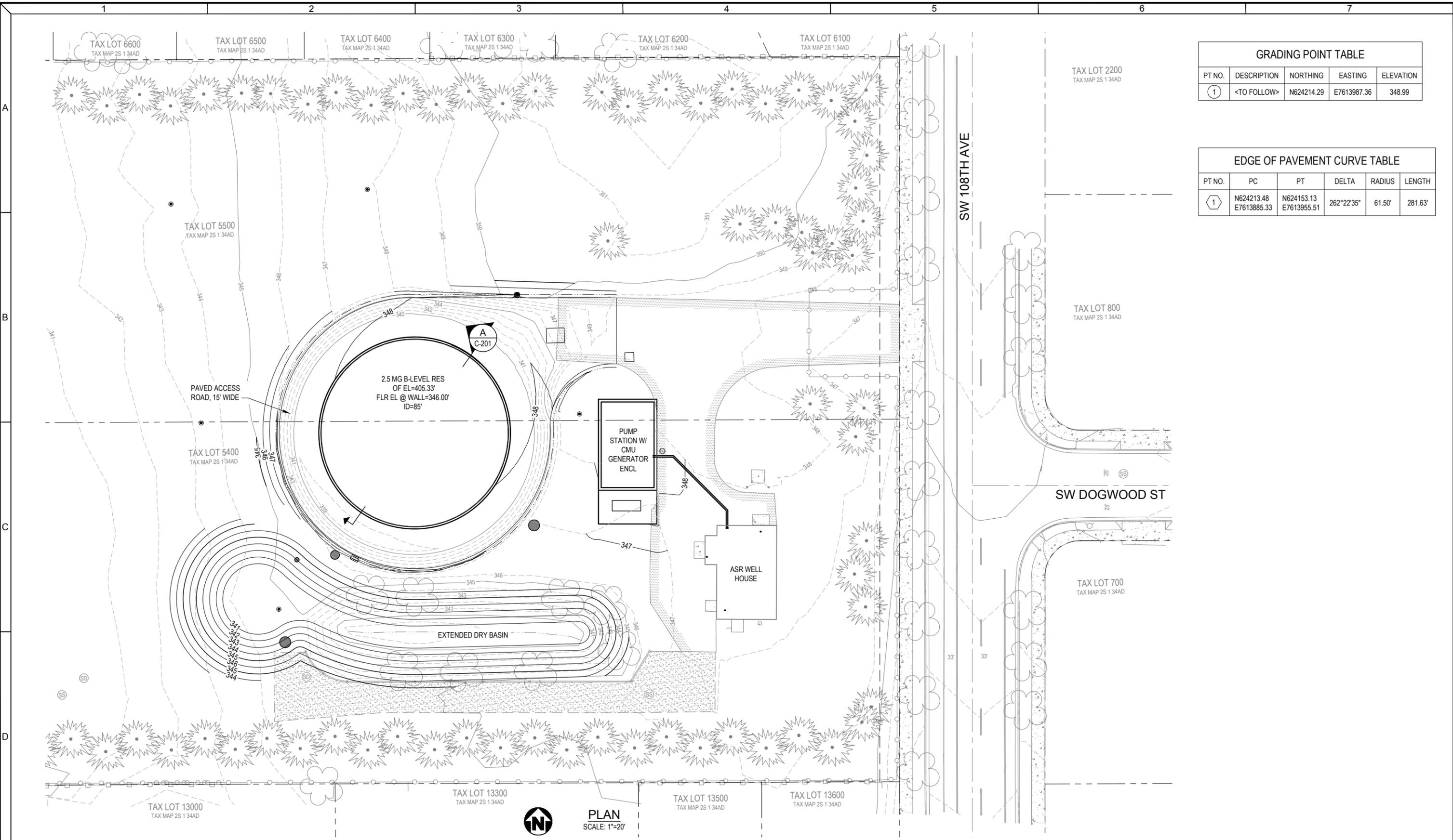


Client / Owner:
CITY OF TUALATIN
 SW 108TH AVE WATER RESERVOIR AND PUMP STATION

Project Title:
05 - CIVIL
SITE LAYOUT PLAN

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 05-C-100
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

Drawing Path and Name: A:\V\Projects\CR\Tualatin\2024\W240758or\05-C-100.dwg, Plotted Date: May 6, 2025 12:25 PM By: Justin Devel



GRADING POINT TABLE				
PT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	<TO FOLLOW>	N624214.29	E7613987.36	348.99

EDGE OF PAVEMENT CURVE TABLE					
PT NO.	PC	PT	DELTA	RADIUS	LENGTH
1	N624213.48 E7613885.33	N624153.13 E7613955.51	262°22'35"	61.50'	281.63'

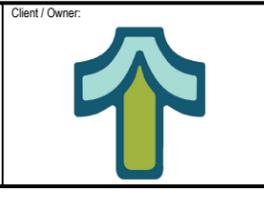
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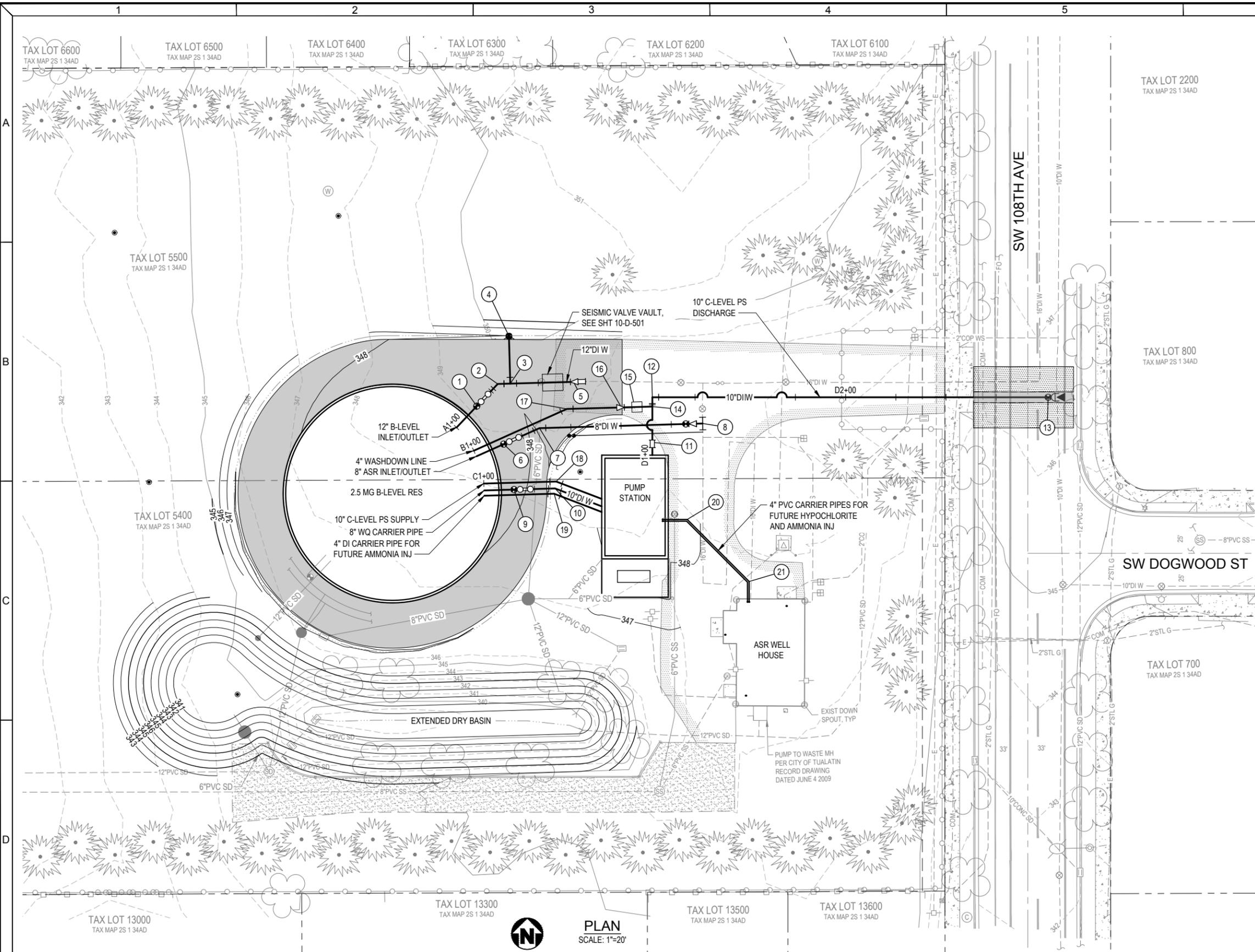
Project Title:

CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION

05 - CIVIL

SITE GRADING PLAN

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 05-C-111
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE



- NOTES:**
1. SEE SHEET 05-C-302 FOR SITE WATER PIPING PROFILES.
 2. CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, SIZES AND DEPTHS OF EXISTING UTILITIES. NOTIFY ENGINEER OR POTENTIAL CONFLICTS 72 HOURS IN ADVANCE OF WATER MAIN INSTALLATION TO ALLOW FOR CHANGES IN ALIGNMENT OR GRADE.
 3. LOCATION OF EXISTING UTILITIES ARE BASED ON INFORMATION SUPPLIED BY OTHERS AND ARE CONSIDERED APPROXIMATE.
 4. ALL PIPE SHALL BE DUCTILE IRON CLASS 52. ALL JOINTS ON PIPE, FITTINGS AND VALVES SHOWN SHALL BE RESTRAINED JOINT, UNLESS OTHERWISE NOTED.
 5. INSTALL WATER FACILITIES PER TYPICAL TRENCH SECTION, SEE DETAIL X, SHEET XX-X-XXX.
 6. WHERE HORIZONTAL AND VERTICAL BENDS ARE NOT SPECIFIED, CONTRACTOR SHALL DEFLECT PIPE TO ACHIEVE HORIZONTAL AND VERTICAL ALIGNMENTS AS SHOWN. DEFLECTION SHALL NOT EXCEED ONE-HALF OF THE MAXIMUM INSTALLED DEFLECTION RECOMMENDED BY THE PIPE MANUFACTURER.
 7. FINAL LOCATIONS FOR FIRE HYDRANTS, BLOW OFFS, AND AIR RELEASE VALVES TO BE COORDINATED IN FIELD WITH AND DETERMINED BY THE OWNER. CONTRACTOR TO PROVIDE OWNER WITH ADJUSTMENTS MADE IN FIELD AND AS BUILT.
 8. PLACEHOLDER NOTE. LOW PRESSURE HYDRANT IS INTENDED TO BE USED FOR EMERGENCY DISTRIBUTION. HYDRANT WILL NOT PROVIDE ADEQUATE PRESSURE FOR FIRE FLOWS.

WATER PIPING SCHEDULE

ALIGN A: 12" B-LEVEL INLET/OUTLET	ALIGN C: 10" C-LEVEL PS SUPPLY
1 STA A1+11 N624186.39, E7613928.63 FURNISH & INSTALL: 1-12" BFV, FLG 1-12" FLEX EXP JT, FLGxMJ	9 STA C1+10 N624152.81, E7613942.54 FURNISH & INSTALL: 1-10" GV, FLG 1-10" FLEX EXP JT, FLGxMJ
2 STA A1+23 N624194.98, E7613937.22 FURNISH & INSTALL: 1-12" 45° HORIZ BEND, MJ	10 STA C1+28 N624152.81, E7613962.58 FURNISH & INSTALL: 1-10" 22.5° HORIZ BEND, MJ
3 STA A1+28 N624194.98, E7613942.22 FURNISH & INSTALL: 1-12"x6" TEE, FLGxMJ 1-6" GV, FLGxMJ	ALIGN D: 10" C-LEVEL PS DISCHARGE
4 STA A1+28 N624213.83, E7613942.22 FURNISH & INSTALL: 1-FH ASSY, LOW PRESSURE HYDRANT, PAINTED BLUE, SEE NOTE 8	11 STA D1+05 N624169.47, E7613998.13 FURNISH & INSTALL: 1-10" LS, MJ
5 STA A1+58 N624194.98, E7613972.22 CONN TO EXIST 16" DI W FURNISH & INSTALL: 1-16"x12" RDCR, MJ 1-16" LS, MJ	12 STA D1+23 N624187.96, E7613998.64 FURNISH & INSTALL: 1-10" 90° DI HORIZ BEND, MJ
6 STA B1+11 N624170.96, E7613938.93 FURNISH & INSTALL: 1-8" GV, FLG 1-8" FLEX EXP JT, FLGxMJ	13 STA D2+81 N624183.56, E7614156.27 CONN TO EXIST 10" DI W FURNISH & INSTALL: 1-10" TAPPING SLV, FLG 1-10" TAPPING GV, FLGxMJ 1-TB
7 STA B1+26 N624176.96, E7613953.36 FURNISH & INSTALL: 1-8" 22.5° HORIZ BEND, MJ	14 FURNISH & INSTALL: 1-10"x2" SERVICE SADDLE
8 STA B1+91 N624176.96, E7614018.42 CONN TO EXIST 16" DI W FURNISH & INSTALL: 1-8" GV, MJ 1-16"x8" RDCR, MJ 1-16" TEE, MJ 1-6" BO ASSY	15 FURNISH & INSTALL: WASHDOWN LINE WITH BFD, SEE DET 2, SHT 05-C-504
	16 N624184.26, E7613985.88 FURNISH & INSTALL: 1-4"x2" RDCR, MJ
	17 N624184.26, E7613964.46 FURNISH & INSTALL: 1-4" 22.5° HORIZ BEND, MJ
	18 N624155.56, E7613959.43 FURNISH & INSTALL: 1-8" 22.5° HORIZ BEND, MJ
	19 N624150.72, E7613958.46 FURNISH & INSTALL: 1-4" 22.5° HORIZ BEND, MJ
	20 N624139.01, E7614011.20 FURNISH & INSTALL: 2-4" 45° LONG RADIUS SCHED 80 PVC HORIZ BEND, MJ
	21 N624113.68, E7614035.15 FURNISH & INSTALL: 2-4" 45° LONG RADIUS SCHED 80 PVC HORIZ BEND, MJ

LEGEND:

FULL DEPTH AC TRENCH PATCH WITH 6" T-CUT	
GRIND & INLAY 2" DEPTH	

Consultant:

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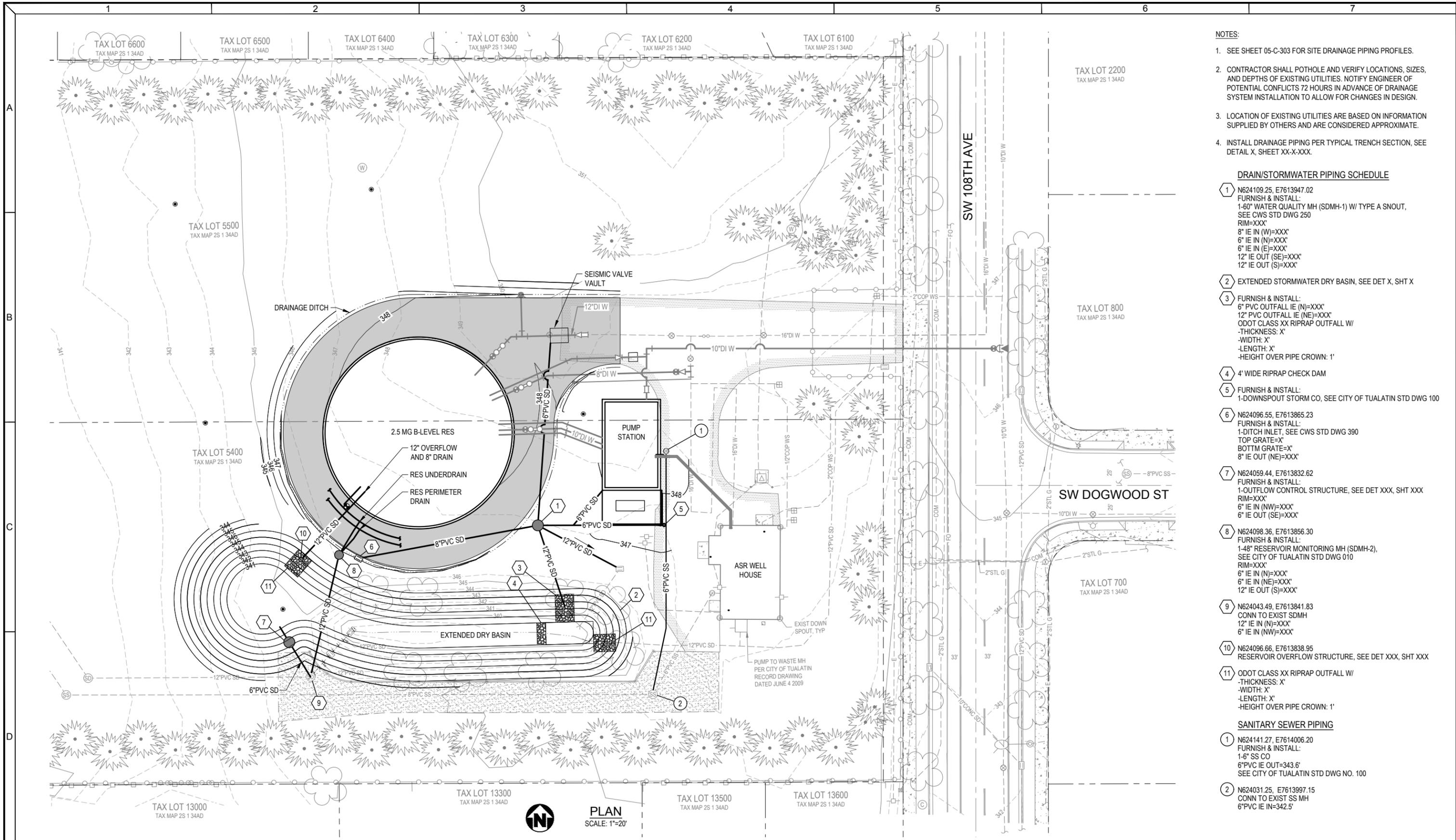
 Client / Owner:

Project Title:
**CITY OF TUALATIN
 SW 108TH AVE WATER RESERVOIR
 AND PUMP STATION**

05 - CIVIL
SITE WATER PIPING PLAN

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 05-C-120
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

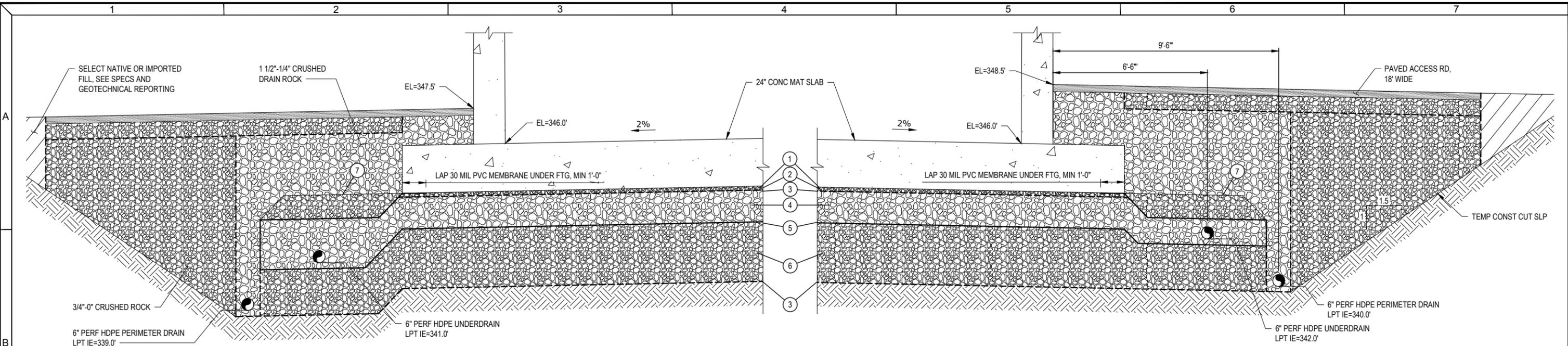
Drawing Path and Name: A:_V\Projects\OR\Tualatin\2024\W240758OR_05-C-120.dwg, Plotted Date: May 6, 2025 12:25 PM By: Justin Deuel



- NOTES:**
- SEE SHEET 05-C-303 FOR SITE DRAINAGE PIPING PROFILES.
 - CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS, SIZES, AND DEPTHS OF EXISTING UTILITIES. NOTIFY ENGINEER OF POTENTIAL CONFLICTS 72 HOURS IN ADVANCE OF DRAINAGE SYSTEM INSTALLATION TO ALLOW FOR CHANGES IN DESIGN.
 - LOCATION OF EXISTING UTILITIES ARE BASED ON INFORMATION SUPPLIED BY OTHERS AND ARE CONSIDERED APPROXIMATE.
 - INSTALL DRAINAGE PIPING PER TYPICAL TRENCH SECTION, SEE DETAIL X, SHEET XX-X-XXX.

- DRAIN/STORMWATER PIPING SCHEDULE**
- N624109.25, E7613947.02
FURNISH & INSTALL:
1-60" WATER QUALITY MH (SDMH-1) W/ TYPE A SNOOT, SEE CWS STD DWG 250
RIM=XXX'
8" IE IN (W)=XXX'
6" IE IN (N)=XXX'
6" IE IN (E)=XXX'
12" IE OUT (SE)=XXX'
12" IE OUT (S)=XXX'
 - EXTENDED STORMWATER DRY BASIN, SEE DET X, SHT X
 - FURNISH & INSTALL:
6" PVC OUTFALL IE (N)=XXX'
12" PVC OUTFALL IE (NE)=XXX'
ODOT CLASS XX RIPRAP OUTFALL W/
-THICKNESS: X'
-WIDTH: X'
-LENGTH: X'
-HEIGHT OVER PIPE CROWN: 1'
 - 4' WIDE RIPRAP CHECK DAM
 - FURNISH & INSTALL:
1-DOWNSPOUT STORM CO, SEE CITY OF TUALATIN STD DWG 100
 - N624096.55, E7613865.23
FURNISH & INSTALL:
1-DITCH INLET, SEE CWS STD DWG 390
TOP GRATE=X'
BOTTM GRATE=X'
8" IE OUT (NE)=XXX'
 - N624059.44, E7613832.62
FURNISH & INSTALL:
1-OUTFLOW CONTROL STRUCTURE, SEE DET XXX, SHT XXX
RIM=XXX'
6" IE IN (NW)=XXX'
6" IE OUT (SE)=XXX'
 - N624098.36, E7613856.30
FURNISH & INSTALL:
1-48" RESERVOIR MONITORING MH (SDMH-2), SEE CITY OF TUALATIN STD DWG 010
RIM=XXX'
6" IE IN (N)=XXX'
6" IE IN (NE)=XXX'
12" IE OUT (S)=XXX'
 - N624043.49, E7613841.83
CONN TO EXIST SDMH
12" IE IN (N)=XXX'
6" IE IN (NW)=XXX'
 - N624096.66, E7613838.95
RESERVOIR OVERFLOW STRUCTURE, SEE DET XXX, SHT XXX
 - ODOT CLASS XX RIPRAP OUTFALL W/
-THICKNESS: X'
-WIDTH: X'
-LENGTH: X'
-HEIGHT OVER PIPE CROWN: 1'
- SANITARY SEWER PIPING**
- N624141.27, E7614006.20
FURNISH & INSTALL:
1-6" SS CO
6" PVC IE OUT=343.6'
SEE CITY OF TUALATIN STD DWG NO. 100
 - N624031.25, E7613997.15
CONN TO EXIST SS MH
6" PVC IE IN=342.5'

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						<p>Drawn By:</p> <p>MBE</p>	<p>Issued On:</p> <p>APRIL 2025</p>
<p>Consultant:</p>		<p>PLAN SCALE: 1"=20'</p>		<p>SITE DRAINAGE PIPING PLAN</p>		<p>Checked By:</p> <p>ANB</p>	<p>Sheet:</p> <p>05-C-121</p>
						<p>Approved By:</p> <p>TMS</p>	<p>0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE</p>



1 SUBGRADE DRAINAGE AND BACKFILL LPT
SCALE: 1/2"=1'-0"

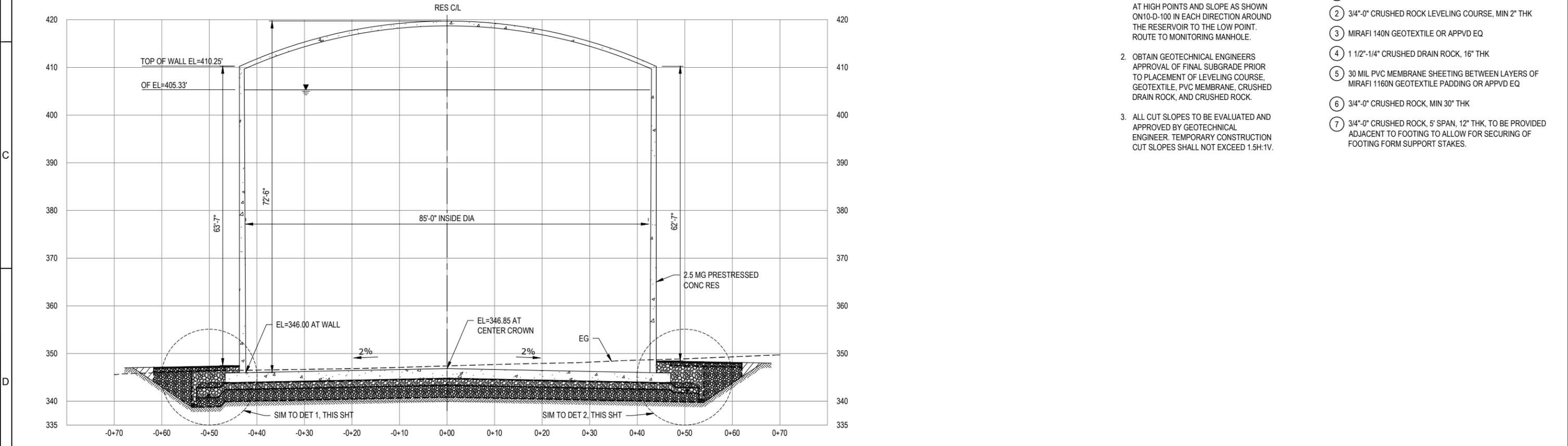
2 SUBGRADE DRAINAGE AND BACKFILL HPT
SCALE: 1/2"=1'-0"

NOTES:

- CAP UNDERDRAIN AND PERIMETER DRAIN AT HIGH POINTS AND SLOPE AS SHOWN ON 10-D-100 IN EACH DIRECTION AROUND THE RESERVOIR TO THE LOW POINT. ROUTE TO MONITORING MANHOLE.
- OBTAIN GEOTECHNICAL ENGINEERS APPROVAL OF FINAL SUBGRADE PRIOR TO PLACEMENT OF LEVELING COURSE, GEOTEXTILE, PVC MEMBRANE, CRUSHED DRAIN ROCK, AND CRUSHED ROCK.
- ALL CUT SLOPES TO BE EVALUATED AND APPROVED BY GEOTECHNICAL ENGINEER. TEMPORARY CONSTRUCTION CUT SLOPES SHALL NOT EXCEED 1.5H:1V.

RESERVOIR SUBGRADE KEY NOTES

- 6 MIL POLYETHYLENE SHEETING UNDER ENTIRE MAT SLAB
- 3/4"-0" CRUSHED ROCK LEVELING COURSE, MIN 2" THK
- MIRAFI 140N GEOTEXTILE OR APPVD EQ
- 1 1/2"-1/4" CRUSHED DRAIN ROCK, 16" THK
- 30 MIL PVC MEMBRANE SHEETING BETWEEN LAYERS OF MIRAFI 1160N GEOTEXTILE PADDING OR APPVD EQ
- 3/4"-0" CRUSHED ROCK, MIN 30" THK
- 3/4"-0" CRUSHED ROCK, 5' SPAN, 12" THK, TO BE PROVIDED ADJACENT TO FOOTING TO ALLOW FOR SECURING OF FOOTING FORM SUPPORT STAKES.



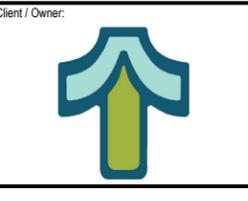
A RESERVOIR SECTION
C-100 SCALE: 1"=10' HORIZ, 1"=10' VERT

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consor
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Client / Owner:
**CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR
AND PUMP STATION**

Project Title:
**PERMIT
RESERVOIR SECTION
AND DETAILS**

Designed By: TMS	Consort Project No.: W240758OR
Drawn By: MBE	Issued On: APRIL 2025
Checked By: ANB	Sheet: 05-C-201
Approved By: TMS	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE

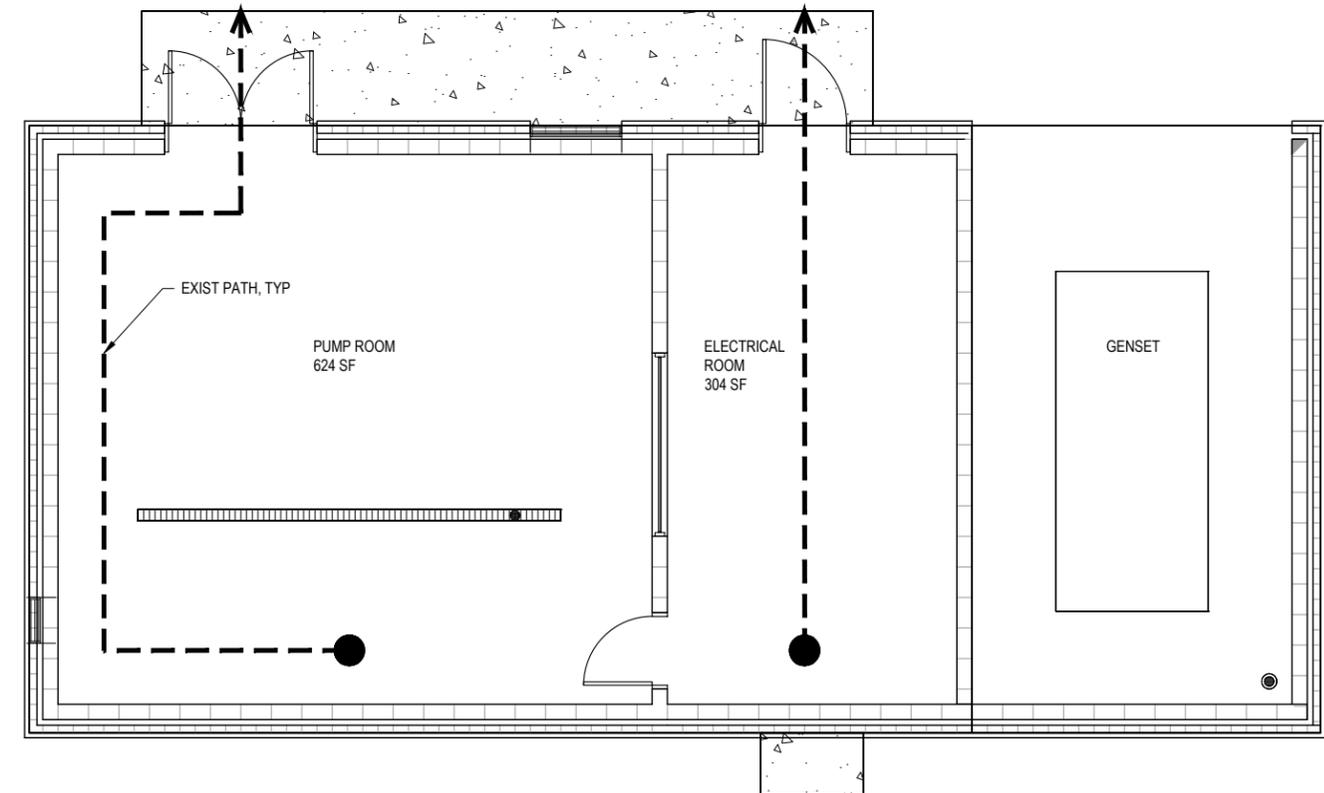
Section I - Governing Codes	
2019 OFC, OESC, OPSC, OSSC	
2019 OMSC, OEESC (ASHRAE 90.1-2019)	
Section II - Building "Construction" Data	
Type of Construction	Type VB - CMU, Metal & Wood
Maximum Building Height	15 feet 10 inches
Maximum Allowable Height	35 feet
Number of Stories	1 story
Allowable Number of Stories	2 story
Basement	No
Total Floor Area Provided	Pump Station=598 square feet Pump Room = 467 square feet Electrical Room = 131 square feet
Minimum Required Property Setbacks*	
Front (West)	15 feet
Side (North)	5 feet
Back (East)	15 feet
Side (South)	5 feet
*Washington County	
Section III - Building "Occupancy" Data	
Building Occupancy Classification Group(s)	U
Occupancy Classification Group by Floor	U
Occupancy Classification Group by Room	U
Well Room	U
Electrical Room	U
Accessory or Incidental Use Areas	N/A
Total Occupant Load by Floor	1
Total Occupant Load for Each Room	1
Total Occupant Load for Each Occupancy Group	N/A
Section IV - Building Area Data "Actual" and "Allowable"	
Section IV - Building Area Data "Actual" and "Allowable"	Pump Station = 598 square feet
Allowable Base Area (OSSC Table 503)	8,500 square feet (Type VB, Group U)
Building Frontage	See Sheet PS-A-2, Non-Sprinklered
Section V - "Fire Resistive" Building Elements	
Separation of Occupancies	0 hours (U, Non-Sprinklered)
Section VI - Building "Exiting"	
Maximum Floor Area Allowance Per Occupant	N/A - Not Customarily Occupied
Exits Required in Each Room or Area	1
Exits Provided in Each Room or Area	1
Exits Required per Floor	1
Exits Provided per Floor	1
Exit Width Required per Exit	32 inches
Minimum Corridor Exit Width Required	30 inches
Emergency Exit Illumination	See Sheets PS-E-3
Exit Sign Layout Plan	See Sheets PS-E-3
Section VII - Building "Fire Detection and Suppression"	
Smoke Detection/Fire Alarm System Req'd	No
Smoke Detection/Fire Alarm System Provided	No
Type of System	N/A
Areas Protected	N/A
Sprinkler System Req'd	No, per OSSC 903.2.11 Exemptions
Standpipe System Req'd	No
Number of Fire Dept Vehicle Accesses	1
Fire Extinguisher Locations	See Sheets PS-A-2

Section VIII - Occupancy Ventilation Requirements	
Not required for pump room or electrical room	
Section IX - Energy Code Requirements	
Building is enclosed space, U occupancies.	
Building Unit Insulation Values (Prescriptive Building Envelope Compliance Path: ASHRAE 90.1-2019)	
Skylights	U-0.50 (Max)
Doors: Swinging, opaque	U-0.37 (Max)
Roof: Attic and other	R-49 Batt (Min)
Walls: Above ground-CMU	R-9.5ci (Min)
Floors: Mass (exposed to exterior)	R-14.6ci (Min)
Slab-on-Grade Floors: Unheated slab	R-15 for 24 inches
Lighting Layout	See Sheet E-C6
Envelope Compliance Certified via COMcheck	
Section X - Hazardous Materials	
Hazardous Materials Present	No
Section XI - Accessibility	
Exterior Route of Travel - See Sheets PS-A-1	
Facility is for equipment access only and does not require accessibility	
Section XII - Plumbing Fixture Count Requirements	
Not Applicable - this remotely monitored station is "not customarily occupied"	
Section XIII - Underground and Pad mounted Transformers	
See Sheets E-C1	
Section XIV - Special Inspection, Structural Observation	
-Required Structural Inspection requirements are indicated on PS-S-2 Sheet and Specifications	
-Structural Observation requirements are indicated on PS-S-2 Sheet and Specifications	
-Deferred Submittals:	
NR	
Section XV - Room Specific Requirements	
Not Applicable -This remotely monitored station is "not customarily occupied"	

REVISED MATERIAL FINISH SCHEDULE			
ITEM	FINISH	COLOR	REMARKS
EXTERIOR WALLS	CMU FACTORY COLOR, COATING SYSTEM 306	NATURAL	SPLIT FACE CMU
ROOFING	FACTORY FINISH	TBD	METAL STANDING SEAM ROOFING SYSTEM
MISCELLANEOUS METALS INTERIOR/EXTERIOR	COATING SYSTEM 101	PER SECTION SECTION 10 14 10 - IDENTIFYING DEVICES	PIPING
WOOD, ARCHITECTURAL FEATURES	COATING SYSTEM 303	TBD	MATCH FACTORY LOUVER COLOR
LOUVERS	FACTORY FINISH	TBD	FACTORY COATING (GREENHECK COLOR MATCH)
DOORS 1, 2, 3, & 4	COATING SYSTEM 101	TBD	FACTORY PRIME, MATCH FACTORY LOUVER COLOR
INTERIOR PUMP ROOM WALLS	UNFINISHED	NATURAL	CMU BLOCK, SMOOTH FACE & GYP BOARD
INTERIOR ELECTRICAL ROOM WALLS	UNFINISHED	NATURAL	CMU BLOCK, SMOOTH FACE & GYP BOARD
CONCRETE FLOORS	COATING SYSTEM 306	NATURAL	SEE SCHEDULE OF FINISHES IN SECTION 03 30 00 AND COATING SCHEDULE IN 09 90 00

DOOR SCHEDULE						
NO.	DOOR SIZE	OPEN	HARDWARE	FRAME		REMARKS
				HEAD	JAMB	
①	ACTIVE 3'-4"x7'-8" INACTIVE 3'-4"x7'-8" (6'-8"x8'-0" RO)	ACTIVE LEAF RHR	GROUP 2	4"	4"	EXTERIOR
②	3'-8"x7'-8" (4'x8' RO)	RHR	GROUP 1	4"	2"	EXTERIOR
③	3'-0"x7'-0" (3'-4"x7'-4" RO)	LHR	GROUP 3	4"	2"	INTERIOR, HALF GLASS DOOR LIGHT

WINDOW SCHEDULE					
NO.	SIZE		TYPE	MATERIAL	REMARKS
	LENGTH	WIDTH			
1	96"	24"	TYPE 1	4"	ELECTRICAL ROOM LITE



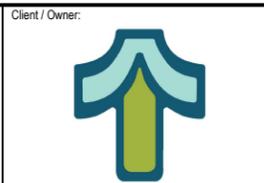
CODE PLAN
SCALE: 1/4" = 1'-0"



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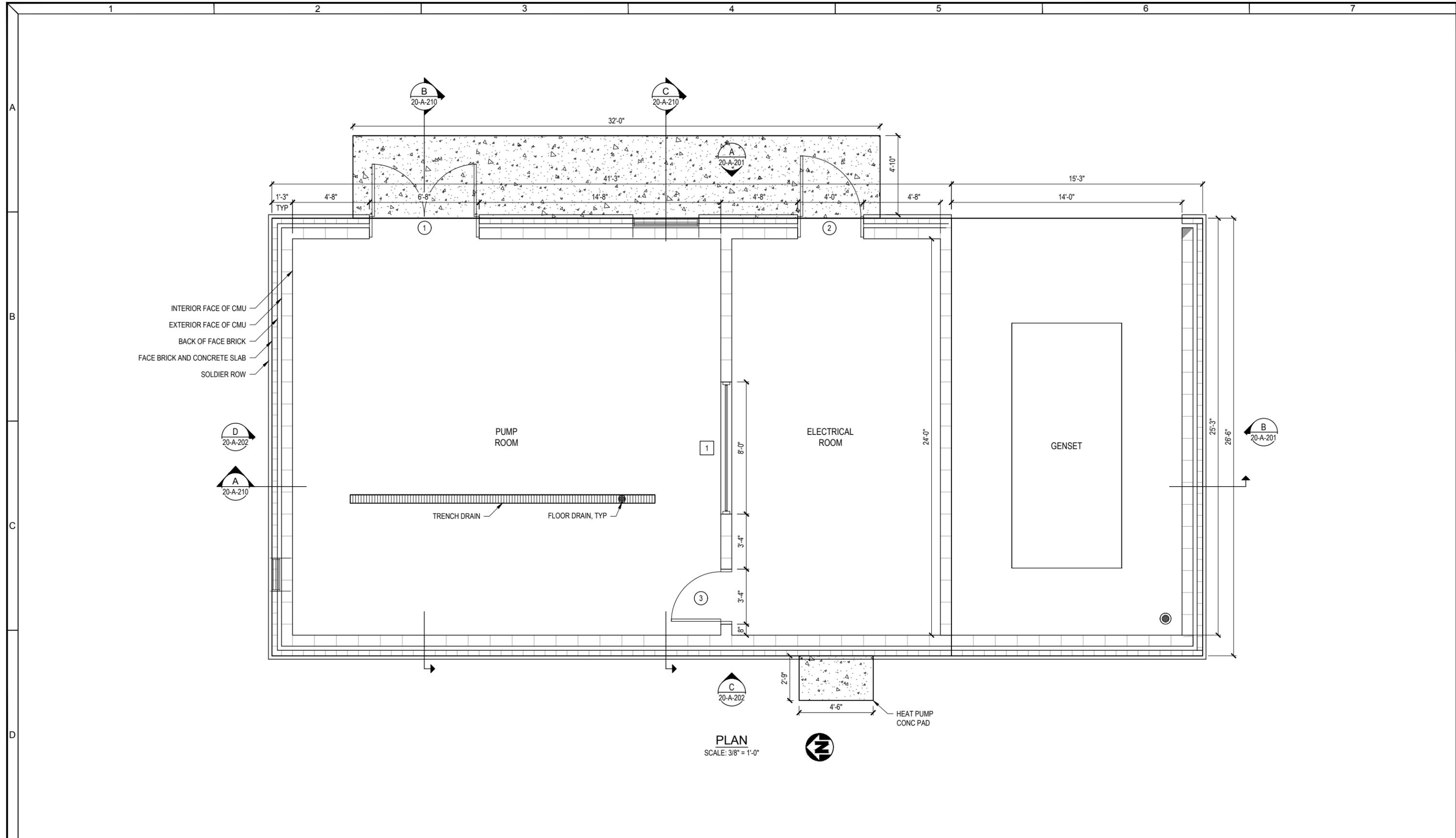
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Project Title:
CITY OF TUALATIN
SW 108TH AVE WATER RESERVOIR AND PUMP STATION

20 - PUMP STATION
PUMP STATION CODE COMPLIANCE AND SCHEDULES

Designed By: TMS
Drawn By: MBE
Checked By: ANB
Approved By: TMS
Consor Project No.: W240758OR
Issued On: APRIL 2025
Sheet: 20-A-001
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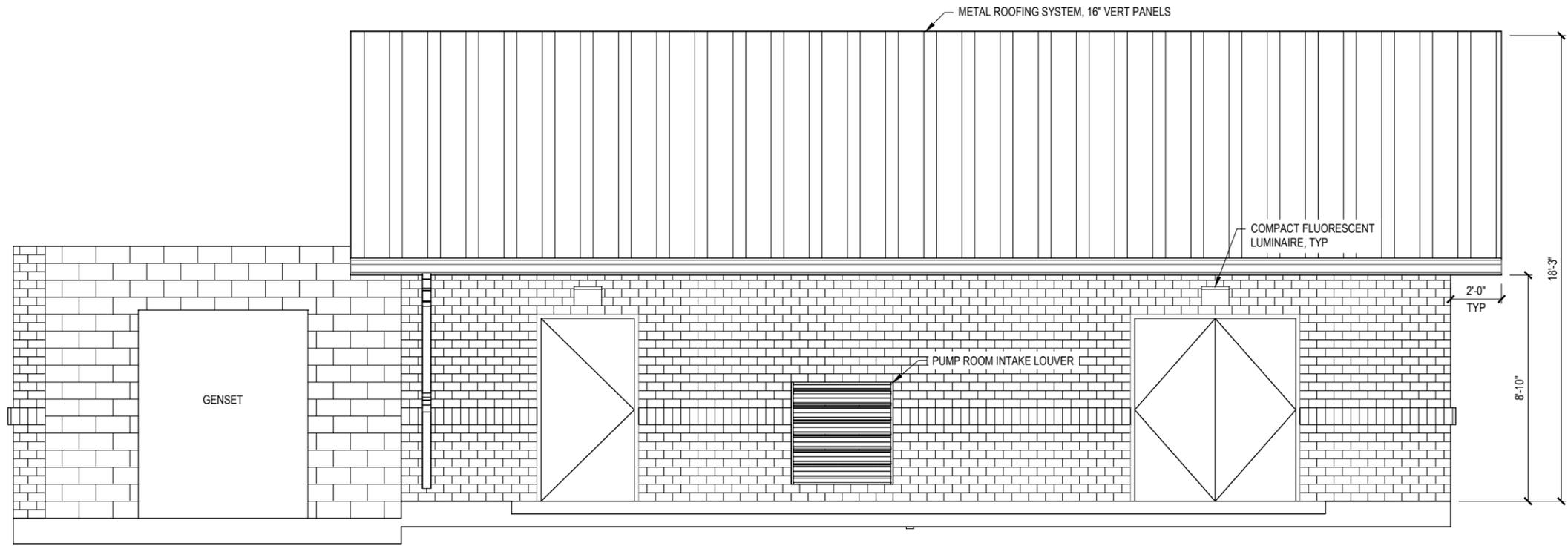
INTERIOR FACE OF CMU
 EXTERIOR FACE OF CMU
 BACK OF FACE BRICK
 FACE BRICK AND CONCRETE SLAB
 SOLDIER ROW

D
20-A-202
 A
20-A-210

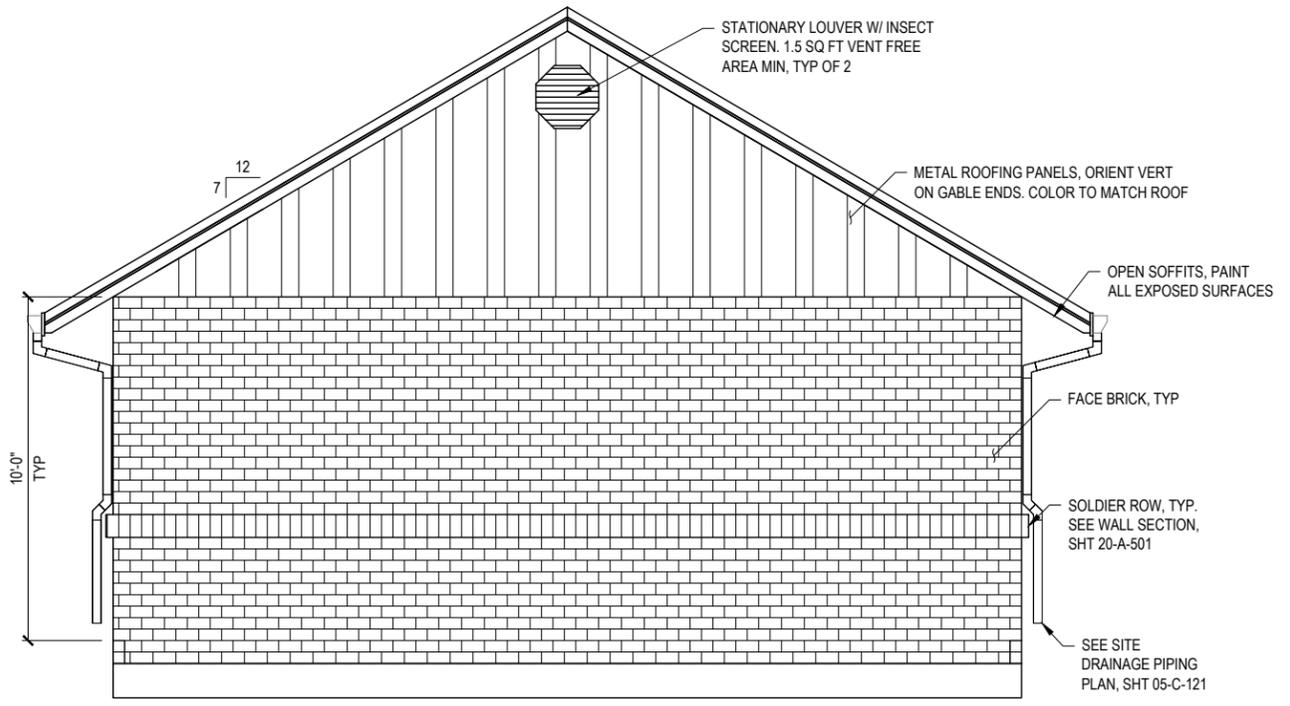
PLAN
 SCALE: 3/8" = 1'-0"



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Drawn By: JLC	Issued On: APRIL 2025														
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A EAST ELEVATION
 20-A-101 SCALE: 3/8" = 1'-0"



B SOUTH ELEVATION
 20-A-101 SCALE: 3/8" = 1'-0"

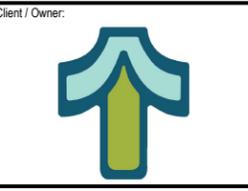
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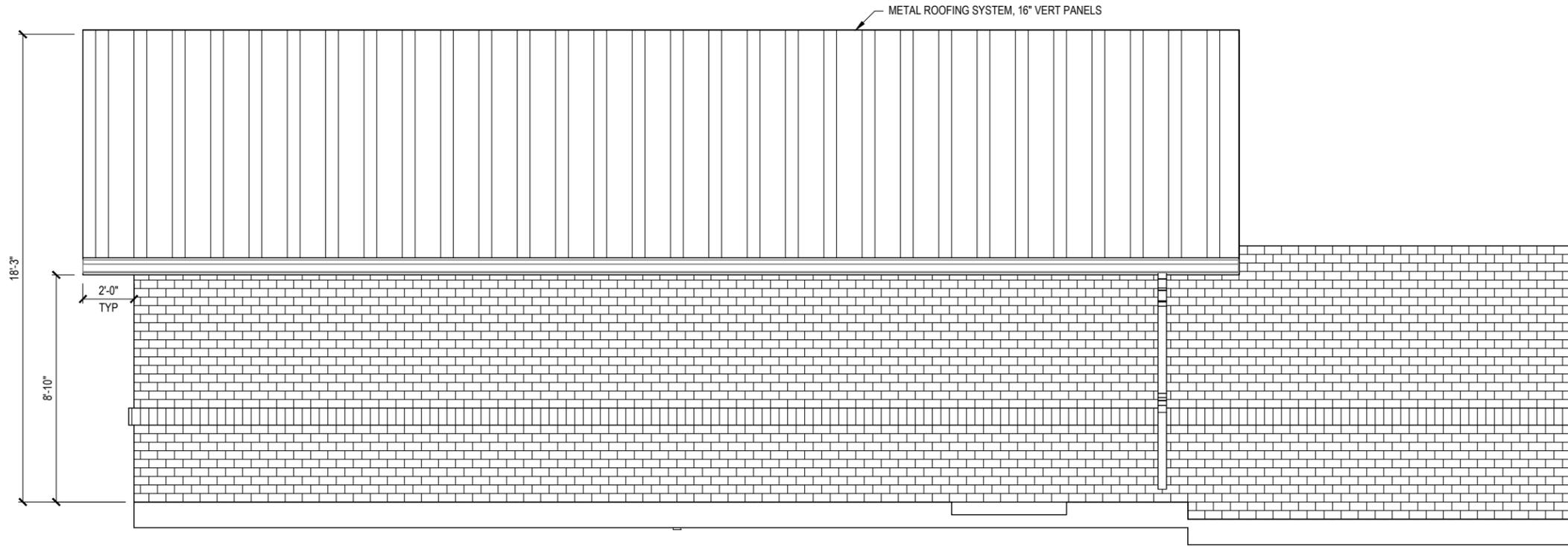
**CITY OF TUALATIN
 SW 108TH AVE WATER RESERVOIR
 AND PUMP STATION**

Project Title:

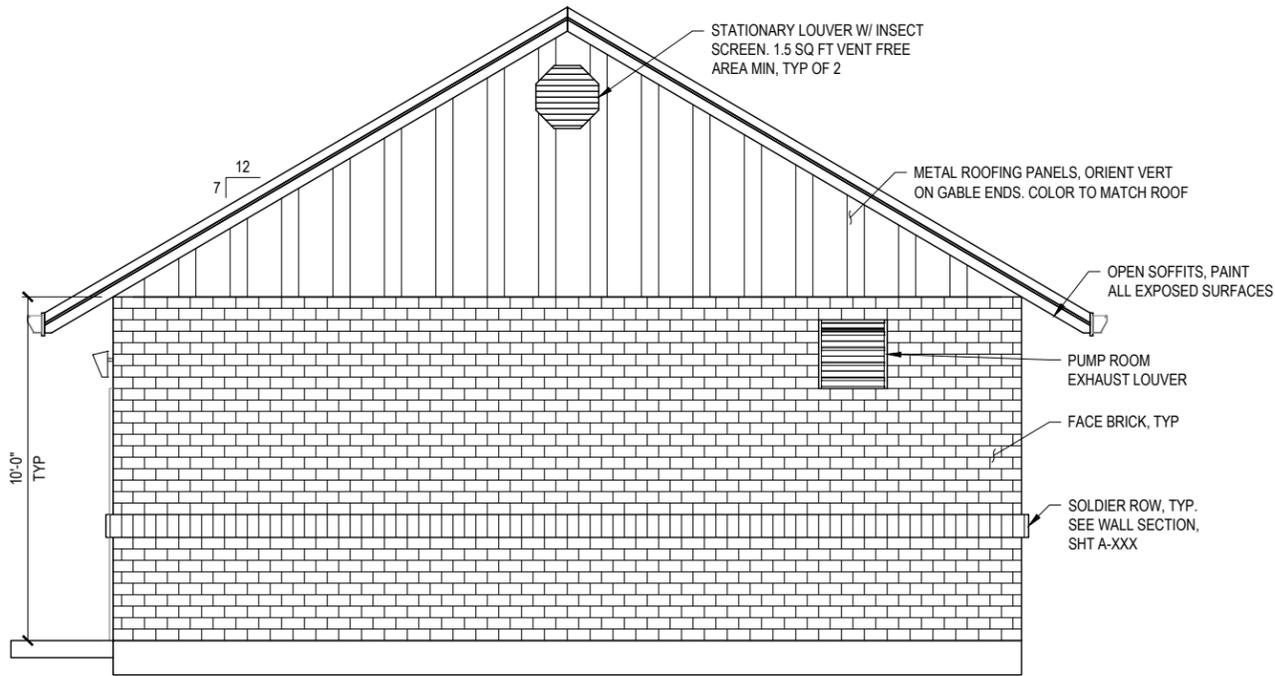
20 - PUMP STATION

PUMP STATION ELEVATIONS - 1

Designed By: AMB	Conсор Project No.: W240758OR
Drawn By: JLC	Issued On: APRIL 2025
Checked By: ANB	Sheet: 20-A-201
Approved By: AMB	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE



C WEST ELEVATION
 20-A-101 SCALE: 3/8" = 1'-0"



D NORTH ELEVATION
 20-A-101 SCALE: 3/8" = 1'-0"

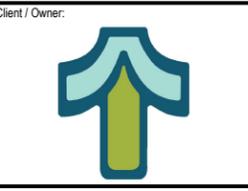
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**CITY OF TUALATIN
 SW 108TH AVE WATER RESERVOIR
 AND PUMP STATION**

Project Title:

20 - PUMP STATION

PUMP STATION ELEVATIONS - 2

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Drawn By: JLC	Issued On: APRIL 2025
Checked By: ANB	Sheet: 20-A-202
Approved By: AMB	0 1/2 1 IF BAR DOES NOT MEASURE 1" DRAWING IS NOT TO SCALE