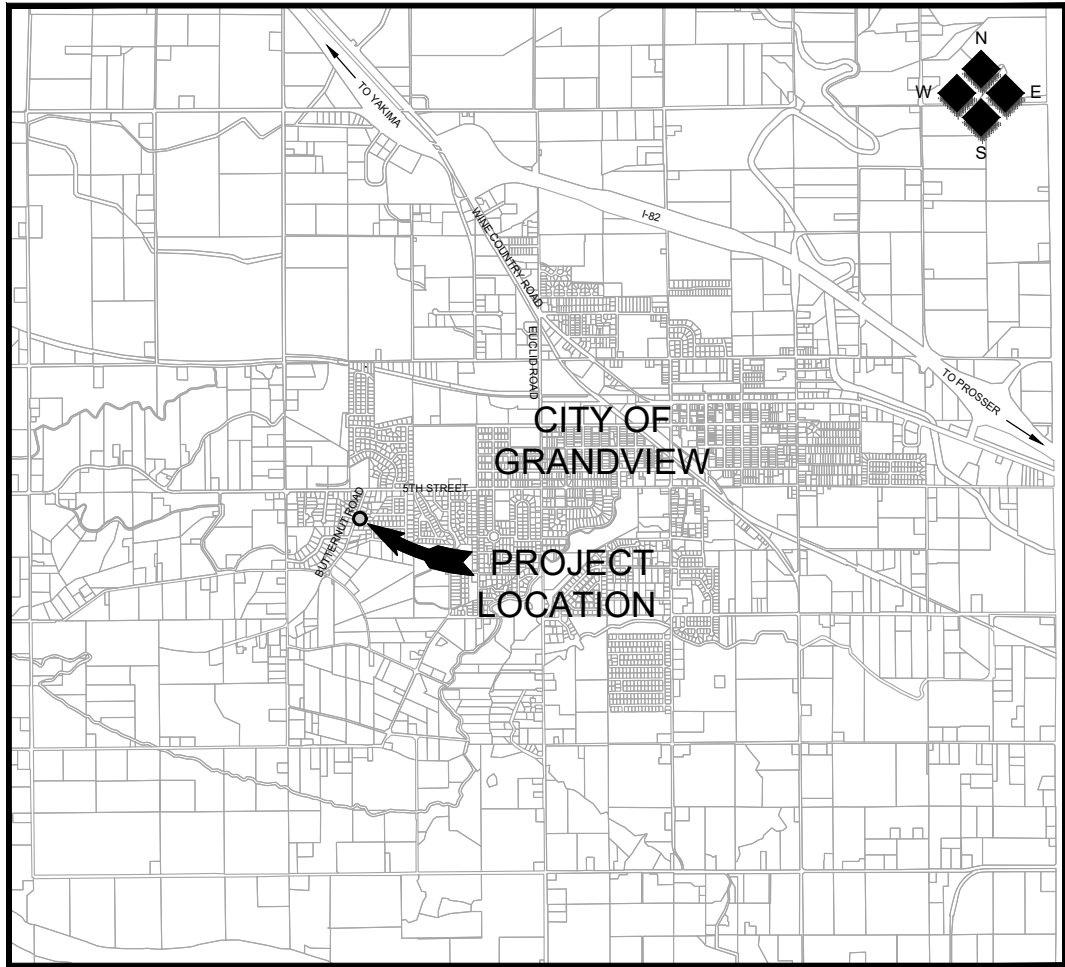




VICINITY MAP
NOT TO SCALE

 **DATUM ELEVATION**
ELEVATIONS BASED ON WASHINGTON STATE
REFERENCE NETWORK (WSRN) NAVD88

CITY OF GRANDVIEW

YAKIMA COUNTY

WASHINGTON

BUTTERNUT WELL CONTROL UPGRADES

HLA PROJECT NO. 23193

APRIL 2024

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Know what's below.
Call before you dig.

LOCATION OF ALL UNDERGROUND UTILITIES SHOWN
HEREON ARE APPROXIMATE AND ARE BASED ON FIELD
LOCATIONS OF ALL VISIBLE STRUCTURES SUCH AS:
CATCH BASINS, MANHOLES, WATER GATES, ETC. AND
COMPILING INFORMATION FROM PLANS SUPPLIED BY
VARIOUS UTILITY COMPANIES. ALL CONTRACTORS
SHOULD CALL 509-248-0202 OR 1-800-424-5555
PRIOR TO ANY EXCAVATION WORK.



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509.966.7000
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		JOB NUMBER: 23193	DATE: 04-24-24
		FILE NAMES:	
		DRAWING: SHEETS.dwg	
		PLAN: SHEETS.dwg	
		DESIGNED BY: JLB	
		ENTERED BY: JWM	
REVISION	DATE		

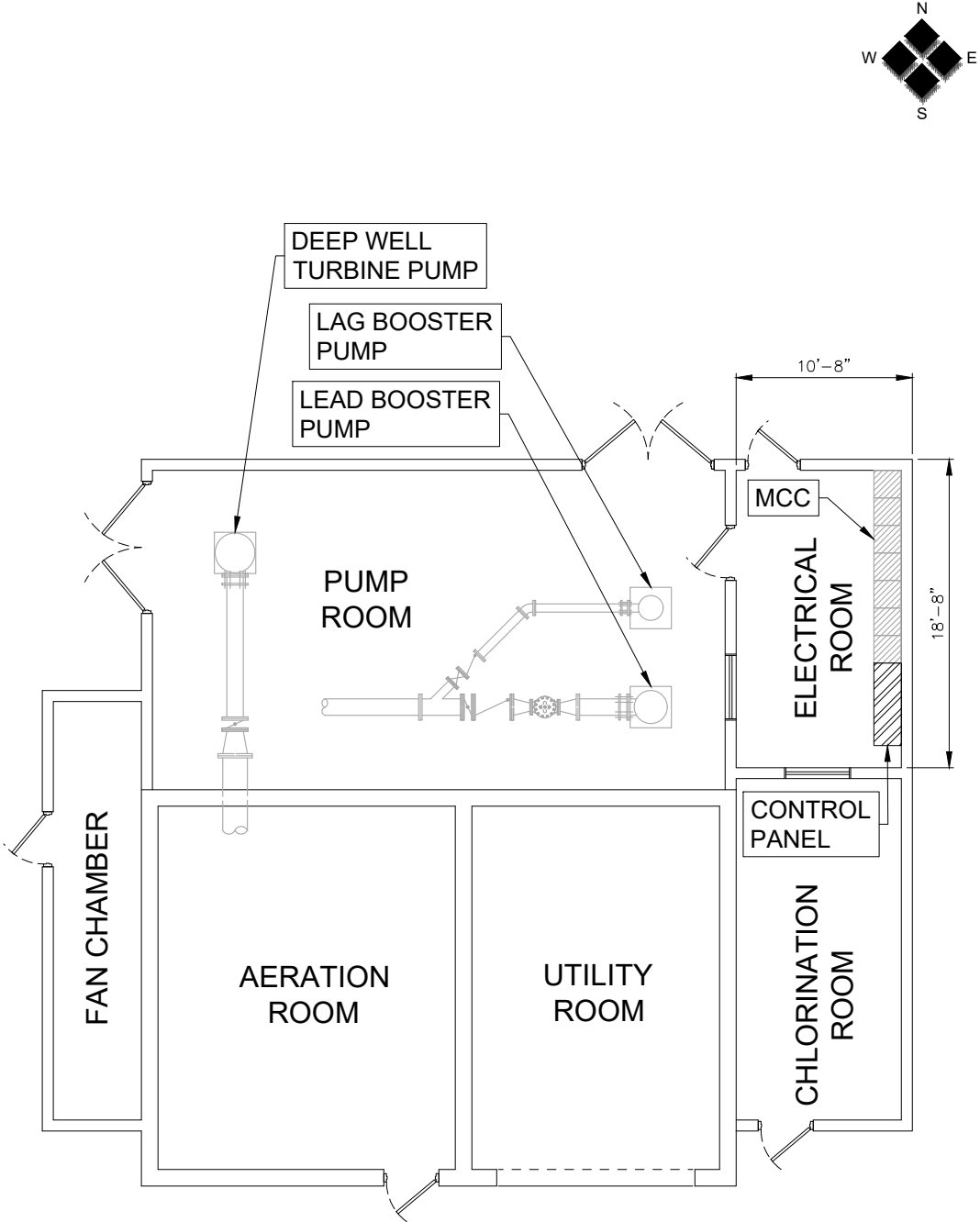
CITY OF GRANDVIEW
BUTTERNUT WELL CONTROL
UPGRADES

COVER SHEET

SHEET
1
OF
9



SITE MAP



WELL BUILDING LAYOUT

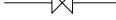
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EXISTING FEATURES

TREE	
UTILITY POLE	
MANHOLE	
DRYWELL	
CATCH BASIN	
WATER VALVE	
SPLICE BOX	
CLEANOUT	
FIRE HYDRANT	
YARD HYDRANT	
IRRIGATION VALVE	
GAS METER	
BOLLARD	
ANCHOR	
LIGHT	
CONTOUR	

ASPHALT PAVEMENT
GRAVEL SURFACING
HYDROSEED

DOUBLE LINE

<u>SINGLE LINE</u>	
	GATE
	BUTTERFLY
	BALL
	PLUG
	CHECK
	CONTROL VALVE
	BALL CHECK VALVE
	DIAPHRAGM VALVE
	PRESSURE REGULATING VALVE

DOUBLE LINE

	SINGLE LINE
	NEW PIPE
	FLANGED JOINT
	MECHANICAL JOINT
	FLANGE COUPLING ADAPTER
	RESTRAINED FLANGE COUPLING ADAPTER
	FLEXIBLE BOLTED SLEEVE COUPLING
	ELASTOMER BELLOWS EXP JOINT
	ELBOW UP
	ELBOW DOWN
	TEE UP
	TEE DOWN
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	UNION
	ELBOW, 90 DEGREE
	TEE
	ELBOW, 45 DEGREE
	HOSE BIBB

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION IMPROVEMENTS SHALL MEET OR EXCEED THE OWNER'S STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE CONTRACTING AGENCY, AND APPLICABLE STATE AND FEDERAL REGULATION, WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE INSPECTED AND APPROVED BY THE CONTRACTING AGENCY.
2. A PRECONSTRUCTION MEETING WITH THE LOCAL JURISDICTION/PUBLIC WORKS DEPARTMENT, THE ENGINEER, THE CONTRACTOR, AND INTERESTED UTILITY COMPANIES SHALL BE HELD PRIOR TO BEGINNING CONSTRUCTION. THE INSPECTOR SHALL BE GIVEN 48-HOURS MINIMUM NOTICE PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS OR AGREEMENTS NEEDED FOR THE JOB, ON-SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
5. IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR FEET OR MORE IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF SECTION 2-09.3(3B), IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR WORKER SAFETY AND THE ENGINEER ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW.
6. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
7. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
8. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH MUTCD TO THE ENGINEER AND APPROPRIATE RIGHT OF WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT OF WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THIS CONTRACT. ALL SECTIONS OF THE WSDOT/APWA STANDARD SPECIFICATIONS SECTION 1-10, TEMPORARY TRAFFIC CONTROL, SHALL APPLY IF WORK WITHIN THE RIGHT OF WAY WILL INTERRUPT NORMAL TRAFFIC OPERATION.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, AND RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE, AND AVAILABLE TO THE CONTRACTING AGENCY AT ALL TIMES. THE CONTRACTOR SHALL DELIVER THESE DRAWINGS TO THE ENGINEER AT THE COMPLETION OF THE WORK.
12. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE ENGINEER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
13. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED, AT THE LIMITS OF CONSTRUCTION, PRIOR TO ANY OTHER GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR, UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING.
14. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF STORM SEWER AND WATER LINES AND DRY UTILITIES.
15. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE, OR RUNNING OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT, AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 7:00 P.M. EVERY DAY UNLESS OTHERWISE APPROVED BY THE CONTRACTING AGENCY.
16. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.



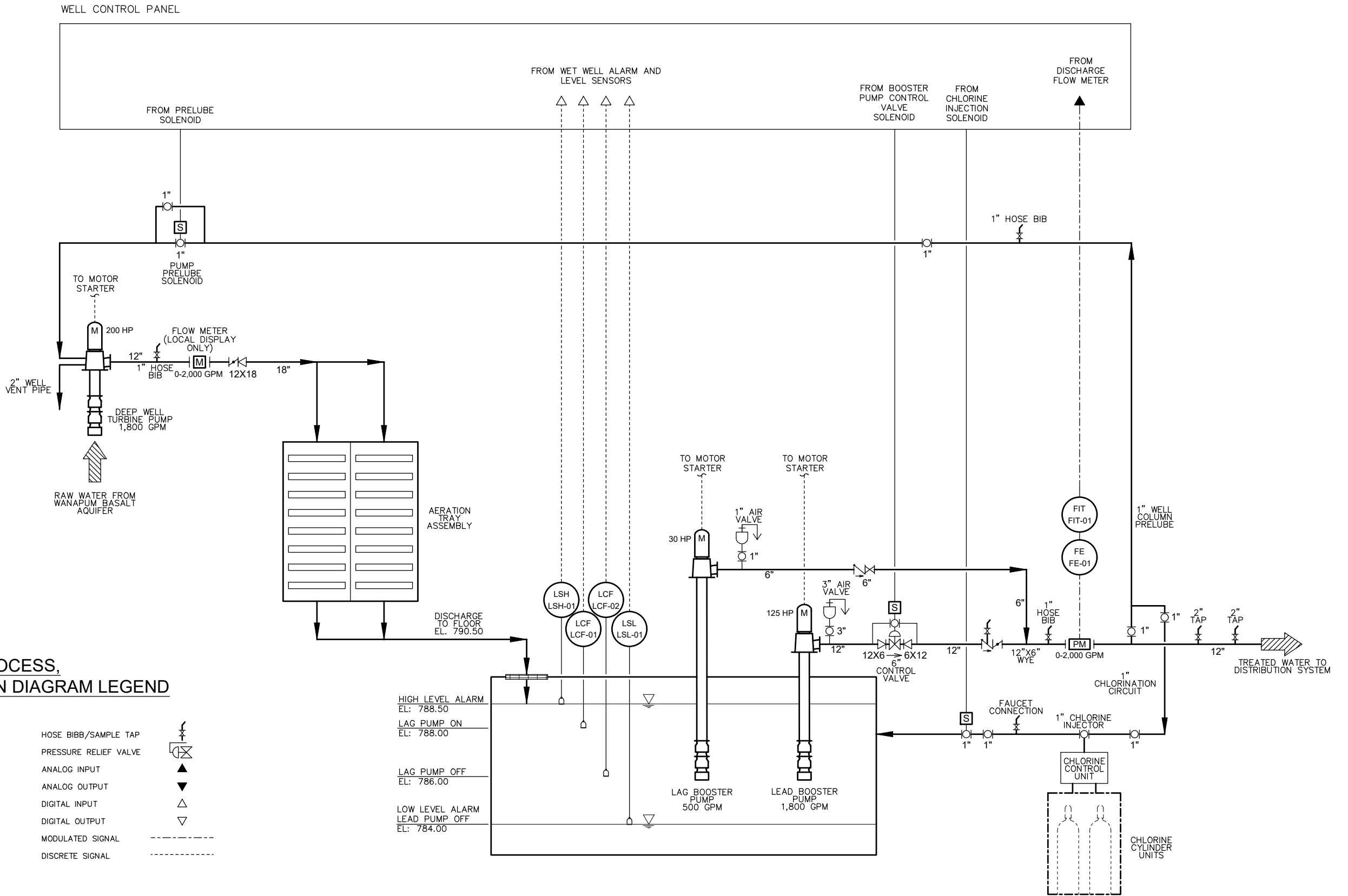
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PLAN:	SHEETS.dwg
DESIGNED BY:	JLB
ENTERED BY:	JWM

LEGEND, SYMBOL SCHEDULE, AND GENERAL NOTES

SHEET
3
OF
9

PIPING, PROCESS, AND, INSTRUMENTATION DIAGRAM LEGEND

FIELD MOUNTED INSTRUMENT*	LTM LT-02	HOSE BIBB/SAMPLE TAP	
ELECTRIC MOTOR	M	PRESSURE RELIEF VALVE	
SOLENOID VALVE	S	ANALOG INPUT	
PROPELLER FLOW METER	PM	ANALOG OUTPUT	
FLOW METER	M	DIGITAL INPUT	
PIPING REDUCER		DIGITAL OUTPUT	
CHECK VALVE		MODULATED SIGNAL	
BUTTERFLY VALVE		DISCRETE SIGNAL	
BALL VALVE			
AIR VALVE			



NOTE:
EXISTING PIPING AND
INSTRUMENTATION SHOWN THIS
SHEET FOR REFERENCE ONLY.



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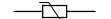
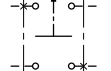
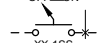
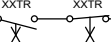
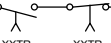
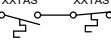
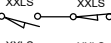


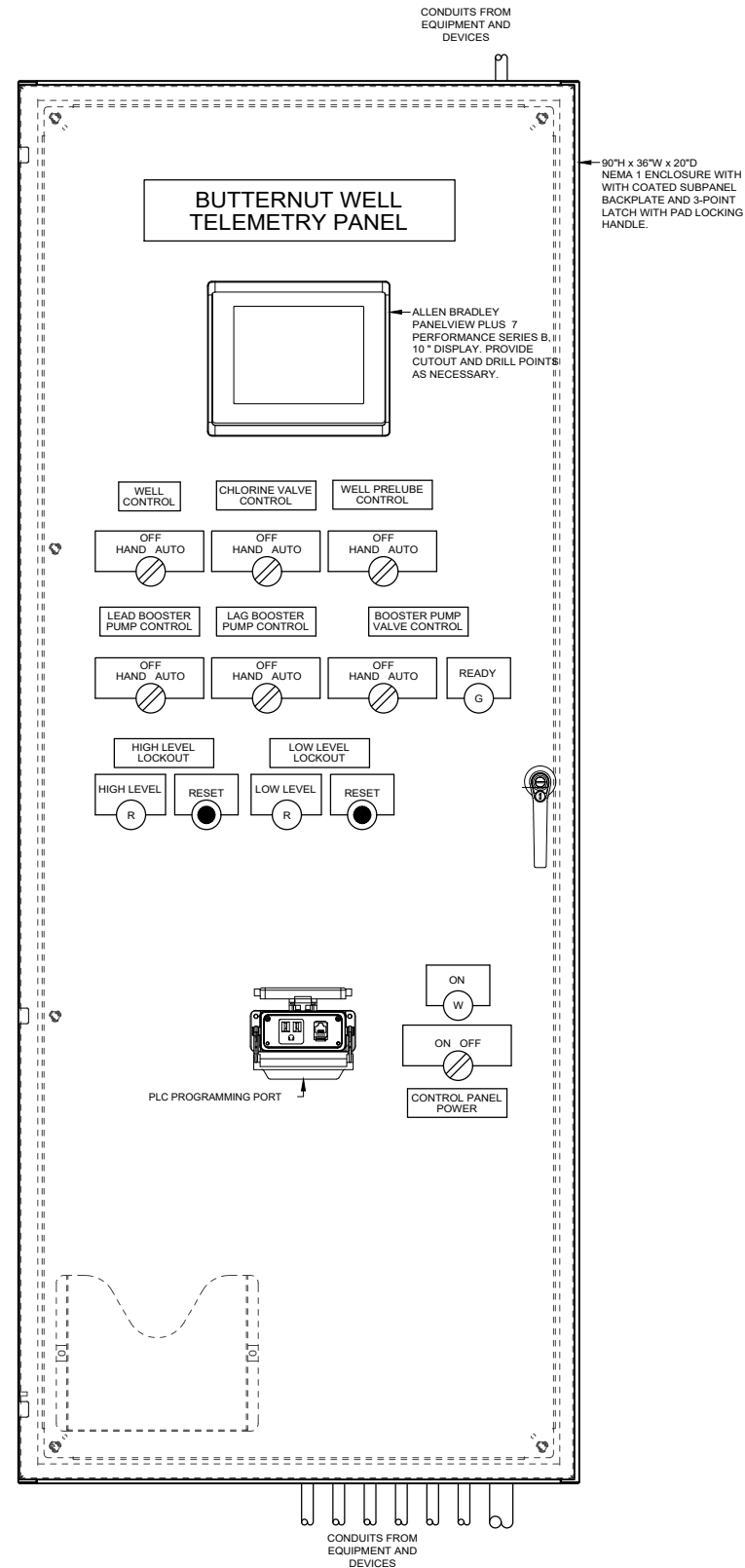
REVISION	DATE

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FILE NAMES: DRAWING: SHEETS.dwg PLAN: SHEETS.dwg	
DESIGNED BY: ENTERED BY:	JLB JWM

CITY OF GRANDVIEW BUTTERNUT WELL CONTROL UPGRADES
PIPING, PROCESS, AND INSTRUMENTATION DIAGRAM

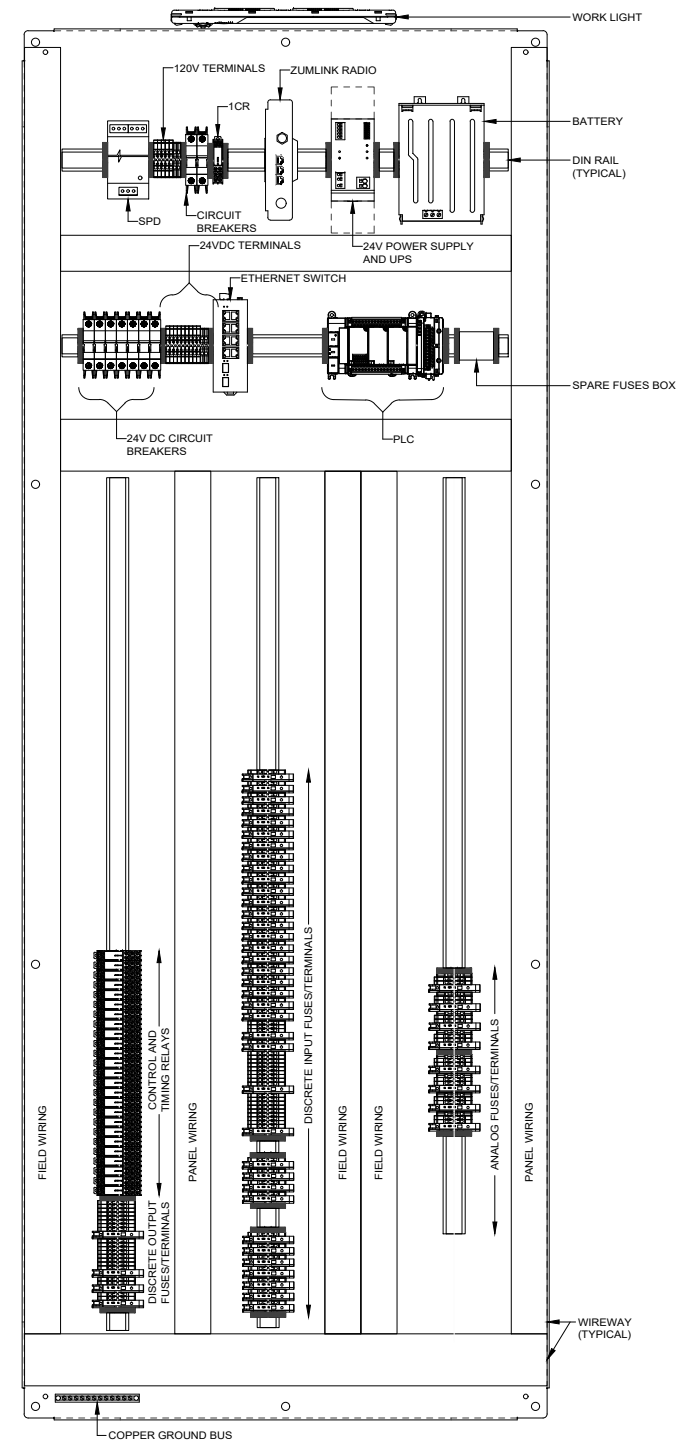
SHEET
4
OF
9

GENERAL ELECTRICAL ACRONYMS AND ABBREVIATIONS		ELEMENTARY WIRING DIAGRAMS SYMBOL SCHEDULE		ONE LINE DIAGRAMS SYMBOL SCHEDULE		ELECTRICAL PLAN DRAWINGS SYMBOL SCHEDULE		PANEL ELEVATION DRAWINGS SYMBOL SCHEDULE	
A AMPERE AC ALTERNATING CURRENT AFC AVAILABLE FAULT CURRENT AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AI ANALOG INPUT AL ALUMINUM AO ANALOG OUTPUT ATS AUTOMATIC TRANSFER SWITCH AWG AMERICAN WIRE GAUGE BKR BREAKER C CONDUIT CB CIRCUIT BREAKER CP CONTROL PANEL CPT CONTROL POWER TRANSFORMER CR CONTROL RELAY CT CURRENT TRANSFORMER CU COPPER DC DIRECT CURRENT DI DISCRETE INPUT DO DISCRETE OUTPUT EMT ELECTRICAL METALLIC TUBING ENCL ENCLOSURE ENT ELECTRICAL NONMETALLIC TUBING EWD ELEMENTARY WIRING DIAGRAM EXIST EXISTING FACP FIRE ALARM CONTROL PANEL FMC FLEXIBLE METAL CONDUIT FU FUSE FVNR FULL VOLTAGE NON REVERSING FVR FULL VOLTAGE REVERSING G GROUNDING CONDUCTOR GND GROUND HMI HUMAN MACHINE INTERFACE HP HORSEPOWER IC INTERRUPTING CAPACITY IP INTERNET PROTOCOL ISR INTRINSICALLY SAFE RELAY KA KILO AMPERES KAIC KILO AMPERES INTERRUPTING CAPACITY KCMIL THOUSAND CIRCULAR MILLS KVA KILOVOLT-AMPERE KVAR KILOVAR (REACTIVE KILOVOLT AMPERE) KW KILOWATT KWH KILOWATT-HOUR LCP LIGHTING CONTROL PANEL LFMC LIQUIDTIGHT FLEXIBLE METAL CONDUIT LNR LINE REACTOR LT LIGHT M MAGNETIC CONTACTOR mA MILLIAMPERES MC MAIN CROSSCONNECT MCP MOTOR CURRENT PROTECTOR – MAGNETIC ONLY CIRCUIT BREAKER MEG MEGOHM MLO MAIN LUGS ONLY MTS MANUAL TRANSFER SWITCH mV MILLIVOLT N NEUTRAL CONDUCTOR NAC NOTIFICATION APPLIANCE CIRCUIT NEC NATIONAL ELECTRICAL CODE NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, NESC NATIONAL ELECTRICAL SAFETY CODE OC OVERCURRENT PROTECTOR ODP OPEN DRIP PROOF OI OPERATOR INTERFACE OL OVERLOAD P POLE PF POWER FACTOR PH PHASE PLC PROGRAMMABLE LOGIC CONTROLLER POT POTENTIOMETER PRMC PVC COATED RIGID METALLIC (STEEL) CONDUIT PS POWER SUPPLY PVC POLYVINYL CHLORIDE RMC RIGID METAL (STEEL) CONDUIT RNC RIGID NON-METALLIC CONDUIT RPM REVOLUTIONS PER MINUTE RTRC REINFORCED THERMOSETTING RESIN CONDUIT SEC SECOND SHL'D SHIELDED SPD SURGE PROTECTIVE DEVICE SS SELECTOR SWITCH STP SHIELDED TWISTED PAIR SUSE SUITABLE FOR USE AS SERVICE ENTRANCE TB TERMINAL BLOCK TEFC TOTALLY ENCLOSED FAN COOLED TENV TOTALLY ENCLOSED NON-VENTILATED TR TIMING RELAY UPS UNINTERRUPTIBLE POWER SUPPLY UTP UNSHIELDED TWISTED PAIR V VOLT VA VOLT AMPERE VAC VOLTS ALTERNATING CURRENT VFD VARIABLE FREQUENCY DRIVE VR VOLTAGE MONITORING RELAY W WATT WH WATT HOUR WP WEATHER PROOF XFMR POWER TRANSFORMER		SYMBOL DESCRIPTION  PANEL OR DEVICE WIRING  FIELD WIRING  EQUIPMENT/DEVICE ENCLOSURE  WIRING CONNECTED  WIRING NOT CONNECTED  DEVICE OR EQUIPMENT TERMINAL  CONTROL PANEL TERMINAL  TRANSFORMER WINDING  FUSE  GROUND  ARC SUPPRESSOR (METAL OXIDE VARISTOR)  DIODE		SYMBOL DESCRIPTION  NON-AUTOMATIC BREAKER		SYMBOL DESCRIPTION  DISTRIBUTION/CONTROL EQUIPMENT - FLOOR MOUNTED  DISTRIBUTION/CONTROL EQUIPMENT - WALL MOUNTED  PANELBOARD - WALL MOUNTED  SWITCH (SAFETY OR DISCONNECT)  SWITCH (FUSIBLE)  MOTOR STARTER WITH SWITCH OR BREAKER (COMBINATION MAGNETIC STARTER)		SYMBOL DESCRIPTION  LEGEND PLATE PUSH BUTTON  LEGEND PLATE INDICATOR LIGHT  LEGEND PLATE CONTROL STATION  LEGEND PLATE POTENTIOMETER  INDICATOR (ANALOG)  INDICATOR (DIGITAL)  ENGRAVED NAMEPLATE DESIGNATIONS 1,2,3,ETC. ARE THE ITEMS IN NAMEPLATE SCHEDULE	
		N.O. N.C.  PUSHBUTTON (1PB, 2PB, ETC.)  SELECTOR SWITCH (1SS, 2SS, ETC.) "X" = CLOSED IN THIS POSITION  OFF-ON SELECTOR SWITCH (1SS, 2SS, ETC.) "X" = CLOSED IN THIS POSITION ARROW POSITION DENOTES OPEN/CLOSED STATUS (SHOWN IN "OPEN" POSITION)							
		N.O. N.C.  INSTANTANEOUS CONTACT OF RELAY (1CR, 2CR, ETC.)  TIMED DELAY CONTACT OF RELAY (DELAY ON/OFF ENERGIZATION-ON/OFF DELAY) (1TR, 2TR, ETC.)  TIMED DELAY CONTACT OF RELAY (DELAY ON ENERGIZATION-ON DELAY) (1TR, 2TR, ETC.)  TIMED DELAY CONTACT OF RELAY (DELAY ON DE-ENERGIZATION-OFF DELAY) (1TR, 2TR, ETC.)  OVERLOAD RELAY (1OL, 2OL, ETC.)							
		N.O. N.C.  FLOAT SWITCHES (1FS, 2FS, ETC.)  PRESSURE SWITCH (1PS, 2PS, ETC.)  TEMPERATURE ACTUATED SWITCH (THERMOSTAT) (1TAS, 2TAS, ETC.)  FLOW SWITCH (1FLS, 2FLS, ETC.)  FREE LIMIT SWITCHES (1LS, 2LS, ETC.)  HELD ABBREVIATIONS N.O. = NORMALLY OPEN N.C. = NORMALLY CLOSED							
		 CONTROL RELAY (1CR, 2CR, ETC.)  TIMED DELAY RELAY (1CR, 2CR, ETC.)  MAGNETIC MOTOR STARTER (1M, 2M, ETC.)  MAGNETIC CONTACTOR (1CON, 2CON, ETC.)  SOLENOID (1SV, 2SV, ETC.) (FOR VALVE UNLESS OTHERWISE NOTED)							
 LED TRANSFORMER TYPE (1LT, 2LT, ETC.)  LED "PUSH-TO-TEST" (CONNECT TEST CIRCUIT TO LINE) (1LT, 2LT, ETC.)		LENS COLOR CODE A = AMBER B = BLUE C = CLEAR G = GREEN O = ORANGE R = RED W = WHITE Y = YELLOW							



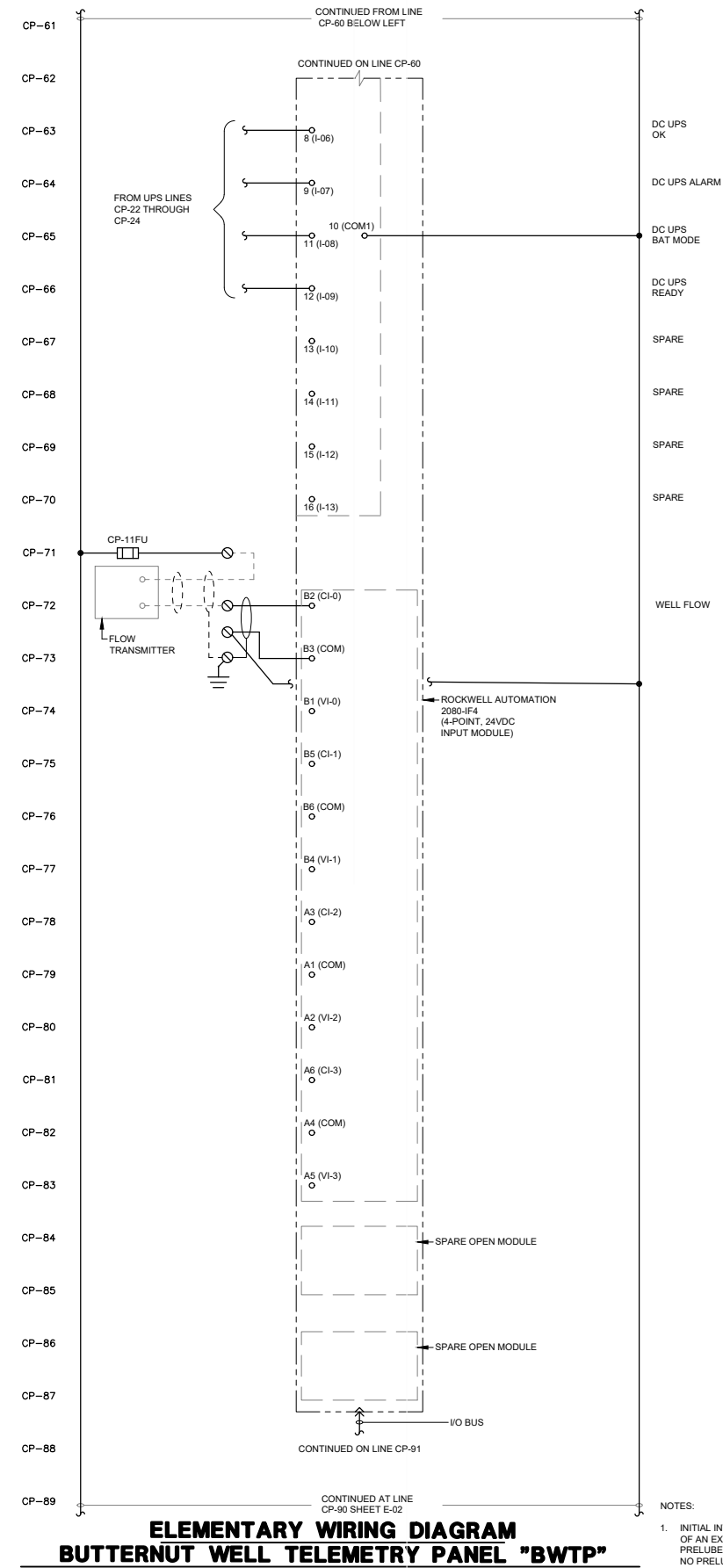
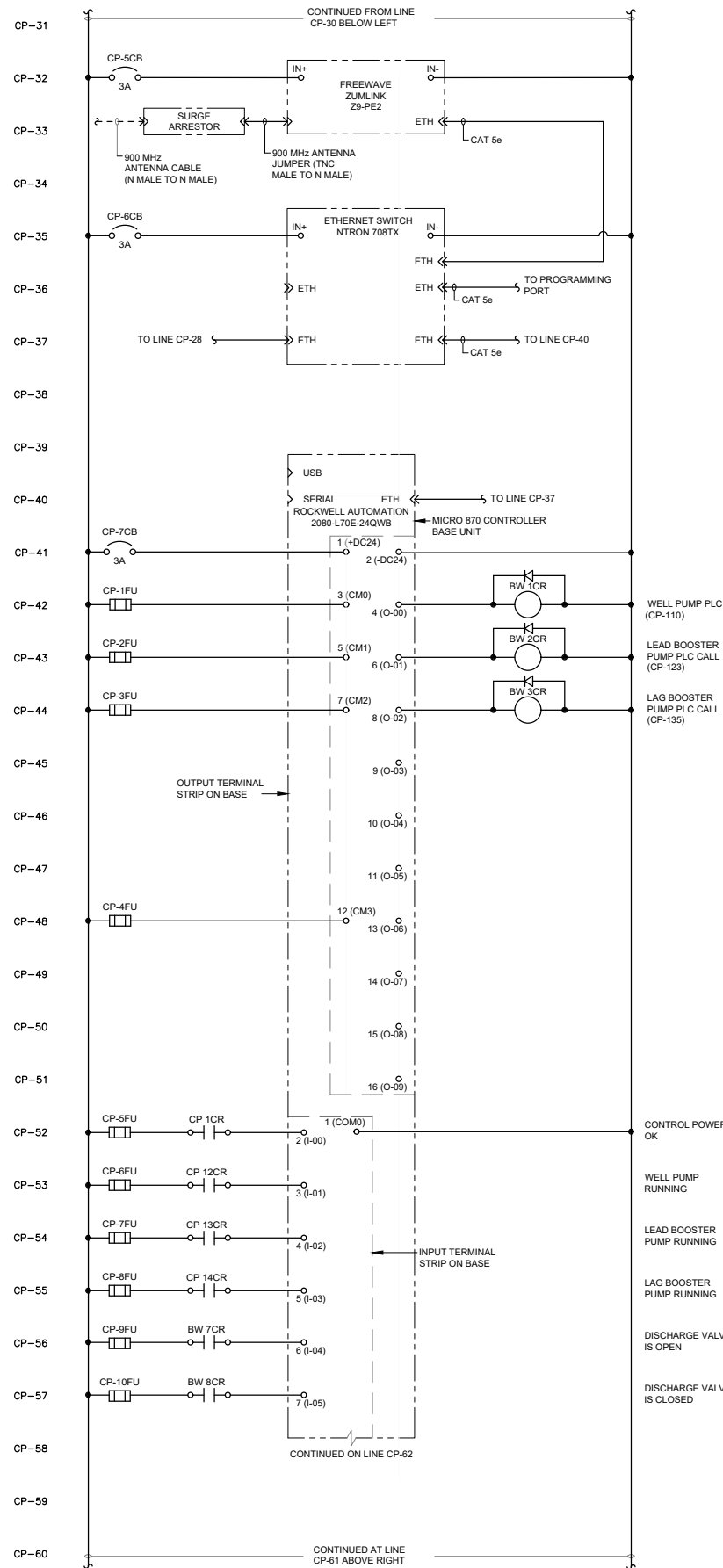
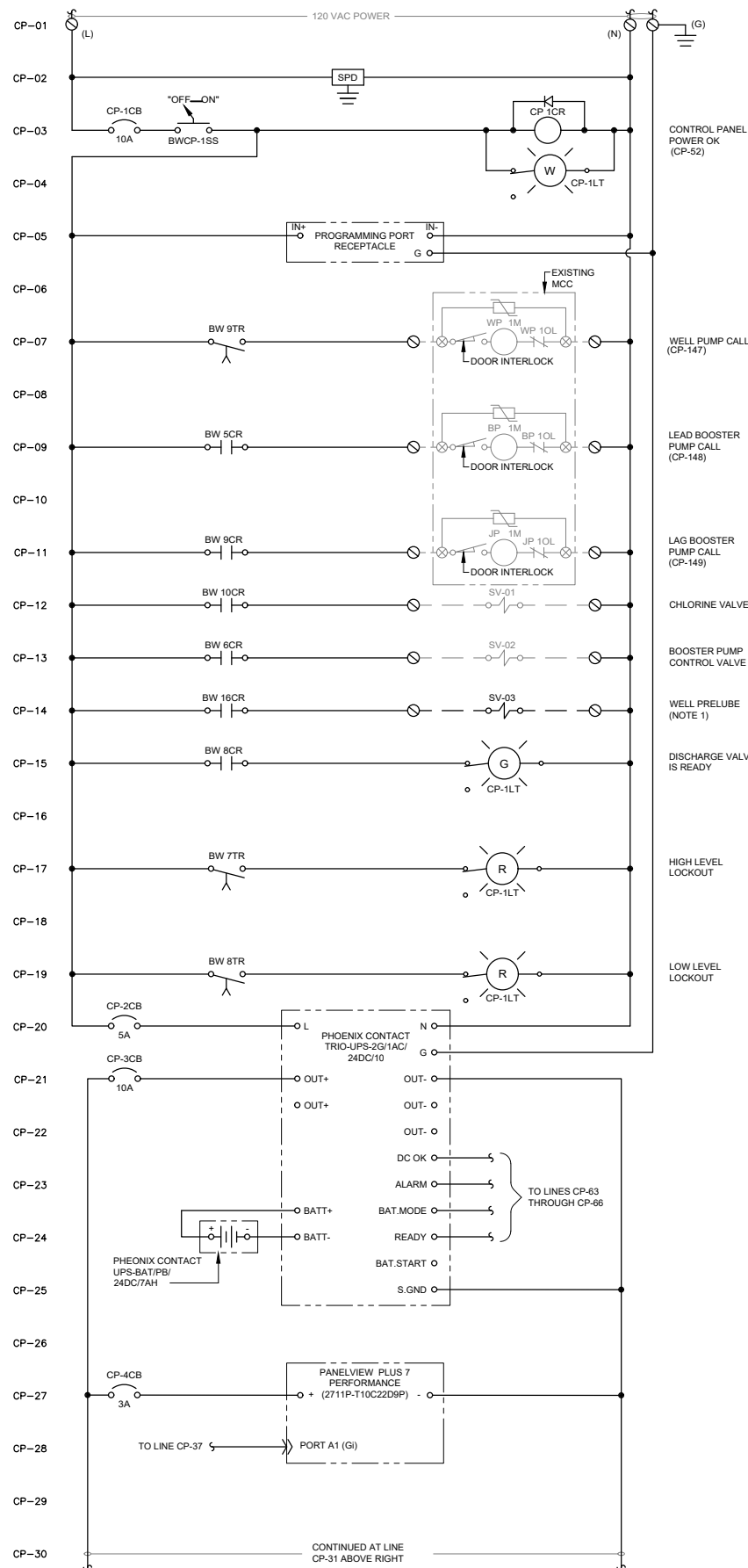
**EXTERIOR ELEVATION
BUTTERNUT WELL TELEMETRY PANEL "BWTP"**

SCALE: 2" = 1'-0"
0 3" 6" 12"



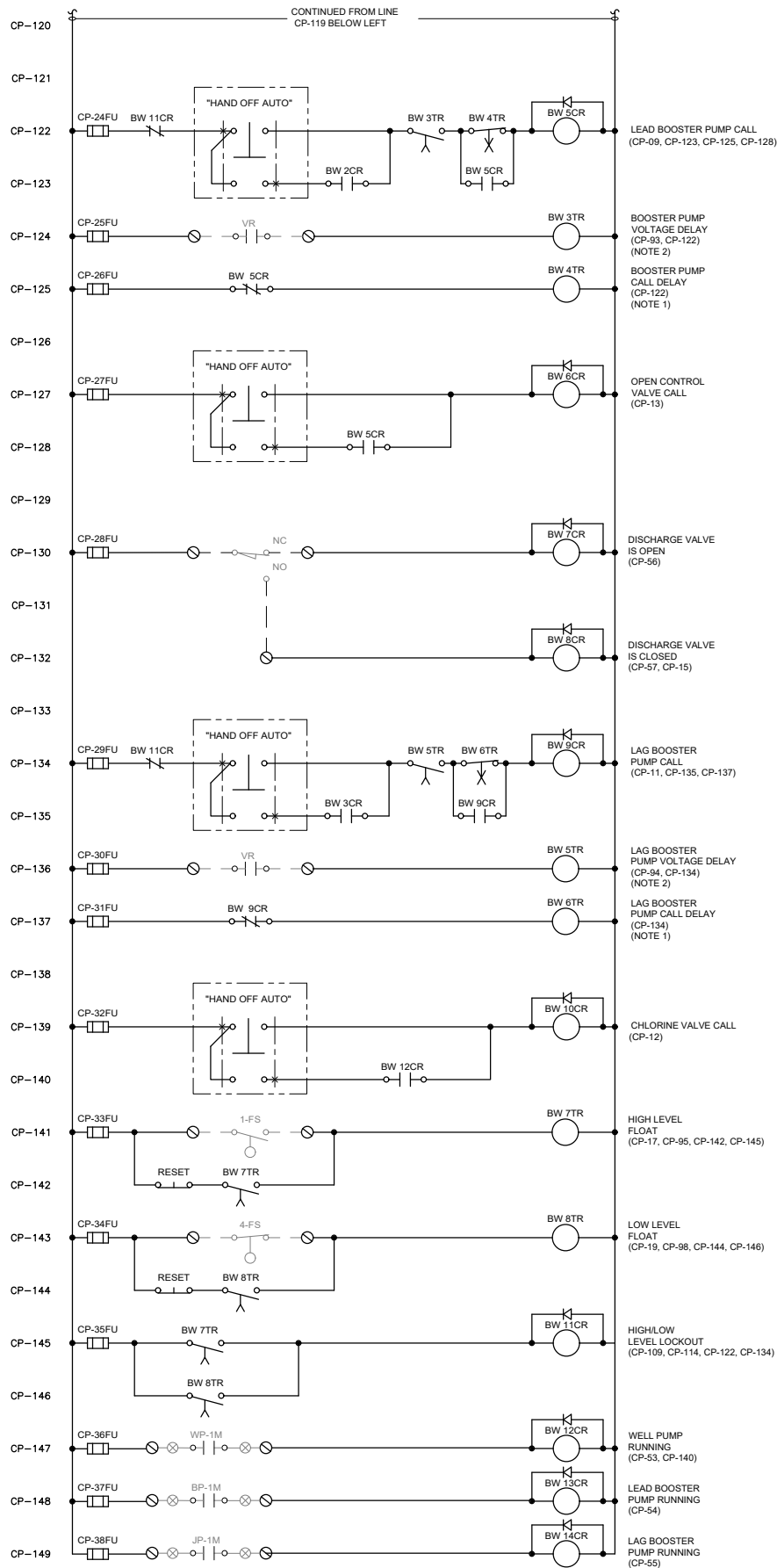
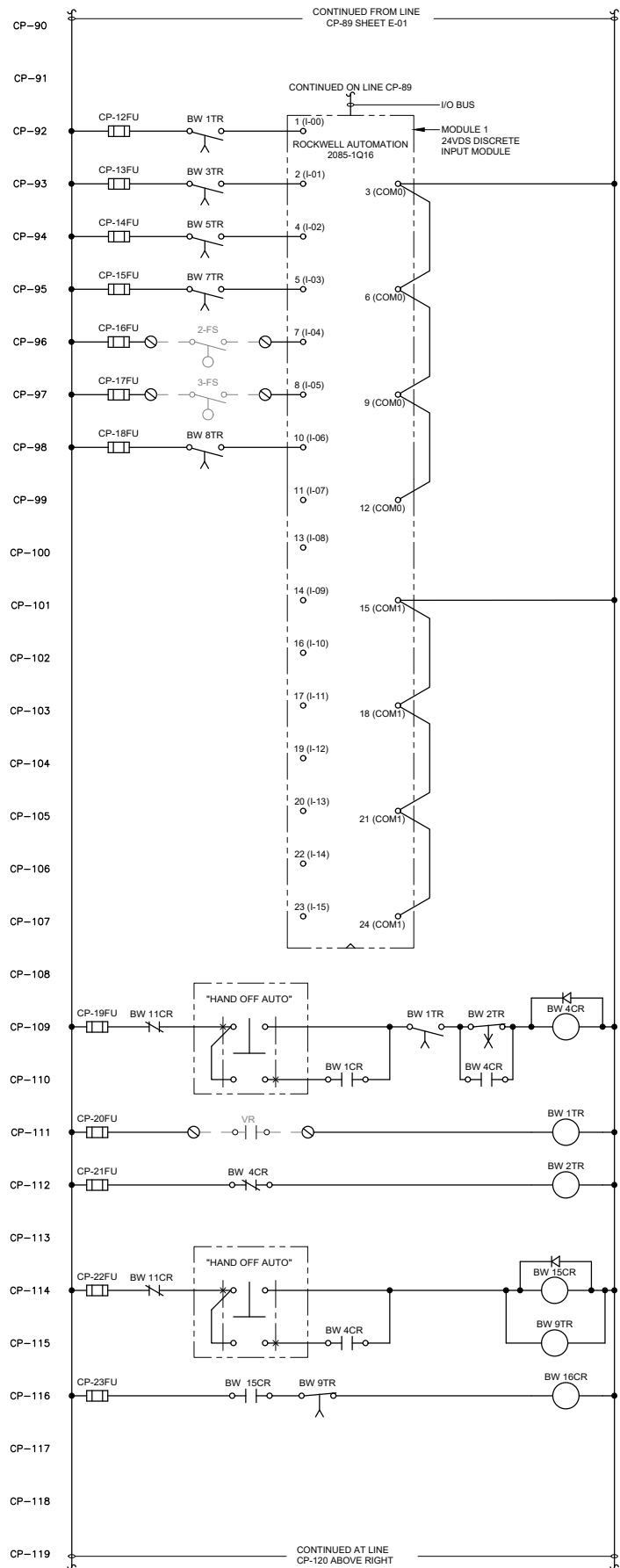
**INTERIOR ELEVATION
BUTTERNUT WELL TELEMETRY PANEL "BWTP"**

SCALE: 2" = 1'-0"
0 3" 6" 12"



**ELEMENTARY WIRING DIAGRAM
BUTTERNUT WELL TELEMETRY PANEL "BWTP"**
SCALE: NONE

NOTES:
1. INITIAL INVESTIGATION OF THE CONTROL PANEL DID NOT SHOW EVIDENCE OF AN EXISTING PRELUBE SOLENOID. IF DURING CONSTRUCTION A PRELUBE SOLENOID IS FOUND, THEN INSTALL THE WIRING AS SHOWN. IF NO PRELUBE SOLENOID IS FOUND, THEN PROVIDE PROVISIONARY WIRING FOR FUTURE INSTALLATION OF PRELUBE SOLENOID.



NOTES:

1. SET ON DELAY TO 10 SECONDS INITIALLY AND OFF DELAY TO 1 SECOND.
2. SET ON DELAY TO 5 SECONDS INITIALLY.

**ELEMENTARY WIRING DIAGRAM
BUTTERNUT WELL TELEMETRY PANEL "BWTP"**

SCALE: NONE



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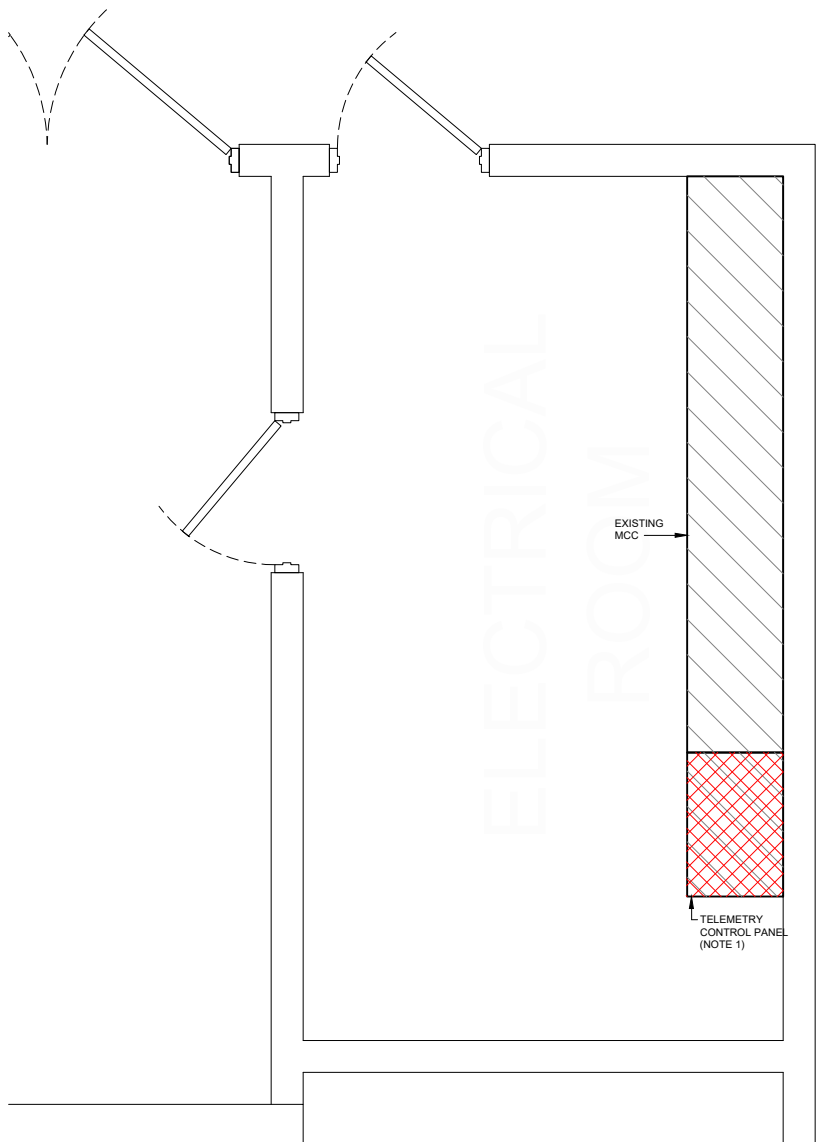
04/19/2024

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REVISION		DATE	

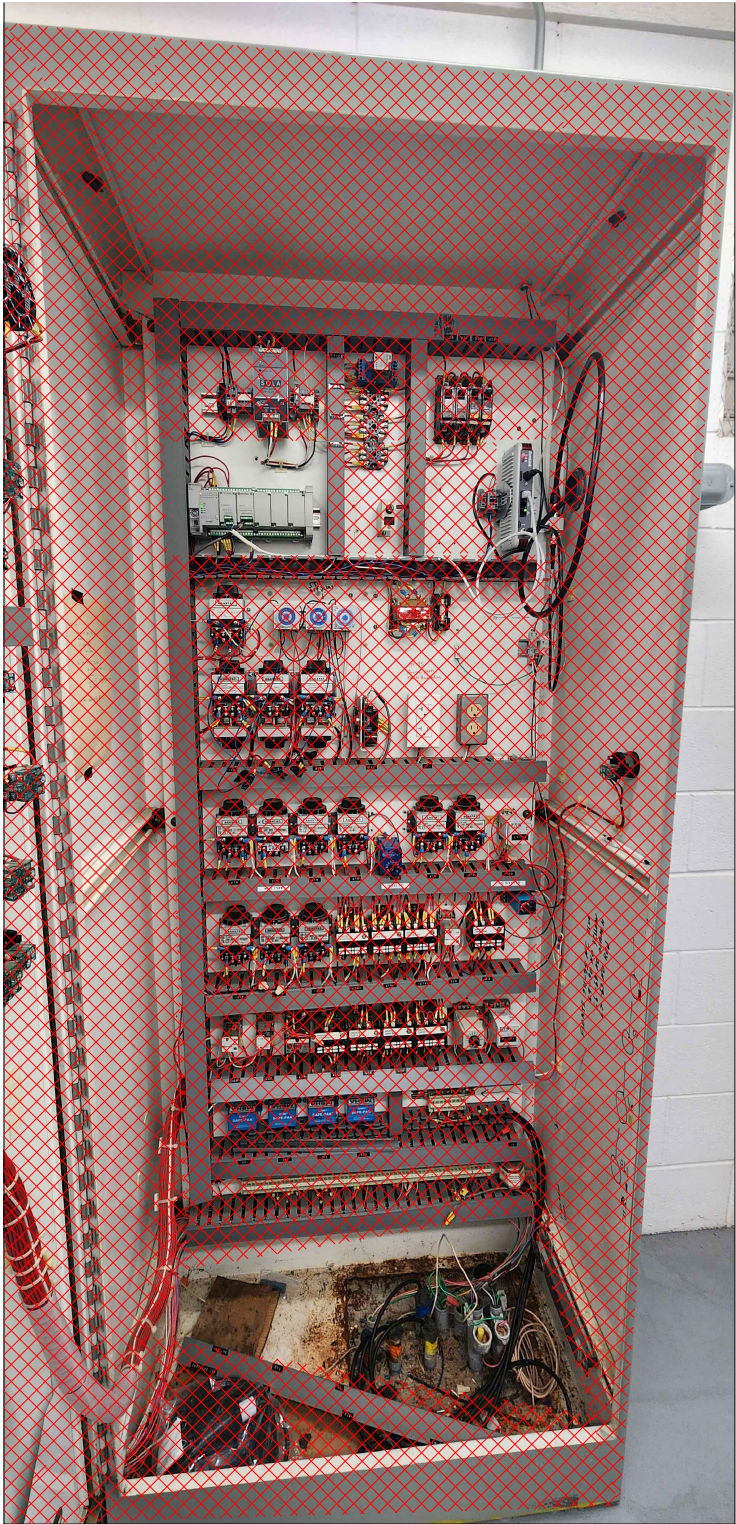
**CITY OF GRANDVIEW
BUTTERNUT WELL CONTROL UPGRADES**

WELL TELEMETRY PANEL ELEMENTARY WIRING DIAGRAM

SHEET
8
OF
9



**EXISTING/DEMOLITION
BUTTERNUT WELL ELECTRICAL ROOM**
SCALE: 1/2" = 1'-0"
0 3' 6' 12'



**EXISTING/DEMOLITION
WELL CONTROL PANEL INTERIOR**
SCALE: NONE
(NOTE 1)



**EXISTING/DEMOLITION
WELL CONTROL PANEL EXTERIOR**
SCALE: NONE
(NOTE 1)

NOTES:
1. DEMOLISH EXISTING WELL CONTROL PANEL. PRESERVE EXISTING CONDUITS AND FIELD WIRES. PRESERVE EXISTING MICRO800 PLC AND PROVIDE IT TO THE OWNER. PRESERVE EXISTING RADIO, FEEDLINE, AND SURGE ARRESTOR. REINSTALL INTO THE NEW CONTROL PANEL.