

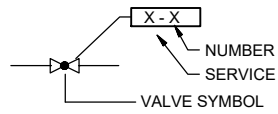
MECHANICAL LEGEND AND NOTES

GENERAL PIPING NOTES

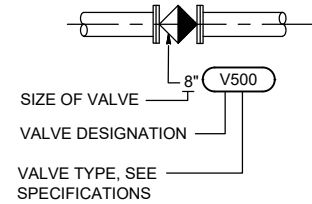
- LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS.
- SIZE OF FITTINGS SHOWN ON DRAWINGS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE THE SAME AS SHOWN FOR ADJACENT STRAIGHT RUN OF PIPE.
- LOCATION AND NUMBER OF PIPE HANGERS AND PIPE SUPPORTS SHOWN IS ONLY APPROXIMATE. CONTRACTOR SHALL DESIGN SUPPORTS AS SPECIFIED.
- ALL JOINTS SHALL BE WATERTIGHT. WALL PIPES SHALL BE USED WHEREVER PIPING PASSES FROM A STRUCTURE TO BACKFILL, UNLESS OTHERWISE NOTED.
- ALL FLEXIBLE CONNECTORS AND COUPLING ADAPTERS SHALL BE PROVIDED WITH THRUST TIES AND ANCHORS, UNLESS OTHERWISE NOTED. THRUST PROTECTION SHALL BE ADEQUATE FOR TEST PRESSURES SPECIFIED.
- SYMBOLS, LEGENDS, AND PIPE USE IDENTIFICATIONS SHOWN SHALL BE FOLLOWED THROUGHOUT THE DRAWINGS, WHEREVER APPLICABLE. NOT ALL OF THE VARIOUS PIPING COMPONENTS ARE NECESSARILY USED IN THE PROJECT.
- NUMBER AND LOCATION OF UNIONS SHOWN ON DRAWINGS IS ONLY APPROXIMATE. PROVIDE ADDITIONAL UNIONS NECESSARY TO FACILITATE CONVENIENT REMOVAL OF VALVES AND MECHANICAL EQUIPMENT.
- WHERE A GROOVED END COUPLING IS SHOWN, IT SHALL BE THE RIGID JOINT TYPE, UNLESS OTHERWISE SPECIFIED. WHERE A FLANGED COUPLING ADAPTER IS SHOWN, A STANDARD FLANGE SHALL BE JOINED TO THE COUPLING ADAPTER. WAX TAPE COAT ALL BURIED FITTINGS, FLANGES, VALVES, ECT. PER SPECIFICATIONS.

VALVE DESIGNATIONS

CONTROL VALVES

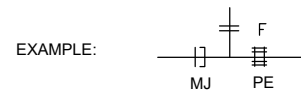


MANUAL VALVES AND CHECK VALVES



PIPE FITTING AND PATTERNS

- | | | | |
|---|--------|----|------------------|
| B | BELL | PE | PLAIN END |
| S | SPIGOT | GE | GROOVED END |
| F | FLANGE | MJ | MECHANICAL JOINT |



PIPE AND FITTING SYMBOLS

DOUBLE LINE		SINGLE LINE				DOUBLE LINE		SINGLE LINE								

- NOTES:**
- ONLY FLANGED END CONNECTIONS ARE SHOWN HERE FOR DOUBLE LINE FITTINGS. FITTINGS WITH OTHER END PATTERNS ARE SHOWN SIMILARLY ON THE CONSTRUCTION DRAWINGS. ALSO SEE PIPING SPECIFICATIONS.
 - SYMBOLS SHOWN HERE FOR SINGLE LINE FITTINGS ARE GENERIC ONLY. REFER TO PIPING SPECIFICATIONS FOR SPECIFIC END CONNECTIONS FOR SINGLE LINE PIPE AND FITTINGS.
 - EXISTING PIPE AND EQUIPMENT IS SHOWN DASHED AND/OR SCREENED AND IS NOTED AS EXISTING. NEW PIPING AND EQUIPMENT IS SHOWN HEAVY-LINED.

VALVE SYMBOLS

SINGLE LINE		DOUBLE LINE	

WELDING

- WELDS SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS):
 - D1.1. STRUCTURAL WELDING CODE STEEL
 - D1.2. STRUCTURAL WELDING CODE ALUMINUM
 - D1.3. STRUCTURAL WELDING CODE SHEET STEEL
 - D1.4. STRUCTURAL WELDING CODE REINFORCING STEEL
 - D1.6. STRUCTURAL WELDING CODE STAINLESS STEEL
- REPAIR WELDS FOUND DEFECTIVE IN ACCORDANCE WITH AWS D1.1 SECTION 5.26.
- USE INTERMITTENT WELDS AT FIELD WELDS OF EMBED PLATES AND ANGLES TO AVOID SPALLING OR CRACKING OF THE EXISTING CONCRETE.
- BUTT JOINT WELDS SHALL BE COMPLETE JOINT PENETRATION (CJP) UNLESS INDICATED OTHERWISE.



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3145 WEST 11400 SOUTH PUMP STATION
IMPROVEMENTS

Jacobs
GENERAL
MECHANICAL NOTES AND
PIPING LEGEND

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	APRIL 2026
PROJ	W7Y49600
DWG	G-2
SHEET	2 of 17

100% DESIGN

SYMBOL	DESCRIPTION
ONE-LINE DIAGRAM	
	DRAWOUT AIR CIRCUIT BREAKER, LOW VOLTAGE
	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER, STATIC TRIP UNIT, SENSOR AMP TRIP AND FRAME RATINGS SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, TRIP RATING SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES, TRIP AND FUSE RATING INDICATED, 3 POLE, UNO
	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING INDICATED, 3 POLE, UNO
	SWITCH, CURRENT RATING INDICATED, 3 POLE, UNO
	FUSE, CURRENT RATING AND QUANTITY INDICATED
	INDUCTOR/REACTOR, PERCENTAGE SHOWN
	MAGNETIC STARTER WITH OVERLOAD, NEMA SIZE INDICATED, FVNR UNO
	ELECTRONIC STARTER/SPEED CONTROL RVSS = REDUCED VOLTAGE SOFT STARTER AFD = AC ADJUSTABLE FREQUENCY DRIVE DC = DC ADJUSTABLE SPEED DRIVE RVAT = REDUCED VOLTAGE AUTO TRANSFORMER TYPE RVRT = REDUCED VOLTAGE REACTOR TYPE
	AC MOTOR, SQUIRREL CAGE INDUCTION - HORSEPOWER INDICATED
	GROUND
	TRANSFORMER, SIZE, VOLTAGE RATINGS, AND PHASE INDICATED
	SHIELDED ISOLATION TRANSFORMER
	POTENTIAL TRANSFORMER, VOLTAGE RATING AND QUANTITY INDICATED
	CURRENT TRANSFORMER, RATIO(100:5) AND QUANTITY INDICATED (3)
	CONNECTION POINT TO EQUIPMENT SPECIFIED IN OTHER DIVISIONS, RACEWAY, CONDUCTOR AND CONNECTION IN THIS DIVISION
	SURGE PROTECTIVE DEVICE
	DELTA CONNECTION
	WYE GROUNDED CONNECTION, SOLID GROUND
	WYE NEUTRAL GROUND RESISTOR OR IMPEDANCE CONNECTION
NOTES: 1. THESE ARE STANDARD LEGEND SHEETS. SOME SYMBOLS AND ABBREVIATIONS MAY APPEAR ON THE LEGEND AND NOT ON THE DRAWINGS. 2. FOR ADDITIONAL ABBREVIATIONS OF OTHER DIVISIONS (HVAC, MECHANICAL, AND STRUCTURAL/ARCHITECTURAL) SEE OTHER LEGENDS.	

SYMBOL	DESCRIPTION															
CONTROL DIAGRAM																
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN															
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED															
	3 POSITION SELECTOR SWITCH MAINTAINED CONTACT															
	SELECTOR SWITCH - MAINTAINED CONTACT - CHART IDENTIFIES OPERATION WHEN NEEDED FOR CLARITY:															
<table border="1"> <tr> <th rowspan="2">CKT</th> <th colspan="3">POSITION</th> </tr> <tr> <th>HAND</th> <th>OFF</th> <th>REMOTE</th> </tr> <tr> <td>1</td> <td>X</td> <td>O</td> <td>O</td> </tr> <tr> <td>2</td> <td>O</td> <td>O</td> <td>X</td> </tr> </table>	CKT	POSITION			HAND	OFF	REMOTE	1	X	O	O	2	O	O	X	X - CLOSED CONTACT O - OPEN CONTACT
CKT		POSITION														
	HAND	OFF	REMOTE													
1	X	O	O													
2	O	O	X													
	SELECTOR SWITCH, ON-OFF TYPE															
	MUSHROOM HEAD PUSHBUTTON SWITCH															
	INDICATING LIGHT, PUSH-TO-TEST, LETTER INDICATES COLOR															
	INDICATING LIGHT - LETTER INDICATES COLOR A - AMBER G - GREEN S - STROBE B - BLUE R - RED C - CLEAR W - WHITE															
	MOTOR STARTER CONTACTOR COIL															
	CONTROL RELAY, X INDICATES NUMERICAL ORDER IN CIRCUIT															
	TIME DELAY RELAY, X INDICATES NUMERICAL ORDER IN CIRCUIT															
	SOLENOID VALVE, X INDICATES NUMERICAL ORDER IN CIRCUIT															
	CONTACT - NORMALLY OPEN															
	CONTACT - NORMALLY CLOSED															
	REMOTE DEVICE															
	TIME DELAY RELAY CONTACT, NORMALLY OPEN, CLOSSES WHEN ENERGIZED AND TIMED OUT															
	TIME DELAY RELAY CONTACT, NORMALLY CLOSED, OPENS WHEN ENERGIZED AND TIMED OUT															
	TIME DELAY RELAY CONTACT, CLOSSES WHEN ENERGIZED, OPENS WHEN DE-ENERGIZED AND TIMED OUT															
	TIME DELAY RELAY CONTACT, OPENS WHEN ENERGIZED, CLOSSES WHEN DE-ENERGIZED AND TIMED OUT															
	TERMINAL BLOCK, REMOTE															
	TERMINAL BLOCK, INTERNAL															
	FUSED TERMINAL BLOCK															
	FUSE, RATING INDICATED															
	TRANSFORMER, CONTROL POWER															
	TEMPERATURE SWITCH, OPENS ON TEMPERATURE RISE															
	TEMPERATURE SWITCH, CLOSSES ON TEMPERATURE RISE															
	FLOAT SWITCH, NORMALLY CLOSED, OPENS ON DESCENDING LEVEL															
	FLOAT SWITCH, NORMALLY OPEN, CLOSSES ON RISING LEVEL															
	PRESSURE SWITCH, NORMALLY CLOSED, OPENS ON RISING PRESSURE															
	PRESSURE SWITCH, NORMALLY OPEN, CLOSSES ON RISING PRESSURE															
	FLOW SWITCH, CLOSSES ON INCREASED FLOW															
	FLOW SWITCH, OPENS ON INCREASED FLOW															

SYMBOL	DESCRIPTION
POWER SYSTEM PLAN-1	
	CONNECTION POINT TO EQUIPMENT SPECIFIED, RACEWAY, CONDUCTOR, TERMINATION AND CONNECTION IN THIS DIVISION.
	MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOWN.
	PANELBOARD - SURFACE MOUNTED
	PANELBOARD LETTER OR NUMBER FACILITY NUMBER LP - LOW VOLTAGE PANEL DP - DISTRIBUTION PANEL
	PANELBOARD - FLUSH MOUNTED
	TERMINAL JUNCTION BOX
	MOTOR, SQUIRREL CAGE INDUCTION
	GENERATOR, VOLTAGE AND SIZE AS INDICATED.
	HOME RUN - DESTINATION SHOWN
	EXPOSED CONDUIT AND CONDUCTORS*
	CONCEALED CONDUIT AND CONDUCTORS*
NOTE: ALL UNMARKED CONDUIT RUNS CONSIST OF TWO NO. 12, ONE NO. 12 GROUND CONDUCTORS IN 3/4" CONDUIT. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF NO. 12 CONDUCTORS. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE.	
	CROSSHATCHES WITH BAR INDICATE NO.10 CONDUCTOR. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.
	CONDUIT AND CONDUCTOR CALLOUT, SEE LEGEND.
	FIBER OPTIC CONDUIT
	CONCRETE ENCASED DUCT BANK WHERE XXXX IS THE DUCT BANK NAME. SEE CIRCUIT AND RACEWAY CODING DEFINITION
	TRANSFORMER
	GENERAL CONTROL OR WIRING DEVICE. LETTER SYMBOLS OR ABBREVIATIONS INDICATE TYPE OF DEVICE
	CONTROL STATION, SEE CONTROL DIAGRAMS FOR CONTROL DEVICE(S) REQUIRED.
	NONFUSED DISCONNECT SWITCH, CURRENT RATING INDICATED, 3 POLE
	FUSED DISCONNECT SWITCH, CURRENT RATING INDICATED (60/40, 60=SWITCH RATING / 40=FUSE RATING) 3 POLE
	COMBINATION CIRCUIT BREAKER AND MAGNETIC STARTER, NEMA SIZE INDICATED
	BREAKER, SEPARATELY MOUNTED, CURRENT RATING INDICATED (100/40, 100 = FRAME SIZE; 40 = TRIP RATING) 3 POLE
	CONTACTOR, MAGNETIC, NEMA SIZE INDICATED
	LIGHTING CONTACTOR, CURRENT RATING INDICATED
	STARTER, MAGNETIC NEMA SIZE INDICATED
	CONVENIENCE RECEPTACLE - DUPLEX UNLESS NOTED OTHERWISE
	WP- WEATHERPROOF C- CLOCK HANGER TL- TWIST LOCK CRE- CORROSION RESISTANT GFCI- GROUND FAULT CIRCUIT INTERRUPTER SUBSCRIPT NUMBER AT RECEPTACLE INDICATES CIRCUIT
	POLE
	240V RECEPTACLE
	PULLBOX
	CONVENIENCE RECEPTACLE - QUADRUPLEX

SYMBOL	DESCRIPTION
POWER SYSTEM PLAN-2	
	MULTI OUTLET ASSEMBLY
	DUPLEX CONVENIENCE RECEPTACLE - FLUSH IN FLOOR
	CONVENIENCE RECEPTACLE, PEDESTAL, DUPLEX SINGLE FACE UNLESS INDICATED OTHERWISE
	RECEPTACLE, SPECIAL PURPOSE-NEMA CONFIGURATION AND AMPERAGE INDICATED
	THERMOSTAT
	UTILITY REVENUE METERING FACILITY
	ELECTRIC UNIT HEATER
	ELECTRIC AIR CONDITIONER (SELF CONTAINED UNIT)
	UTILITY POLE
GROUND SYSTEM PLAN	
	GROUND ROD
	GROUND ROD IN TEST WELL
	GROUNDING CONDUCTOR, SIZE AS INDICATED
	PIGTAIL FOR CONNECTION TO EQUIPMENT CABINET OR FRAME
	EQUIPMENT GROUND BUS
	EQUIPMENT NEUTRAL BUS

NO.	DATE	DR	CHK	APVD	BY

JORDAN VALLEY WATER CONSERVANCY DISTRICT
3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

JACOBS
GENERAL
ELECTRICAL LEGEND 1

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VERIFY SCALE	
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DATE	APRIL 2026
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DWG	G-4
SHEET	4 of 17

GENERAL NOTES

1. FIELD VERIFY EQUIPMENT AND THEIR LOCATIONS, INCLUDING EXISTING, REPLACED AND TO BE DEMOLISHED, ON PROCESS DRAWINGS. FIELD VERIFY LOADS, CONDUCTORS, CONDUIT ROUTING AND CONDUIT SIZES, AND BREAKER SIZES FOR EXISTING ELECTRICAL SYSTEM.
2. REMOVE ALL GROUT, BOLTS, AND CONCRETE DOWN TO THE EXISTING CONCRETE FLOOR SLAB.



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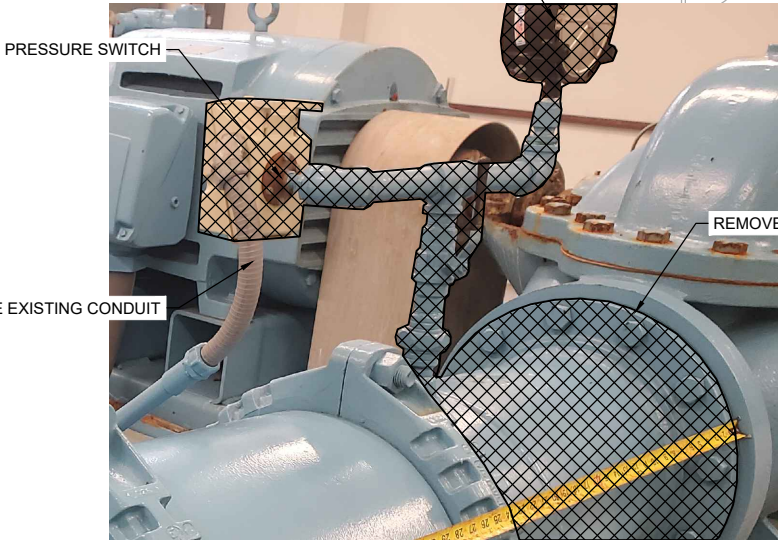
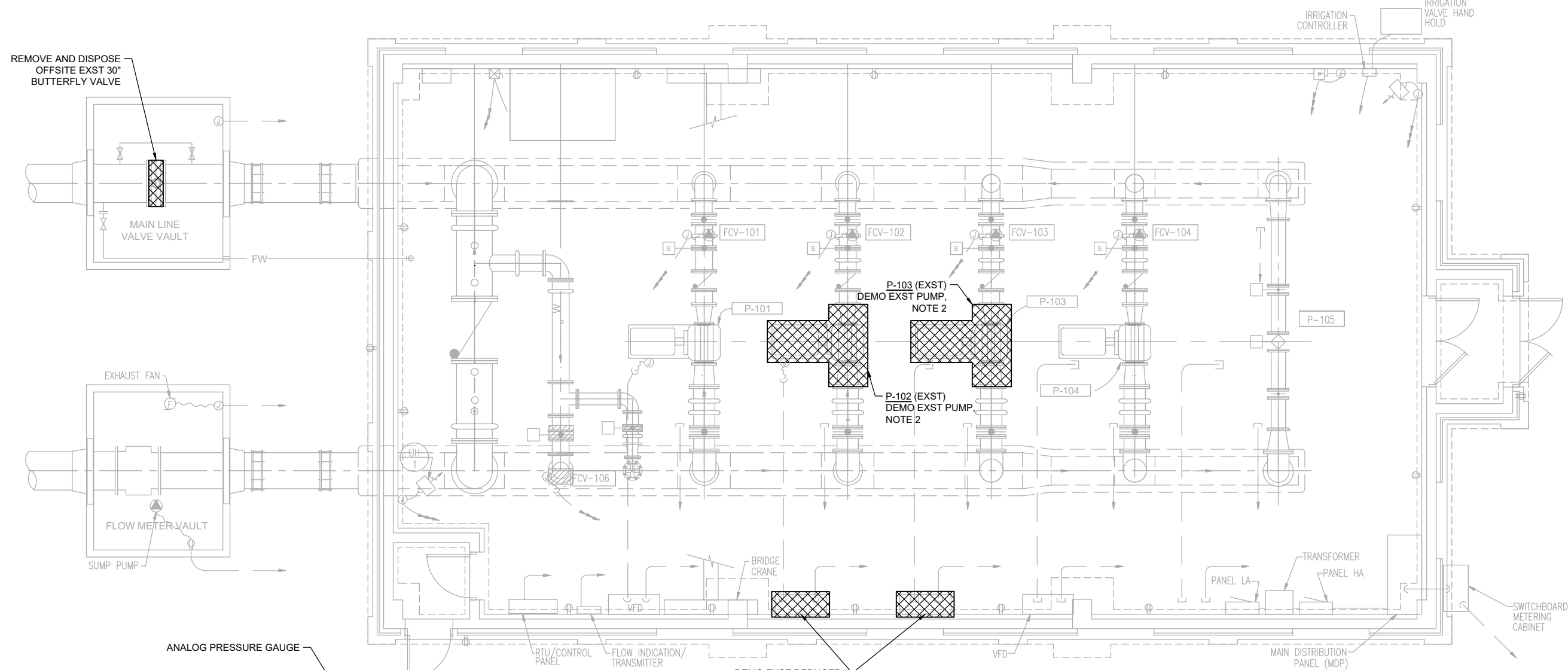
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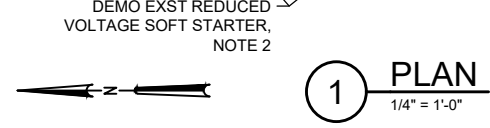
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DEMOLITION
DEMOLITION PLAN

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DATE	APRIL 2026
PROJ	W7Y49600
DWG	D-1
SHEET	6 of 17

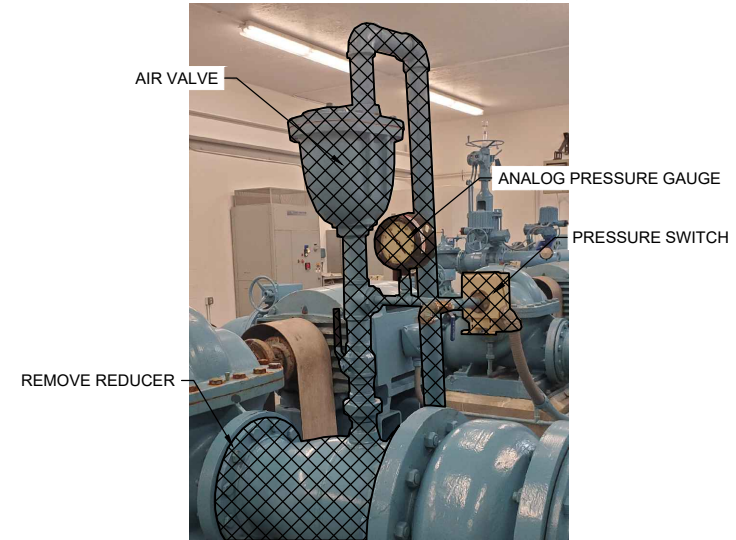
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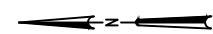
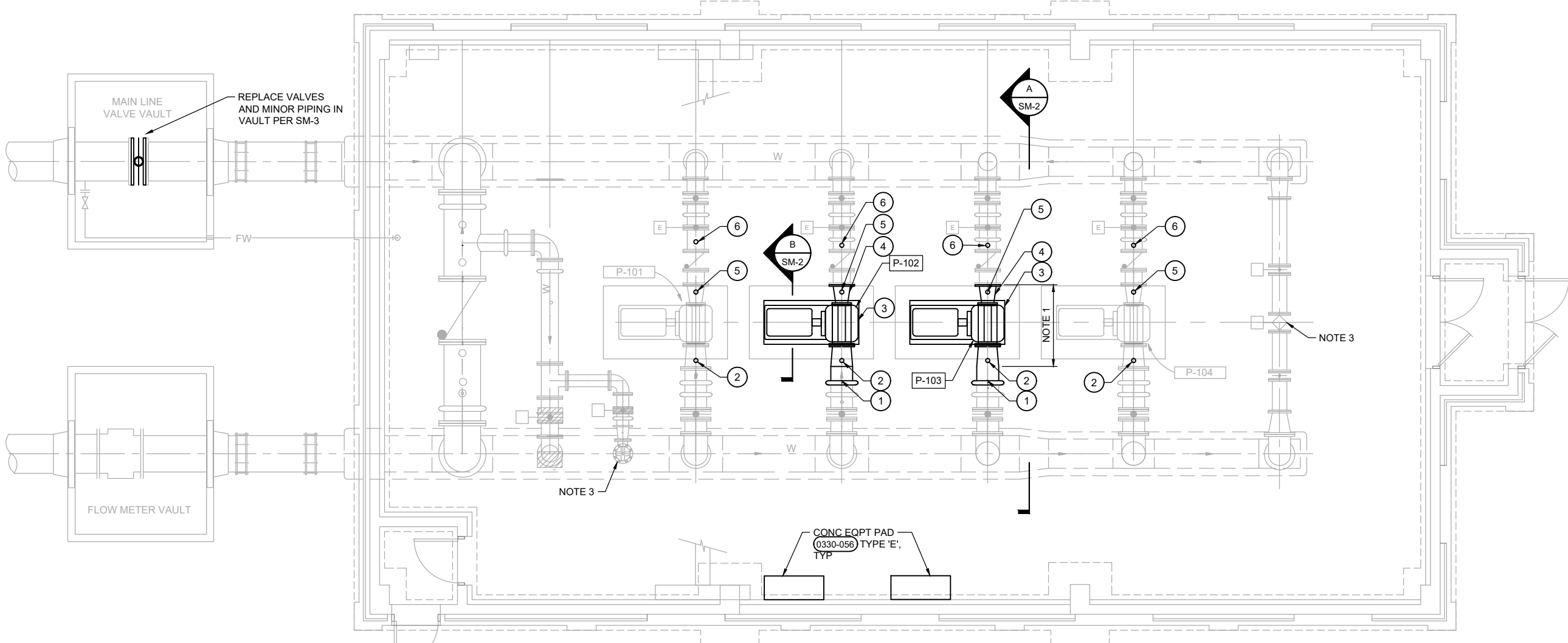
2 PHOTO DETAIL - PUMP SUCTION



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



3 PHOTO DETAIL - PUMP DISCHARGE



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

MATERIAL SCHEDULE

- 1 STD WT WSP REDUCER. 18" CONNECTION TO EXISTING PIPING. NOTES 1 & 2.
- 2 LOW PRESSURE SWITCH PER (4090-690) , NOTE 2.
- 3 CONCRETE EQUIPMENT PAD PER DETAIL B ON SM-2. COORDINATE FINAL DIMENSIONS OF PAD WITH APPROVED EQUIPMENT SUBMITTAL.
- 4 STD WT WSP REDUCER. 14" CONNECTION TO EXISTING PIPING. NOTES 1 & 2.
- 5 AIR VALVE AND HIGH PRESSURE SWITCH PER (4090-692) , NOTE 2.
- 6 PRESSURE GAUGE INSTALLATION WELD TO EXISTING PIPE PER (4090-692) , NOTE 2.

NOTES:

- 1. FIELD VERIFY PIPING DIMENSIONS AND COORDINATE WITH PUMP MANUFACTURER ON LAY LENGTHS AND CONNECTIONS.
- 2. ALL PIPING REQUIRES EPOXY LINING AND COATING, SEE SECTION 09 90 00.
- 3. COORDINATE WITH MANUFACTURER REPRESENTATIVE OF EXISTING VALVE FOR SET POINT ADJUSTMENTS DURING COMMISSIONING.



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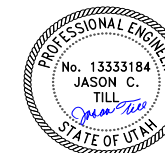
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3145 WEST 11400 SOUTH PUMP STATION
IMPROVEMENTS

Jacobs
STRUCTURAL / MECHANICAL
PUMP STATION PLAN

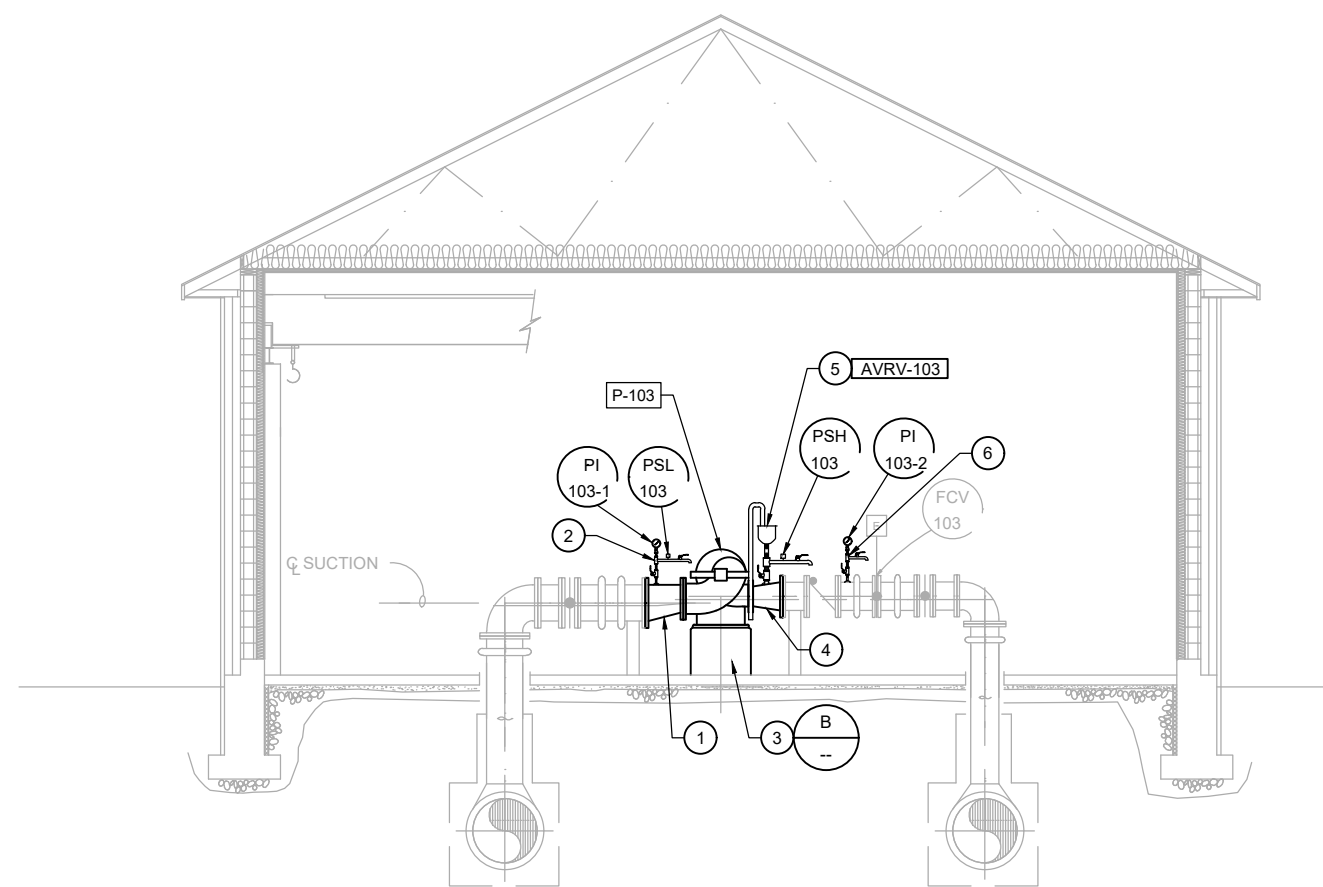
VERIFY SCALE
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DATE	APRIL 2026
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DWG	SM-1
SHEET	7 of 17

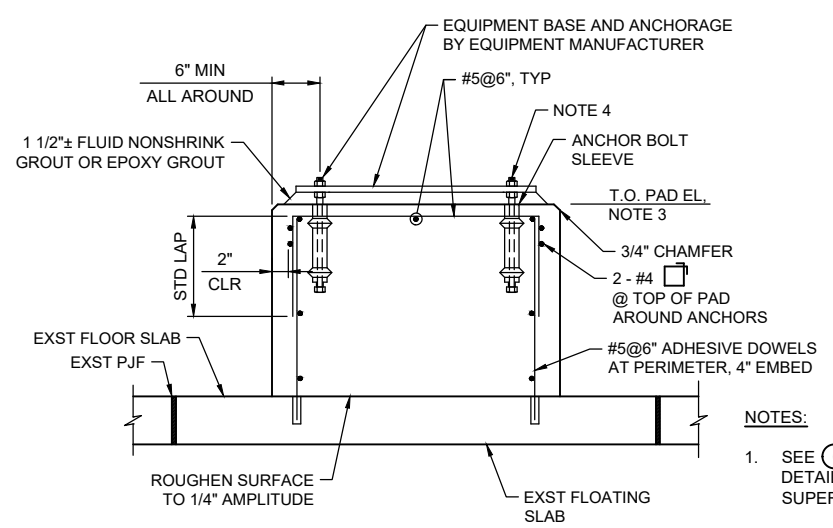
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A SECTION
SM-1
1/4" = 1'-0"



B SECTION
SM-1
1" = 1'-0"

NOTES:

- SEE (0330-056) FOR EQUIPMENT PAD GENERAL NOTES. ANY DETAILS OR CALLOUTS SHOWN ON CONTRACT DRAWINGS SUPERCEDE STANDARD DETAILS.
- VALUE ENGINEERING OPTION TO REUSE EXISTING CONCRETE PAD MAY BE CONSIDERED UPON ENGINEERS REVIEW OF EQUIPMENT SUBMITTAL.
- VERIFY ELEVATION REQUIREMENTS WITH EQUIPMENT SUBMITTAL.
- SHANK OF ANCHOR SHALL EXTEND MINIMUM 8 X ANCHOR DIAMETER FROM THE TOP OF NUT.

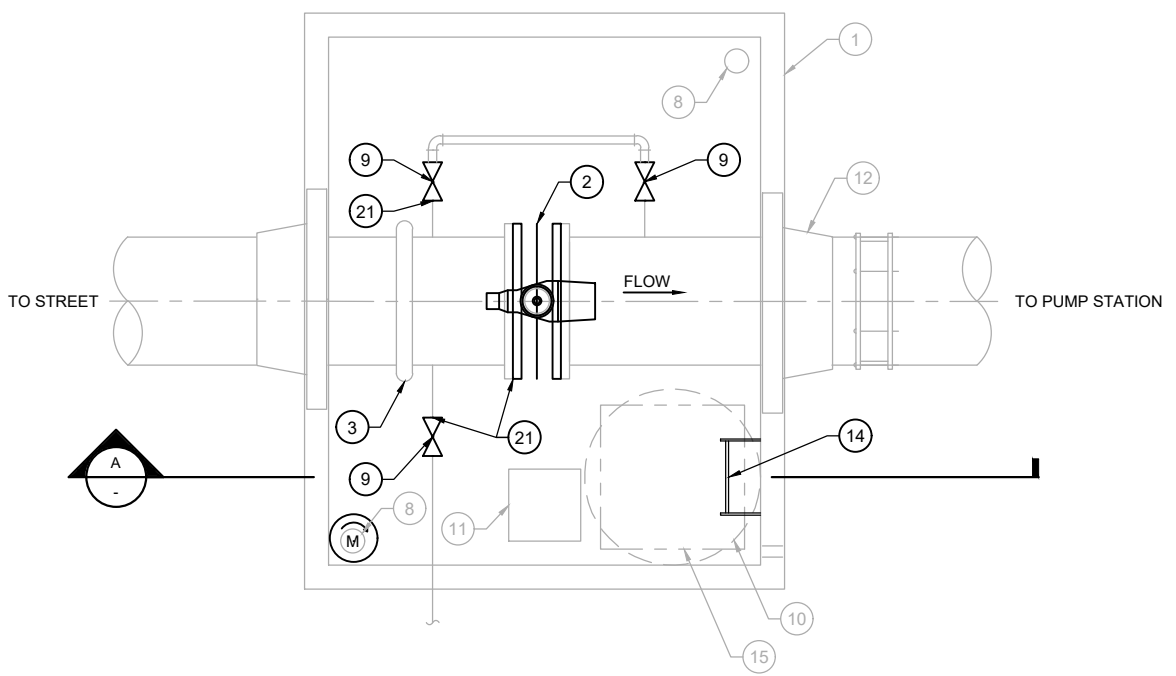
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3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

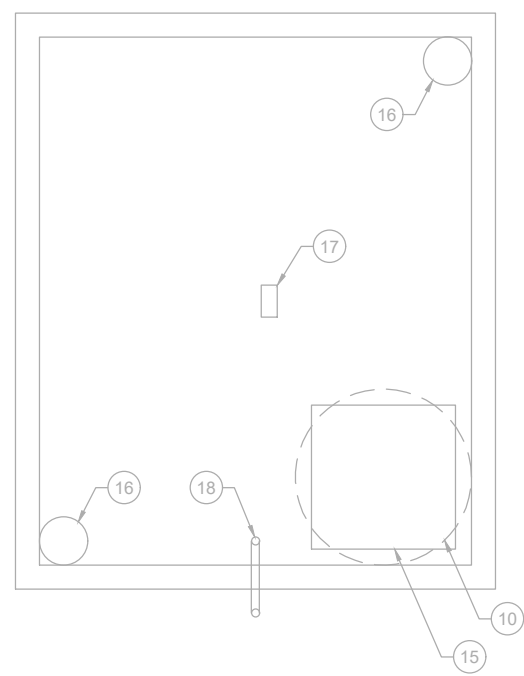
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STRUCTURAL / MECHANICAL
PUMP STATION SECTION AND DETAILS

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DATE	APRIL 2026
PROJ	W7Y49600
DWG	SM-2
SHEET	8 of 17

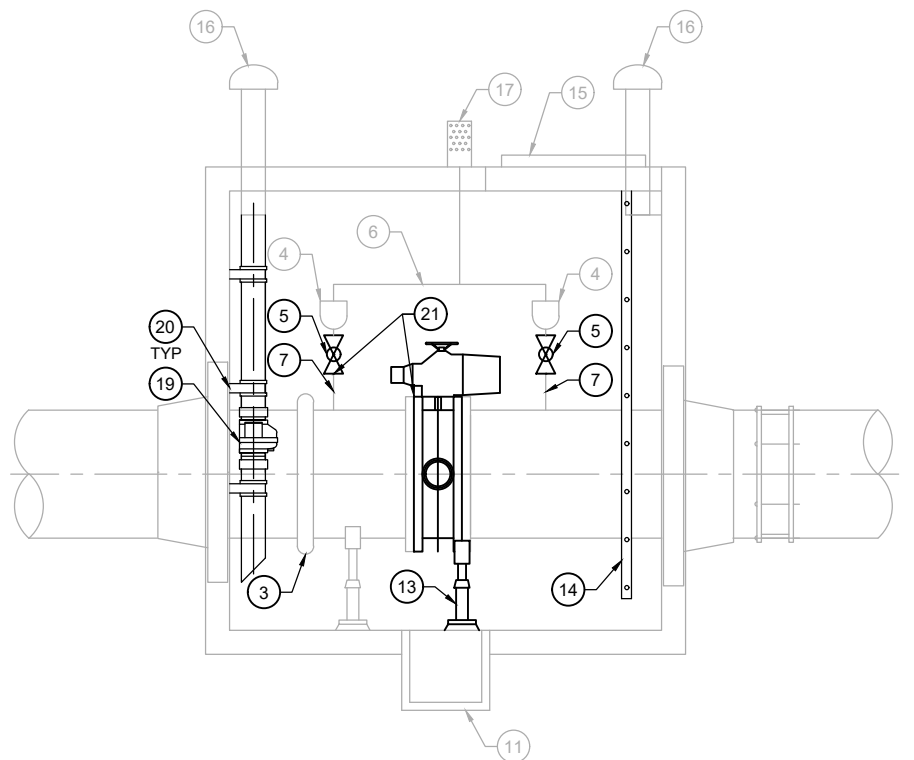
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1 PLAN
1/2" = 1'-0"



2 ROOF PLAN
1/2" = 1'-0"



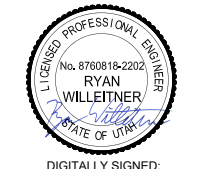
A SECTION
1/2" = 1'-0"

MATERIAL SCHEDULE

- 1 EXISTING 10' x 10' CONCRETE VAULT
- 2 REMOVE AND DISPOSE OF EXISTING 30" BUTTERFLY VALVE, INSTALL NEW 30" FLG BUTTERFLY VALVE, TYPE V504
- 3 REPLACE GASKET ON EXISTING VICTAULIC GROOVED END COUPLING STYLE 770 88S
- 4 REUSE EXISTING V746 COMBINATION AIR VALVE
- 5 REPLACE EXISTING BALL VALVE W/ NEW 2" SST THRD BALL VALVE, V307
- 6 2" SCH 80 PVC
- 7 REPLACE 2" BRASS FITTING W/ 2" SCH 80 BUSHING
- 8 EXISTING VENT PIPE
- 9 REPLACE EXISTING GATE VALVE W/ NEW 2" GATE VALVE, V130
- 10 EXISTING 44" ACCESS MANWAY
- 11 EXISTING FLOOR SUMP AND PUMP
- 12 EXISTING RUBBER MANHOLE BOOT
- 13 INSTALL NEW PIPE SUPPORT (4005-500) BENEATH VALVE FLANGE (38.92" DIAMETER). KEEP EXISTING SUPPORT
- 14 REPLACE LADDER PER DETAIL (0551-101) W/ 8" CLEARANCE FROM WALL
- 15 VAULT HATCH, SEE NOTE 2
- 16 EXISTING MUSHROOM ROOF VENT
- 17 EXISTING AIR VALVE VENT
- 18 SUMP PUMP DISCHARGE PIPE
- 19 EXHAUST FAN (2337-830)
- 20 WALL MOUNTED PIPE SUPPORT AT 4-FT SPACING (4005-505)
- 21 INSULATED FLANGE (2642-925), NOTE 3

NOTES:

- 1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO PURCHASING MATERIALS. PROTECT ALL PIPING IN PLACE.
- 2. REMOVE AND RESTORE VAULT HATCH AS NEEDED TO REPLACE EXISTING VALVE.
- 3. CONTRACTOR TO REPLACE INSULATED FLANGE AND CONFIRM DISCONTINUITY WITH OWNER REPRESENTATIVE PRESENT.



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3145 WEST 11400 SOUTH PUMP STATION
IMPROVEMENTS

Jacobs
STRUCTURAL / MECHANICAL
MAIN LINE VALVE VAULT
PLAN AND SECTION

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	APRIL 2026
PROJ	W7Y49600
DWG	SM-3
SHEET	9 of 17

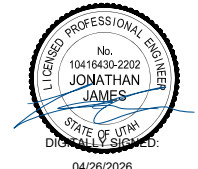
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SHEET KEY NOTES

1. PROVIDE BREAKER, LINE REACTOR AND DRIVE IN THE FLOOR MOUNTED ENCLOSURE SHOWN INSIDE DASHED OUTLINE.
2. USE EXISTING JUNCTION BOX TO RUN WIRING BACK TO THE EXISTING PANELBOARDS.
3. REUSE EXISTING 450KCMIL CONDUCTORS IF CONFIRMED AS XHHW-2, AND NOT THHN/THWN, WITH SUITABLE INSULATION BASED ON MEGGER TESTING, AND ADEQUATE LENGTH BETWEEN MOTOR AND VFD.

GENERAL NOTES

1. FIELD VERIFY EQUIPMENT AND THEIR LOCATIONS, INCLUDING EXISTING, REPLACED AND TO BE DEMOLISHED, ON PROCESS DRAWINGS. FIELD VERIFY LOADS, CONDUCTORS, CONDUIT ROUTING AND CONDUIT SIZES, AND BREAKER SIZES FOR EXISTING ELECTRICAL SYSTEM.
2. COORDINATE WITH OTHER TRADES FOR CONDUIT PENETRATIONS AND PREVENTING CONFLICTS WHEN LOCATING CONDUITS AND CONDUCTORS.
3. INSTALL AFD ON EXISTING HOUSEKEEPING PAD. PULL CONDUCTORS IN EXISTING CONDUITS BETWEEN MAIN DISTRIBUTION PANEL, ADJUSTABLE FREQUENCY DRIVES AND MOTORS.



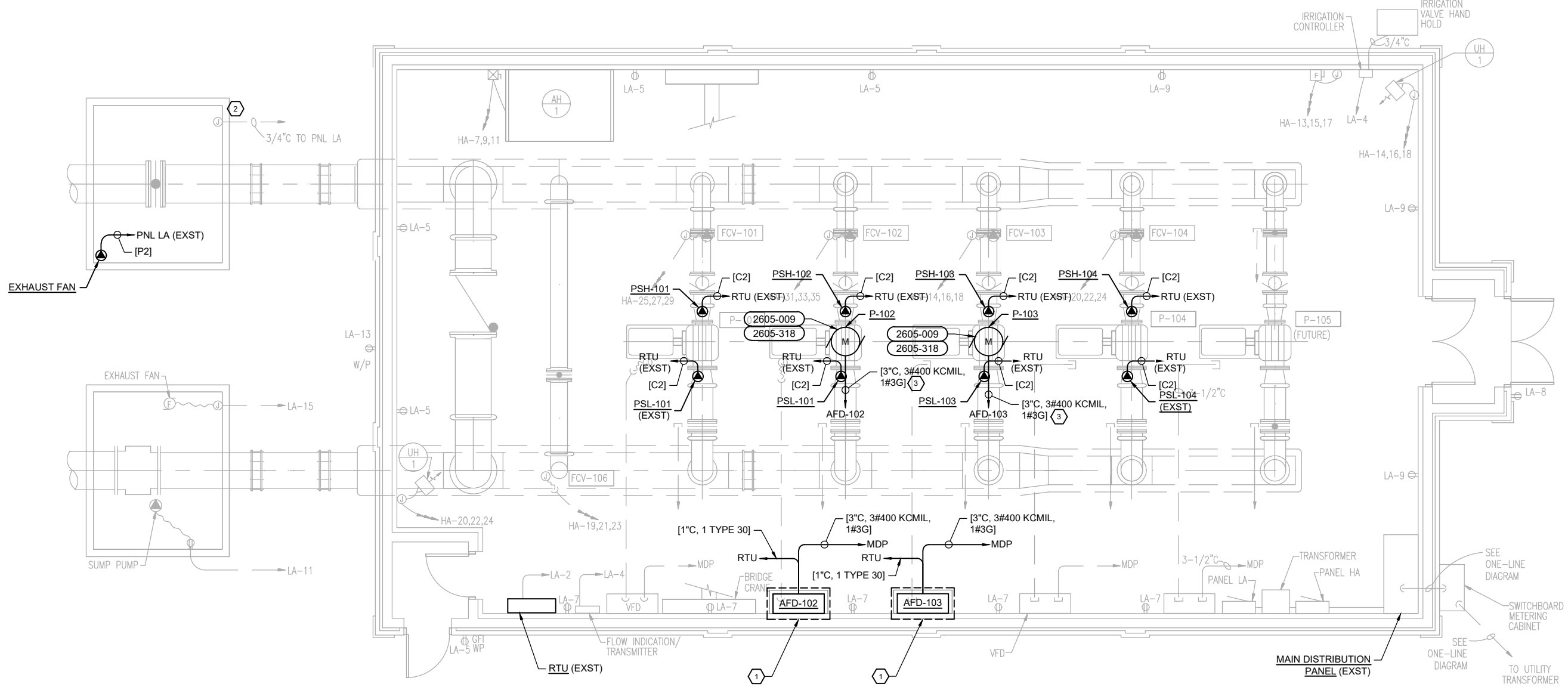
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JORDAN VALLEY WATER CONSERVANCY DISTRICT
 3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

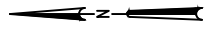
Jacobs
 ELECTRICAL
POWER PLAN

VERIFY SCALE	BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE	APRIL 2026
PROJ	W7Y49600
DWG	E-1
SHEET	10 of 17

100% DESIGN



1 POWER PLAN
 1/4" = 1'-0"



PANEL SCHEDULE LA

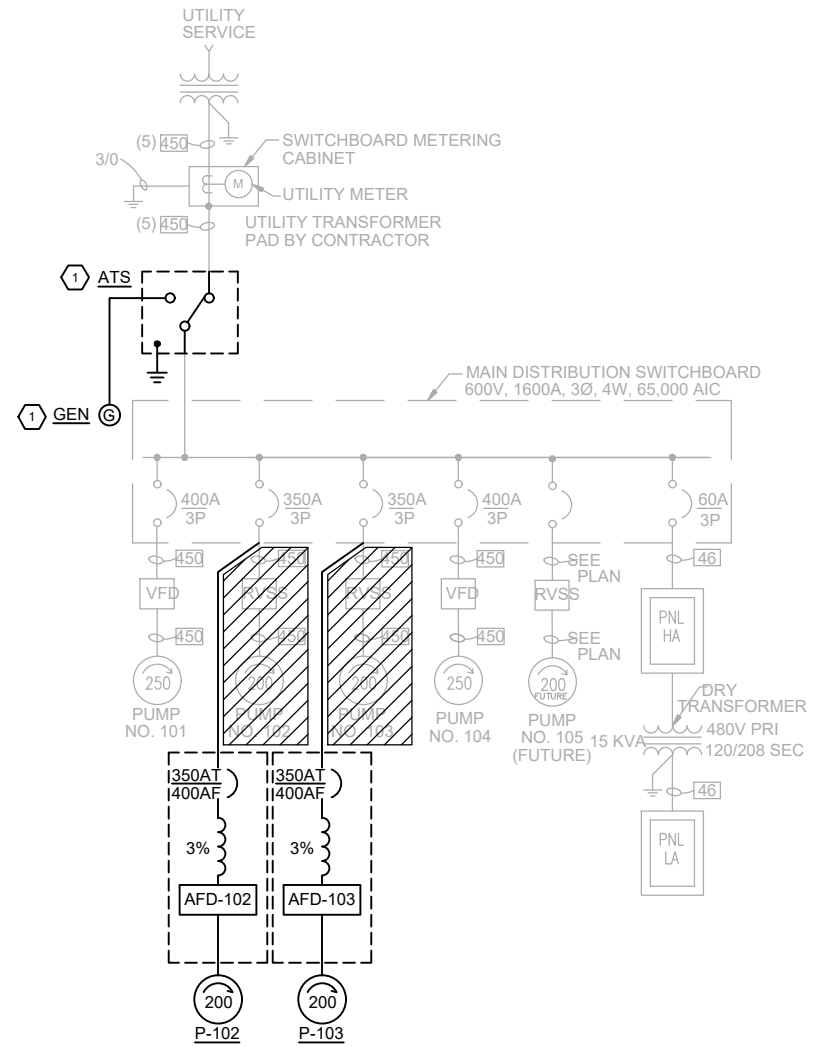
LOCATION: EAST WALL		TYPE: NQOD		100 AMPS		VOLTS: 120/208	
DIMENSIONS:		NEMA: 1		M.L.O.		PHASE: 3	
MOUNTING: SURFACE		50 M.C.B.		WIRES: 4			
FEED: BOTTOM		10,000 A.I.C.		BONDED GROUND BUS			

BRKR	WIRE	CIRCUIT	PHASE	LOADS	CIRCUIT	WIRE	DESCRIPTION	BRKR				
A	P	SIZE	WATTS	NO	A	B	C	NO	WATTS	SIZE	A	P
20	1	212	1500	1	1700			2	200	212	20	1
20	1	212	1500	3		1700		4	200	212	20	1
20	1	212	1500	5			2000	6	500	212	20	1
20	1	212	1500	7	1616			8	116	212	20	1
20	1	212	1500	9		1500		10			20	1
20	1	212	500	11			500	12			20	1
20	1			13	0			14			20	1
20	1	212	500	15		500		16				
				17			0	18				
				19	0			20				
				21			0	22				
				23			0	24				
TOTALS:				3200	3700	2500		TOTAL LOAD:		9,400 WATTS		
								TOTAL AMPS:		39.2 AMPS		

PANEL SCHEDULE HA

LOCATION: EAST WALL		TYPE: NF		100 AMPS		VOLTS: 277/480	
DIMENSIONS:		NEMA: 1		X M.L.O.		PHASE: 3	
MOUNTING: SURFACE		10,000 A.I.C.		BONDED GROUND BUS			
FEED: BOTTOM							

BRKR	WIRE	CIRCUIT	PHASE	LOADS	CIRCUIT	WIRE	DESCRIPTION	BRKR				
A	P	SIZE	WATTS	NO	A	B	C	NO	WATTS	SIZE	A	P
20	3	312	3200	1	6560			2	3360	412	20	3
-	-	-	3200	3		6560		4	3360	-	-	-
-	-	-	3200	5			6560	6	3360	-	-	-
20	3	312	3360	7	6720			8	3360	412	20	3
-	-	-	3360	9		6720		10	3360	-	-	-
-	-	-	3360	11			6720	12	3360	-	-	-
20	3	312	940	13	1440			14	500	312	20	3
-	-	-	940	15		1440		16	500	-	-	-
-	-	-	940	17			1440	18	500	-	-	-
20	3	312	500	19	1000			20	500	312	20	3
-	-	-	500	21		1000		22	500	-	-	-
-	-	-	500	23			1000	24	500	-	-	-
20	3	312	500	25	500			26				
-	-	-	500	27		500		28				
-	-	-	500	29			500	30				
20	3	312	500	31	500			32				
-	-	-	500	33		500		34				
-	-	-	500	35			500	36				
				37	0			38				
				39		0		40				
				41			0	42				
TOTALS:				16720	16720	16720		TOTAL LOAD:		47,160 WATTS		
								TOTAL AMPS:		56.8 AMPS		



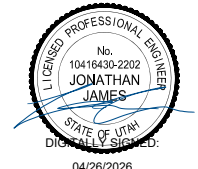
ONE-LINE DIAGRAM
SCALE: NONE

GENERAL NOTES

- FIELD VERIFY LOADS, BREAKERS, CONDUCTOR SIZES SHOWN ON EXISTING ONE-LINE AND PANELBOARD SCHEDULES.

SHEET KEY NOTES

- AUTOMATIC TRANSFER SWITCH AND GENERATOR PROVIDED BY OTHERS.



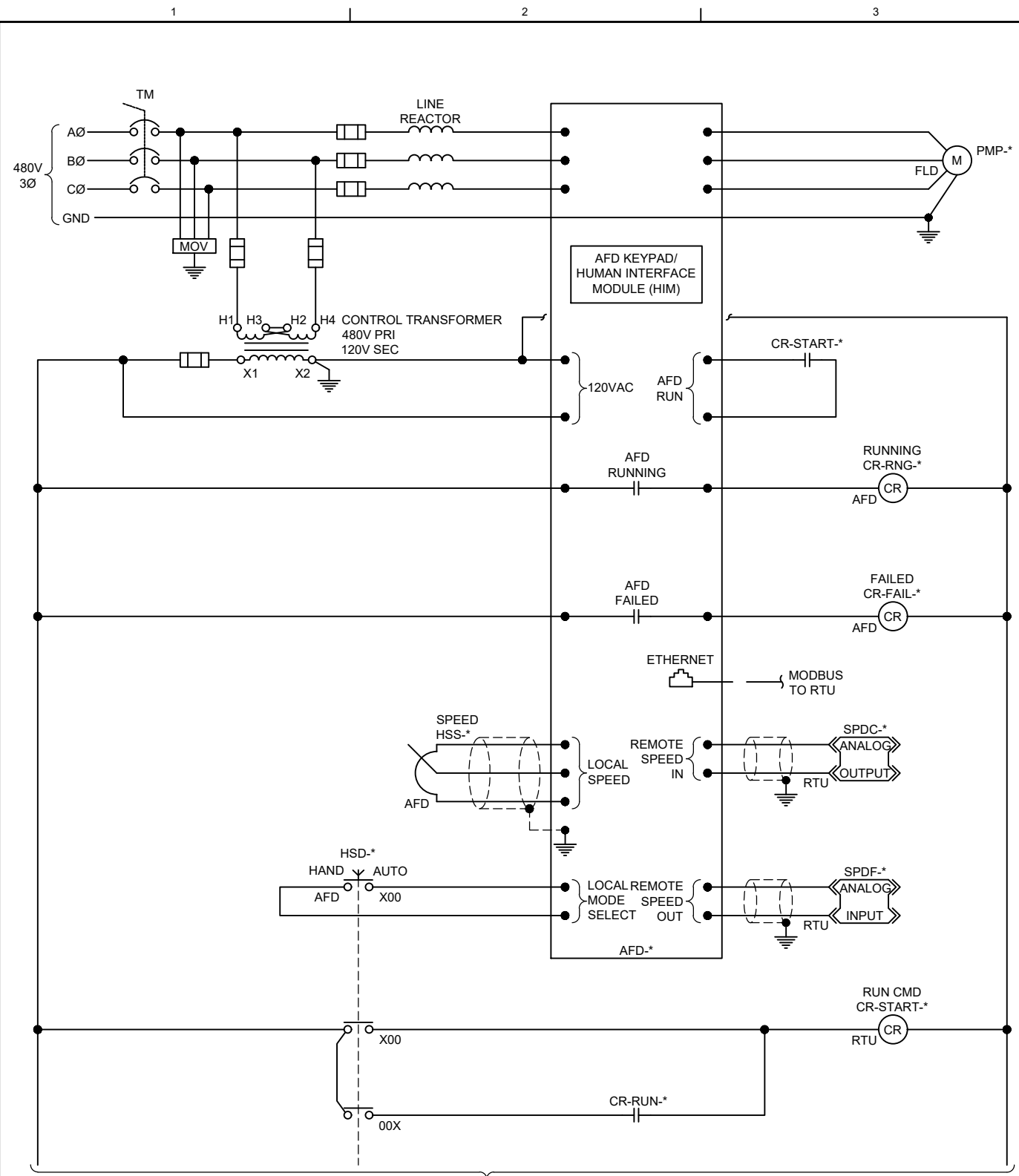
NO.	DATE	DR	CHK	REVISION	BY
					J. JAMES
					H. IDREES
					C. HOGGARD
					H. IDREES
					D. JAMES

JORDAN VALLEY WATER CONSERVANCY DISTRICT
 3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

Jacobs
 ELECTRICAL
 ONE-LINE DIAGRAM

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	APRIL 2026
PROJ	W7Y49600
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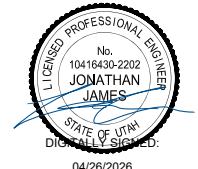
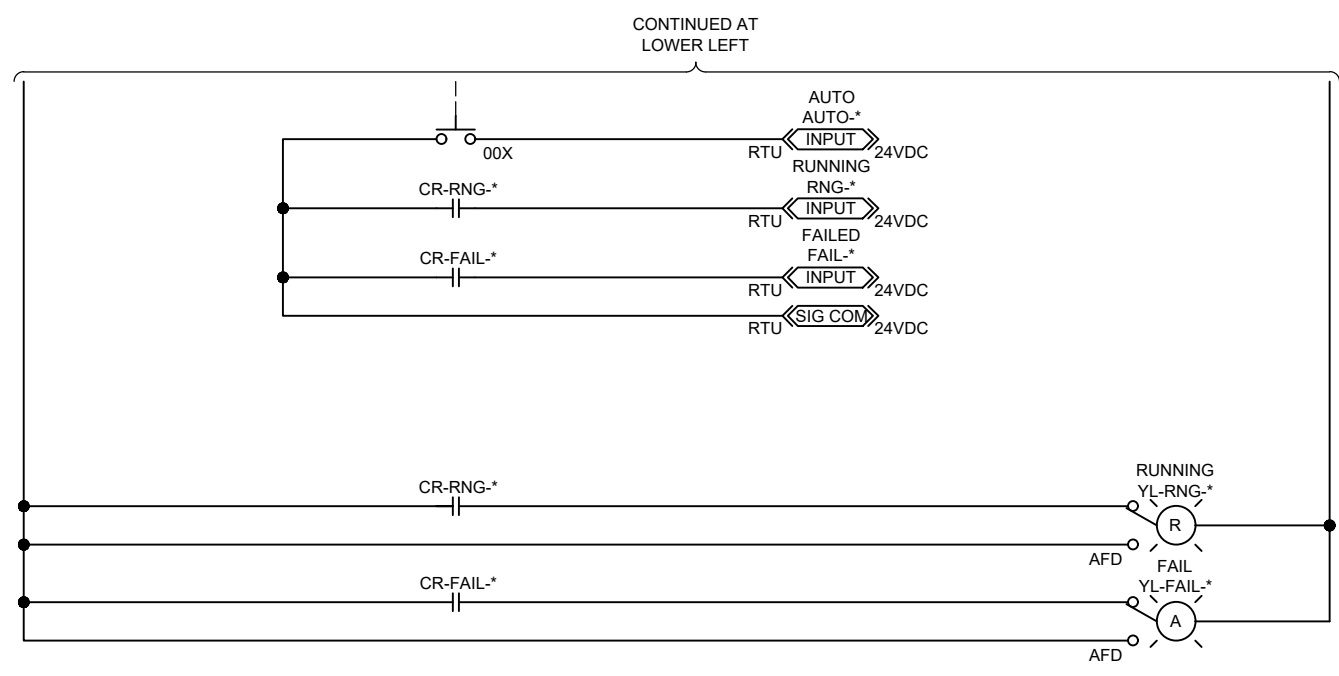
100% DESIGN



V1 MOTOR CONTROL DIAGRAM
NTS

NOTES:

- MOTOR CONTROL DIAGRAMS SHOW THE INTENDED FUNCTION OF THE EQUIPMENT. MANUFACTURER SHALL REVIEW AND DEVELOP MOTOR CONTROLS FOR THE EQUIPMENT SUPPLIED THAT PROVIDE THE IDENTIFIED FUNCTION. ADDITIONAL COMPONENTS MAY BE REQUIRED THAT ARE NOT REFLECTED IN THIS DIAGRAM. PROVIDE 4-20MA FOR CONTROL.
- PROVIDE TERMINAL BLOCKS FOR FIELD WIRING.



NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD
						J JAMES	

Jordan Valley Water Conservancy District
3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

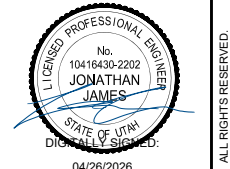
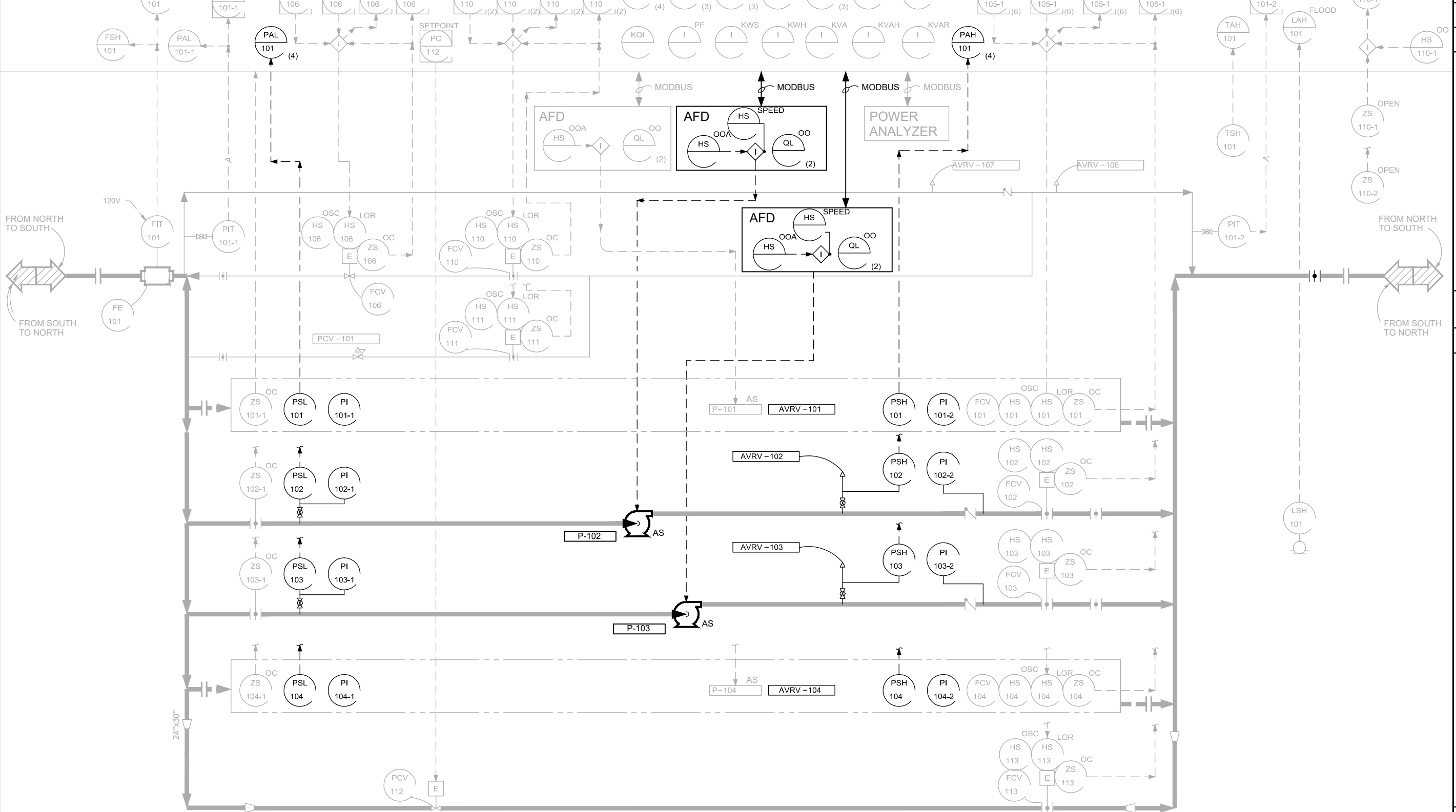
Jacobs
ELECTRICAL
MOTOR CONTROL DIAGRAM

VERIFY SCALE	BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE	APRIL 2026
PROJ	W7Y49600
DWG	E-3
SHEET	12 of 17

100% DESIGN

DISTRICT COMPUTER

RTU

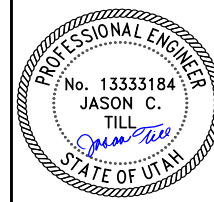


NO.	DATE	DR	REVISION	CHK	APVD	BY	APVD

JORDAN VALLEY WATER
 CONSERVANCY DISTRICT
 3145 WEST 11400 SOUTH PUMP STATION
 IMPROVEMENTS

Jacobs
 INSTRUMENTATION AND CONTROLS
 P&ID

DATE	APRIL 2026
PROJ	W7Y49600
DWG	IC-1
SHEET	13 of 17



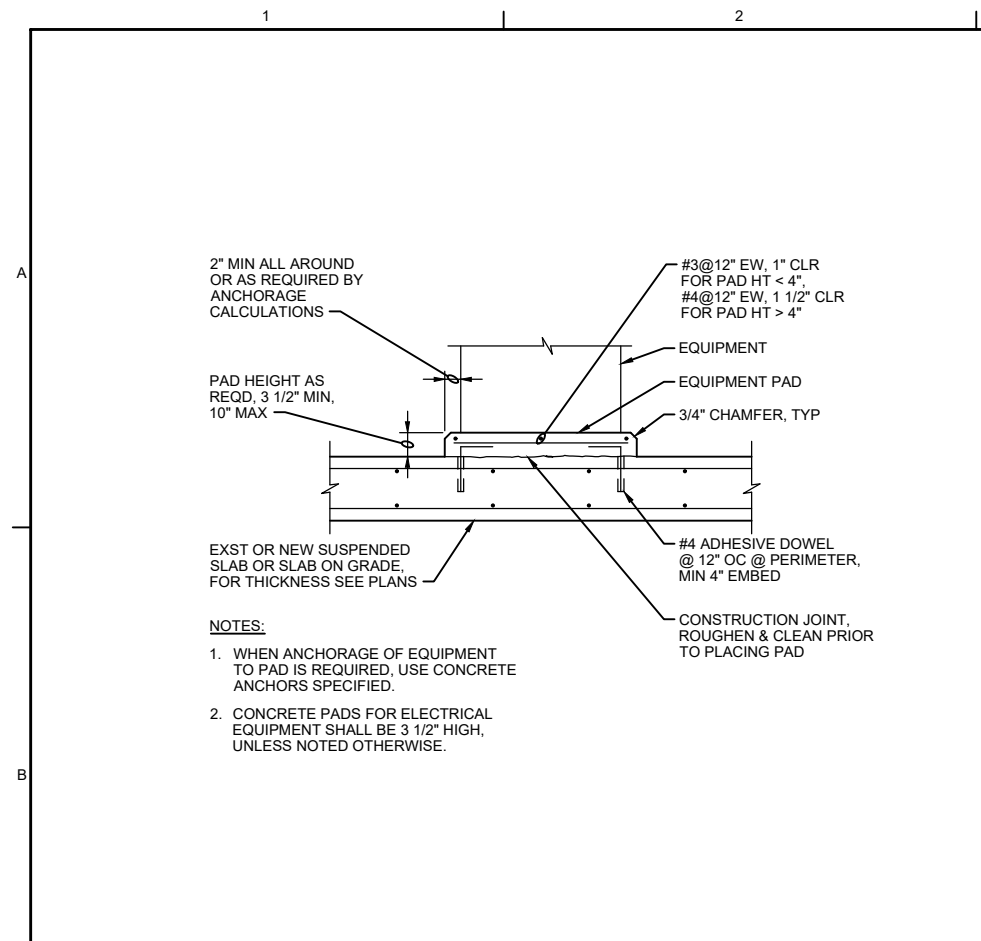
NO.	DATE	DR	CHK	APVD	J TILL

JORDAN VALLEY WATER CONSERVANCY DISTRICT
 3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

Jacobs
 STANDARD DETAILS
 STANDARD DETAILS

DATE	APRIL 2026
PROJ	W7Y49600
DWG	SD-1
SHEET	14 of 17

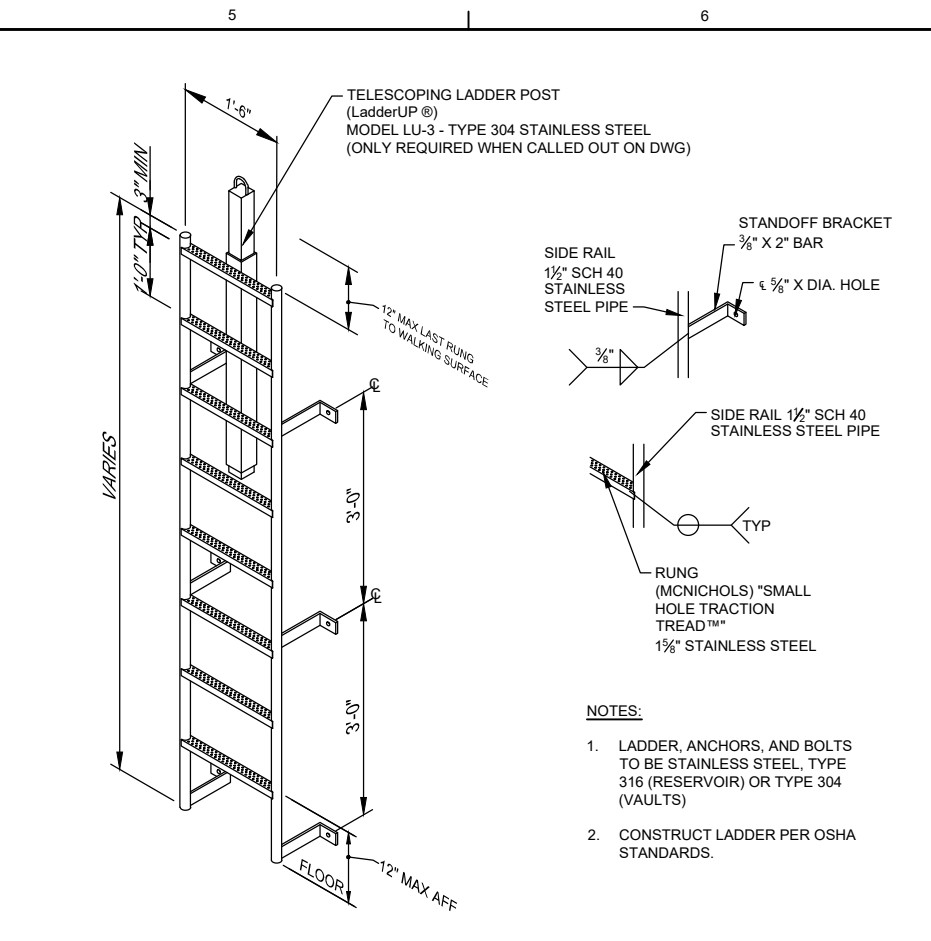
100% DESIGN



- GENERAL NOTES:**
- PAD SIZE SHALL BE MINIMUM INDICATED OR AS SHOWN ON THE PLANS OR AS INDICATED BY THE MANUFACTURER AND APPROVED BY THE ENGINEER.
 - THE SIZE, NUMBER, TYPE, LOCATION, AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER AND AS APPROVED BY THE ENGINEER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A TEMPLATE OR OTHER ACCEPTABLE MEANS, MATCHING THE BASE PLATE, WHILE PAD IS BEING PLACED.
 - ANCHOR BOLT SLEEVES SHALL BE USED TO PROVIDE MINIMUM ANCHOR BOLT MOVEMENT OF 1/2" IN ALL HORIZONTAL DIRECTIONS. THE MINIMUM SLEEVE LENGTH SHALL BE 8 TIMES THE BOLT DIAMETER.
 - ANCHOR BOLT SLEEVES SHALL HAVE A MINIMUM INTERNAL DIAMETER 1" GREATER THAN BOLT DIAMETER AND A MAXIMUM INTERNAL DIAMETER 3" GREATER THAN ANCHOR BOLT DIAMETER. SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT AFTER BOLTS ARE ALIGNED. SEE 0330-057.
 - EQUIPMENT BASES SHALL BE INSTALLED LEVEL UNLESS INDICATED OTHERWISE.
 - WEDGES, SHIMS, OR LEVELING NUTS SHALL BE USED TO SUPPORT THE BASE WHILE THE GROUT IS PLACED. WEDGES OR SHIMS SHALL BE REMOVED AFTER GROUT IS SET AND PACK VOID WITH GROUT.

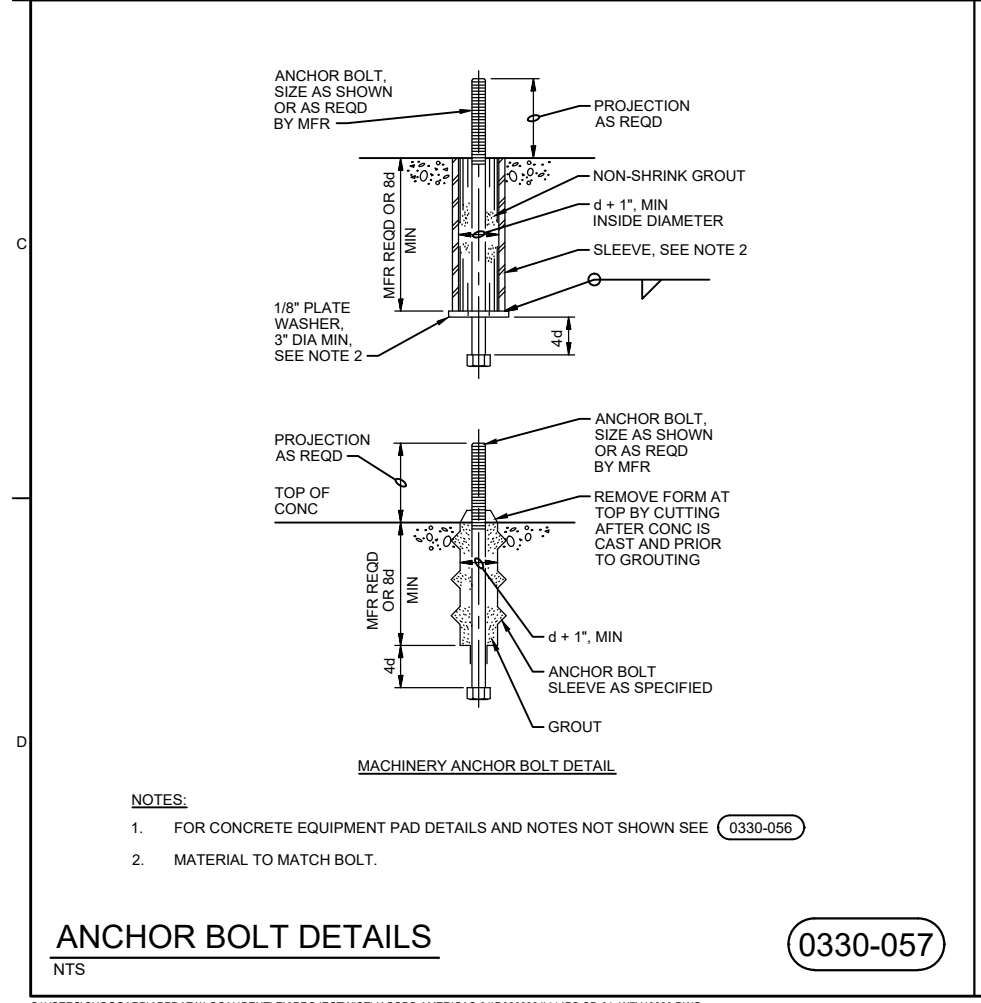
CONCRETE EQUIPMENT PAD - TYPE 'E'
 NTS

0330-056



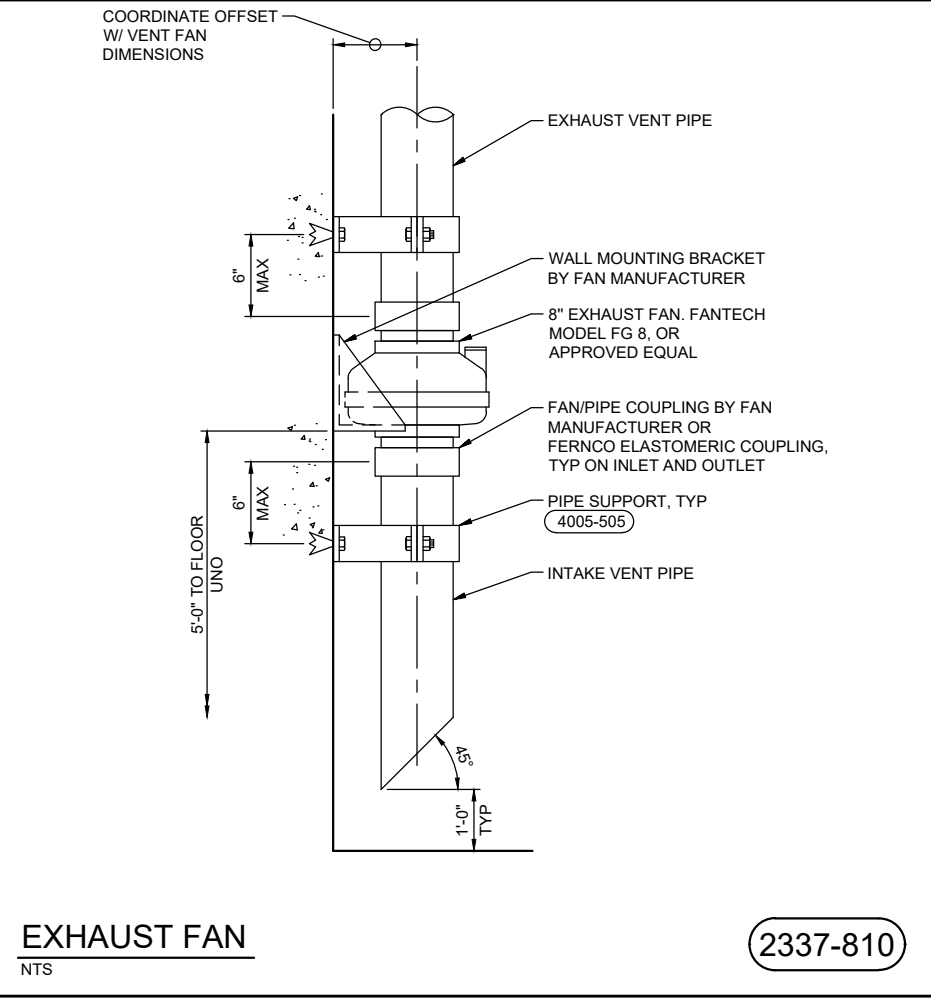
INTERIOR ACCESS LADDER
 NTS

0551-101



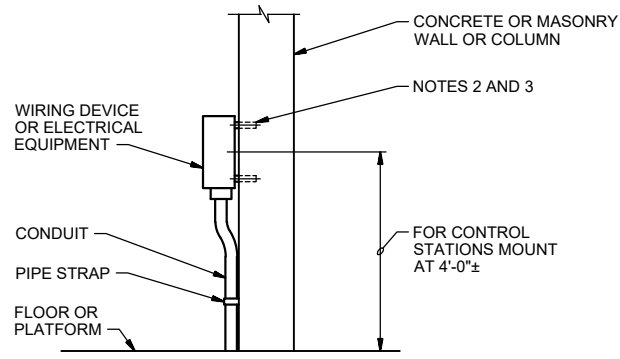
ANCHOR BOLT DETAILS
 NTS

0330-057



EXHAUST FAN
 NTS

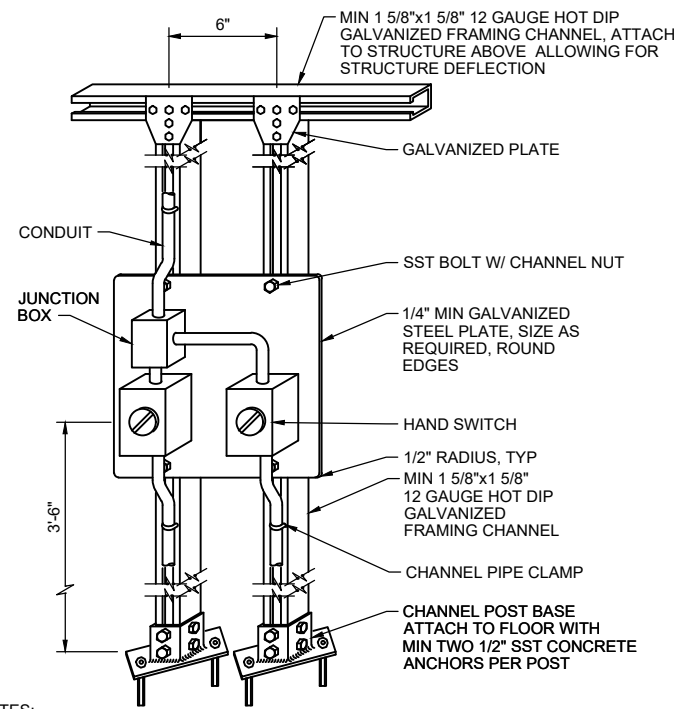
2337-810



- NOTES:**
1. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL. USE BOTH WASHER AND LOCK WASHERS UNDER ALL NUTS.
 2. ON CONCRETE WALLS USE STAINLESS STEEL CONCRETE ANCHORS. MOUNT ENCLOSURE ON SPACERS OF MIN 1/2" SCHEDULE 80 PVC CONDUIT.
 3. BOXES 6 INCHES SQUARE AND SMALLER SHALL BE SUPPORTED BY TWO ANCHORS, MIN. LARGER BOXES SHALL BE SUPPORTED AS REQUIRED BY CALCULATION; FOUR ANCHORS MIN.
 4. SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT AND ANCHORAGE AS SPECIFIED.

DEVICE MOUNTING, WALL OR COLUMN

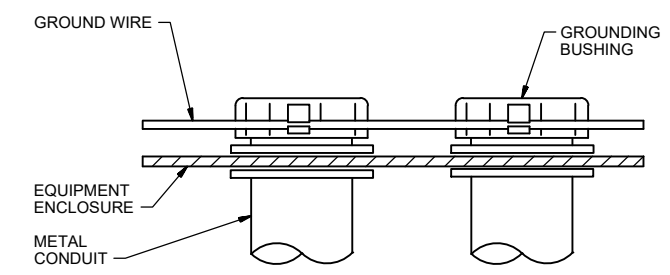
2605-002



- NOTES:**
1. MINIMUM COMPONENT AND CONNECTION SIZES SHOWN. FURNISH LARGER SIZES AS REQUIRED BY CALCULATIONS.
 2. SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT AND ANCHORAGE AS SPECIFIED.

DEVICE MOUNTING, FROM FLOOR

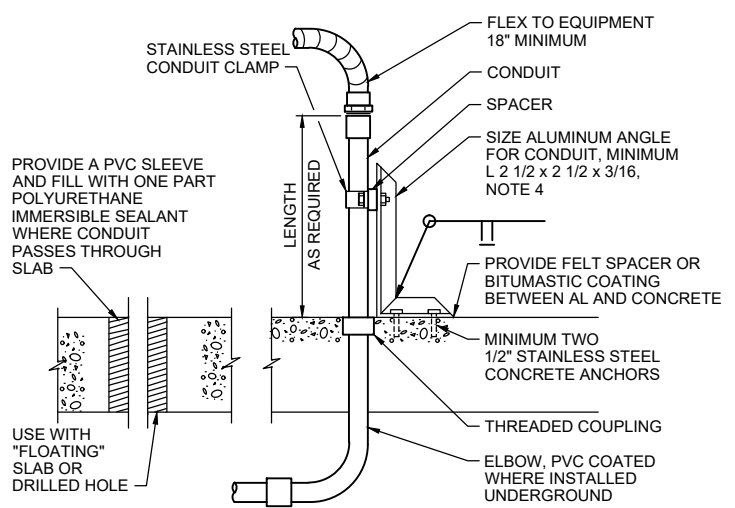
2605-009



- NOTES:**
1. THE ENDS OF ALL CONDUITS REQUIRED TO BE GROUNDED BY THE SPECIFICATIONS SHALL BE GROUNDED IN ACCORDANCE WITH THIS DETAIL.

CONDUIT GROUNDING

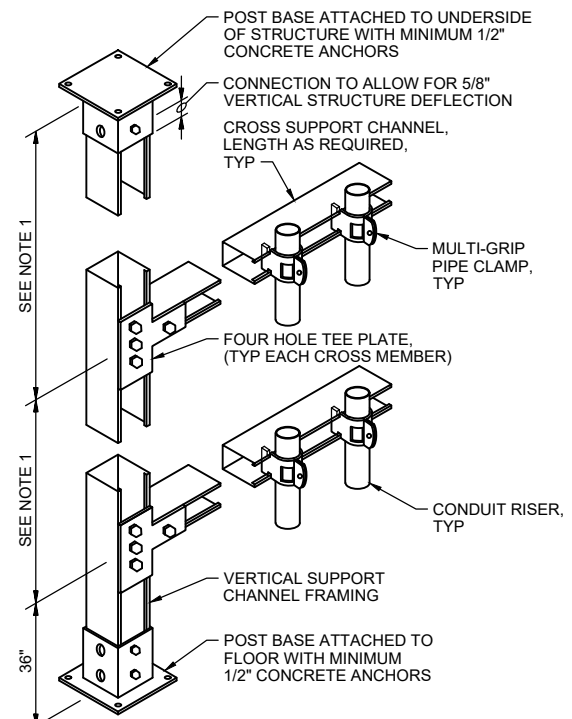
2605-203



- NOTES:**
1. PROVIDE SUPPORT FOR ALL METAL CONDUITS WHICH EXTEND MORE THAN 18 INCHES OUT OF THE SLAB WITHIN 3 INCHES OF THE END OF THE CONDUIT.
 2. PROVIDE SUPPORT FOR ALL PVC CONDUIT WITHIN 3 INCHES OF THE END OF THE CONDUIT.
 3. THIS DETAIL SHALL BE USED FOR SUPPORT OF ALL CONDUITS WHICH ARE NOT OTHERWISE SUPPORTED IN A RIGID MANNER SUCH AS AGAINST AN EQUIPMENT BASE, WALL, COLUMN, ETC. AS REQUIRED ABOVE.
 4. FOR ANY ANGLE GREATER THAN 2'-6" TALL, SIZE ANGLE SUPPORT AND ANCHORS FOR SEISMIC LOADS.

CONDUIT TRANSITION AND SUPPORT

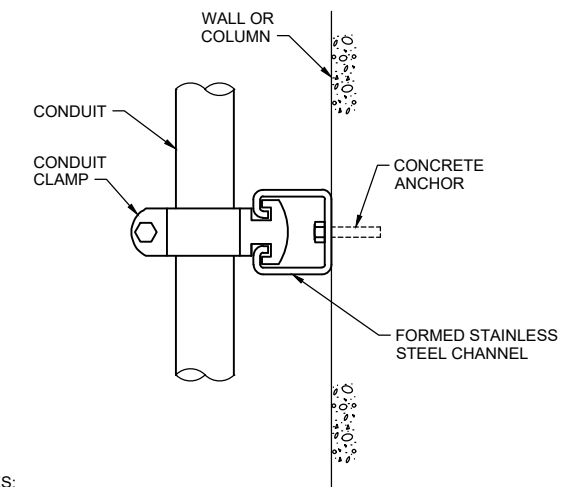
2605-305



- NOTES:**
1. LENGTH AS REQUIRED TO LIMIT UNSUPPORTED CONDUIT LENGTH TO MAXIMUM VALUES ALLOWED BY NEC. PROVIDE TWO VERTICAL SUPPORTS AND/OR ROOF CONNECTIONS AS NECESSARY.
 2. SIZE SUPPORT POST, CROSS CHANNELS, AND CONNECTIONS FOR VERTICAL AND LATERAL LOADS, SEE GENERAL ELECTRICAL CONSTRUCTION NOTES ON DRAWING.
 3. ALL UNISTRUT, CONDUIT CLAMPS, AND ANCHORS INSIDE OF VAULTS SHALL BE STAINLESS STEEL.

VERTICAL CONDUIT SUPPORT

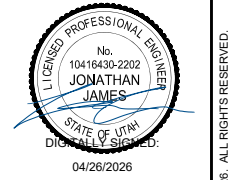
2605-318



- NOTES:**
1. SUPPORT ALL EXPOSED CONDUITS ON FORMED STEEL CHANNELS.
 2. ALL UNISTRUT, CONDUIT CLAMPS, AND ANCHORS INSIDE OF VAULTS SHALL BE STAINLESS STEEL. ANCHORAGE AND BRACING DESIGN BY CONTRACTOR.

CONDUIT SUPPORT ON STRUCTURE

2605-348



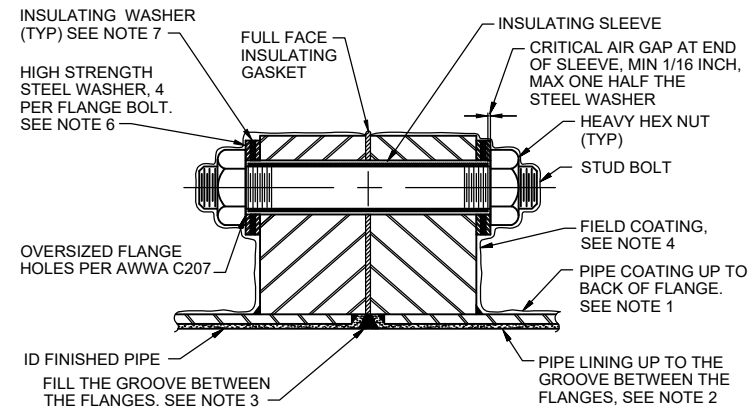
NO.	DATE	DR	REVISION	CHK	APVD	BY
						J. JAMES

JORDAN VALLEY WATER CONSERVANCY DISTRICT
 3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

Jacobs
 STANDARD DETAILS

DATE	APRIL 2026
PROJ	W7Y49600
DWG	SD-2
SHEET	15 OF 17

100% DESIGN



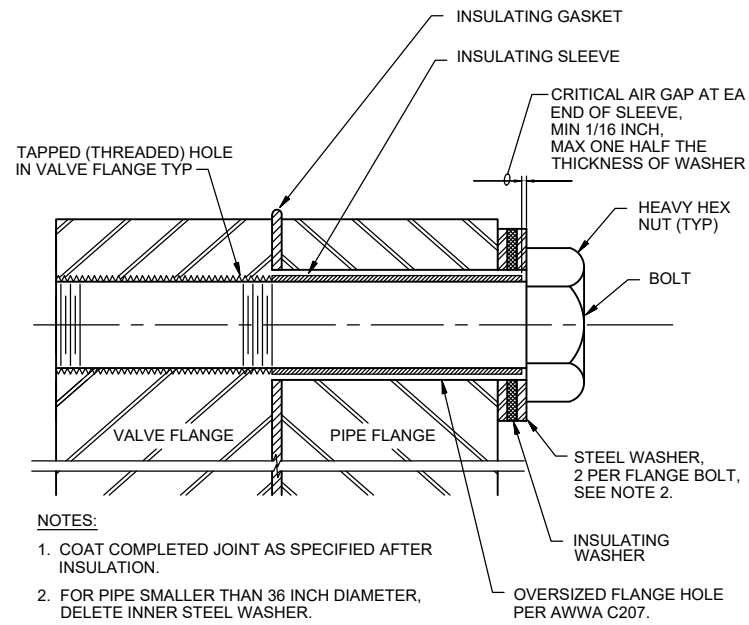
NOTES:

1. THE PIPE COATING ON EACH SIDE OF THE INSULATED FLANGE SHALL BE THE SAME IN TYPE, THICKNESS, AND QUALITY UP TO THE BACK SIDE OF THE RESPECTIVE FLANGE.
2. THE LINING ON THE PIPE SHALL BE THE SAME IN TYPE, THICKNESS, AND QUALITY UP TO THE INSULATED FLANGE JOINT.
3. FOR PIPE LARGER THAN 24 INCH DIAMETER, THOROUGHLY CLEAN THE GROOVE AND FILL THE INSULATED FLANGE'S INTERNAL GAP WITH A MATERIAL COMPATIBLE WITH THE PIPE LINING.
4. COAT JOINTS AS SPECIFIED AFTER INSTALLATION.
5. SEE (2642-927) FOR INSULATED BOLTS AT TAPPED VALVE FLANGES.
6. FOR PIPE SMALLER THAN 36 INCH DIAMETER DELETE INNER STEEL WASHERS.
7. FOR BURIED OR SUBMERGED INSULATING FLANGE, DO NOT INSTALL INSULATING WASHER ON PROTECTED SIDE OF FLANGE.

INSULATED FLANGES

NTS

2642-925



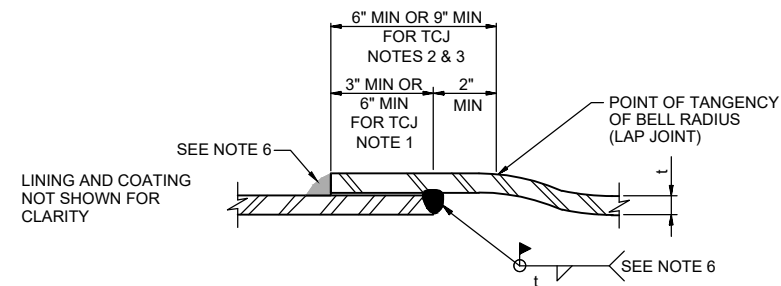
NOTES:

1. COAT COMPLETED JOINT AS SPECIFIED AFTER INSULATION.
2. FOR PIPE SMALLER THAN 36 INCH DIAMETER, DELETE INNER STEEL WASHER.

INSULATING BOLTS AT TAPPED VALVE FLANGES

NTS

2642-927



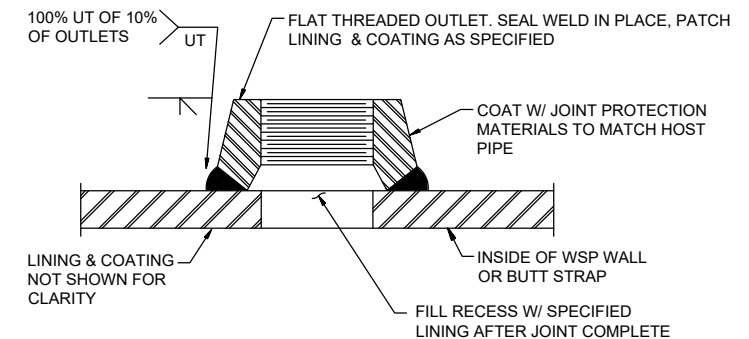
NOTES:

1. COMPLETED JOINT OVERLAP AFTER WELDING SHALL BE 3" FOR STANDARD JOINTS. FOR SPECIAL TEMPERATURE CONTROL JOINTS, THE JOINT OVERLAP, SHALL BE 6 INCHES AS FURTHER DISCUSSED IN NOTE 3.
2. NOT USED.
3. FOR SPECIAL TEMPERATURE CONTROL JOINTS, THE SPIGOT SHALL BE INSERTED INTO THE LENGTHENED BELL TO PROVIDE 6 INCHES MINIMUM JOINT OVERLAP. SEE SPECIFICATIONS SECTION 33 05 01.01 FOR SPECIAL TEMPERATURE CONTROL JOINT WELDING REQUIREMENTS.
4. FILLET WELDS FOR BELL AND SPIGOT LAP JOINTS SHOWN. FILLET WELDS ON OTHER JOINTS ARE SIMILAR.
5. THE JOINTS SHALL BE FABRICATED AND INSTALLED TO BE WITHIN THE TOLERANCES INDICATED. THE TOLERANCE REQUIREMENTS SHALL APPLY TO BOTH WELDS AND TO BOTH STRAIGHT AND DEFLECTED JOINTS.
6. FOR SINGLE LAP JOINTS WELD MAY BE ON THE INTERIOR OR EXTERIOR OF THE PIPE.
7. WELD AFTER BACKFILL WILL NOT BE ALLOWED.

SINGLE LAP JOINT WELD

NTS

3305-883



WSP THREADED CONNECTION

NTS

3305-942



DIGITALLY SIGNED: 04/28/2026

NO.	DATE	DR	CHK	APVD	BY
					R WILLEITNER
					J PITTS
					C HOGGARD
					C NELSON / B DAVIS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

Jacobs

STANDARD DETAILS
STANDARD DETAILS

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

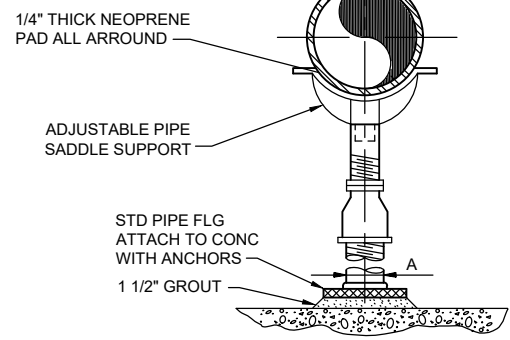
DATE APRIL 2026

PROJ W7Y49600

DWG SD-3

SHEET 16 of 17

100% DESIGN



DIMENSION TABLE

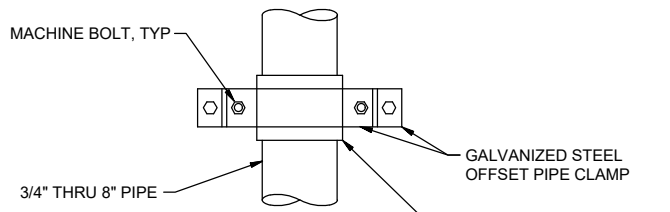
PIPE SIZE	A
2-1/2"	2-1/2"
3"	2-1/2"
4"	3"
6"	3"
8"	3"
10"	3"
12"	3"
14"	4"
16"	4"
18"	6"
20"	6"
24"	6"
30"	6"
36"	6"

NOTE:
1. ALL MATERIAL SHALL BE TYPE 304 STAINLESS STEEL.

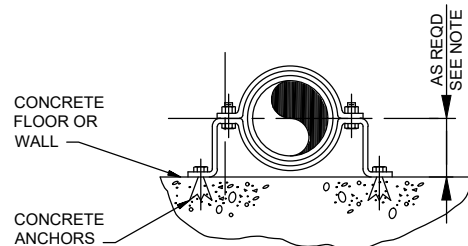
PIPE SUPPORT

NTS

4005-500



ELEVATION



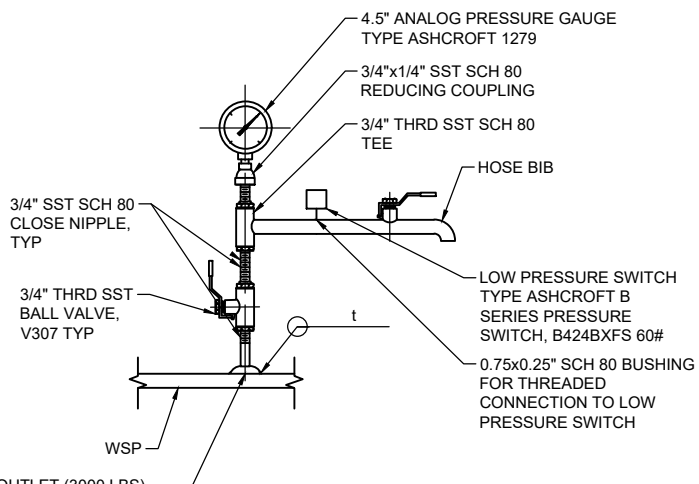
SECTION

NOTE:
COORDINATE BRACKET DIMENSIONS W/ FAN DIAMETER AND INSULATION THICKNESS. 6" MIN PIPE TO WALL SEPARATION.

PIPE SUPPORT - WALL MOUNTED

NTS

4005-505

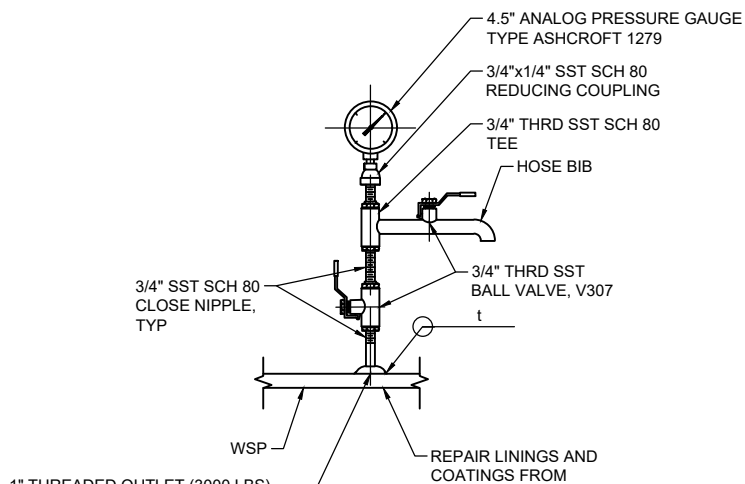


1" THREADED OUTLET (3000 LBS) WELDED TO PIPE W/ 1.5"x3/4" SCH 80 BUSHING. FOR CONNECTION TO REDUCER, USE (3305-942)

LOW PRESSURE SWITCH

NTS

4090-690

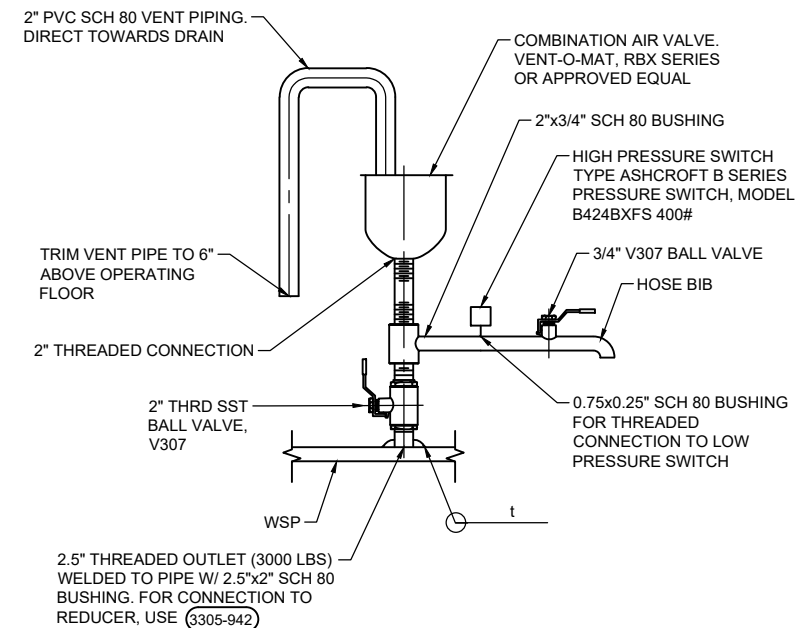


1" THREADED OUTLET (3000 LBS) WELDED TO PIPE W/ 1.5"x3/4" SCH 80 BUSHING. FOR CONNECTION TO REDUCER, USE (3305-942)

ANALOG PRESSURE GAUGE

NTS

4090-691



COMBINATION AIR VALVE AND HIGH PRESSURE SWITCH

NTS

4090-692



DIGITALLY SIGNED: 04/28/2026

NO.	DATE	DR	REVISION	CHK	BY
		B DAVIS		C HOGGARD	R WILLEITNER
		J PITTS			

DR: B DAVIS
CHK: C HOGGARD
BY: R WILLEITNER
REVISION: J PITTS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
3145 WEST 11400 SOUTH PUMP STATION IMPROVEMENTS

Jacobs
STANDARD DETAILS
STANDARD DETAILS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
1"

DATE	APRIL 2026
PROJ	W7Y49600
DWG	SD-4
SHEET	17 OF 17