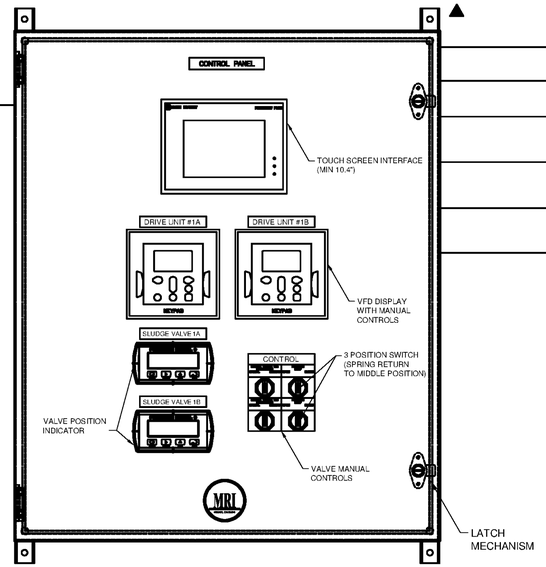
PROVIDE A FIBER PROFIBUS NETWORK CONNECTION

1" C(2-4 STRAND MM FIBER)

DIGITAL SIGNALS FOR SCADA:

INPUT:	CABLE DRIVE NO. 1A	HOME SENSOR
INPUT:	CABLE DRIVE NO. 1A	END SENSOR
INPUT:	CABLE DRIVE NO. 1A	E-STOP
INPUT:	CABLE DRIVE NO. 1A	IN REMOTE
INPUT:	SLUDGE VALVE NO. 1A	POSITION
OUTPUT:	CABLE DRIVE NO. 1A	START
OUTPUT:	CABLE DRIVE NO. 1A	STOP
OUTPUT:	SLUDGE VALVE NO. 1A	POSITION
INPUT:	CABLE DRIVE NO. 1B	HOME SENSOR
INPUT:	CABLE DRIVE NO. 1B	END SENSOR
INPUT:	CABLE DRIVE NO. 1B	E-STOP
INPUT:	CABLE DRIVE NO. 1B	IN REMOTE
INPUT:	SLUDGE VALVE NO. 1B	POSITION
OUTPUT:	CABLE DRIVE NO. 1B	START
OUTPUT:	CABLE DRIVE NO. 1B	STOP
OUTPUT:	SLUDGE VALVE NO. 1B	POSITION
INPUT:	DRIVE SPEED 1A	
INPUT:	DRIVE SPEED 1B	



1"C(3#10) — 120VAC, 20A FROM LP-B2

3/4"C(4#12) - 230VAC POWER

1"C(3#12, BELDEN 2KV VFD CABLE OR APPROVED EQUAL) — JB 1A — 230VAC, .25HP VFD DRIVE UNIT NO. 1A 20-M-1A

3/4"C(2/C#18SHLD) 3/4"C(8#14) - SIGNAL — 20-PV 1A — COMPRESSED AIR SLUDGE VALVE NO. 1A

1"C(3#12, BELDEN 2KV VFD CABLE OR APPROVED EQUAL) — JB 1B — 230VAC, .25HP VFD DRIVE UNIT NO. 1B 20-M-1B

3/4"C(2/C#18SHLD) 3/4"C(8#14) - SIGNAL — 20-PV 1B — COMPRESSED AIR SLUDGE VALVE NO. 1B

SLUDGE COLLECTOR CONTROL PANEL ENCLOSURE FRONT LAYOUT

PEP SD1 | PEP SD2

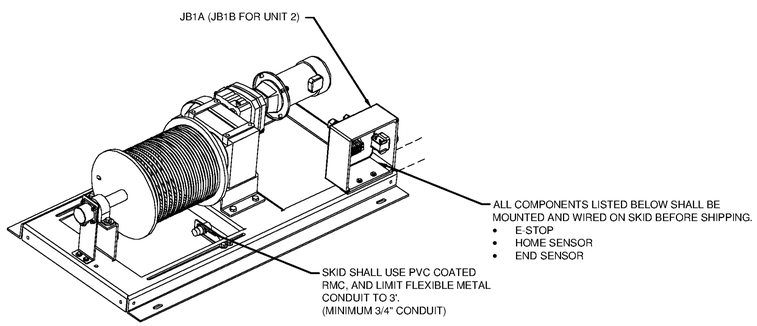
NEMA 4X TYPE 316 STAINLESS STEEL (NOT TO SCALE)
SEE NOTE 2

PANEL WILL BE SUPPLIED WITH AC UNIT TO KEEP VFD'S COOL

ACCESSORIES:
- SURGE SUPPRESSOR ON INCOMING POWER.
- DEEP HINGED WINDOW KIT COVERING DOOR ELEMENTS.
- TYPE 316 STAINLESS STEEL, WITH ACID WASH
- FIBER PATCH PANEL

PLANT CONTROL SYSTEM

PRE-ENGINEERGED CONTROL PANEL



DRIVE SKID

SCALE: NA

GENERAL NOTES:
1. TYPICAL OF 2 PRE-ENGINEERED PANELS. PEP-SD1 AND ASSOCIATED EQUIPMENT IS SHOWN.
2. SEE SECTION 40 99 90 "PACKAGE CONTROL SYSTEMS" FOR PANEL REQUIREMENTS. OUTDOOR PANELS SHALL BE NEMA 4X TYPE 316 STAINLESS STEEL.
3. SEE ELECTRICAL SPECIFICATIONS FOR CONDUIT AND WIRE REQUIREMENTS.
4. EQUIPMENT PLACEMENT SHOWN ON E-2401.
5. PANEL MANUFACTURER MUST DEMONSTRATE INTEGRATION TO SIEMENS S7-1500 PROCESS PRIOR TO COMMISSIONING.

PROCESSOR NOTES:
1. PROVIDE COMMUNICATION CONVERTER TO CONNECT THE PEP-SD CONTROLLER TO THE PLANT SCADA SYSTEM. CONVERTER SHALL CONNECT TO THE PROFIBUS NETWORK WHICH IS CONNECTED TO WTP-LCP-1.
2. PROGRAMMING OF CONTROL PANEL BY SKID MANUFACTURER.

HMI NOTES:
1. MONITOR AND MANUAL START/STOP LOGIC TO BE PROGRAMMED IN WTP-LCP-1.
2. PEP SHALL INCLUDE MANUAL CONTROL OF EQUIPMENT, ALLOWING COMPLETE CONTROL OF NORMAL OPERATION FROM THE PEP WHILE WTP-LCP-1 IS OFFLINE. ANY ADDITIONAL CONTROLS OR INDICATION REQUIRED FOR MANUAL CONTROL SHALL BE INCLUDED IN THE BASE SCOPE OF WORK.

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BID SET

MARK	DATE	DESCRIPTION	BY

HUNTSVILLE UTILITIES
SOUTHEAST WATER TREATMENT PLANT

SLUDGE COLLECTOR CONTROL PANEL

Project No.:	200-11740-10003
Designed By:	CSW
Drawn By:	TAC
Checked By:	DAB

I-2602

Bar Measures 1 inch

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