

NOTE:  
INSTALL ALUMINUM HANDRAILS ON ANY PLATFORM 6" x 8" OR SMALLER AND OVER 18" HIGH.

PUMP HORSEPOWER, HP	LL hp
CAPACITY GPM	LL gpm
TOTAL DEAD HEAD	LLL ft.
OPERATING RPM	LLL rpm
IMPELLER NO.	LLL
VOLTS	LL V
AMPS	LL A
PHASE	3
MANUFACTURER	MIR
MODEL NO.	MODEL
S/N #1	
S/N #2	

ALUMINUM PLATE WITH PUMP PLATE TO BE ATTACHED TO INSIDE OF CONTROL PANEL DOOR IN PLAN VIEW.

**CONTROL PANEL INFORMATION PLATES**

NOTE: THE CONTRACTOR SHALL INCLUDE A SCHEMATIC FOR THE CONTROL PANEL INFORMATION PLATE TO BE SUPPLIED TO THE INSIDE OF THE PANEL DOOR. THE ABOVE PUMP AND MOTOR INFORMATION PLATE SHALL BE PERMANENTLY AFFIXED TO THE INSIDE OF THE PANEL DOOR.  
PUMP DUTY & ASSOCIATES AND MEET OR EXCEED MINIMUM NCSO SPECIFICATIONS (ATTACHED).

- NOTE: PUMP SHALL HAVE FLANGE JOINTS EXCEPT WHERE MECHANICAL JOINTS ARE NOTED.
- ALL HARDWARE IN WETWELL AND ABOVE GROUND PIPING SUCH AS SHALL BE 316 S/S.

PRING AND COMPONENTS SHALL BE SANDBLASTED AND PAINTED HIGH BUILD EPOXY POLYURETHANE SERIES 66 OR 69 COATS OF THERMOC EPOXY POLYURETHANE SERIES 66 OR 69 OF THE COATING SHALL BE PALLETTE 1AN OR EQUIVALENT.

**TYPICAL SUBMERSIBLE PUMP STATION PLAN WITHOUT SLAB (N.T.S.)**

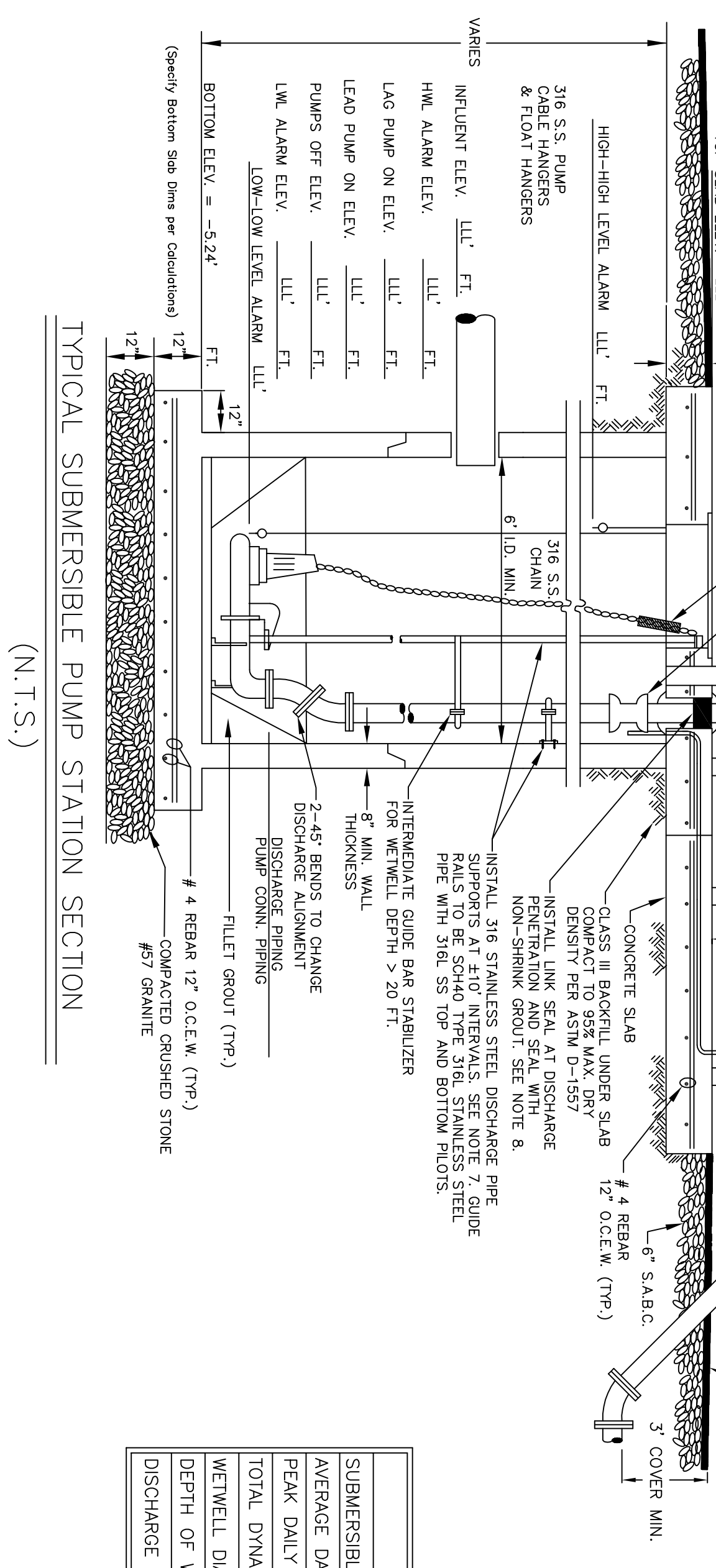
- MODEL NOTES:**
- ENGRS-HAUSER FLOW METER.
  - AGS PUMPS WITH CONTROL PANEL.
  - GA INDUSTRIES AIR RELEASE / VENT.
  - HALLWAY ACCESS HATCH WITH SAFETY GRATE.
  - MULTITRODE CONTROLLER WITH LEVEL SENSING PROBE.

ALL 3" FN VALVES ARE TO BE DEZURK OR A/K/ 1/2" PRESSURE TAP AS MANUFACTURED BY GA INDUSTRIES.

**KEYED NOTES**

- 1/2" INCH S/S NIPPLE, SS BALL VALVE, AND LIQUID-FILLED PRESSURE GAUGE
- OPEN LEFT (COUNTER CLOCKWISE), PLUG BYPASS VALVE WITH RESILIENT SEAT FACING AND ALUMINUM EVERIGHT HOSE COUPLING WITH END CAP.
- 1/2" INCH S/S PIPING.

THE SITE IS LOCATED WITHIN FLOOD ZONE FLOOD MAP/FLOOD PLAN INFORMATION FLOOD MAP PANEL: \_\_\_\_\_



**TYPICAL SUBMERSIBLE PUMP STATION SECTION (N.T.S.)**

PUMP STATION OPERATING PARAMETERS	
SUBMERSIBLE PUMPS	QTY= (MODEL)
AVERAGE DAILY FLOW (GPM)	LL gpm ADF
PEAK DAILY FLOW (GPM)	LL gpm PDF
TOTAL DYNAMIC HEAD (TDH)	LL' TDH
WETWELL DIAMETER	LL feet
DEPTH OF WETWELL	LL feet (Top of slab to inside bottom)
DISCHARGE PIPING	LL" inch Foremain (LL" Ø Pump Discharge)

PUMP MODEL: LLL	IMPELLER DIA. LLL mm (LL")
NO. PUMPS: 2	MOTOR HP: LLL
DISCHARGE Ø: LL mm (LL")	RPM: LLL
MAX. DESIGN FLOW: LL GPM	VOLTAGE: LLL
MAX. DESIGN TDH: LL'	PHASE: 3

**STEEL PAINTING SCHEDULE (IMMERSION):**

**SURFACE PREPARATION:** REMOVE ALL OIL AND GREASE FROM METAL SURFACE PRIOR TO BLAST CLEANING. THE ENTIRE SURFACE SHALL BE BLAST CLEANED TO NEAR WHITE METAL CONDITION. ALL SURFACES SHALL BE CLEANED AND REPAIRED TO MEET THE RECOMMENDED METHODS OUTLINED IN THE STEEL STRUCTURES PAINTING CONSOLE'S SPECIFICATION SP-10.

- 1ST COAT: THERMOC SERIES 1 QUANTHANE APPLIED AT 2.5 - 3.5 DRY MILS.
- 2ND COAT: THERMOC SERIES 66 HI-BUILD EPOXYLINE APPLIED AT 4.0 - 6.0 DRY MILS.
- 3RD COAT: THERMOC SERIES 104 H.S. EPOXY APPLIED AT 3.0 - 5.0 DRY MILS.

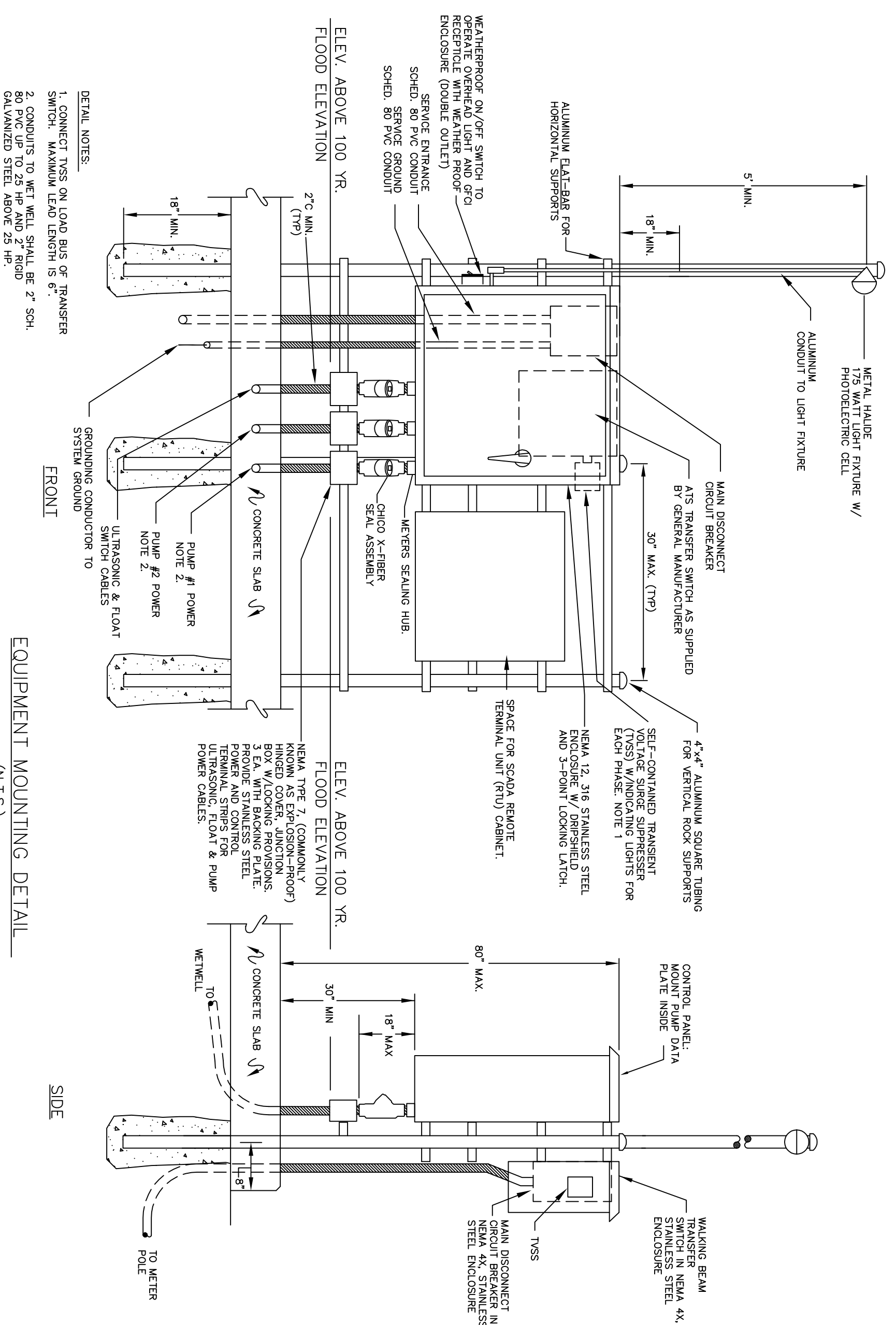
PAINTING CONTRACTOR SHALL PERMIT OWNER'S REPRESENTATIVE AND/OR PAINT & COATING CONSULTANT TO VISIT THE WORK AREA AT ANY TIME TO VERIFY THE WORK AND RESERVES THE RIGHT TO REFLECT ALL WORK THAT DOES NOT COMPLY WITH THIS SPECIFICATION.  
THERMOC CONTACT INFORMATION: THERMOC, INC.  
PO BOX 23599  
COLUMBIA, SC 29224  
CELL: (803) 422-3650  
EMAIL: NAVAUSS@THERMOC.COM

**STEEL PAINTING SCHEDULE (NON-IMMERSION):**

**SURFACE PREPARATION:** REMOVE ALL OIL AND GREASE FROM METAL SURFACE PRIOR TO BLAST CLEANING. THE ENTIRE SURFACE SHALL BE BLAST CLEANED TO A COMMERCIAL GRADE. ALL SURFACES SHALL BE CLEANED AND REPAIRED TO MEET THE RECOMMENDED METHODS OUTLINED IN THE STEEL STRUCTURES PAINTING CONSOLE'S SPECIFICATION SP-63.

- 1ST COAT: THERMOC SERIES 1 QUANTHANE APPLIED AT 2.5 - 3.5 DRY MILS.
- 2ND COAT: THERMOC SERIES 66 HI-BUILD EPOXYLINE APPLIED AT 4.0 - 6.0 DRY MILS.
- 3RD COAT: THERMOC SERIES 73 COLOR ENOURA-SHIELD APPLIED AT 3.0 - 5.0 DRY MILS.
- 4TH COAT: THERMOC SERIES 76 ENOURA-CLEAR APPLIED AT 1.0 - 2.0 DRY MILS.

PAINTING CONTRACTOR SHALL PERMIT OWNER'S REPRESENTATIVE AND/OR PAINT & COATING CONSULTANT TO VISIT THE WORK AREA AT ANY TIME TO VERIFY THE WORK AND RESERVES THE RIGHT TO REFLECT ALL WORK THAT DOES NOT COMPLY WITH THIS SPECIFICATION.  
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**EQUIPMENT MOUNTING DETAIL (N.T.S.)**

**GENERAL NOTES:**

- WETWELL LEVEL AND ALARMS TO BE CONTROLLED BY MULTITRODE CONTROLLER WITH LEVEL SENSING PROBE. THE MULTITRODE SHALL BE HOUSED IN THE CONTROL PANEL. THE UNIT SHALL BE 119VAC, 60 HZ, ISOLA TED 4-20 mA OUTPUT WITH 5 FORM "C" RELAYS, WITH AN ON BOARD 24VDC FIELD BATTERY. PERMANENTLY MOUNTED SENSORS SHALL BE 50 FT. WELDED BY NORTH CHARLESTON SEWER DISTRICT (NCSO).
- ALL POWER TO THE PUMP STATION SHALL BE 3 PHASE POWER.
- THE SIZE OF PIPE AND THE LENGTH OF FITTINGS, COMPONENTS, VALVES, ETC. AND THE PAD ASSEMBLY PAD SHALL BE FIELD VERIFIED WITH THE CONTRACTOR AND THE NCSO FIELD REPRESENTATIVE.
- CONTRACTOR SHALL INSTALL A HATCHWAY AND SAFETY GRATE BY HALLWAY.
- INSTALL SS JUNCTION BOXES AT 100 YEAR FLOOD LEVEL.
- PIPE STANCHIONS SHALL BE GRINNELL PIPE STANCHION S401E, FG-289 WITH STEEL YONE AND NUTS. THE STANCHION SHALL BE SECURED USING 4 EA. H11 KWK BOLT II 316 SS 1/2" TO SUPPORT THE WEIGHT OF THE COMPONENTS WITHIN THE WETWELL AND VALVE ASSEMBLY. VERTICAL SUPPORT BASE PLATES, SADDLES, HARDWARE (ALL THREAD, STUDS, ETC.) ARE TO BE 304 SS AT A MINIMUM.
- CONTRACTOR TO INSTALL LINK SEAL AT DISCHARGE LINE PENETRATIONS OF TOP SLAB. THE LINK SEAL SHALL BE SUPPLIED WITH 316 STAINLESS STEEL HARDWARE. APPLY NON-SHRINK GROUT TO SEAL AROUND PIPE AT TOP AND BOTTOM OF SLAB PENETRATION.
- ALL PUMP STATION CONTROL PANELS SHALL BE EQUIPPED WITH A TERMINAL BLOCK WITH DRY CONTACTS TO ALLOW CONNECTION TO SCADA CONTROL PANEL. SEE ATTACHED SCHEMATIC.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL SCADA ENCLOSURE (STANDARD MOTOROLA THE ENCLOSURE FOR THE MOTOROLA A.C.E. UNIT PER NCSO).
- THE PUMP STATION CONTROLS SHALL BE EQUIPPED WITH MULTITRODE LEVEL SENSING PROBE.
- INSTALL OUTSIDE WEATHERPROOF GFCI, 120VAC OUTLET.
- MOUNT A LIQUID-FILLED PRESSURE GAUGE ON THE FORCE MAIN, DIVER IR EQUIVALENT 2-1/2" MINIMUM FACE DIAMETER. IT SHALL BE LOCATED AS PER MANUFACTURER'S RECOMMENDATIONS.
- PUMPS SHALL HAVE LIFTING HANDLES.
- ENGINEER SHALL VERIFY AND PROVIDE FOR 3-PHASE POWER TO PUMP STATION.