

4' WET WELL - PLAN
SCALE: N.T.S.

LIFT STATION SPECIFICATIONS:

Furnish two Liberty heavy duty submersible grinder pumps. Pumps shall be connected to the discharge piping when lowered onto the discharge connection by one 2" dia. Sch40 304SS rail. Pump shall be centrifugal type with rotating cutter mounted on the pump shaft. The stationary cutter shall be mounted in the adjustable bottom plate. Shredding shall occur outside of volute to avoid clogging. The cutter shall be super abrasive material and hardness of 58-62 Rockwell C. Each pump shall be equipped with two seals. The lower shall be mechanical type with silicon carbide faces. The oil chamber shall be fitted with a moisture probe extending from the bottom of the motor housing into the oil chamber. The pump motor shall be air filled and have class "F" insulated moisture resistant windings. Bimetallic thermal switches shall be imbedded into each phase of the winding to sense high temperature. Float holder and upper guide rail brackets shall be made with 316SS only.

The fiberglass basin shall be manufactured from commercial grade polyster resin. The complete wet well shall have a dynamic loading of 16,000ft-lbs and shall not deflect vertically downward more than a 1/4" at the point of load application when loaded to 24,000lbs. The fiberglass valve vault shall be 24"x36"x30" deep and meet the requirements for incidental traffic H-10 loading as established by ASSHTO. The compression strength shall be at least 11,000psi.

Float switches shall be UL listed type "S-RotoFloat" manufactured by Anchor Scientific, Inc. with 30 feet of STO PVC cable.

Pump Model: LSGX200 No. Pumps: TWO (2)

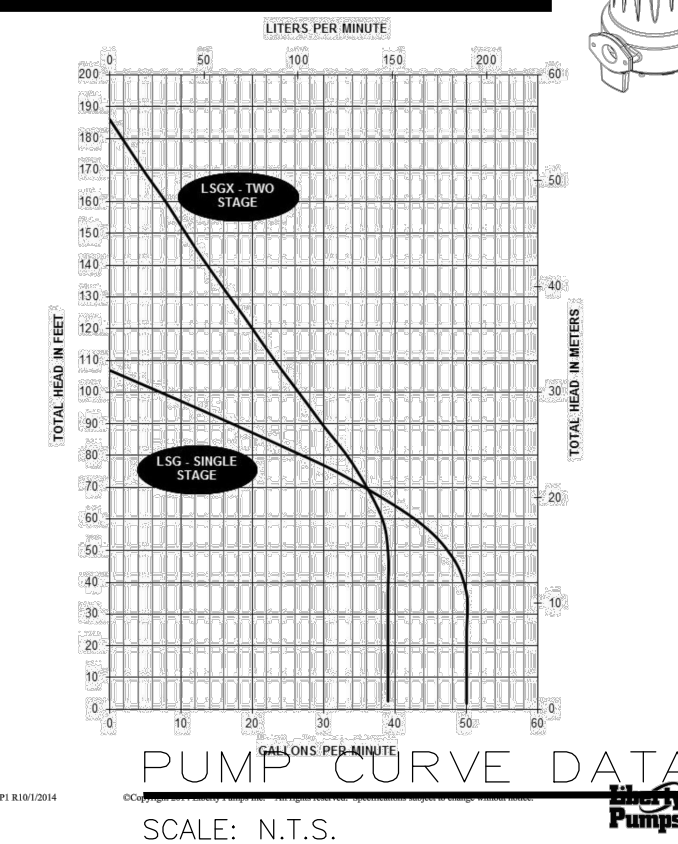
Motor HP: 2 HP.

Discharge: 2.25" RPM: 3450

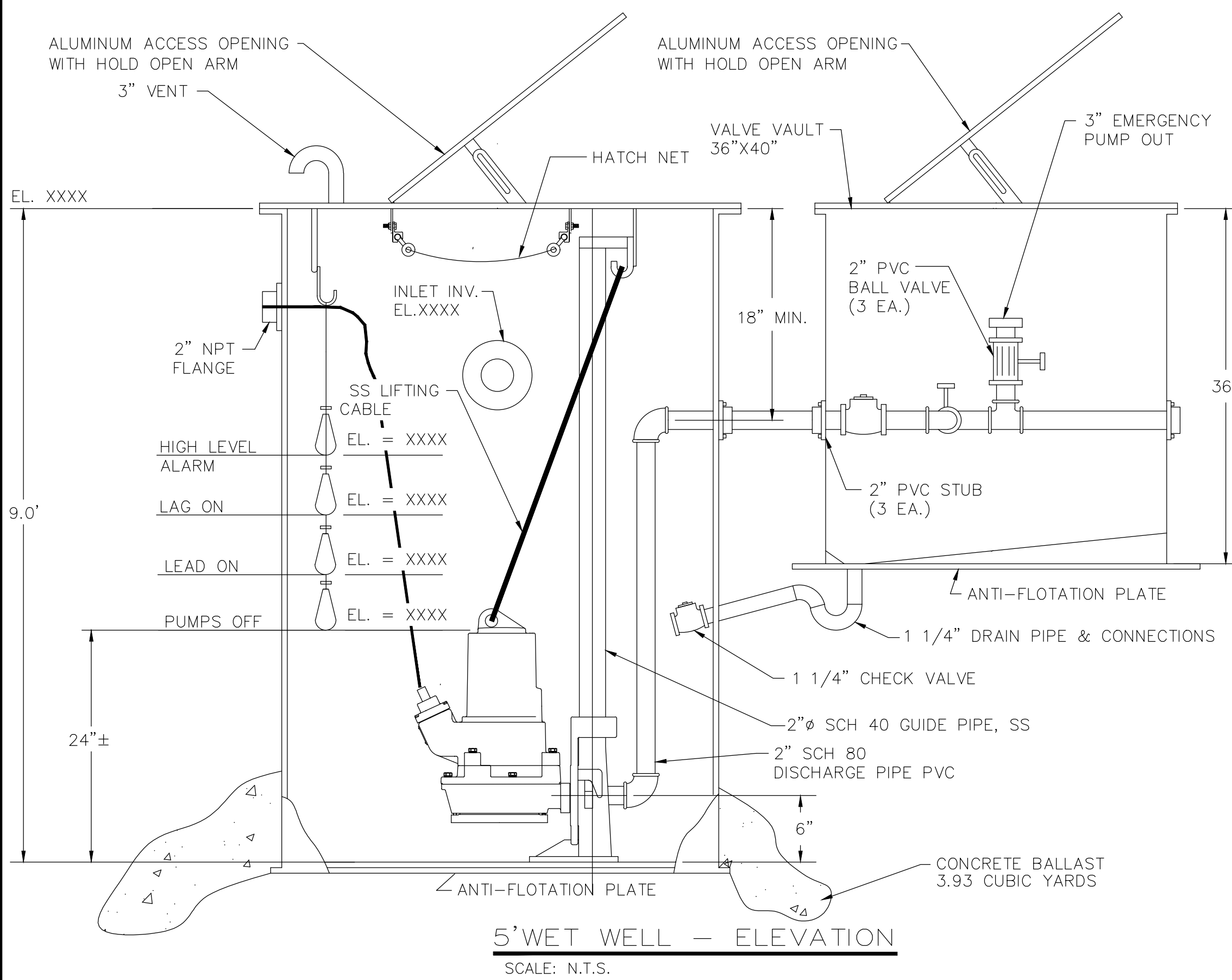
Design Flow: 20 GPM. Voltage: 208/230

Design TDH: 39 FEET. Phase: 1 PHASE

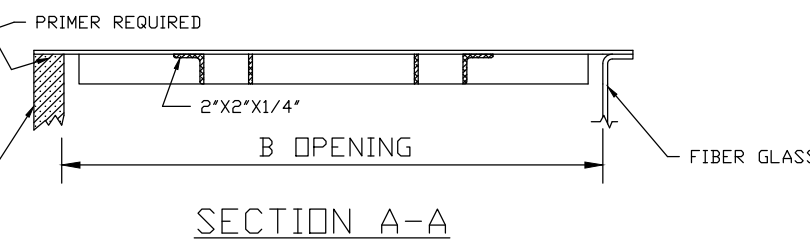
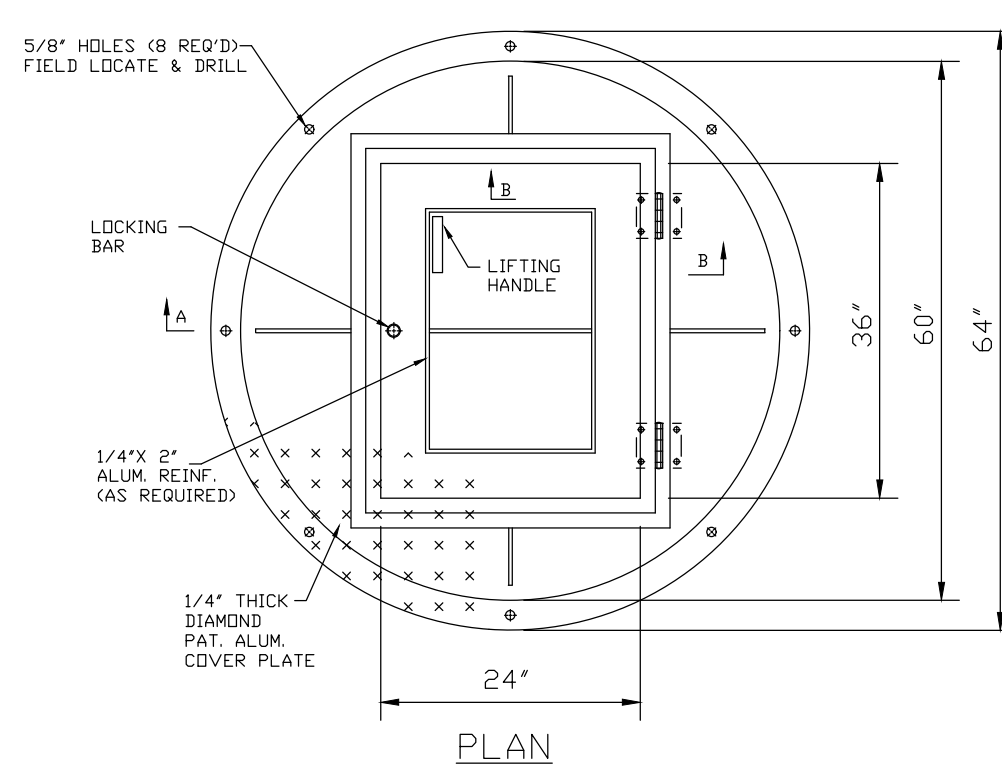
Liberty Pumps
Pump Specifications
LSGX200-SERIES (SINGLE STAGE)
LSGX200-SERIES (TWO STAGE)
Omnivore 2HP Submersible Grinder Pumps



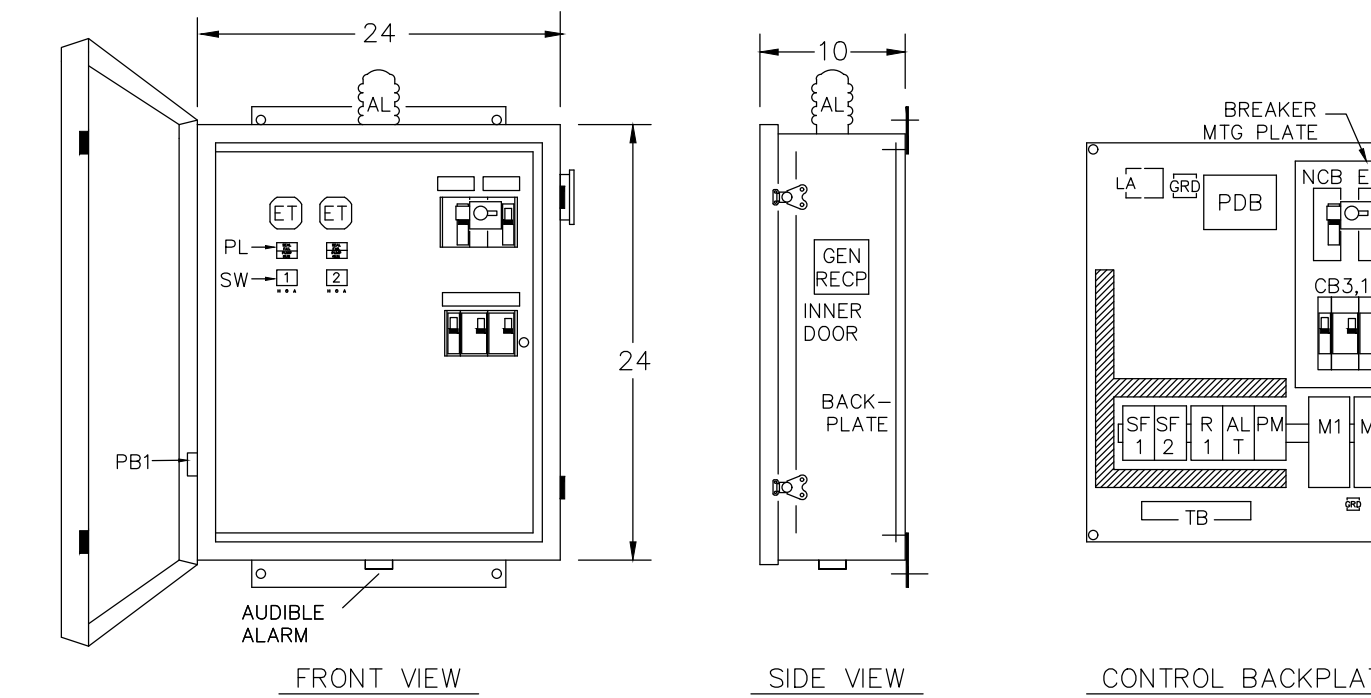
PUMP CURVE DATA
SCALE: N.T.S.



5' WET WELL - ELEVATION
SCALE: N.T.S.

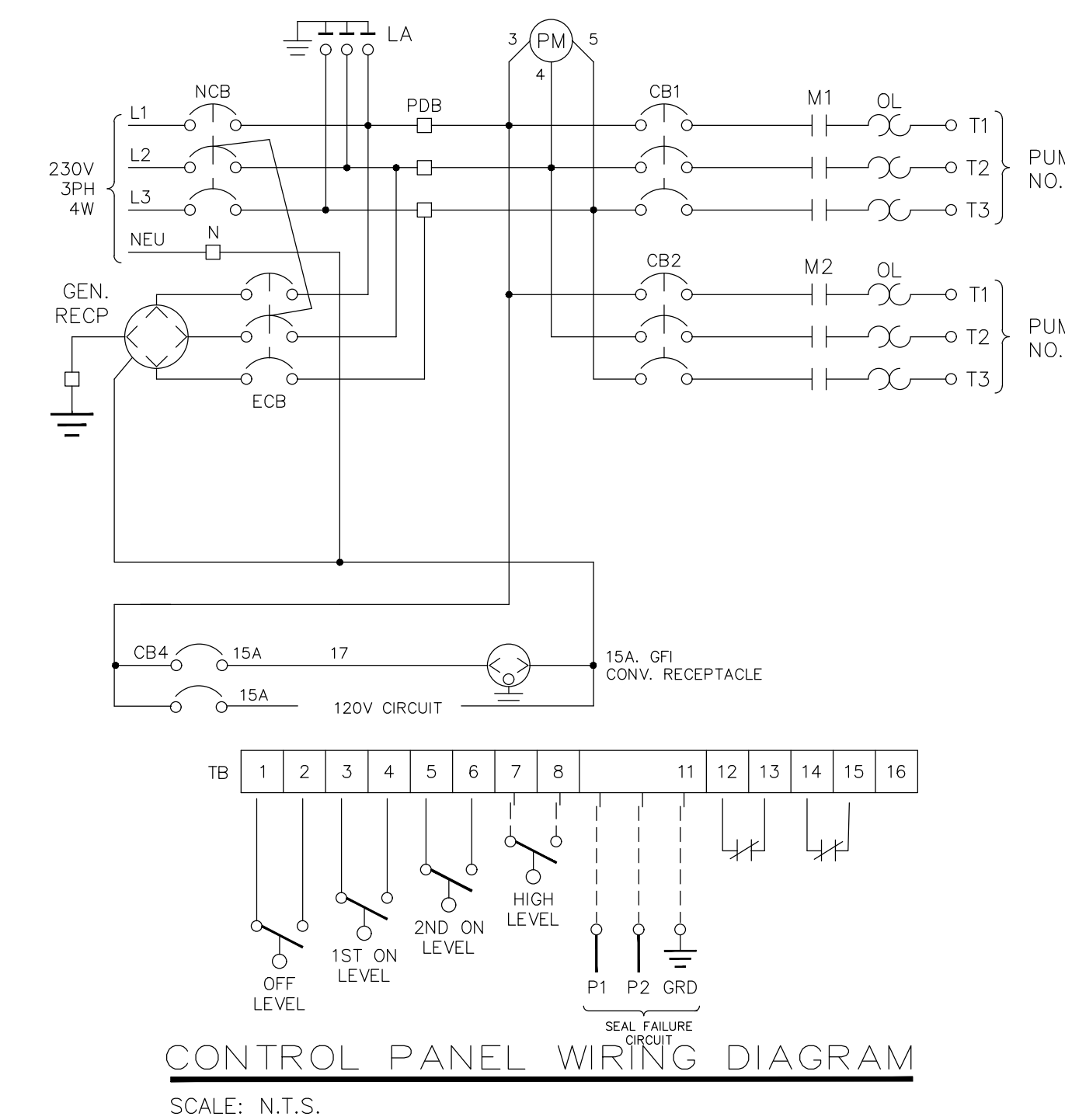


ACCESS COVER DETAILS
SCALE: N.T.S.



NOTES:
1-ENCLOSURE: NEMA 3R STAINLESS STEEL
2-MATERIAL: 14 GAUGE #304 STN. STL.
3-CONSTRUCTION: FORMED AND WELDED
4-FINISH: NO. 2B BRUSHED
5-HINGE: STAINLESS STEEL
6-LATCHES: STAINLESS STEEL LOCKABLE
FL-TOP SEAL FAILURE/ BOTTOM PUMP RUN
SW-HQA SINGLE POLE DOUBLE THROW SWITCH
LA-LIGHTING ARRESTOR
FM-PHASE MONITOR
ALT-ALTERNATOR
SF-SEAL FAIL RELAY
AL-ALARM LIGHT
TB-TERMINAL BLOCK
GRD-GROUND TERMINAL
CB-CIRCUIT BREAKER
PDB-POWER DISTRIBUTION BLOCK
ECB-EMERGENCY CIRCUIT BREAKER
NGB-NORMAL CIRCUIT BREAKER
M1-M2

CONTROL PANEL ENCLOSURE
SCALE: N.T.S.



CONTROL PANEL WIRING DIAGRAM
SCALE: N.T.S.

LIFT STATION NOTES:

1. A MAINTENANCE AGREEMENT WITH A LICENSED UTILITY CONTRACTOR MUST BE EXECUTED TO ALLOW EMERGENCY REPAIRS DURING A 7-DAY A WEEK, 24-HOUR PERIOD. CONTRACTOR'S CALL-OUT NUMBER MUST BE POSTED ON THE ELECTRICAL PANEL OF THE LIFT STATION WITH INSTRUCTIONS TO CALL IN CASE OF EMERGENCY. A COPY OF THE MAINTENANCE AGREEMENT MUST BE SUBMITTED TO THE UTILITIES DEPARTMENT PRIOR TO COMPLETION OF THE UTILITIES CONSTRUCTION PERMIT.
2. THE MAINTENANCE AGREEMENT SHALL INCLUDE ACCOMMODATIONS FOR ANNUAL INSPECTIONS AND NECESSARY PREVENTATIVE MAINTENANCE. ANNUAL INSPECTIONS FORMS MUST BE SUBMITTED TO THE DEPARTMENT OF UTILITY SERVICES.
3. LIFT STATION MUST BE CONSTRUCTED IN AN AREA ACCESSIBLE TO APPROPRIATE MAINTENANCE VEHICLES, SUCH AS LARGE VAC TRUCKS.
4. AN ELECTRICAL RECEPTACLE FOR AN EMERGENCY POWER GENERATOR MUST BE PROVIDED ON THE ELECTRICAL PANEL.

STANDARD FEATURES:

- AUTO-LOCK STAINLESS STEEL HOLD OPEN ARM WITH RELEASE HANDLE
- STAINLESS STEEL HINGES AND ATTACHING HARDWARE
- NON-CORROSIVE LOCKING BAR AND HANDLE
- VENT COUPLING ON REQUEST
- LARGER SIZES AVAILABLE FOR CONCRETE APPLICATIONS
- SINGLE LEAF CONSTRUCTION
- 300 LBS. PER SQ. FT. LOAD RATING
- 10 YEAR GUARANTEE

SEAL

ISSUE	DATE	COMMENTS

SCALE: **BISE SHEET**

APPROVED BY **JWM**

CHECKED BY **JWM**

SANCTUARY COVE
250 ROUSE FORT PIERCE, FL 34946
THIS SHEET LIFT STATION DETAILS
DRAWN BY **WBD**

PROJ. NO. 21-XXXX
DATE 04-21-2023
SHEET NO.