

RILEY & Company, Inc. (H-20 LP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS

DRC
PZ22-12000009
02/01/2023

SCOPE: Supply one complete H-20 LP Pre-Fab Lift Station, per design.
Pumps shall be capable of pumping domestic & commercial sewage.
Complete system shall be supplied by:
RILEY & Company, Inc.
Sanford, FL 32773 (Ph. 407-265-9963)

NO SUBSTITUTIONS - NO ALTERNATES

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty. Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: Submersible pumps shall be KEEN Model KGP150. The grinder pumps shall be installed in the H-20 GP FRP wetwell utilizing a dual slide rail system.

Stator winding shall be open type with Class H insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.

A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors.

The pump motor shaft shall be AISI 430F SS threaded to take the pump impeller.
Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL:

To insure complete unit and warranty responsibility the electrical control panel must be manufactured and built by the pump supplier. The pump supplier must be a TUV (UL508A CERTIFIED) manufacturing facility, with a minimum of 5 years history in the manufacturing of electrical control panels.

The Enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep Marine Grade Aluminum with 4 point latching system.

The enclosure shall have external mounting feet to allow for wall mounting.

The following components shall be mounted through the enclosure:

- 1- ea. Red Alarm Beacon (Light) 4" x 4" Minimum Diameter
- 1- ea. Alarm Horn (minimum 95 DCB)
- 1- ea. Generator Receptacle w/ weatherproof cover(SCM460 -UL 1686)
- 1- ea. Alarm Silence Pushbutton

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to back panel:

- 1- ea. Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
- 1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
- 1- ea. Silence Relay Module
- 1- ea. Duplex Alternator w/ Pump Selector Switch
- 1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger For The High Level Alarm System
- 20- ea. Terminals For Field Connections
- 6- ea. Terminals For Motor Connections (Single Phase Only)
- 7- ea. Grounding Lugs
- 1- ea. Seal Failure Relay

The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge.

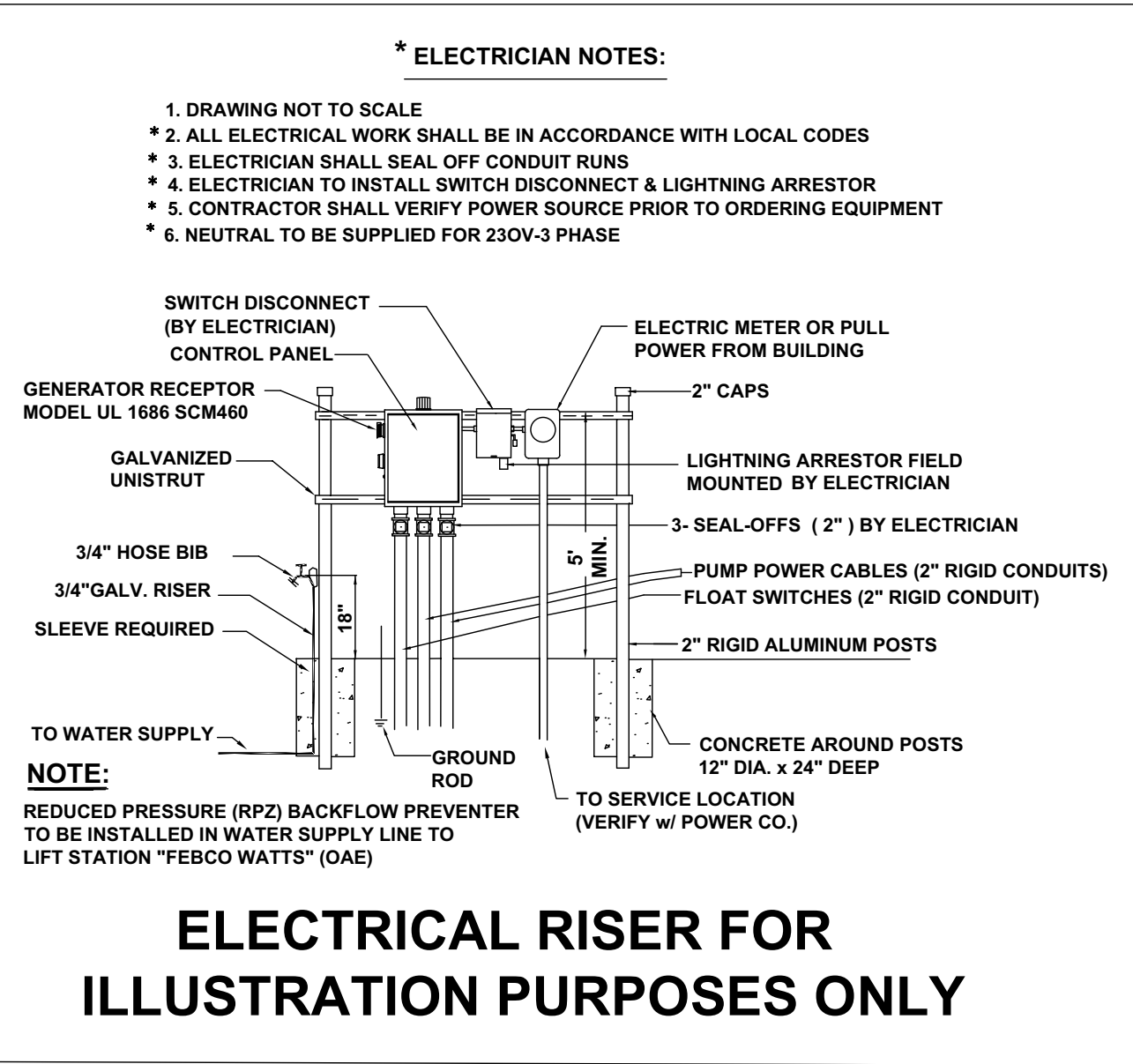
The following components shall be mounted through the inner door:

- 1- ea. Main Circuit Breaker
- 1- ea. Emergency Circuit Breaker
- 1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
- 2- ea. Short Circuit Protectors w/ Auxiliary Contacts
- 1- ea. Control Circuit Breaker
- 2- ea. Seal Failure Indicator Lights
- 1- ea. Hand-Off-Auto Selector Switches
- 2- ea. Pump Run Pilot Lights
- 1- ea. Power On Pilot Light
- 2- ea. Elapse Time Meters (Non-Resetable)
- 1- ea. GFI Duplex Convenience Outlet

PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	55 GPM	TOP OF WETWELL	9.10
PRIMARY TDH	203 'TDH	INLET INVERT	2.80
PUMP MANUFACTURER	KEEN	HIGH LEVEL ALARM (HLA)	2.80
PUMP MODEL #	KGP150	2nd PUMP ON (LAG)	2.30
R.P.M.	3450	1st PUMP ON (LEAD)	1.80
HORSEPOWER	15.0	PUMPS OFF (OFF)	1.30
ELECTRICAL/ VOLTS / PHASE	460V/3	BOTTOM OF WETWELL	-1.90
FULL LOAD AMPS/ PER PUMP	29.8	WETWELL DIAMETER	60"
PUMP DISCHARGE SIZE	3"		

NOTES:

- Water service with hose bibb and reduced pressure backflow preventer to be installed near lift station. (See Electrical Riser Illustration)
- System shall be operated and maintained to provide uninterrupted service as required by DEP Chapter 62-604.500.
- Approved Operation & Maintenance Manual(O&M) shall be kept available for operation and maintenance personnel
- A weather resistant emergency contact sign shall be installed at the lift station and made visible to the public (Lettering shall be min. 2" in height.
- INSPECTION & TESTING: A factory representative shall be provided for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance for the complete lift station package.



CONTRACTOR To Provide Maintenance & Owner Info. Sign

18" x 24" PRIVATE SANITARY SEWER PUMP STATION

IN CASE OF EMERGENCY CONTACT THE FOLLOWING NUMBERS:

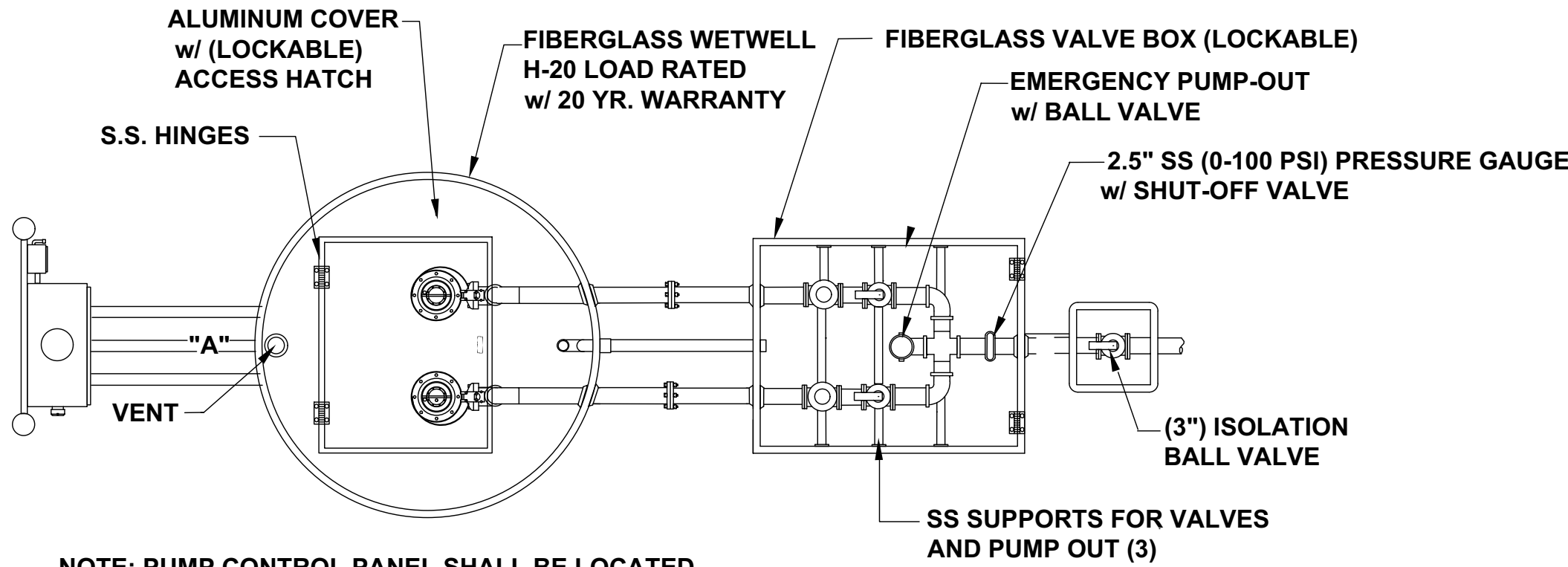
FACILITY OWNED BY: NAME: _____

PHONE NUMBER: _____

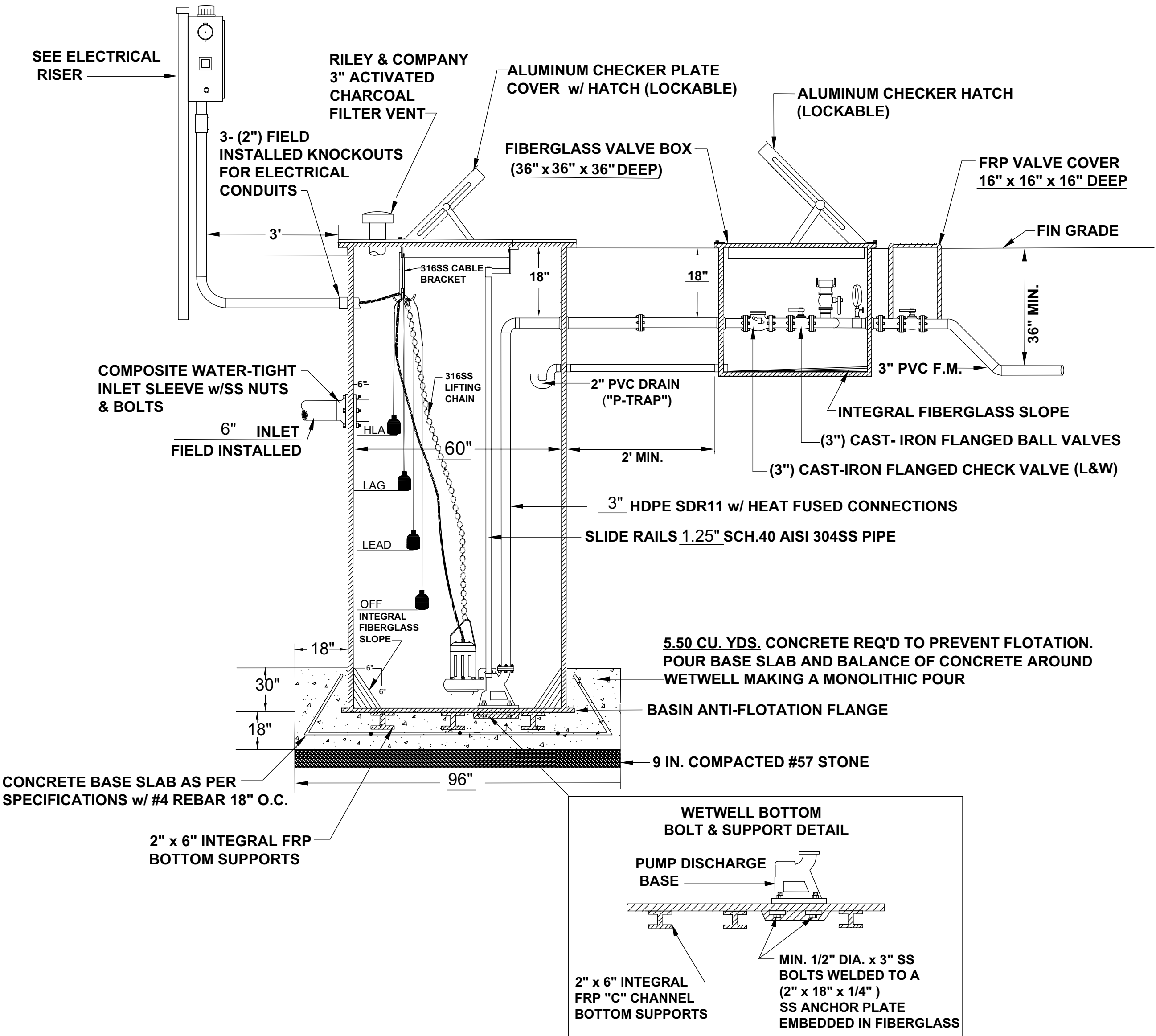
FACILITY MAINTAINED BY: NAME: _____

PHONE NUMBER: _____

STATION NUMBER: _____



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"



RILEY & Company, Inc.
5491 Benchmark Lane
Sanford, FL 32773
PH. 407-265-9963

ALLIANCE - GATEWAY

DRAWN
CHECKED
DATE
SCALE
JOB NO.

12-16-2022

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