



TROUBLE AT LIFT STATION NO. 2 (FAWNWOOD)

If the Fawnwood Lift Station has a plugged pump, it will sound very different...erratic, and out of balance. It may or may not be pumping water. Mostly it will still be pumping some water and have some rags in the impeller which need to be removed and unplugged with the puller bar that is onsite. You will also need a "Come-Along". The second pump can be used to maintain pumping flows. Should there be prime loss, try placing your thumb pad over the intake tube on priming bulb. This may force it to prime. If you have two pumps disabled due to prime or other issues, then you have from 4 to 6 hours before flooding occurs. If possible, you should be monitoring this station within 30-40 minutes of station failure. The Honda 4-inch trash pump at the WRF can be used for emergency bypass pumping.

There is a gate valve in the Fawnwood force main, or "outlet" line. This 2-inch gate valve must be used to drain the force main. Make sure you have room for a couple hundred gallons of backflow sewer into the tank. After draining the force main, the 4-inch trash pump can be primed and started. If the force main is not emptied, severe difficulty will ensue with priming the 4-inch trash pump. To bypass the pumps with the trash pump:

- 1) Empty the force main with the 2-inch gate valve plumbed inside of the sewer tank on the outlet end. You must empty this most of the way at this point to achieve prime. After draining the force main, close the same 2-inch gate valve and you are ready to pump.
- 2) Connect inlet camlock and hose to the inlet of the 4-inch trash pump. Drop this suction line into the sewer tank. Connect the 4-inch trash pump, (outlet side), to the auxiliary bypass valve located in the box in the ground in front of the lift station. It has a wheel valve that opens counter clockwise. (Pump will pump out of sewer tank and into bypass valve).
- 3) Open auxiliary bypass valve.



APPENDIX G

4) drop intake end of pump line into sewer tank at least $\frac{3}{4}$ to a few inches off the floor.

5) You are ready to pump. Start the trash pump and work on making sure prime succeeds. Moving intake hose up and down rapidly has helped in the past. Filling the pump cavity may be successful but quickly pumps out.

6) If the AC comes back on, it will be business as usual. If time allows, note the prime of the two pumps after AC is back on. Manually run each pump to test for prime and proper running.

If AC comes back on while pumping, you may have one, and possibly two, pumps running if wet well level was high enough. Close the bypass wheel to restore pumping through the entire force main. When under AC power, the Fawnwood Lift Station check valves will “thump” 1.5 seconds after shut down of pump. One louder thump, and one softer thump. This is a reassurance that the check valves still work.

There is a pump puller bar at this station for pulling pumps, you will need a tool known as a “come along” as well. It may be necessary to clear debris, rags, etc., from the pump impeller. It is rare, but can happen. Isolate the pump circuit using toggle or at the breaker in the event of lockout procedures. Unbolt the pump at the base and pull the pump upwards paying attention to impeller hanging up on anything. You may have to jockey the pump back and forth on the way up. Clear debris and inspect impeller. Run for a second to test. Restore pump to mounting surface. Be prepared to use the thumb over primer bulb inlet procedure if prime has been lost.

There is one primer bulb replacement kit in the lift station cabinet at the Barn/Drafting room. It will do one side of the primer circuit, solenoids, gaskets, etc.