



City Lift Station Requirements

- Lift station must meet TCEQ requirements.
- Lift station must meet the City's ordinance.
- Ensure to submit/acquire a stormwater permit prior to any construction.
- Provide survey of existing conditions.
- The plans need to provide a plan profile drawing of all utilities and the wet well.
- Lift station must have a generator as a backup power source. Alternate would be to provide bypass pump with its own power source (natural gas).
- Backup generator must be a natural gas generator.
- Acceptable generator brands are Cummins and Taylor.
- The generator must include an automatic transfer switch.
- Electrical components, controller, generator, electric meter, cut-off switch must be at the higher of the two elevations:
 - 100 year base flood elevation plus 2 feet or
 - 500 year base flood elevation
- If a control panel is elevated a platform must be provided so that operator can have access to it.
- The driveway and the parking area must be concrete pavement.
 - Reinforcement Minimum: #4 bars with 12 in. x 12 in. center to center each way or engineer design for HS20 wheel loading.
 - Thickness Minimum: 6 in.
 - Pavement shall have a minimum of 5.5 sacks per cubic yard and a minimum compressive strength of 3500 psi at 28 days.
- Provide detention or mitigation for any increase in runoff according to City Ordinance and other governmental agency (TxDOT, Harris County, etc.) which has jurisdiction.
- A concrete pad must be placed in front of the control panel. The concrete must extend 5 feet from the front of the control panel. The width of the concrete panel must match the width of the control panel with a minimum width of 5 feet.
- There must be a canopy over the control panel. The canopy must be a minimum of 10 feet by 10 feet and be positioned in such a way as to provide maximum protection from the weather. The minimum height clearance shall be 9 feet.
- The control panel must have a minimum 3 feet clear space and meet building/electrical code.
- The lift station must have a minimum of two pumps. Each pump shall have a gate or plug valve located on the discharge after the check valve. Submersibles shall be self-priming Flygt. Gorman Rupp pumps for dry pits. Use submersible pumps as the first choice. The use of pumps with dry pits must be approved by the City in advance.
- Pump controller should be a Multi-Smart controller or MPE SC 2000.



CITY OF BAYTOWN

PUBLIC WORKS & ENGINEERING DEPARTMENT

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- Wet well hatch shall have a safety grate.
- Fence shall be cyclone with slats and 3 rolls of anti-intrusion barbwire. For areas of high visibility, a pre-cast or cast in place concrete fence will be required. No wooden fence.
- Odor control shall be incorporated as part of the lift station design if there is any building, sidewalk, park, or parking within 250 feet of the lift station.
- Control panel shall be Hanh, Sta-Con, Ace Controls, Prime Controls, Mercer Controls, and Motor Controls Inc.
- Lift Station to include SCADA equipment.
- Lift Station shall include A.R.I. air and vacuum release valves.
- All force main headers shall a fitting and valve to allow connection with a portable pump. Valve shall be the same size as the force main.
- The lift station must be designed so that it has bypass piping. This is necessary in case bypass pumping is needed if there is a malfunction or other maintenance in the lift station.
- Site shall have a security light with a photocell.
- Within the lift station the components (pump guide rails, lifting chain, cable, etc.) shall be stainless steel.
- Lift station shall have automatic controls with alternating pumps.
- All check valves shall be swing check type.
- Domestic water must be provided at all lift station. The domestic water must be metered. Provide at least one spigot for a connection to a water hose.
- There must be a 1-year warranty on the lift station and its components. Lift Station must include 5-year service agreement that has already been prepaid.
- As built drawings must be provided in a digital format and paper copy.

Effective: December 6, 2024