Lift Station/Force Main System Application

Texas Commission on Environmental Quality

for Regulated Activities On the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c)(3)(B)and(c), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Regulated Entity Name: ______

Customer Information

(If different than customer information provided on core data form)

1. The person(s) responsible for providing the engineering certification to the TCEQ pursuant to 30 TAC §213.5(f)(2)(C) during construction and 30 TAC §213.5 (c)(3)(D) upon completion of construction is:

   Contact Person: ______
   Entity: ______
   Mailing Address: ______
   City, State: ______  Zip: ______
   Telephone: ______    Fax: ______
   Email Address: ______

2. The engineer responsible for the design of this lift station and force main:

   Contact Person: ______
   Entity: ______
   Mailing Address: ______
   City, State: ______  Zip: ______
   Telephone: ______    Fax: ______
   Email Address: ______
   Texas Licensed Professional Engineer's Serial Number: ______

Project Information

3. This project is for the construction or replacement of:

   □ Lift Station only.

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Lift Station and Force Main system.
☐ Lift Station, Force Main, and Gravity system.

4. The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing
☐ Proposed

5. All components of this lift station/force main system will comply with:

☐ The City of _____ standard specifications.
☐ Other. Specifications are attached.

**Site Plan Requirements**

_**Items 6-14 must be included on the Site Plan.**_

6. ☐ The Site Plan must have a minimum scale of 1" = 400'.

   Site Plan Scale: 1" = _____‘.

7. ☐ Lift station/force main system layout meets all requirements of 30 TAC Chapter 217.

8. Geologic or Manmade Features:

☐ No geologic or manmade features were identified in the Geologic Assessment.
☐ All geologic or manmade features identified in the Geologic Assessment (caves, solution openings, sinkholes, fractures, joints, porous zones, etc.) which exist at the site of the proposed lift station and along the path(s) or within **50 feet of each side** of a proposed force main line are shown on the Site Plan and are listed in the table below. Designs used to protect the integrity of the sewer line crossing each feature are described and labeled on the attached page. A detailed design drawing for each feature is shown on Plan Sheet _____ of _____.

☐ No Geologic Assessment is required for this project.

**Table 1 - Geologic or Manmade Features**

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9. □ Existing topographic contours are shown and labeled. The contour interval is _____ feet. (Contour interval must not be greater than 5 feet).

10. □ Finished topographic contours are shown and labeled. The contour interval is _____ feet. (Contour interval must not be greater than 5 feet).

□ Finished topographic contours will not differ from the existing topographic configuration and are not shown.

11. 100-year floodplain boundaries

□ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

□ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): _____

12. 5-year floodplain:

□ After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above sewer lines.)

□ After construction is complete, all sections of the force main located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

**Table 2 - 5-Year Floodplain**

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13. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

**If applicable, this must agree with Item No. 15 on the Geologic Assessment Form.**

□ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

□ The wells are not in use and have been properly plugged.

□ The wells are not in use and will be properly plugged.

□ The wells are in use and comply with 16 TAC Chapter 76.

□ There are no wells or test holes of any kind known to exist on the project site.

14. □ Legal boundaries of the site are shown.
**Plan and Profile Sheets**

The construction drawings and technical specifications will not be considered for review unless they are the final plans and technical specifications which will be used by the contractor for bidding and construction.

**Items 15 – 18 must be included on the Plan and Profile sheets.**

15. The equipment installation construction plans must have a minimum scale of 1" = 10'.

   Plan sheet scale: 1" = _____ '.

16. Locations, descriptions and elevations of all required equipment and piping for the lift station and force main are shown and labeled.

17. Air Release/Vacuum Valves will be provided at all peaks in elevation of the proposed force main. These locations are listed in the table below and labeled on the appropriate plan and profile sheets.

**Table 3 - Air Release/Vacuum Valves**

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18. The final plans and technical specifications are submitted for the TCEQ’s review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

19. **Attachment A - Engineering Design Report.** An engineering design report with the following required items is attached:

   - The report is dated, signed, and sealed by a Texas Licensed Professional Engineer.
   - Calculations for sizing system.
   - Pump head calculations, including, but not limited to, system head and pump capacity curves, head loss calculations, and minimum and maximum static head C values for normal and peak operational conditions.
   - 100-year and 25-year flood considerations.
   - Total lift station pumping capacity with the largest pump out of service.
   - Type of pumps, including standby units.
   - Type of pump controllers, including standby air supply for bubbler controllers, as applicable.
Pump cycle time.
☐ Type of wet well ventilation; include number of air changes for mechanical ventilation.
☐ Minimum and maximum flow velocities for the force main.
☐ Lift station security.
☐ Lift station emergency provisions and reliability.

**Administrative Information**

20. ☐ Upon completion of the wet well excavation, a geologist must certify that the excavation was inspected for the presence of sensitive features and submit the signed, sealed, and dated certification to the appropriate regional office.

21. ☐ The TCEQ Lift Stations and Force Mains General Construction Notes (TCEQ-0591) are included on the General Notes Sheet of the Final Construction Plans for this lift station and/or force main system.

22. ☐ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

23. ☐ Any modification of this lift station/force main system application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

**Signature**

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Lift Station/Force Main System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c)(3)(C) and 30 TAC Chapter 217, and prepared by:

Print Name of Licensed Professional Engineer: _______

Place engineer's seal here:

Date: ______

Signature of Licensed Professional Engineer: ______

_________________________________________

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