



Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
2. Application materials



Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
 - Inglés
 - Idioma alternativo (español)
2. Solicitud original



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS 'DOMESTIC' WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Fort Bend County Municipal Utility District No. 5 (CN600739098) operates Fort Bend County Municipal Utility District No. 5 Wastewater treatment plant (RN105098651), an activated sludge process plant in the complete mix mode. The facility is located at approximately 480 feet northwest of the intersection of Highway 36 and FM 2218 at 6502 ½ Texas State Highway 36, in Rosenberg, Fort Bend County, Texas 77471. This application requests a minor amendment to the Interim Phase II of the existing permit, which authorizes the discharge of treated domestic wastewater at an average daily flow of 950,000 gallons per day, with a final phase flow of 2,000,000 gallons per day.

Discharges from the facility are expected to contain Five-day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia Nitrogen (NH₃-N) and Escherichia Coli. Domestic wastewater will be treated by an activated sludge process plant. The treatment units include a manual bar screen, aeration basins, final clarifiers, aerobic digesters and chlorine contact chambers. The sludge will be hauled off by a license sludge hauler for disposal.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES DOMESTICAS /AGUAS PLUVIALES

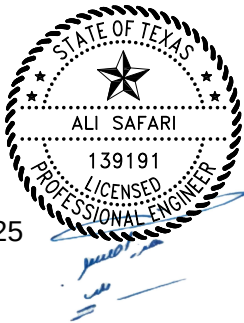
El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Fort Bend County Municipal Utility District No. 5 (CN600739098) opera Planta de tratamiento de aguas residuales del Distrito de Servicios Públicos Municipales Número 5 del Condado de Fort Bend RN105098651, una una planta de proceso de lodos activados operada en el modo de mezcla completa. La instalación está ubicada en aproximadamente a 480 pies al noroeste de la intersección de la Carretera 36 y la FM 2218 en 6502 ½ Texas State Highway 36, en Rosenberg, Condado de Fort Bend, Texas 77471. Esta solicitud pide una modificación menor a la Fase II Interina del permiso existente, que autoriza la descarga de aguas residuales domésticas tratadas a un caudal diario promedio de 950,000 galones por día, con un caudal de fase final de 2,000,000 de galones por día.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbónico (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N) y Escherichia coli. Las aguas residuales domésticas. **estará** tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluyen una pantalla de barra manual, balsas de aireación, clarificadores finales, digestores aeróbicos y cámaras de contacto de cloro. El lodo será acarreado por un transportador de lodos con licencia para su eliminación.

**MINOR AMENDMENT OF DOMESTIC
WASTEWATER DISCHARGE APPLICATION
FOR
FORT BEND COUNTY MUNICIPAL UTILITY
DISTRICT NO.5
PERMIT NO. WQ0014757001
FORT BEND, TEXAS**

OCTOBER 2025



10/28/2025

PREPARED BY:



FIRM REGISTRATION NO. F-487

1080 Eldridge Parkway • Suite 600 • Houston, Texas 77077 • 713.461.9600

Administrative Report 1.0



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Fort Bend County Municipal Utility District No.5

PERMIT NUMBER (If new, leave blank): WQ0014757001

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Original USGS Map	☒	☐
Administrative Report 1.1	☐	☐	Affected Landowners Map	☐	☐
SPIF	☒	☐	Landowner Disk or Labels	☐	☐
Core Data Form	☒	☐	Buffer Zone Map	☒	☐
Summary of Application (PLS)	☐	☐	Flow Diagram	☒	☐
Public Involvement Plan Form	☐	☐	Site Drawing	☒	☐
Technical Report 1.0	☒	☐	Original Photographs	☒	☐
Technical Report 1.1	☒	☐	Design Calculations	☒	☐
Worksheet 2.0	☐	☐	Solids Management Plan	☐	☐
Worksheet 2.1	☐	☐	Water Balance	☐	☐
Worksheet 3.0	☐	☐			
Worksheet 3.1	☐	☐			
Worksheet 3.2	☐	☐			
Worksheet 3.3	☐	☐			
Worksheet 4.0	☐	☐			
Worksheet 5.0	☐	☐			
Worksheet 6.0	☒	☐			
Worksheet 7.0	☐	☐			

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 ☐	\$315.00 ☐
≥0.05 but <0.10 MGD	\$550.00 ☐	\$515.00 ☐
≥0.10 but <0.25 MGD	\$850.00 ☐	\$815.00 ☐
≥0.25 but <0.50 MGD	\$1,250.00 ☐	\$1,215.00 ☐
≥0.50 but <1.0 MGD	\$1,650.00 ☐	\$1,615.00 ☐
≥1.0 MGD	\$2,050.00 ☐	\$2,015.00 ☐

Minor Amendment (for any flow) \$150.00 ☒

Payment Information:

Mailed Check/Money Order Number: [Click to enter text.](#)

Check/Money Order Amount: [Click to enter text.](#)

Name Printed on Check: [Click to enter text.](#)

EPAY Voucher Number: 790194 & 790195

Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

- ☒ Publicly Owned Domestic Wastewater
- ☐ Privately-Owned Domestic Wastewater
- ☐ Conventional Water Treatment

b. Check the box next to the appropriate facility status.

- ☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
☐ TLAP
☐ TPDES Permit with TLAP component
☐ Subsurface Area Drip Dispersal System (SADDs)

d. Check the box next to the appropriate application type

- ☐ New
☐ Major Amendment with Renewal
☐ Major Amendment without Renewal
☐ Renewal without changes
☐ Minor Amendment with Renewal
☒ Minor Amendment without Renewal
☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: We need to apply for a minor amendment to increase the permitted discharge from 0.75 MGD to 0.95 MGD.

f. For existing permits:

Permit Number: WQ00 14757001

EPA I.D. (TPDES only): TX 0129194

Expiration Date: March 25, 2027

Section 3. Facility Owner (Applicant) and Co-Applcant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

Fort Bend County Municipal Utility District No. 5

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)?

You may search for your CN on the TCEQ website at <http://www15.tceq.texas.gov/crpub/>

CN: 600739098

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix: Ms.

Last Name, First Name: Hedrick, Nancy

Title: President

Credential: Fort Bend County Municipal Utility District No. 5

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the

legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: <http://www15.tceq.texas.gov/crpub/>

CN: Click to enter text.

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. Exhibit o1

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: Mr.

Last Name, First Name: Safari, Ali

Title: Senior Project Engineer

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: asafari@dccm.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr.

Last Name, First Name: Hasan, Hasibul

Title: Director of Facility

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: hhasan@dccm.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Mr.

Last Name, First Name: Safari, Ali

Title: Senior Project Engineer

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: asafari@dccm.com

B. Prefix: Mr.

Last Name, First Name: Hasan, Hasibul

Title: Director of Facility

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: hhasan@dccm.com

Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits ***in effect on September 1 of each year***. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: Mr.

Last Name, First Name: Diaz, Jorge

Title: Bookkeeper

Credential: Click to enter text.

Organization Name: McLennan & Associates, L.P.

Mailing Address: 1717 St. James Place, Suite 500 City, State, Zip Code: Houston, TX, 77056

Phone No.: 281-920-4000

E-mail Address: Click to enter text.

Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: Mr.

Last Name, First Name: Dubiel, Greg

Title: District Operator

Credential: Click to enter text.

Organization Name: Municipal Operations & Consulting, Inc

Mailing Address: 20141 Schiel Rd City, State, Zip Code: Cypress, TX, 77433

Phone No.: 281-367-5511

E-mail Address: gdubiel@municipalops.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr.

Last Name, First Name: Safari, Ali

Title: Senior Project Engineer

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: asafari@dccm.com

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr.

Last Name, First Name: Safari, Ali

Title: Senior Project Engineer

Credential: P.E.

Organization Name: R. G. Miller|DCCM

Mailing Address: 1080 Eldridge Parkway, Suite 600 City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600

E-mail Address: asafari@dccm.com

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: George Memorial Library

Location within the building: Resource Stack

Physical Address of Building: 1001 Golfview Drive

City: Richmond

County: Fort Bend

Contact (Last Name, First Name): Myra Ponville

Phone No.: 281-342-4455 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information is required for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

☒ Yes

☐ No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes

☐ No

3. Do the students at these schools attend a bilingual education program at another location?

☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

☐ Yes ☒ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

F. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: Click to enter text.

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: Click to enter text.

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN 105098651

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

Fort Bend County Municipal Utility District No. 5 Wastewater Treatment Plant

C. Owner of treatment facility: Fort Bend County Municipal Utility District No. 5

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: Click to enter text. Last Name, First Name: Fort Bend County Municipal Utility District No. 5 c/o Allen Boone Humphries Robinson, LLP

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: 3200 Southwest Freeway, Suite 2600 City, State, Zip Code: Houston, TX, 77027

Phone No.: 713-860-6400 E-mail Address: gpagan@abhr.com

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: N/A

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: [Click to enter text.](#)

Last Name, First Name: N/A

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒

Yes

☐

No

If **no**, or a new permit application, please give an accurate description:

[Click to enter text.](#)

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒

Yes

☐

No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

[Click to enter text.](#)

City nearest the outfall(s): Village of Pleak

County in which the outfalls(s) is/are located: Fort Bend

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☒

Yes

☐

No

If **yes**, indicate by a check mark if:

- ☒ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: [Click to enter text.](#)

- D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

- A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

N/A

- B. City nearest the disposal site: [Click to enter text.](#)

- C. County in which the disposal site is located: [Click to enter text.](#)

- D. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

N/A

- E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: [Click to enter text.](#)

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

N/A

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: [Click to enter text.](#)

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: [Click to enter text.](#)

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQ0014757001

Applicant: Fort Bend County Municipal Utility District No. 5

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Nancy Hedrick

Signatory title: President

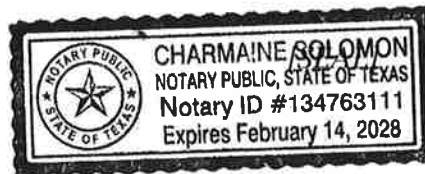
Signature: Nancy Hedrick Date: 10/23/25
(Use blue ink)

Subscribed and Sworn to before me by the said _____

on this 23rd day of October, 2025.

My commission expires on the 14th day of February, 2028.

Charmaine Solomon
Notary Public



Fort Bend
County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
- ☒ The applicant's property boundaries
 - ☒ The facility site boundaries within the applicant's property boundaries
 - ☒ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - ☐ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - ☒ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - ☐ The property boundaries of all landowners surrounding the effluent disposal site
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- B. ☐ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- C. ☐ Indicate by a check mark that the landowners list has also been provided as mailing labels in electronic format (Avery 5160).
- D. Provide the source of the landowners' names and mailing addresses: [Click to enter text.](#)
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes ☒ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- ☒ At least one original photograph of the new or expanded treatment unit location
- ☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☒ At least one photograph of the existing/proposed effluent disposal site
- ☒ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

- ☒ Ownership
- ☐ Restrictive easement
- ☒ Nuisance odor control
- ☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

- ☐ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: Exhibit 2

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- **Do Not mail this form with the application form.**
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Waste Permit No:** [Click to enter text.](#)

1. Check or Money Order Number: [Click to enter text.](#)
2. Check or Money Order Amount: [Click to enter text.](#)
3. Date of Check or Money Order: [Click to enter text.](#)
4. Name on Check or Money Order: [Click to enter text.](#)
5. APPLICATION INFORMATION

Name of Project or Site: [Click to enter text.](#)

Physical Address of Project or Site: [Click to enter text.](#)

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): [Click to enter text.](#)

Full legal name (Last Name, First Name, Middle Initial): [Click to enter text.](#)

Driver's License or State Identification Number: [Click to enter text.](#)

Date of Birth: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#) Fax Number: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

CN: [Click to enter text.](#)

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) ☒ Yes
(Required for all application types. Must be completed in its entirety and signed.
Note: Form may be signed by applicant representative.)

Correct and Current Industrial Wastewater Permit Application Forms ☐ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☐ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
(Full-size map if seeking "New" permit.
8 ½ x 11 acceptable for Renewals and Amendments)

Current/Non-Expired, Executed Lease Agreement or Easement ☒ N/A ☐ Yes

Landowners Map ☐ N/A ☒ Yes
(See instructions for landowner requirements)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Labels and Cross Reference List ☐ N/A ☐ Yes
(See instructions for landowner requirements)

Electronic Application Submittal ☐ Yes
(See application submittal requirements on page 23 of the instructions.)

Original signature per 30 TAC § 305.44 - Blue Ink Preferred ☐ Yes
(If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)

Summary of Application (in Plain Language) ☐ Yes

Technical Report 1.0



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 42)

A. Existing/Interim I Phase

Design Flow (MGD): 0.5

2-Hr Peak Flow (MGD): 2.00

Estimated construction start date: June 2020

Estimated waste disposal start date: September 2020

B. Interim II Phase

Design Flow (MGD): 0.95

2-Hr Peak Flow (MGD): 3.8

Estimated construction start date: January 2026

Estimated waste disposal start date: January 2027

C. Final Phase

Design Flow (MGD): 2.00

2-Hr Peak Flow (MGD): 8.00

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: September 2020

Section 2. Treatment Process (Instructions Page 42)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of *each phase* must be provided.**

The existing phase of the WWTP and proposed phase will utilize a conventional activated sludge process. Raw wastewater is conveyed from the influent lift station to bar screens for preliminary removal of large solids. The screened wastewater then flows through aeration basins for biological treatment, followed by a final clarifier where suspended solids are settled out. Clarified effluent is directed to a chlorine contact basin for disinfection. The disinfected effluent is subsequently discharged in accordance with permit requirements. Waste activated sludge from the clarifier is returned to the head of the plant and the sludge digester. Stabilized sludge is periodically removed and transported offsite by a licensed sludge hauler in compliance with applicable regulations.

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) of **each treatment unit, accounting for *all* phases of operation.**

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Exhibit 04		

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: Exhibit 05

Section 3. Site Information and Drawing (Instructions Page 43)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: 29.491969
- Longitude: -95.808192

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: Exhibit o4

Provide the name **and** a description of the area served by the treatment facility.

Fort Bend County MUD No. 5, Fort Bend County MUD No. 157 and Village of Pleak.

Collection System Information for wastewater TPDES permits only: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 44)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☒ Yes ☐ No

If **yes**, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☐ Yes ☒ No

If **yes**, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.**

N/A

Section 5. Closure Plans (Instructions Page 44)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If **yes**, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If **yes**, provide a brief description of the closure and the date of plan approval.

N/A

Section 6. Permit Specific Requirements (Instructions Page 44)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☒ Yes ☐ No

If **yes**, provide the date(s) of approval for each phase: July 24, 2025

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable.**

See Exhibit 07

B. Buffer zones

Have the buffer zone requirements been met?

☐ Yes ☒ No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

Since the buffer zone requirements cannot be met, a Nuisance Odor Abatement Plan will be provided in accordance with 30 TAC 309.13.

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

☐ Yes ☒ No

If **yes**, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

N/A

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

☐ Yes ☒ No

If **No**, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

☐ Yes ☐ No

If **No**, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Click to enter text.

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

Click to enter text.

E. Stormwater management

1. Applicability

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☒ Yes ☐ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☐ Yes ☒ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☒ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 [Click to enter text.](#) or TXRNE [Click to enter text.](#)

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☒ No

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Click to enter text.

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Click to enter text.

5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

☐ Yes ☒ No

If yes, explain below then skip to Subsection F. Other Wastes Received.

Click to enter text.

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

[Click to enter text.](#)

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.

[Click to enter text.](#)

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

[Click to enter text.](#)

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

If yes, does the facility have a Type V processing unit?

☐ Yes ☐ No

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☐ No

If **yes to any of the above**, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

☐ Yes ☒ No

If **yes**, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 49)

Is the facility in operation?

☒ Yes ☐ No

If **no**, this section is not applicable. Proceed to Section 8.

If **yes**, provide effluent analysis data for the listed pollutants. **Wastewater treatment facilities** complete Table 1.0(2). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 49)

Facility Operator Name: Municipal Operations

Facility Operator's License Classification and Level: N/A

Facility Operator's License Number: WW0041747

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A. WWTP's Sewage Sludge or Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☒ Design flow $\geq$ 1 MGD
- ☐ Serves $\geq$ 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Sewage Sludge or Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (≥ 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: [Click to enter text.](#)

C. Sewage Sludge or Biosolids Management

Provide information on the *intended* sewage sludge or biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the

permit will authorize all sewage sludge or biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If “Other” is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): [Click to enter text.](#)

D. Disposal site

Disposal site name: Richey Road Municipal Utility District

TCEQ permit or registration number: 0012378-002

County where disposal site is located: Harris

E. Transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: K-3 Resources, Inc

Hauler registration number: 22430

Sludge is transported as a:

Liquid ☒ semi-liquid ☐ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

A. Beneficial use authorization

Does the existing permit include authorization for land application of biosolids for beneficial use?

☐ Yes ☒ No

If **yes**, are you requesting to continue this authorization to land apply biosolids for beneficial use?

☐ Yes ☐ No

If **yes**, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

☐ Yes ☐ No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	☐	Yes	☒	No
Marketing and Distribution of Biosolids	☐	Yes	☒	No
Sludge Surface Disposal or Sludge Monofill	☐	Yes	☒	No
Temporary storage in sludge lagoons	☐	Yes	☒	No

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:
Attachment: [Click to enter text.](#)
- USDA Natural Resources Conservation Service Soil Map:
Attachment: [Click to enter text.](#)
- Federal Emergency Management Map:
Attachment: [Click to enter text.](#)
- Site map:
Attachment: [Click to enter text.](#)

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: [Click to enter text.](#)

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

[Click to enter text.](#)

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0*.

Nitrate Nitrogen, mg/kg: [Click to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click to enter text.](#)

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [Click to enter text.](#)

Phosphorus, mg/kg: [Click to enter text.](#)

Potassium, mg/kg: [Click to enter text.](#)

pH, standard units: [Click to enter text.](#)

Ammonia Nitrogen mg/kg: [Click to enter text.](#)

Arsenic: [Click to enter text.](#)

Cadmium: [Click to enter text.](#)

Chromium: [Click to enter text.](#)

Copper: [Click to enter text.](#)

Lead: [Click to enter text.](#)

Mercury: [Click to enter text.](#)

Molybdenum: [Click to enter text.](#)

Nickel: [Click to enter text.](#)

Selenium: [Click to enter text.](#)

Zinc: [Click to enter text.](#)

Total PCBs: [Click to enter text.](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click to enter text.](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click to enter text.](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click to enter text.](#)

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

If yes, describe the liner below. Please note that a liner is required.

[Click to enter text.](#)

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

[Click to enter text.](#)

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: [Click to enter text.](#)
- Copy of the closure plan
Attachment: [Click to enter text.](#)
- Copy of deed recordation for the site
Attachment: [Click to enter text.](#)
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: [Click to enter text.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click to enter text.](#)
- Procedures to prevent the occurrence of nuisance conditions
Attachment: [Click to enter text.](#)

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☐ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: [Click to enter text.](#)

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☐ Yes ☒ No

If yes, provide the TCEQ authorization number and description of the authorization:

Click to enter text.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

☐ Yes ☒ No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

Click to enter text.

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

☐ Yes ☒ No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

☐ Yes ☒ No

C. Details about wastes received

If **yes** to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: [Click to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 55)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*.

Printed Name:

Title:

Signature: _____

Date: _____

Technical Report 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 56)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

FBCMUD No.5 is corresponding to an agreement with Village of Pleak and Fort Bend County Municipal Utility District No. 157 to regionalize the wastewater treatment plant in order to provide treatment services to those areas. Increase in demand requires amending interim and final phases of plant to increase capacity.

B. Regionalization of facilities

For additional guidance, please review [TCEQ's Regionalization Policy for Wastewater Treatment](#)¹.

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☐ No ☒ Not Applicable

If yes, within the city limits of: Village of Pleak

If yes, attach correspondence from the city.

Attachment: [Click to enter text.](#)

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: [Click to enter text.](#)

2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☒ No

¹ <https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater>

If **yes**, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: [Click to enter text.](#)

3. *Nearby WWTPs or collection systems*

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

☒ Yes ☐ No

If **yes**, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: [Exhibit 10](#)

If **yes**, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: [Click to enter text.](#)

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: [Click to enter text.](#)

Section 2. Proposed Organic Loading (Instructions Page 58)

Is this facility in operation?

☒ Yes ☐ No

If **no**, proceed to Item B, Proposed Organic Loading.

If **yes**, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): 0.95 MGD

Average Influent Organic Strength or BOD₅ Concentration in mg/l: 300

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): 2377

Provide the source of the average organic strength or BOD₅ concentration.

Lab analysis of grab sample data performed by facility operator.

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD ₅ from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 58)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1 mg/l after 20 minutes detention time at peak flow

Dechlorination process: NA

☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 58)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: Exhibit 11

Section 5. Facility Site (Instructions Page 59)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☐ Yes ☒ No

If **no**, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

All electrical equipment and control panels will be installed above the 100-year flood elevation.

Provide the source(s) used to determine 100-year frequency flood plain.

[Click to enter text.](#)

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☒ No

If **yes**, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☐ No

If **yes**, provide the permit number: [Click to enter text.](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click to enter text.](#)

B. Wind rose

Attach a wind rose: [Exhibit 13](#)

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 59)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☒ No

If **yes**, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: [Click to enter text.](#)

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

If **any of the above**, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: [Click to enter text.](#)

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: [Click to enter text.](#)

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow

- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

WORKSHEET 6.0

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 87)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs – non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

N/A

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

☐ Yes ☒ No

If **yes**, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2.c. and 2.d. only, and skip Section 3.

If **no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 87)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

☐ Yes ☐ No

If **yes**, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☒ No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW’s effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

☐ Yes ☒ No

If **yes**, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 88)

A. General information

Company Name: N/A

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Telephone number: Click to enter text.

Email address: Click to enter text.

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

Click to enter text.

C. Product and service information

Provide a description of the principal product(s) or services performed.

Click to enter text.

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: 0

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: 0

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☒ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☒ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

☐ Yes ☒ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

[Click to enter text.](#)

EXHIBIT 1

CORE DATA FORM



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☐ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)	☒ Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 600739098		RN 105098651

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)							
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>							
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>			
Fort Bend County Municipal Utility District No. 5							
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)		
N/A		N/A			N/A		
11. Type of Customer:		☐ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited		
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☒ Other		☐ Sole Proprietorship		☐ Other:			
12. Number of Employees				13. Independently Owned and Operated?			
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ Yes ☒ No			
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following							
☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other: ☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant							
15. Mailing Address:	3200 Southwest Freeway, Suite 2600						
	City	Houston	State	TX	ZIP	77027	ZIP + 4
16. Country Mailing Information (if outside USA)					17. E-Mail Address (if applicable)		
					gpagan@abhr.com		

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(713) 860-6400		(713) 860-6417

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Fort Bend County MUD No. 5 Wastewater Treatment Plant								
23. Street Address of the Regulated Entity: (No PO Boxes)	6502 1/2 State Highway 36							
	City	Pleak	State	TX	ZIP	77471	ZIP + 4	
24. County								

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:								
26. Nearest City					State	Nearest ZIP Code		
Pleak					TX	77471		
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:						28. Longitude (W) In Decimal:		
Degrees	Minutes		Seconds		Degrees	Minutes		Seconds
29°	29'		31.1"		95°	48'		29.5"
29. Primary SIC Code	30. Secondary SIC Code		31. Primary NAICS Code			32. Secondary NAICS Code		
(4 digits)	(4 digits)		(5 or 6 digits)			(5 or 6 digits)		
4952			22132					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Wastewater Treatment								
34. Mailing Address:	3200 Southwest Freeway, Suite 2600							
	City	Houston	State	TX	ZIP	77027	ZIP + 4	
35. E-Mail Address:	gpagan@abhr.com							
36. Telephone Number	37. Extension or Code				38. Fax Number (if applicable)			
(713) 860-6400					(713) 860-6417			

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0014757001			

SECTION IV: Preparer Information

40. Name:	Ali Safari		41. Title:	Senior Project Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(713) 461-9600	8765	(713) 461-8455	asafari@dccm.com	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

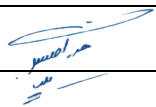
Company:	R. G. Miller DCCM		Job Title:	Senior Project Engineer	
Name (In Print):	Ali Safari			Phone:	(713) 461- 9600
Signature:				Date:	10/14/2025

EXHIBIT 2

S.P.I.F

(SUPPLEMENTAL PERMIT INFORMATION FORM)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

____ Texas Historical Commission

____ U.S. Fish and Wildlife

____ Texas Parks and Wildlife Department

____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Fort Bend County Municipal Utility District No. 5

Permit No. WQ00 14757001

EPA ID No. TX 0129194

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

6502 ½ SH36, Pleak, TX 77471

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Ali Safari

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Senior Project Engineer

Mailing Address: 1080 Eldridge Parkway, Suite 600

City, State, Zip Code: Houston, TX, 77077

Phone No.: 713-461-9600 Ext.: 8765 Fax No.: 713-461-8455

E-mail Address: asafari@dccm.com

2. List the county in which the facility is located: Fort Bend
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

Treated effluent from the WWTP is discharged into an onsite storm sewer, which directly outfalls into Seabourne Creek. About one mile downstream, Seabourne Creek joins Big Creek, which subsequently flows into the Brazos River, classified segment 1202.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☐ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☒ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

N/A

2. Describe existing disturbances, vegetation, and land use:

Wastewater Treatment Plant

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

None

4. Provide a brief history of the property, and name of the architect/builder, if known.

None

EXHIBIT 3

APPLICATION FEE



Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 790194
Trace Number: 582EA000691460
Date: 10/27/2025 11:36 AM
Payment Method: CC - Authorization 0000054805
Voucher Amount: \$100.00
Fee Type: WW PERMIT - FACILITY WITH ANY FLOW - MINOR AMENDMENT
ePay Actor: ALI SAFARI
Actor Email: asafari@dccm.com
IP: 50.190.129.161

Payment Contact Information

Name: HASIBUL HASAN
Company: RG MILLER
Address: 1080 ELDRIDGE PKWY SUITE 600, HOUSTON, TX 77077
Phone: 713-461-9600

Site Information

RN: RN105098651
Site Name: FBCMUD 5 WASTEWATER TREATMENT PLANT
Site Location: 6502 1 2 HWY 36

Customer Information

Customer Name: FORT BEND COUNTY MUNICIPAL UTILITY DISTRICT NO5
Customer Address: 3200 SOUTHWEST FWY SUITE 2600, HOUSTON, TX 77027

Other Information

Program Area ID: WQ0014757001



Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 790195
Trace Number: 582EA000691460
Date: 10/27/2025 11:36 AM
Payment Method: CC - Authorization 0000054805
Voucher Amount: \$50.00
Fee Type: 30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor: ALI SAFARI
Actor Email: asafari@dccm.com
IP: 50.190.129.161

Payment Contact Information

Name: HASIBUL HASAN
Company: RG MILLER
Address: 1080 ELDRIDGE PKWY SUITE 600, HOUSTON, TX 77077
Phone: 713-461-9600

[Close](#)

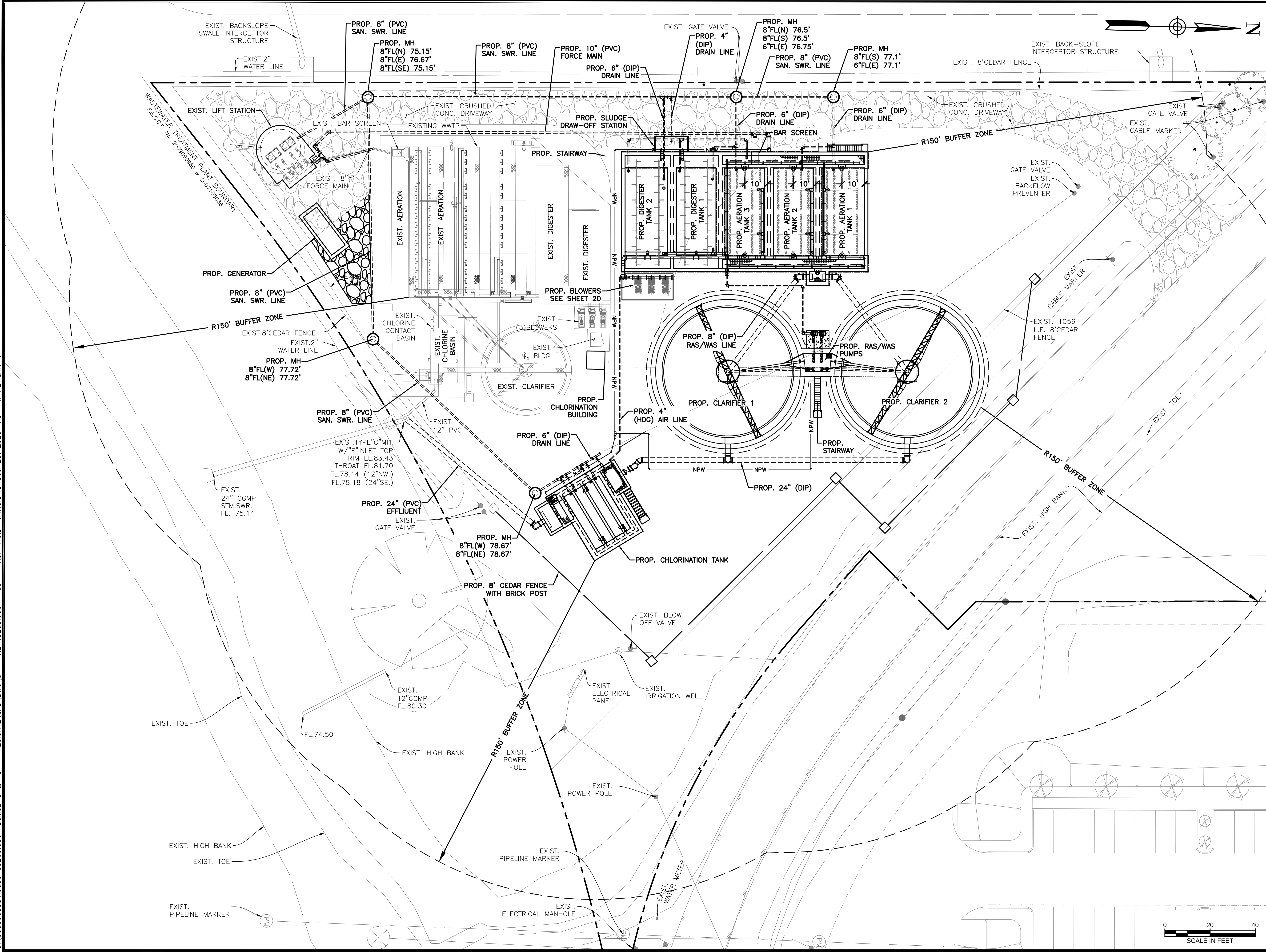
[Site Help](#) | [Disclaimer](#) | [Web Policies](#) | [Accessibility](#) | [Our Compact with Texans](#) | [TCEQ Homeland Security](#) | [Contact Us](#)
[Statewide Links: Texas.gov](#) | [Texas Homeland Security](#) | [TRAIL Statewide Archive](#) | [Texas Veterans Portal](#)

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EXHIBIT 4
SITE DRAWING

O:\000006384\0000 03260.606 FBCMUD 5 & 157 - REGIONAL CAD\DWG\3 - XREF\3260.606 - 09 - PROP YARD PIPING.DWG Oct. 23, 2025-4:57 PM ALI SAFARI

3260.606



NOTICE:
AT LEAST 48 HOURS BEFORE EXCAVATING IN STREET R.O.W. OR EASEMENTS CALL THE LONE STAR NOTIFICATION 713-223-4567.

PRIVATE UTILITY LINES SHOWN

AT&T TEXAS/SWBT UTILITY LINES SHOWN
DATE:
APPROVED FOR AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY
SIGNATURE VALID FOR ONE YEAR

NOTICE:
For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground line can be marked.
This signature does not fulfill your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES
Date:
CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown).
This Signature not to be used for conflict verification.
Signature Valid for six months.

Date:
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY.
(This signature verifies existing underground facilities - not to be used for conflict verification.
Signature Valid for six months.

FLOOD PLAIN
THIS PROJECT IS LOCATED IN SHADED ZONE "AE" AS PER FIRM PANEL 48157C0400 M, REVISED JANUARY 29, 2021. 100-YEAR BASE FLOOD ELEVATION = 84.82

BENCHMARK
RM145 A F.E.M.A. DISK LOCATED ON THE NORTH END OF THE TOP OF THE EAST CONCRETE HEADWALL OF A CULVERT 24 FEET EAST OF THE CENTERLINE OF HIGHWAY 36, APPROXIMATELY 3.7 MILES NORTH OF IT'S INTERSECTION WITH F.M. 360.
ELEVATION= 85.71 NGVD '29, 1987 ADJUSTMENT

F.B.C.M.U.D. No.5 & No.157
REGIONAL W.W.T.P.
PHASE 1 FROM 0.5 TO 0.95 MGD

PROPOSED YARD PIPING PLAN

No.	DATE	REVISION

R.G. Miller Engineers, Inc. | TxEng F - 487
1080 Eldridge Parkway, Ste 600
Houston, TX 77077
713.461.9600 | rgmiller.dccm.com

FBC ENGINEERING APPROVAL

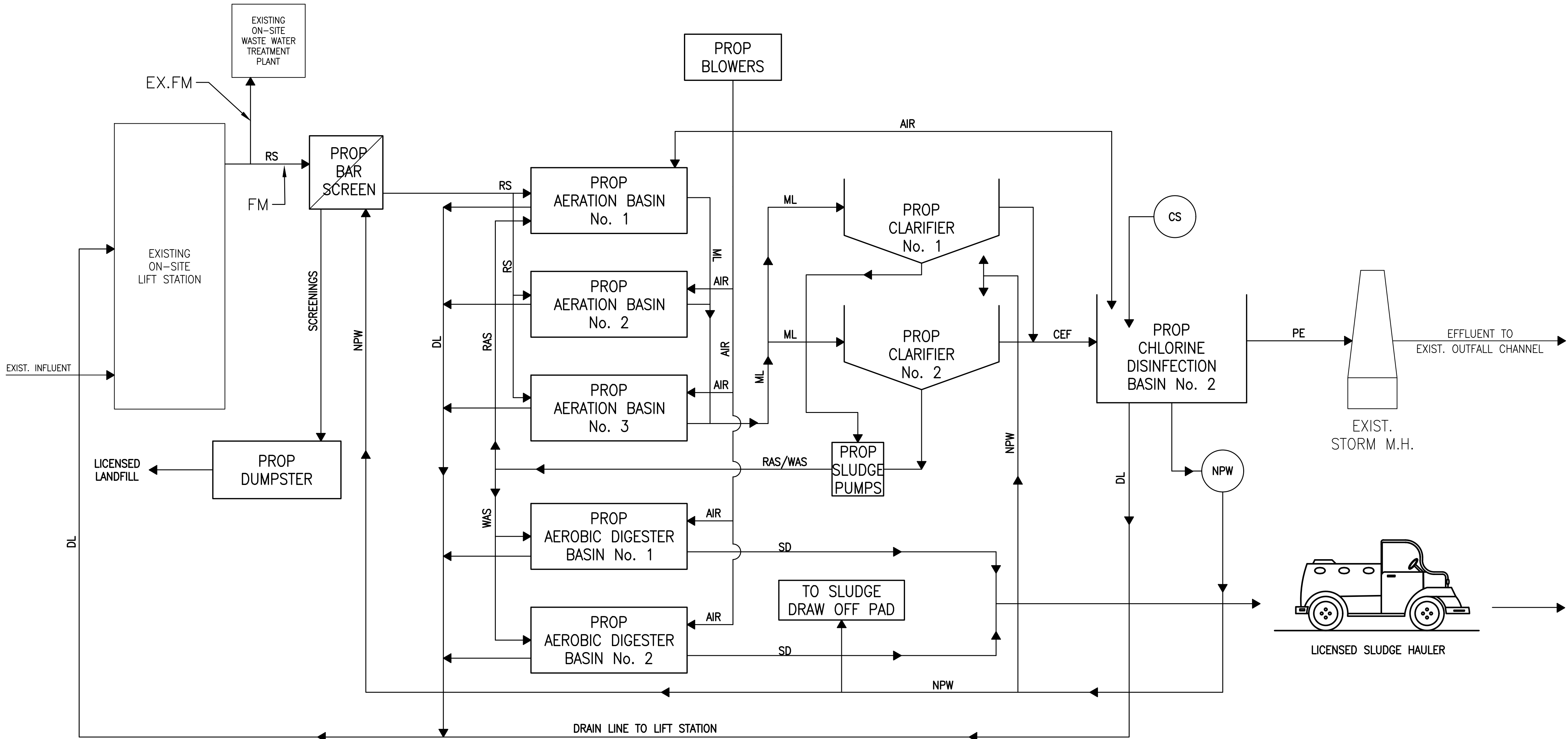
SUBMITTED:
SCALE: 1" = 20'
DATE: MARCH, 2025
SURVEY BY: MILLER SURVEY
F.B. NO.

DESIGNED BY: A.S.
DRAWN BY: N.S.
SHEET NO.09 OF 43 SHEETS
CITY DWG NO:

EXHIBIT 5

PROCESS FLOW DIAGRAM

O:\0000063384\0000_03260.606_FBCMUD_5 & 157 - REGIONAL\CAD\DWG\3 - XREF\3260.606 - 03 - FLOW DIAGRAM.DWG Oct. 23, 2025-3:25 PM ALI SAFARI



FLOW DIAGRAM
N.T.S.

LEGEND	
RS	RAW SEWAGE
ML	MIXED LIQUOR
EF	EFFLUENT
CEF	CLARIFIED EFFLUENT
PE	PLANT EFFLUENT
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
CS	CHLORINE SOLUTION
NPW	NON-POTABLE WATER
SD	SLUDGE DRAW-OFF
DL	DRAIN LINE

F.B.C.M.U.D. No.5 &
No.157
REGIONAL W.W.T.P.
PHASE 1 FROM 0.5
TO 0.95 MGD

PROCESS FLOW DIAGRAM

No.	DATE	REVISION

RG Miller | **DCCM**

R.G. Miller Engineers, Inc. | TxEng F - 487
1080 Eldridge Parkway, Ste 600
Houston, TX 77077
713.461.9600 | rgmiller.dccm.com

FBC ENGINEERING APPROVAL

SUBMITTED:	DESIGNED BY: A.S.
SCALE:	DRAWN BY: N.S.
DATE: MARCH, 2025	SHEET NO. 03 OF 43 SHEETS
SURVEY BY: MILLER SURVEY	CITY DWG NO:
F.B. NO.	

EXHIBIT 6

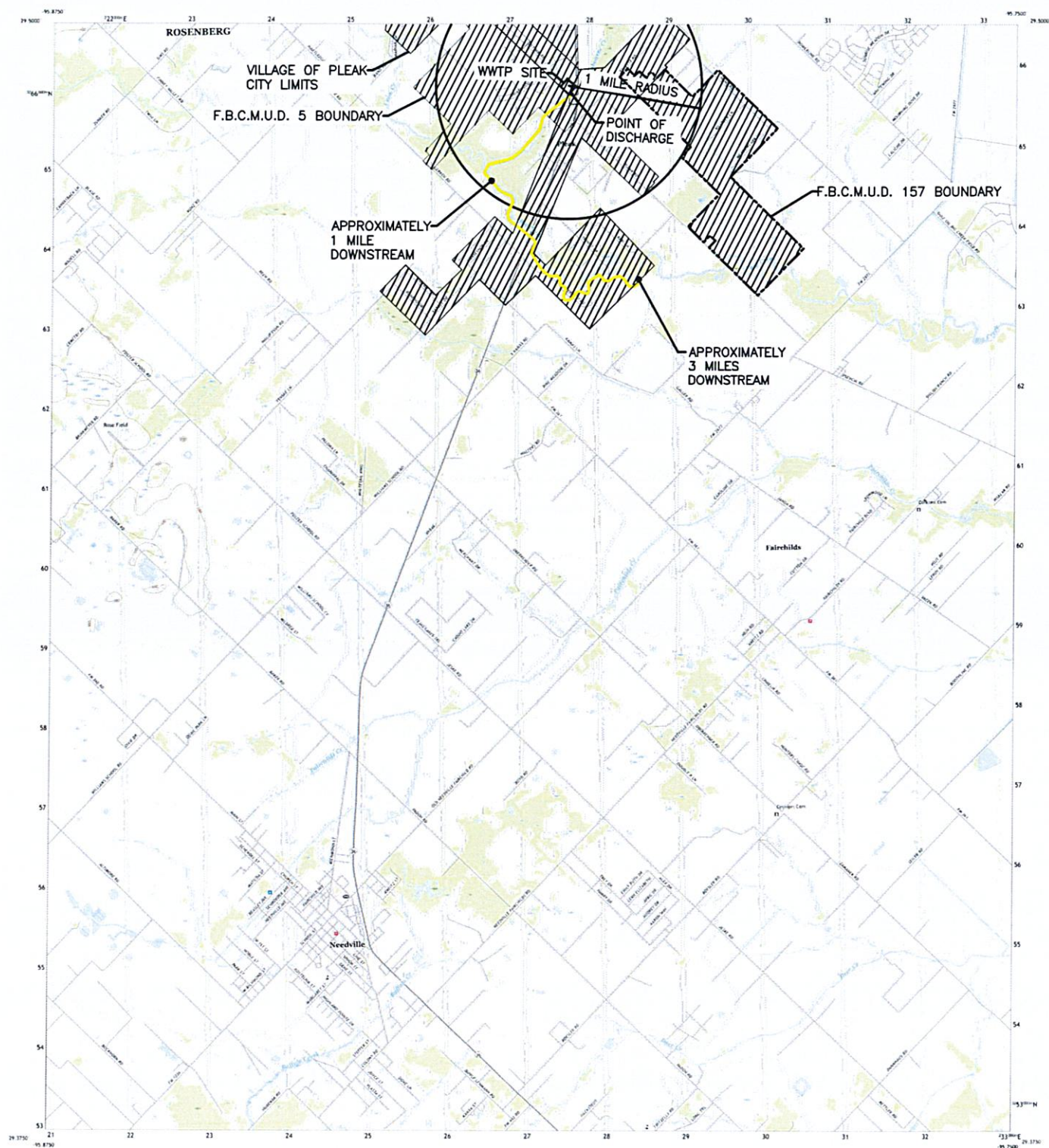
USGS TOPOGRAPHIC MAP



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

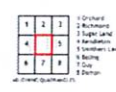


NEEDVILLE QUADRANGLE
TEXAS - FORT BEND COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey

World Geologic Map of the United States
World Geologic Map of the United States
This map is not a legal document. Boundaries may be approximate and subject to change. Please refer to the appropriate government agency for the most current information. Boundaries shown are for reference only. Please refer to the appropriate government agency for the most current information.



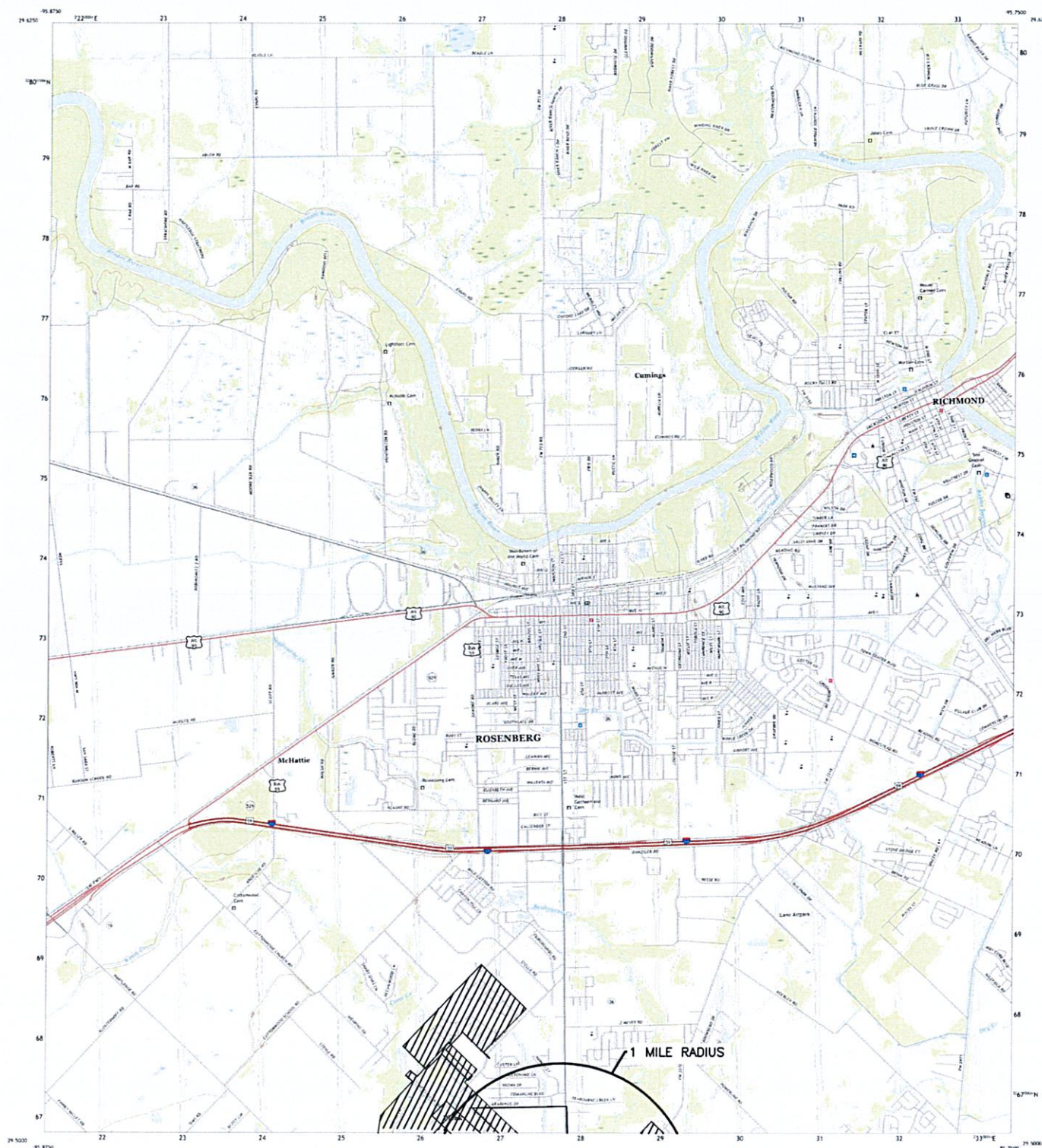
NEEDVILLE, TX
2019



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



RICHMOND QUADRANGLE
TEXAS - FORT BEND COUNTY
7.5-MINUTE SERIES



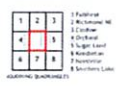
Produced by the United States Geological Survey

North American Datum of 1983 (NAD83). Projection and
1:250,000 scale. Contour interval 10 feet. Zone 14B.
This map is not a legal document. Boundary lines are
approximate. For the most accurate boundary information,
consult the official records of the local government.

Map of the Richmond, Texas area, showing the Colorado River, surrounding roads, and urban areas. The map includes a 1-mile radius circle centered on Rosenberg, Texas.



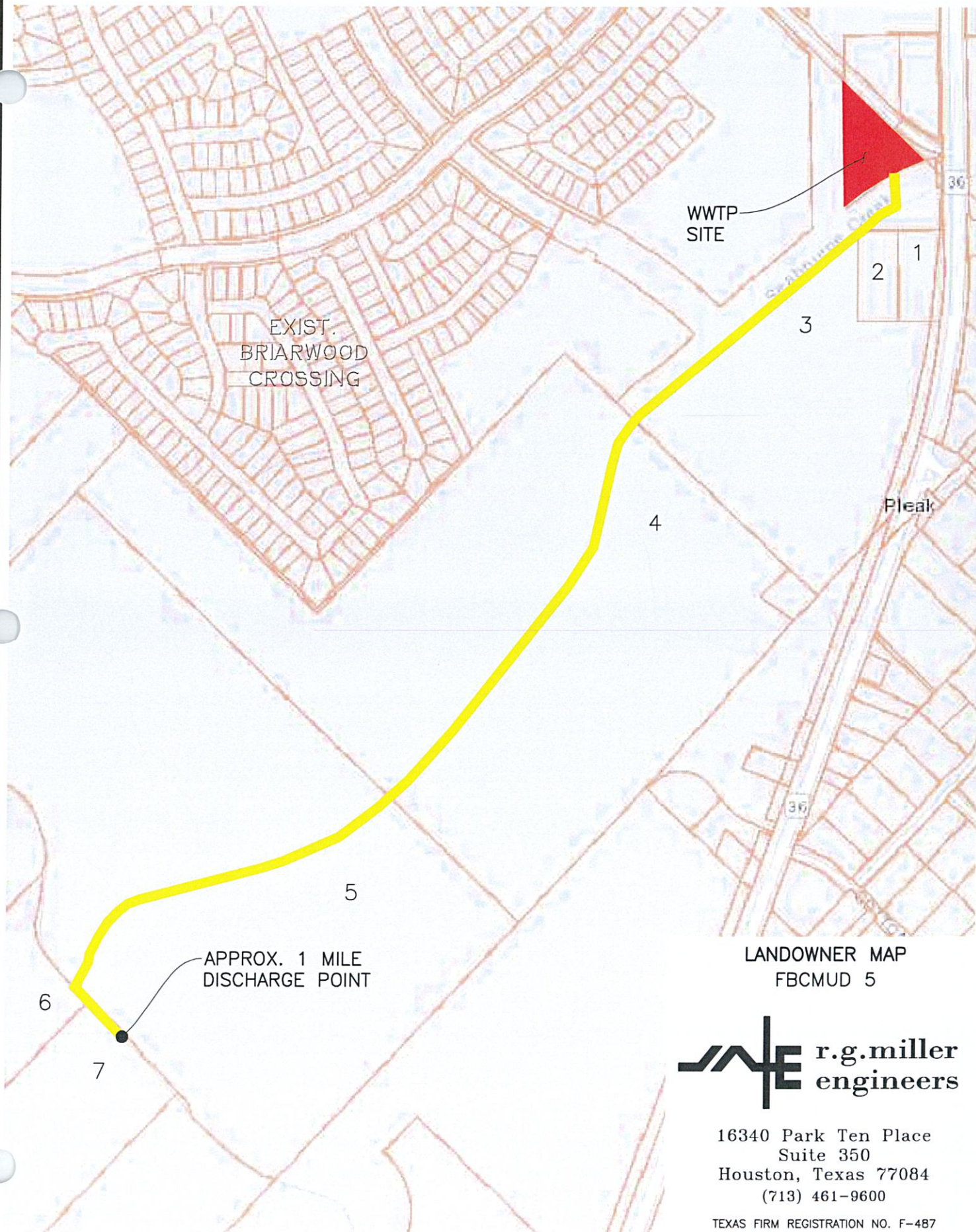
ROAD CLASSIFICATION
Expressway
Major Road
Minor Road
Local Road
Unimproved Road
Water Road



RICHMOND, TX
2019



DRAWING1.DWG Jan 27, 2021 - 10:29 AM BRIAN RABENALDT



LANDOWNER MAP
FBCMUD 5



16340 Park Ten Place
Suite 350
Houston, Texas 77084
(713) 461-9600

TEXAS FIRM REGISTRATION NO. F-487

DATE: JAN 2021 SCALE: N.T.S.

Tract No.	Title Owner and Address
1	McNutt Carol Jean 910 4th St Rosenberg, TX 77471-2610
2	Mcnutt Carol Jean 910 4th St Rosenberg, TX 77471-2610
3	BGM Land Investments Ltd 15915 Katy Fwy Houston, TX 77094-1710
4	Ondrey Hugo 6914 Highway 36 Rosenberg, TX 77471-9132
5	Eicher Patrick 1510 Mustang Lake Ct Richmond, TX 77406-7964
6	Bergen Connie Jo & Carl William Schmidt 5315 Ranch Lake Dr. Magnolia, TX 77354-5028
7	Hartfield Robbie 2504 Cypress Ln. Rosenberg, TX 77471-6006

EXHIBIT 7

TCEQ APPROVAL LETTER

Brooke Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 24, 2025

Ali Safari, P.E.
R. G. MILLER|DCCM
1080 Eldridge Pwy, Suite 600
Houston, Tx 77077

Re: Fort Bend County MUD 5
Regional WWTP Phase 1
Permit No. WQ0014757-001
WWPR Log No. 0725/112
CN600739098, RN105098651
Fort Bend County

Dear Ms. Safari:

We received the project summary transmittal letter dated July 14, 2025. The Texas Commission on Environmental Quality (TCEQ) rules which regulate the design, installation, and testing of domestic wastewater treatment projects are found in 30 TAC, Chapter 217, titled Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon receipt of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of 30 TAC §217.6(e), a technical review of complete plans and specifications for this project is not required, and **the project proposed in the summary transmittal letter is approved for construction. Please note that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as a wastewater treatment permit or any other authorization as required by Chapter 26 of the Texas Water Code.** Below are provisional requirements in 30 TAC Chapter 217, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- You must keep records of certain materials for the life of the project and be prepared to provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with 30 TAC Chapter 217. All plans and specifications must conform to any wastewater discharge requirements authorized in a permit issued by TCEQ. Specific items that must be addressed in the engineering report are discussed in 30 TAC §217.6(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with 30 TAC Chapter 217. The items which shall be included in the summary transmittal letter are addressed in 30 TAC §217.6(d)(1)-(9).

Ali Safari, P.E.
Page 2
July 24, 2025

- Any deviations from 30 TAC Chapter 217 shall be disclosed in the summary transmittal letter, and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from 30 TAC Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
- Any variance from a 30 TAC Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the requirements in 30 TAC Chapter 217 are desired for the project, each variance must be requested in writing by the design engineer. TCEQ will then consider granting a written approval of the additional variance requests for the specific project and the specific circumstances.
- **The permittee must apply for minor amendment to add the 0.95 mgd phase.**
- Within 60 days of construction completion, an appointed engineer shall notify both the Wastewater Permitting Section of the TCEQ Water Quality Division and the appropriate TCEQ Regional Office of the completion date. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, and the rules of TCEQ, as well as provide any change orders filed with TCEQ throughout the duration of project construction. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

This approval does not mean that future projects will be approved without a complete plans and specifications review. TCEQ will provide notification whenever a project is to undergo a complete plans and specifications review. Please note 30 TAC §217.7(a) states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Water Quality Division (MC 148)
Texas Commission on Environmental Quality

LCHIII/tc

cc: TCEQ, Region 12 Office

RECEIVED
JUL 31 2025

EXHIBIT 8

BUFFER ZONE

NOTICE:
AT LEAST 48 HOURS BEFORE EXCAVATING IN STREET R.O.W. OR EASEMENTS CALL THE LONE STAR NOTIFICATION 713-223-4567.

PRIVATE UTILITY LINES SHOWN

DATE: _____
APPROVED FOR AT&T TEXAS/SWB UNDERGROUND CONDUIT FACILITIES ONLY
SIGNATURE VALID FOR ONE YEAR

NOTICE:
For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground line can be marked. This signature does not fulfill your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES

Date: _____
CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not to be used for conflict verification.
Signature Valid for six months.

Date: _____
CenterPoint Energy UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification).
Signature Valid for six months.

FLOOD PLAIN

THIS PROJECT IS LOCATED IN SHADED ZONE "AE" AS PER FIRM PANEL 48157C0400 M, REVISED JANUARY 29, 2021. 100-YEAR BASE FLOOD ELEVATION = 84.82

BENCHMARK

RM145 A F.E.M.A. DISK LOCATED ON THE NORTH END OF THE TOP OF THE EAST CONCRETE HEADWALL OF A CULVERT 24 FEET EAST OF THE CENTERLINE OF HIGHWAY 36, APPROXIMATELY 3.7 MILES NORTH OF IT'S INTERSECTION WITH F.M. 360.
ELEVATION= 85.71 NGVD '29, 1987 ADJUSTMENT

F.B.C.M.U.D. No.5 & No.157

REGIONAL W.W.T.P.
PHASE 1 FROM 0.5 TO 0.95 MGD

PROPOSED SITE PLAN

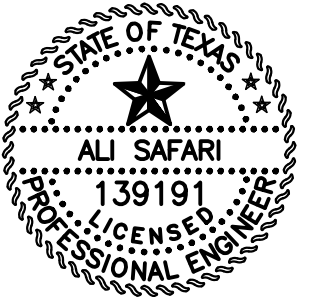
No.	DATE	REVISION

RG Miller | **DCCM**

R.G. Miller Engineers, Inc. | TxEng F - 487

1080 Eldridge Parkway, Ste 600
Houston, TX 77077

713.461.9600 | rgmiller.dccm.com

**FBC ENGINEERING APPROVAL**

SUBMITTED:
SCALE: 1" = 20'
DATE: MARCH, 2025
SURVEY BY: MILLER SURVEY
F.B. NO.

DESIGNED BY: A.S.
DRAWN BY: N.S.
SHEET NO.06 OF 43 SHEETS
CITY DWG NO:

NOTES:

1. EXISTING POTABLE WATER LINE TO BE RELOCATED, AS NECESSARY, TO PREVENT ANY CONFLICTS WITH PROPOSED PIPING AND STRUCTURES.
2. CONTRACTOR TO FILL EXISTING GRASS SWALE ON SOUTH SIDE OF USTINIK ROAD WITHIN THE PROPOSED FENCE LINE.
3. ALL SANITARY SEWER RIM ELEVATIONS SHALL BE NO LESS THAN 12" ABOVE THE 100 YEAR W.S.E.
4. EXISTING CRUSHED CONCRETE DRIVEWAY MUST BE REPLACED AFTER CONSTRUCTION IS COMPLETE.

O:\0000063384\0000 03260.606 FBCMUD 5 & 157 - REGIONAL CAD\DWG\3 - XREF\3260.606 - 06 - PROP SITE PLAN.DWG Oct. 27, 2025-1:59 PM ALI SAFARI

EXHIBIT 9

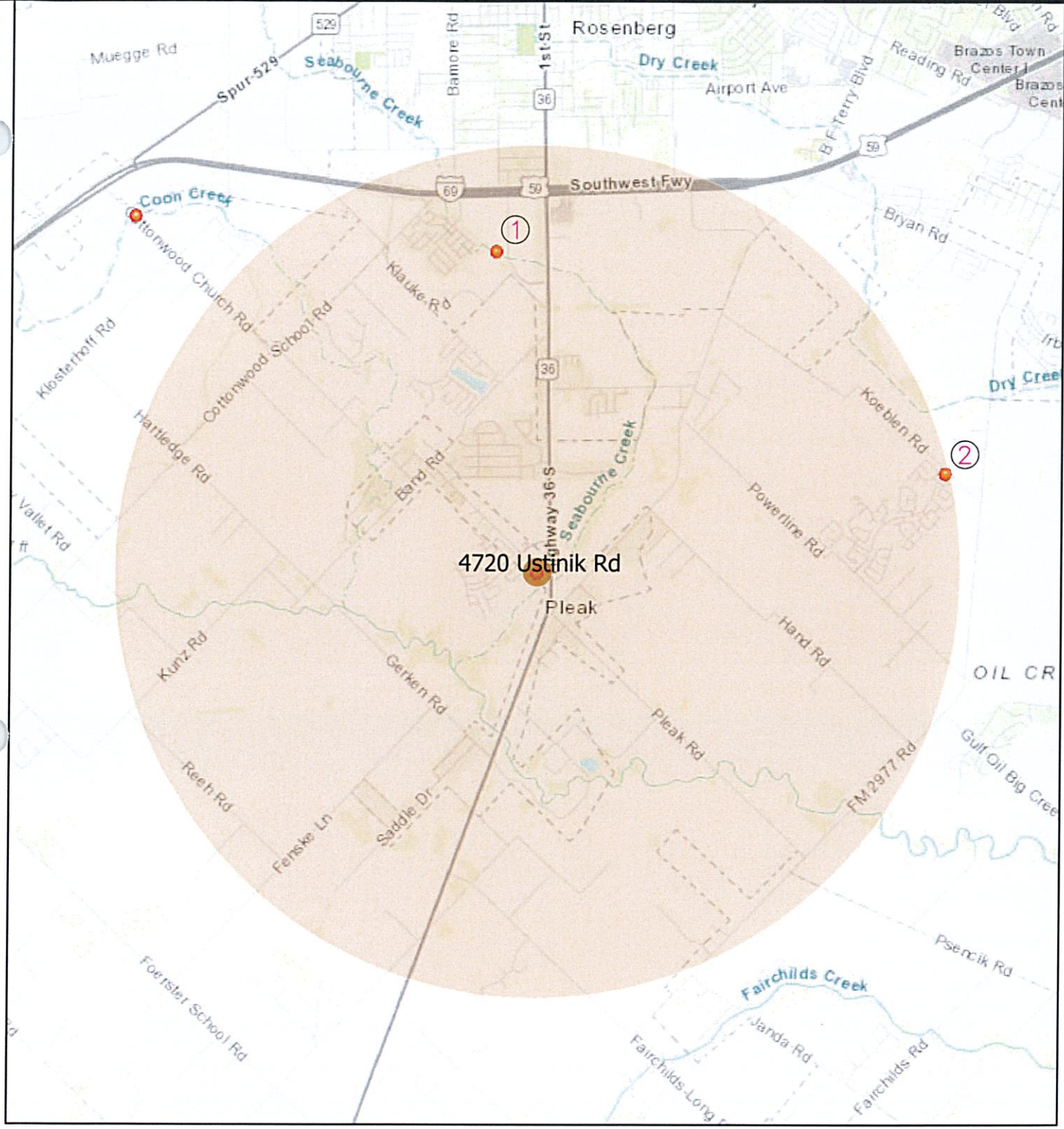
ORIGINAL PHOTO



Exhibit No. 8
Original Photographs

EXHIBIT 10
NEARBY WWTP

L:\3260_FBCMUD_5\3260.605 WWTP DISCHARGE PERMIT MAJOR AMEN\CAD\EXHIBITS\EXHIBIT 6_NEARBY WWTPS.DWG Jan. 6, 2021-9:36 AM BRIAN RABENALDT

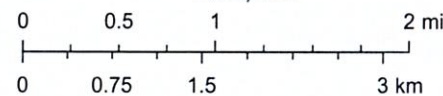


7/16/2020, 8:54:01 AM

1:72,224

EXHIBIT 6
NEARBY WWTPS

● Wastewater Outfalls



WWTP	DESCRIPTION
①	FBCMUD NO. 162 WWTP PERMIT NO. 14564-001
②	CITY OF ROSENBERG WWTP PERMIT NO. 10607-002

16340 Park Ten Place
Suite 350
Houston, Texas 77084
(713) 461-9600

TEXAS FIRM REGISTRATION NO. F-487
DATE: JAN 2021 SCALE: NOTED

EXHIBIT 11

DESIGN CALCULATIONS

**ENGINEERING DESIGN REPORT
FOR
PERMANENT WASTEWATER TREATMENT PLANT – PHASE II
TO SERVE
FORTBEND COUNTY MUNICIPAL UTILITY DISTRICT No. 05**

Influent Quality Characteristics – The raw sewage quality characteristics used for design purposes are as follows:

<u>Parameter</u>	<u>Concentration</u>	
BOD ₅	300	mg/L
TSS	300	mg/L
NH ₃ -N	45	mg/L

Influent Flow Characteristics – The hydraulic design of the facility must ensure that the plant will operate under the most extreme conditions anticipated. The plant process and hydraulic design for this facility are as follows:

<u>Flow</u>	<u>PROPOSED PHASE II</u>		<u>EXISTING PHASE</u>	
Average Daily Flow (Q _A)	0.58	MGD	0.375	MGD
	403	gpm	260	gpm
Peak 2-Hour Flow (Q _P = 4Q _A)	2.3	MGD	1.5	MGD
	1,611	gpm	1,042	gpm

<u>Organic Loading</u>				
BOD ₅	1,451	lbs/day	938	lbs/day
NH ₃ -N	218	lbs/day	141	lbs/day

Process Design – The treatment plant has been designed to produce an effluent quality in compliance with the proposed permitted parameters of: CBOD₅ = 10 mg/L; TSS = 15 mg/L; NH₃-N = 3 mg/L; Dissolved Oxygen = 6 mg/L; Chlorine Residual = 1 to 4 mg/L after 20 minutes detention time. In order to achieve the required removal efficiencies, activated sludge process in the complete mix mode has been chosen.

The anticipated operating ranges for MLSS and RASS are 3,500 mg/L and 7,000 mg/L, respectively.

<u>1. Aeration Basin</u>		<u>PROPOSED PHASE II</u>		<u>EXISTING PHASE</u>	
TCEQ Max Organic Loading		35	lbs/day/1,000 cf		
Min Volume Required		41,462	cf		
PROP. Aeration Basin Size					
	Width	20	Ft		
	Length	47	Ft		Plus 3 feet for thickness of the influent/effluent channel wall
Prop. Side Water Depth		15	Ft		
No. of Basin		3			
Volume Provided		42,300	cf	26,964	cf
Organic Loading		34.3	lbs/day/1,000 cf		
Min. Free Board		18.0	inch		
Volume provided with one Aeration out of service		28,200	cf		

Note: Aeration basins can handle almost 0.4 MGD with one aeration out of service

2. Clarifier

Average Daily Flow	Q _A	0.95	MGD
Peak 2-Hour Flow	Q _P = 4Q _A	3.8	MGD
TCEQ Max Surface Loading	SLR _{max} =	1,200	gal/day/sf
TCEQ Min Detention Time	DT _{min} =	1.8	hrs
TCEQ Max Weir Loading	Q _P =	20,000	gal/day/ft

PROPOSED PHASE II

Number of Clarifier	2	
Diameter	64.0	ft
Side-Water Depth	12.0	ft
Dia. Of Weir	60.0	ft
Weir Length	188	ft

Min Surface Area Required	3,167	sf
Surface Area Provided	3,217	sf
Total Area Provided	6,434	
Volume Provided (Each)	38,604	cf

Surface Loading	Q _A = 148	gal/day/sf
	Q _P = 591	gal/day/sf

Detention Time	Q _A = 7.3	hrs
	Q _P = 1.8	hrs

Weir Loading	10,080	gal/day/ft
--------------	--------	------------

Note: Clarifier tank Designed to handle 0.95 MGD with one clarifier out of service

3. Aerobic Digester

The following calculations assume one (1) pound of solids produced per pound of BOD₅ applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; and 20,000mg/l MLSS concentration in the digester on average.

	PROPOSED PHASE II	EXISTING PHASE
Average Daily Flow	Q _A	0.58 MGD
BOD ₅	1451.16	lbs/day
Digested Solids Production (1-0.30(0.70))(1451lbs/day)	1,146	lb/day
Solids from Clarifier (0.58MGD)(8.34)(300 mg/l BOD ₅)	1,451	lb/day
Average Solids	1,299	lb/day
Assumed Digester Concentration	20,000	mg/L
Required Retention Time	28	days*
Required Volume - OPTION 1	29,141	cf
Required Volume - OPTION 2	29,023	cf
Volume to Loading Ratio	20.7	cf/lb BOD ₅ /day

Prop. Digester Tank Size		
Width	20	ft
Length	50.00	ft
Side Water Depth	15	ft
No. OF Tank	2	

Volume Provided	30,000	cf	31,224	cf
-----------------	--------	----	--------	----

*28-day SRT instead of 40-day SRT based on the EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

4. Chlorine Contact Chamber

Average Daily Flow	Q _A	0.58	MGD
Peak 2-Hour Flow	Q _P = 4Q _A	2.32	MGD
TCEQ Min Detention Time	Q _P =	20	min

Min Volume Required	4,308	cf
---------------------	-------	----

Prop. Chlorine Contact Basin Size

Width of Channel	4
Side Water Depth	9
Length of Channel	30
No. of Channel	4

Volume of Proposed Basin	4,320	cf
Detention Time	20	min

6. Blowers

There are (3) existing centrifugal blowers. As part of the expansion, three (3) additional centrifugal blowers will be added.

Maximum influent BOD ₅	1,451	lb/day
Maximum influent NH ₄ -N	218	lb/day

A. Organic Removal

Required BOD ₅ Removal	1,451	lb/day
Required NH ₄ -N Removal	218	lb/day

B. Oxygen Requirement			
Oxygen Required for Carbonaceous Demand	1.2	lbs O ₂ /lbs BOD ₅	
Oxygen Required for Nitrogenous Demand	4.3	lbs O ₂ /lbs NH ₃ -N	
Oxygen Required per Pound of BOD	1.8	lbs O ₂ /lbs BOD ₅	
Minimum Oxygen w/ Nitrification Requirement	2.2	lbs O ₂	TCEQ 30 TAC 217.155(a)(3) Table F.3
Oxygen Requirement w/ Nitrification	3,193	lbs O ₂ /day	
C. Wastewater Oxygen Transfer Efficiency (Manufacturer)			
Manufacturer Clean Water	0.240		
Wastewater Transfer Efficient Coefficient for Fine Bubble Diffusers	0.450		
Wastewater Oxygen Transfer Efficiency (WOTE)	0.108		
Diffuser Submergence Correction Factor	0.948		
E. Manufacturer Required Airflow Rate (RAF) for Organic Removal			
Density of Air @ 20 Deg C	0.075		
Ratio of Oxygen to Air	0.230		
Required Airflow Rate	1,128	scfm	
Mixing Air requirements	846	scfm	
F. Mixing Air Demands			
Aeration Basin Influent/Effluent Channels	30	scfm/1000 cf	
Air Demand per Channel	108		
Total Air Demand	216	scfm	
G. Chlorine Mixing Chamber			
Total Chlorine Air Demand	86	scfm	
H. Return Sludge Chamber Mixing			
Total Air Demand	35	scfm	
I. Digester			
Mixing Requirement	20	scfm/1000 ft ³	
Total Digester Air Demand	600	scfm	
Total Air Demand	1,783	scfm	
Total Air Provided	2,229	scfm	
<i>IT IS PROPOSED THREE (3) CENTERIFUGAL BLOWERS AT 1400 SCFM EACH, TWO (2) DUTY, ONE (1) STAND BY</i>			
7. Sludge Pump System			
The pumps will be submersible centrifugal pumps capable of handling the required flow range of return activated sludge ("RAS") and waste activated sludge ("WAS"). The proposed pumps will utilize VFDs and will modulate RAS flow based upon the WWTP's effluent flow rate.			
TCEQ Lower Limit Underflow Rate	200	gpd/sf	
TCEQ Upper Limit Underflow Rate	400	gpd/sf	
Total Proposed Clarifier Surface Area	3,217	sf	
Minimum Sludge Pump Capacity	447	gpm	
Maximum Sludge Pump Capacity	894	gpm	
TDH	25	ft	
Proposed Pump Model			

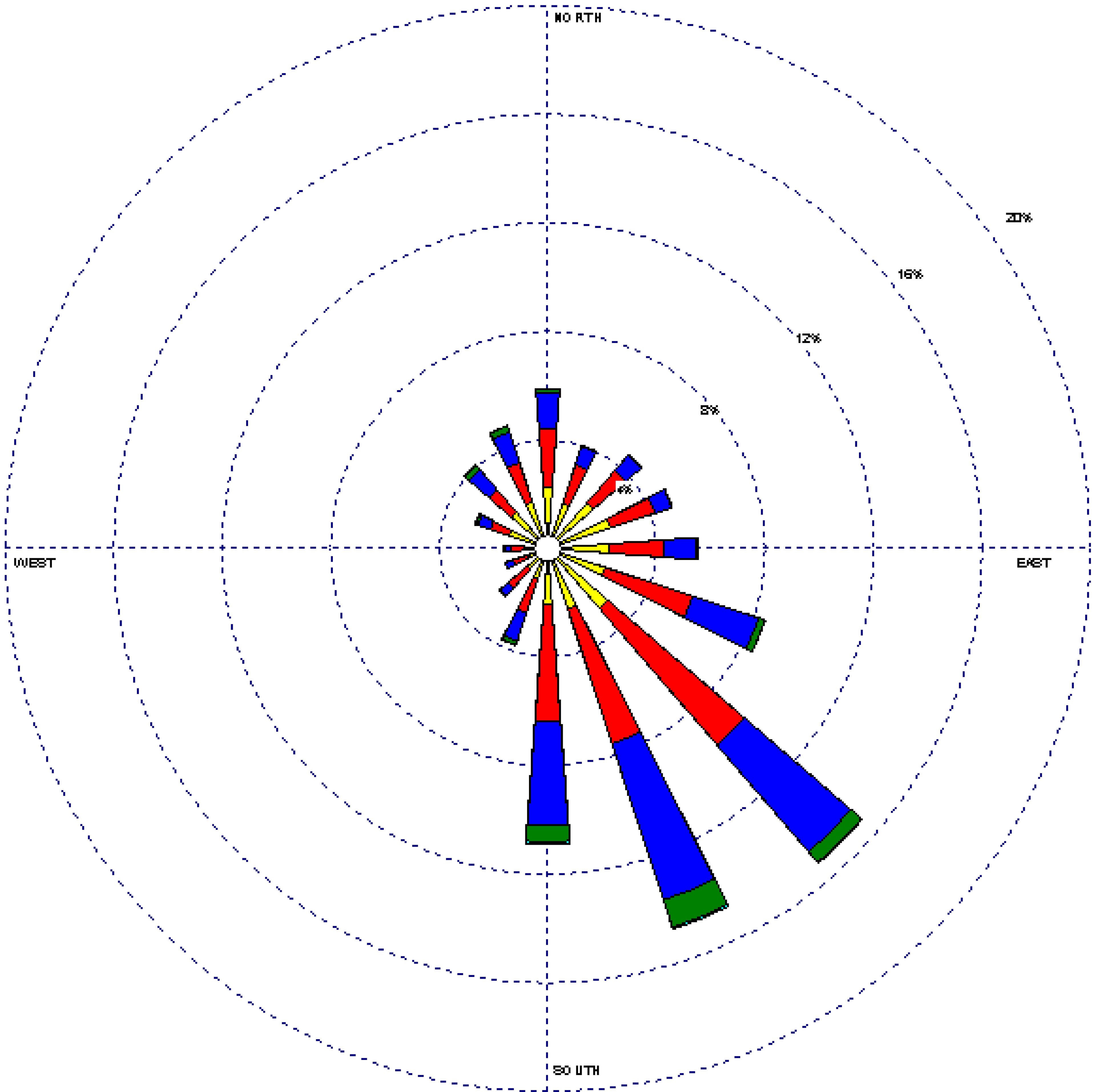
D:\0000063384.0000\03260.606\FBCMUD 5 & 157 - Regional\Engineering\Calculations\FBCMUD 05 WWTP - 0.45 Calcs.xls\WWTP Calcs

EXHIBIT 12

WINDROSE

WIND ROSE PLOT

Station #12960 - HOUSTON,INTERCONTINENTAL ARPT, TX



Wind Speed (m/s) > 11.06 8.49 - 11.06 5.40 - 8.49 3.34 - 5.40 1.20 - 3.34 0.51 - 1.20	MODELER	DATE	COMPANY NAME
	Sara West	8/29/2002	USDA-ARS
	DISPLAY	UNIT	COMMENTS
	Wind Speed	m/s	
	AVG. WIND SPEED	CALM WINDS	
	4.63 m/s	4.65%	
ORIENTATION	Direction (blowing from)	PLOT YEAR-DATETIME	
		1961 Apr 1 - Apr 30 Midnight - 11 PM	

ACORN RANCH
WASTEWATER TREATMENT PLANT
DISCHARGE PERMIT APPLICATION
WINDROSE DIAGRAM

Binkley & Barfield
DCCM

Binkley & Barfield, Inc. | TxEng F-257
1710 Seamist Dr, Houston, TX 77008
713.869.3433 | BinkleyBarfield.com

Rainee Trevino

From: Ali Safari <asafari@dccm.com>
Sent: Wednesday, November 5, 2025 5:03 PM
To: Rainee Trevino
Cc: Hasibul Hasan; Debojit Tanmoy
Subject: RE: Application to Amend Permit No. WQ0014757001-Notice of Deficiency Letter
Attachments: COMMENT RESPONSES.pdf; ADDRESS.HEIC; ADMINISTRATIVE REPORT 1- SECTION 2.pdf; ADMINISTRATIVE REPORT 1- SECTION 10.pdf; CORE DATA FORM-SECTION 3.pdf; PLS EN-SP.pdf; SPIF.pdf; USPS Certified Mail 11.04.2025.jpg

Good afternoon Rainee,

Please see attached updated sheets per your request. Let me know if you need anything else.

Thanks

Ali Safari
Senior Project Engineer

RG Miller | DCCM
281.921.8765 x 281.921.8765 p

Please note that our e-mail addresses have changed.

From: Rainee Trevino <Rainee.Trevino@tceq.texas.gov>
Sent: Monday, November 3, 2025 3:07 PM
To: Ali Safari <asafari@dccm.com>
Cc: Hasibul Hasan <hhasan@dccm.com>
Subject: Application to Amend Permit No. WQ0014757001-Notice of Deficiency Letter

Some people who received this message don't often get email from rainee.trevino@tceq.texas.gov. [Learn why this is important](#)

Caution: This e-mail originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Safari,

The attached Notice of Deficiency letter sent on November 3, 2025, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by November 17, 2025.

Thank you,

Rainee Trevino

Water Quality Division | ARP Team

Texas Commission on Environmental Quality

512-239-4324



c. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
☐ TLAP
☐ TPDES Permit with TLAP component
☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- | | |
|---|--|
| ☐ New | |
| ☐ Major Amendment <u>with</u> Renewal | ☐ Minor Amendment <u>with</u> Renewal |
| ☐ Major Amendment <u>without</u> Renewal | ☒ Minor Amendment <u>without</u> Renewal |
| ☐ Renewal without changes | ☐ Minor Modification of permit |

e. For amendments or modifications, describe the proposed changes: We need to submit a minor amendment application to increase the permitted discharge for the Interim II phase from 0.75 MGD to 0.95 MGD.

f. For existing permits:

Permit Number: WQ00 14757001

EPA I.D. (TPDES only): TX 0129194

Expiration Date: March 25, 2027

Section 3. Facility Owner (Applicant) and Co-Applciant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

Fort Bend County Municipal Utility District No. 5

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)?

You may search for your CN on the TCEQ website at <http://www15.tceq.texas.gov/crpub/>

CN: 600739098

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix: Ms.

Last Name, First Name: Hedrick, Nancy

Title: President

Credential: Fort Bend County Municipal Utility District No. 5

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: N/A

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: [Click to enter text.](#)

Last Name, First Name: N/A

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒

Yes

☐

No

If **no**, or a new permit application, please give an accurate description:

[Click to enter text.](#)

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒

Yes

☐

No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

[Click to enter text.](#)

City nearest the outfall(s): Rosenberg

County in which the outfalls(s) is/are located: Fort Bend

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☒

Yes

☐

No

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

____ Texas Historical Commission

____ U.S. Fish and Wildlife

____ Texas Parks and Wildlife Department

____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Fort Bend County Municipal Utility District No. 5

Permit No. WQ00 14757001EPA ID No. TX 0129194

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

6502 ½ Texas State Highway 36, Rosenberg, TX 77471

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)

\$

☐ Return Receipt (electronic)

\$

☐ Certified Mail Restricted Delivery

\$

☐ Adult Signature Required

\$

☐ Adult Signature Restricted Delivery

\$

Postmark
Here

Postage

\$

Total Postage and Fees

\$

Sent To

TCEQ Application's Review Processing

Street and Apt. No., or PO Box No.

P.O. Box 13087

City, State, ZIP+4®

Austin, TX 78711-3087



18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(713) 860-6400		(713) 860-6417

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Fort Bend County MUD No. 5 Wastewater Treatment Plant								
23. Street Address of the Regulated Entity: (No PO Boxes)	6502 1/2 State Highway 36							
	City	Rosenberg	State	TX	ZIP	77471	ZIP + 4	
24. County								

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	The WWTP site is located approximately 480 feet northwest of the intersection of Highway 36 and FM 2218.							
26. Nearest City					State	Nearest ZIP Code		
Rosenberg					TX	77471		
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:		29.492222			28. Longitude (W) In Decimal:		-95.808333	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
29°	29'	2"	95°	48'	30"			
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
4952			22132					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Wastewater Treatment								
34. Mailing Address:	3200 Southwest Freeway, Suite 2600							
	City	Houston	State	TX	ZIP	77027	ZIP + 4	
35. E-Mail Address:	gpagan@abhr.com							
36. Telephone Number	37. Extension or Code				38. Fax Number (if applicable)			
(713) 860-6400					(713) 860-6417			