Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. 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. Primer aviso (NORI, por sus siglas en inglés)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

HCMUD 441 – TPDES Renewal
Plain Language Summary

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 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Harris County Municipal Utility District No. 441 (CN604639435) operates the Harris County MUD No. 441 Wastewater Treatment Facility (RN110763885), an activated sludge process plant operated in the single stage nitrification mode. The facility is located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road, in Harris County, Texas, 77377.

This application is for a renewal to discharge at a daily average flow of 600,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), Ammonia-Nitrogen (NH_3-N), and *Escherichia coli*. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine disinfection.

Spanish Translation

Se proporciona el siguiente resumen para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por La Comisión de Calidad Ambiental de Texas según lo exige 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 son representaciones federales exigibles de la solicitud de permiso.

El Distrito de Servicios Públicos Municipales del Condado de Harris No. 441 (CN604639435) opera la Instalación de Tratamiento de Aguas Residuales (RN110763885) MUD No. 441 del Condado de Harris, una planta de procesamiento de lodos activados operada en el modo de nitrificación de una sola etapa. La instalación está ubicada a 3,000 pies al sur-suroeste de la intersección de la Carretera Estatal 99 y Mueschke Road, en el Condado de Harris, Texas, 77377.

Esta solicitud es para una renovación para descargar a un flujo promedio diario de 600,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH_3-N) y Escherichia coli. Las aguas residuales domésticas son tratadas por una planta de procesamiento de lodos activados y las unidades de tratamiento incluyen una pantalla de barras, cuencas de aireación, clarificadores finales, digestores de lodos y desinfección con cloro.

HCMUD 441 – TPDES Renewal
Plain Language Summary

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 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Harris County Municipal Utility District No. 441 (CN604639435) operates the Harris County MUD No. 441 Wastewater Treatment Facility (RN110763885), an activated sludge process plant operated in the single stage nitrification mode. The facility is located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road, in Harris County, Texas, 77377.

This application is for a renewal to discharge at a daily average flow of 600,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), Ammonia-Nitrogen (NH_3-N), and *Escherichia coli*. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine disinfection.

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El Distrito de Servicios Públicos Municipales del Condado de Harris No. 441 (CN604639435) opera la Instalación de Tratamiento de Aguas Residuales (RN110763885) MUD No. 441 del Condado de Harris, una planta de procesamiento de lodos activados operada en el modo de nitrificación de una sola etapa. La instalación está ubicada a 3,000 pies al sur-suroeste de la intersección de la Carretera Estatal 99 y Mueschke Road, en el Condado de Harris, Texas, 77377.

Esta solicitud es para una renovación para descargar a un flujo promedio diario de 600,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH_3-N) y Escherichia coli. Las aguas residuales domésticas son tratadas por una planta de procesamiento de lodos activados y las unidades de tratamiento incluyen una pantalla de barras, cuencas de aireación, clarificadores finales, digestores de lodos y desinfección con cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0015795001

APPLICATION. Harris County Municipal Utility District No. 441, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015795001 (EPA I.D. No. TX0139297) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 600,000 gallons per day. The domestic wastewater treatment facility is located approximately 3,000 feet south-southwest of the intersection of Mueschke Road and State Highway 99, near the city of Rose Hill, in Harris County, Texas 77377. The discharge route is from the plant site to an unnamed tributary; thence to an unnamed tributary (2); thence to Little Cypress Creek; thence to Cypress Creek. TCEQ received this application on December 2, 2024. The permit application will be available for viewing and copying at Lone Star College – Tomball Community Library, Reference Desk, 30555 Tomball Parkway, Tomball, in Harris County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.7375,30.045555&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county.

If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Harris County Municipal Utility District No. 441 at the address stated above or by calling Mr. Jonathan Nguyen, Quiddity Engineering, at 512-685-5156.

Issuance Date: January 15, 2025

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA
RENOVACION

PERMISO NO. WQ0015795001

SOLICITUD. Distrito de servicios públicos municipales del condado de Harris No. 441, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0015795001 (EPA I.D. No. TX0139297) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 600,000 galones por día. La planta está ubicada 3,000 pies al sur-suroeste de la intersección de la carretera estatal 99 y Mueschke Road, en el condado de Harris, cerca de la ciudad de Rose Hill, en el condado de Harris, Texas 77377. La ruta de descarga es del sitio de la planta a un afluente sin nombre; de allí a un afluente sin nombre(2); de allí a Little Cypress Creek; de allí a Cypress Creek. La TCEQ recibió esta solicitud el 2 de diciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca comunitaria de Lone Star College – Tomball, mostrador de referencia, 30555 Tomball Parkway, Tomball, en el condado de Harris, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.7375,30.045555&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas

que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. *[For renewal applications that **do not** include a major amendment, include the following sentence:]* **Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Distrito de servicios públicos municipales del condado de Harris No. 441 a la dirección indicada arriba o llamando a Sr. Jonathan Nguyen, Quiddity Engineering, al 512-685-5156.

Fecha de emisión 15 de enero de 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Harris County Municipal Utility District No. 441

PERMIT NUMBER (If new, leave blank): WQ00 WQ0015795001

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	☐	☒
Public Involvement Plan Form	☐	☒	Flow Diagram	☒	☐
Technical Report 1.0	☒	☐	Site Drawing	☒	☐
Technical Report 1.1	☐	☒	Original Photographs	☐	☒
Worksheet 2.0	☒	☐	Design Calculations	☒	☐
Worksheet 2.1	☐	☒	Solids Management Plan	☒	☐
Worksheet 3.0	☐	☒	Water Balance	☐	☒
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: Click to enter text.

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 Wastewater 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: Click to enter text.

f. For existing permits:

Permit Number: WQ00 15795001

EPA I.D. (TPDES only): TX 0139297

Expiration Date: May 22, 2025

Section 3. Facility Owner (Applicant) and Co-Applicant 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?

Harris County Municipal Utility District No. 441

(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: CN604639435

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: Mr. Last Name, First Name: LeBlanc, Edmund

Title: President, HCMUD No. 441 Credential:

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:

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: Last Name, First Name:

Title: Credential:

Provide a brief description of the need for a co-permittee:

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. See Attachment I

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: Nguyen, Jonathan

Title: Permitting Specialist Credential:

Organization Name: Quiddity Engineering

Mailing Address: 912 S. Capital of Texas Highway, Suite 300 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-685-5156 E-mail Address: jnguyen@quiddity.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Last Name, First Name:

Title: Credential:

Organization Name:

Mailing Address: City, State, Zip Code:

Phone No.: E-mail Address:

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: LeBlanc, Edmund

Title: President Credential:

Organization Name: HCMUD No. 441

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

77027

Phone No.: 713-860-6467 E-mail Address: ksherborne@abhr.com

B. Prefix: Ms. Last Name, First Name: Loep, Kathy

Title: Vice-President Credential:

Organization Name: HCMUD No. 441

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

Phone No.: 713-860-6400 E-mail Address: ksherborne@abhr.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: Ms. Last Name, First Name: Iguess, Marissa

Title: Bookkeeper Credential:

Organization Name: Myrtle Cruz, Inc.

Mailing Address: 3401 Louisiana Street, Suit 400 City, State, Zip Code: Houston, TX 77002

Phone No.: 713-626-3552 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: Chapline, Charlie

Title: Operator Credential:

Organization Name: Municipal District Services, LLC

Mailing Address: 406 W Grand Parkway S, Suite 260 City, State, Zip Code: Katy, TX 77494

Phone No.: 281-290-3141 E-mail Address: cchapline@mdswater.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Nguyen, Jonathan

Title: Permitting Specialist Credential:

Organization Name: Quiddity Engineering

Mailing Address: 912 S. Capitol of Texas Highway, Suite 300 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-685-5156 E-mail Address: jnguyen@quiddity.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: Nguyen, Jonathan

Title: Permitting Specialist Credential:

Organization Name: Quiddity Engineering

Mailing Address: 912 S. Capitol of Texas Highway, Suite 300 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-685-5156 E-mail Address: jnguyen@quiddity.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: Lone Star College – Tomball Community Library

Location within the building: Reference Desk

Physical Address of Building: 30555 Tomball Parkway

City: Tomball, TX County: Harris

Contact (Last Name, First Name): Janna Hoglund

Phone No.: 832-559-4200 Ext.:

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. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: See Attachment A

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: N/A

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** 110763885

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):

Harris County MUD No. 441 Wastewater Treatment Plant

C. Owner of treatment facility: Harris County MUD No. 441

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

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

Prefix: Last Name, First Name:

Title: Credential:

Organization Name: Harris County MUD No. 441

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

Phone No.: 713-860-6467 E-mail Address: ksherborne@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:

E. Owner of effluent disposal site:

Prefix: N/A Last Name, First Name:

Title: Credential:

Organization Name:

Mailing Address: City, State, Zip Code:

Phone No.: E-mail Address:

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:

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

Prefix: N/A Last Name, First Name:

Title: Credential:

Organization Name:

Mailing Address: City, State, Zip Code:

Phone No.: E-mail Address:

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:

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:

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:

City nearest the outfall(s): Rose Hill, TX

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

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: N/A

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:

C. County in which the disposal site is located:

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

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:

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.

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: Jonathan Nguyen

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following information:

Account number:

Amount past due:

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, please provide the following information:

Enforcement order number:

Amount past due:

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: See Attachment List

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0015795001

Applicant: Harris County MUD No. 441

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): Edmund LeBlanc

Signatory title: President, Harris County MUD No. 441

Signature: _____ Date: OCT 22nd, 2024

(Use blue ink)

Subscribed and Sworn to before me by the said Edmund LeBlanc

on this 22nd day of October, 20 24.

My commission expires on the 1st day of November, 20 27.

_____

Notary Public

KERRI HOUCK
Notary Public, State of Texas
Comm. Expires: 11-01-2027
Notary ID 132236105

(SEAL)

Harris

County, Texas

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 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.10

2-Hr Peak Flow (MGD): 0.40

Estimated construction start date: 1/2025

Estimated waste disposal start date: 11/2025

B. Interim II Phase

Design Flow (MGD): 0.20

2-Hr Peak Flow (MGD): 0.80

Estimated construction start date: 11/2026

Estimated waste disposal start date: 9/2027

C. Final Phase

Design Flow (MGD): 0.60

2-Hr Peak Flow (MGD): 2.40

Estimated construction start date: 1/2030

Estimated waste disposal start date: 7/2031

D. Current Operating Phase

Provide the startup date of the facility: Facility is not yet constructed

Section 2. Treatment Process (Instructions Page 43)

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**.

See Attachment G

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 Attachment G		

C. Process Flow Diagram

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

Attachment: See Attachment E

Section 3. Site Information and Drawing (Instructions Page 44)

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

- Latitude: 30.04554
- Longitude: -95.738477

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: See Attachment F

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

The plant will serve the eastern half of Harris County MUD No. 441

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
Harris County MUD No. 441	**Harris County MUD No. 441**	**Publicly Owned**	**5,000**
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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**.

See Attachment J

Section 5. Closure Plans (Instructions Page 45)

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 45)

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: N/A

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**.

The plant is currently being designed. A summary transmittal letter will be submitted prior to construction

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.

See Attachment K

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.

Click to enter text.

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.
See Attachment H

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 BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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 BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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.

N/A

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

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). **W*ater 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					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/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 50)

Facility Operator Name: Municipal District Services

Facility Operator's License Classification and Level: Click to enter text.

Facility Operator's License Number: OC0000129

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow>= 1 MGD
- ☐ Serves >= 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 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. Biosolids Management

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

all 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
Agricultural Land Application	Off-site Third-Party Handler or Preparer	Bulk	Unknown	Class B: Density of Fecal Coliform	Option 4: SOUR <=1.5 mg 02/hr/g total solids at 20C (<2% solids)
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: A TCEQ registered site will be selected prior to sludge disposal

TCEQ permit or registration number: Click to enter text.

County where disposal site is located: Click to enter text.

E. Transportation method

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

Name of the hauler: A TCEQ registered sludge hauler will be selected prior to sludge disposal

Hauler registration number: Click to enter text.

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

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

☐ Yes ☒ No

If yes, are you requesting to continue this authorization to land apply sewage sludge 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 sludge	☐ 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 $1x10^{-7}$ 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 55)

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:

N/A

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:

N/A

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 56)

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: Edmund LeBlanc

Title: President, HCMUD 441

Signature: _____

Date: OCT 22nd 2024

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☒ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: Click to enter text.

Distance and direction to the intake: Click to enter text.

Attach a USGS map that identifies the location of the intake.

Attachment: Click to enter text.

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. **If yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: Click to enter text.

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from outfall(s).

Click to enter text.

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from the outfall(s).

Click to enter text.

Section 3. Classified Segments (Instructions Page 64)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☒ No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: unnamed tributary of Little Cypress Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

☒ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

☒ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☒ Personal observation

☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

Little Cypress Creek

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

☐ Yes ☒ No

If yes, discuss how.

Click to enter text.

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

Discharge is to a dry stream

Date and time of observation: 9/9/2024, 9:00 am

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☐ Urban runoff
☒ Agricultural runoff
☐ Other(s), specify: Click to enter text.

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☒ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: Click to enter text.

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☒ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

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 89)

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 90)

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 90)

A. General information

Company Name: No SIUs present

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: Click to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: Click to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☐ 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.

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

LIST OF ATTACHMENTS
HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

Attachment A – Plain Language Summary (Admin Report 1.0, Section 8.F)

Attachment B – Supplemental Permit Information Form (Admin Report)

Attachment C – USGS Map (Admin. Report 1.0, Section 13)

Attachment D – Flow Schematic(s) (Tech Report 1.0, Section 2.C)

Attachment E – Service Area Map (Tech Report 1.0, Section 3)

Attachment F – Supplemental Technical Report (Tech Report 1.0, Section 2.A and B)

Attachment G – Sewage Sludge Management Plan (Tech Report 1.0 Section 6.F)

Attachment H – Core Data Form (Admin Report 1.0, Section 3.C)

Attachment I – Justification for Plant Construction (Tech Report 1.0, Section 4)

Attachment J – Restrictive Easements (Tech Report 1.0, Section 6.B)

ATTACHMENT A

PLAIN LANGUAGE SUMMARY

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

HCMUD 441 – TPDES Renewal
Plain Language Summary

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 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Harris County Municipal Utility District No. 441 (CN604639435) operates the Harris County MUD No. 441 Wastewater Treatment Facility (RN110763885), an activated sludge process plant operated in the single stage nitrification mode. The facility is located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road, in Harris County, Texas, 77377.

This application is for a renewal to discharge at a daily average flow of 600,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), Ammonia-Nitrogen (NH_3-N), and *Escherichia coli*. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine disinfection.

Spanish Translation

Se proporciona el siguiente resumen para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por La Comisión de Calidad Ambiental de Texas según lo exige 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 son representaciones federales exigibles de la solicitud de permiso.

El Distrito de Servicios Públicos Municipales del Condado de Harris No. 441 (CN604639435) opera la Instalación de Tratamiento de Aguas Residuales (RN110763885) MUD No. 441 del Condado de Harris, una planta de procesamiento de lodos activados operada en el modo de nitrificación de una sola etapa. La instalación está ubicada a 3,000 pies al sur-suroeste de la intersección de la Carretera Estatal 99 y Mueschke Road, en el Condado de Harris, Texas, 77377.

Esta solicitud es para una renovación para descargar a un flujo promedio diario de 600,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH_3-N) y Escherichia coli. Las aguas residuales domésticas son tratadas por una planta de procesamiento de lodos activados y las unidades de tratamiento incluyen una pantalla de barras, cuencas de aireación, clarificadores finales, digestores de lodos y desinfección con cloro.

ATTACHMENT B

SUPPLEMENTAL PERMIT INFORMATION FORM

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

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: Harris County Municipal Utility District No. 441

   Permit No. WQ00 15795001 EPA ID No. TX 0139297

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

   The facility will be located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road, in Harris County, Texas

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: Jonathan Nguyen

Credential (P.E, P.G., Ph.D., etc.): Click here to enter text

Title: Permitting Specialist

Mailing Address: 912 S. Capital of Texas Hwy, Suite 300

City, State, Zip Code: Austin, TX 78746

Phone No.: 512-685-5156 Ext.: Click here to enter text Fax No.: Click here to enter text

E-mail Address: jnguyen@quiddity.com

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

The permittee is the property owner

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.

Discharge is to an unnamed tributary of Little Cypress Creek; thence to Little Cypress Creek in Segment No. 1009 of the San Jacinto River Basin

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):

About 3.7 acrtes of land will be disturbed to a depth of about 5 feet. No caves or karst features will be sealed as a result of construction

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

Currently, the land is used for pasturing cattle.

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:

Click here to enter text.

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

Click here to enter text.

ATTACHMENT C

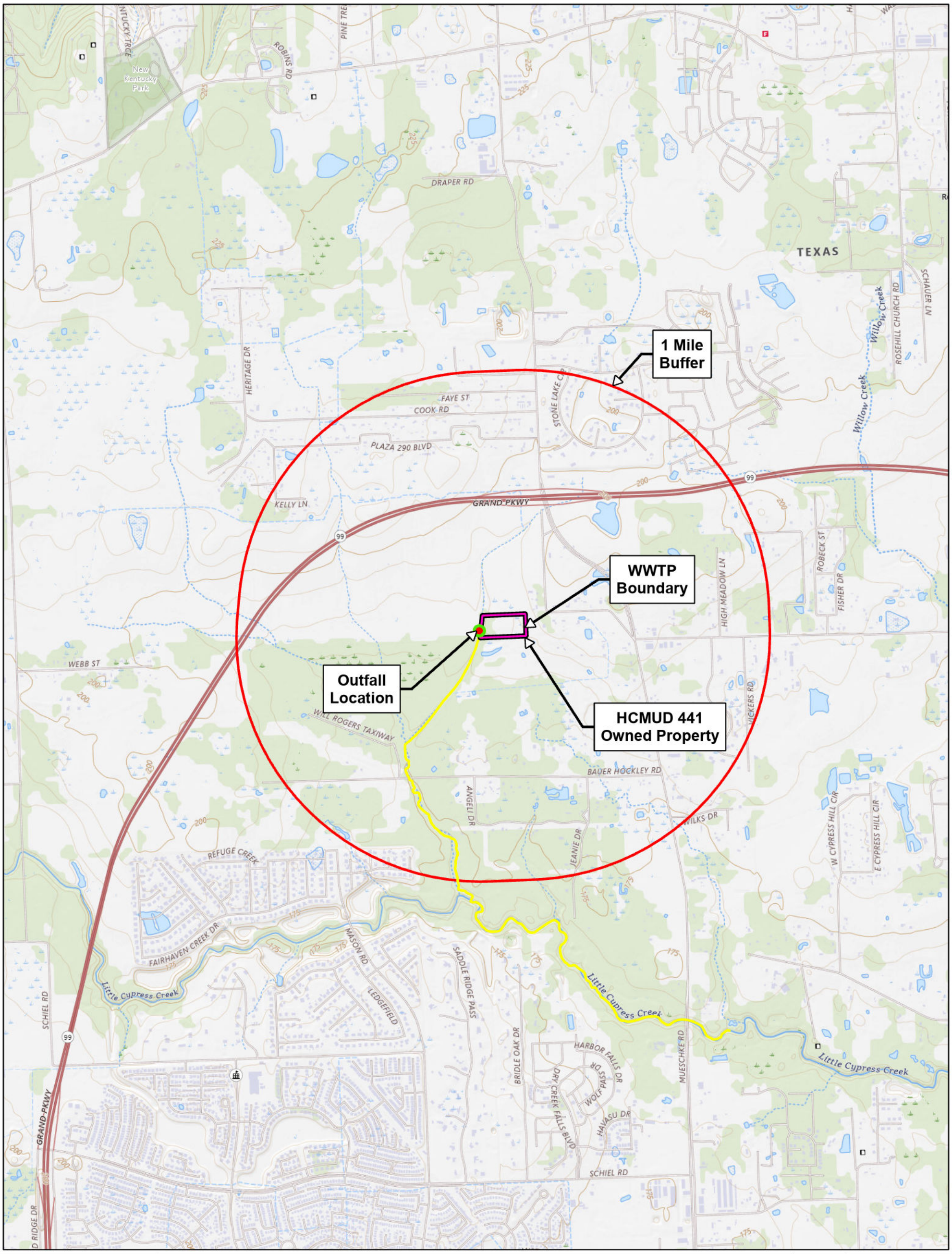
USGS MAP

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

USGS MAP



VICINITY MAP

1 INCH = 10 MILES

HARRIS COUNTY MUD 441

HARRIS COUNTY, TEXAS

N W E S

0 2,000

1 INCH = 2,000 FEET

Legend

- Schools
- Outfall
- Discharge Route
- 1 mile buffer
- 5 mile buffer
- Local park
- WWTP Boundary
- District Owned Property

QUIDDITY

Texas Board of Professional Engineers Registration No. F-23290

Path: V:\Practice Workspace\Corporate Services\GIS\Projects\0_USGS Maps\HCMUD 441\HC 441 USGS.aprx Project Number: 15740-0001-02 Date: 11/4/2024 User Name: ada1

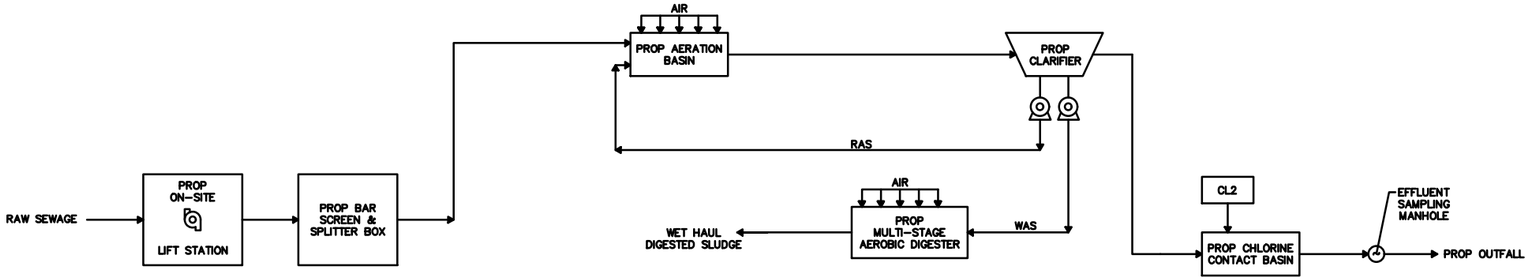
ATTACHMENT D

FLOW SCHEMATIC(S)

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



PUMP LEGEND:

AIR LIFT PUMP

CL2	CHLORINE
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE

PROP PHASE I - 0.10 MGD

ATTACHMENT E

FLOW SCHEMATICS

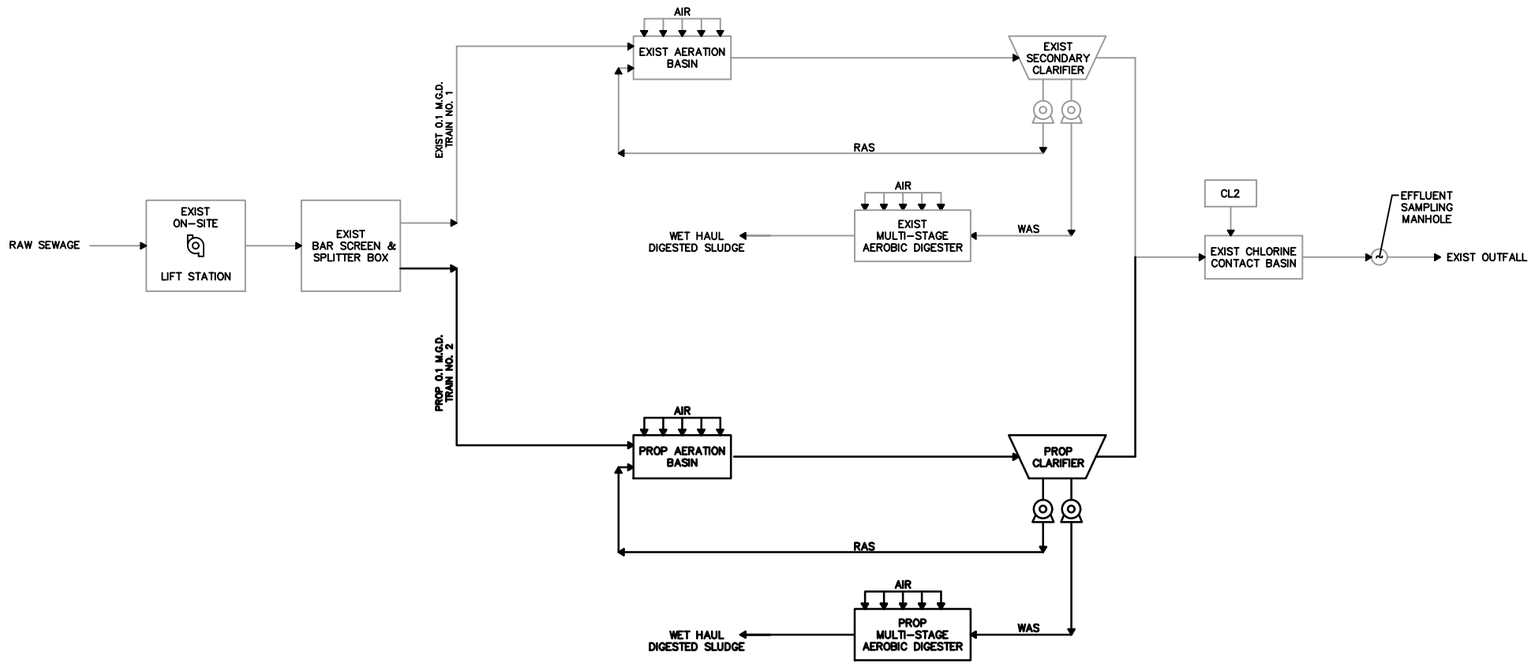
HARRIS COUNTY MUD No. 441

Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



PUMP LEGEND:

AIR LIFT PUMP

CL2 CHLORINE
RAS RETURN ACTIVATED SLUDGE
WAS WASTE ACTIVATED SLUDGE

PROP PHASE II - 0.20 MGD

ATTACHMENT E

FLOW SCHEMATICS

HARRIS COUNTY MUD No. 441

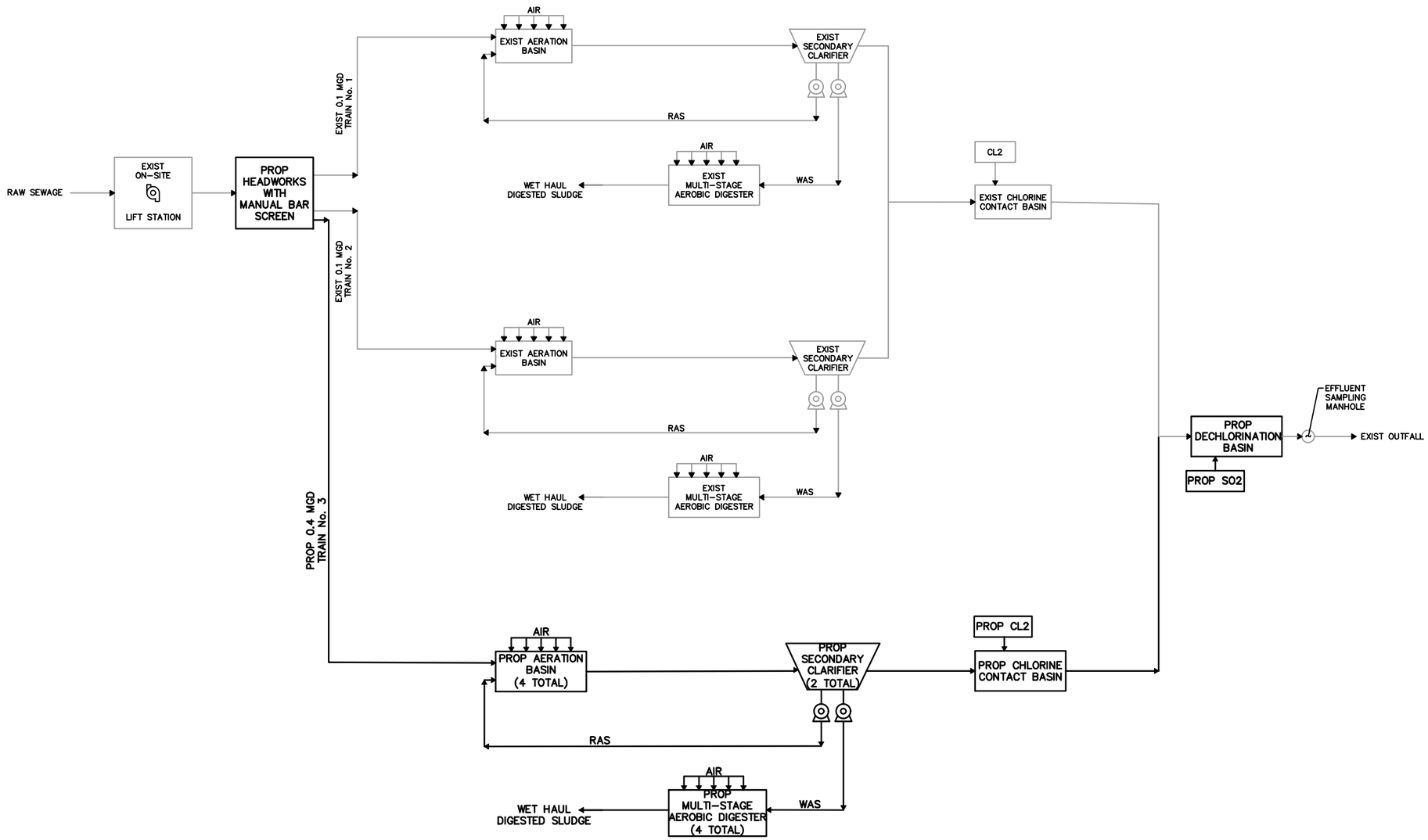
Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

QUIDDITY

Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



PUMP LEGEND:

AIR LIFT PUMP

CL2	CHLORINE
SO2	SULFUR DIOXIDE GAS
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE

PROP PHASE III - 0.6 MGD

ATTACHMENT E

FLOW SCHEMATICS

HARRIS COUNTY MUD No. 441

Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

QUIDDITY

Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

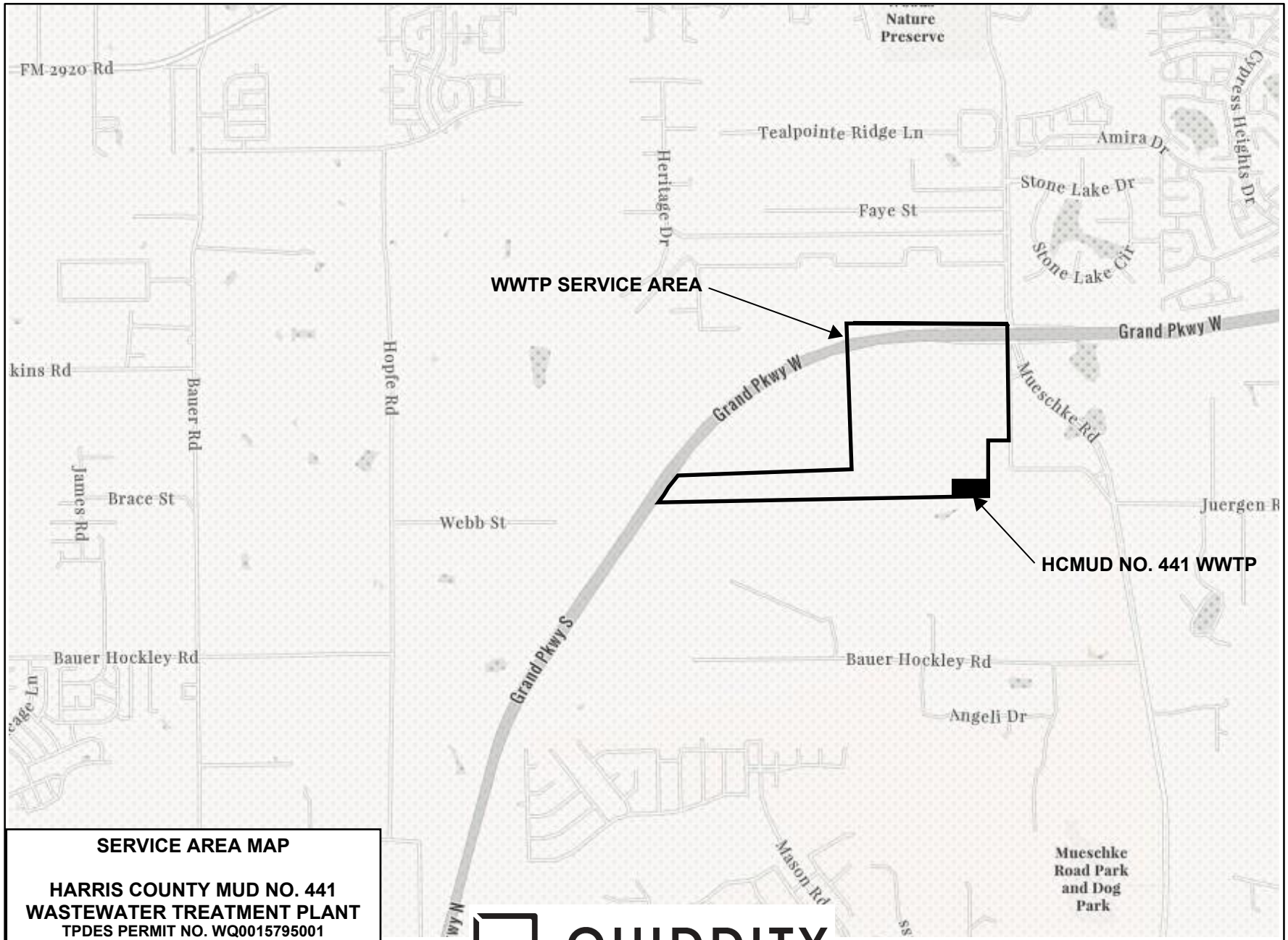
ATTACHMENT E

SERVICE AREA MAP

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



SERVICE AREA MAP

HARRIS COUNTY MUD NO. 441
WASTEWATER TREATMENT PLANT
TPDES PERMIT NO. WQ0015795001

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

ATTACHMENT F

SUPPLEMENTAL TECHNICAL REPORT

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY

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TECHNICAL REPORT

WASTEWATER TREATMENT

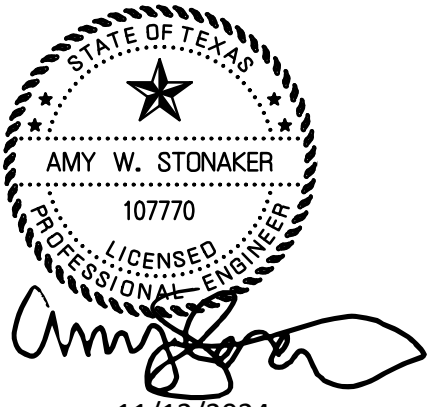
PLANT DOMESTIC WASTEWATER

PERMIT

for

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441

HARRIS COUNTY, TEXAS



11/12/2024

NOVEMBER 2024
QE Job No. 15740-0001-02

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I. INTRODUCTION

The purpose of this report is to provide information pertaining to items in the Domestic Administrative Report and The Domestic Technical Report for the permit application of the Harris County Municipal Utility District No. 441 Wastewater Treatment Plant (WWTP). The proposed permit includes three (3) operational phases to treat 0.10 MGD, 0.20 MGD and 0.60 MGD.

The proposed facilities will be located west of Mueschke Road, is split by the Grand Parkway, and is approximately 4.2 miles north of US 290.

II. LOCATION INFORMATION

Please see Item 7 of the Domestic Admin. Report 1.0 for specific location information. A USGS Map with the required site information is provided as Attachment A.

III. TREATMENT UNITS

(For Item 3 of Technical Report 1.0)

The proposed facility is to be constructed in three (3) operational phases with total design flows as described above. A detailed description of the treatment process for each phase is presented below:

The Phase I facility will consist of a fabricated steel package plant that is designed and constructed to treat 0.10 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. This phase will include an on-site lift station with submersible pumps and the wet well sized to accommodate the ultimate flow, a manual bar screen in a fabricated steel box, an aeration basin train consisting of one (1) aeration basin, one (1) clarifier, one (1) chorine contact basin sized for the Phase II flow, and one (1) multi-stage aerobic digester. Additional facilities include the blowers, a non-potable water system, and a vacuum controlled gaseous chlorine disinfection system.

The Phase II facility will consist of a fabricated steel package plant that is designed and constructed to treat 0.20 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. This phase will include upsizing the pumps in the previously constructed lift station, bar screen modifications, adding a second aeration basin, a second clarifier, a second multi-stage digester, and additional blowers. The chlorine contact basin from the original phase will contain adequate volume for Phase II.

The Phase III facility will consist of a fabricated steel package plant that is designed and constructed to treat 0.60 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. This phase will include expansion of the pumps in the previously constructed lift station, constructing an elevated concrete headworks with mechanical fine screen, manual bar screen, and flow splitting weirs; addition of four (4) aeration basins, two (2) clarifiers, four (4) multi-stage digesters, one (1) chlorine contact basin, and additional blowers. Other facilities include a non-potable water system, a vacuum controlled gaseous chlorine disinfection system, and sulfur dioxide dechlorination system.

In all three (3) phases, raw sewage will be pumped from the proposed on-site lift station to an initial screening structure. Then the influent will be mixed with return activated sludge to create mixed liquor and will flow through the aeration basin operated in the single-stage nitrification mode to consume organics and breakdown ammonia. From the aeration basins, the mixed liquor will flow to the secondary clarifier for clarification. After clarification, the treated effluent will flow to the chlorine contact basin for disinfection. From there, the effluent will then flow over a weir for flow measurement

and then onto the receiving stream.

IV. DESIGN CALCULATIONS AND FEATURES
(For Item 3g of Technical Report 1.0 & Item 4 of Technical Report 1.1)

Design calculations are provided as part of this report on the following pages for all three (3) phases of construction.

The proposed facilities will be equipped with design features to prevent overflows or bypassing of untreated wastewater. An appropriately sized emergency stand-by diesel generator will be installed onsite for all phases with an automatic transfer switch to provide power to essential equipment in the event of a main power failure. The facility will also have an automatic telephone dialer that notifies the operator of pump failures, chlorine gas leaks, main power failures and high basin levels. The onsite lift station will be designed with a redundant pump for all phases to protect against overflows in the event of a pump failure.

PHASE I – 0.10 MGD

I. SUMMARY

The proposed Phase I facility will be a packaged wastewater treatment plant with suspended growth activated sludge processed in the single-stage nitrification mode. Treatment units will include a manual bar screen and flow splitting weirs, aeration basin, clarifier, chlorine contact basin, and multi-stage aerobic digester. Additional facilities include blowers, a non-potable water system and a vacuum controlled gaseous chlorine system.

II. WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 10 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 2 mg/l (daily average)

   d. DO = 4 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC §217, Design Criteria for Sewerage Systems.

   a. Maximum Aeration Basin Organic Loading ($lb\ BOD_5/day/1{,}000\ ft^3$) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow ($gal/day/ft^2$) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

   g. Minimum Air Required for Digester ($scfm/1{,}000\ ft^3$) = 20

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. PROPOSED PHASE I TREATMENT FACILITIES

1. Flow.

a.	Average (Design)	=	1.0Q	=	100,000 gpd	=	69 gpm
b.	Peak (2 hour)	=	4.0Q	=	400,000 gpd	=	278 gpm

2. Organic Loadings.

BOD_5	=	(0.10 MGD)(8.34)(300 mg/L)	= 251 Lbs BOD_5/day
TSS	=	(0.10 MGD)(8.34)(250 mg/L)	= 209 Lbs TSS/day
NH_3-N	=	(0.10 MGD)(8.34)(45 mg/L)	= 38 Lbs NH_3-N/day

3. Process Equipment.

a. Screening. This phase includes a proposed manual bar screen sized to treat a minimum capacity of 0.8 MGD, the Phase II peak flowrate, to be installed at the head of the aeration basin with flow splitting weirs to split the flow between the two (2) trains in the future.

b. Aeration Basin. The proposed package plant will include a single aeration basin train consisting of one (1) package tank sized at twelve feet (12') wide by fifty-two feet (52') long. Average water depth is assumed at eleven feet six inches (11'-6").

i. Total Required Volume

1. Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)
(0.10 MGD)(8.34)(300 mg/L)/(35 lb BOD_5/1,000 ft^3) = 7,149 ft^3

ii. Proposed Volume
(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

iii. Actual Organic Loading
(251 lb BOD_5/day)/(7,176 ft^3/1,000 ft^3) = 35 lb BOD_5 day/1,000 ft^3

c. Secondary Clarifier. The proposed WWTP will include one (1) 28-foot (28') diameter circular clarifier.

i. Required Surface Area At Peak Flow
(400,000 gpd)/(1,200 gpd/ ft^2) = 333 ft^2

ii. Total Proposed Surface Area
(π/4)(28 ft)^2 = 615 ft^2

iii. Proposed Surface Loading

1. At Design Flow
(100,000 gpd)/(615 ft^2) = 163 gpd/ft^2

2. At Peak Flow
(400,000 gpd)/(615 ft^2) = 650 gpd/ft^2

iv. Total Proposed Clarifier Weir Length
(Includes Launder Allowance)
(π)(28 ft – 2 ft) = 82 ft

v. Proposed Weir Loading at Peak Flow
(400,000 gpd)/(82 ft) = 4,878 gpd/ft

vi. Proposed Clarifier Side Water Depth (to top of grout) = 10 ft

vii. Proposed Hydraulic Detention Time at Peak Flow
(615 ft^2)(10 ft)(7.48 gal/ft^3)/(278 gal/min) = 166 minutes
= 2.76 hours

d. Aerobic Digester. The digester will include a single multi-stage digester consisting of one (1) package tank sized at twelve feet (12') by 52 feet (52') with an assumed eleven foot-eight-inch (11'-8") water depth.

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i. Digester Sizing

1. Solids Production
(251 lb BOD_5 /day)/(1 lb solids/1 lb BOD_5) = 251 lb solids/day

2. Digested Solids Production
(251 lb solid/day)(1-(0.3)(0.7)) = 198 lb solids/day

3. Average Solids in Digester
(251 lb solids/day + 198 lb solids/day)/2 = 225 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(225 lb solids/day)(28 days) = 6,300 lb solids

ii. Required Volume
(6,300 lb solids)(10^6)/(8.34)(15,000 mg/l MLSS in digester)(7.48) = 6,733 ft^3

iii. Proposed Volume
(52 ft)(12 ft)(11.67 ft) = 7,282 ft^3

*28-day SRT utilized instead of 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

e. Chlorine Contact Basin. There will be one (1) chlorine contact basin consisting of a steel tank that is twelve feet (12') wide by thirty-six feet (36') in length and has a 6.57-foot (6.57') water depth.

i. Required Volume at Peak Flow
(278 gpm)(20 min)/(7.48) = 743 ft^3

ii. Total Proposed Volume
(12 ft)(36 ft)(6.57 ft) = 2,838 ft^3

iii. Actual Detention Time at Peak Flow
(2,838 ft^3)(7.48)/(278 gpm) = 76 minutes

f. Air Requirements.

1. Air Required for Treatment

$$\frac{(1.2)(300\ mg/l\ BOD_5) + (4.3)(45\ mg/l\ NH_3\text{-}N)}{(300\ mg/l\ BOD_5)} = 1.85\ lb\ O_2/\ lb\ BOD_5*$$

*TCEQ Chapter 217.155(a)(3) requires using a minimum of 2.2 lb O_2/lb BOD_5 if the system is intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(300\ mg/l\ BOD_5)(8.34)(0.10\ MGD)(2.2\ lb\ O_2/\ lb\ BOD_5)(1.42)**}{(0.051*)(0.23)(0.075)(1440)} = 617\ scfm$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble (0.65%/ft. x 12 ft of submergence x 0.65)
** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

i. Aerobic Digester
(7,282 ft^3)(20 scfm/1,000 ft^3) = 146 scfm

ii. Chlorine Contact Basin
(2,838 ft^3)(20 scfm/1,000 ft^3) = 57 scfm

iii. Return Sludge Air Lifts
(2)(50 scfm) = 100 scfm

iv. Total Air Requirements (Coarse Bubble) = 920 scfm

g. Blower Capacities. Capacity calculated at 5.6 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet conditions.

i. Proposed Blower Capacity (Coarse Bubble)
(2)(975 scfm) = 1,950 scfm

ii. Firm Blower Capacity with Largest Unit out of Service
(1)(975 scfm) = 975 scfm

Two (2) proposed centrifugal blowers will be installed.

h. Chlorination Equipment.

i. Dosage Capacity

1. Chlorine Dosage Rate = 8 mg/L

2. Chlorine Feed Rate at Average Daily Flow
(0.10 MGD)(8.34)(8 mg/l) = 7 lbs/day

3. Required Chlorine Feed Rate at Peak Flow
(0.40 MGD)(8.34)(8 mg/l) = 27 lbs/day

ii. Proposed Chlorine Dosage Capacity
(1 - 150-lb cylinder)(65°F)(1 lb $C1_2$/°F/day) = 65 lbs/day

One (1) 150-lb cylinder will be required for treatment. An additional cylinder will be kept on site at all times to comply with 30 TAC §217 requirements.

PHASE II – 0.2 MGD

I. SCOPE

The proposed Phase II facility will be a packaged wastewater treatment plant with suspended growth activated sludge processed in the single stage nitrification mode. Treatment units will include a manual bar screen and flow splitting weirs, aeration basins, clarifiers, chlorine contact basin and multi-stage aerobic digesters. Additional facilities include blowers, a non-potable water system and a vacuum controlled chlorine system.

II. WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 10 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 2 mg/l (daily average)

   d. DO = 4 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC §217, Design Criteria for Sewerage Systems.

   a. Maximum Aeration Basin Organic Loading ($lb\ BOD_5/day/1{,}000\ ft^3$) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow ($gal/day/ft^2$) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

   g. Minimum Air Required for Digester ($scfm/1{,}000\ ft^3$) = 20

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. TREATMENT FACILITIES

1. Flow.

a.	Average (Design)	=	1.0Q	=	200,000 gpd	=	139 gpm
b.	Peak (2 hour)	=	4.0Q	=	800,000 gpd	=	555 gpm

2. Organic Loadings.

BOD_5	=	(0.20 MGD)(8.34)(300 mg/L)	= 500 lbs BOD_5/day
TSS	=	(0.20 MGD)(8.34)(250 mg/L)	= 417 lbs TSS/day
NH_3-N	=	(0.20 MGD)(8.34)(45 mg/L)	= 75 lbs NH_3-N/day

3. Process Equipment.

a. Screening. This phase includes modifications to the flow splitting and screening structure with a manual bar screen sized to meet a minimum capacity of the Phase II peak flow, 0.80 MGD that was installed in Phase I.

b. Aeration Basin. The proposed plant includes one (1) existing and one (1) proposed aeration basins sized at twelve feet (12') wide by fifty-two (52') long. Average water depth is assumed at eleven feet six inches (11'-6").

i. Total Required Volume

1. Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)
(0.20 MGD)(8.34)(300 mg/L)/(35 lb BOD_5/1,000 ft^3) = 14,297 ft^3

ii. Existing Volume
(12ft)(52 ft)(11.5 ft) = 7,176 ft^3

iii. Proposed Volume
(12ft)(52 ft)(11.5 ft) = 7,176 ft^3

iv. Total Volume
(2)(12ft)(52 ft)(11.5 ft) = 14,352 ft^3

v. Actual Organic Loading
(500 lb BOD_5/day)/(14,352 ft^3/1,000 ft^3) = 34.8 lb BOD_5 day/1,000 ft^3

c. Secondary Clarifier. The plant will include one (1) existing 28-foot (28') and one (1) proposed 28-foot (28') diameter clarifier.

i. Total Required Surface Area

1. At Peak Flow
(800,000 gpd)/(1,200 gpd/ ft^2) = 667 ft^2

ii. Existing Surface Area
(π/4)(28 ft)^2 = 616 ft^2

iii. Proposed Surface Area
(π/4)(28 ft)^2 = 616 ft^2

iv. Total Surface Area
(2)(π/4)(28ft)^2 = 1,232 ft^2

v. Proposed Surface Loading

1. At Design Flow
(200,000 gpd)/(1,232 ft^2) = 162 gpd/ft^2

2. At Peak Flow
(800,000 gpd)/(1,232 ft^2) = 649 gpd/ft^2

vi. Existing Clarifier Weir Length
(Includes Launder Allowance)
(π)(28 ft – 2 ft) = 82 ft

vii. Proposed Clarifier Weir Length
(Includes Launder Allowance)
(π)(28 ft – 2 ft) = 82 ft

viii. Total Clarifier Weir Length
(Includes Launder Allowance)
(π)(28 ft – 2 ft)+(π)(28 ft – 2 ft) = 164 ft

ix. Existing Weir Loading at Peak Flow
(400,000 gpd)/(82 ft) = 4,878 gpd/ft

x. Proposed Weir Loading at Peak Flow
(400,000 gpd)/(82 ft) = 4,878 gpd/ft

xi. Total Weir Loading at Peak Flow
(800,000 gpd)/(164 ft) = 4,878 gpd/ft

xii. Proposed Clarifier Side Water Depth (to top of grout) = 10 ft

xiii. Existing Hydraulic Detention Time at Peak Flow
$(616\ ft^2)(10\ ft)(7.48\ gal/ft^3)/(278\ gal/min)$ = 166 minutes
= 2.76 hours

xiv. Proposed Hydraulic Detention Time at Peak Flow
$(616\ ft^2)(10\ ft)(7.48\ gal/ft^3)/(278\ gal/min)$ = 166 minutes
= 2.76 hours

xv. Total Hydraulic Detention Time at Peak Flow
$(1{,}232\ ft^2)(10\ ft)(7.48\ gal/ft^3)/(555\ gal/min)$ = 166 minutes
= 2.76 hours

d. Aerobic Digester. The proposed plant includes one (1) existing and one (1) proposed digester basins that will be multi-stage digesters. The proposed units will be twelve feet (12') by fifty-two feet (52') with a maximum side water depth of eleven feet eight-inches (11'-8").

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i Digester Sizing

1. Solids Production
$(500\ lb\ BOD_5\ /day)/(1\ lb\ solids/1\ lb\ BOD_5)$ = 500 lb solids/day

2. Digested Solids Production
$(500\ lb\ solid/day)(1-(0.3)(0.7))$ = 395 lb solids/day

3. Average Solids in Digester
(500 lb solids/day + 395 lb solids/day)/2 = 448 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(448 lb solids/day)(28 days) = 12,544 lb solids

ii. Required Total Volume
$(12{,}544\ lb\ solids)(10^6)/(8.34)(15{,}000\ mg/l$ MLSS in digester)(7.48) = $13{,}401\ ft^3$

iii. Existing Volume
(1)(52 ft)(12 ft)(11.67 ft) = $7{,}282\ ft^3$

iv. Proposed Volume
(1)(52 ft)(12 ft)(11.67 ft) = $7{,}282\ ft^3$

v. Total Volume
(2)(52 ft)(12 ft)(11.67 ft) = $14{,}564\ ft^3$

*28-day SRT utilized instead of 40-day SRT for use of a two-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge".

e. Chlorine Contact Basin. The chlorine contact basin installed in Phase I includes all required capacity of Phase I and II. No new chlorine contact basin capacity will be installed in Phase II.

g. Air Requirements.

i. Proposed Aeration Basins *(Selection of aeration technology will be determined as part of the detailed design. However, the larger value will control for planning purposes)*

1. Air Required for Treatment

$$\frac{(1.2)(300 \text{ mg/l } BOD_5) + (4.3)(45 \text{ mg/l } NH_3\text{-}N)}{(300 \text{ mg/l } BOD_5)} = 1.85 \text{ lb } O_2\text{/ lb } BOD_5*$$

*TCEQ Chapter 217.155(a)(3) requires using a minimum of 2.2 lb O2/lb BOD5 if the system is intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(300 \text{ mg/l } BOD_5)(8.34)(0.20 \text{ MGD})(2.2 \text{ lb } O_2\text{/ lb } BOD_5)(1.42)**}{(0.051*)(0.23)(0.075)(1440)} = 1{,}234 \text{ scfm}$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble (0.65%/ft. x 12 ft of submergence x 0.65)
** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

i. Aerobic Digester
$(14{,}564 \text{ ft}^3)(20 \text{ scfm}/1000 \text{ ft}^3)$ = 291 scfm

ii. Chlorine Contact Basin
$(2{,}838 \text{ ft}^3)(20 \text{ scfm}/1000 \text{ ft}^3)$ = 57 scfm

iii. Miscellaneous Air Lifts
(3)(50 scfm) = 150 scfm

iv. Total Air Requirements (Coarse Bubble) = 1,732 scfm

h. Blower Capacities. Capacity calculated at 5.5 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet conditions.

i. Existing Blower Capacity
(2)(975 scfm) = 1,950 scfm

ii. Proposed Blower Capacity
(1)(975 scfm) = 975 scfm

iii. Total Blower Capacity
(3)(975 scfm) = 2,925 scfm

iv. Firm Blower Capacity with Largest Unit out of Service
(2)(975 scfm) = 1,950 scfm

One (1) proposed centrifugal blowers will be installed in Phase II.

i. Chlorination Equipment.

i. Dosage Capacity

1. Chlorine Dosage Rate = 8 mg/l

2. Chlorine Feed Rate at Average Daily Flow
(0.2 MGD)(8.34)(8 mg/l) = 13 lbs/day

3. Required Chlorine Feed Rate at Peak Flow
(0.8 MGD)(8.34)(8 mg/l) = 53 lbs/day

ii. Proposed Chlorine Dosage Capacity
(2 – 150 Lb cylinder)(65°F)(1 lb $C1_2$/°F/day) = 130 lbs/day

Two (2) 150 lb cylinder will be required for treatment. An additional cylinder will be kept on site at all times to comply with 30 TAC §217 requirements.

PHASE III – 0.60 MGD

I. SCOPE

The proposed 0.60 MGD Phase facility will be a packaged wastewater treatment plant with suspended growth activated sludge processed in the single stage nitrification mode. Treatment units will include an elevated steel headworks with a manual bar screen bypass channel, and flow splitting weirs, existing 0.2 MGD package plant trains, four (4) proposed aeration basins, two (2) proposed clarifiers, proposed chlorine contact basin, and four (4) proposed multi-stage digesters. Additional facilities include blowers, non-potable water system, gaseous chlorination and dichlorination system.

II. WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 7 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 2 mg/l (daily average)

   d. DO = 6 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC §217, Design Criteria for Sewerage Systems.

   a. Maximum Aeration Basin Organic Loading ($lb\ BOD_5/day/1{,}000\ ft^3$) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow ($gal/day/ft^2$) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

   g. Minimum Air Required for Digester ($scfm/1{,}000\ ft^3$) = 30

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. TREATMENT FACILITIES

1. Flow.

a.	Average (Design)	=	1.0Q	=	600,000 gpd	=	417 gpm
b.	Peak (2 hour)	=	4.0Q	=	2,400,000 gpd	=	1,667 gpm

2. Organic Loadings.

BOD_5	=	(0.60 MGD)(8.34)(300 mg/L)	= 1,501 lbs BOD_5/day
TSS	=	(0.60 MGD)(8.34)(250 mg/L)	= 1,251 lbs TSS/day
NH_3-N	=	(0.60 MGD)(8.34)(45 mg/L)	= 225 lbs NH_3-N/day

3. Process Equipment.

a. Screening. This phase includes the construction of an elevated steel headworks with a manual bar screen channel, bypass channel, and flow splitting weirs sized to meet the peak flow rate capacity of 2.4 MGD.

b. Aeration Basin. The proposed phase will include four (4) proposed aeration basins sized at twelve feet (12') wide by fifty-two feet (52') long. Average water depth is assumed at eleven-feet six-inches (11'-6").

i. Total Required Volume

1. Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)
(0.60 MGD)(8.34)(300 mg/L)/(35 lb BOD_5/1,000 ft^3) = 42,891 ft^3

ii. Existing Volume
(2)(12 ft)(52 ft)(11.5 ft) = 14,352 ft^3

iii. Proposed Volume
(4)(12 ft)(52 ft)(11.5 ft) = 28,704 ft^3

iv. Total Volume
(6)(12 ft)(52 ft)(11.5 ft) = 43,056 ft^3

v. Actual Organic Loading
(1,501 lb BOD_5/day)/(43,056 ft^3/1,000 ft^3) = 34.9 lb BOD_5 day/1,000 ft^3

c. Secondary Clarifier. The plant will include two (2) twenty-eight-foot (28') diameter clarifiers.

i. Total Required Surface Area

1. At Peak Flow
(2,400,000 gpd)/(1,200 gpd/ ft^2) = 2,000 ft^2

ii. Existing Surface Area
$2(\pi/4)(28\ ft)^2$ = 1,232 ft^2

iii. Proposed Surface Area
$2(\pi/4)(28\ ft)^2$ = 1,232 ft^2

iv. Total Surface Area
$4(\pi/4)(28\ ft)^2$ = 2,464 ft^2

v. Proposed Surface Loading

1. At Design Flow
(600,000 gpd)/(2,464 ft^2) = 244 gpd/ft^2

2. At Peak Flow
(2,400,000 gpd)/(2,464 ft^2) = 974 gpd/ft^2

vi. Existing Clarifier Weir Length
(Includes Launder Allowance)
$2(\pi)(28\ ft - 2\ ft)$ = 164 ft

vii. Proposed Clarifier Weir Length
(Includes Launder Allowance)
$2(\pi)(28\ ft - 2\ ft)$ = 164 ft

viii. Total Clarifier Weir Length
(Includes Launder Allowance)
$4(\pi)(28\ ft - 2\ ft)$ = 328 ft

ix. Existing Weir Loading at Peak Flow
(2,400,000 gpd)/(164 ft) = 14,634 gpd/ft

x. Proposed Weir Loading at Peak Flow
(2,400,000 gpd)/(164 ft) = 14,634 gpd/ft

xi. Total Weir Loading at Peak Flow
(2,400,000 gpd)/(328 ft) = 7,317 gpd/ft

xii. Proposed Clarifier Side Water Depth (to top of grout) = 10 ft

xiii. Existing Hydraulic Detention Time at Peak Flow
$(1{,}232\ ft^3)(10\ ft)(7.48\ gal/ft^3)/((834\ gpm)$ = 110.5 minutes
= 1.8 hours

xiv. Proposed Hydraulic Detention Time at Peak Flow
$(1{,}232\ ft^3)(10\ ft)(7.48\ gal/ft^3)/((834\ gpm)$ = 110.5 minutes
= 1.8 hours

xv. Total Hydraulic Detention Time at Peak Flow
$(2{,}464\ ft^3)(10\ ft)(7.48\ gal/ft^3)/((1{,}667\ gpm)$ = 110.5 minutes
= 1.8 hours

d. Aerobic Digester. The proposed phase will include four (4) proposed multi-stage digesters sized at twelve feet (12') wide by fifty-two feet (52') long with a maximum side water depth of eleven feet eight inches (11'-8").

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i Digester Sizing

1. Solids Production
$(1{,}501\ lb\ BOD_5\ /day)/(1\ lb\ solids/1\ lb\ BOD_5)$ = 1,501 lb solids/day

2. Digested Solids Production
$(1{,}501\ lb\ solid/day)(1-(0.3)(0.7))$ = 1,186 lb solids/day

3. Average Solids in Digester
(1,501 lb solids/day + 1,186 lb solids/day)/2 = 1,344 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(1,344 lb solids/day)(28 days) = 37,632 lb solids

ii. Required Volume
$(37{,}632\ lb\ solids)(10^6)/(8.34)(15{,}000\ mg/l$ MLSS in digester)(7.48) = 40,216 ft^3

iii. Existing Volume
(2)(12 ft)(52 ft)(11.67 ft) = 14,564 ft^3

iv. Proposed Volume
(4)(12 ft)(52ft)(11.67 ft) = 29,128 ft^3

v. Total Volume
(6)(12 ft)(52 ft)(11.67 ft) = 43,692 ft^3

*28-day SRT utilized instead of 40-day SRT for use of a two stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge".

e. Chlorine Contact Basin.

i. Required Volume at Peak Flow
(1,667 gpm)(20 min)/(7.48) = 4,457 ft^3

ii. Existing Volume
(12 ft)(36 ft)(6.67 ft) = 2,838 ft^3

iii. Proposed Volume
(12 ft)(36 ft)(6.67 ft) = 2,828 ft^3

iv. Total Volume
(12 ft)(36 ft)(6.67 ft) = 5,676 ft^3

iii. Actual Detention Time at Peak Flow
(5,676 ft^3)(7.48)/(1,667 gpm) = 25.5 minutes

g. Air Requirements.

i. Proposed Aeration Basin *(Selection of aeration technology will be determined as part of the detailed design. However, the larger value will control for planning purposes)*

1. Air Required for Treatment

$$\frac{(1.2)(300\ mg/l\ BOD_5) + (4.3)(45\ mg/l\ NH_3\text{-}N)}{(300\ mg/l\ BOD_5)} = 1.85\ lb\ O_2/\ lb\ BOD_5*$$

*TCEQ Chapter 217.155(a)(3) requires using a minimum of 2.2 lb O2/lb BOD5 if the system is intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(300\ mg/l\ BOD_5)(8.34)(0.60\ MGD)(2.20\ lb\ O_2/\ lb\ BOD_5)(1.42)**}{(0.051*)(0.23)(0.075)(1440)} = 3,702\ scfm$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble (0.65%/ft. x 12 ft of submergence x 0.65)
** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

ii. Aerobic Digester
(43,692 ft^3)(20 scfm/1000 ft^3) = 874 scfm

iii. Chlorine Contact Basin
(5,676 ft^3)(20 scfm/1000 ft^3) = 114 scfm

iv. Miscellaneous Air Lifts
(6)(50 scfm) = 300 scfm

v. Total Air Requirements (Coarse Bubble) = 4,990 scfm

h. Blower Capacities. Capacity calculated at 7.5 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet conditions.

i. Existing Blower Capacity
(3)(975 scfm) = 2,952 scfm

ii. Proposed Blower Capacity
(4)(975 scfm) = 3,900 scfm

iii. Total Blower Capacity
(7)(975 scfm) = 6,825 scfm

iv. Firm Blower Capacity with Largest Unit out of Service
(6)(975 scfm) = 5,850 scfm

Four (4) proposed centrifugal blowers will be installed in Phase III

i. Chlorination Equipment.

i. Dosage Capacity

1. Chlorine Dosage Rate = 8 mg/l

2. Chlorine Feed Rate at Average Daily Flow
(0.60 MGD)(8.34)(8 mg/l) = 40 lbs/day

3. Required Chlorine Feed Rate at Peak Flow
(2.4 MGD)(8.34)(8 mg/l) = 160 lbs/day

iii. Proposed Chlorine Dosage Capacity
(3 – 150 Lb cylinder)(65°F)(1 lb $C1_2$/°F/day) = 195 lbs/day

Three (3) 150 lb cylinders will be required for treatment. An additional cylinder will be kept on site at all times to comply with 30 TAC §217 requirements.

j. Dechlorination Contact Chamber. The proposed phase will include one (1) dechlorination contact chamber, sized at twelve feet (12') long by four feet (4') wide. The side water depth at peak flow is assumed at two feet (2').

i. Required Volume at Peak Flow
(1,667 gpm)(0.33 min)/(7.48) = 74 ft^3

ii. Total Volume
(12 ft)(4 ft)(2 ft) = 96 ft^3

iii. Actual Detention Time at Peak Flow

(96 ft^3)(7.48)/(1,667 gpm)	=	0.43 min
	=	26 sec

k. Dechlorination Equipment. The proposed dichlorination equipment will treat the effluent from all trains in the proposed dechlorination chamber using a sulfur dioxide gas system.

i. Dosage Capacity

1. Anticipated Chlorine Residual	=	2 mg/l
2. Sulfur Dioxide Dosage Rate (2 mg/l Cl_2)(1 part SO_2/part CL_2)	=	2 mg/l
3. Sulfur Dioxide Feed Rate at Average Daily Flow (0.6 MGD)(8.34)(2 mg/l)	=	10.0 lbs/day
4. Required Sulfur Dioxide Feed Rate at Peak Flow (2.4 MGD)(8.34)(2 mg/l)	=	40.0 lbs/day

ii. Proposed Sulfur Dioxide Dosage Capacity

(2 – 150-lb cylinder)(65°F-30°F)(0.75 lb SO_2/°F/day)	=	52.5 lbs/day

Two (2) 150-lb cylinders will be required for treatment. Two spare cylinders will be kept on site at all times to comply with 30 TAC §217 requirements.

ATTACHMENT G

SEWAGE SLUDGE MANAGEMENT PLAN

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

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Austin, Texas 78741
Tel: 512.441.9493
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SLUDGE MANAGEMENT PLAN
HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
TPDES PERMIT RENEWAL

INTRODUCTION

This sludge management and disposal plan is being submitted as an attachment to the TPDES permit application for Harris County Municipal Utility District No. 441. The Harris County MUD No. 441 Wastewater Treatment Plant will be a 0.10 million gallons per day (MGD) single stage nitrification activated sludge plant, with proposed future phases of 0.20 MGD and 0.60 MGD.

DIMENSIONS AND CAPACITIES

Excess solids generated from the activated plant will be wasted to an aerobic digester for further treatment. The digester will have a volume of 7,282 ft^3 in the Interim I phase. The Interim II and Final phases will have digester volumes of 14,564 ft^3 and 43,692 ft^3, respectively. The dewatered stabilized sludge will then be hauled away to a TCEQ permitted land application site for disposal by a licensed sludge hauler.

SOLIDS GENERATION

Solids to be wasted from the activated sludge process are based on 1.0 pounds of TSS produced per pound of BOD applied. The design influent BOD concentration for all plant phases is 300 mg/l. Following is the amount of solids generated by the wastewater treatment plant at design flow and at 75 percent, 50 percent and 25 percent of design flow:

Interim I Phase – 0.10 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.03	63
50	0.05	125
75	0.08	188
100	0.10	250

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Interim II Phase – 0.20 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.05	125
50	0.10	250
75	0.15	375
100	0.20	500

Final Phase – 0.60 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.15	375
50	0.30	751
75	0.46	1126
100	0.60	1501

OPERATING PARAMETERS

The single stage nitrification activated sludge process works best between mixed liquor suspended solids (MLSS) concentrations of 2,000 – 6,000 mg/l. The operator will determine the mixed liquor concentration that produces the highest quality effluent taking into consideration factors such as hydraulic and organic loading, available air capacity, and solids handling. Field testing and laboratory analysis will be done to monitor the MLSS and maintain the appropriate solids concentration.

SOLIDS REMOVAL PROCEDURE

Laboratory analysis and field testing will be conducted to determine the solids concentration in the aeration basin. To maintain an appropriate solids inventory, the amount of solids to be wasted per day is equal to the amount of solids generated per day. This amount is stated in the SOLIDS GENERATION section of this plan. Excess solids will then be wasted from the bottom of the clarifier directly to the aerobic digester to maintain the appropriate solids concentration in the aeration basin.

SOLIDS REMOVAL SCHEDULE

It is assumed that 70% of the solids wasted to the digester are volatile solids and the volatile solids reduction is 30%. For every pound of solids wasted to the digester, 0.79 pounds of solids will need to be disposed of by land application. In addition, it is assumed that the solids can be thickened to 15,000 mg/l in the digester.

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At this concentration, a 7,282 ft^3 digester will hold 6,814 pounds of solids in the Interim I phase. In the Interim II phase, a 14,564 ft^3 digester will hold 13,628 pounds of solids. In the Final phase, a 43,652 ft^3 digester will hold 40,885 pounds of solids. The capacity of the digester divided by the pounds per day of solids to be disposed of will give the sludge hauling schedule.

Interim I Phase – 0.10 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	49	138
50	99	69
75	148	46
100	198	34

Interim II Phase – 0.20 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	99	138
50	198	69
75	296	46
100	395	34

Final Phase – 0.60 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	296	138
50	593	69
75	889	46
100	1186	34

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ULTIMATE SLUDGE DISPOSAL

Sludge will be liquid hauled from the plant by a TCEQ registered sludge transporter to a TCEQ permitted land application site or another wastewater treatment plant.

A manifest will be issued with each load of sludge that is hauled from the plant. The following information will be on the manifest to document ultimate disposal of the sludge:

1. Date of sludge hauling
2. Generator Name
3. Generator's address
4. Volume of sludge hauled
5. Name of transporter
6. TCEQ transporter registration number
7. Driver's name
8. Name of disposal site
9. TCEQ Site permit number
10. Date of disposal
11. Volume of sludge disposed

This information, along with laboratory and field data will be used to determine the amount of solids disposed of in dry weight form.

ATTACHMENT H

CORE DATA FORM

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

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TCEQ Use Only

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 **Permit Transfer**

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 604639435		**RN 110763885**

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)

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).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Harris County Municipal Utility District No. 441

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☒ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ **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
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

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)*
	ksherborne@abhr.com

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(713) 860-6467		( ) -

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

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).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Harris County MUD No. 441 Wastewater Treatment Plant

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County	Harris							

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

25. Description to Physical Location:	The facility will be located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road in Harris County, Texas				
26. Nearest City			**State**	**Nearest ZIP Code**	
Rose Hill			TX	77377	

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).

27. Latitude (N) In Decimal:	30.045526		**28. Longitude (W) In Decimal:**	-95.737612	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Treatment of domestic wastewater

34. Mailing Address:	**406 W Grand Parkway S**							
	Suite 260							
	City	**Katy**	**State**	**TX**	**ZIP**		**ZIP + 4**	

35. E-Mail Address:	**cchapline@mdswater.com**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(281) 290-3141		( ) -

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:
	WQ15795001			

SECTION IV: Preparer Information

40. Name:	Steve Barry, P.E.	41. Title:	Project Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(281) 363-4039		( ) -	sbarry@quiddity.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:	Harris County MUD No. 441	Job Title:	President	
Name *(In Print)*:	Edmund LeBlanc		Phone:	(713) 860- 6467
Signature:			Date:	OCT 22nd 2024

ATTACHMENT I

JUSTIFICATION FOR PLANT CONSTRUCTION

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
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JUSTIFICATION FOR PLANT CONSTRUCTION
HARRIS COUNTY MUD NO. 441
WASTEWATER TREATMENT PLANT

The Harris County Municipal Utility District (MUD) No. 441 Wastewater Treatment Plant will serve a 624 acre residential subdivision located approximately 6 miles northwest of Cypress, Texas in Harris County, Texas. The treatment plant will serve the future Harris County MUD No. 441

At build out, the Harris County MUD No. 441 WWTP will serve 2,000 single family connections. The wastewater treatment plant flows are based on wastewater flows of 300 gallons per day (gpd) for single family connections.

Following is the flow and connection projection for the WTP:

	Single Family Residential	
Month / yr	**Connections**	**Flow (gpd)**
November-2025	13	3,900
December-2025	26	7,800
January-2026	39	11,700
January-2027	195	58,500
January-2028	351	105,300
January-2029	507	152,100
January-2030	663	198,900
January-2038	1,911	573,300
August-2038	2,000	600,000

The initial phase of the Harris County MUD No. 441 WWTP currently has a capacity of 0.10 MGD. Construction of the 0.20 MGD plant phase will begin in time for the plant to go online before the capacity of the initial plant phase reaches 90%. Ten months will be allowed for construction of the 0.20 MGD plant. Construction of the 0.60 MGD permanent plant will begin in time for the plant to go online before the capacity of the interim plant phase of 0.20 MGD reaches 90%. Eighteen months will be allowed for construction of the 0.60 MGD plant.

Following is the projected construction schedule for all three (3) plant phases:

	Existing Phase	**Interim II Phase**	**Final Phase**
Design Flow (MGD)	0.10	0.20	0.60
2-Hr Peak Flow (MGD)	0.40	0.80	2.40
Date construction to commence	1/2025	11/2026	01/2030
Date discharge to commence	11/2025	09/2027	07/2031

ATTACHMENT J

RESTRICTIVE EASEMENTS

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441
WASTEWATER TREATMENT PLANT

NOVEMBER 2024

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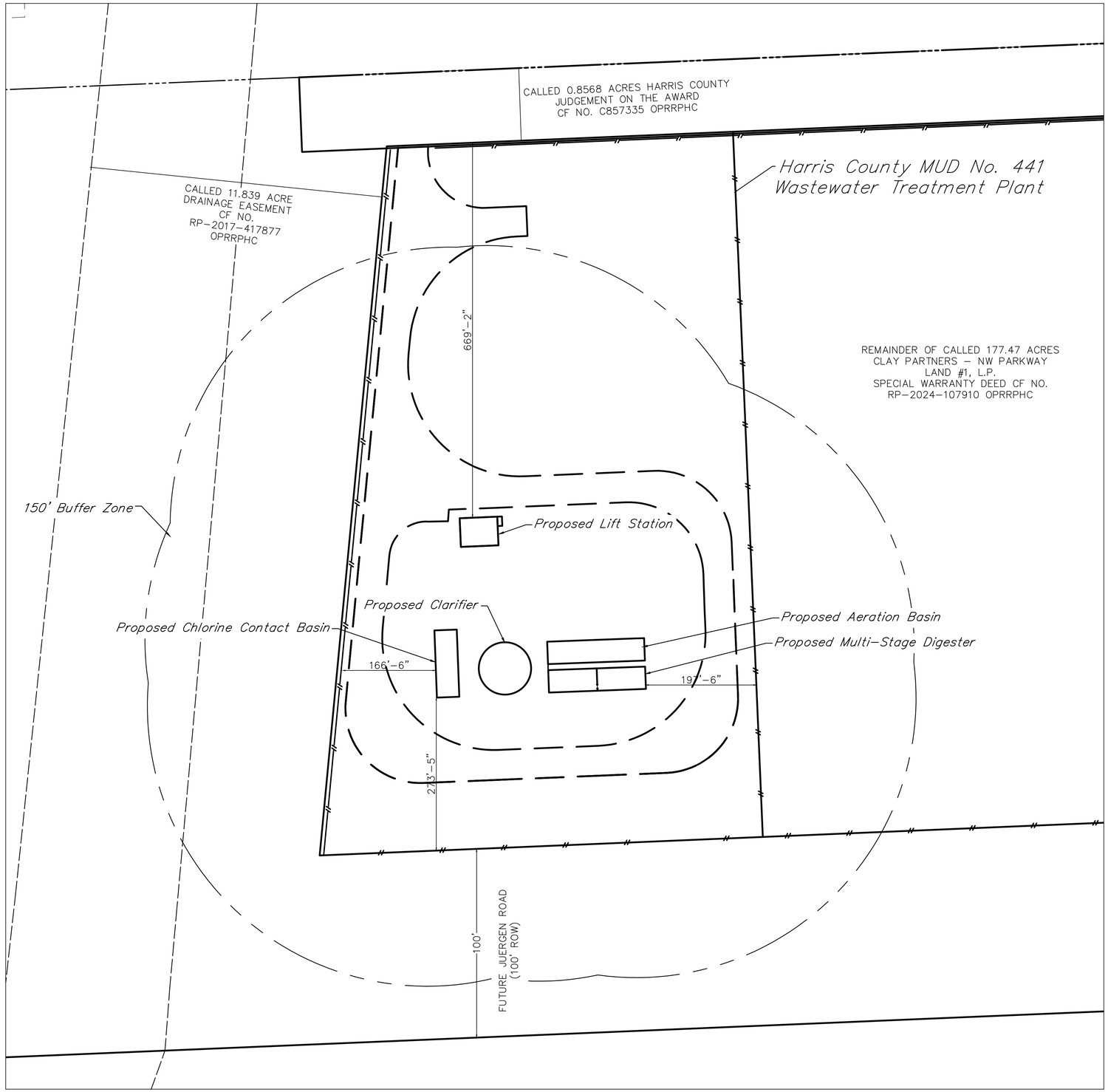

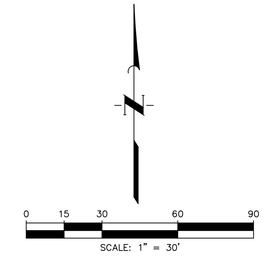

PHASE I - 0.10 MGD

ATTACHMENT K

Buffer Zone Exhibit
HARRIS COUNTY
MUD No. 441
Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

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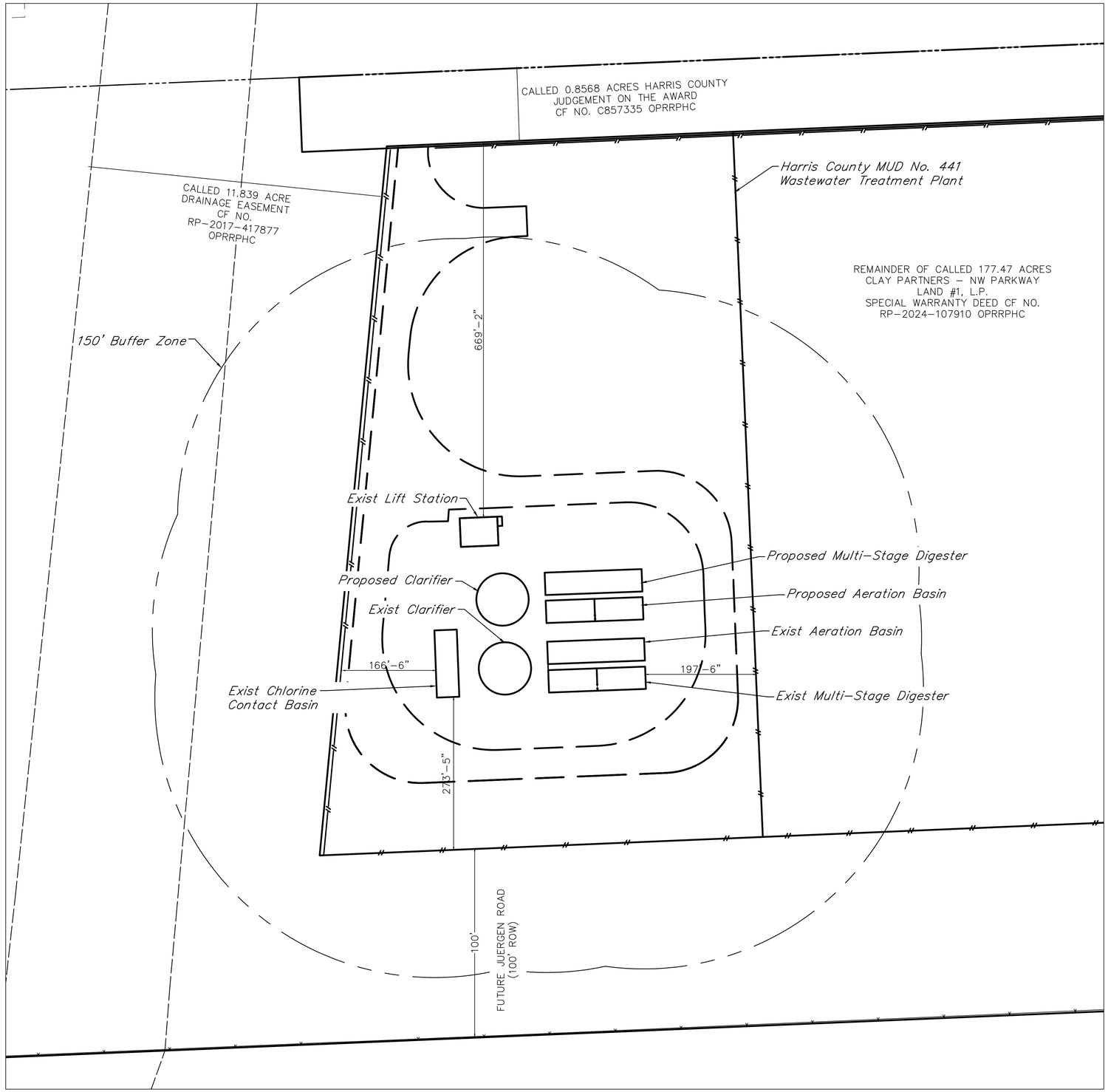

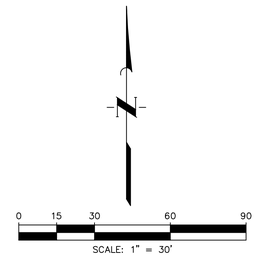

PHASE II - 0.20 MGD

ATTACHMENT K

Buffer Zone Exhibit

HARRIS COUNTY

MUD No. 441

Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

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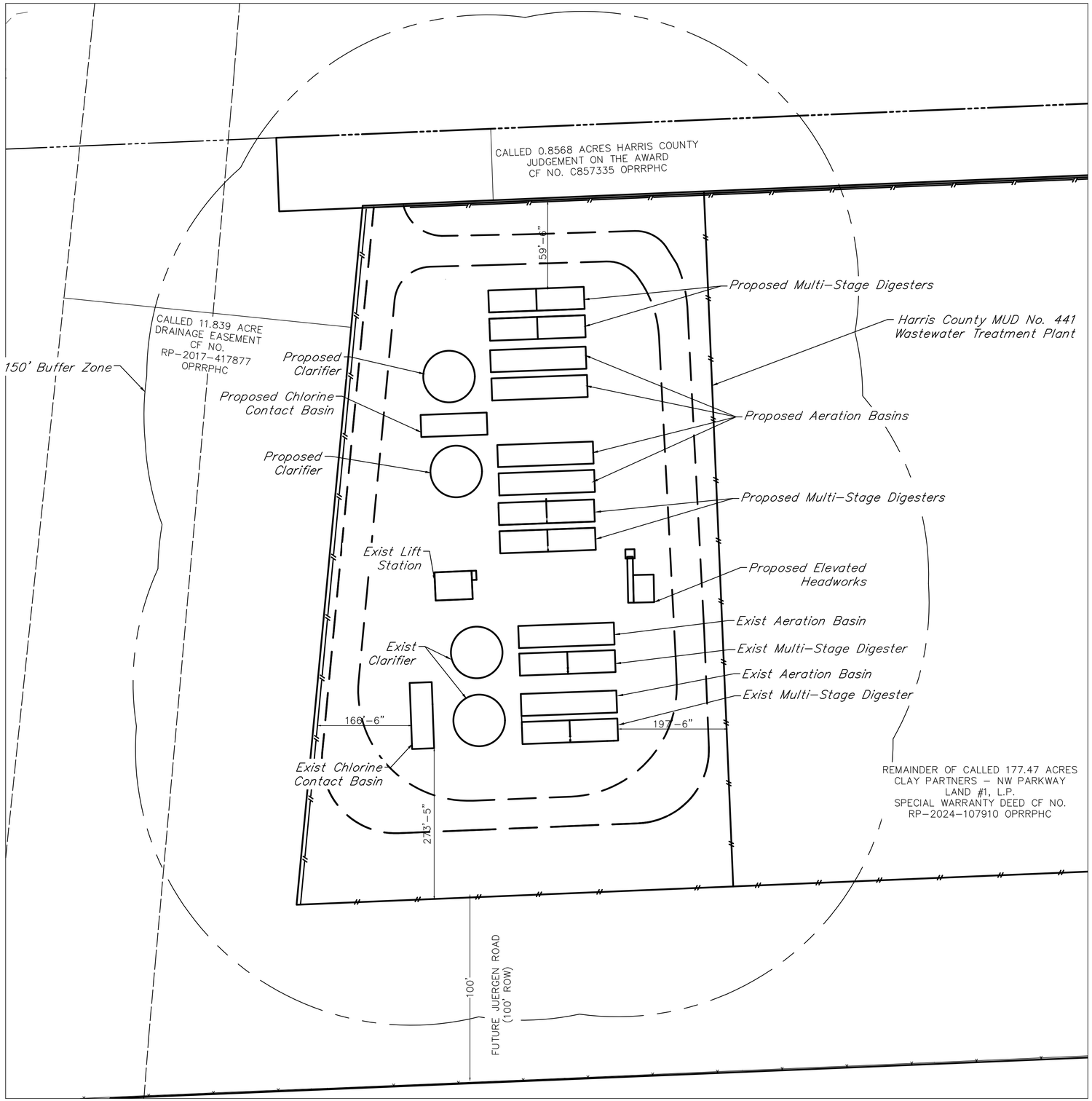

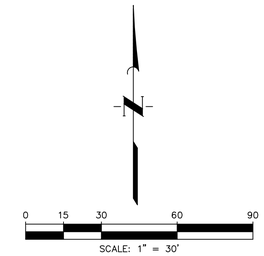

PHASE III - 0.60 MGD

ATTACHMENT K

Buffer Zone Exhibit

HARRIS COUNTY

MUD No. 441

Wastewater Treatment Plant

HARRIS COUNTY, TEXAS

November 2024

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RP-2024-328848
09/06/2024 ER $65.00

BUFFER ZONE EASEMENT
(1.482 Acres)

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

THE STATE OF TEXAS §
§ KNOW ALL BY THESE PRESENTS:
COUNTY OF HARRIS §

THAT **CLAY PARTNERS - NW PARKWAY LAND #1, L.P.**, a Texas limited partnership ("Grantor"), for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, has GRANTED, SOLD, AND CONVEYED and by these presents, does GRANT, SELL, AND CONVEY unto **HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441**, a political subdivision of the State of Texas, its successors and assigns ("Grantee"), a permanent and perpetual, non-exclusive easement and right-of-way (the "Easement") across, along, under, over, upon, and through that certain tract of land located in Harris County, Texas, containing 1.482 acres, as more particularly described in **Exhibit A** and shown on **Exhibit B**, both attached hereto and incorporated herein for all purposes (the "Easement Tract"), for the purpose of establishing a buffer zone therein in connection with the construction, installation, expansion, maintenance, repair, relocation, replacement, removal, modification, and operation of a wastewater treatment plant, including all related connections and appurtenances thereto, on the Site (defined below) located adjacent to the Easement Tract. Grantor does hereby declare that the Easement Tract is bound by the restrictions and covenants set forth herein and agrees that all subsequent purchasers and owners of the Easement Tract shall comply with same.

Grantee intends to establish a buffer zone for the existing wastewater treatment plant located on a site (the "Site") situated adjacent to the Easement Tract. The rules of the Texas Commission on Environmental Quality (the "TCEQ") require the existence of a buffer zone between the wastewater treatment plant and the nearest residential property. The Easement, including all related rights and privileges granted herein by Grantor to Grantee, shall be for the benefit of the wastewater treatment plant, as well as the Site upon which the wastewater treatment plant is situated, and Grantor (and, as a covenant running with the Easement Tract, any successor in title to Grantor with respect to all or part of the Easement Tract) shall be prohibited from utilizing any portion of the Easement Tract for residential uses or purposes of any kind. Grantee agrees to consider any future requests by Grantor to modify the location, size, or

boundaries of the Easement Tract and shall not unreasonably deny any such request for modification, so long as the Easement Tract, as proposed to be modified, will continue to (i) satisfy all purposes for which Grantee requires the Easement, and (ii) allow Grantee to operate its wastewater treatment plant upon the Site in a manner that complies with all rules and requirements of the TCEQ or its successor, and those of any other governmental agency with jurisdiction. The Easement shall automatically terminate if, following commencement of operation of the wastewater treatment plant, Grantee permanently ceases to use the Site for wastewater treatment purposes. In such event, upon Grantor's request, Grantee agrees to execute an abandonment of this Easement and deliver same to Grantor.

Grantor reserves all oil, gas, and other minerals in, on, or under the Easement Tract, but waives all right to use the surface of the Easement Tract for, and all rights of ingress and egress for, the purpose of exploring, developing, mining, or drilling for the same; provided, however, that nothing herein shall prohibit or in any manner restrict the right of Grantor to extract oil, gas, or other minerals from and under the Easement Tract by directional drilling or other means that does not interfere with or disturb the surface of the Easement Tract or Grantee's use of the Easement Tract for the purposes set forth herein.

This conveyance is further made subject to any and all restrictions, covenants, easements, rights-of-way, encumbrances, and mineral or royalty reservations or interests affecting the Easement Tract and appearing of record in the Official Public Records of Real Property of Harris County, Texas, to the extent the same are in effect and validly enforceable against the Easement Tract (the "Permitted Encumbrances"); provided, however, to the extent that Grantor has the ability to enforce any of the Permitted Encumbrances, Grantor will not do so in a manner that would unreasonably prejudice or interfere with Grantee's exercise of its rights in the Easement and use of the Easement Tract for the purposes set forth herein.

TO HAVE AND TO HOLD the Easement, together with, all and singular, the rights and appurtenances thereto in any wise belonging, including all necessary rights to ingress, egress, and regress, unto Grantee, its successors and assigns, forever. Grantor does hereby bind itself, its successors and assigns to WARRANT AND FOREVER DEFEND, all and singular, the Easement and right-of-way and other rights described herein unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through, or under Grantor, but not otherwise, subject only to the Permitted Encumbrances.

The covenants and agreements contained herein shall run with the land and shall inure to the benefit of and shall be binding upon Grantor and Grantee and their respective successors and assigns.

The prevailing party in any suit, action, or other proceeding instituted in connection with any controversy arising out of this instrument or the Easement shall be entitled to recover its reasonable attorneys' fees from the other party.

The individual signing this instrument on behalf of Grantor represents that he/she has the requisite authority to bind Grantor.

Neither party's failure to insist on strict performance of any part of this instrument shall be construed as a waiver of the performance in any other instance.

This instrument shall be interpreted and construed in accordance with the laws of the State of Texas, without regard to conflict of laws, principles, and venue for any suit, action, or proceeding instituted in connection with any controversy arising out of this instrument or the Easement shall be the state courts situated in Harris County, Texas.

This instrument may be executed in multiple counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one instrument.

Grantee's address is c/o Allen Boone Humphries Robinson LLP, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027.

[Signature pages follow this page.]

EXECUTED this 3rd day of September, 2024.

GRANTOR:

CLAY PARTNERS - NW PARKWAY LAND #1, L.P.,
a Texas limited partnership

By: Clay Partners - NW Parkway Land #1 GP, LLC,
a Texas limited liability company,
its General Partner

By: _____
Name: Louis B. Sullivan III
Title: Vice President

THE STATE OF TEXAS §
§
COUNTY OF Harris §

This instrument was acknowledged before me on the 3rd day of September, 2024, by Louis B. Sullivan III, Vice President of Clay Partners - NW Parkway Land #1 GP, LLC, a Texas limited liability company, General Partner of CLAY PARTNERS - NW PARKWAY LAND #1, L.P., a Texas limited partnership, on behalf of said limited liability company and said limited partnership.

(NOTARY SEAL)

JOY MARIE ROSENCUTTER
Notary Public, State of Texas
Comm. Expires 11-10-2026
Notary ID 11738596

_____
Notary Public, State of Texas

RP-2024-328848

1211796

EXECUTED by Grantee on the date set forth in the acknowledgment below, but AGREED to, ACCEPTED, and EFFECTIVE as of the date executed by Grantor.

GRANTEE:

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441

By: _____
Name: Edmund LeBlanc
Title: President

ATTEST:

By: _____
Name: MONI MANSOUR
Title: Secretary

THE STATE OF TEXAS §
§
COUNTY OF Harris §

This instrument was acknowledged before me on the 27 day of August, 2024, by Edmund LeBlanc, president, and moni monsour, secretary, of the Board of Directors of HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 441, a political subdivision of the State of Texas, on behalf of said political subdivision.

(NOTARY SEAL)
KERRI HOUCK
Notary Public, State of Texas
Comm. Expires 11-01-2027
Notary ID 132236105

_____
Notary Public, State of Texas

Attachments:
Consent of Lienholder (Frost Bank)
Exhibit A – Description of the Easement Tract
Exhibit B – Sketch of the Easement Tract

After recording, please return to:
Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027
Attention: Real Estate Department

CONSENT OF LIENHOLDER

(Frost Bank)

FROST BANK, a Texas state bank, being the owner and holder of certain liens or other security interests (the "Security Interests"), against the real property described in **Exhibit A** and shown on **Exhibit B**, both attached hereto (the "Easement Tract"), hereby:

(a) Consents to the conveyance of the Buffer Zone Easement to Harris County Municipal Utility District No. 441 (the "District") across, along, under, over, upon, and through the Easement Tract;

(b) Subordinates all of its Security Interests (including, without limitation, all extensions of the Security Interests and modification agreements thereto) that encumber the Easement Tract, to the rights and interests created under the Buffer Zone Easement; and

(c) Acknowledges and agrees that a foreclosure of its Security Interests shall not extinguish the rights, obligations, and interests of the District created under the Buffer Zone Easement.

[Signature page follows this page.]

EXECUTED on the date set forth in the acknowledgment below, but EFFECTIVE as of the date of Grantor's execution of the Buffer Zone Easement.

FROST BANK,
a Texas state bank

By: Robert L. Mueller
Name: Robert L. Mueller
Title: Market President

THE STATE OF TEXAS §
§
COUNTY OF Harris §

This instrument was acknowledged before me on the 3rd day of September, 2024, by Robert L. Mueller, Market President of FROST BANK, a Texas state bank, on behalf of said state bank.

(NOTARY SEAL)

JOY MARIE ROSENCUTTER
Notary Public, State of Texas
Comm. Expires 11-10-2026
Notary ID 11738596

Joy Marie Rosencutter
Notary Public, State of Texas

RP-2024-328848

Exhibit A - Description of the Easement Tract

WWTP Buffer Zone
1.482 Acres (64,541 Sq. Ft.)

George Haig Survey
Abstract No. 338

STATE OF TEXAS §

COUNTY OF HARRIS §

A **METES & BOUNDS** description of a certain 1.482 acre waste water treatment plant buffer zone situated in the George Haig Survey, Abstract No. 338 in Harris County, Texas, being a portion of a called 175.69 acre tract conveyed by Special Warranty Deed to Clay Partners – NW Parkway Land #1, L.P. recorded in File No. RP-2024-107910 of the Official Public Records of Real Property of Harris County, Texas (OPRRPHC); said 1.482 acre tract being more particularly described as follows with all bearings based on the Texas Coordinate System of 1983, South Central Zone;

COMMENCING at a found 3/4-inch iron rod marking a southeast corner of said 175.69 acre tract, being common with the southwest corner of a called 4.4117 acre tract conveyed by Warranty Deed to Charles P. Alaimo, et ux recorded in File No. N425593 OPRRPHC, the northwest corner of a called 2.594 acre tract conveyed by Warranty Deed with Vendor's Lien to Charles P. Alaimo, et ux recorded in File No. N930760 OPRRPHC, and the easterly north corner of a called 44.3844 acre tract conveyed by General Warranty Deed to Harris County Flood Control District recorded in File No. RP-2020-566704 OPRRPHC;

THENCE North 65°51'43" West, over and across said 175.69 acre tract, 777.98 feet to a point-for-corner marking the **POINT OF BEGINNING** and the northeast corner of the herein described subject tract, beginning a non-tangent curve to the right;

THENCE over and across said 175.69 acre tract, the following fifteen (15) courses and distances:

1. Along said non-tangent curve to the right, having a radius of 150.00 feet, an arc length of 174.34 feet, a delta angle of 66°35'29", and a chord bearing of South 35°23'51" East, 164.69 feet to a point-for-corner;
2. South 02°06'07" East, 27.25 feet to a point-for-corner marking the beginning of a tangent curve to the right;
3. Along said tangent curve to the right, having a radius of 150.00 feet, an arc length of 235.62 feet, a delta angle of 90°00'00", and a chord bearing of South 42°53'53" West, 212.13 feet to a point-for-corner;
4. South 87°53'53" West, 52.00 feet to a point-for-corner marking the beginning of a tangent curve to the right;
5. Along said tangent curve to the right, having a radius of 150.00 feet, an arc length of 9.23 feet, a delta angle of 03°31'30", and a chord bearing of South 89°39'38" West, 9.23 feet to a point-for-corner marking the beginning of a non-tangent curve to the right;
6. Along said non-tangent curve to the right, having a radius of 164.00 feet, an arc length of 25.47 feet, a delta angle of 08°53'59", and a chord bearing of South 87°30'21" West, 25.45 feet to a point-for-corner marking the beginning of a non-tangent curve to the right;
7. Along said non-tangent curve to the right, having a radius of 150.00 feet, an arc length of 13.47 feet, a delta angle of 05°08'45", and a chord bearing of South 85°18'50" West, 13.47 feet to a point-for-corner;

8. South 87°53'13" West, 12.00 feet to a point-for-corner marking the beginning of a tangent curve to the right;
9. Along said tangent curve to the right, having a radius of 150.00 feet, an arc length of 235.62 feet, a delta angle of 90°00'00", and a chord bearing of North 47°06'47" West, 212.13 feet to a point-for-corner;
10. North 02°06'47" West, 36.00 feet to a point-for-corner marking the beginning of a tangent curve to the right;
11. Along said tangent curve to the right, having a radius of 150.00 feet, an arc length of 69.73 feet, a delta angle of 26°38'07", and a chord bearing of North 11°12'16" East, 69.10 feet to a point-for-corner marking the beginning of a non-tangent curve to the right;
12. Along said non-tangent curve to the right, having a radius of 150.00 feet, an arc length of 189.89 feet, a delta angle of 72°32'02", and a chord bearing of North 37°05'46" East, 177.46 feet to a point-for-corner marking the northwest corner of the herein described subject tract, from which a found 1/2-inch iron rod marking an east corner of said 175.69 acre tract, being common with the southeast corner of a called 0.8568 acre tract conveyed by Judgment on the Award to Harris County recorded in HCCF No. C857335 OPRRPHC bears North 84°06'16" East, 895.33 feet;
13. South 05°26'51" West, 326.87 feet to a point-for-corner;
14. North 87°36'20" East, 237.73 feet to a point-for-corner;
15. North 02°21'17" West, 247.48 feet to the **POINT OF BEGINNING, CONTAINING** 1.482 acres (64,541 Sq. Ft.) of land in Harris County, Texas, as shown in Drawing No. 20185 filed in the offices of Quiddity in College Station, Texas.

7/23/24

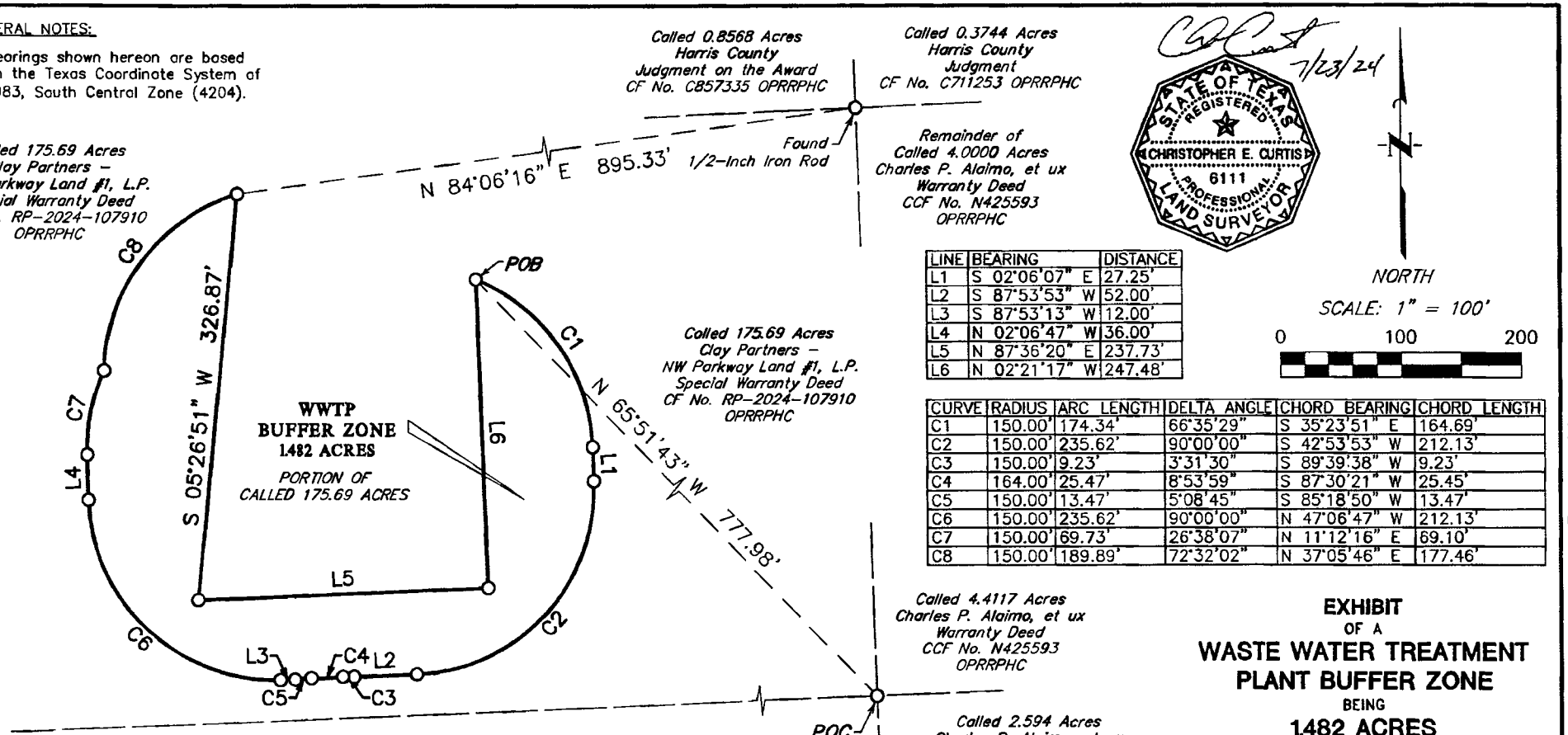
STATE OF TEXAS
REGISTERED
CHRISTOPHER E. CURTIS
6111
PROFESSIONAL
LAND SURVEYOR

RP-2024-328848

Exhibit B - Sketch of the Easement Tract

GENERAL NOTES:

1. Bearings shown hereon are based on the Texas Coordinate System of 1983, South Central Zone (4204).



LINE	BEARING	DISTANCE
L1	S 02°06'07" E	27.25'
L2	S 87°53'53" W	52.00'
L3	S 87°53'13" W	12.00'
L4	N 02°06'47" W	36.00'
L5	N 87°36'20" E	237.73'
L6	N 02°21'17" W	247.48'

CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	150.00'	174.34'	66°35'29"	S 35°23'51" E	164.69'
C2	150.00'	235.62'	90°00'00"	S 42°53'53" W	212.13'
C3	150.00'	9.23'	3°31'30"	S 89°39'38" W	9.23'
C4	164.00'	25.47'	8°53'59"	S 87°30'21" W	25.45'
C5	150.00'	13.47'	5°08'45"	S 85°18'50" W	13.47'
C6	150.00'	235.62'	90°00'00"	N 47°06'47" W	212.13'
C7	150.00'	69.73'	26°38'07"	N 11°12'16" E	69.10'
C8	150.00'	189.89'	72°32'02"	N 37°05'46" E	177.46'

7/23/24

STATE OF TEXAS
REGISTERED
CHRISTOPHER E. CURTIS
6111
PROFESSIONAL
LAND SURVEYOR

NORTH

SCALE: 1" = 100'

0 100 200

LEGEND:

OPRRPHC OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF HARRIS COUNTY
POB POINT OF BEGINNING
POC POINT OF COMMENCING

○ POINT-FOR-CORNER (UNLESS OTHERWISE NOTED)

ADJOINER LINE

BOUNDARY LINE

EXHIBIT
OF A
WASTE WATER TREATMENT PLANT BUFFER ZONE
BEING
1.482 ACRES
OUT OF THE
CLAY PARTNERS TRACT
OUT OF THE
GEORGE HAIG SURVEY, A-338
HARRIS COUNTY, TEXAS
JULY 2024

QUIDDITY

Texas Board of Professional Engineers and Land Surveyors Reg. No. 10046100
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23190
150 Venture Drive, Suite 100 College Station, TX 77845 • 979.731.8000

K:\10258\10258-0006-01 Surveying Northwest 99 Industrial Park\1 Surveying Phase\CAD Files\Easements\NW99 Easements.dwg Jul 23,2024 – 1:58pm kas

CEC/kos JOB No. 10258-0006 DWG. No. 20185

Page 1 of 1

RP-2024-328848

RP-2024-328848

Pages 12

09/06/2024 02:04 PM

e-Filed & e-Recorded in the

Official Public Records of

HARRIS COUNTY

TENESHIA HUDSPETH

COUNTY CLERK

Fees $65.00

RP-2024-328848

RECORDERS MEMORANDUM
This instrument was received and recorded electronically and any blackouts, additions or changes were present at the time the instrument was filed and recorded.

Any provision herein which restricts the sale, rental, or use of the described real property because of color or race is invalid and unenforceable under federal law.
THE STATE OF TEXAS
COUNTY OF HARRIS
I hereby certify that this instrument was FILED in File Number Sequence on the date and at the time stamped hereon by me; and was duly RECORDED in the Official Public Records of Real Property of Harris County, Texas.

COUNTY CLERK
HARRIS COUNTY, TEXAS

CHECK LIST FOR APPLICATION TO TRANSFER A WATER QUALITY PERMIT/REGISTRATION	
Permit No. WQ0015795001	Review Date: 12/18/2024
TX: TX0139297	Region: 12
CN: CN605652163	RN: RN110763855

☐ Core Data Form received

Annual Fees

☑ Verified payment of annual fees and found not delinquent.

Outstanding fees _____ Account Number_____

Application fees:

☑ Verify that the $100 application fee is submitted.

1. APPLICANT INFORMATION

a. b.

☐ ☐ Corporation: □ verify status/ charter number with SOS □ print page □ Check spelling against 1.a. □ verify status/ TAX ID number with the Comptroller

☐ ☐ Individual: □ all info provided (Attachment 1 is required)

☑ ☐ Utility District: □ I-WUD - verify district is not dissolved (inactive is O.K. to process)

☐ ☐ Trust: □ copy of an executed trust agreement is provided by the applicant – each trustee or person on the estate must be listed on permit.

☐ ☐ Partnership: □ Verify w/ SOS □ Check against 1.a. □ Print page OR □ a copy of partnership agreement - If partnership not registered with SOS, the general partnership must register with the county where the facility is located. Limited Partnerships are required to register with SOS.

☐ ☐ Governmental Agency: Confirm legal name of agency when possible, using TNL City official book, State Directory.

☑ Verify address to be used on the permit is provided. □ Verify w/USPS □ print page

2. CONTACT INFORMATION

☑ a. Application Contact info provided ☑ b. Permit Contact info provided and ☒ Update made to database

3. PERMIT / REGISTRATION INFORMATION

☑ a. Check Permit No. and Expiration Date. If expired/ application & fee to be returned to the applicant. If expiring soon, contact the new owner to make certain they are aware of the expiration date.

☐ b. If permit requires implementation of approved pretreatment program, make a copy of endorsement and transfer application to Pretreatment Team Leader.

☐ c. If there is a Domestic Reclaimed Water authorization associated with the transfer, make copy of the entire transfer application and give to Applications Review and Processing Team Leader.

4. SITE INFORMATION

___ Partnership: General Partner as identified in the partnership agreement OR if the partnership is on file with the Secretary of State. The Vice President or General Partner may sign.

___ Trust: The trustee that has been identified in the trust agreement.

___ A letter of authorization for another person to sign on behalf of an entity has been provided or is on file with TCEQ. (The letter includes both the name and the title of person giving the authority.)

☐ If transferee can't obtain signature of transferor, app processed as involuntary transfer with the following:

___ Proof of ownership of the site, if applicable, and treatment facility has been provided by the transferee.

___ Facilities not built & permittee no longer has sufficient property rights in the site of the proposed facilities.

___ Transferor no longer owns the permitted facilities.

___ ED provided notice by certified mail to transferor, using the last address of record, giving opportunity for hearing, **and**

___ ED didn't receive request for hearing from permittee within 30 days from the date the notice was mailed.

8. TRANSFEREE (NEW SITE OWNER AND/OR OPERATOR) SIGNATURE PAGE

☑ **The appropriate signature of the Transferee, as indicated below has been provided, and has been notarized**:

___ City: elected official or position verified in TML City Official Book

___ Individual: only the individual signs for himself/herself.

___ Corporation: at least the level of vice president (CEO, Chairman of Board, Secretary Equivalent to V.P.)

✓ Utility District: at least level of vice president, (Board of Directors, District Manager, and the position can be verified through the District Section of TCEQ, Water Utilities Division).

___ Water Authority: Regional managers

___ Independent School Districts: at least level of the Assistant Superintendent (or board members).

___ Governmental Agencies: Directors of Divisions or Regional Directors.

___ Partnership: General Partner as identified in the partnership agreement OR if the partnership is on file with the SOS. The Vice President or General Partner may sign.

___ Trust: The trustee that has been identified in the trust agreement.

___ A letter of authorization for another person to sign on behalf of an entity has been provided or is on file with TCEQ. The letter includes both the name and the title of person giving the authority.)

9. LANDOWNER SIGNATURE PAGE

☐ Landowner Original - If land application of sludge is authorized in the current permit and the owner of the land on which sludge disposal occurs is **NOT** the applicant **the sludge signature page** bearing the notarized signature of the landowner and applicant is provided.

PARIS UPDATES

☐ CR SEARCH Contacts ☐ Update Mailing Address ☐ Update Billing Address ☐ Facility and Facility Contact Person

☐ If you have a change in customer and there is **not a pending application** then click on Set issued To Name

Look Up a ZIP Code™ FAQs (https://www.usps.com/faqs.htm)

Go to

ZIP Code™ by Address

You entered:

3200 SOUTHWEST FWY 2600
HOUSTON TX

If more than one address matches the information provided, try narrowing your search by entering a street address and, if applicable, a unit number. **Edit and search again. (zip-code-lookup.htm?byaddress)**

3200 SOUTHWEST FWY STE 2600
HOUSTON TX **77027-7537**

Feedback

Look Up Another ZIP Code™

Edit and Search Again (/zip-code-lookup.htm?byaddress)

Look Up a ZIP Code™ FAQs

Go to

ZIP Code™ by Address

You entered:

3401 LOUISIANA STE 400
HOUSTON TX

If more than one address matches the information provided, try narrowing your search by entering a street address and, if applicable, a unit number. **Edit and search again. (zip-code-lookup.htm?byaddress)**

3401 LOUISIANA ST STE 400
HOUSTON TX **77002-9552**

Look Up Another ZIP Code™

Edit and Search Again (/zip-code-lookup.htm?byaddress)

Central Registry Internal Reporting

Additional ID Detail

Additional ID Program	WWPERMIT		**Legacy System (Code)**	(WQ)	
Additional ID	WQ0015795001	**Status**	ACTIVE	**ID Type**	PERMIT
Name	HARRIS COUNTY MUD 441 WWTP			**Sec. Addn Id**	TX0139297, EPA ID
Physical Address	Not on file				
Description	APPROXIMATELY 3000 FT SSW OF INTERSECTION OF MUESCHKE ROAD AND STATE HWY 99				
County	HARRIS	**Region**	REGION 12 - HOUSTON		
Nearest City	CYPRESS	**State**	TX	**Nearest Zip**	77377
Latitude	30° 2 min 44 sec (30.045555)		**Longitude**	95° 44 min 15 sec (-95.7375)	

Map It | Copy Map It URL | Prior Names

Industry Types

Classification System	Code	Name	Primary Flag

0 Industry Type records returned

Site Classifications

Program	Site Classification	Begin Date	End Date	CMS Min Freq Qty
WASTEWATER	DOMESTIC MINOR	04/29/2019	12/31/3000	0

Site Classification: (1-1 of 1 Record)

Customers

List All

CN Number	Name ▲	Role
CN605652163	CYPRESS GRAND PARKWAY HOUSTON ASLI IX LLC	OWNOPR

Customers: (1-1 of 1 Record)

Issued To

CN Number	Issued To Name	Start Date	'Issued To' History
CN605652163	CYPRESS GRAND PARKWAY (HOUSTON) ASLI IX, LLC	05/26/2020	View

Issued To: (1-1 of 1 Record)

Regulated Entity

Reference Number	RN110763885	**Name**	HARRIS COUNTY MUD 441 WWTP	**Stand-Alone**	N
Business Description	TREATMENT OF WW FROM DOMESTIC SOURCES				

Location

Address	Not on file				
Description	APPROXIMATELY 3000 FT SSW OF INTERSECTION OF MUESCHKE ROAD AND STATE HWY 99				
County	HARRIS		**Region**	REGION 12 - HOUSTON	
Nearest City	ROSE HILL	**State**	TX	**Nearest Zip**	77377
Latitude	30° 18 min 16 sec (30.304444)		**Longitude**	95° 44 min 15 sec (-95.7375)	

Central Registry Internal Reporting

Customer Detail

Customer Name	CYPRESS GRAND PARKWAY HOUSTON ASLI IX LLC		**CN**	CN605652163	
Customer Legal Name	CYPRESS GRAND PARKWAY (HOUSTON) ASLI IX, LLC	**Customer Type**	CORPORATION	**Last Updated**	Apr 30, 2019
Customer Status	ACTIVE	**Status Comment**			
Federal Tax Id			**State Franchise Tax Id**	32067731128	
State Sales Tax Id			**Local Tax Id**		
DUNS Number			**SOS Filing No**	803063217	
Compliance Class	UNCLASSIFIED	**Compliance Rating**		**Publication Date**	Nov 15, 2024
Independently Owned			**Number Employees**		

Affiliated Regulated Entities

List All

RN Number	Regulated Entity Name	Roles	Begin Date
RN110763885	HARRIS COUNTY MUD 441 WWTP	OWNER OPERATOR	04/29/2019

Customer Affiliations: (1-1 of 1 Records)

District Name: HARRIS COUNTY MUD 441 (3747142)

Affiliations - Documents

Responsible Party

Organization: **HARRIS COUNTY MUD 441**
Address: **3200 SOUTHWEST FWY STE 2600**
HOUSTON , TX 77027-7537
Individual: **EDMUND LEBLANC**
Job Title: **PRESIDENT** Phone: **(713) 860-6400 Ext:**

Official Address / Phone

Address: **3200 SOUTHWEST FWY STE 2600**
HOUSTON , TEXAS 77027-7537
Telephone: **(713) 860-6400**

Properties

CR Regulated Entity Number:
CCEDS Status: **NO ACTIVE NOE EXISTS**
District Type: **MUNICIPAL UTILITY DISTRICT**
Creation Type: **TCEQ**
Primary County: **HARRIS**
Financial Status: **FINANCIAL REPORT FILED**
Acre Size: **248.121**
Directors: **5**

Comments

Comment Date	Text	Staff Name
11/27/2023	DISTRICT EXCLUDED 318.47 ACRES OF LAND ON 10/30/2023	
07/31/2023	DISTRICT FILED AS FINANCIALLY DORMANT FOR FY 2019. AFR FOR 2020 INCLUDES ALL RELEVANT FINANCIAL INFORMATION FOR CALENDAR YEAR 2019.	STEPHANIE DESOUZA
08/05/2019	The district has designated Jones & Carter Inc as its agent for purposes of communication with the TCEQ on district related matters.	MATTHEW TORRES

Last Modified 2024-11-15 - Production v3.3.0

Basis 2 A/R Outstanding Past Due Transactions Detail Report By Customer Name

DEC-17-24 06:30 AM

Customer Name: CYPRESS BUSINESS PARK
Account #: 91012908 Debtcollpath Stage: WHOLD:REFERRED Calls: CLOSED

PHS	SC2306-001	LATE FEE FOR PHS0058212		0091012908	10-FEB-03	10-FEB-03	$.36
PHS	SC2306-004	LATE FEE FOR PHS0038161		0091012908	10-FEB-03	10-FEB-03	$.36
PHS	SC2307-003	LATE FEE FOR PHS0044886		0091012908	10-MAR-03	10-MAR-03	$.36
PHS	SC2307-001	LATE FEE FOR PHS0058212		0091012908	10-MAR-03	10-MAR-03	$.36
PHS	SC2307-002	LATE FEE FOR PHS0051554		0091012908	10-MAR-03	10-MAR-03	$.36
PHS	SC2307-004	LATE FEE FOR PHS0038161		0091012908	10-MAR-03	10-MAR-03	$.36
PHS	SC2308-003	LATE FEE FOR PHS0044886		0091012908	10-APR-03	10-APR-03	$.36
PHS	SC2308-002	LATE FEE FOR PHS0051554		0091012908	10-APR-03	10-APR-03	$.36
PHS	SC2308-004	LATE FEE FOR PHS0038161		0091012908	10-APR-03	10-APR-03	$.36
PHS	SC2308-001	LATE FEE FOR PHS0058212		0091012908	10-APR-03	10-APR-03	$.36

Total of delinquent transactions (Account): $430.12

Total of delinquent transactions (Customer): $430.12

Customer Name: CYPRESS CHEVRON
Account #: 91012902 Debtcollpath Stage: AGENCY:REFERRED Calls: NOTES

PHS	PHS0209249	WATER SYSTEM FEE		FY23	1012902	30-NOV-22	31-DEC-22	$100.00
PHS	SC00317613	LATE FEE - JAN 2023				10-JAN-23	10-JAN-23	$5.00
PHS	SC00320968	LATE FEE - FEB 2023				10-FEB-23	10-FEB-23	$5.00
PHS	SC00324307	LATE FEE - MAR 2023				10-MAR-23	10-MAR-23	$.85
PHS	PHS0209249	COLLECTION COST RECOVERY				07-APR-23	07-APR-23	$25.00
PHS	SC00326667	LATE FEE - APR 2023				10-APR-23	10-APR-23	$.85
PHS	SC00328862	LATE FEE - MAY 2023				10-MAY-23	10-MAY-23	$.85
PHS	SC00330074	LATE FEE - JUN 2023				10-JUN-23	10-JUN-23	$.85
PHS	SC00331078	LATE FEE - JUL 2023				10-JUL-23	10-JUL-23	$.85
PHS	SC00331998	LATE FEE - AUG 2023				10-AUG-23	10-AUG-23	$.85
PHS	SC00332914	LATE FEE - SEP 2023				10-SEP-23	10-SEP-23	$.85
PHS	SC00333965	LATE FEE - OCT 2023				10-OCT-23	10-OCT-23	$.85
PHS	SC00335153	LATE FEE - NOV 2023				10-NOV-23	10-NOV-23	$.85
PHS	PHS0216348	WATER SYSTEM FEE		FY24	1012902	30-NOV-23	31-DEC-23	$100.00
PHS	SC00336975	LATE FEE - DEC 2023				10-DEC-23	10-DEC-23	$.85
PHS	SC00339445	LATE FEE - JAN 2024				10-JAN-24	10-JAN-24	$5.95
PHS	SC00341795	LATE FEE - FEB 2024				10-FEB-24	10-FEB-24	$5.95
PHS	SC00344319	LATE FEE - MAR 2024				10-MAR-24	10-MAR-24	$1.90
PHS	PHS0216348	COLLECTION COST RECOVERY				29-MAR-24	29-MAR-24	$25.00
PHS	SC00346373	LATE FEE - APR 2024				10-APR-24	10-APR-24	$1.90
PHS	SC00347966	LATE FEE - MAY 2024				10-MAY-24	10-MAY-24	$1.90
PHS	SC00349458	LATE FEE - JUN 2024				10-JUN-24	10-JUN-24	$1.90
PHS	SC00350651	LATE FEE - JUL 2024				10-JUL-24	10-JUL-24	$1.90
PHS	SC00351668	LATE FEE - AUG 2024				10-AUG-24	10-AUG-24	$1.90
PHS	SC00352680	LATE FEE - SEP 2024				10-SEP-24	10-SEP-24	$1.90
PHS	SC00353907	LATE FEE - OCT 2024				10-OCT-24	10-OCT-24	$1.90
PHS	SC00355179	LATE FEE - NOV 2024				10-NOV-24	10-NOV-24	$1.90

Total of delinquent transactions (Account): $297.50

Total of delinquent transactions (Customer): $297.50

Customer Name: CYPRESS COVE MAINTENANCE ASSOC
Account #: 22502103 Debtcollpath Stage: Calls:

STX	STX0057875	STG CHARGE		FY25	1952-601-0	31-OCT-24	30-NOV-24	$50.00
STX	STX0057876	STG CHARGE	AF	FY25	1952-601-0	31-OCT-24	30-NOV-24	$3.39

Total of delinquent transactions (Account): $53.39

Total of delinquent transactions (Customer): $53.39

Customer Name: CYPRESS GRAND PARKWAY HOUSTON
Account #: 23007592 Debtcollpath Stage: Calls:

CWQ	CWQ0079038	PERMIT		FY25	0015795001	31-OCT-24	30-NOV-24	$620.00

Total of delinquent transactions (Account): $620.00

Total of delinquent transactions (Customer): $620.00

QUIDDITY

1575 Sawdust Road, Suite 400
The Woodlands, Texas 77380
Tel: 281.363.4039
www.quiddity.com

October 17, 2024

Texas Commission on Environmental Quality
Revenues Section, MC 214
PO Box 13088
Austin TX 78711-3088

RE: Application to Transfer a Wastewater Permit
Cypress Grand Parkway (Houston) ASLI IX, LLC
TPDES Permit No. WQ00156795001

Attached is a check in the amount of $100.00 to cover the fee to transfer TPDES Permit No. WQ0015795001 from Cypress Grand Parkway (Houston) ASLI IX, LLC to Harris County Municipal Utility District No. 441 and a copy of the cover page of the Application to Transfer a Wastewater Permit sent to the Applications Review and Processing Team.

Please contact me at 281-363-4039 or sbarry@quiddity.com if you have any questions.

Sincerely,

Steve Barry, P.E.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION TO TRANSFER A WASTEWATER PERMIT OR CAFO PERMIT

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

SECTION 1. CURRENT PERMIT INFORMATION

What is the Permit Number? WQ0015795001

What is the EPA I.D. Number? TX TX0139297

What is the Current Name on the Permit?

Cypress Grand Parkway (Houston) ASLI IX, LLC

What is the Customer Number (CN) for the current permittee? CN 605652163

What is the Regulated Entity Reference Number (RN): RN 110763885

For Publicly Owned Treatment Works (POTWs) Only:

a) Does this permit require implementation of an approved pretreatment program by the POTW? Yes ☐ No ☒

b) Does this permit have a domestic reclaimed water authorization associated with it? NOTE: **The domestic reclaimed water authorization associated with this permit will be cancelled on the same date the transfer took place**. See instructions for more information.
Yes ☐ No ☒

SECTION 2. FACILITY OWNER (APPLICANT) INFORMATION

A. What is the Legal Name of the facility owner?

Harris County Municipal Utility District No. 441

B. What is the Customer Number (CN) issued to this entity? CN 6046399435

C. Complete and attach a Core Data Form (TCEQ-10400) for this customer.

SECTION 3. CO-APPLICANT INFORMATION

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

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

N/A

B. What is the Customer Number (CN) issued to this entity? CN

C. Complete and attach a Core Data Form (TCEQ-10400) for this customer.

SECTION 4. APPLICATION CONTACT INFORMATION

This is the person TCEQ will contact if additional information is needed about this application.

Application Contact First and Last Name: Steve Barry

Title: Permitting Engineer Credentials: P.E.

Company Name: Quiddity Engineering

Mailing Address: 1575 Sawdust Road, Suite 400

City, State, and Zip Code: The Woodlands, TX 77380

Phone Number: 281-363-4039 Fax Number:

E-mail Address: sbarry@quiddity.com

SECTION 5. PERMIT CONTACT INFORMATION

This is the person TCEQ will contact if additional information is needed during the term of the permit.

Permit Contact First and Last Name: Edmund LeBlanc

Title: President Credentials:

Company Name: Harris County Municipal Utility District No. 441

Mailing Address: 3200 Southwest Freeway, Suite 2600

City, State, and Zip Code: Houston, TX 77027

Phone Number: 713-860-6467 Fax Number:

E-mail Address:

SECTION 6. SITE INFORMATION

Site Name: Harris County MUD No. 441 WWTP

SECTION 7. LEASE AND EASEMENT REQUIREMENTS

A. Landowner where the facility is or will be located:

Landowner Name: Harris County Municipal Utility District No. 441

If this individual is not the same person as the facility owner or co-applicant, attach one of the following documents:

- A lease agreement or deed recorded easement, if the facility is NOT a fixture of the land, or
- A deed recorded easement if the facility IS a fixture of the land.

B. Landowner of the effluent disposal site:

Landowner Name: N/A

If this individual is not the same person as the facility owner or co-applicant, attach a lease agreement.

C. For CAFOs: Attach the following records:

- Warranty Deed or Property Tax Records
- Lease Agreement (for land management units that are not owned by the facility owner or co-applicant)

Facility Size on the proof of ownership, in acres: N/A

SECTION 8. TRANSFER DATE

What is the date that the transfer of operator or ownership will occur? 10/30/2024

SECTION 9. REPORTING AND BILLING INFORMATION

A. Please identify the individual for receiving the reporting forms.

First and Last Name: Charlie Chapline

Title: Operator Credentials:

Company Name: Municipal District Services LLC

Mailing Address: 406 W Grand Parkway S, Suite 260

City, State, and Zip Code: Katy, TX 77494

Phone Number: 281-290-3141 Fax Number:

E-mail Address:

B. Please identify the individual for receiving the annual fee invoices.

First and Last Name: Marissa Iguess

Title: Bookkeeper Credentials:

Company Name: Myrtle Cruz Inc

If this individual is not the same person as the facility owner or co-applicant, attach one of the following documents:

- A lease agreement or deed recorded easement, if the facility is NOT a fixture of the land, or
- A deed recorded easement if the facility IS a fixture of the land.

B. Landowner of the effluent disposal site:

Landowner Name: N/A

If this individual is not the same person as the facility owner or co-applicant, attach a lease agreement.

C. For CAFOs: Attach the following records:

- Warranty Deed or Property Tax Records
- Lease Agreement (for land management units that are not owned by the facility owner or co-applicant)

Facility Size on the proof of ownership, in acres: N/A

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First and Last Name: Charlie Chapline

Title: Operator Credentials:

Company Name: Municipal District Services LLC

Mailing Address: 406 W Grand Parkway S, Suite 260

City, State, and Zip Code: Katy, TX 77494

Phone Number: 281-290-3141 Fax Number:

E-mail Address:

B. Please identify the individual for receiving the annual fee invoices.

First and Last Name: Marissa Iguess

Title: Bookkeeper Credentials:

Company Name: Myrtle Cruz Inc

Mailing Address: 3401 Louisiana St., Suite 400

City, State, and Zip Code: Houston, TX 77002

Phone Number: 713-759-1368 Fax Number:

E-mail Address:

SECTION 10. DELINQUENT FEES OR PENALTIES

Do you owe fees to the TCEQ? Yes ☐ No ☒

Do you owe any penalties to the TCEQ? Yes ☐ No ☒

If you answered yes to either of the above questions, provide the amount owed, the type of fee or penalty, and an identifying number.

TRANSFEREE SIGNATURE (New Facility Owner)

I certify that a change of ownership of the facility for the subject permit has been issued will occur as indicated in the application. As a condition of the transfer, I do hereby declare that:

The transferee will be the owner of the existing treatment facility from which wastewater is discharged, deposited or disposed or the facilities required to comply with the permit will be constructed as described in the application considered by the TCEQ prior to the issuance of the permit.

The transferee possesses a copy of the permit, understands the terms and conditions therein, and does accept and assume all obligations of the permit.

The transferee assumes financial responsibility for the proper maintenance and operation of all waste treatment and disposal facilities required by the permit or which may be required to comply with the permit terms and conditions. The transferee certifies that the transfer is not made for the purpose of avoiding liability for improper actions carried out prior to the date of transfer. Neither is the transfer made for the purpose of transferring responsibility for improper operations to an insolvent entity.

The transferee certifies under penalty of law that this document 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 known violations and revocation of this permit.

New Facility Owner: Edmund LeBlanc

Title: President, Harris County Municipal Utility District No. 441

Signature: _____ Date: Sept 24th 2024

SUBSCRIBED AND SWORN to before me by the said Edmund LeBlanc on this 24th day of September, 20 24

My commission expires on the 1st day of November, 20 27

(Seal)

KERRI HOUCK
Notary Public, State of Texas
Comm. Expires 11-01-2027
Notary ID 132236105

_____
Notary Public

Harris
_____
County, Texas

TRANSFEROR SIGNATURE (Current Facility Owner)

I consent to the transfer of the permit and 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 Section 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

Facility Owner Name: Cypress Grand Parkway (Houston) ASLI IX, LLC, By: Avanti Strategic Land Investors IX, L.L.L.P., By: APG ASLI IX GP, LLC, By: Avanti Properties Group III, L.L.L.P., By: APG III GP, LLC, By: Avanti Management Corporation, By: Marvin Shapiro
Title: President

Signature: _____ Date: 10/3/24

SUBSCRIBED AND SWORN to before me by the said Marvin Shapiro on

this 3 day of October, 20 24

My commission expires on the 21 day of April, 20 25

(Seal)

Connie Cummins
Notary Public

Connie Cummins
Orange County, Florida

CONNIE CUMMINS
MY COMMISSION # HH 119940
EXPIRES: April 21, 2025
Bonded Thru Notary Public Underwriters

TCEQ Use Only

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 **Permit Transfer**

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 604639435		RN 110763885

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)

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).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Harris County Municipal Utility District No. 441	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☒ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ 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

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

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)*
	ksherborne@abhr.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*

(713) 860-6467		( ) -

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

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).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Harris County MUD No. 441 Wastewater Treatment Plant

23. Street Address of the Regulated Entity:								
(No PO Boxes)								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County	Harris							

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

25. Description to Physical Location:	The facility will be located 3,000 feet south-southwest of the intersection of State Highway 99 and Mueschke Road in Harris County, Texas				
26. Nearest City			**State**	**Nearest ZIP Code**	
Rose Hill			TX	77377	

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).

27. Latitude (N) In Decimal:	30.045526		**28. Longitude (W) In Decimal:**	-95.737612	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Treatment of domestic wastewater

34. Mailing Address:	**406 W Grand Parkway S**							
	Suite 260							
	City	**Katy**	**State**	**TX**	**ZIP**		**ZIP + 4**	
35. E-Mail Address:	**cchapline@mdswater.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(281) 290-3141		( ) -

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:
	WQ15795001			

SECTION IV: Preparer Information

40. Name:	Steve Barry, P.E.	41. Title:	Project Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(281) 363-4039		( ) -	sbarry@quiddity.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:	Harris County MUD No. 441	Job Title:	President	
Name *(In Print)*:	Edmund LeBlanc		Phone:	(713) 860-6467
Signature:	E LeBlanc		Date:	OCT 11, 2024

Package Tracking Label

Recipient: WATER QUALITY
Location: TX, BLDG F, 2ND, 140_145_150_148_228_146

Personnel Id:
Received Date: Oct 24, 2024 8:19 AM

US POSTAGE & FEES
1 LB MEDIA MAIL RATE
ZONE 3 NO SURCHAR

USPS MEI

Quiddity Engineering LLC
1575 Sawdust Rd. Suite 400
THE WOODLANDS TX 77380

9449011899561428204147

RECEIVED
OCT 24 2024
WATER QUALITY DIV
TCEQ

RECEIVED
OCT 24 2024
Water Quality Applications Team

SHIP TO: TEXAS COMMISSION ON
APPLICATIONS REVIEW
PO Box 13087
AUSTIN TX 78711-3087

USPS TRACKING #

9449 0118 9956 1428 2041 47

Brandon Maldonado

From: Brandon Maldonado
Sent: Friday, December 13, 2024 9:01 AM
To: Jonathan Nguyen
Subject: RE: Application to Renew Permit No. WQ0015795001 - Notice of Deficiency Letter

Good morning,

Your responses to all items of the NOD are sufficient. I will now work on moving your application to admin complete.

Please let me know if you have any questions.

Regards,

Brandon Maldonado
Texas Commission on Environmental Quality
Water Quality Division
512-239-4331
Brandon.Maldonado@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

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From: Jonathan Nguyen <jnguyen@quiddity.com>
Sent: Friday, December 13, 2024 8:10 AM
To: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>
Subject: Re: Application to Renew Permit No. WQ0015795001 - Notice of Deficiency Letter

Attached is the Spanish NORI. No comments on the NORI statement in the NOD. Let me know if you have any additional questions.

Thank you!

Jonathan Nguyen
Permitting Specialist

QUID

jnguyen@quiddity.com

(512) 685-5156

912 S. Capital of Texas Hwy, Suite 300, Austin, Texas, 78746

www.quiddity.com

From: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>
Sent: Thursday, December 12, 2024 2:29 PM
To: Jonathan Nguyen <jnguyen@quiddity.com>
Subject: Application to Renew Permit No. WQ0015795001 - Notice of Deficiency Letter

Dear Mr. Nguyen

The attached Notice of Deficiency (NOD) letter sent on **December 12, 2024,** requests additional information needed to declare the application administratively complete. Please send complete response to my attention by **December 26, 2024.**

Please let me know if you have any questions.

Regards,

Brandon Maldonado
Texas Commission on Environmental Quality
Water Quality Division
512-239-4331
Brandon.Maldonado@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

Disclaimer

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA
RENOVACION

PERMISO NO. WQ0015795001

SOLICITUD. Distrito de servicios públicos municipales del condado de Harris No. 441, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0015795001 (EPA I.D. No. TX0139297) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 600,000 galones por día. La planta está ubicada 3,000 pies al sur-suroeste de la intersección de la carretera estatal 99 y Mueschke Road, en el condado de Harris, cerca de la ciudad de Rose Hill, en el condado de Harris, Texas 77377. La ruta de descarga es del sitio de la planta a un afluente sin nombre; de allí a un afluente sin nombre(2); de allí a Little Cypress Creek; de allí a Cypress Creek. La TCEQ recibió esta solicitud el 2 de diciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca comunitaria de Lone Star College – Tomball, mostrador de referencia, 30555 Tomball Parkway, Tomball, en el condado de Harris, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.7375,30.045555&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas

que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. *[For renewal applications that **do not** include a major amendment, include the following sentence:]* **Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Distrito de servicios públicos municipales del condado de Harris No. 441 a la dirección indicada arriba o llamando a Sr. Jonathan Nguyen, Quiddity Engineering, al 512-685-5156.

Fecha de emisión 15 de enero de 2025