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, el Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

Attachment 2

Plain Language Summary
Administrative Report 1.0, Section 8.F

ENGLISH VERSION

The Ann Staacke Rivers Family Limited Partnership (NEW CUSTOMER) proposes to operate the Ann Staacke Rivers Family Wastewater Treatment Plant (NEW REGULATED ENTITY), an activated sludge process plant operated in the extended aeration mode with nitrification. The facility will be located approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road in Harris County, Texas 77484.

This application is for a new Texas Pollutant Discharge Elimination System (TPDES) permit to discharge a daily average flow of 250,000 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*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7, Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process and the treatment units will include a manual bar screen, aeration basins, final clarifiers, aerobic digesters, and disinfection.

SPANISH VERSION

Ann Staacke Rivers Family Limited Partnership (NUEVO CLIENTE) propone operar la Planta de Tratamiento de Aguas Residuales de la Familia Ann Staacke Rivers (NUEVA ENTIDAD REGULADA), una planta de procesamiento de lodos activados operada en el modo de aireación extendida con nitrificación. La instalación estará ubicada aproximadamente a 3,100 pies al noreste de la intersección de Binford Road y Castle Road en el condado de Harris, Texas 77484.

Esta solicitud es para un nuevo permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES, por sus siglas en inglés) para descargar un flujo promedio diario de 250,000 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 (NH3-N) y *Escherichia coli*. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7, Análisis de Contaminantes de Efluentes Tratados en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas mediante un proceso de lodos activados y las unidades de tratamiento incluirán una criba manual de barras, balsas de aireación, clarificadores finales, digestores aeróbicos y desinfección.

Attachment 2

Plain Language Summary
Administrative Report 1.0, Section 8.F

ENGLISH VERSION

The Ann Staacke Rivers Family Limited Partnership (NEW CUSTOMER) proposes to operate the Ann Staacke Rivers Family Wastewater Treatment Plant (NEW REGULATED ENTITY), an activated sludge process plant operated in the extended aeration mode with nitrification. The facility will be located approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road in Harris County, Texas 77484.

This application is for a new Texas Pollutant Discharge Elimination System (TPDES) permit to discharge a daily average flow of 250,000 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*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7, Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process and the treatment units will include a manual bar screen, aeration basins, final clarifiers, aerobic digesters, and disinfection.

SPANISH VERSION

Ann Staacke Rivers Family Limited Partnership (NUEVO CLIENTE) propone operar la Planta de Tratamiento de Aguas Residuales de la Familia Ann Staacke Rivers (NUEVA ENTIDAD REGULADA), una planta de procesamiento de lodos activados operada en el modo de aireación extendida con nitrificación. La instalación estará ubicada aproximadamente a 3,100 pies al noreste de la intersección de Binford Road y Castle Road en el condado de Harris, Texas 77484.

Esta solicitud es para un nuevo permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES, por sus siglas en inglés) para descargar un flujo promedio diario de 250,000 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 (NH3-N) y *Escherichia coli*. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7, Análisis de Contaminantes de Efluentes Tratados en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas mediante un proceso de lodos activados y las unidades de tratamiento incluirán una criba manual de barras, balsas de aireación, clarificadores finales, digestores aeróbicos y desinfección.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PROPOSED PERMIT NO. WQ0016551001

APPLICATION. The Ann Staacke Rivers Family Limited Partnership c/o Mr. Christopher M. Gilbert, Rooted Development, 21322A Provincial Boulevard, Katy, Texas 77450, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016551001 (EPA I.D. No. TX0146129) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 250,000 gallons per day. The domestic wastewater facility will be located at approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road, near the town of Waller, in Harris County, Texas 77484. The discharge route will be from the plant site to directly to Spring Creek (Harris County Flood Control District ditch). TCEQ received this application on May 29, 2024. The permit application will be available for viewing and copying at Harris County Public Library – Lonestar College, resource counter, 9191 Barker Cypress Road, Cypress, in Harris County, Texas and at Waller County Library System-Hempstead Branch, 2331 11th Street, Hempstead, in Waller 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=-95.8865,30.1198&level=18

The application is subject to the goals and policies of the Texas Coastal Management Program and must be consistent with the applicable Coastal Management Program goals and policies.

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.**

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 The Ann Staacke Rivers Family Limited Partnership at the address stated above or by calling Ms. Jennifer Elms, P.E., Senior Project Manager, at 281-306-0240, Extension 124.

Issuance Date: July 10, 2024

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

PERMISO PROPUESTO NO. WQ0016551001

SOLICITUD. The Anne Staacke Rivers Family Limited Partnership, c/o Mr. Christopher M. Gilbert, Rooted Development, 21322A Provincial Boulevard, Katy, Texas 77450, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016551001 (EPA I.D. No. TX0146129) 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 250.000 galones por día. La planta está ubicada aproximadamente a 3,100 pies al noreste de la intersección de Binford Road y Castle Road, cerca da la cuidad de Waller, en el Condado de Harris, Texas 77484. La ruta de descarga será desde el sitio de la planta hasta Spring Creek (zanja del Distrito de Control de Inundaciones del Condado de Harris). La TCEQ recibió esta solicitud el 29 de mayo 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Harris County Public Library Lonestar College, resource center, 9191 Barker Cypress, in Harris County Texas and at Waller County Public Library System-Hempstead Branch, Resource County, 2331 11th Street, Hempstead, in Waller County, Texas antes de la fecha de publicación de este aviso en el periódico. 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=-95.8865,30.1198&level=18

El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

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.

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 A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. 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. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Ann Staacke Rivers Family Limited Partnership a la dirección indicada arriba o llamando a Jennifer L. Elms, P.E., Senior Project Manager al 281-306-0240, Ext. 124.

Fecha de emission 10 de julio de 2024

05/29/2024

New TPDES Permit Application

ANN STAACKE RIVERS FAMILY LIMITED PARTNERSHIP

NEW WASTEWATER TREATMENT PLANT

Project #: 24-007-200:DP

MAY 2024

Owner: Ann Staacke Rivers Family Limited Partnership

Prepared by:

ODYSSEY ENGINEERING GROUP

2500 Tanglewilde Street, Suite 300
Houston, Texas 77063

TBPE No. F-17637

www.odysseyeg.com

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Ann Staacke Rivers Family Limited Partnership

PERMIT NUMBER (If new, leave blank): WQ00 New Permit

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 _____

List of Exhibits and Attachments
Ann Staacke Rivers Family LP

ATTACHMENTS

Attachment 1 – Core Data Form – Ann Staacke Rivers Family LP
Administrative Report 1.0; Section 3.C
Attachment 2 – Plan Language Summary (English and Spanish)
Administrative Report 1.0, Section 8.F
Attachment 3 – Public Involvement Plan Form
Administrative Report 1.0, Section 8.G
Attachment 4 – Surrounding and Downstream Landowners List
Administrative Report 1.1; Section 1.B
Attachment 5 – Surrounding and Downstream Landowners List Address Labels
Administrative Report 1.1; Section 1.C (Separate Word Doc - Avery Labels template)
Attachment 6 – Original Photographs
Administrative Report 1.1; Section 2
Attachment 7 – Supplemental Permit Information Form
Attachment 8 – Treatment Units and Sizes
Technical Report 1.0; Section 2.B
Attachment 9 – Sewage Sludge Solids Management Plan
Technical Report 1.0, Section 6.F
Technical Report 1.1; Section 7
Attachment 10 – Regionalization Correspondence
Technical Report 1.1; Section 1.B.3
Attachment 11 – Design Calculations
Technical Report 1.1; Section 4
Attachment 12 – Plant Features
Technical Report 1.1; Section 4

EXHIBITS

Exhibit 1A – 1D USGS Quad Maps; Waller (main), Waller Northwest, Magnolia and Hockley
Administrative Report 1.0; Section 13
Exhibit 2 – Surrounding and Downstream Landowners Map
Administrative Report 1.1; Section 1.A
Exhibit 3A, 3B and 3C – Buffer Zone Map with Site Layout
Administrative Report 1.1; Section 3.A
Technical Report 1.0; Section 3
Exhibit 4A, 4B and 4C – Process Flow Diagrams Phase 1; Phase 2; and Ultimate
Technical Report 1.0; Section 2.C
Exhibit 5 – Service Area Map
Technical Report 1.0; Section 3
Exhibit 6 – Regionalization Map
Technical Report 1.1; Section 1.B.3
Exhibit 7 – Wind Rose
Technical Report 1.1; Section 5.B

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: 7518

Check/Money Order Amount: $1,250.00

Name Printed on Check: Odyssey Engineering Group, LLC

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: New Permit

f. For existing permits:

Permit Number: WQ00 Click to enter text.

EPA I.D. (TPDES only): TX Click to enter text.

Expiration Date: Click to enter text.

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?

Ann Staacke Rivers Family Limited Partnership

(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: Click to enter text.

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

Prefix: Click to enter text. Last Name, First Name: Abell, Joseph M.

Title: President of the AS Rivers Corporation, the general partner of the Ann Staacke Rivers Family Limited Partnerhip Credential: Click to enter text.

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?

Not applicable

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

legal documents forming the entity.)

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

CN: Click to enter text.

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

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

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

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

C. Core Data Form

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

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: Click to enter text. Last Name, First Name: Elms, Jennifer

Title: Senior Project Manager Credential: P.E.

Organization Name: Odyssey Engineering Group

Mailing Address: 2500 Tanglewilde St. Suite 300 City, State, Zip Code: Houston, TX 77063

Phone No.: 281-306-0240 ext: 124 E-mail Address: jelms@odysseyeg.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Click to enter text. Last Name, First Name: Hartley, Holly

Title: Operations and Development Director Credential: P.E.

Organization Name: Canopy Engineering LLC

Mailing Address: 21322A Provincial Blvd City, State, Zip Code: Katy, TX 77450

Phone No.: 281 732 0830 E-mail Address: hhartley@canopyengineering.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: Click to enter text. Last Name, First Name: Elms, Jennifer

Title: Senior Project Manager Credential: P.E.

Organization Name: Odyssey Engineering Group

Mailing Address: 2500 Tanglewilde St. Suite 300 City, State, Zip Code: Houston, TX 77063

Phone No.: 281-306-0240 ext: 124 E-mail Address: jelms@odysseyeg.com

B. Prefix: Click to enter text. Last Name, First Name: Hartley, Holly

Title: Operations and Development Director Credential: P.E.

Organization Name: Canopy Engineering LLC

Mailing Address: 21322A Provincial Blvd City, State, Zip Code: Katy, TX 77450

Phone No.: 281 732 0830 E-mail Address: hhartley@canopyengineering.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: Click to enter text. Last Name, First Name: Gilbert, Christopher

Title: President Credential: P.E.

Organization Name: Rooted Development

Mailing Address: 21322A Provincial Blvd City, State, Zip Code: Katy, TX 77450

Phone No.: 713-264-1559 E-mail Address: Christopher.gilbert@rooteddev.com

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: Click to enter text. Last Name, First Name: Gilbert, Christopher

Title: President Credential: P.E.

Organization Name: Rooted Development

Mailing Address: 21322A Provincial Blvd City, State, Zip Code: Click to enter text.

Phone No.: 713-264-1559 E-mail Address: Christopher.gilbert@rooteddev.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Click to enter text. Last Name, First Name: Elms, Jennifer

Title: Senior Project Manager Credential: P.E.

Organization Name: Odyssey Engineering Group

Mailing Address: 2500 Tanglewilde St, Suite 300 City, State, Zip Code: Houston, Texas 77063

Phone No.: 281 306 0240 ext 124 E-mail Address: jelms@odysseyeg.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: Click to enter text. Last Name, First Name: Elms, Jennifer

Title: Senior Project Manager Credential: P.E.

Organization Name: Odyssey Engineering Group

Mailing Address: 2500 Tanglewilde St. Suite 300 City, State, Zip Code: Houston, TX 77063

Phone No.: 281 306 0240 ext 124 E-mail Address: jelms@odysseyeg,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: Harris County Public Library – Lonestar College

Location within the building: Resource Counter

Physical Address of Building: 9191 Barker Cypress Rd

City: Cypress County: Harris

Contact (Last Name, First Name): Wachsmann, Melanie

Phone No.: 281-290-3210 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☒ Yes ☐ No

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

   ☐ Yes ☐ No

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

F. Plain Language Summary Template

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

Attachment: **See Attachment 2**

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: **See Attachment 3**

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** NEW ENTITY

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 Waller Counties Municipal Utility District No. 11 Wastewater Treatment Plant

C. Owner of treatment facility: Permittee

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

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

Prefix: Click to enter text. Last Name, First Name: Permittee will own land

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

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: Not Applicable

E. Owner of effluent disposal site:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

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

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: Click to enter text.

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

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

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

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: Click to enter text.

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:

Facility is located approximately 3,100 ft north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

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:

From the plant to an unnamed tributary of Spring Creek thence to Spring Creek (HCFCD J100-00-00) thence to Spring Creek Segment 1008 of the San Jacinto River Basin

City nearest the outfall(s): Waller

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

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Not Applicable

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:

Section 11 Not Applicable

B. City nearest the disposal site: Click to enter text.

C. County in which the disposal site is located: Click to enter text.

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

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

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

See Exhibit 1A – 1D

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

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: Click to enter text.

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: New Permit

Applicant: Ann Staacke Rivers Family Limited Partnership

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): Joseph M. Abell, III

Signatory title: President of the AS Rivers Corporation, the general partner of the Ann Staacke Rivers Family Limited Partnership

Signature: _____ Date: 5/23/2024

(Use blue ink)

Subscribed and Sworn to before me by the said _____

on this 23rd day of May, 20 24.

My commission expires on the 4th day of January, 20 27.

_____

Notary Public

Harris, Texas

County, Texas

SARAMI LAZO
NOTARY PUBLIC
[SEAL]
STATE OF TEXAS
ID. 131842648
EXP. 01-04-2027

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:

See Exhibit 2

- ☒ The applicant's property boundaries
- ☒ The facility site boundaries within the applicant's property boundaries
- ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- ☒ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- ☐ The property boundaries of all landowners surrounding the effluent disposal site
- ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

B. ☒ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided. **See Attachment 4**

C. Indicate by a check mark in which format the landowners list is submitted:

☐ USB Drive ☒ Four sets of labels Word document of Avery labels included

D. Provide the source of the landowners' names and mailing addresses: Harris County Appraisal District and Waller County Appraisal District

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☒ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

See Attachment 6

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

Section 3. Buffer Zone Map (Instructions Page 38)

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

See Exhibit 3A – 3C

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

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

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

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

☒ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: **See Attachment 7**

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): 0.065

2-Hr Peak Flow (MGD): 0.26

Estimated construction start date: April 2025

Estimated waste disposal start date: August 2025

B. Interim II Phase

Design Flow (MGD): 0.13

2-Hr Peak Flow (MGD): 0.52

Estimated construction start date: August 2026

Estimated waste disposal start date: January 2027

C. Final Phase

Design Flow (MGD): 0.25

2-Hr Peak Flow (MGD): 1.0

Estimated construction start date: January 2029

Estimated waste disposal start date: September 2029

D. Current Operating Phase

Provide the startup date of the facility: Not in service

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**.

Facility will be operated in the extended aeration – complete mix mode with nitrification. Treatment units will include – onsite lift station, manual bar screen, aeration basins, aerobic digesters, final clarifiers, chlorine contact chamber. Ancillary equipment will include a non-potable water system for plant wash down and emergency generator

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 8		

C. Process Flow Diagram

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

Attachment: **See Exhibit 4A – 4C**

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° 7’ 11.1”
- Longitude: 95° 53’ 11.3”

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

- Latitude: Not Applicable
- Longitude: Not Applicable

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 Exhibit 5**

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

Click to enter text.

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 Waller Counties Municipal Utility District No. 11	Harris Waller Counties Municipal Utility District No. 11	**Publicly Owned**	Under construction
		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**.

Click to enter text.

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.

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

No Existing 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: Click to enter text.

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**.

Click to enter text.

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.

Click to enter text.

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*.

Click to enter text.

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 9

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.

Click to enter text.

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the 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.

Click to enter text.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 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: To Be Determined

Facility Operator's License Classification and Level: To Be Determined

Facility Operator's License Number: To Be Determined

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
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

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

D. Disposal site

Disposal site name: To Be Determined

TCEQ permit or registration number: To Be Determined

County where disposal site is located: To Be Determined

E. Transportation method

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

Name of the hauler: To Be Determined

Hauler registration number: To Be Determined

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:

Click to enter text.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 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: Click to enter text.

Title: Click to enter text.

Signature: _____

Date: _____

Facility Not in Operation

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

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

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

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

Permittee is developing an area of Harris and Waller counties that is seeing extensive development since the completing of SH 99. There are very few existing or proposed developments in the area and no existing facilities that could be regionalized. The City of Waller is too far to make providing treatment feasible and economical. While there are a few proposed facilities in the area, none are constructed or on timelines that meet this developments construction schedule.

B. Regionalization of facilities

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

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

1. *Municipally incorporated areas*

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

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

☐ Yes ☒ No ☐ Not Applicable

If yes, within the city limits of: Click to enter text.

If yes, attach correspondence from the city.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

2. *Utility CCN areas*

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

☐ Yes ☒ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

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

Attachment: Click to enter text.

3. ***Nearby WWTPs or collection systems***

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

☒ Yes ☐ No

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

Attachment: **See Exhibit 6**

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

Attachment: **See Attachment 10**

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☐ Yes ☒ No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): Click to enter text.

Average Influent Organic Strength or BOD_5 Concentration in mg/l: Click to enter text.

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): Click to enter text.

Provide the source of the average organic strength or BOD_5 concentration.

Click to enter text.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)			Influent BOD5 Concentration (mg/l)
Municipality	0.065	0.13	0.25	350
Subdivision				
Trailer park – transient				
Mobile home park				
School with cafeteria and showers				
School with cafeteria, no showers				
Recreational park, overnight use				
Recreational park, day use				
Office building or factory				
Motel				
Restaurant				
Hospital				
Nursing home				
Other				
TOTAL FLOW from all sources	0.065	0.13	0.25	
AVERAGE BOD_5 from all sources				350

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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

Dissolved Oxygen, mg/l: 4

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

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

Dechlorination process: Click to enter text.

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: **See Attachments 11 and 12**

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

☒ Yes ☐ No

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

Click to enter text.

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

FIRM MAP 45473C0075E

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

☐ Yes ☒ No

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

☐ Yes ☐ No

If yes, provide the permit number: Click to enter text.

If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.

B. Wind rose

Attach a wind rose: **See Exhibit 7**

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

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

☐ Yes ☒ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: See Attachment 9

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

- Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

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

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 Spring 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.

Spring 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.

Click to enter text.

Date and time of observation: April 1, 2024 1000AM

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.

Click to enter text.

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.

Click to enter text.

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: None

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.

Attachment 1 – Core Data Form – Ann Staacke Rivers Family LP
Administrative Report 1.0; Section 3.C

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

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 New Customer		**RN** New Regulated Entity

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy) 04/26/24

☒ 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:*

Ann Staacke Rivers Family Limited Partnership

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
	32036206525	76-0614686	

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:	c/o Mr. Christopher M. Gilbert, Rooted Development						
	21322A Provincial Blvd.						
	City	Katy	**State**	TX	**ZIP**	77450	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	christopher.gilbert@rooteddev.com

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

(713)264 1559		( ) -

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 Waller Counties Municipal Utility District No. 11 Wastewater Treatment Plant

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

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

25. Description to Physical Location:	Approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road in Harris County Texas.

26. Nearest City	**State**	**Nearest ZIP Code**
Waller	Texas	77484

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:	30.1198	**28. Longitude (W) In Decimal:**	-95.8865

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	7	11.1	-95	53	11.3

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		211320	

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

treatment of domestic sewage

34. Mailing Address:	c/o Mr. Christopher M. Gilbert, Rooted Development						
	21322A Provincial Blvd.						
	City	Katy	**State**	TX	**ZIP**	77450	**ZIP + 4**

35. E-Mail Address:	christopher.gilbert@rooteddev.com

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 264 1559		( ) -

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:
	New Permit			

SECTION IV: Preparer Information

40. Name:	Jennifer L. Elms, P.E.	41. Title:	Senior Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(281) 306 0240	124	( ) -	jelms@odysseyeg.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:	Ann Staacke Rivers Family LP	Job Title:	President of the AS Rivers Corporation, the general partner of the Ann Staacke Rivers Family Limited Partnership
Name *(In Print)*:	Joseph M. Abell, III	Phone:	(713) 202 1053
Signature:	JMabell	Date:	5/23/2024

Attachment 2 – Plan Language Summary (English and Spanish)
Administrative Report 1.0, Section 8.F

Attachment 2

Plain Language Summary
Administrative Report 1.0, Section 8.F

ENGLISH VERSION

The Ann Staacke Rivers Family Limited Partnership (NEW CUSTOMER) proposes to operate the Ann Staacke Rivers Family Wastewater Treatment Plant (NEW REGULATED ENTITY), an activated sludge process plant operated in the extended aeration mode with nitrification. The facility will be located approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road in Harris County, Texas 77484.

This application is for a new Texas Pollutant Discharge Elimination System (TPDES) permit to discharge a daily average flow of 250,000 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*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7, Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process and the treatment units will include a manual bar screen, aeration basins, final clarifiers, aerobic digesters, and disinfection.

SPANISH VERSION

Ann Staacke Rivers Family Limited Partnership (NUEVO CLIENTE) propone operar la Planta de Tratamiento de Aguas Residuales de la Familia Ann Staacke Rivers (NUEVA ENTIDAD REGULADA), una planta de procesamiento de lodos activados operada en el modo de aireación extendida con nitrificación. La instalación estará ubicada aproximadamente a 3,100 pies al noreste de la intersección de Binford Road y Castle Road en el condado de Harris, Texas 77484.

Esta solicitud es para un nuevo permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES, por sus siglas en inglés) para descargar un flujo promedio diario de 250,000 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 (NH3-N) y *Escherichia coli*. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7, Análisis de Contaminantes de Efluentes Tratados en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas mediante un proceso de lodos activados y las unidades de tratamiento incluirán una criba manual de barras, balsas de aireación, clarificadores finales, digestores aeróbicos y desinfección.

Attachment 3 – Public Involvement Plan Form
Administrative Report 1.0, Section 8.G

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

☒ New Permit or Registration Application

☐ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☒ Requires public notice,

☐ Considered to have significant public interest, **and**

☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Attachment 4 – Surrounding and Downstream Landowners List
Administrative Report 1.1; Section 1.B

Attachment 4
Downstream and Surrounding Landowners List
Administrative Report 1.1; Section 1.B

1 – Permittee	ANN STAACKE RIVERS FAMILY LP 15 RIVER CIRCLE HOUSTON TX 77063
2	NEW WAVERLY SOUND INVESTMENT LLC 321 EAST RUSSELL STREET FAYETTEVILLE NC 28301
3	25010 KICKAPOO LLC DBA BRIGHT MEADOW RANCH 201 BRIGHT MEADOW RANCH LN WALLER TX 77484
4	KICKAPOO BMR II LLC ATTN GARY ELKINS 24130 TOMBALL PARKWAY SUITE 200 TOMBALL TX 77375
5	TIMOTHY HARLESS 12510 MIDLAND CREEK DR TOMBALL TX 77377
6	ED MOERS 29344 CASTLE RD WALLER TX 77484
7	THOMAS MEHRKAM 29330 CASTLE RD WALLER TX 77484
8	RAYMOND PHILLIPS 24062 FM 1098 HEMPSTEAD TX 77445
9	MICHAEL A DAMON 29402 CASTLE RD WALLER TX 77484
10	COY PITCHFORD 23246 MARGERSTADT RD WALLER TX 77484
11	BRILLIANT LEGACY LLC 910 RIVIERA DR MANSFIELD TX 76063
12	CASTLE ROAD PASTURES LLC 29719 CASTLE RD WALLER TX 77484
12	CASTLE ROAD PASTURES LLC 19710 ARROYO COLORADO CT CYPRESS TX 77433
13	PAUL & KATHARINE MARRACK 29702 CASTLE RD WALLER TX 77484

14	STEVE HART 23010 BINFORD RD WALLER TX 77484
15	DONNA M HART FAMILY 23010 BINFORD RD WALLER TX 77484
16	MAXINE BURTON ESTATE 23327 BINFORD RD WALLER TX 77484

Attachment 5 – Surrounding and Downstream Landowners List
Address Labels
Administrative Report 1.1; Section 1.C
(Separate Word Doc - Avery Labels template)

Attachment 6 – Original Photographs
Administrative Report 1.1; Section 2

Attachment 7 – Supplemental Permit Information Form

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: Ann Staacke Rivers Family LP

   Permit No. WQ00 New Permit EPA ID No. TX New Permit

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

   Facility is located approximately 3,100 ft north-northeast of the intersection of Binford Road and Castle 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): Click here to enter text.

First and Last Name: Jennifer Elms

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

Title: Senior Project Manager

Mailing Address: 2500 Tanglewilde Street, Suite 300

City, State, Zip Code: Houston, Texas 77063

Phone No.: 281 306 0240 Ext.: 124 Fax No.: Click here to enter text.

E-mail Address: jelms@odysseyeg.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.

Permittee is the 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.

From the plant to an unnamed tributary of Spring Creek thence to Spring Creek (HCFCD J100-00-00) thence to Spring Creek Segment 1008 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):

Project is approximately 1.44 acres. Basins will be above grade. No other impacts anticipated.

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

Current use is agricultural pastureland.

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:

No building or structure on site.

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

Property has historically been used as pastureland.

Attachment 8 – Treatment Units and Sizes
Technical Report 1.0; Section 2.B

Attachment 8 – Treatment Units – Number and Sizes
Technical Report 1.0, Section 2.B

Interim Phase 1 – 0.065 mgd

Unit	Number of Units	Dimensions
Aeration Basin	1	12’ W x 10.67’SWD x 43’L
Digester Basin	1	12’ W x 10.67’SWD x 30’L
Final Clarifier*	1	27’ DIA x 10’ SWD
Chlorine Contact Basin*	1	12’ L x 12’ W x 7.5’
Manual Bar Screen		½-inch openings

Final Clarifier and Chlorine contact basin are sized to accommodate Phase 1 and Phase2

Interim Phase 2 – 0.13 mgd

Unit	Number of Units	Dimensions
Aeration Basin	2	12’ W x 10.67’SWD x 43’L
Digester Basin	2	12’ W x 10.67’SWD x 30’L
Final Clarifier	1	27’ DIA x 10’ SWD
Chlorine Contact Basin	1	12’ L x 12’ W x 7.5’
Manual Bar Screen		½-inch openings

Ultimate Phase – 0.25 mgd

Unit	Number of Units	Dimensions
Aeration Basin	4	12’ W x 10.67’SWD x 43’L
Digester Basin	4	12’ W x 10.67’SWD x 30’L
Final Clarifier	2	27’ DIA x 10’ SWD
Chlorine Contact Basin	2	12’ L x 12’ W x 7.5’

Attachment 9 – Sewage Sludge Solids Management Plan
Technical Report 1.0, Section 6.F
Technical Report 1.1; Section 7

Attachment 9 - Sewage Solids Management Plan
Technical Report 1.0; Section 6.F
Technical Report 1.1; Section 7
Proposed Harris Waller Counties MUD No.11 WWTP

Influent design flow	0.065	MGD
Influent BOD_5 concentration	350	mg/l
Effluent BOD_5 concentration	10	
Net Removal	340	
Aerobic Digseter Volume	3,841	gallons
Phase 1 Dimensions	12' W x 10.67' SWD x 30' L	
Aeration basin MLSS	2,000-3,500	mg/l
Assumed Sludge Yield	0.65	lb TSS/lb of BOD_5 removed
Assume TSS in digester	2.00	%

	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)
Solids Generated	100% 0.065	75% 0.0488	50% 0.0325	25% 0.0163
Pounds of Influent BOD5	184	138	92	46
Pounds of digested dry sludge	120	90	60	30
Pounds of wet sludge produced	5,990	4,493	2,995	1,498
Gallons of wet sludge produced	718	539	359	180

Removal	Days	Days	Days	Days
SRT	5	7	11	21

Attachment 9 - Sewage Solids Management Plan
Technical Report 1.0; Section 6.F
Technical Report 1.1; Section 7
Proposed Harris Waller Counties MUD No.11 WWTP

Influent design flow	0.13	MGD
Influent BOD_5 concentration	350	mg/l
Effluent BOD_5 concentration	10	
Net Removal	340	
Aerobic Digseter Volume	7,682	gallons
Phase 1 Dimensions	12' W x 10.67' SWD x 30' L	
Aeration basin MLSS	2,000-3,500	mg/l
Assumed Sludge Yield	0.65	lb TSS/lb of BOD_5 removed
Assume TSS in digester	2.00	%

	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)
Solids Generated	100% 0.13	75% 0.0975	50% 0.0650	25% 0.0325
Pounds of Influent BOD5	369	276	184	92
Pounds of digested dry sludge	240	180	120	60
Pounds of wet sludge produced	11,980	8,985	5,990	2,995
Gallons of wet sludge produced	1,437	1,077	718	359

Removal	Days	Days	Days	Days
SRT	5	7	11	21

Attachment 9 - Sewage Solids Management Plan
Technical Report 1.0; Section 6.F
Technical Report 1.1; Section 7
Proposed Harris Waller Counties MUD No.11 WWTP

Influent design flow	0.25	MGD
Influent BOD_5 concentration	350	mg/l
Effluent BOD_5 concentration	10	
Net Removal	340	
Aerobic Digseter Volume	15,365	gallons
Phase 1 Dimensions	12' W x 10.67' SWD x 30' L x 4 basin	
Aeration basin MLSS	2,000-3,500	mg/l
Assumed Sludge Yield	0.65	lb TSS/lb of BOD_5 removed
Assume TSS in digester	2.00	%

	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)	FLOW (MGD)
Solids Generated	100% 0.25	75% 0.1875	50% 0.1250	25% 0.0625
Pounds of Influent BOD5	709	532	354	177
Pounds of digested dry sludge	461	346	230	115
Pounds of wet sludge produced	23,039	17,279	11,520	5,760
Gallons of wet sludge produced	2,763	2,072	1,381	691

Removal	Days	Days	Days	Days
SRT	6	7	11	22

Attachment 10 – Regionalization Correspondence
Technical Report 1.1; Section 1.B.3

April 23, 2024

Ronan Bailey Smith
403 South Market Street
Brenham, TX 77833

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Spring Creek Village MHC Wastewater Treatment Plant (WQ0015436001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

_____ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: _____ Date: _____

cc: Holly Hartley, P.E. – Canopy Engineering

ODYSSEY
ENGINEERING GROUP

2500 Tanglewilde Street, Suite 300
Houston, Texas 77063

CERTIFIED MAIL®

HOUSTON TX FRDC 773
1 MAY 2024 PM 3 L

7019 2280 0001 2865 1257

U.S. POSTAGE PAID
FCM LETTER
KATY, TX 77493
MAY 01, 2024
$8.73
S2324A501428-13

Ronan Bailey Smith
403 South Market Street
Brenham, TX 77833

77833

RDC 99

NIXIE 773 PE 1 0005/11/24

RETURN TO SENDER
ATTEMPTED - NOT KNOWN
UNABLE TO FORWARD

BC: 77063212575 *2425-02624-01-40

9400921793129200

ANK

77063>2125
77833-3762

April 23, 2024

Prairie Estsates @ Waller, LLC
Louis Mertz
5599 San Felipe St., Suite 565
Houston, TX 77056

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Prairie Estates @ Waller Wastewater Treatment Plant (WQ0016240001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

_____ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: _____ Date: _____

cc: Holly Hartley, P.E. – Canopy Engineering

April 23, 2024

Harris County MUD No. 588
Dominic Cashiola
c/o Schwartz Page & Harding
1300 Post Oak Blvd., Suite 2400
Houston, TX 77056

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Harris County MUD 588 Wastewater Treatment Plant (Pending WQ0016381001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

_____ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: _____ Date: _____

cc: Saib R. Saour, P.E., District Engineer – Benchmark Engineering Corp.
Holly Hartley, P.E. – Canopy Engineering

April 23, 2024

Harris County MUD No. 588
Dominic Cashiola
c/o Schwartz Page & Harding
1300 Post Oak Blvd., Suite 2400
Houston, TX 77056

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Harris County MUD 588 Wastewater Treatment Plant (Pending WQ0016381001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

__✓__ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: Brian Chavanes Date: 5/16/24

cc: Saib R. Saour, P.E., District Engineer – Benchmark Engineering Corp.
Holly Hartley, P.E. – Canopy Engineering

April 23, 2024

Mark Urback, P.E.
Quadvest LP
26926 FM 2978
Magnolia, TX 77354

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Binford Road Wastewater Treatment Plant (WQ0016100001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

_____ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: _____ Date: _____

cc: Holly Hartley, P.E. – Canopy Engineering

April 23, 2024

Mark Urback, P.E.
Quadvest LP
26926 FM 2978
Magnolia, TX 77354

RE: Ann Staacke Rivers Family LP
New Permit Application
Regionalization Correspondence
OEG No. 24-007-200

Dear Sirs:

Odyssey Engineering Group is preparing a new TPDES Discharge Permit application for the proposed Wastewater Treatment Plant to serve the Ann Staacke Rivers Family LP development. The facility will be located approximately 3,100 feet north-northeast of the intersection of Binford Road and Castle Road in Harris County, Texas.

The Texas Commission on Environmental Quality (TCEQ) rules require that the applicants for new TPDES Discharge Permits contact all public and private utilities that own existing wastewater treatment plants or collection systems within a three-mile radius of the proposed facility. The ultimate capacity of the proposed facility is 0.25 million gallons per day. Please indicate below if your facility, Binford Road Wastewater Treatment Plant (WQ0016100001) is capable of providing the proposed amount of capacity within your existing WWTP and collection system or if your utility is willing to expand existing facilities to accommodate the amount of proposed flow.

Should you have any questions or need additional information, I can be contacted at 281. 306.0240, ext. 124 or by email at jelms@odysseyeg.com. Please email me your response or snail mail to the address below. Your timely attention to this matter is greatly appreciated and we thank you for your time.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

_____ Yes, my facility is capable of accepting the proposed flow and/or we are willing to expand our facilities as needed.

__X__ No, we are not able to accommodate the proposed flow and are not willing to expand our facilities as needed.

Signed: _____ Date: 5/6/24

cc: Holly Hartley, P.E. – Canopy Engineering

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

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

Brenham TX 77833

OFFICIAL USE

Certified Mail Fee $4.40
$ $3.65
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) $ $0.00
☐ Return Receipt (electronic) $ $0.00
☐ Certified Mail Restricted Delivery $ $0.00
☐ Adult Signature Required $ $0.00
☐ Adult Signature Restricted Delivery $
Postage $0.68
$
Total Postage and Fees $8.73
$
Sent To Nunca Baile Smith
Street and Apt. No., or PO Box No. 903 S Market St
City, State, ZIP+4® Brenham Tx 77833

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

KATY FINANCE STATION KATY TX 77493
0449 1
MAY 01 2024
Postmark Here
05/01/2024

7019 2280 0001 2865 1257

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

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

Magnolia TX 77354

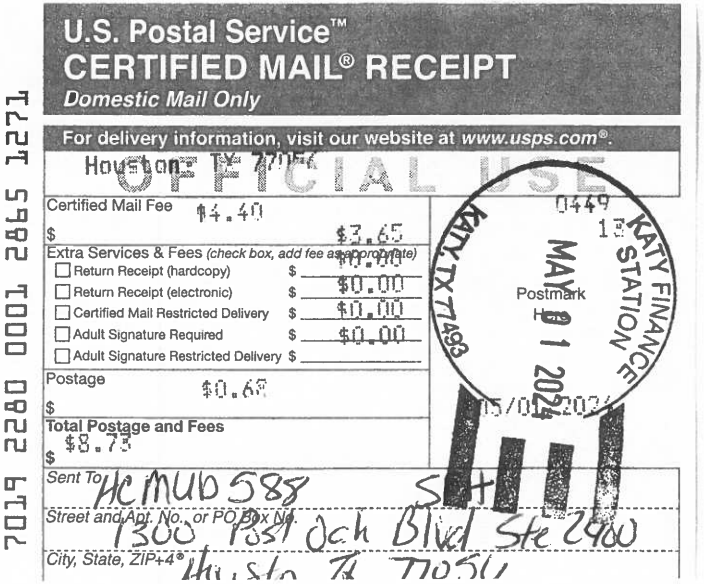
OFFICIAL USE

Certified Mail Fee $4.40
$ $3.65
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) $ $0.00
☐ Return Receipt (electronic) $ $0.00
☐ Certified Mail Restricted Delivery $ $0.00
☐ Adult Signature Required $ $0.00
☐ Adult Signature Restricted Delivery $
Postage $0.68
$
Total Postage and Fees $8.73
$
Sent To Quad West
Street and Apt. No., or PO Box No. 26926 FM 2978
City, State, ZIP+4® Magnolia Tx 77354

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

KATY FINANCE STATION KATY TX 77493
MAY 01 2024
Postmark Here

7019 2280 0001 2865 1318



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

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

Houston TX 77056

OFFICIAL USE

Certified Mail Fee $4.40
$ $3.65
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) $ $0.00
☐ Return Receipt (electronic) $ $0.00
☐ Certified Mail Restricted Delivery $ $0.00
☐ Adult Signature Required $ $0.00
☐ Adult Signature Restricted Delivery $
Postage $0.68
$
Total Postage and Fees $8.73
$
Sent To HCMUD 588
Street and Apt. No., or PO Box No. 1300 Post Oak Blvd Ste 2400
City, State, ZIP+4® Houston Tx 77056

KATY FINANCE STATION KATY TX 77493
0449 1
MAY 01 2024
Postmark Here
05/01/2024

7019 2280 0001 2865 1271

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

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

Houston TX 77056

OFFICIAL USE

Certified Mail Fee $4.40
$ $3.65
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) $ $0.00
☐ Return Receipt (electronic) $ $0.00
☐ Certified Mail Restricted Delivery $ $0.00
☐ Adult Signature Required $ $0.00
☐ Adult Signature Restricted Delivery $
Postage $0.68
$
Total Postage and Fees $8.73
$
Sent To Louis Mertz
Street and Apt. No., or PO Box No. 5599 San Felipe St Suite 565
City, State, ZIP+4®

KATY FINANCE STATION KATY TX 77493
0449 1
MAY 01 2024
Postmark Here
05/01/2024

7019 2280 0001 2865 1288

Attachment 11 – Design Calculations
Technical Report 1.1; Section 4

ENGINEERING DESIGN SUMMARY
FOR
PROPOSED HARRIS WALLER COUNTIES MUD NO. 11
WASTEWATER TREATMENT PLANT PHASE 1 - 0.065 MGD

PURPOSE

The purpose of this report is to present the basis for design and summary of unit sizing and hydraulic calculations for the 0.065 mgd Wastewater Treatment Plant. Ultimate phase will provide capacity to accommodate 833 connections at 300 GPD/ESFC

INFLUENT QUALITY CHARACTERISTICS

The influent wastewater quality characteristics used for design are estimates based on State Design criteria and are as follows:

PARAMETER	CONCENTRATION FOR PHASE I	
BOD_5	350	mg/L
TSS	250	mg/L
NH3-N	45	mg/l

INFLUENT FLOW CHARACTERISTICS

The plant processes and hydraulic design are based on the following flows:

Phase I

Average Daily Flow (Q_{avg})	65,000	gpd	45 gpm
Peak 2-hour Flow (Q_{pk})	260,000	gpd	181 gpm

PROCESS DESIGN

The sewage treatment plant has been designed to produce an effluent in compliance with permitted parameters of:

$CBOD_5$	10	mg/L
TSS	15	mg/L
NH_3-N	3	mg/L
DO	4	mg/L
Chlorine Residual	1	mg/L after 20 minutes contact time

ORGANIC LOADING

	Influent Conditions	**Phase I**	
1	Average Daily Flow (Q_{avg})	65,000	gpd
		45	gpm
		0.10	cfs
2	Peak 2-hour Flow (Q_{pk})	260,000	gpd
		181	gpm
		0.40	cfs

Influent (30-Day Average)

1	BOD_5 (mg/L)	350	Influent concentration of wastewater strength
2	TSS (mg/L)	250	
3	BOD_5 (lbs/day)	190	Organic Load

Process Loadings

1	MLSS (mg/L)	3,000	
2	RASS (mg/L)	7,500	
3	VSS/TSS	0.75	

Aeration

1	TCEQ maximum organic loading	35	lbs/day/1,000 cf
2	TCEQ required volume	5,429	
3	Side Water Depth	10.67	ft
4	Width	12	ft
5	Length	43	ft
6	Number of tanks	1	
7	Aeration volume available	5,506	cf
8	Organic Loading, (lbs/day/1,000 cf)	34.51	
9	F/M, lb BOD_5 / lb MLVSS	0.25	
10	Hydraulic retention time (hr)	15.21	
11	Solids retention time (days)	28.85	

Digester

1	TCEQ mimimum volume	20	cf/lb BOD_5
2	TCEQ mimimum detention time	40	days
3	Digester solids	30,000	mg/L
4	Volatile solids Reduction	44%	Metcalf and Eddy (4th Edition)
5	MLVSS/MLSS ratio	0.75	
6	Total daily solids generation	165	lb/d
7	Total solids after digestion	110	lb/d
8	TCEQ required volume (Loading)	3,293	cf
9	TCEQ required volume (Detention time)	2,358	cf
10	Side water depth	10.67	ft
11	Width	12	ft
12	Length	30.0	ft
13	Number of tanks	1	
14	Digester volume available	3,841	cf
15	Digester loading,	23	cf/lb BOD_5
16	Digester sludge retention time	65.16	days

Clarifier — Phase I

1	TCEQ max. surface loading	1,200	gpd/sf	
2	TCEQ required surface area	217	sf	
3	Diameter	27	ft	
4	Side water depth	10.0	ft	
5	Number of units	1		
6	Area	573	sf	
7	Surface loading @ Q_{avg}	114	gpd/sf	
8	Surface loading @ Q_{pk}	454	gpd/sf	
9	TCEQ min. detention time @ Q_{avg}	6	hours	
10	TCEQ min. detention time @ Q_{pk}	1.8	hours	
11	Detention time @ Q_{avg}	15.8	hours	
12	Detention time @ Q_{pk}	3.95	hours	
13	TCEQ maximum weir loading	20,000	gpd/ft	
14	Weir length	85	ft	
15	Weir loading at Q_{pk}	3,065	gpd/ft	
16	Min RAS Flow	80	gpm	200 gpd/sf of clarifier
17	Max RAS Flow	159	gpm	400 gpd/sf of clarifier
18	WAS Flow	3,038	gpd	
19	Required Torque for Drive Unit	2,734	lbs-ft	Assumes avg sludge loading of 15lbs/ft on rake arm

Chlorine Contact Chamber

1	TCEQ min. detention time	20	minutes
2	Volume required @ Q_{pk}	484	cf
3	Side water depth	7.5	ft
4	Width	12	ft
5	Length	12	ft
6	Number of tanks	1	
7	Volume provided	1,080	cf
8	Detention time at Q_{pk}	44.63	minutes

Air Requirements

1	TCEQ minimum aeration air requirements	2.2	2.2lbs O2/lb BOD_5 or formula (1.2(BOD)+4.3(NH3-N))/BOD, whichever is greater	
2	TCEQ minimum digester air requirements	20	SCFM / 1,000 cf of digester volume	
3	Airflow Rate Correction Factor	1.82	Based on Air Diffuser Submergence (Table F.5 217.155(b)(2)(D))	
4	WOTE	0.07	(0.0075*SWD in Aeration Basin)	
5	Diffuser Type	C	(**C**oarse or **F**ine)	
6	SCFM/day/lb BOD_5	650	SCFM	Aeration Basin
7	SCFM / 1,000 cf	77	SCFM	Digester
8	CC mixing, 2.5 scfm/lf	30	SCFM	Chlorine Contact Basin
9	Air lifts	20	SCFM	
10	Rapid Mixing Channel		SCFM	If Applicable
11	Total Air required (design)	776	SCFM	
12	Total Air required (max)	1,165	SCFM	Total Air Required

ENGINEERING DESIGN SUMMARY
FOR
PROPOSED HARRIS WALLER COUNTIES MUD NO. 11
WASTEWATER TREATMENT PLANT PHASE 2 - 0.13 MGD

PURPOSE

The purpose of this report is to present the basis fo design and summary of unit sizing and hydraulic calculatios for the 0.13 mgd Wastewater Treatment Plant. Ultimate phase will provide capacity to accommodate 833 connections at 300 GPD/ESFC

INFLUENT QUALITY CHARACTERISTICS

The influent wastewater quality characteristics used for design are estimates based on State Design criteria and are as follows:

PARAMETER	CONCENTRATION FOR PHASE I	
BOD_5	350	mg/L
TSS	250	mg/L
NH3-N	45	mg/l

INFLUENT FLOW CHARACTERISTICS

The plant processes and hydraulic design are based on the following flows:

Phase I

Average Daily Flow (Q_{avg})	130,000	gpd	90 gpm
Peak 2-hour Flow (Q_{pk})	520,000	gpd	361 gpm

PROCESS DESIGN

The sewage treatment plant has been designed to produce an effluent in compliance with permitted parameters of:

$CBOD_5$	10	mg/L
TSS	15	mg/L
NH_3-N	3	mg/L
DO	4	mg/L
Chlorine Residual	1	mg/L after 20 minutes contact time

ORGANIC LOADING

	Influent Conditions	**Phase I**
1	Average Daily Flow (Q_{avg})	130,000 gpd
		90 gpm
		0.20 cfs
2	Peak 2-hour Flow (Q_{pk})	520,000 gpd
		361 gpm
		0.80 cfs

Influent (30-Day Average)

1	BOD_5 (mg/L)	350	Influent concentration of wastewater strength
2	TSS (mg/L)	250	
3	BOD_5 (lbs/day)	379	Organic Load

Process Loadings

1	MLSS (mg/L)	3,000	
2	RASS (mg/L)	7,500	
3	VSS/TSS	0.75	

Aeration

1	TCEQ maximum organic loading	35	lbs/day/1,000 cf
2	TCEQ required volume	10,829	
3	Side Water Depth	10.67	ft
4	Width	12	ft
5	Length	43	ft
6	Number of tanks	2	
7	Aeration volume available	11,011	cf
8	Organic Loading, (lbs/day/1,000 cf)	34.42	
9	F/M, lb BOD_5 / lb MLVSS	0.25	
10	Hydraulic retention time (hr)	15.21	
11	Solids retention time (days)	28.85	

Digester

1	TCEQ mimimum volume	20	cf/lb BOD_5
2	TCEQ mimimum detention time	40	days
3	Digester solids	30,000	mg/L
4	Volatile solids Reduction	44%	Metcalf and Eddy (4th Edition)
5	MLVSS/MLSS ratio	0.75	
6	Total daily solids generation	329	lb/d
7	Total solids after digestion	221	lb/d
8	TCEQ required volume (Loading)	6,587	cf
9	TCEQ required volume (Detention time)	4,716	cf
10	Side water depth	10.67	ft
11	Width	12	ft
12	Length	30.0	ft
13	Number of tanks	2	
14	Digester volume available	7,682	cf
15	Digester loading,	23	cf/lb BOD_5
16	Digester sludge retention time	65.16	days

Clarifier

Phase I

1	TCEQ max. surface loading	1,200	gpd/sf	
2	TCEQ required surface area	433	sf	
3	Diameter	27	ft	
4	Side water depth	10.0	ft	
5	Number of units	1		
6	Area	573	sf	
7	Surface loading @ Q_{avg}	227	gpd/sf	
8	Surface loading @ Q_{pk}	908	gpd/sf	
9	TCEQ min. detention time @ Q_{avg}	6	hours	
10	TCEQ min. detention time @ Q_{pk}	1.8	hours	
11	Detention time @ Q_{avg}	7.9	hours	
12	Detention time @ Q_{pk}	1.98	hours	
13	TCEQ maximum weir loading	20,000	gpd/ft	
14	Weir length	85	ft	
15	Weir loading at Q_{pk}	6,130	gpd/ft	
16	Min RAS Flow	80	gpm	200 gpd/sf of clarifier
17	Max RAS Flow	159	gpm	400 gpd/sf of clarifier
18	WAS Flow	6,059	gpd	

Chlorine Contact Chamber

1	TCEQ min. detention time	20	minutes
2	Volume required @ Q_{pk}	965	cf
3	Side water depth	7.5	ft
4	Width	12	ft
5	Length	12	ft
6	Number of tanks	1	
7	Volume provided	1,080	cf
8	Detention time at Q_{pk}	22.38	minutes

Air Requirements

1	TCEQ minimum aeration air requirements	2.2		2.2lbs O2/lb BOD_5 or formula (1.2(BOD)+4.3(NH3-N))/BOD, whichever is greater
2	TCEQ minimum digester air requirements	20	SCFM	/ 1,000 cf of digester volume
3	Airflow Rate Correction Factor	1.82		Based on Air Diffuser Submergence
4	WOTE	0.07		(0.0075*SWD in Aeration Basin)
5	Diffuser Type	c		(**C**oarse or **F**ine)
6	SCFM/day/lb BOD_5	1,296	SCFM	Aeration Basin
7	SCFM / 1,000 cf	154	SCFM	Digester
8	CC mixing, 2.5 scfm/lf	30	SCFM	Chlorine Contact Basin
9	Air lifts	40	SCFM	
10	Rapid Mixing Channel		SCFM	If Applicable
11	Total Air required (design)	1,520	SCFM	
12	Total Air required (max)	2,279	SCFM	Total Air Required (design)*1.5

ENGINEERING DESIGN SUMMARY
FOR
PROPOSED HARRIS WALLER COUNTIES MUD NO. 11
WASTEWATER TREATMENT PLANT PHASE 3 - 0.25 MGD

PURPOSE

The purpose of this report is to present the basis for design and summary of unit sizing and hydraulic calculations for the 0.25 mgd Wastewater Treatment Plant, ultimate phase, will provide capacity to accommodate 833 connections at 300 GPD/ESFC

INFLUENT QUALITY CHARACTERISTICS

The influent wastewater quality characteristics used for design are estimates based on State Design criteria and are as follows:

PARAMETER	CONCENTRATION FOR PHASE I	
BOD_5	350	mg/L
TSS	250	mg/L
NH3-N	45	mg/l

INFLUENT FLOW CHARACTERISTICS

The plant processes and hydraulic design are based on the following flows:

Phase I

Average Daily Flow (Q_{avg})	250,000	gpd	174 gpm
Peak 2-hour Flow (Q_{pk})	1,000,000	gpd	694 gpm

PROCESS DESIGN

The sewage treatment plant has been designed to produce an effluent in compliance with permitted parameters of:

$CBOD_5$	10	mg/L
TSS	15	mg/L
NH_3-N	3	mg/L
DO	4	mg/L
Chlorine Residual	1	mg/L after 20 minutes contact time

ORGANIC LOADING

	Influent Conditions	Phase I	
1	Average Daily Flow (Q_{avg})	250,000	gpd
		174	gpm
		0.39	cfs
2	Peak 2-hour Flow (Q_{pk})	1,000,000	gpd
		694	gpm
		1.55	cfs

Influent (30-Day Average)

1	BOD_5 (mg/L)	350	Influent concentration of wastewater strength
2	TSS (mg/L)	250	
3	BOD_5 (lbs/day)	730	Organic Load

Process Loadings

1	MLSS (mg/L)	3,000
2	RASS (mg/L)	7,500
3	VSS/TSS	0.75

Aeration

1	TCEQ maximum organic loading	35	lbs/day/1,000 cf
2	TCEQ required volume	20,857	
3	Side Water Depth	10.67	ft
4	Width	12	ft
5	Length	43	ft
6	Number of tanks	4	
7	Aeration volume available	22,023	cf
8	Organic Loading, (lbs/day/1,000 cf)	33.15	
9	F/M, lb BOD_5 / lb MLVSS	0.24	
10	Hydraulic retention time (hr)	15.81	
11	Solids retention time (days)	30.01	

Digester

1	TCEQ mimimum volume	20	cf/lb BOD_5
2	TCEQ mimimum detention time	40	days
3	Digester solids	30,000	mg/L
4	Volatile solids Reduction	44%	Metcalf and Eddy (4th Edition)
5	MLVSS/MLSS ratio	0.75	
6	Total daily solids generation	633	lb/d
7	Total solids after digestion	424	lb/d
8	TCEQ required volume (Loading)	12,666	cf
9	TCEQ required volume (Detention time)	9,069	cf
10	Side water depth	10.67	ft
11	Width	12	ft
12	Length	30.0	ft
13	Number of tanks	4	
14	Digester volume available	15,365	cf
15	Digester loading,	24	cf/lb BOD_5
16	Digester sludge retention time	67.77	days

Clarifier

Phase I

1	TCEQ max. surface loading	1,200	gpd/sf	
2	TCEQ required surface area	833	sf	
3	Diameter	27	ft	
4	Side water depth	10.0	ft	
5	Number of units	2		
6	Area	1,145	sf	
7	Surface loading @ Q_{avg}	218	gpd/sf	
8	Surface loading @ Q_{pk}	873	gpd/sf	
9	TCEQ min. detention time @ Q_{avg}	6	hours	
10	TCEQ min. detention time @ Q_{pk}	1.8	hours	
11	Detention time @ Q_{avg}	8.2	hours	
12	Detention time @ Q_{pk}	2.06	hours	
13	TCEQ maximum weir loading	20,000	gpd/ft	
14	Weir length	170	ft	
15	Weir loading at Q_{pk}	5,895	gpd/ft	
16	Min RAS Flow	159	gpm	200 gpd/sf of clarifier
17	Max RAS Flow	318	gpm	400 gpd/sf of clarifier
18	WAS Flow	11,671	gpd	
19	Required Torque for Drive Unit	2,734	lbs-ft	Assumes avg sludge loading of 15lbs/ft on rake arm

Chlorine Contact Chamber

1	TCEQ min. detention time	20	minutes
2	Volume required @ Q_{pk}	1,856	cf
3	Side water depth	7.5	ft
4	Width	12	ft
5	Length	12	ft
6	Number of tanks	2	
7	Volume provided	2,160	cf
8	Detention time at Q_{pk}	23.28	minutes

Air Requirements

1	TCEQ minimum aeration air requirements	2.2	2.2lbs O2/lb BOD_5 or formula (1.2(BOD)+4.3(NH3-N))/BOD, whichever is greater	
2	TCEQ minimum digester air requirements	20	SCFM / 1,000 cf of digester volume	
3	Airflow Rate Correction Factor	1.82	Based on Air Diffuser Submergence (Table F.5 217.155(b)(2)(D))	
4	WOTE	0.07	(0.0075*SWD in Aeration Basin)	
5	Diffuser Type	C	(**C**oarse or **F**ine)	
6	SCFM/day/lb BOD_5	2,496	SCFM	Aeration Basin
7	SCFM / 1,000 cf	307	SCFM	Digester
8	CC mixing, 2.5 scfm/lf	60	SCFM	Chlorine Contact Basin
9	Air lifts	40	SCFM	
10	Rapid Mixing Channel		SCFM	If Applicable
11	Total Air required (design)	2,903	SCFM	
12	Total Air required (max)	4,355	SCFM	Total Air Required

Attachment 12 – Plant Features
Technical Report 1.1; Section 4

Attachment 12 – Design Features
(Corresponds to Domestic Technical Report 1.1, Section 4)

INTERIM PHASE I – 0.065 MGD

A. STANDBY POWER SYSTEM

The area around the proposed wastewater treatment plant is undeveloped land. As such there are no records to indicate the expected duration of local power outages.

A permanent emergency/standby generator set will be installed in the Phase II expansion of the treatment plant. The Interim plant will be equipped with a manual transfer switch for connection to a portable generator capable of operating:

Blowers
Final Clarifier
Chlorination System
Metering and Control Equipment

Additionally, the collection system is sized such that there is enough storage within the lines for minor outages.

B. ALARM FEATURES

The plant will be equipped with an autodialer alarm monitor as well as audible alarm and light.

1. Power Outage
2. Blower Failure
3. Final Clarifier Torque Overload
4. Chlorine Leak Detection

The autodialer will store prerecorded messages concerning each alarm condition and procedure to be followed and will call up to 8 different phone numbers until alarm condition is acknowledged.

C. EQUIPMENT DUPLICITY

BLOWERS

Two blowers are installed, one required to meet firm design aeration rate, the second as backup. Backup operation for these units is manual.

NON-POTABLE WATER SYSTEM

The non-potable water system is equipped with dual pumps, one for firm capacity and one as a backup, capable of meeting the chlorination system and washdown demand.

CHLORINE CONTACT

A dual gaseous chlorination disinfection system will be installed, capable of automatically changing from one cylinder to another per 30TAC 311.36.

D. OVERFLOW PREVENTION

All units are designed with a minimum of 18 inches free board which will allow time for eliminating any line blockage problem or diversion of flow to another tank.

PHASE 2 – 0.13 MGD and PHASE 3 – 0.25 MGD

STANDBY POWER SYSTEM

The area around the proposed wastewater treatment plant is undeveloped land. As such there are no records to indicate the expected duration of local power outages.

A permanent emergency/standby generator set will be installed in the Phase II expansion of the treatment plant. The plant will be equipped with a automatic transfer switch in conjunction with the emergency standby diesel generator. Generator is sized for across the board start of:

- One (1) Centrifugal Blowers
- Final Clarifier
- Chlorination System
- Metering and Control Equipment

Additionally, the collection system is sized such that there is enough storage within the lines for minor outages.

ALARM FEATURES

The plant will be equipped with an autodialer alarm monitor as well as audible alarm and light. Alarms are programed for:

- Utility Power Outage
- Blower Failure
- Final Clarifier Torque Overload
- Chlorine Leak Detection

The autodialer will store prerecorded messages concerning each alarm condition and procedure to be followed and will call up to 8 different phone numbers until alarm condition is acknowledged.

DESIGN FEATURES FOR OPERATING FLEXIBILITY

AERATION BASINS

There are two [multiple basins in the final phases] aeration basins such that one can be taken out of service for repair and maintenance and still provide adequate treatment.

FINAL CLARIFIERS

This facility is less than 400,000 gallons per day, therefore, there is only a single clarifier.

In the final phase, multiple clarifiers will be used to complete the treatment process. At such time the operator will have the ability to shift flows to accommodate any down-times for maintenance or repair.

CHLORINE CONTACT

A dual gaseous chlorination disinfection system will be installed, capable of automatically changing from one cylinder to another per 30TAC 311.36.

EQUIPMENT DUPLICITY

BLOWERS

Two blowers are installed, one required to meet firm design aeration rate, the second as backup. Backup operation for these units is manual.

NON-POTABLE WATER SYSTEM

The non-potable water system is equipped with dual pumps, one for firm capacity and one as a backup, capable of meeting the chlorination system and washdown demand.

OVERFLOW PREVENTION

All units are designed with a minimum of 18 inches free board which will allow time for eliminating any line blockage problem or diversion of flow to another tank.

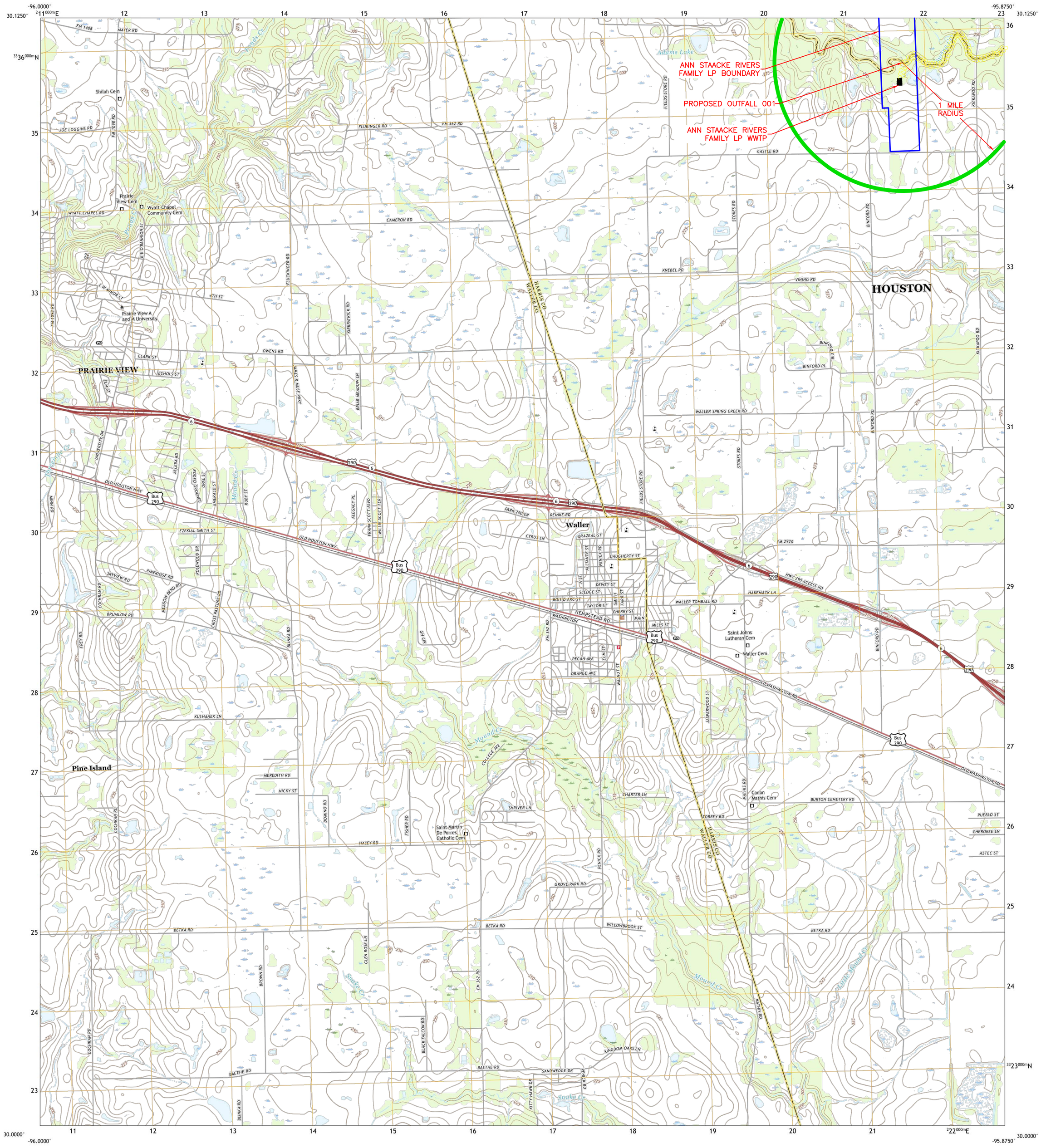
Exhibit 1A – 1D USGS Quad Maps;
Waller (main), Waller Northwest, Magnolia and Hockley
Administrative Report 1.0; Section 13

USGS
science for a changing world

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

The National Map
US Topo

WALLER QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\15R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads..... U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 2008 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96°W
Grid Zone Designation
14R | 15R
96°W

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Howth
2 Waller NW
3 Magnolia West
4 Hempstead
5 Hockley
6 Sunny Side
7 Hockley Mound
8 Warren Lake

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

WALLER, TX
2022

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
ANEW TPDES PERMIT APPLICATION

USGS QUADANGLE MAP WALLER EXHIBIT 1A

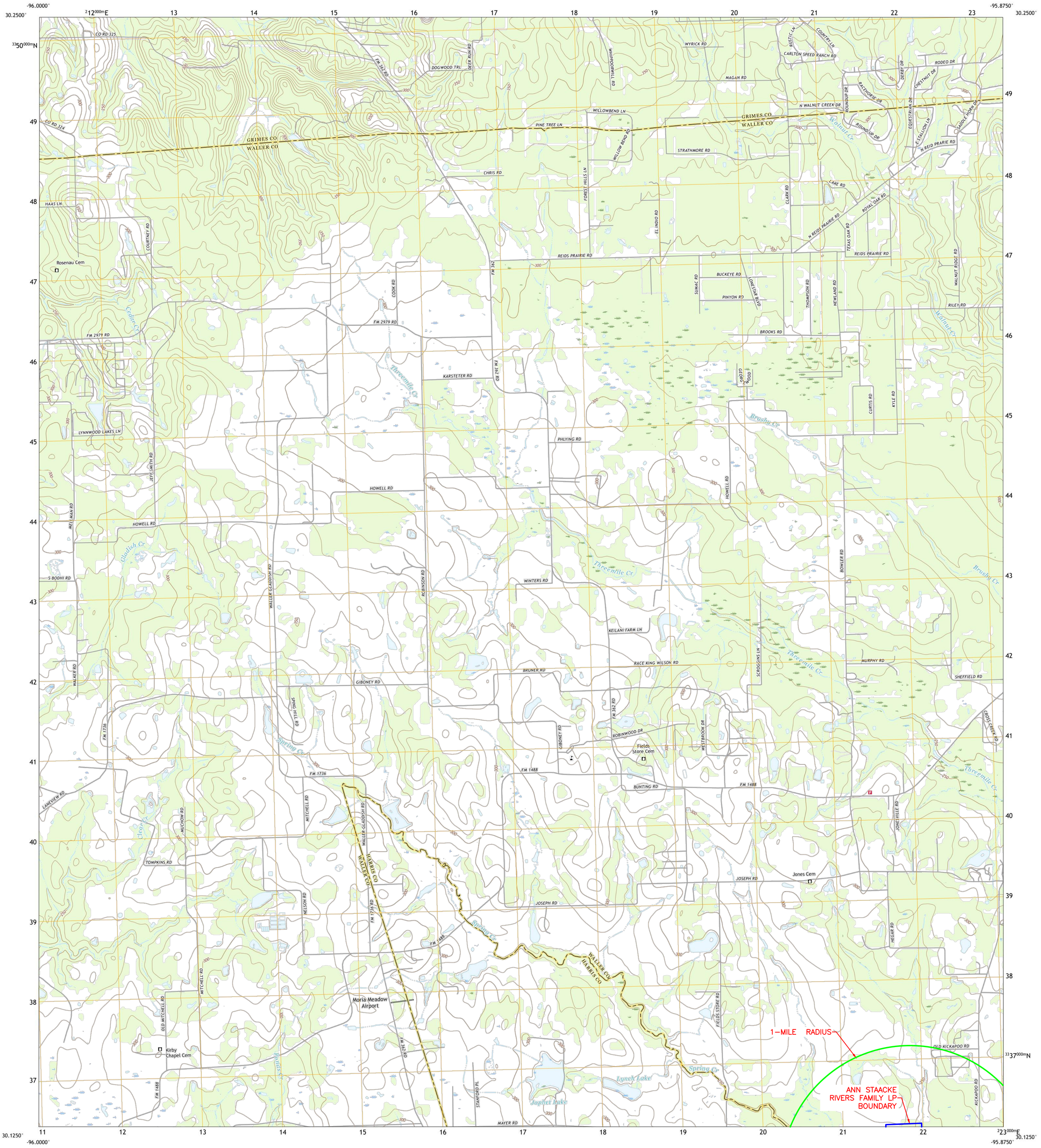
Graphic Scale in Feet
2000' 1000' 0 2000'

APRIL 2024

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

The National Map US Topo

WALLER NW QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\15R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, Not Available
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
2°41'
48 MILS
1°29'
26 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96°W
Grid Zone Designation
14R | 15R
96°W

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1 2 3
4 5
6 7 8
1 Courtney
2 Stoneham
3 Plantersville
4 Howth
5 Magnolia West
6 Hempstead
7 Waller
8 Hockley
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

WALLER NW, TX
2022

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

USGS QUAPANGLE MAP WALLER NW EXHIBIT 1B

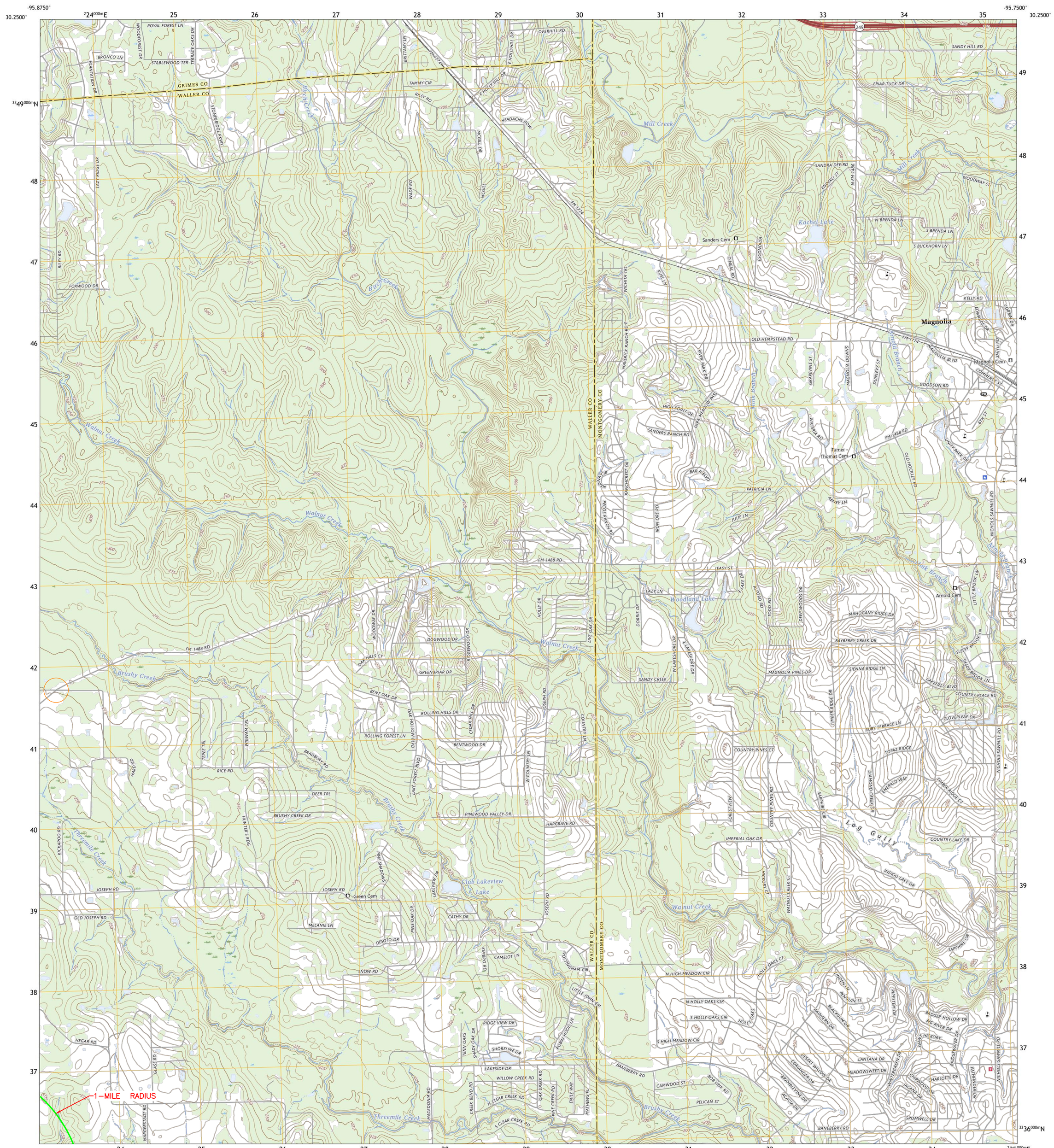
Graphic Scale in Feet
2000' 1000' 0 2000'

APRIL 2024

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

The National Map US Topo

MAGNOLIA WEST QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2023
Hydrography.....National Hydrography Dataset, 2003 - 2022
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2021 - 2022

Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2023 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
TP
Grid Zone Designation
15R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1 MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Stoneham
2 Plantersville
3 Keenan
4 Waller NW
5 Magnolia East
6 Waller
7 Hockley
8 Rose Hill

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

MAGNOLIA WEST, TX
2023

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANNE STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

USGS QUADANGLE MAP MAGNOLIA EXHIBIT 1C

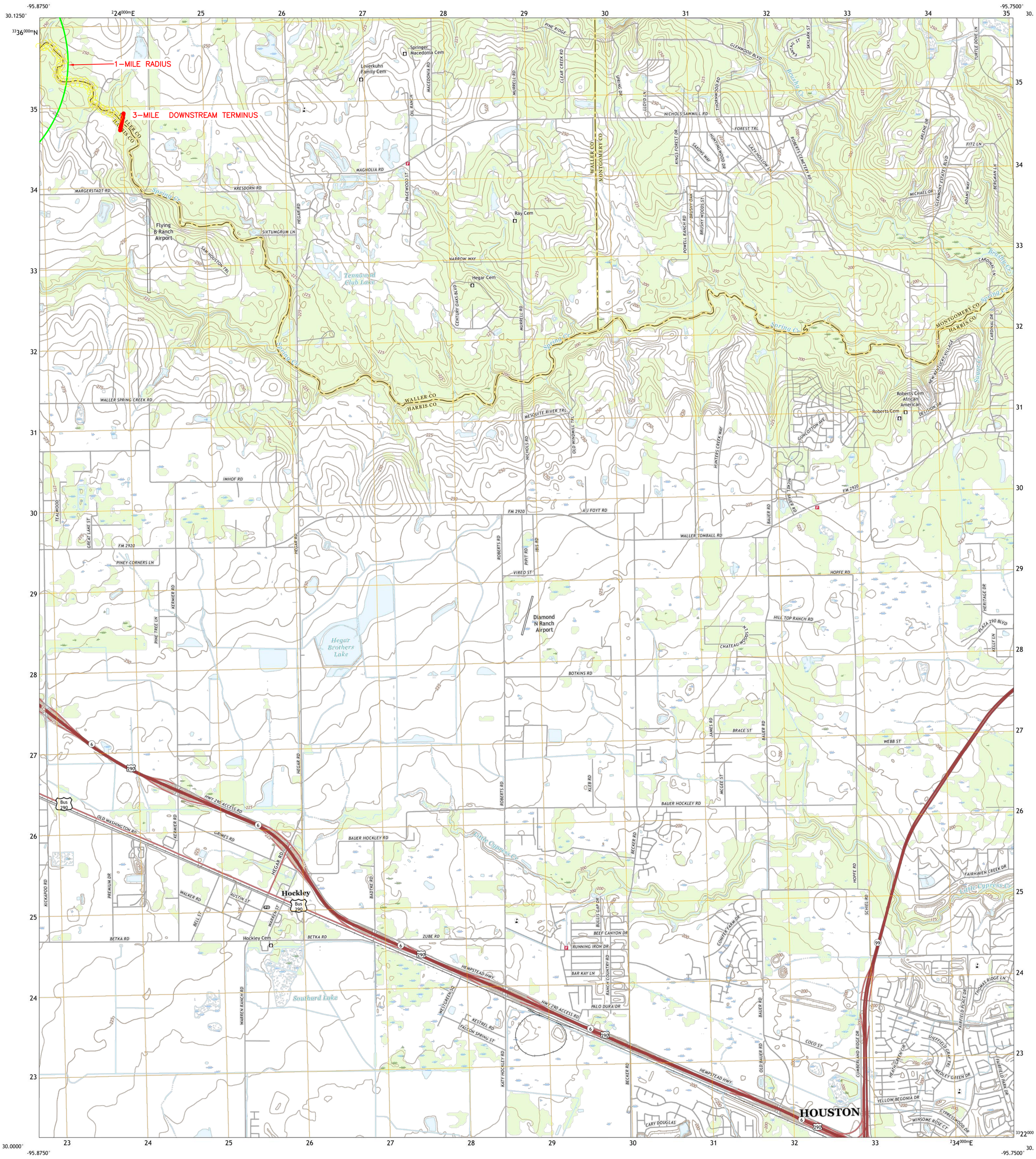
Graphic Scale in Feet
2000' 1000' 0 2000'

APRIL 2024

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

The National Map US Topo

HOCKLEY QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
2°37′ 47 MILS
1°25′ 25 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
TP
Grid Zone Designation 15R

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Waller NW
2 Magnolia West
3 Magnolia East
4 Waller
5 Rose Hill
6 Hockley Mound
7 Warren Lake
8 Cypress
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

HOCKLEY, TX
2022

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANNE STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

USGS QUADANGLE MAP HOCKLEY EXHIBIT 1D

Graphic Scale in Feet
2000' 1000' 0 2000'

APRIL 2024

Exhibit 2 – Surrounding and Downstream Landowners Map
Administrative Report 1.1; Section 1.A

ANN STAACKE RIVERS FAMILY BOUNDARY

PROPOSED OUTFALL 001

1-MILE DOWNSTREAM

ANN STAACKE RIVERS FAMILY WASTEWATER TREATMENT PLANT

PRIVATE ROAD 5,6,7,9

WALLER COUNTY LINE
HARRIS COUNTY LINE

CASTLE ROAD

BINFORD ROAD

KICKAPOO ROAD

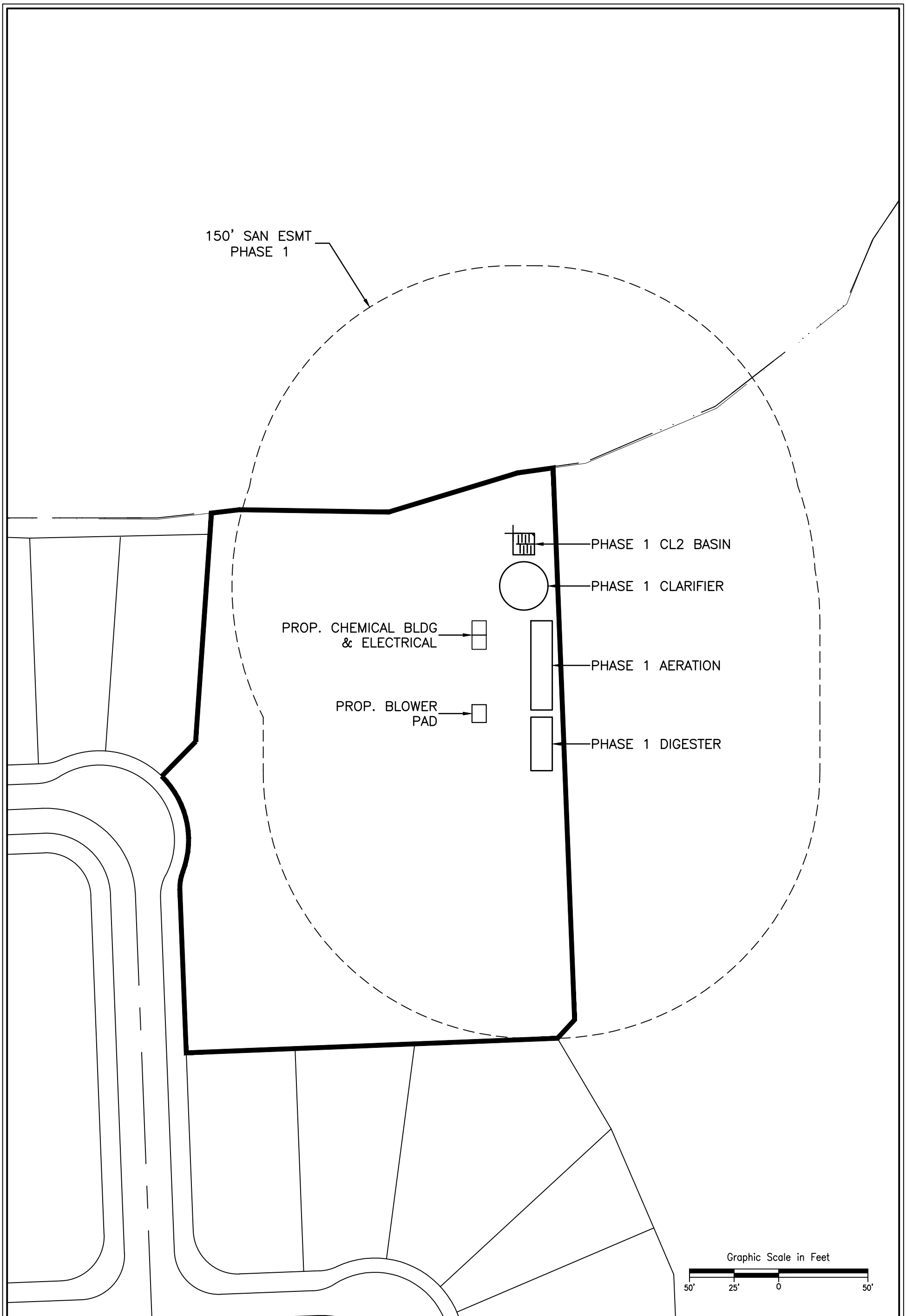
Graphic Scale in Feet
1000' 500' 0 1000'

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION
DOWNSTREAM LANDOWNERS MAP - EXHIBIT 2

APRIL 2024

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

Exhibit 3A, 3B and 3C – Buffer Zone Map with Site Layout
Administrative Report 1.1; Section 3.A
Technical Report 1.0; Section 3

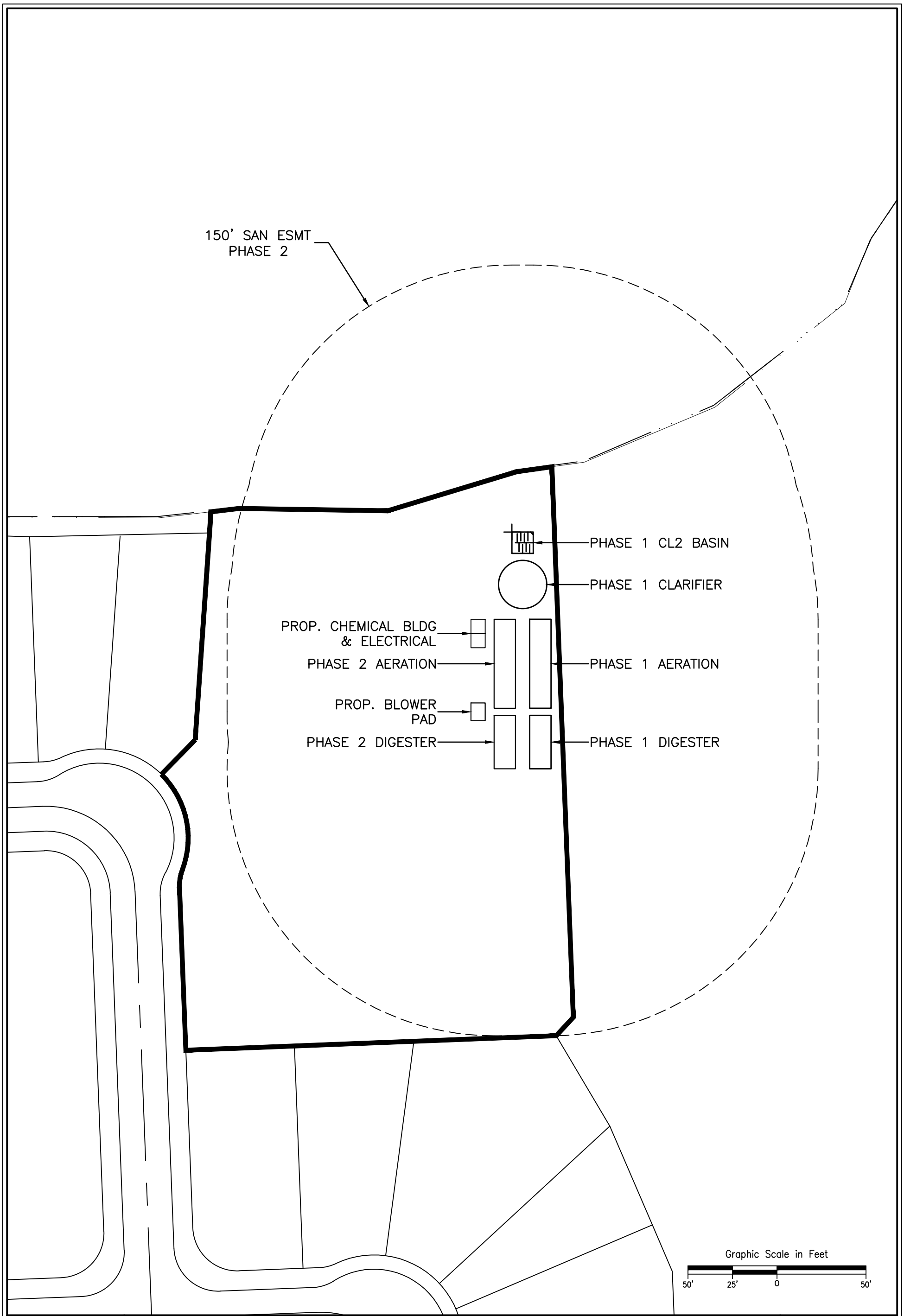


ODYSSEY
ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

SITE LAYOUT WITH BUFFER (PHASE 1)- EXHIBIT 3A

APRIL 2024

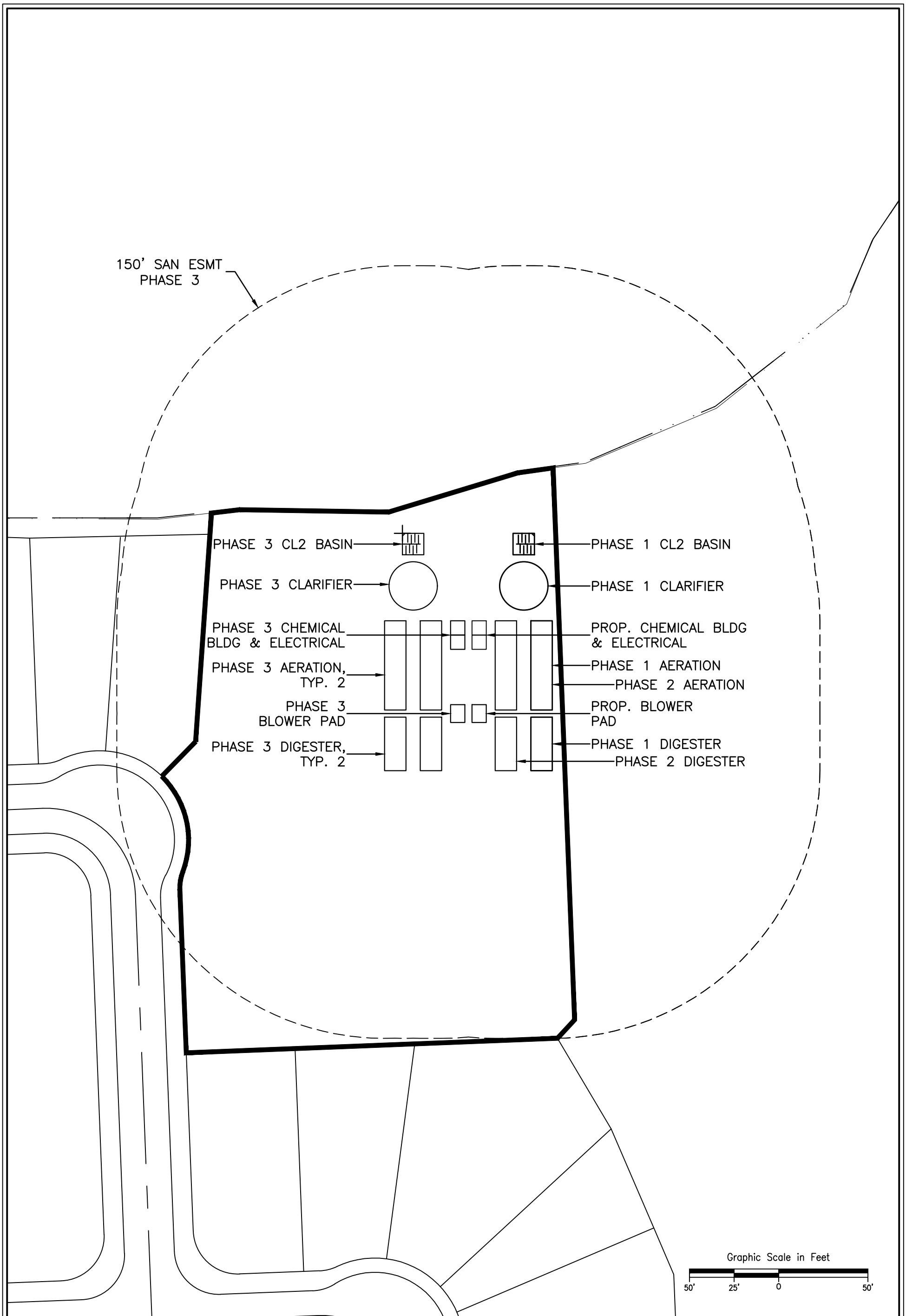


ODYSSEY
ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

SITE LAYOUT WITH BUFFER ZONE (PHASE 2)- EXHIBIT 3B

APRIL 2024



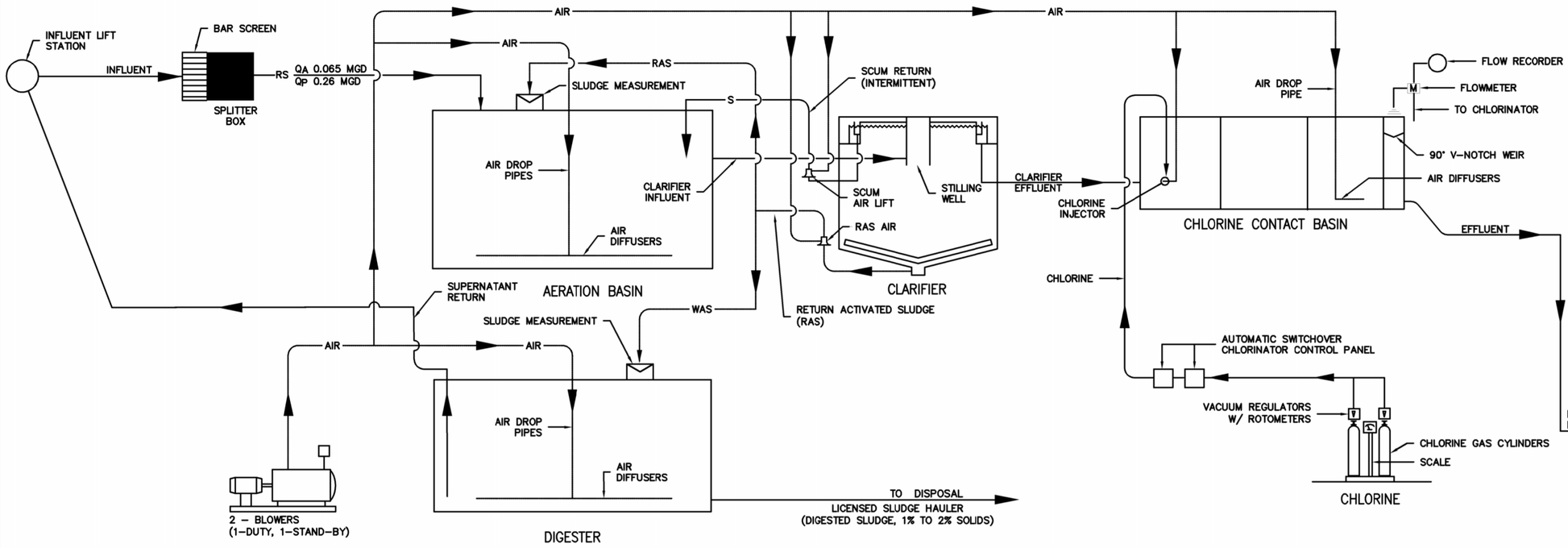
ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

SITE LAYOUT WITH BUFFER (ULTIMATE)- EXHIBIT 3C

APRIL 2024

Exhibit 4A, 4B and 4C – Process Flow Diagrams Phase 1; Phase 2; and Ultimate
Technical Report 1.0; Section 2.C



PROCESS FLOW DIAGRAM
N.T.S.

LEGEND

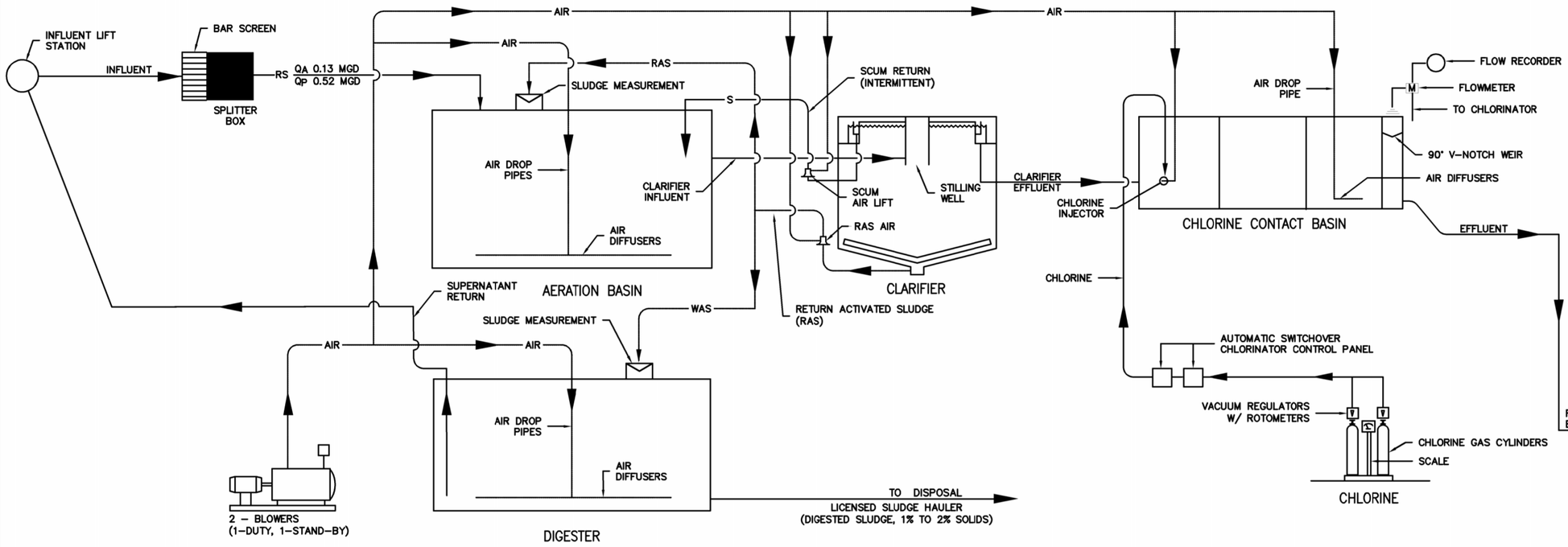
AIR	AIR PIPING
RS	RAW SEWAGE
SL	SLUDGE LINE
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
S	SCUM

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

PROCESS FLOW DIAGRAM - INTERIM 1 **EXHIBIT 4A**

APRIL 2024

ODYSSEY ENGINEERING GROUP
2500 Tanglevilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637



PROCESS FLOW DIAGRAM
N.T.S.

LEGEND

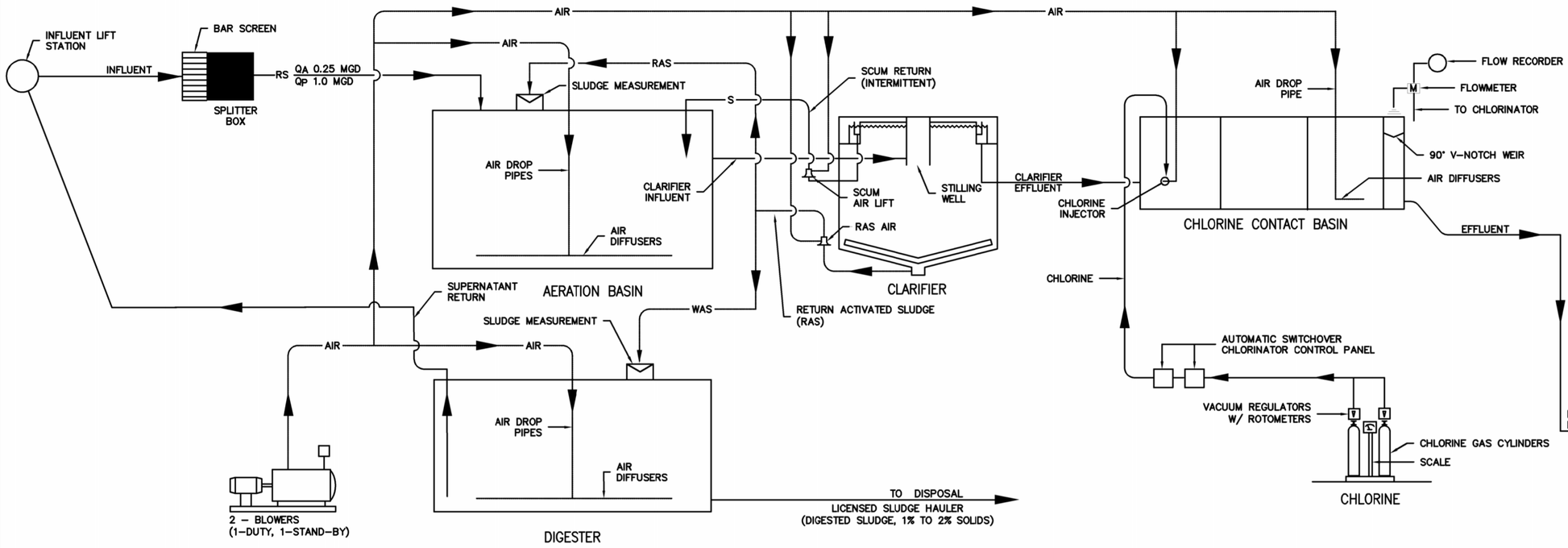
AIR	AIR PIPING
RS	RAW SEWAGE
SL	SLUDGE LINE
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
S	SCUM

ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

PROCESS FLOW DIAGRAM - INTERIM 2 EXHIBIT 4B

APRIL 2024

ODYSSEY ENGINEERING GROUP
2500 Tanglevilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637



PROCESS FLOW DIAGRAM
N.T.S.

LEGEND

AIR	AIR	PIPING
RS	RAW	SEWAGE
SL	SLUDGE	LINE
RAS	RETURN	ACTIVATED SLUDGE
WAS	WASTE	ACTIVATED SLUDGE
S	SCUM	

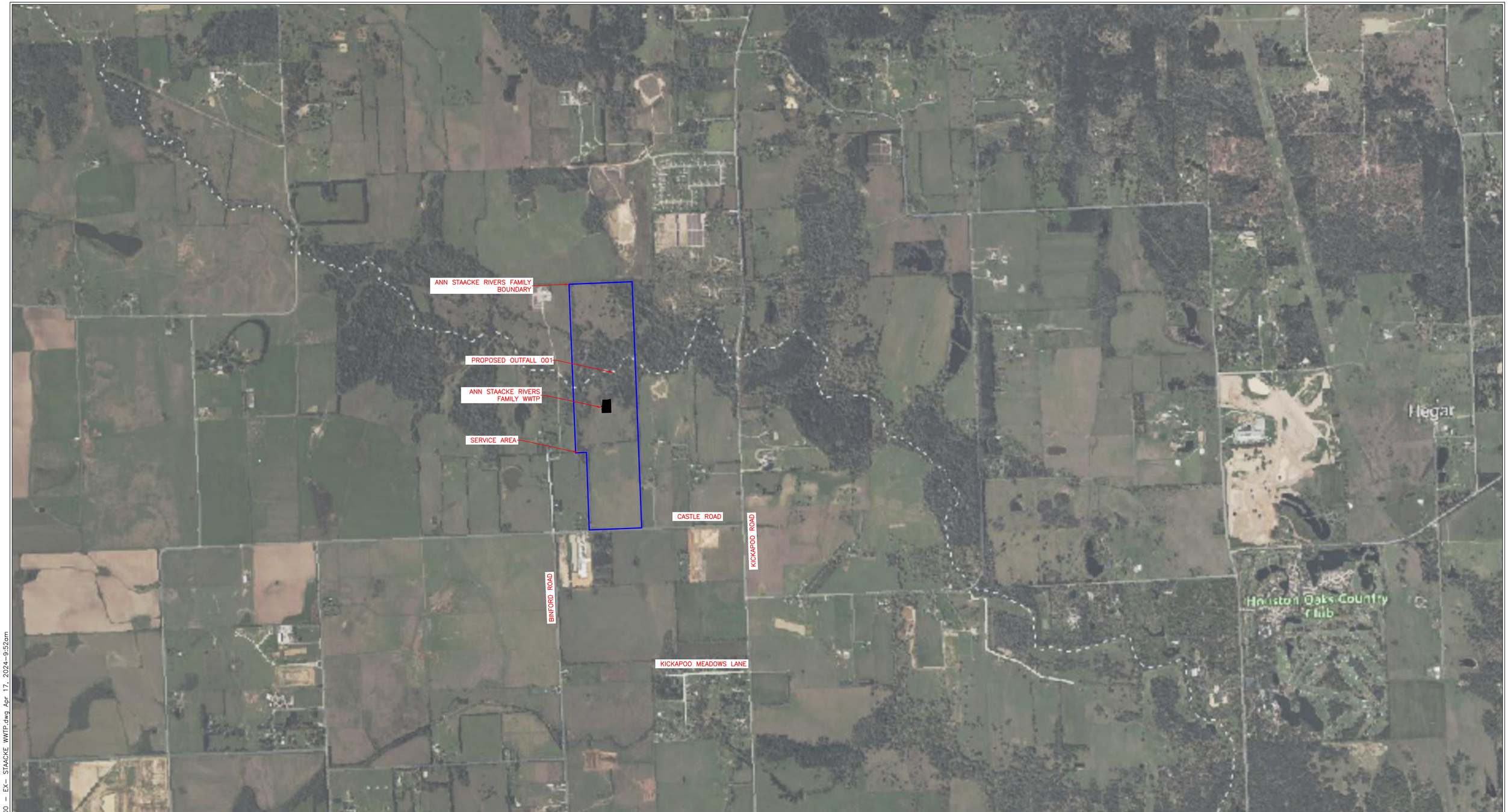
ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

PROCESS FLOW DIAGRAM - ULTIMATE PHASE EXHIBIT 4C

APRIL 2024

ODYSSEY ENGINEERING GROUP
2500 Tanglevilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

Exhibit 5 – Service Area Map
Technical Report 1.0; Section 3



ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

SERVICE AREA MAP - EXHIBIT 5

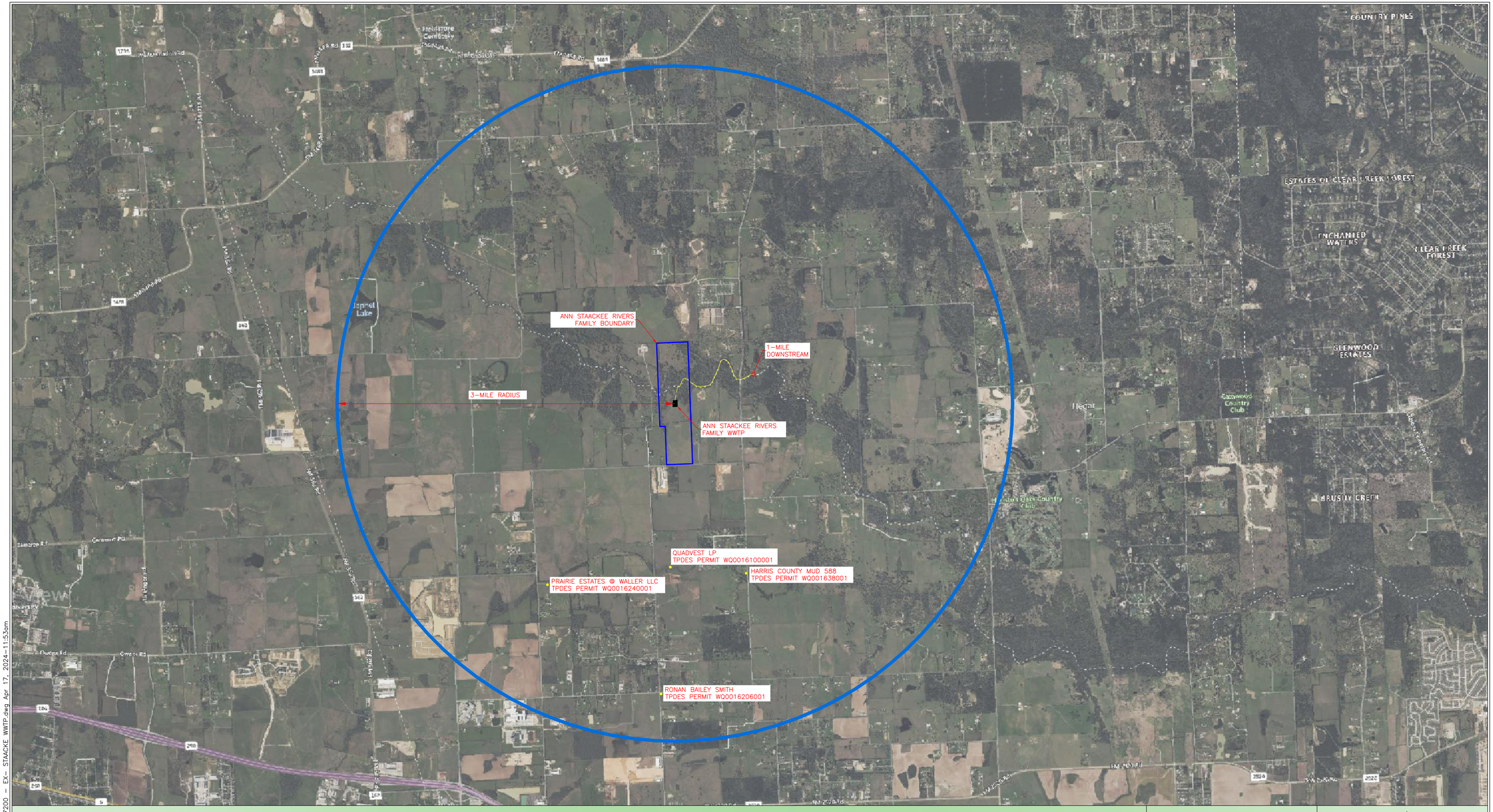
ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

APRIL 2024

Graphic Scale in Feet
1000' 500' 0 1000'

O:\24-007-200\Drawings\Exhibits\DWG\24007200 - EX- STAACKE WWTP.dwg Apr 17, 2024-9:52am

Exhibit 6 – Regionalization Map
Technical Report 1.1; Section 1.B.3



ANN STAACKE RIVERS FAMILY LP
NEW TPDES PERMIT APPLICATION

REGIONALIZATION MAP- EXHIBIT 6

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

APRIL 2024

Graphic Scale in Feet
2000' 1000' 0 2000'

Exhibit 7 – Wind Rose
Technical Report 1.1; Section 5.B

WIND DATA
HOUSTON INTERCONTINENTAL AIRPORT

OBSERVATIONS FROM NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
STATION #12960 -- HOUSTON INTERCONTINENTAL AIRPORT
PERIOD -- JANUARY 1973 THROUGH DECEMBER 1977
TOTAL OBSERVATIONS -- 32,856 (18 OBSERVATIONS PER DAY, 0600-2300 G.S.T.)

CROSSWIND COVERAGE TABLE (%)

RUNWAY DESIGNATION	WIND VELOCITY (DIRECT CROSSWIND COMPONENT)			
	15 M.P.H.		20 M.P.H.	
	ALL WEATHER	I.F.R. WEATHER	ALL WEATHER	I.F.R. WEATHER
8-26	95.79	97.72	98.72	99.25
14-32	98.83	98.48	99.68	99.58
9-27	95.79	97.72	98.72	99.25
8-26 & 14-32	99.65	99.72	100.00	100.00
9-27 & 14-32	99.65	99.72	100.00	100.00
8-26 & 9-27	95.79	97.72	98.72	99.25
ALL RUNWAYS	99.65	99.72	100.00	100.00

NOTES:

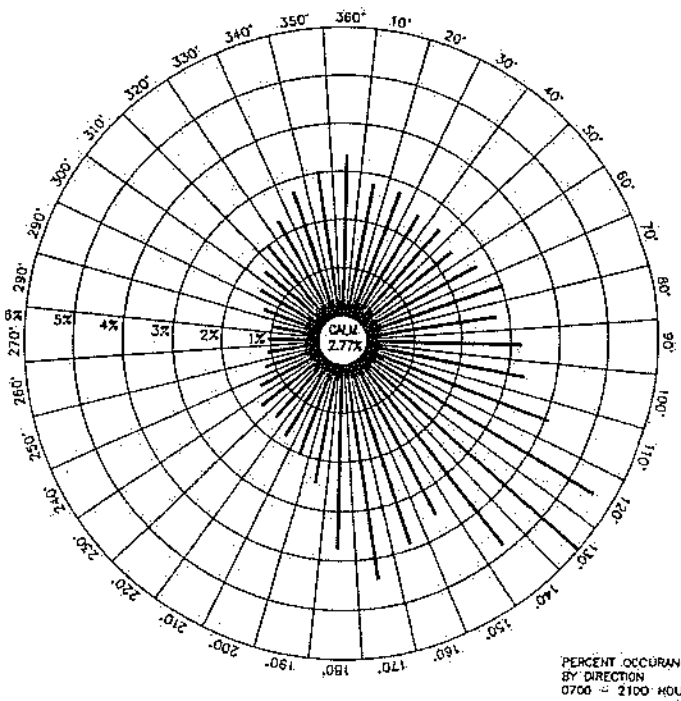
1. WINDS CALM -- 4.5% OF TOTAL OBSERVATIONS.
2. RUNWAYS SUPERIMPOSED HAVE TRUE AND MAGNETIC BEARINGS AS FOLLOWS:

RUNWAY DESIGNATION	RUNWAY BEARING	
	TRUE	MAGNETIC
8-26 & 9-27	89° 56' - 269° 56'	83° 36' - 263° 36'
14-32	151° 57' - 331° 57'	145° 37' - 325° 37'

3. I.F.R. WEATHER DEFINED AS LESS THAN 3 MILES VISIBILITY OR LESS THAN 1000 FOOT CLOUD CEILING.
MEAN MAXIMUM TEMPERATURE FOR THE HOTTEST MONTH: 94.8°

WIND ROSE

ALL - WEATHER
WIND OBSERVATIONS
JUNE 1969 - DEC 1983



PERCENT OCCURANCE
BY DIRECTION
0700 - 2100 HOURS

ANN STAACKE RIVERS FAMILY LP
15 RIVER CIRCLE
HOUSTON TX 77063

BRILLIANT LEGACY LLC
910 RIVIERA DR
MANSFIELD TX 76063

NEW WAVERLY SOUND INVESTMENT LLC
321 EAST RUSSELL STREET
FAYETTEVILLE NC 28301

CASTLE ROAD PASTURES LLC
29719 CASTLE RD
WALLER TX 77484

25010 KICKAPOO LLC
DBA BRIGHT MEADOW RANCH
201 BRIGHT MEADOW RANCH LN
WALLER TX 77484

CASTLE ROAD PASTURES LLC
19710 ARROYO COLORADO CT
CYPRESS TX 77433

KICKAPOO BMR II LLC
ATTN GARY ELKINS
24130 TOMBALL PARKWAY SUITE 200
TOMBALL TX 77375

PAUL & KATHARINE MARRACK
29702 CASTLE RD
WALLER TX 77484

TIMOTHY HARLESS
12510 MIDLAND CREEK DR
TOMBALL TX 77377

STEVE HART
23010 BINFORD RD
WALLER TX 77484

ED MOERS
29344 CASTLE RD
WALLER TX 77484

DONNA M HART FAMILY
23010 BINFORD RD
WALLER TX 77484

THOMAS MEHRKAM
29330 CASTLE RD
WALLER TX 77484

MAXINE BURTON ESTATE
23327 BINFORD RD
WALLER TX 77484

RAYMOND PHILLIPS
24062 FM 1098
HEMPSTEAD TX 77445

MICHAEL A DAMON
29402 CASTLE RD
WALLER TX 77484

COY PITCHFORD
23246 MARGERSTADT RD
WALLER TX 77484

June 18, 2024

Ms. Rachel Ellis
Texas Commission on Environmental Quality
Applications Review and Processing Team (MC 148)
P.O. Box 13087
Austin, Texas 78711-3087

RE: Notice of Deficiency
Ann Staacke Rivers Family Limited Partnership
Proposed Permit No. WQ0016551001
Site Name: Proposed Harris Waller County MUD No. 11

Dear Ms. Ellis:

We are in receipt of your Notice of Deficiency, dated June 5, 2024 for the above referenced facility. In addition to our various email conversations, we offer the following responses.

1) *Administrative Report 1.0, Section 9, Item D* – Enclosed please find a revised sheet 7 of 17 with land owner information.

2) *Additional Public Viewing Location* – As a result of the discharge point being located in and on a body of water that is bordering two countries, in addition to the public review copy of the application being placed in a Harris County Library, a public review copy will also be placed at :
Waller County Library System – Hempstead Branch
2331 11th Street
Hempstead, Texas 77445

3) *Map: Please identify the point of discharge* – The USGS Quad Map – Waller, TX has been revised to identify the discharge/outfall location. An electronic copy is included with this submittal and a hard copy will follow via U.S. Mail.

4) *The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions*. – The notice indicates that the intersection of Binford Road and Castle Road, and thus the proposed facility, is in the City of Waller. That is incorrect. Waller is the closest City, but the proposed District and facility are outside the city limits. Provided language --- "The domestic wastewater facility will be located at approximately 3,100 feet north northeast of the intersection of Binford Road and Castle Road, **in the city of Waller**, in Harris County Texas 77484." This is incorrect.

5) *After confirming the portion of the NORI does not contain any errors, please provide a Spanish translation of the NORI.* The portion of the NORI does contain errors and has two pieces of information missing. We have provided an translated NORI to the best

of our ability based on previous notices of other applications. An electronic copy will accompany this submittal and a hard copy will follow via U.S. Mail.

We hope that with this additional information, the Commission will be able to declare the application Administratively Complete and the permitting process may continue in a timely manner.

Should you have any questions or concerns about the information provided, please contact me at 281.306.0240 ext. 124 or by email at jelms@odysseyeg.com.

Thank you for your attention to this important matter.

Sincerely,

Jennifer L. Elms, P.E.
Senior Project Manager

Enclosures: Page 7 of the Administrative Report
USGS Quad Map – Waller, TX
Translation of NORI – Spanish

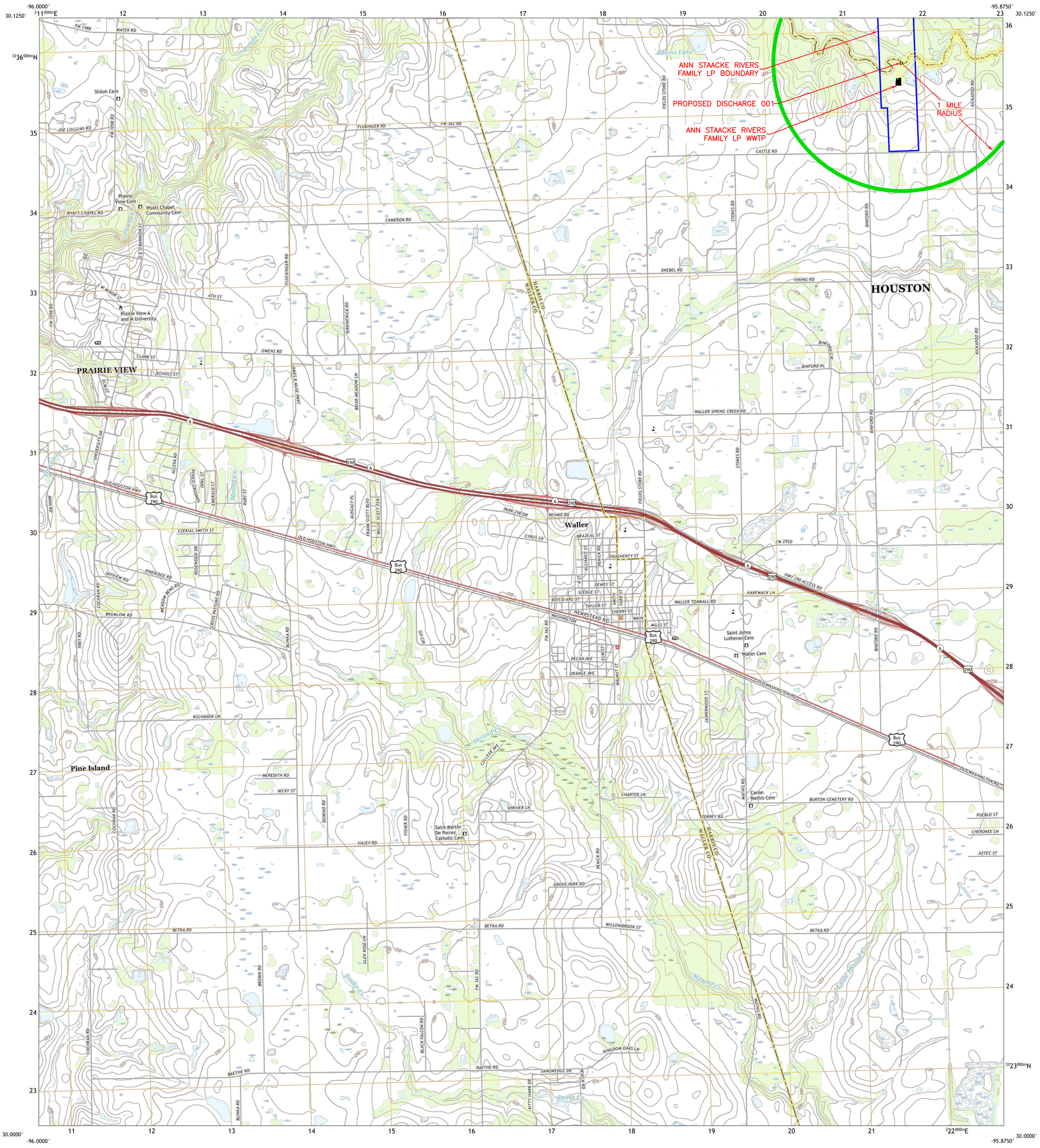
cc: Holly Hartley, P.E. – Canopy Engineering

USGS
science for a changing world

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

The National Map
US Topo

WALLER QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\15R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 2008 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
2°42' 48 MILS
1°28' 26 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96°W
Grid Zone Designation
14R | 15R
96°W

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Howth
2 Waller NW
3 Magnolia West
4 Hempstead
5 Hockley
6 Sunny Side
7 Hockley Mound
8 Warren Lake
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

WALLER, TX
2022

ODYSSEY ENGINEERING GROUP
2500 Tanglewilde Street, Suite 300
Houston, Texas 77063
t: 281.306.0240 | www.odysseyeg.com
TBPE No. F-17637

ANN STAACKE RIVERS FAMILY LP
ANEW TPDES PERMIT APPLICATION

USGS QUADANGLE MAP WALLER EXHIBIT 1A

Graphic Scale in Feet
2000' 1000' 0 2000'

APRIL 2024

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 2**

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: **See Attachment 3**

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** NEW ENTITY

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 Waller Counties Municipal Utility District No. 11 Wastewater Treatment Plant

C. Owner of treatment facility: Permittee

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

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

Prefix: Click to enter text. Last Name, First Name: Abell, Joseph M.

Title: President of the AS Rivers Corporation, the general partner of the Ann Staacke Rivers Family Limited Partnership Credential: Click to enter text.

Organization Name: Ann Staacke Rivers Family Limited Partnership

Mailing Address: c/o Rooted Development, 21322A Provincial Boulevard City, State, Zip Code: Katy, Texas 77450

Phone No.: 713-264-1559 E-mail Address: Christopher.gilbert@rooteddev.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: Not Applicable