



Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
 - Alternative Language (Spanish)
3. Application materials



Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

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

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

PMT Development, LLC (CN606333110) proposes to operate Grand Meadows WWTP (RN112098199), a domestic wastewater treatment facility. The facility will be located at approximately 0.41 miles Northeast of the intersection of County Road 221 and Neal Road, in Forney, Kaufman County, Texas 75126. The applicant is currently applying to the Texas Commission on Environmental Quality for a Texas Pollutant Discharge Elimination System (TPDES) Permit in order to discharge a maximum of 300,000 gallons per day of treated effluent from the proposed Wastewater Treatment Plant that is to be installed on the site.

Discharges from the facility are expected to contain trace amounts of five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), phosphorus (P), and ammonia nitrogen (NH₃-N). Removal of bacteria and pathogens through the MBR process is 96% or greater, and E. Coli concentration is reduced to zero through the use of U.V. The effluent will meet the criteria for Type I reclaimed water per 30 TAC §210.33.. Domestic

wastewater will be treated by MBR (membrane bio-reactor) treatment technology. The facility includes an influent pump station, fine screen, anoxic, aerobic, and membrane cells with ultraviolet disinfection and a sludge press.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

PMT Development, LLC (CN606333110) propone operar Grand Meadows WWTP (RN112098199), una Planta de Tratamiento de Aguas Residuales. La instalación estará ubicada en aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road, en Forney, Condado de Kaufman, Texas 75126. El solicitante está solicitando actualmente a la Comisión de Calidad Ambiental de Texas un permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) para descargar un máximo de 300.000 galones por día de efluentes tratados de la Planta de Tratamiento de Aguas Residuales propuesta que se instalará en el sitio.

Se espera que las descargas de la instalación contengan trazas de demanda bioquímica carbonosa de oxígeno (CBOD₅) en cinco días, sólidos suspendidos totales (SST), fósforo (P) y nitrógeno amoniacal (NH₃-N). La eliminación de bacterias y patógenos a través del proceso MBR es del 96% o más, y la concentración de E. Coli se reduce a cero mediante el uso de U.V. El efluente cumplirá con los criterios para agua regenerada Tipo I según 30 TAC §210.33. Las aguas residuales domésticas. **estará** tratado por Tecnología de tratamiento MBR (biorreactor de membrana). La instalación incluye una estación de bombeo de afluentes, celdas de cribado fino, anóxicas, aeróbicas y de membrana con desinfección ultravioleta y una prensa de lodos.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PROPOSED PERMIT NO. WQ0016684001

APPLICATION. PMT Development, LLC, 5733 Travis Drive, Frisco, Texas 75034, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016684001 (EPA I.D. No. TX0147087) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 300,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.41 miles northeast of the intersection of County Road 221 and Neal Road, near the city of Forney, in Kaufman County, Texas 75126. The discharge route will be from the plant site to unnamed tributary; thence to Soil Conservation service Site 18r (~45 acre); thence to unnamed tributary; thence to Big Brushy Creek; thence to Kings Creek; thence to Cedar Creek Reservoir. TCEQ received this application on December 11, 2024. The permit application will be available for viewing and copying at Kaufman County Library, Reference Desk, 3790 South Houston Street, Kaufman, 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=-96.40583,32.81&level=18>

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

El aviso de idioma alternativo en español está disponible en

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

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

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

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

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

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

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

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 PMT Development, LLC at the address stated above or by calling Ms. Kendall Longbotham, P.E., Water Resources Engineer, ReUse Engineering Inc, at 512-755-9943.

Issuance Date: January 17, 2025

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO PROPUESTO NO. WQ0016684001

SOLICITUD. PMT Development, LLC, 5733 Travis Drive, Frisco, TX 75034 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016684001 (EPA I.D. No. TX0147087) 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 300.000 galones por día. La planta está ubicada aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road, cerca de la ciudad de Forney, en el Condado de Kaufman, Texas 75126. La ruta de descarga es del sitio de la planta a afluente sin nombre, de allí al Sitio 18r del servicio de Conservación de Suelos (~45 acres), de allí al afluente sin nombre, de allí a Big Brushy Creek, de allí a Kings Creek. La TCEQ recibió esta solicitud el 11 de diciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Kaufman County Library, 3790 South Houston Street, Kaufman, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.40583,32.81&level=18>

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

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o

hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

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

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

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará

limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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. Además, puede pedir que la TCEQ ponga su nombre en una o más 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del PMT Development, LLC a la dirección indicada arriba o llamando a Sra. Kendall Longbotham, P.E., reUse Engineering, Inc., al 512-755-9943.

Fecha de emisión 17 de enero de 2025

December 17, 2024

Ms. Abesha Michael
Applications Review and Processing Team (MC148)
Water Quality Division Texas Commission of Environmental Quality

RE: Application for Proposed Permit No.: WQ0016684001 (EPA I.D. No. TX0147087) Applicant Name:
PMT Development, LLC (CN606333110)
Site Name: Grand Meadows WWTP (RN112098199)
Type of Application: New

Dear Ms. Michael,

Thank you for the prompt review of the TPDES application. Please see the responses to the NOD Letter dated December 16, 2024 and the corresponding attachments.

1. *Please complete the Plain Language Summary (PLS) English & Spanish: Please complete the PLS in English and Spanish with CN and RN numbers as stated on subject line of this NOD letter.*

Please see Attachment A for the English & Spanish PLS

2. *Lease Agreement: Thank you for submitting the lease agreement. However, the lease agreement is not signed. Please submit a long-term lease agreement signed by both parties.*

Please see Attachment B for the signed Restrictive Easement Agreement

3. *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 complete notice will be sent to you once the application is declared administratively complete.*

Please see updated portion of the NORI in red highlighted text:

APPLICATION. PMT Development, LLC, 5733 Travis Drive, Frisco, Texas 75034, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016684001 (EPA I.D. No. TX0147087) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 300,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.41 miles northeast of the intersection of County Road 221 and Neal Road, near the city of in Forney in the city of Forney, in Kaufman County, Texas, 75126. The discharge route will be from the plant site to (Discharge Route -Pending RWA). TCEQ received this application on December 10, 2024. The permit application will be

available for viewing and copying at Kaufman County Library, Reference Desk, 3790 S Houston Street, Kaufman, in Kaufman 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=-96.40583,32.81&level=18>

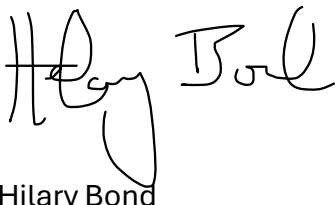
Further information may also be obtained from PMT Development, LLC at the address stated above or by calling Ms. Kendall Longbotham, **P.E.**, Water Resources Engineer, ReUse Engineering Inc, at 512-755-9943.

5. *The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.*

Please see Attachment C for the Spanish translation of the NORI. The translation includes the corrections highlighted above.

Thank you again for your prompt review. If there is anything else needed for you to complete your review of the application, please reach out to me at hilary@reuseeng.com or by phone at (512) 285-0302.

Best Regards,



Hilary Bond
Director, Permitting and Entitlements
reUse Engineering, Inc.

Enclosures:

1. Attachment A: Plain Language Summary
2. Attachment B: Restrictive Easement Agreement
3. Attachment C: Spanish NORI Translation

cc: Ms. Kendall Longbotham, P.E., Water Resources Engineer, reUse Engineering, Inc.

ATTACHMENT A

PLAIN LANGUAGE SUMMARY



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

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

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

PMT Development, LLC (606333110) proposes to operate Grand Meadows WWTP (112098199), a domestic wastewater treatment facility. The facility will be located at approximately 0.41 miles Northeast of the intersection of County Road 221 and Neal Road, in Forney, Kaufman County, Texas 75126. The applicant is currently applying to the Texas Commission on Environmental Quality for a Texas Pollutant Discharge Elimination System (TPDES) Permit in order to discharge a maximum of 300,000 gallons per day of treated effluent from the proposed Wastewater Treatment Plant that is to be installed on the site.

Discharges from the facility are expected to contain trace amounts of five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), phosphorus (P), and ammonia nitrogen (NH₃-N). Removal of bacteria and pathogens through the MBR process is 96% or greater, and E. Coli concentration is reduced to zero through the use of U.V. The effluent will meet the criteria for Type I reclaimed water per 30 TAC §210.33.. Domestic

wastewater will be treated by MBR (membrane bio-reactor) treatment technology. The facility includes an influent pump station, fine screen, anoxic, aerobic, and membrane cells with ultraviolet disinfection and a sludge press.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

PMT Development, LLC (606333110) propone operar Grand Meadows WWTP (112098199), una Planta de Tratamiento de Aguas Residuales. La instalación estará ubicada en aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road, en Forney, Condado de Kaufman, Texas 75126. El solicitante está solicitando actualmente a la Comisión de Calidad Ambiental de Texas un permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) para descargar un máximo de 300.000 galones por día de efluentes tratados de la Planta de Tratamiento de Aguas Residuales propuesta que se instalará en el sitio.

Se espera que las descargas de la instalación contengan trazas de demanda bioquímica carbonosa de oxígeno (CBOD₅) en cinco días, sólidos suspendidos totales (SST), fósforo (P) y nitrógeno amoniacal (NH₃-N). La eliminación de bacterias y patógenos a través del proceso MBR es del 96% o más, y la concentración de E. Coli se reduce a cero mediante el uso de U.V. El efluente cumplirá con los criterios para agua regenerada Tipo I según 30 TAC §210.33. Las aguas residuales domésticas. **estará** tratado por Tecnología de tratamiento MBR (biorreactor de membrana). La instalación incluye una estación de bombeo de afluentes, celdas de cribado fino, anóxicas, aeróbicas y de membrana con desinfección ultravioleta y una prensa de lodos.

ATTACHMENT B

RESTRICTIVE EASEMENT AGREEMENT

Grantee will at all times after doing any work in connection with the construction, operation or repair of the Facilities, restore the surface of the Easement Property and any permitted improvements under this Easement located within the Easement Property as close to the condition in which it was found before such work was undertaken as is reasonably practicable, except for trees and shrubs within the Easement Property that were removed as a result of such work.

Grantor represents and warrants to Grantee that Grantor is the sole owner of the fee simple title to the Easement Property. Grantor does hereby represent and warrant that there are no liens, attachments or other encumbrances which will affect the title or right of the Grantor to convey this easement to the Grantee for the purposes as described herein. If such condition does exist, a signature with acknowledgment shall be included and made a part of this document conveying the rights and privileges contained herein and subordinating any such lien to the easement granted herein.

This instrument shall not be considered as a deed to the Easement Property or any part thereof, and the right is hereby reserved to Grantor, its successors and assigns, to use the Easement Property to landscape and build and construct fences, driveways, parking lots, roads, drainage and other public improvements over or across said easement; provided, however, that in no event shall any such improvements negatively impact the Facilities or planned improvements by the Grantee. The Grantor shall notify the Grantee of any improvements planned within the Easement Property.

The easement rights and privileges granted herein are non-exclusive, but Grantor covenants that Grantor will not convey any other easement or conflicting rights within the area covered by this grant which unreasonably interfere with Grantee's rights granted herein, including that on no portion of the easement area will a habitable structure be permitted, and provided all such other grants comply with all applicable local, state and federal laws, ordinances, rules, regulations and/or requirements, as they exist, may be amended or in the future arising.

Further, notwithstanding anything to the contrary herein, Grantor shall not place any improvement or take any action, permanent or temporary, which may cause damage or jeopardize the integrity of the Facilities or which will affect or interfere with, in any way, the rights granted herein. Grantee, may, due to the necessity of repair and maintenance of the Facilities, remove any and all improvements to the extent necessary to make repairs but shall restore the surface of the Easement Property and any permitted improvements under this Easement within the Easement Property to its prior condition as is reasonably practicable after such repair and maintenance.

This instrument shall be binding on, and inure to the benefit of, Grantee and Grantor and their respective successors or assigns.

The individual executing this instrument on behalf of Grantor represents that all appropriate and necessary actions have been taken to authorize the individual who is executing this instrument to do so for and on behalf of Grantor, that there are no other parties or entities required to execute this instrument in order for the same to be an authorized and binding agreement on Grantor and that the individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.

It is understood and agreed that the consideration received by Grantor hereunder includes adequate compensation for the grant of the rights hereunder.

This instrument may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes.

EXECUTED on the dates of the acknowledgments, but to be EFFECTIVE on the _____ day of _____, 20 _ (“Effective Date”).

Signature page to follow

GRANTOR:

TEXAS GRAND LAND II, LLC

By: 

Printed Name: Terry D. Wheeler

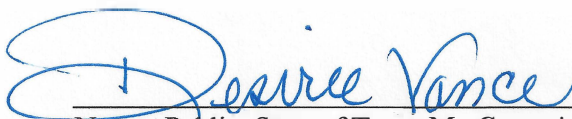
Its: Managing Member of TD Wheeler Development, LLC,
Managing Member of Texas Grand Land II, LLC

STATE OF TEXAS §

COUNTY OF Collin §

BEFORE ME, the undersigned authority, on this day personally appeared Terry D. Wheeler, known to me to be one of the persons whose names are subscribed to the foregoing instrument; he acknowledged to me that he is the managing member and duly authorized representative of TEXAS GRAND LAND II, LLC, a LLC, and that he executed the same for the purposes and consideration therein stated and in the capacity therein stated as the act and deed of said

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office this 18th day of December, 2024



Notary Public, State of Texas My Commission
Expires: 06-20-2025

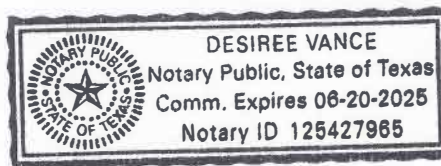


EXHIBIT A

Legal Description

WASTEWATER TREATMENT PLANT EASEMENT

LEGAL DESCRIPTION

A 3.14 acre tract of land, lying within the Ruth Peckum Survey, Abstract No. 374, Kaufman County, Texas, and being a portion of a called 160.737 acre tract of land described by deed to Texas Grand Land II, LLC, as recorded under Volume 2019, Page 14045, Deed Records of Rockwall County, Texas, and as recorded under Volume 6107, Page 414, Deed Records of Kaufman County, Texas, described as follows:

BEGINNING, in the interior of said 160.737 acre tract, for the **POINT OF BEGINNING** of the herein described from which a 1" iron pipe found for the easternmost corner of said 160.737 acre tract bears N44°45'21"E, a distance of 1655.92 feet;

THENCE, over and across said 160.737 acre tract, the following four (4) courses and distances:

1. S44°34'58"W, a distance of 396.12 feet to a calculated point;
2. N48°37'48"W, a distance of 335.21 feet to a calculated point from which a mag nail found for the westernmost corner of said 160.737 acre tract bears S89°45'30"W, a distance of 2224.93 feet;
3. N41°21'57"E, a distance of 395.50 feet to a calculated point;
4. S48°37'48"E, a distance of 357.44 feet to the **POINT OF BEGINNING**.

Containing 3.14 acres, more or less.

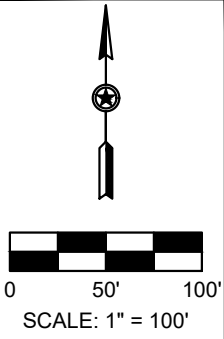
BEARING BASIS NOTE

This project is referenced for all bearing and coordinate basis to the Texas State Plane Coordinate System, NAD 83 North Central Zone (4202)

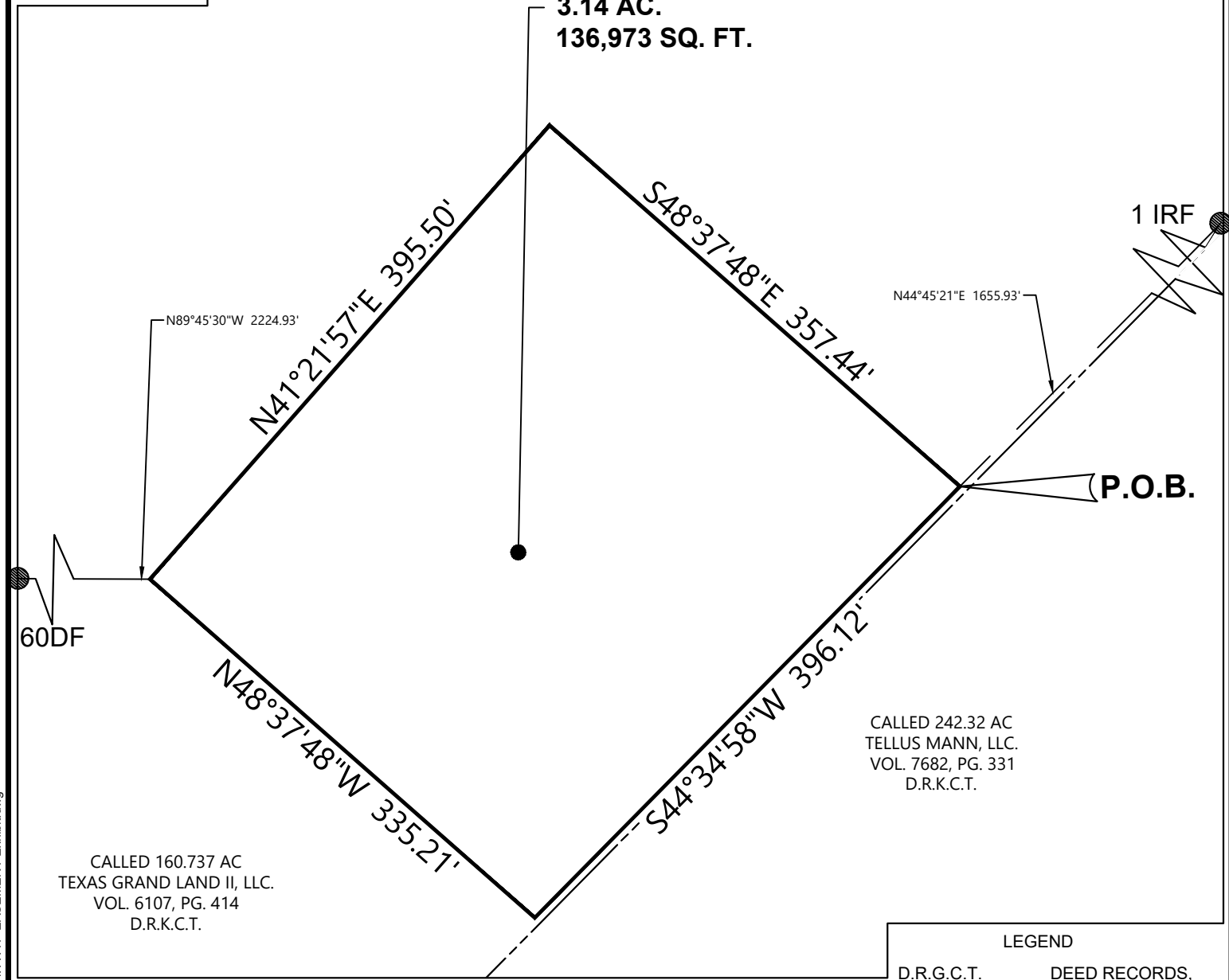
Robert J. Gertson, RPLS# 6367
Atwell LLC
1611 W 5th St, Suite 175
Austin, TX 78703
(510) 940-0505
TBPE LS Firm No. 10193726



12/06/2024



WASTEWATER TREATMENT PLANT EASEMENT
3.14 AC.
136,973 SQ. FT.



LEGEND

D.R.G.C.T.	DEED RECORDS, KAUFMAN COUNTY, TEXAS
60DF	60D NAIL FOUND
IRF	IRON ROD FOUND
VOL.	VOLUME
PG.	PAGE
AC.	ACRE
SQ. FT.	SQUARE FEET
P.O.B.	POINT OF BEGINNING

WASTEWATER TREATMENT PLANT EASEMENT		
RUTH PECKUM SURVEY, ABSTRACT NO. 374, KAUFMAN COUNTY, TEXAS	DATE:	12/06/2024
	DRAWN:	LR
	CHECKED:	RG
	JOB NO.:	24002431
	SHT.	02
	OF	02



ATWELL
www.atwell-group.com

9001 AIRPORT FREEWAY
SUITE 660
NORTH RICHLAND HILLS, TX 76180

ATTACHMENT C

NORI - SPANISH TRANSLATION

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. WQ00_____

SOLICITUD. PMT Development, LLC, 5733 Travis Drive, Frisco, TX 75034 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016684001 (EPA I.D. No. TX 0147087) 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 300.000 galones por día. La planta está ubicada aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road, en la ciudad de Forney, en el Condado de Kaufman, Texas 75126. La ruta de descarga es del sitio de la planta a **(Discharge Route -Pending RWA)** un arroyo efímero sin nombre, de allí a un canal artificial, de allí a un arroyo efímero sin nombre, de allí a Big Brushy Creek, de allí a Kings Creek, de allí a Cedar Creek Reservoir. La TCEQ recibió esta solicitud el 10 de diciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Kaufman County Library, 3790 S Houston Street, Kaufman, en el Condado de Kaufman, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.40583,32.81&level=18>

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

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

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

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

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

de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del PMT Development, LLC a la dirección indicada arriba o llamando a Sra. Kendall Longbotham, P.E., reUse Engineering, Inc. al 512-755-9943.

Fecha de emisión _____ *[Date notice issued]*

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. WQ00_____

SOLICITUD. PMT Development, LLC, 5733 Travis Drive, Frisco, TX 75034 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. **WQ0016684001** (EPA I.D. No. TX _____) 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 **300.000** galones por día. La planta está ubicada **aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road en el Condado de Kaufman, Texas 75129**. La ruta de descarga es del sitio de la planta a **un arroyo efímero sin nombre, de allí a un canal artificial, de allí a un arroyo efímero sin nombre, de allí a Big Brushy Creek, de allí a Kings Creek, de allí a Cedar Creek Reservoir**. La TCEQ recibió esta solicitud el **[11 de diciembre de 2024]**. La solicitud para el permiso está disponible para leerla y copiarla en **Kaufman County Library, 3790 S Houston Street, Kaufman, Texas**. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

[Insert web link from English notice]

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange.] 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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del **PMT Development, LLC** a la dirección indicada arriba o llamando a **Sra. Kendall Longbotham, P.E., reUse Engineering, Inc.** al 512-755-9943.

Fecha de emisión _____ *[Date notice issued]*

Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 11, 2024

Re: Confirmation of Submission of the New Private Domestic Wastewater Individual Permit Application

Dear Applicant:

This is an acknowledgement that you have successfully completed Private Domestic Wastewater Individual Permit Application.

ER Account Number: ER106339
Application Reference Number: 722353
Authorization Number: WQ0016684001
Site Name: Grand Meadows WWTP
Regulated Entity: RN112098199 - GRAND MEADOWS WWTP
Customer(s): CN606333110 - Pmt Development, LLC

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

New Domestic or Industrial Individual Permit

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Grand Meadows WWTP
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	THE WWTP IS LOCATED APPROX 0.41 MILES NE OF THE INTERX OF COUNTY ROAD 221 AND NEAL RD IN FORNEY, KAUFMAN COUNTY, TEXAS 75126
City	Forney
State	TX
ZIP	75126
County	KAUFMAN
Latitude (N) (##.#####)	32.810058
Longitude (W) (-###.#####)	-96.405881
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	
What is the name of the Regulated Entity (RE)?	Grand Meadows WWTP
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	THE WWTP IS LOCATED APPROX 0.41 MILES NE OF THE INTERX OF COUNTY ROAD 221 AND NEAL RD IN FORNEY, KAUFMAN COUNTY, TEXAS 75126
City	Forney
State	TX
ZIP	75126
County	KAUFMAN
Latitude (N) (##.#####)	32.810058
Longitude (W) (-###.#####)	-96.405881
Facility NAICS Code	221320
What is the primary business of this entity?	Wastewater Treatment

PMT DEV-Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner
What is the applicant's Customer Number (CN)?	
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	PMT DEVELOPMENT, LLC
Texas SOS Filing Number	0803907374
Federal Tax ID	861711530
State Franchise Tax ID	32077494097
State Sales Tax ID	
Local Tax ID	
DUNS Number	036511917
Number of Employees	0-20
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	PMT DEVELOPMENT, LLC
Prefix	MR
First	Michael
Middle	
Last	Davidson
Suffix	
Credentials	
Title	CFO
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	5733 TRAVIS DR
Routing (such as Mail Code, Dept., or Attn:)	
City	FRISCO
State	TX
ZIP	75034
Phone (###-###-####)	4697072080
Extension	

Alternate Phone (###-###-####)

Fax (###-###-####)

E-mail

lradley@atwell.com

Billing Contact

Responsible contact for receiving billing statements:

Select the permittee that is responsible for payment of the annual fee.

Organization Name

PMT DEVELOPMENT, LLC

Prefix

PMT DEVELOPMENT, LLC

First

MRS

Middle

Patricia

Last

Thomas

Suffix

Credentials

Title

Managing Member

Enter new address or copy one from list:

PMT DEVELOPMENT, LLC

Mailing Address

Address Type

Domestic

Mailing Address (include Suite or Bldg. here, if applicable)

5733 TRAVIS DR

Routing (such as Mail Code, Dept., or Attn:)

City

FRISCO

State

TX

ZIP

75034

Phone (###-###-####)

4697072080

Extension

Alternate Phone (###-###-####)

Fax (###-###-####)

E-mail

lradley@atwell.com

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?

Organization Name

reUse Engineering Inc

Prefix

MRS

First

Hilary

Middle	
Last	Bond
Suffix	
Credentials	
Title	Director, Permitting and Entitlements
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	4411 S INTERSTATE 35 STE 100
Routing (such as Mail Code, Dept., or Attn:)	
City	GEORGETOWN
State	TX
ZIP	78626
Phone (###-###-####)	5122850302
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	hilary@reuseeng.com

Technical Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	Application Contact
Organization Name	reUse Engineering Inc
Prefix	MRS
First	Kendall
Middle	
Last	Longbotham
Suffix	
Credentials	PE
Title	Water Resources Engineer
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	4411 S INTERSTATE 35 STE 100
Routing (such as Mail Code, Dept., or Attn:)	
City	GEORGETOWN

State	TX
ZIP	78626
Phone (###-###-####)	5127559943
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	kendall@reuseeng.com

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:	
Same as another contact?	Billing Contact
Organization Name	PMT DEVELOPMENT, LLC
Prefix	MRS
First	Patricia
Middle	
Last	Thomas
Suffix	
Credentials	
Title	Managing Member
Enter new address or copy one from list:	Billing Contact
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	5733 TRAVIS DR
Routing (such as Mail Code, Dept., or Attn:)	
City	FRISCO
State	TX
ZIP	75034
Phone (###-###-####)	4697072080
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	lradley@atwell.com

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

- 1) Same as another contact?
- 2) Organization Name
- 3) Prefix
- 4) First
- 5) Middle
- 6) Last
- 7) Suffix
- 8) Credentials
- 9) Title

Mailing Address

- 10) Enter new address or copy one from list
- 11) Address Type
 - 11.1) Mailing Address (include Suite or Bldg. here, if applicable)
 - 11.2) Routing (such as Mail Code, Dept., or Attn:)
 - 11.3) City
 - 11.4) State
 - 11.5) ZIP
- 12) Phone (###-###-####)
- 13) Extension
- 14) Alternate Phone (###-###-####)
- 15) Fax (###-###-####)
- 16) E-mail

Application Contact
reUse Engineering Inc
MRS
Hilary

Bond

Director, Permitting and Entitlements

Application Contact
Domestic
4411 S INTERSTATE 35 STE 100

GEORGETOWN
TX
78626
5122850302

hilary@reuseeng.com

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

- 1) Same as another contact?
- 2) Organization Name
- 3) Prefix
- 4) First
- 5) Middle
- 6) Last
- 7) Suffix
- 8) Credentials
- 9) Title

Atwell LLC
MAJ
Lee

Radley

PE
Senior Project Manager

Mailing Address

10) Enter new address or copy one from list

11) Address Type

Domestic

11.1) Mailing Address (include Suite or Bldg. here, if applicable)

5500 GRANITE PKWY STE 250

11.2) Routing (such as Mail Code, Dept., or Attn:)

11.3) City

PLANO

11.4) State

TX

11.5) ZIP

75024

12) Phone (###-###-####)

2144603729

13) Extension

14) Alternate Phone (###-###-####)

15) Fax (###-###-####)

16) E-mail

hilary@reuseeng.com

Public Notice Information

Individual Publishing the Notices

1) Prefix

MRS

2) First and Last Name

Hilary Bond

3) Credential

4) Title

Director, Permitting and Entitlements

5) Organization Name

reUse Engineering Inc

6) Mailing Address

4411 S INTERSTATE 35 STE 100

7) Address Line 2

8) City

GEORGETOWN

9) State

TX

10) Zip Code

78626

11) Phone (###-###-####)

5122850302

12) Extension

13) Fax (###-###-####)

14) Email

hilary@reuseeng.com

Contact person to be listed in the Notices

15) Prefix

MS

16) First and Last Name

Kendall Longbotham

17) Credential

PE

18) Title

Water Resources Engineer

19) Organization Name

reUse Engineering Inc

20) Phone (###-###-####)	5127559943
21) Fax (###-###-####)	
22) Email	kendall@reuseeng.com
Bilingual Notice Requirements	
23) 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
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	Yes
23.3) 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)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	KAUFMAN
2) Public building name	Kaufman County Library
3) Location within the building	Reference Desk
4) Physical Address of Building	3790 S Houston Street
5) City	Kaufman
6) Contact Name	
7) Phone (###-###-####)	9729326222
8) Extension	
9) Is the location open to the public?	Yes

Owner Information

Owner of Treatment Facility

1) Prefix	
2) First and Last Name	
3) Organization Name	PMT Development LLC
4) Mailing Address	5733 Travis Drive
5) City	Frisco
6) State	TX
7) Zip Code	75034
8) Phone (###-###-####)	4697072080

9) Extension	
10) Email	lradley@atwell.com
11) What is ownership of the treatment facility?	Private
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	Texas Grand Land II LLC
15) Mailing Address	1210 Hills Creek Drive
16) City	McKinney
17) State	TX
18) Zip Code	75072
19) Phone (###-###-####)	4697072080
20) Extension	
21) Email	lradley@atwell.com
22) Is the landowner the same person as the facility owner or co-applicant?	No

Admin General Information

1) Is the facility located on or does the treated effluent cross American Indian Land?	No
2) What is the authorization type that you are seeking?	Private Domestic Wastewater
2.1) Is the facility previously authorized under a Water Quality individual permit?	No
2.2) What is the proposed total flow in MGD discharged at the facility?	0.3
2.3) Select the applicable fee	>=0.25 MGD but < 0.50 MGD - \$1,250
3) What is your facility operational status?	Inactive
4) What is the classification for your authorization?	TPDES
4.1) City nearest the outfall(s):	Terrell
4.2) County where the outfalls are located:	KAUFMAN
4.3) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
4.4) Is the daily average discharge at your facility of 5 MGD or more?	No
5) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Lease Agreement or Deed Attachment

1) Attach a lease agreement or deed recorded easement [File Properties]	
--	--

File Name	LEASE_10053 XD1 WWTP Easment Agreement_unsigned.pdf
Hash	E12D5AF7DDF5718E9E2D534E4F8B3B5112EA90DE090B9A0C221E3FB8B8A1CC7B
MIME-Type	application/pdf

Plain Language

1) Plain Language	
[File Properties]	
File Name	LANG_10053 XB PLS _ Rockwall.docx
Hash	BC20BC0FB269C2AE7D031C6376D468BD2B4A1E0AD5D70AB29613EE91B8D365EA
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)	
[File Properties]	
File Name	SPIF_10053 XI SPIF _ Rockwall.docx
Hash	7ECE9DE20DFC76CCAB2E72C222C5DA61E647C6B4D864333076FC926980860D3B
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document
[File Properties]	
File Name	SPIF_10053 XJ ZOOM TX_Forney_Topo 8.5x11.pdf
Hash	FDF5E90784EF8030A18B2A43950F2352DF94A3F7184BEC359F639FCACBF1A666
MIME-Type	application/pdf

Domestic Attachments

1) Have you clearly outlined and labeled the required information on the original full size USGS Topographic Map?	Yes
1.1) I certify that I have clearly outlined and labeled the required information on the Topographic map and attached here.	
[File Properties]	
File Name	MAP_10053 XE TX_Forney_North_20220719_TM_geo _ S&S.pdf
Hash	9D2E93025E46E2C08342332CE7D274D52E3D973438CCDF8918810D037E41A645

MIME-Type	application/pdf
2) Public Involvement Plan attachment (TCEQ Form 20960)	
[File Properties]	
File Name	PIP_10053 XC PIP Form _ Rockwall.pdf
Hash	76AB1BA6079A7D2115082C6FDFCF5AF05C918CD87BC26E7A88C33CDF1118F39F
MIME-Type	application/pdf
3) Administrative Report 1.1	
[File Properties]	
File Name	ARPT_10053 Admin Rpt 1.1 _ Rockwall.pdf
Hash	972B0FAB5F3F807616021059059FF031F8A3697C065008E585B213F0364BD41E
MIME-Type	application/pdf
4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
4.1) I confirm that Technical Report 1.1 is complete and included in the Technical Attachment.	Yes
4.2) I confirm that Worksheet 2.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
4.3) Are you planning to include Worksheet 2.1 (Stream Physical Characteristics) in the Technical Attachment?	No
4.4) Are you planning to include Worksheet 4.0 (Pollutant Analyses Requirements) in the Technical Attachment?	No
4.5) Are you planning to include Worksheet 5.0 (Toxicity Testing Requirements) in the Technical Attachment?	No
4.6) Are you planning to include Worksheet 7.0 (Class V Injection Well Inventory/Authorization Form) in the Technical Attachment?	No
4.7) Technical Attachment	
[File Properties]	
File Name	TECH_10054 Tech Rpt _ Rockwall.pdf
Hash	6D242E712352DEEBB9A5DDAEA6B6D72E7155774C62DD2259CE89C02E0D36467A
MIME-Type	application/pdf
5) Affected Landowners Map	
[File Properties]	
File Name	LANDMP_10053 XF Landowner Map _ Rockwall.pdf
Hash	61C26A99710477974465E9E0C818277C026D3B90F6375EA9B30D980DE4194AB1
MIME-Type	application/pdf

6) Landowners Cross Reference List

[File Properties]

File Name

LANDCRL_10053 XF2 Landowners List _ Rockwall.pdf

Hash

2FE013B526D7293A21905FD5B4B3277D04C0B6A7D6AB6A9C2E8D79777133270B

MIME-Type

application/pdf

7) Landowner Avery Template

[File Properties]

File Name

LANDAT_10053 XF3 Landowner Labels _ Rockwall.doc

Hash

3D278163D5B3D269DFC1552F8231FD6E0263A34A6DD271B839597D4AC4241268

MIME-Type

application/msword

8) Buffer Zone Map

[File Properties]

File Name

BUFF_ZM_10053 XH Buffer Map 2024_Rockwall.pdf

Hash

F706F8B0716F3CA597A9D54ED1BFAC9DABE0156D00A9FF5A574C9681E18F2FBB

MIME-Type

application/pdf

9) Flow Diagram

[File Properties]

File Name

FLDIA_10054 X1 Process Flow Diagram _ Rockwall.pdf

Hash

A65253A7DDEDC1159CF71D74407AF0B08C96D54203480D2D877BC6EDF0744FAD

MIME-Type

application/pdf

10) Site Drawing

[File Properties]

File Name

SITEDR_10054 X2 Site Dwg R160 2024_Rockwall.pdf

Hash

9CA1851C45C4086BF50AF99B494327BCF42C88752B1822F89BB244D3854D0876

MIME-Type

application/pdf

11) Original Photographs

[File Properties]

File Name

ORIGPH_10053 XG Original Photos _ Rockwall.pdf

Hash

B27E775F0E55C03FB7D83428F07B12503DED3B04215A7C1B56DA769FDABE85E0

MIME-Type

application/pdf

12) Design Calculations

[File Properties]

File Name	DES_CAL_10054 X5 BP999 MBR 150000 gpd rev.pdf
Hash	4F09E038CB155408D965FDB913B9C6856AB380C54B44F6EB049B08D91EC7A38B
MIME-Type	application/pdf
13) Solids Management Plan	
[File Properties]	
File Name	SMP_10054 X7 Solids Mgmt Plan 150k.pdf
Hash	DF303323A6F5146EF8F218BF83D0E6D6505C2A2646CE3498AF2BFFDCB6B6E90B
MIME-Type	application/pdf
14) Water Balance	
[File Properties]	
File Name	WB_reUse_Letterhead_BLANK_DOC_NotApp.docx
Hash	D2768DA0CBD4804B60F042E06CA0D31B640EC8B4DC9C5A2D6FEC0AA8D4D95392
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document
15) Other Attachments	
[File Properties]	
File Name	OTHER_01 TOC _ Rockwall.pdf
Hash	1A1E99727E4F9A103E1477EEA81F3176E4E279997A91403FCE4B4002F519658E
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_10053 XA CDF _ Rockwall.pdf
Hash	49C322444EA746E210C221C2BCAF0287BD28E49F1625C8B8D8CC2A9102C385EC
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_10053 XD2 WOUS Report _ Rockwall.pdf
Hash	DA17E53603F15F3C3D0EFB182AE9E260C2C62E0E743EFE164F88647B8F11ACDA
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_10054 X3 LUE Projection _ Rockwall.pdf
Hash	A90FC23667E69D935F7E43DE7C73C9F0F3BC33EB4A73C588BC493F3C83BF4CA3
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_10054 X4 Wastewater Outfall Map _ Rockwall.pdf
Hash	95143E5F74D6FC405840773385D72E8F3B325E488B2CA8586B0FE5AF4C8A876E
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_10054 X6 Wind Rose.pdf
Hash	5A6911348A06E589B8C2708F4ECA0E59A639DB2695A6D31597070F542E6F96DC
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_01 Cover Sheet.pdf
Hash	C8B3D3F61D3DA10E20816F77DF320BC66C5E7337566B69A970DAEF8180C64F36
MIME-Type	application/pdf

Certification

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

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.

1. I am Hilary Bond, the owner of the STEERS account ER106339.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing New Domestic or Industrial Individual Permit.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Hilary Bond OWNER

Customer Number:

Legal Name:

PMT DEVELOPMENT, LLC

Account Number:

ER106339

Signature IP Address:

97.132.60.186

Signature Date:

2024-12-11

Signature Hash:267D494D2FCD186C78FE717A6313F91B684A2F99E4BE8898AD2DBFE1AD9868C5

Form Hash Code at time of Signature:42E52A9FDBDA4F6DBDF5605A83CE38D11AED84409F68CB4855442AE5BE54B9E2

Fee Payment

Transaction by:The application fee payment transaction was made by ER106339/Hilary Bond

Paid by:The application fee was paid by HILARY BOND

Fee Amount:\$1200.00

Paid Date:The application fee was paid on 2024-12-11

Transaction/Voucher number:The transaction number is 582EA000638084 and the voucher number is 735026

Submission

Reference Number:The application reference number is 722353

Submitted by:The application was submitted by ER106339/Hilary Bond

Submitted Timestamp:The application was submitted on 2024-12-11 at 11:07:43 CST

Submitted From:The application was submitted from IP address 97.132.60.186

Confirmation Number:The confirmation number is 595265

Steers Version:The STEERS version is 6.83

Additional Information

Application Creator: This account was created by Hilary Bond

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

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

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

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

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

- ☐ USB Drive ☒ Four sets of labels

D. Provide the source of the landowners' names and mailing addresses:

<https://gis.bisclient.com/kaufmancad/>

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

- ☐ Yes ☒ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

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

Section 3. Buffer Zone Map (Instructions Page 38)

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

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

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

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

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

- ☒ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: Please see Table of Contents Provided.

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

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

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

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

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

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

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

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

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

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

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

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

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

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

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

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

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

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

Landowners Labels or USB Drive attached ☐ N/A ☒ Yes
(See instructions for landowner requirements)

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

Plain Language Summary ☒ Yes



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		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
PMT Development, LLC					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0803907374		32077494097		86-1711530	036511917
11. Type of Customer:		☒ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☒ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☒ Owner ☐ Operator ☐ Owner & Operator ☐ Other: ☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:		5733 Travis Drive			
City	Frisco	State	TX	ZIP	75034
ZIP + 4					
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				lradley@atwell.com	

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(214) 460-3729		() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Grand Meadows WWTP								
23. Street Address of the Regulated Entity: (No PO Boxes)								
	City		State		ZIP		ZIP + 4	
24. County	Kaufman							

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

25. Description to Physical Location:	THE WWTP IS LOCATED APPROX 0.41 MILES NE OF THE INTERX OF COUNTY ROAD 221 AND NEAL RD IN FORNEY, KAUFMAN COUNTY, TEXAS 75126							
26. Nearest City	State				Nearest ZIP Code			
Forney	Texas				75126			
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:		32.810058			28. Longitude (W) In Decimal:		-96.405881	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
32	48	36.21	-96	24	21.17			
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
4952				221320				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Wastewater treatment								
34. Mailing Address:	5733 Travis Drive							
	City	Frisco	State	TX	ZIP	75034	ZIP + 4	
35. E-Mail Address:		lradley@atwell.com						
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
() -						() -		

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.

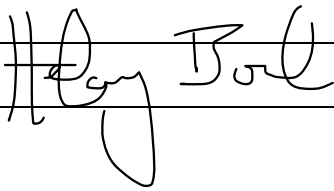
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water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

SECTION IV: Preparer Information

40. Name:	Hilary Bond			41. Title:	Director, Permitting and Entitlements
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(512) 285-0302			hilary@reuseEng.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:	reUse Engineering, Inc.		Job Title:	Director, Permitting and Entitlements	
Name (In Print):	Hilary Bond			Phone:	(512) 285-0302
Signature:				Date:	11/25/2024

PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
DOMESTIC WASTEWATER PERMIT APPLICATION

TABLE OF CONTENTS

DOMESTIC ADMINISTRATIVE REPORT 1.0 AND 1.1

Required by Section

Attachment A.	Core Data Form	Admin 1.0 § 3.C
Attachment B.	Plain Language Summary	Admin 1.0 § 8
Attachment C.	Public Involvement Plan	Admin 1.0 § 8
Attachment D.	Agreements & Reports WWTP Easement Agreement WOUS Report	Admin 1.0 § 9
Attachment E.	U.S. Topographic Map	Admin 1.0 § 13
Attachment F.	Affected Landowner Information Landowners Map Landowners Cross Reference List	Admin 1.1 § 1
Attachment G.	Original Photographs	Admin 1.1 § 2
Attachment H.	Buffer Zone Map	Admin 1.1 § 3

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

Required by Section

Attachment I.	Supplemental Permit Application Form	
Attachment J.	U.S. Topographic Map (8.5" x 11")	SPIF Item # 5

DOMESTIC TECHNICAL REPORT 1.0 AND 1.1

Required by Section

Attachment 1.	Process Flow Diagram	Tech 1.0 § 2.C
Attachment 2.	Site Drawing	Tech 1.0 § 3
Attachment 3.	Justification of Permit Need (LUEs)	Tech 1.1 § 1.A
Attachment 4.	Wastewater Outfall Map	Tech 1.1 § 1.B
Attachment 5.	Design Calculations	Tech 1.1 § 4
Attachment 6.	Wind Rose	Tech 1.1 § 5.B
Attachment 7.	Solids Management Plan	Tech 1.1 § 7



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

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

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

PMT Development, LLC (2. Enter Customer Number here (i.e., CN6#####)) proposes to operate Grand Meadows WWTP (5. Enter Regulated Entity Number here (i.e., RN1#####)), a domestic wastewater treatment facility. The facility will be located at approximately 0.41 miles Northeast of the intersection of County Road 221 and Neal Road, in Forney, Kaufman County, Texas 75126. The applicant is currently applying to the Texas Commission on Environmental Quality for a Texas Pollutant Discharge Elimination System (TPDES) Permit in order to discharge a maximum of 300,000 gallons per day of treated effluent from the proposed Wastewater Treatment Plant that is to be installed on the site.

Discharges from the facility are expected to contain trace amounts of five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), phosphorus (P), and ammonia nitrogen (NH₃-N). Removal of bacteria and pathogens through the MBR process is 96% or greater, and E. Coli concentration is reduced to zero through the use of U.V. The

effluent will meet the criteria for Type I reclaimed water per 30 TAC §210.33.. Domestic wastewater will be treated by MBR (membrane bio-reactor) treatment technology. The facility includes an influent pump station, fine screen, anoxic, aerobic, and membrane cells with ultraviolet disinfection and a sludge press.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

PMT Development, LLC (2. Introduzca el número de cliente aquí (es decir, CN6#####).) propone operar Grand Meadows WWTP 5. Introduzca el número de entidad regulada aquí (es decir, RN1#####), una Planta de Tratamiento de Aguas Residuales. La instalación estará ubicada en aproximadamente 0.41 millas al noreste de la intersección de County Road 221 y Neal Road, en Forney, Condado de Kaufman, Texas 75126. El solicitante está solicitando actualmente a la Comisión de Calidad Ambiental de Texas un permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) para descargar un máximo de 300.000 galones por día de efluentes tratados de la Planta de Tratamiento de Aguas Residuales propuesta que se instalará en el sitio.

Se espera que las descargas de la instalación contengan trazas de demanda bioquímica carbonosa de oxígeno (CBOD₅) en cinco días, sólidos suspendidos totales (SST), fósforo (P) y nitrógeno amoniacal (NH₃-N). La eliminación de bacterias y patógenos a través del proceso MBR es del 96% o más, y la concentración de E. Coli se reduce a cero mediante el uso de U.V. El efluente cumplirá con los criterios para agua regenerada Tipo I según 30 TAC §210.33. Las aguas residuales domésticas. estará tratado por Tecnología de tratamiento MBR (biorreactor de membrana). La instalación incluye una estación de bombeo de afluentes, celdas de cribado fino, anóxicas, aeróbicas y de membrana con desinfección ultravioleta y una prensa de lodos.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

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.

Example 1: Industrial Wastewater TPDES Application (ENGLISH)

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

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as “previously monitored effluents” (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility’s potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Example 2: Domestic Wastewater TPDES Renewal application

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

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to discharge at an annual average flow of 1,200,000 gallons per day of treated domestic wastewater via Outfalls 001 and 002.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 3: Domestic Wastewater TPDES New Application

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

The City of Texas (CN000000000) proposes to operate the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the extended aeration mode. The facility will be located at 123 Texas Street, in the City of More Texas, Texas County, Texas 71234.

This application is for a new application to discharge at a daily average flow of 200,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*. 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 plant and the treatment units will include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 4: Domestic Wastewater TLAP Renewal application

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

of the permit application.

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to dispose a daily average flow not to exceed 76,500 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 32 acres. This permit will not authorize a discharge of pollutants into water in the state.

Land application of domestic wastewater from the facility are expected to contain five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), 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 is treated by an activated sludge process plant and the treatment units include a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, tertiary filters, and a chlorine contact chamber. In addition, the facility includes a temporary storage that equals to at least three days of the daily average flow.



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.

Past TPDES permits pursued for comparable subdivisions in the same or neighboring counties have not received significant public interest.

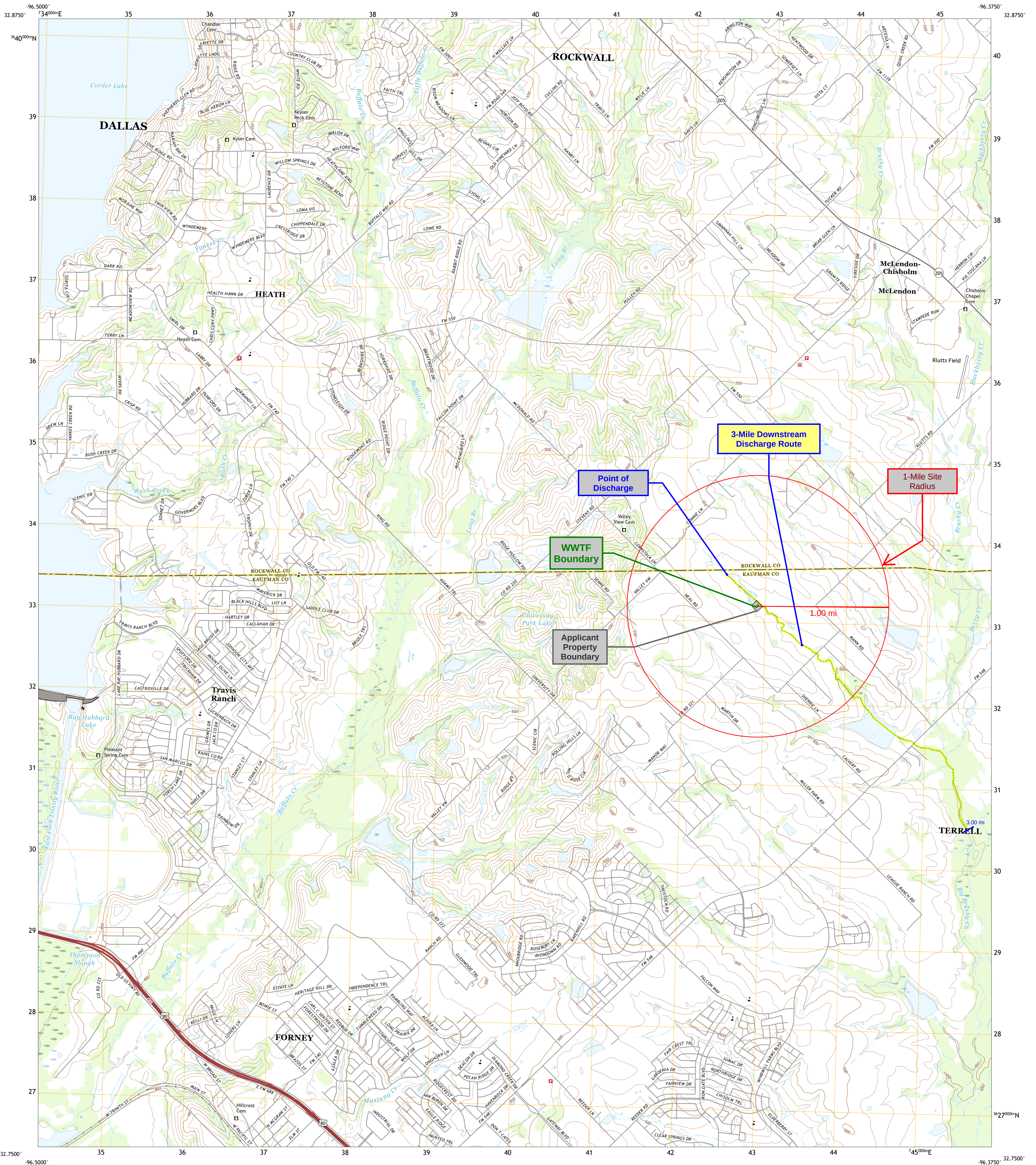
See WQ0016242001, WQ0016440001 in Kaufman County and WQ0014522002 in Hunt County.



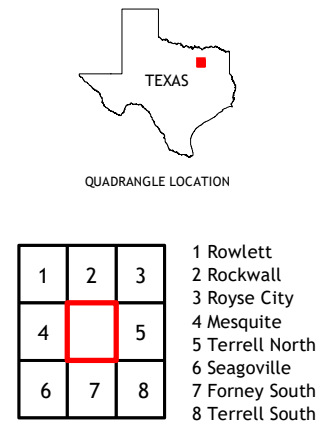
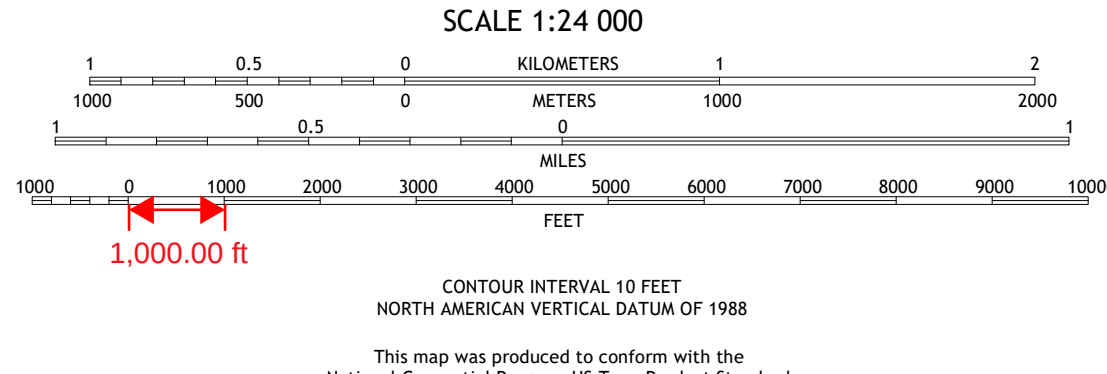
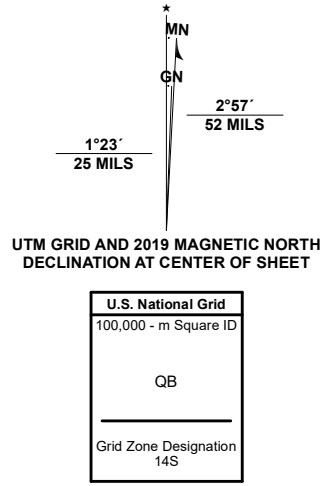
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



FORNEY NORTH 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 14S
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, October 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2018
Names.....GNIS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2002 - 2022
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available



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

FORNEY NORTH, TX
2022

reUse
ENGINEERING
4411 SH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS
U.S. TOPOGRAPHIC MAP
Attachment E

reUse
ENGINEERING

4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

**Texas Grand Land II LLC
Grand Meadows WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS**

LANDOWNER MAP

Attachment F

Landowner's Cross Reference List

1. Parcel 11102

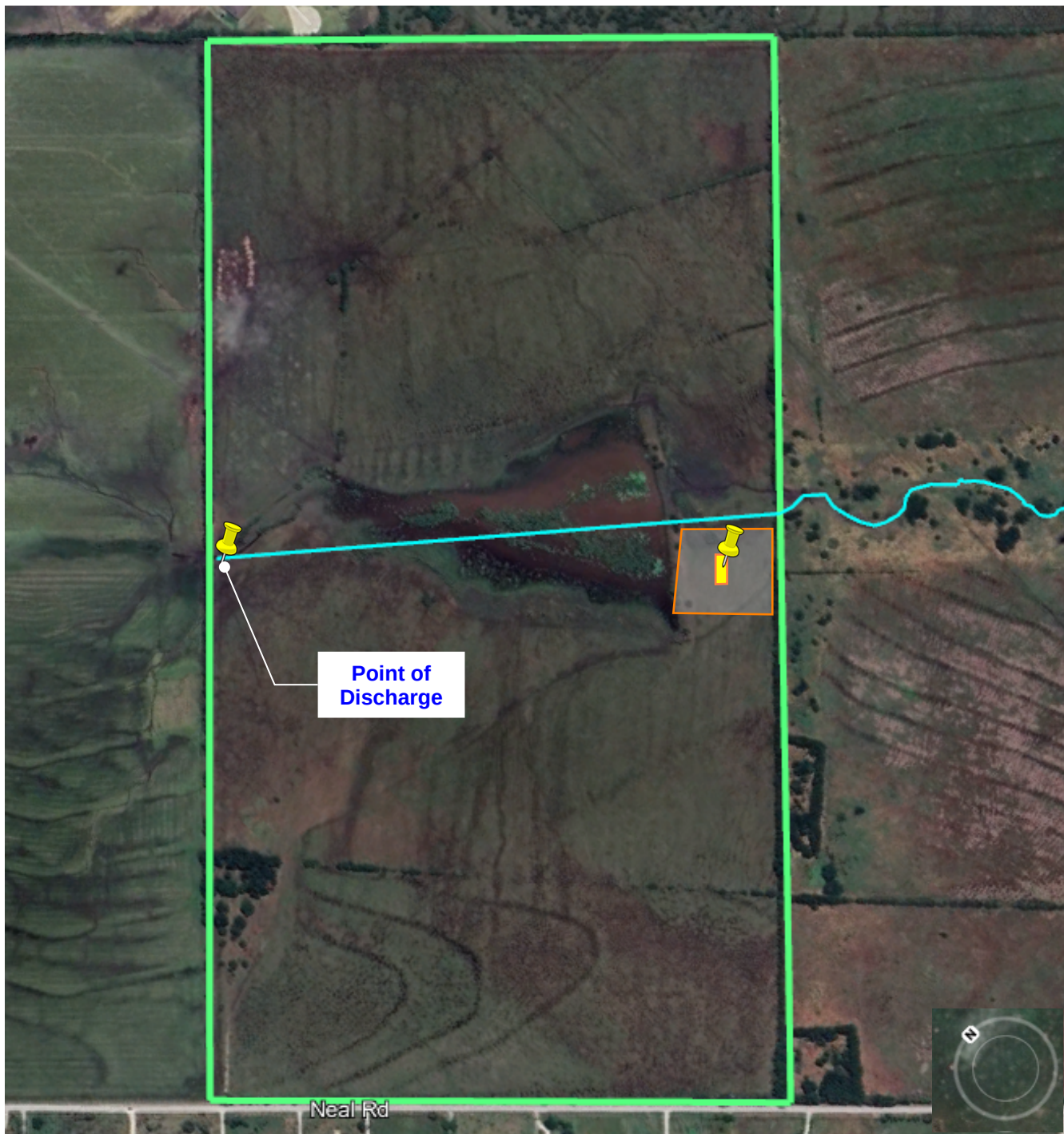
TEXAS GRAND LAND II LLC
426 LOST SPUR LANE
ROYCE CITY TX 75189

2. Parcel 10983

TELLUS MANN LLC
130 N PRESTON RD
PROSPER TX 75078

TEXAS GRAND LAND II LLC
426 LOST SPUR LANE
ROYCE CITY TX 75189

TELLUS MANN LLC
130 N PRESTON RD
PROSPER TX 75078



 Applicant's Property Boundary

 Treatment Facility Boundary

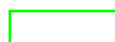
 Area Served By WWTF

 Photo Location

 Discharge Route

reUse
ENGINEERING
4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS

ORIGINAL PHOTOS
Attachment G

WWTF

Northeast



Southwest



Discharge Point

Downstream

Southeast



[See next page for image of culvert crossing the creek](#)

Upstream

Northwest



Upstream (NW)
←



Downstream (SE)
→

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: PMT Development, LLC

Permit No. WQ00 _____

EPA ID No. TX _____

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

The facility is located approximately 0.41 miles northeast of the intersection of County Road 221 and Neal Road in Forney, Kaufman 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): Ms.

First and Last Name: Kendall Longbotham

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

Title: Water Resources Engineer

Mailing Address: 4411 S IH-35, Suite 100

City, State, Zip Code: Georgetown, TX 78626

Phone No.: 512-755-9943 Ext.:

Fax No.:

E-mail Address: kendall@reuseeng.com

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

N/A

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

The applicant will straighten the existing ephemeral stream on the property served by the WWTF, making it a man-made channel. (Please see Attachment D for the WOUS Report stating that the water on the property is not jurisdictional.) Point of discharge is at 32.813367 ° N, 96.409686 ° W. Effluent is discharged into an unnamed ephemeral stream then flows to a man-made channel, thence to an unnamed ephemeral stream, thence to Big Brushy Creek, thence to Kings Creek (Stream Segment 0818C) at 32.562683° N, 96.338024° W

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

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

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

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

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

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

N/A

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

N/A

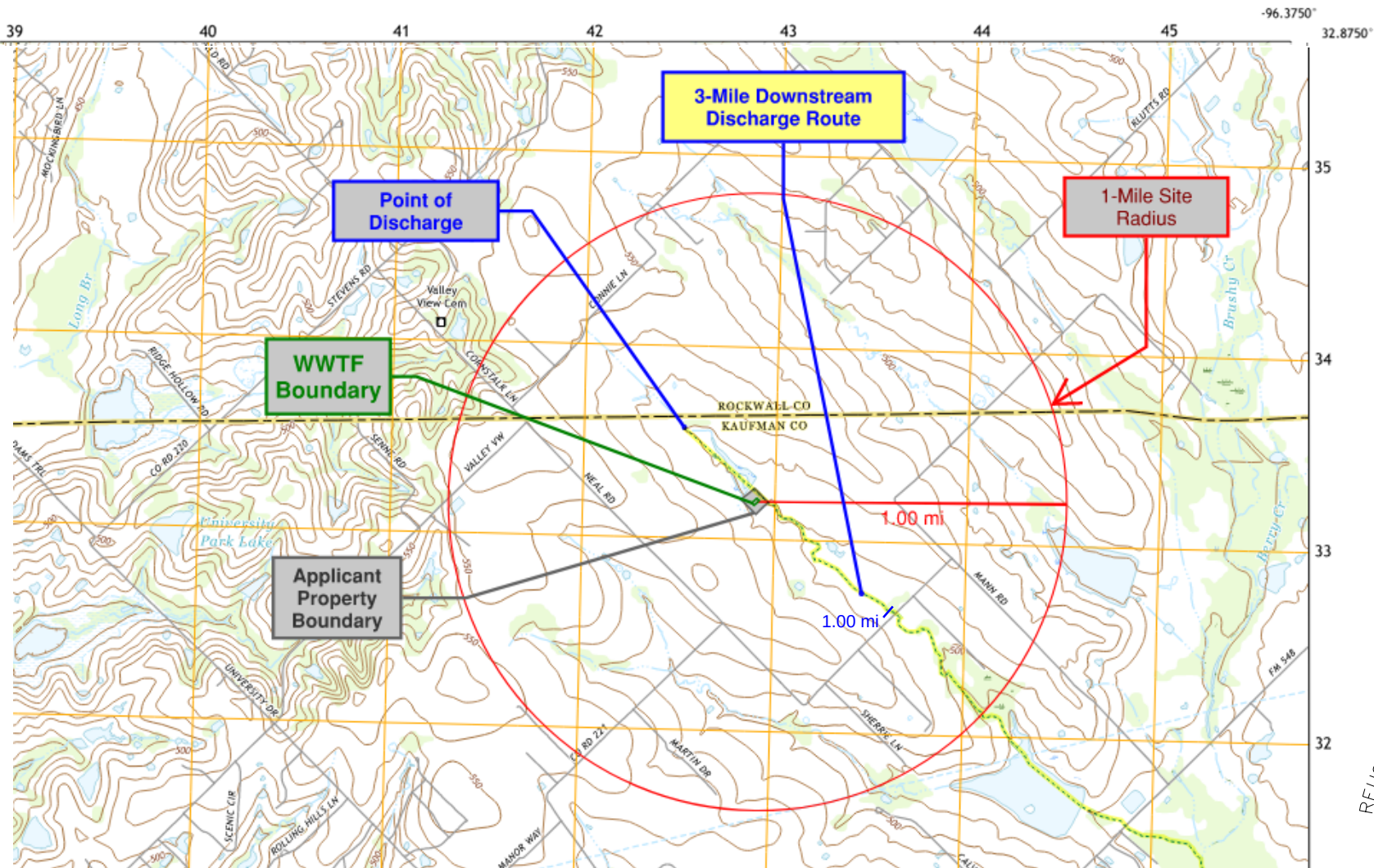
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

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

There are no existing buildings or structures on the property. Subdivision is proposed to be constructed on the property adjacent to the Applicant's property, completion date unknown. Structures, individual homes, will be subject to individual property owners. No structures other than those related to the WWTF will be constructed on the Applicant's property.

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

The property is currently undeveloped. No architect/builder.



reUse
ENGINEERING

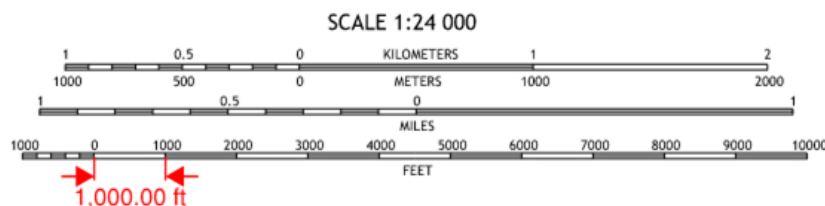
4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880



UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

1°23' 25 MILS
2°54' 52 MILS

U.S. National Grid
100,000 - m Square ID
OB
Grid Zone Designation
14S



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, 2011.
A metadata file associated with this product is draft version 0.6.18



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

1 Rowlett
2 Rockwall
3 Royse City
4 Mesquite
5 Terrell North
6 Seagoville
7 Forney South
8 Terrell South

FULL SIZE US TOPOGRAPHIC MAP IS INCLUDED IN THE APPLICATION. THIS EXHIBIT IS FOR THE PURPOSE OF CLARIFYING LOCATIONS, AS THE SITE IS SMALL ON A FULL-SIZE MAP.

PMT DEVELOPMENT LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS

U.S. TOPOGRAPHIC MAP
(ZOOMED PORTION)
Attachment J

MINIMUM REQUIRED
BUFFER ZONE

150' CONCRETE TANK SETBACK

APPLICANT PROPERTY
BOUNDARY

GENERATOR

CONCRETE PROCESS TANKAGE
150,000 GPD - PHASE 1

BLOWER SKID - PHASE 1

PERMEATE PUMPS - PHASE 1

FENCE

BLOWER SKID - PHASE 2

PERMEATE PUMPS - PHASE 2

CONCRETE PROCESS TANKAGE
150,000 GPD - PHASE 2

LIFT STATION

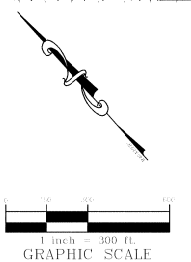
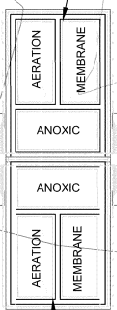
EFFLUENT LIFT STATION

ACCESS DRIVE

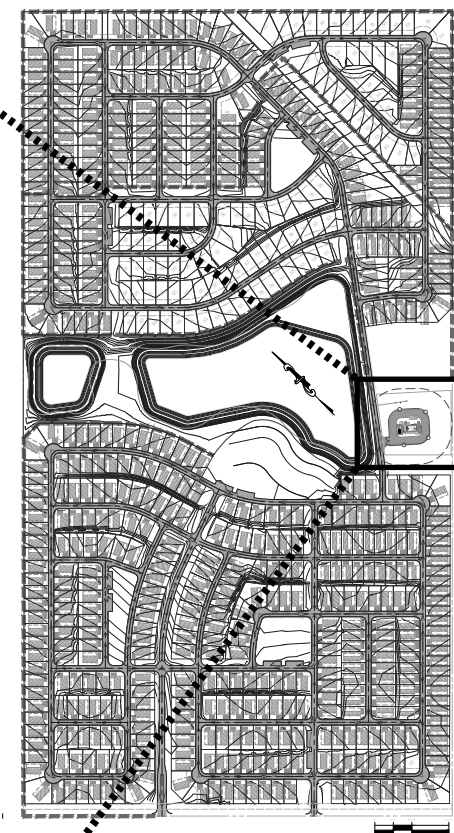
150' CONCRETE TANK SETBACK

SLUDGE PRESS

FINE SCREEN



THE APPLICANT WILL HAVE AN
ODOR & ABATEMENT EASEMENT
WITH THE ADJACENT PROPERTY
OWNER INTO WHICH THE 150-FT
BUFFER ZONE FALLS



reUse
ENGINEERING
4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS

BUFFER ZONE MAP
Attachment H



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
DOMESTIC WASTEWATER PERMIT APPLICATION

DOMESTIC TECHNICAL REPORT 1.0

The Following Is Required For All Applications
Renewal, New, And Amendment

Section 1. Permitted or Proposed Flows (Instructions Page 51)

A. Existing/Interim I Phase

Design Flow (MGD): 0.150

2-Hr Peak Flow (MGD): 0.6

Estimated construction start date: Calendar Year 2025

Estimated waste disposal start date: Calendar Year 2026

B. Interim II Phase

Design Flow (MGD): [Click here to enter text.](#)

2-Hr Peak Flow (MGD): [Click here to enter text.](#)

Estimated construction start date: [Click here to enter text.](#)

Estimated waste disposal start date: [Click here to enter text.](#)

C. Final Phase

Design Flow (MGD): 0.30

2-Hr Peak Flow (MGD): 1.2

Estimated construction start date: Calendar Year 2026

Estimated waste disposal start date: Calendar Year 2027

D. Current operating phase: [Click here to enter text.](#)

Provide the startup date of the facility: Calendar Year 2026

Section 2. Treatment Process (Instructions Page 51)

A. Treatment process description

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 in the permit, a description of *each phase* must be provided.** Process description:

The plant is an MBR (membrane bio-reactor) facility, including influent pump station, fine screen, anoxic, aerobic, and membrane cells with ultraviolet disinfection and a sludge press. The facility includes two (2) 150,000 gpd treatment trains for a total of 300,000 gpd treated effluent to be discharged in the final phase.

Port or pipe diameter at the discharge point, in inches: 6

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)(A) - Treatment Units for 150k Permanent Treatment Train (Interim I Phase)		
Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Fine Screen	3	N/A
Anoxic Tank	1	19'x11'x12'
Aerobic Tank	1	20'x11'x12'
Membranes Cell	1	18'x11'x12'
Ultraviolet Disinfection	1	N/A
Sludge Press	1	N/A

Table 1.0(1)(B) - Treatment Units for 300K Permanent Treatment Facility (Final Phase)		
Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Fine Screen	3 *	N/A
Anoxic Tank	2	19'x11'x12' each
Aerobic Tank	2	20'x11'x12' each
Membranes Cell	2	18'x11'x12' each
Ultraviolet Disinfection	1 *	N/A
Sludge Press	1 *	N/A

* The initial 150k train will have three treatment unit types that have the capacity to treat the flow of the final 300k plant: fine screens, ultraviolet disinfection, and a sludge press. Thus, the quantity of those units will not change from Interim I Phase to the Final Phase.

C. Process flow diagrams

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

Attachment: 1. Process Flow Diagram

Section 3. Site Drawing (Instructions Page 52)

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: 2. Site Drawing

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

Grand Meadows WWTP will serve a residential development, Grand Meadows, with proposed 1,200 lots.

Section 4. Unbuilt Phases (Instructions Page 52)

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.

Section 5. Closure Plans (Instructions Page 53)

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.

Section 6. Permit Specific Requirements (Instructions Page 53)

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

A. Summary transmittal

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

Yes ☐

No ☒

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

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.

B. Buffer zones

Have the buffer zone requirements been met?

Yes ☒

No ☐

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

relevant to maintaining the buffer zones.

See Attachment D of the 10053 Administrative Report. The applicant has a Restrictive Easement Agreement with the adjacent property owner, thereby meeting the conditions of the buffer zone.

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*.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

Yes ☐ No ☒

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

2. Grit and grease processing

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

3. Grit disposal

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

Yes ☐ No ☐

If No, contact the TCEQ Municipal Solid Waste team at 512-239-0000. 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.

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 512-239-0000.

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

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 or TXRNE

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:

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.

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.

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.

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, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.

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

1. Acceptance of sludge from other WWTPs

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

Yes ☐ No ☒

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

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

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

--

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 the facility accepting or will it 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.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

Is the facility in operation?

Yes ☐ No ☒

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

If yes, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). ***Water treatment facilities*** discharging filter backwash water, complete Table 1.0(3).

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

Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml)					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only

Table 1.0(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 60)

Facility Operator Name: Not yet contracted

Facility Operator's License Classification and Level:

Facility Operator's License Number:

Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the

following list. Check all that apply.

- ☒ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use
- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit
- ☐ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.
- ☐ Other:

B. Sludge disposal site

Disposal site name: 121 Regional Disposal Landfill

TCEQ permit or registration number: Sludge 2294, RN105061402

County where disposal site is located: Collin

C. Sludge transportation method

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

Name of the hauler: JGRS Hauling

Hauler registration number: Sludge 26343, RN111682829

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

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 61)

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:

- USDA Natural Resources Conservation Service Soil Map:

Attachment:

- Federal Emergency Management Map:

Attachment:

- Site map:

Attachment:

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:

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:

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:

Total Kjeldahl Nitrogen, mg/kg:

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg:

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:

Zinc:

Total PCBs:

Provide the following information:

Volume and frequency of sludge to the lagoon(s):

Total dry tons stored in the lagoons(s) per 365-day period:

Total dry tons stored in the lagoons(s) over the life of the unit:

C. Liner information

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

Yes ☐ No ☐

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

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the

lagoon(s):

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

Attachment: [\[Click here to attach file\]](#)

- Copy of the closure plan

Attachment: [\[Click here to attach file\]](#)

- Copy of deed recordation for the site

Attachment: [\[Click here to attach file\]](#)

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

Attachment: [\[Click here to attach file\]](#)

- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: [\[Click here to attach file\]](#)

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [\[Click here to attach file\]](#)

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: [\[Click here to attach file\]](#)

Section 12. Authorizations/Compliance/Enforcement

(Instructions Page 63)

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:

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:

Section 13. RCRA/CERCLA Wastes (Instructions Page 63)

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 here to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 64)

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: N/A - No laboratory tests submitted with New Application

Title:

Signature: _____

Date: _____

DOMESTIC TECHNICAL REPORT 1.1

The following is required for new and amendment applications

Section 1. Justification for Permit (Instructions Page 66)

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.

There is not currently a central wastewater service that provides for this area. Sewer treatment per individual lot is not practical and connection to nearby systems is not a viable option. See Attachment 3 for the Projection of LUEs & Wastewater Flow to WWTF Capacity Over Time of Development. The plot shows that the WWTF capacity will increase prior to development and occupation of LUEs (Living Unit Equivalents). Year 0 represents the start of operation, when LUEs are occupied, and wastewater flow begins.

B. Regionalization of facilities

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:

If yes, attach correspondence from the city.

Attachment:

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:

2. Utility CCN areas

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

Yes ☐ No ☒

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:

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 that includes the permittee's name and permit number, and an area map showing the location of these facilities.

Attachment: 4. Wastewater Outfall Map

If yes, attach copies of your certified letters to these facilities **and** their response letters concerning connection with their system.

Attachment:

Does a permitted domestic wastewater treatment facility or a collection system located within three (3) miles of the proposed facility currently have the capacity to accept or is willing to expand to accept the volume of wastewater proposed in this application?

Yes ☐ No ☒

If yes, attach an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion.

Attachment:

Section 2. Organic Loading (Instructions Page 67)

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):

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

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

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

B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision	0.30	350
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria,		

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
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	0.30	
AVERAGE BOD ₅ from all sources		350

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 68)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10.0

Total Suspended Solids, mg/l: 10.0

Ammonia Nitrogen, mg/l: 5.0

Total Phosphorus, mg/l: 1.0

Dissolved Oxygen, mg/l: 5.0

Other:

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10.0

Total Suspended Solids, mg/l: 10.0

Ammonia Nitrogen, mg/l: 5.0

Total Phosphorus, mg/l: 1.0

Dissolved Oxygen, mg/l: 5.0

Other:

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: mg/l after minutes detention time at peak flow

Dechlorination process:

☒ Ultraviolet Light: 1.0 seconds contact time at peak flow

☒ Other: Membranes

Section 4. Design Calculations (Instructions Page 68)

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

Attachment: 5. Design Calculations

Section 5. Facility Site (Instructions Page 68)

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.

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

FEMA Flood Map Service Center (<https://msc.fema.gov/portal/home>)

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:

If no, provide the approximate date you anticipate submitting your application to the Corps:

B. Wind rose

Attach a wind rose. **Attachment:** 6. Wind Rose

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 69)

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)

Attachment:

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 a completed DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT (TCEQ Form No. 10056).

Attachment:

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 69)

Attach a solids management plan to the application.

Attachment: 7. Solids Management Plan

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 TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

Section 1. Domestic Drinking Water Supply (Instructions Page 73)

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 yes, provide the following:

Owner of the drinking water supply:

Distance and direction to the intake:

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

Attachment:

Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)

Does the facility discharge into tidally affected waters?

Yes ☐ No ☒

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:

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).

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).

Section 3. Classified Segments (Instructions Page 73)

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 75)

Name of the immediate receiving waters: Ephemeral stream

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

Average depth of water body within a 500-foot radius of discharge point, in feet:

☐ Man-made Channel or Ditch

- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☒ Other, specify: Ephemeral stream

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: [redacted]

C. Downstream perennial confluences

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

N/A

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.

The applicant will straighten the existing ephemeral stream on the property served by the WWTF, making it a man-made channel. (Please see Attachment D for the WOUS Report stating that the water on the property is not jurisdictional.) Effluent is discharged into an unnamed ephemeral stream at 32.813367 ° N, 96.409686 ° W and then flows into the man-made channel, thence to an unnamed ephemeral stream, thence to Big Brushy Creek, thence to Kings Creek (Stream Segment 0818C) at 32.562683° N, 96.338024°.

E. Normal dry weather characteristics

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

Grassy undeveloped pasture, relatively flat, muddy in areas where water flows.

Date and time of observation: 03 DEC 2024

Was the water body influenced by stormwater runoff during observations?

Yes ☐

No ☒

Section 5. General Characteristics of the Waterbody (Instructions Page 74)

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

☐ Urban runoff

☐ Upstream discharges

☒ Agricultural runoff

☐ Septic tanks

☐ Other(s), specify

B. Waterbody uses

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

☐ Livestock watering

☐ Contact recreation

- | | |
|--|--|
| ☐ Irrigation withdrawal | ☐ Non-contact recreation |
| ☐ Fishing | ☐ Navigation |
| ☐ Domestic water supply | ☐ Industrial water supply |
| ☐ Park activities | ☐ Other(s), specify click here to enter |

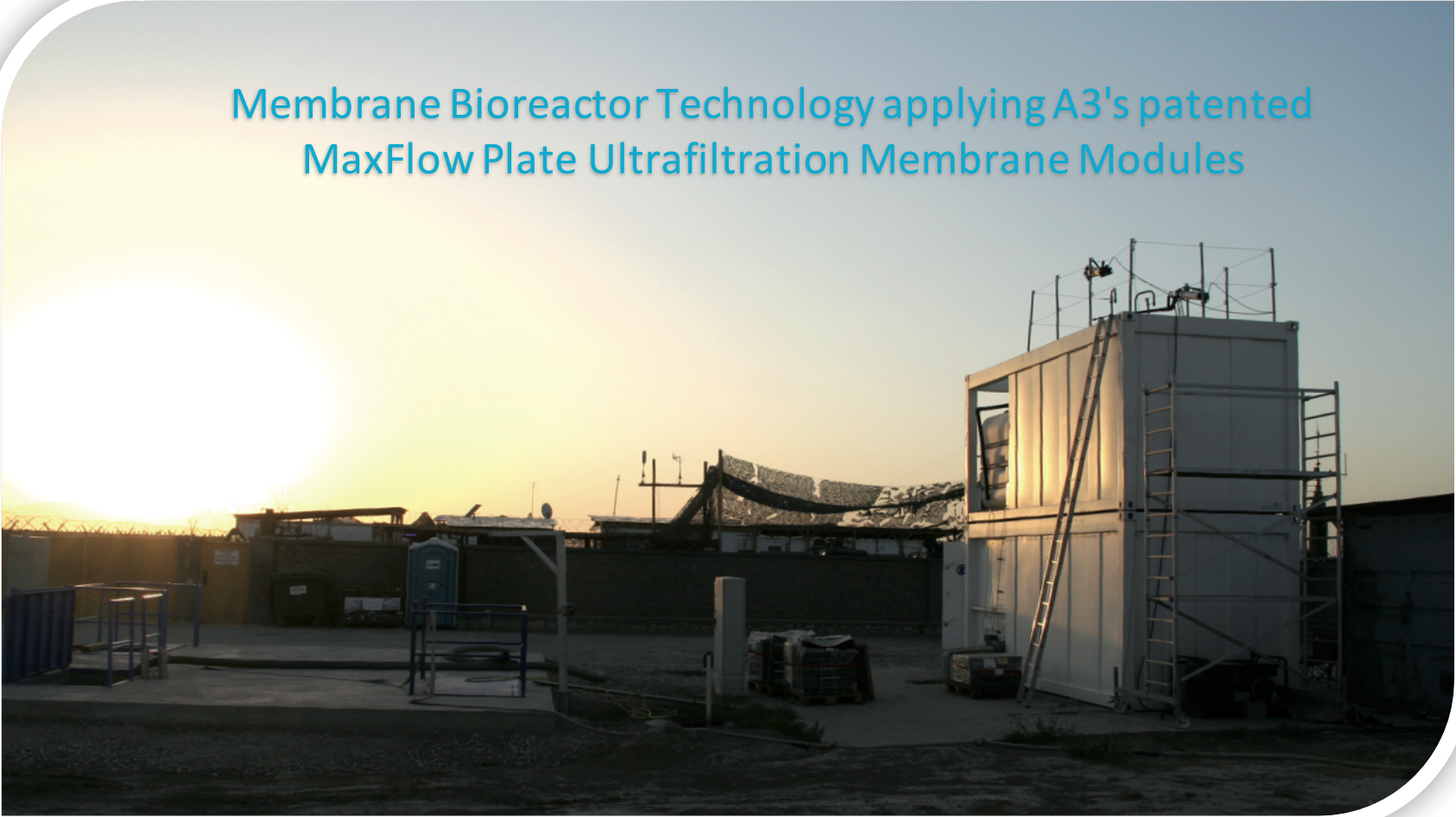
C. Waterbody aesthetics

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

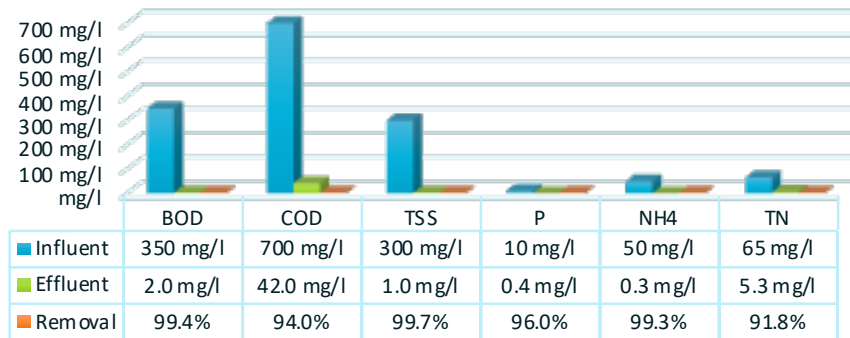
Remainder of 10054 not applicable to this application.

Membrane Bioreactor Technology applying A3's patented
MaxFlow Plate Ultrafiltration Membrane Modules



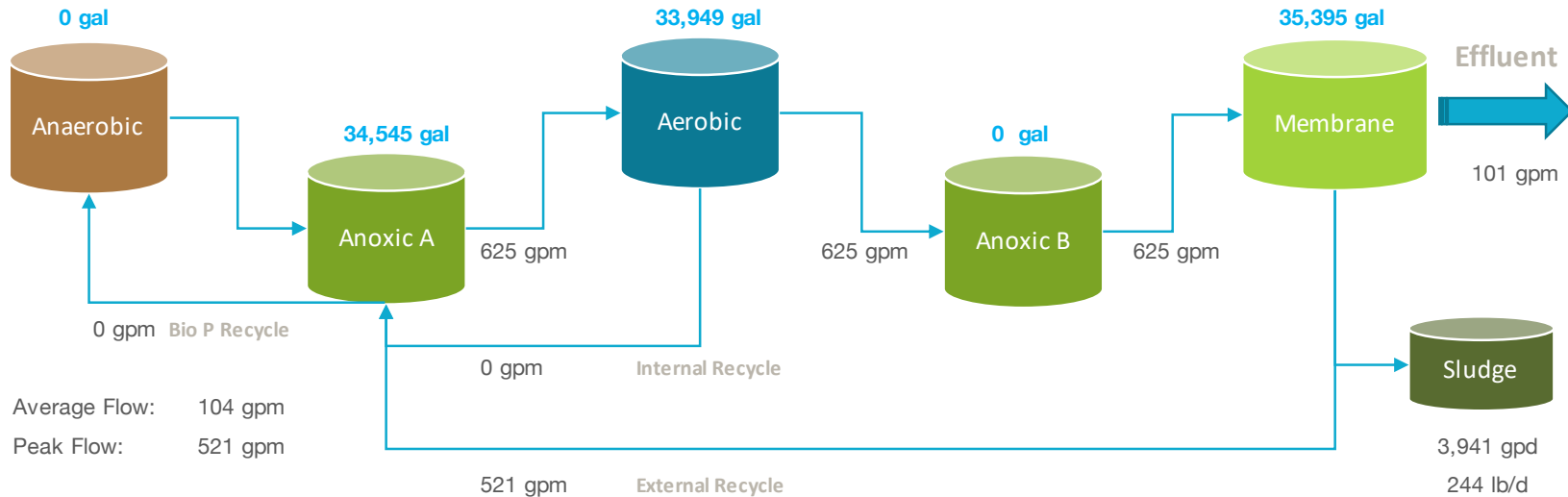
Process Summary

Influent & Effluent Parameters



PROCESS PARAMETERS

Sludge Age	25 d
Total Reactor Volume	103,889 gal
Total SOR	963 kgO2/d
MLSS in Anoxic / Aerobic Tank	7,348 mg/l
MLSS in Membrane Tank	8,953 mg/l
HRT	17 h
F/M RATIO (BOD)	0.071
F/M RATIO (COD)	0.142
Total Membrane Surface	45,338 sf



Aeration	Flow	Pressure
EQ	0 scfm	0.0 psi
Sludge	0 scfm	0.0 psi
Aerobic	341 scfm	8.0 psi
Membrane	504 scfm	7.5 psi

Applied Options:

NO	DAF
NO	RO

11/18/24

Biological Process Calculation

Influent Characteristics	Symbol	Value	Units
Type of wastewater		municipal	
Temperature	T	15	°C
pH	-	7.0	-
H ₂ CO ₃ alkalinity	Alk _i	300	mg/l as CaCO ₃
Site pressure / elevation	p _{a,i}	14.5	psi
Average daily flow	Q _i	150,000	gpd
Peak daily flow	Q _{i, max,d}	375,000	gpd
Hourly peak flow	Q _{i, max,p}	521	gpm
Peak factor	-	5.0	-
Average daily flow	Q _i	568	m ³ /d
Max. monthly average daily flow	Q _{i, max,d}	1,419	m ³ /d
Hourly peak flow	Q _{i, max,h}	118.3	m ³ /h
Total BOD	S _{BOD,i}	350	mgBOD/l
Total COD	S _{COD,i}	700	mgCOD/l
COD/BOD ratio	-	2.00	-
Rapidly biodegradable COD	S _{s,i}	175	mgCOD/l
Volitale fatty acids (VFA)	S _{VFA,i}	26	mgCOD/l
Fermentable COD	S _{F,i}	149	mgCOD/l
Slowly biodegradable COD	S _{ss,i}	378	mgCOD/l
Biodegradable COD	S _{bio,i}	553	mgCOD/l
Soluble inert COD	S _{SIN,i}	42	mgCOD/l
Particulate inert COD	S _{PIN,i}	105	mgCOD/l

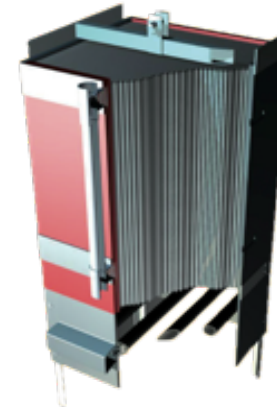
Influent Characteristics	Symbol	Value	Units
NO ₃	N _{NO₃,i}	0.0	mg/l
NH ₄	N _{a,i}	50.0	mg/l
TKN	N _{TKN,i}	65.0	mg/l
TP	P _i	10.0	mg/l
Dissolved Oxygen	S _{O₂,i}	0.0	mg/l
FSA fraction	f _{a/TKN,i}	0.8	-
Fixed (inorganic) suspended solids	X _{FSS,i}	47.5	mgISS/l
TSS concentration	S _{TSS,i}	300.0	mgTSS/l
Total BOD mass	FS _{BOD,i}	198.7	kgBOD/d
Total COD mass	FS _{COD,i}	397.4	kgCOD/d
Total NH ₄ mass	FS _{a,i}	28.4	kgNH ₄ /d
Total TKN mass	FS _{TKN,i}	36.9	kgTKN/d
Total P mass	FS _{P,i}	5.7	kgP/d

Effluent Characteristics	Symbol	Value	Units
Waste Sludge	FX_t	244	lb/d
Waste Sludge	Q_w	3,941	gpd
Effluent BOD	$S_{BOD,e}$	< 3	mgBOD/l
Effluent COD	$S_{COD,e}$	42	mgCOD/l
Effluent TSS	$STSS,e$	1.0	mgTSS/l
Effluent P	P_e	0.4	mgP/l
Effluent NH_4	$N_{a,e}$	0.3	mgN/l
Effluent NO_3	$N_{NO_3,e}$	3.1	mgN/l
Effluent TN ($N_{ne} + N_{te}$)	$N_{t,e}$	5.3	mgN/l

Bioreactor Characteristics	Symbol	Value	Units	Biological Oxygen Demand	Symbol	Value	Units
Temperature	T_{bio}	15	°C	OD for synth & endo respiration (PAO)	FO_{PAO}	0	kgO ₂ /d
Sludge retention time / Sludge age	SRT	25	d	OD for synth & endo respiration (OHO)	FO_{OHO}	252	kgO ₂ /d
Reactor volume	$V_{P,chosen}$	103,889	gallons	Mass carbonaceous oxygen demand	FO_C	252	kgO ₂ /d
Reactor volume	$V_{P,chosen}$	393	m ³	Carbonaceous oxygen utilization rate	O_c	64%	-
Reactor volume	$V_{P,calc}$	98,524	gallons	Nitrification oxygen demand	FO_n	118	kgO ₂ /d
Average MLSS concentration	X_{TSS}	7,500	mgTSS/l	Total oxygen demand	FO_t	370	kgO ₂ /d
Food to microorganism ratio	$F/M_{BOD,used}$	0.071	kgBOD/kgMLSS	Oxygen recovered by denitrification	FO_d	69	kgO ₂ /d
Food to microorganism ratio	$F/M_{COD,used}$	0.142	kgCOD/kgMLSS	Net total oxygen demand (AOR)	FO_{td}	301	kgO ₂ /d
Membrane tank MLSS concentration	X_M	8,953	mgTSS/l	Oxygen saturation @ operating temp.	c_s	10.2	mg/l
Aerobic/Anoxic tank MLSS concentration	X_{Bio}	7,348	mgTSS/l	Desired oxygen level	c_x	2.0	mg/l
Number of anaerobic zones	$\#_{AN}$	0	-	Transfer coefficient	α	0.40	-
Number of anoxic zones	$\#_{AO}$	1	-	Diffuser water depth	DWD	13	feet
Number of aerobic zones	$\#_{AE}$	1	-	Oxygen transfer efficiency	OTE	2	%
External recycle ratio	m	5	-	Standard total oxygen demand (SOR)	SOR	963	kgO ₂ /d
Internal recycle ratio	a	0	-	Required air flow	Q_{air}	326	scfm
DO in m recycle	O_m	1	mgO ₂ /l	Oxygen requir. per volume & depth	OS	18.3	gO ₂ /(Nm ₃ *m _D)
DO in a recycle	O_a	0	mgO ₂ /l				
Recycle ratio to anaerobic tank (PAO)	s	0	-				
DO in s recycle	$S_{O_2,s}$	0	mgO ₂ /l				
Nitrate on s recycle	$S_{NO_3,s}$	0	mg/l				
TKN/COD ratio	$f_{TKN/COD}$	0.093	mgTKN/mgCOD				
Carbon source addition (Micro C)	B_{MicroC}	0.0	lb/d				
Carbon source addition (Micro C)	S_{MicroC}	0.00	gpd				
Nominal hydraulic retention time	HRT_n	16.6	h				
Actual hydraulic retention time	HRT_a	2.8	h				

Membrane Module Design

	Symbol	Value	Units
Permeate on cycle	T_o	8	minute
Permeate off cycle (relaxation)	T_s	2	minute
Effective membrane module surface	$A_{m,eff}$	87.8	m ²
Effective membrane module surface	$A_{m,eff}$	945	ft ²
Total number of membrane modules	N_M	48	-
Total membrane module surface	A_{total}	4,212	m ²
Total membrane module surface	A_{total}	45,338	ft ²
Nominal average daily flux	$Q_{ave,n}$	7.0	lmh
Nominal max. daily flux	$Q_{ave,n,max,mo}$	17.6	lmh
Nominal peak hourly flux	$Q_{peak,n}$	35.1	lmh
Average daily flux (excluding rest cycle)	$Q_{ave,n}$	3.3	gfd
Max. Daily flux (ex. rest cycle)	$Q_{ave,n,max,mo}$	8.3	gfd
Peak hourly flux (ex. rest cycle)	$Q_{peak,n}$	16.5	gfd
Total membrane module displacement vol.	$V_{modules}$	528	ft ³
Total membrane module displacement vol.	$V_{modules}$	3,949	gallons
Aeration modules	$A\#$	16	-
Membrane module aeration requirement	Q_{am}	28.5	acfm
Total membrane modules aeration	$Q_{am,total}$	456	acfm
Membrane diffuser water depth	DWD_m	12.5	feet
Oxygen requirement per volume & depth	OS	14	gO ₂ /(Nm ₃ *m _D)
Standard oxygen rate, membrane aeration	SOR_m	2,118	lbO ₂ /d
Standard oxygen rate, membrane aeration	SOR_m	970	kgO ₂ /d



- ✓ Patented, innovative A3's MaxFlow™ membrane filtration modules manufactured in USA.
- ✓ The MaxFlow™ module "open channel design" provides optimal biofilm control, minimizes the quantity of chemical cleaning procedures and avoids module clogging.
- ✓ The compact module design enables dual-stack and triple-stack installations. It allows for a high membrane packing density resulting in a small footprint and high energy efficiency.
- ✓ Most existing conventional treatment plants can be retrofitted with MaxFlow™ membranes due to the

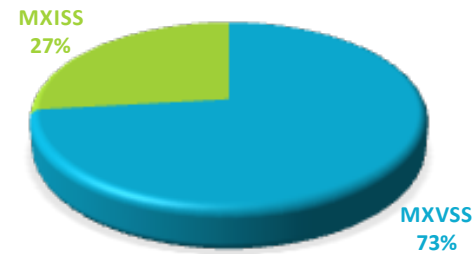
Kinetic Constants	Symbol	Value	Units	Stoichiometric Constants	Symbol	Value	Units
Yield coefficient OHO	Y_{OHO}	0.40	mgVSS/mgCOD	COD/BOD ratio	-	2.00	-
Yield coefficient OHO,OBS	$Y_{OHO,obs}$	0.06	mgVSS/mgCOD	Readily biodeg. org. fraction (RBCOD)	$f_{s,COD}$	0.25	g/gTCOD
Fermentation rate at 20°C	$k_{F,20}$	0.06	m3/gVSSd	Non-biodegradable particulate COD	$f_{PNb,COD}$	0.15	g/gTCOD
Temperature coefficient for $k_{F,T}$	Θ_{kF}	1.029	-	Non-biodegradable soluble COD	$f_{SNb,COD}$	0.06	g/gTCOD
Fermentation rate at T	$k_{F,T}$	0.05	m3/gVSSd	SVFA fraction of RBCOD	$f_{SVFA,SSI}$	0.15	g/gCOD _{SS}
Endogenous respiration rate (decay)	$b_{OHO,20}$	0.24	gVSS/gVSSd	VSS/TSS of activated sludge	f_{VT}	0.73	mgVSS/mgTSS
Endogenous respiration rate T	$b_{OHO,T}$	0.21	gVSS/gVSSd	COD/VSS of activated sludge	f_{cv}	1.48	kgCOD/kgVSS
Yield coefficient FSA	Y_A	0.10	mgVSS/mgFSA	True synthesis fraction	f_s^0	0.57	-
Nitri. pH sensitivity coefficient	K_I	1.13	-	Endogenous residue fraction	$f_{H/E,OHO}$	0.2	-
Nitri. pH sensitivity coefficient	K_{max}	9.50	-	ISS content of OHOs	$f_{ISS,OHO}$	0.15	-
Nitri. pH sensitivity coefficient	K_{II}	0.30	-	Active fraction - VSS	f_{avOHO}	25%	-
Max. specific growth rate at 20°C	μ_{Am}	0.45	1/d	Active fraction - TSS	f_{at}	18%	-
Max. spec. growth rate - Temp/pH	μ_{AmTpH}	0.21	1/d	Influent FSA fraction	$f_{FSA,i}$	0.77	-
Half saturation coefficient	K_n	0.75	mgFSA/l	Non-bio. soluble orgN fraction (inerts)	$f_{SNb,N}$	0.03	-
Half saturation coefficient - Temp	K_{nT}	0.42	mgFSA/l	Non-bio. particulate orgN fraction	f_n	0.12	-
Endogenous respiration rate (decay)	b_A	0.04	1/d	Permissible unaer. sludge mass fraction	f_{xm}	0.65	-
Temperature coefficient for $k_{F,T}$	θ_n	1.123	-	Design unaerated sludge mass fraction	f_{xt}	0.33	-
Endogenous respiration rate T	b_{AT}	0.022	1/d	Minimum primary anoxic mass fraction	f_{x1min}	0.08	-
Temperature sensitivity coefficient	Θ_{nk1}	1.20	-	Primary anoxic mass fraction	f_{x1}	0.33	-
Temperature sensitivity coefficient	Θ_{nk2}	1.05	-	Secondary anoxic mass fraction	f_{x2}	0.00	-
Temperature sensitivity coefficient	Θ_{nk3}	1.03	-	Anaerobic mass fraction	f_{AN}	0.00	-
Denitrification rates at 20°C	k_1	0.70	-	Non-bio. particulate orgP fraction	$f_{P,XE,OHO}$	0.05	mgP/mgVSS
Denitrification rates at 20°C	k_2	0.10	-	Endogenous residue fraction	$f_{XE,PAO}$	0.25	gEVSS/gAVSS
Denitrification rates at 20°C	k_3	0.08	-	P fraction in active PAO mass	$f_{P,PAO}$	0.38	gP/gAVSS
Denitrification rates	k_{1T}	0.281	-	VSS/TSS ratio for PAO active mass	$f_{VT,PAO}$	0.46	gVSS/gTSS
Denitrification rates	k_{2T}	0.079	-	Ratio of P release /VFA uptake	$f_{PO4,REL}$	0.5	gP/gCOD
Denitrification rates	k_{3T}	0.069	-	Frac. of fixed inorganic s. solids of PAO	$f_{FSS,PAO}$	1.3	gFSS/gAVSS
Yield coefficient PAO	Y_{PAO}	0.45	gAVSS/gCOD	P content of TSS	$f_{P,TSS}$	0.041	gP/gTSS
Yield coefficient PAO	$Y_{PAO,obs}$	0.22	gAVSS/gCOD	P content of VSS	$f_{P,FSS,i}$	0.02	gP/gVSS
Endogenous respiration rate (decay)	$b_{PAO,20}$	0.04	gEVSS/gCOD	TKN/COD ratio	f_{ns}	0.09	mgTKN/mgCOD
Temperature coefficient for $k_{F,T}$	$\Theta_{b,PAO}$	1.029	-	Nitrogen content of active biomass	$f_{N,VSS}$	0.10	gN/gAVSS
Endogenous respiration rate T	$b_{PAO,T}$	0.03	gEVSS/gVSSd				

Biological Mass Balance

	Symbol	Value	Units
Sludge age	SRT	25 d	
Mixed liquor suspended solids	X _{TSS}	7,500 mgTSS/l	
Readable biodegradable COD flux	FS _{S,i}	99 kgCOD/d	
Daily flux of VFAs	FS _{VFA,i}	15 kgCOD/d	
Daily flux of fermentable COD	FS _{F,i}	84 kgCOD/d	
Daily flux of biodegradable COD	FS _{bio,i}	314 kgCOD/d	
Daily flux of particulate inert COD	FS _{PIN,i}	60 kgCOD/d	
Daily flux of fixed inorganic sus. solids	FS _{ISS,i}	27 kgISS/d	
Influent particulate non-bio. COD	FX _{VSS,i}	40 kgVSS/d	
Mass nitrogen into sludge prod.	FN _{Sludge}	10 kgN/d	
Mass of nitrate generated per day	FN _{NO3}	26 kgN/d	
VFAs stored by PAOs	FS _{S,PAO}	0 kgCOD/d	
Remaining biodegradable COD	FCOD _{b,OH0}	314 kgCOD/d	
Mass nitrifiers	MX _A	41 kgVSS	
Active biomass PAO	MX _{PAO}	0 KgAVSS	
Endogenous active biomass PAO	MX _{E,PAO}	0 kgEVSS	
Bio mass	MX _{bio}	509 kgVSS	
Active organism mass	MX _{OH0}	509 kgVSS	
Endogenous residue mass	MX _{E,OH0}	530 kgVSS	
Non-biodegradable particulate mass	MX _{Iv}	1,007 kgVSS	
Volatile suspended solids mass	MX _{VSS}	2,046 kgVSS	
Inorganic suspended solid mass	MX _{ISS}	751 kgISS	
Total suspended solids mass	MX _{TSS}	2,797 kgTSS	
Mass/Sludge TSS wasted	FX _t	112 KgTSS/d	
Mass/Sludge VSS wasted	FX _v	82 kgVSS/d	
Effluent COD	S _{COD,e}	42 mgCOD/l	
COD mass out (effluent and waste)	FS _{COD,e}	24 kgCOD/d	
Mass/Sludge COD wasted	FX _{COD,s}	121 kgCOD/d	

Alkalinity

	Symbol	Value	Units
Alkalinity Nitrification as CaCO ₃ (consumed)	Alk _{Nitri}	324 mg/l as CaCO ₃	
Alkalinity Denitrification as CaCO ₃ (recovered)	Alk _{Denitri}	174 mg/l as CaCO ₃	
Alkalinity _{ef}	Alk _e	100 mg/l as CaCO ₃	
Alkalinity _{inf}	Alk _i	300 mg/l as CaCO ₃	
Alkalinity Alum (consumed)	Alk _{Alum}	0.0 mg/l as CaCO ₃	
Alkalinity Total	Alk _{total}	150 mg/l as CaCO ₃	
Alkalinity Added	Alk _{added}	-50 mg/l as CaCO ₃	
Alkalinity Added	XAlk _{added}	0 lb/d	
Density caustic solution (50%)	-	12.76 lb/gal	
Alkalinity recovered	Alk _{recovered}	0.4 lbCaCO ₃ /lb	
Caustic needed	-	0.0 lb/d	
Caustic needed	-	0.0 gpd	



$$MX_{TSS} = MX_{ISS} + MX_{VSS}$$

$$V_p = \frac{MX_{TSS}}{X_{TSS}}$$

$$FX_t = \frac{MX_{TSS}}{SRT}$$

N Removal

	Symbol	Value	Units
Factor of safety	S_f	1.2	-
Nitrogen requirements	FN_{synth}	8	kgN/d
Nitrogen requirements	$TKN_{i,\text{synth}}$	14.42	gN/m ³
Influent non-bio. soluble organic N	$N_{\text{nbios},i}$	1.95	mgN/l
Influent non-bio. particulate org. N	$N_{\text{nbio},i}$	8.5	mgN/l
Influent biodegradable organic N	$N_{\text{bio},i}$	13.1	mgN/l
Effluent non-bio. soluble organic N	$N_{\text{nbios},e}$	1.95	mgN/l
NH ₄ concentration avail. for nitr.	N_{an}	45.8	mgN/l
Effluent ammonia	$N_{\text{a},e}$	0.3	mgN/l
Effluent TKN	$N_{\text{TKN},e}$	2.3	mgN/l
N concentration into sludge prod.	N_s	17.3	mgN/l
Nitrification capacity	N_c	45.4	mgN/l
Denitrification potential RBCOD	$D_{p1\text{RBCOD}}$	24.7	mgNO ₃ -N/l
Denitrification potential SBCOD	$D_{p1\text{SBCOD}}$	23.6	mgNO ₃ -N/l
Denitrification potential RBCOD	$D_{p3\text{RBCOD}}$	0.0	mgNO ₃ -N/l
Denitrification potential SBCOD	$D_{p3\text{SBCOD}}$	0.0	mgNO ₃ -N/l
Minimum sludge age for nitr.	SRT_m	8.4	d
Denitrification potential primary tank	D_{p1}	48.4	mgN/l
Denitrification potential secondary tank	D_{p3}	0.0	mgN/l
Denitri. potential recycle rate ($f_{xm} = f_{xdm}$)	D_{p^*}	39.6	mgN/l
Effluent nitrate	$N_{\text{NO}_3,e}$	3.1	mgN/l
Effluent nitrate @ f_{xdm} & recycle rate	N_{NO_3,e^*}	7.6	mgN/l

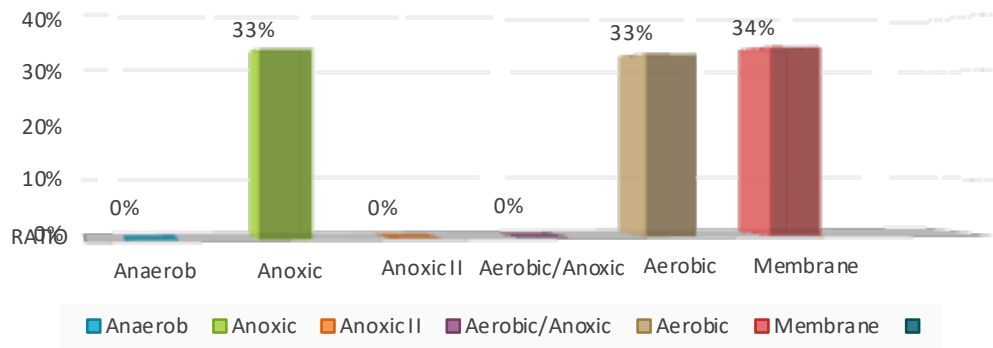
P Removal

	Symbol	Value	Units
COD lost in anaerobic reactor	$S_{F,ANh}$	0.0	gCOD/m ³
COD lost in anaerobic reactor	S_{F,ANh^*}	0.0	gCOD/m ³
Fermentable COD for AN reactor	$S_{F,I,\text{conv}}$	0.0	gCOD/m ³
DO in influent	$S_{O_2,i}$	0.0	mgO ₂ /l
PO ₄ release AN reactor	$S_{PO_4,\text{rel}}$	0.0	gP/m ³
P removal by PAOs	ΔP_{PAO}	0.0	gP/m ³
P removal by OHOs	ΔP_{OHO}	1.1	gP/m ³
P removal by endogenous biomass	ΔP_{XE}	1.9	gP/m ³
P removal by influent inert mass	ΔP_{XI}	3.5	gP/m ³
P into sludge production	P_s	5.8	gP/m ³
Potential P removal by system	$\Delta P_{\text{SYS,POT}}$	12.3	gP/m ³
Actual P removal by system	$\Delta P_{\text{SYS,ACT}}$	10.0	gP/m ³
Effluent particulate P from TSS	$X_{P,e}$	0.0	gP/m ³
Influent total P	P_i	10.0	gP/m ³
Effluent total P	P_{e^*}	0.0	gP/m ³
P precipitated	P_{prec}	0.0	mgP/l
Precipitation chemical	B_{Alum}	0.0	lb/d
Precipitation chemical	Solution	0.0	gal/d
Density Alum	Z_{AL}^{3+}	0.100	lb _{AL} /lb _{prec}
Density Iron	Z_{FE}^{3+}	0.077	lb _{FE} /lb _{prec}
Alum efficiency	-	40.0	g/kg
Chemical precipitation sludge	-	0.0	lb/d

Mechanical Process Calculation

Tank Dimensions	Trains	Length	Width	Dia.	Degree	Height	Liquid level	Volume per train	Volume Total	Volume Total
Anaerobic	0	.00 ft	.00 ft	.00 ft	0.0	.00 ft	.00 ft	gal	gal	0.0 m3
Anoxic I	1	26.00 ft	12.25 ft	.00 ft	0.0	17.00 ft	14.50 ft	34,545 gal	34,545 gal	130.8 m3
Aerobic	1	26.00 ft	12.25 ft	.00 ft	0.0	17.00 ft	14.25 ft	33,949 gal	33,949 gal	128.5 m3
Anoxic II	0	.00 ft	.00 ft	.00 ft	0.0	.00 ft	.00 ft	gal	gal	0.0 m3
Anoxic Buffer	0	.00 ft	.00 ft	.00 ft	0.0	.00 ft	.00 ft	gal	gal	0.0 m3
Membrane	1	26.00 ft	13.00 ft	.00 ft	0.0	17.00 ft	14.00 ft	35,395 gal	35,395 gal	134.0 m3
Sludge	0	.00 ft	.00 ft	.00 ft	0.0	.00 ft	.00 ft	gal	gal	0.0 m3
EQ	0	.00 ft	.00 ft	.00 ft	0.0	.00 ft	.00 ft	gal	gal	0.0 m3

Tank Design	Symbol	Value	Units
Total process tank volume	103,889	gallons	Weir level1.2 inches
Total process tank volume _{calc}	98,524	gallons	Weir length11.0 ft
Un aerated tank percentage	33	%	Velocity1.04 fps
Total tank volume	103,889	gallons	Vertical tank0
Membrane modules volume	3,949	gallons	Horz. Tank0
F/M _{used,BOD}	0.071	kgBOD/kgMLSS	Diameter0 ft
F/M _{used,COD}	0.142	kgCOD/kgMLSS	



Process Volume Distribution

Air Flow Design	Symbol	Membrane per train	Aerobic per train	Sludge	EQ	Unit
Minimum air flow	$Q_{A, re}$	456	326	0	0	acfm / scfm
Chosen air flow - actual	$Q_{A, chosen}$	457	311	0	0	acfm
Chosen air flow - inlet	$Q_{A, chosen}$	856	580	0	0	m ³ /h
Chosen air flow - inlet	$Q_{A, chosen}$	504	341	0	0	scfm
Chosen air flow - piping	$Q_{A, chosen}$	332	220	0	0	acfm
Pipe pressure	p_b	7.5	8.0	0.0	0.0	psi
Pipe losses	H	0.09	0.31	0.00	0.00	psi
Equivalent length in pipe losses	L_p	600	600	400	400	feet
Pipe diameter	d	6.0	4.0	3.0	2.0	inches
Internal pipe diameter	d_i	6.36	4.26	3.26	2.16	inches
Standard temperature	T_1	293	293	293	293	K
Pipe temperature	T_2	330	332	293	293	K
Constant	f	0.02	0.02	0.09	0.09	-
Air velocity	v	25.1	37.1	0.0	0.0	fps
Atmospheric pressure	$p_{a,1}$	14.5	14.5	14.5	14.5	psi
Absolute pressure	p_2	22.0	22.5	14.5	14.5	psi
Pressure due to tank liquid level	$p_{DWD,m}$	5.4	6.0	0.0	0.0	psi
Pressure due to aeration device	p_{DWD}	0.8	0.7	0.5	0.5	psi
Pressure due to pipe losses & elev.	$p_{DWD,s}$	0.5	0.7	0.4	0.4	psi
Total pipe losses	p_t	6.7	7.4	0.9	0.9	psi
Total pipe losses	p_t	464.3	509.9	62.1	62.1	mbar

$$H = 9.82 \cdot 10^{-8} \cdot \frac{(f \cdot L_p T_2 Q_{A, chosen})}{(p_2 d_i)^5}$$

$$f = \frac{(0.029 \cdot d_i^{0.027})}{Q_{A, chosen}^{0.148}} \quad T_2 = T_1 \left(\frac{p_2}{p_{a,1}} \right)^{0.283}$$



TCEQ DOMESTIC WASTEWATER DISCHARGE PERMIT APPLICATION (TPDES)

PMT DEVELOPMENT, LLC

DOMESTIC WASTEWATER ADMINISTRATIVE AND TECHNICAL REPORTS WITH ATTACHMENTS

GRAND MEADOWS WWTP

Approximately 0.41 miles northeast of the intersection of County Road 221 and Neal Road in Forney, Texas
Kaufman County, Texas

PREPARED BY:

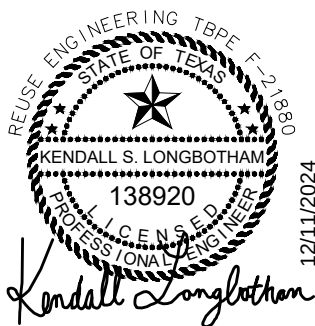
Lauren B. Wahl, PE
reUse Engineering, Inc.

Kendall Longbotham, PE
reUse Engineering, Inc.

Dec 11, 2024



4411 S Interstate 35, Ste 100
Georgetown, Texas 78626





28 June 2023

Mr. Tom Hallock, P.E.
Atwell, LLC.
5500 Granite Parkway; Suite 250
Plano, Texas 75024

Re: Sun Fortney - Waters of the United States Delineation
Approximately 160+/- acres located on the north side of Neal Road between Connie Lane and Kaufman County Road 221, Rockwall and Kaufman Counties, Texas

Dear Mr. Hallock,

Integrated Environmental Solutions, LLC (IES) performed a site survey to identify any aquatic features that meet a definition of a water of the United States on approximately 160+/- acres located on the north side of Neal Road between Connie Lane and Kaufman County Road (CR) 221, Rockwall and Kaufman Counties, Texas (**Attachment A, Figure 1**). This report will ultimately assess and delineate potentially jurisdictional aquatic features to ensure compliance with Clean Water Act (CWA) Sections 401 and 404.

INTRODUCTION

Waters of the United States are protected under guidelines outlined in CWA Sections 401 and 404, in Executive Order (EO) 11990 (Protection of Wetlands), and by the review process of the Texas Commission on Environmental Quality (TCEQ). Agencies that regulate impacts to the nation's water resources within Texas include the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), and the TCEQ. The USACE has the primary regulatory authority for enforcing CWA Section 404 requirements for waters of the United States.

The decision for whether a CWA Section 404 permit is required on a property is determined if there are waters of the United States present and the extent of losses of those features. The USACE and USEPA have gone through rulemaking to define what is a water of the United States, independently and jointly, several times since the initial CWA. The longest standing definitions of waters of the United States were those published in 1986; however, these definitions were challenged in 2001, 2007, and 2023 U.S. Supreme Court (SCOTUS) decisions. In addition to this, the Obama, Trump, and Biden administrations completed rulemaking to modify the definitions of waters of the United States. The 2023 SCOTUS decision defined a water of the United States as "a relatively permanent body of water connected to traditional interstate navigable waters." The SCOTUS also included wetlands that have a continuous surface connection with that water, in the definition of a water of the United States. This wetland connection was described as the boundary where it was difficult to determine where the 'water' ends and the 'wetland' begins.

This 2023 SCOTUS decision is consistent with the relatively permanent water (RPW) standard identified in the previous 2007 SCOTUS decision. Until further guidance is published from the USACE or USEPA, the 2007 USACE and EPA guidance defining a "relatively permanent water" will be used. According to this guidance, RPW are non-navigable tributaries of traditional navigable waters (TNW) that flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). In addition to this, the guidance also stipulated regulation over wetlands that directly abut such tributaries.

METHODOLOGY

Prior to conducting fieldwork, the U.S. Geological Survey (USGS) topographic map (**Attachment A, Figures 2A and 2B**), the *Soil Survey of Rockwall and Kaufman Counties, Texas*, and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) digital soil databases for Rockwall and Kaufman Counties (**Attachment A, Figure 3**), the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (**Attachment A, Figure 4**), and recent and historic aerial photographs of the proposed survey area were studied to identify possible aquatic features that could meet the definition of waters of the United States and areas prone to wetland development. Mr. Rafael Gomez and Ms. Veronica Silva of IES conducted the delineation in the field in accordance with the USACE procedures on 12 October 2022. A second site investigation was conducted on 02 May 2023.

Wetland determinations and delineations were performed on location using the methodology outlined in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineer Wetland Delineation Manual: Great Plains Region (Version 2.0). The presence of a wetland is determined by the positive indication of three criteria (i.e., hydrophytic vegetation, hydrology, and hydric soils). Potential jurisdictional boundaries for other water features (i.e., non-wetland) were delineated in the field at the ordinary high-water mark (OHWM). The 33 CFR 328.3 (c)(7) defines OHWM as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Water feature boundaries were recorded on a Trimble GeoExplorer XT Global Positioning System (GPS) unit capable of sub-meter accuracy. Photographs were also taken at representative points within the survey area (**Attachment B**). Routine wetland determination data forms are provided in **Attachment C**. Historic aerial photographs, from Environmental Data Resources, Inc. (EDR), were used in the jurisdictional determination of some aquatic features, are included in **Attachment D**.

RESULTS

Background Review

Topographic Setting

The USGS topographic map (Forney North 7.5' Quadrangle 1963, revised 1974) illustrates two blue line features. The first blue line feature, oriented northwest-to-southeast, bisects the surveys area. The second blue line feature, oriented northwest-to-southeast, is depicted flowing southeast into the first blue line feature. An excavated pond is depicted within the central portion on channel of the first blue line feature (see **Attachment A, Figure 2A**). The 2022 Forney North 7.5' Quadrangle map illustrates the pond and first blue line feature in similar alignment; however, the second blue line feature is no longer depicted (see **Attachment A, Figure 2B**). The overall site topography was illustrated with slopes oriented northwest-to-southeast. The maximum site elevation was approximately 550 feet above mean sea level (amsl) with a minimum site elevation of approximately 510 feet amsl.

Soils

The USDA NRCS Web Soil Survey identified two soil map units within the survey area, Heiden clay, 3 to 5 percent slopes, and Houston Black clay, 1 to 3 percent slopes. Neither of these soil map units were listed as hydric soil on the Hydric Soils of Texas list prepared by the National Technical Committee for Hydric Soils (accessed 12 October 2022, Rockwall and Kaufman Counties, Texas) (see **Attachment A, Figure 3**). Hydric soils are described as those soils that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season.

FEMA FIRM

The FEMA FIRM (Rockwall and Kaufman Counties; Map Panels 48397C0110L and 48257C0050D; effective 26 September 2008 and 03 July 2012) shows most of the survey area to be within Zone X (Areas determined to be outside the 0.2 percent annual chance floodplain). An area centrally located within the site is within Zone A (Special Flood Hazard Areas subject to inundation by the 1 percent annual chance flood; No base flood elevations determined) (see **Attachment A, Figure 4**).

Historic Aerial Photographs

Historic aerial photographs from an aerial photograph decade package from EDR were also reviewed to understand the sequence of events that have occurred in the survey area (see **Attachment D**). The following paragraphs provide a description of the aerial photographs based on site conditions:

1941-1956 – The survey area is characterized as an active agricultural property comprised of plowed fields, pastureland, and several buildings. The survey area is divided by a relatively large channel flowing northwest to southeast.

1961– While most of the survey area remains similar to the previous aerial photographs, a ditch along the edge of the field in the southeast is visible flowing southwest into the main channel.

1968-1981 – An excavated impoundment has been constructed along the main channel. Following the construction of the impoundment, the channel has reformed flowing from the eastern corner of the pond as seen in the 1981 aerial photograph. The ditch in the southeast is no longer visible.

1989 – Color signatures indicate an additional drainage exiting the pond to the south. Residential development is visible southwest of the survey area.

1996 – The main channel becomes less defined, and the drainageway south of the pond becomes more defined.

2005-2016 – The drainageway south of the pond is no longer visible. The channels southeast of the pond have become less defined. Color signatures in later photographs show possible wetlands where spillways remain.

Weather History

The weather history for Wunderground.com Rockwall County weather station (KTXROCKW54) recorded no precipitation during the 30-day period, prior to the site visit.

Field Investigation

The survey area was characterized as an active agricultural property partially disturbed from earth-moving activities. One distinct vegetation community was observed, **pastureland**. The **pastureland** was areas used for grazing cattle or hay production and consisted of grasses and forbs such as Bermudagrass (*Cynodon dactylon*), Johnsongrass (*Sorghum halepense*), giant ragweed (*Ambrosia trifida*), multiple goldenrods (*Solidago spp.*), annual broomweed (*Amphiachyris dracunculoides*), snow-on-the-prairie (*Euphorbia bicolor*), sumpweed (*Iva annua*), spreading hedge parsley (*Torilis arvensis*), rough cocklebur (*Xanthium strumarium*), and King Ranch bluestem (*Bothriochloa ischaemum*). Woody species consisted of sugarberry (*Celtis laevigata*), American elm (*Ulmus americana*), cedar elm (*Ulmus crassifolia*), and black willow (*Salix nigra*).

Water from the survey area ultimately flows southeast into an unnamed tributary of Big Brushy Creek. Big Brushy Creek merges with Kings Creek, which flows into Cedar Creek Reservoir and then into the Trinity River, a TNW. **Table 1** and the following paragraphs detail the aquatic features identified within the survey area at the time of evaluation (**Attachment A, Figure 5**).

Tributaries 1 and 2 were relatively small tributaries identified centrally. Tributary 1a entered the survey area along the northwestern boundary and flowed southeast before flowing into Pond 1. Tributary 1b originated from hillside slopes along Pond 1, before exiting the survey area. Tributary 2 was identified in the east and flowed into Tributary 1b, outside of the survey area. The tributaries' limits were identified and delineated by OHWM characteristics that included the destruction of terrestrial vegetation, the presence of litter and debris, sediment sorting, and a bed and bank. Tributaries 1 and 2 were incised into the landscape between 1 to 2 feet with average OHWM widths between 3 to 10 feet. Given the tributaries' relatively high location in the watershed, small size, and lack of flowing water at the time of evaluation, it is IES's professional opinion that Tributaries 1 and 2 would be considered to have ephemeral flow.

Table 1. Aquatic Features Identified within the Survey Area

Water Identification	Hydrology Characteristics	Area (Acre)	Length (Linear Feet)	Water Classification
Tributary 1a	Ephemeral	0.01*	35	Non-RPW
Tributary 1b	Ephemeral	0.01*	20	Non-RPW
Tributary 2	Ephemeral	0.01	263	Non-RPW
Wetland 1	Permanently Saturated	0.10	---	No Continuous Surface Connection to a RPW
Wetland 2	Permanently Saturated	0.41	---	No Continuous Surface Connection to a RPW
Pond 1	Seasonally Inundated	14.5	---	Impoundment of a Non-RPW

*Actual acreage less than 0.01 acre

Pond 1 was identified as an artificially excavated pond centrally. The pond was constructed along a relic tributary between 1961 and 1968, as it is first seen in the 1968 aerial photograph. Pond 1 was formed by excavating a depression into the landscape and placing an earthen embankment in such a manner to capture direct rainfall and sheet flow. The pond's limits were identified and delineated by OHWM characteristics that included a natural line impressed in the bank, a wrack line, and water line. A review of recent and historical aerial photographs indicated that Pond 1 maintains water levels seasonally after rainfall events.

Wetlands 1 and 2 were identified as wetlands adjacent to Tributary 1. Wetlands 1 and 2 were dominated by black willow, western ragweed, and sumpweed. Hydric soil for Wetlands 1 and 2 were indicated by concentrations with a matrix of 10YR 2/1 with redoximorphic concentrations of 5YR 4/6 in the pore linings and matrix. Hydrologic indicators consisted of sediment deposits, crayfish burrows, aquatic invertebrates, water-stained leaves, and surface soil cracks. Given the hydrology observed and the location in the landscape, these wetlands are likely saturated for long periods and would be considered permanently saturated.

POTENTIAL JURISDICTIONAL ASSESSMENT

The 2023 SCOTUS decision defined a water of the United States as “a relatively permanent body of water connected to traditional interstate navigable waters.” The SCOTUS also included wetlands that have a continuous surface connection with that water, in the definition of a water of the United States. This wetland connection was described as the boundary where it was difficult to determine where the ‘water’ ends, and the ‘wetland’ begins.

This 2023 SCOTUS decision is consistent with the RPW standard identified in the previous 2007 SCOTUS decision. Until further guidance is published from the USACE or USEPA, the 05 June 2007 USACE and USEPA guidance defining a “relatively permanent water” will be used. According to this guidance, RPW are non-navigable tributaries of TNW that flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). In addition to this, the guidance also stipulated regulation over wetlands that directly abut such tributaries.

All terms, definitions, and conclusions regarding the jurisdictional nature of the aquatic features used within this report are derived directly, as they are practiced, from the 2007 USACE and USEPA guidance. The following outlines the applicable interpretations of the guidance appropriate for this situation. **Table 1** provides an overview of the jurisdictional assessment of the aquatic features under the 2023 SCOTUS decision and the applicable 2007 USACE and USEPA guidance (see **Attachment A, Figure 5**).

Non-Jurisdictional Features – Tributaries 1 and 2, Wetlands 1 and 2, and Pond 1

Tributaries 1 and 2 were identified with ephemeral flow. As such, these features would be considered non-RPWs and would not meet a definition of a water of the United States. Wetlands 1 and 2 were identified with no continuous surface flow connection to a RPW. Pond 1 was identified as an impoundment of a non-RPW. As such, Wetlands 1 and 2, and Pond 1 would not meet a definition of a water of the United States. Therefore, these features would not be regulated under CWA Section 404.

CONCLUSIONS

To summarize the delineation, two tributaries, two wetlands, and a pond were identified and delineated within the survey area. **Tributaries 1 and 2** would be considered to not be jurisdictional as non-RPWs. **Wetlands 1 and 2** would

not be considered jurisdictional as they had no continuous surface flow connection to a RPW. **Pond 1** would not be jurisdictional as an impoundment of a non-RPW. As such, these features would not be regulated under CWA Section 404.

This delineation is based on professional experience in the approved methodology and from experience with the USACE Fort Worth District regulators; however, this delineation does not constitute a jurisdictional determination of waters of the United States. This delineation has been based on the professional experience of IES staff and our interpretation of the 2023 SCOTUS decision, USACE regulations at 33 CFR 328.3, the joint USACE/USEPA guidance relating to the definition of an RPW and the Regulatory Guidance Letter (RGL) 08-02. While IES believes our delineation to be accurate, final authority to interpret the regulations lies solely with the USACE and USEPA. The USACE Headquarters in association with the USEPA often issue guidance that changes the interpretation of published regulations. USACE/USEPA guidance issued after the date of this report has the potential to invalidate the report conclusions and/or recommendations, which may create the need to reevaluate the report conclusions. IES has no regulatory authority, as such, proceeding based solely upon this report does not protect the Client from potential sanction or fines from the USACE/USEPA. The Client acknowledges that they can submit this report to the USACE for a preliminary jurisdictional determination for concurrence prior to proceeding with any work within aquatic features located on the survey area. If the Client elects not to do so, then the Client proceeds at their sole risk.

IES appreciates the opportunity to work with you and Sun Communities, Inc. on this project, and we hope we may be of assistance to you in the future. If you have any comments, questions, or concerns, please do not hesitate to contact myself or Rudi Reinecke at 972-562-7672 (rgomez@intenvsol.com or rreinecke@intenvsol.com).

Sincerely,

Integrated Environmental Solutions, LLC.



Mr. Rafael Gomez
Biologist

Attachments

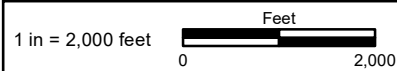
File ref: 04.354.073

ATTACHMENT A
Figures



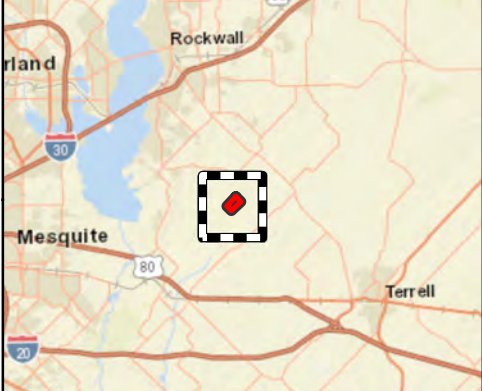
Figure 1.
General Location Map

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas



File Ref. 04.354.073
Date: 10/14/2022

 Survey Area



Area of Detail Scale: 1 inch equals 10 miles

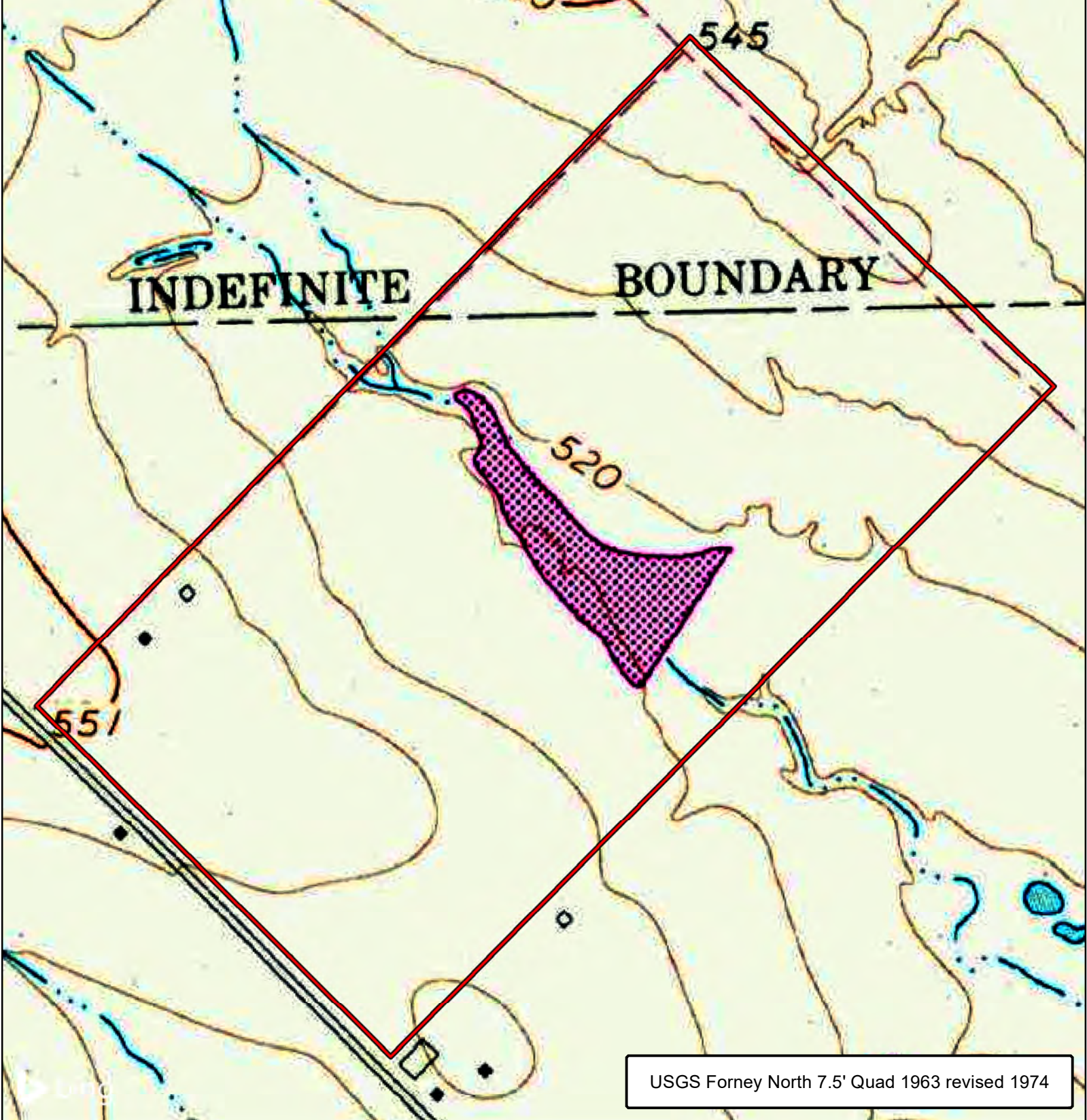


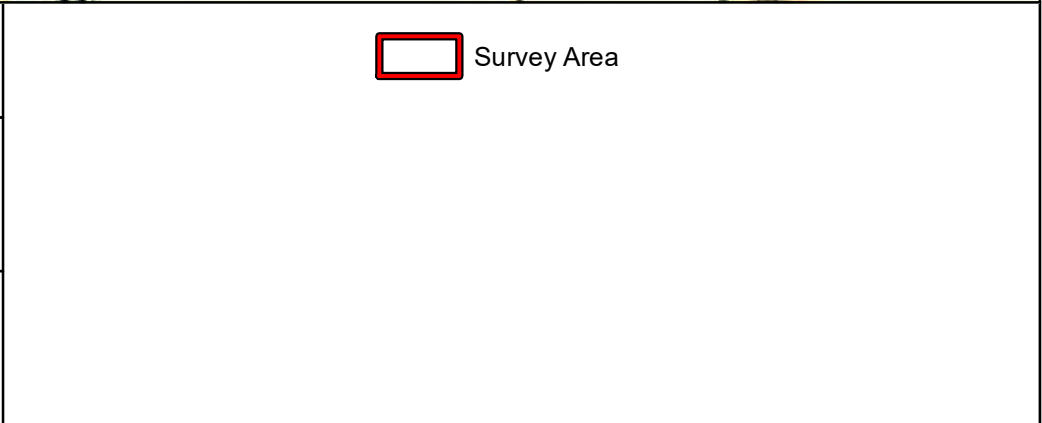
Figure 2A.
Topographic Setting

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas

1 in = 500 feet

Feet
0 500

File Ref. 04.354.073
Date: 10/24/2022



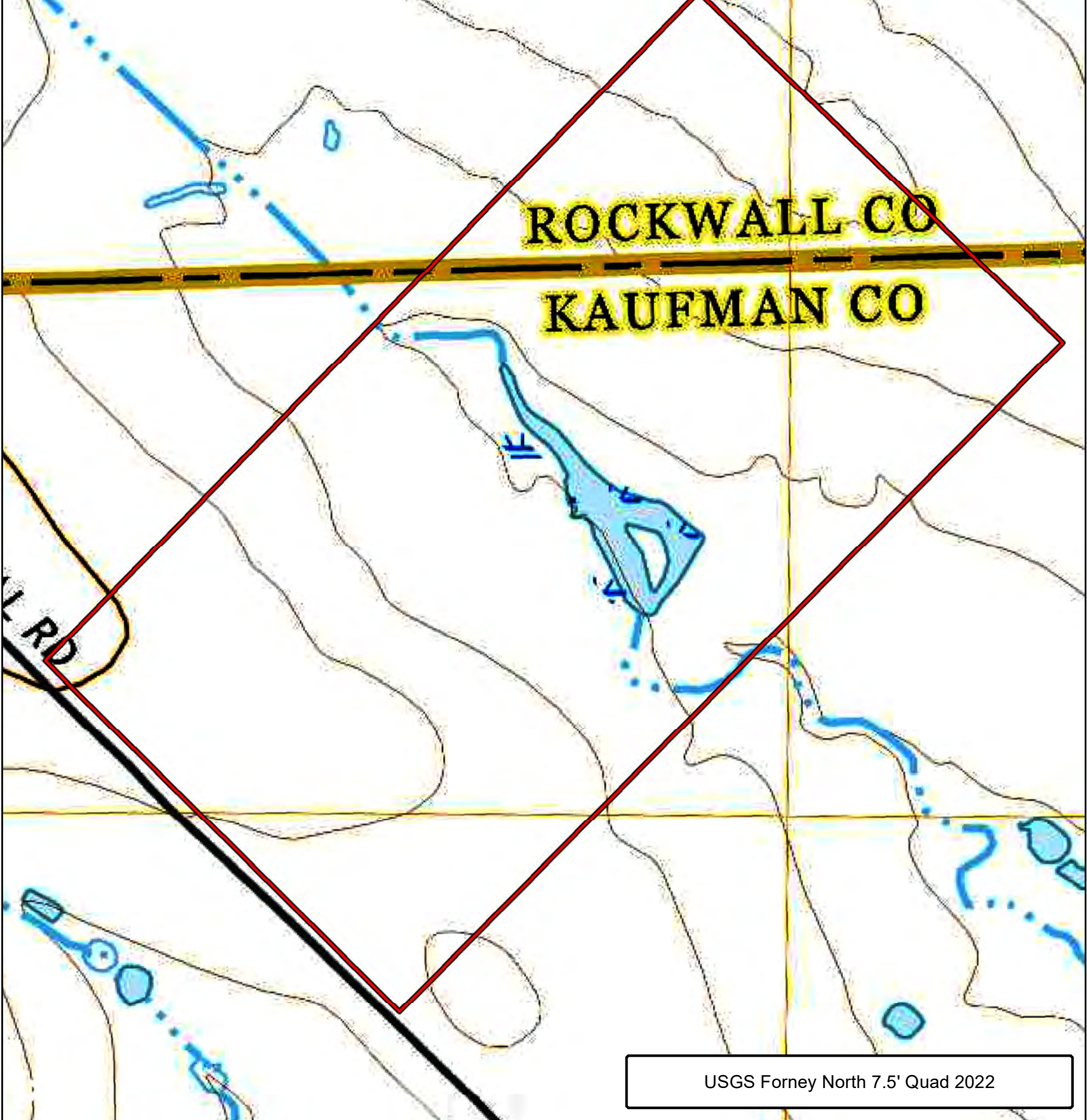


Figure 2B.
Topographic Setting

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas

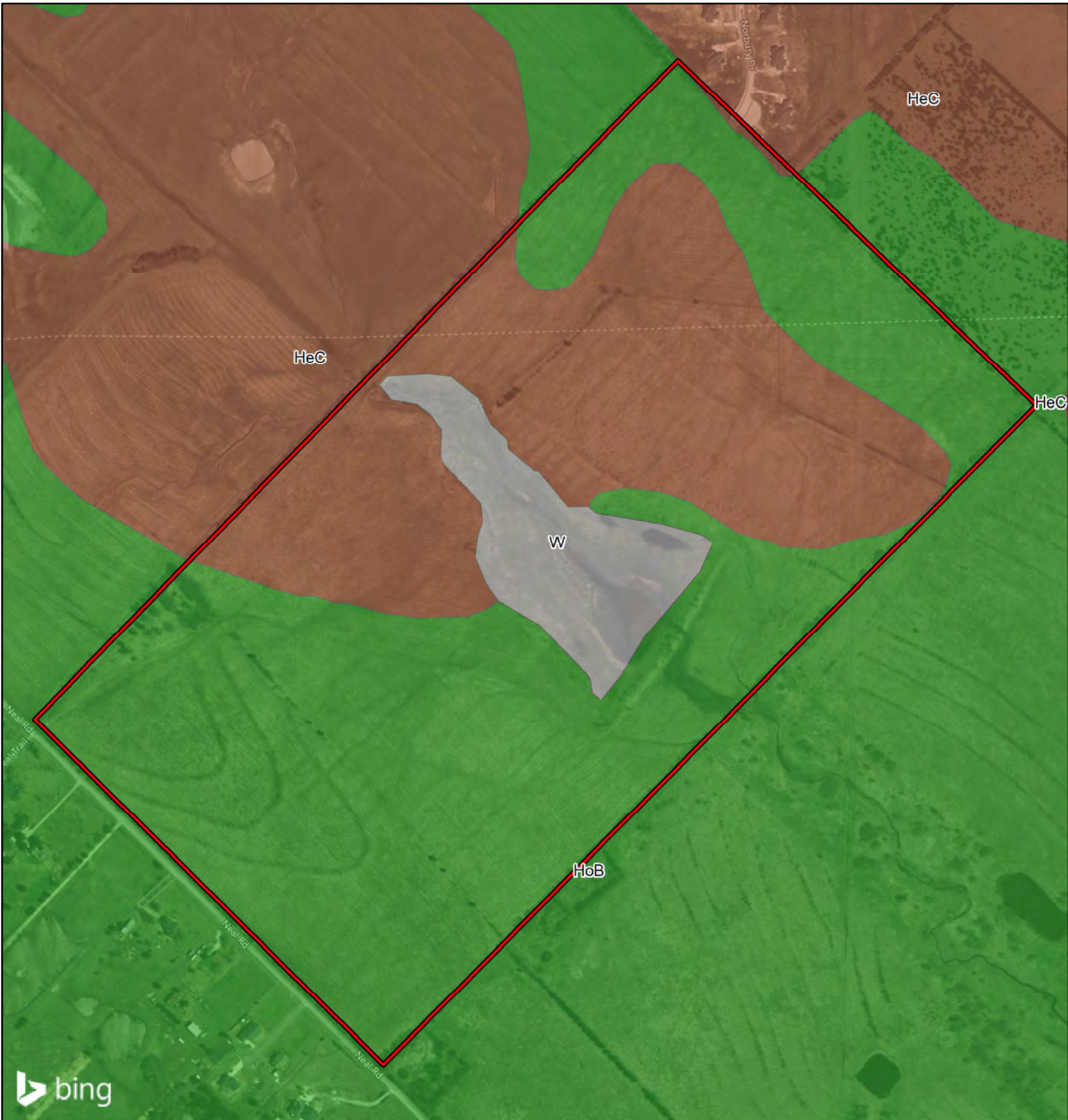
1 in = 500 feet

Feet
0 500



File Ref. 04.354.073
Date: 10/12/2022

 Survey Area



**Figure 3.
Soils Map**

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas

1 in = 500 feet

Feet
0 500

File Ref. 04.354.073
Date: 10/12/2022



- Survey Area
- Soil map units outside the survey area
- Soil Map Units**
- HeC - Heiden clay, 3 to 5 percent slopes
- HoB - Houston Black clay, 1 to 3 percent slopes

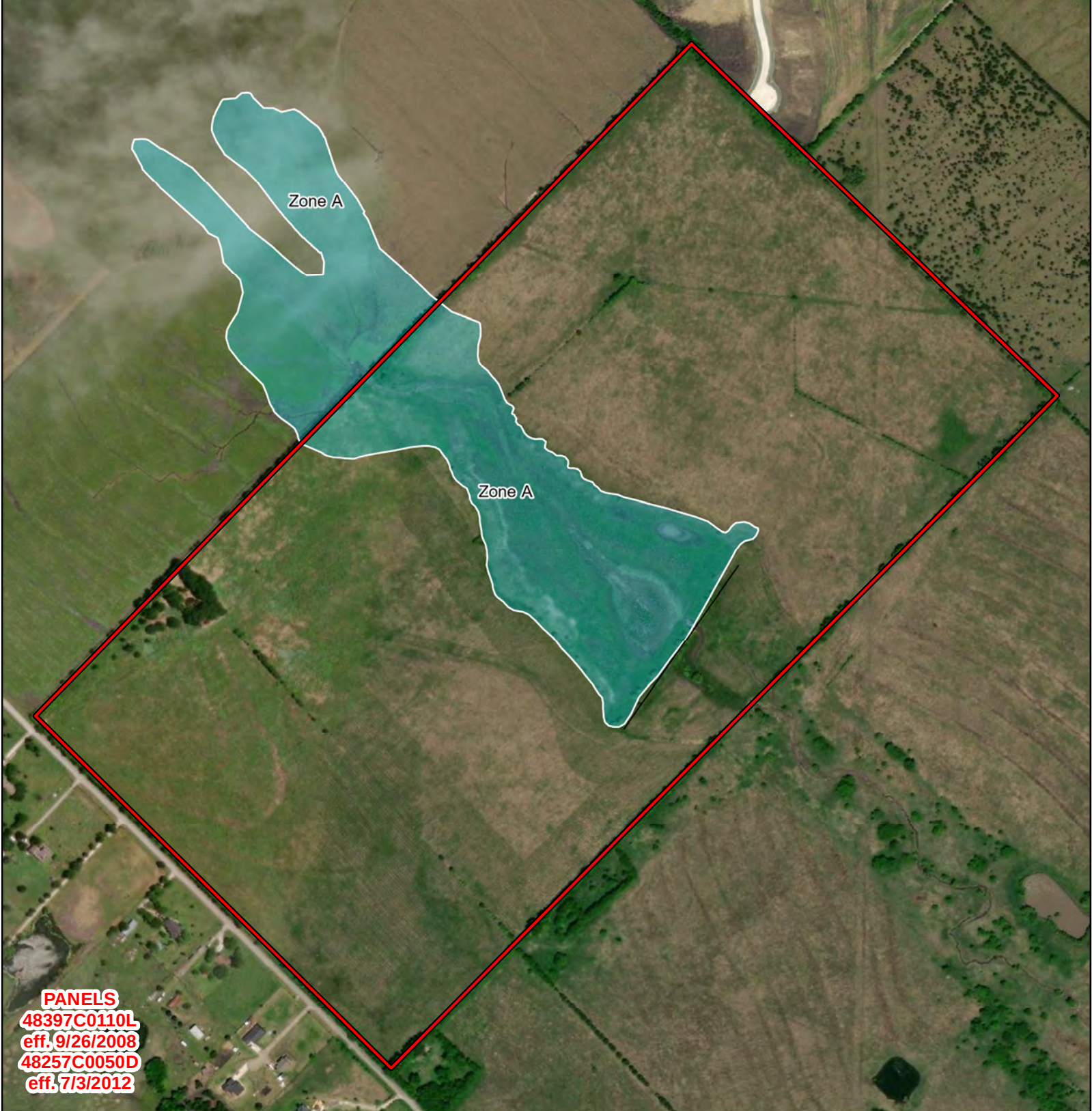


Figure 4.
Federal Emergency
Management Agency
Flood Insurance Rate Map

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas

1 in = 500 feet
Feet
0 400

File Ref. 04.354.073
Date: 10/12/2022



 Survey Area

FEMA FIRM Zone Descriptions

 Zone X - Areas determined to be outside the 0.2% annual chance floodplain

 Zone X - Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood

 Zone A - Special Flood Hazard Areas subject to inundation by the 1% annual chance flood; No base flood elevations determined

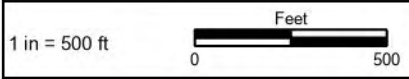
 Zone AE - Special Flood Hazard Areas subject to inundation by the 1% annual chance flood; Base flood elevations determined

 Zone AE - Floodway areas in Zone AE



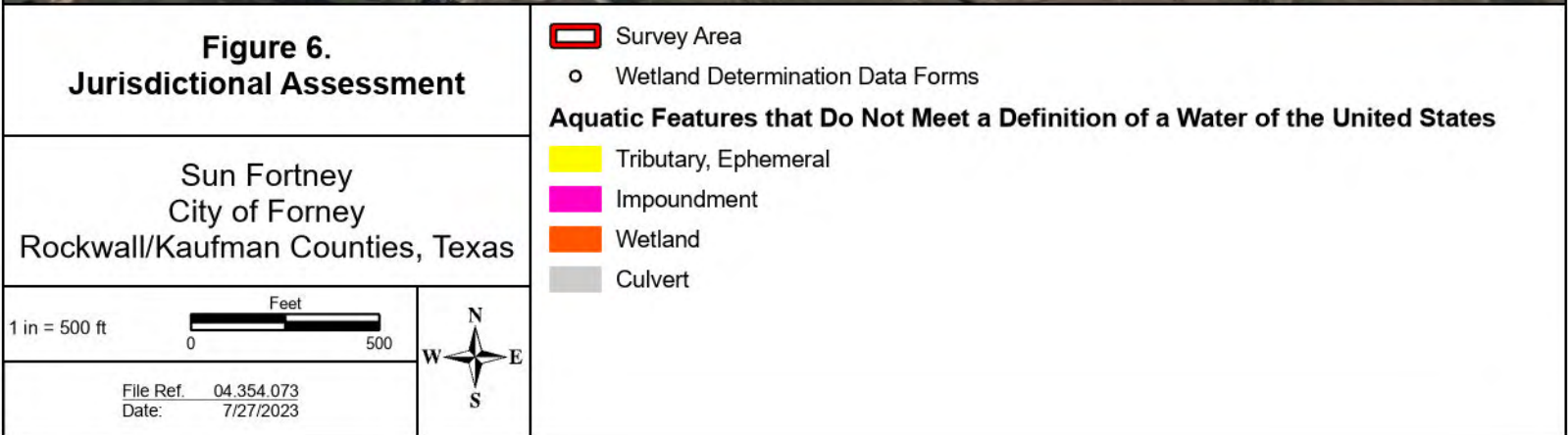
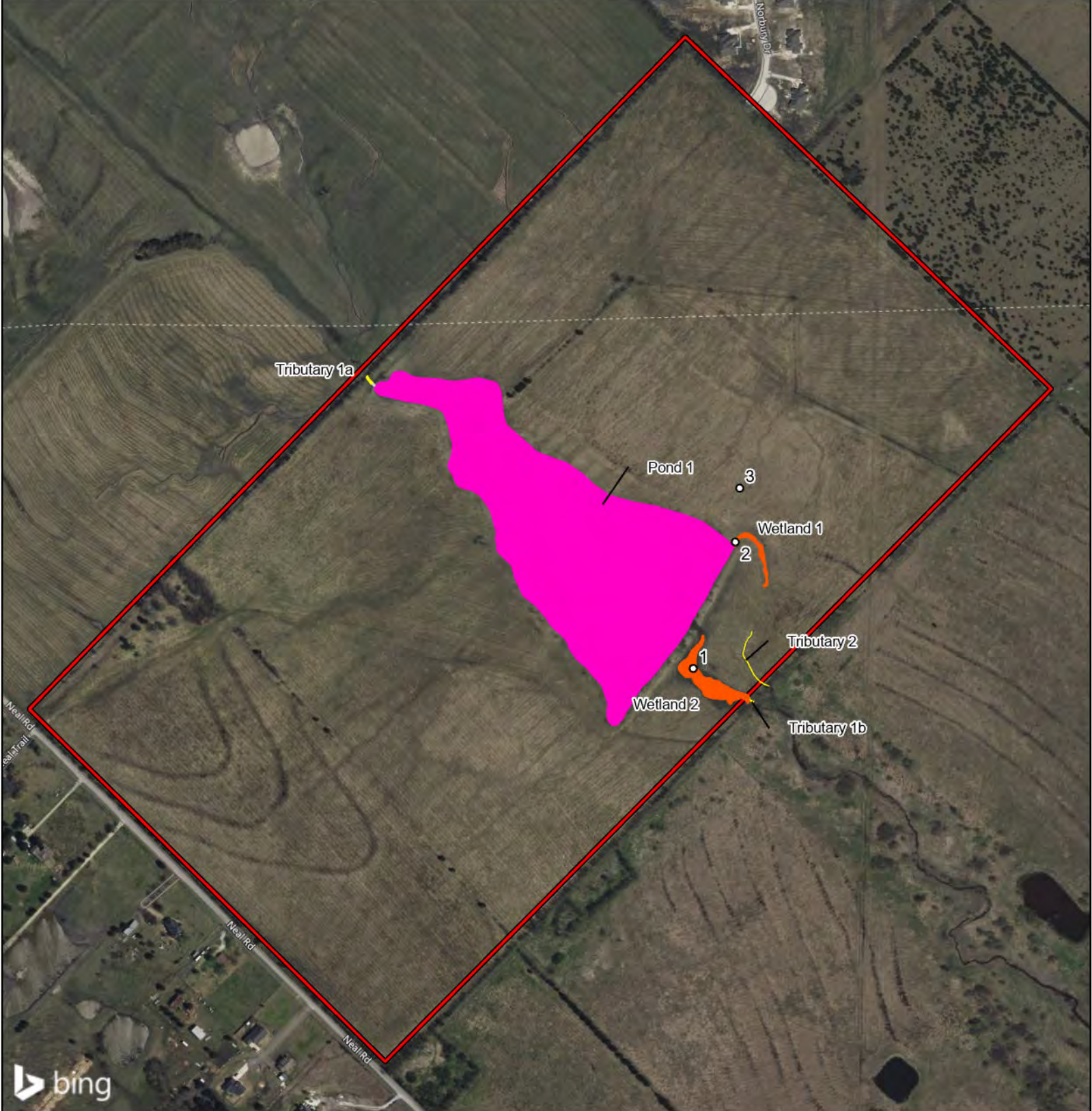
Figure 5.
Aquatic Resources Identified
within the Survey Area

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas

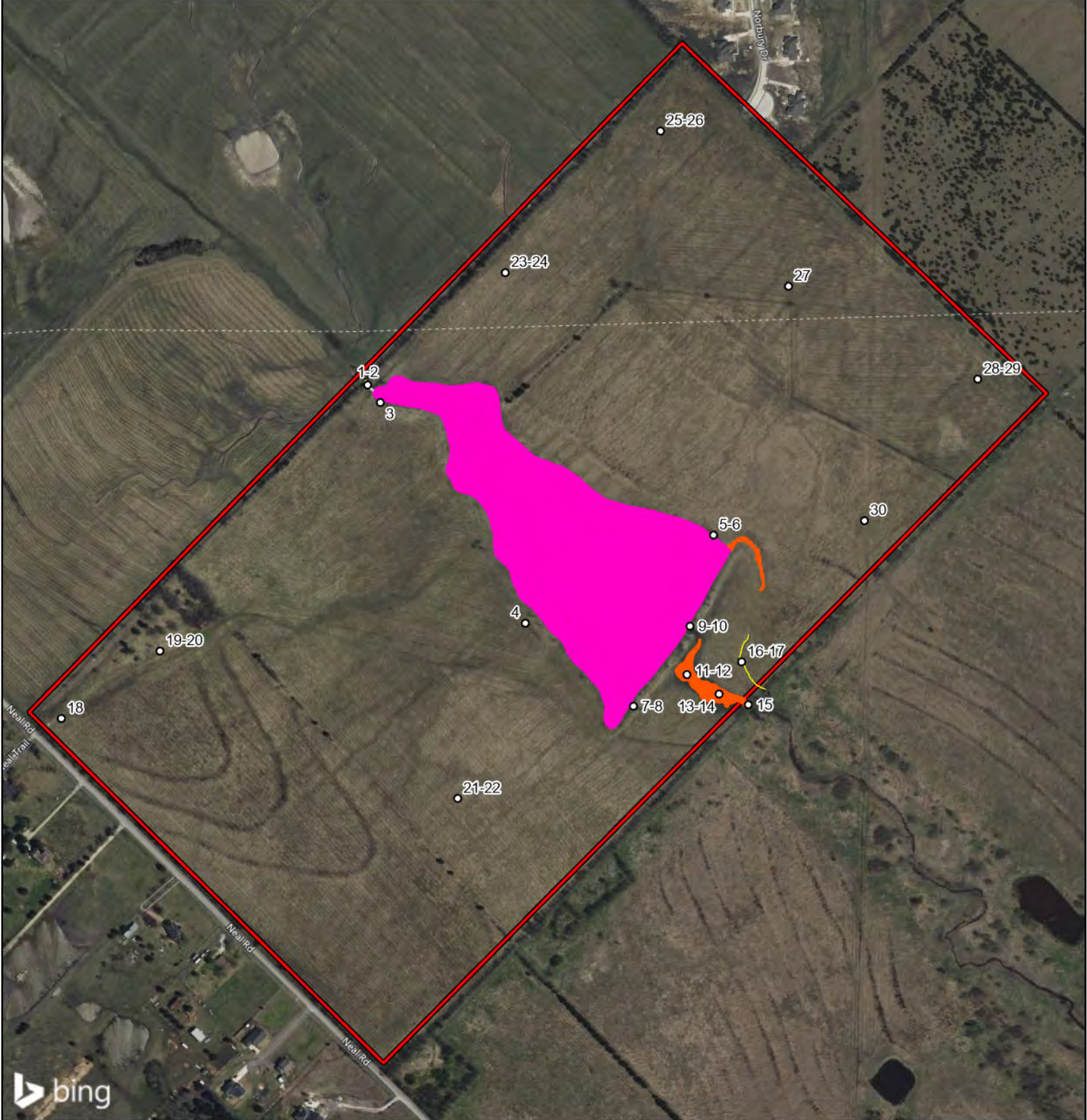


File Ref. 04.354.073
Date: 7/27/2023

-  Survey Area
-  Wetland Determination Data Forms
- Aquatic Features**
-  Tributary, Ephemeral
-  Impoundment
-  Wetland
-  Culvert

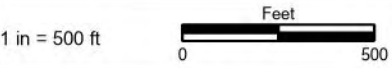


ATTACHMENT B
Site Photographs



Photograph Location Map

Sun Fortney
City of Forney
Rockwall/Kaufman Counties, Texas



File Ref. 04.354.073
Date: 7/27/2023

- Survey Area
- Photograph Location
- Aquatic Features that Do Not Meet a Definition of a Water of the United States**
- Tributary, Ephemeral
- Impoundment
- Wetland
- Culvert



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12



Photograph 13



Photograph 14



Photograph 15



Photograph 16



Photograph 17



Photograph 18



Photograph 19



Photograph 20



Photograph 21



Photograph 22



Photograph 23



Photograph 24



Photograph 25



Photograph 26



Photograph 27



Photograph 28



Photograph 29



Photograph 30

ATTACHMENT C

Routine Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Sun Fortney City/County: Forney / Rockwall and Kaufman Sampling Date: 10/12/2022

Applicant/Owner: Sun Fortney TX 160, LLC State: Texas Sampling Point: 1

Investigator(s): Veronica Silva, Rafael Gomez Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope %: 0-1

Subregion (LRR): J Lat: 32.8102776 N Long: -96.4057416 W Datum: NAD 1983

Soil Map Unit Name: Water NWI Classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	Is the Sampled Area within a wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes	☒	No	☐		
Wetland Hydrology Present?	Yes	☒	No	☐		
Remarks: <u>Vegetated hillslope in fielded setting</u>						

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot Size: <u>30' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
1.	<u>Salix nigra</u>	<u>7</u>	<u>Y</u>	<u>FACW</u>	
2.					
3.					
4.					
		<u>7</u>	= Total Cover		
Sapling/Shrub Stratum	(Plot Size: <u>15' Radius</u>)				Prevalence Index Worksheet: Total % Cover of: _____ Multiply By: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1.	<u>Salix nigra</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2.					
3.					
4.					
5.					
		<u>20</u>	= Total Cover		
Herb Stratum	(Plot Size: <u>5' Radius</u>)				Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is > 50% _____ 3 - Prevalence Index is ≤ 3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Iva annua</u>	<u>8</u>	<u>Y</u>	<u>FAC</u>	
2.	<u>Ambrosia psilostachya</u>	<u>7</u>	<u>Y</u>	<u>FACU</u>	
3.	<u>Paspalum dilatatum</u>	<u>6</u>	<u>Y</u>	<u>UPL</u>	
4.	<u>Xanthium spinosum</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5.					
6.					
7.					
8.					
9.					
10.					
		<u>26</u>	= Total Cover		
Woody Vine Stratum	(Plot Size: <u>15' Radius</u>)				Hydrophytic Vegetation Present? Yes ☒ No ☐
1.	<u>Cardiospermum halicacabum</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
2.					
		<u>10</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>74</u>					
Remarks:					

SOILS

Sampling Point: 1

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Salt Crust (B11)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Invertebrates (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage patterns (B10)
☐ Water Marks (B1)	☐ Dry-Season Water Table (C2)	☐ Oxidized Rhizospheres on Living Roots (C3)
☒ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
☐ Drift Deposits (B3)	(where not tilled)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)
☒ Water Stained Leaves (B9)		☐ Frost-Heave Hummocks (D7) (LRR F)
Field Observations: Surface Water Present? Yes? ☐ No? ☒ Depth (inches): - Water Table Present? Yes? ☐ No? ☒ Depth (inches): - Saturation Present? Yes? ☐ No? ☒ Depth (inches): - (includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Sun Fortney City/County: Forney / Rockwall and Kaufman Sampling Date: 10/12/2022

Applicant/Owner: Sun Fortney TX 160, LLC State: Texas Sampling Point: 2

Investigator(s): Veronica Silva, Rafael Gomez Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0-2

Subregion (LRR): J Lat: 32.8115937 N Long: -96.4051887 W Datum: NAD 1983

Soil Map Unit Name: Water NWI Classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No ☐	Is the Sampled Area within a wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒	No ☐	
Wetland Hydrology Present?	Yes ☒	No ☐	

Remarks: Vegetated depressional fringe of pond in field setting

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot Size: <u>30' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot Size: <u>15' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>		<u>6</u>	<u>Y</u>	<u>FACW</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>6</u> = Total Cover		

Herb Stratum	(Plot Size: <u>5' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>Ambrosia psilostachya</u>		<u>60</u>	<u>Y</u>	<u>FACU</u>
2. <u>Bothriochloa ischaemum</u>		<u>20</u>	<u>Y</u>	<u>FAC</u>
3. <u>Iva annua</u>		<u>12</u>	<u>N</u>	<u>FAC</u>
4. <u>Xanthium spinosum</u>		<u>5</u>	<u>N</u>	<u>FACU</u>
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>97</u> = Total Cover		

Woody Vine Stratum	(Plot Size: <u>15' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>N/A</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 3

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply By:
OBL species	x 1 = _____
FACW species	x 2 = _____
FAC species	x 3 = _____
FACU species	x 4 = _____
UPL species	x 5 = _____
Column Totals:	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

_____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is > 50%

_____ 3 - Prevalence Index is ≤ 3.0¹

_____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOILS

Sampling Point: 2[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Salt Crust (B11)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☒ Aquatic Invertebrates (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage patterns (B10)	
☐ Water Marks (B1)	☐ Dry-Season Water Table (C2)	☐ Oxidized Rhizospheres on Living Roots (C3)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	(where tilled)	
☐ Drift Deposits (B3)	(where not tilled)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☒ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Water Stained Leaves (B9)		☐ Frost-Heave Hummocks (D7) (LRR F)	
Field Observations:			
Surface Water Present?	Yes? ☐ No? ☒	Depth (inches):	-
Water Table Present?	Yes? ☐ No? ☒	Depth (inches):	-
Saturation Present?	Yes? ☐ No? ☒	Depth (inches):	-
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Wetland Hydrology Present? Yes ☒ No ☐	
Remarks:			

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Sun Fortney City/County: Forney / Rockwall and Kaufman Sampling Date: 10/12/2022

Applicant/Owner: Sun Fortney TX 160, LLC State: Texas Sampling Point: 3

Investigator(s): Veronica Silva, Rafael Gomez Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope %: 0-1

Subregion (LRR): J Lat: 32.8121578 N Long: -96.4051205 W Datum: NAD 1983

Soil Map Unit Name: Heiden clay, 3 to 5 percent slopes NWI Classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are vegetation, ☐ Soil, ☐ Or hydrology ☐ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: <u>Upland upslope of depressional wetland</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot Size: <u>30' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot Size: <u>15' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot Size: <u>5' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>Ambrosia psilostachya</u>		<u>45</u>	<u>Y</u>	<u>FACU</u>
2. <u>Amphiachyris dracunculoides</u>		<u>25</u>	<u>Y</u>	<u>UPL</u>
3. <u>Bothriochloa ischaemum</u>		<u>20</u>	<u>Y</u>	<u>FAC</u>
4. <u>Iva annua</u>		<u>5</u>	<u>N</u>	<u>FAC</u>
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>95</u> = Total Cover		

Woody Vine Stratum	(Plot Size: <u>15' Radius</u>)	Absolute % Coverage	Dominant Species?	Indicator Status
1. <u>N/A</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 5

Remarks: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index Worksheet:

Total % Cover of: _____ Multiply By: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

_____ 1 - Rapid Test for Hydrophytic Vegetation

_____ 2 - Dominance Test is > 50%

_____ 3 - Prevalence Index is ≤ 3.0¹

_____ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOILS

Sampling Point: 3

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)
☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Invertebrates (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage patterns (B10)
☐ Water Marks (B1)	☐ Dry-Season Water Table (C2)	☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
☐ Drift Deposits (B3)	(where not tilled)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)
☐ Water Stained Leaves (B9)		☐ Frost-Heave Hummocks (D7) (LRR F)
Field Observations: Surface Water Present? Yes? ☐ No? ☒ Depth (inches): - Water Table Present? Yes? ☐ No? ☒ Depth (inches): - Saturation Present? Yes? ☐ No? ☒ Depth (inches): - (includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

ATTACHMENT D
Historic Aerial Photographs



Sun Fortney

Neal Road

Rockwall, TX 75032

Inquiry Number: 7159241.1

October 28, 2022

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/28/22

Site Name:

Sun Fortney
Neal Road
Rockwall, TX 75032
EDR Inquiry # 7159241.1

Client Name:

Integrated Env. Solutions, Inc.
301 W Eldorado Parkway Suite 101
McKinney, TX 75069
Contact: Veronica Silva



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=625'	Flight Year: 2016	USDA/NAIP
2012	1"=625'	Flight Year: 2012	USDA/NAIP
2008	1"=625'	Flight Year: 2008	USDA/NAIP
2005	1"=625'	Flight Year: 2005	USDA/NAIP
1996	1"=625'	Acquisition Date: January 24, 1996	USGS/DOQQ
1989	1"=625'	Flight Date: January 01, 1989	NAPP
1981	1"=625'	Flight Date: October 24, 1981	USDA
1979	1"=625'	Flight Date: January 01, 1979	TXDOT
1968	1"=625'	Flight Date: January 01, 1968	USGS
1961	1"=625'	Flight Date: January 01, 1961	USGS
1956	1"=625'	Flight Date: December 01, 1956	USGS
1953	1"=625'	Flight Date: January 01, 1953	USGS
1941	1"=625'	Flight Date: July 22, 1941	USGS

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

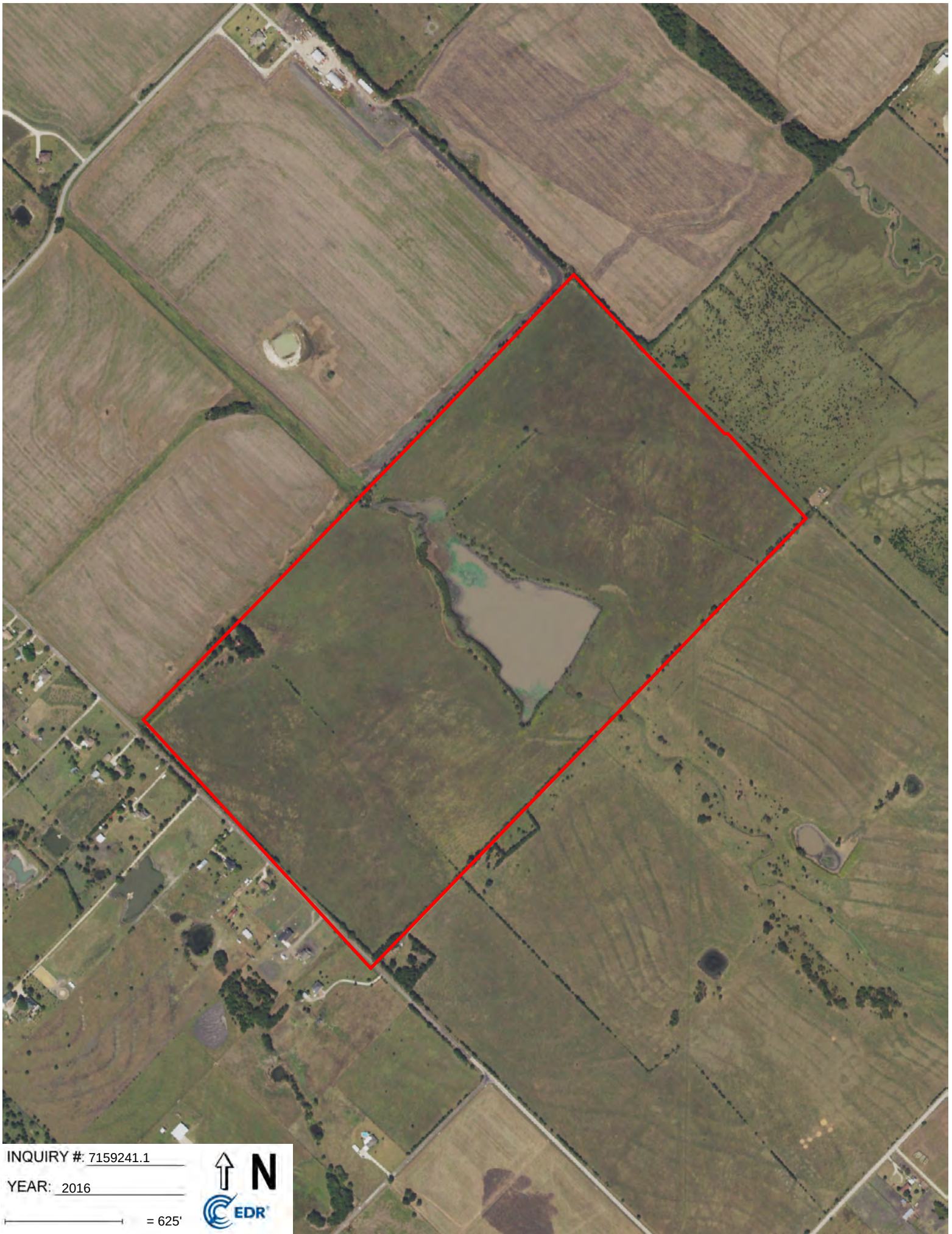
Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.

ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

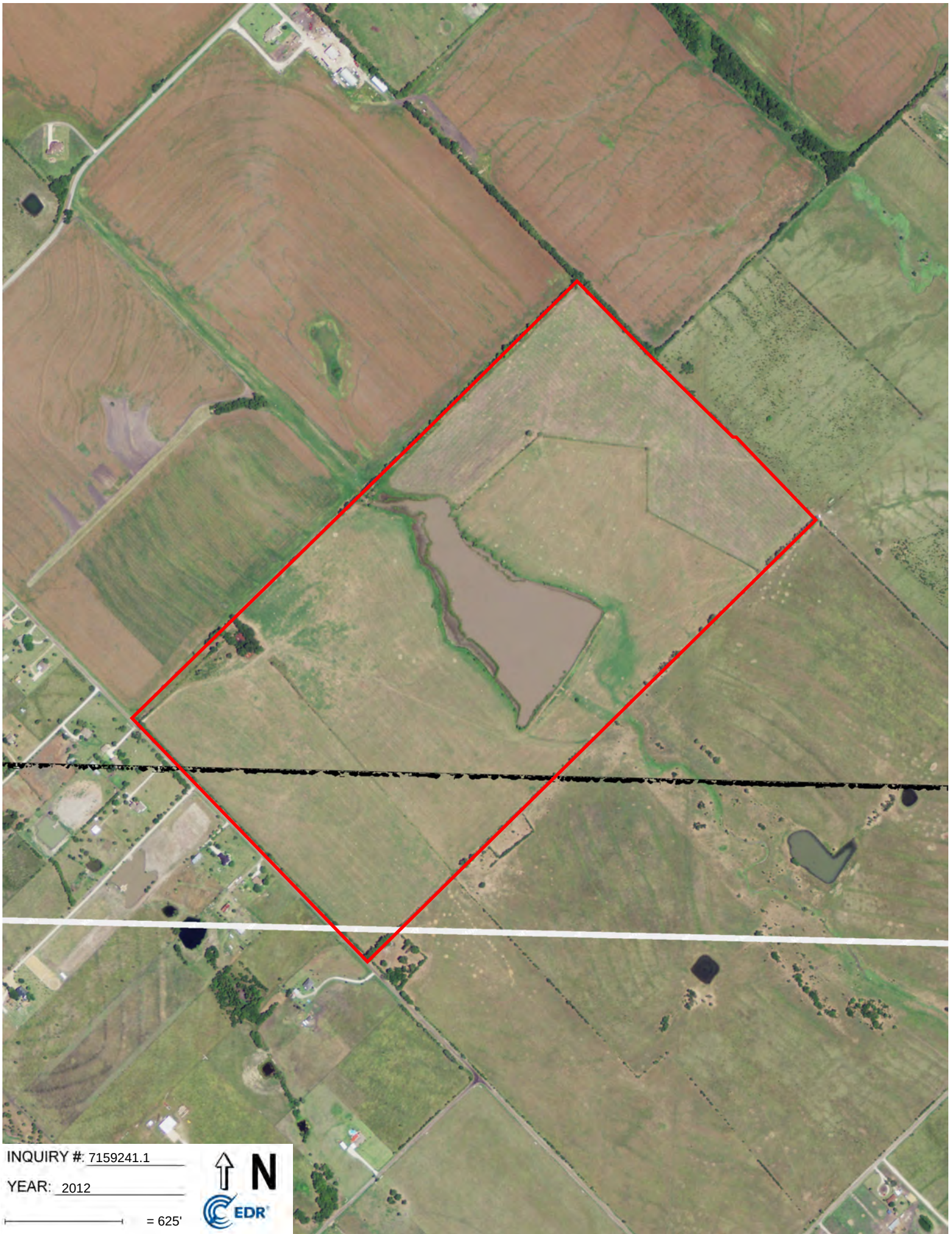


INQUIRY #: 7159241.1

YEAR: 2016

625'





INQUIRY #: 7159241.1

YEAR: 2012

1" = 625'





INQUIRY #: 7159241.1

YEAR: 2008

— = 625'





INQUIRY #: 7159241.1

YEAR: 2005

— = 625'





INQUIRY #: 7159241.1

YEAR: 1996

— = 625'



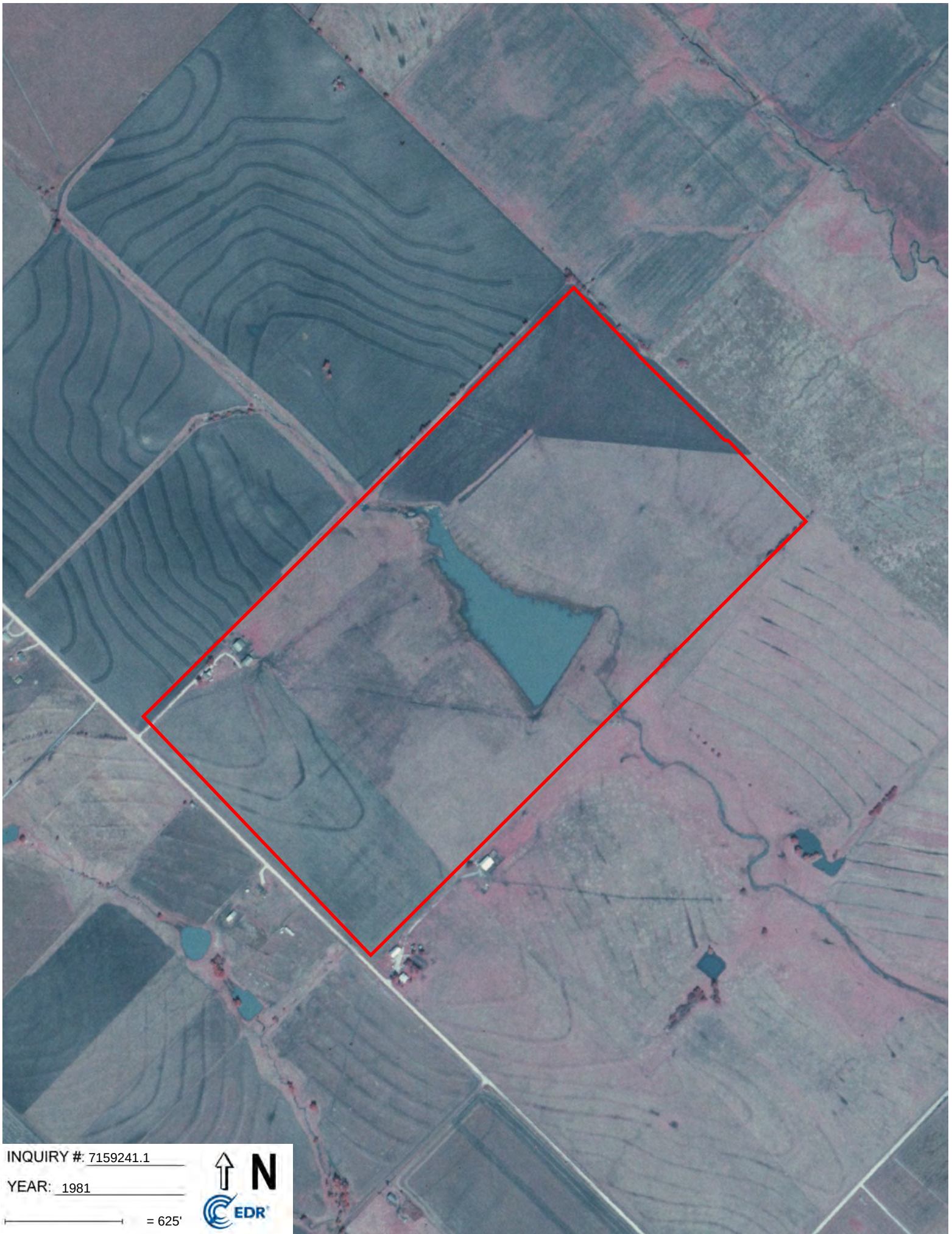


INQUIRY #: 7159241.1

YEAR: 1989

— = 625'





INQUIRY #: 7159241.1

YEAR: 1981

— = 625'





INQUIRY #: 7159241.1

YEAR: 1979

— = 625'





INQUIRY #: 7159241.1

YEAR: 1968

— = 625'





INQUIRY #: 7159241.1

YEAR: 1961

— = 625'





INQUIRY #: 7159241.1

YEAR: 1956

— = 625'





INQUIRY #: 7159241.1

YEAR: 1953

— = 625'





INQUIRY #: 7159241.1

YEAR: 1941

— = 625'



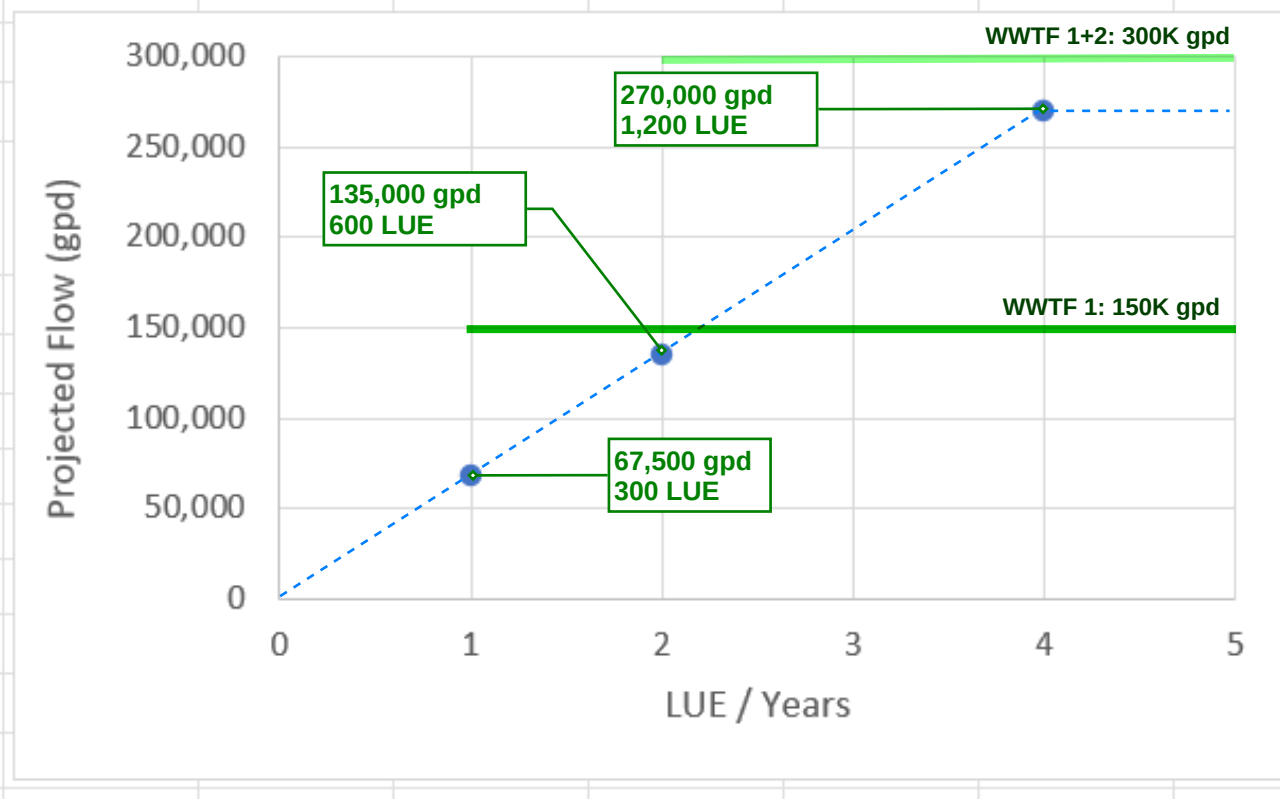
		<u>Design Flow</u> <u>gpd</u>	<u>Cumulative</u> <u>Flow</u> <u>gpd</u>
WWTF	1	150,000	150,000
WWTF	2	150,000	300,000

		<u>Development</u> <u>per Year</u> <u>LUE</u>	<u>Cumulative</u> <u>Development</u> <u>LUE</u>	<u>Projected</u> <u>Flow</u> <u>gpd</u>
Year	1	300	300	67,500
Year	2	300	600	135,000
Year	4	600	1,200	270,000

LUE (Living Unit Equivalents)

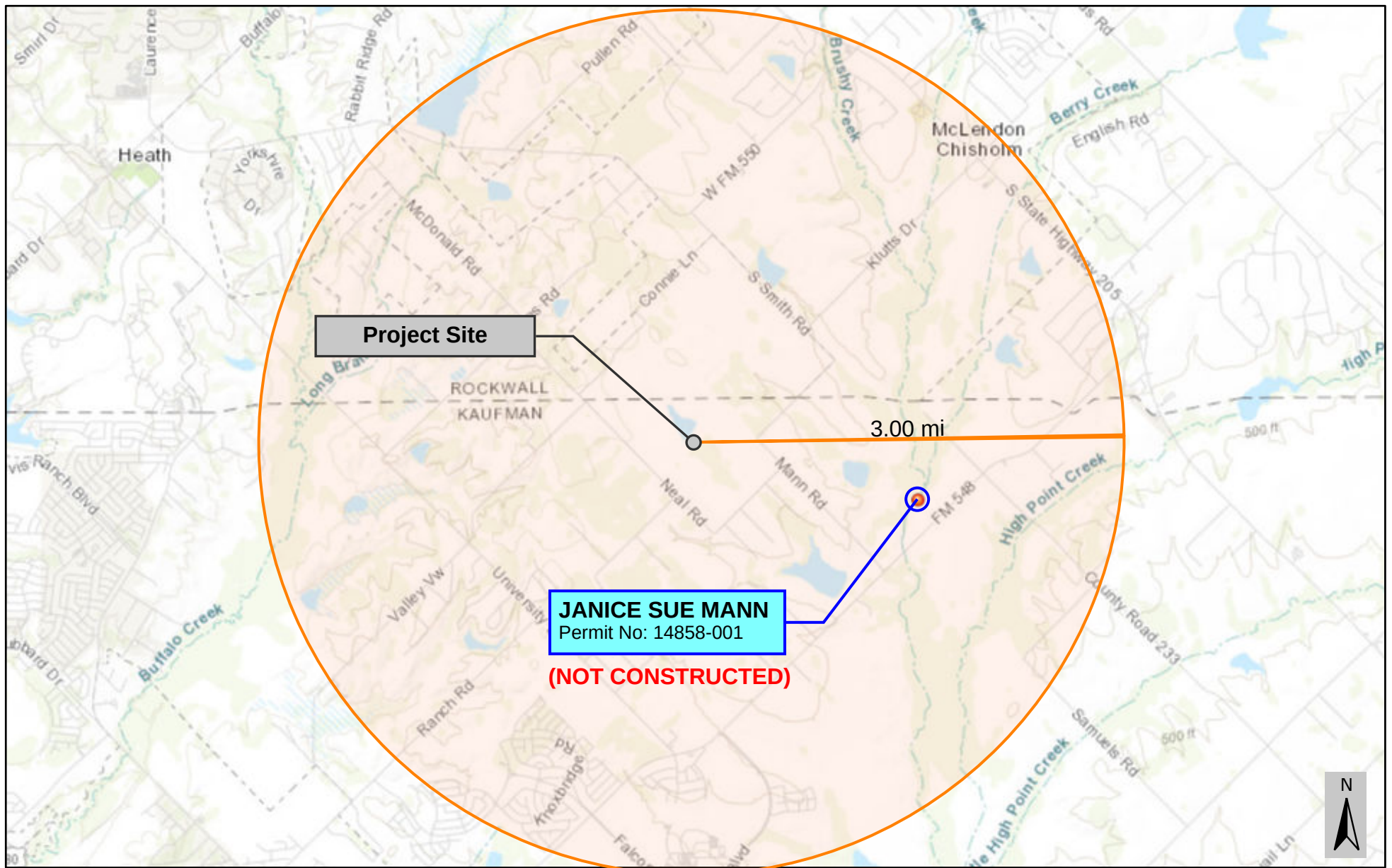
225

gpd/LUE



PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS

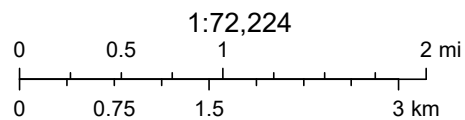
PROJECTION OF LUES &
WASTEWATER FLOW
Attachment 3



12/8/2024, 11:12:21 PM



Wastewater Outfalls



There are *no* constructed facilities within the 3-mile radius of the proposed facility Grand Meadows WWTP.

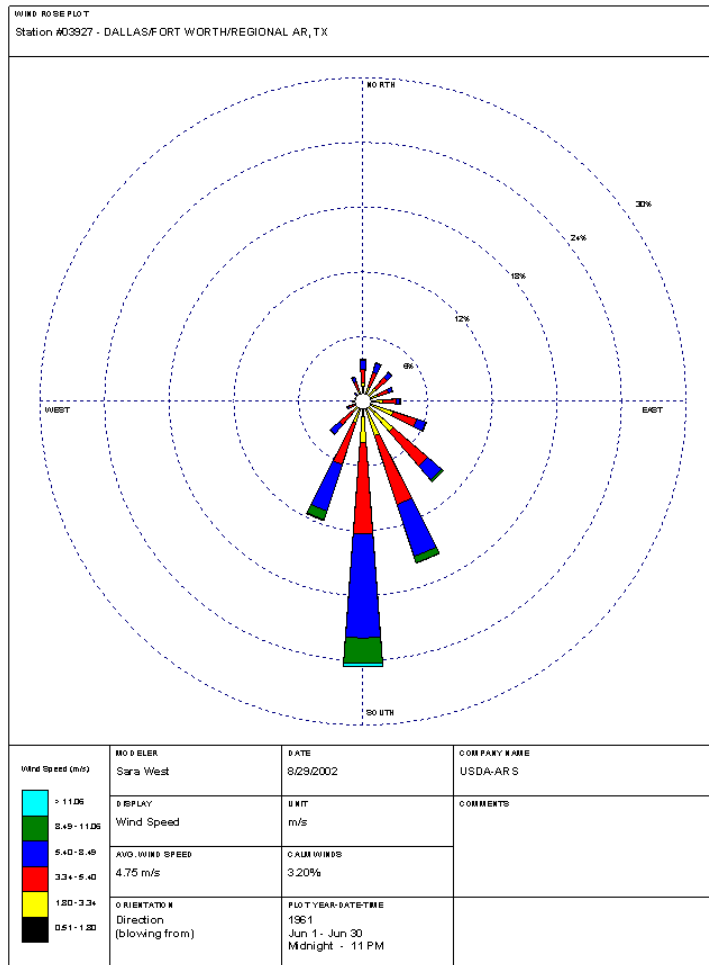


PMT DEVELOPMENT, LLC

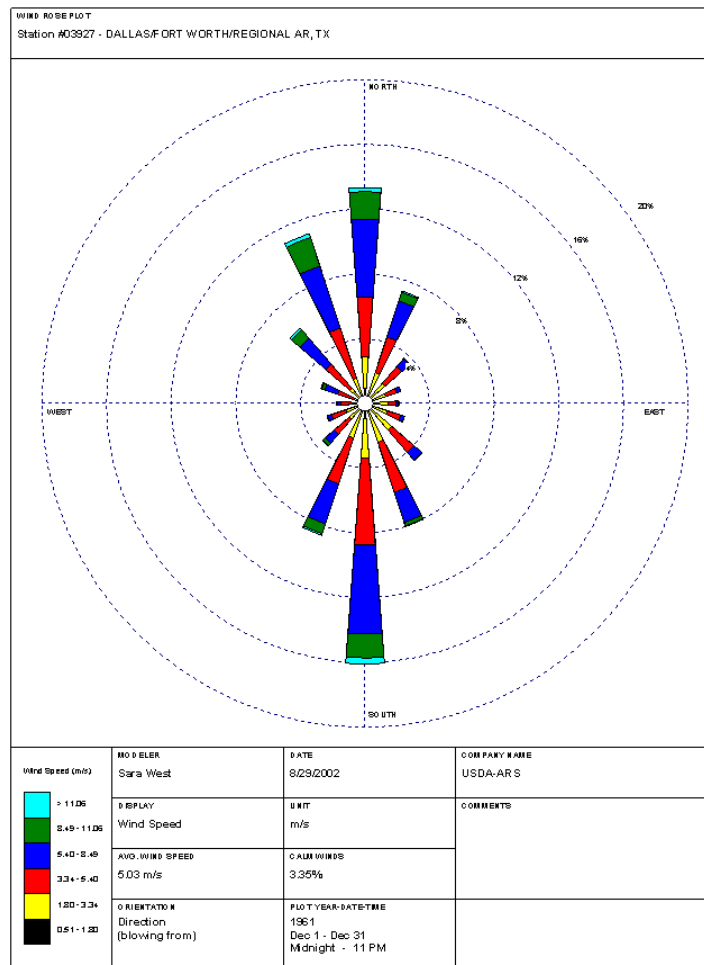
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
DENTON COUNTY, TEXAS

**WASTEWATER OUTFALL
MAP
Attachment 4**

*Representative of summer months



*Representative of winter months



SOLIDS MANAGEMENT PLAN

Influent Design Flow: 0.30 MGD, Total
Influent BOD Concentration: 350 mg/L
MBR Basin MLVSS: 8,953 mg/L

See **Attachment 1 - Process Flow Diagram** and **Attachment 5 - Design Calculations**. Attachment 5 shows calculations for one (1) 150,000 gpd (0.15 MGD) treatment train. In the final phase, there will be two (2) of these treatment trains, for a total of 300,000 gpd (0.30 MGD) treatment capacity.

Table 1 – Sludge Production for 0.150 MGD Design Flow

Solids Generated	100%	75%	50%	25%
Lbs/d Influent BOD₅	438.1	328.6	219.1	109.5
Lbs/d Dry Sludge Produced	244.0	183.0	122.0	61.0

Sludge will be sent from the Recycled Activated Sludge flow stream to the Sludge Screw Press. Calculations are based on 3,941 gpd of waste sludge, which equates to 244 lbs/d (Table 1). The sludge will be pressed in the Sludge Screw Press to remove liquids and produce a dry sludge cake. All liquid will be decanted from the Screw Press and returned to the headworks for treatment. No wet solids will be produced through the treatment process. Dry sludge will be removed from the screw press and deposited into 4 cubic yard (CY) roll-off containers for disposal on a regular basis (Table 2).

Table 2 – Sludge Removal Schedule

Removal Schedule	100%	75%	50%	25%	Unit
Dry Waste Sludge	244.0	183.0	122.0	61.0	lb/d
Wet Waste Sludge	3,941	2,956	1,971	985	gpd
Wet Sludge	19.5	14.6	9.8	4.9	CF/d
Wet Sludge	11.1	8.3	5.6	2.8	CY/d
Reduction Factor	18.0	(provided by MBR WWTP manufacturer)			
Dry Sludge	1.1	0.8	0.5	0.3	CY/d
Dumpster Volume	4.0	4.0	4.0	4.0	CY
Days between Sludge Removal	4	5	7	10	days

The Sludge Age (Solids Retention Time) for a Total Reactor Volume of approximately 103,889 gal is 25 days, with an annual average sludge production of 89,060 lbs dry sludge produced at 100% capacity per 0.15 MGD treatment train. The dewatered sludge will be transported by a registered hauler, JGRS Hauling (TCEQ Sludge Registration ID #26343) to 121 Regional Disposal Landfill (TCEQ Registration ID #2294) in Collin County, Texas.

Final version of restrictive easement will be sent to TCEQ as soon as it is finalized and signed.

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

After Recording Return to:
PMT Development, LLC
5733 Travis Dr., Frisco, TX 75034

WASTEWATER TREATMENT PLANT EASEMENT

STATE OF TEXAS §
COUNTY OF KAUFMAN § KNOW ALL PERSONS BY THESE PRESENTS:
 §

That TEXAS GRAND LAND II, LLC (hereinafter called “Grantor” whether one or more), for and in consideration of the sum of TEN DOLLARS (\$10.00) cash in hand to Grantor paid by PMT Development, LLC (“Grantee”), the receipt of which are hereby acknowledged, and for which no lien is retained, either expressed or implied, does hereby GRANT, SELL AND CONVEY unto Grantee the easement and right (the “Easement”) to construct, reconstruct, operate, repair, enlarge, re- build, replace, relocate, alter, remove and perpetually maintain sewer facilities, public water facilities and/or other public facilities, together with all incidental improvements, and all necessary laterals, thereto (collectively, “Facilities”), over, across, in, on, under and through certain real property owned by Grantor and located in Kaufman County, Texas, as more particularly described and depicted in Exhibit A attached hereto and incorporated herein for all purposes (“Easement Property”). As part of the grant hereby made, it is agreed between the parties hereto that any stone, earth, gravel or caliche which may be excavated in the opening, construction or maintenance of said channel or easement may be removed from said premises by Grantee.

TO HAVE AND TO HOLD the Easement Property perpetually unto the Grantee, its successors and assigns including contractors, agents and representatives, together with the right and privilege at all times to enter the Easement Property, or any part thereof, in accordance with the terms herein, for the purpose of constructing, reconstructing, operating, repairing, enlarging, re-building, replacing, relocating, altering, removing and perpetually maintaining the Facilities, and all incidental improvements thereto and for making connections therewith, it is being acknowledged and agreed between Grantor and Grantee that Grantee shall be solely responsible for the maintenance of the Facilities.

Grantor provides the easement rights set forth in this Easement to Grantee, provided that Grantee shall give reasonable advance written notice to the Grantor prior to any entry to the Easement Property except in the event of an emergency in which event Grantee shall provide a notice as reasonable under the circumstances. Further, in exercising its rights under this Easement, Grantee shall use its commercially reasonable efforts to not materially interfere with or disrupt the operations on, or occupants of, the Easement Property and any improvements thereon.

Grantor does hereby bind itself and its successors to WARRANT all and singular the Easement Property unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise. Grantee, its successors and assigns, shall have the right to construct, reconstruct and perpetually maintain additional Facilities at all times in the future within the Easement Property.

If Grantee is unable to access the Easement Property due to physical barriers or conditions, then Grantee shall have, and is hereby granted, the right of ingress and egress over that portion of the Grantor's adjacent as is reasonably necessary to and for the limited purpose of accessing the Easement Property.

Grantee will at all times after doing any work in connection with the construction, operation or repair of the Facilities, restore the surface of the Easement Property and any permitted improvements under this Easement located within the Easement Property as close to the condition in which it was found before such work was undertaken as is reasonably practicable, except for trees and shrubs within the Easement Property that were removed as a result of such work.

Grantor represents and warrants to Grantee that Grantor is the sole owner of the fee simple title to the Easement Property. Grantor does hereby represent and warrant that there are no liens, attachments or other encumbrances which will affect the title or right of the Grantor to convey this easement to the Grantee for the purposes as described herein. If such condition does exist, a signature with acknowledgment shall be included and made a part of this document conveying the rights and privileges contained herein and subordinating any such lien to the easement granted herein.

This instrument shall not be considered as a deed to the Easement Property or any part thereof, and the right is hereby reserved to Grantor, its successors and assigns, to use the Easement Property to landscape and build and construct fences, driveways, parking lots, roads, drainage and other public improvements over or across said easement; provided, however, that in no event shall any such improvements negatively impact the Facilities or planned improvements by the Grantee. The Grantor shall notify the Grantee of any improvements planned within the Easement Property.

The easement rights and privileges granted herein are non-exclusive, but Grantor covenants that Grantor will not convey any other easement or conflicting rights within the area covered by this grant which unreasonably interfere with Grantee's rights granted herein and provided all such other grants comply with all applicable local, state and federal laws, ordinances, rules, regulations and/or requirements, as they exist, may be amended or in the future arising.

Further, notwithstanding anything to the contrary herein, Grantor shall not place any improvement or take any action, permanent or temporary, which may cause damage or jeopardize the integrity of the Facilities or which will affect or interfere with, in any way, the rights granted herein. Grantee, may, due to the necessity of repair and maintenance of the Facilities, remove any and all improvements to the extent necessary to make repairs but shall restore the surface of the Easement Property and any permitted improvements under this Easement within the Easement Property to its prior condition as is reasonably practicable after such repair and maintenance.

This instrument shall be binding on, and inure to the benefit of, Grantee and Grantor and their respective successors or assigns.

The individual executing this instrument on behalf of Grantor represents that all appropriate and necessary actions have been taken to authorize the individual who is executing this instrument to do so for and on behalf of Grantor, that there are no other parties or entities required to execute this instrument in order for the same to be an authorized and binding agreement on Grantor and that the individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.

It is understood and agreed that the consideration received by Grantor hereunder includes adequate compensation for the grant of the rights hereunder.

This instrument may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes.

EXECUTED on the dates of the acknowledgments, but to be EFFECTIVE on the _____ day of _____, 20 _ (“Effective Date”).

Signature page to follow

GRANTOR:

TEXAS GRAND LAND II, LLC

By: _____
Printed Name: _____
Its: _____

STATE OF TEXAS §
 §
COUNTY OF _____§

BEFORE ME, the undersigned authority, on this day personally appeared _____ ,
known to me to be one of the persons whose names are subscribed to the foregoing instrument; he
acknowledged to me that he is the _____and duly authorized representative of
TEXAS GRAND LAND II, LLC, a_____, and that he executed the
same for the purposes and consideration therein stated and in the capacity therein stated as the act and deed
of said

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office this _____ day
of_____, 20__.

Notary Public, State of Texas My Commission
Expires: _____

EXHIBIT A

Legal Description

WASTEWATER TREATMENT PLANT EASEMENT

LEGAL DESCRIPTION

A 3.14 acre tract of land, lying within the Ruth Peckum Survey, Abstract No. 374, Kaufman County, Texas, and being a portion of a called 160.737 acre tract of land described by deed to Texas Grand Land II, LLC, as recorded under Volume 2019, Page 14045, Deed Records of Rockwall County, Texas, and as recorded under Volume 6107, Page 414, Deed Records of Kaufman County, Texas, described as follows:

BEGINNING, in the interior of said 160.737 acre tract, for the **POINT OF BEGINNING** of the herein described from which a 1" iron pipe found for the easternmost corner of said 160.737 acre tract bears N44°45'21"E, a distance of 1655.92 feet;

THENCE, over and across said 160.737 acre tract, the following four (4) courses and distances:

1. S44°34'58"W, a distance of 396.12 feet to a calculated point;
2. N48°37'48"W, a distance of 335.21 feet to a calculated point from which a mag nail found for the westernmost corner of said 160.737 acre tract bears S89°45'30"W, a distance of 2224.93 feet;
3. N41°21'57"E, a distance of 395.50 feet to a calculated point;
4. S48°37'48"E, a distance of 357.44 feet to the **POINT OF BEGINNING**.

Containing 3.14 acres, more or less.

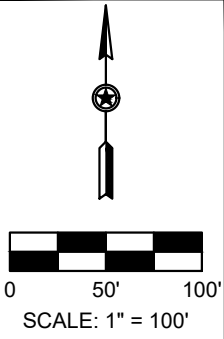
BEARING BASIS NOTE

This project is referenced for all bearing and coordinate basis to the Texas State Plane Coordinate System, NAD 83 North Central Zone (4202)

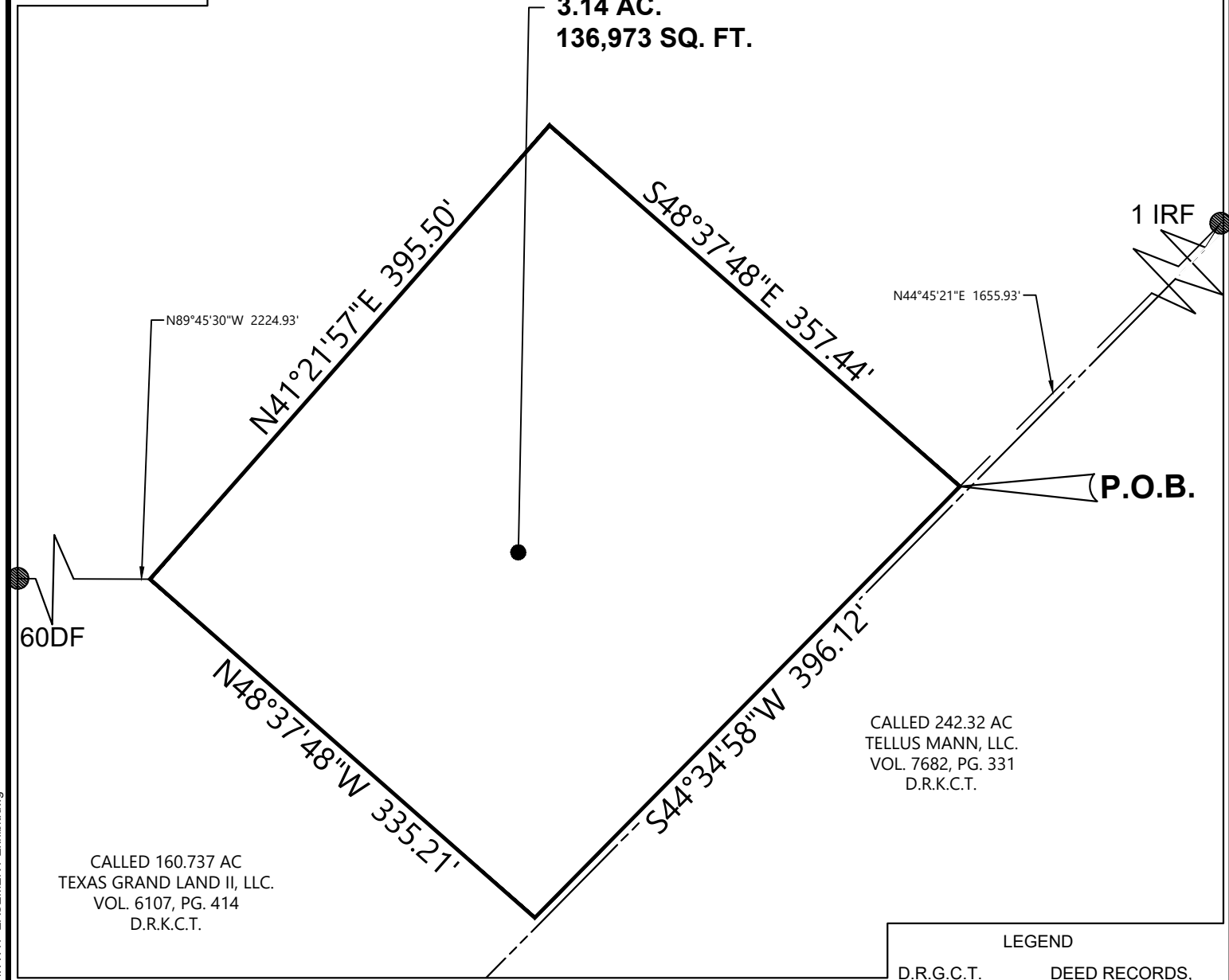
Robert J. Gertson, RPLS# 6367
Atwell LLC
1611 W 5th St, Suite 175
Austin, TX 78703
(510) 940-0505
TBPE LS Firm No. 10193726



12/06/2024



WASTEWATER TREATMENT PLANT EASEMENT
3.14 AC.
136,973 SQ. FT.



LEGEND

D.R.G.C.T.	DEED RECORDS, KAUFMAN COUNTY, TEXAS
60DF	60D NAIL FOUND
IRF	IRON ROD FOUND
VOL.	VOLUME
PG.	PAGE
AC.	ACRE
SQ. FT.	SQUARE FEET
P.O.B.	POINT OF BEGINNING

WASTEWATER TREATMENT PLANT EASEMENT

RUTH PECKUM SURVEY,
ABSTRACT NO. 374,
KAUFMAN COUNTY,
TEXAS

DATE: 12/06/2024
DRAWN: LR
CHECKED: RG
JOB NO.: 24002431

SHT.
02
OF
02



ATWELL

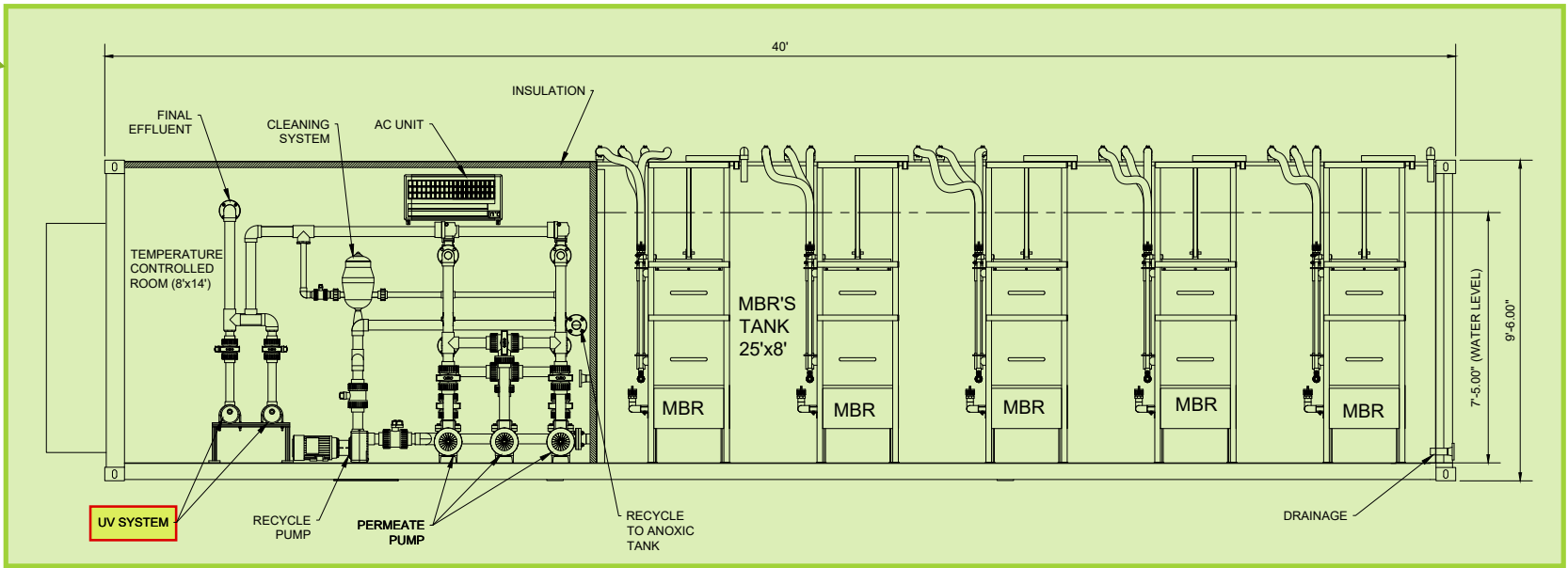
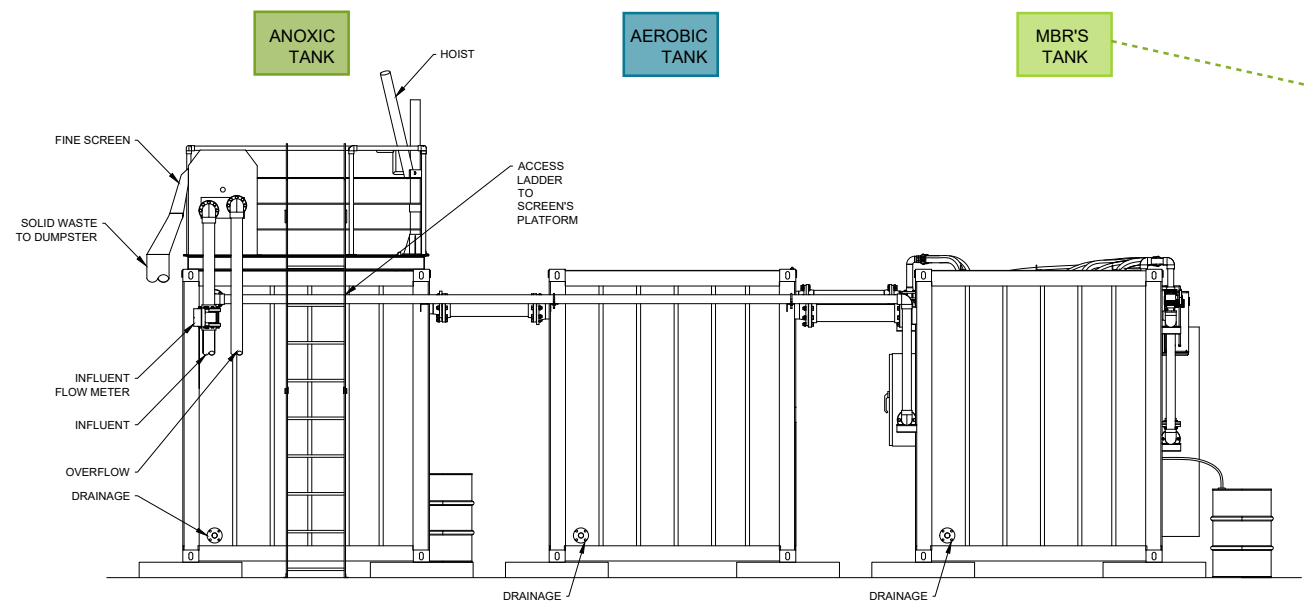
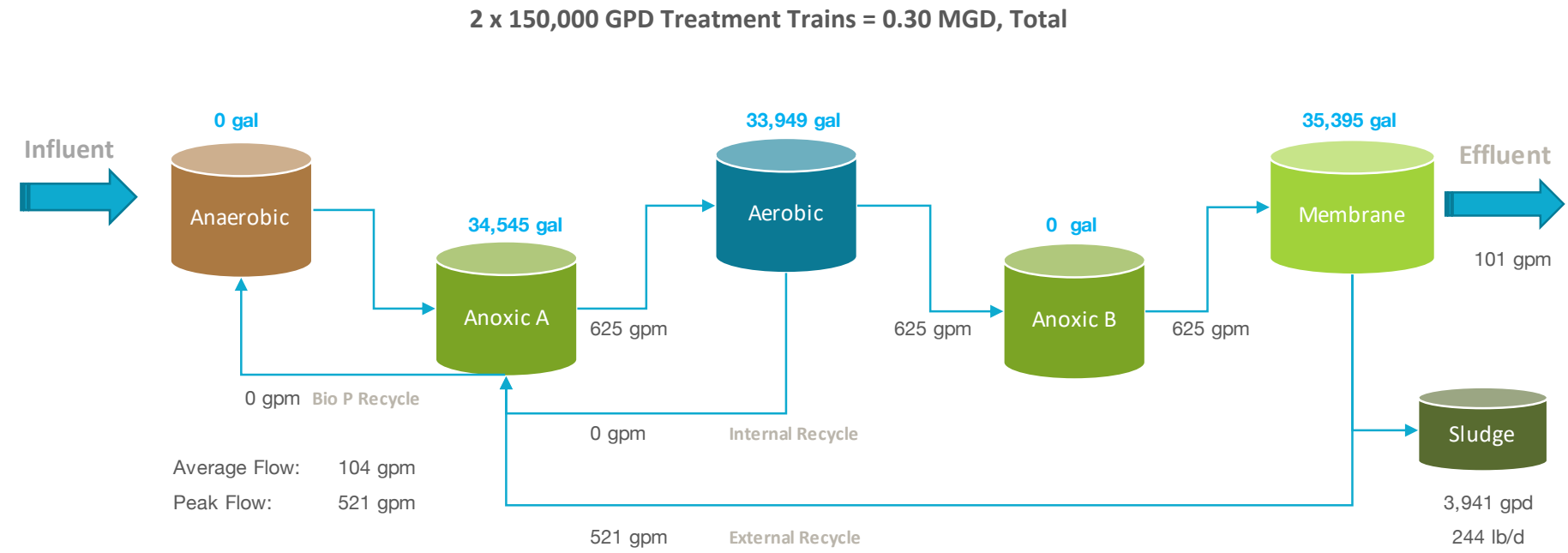
www.atwell-group.com
9001 AIRPORT FREEWAY
SUITE 660
NORTH RICHLAND HILLS, TX 76180



4411 S Interstate 35, Ste 100
Georgetown, Texas 78626
www.reuseinn.com

DOCUMENT NOT APPLICABLE TO THIS APPLICATION

See Technical Report
Attachment 5
Design Calculations
for 150,000 GPD
Treatment



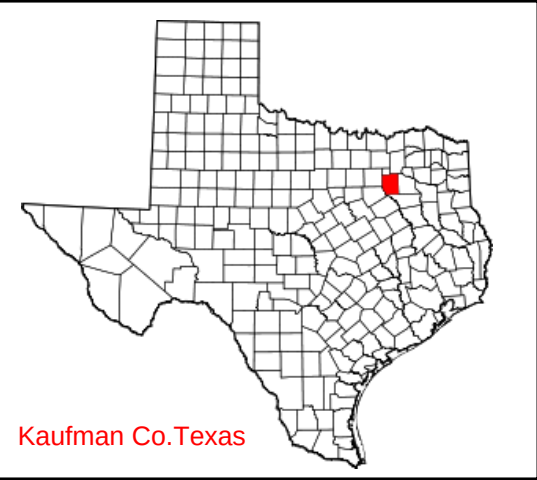
Example of Process Flow/Treatment Process (provided from
design for 80,000 gpd Treatment Plant)

Disclaimer
This drawing was created by A3-USA
for a separate project. It is presented
here for illustrative purposes only.
Sizes and dimensions will vary.

REUSE ENGINEERING TBPE F-21880
STATE OF TEXAS
LAUREN B. WAHL
141050
PROFESSIONAL ENGINEER
10 DEC 2024

reUse
ENGINEERING
4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

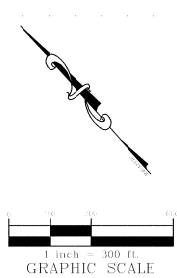
PMT Development, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS
PROCESS FLOW DIAGRAM
Attachment 1



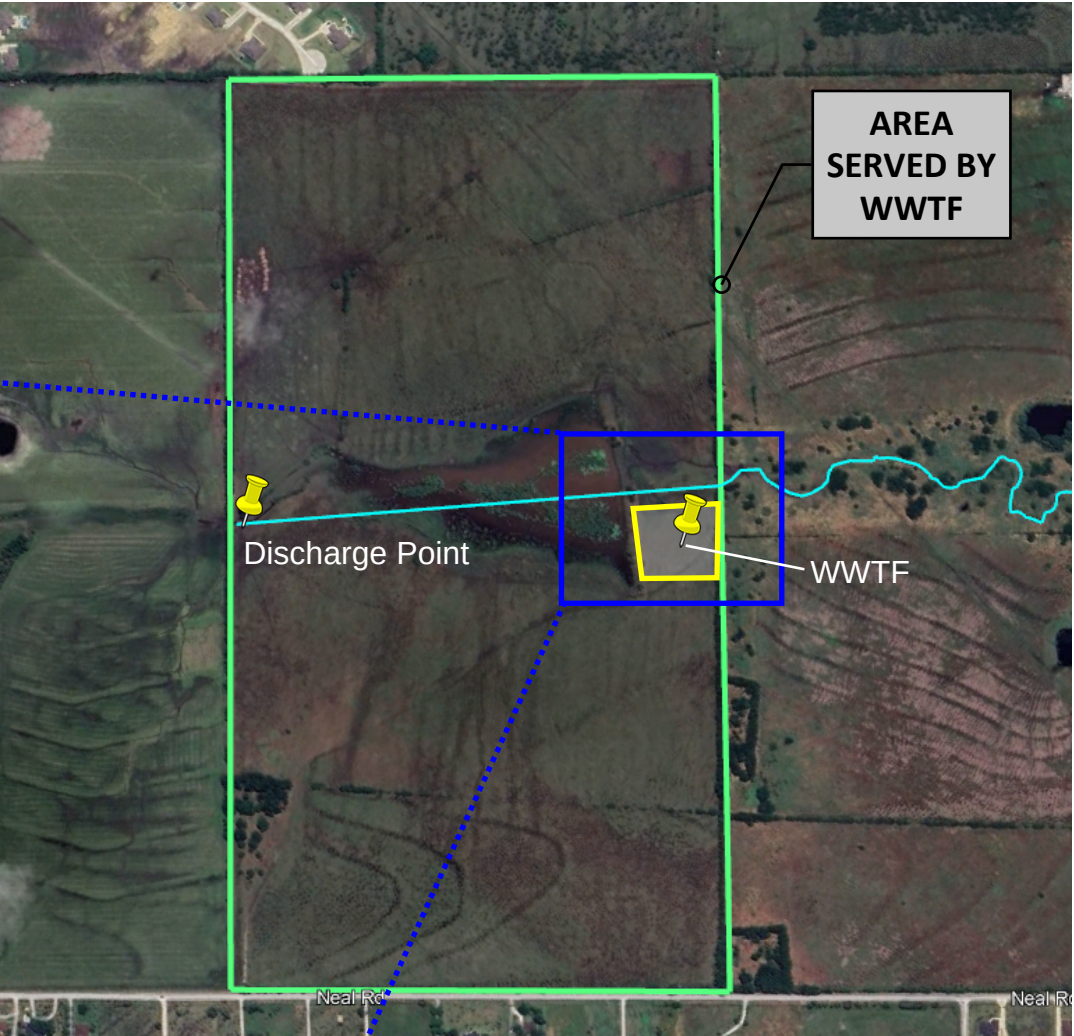
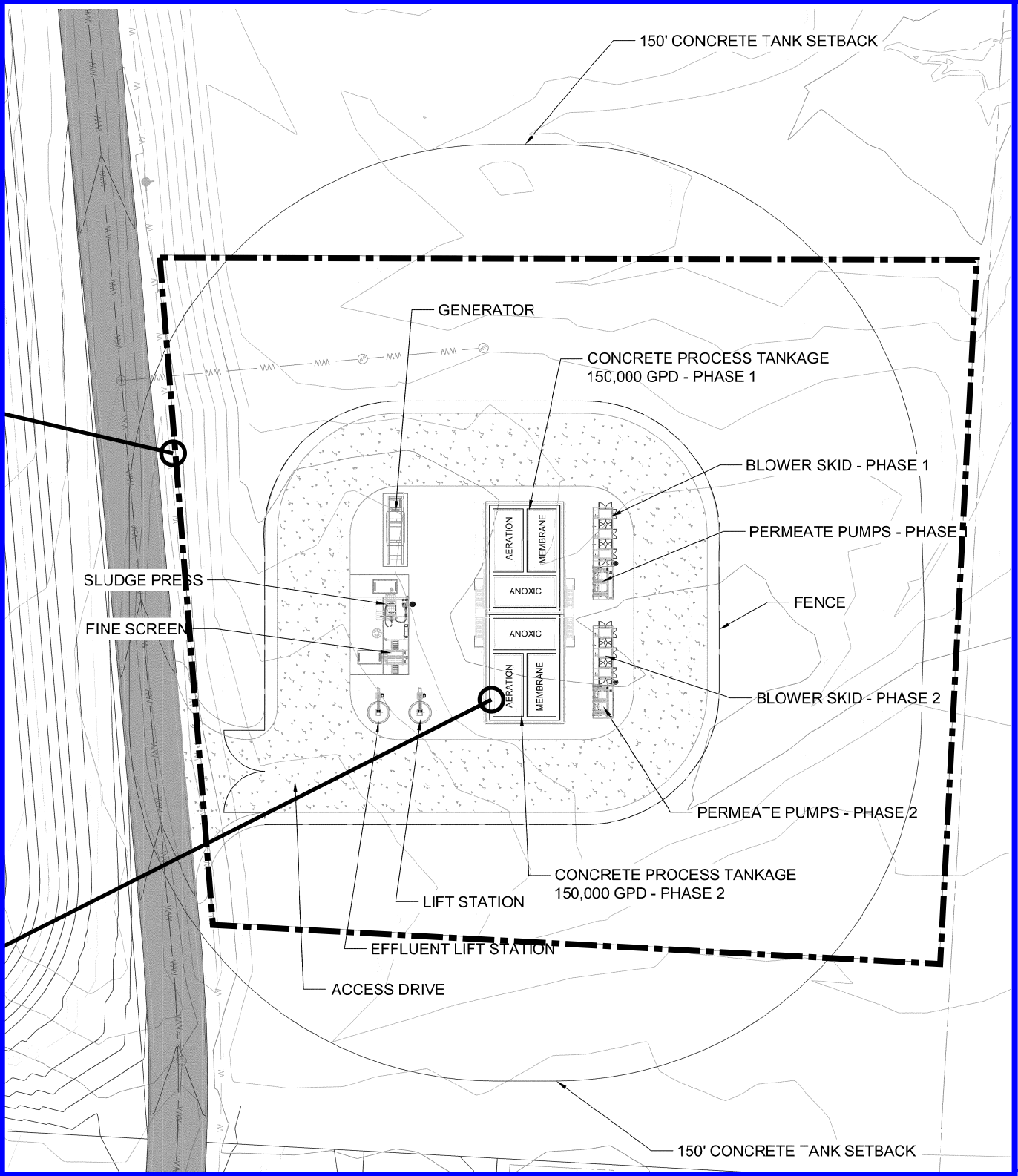
Kaufman Co. Texas

Note: Drawing is for layout only. No work to begin without Geotech and Structural Reports and Designs Available!

**WWTF
PROPERTY
BOUNDARY**



150K GPD WWTF



reUse
ENGINEERING
4411 SIH 35, Suite 100
Georgetown, TX 78626
TX Firm No. 21880

PMT DEVELOPMENT, LLC
GRAND MEADOWS WWTP
TPDES PERMIT APPLICATION
KAUFMAN COUNTY, TEXAS
CONCEPT SITE DRAWING
Attachment 2