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

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary 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 as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their 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 the applicant 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.

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
Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Mustang Ridge, LLC (CN605791656) proposes to operate the Mustang Ridge Water Reclamation Facility (RN111063335), an activated sludge process facility. The facility will be located at approximately 0.70 miles west of the intersection of FM 1327 and Highway 183, in Creedmoor, Travis County, Texas 78747. This application is for a major amendment to relocate the discharge point from its current location in the existing permit, relocate the WWTP to a new location from its current location in the existing permit, and to increase the treatment and disposal capacity from 1.1 MGD to 3.3 MGD.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Deman ($CBOD_5$), Total Suspended Solids (TSS), Ammonia Nitrogen (NH_3-N), Phosphorus (P), pH, and Escherichia Coli. Domestic wastewater will be treated by using an activated sludge process and the treatment units include a bar screen, aeration basins, secondary clarifiers, chlorine contact basins, sludge holding basins, and tertiary filters.

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.

Mustang Ridge, LLC (CN605791656) propone operar la instalacion de tratamiento de aguas residuals de Mustang Ridge (RN111063335, un instalacion do proceso de lodos activados. La instalación estará ubicada en aproximadamente 0,70 millas al oeste de la interseccion de FM 1327 y autopista 183, en la ciudad de Creedmoor, Condado de Travis, Texas 78747. Esta solicitud es para una enmienda importante para reubicar el punto de descarga desde su ubicación actual en el permiso existente, reubicar la tratamiento de aguas residuales a una nueva ubicación desde su ubicación actual en el permiso existente y aumentar la capacidad de tratamiento y disposición de 1.1 MGD a 3.3 MGD.

Se espera que las descargas de la instalación contengan demanda bioquimica de oxigeno carbonoso de cinco dias ($CBOD_5$), y Solidos total suspendidos (TSS), y Nitrogeno Amoniaco (NH_3-N), y Fosforo (P), y Escherichia coli. Aquas residuals domesticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluyen una criba de barras, tanques de aireacion, clarificadores secundarios, taneques de contacto de cloro, tanques de retencion de lodos y filtros terciarios.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0015905001

APPLICATION. Mustang Ridge, LLC, 3939 Bee Caves Road, Suite C100, West Lake Hills, Texas 78746, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015905001 (EPA I.D. No. TX0140473) to authorize relocation of the treatment facility and an increase to the discharge of treated wastewater to a volume not to exceed an annual average flow of 3,300,000 gallons per day**.** The domestic wastewater treatment facility will be located approximately 0.7 miles west of the intersection of Farm-to-Market Road 1327 and U.S. Highway 183, near the city of Creedmoor, in Travis County, Texas 78747. The discharge route is from the plant site to a man-made ditch, thence to an unnamed tributary, thence to Maha Creek, thence to Cedar Creek, thence to the Colorado River Above La Grange. TCEQ received this application on June 17, 2024. The permit application will be available for viewing and copying at Austin Public Library - Southeast Branch, 5803 Nuckols Crossing Road, Austin, in Travis 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=-97.7053,30.0941&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 Mustang Ridge, LLC at the address stated above or by calling Mr. Michael Bevilacqua, P.E., Baxter & Woodman, at 737-358-8103.

Issuance Date: August 7, 2024

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0015905001

SOLICITUD. Mustang Ridge, LLC, 3939 Bee Caves Road, Suite C100, West Lake Hills, Texas 78746, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para modificar el Permiso No. WQ0015905001 (EPA I.D. No. TX 0140473) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la reubicación de la instalación de tratamiento y un aumento a la descarga de aguas residuales tratadas a un volumen que no exceda un flujo promedio anual de 3,300,000 galones por día. La instalación de tratamiento de aguas residuales domesticas estará ubicada aproximadamente a 0,7 millas al oeste de la intersección de Farm-to-Market Road 1327 y U.S. Highway 183, cerca de la ciudad de Creedmoor, en el Condado de Travis, Texas 78747. La ruta de descarga es del sitio de la planta hasta una zanja artificial, de allí a un afluente sin nombre, de allí a Maha Creek, de allí a Cedar Creek, de allí al Ro Colorado sobre La Grange. La TCEQ recibió esta solicitud el 17 de junio de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Austin Public Library – Southeast Branch, 5803 Nuckols Crossing Road, Austin, en el Condado de Travis, Texas antes de la fecha de publicación de este aviso en el periódico. La aplicación, incluidas las actualizaciones y los avisos asociados, están disponible electrónicamente en la siguiente pagina 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=-97.7053,30.0941&level=18.

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

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

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

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

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

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante

indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Mustang Ridge, LLC a la dirección indicada arriba o llamando a Mr. Michael Bevilacqua, P.E., Baxter & Woodman al 737-358-8103.

Fecha de emisión el 7 de agosto de 2024

TCEQ TPDES
MAJOR AMENDMENT
PERMIT APPLICATION

MUSTANG RIDGE
WATER RECLAMATION FACILITY
WQ0015905001

Prepared For:

MUSTANG RIDGE, LLC

6/14/2024

STATE OF TEXAS
MICHAEL E. BEVILACQUA
124762
LICENSED
PROFESSIONAL ENGINEER

Michael Bevilacqua

Prepared by:

Green Civil Design
a BAXTER & WOODMAN company

TX Registered Engineering Firm F-21783
301 Denali Pass, Suite 3
Cedar Park, TX 78613
281-350-7027

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Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 14, 2024

Texas Commission on Environmental Quality
Applications Review and Processing Team (MC 158)
P.O. Box 13087
Austin, Texas 78711-3087

Re: TPDES Major Amendment Permit Application
Mustang Ridge, LLC
Mustang Ridge Water Reclamation Facility
WQ0015905001
CN:605791656 RN:111063335

To Whom it May Concern,

The attached application is for a major amendment to the existing TPDES permit WQ0015905001 for Mustang Ridge LLC's Mustang Ridge Water Reclamation Facility (WRF). The WRF will be located approximately 0.70 miles west of the intersection of Farm-to-Market Road 1327 and Highway 183 in Travis County, TX.

The proposed major amendment is to move the location of the WRF and to increase the treatment and disposal capacity from 1.1 MGD to 3.3 MGD. The increase capacity is proposed due to the growing municipalities near the WRF who are requesting service. While the WRF location is changing, the existing discharge location will remain unchanged. Further information is provided in the application.

If you have any questions, or need additional information, please do not hesitate to contact me. My address and phone number are listed above, and my email is mbevilacqua@baxterwoodman.com.

Sincerely,
Green Civil Design, LLC

Michael E. Bevilacqua, P.E.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Mustang Ridge, LLC

PERMIT NUMBER (If new, leave blank): WQ00 15905001

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed — Check/Money Order Number: 10135

Check/Money Order Amount: $2,050.00

Name Printed on Check: Mustang Ridge, LLC

EPAY — Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

☐ Publicly-Owned Domestic Wastewater

☒ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

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

☐ Active ☒ Inactive

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

☒ TPDES Permit

☐ TLAP

☐ TPDES Permit with TLAP component

☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

☐ New

☐ Major Amendment *with* Renewal

☒ Major Amendment *without* Renewal

☐ Renewal without changes

☐ Minor Amendment *with* Renewal

☐ Minor Amendment *without* Renewal

☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: Move the location of the WWTP and to increase the treatment and disposal capacity from 1.1 MGD to 3.3 MGD

f. For existing permits:

Permit Number: WQ00 15905001

EPA I.D. (TPDES only): TX 0140473

Expiration Date: 5/24/2026

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

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

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

Mustang Ridge, LLC

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

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

CN: 605791656

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

Prefix: Mr

Last Name, First Name: Bilger, Andy

Title: Manager

Credential: Click to enter text.

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

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

Click to enter text.

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

legal documents forming the entity.)

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

CN: Click to enter text.

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

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

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

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

C. Core Data Form

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

Section 4. Application Contact Information (Instructions Page 27)

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

A. Prefix: Mr Last Name, First Name: Bevilacqua, Michael

Title: Senior Project Manager Credential: P.E.

Organization Name: Baxter & Woodman

Mailing Address: 301 Denali Pass, Suite #3 City, State, Zip Code: Cedar Park, TX 78613

Phone No.: 737-358-8103 E-mail Address: mbevilacqua@baxterwoodman.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr. Last Name, First Name: Bilger, Andy

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Cave Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: atbilger@icloud.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: Mr Last Name, First Name: Breedlove, Shawn

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Cave Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: ibreedlove@icloud.com

B. Prefix: Mr Last Name, First Name: Bilger, Andy

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Cave Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: atbilger@icloud.com

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: Mr Last Name, First Name: Breedlove, Shawn

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Cave Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: ibreedlove@icloud.com

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

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

Prefix: Mr Last Name, First Name: Breedlove, Shawn

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Cave Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: ibreedlove@icloud.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Bevilacqua, Michael

Title: Senior Project Manager Credential: P.E.

Organization Name: Baxter & Woodman

Mailing Address: 301 Denali Pass, Suite #3 City, State, Zip Code: Cedar Park, TX 78613

Phone No.: 737-358-8103 E-mail Address: mbevilacqua@baxterwoodman.com

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

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

☒ E-mail Address

☐ Fax

☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr Last Name, First Name: Bevilacqua, Michael

Title: Senior Project Manager Credential: P.E.

Organization Name: Baxter & Woodman

Mailing Address: 301 Denali Pass, Suite #3 City, State, Zip Code: Cedar Park, TX 78613

Phone No.: 737-358-8103 E-mail Address: mbevilacqua@baxterwoodman.com

D. Public Viewing Information

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

Public building name: Austin Public Library – Southeast Branch

Location within the building: Click to enter text.

Physical Address of Building: 5803 Nuckols Crossing Road

City: Austin County: Travis

Contact (Last Name, First Name): Click to enter text.

Phone No.: 512-974-8840 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☐ No

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

   ☐ Yes ☐ No

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

F. Plain Language Summary Template

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

Attachment: Q

G. Public Involvement Plan Form

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

Attachment: R

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 111063335

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

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

Mustang Ridge Water Reclamation Facility

C. Owner of treatment facility: Mustang Ridge, LLC

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

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

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

Title: Manager Credential: Click to enter text.

Organization Name: Mustang Ridge, LLC

Mailing Address: 3939 Bee Caves Road, Suite C-100 City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 E-mail Address: atbilger@icloud.com

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

Attachment: B

E. Owner of effluent disposal site:

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

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

Organization Name: Click to enter text.

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

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

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

Attachment: Click to enter text.

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

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

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

Organization Name: Click to enter text.

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

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

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

Attachment: Click to enter text.

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☐ Yes ☐ No

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

As part of the major amendment, we are proposing to move the WWTP. The WWTP will now be located approximately 0.70 miles west of the intersection of the Farm-to-Market Roads 1327 and Highway 183.

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

☐ Yes ☒ No

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

The discharge route will be from the plant site to a man-made ditch, thence to an unnamed tributary, thence to Maha Creek (unclassified segment 1434F), thence to Cedar Creek (unclassified segment 1434B), thence to the Colorado River above La Grange (Segment No. 1434).

City nearest the outfall(s): Creedmoor

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

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Click to enter text.

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ Attachment 1 for Individuals as co-applicants

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

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: WQ0015905001

Applicant: Mustang Ridge, LLC

Certification:

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

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

Signatory name (typed or printed): [redacted]

Signatory title: [redacted]

Signature: _____ Date: 4-2-24

(Use blue ink)

Subscribed and Sworn to before me by the said Andy Bilger

on this Second day of April, 20 24.

My commission expires on the 23 day of June, 20 27.

_____

Notary Public

STEPHANIE DOGGETT
My Notary ID # 130271560
Expires June 23, 2027

[SEAL]

Travis

_____

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

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

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

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

C. Indicate by a check mark 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: Travis County Appraisal District

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

☐ Yes ☒ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

☒ 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: S

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): See Attachment H

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD): See Attachment H

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): See Attachment H

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: N/A – Plant not constructed yet.

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

See Attachment H

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Attachment H		

C. Process Flow Diagram

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

Attachment: I

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

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

- Latitude: 30.092917
- Longitude: -97.704203

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

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

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

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

Attachment: J

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

The proposed treatment facility will serve the proposed Mustang Ridge development totaling 415-acres of high density residential and commercial development with approximately 10,900 LUEs

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

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
Mustang Ridge Collection System	M**ustang Ridge, LLC**	Privately Owned	Approx 40,000 (10,900 LUEs)
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☐ Yes ☒ No

If yes, provide the date(s) of approval for each phase: Click to enter text.

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

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

See Attachment B

C. Other actions required by the current permit

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

☒ Yes ☐ No

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

N/A currently. Other requirements are listed in the existing permit, however, the Plant has not been constructed

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

Click to enter text.

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

Click to enter text.

4. *Grease and decanted liquid disposal*

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

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

Click to enter text.

E. Stormwater management

1. *Applicability*

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

☒ Yes ☐ No

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

☐ Yes ☒ No

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

2. *MSGP coverage*

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

☐ Yes ☒ No

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

TXR05 Click to enter text. or TXRNE Click to enter text.

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

☐ Yes ☒ No

3. *Conditional exclusion*

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

☐ Yes ☒ No

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

Click to enter text.

4. ***Existing coverage in individual permit***

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

☐ Yes ☒ No

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

Click to enter text.

5. ***Zero stormwater discharge***

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

☐ Yes ☒ No

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

Click to enter text.

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

6. ***Request for coverage in individual permit***

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

☐ Yes ☒ No

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

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

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

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

Is the facility in operation?

☐ Yes ☒ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					
Oil & Grease, mg/l					
Alkalinity ($CaCO_3$)*, mg/l					

*TPDES permits only
†TLAP permits only

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity ($CaCO_3$), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Aqua Operations

Facility Operator's License Classification and Level: Operations Company

Facility Operator's License Number: OC0000142

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

C. Biosolids Management

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

all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk		Class B: PSRP Aerobic Digestion	Option 1: Volatile solids reduced by 38%
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

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

D. Disposal site

Disposal site name: Walker Aero Environmental

TCEQ permit or registration number: 2310

County where disposal site is located: Travis

E. Transportation method

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

Name of the hauler: Sheridan Environmental LLC

Hauler registration number: 24220

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: Click to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: Click to enter text.
- Federal Emergency Management Map:

  Attachment: Click to enter text.
- Site map:

  Attachment: Click to enter text.

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

☐ Yes ☐ No

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

Click to enter text.

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

  Attachment: Click to enter text.
- Copy of the closure plan

  Attachment: Click to enter text.
- Copy of deed recordation for the site

  Attachment: Click to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: Click to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: Click to enter text.
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

A. Additional authorizations

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

☐ Yes ☒ No

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

Click to enter text.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Click to enter text.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 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: Andrew Bilyeu

Title:

Signature: _____

Date: 4-2-24

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

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

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

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

The proposed facility is required to serve the proposed development and surrounding future developments. No plant within a 3-mile radius has the capacity to provide service.

B. Regionalization of facilities

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

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

1. *Municipally incorporated areas*

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

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

☒ Yes ☐ No ☐ Not Applicable

If yes, within the city limits of: Mustang Ridge and Creedmoor

If yes, attach correspondence from the city.

Attachment: N/A – Neither City has a WWTP, Permit, or WW CCN.

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

Attachment: Click to enter text.

2. *Utility CCN areas*

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

☐ Yes ☒ No

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

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

Attachment: Click to enter text.

3. Nearby WWTPs or collection systems

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

☒ Yes ☐ No

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

Attachment: P

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

Attachment: P

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☐ Yes ☒ No

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

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

A. Current organic loading

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

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

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

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

Click to enter text.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality	2.3	300
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory	0.50	300
Motel		
Restaurant	0.50	300
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	3.3	
AVERAGE BOD_5 from all sources		300

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

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

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

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

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

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

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 2 mg/l after 20 minutes detention time at peak flow

Dechlorination process: Chemical injection to 0.1 mg/L or less for flows above 0.40 MGD

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: K

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

☒ Yes ☐ No

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

Click to enter text.

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

FEMA FIRM Map – See Attachment L

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

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

B. Wind rose

Attach a wind rose: M

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

Attachment: N

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

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

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

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

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

☐ Yes ☒ No

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

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

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

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

Attachment: Click to enter text.

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

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall

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

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

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

Click to enter text.

C. Sea grasses

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

☐ Yes ☐ No

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

Click to enter text.

Section 3. Classified Segments (Instructions Page 64)

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

☐ Yes ☒ No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters: Click to enter text.

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

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

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

☒ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☒ Other, specify: Unnamed Tributary – Wet-weather Creek

B. Flow characteristics

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

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

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

☐ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

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

Maha Creek (Segment 1434F)

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 discharge starts from a man-made ditch for approximately 165-ft, then is conveyed to an unnamed tributary for 1,370-ft (0.26-miles) and then is conveyed to Maha Creek.

E. Normal dry weather characteristics

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

Dry Creek – No Water flowing or standing water in the unnamed tributary

Date and time of observation: 10/14/2022 at 11:00 AM

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

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

B. Waterbody uses

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

- ☒ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☒ Other(s), specify: Wet-weather creek

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

ATTACHMENT A

CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)*

☒ Other **Major Amendment to TPDES Permit**

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 605791656		**RN 111063335**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	6/14/2024

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Mustang Ridge, 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)*
0803415746	32071876943		

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

15. Mailing Address:	3939 Bee Cave Road							
	Suite C-100							
	City	Austin	**State**	TX	**ZIP**	78746	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	ibreedlove@icloud.com

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

(512) 328-1184		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

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

Mustang Ridge Water Reclamation Facility

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

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

25. Description to Physical Location:	Approximately 0.70 miles west of the intersection of Farm-to-Market Raod 1327 and Highway 183 in Travis County, TX.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Creedmoor			TX	78747	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	30.0941		**28. Longitude (W) In Decimal:**	-97.7053	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	05	38.76	-97	42	19.0794

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		22130	

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

Treat and dispos of treated wastewater

34. Mailing Address:	**3939 Bee Cave Road**							
	Suite C-100							
	City	**Austin**	**State**	**TX**	**ZIP**	**78746**	**ZIP + 4**	
35. E-Mail Address:	**ibreedlove@icloud.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 328-1184		( ) -

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:	Michael Bevilacqua	41. Title:	Senior Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(737) 358-8103		( ) -	mbevilacqua@baxterwoodman.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:	Baxter & Woodman	Job Title:	Senior Project Manager
Name *(In Print)*:	Michael Bevilacqua	Phone:	(737) 358- **8103**
Signature:	Michael Bevilacqua	Date:	6/14/2024

ATTACHMENT B

WASTEWATER TREATMENT PLANT AND DISCHARGE PROPERTY DEED

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS
Rebecca Guerrero, County Clerk
Travis County, Texas
Mar 03, 2022 04:13 PM Fee: $42.00
2022039968
Electronically Recorded

Capital Title
GF# 21-646564-NB

GENERAL WARRANTY DEED

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

Date: March ~~2~~, 2022

Grantor: Home-Tech Industries, Inc., a Texas corporation

Grantor's Mailing Address: 11939 Manchaca Road, Austin, Texas 78748

Grantee: Mustang Ridge, LLC, a Texas limited liability company

Grantee's Mailing Address: 3939 Bee Cave Road, Suite G-100, Austin, TX 78746

Consideration: TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

Property (including any improvements):

74.557 acres of land out of the Williams Lewis, Sr. Survey Abstract No. 479 and the Augustus Kincheloe Survey Abstract No. 457 in Travis County, Texas, being all of that certain (74.549 acre) tract of land as conveyed to Richard Alan Ehrlich by Special Warranty Deed recorded in Volume 10795, Page 295 of the Real Property Records of Travis County, Texas, and being more particularly described by metes and bounds in Exhibit "A" attached hereto and incorporated herein by reference.

Reservations from Conveyance: None.

Exceptions to Conveyance and Warranty: Validly existing easements, rights-of-way, and prescriptive rights; all presently recorded and validly existing restrictions, reservations, covenants, conditions, oil and gas leases, mineral interests, and water interests outstanding in persons other than Grantor, and other instruments, other than conveyances of the surface fee estate, that affect the Property; validly existing rights of adjoining owners in any walls and fences situated on a common boundary; any discrepancies, conflicts, or shortages in area or boundary lines; any encroachments or overlapping of improvements; and taxes and assessments for 2022, which Grantee assumes and agrees to pay, and subsequent taxes and assessments by any taxing authority for that and prior years due to change in land usage, ownership, or both, the payment of which Grantee assumes.

Grantor, for the Consideration and subject to the Reservations from Conveyance and Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to

Grantee and Grantee's heirs, successors, and assigns forever. Grantor hereby binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Exceptions to Conveyance and Warranty.

When the context requires, singular nouns and pronouns include the plural.

Home-Tech Industries, Inc.,
a Texas corporation

By: _____
Richard Crum, President

THE STATE OF TEXAS §
§
COUNTY OF Hays §

This instrument was acknowledged before me on the 2 day of March, 2022, by Richard Crum, President of Home-Tech Industries, Inc., a Texas corporation, on behalf of said corporation.

MOLLY VOGT
Notary ID #132253880
My Commission Expires
November 15, 2023

_____
Notary Public in and for the State of Texas

After Recorded Return to:
Sprouse Shrader Smith PLLC
Attn: Courtney Mogonye-McWhorter
805 Las Cimas Pkwy, Ste 350
Austin, Texas 78746

EXHIBIT "A"

HOLT CARSON, INC.
PROFESSIONAL LAND SURVEYORS
1904 FORTVIEW ROAD
AUSTIN, TEXAS 78704
TELEPHONE: (512) 442-0990
www.hciaustin.com

FIELD NOTE DESCRIPTION OF 74.557 ACRES OF LAND OUT OF THE WILLIAM LEWIS, SR. SURVEY ABSTRACT No. 479 AND THE AUGUSTUS KINCHELOE SURVEY, ABSTRACT No. 457 IN TRAVIS COUNTY, TEXAS, BEING ALL OF THAT CERTAIN (74.549 ACRE) TRACT OF LAND AS CONVEYED TO RICHARD ALAN EHRLICH BY SPECIAL WARRANTY DEED RECORDED IN VOLUME 10795 PAGE 295 OF THE REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a ½" iron rod found in the North right-of-way line of F.M. Highway No. 1327 and in the Northeast line of that certain (59.13 acre) tract of land described as "First Tract" and as conveyed to Max Ehrlich by deed recorded in Volume 1254 Page 341 of the Deed Records of Travis County, Texas, and for the Southeast corner of that certain (74.549 acre) tract of land as conveyed to Richard Alan Ehrlich by Special Warranty Deed recorded in Volume 10795 Page 295 of the Real Property Records of Travis County, Texas, and for the Southwest corner of that certain (9.380 acre) tract of land as conveyed to Lee O. Box by General Warranty Deed recorded in Document No. 2010141671 of the Official Public Records of Travis County, Texas, and being the Southeast corner and **PLACE OF BEGINNING** of the herein described tract of land, and from which a ½" iron rod found in the concrete base of a fence corner post in the South right-of-way line of F.M. Highway No. 1327 bears S 44 deg. 57' 33" E 93.38 ft.;

THENCE crossing the interior of said Max Ehrlich (59.13 acre) tract with the North right-of-way line of F.M. Highway No. 1327 and with the South line of said Ehrlich (74.549 acre) tract, S 75 deg. 08' 00" W 1483.55 ft. to a 5/8" iron rod set with an aluminum cap imprinted with "Holt Carson, Inc." in the Southwest line of said Ehrlich (59.13 acre) tract for the Southwest corner of said Ehrlich (74.549 acre) tract and for the Southeast corner of that certain (4.334 acre) tract of land as conveyed to Texana Builders, Inc. by Warranty Deed recorded in Volume 8688 Page 688 of the Real Property Records of Travis County, Texas, and being on or near the common line of the Augustus Kincheloe Survey Abstract No. 457 and the Samuel Little Survey Abstract No. 480 and being an angle corner of this tract, and from which a capped iron rod found for a point of curvature in the North right-of-way line of F.M. Highway No. 1327 bears S 75 deg. 08' 00" W 4046.44 ft., and also from which a ½" iron rod found bears S 46 deg. 04' E 1.15 ft.;

end of Page 1

Page 2 of 4
74.557 ACRES

THENCE leaving the North right-of-way line of F.M. Highway No. 1327 with the Southwest line of said Ehrlich (74.549 acre) tract, N 46 deg. 04' 07" W at 325.31 ft., more or less, passing the West corner of said Ehrlich (59.13 acre) tract and an angle corner of that certain (129.5 acre) tract of land described as "Second Tract" and as conveyed to Max Ehrlich by said deed recorded in Volume 1254 Page 341 of the Deed Records of Travis County, Texas, and continuing with the same bearing for a total distance of 478.31 ft. to a ½" iron rod found near an old fence corner post for an angle corner of said Ehrlich (129.5 acre) tract and an angle corner of said Ehrlich (74.549 acre) tract and being at or near the North corner of the Samuel Little Survey Abstract No. 480 and being an angle corner of this tract;

THENCE with the common line of said Ehrlich (74.549 acre) tract and said Texana Builders (4.334 acre) tract and being on or near the Northwest line of the Samuel Little Survey Abstract No. 480, S 43 deg. 48' 21" W 312.91 ft. to a ½" iron rod found at or near the East corner of the Elijah Caples Survey Abstract No. 155 and on the Southwest line of the William Lewis, Sr. Survey Abstract No. 479 for an angle corner of said Ehrlich (129.5 acre) tract and an angle corner of said Ehrlich (74.549 acre) tract and for the East corner of that certain (45.52 acre) tract of land as conveyed to Mrs. Hulda Malmstrom by deed recorded in Volume 712 Page 487 of the Deed Records of Travis County, Texas, and being an angle corner of the tract, and from which a ½" iron rod found for the West corner of said Texana Builders (4.334 acre) tract bears S 43 deg. 47' 08" W 474.87 ft.;

THENCE on or near the common line of the William Lewis, Sr. Survey Abstract No. 479 and the Elijah Caples Survey Abstract No. 155 and with a Southwest line of said Ehrlich (129.5 acre) tract and a Southwest line of said Ehrlich (74.549 acre) tract, N 60 deg. 56' 15" W at 1257.53 ft. passing a 3/8" iron rod found, being 1.67 ft. Northeast of this line, for the East corner of that certain (40.47 acre) tract of land as conveyed to David Louis Johnson and wife, Barbara Johnson by deed recorded in Volume 4180 Page 2057 of the Deed Records of Travis County, Texas, and for an angle corner of that certain (96.75 acre) tract of land as conveyed to William E. Selman and wife, Claire Selman by General Warranty Deed recorded in Document No. 2016140963 of the Official Public Records of Travis County, Texas, and continuing with the same bearing for a total distance of 1295.83 ft. to a ½" iron rod found at an old fence corner post at or near the Southwest corner of the William Lewis, Sr. Survey Abstract No. 479 and the Southeast corner of the Alexander Eanes Survey Abstract No. 268 for the Southwest corner of said Ehrlich (129.5 acre) tract and for the Southwest corner of said Ehrlich (74.549 acre) tract and being the most Westerly or Southwest corner of this tract;

end of Page 2

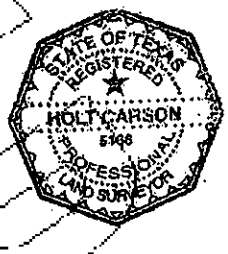
74.557 ACRES

THENCE with the Northeast line of said Ehrlich (59.13 acre) tract and with a Northeast line of said Ehrlich (74.549 acre) tract and with the Southwest line of said Graef (57.463 acre) tract, S 45 deg. 47' 22" E at 460.31 ft. passing a ½" iron rod found, being 1.87 ft. Southwest of this line, for the South corner of said Graef (23.683 acre) tract and for the West corner of the aforementioned Lee O. Box (9.380 acre) tract, and continuing with the same bearing for a total distance of 1090.86 ft. to the **PLACE OF BEGINNING**, containing 74.557 acres of land.

SURVEYED: July 12, 2017

Holt Carson
Registered Professional Land Surveyor No. 5166

see accompanying map: B 983140



ATTACHMENT C

USGS MAPS

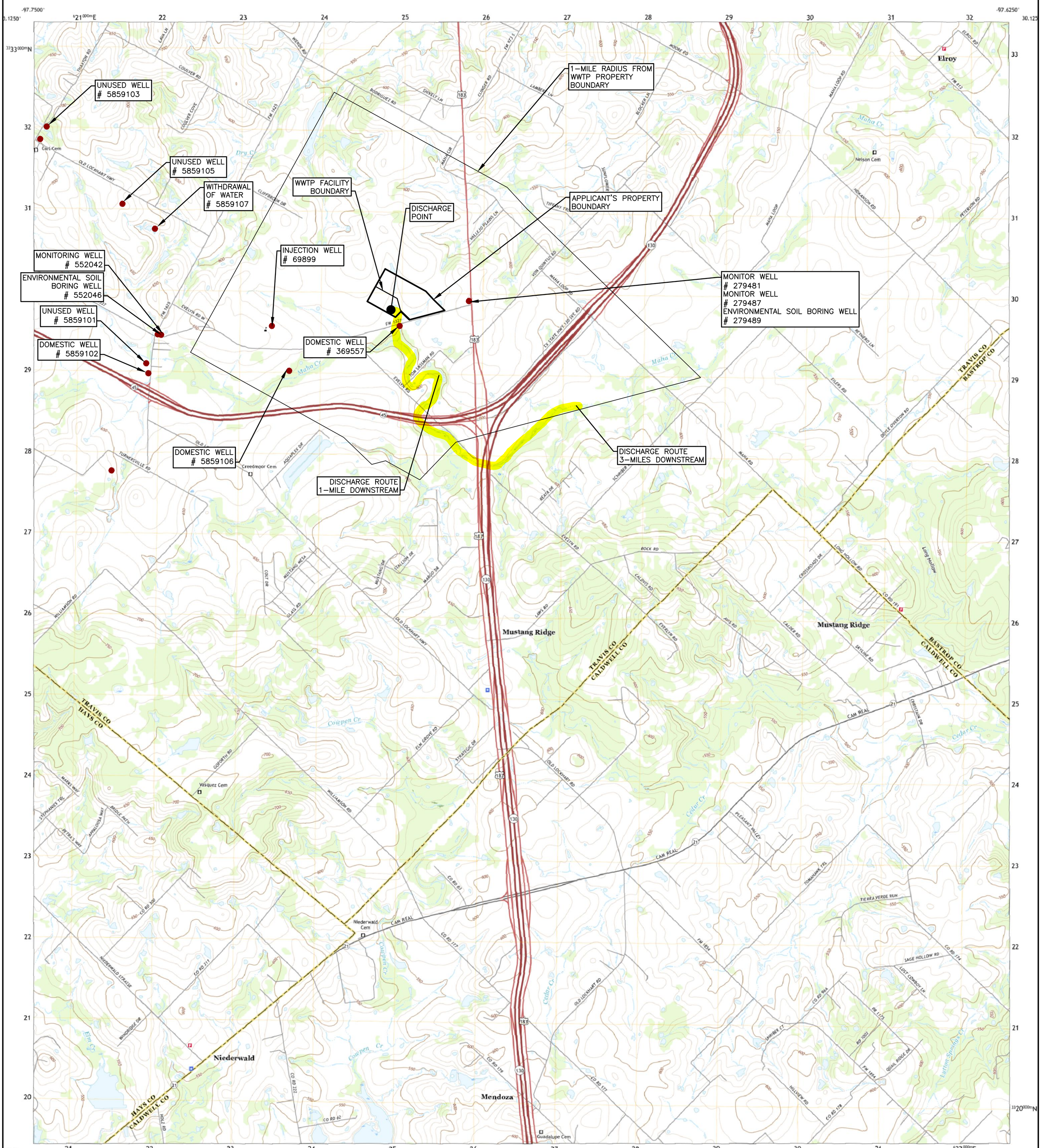
FILE: P:\MUSRD\2326484-Mustang Ridge TCEQ A\00-Multiple Work Types\CAD\Exhibits\ATTACHMENT C - USGS MAP.dwg TAB: ATTACHMENT C USGS MAP PLOTTED: 6/13/2024 8:58 AM BY: GLENN POPE

USGS science for a changing world

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

The National Map US Topo

CREEDMOOR QUADRANGLE
TEXAS
7.5-MINUTE SERIES



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

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

Imagery	NAIP,	September 2016 - November 2016
Roads	U.S. Census Bureau,	2015
Names	GNIS,	1979 - 2018
Hydrography	National Hydrography Dataset,	2000 - 2018
Contours	National Elevation Dataset,	2002 - 2004
Boundaries	Multiple sources; see metadata file	2016 - 2017
Wetlands	FWS National Wetlands Inventory	1982 - 2005

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
MN
GN
3°39' 65 MILS
0°39' 12 MILS
U.S. National Grid
100,000-m Square ID
PU
Grid Zone Designation 14R

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

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

TEXAS
QUADRANGLE LOCATION

1 Oak Hill
2 Montopolis
3 Webberville
4 Buda
5 Lytton Springs
6 Uhland
7 Lockhart North
8 Dale
ADJOINING QUADRANGLES

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

CREEDMOOR, TX
2019

Green Civil Design
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301 DENALI PASS DR., SUITE 3
CEDAR PARK, TEXAS 78613
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT C USGS MAP

ATTACHMENT D

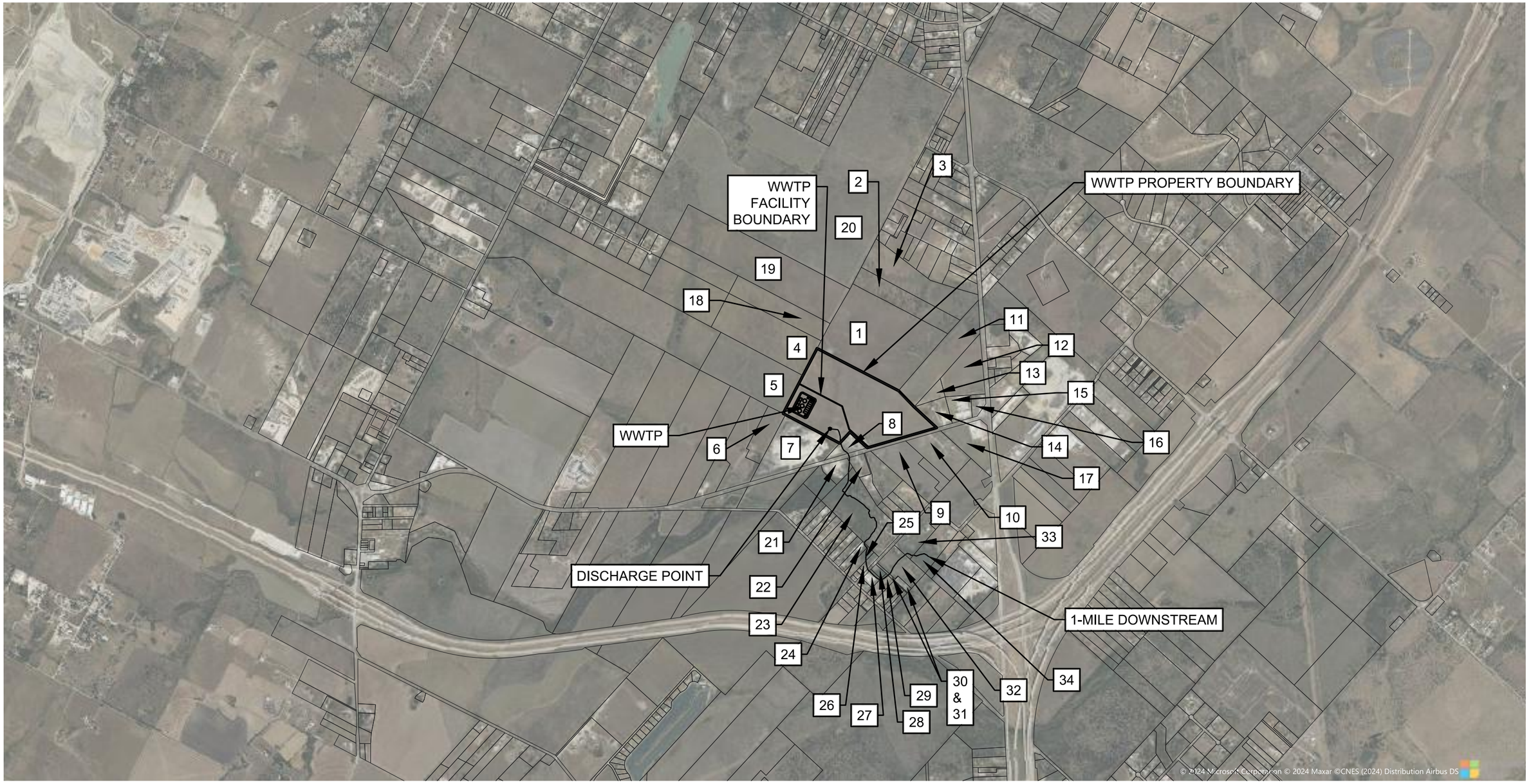
AFFECTED LANDOWNERS LIST & MAP

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF
Attachment D - Affected Landowners List

NUMBER	OWNER NAME	MAILING ADDRESS
1	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
2	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
3	CHARLOTTE STALLINGS	2059 JOSHUA DRIVE SARASOTA FL 34240
4	DC SOUTH FORK LLC	3939 BEE CAVE ROAD SUITE C100 WEST LAKE HILLS TX 78746
5	WILLIAM E AND CLAIRE E SELMAN	4747 E FM 20 LOCKHART TX 78644
6	WILLIAM E AND CLAIRE E SELMAN	4747 E FM 20 LOCKHART TX 78644
7	ASPHALT INC LLC DBA LONE STAR PAVING	PO BOX 200608 AUSTIN TX 78720
8	JULIO AND ISABEL TORRES	11509 CARL ROAD CREEDMOOR TX 78610
9	CLAY PARTNERS-MUSTANG RIDGE LAND #1 LP	PO BOX 37109 HOUSTON TX 77237
10	CLAY PARTNERS-MUSTANG RIDGE LAND #1 LP	PO BOX 37109 HOUSTON TX 77237
11	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
12	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
13	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
14	LEE O BOX	1717 S CHADBOURNE STREET SAN ANGELO TX 76903
15	SOUTHSIDE STORAGE INC	400 JERRYS LANE BUDA TX 78610
16	SHAKIL BUSINESS INC	10050 US HIGHWAY 183 SOUTH SUITE A AUSTIN TX 78747
17	CLIFFORD GRAEF	303 LEISUREWOODS DRIVE BUDA TX 78610

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF
Attachment D - Affected Landowners List

NUMBER	OWNER NAME	MAILING ADDRESS
18	DC SOUTH FORK LLC	3939 BEE CAVE ROAD SUITE C100 WEST LAKE HILLS TX 78746
19	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
20	GATEWAY OASIS V LLC	2800 NIAGARA LANE NORTH PLYMOUTH MN 55447
21	MANUEL ALEJANDRO AND ELVIRA GONZALEZ-FREGOZO	6609 FM 1327 AUSTIN TX 78747
22	EDUARDO NAVARRO JR	11478 OLD LOCKHART ROAD CREEDMOOR TX 78610
23	DONNA L STERLING	11248 TOM SASSMAN ROAD AUSTIN TX 78747
24	NOE J ORTEGA	6900 EVELYN ROAD TRAILER 1 AUSTIN TX 78747
25	JOHNNY H HAWKINS JR	9195 FM 1854 DALE TX 78616
26	MONICA RAMOS	9814 MARLBOROUGH DRIVE AUSTIN TX 78753
27	PEDRO MARTINEZ	2200 CEDAR STREET BASTROP TX 78602
28	FAUSTINO MARTINEZ RODRIGUEZ	203 PEGGYS TRAIL KYLE TX 78640
29	MORRIS THOMPSON AND DEBRA A KEITH-THOMPSON	7100 EVELYN ROAD AUSTIN TX 78747
30	JAVIER AND ANITA RUIZ	11203 TOM SASSMAN ROAD AUSTIN TX 78747
31	JAVIER AND ANITA RUIZ	11203 TOM SASSMAN ROAD AUSTIN TX 78747
32	FRINGE PROPERTIES LLC	4805 TRAILS END SAN MARCOS TX 78666
33	DAVID C AND GLORIA C GONZALEZ	11413 TOM SASSMAN ROAD AUSTIN TX 78747
34	LISA CRAIG	11503 TOM SASSMAN ROAD AUSTIN TX 78747



N

0' 2,000' 4,000'

SCALE: 1"=2,000'

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CEDAR PARK, TEXAS 78613
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

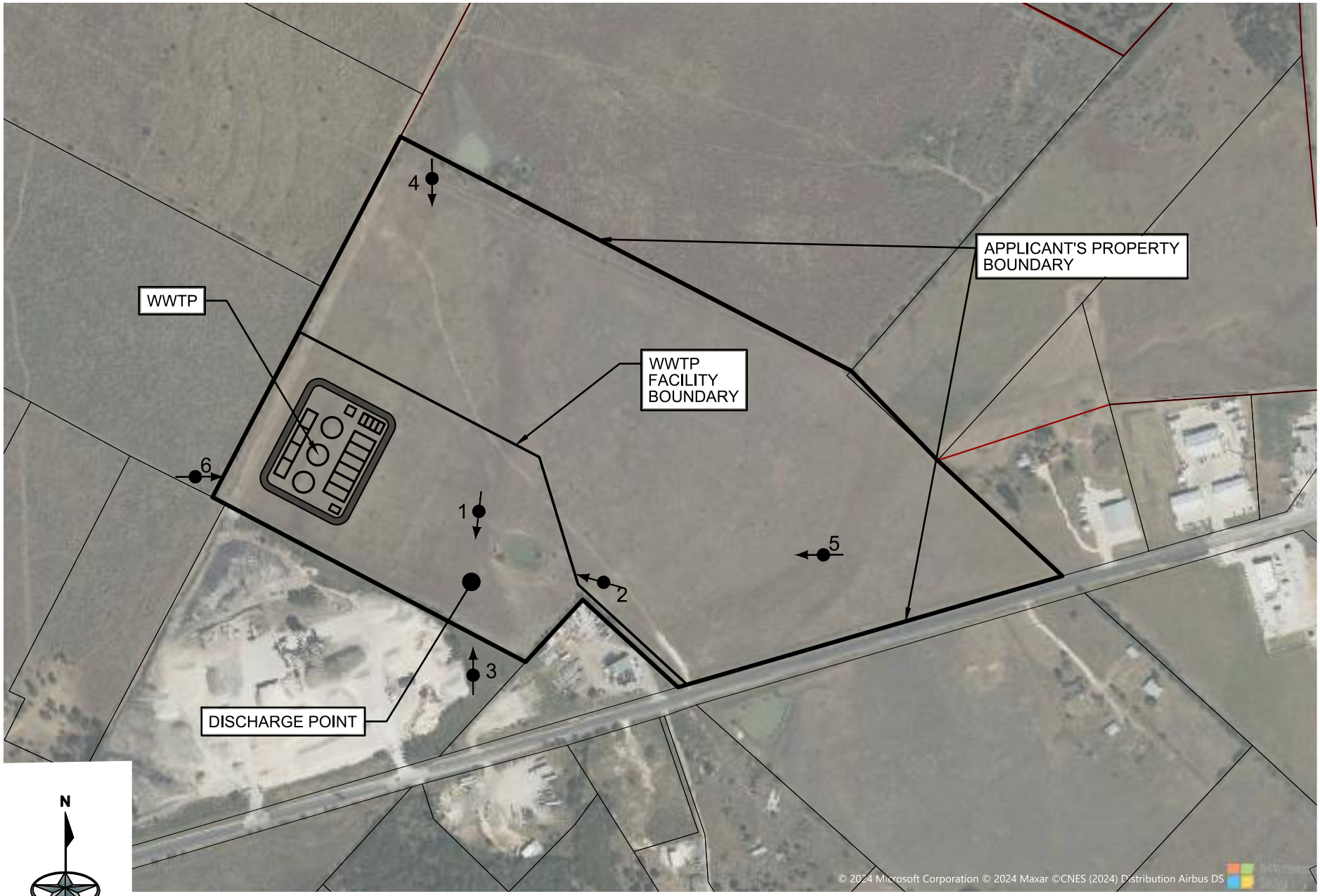
MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT D - AFFECTED LANDOWNERS MAP

FILE: ATTACHMENT D – AFFECTED LANDOWNERS MAP.dwg TAB: LANDOWNERS PLOTTED: 6/13/2024 10:50 AM BY: MIKE BEVILACQUA

ATTACHMENT E

ORIGINAL PHOTOGRAPHS



N

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SCALE: 1"=500'

FILE: ATTACHMENT E – PHOTO PLOT MAP.dwg TAB: PHOTO PLOT 3 PLOTTED: 6/13/2024 12:06 PM BY: MIKE BEVILACQUA

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(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT E - PHOTO PLOT MAP

Photo #1 – Discharge Point, facing downstream (South/Southwest)

Photo #2 – Discharge Point, facing upstream (Northwest)

Photo #3 – WWTP, facing North – All Units.

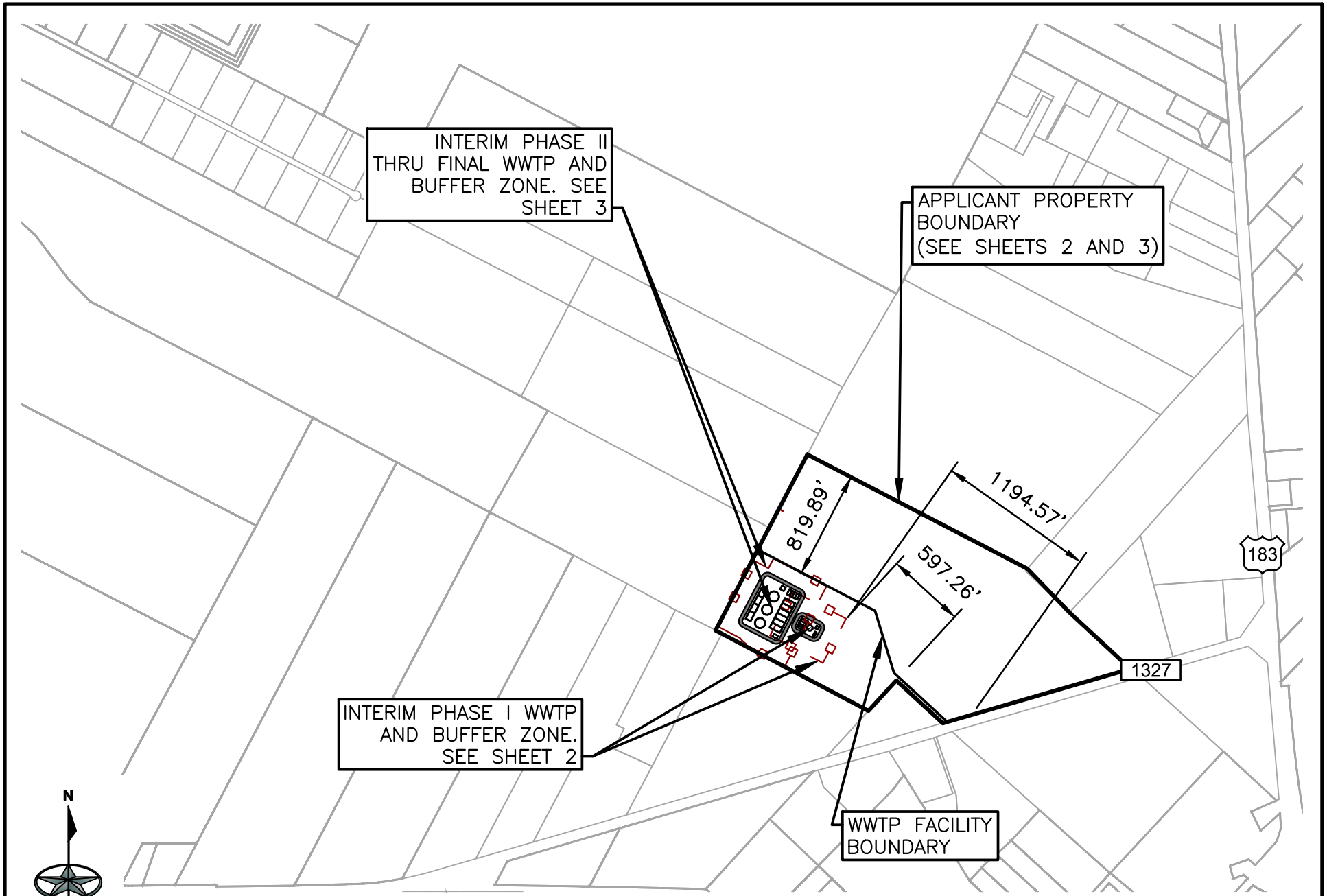
Photo #4 – WWTP, facing South – All Units

Photo #5 – WWTP, facing West – All Units

Photo #6 – WWTP, facing East – All Units

ATTACHMENT F

BUFFER ZONE MAP



FILE: ATTACHMENT F – BUFFER MAP.dwg TAB: ATTACHMENT F BUFFER MAP – OVERALL PLOTTED: 6/13/2024 8:50 AM BY: MIKE BEVILACQUA

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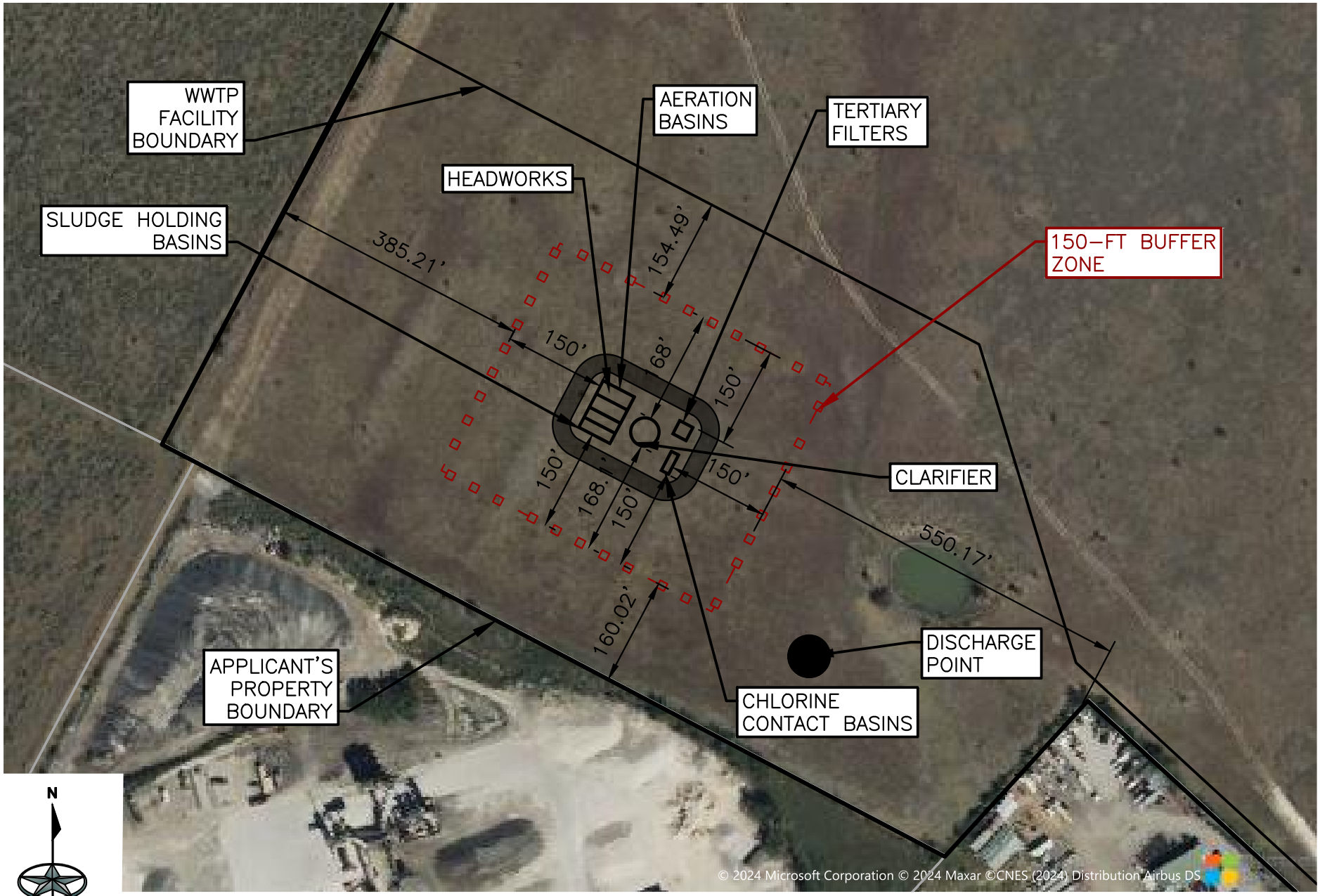
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT F - BUFFER MAP - OVERALL



FILE: ATTACHMENT F – BUFFER MAP.dwg TAB: ATTACHMENT F BUFFER MAP – PHASE 1 PLOTTED: 6/13/2024 9:05 AM BY: MIKE BEVILACQUA

N

0' 200' 400'

SCALE: 1"=200'

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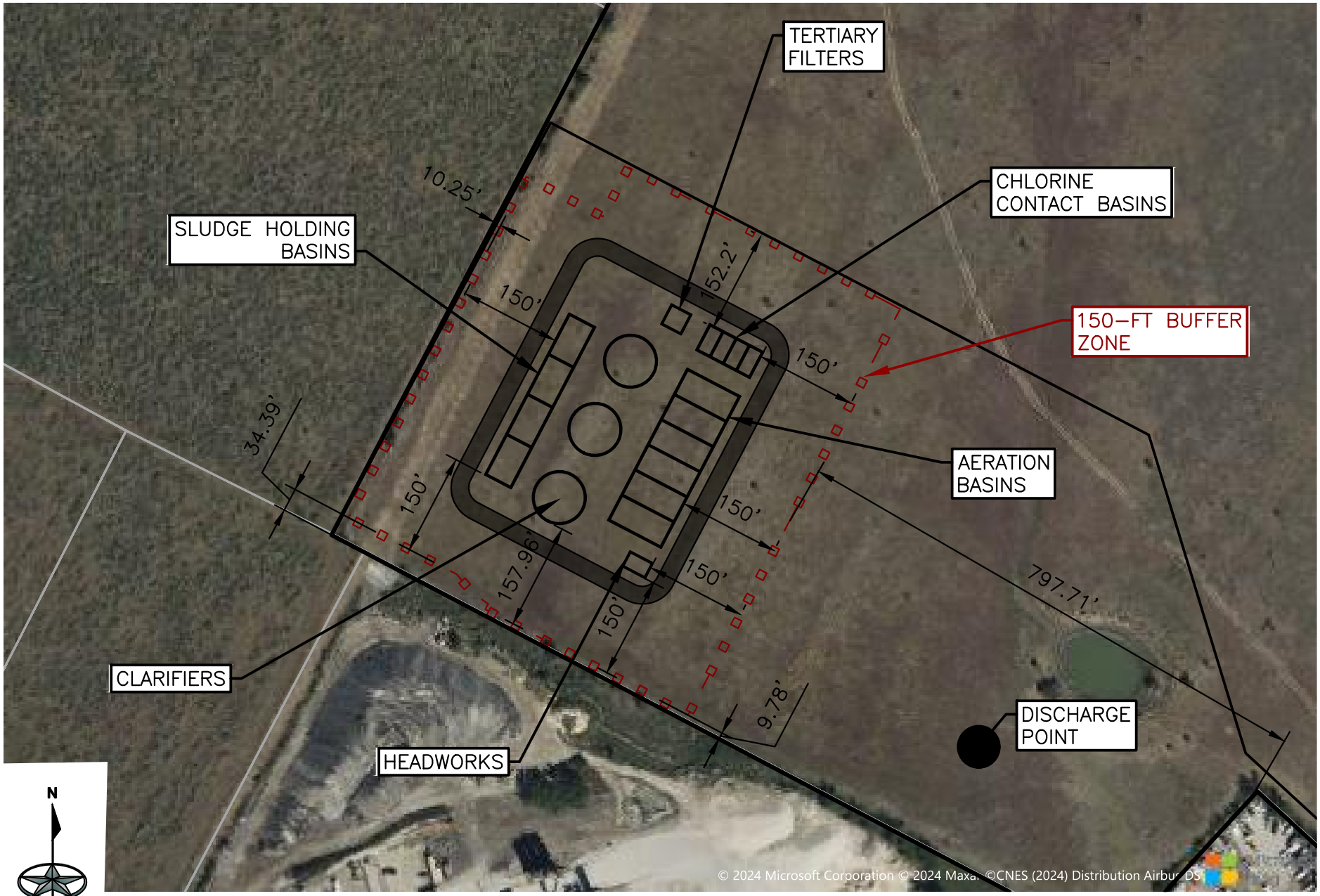
MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT F - BUFFER MAP - PHASE 1



Green Civil Design
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TEXAS REGISTERED ENGINEERING FIRM F-21783

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT F - BUFFER MAP - PHASE 2 THRU FINAL

FILE: ATTACHMENT F – BUFFER MAP.dwg TAB: ATTACHMENT F BUFFER MAP – PHASE 2 PLOTTED: 6/13/2024 9:17 AM BY: MIKE BEVILACQUA

ATTACHMENT G

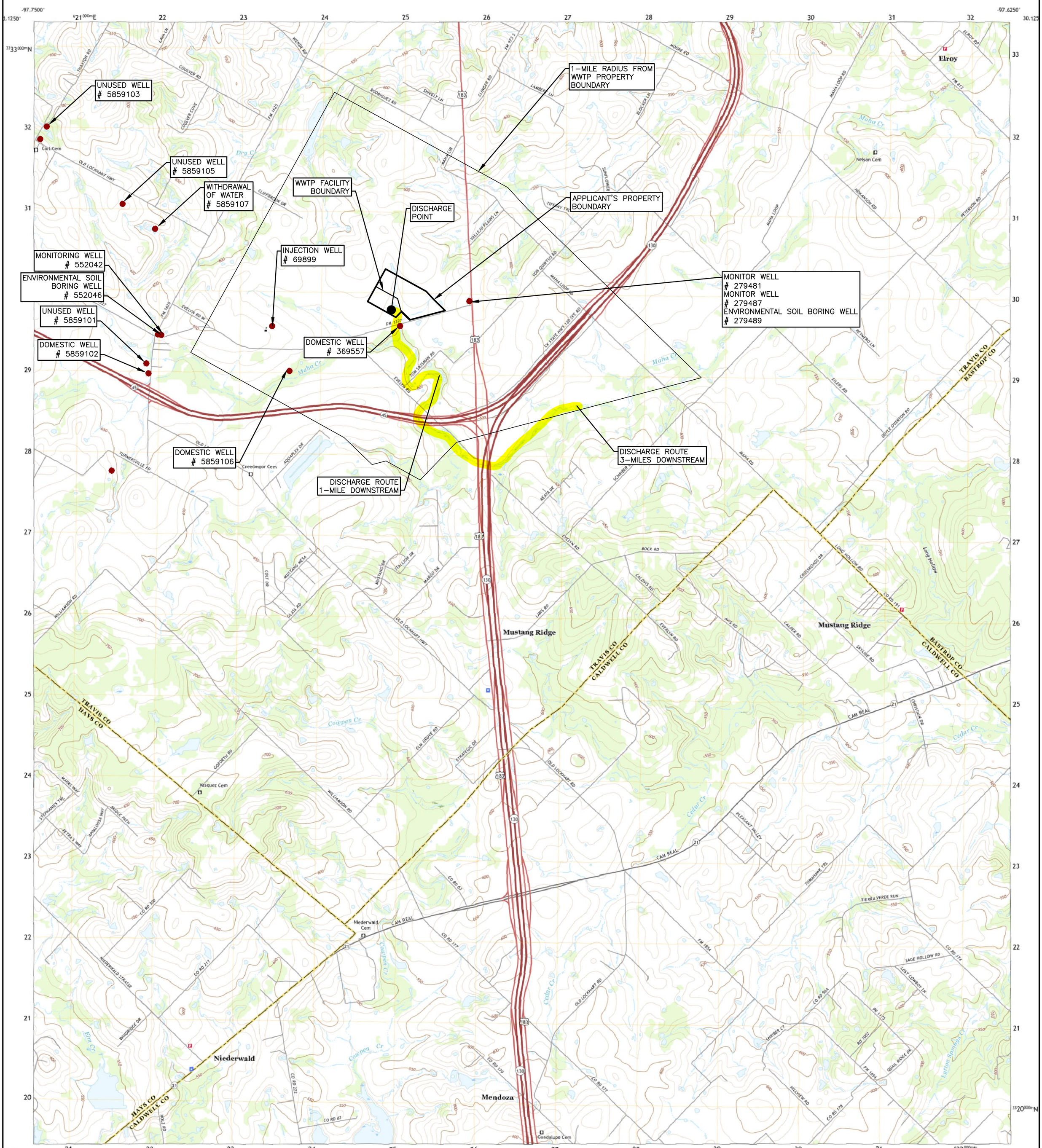
SPIF USGS MAPS

USGS science for a changing world

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

The National Map US Topo

CREEDMOOR QUADRANGLE
TEXAS
7.5-MINUTE SERIES



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

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

Imagery	NAIP,	September 2016 - November 2016
Roads	U.S. Census Bureau,	2015
Names	GNIS,	1979 - 2018
Hydrography	National Hydrography Dataset,	2000 - 2018
Contours	National Elevation Dataset,	2002 - 2004
Boundaries	Multiple sources; see metadata file	2016 - 2017
Wetlands	FWS National Wetlands Inventory	1982 - 2005

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

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

SCALE 1:24 000

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

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

TEXAS
QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Oak Hill
2 Montopolis
3 Webberville
4 Buda
5 Lytton Springs
6 Uhland
7 Lockhart North
8 Dale

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

CREEDMOOR, TX
2019

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301 DENALI PASS DR., SUITE 3
CEDAR PARK, TEXAS 78613
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

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MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT G - SPIF USGS MAP

ATTACHMENT H

TREATMENT PROCESS DESCRIPTION AND TREATMENT UNIT SIZING

ATTACHMENT H – PERMIT PHASING, EFFLUENT PARAMETERS, PROCESS DESCRIPTION & UNIT SIZING

PROPOSED PERMIT PHASING

	Interim I Phase	Interim II Phase	Interim III Phase	Final Phase
Design Flow (MGD):	0.30	1.10	2.2	3.3
2-Hr Peak Flow (MGD):	1.20	4.40	8.8	13.2
Estimated Construction Start Date:	06/2025	06/2027	06/2030	06/2033
Estimated Waste Disposal Start Date:	01/2026	06/2028	06/2031	06/2034

PROPOSED EFFLUENT QUALITY PARAMETERS

	Interim I Phase	Interim II Phase	Interim III Phase	Final Phase
$CBOD_5$ (mg/L):	5	5	5	5
Total Suspended Solids (mg/L):	5	5	5	5
Ammonia Nitrogen (mg/L):	2	2	2	2
Dissolved Oxygen (mg/L):	4	4	4	4
Total Phosphorus (mg/L):	1	1	1	1
E. Coli (CFU)	126	126	126	126

PROPOSED TREATMENT UNIT SIZING SUMMARY INTERIM I

Treatment Basin	No. of Basins Interim I Phase	Dimensions (ft)	Anticipated SWD (ft)
Headworks	1	2’ x 2’	0.7’
Aeration	2	50’ x 20’	12.0’
Sludge Holding	2	50’ x 15’	11.75’
Clarifier	1	40’ Diameter	11.5’
Chlorine Contact	1	30’ x 10’	9’
Effluent Filter	1	20’ x 20’	8’

PROPOSED TREATMENT UNIT SIZING SUMMARY INTERIM II THRU FINAL PHASES

Treatment Basin	No. of Basins Interim II Phase	No. of Basins Interim III Phase	No. of Basins Final Phase	Dimensions (ft)	Anticipated SWD (ft)
Headworks	1	2	2	35’ x 22’	6’
Aeration	2	4	6	85’ x 40’	12.0’
Sludge Holding	2	3	4	65’ x 40’	11.75’
Clarifier	2	2	3	75’ Diameter	11.5’
Chlorine Contact	2	3	4	40’ x 20’	9’
Effluent Filter	1	2	2	30’ x 30’	8’

Treatment Process – Interim I Phase

The wastewater treatment plant for the Interim I phase will be an activated sludge process plant. The treatment process will follow the steps below. The number and size of each treatment unit is provided in the table on Page 1.

Activated Sludge Process: Bar-Screen (Headworks) → Aeration Basin → Clarifier → Effluent Filters → Chlorine Contact → Discharge Point

Sludge Process: Clarifier → Sludge Holding Basin (or RAS) → TCEQ Permitted Land Application Site/Landfill

Treatment Process – Interim II Phase

The wastewater treatment plant for the Interim II phase will be an activated sludge process plant. The treatment process will follow the steps below. The number and size of each treatment unit is provided in the table on Page 1.

Activated Sludge Process: Bar-Screen (Headworks) → Aeration Basin → Clarifier → Effluent Filters → Chlorine Contact → Dechlorination → Discharge Point

Sludge Process: Clarifier → Sludge Holding Basin (or RAS) → TCEQ Permitted Land Application Site/Landfill

Treatment Process – Interim III Phase

The wastewater treatment plant for the Interim III phase will be an activated sludge process plant. The treatment process will follow the steps below. The number and size of each treatment unit is provided in the table on Page 1.

Activated Sludge Process: Bar-Screen (Headworks) → Aeration Basin → Clarifier → Effluent Filters → Chlorine Contact → Dechlorination → Discharge Point

Sludge Process: Clarifier → Sludge Holding Basin (or RAS) → TCEQ Permitted Land Application Site/Landfill

Treatment Process – Final Phase

The wastewater treatment plant for the Final phase will be an activated sludge process plant. The treatment process will follow the steps below. The number and size of each treatment unit is provided in the table on Page 1.

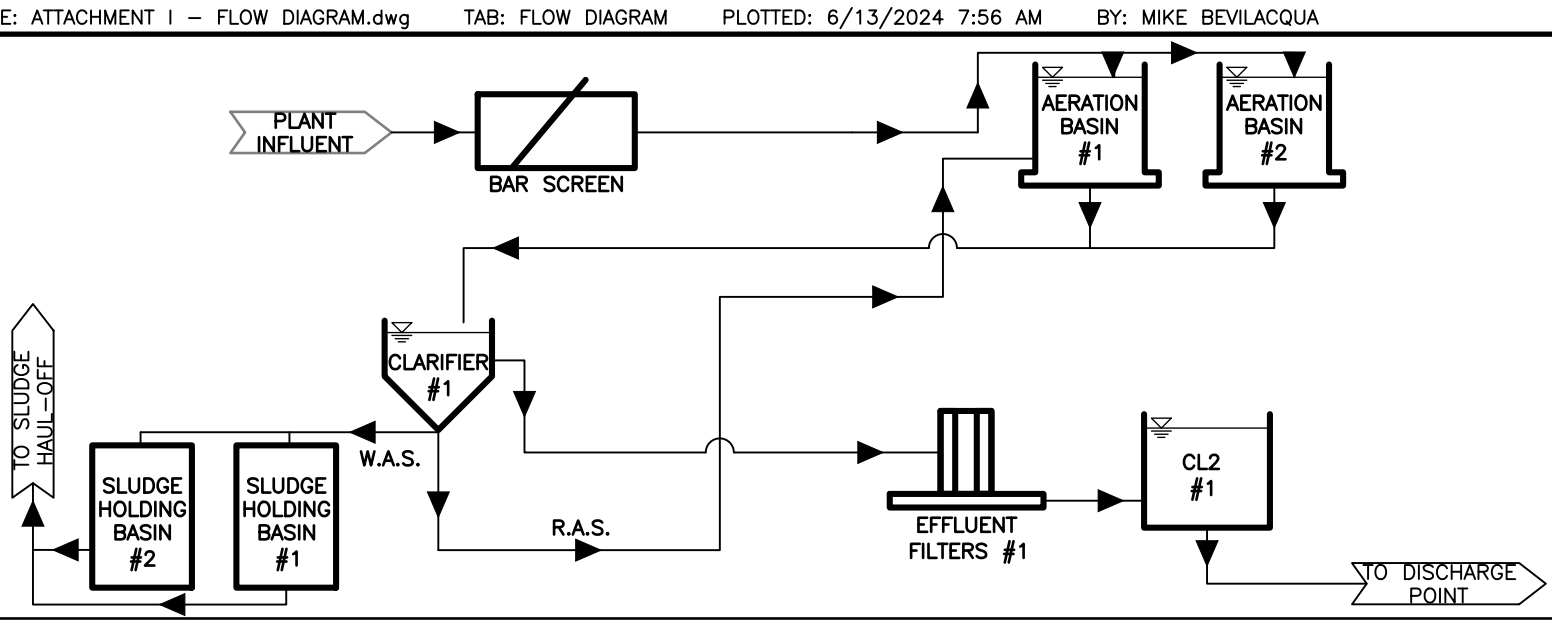
Activated Sludge Process: Bar-Screen (Headworks) ➡ Aeration Basin ➡ Clarifier ➡ Effluent Filters ➡ Chlorine Contact ➡ Dechlorination ➡ Discharge Point

Sludge Process: Clarifier ➡ Sludge Holding Basin (or RAS) ➡ TCEQ Permitted Land Application Site/Landfill

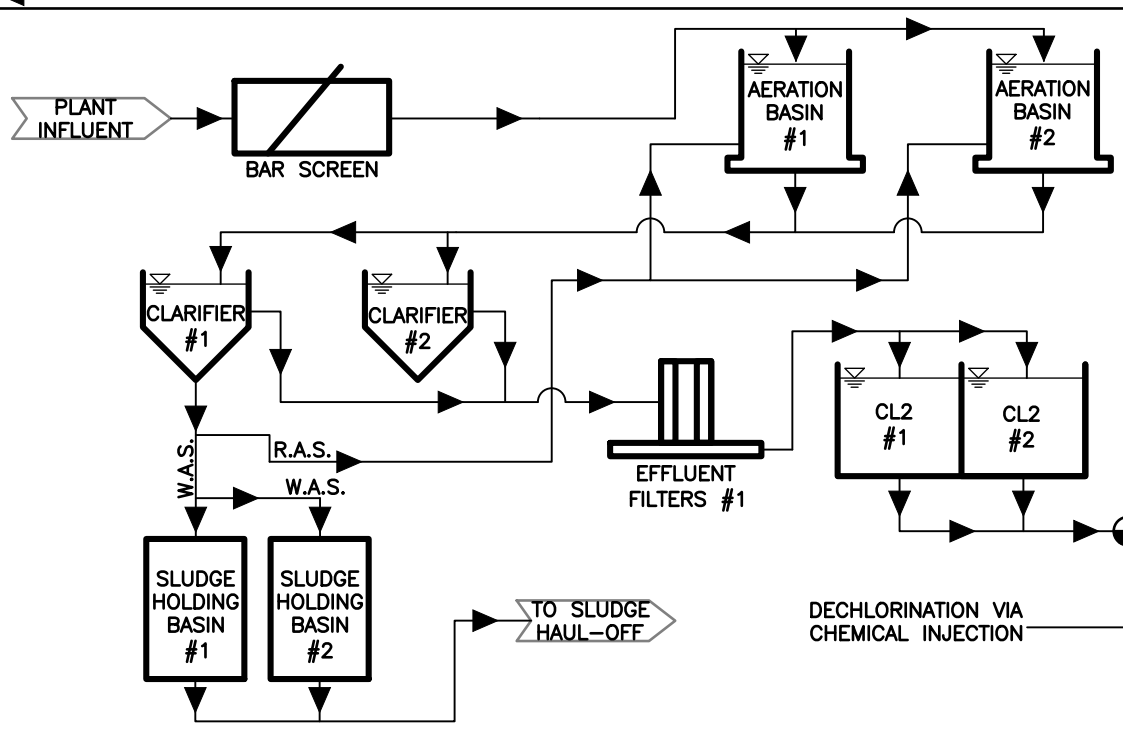
ATTACHMENT I

FLOW DIAGRAM

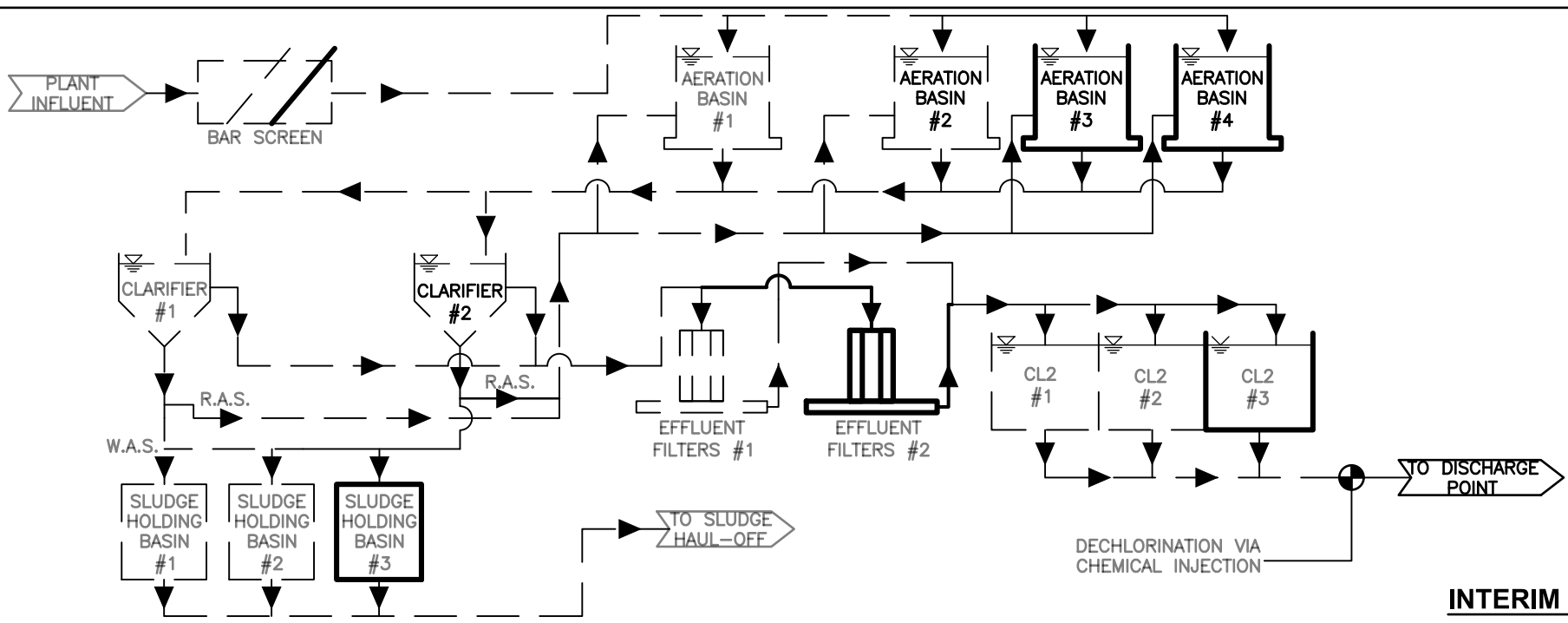
FILE: ATTACHMENT I – FLOW DIAGRAM.dwg TAB: FLOW DIAGRAM PLOTTED: 6/13/2024 7:56 AM BY: MIKE BEVILACQUA



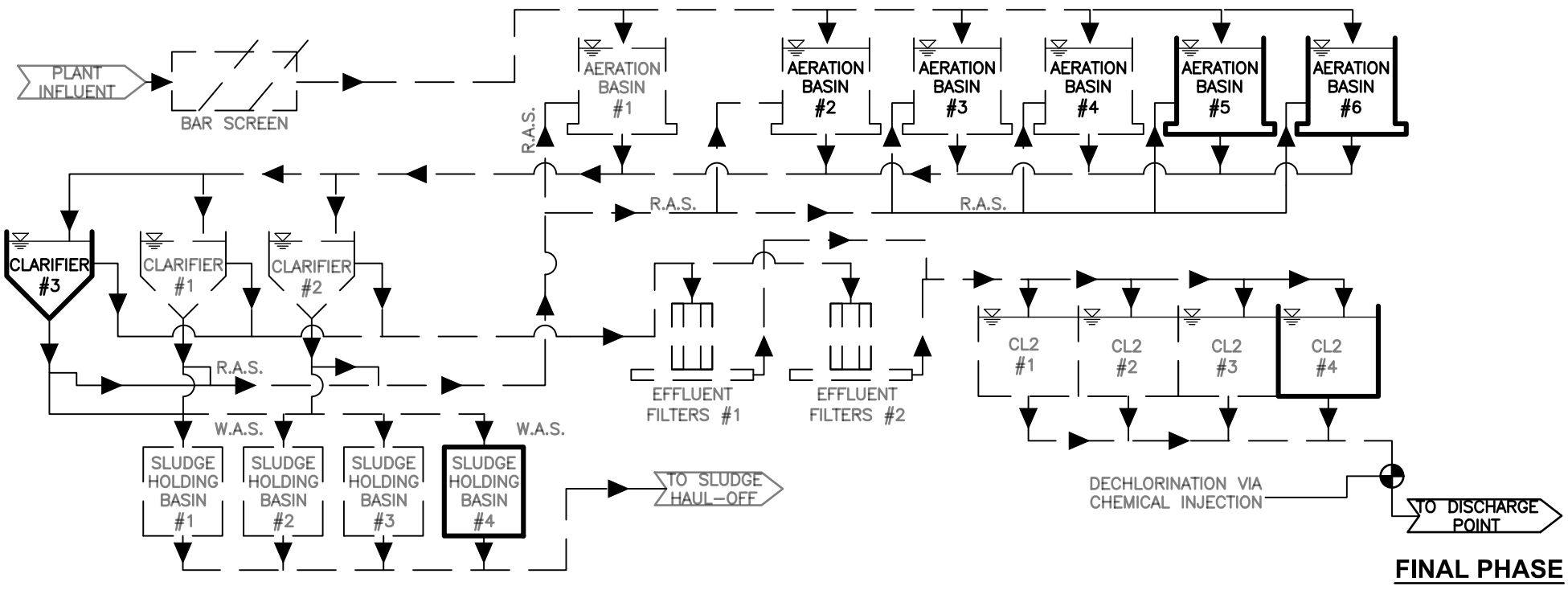
INTERIM I PHASE



INTERIM II PHASE



INTERIM III PHASE



FINAL PHASE

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301 DENALI PASS DR., SUITE 3
CEDAR PARK, TEXAS 78613
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

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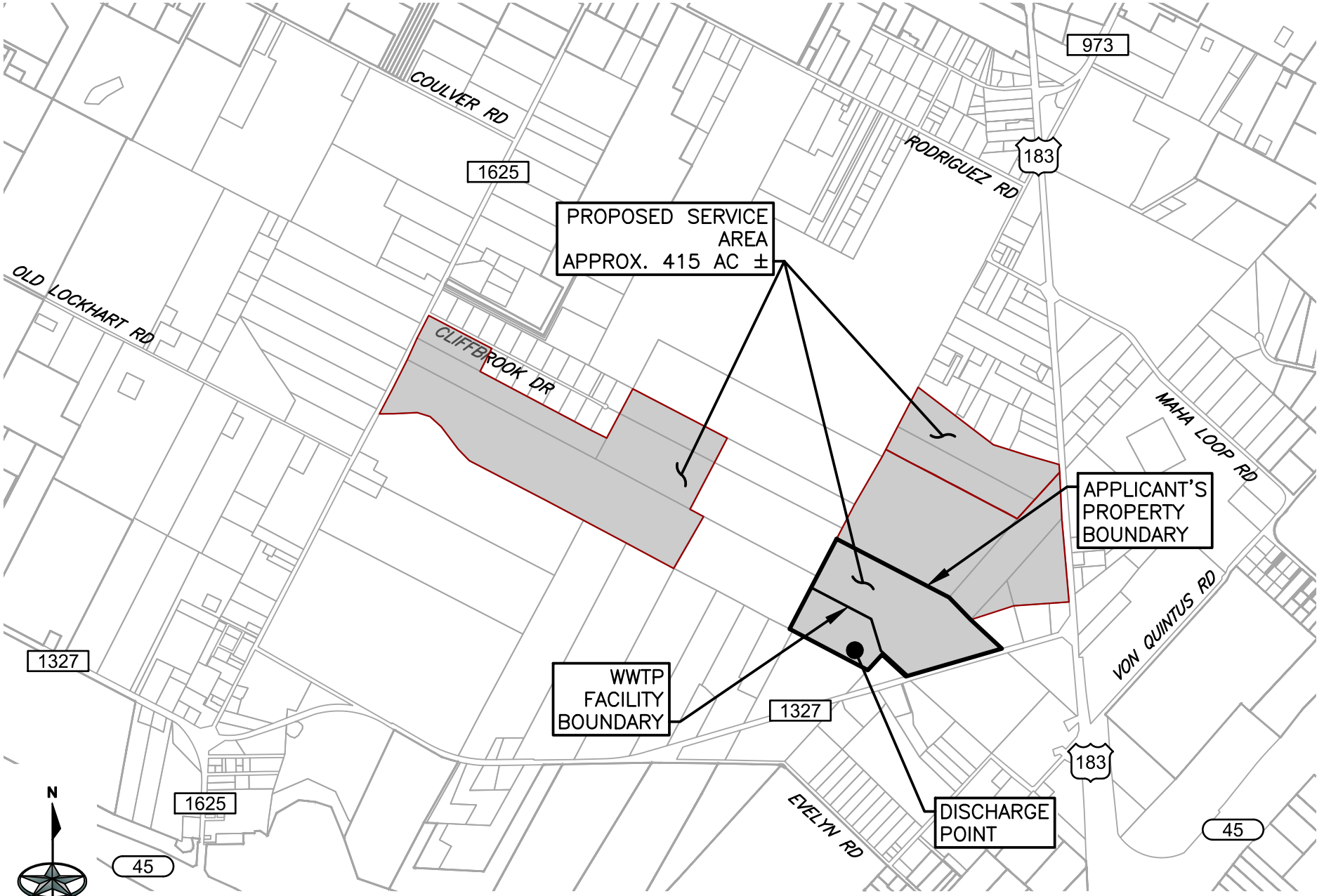
ATTACHMENT I - FLOW DIAGRAM

ATTACHMENT J

SITE DRAWING



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ATTACHMENT J - SITE DRAWING

FILE: ATTACHMENT J – SITE DRAWING.dwg TAB: ATTACHMENT J SITE DRAWING PLOTTED: 6/13/2024 8:14 AM BY: MIKE BEVILACQUA

ATTACHMENT K

DESIGN CALCULATIONS

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
SUMMARY

PARAMETERS

Anticipated Influent Flows:

Average Daily Flow:	300	gpd/connection

Treatment Description:

Conventional activated sludge process mode to treat municipal wastewater.
System to include aeration, clarifier, tertiary filtration, chlorine contact or UV, and sludge holding.

Design WWTP Influent Flows:

	Interim I	Interim II	Interim III	Final
Average Daily (gpd):	300,000	1,100,000	2,200,000	3,300,000
Peak Daily (2-Hr Peak) (gpd):	1,200,000	4,400,000	8,800,000	13,200,000

Design Influent Loading:

BOD_5 (mg/l)=	300	300	300	300
TSS (mg/l)=	300	300	300	300
NH3N (mg/l)=	35	35	35	35
Total Nitrogen (mg/l)=	70	70	70	70
Total Phosphorus (mg/l)=	10	10	10	10

Design Effluent Water Quality Parameters:

BOD_5 (mg/l)=	5	5	5	5
TSS (mg/l)=	5	5	5	5
NH3N (mg/l)=	2	2	2	2
Chorine Residual (after 20 minutes) (mg/l)=	1	1	1	1
Dissolved Oxygen (mg/l)	2	2	2	2
Total Phosphorus (mg/l)	1	1	1	1

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
SUMMARY

PROPOSED FACILITIES

	Interim I	Interim II	Interim III	Final
Process:				
Total Plant BOD5 Loading (lbs/day):	738.1	2706.3	5412.7	8119.0
TSS Loading (lbs/day):	738.1	2706.3	5412.7	8119.0
MLSS (mg/l):	3,000	3,000	3,000	3,000
Hydraulic Retention Time (days):	0.60	0.55	0.55	0.55
Aerobic Sludge Residence Time (days):	6.76	6.27	6.27	6.27
Food to Mass Ratio:	0.167	0.180	0.180	0.180
Sludge Yield (lbs/day):	664	2,436	4,871	7,307
Sludge Yield (gpd): (1.5%)	5,310	19,470	38,940	58,410
Aeration Basin:				
Max Organic Loading (lbs/day/1,000 cf):	35	35	35	35
Proposed Organic Loading (lbs/day/1,000 cf):	30.75	33.17	33.17	33.17
Minimum Required Volume for BOD (cf):	21,088	77,324	154,647	231,971
Minimum Required Volume for Nitrification (cf):	21,322	78,181	156,362	234,543
Proposed Volume (cf):	24,000	81,600	163,200	244,800

	Interim I	Interim II	Interim III	Final
Clarifier:				
Max Surface Loading at PDF (gpd/sf):	1,200	1,200	1,200	1,200
Proposed Surface Loading at PDF (gpd/sf):	995	519	1,037	1,037
Max Surface Loading at ADF (gpd/sf):	600	600	600	600
Proposed Surface Loading at ADF (gpd/sf):	249	130	259	259
Min Detention Time at PDF (hrs):	1.8	1.8	1.8	1.8
Proposed Detention Time at PDF (hrs):	2.08	3.98	1.99	1.99
Minimum Required Surface Area (sf):	1,000	3,667	7,333	11,000
Proposed Surface Area (sf):	1,206	8,482	8,482	12,723
Minimum Required Volume (cf):	12,031	44,115	88,229	132,344
Minimum Required Weir Length (ft):	60	220	440	660
Proposed Weir Length (ft):	110	440	440	660
Proposed Volume (cf):	13,873	97,546	97,546	146,320
Stilling Well Diameter (ft)	8	15	15	15
Stilling Well Velocity at PDF (ft/s)	0.037	0.039	0.077	0.116
Chlorine Contact Basin:				
Min Detention Time at PDF (min):	20	20	20	20
Detention Time Provided at PDF (min):	24.24	35.25	26.44	23.50
Minimum Required Volume (cf):	2,228.0	8,169.4	16,338.8	24,508.2
Proposed Volume (cf):	2,700.0	14,400.0	21,600.0	28,800.0
Sludge Holding Basin:				
Minimum Required Volume (cf):	10,648	39,042	78,083	117,125
Proposed Volume (cf):	17,625	61,100	91,650	122,200
Proposed Detention Time (days):	25	23	18	16
Air Supply:				
Min Air Supply - Aeration (scfm):	1,640	6,014	12,028	18,042
Min Air Supply - Digester (scfm):	319	1171	2342	3514
Min Air Supply - Air Lift Pumps (scfm):	210	700	1365	2030
Min Total Air Supply (scfm):	2,170	7,885	15,736	23,586

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
SIZING

AERATION BASIN

	Interim I	Interim II	Interim III	Final
Minimum Volume Required:	21,322 cf	78,181 cf	156,362 cf	234,543 cf
No. of Basins:	2	2	4	6
Proposed SWD:	12 ft	12 ft	12 ft	12 ft
Length (Ea. Basin):	50 ft	85 ft	85 ft	85 ft
Width (Ea. Basin):	20 ft	40 ft	40 ft	40 ft
Proposed Volume:	**24,000 cf**	**81,600 cf**	**163,200 cf**	**244,800 cf**

SLUDGE HOLDING

	Interim I	Interim II	Interim III	Final
Minimum Volume Required:	10,648 cf	39,042 cf	78,083 cf	117,125 cf
No. of Basins:	2	2	3	4
Proposed SWD:	11.75 ft	11.75 ft	11.75 ft	11.75 ft
Length (Ea. Basin):	50 ft	65 ft	65 ft	65 ft
Width (Ea. Basin):	15 ft	40 ft	40 ft	40 ft
Proposed Volume:	**17,625 cf**	**61,100 cf**	**91,650 cf**	**122,200 cf**

CLARIFIER

	Interim I	Interim II	Interim III	Final
Minimum Surface Area Required:	1,000 sf	3,667 sf	7,333 sf	11,000 sf
Minimum Volume Required:	12,031 cf	44,115 cf	88,229 cf	132,344 cf
Minimum Weir Length Required:	60 ft	220 ft	440 ft	660 ft
No. of Clarifiers:	1	2	2	3
Proposed SWD:	11.5 ft	11.5 ft	11.5 ft	11.5 ft
Proposed Diameter:	40	75	75	75
Proposed Stilling Well Diameter:	8 ft	15 ft	15 ft	15 ft
Proposed Weir Length:	110 ft	440 ft	440 ft	660 ft
Proposed Area:	**1,206 sf**	**8,482 sf**	**8,482 sf**	**12,723 sf**
Proposed Volume:	**13,873 cf**	**97,546 cf**	**97,546 cf**	**146,320 cf**

CHLORINE CONTACT

	Interim I	Interim II	Interim III	Final
Minimum Volume Required:	2228.02 cf	8169.39 cf	16338.78 cf	24508.17 cf
No. of Basins	1	2	3	4
Proposed SWD:	9 ft	9 ft	9 ft	9 ft
Width (Ea. Basin):	30 ft	40 ft	40 ft	40 ft
Length (Ea. Basin):	10 ft	20 ft	20 ft	20 ft
Total Volume:	2,700.00 cf	14,400.00 cf	21,600.00 cf	28,800.00 cf
Proposed Volume:	**2,700.00 cf**	**14,400.00 cf**	**21,600.00 cf**	**28,800.00 cf**

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM I PHASE

PARAMETERS

Influent:			*Effluent:*		
Q =	300,000	GPD	S =	5	mg/l, BOD_{5eff}
Qp_1 =	1,200,000	GPD to Headworks	TSSeff =	5	mg/l
Qp_2 =	1,200,000	GPD downstream of Infl EQ (N/A)	NH_3N =	2	mg/l
So =	300	mg/l, BOD_5infl	Chlorine Residual =	1	mg/l @ 20 min det
TSSinf =	300	mg/l	Total Phosphorus =	1	mg/l
Chemical Oxygen Demand (COD) =	545	mg/l .3-.8 (BOD/COD), used 0.55			
TKN =	70	mg/l			
NH_3N =	35	mg/l			
Organic $N_{14° C}$ =	35	mg/l			
Winter Temp. Min. =	15	°C			
Summer Temp. Max. =	29	°C			
MLSS =	3,000	mg/l, conc. Of suspended solids in aeration tank			
MLVSS =	70	% of MLSS			
MLVSS (X) =	2100	mg/l, conc. Of volatile suspended solids in aeration tank			

COEFFICIENTS

θc =	30	days, mean cell residence time
Y =	0.4	maximum yield coefficient, range: 0.3 - 0.5 (Metcalf & Eddy Table 8-10)
Y_n =	0.12	g VSS / g NH4-N, range: 0.1 - 0.15 (Metcalf & Eddy Table 8-11)
K_o =	0.5	g / m^3, range: 0.40 - 0.60 (Metcalf & Eddy Table 8-11)
k_d =	0.12	day^-1, endogenous decay coefficient, range: 0.06 - 0.2 (Metcalf & Eddy Table 8-10)
k_d =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-10)
$k_{d,\ 14°C}$ =	0.099	g/g*d
K_{dn} =	0.080	g VSS / g VSS*d, range: 0.05 - 0.15 (Metcalf & Eddy Table 8-10)
K_{dn} =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-11)
$K_{dn,\ 14°C}$ =	0.066	g/g*d
K_n =	0.740	g NH4-N / m^3, range: 0.5 - 1.0 (Metcalf & Eddy Table 8-11)
K_n =	1.053	unitless, range: 1.03 - 1.123 (Metcalf & Eddy Table 8-11)
$K_{n,\ 14°}C$ =	0.572	g / m^3
μ_{mn} =	0.750	g VSS / g VSS*d, range: 0.20 - 0.90 (Metcalf & Eddy Table 8-11)
μ_n =	1.070	unitless, range: 1.06 - 1.123 (Metcalf & Eddy Table 8-11)
$\mu_{m,\ 14°C}$ =	0.535	g /g*d
f_d =	0.150	unitless, range: 0.08 - 0.2 (Metcalf & Eddy Table 8-10)

DESIGN CALCULATIONS

A. BOD_5 Loading

$$F = \frac{8.34 \times Q \times (S_o - S)}{10^6}$$

F = **738.1** lb BOD_5 /day

B. TSS Loading

$$TSS = \frac{8.34 \times Q \times (TSS_{\text{inf}} - TSS_{eff})}{10^6}$$

TSS = **738.1** lb TSS /day

C. Micro-organism Mass in Aeration Basin

$$M_v = F \times \frac{\theta_c \times Y}{1 + (k_d \times \theta_c)}$$

Mv = **1925** lb

D. Aeration Volume

$$V = \frac{Q \times \theta_c}{X} \times \frac{Y \times (S_o - S)}{1 + (k_d \times \theta_c)}$$

Min Volume (gal): 109,937.89
Min Volume (cf): 14,697

TCEQ Max. Organic Loading: 35 lbs BOD5/day/1000 cf (TCEQ Chap. 217.154: Conventional with Nitrification, Temps 715°C)

Min Volume (cf): 21,088

Min Volume (cf): 21,088 For BOD Reduction

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM I PHASE

E. Nitrification

pH:	7.2		
DO (mg/L):	2.0	Dissolved Oxygen	
Ko:	0.5	Half-Saturation coefficient for DO (Metcalf & Eddy Table 8-11)	
Temp (°C):	15.0		
Effluent NH3 (mg/L):	2.0		
Temperature Term, Tt:	1.00		Tt=e^(0.098*(T-15))
DO Term, DOt:	0.80		DOt=DO/(Ko+DO)
pH Term, pHt:	1.00		pHt=1-0.833*(7.2-pH)
Kn:	0.40	Half-Saturation coefficient for oxidation of ammonia	Kn=10^(0.051*T-1.158)
NH3 Term, NH3t:	0.83		NH3t=NH3/(Kn+NH3)
Nitrifier Growth Rate (days^-1):	0.33		Growth Rate=0.5*Tt*pHt*DOt*NH3t
Aerobic SRT Required (days):	3.01		SRT=1/Nitrifier Growth Rate
Safety Factor:	2.0	Typical Range: 1.5 - 2.5	
Min Required Aerobic SRT (days):	**6.0**		
Minimum Aerobic Volume (cf):	**21,322.1**	**For Nitrification**	

F. Sludge Yield

	0.9	lbs Sludge / lb BOD
Sludge Yield:	664	lbs/day
Assume Percent Solids =	1.5	%
Q_{sludge} =	**5,310**	**gal/day**

G. Clarifier

Max Surface Loading:	1,200	gpd/sf at Peak Flow	(TCEQ Chap. 217.154: Activated Sludge, Secondary with
Max Surface Loading:	600	gpd/sf at Design Flow	
Min Detention Time:	1.8	hrs at Peak Flow	
Max Weir Loading:	20,000	gpd/lf at Peak Flow	
Minimum Surface Area:	**1,000**	**sf**	
Minimum Volume:	**90,000**	**gallons =**	**12031.3 cf**
Minimum Weir Length:	**60**	**lf**	

H. Return Activated Sludge

Minimum Rate:	**50%**	**of Design Flow =**	**104.2**	**gpm**	
Maximum Rate:	**100%**	**of Design Flow =**	**208.3**	**gpm**	
Provide:	**6**	**6" Air Lift Pumps or**	**3**	**8" Air Lift Pumps**	(If Air Lift Pumps Utilized)

I. Sludge Holding Basin

Max Loading:	200	lbs volatile solids per day / 1,000 cf (TCEQ Chap. 217.249.j.5)
Sludge Yield (lbs/day):	664	
Volatile Portion:	70%	
Min Basin Volume (cf):	2,325	
Minimum Detention Time:	15	days (TCEQ Chap. 217.249.j.4)
Sludge Yield (gpd):	5,310	
Min Basin Volume (cf):	10,648	
Min Required Basin Volume (cf):	**10,647.7**	

J. Chlorine Contact Basin

Minimum Detention Time:	20	minutes at Peak Flow		
Minimum Volume:	**16,666.67**	**gallons =**	**2,228.0**	**cf**

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM I PHASE

K. Aeration

1. Aeration Basins

Minimum oxygen requirement = 3,200 scf per lb BOD_5 per day @ 12' submergence and 20 deg C

Diffuser Submergence Depth (ft)	Airflow Correction Factor
8	1.82
10	1.56
12	1.00
15	0.91
18	0.73
20	0.64

Diffuser Submergence Depth = 12 ft
Correction Factor = 1.00

Minimum oxygen requirement = 1,640 scfm @ 20 deg C

2. Digester

Oxygen Requirement = 30 scfm per 1,000 ft^3

Minimum oxygen requirement = 319 scfm

3. Air Lift Pumps

Minimum air requirement = 210 scfm

4. Total

Total Air Flow Requirement = 2,170 scfm

L. Fine Screen

Bar Spacing: 1.125 in (center to center)
Average Flow Rate: 0.3 MGD
Approximate Volume of Screenings: 13 cf/MG

Anticipated Volume of Screenings: 3.9 cf per day 1.01 CY Per Week

COARSE SCREEN (BYPASS/OVERFLOW BAR SCREEN)

Influent Flow Rate

Average Influent Flow Rate:	0.30	MGD	=	208	gpm	=	0.464	cfs
Peak Influent Flow Rate:	1.20	MGD	=	833	gpm	=	1.857	cfs

Channel Geometry

Channel Width: 2.00 ft
Design Channel Flow Depth: 0.3 ft
Max. Channel Depth: 0.7 ft

Bar Rack Geometry

Bar Size: 0.625 in
Clear Space Between Bars: 0.500 in
Incline Angle: 45 degrees

No. of Bars in Rack: 22
Clear Space: 0.8541667 sf per ft of channel depth

Headloss thru Bar Screen

Channel Area (Avg): 0.6 sf
Channel Area (Max): 1.4 sf
Approach Velocity (Avg): 0.774 fps (using design channel depth)
Approach Velocity (Peak): 1.326 fps (using max. channel depth)

Bar Screen Area (Avg): 0.26 sf
Bar Screen Area (Max): 0.60 sf
Velocity Through Bars (Avg): 1.81 fps (using design channel depth)
Velocity Through Bars (Max): 3.11 fps (using max. channel depth)

$$HeadLoss = \frac{V^2 - v^2}{0.7 \times 2 \times g}$$

V= Velocity of flow through openings in rack
v= Approach velocity
g= Acceleration of gravity, 32.2

Assuming No Clogging:			*Assuming Clogging:*		
			Clogging Factor:	0.500	
Head Loss (Design):	0.0595	ft	Head Loss (Design):	0.238	ft
Head Loss (Max):	0.1749	ft	Head Loss (Max):	0.700	ft

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM II PHASE

PARAMETERS

Influent:			*Effluent:*		
Q =	1,100,000	GPD	S =	5	mg/l, BOD_{5eff}
Qp_1 =	4,400,000	GPD to Headworks	TSSeff =	5	mg/l
Qp_2 =	4,400,000	GPD downstream of Infl EQ (N/A)	NH_3N =	2	mg/l
So =	300	mg/l, BOD_5infl	Chlorine Residual =	1	mg/l @ 20 min det
TSSinf =	300	mg/l	Total Phosphorus =	1	mg/l
Chemical Oxygen Demand (COD) =	545	mg/l .3-.8 (BOD/COD), used 0.55			
TKN =	70	mg/l			
NH_3N =	35	mg/l			
Organic $N_{14°C}$ =	35	mg/l			
Winter Temp. Min. =	15	°C			
Summer Temp. Max. =	29	°C			
MLSS =	3,000	mg/l, conc. Of suspended solids in aeration tank			
MLVSS =	70	% of MLSS			
MLVSS (X) =	2100	mg/l, conc. Of volatile suspended solids in aeration tank			

COEFFICIENTS

θc =	30	days, mean cell residence time
Y =	0.4	maximum yield coefficient, range: 0.3 - 0.5 (Metcalf & Eddy Table 8-10)
Y_n =	0.12	g VSS / g NH4-N, range: 0.1 - 0.15 (Metcalf & Eddy Table 8-11)
K_o =	0.5	g / m^3, range: 0.40 - 0.60 (Metcalf & Eddy Table 8-11)
k_d =	0.12	day^-1, endogenous decay coefficient, range: 0.06 - 0.2 (Metcalf & Eddy Table 8-10)
k_d =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-10)
$k_{d,\ 14°C}$ =	0.099	g/g*d
K_{dn} =	0.080	g VSS / g VSS*d, range: 0.05 - 0.15 (Metcalf & Eddy Table 8-10)
K_{dn} =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-11)
$K_{dn,\ 14°C}$ =	0.066	g/g*d
K_n =	0.740	g NH4-N / m^3, range: 0.5 - 1.0 (Metcalf & Eddy Table 8-11)
K_n =	1.053	unitless, range: 1.03 - 1.123 (Metcalf & Eddy Table 8-11)
$K_{n,\ 14°}C$ =	0.572	g / m^3
μ_{mn} =	0.750	g VSS / g VSS*d, range: 0.20 - 0.90 (Metcalf & Eddy Table 8-11)
μ_n =	1.070	unitless, range: 1.06 - 1.123 (Metcalf & Eddy Table 8-11)
$\mu_{m,\ 14°C}$ =	0.535	g /g*d
f_d =	0.150	unitless, range: 0.08 - 0.2 (Metcalf & Eddy Table 8-10)

DESIGN CALCULATIONS

A. BOD_5 Loading

$$F = \frac{8.34 \times Q \times (S_o - S)}{10^6}$$

F = **2706.3** lb BOD_5 /day

B. TSS Loading

$$TSS = \frac{8.34 \times Q \times (TSS_{\text{inf}} - TSS_{eff})}{10^6}$$

TSS = **2706.3** lb TSS /day

C. Micro-organism Mass in Aeration Basin

$$M_v = F \times \frac{\theta_c \times Y}{1 + (k_d \times \theta_c)}$$

Mv = **7060** lb

D. Aeration Volume

$$V = \frac{Q \times \theta_c}{X} \times \frac{Y \times (S_o - S)}{1 + (k_d \times \theta_c)}$$

Min Volume (gal): 403,105.59
Min Volume (cf): 53,888

TCEQ Max. Organic Loading: 35 lbs BOD5/day/1000 cf (TCEQ Chap. 217.154: Conventional with Nitrification, Temps 715°C)

Min Volume (cf): 77,324

Min Volume (cf): 77,324 For BOD Reduction

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM II PHASE

E. Nitrification

pH:	7.2		
DO (mg/L):	2.0	Dissolved Oxygen	
Ko:	0.5	Half-Saturation coefficient for DO (Metcalf & Eddy Table 8-11)	
Temp (°C):	15.0		
Effluent NH3 (mg/L):	2.0		
Temperature Term, Tt:	1.00		Tt=e^(0.098*(T-15))
DO Term, DOt:	0.80		DOt=DO/(Ko+DO)
pH Term, pHt:	1.00		pHt=1-0.833*(7.2-pH)
Kn:	0.40	Half-Saturation coefficient for oxidation of ammonia	Kn=10^(0.051*T-1.158)
NH3 Term, NH3t:	0.83		NH3t=NH3/(Kn+NH3)
Nitrifier Growth Rate (days^-1):	0.33		Growth Rate=0.5*Tt*pHt*DOt*NH3t
Aerobic SRT Required (days):	3.01		SRT=1/Nitrifier Growth Rate
Safety Factor:	2.0	Typical Range: 1.5 - 2.5	
Min Required Aerobic SRT (days):	**6.0**		
Minimum Aerobic Volume (cf):	**78,181.1**	**For Nitrification**	

F. Sludge Yield

	0.9	lbs Sludge / lb BOD
Sludge Yield:	2,436	lbs/day
Assume Percent Solids =	1.5	%
Q_{sludge} =	**19,470**	**gal/day**

G. Clarifier

Max Surface Loading:	1,200	gpd/sf at Peak Flow	(TCEQ Chap. 217.154: Activated Sludge, Secondary with
Max Surface Loading:	600	gpd/sf at Design Flow	
Min Detention Time:	1.8	hrs at Peak Flow	
Max Weir Loading:	20,000	gpd/lf at Peak Flow	
Minimum Surface Area:	**3,667**	**sf**	
Minimum Volume:	**330,000**	**gallons =**	**44114.7 cf**
Minimum Weir Length:	**220**	**lf**	

H. Return Activated Sludge

Minimum Rate:	**50%**	**of Design Flow =**	**381.9**	**gpm**	
Maximum Rate:	**100%**	**of Design Flow =**	**763.9**	**gpm**	
Provide:	**20**	**6" Air Lift Pumps or**	**11**	**8" Air Lift Pumps**	(If Air Lift Pumps Utilized)

I. Sludge Holding Basin

Max Loading:	200	lbs volatile solids per day / 1,000 cf (TCEQ Chap. 217.249.j.5)
Sludge Yield (lbs/day):	2,436	
Volatile Portion:	70%	
Min Basin Volume (cf):	8,525	
Minimum Detention Time:	15	days (TCEQ Chap. 217.249.j.4)
Sludge Yield (gpd):	19,470	
Min Basin Volume (cf):	39,042	
Min Required Basin Volume (cf):	**39,041.5**	

J. Chlorine Contact Basin

Minimum Detention Time:	20	minutes at Peak Flow		
Minimum Volume:	**61,111.11**	**gallons =**	**8,169.4**	**cf**

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM II PHASE

K. Aeration

1. Aeration Basins

Minimum oxygen requirement = 3,200 scf per lb BOD_5 per day @ 12' submergence and 20 deg C

Diffuser Submergence Depth (ft)	Airflow Correction Factor
8	1.82
10	1.56
12	1.00
15	0.91
18	0.73
20	0.64

Diffuser Submergence Depth = 12 ft
Correction Factor = 1.00

Minimum oxygen requirement = 6,014 scfm @ 20 deg C

2. Digester

Oxygen Requirement = 30 scfm per 1,000 ft^3

Minimum oxygen requirement = 1171 scfm

3. Air Lift Pumps

Minimum air requirement = 700 scfm

4. Total

Total Air Flow Requirement = 7,885 scfm

L. Fine Screen

Bar Spacing: 1.125 in (center to center)
Average Flow Rate: 1.1 MGD
Approximate Volume of Screenings: 13 cf/MG

Anticipated Volume of Screenings: 14.3 cf per day 3.71 CY Per Week

COARSE SCREEN (BYPASS/OVERFLOW BAR SCREEN)

Influent Flow Rate

Average Influent Flow Rate:	1.10	MGD	=	764	gpm	=	1.702	cfs
Peak Influent Flow Rate:	4.40	MGD	=	3056	gpm	=	6.808	cfs

Channel Geometry

Channel Width: 3.00 ft
Design Channel Flow Depth: 0.7 ft
Max. Channel Depth: 2.1 ft

Bar Rack Geometry

Bar Size: 0.625 in
Clear Space Between Bars: 0.500 in
Incline Angle: 45 degrees

No. of Bars in Rack: 32
Clear Space: 1.3333333 sf per ft of channel depth

Headloss thru Bar Screen

Channel Area (Avg): 2.1 sf
Channel Area (Max): 6.3 sf
Approach Velocity (Avg): 0.810 fps (using design channel depth)
Approach Velocity (Peak): 1.081 fps (using max. channel depth)

Bar Screen Area (Avg): 0.93 sf
Bar Screen Area (Max): 2.80 sf
Velocity Through Bars (Avg): 1.82 fps (using design channel depth)
Velocity Through Bars (Max): 2.43 fps (using max. channel depth)

$$HeadLoss = \frac{V^2 - v^2}{0.7 \times 2 \times g}$$

V= Velocity of flow through openings in rack
v= Approach velocity
g= Acceleration of gravity, 32.2

Assuming No Clogging:			*Assuming Clogging:*		
			Clogging Factor:	0.500	
Head Loss (Design):	0.0592	ft	Head Loss (Design):	0.237	ft
Head Loss (Max):	0.1052	ft	Head Loss (Max):	0.421	ft

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM III PHASE

PARAMETERS

Influent:			*Effluent:*		
Q =	2,200,000	GPD	S =	5	mg/l, BOD_{5eff}
Qp_1 =	8,800,000	GPD to Headworks	TSSeff =	5	mg/l
Qp_2 =	8,800,000	GPD downstream of Infl EQ (N/A)	NH_3N =	2	mg/l
So =	300	mg/l, BOD_5infl	Chlorine Residual =	1	mg/l @ 20 min det
TSSinf =	300	mg/l	Total Phosphorus =	1	mg/l
Chemical Oxygen Demand (COD) =	545	mg/l .3-.8 (BOD/COD), used 0.55			
TKN =	70	mg/l			
NH_3N =	35	mg/l			
Organic $N_{14° C}$ =	35	mg/l			
Winter Temp. Min. =	15	°C			
Summer Temp. Max. =	29	°C			
MLSS =	3,000	mg/l, conc. Of suspended solids in aeration tank			
MLVSS =	70	% of MLSS			
MLVSS (X) =	2100	mg/l, conc. Of volatile suspended solids in aeration tank			

COEFFICIENTS

θc =	30	days, mean cell residence time
Y =	0.4	maximum yield coefficient, range: 0.3 - 0.5 (Metcalf & Eddy Table 8-10)
Y_n =	0.12	g VSS / g NH4-N, range: 0.1 - 0.15 (Metcalf & Eddy Table 8-11)
K_o =	0.5	g / m^3, range: 0.40 - 0.60 (Metcalf & Eddy Table 8-11)
k_d =	0.12	day^-1, endogenous decay coefficient, range: 0.06 - 0.2 (Metcalf & Eddy Table 8-10)
k_d =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-10)
$k_{d,\ 14°C}$ =	0.099	g/g*d
K_{dn} =	0.080	g VSS / g VSS*d, range: 0.05 - 0.15 (Metcalf & Eddy Table 8-10)
K_{dn} =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-11)
$K_{dn,\ 14°C}$ =	0.066	g/g*d
K_n =	0.740	g NH4-N / m^3, range: 0.5 - 1.0 (Metcalf & Eddy Table 8-11)
K_n =	1.053	unitless, range: 1.03 - 1.123 (Metcalf & Eddy Table 8-11)
$K_{n,\ 14°C}$ =	0.572	g / m^3
μ_{mn} =	0.750	g VSS / g VSS*d, range: 0.20 - 0.90 (Metcalf & Eddy Table 8-11)
μ_n =	1.070	unitless, range: 1.06 - 1.123 (Metcalf & Eddy Table 8-11)
$\mu_{m,\ 14°C}$ =	0.535	g /g*d
f_d =	0.150	unitless, range: 0.08 - 0.2 (Metcalf & Eddy Table 8-10)

DESIGN CALCULATIONS

A. BOD_5 Loading

$$F = \frac{8.34 \times Q \times (S_o - S)}{10^6}$$

F = **5412.7** lb BOD_5 /day

B. TSS Loading

$$TSS = \frac{8.34 \times Q \times (TSS_{\text{inf}} - TSS_{eff})}{10^6}$$

TSS = **5412.7** lb TSS /day

C. Micro-organism Mass in Aeration Basin

$$M_v = F \times \frac{\theta_c \times Y}{1 + (k_d \times \theta_c)}$$

Mv = **14120** lb

D. Aeration Volume

$$V = \frac{Q \times \theta_c}{X} \times \frac{Y \times (S_o - S)}{1 + (k_d \times \theta_c)}$$

Min Volume (gal): 806,211.18
Min Volume (cf): 107,775

TCEQ Max. Organic Loading: 35 lbs BOD5/day/1000 cf (TCEQ Chap. 217.154: Conventional with Nitrification, Temps 715°C)

Min Volume (cf): 154,647

Min Volume (cf): 154,647 For BOD Reduction

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM III PHASE

E. Nitrification

pH:	7.2	
DO (mg/L):	2.0	Dissolved Oxygen
Ko:	0.5	Half-Saturation coefficient for DO (Metcalf & Eddy Table 8-11)
Temp (°C):	15.0	
Effluent NH3 (mg/L):	2.0	

Temperature Term, Tt:	1.00		Tt=e^(0.098*(T-15))
DO Term, DOt:	0.80		DOt=DO/(Ko+DO)
pH Term, pHt:	1.00		pHt=1-0.833*(7.2-pH)
Kn:	0.40	Half-Saturation coefficient for oxidation of ammonia	Kn=10^(0.051*T-1.158)
NH3 Term, NH3t:	0.83		NH3t=NH3/(Kn+NH3)
Nitrifier Growth Rate (days^-1):	0.33		Growth Rate=0.5*Tt*pHt*DOt*NH3t
Aerobic SRT Required (days):	3.01		SRT=1/Nitrifier Growth Rate

Safety Factor:	2.0	Typical Range: 1.5 - 2.5
Min Required Aerobic SRT (days):	**6.0**	
Minimum Aerobic Volume (cf):	**156,362.2**	**For Nitrification**

F. Sludge Yield

	0.9	lbs Sludge / lb BOD
Sludge Yield:	4,871	lbs/day
Assume Percent Solids =	1.5	%
Q_{sludge} =	**38,940**	**gal/day**

G. Clarifier

Max Surface Loading:	1,200	gpd/sf at Peak Flow	(TCEQ Chap. 217.154: Activated Sludge, Secondary with Nitrification)
Max Surface Loading:	600	gpd/sf at Design Flow	
Min Detention Time:	1.8	hrs at Peak Flow	
Max Weir Loading:	20,000	gpd/lf at Peak Flow	
Minimum Surface Area:	**7,333**	**sf**	
Minimum Volume:	**660,000**	**gallons =**	**88229.4 cf**
Minimum Weir Length:	**440**	**lf**	

H. Return Activated Sludge

Minimum Rate:	**50%**	**of Design Flow =**	**763.9**	**gpm**	
Maximum Rate:	**100%**	**of Design Flow =**	**1,527.8**	**gpm**	
Provide:	**39**	**6" Air Lift Pumps or**	**22**	**8" Air Lift Pumps**	(If Air Lift Pumps Utilized)

I. Sludge Holding Basin

Max Loading:	200	lbs volatile solids per day / 1,000 cf (TCEQ Chap. 217.249.j.5)
Sludge Yield (lbs/day):	4,871	
Volatile Portion:	70%	
Min Basin Volume (cf):	17,050	
Minimum Detention Time:	15	days (TCEQ Chap. 217.249.j.4)
Sludge Yield (gpd):	38,940	
Min Basin Volume (cf):	78,083	
Min Required Basin Volume (cf):	**78,083.0**	

J. Chlorine Contact Basin

Minimum Detention Time:	20	minutes at Peak Flow		
Minimum Volume:	**########**	**gallons =**	**16,338.8**	**cf**

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
INTERIM III PHASE

K. Aeration

1. Aeration Basins

Minimum oxygen requirement = 3,200 scf per lb BOD_5 per day @ 12' submergence and 20 deg C

Diffuser Submergence Depth (ft)	Airflow Correction Factor
8	1.82
10	1.56
12	1.00
15	0.91
18	0.73
20	0.64

Diffuser Submergence Depth = 12 ft
Correction Factor = 1.00

Minimum oxygen requirement = 12,028 scfm @ 20 deg C

2. Digester

Oxygen Requirement = 30 scfm per 1,000 ft^3

Minimum oxygen requirement = 2342 scfm

3. Air Lift Pumps

Minimum air requirement = 1365 scfm

4. Total

Total Air Flow Requirement = 15,736 scfm

L. Fine Screen

Bar Spacing: 1.125 in (center to center)
Average Flow Rate: 2.2 MGD
Approximate Volume of Screenings: 13 cf/MG

Anticipated Volume of Screenings: 28.6 cf per day 7.41 CY Per Week

COARSE SCREEN (BYPASS/OVERFLOW BAR SCREEN)

Influent Flow Rate

Average Influent Flow Rate:	2.20	MGD	=	1528	gpm	=	3.404	cfs
Peak Influent Flow Rate:	8.80	MGD	=	6111	gpm	=	13.616	cfs

Channel Geometry

Channel Width: 3.00 ft
Design Channel Flow Depth: 1.3 ft
Max. Channel Depth: 3.9 ft

Bar Rack Geometry

Bar Size: 0.625 in
Clear Space Between Bars: 0.500 in
Incline Angle: 45 degrees

No. of Bars in Rack: 32
Clear Space: 1.3333333 sf per ft of channel depth

Headloss thru Bar Screen

Channel Area (Avg): 3.9 sf
Channel Area (Max): 11.7 sf
Approach Velocity (Avg): 0.873 fps (using design channel depth)
Approach Velocity (Peak): 1.164 fps (using max. channel depth)

Bar Screen Area (Avg): 1.73 sf
Bar Screen Area (Max): 5.20 sf
Velocity Through Bars (Avg): 1.96 fps (using design channel depth)
Velocity Through Bars (Max): 2.62 fps (using max. channel depth)

$$HeadLoss = \frac{V^2 - v^2}{0.7 \times 2 \times g}$$

V= Velocity of flow through openings in rack
v= Approach velocity
g= Acceleration of gravity, 32.2

Assuming No Clogging:			*Assuming Clogging:*		
			Clogging Factor:	0.500	
Head Loss (Design):	0.0686	ft	Head Loss (Design):	0.275	ft
Head Loss (Max):	0.1220	ft	Head Loss (Max):	0.488	ft

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
FINAL PHASE

PARAMETERS

Influent:			*Effluent:*		
Q =	3,300,000	GPD	S =	5	mg/l, BOD_{5eff}
Qp_1 =	13,200,000	GPD to Headworks	TSSeff =	5	mg/l
Qp_2 =	13,200,000	GPD downstream of Infl EQ (N/A)	NH_3N =	2	mg/l
So =	300	mg/l, BOD_5infl	Chlorine Residual =	1	mg/l @ 20 min det
TSSinf =	300	mg/l	Total Phosphorus =	1	mg/l
Chemical Oxygen Demand (COD) =	545	mg/l .3-.8 (BOD/COD), used 0.55			
TKN =	70	mg/l			
NH_3N =	35	mg/l			
Organic $N_{14° C}$ =	35	mg/l			
Winter Temp. Min. =	15	°C			
Summer Temp. Max. =	29	°C			
MLSS =	3,000	mg/l, conc. Of suspended solids in aeration tank			
MLVSS =	70	% of MLSS			
MLVSS (X) =	2100	mg/l, conc. Of volatile suspended solids in aeration tank			

COEFFICIENTS

θc =	30	days, mean cell residence time
Y =	0.4	maximum yield coefficient, range: 0.3 - 0.5 (Metcalf & Eddy Table 8-10)
Y_n =	0.12	g VSS / g NH4-N, range: 0.1 - 0.15 (Metcalf & Eddy Table 8-11)
K_o =	0.5	g / m^3, range: 0.40 - 0.60 (Metcalf & Eddy Table 8-11)
k_d =	0.12	day^-1, endogenous decay coefficient, range: 0.06 - 0.2 (Metcalf & Eddy Table 8-10)
k_d =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-10)
$k_{d,\ 14°C}$ =	0.099	g/g*d
K_{dn} =	0.080	g VSS / g VSS*d, range: 0.05 - 0.15 (Metcalf & Eddy Table 8-10)
K_{dn} =	1.04	unitless, range: 1.03 - 1.08 (Metcalf & Eddy Table 8-11)
$K_{dn,\ 14°C}$ =	0.066	g/g*d
K_n =	0.740	g NH4-N / m^3, range: 0.5 - 1.0 (Metcalf & Eddy Table 8-11)
K_n =	1.053	unitless, range: 1.03 - 1.123 (Metcalf & Eddy Table 8-11)
$K_{n,\ 14}$-C =	0.572	g / m^3
μ_{mn} =	0.750	g VSS / g VSS*d, range: 0.20 - 0.90 (Metcalf & Eddy Table 8-11)
μ_n =	1.070	unitless, range: 1.06 - 1.123 (Metcalf & Eddy Table 8-11)
$\mu_{m,\ 14°C}$ =	0.535	g /g*d
f_d =	0.150	unitless, range: 0.08 - 0.2 (Metcalf & Eddy Table 8-10)

DESIGN CALCULATIONS

A. BOD_5 Loading

$$F = \frac{8.34 \times Q \times (S_o - S)}{10^6}$$

F = **8119.0** lb BOD_5 /day

B. TSS Loading

$$TSS = \frac{8.34 \times Q \times (TSS_{\text{inf}} - TSS_{eff})}{10^6}$$

TSS = **8119.0** lb TSS /day

C. Micro-organism Mass in Aeration Basin

$$M_v = F \times \frac{\theta_c \times Y}{1 + (k_d \times \theta_c)}$$

Mv = **21180** lb

D. Aeration Volume

$$V = \frac{Q \times \theta_c}{X} \times \frac{Y \times (S_o - S)}{1 + (k_d \times \theta_c)}$$

Min Volume (gal): #########
Min Volume (cf): 161,663

TCEQ Max. Organic Loading: 35 lbs BOD5/day/1000 cf (TCEQ Chap. 217.154: Conventional with Nitrification, Temps 715°C)

Min Volume (cf): 231,971

Min Volume (cf): 231,971 For BOD Reduction

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
FINAL PHASE

E. Nitrification

pH:	7.2		
DO (mg/L):	2.0	Dissolved Oxygen	
Ko:	0.5	Half-Saturation coefficient for DO (Metcalf & Eddy Table 8-11)	
Temp (°C):	15.0		
Effluent NH3 (mg/L):	2.0		
Temperature Term, Tt:	1.00		Tt=e^(0.098*(T-15))
DO Term, DOt:	0.80		DOt=DO/(Ko+DO)
pH Term, pHt:	1.00		pHt=1-0.833*(7.2-pH)
Kn:	0.40	Half-Saturation coefficient for oxidation of ammonia	Kn=10^(0.051*T-1.158)
NH3 Term, NH3t:	0.83		NH3t=NH3/(Kn+NH3)
Nitrifier Growth Rate (days^-1):	0.33		Growth Rate=0.5*Tt*pHt*DOt*NH3t
Aerobic SRT Required (days):	3.01		SRT=1/Nitrifier Growth Rate
Safety Factor:	2.0	Typical Range: 1.5 - 2.5	
Min Required Aerobic SRT (days):	**6.0**		
Minimum Aerobic Volume (cf):	**234,543.3**	**For Nitrification**	

F. Sludge Yield

	0.9	lbs Sludge / lb BOD
Sludge Yield:	7,307	lbs/day
Assume Percent Solids =	1.5	%
Q_{sludge} =	**58,410**	**gal/day**

G. Clarifier

Max Surface Loading:	1,200	gpd/sf at Peak Flow	(TCEQ Chap. 217.154: Activated Sludge, Secondary with Nitrification)
Max Surface Loading:	600	gpd/sf at Design Flow	
Min Detention Time:	1.8	hrs at Peak Flow	
Max Weir Loading:	20,000	gpd/lf at Peak Flow	
Minimum Surface Area:	**11,000**	**sf**	
Minimum Volume:	**990,000**	**gallons =**	**132344.1 cf**
Minimum Weir Length:	**660**	**lf**	

H. Return Activated Sludge

Minimum Rate:	**50%**	**of Design Flow =**	**1,145.8**	**gpm**	
Maximum Rate:	**100%**	**of Design Flow =**	**2,291.7**	**gpm**	
Provide:	**58**	**6" Air Lift Pumps or**	**33**	**8" Air Lift Pumps**	(If Air Lift Pumps Utilized)

I. Sludge Holding Basin

Max Loading:	200	lbs volatile solids per day / 1,000 cf (TCEQ Chap. 217.249.j.5)
Sludge Yield (lbs/day):	7,307	
Volatile Portion:	70%	
Min Basin Volume (cf):	25,575	
Minimum Detention Time:	15	days (TCEQ Chap. 217.249.j.4)
Sludge Yield (gpd):	58,410	
Min Basin Volume (cf):	117,125	
Min Required Basin Volume (cf):	**117,124.5**	

J. Chlorine Contact Basin

Minimum Detention Time:	20	minutes at Peak Flow		
Minimum Volume:	**########**	**gallons =**	**24,508.2**	**cf**

MUSTANG RIDGE
WATER RECLAMATION FACILITY
ATTACHMENT K - PRELIMINARY DESIGN CALCULATIONS
FINAL PHASE

K. Aeration

1. Aeration Basins

Minimum oxygen requirement = 3,200 scf per lb BOD_5 per day @ 12' submergence and 20 deg C

Diffuser Submergence Depth (ft)	Airflow Correction Factor
8	1.82
10	1.56
12	1.00
15	0.91
18	0.73
20	0.64

Diffuser Submergence Depth = 12 ft
Correction Factor = 1.00

Minimum oxygen requirement = 18,042 scfm @ 20 deg C

2. Digester

Oxygen Requirement = 30 scfm per 1,000 ft^3

Minimum oxygen requirement = 3514 scfm

3. Air Lift Pumps

Minimum air requirement = 2030 scfm

4. Total

Total Air Flow Requirement = 23,586 scfm

L. Fine Screen

Bar Spacing: 1.125 in (center to center)
Average Flow Rate: 3.3 MGD
Approximate Volume of Screenings: 13 cf/MG

Anticipated Volume of Screenings: 42.9 cf per day 11.12 CY Per Week

COARSE SCREEN (BYPASS/OVERFLOW BAR SCREEN)

Influent Flow Rate

Average Influent Flow Rate:	3.30	MGD	=	2292	gpm	=	5.106	cfs
Peak Influent Flow Rate:	13.20	MGD	=	9167	gpm	=	20.423	cfs

Channel Geometry

Channel Width: 3.00 ft
Design Channel Flow Depth: 2.0 ft
Max. Channel Depth: 6.0 ft

Bar Rack Geometry

Bar Size: 0.625 in
Clear Space Between Bars: 0.500 in
Incline Angle: 45 degrees

No. of Bars in Rack: 32
Clear Space: 1.3333333 sf per ft of channel depth

Headloss thru Bar Screen

Channel Area (Avg): 6.0 sf
Channel Area (Max): 18.0 sf
Approach Velocity (Avg): 0.851 fps (using design channel depth)
Approach Velocity (Peak): 1.135 fps (using max. channel depth)

Bar Screen Area (Avg): 2.67 sf
Bar Screen Area (Max): 8.00 sf
Velocity Through Bars (Avg): 1.91 fps (using design channel depth)
Velocity Through Bars (Max): 2.55 fps (using max. channel depth)

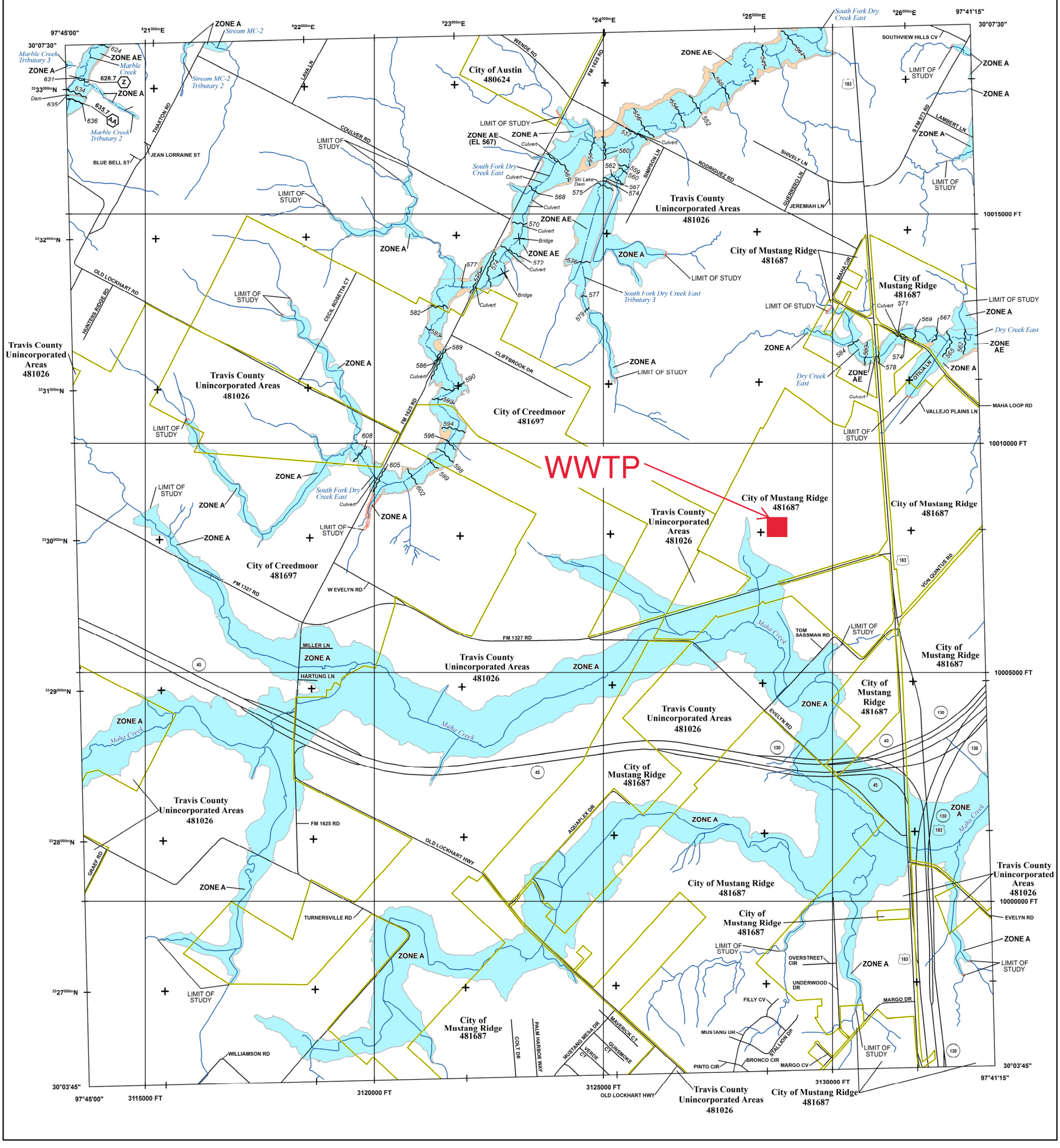
$$HeadLoss = \frac{V^2 - v^2}{0.7 \times 2 \times g}$$

V= Velocity of flow through openings in rack
v= Approach velocity
g= Acceleration of gravity, 32.2

Assuming No Clogging:			*Assuming Clogging:*		
			Clogging Factor:	0.500	
Head Loss (Design):	0.0653	ft	Head Loss (Design):	0.261	ft
Head Loss (Max):	0.1160	ft	Head Loss (Max):	0.464	ft

ATTACHMENT L

FEMA FIRM MAP



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTPS://MSC.FEMA.GOV

	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
	Future Conditions 1% Annual Chance Flood Hazard *Zone X*
OTHER AREAS OF FLOOD HAZARD	Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
	Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X*
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	E 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	513 Base Flood Elevation Line (BFE)
OTHER FEATURES	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from digital data obtained from City of Austin dated 2016, NFHL dated 2014, and CAPCOG dated 2014 and 2016.

SCALE

N

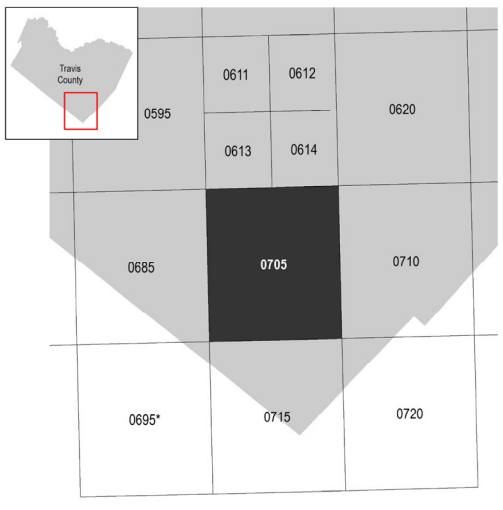
Map Projection:
State Plane Lambert Conformal Conic, Texas Central Zone FIPS 4203; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

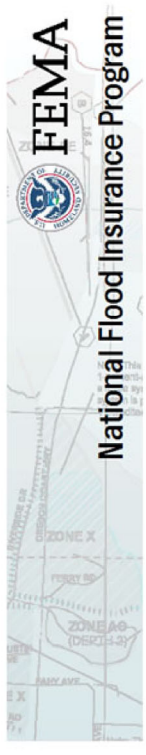
0 1,000 2,000 4,000 feet

0 250 500 1,000 meters

PANEL LOCATOR



*PANEL NOT PRINTED



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

TRAVIS COUNTY, TEXAS
and Incorporated Areas

PANEL 705 OF 730

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUSTIN, CITY OF	480624	0705	K
CREEDMOOR, CITY OF	481697	0705	K
MUSTANG RIDGE, CITY OF	481687	0705	K
TRAVIS COUNTY	481026	0705	K

VERSION NUMBER
2.3.3.3

MAP NUMBER
48453C0705K

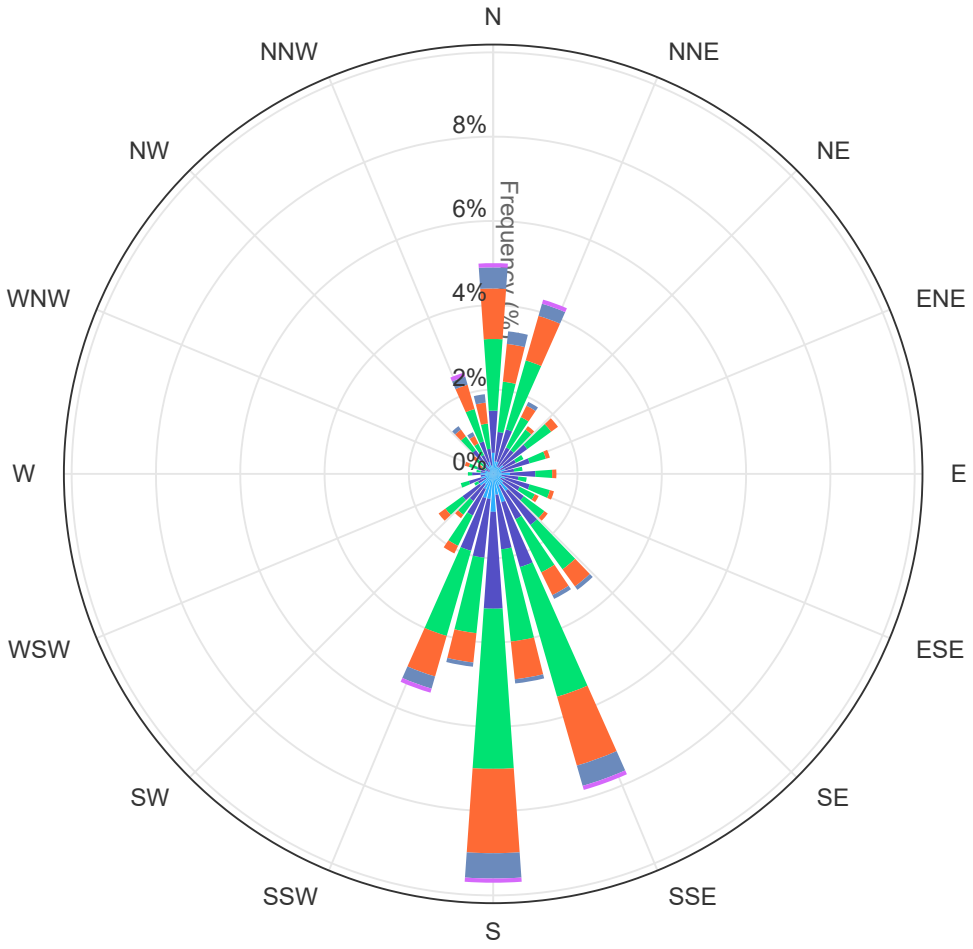
MAP REVISED
JANUARY 22, 2020

ATTACHMENT M

WIND ROSE

AUSTIN BERGSTROM AP (TX) Wind Rose

Oct. 1, 1942 - June 13, 2024
Sub-Interval: Jan. 1 - Dec. 31, 0 - 23



Wind Speed (mph)

- 1.3 - 4
- 4 - 8
- 8 - 13
- 13 - 19
- 19 - 25
- 25 - 32
- 32 - 39
- 39 - 47
- 47 -

Click and drag to zoom

ATTACHMENT N

SEWAGE SLUDGE MANAGEMENT PLAN

MUSTANG RIDGE
ATTACHMENT N - SLUDGE MANAGEMENT PLAN
INTERIM I PHASE

Dimensions and Capacities of Sludge Holding

Average Anticipated Sludge Yield:	5,310	gal/day		
TCEQ Minimum Sludge Retention Time:	15	days		
SRT from Treatment Basins:	6.76	days		
Minimum SRT needed in Sludge Holding:	8.24	days		
Prop Sludge Holdign Basins:	131,844	gal =	17,625	cubic feet
Proposed Sludge Holding SRT:	24.83	days		
Total Proposed Sludge Retention Time:	31.59	days		

Solids Generated

BOD_5 Removal	Influent concentration =	300	mg/l
	Effluent concentration =	5	mg/l
	Net removal =	295	mg/l

MLSS Operating Range =	3,000	mg/l
BOD_5 removed	738	lbs/day
Dry Sludge Produced	664	lbs/day
Wet Sludge Produced*	44,285	lbs/day
Wet Sludge Produced*	5,310	gal/day

*Assuming Percent Solids in Sludge: 1.5 % Solids

Length of Sustainded Peak (days)	Peaking Factor	Waste Sludge Mass Loading (lbs/day)	Total Sustained Loading (lb)
1	2.4	1,594	1,594
2	2.1	1,395	2,790
3	1.9	1,262	3,786
4	1.8	1,196	4,783
5	1.7	1,129	5,646
7	1.65	1,096	7,672
14	1.32	877	12,276
15	1.3	864	12,953
365	1	664	242,463

Process:
Conventional activated sludge process will be utilized. Sludge will be wasted from the clarifiers to the sludge holding basin. Sludge will be hauled by a licensed hauler to a TCEQ registered disposal site.

MUSTANG RIDGE
ATTACHMENT N - SLUDGE MANAGEMENT PLAN
INTERIM II PHASE

Dimensions and Capacities of Sludge Holding

Average Anticipated Sludge Yield:	19,470	gal/day		
TCEQ Minimum Sludge Retention Time:	15	days		
SRT from Treatment Basins:	6.27	days		
Minimum SRT needed in Sludge Holding:	8.72975	days		
Prop Sludge Holding Basins:	457,059	gal =	61,100	cubic feet
Proposed Sludge Holding SRT:	23.48	days		
Total Proposed Sludge Retention Time:	29.75	days		

Solids Generated

BOD_5 Removal	Influent concentration =	300	mg/l
	Effluent concentration =	5	mg/l
	Net removal =	295	mg/l

MLSS Operating Range =	3,000	mg/l
BOD_5 removed	2,706	lbs/day
Dry Sludge Produced	2,436	lbs/day
Wet Sludge Produced*	162,380	lbs/day
Wet Sludge Produced*	19,470	gal/day

*Assuming Percent Solids in Sludge: 1.5 % Solids

Length of Sustainded Peak (days)	Peaking Factor	Waste Sludge Mass Loading (lbs/day)	Total Sustained Loading (lb)
1	2.4	5,846	5,846
2	2.1	5,115	10,230
3	1.9	4,628	13,883
4	1.8	4,384	17,537
5	1.7	4,141	20,703
7	1.65	4,019	28,132
14	1.32	3,215	45,012
15	1.3	3,166	47,496
365	1	2,436	889,029

Process:
Conventional activated sludge process will be utilized. Sludge will be wasted from the clarifiers to the sludge holding basin. Sludge will be hauled by a licensed hauler to a TCEQ registered disposal site.

MUSTANG RIDGE
ATTACHMENT N - SLUDGE MANAGEMENT PLAN
INTERIM III PHASE

Dimensions and Capacities of Sludge Holding

Average Anticipated Sludge Yield:	38,940	gal/day		
TCEQ Minimum Sludge Retention Time:	15	days		
SRT from Treatment Basins:	6.27	days		
Minimum SRT needed in Sludge Holding:	8.73	days		
Prop Sludge Holding Basins:	685,588	gal =	91,650	cubic feet
Proposed Sludge Holding SRT:	17.61	days		
Total Proposed Sludge Retention Time:	23.88	days		

Solids Generated

BOD_5 Removal	Influent concentration =	300	mg/l
	Effluent concentration =	5	mg/l
	Net removal =	295	mg/l

MLSS Operating Range =	3,000	mg/l
BOD_5 removed	5,413	lbs/day
Dry Sludge Produced	4,871	lbs/day
Wet Sludge Produced*	324,760	lbs/day
Wet Sludge Produced*	38,940	gal/day

*Assuming Percent Solids in Sludge: 1.50 % Solids

Length of Sustainded Peak (days)	Peaking Factor	Waste Sludge Mass Loading (lbs/day)	Total Sustained Loading (lb)
1	2.4	11,691	11,691
2	2.1	10,230	20,460
3	1.9	9,256	27,767
4	1.8	8,769	35,074
5	1.7	8,281	41,407
7	1.65	8,038	56,265
14	1.32	6,430	90,023
15	1.3	6,333	94,992
365	1	4,871	1,778,059

Process:
Conventional activated sludge process will be utilized. Sludge will be wasted from the clarifiers to the sludge holding basin. Sludge will be hauled by a licensed hauler to a TCEQ registered disposal site.

MUSTANG RIDGE
ATTACHMENT N - SLUDGE MANAGEMENT PLAN
FINAL PHASE

Dimensions and Capacities of Sludge Holding

Average Anticipated Sludge Yield:	58,410	gal/day		
TCEQ Minimum Sludge Retention Time:	15	days		
SRT from Treatment Basins:	6.27	days		
Minimum SRT needed in Sludge Holding:	8.73	days		
Prop Sludge Holding Basins:	914,117	gal =	122,200	cubic feet
Proposed Sludge Holding SRT:	15.65	days		
Total Proposed Sludge Retention Time:	21.92	days		

Solids Generated

BOD_5 Removal	Influent concentration =	300	mg/l
	Effluent concentration =	5	mg/l
	Net removal =	295	mg/l

MLSS Operating Range =	3,000	mg/l
BOD_5 removed	8,119	lbs/day
Dry Sludge Produced	7,307	lbs/day
Wet Sludge Produced*	487,139	lbs/day
Wet Sludge Produced*	58,410	gal/day

*Assuming Percent Solids in Sludge: 1.50 % Solids

Length of Sustainded Peak (days)	Peaking Factor	Waste Sludge Mass Loading (lbs/day)	Total Sustained Loading (lb)
1	2.4	17,537	17,537
2	2.1	15,345	30,690
3	1.9	13,883	41,650
4	1.8	13,153	52,611
5	1.7	12,422	62,110
7	1.65	12,057	84,397
14	1.32	9,645	135,035
15	1.3	9,499	142,488
365	1	7,307	2,667,088

Process:
Conventional activated sludge process will be utilized. Sludge will be wasted from the clarifiers to the sludge holding basin. Sludge will be hauled by a licensed hauler to a TCEQ registered disposal site.

MUSTANG RIDGE
ATTACHMENT N - SLUDGE MANAGEMENT PLAN
FINAL PHASE
SUMMARY

SOLIDS GENERATED & REMOVAL SUMMARY TABLE

	Interim Phase 1 - 0.30 MGD				Interim Phase II - 1.1 MGD				Interim III - 2.2 MGD				Final Phase - 3.3 MGD			
Percent of Phase Flow:	100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%	100%	75%	50%	25%
Dry Sludge (lbs/Day)	664	498	332	166	2,436	1,827	1,218	609	4,871	3,654	2,436	1,218	7,307	5,480	3,654	1,827
Wet Sludge (lbs/Day)*	44,285	33,214	22,143	11,071	162,380	121,785	81,190	40,595	324,760	243,570	162,380	81,190	487,139	365,355	243,570	121,785
Wet Sludge generated and to be removed (gal/Day)*	5,310	3,983	2,655	1,328	19,470	14,603	9,735	4,868	38,940	29,205	19,470	9,735	58,410	43,808	29,205	14,603

* Assumes 1.5% Solids

Sludge Management Summary

MLSS Operating Range
(design and actual flow): 3000 to 2100 mg/l

Solids Removal Procedure:

- Solids will be removed by wasting from the clarifier to the sludge holding basin.

- After minimum SRT is reached and sludge provisions in the permit are met, sludge will be hauled from the plant by a license hauler to a permitted facility.

- All removal shall be in accordance with the approved permit and TAC 312.

Solids Removal Schedule:

Removal schedule is highly variable based on operations of the plant but will generally be remove as needed after minimum sludge retention time is reached, sludge provisions in the permit are met, and to maintain an appropriate solids inventory. Typical removal schedule is 17 to 25 days.

Disposal Site Information:

Hauler: Sheridan Environmental LLC, License #24220

Site: Walker Aero Environmental, Permit #2310

ATTACHMENT O

FLOW PROJECTIONS

Attachment O – Flow Projections

Mustang Ridge WRF

The Mustang Ridge Water Reclamation Facility (the WRF) is proposing to serve approximately 10,900 Living Unit Equivalents (LUE's) of high-density residential development. The proposed service area consists of three (3) tracts totaling 415-acres as summarized below.

Mustang Ridge Service Area and Flow Summary

Tract	Area (acres)	Projected LUE's to be Served	Flow per LUE (gpd/LUE)	Projected Max Flow (gpd)
1	193	5000	300	1,500,000
2	49	1400	300	420,000
3	173	4500	300	1,350,000
TOTAL:	***415***	***10,900***		***3,270,000***

The projected yearly LUE and flow connections are provided below.

Mustang Ridge WRF Yearly LUE and Flow Projection

Year	LUEs Connected	Cumulative LUE's Connected	Max Monthly Flow (gpd)	WWTP Phase
2026	400	400	120,000	Interim I
2027	500	900	270,000	Interim I
2028	800	1700	510,000	Interim II
2029	900	2600	780,000	Interim II
2030	1000	3600	1,080,000	Interim II
2031	1200	4800	1,440,000	Interim III
2032	1200	6000	1,800,000	Interim III
2033	1200	7200	2,160,000	Interim III
2034	1000	8200	2,460,000	Final
2035	800	9000	2,700,000	Final
2036	700	9700	2,910,000	Final
2037	600	10300	3,090,000	Final
2038	600	10900	3,270,000	Final

ATTACHMENT P

NEARBY WWTP CORRESPONDENCE AND EXHIBITS

ATTACHMENT P - NEARBY WWTP LIST

NEARBY WWTP WITHIN 3-MILES SUMMARY

Permit #	Current Permit Holder	Final Phase Flow (MGD)
WQ0015750001	South 9 LLC	0.039
WQ0015958001	Gateway Oasis V LLC	0.300
WQ0015810001	Crossroads 10445 LP	0.010
WQ0016484001	Clay Partners-Mustang Ridge Land 1 LP	0.020
WQ0015981001	Camino Real Utility Company, LLC	0.150
WQ0015822001	Travis County MUD No. 26	0.180
WQ0016106001	Camino Real Utility Company, LLC	0.455
WQ0016376001	45 Williamson LLC	0.750
WQ0015948001	Continental Homes of Texas	0.200
WQ0016302001	Wright Road 1327 LLC	0.040


WQ0015750001
South 9 LLC
WQ0015958001
Gateway Oasis
V LLC
WQ0016302001
Wright Road
1327 LLC
Current
Mustang Ridge
Location
WQ0015905001
WQ0015810001
Crossroads
10445 LP
Proposed MR
location with this
amendment
WQ0016484001
Clay Partners-
Mustang Ridge
Land #1 LP
WQ0015822001
Travis County MUD No. 26
(previously MRC Utility Co LLC)
WQ0016106001
Camino Real
Utility Company
LLC (previously
Creedmoor
MUD)
WQ0015981001
Camino Real Utility Company
LLC (previously Buda 347
WWTP LLC)
WQ0016376001
45 Williamson
LLC
WQ0015948001
Continental
Homes of Texas
WQ0016020001
Davaus Three LP
(Outside the 3-Mile boundary)

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Postage	$0.68
Total Postage and Fees	$8.73

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City, State, ZIP+4®: Houston, TX 77055

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☐ Adult Signature Restricted Delivery	$
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City, State, ZIP+4®: Arlington, TX 76011

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☐ Adult Signature Restricted Delivery	$
Postage	$0.68
Total Postage and Fees	$8.73

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City, State, ZIP+4®: Austin, TX 78731

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☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.68
Total Postage and Fees	$8.73

0613 26

Postmark Here

CEDAR PARK TX 78613 JUN 12 2024

06/12/2024

Sent To: Gateway Oasis V LLC
Street and Apt. No., or PO Box No.: 2800 Niagara Lane North
City, State, ZIP+4®: Plymouth, MN 55447

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0900 5497 29

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

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

Austin, TX 78731

OFFICIAL USE

Certified Mail Fee	$4.40
Extra Services & Fees (check box, add fee as appropriate)	$3.65
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.68
Total Postage and Fees	$8.73

0613 26

Postmark Here

CEDAR PARK TX 78613

06/12/2024

Sent To: Travis County MUD 26
Street and Apt. No., or PO Box No.: 4301 Bull Creek Rd, Suite 150
City, State, ZIP+4®: Austin, TX 78731

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0900 5497 36

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

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

San Marcos, TX 78666

OFFICIAL USE

Certified Mail Fee	$4.40
Extra Services & Fees (check box, add fee as appropriate)	$3.65
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.68
Total Postage and Fees	$8.73

0613 26

Postmark Here

CEDAR PARK TX 78613 JUN 12 2024

06/12/2024

Sent To: South 9 LLC
Street and Apt. No., or PO Box No.: 1010 Mountain View Dr
City, State, ZIP+4®: San Marcos, TX 78666

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0900 5497 12

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

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

San Francisco, CA 94115

OFFICIAL USE

Certified Mail Fee	$4.40
Extra Services & Fees (check box, add fee as appropriate)	$3.65
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.68
Total Postage and Fees	$8.73

0613 26

Postmark Here

CEDAR PARK TX 78613

06/12/2024

Sent To: Wright Road 1327 LLC
Street and Apt. No., or PO Box No.: 2040 Webster Street
City, State, ZIP+4®: San Francisco, CA 94115

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

45 Williamson LLC
300 Bowie Street
Suite 106A
Austin, TX 78703

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.3 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0016376001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Camino Real Utility Company, LLC
P.O. Box 701201
San Antonio, TX 78270

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015981001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Camino Real Utility Company, LLC
P.O. Box 701201
San Antonio, TX 78270

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0016106001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Clay Partners – Mustang Ridge Land 1 LP
1244 N. Post Oak Road
Suite 200
Houston, TX 77055

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0016484001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Continental Homes of Texas, LP
1361 Horton Circle
Arlington, TX 76011

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015948001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Crossroads 10445 LP
7801 N. Capital of Texas Highway
Suite 390
Austin, TX 78731

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015810001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Gateway Oasis V LLC
2800 Niagara Lane North
Plymouth, MN 55447

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015958001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

South 9 LLC
1010 Mountain View Drive
San Marcos, TX 78666

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015750001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Travis County MUD 26
4301 Bull Creek Road
Suite 150
Austin, TX 78731

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0015822001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

June 12, 2024

Wright Road 1327 LLC
2040 Webster Street
San Francisco, CA 94115

RE: Wastewater Service and
Proposed TPDES Facility WQ0015905001 (Mustang Ridge, LLC)

To Whom It May Concern:

We are currently working on an application to amend our existing wastewater treatment facility discharge permit from an ultimate capacity of 1.1 million gallons per day (MGD) to 3.5 MGD in Travis County. TCEQ requires us to contact entities with a permitted plant or collection system within three (3) miles of our site. Your permit WQ0016302001 is within 3 miles of our proposed facility. Please let us know if you are willing to and/or have the extra capacity in your facilities to accommodate this additional flow.

Please respond in writing to Mike Bevilacqua at the address in the header of this letter or e-mail a copy of your response to mbevilacqua@baxterwoodman.com. Thank you in advance for your prompt attention regarding this matter.

Respectfully submitted,

Michael E. Bevilacqua, P.E.

ATTACHMENT Q

PLAIN LANGUAGE SUMMARIES

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary 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 as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their 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 the applicant 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.

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
Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Mustang Ridge, LLC (CN605791656) proposes to operate the Mustang Ridge Water Reclamation Facility (RN111063335), an activated sludge process facility. The facility will be located at approximately 0.70 miles west of the intersection of FM 1327 and Highway 183, in Creedmoor, Travis County, Texas 78747. This application is for a major amendment to relocate the discharge point from its current location in the existing permit, relocate the WWTP to a new location from its current location in the existing permit, and to increase the treatment and disposal capacity from 1.1 MGD to 3.3 MGD.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Deman ($CBOD_5$), Total Suspended Solids (TSS), Ammonia Nitrogen (NH_3-N), Phosphorus (P), pH, and Escherichia Coli. Domestic wastewater will be treated by using an activated sludge process and the treatment units include a bar screen, aeration basins, secondary clarifiers, chlorine contact basins, sludge holding basins, and tertiary filters.

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.

Mustang Ridge, LLC (CN605791656) propone operar la instalacion de tratamiento de aguas residuals de Mustang Ridge (RN111063335, un instalacion do proceso de lodos activados. La instalación estará ubicada en aproximadamente 0,70 millas al oeste de la interseccion de FM 1327 y autopista 183, en la ciudad de Creedmoor, Condado de Travis, Texas 78747. Esta solicitud es para una enmienda importante para reubicar el punto de descarga desde su ubicación actual en el permiso existente, reubicar la tratamiento de aguas residuales a una nueva ubicación desde su ubicación actual en el permiso existente y aumentar la capacidad de tratamiento y disposición de 1.1 MGD a 3.3 MGD.

Se espera que las descargas de la instalación contengan demanda bioquimica de oxigeno carbonoso de cinco dias ($CBOD_5$), y Solidos total suspendidos (TSS), y Nitrogeno Amoniaco (NH_3-N), y Fosforo (P), y Escherichia coli. Aquas residuals domesticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluyen una criba de barras, tanques de aireacion, clarificadores secundarios, taneques de contacto de cloro, tanques de retencion de lodos y filtros terciarios.

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

Individual Industrial Wastewater 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 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.

ATTACHMENT R

PUBLIC INVOLVEMENT PLAN FORM

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.

All boxes are not checked in Section 2, therefore a PIP is not required.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office ☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

ATTACHMENT S

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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: Mustang Ridge, LLC

   Permit No. WQ00 15905001 EPA ID No. TX 0140473

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

   Approximately 0.70 miles west of the intersection of Farm-to-Market Road 1327 & Highway 183 in Creedmoor, Travis County, TX

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

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

First and Last Name: Shawn Breedlove

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

Title: Manager

Mailing Address: 3939 Bee Cave Road, Suite C-100

City, State, Zip Code: Austin, TX 78746

Phone No.: 512-328-1184 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: ibreedlove@icloud.com

2. List the county in which the facility is located: Travis
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 discharge location is located approximately 0.62 miles west of the US Highway 183 and FM 1327 intersection in Creedmoor, TX. The Discharge rout is from the plant site to a man-made ditch, thence to an unnamed tributary, thence to Maha Creek (Unclassified Segment 1434F), thence to Cedar Creek (Unclassified Segment #1434B), thence to Colorado River above La Grange (Classified Segment #1434).

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):

The proposed construction is anticipated to impact approximately 10 acres. Existing vegetation and brush are anticipated to be removed. The depth of excavation is anticipated to be a maximum of 15-feet. Cave and/or other karst features are not known to be present on site.

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

The existing site is undeveloped with natural vegetation. It appears the land has been used for farming and grazing.

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

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

No existing buildings or structures are present on the property. Proposed start of construction is 06/2025.

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

The history of the property is not known other than it appears based on site visits and historical imagery. It appears the site has been used for farming and/or grazing. The architect and builder are not known at this time.

Leah Whallon

From: Mike Bevilacqua <mbevilacqua@baxterwoodman.com>
Sent: Monday, July 8, 2024 9:40 AM
To: Leah Whallon
Cc: Andy Bilger (atbilger@icloud.com)
Subject: RE: Application to Amend Permit No. WQ0015905001; Mustang Ridge, LLC; Mustang Ridge WRF
Attachments: TCEQ.WQ0015905001 Response To Admin Comments #1.2024.07.08.pdf; 09 - Attachment D - Affected Landowners List & Map.pdf; Mustang Ridge LLC WQ0015905001_Mailing Labels.docx; Spanish NORI.WQ0015905001.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Leah,

Attached is our response to the 6/27/2024 comments. Our response letter, affected landowners list and map, mailing labels, and Spanish NORI are attached. Let me know if I need to send hard copies to your office.

Thanks

Michael E. Bevilacqua, P.E.
Senior Project Manager

Green Civil Design
A Baxter & Woodman Company
Direct: 737-358-8103
Cell: 512-568-9974
301 Denali Pass, Suite #3
Cedar Park, TX 78613
TBPELS Registration No. F-21783

From: Leah Whallon <Leah.Whallon@Tceq.Texas.Gov>
Sent: Thursday, June 27, 2024 1:52 PM
To: Mike Bevilacqua <mbevilacqua@baxterwoodman.com>
Cc: Andy Bilger (atbilger@icloud.com) <atbilger@icloud.com>
Subject: Application to Amend Permit No. WQ0015905001; Mustang Ridge, LLC; Mustang Ridge WRF

Good Afternoon,

Please see the attached Notice of Deficiency letter dated June 27, 2024 requesting additional information needed to declare the application administratively complete. Please send the complete response by July 11, 2024.

Please let me know if you have any questions.

Thank you,

Leah Whallon
Texas Commission on Environmental Quality
Water Quality Division
512-239-0084
leah.whallon@tceq.texas.gov

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

Green Civil Design
a BAXTER & WOODMAN company
301 Denali Pass, Suite #3, Cedar Park, Texas 78613 • baxterwoodman.com • Texas Registered Engineering Firm F-21783

July 8, 2024

Leah Whallon
Texas Commission on Environmental Quality
Applications Review and Processing Team (MC 148)
Water Quality Division
P.O. Box 13087
Austin, Texas 78711-3087

Re: Permit No. WQ0015905001 (EPA I.D. No. TX0140473)
Mustang Ridge, LLC
CN605791656, RN111063335
Response to Admin Review Comments #1

Leah Wallon,

We have received your administrative review comments dated 6/27/2024 for the above referenced application. A summary of the comments is provided below with our response in italics.

1. Receipt of the application fee could not be confirmed. Please provide proof of payment of the application fee.
   - *The application fee and payment submittal form were mailed to TCEQ per the mailing address on the payment form. Please let us know if has not been received.*

2. The affected landowner map properties labeled as 1, 2, 11, 12, 13 and 19 are owned by the applicant. The applicant cannot be their own affected landowner. Please provide an updated map, list, and mailing labels.
   - *The updated affected landowners map, list, and mailing labels are attached. The exhibit has been revised to bold/thicken the property lines owned by the applicant, with adjacent tracts in a lighter gray. The property lines are shown based on Travis County Appraisal District parcel map. Affected landowners 35 thru 46 have been added as those now include properties bordering all the land owned by the applicant.*

3. Please review a portion of the NORI and indicate if it contains any errors or omissions.
   - *We have reviewed the portion of the NORI and take no exceptions.*

4. Provide a translated Spanish NORI using the attached template.
   - *The Spanish NORI is attached. A word document was also e-mailed.*

If you have any questions, or need additional information, please do not hesitate to contact me. My address and phone number are listed above, and my email is mbevilacqua@baxterwoodman.com.

Sincerely,
Green Civil Design, LLC

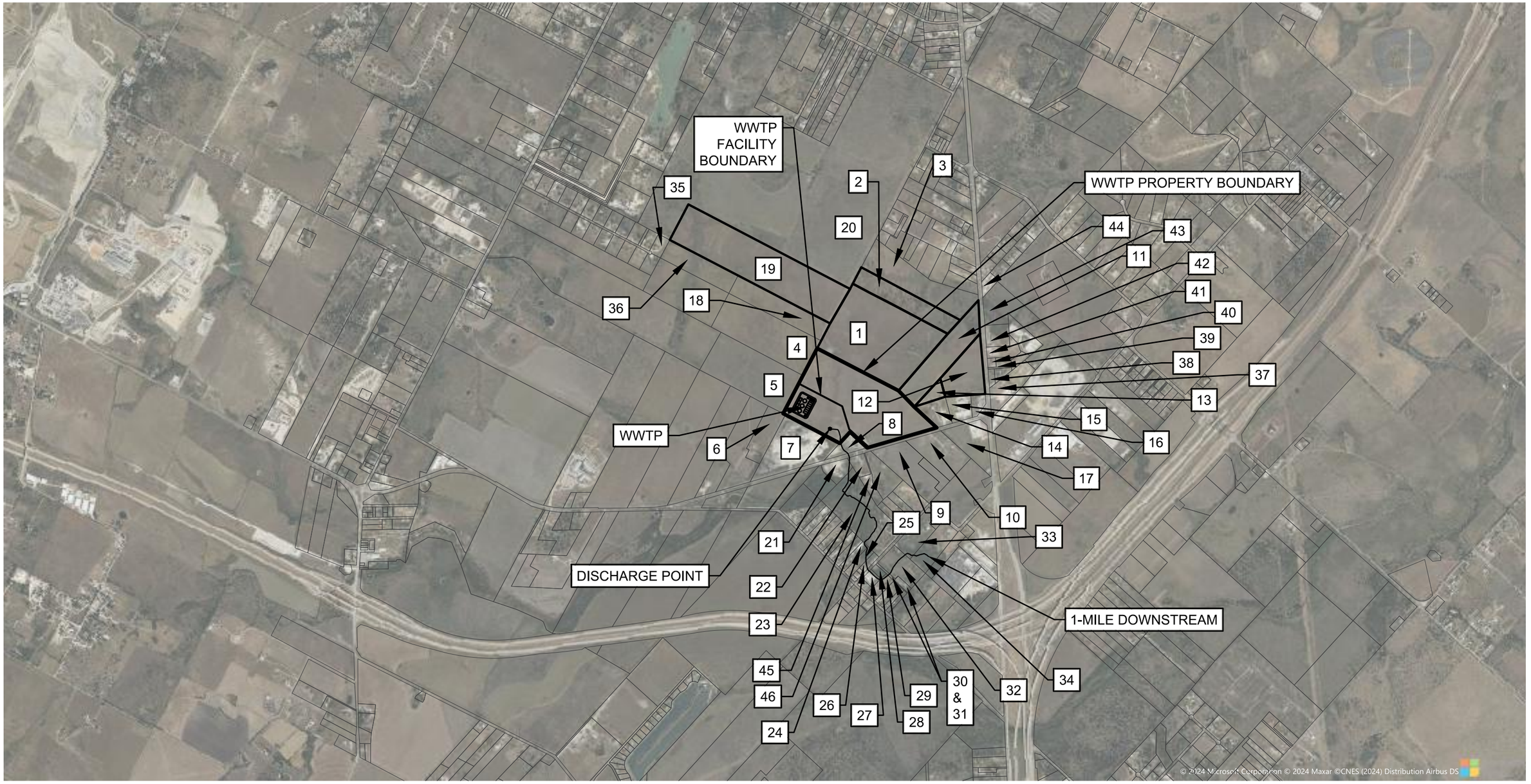
Michael E. Bevilacqua, P.E.

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF
Attachment D - Affected Landowners List

NUMBER	OWNER NAME	MAILING ADDRESS
1	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
2	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
3	CHARLOTTE STALLINGS	2059 JOSHUA DRIVE SARASOTA FL 34240
4	DC SOUTH FORK LLC	3939 BEE CAVE ROAD SUITE C100 WEST LAKE HILLS TX 78746
5	WILLIAM E AND CLAIRE E SELMAN	4747 E FM 20 LOCKHART TX 78644
6	WILLIAM E AND CLAIRE E SELMAN	4747 E FM 20 LOCKHART TX 78644
7	ASPHALT INC LLC DBA LONE STAR PAVING	PO BOX 200608 AUSTIN TX 78720
8	JULIO AND ISABEL TORRES	11509 CARL ROAD CREEDMOOR TX 78610
9	CLAY PARTNERS-MUSTANG RIDGE LAND #1 LP	PO BOX 37109 HOUSTON TX 77237
10	CLAY PARTNERS-MUSTANG RIDGE LAND #1 LP	PO BOX 37109 HOUSTON TX 77237
11	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
12	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
13	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
14	LEE O BOX	1717 S CHADBOURNE STREET SAN ANGELO TX 76903
15	SOUTHSIDE STORAGE INC	400 JERRYS LANE BUDA TX 78610
16	SHAKIL BUSINESS INC	10050 US HIGHWAY 183 SOUTH SUITE A AUSTIN TX 78747
17	CLIFFORD GRAEF	303 LEISUREWOODS DRIVE BUDA TX 78610
18	DC SOUTH FORK LLC	3939 BEE CAVE ROAD SUITE C100 WEST LAKE HILLS TX 78746
19	MUSTANG RIDGE LLC	3939 BEE CAVE ROAD SUITE C100 AUSTIN TX 78746
20	GATEWAY OASIS V LLC	2800 NIAGARA LANE NORTH PLYMOUTH MN 55447
21	MANUEL ALEJANDRO AND ELVIRA GONZALEZ-FREGOZO	6609 FM 1327 AUSTIN TX 78747
22	EDUARDO NAVARRO JR	11478 OLD LOCKHART ROAD CREEDMOOR TX 78610
23	DONNA L STERLING	11248 TOM SASSMAN ROAD AUSTIN TX 78747

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF
Attachment D - Affected Landowners List

NUMBER	OWNER NAME	MAILING ADDRESS
24	NOE J ORTEGA	6900 EVELYN ROAD TRAILER 1 AUSTIN TX 78747
25	JOHNNY H HAWKINS JR	9195 FM 1854 DALE TX 78616
26	MONICA RAMOS	9814 MARLBOROUGH DRIVE AUSTIN TX 78753
27	PEDRO MARTINEZ	2200 CEDAR STREET BASTROP TX 78602
28	FAUSTINO MARTINEZ RODRIGUEZ	203 PEGGYS TRAIL KYLE TX 78640
29	MORRIS THOMPSON AND DEBRA A KEITH-THOMPSON	7100 EVELYN ROAD AUSTIN TX 78747
30	JAVIER AND ANITA RUIZ	11203 TOM SASSMAN ROAD AUSTIN TX 78747
31	JAVIER AND ANITA RUIZ	11203 TOM SASSMAN ROAD AUSTIN TX 78747
32	FRINGE PROPERTIES LLC	4805 TRAILS END SAN MARCOS TX 78666
33	DAVID C AND GLORIA C GONZALEZ	11413 TOM SASSMAN ROAD AUSTIN TX 78747
34	LISA CRAIG	11503 TOM SASSMAN ROAD AUSTIN TX 78747
35	JULIO CESAR QUINTERO AND CLAUDIA Y GONZALEZ	9608 CLIFFBROOK DRIVE AUSTIN TX 78747
36	DC SOUTH FORK LLC	3939 BEE CAVE ROAD SUITE C100 WEST LAKE HILLS TX 78746
37	CARLOS CALVILLO	306 STORK ROAD DEL VALLE TX 78617
38	BEN NEVIS WEST LTD	PO BOX 8642 HOUSTON TX 77249
39	MIKE P AND BEATRICE R PEREZ	10411 US HIGHWAY 183 S AUSTIN TX 78747
40	ANDY R PEREZ	10411A US HIGHWAY 183 S AUSTIN TX 78747
41	TURNER LAND AND HAY LLC	PO BOX 528 MANOR TX 78653
42	BRANDON EVERETT	6505 MARBLE CREEK LOOP AUSTIN TX 78747
43	CROSSROADS 10445 QOZB LLC	7801 N CAPITAL OF TEXAS HIGHWY SUITE 390 AUSTIN TX 78731
44	DONALD MAX SILES	15036 VALERIAN TEA DRIVE PFLUGERVILLE TX 78660
45	JOSE LUIS GARCIA-ORTIZ	6705 FM 1327 AUSTIN TX 78747
46	IRMA FERNANDEX DE LEON	3109 COVE LAKE ROAD SE HAMPTON COVE ALABAMA 35763



N

0' 2,000' 4,000'

SCALE: 1"=2,000'

Green Civil Design
a BAXTER & WOODMAN company
301 DENALI PASS DR., SUITE 3
CEDAR PARK, TEXAS 78613
(281)350-7027
TEXAS REGISTERED ENGINEERING FIRM F-21783

MUSTANG RIDGE, LLC
MUSTANG RIDGE WRF MAJOR AMENDMENT

ATTACHMENT D - AFFECTED LANDOWNERS MAP

FILE: ATTACHMENT D – AFFECTED LANDOWNERS MAP.dwg TAB: LANDOWNERS PLOTTED: 7/8/2024 9:15 AM BY: MIKE BEVILACQUA

MUSTANG RIDGE, LLC – MUSTANG RIDGE WRF TPDES APPLICATION WQ0015905001

MUSTANG RIDGE LLC
3939 BEE CAVE ROAD
SUITE C100
AUSTIN TX 78746

CHARLOTTE STALLINGS
2059 JOSHUA DRIVE
SARASOTA FL 34240

DC SOUTH FORK LLC
3939 BEE CAVE ROAD
SUITE C100
WEST LAKE HILLS TX 78746

WILLIAM E AND CLAIRE E SELMAN
4747 E FM 20
LOCKHART TX 78644

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DONNA L STERLING
11248 TOM SASSMAN ROAD
AUSTIN TX 78747

NOE J ORTEGA
6900 EVELYN ROAD
TRAILER 1
AUSTIN TX 78747

JOHNNY H HAWKINS JR
9195 FM 1854
DALE TX 78616

MONICA RAMOS
9814 MARLBOROUGH DRIVE
AUSTIN TX 78753

PEDRO MARTINEZ
2200 CEDAR STREET
BASTROP TX 78602

FAUSTINO MARTINEZ RODRIGUEZ
203 PEGGYS TRAIL
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AUSTIN TX 78747

FRINGE PROPERTIES LLC
4805 TRAILS END
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CARLOS CALVILLO
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MUSTANG RIDGE, LLC – MUSTANG RIDGE WRF TPDES APPLICATION WQ0015905001

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HAMPTON COVE ALABAMA 35763

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
MODIFICACION

PERMISO NO. WQoo_____

SOLICITUD. Mustang Ridge, LLC, 3939 Bee Caves Road, Suite C100, West Lake Hills, Texas 78746 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para modificar el Permiso No. WQ0015905001 (EPA I.D. No. TX 0140473) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la la reubicación de la instalación de tratamiento y un aumento a la descarga de aguas residuales tratadas a un volumen que no exceda un flujo promedio anual de 3,300,000 galones por día. La instalación de tratamiento de aguas residuales domesticas estará ubicada aproximadamente a 0,7 millas al oeste de la intersección de Farm-to-Market Road 1327 y U.S. Highway 183, cerca de la ciudad de Creedmoor, en el Condado de Travis, Texas 78747. La ruta de descarga es del sitio de la planta hasta una zanja artificial, de allí a un afluente sin nombre, de allí a Maha Creek, de allí a Cedar Creek, de allí al Ro Colorado sobre La Grange. La TCEQ recibió esta solicitud el 17 de junio de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Austin Public Library – Southeast Branch, 5803 Nuckols Crossing Road, Austin, en el Condado de Travis, Texas antes de la fecha de publicación de este aviso en el periódico. La aplicación, incluidas las actualizaciones y los avisos asociados, están disponible electrónicamente en la siguiente pagina 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=-97.7053,30.0941&level=18.

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary and is an application for a major amendment which will increase the pollutant loads to coastal waters or would result in relocation of an outfall to a critical areas, or a renewal with such a major amendment. 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. If the application is for amendment that does ot meet the above description, do not include the sentence: El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

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

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

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

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

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

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

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

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Mustan Ridge, LLC a la dirección indicada arriba o llamando a Mr. Michael Bevilacqua, P.E., Baxter & Woodman al 737-358-8103.

Fecha de emisión _____ *[Date notice issued]*