



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
DOMESTIC WASTEWATER PERMIT APPLICATION
CHECKLIST

Complete and submit this checklist with the application.

COPY

APPLICANT: Quadvest, LP

PERMIT NUMBER: 0000000000

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

	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original USGS Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Affected Landowners Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landowner Disk or Labels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Original Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 6.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

For TCEQ Use Only

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

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
**APPLICATION FOR A DOMESTIC WASTEWATER PERMIT
ADMINISTRATIVE REPORT 1.0**

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

Section 1. Application Fees (Instructions Page 29)

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

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

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number:
Check/Money Order Amount: \$1,250.00
Name Printed on Check: Quadvest, LP
EPAY Voucher Number: 12345678901234567890
Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 29)

- | | |
|---|---|
| <input checked="" type="checkbox"/> New TPDES | <input type="checkbox"/> New TLAP |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal | <input type="checkbox"/> Minor Amendment <u>with</u> Renewal |
| <input type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal |
| <input type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

For amendments or modifications, describe the proposed changes:

For existing permits:

Permit Number: WQ0012345678901234567890

EPA I.D. (TPDES only): TX0012345678901234567890

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Expiration Date: [REDACTED]

Section 3. Facility Owner (Applicant) and Co-Applclicant Information (Instructions Page 29)

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

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

Quadvest, LP

(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: 602944746

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., Ms., Miss): Mr.

First and Last Name: Mark Urback

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

Title: Executive Manager of Engineering and Construction

B. Co-applclicant 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-applclicant applying for this permit?

[REDACTED]

(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-applclicant 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: [REDACTED]

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., Ms., Miss): [REDACTED]

First and Last Name: [REDACTED]

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

Title: [REDACTED]

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

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.

Attachment: A

Section 4. Application Contact Information (Instructions Page 30)

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., Ms., Miss): Mr.

First and Last Name: Mark Urback

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

Title: Executive Manager of Engineering and Construction

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: murback@quadvest.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix (Mr., Ms., Miss): [REDACTED]

First and Last Name: [REDACTED]

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

Title: [REDACTED]

Organization Name: [REDACTED]

Mailing Address: [REDACTED]

City, State, Zip Code: [REDACTED]

Phone No.: [REDACTED] Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: [REDACTED]

Check one or both: ☐ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 30)

Provide two names of individuals that can be contacted throughout the permit term.

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

First and Last Name: Mark Urback

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

Title: Executive Manager of Engineering and Construction

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: murback@quadvest.com

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

First and Last Name: Tony Spears

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

Title: COO

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: tspears@quadvest.com

Section 6. Billing Information (Instructions Page 30)

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., Ms., Miss): Ms.

First and Last Name: Mary Downey

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

Title: Controller

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: mdowney@quadvest.com

Section 7. DMR/MER Contact Information (Instructions Page 31)

Provide the name and complete mailing address of the person delegated to receive and submit

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Discharge Monitoring Reports (EPA 3320-1) or maintain Monthly Effluent Reports.

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

First and Last Name: Margo Watson

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

Title: Environmental Compliance / Safety Coordinator

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-305-1154 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: mwatson@quadvest.com

DMR data is required to be submitted electronically. Create an account at:

<https://www.tceq.texas.gov/permitting/netdmr/netdmr.html>.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

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

First and Last Name: Mark Urback

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

Title: Managing Engineer

Organization Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: murback@quadvest.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 person to be listed in the Notices

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

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First and Last Name: Mark Urback
Credential (P.E, P.G., Ph.D., etc.): P.E.
Title: Executive Manager of Engineering and Construction
Organization Name: Quadvest, LP
Phone No.: 281-356-5347 Ext.: [REDACTED]
E-mail: murback@quadvest.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: Hempstead Library
Location within the building: Information Desk
Physical Address of Building: 2331 11th Street
City: Hempstead County: Waller
Contact Name: Librarian
Phone No.: 979-826-7658 Ext.: [REDACTED]

E. Bilingual Notice Requirements:

This information is required for new, major amendment, and renewal applications. It is not required for minor amendment or minor modification 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

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 33)

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

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):

Trails at Cochran Ranch Wastewater Treatment Plant

- C. Owner of treatment facility: Quadvest, LP

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

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

Prefix (Mr., Ms., Miss):

First and Last Name: Quadvest, LP

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347

E-mail Address:

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

Attachment:

- E. Owner of effluent disposal site:

Prefix (Mr., Ms., Miss):

First and Last Name:

Mailing Address:

City, State, Zip Code:

Phone No.: E-mail Address:

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

Attachment:

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

Prefix (Mr., Ms., Miss): [REDACTED]

First and Last Name: [REDACTED]

Mailing Address: [REDACTED]

City, State, Zip Code: [REDACTED]

Phone No.: [REDACTED] E-mail Address: [REDACTED]

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: [REDACTED]

Section 10. TPDES Discharge Information (Instructions Page 34)

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:

Approximately 2.8 miles south of the intersection of Cochran Road and Betka Road 6.5 miles southwest of Waller, Texas.

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

☐ Yes ☒ No

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

From the facility via effluent pipe thence to detention pond to an unnamed tributary, then to Harris Creek then to Brazos River.

City nearest the outfall(s): Waller

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

Outfall Latitude: 29°58'50.70" N

Longitude: 95°59'29.64" W

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.

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Attachment: [REDACTED]

- 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.

[REDACTED]

Section 11. TLAP Disposal Information (Instructions Page 36)

- 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:

[REDACTED]

- B. City nearest the disposal site: [REDACTED]

- C. County in which the disposal site is located: [REDACTED]

- D. Disposal Site Latitude: [REDACTED] Longitude: [REDACTED]

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

[REDACTED]

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

[REDACTED]

Section 12. Miscellaneous Information (Instructions Page 37)

- 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

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application, provide an accurate location description of the sewage sludge disposal site.

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

☐ Yes ☒ No

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

- D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number:

Amount past due:

- E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number:

Amount past due:

Section 13. Attachments (Instructions Page 38)

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

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- 3 miles downstream information (TPDES only)
- All ponds.



Attachment 1 for Individuals as co-applicants



Other Attachments. Please specify: [REDACTED]

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: 000000000000000000

Applicant: Quadvest, LP

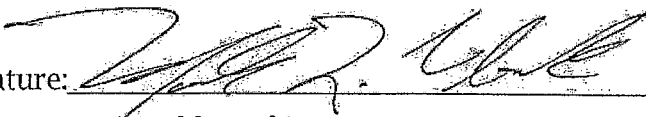
Certification:

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): Mark Urback

Signatory title: Executive Manager of Engineering and Construction

Signature: 

Date: 10/27/2022

(Use blue ink)

Subscribed and Sworn to before me by the said Mark L. Urback

on this 27th

day of October

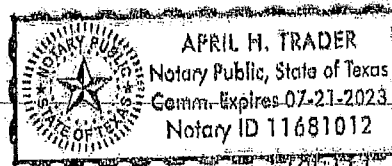
, 2022.

My commission expires on the 21st

day of July

, 2023.


Notary Public



Montgomery
County, Texas

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DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 41)

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:

- ☐ Readable/Writeable CD ☒ Four sets of labels

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

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):

Section 2. Original Photographs (Instructions Page 44)

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 44)

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

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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


Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

Fee Code: WQP Waste Permit No: 

1. Check or Money Order Number: 11619
2. Check or Money Order Amount: \$1,250.00
3. Date of Check or Money Order: 10/18/2022
4. Name on Check or Money Order: Quadvest, LP

5. APPLICATION INFORMATION

Name of Project or Site: Trails of Cochran Ranch Wastewater Treatment Plant

Physical Address of Project or Site: Approximately 2.8 miles south of the intersection of Cochran Road and Betka Road 6.5 miles southwest of Waller, Texas.

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

Staple Check or Money Order in This Space

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PLAIN LANGUAGE SUMMARY

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

Quadvest, LP (CN602944746) proposes to operate the Trails at Cochran wastewater treatment plant (RN111604286), an activated sludge process plant to be operated in the conventional plug flow mode. The facility will be located at approximately 2.8 miles south of the intersection of Cochran Road and Betka Road and 0.5 miles southwest of Waller, Waller County, Texas.

This application is for a new application to discharge at a daily average flow of 250,000 gallons per day of treated domestic wastewater.

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

RESUMEN EN LENGUAJE SENCILLO

El siguiente resumen se proporciona para esta solicitud pendiente de permiso de calidad del agua que está siendo revisada por la Comisión de Calidad Ambiental de Texas como lo requiere 30 Código Administrativo de Texas, Capítulo 39. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no son representaciones ejecutables federales de la solicitud de permiso.

Quadvest, LP (CN 602944746) propone operar la planta de tratamiento de aguas residuales Trails at Cochran (RN 111604286), una planta de proceso de lodos activados que se operará en el modo de flujo de tapón convencional. La instalación estará ubicada aproximadamente a 2.8 millas al sur de la intersección de Cochran Road y Betka Road y 0.5 millas al suroeste de Waller, condado de Waller, Texas.

Esta aplicación es para una nueva aplicación para descargar a un flujo promedio diario de 250,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica de oxígeno carbonoso de cinco días (CBOD₅), sólidos suspendidos totales (TSS), nitrógeno amoníaco (NH₃-N) y *Escherichia coli*. Otros contaminantes potenciales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7. Análisis de Contaminantes de Efluentes Tratados en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas por una planta de proceso de lodos activados y las unidades de tratamiento incluirán una pantalla de barra, una cámara de arena, cuencas de aireación, clarificadores finales, digestores de lodos, una prensa de filtro de banda, cámaras de contacto con cloro y una cámara de decloración.



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, a Public Involvement Plan is not necessary. Completion of the remaining sections not required.

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

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

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

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
 ☐ Radioactive Materials Licensing ☐ Underground Injection Controls

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)

<p>(Census Tract)</p> <p>Please indicate which of these three is the level used for gathering the following information.</p> <p><input type="checkbox"/> City</p> <p><input type="checkbox"/> County</p> <p><input type="checkbox"/> Census Tract</p>
(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
<p>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, please describe.</p>
<p>If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</p>
<p>(c) Will you provide notice of this application in alternative languages?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>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.</p> <p>If yes, how will you provide notice in alternative languages?</p> <p><input type="checkbox"/> Publish in alternative language newspaper</p> <p><input type="checkbox"/> Posted on Commissioner's Integrated Database Website</p>

<input type="checkbox"/> Mailed by TCEQ's Office of the Chief Clerk <input type="checkbox"/> Other (specify)
(d) Is there an opportunity for some type of public meeting, including after notice? <input type="checkbox"/> Yes <input type="checkbox"/> No
(e) If a public meeting is held, will a translator be provided if requested? <input type="checkbox"/> Yes <input type="checkbox"/> No
(f) Hard copies of the application will be available at the following (check all that apply): <input type="checkbox"/> TCEQ Regional Office <input type="checkbox"/> TCEQ Central Office <input type="checkbox"/> 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)



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
DOMESTIC WASTEWATER PERMIT APPLICATION

DOMESTIC TECHNICAL REPORT 1.0

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

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

A. Existing/Interim I Phase

Design Flow (MGD): 0.0625

2-Hr Peak Flow (MGD): 0.25

Estimated construction start date: 2023

Estimated waste disposal start date: 2023

B. Interim II Phase

Design Flow (MGD): 0.125

2-Hr Peak Flow (MGD): 0.50

Estimated construction start date: 2024

Estimated waste disposal start date: 2025

C. Final Phase

Design Flow (MGD): 0.25

2-Hr Peak Flow (MGD): 1.00

Estimated construction start date: 2026

Estimated waste disposal start date: 2027

D. Current operating phase: None

Provide the startup date of the facility: None

Section 2. Treatment Process (Instructions Page 51)

A. Treatment process description

Provide a detailed description of the treatment process. **Include the type of**

treatment plant, mode of operation, and all treatment units. Start with the plant's head works and finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed in the permit, a description of *each phase* must be provided.** Process description:

Attachment I

Port or pipe diameter at the discharge point, in inches: 12

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)
<u>Attachment J</u>		

C. Process flow diagrams

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

Attachment: K

Section 3. Site Drawing (Instructions Page 52)

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

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

Attachment: L

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

Trails at Cochran Ranch Subdivision - a residential community with ±471 single family homes.

Section 4. Unbuilt Phases (Instructions Page 52)

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

Yes ☐

No ☒

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

Yes ☐

No ☐

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

Section 5. Closure Plans (Instructions Page 53)

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

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Section 6. Permit Specific Requirements (Instructions Page 53)

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

A. Summary transmittal

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

Yes ☐ No ☒

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

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

B. Buffer zones

Have the buffer zone requirements been met?

Yes ☒ No ☐

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

relevant to maintaining the buffer zones.

Buffer Zone requirements will be met through property ownership and ROW easements.

C. Other actions required by the current permit

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

Yes ☐ No ☒

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

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

Yes ☐ No ☒

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

2. Grit and grease processing

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

3. Grit disposal

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

Yes ☐ No ☒

If No, contact the TCEQ Municipal Solid Waste team at 512-239-0000. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.

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

E. Stormwater management

1. Applicability

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

Yes ☐ No ☒

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

Yes ☐ No ☒

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

2. MSGP coverage

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

Yes ☐ No ☐

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

TXR05 [REDACTED] or TXRNE [REDACTED]

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

Yes ☐ No ☐

3. Conditional exclusion

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

Yes ☐ No ☐

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

4. Existing coverage in individual permit

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

Yes ☐ No ☐

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

5. Zero stormwater discharge

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

Yes ☐

No ☐

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

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

6. Request for coverage in individual permit

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

Yes ☐

No ☐

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

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

Yes ☒ No ☐

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

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

1. Acceptance of sludge from other WWTPs

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

Yes ☐ No ☒

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

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

Note: Permits that accept sludge from other wastewater treatment plants

may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Yes ☐ No ☐

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

--

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

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

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

Yes ☐ No ☒

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

--

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

Is the facility in operation?

Yes ☐

No ☒

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

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only


Table 1.0(3) - Pollutant Analysis for Water Treatment Facilities

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

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Operator has not been chosen yet

Facility Operator's License Classification and Level: will be C or higher

Facility Operator's License Number: 

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

A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the following list. Check all that apply.



Permitted landfill



Permitted or Registered land application site for beneficial use

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

B. Sludge disposal site

Disposal site name: Mt. Houston MUD WWTP

TCEQ permit or registration number: WQ0011154001

County where disposal site is located: Harris

C. Sludge transportation method

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

Name of the hauler: Magna Flow Environmental

Hauler registration number: 21489

Sludge is transported as a:

Liquid ☒

semi-liquid ☐

semi-solid ☐

solid ☐

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

A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage

sludge for beneficial use?

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Yes ☐ No ☐

B. Sludge processing authorization

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

Sludge Composting Yes ☐ No ☒

Marketing and Distribution of sludge Yes ☐ No ☒

Sludge Surface Disposal or Sludge Monofill Yes ☐ No ☒

Temporary storage in sludge lagoons Yes ☐ No ☒

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

Yes ☐ No ☐

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes ☐ No ☒

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

A. Location information

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

- Original General Highway (County) Map:

Attachment:

- USDA Natural Resources Conservation Service Soil Map:

Attachment:

- Federal Emergency Management Map:

Attachment: [REDACTED]

- Site map:

Attachment: [REDACTED]

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: [REDACTED]

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

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: [REDACTED]

Total Kjeldahl Nitrogen, mg/kg: [REDACTED]

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

Phosphorus, mg/kg: [REDACTED]

Potassium, mg/kg: [REDACTED]

pH, standard units: [REDACTED]

Ammonia Nitrogen mg/kg: [REDACTED]

Arsenic: [REDACTED]

000038

Cadmium: [REDACTED]

Chromium: [REDACTED]

Copper: [REDACTED]

Lead: [REDACTED]

Mercury: [REDACTED]

Molybdenum: [REDACTED]

Nickel: [REDACTED]

Selenium: [REDACTED]

Zinc: [REDACTED]

Total PCBs: [REDACTED]

Provide the following information:

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

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

[REDACTED]

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

[REDACTED]

C. Liner information

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

Yes ☐ No ☐

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

D. Site development plan

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

Attach the following documents to the application.

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

Attachment: [REDACTED]

- Copy of the closure plan

Attachment: [REDACTED]

- Copy of deed recordation for the site

Attachment: [REDACTED]

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

Attachment: [REDACTED]

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

Attachment: [REDACTED]

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [REDACTED]

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: [REDACTED]

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 63)

A. Additional authorizations

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

Yes ☐ No ☒

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

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes ☐ No ☒

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

Yes ☐ No ☒

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

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

A. RCRA hazardous wastes

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

Yes ☐ No ☒

B. Remediation activity wastewater

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

Yes ☐ No ☒

C. Details about wastes received

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

Attachment: 

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: ~~Tony Spears~~ Mark Urback, P.E.

Title: ~~COO~~ Executive Manager of Engineering and Construction

Signature: _____

Date: _____

DOMESTIC TECHNICAL REPORT 1.1

The following is required for new and amendment applications

Section 1. Justification for Permit (Instructions Page 66)

A. Justification of permit need

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

The proposed development will consist of 453 Equivalent Single Family Connections (ESFC). Initial lot delivery is scheduled for June 2023. Initial home sales will be in November 2023. Expected sales are 20 single family residences per month based on an average wastewater flow per household of 300 gpd the required plant capacity of 189,000 gpd is required. The ultimate capacity of 0.250 MGD allows for regional sewer capacity for anticipated commercial development near the service area.

B. Regionalization of facilities

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

1. Municipally incorporated areas

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

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

Yes ☐ No ☒ Not Applicable ☐

If yes, within the city limits of: [REDACTED]

If yes, attach correspondence from the city.

Attachment: [REDACTED]

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: [REDACTED]

2. Utility CCN areas

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

Yes ☐

No ☒

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

Attachment: 

3. Nearby WWTPs or collection systems

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

Yes ☐

No ☒

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

Attachment: 

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

Attachment: 

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

Yes ☐

No ☒

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

Attachment: 

Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes ☐

No ☒

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

000044

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

A. Current organic loading

Facility Design Flow (flow being requested in application): [REDACTED]

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

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

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

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision	0.250	275
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria,		

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.250	
AVERAGE BOD ₅ from all sources		275

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2.0

Total Phosphorus, mg/l: 0.1

Dissolved Oxygen, mg/l: 2.0

Other: [REDACTED]

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: [REDACTED]

Total Phosphorus, mg/l: [REDACTED]

Dissolved Oxygen, mg/l: [REDACTED]

Other: [REDACTED]

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: [REDACTED]

Total Phosphorus, mg/l: [REDACTED]

Dissolved Oxygen, mg/l: [REDACTED]

Other: [REDACTED]

D. Disinfection Method

Identify the proposed method of disinfection.



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

Dechlorination process: [REDACTED]



Ultraviolet Light: [REDACTED] seconds contact time at peak flow



Other: [REDACTED]

Section 4. Design Calculations (Instructions Page 68)

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

Attachment: 0

Section 5. Facility Site (Instructions Page 68)

A. 100-year floodplain

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

Yes ☒ No ☐

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

--

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

FIRM Map #48473C0275E eff 2/18/2009

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

Yes ☐ No ☒

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

Yes ☐ No ☒

If yes, provide the permit number:

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

B. Wind rose

Attach a wind rose. Attachment: P

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

A. Beneficial use authorization

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

Yes ☐

No ☒

If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)

Attachment: [REDACTED]

B. Sludge processing authorization

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



Sludge Composting



Marketing and Distribution of sludge



Sludge Surface Disposal or Sludge Monofill

If any of the above sludge options are selected, attach a completed DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT (TCEQ Form No. 10056).

Attachment: [REDACTED]

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

Attach a solids management plan to the application.

Attachment: Q

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

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

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

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

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

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

Yes ☐

No ☒

If yes, provide the following:

Owner of the drinking water supply: [REDACTED]

Distance and direction to the intake: [REDACTED]

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

Attachment: [REDACTED]

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

Does the facility discharge into tidally affected waters?

Yes ☐

No ☒

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: [REDACTED]

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).

[REDACTED]

C. Sea grasses

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

Yes ☐

No ☒

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

--

Section 3. Classified Segments (Instructions Page 73)

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

Yes ☐

No ☒

If yes, this Worksheet is complete.

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

Section 4. Description of Immediate Receiving Waters (Instructions Page 75)

Name of the immediate receiving waters: Wet detention pond number 1

A. Receiving water type

Identify the appropriate description of the receiving waters.



Stream



Freshwater Swamp or Marsh



Lake or Pond

Surface area, in acres: 3.30

Average depth of the entire water body, in feet: 6

Average depth of water body within a 500-foot radius of discharge point, in feet: 6



Man-made Channel or Ditch



Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Wetland

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: Wetland

C. Downstream perennial confluences

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

N/A

D. Downstream characteristics

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

Yes ☒

No ☐

If yes, discuss how.

From the plant to Wet Detention Pond; then to unnamed tributary via pipe; then to man made pond 1.3 miles downstream; then to downstream unnamed tributary; then ultimately to Brazos River more than 15 miles downstream.

E. Normal dry weather characteristics

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

The pond has a year-round pool depth of approximately 6 feet. The tributaries are normally dry.

Date and time of observation: 8-18-2022

Was the water body influenced by stormwater runoff during observations?

Yes ☐

No ☒

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

A. Upstream influences

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



Oil field activities



Urban runoff



Upstream discharges



Agricultural runoff



Septic tanks



Other(s), specify

B. Waterbody uses

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



Livestock watering



Contact recreation



Irrigation withdrawal



Non-contact recreation



Fishing



Navigation



Domestic water supply



Industrial water supply



Park activities



Other(s), specify amenity pond

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 regarding completion of 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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 602944746		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input type="checkbox"/> New Customer		<input checked="" type="checkbox"/> Update to Customer Information	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership	
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:	
Quadvest, L.P.			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
08000539284	17421243712		
11. Type of Customer:		Partnership: <input type="checkbox"/> General <input checked="" type="checkbox"/> Limited	
<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual	
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?	
<input type="checkbox"/> 0-20 <input checked="" type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following:			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
15. Mailing Address:			
26926 FM 2978			
City	Magnolia	State	TX
ZIP	77354	ZIP + 4	
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(281) 356-5347		() -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency 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.)	000056
Trails at Cochran Ranch Wastewater Treatment Plant	

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

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Approximately 2.8 miles south of the intersection of Cochran Road and Betka Road and 6.5 miles southwest of Waller, Texas.
---------------------------------------	--

26. Nearest City	State	Nearest ZIP Code
Waller	TX	

27. Latitude (N) In Decimal:	29.98075	28. Longitude (W) In Decimal:	95.991567
Degrees	Minutes	Seconds	Degrees
29	58	50.70	95
			59
			29.64

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)

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

34. Mailing Address:	Quadvest, LP						
	26926 FM 1978						
	City	Magnolia	State	TX	ZIP	77354	ZIP + 4

35. E-Mail Address:	
36. Telephone Number	37. Extension or Code
(281) 356-5347	() -
38. Fax Number (if applicable)	
() -	

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

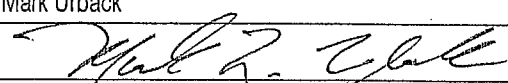
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Mark Urback, P.E.	41. Title:	Executive Manager of Engineering
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(281) 356-5347		() -	murback@quadvest.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:	Quadvest, L.P.	Job Title:	Executive Manager of Engineering and Construction
Name (in Print):	Mark Urback	Phone:	(281) 356-5347 000057
Signature:		Date:	11/9/22

ATTACHMENT B

USGS TOPOGRAPHIC MAP

Original Full-size

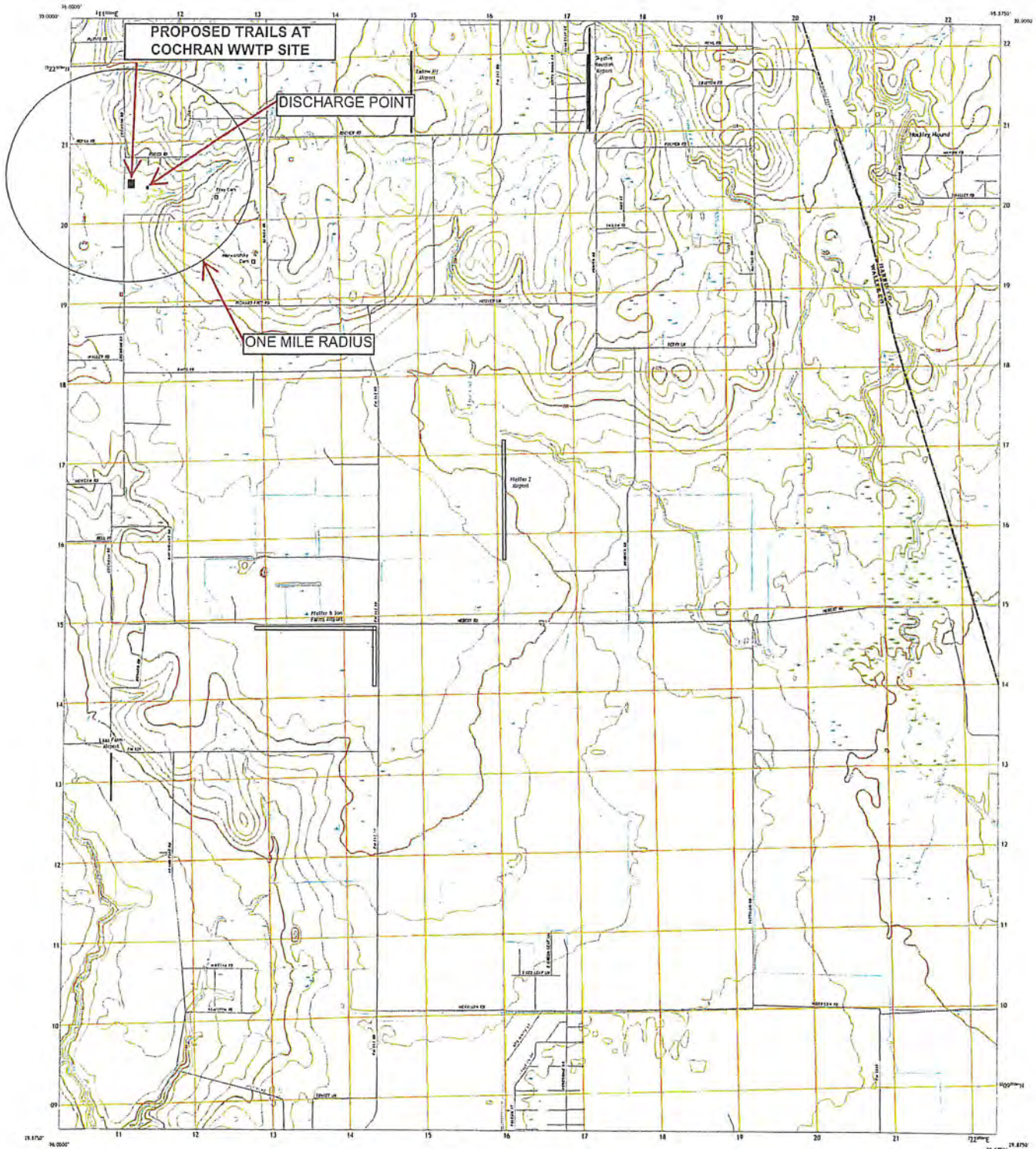
(Admin Report 1.0-section 13)



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



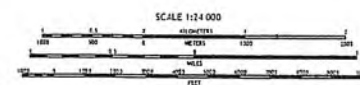
HOCKLEY MOUND QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey

Map is derived from USGS 7.5-Minute
Topographic Series of 1963 (24,000). Resection and
3-Dimensional photogrammetric methods were used.
This map is a digital document. Some data may be
perturbed for the new scale. Please note: when government
information may be used, please obtain permission before
reusing this data.

Map Date: 1963, September 1963, November 1963
Map Scale: 1:24,000
Map Series: 7.5-Minute
Map Sheet: 24000
Map Date: 1963, September 1963, November 1963
Map Scale: 1:24,000
Map Series: 7.5-Minute
Map Sheet: 24000



CONTOUR INTERVAL, 5 FEET
VERTICAL DATUM, DATUM OF 1929
This map was produced to conform with the
National Standard for Topographic Maps, 1983.
It complies with the standard for 7.5-Minute Series 24,000.



HOCKLEY MOUND, TX
2019

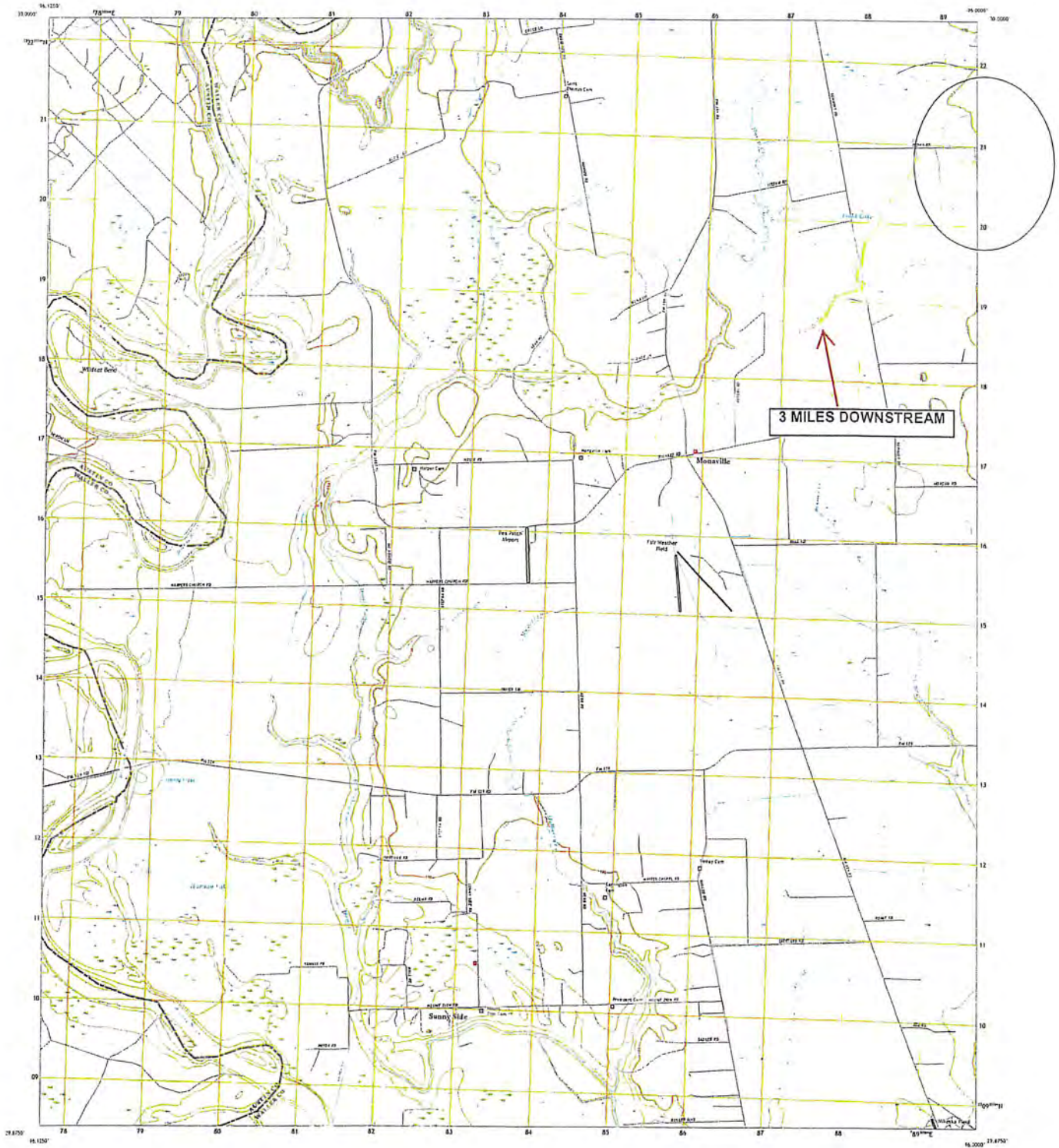
000059



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

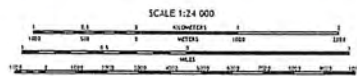


SUNNY SIDE QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
Data from the 1980s and 1990s
This map is not a legal document. Boundaries may be
different from those shown on the ground. Please consult the
appropriate laws and regulations for the area.

Map by: U.S. Geological Survey, 2019
Data: U.S. Geological Survey, 2019
Map by: U.S. Geological Survey, 2019
Data: U.S. Geological Survey, 2019
Map by: U.S. Geological Survey, 2019
Data: U.S. Geological Survey, 2019



CHARTERED BY THE
NORTH AMERICAN VERTICAL DATUM OF 1988
This map is not a legal document. Boundaries may be
different from those shown on the ground. Please consult the
appropriate laws and regulations for the area.



PSAD CLASSIFICATION
Elevation: 1000 feet
Secondary: 1000 feet
Tertiary: 1000 feet
Quaternary: 1000 feet
Pleistocene: 1000 feet
Holocene: 1000 feet
Recent: 1000 feet
Modern: 1000 feet

SUNNY SIDE, TX
2019

000060

ATTACHMENT C

SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC
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)

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

Do not refer to a response of any item in the permit application form. Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee: [REDACTED]

Permit No. WQ00 [REDACTED]

EPA ID No. TX [REDACTED]

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

Approximately 2.8 miles south of the intersection of Cochran Road and Betka Road 6.5 miles southwest of Waller, Texas.

000062

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: Mark Urback

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

Title: Executive Manager of Engineering and Construction

Mailing Address: 26926 FM 2978

City, State, Zip Code: Magnolia, TX 77354

Phone No.: 281-356-5347 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: murback@quadvest.com

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

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

From the facility via effluent pipe thence to detention pond to an unnamed tributary, then to Harris Creek then to Brazos River.

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

000063



Disturbance of vegetation or wetlands

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

None

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

None

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

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

None

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

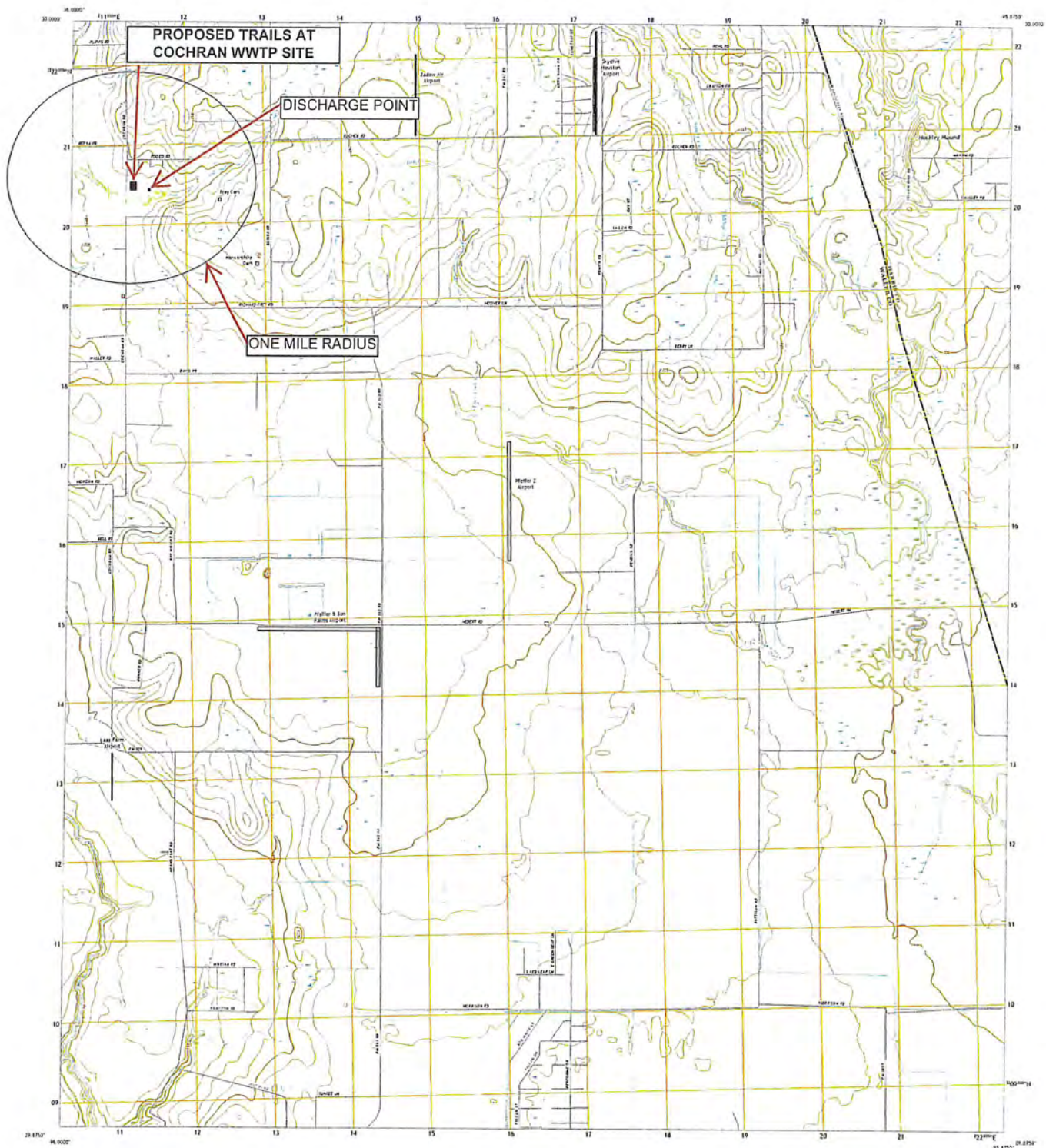
Not Known

ATTACHMENT D

USGS TOPOGRAPHIC MAP_(7.5 minute)

EFFLUENT DISCHARGE ROUTE

(SPIF #5)



Produced by the United States Geological Survey
North American Section of 1988. 10/19/88

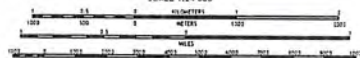
North American Edition of 1992 (NAG92)
World Geodetic System of 1984 (WGS84). Projections and
1:250,000 scale Universal Transverse Mercator, Zone 46N UTM.

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

Images NAD 83 September
Refr U.S. Census
North
Northings National Hydrographic Survey
Contours National Hydrographic Survey
Boundaries Multiple sources (see metadata)
Features Fw Islands Islands

Figure 1 shows a vertical wellbore with a central axis. At the top, a horizontal line represents the ground surface. A point on the surface is labeled 'P10' with a horizontal arrow pointing right. Another point on the surface is labeled 'P15' with a horizontal arrow pointing left. The wellbore is labeled 'WELL' and 'WELL' on either side. Below the wellbore, a rectangular box contains the text 'WELL' and 'WELL'.

SCALE 1:24 000



CONTOUR INTERVAL 5 FEET
NORTH AMERICAN DATUM OF 1985

This map was produced to conform with the
National Geospatial Program's Data Product Standard, 2011.
& metadata file associated with the product is available version 2.0.



1	2	3	1 Huanyang
4		5	2 Wafan
6	7	8	3 Huanyang

4 Tuny Jia
5 Wafan Lu
6 Lan Fei
7 Shuang
8 Yit

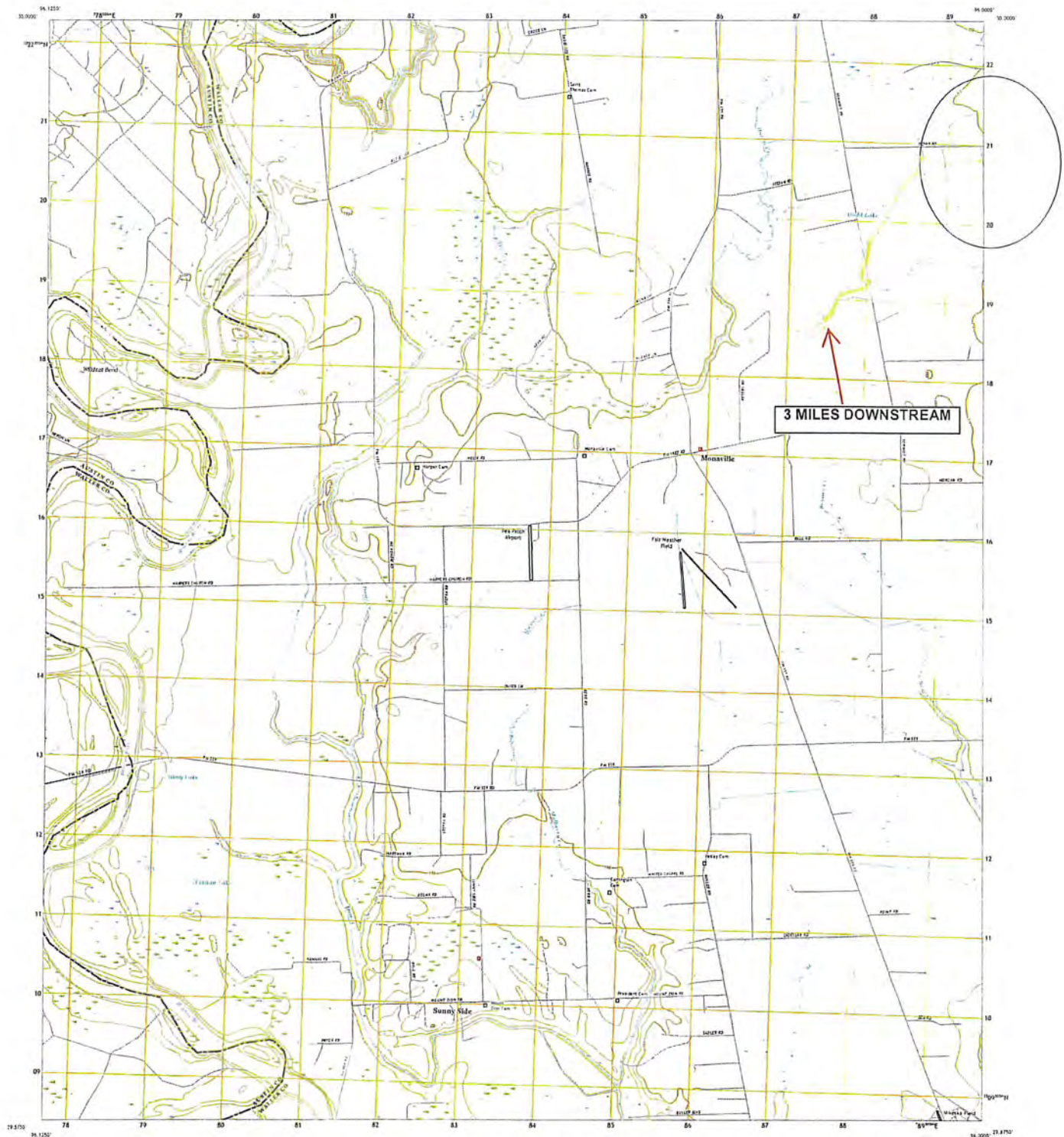
ROAD CLASSIFICATION

 Local Connector  Local Road Road

 Route US Route  State Route

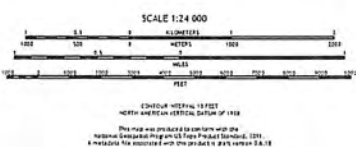
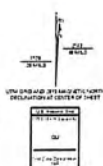
HOCKLEY MOUND, TX
2018

000066



Produced by the United States Geological Survey
 version 1.00 (last mod 1993-04-23)
 World Geologic Map of 1994 (WGM94) Projection and
 1:100-million geologic-scale Transverse Mercator, Zone 18E
 This map is not a legal document. Boundaries may be
 generated for this map scale. Please consult appropriate
 authorities for legal status. Obtain permission before
 entering private lands.

Imagery.....NIP, September
 Resol.....U.S. Census
 Names.....
 Hydrography.....National Hydrography Data
 Geobase.....National Geobase
 Boundaries.....Maple Shaded see metadata
 Metadata.....FWS Natural Wetlands (Inventory)



1	2	3	1 Buckhorn
4	5	6	2 Hammond
7	8	9	3 Waller
			4 Burleigh
			5 McKinley Street
			6 Seelye
			7 San Felipe
			8 Brucemore

all streets travel East/E

ROAD CLASSIFICATION

Expressway		Local Connector	
Secondary Hwy		Local Road	
Ramp		etc.	

Interstate Route US Route State Route

SUNNY SIDE, TX
2019

000067

ATTACHMENT E

APPLICATION CHECK

Reprint Check Remittance

Page: 1

Quadvest LP
26926 FM 2978
Magnolia TX 77354

Vendor ID	Vendor Name	Check Name	Payment Number	Check Date	Check Number		
TCEQ	TCEQ	Texas Commission on Environmental Qua	00032319	10/18/2022	11819		
Payment Type	Check Amount						
Check	\$1,260.00						
Our Voucher Number	Your Voucher Number	Date	Amount	Amount Paid	Discount	Withhold	Net
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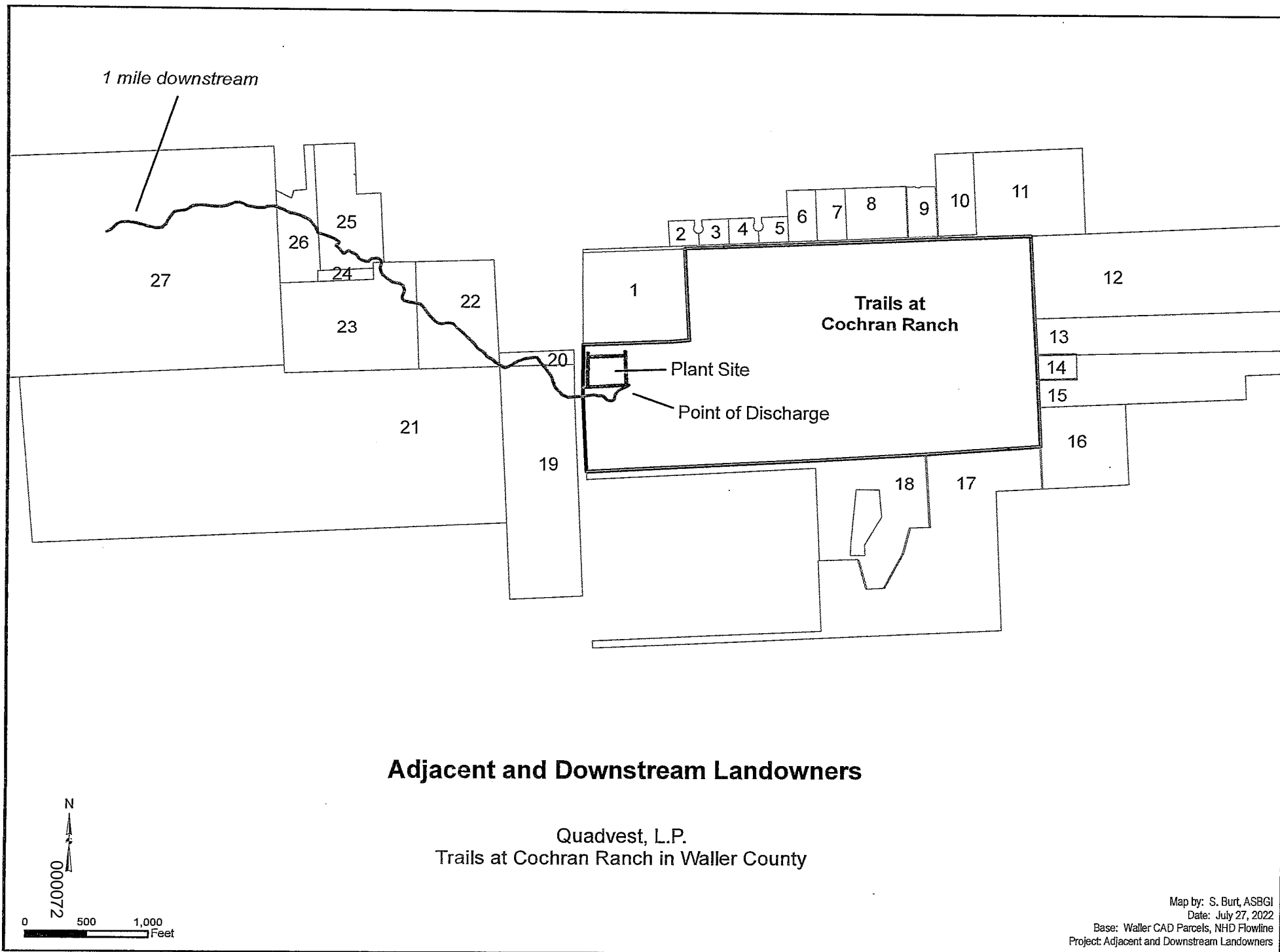
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ATTACHMENT F

**AFFECTED LANDOWNERS MAP,
List of Addresses, & Labels**

(Admin Report 1.1 – Section 1)

Property Number on Map	Landowners	Street	City	State	Zip
1	Weinstein David B & Candace P	145 Knipp Rd	Houston	TX	77024
2	Robinson Scott Edward	14501 Bridle Lane	Waller	TX	77484
3	Martinez Elisa Y & Noe	14508 Bridle Lane	Waller	TX	77484
4	Martinez Elisa Y & Noe	14508 Bridle Lane	Waller	TX	77484
5	Iniesta Juan & Mary E	34461 Rodeo Rd	Waller	TX	77484
6	Iniesta Juan & Mary E	34461 Rodeo Rd	Waller	TX	77484
7	Iniesta Juan & Mary E	34461 Rodeo Rd	Waller	TX	77484
8	Cotton Antoinette Vita	3238 Golden Eye	Katy	TX	77493
9	Campbell Ronald Wayne	34301 Rodeo Rd	Waller	TX	77484
10	Sheppard Cheryl Calloway	14518 Cochran Rd	Waller	TX	77484
11	Stowe Donald & Tiffany	21802 Stokes Rd	Waller	TX	77484
12	Ortega-Mondragon Napoleon	6211 Catron Crossing	Katy	TX	77493
13	Hernandez-Marchan Damian	19601 FM 362	Waller	TX	77484
14	Frey Cemetery Association Trustees	34669 Richard Frey	Waller	TX	77484
15	Hernandez-Marchan Damian	19601 FM 362	Waller	TX	77484
16	Rheman Betty B	14535 Blinka Rd	Waller	TX	77484
17	Jackson Thomas & Marissa	13950 Cochran Rd	Waller	TX	77484
18	14182 Cochran Road LLC	14182 Cochran Rd	Waller	TX	77484
19	Burton James H Jr	9934 Deanwood	Houston	TX	77040
20	Burton James H Jr	9934 Deanwood	Houston	TX	77040
21	Trog Ranch LLC	8702 Holly Hills Dr	Tomball	TX	77377
22	Burton James H Jr	9934 Deanwood	Houston	TX	77040
23	Beck Michael	8107 Sedona Ridge Dr	Cypress	TX	77433
24	Hall Joe & Dyann	1422 22nd Street	Hempstead	TX	77445
25	Hall's Trees & Service Inc.	1422 22nd Street	Hempstead	TX	77445
26	Curtis Michael	PO Box 775	Hempstead	TX	77445
27	Collins George F II & Kassie	35665 Repka Rd	Waller	TX	77484



Adjacent and Downstream Landowners

Quadvest, L.P.
Trails at Cochran Ranch in Waller County

Map by: S. Burt, ASBGI
Date: July 27, 2022
Base: Waller CAD Parcels, NHD Flowline
Project: Adjacent and Downstream Landowners

8160^{TM/US}Easy Peel[®] Address Labels

Bend along line to expose Pop-up Edge

Go to avery.com/templates

Use Avery Template 5160

Weinstein David B & Candace P
145 Knipp Rd
Houston, TX 77024

Robinson Scott Edward
14501 Bridle Lane
Waller, TX 77484

Martinez Elisa Y & Noe
14508 Bridle Lane
Waller, TX 77484

Martinez Elisa Y & Noe
14508 Bridle Lane
Waller, TX 77484

Iniesta Juan & Mary E
34461 Rodeo Rd
Waller, TX 77484

Iniesta Juan & Mary E
34461 Rodeo Rd
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Iniesta Juan & Mary E
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Cotton Antoinette Vita
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Katy, TX 77493

Campbell Ronald Wayne
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Sheppard Cheryl Calloway
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Ortega-Mondragon Napoleon
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Hernandez-Marchan Damian
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Frey Cemetery Association Trustees
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Burton James H Jr
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Burton James H Jr
9934 Deanwood
Houston, TX 77040

Trog Ranch LLC
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Tomball, TX 77377

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Houston, TX 77040

Beck Michael
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Cypress, TX 77433

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Hempstead, TX 77445

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Waller, TX 77484

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Weinstein David B & Candace P
145 Knipp Rd
Houston, TX 77024

Robinson Scott Edward
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8160^{mini}Easy Peel[®] Address Labels
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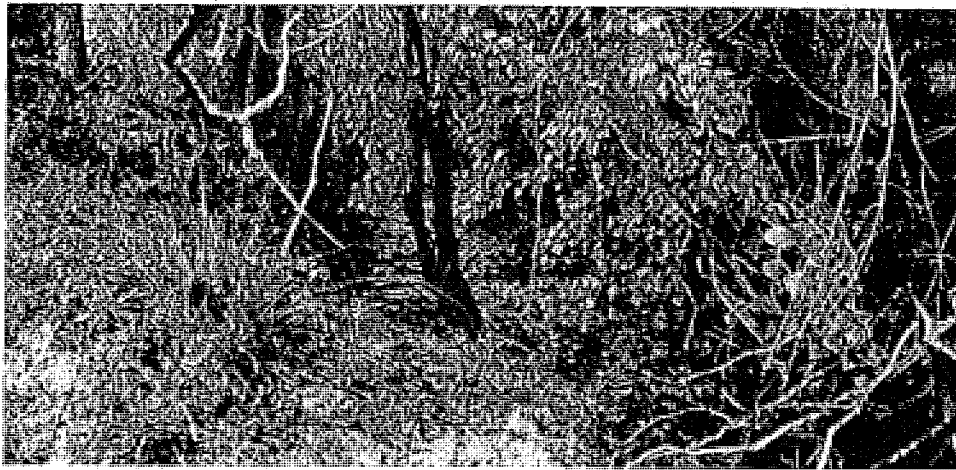
Curtis Michael
 PO Box 775
 Hempstead, TX 77445

Collins George F II & Kassie
 35665 Repka Rd
 Waller, TX 77484

ATTACHMENT G

ORIGINAL PHOTOGRAPHS

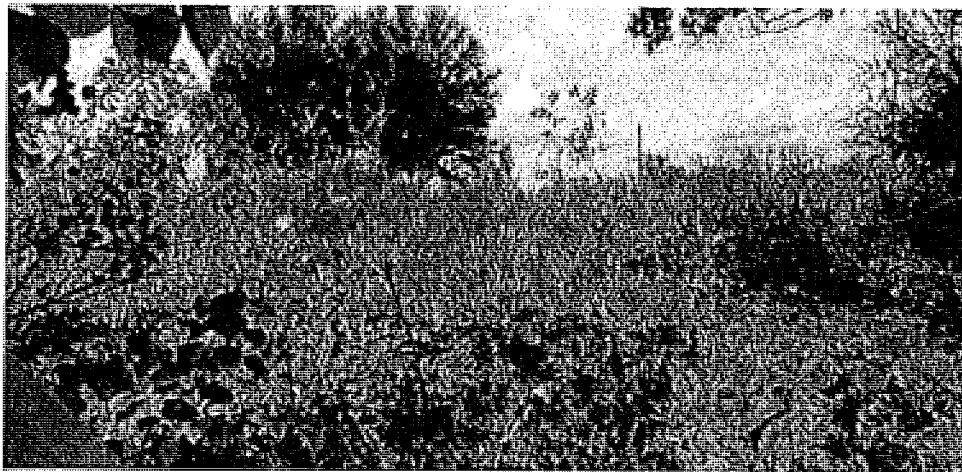
(Admin Report 1.1 – Section 2)



Upstream (East)



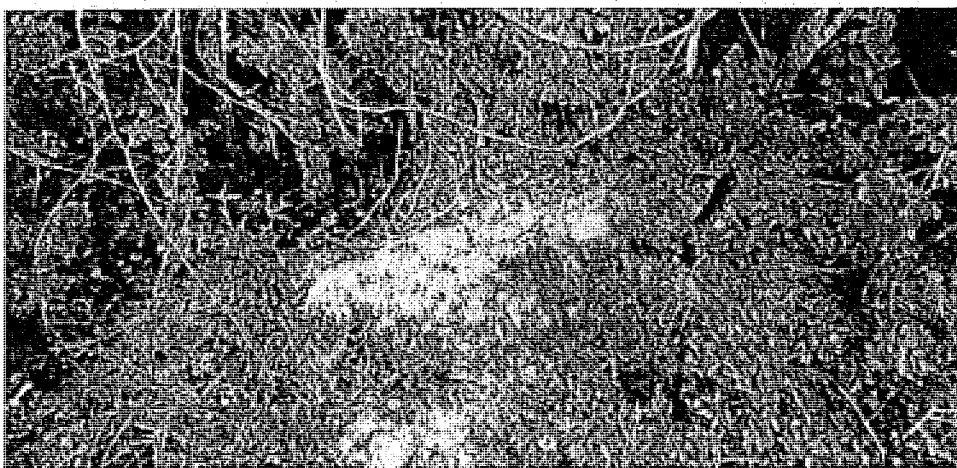
Downstream (West)



Outfall – South



Outfall – North



Stream Bed - Dry

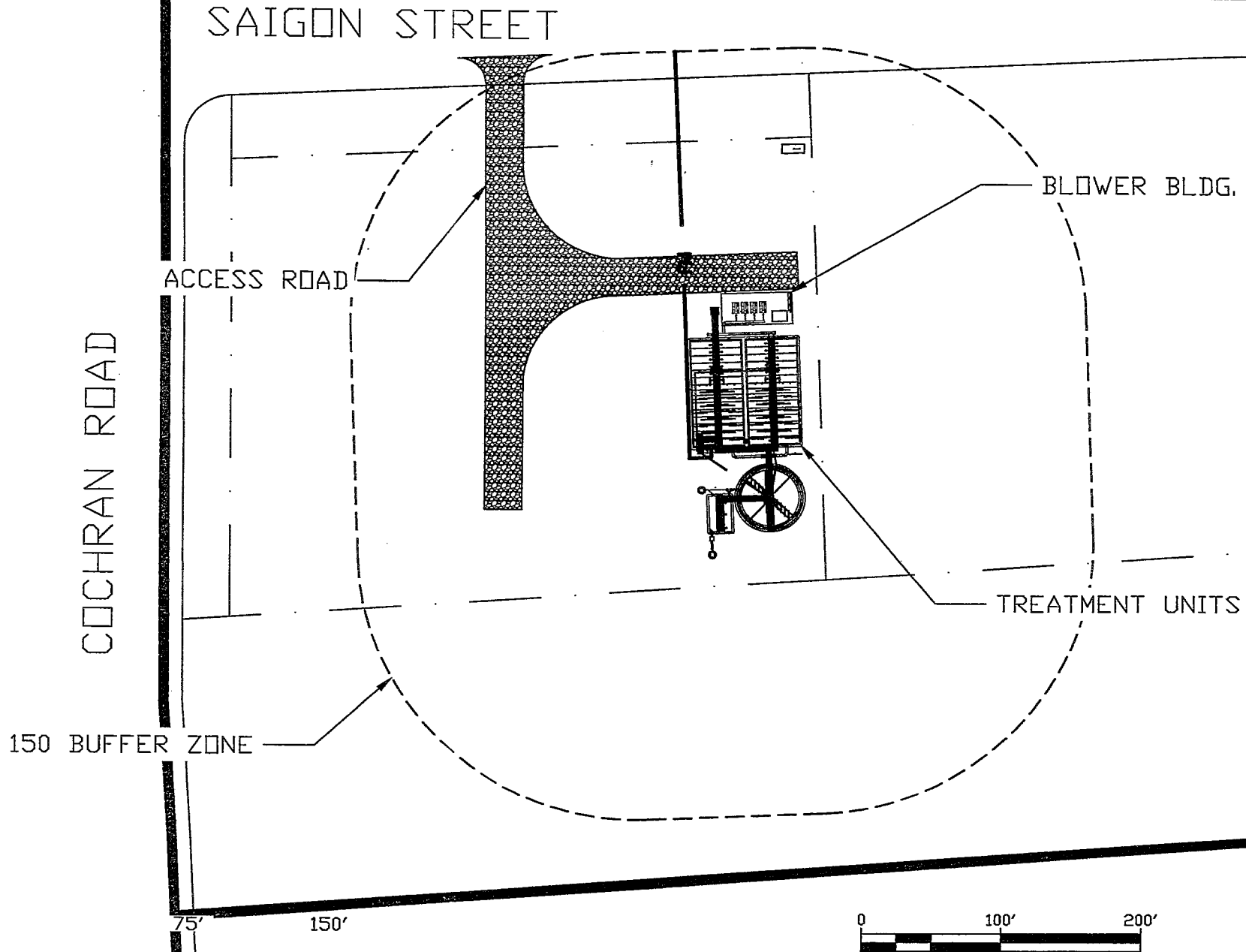
ATTACHMENT H

BUFFER ZONE MAP

(Admin Report 1.1 – Section 3)

EXHIBIT B(1) - WASTEWATER TREATMENT PLANT FACILITIES - BUFFER ZONE

Except as otherwise set forth in the Agreement, the wastewater treatment plant facilities shall generally consist of the components identified in the following schematic, subject to final as-built modifications.



QUADVEST L.P.
COCHRAN ROAD WASTEWATER PLANT

LGI SUBDIVISION
WALLER, TEXAS

2/8/2022

000081

ATTACHMENT I

TREATMENT PROCESS

(Technical Report 1.0 : Section 2A)

TECHNICAL DESIGN REPORT

FOR

Trails at Cochran Ranch WWTP

1. **PURPOSE** The purpose of this report is to present the basis of design and summary of unit sizing and hydraulic calculations for the Sewage Treatment Plant.
2. **DESCRIPTION OF PROPERTY** The project under development is a residential community
3. **POPULATION SERVED** The location of the proposed facility is shown on Sheet One of the Plans. The population flow is based on 71 gallons per capita per day (250 gpd/ESFC).

	ESFC	Q, MGD
Phase I	250	0.063
Phase II	500	0.125
Phase III	600	0.150

4. **INFLUENT QUALITY CHARACTERISTICS** The raw sewage quality characteristics used for design are estimates based on past experience and on State Design Criteria and are as follows:

PARAMETER	CONCENTRATION - MG/L	PER CAPITA CONTRIBUTION - LB/DAY
BOD ₅	300	0.1668
TSS	360	0.2000

5. **INFLUENT FLOW CHARACTERISTICS** The hydraulic design of the plant must be conservative to insure that the plant will operate under the most extreme conditions anticipated. Future enlargement to the plant will be based on actual influent flow data. The plant process

First Phase		
Average Daily Flow (Qav)	62,500 GPD	43 GPM
Peak 2-Hr. Flow (Qpk) 4	250,000 GPD	174 GPM
Second Phase		
Average Daily Flow (Qav)	125,000 GPD	87 GPM
Peak 2-Hr. Flow (Qpk) 4	500,000 GPD	347 GPM
Third Phase		
Average Daily Flow (Qav)	250,000 GPD	174 GPM
Peak 2-Hr. Flow (Qpk) 4	1,000,000 GPD	694 GPM

Refer to Attachment "A" - Process Design Calculations, Hydraulic Profile Calculations, Process Flow Diagrams, and Plant Discharge relationship for the 100 year flood.

6. **PROCESS DESIGN** The Sewage Treatment Plant has been designed to produce an effluent in compliance with permitted parameters of: BOD₅ = 10 mg/l, TSS = 15 mg/l, and Chlorine Residual = 1mg/l after 20 minutes contact.

Compressed air will be supplied to the process units by multiple blowers.

7. PROCESS DESIGN DESCRIPTION

INTERIM I -The facility will employ the conventional plug flow variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the aeration basin; from the aeration basin the mix-liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the headworks.

INTERIM II - The facility will employ the conventional plug flow variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the aeration basin; from the aeration basin the mix-liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the headworks.

FINAL - The facility will employ the conventional plug flow variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the aeration basins; from the aeration basins the mix-liquor will be transferred to the clarifiers where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the headworks.

8.

FLOOD HAZARD ANALYSIS The plant site is located wholly in Zone X area of minimal flood hazard. The nearest 100 year flood elevation is not published at this time as it is an unstudied Zone A floodplain.

9. SLUDGE DISPOSAL

Digester.....	Aerobic
Transportation.....	Contract Hauler
Final Dispositior	To be Determined by Contract Hauler

**Facility Dimensions &
Facility Features**
TCEQ Permit No WQ00_____

The facility will employ the conventional plug flow variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the aeration basin; from the aeration basin the mixed liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the headworks.

Phase I – 0.0625 MGD

<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Clarifier		36'	12'
Chlorine Contact	20'	12'	10'
Aeration 1@	34'	12'	12'
Digester 1@	26'	12'	12'

Phase II – 0.125 MGD

<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Clarifier		36'	12'
Chlorine Contact	20'	12'	12'
Aeration 2@	34'	12'	12'
Digester 2@	26'	12'	12'

Phase III – 0.0250 MGD

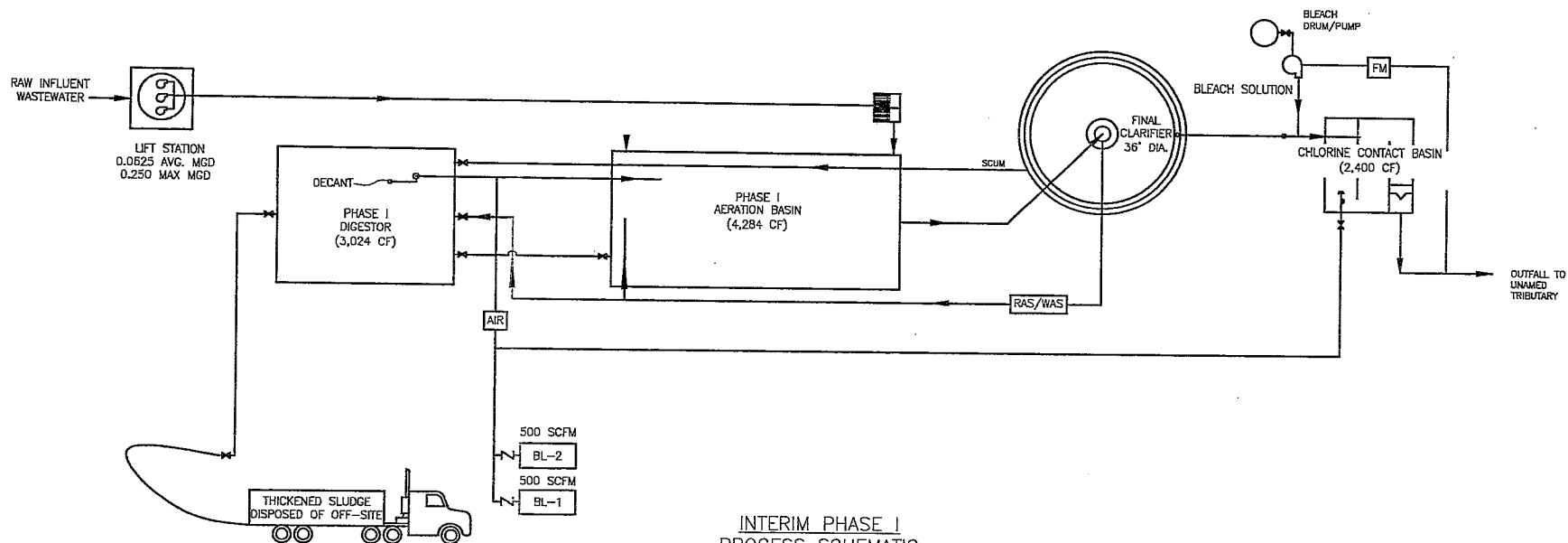
<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
1@ Clarifier		36'	12'
Chlorine Contact	20'	12'	12'
Aeration 4@	34'	12'	12'
Digester 4@	26'	12'	12'

- For short power outages the sewage will be contained in the collection system. Influent is from a triplex lift station which will not function during a general power outage. The plant features digesters, chlorinator, and stand-by blowers. The collection system will be new, and minimum infiltration is anticipated. The plant is to be maintained and operated by personnel licensed by the State of Texas.
- The plant is designed to be maintained without bypassing. Replacement or repair of the interior coating system is the only maintenance item that would necessitate bypassing and the epoxy system should last 15-20 years.
- An intruder resistant fence will be placed around the facility.

ATTACHMENT K

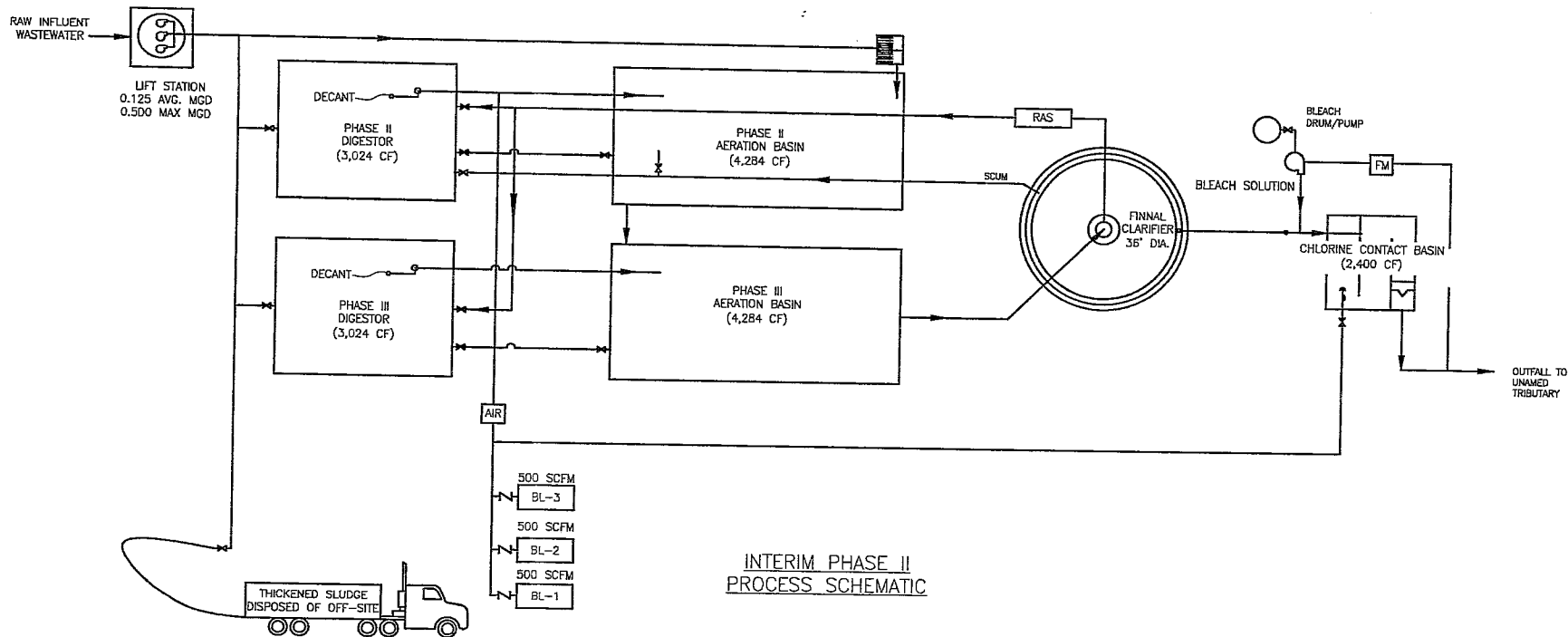
FLOW DIAGRAMS

(Technical Report 1.0 : Section 2C)



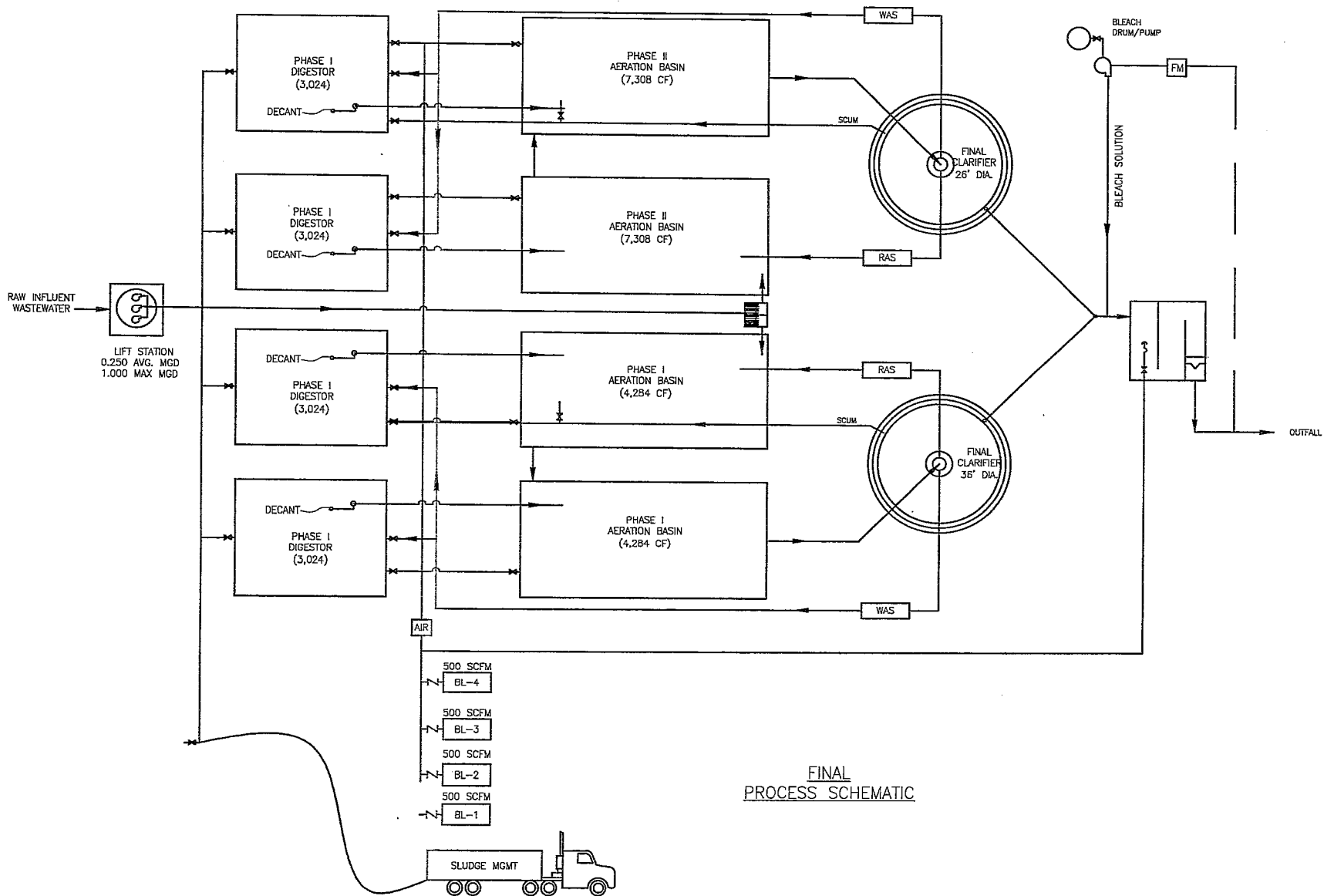
INTERIM PHASE I
PROCESS SCHEMATIC

000087



INTERIM PHASE II
PROCESS SCHEMATIC

000088



FINAL
PROCESS SCHEMATIC

680000

ATTACHMENT L

SITE DRAWING

(Technical Report 1.0 : Section 3)

SERVICE AREA BOUNDARY
453 SINGLE FAMILY HOMES

COCHRAN ROAD
(80' PUBLIC R.O.W.) ASPHALT

SAIGON STREET
(80' R.O.W.)

FAITH MEADOW LANE
(60' R.O.W.)

FASTBOY LANE
(60' R.O.W.)

KINGSTON WAY
(60' R.O.W.)

TEJAS TRAIL
(60' R.O.W.)

PROPOSED
WASTEWATER
TREATMENT
PLANT



PROPOSED
WATER PLANT

QUADVEST L.P.
TRAILS AT COCHRAN WASTEWATER TREATMENT PLANT

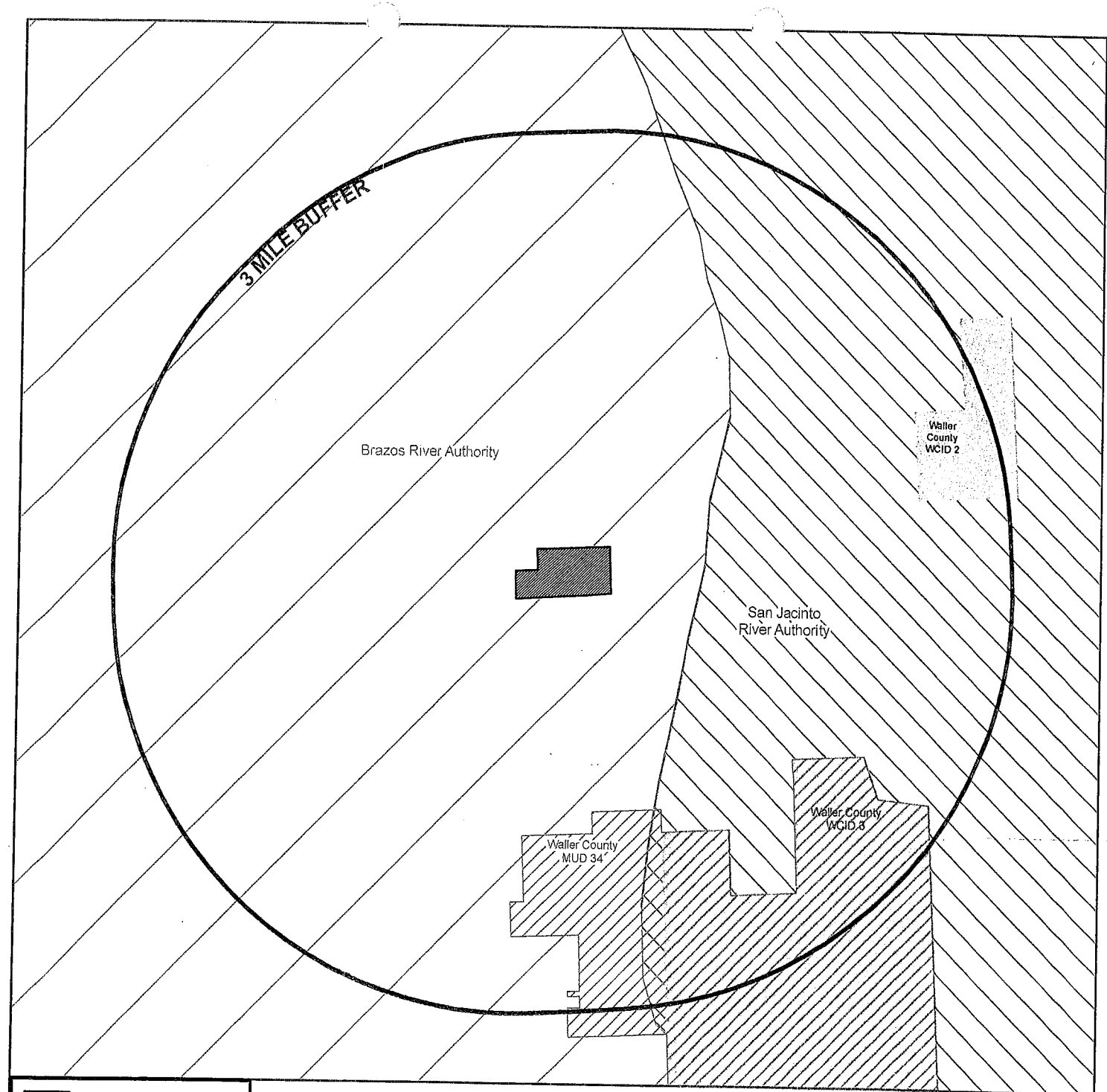
FASTBOY COCHRAN RD LLC SUBDIVISION
WALLER, TEXAS

10/17/2022

ATTACHMENT M

NEARBY WWTP MAP

(Technical Report 1.1 : Section 1.B.3)








3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



0 0.5 1 Miles

000093
Map by: S. Burt, ASBGI
Date: July 26, 2022
Base: TxDOT Roadways
Project: 3 Mile Buffer

ATTACHMENT N

COPY OF LETTER

(Technical Report 1.1 : Section 1.B.3)



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

FCM Corporation
3050 Post Oak Blvd Ste 600
Houston, TX 77056

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

You have been identified as a neighboring utility of like kind and/or municipality with an extraterritorial jurisdiction (ETJ) within 3 miles of the proposed service area. Pursuant to TCEQ regulations, Quadvest, L.P. formally asks whether you are willing or able to provide water and wastewater service to this proposed property sufficient to meet the TCEQ's minimum service standards plus local demands thereby providing continuous and adequate utility service to the consuming public. Please fill out the questionnaire below and return to us.

You may fax or email your response to 281-356-5382 or atrader@quadvest.com. If you have any questions please call me at 281-305-1153. Thank you for your assistance.

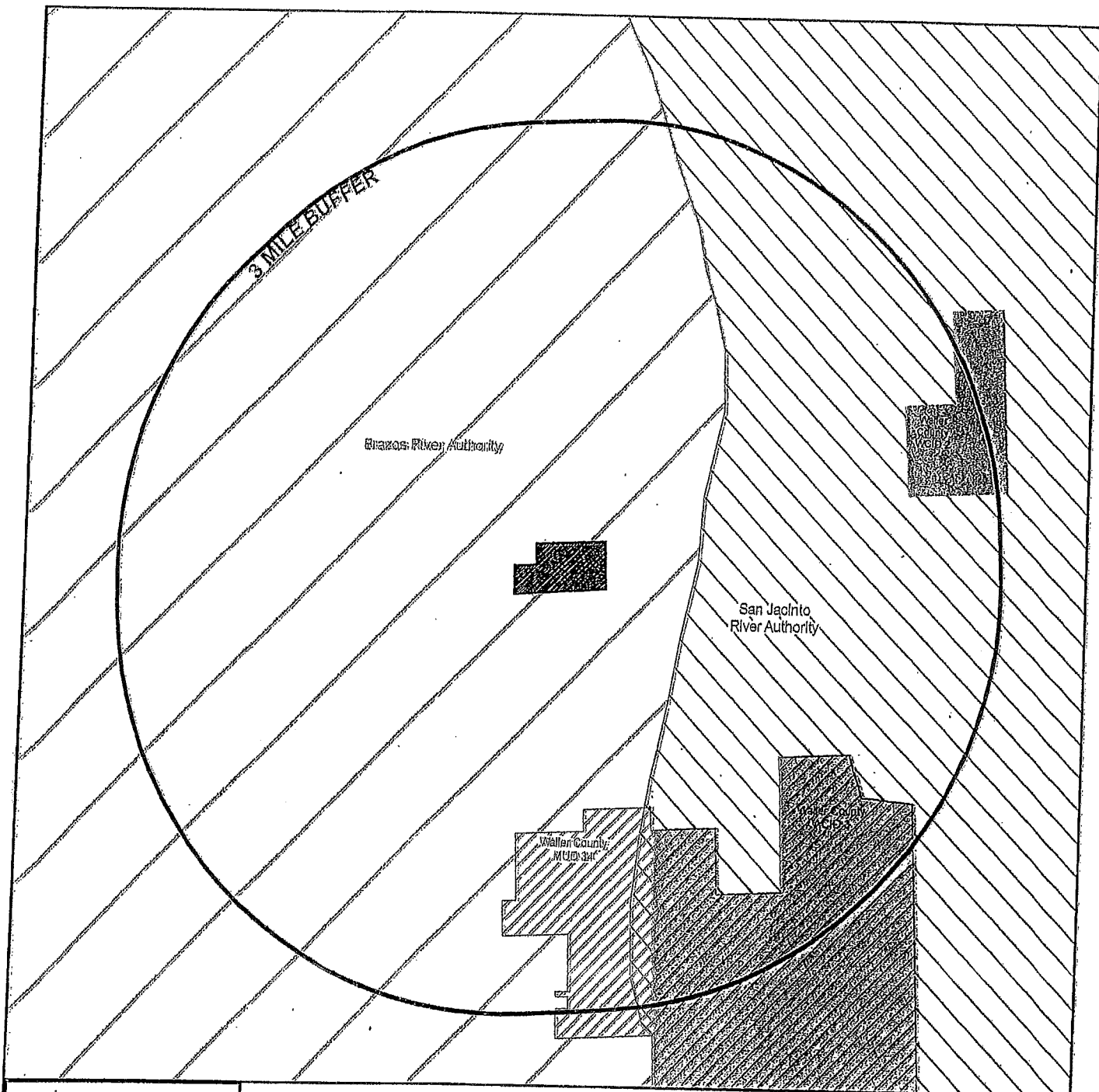
Sincerely,



A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____

000095








 Trails at Cochran Ranch
 3 Mile Buffer

3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
 Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
 Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



0 0.5 1
 Miles



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Brazos River Authority
PO Box 7555
Waco, TX 76714

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

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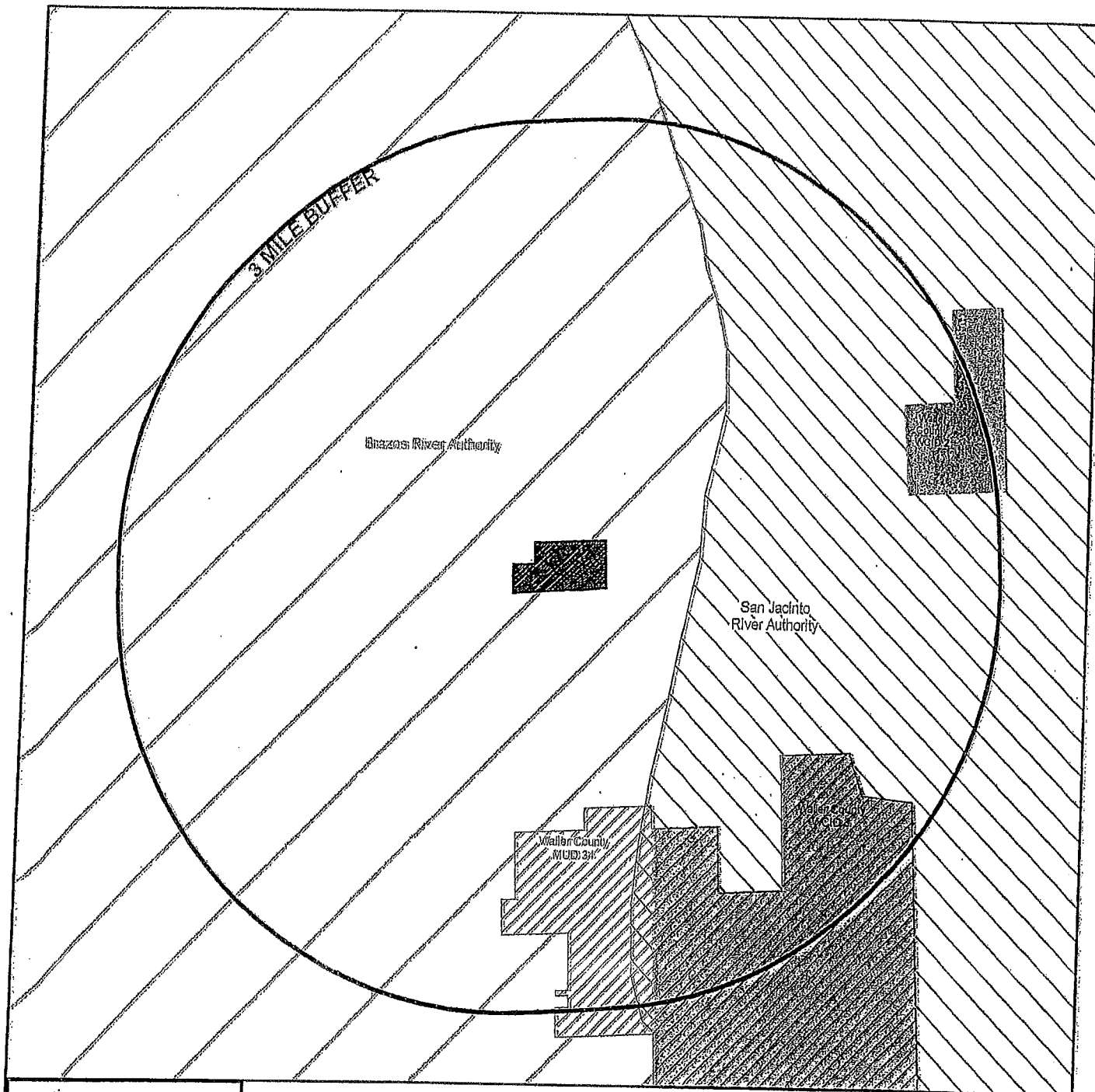
Sincerely,



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April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____

000097








 Trails at Cochran Ranch
 3 Mile Buffer

3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
 Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
 Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW

Map by: S. Burt, ASCE
 Date: July 26, 2022
 Base: TxDOT Roadways
 Project: 3 Mile Buffer

000098



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

San Jacinto River Authority
PO Box 329
Conroe, TX 77305

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

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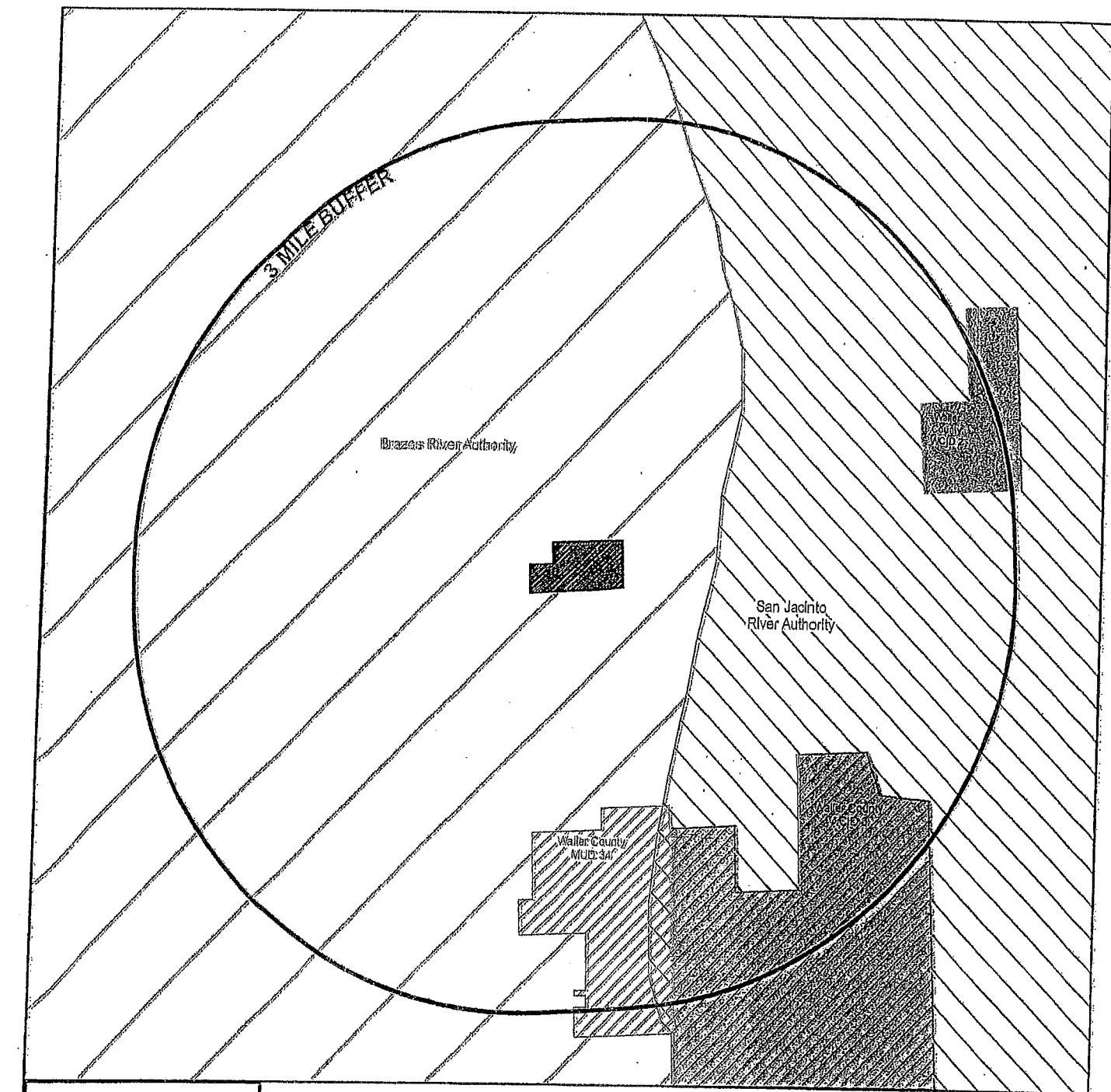
Sincerely,



A handwritten signature in black ink, appearing to read 'April H. Trader'.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____

000099








 Tralls at Cochran Ranch
 3 Mile Buffer

3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
 Tralls at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
 Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

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-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



0 0.5 1
 Miles



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Waller County MUD 34A
Swartz Page & Harding
1300 Post Oak Blvd Ste 2400
Houston, TX 77056

Re Service Availability Request

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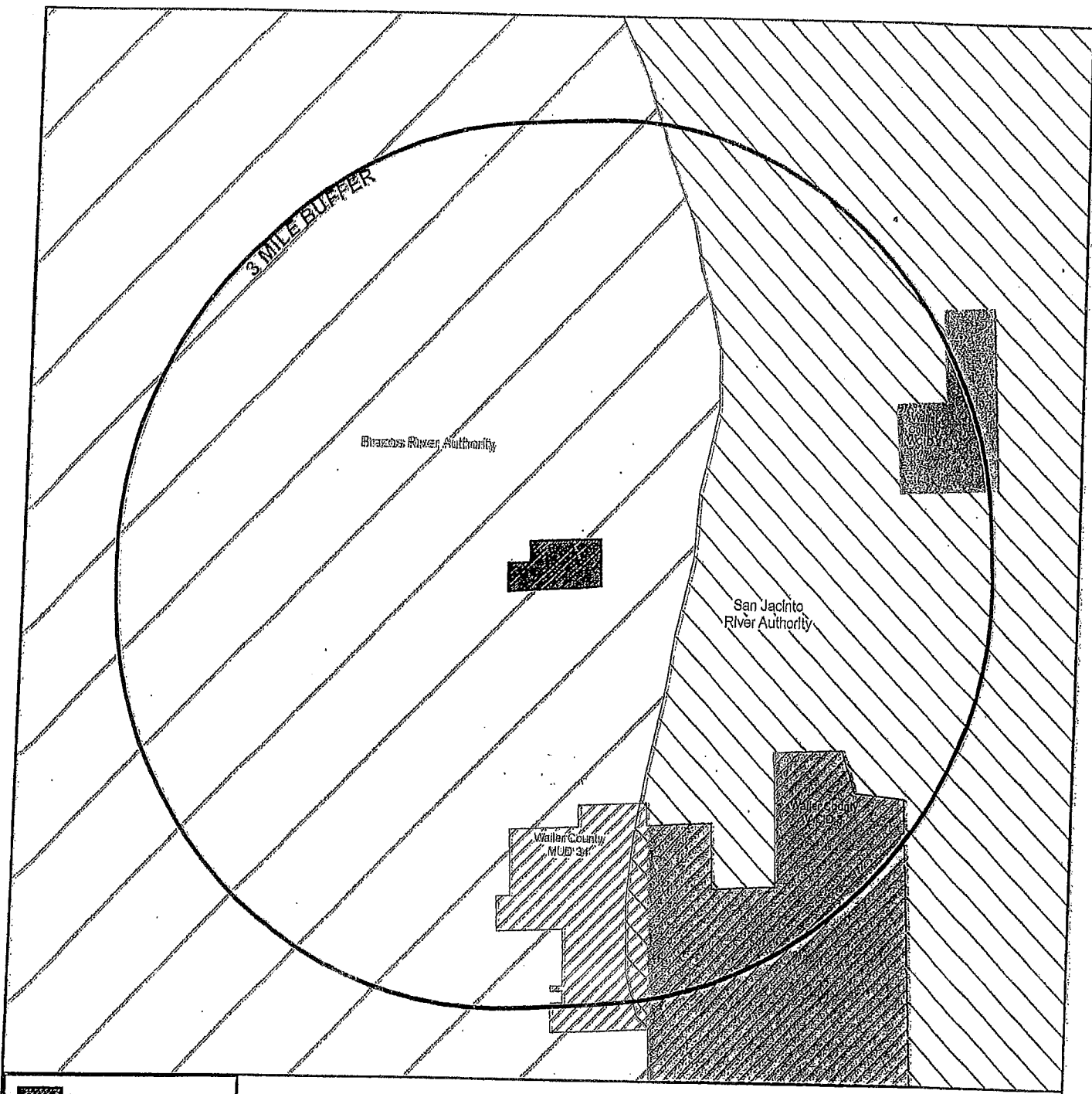
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
A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____

000101








 Trails at Cochran Ranch
 3 Mile Buffer

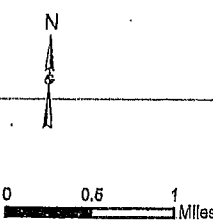
3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

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Map by: S. Burt, ASPE
 Date: July 26, 2022
 Base: TxDOT Roadways
 Project: 3 Mile Buffer



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Bluebonnet GCD
303 E Washington Ave Ste D
Navasota, TX 77868

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

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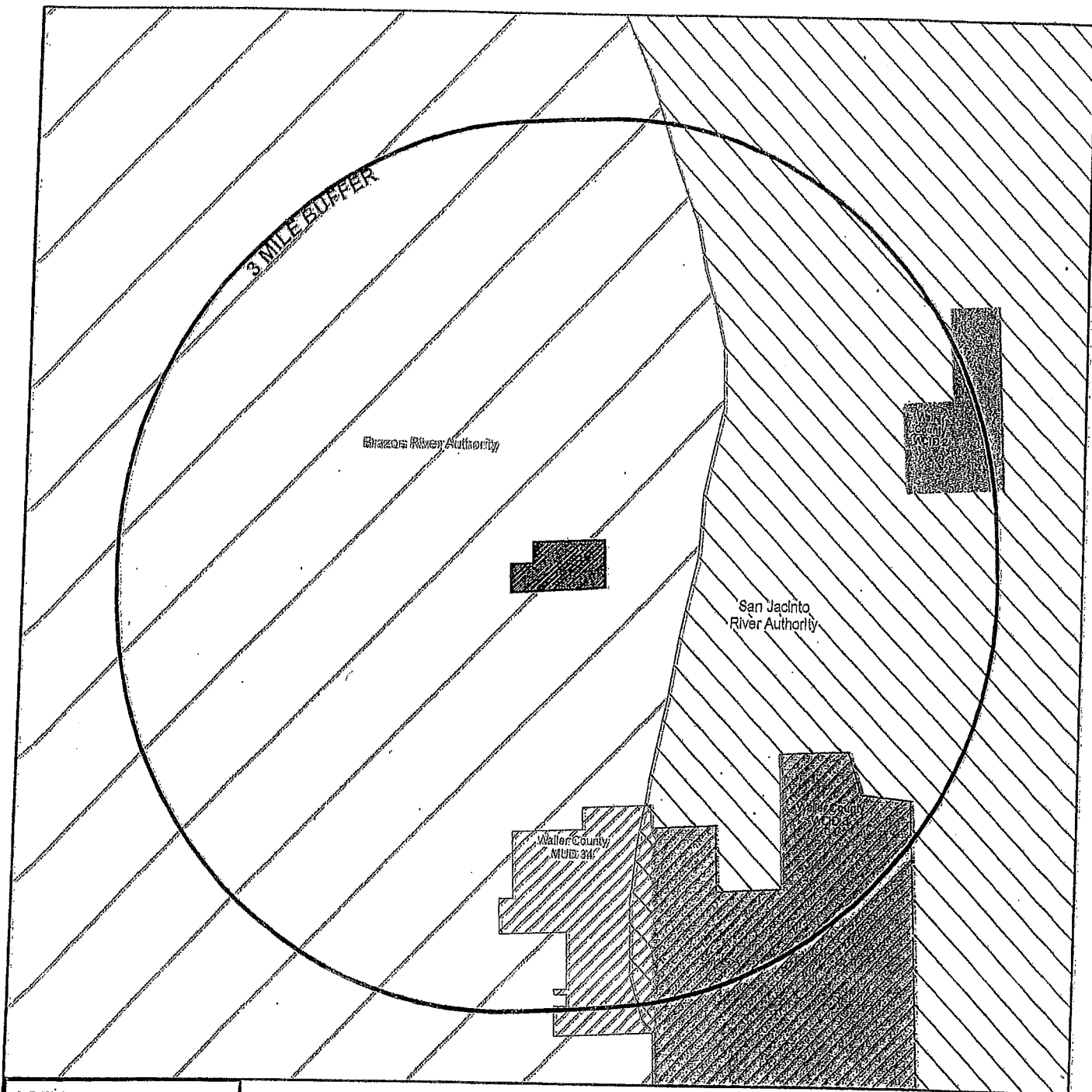
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
Sincerely,

A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____








-  Tralls at Cochran Ranch
-  3 Mile Buffer

3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Tralls at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



0 0.5 1
Miles

Map by: S. Burt, ASBGI
Date: July 28, 2004
Base: TxDOT Roadways
Project: 3 Mile Buffer

000104



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Brazos River Authority
PO Box 7555
Waco, TX 76714

Re Service Availability Request

To Whom It May Concern:

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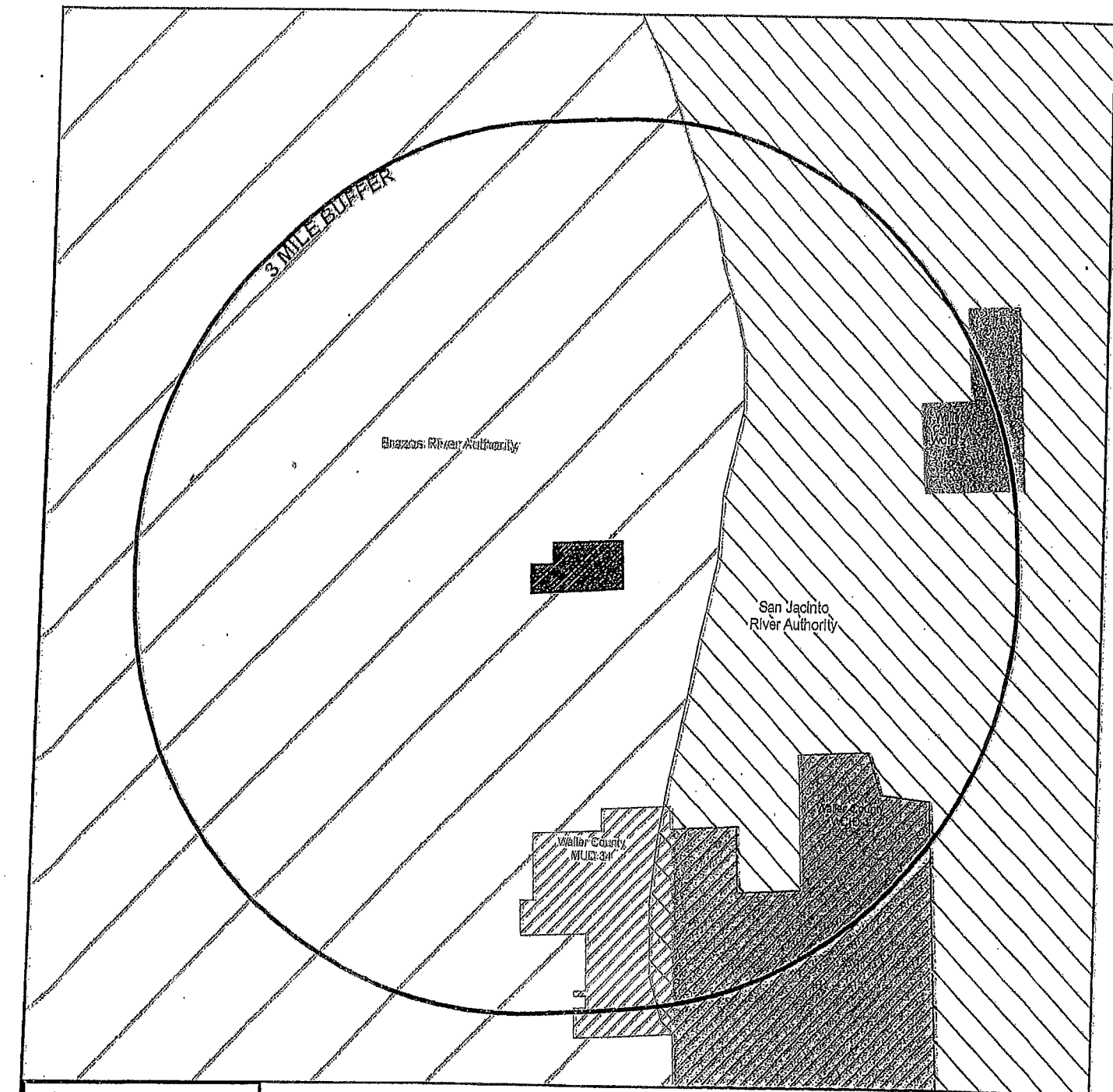
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Sincerely,

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April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service? _____
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____








-  Tralls at Cochran Ranch
-  3 Mile Buffer

3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Tralls at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



0 0.5 1 Miles

Map by: S. Burt, ASBGI
Date: July 26, 2009
Base: TxDOT Roadways
Project: 3 Mile Buffer



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

San Jacinto River Authority
PO Box 329
Conroe, TX 77305

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

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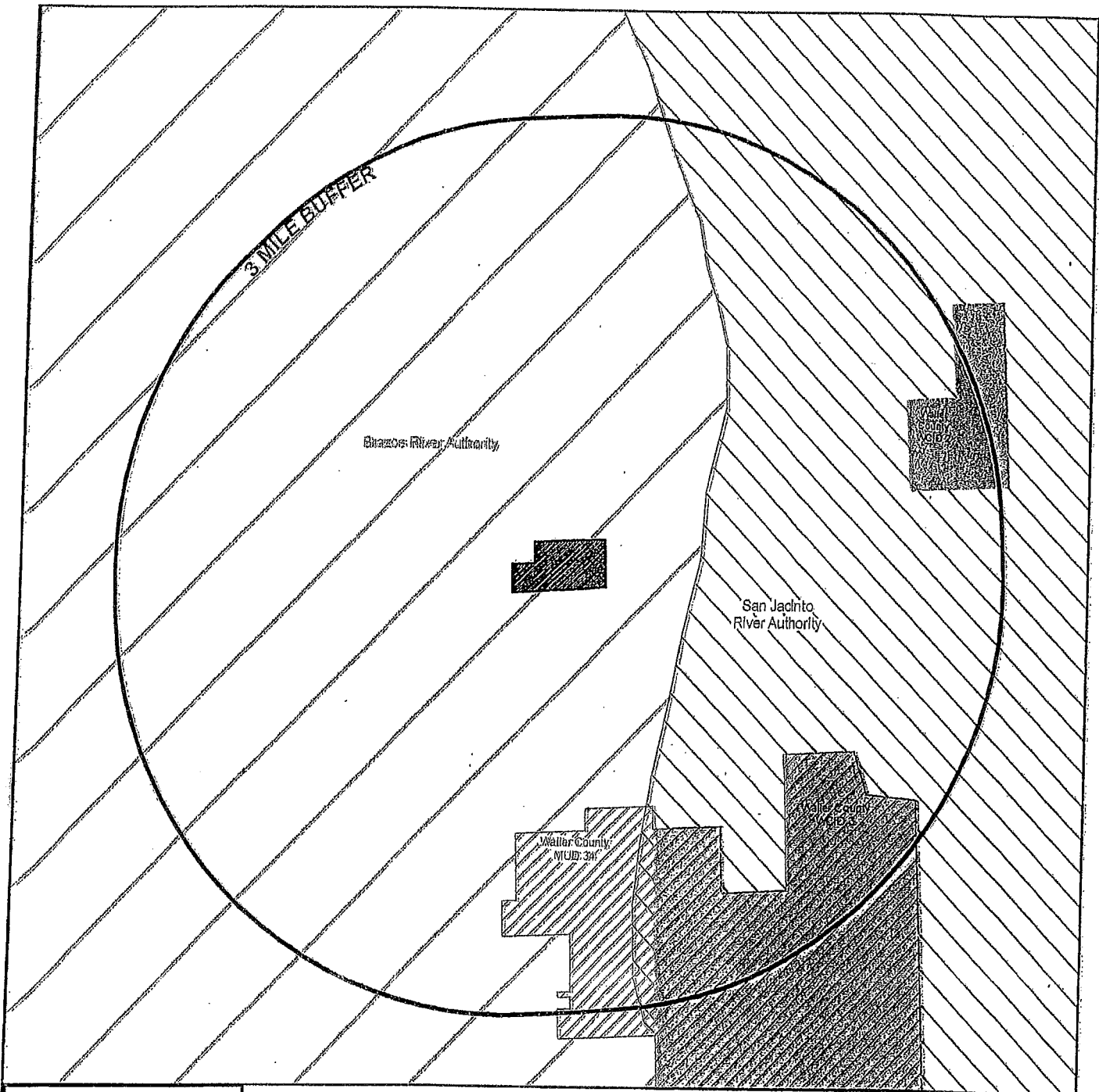
You may fax or email your response to 281-356-5382 or atrader@quadvest.com. If you have any questions please call me at 281-305-1153. Thank you for your assistance.



Sincerely,

A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____
Email/Telephone _____








-  Tralls at Cochran Ranch
-  3 Mile Buffer

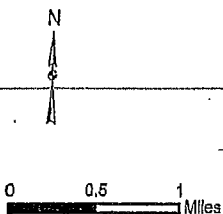
3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Tralls at Cochran Ranch In Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW



Map by: S. Burt, ASBG
Date: July 28, 2008
Base: TxDOT Roadways
Project: 3 Mile Buffer



Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Waller County MUD 34A
Swartz Page & Harding
1300 Post Oak Blvd Ste 2400
Houston, TX 77056

Re Service Availability Request

To Whom It May Concern:

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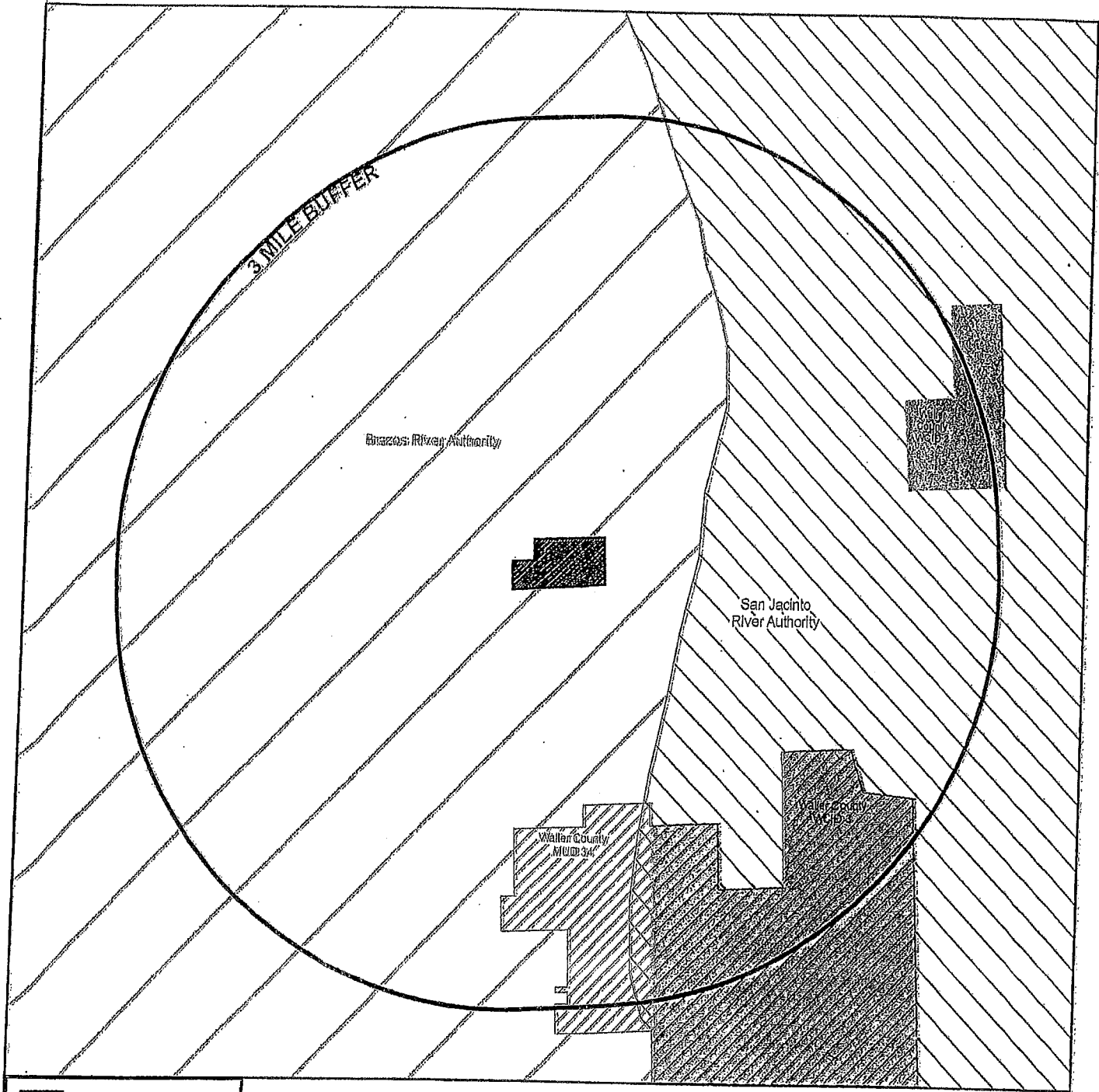
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
Sincerely,

A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____








-  Trails at Cochran Ranch
-  3 Mile Buffer

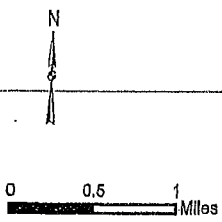
3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
Wastewater Outfalls within 3 Miles - None

Districts within 3 Miles

-  Brazos River Authority - Special Law
-  San Jacinto River Authority - Special Law
-  Waller County MUD 34 - Wholesale WW
-  Waller County WCID 2 - No WW
-  Waller County WCID 3 - Wholesale WW





Quadvest, L.P.
26926 FM 2978
Magnolia, TX 77354

Main: 281-356-5347
Fax: 281-356-5382
Quadvest.com

October 4, 2022

Waller County WCID 2
Smith Murdaugh Little & Bonham LLP
1100 Louisiana St Ste 400
Houston, TX 77002

Re Service Availability Request

To Whom It May Concern:

Quadvest, L.P. is in the process of preparing a design submittal package to obtain approval from the TCEQ to construct a public water system and a wastewater treatment plant to serve developments located in the approximately 6.8 miles southeast of downtown Pine Island, Texas in Waller County, shown on enclosed map.

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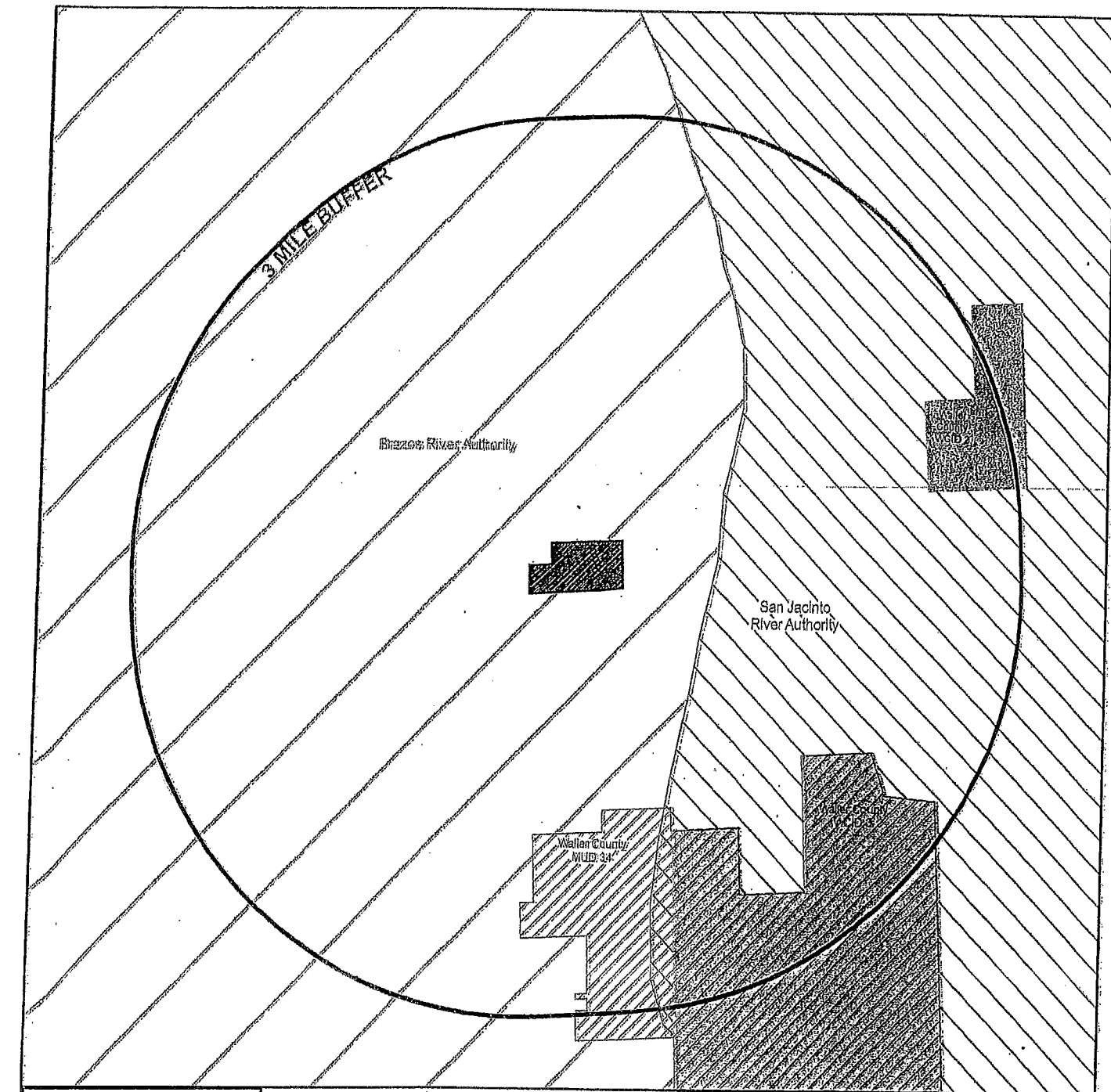
Sincerely,

A handwritten signature in black ink, appearing to read 'April H. Trader', is written over a horizontal line.

April H. Trader
Engineering & Construction
Coordinator

Date of Reply: _____
Name of Utility _____
Ability to Provide Service?
(Yes/No) _____
Printed Name _____
Organization _____

000111








3 Mile Buffer with Sewer CCNs, Districts and WW Outfalls

Quadvest, L.P.
Trails at Cochran Ranch in Waller County

Sewer CCNs within 3 Miles - None
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-  Waller County WCID 3 - Wholesale WW



0 0.5 1 Miles

Map by: S. Burt, ASPE
Date: July 26, 2022
Base: TxDOT Roadways
Project: 3 Mile Buffer

000112

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Swartz Page & Harding
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Houston, TX 77056

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Waller County WCID 2
Smith Murdaugh Little & Bonham LLP
1100 Louisiana St Ste 400
Houston, TX 77002

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Quadvest
Water and Sewer Utility

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Magnolia, TX 77354

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Bluebonnet GCD
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Navasota, TX 77868

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Water and Sewer Utility
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Magnolia, TX 77354

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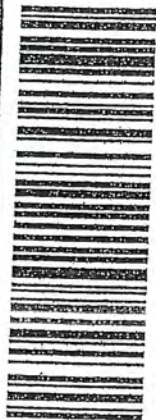
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Swartz Page & Harding
1300 Post Oak Blvd Ste 2400
Houston, TX 77056

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Magnolia, TX 77354

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Total Post

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Street and

City, State

San Jacinto River Authority
PO Box 329
Conroe, TX 77305

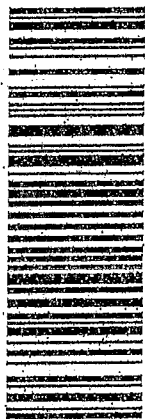
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Brazos River Authority
PO Box 7555
Waco, TX 76714

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Water and Sewer Utility
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City, St

FCM Corporation
3050 Post Oak Blvd Ste 600
Houston, TX 77056

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ATTACHMENT O

DESIGN CALCULATIONS

(Technical Report 1.1 : Section 4)

Proposed Organic Loading

<u>Influent Conditions</u>	First Phase		Second Phase		Third Phase	
	GPD	GPM	GPD	GPM	GPD	GPM
Average Daily Flow - Qav	62,500	43	125,000	87	250,000	174
2hr. Peak Flow (Qpk)	250,000	174	500,000	347	1,000,000	694
BOD ₅ (lbs/day)@.1668 lb/capita	143.3438		286.6875		573.375	
2 hr Average Flow (Qav) cf/sec	0.10		0.19		0.39	
2 hr Peak Flow (Qpk) cf/sec	0.39		0.77		1.55	
<u>Effluent (30 Day Average)</u>						
BOD ₅ (mg/l)	275					
TSS (mg/l)	360					
<u>Process Loadings</u>						
MLSS (mg/l)	3000					
RASS (mg/l)	6000					
<u>Aeration</u>						
Total Aeration Vol. Available	4284 cf		8568 cf		17136 cf	
Organic Loading (lbs/day/1000cu ft)	33.5 lbs		33.5 lbs		33.5 lbs	
TCEQ Maximum Organic Loading lbs/day/1000cu ft	35 lbs		35 lbs		35 lbs	
<u>Digester</u>						
Total Volume Available	3024 cf		6048 cf		12096 cf	
Digester Loadings (Vol.) / (lbs BOD ₅)	21.1 cf/lb		21.1 cf/lb		21.1 cf/lb	
TCEQ Minimum Volume for Organic Loading	20 cf/lb		20 cf/lb		20 cf/lb	
Retention Time	41.0 days		41.0 days		41.0 days	
<u>Clarifier</u>						
Diameter	36 ft		36 ft (Dia "A")		36 ft (Dia "A") ft (Dia "B") ft (Dia "C")	
Area	1017.9 sf		1017.9 sf		1017.9 sf	
TCEQ Maximum Surface Loading @ Qav	1,200 GPD/sf		1,200 GPD/sf		1,200 GPD/sf	
Surface Loading @ Qpk	246 GPD/sf		491 GPD/sf		982 GPD/sf	
Stilling Well Diameter	3 ft		3 ft (Dia "A") ft (Dia "B")		3 ft (Dia "A") ft (Dia "B") ft (Dia "C")	
Stilling Well Area	7.07 sf		7.07 sf		7.07 sf	

Vert. Flow Velocity @ Qpk / (Area)	(CFS)	0.05 ft/sec	0.11 ft/sec	0.22 ft/sec
		First Phase	Second Phase	Third Phase
<u>Clarifier Weir</u>				
Weir Diameter		34 ft	34 ft	34 ft ("A") 0 ft ("B") 0 ft ("C")
Weir Length		106.8 ft	106.8 ft	106.8 ft ("A") 0.0 ft ("B") 0.0 ft ("C")
Total Weir length				106.8
Maximum Weir loading at Qpk		20,000 GPD/sq.ft.	20,000 GPD/sq.ft.	20,000 GPD/sq.ft.
Weir Loading at Qpk		2,341 GPD/sq.ft.	4,681 GPD/sq.ft.	9,362 GPD/sq.ft.
<u>Chlorine Contact Chamber</u>				
Volume Required by TCEQ		464 cf	928 cf	1,857 cf
Volume Furnished cf		2,400 cf	2,400 cf	2,400 cf
Volume gal		17,952.0 gal	17,952.0 gal	17,952.0 gal
Min TCEQ Detention Time		20 min	20 min	20 min
Detention Time @ Qpk (Vol. Gal)(1440) / (Qpk GPD)		103.4 min	51.7 min	25.9 min
Dosage Rate lb/day=Qpk MGD**mg/1*8.34		23.98 lb/day	47.96 lb/day	95.92 lb/day
Solution Water Supply GPM=20 Gpm/100lb/day		4.80 GPM	9.59 GPM	19.18 GPM

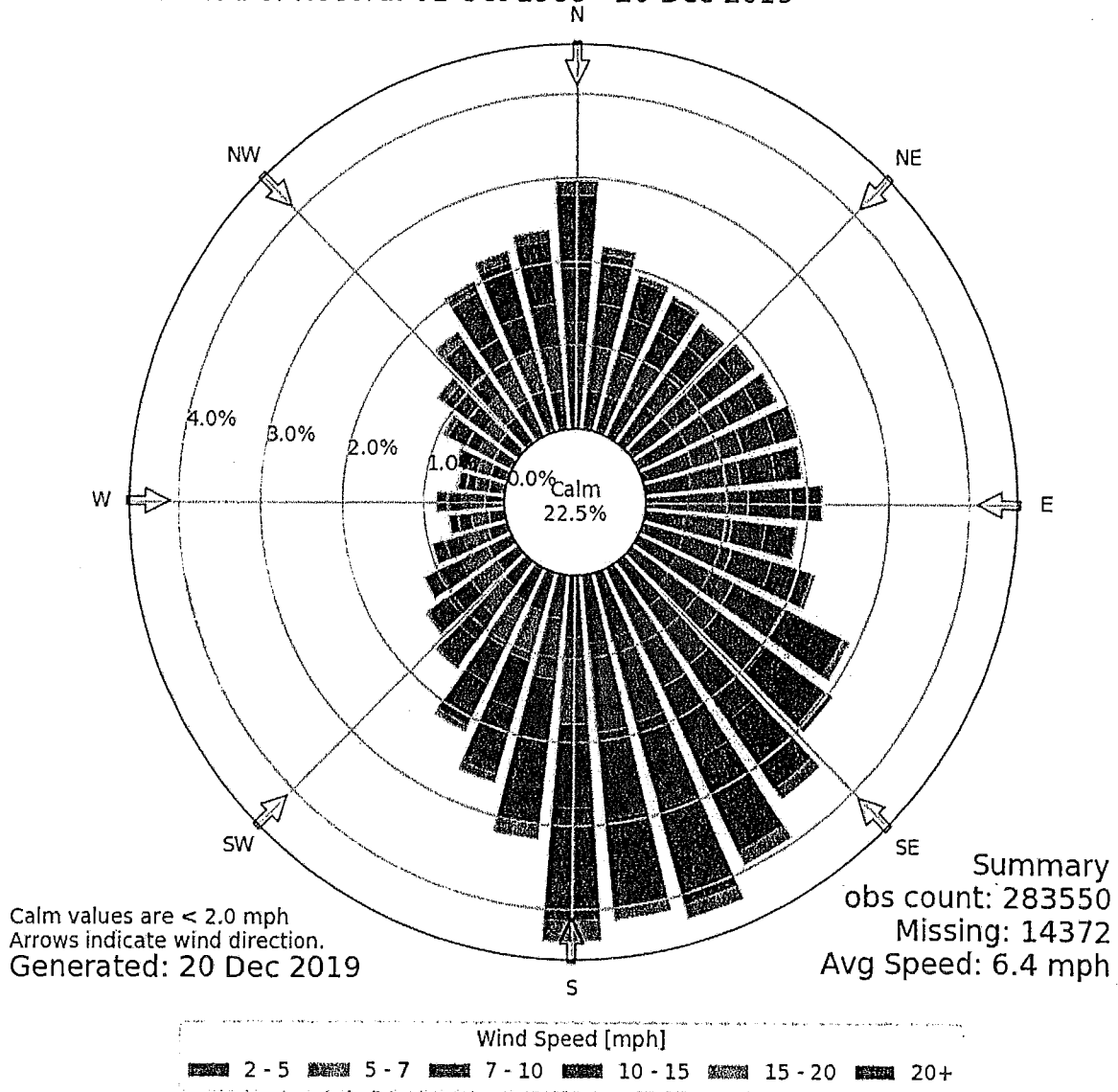
ATTACHMENT P

WIND ROSE

(Technical Report 1.1 : Section 5B)



[DWH] HOUSTON/D.W. HOOKS
Windrose Plot [All Year]
Period of Record: 01 Oct 1986 - 20 Dec 2019



ATTACHMENT Q

SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN

(Technical Report 1.0 : Section 7)

SLUDGE PRODUCTION RATES

	Phase I			
	Avg. Daily Flow (MGD) = 0.063			
	Percent Capacity			
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.0625	0.046875	0.03125	0.015625
Dimensions & Volume of Digester				
	Volume =	3,024	cu.ft. =	22,620 gal
CBOD ₅ Removal				
		Influent Concentration =	300	mg/l
		Effluent Concentration =	10	mg/l
		Net Removal =	<u>290</u>	<u>mg/l</u>

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	151	113	76	38
Lbs. of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	48	36	24	12
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	3,174	2,381	1,587	794
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	381	285	190	95

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	59	79	119	238
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Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids, the contents will be hauled by **the contracted sludge hauler** to one of the approved land application sites.

The sludge hauler will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.

SLUDGE PRODUCTION RATES

	Phase II			
	Avg. Daily Flow (MGD) =			
	0.125			
	Percent Capacity			
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.125	0.09375	0.0625	0.03125
Dimensions & Volume of Digester				
	Volume =	6,048	cu.ft. =	45,239 gal
CBOD ₅ Removal				
			Influent Concentration =	300 mg/l
			Effluent Concentration =	10 mg/l
			Net Removal =	<u>290 mg/l</u>

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	302	227	151	76
Lbs. of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	95	71	48	24
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	6,349	4,762	3,174	1,587
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	761	571	381	190

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	59	79	119	238
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Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids,the contents will be hauled by **the contracted sludge hauler** to one of the approved land application sites.

The sludge hauler will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.

SLUDGE PRODUCTION RATES

	Phase III			
	Avg. Daily Flow (MGD) =			
	0.250			
	Percent Capacity			
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.25	0.1875	0.125	0.0625
Dimensions & Volume of Digester				
	Volume =			
	12,096	cu.ft.	=	180,956 gal
CBOD ₅ Removal				
	Influent Concentration =			
	300 mg/l			
	Effluent Concentration =			
	10 mg/l			
	Net Removal =			
	<u>290 mg/l</u>			

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	605	453	302	151
Lbs. of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	190	143	95	48
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	12,698	9,523	6,349	3,174
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	1523	1142	761	381

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	119	158	238	475
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Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids, the contents will be hauled by the **contracted sludge hauler** to one of the approved land application sites.

The **sludge hauler** will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.