



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
DOMESTIC WASTEWATER PERMIT APPLICATION
CHECKLIST



Complete and submit this checklist with the application.

APPLICANT: Restore the Grasslands, LLC and Harrington/Turner Enterprises, LP

PERMIT NUMBER: TBD

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 type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

For TCEQ Use Only

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



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 checked="" type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input 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: [Click here to enter text.](#)
Check/Money Order Amount: [Click here to enter text.](#)
Name Printed on Check: [Click here to enter text.](#)

EPAY Voucher Number: [Click here to enter text.](#)

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 <i>with</i> Renewal | <input type="checkbox"/> Minor Amendment <i>with</i> Renewal |
| <input type="checkbox"/> Major Amendment <i>without</i> Renewal | <input type="checkbox"/> Minor Amendment <i>without</i> Renewal |
| <input type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

For amendments or modifications, describe the proposed changes: N/A

For existing permits:

Permit Number: WQ00N/A

EPA I.D. (TPDES only): TXN/A

Expiration Date: N/A

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?

Restore the Grasslands, LLC

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

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

CN: N/A

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: John Cox

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

Title: Manager

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

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

Harrington/Turner Enterprises, LP

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at:

<http://www15.tceq.texas.gov/crpub/>

CN: N/A

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): Ms.

First and Last Name: Margaret Turner

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

Title: N/A

Provide a brief description of the need for a co-permittee: Intended owner of the facility is not the landowner

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: 1.1 and 1.2

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): Ms.

First and Last Name: Ashley Broughton

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

Title: Project Manager

Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Pkwy S, Suite 600

City, State, Zip Code: Houston, Texas 77042

Phone No.: 713-380-4431 Ext.: N/A Fax No.: N/A

E-mail Address: abroughton@lja.com

Check one or both: Administrative Contact Technical Contact

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

First and Last Name: Laura Preston

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

Title: Graduate Engineer

Organization Name: LJA Engineering, Inc.

Mailing Address: 6060 N Central Expy Suite 400

City, State, Zip Code: Dallas, TX, 75206

Phone No.: 325-668-2952 Ext.: N/A Fax No.: N/A

E-mail Address: lpreston@lja.com

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.

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

First and Last Name: Ashley Broughton

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

Title: Project Manager

Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Parkway S, STE 600

City, State, Zip Code: Houston, TX 77042

Phone No.: 713-380-4431 Ext.: N/A Fax No.: N/A

E-mail Address: abroughton@lja.com

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

First and Last Name: Jaison Stephen

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

Title: Vice President

Organization Name: LJA Engineering, Inc.

Mailing Address: 6060 N Central Expy Suite 400

City, State, Zip Code: Dallas, Texas 75206

Phone No.: 469-484-0776 Ext.: N/A Fax No.: N/A

E-mail Address: jstephen@lja.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): Mr

First and Last Name: John Cox

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

Title: Manager

Organization Name: Restore the Grasslands, LLC

Mailing Address: 4801 West Lovers Lane

City, State, Zip Code: Dallas, TX 75209

Phone No.: (214) 415-6047 Ext.: N/A Fax No.: N/A

E-mail Address: john.cox@coxsarbentlaw.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

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

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

First and Last Name: John Cox

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

Title: Manager

Organization Name: Restore the Grasslands, LLC

Mailing Address: 4801 West Lovers Lane

City, State, Zip Code: Dallas, TX 75209

Phone No.: (214) 415-6047 Ext.: N/A Fax No.: N/A

E-mail Address: john.cox@coxsarbentelaw.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): Ms.

First and Last Name: Laura Preston

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

Title: Graduate Engineer

Organization Name: LJA Engineering, Inc.

Mailing Address: 6060 N Central Expy Suite 400

City, State, Zip Code: Dallas, Texas 75206

Phone No.: 325-668-2952 Ext.: N/A Fax No.: N/A

E-mail Address: lpreston@lja.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: lpreston@lja.com and abroughton@lja.com;

Fax

Regular Mail

C. Contact person to be listed in the Notices

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

First and Last Name: Ashley Broughton
Credential (P.E, P.G., Ph.D., etc.): PE
Title: Project Manager
Organization Name: LJA Engineering, Inc
Phone No.: 713-380-4431 Ext.: Click here to enter text
E-mail: abroughton@lja.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: Smith Public Library
Location within the building: Reference Desk
Physical Address of Building: 300 Country Club Rd
City: Wylie County: Collin
Contact Name: Library Staff
Phone No.: (972)-516-6250 Ext.: N/A

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. RNN/A

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):

Collin County MUD No. 7 WWTP

C. Owner of treatment facility: Restore the Grasslands, LLC

Ownership of Facility: Public Private Both Federal

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

Prefix (Mr., Ms., Miss): Click here to enter text.

First and Last Name: Harrington/Turner Enterprises, LP

Mailing Address: 3510 Dublin Road

City, State, Zip Code: Parker, TX 75002

Phone No.: (214) 802-0011 E-mail Address: N/A

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: N/A

E. Owner of effluent disposal site:

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

First and Last Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

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: N/A

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): N/A

First and Last Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

Phone No.: N/A

E-mail Address: N/A

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: N/A

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 0.4 miles northwest from the intersection of N. Murphy Road and Rolling Ridge Dr. in Collin County, Texas

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

Yes No

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

To Maxwell Creek; thence to Muddy Creek; thence to Lake Ray Hubbard in Segment 0820 of the Trinity River Basin

City nearest the outfall(s): Parker

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

Outfall Latitude: N 30° 2' 30"

Longitude: W 96° 36' 59"

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.

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

N/A

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:

N/A

D. Do you owe any fees to the TCEQ?

- Yes No

If yes, provide the following information:

Account number: N/A

Amount past due: N/A

E. Do you owe any penalties to the TCEQ?

- Yes No

If yes, please provide the following information:

Enforcement order number: N/A

Amount past due: N/A

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

- Attachment 1 for Individuals as co-applicants
- Other Attachments. Please specify: Core Data Forms: Attachments 1.1 and 1.2

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: TBD

Applicant: Restore the Grasslands, LLC

Certification:

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

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

Signatory name (typed or printed): John Cox

Signatory title: MANAGER

Signature: [Handwritten Signature] Date: 4/20/2021
(Use blue ink)

Subscribed and Sworn to before me by the said JOHN COX
on this 20 day of April, 20 21.
My commission expires on the 20 day of March, 20 25.

Roxanne Cabrera
Notary Public



[SEAL]

Dallas
County, Texas

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: TBD

Applicant: Harrington / Turner Enterprises, 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): Margaret Turner

Signatory title: [REDACTED]

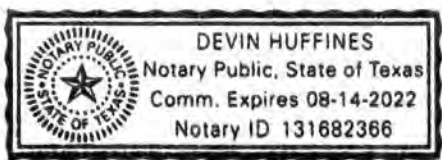
Signature: Margaret E. Turner Date: 4-28-21
(Use blue ink)

Subscribed and Sworn to before me by the said Margaret Turner
on this 28th day of April, 20 21.
My commission expires on the 14th day of August, 20 22.

Devin Huffines
Notary Public

[SEAL]

Dallas
County, Texas



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: Collin County 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):

N/A

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

**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: Restore the Grasslands, LLC and Harrington/Turner Enterprises, LP

Permit No. WQ00 N/A

EPA ID No. TX N/A

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

Approximately 0.4 miles northwest from the intersection of N. Murphy Road and Rolling Ridge Dr. in Collin County, Texas

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

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

First and Last Name: Jaison Stephen

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

Title: Vice President

Mailing Address: 6060 N Central Expy Suite 400

City, State, Zip Code: Dallas, Texas 75206

Phone No.: (469)-484-0779 Ext.: N/A Fax No.: N/A

E-mail Address: jstephen@lja.com

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

N/A

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

To Maxwell Creek; thence to Muddy Creek; thence to Lake Ray Hubbard in Segment 0820 of the Trinity River Basin

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

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

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

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

Disturbance of vegetation or wetlands

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

N/A

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

The property is currently being used for agriculture, and the existing vegetation consists of grasses, shrubs, and trees.

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:

No existing buildings or structures are located on the property.

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

The property has never been developed previously and has generally been used for agricultural purposes or vacant.

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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): 0.1 MGD

2-Hr Peak Flow (MGD): 0.40 MGD

Estimated construction start date: 05/2022

Estimated waste disposal start date: 12/2022

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): 0.2 MGD

2-Hr Peak Flow (MGD): 0.80 MGD

Estimated construction start date: 01/2024

Estimated waste disposal start date: 06/2024

D. Current operating phase: N/A - The facility has not yet been constructed

Provide the startup date of the facility: N/A

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:

See attachment 7

Port or pipe diameter at the discharge point, in inches: 24

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See attachment 8		

C. Process flow diagrams

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

Attachment: 9.1 & 9.2

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: 10

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

Turner Tract - a 101-acre tract that will be developed as single-family residential lots and townhomes.

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.

N/A

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.

N/A

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: N/A

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

Click here to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

Yes No

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

Buffer zone requirements will be met by ownership and restrictive easement.

C. Other actions required by the current permit

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

Yes No

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

N/A

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

Yes No

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

2. Grit and grease processing

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

[Click here to enter text.](#)

3. Grit disposal

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

Yes No

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

[Click here to enter text.](#)

4. Grease and decanted liquid disposal

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

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

[Click here to enter text.](#)

E. Stormwater management

1. Applicability

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

Yes No

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

Yes No

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

2. MSGP coverage

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

Yes No

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

TXR05 N/A or TXRNE N/A

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:

<u>N/A</u>

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.

N/A

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.

N/A

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.

<u>N/A</u>

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.

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

Yes No

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

Yes No

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

Yes No

If yes to any of the above, provide 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.

N/A

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

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

Is 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.

N/A

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	N/A				
Total Suspended Solids, mg/l	N/A				
Ammonia Nitrogen, mg/l	N/A				
Nitrate Nitrogen, mg/l	N/A				
Total Kjeldahl Nitrogen, mg/l	N/A				
Sulfate, mg/l	N/A				
Chloride, mg/l	N/A				
Total Phosphorus, mg/l	N/A				
pH, standard units	N/A				
Dissolved Oxygen*, mg/l	N/A				
Chlorine Residual, mg/l	N/A				
<i>E.coli</i> (CFU/100ml) freshwater	N/A				

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Enterococci (CFU/100ml) saltwater	N/A				
Total Dissolved Solids, mg/l	N/A				
Electrical Conductivity, µmohs/cm, †	N/A				
Oil & Grease, mg/l	N/A				
Alkalinity (CaCO ₃)*, mg/l	N/A				

*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	N/A				
Total Dissolved Solids, mg/l	N/A				
pH, standard units	N/A				
Fluoride, mg/l	N/A				
Aluminum, mg/l	N/A				
Alkalinity (CaCO ₃), mg/l	N/A				

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: TBD

Facility Operator's License Classification and Level: TBD

Facility Operator's License Number: TBD

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

B. Sludge disposal site

Disposal site name: TBD

TCEQ permit or registration number: [Click here to enter text.](#)

County where disposal site is located: [Click here to enter text.](#)

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: N/A

- USDA Natural Resources Conservation Service Soil Map:

Attachment: N/A

- Federal Emergency Management Map:

Attachment: N/A

- Site map:

Attachment: N/A

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: N/A

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:

N/A

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: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

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

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

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

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

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

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.

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: N/A
- Copy of the closure plan
Attachment: N/A
- Copy of deed recordation for the site
Attachment: N/A
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions
Attachment: N/A

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: N/A

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:

N/A

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes No

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

Yes No

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

N/A

Section 13. RCRA/CERCLA Wastes (Instructions Page 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: N/A

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 permit is needed for the proposed new Wastewater Treatment Facility which will provide service to the planned single-family residential and townhome development.

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: N/A

If yes, attach correspondence from the city.

Attachment: N/A

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: N/A

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: N/A

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: 11

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

Attachment: 12

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: N/A

Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): N/A

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

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

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

<u>N/A</u>

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	0.20 MGD	300 mg/L
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park,		

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.20 MGD	
AVERAGE BOD ₅ from all sources		300 mg/L

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: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: [Click here to enter text.](#)

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: [Click here to enter text.](#)

Total Suspended Solids, mg/l: [Click here to enter text.](#)

Ammonia Nitrogen, mg/l: [Click here to enter text.](#)

Total Phosphorus, mg/l: [Click here to enter text.](#)

Dissolved Oxygen, mg/l: [Click here to enter text.](#)

Other: [Click here to enter text.](#)

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: [Click here to enter text.](#)

D. Disinfection Method

Identify the proposed method of disinfection.

- Chlorine: 4 mg/l after 20 minutes detention time at peak flow
Dechlorination process: N/A
- Ultraviolet Light: [Click here to enter text.](#) seconds contact time at peak flow
- Other: [Click here to enter text.](#)

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: 13

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.

N/A

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

FEMA FIRM 48085C0415J

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: N/A

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

B. Wind rose

Attach a wind rose. **Attachment:** 14

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: N/A

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: N/A

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

Attach a solids management plan to the application.

Attachment: 15

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: N/A

Distance and direction to the intake: N/A

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

Attachment: N/A

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

Does the facility discharge into tidally affected waters?

Yes No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet:

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes No

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

<input type="text"/>

C. Sea grasses

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

Yes No

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

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: Maxwell Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

- Stream
- Freshwater Swamp or Marsh
- Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

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

- Man-made Channel or Ditch

- Open Bay
- Tidal Stream, Bayou, or Marsh
- Other, specify: _____

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: _____

C. Downstream perennial confluences

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

No perennial streams join Maxwell Creek within three miles downstream of the discharge point.

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.

N/A

E. Normal dry weather characteristics

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

The water body is generally a shallow, slow-flowing stream during normal dry weather conditions. The stream banks are heavily vegetated.

Date and time of observation: April 7, 2021 3:00 pm

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.

- | | |
|---|--|
| <input type="checkbox"/> Oil field activities | <input checked="" type="checkbox"/> Urban runoff |
| <input type="checkbox"/> Upstream discharges | <input checked="" type="checkbox"/> Agricultural runoff |
| <input type="checkbox"/> Septic tanks | <input type="checkbox"/> Other(s), specify <input type="text" value="link here to enter"/> |
| <input type="checkbox"/> | |

B. Waterbody uses

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

- | | |
|--|--|
| <input checked="" type="checkbox"/> Livestock watering | <input checked="" type="checkbox"/> Contact recreation |
| <input type="checkbox"/> Irrigation withdrawal | <input type="checkbox"/> Non-contact recreation |
| <input type="checkbox"/> Fishing | <input type="checkbox"/> Navigation |

Domestic water supply

Industrial water supply

Park activities

Other(s), specify

[click here to enter](#)

C. Waterbody aesthetics

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

Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional

Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored

Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WORKSHEET 2.1

STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 75)

Date of study: February 1, 2022 Time of study: 10:00 am

Stream name: Maxwell Creek

Location: Murphy, TX

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

Perennial Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 75)

Number of stream bends that are well defined: 1

Number of stream bends that are moderately defined: 16

Number of stream bends that are poorly defined: 7

Number of riffles: 23

Evidence of flow fluctuations (check one):

Minor moderate severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

This stream is used for subdivision and roadway drainage.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	Transect location	Water surface width (ft)	Stream depths (ft) at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
pool	(-96.615708, 33.041619)	7	0.70, 0.88, 1, 1.08, 1.04
riffle	(-96.614994, 33.040858)	5	0.04, 0.17, 0.06, 0.10
run	(-96.613348, 33.040048)	17	0.29, 0.33, 0.58, 0.38, 0.5
run	(-96.611755, 33.039412)	14	0.10, 0.25, 0.29, 0.46, 0.42, 0.25
glide	(-96.610663, 33.038262)	10.5	0.83, 0.92, 1.08, 0.96, 1.08
pool	(-96.610767, 33.036906)	11	0.58, 0.96, 1.71, 1.25
pool	(-96.609778, 33.035932)	15	1.13, 1.15, 1.33, 0.92, 0.21
riffle	(-96.609243, 33.034623)	15	0.25, 0.29, 0.19, 0.13, 0.08
run	(-96.608696, 33.033888)	20	0.54, 0.66, 0.92, 0.79, 0.88, 1.08, 1.15, 1.02, 0.41, 0.25
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 76)

Streambed slope of entire reach, from USGS map in feet/feet: 0.006 ft/ft

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): 1.073 square miles

Length of stream evaluated, in feet: 4,051 feet

Number of lateral transects made: Nine

Average stream width, in feet: 10.6 feet

Average stream depth, in feet: 0.64 feet

Average stream velocity, in feet/second: 0.637 feet/second

Instantaneous stream flow, in cubic feet/second: 2.29 cubic feet/second

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): floating chip timed over a fixed distance

Size of pools (large, small, moderate, none): Small

Maximum pool depth, in feet: 2.58 feet

DOMESTIC WORKSHEET 6.0

INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

Section 1. All POTWs (Instructions Page 99)

A. Industrial users

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

Yes

No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

N/A - Facility has not yet been constructed

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

Yes No

If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

N/A - Facility has not yet been constructed

D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

Yes No

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

If no to either question above, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to 40 CFR §403.18?

Yes No

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click here to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

Yes No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click here to enter text.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) - Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

Yes No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click here to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 100)

A. General information

Company Name: N/A

SIC Code: N/A

Telephone number: N/A Fax number: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

N/A

C. Product and service information

Provide a description of the principal product(s) or services performed.

N/A

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: Continuous Batch Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: Continuous Batch Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

Yes No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

Yes No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

Yes No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

<u>N/A</u>



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		RN

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	5/1/2021	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
Restore the Grasslands LLC		N/A	
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
803409146	32071830353	N/A	N/A
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
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 checked="" type="checkbox"/> 0-20 <input 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 checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input 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:	Restore the Grasslands LLC		
	4801 West Lovers Lane		
	City	Dallas	State TX ZIP 75209 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
N/A		N/A	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(214) 415-6047		() -	

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	
<i>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).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Collin County MUD No. 7 WWTP	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	N/A						
	City		State		ZIP		ZIP + 4
24. County	Collin						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Approximately 0.4 miles northwest from the intersection of N. Murphy Road and Rolling Ridge Dr. in Collin County, Texas						
26. Nearest City	Parker				State	Nearest ZIP Code	
					TX	75002	
27. Latitude (N) In Decimal:				28. Longitude (W) In Decimal:			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
33	2	30	96	36	59		
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
4952			22132				
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Domestic Wastewater Treatment							
34. Mailing Address:	Collin County MUD No. 7 WWTP						
	4810 West Lovers Lane						
	City	Dallas	State	TX	ZIP	75209	ZIP + 4
35. E-Mail Address:							
36. Telephone Number		37. Extension or Code			38. Fax Number <i>(if applicable)</i>		
(214) 415-6047					() -		

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:	Ashley Broughton, P.E., LJA Engineering	41. Title:	Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(713) 380-4431		() -	abroughton@lja.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:	LJA Engineering	Job Title:	Project Manager
Name (In Print):	Ashley Broughton, P.E.	Phone:	(713) 380- 4431
Signature:		Date:	7/19/21



TCEQ Use Only

TCEQ Core Data Form

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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		RN

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	5/1/2021	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
Harrington/Turner Enterprises, LP		N/A	
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0801038766	32038116466	N/A	N/A
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input checked="" type="checkbox"/> Limited
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 checked="" type="checkbox"/> 0-20 <input 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 checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input 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:	Harrington/Turner Enterprises, LP		
	3510 Dublin Road		
	City	Parker	State TX ZIP 75002 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
N/A		N/A	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(214) 802-0011		() -	

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	
<i>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).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Collin County MUD No. 7 WWTP	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	N/A						
	City		State		ZIP		ZIP + 4
24. County	Collin						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Approximately 0.4 miles northwest from the intersection of N. Murphy Road and Rolling Ridge Dr. in Collin County, Texas															
26. Nearest City	Parker				State	TX		Nearest ZIP Code	75002							
27. Latitude (N) In Decimal:	Degrees			Minutes			Seconds			28. Longitude (W) In Decimal:	Degrees		Minutes		Seconds	
	33			2			30			96		36		59		
29. Primary SIC Code (4 digits)	4952			30. Secondary SIC Code (4 digits)				31. Primary NAICS Code (5 or 6 digits)	22132			32. Secondary NAICS Code (5 or 6 digits)				
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>																
Domestic Wastewater Treatment																
34. Mailing Address:	Collin County MUD No. 7 WWTP															
	4810 West Lovers Lane															
	City	Dallas		State	TX		ZIP	75002		ZIP + 4						
35. E-Mail Address:																
36. Telephone Number				37. Extension or Code				38. Fax Number <i>(if applicable)</i>								
(214) 415-6047								() -0								

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<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:	Ashley Broughton, P.E., LJA Engineering			41. Title:	Project Manager	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address			
(713) 380-4431		() -	abroughton@lja.com			

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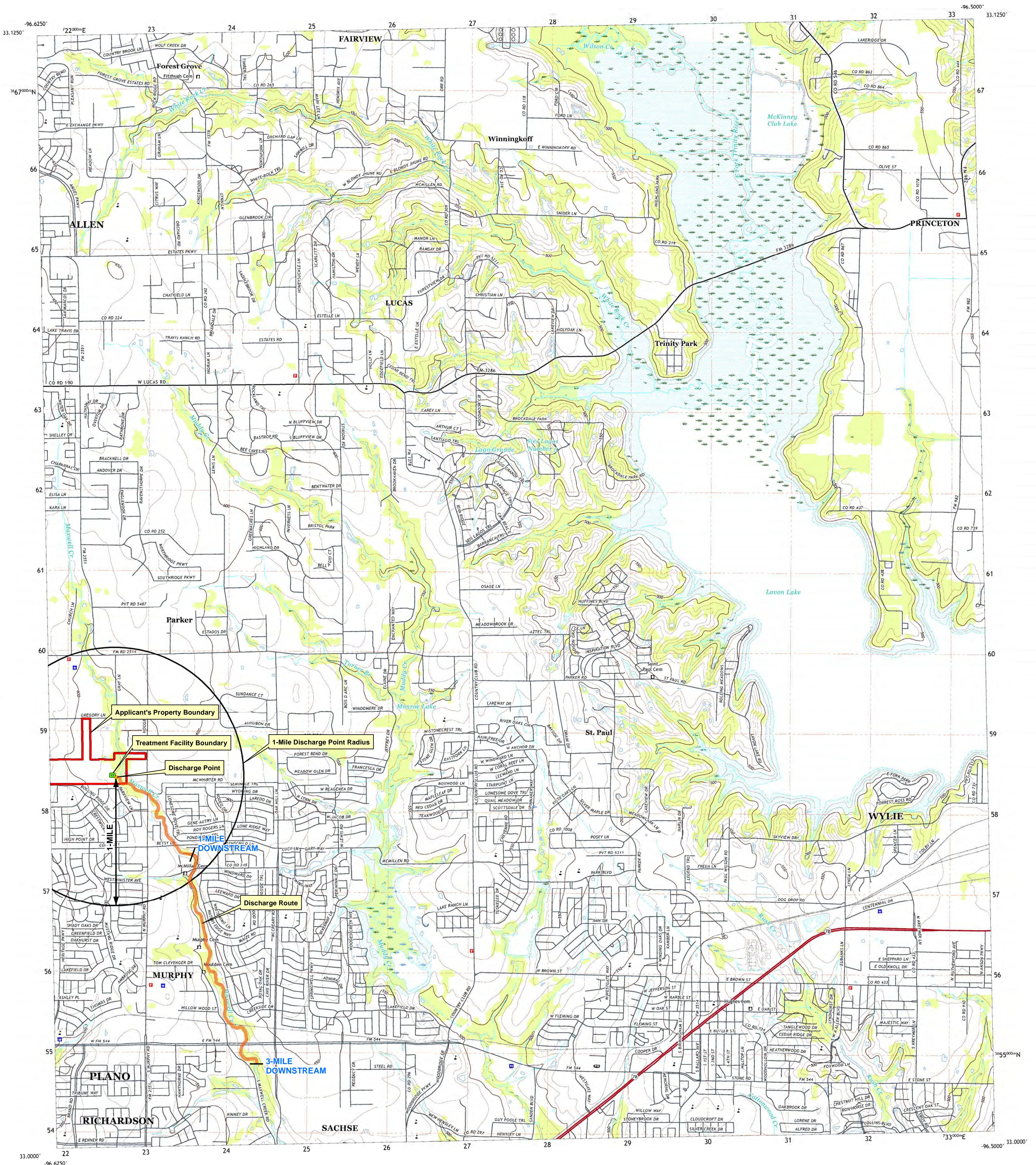
Company:	LJA Engineering		Job Title:	Project Manager		
Name <i>(In Print)</i> :	Ashley Broughton, P.E.				Phone:	(713) 380- 4431
Signature:					Date:	



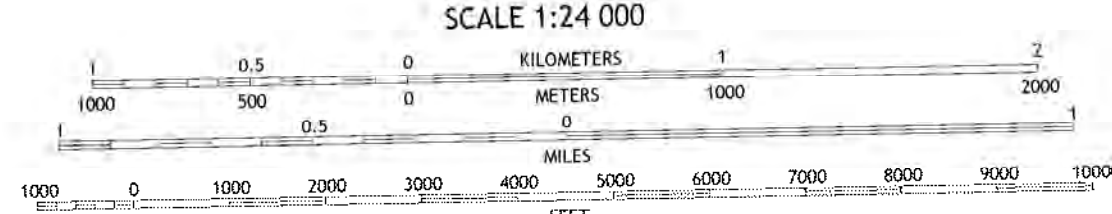
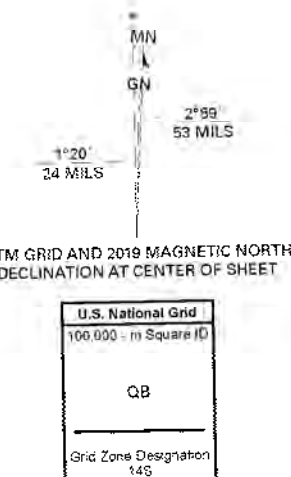
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



WYLIE QUADRANGLE
TEXAS - COLLIN COUNTY
7.5-MINUTE SERIES



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



ADJOINING QUADRANGLES

1	2	3
4	5	6
7	8	9

1 McKinney West
2 McKinney East
3 Cuddehe
4 Plano
5 Lavon
6 Garland
7 Rowlett
8 Rockwall

ROAD CLASSIFICATION

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

WYLIE, TX
2019

ATTACHMENT 2.1
HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT (3-MILE)
USGS TOPOGRAPHIC MAP

6060 North Central Expressway, Suite 400
Dallas, Texas 75206
LJA ENGINEERING LJA.com Phone 469.821.0710 TBP# F-1386

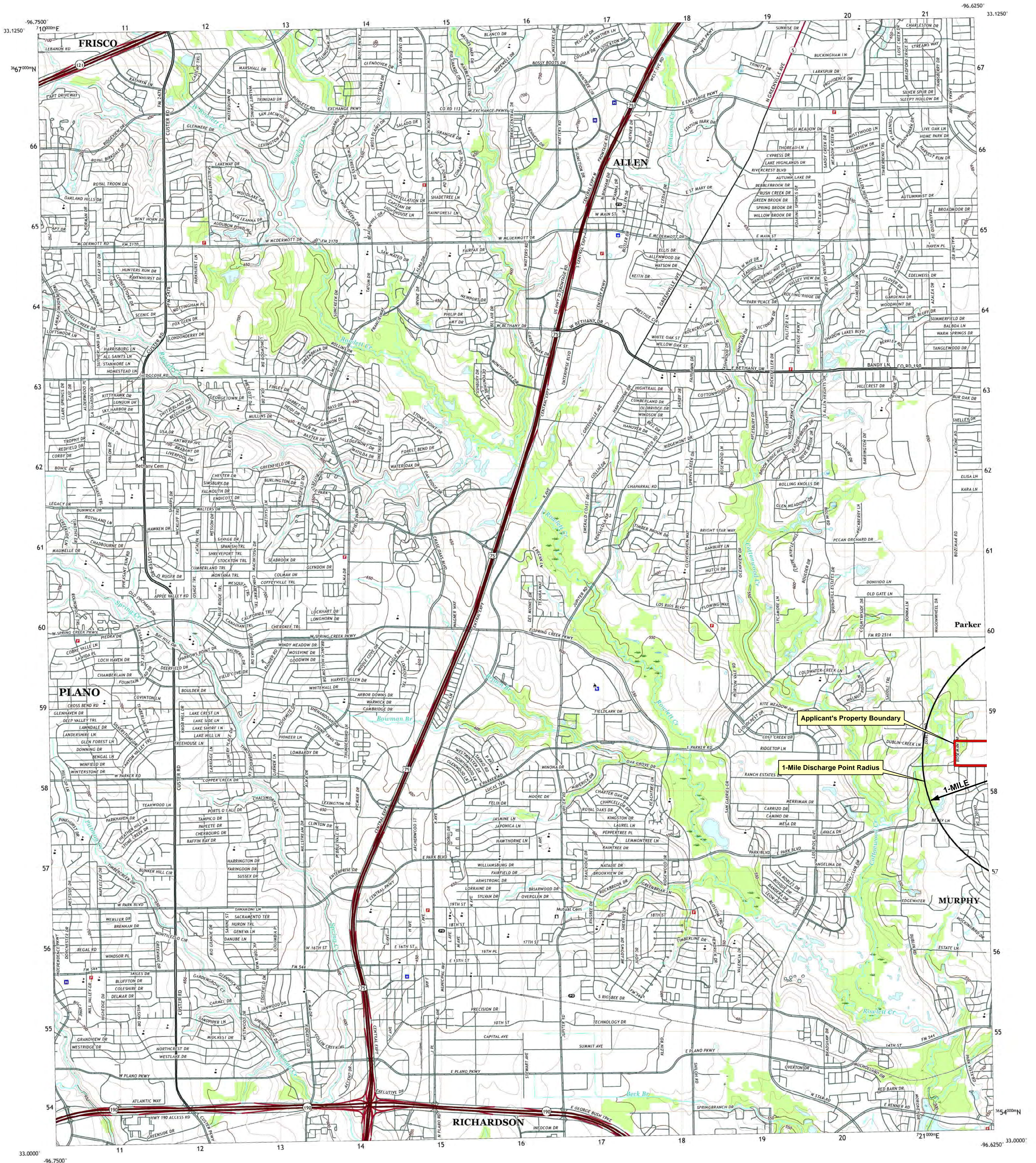
APRIL 2021 LJA JOB NO: NT561-0133



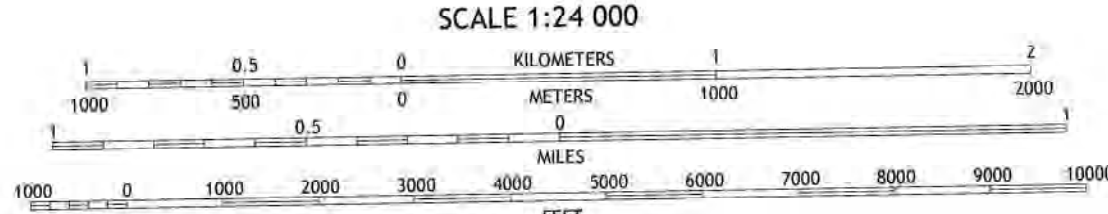
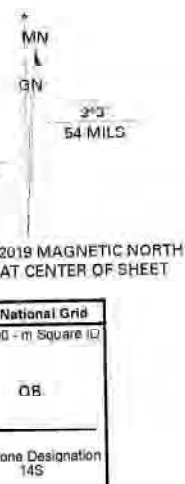
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



PLANO QUADRANGLE
TEXAS - COLLIN COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000-meter grid-Universal Transverse Mercator, Zone 14S
This map is not a legal document. Boundaries may be
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entering private lands.



ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	AWP
Interstate Route	US Route
	State Route

1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

PLANO, TX
2019

ATTACHMENT 2.2
HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT (3-MILE)
USGS TOPOGRAPHIC MAP

LJA ENGINEERING
6060 North Central Expressway, Suite 400
Dallas, Texas 75206
Phone 469.621.0710 TBPE F-1386
LJA.com









APRIL 2021 LJA JOB NO: NT561-0133

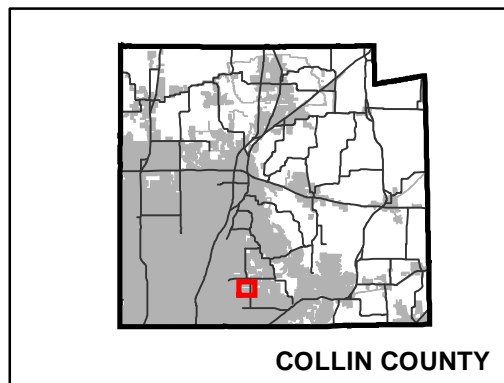
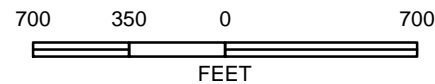
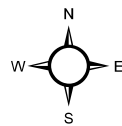
**HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT**

**ATTACHMENT 3
AFFECTED LANDOWNER EXHIBIT FOR
APPLICANT BOUNDARY**

JULY 2021

LEGEND

-  SERVICE AREA
-  WWTP SITE BOUNDARY
-  APPLICANT'S PROPERTY BOUNDARY
-  150' BUFFER ZONE
-  DISCHARGE ROUTE
-  PARCELS
-  AFFECTED LANDOWNERS
-  POINT OF DISCHARGE

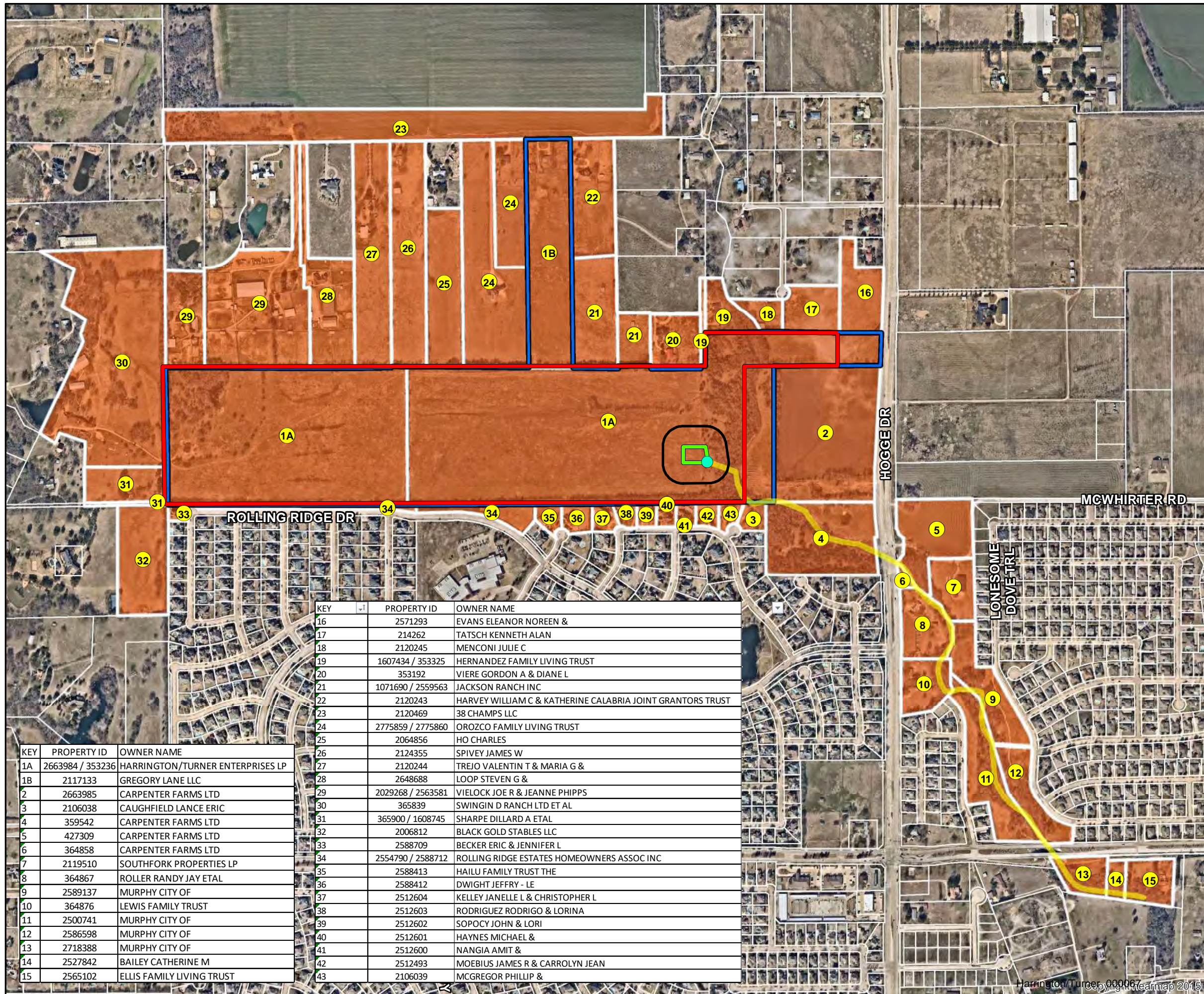


AERIAL PHOTOGRAPH DATE: NEARMAP 2021

THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT HAVE BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL, ENGINEERING, OR SURVEYING PURPOSES. IT DOES NOT REPRESENT AN ON-THE-GROUND SURVEY AND REPRESENTS ONLY THE APPROXIMATE RELATIVE LOCATION OF PROPERTY BOUNDARIES.



6060 North Central Expressway, Suite 440
Dallas, Texas 75206
Phone 469.621.0710 TBPE F-1386
LJA.com



KEY	PROPERTY ID	OWNER NAME
1A	2663984 / 353236	HARRINGTON/TURNER ENTERPRISES LP
1B	2117133	GREGORY LANE LLC
2	2663985	CARPENTER FARMS LTD
3	2106038	CAUGHFIELD LANCE ERIC
4	359542	CARPENTER FARMS LTD
5	427309	CARPENTER FARMS LTD
6	364858	CARPENTER FARMS LTD
7	2119510	SOUTHFORK PROPERTIES LP
8	364867	ROLLER RANDY JAY ETAL
9	2589137	MURPHY CITY OF
10	364876	LEWIS FAMILY TRUST
11	2500741	MURPHY CITY OF
12	2586598	MURPHY CITY OF
13	2718388	MURPHY CITY OF
14	2527842	BAILEY CATHERINE M
15	2565102	ELLIS FAMILY LIVING TRUST

KEY	PROPERTY ID	OWNER NAME
16	2571293	EVANS ELEANOR NOREEN &
17	214262	TATSCH KENNETH ALAN
18	2120245	MENCONI JULIE C
19	1607434 / 353325	HERNANDEZ FAMILY LIVING TRUST
20	353192	VIERE GORDON A & DIANE L
21	1071690 / 2559563	JACKSON RANCH INC
22	2120243	HARVEY WILLIAM C & KATHERINE CALABRIA JOINT GRANTORS TRUST
23	2120469	38 CHAMPS LLC
24	2775859 / 2775860	OROZCO FAMILY LIVING TRUST
25	2064856	HO CHARLES
26	2124355	SPIVEY JAMES W
27	2120244	TREJO VALENTIN T & MARIA G &
28	2648688	LOOP STEVEN G &
29	2029268 / 2563581	VIELOCK JOE R & JEANNE PHIPPS
30	365839	SWINGIN D RANCH LTD ET AL
31	365900 / 1608745	SHARPE DILLARD A ETAL
32	2006812	BLACK GOLD STABLES LLC
33	2588709	BECKER ERIC & JENNIFER L
34	2554790 / 2588712	ROLLING RIDGE ESTATES HOMEOWNERS ASSOC INC
35	2588413	HAILU FAMILY TRUST THE
36	2588412	DWIGHT JEFFRY - LE
37	2512604	KELLEY JANELLE L & CHRISTOPHER L
38	2512603	RODRIGUEZ RODRIGO & LORINA
39	2512602	SOPOCY JOHN & LORI
40	2512601	HAYNES MICHAEL &
41	2512600	NANGIA AMIT &
42	2512493	MOEBIUS JAMES R & CARROLYN JEAN
43	2106039	MCGREGOR PHILLIP &

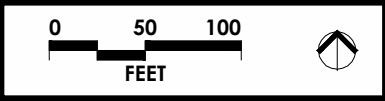
- | | |
|--|--|
| <p>1A. HARRINGTON/TURNER ENTERPRISES LP
3510 DUBLIN ROAD
PARKER TX 75002</p> <p>1B. GREGORY LANE LLC
3510 DUBLIN ROAD
PARKER TX 75002</p> <p>2. CARPENTER FARMS LTD
3337 OVERLAND DR
PLANO TX 75023</p> <p>3. CAUGHFIELD LANCE ERIC
1404 KEATHLY CIR
MURPHY TX 75094</p> <p>4. CARPENTER FARMS LTD
3337 OVERLAND DR
PLANO TX 75023</p> <p>5. CARPENTER FARMS LTD
3337 OVERLAND DR
PLANO TX 75023</p> <p>6. CARPENTER FARMS LTD
3337 OVERLAND DR
PLANO TX 75023</p> <p>7. SOUTHFORK PROPERTIES LP
C/O MIKE A THOMAS
PO BOX 941428
PLANO TX 75094</p> <p>8. ROLLER RANDY JAY ETAL
120 E FM 544 STE 72 #140
MURPHY TX 75094</p> <p>9. MURPHY CITY OF
206 N MURPHY RD
MURPHY TX 75094</p> <p>10. LEWIS FAMILY TRUST
5880 FM 546
PRINCETON TX 75407</p> | <p>11. MURPHY CITY OF
206 N MURPHY RD
MURPHY TX 75094</p> <p>12. MURPHY CITY OF
206 N MURPHY RD
MURPHY TX 75094</p> <p>13. MURPHY CITY OF
206 N MURPHY RD
MURPHY TX 75094</p> <p>14. BAILEY CATHERINE M
309 MCMILLEN DR
MURPHY TX 75094</p> <p>15. ELLIS FAIMLY LIVING TRUST
C/O GENE C ELLIS & SHARON KAY ELLIS
305 MCMILLEN DR
MURPHY TX 75094</p> <p>16. EVANS ELEANOR NOREEN & ALICIA S
3507 HOGGE DR
PARKER TX 75002</p> <p>17. TATSCH KENNETH ALAN
PO BOX 850955
RICHARDSON TX 75085</p> <p>18. MENCONI JULIE C
2080 KENDALL ST
EDGEWATER CO 80214</p> <p>19. HERNANDEZ FAMILY LIVING TRUST
5906 GREGORY LN
PARKER TX 75002</p> <p>20. VIERE CORDON A & DIANE L
5902 GREGORY LN
ALLEN TX 75002</p> |
|--|--|

21. JACKSON RANCH INC
6670 HILLBRIAR DR
DALLAS TX 75248
22. HARVEY WILLIAM C & KATHERINE
CALABRIA JOINT GRANTORS TRUST
5804 GREGORY LN
PARKER TX 75002
23. 38 CHAMPS LLC
1412 SUSSEX DR
PLANO TX 75075
24. OROZCO FAMILY LIVING TRUST
5704 GREGORY LN
ALLEN TX 75002
25. HO CHARLES
2800 W PARKER RD STE 110
PLANO TX 75075
26. SPIVEY JAMES W
5604 GREGORY LN
ALLEN TX 75002
27. TREJO VALENTIN T & MARIA G &
MAYRA & VALENTIN TREJO JR
5600 GREGORY LN
ALLEN TX 75002
28. LOOP STEVEN G & LINDA C LOOP
5580 GREGORY LN
PARKER TX 75002
29. VIELOCK JOE R & JEANNE F
5504 GREGORY LN
ALLEN TX 75002
30. SWINGIN D RANCH LTD ET AL
3510 DUBLIN RD
ALLEN TX 75002
31. SHARPE DILLARD A ETAL
3300 DUBLIN RD
ALLEN TX 75002
32. BLACK GOLD STABLES LLC
3106 DUBLIN ROAD
ALLEN TX 75002
33. BECKER ERIC & JENNIFER L
1335 TWIN KNOLL DR
MURPHY TX 75094
34. ROLLING RIDGE ESTATES HOA INC
C/O REAL MANAGE
PO BOX 803555
DALLAS TX 75380
35. HAILU FAMILY TRUST THE
PO BOX 550386
DALLAD TX 75355
36. DWIGHT JEFFRY – LE (DWIGHT FAMILY
TRUST)
308 ORIOLE DR
MURPHY TX 75094
37. KELLEY JANELLE L & CHRISTOPHER L
1432 PARKVIEW LN
MURPHY TX 75094
38. RODRIGUEZ RODRIGO & LORINA
1428 PARKVIEW LN
MURPHY TX 75094
39. SOPOCY JOHN & LORI
1424 PARKVIEW LN
MURPHY TX 75094
40. HAYNES MICHAEL & ALESHA R HAYNES
1420 PARKVIEW LN
MURPHY TX 75094

41. NANGIA AMIT & RANJANI
VAKATARAMAN
1416 PARKVIEW LN
MURPHY TX 75094

42. MOEBIUS JAMES R & CARROLYN JEAN
1412 PARKVIEW LN
MURPHY TX 75094

43. MCGREGOR PHILLIP & SHARON LYNN
MCGREGOR
1408 KEATHLY CIR
MURPHY TX 75094



SITE BOUNDARY

PHOTO 4

PHOTO 3

PHOTO 1

PHOTO 2

PHOTO LOCATION MAP

ATTACHMENT 4
COLLIN COUNTY
MUD NO. 7 WWTP

LJA Engineering, Inc.



Harmon, Texas 76007 Phone 469.621.0710
Suite 400
Dallas, Texas 75206 FRN - F-1386



Photo 1: Upstream of the discharge point

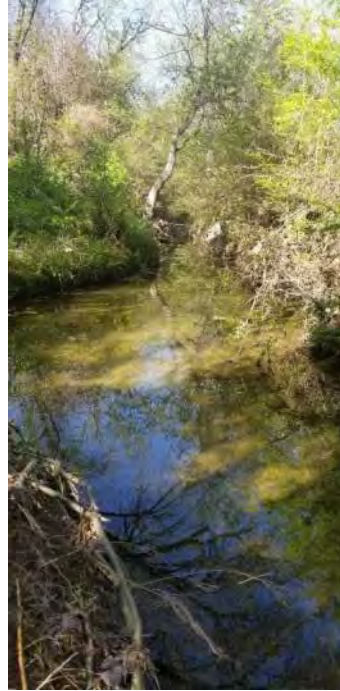


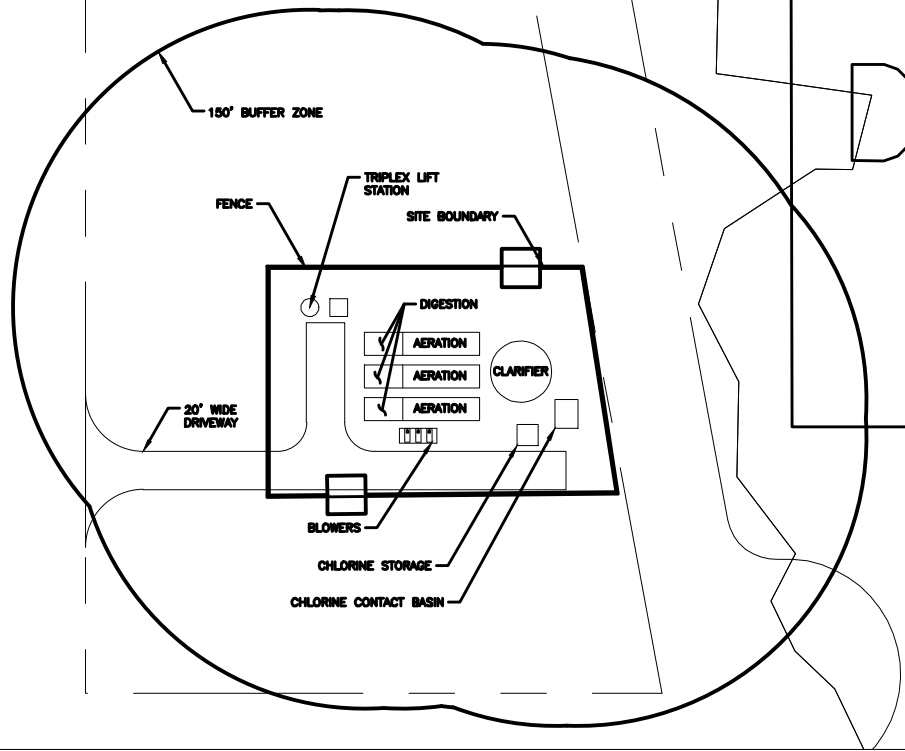
Photo 2: Downstream of the discharge point



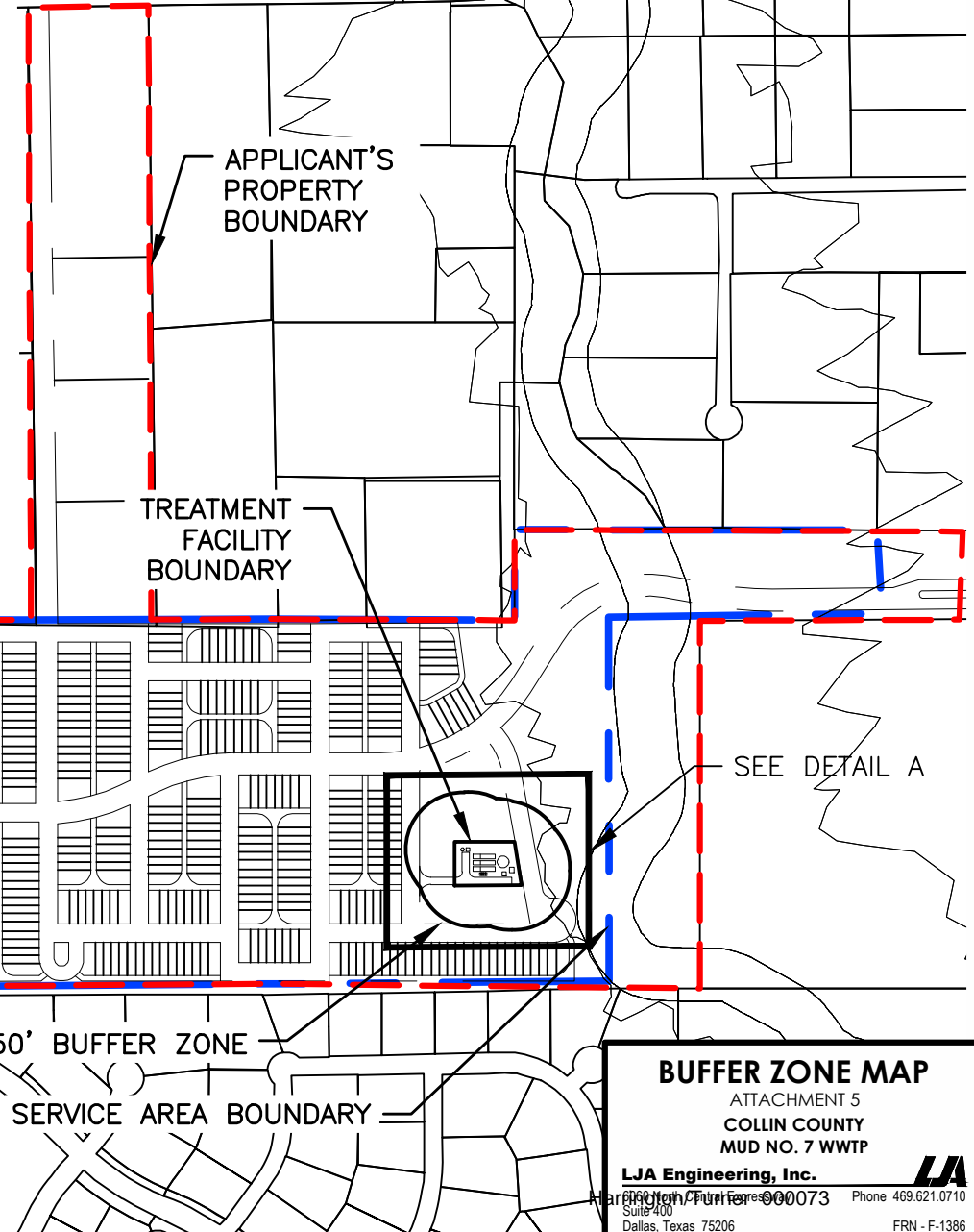
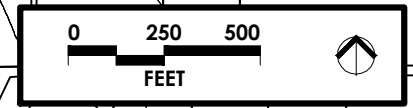
Photo 3 WWTP Site



Photo 4 WWTP Site



DETAIL A
SCALE: 1"=100'



BUFFER ZONE MAP

ATTACHMENT 5
COLLIN COUNTY
MUD NO. 7 WWTP

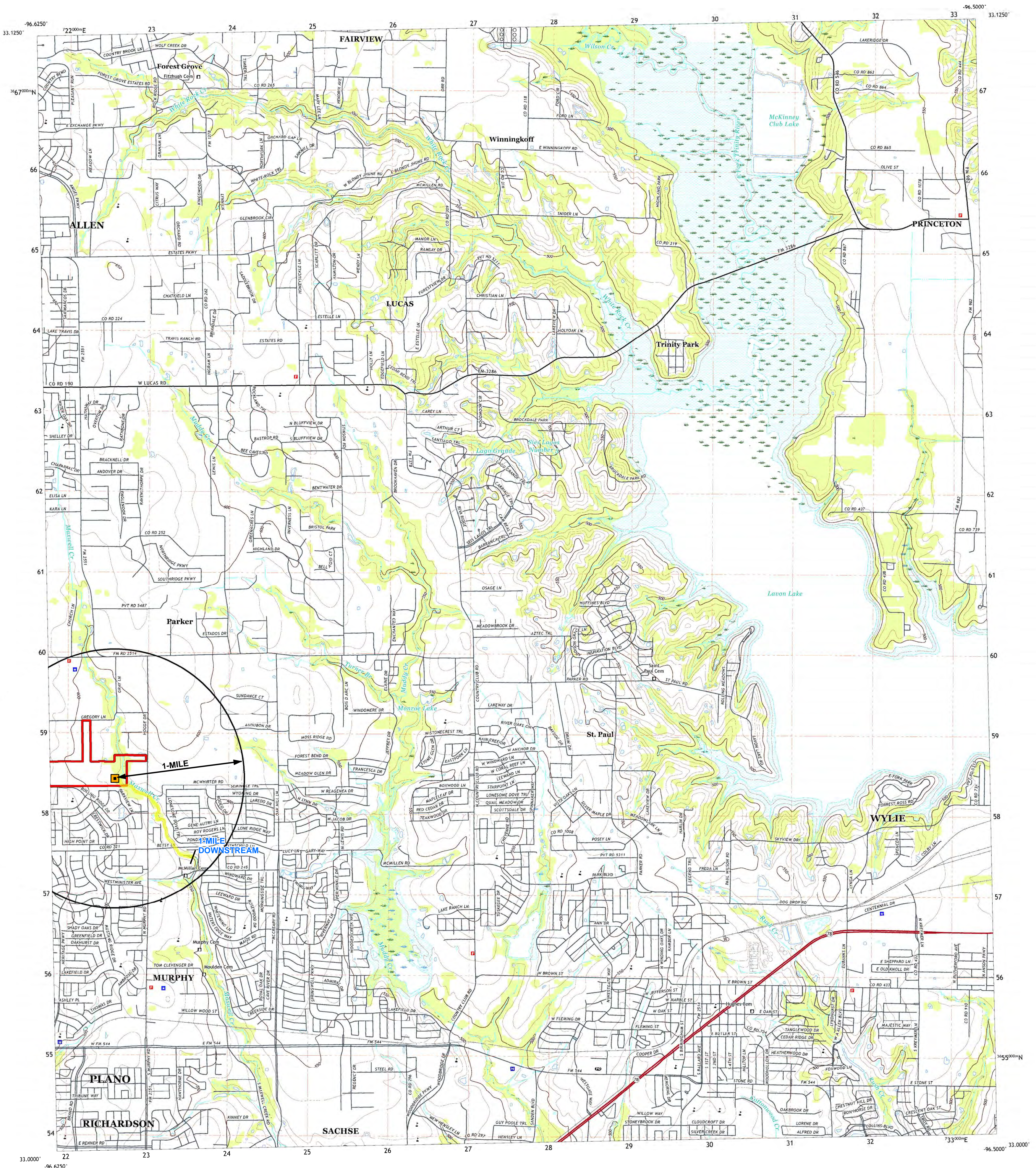
LJA Engineering, Inc.
 1800 North Central Expressway, Suite 400
 Dallas, Texas 75206
 Phone 469.621.0710
 Fax 469.621.0073
 FRN - F-1386



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

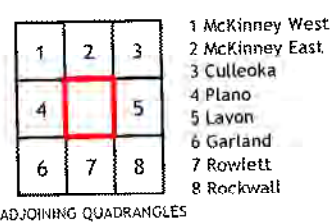
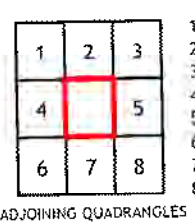
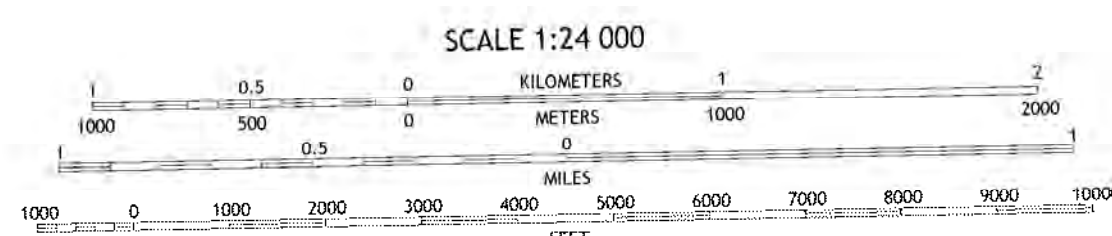
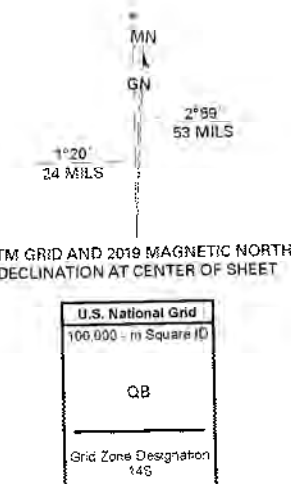


WYLIE QUADRANGLE
TEXAS - COLLIN COUNTY
7.5-MINUTE SERIES



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

Map Date: NAD, September 2016 - November 2016
Roads: U.S. Census Bureau, 2015 - 2018
Names: National Hydrography Dataset, 1979 - 2018
Hydrography: National Hydrography Dataset, 2002 - 2018
Contours: National Elevation Dataset, 2003 - 2009
Boundaries: Multiple sources, metadata file 2016 - 2017
Wetlands: FWS National Wetlands Inventory 1982



WYLIE, TX
2019

ATTACHMENT 6.1
HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT (1-MILE)
USGS TOPOGRAPHIC MAP

LJA ENGINEERING
6060 North Central Expressway, Suite 400
Dallas, Texas 75206
Phone 469.821.0710 TBPE F-1386
LJA.com

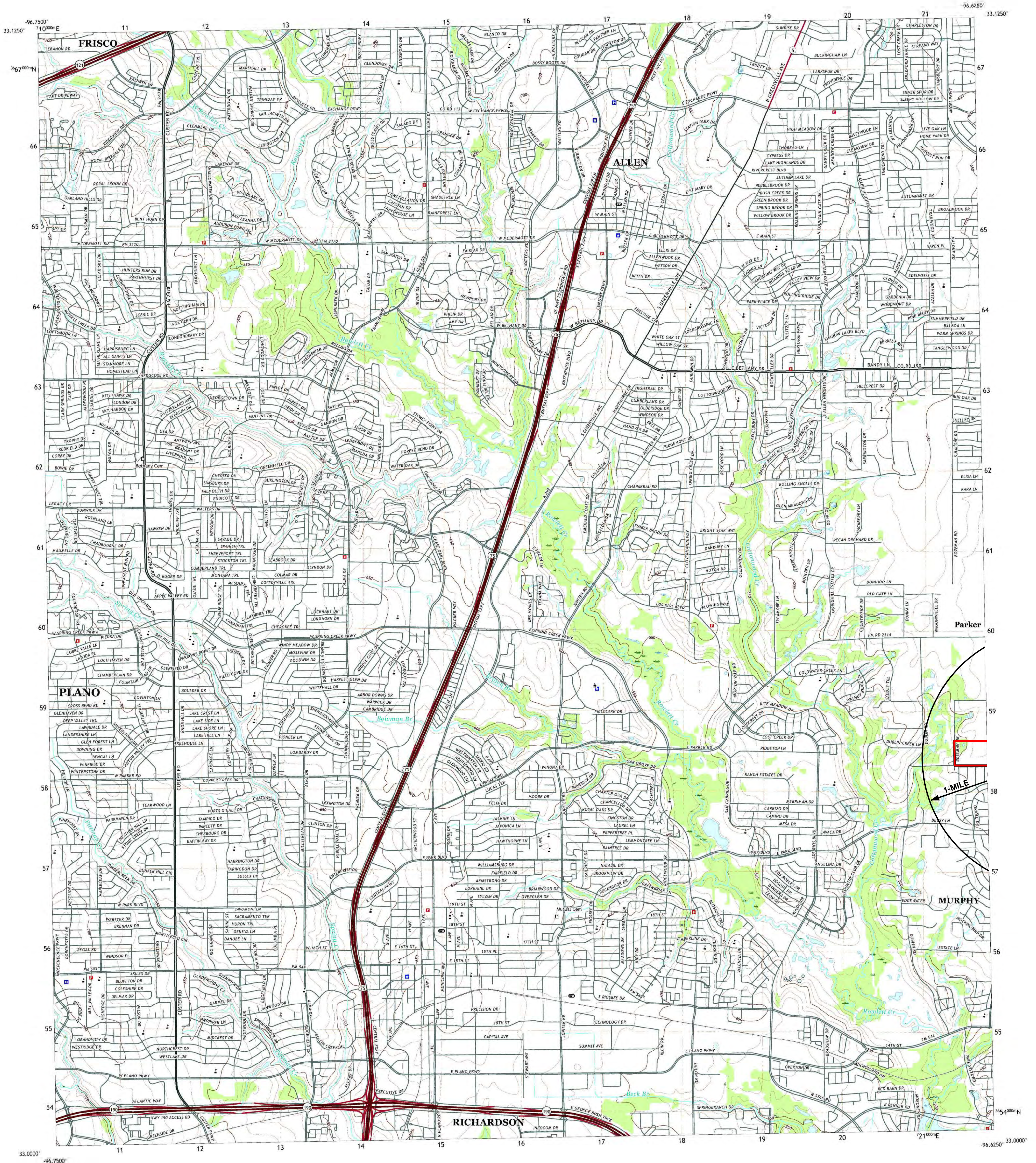
APRIL 2021 | LJA JOB NO: NT561-0133



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



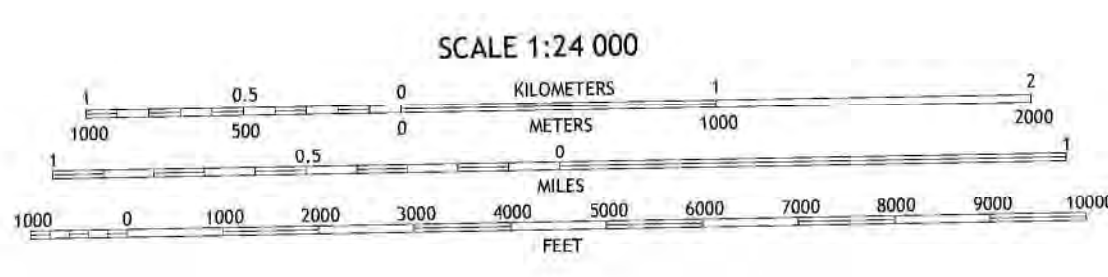
PLANO QUADRANGLE
TEXAS - COLLIN COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey

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

Imagery.....NAIP, September 2016 - November 2016
Names.....U.S. Census Bureau, 2015
Roads.....OpenStreetMap, 2018
Hydrography.....National Hydrography Dataset, 2016
Contours.....National Elevation Dataset, 2011
Boundaries.....Aerial Imagery, 2017
Wetlands.....FWS National Wetlands Inventory 1982



ROAD CLASSIFICATION

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

ADJOINING QUADRANGLES

1	2	3
4	5	6
7	8	

1 Frisco
2 McKinney West
3 McKinney East
4 Hebron
5 Wylie
6 Addison
7 Garland
8 Rowlett

PLANO, TX
2019

ATTACHMENT 6.2
**HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT (1-MILE)
USGS TOPOGRAPHIC MAP**

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Dallas, Texas 75206
Phone 469.821.0710 TBPE F-1386
LJA.com

APRIL 2021 LJA JOB NO: NT561-0133

ATTACHMENT 7
DESCRIPTION OF THE TREATMENT PROCESS

(In reference to Domestic Technical Report 1.0, Section 2, Item A)

The treatment system includes a package plant employing the activated sludge process operating in the complete mix mode. The plant will be developed in two phases and will include one treatment train when complete. Phase 1 and the final Phase 2 will have a capacity of 0.10 MGD and 0.20 MGD respectively. In the final phase 2, the plant will have a common header between the aeration basins and clarifier to allow for flexibility in plant repairs and operations. Since the chlorine contact basin will be sized for the final Phase 2, the two planned phases will have a common outfall and sampling point.

The completed treatment train will consist of steel "box car" units used for aeration and digestion. Two aeration basins, one split sludge digestion basin, one 40' diameter clarifier and one chlorine contact basin will be fabricated for Phase 1. The final Phase 2 will include an additional aeration basin, but will utilize the Phase 1 clarifier, chlorine contact basin and split digestion basin.

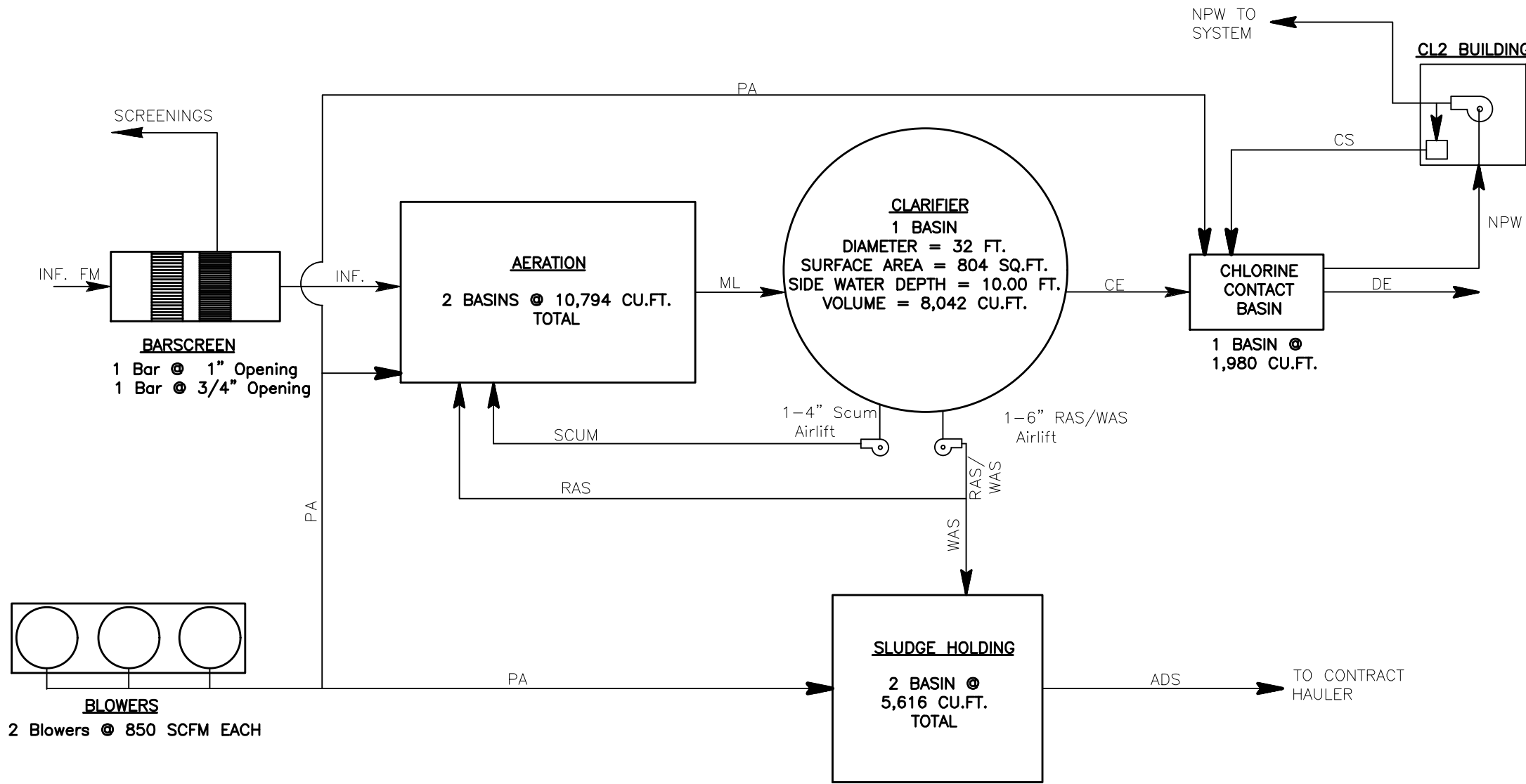
Influent to this facility will be pumped from an on-site lift station to a bar screen. In the final Phase 2, the bar screen will include a flow splitter thus splitting the influent to each bank of aeration basins. The mixed liquor from the aeration basins will flow to the clarifier. The clarified effluent from the clarifier will then flow to the chlorine contact basin and the disinfected plant effluent will outfall via a 24" pipe to an unnamed channel. Sludge will be returned to the aeration basins then wasted to the digester basins via air lifts. Sludge from the digesters will be truck hauled to another WWTP for dewatering before being disposed at a registered disposal site.

Attachment No. 8

Treatment Units	# of Units	Dimensions (L*W*D) (ft.)	
Aeration Basin	2	40*12*13.2	INTERIM PHASE 1 0.10 MGD
Clarifier	1	32*Dia*14.2	
Cl2 Contact Basin	1	15*12*12	
Aerobic Digester	2	20*12*13.2	
Aeration Basin	2	40*12*13.2	ULTIMATE PHASE 0.20 MGD
Aeration Basin	1	40*12*13.2	
Clarifier	1	32*Dia*14.2	
Cl2 Contact Basin	1	15*12*12	
Aerobic Digester	1	20*12*13.2	
Aerobic Digester	2	20*12*13.2	

Bolded	New processes
Shaded	Existing processes

Date: Time: Sun, 25 Apr 2021 - 4:23pm User Name: abroughton Path: Name: S:\NTX-LAND\0133\300 SUPPORT\370 Wastewater\Discharge Permit\FORMS\Attachments\Process_Flow_Diagrams.dwg



2 NPW PUMPS
 @ 60 GPM AND 60 PSI
 1 CL2 EQUIPMENT
 @ 100 LB

BLOWERS
 2 Blowers @ 850 SCFM EACH

LEGEND

- SAN SWR SANITARY SEWER
- INF. FM INFLUENT FORCE MAIN
- INF. INFLUENT
- ML MIXED LIQUOR
- CE CLARIFIED EFFLUENT
- FE FILTERED EFFLUENT
- DE DISINFECTED EFFLUENT
- RAS RETURN ACTIVATED SLUDGE
- WAS WASTE ACTIVATED SLUDGE
- ADS AEROBICALLY DIGESTED SLUDGE
- NPW NON-POTABLE WATER
- CS CHLORINE SOLUTION
- TOW TOP OF WALL ELEVATION
- FG FINISHED GRADE ELEVATION
- WSEL WATER SURFACE ELEVATION
- PA PRESSURE AIR

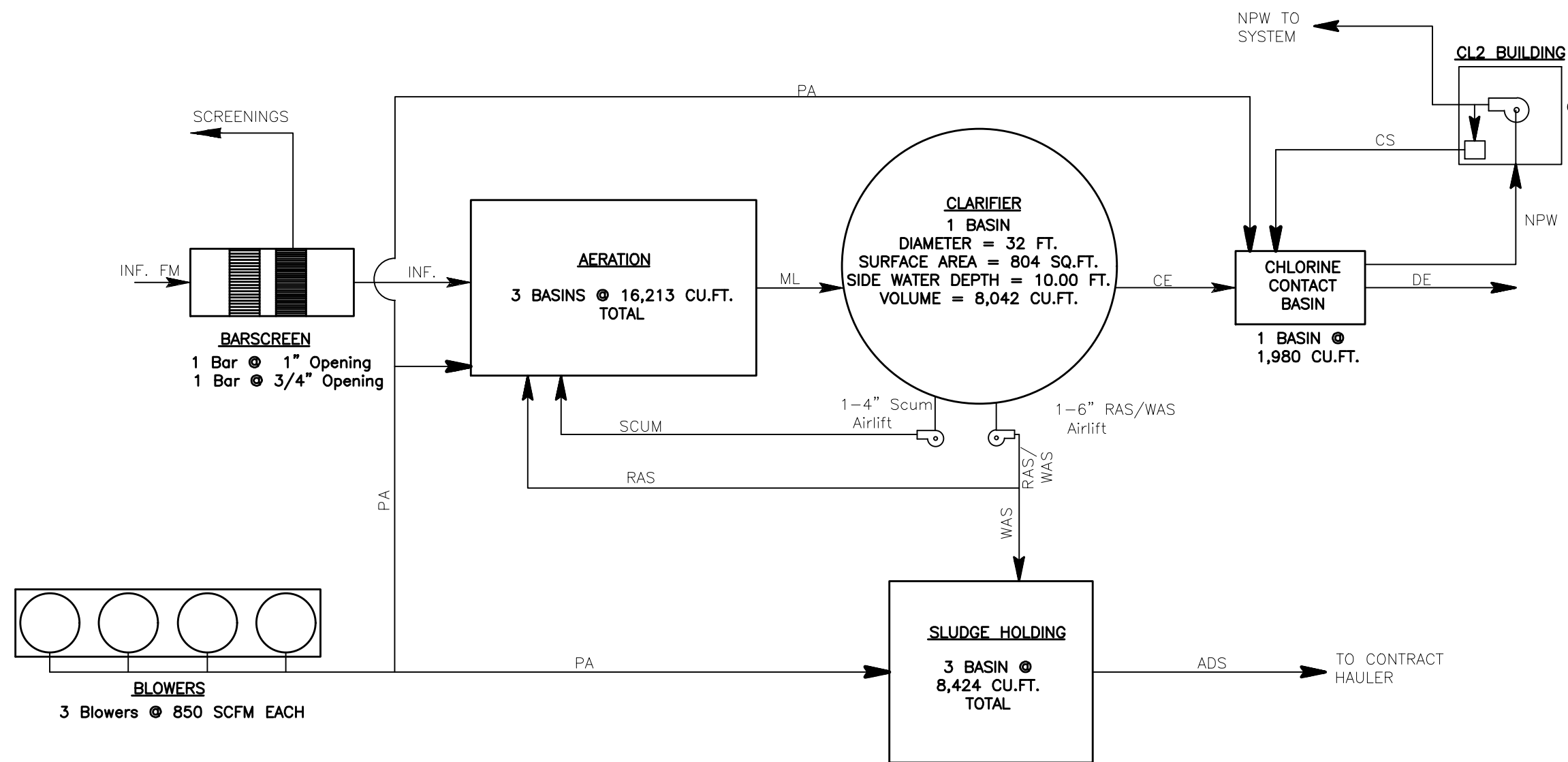
PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE 1	0.10 MGD	0.40 MGD

ATTACHMENT 9.1
 PROCESS FLOW DIAGRAM
 INTERIM PHASE 1 - 0.10 MGD

LJA Engineering, Inc.

3600 W Sam Houston Parkway S. Phone 713.953.5200
 Suite 600 Fax 713.953.5026
 Houston, Texas 77042 Harrington/Turner 000798 PRN - F-1386

Date: Time: Sun, 25 Apr 2021 - 4:22pm User Name: abroughton Path: Name: S:\NTX-LAND\0133\300 SUPPORT\370 Wastewater\Discharge Permit\FORMS\Attachments\Process_Flow_Diagrams.dwg



2 NPW PUMPS
 @ 60 GPM AND 60 PSI
 1 CL2 EQUIPMENT
 @ 100 LB

LEGEND

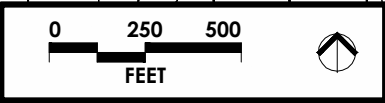
- SAN SWR SANITARY SEWER
- INF. FM INFLUENT FORCE MAIN
- INF. INFLUENT
- ML MIXED LIQUOR
- CE CLARIFIED EFFLUENT
- FE FILTERED EFFLUENT
- DE DISINFECTED EFFLUENT
- RAS RETURN ACTIVATED SLUDGE
- WAS WASTE ACTIVATED SLUDGE
- ADS AEROBICALLY DIGESTED SLUDGE
- NPW NON-POTABLE WATER
- CS CHLORINE SOLUTION
- TOW TOP OF WALL ELEVATION
- FG FINISHED GRADE ELEVATION
- WSEL WATER SURFACE ELEVATION
- PA PRESSURE AIR

PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE 1	0.10 MGD	0.40 MGD
PHASE 2	0.20 MGD	0.80 MGD

ATTACHMENT 9.2
 PROCESS FLOW DIAGRAM
 (ULTIMATE) PHASE 2 - 0.20 MGD

LJA Engineering, Inc.

3600 W Sam Houston Parkway S. Phone 713.953.5200
 Suite 600 Fax 713.953.5026
 Houston, Texas 77042 Harrington/Turner 000879 PRN - F-1386



TREATMENT FACILITY BOUNDARY

SERVICE AREA BOUNDARY

150' BUFFER ZONE

SITE DRAWING

ATTACHMENT 10
COLLIN COUNTY
MUD NO. 7 WWTP

LJA Engineering, Inc.

Harmon Center 90080
Suite 400
Dallas, Texas 75206

Phone 469.621.0710

FRN - F-1386







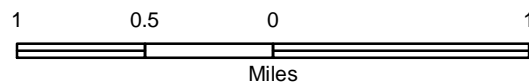
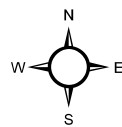
**HARRINGTON / TURNER ENTERPRISES, LP
RESTORE THE GRASSLANDS, LLC
WWTP DISCHARGE PERMIT**

**ATTACHMENT 11
NEARBY DOMESTIC PERMITTED WWTFs
(WITHIN 3-MILE RADIUS)**

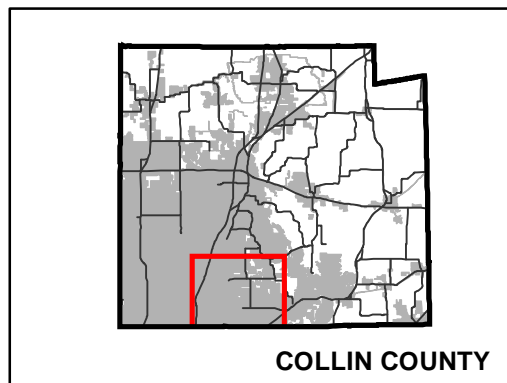
APRIL 2021

LEGEND

-  APPLICANT'S PROPERTY BOUNDARY
-  3-MILE RADIUS
-  POINT OF DISCHARGE
-  WASTEWATER OUTFALLS



DATA SOURCE: TCEQ OUTFALLS - UPDATED 10/16/2020

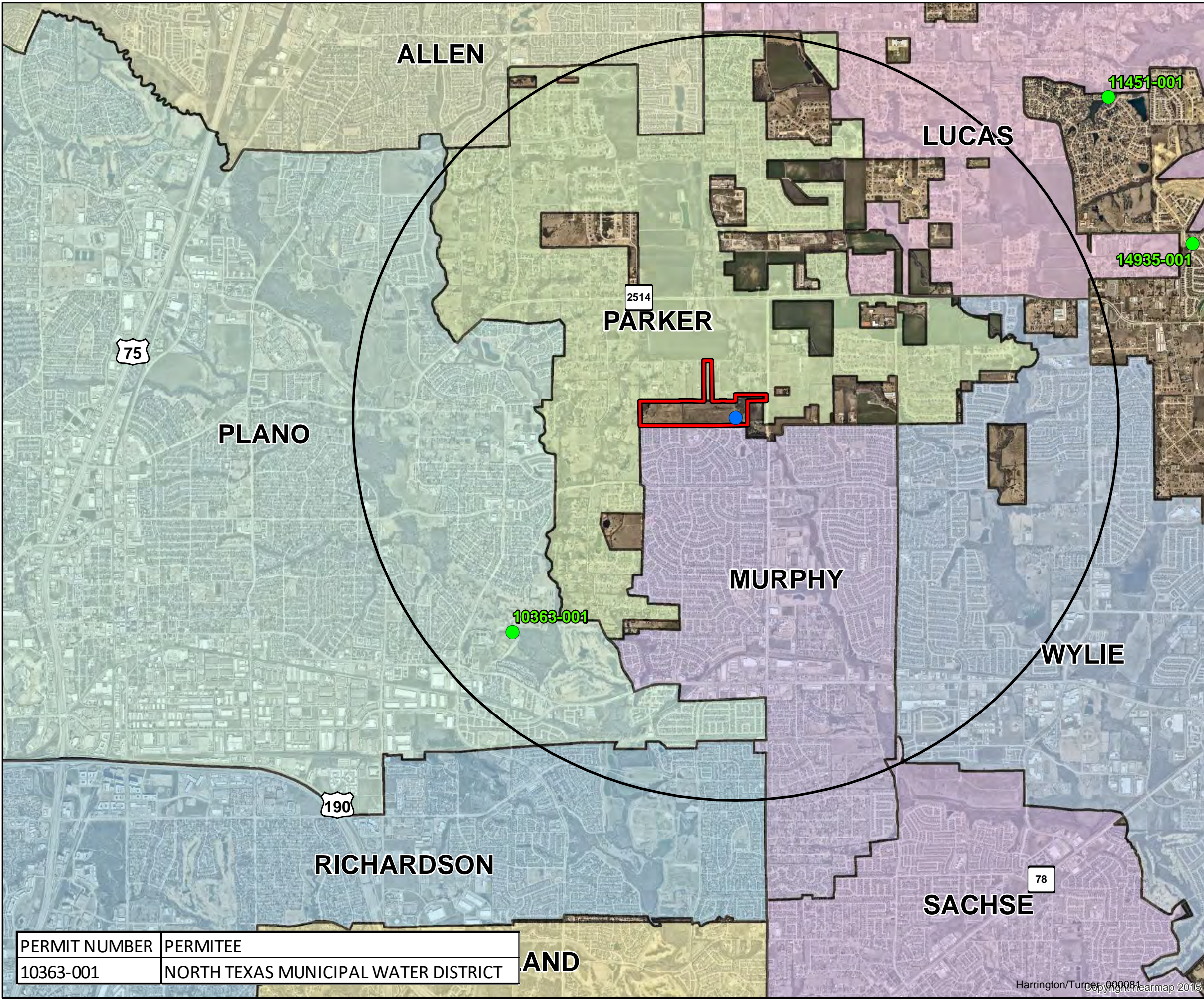


AERIAL PHOTOGRAPH DATE: NEARMAP 2021

THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT HAVE BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL, ENGINEERING, OR SURVEYING PURPOSES. IT DOES NOT REPRESENT AN ON-THE-GROUND SURVEY AND REPRESENTS ONLY THE APPROXIMATE RELATIVE LOCATION OF PROPERTY BOUNDARIES.



6060 North Central Expressway, Suite 440
Dallas, Texas 75206
Phone 469.621.0710 TBPE F-1386
LJA.com



PERMIT NUMBER	PERMITEE
10363-001	NORTH TEXAS MUNICIPAL WATER DISTRICT

AND

Path: S:\NTX-LAND\0133\300 SUPPORT\1370 Wastewater\Discharge Permit\Support\GIS Coordination\MXD\Discharge Permit - Attachment 11 - 20210414.mxd



April 27, 2021

VIA CERTIFIED MAIL

City of Wylie
949 Hensley Lane, Building 300
Wylie, Texas 75098

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Wylie has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

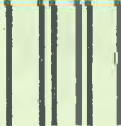
Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____

USPS TRACKING #



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

9590 9402 4830 9032 8332 10

United States
Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box •

LJA Engineering
3600 W. Sam Houston Pkwy. S. Ste. #600
Houston, Texas 77042

Ashley Broughton

713-553-9799

4/27/21

Harrington/Turner 000083

Job # NT561-0138(2,0)



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

City of Wylie
 949 Hensley Lane
 Building 300
 Wylie, TX 75098



9590 9402 4830 9032 8332 10

2. Article Number (Transfer from service label)

7019 2970 0000 2906 4503

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X City of Wylie

 Agent Addressee

B. Received by (Printed Name)

DG R13 CV-19

C. Date of Delivery

04-30-21

D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail

- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Harrington/Turner, 000084
Restricted Delivery



3600 W Sam Houston Pkwy S, Suite 600, Houston, Texas 77042
t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

City of Parker
5700 E. Parker Rd.
Parker, TX 75002

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

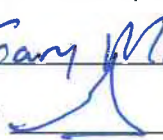
Please respond in writing or indicating below on this letter if the City of Parker has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

We do not have any wastewater treatment facility

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: *Gary Machado* Title: *Public Works Director*
Signature:  Date: *May 11, 2021*



3600 W Sam Houston Pkwy S, Suite 600, Houston, Texas 77042
t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

City of Murphy
206 N. Murphy Rd.
Murphy, TX 75094

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Murphy has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____

Ashley Broughton

From: Jaison Stephen
Sent: Thursday, November 18, 2021 1:55 PM
To: Ashley Broughton
Subject: FW: Water / Wastewater Service

From: Timothy Rogers <TRogers@murphytx.org>
Sent: Monday, December 14, 2020 4:58 PM
To: Jaison Stephen <jstephen@lja.com>
Subject: RE: Water / Wastewater Service

[EXTERNAL EMAIL]

The City of Murphy is not interested in providing water and wastewater to any outside jurisdictions.

Regards,

Tim Rogers
Public Services Director
trogers@murphytx.org
O: (972) 468-4353
C: (321) 704-4699
www.murphytx.org

City of Murphy
LIFE LIVED AT YOUR PACE™

“Murphy values being a safe, vibrant, family-oriented, distinctive City that fosters a strong sense of community.”



Please consider the environment before printing this email.

From: Jaison Stephen <jstephen@lja.com>
Sent: Friday, December 11, 2020 1:03 PM
To: Timothy Rogers <TRogers@murphytx.org>
Subject: Water / Wastewater Service

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon Mr. Rogers,

Hope you are well.

We are working on the property highlighted in red on the attached exhibit located in the City of Parker ETJ. Parker is not able to provide water and wastewater service to the property. We are reaching out to see if the City of Murphy has water and wastewater infrastructure in the area with capacity to service this property for approximately 550 residential lots.

Please let us know. We would be happy to set up a virtual meeting to discuss.

Thank you,
Jaison

Jaison M. Stephen, P.E.
Sr. Project Manager

LJA Engineering | We Build Civilization ®

• North Texas

P: 469.484.0776

C: 214.803.2139

www.lja.com

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t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

City of Plano
1520 K Avenue
Plano, TX 75074

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Plano has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____

No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: B. Chris Titus Title: Director of Engineering

Signature: [Signature] Date: 5/20/2021



April 27, 2021

VIA CERTIFIED MAIL

City of Allen
305 Century Parkway
Allen, Texas 75013

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Allen has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: STEPHEN B. MASSEY, P.E. Title: Director of Community Services

Signature: [Handwritten Signature] Date: 10-17-2021

allen has no wastewater treatment facilities -

Steve Massey - 214-509-4501



3600 W Sam Houston Pkwy S, Suite 600, Houston, Texas 77042
t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

City of Lucas
665 Country Club Road
Lucas, Texas 75002-7651

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Lucas has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: Joni Clarke Title: City Manager
 Signature:  Date: 7/6/21



3600 W Sam Houston Pkwy S, Suite 600, Houston, Texas 77042
t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

City of Richardson
411 W. Arapaho Road
Suite 204
Richardson, TX 75080

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the City of Richardson has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

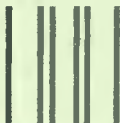
Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____

USPS TRACKING #



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

9590 9402 4830 9032 8331 59

United States
Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box •

LJA Engineering
3600 W. Sam Houston Pkwy. S. Ste. #600
Houston, Texas 77042

Ashley Broughton
713-553-9799.

4/27/21

Job # NT561-0183(2.0)

Harrington/Turner 000093



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

City of Richardson
 411 W. Arapaho Road
 Suite 204
 Richardson, TX 75080



9590 9402 4830 9032 8331 59

2. Article Number (Transfer from service label)

7019 2970 0000 2906 4565

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Tracy Scott

-
- Agent
-
-
- Addressee

B. Received by (Printed Name)

Tracy Scott

C. Date of Delivery

4/30/21

 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

-
- Adult Signature
-
-
- Adult Signature Restricted Delivery
-
-
- Certified Mail®
-
-
- Certified Mail Restricted Delivery
-
-
- Collect on Delivery
-
-
- Collect on Delivery Restricted Delivery
-
-
- Priority Mail Express®
-
-
- Registered Mail™
-
-
- Registered Mail Restricted Delivery
-
-
- Return Receipt for Merchandise
-
-
- Signature Confirmation™
-
-
- Signature Confirmation Restricted Delivery

Harrington/Turner 000094

il Restricted Delivery



3600 W Sam Houston Pkwy S, Suite 600, Houston, Texas 77042
t 713.953.5200 LJA.com TBPE F-1386 TBPLS 10110501

April 27, 2021

VIA CERTIFIED MAIL

North Texas Municipal Water District
501 East Brown St.
P.O. Box 2408
Wylie, TX 75098

Re: Wastewater Service Request for Collin County MUD No. 7 WWTP
LJA Job No. NT561-0133 (2.0)

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Collin County MUD No. 7 Wastewater Treatment Plant, in Collin County. The proposed development will require 0.20 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred system is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the NTMWD WWTP with TPDES Permit No. WQ0010363001 has available capacity. After you have made the required indication, please email (abroughton@lja.com) or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ashley Broughton, PE
Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____

USPS TRACKING #



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

9590 9402 4830 9032 8331 66

United States
Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box*

LJA Engineering
3600 W. Sam Houston Pkwy. S. Ste. #600
Houston, Texas 77042

Ashley Broughton
713-553-9799

4/27/21

Job # NT561-0132(2.0)

Harrington/Turner 000096



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**North Texas Municipal Water District
 501 East Brown St.
 P.O. Box 2408
 Wylie, TX 75098**



9590 9402 4830 9032 8331 66

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Phil Turner

Agent

Addressee

B. Received by (Printed Name)

Phil Turner

C. Date of Delivery

5-5

D. Is delivery address different from item 1?

Yes

If YES, enter delivery address below:

No

3. Service Type

Adult Signature

Adult Signature Restricted Delivery

Certified Mail®

Certified Mail Restricted Delivery

Priority Mail Express®

Registered Mail™

Registered Mail Restricted Delivery

Return Receipt for Merchandise

2. Article N

Harrington/Turner 000097

Confirmation™
Confirmation
Delivery

PS Form 3

Return Receipt

Attachment 13

Project Name:

Collin County MUD No. 7 WWTP

Wastewater Treatment Plant
Process Design Calculations

Project #:

		Phase 1	Phase 2
WWTP Influent Flow			
Average Daily Flow	gpd	100,000	200,000
Peaking Factor		4	4
Peak Flow	gpd	400,000	800,000
Equivalent Single Family Connections	ESFC	333	666
Water Usage per Connection	gal/ESFC	300	300

WWTP Organic Parameters

BOD ₅	300 mg/L		
NH ₃	64 mg/L		
BOD Loading	lbs/d	250	500

Aeration Basin Design

Process Description	Temperatures Exceed 15C		
Organic Loading Rate	35 lbs BOD ₅ /day/1,000ft ³		
Minimum Free Board	1.5 ft		
Minimum Aeration Volume	ft ³	7,149	14,297
Number of Tanks		2	3
Length	ft	40	40
Width	ft	12	12
Height of Basin	ft	13.2	13.2
Calculated Side Water Depth at Average Flow	ft	11.24	11.26
Calculated Side Water Depth at Peak Flow		11.29	11.35
Proposed Free Board at Peak Flow	ft	1.50	1.50
Proposed Volume	ft ³	10,794	16,213

Secondary Clarifier Design

Process Description	Activated Sludge - Secondary, Enhanced Secondary, or Secondary With		
Maximum Surface Loading @ 2-hr Peak Flow	1,200 gpd/ft ²		
Minimum Detention Time	1.8 hrs		
Minimum SWD	10 ft		
Minimum Free Board	1 ft		
Maximum Weir Loading	gpd/lf	20,000	20,000
Maximum Vertical Velocity in Stilling Well	0.15 ft/s		
Minimum Surface Area Required	ft ²	333	667
Number of Clarifiers		1	1
Diameter	ft	32	32
Proposed Weir Loading	gpd/lf	4,244	8,488
Height of Clarifier	ft	14.20	14.20
Calculated Side Water Depth	ft	10.00	10.00

Proposed Free Board at Peak Flow	ft	1.00	1.00
Proposed Surface Area	ft ²	804	804
Proposed Volume	ft ³	8,042	8,042
Proposed Detention Time	hrs	3.61	1.80
Stilling Well Diameter	ft	8.0	8.0
Proposed Stilling Well Velocity	ft/s	0.01	0.02

Chlorine Contact Basin

Minimum Contact Time	20 min		
Minimum Free Board	1 ft		
Number of Basins		1	1
Width of Tank	12 ft	12	12
Height of Tank	12 ft	12	12
Calculated Side Water Depth at Peak Flow	ft	11.00	11.00
Calculated Free Board at Peak Flow	ft	1.00	1.00
Proposed Length of Tank	15 ft	15	15
Proposed Volume	ft ³	1,980	1,980
Proposed Detention Time	min	53.32	26.66

Aerobic Digester Design

Volatile Solids Wasted (From Solids Balance)	lbs/d	165	330
TCEQ Loading Rate	200 lbs/d/1,000ft ³		
Minimum Required Volume	$V = \frac{P_{x,tss}}{\text{LoadingRate}}$ ft ³	825	1,650
Number of Digesters		2	3
Width	ft	12	12
Depth	ft	11.7	11.7
Length	ft	20	20
Proposed Volume	ft ³	5,616	8,424

Chlorine Dosage Requirements

Type of Effluent	Activated Sludge		
Chlorine Concentration	8 mg/L		
Storage of Chlorine Tanks	Temperature-Controlled Enclosure		
Low Ambient Temperature	65 °F		
Required Chlorine Dosage	lbs/d	27	53
Withdrawal Rate per 150-lb Chlorine Cylinder	65 lbs/d		
Withdrawal Rate per 1-ton Chlorine Cylinder	520 lbs/d		
Number of 150-lb Chlorine Cylinders per Bank		1	2
Number of 1-ton Chlorine Cylinders per Bank		0	0
Proposed Maximum Chlorine Withdrawal Rate		65	130

Air Requirements

Aeration Basins

Type of Diffuser	Coarse Bubble Diffuser		
Transfer Efficiency Factor	0.65		
Depth of Diffuser		10.24	10.26
Submergence Correction Factor		1.49	1.49
Clean Water Transfer Efficiency	8.40%		
Wastewater Transfer Efficiency	5.46%		
Aeration Oxygen Requirement	2.12 lb O ₂ /lb BOD ₅		
Aeration Airflowrate	scfm	583	1,162
Mixing Oxygen Requirement	20 scfm/1,000 ft ³		
Mixing Airflowrate	scfm	216	324
Required Airflowrate	scfm	583	1,162

Aerobic Digester

Type of Diffuser	Coarse Bubble Diffuser		
Required Mixing Air Rate	20 scfm/1,000 ft ³		
Required Airflowrate	scfm	112.32	168.48

Chlorine Contact Basin

Effluent DO Concentration	4 mg/L		
Initial DO Concentration*	0 mg/L		
Diffuser Capacity	150%		
Required Oxygen at Peak Flow	lb O ₂ /d	13.35	26.70
Required Airflowrate	scfm	9.84	19.69
Airflowrate Required by Diffusers		14.77	29.53
Minimum Airdrops (10 scfm)		2	3

* Minimum DO Concentration in the Aeration Basin is 2 mg/L however, to be conservative an estimated DO of 0 mg/L has been assumed entering the CCB

Airlifts

Amount Required	110 scfm
-----------------	----------

Total Air Requirement

Total Plant Required Air	scfm	815	1,460
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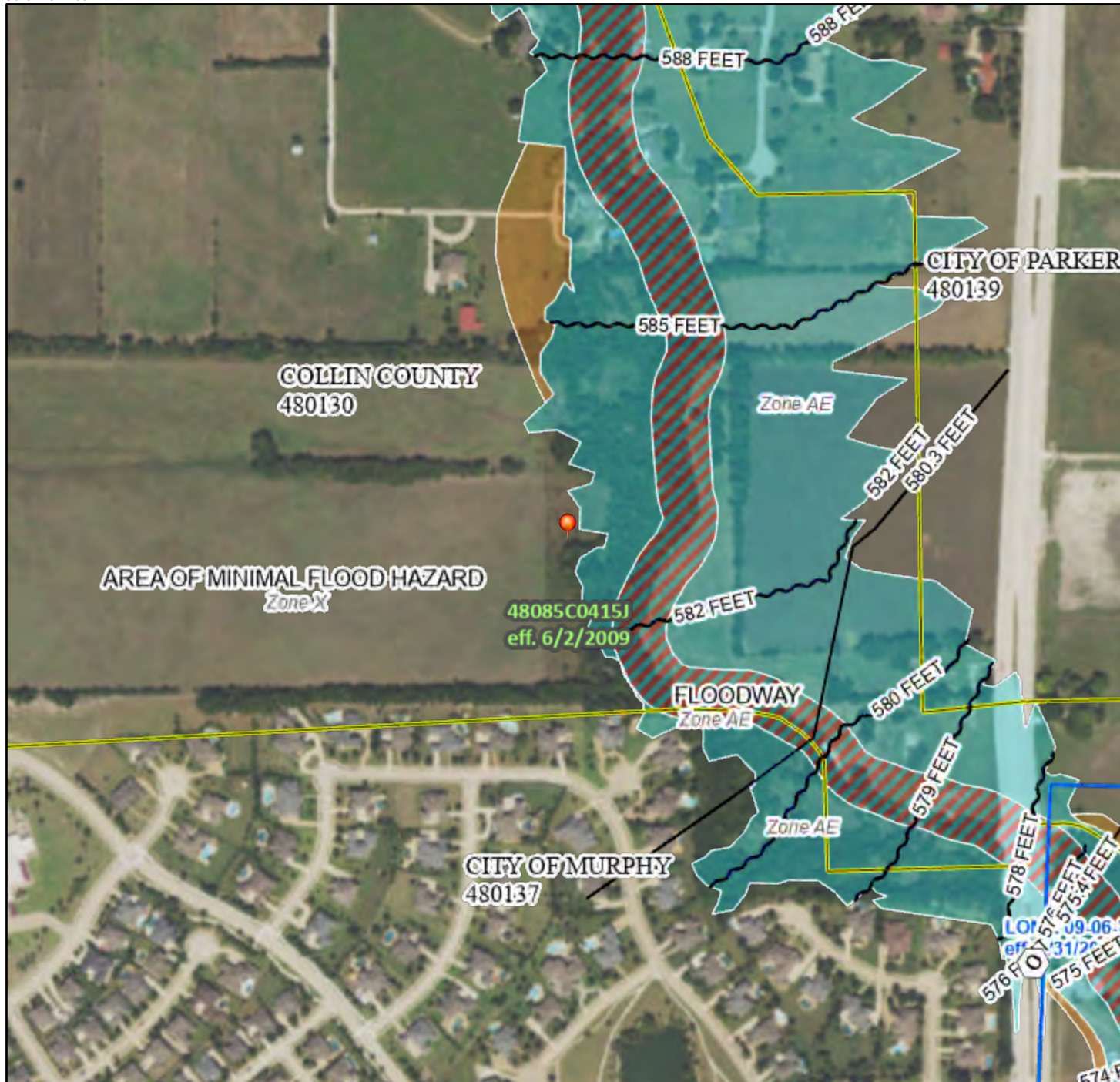
Blower Sizing

Blower Capacity	850 scfm		
Blower Required		1	2
Proposed Blowers		2	3

National Flood Hazard Layer FIRMMette



96°37'18"W 33°2'47"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

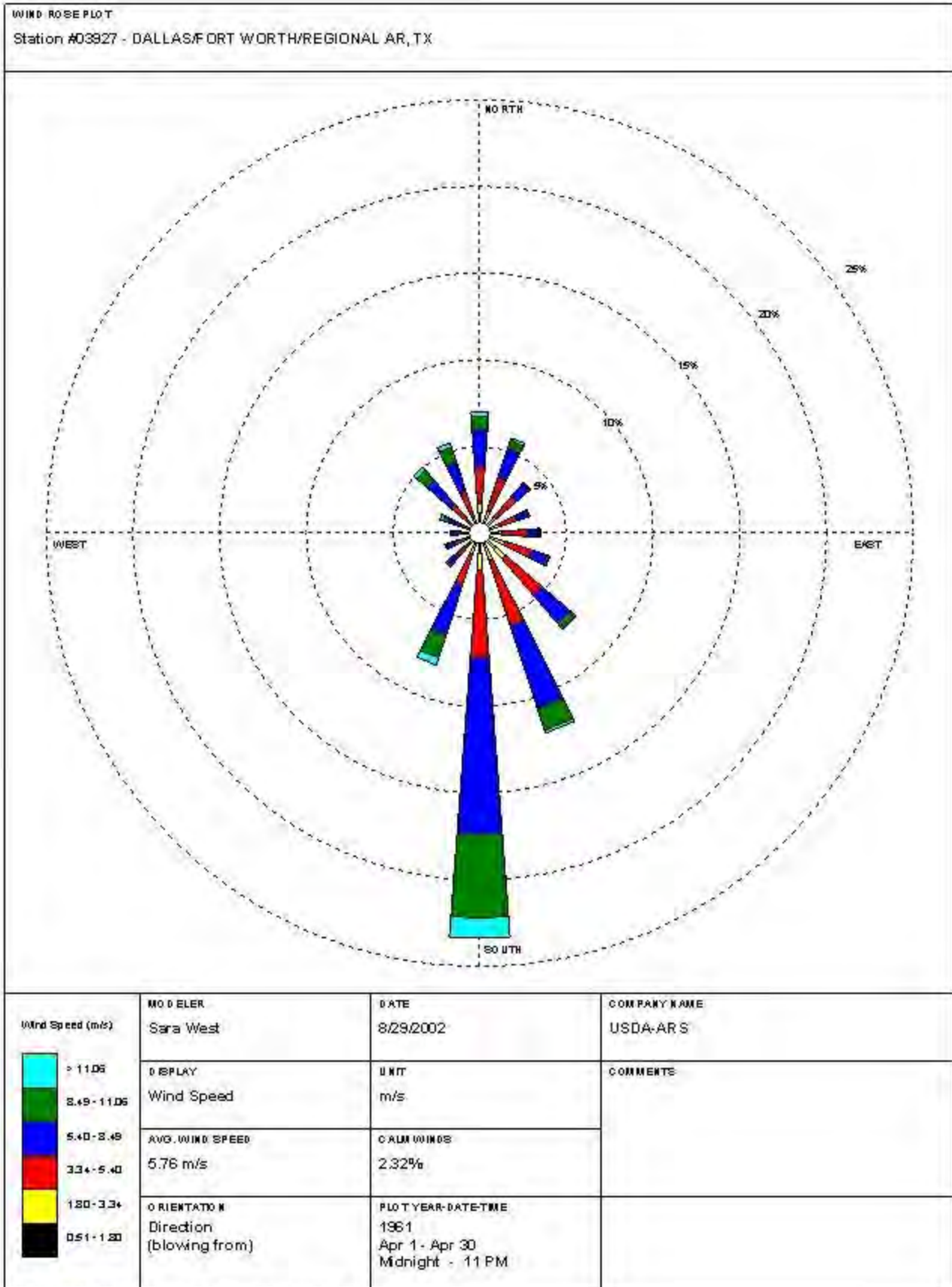
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/17/2021 at 10:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment 14



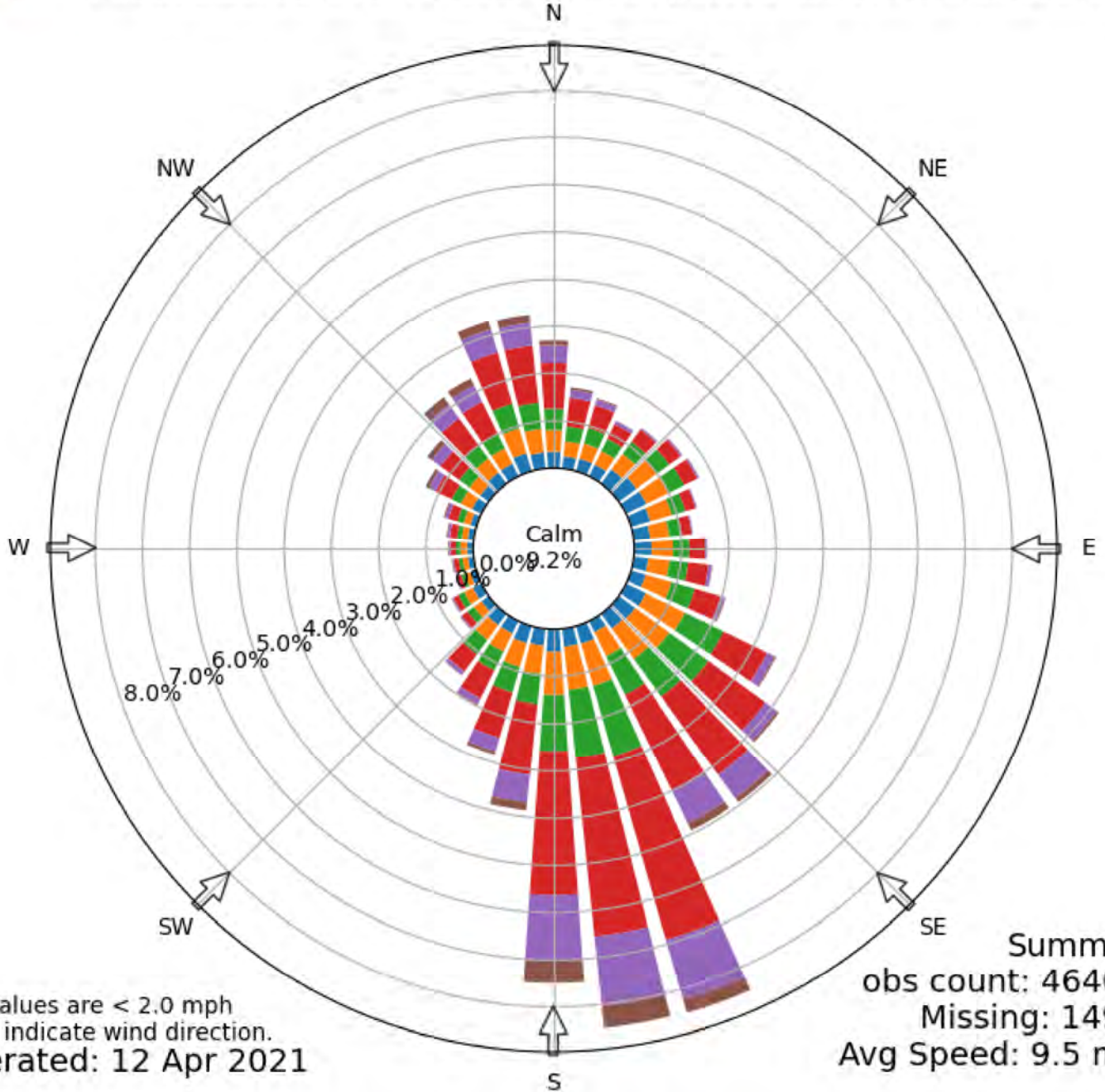
MPSP, Dr. Ver 3.3 by Caldes Environmental Software - www.blaas-software.com



[DAL] DALLAS/LOVE FIELD

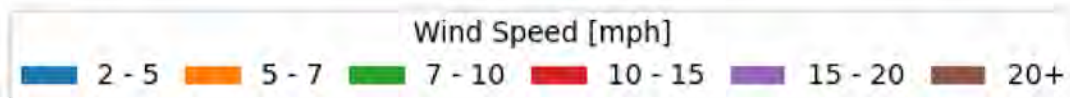
Windrose Plot

Time Bounds: 01 Jan 1970 03:00 AM - 12 Apr 2021 02:53 AM America/Chicago



Calm values are < 2.0 mph
Arrows indicate wind direction.
Generated: 12 Apr 2021

Summary
obs count: 464044
Missing: 14977
Avg Speed: 9.5 mph



ATTACHMENT - 15
Sludge Management Plan
Phase 2 (Ultimate) - 0.20 MGD

Influent Design Flow	0.2 MGD
Influent BOD ₅ Concentration	300 mg/L
Aerobic Digester Volume	63,006 Gal
Aeration Basin MLSS	2000 mg/L

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD ₅	500	375	250	125
Pounds (lbs) of digested dry sludge produced*	175	131	88	44
Pounds (lbs) of wet sludge produced	8757	6568	4379	2189
Gallons (Gal) of wet sludge produced	1050	788	525	263

*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD₅ at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	7	10	14	29

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time (MCRT) for the digester storage volume of 63006 gal will be approximately 60 days at 100% capacity and annual average digested sludge produced of 175 ppd.