



January 10th, 2022

Texas Commission on Environmental Quality  
Applications Review and Processing Team (MF 148)  
Building F, Room 2101  
12100 Park 35 Circle  
Austin, Texas 76753

**RE: *Discharge Permit for the  
Highland Lakes Wastewater Reclamation Facility***

Dear Water Quality Team:

This letter serves to transmit the application for the Highland Lakes Wastewater Reclamation Facility.

The permit application follows this letter within the following attachments:

- Attachment A. Administrative Report 1.0
- Attachment B. Administrative Report 1.1
- Attachment C. SPIF
- Attachment D. TCEQ Core Data Form
- Attachment E. Domestic Technical Report 1.0
- Attachment F. Domestic Technical Report 1.1
- Attachment G. Domestic Technical Worksheet 2.0
- Attachment H. Domestic Technical Worksheet 2.1
- Attachment I. Original USGS Map
- Attachment J. Affected Landowners Map
- Attachment K. Landowner Labels
- Attachment L. Buffer Zone Map
- Attachment M. Process Flow Diagram
- Attachment N. Site Drawing
- Attachment O. Original Photographs
- Attachment P. Design Calculations
- Attachment Q. Solids Management Plan
- Attachment R. Wind Rose
- Attachment S. Copy of Permit Fee Check

If you have any questions regarding this project, please contact me at 817-339-2299.

Sincerely,  
KIMLEY-HORN AND ASSOCIATES, INC.  
Texas Firm No. 928

A handwritten signature in black ink, appearing to read "Chris Vela". The signature is fluid and cursive, with a large initial "C" and a stylized "V".

Chris Vela, P.E. (Texas License No. 137264)

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**ATTACHMENT A.**  
**ADMINISTRATIVE REPORT 1.0**



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
**DOMESTIC WASTEWATER PERMIT APPLICATION  
CHECKLIST**

Complete and submit this checklist with the application.

APPLICANT: Highland Lakes Midlothian I, LLC

PERMIT NUMBER: WQ0015999001

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

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

For TCEQ Use Only

Segment Number \_\_\_\_\_ County \_\_\_\_\_  
Expiration Date \_\_\_\_\_ Region \_\_\_\_\_  
Permit Number \_\_\_\_\_





## Section 1. Application Fees (Instructions Page 29)

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

Mailed      Check/Money Order Number: 1058  
 Check/Money Order Amount: \$2,050.00  
 Name Printed on Check: RREAF Holdings, LLC  
 EPAY      Voucher Number:    
 Copy of Payment Voucher enclosed?      Yes ☐

## Section 2. Type of Application (Instructions Page 29)

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

For amendments or modifications, describe the proposed changes:

**For existing permits:**

Permit Number: WQ00N/A

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

Expiration Date: N/A

### Section 3. Facility Owner (Applicant) and Co-Applciant 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?

Highland Lakes Midlothian I, 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: Shannon Livingston

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

Title: Vice President

**B. Co-applciant 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-applciant applying for this permit?

N/A

*(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-applciant 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): N/A

First and Last Name: N/A

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

Title: N/A

Provide a brief description of the need for a co-permittee: N/A

### 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:** Attachment D – TCEQ Core Data Form

## Section 4. Application Contact Information (Instructions Page 30)

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

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

First and Last Name: Shannon Livingston

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

Title: Vice President

Organization Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300 Ext.: N/A Fax No.: N/A

E-mail Address: slivingston@rreaf.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

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

First and Last Name: Chris Vela

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

Title: Professional Engineer

Organization Name: Kimley-Horn and Associates

Mailing Address: 801 Cherry St, Unit 11, Suite 1300

City, State, Zip Code: Fort Worth, TX 76102

Phone No.: (817) 339-2299 Ext.:  Fax No.:

E-mail Address: chris.vela@kimley-horn.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): Mr.

First and Last Name: Shannon Livingston

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

Title: Vice President

Organization Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300 Ext.:

Fax No.:

E-mail Address: slivingston@rreaf.com

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

First and Last Name: Kip Sowden

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

Title: Sr. Vice President

Organization Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300 Ext.:

Fax No.:

E-mail Address: kip@rreaf.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: Shannon Livingston

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

Title: Vice President

Organization Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300 Ext.:

Fax No.:

E-mail Address: slivingston@rreaf.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: Shannon Livingston

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

Title: Vice President

Organization Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 210-867-2400 Ext.:

Fax No.:

E-mail Address: slivingston@rreaf.com

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

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

## Section 8. Public Notice Information (Instructions Page 31)

### A. Individual Publishing the Notices

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

First and Last Name: Chris Vela

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

Title: Professional Engineer

Organization Name: Kimley-Horn and Associates

Mailing Address: 801 Cherry St, Unit 11, Suite 1300

City, State, Zip Code: Fort Worth, TX 76102

Phone No.: (817) 339-2299 Ext.:

Fax No.:

E-mail Address: chris.vela@kimley-horn.com

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

### C. Contact person to be listed in the Notices

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

First and Last Name: Chris Vela

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

Title: Professional Engineer

Organization Name: Kimley-Horn and Associates

Phone No.: (817) 339-2299 Ext.:

E-mail: chris.vela@kimley-horn.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: Midlothian City Hall

Location within the building: City Hall front window

Physical Address of Building: 104 W Ave E

City: Midlothian, TX

County: Ellis

Contact Name: Tammy Varner, City Secretary

Phone No.: (972) 775-3481 Ext.:

#### **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. RN111266862

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):

Highland Lakes Wastewater Reclamation Facility

C. Owner of treatment facility: Highland Lakes Midlothian I, LLC

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

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

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

First and Last Name: Highland Lakes Midlothian I, LLC

Mailing Address: 1909 Woodall Rodgers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300

E-mail Address: slivingston@rreaf.com

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

**Attachment:** 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 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:

Facility will be located approximately 1.5 miles SW of the intersection of Lone Elm Rd and E FM 875.

- 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:

Discharge will be into South Prong Creek (Unclassified Segment 0816A); thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie (0816).

City nearest the outfall(s): City of Midlothian

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

Outfall Latitude: 32.3888° Longitude: -96.9652°

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending



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

**Attachment:** N/A

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

N/A

## Section 11. TLAP Disposal Information (Instructions Page 36)

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

☐ Yes ☐ No

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

N/A

- B. City nearest the disposal site: N/A

- C. County in which the disposal site is located: N/A

- D. Disposal Site Latitude: N/A Longitude: N/A

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

N/A

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

N/A

## Section 12. Miscellaneous Information (Instructions Page 37)

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

☐ Yes ☒ No

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

☐ Yes      ☐ No      ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit 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: Click here to enter text

## Section 14. Signature Page (Instructions Page 39)

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

Permit Number: N/A

Applicant: Highland Lakes Midlothian I, 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): Shannon Livingston

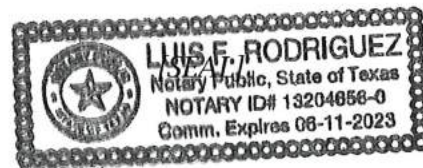
Signatory title: Vice President

Signature:  Date: 05-06-2021  
(Use blue ink)

Subscribed and Sworn to before me by the said Vice President Shannon Livingston  
on this 6<sup>th</sup> day of May, 2021.  
My commission expires on the 11<sup>th</sup> day of June, 2021.

  
Notary Public

Dallas, TX  
County, Texas



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**ATTACHMENT B.**  
**ADMINISTRATIVE REPORT 1.1**

## 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: Ellis County Appraisal District
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes
  - ☒ No

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

## 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



**ATTACHMENT C.**

**SPIF**

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

### FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

#### TCEQ USE ONLY:

Application type: \_\_\_\_Renewal \_\_\_\_Major Amendment \_\_\_\_Minor Amendment \_\_\_\_New

County: \_\_\_\_\_ Segment Number: \_\_\_\_\_

Admin Complete Date: \_\_\_\_\_

#### Agency Receiving SPIF:

\_\_\_\_ Texas Historical Commission

\_\_\_\_ U.S. Fish and Wildlife

\_\_\_\_ Texas Parks and Wildlife Department

\_\_\_\_ U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: Highland Lakes Midlothian I, LLC

Permit No. WQ00 15999001

EPA ID No. TX 0141318

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

Facility will be located approximately 2.72 miles SW of the intersection of FM 663 and E FM 875.

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: Shannon Livingston

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

Title: Vice President

Mailing Address: 1909 Woodall Rogers Fwy., Ste. 300

City, State, Zip Code: Dallas, TX 75201

Phone No.: 214-522-3300 Ext.:

Fax No.:

E-mail Address: slivingston@rreaf.com

2. List the county in which the facility is located: Ellis
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.

Discharge is into an unnamed stream; thence to South Prong Creek (Segment 0816A); thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie.

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):

Minimal surface disturbance of approximately 15 acres.

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

Land use is currently pasture.

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:

N/A

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

Property is historically native pasture.

**ATTACHMENT D.**  
**TCEQ CORE DATA FORM**



TCEQ Use Only

# TCEQ Core Data Form

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

## SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 605893353		RN 111266862

## SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		5/10/2021	
<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)					
<b>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).</b>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				If new Customer, enter previous Customer below:	
Highland Lakes Midlothian I, LLC					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	
803842620		32076880304		85-4123382	
10. DUNS Number (if applicable)					
11. Type of Customer:		<input checked="" type="checkbox"/> Corporation		<input type="checkbox"/> Individual	
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
12. Number of Employees		<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		13. Independently Owned and Operated?	
				<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:					
1909 Woodall Rodgers Fwy., Ste. 300					
City		Dallas		State TX	
ZIP		75201		ZIP + 4	
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				slivingston@rreaf.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	
( 214 ) 522-3300				( ) -	

## 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	
<b>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).</b>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Highland Lakes Wastewater Reclamation Facility	

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

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Facility will be located approximately 2.72 miles SW of the intersection of FM 663 and E FM 875.										
26. Nearest City	Midlothian				State	TX		Nearest ZIP Code	76065		
27. Latitude (N) In Decimal:	32.387900			28. Longitude (W) In Decimal:	-96.968800						
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds						
32°	23'	16.44"	-96°	58'	7.68"						
29. Primary SIC Code (4 digits)	6552		30. Secondary SIC Code (4 digits)	4952		31. Primary NAICS Code (5 or 6 digits)	237210		32. Secondary NAICS Code (5 or 6 digits)	221320	
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)											
Wastewater Treatment											
34. Mailing Address:	1909 Woodall Rodgers Fwy., Ste. 300										
	City	Dallas	State	TX	ZIP	75201	ZIP + 4				
35. E-Mail Address:	slivingston@rreaf.com										
36. Telephone Number	( 214 ) 522-3300		37. Extension or Code			38. Fax Number (if applicable)	( ) -				

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

<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:
WQ0015999001				

#### SECTION IV: Preparer Information

40. Name:	Chris Vela		41. Title:	Professional Engineer	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
( 817 ) 339-2299		( ) -	chris.vela@kimley-horn.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:	Highland Lakes Midlothian, LLC		Job Title:	Vice President	
Name (In Print):	Shannon Livingston			Phone:	( 210 ) 867- 2400
Signature:				Date:	7-14-2021

**ATTACHMENT E.**  
**DOMESTIC TECHNICAL REPORT 1.0**





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION

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**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): 0.3

2-Hr Peak Flow (MGD): 1.2

Estimated construction start date: 2023

Estimated waste disposal start date: 2024

**B. Interim II Phase**

Design Flow (MGD): 1.2

2-Hr Peak Flow (MGD): 4.8

Estimated construction start date: TBD

Estimated waste disposal start date: TBD

**C. Final Phase**

Design Flow (MGD): 2.76

2-Hr Peak Flow (MGD): 11.04

Estimated construction start date: TBD

Estimated waste disposal start date: TBD

**D. Current operating phase: N/A**

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:

**Interim 1:** Raw water will enter the headworks screen, split flow into 2 aeration basins, 2 clarifiers, 1 aerobic digester, 1 chlorine contact basin, and then outfall. Solids will be pumped out of the aerobic digester and then trucked to a landfill. **Interim 2:** Raw water will enter the Interim 1 headworks screen, split flow into 5 aeration basins, 4 clarifiers, 2 aerobic digesters, 1 chlorine contact basin, and then outfall. Solids will be pumped out of the aerobic digester and then trucked to a landfill. **Final Phase:** Raw water will enter the Interim 1 headworks screen, split flow into 9 aeration basins, 7 clarifiers, 4 aerobic digesters, 2 chlorine contact basins, and then outfall. Solids will be pumped out of the aerobic digester and then trucked to a landfill.

Port or pipe diameter at the discharge point, in inches: 18 inches

### 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)
Aeration Basin (Interim 1)	2	75' x 15' x 20'
Aeration Basin (Interim 2)	3	75' x 15' x 20'
Aeration Basin (Final Phase)	4	85' x 17' x 20'
Clarifier (Interim 1)	2	40' ø x 15'
Clarifier (Interim 2)	2	45' ø x 15'
Clarifier (Final Phase)	3	50' ø x 15'

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Aerobic Digester (Interim 1)	1	45' ø x 18'
Aerobic Digester (Interim 2)	1	45' ø x 18'
Aerobic Digester (Final Phase)	2	50' ø x 18'
Chlorine Contact Basin (Interim 1 and 2)	1	27.7' x 10' x 8'
Chlorine Contact Basin (Final Phase)	1	31.7' x 10' x 8'

### C. Process flow diagrams

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

**Attachment:** Attachment M – Process Flow Diagram

## Section 3. Site Drawing (Instructions Page 52)

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

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

**Attachment:** Attachment N – Site Drawing

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

Highland Lakes Development - 3,270 acres of single-family, multi-family, and commercial properties.

#### 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:

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.

N/A

### 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.

Ownership

### 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.

N/A

##### ***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.

N/A

#### ***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.

N/A

#### **E. Stormwater management**

##### ***1. Applicability***

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

Yes ☒ No ☐

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

Yes ☐ No ☒

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

##### ***2. MSGP coverage***

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

Yes ☐ No ☒

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

TXR05  or TXRNE

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

Yes ☐

No ☒

### ***3. Conditional exclusion***

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

Yes ☐

No ☒

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

N/A

### ***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.

N/A

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 BOD<sub>5</sub> concentration of the sludge, and the design BOD<sub>5</sub> 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 BOD<sub>5</sub> concentration of the septic waste, and the design BOD<sub>5</sub> 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 <sub>5</sub> , mg/l					

<b>Pollutant</b>	<b>Average Conc.</b>	<b>Max Conc.</b>	<b>No. of Samples</b>	<b>Sample Type</b>	<b>Sample Date/Time</b>
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, $\mu$ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO <sub>3</sub> )*, mg/l					

\*TPDES permits only

†TLAP permits only

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

<b>Pollutant</b>	<b>Average Conc.</b>	<b>Max Conc.</b>	<b>No. of Samples</b>	<b>Sample Type</b>	<b>Sample Date/Time</b>
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO <sub>3</sub> ), mg/l					

## Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Registered Facility Operator to be Selected at Future Date

Facility Operator's License Classification and Level: N/A

Facility Operator's License Number: N/A

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

### A. Sludge disposal method

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

- ☒ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use
- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit

- ☐ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.
- ☐ Other:

### B. Sludge disposal site

Disposal site name: Registered Landfill to be Selected at a Future Date

TCEQ permit or registration number: N/A

County where disposal site is located: N/A

### C. Sludge transportation method

Method of transportation (truck, train, pipe, other): Registered Hauler to be Selected at a Future Date

Name of the hauler: N/A

Hauler registration number: N/A

Sludge is transported as a:

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

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

### A. Beneficial use authorization

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

Yes ☐    No ☒

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

Yes ☐    No ☐

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

Yes ☐    No ☐

## B. Sludge processing authorization

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

Sludge Composting	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Marketing and Distribution of sludge	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sludge Surface Disposal or Sludge Monofill	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Temporary storage in sludge lagoons	Yes <input type="checkbox"/>	No <input type="checkbox"/>

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

Yes ☐ No ☐

## Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes ☐ No ☒

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

### A. Location information

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

- Original General Highway (County) Map:

**Attachment:** 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:

Total Kjeldahl Nitrogen, mg/kg:

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

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:



Zinc:

Total PCBs:

Provide the following information:

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

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

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

### C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of  $1 \times 10^{-7}$  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

## Section 14. Laboratory Accreditation (Instructions Page 64)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - performing work for another company with a unit located in the same site; or
  - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

### CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*.

Printed Name: Shannon Livingston

Title: Vice President

Signature: \_\_\_\_\_

Date: 05/06/2021

**ATTACHMENT F.**  
**DOMESTIC TECHNICAL REPORT 1.1**

# 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.

A new treatment plant is needed to serve the Highland Lakes development. Ultimately, the development will include 3,270 acres of single-family, multi-family, and commercial properties. With the proposed acreage distribution and number of single-family lots, industry standard flows from Metcalf and Eddy were used to determine that a 2.76 MGD plant would be needed to meet the needs of this future community.

### 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: N/A

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

Attachment: N/A

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 BOD<sub>5</sub> Concentration in mg/l: N/A

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34): N/A

Provide the source of the average organic strength or BOD<sub>5</sub> concentration.

Metcalf & Eddy

**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 <sub>5</sub> Concentration (mg/l)
Municipality	2.76	300
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		



Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	2.76	
AVERAGE BOD <sub>5</sub> from all sources		300

### 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: N/A

### **B. Interim II Phase Design Effluent Quality**

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: N/A

### **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: N/A

### **D. Disinfection Method**

Identify the proposed method of disinfection.

- ☒ Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow  
Dechlorination process: Sulfur Dioxide
- ☐ Ultraviolet Light: 100 seconds contact time at peak flow
- ☐ Other: 100

## **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:** Attachment P - Design Calculations

## Section 5. Facility Site (Instructions Page 68)

### A. 100-year floodplain

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

Yes ☒ No ☐

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

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

FEMA flood map #48139C0175F

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:** Attachment R - Wind Rose

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

### A. Beneficial use authorization

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

Yes ☐ No ☒

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

**Attachment:** 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:** Attachment Q – Solids Management Plan

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

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

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

**ATTACHMENT G.**  
**DOMESTIC TECHNICAL WORKSHEET 2.0**

# 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: N/A

#### 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).

N/A

### 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).

N/A

## 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: Unnamed Segment

### 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.

N/A

### D. Downstream characteristics

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

Yes ☒ No ☐

If yes, discuss how.



South Prong Creek flows into Soil Conservation Service Site 17 Reservoir about 2.30 miles downstream of the discharge.

#### E. Normal dry weather characteristics

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

Stream is intermittent and is dry during normal dry weather conditions

Date and time of observation: 12/14/2021 11:00 am

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 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="not here to enter"/> |

#### B. Waterbody uses

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

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Livestock watering | <input 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

**ATTACHMENT H.**  
**DOMESTIC TECHNICAL WORKSHEET 2.1**

## 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: 12/14/2021 Time of study: 11:00 am

Stream name: Unnamed tributary creek of South Prong Creek

Location: Latitude: 32.3888 ° Longitude: -96.9652 °

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: 11

Number of stream bends that are moderately defined: 4

Number of stream bends that are poorly defined: 0

Number of riffles: 0

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.

Stream shows agricultural/livestock use and minor evidence of flow fluctuations. Channel does not appear to have been unnaturally obstructed or modified.

#### 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**

<b>Stream type at transect</b> Select riffle, run, glide, or pool. See Instructions, Definitions section.	<b>Transect location</b>	<b>Water surface width (ft)</b>	<b>Stream depths (ft)</b> at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
dry	Transect 1 Discharge Point	6'* *Width of dry bed	0'
dry	Transect 2 About 300' downstream of the Discharge Location	22' 6"*	0'
dry	Transect 3 About 950' downstream from Transect 2	14'*	0'
dry	Transect 4 About 990' downstream from Transect 3	11' 9"*	0'
dry	Transect 5 About 850' downstream from Transect 4	7' 1"*	0'
dry	Transect 6 About 680' downstream from Transect 5	8' 5"*	0'
dry	Transect 7 About 580' downstream from Transect 6	6' 5"*	0'

<b>Stream type at transect</b> Select riffle, run, glide, or pool. See Instructions, Definitions section.	<b>Transect location</b>	<b>Water surface width (ft)</b>	<b>Stream depths (ft)</b> at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
dry	Transect 8 About 1100' downstream from Transect 7	11' 4"*	0'

### Section 3. Summarize Measurements (Instructions Page 76)

Streambed slope of entire reach, from USGS map in feet/feet: 0.0189

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): 1.16

Length of stream evaluated, in feet: 5450'

Number of lateral transects made: 8

Average stream width, in feet: 10.94' \*dry stream bed width

Average stream depth, in feet: 0'

Average stream velocity, in feet/second: 0' ft/s

Instantaneous stream flow, in cubic feet/second: 0 ft<sup>3</sup>/s

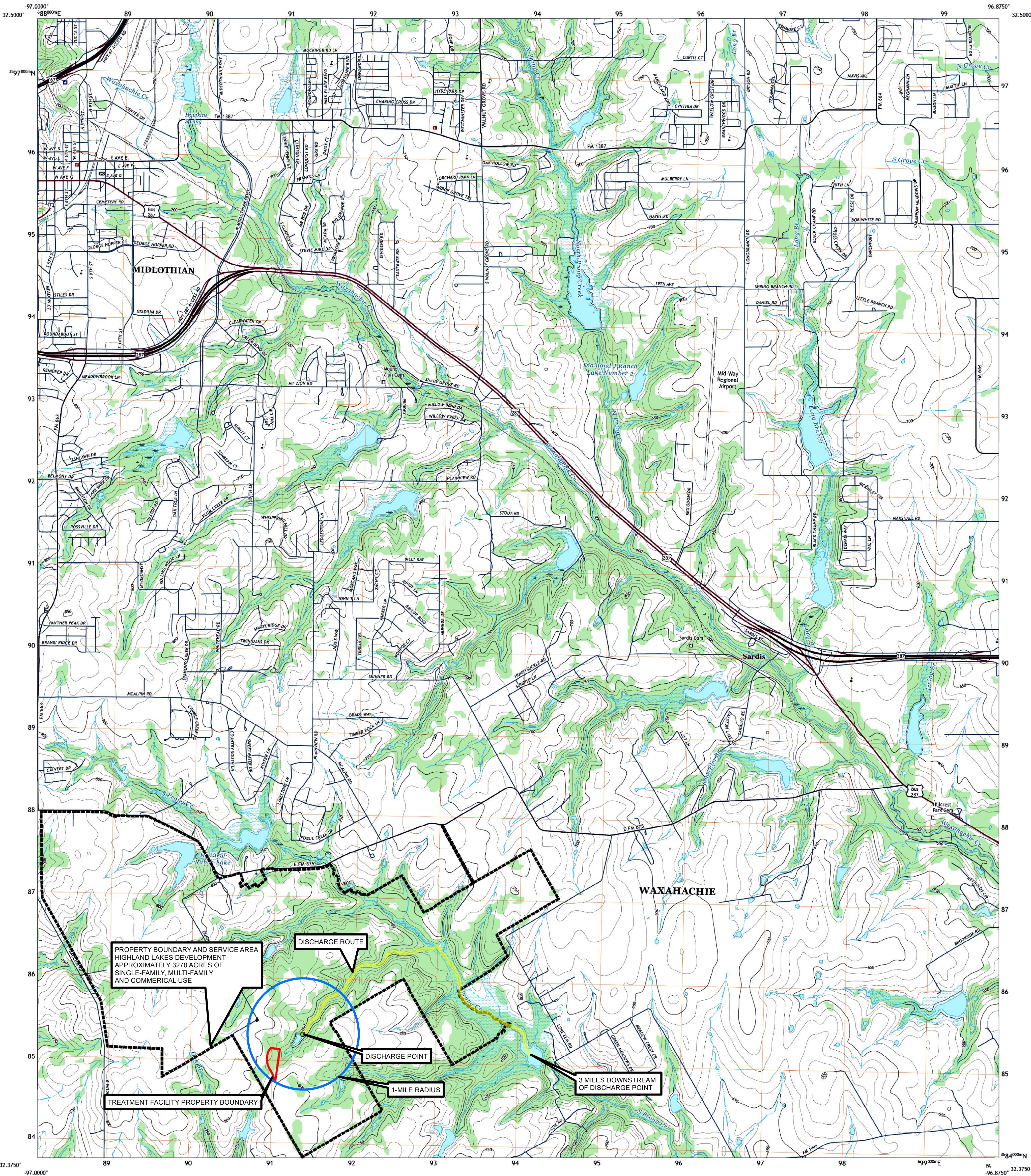
Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): N/A

Size of pools (large, small, moderate, none): N/A

Maximum pool depth, in feet: N/A

**ATTACHMENT I.**  
**ORIGINAL USGS MAP**





Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84). Projection and  
1000-meter grid/Universal Transverse Mercator, Zone 14S  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
reservations may not be shown. Obtain permission before  
entering private lands.  
Imagery.....NAIP, September 2016 - November 2016  
Roads.....U.S. Census Bureau, 2015 - 2018  
Names.....GNIS, 1979 - 2018  
Hydrography.....National Hydrography Dataset, 2000 - 2018  
Contours.....National Elevation Dataset, 2003 - 2004  
Boundaries.....Multiple sources; see metadata file 2016 2017  
Wetlands.....FWS National Wetlands Inventory 1982

UTM GRID AND 2018 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET  
U.S. National Grid  
100,000 - m Square ID  
PA  
Grid Zone Designation  
14S

SCALE 1:24 000  
KILOMETERS  
METERS  
FEET  
CONTOUR INTERVAL 10 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988

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

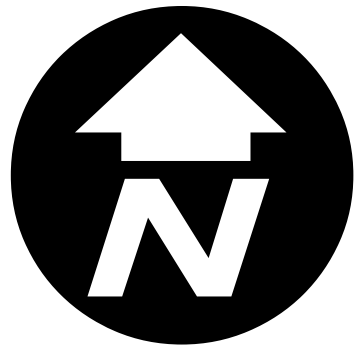


ADJOINING QUADRANGLES  
1 Britton  
2 Cedar Hill  
3 Lancaster  
4 Venus  
5 Waxahachie  
6 Maypearl  
7 Boz  
8 Farwellton

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

MIDLOTHIAN, TX  
2019

0 2,000  
Feet



Kimley»Horn

# HIGHLAND LAKES DOMESTIC WASTEWATER PERMIT SITE DRAWING

DATE: 11/8/2021

DESIGN: CAV

DRAWN: ASH

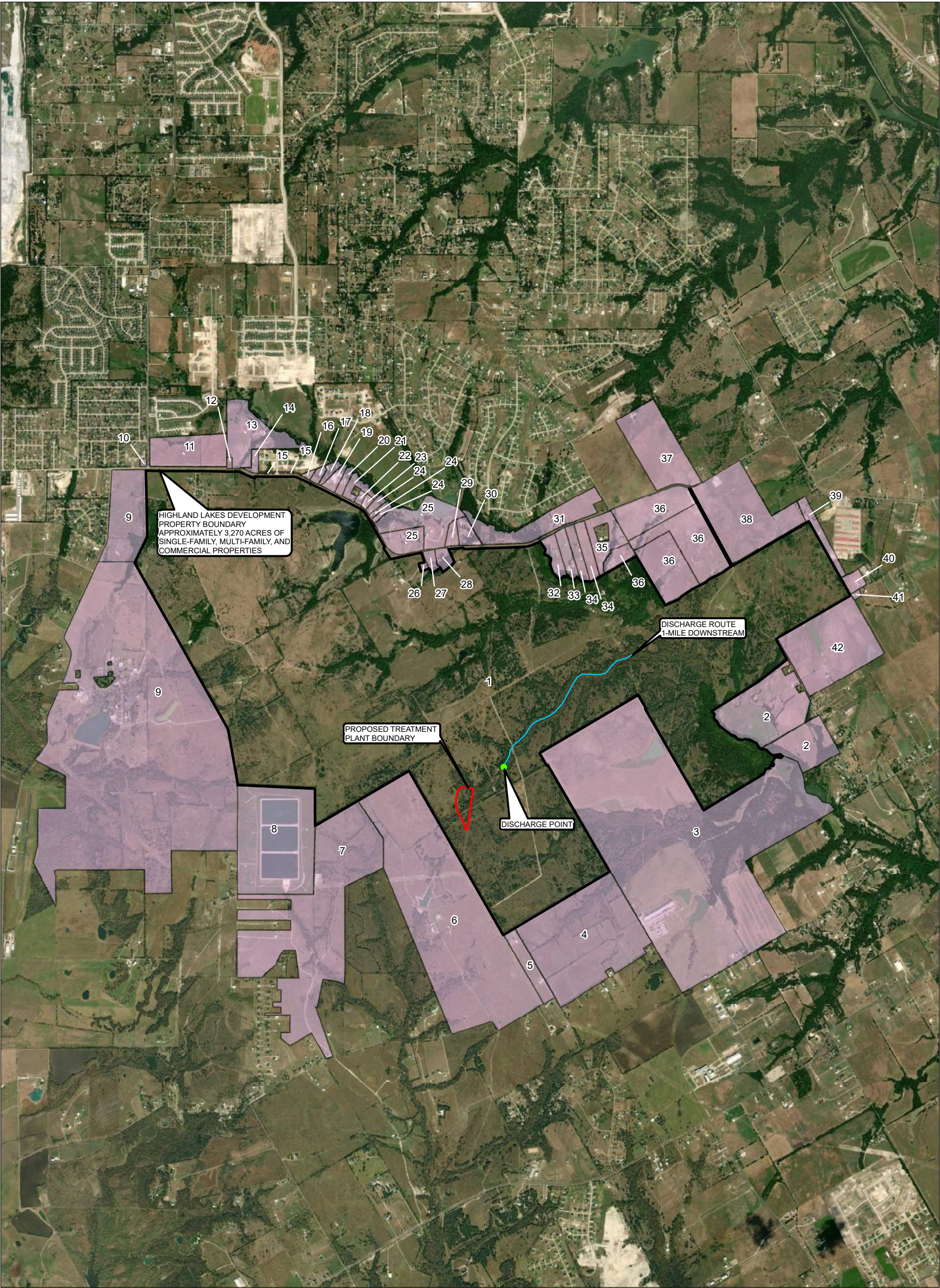
CHECKED: KPK

KHA NO: 063220906



**ATTACHMENT J.**  
**AFFECTED LANDOWNERS MAP**





2,000 0 2,000  
Feet



Kimley»Horn

# HIGHLAND LAKES DOMESTIC WASTEWATER PERMIT LANDOWNER MAP

DATE: 3/9/2021

DESIGN: CAV

DRAWN: ASH

CHECKED: CAV

KHA NO: 063220906

000070



PARCEL LANDOWNER TABLE

Parcel	Property Owner	Mailing Address
1	Applicant's Property - Highland Lakes Midlothian I, LLC	1909 Woodall Rodgers Fwy, Ste. 300, Dallas, TX 75201
2	Loftis Family Partnership, Ltd.	PO Box 134, Hamilton, TX 76531
3	Chas 1933 LP	3000 Alta Mesa Blvd #300, Fort Worth, TX 76133
4	Loftis, James A III & J A Loftis Jr Revocable Trust John S Loftis, Trustee	917 Stevens Rd, Ennis, TX 75119
5	Steadham, Steven C & April R	100 Angus Rd, Waxahachie, TX 75167
6	K & D Francis Realty Company LLC	6505 Dreyfus, Amarillo, TX 79106
7	Tucker Bypass Trust	9670 Baucum Rd, Midlothian, TX 76065
8	Tarrant Regional Water District	PO Box 4508, Fort Worth, TX 76164
9	The Salvation Army	1221 River Bend Dr, Dallas, TX 75247
10	Cobblestone Learning Center	6451 FM 663, Midlothian, TX 76065
11	Capstone Land Interests LLC	109 Mariah, Weatherford, TX 76087
12	No data	No data
13	Wright, Katherine J	491 FM 875, Midlothian, TX 76065
14	Hartson, Glenn & Brenda	PO Box 1821, Midlothian, TX 76065
15	Glass Developments LLC	3924 Marquette St, Dallas, TX 75225
16	Battey, Donna L	871 E FM 875, Midlothian, TX 76065
17	Battey, Dean R	871 E FM 875, Midlothian, TX 76065
18	Struve, Mitchell A & Vickie L	899 E FM 875, Midlothian, TX 76065
19	Proffitt, Rusty & Roxanne E Struve	1051 E FM 875, Midlothian, TX 76065
20	Stanley, Tawnya & Johnny L	2454 Savana Cir, Midlothian, TX 76065
21	Clark, Edward E IV	1231 E FM 875, Midlothian, TX 76065
22	Ruby, Kevin & Laura	1241 E FM 875, Midlothian, TX 76065
23	Ruby, Anthony & Cheyenne D	1251 E FM 875, Midlothian, TX 76065
24	Gullet, Scott R & Kimberly K	1411 E FM 875, Midlothian, TX 76065
25	McMillen, Garry D and Connie	1605 E FM 875, Midlothian, TX 76065
26	Gravens, Jay and Kimberly	1690 E FM 875, Midlothian, TX 76065
27	Calvert Hardin Grady Trust	3535 N Hall St #621, Dallas, TX 75219
28	Stephenson, Tim and Julie	PO Box 1030, Midlothian, TX 76065
29	Ward, Kay L McMillen & Grant Ward	1895 E FM 875, Midlothian, TX 76065
30	Shaw, Nick & Anna	PO Box 632, Midlothian, TX 76065
31	McAlpin, Gene and Doris	2845 E FM 875, Midlothian, TX 76065
32	Lepori, Mark C & Deweylene	2840 E FM 875, Midlothian, TX 76065
33	Capehart, David & L Danielle	2910 E FM 875, Midlothian, TX 76065
34	Daniels, Arvin J & Carla A	PO Box 864, Midlothian, TX 76065
35	Briggs, Carolyn Ann	3032 E FM 875, Midlothian, TX 76065
36	Rodes, Oscar D & Patricia Kay Co Tr Family Trust	4831 Honeysuckle Rd, Midlothian, TX 76065
37	Hartson, Dalayne	3801 E FM 875, Midlothian, TX 76065
38	MMM Procurement LTD	2845 E FM 875, Midlothian, TX 76065
39	Mayfield Family Revocable Living Trust	PO Box 1134, Midlothian, TX 76065
40	Owens, Dane and Carol	388 Lone Elm Rd, Waxahachie, TX 75167
41	Armstrong, Robert and Janet	441 Lone Elm Rd, Waxahachie, TX 75167
42	Pitts, Katherine Anne	111 Mustang Creek Dr, Waxahachie, TX 75165

**ATTACHMENT K.**  
**LANDOWNER LABELS**

LOFTIS FAMILY PARTNERSHIP, LTD  
PO BOX 134  
HAMILTON, TX 76531

CHAS 1933 LP  
300 ALTA MESA BLVD #300  
FORT WORTH, TX 76133

JOHN S LOFTIS, TRUSTEE  
917 STEVENS RD  
ENNIS, TX 75119

STEADHAM, STEVEN C & APRIL R  
100 ANGUS RD  
WAXAHACHIE, TX 75167

K&D FRANCIS REALTY CO, LLC  
6505 DREYFUS  
AMARILLO, TX 79106

TUCKER BYPASS TRUST  
9670 BAUCUM RD  
MIDLOTHIAN, TX 76065

TARRANT REGIONAL WATER DISTRICT  
PO BOX 4508  
FORT WORTH, TX 76164

THE SALVATION ARMY  
C/O DURAI PANDITHURAI  
1221 RIVER BEND DR  
DALLAS, TX 75247

COBBLESTONE LEARNING CENTER  
6451 FM 663  
MIDLOTHIAN, TX 76065

CAPSTONE LAND INTERESTS, LLC  
109 MARIAH  
WEATHERFORD, TX 76087

WRIGHT, KATHERINE J  
491 FM 875  
MIDLOTHIAN, TX 76065

HARTSON, GLENN AND BRENDA  
PO BOX 1821  
MIDLOTHIAN, TX 76065

CALVERT HARDIN GRADY TRUST  
3535 N HALL ST #621  
DALLAS, TX 75219

GLASS DEVELOPMENTS, LLC  
3924 MARQUETTE ST  
DALLAS, TX 75225

BATTEY, DONNA L  
871 E FM 875  
MIDLOTHIAN, TX 76065

BATTEY, DEAN R  
871 E FM 875  
MIDLOTHIAN, TX 76065

STRUVE, MITCHELL A & VICKIE L  
899 E FM 875  
MIDLOTHIAN, TX 76065

PROFFITT, RUSTY & ROXANNE STRUVE  
1051 E FM 875  
MIDLOTHIAN, TX 76065

STANLEY, TAWNYA & JOHNNY L  
2454 SAVANA CIR  
MIDLOTHIAN, TX 76065

CLARK, EDWARD IV  
1231 E FM 875  
MIDLOTHIAN, TX 76065

RUBY, KEVIN & LAURA  
1241 E FM 875  
MIDLOTHIAN, TX 76065

RUBY, ANTHONY AND CHEYENNE D  
1251 E FM 875  
MIDLOTHIAN, TX 76065

GULLET, SCOTT R AND KIMBERLY K  
1411 E FM 875  
MIDLOTHIAN, TX 76065

MCMILLEN, GARRY D AND CONNIE  
1605 E FM 875  
MIDLOTHIAN, TX 76065

GRAVENS, JAY AND KIMBERLY  
1690 FM 875  
MIDLOTHIAN, TX 76065

STEPHENSON, TIM AND JULIE  
PO BOX 632  
MIDLOTHIAN, TX 76065

WARD, KAY L MCMILLEN & GRANT  
1895 E FM 875  
MIDLOTHIAN, TX 76065

SHAW, NICK & ANNA  
PO BOX 632  
MIDLOTHIAN, TX 76065

MCALPIN, GENE & DORIS  
2845 E FM 875  
MIDLOTHIAN, TX 76065

LEPORI, MARK C & DEWEYLYNE  
2840 E FM 875  
MIDLOTHIAN, TX 76065

CAPEHART, DAVID L & DANIELLE  
2910 E FM 875  
MIDLOTHIAN, TX 76065

DANIELS, ARVIN J & CARLA A  
PO BOX 864  
MIDLOTHIAN, TX 76065

BRIGGS, CAROLYN ANN  
3032 E FM 875  
MIDLOTHIAN, TX 76065

RODES, OSCAR D & PATRICIA KAY  
4831 HONEYSUCKLE RD  
MIDLOTHIAN, TX 76065

HARTSON, DALYNE  
3801 E FM 875  
MIDLOTHIAN, TX 76065

MMM PROCUREMENT, LTD  
2845 E FM 875  
MIDLOTHIAN, TX 76065

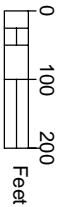
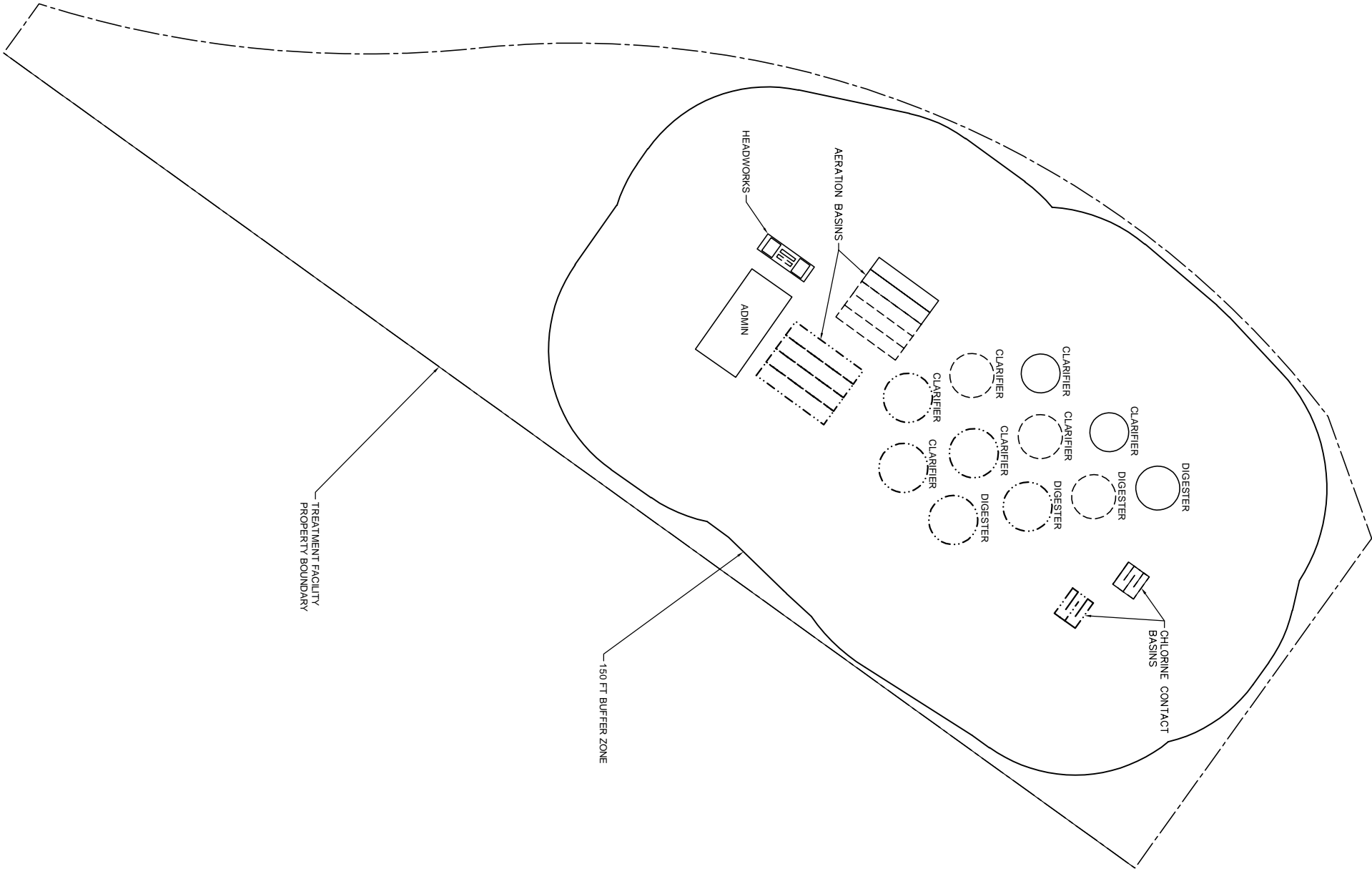
MAYFIELD, JAMES R & DEANNE  
PO BOX 1134  
MIDLOTHIAN, TX 76065

OWENS, DANE & CAROL  
388 LONE ELM RD  
WAXAHACHIE, TX 75167

ARMSTRONG, ROBERT & JANET  
441 LONE ELM RD  
WAXAHACHIE, TX 75167

PITTS, KATHERINE ANNE  
111 MUSTANG CREEK DR  
WAXAHACHIE, TX 75165

**ATTACHMENT L.**  
**BUFFER ZONE MAP**



LEGEND

PHASE 1

PHASE 2

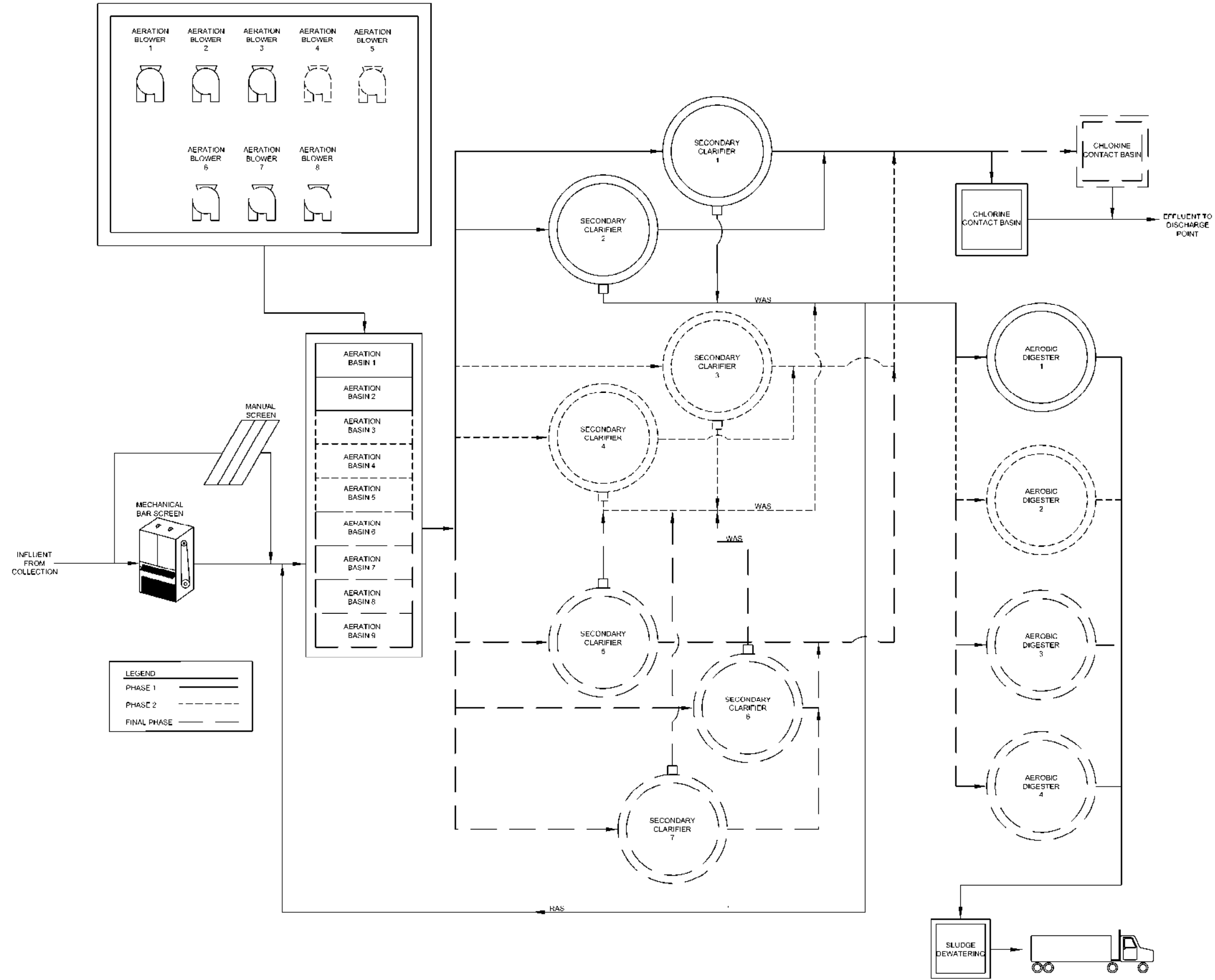
FINAL PHASE

SHEET	DATE:	FEBRUARY 2021	BUFFER ZONE MAP	HIGHLAND LAKES WASTEWATER RECLAMATION FACILITY		<div>Kimley»Horn</div> <div>801 Cherry St., Suite 1300, Unit 11 Ft. Worth, TX 76102 P: 817-335-6511 TBPE No. 928 F: 817-335-5070</div>			
	DESIGN:	CAV				No.	Revision	By	Date
	DRAWN:	ASH							
	CHECKED:	CAV							
	KHA NO.:	063220906							



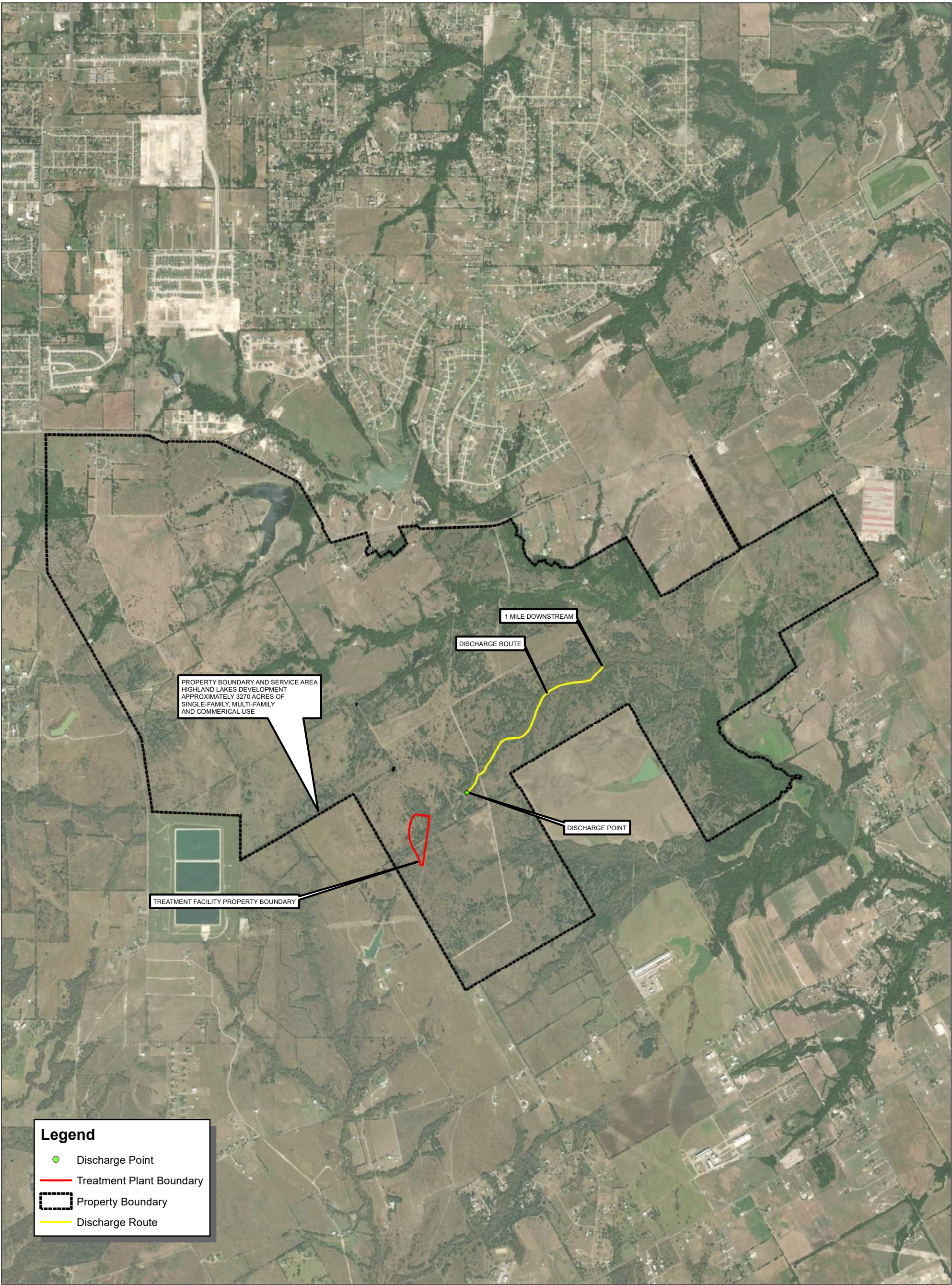
**ATTACHMENT M.**  
**PROCESS FLOW DIAGRAM**

K:\T2\Utility\03220606.dgn 11/1/2021 11:15:15 AM



**ATTACHMENT N.**  
**SITE DRAWING**

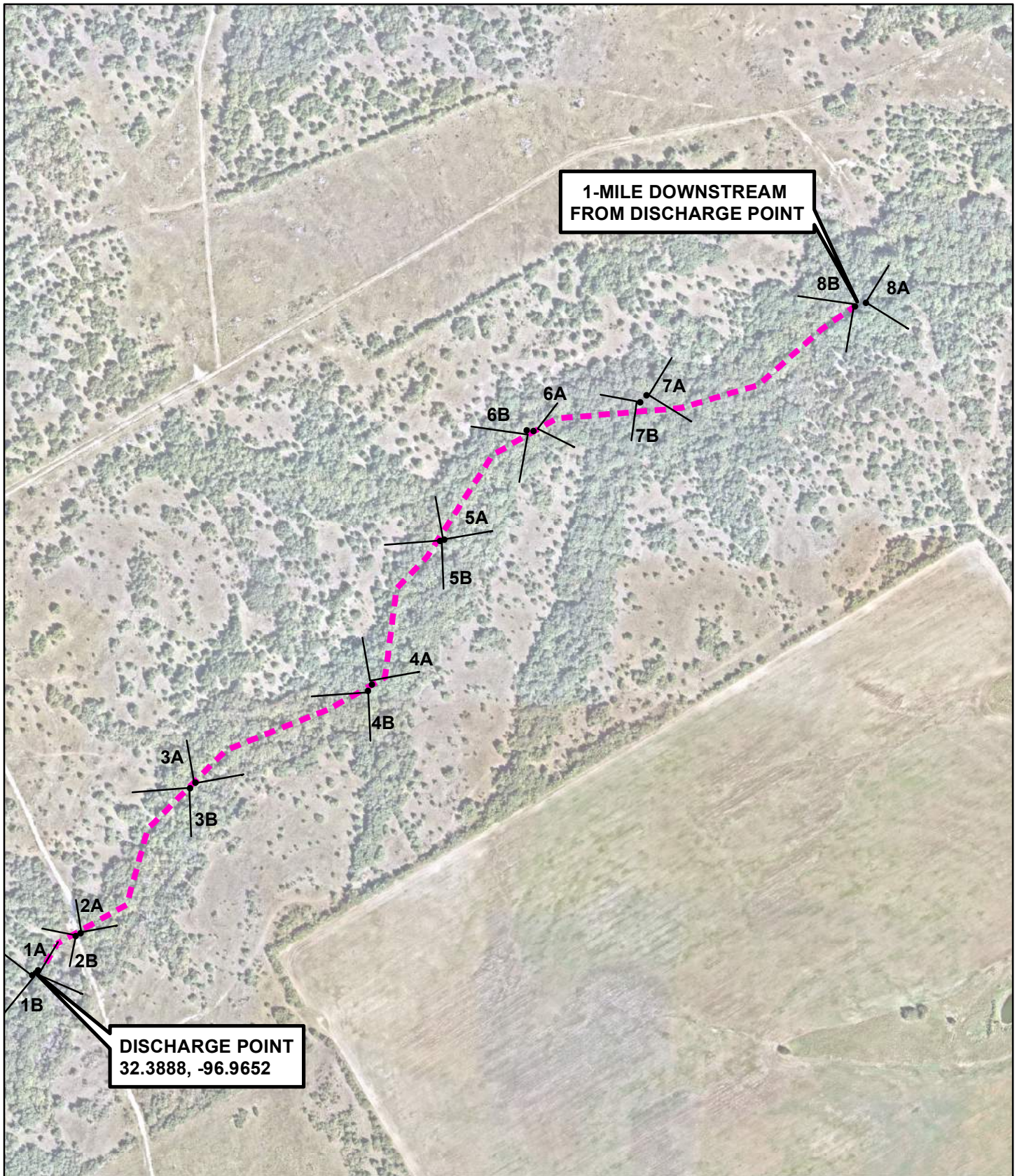





<div><div><div>010002000</div><div>Feet</div></div><div></div><div><div>Kimley</div><div>»»Horn</div></div></div>	<div><div>HIGHLAND LAKES</div><div>DOMESTIC WASTEWATER PERMIT</div><div>SITE DRAWING</div></div>	DATE: 11/8/2021
		DESIGN: CAV
		DRAWN: ASH
		CHECKED: KPK
		KHA NO: 063220906



**ATTACHMENT O.**  
**ORIGINAL PHOTOGRAPHS**



0 500 1,000  
Feet



**Kimley»Horn**

**HIGHLAND LAKES  
WASTEWATER RECLAMATION  
FACILITY**

**ORIGINAL PHOTOGRAPH MAP**

DATE: 12/14/2021
DESIGN: CAV
DRAWN: ASH
CHECKED: CAV
KHA NO.: 063220906





*Photo 1A: Upstream of Transect 1*



*Photo 1B: Downstream of Transect 1*





*Photo 2A: Upstream of Transect 2*



*Photo 2B: Downstream of Transect 2*





*Photo 3A: Upstream of Transect 3*



*Photo 3B: Downstream of Transect 3*





*Photo 4A: Upstream of Transect 4*



*Photo 4B: Downstream of Transect 4*





*Photo 5A: Upstream of Transect 5*



*Photo 5B: Downstream of Transect 5*





*Photo 6A: Upstream of Transect 6*



*Photo 6B: Downstream of Transect 6*

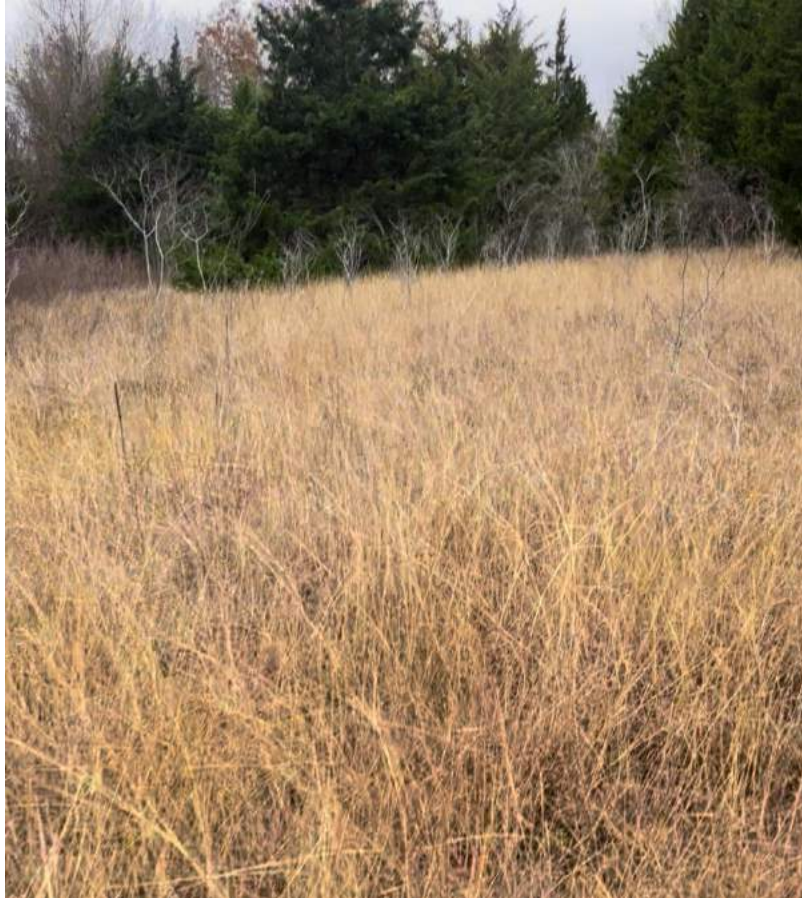




*Photo 7A: Upstream of Transect 7*



*Photo 7B: Downstream of Transect 7*



*Photo 9: Plant Site*

**ATTACHMENT P.**  
**DESIGN CALCULATIONS**

## Phase 1

### RAS

\*Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L

\*Calculate RAS rate by using a mass balance of the aeration tank

Influent Design Flow Rate to Aeration Tank ( $Q_0$ )	0.3	MGD	
Influent Peak Flow Rate to Aeration Tank ( $Q_{PEAK}$ )	1.2	MGD	
Mixed Liquor Suspended Solids (X)	10,000	mg/L	
Return Activated Sludge Suspended Solids ( $X_R$ )	14,000	mg/L	
Return Sludge Flow at Design Flow (RAS)	0.75	MGD	$Q \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42
Return Sludge Flow at Peak Flow (RAS)	3	MGD	$Q_{PEAK} \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42

### Aeration Basins

Design Flow for Aeration Basins	1.05	MGD	$Q_0 + RAS$
Design Sludge Retention Time ( $\theta_d$ )	25	days	per TCEQ §217.157(d)(2)(b)
Organic Loading Rate	35	lbBOD <sub>5</sub> /d/1,000 ft <sup>3</sup>	per TCEQ §217.154(b)(2)
Required Minimum Volume	21,446	ft <sup>3</sup>	
Number of Aeration Basins to Add	2		
Aeration Basin Length	75	ft	
Aeration Basin Width	15	ft	
Side Water Depth of Aeration Basin	20	ft	(Usually between 10' and 30')
Total Provided Aeration Basin Volume	45,000	ft <sup>3</sup>	
Aeration Basin in Service with Largest Length	75	ft	
Largest Aeration Basin's Side Water Depth	20	ft	
Total Aeration Basin Volume with Largest AB out of Service ( $V_0$ )	22,500	ft <sup>3</sup>	
Calculated Oxygen Required	1.63	lbs O <sub>2</sub> / lb BOD <sub>5</sub>	$= (1.2 \cdot BOD_5 + 4.3 \cdot NH_3 - N) / BOD_5$
Oxygen Requirement ( $O_2R$ )	2.2	lbs O <sub>2</sub> / lb BOD <sub>5</sub>	per TCEQ §217.155 (a)(3)
Calculated Air Flowrate	1,662	scfm	$= (O_2R \cdot BOD_5) / (WOTE \cdot 0.23 \cdot 0.075 \cdot 1440)$

### WAS

\*Design based on volume of aeration tank

Provided Aeration Basin Volume ( $V_0$ )	0.337	Mgal	
Waste Sludge Flowrate from Aeration Basin, Average Flow	0.013464	MGD	$= V_0 / \theta_d$ ; per Metcalf and Eddy Chapter 10, Equation 10-11
Daily Sludge Production Rate	115,658	lb/d	$= WAS \cdot SG$ ; waste activated sludge rate multiplied by the specific gravity of sludge solids

### Aerobic Digester

% of Volatile Solids (%VS)	80%		
% Volatile Solids Destroyed in Digestion (%VSD)	40%		
MLSS Concentration	30,000	mg/L	per TCEQ §217.157 (d)(2)(c)(ii)
Minimum Solids Retention Time (SRT)	40	days	Figure: 30 TAC §217.249(i)(4)(B); for an average of 20° C
Solids Loading	0.3	lb VSS/ft <sup>3</sup> -d	
Digester Percent Solids	2%		
Mass of Influent Solids	751	ppd	$= BOD_5 \cdot Q_{DES}$
Mass of Digested Solids	510	ppd	$= \text{Mass of Influent Solids} \cdot [1 - (\%VS \cdot \%VSD)]$
Average Solids in Digester	631	ppd	$= (\text{Mass of Influent Solids} + \text{Mass of Digested Solids}) / 2$
Total Solids in Digester Based on SRT	25,220	lb	$= \text{Average Solids} \cdot SRT$
Minimum Required Digester Volume	13,476	ft <sup>3</sup>	$= \text{Total Solids} / \text{MLSS Concentration}$
Number of Digester Basins to Add	1		
Digester Basins Diameter	45	ft	
Side Water Depth	18	ft	
Digester Basin Volume to Add	28,628	ft <sup>3</sup>	
Digester Basin Volume to Add	214,136	gal	
Total Digester Basin Volume	28,628	ft <sup>3</sup>	
Total Digester Basin Volume	214,136	gal	
% Volatile Solids Destroyed in Digestion (%VSD)	40%		per Metcalf and Eddy, Chapter 12, Table 12-24
Total Mass Reduced	240	lb VSS red/day	
Oxidation of VSS	2.3	kg O <sub>2</sub> /kg VSS	per Metcalf and Eddy, Chapter 12, Table 12-24
Oxygen Required	249	kg O <sub>2</sub> /day	
Density of Air	1.204	kg/m <sup>3</sup> @ 20° C	
Volume of Air Required per Day	890	m <sup>3</sup> air/day	
Oxygen Transfer Efficiency	10%		
Air Flow Rate	6.2	m <sup>3</sup> /min	
Air Loading	57.0	ft <sup>3</sup> /min*1000ft <sup>3</sup>	

Solids Generated	100% Flow	75% Flow	50% Flow	25% Flow
Pounds Influent BOD <sub>5</sub> (lb/d)	751	563	375	188
Pounds of Digested Dry Sludge Produced (lb/d)	510	383	255	128
Pounds of Wet Sludge Produced (lb/d)	17,014	12,760	8,507	4,253
Gallons of Wet Sludge Produced (gpd)	2,040	1,530	1,020	510

### Clarifier

Maximum Overflow Rate @ Peak Flow	1,200	gal/day/ft <sup>2</sup>	per TCEQ §217.154(c)(1)
Minimum Detention Time @ Peak Flow	1.8	hours	per TCEQ §217.154(c)(1)
Maximum Weir Loading	20,000	gal/day/ft	per TCEQ Ch. 217
Minimum Required Surface Area (Overflow)	1,000	ft <sup>2</sup>	
Minimum required Surface Area (Detention Time)	802	ft <sup>2</sup>	
Minimum Required Weir Length	60	ft	

Number of Clarifiers to Add	2		
Clarifier Diameter	40	ft	
Side Water Depth of Clarifier	15	ft	
Total Weir Length	251	ft	
Total Clarifier Surface Area	2,513	ft <sup>2</sup>	
Total Clarifier Volume	75,398	gal	
Clarifier in Service with Largest Diameter	40	ft	
Side Water Depth of Largest Clarifier	15	ft	
Total Surface Area with Largest Clarifier out of Service	1,257	ft <sup>2</sup>	
Total Weir Length with Largest Clarifier out of Service	126	ft	
Total Volume with Largest Clarifier out of Service	56,549	ft <sup>3</sup>	

### Chlorine Contact Basin

Minimum Detention Time at Peak Flow	20	min	per TCEQ 217.281(b)(1)
Required Length	27.7	ft	
Number of Parallel Channels	1		
Width	10	ft	
Depth	8	ft	



## Phase 2

## RAS

\*Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L

\*Calculate RAS rate by using a mass balance of the aeration tank

Influent Design Flow Rate to Aeration Tank ( $Q_0$ )	1.2	
Influent Peak Flow Rate to Aeration Tank ( $Q_{PEAK}$ )	4.8	
Mixed Liquor Suspended Solids (X)	10,000	
Return Activated Sludge Suspended Solids ( $X_R$ )	14,000	
Return Sludge Flow at Design Flow (RAS)	3	$Q \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42
Return Sludge Flow at Peak Flow (RAS)	12	$Q_{PEAK} \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42

## Aeration Basins

Design Flow for Aeration Basins	4.2	$Q_0 + RAS$
Design Sludge Retention Time ( $\theta_d$ )	25	per TCEQ §217.157(d)(2)(b)
Organic Loading Rate	35	per TCEQ §217.154(b)(2)
Required Minimum Volume	85,783	
Number of Aeration Basins to Add	3	
Aeration Basin Length	75	
Aeration Basin Width	15	
Side Water Depth of Aeration Basin	20	(Usually between 10' and 30')
Total Provided Aeration Basin Volume ( $V_0$ )	112,500	
Aeration Basin in Service with Largest Length	75	
Largest Aeration Basin's Side Water Depth	20	
Total Aeration Basin Volume with Largest AB out of Service ( $V_0$ )	90,000	
Calculated Oxygen Required	1.63	$= (1.2 \cdot BOD_5 + 4.3 \cdot NH_3-N) / BOD_5$
Oxygen Requirement ( $O_2R$ )	2.2	per TCEQ §217.155 (a)(3)
Calculated Air Flowrate	6,648	$= (O_2R \cdot BOD_5) / (WOTE \cdot 0.23 \cdot 0.075 \cdot 1440)$

## WAS

\*Design based on volume of aeration tank

Provided Aeration Basin Volume ( $V_0$ )	0.842	
Waste Sludge Flowrate from Aeration Basin, Average Flow	0.03366	$= V_0 / \theta_d$ ; per Metcalf and Eddy Chapter 10, Equation 10-11
Daily Sludge Production Rate	289,146	$= WAS \cdot SG$ ; waste activated sludge rate multiplied by the specific gravity of sludge solids

## Aerobic Digester

% of Volatile Solids (%VS)	80%	
% Volatile Solids Destroyed in Digestion (%VSD)	40%	
MLSS Concentration	30,000	per TCEQ §217.157 (d)(2)(c)(ii)
Minimum Solids Retention Time (SRT)	40	Figure: 30 TAC §217.249(f)(4)(B); for an average of 20° C
Solids Loading	0.3	
Digester Percent Solids	2%	
Mass of Influent Solids	3,002	$= BOD_5 \cdot Q_{DES}$
Mass of Digested Solids	2,042	$= \text{Mass of Influent Solids} \cdot [1 - (\%VS \cdot \%VSD)]$
Average Solids in Digester	2,522	$= (\text{Mass of Influent Solids} + \text{Mass of Digested Solids}) / 2$
Total Solids in Digester Based on SRT	100,881	$= \text{Average Solids} \cdot SRT$
Minimum Required Digester Volume	53,904	$= \text{Total Solids} / \text{MLSS Concentration}$
Number of Digester Basins to Add	1	
Digester Basins Diameter	45	
Side Water Depth	18	
Digester Basin Volume to Add	28,628	
Digester Basin Volume to Add	214,136	
Total Digester Basin Volume	57,256	
Total Digester Basin Volume	428,271	
% Volatile Solids Destroyed in Digestion (%VSD)	40%	per Metcalf and Eddy, Chapter 12, Table 12-24
Total Mass Reduced	961	
Oxidation of VSS	2.3	per Metcalf and Eddy, Chapter 12, Table 12-24
Oxygen Required	994	
Density of Air	1.204	
Volume of Air Required per Day	3560	
Oxygen Transfer Efficiency	10%	
Air Flow Rate	24.7	
Air Loading	228.0	

Solids Generated	100% Flow	75% Flow	50% Flow
Pounds Influent $BOD_5$ (lb/d)	3,002	2,252	1,501
Pounds of Digested Dry Sludge Produced (lb/d)	2,042	1,531	1,021
Pounds of Wet Sludge Produced (lb/d)	68,054	51,041	34,027
Gallons of Wet Sludge Produced (gpd)	8,160	6,120	4,080

## Clarifier

Maximum Overflow Rate @ Peak Flow	1,200	per TCEQ §217.154(c)(1)
Minimum Detention Time @ Peak Flow	1.8	per TCEQ §217.154(c)(1)
Maximum Weir Loading	20,000	per TCEQ Ch. 217
Minimum Required Surface Area (Overflow)	4,000	
Minimum required Surface Area (Detention Time)	3,209	
Minimum Required Weir Length	240	

Number of Clarifiers to Add	2
Clarifier Diameter	45
Side Water Depth of Clarifier	15
Total Weir Length	534
Total Clarifier Surface Area	5,694
Total Clarifier Volume	160,810

Clarifier in Service with Largest Diameter	45
Side Water Depth of Largest Clarifier	15
Total Surface Area with Largest Clarifier out of Service	4,104
Total Weir Length with Largest Clarifier out of Service	393
Total Volume with Largest Clarifier out of Service	136,954

## Chlorine Contact Basin

Minimum Detention Time at Peak Flow	20	per TCEQ 217.281(b)(1)
Required Length	27.7	
Number of Parallel Channels	4	
Width	10	
Depth	8	

### Phase 3

#### RAS

\*Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L

\*Calculate RAS rate by using a mass balance of the aeration tank

Influent Design Flow Rate to Aeration Tank ( $Q_{IO}$ )	2.76	
Influent Peak Flow Rate to Aeration Tank ( $Q_{PEAK}$ )	11.04	
Mixed Liquor Suspended Solids (X)	10,000	
Return Activated Sludge Suspended Solids ( $X_R$ )	14,000	
Return Sludge Flow at Design Flow (RAS)	6.9	$Q \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42
Return Sludge Flow at Peak Flow (RAS)	27.6	$Q_{PEAK} \cdot X / (X_R - X)$ ; M&E 5th Ed. Eq. 8-42

#### Aeration Basins

Design Flow for Aeration Basins	9.66	$Q_{IO} + RAS$
Design Sludge Retention Time ( $\theta_A$ )	25	per TCEQ §217.157(d)(2)(b)
Organic Loading Rate	35	per TCEQ §217.154(b)(2)
Required Minimum Volume	197,301	
Number of Aeration Basins to Add	4	
Aeration Basin Length	85	
Aeration Basin Width	17	
Side Water Depth of Aeration Basin	20	(Usually between 10' and 30')
Total Provided Aeration Basin Volume ( $V_a$ )	228,100	
Aeration Basin in Service with Largest Length	85	
Largest Aeration Basin's Side Water Depth	20	
Total Aeration Basin Volume with Largest AB out of Service ( $V_a$ )	199,200	
Calculated Oxygen Required	1.63	$= (1.2 \cdot BOD_5 + 4.3 \cdot NH_3 - N) / BOD_5$
Oxygen Requirement ( $O_2R$ )	2.2	per TCEQ §217.155 (a)(3)
Calculated Air Flowrate	15,290	$= (O_2R \cdot BOD_5) / (WOTE \cdot 0.23 \cdot 0.075 \cdot 1440)$

#### WAS

\*Design based on volume of aeration tank

Provided Aeration Basin Volume ( $V_a$ )	1.706	
Waste Sludge Flowrate from Aeration Basin, Average Flow	0.06824752	$= V_a / \theta_A$ ; per Metcalf and Eddy Chapter 10, Equation 10-11
Daily Sludge Production Rate	586,260	$= WAS \cdot SG$ ; waste activated sludge rate multiplied by the specific gravity of sludge solids

#### Aerobic Digester

% of Volatile Solids (%VS)	80%	
% Volatile Solids Destroyed in Digestion (%VSD)	40%	
MLSS Concentration	30,000	per TCEQ §217.157 (d)(2)(c)(ii)
Minimum Solids Retention Time (SRT)	40	Figure: 30 TAC §217.249(b)(4)(B); for an average of 20° C
Solids Loading	0.3	
Digester Percent Solids	2%	
Mass of Influent Solids	6,906	$= BOD_5 \cdot Q_{DES}$
Mass of Digested Solids	4,696	$= \text{Mass of Influent Solids} \cdot [1 - (\%VS \cdot \%VSD)]$
Average Solids in Digester	5,801	$= (\text{Mass of Influent Solids} + \text{Mass of Digested Solids}) / 2$
Total Solids in Digester Based on SRT	232,025	$= \text{Average Solids} \cdot SRT$
Minimum Required Digester Volume	123,979	$= \text{Total Solids} / \text{MLSS Concentration}$
Number of Digester Basins to Add	2	
Digester Basins Diameter	50	
Side Water Depth	18	
Digester Basin Volume to Add	70,686	
Digester Basin Volume to Add	528,730	
Total Digester Basin Volume	127,941	
Total Digester Basin Volume	957,001	
% Volatile Solids Destroyed in Digestion (%VSD)	40%	per Metcalf and Eddy, Chapter 12, Table 12-24
Total Mass Reduced	2210	
Oxidation of VSS	2.3	per Metcalf and Eddy, Chapter 12, Table 12-24
Oxygen Required	2287	
Density of Air	1.204	
Volume of Air Required per Day	8188	
Oxygen Transfer Efficiency	10%	
Air Flow Rate	56.9	
Air Loading	212.4	

Solids Generated	100% Flow	75% Flow	50% Flow
Pounds Influent $BOD_5$ (lb/d)	6,906	5,179	3,453
Pounds of Digested Dry Sludge Produced (lb/d)	4,696	3,522	2,348
Pounds of Wet Sludge Produced (lb/d)	156,525	117,394	78,263
Gallons of Wet Sludge Produced (gpd)	18,768	14,076	9,384

#### Clarifier

Maximum Overflow Rate @ Peak Flow	1,200	per TCEQ §217.154(c)(1)
Minimum Detention Time @ Peak Flow	1.8	per TCEQ §217.154(c)(1)
Maximum Weir Loading	20,000	per TCEQ Ch. 217
Minimum Required Surface Area (Overflow)	9,200	
Minimum required Surface Area (Detention Time)	7,380	
Minimum Required Weir Length	552	
Number of Clarifiers to Add	3	
Clarifier Diameter	50	
Side Water Depth of Clarifier	15	
Total Weir Length	1,005	
Total Clarifier Surface Area	11,585	
Total Clarifier Volume	656,200	
Clarifier in Service with Largest Diameter	50	
Side Water Depth of Largest Clarifier	15	
Total Surface Area with Largest Clarifier out of Service	9,621	
Total Weir Length with Largest Clarifier out of Service	848	
Total Volume with Largest Clarifier out of Service	626,748	

#### Chlorine Contact Basin

Minimum Detention Time at Peak Flow	20	per TCEQ 217.281(b)(1)
Required Length	31.9	
Number of Parallel Channels	8	
Width	10	
Depth	8	

**ATTACHMENT Q.**  
**SOLIDS MANAGEMENT PLAN**

**Highland Lakes Development Wastewater Treatment Facility**  
**Solids Management Plan**

Design Calculations of the Domestic Technical Report identifies an influent BOD strength of 300 mg/L. The final design flow capacity of this treatment facility is 2.76 MGD. This corresponds to a removal of 6,906 lbs. BOD/day (300 mg/L x 8.34 lbs./gallon x 2.76 MGD). The volatile solids in the sludge are estimated to have no reduction, therefore 100% solids would be remaining.

Biosolids Production			
Percent Permitted Flow	lbs. BOD/ Day Removed	Lbs. Wet Sludge/ Day (@2.0%)	Gal. of Wet Sludge/Day
100%	6906	156,525	18,768
75%	5179	117,394	14,076
50%	3453	78,263	9,384
25%	1726	39,131	4,692

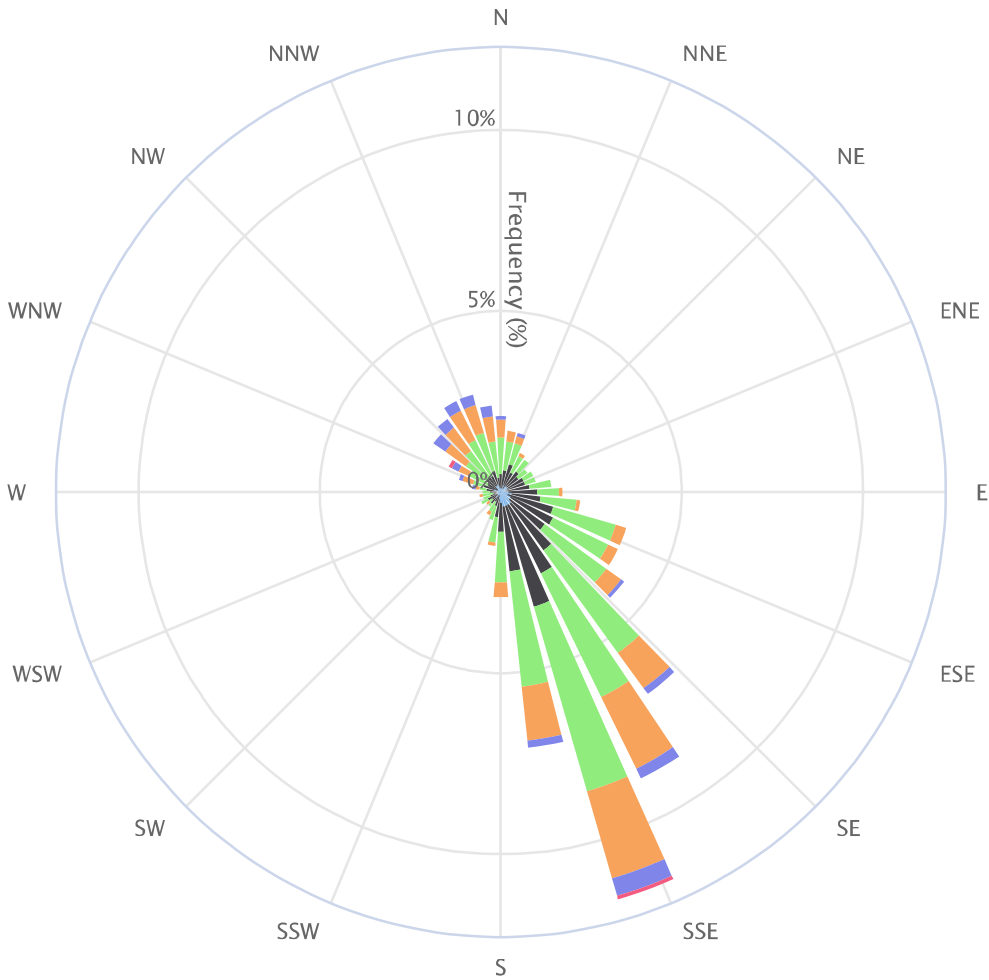
Assuming influent BOD at average temperatures and 2.0% solids concentration in the Aerobic Digester and at 100% of design flow, sludge would be wasted at 18,768 gallons per day. The total capacity of the proposed aerobic digester basins is 957,001 gallons. The digested sludge will be transported by a registered hauler and disposed of at a registered landfill.

**ATTACHMENT R.**  
**WIND ROSE**

# ARLINGTON MUNI AP (TX) Wind Rose



Jan. 1, 2021 – Jan. 6, 2022  
Sub-Interval: Jan. 1 – Dec. 31, 0 – 23



## Wind Speed (mph)

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

Click and drag to zoom

**ATTACHMENT S.**  
**COPY OF PERMIT FEE CHECK**

ORIGINAL DOCUMENT HAS A SECURITY VOID BACKGROUND PANTOGRAPH, MICROPRINTED BORDER - SEE REVERSE SIDE FOR COMPLETE SECURITY FEATURES

**RREAF Holdings, LLC**  
Escrow 3  
1909 Woodall Rodgers Freeway  
Suite 300  
Dallas, TX. 75201  
214-522-3300

UMB Bank NA  
1010 Grand Blvd.  
Kansas City, MO 64106  
(214) 987-7434

**001058**

DATE 5/6/2021

PAY TO THE ORDER OF Texas Commission on Environmental Quality

**\*\*2,050.00**

Two Thousand Fifty and 00/100\*\*\*\*\*

DOLLARS

Texas Commission on Environmental Quality  
PO Box 13088  
Cashier's Office, MC-214  
Austin, TX. 78711-3088

MEMO: WWTP Discharge Permit Application Fee

  
AUTHORIZED SIGNATURE



⑈001058⑈ ⑆101000695⑆ 9872360567⑈

THIS DOCUMENT CONTAINS HEAT SENSITIVE INK. TOUCH OR PRESS AND RED IMAGE DISAPPEARS WITH HEAT.

**RREAF Holdings, LLC**

**001058**

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
5/6/2021	Bill		2,050.00	2,050.00		2,050.00
					Check Amount	2,050.00



# WATER QUALITY PERMIT

## PAYMENT SUBMITTAL FORM

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

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

**Mail this form and the check or money order to:**

*BY REGULAR U.S. MAIL*

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

*BY OVERNIGHT/EXPRESS MAIL*

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

**Fee Code: WQP      Waste Permit No:**

1. Check or Money Order Number: 1058
2. Check or Money Order Amount: \$2,050.00
3. Date of Check or Money Order: 5/6/2021
4. Name on Check or Money Order: RREAF Holdings, LLC
5. APPLICATION INFORMATION

Name of Project or Site: Highland Lakes Wastewater Reclamation Facility

Physical Address of Project or Site: Ellis County, TX 76065

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

**Staple Check or Money Order in This Space**



September 7, 2021

Texas Commission on Environmental Quality (MC148)  
Applications Review and Processing Team  
Building F, Room 2101  
12100 Park 35 Circle  
Austin, Texas 78753

**RE: *Discharge Permit for the Highland Lakes Wastewater Treatment Facility***  
**CN: 605893353**  
**RN: 111266862**

Dear Jose Alfonso Martinez,

This letter serves to transmit the response to the items requested for the pre-technical review of the Application for Permit No. WQ0015999001 (EPA I.D. No. TX0141348).

**1) Domestic Technical Report 1.1, Section 1. Justification for Permit, A. Justification of permit need:**

- a) How many connections are being considered for this entire development and how much flow per connection was considered?
  - *There will be an estimated 9500-10000 total connections for the entire development with an estimated average flow of 276-290 gallons per day per connection.*
- b) What is the proposed construction schedule for this development (i.e. # of homes constructed per month) and will it be fully constructed within the permit cycle or at least 10 years from the date of permit issuance?
  - *There is an estimated completion rate of 14-42 units per month for the first five years with a total estimate of 9,112 single family units for the entire development over a span of 20 years.*
- c) What is the population growth of the area, will it be enough to match the proposed development in a 10 year span or less?
  - *Since 2010, Ellis county has seen a population increase of 28%. The nearest cities to the development, Waxahachie and Midlothian, have seen increases in population of 38% and 94% respectively. This growth would support the development should the trend continue over the next 10 years.*  
*Sources: <https://www.census.gov/quickfacts/waxahachiecitytexas>  
<https://www.census.gov/quickfacts/midlothiancitytexas>  
<https://www.census.gov/quickfacts/fact/table/elliscountytexas/PST045219>*

**2) Domestic Technical Report 1.1, Section 1. Justification for Permit, B. Regionalization of facilities, 3. Nearby WWTPs or collection systems:**

**PRE-TECH REVIEW RECIEVED AUGUST 19TH, 2021, RESPONDED SEPTEMBER 7TH, 2021**

- a) Please confirm that the City of Waxahatchie does not have a collection system nearby to the proposed development. A CCN was located within 1 mile from the proposed facility location. If confirmed there is a collection system in that area, then please provide a correspondence with the City requesting if they are capable of accepting the flow from this development.
- *The facility is located within the city of Waxahatchie's water CCN, but the nearest sewer CCN served by Waxahatchie is over 1 mile away (1.16 mi.) according to the Public Utility Commission of Texas CCN Viewer. The nearest sewer pipeline is about 5.1 miles away. See Attachment A – Nearest CCN and Sewer Line Maps*

**3) Domestic Technical Report 1.1, Section 5. Facility Site, A. 100-year floodplain.**

- a) I just want to make sure it is confirmed that it is not within the 100-year flood plain. After reviewing the map, the facility looks to be close to the boundaries within Zone A. Please provide the location of the facility within the flood map to confirm the location.
- *The proposed treatment plant boundary is within Zone A of the 100-year floodplain. The full build-out of the treatment units are outside of Zone A of the 100-year floodplain. See Attachment B – FEMA Flood Map Exhibits*

If you have any questions regarding this project, please contact me at 817-339-2299.

Sincerely,  
KIMLEY-HORN AND ASSOCIATES, INC. Texas Firm No. 928



Chris Vela, P.E. (Texas License No. 137264)

K:\FTW\_Uilities\063220906-Highland Lakes WWTP\CORR\TO\TCEQ\Pre-Tech Review\TCEQ\_Transmittal\_Highland Lakes\_Pre-TechnicalReview\_2021.docx

PRE-TECH REVIEW RECIEVED AUGUST 19TH, 2021, RESPONDED SEPTEMBER 7TH, 2021

Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Bobby Janecka, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

July 8, 2021

### CERTIFIED MAIL

Mr. Shannon Livingston  
Vice President  
Highland Lakes Midlothian I, LLC  
1909 Woodall Rogers Freeway, Suite 300  
Dallas, Texas 75201

Re: Application for Proposed Permit No. WQ0015999001 (EPA I.D TX0141348)  
Issued to Highland Lakes Midlothian I, LLC  
CN605893353, RN111266862

Dear Mr. Livingston:

We have received the application for the above referenced permit, and it is currently under review. Your attention to the following items is requested before we can declare the application administratively complete. Please submit one original and two copies (including a cover letter) of the complete response.

1. Core Data Form, Section 2, item 15 on page 1: After a routine verification with the United States Postal Service, we have found that the mailing address provided is not a valid address. Please provide a revised page indicating a valid mailing address that can be used for the permit mailing address and correspondence.
2. Core Data Form, Section 3, item 25 on page 2, Section 10.a on page 9 of the administrative report and Supplemental Permit Information Form, item 1 on page 16: The location description indicated appears to be accurate; however, the description must include the distance in feet or miles from road intersections. Please provide revised pages with a revised facility location description that uses road intersections.
3. Core Data Form, Section 3, item 29 on page 2: This item was not address; however, it is required. Please provide a revised page indicating the Primary SIC code.
4. Section 6 on page 5 of the administrative report: After a routine verification with the United States Postal Service, we have found that the mailing address provided is not a valid address. Please provide a revised page indicating a valid mailing address that can be used for the billing address.
5. Section 8.d on page 7 of the administrative report: Please confirm Midlothian City Hall is open to the public. The public viewing location must be available at the time the notice is published in the paper. If the location is not available, a new public viewing location in the county is required. Due to COVID-19, if a publicly owned building cannot be found, the new location may consist of any reasonable location within the county that is accessible to the public where the application can be reviewed and copied (or where extra copies are made available by the applicant for public distribution) during reasonable hours during the day. The location does not need to be a publicly owned building; however, it must be accessible to the public. If a publicly accessible physical

Mr. Shannon Livingston  
 Page 2  
 July 8, 2021  
 Permit No. WQ0015999001

viewing location cannot be found in the county, the complete application can be posted online for public viewing. A direct weblink to the documents must be provided and included in the public notice. Also, a written statement certifying that a diligent search to locate a publicly accessible physical viewing location was made and the required application documents will be posted online at the time the notice is published is required.

6. Section 10.b on page 9 of the administrative report and Supplemental Permit Information Form, item 4 on page 17: The discharge route indicated differs from the discharge route that our Standards Team determined. The Standards Team indicates the discharge route is it South Prong Creek; thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie. Please confirm the discharge route determined by our Standards Team is accurate and provide a revised pgae indicating the accurate discharge route. If you have any questions about the Standards Team review, please contact Ms. Jenna Lueg at 512-239-4590.
7. Section 13 (USGS map) on page 11 of the administrative report: The maps submitted are insufficient because the solid yellow line used to identify the discharge route covers up the map characteristics. The stream (ditch) must be visible. Furthermore, please confirm if the purple area labeled highland lakes development 3,270 acres of single-family, multi-family, and commercial properties is the applicant's property boundary. Please provide a new original USGS 7.5 minute topographic showing and labeling the: applicant's property boundary, location of the treatment facility within the applicant's property boundaries, point of discharge (indicate it with an X or arrow), highlighted discharge route for three miles downstream (using a light-colored highlighter) from the point of discharge, and an area of not less than one mile in all directions from the facility.
8. Domestic Administrative Report 1.1, Section 1.b on page 14: The landowners list indicates that no data is available for landowner number 15; however, we need proof of this information. Please send screen shots as proof that no information is available per the Ellis County Appraisal District.
9. Domestic Administrative Report 1.1, Section 1.c on page 14: We did receive four sets of labels for the landowners; however, two labels are missing. We could not locate a label for landowner 30, Calvert Hardin Grady Trust, and landowner 31, Tim and Julie Stephenson. Furthermore, there was a label for Wayne Hill, P.O. Box 1007, Midlothian, Texas 76065, and I could not locate his name on the landowners list provided. Please provide four sets of labels for the two missing landowners and confirm if a label should have been provided for Wayne Hill or if this was an error.
10. The following is a portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

**APPLICATION.** Highland Lakes Midlothian I, LLC, (*pending response of permit mailing address*), has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015999001 (EPA I.D. No. TX0141348) to authorize the discharge of treated

Mr. Shannon Livingston  
Page 3  
July 8, 2021  
Permit No. WQ0015999001

wastewater at a volume not to exceed an annual average flow of 2,760,000 gallons per day. The domestic wastewater treatment facility will be located *(pending response of location description that meets TCEQ requirements)* in Ellis County, Texas 76065. The discharge route will be from the plant site to *(pending response) South Prong Creek; thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie*. TCEQ received this application on May 25, 2021. The permit application is available for viewing and copying at Midlothian City Hall, 104 West Avenue E, Midlothian, Texas. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-96.9439%2C32.3951&level=12>

Further information may also be obtained from Highland Lakes Midlothian I, LLC at the address stated above or by calling Mr. Chris Vela, P.E., Professional Engineer, Kimley-Horn and Associates at 817-339-2299.

*Notice prepared with information from application. At time of preparation of this notice, there are pending responses. (plant physical address/facility location description, county, public viewing location)*

Please submit the complete response, addressed to my attention by August 7, 2021. If the requested information is not received by the given deadline, pursuant to 30 TAC Chapter 281, the application will be removed from our list of pending applications. If you should have any other questions, please do not hesitate to call me at (512) 239-0084.

Sincerely,



Michelle A. Teller  
Applications Review and Processing Team (MC148)  
Water Quality Division  
Texas Commission of Environmental Quality

cc: Mr. Chris Vela, P.E., Professional Engineer, Kimley-Horn and Associates, 801 Cherry Street, Unit 11, Suite 1300, Fort Worth, Texas 76102



July 16th, 2021

Texas Commission on Environmental Quality (MC148)  
Applications Review and Processing Team  
Building F, Room 2101  
12100 Park 35 Circle  
Austin, Texas 78753

**RE: *Discharge Permit Renewal for the Highland Lakes Wastewater Treatment Facility***  
**CN: 605893353**  
**RN: 111266862**

Dear Michelle A. Teller:

This letter serves to transmit the response to the items requested for the administrative review of the Application to Renew Permit No. WQ0015999001 (EPA I.D. No. TX0141348).

1. Core Data Form, Section 2, item 15 on page 1: After a routine verification with the United States Postal Service, we have found that the mailing address provided is not a valid address. Please provide a revised page indicating a valid mailing address that can be used for the permit mailing address and correspondence.
  - *The correct address is 1909 Woodall Rodgers Fwy, Ste 300, Dallas, TX 75201. See Attachment A – Revised Core Data Form.*
2. Core Data Form, Section 3, item 25 on page 2, Section 10.a on page 9 of the administrative report and Supplemental Permit Information Form, item 1 on page 16: The location description indicated appears to be accurate; however, the description must include the distance in feet or miles from road intersections. Please provide revised pages with a revised facility location description that uses road intersections.
  - *See Attachment A – Revised Core Data Form.*
3. Core Data Form, Section 3, item 29 on page 2: This item was not addressed; however it is required. Please provide a revised page indicating the Primary SIC code.
  - *See Attachment A – Revised Core Data Form.*
4. Section 6 on page 5 of the administrative report: After a routine verification with the United States Postal Service, we have found that the mailing address provided is not a valid address. Please provide a revised page indicating a valid mailing address that can be used for the billing address.
  - *The correct address is 1909 Woodall Rodgers Fwy, Ste 300, Dallas, TX 75201. See Attachment B – Revised Administrative Report Pages 4-6 and 8-9.*
5. Section 8.d on page 7 of the administrative report: Please confirm Midlothian City Hall is open to the public. The public viewing location must be available at the time the notice is published in the paper. If the location is not available, a new public viewing location in the county is required. Due to COVID-19, if a publicly owned building cannot be found, the new location may consist of any reasonable location within the county that is accessible to the public where the application can be reviewed and copied (or where extra copies are made available by the applicant for public distribution) during reasonable hours during the day. The location does not need to be a publicly owned building; however it must be accessible to the public. If a publicly accessible physical

viewing location cannot be found in the county, the complete application can be posted online for public viewing. A direct weblink to the documents must be provided and included in the public notice. Also, a written statement certifying that a diligent search to locate a publicly accessible physical viewing location was made and the required application documents will be posted online at the time the notice is published is required.

- *Midlothian City Hall has been confirmed to be open to the public.*
6. Section 10.b on page 9 of the administrative report and Supplemental Permit Information Form, item 4 on page 17: The discharge route indicated differs from the discharge route that our Standards Team determined. The Standards Team indicates the discharge route is to South Prong Creek; thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie. Please confirm the discharge route determined by our Standards Team is accurate and provide a revised page indicating the accurate discharge route. If you have any questions about the Standards Team review, please contact Ms. Jenna Lueg at 512-239-4590.
- *The discharge route determined by the Standards Team is correct. See Attachment B – Revised Administrative Report Pages 4-6 and 8-9.*
7. Section 13 (USGS Map) on page 11 of the administrative report: The maps submitted are insufficient because the solid yellow line used to identify the discharge route covers up the map characteristics. The stream (ditch) must be visible. Furthermore, please confirm if the purple area labeled highland lakes development 3,270 acres of single-family, multi-family, and commercial properties is the applicant's property boundary. Please provide a new original USGS 7.5 minute topographic showing and labeling the: applicant's property boundary, location of the treatment facility within the applicant's property boundaries, point of discharge (indicate it with an X or arrow), highlighted discharge route for three miles downstream (using a light-colored highlighter) from the point of discharge, and an area of not less than one mile in all directions from the facility.
- *See Attachment C – Revised USGS Maps*
8. Domestic Administrative Report 1.1, Section 1.b on page 14: The landowners list indicates that no data is available for landowner number 15; however we need proof of this information. Please send screen shots as proof that no information is available per the Ellis County Appraisal District.
- *See Attachment D – Landowner Confirmation*
9. Domestic Administrative Report 1.1, Section 1.c on page 14: We did receive four sets of labels for the landowners; however, two labels are missing. We could not locate a label for landowner 30, Calvert Hardin Grady Trust, and landowner 31, Tim and Julie Stephenson. Furthermore, there was a label for Wayne Hill, P.O. Box 1007, Midlothian, Texas 76065, and I could not locate his name on the landowners list provided. Please provide four sets of labels for the two missing landowners and confirm if a label should have been provided for Wayne Hill or if this was an error.
- *See Attachment D – Landowner Confirmation and Revised Landowner Labels*
10. The following is a portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

APPLICATION. Highland Lakes Midlothian I, LLC, (pending response of permit mailing address), has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015999001 (EPA I.D. No. TX0141348) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 2,760,000 gallons per day. The domestic wastewater treatment facility will be located (pending response of location description that meets TCEQ requirements) in Ellis County, Texas 76065. The discharge route will be from the plant site to (pending response) South Prong Creek; thence to a small unnamed lake; thence to South Prong Creek; thence to Lake Waxahachie. TCEQ received this application on May 25, 2021. The permit application is available for viewing and copying at Midlothian City Hall, 104 West Avenue E, Midlothian, Texas. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-96.9439%2C32.3951&level=12>

Further information may also be obtained from Highland Lakes Midlothian I, LLC at the address stated above or by calling Mr. Chris Vela, P.E., Professional Engineer, Kimley-Horn, at 817-339-2299.

Notice prepared with information from application. At time of preparation of this notice, there are pending responses. (plant physical address/facility location description, county, public viewing location)

- *With consideration to pending responses, the above paragraph was confirmed to be correct without any errors or omissions.*

If you have any questions regarding this project, please contact me at 817-339-2299.

Sincerely,



Chris Vela, P.E. (Texas License No. 137264)

KIMLEY-HORN AND ASSOCIATES, INC. Texas Firm No. 928

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