

# TPDES Permit New Application Submittal

Submitted to:

Texas Commission on Environmental Quality  
Application Review & Processing Team (MC-148)  
P.O. Box 13087  
Austin, Texas 78711-3087

For:

Stephen Selinger  
Shankle Road WWTP  
620 Truelove Trail  
Southlake, TX 76092

Owner:

Stephen Selinger  
620 Truelove Trail  
Southlake, Texas 76092

Issue Date: January 26, 2022



**consulting environmental engineers, inc.**

**150 n. harbin drive – suite 408 • stephenville, tx 76401**  
**phone: (254) 968-8130 fax: (254) 968-8134**  
**email: [ceeinc@ceeinc.org](mailto:ceeinc@ceeinc.org) registered firm: #F-2323**

## Shankle Road WWTP Exhibit Cross Reference

<u>Exhibit I.D.</u>	<u>Description</u>	<u>Reference</u>
I	Core Data Form 10400	Section 3 (C) page 4 of 21
II	Topographic Map	Item 13, page 11 of 20
III	Affected Landowners Map	Item 1 (a), page 13 of 20
IV	Affected Landowners Cross Reference	Item 1 (b), page 13 of 20
V	Affected Landowners Disk	Item 1 (c), page 13 of 20
VI VI(a)	Photographs Photograph Location map	Item 2, page 14 of 20
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VIII	SPIF Topographic Map	Item 5, page 16 of 20
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X	Site Drawing	Item 3, page 3 of 79
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XIV	Wind Rose	Item 5 (b), page 25 of 79
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XVI	Copy of Check	
XVII	Domestic Administrative Report Form 10053	
XVIII	Domestic Technical Report Form 10054	



**Shankle Road WWTP  
Core Data Form 10400**





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)	<a href="#">Follow this link to search for CN or RN numbers in Central Registry**</a>	3. Regulated Entity Reference Number (if issued)
CN <b>60581593</b>		RN

## SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	1/28/2022	
<input type="checkbox"/> New Customer		<input checked="" type="checkbox"/> Update to Customer Information	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership	
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
Selinger Stephen R			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
<input type="checkbox"/> Corporation		<input checked="" type="checkbox"/> Individual	
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input checked="" type="checkbox"/> Owner		<input type="checkbox"/> Operator	
<input type="checkbox"/> Occupational Licensee		<input type="checkbox"/> Responsible Party	
<input type="checkbox"/> Owner & Operator		<input type="checkbox"/> Voluntary Cleanup Applicant	
<input type="checkbox"/> Other:			
15. Mailing Address:	620 Truelove Trail		
	City	Southlake	State TX ZIP 76092 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		steve_selinger@yahoo.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
( 817 ) 421-0731		( ) -	

## SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
<i>The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Shankle Road WWTP	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	1008 Shankle Road						
	City	Palmer	State	TX	ZIP	75152	ZIP + 4
24. County	Ellis						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:							
26. Nearest City	Palmer			State	TX	Nearest ZIP Code	75152
27. Latitude (N) In Decimal:	32.412290		28. Longitude (W) In Decimal:	-96.606006			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
32	24	43.33	-96	36	22.06		
29. Primary SIC Code (4 digits)	4952		30. Secondary SIC Code (4 digits)				
31. Primary NAICS Code (5 or 6 digits)			32. Secondary NAICS Code (5 or 6 digits)				
221320							
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Provide wastewater service to the Shankle Road Subdivision							
34. Mailing Address:	620 Truelove Trail						
	City	Southlake	State	TX	ZIP	76096	ZIP + 4
35. E-Mail Address:	steve_selinger@yahoo.com						
36. Telephone Number		37. Extension or Code		38. Fax Number <i>(if applicable)</i>			
( 817 ) 421-731				( ) -			

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:
New Permit				

### SECTION IV: Preparer Information

40. Name:	Charles Gillespie		41. Title:	President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
( 254 ) 968-8130		( ) -	ceeinc@ceeinc.org	

### 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:	Consulting Environmental Engineers, Inc	Job Title:	President
Name <i>(In Print)</i> :	Charles Gillespie	Phone:	( 254 ) 968- 8130
Signature:		Date:	

**Shankle Road WWTP  
Topographic Map**



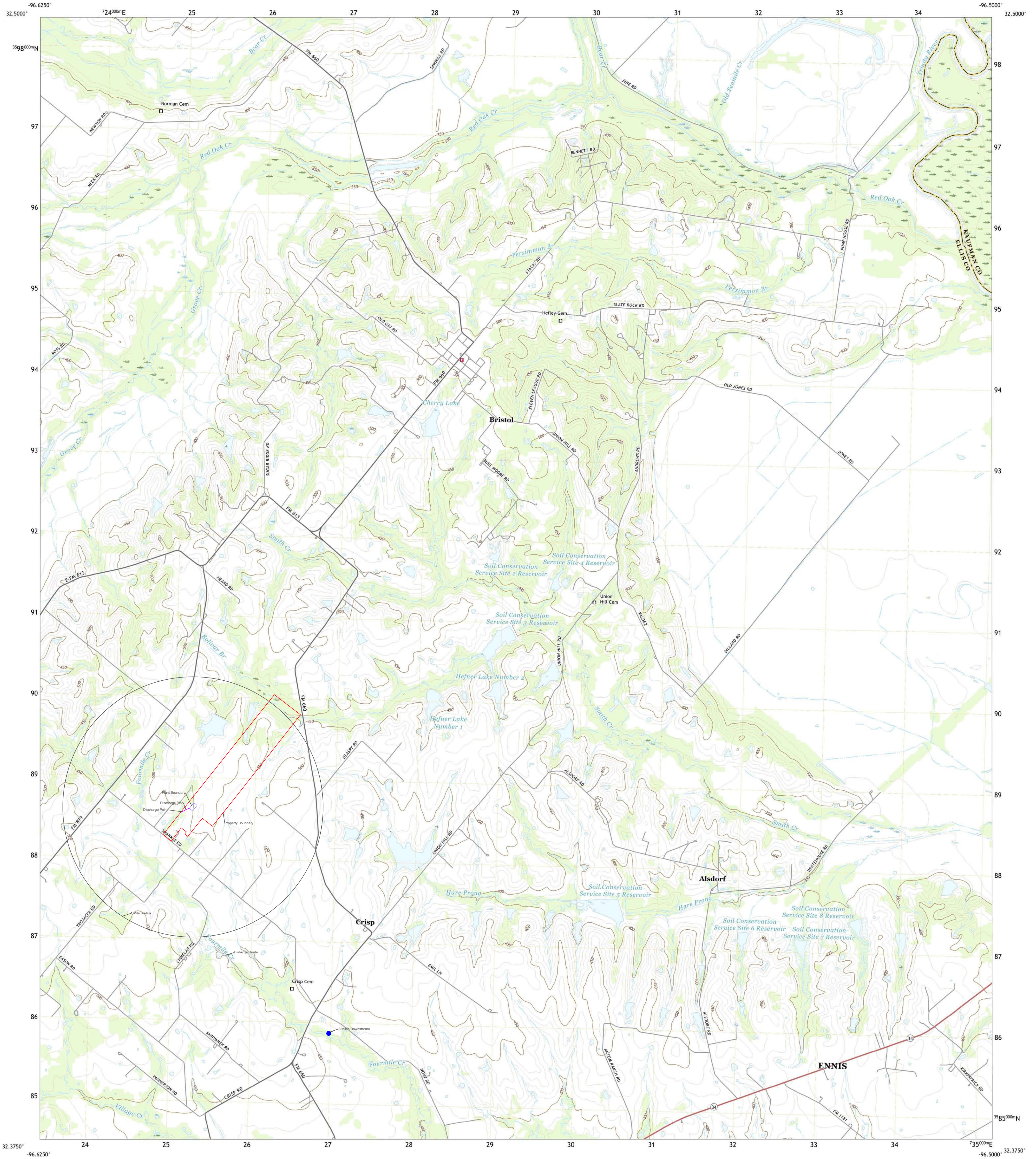




U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

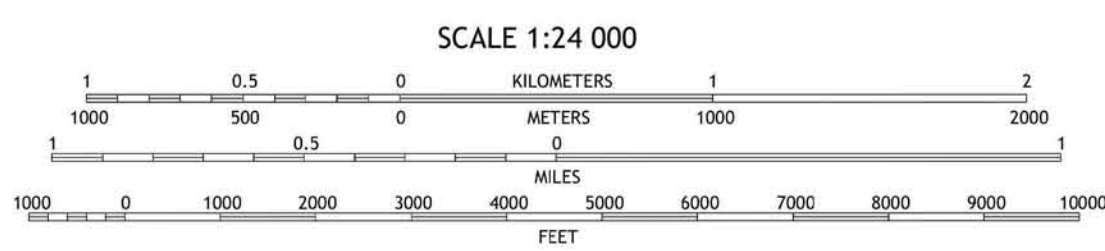
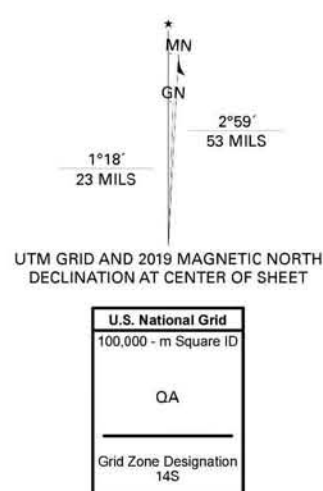


BRISTOL QUADRANGLE  
TEXAS  
7.5-MINUTE SERIES



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

Imagery.....NAP, September 2016 - November 2016  
Roads.....U.S. Census Bureau, 2015 - 2018  
Names.....GNS, 1979 - 2018  
Hydrography.....National Hydrography Dataset, 2002 - 2018  
Contours.....National Elevation Dataset, 2003 - 2004  
Boundaries.....Multiple sources; see metadata file 2016 - 2017  
Wetlands.....FWS National Wetlands Inventory 1982



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



QUADRANGLE LOCATION

1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

1 Ferris  
2 India  
3 Scary  
4 Palmer  
5 Rosser  
6 Ennis West  
7 Ennis East  
8 Rosser SW



BRISTOL, TX  
2019

Date  
January 4, 2022

Drawn By  
CE

Scale  
1":1900'

consulting environmental engineers, inc.  
150 n. harbin drive - suite 408 stephenville, tx 76401  
(254)968-8130 fax: (254)968-8134 email: ceinc@ceinc.org  
registered firm: #F-2323

Shankle Road WWTP  
Stephen Selinger  
Palmer, Texas  
Topographic

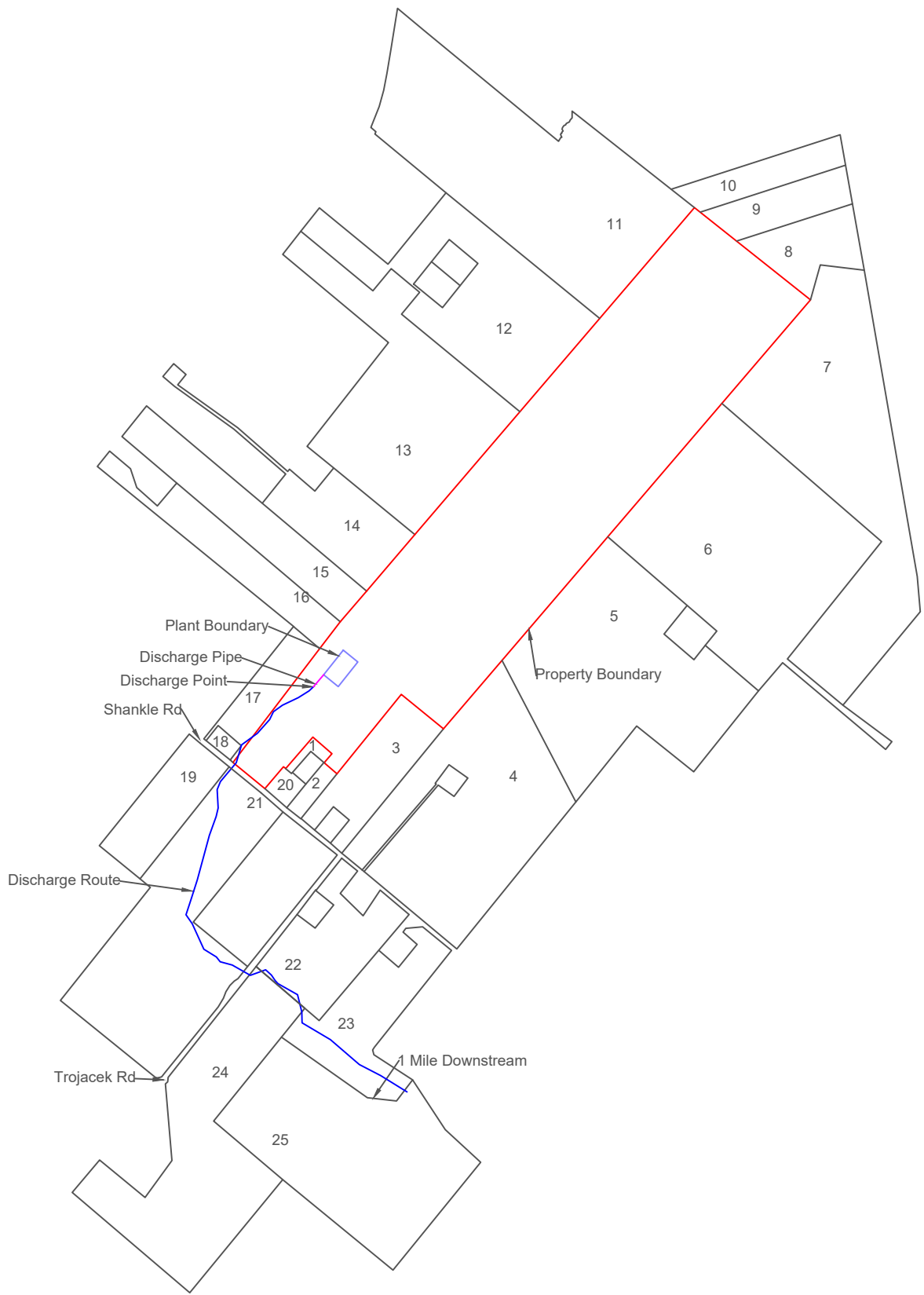
Sheet 001



**Shankle Road WWTP  
Affected Landowners Map**







Date  
**January 18, 2022**

Drawn By  
**CE**

Scale  
**1":1400'**

**consulting environmental engineers, inc.**  
 150 N. Harbin Drive - Suite 405 - Stephenville, TX 76401  
 (254)968-8130 fax: (254)968-8134 email: ceo@ceeinc.org  
 registered firm #F-2323

**Shankle Road WWTP**  
**Stephen Selinger**  
**Palmer, Texas**

---

**Affected Landowners Map**

**Sheet 002**

000009



**Shankle Road WWTP  
Affected Landowners Cross Reference**





Shankle Road WWTP  
Wastewater Permit Application  
Affected Landowners Cross Reference  
Exhibit IV

1. Greenlee James R & Janette  
PO Box 327  
Palmer, TX, 75152
2. Greenlee James R & Janette  
PO Box 327  
Palmer, TX, 75152
3. Greenlee Family Trust  
1008 Shankle Rd  
Ennis, TX, 75119
4. Chmelar Living Trust  
948 Shankle Rd  
Ennis, TX, 75119
5. Martinek Marvin L & Irene  
670 Shankle Rd  
Ennis, TX, 75119
6. Martinek Emil & Margaret  
8046 FM 660  
Ennis, TX, 75119
7. Sims William D  
7191 FM 660  
Ennis, TX, 75119
8. PRACHYL ALAN & DEBBIE  
7686 FM 660  
Ennis, TX, 75119
9. Cabrera Juan & Amanda  
7674 FM 660  
Ennis, TX, 75119
10. Dews Harlan & Christy Dews  
7622 FM 660  
Ennis, TX, 75119
11. LRM PTM Partners LP  
12400 Coit Rd, STE 800  
Dallas, TX, 75251



12. Texas Star Truck Sales Inc  
PO Box 247  
Ferris, TX, 75125
13. Garcia Herman Sr  
8018 FM 879  
Palmer, TX, 75152
14. Jurik James & Regina  
7764 FM 879  
Palmer, TX, 75152
15. Jurik James & Regina  
7764879  
Palmer, TX, 75152
16. Jurik James & Regina  
7764879  
Palmer, TX, 75152
17. Slovacek Albin F & Lillie A  
1136 Shankle Rd  
Ennis, TX, 75119
18. Stiff David A & Shelley R  
1128 Shankle Rd  
Ennis, TX, 75119
19. Youmans Steven & Michelle  
1101 Shankle Rd  
Ennis, TX, 75119
20. Greenlee James R & Janette  
1040 Shankle Rd  
Ennis, TX, 75119
21. Pouzar Charlie J  
1013 Shankle Rd  
Ennis, TX, 75119
22. Langer Emil Jr & Judith K  
947 Shankle Rd  
Ennis, TX, 75119
23. Mach Nancy  
803 Chmelar Rd  
Ennis, TX, 75119

24. Pouzar Charlie J  
1013 Shankle Rd  
Ennis, TX, 75119

25. Chmelar Living Trust  
521 Chmelar Rd  
Ennis, TX, 75119



**Shankle Road WWTP  
Affected Landowners Disk**







# Shankle Road WWTP Photographs



# WWTP Discharge Point



Date	January 14, 2022
Drawn By	CE
Scale	NTS

**consulting environmental engineers, inc.**  
150 n. harbin drive - suite 408 | geophenille, tx 76401  
(254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
registered firm: #F-2323

Shankle Road WWTP  
Stephen Selinger  
Palmer, Texas

WWTP Discharge Point Photo

Sheet 008



# Looking Downstream



# Looking Upstream



Date  
January 14, 2022

Drawn By  
CE

Scale  
NTS

**consulting environmental engineers, inc.**  
150 n. harbin drive - suite 408 | geophenville, tx 76401  
(254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
registered firm: #F-2323

Shankle Road WWTP  
Stephen Selinger  
Palmer, Texas

Upstream and Downstream Photos

Sheet 009

# Site Location

Looking Northwest



# Site Location

Looking Northeast



Date  
January 25, 2022

Drawn By  
CE

Scale  
NTS

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(254)968-8130 fax: (254)968-8134 email: ceelinc@ceelinc.org  
registered firm: #F-2323

Shankle Road WWTP  
Stephen Selinger  
Palmer, Texas

Site Location Photos

Sheet 009

# Shankle Road WWTP Photograph Location Map



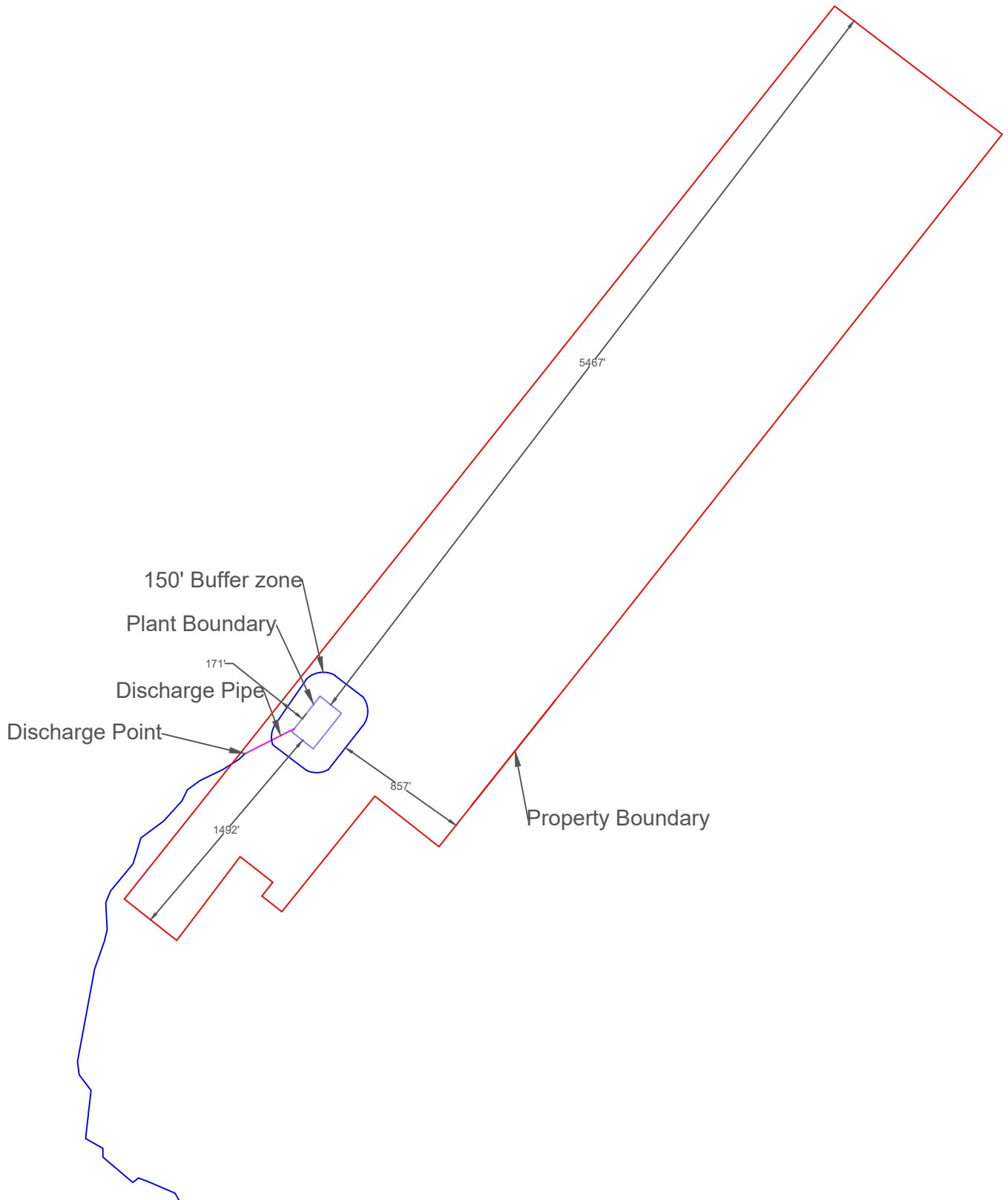




Date January 25, 2022	consulting <b>environmental</b> engineers, inc. <small>150 n. harbin drive - suite 408 stephenville, tx 76401          (254)968-8130 fax: (254)968-8134 email: ceo@ceeinc.org          registered firm #F-2323</small>	Shankle Road WWTP Stephen Selinger Palmer, Texas Photograph Map	Sheet 007
Drawn By CE			
Scale 1"=1000'			

# Shankle Road WWTP Buffer Zone Map





Date  
**January 7, 2022**

Drawn By  
**CE**

Scale  
**1":900'**

**consulting environmental engineers, inc.**  
 150 n. harbin drive - suite 408 stephenville, tx 76401  
 (254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
 registered firm: #F-2323

**Shankle Road WWTP**  
**Stephen Selinger**  
**Palmer, Texas**

---

**Bufferzone**

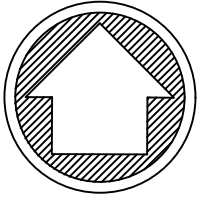
**Sheet 003**



**Note:**

The entirety of the 150' buffer zone is owned by the applicant.

- Digester
- Aeration Basin
- Clarifier
- Chlorine Contact Chamber
- Outlet



1" : 400'

150' Buffer zone  
Plant Boundary

5350 ft from property line

171'

Discharge Pipe

Discharge Point

Unnamed Tributary

857 ft from property line

Property Of:  
Stephen Selinger

Shankle Road

1492'

Property Boundary

Date	March 22, 2022
Drawn By	CE
Scale	1":400'

**consulting environmental engineers, inc.**  
 150 n. harbin drive - suite 408 | stephenville, tx 76401  
 (254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
 registered firm: #F-2323

Shankle Road WWTP  
 Stephen Selinger  
 Palmer, Texas  
 Bufferzone

Sheet 003

**Shankle Road WWTP  
SPIF Topographic Map**



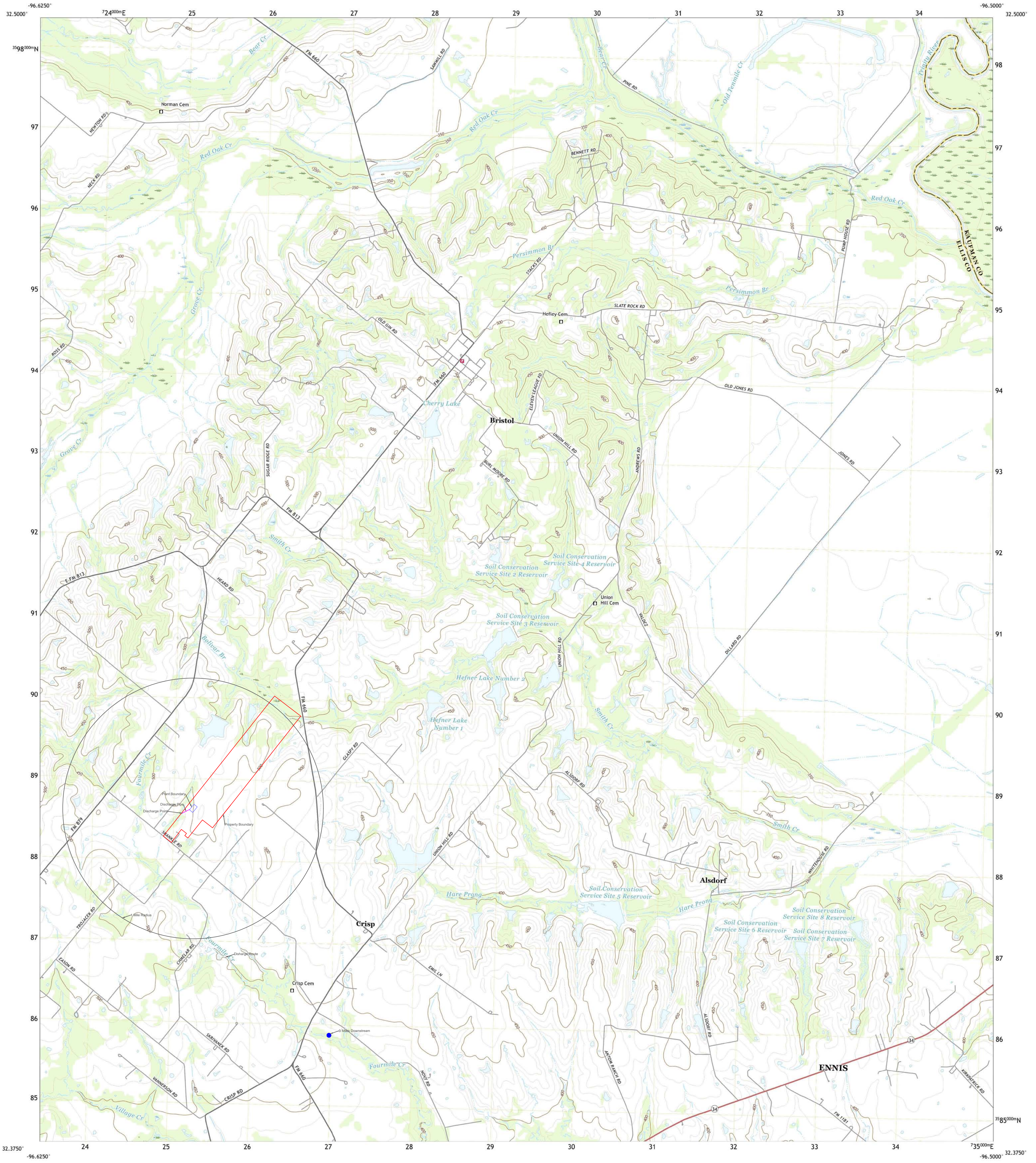




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U.S. GEOLOGICAL SURVEY



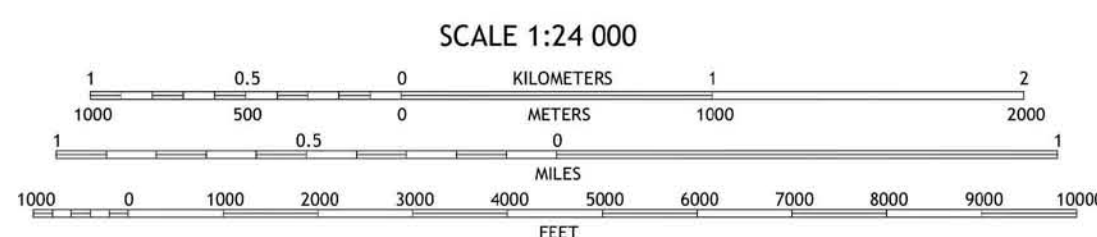
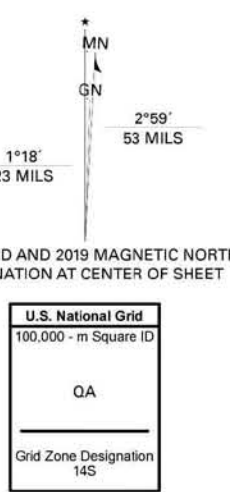
BRISTOL QUADRANGLE  
TEXAS  
7.5-MINUTE SERIES



**Produced by the United States Geological Survey**

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

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Contours.....National Elevation Dataset, 2003 - 2004  
Boundaries.....Multiple sources; see metadata file 2016 - 2017  
Wetlands.....FWS National Wetlands Inventory 1982



QUADRANGLE LOCATION

1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

- 1 Ferris
- 2 India
- 3 Scurry
- 4 Palmer
- 5 Rosser
- 6 Ennis West
- 7 Ennis East
- 8 Rosser SW



BRISTOL, TX  
2019

Date  
**January 11, 2022**  
Drawn By  
**CE**  
Scale  
**1;1900**

**consulting environmental engineers, inc.**  
150 n. harbin drive - suite 408 stephenville, tx 76401  
(254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
registered firm: #F-2323

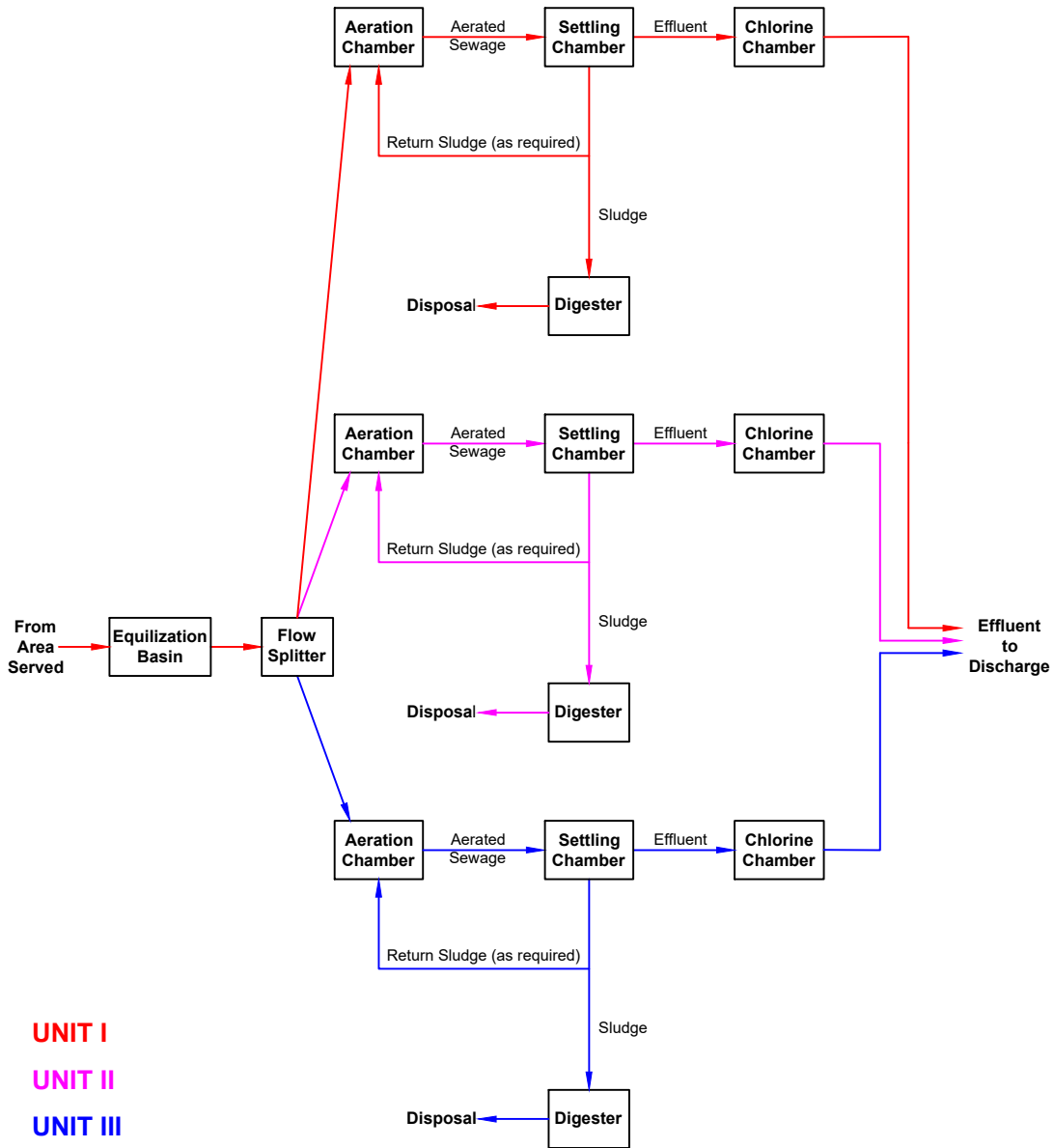
**Shankle Road WWTP**  
**Stephen Selinger**  
**Palmer, Texas**  
**SPIF Topographic**

**Sheet 004**



# Shankle Road WWTP Flow Diagram





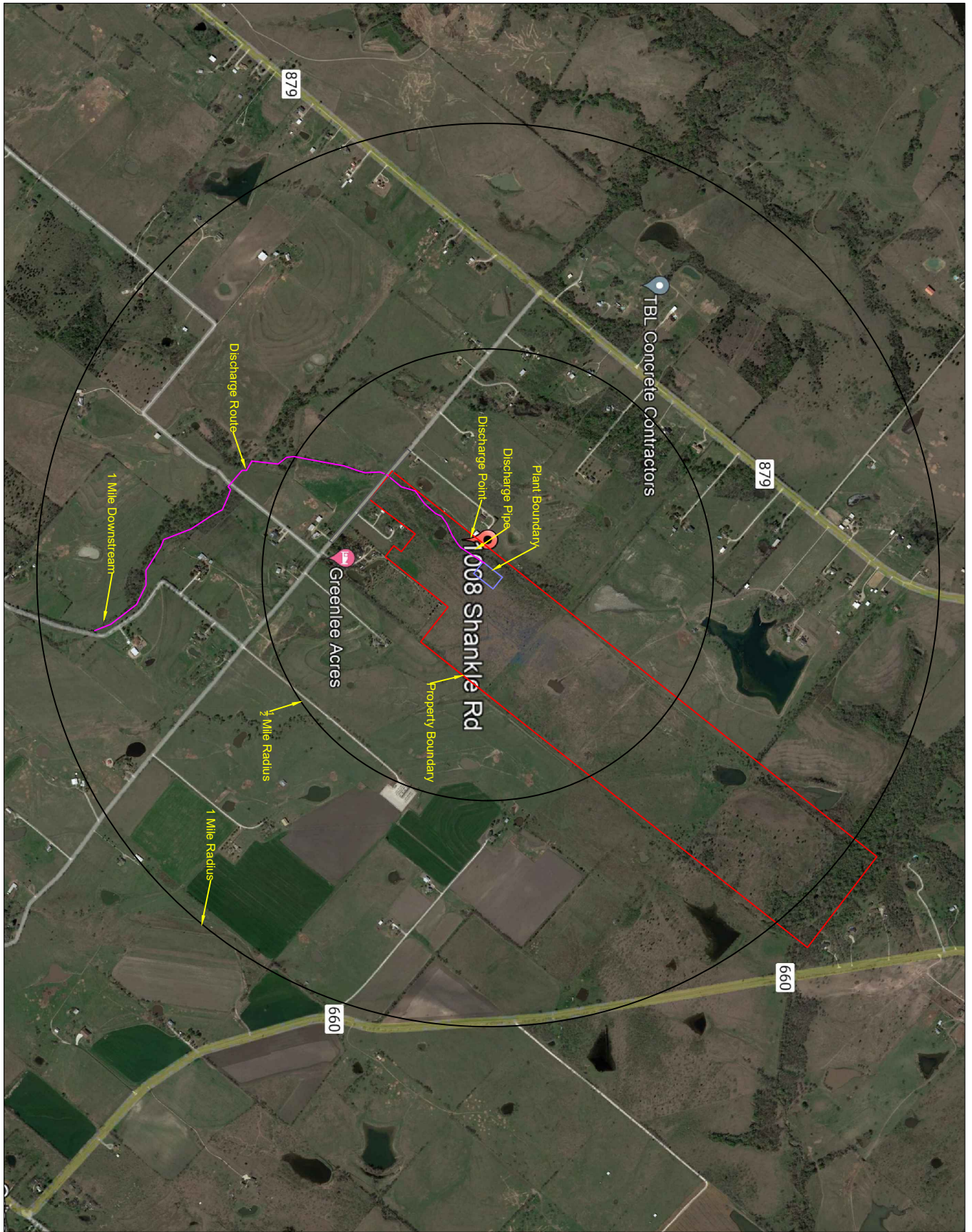
UNIT I  
 UNIT II  
 UNIT III

Date January 11, 2022 Drawn By CE Scale NTS	<b>consulting environmental engineers, inc.</b> <small>150 n. harbin drive - suite 408 stephenville, tx 76401          (254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org          registered firms: #F-2323</small>	Shankle Road WWTP Stephen Selinger Palmer, Texas Flow Diagram	Sheet 005
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**Shankle Road WWTP  
Site Drawing**







Date  
**January 25, 2022**

Drawn By  
**CE**

Scale  
**1":1600'**

**consulting environmental engineers, inc.**  
 150 n. harbin drive - suite 408    stephenville, tx 76401  
 (254)968-8130 fax: (254)968-8134 email: ceelnc@ceelnc.org  
 registered firm: #F-2323

**Shankle Road WWTTP**  
**Stephen Selinger**  
**Palmer, TX**

**Site Drawing**

**Sheet 006**

**Shankle Road WWTP  
Close Proximity WWTP Data**





**consulting environmental engineers, inc.**

---

**Main Office:**

150 N. Harbin Drive – Suite 408  
Stephenville, TX 76401  
Phone: (254) 968-8130  
Fax: (254) 968-8134

**Branch Office:**

11504 PR 7440  
Wolfforth, TX 79382  
Phone: (817) 504-8390  
[www.ceeinc.org](http://www.ceeinc.org)

email: [ceeinc@ceeinc.org](mailto:ceeinc@ceeinc.org)

Registered Firm: F-2323

**LIST OF WASTEWATER UTILITIES WITHIN 3 MILES  
OF THE PROPOSED SERVICE AREA BOUNDARY**

None

# Shankle Road WWTP Design Calculations





## Shankle Road WWTP - Extended Aeration Design Spreadsheet

### INPUT

---

$$ADF \text{ (average daily flow)} = 100,000 \text{ gallons/day}$$

$$BOD \text{ (biochemical oxygen demand)} = 250 \text{ mg/l}$$

### OUTPUT

---

#### I Daily Average Organic Load

$$\frac{ADF \times 8.33 \text{ gallon}}{\text{gallon}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 208 \text{ lbs/day}$$

#### II Peak Flow Organic Load

$$4 \times ADF \times 8.33 \frac{\text{lbs}}{\text{gallon}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 833 \text{ lbs/day}$$

#### III Minimum Clarifier Detention Diameter

$$\frac{(4)(ADF)(2.2 \text{ detention time})}{\sqrt{(24\text{hrs})(7.48 \text{ gal})(11 \text{ ft})(.785)}} = 23.83 \text{ ft. dia.}$$

#### IV Peak Flow Clarifier Design Diameter

$$\frac{(4)(ADF)}{\sqrt{(.785)(900)}} = 23.79 \text{ ft Diameter}$$

**V Digester Volume**

$$\frac{20 \text{ ft}^3}{\text{lb/day}} \times \text{daily average organic load (above Item I)} = \mathbf{4,165 \text{ ft}^3}$$

**Digester Length**  
**38.9708 ft**

**VI Chlorine Tank Volume**

(Minimum=3')

$$\frac{4 \times \text{ADF}}{(7.48 \text{ gallons})(1440 \text{ minutes})} \times 20 \text{ minutes} = \mathbf{743 \text{ ft}^3}$$

**Chlorine Chamber Length**  
**10.659 ft**

**VII Aeration Basin Sizing**

$$\text{daily average organic load (above Item I)} \times \frac{\text{day}}{15 \text{ lbs}} \times 1,000 \text{ ft}^3 = \mathbf{13,883 \text{ ft}^3}$$

**Basin Length**  
**129.90253 ft**

**VIII Air Supply For Aeration**

$$\text{daily average organic load (above Item I)} \times \frac{2.22 \text{ ft}^3/\text{min}}{\text{lb BOD}} = \mathbf{462 \text{ ft}^3/\text{min}}$$

**IX Air Supply For Digestion**

$$\text{digester volume (above Item VII)} \times \frac{30 \text{ ft}^3/\text{min}}{1,000 \text{ ft}^3} = \mathbf{83 \text{ ft}^3/\text{min}}$$

**X Total Air Required**

air supply for aeration (above item VIII)  
+ air supply for digestion (above item IX)  
+ 40 ft<sup>3</sup>/min (air lifts)

**586 ft<sup>3</sup>/min**

## Shankle Road WWTP - Extended Aeration Design Spreadsheet

### INPUT

---

$$ADF \text{ (average daily flow)} = 100,000 \text{ gallons/day}$$

$$BOD \text{ (biochemical oxygen demand)} = 250 \text{ mg/l}$$

### OUTPUT

---

#### I Daily Average Organic Load

$$\frac{ADF \times 8.33 \text{ gallon}}{\text{lb}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 208 \text{ lbs/day}$$

#### II Peak Flow Organic Load

$$4 \times ADF \times 8.33 \frac{\text{lb}}{\text{gallon}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 833 \text{ lbs/day}$$

#### III Minimum Clarifier Detention Diameter

$$\frac{(4)(ADF)(2.2 \text{ detention time})}{\sqrt{(24\text{hrs})(7.48 \text{ gal})(11 \text{ ft})(.785)}} = 23.83 \text{ ft. dia.}$$

#### IV Peak Flow Clarifier Design Diameter

$$\frac{(4)(ADF)}{\sqrt{(.785)(900)}} = 23.79 \text{ ft Diameter}$$

**V Digester Volume**

$$\frac{20 \text{ ft}^3}{\text{lb/day}} \times \text{daily average organic load (above Item I)} = 4,165 \text{ ft}^3$$

**Digester Length**  
**38.9708 ft**

**VI Chlorine Tank Volume**

(Minimum=3')

$$\frac{4 \times \text{ADF}}{(7.48 \text{ gallons})(1440 \text{ minutes})} \times 20 \text{ minutes} = 743 \text{ ft}^3$$

**Chlorine Chamber Length**  
**10.659 ft**

**VII Aeration Basin Sizing**

$$\text{daily average organic load (above Item I)} \times \frac{\text{day}}{15 \text{ lbs}} \times 1,000 \text{ ft}^3 = 13,883 \text{ ft}^3$$

**Basin Length**  
**129.90253 ft**

**VIII Air Supply For Aeration**

$$\text{daily average organic load (above Item I)} \times \frac{2.22 \text{ ft}^3/\text{min}}{\text{lb BOD}} = 462 \text{ ft}^3/\text{min}$$

**IX Air Supply For Digestion**

$$\text{digester volume (above Item VII)} \times \frac{30 \text{ ft}^3/\text{min}}{1,000 \text{ ft}^3} = 83 \text{ ft}^3/\text{min}$$

**X Total Air Required**

$$\begin{aligned} &\text{air supply for aeration (above item VIII)} \\ &+ \text{air supply for digestion (above item IX)} \\ &+ 40 \text{ ft}^3/\text{min (air lifts)} \end{aligned} = 586 \text{ ft}^3/\text{min}$$



# Shankle Road WWTP - Extended Aeration Design Spreadsheet

## INPUT

---

$$ADF \text{ (average daily flow)} = 300,000 \text{ gallons/day}$$

$$BOD \text{ (biochemical oxygen demand)} = 250 \text{ mg/l}$$

## OUTPUT

---

### I Daily Average Organic Load

$$\frac{ADF \times 8.33 \text{ gallon}}{\text{lb}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 625 \text{ lbs/day}$$

### II Peak Flow Organic Load

$$4 \times ADF \times 8.33 \frac{\text{lb}}{\text{gallon}} \times \frac{BOD}{1,000,000 \text{ lbs.}} = 2,499 \text{ lbs/day}$$

### III Minimum Clarifier Detention Diameter

$$\frac{(4)(ADF)(2.2 \text{ detention time})}{\sqrt{(24\text{hrs})(7.48 \text{ gal})(11 \text{ ft})(.785)}} = 41.27 \text{ ft. dia.}$$

### IV Peak Flow Clarifier Design Diameter

$$\frac{(4)(ADF)}{\sqrt{(.785)(900)}} = 41.21 \text{ ft Diameter}$$

**V Digester Volume**

$$\frac{20 \text{ ft}^3}{\text{lb/day}} \times \text{daily average organic load (above Item I)} = \mathbf{12,495 \text{ ft}^3}$$

**Digester Length**  
**116.912 ft**

**VI Chlorine Tank Volume**

(Minimum=3')

$$\frac{4 \times \text{ADF}}{(7.48 \text{ gallons})(1440 \text{ minutes})} \times 20 \text{ minutes} = \mathbf{2,228 \text{ ft}^3}$$

**Chlorine Chamber Length**  
**31.9771 ft**

**VII Aeration Basin Sizing**

$$\text{daily average organic load (above Item I)} \times \frac{\text{day}}{15 \text{ lbs}} \times 1,000 \text{ ft}^3 = \mathbf{41,650 \text{ ft}^3}$$

**Basin Length**  
**389.7076 ft**

**VIII Air Supply For Aeration**

$$\text{daily average organic load (above Item I)} \times \frac{2.22 \text{ ft}^3/\text{min}}{\text{lb BOD}} = \mathbf{1,387 \text{ ft}^3/\text{min}}$$

**IX Air Supply For Digestion**

$$\text{digester volume (above Item VII)} \times \frac{30 \text{ ft}^3/\text{min}}{1,000 \text{ ft}^3} = \mathbf{250 \text{ ft}^3/\text{min}}$$

**X Total Air Required**

air supply for aeration (above item VIII)  
+ air supply for digestion (above item IX)  
+ 40 ft<sup>3</sup>/min (air lifts)

**1,677 ft<sup>3</sup>/min**

# Shankle Road WWTP Flood Plain Map





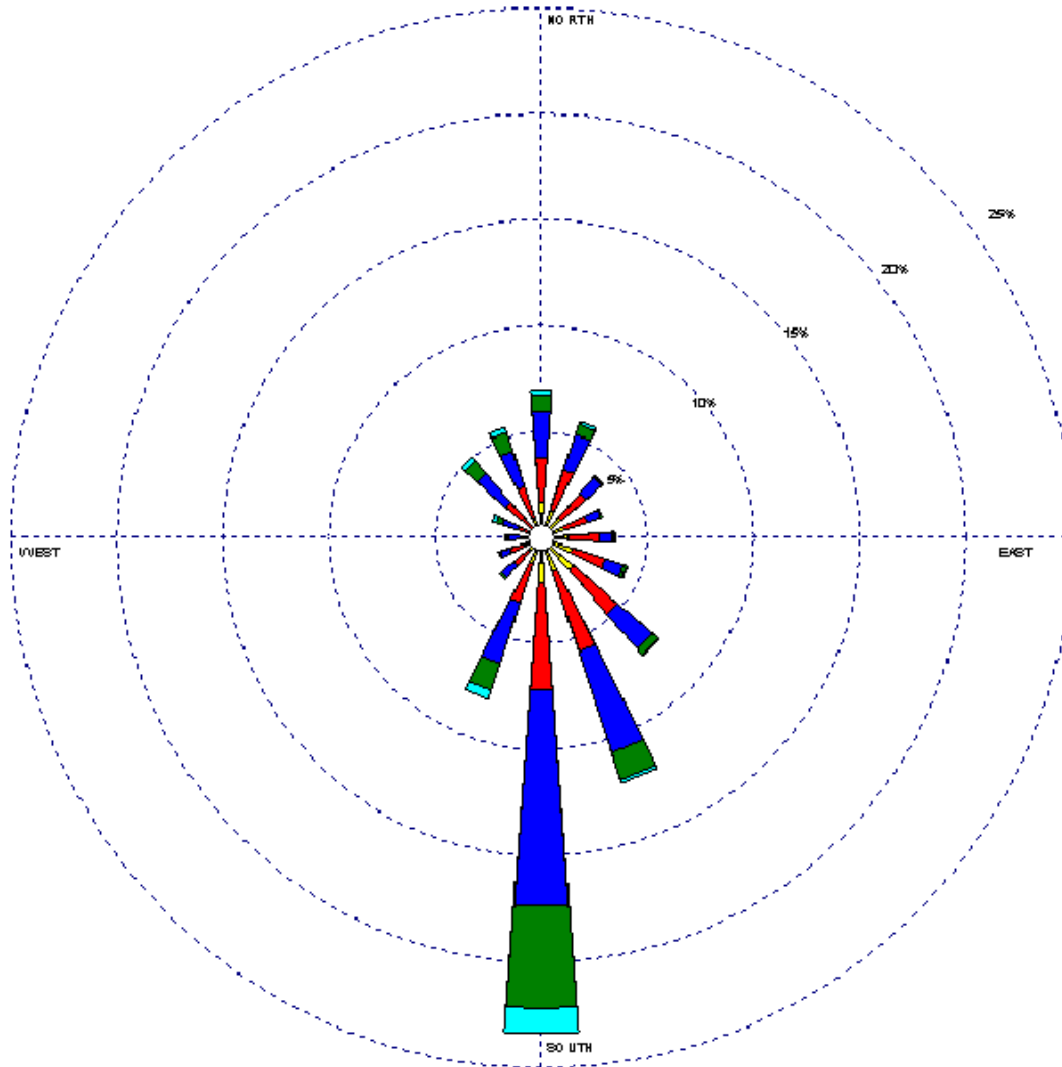


**Shankle Road WWTP  
Wind Rose**



WIND ROSE PLOT

Station #03927 - DALLAS/FORT WORTH/REGIONAL AR, TX



<p>Wind Speed (m/s)</p>	<p>MODELER Sara West</p>	<p>DATE 8/29/2002</p>	<p>COMPANY NAME USDA-AR S</p>
	<p>DISPLAY Wind Speed</p>	<p>UNIT m/s</p>	<p>COMMENTS</p>
	<p>AVG. WIND SPEED 5.76 m/s</p>	<p>CALM WINDS 2.32%</p>	
	<p>ORIENTATION Direction (blowing from)</p>	<p>PLOT YEAR-DATETIME 1961 Apr 1 - Apr 30 Midnight - 11 PM</p>	

WINDY BY: Ver 3.3 by Calce Environmental Solutions - www.calce-environmental.com

Date January 11, 2022
Drawn By CE
Scale NTS

consulting environmental engineers, inc.  
150 n. harbin drive - suite 408 geophenille, tx 76401  
(254)968-9150 fax: (254)968-9154 email: ceinc@ceinc.org  
registered firm #P-2323

Shankle Road WWTP  
Stephen Selinger  
Palmer, Texas  
Wind Rose

Sheet 012

**Shankle Road WWTP  
Sewage Sludge Solids Management**





**consulting environmental engineers, inc.**

150 n. harbin drive – suite 408 • stephenville, tx 76401

phone: (254) 968-8130 fax: (254) 968-8134

email: [ceeinc@ceeinc.org](mailto:ceeinc@ceeinc.org) registered firm: #F-2323

## Sludge Management Calculation Sheet

Permittee	1	<u>Shankle Road WWTP</u>
Influent BOD	2	<u>250</u> mg/l
Effluent BOD	3	<u>20</u> mg/l
Average Daily Flow	4	<u>100000</u> gallon/day
Influent TSS	5	<u>20</u> mg/l
Average Daily Organic Load	6	50.00 lbs/day
Required Digester Volume	7	1000 cubic feet
BOD Removal	8	191.82 lbs/day

<b>Solids Generated</b>		<b>100%</b>	<b>75%</b>	<b>50%</b>	<b>25%</b>
BOD Removed	9	191.82	143.87	95.91	47.96
Non-Volatile TSS	10	16.66	12.50	8.33	4.17
Solids Produced (lbs)	11	95.91	71.93	47.96	23.98
Total Wet Sludge	12	2814.25	2110.69	1407.13	703.56
Volume of Wet Sludge (cubic ft)	13	45.17	33.87	22.58	11.29
Sludge Storage Available	14	22.1	29.5	44.3	88.6

Sludge will be wasted from the RAS flow stream to the aerobic digester. Sludge solids will be stabilized in the digester; supernatant will be decanted from the digester and returned to the facility headworks for treatment.

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time for the digester storage volume of 20,000 gallons will be approximately 20 days at 100% capacity. Generated waste will be hauled by an approved transporter to a permitted site.





**consulting environmental engineers, inc.**

150 n. harbin drive – suite 408 • stephenville, tx 76401  
 phone: (254) 968-8130 fax: (254) 968-8134  
 email: [ceeinc@ceeinc.org](mailto:ceeinc@ceeinc.org) registered firm: #F-2323

## Sludge Management Calculation Sheet

Permittee	1	Shankle Road WWTP
Influent BOD	2	250 mg/l
Effluent BOD	3	20 mg/l
Average Daily Flow	4	100000 gallon/day
Influent TSS	5	20 mg/l
Average Daily Organic Load	6	50.00 lbs/day
Required Digester Volume	7	1000 cubic feet
BOD Removal	8	191.82 lbs/day

Solids Generated		100%	75%	50%	25%
BOD Removed	9	191.82	143.87	95.91	47.96
Non-Volatile TSS	10	16.66	12.50	8.33	4.17
Solids Produced (lbs)	11	95.91	71.93	47.96	23.98
Total Wet Sludge	12	2814.25	2110.69	1407.13	703.56
Volume of Wet Sludge (cubic ft)	13	45.17	33.87	22.58	11.29
Sludge Storage Available	14	22.1	29.5	44.3	88.6

Sludge will be wasted from the RAS flow stream to the aerobic digester. Sludge solids will be stabilized in the digester; supernatant will be decanted from the digester and returned to the facility headworks for treatment.

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time for the digester storage volume of 20,000 gallons will be approximately 20 days at 100% capacity. Generated waste will be hauled by an approved transporter to a permitted site.



**consulting environmental engineers, inc.**

150 n. harbin drive – suite 408 • stephenville, tx 76401

phone: (254) 968-8130 fax: (254) 968-8134

email: [ceeinc@ceeinc.org](mailto:ceeinc@ceeinc.org) registered firm: #F-2323

## Sludge Management Calculation Sheet

Permittee	1	Shankle Road WWTP
Influent BOD	2	250 mg/l
Effluent BOD	3	20 mg/l
Average Daily Flow	4	300000 gallon/day
Influent TSS	5	20 mg/l
Average Daily Organic Load	6	50.00 lbs/day
Required Digester Volume	7	1000 cubic feet
BOD Removal	8	575.46 lbs/day

Solids Generated		100%	75%	50%	25%
BOD Removed	9	575.46	431.60	287.73	143.87
Non-Volatile TSS	10	49.98	37.49	24.99	12.50
Solids Produced (lbs)	11	287.73	215.80	143.87	71.93
Total Wet Sludge	12	8442.75	6332.06	4221.38	2110.69
Volume of Wet Sludge (cubic ft)	13	135.50	101.62	67.75	33.87
Sludge Storage Available	14	7.4	9.8	14.8	29.5

Sludge will be wasted from the RAS flow stream to the aerobic digester. Sludge solids will be stabilized in the digester; supernatant will be decanted from the digester and returned to the facility headworks for treatment.

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time for the digester storage volume of 20,000 gallons will be approximately 20 days at 100% capacity. Generated waste will be hauled by an approved transporter to a permitted site.

**Shankle Road WWTP  
Copy of Check**



STEPHEN SELINGER  
ITF INNA SELINGER  
620 TRUELOVE TRL  
SOUTHLAKE, TX 76092-6113

1548

11-35/1210 CA  
90512

DATE 1/12/22

PAY TO THE  
ORDER OF


TCEQ

\$ 1650.

sixteen hundred fifty

DOLLARS

 Security  
Features  
Details on  
Back

BANK OF AMERICA 

ACH R/T 121000358

FOR \_\_\_\_\_



MP

⑈001548⑈ ⑆121000358⑆ 000395369619⑈



**Shankle Road WWTP  
Domestic Administrative Report Form 10053**





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION  
CHECKLIST



Complete and submit this checklist with the application.

APPLICANT: Stephen Richard Selinger

PERMIT NUMBER: New Permit

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 type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 6.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

For TCEQ Use Only

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



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

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

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

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

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

Minor Amendment (for any flow) \$150.00

**Payment Information:**

Mailed      Check/Money Order Number: 1548  
 Check/Money Order Amount: \$1,650.00  
 Name Printed on Check: Stephen Selinger ITF Inna Selinger

EPAY      Voucher Number: [REDACTED]

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: [REDACTED]

**For existing permits:**

Permit Number: WQ00 [REDACTED]

EPA I.D. (TPDES only): TX [REDACTED]

Expiration Date: [REDACTED]

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

Stephen Selinger

*(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: 605815893

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: Stephen Selinger

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

Title: Owner

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

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

[REDACTED]

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

If the co-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: [REDACTED]

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

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

First and Last Name: [REDACTED]

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

Title: [REDACTED]



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

**C. Core Data Form**

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

**Attachment:** 1

**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: Stephen Selinger

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

Title: Owner

Organization Name: [REDACTED]

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: steve\_selinger@yahoo.com

Check one or both:  Administrative Contact  Technical Contact

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

First and Last Name: Charles Gillespie

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

Title: President

Organization Name: Consulting Environmental Engineers

Mailing Address: 150 N Harbin Dr., Suite 408

City, State, Zip Code: Stephenville, TX 76401

Phone No.: 254-968-8130 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: ceeinc@ceeinc.org

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: Stephen Selinger

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

Title: Owner

Organization Name: [REDACTED]

Mailing Address: 620 Truelove Lane

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: Steve\_selinger@yahoo.com

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

First and Last Name: Inna Selinger

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

Title: [REDACTED]

Organization Name: [REDACTED]

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 310-486-7677 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: steve\_selinger@yahoo.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: Stephen Selinger

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

Title: Owner

Organization Name: [REDACTED]

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: steve\_selinger@yahoo.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: Stephen Selinger

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

Title: Owner

Organization Name: [REDACTED]

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: steve\_selinger@yahoo.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: Charles Gillespie

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

Title: President

Organization Name: Consulting Environmental Engineers, Inc.

Mailing Address: 150 N Harbin Dr., Suite 408

City, State, Zip Code: Stephenville, TX 76401

Phone No.: 254-968-8130 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: ceeinc@ceeinc.org

### 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: Stephen Selinger

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

Title: Owner

Organization Name: [REDACTED]

Phone No.: 817-421-0731 Ext.: [REDACTED]

E-mail: steve\_selinger@yahoo.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: Ennis Public Library

Location within the building: Front Desk

Physical Address of Building: 501 W. Ennis Ave.

City: Ennis

County: Ellis

Contact Name: Jessica Diaz

Phone No.: 972-875-5360 Ext.: [REDACTED]

**E. Bilingual Notice Requirements:**

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

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

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

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

Yes       No

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

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

Yes       No

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

Yes       No



4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
- Yes       No
5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language are required. Which language is required by the bilingual program? \_\_\_\_\_

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

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

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

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

Shankle Road WWTP

C. Owner of treatment facility: Stephen Selinger

Ownership of Facility:  Public       Private       Both       Federal

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

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

First and Last Name: Stephen Selinger

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731

E-mail Address: steve\_selinger@yahoo.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:** \_\_\_\_\_

E. Owner of effluent disposal site:

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

First and Last Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Phone No.: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

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

**Attachment:** \_\_\_\_\_

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

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

First and Last Name: [REDACTED]

Mailing Address: [REDACTED]

City, State, Zip Code: [REDACTED]

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

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

Attachment: [REDACTED]

### Section 10. TPDES Discharge Information (Instructions Page 34)

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

Yes  No

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

New Permit: 1008 Shankle Road, Palmer TX 75152

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:

New Permit: The effluent travels through an Unnamed Tributary, thence to Fourmile Creek, thence to Village Creek, thence to the Upper Trinity River Classified Segment No. 0805.

City nearest the outfall(s): Palmer

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

Outfall Latitude: 32.412290

Longitude: -96.606006

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: [REDACTED]

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

[REDACTED]

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

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

- Yes       No

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

[REDACTED]

B. City nearest the disposal site: [REDACTED]

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

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

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

[REDACTED]

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

[REDACTED]

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

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

- Yes       No

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

- Yes       No       Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit

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

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

- Yes       No

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

D. Do you owe any fees to the TCEQ?

- Yes       No

If yes, provide the following information:

Account number:

Amount past due:

E. Do you owe any penalties to the TCEQ?

- Yes       No

If yes, please provide the following information:

Enforcement order number:

Amount past due:

### Section 13. Attachments (Instructions Page 38)

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

- Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.
- Original full-size USGS Topographic Map with the following information:
  - Applicant's property boundary
  - Treatment facility boundary
  - Labeled point of discharge for each discharge point (TPDES only)
  - Highlighted discharge route for each discharge point (TPDES only)
  - Onsite sewage sludge disposal site (if applicable)
  - Effluent disposal site boundaries (TLAP only)
  - New and future construction (if applicable)
  - 1 mile radius information



- 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: [REDACTED]

Applicant: Stephen Selinger

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): Stephen Selinger

Signatory title: Proprietor

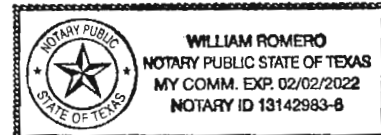
Signature: [Handwritten Signature] Date: 1/12/22  
(Use blue ink)

Subscribed and Sworn to before me by the said Stephen Selinger  
on this 12th day of January, 20 22.  
My commission expires on the 2nd day of February, 20 22.

[Handwritten Signature]  
Notary Public

[SEAL]

Tarrant  
County, Texas



# DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

## Section 1. Affected Landowner Information (Instructions Page 41)

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

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

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

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

- Readable/Writeable CD       Four sets of labels

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

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

- Yes       No

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

## Section 2. Original Photographs (Instructions Page 44)

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

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

## Section 3. Buffer Zone Map (Instructions Page 44)

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

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

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

- Ownership
- Restrictive easement
- Nuisance odor control
- Variance

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

- Yes     No



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

**FOR AGENCIES REVIEWING DOMESTIC  
TPDES WASTEWATER PERMIT APPLICATIONS**

**TCEQ USE ONLY:**

Application type:  Renewal  Major Amendment  Minor Amendment  New

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

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

Agency Receiving SPIF:

Texas Historical Commission

U.S. Fish and Wildlife

Texas Parks and Wildlife Department

U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: Stephen Selinger

Permit No. WQ00 \_\_\_\_\_

EPA ID No. TX \_\_\_\_\_

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

1008 Shankle Road, Palmer TX 75152

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: Stephen Selinger

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

Title: Owner

Mailing Address: 620 Truelove Trail

City, State, Zip Code: Southlake, TX 76092

Phone No.: 817-421-0731 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: steve\_selinger@yahoo.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.

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

The effluent travels through an Unnamed Tributary, thence to Fourmile Creek, thence to Village Creek, thence to the Upper Trinity River Classified Segment No. 0805.

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

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

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

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

Sealing caves, fractures, sinkholes, other karst features

Disturbance of vegetation or wetlands

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

N/A

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

Undeveloped Land

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.

N/A

# 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: New Permit**

1. Check or Money Order Number:
2. Check or Money Order Amount: \$1,650
3. Date of Check or Money Order:
4. Name on Check or Money Order:
5. APPLICATION INFORMATION

Name of Project or Site: Shankle Road WWTP

Physical Address of Project or Site: 1008 Shankle Road, Palmer TX 75152

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

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

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## ATTACHMENT 1

### INDIVIDUAL INFORMATION

---

#### Section 1. Individual Information (Instructions Page 50)

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

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

Full legal name (first, middle, last): Stephen Richard Selinger

Driver's License or State Identification Number: 38316518

Date of Birth: 04/15/1953

Mailing Address: 620 Truelove Trail

City, State, and Zip Code: Southlake, TX 76092

Phone Number: 817-421-0731 Fax Number:

E-mail Address: Steve\_selinger@yahoo.com

CN: 605818129

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

## CHECKLIST OF COMMON DEFICIENCIES

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

Core Data Form (TCEQ Form No. 10400) <i>(Required for all applications types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Yes
Correct and Current Industrial Wastewater Permit Application Forms <i>(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Yes
Water Quality Permit Payment Submittal Form (Page 19) <i>(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Yes
7.5 Minute USGS Quadrangle Topographic Map Attached <i>(Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Yes
Current/Non-Expired, Executed Lease Agreement or Easement Attached	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Yes
Landowners Map <i>(See instructions for landowner requirements)</i>	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Yes
<b>Things to Know:</b>				
<ul style="list-style-type: none"> <li>• All the items shown on the map must be labeled.</li> <li>• The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.</li> <li>• The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.</li> <li>• If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.</li> </ul>				
Landowners Cross Reference List <i>(See instructions for landowner requirements)</i>	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Yes
Landowners Labels or CD-RW attached <i>(See instructions for landowner requirements)</i>	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred <i>(If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)</i>			<input checked="" type="checkbox"/>	Yes

**Shankle Road WWTP  
Domestic Technical Report Form 10054**





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION

**DOMESTIC TECHNICAL REPORT 1.0**

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

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

**A. Existing/Interim I Phase**

Design Flow (MGD): 0.1

2-Hr Peak Flow (MGD): 0.4

Estimated construction start date: 02/03/2023

Estimated waste disposal start date: 03/03/2023

**B. Interim II Phase**

Design Flow (MGD): 0.2

2-Hr Peak Flow (MGD): 0.8

Estimated construction start date: 03/10/2024

Estimated waste disposal start date: 06/11/2024

**C. Final Phase**

Design Flow (MGD): 0.5

2-Hr Peak Flow (MGD): 2.0

Estimated construction start date: 06/15/2025

Estimated waste disposal start date: 08/15/2025

**D. Current operating phase: Proposed**

Provide the startup date of the facility: 03/05/2023

**Section 2. Treatment Process (Instructions Page 51)**

**A. Treatment process description**

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

Shankle Road WWTP - New Permit

**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 I- Effluent flow from source, to an equalization basin, then to a flow splitter. From there, the effluent will flow to Interim I phase activated sludge plant using continuous aeration treatment. Sewage passes through a bar screen to an aeration chamber and then to a clarifier. Sludge is transferred to a holding chamber and supernatant is moved through a chlorine contact chamber to discharge.

Interim II - Effluent flow from source, to an equalization basin, then to a flow splitter. From there, the effluent will flow to Interim II phase activated sludge plant using continuous aeration treatment. Sewage passes through a bar screen to an aeration chamber and then to a clarifier. Sludge is transferred to a holding chamber and supernatant is moved through a chlorine contact chamber to discharge.

Final Phase - Effluent flow from source, to an equalization basin, then to a flow splitter. From there, the effluent will flow to final phase activated sludge plant using continuous aeration treatment. Sewage passes through a bar screen to an aeration chamber and then to a clarifier. Sludge is transferred to a holding chamber and supernatant is moved through a chlorine contact chamber to discharge.

Port or pipe diameter at the discharge point, in inches: 4

## 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)
Phase 1 & 2 Aeration Basin	2	130.0' x 11.25' x 9.5'
Digester	2	39' x 11.25' x 9.5'
Clarifier (Round)	2	24.0' diameter
Chlorine Chamber	2	11.0' x 11.25' x 9.5'



Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Phase 3		
Aeration Basin	1	390.0' x 11.25' x 9.5'
Digester	1	117.0' x 11.25' x 9.5'
Clarifier (Round)	1	42' diameter
Chlorine Chamber	1	32.0' x 11.25' x 9.5'

### C. Process flow diagrams

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

Attachment: IX

### 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: X

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

The facility will provide wastewater services to the proposed Shankle Road single family home subdivision.

### 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

Yes  No

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

### Section 5. Closure Plans (Instructions Page 53)

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

Yes  No

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

Yes  No

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

### Section 6. Permit Specific Requirements (Instructions Page 53)

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

#### A. Summary transmittal

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

Yes  No

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

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

**B. Buffer zones**

Have the buffer zone requirements been met?

Yes  No

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

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*.

**D. Grit and grease treatment**

***1. Acceptance of grit and grease waste***

Does the facility have a grit and/or grease processing facility onsite that

treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

Yes  No

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

## ***2. Grit and grease processing***

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

## ***3. Grit disposal***

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

Yes  No

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

Describe the method of grit disposal.

## ***4. Grease and decanted liquid disposal***

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

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

**E. Stormwater management**

***1. Applicability***

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

Yes  No

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

Yes  No

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

***2. MSGP coverage***

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

Yes  No

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

TXR05 [redacted] or TXRNE [redacted]

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

Yes  No

***3. Conditional exclusion***

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

Yes  No

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



**4. Existing coverage in individual permit**

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

Yes  No

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

**5. Zero stormwater discharge**

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

Yes  No

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

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

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

Are you requesting coverage of stormwater discharges associated with your

treatment plant under this individual permit?

Yes  No

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

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

**F. Discharges to the Lake Houston Watershed**

Does the facility discharge in the Lake Houston watershed?

Yes  No

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

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

***1. Acceptance of sludge from other WWTPs***

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

Yes  No

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

In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge

acceptance (gallons or millions of gallons), an estimate of the 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.

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.

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

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

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

Yes  No

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

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

Is the facility in operation?

Yes  No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
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**

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

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

Facility Operator Name: Licensed Operator will be determined upon permit approval

Facility Operator's License Classification and Level:

Facility Operator's License Number:

Shankle Road WWTP - New Permit



## 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: To be determined upon permit approval

TCEQ permit or registration number:

County where disposal site is located:



## 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:** [REDACTED]

- USDA Natural Resources Conservation Service Soil Map:

**Attachment:** [REDACTED]

- Federal Emergency Management Map:

**Attachment:** [REDACTED]

- Site map:

**Attachment:** [REDACTED]

Discuss in a description if any of the following exist within the lagoon area.

Check all that apply.

- Overlap a designated 100-year frequency flood plain
- Soils with flooding classification
- Overlap an unstable area
- Wetlands
- Located less than 60 meters from a fault
- None of the above

**Attachment:** [REDACTED]

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



**B. Temporary storage information**

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

- Nitrate Nitrogen, mg/kg:
- 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.

[Redacted text box]

**D. Site development plan**

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

[Redacted text box]

Attach the following documents to the application.

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

**E. Groundwater monitoring**

Is groundwater monitoring currently conducted at this site, or are any wells

available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

Yes  No

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

Attachment:

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

### A. Additional authorizations

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

Yes  No

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

### B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes  No

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

Yes  No

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



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

### A. RCRA hazardous wastes

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

Yes  No

### B. Remediation activity wastewater

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

Yes  No

### C. Details about wastes received

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

Attachment:

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

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

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

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

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

**CERTIFICATION:**

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

Printed Name: Stephen Selinger

Title: Proprietor

Signature: 

Date: 1/12/22

# DOMESTIC TECHNICAL REPORT 1.1

The following is required for new and amendment applications

## Section 1. Justification for Permit (Instructions Page 66)

### A. Justification of permit need

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

The proposed 181-acre development of the Shankle Road Subdivision will serve approximately 1800 homes. Assuming full capacity of the subdivision, an estimated daily wastewater flow rate of 500,000 GPD was calculated. The property does not have access to a municipal treatment system and septic systems are not an economically and ecologically sound alternative. Phase 1 will begin construction in 2023 and will contain 285 homes, followed by phase 2 which will contain an additional 285 homes in 2025. Phases 1 and 2 will be constructed at approximately 12 homes per month. Phase 3 is estimated to begin construction in 2027 and will contain 1230 homes. Phase 3 will be constructed at a rate of approximately 17 homes per month until the subdivision has reached its maximum capacity of 1800 homes. With a 1.9% population growth rate, the future population estimates, indicate the need for the WWTP facility to be constructed and operational within the next 5 years.

### B. Regionalization of facilities

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

#### 1. Municipally incorporated areas

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

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

Yes  No  Not Applicable

If yes, within the city limits of:

If yes, attach correspondence from the city.

Attachment:

If consent to provide service is available from the city, attach a

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:** XI

### **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:** XI

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

**Attachment:** XI

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

Yes  No

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

**Attachment:**

## **Section 2. Organic Loading (Instructions Page 67)**

Is this facility in operation?

Yes  No

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

Shankle Road WWTP - New Permit

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

**A. Current organic loading**

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

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: [redacted]

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

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

**B. Proposed organic loading**

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

*Table 1.1(1) - Design Organic Loading*

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Municipality		
Subdivision	0.5	250
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no		

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.5	
AVERAGE BOD <sub>5</sub> from all sources		250

### 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: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 2



Other: N/A

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

Biochemical Oxygen Demand (5-day), mg/l: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 2

Other: N/A

**C. Final Phase Design Effluent Quality**

Biochemical Oxygen Demand (5-day), mg/l: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 2

Other: N/A

**D. Disinfection Method**

Identify the proposed method of disinfection.

- Chlorine: 2 mg/l after 20 minutes detention time at peak flow  
Dechlorination process: [REDACTED]
- Ultraviolet Light: [REDACTED] seconds contact time at peak flow
- Other: [REDACTED]

**Section 4. Design Calculations (Instructions Page 68)**

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

**Attachment: XII**

## 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 Map: 48139C0250F

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: XXXXXXXXXXXX

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

### B. Wind rose

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

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

### A. Beneficial use authorization

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

Yes  No

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

**Attachment:** [REDACTED]

### **B. Sludge processing authorization**

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

- Sludge Composting
- Marketing and Distribution of sludge
- Sludge Surface Disposal or Sludge Monofill

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

**Attachment:** [REDACTED]

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

Attach a solids management plan to the application.

Attachment: XV

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

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

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

# DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

## RECEIVING WATERS

The following is required for all TPDES permit applications

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

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

Yes  No

If yes, provide the following:

Owner of the drinking water supply: \_\_\_\_\_

Distance and direction to the intake: \_\_\_\_\_

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

Attachment: \_\_\_\_\_

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

Does the facility discharge into tidally affected waters?

Yes  No

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

#### A. Receiving water outfall

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

#### B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes  No

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

**C. Sea grasses**

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

Yes  No

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

**Section 3. Classified Segments (Instructions Page 73)**

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

Yes  No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters: Unnamed Tributary

**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.

Unnamed tributary, Fourmile Creek

**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.



**E. Normal dry weather characteristics**

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

The water body is dry.

Date and time of observation: 1/13/2022 12:30 PM

Was the water body influenced by stormwater runoff during observations?

Yes  No

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

**A. Upstream influences**

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

- |   |  |
|---|--|
| <input type="checkbox"/> Oil field activities | <input 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 <span style="background-color: #cccccc; padding: 2px;">click here to enter</span> |
- 

**B. Waterbody uses**

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

- |  |   |
|--|---|
| <input 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 None

### 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