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July 11, 2025

Via FedEx

Mr. Armando Barrera, Environmental Permit Specialist
Municipal Solid Waste Permits – MC 124
TCEQ
PO Box 13087
Austin TX 78711-3087

Re: Technical Notice of Deficiency Letter 2
AmTex Liquid Waste Processing, LLC
Amarillo, Potter County, TX
Proposed Municipal Solid Waste Permit Number: 2424
Tracking No. 30815798; RN112134879/CN606349876
New Type V Permit Application

Dear Municipal Solid Waste Permits Section,
Enclosed, please find Revised Parts II & III of the application and the application. The attached table of the WPD MWS Deficiency Table – Technical NOD #2 has our comments in red.

If you have any questions or require additional information, please give me a call.

Sincerely,

Amy Peoples
Enviro-Ag Engineering, Inc.

Enclosures

Cc: Am Tex Liquid Waste Processing, LLC
EAE file



Texas Commission on Environmental Quality

Part I Application Form for New Permit, Permit Amendment, or Registration for a Municipal Solid Waste Facility

Instructions for completing this Part I Application Form are provided in [TCEQ 00650-instr¹](#). Include a [Core Data Form \(TCEQ 10400\)²](#) with the application for the facility owner, and Core Data Forms for the operator and property owner if different from the facility owner. If you have questions, contact the Municipal Solid Waste (MSW) Permits Section by email to mswper@tceq.texas.gov, or by phone at 512-239-2335. Rules cited on this form are in Title 30 Texas Administrative Code (30 TAC) and may be viewed online at www.tceq.texas.gov/goto/view-30tac.

Application Tracking Information

Facility Regulated Entity Name³:

Site Operator (Permittee or Registrant Name)⁴:

MSW Authorization Number: _____

Initial Submission Date: _____

Revision Date: _____

Application Data

1. Submission Type

☐ Initial Submission ☐ Notice of Deficiency (NOD) Response

2. Authorization Type

☐ Permit ☐ Registration

3. Application Type

☐ New Permit
☐ Permit Major Amendment ☐ Permit Limited Scope Major Amendment
☐ New Registration

¹ www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf

² www.tceq.texas.gov/goto/coredata

³ Facility Regulated Entity Name must match the Regulated Entity Name indicated on the TCEQ Core Data Form.

⁴ Site Operator is defined in 30 TAC 330.3(148) as the holder of, or the applicant for, an authorization (or license) for a municipal solid waste facility.

4. Application Fee

Amount

- ☐ \$2,050—New Landfill Permits, and Landfill Permit Major Amendments Described in 30 TAC [305.62\(j\)\(1\)](#)
- ☐ \$150—Other Permits, Permit Amendments, Limited Scope Major Amendments, and all Registrations

Payment Method

- ☐ Online through ePay portal www3.tceq.texas.gov/epay/
Enter ePay Trace Number: _____
- ☐ Check (send to TCEQ Financial Administration Division)
Payor Name: _____ Check Number: _____

5. Electronic Versions of Application

TCEQ will publish electronic versions of the application online. Applicants must provide a clean copy of the administratively complete application and technically complete application. TCEQ will also publish electronic versions of NOD responses online.

6. Party Responsible for Publishing Notice

Indicate who will be responsible for publishing notice:

- ☐ Applicant ☐ Agent in Service ☐ Consultant

Contact Name: _____

Title: _____

Email Address [REDACTED]

7. Alternative Language Notice

Use the Alternative Language Checklist on Public Notice Verification Form TCEQ-20244-Waste-NORI, TCEQ-20244-Waste-NAPD, or TCEQ-20244-Waste-NAORPM available at www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_notice.html to determine if an alternative language notice is required.

Is an alternative language notice required for this application?

- ☐ Yes ☐ No

Indicate the alternative language: _____

8. Public Place for Copy of Application

Name of the Public Place: _____

Physical Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

9. Consolidated Permit Processing

Is this submittal part of a consolidated permit processing request, in accordance with 30 TAC Chapter 33?

☐ Yes ☐ No

If "Yes", indicate the other TCEQ program authorizations requested:

10. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☐ No

If "Yes", reference the confidential documents in the application, but submit the confidential documents as an attachment in a separate binder marked "CONFIDENTIAL."

11. Permits and Construction Approvals

Mark the following table to indicate status of other permits or approvals.

Table 1. Permits and Construction Approvals.

Permit or Approval	Received	Pending	Not Applicable
Hazardous Waste Management Program under Texas Solid Waste Disposal Act			
Underground Injection Control Program under Texas Injection Well Act			
National Pollutant Discharge Elimination System Program under Clean Water Act; Waste Discharge Program under Texas Water Code, Chapter 26			
Prevention of Significant Deterioration Program under Federal Clean Air Act (FCAA); Nonattainment Program under the FCAA			
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA			
Ocean Dumping Permits under Marine Protection Research and Sanctuaries Act			
Dredge or Fill Permits under Clean Water Act			
Licenses under the Texas Radiation Control Act			
Other (describe):			
Other (describe):			

12. General Information About the Facility

Facility Regulated Entity Name: _____

Contact Name: _____ Title: _____

MSW Authorization Number (if existing): _____

Regulated Entity Reference Number: **RN** _____

Physical or Street Address (if available): _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Latitude (decimal degrees, six decimal places): _____

Longitude (decimal degrees, six decimal places): _____

Elevation (above mean sea level): _____ feet (benchmark elevation for landfills)

Description of facility location with respect to known or easily identifiable landmarks:

Access routes from the nearest United States or state highway to the facility:

Coastal Management Program

Is the facility within the Coastal Management Program boundary?

☐ Yes ☐ No

13. Facility Types

Facility types are described in 30 TAC [330.5\(a\)](#).

Indicate facility type (select all that apply):

☐ Type I ☐ Type IV ☐ Type V
☐ Type IAE ☐ Type IVAE ☐ Type VI

14. Activities Conducted at the Facility

☐ Storage ☐ Processing ☐ Disposal

15. Facility Waste Management Units

Check the box for each type of waste management unit proposed.

- | | |
|---|---|
| <input type="checkbox"/> Landfill Unit(s) | <input type="checkbox"/> Container(s) |
| <input type="checkbox"/> Incinerator(s) | <input type="checkbox"/> Roll-off Boxes |
| <input type="checkbox"/> Class 1 Landfill Unit(s) | <input type="checkbox"/> Surface Impoundment |
| <input type="checkbox"/> Process Tank(s) | <input type="checkbox"/> Autoclave(s) |
| <input type="checkbox"/> Storage Tank(s) | <input type="checkbox"/> Refrigeration Unit(s) |
| <input type="checkbox"/> Tipping Floor | <input type="checkbox"/> Mobile Processing Unit(s) |
| <input type="checkbox"/> Storage Area | <input type="checkbox"/> Compost Pile(s) or Vessel(s) |
| <input type="checkbox"/> Other (specify): | |

16. Description of Proposed Facility or Changes to Existing Facility

Provide a brief description of the proposed activities if application is for a new facility, or the proposed changes to an existing facility or permit conditions if the application is for an amendment.

17. Facility Contact Information

Site Operator (Permittee or Registrant)

Name: _____

Customer Reference Number: **CN** _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: ____ Zip Code: ____

Phone Number: _____

Email Address: _____

Operator (if different from Site Operator)

Name: _____

Customer Reference Number: **CN** _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: ____ Zip Code: ____

Phone Number: _____

Email Address: _____

Consultant (if applicable)

Firm Name: _____

Consultant Name: _____

Texas Board of Professional Engineers Firm Registration Number: _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: ____ Zip Code: ____

Phone Number: _____

Email Address: _____

Agent in Service (required for out-of-state applicants)

Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: ____

Phone Number: _____

Email Address: _____

18. Facility Supervisor License

Indicate the level of Municipal Solid Waste Facility Supervisor license, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations, Subchapter F that the individual who supervises or manages the operations will obtain prior to commencing operations.

☐ Class A Supervisor License ☐ Class B Supervisor License

19. Facility Ownership**Facility Owner**

Does the Site Operator (Permittee or Registrant) own all the facility units and all the facility property?

☐ Yes ☐ No

If "No", provide the following information for the other owner, and include a Core Data Form for the other owner. Attach supplemental sheet if more than one other owner.

Other Owner Name: _____

What is Owned: ☐ Facility Units ☐ Property

☐ Other (describe): _____

Mailing Address: _____

City: _____ County: _____ State: ____ Zip Code: ____

Phone Number: _____

Email Address: _____

20. Other Government Entities Information**Texas Department of Transportation**

District: _____

District Engineer's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

Local Government Authority Responsible for Road Maintenance (if applicable)

Government or Agency Name: _____

Contact Person's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

City Mayor Information

City Mayor's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

City Health Authority

Authority Name: _____

Contact Person's Name: _____

Contact Person's Title: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

County Judge Information

County Judge's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

County Health Authority

Agency Name: _____

Contact Person's Name: _____

Contact Person's Title: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

State Representative Information

House District Number: _____

State Representative's Name: _____

District Office Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

State Senator Information

District Number: _____

State Senator's Name: _____

District Office Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

Council of Governments (COG)

COG Name: _____

COG Representative's Name: _____

COG Representative's Title: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

River Basin Authority

Authority Name: _____

Contact Person's Name: _____

Watershed Sub-Basin Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

Local Drainage or Flood Management Authority

Authority Name: _____

Contact Person's Name: _____

Mailing Address: _____

City: _____ County: _____ State: TX Zip Code: _____

Phone Number: _____

Email Address: _____

U.S. Army Corps of Engineers District

Indicate the U.S. Army Corps of Engineers district in which the facility is located:

☐ Albuquerque, NM

☐ Galveston, TX

☐ Fort Worth, TX

☐ Tulsa, OK

Local Government Jurisdiction

Within City Limits of: _____

Within Extraterritorial Jurisdiction of: _____

Is the facility located in an area in which the governing body of the municipality or county has prohibited the storage, processing, or disposal of municipal or industrial solid waste?

☐ Yes ☐ No

If "Yes", provide a copy of the ordinance as an attachment.

Applicant Signature Page

Site Operator (Permittee or Registrant Name) or Authorized Signatory

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.

Name: _____ Title: _____

Email Address: _____

Signature: _____ Date: _____

Authorization by Facility Owner for Operator to Submit Application

To be completed by the facility owner if the application is submitted by an operator who is not the facility owner.

I am the owner of the facility that is the subject of this application, and authorize the operator, _____ to submit this application pursuant to 30 TAC [305.43\(c\)](#).

Name: _____ Title: _____

Email Address: _____

Signature: _____ Date: _____

Notary

SUBSCRIBED AND SWORN to before me by the said _____

On this ____ day of _____, ____

My commission expires on the ____ day of _____, ____

Notary Public in and for

_____ (notary's jurisdiction, including county and state)

Note: Application Must Bear Signature & Seal of Notary Public

Property Owner Affidavit

Property Owner Affidavit for Landfill Facility

I acknowledge in accordance with 30 TAC 330.59(d)(2) that the State of Texas may hold me either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the facility. For a facility where waste will remain after closure, I acknowledge that I have a responsibility to file with the county deed records an affidavit to the public advising that the land will be used for a solid waste facility prior to the time that the facility actually begins operating as a municipal solid waste landfill facility, and to file a final recording upon completion of disposal operations and closure of the landfill units according to 30 TAC 330.19 (relating to Deed Recordation). I further acknowledge that the facility owner or operator and the State of Texas shall have access to the property during the active life and post-closure care period for the purpose of inspection and maintenance.

Name: _____

Email Address: _____

Signature: _____ Date: _____

Property Owner Affidavit for Processing Facility

I acknowledge in accordance with 30 TAC 330.59(d)(2) that the State of Texas may hold me either jointly or severally responsible for the operation, maintenance, and closure of the facility. I further acknowledge that the facility owner or operator and the State of Texas shall have access to the property during the active life and post-closure care period for the purpose of inspection and maintenance.

Name: _____

Email Address: _____

Signature: _____ Date: _____

Notary

SUBSCRIBED AND SWORN to before me by the said _____

On this ____ day of _____, ____

My commission expires on the ____ day of _____, ____

Notary Public in and for

_____ (notary's jurisdiction, including county and state)

Note: Application Must Bear Signature & Seal of Notary Public

Part I Attachments

Refer to instruction document [TCEQ 00650-instr⁵](#) for professional engineer seal requirements.

Attachments Table 1. Required attachments.

Required Attachments	Attachment Number
Supplementary Technical Report [30 TAC 305.45(a)(8)]	
Property Legal Description [30 TAC 330.59(d)(1)]	
Property Metes and Bounds Description [30 TAC 330.59(d)(1)]	
Facility Legal Description [30 TAC 330.59(d)(1)]	
Facility Metes and Bounds Description [30 TAC 330.59(d)(1)]	
Metes and Bounds Drawings [30 TAC 330.59(d)(1)]	
On-Site Easements Drawing [30 TAC 330.61(c)(10)]	
Land Ownership Map [30 TAC 330.59(c)(3)]	
Landowners List [30 TAC 330.59(c)(3)]	
Mailing Labels (in electronic file, in Avery 5160 format; see instructions) [30 TAC 281.5(7)]	
General Location Maps [30 TAC 330.59(c)(2)]	
Texas Department of Transportation (TxDOT) County Map [30 TAC 330.59(c)(2)]	
General Topographic Maps [30 TAC 330.61(e)]	
Verification of Legal Status / Legal Authority (certificate of incorporation) [30 TAC 281.5 and 330.59(e)]	
Evidence of Competency [30 TAC 330.59(f)]	
Signatory Authority Documentation [30 TAC 305.44 and 330.59(g)]	
TCEQ Core Data Form(s) TCEQ-10400⁶ [30 TAC 281.5(7)]	

⁵ www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf

⁶ www.tceq.texas.gov/permitting/central_registry/guidance.html

Attachments Table 2. Additional attachments as applicable.

Additional Attachments (select all that apply and add others as needed)	Attachment Number
<input type="checkbox"/> Plain Language Summary Form TCEQ-20947 ⁷ [30 TAC 39.405(k)]	
<input type="checkbox"/> Public Involvement Plan Form TCEQ-20960 ⁸	
<input type="checkbox"/> Fee Payment Receipt	
<input type="checkbox"/> Confidential Documents	
<input type="checkbox"/> Waste Storage, Processing and Disposal Ordinances [Texas Health and Safety Code, Section 363.112 ⁹]	
<input type="checkbox"/> Final Plat Record of Property Description [30 TAC 330.59(d)(1)(B)]	
Other (describe):	
Other (describe):	
Other (describe):	

⁷ www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/20947-instr.pdf

⁸ www.tceq.texas.gov/downloads/agency/decisions/hearings/environmental-equity/pip-form-tceq-20960.pdf
www.tceq.texas.gov/downloads/agency/decisions/hearings/environmental-equity/instructions-for-pip-form-tceq-20960.pdf

⁹ statutes.capitol.texas.gov/Docs/HS/htm/HS.363.htm#363.112

APPLICATION TO THE TCEQ FOR NEW PERMIT FOR A MUNICIPAL SOLID WASTE FACILITY

Part II – General Information – MSW Permit No. 2424

Am Tex Liquid Waste Processing LLC

913 SE 28th Ave

Amarillo, TX 79103

Prepared For:

Jeff Jones

2465 FM 2575

Amarillo, TX 79108

1-806-223-7159

January 23, 2025

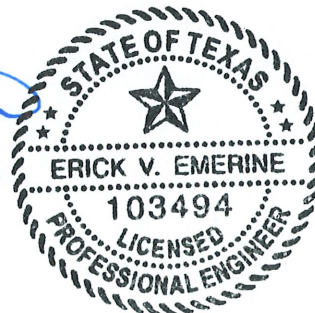
Revision Date: February 20, 2025, April 28, 2025, June 25, 2025

TX F#2507

Prepared By:

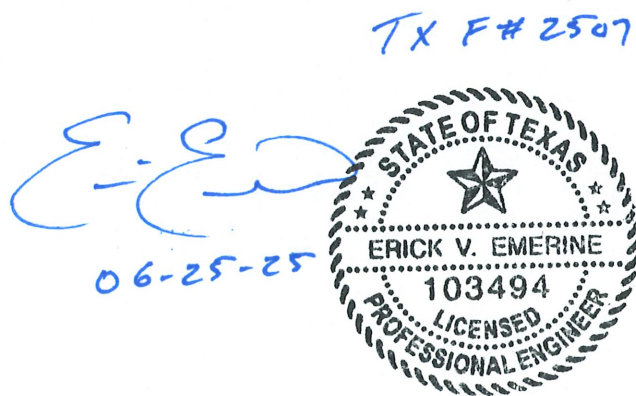


E. Emerine
06-25-25



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2.1 Facility Location & General Information

Am Tex Liquid Waste Processing LLC is located on Lots 1,2,3,4,5 and 6, Block 8 and Lot 1, Block 9, Glenwood Addition, an Addition to the City of Amarillo, Potter County, Texas, according to the Plat of Record as recorded in Volume 29, Page 109, of the Deed of Records of Potter County, Texas. See Figure 2.1.1 Deed Record and Figure 2.1.2 – Metes & Bounds Survey

The facility is an enclosed 8000 sq ft building with roll-up doors. Contract trucks full of grease, grit and human waste from septic tanks will be offloaded into a pit inside the building containing two 15-yard roll-off containers. From here, the waste will be vacuumed into one of two 400-barrel frac tanks for storage. The waste will then flow into one of two 30-yard dewatering boxes. The 30 yard ADS Dewatering box is configured with a special arrangement of screens that allows the water to escape into the designated collection space, then drain through eight drain ports for disposal. Through the use of 205 square feet of filter media and the addition of an ADS 5084G polymer, all water in the liquid waste is purified and drained. This process results in dewatered solids of 18-22% on the average and reduces total volume of waste by up to 95% and reduces FOG, BOD, COD and TSS levels by an average of 99%. The liquids will drain through the drainage ports into the City of Amarillo sewage treatment plant via underground lines. This will not cause surface water or groundwater pollution. The facility has contacted and will be applying for a City of Amarillo permit and will comply with the conditions within that permit as well. This process reduces the weight and volume making it easier to store and dispose of in bulk amounts. The solids will be stored for a short period of time (no more than 24 hours) until the filter box container is full of the separated solids and then it will be transported to the Southwest Landfill in Canyon, TX. The facility plans on processing approximately 2 filter box containers of solid waste daily to be hauled to the landfill. This is estimated at 22,000-25,000 gallons of waste at 1-3% solids per day.

- The solid waste will consist of lipids, grit and septic waste. The lipids are made up of fatty acids, triacylglycerols and fat-soluble hydrocarbons and originate from scraps of baked and fried food items removed from grease traps. The grit includes sand, gravel, cinder, as well as eggshells, bone chips, seeds, coffee grinds and large organic materials (food waste). Septic waste is the liquid and water-borne waste derived from ordinary living processes.
- The liquid waste will be the grey water that is mixed with the solids in the grease and grit traps as well as in the septic tanks.
- See Figure 2.1.3 – Facility Layout and Figure 2.1.4 – Topo Map

Polymer – ADS 5084G

- The ADS 5084G polymer is a product of AQUA-Zyme Disposal Systems, Inc. It is a mixture that is a processing aid for industrial applications and used in the dewatering process. The addition of the polymer causes sludge mixture to

flocculate, separating the liquids from the solids, therefore speeding up the dewatering process. See supporting documents 2.1.5 – Polymer MSDS

Access Routes

The facility is located 0.5 miles east of Interstate 27. From I-27 take SE 26th Ave exit, turn right on SE 26th Ave and continue onto SE 27th Ave for 0.4 miles and then turn right into the facility.

Latitude and Longitude

Latitude: 35.184544°

Longitude: -101.830083°

Acknowledgement

The proposed facility owner acknowledges his responsibilities according to 30 TAC § 330.59(d)(2)(A) and (C). He also acknowledges that the State has access during the life of the facility and during closure.

2.2 Waste Identification

The waste materials that will be processed at the facility are grease trap waste from food service businesses and septage. Each incoming load will have a manifest and be screened by employees visually for unauthorized or prohibited materials. The trucks may have lengths up to 40 feet and capacities up to 5,000 gallons. The mix of incoming material will vary but will not affect the dewatering process. Grease trap waste is expected to be the largest component of the waste stream.

Characteristics of proposed waste stream:

Fats, Oil and greases:	5-10%
Solids:	15-25%
Water:	65-80%

A sample analysis for the proposed waste before and after processing is provided in the Support Documentation (Figure 2.2.1). The sample analysis describes expected total dissolved solids (TSS), biochemical oxygen demand (BOD) and oil and grease concentration of the waste.

2.3 Waste Data

The proposed facility is designed to accept and process non-hazardous grease trap, domestic sewage sludge and septage wastes for the purpose of separation into liquid and solids.

The facility plans on processing approximately 2 filter box containers of solid waste daily to be hauled to the landfill. This is estimated at 22,000-25,000 gallons of waste at 1-3% solids per day.

Waste will be processed daily with approximately 20-25% of the material retained in the dewatering tanks. The maximum length of time for solid waste storage is no more than 24 hours after processing.

Representative sample result of sludge after processing are provided in the Supporting Documentation (Figure 2.3.1).

Solids are planned to be transported by a contract hauler to the Southwest Landfill in Canyon, Texas.

The facility will serve the Amarillo, Canyon and surrounding areas. The total population of the area served by the facility is estimated at 220,000 people.

2.4 Description of Land Use

The land use within one mile of the site is shown on the Zoning Map (Figure 2.4.1a) in the supporting documents. This area encompasses part of the City of Amarillo, including over 250 businesses and 2,750 residences. The facility tract is zoned as industrial and is adjacent to other industrial land uses. The surrounding land use is comprised of industrial, commercial and residential properties. To the north of the property are some residences just off SE 27th Ave as well as the City of Amarillo waste treatment plant. Directly to the west is the Llano Cemetery Association and BNSF Railroad properties. To the south is the Llano Cemetery Association Property and Residential properties to the East and Northeast. There are also about 7 churches, 2 schools and Llano Cemetery located within one mile (Figure 2.4.1b). Rick Husband International Airport and Tradewind Airport are within a 6-mile radius (Figure 2.4.1c) of the proposed facility.

The City of Amarillo has compiled community growth trends for the City of Amarillo as shown below:

Year	Population	Percent Change
2019	198,955	0.09%
2020	200,393	0.72%
2021	200,371	-0.01%
2022	200,360	-0.01%
2023	203,042	1.34%

The number of single-family new construction building permit application rates have gone up and down over the past few years with no defined increase or decrease.

Year	Number of Building Permits
2019	448
2020	560
2021	535
2022	675
2023	495

Education, health care and social assistance make up the largest employment sector in the City of Amarillo (19.7%) followed by retail trade (14.8%) and arts, entertainment and food services (11.0%).

Found in Supporting Documents Figure 2.4.1d [Community-Growth-Trends-Oct.-2024.pdf](#) and Figure 2.4.1e -School Data Map

The proposed grease trap, grit and sewage sludge waste processing facility is an industrial activity similar to the City of Amarillo wastewater treatment facility to the north.

See Figure 2.4.2– City of Amarillo Coordination Letter

2.5 Transportation and Site Access

Interstate 27 is the major traffic and roadway within a mile of the facility. The 2023 TXDOT traffic count on Interstate 27 shows that the average daily traffic count is 60,900 veh/day about a ¼ mile west of the site. The average daily traffic count for SE 27th Ave in 2020 ranged from 7,200-7,900 veh/day. [TPP Statewide Traffic Count Map](#) – Figure 2.5.1

Traffic will access the facility via Interstate 27 from the North or South and then exit on the SE 26th Avenue exit and enter the site via SE 27th Avenue into the existing driveway on the north side of the property. The site traffic will not use any residential streets. SE 27th Avenue is a paved roadway. See Figure 2.5.2 – TX DOT Maps. The estimated 5-10 vehicles/day generated by the facility will not cause disruption of normal traffic patterns. See Figure 2.5.3-TxDOT Coordination Letter

The internal driveway from the facility entrance to the facility processing area is concrete. Roadways within the facility will be inspected daily and cleaned as required. Dust generation will be minimal due to the paved and concrete roads as well as slow truck speeds. No tracking of mud will occur. No solid waste unloading, storage, disposal or processing operations will occur within any easement, buffer zone or right-of-way that crosses the facility.

2.6 General Geology and Soils

The facility is located in an area with soils characterized as Pullman-Urban land complex. This component is on plains on plateaus and playa slopes on plateaus. The parent material consists of clayey eolian deposits. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded and is not ponded. There is no zone of water saturation within a depth of 72 inches. Specific information regarding soils (Figure 2.6.1 & 2.6.2) is in the supporting documentation.

The clay loams of the Pullman series of soils in southern Potter County are immediately underlain by the Quaternary windblown sand and the Blackwater Draw Formation rock formation. The Ogallala Formation principally consists of interfingering bodies of fine to coarse sand, gravel, silt, and clay-material eroded from the Rocky Mountains which was carried southeastward and deposited by streams. The earliest sediments, mainly gravel and coarse sand, filled the valleys cut in the pre-Ogallala surface. Pebbles and cobbles of quartz, quartzite, and chert are typical of these early sediments. After filling the valleys, deposition continued until the entire area that is now the Texas High Plains was covered by sediments from the shifting streams.

The upper part of the formation contains several hard, caliche-cemented, erosionally resistant beds called the "caprock." A wind-blown cover of fine silt, sand, and soil overlies the caprock. The Ogallala deposits overlie rocks of Triassic and Permian ages.

The Ogallala deposits overlie rocks of Triassic and Permian ages. These rocks, principally red shale, serve as a nearly impermeable floor for the aquifer. On a broad scale, the erosional surface at the top of the Triassic and Permian rocks dips gently about 10 feet per mile toward the southeast, similar to the slope of the land surface. In general, however, this pre-Ogallala surface had greater relief than the present land surface. Low hills and wide valleys which contain deep, narrow stream channels are a typical feature of the Triassic and Permian erosional surfaces. Because the Ogallala was deposited on top of this irregular surface, the formation is very thin in some areas and very thick in others.

There are no faults shown within 0.5 miles of the site on the Geologic Atlas of Texas. Seismic zone and unstable area demonstrations for landfills (330.304 and .305) do not apply to this facility. [USGS | Pocket Texas Geology](#)

2.7 Ground and Surface Water

The Ogallala Aquifer is the largest aquifer in the United States and is a major aquifer of Texas underlying much of the High Plains region. The aquifer consists of sand, gravel, clay, and silt and has a maximum thickness of 800 feet. Freshwater saturated thickness averages 95 feet. The Ogallala Aquifer provides significantly more water for users than any other aquifer in the state. The availability of this water is critical to the economy of the region, as approximately 95 percent of groundwater pumped is used for irrigated agriculture. Throughout much of the aquifer, groundwater withdrawals exceed the amount of recharge, and water levels have declined fairly consistently through time. Although water level declines in excess of 300 feet have occurred in several areas over the last 50 to 60 years, the rate of decline has slowed, and water levels have risen in a few areas. The regional water planning groups for the Panhandle and Llano Estacado regions, in their 2006 Regional Water Plans, recommended numerous water management strategies using the Ogallala Aquifer, including drilling new wells, developing well fields, over drafting, and reallocating supplies.

The Dockum Aquifer is a minor aquifer found in the northwest part of the state. It is defined stratigraphically by the Dockum Group and includes, from oldest to youngest, the Santa Rosa Formation, the Tecovas Formation, the Trujillo Sandstone, and the Cooper Canyon Formation. The Dockum Group consists of gravel, sandstone, siltstone, mudstone, shale, and conglomerate. Groundwater located in the sandstone and conglomerate units is recoverable, the highest yields coming from the coarsest grained deposits located at the middle and base of the group. Typically, the water-bearing sandstones are locally referred to as the Santa Rosa Aquifer (George et. Al., 2011). See Texas Water Development Board Map (Figure 2.7.1) in supporting documents. No wells are located on the proposed property.

The proposed facility was an existing burial vault manufacturer. The building will enclose the proposed facility so there will be less than 1 acre disturbed to retro-fit the inside of the

building. Coverage is not required under the TPDES storm water permitting requirements and Clean Water Act to discharge stormwater.

The volume of surface runoff from rain or melting snow is minimal due to the flat slope of the land. With this type of level land, the water will tend to accumulate in low areas then slowly percolate in the soil or evaporate. Any surface runoff leaving the property will follow the existing drainage structures designed by the City of Amarillo. The average annual precipitation for Amarillo is 19.71 inches. Three-fourths of the average precipitation falls from April through September.

2.8 Floodplains and Wetlands

Am Tex Liquid Waste Processing LLC is located in Zone B on the FIRM map. This zone is areas of minimal flooding. The FIRM map (Figure 2.8.1) is located in the supporting documentation.

The National Map and National Wetland Inventory Database were reviewed. No defined wetlands were identified on the site of the facility or surrounding areas. The Wetland Map (Figure 2.8.2) and Coastal Boundary Map (Figure 2.8.3) are located in the Supporting Documentation.

2.9 Endangered Species

An official list of endangered species in the area was obtained from the United States Department of Interior-Information for Planning and Consultation (IPaC). Based on the provided list from the Arlington Ecological Services Field Office, three threatened, endangered or candidate species were listed, and no critical habitats are within the project area. The IPaC species list (Figure 2.9.1) is included in the supporting documentation.

2.10 Climate

Am Tex Liquid Waste Processing LLC is located in the High Plains at an altitude of approximately 3,570 feet above mean sea level. Potter County is the county seat to Amarillo, Texas, and is in the southern part of the Great Plains. In the general area of the proposed facility is mainly light industrial with housing developments and major transportation hub located on both the north and west of the property.

According to the National Weather Service, temperatures in the high plains vary greatly depending on the time of year. Average high temperatures in the summer rise into the low 90s and in the winter averages in the upper 40s but can vary widely from the teens to the 70s or even 80 degrees.

The average annual precipitation for Amarillo is 19.71 inches. Three-fourths of the average precipitation falls from April through September, generally occurring with thunderstorm activity. Measurable precipitation falls on an average of 72 days per year, which averages out to a little more than once per week.

Snowfall averages 17.9 inches annually in Amarillo. Snow is most frequent during the winter months, but some of the heavier snowfalls have occurred in March.

The Texas Panhandle is one of the windiest regions in the United States. As westerly winds flow over the Rocky Mountains, low pressure forms to the east of the mountains in the high plains. This very persistent low pressure is what leads to the strong average wind speeds from the southwest and west. Wind speeds of 50 mph or more occur each year, often with clear skies, warm temperatures, and blowing dust. These strong winds are most common in the winter and spring.

There are multiple residences (north central, east, north, south) within one mile of the project area. The prevailing wind pattern is from the south-southwest and a wind rose data (Figure 2.10.1) included in the supporting documentation. There are no known documented health effects caused by odors generated by this type of facility. There are no topographical or meteorological conditions present which would hinder the dispersion of air emissions and odors.

2.11 Historical/Archeological Resources

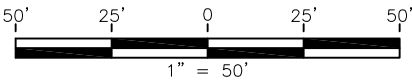
A review of the Texas Archeological Sites Atlas and the National Register of Historic Places database for Potter County, no recorded archeological sites or historic resources are recorded on the parcels. (Figure 2.11.1-National Register of Historic Places Map & Figure 2.11.2 – Tx DOT PALM Map). A request for SHPO Consultation for the proposed facility has also been made. (Figure 2.11.3 – SHPO Consultation)

2.12 Community Infrastructure

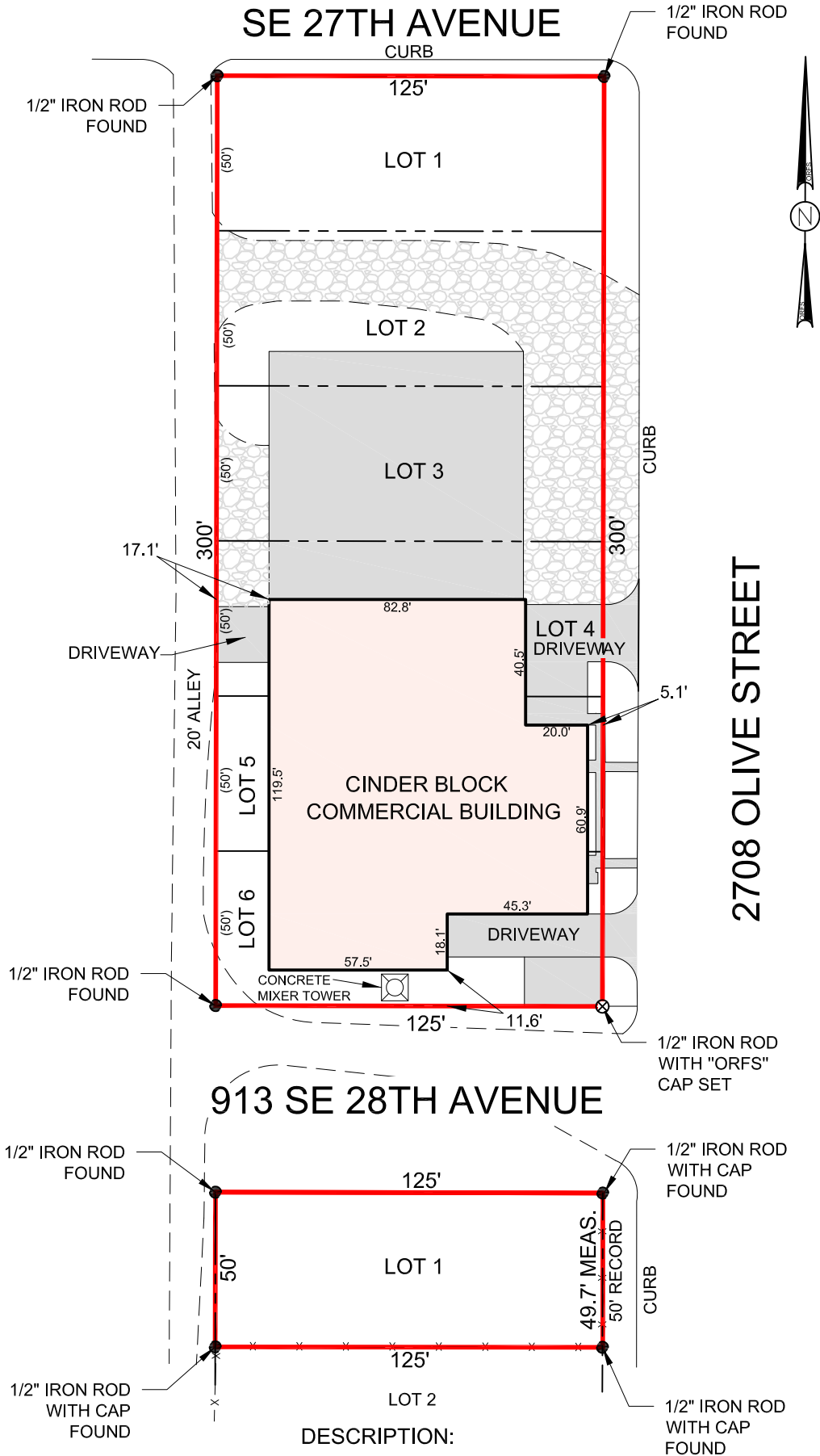
Amarillo is located in the Great Plains region and is the largest city in the Texas Panhandle. The proposed facility location has access to interstate highways. Am Tex Liquid Waste Processing, LLC will work closely with the City of Amarillo to apply for the necessary permits required by the City for the proposed site. (See Figure 2.4.2). The location of the facility and management of wastes are not believed to have a negative impact on this area of Amarillo.

Supporting Documents

2.1.1: Metes & Bounds Survey



LOT SURVEY



DESCRIPTION:
Lots 1,2,3,4,5,6, Block 8 and Lot 1, Block 9, Glenwood Addition, an Addition of the City of Amarillo, Potter County, Texas, according to the recorded map or plat Deed Records of Potter County, Texas.

CERTIFICATE

I, Codi Lamberson, do hereby certify that this survey was made on the ground under my supervision and that all measurements and monuments are correctly shown and indicated. I further certify that the improvements are situated as shown and there are no visible easements or encroachments except as shown. This property is located in Flood Zone (X) according to Corelogic Flood Services.

LEGEND				
	BOUNDARY LINE			
	FENCE			
	LOT LINE			
	SETBACK LINE			
	BUILDING			
	CONCRETE			
	MONUMENT FOUND			
	MONUMENT SET			

CODI LAMBERSON, P.L.S. 6480

REVISION				SURVEYED BY	B.A.	12-12-24
NO.	DESCRIPTION	BY	DATE	DRAWN BY	K.W.	12-15-24
1	NAME CHANGE	KW	12/30/24	CHECKED BY	C.L.	12-16-24
				PROJECT MGR.	K.W.	12-16-24
				PROJ. NO.	ORFS-P24-256	
				DWG NAME:	2708 OLIVE STREET.DWG	

AmTex Liquid Waste Processing LLC.



1503 S. BARNES, PAMPA, TX 79065
TBPELS No.: 10193994
OFFICE: 806-665-0770
39350 IH-10 WEST, BOERNE, TX 78006
TBPELS No.: 10194069
OFFICE: 830-816-5009

2.1.2: Deed Record

GLENWOOD ADDITION

TO

AMARILLO.

On Section 154, Block 2, A.B.E. Co., Potter and Randall Counties, Texas.

The State of Texas } H.A. Nobles, owner of the GLENWOOD ADDITION to Amarillo, do hereby dedicate to the City of Amarillo, Texas, all
County of Potter. } Streets and Alley ways to shown hereon, to be used for street and Alley purposes. Reserving however, to each owner of all
Streets for property owners to use for sidewalks, free drainage and town, also reserving all Streets and Alleys for
Electric light purposes, Telephone, Water mains, Gas mains, and other franchises. Also reserving the full power shown hereon.
Business only have this the 21st day of Feb'y 1907.

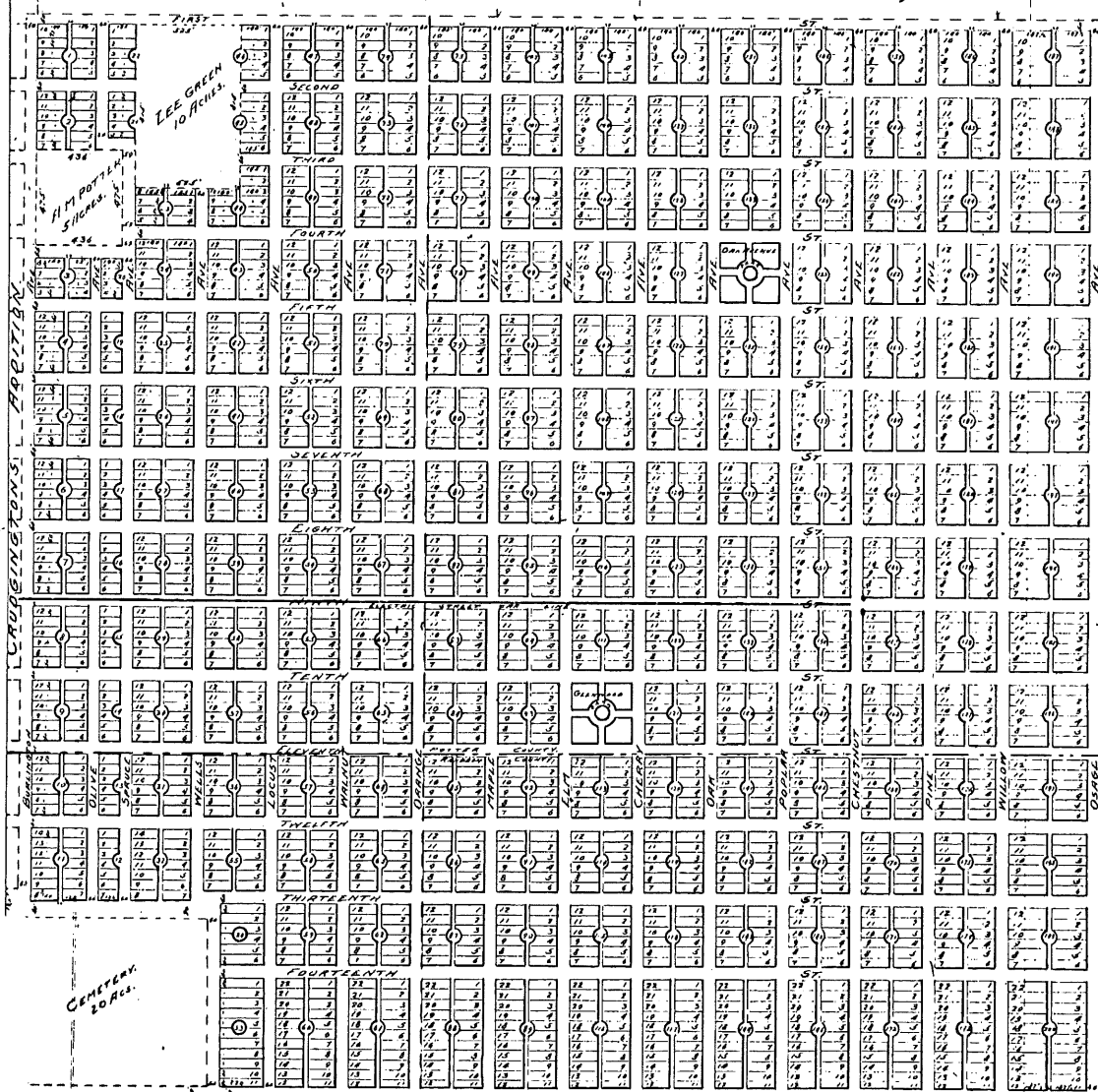
The State of Texas } Before me, A.B. Newcome, a Notary Public, in and for said State and County on this day personally appeared
County of Potter. } H.A. Nobles, known to me to be the person whose name is subscribed to the foregoing, and acknowledged to me
that he signed the same for the purposes and uses therein stated.
Witness my hand and seal of office, this the 21st day of Feb'y 1907.

{ Seal }

A.B. Newcome,
Notary Public, Potter County, Texas.

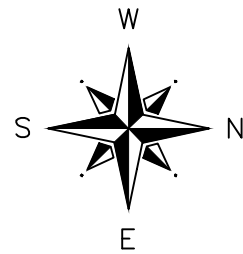
(MIRROR

ADDITION.)



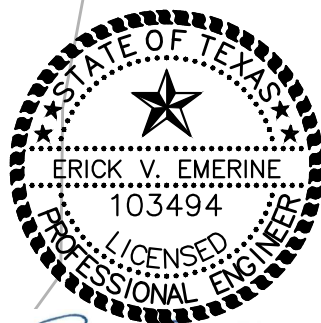
Filed for record Feb'y 21, 1907, at 10 o'clock A.M.
Recorded March 2, 1907. Frank Wolfen, County Clerk.

2.1.3: Facility Layout (Figure 3.15.1)

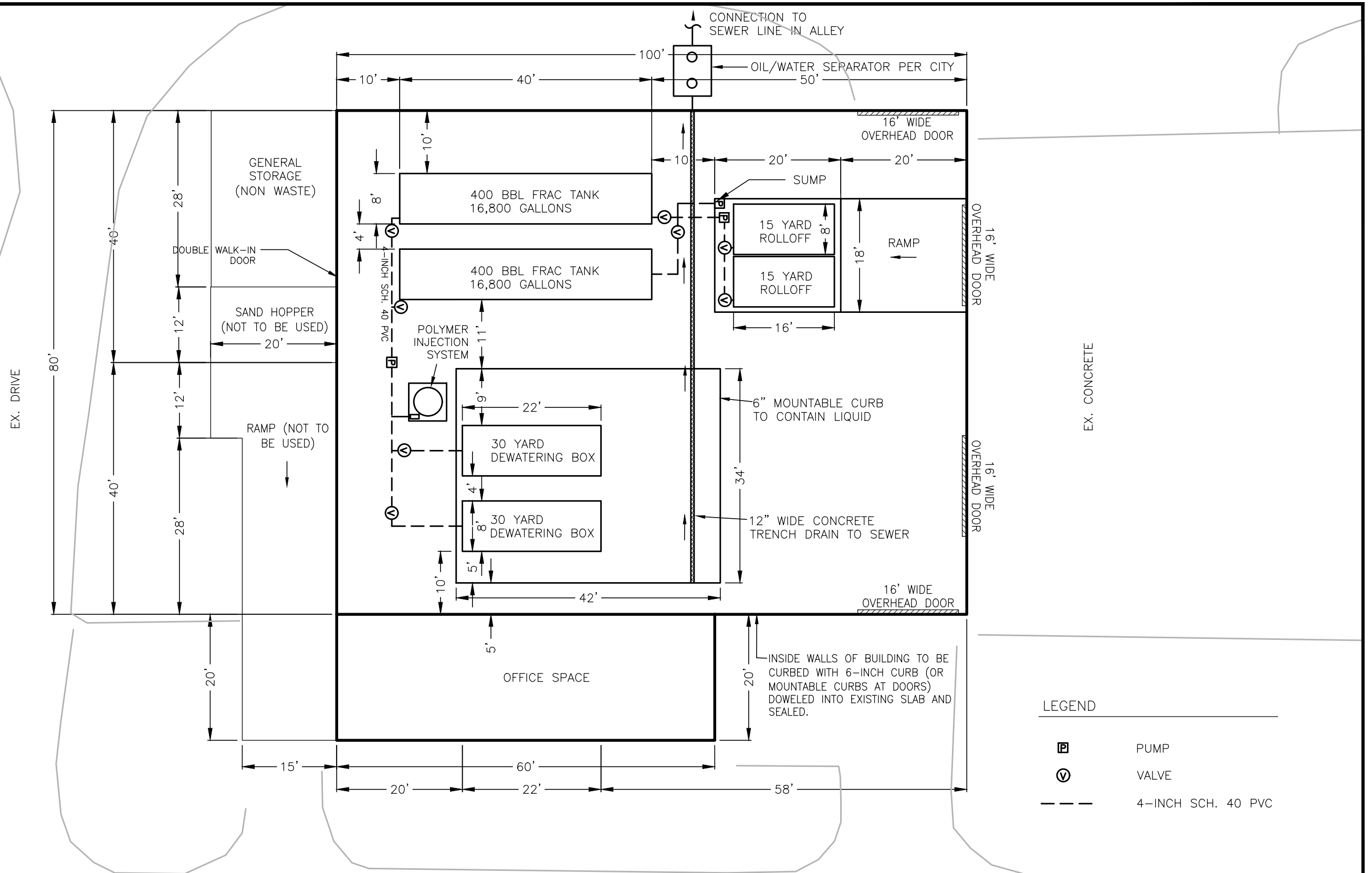


0 16
SCALE: 1" = 16'

TX FIRM No. 2507



07-11-2025



AMTEX LIQUID WASTE PROCESSING LLC
AMARILLO
POTTER COUNTY, TEXAS

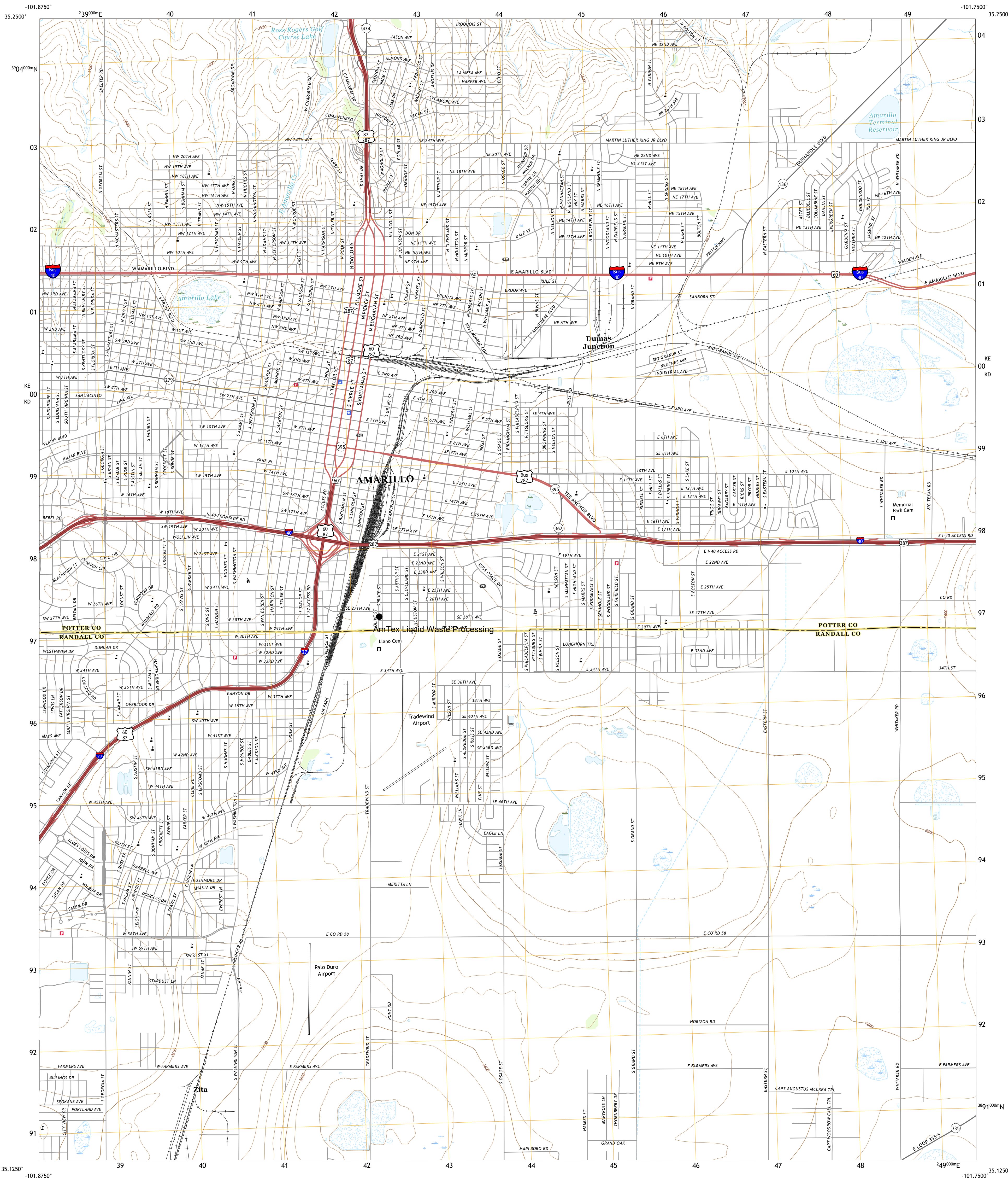
AM TEX LIQUID WASTE PROCESSING LAYOUT

FIGURE 3.15.1



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

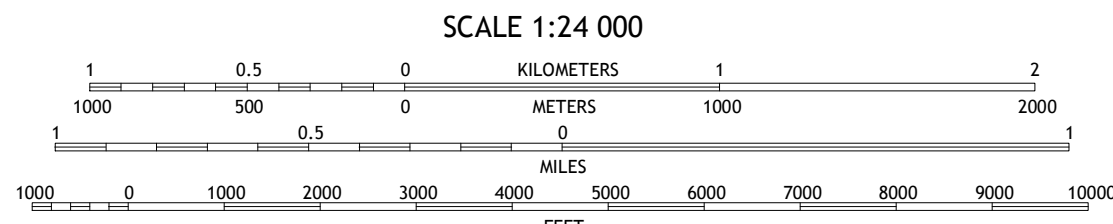
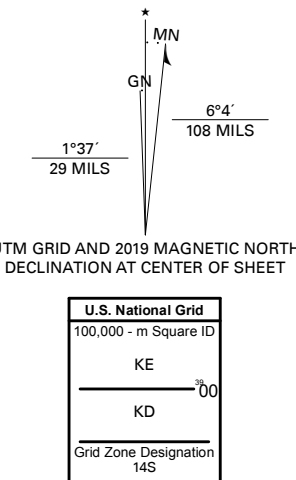
2.1.4: Topo Map



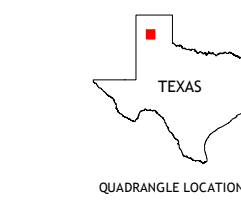
Produced by the United States Geological Survey

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.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2018
Names.....GNIS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2002
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 2003 - 2005



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



1	2	3
4	5	6
7	8	9

1 Cliffside
2 Pleasant Valley
3 Mayer
4 Amarillo West
5 Pullman
6 Buffalo Stadium
7 The Palisades
8 Thomas Ranch

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



2.1.5: Polymer - MSDS



SAFETY DATA SHEET

According to U.S. Code of Federal Regulations 29 CFR
1910.1200, Hazard Communication.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

ADS 5084G

Product name:

Type of product: Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Processing aid for industrial applications.

Uses advised against: None.

1.3. Details of the supplier of the safety data sheet

AQUA-Zyme Disposal Systems, Inc.

Company:

PO BOX 489
Van Vleck, TX 77482
United States
(979) 245-5656

Telephone: Telefax:

E-mail address:

1.4. Emergency telephone number

24-hour emergency number:

Chemtrec: 1-800-424-9300 (CCN 20412)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of 29 CFR 1910.1200:

2.2. Label elements

Labelling according to paragraph (f) of 29 CFR 1910.1200:

Hazard symbol(s): None.

Signal word: None.

Hazard statement(s): None.

Precautionary statement(s): None.

2.3. Other hazards

Spills produce extremely slippery surfaces.

For explanation of abbreviations see Section 16.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable, this product is a mixture.

3.2. Mixtures

This product is a mixture.

Hazardous components

Distillates (petroleum), hydrotreated light

Concentration/ -range: 20 - 30%

CAS Number: 64742-47-8

Asp. Tox. 1; H304

Classification according to paragraph (d) of 29 CFR 1910.1200:

Notes

Does not result in classification of the mixture if the kinematic viscosity is greater than 20.5 mm²/s measured at 40°C.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Concentration/ -range: < 5%

CAS Number: 69011-36-5

Acute Tox. 4; H302, Eye Dam. 1; H318

Classification according to paragraph (d) of 29 CFR 1910.1200:

For explanation of abbreviations see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. No hazards which require special first aid measures.

Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of persistent skin irritation, consult a physician.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Ingestion:

Rinse mouth with water. Do NOT induce vomiting. Call a physician or poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed

None under normal use.

4.3. Indication of any immediate medical attention and special treatment needed

None reasonably foreseeable.

Other information:

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder. Warning! Spills produce extremely slippery surfaces.

Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), Carbon oxides (CO_x). Ammonia (NH₃). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3. Advice for firefighters

Protective measures:

Wear self-contained breathing apparatus and protective suit.

Other information:

Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

Personal precautions:

Avoid contact with skin and eye. Do not touch or walk through spilled material. Spills produce extremely slippery surfaces.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures:

Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

6.2. Environmental precautions

As with all chemical products, do not flush into surface water.

6.3. Methods and material for containment and cleaning up

Small spills:

Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Large spills:

Do not flush with water. Dam up. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum.

Residues:

After cleaning, flush away traces with water.

6.4. Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Renders surfaces extremely slippery when spilled. When using, do not eat, drink, or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material. Incompatible with oxidizing agents.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Distillates (petroleum), hydrotreated light

ACGIH: 200 mg/m³ (8 hours) (vapors)

8.2. Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas. Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual protection measures, such as personal protective equipment:

a) Eye/face protection:

Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

i) Hand Protection: PVC or other plastic material gloves. Be aware that liquid may permeate gloves, frequent change is advised. Suitable gloves can be recommended by the glove supplier. The selected protective gloves must satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

ii) Other: Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur. The type of protective equipment must be selected according to the concentrations and amount of the dangerous substance at the specific workplace.

c) Respiratory Protection: No personal respiratory protective equipment normally required.

d) Additional advice:

Wash hands before breaks and at the end of workday. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance: Viscous liquid, Milky.

b) Odour: Aliphatic.

c) Odour Threshold: No data available.

d) pH: Not applicable.

e) Melting point/freezing point: < 5°C

f) Initial boiling point and boiling range: > 100°C

g) Flash point: Does not flash.

<i>h) Evaporation rate:</i>	No data available.
<i>i) Flammability (solid, gas):</i>	Not applicable.
<i>j) Upper/lower flammability or explosive limits:</i>	Not expected to create explosive atmospheres.
<i>k) Vapour pressure:</i>	2.3 kPa @ 20°C
<i>l) Vapour density:</i>	0.804 g/litre @ 20°C
<i>m) Relative density:</i>	1.0 - 1.2 (See technical Bulletin or Product Specifications for more precise value, if available)
<i>n) Solubility(ies):</i>	Completely miscible.
<i>o) Partition coefficient:</i>	Not applicable.
<i>p) Autoignition temperature:</i>	No data available.
<i>q) Decomposition temperature:</i>	> 150°C
<i>r) Viscosity:</i>	> 20.5 mm ² /s @ 40°C
<i>s) Kinematic viscosity:</i>	No data available.
<i>t) Explosive properties</i>	Not expected to be explosive based on chemical structure.
<i>u) Oxidizing properties:</i>	Not expected to be oxidizing based on the chemical structure.
<i>v) Particle characteristics:</i>	Not applicable

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Oxidizing agents may cause exothermic reactions.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x). Ammonia (NH₃). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

<i>Acute oral toxicity:</i>	LD50/oral/rat > 5000 mg/kg (Estimated)
<i>Acute dermal toxicity:</i>	LD50/dermal/rat > 5000 mg/kg. (Estimated)
<i>Acute inhalation toxicity:</i>	The product is not expected to be toxic by inhalation.
<i>Skin corrosion/irritation:</i>	Non-irritating to skin.
<i>Serious eye damage/eye irritation:</i>	Not irritating. (OECD 437)
<i>Respiratory/skin sensitisation:</i>	Not sensitizing.
<i>Mutagenicity:</i>	Not mutagenic.
<i>Carcinogenicity:</i>	Not carcinogenic.
<i>Reproductive toxicity:</i>	Not toxic for reproduction.
<i>STOT - Single exposure:</i>	No known effects.
<i>STOT - Repeated exposure:</i>	No known effect.
<i>Aspiration hazard:</i>	Due to the viscosity, this product does not present an aspiration hazard.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

<i>Acute oral toxicity:</i>	LD50/oral/rat > 5000 mg/kg (OECD 401)
<i>Acute dermal toxicity:</i>	LD50/dermal/rabbit > 5000 mg/kg (OECD 402)
<i>Acute inhalation toxicity:</i>	LC0/inhalation/4 hours/rat \geq 4951 mg/m ³ (vapors) (OECD 403) (Based on results obtained from tests on analogous products)
<i>Skin corrosion/irritation:</i>	Not irritating. (OECD 404) Repeated exposure may cause skin dryness or cracking.
<i>Serious eye damage/eye irritation:</i>	Not irritating. (OECD 405)
<i>Respiratory/skin sensitisation:</i>	By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)
<i>Mutagenicity:</i>	Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)

Carcinogenicity: Carcinogenicity study in rats (OECD 451): Negative.

Reproductive toxicity: By analogy with similar substances, this substance is not expected to be toxic for reproduction.
NOAEL/rat = 300 ppm. (OECD 421)

STOT - Single exposure: No known effects.

STOT - Repeated exposure: Based on available data, product is not expected to demonstrate chronic toxic effects.
NOAEL/oral/rat/90 days \geq 3000 mg/kg/day (OECD 408) (Based on results obtained from tests on analogous products)

Aspiration hazard: May be fatal if swallowed and enters airways.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Acute oral toxicity: LD50/oral/rat = 500 - 2000 mg/kg

Acute dermal toxicity: LD50/dermal/rabbit > 2000 mg/kg

Acute inhalation toxicity: No data available.

Skin corrosion/irritation: Not irritating. (OECD 404)

Serious eye damage/eye irritation: Causes serious eye irritation. (OECD 405)

Respiratory/skin sensitisation: By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)

Mutagenicity: Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)

Carcinogenicity: Carcinogenicity study in rats (OECD 451): Negative.

Reproductive toxicity: Based on available data, the product is not expected to be toxic for reproduction.
Two – Generation Reproduction Toxicity (OECD 416)
NOAEL/rat = 250 mg/kg/day
Prenatal Development Toxicity Study (OECD 414)
NOAEL/Maternal toxicity/rat = 50 mg/kg/day
NOAEL/Developmental toxicity/rat = 50 mg/kg/day

STOT - Single exposure: No known effects.

STOT - Repeated exposure: Based on available data, the product is not expected to demonstrate chronic toxic effects. NOAEL/oral/rat/600 days = 50 mg/kg/day

Aspiration hazard: No known effects.

SECTION 12: Ecological information

12.1. Toxicity

Information on the product as supplied:

<i>Acute toxicity to fish:</i>	LC50/Fish/96 hours > 10 - 100 mg/L (Estimated)
<i>Acute toxicity to invertebrates:</i>	EC50/Daphnia magna/48 hours > 10 - 100 mg/L (Estimated)
<i>Acute toxicity to algae:</i>	Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
<i>Chronic toxicity to fish:</i>	No data available.
<i>Chronic toxicity to invertebrates:</i>	No data available.
<i>Toxicity to microorganisms:</i>	No data available.
<i>Effects on terrestrial organisms:</i>	No data available.
<i>Sediment toxicity:</i>	No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

<i>Acute toxicity to fish:</i>	LC0/Oncorhynchus mykiss/96 hours > 1000 mg/L. (OECD 203)
<i>Acute toxicity to invertebrates:</i>	EC0/Daphnia magna/48 hours > 1000 mg/L (OECD 202)
<i>Acute toxicity to algae:</i>	IC0/Pseudokirchneriella subcapitata/72 hours > 1000 mg/L. (OECD 201)
<i>Chronic toxicity to fish:</i>	NOEC/Oncorhynchus mykiss/28 days > 1000 mg/L
<i>Chronic toxicity to invertebrates:</i>	NOEC/Daphnia magna/21 days > 1000 mg/L
<i>Toxicity to microorganisms:</i>	EC50/Tetrahymena pyriformis/ 48h > 1000 mg/L.
<i>Effects on terrestrial organisms:</i>	No data available.
<i>Sediment toxicity:</i>	No data available. Readily biodegradable, exposure to sediment is unlikely.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

<i>Acute toxicity to fish:</i>	LC50/Cyprinus carpio/96 hours = 1 - 10 mg/L (OECD 203)
--------------------------------	--

Acute toxicity to invertebrates: EC50/Daphnia/48 hours = 1 - 10 mg/L (OECD 202)

Acute toxicity to algae: IC50/Desmodesmus subspicatus/72 hours = 1 - 10 mg/L (OECD 201)

Chronic toxicity to fish: No data available.

Chronic toxicity to invertebrates: NOEC/Daphnia magna/21 days > 1 mg/L (OECD 202)

Toxicity to microorganisms: EC10/activated sludge/17 hours > 10000 mg/L (DIN 38412-8)

Effects on terrestrial organisms: No data available.

Sediment toxicity: No data available.

12.2. Persistence and degradability

Information on the product as supplied:

Degradation: Based on the degradability, data of the components, this product is expected to be readily (bio)degradable according to OECD criteria.

Hydrolysis: At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

Photolysis: No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Degradation: Readily biodegradable. 67.6% / 28 days (OECD 301 F); 68.8% / 28 days (OECD 306); 61.2% / 61 days (OECD 304 A)

Hydrolysis: Does not hydrolyse.

Photolysis: No data available.

Poly(oxy-1,2-ethanediyl), *n*-tridecyl-*ω*-hydroxy-, branched

Degradation: Readily biodegradable. > 60% / 28 days (OECD 301 B)

Hydrolysis: Does not hydrolyse.

Photolysis: No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): Not applicable.

Bioconcentration factor (BCF): No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Partition co-efficient (Log Pow): 3 - 6

Bioconcentration factor (BCF): No data available.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Partition co-efficient (Log Pow): > 3

Bioconcentration factor (BCF): No data available.

12.4. Mobility in soil

Information on the product as supplied:

No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Koc: No data available.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Koc: > 5000

12.5. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products:

Dispose in accordance with local and national regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling:

Store containers and offer recycling of material when in accordance with the local regulations.

SECTION 14: Transport information

Land transport (DOT)

Not classified.

Sea transport (IMDG)

Not classified.

Air transport (IATA)

Not classified.

SECTION 15: Regulatory information

15.1. Safety, health, and environmental regulations/legislation specific for the substance or mixture

Information on the product as supplied:

TSCA Chemical Substances Inventory:

All components of this product are either listed as active on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:

Not concerned.

SARA Title III Sections:

Section 302 (TPQ) - Reportable Quantity:

Not concerned.

Section 304 - Reportable Quantity:

Not concerned.

Section 313 (De minimis concentration):

Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) - Reportable Quantity: Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) - Reportable Quantity: Not concerned.

CERCLA

Hazardous Substances List (40 CFR 302.4) - Reportable Quantity: Not concerned.

RCRA status:

Not RCRA hazardous.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide

SECTION 16: Other information

NFPA and HMIS Ratings:

NFPA:

Health:	0
Flammability:	1
Instability:	0



HMIS:

Health:	0
Flammability:	1
Physical	0
Hazard: PPE	B
Code:	

This data sheet contains changes from the previous version in section(s):

SECTION 8. Exposure controls/personal protection, SECTION 9. Physical and chemical properties. SECTION 16. Other information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

Acronyms

STOT = Specific target organ toxicity

Abbreviations

Acute Tox. 4 = Acute toxicity Category Code 4

Asp. Tox. 1 = Aspiration hazard Category Code 1

Eye Dam 1 = Serious eye damage/eye irritation Category Code 1

Hazard statements

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H318 - Causes serious eye damage

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 29 CFR 1910.1200

Version: 19.01.c

ENAC001A

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

2.2.1: Lab Analysis Examples – Before Processing/After Processing

Laboratory Analysis Report

Total Number of Pages: 41

Job ID : 11090672



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, <http://www.ablabs.com>

Client Project Name :

Report To :	Client Name: Aqua Zyme Services	P.O.#:
	Attn: Justin	Sample Collected By: Allison Diamond
	Client Address: PO Box 800	Date Collected: 09/20/11
	City, State, Zip: Van Vleck, Texas, 77482	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Septic Before	Water	11090672.01
Septic After	Water	11090672.02
Grease Before	Water	11090672.03
Grease After	Water	11090672.04

A handwritten signature in black ink that reads 'Shantall Carpenter'.

Released By: Shantall Carpenter
Title: Senior Project Manager
Date: 9/29/2011

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted.



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Septic Before

Job Sample ID: 11090672.01

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 12:47

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	31.4	mg/L	1.12	2.80			09/27/11 09:30	SG
EPA 200.7	Total Recoverable Metals								
	Aluminum	13.30	mg/L	1	0.01			09/21/11 14:39	SS
	Arsenic	0.01	mg/L	1	0.01			09/21/11 14:39	SS
	Barium	0.50	mg/L	1	0.01			09/21/11 14:39	SS
	Boron	0.27	mg/L	1	0.01			09/21/11 14:39	SS
	Cadmium	BRL	mg/L	1	0.01			09/21/11 14:39	SS
	Chromium	0.02	mg/L	1	0.01			09/21/11 14:39	SS
	Cobalt	BRL	mg/L	1	0.01			09/21/11 14:39	SS
	Copper	0.27	mg/L	1	0.01			09/21/11 14:39	SS
	Iron	13.30	mg/L	1	0.02			09/21/11 14:39	SS
	Lead	0.05	mg/L	1	0.01			09/21/11 14:39	SS
	Manganese	0.31	mg/L	1	0.01			09/21/11 14:39	SS
	Molybdenum	BRL	mg/L	1	0.02			09/21/11 14:39	SS
	Nickel	0.03	mg/L	1	0.01			09/21/11 14:39	SS
	Selenium	BRL	mg/L	1	0.05			09/21/11 14:39	SS
	Silver	BRL	mg/L	1	0.01			09/21/11 14:39	SS
	Zinc	1.81	mg/L	1	0.02			09/21/11 14:39	SS
EPA 200.7	Total Recoverable Metals								
	Lithium	BRL	mg/L	1	0.1			09/28/11 12:00	SC
	Tin	BRL	mg/L	1	0.1			09/27/11 12:04	SS
EPA 245.1	Total Metals - Mercury								
	Mercury	0.00065	mg/L	1	0.0002			09/23/11 14:18	GG
EPA 300.0	Anions								
	Fluoride	BRL	mg/L	1	0.1			09/28/11 15:28	JKD
	Sulfate	6.53	mg/L	1	0.1			09/28/11 15:28	JKD
EPA 330.5	Chlorine, as Total Residual								
	Chlorine, Free	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
	Chlorine, Total	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
EPA 420.1	Phenolics (Total Phenols)								
	Phenols	BRL	mg/L	5.00	0.250			09/29/11 14:08	SR
LA 29-B	Sodium Adsorption Ratio								
	SAR	4.4	meq/L	1	0.1			09/22/11 18:00	SC
NIOSH 3500	Formaldehyde								
	Formaldehyde	BRL	mg/L	10	0.5			09/28/11 15:10	KS
SM 2120B	Apparent Color								
	Color	<100	PCU	100	200			09/22/11 10:00	AJ
SM 2150B	Threshold Odor Test								



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Septic Before

Job Sample ID: 11090672.01

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 12:47

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
	Odor	>200		200	200			09/21/11 10:45	AJ
SM 2510B	Conductivity								
	Conductance	1674	umho/cm	1	5			09/29/11 16:05	SR
SM 2540D	Total Suspended Solids								
	TSS	849	mg/L	10	25			09/22/11 12:01	PRK
SM 2550B									
	Temperature	27.6		1				09/20/11 12:47	AD
SM 4500CNC/E	Total Cyanide								
	Cyanide	0.045	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500CN-I	Weak Acid Dissociable Cyanide								
	Cyanide, Free	0.037	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500H B	Corrosivity, pH								
	pH	6.83	s.u.	1				09/20/11 12:47	AD
SM 4500NH3D	Ammonia as Nitrogen								
	Ammonia as N	65.0	mg/L	20	2.00	5		09/28/11 13:22	SR
SM 4500NH3D	Total Kjeldahl Nitrogen								
	TKN	79.4	mg/L	50	25			09/29/11 14:44	KS
SM 4500P-E									
	Phosphorus	9.0	mg/L	20	1			09/22/11 17:34	SR
SM 4500-S D	Sulfide								
	Sulfide	BRL	mg/L	10	0.5		H1	09/29/11 12:40	KS
SM 4500SO3-B	Reducing Agents, as Sulfite								
	Sulfite	20	mg/L	1	2		H3	09/21/11 11:00	SG
SM 5220D	Chemical Oxygen Demand								
	COD	306	mg/L	2.00	20			09/29/11 10:44	KS
SW-846 1010A	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				09/21/11 10:30	PRK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	1.06	mg/L	1	1		J	09/22/11 09:00	AVB
	>C12-C28	11.2	mg/L	1	2.48			09/22/11 09:00	AVB
	>C28-C35	23.2	mg/L	1	1.88			09/22/11 09:00	AVB
	Total C6-C35	35.46	mg/L	1				09/22/11 09:00	AVB
	1-Chlorooctane(surr)	100	%	1	60-120			09/22/11 09:00	AVB
	Chlorooctadecane(surr)	N/A	%	1	53-122		S5	09/22/11 09:00	AVB



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Septic After

Job Sample ID: 11090672.02

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 13:50

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	BRL	mg/L	1.12	2.80			09/27/11 09:30	SG
EPA 200.7	Total Recoverable Metals								
	Aluminum	0.02	mg/L	1	0.01			09/21/11 14:45	SS
	Arsenic	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Barium	0.10	mg/L	1	0.01			09/21/11 14:45	SS
	Boron	0.48	mg/L	1	0.01			09/21/11 14:45	SS
	Cadmium	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Chromium	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Cobalt	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Copper	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Iron	0.64	mg/L	1	0.02			09/21/11 14:45	SS
	Lead	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Manganese	0.14	mg/L	1	0.01			09/21/11 14:45	SS
	Molybdenum	BRL	mg/L	1	0.02			09/21/11 14:45	SS
	Nickel	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Selenium	BRL	mg/L	1	0.05			09/21/11 14:45	SS
	Silver	BRL	mg/L	1	0.01			09/21/11 14:45	SS
	Zinc	0.03	mg/L	1	0.02			09/21/11 14:45	SS
EPA 200.7	Total Recoverable Metals								
	Lithium	BRL	mg/L	1	0.1			09/28/11 12:02	SC
	Tin	BRL	mg/L	1	0.1			09/27/11 12:07	SS
EPA 245.1	Total Metals - Mercury								
	Mercury	BRL	mg/L	1	0.0002			09/23/11 13:58	GG
EPA 300.0	Anions								
	Fluoride	BRL	mg/L	1	0.1			09/28/11 17:23	JKD
	Sulfate	3.33	mg/L	1	0.1			09/28/11 17:23	JKD
EPA 330.5	Chlorine, as Total Residual								
	Chlorine, Free	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
	Chlorine, Total	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
EPA 420.1	Phenolics (Total Phenols)								
	Phenols	0.2625	mg/L	5.00	0.250			09/29/11 14:08	SR
LA 29-B	Sodium Adsorption Ratio								
	SAR	8.1	meq/L	1	0.1			09/22/11 18:00	SC
NIOSH 3500	Formaldehyde								
	Formaldehyde	BRL	mg/L	10	0.5			09/28/11 15:10	KS
SM 2120B	Apparent Color								
	Color	<100	PCU	100	200			09/22/11 10:00	AJ
SM 2150B	Threshold Odor Test								



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Septic After

Job Sample ID: 11090672.02

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 13:50

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
	Odor	>200		200	200			09/21/11 10:45	AJ
SM 2510B	Conductivity								
	Conductance	3390	umho/cm	1	5			09/29/11 16:05	SR
SM 2540D	Total Suspended Solids								
	TSS	12.1	mg/L	1	2.50			09/22/11 12:01	PRK
SM 2550B									
	Temperature	26.3	°C	1				09/20/11 13:50	AD
SM 4500CNC/E	Total Cyanide								
	Cyanide	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500CN-I	Weak Acid Dissociable Cyanide								
	Cyanide, Free	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500H B	Corrosivity, pH								
	pH	6.95	s.u.	1				09/20/11 13:50	AD
SM 4500NH3D	Ammonia as Nitrogen								
	Ammonia as N	201.9	mg/L	25	2.50	5		09/28/11 13:22	SR
SM 4500NH3D	Total Kjeldahl Nitrogen								
	TKN	208.4	mg/L	50	25			09/29/11 14:44	KS
SM 4500P-E									
	Phosphorus	20	mg/L	50	2.50			09/22/11 17:34	SR
SM 4500-S D	Sulfide								
	Sulfide	BRL	mg/L	10	0.5		H1	09/29/11 12:40	KS
SM 4500SO3-B	Reducing Agents, as Sulfite								
	Sulfite	8	mg/L	1	2		H3	09/21/11 11:00	SG
SM 5220D	Chemical Oxygen Demand								
	COD	1298	mg/L	2.00	20			09/29/11 10:44	KS
SW-846 1010A	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				09/21/11 10:30	PRK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	2.52	mg/L	1	1			09/22/11 09:00	AVB
	>C12-C28	BRL	mg/L	1	2.48			09/22/11 09:00	AVB
	>C28-C35	BRL	mg/L	1	1.88			09/22/11 09:00	AVB
	Total C6-C35	2.52	mg/L	1				09/22/11 09:00	AVB
	1-Chlorooctane(surr)	118	%	1	60-120			09/22/11 09:00	AVB
	Chlorooctadecane(surr)	97.2	%	1	53-122			09/22/11 09:00	AVB



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Grease Before

Job Sample ID: 11090672.03

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 13:40

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 200.7	Total Recoverable Metals								
	Aluminum	21.8	mg/L	2	0.02			09/22/11 17:12	SC
	Arsenic	0.056	mg/L	2	0.02			09/22/11 17:12	SC
	Barium	2.47	mg/L	2	0.02			09/22/11 17:12	SC
	Boron	0.363	mg/L	2	0.02			09/22/11 17:12	SC
	Cadmium	BRL	mg/L	2	0.02		D1,U	09/22/11 17:12	SC
	Chromium	0.171	mg/L	2	0.02			09/22/11 17:12	SC
	Cobalt	BRL	mg/L	2	0.02		D1,U	09/22/11 17:12	SC
	Copper	1.4	mg/L	2	0.02			09/22/11 17:12	SC
	Iron	29.3	mg/L	2	0.04			09/22/11 17:12	SC
	Lead	0.143	mg/L	2	0.02			09/22/11 17:12	SC
	Manganese	0.619	mg/L	2	0.02			09/22/11 17:12	SC
	Molybdenum	0.06	mg/L	2	0.04			09/22/11 17:12	SC
	Nickel	0.087	mg/L	2	0.02			09/22/11 17:12	SC
	Selenium	BRL	mg/L	2	0.1		D1,U	09/22/11 17:12	SC
	Silver	BRL	mg/L	2	0.02		D1,U	09/22/11 17:12	SC
	Zinc	4.51	mg/L	2	0.04			09/22/11 17:12	SC
EPA 200.7	Total Recoverable Metals								
	Lithium	BRL	mg/L	1	0.1			09/28/11 12:04	SC
	Tin	0.197	mg/L	1	0.1			09/27/11 12:11	SS
EPA 245.1	Total Metals - Mercury								
	Mercury	BRL	mg/L	10	0.002		D1	09/23/11 18:04	GG
EPA 300.0	Anions								
	Fluoride	0.298	mg/L	1	0.1			09/28/11 17:42	JKD
	Sulfate	1.35	mg/L	1	0.1			09/28/11 17:42	JKD
EPA 330.5	Chlorine, as Total Residual								
	Chlorine, Free	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
	Chlorine, Total	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
EPA 420.1	Phenolics (Total Phenols)								
	Phenols	0.3122	mg/L	5.00	0.250			09/29/11 14:08	SR
LA 29-B	Sodium Adsorption Ratio								
	SAR	4.1	meq/L	1	0.1			09/22/11 18:00	SC
NIOSH 3500	Formaldehyde								
	Formaldehyde	BRL	mg/L	10	0.5			09/28/11 15:10	KS
SM 2120B	Apparent Color								
	Color	<100	PCU	100	200			09/22/11 10:00	AJ
SM 2150B	Threshold Odor Test								
	Odor	>200		200	200			09/21/11 10:45	AJ
SM 2510B	Conductivity								



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Grease Before

Job Sample ID: 11090672.03

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 13:40

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
	Conductance	3850	umho/cm	1	5			09/29/11 16:05	SR
SM 2540D	Total Suspended Solids								
	TSS	24600	mg/L	20	50			09/22/11 12:01	PRK
SM 2550B									
	Temperature	29.5	°C	1				09/20/11 13:40	AD
SM 4500CNC/E	Total Cyanide								
	Cyanide	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500CN-I	Weak Acid Dissociable Cyanide								
	Cyanide, Free	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500H B	Corrosivity, pH								
	pH	7.01	s.u.	1				09/20/11 13:40	AD
SM 4500NH3D	Ammonia as Nitrogen								
	Ammonia as N	184.0	mg/L	50	5.00	5		09/28/11 13:22	SR
SM 4500NH3D	Total Kjeldahl Nitrogen								
	TKN	259.9	mg/L	250	125			09/29/11 14:44	KS
SM 4500P-E									
	Phosphorus	57	mg/L	100	5.00			09/22/11 17:34	SR
SM 4500-S D	Sulfide								
	Sulfide	BRL	mg/L	10	0.5		H1	09/29/11 12:40	KS
SM 4500SO3-B	Reducing Agents, as Sulfite								
	Sulfite	84	mg/L	1	2		H3	09/21/11 11:00	SG
SM 5220D	Chemical Oxygen Demand								
	COD	9420	mg/L	10	100			09/29/11 10:44	KS
SW-846 1010A	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				09/21/11 10:30	PRK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	411	mg/L	100	100			09/29/11 15:09	AVB
	>C12-C28	2278	mg/L	100	248			09/29/11 15:09	AVB
	>C28-C35	169	mg/L	10	18.8			09/29/11 13:59	AVB
	Total C6-C35	2858	mg/L	100				09/29/11 15:09	AVB
	1-Chlorooctane(surr)	8987	%	10	60-120		S5	09/29/11 15:09	AVB
	Chlorooctadecane(surr)	4463	%	10	53-122		S5	09/29/11 15:09	AVB



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Grease After

Job Sample ID: 11090672.04

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 14:15

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	BRL	mg/L	1.14	2.85			09/27/11 09:30	SG
EPA 200.7	Total Recoverable Metals								
	Aluminum	0.15	mg/L	1	0.01			09/21/11 14:50	SS
	Arsenic	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Barium	0.47	mg/L	1	0.01			09/21/11 14:50	SS
	Boron	0.36	mg/L	1	0.01			09/21/11 14:50	SS
	Cadmium	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Chromium	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Cobalt	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Copper	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Iron	10.30	mg/L	1	0.02			09/21/11 14:50	SS
	Lead	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Manganese	0.51	mg/L	1	0.01			09/21/11 14:50	SS
	Molybdenum	BRL	mg/L	1	0.02			09/21/11 14:50	SS
	Nickel	0.02	mg/L	1	0.01			09/21/11 14:50	SS
	Selenium	BRL	mg/L	1	0.05			09/21/11 14:50	SS
	Silver	BRL	mg/L	1	0.01			09/21/11 14:50	SS
	Zinc	0.11	mg/L	1	0.02			09/21/11 14:50	SS
EPA 200.7	Total Recoverable Metals								
	Lithium	BRL	mg/L	1	0.1			09/28/11 12:07	SC
	Tin	BRL	mg/L	1	0.1			09/27/11 12:14	SS
EPA 245.1	Total Metals - Mercury								
	Mercury	BRL	mg/L	1	0.0002			09/23/11 14:02	GG
EPA 300.0	Anions								
	Fluoride	BRL	mg/L	1	0.1			09/28/11 18:00	JKD
	Sulfate	6.58	mg/L	1	0.1			09/28/11 18:00	JKD
EPA 330.5	Chlorine, as Total Residual								
	Chlorine, Free	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
	Chlorine, Total	BRL	mg/L	1	0.05	0.1	H3	09/21/11 16:55	AJ
EPA 420.1	Phenolics (Total Phenols)								
	Phenols	0.3122	mg/L	5.00	0.250			09/29/11 14:08	SR
LA 29-B	Sodium Adsorption Ratio								
	SAR	5.2	meq/L	1	0.1			09/22/11 18:00	SC
NIOSH 3500	Formaldehyde								
	Formaldehyde	BRL	mg/L	10	0.5			09/28/11 15:10	KS
SM 2120B	Apparent Color								
	Color	<100	PCU	100	200			09/22/11 10:00	AJ
SM 2150B	Threshold Odor Test								



LABORATORY TEST RESULTS

Job ID : 11090672

Date 9/29/2011

Client Name: Aqua Zyme Services

Attn: Justin

Project Name:

Client Sample ID: Grease After

Job Sample ID: 11090672.04

Date Collected: 09/20/11

Sample Matrix Water

Time Collected: 14:15

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
	Odor	>200		200	200			09/21/11 10:45	AJ
SM 2510B	Conductivity								
	Conductance	3510	umho/cm	1	5			09/29/11 16:05	SR
SM 2540D	Total Suspended Solids								
	TSS	150	mg/L	2	5			09/22/11 12:01	PRK
SM 2550B	Temperature	28.5	°C	1				09/20/11 14:15	AD
SM 4500CNC/E	Total Cyanide								
	Cyanide	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500CN-I	Weak Acid Dissociable Cyanide								
	Cyanide, Free	BRL	mg/L	1	0.02			09/26/11 13:52	SR
SM 4500H B	Corrosivity, pH								
	pH	5.21	s.u.	1				09/20/11 14:15	AD
SM 4500NH3D	Ammonia as Nitrogen								
	Ammonia as N	151.5	mg/L	20	2.00	5		09/28/11 13:22	SR
SM 4500NH3D	Total Kjeldahl Nitrogen								
	TKN	200.5	mg/L	100	50			09/29/11 14:44	KS
SM 4500P-E	Phosphorus	46	mg/L	100	5.00			09/22/11 17:34	SR
SM 4500-S D	Sulfide								
	Sulfide	BRL	mg/L	10	0.5		H1	09/29/11 12:40	KS
SM 4500SO3-B	Reducing Agents, as Sulfite								
	Sulfite	8	mg/L	1	2		H3	09/21/11 11:00	SG
SM 5220D	Chemical Oxygen Demand								
	COD	6650	mg/L	10	100			09/29/11 10:44	KS
SW-846 1010A	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				09/21/11 10:30	PRK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	83.9	mg/L	10	10			09/22/11 09:00	AVB
	>C12-C28	3.75	mg/L	1	2.48			09/22/11 09:00	AVB
	>C28-C35	BRL	mg/L	1	1.88			09/22/11 09:00	AVB
	Total C6-C35	87.65	mg/L	1				09/22/11 09:00	AVB
	1-Chlorooctane(surr)	N/A	%	10	60-120		S5	09/22/11 09:00	AVB
	Chlorooctadecane(surr)	117	%	10	53-122			09/22/11 09:00	AVB

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Reducing Agents, as Sulfite **Method :** SM 4500SO3-B **Reporting Units :** mg/L

QC Batch ID : Qb11092140 **Created Date :** 09/21/11 **Created By :** Sgarcia

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Sulfite		BRL	mg/L	1	2	

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Sulfite	19.53	19.53	mg/L	0	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Sulfite	1000	904	90.4	1000	884	88.4	2.2	20	70-130	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Ignitability (Flash Point)

Method : SW-846 1010A

Reporting Units : °F

QC Batch ID : Qb11092142

Created Date : 09/21/11

Created By : PRKasar

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Ignitability	>150	>150	°F		20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	84	101	0	20	75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Recoverable Metals **Method :** EPA 200.7 **Reporting Units :** mg/L

QC Batch ID : Qb11092143 **Created Date :** 09/21/11 **Created By :** Ssrinivasan

Samples in This QC Batch : 11090672.01,02,04

Digestion : PB11092129 **Prep Method :** EPA 200.7 **Prep Date :** 09/21/11 11:30 **Prep By :** Ggorane

QC Type: Method Blank										
Parameter	CAS #	Result	Units	D.F.	RptLimit					Qual
Aluminum	7429-90-5	BRL	mg/L	1	0.01					
Arsenic	7440-38-2	BRL	mg/L	1	0.01					
Barium	7440-39-3	BRL	mg/L	1	0.01					
Boron	7440-42-8	BRL	mg/L	1	0.01					
Cadmium	7440-43-9	BRL	mg/L	1	0.01					
Chromium	7440-47-3	BRL	mg/L	1	0.01					
Cobalt	7440-48-8	BRL	mg/L	1	0.01					
Copper	7440-50-8	BRL	mg/L	1	0.01					
Iron	7439-89-6	BRL	mg/L	1	0.02					
Lead	7439-92-1	BRL	mg/L	1	0.01					
Manganese	7439-95-5	BRL	mg/L	1	0.01					
Molybdenum	7439-98-7	BRL	mg/L	1	0.02					
Nickel	7440-02-0	BRL	mg/L	1	0.01					
Selenium	7782-49-2	BRL	mg/L	1	0.05					
Silver	7440-22-4	BRL	mg/L	1	0.01					
Zinc	7440-66-6	BRL	mg/L	1	0.02					

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Aluminum	1	1.04	104	1	1.04	104	0	20	85-115	
Arsenic	1	1.01	101	1	1.02	102	1	20	85-115	
Barium	1	1.05	105	1	1.05	105	0	20	85-115	
Boron	1	1.03	103	1	1.03	103	0	20	85-115	
Cadmium	1	1.00	100	1	1.01	101	1	20	85-115	
Chromium	1	1.01	101	1	1.02	102	1	20	85-115	
Cobalt	1	1.02	102	1	1.03	103	1	20	85-115	
Copper	1	1.04	104	1	1.04	104	0	20	85-115	
Iron	1	1.03	103	1	1.03	103	0	20	85-115	
Lead	1	1.01	101	1	1.01	101	0	20	85-115	
Manganese	1	1.03	103	1	1.04	104	1	20	85-115	
Molybdenum	1	1.05	105	1	1.05	105	0	20	85-115	
Nickel	1	1.01	101	1	1.02	102	1	20	85-115	
Selenium	1	0.99	99.2	1	1.00	99.6	0.4	20	85-115	
Silver	1	1.01	101	1	1.01	101	0	20	85-115	
Zinc	1	1.00	99.5	1	1.00	99.6	0.1	20	85-115	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Recoverable Metals

Method : EPA 200.7

Reporting Units : mg/L

QC Batch ID : Qb11092143

Created Date : 09/21/11

Created By : Ssrinivasan

Samples in This QC Batch : 11090672.01,02,04

QC Type: MS and MSD

QC Sample ID: 11090671.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Aluminum	0.117	1	1.17	105						75-125	
Arsenic	BRL	1	1.12	111						75-125	
Barium	0.039	1	1.02	98.1						75-125	
Boron	0.445	1	1.50	106						75-125	
Cadmium	BRL	1	1.08	108						75-125	
Chromium	BRL	1	1.01	101						75-125	
Cobalt	BRL	1	0.96	96.1						75-125	
Copper	BRL	1	1.08	108						75-125	
Iron	0.117	1	1.12	100						75-125	
Lead	BRL	1	0.91	91.1						75-125	
Manganese	0.037	1	1.04	100						75-125	
Molybdenum	BRL	1	1.04	104						75-125	
Nickel	BRL	1	0.95	94.6						75-125	
Selenium	BRL	1	1.09	109						75-125	
Silver	BRL	1	1.11	111						75-125	
Zinc	0.02	1	1.02	100						75-125	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Suspended Solids **Method :** SM 2540D **Reporting Units :** mg/L

QC Batch ID : Qb11092229 **Created Date :** 09/22/11 **Created By :** PRKasar

Samples in This QC Batch : 11090672.01,02,03

Sample Preparation : PB11092215 **Prep Method :** SM 2540D **Prep Date :** 09/22/11 12:00 **Prep By :** PRKasar

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
TSS		BRL	mg/L	1	2.50	

QC Type: Duplicate

QC Sample ID: 11090643.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
TSS	20.0	19.5	mg/L	2.5	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TSS	500	495.0	99	500	496.7	99.3	0.3	20	72-108	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Suspended Solids **Method :** SM 2540D **Reporting Units :** mg/L

QC Batch ID : Qb11092230 **Created Date :** 09/22/11 **Created By :** PRKasar

Samples in This QC Batch : 11090672.04

Sample Preparation : PB11092215 **Prep Method :** SM 2540D **Prep Date :** 09/22/11 12:00 **Prep By :** PRKasar

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
TSS		BRL	mg/L	1	2.50		

QC Type: Duplicate

QC Sample ID: 11090672.04

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
TSS	148.6	150	mg/L	1.2	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TSS	500	494.4	98.9						72-108	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Recoverable Metals **Method :** EPA 200.7 **Reporting Units :** mg/L

QC Batch ID : Qb11092238 **Created Date :** 09/22/11 **Created By :** Scuello

Samples in This QC Batch : 11090672.03

Digestion : PB11092224 **Prep Method :** EPA 200.7 **Prep Date :** 09/22/11 10:40 **Prep By :** Ggorane

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Aluminum	7429-90-5	BRL	mg/L	1	0.01		
Arsenic	7440-38-2	BRL	mg/L	1	0.01		
Barium	7440-39-3	BRL	mg/L	1	0.01		
Boron	7440-42-8	BRL	mg/L	1	0.01		
Cadmium	7440-43-9	BRL	mg/L	1	0.01		
Chromium	7440-47-3	BRL	mg/L	1	0.01		
Cobalt	7440-48-8	BRL	mg/L	1	0.01		
Copper	7440-50-8	BRL	mg/L	1	0.01		
Iron	7439-89-6	BRL	mg/L	1	0.02		
Lead	7439-92-1	BRL	mg/L	1	0.01		
Manganese	7439-95-5	BRL	mg/L	1	0.01		
Molybdenum	7439-98-7	BRL	mg/L	1	0.02		
Nickel	7440-02-0	BRL	mg/L	1	0.01		
Selenium	7782-49-2	BRL	mg/L	1	0.05		
Silver	7440-22-4	BRL	mg/L	1	0.01		
Zinc	7440-66-6	BRL	mg/L	1	0.02		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Aluminum	1	1.03	103	1	1.04	104	1	20	85-115	
Arsenic	1	1.04	104	1	1.03	103	1	20	85-115	
Barium	1	0.99	99	1	0.986	98.6	0.4	20	85-115	
Boron	1	1.04	104	1	1.03	103	1	20	85-115	
Cadmium	1	1.02	102	1	1.01	101	1	20	85-115	
Chromium	1	0.991	99.1	1	0.993	99.3	0.2	20	85-115	
Cobalt	1	1.04	104	1	1.04	104	0	20	85-115	
Copper	1	0.988	98.8	1	0.989	98.9	0.1	20	85-115	
Iron	1	1.03	103	1	1.04	104	1	20	85-115	
Lead	1	1.02	102	1	1.02	102	0	20	85-115	
Manganese	1	0.943	94.3	1	0.946	94.6	0.3	20	85-115	
Molybdenum	1	1.03	103	1	1.03	103	0	20	85-115	
Nickel	1	1.04	104	1	1.03	103	1	20	85-115	
Selenium	1	1.03	103	1	1.02	102	1	20	85-115	
Silver	1	0.968	96.8	1	0.968	96.8	0	20	85-115	
Zinc	1	1.03	103	1	1.02	102	1	20	85-115	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Recoverable Metals

Method : EPA 200.7

Reporting Units : mg/L

QC Batch ID : Qb11092238

Created Date : 09/22/11

Created By : Scuello

Samples in This QC Batch : 11090672.03

QC Type: MS and MSD

QC Sample ID: 11090707.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Aluminum	0.084	1	1.14	106						75-125	
Arsenic	BRL	1	1.08	108						75-125	
Barium	0.064	1	1.04	97.6						75-125	
Boron	0.118	1	1.19	107						75-125	
Cadmium	BRL	1	1.04	104						75-125	
Chromium	BRL	1	0.994	99.1						75-125	
Cobalt	BRL	1	1.03	103						75-125	
Copper	0.066	1	1.07	100						75-125	
Iron	0.321	1	1.35	103						75-125	
Lead	BRL	1	1	99.7						75-125	
Manganese	0.012	1	0.951	93.9						75-125	
Molybdenum	BRL	1	1.05	105						75-125	
Nickel	0.019	1	1.04	102						75-125	
Selenium	BRL	1	1.07	107						75-125	
Silver	0.011	1	0.996	98.5						75-125	
Zinc	0.065	1	1.1	104						75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : **Method :** SM 4500P-E **Reporting Units :** mg/L

QC Batch ID : Qb11092254 **Created Date :** 09/23/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Phosphorus	7723-14-0	BRL	mg/L	1	0.05		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Phosphorus	0.200	0.195	97.4	0.200	0.188	93.8	3.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090516.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Phosphorus	0.4880	0.200	0.699	106						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : **Method :** LA 29-B **Reporting Units :** meq/L

QC Batch ID : Qb11092256 **Created Date :** 09/22/11 **Created By :** Scuello

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092255 **Prep Method :** LA 29-B **Prep Date :** 09/22/11 10:00 **Prep By :** Ssrinivasan

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
SAR		BRL	meq/L	1	0.1	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
SAR	0.16	0.177	111	0.16	0.179	112	1.1	20	80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/L

QC Batch ID : Qb11092309 **Created Date :** 09/21/11 **Created By :** AVBembde

Samples in This QC Batch : 11090672.01,02,04

Sample Preparation : PB11092303 **Prep Method :** TX 1005 **Prep Date :** 09/21/11 16:00 **Prep By :** AVBembde

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12	TPH-1005-1	BRL	mg/L	1	1.00		
>C12-C28	TPH-1005-2	BRL	mg/L	1	2.48		
>C28-C35	TPH-1005-4	BRL	mg/L	1	1.88		
Total C6-C35		BRL	mg/L	1			
Chlorooctadecane(surr)	3386-33-2	80.7	%	1	53-122		
1-Chlorooctane(surr)	111-85-3	81.5	%	1	60-120		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	43	39.2	91.2	43	39.2	91.2	0	20	75-125	
>C12-C28	43	36.4	84.7	43	34.4	80	5.6	20	75-125	
>C28-C35	43	36.9	85.8	43	36.8	85.6	0.3	20	75-125	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Metals - Mercury **Method :** EPA 245.1 **Reporting Units :** mg/L

QC Batch ID : Qb11092346 **Created Date :** 09/23/11 **Created By :** Ggorane

Samples in This QC Batch : 11090672.01,02,03,04

Digestion : PB11092319 **Prep Method :** EPA 245.1 **Prep Date :** 09/23/11 11:15 **Prep By :** Ggorane

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0002		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.00503	101	0.005	0.00490	98	2.6	35	80-120	

QC Type: MS and MSD

QC Sample ID: 11090737.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.00515	102						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Cyanide **Method :** SM 4500CNC/E **Reporting Units :** mg/L

QC Batch ID : Qb11092609 **Created Date :** 09/26/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092606 **Prep Method :** SM 4500CNC/E **Prep Date :** 09/26/11 08:00 **Prep By :** Srani

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Cyanide		BRL	mg/L	1	0.02		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide	0.1	0.087	87.2	0.1	0.088	88.2	0.9	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090663.05

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cyanide	BRL	0.1	0.083	83						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Ammonia as Nitrogen **Method :** SM 4500NH3D **Reporting Units :** mg/L

QC Batch ID : Qb11092616 **Created Date :** 09/28/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Ammonia as N		BRL	mg/L	1	0.1	

QC Type: Duplicate

QC Sample ID: 11090711.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Ammonia as N	115	116	mg/L	0.7	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ammonia as N	5.00	4.66	93.1	5.00	4.58	91.5	1.6	17.9	87.1-115	

QC Type: MS and MSD

QC Sample ID: 11090711.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Ammonia as N	116	250	317	80.5						85.2-121	M2

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Oil & Grease, Hexane Extractables **Method :** EPA 1664A **Reporting Units :** mg/L

QC Batch ID : Qb11092703 **Created Date :** 09/27/11 **Created By :** Sgarcia

Samples in This QC Batch : 11090672.01,02,04

Sample Preparation : PB11092704 **Prep Method :** EPA 1664A **Prep Date :** 09/27/11 08:54 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Oil & Grease		BRL	mg/L	1	2.50		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Oil & Grease	40	35.8	89.5	40	35.1	87.8	2	11	78-114	

QC Type: MS and MSD

QC Sample ID: 11090661.02

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Oil & Grease	BRL	40	40.3	101						78-114	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Recoverable Metals **Method :** EPA 200.7 **Reporting Units :** mg/L

QC Batch ID : Qb11092727 **Created Date :** 09/27/11 **Created By :** Ssrinivasan

Samples in This QC Batch : 11090672.01,02,03,04

Digestion : PB11092715 **Prep Method :** SW-846 3005A **Prep Date :** 09/27/11 08:40 **Prep By :** Ssrinivasan

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Lithium	7439-93-2	BRL	mg/L	1	0.1	
Tin	7440-31-5	BRL	mg/L	1	0.1	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Lithium	1	1.007	101	1	1.000	100	0.7	20	80-120	
Tin	1	0.9909	99.1	1	0.9968	99.7	0.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090671.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Lithium	0.055	1	2.059	200						80-120	M3
Tin	BRL	1	0.9265	92.4						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Chlorine, as Total Residual **Method :** EPA 330.5 **Reporting Units :** mg/L

QC Batch ID : Qb11092753 **Created Date :** 09/21/11 **Created By :** Ajohn

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Chlorine, Free		BRL	mg/L	1	0.05		
Chlorine, Total		BRL	mg/L	1	0.05		

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Chlorine, Free	BRL	BRL	mg/L		20		
Chlorine, Total	BRL	BRL	mg/L		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Chlorine, Total	1	0.97	97						95-105	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Apparent Color

Method : SM 2120B

Reporting Units : PCU

QC Batch ID : Qb11092754

Created Date : 09/22/11

Created By : Ajohn

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Color		BRL	PCU	1	2	

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Color	<100	<100	PCU		20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Color	5.0	5.0	100						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Threshold Odor Test

Method : SM 2150B

Reporting Units :

QC Batch ID : Qb11092809

Created Date : 09/21/11

Created By : Ajohn

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Odor		No Odor O		1	1	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Anions **Method :** EPA 300.0 **Reporting Units :** mg/L

QC Batch ID : Qb11092903 **Created Date :** 09/29/11 **Created By :** Jdongre

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092905 **Prep Method :** EPA 300.0 **Prep Date :** 09/28/11 14:35 **Prep By :** Jdongre

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Fluoride		BRL	mg/L	1	0.1		
Sulfate		BRL	mg/L	1	0.1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Fluoride	1	0.949	94.9	1	0.919	91.9	3.2	20	90-110	
Sulfate	1	0.938	93.8	1	0.984	98.4	4.8	20	90-110	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Chemical Oxygen Demand **Method :** SM 5220D **Reporting Units :** mg/L

QC Batch ID : Qb11092914 **Created Date :** 09/29/11 **Created By :** Ksudha

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092911 **Prep Method :** SM 5220D **Prep Date :** 09/29/11 10:40 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
COD		BRL	mg/L	1	10	

QC Type: Duplicate

QC Sample ID: 11090800.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
COD	13	13	mg/L	0	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
COD	300	315	105	300	311	104	1.3	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090800.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
COD	13	400	462	112						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Weak Acid Dissociable Cyanide **Method :** SM 4500CN-I **Reporting Units :** mg/L

QC Batch ID : Qb11092917 **Created Date :** 09/26/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092913 **Prep Method :** SM 4500CN-I **Prep Date :** 09/26/11 08:15 **Prep By :** Srani

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Cyanide, Free		BRL	mg/L	1	0.02		

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide, Free	0.1	0.082	82	0.1	0.081	81	1.2	20	80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Phenolics (Total Phenols) **Method :** EPA 420.1 **Reporting Units :** mg/L

QC Batch ID : Qb11092922 **Created Date :** 09/29/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092921 **Prep Method :** EPA 420.1 **Prep Date :** 09/29/11 08:00 **Prep By :** Srani

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Phenols		BRL	mg/L	1	0.05		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Phenols	0.200	0.185	92.5	0.200	0.188	94.2	1.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090913.04

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Phenols	BRL	0.200	0.178	89						80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Kjeldahl Nitrogen **Method :** SM 4500NH3D **Reporting Units :** mg/L

QC Batch ID : Qb11092926 **Created Date :** 09/29/11 **Created By :** Ksudha

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092925 **Prep Method :** SM 4500NorgB **Prep Date :** 09/28/11 14:20 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
TKN		BRL	mg/L	1	0.500	

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
TKN	81.1	79.3619	mg/L	2.2	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TKN	5.00	4.06	81.2	5.00	4.22	84.5	3.9	20	80-120	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/L

QC Batch ID : Qb11092933 **Created Date :** 09/29/11 **Created By :** AVBembde

Samples in This QC Batch : 11090672.03

Sample Preparation : PB11092932 **Prep Method :** TX 1005 **Prep Date :** 09/29/11 12:00 **Prep By :** AVBembde

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12	TPH-1005-1	BRL	mg/L	1	1		
>C12-C28	TPH-1005-2	BRL	mg/L	1	2.48		
>C28-C35	TPH-1005-4	BRL	mg/L	1	1.88		
Total C6-C35		BRL	mg/L	1			
Chlorooctadecane(surr)	3386-33-2	99.4	%	1	53-122		
1-Chlorooctane(surr)	111-85-3	98.1	%	1	60-120		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	43	39.9	92.8	43	42.4	98.6	6.1	20	75-125	
>C12-C28	43	34.8	80.9	43	35.2	81.9	1.1	20	75-125	
>C28-C35	43	32.5	75.6	43	33.2	77.2	2.1	20	75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Conductivity **Method :** SM 2510B **Reporting Units :** umho/cm

QC Batch ID : Qb11092943 **Created Date :** 09/29/11 **Created By :** Srani

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Conductance		BRL	umho/cm	1	5	

QC Type: Duplicate

QC Sample ID: 11090648.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Conductance	457	456	umho/cm	0.2	20	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Conductance	100	104.1	104						90-110	

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Formaldehyde **Method :** NIOSH 3500 **Reporting Units :** mg/L

QC Batch ID : Qb11092947 **Created Date :** 09/29/11 **Created By :** Ksudha

Samples in This QC Batch : 11090672.01,02,03,04

Sample Preparation : PB11092950 **Prep Method :** NIOSH 3500 **Prep Date :** 09/28/11 15:09 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Formaldehyde	50-00-0	BRL	mg/L	1	0.05	

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Formaldehyde	BRL	BRL	mg/L		14	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Formaldehyde	0.250	0.225	90	0.250	0.234	93.6	3.9	14	82-113	

QC Type: MS and MSD

QC Sample ID: 11090672.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Formaldehyde	BRL	2.5	1.02	40.8						75-125	M2

QUALITY CONTROL CERTIFICATE



Job ID : 11090672

Date : 9/29/2011

Analysis : Sulfide **Method :** SM 4500-S D **Reporting Units :** mg/L

QC Batch ID : Qb11092951 **Created Date :** 09/29/11 **Created By :** Ksudha

Samples in This QC Batch : 11090672.01,02,03,04

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Sulfide		BRL	mg/L	1	0.05	

QC Type: Duplicate

QC Sample ID: 11090672.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
Sulfide	BRL	BRL	mg/L			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Sulfide	0.2	0.189	94.5	0.2	0.177	88.5	6.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 11090672.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Sulfide		2.0	1.96	98						70-130	

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 11090672

Date: 9/29/2011

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

D1	Sample required dilution due to matrix effects.
H1	Sample analysis performed past holding time.
H3	Sample was received and analyzed past holding time.
J	Estimation. Below calibration range but above MDL.
M2	Matrix Spike and/or Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference."The sample randomly selected as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The LCS recovery is acceptable."The sample randomly selected as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
S5	Target compounds caused elevation of baseline. Surrogate not calculated
U	Undetected at SDL (Sample Detection Limit).

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com



A&B JOB ID #

11090672

5. Project #

REPORT TO:

Company:

AQUA Zyme SERVICES

Address:

PO BOX 1189

Contact:

VAN VLECK TX 77082

Phone:

979-245-0957

Fax:

E-mail:

E-mail:

Company:

Address:

Contact:

Phone:

Fax:

E-mail:

INVOICE TO:

3. PO #

4. Turnaround Time (Business Days)

☐ 1 Day* ☐ Other☐ 2 Days*☐ 3 Days*☐ 7 Days - Standard

*Surcharge applies

6. Project Name/Location

7. Reporting Requirement:

☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT)

Sampler's Signature & Date

ALLISON DIAMOND A&B LABS Allison Diamond 9-20-11

9. Sample ID and Description

LAB USE ONLY

10. Sampling

11. Time

12. Matrix

Date

Time

Comp

Grab

Water

Soil

Sludge

Air

Other

18. REMARKS

01A-0 SEPTIC BEFORE

9/20/11 12:47

X

15

PH 6.83

02A-0 SEPTIC AFTER

9/20/11 1:50

X

15

TEMP 27.6
PH 6.95

03A GREASE BEFORE

9/20/11 1:40

X

15

TEMP 30.1 - A.D
PH 5.21 - A.D

04A-0 GREASE AFTER

9/20/11 2:15

X

15

TEMP 28.5
PH 5.21

19. RELINQUISHED BY

DATE

TIME

20. RECEIVED BY

DATE

TIME

22. KNOWN HAZARDS/COMMENTS

1 Allison Diamond 9/20/11 4:17

DATE

TIME

22. KNOWN HAZARDS/COMMENTS

2

DATE

TIME

22. KNOWN HAZARDS/COMMENTS

3

DATE

TIME

22. KNOWN HAZARDS/COMMENTS

*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter

4 oz/8 oz - glass wide mouth P/O - Plastic/Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

PRESERVATIVES: C - Cool N - HNO₃ X - OtherH - HCl T - Na₂S₂O₃S - H₂SO₄Intact ☒ N Initials

A&B cannot accept verbal changes

Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days

A&B reserves the right to return samples

LAB USE ONLY SAMPLING

RENTAL

PU



A&B Labs Analytical Testing Quotation

Date: 08/11/2011

QUOTE ID: QT11081101

1109062

Quote To :

Client : Aqua Zyme Services
Contact : Justin Atkinson
Address : PO Box 800
Van Vleck, Texas - 77482

Quoted By :

Contact : Bethany Sapp
Phone : (713) 453-6060
Fax : (713) 453-6091
Email :

Project :

Phone : 979-245-0957 **Fax** : 979-244-8239

	Test Description	Matrix	Method	Qty	TAT
A	Apparent Color	Liquid	SM 2120B	4	7 Days
B	Threshold Odor Test	Liquid	SM 2150B	4	7 Days
	Temperature*	Liquid	SM 2550B	4	7 Days
C	Chemical Oxygen Demand	Liquid	SM 5220D	4	7 Days
D	Conductivity	Liquid	SM 2510B	4	7 Days
E	Sodium Adsorption Ratio	Liquid	LA 29-B	4	7 Days
D	Total Suspended Solids	Liquid	SM 2540D	4	7 Days
	Corrosivity, pH*	Liquid	SM 4500H B	4	7 Days
F	Oil & Grease, Hexane Extractables	Liquid	EPA 1664A	4	7 Days
C	Ammonia as Nitrogen	Liquid	SM 4500-NH3 G	4	7 Days
C	Total Kjeldahl Nitrogen	Liquid	SM 4500NH3D	4	7 Days
D	Anions (Sulfate, Fluoride)	Liquid	EPA 300.0	4	7 Days
G	Reducing Agents, as Sulfite	Liquid	SM 4500SO3-B	4	7 Days
H	Sulfide	Liquid	SM 4500-S D	4	7 Days
C	Total Phosphorus	Liquid	SM 4500P-E	4	7 Days
I	Ignitability (Flash Point)	Liquid	SW-846 1010A	4	7 Days
E	Total Metals (B, Al, As, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mn, Mo, Ni, Se, Ag, Zn)	Liquid	EPA 200.7	4	7 Days
E	Total Metals - Mercury	Liquid	EPA 245.1	4	7 Days
E	Total Metals, Tin**	Liquid	EPA 200.7	4	2 Weeks
E	Total Metals, Li	Liquid	EPA 200.7	4	7 Days
D	Chlorine, Total and Free	Liquid	EPA 330.5	4	7 Days
J	Total Cyanide	Liquid	SM 4500CNC/E	4	7 Days
J	Weak Acid Dissociable Cyanide	Liquid	SM 4500CN-I	4	7 Days
K	Formaldehyde	Liquid	NIOSH 3500	4	7 Days
L	Phenolics (Total Phenols)	Liquid	EPA 420.1	4	7 Days
U	Total Petroleum Hydrocarbons	Liquid	TX 1005	4	7 Days
D	Sampling Fees	per hour	2 hour minimum	4	



Sample Condition Checklist

Date : 09/29/11

A&B JobID : 11090672		Date Received : 09/20/2011		Time Received : 4:17PM								
Client Name : Aqua Zyme Services												
Temperature : 13.1°C		Sample pH : <2 COD, NH3N, TKN, P, Metals >12 Cyanide										
	Check Points				Yes	No	N/A					
1.	Cooler seal present and signed.					X						
2.	Sample(s) in a cooler.				X							
3.	If yes, ice in cooler.				X							
4.	Sample(s) received with chain-of-custody.				X							
5.	C-O-C signed and dated.				X							
6.	Sample(s) received with signed sample custody seal.					X						
7.	Sample containers arrived intact. (If no comment).				X							
8.	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other
	:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Sample(s) were received in appropriate container(s).						X					
10.	Sample(s) were received with proper preservative						X					
11.	All samples were logged or labeled.						X					
12.	Sample ID labels match C-O-C ID's						X					
13.	Bottle count on C-O-C matches bottles found.				X							
14.	Sample volume is sufficient for analyses requested.				X							
15.	Samples were received within the hold time.				X							
16.	VOA vials completely filled.				X							
17.	Sample accepted.				X							
Comments : Include actions taken to resolve discrepancies/problem:												
Sample cooling initiated in the field. Sample 03 was received in a plastic bucket and will need to be split and preserved by lab. Sample 03 has too many solids for O&G analysis; lab is not set up to run O&G on solid samples.												

Received by : Dlopez

Check in by/date : Dlopez / 09/20/2011



Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

22 April 2024

Aqua-Zyme Services
JW Massey
PO Box 800
Van Vleck, TX 77482-0800

OAK HOLLOW WWTP

Enclosed are the results of analyses for samples received by the laboratory on 26-Mar-24 14:25. The analytical data provided relates only to the samples as received in this laboratory report.

ELI certifies that all results are NELAP compliant and performed in accordance with the referenced method except as noted in the Case Narrative or as noted with a qualifier. Any reproductions of this laboratory report should be in full and only with the written authorization from the client.

The total number of pages in this report is 7

Thank you for selecting ELI for your analytical needs. If you have any questions regarding this report, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Julie Peterson'.

Julie Peterson
Client Services Representative



Certificate No: T104704265-22-20



Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Dewatering Container	24C3183-01	Water	26-Mar-24 00:00	26-Mar-24 14:25

Envirodyne Laboratories, Inc.

A handwritten signature in black ink, appearing to read 'Julie Peterson'.

Julie Peterson, Client Services Representative

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Envirodyne Laboratories, Inc
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Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

Dewatering Container
24C3183-01 (Water) Sampled: 26-Mar-24 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	---------	-------

Envirodyne Laboratories, Inc.

Field Analysis

pH	7.42		SU	1	B4C5765	26-Mar-24	26-Mar-24 00:00	SM4500H+ B	MD	a
----	------	--	----	---	---------	-----------	-----------------	------------	----	---

Wet Chemistry

Ammonia-N (NH3-N)	1.77	0.20	mg/L	1	B4D4479	15-Apr-24	15-Apr-24 15:20	EPA 350.1	SSJ	
BOD-5	> 686.43	2.0	mg/L	1	B4D3176	26-Mar-24	26-Mar-24 19:34	SM5210 B	AGT	
COD	1240	50.0	mg/L	10	B4D4967	18-Apr-24	18-Apr-24 13:06	HACH 8000	JMM	
Oil & Grease	11.2	5.0	mg/L	1	B4D3918	11-Apr-24	11-Apr-24 13:00	EPA 1664 A	JMM	
TSS	40.0	2.0	mg/L	1	B4D3062	02-Apr-24	02-Apr-24 10:45	SM2540 D	TB	Q

Envirodyne Laboratories, Inc.

Julie Peterson, Client Services Representative

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Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

Wet Chemistry - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch B4D3062 - Inorganics									
Blank (B4D3062-BLK1)				Prepared & Analyzed: 02-Apr-24					
TSS	<2.0	2.0	mg/L						
LCS (B4D3062-BS1)				Prepared & Analyzed: 02-Apr-24					
TSS	81.0		mg/L	100		81.0	80-120		
Duplicate (B4D3062-DUP1)				Source: 24C2394-01		Prepared & Analyzed: 02-Apr-24			
TSS	4.0	2.0	mg/L		5.8		36.7	20	
Batch B4D3176 - Inorganics									
Blank (B4D3176-BLK1)				Prepared & Analyzed: 26-Mar-24					
BOD-5	<2.0	2.0	mg/L						
LCS (B4D3176-BS1)				Prepared & Analyzed: 26-Mar-24					
BOD-5	220		mg/L	198		111	84.6-115.4		
Duplicate (B4D3176-DUP1)				Source: 24C2756-01		Prepared & Analyzed: 26-Mar-24			
BOD-5	<2.0	2.0	mg/L		<2.0		0	20	
Batch B4D3918 - Inorganics									
Blank (B4D3918-BLK1)				Prepared & Analyzed: 11-Apr-24					
Oil & Grease	<5.0	5.0	mg/L						
LCS (B4D3918-BS1)				Prepared & Analyzed: 11-Apr-24					
Oil & Grease	34.3		mg/L	40.0		85.8	78-114		

Envirodyne Laboratories, Inc.

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Julie Peterson, Client Services Representative



Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

Wet Chemistry - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4D3918 - Inorganics										
LCS Dup (B4D3918-BSD1)				Prepared & Analyzed: 11-Apr-24						
Oil & Grease	35.6		mg/L	40.0		89.0	78-114	3.61	18	
Batch B4D4479 - Inorganics										
Blank (B4D4479-BLK1)				Prepared & Analyzed: 15-Apr-24						
Ammonia-N (NH3-N)	<0.20	0.20	mg/L							
LCS (B4D4479-BS1)				Prepared & Analyzed: 15-Apr-24						
Ammonia-N (NH3-N)	0.99		mg/L	1.00		99.0	90-110			
Matrix Spike (B4D4479-MS1)				Source: 24C2834-01		Prepared & Analyzed: 15-Apr-24				
Ammonia-N (NH3-N)	1.25	0.20	mg/L	1.00	0.34	91.0	90-110			
Matrix Spike Dup (B4D4479-MSD1)				Source: 24C2834-01		Prepared & Analyzed: 15-Apr-24				
Ammonia-N (NH3-N)	1.28	0.20	mg/L	1.00	0.34	94.0	90-110	2.37	20	
Batch B4D4967 - Inorganics										
Blank (B4D4967-BLK1)				Prepared & Analyzed: 18-Apr-24						
COD	<5.0	5.0	mg/L							
LCS (B4D4967-BS1)				Prepared & Analyzed: 18-Apr-24						
COD	93.0		mg/L	100		93.0	90-110			
Matrix Spike (B4D4967-MS1)				Source: 24D0005-03		Prepared & Analyzed: 18-Apr-24				
COD	57.0	5.0	mg/L	50.0	7.00	100	80-120			

Envirodyne Laboratories, Inc.

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Julie Peterson, Client Services Representative

Page 5 of 7



Envirodyne Laboratories, Inc
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Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

Wet Chemistry - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch B4D4967 - Inorganics

Matrix Spike Dup (B4D4967-MSD1)

Source: 24D0005-03

Prepared & Analyzed: 18-Apr-24

COD	59.0	5.0	mg/L	50.0	7.00	104	80-120	3.45	20	
-----	------	-----	------	------	------	-----	--------	------	----	--

Envirodyne Laboratories, Inc.

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Julie Peterson, Client Services Representative



Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: Aqua-Zyme Services
Project: OAK HOLLOW WWTP
Work Order: 24C3183

Reported:
22-Apr-24 16:35

Notes and Definitions

Q QC did not meet ELI acceptance criteria
> > 686.43
ND Analyte NOT DETECTED at or above the reporting limit
< Result is less than the RL
a Analyte not available for TNI/NELAP accreditation
n Not accredited

Envirodyne Laboratories, Inc.

A handwritten signature in black ink, appearing to read 'Julie Peterson', is written over a horizontal line.

Julie Peterson, Client Services Representative

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2.3.1: Lab Analysis Example – Sludge Sample



Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642 (409) 982-1575 FAX (409) 982-1577

5544 Leopard Street, Corpus Christi, Texas 78408 (361) 299-9900 FAX (361) 299-1155
 138 S. Cities Service Hwy., Sulphur, Louisiana 70663 (337) 626-2121 FAX (337) 626-2126
 401 N. 11 Street, La Porte, Texas 77571 (281) 867-9900 FAX (281) 867-1155

Client: VALLEY DEWATERING SERVICES INC
 P. O. Box 489
 VAN VLEEK, TX 78482-0489

Attn: Mr. Justin Atkinson
 Phone: 979-245-5656
 Cell: 956-376-8229, 979-4530911
 E.mail: zymme@aqua-zyme.com
 E.mail: vdsi@att.net

Reporting Date: 7/17/2022
 Sample Matrix: Wastewater
 Date Collected: 7/12/22
 Time Collected: 12:30 pm
 Collected by: Mr. Ricku Vasquez
 Date Received: 7/13/22
 Time Received: 11:10 am
 CHEMTEX File #: C22070130

RESULTS OF ANALYSIS

Site/Location: Valley Dewatering Monitoring, Inc 120 Patricia St Texas

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL
C22070130A	Valley Dewatering	CBOD	mg/L	>1320	2
		TSS	mg/L	106	4
C22070130B	Valley Dewatering	*Ammonia-N	mg/L	66.5	0.10
C22070130C	Valley Dewatering	COD	mg/L	5375	250
C22070130C	Valley Dewatering	Oil & Grease	mg/L	<5.0	5

RL(Reporting Limit) values in our report are our lowest analyses limits, not the Reporting Limits to report to any Governmental Agencies.
 Analysis performed and report generated at CHEMTEX, Corpus Christi, TX. a NELAP Accredited Laboratory (T104704259-22-5).

Parameter	Method Reference	Date Analyzed/Analyzed By
Carbonaceous Biochemical Oxygen Demand (CBOD)	SM 5210 B	7/13 - 18/22@4:30 pm - 12:00 pm CHR
Total Suspended Solids (TSS)	SM 2540 D	7/14/22 GC
Ammonia-N	SM 4500-NH3 D	7/15/22 KM
Chemical Oxygen Demand (COD)	HACH8000	7/15/22 SMK
Oil & Grease (O & G)	EPA Method 1664AB	7/15/22 KS


 Hari R. Chinnasani, M.Sc.,
 Technical Manager

csr/chr/CNR

NOTICE / DISCLAIMER: The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. No person or entity other than the client may rely on this report. Any such reliance will be unjustified. Any person other than the client, that reads this report does so at his or her own risk. The analytical results, opinions and/or interpretations expressed herein represent the best judgement of CHEMTEX, based on the information and instructions received from the client. Chemtex makes no warranty or representation, express or implied, of any type, and expressly disclaims same. This report shall not be reproduced, in whole or in part, without the written approval of CHEMTEX. In no event shall CHEMTEX be responsible for any damage greater than the amount it received for the analysis performed.

CHEMTX

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL ANALYTICAL SERVICES REQUEST

Environmental & Industrial Hygiene Services
5544 Leopard Street, Corpus Christi, TX 78408

CLIENT: Valley Dewatering Services, Inc
ATTN : Mr. Justin Atkinson

ADDRESS: Valley Dewatering Services, Inc
PO Box 489
Van Vleet, TX 77482-0489

PHONE : (361) 299-9900 FAX : (361) 299-1155
E-mail : cc@chemtexas.com
Web Site : www.chemtexas.com
E. Mail : zymme@aquazyme.com
(956) 376-8229

BILLING CONTACT/ADDRESS:
(if different from above)

P. O. #: PROJECT NO:
Valley Dewatering Monitoring

SITE/LOCATION:
Valley Dewatering Services, Inc.
120 Patricia St.

SAMPLE (S) COLLECTED BY: (Print Name)

Expected Turnaround Time
2-4 hr. Rush 24 hr. Rush 48 hr. Rush 5-7 days X 7-14 days

REQUESTED ANALYSES

Sample Matrix Codes: Drinking Water: DW; Groundwater: GW; Liquid Waste: LW; Oil(s): O; Paint Chips: PC; Sand: Sn.
Sludge: SL; Soil/Solid: S; Solid Waste: SW; Trip Blank: TB; Water: W; Wipes: WP; Wastewater: WW

CHEMTX #	SAMPLE IDENTIFICATION	COLLECTION		Sample Matrix	Composite/Grab	Chemical Preservative	Sample Containers			CBOD, TSS	NH ₃ - N	COD	Oil & Grease		
		Date	Time				No	Size (oz)	Type (Glass/Plastic)						
C22070130A	Vally Dewatering	7-12-22	12:30 PM	WW	G	-	1	32 oz	P	X					
C22070130B	Vally Dewatering			WW	G	H ₂ SO ₄	1	8 oz	P		X				
C22070130C	Vally Dewatering			WW	G	H ₂ SO ₄	1	8 oz	P			X			
C22070130D	Vally Dewatering			WW	G	H ₂ SO ₄	1	32 oz	G				X		
C22070130E	Vally Dewatering			WW	G	-	2	32	G					X	

Special Instructions: Samples are preserved on ice after collection and transported in ice chest. Regulatory -----: non-Regulatory X RV

Relinquished By:

Date/Time: 7-13-22 1:10 PM

Received By:

ATK

Date/Time: 7/13/22

11:10 AM

Relinquished By:

Date/Time:

Received By:

Date/Time:

Facilities also available at: 3082 25th Street, Port Arthur, TX 77642; Phone: 409-983-4575; Fax: 409-982-1522; E-mail: pa@chemtexas.com; and 138 S. Cities Service Hwy., Sulphur, LA 70663; Phone 337-626-2121; Fax: 337-626-2126; E-mail: lc@chemtexas.com

NOTICE / DISCLAIMER: Client has asked Chemtex to perform the analyses listed above, on the samples described herein. Any analytical results, opinions or interpretations which may be provided to Client are based upon the information and material supplied by Client, for whose exclusive and confidential use a report will be made. No person or entity other than Client may rely on any such report. Any such reliance will be unjustified. Any person, other than Client, that reads or relies on any such report, does so at his or her own risk. Chemtex makes no warranty or representation, express or implied, of any type and expressly disclaims same. Any report provided by Chemtex shall not be reproduced, in whole or in part, without the written approval of Chemtex. In no event shall Chemtex be responsible for any damage greater than the amount that it received for performing some or all of the analyses listed above.

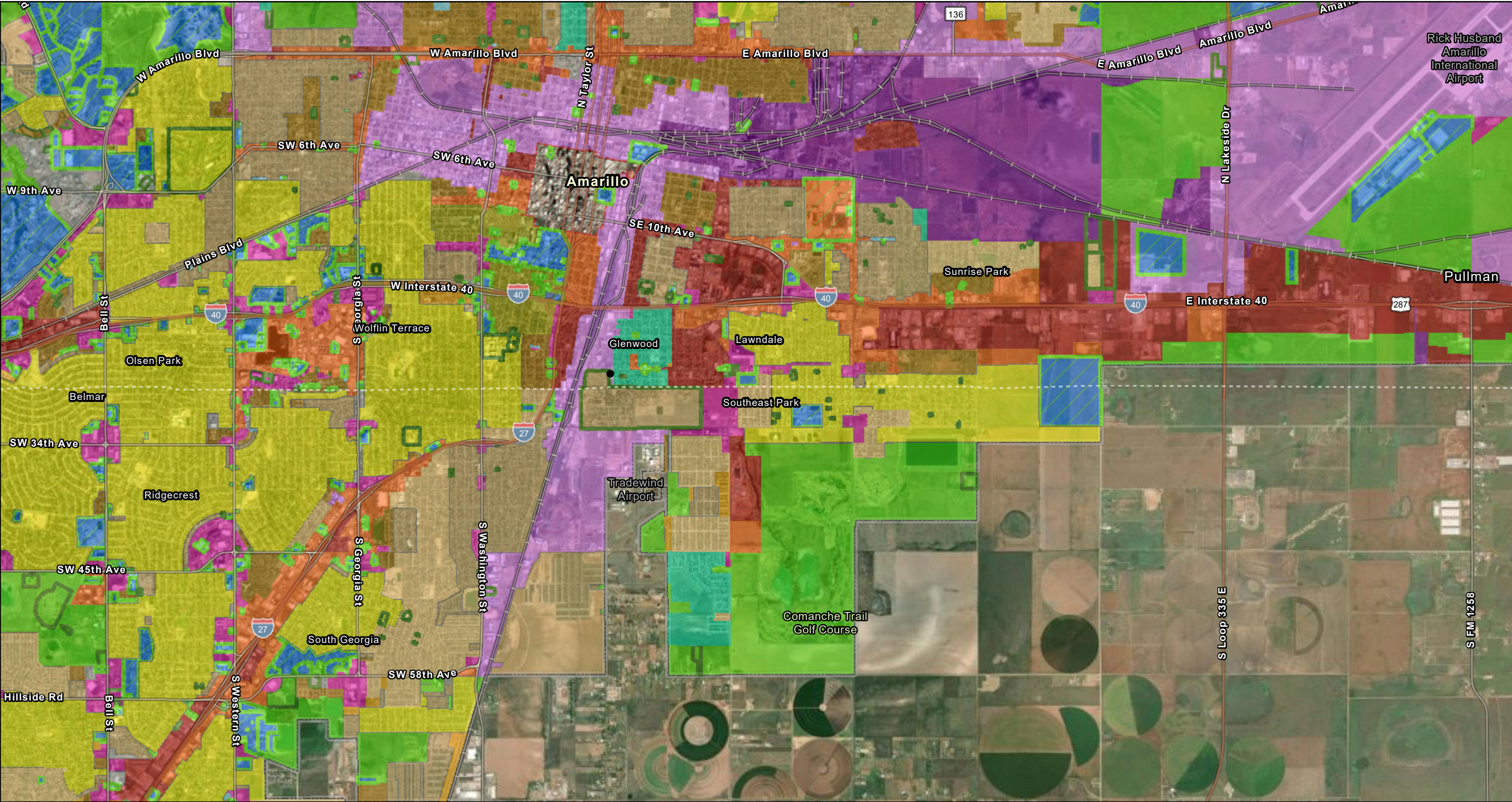
07-14-22
CJ-H.S.

Ydsi@ATT.net

2.4.1 a-e: Zoning Map, Community Growth Trends,1-Mile, School data & 6-Mile Maps

Zoning Map

Figure 2.4.1a

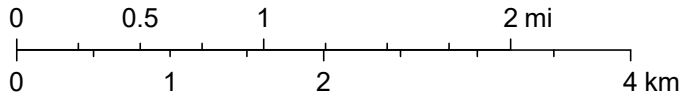


1/8/2025, 11:14:45 AM

Zoning			
A Agricultural	I-1 Light Industrial	MF-2 Multiple Family 2	O-2 Office District 2 / SUP
A Agricultural / SUP	I-1 Light Industrial / SUP	MF-2 Multiple Family 2 / SUP	PD Planned Development; PD ; PD-403; PD-405; PD-407
CB Central Business	I-2 Heavy Industrial	MH Manufactured Home	R-1 Residential District 1
CB Central Business / SUP	I-2 Heavy Industrial / SUP	MH Manufactured Home / SUP	R-1 Residential District 1 / SUP; R-1/S-205
GR General Retail	LC Light Commercial;	NS Neighborhood Services	R-2 Residential District 2
GR General Retail / SUP	LC Light Commercial / SUP	NS Neighborhood Services / SUP	R-2 Residential District 2 / SUP
HC Heavy Commercial	MD Moderate Density	O-1 Office District 1	R-3 Residential District 3
HC Heavy Commercial / SUP	MF-1 Multiple Family 1	O-1/S	R-3 Residential District 3 / SUP
	MF-1 Multiple Family 1 / SUP	O-2 Office District 2	Amarillo City Limits

● Am Tex Liquid Waste Processing, LLC

1:60,187



Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Earthstar Geographics, sena

Figure 2.4.1b
One Mile Radius Map

Am Tex Liquid Waste Processing, LLC

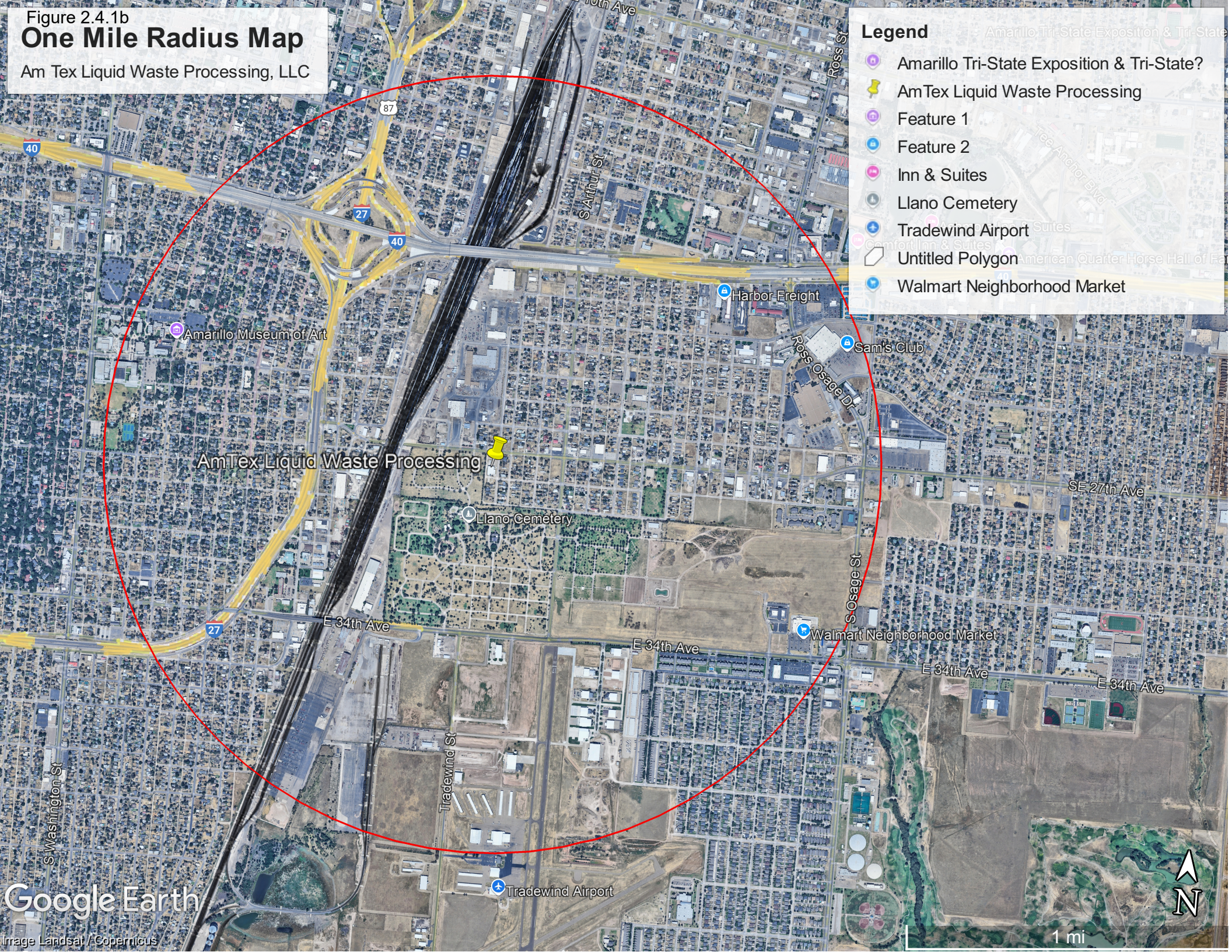


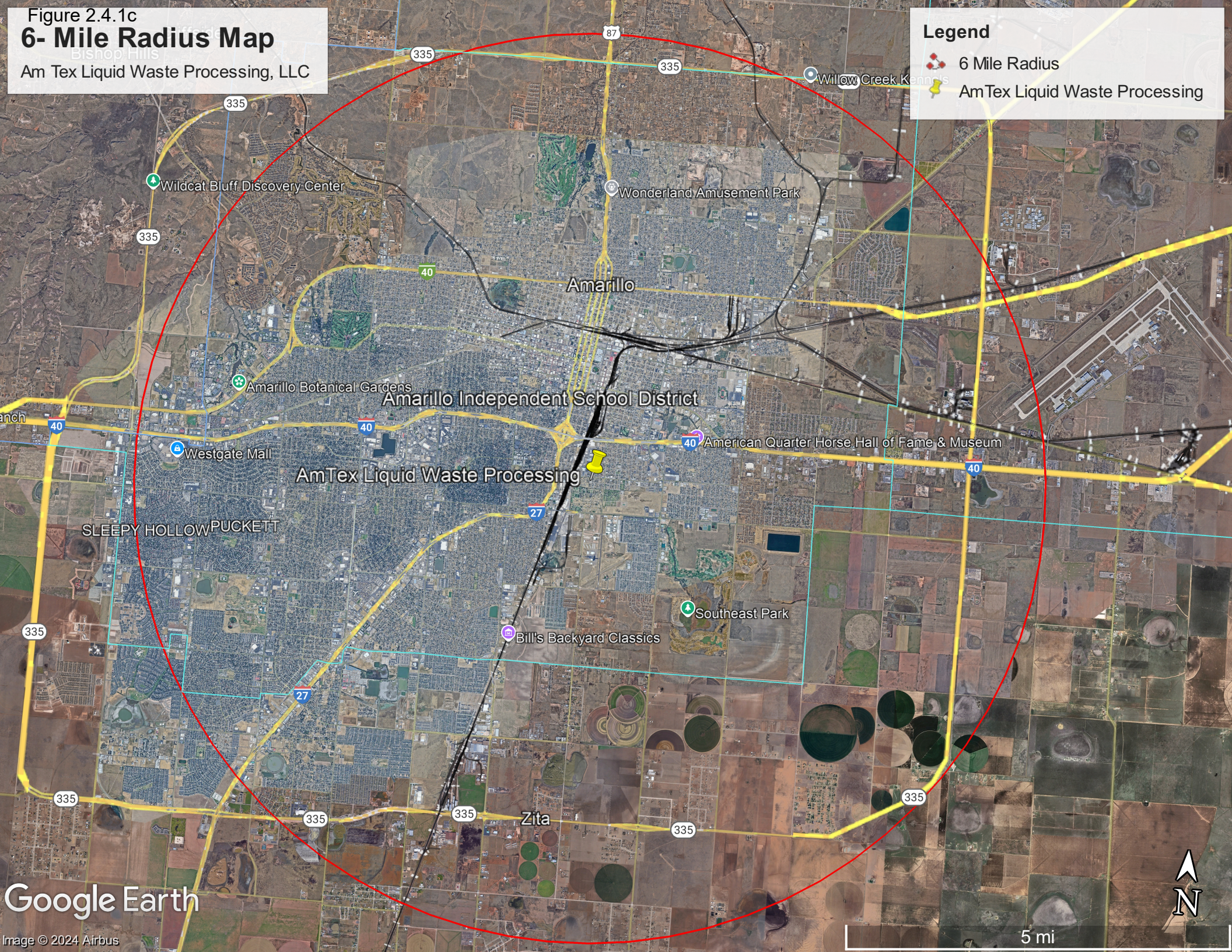


Figure 2.4.1c
6- Mile Radius Map

Am Tex Liquid Waste Processing, LLC

Legend

-  6 Mile Radius
-  AmTex Liquid Waste Processing



**AMARILLO, TEXAS
COMMUNITY GROWTH TRENDS
OCTOBER, 2024**

Introduction

The City of Amarillo has experienced many changes over the past several decades. From 2010 to 2020 the City saw a growth in population of 5.1%. Almost all of that growth happened in the Randall County boundaries of Amarillo. Randall County saw a population increase of 16.4% during the same period, compared to Potter County, which saw a decline of 1.5%. This community profile will outline current and past U.S. Census data, as well as state and local data regarding demographic changes in Amarillo. Information regarding population growth, changing housing and education trends, and labor and wages is critical when considering the community's health. Statistics that can be found in this profile include:

- Population
- Student Enrollment by School District
- Per Capita Personal Income
- City of Amarillo Annual Budget
- Ethnic and Racial Composition
- Median Home Values
- Hourly Wages by Occupation
- Property Tax Rates

Unless otherwise noted, all data included in this profile are from the U.S. Census Bureau. Data reflects the most current and will be updated as new information becomes available.

POPULATION

Population Estimates

Year	Amarillo			Randall County			Potter County			Randall Co	Potter Co
	Census ¹	Local Estimate ²	% Change	Census ¹	Local Estimate ²	% Change	Census ¹	Local Estimate ²	% Change	In City Limits	In City Limits
2010	190,695	190,695		116,811	116,811		120,124	120,124			
2011	189,132	191,664	-0.82%	118,994	118,727	1.87%	120,626	119,945	0.41%		
2012	191,118	192,637	1.05%	121,090	120,674	1.76%	121,099	119,766	0.39%		
2013	193,153	193,616	1.06%	123,062	122,653	1.64%	121,526	119,588	0.35%		
2014	194,930	194,600	0.92%	124,862	124,664	1.46%	122,053	119,410	0.43%		
2015	196,571	195,588	0.84%	126,782	126,709	1.54%	122,352	119,232	0.24%		
2016	197,570	196,582	0.51%	128,603	128,787	1.44%	121,883	119,054	-0.38%		
2017	197,823	197,580	0.13%	130,552	130,899	1.52%	121,230	118,877	-0.54%		
2018	198,773	198,584	0.48%	132,475	133,046	1.47%	120,899	118,700	-0.27%		
2019	198,955	199,593	0.09%	134,026	135,228	1.17%	119,674	118,523	-1.01%		
2020	200,393	200,393	0.72%	136,005	137,445	1.48%	118,323	118,343	-1.13%	98,839	101,554
2021	200,371	201,415	-0.01%	139,176	138,235	2.33%	119,043	118,145	0.61%		
2022	200,360	202,442	-0.01%	141,489	140,502	1.66%	117,905	117,991	-0.96%		
2023	203,042	203,475	1.34%	148,255	142,806	4.78%	114,647	117,815	-2.76%		
2024	**	204,512		**	145,148		**	117,638			

¹ All population census data taken from US Census Bureau ACS Demographic and Housing Estimates, 5-Year Estimate Data Profiles, DP05.

² Population estimates prepared by City of Amarillo Planning Department based on 2010 and 2020 Census Data. Amarillo grows by an average rate of .51%, Randall County at a rate of 1.64%, and Potter County at a rate of -.15%.

** Data not available

Age Distribution

	Male		Female		Total	
	2010	2020	2010	2020	2010	2020
Age Groups						
Under 5 years	7,918	7,838	7,431	7,374	15,352	15,212
5 to 9 years	6,521	7,994	6,679	7,335	13,293	15,329
10 to 14 years	7,080	7,392	6,585	6,940	13,667	14,332
15 to 19 years	6,614	6,934	6,208	6,608	12,919	13,542
20 to 24 years	7,453	6,457	6,867	6,317	25,047	12,774
25 to 29 years	7,359	7,882	7,149	7,610	14,416	15,492
30 to 34 years	6,335	7,888	6,303	7,598	14,416	15,486
35 to 39 years	6,894	7,543	6,114	6,416	12,731	13,959
40 to 44 years	5,869	5,557	5,550	6,461	11,421	12,018
45 to 49 years	6,614	5,273	6,208	5,364	14,416	10,637
50 to 54 years	6,148	4,993	6,585	5,800	14,416	10,793
55 to 59 years	5,217	5,360	5,174	5,864	10,484	11,224
60 to 64 years	4,006	5,280	4,327	5,576	8,425	10,856
65 to 69 years	2,795	4,494	4,327	4,762	6,178	9,256
70 to 74 years	2,422	2,851	2,916	3,727	5,242	6,578
75 to 79 years	1,863	1,918	2,634	2,902	4,493	4,820
80 to 84 years	1,304	1,274	1,693	2,046	2,996	3,320
85 years and over	838	1,314	1,975	2,283	2,808	3,597

Median Age

	2010	2020
Amarillo	33.7	34.1
Texas	33.4	34.8

All age distribution data taken from US Census Bureau ACS Demographic and Housing Estimates, 5-Year Estimate Data Profiles, DP05.

Ethnic and Racial Composition

RACE	2010		2020		*2023	
	Number	Percent	Number	Percent	Number	Percent
Total population	190,695	100%	200,393	100%	203,475	100%
White	113,844	59.7%	104,003	51.9%	104,513	51.36%
Black or African American	15,358	6.3%	13,478	6.9%	13,316	6.54%
American Indian and Alaska Native	2,762	0.5%	1,520	0.5%	1,444	0.71%
Asian	6,144	3.1%	8,219	4.1%	8,498	4.18%
Native Hawaiian and Other Pacific Islander	251	0.1%	253	0.1%	253	0.12%
Some other race	16,483	1.6%	5,838	2.9%	5,459	2.68%
Hispanic or Latino (of any race)	52,483	28%	66,165	32.6%	67,885	33.36%

Ethnic and Racial data compiled from US Census Bureau Demographic and Housing Characteristics Decennial reports, P1

*2023 data estimated by Amarillo Planning Department based on 2010 and 2020 Census data.

Student Enrollment by School District

Amarillo ISD

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Early Childhood	98	88	103	109	100	138	126	93	151	
Pre-Kindergarten	1,904	1,897	1,856	1,853	1,821	1,765	1,327	1,698	1,648	
Kindergarten	2,763	2,571	2,472	2,429	2,533	2,485	2,296	2,229	2,145	
Grade 1	2,736	2,734	2,568	2,491	2,353	2,446	2,393	2,264	2,177	
Grade 2	2,674	2,697	2,687	2,506	2,455	2,338	2,340	2,319	2,252	
Grade 3	2,535	2,648	2,643	2,628	2,468	2,416	2,258	2,278	2,294	
Grade 4	2,576	2,488	2,611	2,593	2,540	2,419	2,328	2,206	2,248	
Grade 5	2,483	2,511	2,429	2,570	2,541	2,512	2,371	2,283	2,176	
Grade 6	2,336	2,439	2,469	2,344	2,480	2,457	2,397	2,272	2,227	
Grade 7	2,305	2,327	2,428	2,404	2,336	2,470	2,410	2,345	2,241	
Grade 8	2,405	2,317	2,284	2,399	2,389	2,335	2,437	2,370	2,296	
Grade 9	2,371	2,535	2,535	2,374	2,495	2,583	2,410	2,567	2,524	
Grade 10	2,167	2,079	2,197	2,193	2,148	2,236	2,304	2,000	2,216	
Grade 11	2,039	2,002	1,938	2,091	2,051	1,984	2,115	2,020	1,887	
Grade 12	1,777	1,856	1,846	1,787	1,891	1,855	1,876	1,922	1,860	
Total Enrolled	33,169	33,189	33,066	32,771	32,601	32,439	31,388	30,866	30,342	-

Canyon ISD

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Early Childhood	50	42	42	46	49	95	72	79	90	
Pre-Kindergarten	133	134	125	127	127	146	105	181	160	
Kindergarten	691	680	751	716	738	783	733	782	806	
Grade 1	699	683	676	776	748	779	761	780	825	
Grade 2	729	728	738	699	780	740	773	804	811	
Grade 3	695	762	754	764	731	781	779	826	834	
Grade 4	698	704	780	776	800	745	795	822	848	
Grade 5	733	727	741	812	827	835	755	836	846	
Grade 6	767	756	748	778	832	864	841	830	860	
Grade 7	701	774	788	750	785	856	851	852	843	
Grade 8	734	734	788	799	762	788	864	865	897	
Grade 9	766	753	764	772	788	785	795	900	893	
Grade 10	699	753	744	755	758	776	754	752	884	
Grade 11	699	686	731	704	712	729	730	714	765	
Grade 12	602	670	657	688	685	679	716	688	713	
Total Enrolled	9,396	9,586	9,827	9,962	10,122	10,381	10,324	10,711	11,075	-

River Road ISD

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Early Childhood	-	3	2	-	1	2	3	2	-	
Pre-Kindergarten	42	57	48	41	59	73	34	63	69	
Kindergarten	107	72	75	84	78	84	80	78	70	
Grade 1	92	104	75	81	98	76	83	75	86	
Grade 2	85	82	97	76	77	93	76	98	82	
Grade 3	88	87	84	110	89	79	86	76	84	
Grade 4	96	89	89	87	117	92	78	95	80	
Grade 5	98	98	87	95	94	118	89	74	105	
Grade 6	118	93	107	106	115	94	119	103	83	
Grade 7	98	116	96	112	103	109	104	122	120	
Grade 8	82	95	116	94	118	105	114	106	116	
Grade 9	118	94	115	115	117	113	109	137	110	
Grade 10	106	110	89	99	100	102	116	111	112	
Grade 11	103	110	97	79	89	99	91	106	83	
Grade 12	77	93	111	98	82	87	90	94	97	
Total Enrolled	1,310	1,303	1,288	1,277	1,337	1,326	1,272	1,340	1,297	-

School District enrollment counts pulled from Texas Education Agency Annual Academic Performance Reports.

HOUSING

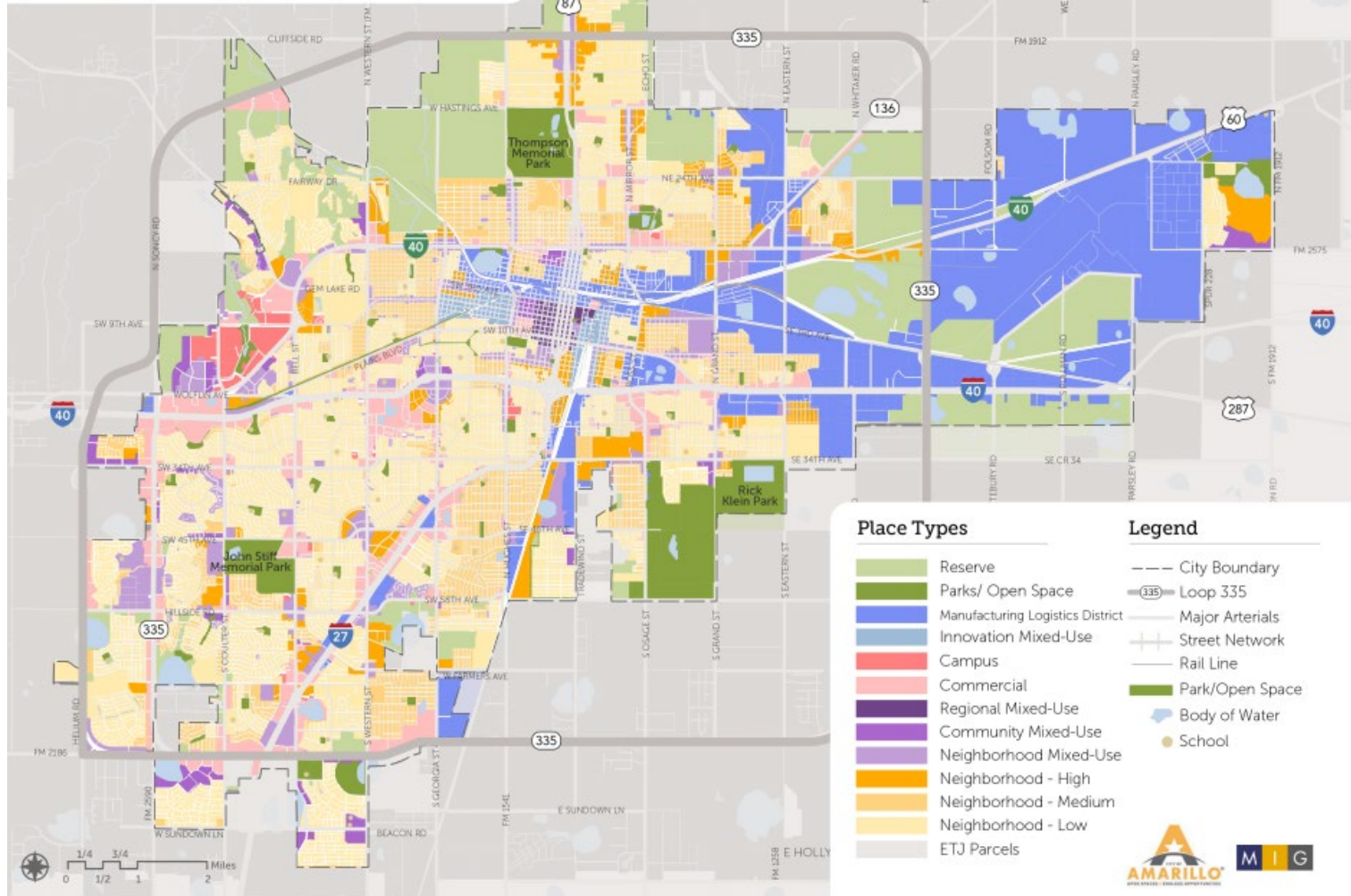
Housing Occupancy

	2010	2020	2022	2023
Total Housing Units	70,122	76,778	78,616	91,397
Owner Occupied	44,099	45,394	46,840	49,710
Average Household Size	2.79	2.69	2.69	2.67
Renter Occupied	26,023	31,384	31,776	31,044
Average Household Size	2.42	2.4	2.28	2.18
Vacant Units	7,763	9,124	9,177	10,643

Housing Occupancy data from U.S. Census Bureau Selected Housing Characteristics ACS 5-Year Estimates Data Profiles, DP04

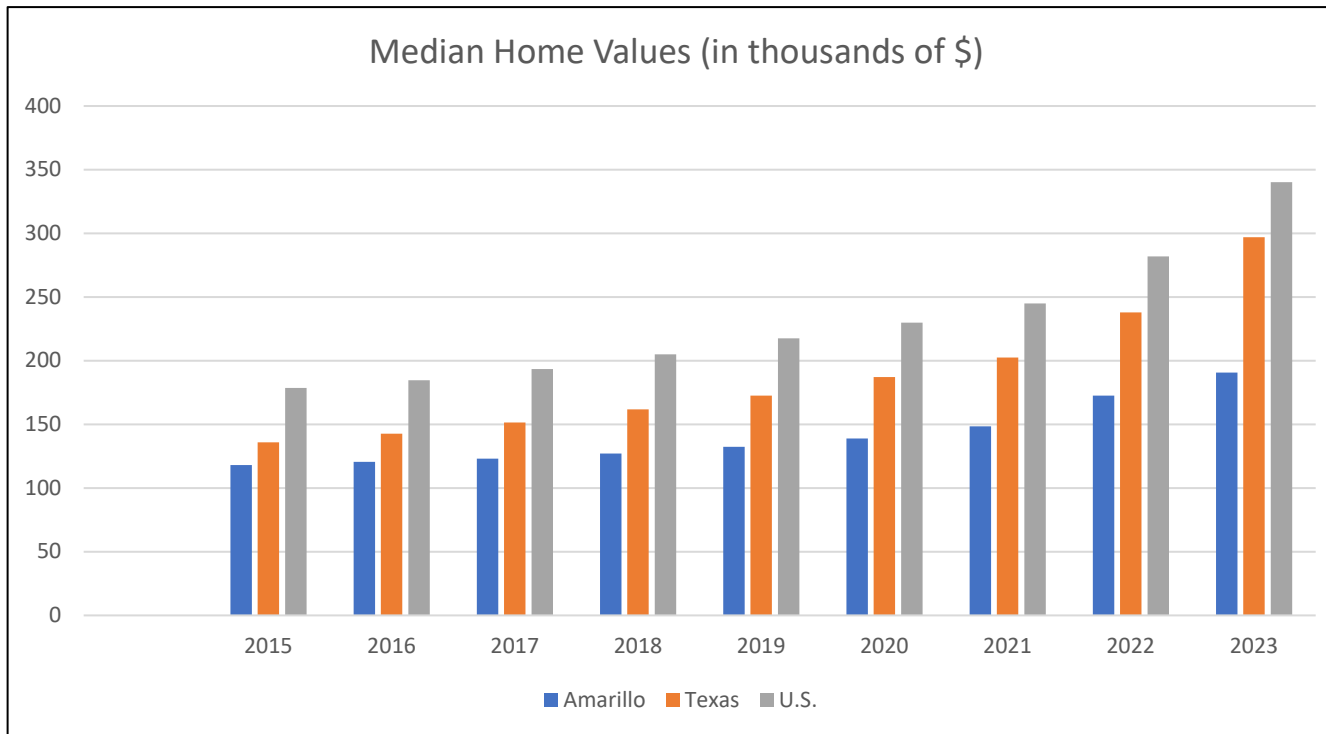


Complete Neighborhoods Scenario



Median Home Values (In thousands of dollars)

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Amarillo	118	120.5	123.2	127.2	132.5	138.9	148.5	172.7	190.7
Texas	136	142.7	151.5	161.7	172.5	187.2	202.6	238.0	296.9
U.S.	178.6	184.7	193.5	204.9	217.5	229.8	244.9	281.9	340.2



Home Value data compiled from US Census Bureau Selected Housing Characteristics ACS 5-Year Estimate Data Profiles, DP04

Median Home Sale Price (In thousands of dollars)

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Amarillo	145	150	155	153.8	159	177.5	196	212	220

Median Home Sale Price data from the Amarillo Association of REALTORS, Inc. Annual Reports

CONSUMER CHARACTERISTICS

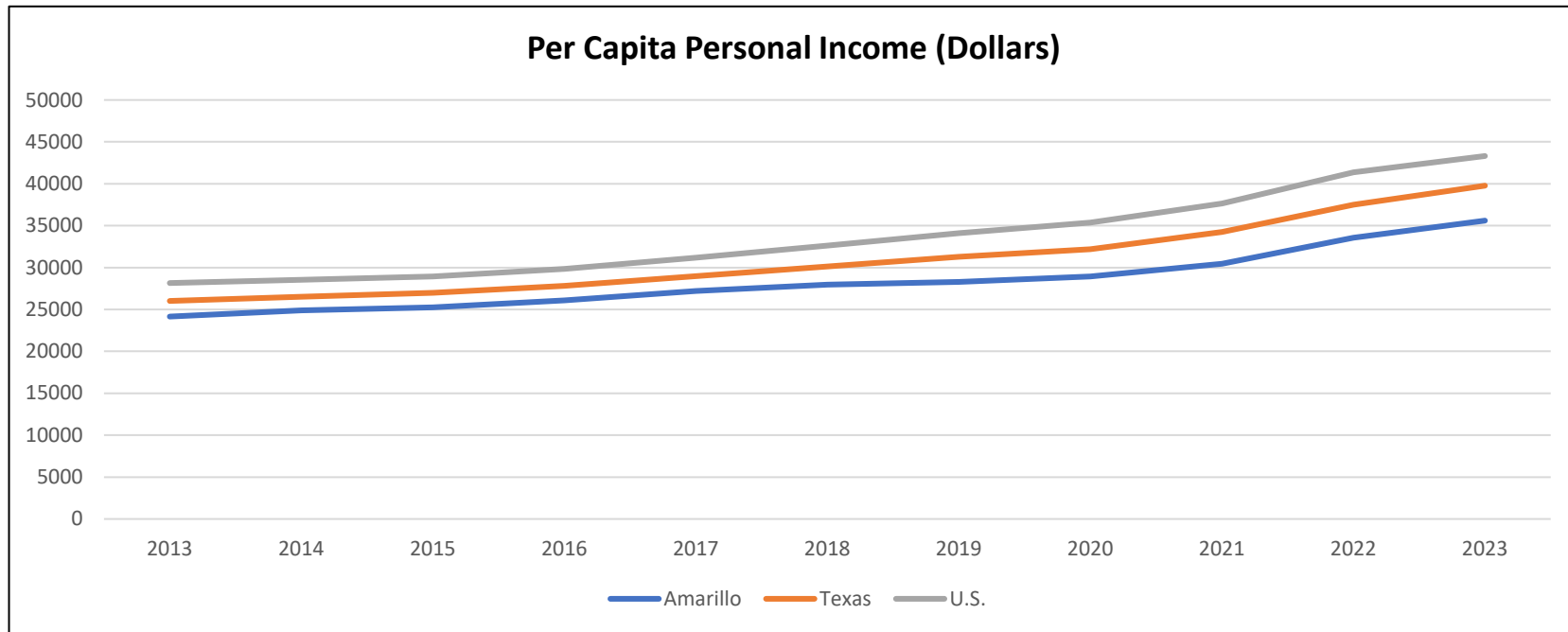
Median Earnings by Industry

	2016	2017	2018	2019	2020	2021	2022	2023
Management, Business, and Finance	54,499	56,255	54,880	55,864	53,040	54,080	60,720	65,373
Computer, Engineering, and Science	62,378	66,920	69,082	71,580	72,840	75,118	80,274	79,802
Education, Legal, Community Service, Arts, and Media	40,249	40,788	42,194	44,590	45,367	47,275	52,179	51,403
Healthcare Practitioners and Technical	51,564	54,343	55,919	55,881	55,781	58,164	64,251	43,245
Healthcare Support	20,989	21,904	21,696	23,033	22,593	24,375	27,075	36,100
Protective Services	41,639	46,067	45,992	46,086	44,636	49,748	54,545	53,218
Food Preparation	12,839	13,138	13,942	15,248	15,331	15,916	15,819	15,922
Building and Grounds Cleaning and Maintenance	17,890	20,020	22,054	21,137	22,114	23,562	23,323	29,324
Personal Care and Services	15,720	16,145	17,620	17,328	17,403	19,685	19,082	30,412
Sales and Related	25,613	26,939	26,699	26,408	27,220	30,503	30,828	36,049
Office and Administrative Support	26,726	27,540	28,619	29,331	29,357	29,717	31,348	35,642
Farming, Fishing, and Forestry	26,182	30,859	27,143	41,667	48,558	50,219	44,598	-
Construction and Extraction	30,548	31,031	31,345	31,788	35,247	39,416	41,438	31,359
Installation, Maintenance, and Repair	41,211	40,273	40,560	41,094	44,034	43,514	53,209	34,312
Production	27,416	30,195	31,043	30,559	30,650	33,449	35,700	40,642
Transportation	41,795	40,257	41,482	41,372	39,261	41,648	50,835	61,334
Material Moving	21,323	21,264	23,968	25,333	26,800	26,420	27,505	30,634

Earnings data compiled from US. Census Bureau Occupation by Sex and Median Earnings in the Past 12 Months ACS 5-Year Estimates Subject Tables, S2411

Per Capita Personal Income (Dollars)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Amarillo	24,156	24,904	25,244	26,086	27,198	27,950	28,274	28,927	30,474	33,559	35,604
Texas	26,019	26,513	26,999	27,828	28,985	30,143	31,277	32,177	34,255	37,514	39,775
U.S.	28,155	28,555	28,930	29,829	31,177	32,621	34,103	35,384	37,638	41,361	43,313



Per Capita Income data compiled from US Census Bureau Selected Economic Characteristics, ACS 5-Year Estimates Data Profiles, DP03.

Median Family Income (Dollars)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Amarillo	56,429	57,766	57,976	59,750	61,125	63,264	63,853	64,632	67,790	76,749	79,918
Texas	61,066	61,958	62,717	64,585	67,344	70,423	73,349	76,073	80,498	87,590	86,267
U.S.	64,719	65,443	66,011	67,871	70,850	73,965	77,263	80,069	85,028	92,646	92,148

Median Family Income compiled from US Census Bureau Selected Economic Characteristics ACS 5-Year Estimates Detailed Tables, S1903.

Size of Buying Groups

% of Households by Income 2023

	<\$10,000	\$10,000 - \$14,999	\$15,000 - \$24,999	\$25,000 - \$34,999	\$35,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999	\$100,000 - \$149,999	\$150,000- \$199,999	\$200,000+
Amarillo	5.7%	3.3%	9.8%	9.1%	13.6%	18.1%	12.1%	15.3%	5.8%	7.2%
Potter County	5.7%	4.7%	11.8%	10.1%	16.2%	19.8%	9.8%	11.8%	5.2%	5.0%
Randall County	4.9%	1.3%	7.0%	8.8%	8.9%	16.2%	14.8%	19.5%	8.3%	10.4%

Household Income data compiled from US Census Bureau Selected Economic Characteristics, ACS 5-Year Estimates Data Profiles, DP03.

LABOR FORCE

Civilian Industry by Occupation

	2016	2017	2018	2019	2020	2021	2022	2023
Agriculture, Forestry, and related	1,597	1,754	1,538	1,387	1,265	1,317	1,289	1,312
Construction	7,389	7,651	7,747	8,056	7,953	8,208	7,851	8,336
Manufacturing	9,868	9,575	10,064	11,242	11,648	11,382	11,389	9,674
Wholesale trade	2,901	3,136	3,014	2,885	2,604	2,668	2,947	2,499
Retail trade	11,732	11,382	11,948	11,981	10,937	10,851	11,384	15,426
Transportation and Warehousing	5,528	5,339	5,256	5,328	5,642	5,887	6,412	9,118
Information	1,536	1,299	1,186	1,165	1,041	855	1,052	1,979
Finance, Real Estate, and related	5,913	5,935	5,848	5,344	5,488	5,228	5,300	6,404
Professional, Scientific, Management	7,253	7,940	7,636	7,581	7,841	7,767	7,812	7,011
Education, Health Care, and Social Assistance	21,659	21,779	22,280	22,080	21,941	21,903	21,597	20,511
Arts, Entertainment, and Food Services	10,193	10,085	10,176	9,264	9,438	9,536	9,585	11,466
Other services, except public administration	6,127	5,941	5,975	5,510	4,739	4,965	4,622	5,681
Public administration	4,590	4,577	4,778	4,828	4,893	5,222	5,662	4,586
Total Employment	96,286	96,393	97,446	96,651	95,430	95,789	96,902	104,003

Labor Force data compiled from US Census Bureau Selected Economic Characteristics, ACS 5-Year Estimates Data Profiles, DP03.

Hourly Wages by Occupation (May 2023)

	Mean	
	Hourly	Mean Annual
Management Occupations	\$ 51.53	\$ 107,180.00
Business and Financial Occupations	\$ 34.72	\$ 72,210.00
Computer and Mathematical Occupations	\$ 42.38	\$ 88,150.00
Architecture and Engineering Occupations	\$ 41.84	\$ 87,020.00
Life, Physical, and Social Science Occupations	\$ 31.77	\$ 66,080.00
Community and Social Service Occupations	\$ 24.45	\$ 50,850.00
Legal Occupations	\$ 56.24	\$ 116,970.00
Educational Instruction and Library Occupations	\$ 28.50	\$ 59,290.00
Arts, Design, Entertainment, Sports, and Media Occupations	\$ 29.66	\$ 61,700.00
Healthcare Practitioners and Technical Occupations	\$ 41.87	\$ 87,100.00
Healthcare Support Occupations	\$ 15.91	\$ 33,100.00
Protective Service Occupations	\$ 25.79	\$ 53,640.00
Food Preparation and Serving Related Occupations	\$ 13.49	\$ 28,060.00
Building and Grounds Cleaning and Maintenance Occupations	\$ 15.40	\$ 32,040.00
Personal Care and Service Occupations	\$ 14.76	\$ 30,700.00
Sales and Related Occupations	\$ 19.53	\$ 40,610.00
Office and Administrative Support Occupations	\$ 19.74	\$ 41,060.00
Farming, Fishing, and Forestry Occupations	\$ 19.21	\$ 39,960.00
Construction and Extraction Operations	\$ 23.01	\$ 47,860.00
Installation, Maintenance, and Repair Occupations	\$ 24.01	\$ 49,940.00
Production Occupations	\$ 21.40	\$ 44,510.00
Transportation and Material Moving Occupations	\$ 19.68	\$ 40,940.00
All Occupations	\$ 25.41	\$ 52,850.00

Occupational Employment and Data Statistics from the U.S. Bureau of Labor Statistics, May 2023 Metropolitan and Nonmetropolitan Area
Occupational Employment and Wage Estimates

LAND USE

Zoned Land Use (2024)

Zoning District	Acres	Percentage
Agricultural	13289.62	19.75
Commercial	5496.95	8.17
Industrial	10728.08	15.94
Office	368.28	0.55
Planned Development	4392.25	6.53
Residential	19473.57	28.94
Retail	2038.87	3.03
Sum All District	55787.62	
Right-of-Way	11495.01	17.08
City Limits	67282.63	100.00

Zoning data compiled from City of Amarillo GIS annual reports.

Annexations (acres)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New	659.48	347.23	19.2	519.68	0	154.68	91.334	329.62	330.26	191.07	322.26	0
City Limits	64326.4	64673.6	64692.8	65212.5	65212.5	65367.2	65458.5	65788.1	66118.4	66309.5	66631.7	66631.7

Annexation data compiled from City of Amarillo GIS surveys.

Building Permits

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Residential										
New Construction										
Single Family	441	502	625	479	543	448	560	535	675	495
Multi-Family	19	4	7	4	7	13	42	16	26	18
Total Units	386	330	14	8	114	26	256	32	52	124
Additions/Remodels	7,523	3,768	3,055	5,208	3,429	5,353	5,103	4,449	1,354	2,505
Non-Residential										
New Construction	58	72	90	63	68	54	55	61	66	52
Additions/Remodels	1,370	727	490	737	604	619	587	523	647	427

GOVERNMENT

Fire/Police/Marshals/City Employees (2023)

	-----Number of Employees-----	
	Full-Time	Part-Time/Seasonal
Fire Department	325	1
Police Department	461	9
City Marshal	23	0
City Employees	1541	343
Total	2350	353

City of Amarillo Annual Budget

2013	2014	2015	2016	2017	2018
\$298,068,009	\$295,087,777	\$336,233,404	\$328,113,909	\$359,725,301	\$379,573,236
2019	2020	2021	2022	2023	2024
\$401,558,236	\$392,706,422	\$419,530,054	\$490,830,448	\$531,043,295	\$499,561,498

Primary Sources of Revenue Fiscal Year (Percentage)

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Sales Tax	28%	26%	26%	25%	24%	26.4%	21.8%	24.2%	30.2%
Property Tax	22%	21%	22%	22%	23%	22.7%	21.6%	22.4%	21.7%
Other Taxes	12%	12%	11%	11%	9%	10.9%	12.3%	10.5%	11.7%
Capital Grants	5%	6%	6%	5%	5%	5.1%	5.2%	6.9%	2.5%

Employment, Budget, and Revenue data taken from City of Amarillo Annual Budgets and Annual Comprehensive Financial Reports

Property Tax Rates

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Amarillo ISD	1.18900	1.18900	1.18900	1.23900	1.16900	1.15540	1.14960	1.08470	0.92580
Amarillo Jr. College	0.20750	0.20750	0.20750	0.20750	0.22790	0.22790	0.21129	0.22323	0.22031
Bushland ISD	1.26804	1.25433	1.23777	1.23370	1.16371	1.16010	1.15665	1.34055	1.06737
Canyon ISD	1.26000	1.26000	1.26500	1.26500	1.23000	1.28000	1.23300	1.14000	0.93000
City of Amarillo	0.35072	0.35072	0.36364	0.36838	0.38851	0.39681	0.44334	0.40628	0.39195
City of Canyon	0.39083	0.46503	0.45484	0.44758	0.43809	0.43809	0.42618	0.40016	0.39286
Hi Plains Water-Potter	0.00802	0.00750	0.00690	0.00670	0.00630	0.00550	0.00510	0.00469	0.00420
Highland Park ISD	1.16190	1.16190	1.16190	1.18590	1.10330	1.09740	1.08480	0.98670	0.98920
Panhandle Water District #3	0.00790	0.00902	0.00905	0.00906	0.00960	0.01020	0.01020	0.00936	0.00864
Noxious Weed Dist	.03/ac	.03/ac	.03/ac	.03/ac	.03/ac	.03/ac	.03/ac	.03/ac	.03/ac
River Road ISD	1.35000	1.35000	1.35000	1.35000	1.27650	1.26280	1.23970	1.16200	0.96560
So. Randall Hosp	0.07587	0.07446	0.07000	0.07000	0.05200	0.05000	0.04812	0.04193	0.03770
Potter County	0.66402	0.66402	0.67000	0.68500	0.70100	0.69015	0.70595	0.64725	0.61692
Bishop Hills	0.08000	0.08000	0.08000	0.08000	0.08000	0.08000	0.08000	0.08000	0.07800
Randall County	0.40605	0.41473	0.41473	0.43126	0.44126	0.44421	0.44421	0.41713	0.40148
Hi Plains Water-Randall	0.00802	0.00750	0.00690	0.00670	0.00630	0.00550	0.00510	0.00469	0.00420
Wildorado ISD	1.47000	1.47000	1.18200	1.58270	1.51000	1.41470	1.40340	1.38410	1.37800
Palisades	0.25000	0.25000	0.25000	0.25000	0.13921	0.14244	0.14530	0.12878	0.12476
Happy ISD	1.04000	1.04000	1.04000	1.04000	0.97000	0.95850	0.91810	0.87110	0.81730
City of Happy	0.82248	0.81520	0.78121	0.76850	0.77044	0.54540	0.52020	0.49430	0.45900
Timbercreek	0.20000	0.20000	0.21000	0.21000	0.20800	0.20600	0.20600	0.19383	0.18250
Tierra Blanca Mud No 1									1.00000

Property Tax Rates as reported to the Potter-Randall Appraisal District

Local Public Transit Riders

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
408,440	367,523	339,459	356,858	340,731	318,890	230,622	216,450	252,672	225,315

Local Public Transit data from the Department of Transportation Annual Agency Profile reports

Sales Tax Revenues (in thousands of dollars)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
54,414	55,483	56,094	55,544	57,404	59,176	59,785	67,507	74,468	75,393

Property Tax Revenues (in thousands of dollars)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
32,628	37,687	40,002	42,003	44,062	45,108	48,833	50,574	54,337	56,782

Assessed Valuation (in millions of dollars)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
10,761	11,100	11,542	12,065	12,788	13,149	13,617	14,099	14,594	15,130

Sales Tax, Property Tax, and Assessed Valuation data from City of Amarillo Annual Financial Reports.

Wastewater

Hollywood Road Wastewater Treatment Plant

Treatment Capacity	2023 12 Million Gallons/Day
Peak Demand	29.9 Million Gallons/Day
Average Daily Flow	8.5 Million Gallons/Day

River Road Wastewater Treatment Plant

	2023
Treatment Capacity	16 Million Gallons/Day
Peak Demand	16.8 Million Gallons/Day
Average Daily Flow	8.4 Million Gallons/Day

Water Production and Distribution (2023)

Sources: Canadian River Municipal Authority/ Ogallala, Santa Rosa, and Dockum Aquifers

Treated Storage Capacity:	87 M Gallons	Average Daily Demand:	46.1 M Gallons/Day
Raw Storage Capacity:	500 M Gallons	Pumping Capacity:	118 M Gallons
Peak Demand:	89 M Gallons/Day		

Water and Wastewater data as reported by City of Amarillo Water and Wastewater departments

Key Facts about Amarillo

Population and Work Force	Data
2020 Census	200,393
Growth 2010 - 2020	5.10%
Total Population Randall County	136,005
Total Population Potter County	118,323
Total Population of Randall County within Amarillo City Limits	98,839
Total Population of Potter County within Amarillo City Limits	101,554
Median Age (2020)	34.1

Data Source: U.S. Census Bureau

Amarillo Households	Data
Median Family Income (2020)	\$64,632
Total Households	78,616
Average Household Size	2.5
Owner Occupied Households	46,840
Renter Occupied Households	31,776
Median Home Value	\$172,700
Median Sale Price	\$212,000

Data Sources: U.S. Census Bureau, Amarillo Association of REALTORS, Inc

Amarillo Economy	Data
Total Employment	96,902
Sales Tax Revenues	\$78,839,119
Property Tax Revenues	\$52,807,757




Data Source: U.S. Census Bureau, City of Amarillo 2024/2025 Approved Budget

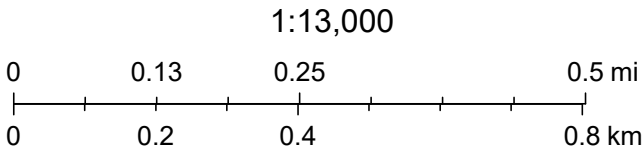
School Data Map


Figure 2.4.1e



1/8/2025, 11:21:11 AM

-  Schools
-  Amarillo City Limits
-  Am Tex Liquid Waste Processing, LLC



 Esri Community Maps Contributors, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, sena, Maxar

2.4.2: City of Amarillo Coordination Letter and Response



Corporate Office:
3404 Airway Blvd.
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

February 26, 2025

Via email – [REDACTED]

Mr. Jason Williams
Permit Compliance Manager
City of Amarillo
623 S Johnson St
PO Box 1971
Amarillo, Texas 79105

Re: TCEQ Type V Municipal Solid Waste Permit Application Coordination
Am Tex Liquid Waste Processing, LLC
Amarillo, Potter County, Texas

Dear Mr. Williams,

Enviro-Ag Engineering, Inc. is preparing an application to the Texas Commission on Environmental Quality (TCEQ) for a Type V Municipal Solid Waste (MWS) permit for operation of a municipal liquid waste processing facility. Am Tex Liquid Processing, LLC will be located on 1.5 acres at 913 SE 28th Ave., Amarillo, TX 79103. The facility is an 8,000 square foot building located just north of Llano Cemetery and south of the Amarillo City Street Department off SE 28th Ave in Amarillo. The site is located at Latitude 35.184544 and longitude -101.830083. Please refer to the enclosed location map.

The facility's property is zoned for industrial use. The surrounding land use is comprised of industrial, commercial and residential properties. The facility will dewater grease, grit and household septage waste. The proposed plan is to have the liquids drain through the drainage ports to the City of Amarillo sewage treatment plant via underground lines. The facility will be applying for a City of Amarillo permit and will comply with the conditions within that permit. This process reduces the weight and volume making it easier to store and dispose of in bulk amounts. The solids will be stored for a short period of time (no more than 24 hours) until the filter box container is full of the separated solids and then it will be transported to Southwest Landfill in Canyon, TX.

This letter is to request a letter of confirmation with the City of Amarillo. The information will be used to document coordination with your agency, to show compliance with the

Regional Solid Waste Plan and the local Council of Governments. Please e-mail your response to me at apecoples@enviroag.com.

If you have any questions or require additional information, please contact me at 806-353-6123 or via the email provided above.

Sincerely,



Amy Peoples
Enviro-Ag Engineering, Inc.

Enclosures

Cc: Am Tex Liquid Waste Processing, LLC
EAE file

Amy Peoples

From: Williams, Jason [REDACTED]
Sent: Monday, March 17, 2025 8:45 AM
To: Amy Peoples
Subject: RE: Letter of Coordination

CAUTION: This email originated from outside of Enviro-Ag Engineering. Do not click links or open attachments unless you have verified the sender and know the content is safe.

Ms. Peoples,

I forwarded your request to our director of utilities office for evaluation. You should be receiving a response in the near future.

My apologies for the delay.

Jason Williams

Permit Compliance Manager
Laboratory Administration
[REDACTED]

806-418-6314



NOTICE: *This email may contain confidential information for the intended recipient only. Unauthorized use, disclosure, or distribution is prohibited. If received in error, please notify sender and delete.*

From: Amy Peoples <apecples@enviroag.com>
Sent: Monday, March 17, 2025 7:29 AM
To: Williams, Jason <Jason.Williams@amarillo.gov>
Subject: RE: Letter of Coordination

You don't often get email from [REDACTED]

Attention: This email was sent from someone outside of City of Amarillo. Always use caution when opening attachments or clicking links from unknown senders or when receiving unexpected emails.

Mr. Williams,
Good morning.

I just wanted to follow up with you regarding the letter of coordination for my client, Am Tex Liquid Waste Processing, proposed project. Please let me know if you need more information regarding this project.

Thanks,
Amy Peoples

From: Amy Peoples
Sent: Wednesday, February 26, 2025 2:35 PM
[REDACTED]
Subject: Letter of Coordination

Mr. Williams,

Thank you for taking the time to talk with me this afternoon. Attached is a letter requesting that my client is in contact with the City. Please let me know if you need more information regarding the proposed project.

Thanks,

Amy Peoples

Enviro-Ag Engineering, Inc.
3404 Airway Blvd
Amarillo, TX 79118
806-353-6123 – Office
620-417-0525 - Cell

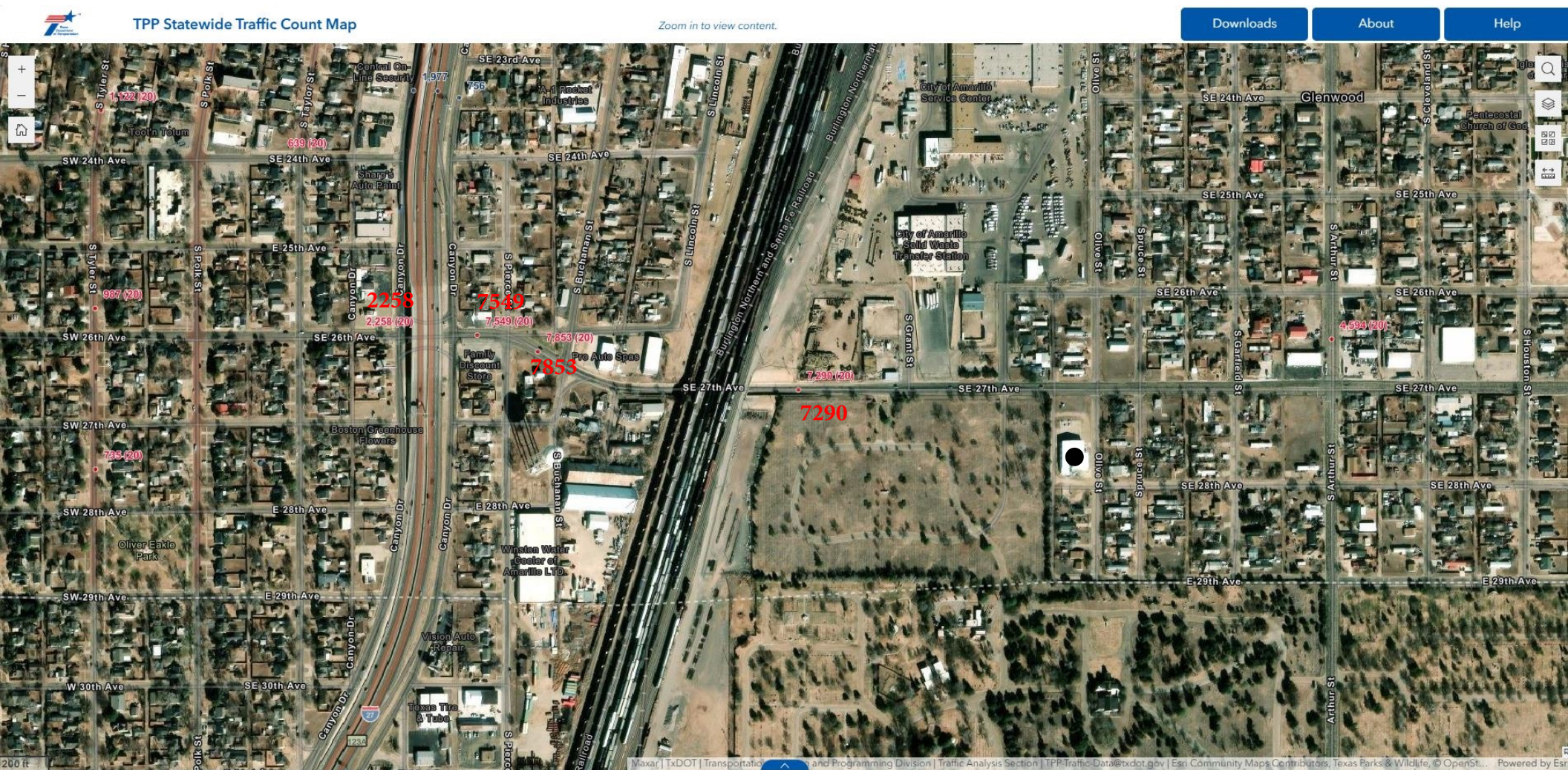
Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

2.5.1: Traffic Counts

Figure 2.5.1



<https://experience.arcgis.com/experience/6c0166bfc5144afe83926a3a529a8d03/page/District-Traffic-Web-Viewer/>

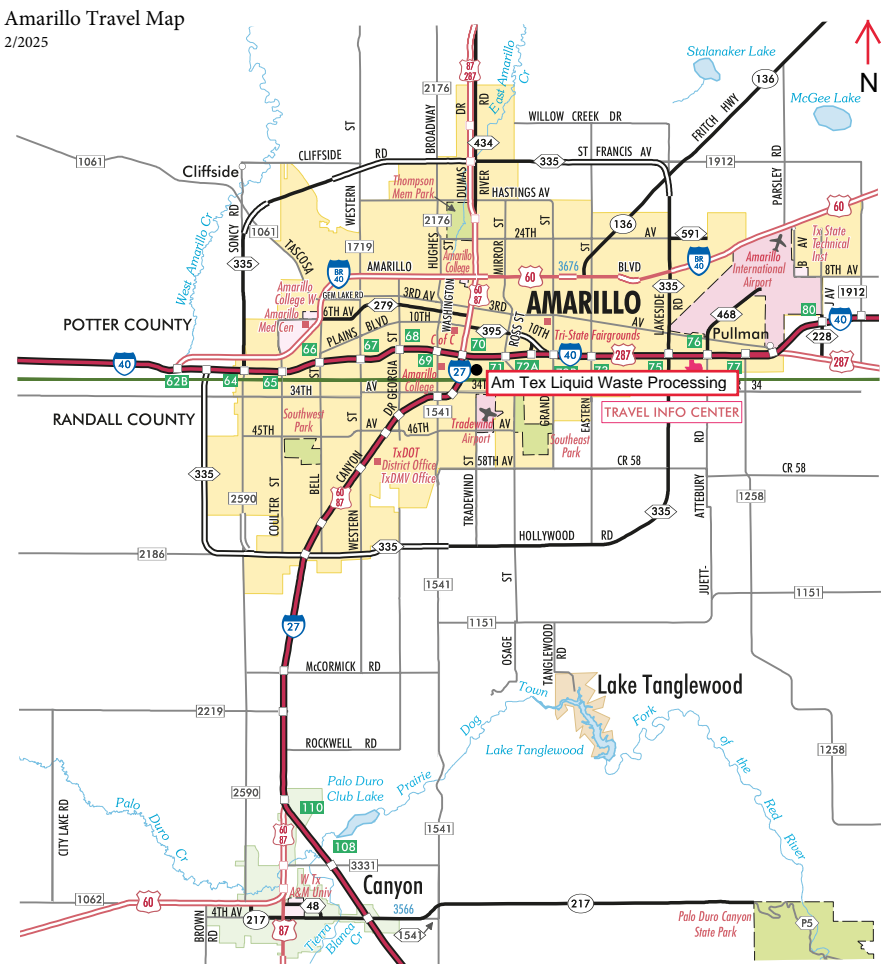
- Legend**
- Am Tex Liquid Waste Processing Location
 - Red numbers are the traffic counts in 2020

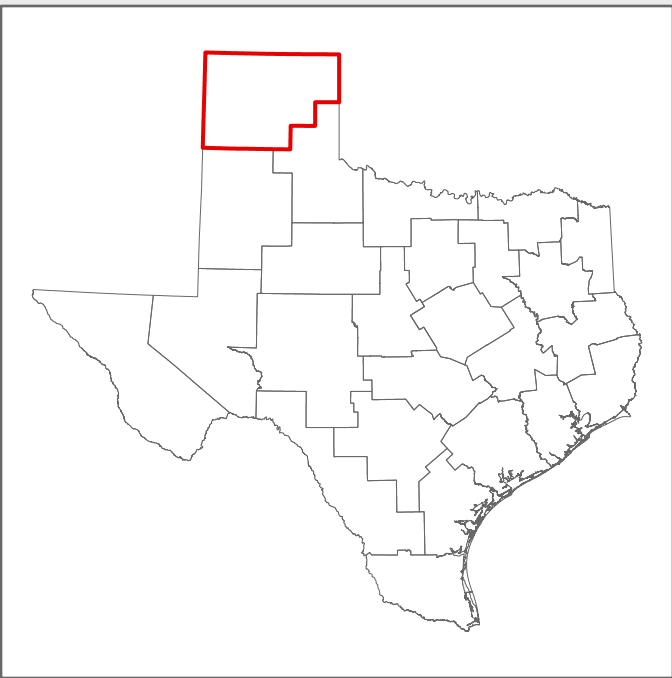


2.5.2: TX DOT Travel Maps

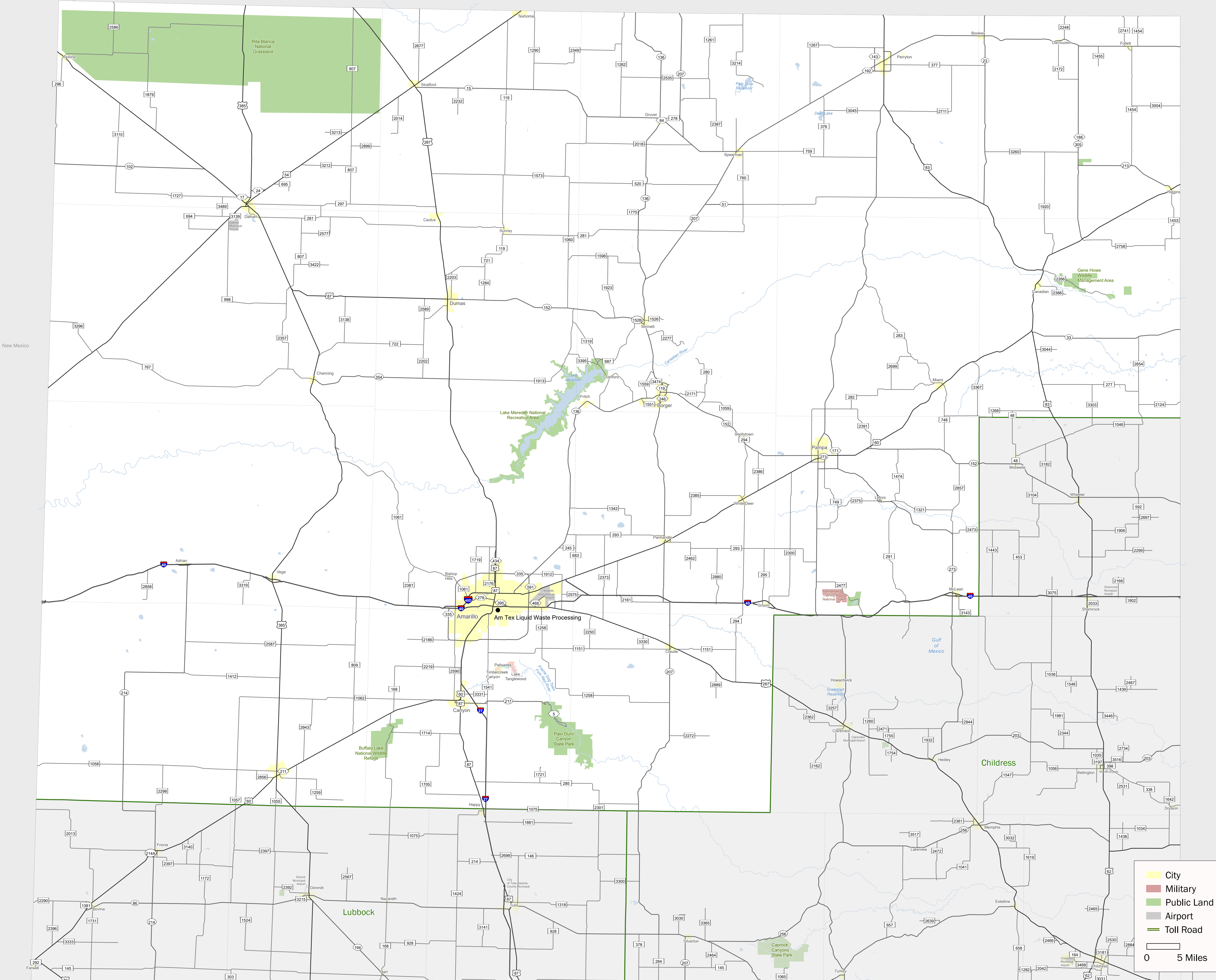
Amarillo Travel Map

2/2025





2/2025



2.5.3: TX DOT Coordination Letter & Response



5715 Canyon Drive | Amarillo, Texas 79110
806.356.3261
www.txdot.gov

02/26/2025

Amy Peoples
Enviro-AG Engineering Inc.
3404 Airway Blvd
Amarillo TX 79118

Re: TCEQ Type V Municipal Solid Waste Permit Application Coordination
Am Tex Liquid Waste Processing, LLC
Amarillo, Potter County, Texas

Ms. Peoples,

The proposal has been reviewed and the additional traffic will not adversely affect TxDOT. This proposal is approved by TxDOT. If changes occur, please contact us so we may reevaluate.

Sincerely,

Signed by:

3719DE174B2A4C6...

Zachary Mayer, P.E.
Amarillo District Director of Maintenance



Corporate Office:
3404 Airway Blvd.
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

February 25, 2025

Via email – Zachary.mayer@txdot.gov

Mr. Blair Johnson
District Engineer
Texas Department of Transportation
Amarillo District
8401 S. Washington St.
Amarillo, Texas 79118

Re: TCEQ Type V Municipal Solid Waste Permit Application Coordination
Am Tex Liquid Waste Processing, LLC
Amarillo, Potter County, Texas

Dear Mr. Johnson,

Enviro-Ag Engineering, Inc. is preparing an application to the Texas Commission on Environmental Quality (TCEQ) for a Type V Municipal Solid Waste (MWS) permit for operation of a municipal liquid waste processing facility. Am Tex Liquid Processing, LLC will be located on 1.5 acres at 913 SE 28th Ave., Amarillo, TX 79103. The facility is an 8,000 square foot building located just north of Llano Cemetery and south of the Amarillo City Street Department off SE 28th Ave in Amarillo – (Lots 1,2,3,4,5 and 6, Block 8 and Lot 1, Block 9, Glenwood Addition, an Addition to the City of Amarillo, Potter County, Texas). Traffic will access the facility via Interstate 27 from the North or South and then exit on the SE 26th Avenue exit and enter the site via SE 27th Avenue into the existing driveway on the north side of the property. The site traffic will not use any residential streets. SE 27th Avenue is a paved roadway. There is an estimated 5-10 vehicles/day generated by the facility to the normal traffic patterns. The site is located at Latitude 35.184544 and longitude - 101.830083. Please refer to the enclosed location map.

The facility's property is zoned for industrial use. The surrounding land use is comprised of industrial, commercial and residential properties. The facility will dewater grease, grit and household septage waste. The liquids will drain through the drainage ports into the City of Amarillo sewage treatment plant via underground lines. The facility has contacted and will be applying for a City of Amarillo permit and will comply with the conditions within that permit as well. This process reduces the weight and volume

making it easier to store and dispose of in bulk amounts. The solids will be stored for a short period of time (no more than 24 hours) until the filter box container is full of the separated solids and then it will be transported to Southwest Landfill in Canyon, TX.

This letter is to request a letter of confirmation with the TxDOT for traffic and location restrictions in accordance with TCEQ regulations at 30 TAC§330.61(i)(4). The information will be used to document coordination with your agency, to show adequate road service for the facility and to show that added traffic will not adversely affect the roadway. Information regarding the adequacy of the roads in the area as well as traffic counts for roads that are under the TxDOT jurisdiction is appreciated. Please e-mail your response to me at [REDACTED]

If you have any questions or require additional information, please contact me at 806-353-6123 or via the email provided above.

Sincerely,

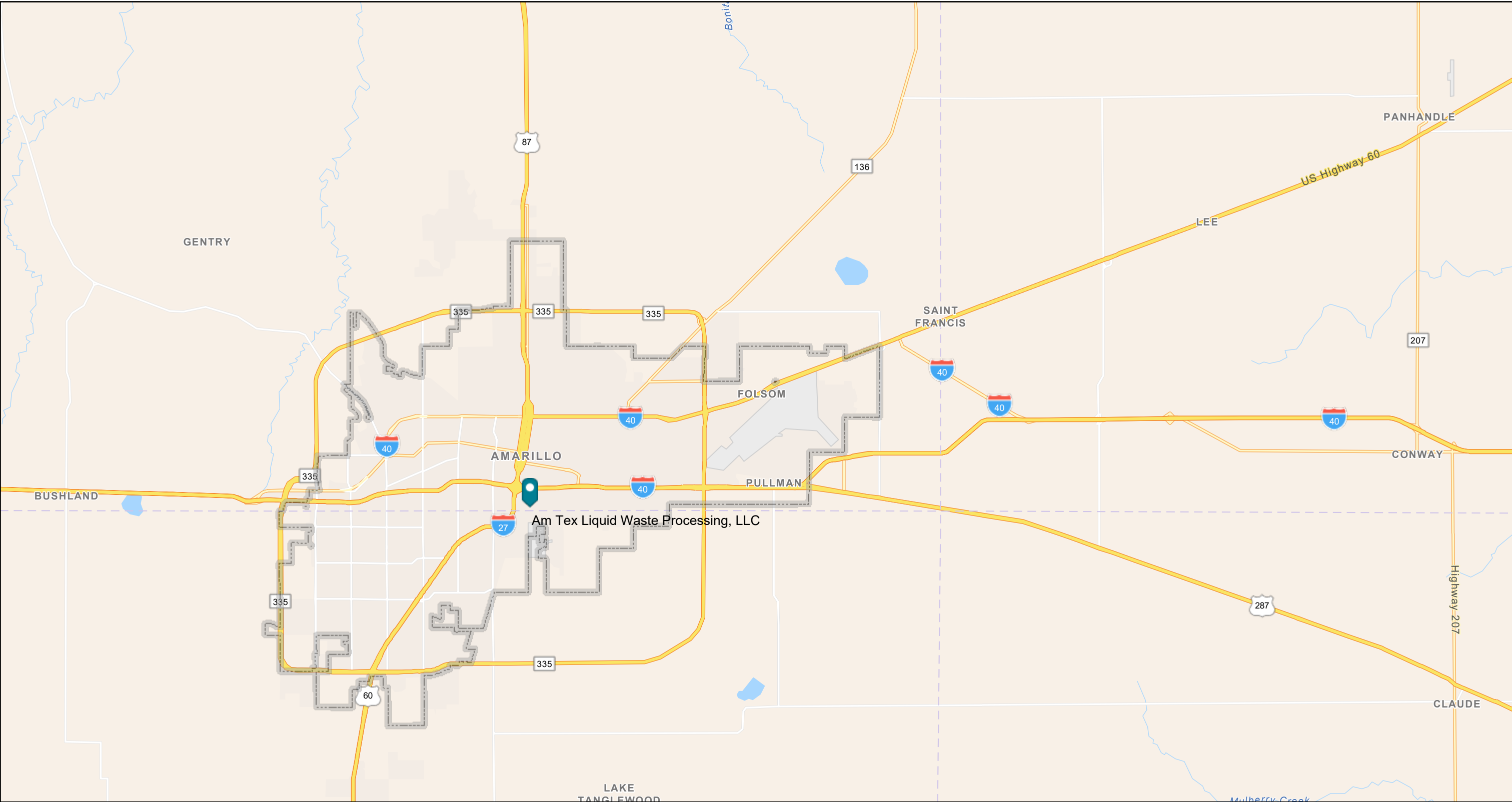


Amy Peoples
Enviro-Ag Engineering, Inc.

Enclosures

Cc: Am Tex Liquid Waste Processing, LLC
EAE file

Figure 1.7 - Vicinity Map




Legend

 Amarillo City Limits

1:212,326

0 2.25 4.5 9 mi
0 3.5 7 14 km

 sena, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

2.6.1: Soil Map

Figure 2.6.1



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Potter County, Texas

Survey Area Data: Version 25, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 13, 2022—Nov 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PuU	Pullman-Urban land complex	1.4	100.0%
Totals for Area of Interest		1.4	100.0%

2.6.2: Map Unit Description

Potter County, Texas

PuU—Pullman-Urban land complex

Map Unit Setting

National map unit symbol: 2mhvq

Elevation: 0 to 4,000 feet

Mean annual precipitation: 8 to 60 inches

Mean annual air temperature: 54 to 73 degrees F

Frost-free period: 180 to 310 days

Farmland classification: Not prime farmland

Map Unit Composition

Pullman and similar soils: 50 percent

Urban land: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pullman

Setting

Landform: Playa slopes, plains

Down-slope shape: Concave, convex

Across-slope shape: Linear

Parent material: Clayey eolian deposits from the blackwater draw formation of pleistocene age

Typical profile

H1 - 0 to 7 inches: clay loam

H2 - 7 to 23 inches: clay

H3 - 23 to 54 inches: clay loam

H4 - 54 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 60 percent

Gypsum, maximum content: 2 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Description of Urban Land

Typical profile

H1 - 0 to 40 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 20 percent
Hydric soil rating: No

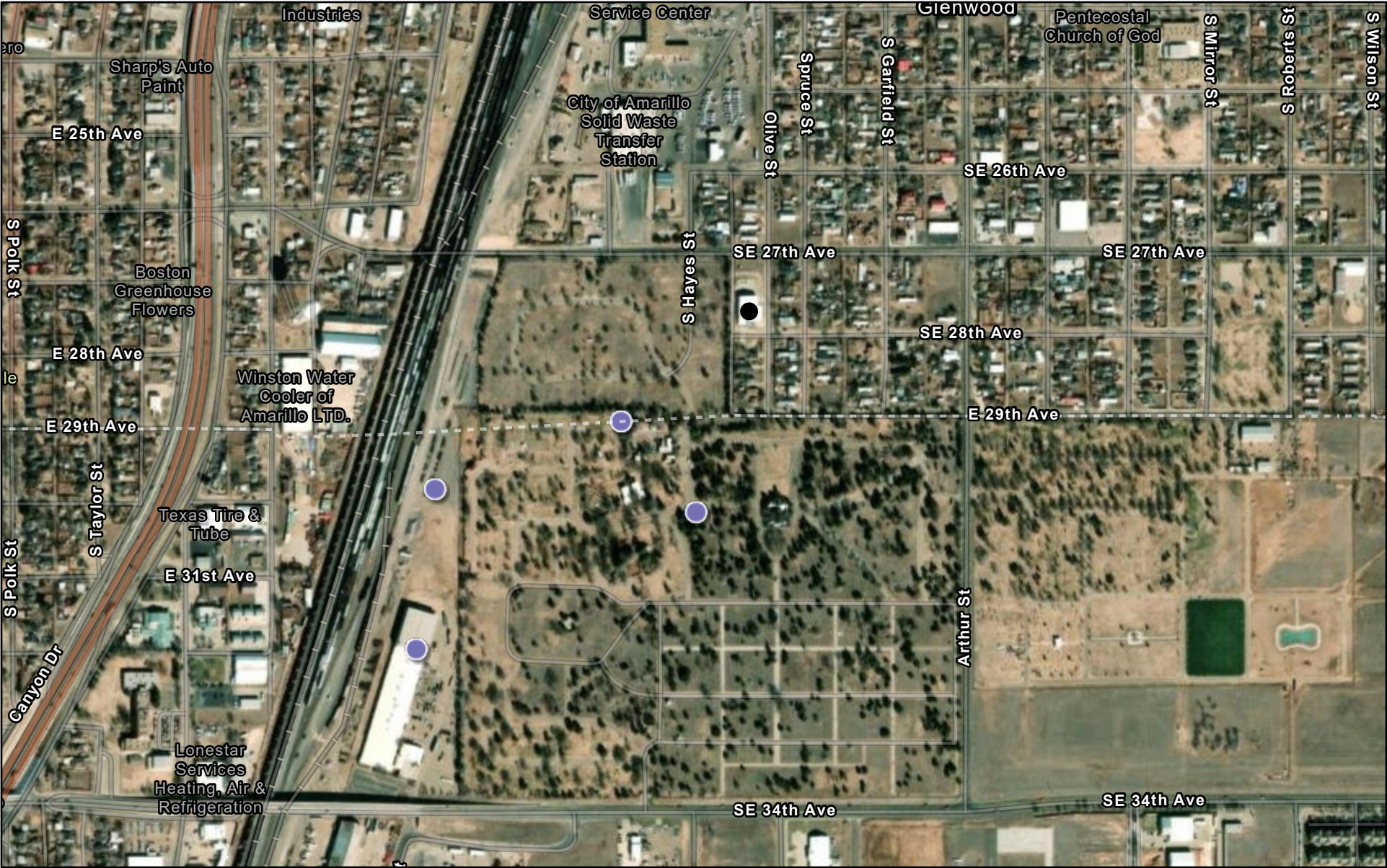
Data Source Information

Soil Survey Area: Potter County, Texas
Survey Area Data: Version 25, Aug 30, 2024

2.7.1: Texas Water Development Board Map

Figure 2.7.1

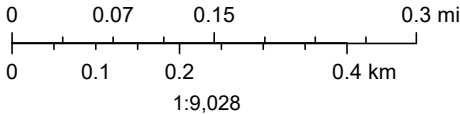
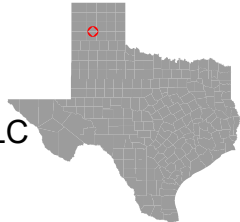
Am Tex Liquid Waste Processing



Texas Water Development Board

December 30, 2024

- TWDB Groundwater
- Am Tex Liquid Waste Processing, LLC

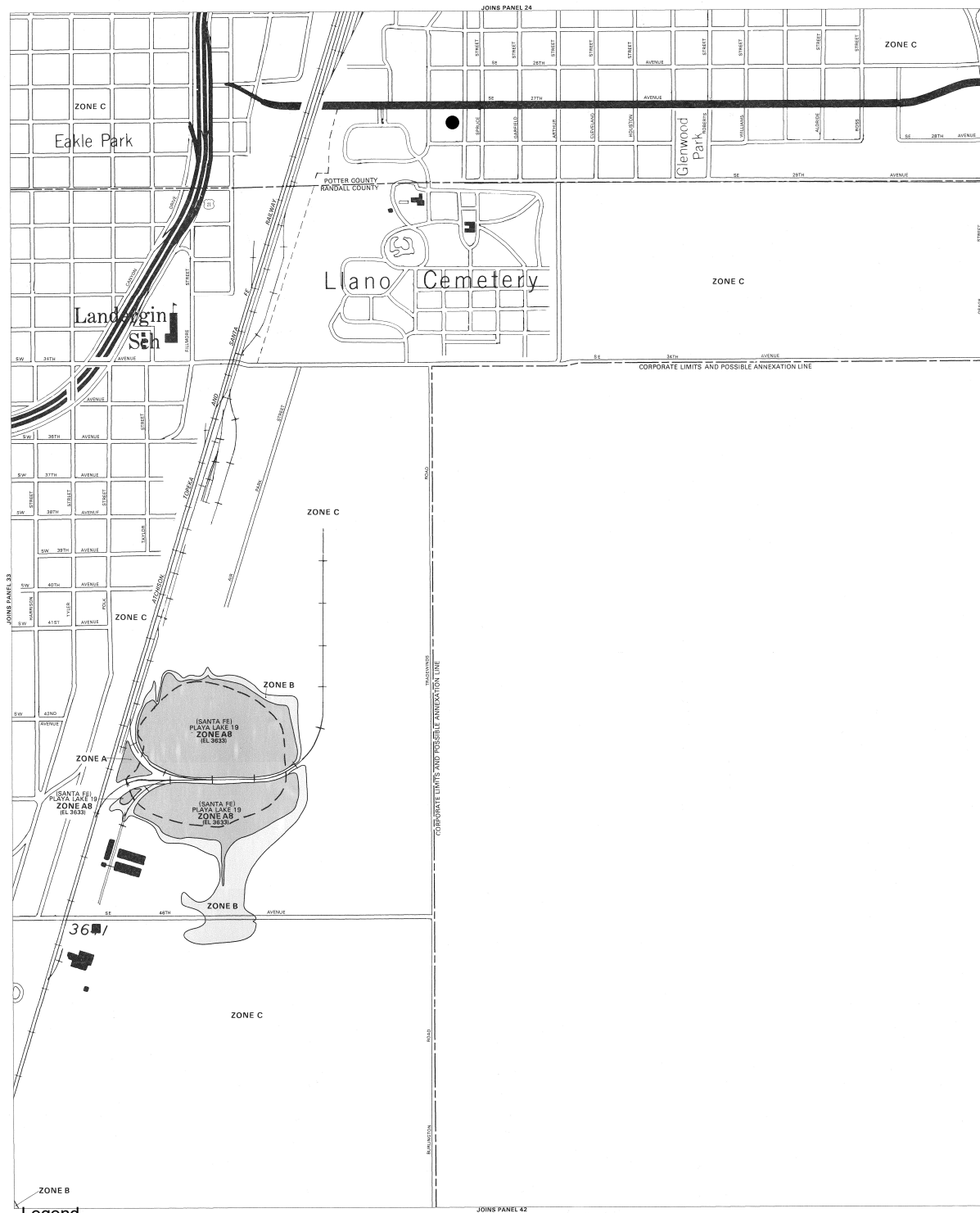


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap

The data in Water Data Interactive represents the best available information provided by the TWDB and third-party cooperators of the TWDB. The TWDB provides information via this web site as a public service. Neither the State of Texas nor the TWDB assumes any legal liability or responsibility or makes any guarantees or warranties as to the accuracy, completeness or suitability of the information for any particular purpose. The TWDB systematically revises or removes data discovered to be incorrect. If you find inaccurate information or have questions, please contact WDI-Support@twdb.texas.gov.

2.8.1: FIRM Map

Figure 2.8.1



Legend

- Am Tex Liquid Waste Processing, LLC

KEY TO MAP

100-Year Flood Boundary ———→ **ZONE B**

100-Year Flood Boundary ———→ **ZONE A1**

Zone Designations* ———→ **ZONE A5**

100-Year Flood Boundary ———→ **ZONE B**

Base Flood Elevation Line With Elevation in Feet** ———→ **513'**

Base Flood Elevation in Feet Where Uniform Within Zone** ———→ **RM7X**

Elevation Reference Mark ———→ **RM7X**

Zone D Boundary ———→ **M1.5**

River Mile ———→ **M1.5**

**Referenced to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A50	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
FEBRUARY 15, 1982

FLOOD INSURANCE RATE MAP EFFECTIVE:
JULY 19, 1982

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actual rates apply to structures in the zones where elevations or depths have been established.

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

APPROXIMATE SCALE

0 500 1000 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
AMARILLO, TEXAS
POTTER AND RANDALL
COUNTIES

PANEL 34 OF 45
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
480529 0034 A

EFFECTIVE DATE:
JULY 19, 1982



Federal Emergency Management Agency





2.8.2: Wetland Map

Wetland Map



December 30, 2024

Wetlands

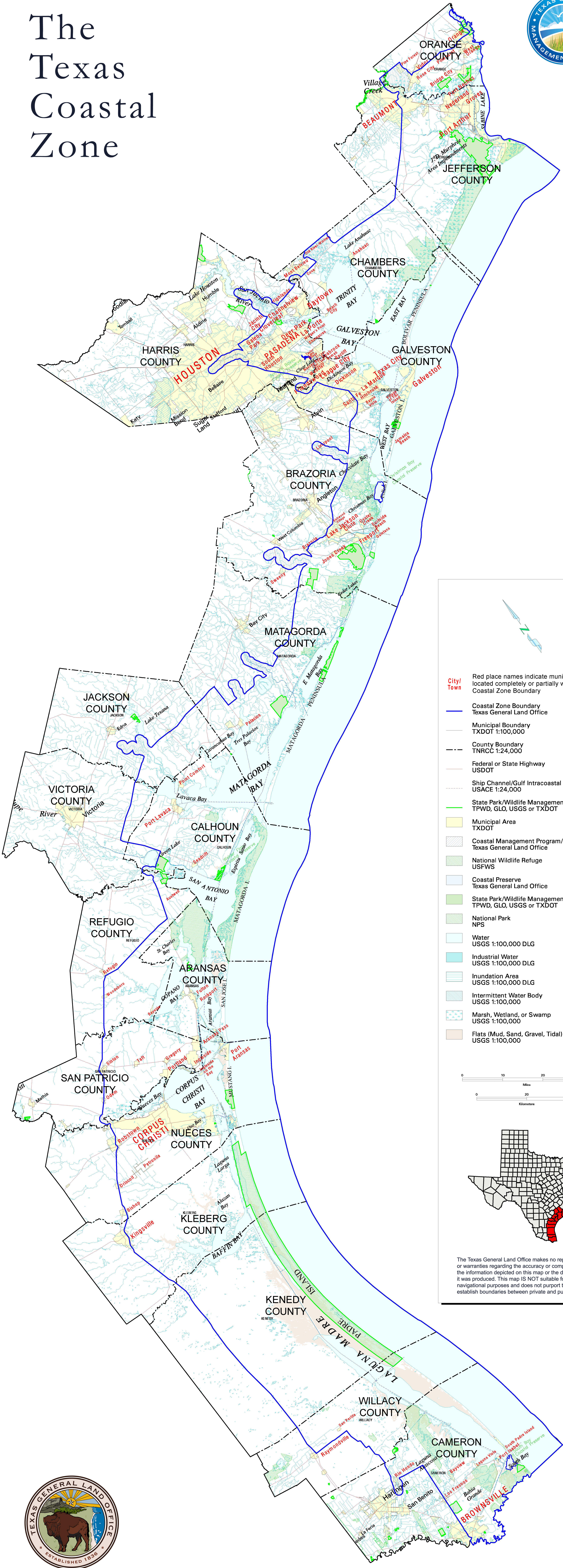
	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

● Am Tex Liquid Waste Processing, LLC

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

2.8.3: Coastal Map

The Texas Coastal Zone



City/
Town

Red place names indicate municipal areas located completely or partially within the Coastal Zone Boundary

Coastal Zone Boundary
Texas General Land Office

Municipal Boundary
TXDOT 1:100,000

County Boundary
TNRCC 1:24,000

Federal or State Highway
USDOT

Ship Channel/Gulf Intracoastal Waterway
USACE 1:24,000

State Park/Wildlife Management Area
TPWD, GLO, USGS or TXDOT

Municipal Area
TXDOT

Coastal Management Program/Wetlands Only
Texas General Land Office

National Wildlife Refuge
USFWS

Coastal Preserve
Texas General Land Office

State Park/Wildlife Management Area
TPWD, GLO, USGS or TXDOT

National Park
NPS

Water
USGS 1:100,000 DLG

Industrial Water
USGS 1:100,000 DLG

Inundation Area
USGS 1:100,000 DLG

Intermittent Water Body
USGS 1:100,000

Marsh, Wetland, or Swamp
USGS 1:100,000

Flats (Mud, Sand, Gravel, Tidal)
USGS 1:100,000

0102030

Miles

02040

Kilometers

The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map IS NOT suitable for navigational purposes and does not purport to depict or establish boundaries between private and public land.



2.9.1: Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arlington Ecological Services Field Office
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
Phone: (817) 277-1100 Fax: (817) 277-1129
Email Address: [REDACTED]

In Reply Refer To:

12/30/2024 21:37:44 UTC

Project Code: 2025-0036668

Project Name: Am Tex Liquid Waste Processing LLC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, which may occur within the boundary of your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under section 7(a)(1) of the Act, Federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Under and 7(a)(2) and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether their actions may affect threatened and endangered species and/or designated critical habitat. A Federal action is an activity or program authorized, funded, or carried out, in whole or in part, by a Federal agency (50 CFR 402.02).

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For Federal actions other than major construction activities, the Service suggests that a biological evaluation (similar to a Biological Assessment) be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and

the effect is not discountable or insignificant. This determination requires formal section 7 consultation.

The Service has performed up-front analysis for certain project types and species in your project area. These analyses have been compiled into *determination keys*, which allows an action agency, or its designated non-federal representative, to initiate a streamlined process for determining a proposed project's potential effects on federally listed species. The determination keys can be accessed through IPaC.

The Service recommends that candidate species, proposed species, and proposed critical habitat be addressed should consultation be necessary. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at: <https://www.fws.gov/service/section-7-consultations>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>). Additionally, wind energy projects should follow the wind energy guidelines (<https://www.fws.gov/media/land-based-wind-energy-guidelines>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>. The Federal Aviation Administration (FAA) released specifications for and made mandatory flashing L-810 lights on new towers 150-350 feet AGL, and the elimination of L-810 steady-burning side lights on towers above 350 feet AGL. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. For additional information concerning migratory birds and eagle conservation plans, please contact the Service's Migratory Bird Office at 505-248-7882.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in

the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arlington Ecological Services Field Office

17629 El Camino Real, Suite 211

Houston, TX 77058-3051

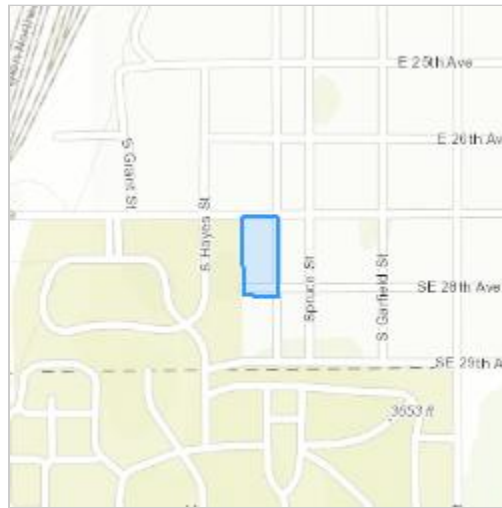
(817) 277-1100

Project Code: 2025-003660

Project Type: Disposal / Transfer

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.1845112,-101.83003567950328,14z>



Counties: Potter County, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
<p>Piping Plover <i>Charadrius melodus</i></p> <p>Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none">▪ Wind Energy Projects <p>Species profile: https://ecos.fws.gov/ecp/species/6039</p>	Threatened
<p>Rufa Red Knot <i>Calidris canutus rufa</i></p> <p>There is proposed critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none">▪ Wind Energy Projects <p>Species profile: https://ecos.fws.gov/ecp/species/1864</p>	Threatened

INSECTS

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>There is proposed critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/9743</p>	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

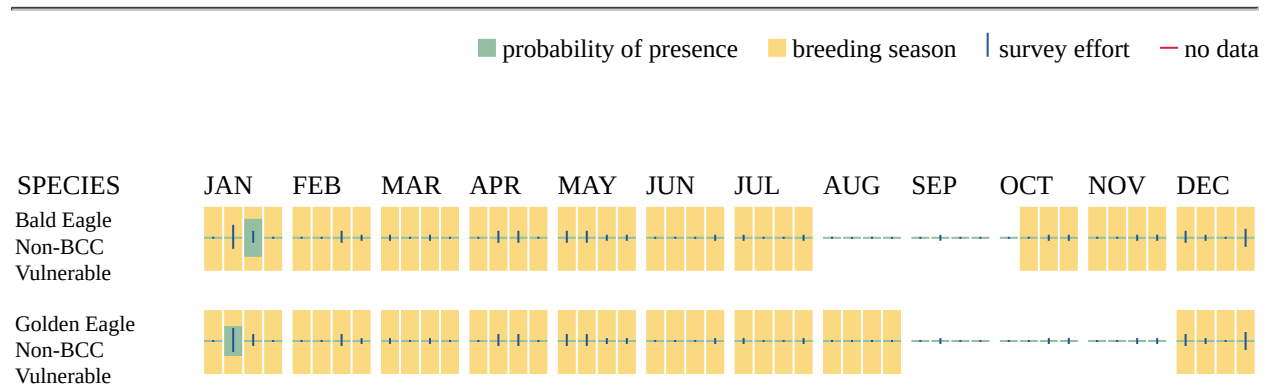
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.

3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31
Broad-tailed Hummingbird <i>Selasphorus platycercus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11935	Breeds May 25 to Aug 21
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Ferruginous Hawk <i>Buteo regalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6038	Breeds Mar 15 to Aug 15
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482	Breeds elsewhere
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Long-billed Curlew <i>Numenius americanus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5511	Breeds Apr 1 to Jul 31

NAME	BREEDING SEASON
Northern Harrier <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Thick-billed Longspur <i>Rhynchophanes mccownii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11901	Breeds May 1 to Aug 15

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

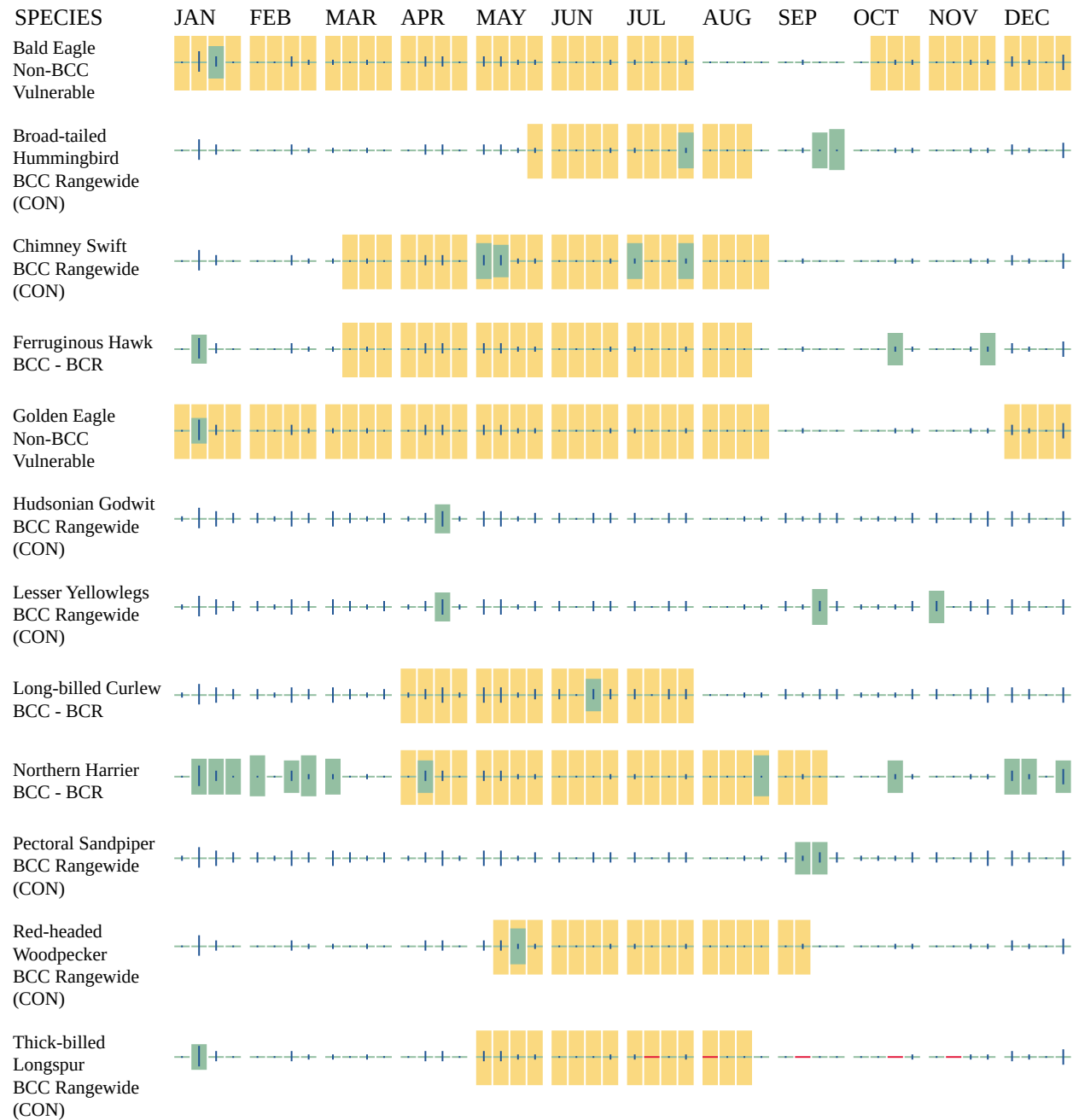
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Amy Peoples
Address: 3404 Airway Blvd
City: Amarillo
State: TX
Zip: 79118
Email: apeoples@enviroag.com
Phone: 6204170525

2.10.1: Amarillo Wind Rose

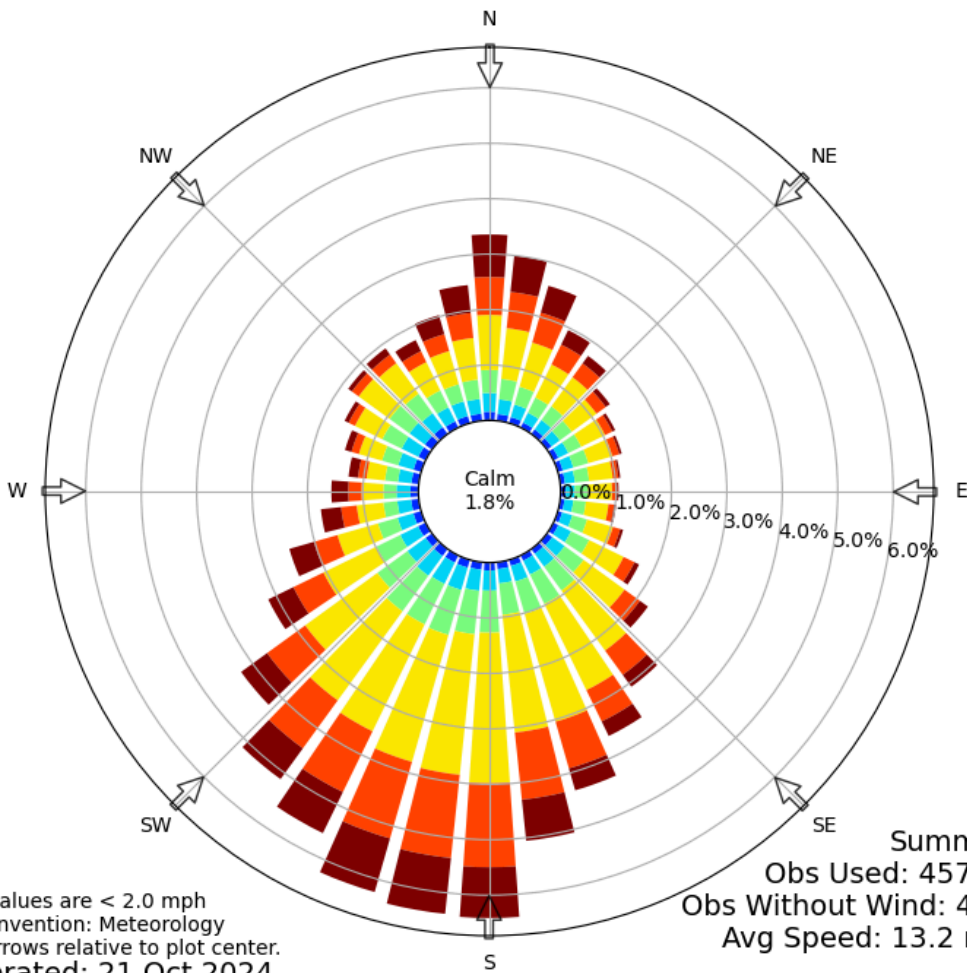
Amarillo Wind Rose

A wind rose is a diagram that depicts the distribution of wind direction and speed at a location over a period of time. The length of each bar represents the percent of time the wind blows from that direction. Each bar is subdivided with colors to show wind speed ranges associated with each direction. A wind rose can quickly indicate the dominant wind directions and the direction of the strongest wind speeds. Wind rose plots are created by the [Iowa Environmental Mesonet](#).

Annual

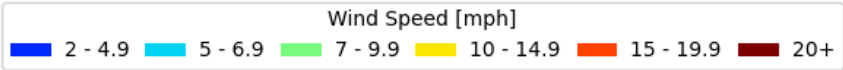


Windrose Plot for [AMA] AMARILLO ARPT(AWOS)
Obs Between: 01 Jan 1970 03:00 AM - 21 Oct 2024 01:53 AM America/Chicago

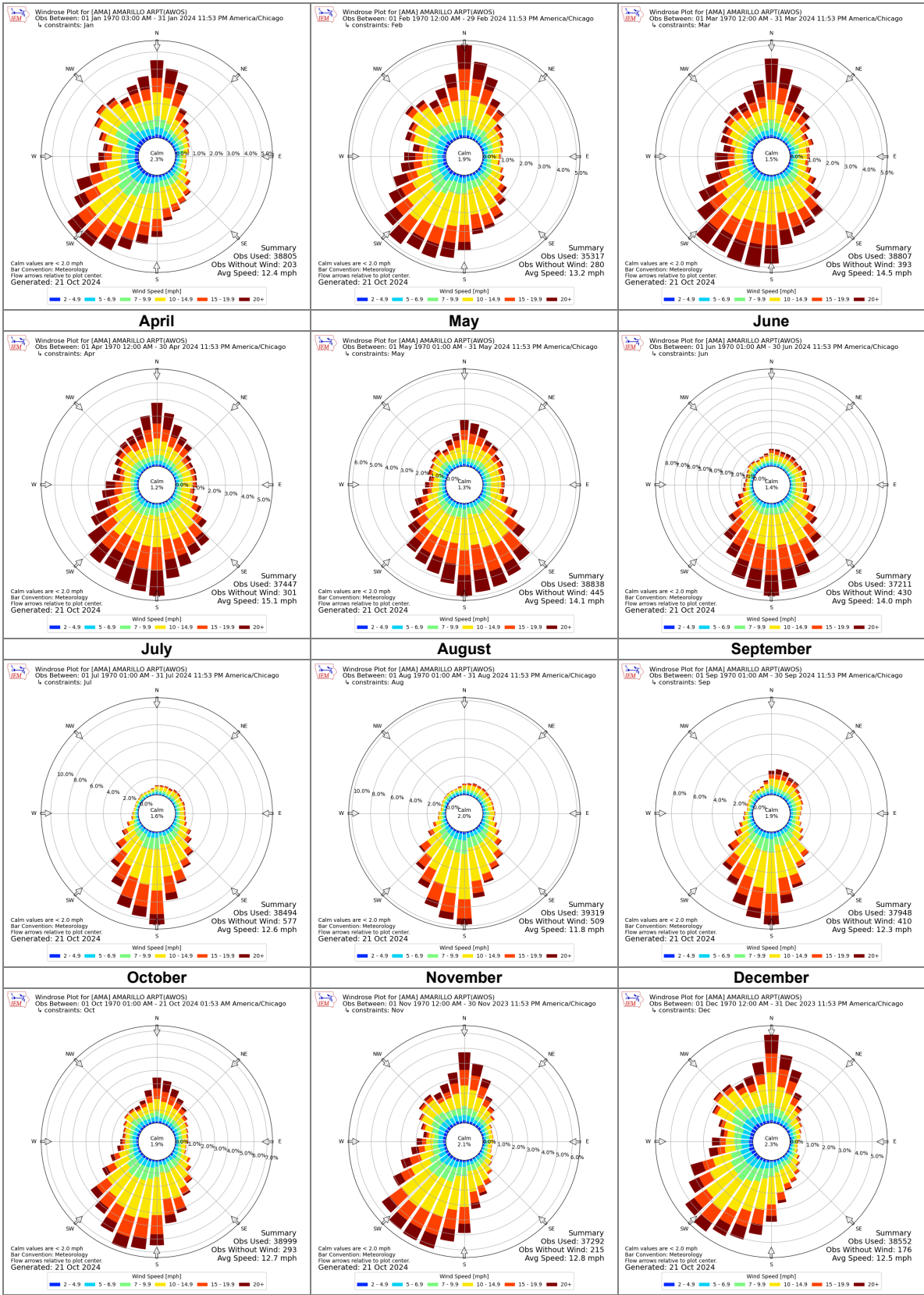


Calm values are < 2.0 mph
Bar Convention: Meteorology
Flow arrows relative to plot center.
Generated: 21 Oct 2024

Summary
Obs Used: 457029
Obs Without Wind: 4232
Avg Speed: 13.2 mph



January	February	March
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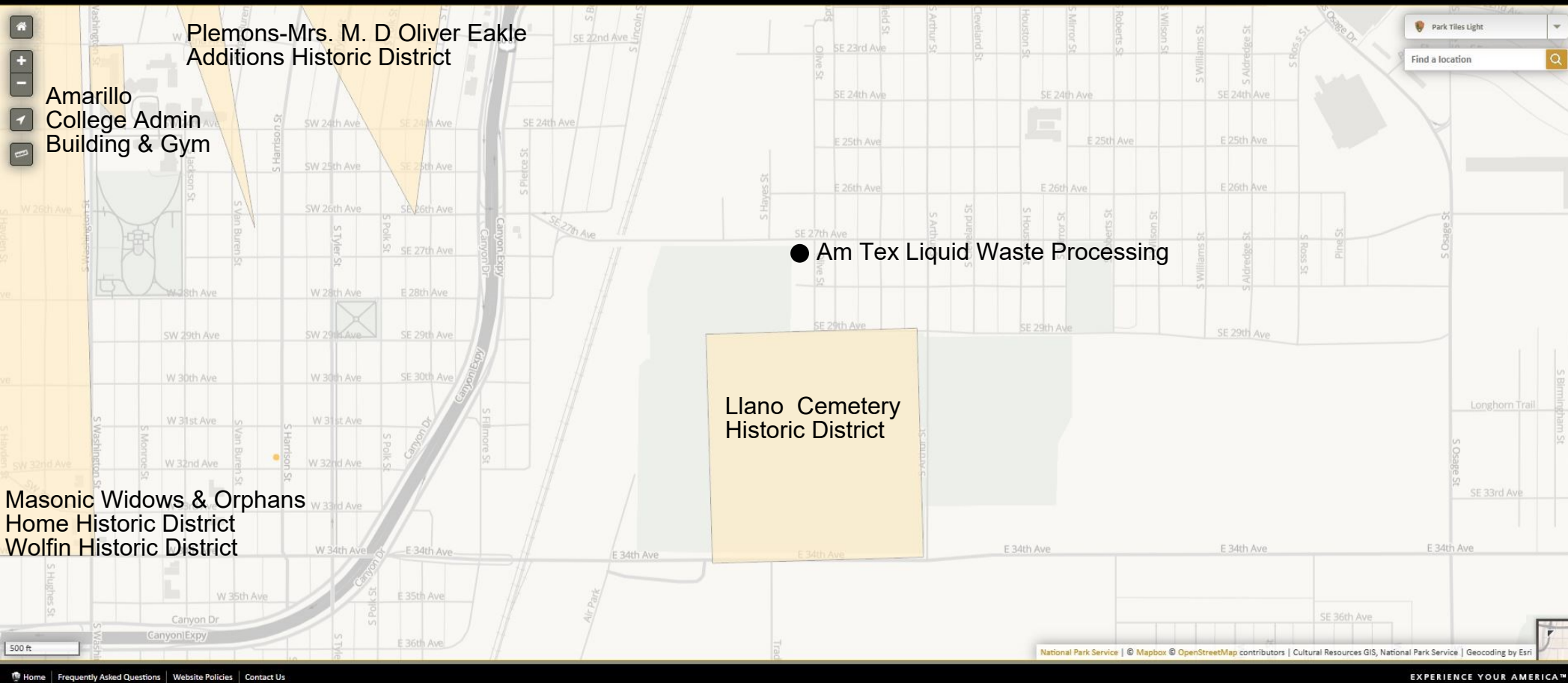


2.11.1: National Register of Historic Places

National Register of Historic Places

Public, non-restricted data depicting National Register spatial data processed by the Cultural Resources GIS facility. Last minor update, September 2020.

National Park Service
U.S. Department of the Interior



<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>
2/2025

Legend

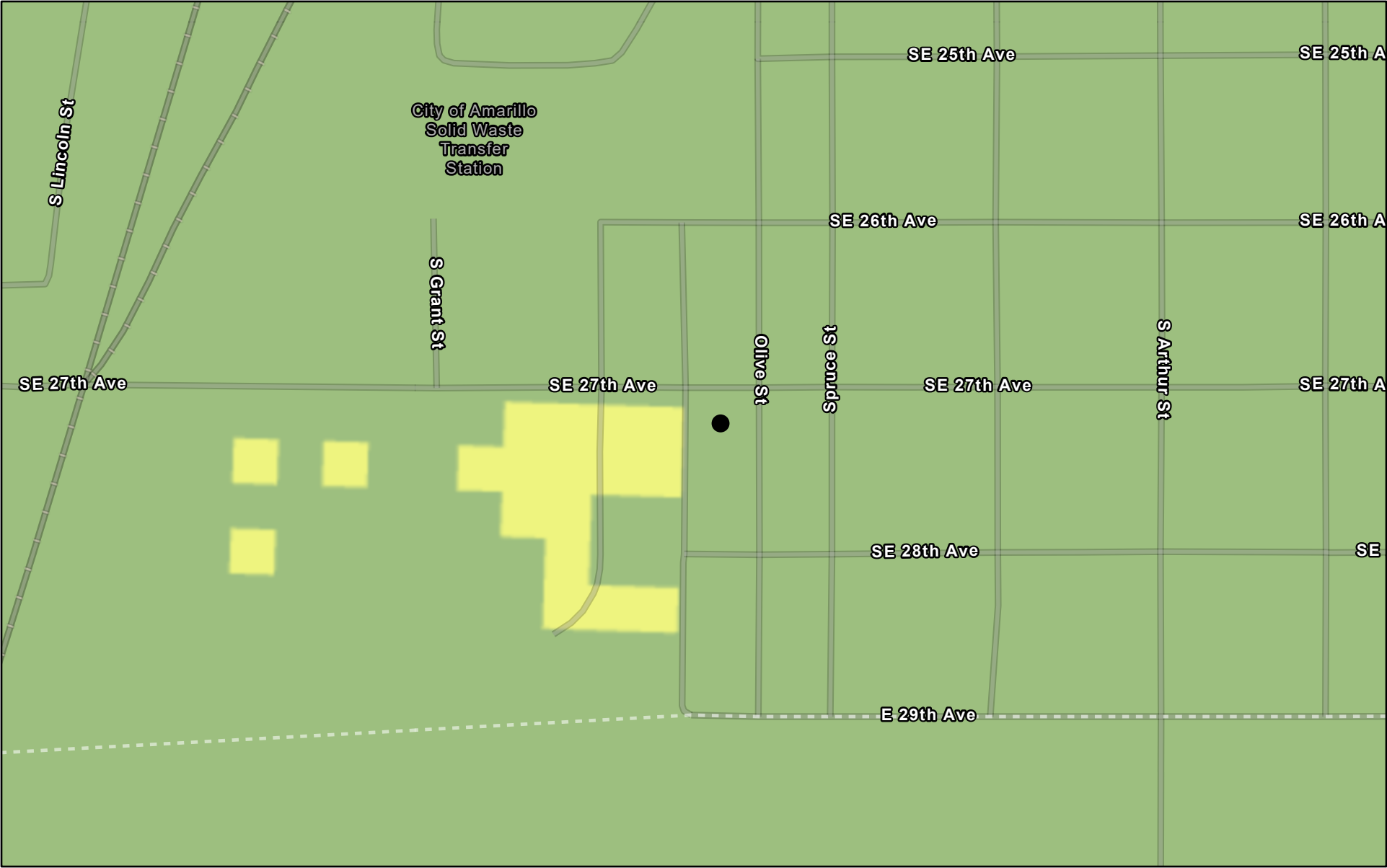
● Proposed Facility

■ National Registered Historic Places



2.11.2: TxDOT PALM Map

TxDOT PALM Map



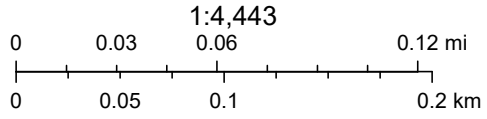
2/26/2025

PALM Legend Layer 0 to 9

0	3	7
1-low	4	8
2	5-mod	9-high
	6	

World Imagery
Low Resolution 15m Imagery
High Resolution 60cm Imagery
High Resolution 30cm Imagery

Citations
1.2m Resolution Metadata



ESRI, TxDOT, Maxar, Esri Community Maps Contributors, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph,

● Am Tex Liquid Waste Processing, LLC

2.11.3: SHPO Consultation Request



Corporate Office:
3404 Airway Blvd.
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

February 26, 2025

Via FedEx

Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
108 W. 16th Street
Austin, TX 78701

Re: Request for SHPO Consultation
Am Tex Liquid Waste Processing, Inc, Potter County, Texas

Dear Mr. Wolfe,

Enclosed, please find the request for an SHPO consultation with attachments for the proposed Am Tex Liquid Waste Processing Facility located on 1.5 acres at 913 SE 28th Ave., Amarillo, TX 79103. The facility is an 8,000 square foot building located just north of Llano Cemetery and south of the Amarillo City Street Department off SE 28th Ave in Amarillo – (Lots 1,2,3,4,5 and 6, Block 8 and Lot 1, Block 9, Glenwood Addition, an Addition to the City of Amarillo, Potter County, Texas).

The project work description includes the following:

The facility will dewater grease, grit and household septage waste. The liquids will drain through the drainage ports into the City of Amarillo sewage treatment plant via underground lines. The facility has contacted and will be applying for a City of Amarillo permit and will comply with the conditions within that permit as well. This process reduces the weight and volume making it easier to store and dispose of in bulk amounts. The solids will be stored for a short period of time (no more than 24 hours) until the filter box container is full of the separated solids and then it will be transported to Southwest Landfill in Canyon, TX.

A desktop analysis has been completed for the proposed location. This included a review of the National Register of Historic Places (See attached map). According to the HPALM map there is a low amount of negligible potential for archeological deposits at the proposed location of the facility. This location was formerly a manufacturer of burial vaults for gravesite services. The proposed facility's property is zoned for industrial

use. The surrounding land use is comprised of industrial, commercial and residential properties.

After our desktop review, we recommend a finding of no historic properties affected and ask for concurrence from the SHPO.

If you have any questions or require additional information, please give me a call at 806-353-6123.

Sincerely,



Amy Peoples
Enviro-Ag Engineering, Inc.

Enclosures

Cc: Am Tex Liquid Waste Processing, LLC
EAE file

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:

Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <http://www.thc.state.tx.us/crm/crmsend.shtml>.

☒ This is a new submission.

☐ This is additional information relating to THC tracking number(s): _____

Project Information		
PROJECT NAME Am Tex Liquid Waste Processing, LLC		
PROJECT ADDRESS 913 SE 28th Ave	PROJECT CITY Amarillo	PROJECT ZIP CODE(S) 79103
PROJECT COUNTY OR COUNTIES Potter		
PROJECT TYPE (Check all that apply) <input type="checkbox"/> Road/Highway Construction or Improvement <input type="checkbox"/> Site Excavation <input type="checkbox"/> Utilities and Infrastructure <input type="checkbox"/> New Construction <input type="checkbox"/> Repair, Rehabilitation, or Renovation of Structure(s) <input type="checkbox"/> Addition to Existing Structure(s) <input type="checkbox"/> Demolition or Relocation of Existing Structure(s) <input checked="" type="checkbox"/> None of these		
BRIEF PROJECT DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form. This is a grease/grit trap and septic processing facility. The facility is an enclosed 8000 sq ft building with roll-up doors. Contract trucks full of grease, grit and human waste from septic tanks will be offloaded into a pit inside the building containing a roll-off container. Solid separation process occurs and the solids are then hauled to the landfill and the liquid will drain into the City of Amarillo sewage treatment plant located to the north of the proposed facility.		

Project Contact Information			
PROJECT CONTACT NAME Amy Peoples		TITLE Consultant	ORGANIZATION Enviro-Ag Engineering, Inc.
ADDRESS 3404 Airway Blvd	CITY Amarillo	STATE TX	ZIP CODE 79118
PHONE 806-353-6123	EMAIL apeoples@enviroag.com		

Federal Involvement (Section 106 of the National Historic Preservation Act)	
Does this project involve approval, funding, permit, or license from a federal agency? <input type="checkbox"/> Yes (Please complete this section) <input checked="" type="checkbox"/> No (Skip to next section)	
FEDERAL AGENCY	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE
CONTACT PERSON	PHONE
ADDRESS	EMAIL

State Involvement (Antiquities Code of Texas)	
Does this project occur on land or property owned by the State of Texas or a political subdivision of the state? <input type="checkbox"/> Yes (Please complete this section) <input checked="" type="checkbox"/> No (Skip to next section)	
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND	
CONTACT PERSON	PHONE
ADDRESS	EMAIL

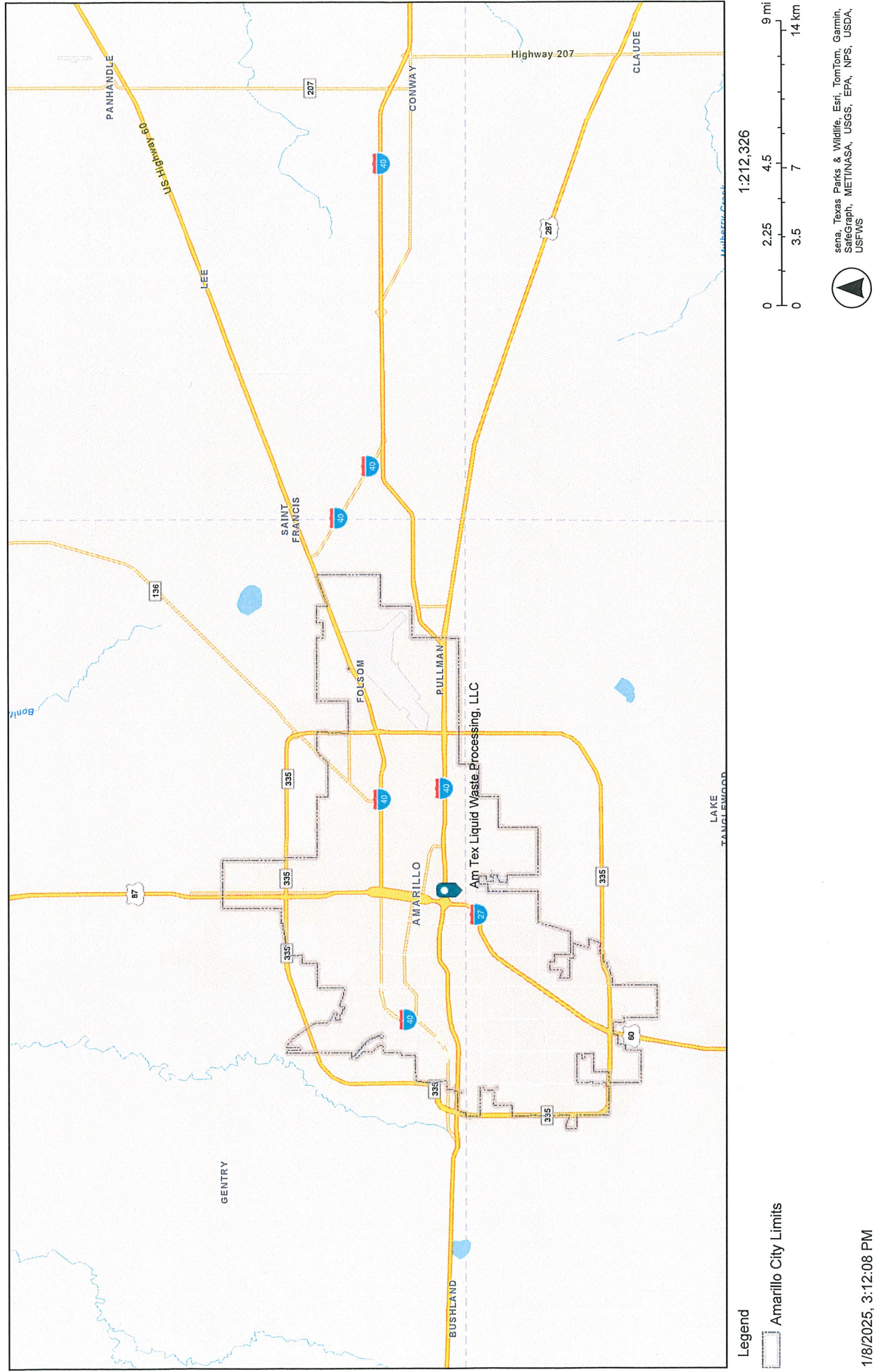
Identification of Historic Properties: Archeology
Does this project involve ground-disturbing activity? <input type="checkbox"/> Yes (Please complete this section) <input checked="" type="checkbox"/> No (Skip to next section)
Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length.
Describe the previous and current land use, conditions, and disturbances.

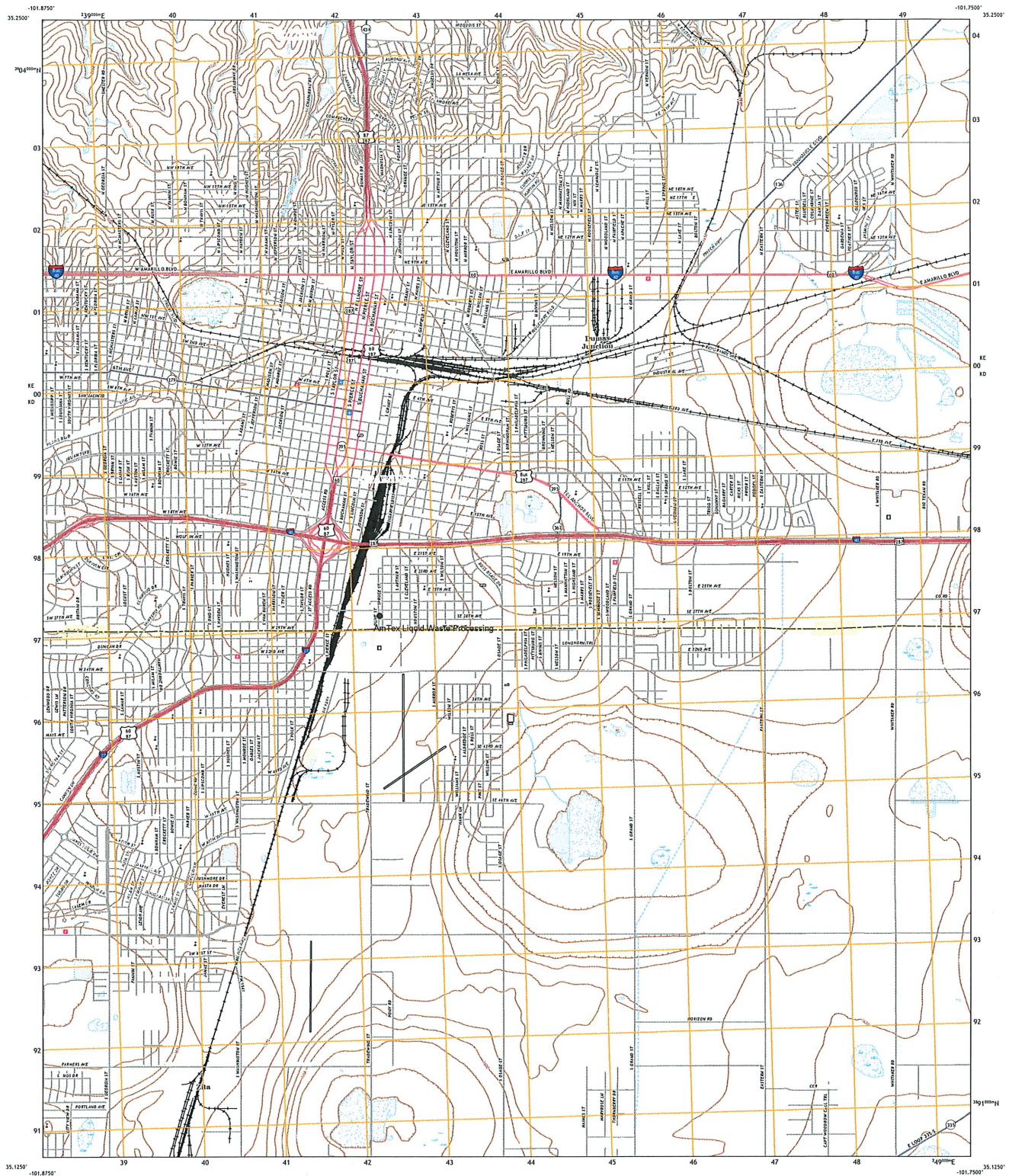
Identification of Historic Properties: Structures									
Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older? <input checked="" type="checkbox"/> Yes (Please complete this section) <input type="checkbox"/> No (Skip to next section)									
Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places? <input checked="" type="checkbox"/> Yes, name of property or district: Llano Cemetery Historic District <input type="checkbox"/> No <input type="checkbox"/> Unknown									
In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.									
<table border="1"> <tr> <td>ADDRESS 2900 S Hayes St., Amarillo, TX 79103</td> <td>DATE OF CONSTRUCTION 1920-1961</td> <td>SOURCE FOR CONSTRUCTION DATE Llano Cemetery Website</td> </tr> <tr> <td>ADDRESS</td> <td>DATE OF CONSTRUCTION</td> <td>SOURCE FOR CONSTRUCTION DATE</td> </tr> <tr> <td>ADDRESS</td> <td>DATE OF CONSTRUCTION</td> <td>SOURCE FOR CONSTRUCTION DATE</td> </tr> </table>	ADDRESS 2900 S Hayes St., Amarillo, TX 79103	DATE OF CONSTRUCTION 1920-1961	SOURCE FOR CONSTRUCTION DATE Llano Cemetery Website	ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE	ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS 2900 S Hayes St., Amarillo, TX 79103	DATE OF CONSTRUCTION 1920-1961	SOURCE FOR CONSTRUCTION DATE Llano Cemetery Website							
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE							
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE							

Attachments
[Please see detailed instructions regarding attachments.](#)
 Include the following with each submission:
☒ Project Work Description
☒ Maps
☒ Identification of Historic Properties
☒ Photographs
 For Section 106 reviews only, also include:
☐ Consulting Parties/Public Notification
☐ Area of Potential Effects
☐ Determination of Eligibility
☐ Determination of Effect
Submit completed form and attachments to the address below. Faxes and email are not acceptable.
 Mark Wolfe
 State Historic Preservation Officer
 Texas Historical Commission
 P.O. Box 12276, Austin, TX 78711-2276 (mail service)
 108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only

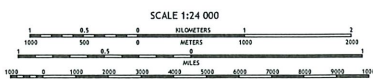
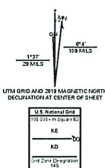
Figure 2.1.1 - Vicinity Map





Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
100-meter and International Transverse Mercator, Zone 14Q
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.

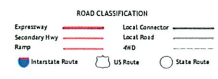
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Relief: U.S. Census Bureau, 2015 - 2018
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Hydrography: National Hydrography Dataset, 2002 - 2018
Contours: National Elevation Dataset, 2000
Boundaries: Multiple Sources, last metadata file 2018 - 2017
Web: USGS National Wetlands Inventory 2003 - 2005



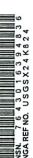
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1983
This map was produced to conform with the
National Geographic Society US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 8.1.18

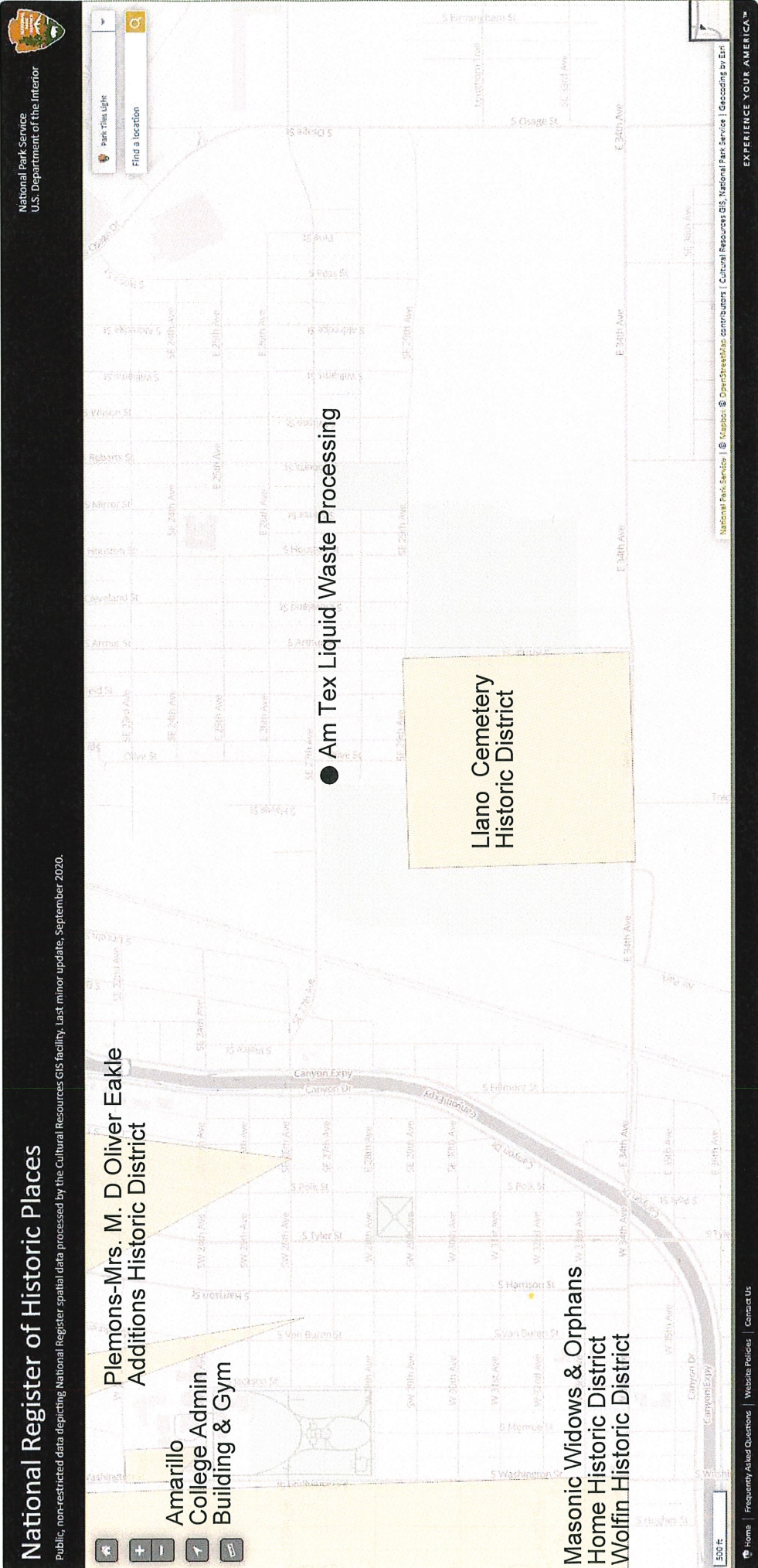


1	2	3	1	Clarksburg
4	5	6	2	Plainsville
7	8	9	3	Waynesville
			4	Amelia West
			5	Pulaski
			6	Ballou Station
			7	The Palmettos
			8	Thomas Branch



AMARILLO EAST, TX
2019





<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>
2/2025

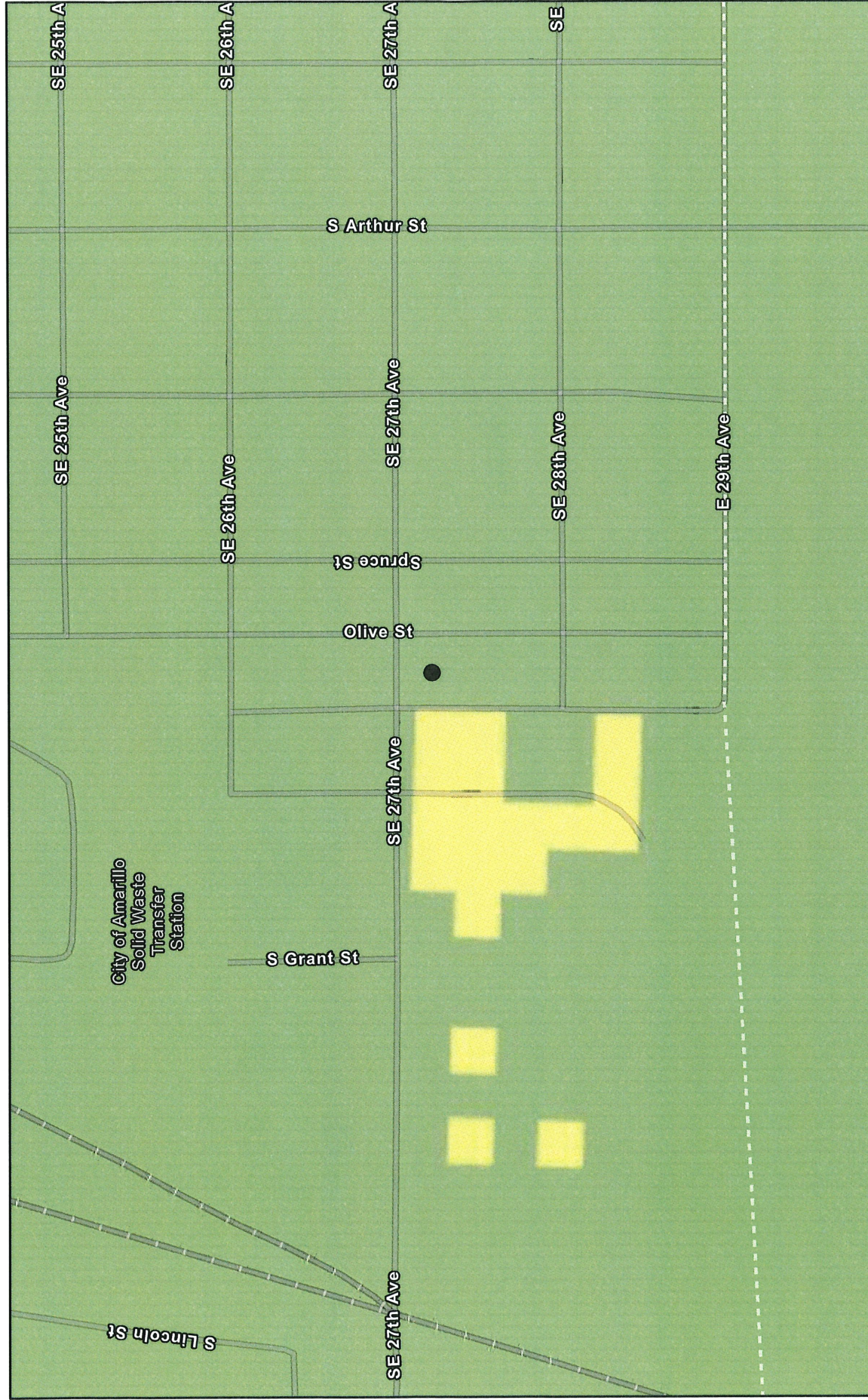
Legend

● Proposed Facility

■ National Registered Historic Places



TxDOT PALM Map



2/26/2025

PALM Legend Layer 0 to 9



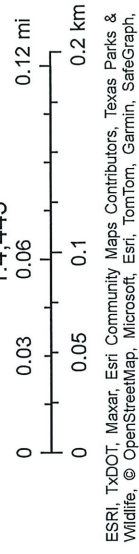
World Imagery

Low Resolution 15m Imagery
High Resolution 60cm Imagery
High Resolution 30cm Imagery

Citations

1.2m Resolution Metadata

1:4,443



ESRI, TxDOT, Maxar, Esri Community Maps Contributors, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph,

NW Corner of property – Looking South



NE Corner of property – Looking South



West side of Property



East side of Property



South side of Property



Amy Peoples

From: [REDACTED]
Sent: Saturday, March 22, 2025 7:55 AM
To: Amy Peoples; [REDACTED]
Subject: Am Tex Liquid Waste Processing, LLC

CAUTION: This email originated from outside of Enviro-Ag Engineering. Do not click links or open attachments unless you have verified the sender and know the content is safe.



Re: Project Review under the Antiquities Code of Texas

THC Tracking #202507642

Date: 03/22/2025

Am Tex Liquid Waste Processing, LLC

913 SE 28th Ave

Amarillo, TX 79103

Description: Proposed grease/grit trap and septic processing facility.

Dear Amy Peoples:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the Executive Director of the Texas Historical Commission (THC), pursuant to review under the Antiquities Code of Texas.

The review staff, led by Caitlin Brashear and Drew Sitters, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No further review of potential effects to above-ground historic resources is required under the Antiquities Code of Texas. However, should this project ultimately include any federal involvement, additional consultation with THC/SHPO under Section 106 of the National Historic Preservation Act will be required.

Archeology Comments

- No effect on identified archeological sites or other cultural resources. However, if cultural materials are encountered during project activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.
- No archeological survey of the project area is needed.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your

efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: caitlin.brashear@thc.texas.gov, drew.sitters@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit <http://thc.texas.gov/etrac-system>.

Sincerely,



for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

References

REFERENCES

- Ashworth and Flores, June 1991. Delineation Criteria for the Major and Minor Aquifer Maps of Texas. Report LP-212, Texas Water Development Board.
- Amarillo Economic Development Data and Demographics, Available at <https://www.amarilloedc.com/data-and-demographics>. Accessed 11/2024.
- City of Amarillo GIS/Maps, Available at: <https://www.amarillo.gov/our-city/home-and-property/gis-maps>. Accessed 1/2024.
- City of Amarillo Planning Department, Available at: <https://www.amarillo.gov/departments/planning-and-development-services/planning>. Accessed 12/2024.
- National Weather Service. Available at: <https://www.weather.gov/wrh/Climate?wfo=ama>. Accessed 1/2025.
- Texas Parks & Wildlife, Panhandle Plains. Available at: <https://tpwd.texas.gov/education/resources/texas-junior-naturalists/regions/panhandle-plains>. Accessed 11/2024.
- Texas Water Development Board, Geologic Atlas. Available at <https://www.twdb.texas.gov/groundwater/aquifer/GAT/index.asp>. Accessed 12/2024.
- USGS Texas Geology. Available at: <https://txpub.usgs.gov/txgeology/>. Accessed 11/2024.
- United States Census Bureau, Available at: <https://www.census.gov/quickfacts/amarillocitytexas>. Accessed 12/2024.
- U.S. Bureau of Labor Statistics, Available at: https://www.bls.gov/eag/eag.tx_amarillo_msa.htm. Accessed 12/2024.
- U.S. Fish & Wildlife Service, IPaC Information for Planning and Consultation. Available at: <https://ipac.ecosphere.fws.gov/user/login>. Accessed 12/2024.

APPLICATION TO THE TCEQ FOR NEW PERMIT FOR A MUNICIPAL SOLID WASTE FACILITY

Part III – Site Development Plan - MSW Permit No. 2424

Am Tex Liquid Waste Processing LLC

913 SE 28th Ave

Amarillo, TX 79103

Prepared For:

Jeff Jones

2465 FM 2575

Amarillo, TX 79108

1-806-223-7159

January 23, 2025

Revision Date: February 20, 2025, April 28, 2025, June 25, 2025

Tx F# 2501

Prepared By:



E. Emerine
06-25-25

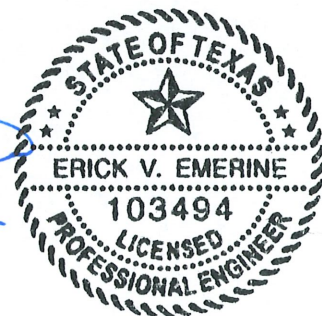


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3.0 Site Plan

This is a grease/grit trap and septic processing facility. The facility is an enclosed 8000 sq ft building with roll-up doors. Contract trucks full of grease, grit and human waste from septic tanks will be offloaded into a pit inside the building containing two 15-yard roll-off containers. From here, the waste will be vacuumed into one of two 400-barrel frac tanks for storage. The waste will then flow into one of two 30-yard dewatering boxes. A polymer will be added that works to separate the liquid from the solids. The liquids will drain off by gravity flow into the City of Amarillo sewage treatment plant via underground lines. The solids will be stored for a short period of time (no more than 24 hours) until the filter box container is full of the separated solids and then it will be transported by a contract hauler to the Southwest Landfill in Canyon, TX. The areas surrounding the facility are concrete. The facility will be designed to comply with the requirements of 30 TAC 330.303(a)-(b). A proposed facility layout is included in the Supporting Documents of Part 2-Figure 2.1.3.

3.1 Facility Access

The facility will be in operation Monday-Friday, 8am-5pm. Access to the facility will be limited to employees and authorized visitors. Unauthorized visitors will be allowed when employees are present. A 4' x 4' sign with 3" letters will be placed at the entrance of the facility displaying the Site Name, Permittee Name, Type of Site, Hours of Operation, and Emergency Contact Information.

3.2 Waste Movement

Liquid waste (grease, grit and human waste from septic tanks) is delivered to the facility by truck. The load/material will be inspected to make sure no prohibited or unauthorized waste is delivered to the facility. The liquid waste will be offloaded from the truck into a 15-yard container and then transferred by a sump pump in a 16,800-gallon frac tank. From the frac tank, the wastewater is pumped through a special mixing pump into a 30-yard dewatering box. A polymer is added as the liquid moves to the dewatering box. The solids flocculate and separate from the liquids. The liquids will drain through an opening in the wall of the box and into a 6" wide trough to the City of Amarillo sewer at the dewatering slab. The liquid will immediately drain to the City of Amarillo sewer via underground pipes. Solids are retained in the dewatering box while draining for no more than 24 hours. The dewatering process is complete after the solids drain for several hours.

The dewatering boxes (rolloff units) will entirely leave the facility and will be emptied at the Southwest Landfill in Canyon, TX after drying has been achieved. The boxes will be pulled out of the building with semi-truck thru the overhead door shown on the drawings. All free liquid is removed during the dewatering process. The material can comply with the landfill waste acceptance criteria. The dewatering process can produce solid

material that will pass the Paint Filter Liquid Test (EPA Method 9095B) for landfill acceptance.

A process flow chart (Figure 3.2.1) for the proposed facility is in the supporting documents.

3.3 Process Wastes

The products of this process include treated water and dewatered solids.

- Water: The wastewater gravity flows from the dewatering box to 6" wide floor trough to the sewer line to meet the requirements of the City of Amarillo
- Solids: Dewatered solids in the dewatering boxes will be removed by a roll-off truck. It will be delivered to the Southwest Landfill in Canyon, TX.

3.4 Odor Control and Ventilation

The facility is completely enclosed to prevent nuisance odors from leaving the property by minimizing the contact between unprocessed waste and air. All liquid and solid waste will be stored in odor retaining containers and vessels. The storage tanks are enclosed. Liquid from the storage tanks will be pumped to the dewatering box. All pumps will be capable of 200 gpm at 60' TDH. The number of pumps for the project will be three. Typically, solids will not remain in the boxes long enough to create an odor problem. Tarps will be used to cover the boxes as needed to limit the odors.

The enclosed facility has a large exhaust fan on the south end that would expel the odorous air higher into the atmosphere for odor abatement. The empty containers will be washed down with hot water and degreaser.

The facility will not be in operation on the weekends.

3.5 Sanitation

The equipment will be regularly inspected and cleaned to minimize solid loading. All working surfaces that are in contact with waste material will be washed at least 2-3 times per week. All solids removed from the storage tanks will be processed through the dewatering box and all wash water for cleaning will be processed with the waste material or pumped to the wastewater treatment plant. Washing will consist of portable power wash equipment. Wash water will be conveyed to the trench drain inside the building. The outside slope of the building is sloped away to prevent run-on of stormwater into the building. The trench drain will act as the primary means to remove wash water. Additionally, a sump pit associated with the ramp unloading/staging area will act as a secondary means. The building will have a curb inside the entire building walls to ensure full containment of wash water waste as it makes its way to the trench drain which ultimately drains to the City sewer system.

located outside the west side of the building. The curb inside the building will provide full containment of the operation/process.

3.6 Water Pollution Control

Water pollution from the dewatering process is minimized. The building has 18 ft walls with all the equipment being covered completely. Wastewater effluent from the dewatering process will be discharged into the sewer line on the east of the property in accordance with the City of Amarillo Wastewater Department requirements. Based on the design, the waste management unit can sufficiently control and contain a worst-case scenario spill or release from the unit. The spill or release will be contained inside the building. There will be no contaminated groundwater.

3.7 Drinking Water Protection

All areas of the facility are enclosed and are concrete surfaces. It is designed to contain liquids in the event of a spill.

3.8 Endangered Species

See Part 2.9 of this application. The proposed facility is in a building. There are no critical habitats within the project area.

3.9 Runoff Management, Site Drainage and Drainage Structures

The facility is in an enclosed 8,000 square foot building with 18' walls. If a release of waste were to occur, it would be contained inside the building. The roll-offs will have screens to filter out the trash and debris and no trucks will be allowed to uncap their discharge ports outside of the off-load area. The surrounding area is sloped to drain away from the building.

3.10 Discharge of Wastes

If a spill were to occur, it would be contained inside the building. A portable vacuum trailer will be kept inside to clean up the spill and return the waste to the roll-off containers.

Wastewater effluent from the dewatering process is discharged into the sewer line at the east of the property boundary in accordance with the City of Amarillo Wastewater Department requirements.

3.11 Storage Requirements

The proposed facility is designed with two 15-yard roll-offs with tarps where the trucks will be offloaded. From there the liquid is pumped into two 16,800-gallon enclosed frac tanks. From the enclosed frac tanks, the wastewater is pumped to two 30-yard dewatering boxes with tarps which have the capacity of about 5,650 gallons each, providing adequate design capacity to process waste without delays. Dewatered material is stored in the dewatering box and is hauled to the landfill within 24 hours. The maximum allowable time to store unprocessed waste is 24 hours. Wastewater effluent from the dewatering process will be discharged into the sewer line on the east of the property in accordance with the City of Amarillo Wastewater Department requirements.

All solids sent to the landfill will pass the Paint Filter Liquids Test (EPA Method 9095B). Any testing required by the landfill for classification of waste will be followed and records of all analyses will be retained on-site for a minimum of three years.

3.12 Noise Pollution and Screening

The sources of noise will include trucks entering and leaving the property as well as small engines that operate the pumps or other equipment. Truck traffic will be minor. Proper operation and maintenance of pumps and machinery with help to minimize noise pollution. The facility is completely enclosed. The hours of operation are Monday-Friday 8am-5pm.

3.13 Employee Sanitation Facilities

A restroom facility is provided for the use of employees and visitors in the designated office area.

3.14 Operating Life of the Facility

There is no limit to the operating life of this facility since site capacity is not consumed during operations like at a landfill.

3.15 Facility Closure Plan

Figure 3.15.1

PUMPED DOMESTIC SEPTIC TANK WASTE, GREASE AND GRIT PROCESSING FACILITY FUTURE CLOSURE PLAN AND COST ESTIMATE

for

**AmTex Liquid Waste Processing LLC
913 SE 28th Ave
Amarillo, TX 79103**

Prepared for:

**Jeff Jones
2465 FM 2575
Amarillo, TX 79108**

Prepared by:



**Enviro-Ag Engineering, Inc.
3404 Airway Boulevard
Amarillo, Texas 79118
Phone: (806) 353-6123**



1-23-2025

January 2025

**Pumped Domestic Septic Tank Waste, Grease and Grit Processing Facility
Future Closure Plan and Cost Estimate
AmTex Liquid Waste Processing LLC –913 SE 28th Ave, Amarillo, TX**

Introduction

This closure plan and cost estimate has been provided for the future closure of a pumped domestic septic tank waste, grease and grit processing facility for AmTex Liquid Waste Processing LLC in Amarillo, Texas. This facility consists of an enclosed 8,000 sq-ft building with roll-up doors where contract trucks full of grease, grit and septic waste from households are offloaded into a pit inside the building containing a leak-proof roll off. The waste is pumped into a 30 cubic yard dewatering unit. The dewatering unit is configured with an arrangement of screens that allows effluent water to escape into the designated collection space, then drain through drain ports for disposal. Through the use of filter media and added polymers for treating the effluent, the water in the liquid waste is clarified and drained. The liquids drain through the drainage ports into the City of Amarillo sewage treatment plant via underground lines. The resulting solids are stored until the filter box container is full of the separated solids and then it is transported to the Southwest Landfill in Canyon, TX. The solid waste consists of lipids, grit and septic waste. The lipids are fatty acids, triacylglycerols and fat-soluble hydrocarbons and originate from scraps of baked and fried food items removed from grease traps. The grit includes sand, gravel, cinder, as well as eggshells, bone chips, seeds, coffee grinds and large organic materials (food waste). Septic waste is the liquid and water-borne waste derived from ordinary living processes. Additionally, the resulting polymer in the solid waste is a processing aid for industrial applications and used in the dewatering process. The addition of the polymer causes sludge mixture to flocculate, separating the liquids from the solids, therefore speeding up the dewatering process. This future closure plan and cost estimate was developed based on the provisions contained in Texas Administrative Code, Chapter 330, Subchapters K and L. For reference, the attached Vicinity and Location Map shows the location of the facility for AmTex Liquid Waste Processing LLC. Generally, the facility exists as an enclosed 8,000 sq-ft metal building housing two 400-barrel (16,800-gal) effluent holding frac tanks, two 30-cubic yard (6,060-gal) dewatering boxes, two 15-cubic yard (3,030-gal) rolloff bins, piping, pumps, valves, oil/water separator, polymer injection system, ramps, sand hopper, trough drain, curbs, etc.

The goal of this future closure plan and cost estimate is to ensure the proper decommissioning of the pumped domestic septic tank waste, grease and grit processing facility and ensure the State required financial security to be filed by AmTex Liquid Waste Processing LLC in an amount that is equal to or greater than the maximum amount necessary to close the facility at any time during the life of the permit term in accordance with all applicable State laws.

General Information

- 1) Facility Name & Address: AmTex Liquid Waste Processing LLC
913 SE 28th Ave
Amarillo, TX 79103
- 2) Authorized Contact: Jeff Jones, Ph: (806) 223-7159
2465 FM 2575
Amarillo, TX 79108

Closure Plan and Cost Estimate Guidelines

This closure plan provides for the future closure of a pumped domestic septic tank waste, grease and grit processing facility for AmTex Liquid Waste Processing LLC in Amarillo, Texas. Closure will conform to following provisions also contained in Texas Administrative Code, Chapter 330, Subchapters K and L.

- 1) The operator will begin closure no later than 30 days after final receipt of waste or no later than one year if the unit has remaining capacity and additional waste may be received.
- 2) Closure activities to be completed within 180 days of initiation.
- 3) Suitable barriers shall be installed at all access points to adequately prevent the unauthorized dumping of solid waste at the closed facility.
- 4) At least one closure sign will be posted at every point of access and notify all persons who utilize the facility of the date of closure and the prohibition against further receipt of waste materials.
- 5) Submit a closure plan for Storage and Processing units to remove all waste, waste residues, and any recovered materials. Units shall be dismantled and removed off-site or decontaminated.
- 6) Provide plans for the evacuation of all material on-site to an authorized facility and the disinfecting of all contaminated water handling units, tipping areas, processing and post-processing areas (as applicable).
- 7) If there is evidence of a release, the TCEQ Executive Director may require an investigation, assessment, and or corrective action.
- 8) Acknowledge that following receipt of closure documents and the inspection report by the TCEQ region, the Executive Director may acknowledge termination of operation & closure & deem the facility properly closed.
- 9) A notice of closure shall be published in the newspaper of largest circulation 90 days prior to the initiation of a final facility closure. The notice shall provide the name, address, and physical location of the facility; the TCEQ authorization number; and the last date of intended receipt of waste.
- 10) The notice of closure shall be provided to the TCEQ Executive Director 90 days prior to the initiation of a final facility closure and that the owner or operator will also make available an adequate number of copies of the approved final closure and post-closure plans (if applicable) for public access and review.
- 11) An Affidavit to the Public shall be submitted to the TCEQ Executive Director by registered mail, if waste will remain onsite and that the Owner or Operator will also record a certified notation on the deed to the facility property that the land has been used as a landfill and submit a certified copy of the modified deed to the TCEQ Executive Director.
- 12) Certification, signed by a P.E., shall be provided within 10 days of final closure activities, verifying that final facility closure has been completed in accordance with the approved closure plan and shall include all applicable documentation necessary for certification.
- 13) The owner or operator may request permission from the TCEQ Executive Director to remove the notation from the deed if all wastes are removed from the facility.
- 14) Submit cost estimates for closure & post-closure. Existing facilities must submit a copy of the financial assurance documentation. New facilities must submit financial assurance within 60 days prior to receipt of waste.
- 15) The closure cost estimate shall equal the costs of closure of the facility, including disposition of the maximum inventories of all waste.
- 16) The closure cost estimate shall be based on the costs of hiring a third party that is not affiliated with the owner or operator; and is based on a per cubic yard and/or short ton measure for collection and disposition costs.

- 17) Provide for the closure cost estimate & financial assurance to be increased if conditions change which increase the maximum cost of closure at any time during the active life of the facility.
- 18) A reduction in the closure cost estimate and the amount of financial assurance may be approved if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the facility.
- 19) Provide for the maintenance of financial assurance until closure is approved by the TCEQ Executive Director.
- 20) Maintain documentation that the facility is in compliance with the conditions of the permit.
- 21) Establish criteria for delineating between waste material that will be hauled to active permitted waste disposal facilities versus that which is to remain.
- 22) None of the operator's equipment or facilities that may have otherwise been available at the time of the closure (e.g. treatment facilities, trucks, bulldozers, employees, etc.) shall be available to assist in the closure.
- 23) The facility shall be closed in accordance with the permit. Disposal of wastes should assume that storage tanks/processing units contain maximum permitting holding amounts of waste material.
- 24) Provide a list of the unit costs for all material, equipment, services, and labor needed to close the facility. The list must be specific and must state the source or basis for the specific unit cost.
- 25) Show the total quantity of each unit cost item and how the total quantity was determined (i.e. cubic yards of material divided by size of load equals total number of loads, etc.)
- 26) Show all calculations used to arrive at total maximum closure costs.
- 27) Include supporting maps and illustrations, such as: before and after topographical maps, facility plot plans and photographs that illustrate the current condition of the facility, and/or anticipated condition of the facility upon reaching maximum permit conditions at closure. All structures associated with the facility (including but not limited to all buildings, storage tanks, processing units, pipelines, pits, etc.) that are currently on site or will be upon reaching maximum permitted capacity. For instance, the estimate should assume all permitted but undeveloped pit capacity, treatment cells, or any other structures and/or equipment that would be in place under permitted operations whether such structures and equipment are in place at the time of the estimate or not. All such structures and the proposed method of demolition, disposal, and/or removal must be clearly identified in the closure cost estimate.

Attachments

Future Closure Cost Estimate
Vicinity Map
Location Map
Processing Facility Layout
Letter of Credit from Permittee's Financial Institution

Closure Cost Estimate for Pumped Domestic Septic Tank Waste, Grease and Grit Processing Facility

AmTex Liquid Waste Processing LLC


913 SE 28th Ave, Amarillo, TX 79103

		QTY	Unit	Unit Price	Amount
Closure Cost					
1	Remove all Liquid Domestic Wastewater from Tanks, Dispose of per State Regulations	40,000	Gal	\$1	\$40,000
2	Clean/Remove Solid Domestic Waste from Tanks/Bins, Dispose of per State Regulations	65	CY	\$105	\$6,825
3	Remove Grease Trap Waste from Tanks, Dispose of per State Regulations	1,500	Gal	\$1	\$1,500
4	Remove Grit/Sand from Hoppers and/or Storage Areas, Dispose of per State Regulations	10	CY	\$105	\$1,050
5	Remove all Portable or Disposable Storage Tanks and Containers from Site and Dispose of per State Regulations	1	LS	\$5,000	\$5,000
6	Sanitize Facility and Permanent Storage Tank Facilities	1	LS	\$5,000	\$5,000
				Total	\$59,375

Notes:

1. Domestic waste (liquid & solid) and grease to be taken to City of Amarillo Wastewater Collection Facility (Ph: 806-378-6827) located at 800 SE 24th Ave, Amarillo TX, 79103.
2. Non-Domestic solid waste to be take to the Southwest Landfill Facility (Ph: 806-342-6245) located at 20700 Helium Road, Canyon TX, 79015.
3. Costs above includes transportation and disposal of all tanks and associated equipment.

F# 2507

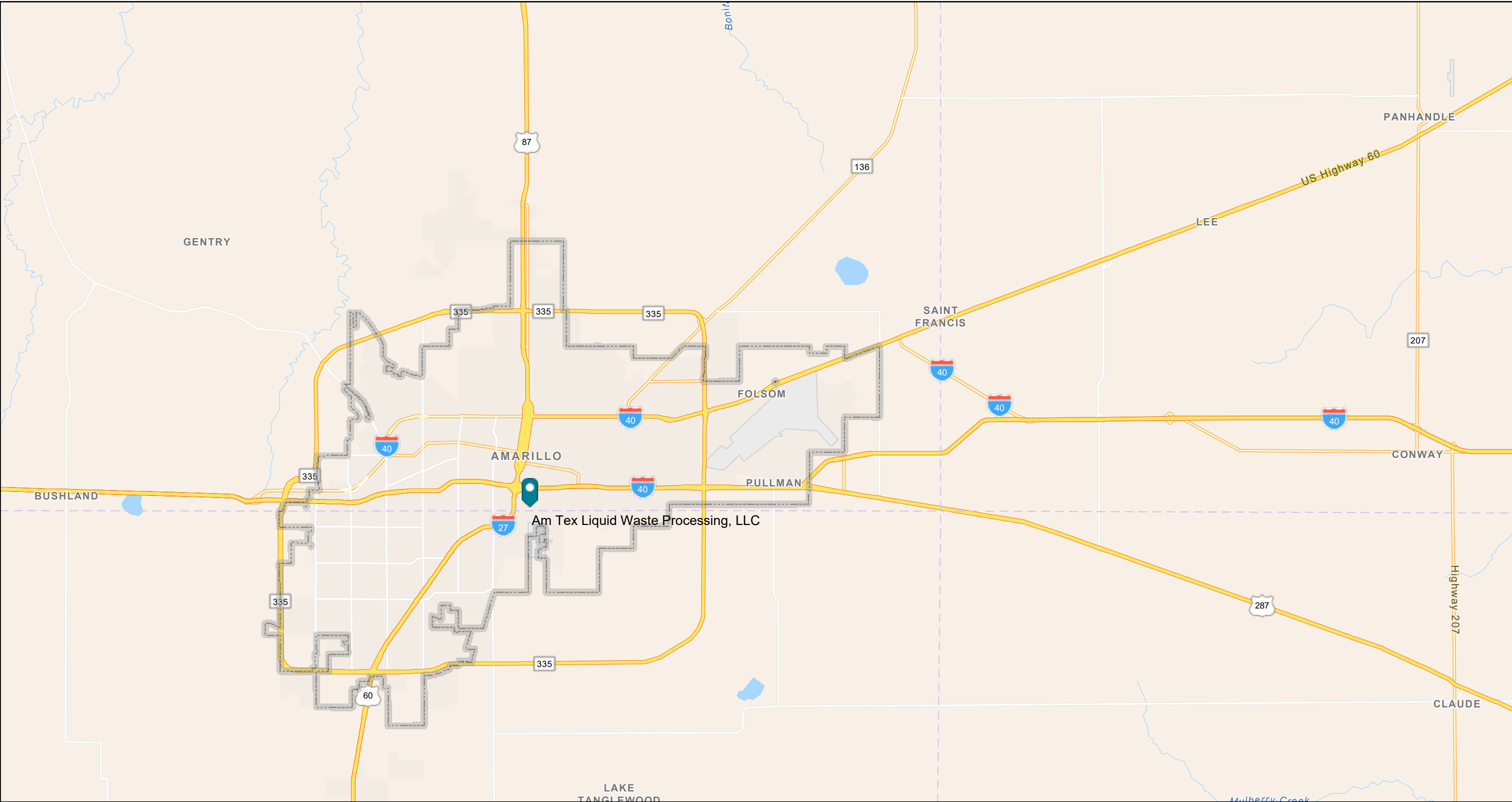


[Signature]

1-23-2025

Submitted By:
 Erick Emerine, PE
 Enviro-Ag Engineering, Inc.
 3404 Airway Blvd
 Amarillo, TX 79118
 Ph: 806-353-6123

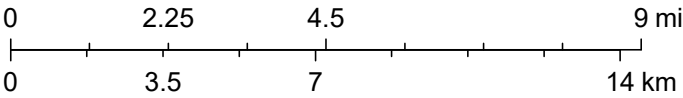
Vicinity Map




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 Amarillo City Limits


1:212,326



 sena, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Location Map

Legend

 AmTex Liquid Waste

AmTex Liquid Waste 

SE 27th Ave

SE 28th Ave

SE 29th Ave

Olive St

Spruce St

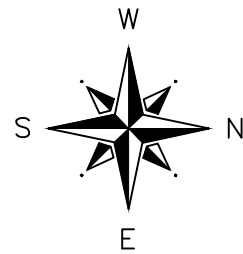
Garfield St

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Google Earth

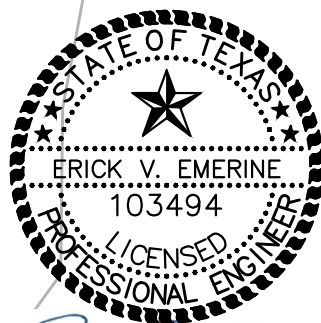


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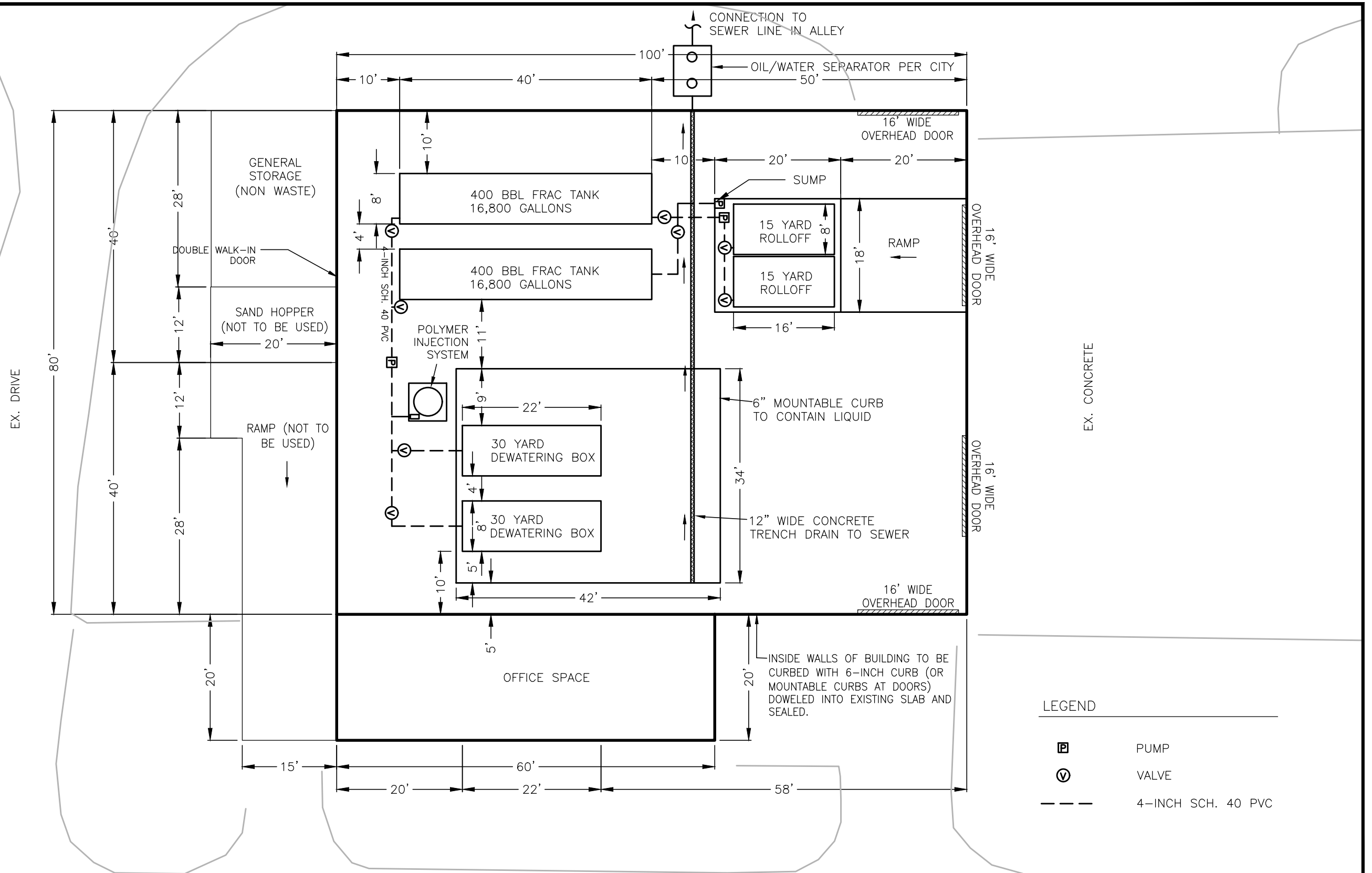


0 16
SCALE: 1" = 16'

TX FIRM No. 2507



07-11-2025



AMTEX LIQUID WASTE PROCESSING LLC
AMARILLO
POTTER COUNTY, TEXAS

AM TEX LIQUID WASTE PROCESSING LAYOUT

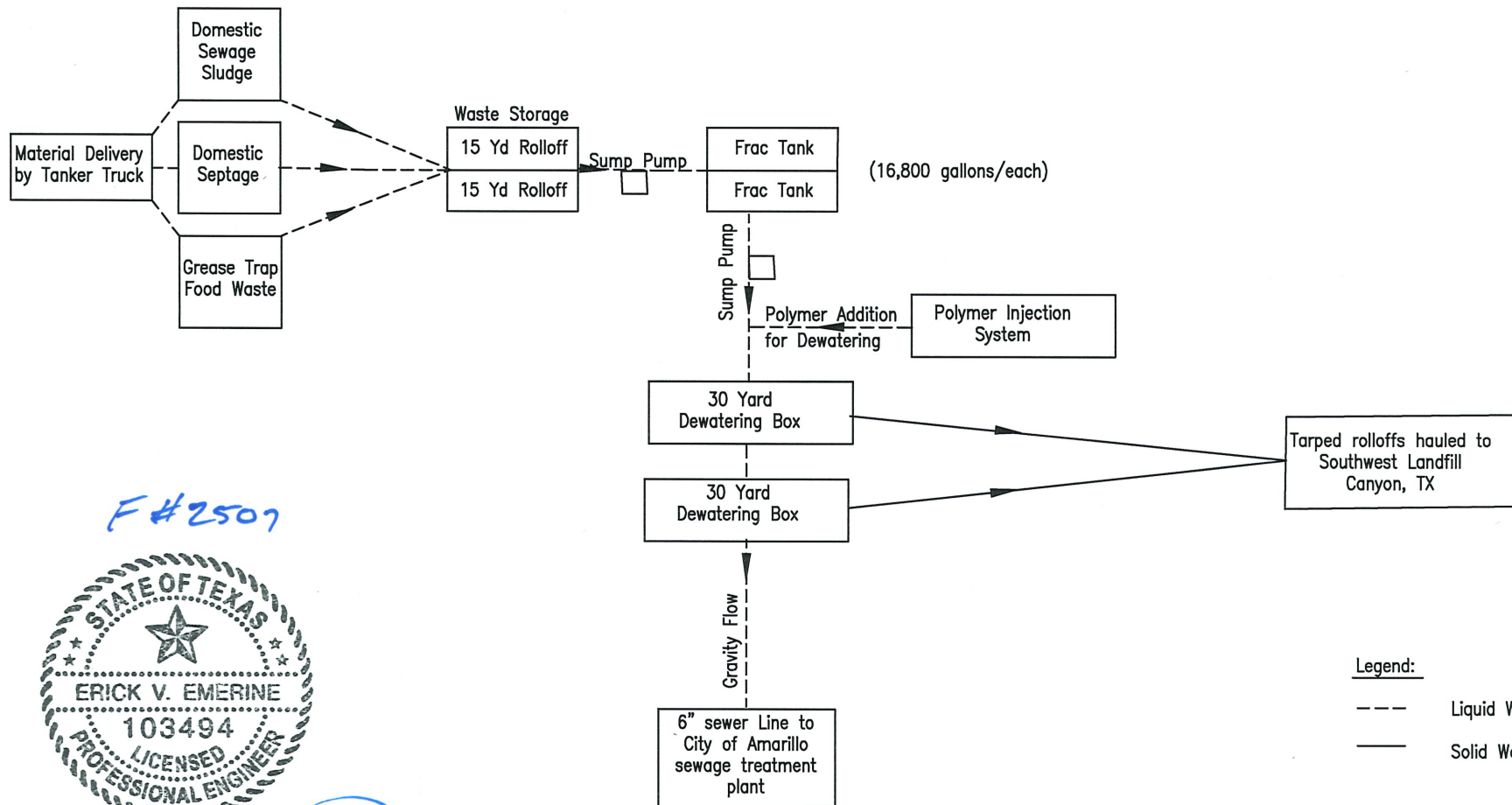
FIGURE 3.15.1



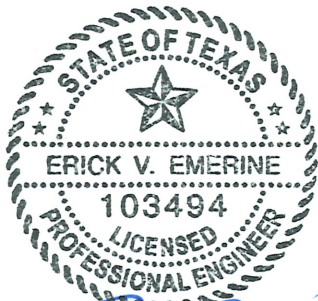
Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

Supporting Documents

3.2.1 Process Flow Chart



F#2507



E. Emerine
03-17-2025

Am Tex Liquid Waste LLC
Potter County
Amarillo, Texas

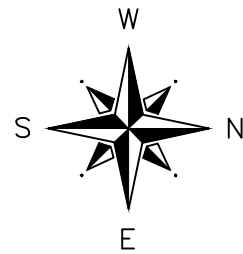
Process Flow Diagram
Figure 3.2.1
January 2025



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

Revised 3-17-2025

3.15.1 Processing Facility Layout

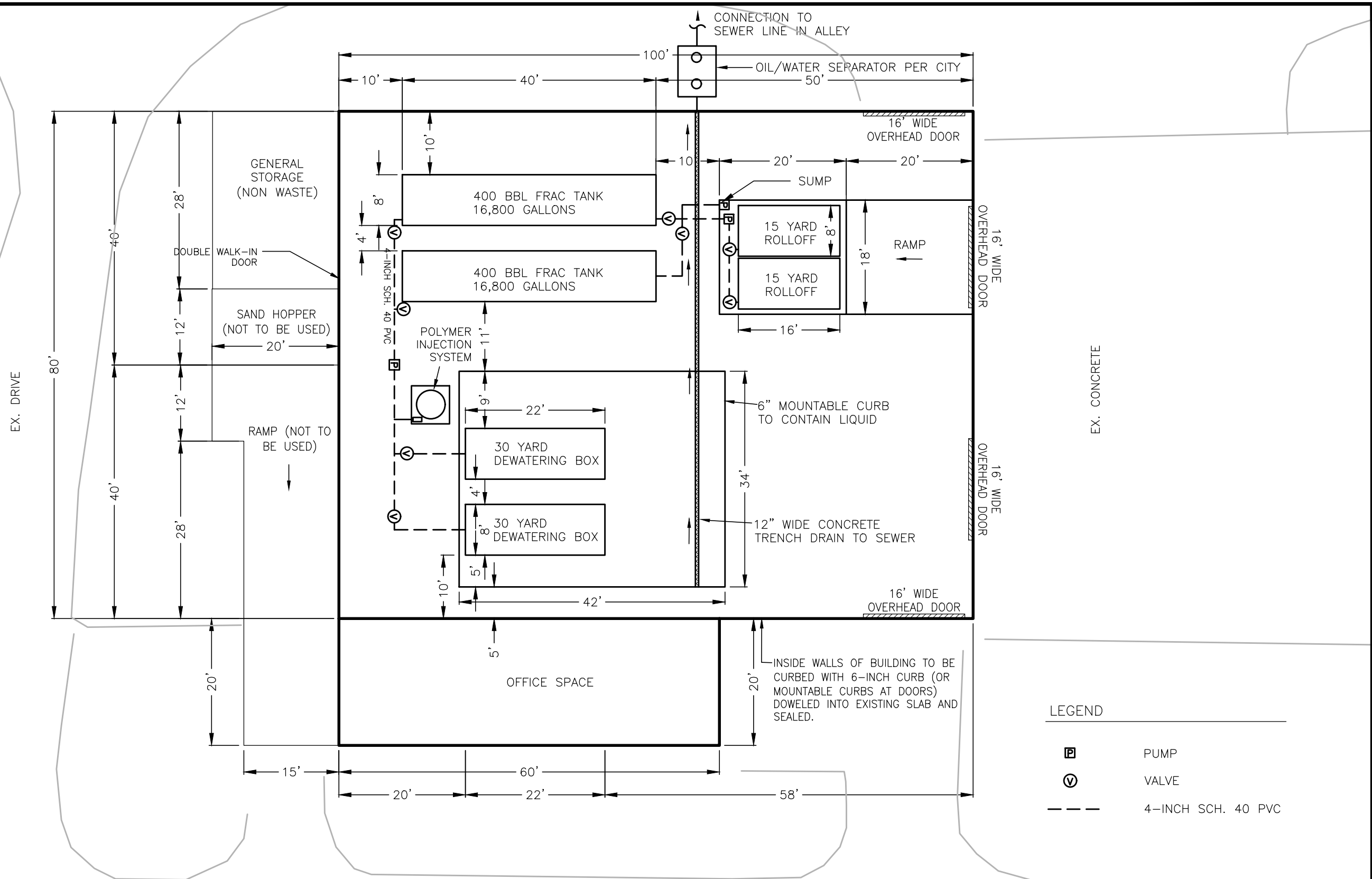


0 16
SCALE: 1" = 16'

TX FIRM No. 2507



07-11-2025



AMTEX LIQUID WASTE PROCESSING LLC
AMARILLO
POTTER COUNTY, TEXAS

AM TEX LIQUID WASTE PROCESSING LAYOUT

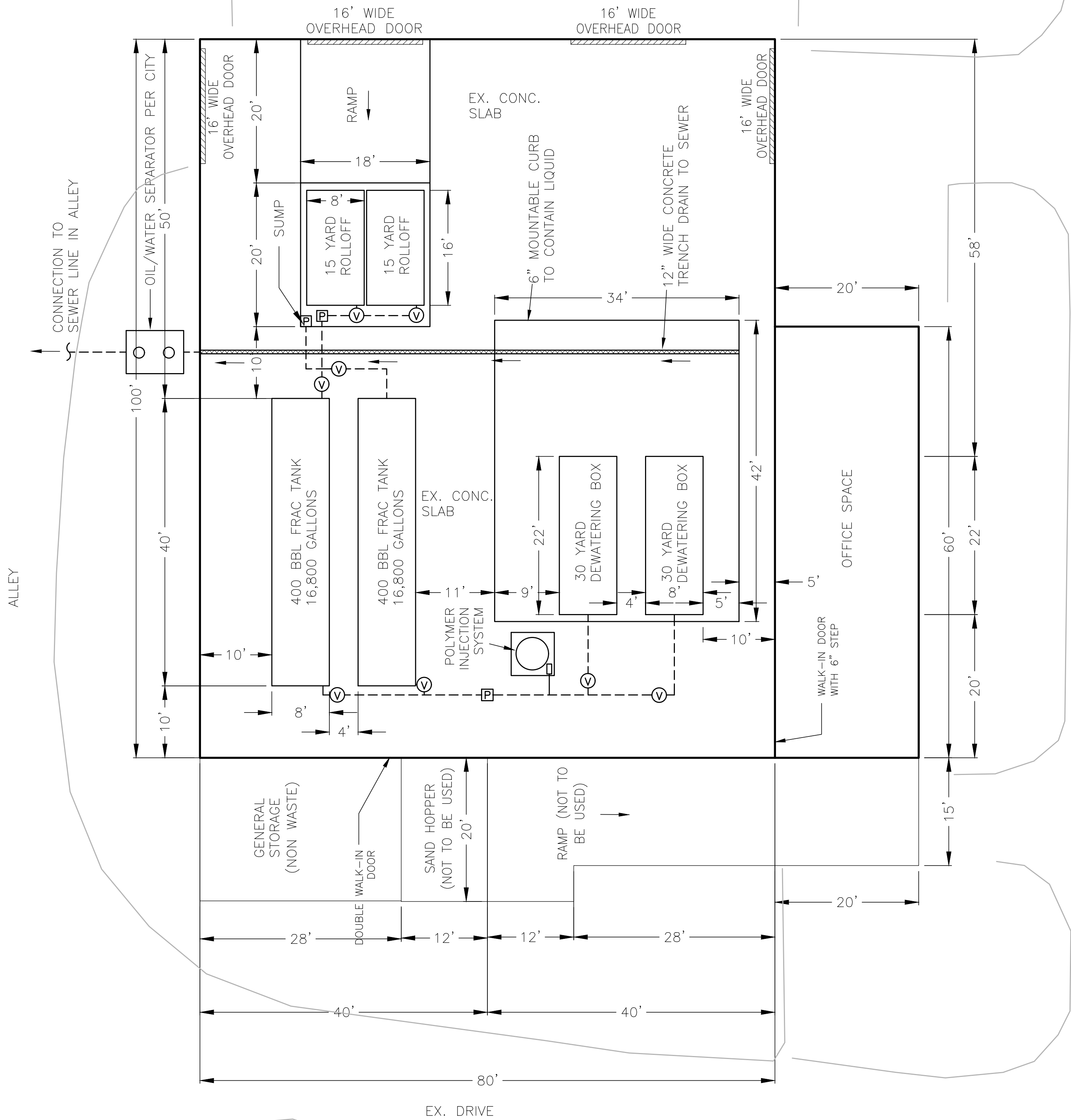
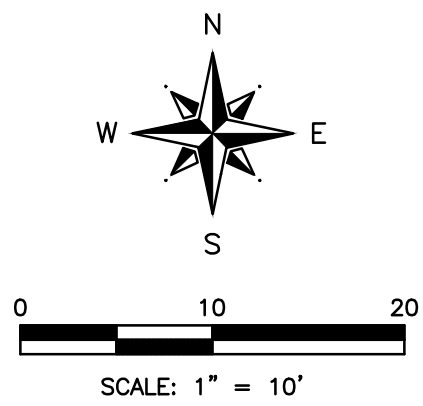
FIGURE 3.15.1





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3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

Construction Drawings

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	-	INITIAL RELEASE		



LEGEND

-  PUMP
-  VALVE
- 4-INCH SCH. 40 PVC

SE 28TH AVE.

PROPRIETARY INFORMATION
THIS DRAWING CONTAINS PROPRIETARY INFORMATION BELONGING TO ENVIRO-AG ENGINEERING, INC. AND MAY NOT BE WHOLLY OR PARTIALLY REPRODUCED NOR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION OF ENVIRO-AG ENGINEERING, INC.
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PROJECT:
AMTEX LIQUID WASTE PROCESSING LLC
AMARILLO
POTTER COUNTY, TX



ENVIRO-AG ENGINEERING, INC.
ENGINEERING CONSULTANTS

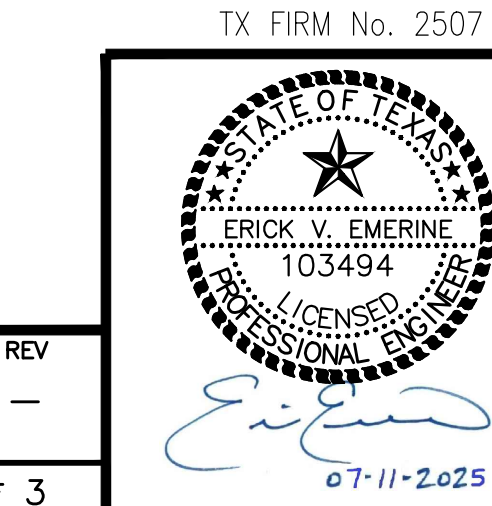
3404 Airway Blvd.
Amarillo, Texas
79118
TEL (806) 353-6123
FAX (806) 353-4132

SHEET DESCRIPTION:
LAYOUT AND DIMENSION PLAN

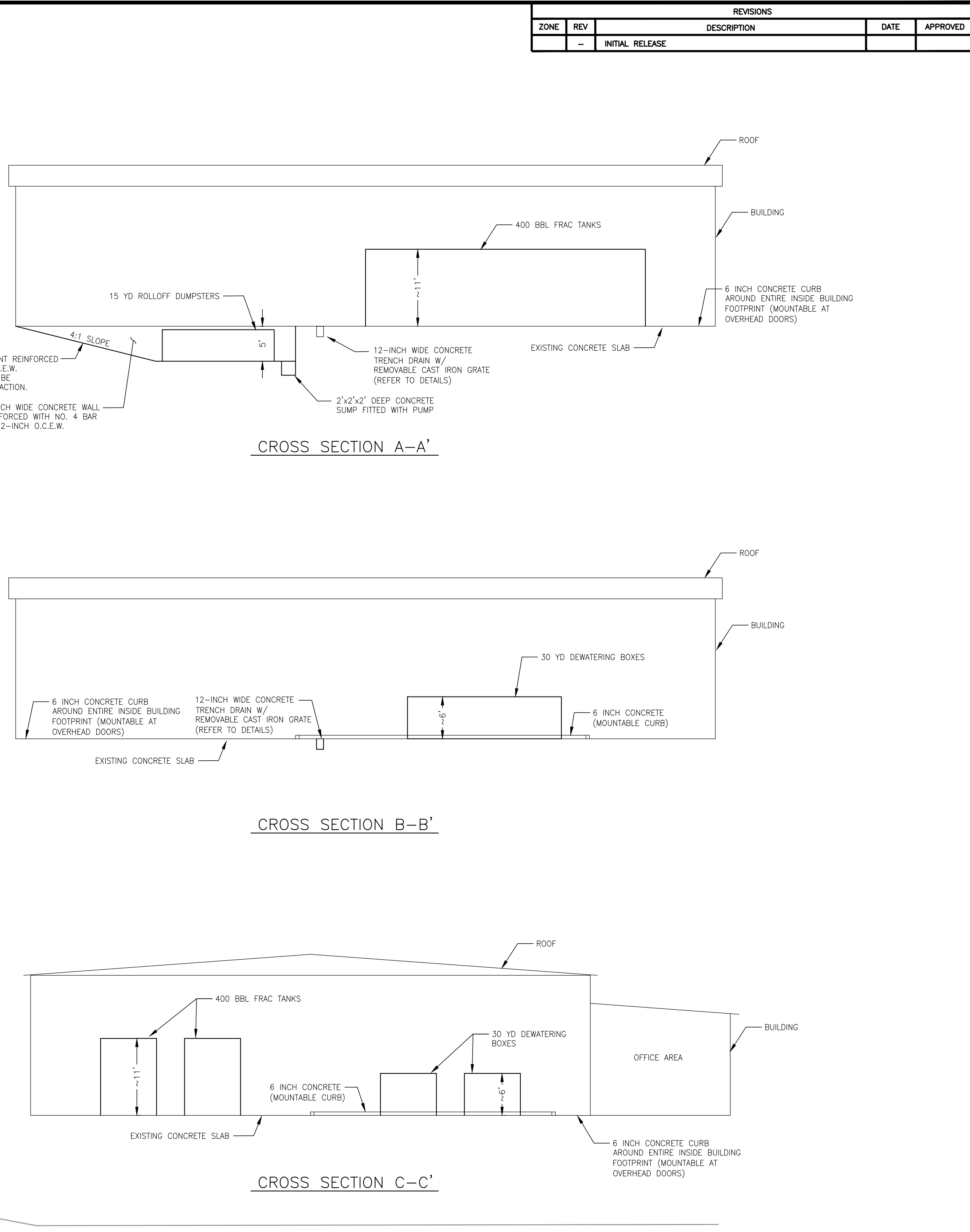
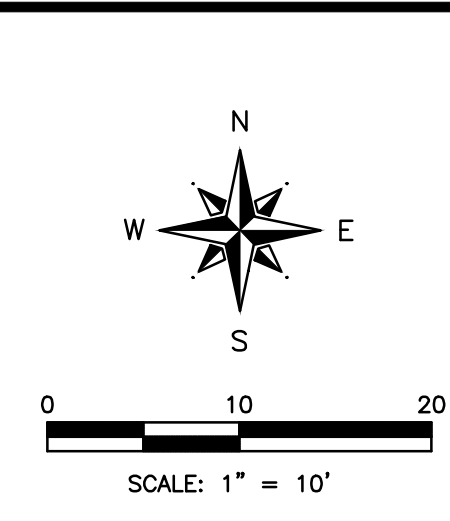
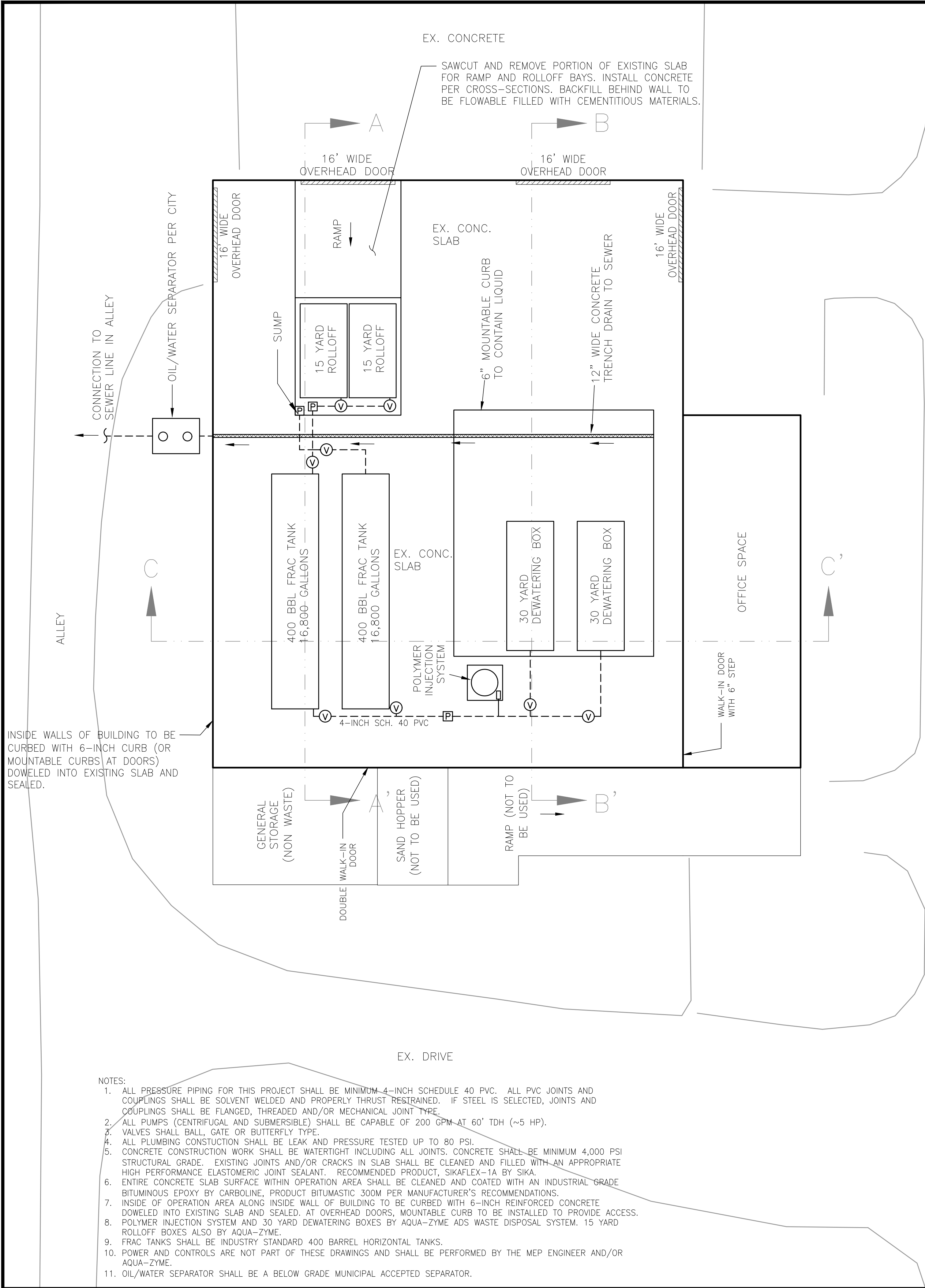
SCALE: AS SHOWN
PROFILE SCALE:
HORIZONTAL
VERTICAL

USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTION ON THE FIRST SHEET OF THIS DOCUMENT.

DWG. SIZE: D SHEET 1 OF 3



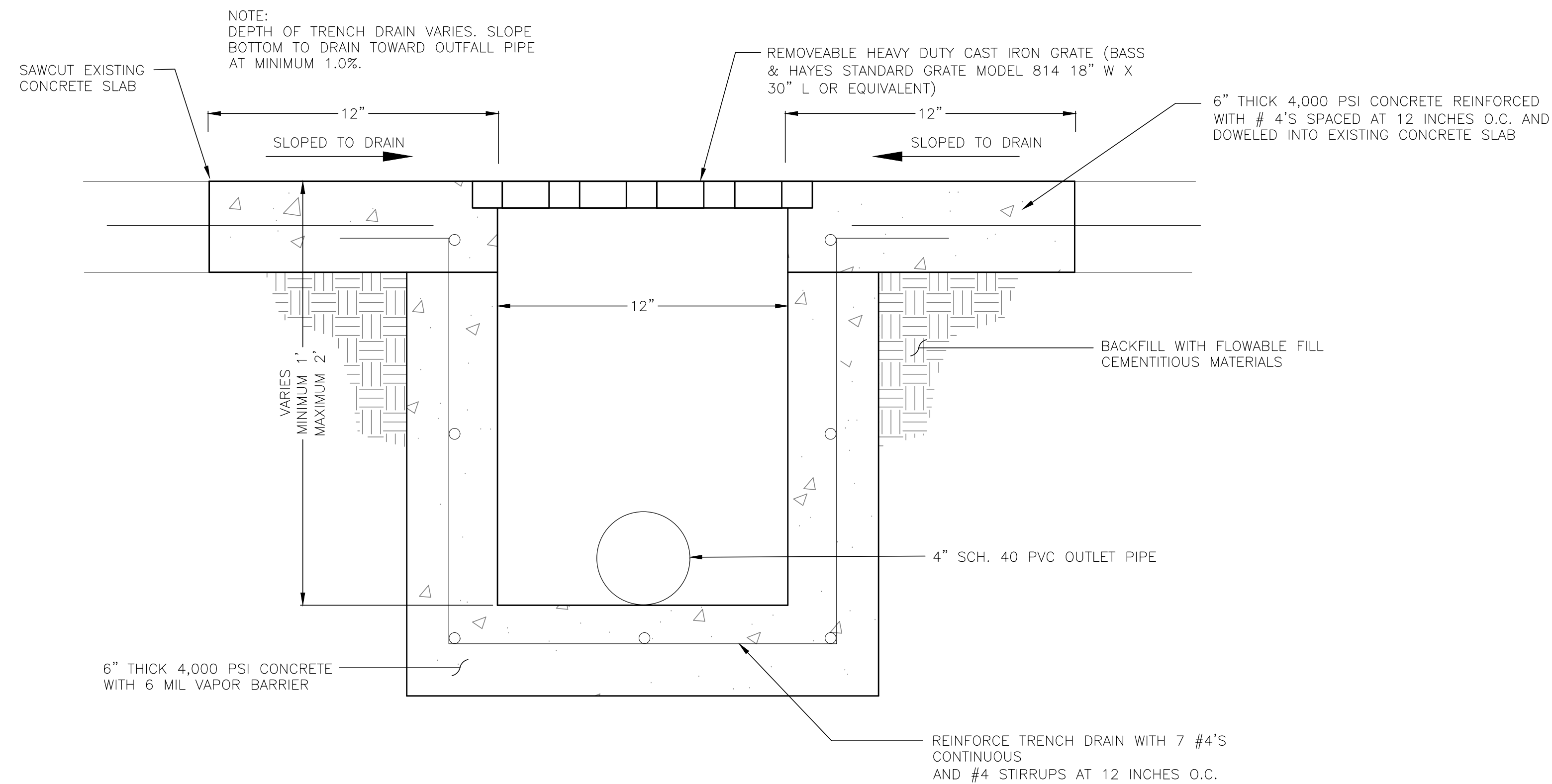
AMTEX LIQUID WASTE PROCESSING LLC
LAYOUT AND DIMENSION PLAN



- NOTES:
1. ALL PRESSURE PIPING FOR THIS PROJECT SHALL BE MINIMUM 4-INCH SCHEDULE 40 PVC. ALL PVC JOINTS AND COUPLINGS SHALL BE SOLVENT WELDED AND PROPERLY THRUST RESTRAINED. IF STEEL IS SELECTED, JOINTS AND COUPLINGS SHALL BE FLANGED, THREADED AND/OR MECHANICAL JOINT TYPE.
 2. ALL PUMPS (CENTRIFUGAL AND SUBMERSIBLE) SHALL BE CAPABLE OF 200 GPM AT 60' TDH (~5 HP).
 3. VALVES SHALL BALL, GATE OR BUTTERFLY TYPE.
 4. ALL PLUMBING CONSTRUCTION SHALL BE LEAK AND PRESSURE TESTED UP TO 80 PSI.
 5. CONCRETE CONSTRUCTION WORK SHALL BE WATERTIGHT INCLUDING ALL JOINTS. CONCRETE SHALL BE MINIMUM 4,000 PSI STRUCTURAL GRADE. EXISTING JOINTS AND/OR CRACKS IN SLAB SHALL BE CLEANED AND FILLED WITH AN APPROPRIATE HIGH PERFORMANCE ELASTOMERIC JOINT SEALANT. RECOMMENDED PRODUCT, SIKAFLEX-1A BY SIKA.
 6. ENTIRE CONCRETE SLAB SURFACE WITHIN OPERATION AREA SHALL BE CLEANED AND COATED WITH AN INDUSTRIAL GRADE BITUMINOUS EPOXY BY CARBOLINE, PRODUCT BITUMASTIC 300M PER MANUFACTURER'S RECOMMENDATIONS.
 7. INSIDE OF OPERATION AREA ALONG INSIDE WALL OF BUILDING TO BE CURBED WITH 6-INCH REINFORCED CONCRETE DOWELED INTO EXISTING SLAB AND SEALED. AT OVERHEAD DOORS, MOUNTABLE CURB TO BE INSTALLED TO PROVIDE ACCESS.
 8. POLYMER INJECTION SYSTEM AND 30 YARD DEWATERING BOXES BY AQUA-ZYME ADS WASTE DISPOSAL SYSTEM. 15 YARD ROLLOFF BOXES ALSO BY AQUA-ZYME.
 9. FRAC TANKS SHALL BE INDUSTRY STANDARD 400 BARREL HORIZONTAL TANKS.
 10. POWER AND CONTROLS ARE NOT PART OF THESE DRAWINGS AND SHALL BE PERFORMED BY THE MEP ENGINEER AND/OR AQUA-ZYME.
 11. OIL/WATER SEPARATOR SHALL BE A BELOW GRADE MUNICIPAL ACCEPTED SEPARATOR.

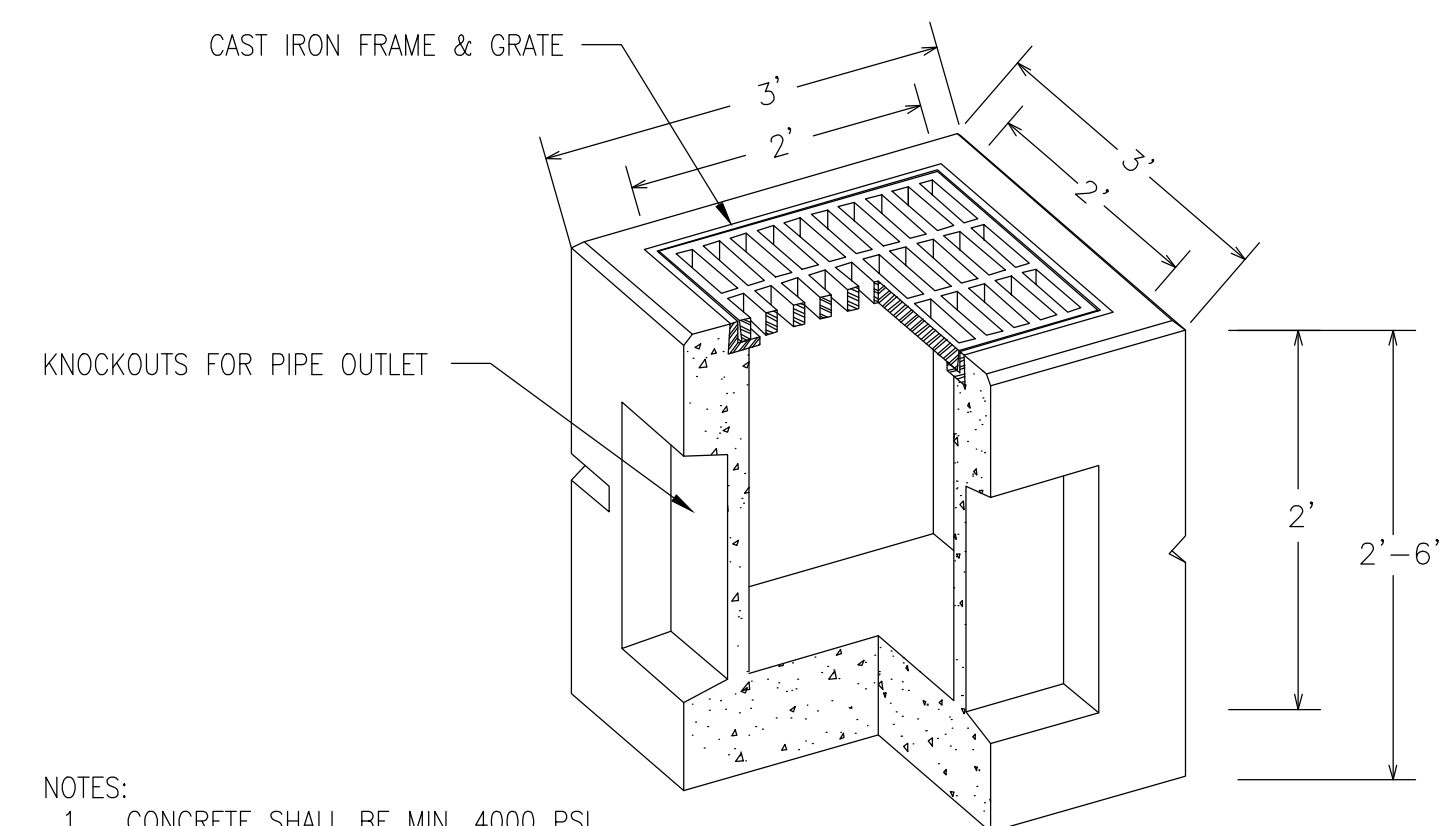
- LEGEND
- PUMP
 - VALVE
 - 4-INCH SCH. 40 PVC

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	-	INITIAL RELEASE		



TRENCH DRAIN DETAIL

NOT TO SCALE



- NOTES:
1. CONCRETE SHALL BE MIN. 4000 PSI
 2. REINFORCEMENT SHALL BE MIN. GRADE 60 STEEL
 3. SHALL BE DESIGNED FOR AASHTO H-20 LOADINGS.
 4. GRATE AND FRAMES SHALL BE OF IRON CASTING MEETING ASTM A-48, CLASS 30/35.
 5. PRECAST CATCH BASINS DEEPER THAN THE SPECIFIED DESIGN DEPTH MAY BE GROUT/CONCRETE FILLED TO ACHIEVE INTENDED FLOWLINE DEPTH.

2'x2'x2' PRECAST CONCRETE CATCH BASIN (SUMP PIT)

Equipment Specifications

[Request Info \(/Contact/\)](#)

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[Home \(Index.Html\)](#) [Services \(Services.Html\)](#) [ADS 15&30 Cubic Yard Roll Off Dewatering Unit](#)



Overview

Experts in liquid waste removal, Aqua Zyme offers our 30 cubic yard ADS roll off dewatering container, to help give large-scale liquid waste producers the ability to save time and money in their waste handling process. By eliminating excess weight in your liquid waste through the removal of water, you are able to limit the number of times you need to offload the residual materials. By eliminating the number of trips you take, you can effectively improve your operation's overall efficiency. Here is a bit of info on how our 30 cubic yard ADS roll off dewatering equipment (<https://aqua-zyme.com/what-is-dewatering-equipment>) works.

Shaped similarly to a larger dumpster, our 30 yd. dewatering container holds a maximum of 30 cubic yards of solid waste when full. Through the use of 205 square feet of filter media, all water in your liquid waste is purified and drained through the drainage ports located near the bottom. The residual flocculated solids are far less heavy and voluminous, making them easier to store and dispose of in bulk amounts.

Capable of being hauled off and delivered via a standard capacity roll off truck, these units are versatile, portable, and useful for various industries. Aqua Zyme offers both our 30 cubic yard ADS roll of dewatering equipment, along a 15 cubic yard configuration. Intersted in learning more about our ADS roll off dewatering units, and other host of disposal services? Call Aqua Zyme today at **979-245-5656**.

Get Free Quotation

Would you like to get a quote for good service, just submit your email.

Ph: 979-245-5656

Frequently Asked Questions

- How do I find a dumpster rental?
- What size roll-off dumpster should I use?
- How long can I rent a dumpster for? Do you offer longer-term roll-off dumpster rentals?
- What equipment will be needed to start dewatering my liquid waste?
- Where should I locate my dewatering facility?
- What permits and/or approvals will I need?
- What about effluent & dewatered sludge disposal?
- What about disposal trucking?
- How can I know that dewatering will actually save me money?

Dewatering Equipment for Liquid Solids Separation (/dewatering-systems/dewatering-equipment-for-liquid-solids-separation/)



Servicing Septic & Grease Pumpers World Wide (/dewatering-systems/servicing-septic-grease-pumpers-worldwide/)



Servicing Water & Wastewater Treatment Plants (/dewatering-systems/servicing-water-and-wastewater/)



ADS 15 & 30 Cubic Yard Roll Off Dewatering Unit (/dewatering-systems/ads/)



Polymer Injection Unit (/dewatering-systems/polymer-injection-unit/)



Debris Screener (/dewatering-systems/debris-screener/)



4" Trash Pump (/dewatering-systems/4-trash-pump/)



Rental & Sales Dewatering Equipment (/dewatering-systems/rental-and-sales-dewatering-equipment/)



Polymer Sales, Testing & Distribution (/dewatering-systems/polymer-sales-testing-and-distribution/)



Consulting Services & Onsite Training (/dewatering-systems/consulting-services-and-onsite-training/)



Our Brochures

Drawings & Specs (/site/assets/files/1078/aquazyme_-_30_yd_dewatering_unit.pdf)

Words From Customers

RES Group



RES would like to THANK EVERYONE for the GREAT SERVICE and professionalism of Aqua-Zyme. We will be back completing the SS at Celanese in the Fall 2021. and will be reaching out to you. I know the weather

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conditions were not the best – yet you all tried your
hardest to service our porta johns. THANK YOU ALL
AGAIN!

conditions were not the best – yet you all tried your
hardest to service our porta johns. THANK YOU ALL
AGAIN!

We can't control the weather, but we can control the schedule, cost, quality, and safety.

[Contact Us Today \(/Contact/\)](#)



The ADS Waste Disposal System is completely shop assembled and, upon delivery, is ready for installation.

569 FM-2540
Van Vleck, Texas 77482
(979) 245-5656
[Redacted]
Mon - Sat 8:00am - 5:00 pm
Closed Sunday

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- [Local Services \(/local-services/septic-pumping/\)](#)
- [About \(/about/why-dewatering/\)](#)
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Related Links



Our Polymer Dosing and Injection Unit works with the 15 & 30 cubic yard ADS dewatering units. The Polymer Dosing and Injection unit works to inject a polymer mixture into the sludge as it flows into the ADS Dewatering Units. The addition of polymer causes the sludge mixture to flocculate, separating the liquids from the solids, therefore speeding up the dewatering process. For more information on our Polymer Dosing and Injection units, give us a call today at **979-245-5656**

Would you like to get a quote for good service, just submit your email.

Ph: 979-245-5656

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[Drawings & Specs \(/site/assets/files/1102/aquazyme_-_polymer_unit.pdf\)](/site/assets/files/1102/aquazyme_-_polymer_unit.pdf)

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We can't control the weather, but we can control the service, quality, and safety. [HOME](#) [DEWATERING](#) [LOCAL SERVICES](#) [DISPOSAL SITES](#) [VIDEOS](#) [CONTACT](#) [Today's Specials](#)



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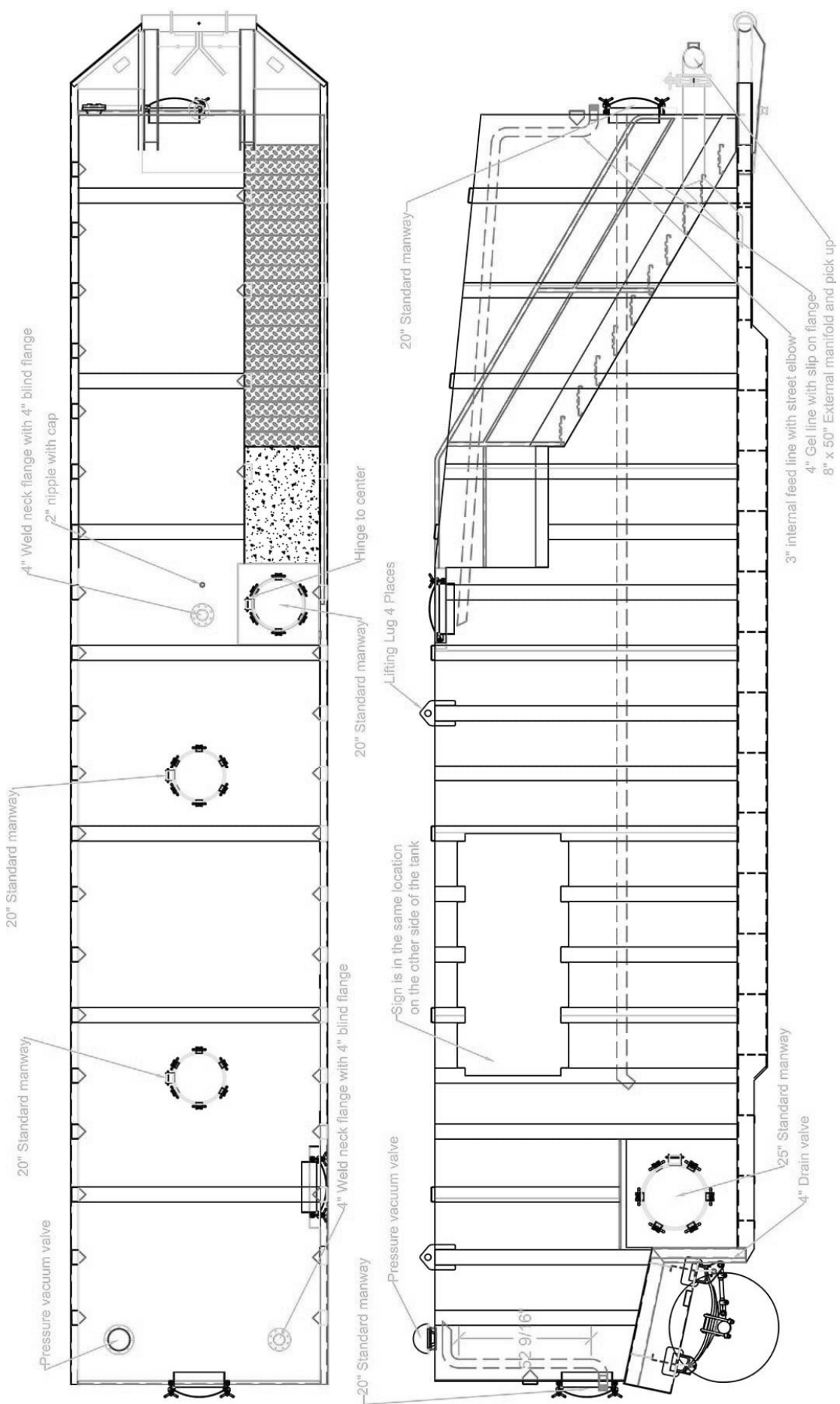
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References

REFERENCES

Aqua-Zyme Disposal Systems, Inc. Available at [REDACTED] Accessed 12/2024