

May 7, 2025

QUIKTRIP CORPORATION

Underground Storage Tank Facility Plan Application

QuikTrip Store 4004 - 11306 Huebner Road, San Antonio, Texas

PROJECT NUMBER:

0258517.01.01

PROJECT CONTACT:

Steve McVey, PG

EMAIL:

steve.mcvey@powereng.com

PHONE:

512-879-6625



QuikTrip Store 4004 - 11306 Huebner Road, San Antonio, Texas

PREPARED FOR: QUIKTRIP CORPORATION

PREPARED BY: STEVE MCVEY, PG
512-879-6625
STEVE.MCVEY@POWERENG.COM

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with [30 TAC 213](#).

Administrative Review

1. [Edwards Aquifer applications](#) must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: <http://www.tceq.texas.gov/field/eapp>.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied the application fee will be forfeited.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: QuikTrip Store 4004				2. Regulated Entity No.: TBD					
3. Customer Name: QT South LLC				4. Customer No.: CN605786011					
5. Project Type: (Please circle/check one)		New		Modification		Extension		Exception	
6. Plan Type: (Please circle/check one)		WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification
7. Land Use: (Please circle/check one)		Residential		Non-residential		8. Site (acres):		4.837	
9. Application Fee:		\$3,250		10. Permanent BMP(s):		Monitored double-walled tanks/piping/sumps, Snouts, underground detention pond			
11. SCS (Linear Ft.):				12. AST/UST (No. Tanks):		5			
13. County:		Bexar		14. Watershed:		Headwaters San Antonio River			

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	—
Region (1 req.)	—	—	—
County(ies)	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/ Edwards Aquifer <input type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	<input type="checkbox"/> Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	<input checked="" type="checkbox"/> _X_	—	—	—	—
Region (1 req.)	<input checked="" type="checkbox"/> _X_	—	—	—	—
County(ies)	<input checked="" type="checkbox"/> _X_	—	—	—	—
Groundwater Conservation District(s)	<input checked="" type="checkbox"/> _X_ Edwards Aquifer Authority <input type="checkbox"/> Trinity-Glen Rose	<input type="checkbox"/> Edwards Aquifer Authority	<input type="checkbox"/> Kinney	<input type="checkbox"/> EAA <input type="checkbox"/> Medina	<input type="checkbox"/> EAA <input type="checkbox"/> Uvalde
City(ies) Jurisdiction	<input type="checkbox"/> Castle Hills <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Helotes <input type="checkbox"/> Hill Country Village <input type="checkbox"/> Hollywood Park <input checked="" type="checkbox"/> _X_ San Antonio (SAWS) <input type="checkbox"/> Shavano Park	<input type="checkbox"/> Bulverde <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Garden Ridge <input type="checkbox"/> New Braunfels <input type="checkbox"/> Schertz	NA	<input type="checkbox"/> San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Steve McVey

Print Name of Customer/Authorized Agent



Signature of Customer/Authorized Agent

Date May 7, 2025

****FOR TCEQ INTERNAL USE ONLY****

Date(s) Reviewed:		Date Administratively Complete:	
Received From:		Correct Number of Copies:	
Received By:		Distribution Date:	
EAPP File Number:		Complex:	
Admin. Review(s) (No.):		No. AR Rounds:	
Delinquent Fees (Y/N):		Review Time Spent:	
Lat./Long. Verified:		SOS Customer Verification:	
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):
Core Data Form Complete (Y/N):			Signed (Y/N):
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent: Steve McVey

Date: April 15, 2025

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: QuikTrip Store 4004
2. County: Bexar
3. Stream Basin: Olmos Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority
5. Edwards Aquifer Zone:
 - ☐ Recharge Zone
 - ☒ Transition Zone
6. Plan Type:

<input type="checkbox"/> WPAP	<input type="checkbox"/> AST
<input type="checkbox"/> SCS	<input checked="" type="checkbox"/> UST
<input type="checkbox"/> Modification	<input type="checkbox"/> Exception Request

7. Customer (Applicant):

Contact Person: Ms. Margaret Fehn

Entity: QT South LLC

Mailing Address: 4705 South 129th East Avenue

City, State: Tulsa, OK

Zip: 74134

Telephone: 918-615-7708

FAX: _____

Email Address: mfehn@quiktrip.com

8. Agent/Representative (If any):

Contact Person: Steve McVey

Entity: POWER Engineers, Inc.

Mailing Address: 7600B N Capital of Texas Highway, Suite 320

City, State: Austin, TX

Zip: 78731

Telephone: 512-879-6625

FAX: _____

Email Address: steve.mcvey@powereng.com

9. Project Location:

- ☒ The project site is located inside the city limits of San Antonio.
- ☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
- ☐ The project site is not located within any city's limits or ETJ.

10. ☐ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The site is located at 11306 Huebner Road, San Antonio, Texas 78230. The undeveloped tract located in the northeast corner of the intersection of Huebner Road and Expo Boulevard, which is 0.20 miles north of IH-10 on Huebner Road.

11. ☒ **Attachment A – Road Map.** A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.
12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map.** A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:
- ☒ Project site boundaries.
 - ☒ USGS Quadrangle Name(s).
 - ☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
 - ☒ Drainage path from the project site to the boundary of the Recharge Zone.
13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned.** Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

☐ Survey staking will be completed by this date: _____

14. ☐ **Attachment C – Project Description.** Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

- ☒ Area of the site
- ☒ Offsite areas
- ☒ Impervious cover
- ☒ Permanent BMP(s)
- ☒ Proposed site use
- ☒ Site history
- ☐ Previous development
- ☐ Area(s) to be demolished

15. Existing project site conditions are noted below:

- ☐ Existing commercial site
- ☐ Existing industrial site
- ☐ Existing residential site
- ☐ Existing paved and/or unpaved roads
- ☐ Undeveloped (Cleared)
- ☒ Undeveloped (Undisturbed/Uncleared)
- ☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and
- (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18. The fee for the plan(s) is based on:

- ☐ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☒ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- ☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- ☐ A request for an extension to a previously approved plan.

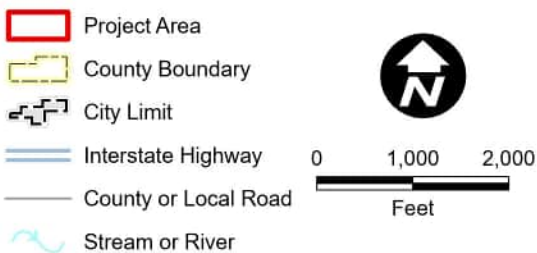
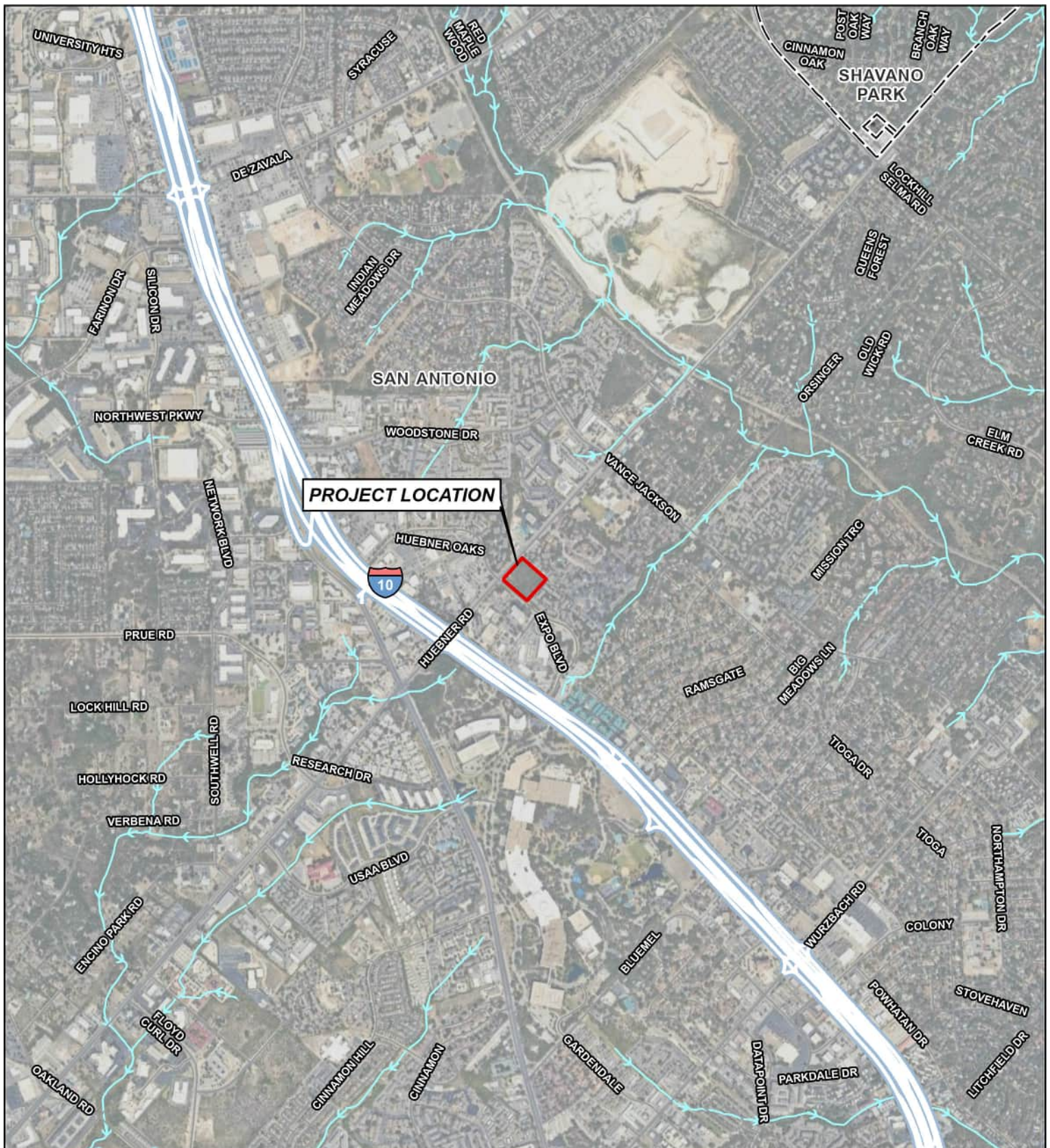
19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

- ☐ TCEQ cashier
- ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

ATTACHMENT A – ROAD MAP



QUIKTRIP STORE 4004
UST PLAN

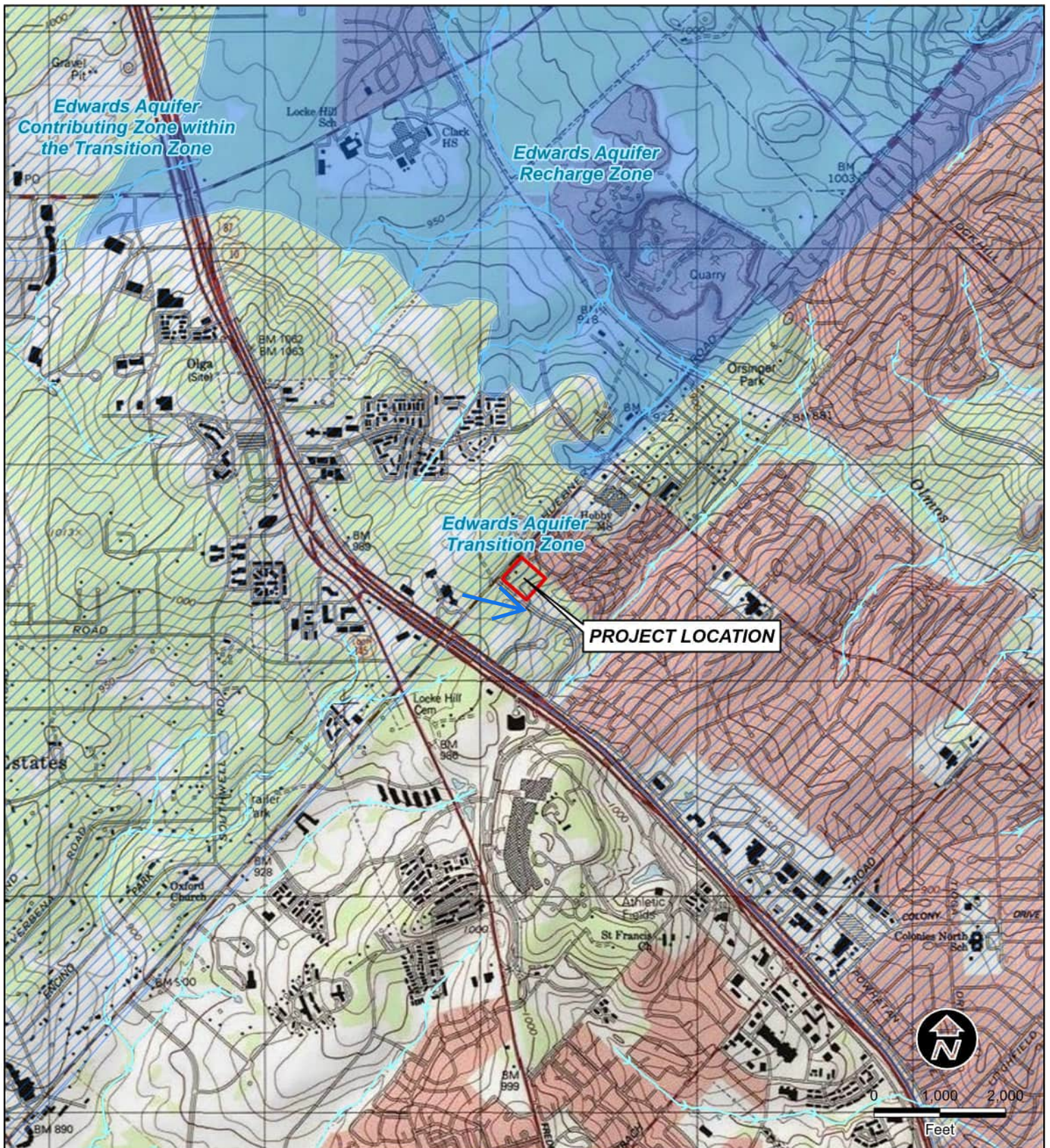
GENERAL INFORMATION FORM
TCEQ-0587
ATTACHMENT A - ROAD MAP

SAN ANTONIO, TEXAS



Date: 4/14/2025

ATTACHMENT B – USGS/ EDWARDS RECHARGE ZONE MAP



- Project Area
- Flow Direction
- Edwards Aquifer Contributing Zone within the Transition Zone
- Edwards Aquifer Recharge Zone
- Edwards Aquifer Transition Zone
- Castle Hills
- ~ Stream or River
- USGS Quadrangles



QUIKTRIP STORE 4004
UST PLAN
GENERAL INFORMATION FORM
TCEQ-0587 ATTACHMENT B -
EDWARDS AQUIFER
RECHARGE ZONE MAP

SAN ANTONIO, TEXAS



Date: 4/14/2025

ATTACHMENT C – PROJECT DESCRIPTION

ATTACHMENT C PROJECT DESCRIPTION

This Underground Storage Tank (UST) Facility Plan application has been prepared for QuikTrip Corporation (QuikTrip) in accordance with 30 Texas Administrative Code (TAC) 213.5(e).

Area of the Site, Offsite Areas, and Previous Development

The site is located at 11306 Huebner Road, on the southeast corner of the intersection of Huebner Road and Expo Boulevard, within the city limits of San Antonio in Bexar County, Texas (Attachment A). The geographic coordinates of the approximate center of the property are latitude 29.547123 degrees North, longitude -98.575018 degrees West. This site is located within the Transition Zone of the Edwards Aquifer (Attachment B). The site is comprised of approximately 4.837 acres of land previously used as a single-family residential. The current owner of record is QT South, LLC, a subsidiary of QuikTrip Corporation.

Area(s) to be Demolished and Proposed Site Use

QuikTrip is proposing to demolish/remove the remaining pavement prior to constructing a new gasoline service station/convenience store as depicted in the drawings submitted with this application. Additional information regarding proposed site use is included in the Detailed Narrative of UST Facility included with this UST Plan.

Impervious Cover

Approximately 50% of the 4.837 acres comprising the site will consists of impervious cover (roofs, canopy, parking/pavement, etc.). The remaining area is pervious consisting of native vegetation to the southeast and turf grasses, trees and shrubs as landscaping.

Permanent Best Management Practices (BMPs)

QuikTrip will utilize a number of Permanent BMPs which have been designed to prevent a release from entering the environment and the Edwards Aquifer in addition to being good business practices. These BMPs will include the following:

- 1) Utilization and maintenance of industry best practices for UST and piping design, construction, and system monitoring including interstitial monitoring and electronic line leak detection;
- 2) Practices and procedures to prevent and control a spill or overfill, including use of overfill protection equipment, containment sumps, and bladder shear valves in dispensers;
- 3) Utilization of a detention pond to collect stormwater for sediment removal.
- 4) Routine inspections and regular preventive maintenance of all mechanical systems which may result in leaks or spills; and
- 5) Practices, procedures, and employee training for responding to leaks, spills, and abnormal occurrences.

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Steve McVey, PG

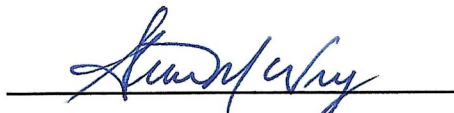
Telephone: 512-879-6625

Date: April 15, 2025

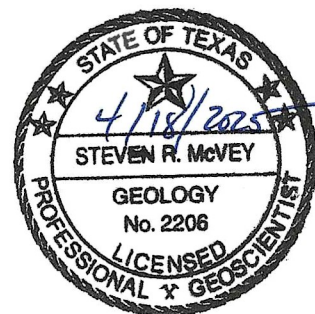
Fax: _____

Representing: POWER Engineers, Inc. (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: QuikTrip Store 4004



Project Information

1. Date(s) Geologic Assessment was performed: April 10, 2025

2. Type of Project:

☐ WPAP

☐ AST

☐ SCS

☒ UST

3. Location of Project:

☐ Recharge Zone

☒ Transition Zone

☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
TaB	D	0-1
Tb	D	0-0.5

** Soil Group Definitions (Abbreviated)*

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. ☒ **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. ☒ **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'
 Applicant's Site Plan Scale: 1" = 30'
 Site Geologic Map Scale: 1" = 30'
 Site Soils Map Scale (if more than 1 soil type): 1" = 30'
9. Method of collecting positional data:
 - ☐ Global Positioning System (GPS) technology.
 - ☐ Other method(s). Please describe method of data collection: _____
10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☐ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
- ☒ Geologic or manmade features were not discovered on the project site during the field investigation.
13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
- ☐ There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
- ☒ The wells are not in use and have been properly abandoned.
- ☐ The wells are not in use and will be properly abandoned.
- ☐ The wells are in use and comply with 16 TAC Chapter 76.
- ☐ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

ATTACHMENT A – GEOLOGIC ASSESSMENT TABLE

ATTACHMENT B – STRATIGRAPHIC COLUMN

ATTACHMENT B
STRATIGRAPHIC COLUMN

Age	Unit	Description	Thickness in Feet
Cretaceous	Austin Chalk (Ka)	Alternating chalk and marl. Chalk is microgranular, grayish white to white, and ledge-forming. Marl is medium gray, bentonitic seams found locally, with occasional beds with large-scale cross-stratification. The Austin Group is highly fossiliferous and thickens westward.	350'-580'
	Eagle Ford Group (Kef)	Shale, siltstone, and limestone. Light yellowish brown, flaggy limestone and shale make up the upper portion while the lower portion is characterized by siltstone and very fine-grained, light yellow to gray sandstone.	30'-75'
	Buda Limestone (Kb)	Limestone; light gray to pale orange, fine-grained, hard, massive, poorly bedded to nodular, bioclastic, with burrows and abundant pelecypods.	60'-100'
	Del Rio Clay (Kdr)	Calcareous and gypsiferous medium gray clay with common pyrite, thin lenticular beds of siltstone, and abundant marine megafossils.	60'-120'
	Georgetown Formation (Kg)	Largely limestone with some marl. Limestone is fine-grained, nodular, moderately indurated and light gray in color with marine megafossils present.	30'-80'
	Person Formation Cyclic Member (Kpcm)	Cyclic sequences of stromatolitic crusts and collapse breccias, disrupted intervals, apparant channel deposits, and burrowed pelleted micrite, all of which may be dolomitic.	30'-115'

Data Sources: USGS Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers Within Northern Bexar and Comal Counties, Texas by Clark et al. 2023. USGS Mineral Resources On-Line Spatial Data, Texas Bureau of Economic Geology. Texas BEG Edwards Group, Surface and Subsurface, Central Texas by Peter R. Rose 1972.

Formations outcropping at the project site are shaded.

ATTACHMENT C – NARRATIVE OF SITE SPECIFIC GEOLOGY

ATTACHMENT C

NARRATIVE OF SITE SPECIFIC GEOLOGY

1.0 INTRODUCTION

A geologic assessment of the 4.837 acres of undeveloped property located at 11306 Huebner Road, San Antonio, Texas was conducted by POWER Engineers, Inc. (POWER) pursuant to Texas rules for regulated activities on the Edwards Aquifer Transition Zone (EATZ) (30 Texas Administrative Code 213).

1.1 PROJECT DESCRIPTION

The QuikTrip Store 4004 site (Project) is a 4.837-acre tract of property which is located in northwest San Antonio, Texas. This property was previously utilized as a residential property and has been rezoned for commercial use and is now vacant and undeveloped. The approximate geographic coordinates of the approximate center of the Project are latitude 29.547123°N and longitude -98.575018°W.

The geologic assessment was conducted to meet regulations for land located within the Transition Zone of the Edwards Aquifer (EATZ).

1.2 GEOLOGIC ASSESSMENT SCOPE

The geologic assessment included the following data collection and evaluation tasks:

- Published geological and/or hydrological reports for Bexar County and the San Antonio area were reviewed.
- Texas Water Development Board groundwater well reports and submitted driller's reports were reviewed for information about wells at the site and local formation descriptions and thicknesses.
- A field survey was conducted by registered professional geoscientists Rob von Czoernig, P.G. (No. 11407), and Sean Hemmer, P.G. (No. 15455), on April 10, 2025. The survey was conducted by walking transects (less than 50 feet), northwest to southeast, across the entire site.
- Historical aerial imagery and United States Geological Survey (USGS) topographic maps were reviewed to understand the surficial nature and history of the site.

2.0 SITE GEOLOGY

The Project site is located within the EATZ as defined by the Texas Commission on Environmental Quality (TCEQ 2025). The EATZ receives surface water and groundwater flow from younger overlying lithologic units that can transmit directly to the underlying Recharge

Zone. The project is situated on an outcrop of the Upper Cretaceous Austin Chalk (Ka) (see Attachment D-2- Site Geology and Soils Map). The site has a thin soil profile which is underlain by 1-11 feet of highly weathered to slightly weathered limestone bedrock (USGS 2023).

The ground surface of the Project is covered with a veneer of cobbly clay topsoil which overlies the Cretaceous Austin Chalk which is mapped underlying the entire Project (see Attachment D-1). During the karst survey, ground surface conditions were characterized as a cobbly clay soil with an outcrop of highly weathered limestone noted in the southeast portion of the property. Two soil types are mapped on the Project and are presented in Attachment D-2 (USDA 2025).

The Austin Chalk is a thick sequence of chalk and marl which ranges from 350 to 580 feet in thickness and thickens westward. The chalk is characterized as microgranular, grayish white to white in color and ledge-forming. The marl is characterized as medium gray in color with bentonitic seams found locally with occasional beds exhibiting large-scale cross-stratification. The Austin Chalk is highly fossiliferous throughout (USGS 2007).

2.1 TOPOGRAPHY AND SURFACE DRAINAGE

The Project is located on gently to moderately sloping terrain dipping to the southeast (see Attachment B). Topographic elevations within the Project range from 1018 feet above mean sea level along the northwest property boundary to 982 feet above mean sea level along the eastern property boundary (USGS 2023). The Project is located approximately 0.25 miles northwest of an unnamed tributary of Olmos Creek which flows southeast towards the San Antonio River.

2.2 STRUCTURAL GEOLOGY AND STRATIGRAPHY

The inactive Balcones Fault Zone (BFZ) consisting of numerous northeast to southwest trending faults dictates the structural geology of the region. A review of the geologic map (USGS 2023) of the area determined that a fault with a 225-degree trend is shown in the southern corner of the Project area and extends approximately 50 feet into the property before ending. This fault is shown to be inferred and could not be verified during the karst survey. The USGS map (Clark 2023) also shows a northwest-southeast trending fault located approximately 200 feet to the northwest of the Project on the northwest side of Huebner Road.

2.3 GEOLOGIC AND MANMADE FEATURES

A pedestrian survey of the site was conducted on April 10, 2025. No evidence of natural or man-made features were observed on the Project during the karst survey. However, online research revealed one natural feature, an inferred fault (F1); and one man-made feature, a plugged domestic water well (F2). No visible evidence of this natural feature was confirmed during the karst survey. A plugging report (#227585) documented proper plugging and abandonment of the domestic water well on February 17, 2023. Both of these features are considered to have a low infiltration rate and are not sensitive to rapid recharge to the Edwards Aquifer.

3.0 CONCLUSIONS

The karst survey discovered no visual evidence of natural or manmade features on the Project. According to the geologic map, a fault extends into the southern corner of the Project. No visible evidence of this natural feature was confirmed during the karst survey. Texas Water Development Board reports a plugged domestic water well is located in the northern corner of the Project. A plugging report verifies that this well was properly plugged and abandoned in 2023. Both of these features are considered to have a low infiltration rate and are not sensitive to rapid recharge to the Edwards Aquifer.

4.0 REFERENCES

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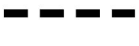


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Texas Water Development Board (TWDB). 2025. Water Data Interactive: Groundwater Well Reports and Submitted Driller Reports
<http://www2.twdb.texas.gov/apps/WaterDataInteractive/GroundWaterDataViewer>. Accessed April 8, 2025.

ATTACHMENT D – SITE GEOLOGIC MAP

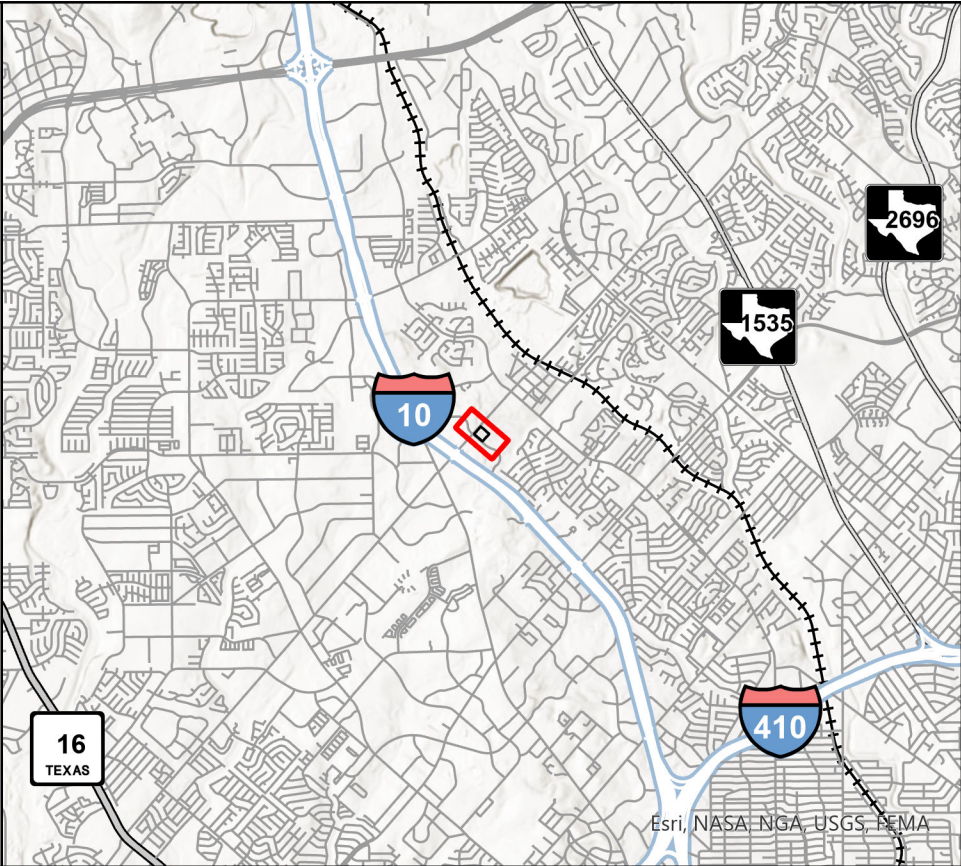
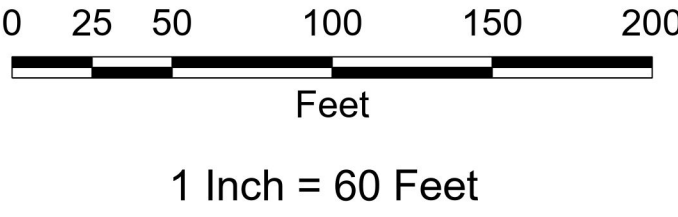


Legend

-  Project Area
-  Feature F1
-  Feature F2
-  Fault (Well Confined)
-  SSURGO Soil

Soil
TaB - Eckrant cobbly clay, 1 to 8 percent slopes
Tb - Eddy gravelly clay loam, 1 to 8 percent slopes

Geology
Ka - Austin Chalk
Kpcm - Person Formation



QUIKTRIP STORE 4004
UST PLAN

**GEOLOGIC ASSESSMENT
TCEQ-0585
ATTACHMENT D
SITE GEOLOGIC AND SOILS MAP**

SAN ANTONIO, TEXAS

 **POWER
ENGINEERS**

Date: 4/18/2025

Underground Storage Tank Facility Plan Application

Texas Commission on Environmental Quality

for Storage on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.5(d), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. All components used for this facility are U.L. listed or certified by a 3rd party and are compatible and will function pursuant to 30 TAC §213.5(d) and 30 TAC Chapter 334 Subchapter C. This **Underground Storage Tank Facility Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Steve McVey

Date: April 15, 2025

Signature of Customer/Agent:



Regulated Entity Name: QuikTrip Store 4004

Underground Storage Tank (UST) System Information

- ☒ **Attachment A – Detailed Narrative of UST Facility.** A detailed narrative description of the proposed UST Facility is attached. Note: Example descriptions are provided in the instructions (TCEQ-0583-Instructions)
- Tanks and substance to be stored:

Table 1 - Tanks and Substances Stored

<i>UST Number</i>	<i>Size(Gallons)</i>	<i>Substance to be Stored</i>	<i>Double-wall Tank Material</i>
1	15,000	Unleaded Gasoline	FRP

<i>UST Number</i>	<i>Size(Gallons)</i>	<i>Substance to be Stored</i>	<i>Double-wall Tank Material</i>
2	15,000	Unleaded Gasoline	FRP
3	15,000	Ethanol Free	FRP
4	15,000	Premium Gasoline	FRP
5	15,000	Diesel	FRP

3. Tanks:

- ☒ **Attachment B – Manufacturer Information for Tanks.** New or replacement systems for the underground storage of static hydrocarbons or hazardous substances must be double-walled or provide an equivalent method of protection approved by the executive director. Tanks must comply with technical standards as required by 30 TAC 334.45(b) relating to technical standards for new tanks. Manufacturer information is attached.
- ☐ **Attachment C – Alternative Design and Protection Method for Tanks.** Information required by 30 TAC 334.43, relating to variances and alternative procedures is attached.

4. Piping:

- ☒ **Attachment D – Manufacturer Information for Piping.** Piping must comply with technical standards as required by 30 TAC 334.45(c) relating to technical standards for new piping. Manufacturer information is attached.
- ☐ **Attachment E – Alternative Design and Protection Method for Piping.** Information required by 30 TAC 334.43, relating to variances and alternative procedures is attached.

5. ☒ Any new underground storage tank system that does not incorporate a method for tertiary containment shall be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature as required by 30 TAC §213.5(d)(1)(B).
- ☒ The UST system(s) will not be installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- ☐ **Attachment F - Tertiary Containment Method.** The UST system(s) will be required to have tertiary containment provided. A description of the method proposed to provide tertiary containment is attached.

6. ☐ Corrosion protection equipment to be installed or type of non-corrodible materials:

Table 2 - Corrosion Protection

<i>Equipment</i>	<i>Corrosion Protection (Method)</i>
Tanks	Constructed of double walled fiberglass
Product Delivery Piping	Constructed of double walled fiberglass

Equipment	Corrosion Protection (Method)
Vapor Recovery Piping	Constructed of double walled fiberglass
Submersible Pumps	Constructed of anti-corrosive materials and contained within fiberglass sumps
Flex Connector (dispenser end)	Constructed of stainless steel and contained within fiberglass sumps
Flex Connector (pump end)	Constructed of stainless steel and contained within fiberglass sumps
Riser	Risers are constructed of black iron for diesel and galvanized aluminum for gasoline products and are primed and wrapped to prevent corrosion. The annular space riser is constructed of FRP.

7. ☒ Overfill protection equipment to be installed:
- ☒ Overfill prevention restrictor positioned at 90% capacity.
 - ☐ Overfill prevention valve positioned at 95% capacity.
 - ☐ Overfill audible and visual alarm positioned at 90% capacity.
8. ☒ Methods for detecting leaks in the inside wall of a double-walled system must be included in the facility's design and construction. The leak detection system must provide continuous monitoring of the system and must be capable of immediately alerting the system's owner of possible leakages. Release detection equipment to be installed: (Check all that apply)
- ☒ Central on-site monitor
 - ☒ Interstitial tank probes
 - ☒ Automatic tank gauge
 - ☒ Pump/manway sump probes
 - ☒ Observation well probes
 - ☐ Mechanical line leak detectors (for pressurized lines only)
 - ☒ Automatic (electronic) line leak detectors

Excavation and Backfill

9. ☒ The depth of the tank excavation will be sufficient to accommodate piping fall requirements, tank diameter, bedding, and a minimum cover of three (3) feet [30 TAC §334.46].
- The depth of the tank excavation will be minimum of 15ft 4 in and maximum 17 ft 4 in. feet.
10. ☒ The minimum thickness of the tank bedding will conform to 30 TAC §334.46(a)(5)(C and D).

The tank bedding thickness will be 12 inches.

11. ☒ The material to be used as backfill will conform to 30 TAC §334.46(a)(5)(A and B) and will consist of:
- ☐ Clean washed non-corrosive sand
 - ☒ Pea gravel
 - ☐ Crushed rock
 - ☐ Other: _____
12. ☒ The slope of the product delivery line(s) will conform to 30 TAC §334.46(c)(2) and will be 1/8 inch/foot (1/8" per foot minimum).

Site Plan Requirements

Items 13 - 24 must be included on the Site Plan.

13. ☐ The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 30.
14. 100-year floodplain boundaries:
- ☐ The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM 48029C0240G effective 9/29/2010
 - ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
 - ☒ No part of the project site is located within the 100-year floodplain.
15. ☐ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
- ☐ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.
16. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
- ☐ There are 1(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
 - ☒ The wells are not in use and have been properly abandoned.
 - ☐ The wells are not in use and will be properly abandoned.
 - ☐ The wells are in use and comply with 16 TAC §76.
 - ☐ There are no wells or test holes of any kind known to exist on the project site.
17. Geologic or manmade features which are on the site:
- ☐ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
 - ☒ No sensitive geologic or manmade features were identified in the Geologic Assessment.

- ☐ **Attachment G - Exception to the Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.
18. ☐ The drainage patterns and approximate slopes anticipated after major grading activities.
19. ☐ Areas of soil disturbance and areas which will not be disturbed.
20. ☐ Locations of major structural and nonstructural controls. These are the temporary best management practices.
21. ☐ Locations where soil stabilization practices are expected to occur.
22. ☐ Surface waters (including wetlands).
☐ N/A
23. ☐ Locations where stormwater discharges to surface water or sensitive features.
☐ There will be no discharges to surface water or sensitive features.
24. ☐ Legal boundaries of the site are shown.

UST System Profiles

25. ☒ **Attachment H - Profile Drawing(s).** A profile drawing(s) of the proposed UST system with all components shown and labeled is attached.

Best Management Practices

26. ☒ **Attachment I - Initial and Continuing Training.** A description of the initial and continuing training of on-site personnel for operation of release detection equipment is attached. The description should include how personnel will respond to warning and alarm conditions of the leak detection monitoring system.
27. ☒ **Attachment J - Release Detection Maintenance.** A description of the program and schedule for maintaining release detection and cathodic protection equipment is attached. Any such equipment should be operated and maintained in accordance with the manufacturer's specifications and instructions.

Administrative Information

28. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.
- ☐ The WPAP application for this project was approved by letter dated _____. A copy of the approval letter is attached at the end of this application.
- ☐ The WPAP application for this project was submitted to the TCEQ on _____, but has not been approved.
- ☐ A WPAP application is required for an associated project, but it has not been submitted.
- ☐ There will be no building or structure associated with this project. In the event a building or structure is needed in the future, the required WPAP will be submitted to the TCEQ.

- ☒ The proposed UST is located on the **Transition Zone** and a WPAP is not required. Information requested in 30 TAC 213.5 subsection (b)(4)(B) and (C) and (5) is provided with this application. (Forms TCEQ-0600 Permanent Stormwater Section and TCEQ-0602 Temporary Stormwater Section or Stormwater Pollution Prevention Plan/SW3P).
29. ☒ UST systems must be installed by a person possessing a valid certificate of registration in accordance with the requirements of 30 TAC Chapter 334 Subchapter I.
30. ☒ This facility is subject to and must meet the requirements of 30 TAC Chapter 334, including but not limited to the 30 day construction notification and reporting and cleanup of surface spills and overfills.
31. ☒ Upon completion of the tankhold excavation, a geologist must certify that the excavation was inspected for the presence of sensitive features. The certification must be submitted to the appropriate regional office. If sensitive features are found, then excavation near the feature may not proceed until the methods to protect the Edwards Aquifer are reviewed and approved by the executive director.
32. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
33. ☒ Any modification of this UST application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A – DETAILED NARRATIVE OF UST FACILITY

ATTACHMENT A DETAILED NARRATIVE OF UST FACILITY

The proposed new underground static hydrocarbon storage system will consist of five new double-walled fiberglass tanks to be used for the storage of gasoline and diesel fuels. Should subsurface conditions encountered while excavating the tank hold dictate the need for additional water quality protection measures, QuikTrip will upgrade the tank system to triple-walled tanks with triple-walled piping.

The proposed underground storage tank capacities and contents stored are as follows:

- Two 15,000-gallon capacity tanks used for storing unleaded gasoline
- One 15,000-gallon capacity tank used for storing ethanol-free gasoline
- One 15,000-gallon capacity tank used for storing premium gasoline
- One 15,000-gallon capacity tank used for storing diesel fuel

Each 15,000-gallon tank will each be equipped with a 4 horsepower, 4-inch diameter submersible pump. Overfill prevention for each UST will be provided by a two-stage vapor-tight overfill protection valve which will be installed in the tank below the fill tube. The UST overfill protection valves will be set to restrict flow of product to approximately 5 gallons per minute into the tank/tank compartment when the volume of liquid in the tank reaches no more than 84% of the tank capacity and will shut off flow into the tank when the volume of liquid in the tank reaches no more than 86% of the tank capacity (for safety reasons, QuikTrip considers 90% of the total tank capacity to be the maximum fill volume). Spill protection for each tank will be provided by a spill containment manhole which will be fitted on the fill tube of each tank.

Product and vent piping will be U.L. listed fiberglass-reinforced plastic piping. Product lines will be of double-wall construction and will consist of a 2-inch diameter primary pipe within a 3-inch diameter secondary containment pipe. Vent lines will be 2-inch diameter single-wall pipe. A safety/bladder shear valve will be installed on each product line at the dispenser island surface level to assure automatic shut-off of product flow during emergencies and to minimize fuel loss in the event . In addition, stainless steel braid flexible connectors will be installed at both ends of each product line to connect to the dispenser unit and the submersible pump.

Corrosion protection for the metallic components of the underground storage systems will be provided by electrical isolation. The submersible pump housings and pump-end flexible connectors will be installed within a liquid-tight fiberglass-reinforced plastic piping sump which will provide isolation from the corrosive elements of the backfill material while also providing secondary containment for any leaks from these components. The dispenser-end flexible connector will be similarly isolated by enclosure within a flexible isolation sleeve. The vapor recovery riser, the fill tube riser, and the riser for the automatic tank gauging system will be thoroughly wrapped with a suitable dielectric material.

The proposed tanks and piping will be monitored for leaks by means of inventory, leak detection, and a line pressure monitor. Each tank will be equipped with a liquid discrimination sensor which

will be installed in the interstitial space between the walls of the double-wall tanks. An electronic line leak detector system (VeederRoot TLS 450) will be utilized to monitor leaks in both the fuel lines and in the containment sumps. Two 4-inch diameter and one 12-inch diameter slotted PVC observation well will be installed within each of the two tank pit excavations. These observation wells will be equipped with a vapor/conductivity (water) probe to provide a means of monitoring the backfilled tank pit area. Each tank/tank compartment will also be equipped with an automatic tank gauging probe which will automatically inventory the product volume in the tank/tank compartment. Each product piping line will be equipped with an electronic positive flow shut off that is designed to stop product flow in the event a leak in the product line is detected. The probes and sensors from all tanks, piping, and observation wells will be connected to a programmable control unit (VeederRoot TLS 450 system) to be located in the store building. This central monitoring unit is designed to provide visual and audible alarms when hydrocarbon liquids, hydrocarbon vapors, or water is detected. A third party certified consultant monitors the system for leaks in “real time” and certain alarms or conditions trigger automatic notifications to responsible parties within QuikTrip for immediate investigation and resolution.

ATTACHMENT B – MANUFACTURER INFORMATION FOR TANKS

ZCL | XERXES®
making a **lasting** difference®

Fiberglass Underground Storage Tanks





ZCL | XERXES

RELIABLE, CORROSION-RESISTANT TANKS

OVER **200,000** FIBERGLASS STORAGE TANKS MANUFACTURED AND SHIPPED
IN NORTH AMERICA



A history of **innovation** in the **fuel industry**

When ZCL Composites Inc. and Xerxes Corporation joined in 2007, it brought together North America's two leading fiberglass tank brands: ZCL (founded in 1987) and Xerxes (founded in 1979). Today, ZCL | Xerxes is one of the world's leading innovators in composite tank engineering. Nearly 40 years of manufacturing experience and more than 200,000 tanks manufactured and shipped stand as proof of the reliability and quality of our products.

This solid track record provides our customers with peace of mind, which is why petroleum equipment distributors, fuel marketers and commercial accounts rely on our double-wall tanks for safe underground storage of fuel products. We have provided customers with durable and sustainable products that protect the environment for decades. Our proven track record along with our financial strength assures customers that we will be around to support our industry-leading products and warranties. Currently, 29 of the 30 top c-store marketers¹ choose E15-, E85- and ULSD-compatible, corrosion-resistant fiberglass storage tanks from industry leaders like ZCL | Xerxes.

¹ CSP's Convenience Top 101, <http://www.cspdailynews.com/industry-news-analysis/top-convenience-stores/archive/2015>

Our history of **storage solutions** includes:

- developing the first UL-listed double-wall fiberglass tank
- incorporating our factory-installed hydrostatic monitoring system (TRUCHEK®)
- incorporating our unique 3D glass fabric (Parabeam®) into our tank design



WHY CHOOSE A FIBERGLASS TANK?

Best Product Investment

Fiberglass tanks have rapidly grown in popularity since they were first introduced more than 50 years ago as the corrosion-resistant alternative to underground steel tanks that were rusting, leaking and creating serious environmental damage. Major oil companies and large fuel marketers were the first to realize the benefits of fiberglass over steel for underground tanks. Today, a large majority of North American fuel marketers choose fiberglass, and the preference for fiberglass reaches all segments of the market, including industrial, commercial and government accounts who specify, install and own underground storage tanks. The growing understanding of fiberglass' benefits goes well beyond external corrosion protection with the recognition that fiberglass is corrosion-resistant, both inside and out.

FIBERGLASS OUTPERFORMS STEEL CORROSION RESISTANCE

It's now common knowledge that fiberglass tanks are protected from external rusting due to corrosive soil environments. Today, the widespread use of ethanol-blended gasoline (E10, E15, E85), biodiesel fuels and ultra-low sulfur diesel (ULSD) has shifted the concern about corrosion to include internal protection. Most significantly, new ethanol-blended fuels raise questions about the compatibility of storage tank materials with stored fuel. When today's buyers compare fiberglass and steel tanks they see the clear advantage of our fiberglass tanks, which are not vulnerable to aggressive internal corrosion caused by storage of today's biofuels. The fact that fiberglass tanks are corrosion-resistant both inside and out give them a distinct advantage over steel tanks.

FUEL COMPATIBILITY

Customers today want to be confident that they are choosing a tank material that is compatible with the new fuels as well as traditional fuels. Our UL-listed (1316) and ULC-listed (S615) double-wall fiberglass tanks are UL-compatible with 0-100 percent ethanol storage. They are also warranted for the full range of ethanol-blended gasoline. The correlating UL listing (58) for steel fuel tanks does not require testing for ethanol compatibility. This third-party compatibility verification for fiberglass tanks – that steel tanks do not have – makes fiberglass the clear and superior choice for fuel tanks.





OUR FIBERGLASS TANKS PROVIDE **UNMATCHED BENEFITS**

The ZCL | Xerxes Advantage

ZCL | Xerxes double-wall underground storage tanks offer customers several significant design and performance differences that make them a superior choice to both steel tanks and other fiberglass tanks.



RIB DESIGN FOR STRUCTURAL INTEGRITY

As engineers, system designers and customers compare products, the rib geometry of our tanks is an important consideration in their analysis. Our uniform, high-profile ribs are fabricated directly into the tank cylinder. In some other tanks, ribs are incorporated as a separate step in the manufacturing process. Integrally constructed ribs increase the overall strength of the tank and create a structurally superior product.

30-YEAR WARRANTY

ZCL | Xerxes offers a 30-year limited warranty with no restrictions regarding water-bottom monitoring and removal. In contrast, many steel tank manufacturers now have a 10-year rather than 30-year warranty, and make ongoing maintenance and water-bottom removal a condition of warranty coverage.

PARABEAM®

Our proprietary 3D glass fabric, Parabeam®, also enhances the overall structural integrity of our tank by creating a bond between the tank walls, while providing a free-flowing interstitial space for monitoring capabilities. This technology also eliminates the potential for false alarms (created by fluctuating reservoir levels) that can occur in other hydrostatically monitored tanks.

MAINTENANCE-FREE

The presence of water in the bottom of fuel tanks is a common condition. Maintenance to remove it can be frequent and expensive. The requirement to do so, which is found in most steel-tank warranties, can leave a steel-tank owner vulnerable to a denied warranty claim should the tank corrode internally.

TRUCHEK® CONTINUOUS LEAK DETECTION

Our patented TRUCHEK® hydrostatic tank monitoring system for double-wall tanks is an easy, reliable method for true continuous leak detection and tank-tightness testing. Hydrostatic monitoring – now the industry standard for continuous monitoring – gives tank owners greater peace of mind than with a simple liquid sensor, which can fail to detect an outer-wall breach. (See p. 10 for more information.)



ZCL | XERXES STORAGE TANK SOLUTIONS

Today, double-wall tanks are the industry standard in fuel applications. To meet the needs of our customers we also offer several other fiberglass tank options for a variety of applications and requirements. Our tank options include: double-wall tanks, multicompartment tanks, triple-wall tanks, diesel exhaust fluid tanks and oil-water separators. We also have a tank upgrade system when tank replacement is not viable.

DOUBLE-WALL TANKS

Tank owners and system designers of underground fuel systems need tanks that provide secure storage of fuel over time. ZCL | Xerxes fiberglass double-wall tanks are an excellent solution because they are corrosion-resistant, both inside and out. Our tanks have a proven record of compatibility with traditional petroleum fuel as well as with new biofuels, which are increasing in use. Our double-wall fiberglass tanks are not vulnerable to the corrosion problems inherent in storing ethanol-blended fuels (E10, E15, E85), biodiesel fuels and ultra-low sulfur diesel (ULSD). Nor are they vulnerable to rust caused by corrosive soil environments. Options such as protective coatings and cathodic protection don't guard entirely against external corrosion and rust. This makes ZCL | Xerxes fiberglass double-wall tanks a superior choice for a wider range of fuel applications.

FEATURES

- UL-listed (1316) & ULC-listed (S615) for alcohol fuels
- Secondary containment around full tank circumference
- Dry & hydrostatic monitoring options
- Capacities up to 50,000 gal. (USA)
- Capacities up to 155,000 L (Canada)

MULTICOMPARTMENT TANKS

These tanks are a popular choice among retail gasoline marketers and fleet fueling owners. The ability to store two or three grades or types of fuel in a single tank is particularly appealing when the amount of onsite space makes multiple tanks impossible or difficult. Customers may also find installation and insurance cost savings with a multicompartment tank.

The ZCL | Xerxes double-wall multicompartment tank comes standard with a double-wall bulkhead, while some other tank manufacturers require an upgrade to a double-wall bulkhead. Tanks are available in a wide range of capacities and in diameters of 6 to 10 feet.

FEATURES

- UL-Listed (1316) & ULC-listed (S615) for alcohol fuels
- Secondary containment around full tank circumference
- Dry & hydrostatic monitoring options
- Two- & three-compartment models
- Capacities up to 40,000 gal. (USA)
- Capacities up to 155,000 L (Canada)



TRIPLE-WALL TANKS

Some customers and regulatory agencies now require protection beyond secondary containment. Site conditions that could lead to a requirement for tertiary containment are the following: the presence of sensitive groundwater aquifers, lakes or streams. Our UL-listed triple-wall tank, with an additional Parabeam® interstice, is the innovative and cost-effective answer for this level of containment.

FEATURES

- UL-listed (1316) for alcohol fuels
- Tertiary containment around full tank circumference
- Dry & hydrostatic monitoring options
- Capacities up to 50,000 gal. (USA)
- Capacities up to 155,000 L (Canada)

DIESEL EXHAUST FLUID TANKS

ZCL | Xerxes has become a leading provider of diesel exhaust fluid (DEF) tanks in truck stops and vehicle fleet fuel facilities in the relatively short time DEF has been in demand in North America. Many fueling facilities now need to add bulk storage of DEF to meet the growing number of vehicles with diesel engines that require diesel exhaust fluid. A fiberglass underground storage tank has a number of benefits over the alternatives.

Since DEF cannot be exposed to carbon steel, a tank constructed of fiberglass is the clear choice. Using our fiberglass underground tank avoids the need for protective coatings or linings to protect the integrity of the product.

Underground storage of DEF has clear advantages over aboveground storage, in part because of the product's specific temperature requirements. An underground DEF tank also allows for storage of larger capacities than an aboveground tank and avoids an unsightly, space-consuming aboveground installation.

FEATURES

- Single-wall & double-wall models
- UL label available for future product storage flexibility
- Extensive third-party compatibility testing
- Capacities up to 50,000 gal. (USA)
- Capacities up to 155,000 L (Canada)

OIL-WATER SEPARATORS

With a fiberglass underground tank at the heart of the design, a ZCL | Xerxes oil-water separator incorporates unique refinements within the vessel to create a separator that removes free-floating oils and settleable solids from oil-water mixtures.

A properly sized coalescer is designed to produce effluent quality acceptable to most regulatory requirements for water runoff. Our oil-water separator is an excellent choice for managing water runoff from parking lots or equipment washdown stations.

This product is also available as a UL-listed (2215) and ULC-listed (S656) model.

FEATURES

- UL-listed (2215) & ULC-listed (S656) models available
- Single-wall & double-wall models
- Flexible design options
- Coalescer & gravity-flow models available
- Capacities up to 30,000 gal. (USA)
- Capacities up to 113,000 L (Canada)



ZCL | XERXES STORAGE TANK SOLUTIONS



TANK UPGRADE SYSTEM

In a growing number of situations, secondary containment needs to be added to single-wall tanks, and site challenges make removal of existing tanks either cost-prohibitive or difficult. In instances where tanks are covered or surrounded by buildings, roads or rail lines, adding secondary containment to a single-wall fiberglass or steel tank can be accomplished with our Phoenix System®.

This upgrade system consists of two corrosion-resistant laminates with the proprietary Parabeam® glass fabric between the laminates creating an interstitial space. The interstice can be either dry or hydrostatically monitored. The Phoenix System®, applied onsite by trained installers, is compatible with biofuels, including ethanol-blended fuels and biodiesels.

FEATURES

- ULC/ORD-listed (C58)
- Corrosion-resistant fiberglass system
- Viable alternative in difficult tank replacement situations
- Suitable for both fiberglass & steel tanks



ZCL | XERXES FUEL TANK ACCESSORIES

Your Complete Solution

Today's retail and commercial fueling facilities are sophisticated systems that are installed in a highly regulated environment. While the storage tank is the critical component in an underground fuel system, other important accessories are necessary to provide spill containment, tank anchoring, secondary pipe-drain collection, leak detection and other important functions. ZCL | Xerxes engineers have designed innovative, complementary products that provide system designers and installers with cost-effective, easy-to-install accessories. Very few tank manufacturers provide the wide range of accessories that we can supply. This is yet another example of how our innovative spirit benefits customers.

Installation & Technical Support

ZCL | Xerxes provides a comprehensive Installation Manual and Operating Guidelines (IMOG) document that outlines the proper – yet easy – steps necessary for a successful installation.

LEARN MORE ONLINE

Search our online database (zcl.com) for hundreds of resources for our fuel tanks and accessories, including:

- a pdf version of the Installation Manual
- a video of our Installation Manual
- technical drawings (available in CAD, DWG & BIM)
- guide specifications
- typical installation drawings

CONTAINMENT SUMPS AND COLLARS

Sumps and collars are common accessories found on virtually all double-wall tanks installed today. ZCL | Xerxes offers factory-installed containment collars that provide secondary containment around tank fittings and manways.

Designed to be a custom-match to the collar, our containment sump comes in a variety of models and sizes, all engineered to accommodate different customer preferences and needs. Our sumps and collars are also available in double-wall models, which are growing in popularity given changes to tank regulations.

FEATURES

- Flat-sided & round models for various piping layouts
- Watertight or friction-fit cover & open top options
- Diameters of 42 & 48 inches
- Heights of 36-72 inches
- Field-adjustable heights
- Custom options



ANCHORING SYSTEM

Site-specific installation conditions generally dictate whether a tank-anchoring system is necessary. Some customers choose to anchor all their tanks.

ZCL | Xerxes offers a complete tank-anchoring system, including reinforced precast concrete deadmen (designed to American Concrete Institute standards), fiberglass anchoring straps and galvanized turnbuckles.

Each component is engineered to specific tank sizes and for ease of installation. In most cases, concrete deadmen can be delivered on the same trailer as the tank, which minimizes the shipping cost and assures that deadmen are ready when the tank is set.

FEATURES

- Deadmen sizes for tank diameters 6-12 feet
- Corrosion-resistant anchor straps
- Optional man-out-of-hole straps available
- Galvanized turnbuckles

TRUCHEK® CONTINUOUS MONITORING

TRUCHEK® is the ideal solution to the growing regulatory interest in leak-detection methods that provide true continuous leak detection. Unlike dry interstitial monitoring methods, TRUCHEK® is able to monitor both walls of a tank 24/7 in all installation conditions.

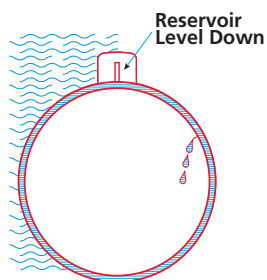
When you order our double-wall tank with the TRUCHEK® option, the interstice is filled at the factory with a calcium-chloride fluid that also partially fills a reservoir, creating an interstitial hydrostatic pressure. An electronic probe placed in the tank's reservoir alarms when the fluid level falls below or rises above the acceptable level.

FEATURES

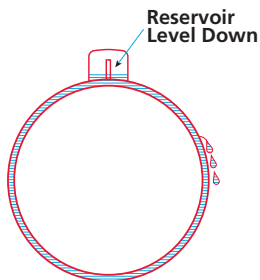
- 24/7 continuous tank monitoring regardless of installation conditions
- UL-verified as meeting the EPA criteria for tank-tightness testing
- Designed for dry-hole & wet-hole installations

How TRUCHEK® Works

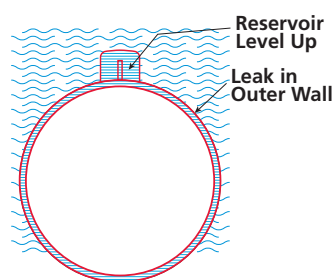
Primary-Tank Leak in Wet Hole or Dry Hole



Secondary-Tank Leak in Dry Hole



Secondary-Tank Leak in Wet Hole



TANK-TIGHTNESS TESTING

Besides providing true continuous monitoring of both tank walls – regardless of site conditions – TRUCHEK® also provides a simple and precise method to perform tank-tightness tests. A 10-hour tightness-test procedure meets the strict NFPA329 criteria. A 4-hour test (while product is dispensing) exceeds EPA's criteria for a tank-tightness test.

ZCL | Xerxes

Underground Double-Wall Tank Data

	Nominal Capacity (gallons)	Tank Length (feet/inches)	Nominal Shipping Weights (lbs) (dry interstitial)	Nominal Shipping Weights (lbs) (wet interstitial)	Number of Anchor Straps Required		Nominal Capacity (liters)	Tank Length (mm)	Nominal Shipping Weights (Kg) (dry interstitial)	Nominal Shipping Weights (Kg) (wet interstitial)	Number of Anchor Straps Required
4'	600	7'-3 1/2"	900	1,100	2		2,500	2,303	400	500	2
	1,000	11'-7 1/2"	1,100	1,300	2		3,900	3,395	500	600	2
	2,000	22'-3 5/8"	2,800	3,400	2		5,000	4,380	600	700	2
6'	2,500	13'-5 3/4"	2,200	2,800	2		10,000	4,520	900	1,100	2
	3,000	16'-4 1/4"	2,600	3,300	2		15,000	6,604	1,300	1,600	4
	4,000	20'-8"	3,600	4,400	2		20,000	8,465	1,700	2,000	4
	5,000	26'-5"	4,300	5,200	4		25,000	10,420	2,200	2,500	4
	6,000	30'-8 3/4"	5,000	6,100	4						
8'	4,000	15'-1/2"	2,700	3,600	2		15,000	3,994	900	1,100	2
	5,000	17'-8 1/2"	3,200	4,200	2		20,000	5,137	1,200	1,500	2
	6,000	20'-6 1/2"	3,700	4,900	2		25,000	6,090	1,400	1,700	2
	8,000	26'-1/2"	4,800	6,200	4		30,000	7,264	1,700	2,100	4
	10,000	31'-6 1/2"	5,900	7,500	4		35,000	8,185	2,000	2,300	4
	12,000	37'-1/2"	7,000	8,800	4		40,000	9,392	2,300	2,700	4
	15,000	46'-9"	9,100	11,200	6		45,000	10,363	2,500	3,000	4
							50,000	11,328	2,700	3,200	4
10'							60,000	13,500	3,400	3,900	6
							65,000	14,522	3,700	4,300	6
	10,000	21'-5 1/4"	4,900	6,400	4		50,000	7,449	2,900	3,300	4
	12,000	24'-1/4"	5,600	7,200	4		55,000	8,280	3,200	3,600	4
	15,000	29'-5 3/4"	7,000	8,900	4		60,000	8,827	3,300	3,800	5
	20,000	37'-8 3/4"	9,000	11,300	6		65,000	9,576	3,600	4,200	5
	25,000	47'-6 3/4"	11,800	14,600	8		70,000	10,395	3,900	4,500	6
	30,000	55'-9 3/4"	14,000	17,200	10		75,000	10,903	4,100	4,700	6
	35,000	64'-3/4"	16,500	20,100	12		80,000	11,582	4,400	4,900	6
	40,000	73'-8 1/4"	19,000	23,100	14		85,000	12,268	4,700	5,300	7
12'							90,000	13,068	5,000	5,600	7
							100,000	14,345	5,400	6,100	8
							110,000	15,723	5,900	6,700	9
	20,000	29'-4"	14,000	16,700	6						
	25,000	35'-7"	16,600	19,700	8						
	30,000	43'-1"	19,900	23,500	10						
	35,000	49'-4"	22,500	26,500	12						
	40,000	54'-4"	24,600	28,900	12						
	45,000	60'-7"	27,400	32,100	16						
	48,000	65'-7"	29,500	34,500	18						
	50,000	68'-1"	30,500	35,700	18						

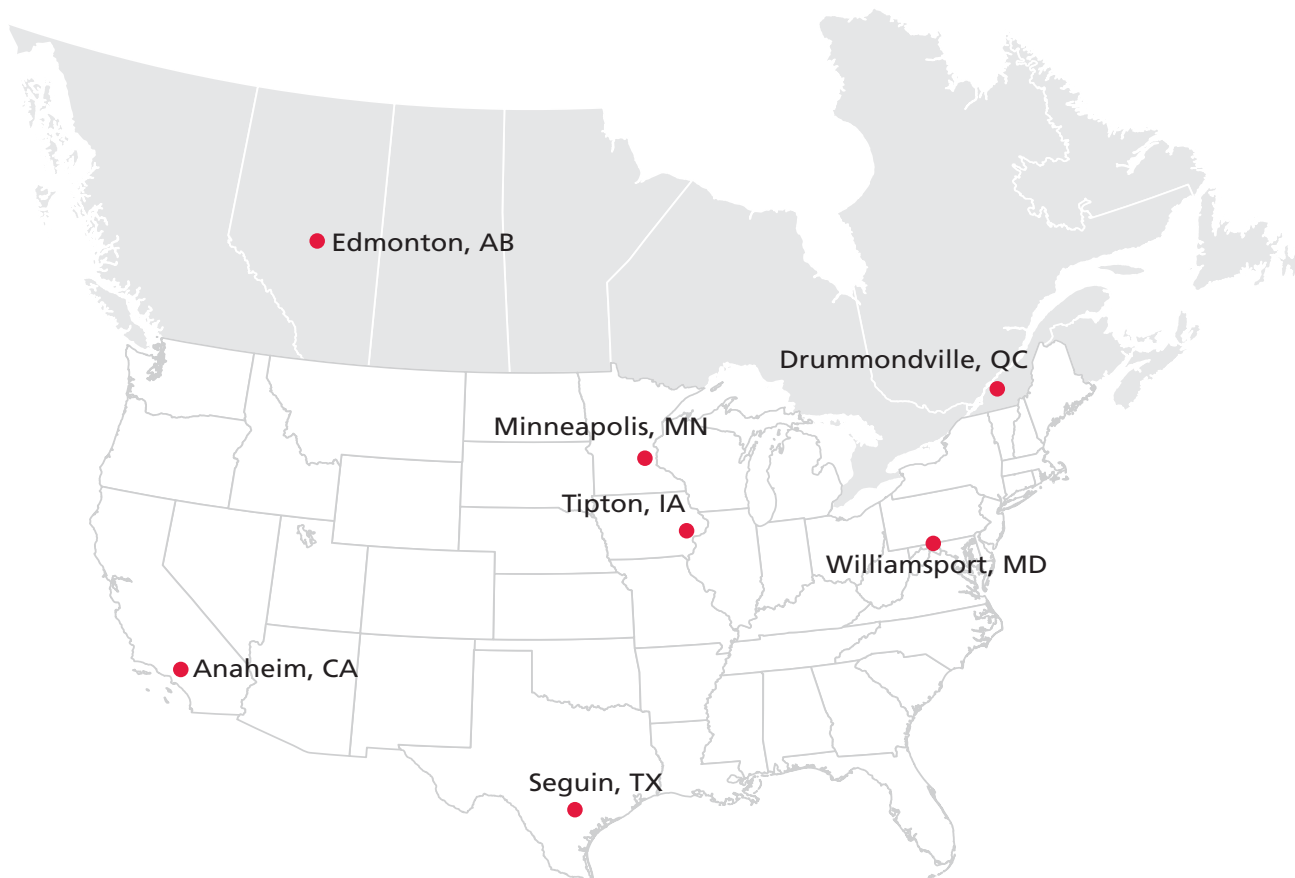
Notes:

1. Tank data for multicompartment tank models is available at www.zcl.com.
2. Actual height of the tank may be greater than the actual diameter due to fittings and accessories. Load height during shipping may vary due to tank placement on the shipping trailer.
3. If an overflow-protection device is installed in the tank, the actual capacity will be reduced.

Multiple Facilities

Customers Can Rely on Timely Manufacturing and Delivery of Tanks and Accessories.

With six manufacturing facilities – four in the United States and two in Canada – no matter where customers need fiberglass tanks and accessories shipped, a ZCL | Xerxes manufacturing facility is not far away. No other tank producer offers this kind of manufacturing capability in North America. All our facilities are either UL-listed or ULC-listed.



Contact Us

We're ready to design a double-wall tank, multi-compartment tank, triple-wall tank, diesel exhaust fluid tank or oil-water separator for your next project.

On the Web:
www.zcl.com

Technical Support:
1.800.661.8265
USA: 952.887.1890
Email: eng.support@zcl.com

Corporate Head Office

ZCL Composites Inc.
1420 Parsons Road SW
Edmonton, AB T6X 1M5

US Office

Xerxes Corporation
7901 Xerxes Avenue S
Minneapolis, MN 55431

Manufacturing Facilities:

Canada

Edmonton, AB
Drummondville, QC

USA

Anaheim, CA
Seguin, TX
Tipton, IA
Williamsport, MD

ATTACHMENT C – ALTERNATIVE DESIGN AND PROTECTION METHOD FOR TANKS

Not applicable - This UST Plan Application is not requesting a variance to 30 TAC 334.43

ATTACHMENT D – MANUFACTURER INFORMATION FOR PIPING

Dualoy™ 3000/L Fiberglass Pipe

(Product Data)



Applications

- Service Station
- Vent/Vapor Recovery
- Bulk Plant Terminals
- Fueling Terminals
- Central Fuel Oil Systems
- Marinas Terminals
- Ethanol Fuel Blends
- Diesel Exhaust Fluid
- UL/ULC Systems that require MV, HB, CT, A&M Fuels

Materials and Construction

Filament-wound fiberglass reinforced epoxy pipe with integral epoxy liner and exterior coating. When classified in accordance with ASTM D2310 and ASTM D2996, the pipe meets the following cell limits: RTRP 11CXF1-5420. The operating pressure of the pipe is up to 200 psig (13.8 bar) with continuous operating temperature to 150°F (66°C).

Dualoy 3000/L is Listed with Underwriters Laboratories Standard 971-2004 for nonmetallic underground piping for motor vehicle (MV), high blend (HB), concentrated (CT) and aviation and marine (A&M) fuels (File MH9162). Dualoy 3000/L pipe and fittings are

also Listed with Underwriters Laboratories of Canada (File CMH 715). In Great Britain the Dualoy 3000/L system has been tested and accepted by the London Fire and Civil Defence Authority. Dualoy 3000/L has been issued a Certificate of Compliance to the Institute of Petroleum (IP) Specification by ERA Technology, Ltd.

Performance

Individual system components may not have the same ratings as the pipe. Refer to the detailed product information for the specific components to determine the pressure rating for the system as a whole.

Fittings

Compression-molded and filament-wound fiberglass reinforced epoxy.

For dimensions of fittings, consult publication Dualoy 3000/L Fittings Dimensions.

Pressure ratings of fittings without UL listing are available on request

Joining System

- **Bell & Spigot** - The primary joining method for fitting joints.

Nominal Dimensional Data

Pipe Size		Inside Diameter		Outside Diameter ⁽¹⁾		Wall Thickness				Capacity		Weight		Max. Deflection per 20 ft Joint	Min. Length Req. for 10° Change		Stiffness Factor ⁽²⁾	
						Total		Structural										
in	mm	in	mm	in	mm	in	mm	in	mm	gal/ft	l/m	lb/ft	kg/m	deg	ft	m	lb·in³/in²	N·m
2	50	2.21	56	2.37	60	0.080	2.03	0.060	1.5	0.20	2.50	0.47	0.70	15	13	4	45	5.1
3	80	3.32	84	3.50	89	0.085	2.16	0.065	1.6	0.45	5.60	0.72	1.07	9	22	7	75	8.5
4	100	4.33	110	4.50	114	0.087	2.21	0.070	1.8	0.77	2.92	1.00	1.49	7.5	27	8	60	6.8
6	150	6.39	162	6.63	168	0.120	3.10	0.100	2.5	1.67	6.35	2.10	3.13	5	40	12	275	31.1

⁽¹⁾ Typical outside diameters of 2 through 6-inch pipe are within API, ASTM and ANSI fiberglass and steel pipe dimensions.

⁽²⁾ At 5% deflection.

View of Joint Illustrations (Joint illustration only depicts type of connection available, not type of pipe featured in data sheet)



Bell & Spigot

Typical Pipe Performance

Nominal Pipe Size		Pressure Rating ⁽¹⁾		Ultimate Internal Pressure ⁽¹⁾		Ultimate Collapse Pressure ⁽²⁾	
in	mm	psig	MPa	psig	MPa	psig	MPa
2	50	200	2.07	3200	22.1	153	1.05
3	80	200	1.38	2400	16.5	90	0.62
4	100	175	1.21	2000	13.8	39	0.27
6	150	175	1.21	2000	13.8	38	0.26

⁽¹⁾ At 80°F (27°C).

⁽²⁾ At 80°F (27°C). For continuous service do not exceed 75% of these values.

Typical Mechanical Properties

Pipe Property ⁽¹⁾			Method
Tensile Strength			
Longitudinal	35,000 psi	241.3 MPa	ASTM D2105
Circumferential	70,000 psi	482.7 MPa	ASTM D1599
Poisson's Ratio $\nu_{ha}^{(2)} - \nu_{ha}^{(3)}$	0.16 - 0.26		FGSTM
Tensile Modulus			
Longitudinal	25,000 psi	172.4 Mpa	ASTM D2105
Circumferential	38,000 psi	262.0 MPa	FGSTM
Compressive Strength			
Longitudinal	24,500 psi	168.9 MPa	FGSTM
Compressive Modulus			
Longitudinal	26,000 psi	179.3 MPa	FGSTM
Cyclic	8,000 psi	55.2 MPa	ASTM D2992 Procedure A

Typical Physical Properties

Pipe Property	Value	Value	Method
Thermal Conductivity	1.7 BTU-in/hr·ft²·°F	7.6 W/m·°C	ASTM C177
Thermal Expansion	8.5 x 10 ⁻⁶ in/in °F	15.3 x 10 ⁻⁶ cm/cm °C	ASTM D696
Friction Factor	Hazen-Williams 150.0	-	
Absolute Roughness	0.00021 in	0.00053 mm	
Specific Gravity	1.8		ASTM D792
Barcol Hardness	65.0 (Impressor 934-1)		ASTM D2583

⁽¹⁾ Based on structural wall thickness.

⁽²⁾ ν_{ha} = The ratio of axial strain to hoop strain resulting from stress in the hoop direction.

⁽³⁾ ν_{ah} = The ratio of hoop strain to axial strain resulting from stress in the axial direction.

Pipe Length

Size		Standard		Random	
in	mm	ft	m	ft	m
2-6	50-150	20	6.1	17-21	5.2 - 6.4

Minimum Bending Radius

Size		Minimum Bending Radius ⁽¹⁾	
in	mm	ft	m
2	50	75	23
3	80	100	38
4	100	150	46
6	150	200	61

⁽¹⁾ At rated pressure. Sharper bends may create excessive stress concentrations. Do not bend pipe until adhesive has cured.

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Fiber Glass Systems

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FH3500ENG August 2016

Dualoy® 3000/L Secondary Containment Pipe and Fittings

Uses and Applications

- Service station product, vent and vapor recovery piping
- Bulk plant terminals and fueling terminals
- Central fuel oil systems
- Marinas and marine terminals (onshore only)
- All piping systems requiring UL or ULC Listing for MV, HB, CT and A&M fuels
- Containment piping for all of the above

Description

Dualoy 3000/L secondary containment systems require pipe one size larger than the primary and specially designed fittings. The system provides complete enclosure of UL- and ULC-Listed Dualoy primary piping used in product lines and vapor recovery lines from the sump at the product storage tank to the shear valve connector at the dispenser, and vent lines from the tank. Dualoy containment systems have been sized for close make-up and ease of installation.

Features of Dualoy 3000/L containment systems include:

- Filament-wound, fiberglass-reinforced pipe with integral liner;
- Compact fittings dimensions to minimize trench excavation;
- Smooth exterior pipe surface that eliminates the need for special end preparation tools;
- Ready accessibility to and complete inspectability of primary fittings prior to closure of the containment;
- Complete testability during installation and at any time thereafter;
- Rapid joint makeup with pre-inserted nuts and ambient cure adhesive.

Listings

Dualoy 3000/L is Listed in the United States with Underwriters Laboratories Standard 971-2004 for nonmetallic underground piping for motor vehicle (MV), high blend (HB), concentrated (CT) and aviation and marine (A&M) fuels for both primary and contained piping systems (File MH9162). Dualoy 3000/L pipe and fittings are also Listed with Underwriters' Laboratories of Canada (File CMH715). In Great Britain the Dualoy/3000L system has been tested and accepted by the London Fire and Civil Defense Authority. Dualoy 3000/L has been issued a Certificate of Compliance to the Institute of Petroleum (IP) Specification by ERA Technology, Ltd.

Performance

Operating pressures to 100 psig

Continuous operating temperatures to 150°F (66°C)

Individual system components may not have the same ratings as the pipe. Refer to the detailed product information for the specific components to determine the pressure rating for the system as a whole.

Secondary employs full-performance pipe — Many contained fuel handling systems employ materials in the secondary that fall far short of the primary piping in regard to chemical resistance and mechanical strength. By contrast, Dualoy 3000/L systems are manufactured with the same high-performance fiberglass-reinforced pipe in the secondary as in the primary. Thus, Dualoy 3000/L containment systems easily withstand both high external loads from backfill and traffic as well as internal pressures as high as 100 psig.

Compact containment fittings — Dualoy 3000/L containment fittings are compact clamshell-type closure pieces. Crossovers can be made with the same centerline-to-centerline dimension as single-wall system.

Piping System Characteristics

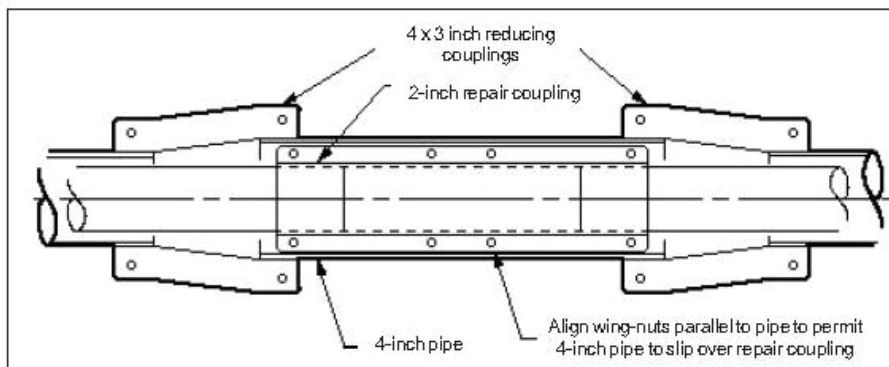
Precision pipe exterior eliminates scarfing — Dualoy pipe is manufactured in a proprietary continuous winding process that provides an extremely precise, consistent outside diameter. Light sanding of the pipe end to remove the surface gloss and obtain a suitable bonding surface is the only end prep required, although the scarfing feature of tapering tools can be used.

Easy containment fitting assembly — Dualoy 3000/L containment fitting clamshells are supplied in matched pairs. One half of each pair is fitted with pre-inserted propeller nuts, allowing the fitting to be assembled from one side, using the bolts provided.

Complete retestability — Dualoy 3000/L containment employs rigid-wall pipe and fittings that maintain their slope during the entire service life of the station. When installed with isolating penetration fittings (see page 3), Dualoy 3000/L containment piping can be repeatedly retested whenever desired.

Convenient repair capability — Contained piping systems are occasionally damaged after installation. Damage is generally caused by paving or excavation operations. Dualoy 3000/L contained piping systems are designed so that only the damaged section need be replaced instead of the entire line. The 2-inch Dualoy repair coupling is sized so that it can be contained within 4-inch Dualoy 3000/L containment pipe.

Two-inch primary pipe contained within 3-inch containment pipe can be repaired with a UL-listed 2-inch repair coupling. The containment is restored by replacement of a section of the existing containment pipe with a 4-inch containment nipple. The 4-inch replacement nipple is then joined to the existing containment pipe with Dualoy reducing couplings.

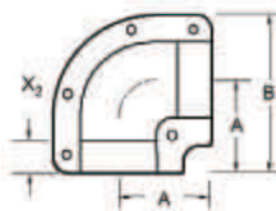


Containment Pipe and Fittings Dimensions

Pipe

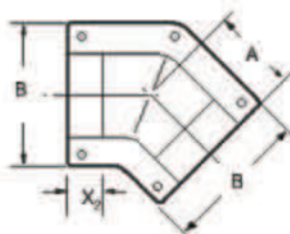
Nominal Pipe Size		A	B	C	X ₂	No. of Bolt Holes	Wt.
in	mm	in	in	in	in		lb
3	80	3.50	3.32	—	—	—	0.72
4	100	4.50	4.33	—	—	—	1.00
6	150	6.63	6.39	—	—	—	2.10

90° Elbows



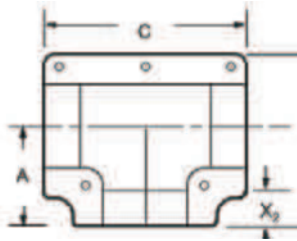
3	80	4.28	7.28	—	1.50	5	1.1
4	100	4.77	8.25	—	1.50	5	1.3
6	150	5.62	10.53	—	2.00	8	1.5

45° Elbows



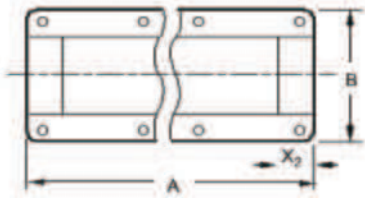
3	80	3.50	6.00	—	1.50	5	0.8
4	100	3.75	7.00	—	1.50	5	1.2
6	150	6.32	9.75	—	2.00	8	1.5

Tees



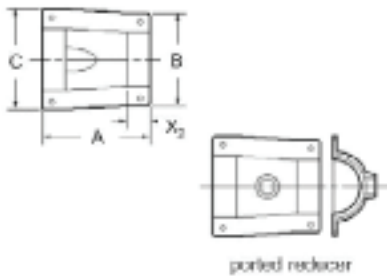
Nominal Pipe Size		A	B	C	X ₂	No. of Bolt Holes	Wt.
in	mm	in	in	in	in		lb
3	80	4.28	7.24	8.56	1.50	5	1.2
4	100	4.78	8.25	9.58	1.50	5	1.6
6	150	5.72	10.67	11.65	2.00	6	1.7

Couplings



2	50	14.00	4.00	—	1.50	8	1.3
3	80	14.00	6.00	—	1.50	8	1.7
4	100	14.00	7.00	—	1.50	8	2.0
6	150	5.37	9.75	—	4.00	10	2.0

Reducers, Plain and with 3/4 inch NPT Outlet

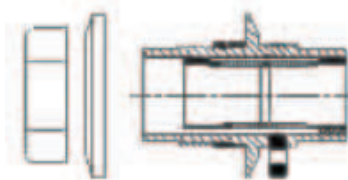


3 x 1½	80 x 40	6.25	4.48	6.10	1.50	4	0.6
3 x 1½	80 x 40	6.25	4.47	6.10	1.50	4	1.1 ⁽¹⁾
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	0.7
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	1.1 ⁽¹⁾
4 x 3	100 x 80	7.00	6.00	7.00	1.50	4	0.9
4 x 3	100 x 80	7.00	6.00	7.00	1.50	4	2.0 ⁽¹⁾
6 x 4	150 x 100	7.17	7.62	9.74	2.00	6	1.0

(1) Ported reducer

Sump Penetration Fittings

Sump penetrations are designed for use at turbine sumps and dispenser pans. Plain sump penetration fittings permit the annular space between the primary and secondary lines to communicate with the interior of the sump or pan. Penetration fittings with factory-installed centralizers, sleeve couplings and monitoring ports may be used to isolate the pipe annular space from the sump or pan. When the annular space is so isolated, the secondary containment line can be retested at any time and as often as desired.



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Dubai, UAE
Phone: 971 4881 3566

ATTACHMENT E – ALTERNATIVE DESIGN AND PROTECTION METHOD FOR PIPING

Not applicable - This UST Plan Application is not requesting a variance to 30 TAC 334.43

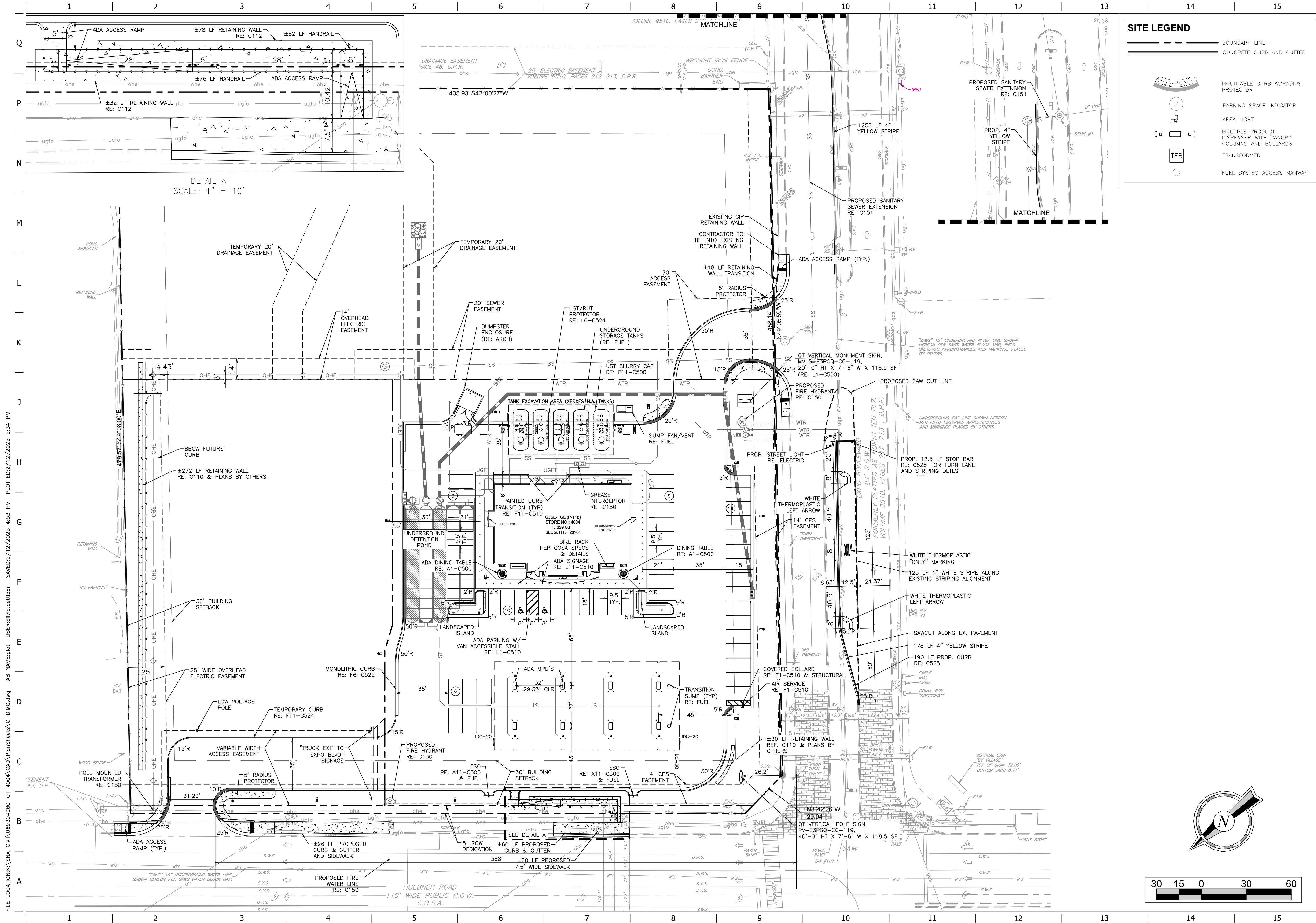
ATTACHMENT F – TERTIARY CONTAINMENT METHOD

Not applicable – The proposed UST system represented in this UST Plan Application will not be installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

ATTACHMENT G – EXCEPTION TO THE GEOLOGIC ASSESSMENT

Not applicable - This UST Plan Application is not requesting an exception to the Geologic Assessment.

ATTACHMENT H – PROFILE DRAWING(S)



SITE LEGEND

BOUNDARY LINE

CONCRETE CURB AND GUTTER

MOUNTABLE CURB W/RADIUS PROTECTOR

PARKING SPACE INDICATOR

AREA LIGHT

MULTIPLE PRODUCT DISPENSER WITH CANOPY COLUMNS AND BOLLARDS

TRANSFORMER

FUEL SYSTEM ACCESS MANWAY

AMY EILEEN NOBLE
149771
REGISTERED PROFESSIONAL ENGINEER

02/12/2025
PROJECT NO.: 069304960

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
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SAN ANTONIO, TX 78216
PHONE: 210-541-1868 FAX: 210-541-8699
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TX REG. NO. 005

QuikTrip No. 4004

11306 HUEBNER RD
SAN ANTONIO, TX 78230

QT

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PROTOTYPE: P-118 (05/14/24)

DIVISION: 82

VERSION: 001

DESIGNED BY: SEG

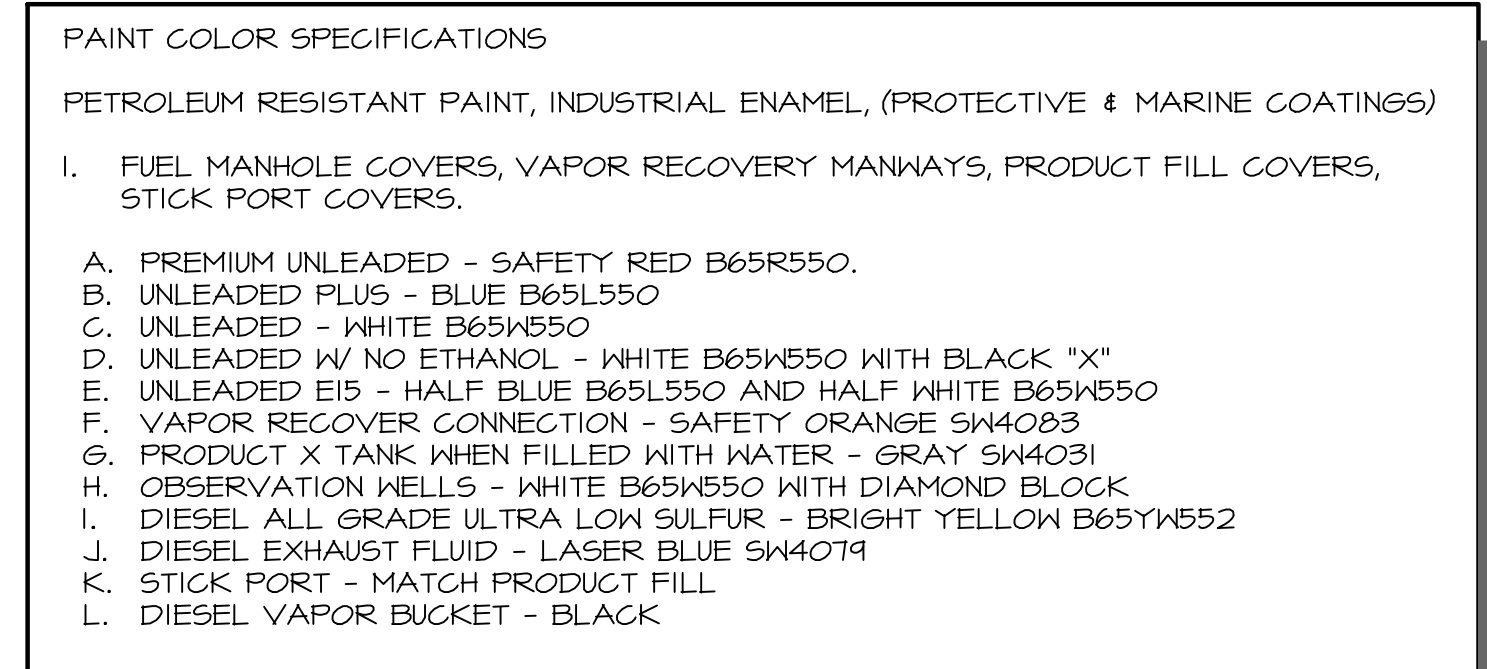
DRAWN BY: SEG

REVIEWED BY: AEN

REV	DATE	DESCRIPTION

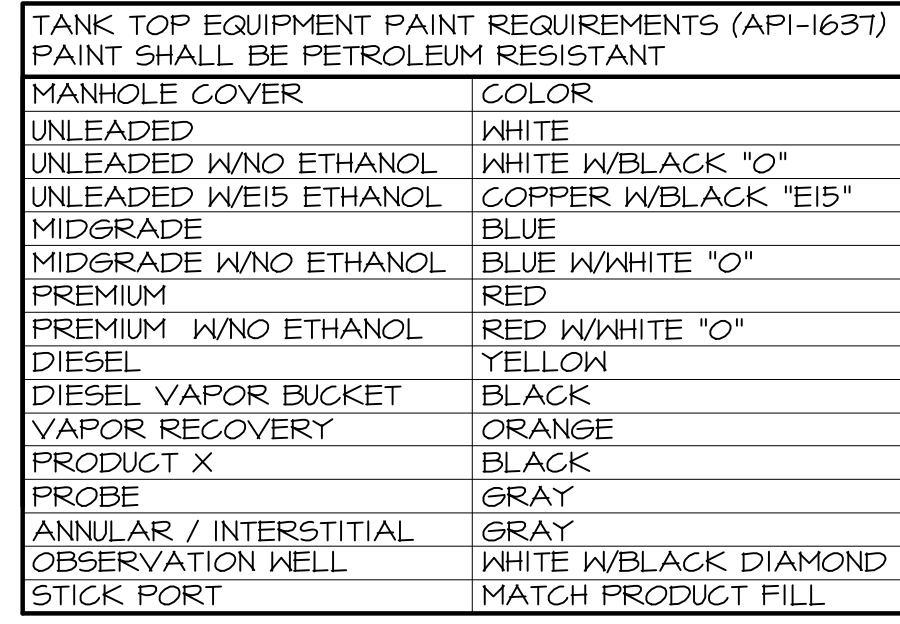
SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C100

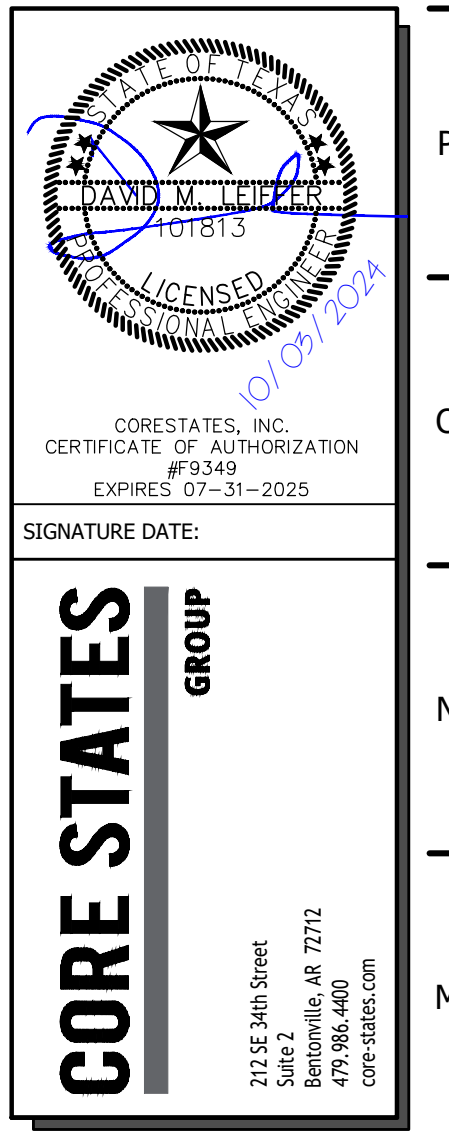


FIBRELITE COVER NOTE:

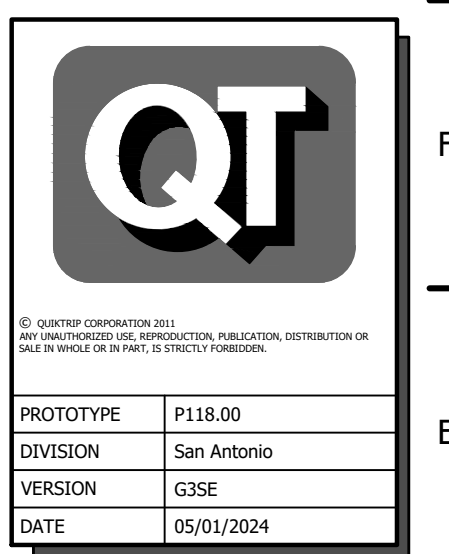
1. ENSURE THAT THE SEAL AND SEALING FACES OF THE COVER ARE CLEAN
2. APPLY SILICONE TO THE COVER SEAL
3. LEAVE SILICONE CAN IN SUMP FOR FUTURE USE



TANK NUMBERING	
TANK #1	15K UNLEADED 1
TANK #2	15K UNLEADED 2
TANK #3	15K EO
TANK #4	15K PREMIUM
TANK #5	15K DIESEL



QuikTrip No. 4004
11306 HUEBNER RD.
SAN ANTONIO, TX 78230

[illegible]

SHEET TITLE:

UST PLAN & SECTIONS

SHEET NUMBER:
XF203

ATTACHMENT I – INITIAL AND CONTINUING TRAINING

ATTACHMENT I INITIAL AND CONTINUING TRAINING

The automatic tank gauging and release detection system at this facility will be continuously monitored by an offsite certified monitoring firm, Warren Rogers. Qualified, trained technicians monitoring the system will generate and distribute work orders for alarms and/or fuel variances that trained QuikTrip Facility Support technicians will investigate. Monitoring, work order generation/distribution, and investigations are conducted 24 hours per day, 7 days per week, 365 days per year.

QuikTrip store employees typically do not respond to UST system alarms, and when they do it is under the guidance of one of the technicians from Warren Rogers or QuikTrip Facility Support. Store employees are usually the first responders to surface spills that may occur at the facility. QuikTrip store employees receive training on emergency response procedures, spill response procedures, and a familiarization with UST monitoring system upon initial hire.

A copy of the VeederRoot alarm system troubleshooting guide that is kept at each site for reference has been included as part of this Plan.

ATTACHMENT J – RELEASE DETECTION MAINTENANCE

ATTACHMENT J

RELEASE DETECTION MAINTENANCE

The automatic tank gauging and release detection system and cathodically-protected equipment at this facility will be routinely inspected and maintained by qualified, trained QuikTrip Facility Support technicians or certified contractors. Inspections, routine maintenance, and preventative maintenance will be performed according to the manufacturer's specifications and recommended schedules. Copies of these relevant maintenance programs and schedules are included as part of this Plan.

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

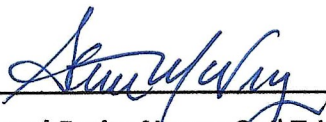
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Steve McVey

Date: April 15, 2025

Signature of Customer/Agent:


Regulated Entity Name: QuikTrip Store 4004

Project Information

Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

☐ The following fuels and/or hazardous substances will be stored on the site: _____

These fuels and/or hazardous substances will be stored in:

- ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

- ☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
- ☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- ☒ Fuels and hazardous substances will not be stored on the site.
- 2. ☒ **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4. ☒ **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

- 5. ☒ **Attachment C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
 - ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
 - ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: An unnamed tributary of Olmos Creek.

Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

- 7. ☒ **Attachment D – Temporary Best Management Practices and Measures.** TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

- ☐ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
 - ☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
 - ☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
 - ☐ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8. ☐ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
- ☐ **Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
- ☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.
9. ☒ **Attachment F - Structural Practices.** A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10. ☐ **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:
- ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
 - ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
 - ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
 - ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

- ☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
- ☒ N/A
12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15. ☐ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. ☒ **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached.

- 18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

- 20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
- 21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
- 22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

ATTACHMENT A – SPILL RESPONSE ACTIONS

ATTACHMENT A SPILL RESPONSE ACTIONS

Storage tanks for fueling equipment are not planned to be placed/stored at the construction site; however, QuikTrip acknowledges that on-site refueling of heavy equipment is likely to occur using mobile or portable means and will be prepared to address any incidents should they arise. All temporary fuel containers will comply with state and local regulations.

Heavy equipment (such as backhoe, track loader, or dozer) may be fueled on-site when necessary, using either portable fuel containers or a mobile, truck-mounted fuel tank. The mobile fuel tank will be removed from the site following the completion of fueling activities, and no later than the end of the workday. Drip pans will be used during all on-site fueling activities. A spill response kit will be kept in the mobile fueling vehicle. To minimize adverse impacts to water bodies from petroleum products used for construction equipment, contractors will not park a fuel truck, perform refueling and/or lubing activities, or store any hazardous materials within 100 feet of any storm drain or water body.

Should a spill occur, spilled material will be cleaned up immediately. Contractors will immediately report all confirmed or suspected releases to QuikTrip. Any contractor-related spills/leaks (i.e. spills/leaks from contractor trucks, equipment and/or fuel storage, etc.) are the responsibility of the contractor. QuikTrip and the contractor will determine who is responsible for making all necessary notifications/reports in accordance with any and all federal, state or local procedures. The contractor will be responsible for remediating any contractor-related spills/leaks, as required by law.

ATTACHMENT B – POTENTIAL SOURCES OF CONTAMINATION

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

The primary pollutant sources associated with this project will be disturbed soils and subsequent sediment-laden surface water runoff. Other potential pollutant sources include dust, solid waste materials, and materials and chemicals needed for construction equipment (e.g., gasoline, lube oil, etc.). Any potentially polluting materials brought to the construction site will be stored in their original containers when possible. All containers of potentially polluting materials will be kept tightly closed to prevent contact with stormwater or stormwater runoff.

Fueling

Heavy equipment (such as backhoe, track loader, or dozer) may be fueled on-site when necessary, using either portable fuel containers or a mobile, truck-mounted fuel tank. The mobile fuel tank will be removed from the site following the completion of fueling activities, and no later than the end of the workday. Drip pans will be used during all on-site fueling activities. A spill response kit will be kept in the mobile fueling vehicle. To minimize adverse impacts to water bodies from petroleum products used for construction equipment, contractors will not park a fuel truck, perform refueling and/or lubing activities, or store any hazardous materials within 100 feet of any storm drain or water body.

Wastes

Anticipated wastes generated and stored on-site will typically include discarded construction materials (wood, drywall, wiring/cabling, cardboard, etc.) and miscellaneous paper and food/lunch wastes. These wastes will be containerized and covered as necessary to prevent contact with stormwater.

QuikTrip will implement BMPs to ensure that no solid materials, including building materials, will be discharged to waters of the US. All waste material, including any contaminated soil, will be properly stored and ultimately disposed of in accordance with federal, state, and local regulations. These materials will be identified with the appropriate label and/or hazard marking as required by the Hazard Communication program and DOT hazardous materials regulations. No wastes or unused materials will be buried, burned, dumped or discharged at the site.

Concrete Washout

Any concrete washout/wash water generated at the site will be directed into a leak-proof container or lined pit designed so that no overflows can occur from precipitation or inadequate sizing. Any washout activities on-site will be conducted in a designated area of the site which is placed as far as possible from any waters of the U.S., stormwater inlets, or conveyances. Washout wastes will not be disposed of in storm sewers or waters of the U.S. QuikTrip and/or its designated contractors will dispose of liquid and hardened concrete wastes in an appropriate manner.

Water

If water is needed for construction, it will be obtained from a potable water hydrant or standpipe designated by the responsible municipal public works department. The water fill area will be designed and maintained so that water does not pond/accumulate and contribute to erosion.

Dust

If necessary, dust will be controlled during earthwork, grading, and related activities by watering. Watering for dust suppression will be performed such that no runoff will occur.

Sanitary Waste

Sanitary sewage facilities (typically portable) will be maintained and collected to ensure and demonstrate compliance with applicable state and/or local waste disposal, sanitary sewer or septic system regulations. Any portable toilets at the site will be placed so that they are secure, out of vehicle pathways, and located such that a spill or leak could be contained before it reaches a receiving stream. Portable toilets will be located away from waters of the U.S. and stormwater conveyances.

ATTACHMENT C – SEQUENCE OF MAJOR ACTIVITIES

ATTACHMENT C SEQUENCE OF MAJOR ACTIVITIES

The sequence of major activities is proposed as follows:

- Install preliminary Phase 1 erosion control measures (storm sewer inlet protection, silt fencing, tree protection)
- Clear and demolish areas necessary to complete installation of Phase 1 erosion control measures
- Install temporary stabilized construction entry/exit adjacent to Huebner Road
- Install remaining perimeter silt fencing
- Install erosion protection within Expo Blvd as per COSA Standards
- Construct building foundation
- Install utilities
- Excavate tank holds for USTs
- Inspection of tank holds performed by a licensed geologist
- Construct retaining wall
- Perform grading operations in Phase 1 area
- Temporarily stabilize any disturbed areas where work has/will be ceased for 14 days or more
- Perform Phase 2 area demolition
- Perform storm drain and storm sewer installation, including tie-ins and partial replacement on neighboring property
- Install storm sewer inlet protection on completed portions of storm drain system
- Re-grade/tie all proposed and existing grades together
- Temporarily stabilize any disturbed areas where work has/will be ceased for 14 days or more
- Install any additional storm sewer inlet protection once new storm drain system is complete
- Re-grade/tie all proposed and existing grades together
- Temporarily stabilize any disturbed areas where work has/will be ceased for 14 days or more
- Construct building and canopy/dispenser areas
- Install landscaping and permanently stabilize disturbed areas
- Clean out storm drain system and paved areas and remove remaining erosion control measures upon approval by COSA

ATTACHMENT D – TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

QuikTrip and its contractors for this project will be implementing several erosion and sediment control measures to prevent pollution of surface water, groundwater, and stormwater.

Erosion control measures to be used during demolition and construction will include silt fencing, tree protection, staged grading activities, and implementation of temporary stabilization measures wherever practical. Suitable erosion control devices will be used to intercept and retain small amounts of sediment carried by sheet flow from the disturbed areas during these activities. Silt fence in combination with small rock berms or similar devices will be placed in any areas where large volumes and/or fast flowing runoff is expected such as in drainage swales and at site stormwater outfalls. These types of erosion and sedimentation controls will be placed down-slope, perpendicular to the flow of runoff and parallel to the grade contours. The existing sod borders will be preserved as much as possible to function as both erosion control and as a velocity dissipation device for stormwater runoff that may be flowing from disturbed areas outwards towards the adjacent roadways and storm sewer inlets. Additionally, grading of the site will be conducted in two phases to reduce the amount of soil/sediment moved at one time and incrementally change soil contouring to reduce the potential for erosion.

Sediment control practices implemented will include silt fencing, a temporary stabilized construction entrance/exit, stormwater inlet protection, and use of other BMPs to minimize erosion and sedimentation off-site. Prior to commencing major demolition and construction activities, a temporary stabilized construction entrance/exit will be installed on Huebner Road consisting of rock/stone for use by all entering/exiting traffic to minimize tracking of sediment offsite. Where tracking occurs, sediment will be removed immediately from the road by shoveling or sweeping. Sediment control practices such as silt fencing will be placed on upland soils to the degree attainable. Where possible, stormwater will be diverted into or onto vegetation or a flat area outside of the immediate disturbed area. As mentioned previously, portions of the existing sod will be preserved where possible, allowing it to function as a vegetated buffer strip between disturbed areas of the site and nearby public roadways and associated storm drains (as a supplement to silt fencing to be used). The sod will act as a velocity dissipation device and sediment filter for stormwater runoff that may be exiting the site. Additionally, stormwater inlet protection (filtration socks/bales, drain blockers, or a combination) will be used on all onsite and all adjacent offsite storm drain inlets to prevent runoff which may contain sediment from entering the storm sewer system, and ultimately impact nearby waterways.

Some additional BMPs have been briefly described/identified in the Potential Sources of Contamination portion of this Plan as appropriate.

ATTACHMENT E – REQUEST TO TEMPORARILY SEAL A FEATURE

Not applicable – There are no naturally-occurring sensitive features on this site.

ATTACHMENT F – STRUCTURAL PRACTICES

ATTACHMENT F STRUCTURAL PRACTICES

A detailed description of structural practices that will be employed during this project is included in the Temporary Best Management Practices and Measures section of this Plan.

ATTACHMENT G – DRAINAGE AREA MAP

Not applicable – Less than 5.5 acres will be disturbed. Sediment ponds/sediment traps/sediment basins will not be used for temporary erosion control.

ATTACHMENT H – TEMPORARY SEDIMENT POND(S) PLANS AND CALCULATIONS

Not applicable – Less than 5.5 acres will be disturbed. Sediment ponds/sediment traps/sediment basins will not be used for temporary erosion control.

ATTACHMENT I – INSPECTION AND MAINTENANCE FOR BMPS

ATTACHMENT I INSPECTION AND MAINTENANCE FOR BMPS

Inspections of BMPs and other stormwater controls will be performed to identify integrity of physical and/or structural controls and evidence of the potential for pollutants entering the drainage system. Inspections will be performed by a person knowledgeable of the TCEQ Construction General Stormwater Permit (CGP), the construction Stormwater Pollution Prevention Plan (SWPPP) prepared for this project, and the site. The inspections will include disturbed areas of the construction site that have not been finally stabilized, areas used for the storage of materials that are exposed to precipitation, erosion and sedimentation control measures, and areas where vehicles enter and exit the site.

The Inspector will notify the responsible party or contractor as soon as practicable of any findings made. Actions taken as a result of the inspection will be documented on the inspection form. Where no incidents of non-compliance are observed or reported during the inspection, the inspection form certification, certifying that the project or site is in compliance with the SWPPP and the CGP, must be signed by the person and in the manner described in 30 TAC § 305.128 (relating to Signatories to Reports). The SWPPP will be modified based on the results of inspections, as necessary. Revisions will be completed within seven calendar days following the inspection.

Inspections will be performed on one of the schedules listed below. Once a schedule is selected, the schedule may be changed no more than once per month. Schedule changes may occur only once a month and the change must occur at the beginning of the month. The selected schedule and the reason for changing the schedule will be noted on the inspection form. In the event of flooding or other uncontrollable situations that prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

- Every 7 calendar days, on a specific day of the week, regardless of whether or not there has been a rainfall event since the previous inspections.

Alternative Inspection Schedules Allowed for Specific Conditions:

- For sites located in arid, semi-arid, and drought stricken regions, the following alternative inspection schedule may be used: once every month and within 24 hours following a storm event of 0.5 inches or more precipitation. If this alternative schedule is used, the SWPPP must also contain a record of the total rainfall measured, as well as the approximate beginning and ending dates of drought conditions resulting in the use of this schedule.
- For site areas that have been either finally or temporarily stabilized, the following alternative inspection schedule may be used: once a month.

All erosion and sediment control measures and other protective measures implemented must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event, whenever practicable, to maintain the continued effectiveness of stormwater controls. BMPs that have been damaged by construction activities (run over, disabled, removed etc.) will be repaired or replaced immediately upon discovery.

Sediment resulting from construction activities will be removed from sediment traps/inlet drain protection before the design capacity has been reduced by 50 percent. Trapped sediment will be removed from perimeter controls such as silt fences and berms before the sediment reaches 50 percent of the aboveground height of the control.

If sediment escapes the site, off-site accumulations of sediment must be removed and returned to the construction site (or properly disposed of) as soon as possible to minimize off-site impacts. The contractor will coordinate removal efforts with the owner and/or operator of the off-site stormwater conveyance (ditch, channel, roadway etc.).

If maintenance is not possible prior to the next anticipated rainfall event, the reason will be documented on the maintenance/inspection form and maintenance will be performed as soon as practicable.

ATTACHMENT J – SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

A schedule of the anticipated phases of this project, including implementation of interim and permanent/final soil stabilization measures, is included in the Sequence of Major Activities section of this Plan.

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I Margaret Fehn,
Print Name
Environmental Project Manager,
Title - Owner/President/Other
of QT South LLC,
Corporation/Partnership/Entity Name
have authorized Steve McVey, PG
Print Name of Agent/Engineer
of POWER Engineers. Inc.
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Margaret Fehn
Applicant's Signature

5/7/2025
Date

THE STATE OF Oklahoma
County of Tulsa §

BEFORE ME, the undersigned authority, on this day personally appeared Margaret Fehn known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 7th day of May, 2025

Erin Snedden
NOTARY PUBLIC
Erin Snedden
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 09-03-25

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: QuikTrip Store 4004

Regulated Entity Location: 11306 Huebner Rd, San Antonio, TX

Name of Customer: QT South LLC

Contact Person: Ms. Margaret Fehn

Phone: 918-615-7708

Customer Reference Number (if issued): CN 605786011

Regulated Entity Reference Number (if issued): RN TBD

Austin Regional Office (3373)

☐ Hays

☐ Travis

☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar

☐ Medina

☐ Uvalde

☐ Comal

☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment.** This payment is being submitted to:

☐ Austin Regional Office

☒ San Antonio Regional Office

☐ Mailed to: TCEQ - Cashier

☐ Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

12100 Park 35 Circle

Building A, 3rd Floor

Austin, TX 78753

(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone

☐ Contributing Zone

☒ Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	\$
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	5 Tanks	\$ 3,250
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: May 7, 2025

Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

<i>Project</i>	<i>Project Area in Acres</i>	<i>Fee</i>
One Single Family Residential Dwelling	< 5	\$650
Multiple Single Family Residential and Parks	< 5	\$1,500
	5 < 10	\$3,000
	10 < 40	\$4,000
	40 < 100	\$6,500
	100 < 500	\$8,000
	≥ 500	\$10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1	\$3,000
	1 < 5	\$4,000
	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$8,000
	≥ 100	\$10,000

Organized Sewage Collection Systems and Modifications

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input checked="" type="checkbox"/> Other Edwards Aquifer UST Facility Plan Application
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 605786011		RN 0

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)							
<input type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership									
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)									
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>									
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			<i>If new Customer, enter previous Customer below:</i>						
QT South LLC									
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)						
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited						
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:						
12. Number of Employees		13. Independently Owned and Operated?							
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input checked="" type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following									
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:									
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant									
15. Mailing Address:	4705 South 129 th East Avenue								
	City	Tulsa	State	OK	ZIP	74131	ZIP + 4		
16. Country Mailing Information (if outside USA)					17. E-Mail Address (if applicable)				

18. Telephone Number (918) 615-7708	19. Extension or Code	20. Fax Number (if applicable) () -
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SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.) <input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information							
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>							
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.) QuikTrip Store 4004							
23. Street Address of the Regulated Entity: (No PO Boxes)	11306 Huebner Road						
	City	San Antonio	State	TX	ZIP	78230	ZIP + 4
24. County	Bexar						

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:							
26. Nearest City				State		Nearest ZIP Code	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>							
27. Latitude (N) In Decimal:		29.547123		28. Longitude (W) In Decimal:		-98.575018	
Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)	
5541				447110			
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.) Retail Petroleum Marketing Facility							
34. Mailing Address:	QuikTrip Corporation						
	4705 South 129th East Avenue						
	City	Tulsa	State	OK	ZIP	74134	ZIP + 4
35. E-Mail Address:		mfehn@quiktrip.com					
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)			
(918) 615-7708				() -			

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

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

SECTION IV: Preparer Information

40. Name:	Steve McVey			41. Title:	Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(512) 879-6625		() -	steve.mcvey@powereng.com		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	QT South	Job Title:	Environmental Project Manager
Name (In Print):	Margaret Fehn	Phone:	(918) 615-7708
Signature:		Date:	5/7/2025