Underground Storage Tank Application

Facility ID # 65801
Facility Name: Blanco Express Shell Station
Facility Location: 16525 Blanco Rd.
San Antonio, Texas 78232

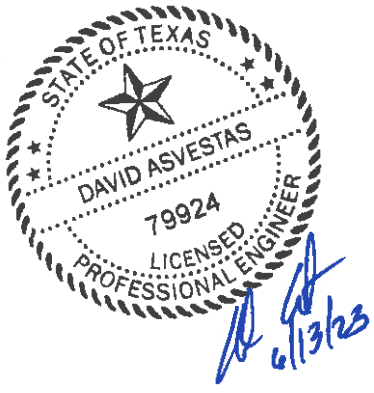
Prepared by:

Banester Engineering Consultants, Ltd.
28070 Smithson Valley Rd.
San Antonio, Texas 78261
TX PE Firm No. F-9126

Phone (210) 771-8154
Fax (210) 579-7738

June 13, 2023

RCAS CS0000059
Project # 2023-1823



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TCEQ Form – 20705

Edwards Aquifer Cover Page

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: Blanco Express Shell Station						**2. Regulated Entity No.:** 101816684			
3. Customer Name: 4GEnterprises LLC						**4. Customer No.:** 602585390			
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	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**			1.82
9. Application Fee:	650.00		**10. Permanent BMP(s):**						
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			1			
13. County:	Bexar		**14. Watershed:**			Salado Creek			

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)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	X	___	___	___	___
Region (1 req.)	X	___	___	___	___
County(ies)	X	___	___	___	___
Groundwater Conservation District(s)	X Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park X San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___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.
Umer Khawaja
Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent 6/13/23 Date

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):	

TCEQ Form – 0587

General Information Form

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: Umer Khawaja

Date: 6-13-22

Signature of Customer/Agent:

X _____

Project Information

1. Regulated Entity Name: Blanco Express Shell Station
2. County: Bexar County
3. Stream Basin: Salado Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority
5. Edwards Aquifer Zone:
   - ☒ Recharge Zone
   - ☐ Transition Zone
6. Plan Type:
   - ☐ WPAP
   - ☐ SCS
   - ☒ Modification
   - ☐ AST
   - ☒ UST
   - ☐ Exception Request

7. Customer (Applicant):

Contact Person: Umer Khawaja
Entity: 4G Enterprises, LLC
Mailing Address: 11 Remington Run
City, State: San Antonio, TX Zip: 78258
Telephone: 210-240-1032 FAX: _____
Email Address: umer@nissanboerne.com

8. Agent/Representative (If any):

Contact Person: David Asvestas, P.E.
Entity: Banester Engineering Consultants, Ltd.
Mailing Address: 28070 Smithson Valley Rd.
City, State: San Antonio, TX Zip: 78261
Telephone: 210-771-8154 FAX: 210-579-7738
Email Address: david@banester.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.

16525 Blanco Rd.

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

DIRECTIONS: BLANCO EXPRESS IS LOCATED 1.1 MILES SOUTH OF LOOP 1604 ON THE WEST SIDE OF BLANCO RD.

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 5/5/23
SCALE: N.T.S.	TX FIRM NO. F-9126
CAD FILE NAME: ATTACHA	PROJECT NO.: 23-1823

BANESTER ENGINEERING

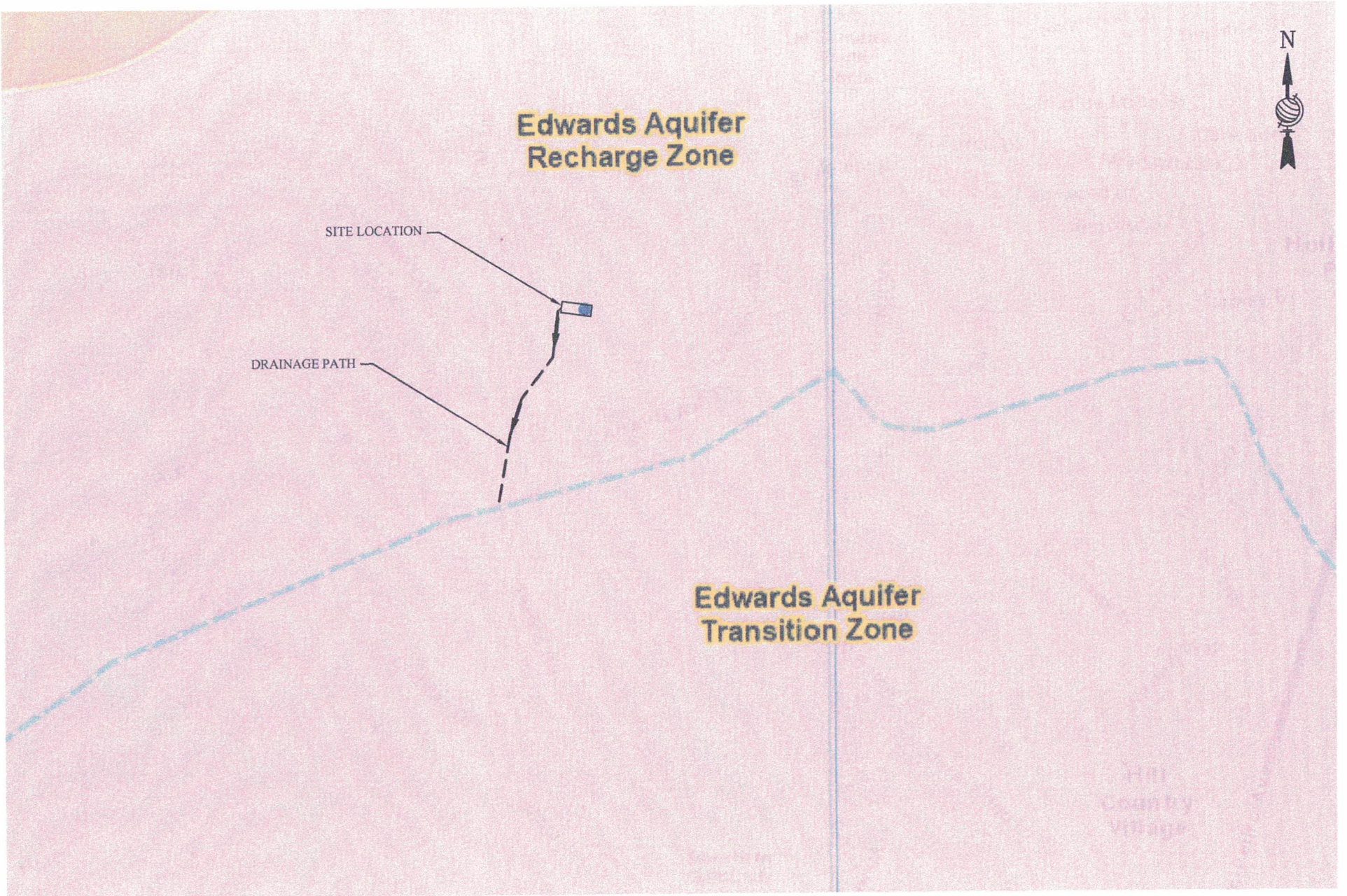
ATTACHMENT A

ROAD MAP

BLANCO EXPRESS
16525 BLANCO RD., SAN ANTONIO, TX

Attachment B

USGS/Edwards Recharge Zone Map



1000500 0 2000

Scale 1" = 2000'

SOURCE: EDWARDS AQUIFER VIEWER VERSION 5.1

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 6/5/23
SCALE: 1"=2000'	TX FIRM NO. F-9126
CAD FILE NAME: ATTACHB	PROJECT NO.: 23-1823

BANESTER ENGINEERING

ATTACHMENT B

EDWARDS RECHARGE ZONE MAP

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX

Attachment C

Project Description

Attachment C Project Description

The Blanco Express Shell Station convenience store is located at 16525 Blanco Rd. approximately 0.07 miles south of Brookstone St. on a 1.82 acre property. A Water Pollution Abatement Plan has been submitted and approval by TCEQ for redevelopment of the site.

The improvements addressed by this Underground Storage Tank Application consist of the following:

Underground Storage Tank (UST) Removal

The UST system consisting of one 20,000 gallon UST along with three dispensers and all associated piping will be removed from the ground.

New UST System Installation

A new 20,175 gallon three compartment UST and six dispensers and associated piping will be installed at the site. The UST system including the tank and piping will consist of tertiary containment.

TCEQ Form – 0585

Geologic Assessment Form

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: Carl P. Wentz Telephone: 361-648-8233

Date: 6/05/2023 Fax: N/A

Representing: Banester Engineering Consultants, Ltd (TBPE F-9126 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Blanco Express Shell Station

Project Information

1. Date(s) Geologic Assessment was performed: 6/01/2023
2. Type of Project:
   - ☐ WPAP
   - ☐ SCS
   - ☐ AST
   - ☒ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

STATE OF TEXAS
CARL P. WENTZ
GEOLOGY
No. 10764
LICENSED
PROFESSIONAL GEOSCIENTIST
6/05/2023

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)

Soil Name	Group*	Thickness(feet)
Cb-Crawford, stony and Bexar soils, 0-5% slopes	D	2.83

** 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" = 60'
   Site Geologic Map Scale: 1" = 60'
   Site Soils Map Scale (if more than 1 soil type): 1" = N/A'

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 0 (#) 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

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Blanco Express Shell Station 1.82-Acre Tract

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	MOD	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.8	>1.8	
No geologic or manmade features observed during the site assessment.																				

* DATUM:

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 6/05/2023

Sheet 1 of 1

STATE OF TEXAS
CARL P. WENTZ
GEOLOGY
No. 10764
LICENSED
PROFESSIONAL GEOSCIENTIST

6/05/2023

TCEQ-0585-Table (Rev. 10-01-04)

Attachment B

Stratigraphic Column

Attachment B – Stratigraphic Column

SYSTEM	GROUP OR FORMATION	MEMBER	THICKNESS (ft)	SYMBOL	DESCRIPTION
Lower Cretaceous	Person Formation	Leached and collapsed members	30-80	Kplc	Crystalline limestone, mudstone to wackestone to grainstone, chert, collapsed breccia
Lower Cretaceous	Person Formation	Regional dense member	20-30	Kprd	Light tan, dense, argillaceous mudstone
Lower Cretaceous	Kainer Formation	Grainstone member	45-60	Kkg	Light gray grainstone, mudstone to wackestone, chert
Lower Cretaceous	Kainer Formation	Kirschberg member	65-75	Kkke	Light gray, crystalline limestone, chalky mudstone, chert
Lower Cretaceous	Kainer Formation	Dolomitic member	110-150	Kkd	Mudstone to grainstone, crystalline grainstone
Lower Cretaceous	Kainer Formation	Basal modular member	45-60	Kkbn	Shaly, fossiliferous, nodular limestone, mudstone, grainstone
Lower Cretaceous	Upper member of the Glen Rose Limestone		350-500	Kgr	Yellowish-tan, thinly bedded limestone and marl

Clark, A.R., Blome, C.D., and Faith, J.R, 2009, Map showing the geology and hydrostratigraphy of the Edwards aquifer catchment area, northern Bexar County, south-central Texas: U.S. Geological Survey Open-File Report 2009-1008, 24 p., 1 pl.

Attachment C

Site Geology

Attachment C – Site Geology

The eastern third of the site is covered by pavement while the remaining western portion of the site is covered in native grasses and trees. According to the USDA Natural Resources Conservation Service, the site soil is classified as the Crawford and Bexar stony soils (Cb). The Crawford and Bexar stony soils are typically up to 34 inches in thickness and is characterized with stony clay or cobbly clay. According to a State of Texas Well Report # 6828314 that is located approximately 145 feet north of the project site, the formation underlying the Crawford and Bexar stony soils at this well location is the Person Formation. The Person Formation is the upper section of the Edwards Group. The thickness of the Person Formation at this well site is about 86 feet in thickness. The Person Formation at this well location is characterized by 26 feet of the marine member. Below the marine member is about 40 feet of the leached/collapsed members. Below the leached/collapsed members are about 20 feet of the regional dense member of the Person Formation. Underlying the Person Formation at this well site is the Kainer Formation. The Kainer Formation at this well site is at least 151 feet thick and is the lower section of the Edwards Group. At the site, the Kainer Formation consists of three members which are the grainstone member, the Kirschberg evaporite member, and then the dolomitic member. This site lies entirely in the Edwards Aquifer recharge zone.

No geologic features were noted on the property during the site investigation.

Attachment D

Site Maps

SITE GEOLOGIC MAP

Blanco Shell Station 1.82 Acre Tract
16525 Blanco Rd.
San Antonio, TX

Kp = Person Formation

Scale = 1"=60'

STATE OF TEXAS
CARL P. WENTZ
GEOLOGY
No. 10764
LICENSED
PROFESSIONAL GEOSCIENTIST

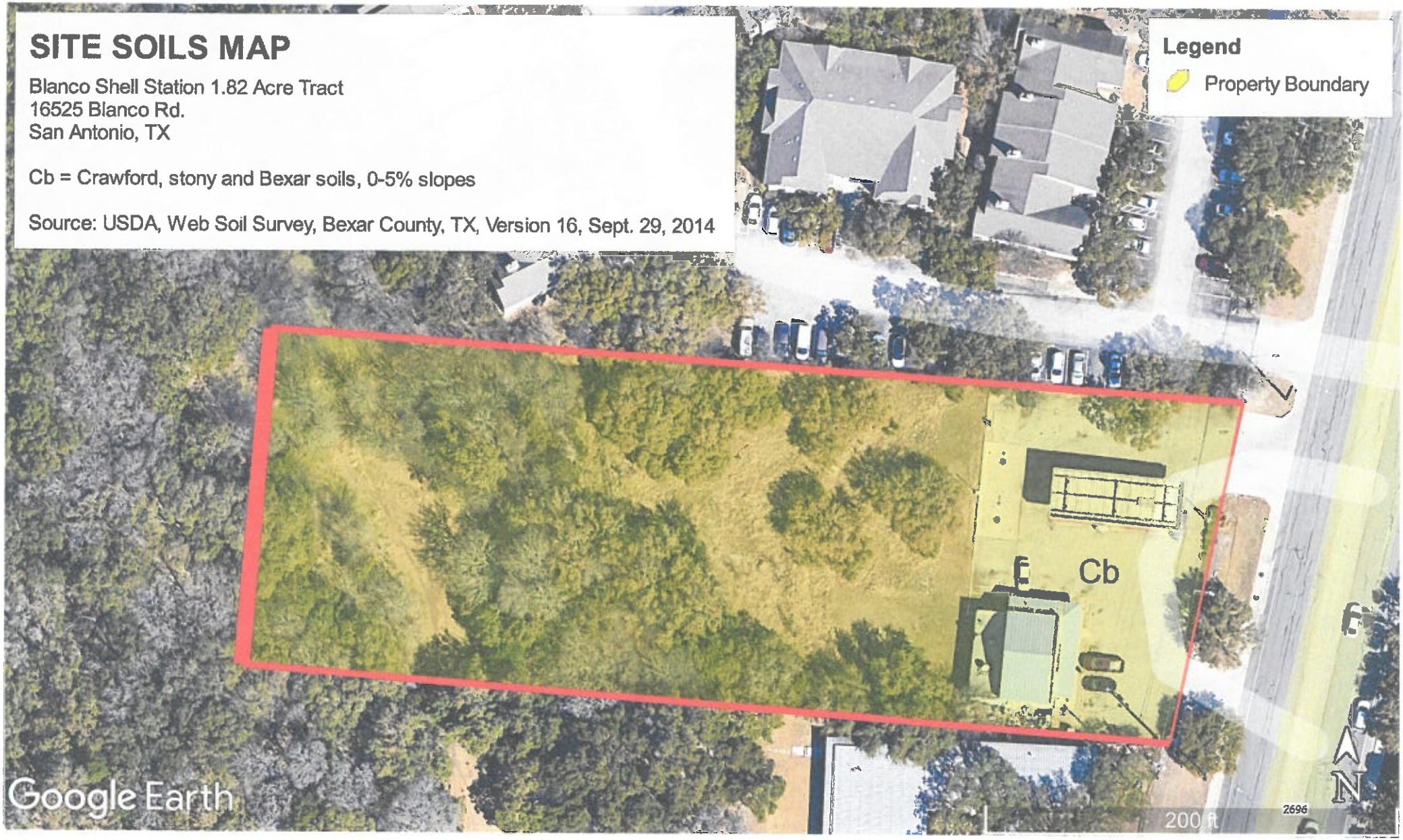
6/05/2023

SITE SOILS MAP

Blanco Shell Station 1.82 Acre Tract
16525 Blanco Rd.
San Antonio, TX

Cb = Crawford, stony and Bexar soils, 0-5% slopes

Source: USDA, Web Soil Survey, Bexar County, TX, Version 16, Sept. 29, 2014



TCEQ Form – 0590

Modification of a Previously Approved Plan

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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 request for a **Modification of a Previously Approved Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Umer Khawaja

Date: 6-13-23

Signature of Customer/Agent:

Project Information

1. Current Regulated Entity Name: Blanco Express Shell Station
   Original Regulated Entity Name: Citgo Facility
   Regulated Entity Number(s) (RN): 101816684
   Edwards Aquifer Protection Program ID Number(s): 13001677, 13-9306091
   ☒ The applicant has not changed and the Customer Number (CN) is: 602585390
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):
   - ☐ Physical or operational modification of any water pollution abatement structure(s) including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   - ☐ Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   - ☐ Development of land previously identified as undeveloped in the original water pollution abatement plan;
   - ☐ Physical modification of the approved organized sewage collection system;
   - ☒ Physical modification of the approved underground storage tank system;
   - ☐ Physical modification of the approved aboveground storage tank system.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	_____	_____
Type of Development	_____	_____
Number of Residential Lots	_____	_____
Impervious Cover (acres)	_____	_____
Impervious Cover (%	_____	_____
Permanent BMPs	_____	_____
Other	_____	_____

SCS Modification Summary	***Approved Project***	***Proposed Modification***
Linear Feet	_____	_____
Pipe Diameter	_____	_____
Other	_____	_____

AST Modification Summary	*Approved Project*	*Proposed Modification*
Number of ASTs	_____	_____
Volume of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	*Approved Project*	*Proposed Modification*
Number of USTs	1	1
Volume of USTs	20,000 gal	20,175
Other	N/A	N/A

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.

6. ☒ **Attachment C: Current Site Plan of the Approved Project**. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☒ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. ☐ The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.
   ☒ Acreage has not been added to or removed from the approved plan.

8. ☒ 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

TEXAS WATER COMMISSION

PROTECTING TEXANS' HEALTH AND SAFETY BY PREVENTING AND REDUCING POLLUTION

August 13, 1993

Dennis Jones
Wehman, Inc.
P.O. Drawer W
Plesanton, Texas 78064

Re: Edwards Aquifer, Bexar County.
PROJECT NAME: Citgo, Located at 16525 Blanco Rd., 1.25 miles north of Bitters road on the west side of Blanco Rd., San Antonio, Texas.
PLAN TYPE: Request for Approval of Underground Storage Tank (UST) Facility Construction Plans and Specifications; 31 Texas Administrative Code (TAC) §313.10; Edwards Aquifer Protection Program.

Dear Mr. Dennis Jones;

The Texas Water Commission (TWC) has completed its review of the plans and specifications for the referenced project that were submitted by David L. Urban of Dwight C. Russell & Associates, on behalf of Wehman, Inc. and received by the District 8 Office on June 9, 1993.

The proposed UST facility is located on the West side of Blanco Rd., 1.25 miles north of Bitters road, San Antonio, Bexar County, Texas.

A site inspection was conducted by a District 8 field investigator on June 6, 1993. The field investigator found no karst features, or fractures on the site.

PROJECT DESCRIPTION

The proposed application is for the installation of new petroleum storage tanks and all applicable hardware. The proposed new underground static hydrocarbon storage system will consist of one (1) double wall, dual compartment, 20,000 gallon fiberglass coated STI-P3 tank manufactured by Modern Welding.

Overfill prevention for each tank will be provided by a flow restriction valve (Model No. 53 VML ball float as manufactured by OPW) will be installed in each compartment of the tank below the fill tube and be set to shut off flow into the tank when the volume of liquid in the tank reaches no more than 95% of the tank capacity. Spill protection for each compartment will be provided by a spill containment manholes (Model No. 1-4000 manufactured by

OPW) which will be fitted on the fill tube of each compartment within the tank.

Each pump will be fitted with a pressurized leak detector designed to detect a leak in the product piping between the detector and the dispenser.

Product and vent piping will be U.L. listed fiberglass-reinforced plastic piping manufactured by A.O. Smith. 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 U.L. listed and be of 2-inch diameter single-wall pipe. A safety 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. In addition, stainless steel braid flexible connectors (Resisto-Flex R292365-24-L and R292365-32-L Crane) will be installed at both ends of each product line to connect to the dispenser unit and the submersible pump.

The submersible pump housings and pump-end flexible connectors will be installed within a Total Containment liquid-tight fiberglass-reinforced plastic piping sump which will provide complete 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 with an Environ poly sump (Model No. Fit 3542). 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 a Veeder-Root TLS 350 inventory, leak detection, and line pressure monitor. A liquid discrimination sensor will be installed in the interstitial space between the walls of the double-wall tank. Each of the product piping systems will be monitored by a liquid discrimination sensor which will be installed adjacent to the submersible pump in the piping sump. Two (2) 4-inch diameter slotted PVC observation wells will be installed in the territary tank pit liner and in the corners of the tank pit excavation. The two wells will not be equipped with an optional monitoring probe. The probes and sensors from all tanks, piping, and observation wells will be connected to a programmable control unit 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.

APPROVAL

The planning materials for the proposed underground static hydrocarbon storage facility have been reviewed by the Commission's staff and have been found to be in general agreement with the requirements of 31 TAC §334, Underground Storage Tanks, and 31 TAC §313.10, which establishes the criteria for static hydrocarbon and hazardous substance storage facilities located in the Edwards Aquifer Recharge Zone. Therefore, the planning materials for construction of the proposed facilities are hereby approved, subject to the following conditions.

Failure to comply with any of the following conditions or any other specific conditions of approval is a violation of these rules. Pursuant to Section 26.136 of the Texas Water Code, violations of these rules may result in administrative penalties of up to $10,000 for each act of violation and for each day of violation.

Special Conditions

1. There are no special conditions.

Standard Conditions

1. For projects on the recharge zone all temporary erosion and sedimentation (E&S) controls shall be installed prior to all other construction at the site. (1) Silt fences should be used when the drainage area is less than 2 acres and the slope is less than 10%. (2) Rock berms with filtration should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried a minimum of 6 inches below grade.

2. The TWC may monitor stormwater discharges from the site to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection may be necessary if excessive solids are being discharged from the site.

3. **A copy of any local construction permit should be submitted to District 8 within 30 days of the issuance of this approval.**

4. Prior to commencing construction, the applicant shall submit any modifications to this approved UST facility required by some other regulating authority or desired by the applicant. To amend this approval copies of any changes to the plans and specifications shall be submitted to this office and all other

permitting authorities. As indicated in 31 TAC §313.4 and 31 TAC §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.

5. All contractors conducting regulated activities associated with this proposed regulated development shall be provided with copies of this approval letter and the entire contents of the submitted UST Plans & Specifications so as to convey to the contractors the specific conditions of approval. During the course of regulated activities, the contractors shall be required to keep on-site copies of the UST Plans and this approval letter.

6. Pursuant to 31 TAC §313.4(d)(1), prior to commencing construction, the applicant must notify the District 8 Office at least 48 hours prior to initiation of construction.

7. If any solution openings or sinkholes are discovered during the construction of the tank excavation, all excavation and installation activities shall be immediately suspended, and the owner or his designated representative shall notify the Commission's District 8 Office. Upon completion of the excavation, a qualified geologist shall inspect the pit. Further excavation and installation activities shall not proceed until the Commission has reviewed and approved the methods proposed to protect such features from any potential adverse impacts of the hydrocarbon storage facility.

8. All UST installations, repairs, and removals must be conducted by a registered UST contractor who has a licensed installer or on-site supervisor at the site during all critical junctures, as required by 31 TAC §334 Subchapter I.

9. Installation, testing, and operation of the tanks, piping, and all other components of the proposed storage and monitoring systems shall be in conformance with the manufacturer's specifications and the procedures described in this letter.

10. An "as-built" project-specific site design plan shall be drawn to scale and of sufficient accuracy, clarity, and detail to depict the specific locations and dimensions of all components of the underground storage tank system, including the tanks, piping and fittings, pumps, observation wells, containment equipment, release detection devices, and other auxiliary equipment. Also, detailed construction drawings of plan and profile views and detail drawings of specific components shall be prepared. A copy of such "as-built" site plan and construction drawings, as well as operating instructions for

all major system components and written records of all tank tests, piping tests, release detection monitoring results, and other inspections, shall be maintained in a secure location at the site of the proposed facility and shall be available for examination by Commission personnel.

11. The owner of the proposed facility shall assure that the storage tank system is installed, operated, and maintained in full compliance with the applicable provisions of 31 TAC §334 of Commission rules, which establishes the requirements for the design, installation, operation, construction notification, registration, fee assessment, financial responsibility, release reporting, and corrective action related to such system.

12. All underground metallic components of the proposed system which are not electrically isolated from the backfill material (including any vent line fittings and connectors, risers for monitoring equipment and fill tubes, containment manholes, etc.) must be properly protected from corrosion in accordance with 31 TAC §334.49 of Commission rules.

13. The flexible connectors at the dispenser-end of the product piping lines, which are enclosed within secondary containment sleeves and which cannot be visibly inspected for evidence of corrosion, shall be periodically tested by a qualified corrosion technician or specialist to ensure that the metal components of such connectors remain electrically isolated from the surrounding backfill, groundwater, and other metal components. Such tests shall be conducted within three to six months after installation and at least once every three years thereafter, in full conformance with the requirements in 31 TAC §334.49(d)(1) of Commission rules.

14. All piping must slope at least one-eighth inch per foot in the direction of the tank [as required by 31 TAC §334.46(c)(1)].

15. When applicable, field-installed cathodic protection systems shall be designed by a qualified corrosion specialist [as required by 31 TAC §334.49(c)(2)]. Additionally, all factory-installed and field-installed cathodic protection systems shall be properly tested for operability and adequacy of protection by a qualified corrosion technician or corrosion specialist after the UST system installation is completed but prior to placing the system into operation [as required by 31 TAC §334.46(d)(4)(c)].

16. The facility owner should be aware of the proposed federal EPA regulations for benzene emissions (40 CFR Part 61). The proposed regulations will require the addition of Stage I

vapor recovery equipment by 1991 or 1992 (depending on volume of throughput) for all service stations with an annual throughput greater than 120,000 gallons. The owner should consider the feasibility of installing the Stage I vapor recovery equipment as part of this installation project to preclude the need for additional construction in the future.

If you have any questions contact Mr. Tom Gutierrez of the Commission's District 8 (San Antonio) Office at 210/490-3096.

Sincerely,

Billy H. Boggs
for
Tony Grigsby,
Executive Director

TCG/tcg

cc: Dennis Jones, Wehman Inc.
Dwight C. Russell & Associates, Inc.
Rebecca Cedillo, Director,
Ron Pena, P.E., Environmental Engineer, Bexar County Public Works Department
Hank Smith , Ground Water, Texas Water Commission
TWC - Allen Martinets - PST

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
November 8, 2004

Mr. Umer Khawaja
4G Enterprises, LLC
11 Remington Run
San Antonio, Texas 78258

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: Bubba's 360 (aka Citgo Facility); Located at 16545 Blanco Road; San Antonio, Texas
TYPE OF PLAN: Request for Information; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer, Edwards Aquifer Protection Program File No.-297.01, RN101816684, Investigation 338971

Dear Mr. Khawaja:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the request for information about the approved Water Pollution Abatement Plan (WPAP) for the referenced project submitted to the San Antonio Regional Office by Property Advancement Resources/Services on behalf of 4G Enterprises, LLC on August 6, 2004. Final review of the request was completed after additional material was received on October 14, 2004, and October 27, 2004.

As understood, the owner wishes to expand the store building and construct a 9' x 20' addition on a 10' x 40' area of existing pavement.

The plan for modifying this project has been reviewed for compliance with 30 TAC §213.5 (b) which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed activity is in general agreement with 30 TAC §213.4(j); however, since there is no increase in impervious cover or change in the nature or character of the building addition, TCEQ approval is not required. The plan is still subject to the specific conditions of the enclosed copy of the August 13, 1993 approval letter .

If you have any questions or require additional information, please contact John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell
Water Section Manager

BDC/JKM/eg

Enclosure: Letter dated August 13, 1993 from TWC to Wehmam, Inc.

fc with enclosure: Ms. Michele Debs, Property Advancement Resources
cc with enclosure: Mr. Scott Halty, San Antonio Water System
Ms. Renee Green, Bexar County Public Works
Mr. Greg Ellis, Edwards Aquifer Authority

TEXAS WATER COMMISSION

PROTECTING TEXANS' HEALTH AND SAFETY BY PREVENTING AND REDUCING POLLUTION

August 13, 1993

Dennis Jones
Wehman, Inc.
P.O. Box W
Pleasanton, Texas 78064

Re: Edwards Aquifer, Bexar County
PROJECT: Citgo Facility, Located at 16525 Blanco Rd., approximately 1.25 miles north of Bitters Rd. on the west side of Blanco Rd., San Antonio, Texas.
TYPE: Request for Approval of Water Pollution Abatement Plan (WPAP); 31 Texas Administrative Code (TAC) §313.4; Edwards Aquifer Protection Program.

Dear Mr. Jones:

The Texas Water Commission (TWC) has completed their review of the WPAP application for the referenced project that was submitted by Dwight C. Russell Associates, Inc. on behalf of Dennis Jones to the District 8 Office on June 9, 1993.

PROJECT DESCRIPTION

The proposed Citgo is to be developed as a commercial project and will consist of a 1.824 acre track. The project will consist of a 780 sq. ft. addition to an already existing structure. The site is located within the City of San Antonio, and will conform with applicable codes and requirements of the City of San Antonio. Potable water will be supplied by San Antonio Water System.

The normal population of the development is estimated to be (2) full time employees and 150 customers per day. It is expected that 450 gallons per day of domestic wastewater is to be generated by this project. It will be disposed of by conveyance to the Salado Creek Wastewater Treatment Plant owned by the City of San Antonio.

The proposed impervious cover for the development, approximately 0.349 acres or 15,184 sq. feet (19.11%), and includes commercial dwelling roof tops, driveways, sidewalks, and streets.

Approximately 4.842 cubic feet per second of stormwater flow will be generated in a 25 year storm event from the 1.824 acre tract.

GEOLOGY ON SITE

According to the geologic assessment included with the submittal, the Cretaceous Edwards formation outcrops in one area of the site. The limestone that was visible consisted of one "small exposure of poorly developed vuggy out cropping and identified as a potential recharge feature".

The District 8 site inspection of June 9, 1993, revealed no recharge features.

GEOLOGY DOWN-GRADIENT OF SITE

According to the geologic assessment included with the submittal, four potential recharge features were confined to off-site downstream and down gradient survey. Three of the four features consisted of small fractures and vuggy outcroppings on the exposed limestone and were determined to be of low significance. Feature four however consisted of a small cave which measures 5.0 feet across at the widest point and is a maximum of 32 inches high. This feature is identified as being a potentially significant recharge feature, however drainage from this feature would flow into the natural stream channel.

POLLUTION ABATEMENT

I. During Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site during construction:

A. Stabilized construction entrances shall be installed at all sites of ingress and egress prior to initiation of any other regulated activity.

B. Temporary erosion and sedimentation controls (silt fences and rock berms) shall be provided for construction site.

C. Temporary erosion and sedimentation controls (silt fences and rock berms) shall be installed prior to initiation of any other regulated activity.

II. After Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site after construction:

A. A filtration/sedimentation basin will be constructed and maintained to prevent pollution from generating and flowing off site.

III. Recharge Features:

The following measures will be taken to prevent pollutants from entering recharge features while maintaining or enhancing the quantity of water entering the recharge features identified in the geologic assessment.

A. No significant recharge features were noted in the geologic assessment.

APPROVAL

The plan for this project has been reviewed for compliance with 31 TAC §313.4 which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan is in general agreement with 31 TAC §313.4; therefore, approval of the plan is hereby granted subject to the specific conditions listed below.

Failure to comply with any of the following conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to §26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative penalties of up to $10,000 for each act of violation and for each day of violation.

SPECIAL CONDITIONS

A. A detention/filtration structure designed to store a 25-year storm event will be constructed per City of Austin design

standards and maintained to insure that drainage flow is allowed to operate as described within the design standards.

STANDARD CONDITIONS OF APPROVAL

1. Please be reminded that 31 TAC §313.4(c) requires the owner/developer to: (1) record in the county deed records that this property is subject to the approved WPAP; and (2) submit to the Executive Director through the District 8 Office, within 30 days of receiving this written notice of approval of the water pollution abatement plan and prior to commencing construction, proof of application for recordation of notice in the county deed records. Enclosed is a suggested format you may be used to deed record your approved WPAP.

2. Prior to commencing construction, the applicant/agent shall submit to the District 8 Office copies of any changes made to the plans and specifications for this project which have been required by the TWC review and/or all other permitting authorities.

3. Please note, following this approval of the regulated activities described in the referenced WPAP submittal, any amendment to these activities required by some other regulating authority or desired by the applicant will require the submittal of a WPAP application to amend this approval. And, as indicated in 31 TAC §313.4 and 31 TAC §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.

4. Additionally, all contractors conducting regulated activities associated with this proposed regulated project shall be provided with copies of this approval letter and the entire contents of the submitted WPAP so as to convey to the contractors the specific conditions of this approval. During the course of these regulated activities, the contractors shall be required to keep on-site copies of the WPAP and this approval letter.

5. The temporary erosion and sedimentation (E&S) controls for the entire project shall be installed prior to beginning any other construction work on this project.

6. The appropriate E&S control(s) that shall be used during the construction of the project should be determined as follows: (1) silt fences should be used when the drainage area is less than 2 acres and the slope is less than 10%. (2) Rock berms with filtration should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried a minimum of 6 inches below grade.

7. The TWC may monitor stormwater discharges from the site to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection may be necessary if excessive solids are being discharged from the site.

8. Also, 31 TAC §313.4(d)(2) requires that if any significant recharge features, such as solution openings or sinkholes, are discovered during construction, all regulated activities near the significant recharge feature must be suspended immediately and may not be resumed until the Executive Director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. Upon discovery of the significant recharge features, the developer shall immediately notify the District 8 office.

9. Upon completion of the project, the applicant shall reseed or sod all areas disturbed during construction.

10. If any abandoned wells exist on the site or are found during construction of the proposed development, they shall be plugged in accordance with the local underground water conservation district's plugging procedures, if applicable, or 31 TAC §287.50(a) of this title (relating to Standards for Plugging Wells that Penetrate Undesirable Water Zones), or an equivalent method, as approved by the Executive Director. Pursuant to 31 TAC §287.48(e), the person that plugs such a well shall, within 30 days after plugging is complete, submit a Water Well Completion and Plugging Report to the Executive Director, through the District 8 Office and to the Edwards Underground Water District.

Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with cement slurry, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

11. No waste-disposal wells, new confined animal feeding operations, land disposal of Class I wastes, or use of sewage holding tanks as parts of organized collection systems shall be allowed on the recharge zone of this regulated development.

12. During the course of the construction related to the referenced regulated project, the owner/developer shall comply with all applicable provisions of 31 TAC §313.4. Construction which is initiated and abandoned, or not completed, shall be returned to a permanent condition such that groundwater in the Edwards Aquifer is protected from potential contamination. Additionally, RAYCO, Ltd., applicant, shall remain responsible for the provisions and special conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and specific conditions of this approval.

13. Pursuant to 31 TAC §313.4(d)(1) and prior to commencing regulated activities, the applicant must provide the District 8 Office with the date on which the regulated activity will commence.

14. Please note that 31 TAC §313.4(g) states that this approval expires two years from this date unless, prior to the expiration date, construction has commenced on the regulated project.

15. Approval of the design of the sewage collection system for this proposed subdivision shall be obtained from the Texas Water Commission prior to the commencement of construction of any sewage collection system, the design of which shall be in accordance with 31 TAC §313.5 and 31 TAC §317.

16. The developer shall ensure that construction debris, such as but not limited to scrap wood, bricks, paint, adhesives, containers, paper, etc. is disposed of properly at an authorized landfill off of the Edwards Aquifer Recharge Zone.

17. If asphaltic materials such as "seal coat", emulsion or other asphaltic products used for paving, roofing, etc. wash off or leave the project site the developer shall notify the Texas Water Commission immediately and commence clean-up.

If you have any questions or require additional information, please contact a representative of the Edwards Aquifer Protection Program at the District 8 Office (210) 490-3096.

Sincerely,

Billy H. Boggs,
District Manager, for

Tony Grigsby
Executive Director

BHB-TCG/tcg

Enclosures

cc: Dwight C. Russell & Associates, Inc.
Rebecca Cedillo, San Antonio Water System
Edward Gonzales, San Antonio Water System
Ron Pena, P.E., Environmental Engineer, Bexar County
Russell L. Masters, Edwards Underground Water District
Tom Gutierrez, Texas Water Commission, District 8 Office
Hank Smith, Edwards Program Coordinator, TWC
TWC - Central Records (with attachment)

Attachment B

NEW UST SYSTEM INSTALLATION

Removal

Prior to installation of the new UST system, the existing underground storage tank (UST) system consists of one 20,000 gallon UST along with three dispensers and associated piping which will be removed from the ground. The total recognized capacity of the existing UST's is 20,000 gallons as noted by Edwards Aquifer Authority (EAA). Proper 30 day notifications will be provided to all agencies during removal and installation activities.

New Installation

The proposed new underground hydrocarbon storage system will consist of one 20,000 gallon Permatank triple wall tank. The actual total capacity of the UST is 20,175 gallons. According to Mr. Kyle Craig of EAA, the tank owner is allowed to go over up to 3% of tank volume recognized by EAA. Therefore, the maximum allowed capacity is 20,600 gallons according to EAA (Attachment behind this page is the email confirmation). The UST is a three compartment tank consisting of a 11,000 gallon compartment, 4,000 gallon compartment, and a 5,000 gallon compartment. The UST is constructed of a primary and secondary steel shell, while the tertiary shell consist of a 100 mil fiberglass wrap. The tank is constructed per UL-58 ACT-100 Type II Double Wall and UL-1746 Jacketed Permatank for Tertiary Containment. Each tank compartment will be equipped with a Red Jacket 4 inch diameter, 2 horsepower submersible pump. Overfill prevention for each compartment of the tank will be provided by an OPW automatic operation positive shut off vapor tight overfill valve which will be installed in the tank below the fill tube. The valve closes when the tank level rises to 95% capacity. Additionally, the overfill system is equipped with a veeder root audible/visual alarm and acknowledgement switch set at 90%. Each fill tube is equipped with a double wall sump with a single wall spill container.

Product and vent piping will be U. L. listed fiberglass – reinforced plastic piping. Product lines will be of triple wall construction. The piping consists of 2 inch Dualoy 3000/LCX coaxial piping for the primary and secondary containment and three inch Dualoy 3000/L piping for the tertiary containment. Vent lines will consist of two inch single wall Dualoy 3000/L pipe. Single wall vent lines are adequate since no product is contained in the vent lines and product prevention in the vent lines is provided by positive flow shut off valves installed in each tank compartment. An OPW double poppet safety 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. Additionally, Fireflex flexible connections will be installed at both ends of each product line to connect to the dispenser unit and the submersible pump.

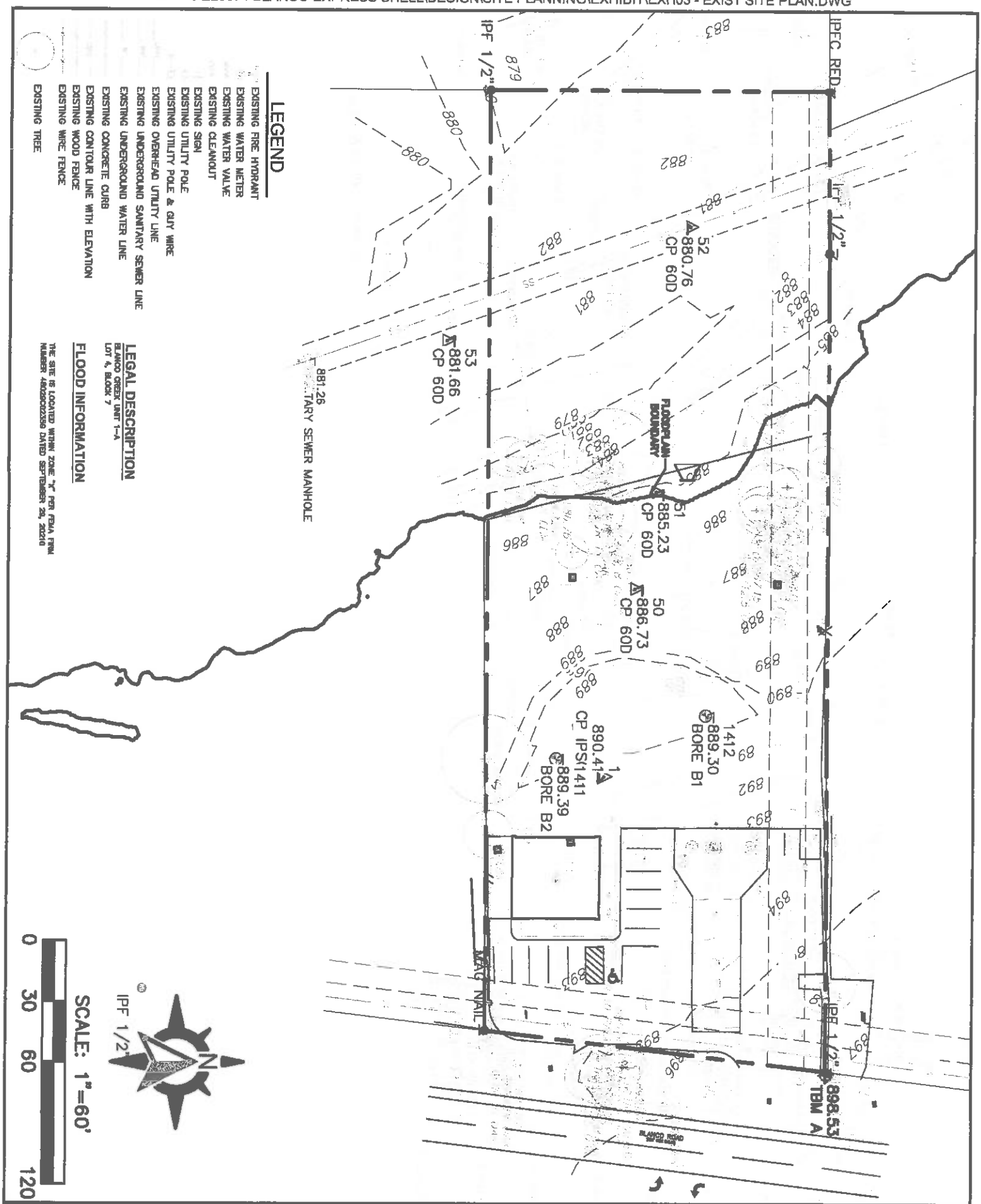
Corrosion protection for the metallic components of the underground storage systems will be provided by electrical isolation. The submersible pump housings and pump-end flexible connectors will be installed within a liquid-tight fiberglass-reinforced plastic piping sump which will provide isolation from the corrosive elements of the backfill material while also providing secondary and tertiary containment for any leaks from these components. The dispenser-end flexible connector will be similarly isolated by enclosure within a double wall sump. 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 sump sensors. Each tank will be equipped with a liquid sensor which will be installed in the interstitial space between the walls of the double-wall and a triple wall of the tank. Each of the product piping systems will be monitored by a liquid sensor which will be installed adjacent to the submersible pump in the piping sump and in the dispenser sumps. Additionally, the interstitial space in each sump will be monitored also. Each tank compartment will also be equipped with an automatic tank gauging probe which will automatically inventory the product volume in each compartment of the tank. 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 tank compartments, piping, and sumps will be connected to a Veeder Root TLS 450 Plus programmable control unit to be located in the store building. This central monitoring unit is designed to provide visual and audible alarms when hydrocarbon liquids or water is detected.

Attachment C

\\BSD-DS1618\ENGINEERING\220074 BLANCO EXPRESS SHELL\DESIGN\SITE PLANNING\EXHIBIT\EXH03 - EXIST SITE PLAN.DWG



LEGEND

- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE & GUY WIRE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING UNDERGROUND SANITARY SEWER LINE
- EXISTING UNDERGROUND WATER LINE
- EXISTING CONCRETE CURB
- EXISTING CONTOUR LINE WITH ELEVATION
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING TREE

LEGAL DESCRIPTION

BLANCO CREEK UNIT 1-A
LOT 4, BLOCK 7

FLOOD INFORMATION

THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA FIRM NUMBER 48029C0233G DATED SEPTEMBER 29, 2010

DATE: 06/01/2023 SHEET: 1	EXISTING SITE PLAN	BLANCO SHELL STATION 16525 Blanco Rd SAN ANTONIO, TEXAS	balanced SITE DESIGN Balanced Site Design, LLC 12950 Country Parkway Suite 150 San Antonio, TX 78216 210.530.1312

A TEXAS REGISTERED ENGINEERING FIRM (REGISTRATION No. F-20752)

TCEQ Form – 0583

Underground Storage Tank Facility Plan Application

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.

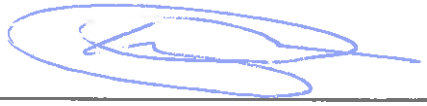
Signature

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: Umer Khawaja

Date: 6-13-23

Signature of Customer/Agent:



Regulated Entity Name: Blanco Express Shell Station

Underground Storage Tank (UST) System Information

1. ☒ **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)

2. Tanks and substance to be stored:

Table 1 - Tanks and Substances Stored

UST Number	*Size(Gallons)*	*Substance to be Stored*	*Double-wall Tank Material*

UST Number	*Size(Gallons)*	*Substance to be Stored*	*Double-wall Tank Material*
1	20,175	gasoline/diesel	permatank steel/fiberglass
2			
3			
4			
5			

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

Equipment	*Corrosion Protection (Method)*

Equipment	*Corrosion Protection (Method)*
Tanks	permantank steel/fiberglass
Product Delivery Piping	fiberglass
Vapor Recovery Piping	not applicable
Submersible Pumps	isolated in sump
Flex Connector (dispenser end)	isolated in sump
Flex Connector (pump end)	isolated in sump
Riser	isolated in sump

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 15 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 (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" = 60.

14. 100-year floodplain boundaries:

☒ The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA DFIRM #48029C0235G effective 09/29/2010

☒ 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 _____(#) 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 March 3, 2023 (Attachment K). 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

Narrative of UST System Installation

NEW UST SYSTEM INSTALLATION

Removal

Prior to installation of the new UST system, the existing underground storage tank (UST) system consists of one 20,000 gallon UST along with three dispensers and associated piping which will be removed from the ground. The total recognized capacity of the existing UST's is 20,000 gallons as noted by Edwards Aquifer Authority (EAA). Proper 30 day notifications will be provided to all agencies during removal and installation activities.

New Installation

The proposed new underground hydrocarbon storage system will consist of one 20,000 gallon Permatank triple wall tank. The actual total capacity of the UST is 20,175 gallons. According to Mr. Kyle Craig of EAA, the tank owner is allowed to go over up to 3% of tank volume recognized by EAA. Therefore, the maximum allowed capacity is 20,600 gallons according to EAA (Attachment behind this page is the email confirmation). The UST is a three compartment tank consisting of a 11,000 gallon compartment, 4,000 gallon compartment, and a 5,000 gallon compartment. The UST is constructed of a primary and secondary steel shell, while the tertiary shell consist of a 100 mil fiberglass wrap. The tank is constructed per UL-58 ACT-100 Type II Double Wall and UL-1746 Jacketed Permatank for Tertiary Containment. Each tank compartment will be equipped with a Red Jacket 4 inch diameter, 2 horsepower submersible pump. Overfill prevention for each compartment of the tank will be provided by an OPW automatic operation positive shut off vapor tight overfill valve which will be installed in the tank below the fill tube. The valve closes when the tank level rises to 95% capacity. Additionally, the overfill system is equipped with a veeder root audible/visual alarm and acknowledgement switch set at 90%. Each fill tube is equipped with a double wall sump with a single wall spill container.

Product and vent piping will be U. L. listed fiberglass – reinforced plastic piping. Product lines will be of triple wall construction. The piping consists of 2 inch Dualoy 3000/LCX coaxial piping for the primary and secondary containment and three inch Dualoy 3000/L piping for the tertiary containment. Vent lines will consist of two inch single wall Dualoy 3000/L pipe. Single wall vent lines are adequate since no product is contained in the vent lines and product prevention in the vent lines is provided by positive flow shut off valves installed in each tank compartment. An OPW double poppet safety 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. Additionally, Fireflex flexible connections 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 and tertiary containment for any leaks from these components. The dispenser-end

flexible connector will be similarly isolated by enclosure within a double wall sump. 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 sump sensors. Each tank will be equipped with a liquid sensor which will be installed in the interstitial space between the walls of the double-wall and a triple wall of the tank. Each of the product piping systems will be monitored by a liquid sensor which will be installed adjacent to the submersible pump in the piping sump and in the dispenser sumps. Additionally, the interstitial space in each sump will be monitored also. Each tank compartment will also be equipped with an automatic tank gauging probe which will automatically inventory the product volume in each compartment of the tank. 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 tank compartments, piping, and sumps will be connected to a Veeder Root TLS 450 Plus programmable control unit to be located in the store building. This central monitoring unit is designed to provide visual and audible alarms when hydrocarbon liquids or water is detected.

RE: 16525 Blanco Rd- UST replacement

Kyle Craig <kcraig@edwardsaquifer.org>
Fri 5/5/2023 10:14 AM
To: david banester.com <david@banester.com>
Cc: Buddy Reinhart <breinhart@aapumpco.com>

You are allowed to go over by 3%. Which for 20,000 you can go to 20,600. However, EAA will only issue Recognized Capacity for 20,000 after the system is installed.

An upgrade to 713,607(c) box will be fine.

If you have any further questions feel free to contact me.

Kyle Craig CPESC-IT, CESSWI
Supervisor – Recharge Zone Regulation
www.edwardsaquifer.org
210.222.2204 ext 138
900 E Quincy
San Antonio, TX 78215

From: david banester.com <david@banester.com>
Sent: Friday, May 5, 2023 9:01 AM
To: Kyle Craig <kcraig@edwardsaquifer.org>
Cc: Buddy Reinhart <breinhart@aapumpco.com>
Subject: 16525 Blanco Rd- UST replacement

External Email

Kyle,

I am working on the UST application and will be submitting it in the near future for the tertiary UST system at Blanco Express- 16525 Blanco Rd. Currently, the Edwards records indicate an existing two compartment 20,000 gallon tank. Additionally, the TCEQ record shows a 20,000 gallon tank.

The new 20,000 gallon proposed tank (tertiary containment), shows a total capacity of 20,175. This capacity is based off the tank chart of each compartment. Will this be an issue with Edwards and do I need to have the tank modified at this point to be at or below the 20,000 gallon value? Also, if it is acceptable , how should I answer section IV in your application.

Sincerely,

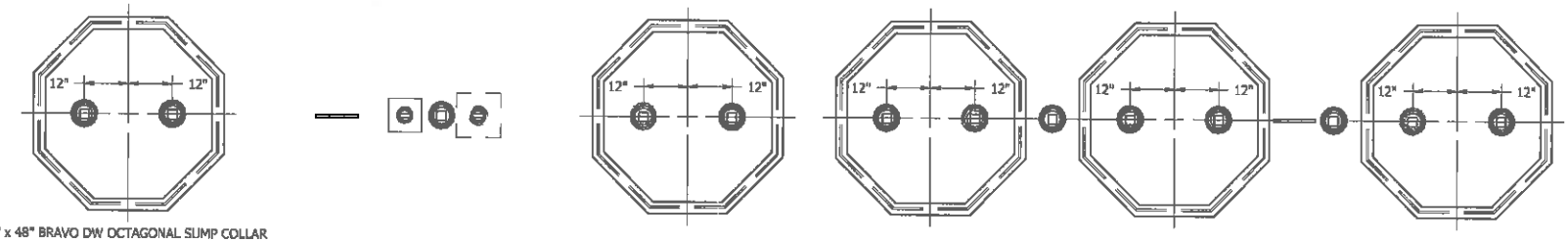
David Asvestas, P.E.
Banester Engineering Consultants, Ltd.
28070 Smithson Valley Rd.
San Antonio, TX 78261
TX Firm No. F-9126
Phone (210) 771-8154
Fax (210) 579-7738

Don't click links or attachments unless you know they're safe.

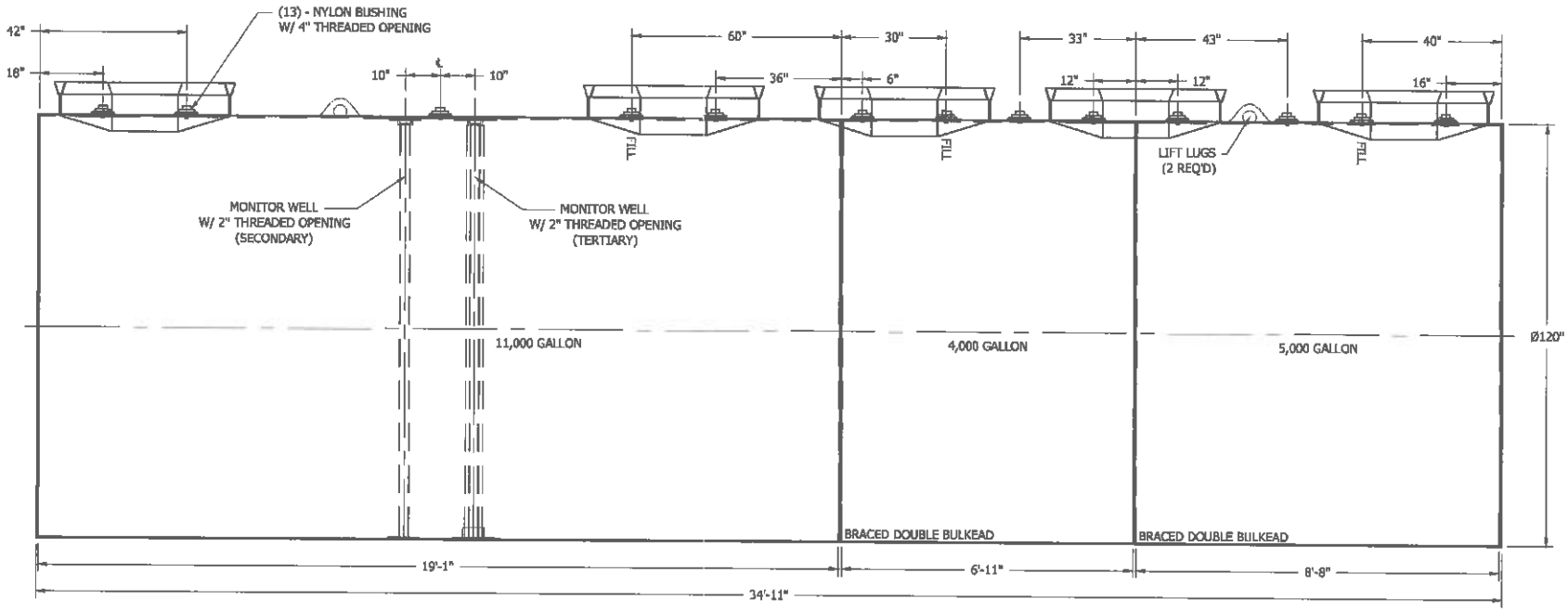
- EAA Helpdesk

Attachment B

Tank Manufacturer Information



6" x 48" BRAVO DW OCTAGONAL SUMP COLLAR
(PN: #B483-12-D-CO)
(5 REQ'D)



TANK CONSTRUCTED PER UL-58 ACT-100 TYPE II DOUBLE WALL AND UL-1746 JACKETED PERMATANK FOR TERTIARY CONTAINMENT

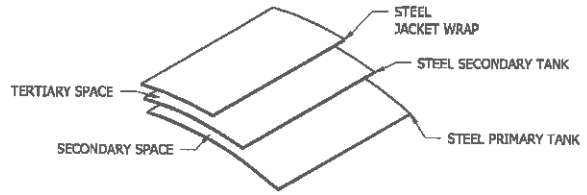
20,000 GALLON
TERTIARY PERMATANK - UL 1746
120" X 34'-11"
(11,000/4,000/5,000)

CUST.: A & A PUMP COMPANY
LOC.: SAN ANTONIO, TX
DWG NO: 40183

REV.	DATE	DWG BY	APP'D	DESCRIPTION
8				
7				
6				
5				
4				
3				
2				
1			WH	ISSUED FOR APPROVAL
0	2/9/23	ZD		

NOTES:
EXTERNAL: 100 MILS FIBERGLASS JACKET
INTERNAL: BARE METAL
TESTING:
- PRIMARY: 5 PSIG SOAP & WATER
- SECONDARY: VACUUM
- TERTIARY: VACUUM
STRIKER PLATES UNDER "FILL" OPENINGS ONLY
ESTIMATED WEIGHT: 31,000 LBS (+/- 5%)

CONTAINMENT VIEW



TECHNICAL DATA

PERMATANK® MEETS REQUIREMENTS OF:

- U.S. ENVIRONMENTAL PROTECTION AGENCY UNDERGROUND STORAGE TANK REGULATIONS (40 CFR 280)
- STEEL TANK INSTITUTE F922, PERMATANK® FABRICATION SPECIFICATION
- UNDERWRITERS LABORATORIES UL 58 STANDARD FOR, STEEL UNDERGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS
- UNDERWRITERS LABORATORIES UL 1746 STANDARD FOR, EXTERNAL CORROSION PROTECTION SYSTEMS FOR STEEL UNDERGROUND STORAGE TANKS

WATCO TANKS INC. est. 1984

Capacity Chart
WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
0.125	1	5.250	67	10.375	177
0.250	2	5.375	69	10.500	180
0.375	3	5.500	71	10.625	183
0.500	3	5.625	74	10.750	186
0.625	4	5.750	76	10.875	189
0.750	5	5.875	78	11.000	192
0.875	6	6.000	81	11.125	195
1.000	7	6.125	83	11.250	198
1.125	8	6.250	85	11.375	202
1.250	10	6.375	88	11.500	205
1.375	11	6.500	90	11.625	208
1.500	12	6.625	93	11.750	211
1.625	13	6.750	95	11.875	215
1.750	15	6.875	98	12.000	218
1.875	16	7.000	100	12.125	221
2.000	18	7.125	103	12.250	224
2.125	19	7.250	106	12.375	228
2.250	21	7.375	108	12.500	231
2.375	22	7.500	111	12.625	234
2.500	24	7.625	114	12.750	238
2.625	25	7.750	116	12.875	241
2.750	27	7.875	119	13.000	244
2.875	29	8.000	122	13.125	248
3.000	30	8.125	124	13.250	251
3.125	32	8.250	127	13.375	255
3.250	34	8.375	130	13.500	258
3.375	36	8.500	133	13.625	261
3.500	38	8.625	136	13.750	265
3.625	40	8.750	138	13.875	268
3.750	42	8.875	141	14.000	272
3.875	43	9.000	144	14.125	275
4.000	45	9.125	147	14.250	279
4.125	47	9.250	150	14.375	282
4.250	49	9.375	153	14.500	286
4.375	52	9.500	156	14.625	289
4.500	54	9.625	159	14.750	293
4.625	56	9.750	162	14.875	296
4.750	58	9.875	165	15.000	300
4.875	60	10.000	168	15.125	304
5.000	62	10.125	171	15.250	307
5.125	64	10.250	174	15.375	311

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
15.500	314	20.750	477	26.000	657
15.625	318	20.875	481	26.125	661
15.750	322	21.000	485	26.250	666
15.875	325	21.125	489	26.375	670
16.000	329	21.250	494	26.500	675
16.125	333	21.375	498	26.625	679
16.250	337	21.500	502	26.750	684
16.375	340	21.625	506	26.875	688
16.500	344	21.750	510	27.000	693
16.625	348	21.875	514	27.125	697
16.750	351	22.000	518	27.250	702
16.875	355	22.125	523	27.375	706
17.000	359	22.250	527	27.500	711
17.125	363	22.375	531	27.625	715
17.250	367	22.500	535	27.750	720
17.375	370	22.625	540	27.875	724
17.500	374	22.750	544	28.000	729
17.625	378	22.875	548	28.125	733
17.750	382	23.000	552	28.250	738
17.875	386	23.125	557	28.375	743
18.000	390	23.250	561	28.500	747
18.125	393	23.375	565	28.625	752
18.250	397	23.500	569	28.750	756
18.375	401	23.625	574	28.875	761
18.500	405	23.750	578	29.000	766
18.625	409	23.875	582	29.125	770
18.750	413	24.000	587	29.250	775
18.875	417	24.125	591	29.375	780
19.000	421	24.250	595	29.500	784
19.125	425	24.375	600	29.625	789
19.250	429	24.500	604	29.750	793
19.375	433	24.625	608	29.875	798
19.500	437	24.750	613	30.000	803
19.625	441	24.875	617	30.125	808
19.750	445	25.000	621	30.250	812
19.875	449	25.125	626	30.375	817
20.000	453	25.250	630	30.500	822
20.125	457	25.375	635	30.625	826
20.250	461	25.500	639	30.750	831
20.375	465	25.625	643	30.875	836
20.500	469	25.750	648	31.000	840
20.625	473	25.875	652	31.125	845

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
31.250	850	36.500	1,054	41.750	1,266
31.375	855	36.625	1,059	41.875	1,271
31.500	859	36.750	1,064	42.000	1,276
31.625	864	36.875	1,069	42.125	1,281
31.750	869	37.000	1,074	42.250	1,286
31.875	874	37.125	1,079	42.375	1,291
32.000	878	37.250	1,084	42.500	1,297
32.125	883	37.375	1,088	42.625	1,302
32.250	888	37.500	1,093	42.750	1,307
32.375	893	37.625	1,098	42.875	1,312
32.500	898	37.750	1,103	43.000	1,317
32.625	902	37.875	1,109	43.125	1,322
32.750	907	38.000	1,114	43.250	1,328
32.875	912	38.125	1,119	43.375	1,333
33.000	917	38.250	1,124	43.500	1,338
33.125	922	38.375	1,129	43.625	1,343
33.250	926	38.500	1,134	43.750	1,348
33.375	931	38.625	1,139	43.875	1,353
33.500	936	38.750	1,144	44.000	1,359
33.625	941	38.875	1,149	44.125	1,364
33.750	946	39.000	1,154	44.250	1,369
33.875	951	39.125	1,159	44.375	1,374
34.000	955	39.250	1,164	44.500	1,379
34.125	960	39.375	1,169	44.625	1,385
34.250	965	39.500	1,174	44.750	1,390
34.375	970	39.625	1,179	44.875	1,395
34.500	975	39.750	1,184	45.000	1,400
34.625	980	39.875	1,189	45.125	1,405
34.750	985	40.000	1,194	45.250	1,411
34.875	990	40.125	1,199	45.375	1,416
35.000	994	40.250	1,204	45.500	1,421
35.125	999	40.375	1,210	45.625	1,426
35.250	1,004	40.500	1,215	45.750	1,432
35.375	1,009	40.625	1,220	45.875	1,437
35.500	1,014	40.750	1,225	46.000	1,442
35.625	1,019	40.875	1,230	46.125	1,447
35.750	1,024	41.000	1,235	46.250	1,453
35.875	1,029	41.125	1,240	46.375	1,458
36.000	1,034	41.250	1,245	46.500	1,463
36.125	1,039	41.375	1,250	46.625	1,468
36.250	1,044	41.500	1,255	46.750	1,474
36.375	1,049	41.625	1,261	46.875	1,479

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
47.000	1,484	52.250	1,707	57.500	1,932
47.125	1,489	52.375	1,712	57.625	1,937
47.250	1,495	52.500	1,717	57.750	1,942
47.375	1,500	52.625	1,723	57.875	1,948
47.500	1,505	52.750	1,728	58.000	1,953
47.625	1,510	52.875	1,733	58.125	1,958
47.750	1,516	53.000	1,739	58.250	1,964
47.875	1,521	53.125	1,744	58.375	1,969
48.000	1,526	53.250	1,749	58.500	1,974
48.125	1,531	53.375	1,755	58.625	1,980
48.250	1,537	53.500	1,760	58.750	1,985
48.375	1,542	53.625	1,765	58.875	1,991
48.500	1,547	53.750	1,771	59.000	1,996
48.625	1,553	53.875	1,776	59.125	2,001
48.750	1,558	54.000	1,781	59.250	2,007
48.875	1,563	54.125	1,787	59.375	2,012
49.000	1,568	54.250	1,792	59.500	2,017
49.125	1,574	54.375	1,797	59.625	2,023
49.250	1,579	54.500	1,803	59.750	2,028
49.375	1,584	54.625	1,808	59.875	2,034
49.500	1,590	54.750	1,813	60.000	2,039
49.625	1,595	54.875	1,819	60.125	2,044
49.750	1,600	55.000	1,824	60.250	2,050
49.875	1,605	55.125	1,830	60.375	2,055
50.000	1,611	55.250	1,835	60.500	2,060
50.125	1,616	55.375	1,840	60.625	2,066
50.250	1,621	55.500	1,846	60.750	2,071
50.375	1,627	55.625	1,851	60.875	2,077
50.500	1,632	55.750	1,856	61.000	2,082
50.625	1,637	55.875	1,862	61.125	2,087
50.750	1,643	56.000	1,867	61.250	2,093
50.875	1,648	56.125	1,872	61.375	2,098
51.000	1,653	56.250	1,878	61.500	2,103
51.125	1,659	56.375	1,883	61.625	2,109
51.250	1,664	56.500	1,889	61.750	2,114
51.375	1,669	56.625	1,894	61.875	2,120
51.500	1,675	56.750	1,899	62.000	2,125
51.625	1,680	56.875	1,905	62.125	2,130
51.750	1,685	57.000	1,910	62.250	2,136
51.875	1,691	57.125	1,915	62.375	2,141
52.000	1,696	57.250	1,921	62.500	2,146
52.125	1,701	57.375	1,926	62.625	2,152

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
62.750	2,157	68.000	2,382	73.250	2,603
62.875	2,162	68.125	2,387	73.375	2,609
63.000	2,168	68.250	2,392	73.500	2,614
63.125	2,173	68.375	2,398	73.625	2,619
63.250	2,179	68.500	2,403	73.750	2,624
63.375	2,184	68.625	2,408	73.875	2,629
63.500	2,189	68.750	2,414	74.000	2,635
63.625	2,195	68.875	2,419	74.125	2,640
63.750	2,200	69.000	2,424	74.250	2,645
63.875	2,205	69.125	2,429	74.375	2,650
64.000	2,211	69.250	2,435	74.500	2,655
64.125	2,216	69.375	2,440	74.625	2,661
64.250	2,221	69.500	2,445	74.750	2,666
64.375	2,227	69.625	2,451	74.875	2,671
64.500	2,232	69.750	2,456	75.000	2,676
64.625	2,238	69.875	2,461	75.125	2,681
64.750	2,243	70.000	2,467	75.250	2,687
64.875	2,248	70.125	2,472	75.375	2,692
65.000	2,254	70.250	2,477	75.500	2,697
65.125	2,259	70.375	2,482	75.625	2,702
65.250	2,264	70.500	2,488	75.750	2,707
65.375	2,270	70.625	2,493	75.875	2,713
65.500	2,275	70.750	2,498	76.000	2,718
65.625	2,280	70.875	2,504	76.125	2,723
65.750	2,286	71.000	2,509	76.250	2,728
65.875	2,291	71.125	2,514	76.375	2,733
66.000	2,296	71.250	2,519	76.500	2,738
66.125	2,302	71.375	2,525	76.625	2,743
66.250	2,307	71.500	2,530	76.750	2,749
66.375	2,312	71.625	2,535	76.875	2,754
66.500	2,318	71.750	2,540	77.000	2,759
66.625	2,323	71.875	2,546	77.125	2,764
66.750	2,328	72.000	2,551	77.250	2,769
66.875	2,334	72.125	2,556	77.375	2,774
67.000	2,339	72.250	2,561	77.500	2,779
67.125	2,344	72.375	2,567	77.625	2,785
67.250	2,350	72.500	2,572	77.750	2,790
67.375	2,355	72.625	2,577	77.875	2,795
67.500	2,360	72.750	2,582	78.000	2,800
67.625	2,366	72.875	2,588	78.125	2,805
67.750	2,371	73.000	2,593	78.250	2,810
67.875	2,376	73.125	2,598	78.375	2,815

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
78.500	2,820	83.750	3,031	89.000	3,232
78.625	2,825	83.875	3,036	89.125	3,237
78.750	2,831	84.000	3,040	89.250	3,241
78.875	2,836	84.125	3,045	89.375	3,246
79.000	2,841	84.250	3,050	89.500	3,251
79.125	2,846	84.375	3,055	89.625	3,255
79.250	2,851	84.500	3,060	89.750	3,260
79.375	2,856	84.625	3,065	89.875	3,265
79.500	2,861	84.750	3,070	90.000	3,269
79.625	2,866	84.875	3,075	90.125	3,274
79.750	2,871	85.000	3,079	90.250	3,279
79.875	2,876	85.125	3,084	90.375	3,283
80.000	2,881	85.250	3,089	90.500	3,288
80.125	2,886	85.375	3,094	90.625	3,292
80.250	2,891	85.500	3,099	90.750	3,297
80.375	2,896	85.625	3,104	90.875	3,301
80.500	2,901	85.750	3,109	91.000	3,306
80.625	2,906	85.875	3,113	91.125	3,311
80.750	2,911	86.000	3,118	91.250	3,315
80.875	2,916	86.125	3,123	91.375	3,320
81.000	2,921	86.250	3,128	91.500	3,324
81.125	2,926	86.375	3,133	91.625	3,329
81.250	2,931	86.500	3,137	91.750	3,333
81.375	2,936	86.625	3,142	91.875	3,338
81.500	2,941	86.750	3,147	92.000	3,342
81.625	2,946	86.875	3,152	92.125	3,347
81.750	2,951	87.000	3,157	92.250	3,351
81.875	2,956	87.125	3,161	92.375	3,356
82.000	2,961	87.250	3,166	92.500	3,360
82.125	2,966	87.375	3,171	92.625	3,365
82.250	2,971	87.500	3,176	92.750	3,369
82.375	2,976	87.625	3,180	92.875	3,374
82.500	2,981	87.750	3,185	93.000	3,378
82.625	2,986	87.875	3,190	93.125	3,383
82.750	2,991	88.000	3,195	93.250	3,387
82.875	2,996	88.125	3,199	93.375	3,392
83.000	3,001	88.250	3,204	93.500	3,396
83.125	3,006	88.375	3,209	93.625	3,400
83.250	3,011	88.500	3,213	93.750	3,405
83.375	3,016	88.625	3,218	93.875	3,409
83.500	3,021	88.750	3,223	94.000	3,414
83.625	3,026	88.875	3,227	94.125	3,418

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
94.250	3,422	99.500	3,598	104.750	3,756
94.375	3,427	99.625	3,602	104.875	3,760
94.500	3,431	99.750	3,606	105.000	3,763
94.625	3,435	99.875	3,610	105.125	3,767
94.750	3,440	100.000	3,614	105.250	3,770
94.875	3,444	100.125	3,618	105.375	3,774
95.000	3,448	100.250	3,622	105.500	3,777
95.125	3,453	100.375	3,626	105.625	3,780
95.250	3,457	100.500	3,630	105.750	3,784
95.375	3,461	100.625	3,634	105.875	3,787
95.500	3,466	100.750	3,638	106.000	3,791
95.625	3,470	100.875	3,642	106.125	3,794
95.750	3,474	101.000	3,645	106.250	3,797
95.875	3,478	101.125	3,649	106.375	3,801
96.000	3,483	101.250	3,653	106.500	3,804
96.125	3,487	101.375	3,657	106.625	3,807
96.250	3,491	101.500	3,661	106.750	3,811
96.375	3,495	101.625	3,665	106.875	3,814
96.500	3,500	101.750	3,668	107.000	3,817
96.625	3,504	101.875	3,672	107.125	3,820
96.750	3,508	102.000	3,676	107.250	3,824
96.875	3,512	102.125	3,680	107.375	3,827
97.000	3,516	102.250	3,684	107.500	3,830
97.125	3,521	102.375	3,687	107.625	3,833
97.250	3,525	102.500	3,691	107.750	3,836
97.375	3,529	102.625	3,695	107.875	3,840
97.500	3,533	102.750	3,698	108.000	3,843
97.625	3,537	102.875	3,702	108.125	3,846
97.750	3,541	103.000	3,706	108.250	3,849
97.875	3,546	103.125	3,709	108.375	3,852
98.000	3,550	103.250	3,713	108.500	3,855
98.125	3,554	103.375	3,717	108.625	3,858
98.250	3,558	103.500	3,720	108.750	3,861
98.375	3,562	103.625	3,724	108.875	3,864
98.500	3,566	103.750	3,728	109.000	3,867
98.625	3,570	103.875	3,731	109.125	3,870
98.750	3,574	104.000	3,735	109.250	3,873
98.875	3,578	104.125	3,738	109.375	3,876
99.000	3,582	104.250	3,742	109.500	3,879
99.125	3,586	104.375	3,746	109.625	3,882
99.250	3,590	104.500	3,749	109.750	3,885
99.375	3,594	104.625	3,753	109.875	3,888

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
110.000	3,891	115.250	3,993		
110.125	3,894	115.375	3,995		
110.250	3,897	115.500	3,997		
110.375	3,899	115.625	3,999		
110.500	3,902	115.750	4,001		
110.625	3,905	115.875	4,003		
110.750	3,908	116.000	4,004		
110.875	3,911	116.125	4,006		
111.000	3,913	116.250	4,008		
111.125	3,916	116.375	4,010		
111.250	3,919	116.500	4,011		
111.375	3,921	116.625	4,013		
111.500	3,924	116.750	4,014		
111.625	3,927	116.875	4,016		
111.750	3,929	117.000	4,017		
111.875	3,932	117.125	4,019		
112.000	3,934	117.250	4,020		
112.125	3,937	117.375	4,022		
112.250	3,940	117.500	4,023		
112.375	3,942	117.625	4,024		
112.500	3,945	117.750	4,025		
112.625	3,947	117.875	4,027		
112.750	3,949	118.000	4,028		
112.875	3,952	118.125	4,029		
113.000	3,954	118.250	4,030		
113.125	3,957	118.375	4,031		
113.250	3,959	118.500	4,032		
113.375	3,961	118.625	4,032		
113.500	3,964	118.750	4,033		
113.625	3,966	118.875	4,034		
113.750	3,968	119.000	4,034		
113.875	3,970	119.125	4,035		
114.000	3,973	119.250	4,035		
114.125	3,975				
114.250	3,977				
114.375	3,979				
114.500	3,981				
114.625	3,983				
114.750	3,985				
114.875	3,987				
115.000	3,989				
115.125	3,991				

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 4,000 GALLON
Serial Number: 120" 0D x 6'-11"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)

Capacity Chart
WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
0.125	2	5.250	83	10.375	221
0.250	2	5.375	86	10.500	225
0.375	3	5.500	89	10.625	229
0.500	4	5.625	92	10.750	232
0.625	5	5.750	95	10.875	236
0.750	7	5.875	98	11.000	240
0.875	8	6.000	101	11.125	244
1.000	9	6.125	104	11.250	248
1.125	11	6.250	107	11.375	252
1.250	12	6.375	110	11.500	256
1.375	14	6.500	113	11.625	260
1.500	15	6.625	116	11.750	264
1.625	17	6.750	119	11.875	268
1.750	18	6.875	122	12.000	272
1.875	20	7.000	126	12.125	276
2.000	22	7.125	129	12.250	280
2.125	24	7.250	132	12.375	285
2.250	26	7.375	135	12.500	289
2.375	28	7.500	139	12.625	293
2.500	30	7.625	142	12.750	297
2.625	32	7.750	145	12.875	301
2.750	34	7.875	149	13.000	305
2.875	36	8.000	152	13.125	310
3.000	38	8.125	155	13.250	314
3.125	40	8.250	159	13.375	318
3.250	43	8.375	162	13.500	322
3.375	45	8.500	166	13.625	327
3.500	47	8.625	169	13.750	331
3.625	50	8.750	173	13.875	335
3.750	52	8.875	176	14.000	340
3.875	54	9.000	180	14.125	344
4.000	57	9.125	184	14.250	348
4.125	59	9.250	187	14.375	353
4.250	62	9.375	191	14.500	357
4.375	64	9.500	195	14.625	362
4.500	67	9.625	198	14.750	366
4.625	70	9.750	202	14.875	371
4.750	72	9.875	206	15.000	375
4.875	75	10.000	209	15.125	380
5.000	78	10.125	213	15.250	384
5.125	81	10.250	217	15.375	389

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
15.500	393	20.750	596	26.000	821
15.625	398	20.875	602	26.125	827
15.750	402	21.000	607	26.250	832
15.875	407	21.125	612	26.375	838
16.000	411	21.250	617	26.500	843
16.125	416	21.375	622	26.625	849
16.250	421	21.500	627	26.750	855
16.375	425	21.625	632	26.875	860
16.500	430	21.750	638	27.000	866
16.625	435	21.875	643	27.125	871
16.750	439	22.000	648	27.250	877
16.875	444	22.125	653	27.375	883
17.000	449	22.250	659	27.500	888
17.125	453	22.375	664	27.625	894
17.250	458	22.500	669	27.750	900
17.375	463	22.625	674	27.875	905
17.500	468	22.750	680	28.000	911
17.625	473	22.875	685	28.125	917
17.750	477	23.000	690	28.250	923
17.875	482	23.125	696	28.375	928
18.000	487	23.250	701	28.500	934
18.125	492	23.375	706	28.625	940
18.250	497	23.500	712	28.750	946
18.375	501	23.625	717	28.875	951
18.500	506	23.750	722	29.000	957
18.625	511	23.875	728	29.125	963
18.750	516	24.000	733	29.250	969
18.875	521	24.125	739	29.375	974
19.000	526	24.250	744	29.500	980
19.125	531	24.375	749	29.625	986
19.250	536	24.500	755	29.750	992
19.375	541	24.625	760	29.875	998
19.500	546	24.750	766	30.000	1,004
19.625	551	24.875	771	30.125	1,009
19.750	556	25.000	777	30.250	1,015
19.875	561	25.125	782	30.375	1,021
20.000	566	25.250	788	30.500	1,027
20.125	571	25.375	793	30.625	1,033
20.250	576	25.500	799	30.750	1,039
20.375	581	25.625	804	30.875	1,045
20.500	586	25.750	810	31.000	1,051
20.625	591	25.875	815	31.125	1,056

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
31.250	1,062	36.500	1,317	41.750	1,582
31.375	1,068	36.625	1,323	41.875	1,589
31.500	1,074	36.750	1,330	42.000	1,595
31.625	1,080	36.875	1,336	42.125	1,601
31.750	1,086	37.000	1,342	42.250	1,608
31.875	1,092	37.125	1,348	42.375	1,614
32.000	1,098	37.250	1,354	42.500	1,621
32.125	1,104	37.375	1,361	42.625	1,627
32.250	1,110	37.500	1,367	42.750	1,634
32.375	1,116	37.625	1,373	42.875	1,640
32.500	1,122	37.750	1,379	43.000	1,647
32.625	1,128	37.875	1,386	43.125	1,653
32.750	1,134	38.000	1,392	43.250	1,660
32.875	1,140	38.125	1,398	43.375	1,666
33.000	1,146	38.250	1,404	43.500	1,672
33.125	1,152	38.375	1,411	43.625	1,679
33.250	1,158	38.500	1,417	43.750	1,685
33.375	1,164	38.625	1,423	43.875	1,692
33.500	1,170	38.750	1,430	44.000	1,698
33.625	1,176	38.875	1,436	44.125	1,705
33.750	1,182	39.000	1,442	44.250	1,711
33.875	1,188	39.125	1,449	44.375	1,718
34.000	1,194	39.250	1,455	44.500	1,724
34.125	1,200	39.375	1,461	44.625	1,731
34.250	1,207	39.500	1,468	44.750	1,737
34.375	1,213	39.625	1,474	44.875	1,744
34.500	1,219	39.750	1,480	45.000	1,750
34.625	1,225	39.875	1,487	45.125	1,757
34.750	1,231	40.000	1,493	45.250	1,763
34.875	1,237	40.125	1,499	45.375	1,770
35.000	1,243	40.250	1,506	45.500	1,776
35.125	1,249	40.375	1,512	45.625	1,783
35.250	1,255	40.500	1,518	45.750	1,790
35.375	1,262	40.625	1,525	45.875	1,796
35.500	1,268	40.750	1,531	46.000	1,803
35.625	1,274	40.875	1,537	46.125	1,809
35.750	1,280	41.000	1,544	46.250	1,816
35.875	1,286	41.125	1,550	46.375	1,822
36.000	1,292	41.250	1,557	46.500	1,829
36.125	1,299	41.375	1,563	46.625	1,835
36.250	1,305	41.500	1,569	46.750	1,842
36.375	1,311	41.625	1,576	46.875	1,849

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
47.000	1,855	52.250	2,133	57.500	2,414
47.125	1,862	52.375	2,140	57.625	2,421
47.250	1,868	52.500	2,147	57.750	2,428
47.375	1,875	52.625	2,153	57.875	2,435
47.500	1,881	52.750	2,160	58.000	2,441
47.625	1,888	52.875	2,167	58.125	2,448
47.750	1,895	53.000	2,173	58.250	2,455
47.875	1,901	53.125	2,180	58.375	2,461
48.000	1,908	53.250	2,187	58.500	2,468
48.125	1,914	53.375	2,193	58.625	2,475
48.250	1,921	53.500	2,200	58.750	2,482
48.375	1,928	53.625	2,207	58.875	2,488
48.500	1,934	53.750	2,213	59.000	2,495
48.625	1,941	53.875	2,220	59.125	2,502
48.750	1,947	54.000	2,227	59.250	2,508
48.875	1,954	54.125	2,233	59.375	2,515
49.000	1,961	54.250	2,240	59.500	2,522
49.125	1,967	54.375	2,247	59.625	2,529
49.250	1,974	54.500	2,254	59.750	2,535
49.375	1,980	54.625	2,260	59.875	2,542
49.500	1,987	54.750	2,267	60.000	2,549
49.625	1,994	54.875	2,274	60.125	2,555
49.750	2,000	55.000	2,280	60.250	2,562
49.875	2,007	55.125	2,287	60.375	2,569
50.000	2,014	55.250	2,294	60.500	2,576
50.125	2,020	55.375	2,300	60.625	2,582
50.250	2,027	55.500	2,307	60.750	2,589
50.375	2,033	55.625	2,314	60.875	2,596
50.500	2,040	55.750	2,321	61.000	2,602
50.625	2,047	55.875	2,327	61.125	2,609
50.750	2,053	56.000	2,334	61.250	2,616
50.875	2,060	56.125	2,341	61.375	2,623
51.000	2,067	56.250	2,347	61.500	2,629
51.125	2,073	56.375	2,354	61.625	2,636
51.250	2,080	56.500	2,361	61.750	2,643
51.375	2,087	56.625	2,367	61.875	2,649
51.500	2,093	56.750	2,374	62.000	2,656
51.625	2,100	56.875	2,381	62.125	2,663
51.750	2,107	57.000	2,388	62.250	2,670
51.875	2,113	57.125	2,394	62.375	2,676
52.000	2,120	57.250	2,401	62.500	2,683
52.125	2,127	57.375	2,408	62.625	2,690

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
62.750	2,696	68.000	2,977	73.250	3,254
62.875	2,703	68.125	2,984	73.375	3,261
63.000	2,710	68.250	2,990	73.500	3,267
63.125	2,717	68.375	2,997	73.625	3,274
63.250	2,723	68.500	3,004	73.750	3,280
63.375	2,730	68.625	3,010	73.875	3,287
63.500	2,737	68.750	3,017	74.000	3,293
63.625	2,743	68.875	3,024	74.125	3,300
63.750	2,750	69.000	3,030	74.250	3,306
63.875	2,757	69.125	3,037	74.375	3,313
64.000	2,763	69.250	3,044	74.500	3,319
64.125	2,770	69.375	3,050	74.625	3,326
64.250	2,777	69.500	3,057	74.750	3,332
64.375	2,784	69.625	3,063	74.875	3,339
64.500	2,790	69.750	3,070	75.000	3,345
64.625	2,797	69.875	3,077	75.125	3,352
64.750	2,804	70.000	3,083	75.250	3,358
64.875	2,810	70.125	3,090	75.375	3,365
65.000	2,817	70.250	3,096	75.500	3,371
65.125	2,824	70.375	3,103	75.625	3,378
65.250	2,830	70.500	3,110	75.750	3,384
65.375	2,837	70.625	3,116	75.875	3,391
65.500	2,844	70.750	3,123	76.000	3,397
65.625	2,850	70.875	3,129	76.125	3,404
65.750	2,857	71.000	3,136	76.250	3,410
65.875	2,864	71.125	3,143	76.375	3,417
66.000	2,871	71.250	3,149	76.500	3,423
66.125	2,877	71.375	3,156	76.625	3,429
66.250	2,884	71.500	3,162	76.750	3,436
66.375	2,891	71.625	3,169	76.875	3,442
66.500	2,897	71.750	3,176	77.000	3,449
66.625	2,904	71.875	3,182	77.125	3,455
66.750	2,911	72.000	3,189	77.250	3,462
66.875	2,917	72.125	3,195	77.375	3,468
67.000	2,924	72.250	3,202	77.500	3,474
67.125	2,931	72.375	3,208	77.625	3,481
67.250	2,937	72.500	3,215	77.750	3,487
67.375	2,944	72.625	3,222	77.875	3,494
67.500	2,951	72.750	3,228	78.000	3,500
67.625	2,957	72.875	3,235	78.125	3,506
67.750	2,964	73.000	3,241	78.250	3,513
67.875	2,970	73.125	3,248	78.375	3,519

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
78.500	3,525	83.750	3,788	89.000	4,040
78.625	3,532	83.875	3,795	89.125	4,046
78.750	3,538	84.000	3,801	89.250	4,052
78.875	3,545	84.125	3,807	89.375	4,058
79.000	3,551	84.250	3,813	89.500	4,064
79.125	3,557	84.375	3,819	89.625	4,069
79.250	3,564	84.500	3,825	89.750	4,075
79.375	3,570	84.625	3,831	89.875	4,081
79.500	3,576	84.750	3,837	90.000	4,087
79.625	3,583	84.875	3,843	90.125	4,092
79.750	3,589	85.000	3,849	90.250	4,098
79.875	3,595	85.125	3,856	90.375	4,104
80.000	3,602	85.250	3,862	90.500	4,110
80.125	3,608	85.375	3,868	90.625	4,115
80.250	3,614	85.500	3,874	90.750	4,121
80.375	3,620	85.625	3,880	90.875	4,127
80.500	3,627	85.750	3,886	91.000	4,133
80.625	3,633	85.875	3,892	91.125	4,138
80.750	3,639	86.000	3,898	91.250	4,144
80.875	3,646	86.125	3,904	91.375	4,150
81.000	3,652	86.250	3,910	91.500	4,155
81.125	3,658	86.375	3,916	91.625	4,161
81.250	3,664	86.500	3,922	91.750	4,167
81.375	3,671	86.625	3,928	91.875	4,172
81.500	3,677	86.750	3,934	92.000	4,178
81.625	3,683	86.875	3,940	92.125	4,184
81.750	3,689	87.000	3,946	92.250	4,189
81.875	3,696	87.125	3,952	92.375	4,195
82.000	3,702	87.250	3,958	92.500	4,201
82.125	3,708	87.375	3,964	92.625	4,206
82.250	3,714	87.500	3,970	92.750	4,212
82.375	3,720	87.625	3,976	92.875	4,217
82.500	3,727	87.750	3,981	93.000	4,223
82.625	3,733	87.875	3,987	93.125	4,228
82.750	3,739	88.000	3,993	93.250	4,234
82.875	3,745	88.125	3,999	93.375	4,239
83.000	3,751	88.250	4,005	93.500	4,245
83.125	3,758	88.375	4,011	93.625	4,251
83.250	3,764	88.500	4,017	93.750	4,256
83.375	3,770	88.625	4,023	93.875	4,262
83.500	3,776	88.750	4,029	94.000	4,267
83.625	3,782	88.875	4,034	94.125	4,273

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
94.250	4,278	99.500	4,498	104.750	4,695
94.375	4,283	99.625	4,503	104.875	4,700
94.500	4,289	99.750	4,508	105.000	4,704
94.625	4,294	99.875	4,513	105.125	4,708
94.750	4,300	100.000	4,518	105.250	4,713
94.875	4,305	100.125	4,523	105.375	4,717
95.000	4,311	100.250	4,528	105.500	4,721
95.125	4,316	100.375	4,533	105.625	4,726
95.250	4,321	100.500	4,537	105.750	4,730
95.375	4,327	100.625	4,542	105.875	4,734
95.500	4,332	100.750	4,547	106.000	4,738
95.625	4,337	100.875	4,552	106.125	4,743
95.750	4,343	101.000	4,557	106.250	4,747
95.875	4,348	101.125	4,562	106.375	4,751
96.000	4,353	101.250	4,566	106.500	4,755
96.125	4,359	101.375	4,571	106.625	4,759
96.250	4,364	101.500	4,576	106.750	4,763
96.375	4,369	101.625	4,581	106.875	4,767
96.500	4,375	101.750	4,586	107.000	4,772
96.625	4,380	101.875	4,590	107.125	4,776
96.750	4,385	102.000	4,595	107.250	4,780
96.875	4,390	102.125	4,600	107.375	4,784
97.000	4,396	102.250	4,604	107.500	4,788
97.125	4,401	102.375	4,609	107.625	4,792
97.250	4,406	102.500	4,614	107.750	4,796
97.375	4,411	102.625	4,619	107.875	4,800
97.500	4,416	102.750	4,623	108.000	4,804
97.625	4,422	102.875	4,628	108.125	4,807
97.750	4,427	103.000	4,632	108.250	4,811
97.875	4,432	103.125	4,637	108.375	4,815
98.000	4,437	103.250	4,642	108.500	4,819
98.125	4,442	103.375	4,646	108.625	4,823
98.250	4,447	103.500	4,651	108.750	4,827
98.375	4,452	103.625	4,655	108.875	4,831
98.500	4,458	103.750	4,660	109.000	4,834
98.625	4,463	103.875	4,664	109.125	4,838
98.750	4,468	104.000	4,669	109.250	4,842
98.875	4,473	104.125	4,673	109.375	4,846
99.000	4,478	104.250	4,678	109.500	4,849
99.125	4,483	104.375	4,682	109.625	4,853
99.250	4,488	104.500	4,687	109.750	4,857
99.375	4,493	104.625	4,691	109.875	4,860

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
110.000	4,864	115.250	4,992		
110.125	4,867	115.375	4,994		
110.250	4,871	115.500	4,997		
110.375	4,874	115.625	4,999		
110.500	4,878	115.750	5,001		
110.625	4,881	115.875	5,003		
110.750	4,885	116.000	5,006		
110.875	4,888	116.125	5,008		
111.000	4,892	116.250	5,010		
111.125	4,895	116.375	5,012		
111.250	4,898	116.500	5,014		
111.375	4,902	116.625	5,016		
111.500	4,905	116.750	5,018		
111.625	4,908	116.875	5,020		
111.750	4,912	117.000	5,022		
111.875	4,915	117.125	5,024		
112.000	4,918	117.250	5,025		
112.125	4,921	117.375	5,027		
112.250	4,925	117.500	5,029		
112.375	4,928	117.625	5,030		
112.500	4,931	117.750	5,032		
112.625	4,934	117.875	5,033		
112.750	4,937	118.000	5,035		
112.875	4,940	118.125	5,036		
113.000	4,943	118.250	5,037		
113.125	4,946	118.375	5,038		
113.250	4,949	118.500	5,040		
113.375	4,952	118.625	5,041		
113.500	4,955	118.750	5,041		
113.625	4,958	118.875	5,042		
113.750	4,960	119.000	5,043		
113.875	4,963	119.125	5,044		
114.000	4,966	119.250	5,044		
114.125	4,969				
114.250	4,971				
114.375	4,974				
114.500	4,977				
114.625	4,979				
114.750	4,982				
114.875	4,984				
115.000	4,987				
115.125	4,989				

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 5,000 GALLON
Serial Number: 120" 0D x 8'-8"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)

Capacity Chart
WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
0.125	3	5.250	183	10.375	486
0.250	5	5.375	190	10.500	494
0.375	7	5.500	196	10.625	503
0.500	9	5.625	202	10.750	511
0.625	12	5.750	209	10.875	520
0.750	14	5.875	215	11.000	528
0.875	17	6.000	222	11.125	537
1.000	20	6.125	228	11.250	546
1.125	23	6.250	235	11.375	555
1.250	26	6.375	242	11.500	563
1.375	30	6.500	249	11.625	572
1.500	33	6.625	255	11.750	581
1.625	37	6.750	262	11.875	590
1.750	41	6.875	269	12.000	599
1.875	44	7.000	276	12.125	608
2.000	48	7.125	283	12.250	617
2.125	52	7.250	291	12.375	626
2.250	57	7.375	298	12.500	635
2.375	61	7.500	305	12.625	644
2.500	65	7.625	312	12.750	653
2.625	70	7.750	320	12.875	663
2.750	74	7.875	327	13.000	672
2.875	79	8.000	335	13.125	681
3.000	84	8.125	342	13.250	691
3.125	89	8.250	350	13.375	700
3.250	94	8.375	357	13.500	709
3.375	99	8.500	365	13.625	719
3.500	104	8.625	373	13.750	728
3.625	109	8.750	380	13.875	738
3.750	114	8.875	388	14.000	747
3.875	120	9.000	396	14.125	757
4.000	125	9.125	404	14.250	767
4.125	130	9.250	412	14.375	776
4.250	136	9.375	420	14.500	786
4.375	142	9.500	428	14.625	796
4.500	147	9.625	436	14.750	805
4.625	153	9.750	444	14.875	815
4.750	159	9.875	453	15.000	825
4.875	165	10.000	461	15.125	835
5.000	171	10.125	469	15.250	845
5.125	177	10.250	477	15.375	855

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
15.500	865	20.750	1,312	26.000	1,806
15.625	875	20.875	1,323	26.125	1,818
15.750	885	21.000	1,335	26.250	1,831
15.875	895	21.125	1,346	26.375	1,843
16.000	905	21.250	1,357	26.500	1,855
16.125	915	21.375	1,369	26.625	1,867
16.250	925	21.500	1,380	26.750	1,880
16.375	936	21.625	1,391	26.875	1,892
16.500	946	21.750	1,403	27.000	1,905
16.625	956	21.875	1,414	27.125	1,917
16.750	966	22.000	1,426	27.250	1,929
16.875	977	22.125	1,437	27.375	1,942
17.000	987	22.250	1,449	27.500	1,954
17.125	998	22.375	1,460	27.625	1,967
17.250	1,008	22.500	1,472	27.750	1,979
17.375	1,018	22.625	1,484	27.875	1,992
17.500	1,029	22.750	1,495	28.000	2,004
17.625	1,039	22.875	1,507	28.125	2,017
17.750	1,050	23.000	1,519	28.250	2,030
17.875	1,061	23.125	1,530	28.375	2,042
18.000	1,071	23.250	1,542	28.500	2,055
18.125	1,082	23.375	1,554	28.625	2,067
18.250	1,093	23.500	1,566	28.750	2,080
18.375	1,103	23.625	1,577	28.875	2,093
18.500	1,114	23.750	1,589	29.000	2,106
18.625	1,125	23.875	1,601	29.125	2,118
18.750	1,136	24.000	1,613	29.250	2,131
18.875	1,146	24.125	1,625	29.375	2,144
19.000	1,157	24.250	1,637	29.500	2,156
19.125	1,168	24.375	1,649	29.625	2,169
19.250	1,179	24.500	1,661	29.750	2,182
19.375	1,190	24.625	1,673	29.875	2,195
19.500	1,201	24.750	1,685	30.000	2,208
19.625	1,212	24.875	1,697	30.125	2,221
19.750	1,223	25.000	1,709	30.250	2,233
19.875	1,234	25.125	1,721	30.375	2,246
20.000	1,245	25.250	1,733	30.500	2,259
20.125	1,256	25.375	1,745	30.625	2,272
20.250	1,267	25.500	1,757	30.750	2,285
20.375	1,278	25.625	1,769	30.875	2,298
20.500	1,290	25.750	1,782	31.000	2,311
20.625	1,301	25.875	1,794	31.125	2,324

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
31.250	2,337	36.500	2,898	41.750	3,481
31.375	2,350	36.625	2,911	41.875	3,495
31.500	2,363	36.750	2,925	42.000	3,509
31.625	2,376	36.875	2,939	42.125	3,523
31.750	2,389	37.000	2,952	42.250	3,537
31.875	2,402	37.125	2,966	42.375	3,551
32.000	2,416	37.250	2,980	42.500	3,566
32.125	2,429	37.375	2,993	42.625	3,580
32.250	2,442	37.500	3,007	42.750	3,594
32.375	2,455	37.625	3,021	42.875	3,608
32.500	2,468	37.750	3,035	43.000	3,622
32.625	2,481	37.875	3,048	43.125	3,637
32.750	2,495	38.000	3,062	43.250	3,651
32.875	2,508	38.125	3,076	43.375	3,665
33.000	2,521	38.250	3,090	43.500	3,679
33.125	2,534	38.375	3,104	43.625	3,693
33.250	2,548	38.500	3,117	43.750	3,708
33.375	2,561	38.625	3,131	43.875	3,722
33.500	2,574	38.750	3,145	44.000	3,736
33.625	2,587	38.875	3,159	44.125	3,751
33.750	2,601	39.000	3,173	44.250	3,765
33.875	2,614	39.125	3,187	44.375	3,779
34.000	2,627	39.250	3,201	44.500	3,793
34.125	2,641	39.375	3,214	44.625	3,808
34.250	2,654	39.500	3,228	44.750	3,822
34.375	2,668	39.625	3,242	44.875	3,836
34.500	2,681	39.750	3,256	45.000	3,851
34.625	2,694	39.875	3,270	45.125	3,865
34.750	2,708	40.000	3,284	45.250	3,879
34.875	2,721	40.125	3,298	45.375	3,894
35.000	2,735	40.250	3,312	45.500	3,908
35.125	2,748	40.375	3,326	45.625	3,922
35.250	2,762	40.500	3,340	45.750	3,937
35.375	2,775	40.625	3,354	45.875	3,951
35.500	2,789	40.750	3,368	46.000	3,966
35.625	2,802	40.875	3,382	46.125	3,980
35.750	2,816	41.000	3,396	46.250	3,994
35.875	2,830	41.125	3,410	46.375	4,009
36.000	2,843	41.250	3,424	46.500	4,023
36.125	2,857	41.375	3,438	46.625	4,038
36.250	2,870	41.500	3,453	46.750	4,052
36.375	2,884	41.625	3,467	46.875	4,067

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
47.000	4,081	52.250	4,693	57.500	5,312
47.125	4,095	52.375	4,708	57.625	5,326
47.250	4,110	52.500	4,722	57.750	5,341
47.375	4,124	52.625	4,737	57.875	5,356
47.500	4,139	52.750	4,752	58.000	5,371
47.625	4,153	52.875	4,766	58.125	5,385
47.750	4,168	53.000	4,781	58.250	5,400
47.875	4,182	53.125	4,796	58.375	5,415
48.000	4,197	53.250	4,810	58.500	5,430
48.125	4,211	53.375	4,825	58.625	5,445
48.250	4,226	53.500	4,840	58.750	5,459
48.375	4,240	53.625	4,855	58.875	5,474
48.500	4,255	53.750	4,869	59.000	5,489
48.625	4,269	53.875	4,884	59.125	5,504
48.750	4,284	54.000	4,899	59.250	5,518
48.875	4,298	54.125	4,913	59.375	5,533
49.000	4,313	54.250	4,928	59.500	5,548
49.125	4,328	54.375	4,943	59.625	5,563
49.250	4,342	54.500	4,958	59.750	5,578
49.375	4,357	54.625	4,972	59.875	5,592
49.500	4,371	54.750	4,987	60.000	5,607
49.625	4,386	54.875	5,002	60.125	5,622
49.750	4,400	55.000	5,016	60.250	5,637
49.875	4,415	55.125	5,031	60.375	5,651
50.000	4,430	55.250	5,046	60.500	5,666
50.125	4,444	55.375	5,061	60.625	5,681
50.250	4,459	55.500	5,075	60.750	5,696
50.375	4,473	55.625	5,090	60.875	5,711
50.500	4,488	55.750	5,105	61.000	5,725
50.625	4,503	55.875	5,120	61.125	5,740
50.750	4,517	56.000	5,134	61.250	5,755
50.875	4,532	56.125	5,149	61.375	5,770
51.000	4,546	56.250	5,164	61.500	5,784
51.125	4,561	56.375	5,179	61.625	5,799
51.250	4,576	56.500	5,193	61.750	5,814
51.375	4,590	56.625	5,208	61.875	5,829
51.500	4,605	56.750	5,223	62.000	5,843
51.625	4,620	56.875	5,238	62.125	5,858
51.750	4,634	57.000	5,253	62.250	5,873
51.875	4,649	57.125	5,267	62.375	5,888
52.000	4,664	57.250	5,282	62.500	5,903
52.125	4,678	57.375	5,297	62.625	5,917

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
62.750	5,932	68.000	6,549	73.250	7,159
62.875	5,947	68.125	6,564	73.375	7,173
63.000	5,962	68.250	6,579	73.500	7,188
63.125	5,976	68.375	6,593	73.625	7,202
63.250	5,991	68.500	6,608	73.750	7,217
63.375	6,006	68.625	6,623	73.875	7,231
63.500	6,021	68.750	6,637	74.000	7,245
63.625	6,035	68.875	6,652	74.125	7,260
63.750	6,050	69.000	6,666	74.250	7,274
63.875	6,065	69.125	6,681	74.375	7,288
64.000	6,079	69.250	6,696	74.500	7,303
64.125	6,094	69.375	6,710	74.625	7,317
64.250	6,109	69.500	6,725	74.750	7,331
64.375	6,124	69.625	6,739	74.875	7,345
64.500	6,138	69.750	6,754	75.000	7,360
64.625	6,153	69.875	6,768	75.125	7,374
64.750	6,168	70.000	6,783	75.250	7,388
64.875	6,183	70.125	6,797	75.375	7,402
65.000	6,197	70.250	6,812	75.500	7,417
65.125	6,212	70.375	6,827	75.625	7,431
65.250	6,227	70.500	6,841	75.750	7,445
65.375	6,241	70.625	6,856	75.875	7,459
65.500	6,256	70.750	6,870	76.000	7,474
65.625	6,271	70.875	6,885	76.125	7,488
65.750	6,286	71.000	6,899	76.250	7,502
65.875	6,300	71.125	6,914	76.375	7,516
66.000	6,315	71.250	6,928	76.500	7,530
66.125	6,330	71.375	6,943	76.625	7,544
66.250	6,344	71.500	6,957	76.750	7,559
66.375	6,359	71.625	6,972	76.875	7,573
66.500	6,374	71.750	6,986	77.000	7,587
66.625	6,388	71.875	7,000	77.125	7,601
66.750	6,403	72.000	7,015	77.250	7,615
66.875	6,418	72.125	7,029	77.375	7,629
67.000	6,432	72.250	7,044	77.500	7,643
67.125	6,447	72.375	7,058	77.625	7,657
67.250	6,462	72.500	7,073	77.750	7,672
67.375	6,476	72.625	7,087	77.875	7,686
67.500	6,491	72.750	7,102	78.000	7,700
67.625	6,506	72.875	7,116	78.125	7,714
67.750	6,520	73.000	7,130	78.250	7,728
67.875	6,535	73.125	7,145	78.375	7,742

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
78.500	7,756	83.750	8,334	89.000	8,888
78.625	7,770	83.875	8,348	89.125	8,901
78.750	7,784	84.000	8,361	89.250	8,914
78.875	7,798	84.125	8,375	89.375	8,927
79.000	7,812	84.250	8,388	89.500	8,939
79.125	7,826	84.375	8,402	89.625	8,952
79.250	7,840	84.500	8,415	89.750	8,965
79.375	7,854	84.625	8,428	89.875	8,978
79.500	7,868	84.750	8,442	90.000	8,990
79.625	7,881	84.875	8,455	90.125	9,003
79.750	7,895	85.000	8,469	90.250	9,016
79.875	7,909	85.125	8,482	90.375	9,028
80.000	7,923	85.250	8,495	90.500	9,041
80.125	7,937	85.375	8,509	90.625	9,054
80.250	7,951	85.500	8,522	90.750	9,066
80.375	7,965	85.625	8,535	90.875	9,079
80.500	7,979	85.750	8,548	91.000	9,092
80.625	7,992	85.875	8,562	91.125	9,104
80.750	8,006	86.000	8,575	91.250	9,117
80.875	8,020	86.125	8,588	91.375	9,129
81.000	8,034	86.250	8,601	91.500	9,142
81.125	8,048	86.375	8,615	91.625	9,154
81.250	8,061	86.500	8,628	91.750	9,167
81.375	8,075	86.625	8,641	91.875	9,179
81.500	8,089	86.750	8,654	92.000	9,191
81.625	8,103	86.875	8,667	92.125	9,204
81.750	8,116	87.000	8,680	92.250	9,216
81.875	8,130	87.125	8,694	92.375	9,228
82.000	8,144	87.250	8,707	92.500	9,241
82.125	8,157	87.375	8,720	92.625	9,253
82.250	8,171	87.500	8,733	92.750	9,265
82.375	8,185	87.625	8,746	92.875	9,278
82.500	8,198	87.750	8,759	93.000	9,290
82.625	8,212	87.875	8,772	93.125	9,302
82.750	8,226	88.000	8,785	93.250	9,314
82.875	8,239	88.125	8,798	93.375	9,327
83.000	8,253	88.250	8,811	93.500	9,339
83.125	8,266	88.375	8,824	93.625	9,351
83.250	8,280	88.500	8,837	93.750	9,363
83.375	8,294	88.625	8,850	93.875	9,375
83.500	8,307	88.750	8,862	94.000	9,387
83.625	8,321	88.875	8,875	94.125	9,399

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
94.250	9,411	99.500	9,895	104.750	10,329
94.375	9,423	99.625	9,906	104.875	10,339
94.500	9,435	99.750	9,917	105.000	10,349
94.625	9,447	99.875	9,928	105.125	10,358
94.750	9,459	100.000	9,939	105.250	10,368
94.875	9,471	100.125	9,950	105.375	10,377
95.000	9,483	100.250	9,960	105.500	10,387
95.125	9,495	100.375	9,971	105.625	10,396
95.250	9,507	100.500	9,982	105.750	10,405
95.375	9,518	100.625	9,993	105.875	10,415
95.500	9,530	100.750	10,003	106.000	10,424
95.625	9,542	100.875	10,014	106.125	10,433
95.750	9,554	101.000	10,025	106.250	10,443
95.875	9,566	101.125	10,035	106.375	10,452
96.000	9,577	101.250	10,046	106.500	10,461
96.125	9,589	101.375	10,056	106.625	10,470
96.250	9,601	101.500	10,067	106.750	10,479
96.375	9,612	101.625	10,078	106.875	10,488
96.500	9,624	101.750	10,088	107.000	10,497
96.625	9,635	101.875	10,098	107.125	10,506
96.750	9,647	102.000	10,109	107.250	10,515
96.875	9,659	102.125	10,119	107.375	10,524
97.000	9,670	102.250	10,130	107.500	10,533
97.125	9,682	102.375	10,140	107.625	10,541
97.250	9,693	102.500	10,150	107.750	10,550
97.375	9,705	102.625	10,160	107.875	10,559
97.500	9,716	102.750	10,171	108.000	10,567
97.625	9,727	102.875	10,181	108.125	10,576
97.750	9,739	103.000	10,191	108.250	10,585
97.875	9,750	103.125	10,201	108.375	10,593
98.000	9,761	103.250	10,211	108.500	10,602
98.125	9,773	103.375	10,221	108.625	10,610
98.250	9,784	103.500	10,231	108.750	10,618
98.375	9,795	103.625	10,241	108.875	10,627
98.500	9,806	103.750	10,251	109.000	10,635
98.625	9,818	103.875	10,261	109.125	10,643
98.750	9,829	104.000	10,271	109.250	10,652
98.875	9,840	104.125	10,281	109.375	10,660
99.000	9,851	104.250	10,291	109.500	10,668
99.125	9,862	104.375	10,300	109.625	10,676
99.250	9,873	104.500	10,310	109.750	10,684
99.375	9,884	104.625	10,320	109.875	10,692

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)
110.000	10,700	115.250	10,982		
110.125	10,708	115.375	10,987		
110.250	10,716	115.500	10,992		
110.375	10,723	115.625	10,997		
110.500	10,731	115.750	11,002		
110.625	10,739	115.875	11,007		
110.750	10,746	116.000	11,012		
110.875	10,754	116.125	11,017		
111.000	10,761	116.250	11,022		
111.125	10,769	116.375	11,026		
111.250	10,776	116.500	11,031		
111.375	10,784	116.625	11,035		
111.500	10,791	116.750	11,039		
111.625	10,798	116.875	11,043		
111.750	10,805	117.000	11,048		
111.875	10,813	117.125	11,052		
112.000	10,820	117.250	11,055		
112.125	10,827	117.375	11,059		
112.250	10,834	117.500	11,063		
112.375	10,841	117.625	11,066		
112.500	10,847	117.750	11,070		
112.625	10,854	117.875	11,073		
112.750	10,861	118.000	11,076		
112.875	10,868	118.125	11,079		
113.000	10,874	118.250	11,082		
113.125	10,881	118.375	11,084		
113.250	10,887	118.500	11,087		
113.375	10,894	118.625	11,089		
113.500	10,900	118.750	11,091		
113.625	10,906	118.875	11,093		
113.750	10,913	119.000	11,094		
113.875	10,919	119.125	11,095		
114.000	10,925	119.250	11,096		
114.125	10,931				
114.250	10,937				
114.375	10,943				
114.500	10,948				
114.625	10,954				
114.750	10,960				
114.875	10,965				
115.000	10,971				
115.125	10,976				

WATCO TANKS INC

Customer: STANDARD UNDERGROUND GAUGE CHART WITH STRIKER PLATE
Tank Description: 11,000 GALLON
Serial Number: 120" x 19'-1"

Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)	Depth (inches)	Capacity (gallons)

Attachment D

Pipe Manufacturer Information

Dualoy® 3000/LCX Product Data

Applications

Rigid fiberglass coaxial fuel handling systems requiring Underwriters Laboratories Listing for integral primary and containment piping conveying the following fuels:

- Motor Vehicle (MV)
- Aviation and Marine A&M)
- High Blend (HB)
- Bio-Diesel
- Concentrated (CT)
- Diesel Exhaust Fluid

Description

Dualoy 3000/LCX rigid fiberglass coaxial piping is a cost-effective solution for contained piping systems. LCX is used for product delivery lines in underground fuel handling systems to convey fuel from the tank to the dispensers. Dualoy 3000/LCX pipe is UL Listed for use with motor vehicle (MV), high blend (HB), concentrated (CT) and aviation and marine (A&M) fuels. Based on currently known tests, NOV Fiber Glass Systems found this product to be suitable for conveying all blends of biodiesel and ethanol type fuels and the conveyance of DEF.

The LCX pipe is manufactured as an integral unit. The primary is made of chemically inert, non-permeable, fiberglass reinforced epoxy resin which is inherently resistant to deterioration due to water and microbial attack. This layer is covered with a porous layer to provide the small volume interstitial space, which facilitates rapid leak detection. Then, the containment layer, comprised of the same material as the primary, is wound over the primary and porous layers.

The containment system is installed with custom designed clamshell containment fittings. Both the primary and containment systems are bonded for long-term, reliable performance.

- Dualoy 3000/LCX containment fittings are typically bolted in place while the adhesive cures.
- Dualoy 3000/LCX reduces installation and inspection time dramatically, retaining system integrity.
- Dualoy 3000/LCX double wall design significantly improves impact resistance over single wall pipe.
- Dualoy 3000/LCX systems provide true double wall design which permits rapid communication through the interstice.

Listings and Approvals

The rigid fiberglass piping used in Dualoy 3000/LCX is Listed in the United States with Underwriters Laboratories for nonmetallic underground piping for MV, HB, CT and A&M fuels under File No. MH9162. Dualoy 3000/LCX pipe and fittings are also Listed with Underwriters Laboratories of Canada for Petroleum Products and Oxygenated Fuels (File CMH715). Underwriters Laboratories has also approved Dualoy 3000/L and Dualoy 3000/LCX for use with MTBE fluids.

Performance

Primary operating pressures to 200 psig (13.8 bar)

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

Containment system pressures to 50 psig (3.45 bar)

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.

Composition

Primary pipe: Filament-wound fiberglass reinforced epoxy pipe with integral epoxy liner. When classified in accordance with ASTM D2310 and ASTM D2996, the pipe meets the following cell limits: RTRP 11CF1-5420.

Pipe containment: Filament-wound fiberglass reinforced epoxy pipe.

Interstitial space: Dry, graded glass beads secured in place with adhesive backed tape.

Fittings: Compression molded or filament-wound fiberglass reinforced epoxy primary fittings. Containment fittings are molded.

Adhesive: PSX™ •20 or PSX™ •34 ambient-cure, two-part epoxy for all services (including alcohols and MTBE).

Joining System

Primary:

Bell and spigot taper/taper adhesive-bonded joint

Containment:

Adhesive-bonded clamshell fittings. Parts are compression molded for exact fit and match. Material is identical to primary fittings and is UL Listed for all services, including use in MTBE fluids.

Pipe Lengths

Standard 20 ft. (6.1 m) random lengths 17 to 21 ft. (5.2 to 6.4 m)
and 30 ft. (9.1 m) random lengths 27 to 32 ft. (8.2 to 9.7 m)

Other lengths up to 42 ft. (12.8 m) available upon request.

Fittings

Primary	Adapters: bell x NPT male[1]	Flange stub ends[1]
	Adapters: bell x NPT female[2]	Isolation bushings[1]
	Adapters: spigot x NPT female[2]	Nipples[2]
	Adapters: spigot x NPT male[2]	Reducer bushings[1]
	45° elbows[1]	Repair couplings[1]
	90° elbows[1]	Sleeve couplings[2]
	End caps[1]	Tees[1]
	Flange rings[1]	Dispenser pan penetration fittings[1]
Containment	45° elbows[1]	Couplings[1]
	90° elbows[1]	Tees[1]
	Termination sleeves[1], [3]	

[1] Molded fitting
[2] Filament-wound fitting
[3] 2" (50 mm) available with or without test valve. 3" and 4" (80 and 100 mm) available only with test valve

Typical Pipe Dimensions and Weights

Pipe Size		Primary Pipe ID		Primary Pipe OD[1]		Primary Wall Thickness		Containment OD		Capacity		Weight	
in	mm	in	mm	in	mm	in	mm	in	mm	gal/ft	l/m	lb/ft	kg/m
2	50	2.21	56	2.37	60	0.080	2.03	2.59	66	0.20	0.76	0.90	1.34
3	80	3.32	84	3.50	89	0.085	2.16	3.70	94	0.45	1.70	1.30	1.93
4	100	4.33	110	4.50	114	0.087	2.21	4.70	119	0.77	2.92	1.74	2.59

[1] Typical outside diameters of 2"-4" (50 -100 mm) pipe are within API, ASTM and ANSI fiberglass and steel pipe dimensions.

Typical Primary Pipe Performance

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	1500	10.3	153	1.05
3	80	200	1.38	1000	6.9	90	0.62
4	100	175	1.21	750	5.2	39	0.27

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

Fittings Pressure Performance

Pipe Size		Primary All Fittings		Containment Clamshell Fittings	
in	mm	psig	MPa	psig	kPa
2	50	200	1.38	50[1]	345
3	80	125	0.86	50[1]	345
4	100	100	0.69	20	138

[1] With reinforcing rings

For dimensions of primary fittings, consult Dualoy 3000/L Fittings Dimensions document. Pressure ratings of fittings without UL Listing are available on request.

Dualoy 3000/LCX piping systems are designed to function at temperatures ranging from -40 to 150°F (-40 to 66°C) at service pressures between -1 and 13.8 bar. Dualoy 3000/LCX pipe conforms to ASTM D2310, D2517 and D2996.

Typical Physical Properties of Primary Pipe

Pipe Property	Units	Value	ASTM
Thermal conductivity	Btu-in/(h•ft²•°F) W/m•°C	1.7 7.6	C177
Linear thermal expansion	10^{-6} in/in/°F 10^{-6} cm/cm/°C	8.5 15.3	D696
Friction factor	Hazen-Williams	150.0	—
Absolute roughness	10^{-6} ft 10^{-6} m	15.0 4.6	—
Specific gravity	—	1.81	D792
Barcol Hardness	Impressor 934-1	65.0	D2583

Typical Mechanical Properties of Primary Pipe

Pipe Property[1]	Units	Value[1]	ASTM
Tensile strength			
Longitudinal	10^3 psi MPA	35.0 241.0	D2105
Circumferential	10^3 psi MPA	70.0 483.0	D1599
Tensile modulus			
Longitudinal	10^6 psi GPa	2.5 17.2	D2105
Circumferential	10^6 psi GPa	3.8 26.2	FGSTM
Compressive strength			
Longitudinal	10^3 psi MPa	24.5 168.9	FGSTM
Compressive modulus			
Longitudinal	10^6 psi GPa	2.6 17.8	FGSTM
Cyclic	10^3 psi MPa	8.0 55.0	D2992(A)
Poisson's Ratio[2]			
ν_{xy}	—	0.16	FGSTM
ν_{yx}	—	0.17	FGSTM

(1) Based on structural wall thickness.
(2) The first subscript denotes the direction of applied stress and the second that of measured contraction
x denotes longitudinal direction.
y denotes circumferential direction.

Bending Radius

Pipe Size		Minimum Bending Radius[1]		Maximum Deflection per 20 ft Joint	Minimum Length Required for 10° Change	
in	mm	ft	m	deg	ft	m
2	50	75	23	15	13	4
3	80	100	38	9	22	7
4	100	150	46	7.5	27	8

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

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NOV Fiber Glass Systems

FH3600 September 2012

Dualoy® 3000/LCX Secondary Containment 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 underground piping systems requiring UL or ULC Listing for MV, HB, CT and A&M fuels
- Containment piping for all of the above
- Designed for use with pressure, vacuum or hydrostatic monitoring systems

Description

Dualoy 3000/LCX systems employ a coaxial construction for the pipe wall and specially designed primary and containment fittings. The system provides a complete double-wall enclosure for all product, vent and vapor recovery lines. The "LCX" contained system has been designed for providing a compact profile and easy, fast and reliable installation. "LCX" can be installed in either parallel or series patterns, taking advantage, where possible, of the reduced cost and number of buried fittings afforded by the series pattern. See details below.

Features of Dualoy 3000/LCX 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/LCX is Listed in the United States with Underwriters Laboratories for nonmetallic underground piping for motor vehicle (MV), high blend (HB), concentrated (CT) and aviation and marine (A&M) under File MH9162. Dualoy 3000/LCX pipe and fittings are also Listed with Underwriters' Laboratories of Canada (File CMH715)

Performance

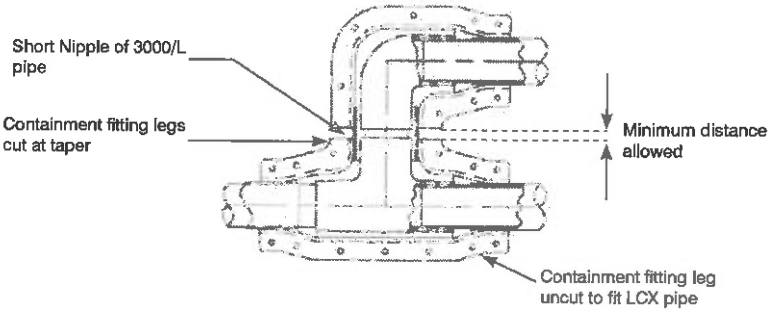
Containment pressure rated to 50 psig

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.

Piping System Features

Low Profile Crossovers - Dualoy 3000/LCX clamshell fittings are specifically designed to allow the minimum distance between primary fittings to be maintained when crossovers or offsets are needed. The center portion of the fitting is designed to fit the next-size-larger single wall pipe size. When distance between primary fittings is critical, simply cut off the corresponding tapered legs of the clamshell fittings and connect them with single wall pipe. (Reference dimension E on part drawings.) The distance between center lines shown in the drawing below is exactly the same as it would be for a single-wall system.



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

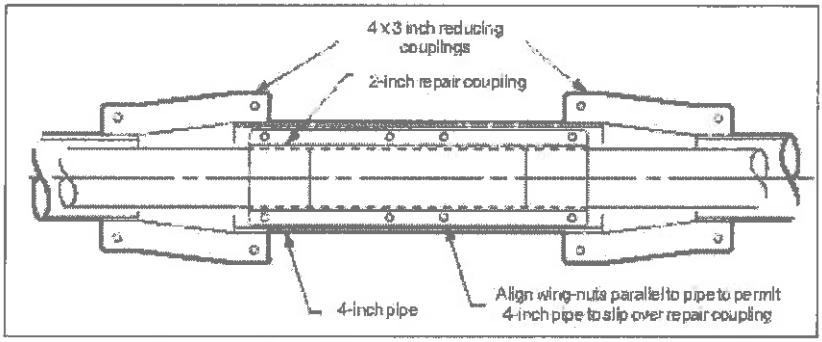
Precision pipe exterior eliminates scarfing — Dualoy pipe is manufactured in a proprietary continuous winding process that provides an extremely precise, consistent outside diameter. Light sanding of the pipe end to remove the surface gloss and obtain a suitable bonding surface is the only end prep required, 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. Dualoy3000/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.

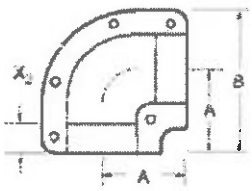


Containment Pipe and Fittings Dimensions

Pipe

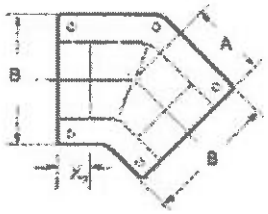
Nominal Pipe Size		A	B	C	X_2	No. of Bolt Holes	Wt.
in	mm	in	in	in	in		lb
3	80	3.50	3.32	—	—	—	0.72
4	100	4.50	4.33	—	—	—	1.00
6	150	6.63	6.39	—	—	—	2.10

90° Elbows



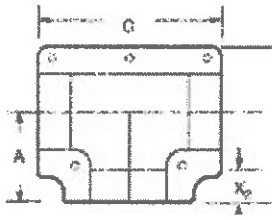
3	80	4.28	7.28	—	1.50	5	1.1
4	100	4.77	8.25	—	1.50	5	1.3
6	150	5.62	10.53	—	2.00	8	1.5

45° Elbows



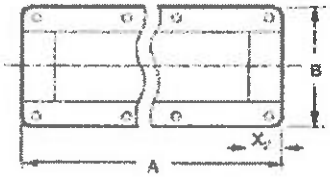
3	80	3.50	6.00	—	1.50	5	0.8
4	100	3.75	7.00	—	1.50	5	1.2
6	150	6.32	9.75	—	2.00	8	1.5

Tees



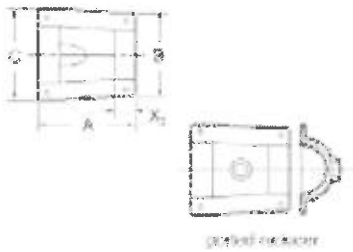
Nominal Pipe Size		A	B	C	X_2	No. of Bolt Holes	Wt.
in	mm	in	in	in	in		lb
3	80	4.28	7.24	8.56	1.50	5	1.2
4	100	4.78	8.25	9.58	1.50	5	1.6
6	150	5.72	10.67	11.65	2.00	6	1.7

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 ¾ Inch NPT Outlet

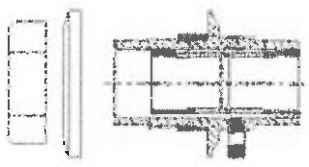


3 x 1½	80 x 40	6.25	4.48	6.10	1.50	4	0.6
3 x 1½	80 x 40	6.25	4.47	6.10	1.50	4	1.1(1)
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	0.7
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	1.1(1)
4 x 3	100 x 80	7.00	6.00	7.00	1.50	4	0.9
4 x 3	100 x 80	7.00	5.00	7.00	1.50	4	2.0(1)
6 x 4	150 x 100	7.17	7.62	9.74	2.00	6	1.0

(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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NOV Fiber Glass Systems

FH3510 March 2013

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		Structual										
in	mm	in	mm	in	mm	in	mm	in	mm	gal/ft	l/m	lb/ft	kg/m	deg	ft	m	lb•in²/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	13	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 typical 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[3]			Method
Tensile Strength			
Longitudinal	35,000 psi	241.3 MPa	ASTM D2105
Circumferential	70,000 psi	482.7 MPa	ASTM D1599
Poisson's Ratio ν_{ba} [3] - ν_{ab} [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/hrft²-°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

[3] Based on structural wall thickness.

[4] ν_{ba} = The ratio of axial strain to hoop strain resulting from stress in the hoop direction.

[5] ν_{ab} = 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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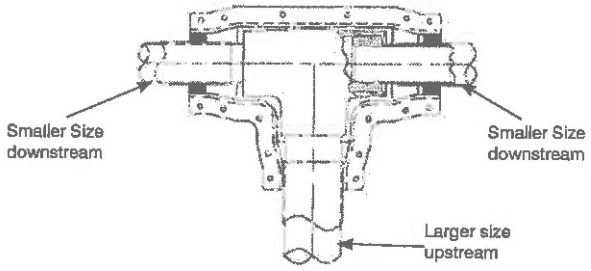
FH3500ENG August 2016

Branch Termination for Series Installation - Dualoy 3000/LCX piping can be installed in series with the pipe coming in on one side of the sump and exiting the other side. To maintain the containment continuity through the sump, the system can be configured with a termination ring on the branch of the tee or leg of an elbow. To do this, the tapered portion of the clamshell fitting leg is cut off and a termination ring is bonded between the primary fitting and the clamshell. A bushing or pipe nipple can be bonded into the primary bell as needed.

Size Reductions - For large systems where larger diameter trunk lines are used, pipe diameter reductions are easily made with the Dualoy 3000/LCX system at fittings. Single piece bushings are used in the primary fitting to reduce the primary pipe size. The containment pipe size is reduced by bonding a 2-piece reducer ring between the clamshell and the smaller pipe jacket. No cutting of clamshell fitting tapers is involved.

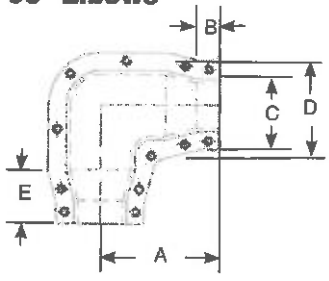
Size reduction can be done on any fitting leg or legs (as on a tee).



Continuous Monitoring - The Dualoy 3000/LCX system has exceptional performance in continuously monitored systems. Due to its small interstitial space, it is very reliable in detecting leaks in systems monitored by pressure, vacuum or hydrostatic methods. False alarms are eliminated by the lesser sensitivity to external conditions while detection capability of actual leaks is increased. Consult NOV Fiber Glass Systems Engineering for details and design of monitoring methods.

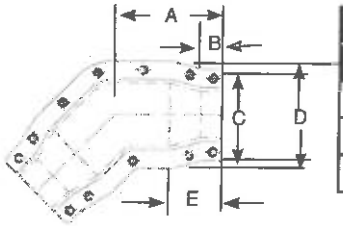
LCX Fittings Dimensions

90° Elbows



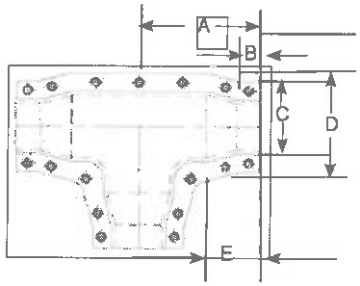
Size		A	B	C	D	E	Weight
(in)	(mm)						lbs
2	50	6.88	1.34	5.12	6.04	3.00	3.55
3	80	7.75	1.38	6.32	7.13	3.00	4.70
4	100	8.75	1.35	7.23	9.19	3.50	7.50

45° Elbows



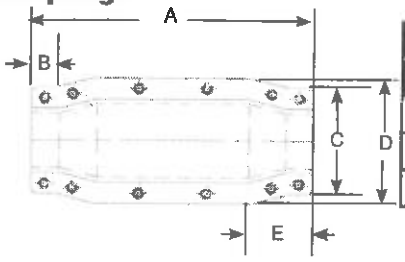
Size		A	B	C	D	E	Weight
(in)	(mm)						lbs.
2	50	6.25	1.34	5.12	6.04	3.00	3.30
3	80	6.75	1.38	6.32	7.13	3.00	4.15
4	100	7.50	1.35	7.23	9.19	3.50	6.50

Tees



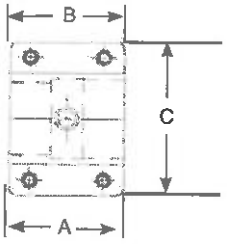
Size		A	B	C	D	E	Weight
(in)	(mm)						lbs.
2	50	6.88	1.34	5.12	6.04	3.00	4.30
3	80	7.75	1.38	6.32	7.13	3.00	6.00
4	100	8.75	1.35	7.23	9.19	3.50	9.95

Containment-Couplings



Size		A	B	C	D	E	Weight
(in)	(mm)						lbs.
2	50	13.50	1.34	5.12	6.04	3.00	3.12
3	80	12.81	1.38	6.32	7.13	3.00	2.95
4	100	12.25	1.38	7.23	9.19	3.50	3.44

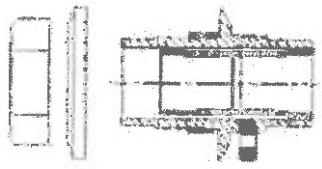
Termination



Size		A	B	C	Weight
(in)	(mm)				lbs.
2	50	3.75	1.34	5.12	1.00
3	80	3.75	1.38	6.32	1.35
4	100	3.75	1.35	7.23	1.45

Sump Penetration Fittings

Sump penetration fittings (SPF) can be used on straight sumps. Dualoy 3000/LCX pipe can pass through or be terminated at the SPF. Ends are closed by bonding half-sections of 2-inch coupling clamshells between the SPF and the pipe jacket. Shrader valves can be supplied for testing or monitoring. SPF is not open to mid-wall of double wall sump, as provided. Field drilling of SPF body near flange can be done to open interstice between SPF and pipe to sump interstice.



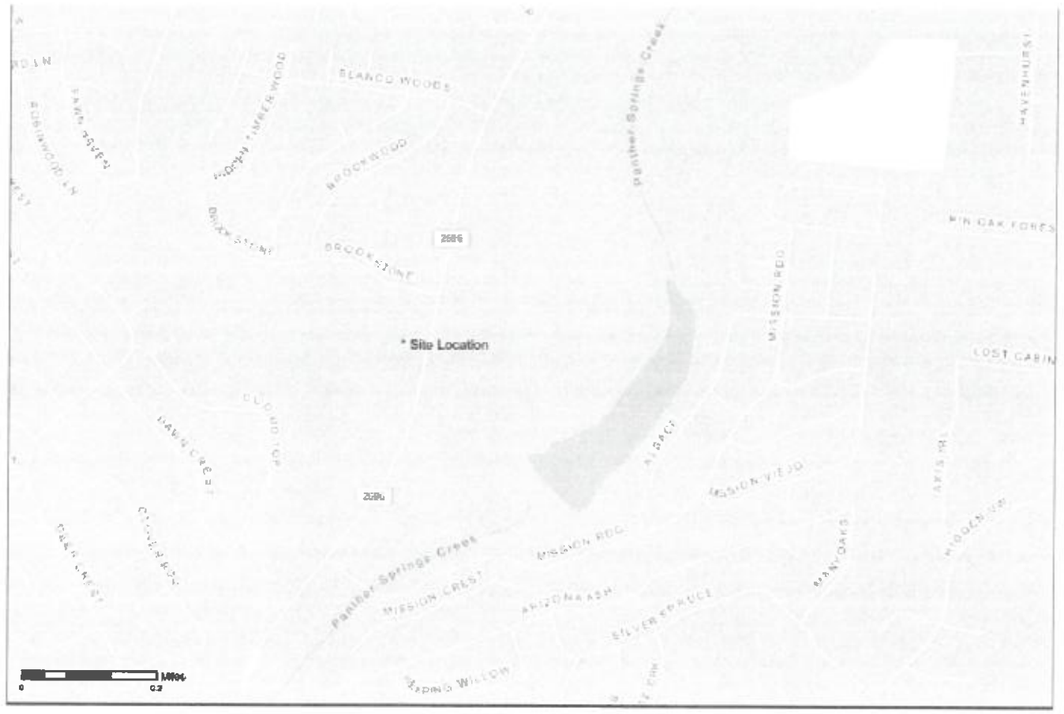
Attachment F

TERTIARY CONTAINMENT METHOD

The UST system will consist of one 20,175 gallon permatank triple wall tank. The associated piping will be triple wall consisting of Dualoy 3000/LCX coaxial piping for the primary and secondary containment and Dualoy 3000/L piping for the tertiary containment.

Attachment H

- **Drawings**
- **Specifications**



SITE LOCATION MAP

UNDERGROUND STORAGE TANK SYSTEM
FOR

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD.
SAN ANTONIO, TX 78232
TCEQ FAC. NO. 65801
TCEQ RN101816684
TCEQ CN602585390
EA FACILITY NO. 100-022
EA ENTITY NO. E103-332

LIST OF DRAWINGS

STATE OF TEXAS
DAVID ASVESTAS
79924
LICENSED
PROFESSIONAL ENGINEER
6/12/23

BY:

BANESTER ENGINEERING CONSULTANTS, LTD.
28070 SMITHSON VALLEY RD., SAN ANTONIO, TX 78261
PHONE (210) 771-8154
TX FIRM NO. F-9126

JUNE 12, 2023

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 5/30/23
SCALE: N.T.S.	TX FIRM NO. F-9126
CAD FILE NAME: cover	PROJECT NO.: 23-1823

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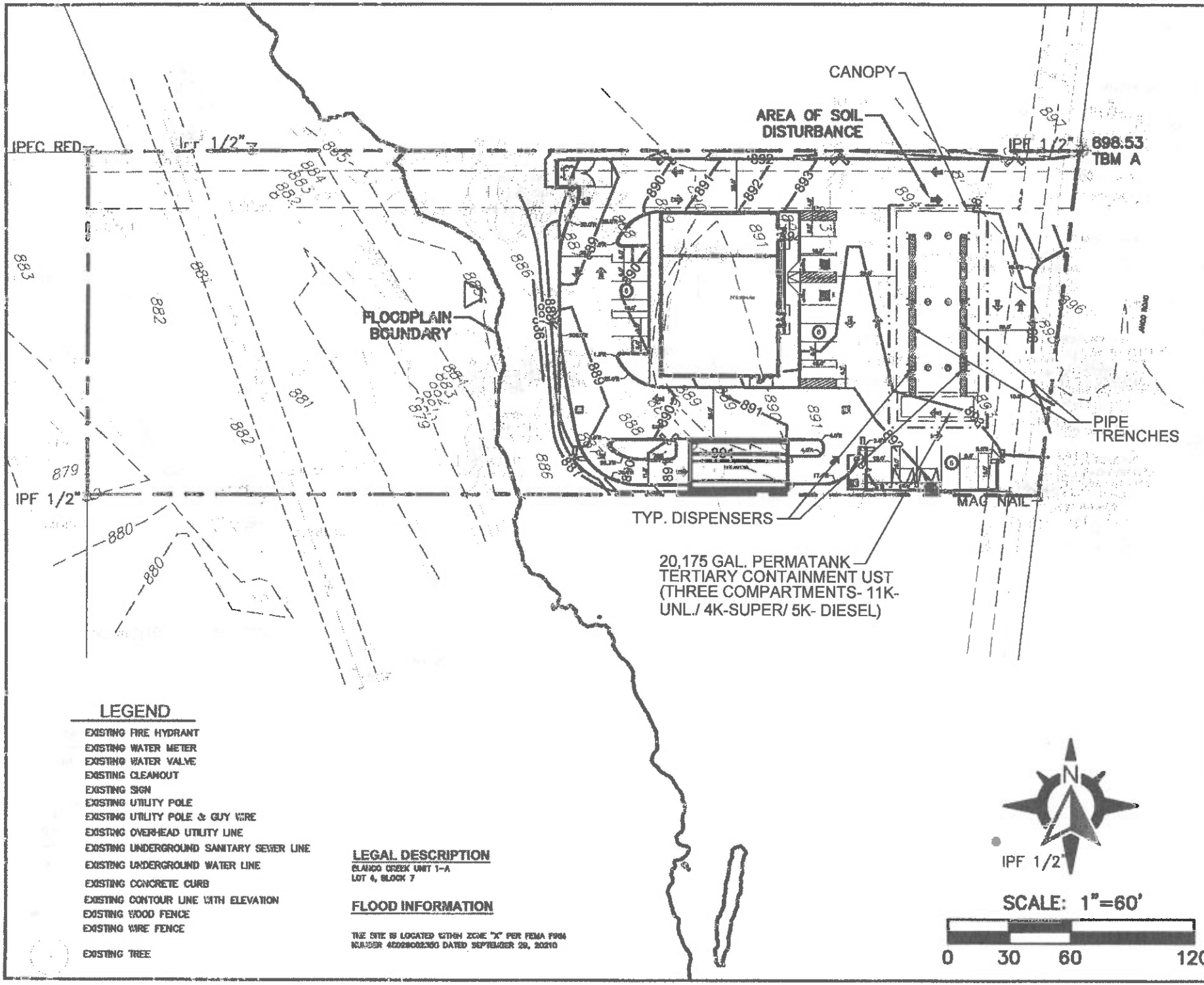
FIGURE 1
BLANCO EXPRESS SHELL STATION UST SYSTEM

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX 78232



LEGEND

- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE & GUY WIRE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING UNDERGROUND SANITARY SEWER LINE
- EXISTING UNDERGROUND WATER LINE
- EXISTING CONCRETE CURB
- EXISTING CONTOUR LINE WITH ELEVATION
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING TREE

LEGAL DESCRIPTION

BLANCO CREEK UNIT 1-A
LOT 4, BLOCK 7

FLOOD INFORMATION

THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA FIRM NUMBER 48029C0025G DATED SEPTEMBER 29, 20210

Balanced Site Design, LLC
12950 Country Parkway
Suite 150
San Antonio, TX 78216
210.530.1312

balanced SITE DESIGN

A TEXAS REGISTERED ENGINEERING FIRM (REGISTRATION No. F-20752)

BLANCO SHELL STATION
16525 Blanco Rd
SAN ANTONIO, TEXAS

SITE PLAN

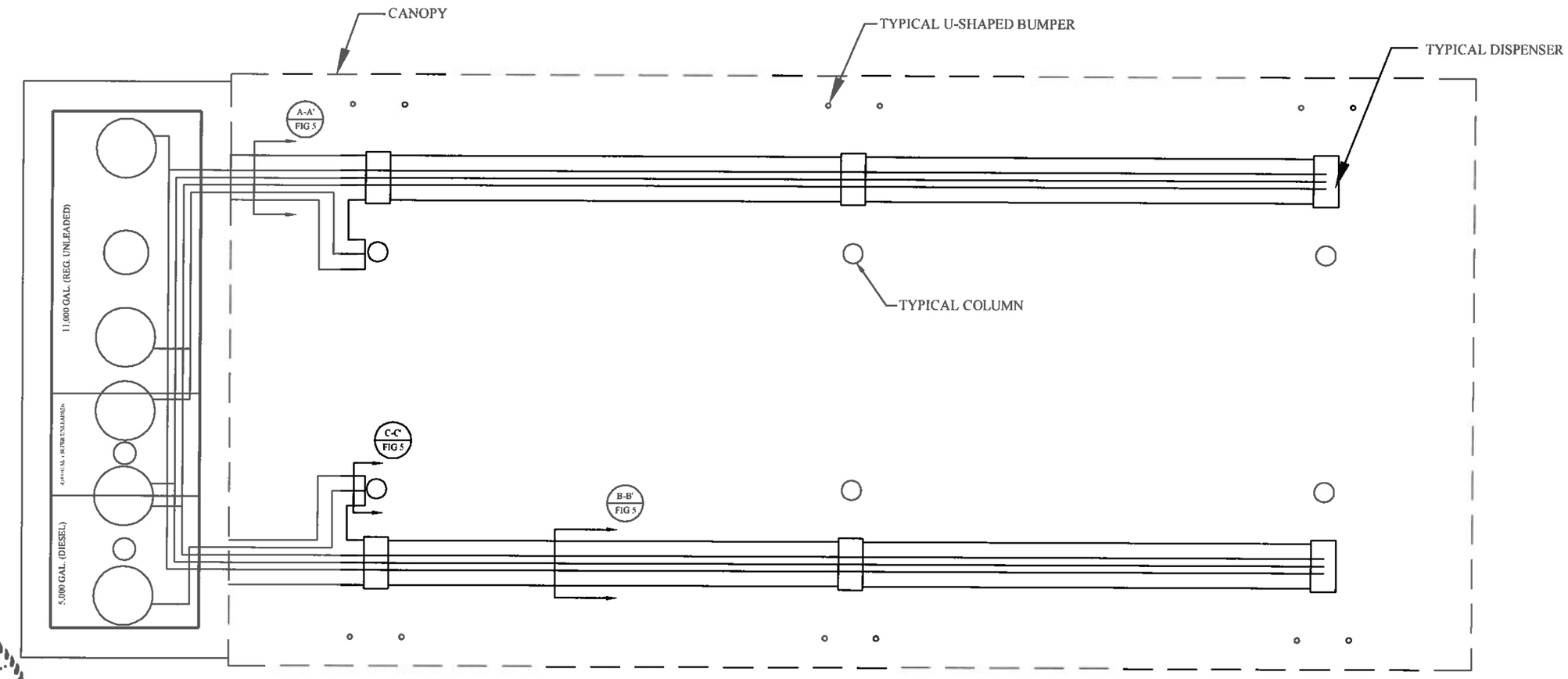
FIGURE 2

DATE: 06/01/2023

SHEET: 1

1. THE UST SYSTEM SHALL COMPLY WITH ALL TECHNICAL REQUIREMENTS OF TCEQ CHAPTER 334 SUBCHAPTER C, TECHNICAL STANDARDS 334.41 THROUGH 334.56. THESE TECHNICAL REQUIREMENTS TAKE PRECEDENCE OVER MANUFACTURERS SPECIFICATIONS AND INSTRUCTIONS AND NATIONALLY RECOGNIZED ASSOCIATIONS OR INDEPENDENT TESTING LABORATORY.
2. THE UST CONTRACTOR SHALL INSTALL THE UST SYSTEM IN ACCORDANCE WITH THE TCEQ TECHNICAL STANDARDS AND MANUFACTURERS SPECIFICATIONS/INSTRUCTIONS.
3. THE UST SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE PROVISIONS OF ONE OF THE FOLLOWING STANDARDS: PEI PUBLICATION RP-100, API PUBLICATION 1615, NFPA STANDARD 30, OR ANY OTHER CODE OR STANDARD OF PRACTICE DEVELOPED BY A NATIONALLY RECOGNIZED ASSOCIATION OR INDEPENDENT TESTING LABORATORY THAT HAS BEEN REVIEWED AND DETERMINED BY THE AGENCY TO BE PROTECTIVE OF HUMAN HEALTH AND SAFETY.
4. THE DEPTH OF THE TANK EXCAVATION WILL BE SUFFICIENT TO ACCOMMODATE PIPING FALL REQUIREMENTS,TANK DIAMETER, BEDDING, AND A MINIMUM COVER OF THREE FEET.
5. THE TANK BEDDING THICKNESS WILL BE 12 INCHES AND CONSIST OF CRUSHED ROCK FOR COMPLIANCE WITH THE MANUFACTURERS SPECIFICATIONS.
6. CRUSHED ROCK WILL BE UTILIZED AS THE BACKFILL MATERIAL.
7. OVERFILL PREVENTION VALVE POSITIONED AT 95% CAPACITY. OVERFILL AUDIBLE AND VISUAL ALARM POSITIONED AT 90 % CAPACITY.
8. CONTRACTOR SHALL BE CERTIFIED BY THE MANUFACTURER FOR INSTALLATION OF THEIR SPECIFIC PRODUCT.

N



STATE OF TEXAS
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79924
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6/12/23

4 2 0 8
Scale 1" = 8'

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 6/3/23
SCALE: 1"=8'	TX FIRM NO. F-9126
CAD FILE NAME: FIG3	PROJECT NO.: 23-1823

BANESTER ENGINEERING

FIGURE 3

UST SYSTEM LAYOUT

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX 78232

NOTES:

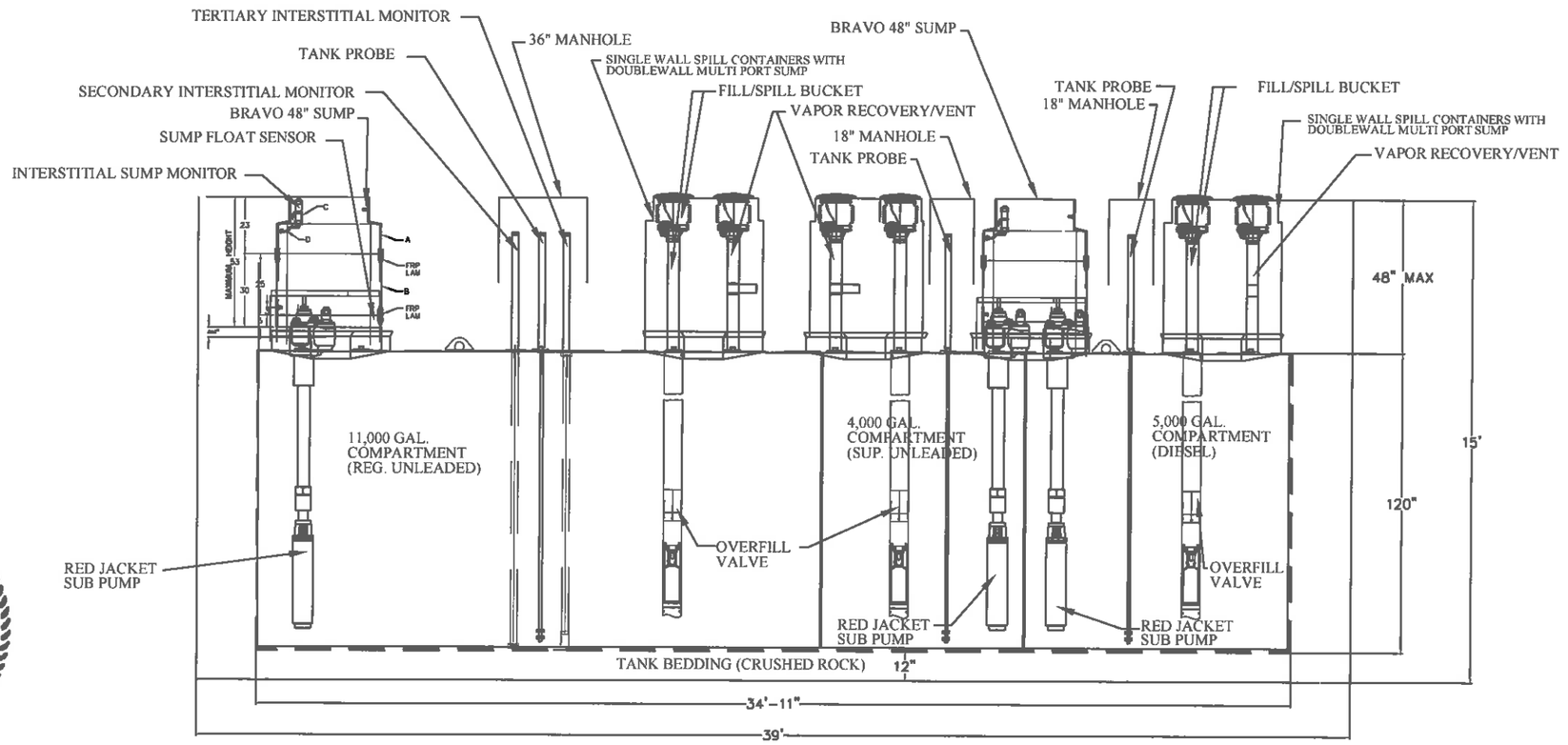
1. THE UST SYSTEM SHALL COMPLY WITH ALL TECHNICAL REQUIREMENTS OF TCEQ CHAPTER 334 SUBCHAPTER C, TECHNICAL STANDARDS 334.41 THROUGH 334.56. THESE TECHNICAL REQUIREMENTS TAKE PRECEDENCE OVER MANUFACTURERS SPECIFICATIONS AND INSTRUCTIONS AND NATIONALLY RECOGNIZED ASSOCIATIONS OR INDEPENDENT TESTING LABORATORY.
2. THE UST CONTRACTOR SHALL INSTALL THE UST SYSTEM IN ACCORDANCE WITH THE TCEQ TECHNICAL STANDARDS AND MANUFACTURERS SPECIFICATIONS/INSTRUCTIONS.
3. THE UST SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE PROVISIONS OF ONE OF THE FOLLOWING STANDARDS: PEI PUBLICATION RP-100, API PUBLICATION 1615, NFPA STANDARD 30, OR ANY OTHER CODE OR STANDARD OF PRACTICE DEVELOPED BY A NATIONALLY RECOGNIZED ASSOCIATION OR INDEPENDENT TESTING LABORATORY THAT HAS BEEN REVIEWED AND DETERMINED BY THE AGENCY TO BE PROTECTIVE OF HUMAN HEALTH AND SAFETY.
4. THE DEPTH OF THE TANK EXCAVATION WILL BE SUFFICIENT TO ACCOMMODATE PIPING FALL REQUIREMENTS,TANK DIAMETER, BEDDING, AND A MINIMUM COVER OF THREE FEET.
5. THE TANK BEDDING THICKNESS WILL BE 12 INCHES AND CONSIST OF CRUSHED ROCK FOR COMPLIANCE WITH THE MANUFACTURERS SPECIFICATIONS.
6. CRUSHED ROCK WILL BE UTILIZED AS THE BACKFILL MATERIAL.
7. OVERFILL PREVENTION VALVE POSITIONED AT 95% CAPACITY. OVERFILL AUDIBLE AND VISUAL ALARM POSITIONED AT 90 % CAPACITY.
8. CONTRACTOR SHALL BE CERTIFIED BY THE MANUFACTURER FOR INSTALLATION OF THEIR SPECIFIC PRODUCT.

TANK OPENING DESCRIPTIONS

QTY	DESCRIPTION
13	4"NPT THREADED FITTINGS
1	2"NPT SECONDARY MONITOR PIPE OPENING
1	2"NPT TERTIARY MONITOR PIPE OPENING
2	LIFTING LUGS

BRAVO SUMP DETAILS

NO.	QTY.	PART DESCRIPTION:
A	1	DOUBLE WALL FRP SUMP TOP
B	1	DOUBLE WALL FRP BASE
C	1	MANOMETER ASSEMBLY
D	1	TUBING ASSEMBLY
E	5	INTERSTITIAL FLUID
F	2	GUAGE ASSEMBLY



STATE OF TEXAS
DAVID ASVESTAS
79924
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6/12/23

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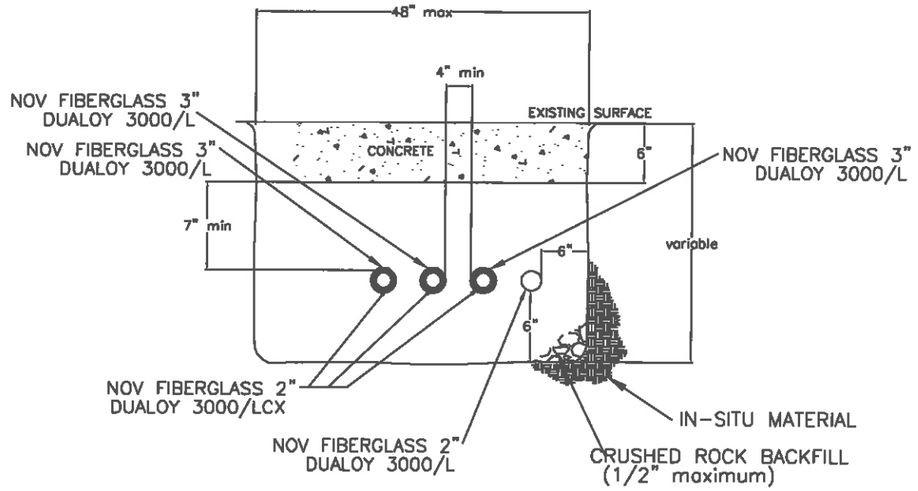
DRAWN BY: DA	DRAWING DATE: 6/3/23
SCALE: N.T.S.	TX FIRM NO. F-9126
CAD FILE NAME: FIG4	PROJECT NO.: 23-1823

BANESTER ENGINEERING

FIGURE 4

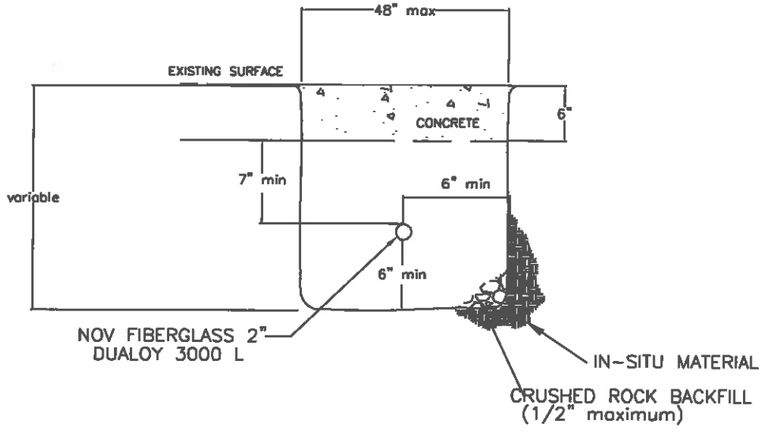
UST SYSTEM PROFILE VIEW

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX 78232



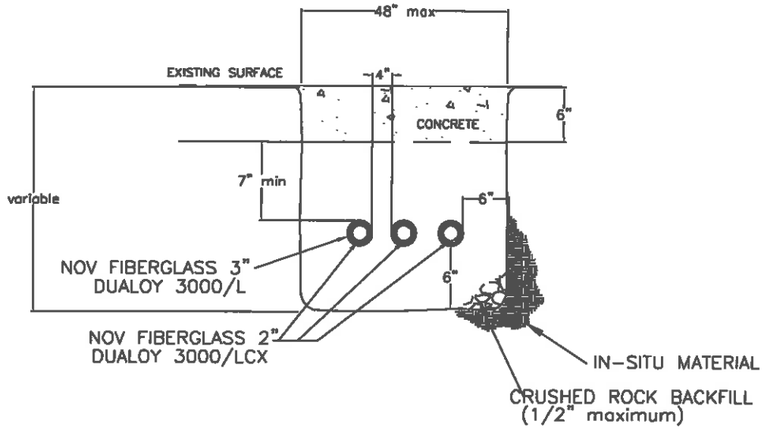
TYPICAL VENT PIPE CROSS-SECTION A-A'

NTS



TYPICAL PIPE CROSS-SECTION C-C'

NTS



TYPICAL PIPE CROSS-SECTION B-B'

NTS

EQUIPMENT SCHEDULE

GILBARCO VEEDER-ROOT · A&A PUMP CO. · GASBOY

8747 Broadway Rd.
San Antonio, Texas 78218
210-326-1181
aapumpco.com

Site
Blanco Express
16525 Blanco Rd.
San Antonio, Texas

DISPENSERS

6	Gilbarco Encore 700 "S" N1 (3 + 1) Blenders	
	10.4" Color, HCR, DCM's, Contactless, Speakers & Hose Sets	
6	Shell Valances	
12	Flagship Signs	

POS

1	Dual Passport System (PX 60 All In One)	
	Executive Suite Module Package	
	Pin Pads w/ Stands	
	2D Scanners	
	Battery Back-up's	

Intercom

1	3M Signature Series w/ (2) Stations	

Equipment

1	Watco 20,000 Gallon Triple Wall Compartment Tank	
	Compartments 11K/4K/5K	
5	Bravo 48" Doublewall Sumps	
6	Bravo DW Dispenser Containments	
12	U-Shaped Bumpers	
36	Bravo F-Series Rigid Entry Fittings (Triple Wall)	F-32LU-TF
36	2" LCX Termination Test Boots	
13	Bravo F-Series Conduit Entry Fittings	F-17-RR-O
13	Petro Seal Adhesive	
3	Bravo F-Series 2" Entries (Vents)	
40	Bravo Epoxy Kits	EP-100
18	Dualoy 3000/LCX rigid fiberglass coaxial piping	2" x 34' pipe
6	Dualoy 3000/L	2" x 34' pipe
18	Dualoy 3000/L	3" x 34' Pipe

Secondary Fittings

11	2" 90's	
4	2" 45's	
2	2" Tee's	
25	2" Couplings	

Standard Fittings

10	2" B x F	
22	2" 90's	
8	2" 45's	
2	2" Tee's	
10	2" Couplings	
18	2" x 1.5" Reducer Bushings	

Tertiary Fittings

9	4" 90's	
4	4" 45's	
2	4" Tee	
14	4"x 6" Clam Reducer	
36	3" x 4" Rings	
7	6"x 12" Nipple	

Glue

50	Adhesive Kits, PSX 34	

Tank Fittings

18	OPW 10 Plus Double Poppet Emergency Shear	10P-0152
3	RJ 2.0 HP Complete	
3	Red Jacket IQ Control Boxes	
3	OPW Positive Flow Shut -Off Overfill Valves	7150-410C
3	OPW Extractor Tee's 4" x 4" x 2"	233-4420
2	OPW Vapor Recovery Adapters	1611AV-1620
2	OPW 1711T Vapor Caps	
2	OPW Pressurized Vent Cap (Gasoline)	623V-2203
1	OPW Non Pressure Vent	23-0033
3	Swivel Fill Adapters	
3	OPW 4" Fill Caps	
3	Tank ID Marker	
3	4" x 4" Nipples (Galv)	
3	4" x 7" Nipples (Galv)	
4	Flexing 2" Flexible Connectors	
18	Flexing 1 1/2" Flexible Connectors	
3	2" Full Port Ball Valves	
3	Sub Pump Fittings	
9	4" x 36" Tank Risers	
1	2" x 36" Tank Sensor Risers	
3	2" Pipe Tape Rolls	
3	2" Vent Riser Stacks	

LEAK DETECTION

1	Veeder-Root TLS 450 Plus w/ Printer w/ WPLLD & BIR	
3	10' Probes	
2	4" Float Kits (Gas)	
1	4" Float Kit (Diesel)	
3	Cap & Ring Kits	
3	Electronic Line Leak Detectors (DPLLD)	
12	Standard Sump Float Sensors	
1	Steel Tank Interstitial Sensors	
1	2" Sensor Adapters	
12	Sump Float Liquid Interstitial Sensors for DW Brine Sumps	

Manholes

3	Bravo 44" Light Weight Sub Pump Manholes	
3	OPW Multi-port Manholes w/ Inspection cover & Shroud Boots	
2	18" Round Manholes	
1	Bravo 36" Light Weight Manhole	
2	12" Monitor Well Manholes	
2	4" x 15' Monitor Wells /w Locking 4" Plugs	

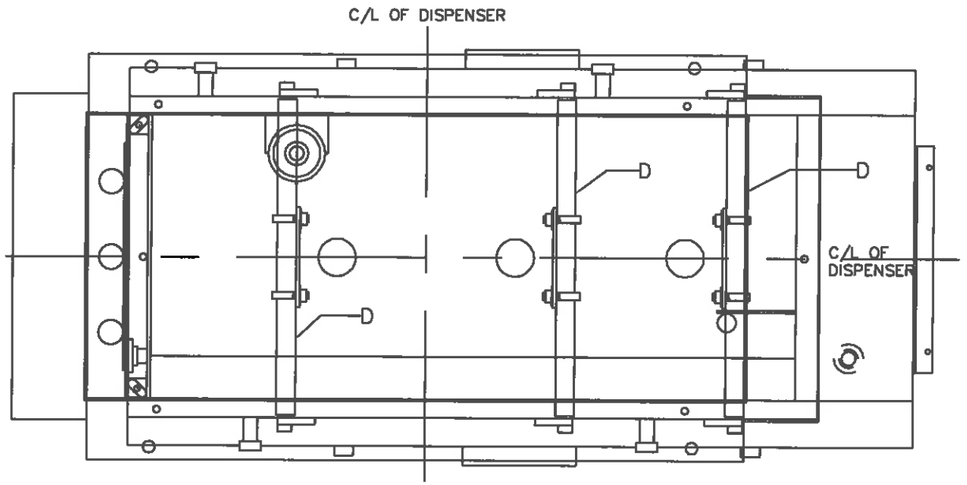
NOTES:
1. PIPING MUST BE SLOPED MINIMUM ⅛" PER FOOT BACK TOWARDS THE TANK. SUPPORT PIPE PROPERI PREVENT LOW POINTS.
2. SIX INCHES OF FILL (CRUSHED ROCK) MUST BE PLACED UNDER THE PIPE AS BEDDING MATERIAL.
3. THE MINIMUM BURIAL DEPTH IS BASED ON SOIL MODULUS OF 1000 PSI OR HIGHER.
4. ALL PIPING, SUMPS, FITTINGS, ETC. MUST BE INSTALLED IN ACCORDANCE WITH THE TCEQ CHAPTER SUBCHAPTER C TECHNICAL STANDARDS 334.41 THROUGH 334.56 AND THE MANUFACTURERS INSTALLA SPECIFICATION REQUIREMENTS.
5. CONTRACTOR SHALL OBTAIN ALL MANUFACTURER CERTIFICATIONS AS REQUIRED FOR INSTALLATION SYSTEM.

STATE OF TEXAS · DAVID ASVESTAS · 79924 · LICENSED PROFESSIONAL ENGINEER
6/2/23

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 6/3/23
SCALE: N.T.S.	TX FIRM NO. F-9126
CAD FILE NAME: FIG5	PROJECT NO.: 23-1823

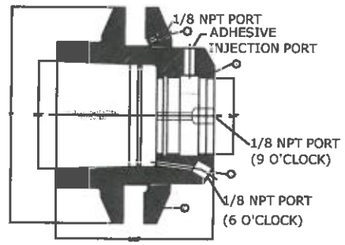
BANESTER ENGINEERING

FIGURE 5
MISCELLANEOUS DETAILS & EQUIPMENT SCHEDULE
BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX 78232



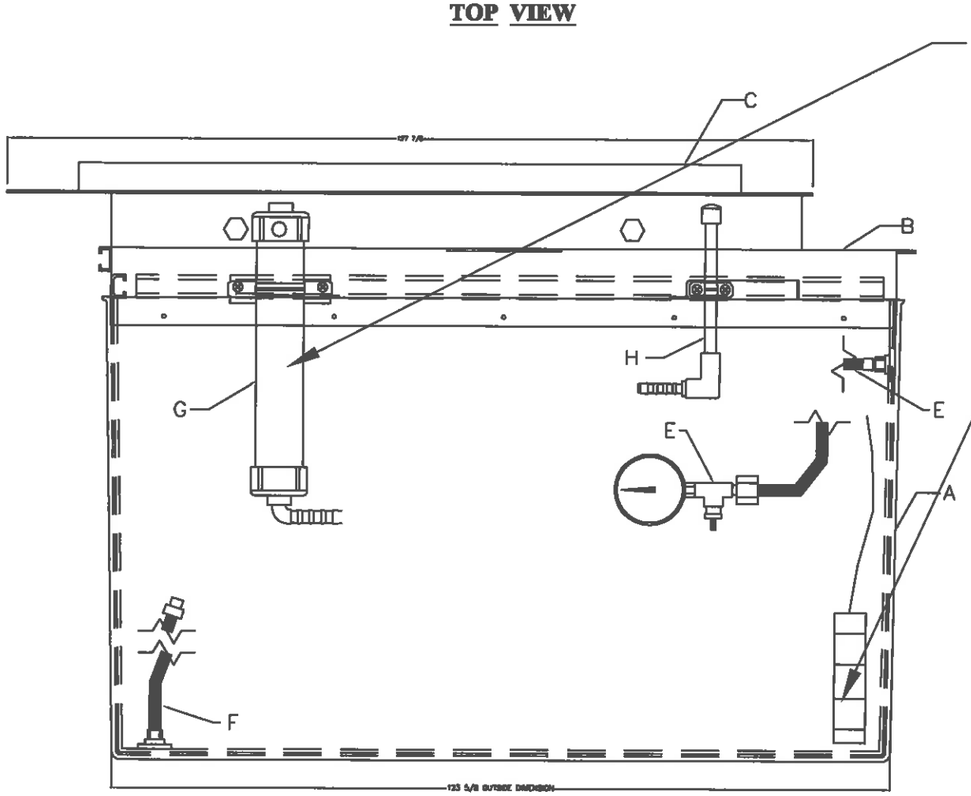
TOP VIEW

3" x 2"



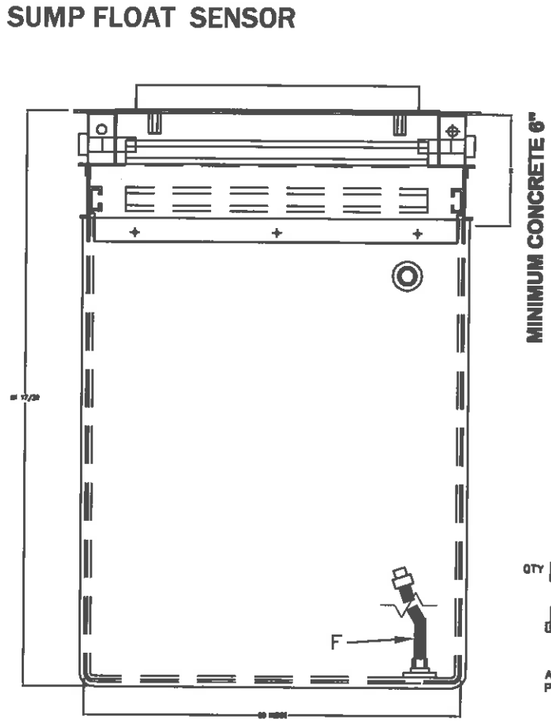
BILL OF MATERIALS		
NO.	QTY	PART DESCRIPTION
A	1	F-32-TS-T-MP FITTING BODY W/ TEST PORT
B	1	FLANGE 4-1/2" WITH TEST PORT
C	1	1/8 NPT SCHRADER ASSEMBLY
D	2	1/8 NPT BRASS PIPE PLUG

BRAVO F-SERIES RIGID ENTRY FITTING



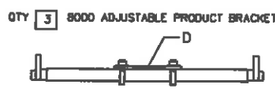
FRONT VIEW

BRAVO DISPENSER CONTAINMENT



LEFT SIDE VIEW

BILL OF MATERIALS		
NO.	QTY.	PART DESCRIPTION:
A	1	DOUBLEWALL FRP BOX 41-1/2Lx20Wx24-1/2D
B	1	B8000 MIDFRAME LARGE - EO
-	4	1/2"x1-1/4" WELDED COUPLING NUTS
C	1	FXXX UPPER FRAME CUSTOMIZED TO DISPENSER
-	4	ANCHOR BOLTS
-	1	VULKEM SEALANT
D	3	BRACKET 8000 ADJ VARIES PER DISPENSER
E	1	GUAGE ASSEMBLY (BOX)
F	1	TUBING ASSEMBLY
G	1	EXTENDED MANOMETER ASSEMBLY
H	1	ATMOSPHERIC MANOMETER ASSEMBLY
J	2	INTERSTITIAL FLUID (1 GAL.)



ADJUSTABLE VAPOR BRACKET NOT INCLUDED
PART NO: BRKT-82

STATE OF TEXAS
DAVID ASVESTAS
79924
LICENSED
PROFESSIONAL ENGINEER
6/14/23

SITE MANAGER: DA	CHECKED BY: JLA
DRAWN BY: DA	DRAWING DATE: 6/3/23
SCALE: N.T.S.	TX FIRM NO. F-9126
CAD FILE NAME: FIG6	PROJECT NO.: 23-1823

BANESTER ENGINEERING

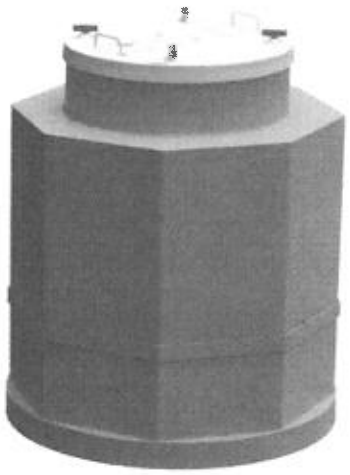
FIGURE 6

MISCELLANEOUS DETAILS

BLANCO EXPRESS SHELL STATION
16525 BLANCO RD., SAN ANTONIO, TX 78232

Doublewall Collar-Mount Tank Sumps with Lids

TANK SUMPS



Product Shown
B421-60-D-01

SIZES

- 42" or 48" diameter
- 32" or 36" reducer

**See page 2 for dimension drawing and dimension chart*

MATERIAL

- Fiberglass

SPECIFICATIONS

- Quality FRP construction
- Split configuration is height-adjustable
- Fuel compatible resin doesn't require gel coat
- Doublewall is suitable for constant monitoring – triennial testing exempt
- 30-year corrosion warranty
- UL2447 listed

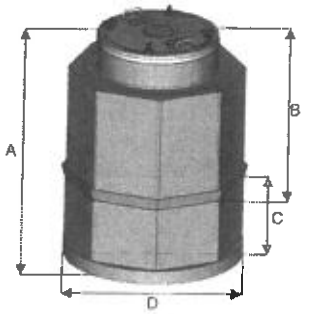
About the Doublewall Collar-Mount Tank Sumps with Lids

The octagon-shaped collar-mount doublewall tank sump is ideally configured for piping laid out in 45- and 90-degree angles. It is field height-adjustable and features a pour channel that makes for a simple PC slurry pour to join the sump base and top hat. It comes standard with a snap-lock lid with vertical O-ring seal to make it watertight with other available lid options. It is VPH compliant and can be laminated on to doublewall collars. When using Bravo doublewall collars with a pour channel, no field lamination is needed. It ships under 20" HG vacuum to ensure wall integrity.

Bravo Solution Center
Call or Text (323) 541-3851
orders@sbravo.com

UL LISTED
UL 2447

Doublewall Collar-Mount Tank Sumps with Lids - Dimensions



42" Diameter 42" Collar-mounted Doublewall VPH FRP

Sump Type	Part # with 32" SL lid	Part # with 36" SL lid	Part # with 32" Twist-Lock lid	Min/Max	A	B	C	D
Doublewall VPH 42" tall	B421-42-D-01	B421-42-D-02	B421-42-D-50	30"/ 3'6"	42"	26"	16"	42"
Doublewall VPH 48" tall	B421-48-D-01	B421-48-D-02	B421-48-D-50	36"/ 4'	48"	26"	22"	42"
Doublewall VPH 60" tall	B421-60-D-01	B421-60-D-02	B421-60-D-50	40"/ 5'	60"	38"	22"	42"
Doublewall VPH 72" tall	B421-72-D-01	B421-72-D-02	B421-72-D-50	40"/ 6'	72"	50"	22"	42"
Doublewall VPH 84" tall	B421-84-D-01	B421-84-D-02	B421-84-D-50	40"/ 7'	84"	62"	22"	42"

48" Diameter 48" Collar-mounted Doublewall VPH FRP

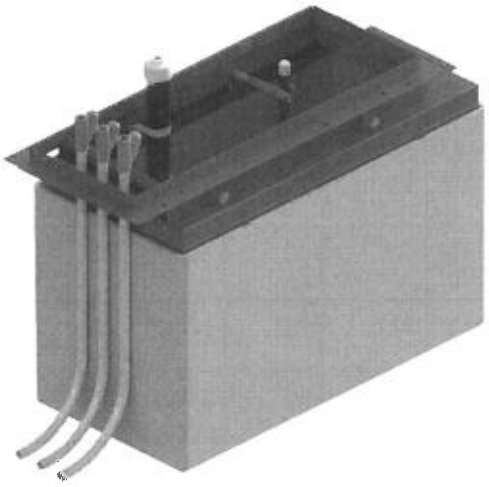
Sump Type	Part # with 32" SL lid	Part # with 36" SL lid	Part # with 32" Twist-Lock lid	Min/Max	A	B	C	D
Doublewall VPH 42" tall	B481-42-D-01	B481-42-D-02	B481-42-D-50	30"/ 3'6"	42"	26"	16"	48"
Doublewall VPH 48" tall	B481-48-D-01	B481-48-D-02	B481-48-D-50	36"/ 4'	48"	26"	22"	48"
Doublewall VPH 60" tall	B481-60-D-01	B481-60-D-02	B481-60-D-50	40" / 5'	60"	38"	22"	48"
Doublewall VPH 72" tall	B481-72-D-01	B481-72-D-02	B481-72-D-50	40"/ 6'	72"	50"	22"	48"
Doublewall VPH 84" tall	B481-84-D-01	B481-84-D-02	B481-84-D-50	40"/ 7'	84"	62"	22"	48"

48" Diameter 42" Collar-mounted Doublewall VPH FRP

Sump Type	Part # with 32" SL lid	Part # with 36" SL lid	Part # with 32" Twist-Lock lid	Min/Max	A	B	C	D
Doublewall VPH 42" tall	B487-42-D-01	B487-42-D-02	B487-42-D-50	30"/ 3'6"	42"	26"	16"	42"
Doublewall VPH 48" tall	B487-48-D-01	B487-48-D-02	B487-48-D-50	36"/ 4'	48"	26"	22"	42"
Doublewall VPH 60" tall	B487-60-D-01	B487-60-D-02	B487-60-D-50	40"/ 5'	60"	38"	22"	42"
Doublewall VPH 72" tall	B487-72-D-01	B487-72-D-02	B487-72-D-50	40"/ 6'	72"	50"	22"	42"
Doublewall VPH 84" tall	B487-84-D-01	B487-84-D-02	B487-84-D-50	40"/ 7'	84"	62"	22"	42"

VPH B8000 Series Doublewall UDC

UDC SUMPS



Product Shown
B8380-D30

SIZES

- 20" width at base

*See page 2 for dimension drawing and dimension chart

MATERIAL

- Tank-spec doublewall fiberglass
- Epoxy coated galvannealed steel
- Doublewall construction allows for constant monitoring

About the VPH B8000 Doublewall UDC

The B8000 Series Doublewall VPH UDCs are available in models for almost all existing dispensers. All metal work is galvannealed and epoxy coated for superior corrosion resistance. This series ships under a continuous 20" Hg vacuum test.

SPECIFICATIONS

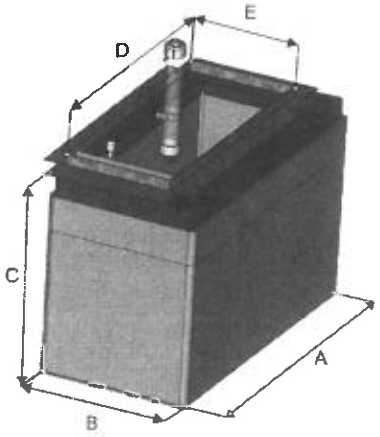
- Doublewall construction allows for constant monitoring – triennial testing exempt
- Compact design ideal for parallel/manifold piping systems and narrow islands
- Electrical offset frame eliminates the need for conduit penetrations
- Interstice can be monitored hydrostatically or with vacuum
- Interchangeable upper frame for future dispenser upgrades without breaking concrete
- 30-year corrosion warranty
- UL2447 listed

LISTED
UL 2447

Bravo Solution Center
Call or Text (323) 541-3851
orders@sbravo.com

VPH B8000 Series Doublewall UDC Dimensions

UDC SUMPS



VPH B8000 Series Doublewall

Dispenser Model	Part #	A	B	C	D	E
Gilbarco Encore 300, 500, 700	B8380-D30	41"	20"	30"	36"	15.25"
Wayne Ovation (3+0) (3+1) up to 3 inlets	B8250-D30	41"	20"	30"	35"	14.75"
Wayne Helix Wide Frame	B8256-D30	41"	20"	30"	40"	15"
Wayne Helix Narrow Frame	B8242-D30	29"	20"	30"	40.5"	15"
Wayne Ovation High-speed Diesel/Ovation HL Series	B8254-D30	41"	20"	30"	40.5"	14.75"
Wayne Ovation High-speed Diesel/Ovation HS Series	B8257-D30	29"	20"	30"	28.5"	14.75"
Wayne Reliance Select	B8210-D30	29"	20"	30"	27.25"	15"
Gasboy Atlas K or KX	B8670-D30	25.5"	20"	30"	23"	11.5"
Gasboy Twin Cabinet AX or QX	B8635-D30	25.5"	20"	30"	22.75"	12.5"
Bennett 3000 Big Fueler	B8430-D30	25.5"	20"	30"	23"	12.25"

Bracket and Kits for B8000 Two-Piece

Stabilizer Bar and Bracket Assembly		
All Dispensers with B8000 series	BK-8000	Boss-mount bracket and stabilizer bar assembly with hardware.
Bracket for Vapor valve	BK-B2	X and Y Axis Adjustable stabilizer bracket for Vapor Valve

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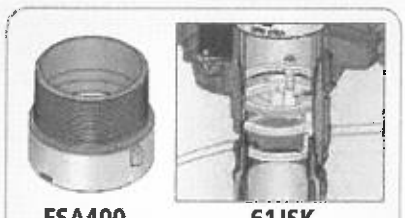
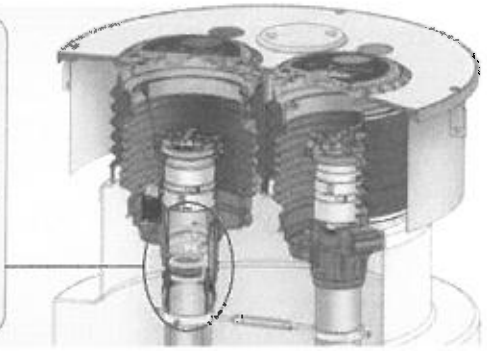
UL LISTED
UL 2447



See page 65 for ordering specifications on the FSA-400 & 61JSK



OPW 400 and 500 Series Multi-Port Spill Containment Manholes

OPW Multi-Port Spill Containment Manholes provide spill containment for underground storage tank (UST) fill pipes and vapor recovery risers in a completely integrated single manhole package. Multi-ports are installed over the top of tank sumps to preserve future access to the tank top and to facilitate containment of tank bung fittings. OPW offers a vast array of standard multi-port configurations and options, in addition to an almost unlimited ability to provide custom solutions for virtually any spill containment application.

Model Descriptions

- **OPW 411 Series** – features a flush-mounted manhole lid and raised dual dam and groove spill container rings, with P2105 Buckets using OPW 1-2105 Style Slip-On 5-gallon containers. Base is standard 1" offset from center and can be used for 12", 14", 16" or wider riser spacing. Optional 1P-2105 Hand Pump available.
- **OPW 500 Series (511 / 521) EVR Multi-Port** – features a flush-mounted manhole lid and raised dual dam and groove spill container ring, with P511-EVR Buckets using OPW 1-2100 Style Thread-On Spill Containers. All Fill Ports in these spill containers feature an enhanced 1DK-2100-EVR vapor tight drain valve. The Vapor Return Spill Container features a permanent plug in the drain port as per EVR requirements. EVR Multi-Port Thread-On Spill containers are available in Composite or Cast Iron bases with 5 gallon buckets. Drain Valve Spill Bucket & Plug Spill Bucket standard on Dual Ports, Drain Valve Spill Bucket standard on Single Port.
- **Required for EVR APPLICATIONS** – the FSA-400 Threaded Riser Face Seal Adaptor is installed on the fill pipe below the spill container to provide a true sealing for the drop tube flange on the 71SO overfill prevention valve. The 61SO and/or 71SO series valve is installed in the base of the OPW EVR spill container with the patent pending 61JSK jack screw device. This configuration allows liquid in the spill container to be drained directly into the drop tube, thereby isolating the drain valve from the tank ullage, eliminating a notorious leak point in previous systems.

Features

- **Contractor-Friendly Installation** – studded mounting ring simply bolts together inside the spill containment bucket. No need to align bolt holes in the manhole cover.
- **Raintight Service** – nitrile gaskets on the manhole and spill bucket mounting rings help prevent contamination of the sump area from surface water intrusion.
- **Highway 20 Load Rating** – the rugged diamond plate steel manhole covers, as well as the ductile iron (RT) or aluminum (SC) spill container covers meet H20 Load Rating requirements.
- **Spill Container and Manhole Positive I.D. System** – special recesses cast into spill container covers allow product I.D. tags to be attached to the lids. Matching bucket tags can be affixed to the inside of the spill container to prevent covers from getting switched.
- **Fill/Vapor Ports** – configurations are available to accommodate a single fill riser, dual ports for both a fill and vapor riser, and triple and quad ports for multiple fill and vapor risers. Ports can be supplied with or without containment buckets.
- **Port Configurations** – standard port locations match the popular riser spacings (16" or 24") and bung configurations on underground storage tanks. Custom port locations are easily accommodated. For riser spacings less than 16", old style buckets must be used.
- **CARB Certified** – 500 Series CARB EVR Approved Executive Order #VR-102
- **Manhole Cover Sizes** – standard bolt-down manhole cover diameters of 30" (76 cm), 37" (94 cm), 42" (107 cm) and 48" (122 cm) allow ample access to the sump area. Heavy-duty reinforced lid options are also available upon request.
- **Spill Container Cover Options** – standard spill container options include the patented OPW dam and groove raintight (RT) design and the watertight Sealable Cover (SC) "plumber's plug" design. The raintight cover features a finger-grip lifting facility and an integral seal. The sealable cover features a cam-operated mechanism that expands the seal against the vertical wall of the mounting ring. Both of these water-shedding covers are protected by raised mounting rings.
- **Fastener Options** – two types of fasteners are available to secure the manhole lid and monitoring port to mounting rings. Standard are 5/16"-18 hex head bolts. Optional are OPW Roto-Lock Fasteners. The OPW Roto-Lock system enables a secure, watertight connection without the need to locate threaded bolt holes on the mounting ring.
- **Powder Coated Rings & Covers** – available upon request.
- **Replacement Covers** – see Part Number Configurations at **www.opwglobal.com**.

Listings and Certifications

Look for this label for authentic OPW EVR Approved products.

CARB EVR Executive Order #VR-102
NYCFD Certified (6571Series) #5053
Florida EQ-145

OPW
a DOVER company

OPW Multi-Port Spill Containment Ordering Specifications

Product Number

6 _ _ _ **EVR** _ — _ _ _ _ _ _ _ _

(500 Series Only) Do Not Enter "EVR" for old style multiports

Bolt Down Model Number

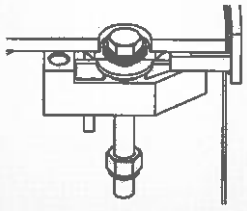
511EVR -	HDPE Bellows, Thread-On Composite Base, Bolt-Down
561EVR -	HDPE Bellows, Thread-On Cast Iron Base, Bolt-Down
411-	HDPE Bellows, Slip-On Composite Base

Roto-Lock Model Number

521EVR -	HDPE Bellows, Thread-On Composite Base, Roto-Lock
571EVR -	HDPE Bellows, Thread-On Cast Iron Base, Roto-Lock
421-	HDPE Bellows, Slip-On Composite Base with Roto-Lock Fasteners

Optional Roto-Lock Fastener System

The OPW Roto-Lock system enables a secure raintight connection without the need to locate threaded bolt holes on the mounting ring.



Fill/Vapor Port Configurations

A (Dead Center)

B

E

G (42" Minimum Cover)

L (Offset Single Port)

T

NOTE: 43 or 49 style Gauge Port must be used if a water shroud is to be used with L style

Replacement / Retrofit Manhole

RP* - (No Ring / Skirt)

*RP cover orders must be accompanied by an up-to-date OPW field survey form.

Riser Spacing

00 - Single Port (A Configurations)

16 - 16" Centers

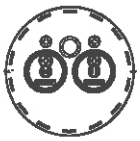
24 - 24" Centers (42" Minimum Cover)

Old Style - 14" Centers Available

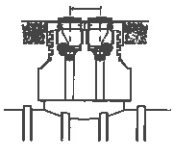
Gauge Port Location

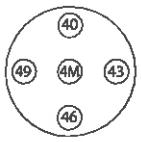
00 - No Gauge Port
40 - Port at 12 o'clock
43 - Port at 3 o'clock
46 - Port at 6 o'clock
49 - Port at 9 o'clock
4M - Port in Center
7X - Flush Mount

Manhole Cover Size*
30" (Configurations)
36 - 36" Retrofit Only
37 - 37"
39 - 39" Retrofit Only
42 - 42"
48 - 48"
* 42" is standard



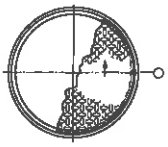
Riser Spacing

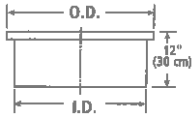




Port Location Example

NOTE: 3M Style gauge port must be used with port in the center of "G" Style





Dimensions

O.D.		I.D.		Thickness	
in.	cm	in.	cm	in.	cm
30	76	26 5/8	68	3/8	0.952
37	94	34 5/8	88	3/8	0.952
42	107	39 5/8	101	1/2	1.27
48	122	44 5/8	113	1/2	1.27

EVR Multi-Ports

Thread-On Spill Containers are available in composite or cast iron bases with either 5 or 15-gallon buckets. (1) Drain Valve Spill Bucket & (1) Plug Spill Bucket standard on Dual Ports. Drain Valve Spill Bucket standard on Single Port.

Optional Accessories

Part #	Description
6511-RB16	12" to 18" Riser Spacer
6511-RB24	20" to 26" Riser Spacer
H15144M	4" NPT Nipple, 4" Length
H12806M	4" NPT Nipple, 5" Length
VPN4X7	4" NPT Nipple, 7" Length
H15271M	4" NPT Nipple, 8" Length
H15268M	4" NPT Nipple, 10" Length
H15888M	4" NPT Nipple, 9" Length
209502	4" NPT Nipple, 14" Length
209501	4" NPT Nipple, 10" Length
TC-400	4" Torque Cap for 16" Nipples
6521-XAR37	36", 37" OR 38" Roto-Lock Adaptor Ring to convert from Bolt Down
6521-XAR42	39" OR 42" Roto-Lock Adaptor to convert from Bolt Down
6521-XAR48	48" OR 52" Roto-Lock Adaptor to convert from Bolt Down

6511-RB16 Riser Spacer

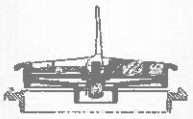
Torque Cap

4" Nipple

9393 Princeton-Glendale Road • Hamilton, Ohio USA 45011 • Phone: (800) 422-2525 • Fax: (800) 421-3297

Spill Container Cover Style**
RT - Raintight
SC - Sealable Cover
00 - No Ring or Cover

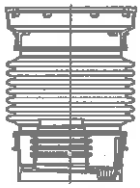
RT - Raintight



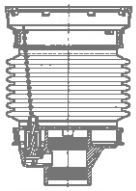
SC - Sealable Cover (Lid in open position)

** Raintight cover is standard

Spill Container Capacity***
00 - No Containment
05 - 5-Gallon
15 - 15-Gallon
*** 5-Gallon bucket is standard



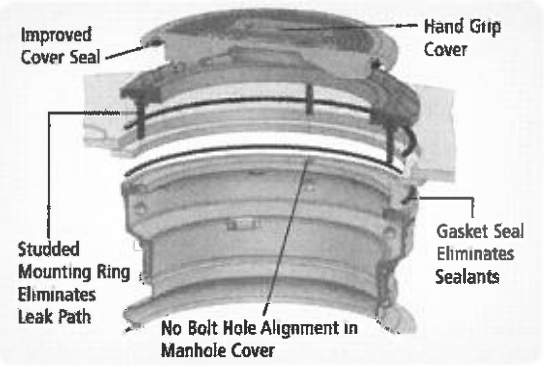
411-5-gallon (Slip-On)



511-5-gallon (Thread-On)

 # Of Ports With Containment
0
1
2
3
4

Powder Coated Manhole Covers
R - (1) Red
(1) Orange
W - (1) White
(1) Orange
Y - (1) Yellow



Current Replacement Parts

For New 500 Series EVR Multi-Ports 6511/6521, 6561/571 made post 11/2003

Part #	Description
P711-EVRDV	Replacement 5-Gallon Bucket, w/ Drain Valve
P711-EVRPL	Replacement 5-Gallon Bucket, w/Plug (Vapor)
P761C-EVRDV	Replacement 5-Gallon Bucket, C.I. Base w/Drain Valve
P761C-EVRPL	Replacement 5-Gallon Bucket, C.I.
P411-EVRPL	Replacement 5-Gallon Slip-On Bucket
P511-15-EVRDV	Replacement 15-Gallon Bucket, Comp Base, W/ Drain Valve
C05170M	Gasket, Spill Bucket & Mounting Ring
H15187M	Replacement Seal for New Rain Tight Cover

Note: New P711 & P761 EVR buckets will only work with New "EVR" Multi-Port covers. (made post 11/2003)

See page 80 for replacement rings and covers part numbers.

Old Style Replacement Parts
311/411/511/521 Series Multi-Ports
Note: 511/521 parts are for Multi-Ports made prior to Nov. 2003

	Part #	Description
ALL	1DK-2100-EVR	511/521 Series Drain Valve
	H13931M	Replacement Seal for SC Cover
	P110-37G	34"-37" Manhole Gasket
	P110-42G	42" Manhole Gasket
	P110-48G	48" Manhole Gasket
	PROTO-LOCK	(1) Roto-Lock
	P40-ROTOLID	Replacement 40 Style Gauge Port Roto-Lock Lid
	H15240M	Replacement Gasket for 40 Style Gauge Port
	C05501	Flush Mount Gauge Port Cover Only
	P571-GK3T	Gasket KitFor New Style 571 Roto Multiport
	203148	Replacement 3M Style Bolt Down Gauge Port, 4.8" diameter
	205322	Replacement 30 Style Bolt Down Gauge Port, 6.5" diameter
	P311-G	Bucket Top Flange Gasket
	P511BUCKETBOLT	Spill Bucket RT Ring Kit (4) Bolts, Washers & Gaskets
	H15238M	Replacement Gasket, 30 Style (Bolt Down)
	1-2100-DSH	5 Gallon Fill Bucket with Composite Base & Drain Valve
	1-2100-PSH	5 Gallon Vapor Bucket with Composite Base & Plug

See page 80 for additional cover options.

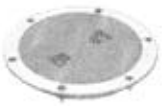
	Part #	Description
411 Parts	P2105BUCKET	411 Replacement Bucket 5-Gallon
	1P-2105	H& Pump Kit for 411/P2105
511/521 Parts	P111-WTL	Replacement Cover (RT)
	P111WTL-S	Replacement Seal for RT Cover
	P311-1R	Replacement RT Ring
	P311-14	RT Ring for 14" Riser
	P511YBUCKET	Replacement Waste Oil Bucket
	P511-DEVRBUCKET	Replacement 5-Gallon Bucket with Drain Valve
	P511-G14	Bucket Top Flange Gasket for Notched Gasket Set
	P511-PEVRBUCKET	Replacement 5-Gallon Bucket with Plug
	P511C-DEVRBUCKET	Replacement 5-Gallon Bucket With C.I. Base & Drain Valve
	P511C-PEVRBUCKET	Replacement 5-Gallon Bucket With C.I. Base & Plug
	P511-DEVRB-14	Replacement 5-Gallon Bucket with Drain Valve 12" & 14" Risers
	P511-PEVRB-14	Replacement 5-Gallon Bucket with Plug – 12" & 14" Risers
	P511C-DEVRB-14	Replacement 5-Gallon Bucket W/ C.I. Base, Drain Valve for 12" & 14" Risers
	P511C-PEVRB-14	Replacement 5-Gallon Bucket W/ C.I. Base, Plug, for 12" & 14" Risers
	P521-GKIT	521 Multi-Port Complete Gasket Kit
	P511-GKIT	511 Multi-Port Complete Gasket Kit

Multi-Port Manhole Water Shroud System Option

The new OPW Multi-Port Manhole Water Shroud System (MPWS) is designed to completely isolate surface water and condensation from the tank sump. The MPWS features an injection-molded fiberglass Water Shroud lid that mates to a standard tank sump top hat reducer. This new bolt down design allows even compression to facilitate water-tight sump access. Shroud Boots isolate the spill container buckets using stainless steel band clamps, which provide a tight seal between the water shroud top hat and the underside of the spill container mounting rings. A 6" Sump Inspection Port is provided on each FRP Cover, allowing full inspection access through the Multi-Port Gauge Port. The OPW Water Shroud system is available in 33" and 36" models. The MPWS Water Shroud is sold separately.

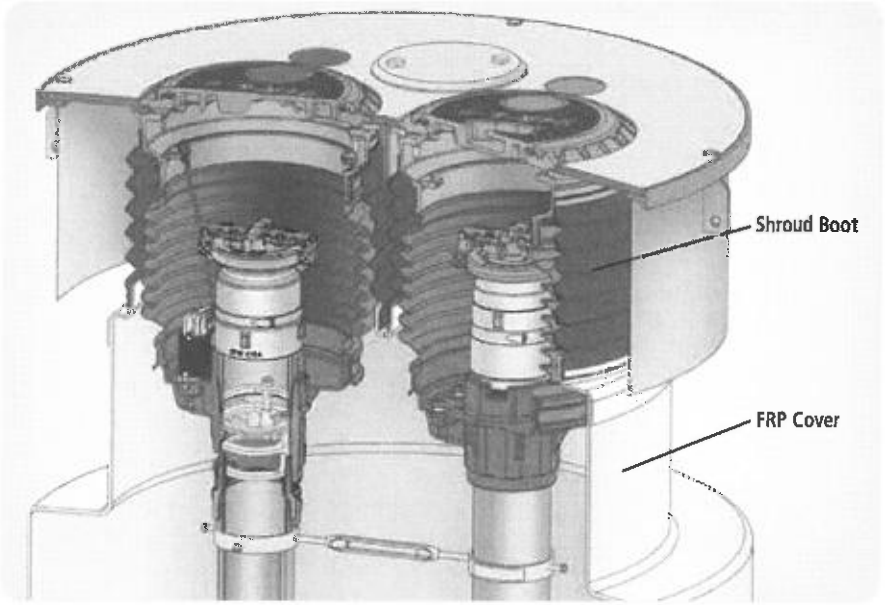
Rubber Shroud Cap

Shroud Boots Vinyl Plastisol



Sump Inspection Port (SIP) – Clear ABS Construction Inspection Port

FRP Cover Injection Molded Fiberglass Cover



Ordering Specifications

Part #	Description
MPWS-33	33" FRP Cover with (2) 5-gallon Water Shroud Boots & Clamps
MPWS-33BD	33" Bolt Down Water Shroud
MPWS-33BDD	33" Bolt Down Water Shroud for Diesel
MPWS-36	36" FRP Cover with (2) 5-gallon Water Shroud Boots & Clamps
MPWS-39BD	39" Bolt Down Water Shroud

Replacement Parts

Part #	Description
C05223M	Shroud Boot Cap to Isolate One FRP Cover Port
D02571M	33" FRP Replacement Cover
D02586M	36" FRP Replacement Cover
D02575M	5-gallon Shroud Boot
H15188M	Lower Clamp for 5-gallon Shroud Boot
H15190M	Upper Clamp for 5 or 15-gallon Shroud Boot
SIP-6	6" Sump Inspection Port Sight Glass
SLPK	Gasket and Sealant Kit for Shroud
205181	Lower Clamp for 5 Gallon Shroud
205183	Upper Clamp for 5 Gallon Shroud

Listings and Certifications

Florida EQ-145
NY Approval

NOTE: Part numbers do not include rings or covers. Rings and Covers must be ordered separately.

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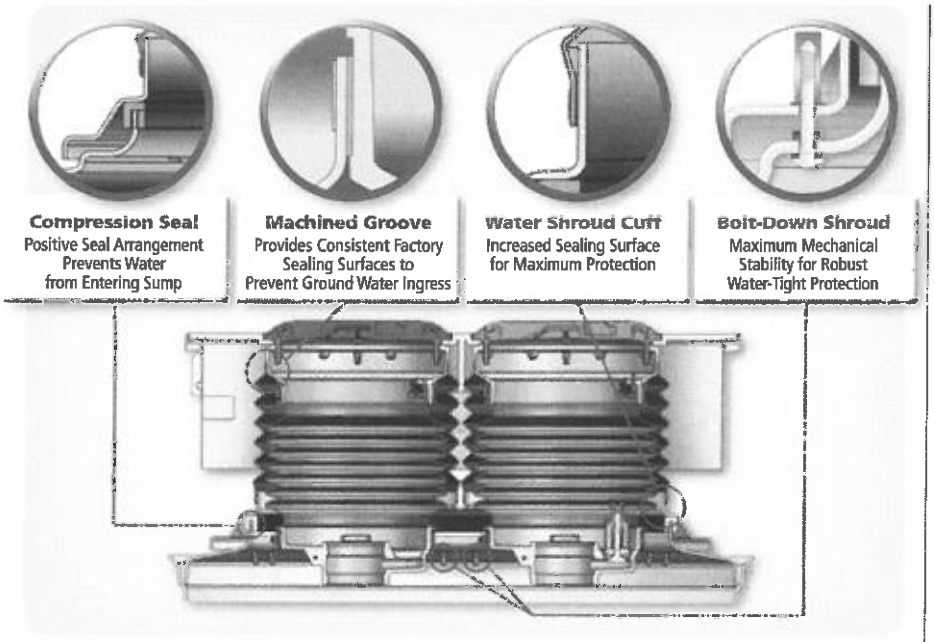


Bolt Down Manhole Water Shroud System Option

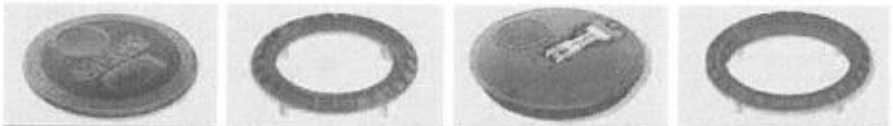
The Bolt Down Multi-Port Water Shroud (MPWS-BD) is designed to mate with the OPW Multi-Port. The MPWS-BD isolates surface water and condensation from Tank Sumps.

Shroud boots isolate the spill container buckets using stainless steel band clamps, providing a tight seal between the water shroud top hat and the underside of the spill container-mounting ring. Bolts on the outer edge of the shroud cover secure it to the top hat. Available in 33" and 39" Diameter Covers.

Ordering Specifications

Part #	Description
Bolt-Down FRP Top Hat Options	
203246	42" x 33" FRP Bolt-Down Top Hat
203272	42" x 39" FRP Bolt-Down Top Hat

New Ring and Cover Part Numbers



Raintight Covers	Raintight Cover Rings	Sealable Covers	Sealable Cover Rings
RTC-WHITE	RTR-WHITE	SC-WHITE	SCR-WHITE
RTC-RED	RTR-RED	SC-RED	SCR-RED
RTC-YELLOW	RTR-YELLOW	SC-YELLOW	SCR-YELLOW
RTC-GREEN	RTR-GREEN	SC-ORANGE	SCR-ORANGE
RTC-ORANGE	RTR-ORANGE	SC-BLACK	SCR-BLACK
RTC-BLACK	RTR-BLACK	SC-PLAIN	

Replacement Parts

Part #	Description
C05223M	Shroud Boot Cap to Isolate One FRP Cover Port
D02571M	33" FRP Replacement Cover
D02586M	36" FRP Replacement Cover
D02575M	5-gallon Shroud Boot
H15187M	Raintight Cover Replacement Gasket
H15188M	Lower Clamp for 5-gallon Shroud Boot
H15190M	Upper Clamp for 5 or 15-gallon Shroud Boot
SIP-6	6" Sump Inspection Port Sight Glass
SLPK	Gasket and Sealant Kit for Shroud
205181	Lower Clamp for 5 Gallon Shroud
205183	Upper Clamp for 5 Gallon Shroud

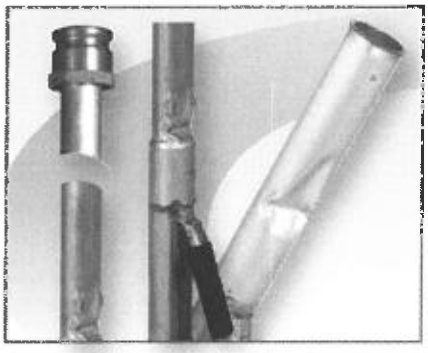
Overfill Prevention and Venting Equipment

71SO Testable Overfill Valve

The OPW new patent-pending Testable 71SO-T Overfill Prevention Valve is the easiest, quickest and most cost efficient way to ensure that your overfill valves will operate when called upon - verifiable without removing them from the tanks. The OPW 71SO-T Testable Overfill Prevention Valve is the only UST Overfill Prevention Valve that is testable from the surface without removal from the tank.

61SO & 71SO Overfill Prevention Valves

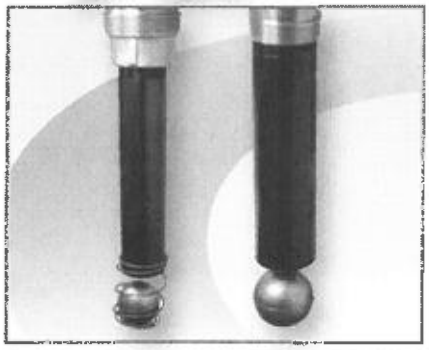
The OPW 61SO and 71SO vapor-tight Overfill Prevention Valves are two-stage shut-off valves designed to prevent the overfill of underground storage tanks by providing a positive shut-off of product delivery. Models of the 61SO and 71SO are available to meet virtually any UST application, including two-point, coaxial, poppeted coaxial and remote fill. The 71SO vapor-tight model is designed for enhanced vapor recovery (EVR) applications. Both the 61SO and 71SO are designed for use on tight-fill gravity drop applications only, and can be installed in the fill riser of both new and existing underground storage tanks.



Ball Float Vent Valves and Extractor Fittings

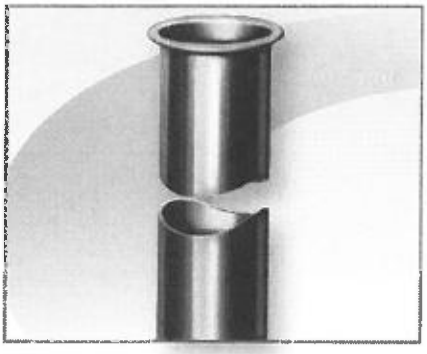
OPW Ball Float Vent Valves protrude into underground storage tanks from the Stage I vapor return riser pipe. As the tank becomes full during a product drop, the ball seats – restricting the flow of vapors back to the transport truck or through the tank vent. As the vapors are compressed in the tank, product flow into the tank is severely restricted.

OPW ball floats are mounted in OPW extractor fittings to maintain access through grade-level manholes.



Drop Tubes and Accessories

OPW drop tubes are installed inside tank fill risers to prevent fuel from contacting riser joints. Drop tubes extend close to the bottom of the tank to minimize turbulence and vapor production. Tank bottom protectors are installed on the bottom of drop tubes to prevent tank erosion at the fill point.



Pressure Vacuum Vents and Adaptors

Pressure Vacuum Vents are installed on the top of vent pipes from underground or aboveground fuel storage tanks. The vent cap and internal wire screen are designed to protect the tank vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.

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Patent Pending

Testable 71SO Overfill Prevention Valve

Are you Compliant with the New EPA Overfill Valve Test Requirements?

CARB EVR CERTIFIED

Now you can be, with the New OPW Testable 71SO Overfill Prevention Valve

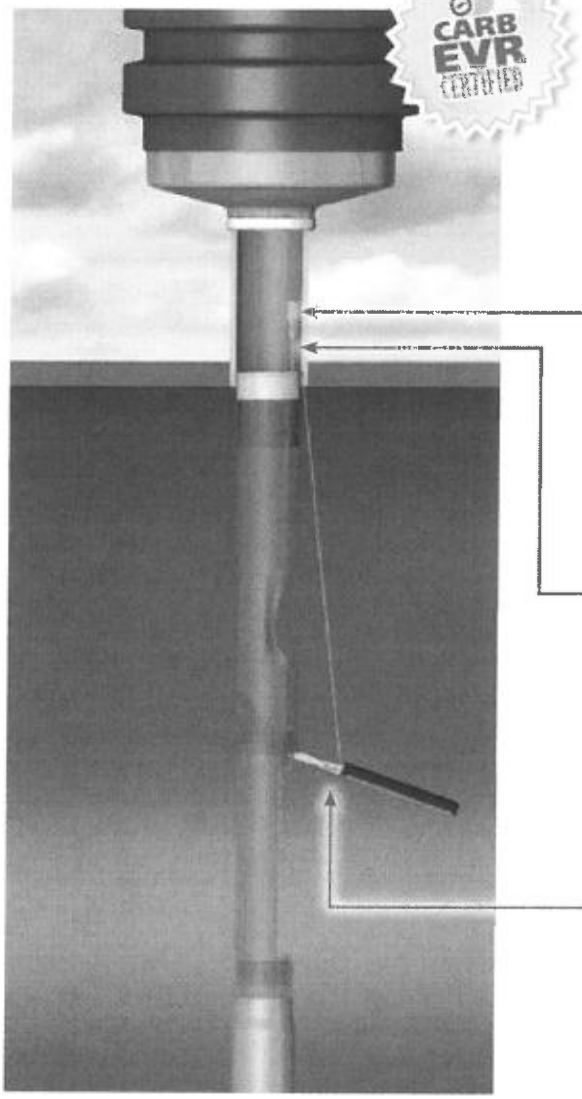
The easiest, most affordable way to ensure overfill compliance

- UST systems (drop tube, overfill prevention valve, spill containers) must be tested for vapor tightness
- Overfill prevention valves shut off devices must be manually inspected
- OPW offers the only overfill prevention valve that can be tested without removal from the tank – test in 60 seconds versus 60 minutes per tank

OPW
a DOVER company

Testable 71SO Overfill Prevention Valve

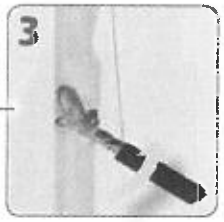
Patent Pending



Testing & Verification
Easy as 1·2·3

Loosen test plug

Lift float with cable to simulate fill



Validate proper poppet operation

The OPW Testable 71SO helps you be in compliance with the NEW EPA Regulations

- The Only UST Overfill Prevention Valve that is testable without removal from the tank
- A testable feature is attached to a sealed plug in the inlet Adaptor
- The plug is easily accessed with a standard socket extension
- Attached to the extension, the testable feature can be raised and lowered, allowing the user to inspect the valve operation from the inside of the tube
- The plug is then easily reinstalled to the inlet Adaptor from grade
- No fill components, overfill valves, or vapor tight seals have to be removed - avoids compromising vapor tight compliance
- The Testable 71SO uses the same industry leading overfill prevention technology for strong vapor tight compliance
- B100 Compatible (ULC)

NOTE: The OPW 71SO is designed for use on tight-fill gravity drop applications only. Do not use for pressure fill applications.

Ordering Specifications

Product #	Description	A- Upper Tube Length		B- Lower Tube Length		C- Overall Length		Max. Riser Length		Max. Nominal Tank Dia.		Max. Actual Tank Dia.		Weight	
		in.	m	in.	m	in.	m	in.	m	in.	m	in.	m	lbs.	kg
71SO-400CTB*	Testable Vapor-Tight Overfill Valve, 5 Ft. Bury, 8 Foot Tank	60	1.5	83	2.1	154¾	3.9	53½	1.4	96	2.4	107	2.7	16	7
71SO-410CTB*	Testable Vapor-Tight Overfill Valve, 10 Ft. Bury, 10 Foot Tank	120	3.1	102	2.6	234¾	5.9	113½	2.9	120	3.1	126	3.2	25	11
71SO-420CTB*	Testable Vapor-Tight Overfill Valve, 10 Ft. Bury, 12 Foot Tank	120	3.1	126	3.2	258¾	6.5	113½	2.9	144	3.7	150	3.8	26	12
206740-Kit	Replacement Cable Kit														

* ULC B100 Compatible

Listings and Certifications

Look for this label for authentic OPW EVR Approved products.

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OPW 71SO Overfill Prevention Valves

The CARB-certified OPW 71SO vapor-tight Overfill Prevention Valve is designed to prevent the overfill of underground storage tanks by providing a positive shut-off of product delivery. The shut-off valve is an integral part of the drop tube used for gravity filling. The OPW 71SO allows easy installation (without breaking concrete) and requires no special manholes.

The OPW 71SO is a vapor-tight two-stage shut-off valve. When the liquid level rises to about 95% of tank capacity, the valve mechanism is released, closing automatically with the flow. This reduces the flow rate to approximately 5 gpm through a bypass valve. The operator may then stop the filling process and disconnect and drain the delivery hose. As long as the liquid exceeds the 95% level, the valve will close automatically each time delivery is attempted.

If the delivery is not stopped and the liquid rises to about 98% of tank capacity, the bypass valve closes completely. No additional liquid can flow into the tank until the level drops below a reset point.

NOTE: The 71SO Overfill Prevention Valve can be adjusted to shutoff at any desired tank capacity. Please contact the Authority Having Jurisdiction (AHJ) and review local, state, and national codes to determine the regulatory requirements governing shut-off capacity in your region, as well as take into account other considerations such as extreme tank tilt. In all cases, the upper tube must protrude into the tank at least 6 1/2" to ensure that the valve can shut off flow into the tank completely before the top of the tank is wetted as per EPA requirements.

71SO Instruction Sheet Order Number: **H15524PA**

Listings and Certifications

California Air Resources Board

Materials

Valve Body: Cast aluminum
Float: Nitrile rubber, closed cell foam
Valve: Aluminum
Seals: Viton®
Upper & lower Drop Tube: Aluminum
Plastic parts: Acetal
Hardware: Stainless steel

Features

- **Simple, Easy and Quick Installation** – no excavation or special manholes required.
- **Economical** – costs a fraction of expensive, complicated and difficult-to-install valves.
- **Furnished Complete** – supplied with new upper and lower drop tubes, mounting hardware and thorough instructions for quick job site time.
- **Completely Automatic Operation** – no prechecks to perform, no resets and no overrides to be broken or abused.
- **No Pressurization of the Tank** – operates directly from liquid level.
- **Will Accept a Dipstick for Gauging**
- **Retrofits Directly** – for both new and existing tanks with 4" fill risers.
- **Quick Drain Feature** – automatically drains hose when head pressure is relieved.
- **Best Flow Rate in The Industry***

*** OPW Test Lab results**

Important

In order to prevent product spillage from the Underground Storage Tank (UST), properly maintained delivery equipment and a proper connection at the tight-fill adaptor are essential. Delivery personnel should be managed and trained to inspect delivery elbows and hoses for damaged and missing parts. They should always make certain there is a positive connection between the adaptor and elbow. If delivery equipment is not properly maintained, or the elbow is not securely coupled to the adaptor, a serious spill may result when the OPW 71SO closes, causing a hazard and environmental contamination.

NOTE: The OPW 71SO is designed for use on tight-fill gravity drop applications only. Do not use for pressure fill applications.

Advantages of Overfill Prevention Compared to Overfill Warning Systems:

- **Completely Automatic Operation** – does not rely on the alertness or speed of response of the delivery attendant for certainty of overfill prevention.
- **Keeps the Top of UST "Dry," per EPA Requirements** – eliminating possible leaks at loose bung fittings and the need for double containment on vent lines.
- **Does Not Rely on Pressure in the UST to Stop Flow** – allowing faster fill times and reducing spill risk.
- **Speeds Delivery Operations** – product flows unimpeded into the tank until the hose "kick" that accompanies the valve shut-off provides a clear signal that the liquid has reached the shut-off level.
- **Simple and Inexpensive Installation** – in both two-point and coaxial fill applications, no additional excavation, manholes or vent piping are required.

Look for this label for authentic OPW EVR Approved products.
OPW 71SOM is EVR Approved for E85

Raising The Standard In Overfill Prevention

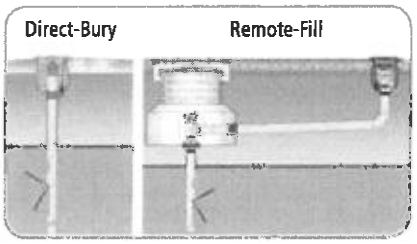
From the company that brought you the industry standard OPW 61SO, OPW raises the standard with the introduction of the **71SO Overfill Prevention Valve** – breakthrough innovation that takes overfill prevention to a whole new level of overfill perfection.

- **Eliminates curing issues due to hot or cold temperatures**
- **Easier, quicker, installation**
- **Higher quality, more reliable installation**
- **Lower costs**
- **Greater protection against fugitive emissions and pressure decay**
- **Fastest flow rate in the industry**

The new 71SO is a two-stage, positive shut-off valve, providing completely automatic operation with no pre-checks to perform, no resets, and no overrides to be broken or abused. The valve closes when the tank level rises to 95% capacity and provides a special bypass valve so the tank can be filled to a maximum capacity of 98%. The 71SO is available for direct-bury and remote applications.

All Vapor-Tight Overfill Valves are CARB EVR Certified

No Epoxy Sealants Required!



Replacement Parts

Part #	Description
61SOK-0001	Replacement Float Kit
H11931M	Drop Tube Seal
H14840M	Lower Tube Seal
C05117	Lower Tube
D02508	Vapor-Tight Inlet Tube
C03899M	Non-Vapor-Tight Inlet Tube
D02508	Vapor-Tight Inlet Tube (Blue)

71SO Ordering Specifications

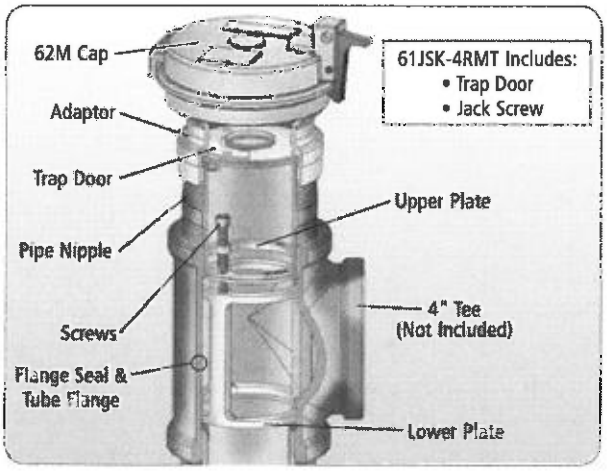
Product #	Description	Bury Depth ft.	Bury Depth m	Tank Diameter ft.	Tank Diameter m	Upper Tube Length in.	Upper Tube Length m	Lower Tube Length in.	Lower Tube Length m	Overall Length in.	Overall Length m	Max. Riser Length in.	Max. Riser Length m	Max. Nominal Tank Dia. in.	Max. Nominal Tank Dia. m	Max. Actual Tank Dia. in.	Max. Actual Tank Dia. m	Weight lbs.	Weight kg
71SO-400CB*	Vapor-Tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155¾	3.9	53½	1.4	96	2.4	107	2.7	16	7
71SO-410CB*	Vapor-Tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234¾	5.9	113½	2.9	120	3.1	126	3.2	25	11
71SO-420CB*	Vapor-Tight Overfill Valve	10	3.0	12	3.6	120	3.1	126	3.2	258¾	6.5	113½	2.9	144	3.7	150	3.8	26	12
71SO-4000	Non Vapor-tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155¾	3.9	53½	1.4	96	2.4	107	2.7	16	7
71SO-4010	Non Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234¾	5.9	113½	2.9	120	3.1	126	3.2	25	11
71SOM-412C	E85 Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234¾	5.9	113½	2.9	120	3.1	126	3.2	38	17.3
71SO-TOOLCT	71SO Installation Tool																	2.5	1
61JSK-4RMT	Jack Screw Kit For Vapor-Tight Remote Applications																	1.5	0.7
61JSK-4410	Jack Screw Kit For Composite Base Spill Bucketst																	1	0.5
61JSK-44CB	Jack Screw Kit For Cast Iron Base Spill Buckets																	1	0.5
71JSK-4RMT	E85 Jack Screw for Remote-Fill Applications																	1	0.5
71JSK-44MA	E85 Jack Screw for Direct-Fill Applications																	1.5	0.7

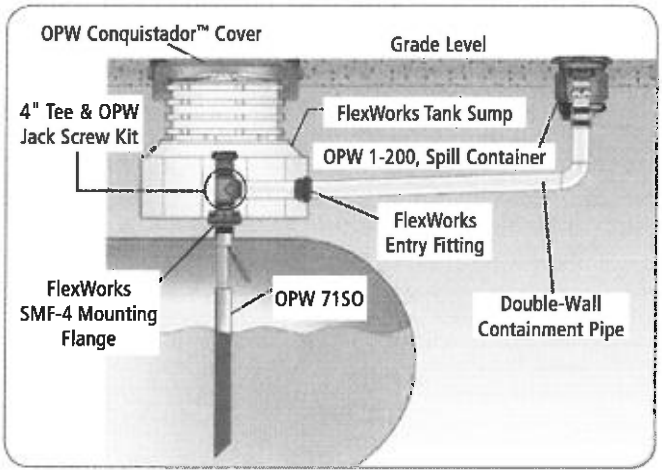
61JSK-4410 AND 61JSK-44CB Instruction Sheet Order Number: H15289M

*ULC B100 Compatible

71SO Vapor-Tight Remote Fill

The OPW Vapor-Tight Remote Fill is designed for two-point vapor-tight remote-fill applications, where the fill point is not directly over the UST. A CARB approved vapor-tight 71SO overfill valve is installed in the sump through a riser pipe directly over the tank.





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VEEDER-ROOT

TLS-450

AUTOMATED COMPLIANCE AND SITE MANAGEMENT

At Veeder-Root, we've delivered over 200,000 times worldwide. With our TLS-450 platform, the same promises apply, along with new benefits that will keep your stations ready and help you adapt to changing business environments.

Experience the New Standard in Tank Monitoring

The TLS-450 offers retail and commercial petroleum site owners automated compliance and site management so they are always inspector-ready, they always know their business status, and they are always in control of their fueling operations.

Prove Compliance

Always be inspector ready. Meet all requirements.

- Provides one-touch inspector-ready compliance reporting
- Automatically stores and organizes compliance data for up to three years
- Allows access to compliance data via web browser

Stay in Compliance

Always know your compliance status. Take instant action.

- Provides automatic compliance updates via email
- Customized alarms and built-in help menu ensure fast appropriate site action
- Allows easy upgrades for future compliance requirements

Improve Site Management

Always control your inventory. Eliminate service costs.

- Provides inventory and delivery data via email or via web interface
- Custom alarms, remote diagnostics, & easy-to-run annual tests help customers avoid unnecessary service calls

VEEDER-ROOT

TLS-450 Features

The TLS-450 offers a variety of features for access, control, data storage, and business management. The base TLS-450 Console comes complete with the following communications features:

Total Access
Wherever you are, you can access or monitor your sites via a web browser. Using the TLS-450 XML Web-Enabled feature, you can securely control and modify configurations and access diagnostics and print vital wet stock management and compliance reports right from your web browser without any additional software required.

Total Control
Customize password access, alarms, email notifications, reports, built-in Help and dashboard views to make sure all sites are under control.

External Storage
Back up your reports, alarms, compliance, inventory and delivery data for up to three years on a Veeder-Root thumb-drive using the USB connection. The TLS-450 can also back up your configuration settings.

System Capabilities

- Up to three years of data history
- Inventory and delivery monitoring and reporting
- Supports up to 32 probes
- Interstitial/sump monitoring capability
- Dispenser sump monitoring capability
- Vapor well monitoring capability
- Groundwater monitoring capability
- Email notification and reporting
- Fax notification and reporting
- Continuous Statistical Leak Detection software - 0.2 GPH for both single and manifolded tanks
- 3.0 GPH, 0.1 GPH and 0.2 GPH in tank leak detection
- 3.0 GPH, 0.1 GPH and 0.2 GPH line leak detection capabilities
- Sensor status report
- Sensor status history report
- 7.4" full VGA LCD touch screen
- High resolution, high speed printer
- Universal compartments support universal sensor and probe module, and input output interface module
- Built-in relay for overfill alarm
- Supports multiple languages
- Intuitive and user-friendly interface
- Single-touch access to most functions
- Customizable on-board Help
- Custom dashboard
- Remote web access
- XML Web-Enabled interface
- Up to nine communication ports
- Internal auto-dial fax modem communications SiteFax™
- Ethernet communications
- RS-232 data communications
- RS-485 data communications
- USB ports for software upgrade and data back up

RELIABILITY. QUALITY. INNOVATION. SERVICE.

Standard Model TLS-450 Comes Complete With:

- TLS-450 console with 80 column high speed thermal printer and 7.4" full VGA LCD touch screen. Supports up to 64 sensors (up to 32 of one sensor type)
- Total Access USB/ethernet dual interface module and XML Web-Enabled interface
- Total Control software
- RS-232 dual interface module
- One built-in relay
- Three-years of data storage

TLS-450 With Interface Modules:

- TLS-450 contains four compartments in which the universal sensor/probe or input/output interface modules can be installed interchangeably. One module per compartment.

Description	Function
Low-Power/High-Power Compartments (limit four modules per console)	
Universal sensor/probe interface module	16 input module supports probes and sensors
Universal input/output interface module	Five dry contact output relays/four low voltage dry contact inputs/five high voltage inputs (<=240Vac). Supports PLLD and Pump Sense as well as standard functions
Built-in relay	Supports tank overfill alarm
Communication Compartment (limit five modules per console)	
SiteFax™ interface module	Allows hookup to most remote facsimile or modem equipment
Ethernet interface module	Provides connectivity to local and wide area networks (LAN/WAN)
USB interface module	Supports Veeder-Root USB thumb drive
USB/ethernet dual interface module	Provides connectivity to local and wide area networks (LAN/WAN)
RS-232 dual interface module	Provides two 9-Pin female D-Connectors for data transmission to P.O.S. terminal or computer
RS-232/RS-485 dual interface module	Provides a 9-Pin female D-Connector and an 8-position RJ45 D-Connector for data transmission to P.O.S. terminal or computer
Single RS-232 interface module	Provides a 9-Pin female D-Connector for data transmission to P.O.S. terminal or computer
Specifications	
Operating temperature range	32°F to 104°F (0°C to 40°C)
Storage temperature range	14°F to 158°F (-10°C to 70°C)

To learn more, contact us at **888.561.7942**, or visit **www.veeder.com.**

VEEDER-ROOT

125 Powder Forest Drive, P.O. Box 2003, Simsbury, CT 06070 USA

Attachment I

Initial and Continuing Training

INITIAL AND CONTINUING TRAINING

The Blanco Express Shell Station will have at least one trained operator as a Class A operator, Class B operator or Class C operator during hours of operation.

The operators must fulfill all the training requirements of TCEQ Subchapter N Operator Training, and be retrained within three years of their training.

The Class A operator will have general knowledge of the requirements of all applicable UST regulations. The Class B operator is required to implement all applicable UST regulatory requirements at the facility and to ensure implementation of the day to day aspects of facility operations, maintenance, and recordkeeping. Also, the Class B operator, is responsible for training all Class C operators at the facility. The Class C operator controls dispensing of the fuel and is responsible for initial response to emergencies.

Personnel on site will be trained on the leak detection system and responding to warnings and alarm conditions. The training will provide emergency response procedures on utilizing the emergency shut off devices, responding to spills, and evaluate and responding to warnings and alarms on the TLS 450 Veeder Root System.

Attachment J

Release Detection Maintenance

RELEASE DETECTION MAINTENANCE

All release detection requirements and testing will be completed in compliance with TCEQ Chapter 334 Subchapter C Technical Standards. The Blanco Express Shell Station will utilized a Veeder Root TLS 450 Plus automatic tank gauging (ATG) and business inventory reconciliation.

The ATG will perform a complete test on each tank continuously via continuous state leak detection (CSLD) and perform business inventory reconciliation through the system. The Veeder Root System will perform a 0.2 gallons per hour (gph) line and tank test and a 0.1 gph tank and line test on demand.

Pressurized lines are continuously tested through the Veeder Root System while the line leak detectors will be tested yearly by a third party representative. All release detection equipment will be operated and maintained in accordance with the manufacturer's specifications and instructions.

Attachment K

TCEQ WPAP Approval Letter

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 3, 2023

Mr. Umer Khawaja
4G Enterprises, LLC.
11 Remington Run
San Antonio, Texas 78258

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: Blanco Express Shell Station; Located at 16525 Blanco Road, San Antonio, Texas
TYPE OF PLAN: Request for a Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Regulated Entity No. RN101816684; Additional ID No. 13001677

Dear Mr. Khawaja:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification request application for the above-referenced project submitted to the San Antonio Regional Office by Balanced Site Design, LLC. on behalf of 4G Enterprises, LLC. on January 3, 2023. Final review of the Modification was completed after additional material was received on February 23, 2023. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The original WPAP plan was approved by the TCEQ by letter dated August 13, 1993 (13-93060901A). The commercial project had an area of approximately 1.824-acres with 0.349-acres (19.1 percent) of impervious cover. The approved permanent best management practice (PBMP) was a sedimentation/filtration basin.

A site plan update was approved by the TCEQ on letter dated November 8, 2004 (13-93060901A). The site plan update included the expansion of the commercial store building and to construct a 9' x 20' addition on a 10' x 40' are of existing pavement.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 1.82-acres with 0.85-acres (46.7 percent) of impervious cover. This modification request proposes removal of the sedimentation/filtration basin, additional clearing, grading, excavation, installation of utilities and drainage improvements, construction of one commercial building with associated fuel pumps, car wash, and surface parking and sidewalks. Wastewater will be disposed of by conveyance to the existing Steven M. Clouse Water Recycling Center owned and operated by the San Antonio Water System.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one (1) jellyfish filter, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 694 pounds of TSS generated from the 0.85-acres of impervious cover. The approved measure meets the required 80 percent removal of the increased load in TSS caused by the project.

GEOLOGY

According to the geologic assessment included with the application, the site is located within the cyclic and marine members of the Person Formation. No naturally occurring sensitive features were noted by the project geologist. The site assessment conducted on February 2, 2023, revealed that the site was generally described in the geologic assessment.

SPECIAL CONDITIONS

1. This modification is subject to all special and standard conditions listed in the WPAP approval letter dated August 13, 1993, and subsequent site plan update dated November 8, 2004.
2. The permanent pollution abatement measure shall be operational prior to occupancy of the facility.
3. All sediment and/or media removed from the permanent pollution abatement measure during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature

and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. No wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the 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). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: 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.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

<u>After Completion of Construction:</u>

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Hunter Patterson of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4026.

Sincerely,

Lillian Butler

Lillian Butler, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

LIB/hhp

Enclosures: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Chad Respondek, P.E., Balanced Site Design, LLC.

TCEQ Form – 0602

Temporary Stormwater Section

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.

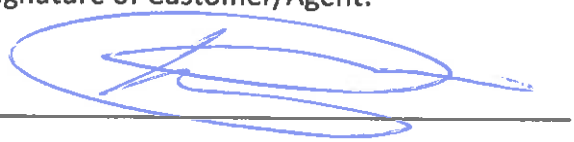
Signature

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: Umer Khawaja

Date: 6-13-23

Signature of Customer/Agent:



Regulated Entity Name: Blanco Express Shell Station

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: Salado 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

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the analysis results are known the contaminated soils and cleanup materials will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in the event of a significant hazardous/reportable quantity spill. Additional notifications as required by the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

- The contractor will be required to report significant or hazardous spills in reportable quantities to:
  - Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
  - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center

at (800) 424-8802.

- Notification should first be made by telephone and followed up with a written report. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

- Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.

Attachment B – Potential Sources of Contamination

Other potential sources of contamination during construction include:

Potential Source	•	*Asphalt products used on this project.*
Preventative Measure	•	*After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.*
Potential Source	•	*Oil, grease, fuel and hydraulic fluid Contamination from construction equipment and vehicle dripping.*
Preventative Measure	•	*Vehicle maintenance when possible will be performed within the construction staging area.*
	•	*Construction vehicles and equipment shall be checked regularly for leaks and required immediately.*
Potential Source	•	*Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.*
Preventative Measure	•	*Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.*
	•	*Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.*
	•	*Hazardous materials and wastes shall be stored in covered containers and protected from vandalism.*
	•	*A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.*
Potential Source	•	*Miscellaneous trash and litter from construction workers and material wrappings.*
Preventive Measure	•	*Trash containers will be placed throughout the site to encourage proper trash disposal.*
Potential Source	•	*Construction debris.*
Preventive Measure	•	*Construction debris will be monitored daily*

by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.

Potential Source

- *Spills/Overflow of waste from portable toilets*

Preventative Measure

- *Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.*
- *Portable toilets will be placed on a level ground surface.*
- *Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.*

Attachment C - Sequence of Major Activities

The Sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include installation of TBMPs, clearing and grubbing of vegetation where applicable. This will disturb approximately 0.87 acres. The second is construction that will include construction of the building with associated surface parking, installation of UST system, new pavement area, landscaping and site cleanup. This will disturb approximately 0.87 acres.

Attachment D – Temporary Best Management Practices and Measures

a. 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.

The site does not accept upgradient water.

b. 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.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include: (1) erection of silt fences, or sediment control rolls, along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of rock berms with silt fencing downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) installation of gravel bags and inlet protection and downgradient inlets, (4) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (5) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and7or sensitive features.

c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

There were no naturally-occurring sensitive features observed on the site and no surface streams on, or adjacent, to the project limits. All Temporary BMPs utilized are adequate for the drainage areas served.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended soils to settle out of the

runoff. By containing the sediment and solids within the site, they will not enter surface streams and7or sensitive features.

d. 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.

There were no naturally-occurring sensitive features observed on the site and no surface streams on, or adjacent, to the project limits. All Temporary BMPs utilized are adequate for the drainage areas served.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and7or sensitive features.

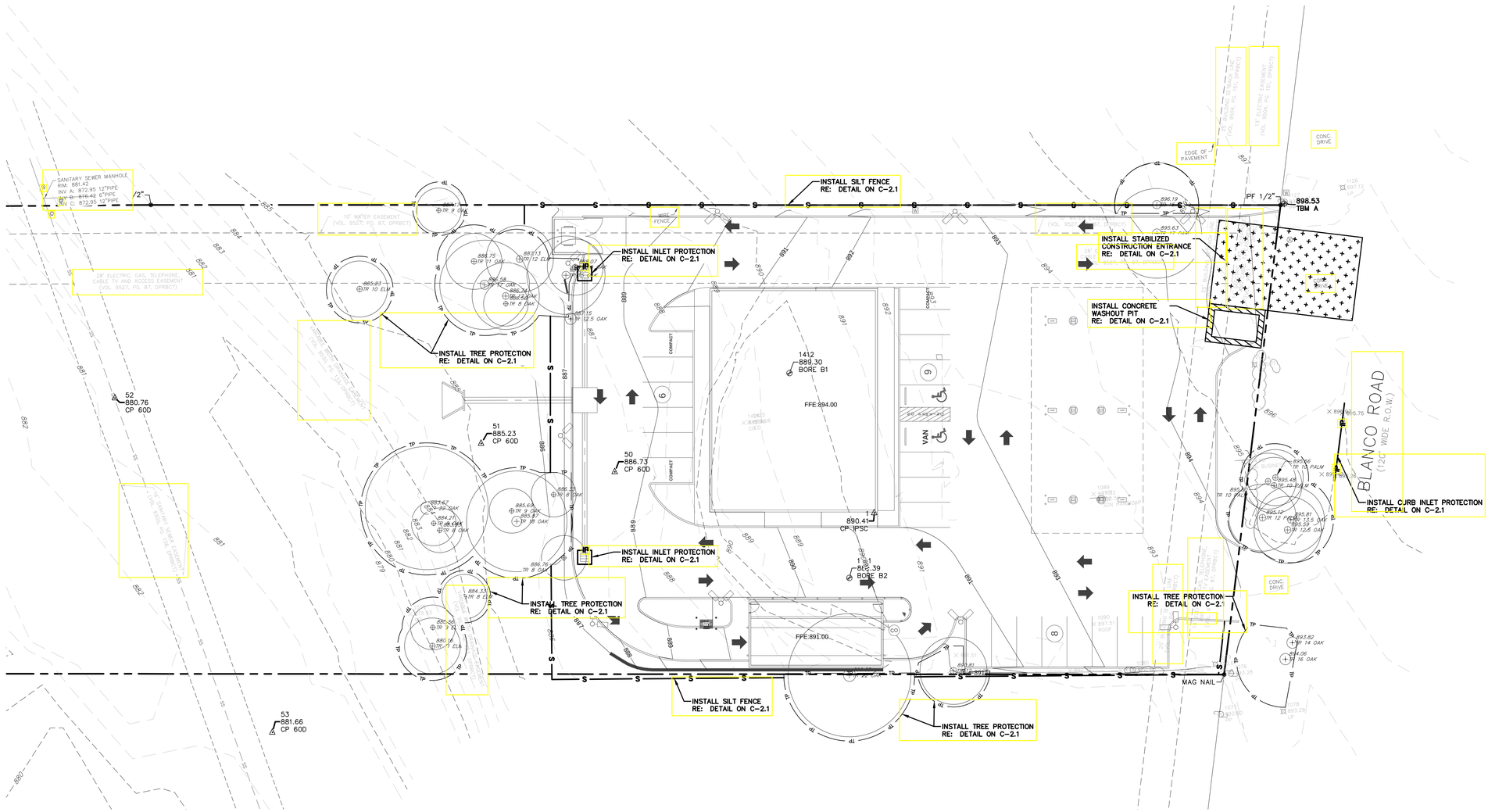
Attachment F – Structural Practices

The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences, or sediment control rolls, along the downgradient boundary of construction activities and rock berms with silt fence for secondary protection, as shown on Sheet C-2.0.
- Installation of inlet protection and gravel filter bags, at downgradient inlets of construction activities, as located on Sheet C-2.0.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located Sheet C-2.0.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

- Installation of concrete truck washout pit(s), as required and shown on Sheet C-2.0.



SCALE: 1"=20'

0 10 20 40

LEGEND

- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING CLEANOUT
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE & GUY WIRE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING UNDERGROUND SANITARY SEWER LINE
- EXISTING UNDERGROUND WATER LINE
- EXISTING CONCRETE CURB
- EXISTING CONTOUR LINE WITH ELEVATION
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- STABILIZED CONSTRUCTION ENTRANCE
- INSTALL TREE PROTECTION
- INSTALL SILT FENCE
- INLET PROTECTION
- CONCRETE TRUCK WASHOUT PIT

NOTE:
SURVEY WAS PERFORMED BY DA MAWYER. CONTACT DREW MAWYER AT 830.730.4449 FOR ANY SURVEY QUESTIONS, COORDINATION OR NEEDS.

SITE INFO

LEGAL DESCRIPTION

BLANCO CREEK UNIT 1-A
LOT 4, BLOCK 7

FLOOD INFORMATION

THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA FIRM NUMBER 48029C0235G DATED SEPTEMBER 29, 20210

BENCHMARK INFORMATION

TBM A
N: 13763489.2635'
E: 2123655.1484'
ELEVATION: 892.53'

CP #1
N: 13763390.0521'
E: 2123500.5711'
ELEVATION: 890.41'

Balanced Site Design, LLC
12950 Country Parkway
Suite 150
San Antonio, TX 78216
210.530.1312

balanced SITE DESIGN

STATE OF TEXAS
CHAD RESPONDEK
129700
LICENSED
PROFESSIONAL
ENGINEER
01/03/2023

REV.	DESCRIPTION	DATE

CLIENT NAME
ADDRESS

STORM WATER POLLUTION PREVENTION PLAN

SHELL STATION REDEVELOPMENT
16525 BLANCO ROAD
SAN ANTONIO, TX

DATE: 01/03/2023

SHEET:

C-2.0

E:\220074 BLANCO EXPRESS SHELL\DESIGN\CONSTRUCTION DOCS\C-2.0 SWPPP.DWG

STORM WATER POLLUTION PREVENTION NOTES

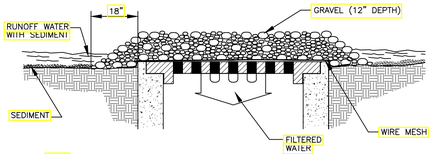
1. PRIOR TO CONSTRUCTION, MAKE CERTAIN THE NOTICE OF INTENT (NOI) OR CONSTRUCTION SITE NOTICE (CSN) HAS BEEN FILED AND POSTED ONSITE FOR PUBLIC VIEWING AND THE TPDES REPORT AND SWPPP ARE AVAILABLE AT THE TRAILER.
2. INSTALL STORM WATER POLLUTION PREVENTION CONTROLS PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, EXCAVATION).
3. THE PLACEMENT OF STORM WATER POLLUTION PREVENTION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED STORM WATER POLLUTION PREVENTION CONTROL PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR AND ENGINEER AFTER INSTALLATION OF THE STORM WATER POLLUTION PREVENTION CONTROLS AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE ENGINEER AS APPROPRIATE. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE STORM WATER POLLUTION PREVENTION CONTROL PLAN MAY BE REQUIRED BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES. IN ALL CASES THE CONTRACTOR SHALL REDLINE CHANGES TO THE SWPPP TO REFLECT THE LATEST FIELD ADJUSTMENTS.
6. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT INTERVALS OF AT LEAST ONCE EVERY TWO (2) WEEKS AND IMMEDIATELY AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF PROPERLY.
8. WHERE SILT FENCE CANNOT BE PROPERLY INSTALLED USE TRIANGULAR FILTRATION DIKE OR HAY BALES.
9. SOIL DISTURBANCES SHALL BE MINIMIZED BY EXPOSING ONLY THE SMALLEST PRACTICAL AREA OF LAND REQUIRED FOR THE CLEARING AND GRADING ACTIVITY AND FOR THE CONSTRUCTION ACTIVITY, FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
10. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND EXCEPT AS PROVIDED BELOW, WILL BE INITIATED NO MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
11. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN TWENTY-ONE (21) DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE.
12. TRAFFIC LEAVING THE CONSTRUCTION SITE WILL EXIT THROUGH A STABILIZED CONSTRUCTION EXIT AS LOCATED ON THE PLANS. WHEN SOILS HAVE COLLECTED ON THE STABILIZED VEHICULAR EXIT TO AN EXTENT WHICH REDUCES ITS INTENDED EFFECTIVENESS, THE SURFACE WILL BE CLEANED AND REESTABLISHED FOR THE INTENDED PURPOSE.
13. MUD/DIRT INADVERTENTLY TRACKED OFF-SITE AND ONTO PUBLIC STREETS SHALL BE REMOVED IMMEDIATELY.
14. PERMANENT EROSION CONTROL:
    ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
    (A) A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE PLACED IN ALL DRAINAGE CHANNELS (EXCEPT ROCK) AND BETWEEN THE CURB AND RIGHT-OF-WAY LINE.
    (B) THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS UNLESS SPECIFIED OTHERWISE BY THE PROJECTS LANDSCAPE PLAN:
    BROADCAST SEEDING:
    I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 2 POUNDS PER 1000 SF OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SF OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
    II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 2 POUNDS PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION.
    (C) FERTILIZER SHALL BE A PELLETED OR GRANULAR SLOW RELEASE WITH AN ANALYSIS OF 15-15-15 TO BE APPLIED ONCE AT PLANTING AND ONCE DURING THE PERIOD OF ESTABLISHMENT AT A RATE OF 1 POUND PER 1000 SF.
    (D) MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF.
    HYDRAULIC SEEDING:
    I. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF 1 POUND PER 1000 SF OF UNHULLED BERMUDA AND 7 POUNDS PER 1000 SF OF WINTER RYE WITH A PURITY OF 95% WITH 90% GERMINATION.
    II. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 1 POUND PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION.
    (E) FERTILIZER SHALL BE A WATER SOLUBLE FERTILIZER WITH AN ANALYSIS OF 15-15-15 AT A RATE OF 1.5 POUNDS PER 1000 SF.
    (F) MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF, WITH SOIL TACKIFIER AT A RATE OF 1.4 POUNDS PER 1000 SF.
    (G) THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS RAINFALL OCCURRENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK. (COORDINATE WITH IRRIGATION PLAN)
    (H) RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1 1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
    (I) SEEDING SHALL APPLY TO ALL AREAS WITHIN DISTURBED PROJECT AREA NOT COVERED BY PAVEMENT, BUILDING PAD OR PROJECT LANDSCAPING PLANS INCLUDING RIGHT-OF-WAYS AND OFFSITE EASEMENTS.
    (J) AT LEAST TWO SEEDINGS SHOULD OCCUR DURING PROJECT. THEY SHOULD OCCUR WITHIN 14 DAYS AFTER PONDS ARE GRADED AND PRIOR TO BY FINAL PUNCH LIST.
15. THE EPA GENERAL PERMIT REQUIRES THAT A TEMPORARY OR PERMANENT SEDIMENT BASIN BE INSTALLED IN ANY DRAINAGE LOCATION WHERE MORE THAN 10 ACRES IN THE UPSTREAM DRAINAGE ARE DISTURBED AT ONE TIME. THE SEDIMENT BASIN MUST PROVIDE AT LEAST 3,600 CUBIC FEET OF STORAGE FOR EVERY ACRE IF LAND, WHICH IT DRAINS.
16. CONTRACTOR'S FILING OF NOTICE OF TERMINATION (NOT) SHALL OCCUR UPON HEB'S ACCEPTANCE OF REVEGITATION.

STORM WATER POLLUTION PREVENTION PLAN / TPDES

FURNISH AND INSTALL TEMPORARY AND PERMANENT STORM WATER POLLUTION PREVENTION CONTROL MEASURES SHOWN IN THE PLANS. CONSTRUCT IMPROVEMENTS IN COMPLIANCE WITH THE INTENT OF SUCH POLLUTION CONTROL MEASURES, TPDES PERMITS, OR OTHER LOCAL WATERWAY DEVELOPMENT PERMITS.

EXECUTION:

1. CONTRACTOR IS RESPONSIBLE FOR ALL POLLUTION PREVENTION MEASURES SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
2. SUBMIT A STORM WATER TPDES GENERAL PERMIT NOTICE OF INTENT (NOI) AT LEAST TWO DAYS PRIOR TO START OF CONSTRUCTION TO THE APPROPRIATE AGENCY SHOWN ON THE SWPPP.
3. POST SIGNED AND COMPLETED NOI POSTING NOTICE OR CONSTRUCTION SITE NOTICE (CSN) AT CONSTRUCTION ENTRANCE FOR PUBLIC VIEWING, AND KEEP A COPY OF THE SWPPP AT THE JOB SITE AT ALL TIMES.
4. INSTALL AND MAINTAIN POLLUTION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND WITH PROJECT SPECIFICATIONS.
5. INSTALL EROSION CONTROL MEASURES AND CONSTRUCTION ENTRANCES AS SHOWN IN THE SWPPP PRIOR TO BEGINNING CONSTRUCTION. POLLUTION CONTROL MEASURES SHALL BE REPAIRED, RESTABLISHED, ADJUSTED OR REINSTALLED WITH EACH SUBSEQUENT PHASE OF CONSTRUCTION IN ACCORDANCE WITH THE SWPPP.
6. CONTRACTOR IS RESPONSIBLE FOR ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE, AND SHALL REMOVE THE ACCUMULATION OF OFF-SITE SEDIMENT PROMPTLY.

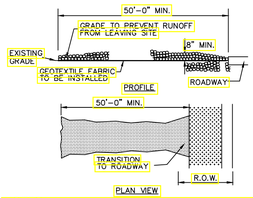


NOTE:

A. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
B. AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ABOVE. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
C. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT'S FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

INLET PROTECTION/SEDIMENT FILTER

NOT TO SCALE

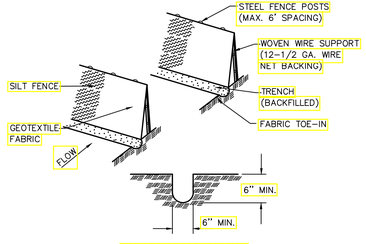


NOTES:

1. STONE SIZE- 3 TO 5 INCH OPEN GRADED ROCK.
2. LENGTH- AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS- NOT LESS THAN 8 INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING- WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED STRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE- ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
8. REMOVE COMPLETELY AND REGRADE TO ORIGINAL CONDITION AND ELEVATION.

STABILIZED CONST. ENTRANCE

NOT TO SCALE

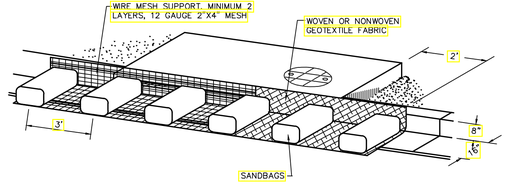


NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH UNDER FENCE.
3. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. COMPACTED MATERIAL.
4. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
7. CONTRACTOR SHALL PROVIDE TRIANGULAR SEDIMENT FILTER DIKE WHERE SILT FENCE IS REQUIRED BUT NOT INSTALLABLE.

SILT FENCE

NOT TO SCALE

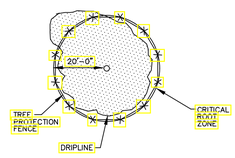


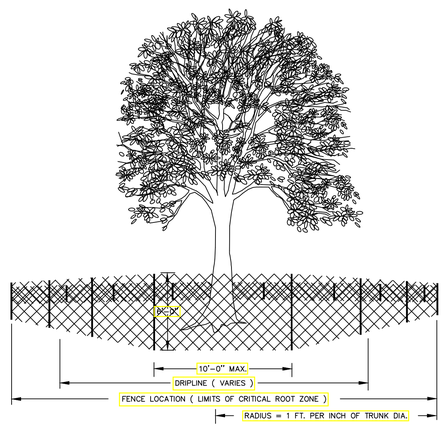
NOTES:

1. WHEN A SANDBAG IS FILLED WITH MATERIAL, THE OPEN END OF THE SANDBAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CHORD.
2. INLET PROTECTION SHALL BE PLACED OVER THE MOUTH OF THE INLET WITH A 2 FOOT OVERLAP ON EITHER SIDE.
3. THE FABRIC COVER AND SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE.
4. THE SKIRT SHALL BE WEIGHTED WITH ONE 18"X24"X6" SANDBAG
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF FOUR INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
7. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, INLET PROTECTION AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 6 ABOVE.

INLET PROTECTION FOR CURB INLET

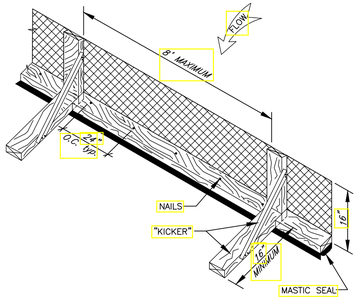
NOT TO SCALE





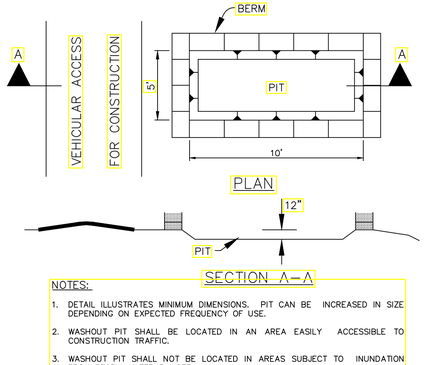
TREE PROTECTION

NOT TO SCALE



SILT FENCE ON PAVEMENT DETAIL

NOT TO SCALE



NOTES:

1. DETAIL ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

CONCRETE TRUCK WASHOUT PIT

NOT TO SCALE

Balanced Site Design, LLC
12950 Country Parkway
Suite 150
San Antonio, TX 78216
210.530.1312

balanced SITE DESIGN

STATE OF TEXAS
CHAD RESPONDEK
129700
LICENSED PROFESSIONAL ENGINEER
01/03/2022

REV.	DESCRIPTION	DATE

CLIENT NAME
ADDRESS

STORM WATER POLLUTION PREVENTION PLAN DETAILS

SHELL STATION REDEVELOPMENT
16525 BLANCO ROAD
SAN ANTONIO, TX

DATE: 012/28/2022

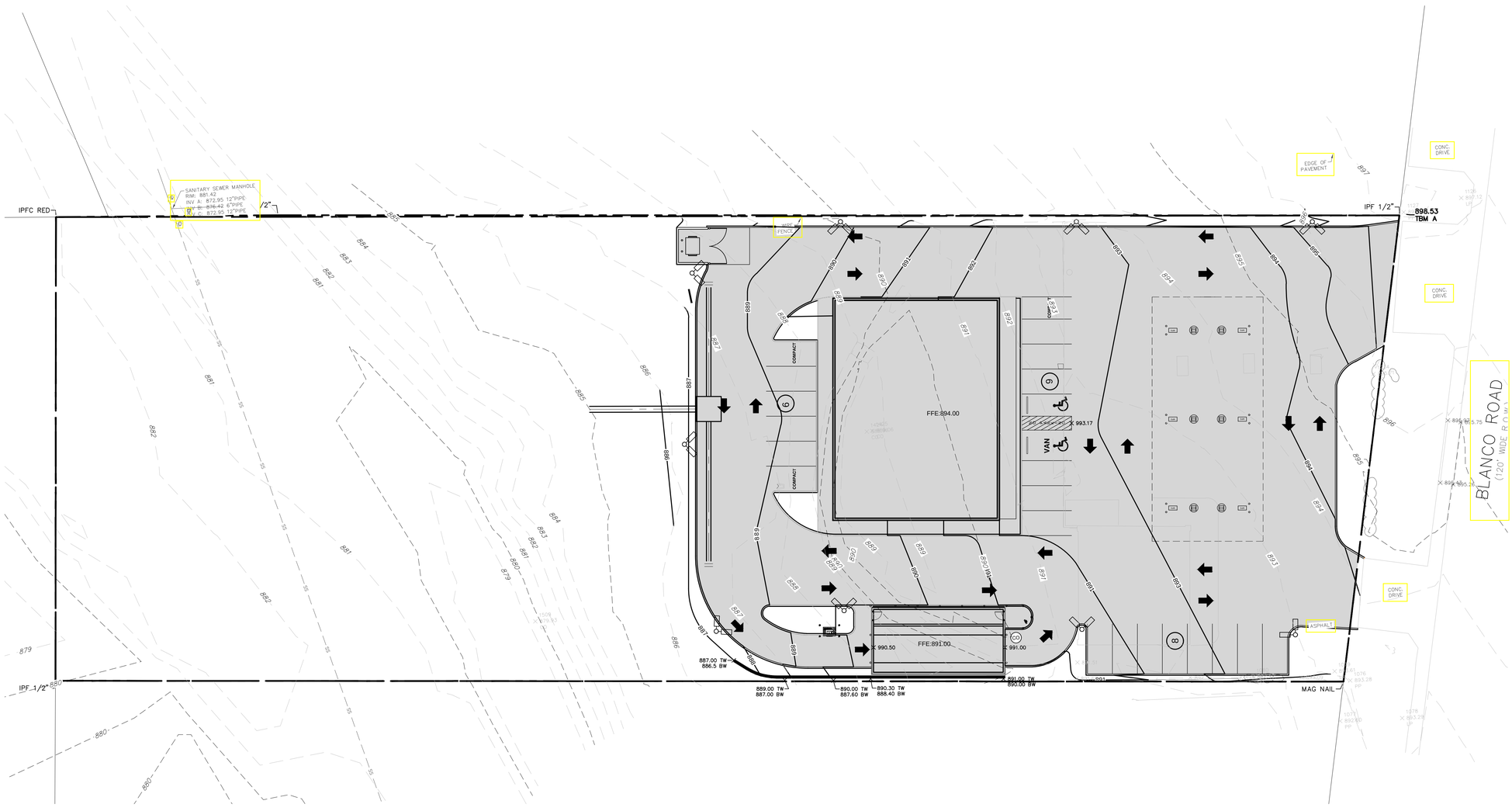
SHEET:

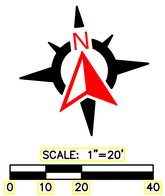
C-2.1

E:\220074 BLANCO EXPRESS SHELL\DES\GN\CONSTRUCTION DOCS\C-2.1 SWPPP DETAILS.DWG

Attachment G – Drainage Area Map

No more than ten (10) acres will be disturbed within a common drainage area at one time as construction of civil infrastructure (utilities, parking, drainage, etc.) will precede building construction. The site is comprised of one drainage area. All TBMPs utilized are adequate for the drainage area served.





IMPERVIOUS COVER

PERVIOUS COVER

DRAINAGE AREA BOUNDARY

IMPERVIOUS COVER SUMMARY TABLE	
PROPOSED IMPERVIOUS COVER	0.85 AC.
TOTAL ACREAGE	1.82 AC.
% OF IMPERVIOUS COVER	46%

NOTE:
SURVEY WAS PERFORMED BY DA MAWYER. CONTACT DREW MAWYER AT 830.730.4449 FOR ANY SURVEY QUESTIONS, COORDINATION OR NEEDS.

DA	AREA (AC)	C	Tc (MIN)	FREQUENCY (YR)	INTENSITY (IN/HR)	Q (CFS)
1	1.82	0.63	5	100	14.01	16.09
1	1.82	0.63	5	25	11.14	12.79
1	1.82	0.63	5	5	7.94	9.12

SITE INFO

LEGAL DESCRIPTION

BLANCO CREEK UNIT 1-A
LOT 4, BLOCK 7

FLOOD INFORMATION

THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA FIRM NUMBER 48029C0235G DATED SEPTEMBER 29, 20210

BENCHMARK INFORMATION

TBM A
N: 13763489.2635'
E: 2123655.1484'
ELEVATION: 892.53'

CP #1
N: 13763390.0521'
E: 2123500.5711'
ELEVATION: 890.41'

Balanced Site Design, LLC
12950 Country Parkway
Suite 150
San Antonio, TX 78216
210.530.1312

balanced SITE DESIGN

STATE OF TEXAS
CHAD RESPONDEK
129700
LICENSED
PROFESSIONAL
ENGINEER
02/22/2023

REV.	DESCRIPTION	DATE

4G ENTERPRISES

PROPOSED IMPERVIOUS COVER & DRAINAGE AREA MAP

SHELL STATION REDEVELOPMENT
16525 BLANCO ROAD
SAN ANTONIO, TX

DATE: 02/22/2023

SHEET:

\\BSD-DS1618\ENGINEERING\U20074 BLANCO EXPRESS SHELL\DESIGN\SITE PLANNING\EXHIBIT\EXH04-IMPERVIOUS COVER.DWG

Attachment I

balanced
SITE DESIGN

Inspection Report

Prevention Pollution Measure	Inspected In Compliance (Y/N)	Corrective Action Required: Description (use additional sheet if necessary)	Corrective Action Required: Date Completed
BEST MANAGEMENT PRACTICES			
Silt fences			
Rock berms			
Drain inlet protection			
Gravel filter bags			
Vehicle exits (offsite tracking)			
Concrete washout pit (leaks, failure)			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Other structural controls			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Construction debris			
General site cleanliness			
Trash receptacles			
Natural vegetation buffer strips			
EVIDENCE OF EROSION			
Site preparation			
Roadway or Parking Lot Construction			
Utility Construction			
Drainage Construction			
Building Construction			
MAJOR OBSERVATIONS			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			

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

Inspector's Name (Superintendent)	Inspector's Signature	Date
Name of Owner/Operator (Firm)	Authorized Signature	Date

Note: If there is a "NO" answer in the second column, the right columns will need to be completed and action is required within 7 days. Use additional sheets if necessary.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

No interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site. in areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by reasonably arid conditions, stabilization measures must be initiated as soon as practicable. Stabilization measures in this instance shall comply with temporary stabilization as defined in TXR150000 or as defined otherwise in the landscape plans where applicable.

TCEQ Form – 0600 Permanent Stormwater Section

Permanent 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)(C), (D)(ii), (E), and (5), 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.

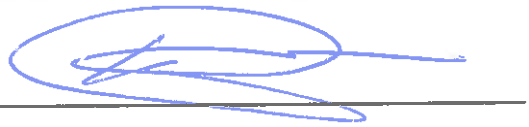
Signature

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 **Permanent Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Umer Khawaja

Date: 6-13-22

Signature of Customer/Agent



Regulated Entity Name: Blanco Express Shell Station

Permanent Best Management Practices (BMPs)

Permanent best management practices and measures that will be used during and after construction is completed.

1. ☐ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

   ☒ N/A

2. ☐ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

   ☐ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____

☒ N/A

3. ☐ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

   ☒ N/A

4. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

5. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ **Attachment A - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☒ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☐ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☐ **Attachment B - BMPs for Upgradient Stormwater.**

☐ A description of the BMPs and measures that **will** be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

7. ☐ **Attachment C - BMPs for On-site Stormwater.**

☐ A description of the BMPs and measures that **will** be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☐ **Attachment D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☒ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ **Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☐ **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☐ Design calculations (TSS removal calculations)

☐ TCEQ construction notes

☐ All geologic features

☐ All proposed structural BMP(s) plans and specifications

☒ N/A

11. ☐ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☐ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☐ Signed by the owner or responsible party
    ☐ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☐ A discussion of record keeping procedures

    ☒ N/A

12. ☐ **Attachment H - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☐ **Attachment I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. ☐ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

    ☒ N/A

15. ☐ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

    ☒ N/A

TCEQ Form – 0599

Agent Authorization Form

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

I Umer Khawaja,
Print Name

Owner,
Title - Owner/President/Other

of 4G Enterprises LLC,
Corporation/Partnership/Entity Name

have authorized David Asvestas, P. E.
Print Name of Agent/Engineer

of Banester Engineering Consultants, Ltd.
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:

Applicant's Signature

6-13-23
Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Umer Khawaja 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 13th day of June 2023

JACQUELYN C. VERSTUYFT
MY COMMISSION EXPIRES
NOVEMBER 19, 2025
NOTARY ID: 2606399

NOTARY PUBLIC

Jacquelyn C Verstuyft
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11-19-2025

TCEQ Form – 0574

Application Fee Form

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Blanco Express Shell Station
Regulated Entity Location: 16525 Blanco Rd., San Antonio, TX
Name of Customer: 4G Enterprises LLC
Contact Person: Umer Khawaja Phone: 210-240-1032
Customer Reference Number (if issued):CN 602585390
Regulated Entity Reference Number (if issued):RN 101816684

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
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
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	1 Tanks	$ 650.00
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 6-13-23

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

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

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Form – 10400

Core Data Form

TCEQ Use Only

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.)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 602585390		RN 101816684

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

4G Enterprises 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)*
0800051675	32004229889	74-3056801	

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

11 Remington Run

City	San Antonio	State	TX	ZIP	78258	ZIP + 4	7707

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	umer@nissanboerne.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*

(210) 240-1032		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

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).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Blanco Express Shell Station

23. Street Address of the Regulated Entity: *(No PO Boxes)*								
	16525 Blanco Rd.							
	City	San Antonio	**State**	TX	**ZIP**	78232	**ZIP + 4**	1903
24. County								

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

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).

27. Latitude (N) In Decimal:	29.59289		**28. Longitude (W) In Decimal:**	98.51199	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	35	34.39	98	30	43.17

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	N/A	447190	N/A

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Convenience store/UST facility

34. Mailing Address:								
	11 Remington Run							
	City	San Antonio	**State**	TX	**ZIP**	78258	**ZIP + 4**	7707
35. E-Mail Address:	umer@nissanboerne.com							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 240-1032		( ) -

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.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☒ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	David Asvestas, P. E.	41. Title:	Partner

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 771-8154		( ) -	david@banester.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:	4G Enterprises LLC	Job Title:	Owner
Name *(In Print)*:	Umer Khawaja	Phone:	(210) 240- 1032
Signature:		Date:	6-13-23