TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 24, 2003

Mr. M.D. Fischer
Midtex Oil, LP
P.O. Box 310339
New Braunfels, Texas 78131

Re: Edwards Aquifer, Comal County.
NAME OF PROJECT: Pit Stop No.7, 1320 River Road, New Braunfels, Texas.
TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 1906.00. Investigation No. 22031

Dear Mr. Fischer:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted by Mr. David Urban, P.E. of Dwight Russell and Associates, Inc. on behalf of Midtex Oil, L.P., and received by the San Antonio Regional Office on October 9, 2002. Final review of the WPAP submittal was completed after additional material was received on January 13, 2003. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) 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, modification to a plan, or exception. A motion for reconsideration must be filed no later than 20 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% of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

This site consists of an existing underground storage tank facility and convenience store located on approximately 1.288 acres. According to the application, the existing site covers approximately 0.61 acres or approximately 47.44% of the entire area of the site. According to this application, the applicant intends to construct approximately 1,800 square feet of additional building area, and 3,000 square feet of additional parking area. The proposed commercial project will have an area of approximately an overall impervious cover of acres and will have the following parameters:

- The improvements covered under this application will include the addition of approximately 1,800 square feet of building area and 3,000 square feet of parking area.
- The overall proposed impervious cover for the development is approximately 56.39% (proposed and existing areas)of the total area of the site.
- The newly proposed impervious cover for this commercial development encompasses approximately 0.11 acres or 8.55 % of the entire project area.

Wastewater treatment for the existing portion of the project site is currently treated by the use of on-site sewage facilities. In Phase II of the proposed project, wastewater will be disposed of by conveyance to the existing New Braunfels Sewage Treatment Plant owned by the City of New Braunfels. According to the engineer for the project, a proposed sewage collection system will be designed and constructed to treat wastewater generated by the entire project site.

PERMANENT POLLUTION ABATEMENT MEASURES

A sedimentation/filtration basin will be constructed to treat stormwater runoff. The individual treatment measures will consist of the items described in the table below. The approved measures are presented to meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

Sedimentation/Filtration Basins	
Watershed/Basin	Single
Drainage Area (acres)	0.115 acres
Capture Volume (ft^3)	1,260
Sand Filter Surface Area (ft^2)	520
Storage Depth (ft)	0.5
Impervious Liner	Yes
Target TSS Removal (lbs)	190.6

GEOLOGY

According to the geologic assessment included with the submittal, nine man-made features were identified on the proposed project site. Features S1, S2, S3, and S4 consisted of septic tank related piping, feature S5 consists of an on-site septic tank, S6 consists of an underground water line, S7 consists of an underground fiberoptic line, S8 consists of the existing septic tank drainfield, and S9 consists of a water well. The San Antonio Regional Office site inspection of November 1, 2002, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

1. All permanent abatement measures utilized for this project must be completed prior to completion of construction and prior to use for commercial operation.

II. The sedimentation/filtration basin is designed in accordance with the document *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (June 1999)*. The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

Please note that for full sedimentation/filtration basins, the Technical Guidance Manual on Best Management Practices (1999 edition), suggests using the valve in Section 3.4.7 and Figure 3.14 for the purpose of isolating the sedimentation basin in case of a hazardous material spill in the watershed.

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. 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, covered by the Edwards Aquifer protection plan, 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.

3. 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.

4. 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.

5. 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 file 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 of an approved plan.

6. 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.

7. Abandoned injection wells must be closed under the requirements of 30 TAC Chapter 331 (relating to Underground Injection Control).

8. All borings with depths greater than or equal to 20 feet must be plugged with a 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.

<u>During Construction:</u>

9. During the course of regulated activities related to this project, the applicant or his 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.

10. If any sensitive feature 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 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.

11. A single well exists on the site. All identified abandoned water wells, including injection, dewatering, and monitoring wells must be plugged pursuant to requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Licensing and Regulation of Water Well Drillers and Water Well Pump Installers) and all other locally applicable rules, as appropriate. If any abandoned wells (including water, injection (injection well referenced in Item 7), dewatering, and monitoring well) are encountered during construction, they must be plugged pursuant to requirements of the Texas Department of Licensing and Regulation (16 TAC Chapter 76) and all other locally applicable rules, as appropriate.

12. 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%. 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).

13. 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.

14. 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.

15. To the maximum 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 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. A request to temporarily seal the feature must include a justification that no reasonable and practicable alternative exists. The request will be evaluated by the executive director on a case-by-case basis.

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

16. Owners of permanent BMPs and measures must insure that the 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 San Antonio Regional Office within 30 days of site completion.

17. 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. Such 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 the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

18. 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.

19. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% 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.

20. 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.

If you have any questions or require additional information, please contact Tom Gutierrez of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4025.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/TG/eg

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

cc: Mr. David Urban, P.E., Dwight Russell and Associates, Inc.
Mr. Harry Bennett, City of New Braunfels
Mr. Mike Shands, City of New Braunfels
Mr. John Bohuslav, TXDOT San Antonio District
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

APPLICATION FOR
WATER POLLUTION ABATEMENT PLAN
PIT STOP NO. 7
1320 RIVER ROAD
NEW BRAUNFELS, COMAL COUNTY, TEXAS 78750

OCTOBER 2, 2002

Prepared for:

Mr. M. D. Fischer
Midtex Oil, L. P.
P. O. Box 310339
New Braunfels, Texas 78131

Prepared by:

Dwight C. Russell Associates, Inc.
7801 N. Lamar Blvd., Suite D-77
Austin, Texas 78752
512/452-8834
DRA Project No. 80407
TNRCC Corrective Action Specialist No. RCAS00248

TABLE OF CONTENTS

TNRCC Core Data Form

TNRCC Use Only

SECTION I: General Information

1. Reason for Submission *Example: new wastewater permit; IHW registration; change in customer information; etc.*
WPAP and UST Application for Pit Stop No. 7, 1320 River Road, New Braunfels, Texas

2. Attachments ☐ Yes ☐ No
Describe Any Attachments: *(ex: Title V Application, Waste Transporter Application, etc.)*
Permit Applications for WPAP and UST Construction over the Edwards Aquifer

3. Customer Reference Number *if issued*
CN *(9 digits)*

4. Regulated Entity Reference Number *if issued*
RN *(9 digits)*

SECTION II: Customer Information

5. 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 and Operator
☐ Occupational Licensee ☐ Volunteer Cleanup Applicant ☐ Other:

TNRCC Use Only: ☐ Superfund ☐ PST ☐ Respondent

6. General Customer Information
☐ New Customer ☐ Change to Customer Information ☐ Change in Regulated Entity Ownership ☒ No Change*
*If "No Change" and Section I is complete, skip to Section III - Regulated Entity Information.

7. Type of Customer: ☐ Individual ☐ Sole Proprietorship - D.B.A. ☑ Partnership ☐ Corporation
☐ Federal Government ☐ State Government ☐ County Government ☐ City Government
☐ Other Government ☐ Other

8. Customer Name *(If an individual, please print last name first)*
Midtex Oil, L. P.

9. Mailing Address: P. O. Box 310339

City	State	ZIP	ZIP + 4
New Braunfels	Tx	78131	

10. Country Mailing Information *if outside USA*

11. E-Mail Address *if applicable*

12. Telephone Number: (830)625-4214

13. Extension or Code

14. Fax Number *if applicable*: (830)606-6778

15. Federal Tax ID *(9 digits)*: 1-74-1864941-8

16. State Franchise Tax ID Number *if applicable*

17. DUNS Number *if applicable (9 digits)*: 083958371

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

19. Independently Owned and Operated?
☑ YES ☐ NO

SECTION III: Regulated Entity Information

20. General Regulated Entity Information
☐ New Regulated Entity ☐ Change to Regulated Entity Information ☒ No Change*
*If "No Change" and Section I is complete, skip to Section IV - Preparer Information.

21. Regulated Entity Name *(If an individual, please print last name first)*
Midtex Oil, L. P.

22. Street Address: (No P.O. Boxes)	3455 I.H. 35 South			
	City: New Braunfels	State: Tx	ZIP: 78131	ZIP + 4:
23. Mailing Address	P. O. Box 310339			
	City: New Braunfels	State: Tx	ZIP: 78131	ZIP + 4:
24. E-Mail Address:				
25. Telephone Number: (830)625-4214	26. Extension or Code:	27. Fax Number *if applicable*: (830)606-6778		
28. Primary SIC Code *(4 digits)*: 5541	29. Secondary SIC Code *(4 digits)*: —	30. Primary NAICS Code *(5 or 6 digits)*: 445120	31. Secondary NAICS Code *(5 or 6 digits)*:	

32. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*
Food and fuel sales

Questions 33 - 37 address geographic location. Please refer to the instructions for applicability.

33. County: Comal

34. Description of Physical Location
Located in the northeast corner of the intersection of Loop 337 and River Road in New Braunfels, Tx.

35. Nearest City	State	Nearest ZIP
New Braunfels	Tx	78132

36. Latitude (N)			37. Longitude (W)		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	77	96	7	47

38. TNRCC Programs In Which This Regulated Entity Participates *Not all programs have been listed. Please add to this list as needed. If you don't know or are unsure, please mark "unknown."*

☐ Animal Feeding Operation	☒ Petroleum Storage Tank	☐ Water Rights
☐ Title V – Air	☐ Wastewater Permit	☐
☐ Industrial & Hazardous Waste	☐ Water Districts	☐
☐ Municipal Solid Waste	☐ Water Utilities	☐ Unknown
☐ New Source Review - Air	☐ Licensing - TYPE(s)	

SECTION IV: Preparer Information

39. Name		40. Title
Rodney Fischer		Director of Retail Operations
41. Telephone Number: (830)625-4214	42. Extension or Code:	43. Fax Number *if applicable*: (830)606-6778
44. E-Mail Address:		

General Information Form

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

REGULATED ENTITY NAME: Pit Stop No. 7
COUNTY: Comal STREAM BASIN: Blieders

EDWARDS AQUIFER: X RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: X WPAP __ AST __ EXCEPTION
__ SCS X UST __ MODIFICATION

CUSTOMER INFORMATION

1. Agent/Representative (If any):
Contact Person: M. D. Fischer
Entity: Midtex Oil Company, LP
Mailing Address: P. O Box 310339
City, State: New Braunfels, Texas Zip: 78131

Telephone: 830 625-4214 FAX: 830 606-6778

2. X This project is inside the city limits of New Braunfels.
__ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
__ This project is not located within any city's limits or ETJ.

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

Southeast corner of Loop 337 and River Road, 1320 River Road, New Braunfels

4. X ATTACHMENT A - ROAD MAP. A road map showing directions to and the location of the project site is attached at the end of this form.

5. X 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 behind this sheet. The map(s) should clearly show:

X Project site.
X USGS Quadrangle Name(s).
X Boundaries of the Recharge Zone (and Transition Zone, if applicable).
X Drainage path from the project to the boundary of the Recharge Zone.

6. X Sufficient survey staking is provided on the project to allow TNRCC regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. **The TNRCC must be able to inspect the project site or the application will be returned.**

7. X ATTACHMENT C - PROJECT DESCRIPTION. Attached at the end of this form is a detailed narrative description of the proposed project.

8. Existing project site conditions are noted below:
   - X Existing commercial site
   - ___ Existing industrial site
   - ___ Existing residential site
   - ___ Existing paved and/or unpaved roads
   - ___ Undeveloped (Cleared)
   - ___ Undeveloped (Undisturbed/Uncleared)
   - ___ Other: _____

PROHIBITED ACTIVITIES

9. X 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).

10. ___ 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

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

   - X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
   - ___ For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.

X For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.
__ A Contributing Zone Plan.
__ 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.

12. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TNRCC 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:

__ TNRCC cashier
__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
X San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

13. X Submit one (1) original and three (3) copies of the completed application to the appropriate regional office for distribution by the TNRCC to the local municipality or county, groundwater conservation districts, and the TNRCC's Central Office.

14. X 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.
__ No person shall commence any regulated activity until the Contributing Zone Plan for the activity has been filed with the executive director.

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 TNRCC review. The application was prepared by:

DAVID L. URBAN
Print Name of Customer/Agent

David L Urban
Signature of Customer/Agent

10/2/02
Date

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

New Braunfels West, Tex ↔ New Braunfels East, Tex

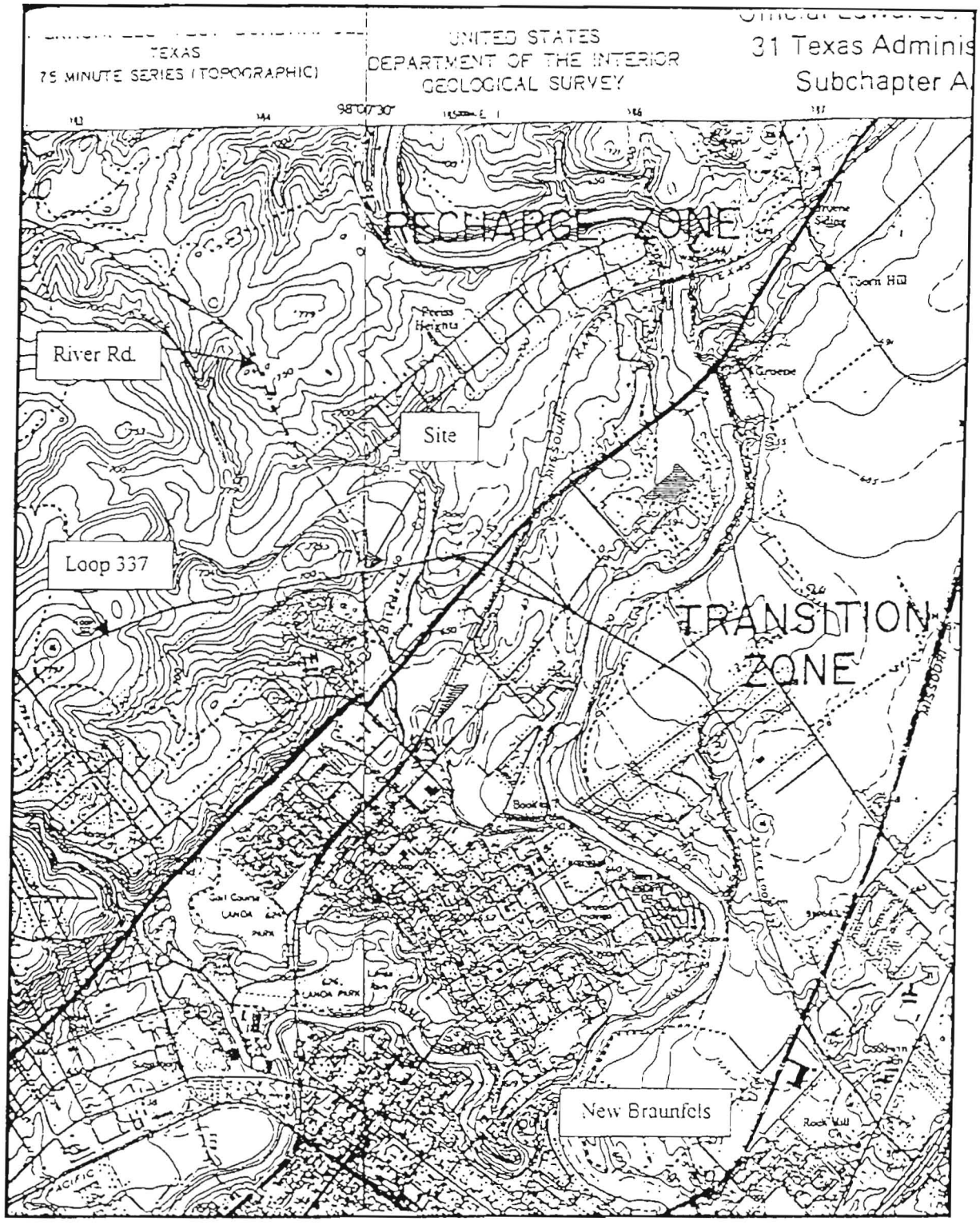
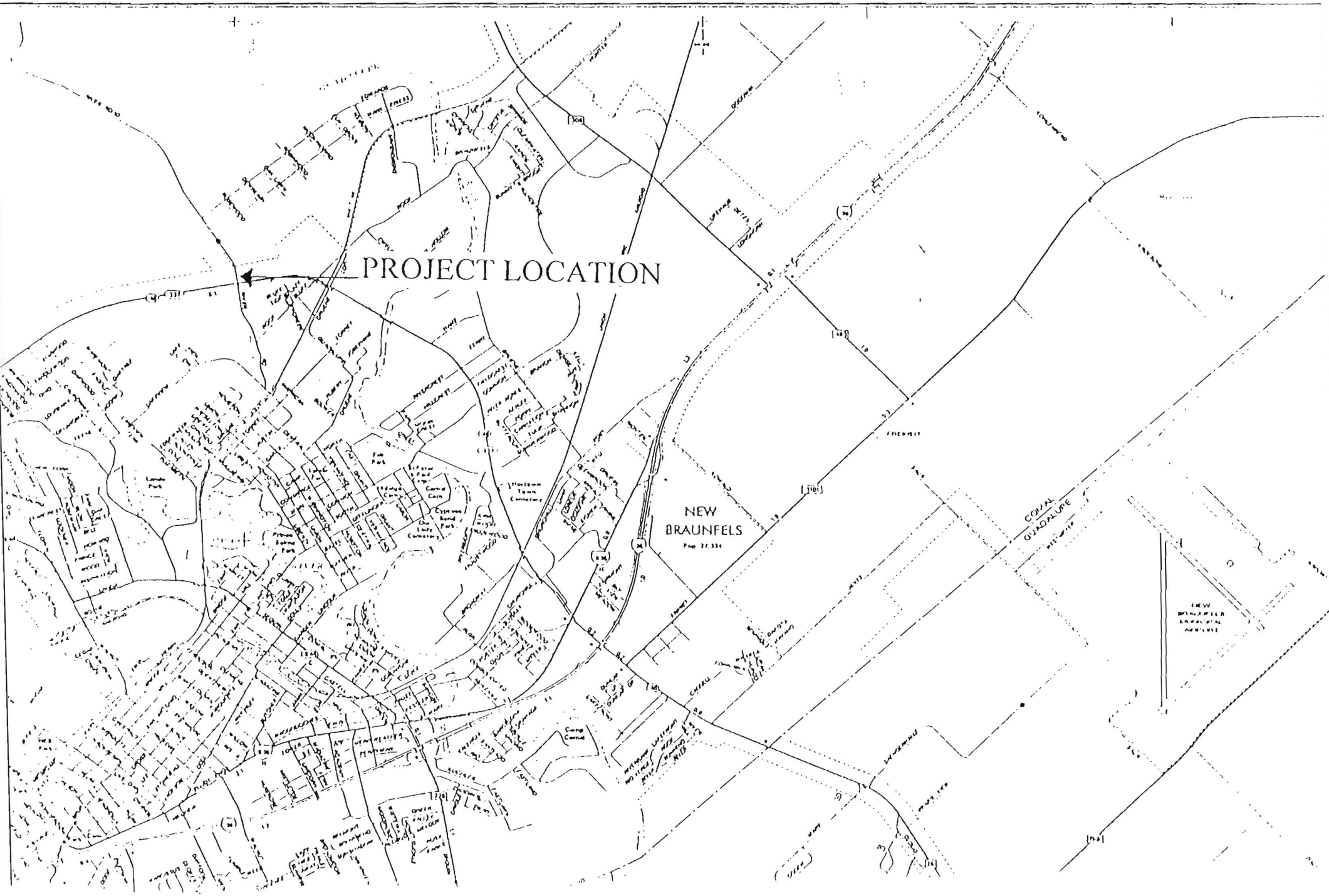


Fig. 1 Site Location Map 1:24,000 N ↑	Midtex Oil Company, Inc. (Pit Stop #7) 1320 River Road New Braunfels, Texas	Dwight C. Russell Associates, Inc. 7801 North Lamar Suite D-77 Austin, Texas 78752


PROJECT LOCATION
NEW
BRAUNFELS
COMAL
GUADALUPE

ATTACHMENT C

The project consists of the demolition of the existing canopy, removal of the existing dispensers, piping, demolition of the concrete and asphalt drive, and the removal of the four (4) single-wall fiberglass underground storage tanks(USTs). Phase I of this project includes the replacement of the tanks with two (2) double-wall fiberglass USTs, the installation of a 28-foot by 120-foot canopy with five (5) fuel islands containing five multi-product dispensers (MPDs). The existing site consists of a 1.288 acrse located in the southeast corner of the intersection of Loop 337 and River Road, New Braunfels, Texas. The existing building, canopy, and pavement total coverage is approximately 0.6114 acres or 47.44% of the Project Site.The total new impervious cover proposed in Phase I will add approximately 3,000 square feet of concrete over the tanks and new parking. Phase II will add approximately 1,800 square feet to the building which brings the total new impervious cover to approximately 4,800 square feet The proposed impervious cover of both Phase I and II will be 56.39%. Temporary erosion control will be constructed prior to the start of construction.

A new tankhold will be excavated and the proposed new underground fuel storage system will consist of two (2) new double-wall fiberglass tanks manufactured by Xerxes. The tanks will be manufactured to meet Underwriters Laboratories, Inc. (U.L.) Standard for Safety 1316, File MH 9061 for storage of flammable liquids. One tank which is 15,000 gallons will be used to store unleaded gasoline and the second tank which is a dual-compartment 16,000 gallon tank will be used to store 10,000 gallons of super unleaded gasoline and 6,000 gallons will be used to store diesel. Each compartment will be equipped with a 1.5 hp, 4-inch diameter submersible pump (F. E. Petro or Red Jacket) to dispense gasoline and diesel to the blending dispensers. Overfill prevention for each tank will be provided by a ball float restrictor valve (OPW 53VML-0160), and will be set to restrict the flow into the tank when the volume of liquid in the tank reaches no more than 90% of the tank capacity. Spill protection for each compartment will be provided by a spill containment manhole (OPW-ISC-2100), which will be fitted onto the drop tube fill riser of each tank.

Product piping will be U.L. listed Ameron Fiberglass Reinforced Plastic, 2-inch primary and 3-inch secondary. Vent lines will be 2-inch diameter single-wall FRP pipe. Stage II vapor recovery lines will be 3-inch diameter single-wall FRP pipe for the trunk line and 2-inch feeder lines. The Stage II will be plugged for future connection. A safety shear valve (OPW 10 BMC) 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 (Fireman Flexhose) will be installed at both ends of each product line to connect to the dispenser unit (1.5" x 18") and the submersible pump (2.0" x 24").

Corrosion protection for the metallic components of the underground storage systems will be provided by electrical isolation. The submersible pump housings and pump-end flexible connectors will be installed within a liquid-tight fiberglass-reinforced plastic piping sump, which will provide isolation from the corrosive elements of the backfill material while also providing secondary containment for any leaks from these components. The dispenser-end flexible connector will be similarly isolated by enclosure within a plastic dispenser pan. 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 or Gilbarco multi-channel inventory, leak detection (0.1 gallon/hour) monitoring device. Two 4-inch diameter slotted PVC observation wells will be installed in the corners of the tank pit excavations. Each tank will also be equipped with an automatic tank gauging probe (Mag I) which will automatically inventory the product volume in each tank. Additionally, each tank will be equipped with an interstitial probe to detect the presence of fluid. Each subpump sump will be equipped with sensors to detect the presence of liquids. Each subpump will be equipped with an electronic line leak detector. The sensors from all tanks and piping will be connected to a programmable control unit to be located in the store. This central monitoring unit is designed to provide visual and audible alarms when a release or water is detected.

The USTs tankhold and piping trench will be fitted with a liner as manufactured by Reef Industries, Inc., Permalon PLY X-210R. See specification sheet attached.

ATTACHMENT D

PRODUCT INFORMATION

PERMALON® PLY X-210®

- High density, cross-laminated polyethylene resists punctures and tears.
- UV stabilized to withstand prolonged exposure to sunlight.
- Ply X-210 is not prone to environmental stress-cracking (ESC) so it can endure repeated thermal expansion & contraction cycles.
- Meets ASTM standard D-3083 Soil Burial test performance requirements.

PHYSICAL PROPERTIES AND TYPICAL VALUES

PROPERTY		ASTM TEST METHOD	US VALUE	METRIC VALUE
THICKNESS		D-4801	20 MIL	.50 MM
WEIGHT		D-3776	68 LB/1000 FT^2	33 KG/100 M^2
			9.9 OZ/YD^2	335 GM/M^2
TENSILE STRENGTH	MD	D-882	66 LBF	294 N
	PSI		3660 PSI	25.2 MPA
	TD		58 LBF	258 N
	PSI		3170 PSI	21.9 MPA
TENSILE ELONGATION	MD	D-882	700 %	700 %
	TD		400 %	400 %
TONGUE TEAR	MD	D-751B	37.5 LBF	167 N
	TD		31.5 LBF	140 N
PPT RESISTANCE	MD	D-2582	48.2 LBF	214 N
	TD		44.3 LBF	197 N
TRAPEZOIDAL TEAR	MD	D-4533	62 LBF	276 N
	TD		77.3 LBF	344 N
DART IMPACT STRENGTH		D-1709	3.01 LBS	1.36 KG
PUNCTURE RESISTANCE		D-4833	42.4 LBS	189 N
COLD IMPACT STRENGTH		D-1709MOD	-80°F	-60°C
CARBON BLACK CONTENT		D-1603	>2.0 %	>2.0 %

PERMALON®

Call today for technical assistance or to place your order:

800/231-6074

REEF INDUSTRIES, INC.
Since 1957

P.O. Box 750250
Houston
Texas 77275-0250
713/507-4200
713/507-4295 FAX

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

REGULATED ENTITY NAME: Midtex Oil Company, Inc. (Pit Stop #7), 1320 River Road, New Braunfels, Texas 78132

TYPE OF PROJECT: X WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. X Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

2. 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** (Attached).

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Comfort-Rock (CrD)	C	0.5' - 1.0'
Lewisville silty clay (LeB)	B	Up to 5.0'

* 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.

3. X A **STRATIGRAPHIC COLUMN** is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column (See Table 1).

4. X A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY & SOIL** is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.

5. X Appropriate **SITE GEOLOGIC MAP(S)** are attached (See Fig. 2).

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" = 20 '
Site Geologic Map Scale 1" = 20 '
Site Soils Map Scale (if more than 1 soil type) 1" ≈ 1,666 '

6. Method of collecting positional data:
X Global Positioning System (GPS) technology.

__ Other method(s).

7. X The project site is shown and labeled on the Site Geologic Map.

8. X Surface geologic units are shown and labeled on the Site Geologic Map.

9. X 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.

10. X The Recharge Zone boundary is shown and labeled, if appropriate (See Fig. 1).

11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):

X There is 1 (#) well present on the project site and the location is shown (Fig. 2) 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.
X The well is 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.

ADMINISTRATIVE INFORMATION

12. X One (1) original and three (3) copies of the completed assessment has been provided.

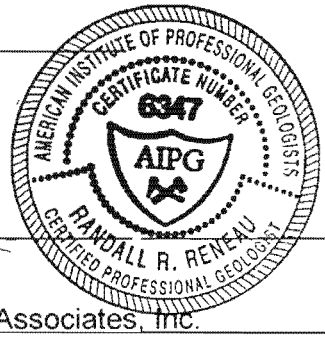
Date(s) Geologic Assessment was performed: 7/19/02
Date(s)

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 213.

Randall R. Reneau, P.G.
Print Name of Geologist

(512) 258-8969
Telephone

(509) 471-1099
Fax



Signature of Geologist

7/23/02
Date

Representing: Dwight C. Russell Associates, Inc.
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME:																
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)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29, 43.771'	98, 07.484'	MB	30	Ked								C	8	38	X		X		Hillside
S-2	29, 43.775'	98, 07.475'	MB	30	Ked								C	8	38	X		X		Hillside
S-3	29, 43.771'	98, 07.473'	MB	30	Ked								C	8	38	X		X		Hillside
S-4	29, 43.771'	98, 07.473'	MB	30	Ked								C	8	38	X		X		Hillside
S-5	29, 43.771'	98, 07.473'	MB	30	Ked								C	8	38	X		X		Hillside
S-6	29, 43.771'	98, 07.473'	MB	30	Ked								C	8	38	X		X		Hillside
S-7	29, 43.766'	98, 07.473'	MB	30	Ked								C	8	38	X		X		Hillside
S-8	29, 43.771'	98, 07.469'	MB	30	Ked								C	8	38	X		X		Hillside
S-9	29, 43.737'	98, 07.452'	MB	30	Ked								C	8	38	X		X		Hillside

* DATUM: NAD-83

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 Natural Resource Conservation Commission'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 213

Date: 7/23/02

Sheet 1 of 1

TNRCC-0585-Table (Rev. 5-1-02)

NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY & SOILS
Pit Stop No. 7, 1320 River Road, New Braunfels, Texas

Dwight C. Russell Associates, Inc. conducted a Geologic Assessment of the subject property on July 19, 2002. The Geologic Assessment covered an area of less than 1.0 acre contiguous to an existing Pit Stop convenience store (See Fig. 2). The surveyed area consists of a grassy hillside sloping to the east-southeast towards Blieders Creek (See Fig 1).

No surface geologic recharge features were noted during the Geological Assessment survey.

Nine (9) manmade features were noted (S-1 through S-9). The locations of these manmade features are shown on the Geologic Site Map (Fig. 2). Evaluation of these features using the attached Geologic Assessment Table, indicates potential recharge sensitivity is low.

Surface elevation in the Geologic Assessment survey area ranges from 660-670 feet above mean sea level. The nearest 100-year floodplain (Blieders Creek) is offsite. Surface water runoff from the survey area is to the Northeast, East and Southeast (See Fig's. 1 & 2). During rain events, drainage (runoff) flows into Blieders Creek, a tributary of the Comal River. Stream flow is from the recharge zone into the transition zone.

Soils

According to the *Soil Survey of Comal and Hays Counties, Texas* (USDA), the surveyed area (<1.0 ac.) is covered by soils of the Comfort-Rock outcrop complex (CrD). The surface layer (0.0-0.5ft.) is typically dark brown, extremely stony clay. The subsoil (0.5-1.0 ft.) is dark reddish brown, extremely stony clay. The Comfort soil is well drained with slow to medium surface runoff. Permeability is slow and the available water capacity is very low.

The eastern property boundary (Site) is near the contact of Comfort (CrD) soils and Lewisville (LeB) silty clay (See attached Soils Map). Runoff from the Site will contact Lewisville soils (downslope-gradient) prior to entering Blieders Creek.

The Lewisville silty clay typically forms on gently sloping stream terraces (Blieders Creek at the Site). The surface layer (0.0-1.3 ft.) is a dark grayish brown silty clay. From 1.3-3.0 feet it is a light brown silty clay. The subsoil (3.0-5.0 ft._ is a reddish yellow silty clay. The soil is well drained, surface runoff is medium and permeability is moderate. Available water capacity is high.

NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY & SOILS
Pit Stop No. 7, 1320 River Road, New Braunfels, Texas (cont. pg. 2)

Geology

Review of available geologic publications, plus on-site investigation, show the Site area to be underlain by Cretaceous aged Edwards Limestone (Ked). The Edwards (including the Georgetown at the top) is composed of fine to coarse grained limestone with abundant chert. Color is gray to grayish brown. Fossils are rudistids, miliolids and shell fragments. Solution zones and collapse breccia zones are common. Thickness in the area of the Site ranges from 300-500 feet.

No karst features were noted during the Geologic Assessment (Fig. 2). Nine (9) manmade (buried septic system / fiber optic line) features were identified (Fig. 2). These features are deemed to have low-no recharge potential (see attached Geologic Assessment Table).

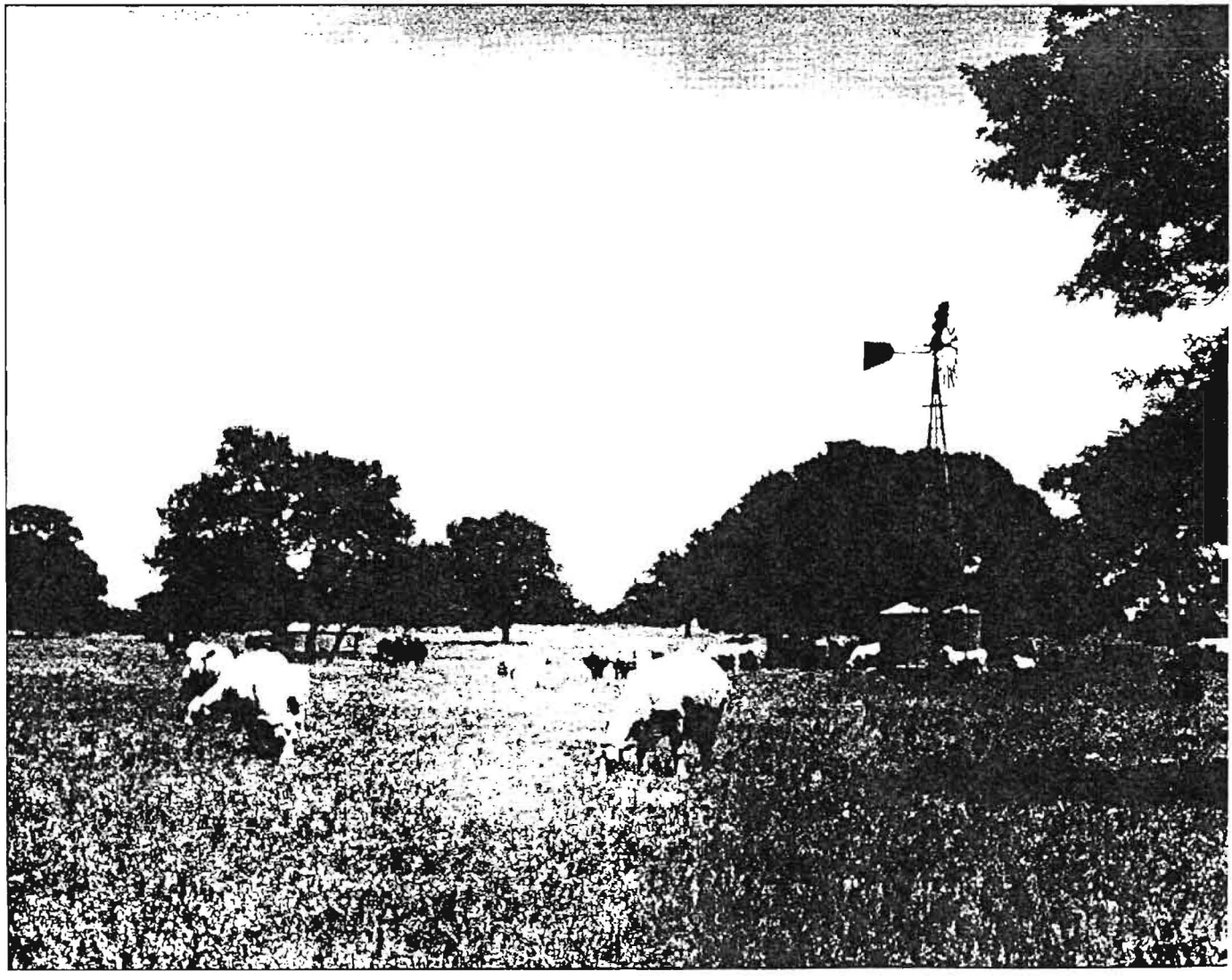
Based on topography and local drainage features, runoff is projected to the North, East and Southeast towards Blieders Creek (Fig. 1).

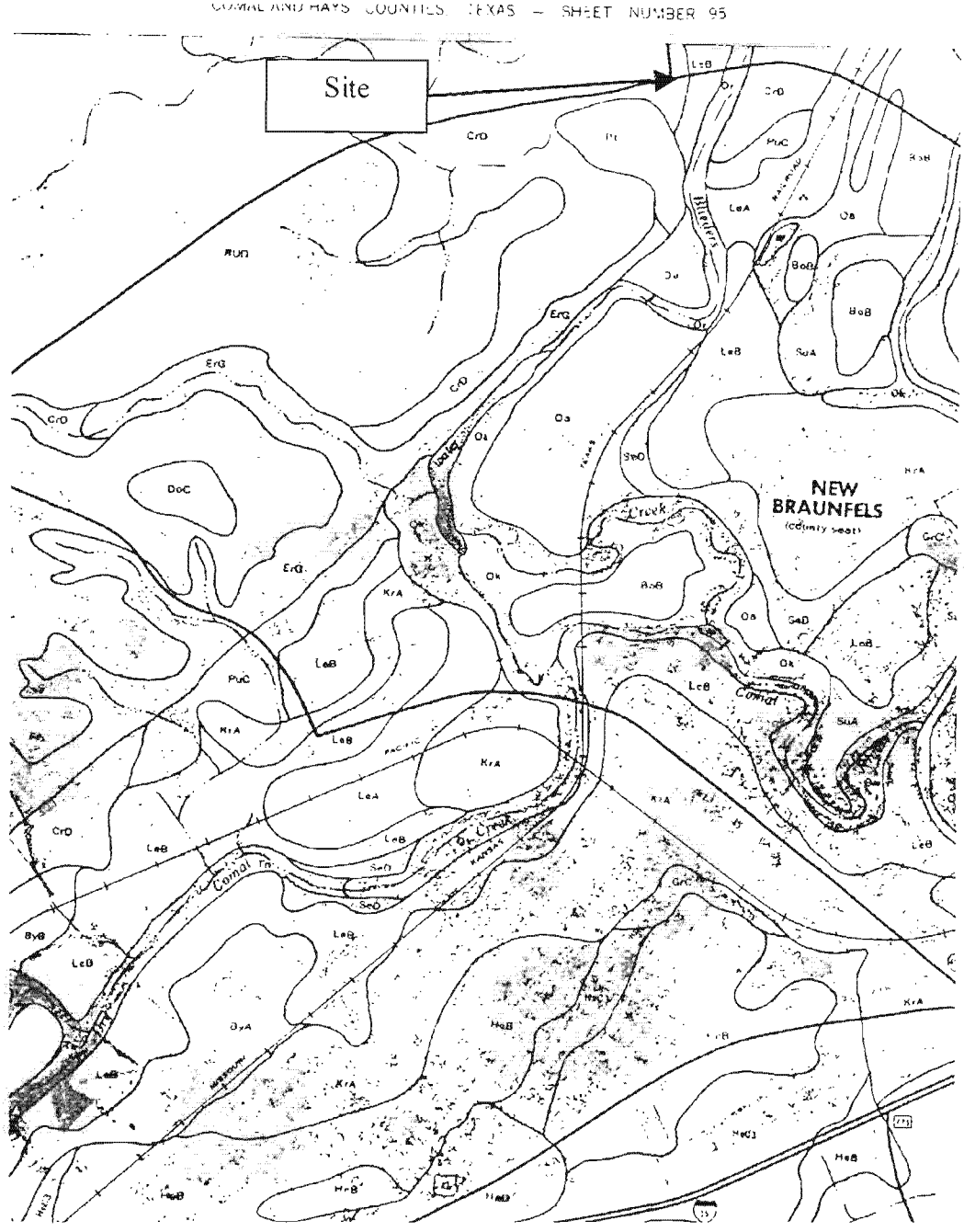
United States Department of Agriculture

Soil Conservation Service

In Cooperation with Texas Agricultural Experiment Station

Soil Survey of Comal and Hays Counties Texas





Midtex Oil Company, Inc. (Pit Stop #7), 1320 River Road
New Braunfels, Texas: **SOIL MAP** (USDA-SCS)

CrD = Comfort-Rock outcrop complex soils

LeB = Lewisville silty clays

N

1" ≈ 1,666'

TABLE 1: Stratigraphic Column: Midtex Oil Company, Inc. (Pit Stop #7) 1320 River Road, New Braunfels, Texas.

AGE	FORMATION	THICKNESS	DESCRIPTION
Cretaceous	Edwards Limestone (Ked)	300-500'	Edwards (includes Georgetown at top) is fine-medium grained limestone with abundant chert. Color is gray to grayish brown. Fossils include rudistids, miliolids and shell fragments. Solution zones and collapse breccia zones are common.
Cretaceous	Glen Rose Formation (Kgru)	+/- 400'	Limestone, dolomite and marl in alternating beds. Forms stairstep topography. Limestone is coarse to fine grained, hard to marly and light gray to yellowish gray. Dolomite is fine grained, porous and yellow brown. Upper Glen Rose (Kgru) is thinner bedded than lower section, contains more dolomite and is more fossiliferous.

(184/87)

N 83°37'22"E 417.42'

Ked

AC AC AC

8.6

60.4

BUILDING

60.5

CONCRETE WALK

S-9

WATER WELL

S-1

CLEAN OUT

S-2

4" PVC PIPE

S-3

1.3' PVC PIPE

S-4

S-5

SEPTIC TANK

S-6

UNDERGROUND WATER LINE

APPROXIMATE LOCATION OF DRAIN FIELD

S-8

99.00

98.00

97.00

96.00

95.00

94.00

93.00

92.00

91.00

90.00

89.00

150' SANITARY CONTROL EASEMENT

+/- 25" PECAN DRIPLINE NOT TO SCALE

1.288 ACRES TOTAL

ASPHALT

CONCRETE & UNDERGROUND STORAGE

COVERED CONCRETE

AIR & WATER

SIGN

SIGN

+/- 36" LIVE OAK CORPS OF ENGINEERS FIELD MARKER (TAG) No. 903

FIBER OPTIC LINE

S-7

FO FO FO FO FO FO FO FO FO FO FO FO FO FO FO FO FO FO

E E E

PP.

LOOP 337

S 05°17'26"E 126.32'

S 79°47'00"W 347.59'

(REFERENCE BEARING)

Ked Ked Ked

0 20

SCALE IN FEET

LEGEND

S-1 Site Feature

Ked Edward's Limestone

Direction of Storm Water Run-off

MIDTEX OIL COMPANY, INC.
PIT STOP No. 7
1320 River Road
New Braunfels, Texas

FIGURE 2
GEOLOGIC SITE MAP

DRA No. 80407

DWIGHT C. RUSSELL ASSOCIATES, INC.
7801 North Lamar, Suite D-77 • Austin, Texas 78752

WAGABAG-7.dwg 7/23/02

Water Pollution Abatement Plan Application
for Regulated Activities
on the Edwards Aquifer Recharge Zone
and Relating to 30 TAC §213.5(b), Effective June 1, 1999

REGULATED ENTITY NAME: Pit Stop No. 7

REGULATED ENTITY INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots: ____
   - ___ Residential: # of Living Unit Equivalents: ____
   - X Commercial
   - ___ Industrial
   - ___ Other: _____

2. Total site acreage (size of property): 1.288

3. Projected population: 12-20

4. The amount and type of impervious cover expected after construction are shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	1,800 (new)	÷ 43,560 =	0.0413
Parking		÷ 43,560 =	
Other paved surfaces	3,000 (new)	÷ 43,560 =	0.0688
Total Impervious Cover	4,800 (new)	÷ 43,560 =	0.11
Total Impervious Cover ÷ Total Acreage x 100 =			8.55 %

5. X ATTACHMENT A - **Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.

6. X Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

FOR ROAD PROJECTS ONLY
Complete questions 7-12 if this application is exclusively for a road project.

7. Type of project:
   - ___ TXDOT road project.
   - ___ County road or roads built to county specifications.
   - ___ City thoroughfare or roads to be dedicated to a municipality.
   - ___ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:

   ___ Concrete

__ Asphaltic concrete pavement
__ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.
Width of R.O.W.: _____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.
Width of pavement area: _____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = ____% impervious cover.

11. __ A rest stop will be included in this project.
__ A rest stop will **not** be included in this project.

12. __ Maintenance and repair of existing roadways that do not require approval from the TNRCC Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TNRCC.

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

13. **ATTACHMENT B - Volume and Character of Stormwater.** A description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

14. The character and volume of wastewater is shown below:

100 % Domestic	<200 gallons/day
__ % Industrial	_____ gallons/day
__ % Commingled	_____ gallons/day
TOTAL	<200 gallons/day

15. Wastewater will be disposed of by: **EXISTING**
_X_ **On-Site** Sewage Facility (OSSF/Septic Tank):
ATTACHMENT C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.
__ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC §285.

__ Sewage Collection System (Sewer Lines):
__ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
__ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

__ The SCS was previously submitted on _____.
__ The SCS was submitted with this application.
__ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to executive director approval.

The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is :
__ existing.
__ proposed.

16. __ All private service laterals will be inspected as required in 30 TAC 213.5.

SITE PLAN REQUIREMENTS

Items 17 through 27 must be included on the Site Plan.

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 20 '.

18. 100-year floodplain boundaries
__ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
X No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):
Flood Insurance Rate Map Panel No. 485493 0006 C dated June 17, 1986

19. X 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.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
X There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
X The wells are in use and comply with 30 TAC §238.
__ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:
X All **sensitive and possibly sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.
__ No **sensitive and possibly sensitive** geologic or manmade features were identified in the Geologic Assessment.
__ ATTACHMENT D - Exception to the Required Geologic Assessment. An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. Geologic or manmade features were found and are shown and labeled.
__ ATTACHMENT D - Exception to the Required Geologic Assessment. An exception to

the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. No geologic or manmade features were found.

22. X The drainage patterns and approximate slopes anticipated after major grading activities.

23. X Areas of soil disturbance and areas which will not be disturbed.

24. X Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. X Locations where soil stabilization practices are expected to occur.

26. ___ Surface waters (including wetlands).

27. ___ Locations where stormwater discharges to surface water or sensitive features.
X There will be no discharges to surface water or sensitive features.

ADMINISTRATIVE INFORMATION

28. X One (1) original and three (3) copies of the completed application have been provided.

29. X Any modification of this WPAP will require TNRCC executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

To the best of my knowledge, the responses to this form accurately reflect all information requested conceming the proposed regulated activities and methods to protect the Edwards Aquifer. This **WATER POLLUTION ABATEMENT PLAN APPLICATION FORM** is hereby submitted for TNRCC review and executive director approval. The form was prepared by:

David L. Urban, P. E.
Print Name of Customer/Agent

David L Urban
Signature of Customer/Agent Date 10/2/02

Pit Stop No. 7
1320 River Road
New Braunfels, Texas

ATTACHMENT A

There are several factors that could affect surface water and groundwater quality. During construction, fuels and hazardous substances could spill. These spills shall be contained on-site and immediately cleaned up and properly discarded. There are no significant factors proposed which could affect surface or groundwater quality relating to permanent use of the facility.

ATTACHMENT B

The character of the stormwater leaving the site shall be filtered and all pollutants will remain on-site. All stormwater from the proposed 5,000 square foot addition will be directed through an oil/water separator, sand filter, and finally a detention pond located on-site. These water quality devices will filter the first 0.5-inches of runoff, detain the 25 and 100-year storms of water quality volume from the "new" impervious cover area. The outflows from this water quality pond will be released in a manner, which will not adversely impact the environment down stream. For storm water runoff quantities and runoff coefficients refer to drawing, Sheet FS1.1.

ATTACHMENT C

The existing Convenience Store is currently served by an On-Site Sewage Facility. There are no proposed changes to the building or OSSF in this Scope of Work. The OSSF will be abandoned in Phase II of the Site's development with the installation of a sanitary sewer line from the existing City of New Braunfels service which is located in the Right-of-Way north of Blieders Creek.

Pit Stop #7
1320 River Road
New Braunfels, Texas

SIZING OF THE SAND FILTER FOR THE EDWARDS AQUIFER RULES

The renovation of the existing convenience store will add new impervious cover totaling approximately 4,800 square feet (0.115 acres) (5,000 square feet has been used in these calculations). Three thousand square feet will be installed in Phase I during removal and replacement of the USTs. This will consist of new concrete over the new tanks and additional driveway and parking. The building will be remodeled with the addition of 1,800 square feet at a later date.

1. The site is currently 47.44% developed. The USTs will be removed and installed in a different tankhold. The new concrete over the tanks and additional driveway and parking total approximately 3,000 square feet. Phase II will be an enlargement of the existing convenience store with approximately 1,800 square feet. The project site is 5,000 square feet (0.115 acres).
2. All existing upgradient areas are paved. The soil is well drained, surface runoff is medium, and permeability is moderate. Available water capacity is high.
3. The site is located in Comal County with an annual rainfall = 33 inches.
4. All upgradient runoff is directed around the development and does not enter the BMPs.
5. Existing lot is 1.288 acres = 56,105 square feet.
6. Existing impervious cover is 0.6114 acres = 26,636 square feet (47.44%).
7. The proposed impervious cover is 0.7264 acres = 31,641 square feet (56.39%).
8. All BMP runoff leaves the site at a single point. The proposed BMP will not alter the point of discharge from the site.
9. Slopes do not exceed 5% on this site.
10. Runoff coefficient for 56% impervious cover is = 0.35.

Pre-development load with 47.44% impervious cover	Post-development load with 56.39% impervious cover
$L = P (A_u \cdot 0.54 \cdot A_d \cdot R_v \cdot 38.4)$	$L = A \cdot P \cdot R_v \cdot 38.4$
P =33 inches per year	P =33 inches per year
$A_u = 0.6766$ acres	A = 0.7264 acres
$A_d = 0.6114$ acres	$R_v = 0.35$
$R_v = 0.3$	
L = 84.92 lbs per year	L = 323.17 lbs per year
Required Reduction = 0.8 (323.17 – 84.92) = 190.6 lbs per year reduction	
$L_R = L_l \cdot F \cdot$ Fraction of the site treated $\cdot$ (TSS Removal Efficiency)	
190.6 lbs = 323 lbs $\cdot$ F $\cdot$ 1.0 $\cdot$ 0.89	F = 0.66

Therefore, the fraction of load that must be treated to achieve the 80% reduction is 66%. From Figure 3.8, the runoff depth associated with a fraction captured of 0.66 and impervious cover of 56% is approximately 0.5 inches. The site area is 5,000 square feet, therefore, the water quality volume to be captured is 208 cubic feet plus 20% equals 250 cubic feet.

In addition to the filtration of these 250 cubic feet, a trench drain will divert all flow through a 1,000-gallon oil/water separator prior to entering the sand filter. The maximum flow through the separator will occur when the storm water is at the top of the grate. If the storm event should top the grated inlet, flow will be diverted to the sand filter via a secondary spillway inlet. When the filter is full, flow will then be diverted to the detention basin.

$Q_{MAX} = C_o \cdot A \cdot (2gh)^{0.5}$	*Assume no head loss
$Q_{4''} = .6 \cdot .049 \cdot (2 \cdot 32.2 \cdot 1.5)^{0.5}$	$Q_{4''} = 0.289$ CFS = max. Flow through the separator
$I = Q/(C \cdot A) = .289/(.73 \cdot .05) = 7.9$ "/hour	V = L/ detention time = 1.15 ft/min/8.9 min. = 1.15ft/min. (max. acceptable is four (4) ft/min)

Pit Stop #7
1320 River Road
New Braunfels, Texas

SIZING OF DRAINAGE BASIN USING THE RATIONAL METHOD

The renovation of the existing convenience store will add new impervious cover totaling approximately 4,800 square feet (0.115 acres) (5,000 square feet has been used in these calculations). Three thousand square feet will be installed in Phase I during removal and replacement of the USTs. This will consist of new concrete over the new tanks and additional driveway and parking. The building will be remodeled with the addition of 1,800 square feet at a later date.

Step 1. Calculate the 100-yr Peak Discharge Condition and Proposed Conditions:

Existing	Proposed
$A = .115$	$A = .115$
$K = 1.25$	$K = 1.25$
$C_e = 0.38$	$C_p = 0.83$
$T_{ce} = 10$	$T_{cp} = 5$
$I_{100e} = 95.1/(T_{ce} + 7.17)^{.731}$	$I_{100p} = 95.1/(T_{cp} + 7.17)^{.731}$
$I_{100e} = 11.90$	$I_{100p} = 15.3$
$Q_{100e} = K \cdot C_e \cdot I_{100e} \cdot A$	$Q_{100p} = K \cdot C_p \cdot I_{100p} \cdot A$
$Q_{100e} = 0.65$ Maximum Release Rate (cfs)	$Q_{100p} = 1.82$ cfs

---

Step 2. Determine inflow hydrograph for various storm durations in the proposed conditions. The required storage volume is equivalent to the maximum difference between the inflow hydrograph and the outflow:

$T_d = 5, 10, 20, \ldots 90$ — T_d (min) incremental increase of the storm duration

$I_{100(td)} = 95.1/(T_d + 7.17)^{.731}$ — I_{100} (in/hr) as a function of storm duration f(td)

$Q_{100(td)} = K \cdot C_p \cdot I_{100(td)} \cdot A$ — Q_{100} (cfs) as a function of storm duration f(tc)

$\text{Storage}_{(td)} = T_d \cdot Q_{100(td)} \cdot 60 - 0.5 \cdot (t_e + t_d) \cdot Q_{100e} \cdot 60$

Storage = Inflow – Outflow: **Storage Volume (cf) as a function of storm duration f (tc). The calculation presented represents the required storage volume for each increment of the storm duration.**

T_d	$I_{100\,(td)}$	$Q_{100(td)}$	$\text{Storage}_{(td)}$			
5	15.3	1.82	351			
10	11.9	1.417	557			
15	9.87	1.175	667			
20	8.5	1.01	724			
30	6.77	.806	767	Maximum storage volume (CF)		
40	5.68	.68	754			
50	4.94	.59	697			
60	4.39	.52	604			
70	3.97	.47	-			
80	3.63	.43	-			
90	3.35	.40	-			

Temporary Stormwater Section
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

REGULATED ENTITY NAME: Pit Stop No. 7

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:

   ___ Aboveground storage tanks with a cumulative storage capacity of less that 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 TNRCC prior to moving the tanks onto the project.

   X Fuels and hazardous substances will not be stored on-site.

2. X **ATTACHMENT A - Spill Response Actions**. A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.

3. X 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. X **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.

   X The are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. X **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 provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. X 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: Blieders 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. _X_ ATTACHMENT D - **Temporary Best Management Practices and Measures.** A description of the TBMPs and measures that will be used during and after construction are provided at the end of this form. For each activity listed in the sequence of construction, include appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

_X_ 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 has been provided in the attachment at the end of this form

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.

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.

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

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, TNRCC 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 provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

_X_ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. _X_ ATTACHMENT F - **Structural Practices.** Describe 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. Placement of structural practices in floodplains has been avoided.

10. __ **ATTACHMENT G - Drainage Area Map.** A drainage area map is provided at the end of this form to support the following requirements.

__ 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.

X 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.

11. X **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 has 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 provided as at the end of this form.

12. X **ATTACHMENT I - Inspection and Maintenance for BMPs.** A plan for the inspection of temporary BMPs and measures and for their timely maintenance, repair, and, if necessary, retrofit is provided at the end of this form. A description of documentation procedures and recordkeeping practices is included in the plan.

13. X All control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicates a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. X 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. X 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. X 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. X **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 at the end of this form.

18. X 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. X Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

ADMINISTRATIVE INFORMATION

20. X All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. X 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 TNRCC Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TNRCC has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. X 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.

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 TNRCC review and executive director approval. The application was prepared by:

David L. Urban, P. E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/2/02
Date

Pit Stop No. 7
1320 River Road
New Braunfels, Texas

ATTACHMENT A: Actions to be taken to contain any spill of hydrocarbons or hazardous materials:

This site is going to be submitted to the City of New Braunfels under the conditions of on-site detention of the stormwater water quality for construction within the City Limits of New Braunfels, Texas. During construction, the UST Contractor will maintain a spill response kit consisting of sorbent material, shovels, brooms, and disposable containers onsite to respond to spills. The Contractor will instruct personnel to immediately cleanup oil, grease, fuel, and hydraulic fluid when observed being released from construction equipment or personal vehicles.

ATTACHMENT B: Other potential sources of contamination during construction include:

The Contractor will insure that trash containers are placed throughout the site to encourage proper trash disposal. Construction debris will be monitored daily and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis. Stormwater contamination from excess application of fertilizers, herbicides, and pesticides will be prevented by strict application in accordance with the manufacturers directions and only when necessary. The sand filter will provide for the prevention of discharging suspended solids into the stormwater runoff.

ATTACHMENT C: Construction Sequence:

1. Install temporary erosion control devices.
2. Arrange for pre-construction meeting. See general construction notes for detail guidline.
3. Demolish the canopy and fuel islands. Remove the existing single wall USTs as per API 1604, Recommended Practices for removal of underground fuel tanks. Sample and backfill tankhold. Excavate new underground storage tankhold, perform geologic inspection, install tanks, piping, dispensers, and canopy.
4. Install the permanent outlet structure, emergency spillway, and complete the detention pond. Perform clearing and grubbing. Contractor to mulch (shred) cut vegetation and stockpile on-site in designated temporary spoils area, or material to the hauled off-site by others.
5. Construct all vehicular and pedestrian paving and other appurtenances.
6. Install UST safety signs and controls.
7. Install landscaping materials and finish grading. Hydro-mulch and/or place sod.
8. Remove temporary erosion control devices and clean up the site.
9. Remove all trash and debris off-site and dispose of it legally.
10. Dress up and restore any areas disturbed by Item 8 procedure.

ATTACHMENT D: Temporary Best Management Practices and Measures:

The TBMP's for this project will consist of:

1. Silt fencing downgradient of the limits of construction.
2. All of the area of construction consists of grade which is less than 5% slope.
3. Construction entrances are existing and are not proposed to change.

ATTACHMENT F

The affected areas of this site will be developed with uniform gradual slopes to route the stormwater to be captured to the oil/water separator, sand filter, and the water quality detention pond.

ATTACHMENT G

Refer to the drawings.

ATTACHMENT H

There is no temporary sedimentation pond for this renovation project.

ATTACHMENT I

The Contractor is required to inspect the controls and fences at weekly intervals and 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.

ATTACHMENT J

Interim soil stabilization will consist of grading and compacting fill material. Establishment of permanent vegetation will begin after final grading is complete.

Permanent Stormwater Section
for Regulated Activities
on the Edwards Aquifer Recharge Zone
and Relating to 30 TAC §213.5(b)(4)(C), (D)(li), (E), and (5), Effective June 1, 1999

REGULATED ENTITY NAME: Pit Stop No. 7

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

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

2. X 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.

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

   _ A technical guidance other than the TNRCC TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is provided below

   _____

   _____

   _____

   _____

3. X 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.

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.

   _ This site will be used for low density single-family residential development and has 20% or less impervious cover.

   _ This site will be used for low density single-family residential development but has more than 20% impervious cover.

   _ This 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.** This 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 found at the end of this form.

___ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

___ This 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 identified as **ATTACHMENT B** at the end of this form.

___ If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.

_X_ If 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, an explanation is provided as **ATTACHMENT B** at the end of this form .

7. **ATTACHMENT C - BMPs for On-site Stormwater.**

_X_ 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 identified as **ATTACHMENT C** at the end of this form.

___ If 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, an explanation is provided as **ATTACHMENT C** at the end of this form.

8. _X_ **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 provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" or "possibly sensitive" has been addressed.

9. _X_ 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" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.

__ **ATTACHMENT E - Request to Seal Features.** A request to seal a naturally-occurring "sensitive" or "possibly sensitive" feature, that includes a justification as to why no reasonable and practicable alternative exists, is found at the end of this form. A request and justification has been provided for each feature.

10. _X_ **ATTACHMENT F - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TNRCC Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

11. _X_ **ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is provided at the end of this form. The plan has been prepared and certified by the engineer designing the permanent BMPs and measures. The plan has been signed by the owner or responsible party. The plan includes procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofits as well as a discussion of record keeping procedures.

12. _X_ The TNRCC Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

__ Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by or prepared by the executive director.

__ **ATTACHMENT H - Pilot-Scale Field Testing Plan.** A plan for pilot-scale field testing is provided at the end of this form.

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 provided at the end of this form. 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.

Responsibility for maintenance of permanent BMPs and measures after construction is complete.

14. _X_ 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.

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.

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 TNRCC review and executive director approval. The application was prepared by:

David L. Urban, P. E.
Print Name of Customer/Agent

David L Urban
Signature of Customer/Agent

10/2/02
Date

Pit Stop No. 7
1320 River Road
New Braunfels, Texas

ATTACHMENT B

The stormwater which originates upgradient of the site work, is currently diverted out the driveway and onto TXDOT Right-of-Way. The proposed improvements do not propose to change this diversion of stormwater around the BMPs. The required filteration will collect approximately 5,000 square feet of runoff from the fueling area and above the tanks and treat the entire volume of the various storms.

ATTACHMENT C

The character of the stormwater leaving the site shall be filtered and all pollutants will remain on-site. All stormwater from the proposed 5,000 square foot addition will be directed through an oil/water seperator, sand filter, and finally a detention pond located on-site. These water quality devices will filter the first 0.5-inches of runoff, detain the 25 and 100-year storms of water quality volume from the "new" impervious cover area. The outflows from this water quality pond will be released in a manner, which will not adversely impact the environment down stream. For storm water runoff quantities and runoff coefficients refer to drawing, Sheet FS1.1.

ATTACHMENT D

Nine (9) features were noted in the Geologic Assessment. All were identified as part of the existing On-site wastewater system with low probability of recharge. There are no proposed changes to this area and this area is not located within the limits of construction. Silt fencing will be the primary BMPs for all proposed construction.

ATTACHMENT F

See the plans.

ATTACHMENT G

This plan is attached and the Plan has been placed on the Cover Page of the Drawings.

ATTACHMENT I

The silt fence will serve as the primary measure to control surface stream contamination during construction. Upon completion of construction, the oil/water seperator, sand filter, and detention pond will serve to keep all pollution on-site and to not allow flows from the site which exceed the predevelopment conditions.

SUGGESTED MAINTENANCE PLAN AND SCHEDULE FOR SEDIMENTATION AND FILTRATION BASINS

PROJECT NAME: PIT STOP NO. 7
ADDRESS: 1320 RIVER ROAD
CITY, STATE ZIP: NEW BRAUNFELS, TEXAS 78132

SEDIMENTATION BASINS

Monthly: The vegetative growth in the basin shall be checked. The growth shall no exceed 12 inches in height.

Quarterly: The level of accumulated silt shall be checked. If depth of silt exceeds 6 inches, it shall be removed and disposed of "properly".

Annually: The basin shall be inspected for structural integrity and repaired if necessary.

After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the storm is over. If it does not drain within this time, corrective maintenance will be performed.

FILTRATION BASINS

Monthly: The vegetative growth shall be checked. Vegetation in the basin shall not exceed 12 inches in height.

Quarterly: The level of accumulated silt shall be checked. If depth of silt/pollutants exceeds ½ inch, it shall be removed and disposed of "properly". If depth of silt/pollutants have significantly reduced the designed capacity of the sand filter, the pollutants shall be removed. All debris and trash shall be removed at least every 3 months.

Annually: The basin shall be inspected for structural integrity and repaired if necessary.

After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the sedimentation basin has been emptied. If it does not drain within this time, corrective maintenance will be performed.

Following any required maintenance, the surface of the filtration basin shall be raked and leveled to restore the system to its designed conditions.

"Proper" disposal of accumulated silt shall be accomplished following Texas Natural Resources Conservation Commission and City of New Braunfels guidelines and specifications.

An amended copy of this document will be provided to the TNRCC within thirty (30) day of any changes in the following information.

Responsible Party: Rodney Fischer
Mailing Address: P. O. Box 310339
City, State: New Braunfels, Texas Zip: 78131
Telephone: (830) 625-4214 Fax: (830) 606-6778

Signature of Responsible Party

Date 10/4/02

AGENT AUTHORIZATION FORM
FOR REQUIRED SIGNATURE
EDWARDS AQUIFER PROTECTION PROGRAM
RELATING TO 30 TAC CHAPTER 213
EFFECTIVE JUNE 1, 1999

I M.D. Fischer,
Print Name

President
Title - Owner/President/Other

of Midtex Oil, L.P.
Corporation/Partnership/Entity Name

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

of Dwight C. Russell Associates, Inc.
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Natural Resource Conservation Commission (TNRCC) 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 TNRCC's approval letter. The TNRCC is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and the forms must accompany the completed application.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TNRCC cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. For applicants who are not the property owner, but who have the right to control and possess and control the property, additional authorization is required from the owner.

M. D. Fischer — 2-12-02

Applicant's Signature — Date

THE STATE OF TX §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared M.D. Fischer 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 12 day of February, 2002

Michele Poole
NOTARY PUBLIC

Michele Poole
Typed or Printed Name of Notary

NOTARY PUBLIC STATE OF TEXAS
MICHELE POOLE
Notary Public, State of Texas
My Commission Expires
MAY 18, 2005

MY COMMISSION EXPIRES: 5-18-2005

Texas Natural Resource Conservation Commission
Edwards Aquifer Protection Plan
Application Fee Form

NAME OF PROPOSED REGULATED ENTITY: Pit Stop No. 7
REGULATED ENTITY LOCATION: 1320 River Road, New Braunfels, Texas
NAME OF CUSTOMER: Midtex Oil, L.P.
CONTACT PERSON: M. D. Fischer PHONE: (830) 625-4214
(Please Print)

Customer Reference Number (if issued): CN _____ (nine digits)
Regulated Entity Reference Number (if issued): RN _____ (nine digits)

AUSTIN REGIONAL OFFICE (3373)
- ☐ Hays
- ☐ Travis
- ☐ Williamson

SAN ANTONIO REGIONAL OFFICE (3362)
- ☐ Bexar
- ■ Comal
- ☐ Kinney
- ☐ Medina
- ☐ Uvalde

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT.** THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

■ **SAN ANTONIO REGIONAL OFFICE**
- ☐ **Mailed to TNRCC:**
  TNRCC - Cashier
  Revenues Section
  Mail Code 214
  P.O. Box 13088
  Austin, TX 78711-3088

☐ **AUSTIN REGIONAL OFFICE**
- ☐ **Overnight Delivery to TNRCC:**
  TNRCC - Cashier
  12100 Park 35 Circle
  Building A, 3rd Floor
  Austin, TX 78753
  512/239-0347

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement, Non-residential	Acres	$3,000.00
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$1,000.00
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

David L Mich
Signature

10/2/02
Date

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

Texas Natural Resource Conservation Commission
Edwards Aquifer Protection Program
Application Fee Schedule
30 TAC §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

Water Pollution Abatement Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, Industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

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	$500	$500 - $5,000

Exception Requests

PROJECT	FEE
Exception Request	$250

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$100

TEMPORARY & PERMANENT EROSION & SEDIMENTATION CONTROL

THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).

THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE DRAINAGE & EROSION CONTROL DESIGN MANUAL FOR THE CITY OF NEW BRAUNFELS.

A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY PUBLIC WORKS DEPARTMENT, (830) 629-8400, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE.

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 REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ENGINEER AS APPROPRIATE. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND 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.

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 IN APPROVED SPOIL DISPOSAL SITES.

ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IN DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY & THE CITY OF NEW BRAUNFELS ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION.

PERMANENT EROSION CONTROL:

ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:

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.

THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:

BROADCAST SEEDING:

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 90% GERMINATION.

FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA A A RATE OF 2 POUNDS PER 1000 SF WITH A PURITY OF 95% WITH 85% GERMINATION.

A. 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 10 POUNDS PER 1000 SF.

B. MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 45 POUNDS PER 1000 SF.

HYDRAULIC SEEDING:

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.

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.

A. FERTILIZER SHALL BE WATER SOLUBLE FERTILIZER WITH AN ANALYSIS OF 15-15-15 AT A RATE OF 5 POUNDS PER 1000 SF.

B. 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.

C. 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.

D. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.

SUGGESTED MAINTENANCE PLAN & SCHEDULE FOR SEDIMENTATION & FILTRATION BASINS

SEDIMENTATION BASINS

MONTHLY: THE VEGETATIVE GROWTH IN THE BASIN SHALL BE CHECKED. THE GROWTH SHALL NO EXCEED 12 INCHES IN HEIGHT.

QUARTERLY: THE LEVEL OF ACCUMULATED SILT SHALL BE CHECKED. IF DEPTH OF SILT EXCEEDS 6 INCHES, IT SHALL BE REMOVED AND DISPOSED OF "PROPERLY".

ANNUALLY: THE BASIN SHALL BE INSPECTED FOR STRUCTURAL INTEGRITY AND REPAIRED IF NECESSARY.

AFTER RAINFALL: THE BASIN SHALL BE CHECKED AFTER EACH RAINFALL OCCURRENCE TO INSURE THAT IT DRAINS WITHIN 48 HOURS AFTER THE STORM IS OVER. IF IT DOES NOT DRAIN WITHIN THIS TIME, CORRECTIVE MAINTENANCE WILL BE PERFORMED.

FILTRATION BASINS

MONTHLY: THE VEGETATIVE GROWTH SHALL BE CHECKED. VEGETATION IN THE BASIN SHALL NOT EXCEED 12 INCHES IN HEIGHT.

QUARTERLY: THE LEVEL OF ACCUMULATED SILT SHALL BE CHECKED. IF DEPTH OF SILT/POLLUTANTS EXCEEDS ½ INCH, IT SHALL BE REMOVED AND DISPOSED OF "PROPERLY". IF DEPTH OF SILT/POLLUTANTS HAVE SIGNIFICANTLY REDUCED THE DESIGNED CAPACITY OF THE SAND FILTER, THE POLLUTANTS SHALL BE REMOVED. ALL DEBRIS AND TRASH SHALL BE REMOVED AT LEAST EVERY 3 MONTHS.

ANNUALLY: THE BASIN SHALL BE INSPECTED FOR STRUCTURAL INTEGRITY AND REPAIRED IF NECESSARY.

AFTER RAINFALL: THE BASIN SHALL BE CHECKED AFTER EACH RAINFALL OCCURRENCE TO INSURE THAT IT DRAINS WITHIN 48 HOURS AFTER THE SEDIMENTATION BASIN HAS BEEN EMPTIED. IF IT DOES NOT DRAIN WITHIN THIS TIME, CORRECTIVE MAINTENANCE WILL BE PERFORMED.

FOLLOWING ANY REQUIRED MAINTENANCE, THE SURFACE OF THE FILTRATION BASIN SHALL BE RAKED AND LEVELED TO RESTORE THE SYSTEM TO ITS DESIGNED CONDITIONS. "PROPER" DISPOSAL OF ACCUMULATED SILT SHALL BE ACCOMPLISHED FOLLOWING TEXAS NATURAL RESOURCES CONSERVATION COMMISSION AND CITY OF NEW BRAUNFELS GUIDELINES AND SPECIFICATIONS. AN AMENDED COPY OF THIS DOCUMENT WILL BE PROVIDED TO THE TNRCC WITHIN THIRTY (30) DAY OF ANY CHANGES IN THE FOLLOWING INFORMATION.

REVISIONS / CORRECTIONS

No.	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET No.'s	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMPERVIOUS COVER (SQ. FT.)	TOTAL SITE IMPERVIOUS COVER (SQ. FT.)/%	CITY OF NEW BRAUNFELS APPROVAL/DATE	DATE IMAGED

10/08/02

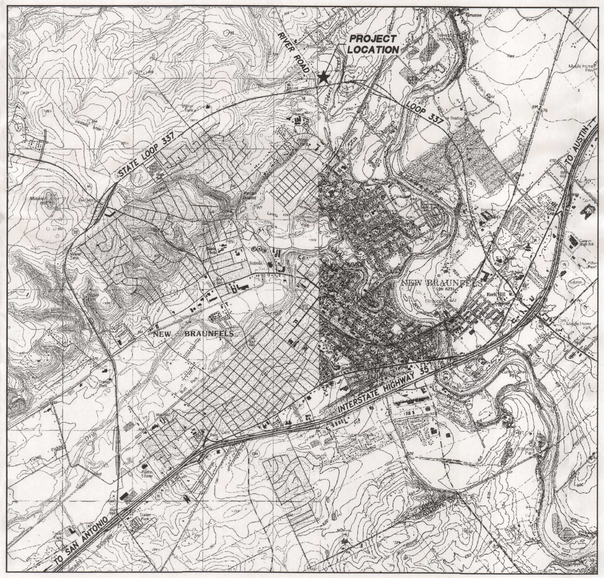
COVER.dwg

UNDERGROUND STORAGE TANK REMOVAL & INSTALLATION

PIT STOP No. 7

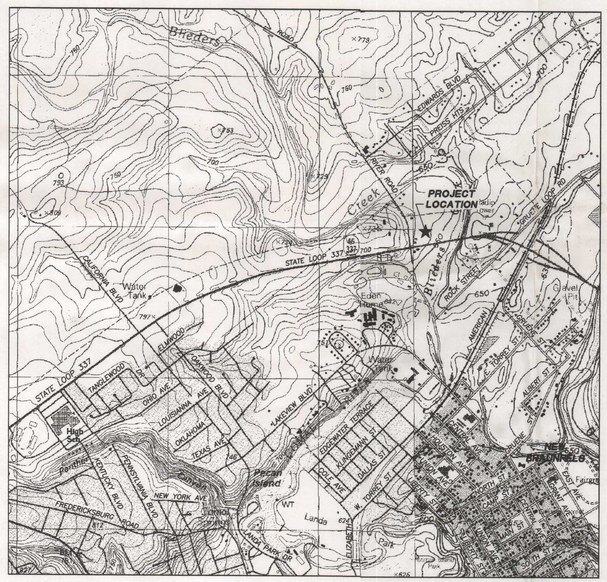
1320 RIVER ROAD

NEW BRAUNFELS, TEXAS



VICINITY MAP

SCALE: 1"=3000'



PROJECT LOCATION MAP

SCALE: 1"=600'

Prepared By:

DWIGHT C. RUSSELL ASSOCIATES, INC.

7801 North Lamar Blvd.. Suite D-77

Austin, Texas 78752

Phone: (512) 452-8834

PROJECT INFORMATION / NOTES

THE PROJECT CONSISTS OF THE DEMOLITION OF THE EXISTING CANOPY, REMOVAL OF THE EXISTING DISPENSERS, PIPING, DEMOLITION OF THE CONCRETE & ASPHALT DRIVE, & THE REMOVAL OF FOUR (4) SINGLE-WALL FIBERGLASS UNDERGROUND STORAGE TANKS (UST's). PHASE I OF THIS PROJECT INCLUDES THE REPLACEMENT OF THE TANKS WITH TWO (2) DOUBLE-WALL FIBERGLASS UST's, THE INSTALLATION OF A 28-FOOT BY 120-FOOT CANOPY WITH FIVE (5) FUEL ISLANDS CONTAINING FIVE (5) MULTI-PRODUCT DISPENSERS (MPD's). THE EXISTING SITE CONSISTS OF 1.288 ACRES LOCATED IN THE SOUTHEAST CORNER OF THE INTERSECTION OF LOOP 337 & RIVER ROAD, NEW BRAUNFELS, TEXAS. THE EXISTING BUILDING, CANOPY, & PAVEMENT TOTAL COVERAGE IS APPROXIMATELY 26,636 SQUARE FEET. PHASE I CONSISTS OF 3,000 SQUARE FEET OF CONCRETE OVER THE TANKS & NEW PARKING. PHASE II WILL ADD APPROXIMATELY 1,800 SQUARE FEET TO THE BUILDING WHICH BRINGS THE TOTAL NEW IMPERVIOUS COVER TO APPROXIMATELY 4,800 SQUARE FEET. THE PROPOSED IMPERVIOUS COVER OF BOTH PHASE I & 11 WILL BE 56.39%. TEMPORARY EROSION CONTROL WILL BE CONSTRUCTED, PERMANENT DETENTION & FILTRATION WILL BE CONSTRUCTED PRIOR TO THE START OF CONSTRUCTION.

THIS PROJECT IS LOCATED IN THE BLEIDERS CREEK WATER SHED & IS LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE.

PROJECT SPECIFIC NOTES:

1. THERE WILL BE AN INCREASE IN IMPERVIOUS COVER (I.P.) OF 4,800 SQUARE FEET, WHICH WILL INCREASE THE I.P. FROM 47.44% TO 56.39%.

2. NO SLOPES ON THIS SITE EXCEED 5%.

3. NO PORTION OF THIS SITE LIES WITHIN THE 100-YEAR FLOOD PLAIN, REFERENCED FIRM MAP No. 485493 006 C DATED JUNE 17, 1986.

4. THE SITE IS SUPPLIED WITH WATER BY AN ON-SITE WATER WELL & IS SERVED BY AN ON-SITE DISPOSAL SYSTEM WHICH WAS CONSTRUCTED OCTOBER, 1985. PRIOR TO CONSTRUCTION OF PHASE II (BUILDING REMODELING) PERMITS FROM THE CITY OF NEW BRAUNFELS & TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WILL BE OBTAINED IN ORDER TO INSTALL SANITARY SEWER SERVICE FROM THE BLEIDERS CREEK WASTEWATER LINE.

CONTRACTOR:	TO BE DETERMINED
DESIGN ENGINEER:	DAVID L. URBAN, P.E. DWIGHT C. RUSSELL ASSOCIATES 7801 NORTH LAMAR, SUITE D-77 AUSTIN, TEXAS 78752

OWNER INFORMATION

OWNER:	MIDTEX OIL, L.P. 3455 IH-35 SOUTH NEW BRAUNFELS, TEXAS 78131
LEGAL DESCRIPTION:	BEING A 1.288 ACRE TRACT OF LAND OUT OF SUBDIVISION NO. 4 OF THE J. M. VERAMENDI TWO LEAGUE SURVEY NO. 1, COMAL COUNTY, TEXAS, BEING THE SAME TRACT OF LAND CALLED 1.288 ACRES DESCRIBED IN VOLUME 294, PAGES 54-55 OF THE DEED RECORDS OF COMAL COUNTY, TEXAS, AND ALSO BEING ALL OF A TRACT CALLED 0.844 ACRES DESCRIBED IN VOLUME 833, PAGES 375- 378 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS, SAID 0.844 ACRE TRACT BEING OUT OF THE ABOVE REFERENCED 1.288 ACRE TRACT.

INDEX OF SHEETS

"RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS."

STATE OF TEXAS
DAVID L. URBAN
46245
REGISTERED
PROFESSIONAL ENGINEER

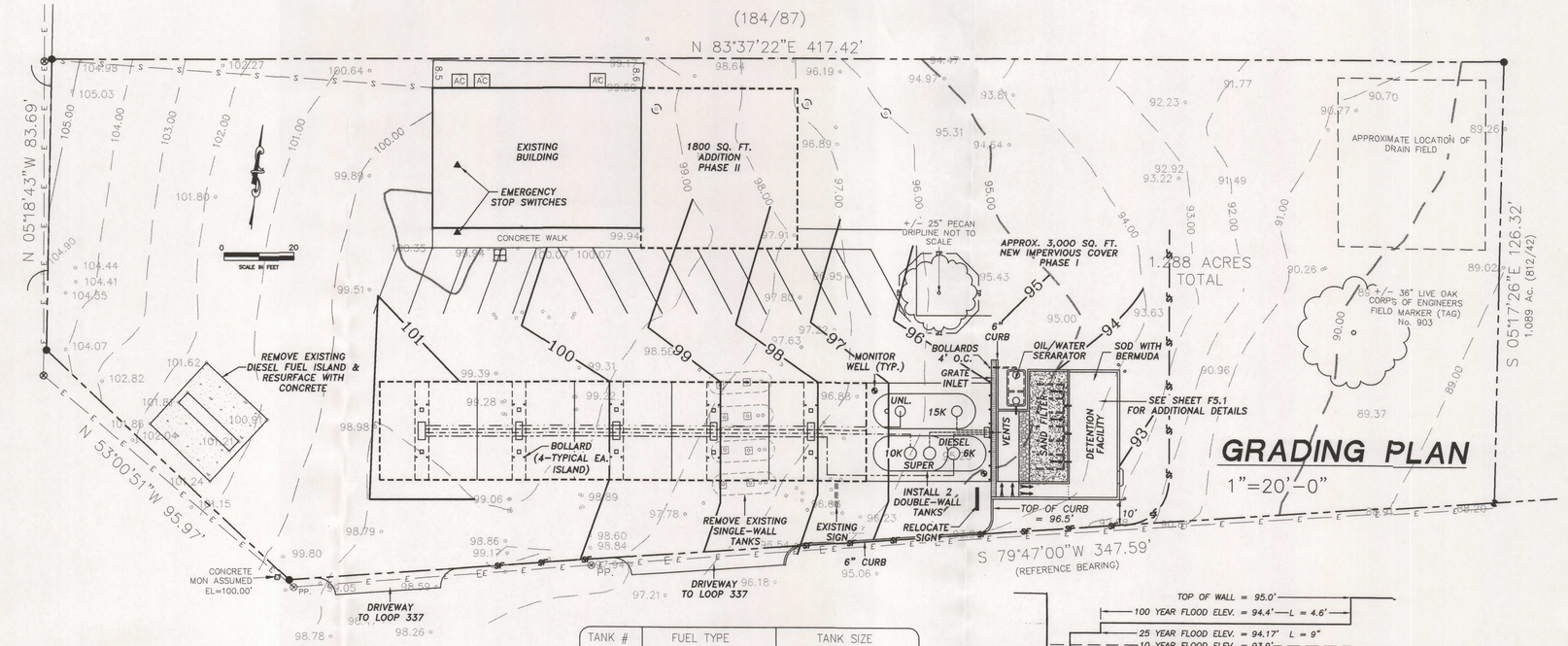
I HEREBY CERTIFY THAT THIS DEVELOPMENT SATISFIES, AND IS COMPLETE, ACCURATE AND IN COMPLIANCE WITH THE DRAINAGE & EROSION CONTROL DESIGN MANUAL OF THE CITY OF NEW BRAUNFELS.

SUBMITTED FOR APPROVAL BY:

DAVID L. URBAN, P.E.
DWIGHT C. RUSSELL ASSOCIATES, INC.

10/7/02
DATE

SHEET NUMBER
1 OF **10**



GRADING PLAN

1"=20'-0"

THERE ARE SLIGHT VARIATIONS OF BEARINGS AND DISTANCES FROM DEED RECORDED IN 294/54.

CONTOUR LINES SHOWN ARE AN INTERPRETATION OF OF SPOTS ELEVATIONS TAKEN FROM GROUND SURFACE.

REFERENCE FIELD NOTES DATED OCTOBER 22, 2001, OF THIS 1.288 ACRE TRACT.

THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS, SETBACKS, ETC., AFFECTING THIS PROPERTY THAT ARE NOT SHOWN HEREON.

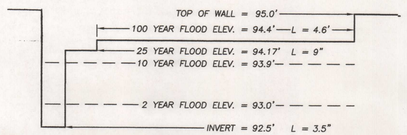
Being a 1.288 acre tract of land out of Subdivision No. 4 of the J. M. Veramendi Two League Survey No. 1, Comal County, Texas, being the same tract of land called 1.288 acres described in Volume 294, Pages 54-55 of the Deed Records of Comal County, Texas, and also being all of a tract called 0.844 acres described in Volume 833, Pages 375- 378 of the Official Public Records of Comal County, Texas, said 0.844 acre tract being out of the above referenced 1.288 acre tract.

LEGEND

- MONITOR WELL
- EMERGENCY SHUTOFF
- PROPERTY LINE
- EXISTING CONTOUR (1 FT.)
- EXISTING CONTOUR (5 FT.)
- PROPOSED FINISHED CONTOUR

TANK #		FUEL TYPE	TANK SIZE	
#1		REGULAR UNLEADED	15,000 GAL.	
#2	#2a	SUPER UNLEADED	16,000 GAL.	10,000 GAL.
	#2b	DIESEL		6,000 GAL.

VAPOR
SUPERUNLEADED
UNLEADED
DIESEL

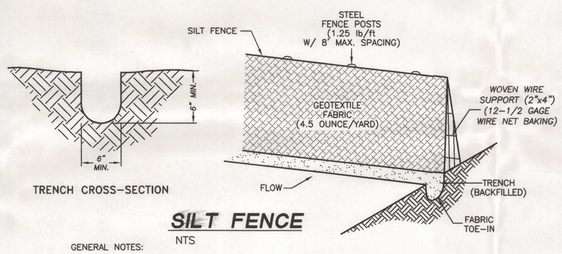


WEIR SECTION

NTS

KEY NOTES:

ITEM NO:	PROV. BY:	INST. BY:	
1	MIDTEX	G.C.	INSTALL (2) BELOW GRADE "XERXES" – DOUBLE WALL FIBERGLASS STORAGE TANKS, MANUFACTURED BY XERXES CORPORATION, (1) 15,000 GAL. (10ft DIA.) FIBERGLASS TANK AND (1) 16,000 GAL. (10ft DIA.) –10K/6K SPLIT FIBERGLASS TANK. (SEE SHEET F2.1)
2	MIDTEX	G.C.	INSTALL (5) NEW DISPENSERS, INCLUDE ALL NOZZLES, HOSES DISPENSERS TO BE INSTALLED ABOVE GRADE ON NEW DISPENSER CONTAINMENT BOXES. REFER TO SHEET F1.1 ITEM NUMBERS 56 & 57 FOR EXACT MODEL NUMBERS.
3	G.C.	G.C.	NOT USED
4	G.C.	G.C.	PROVIDE 2" DIA. FIBERGLASS PRODUCT PIPING FROM SUB-PUMP TO DISPENSER LOCATIONS WITH 3" DIA. SECONDARY CONTAINMENT FIBERGLASS PIPING AS SHOWN.
5	G.C.	G.C.	OVER EXCAVATE THE TANK HOLE TO ALLOW FOR SAFE INSTALLATION OF NEW PRODUCT TANKS.
6	G.C.	G.C.	INSTALL NEW SUMPS, MANWAYS, OVERFILL/SPILL CONTAINMENT, SUB-PUMPS, EXTRACTORS, RISERS, CAPS AND ADAPTERS, ETC. AT ALL TANKS. SEE ALL ATTACHED FUEL INSTALLATION DRAWINGS FOR EQUIPMENT AND DETAILS. CONTRACTOR SHALL PROVIDE LOCK WITH KEY AT FILL TUBE LOCK CAP.
7	G.C.	G.C.	INSTALL A NEW AUTOMATIC TANK GAUGE SYSTEM, INCLUDING ALL CONDUITS, WIRING AND EQUIPMENT REQUIRED FOR INSTALLING PER MANUFACTURERS REQUIREMENTS. RUN CONDUIT TO NEW TLS PANEL LOCATED IN THE ELECTRICAL AREA.
8	G.C.	G.C.	PROVIDE (3) NEW 2" DIA. GALV. PETROLEUM VENT RISER WITH P/V VENT CAP. VENT CAPS TO BE 12'-0" MIN. ABOVE GRADE AS SHOWN. REFER TO 18/F3.1.
9	G.C.	G.C.	PROVIDE NEW 2" DIA. FIBERGLASS VENT LINES FOR GASOLINE FUEL TANKS. SLOPE 1/4" PER FOOT MIN. BACK TO TANKS.
10	G.C.	G.C.	NOT USED
11	G.C.	G.C.	PROVIDE NEW 3" DIA. MANIFOLDED FIBERGLASS STAGE II TRUNK LINE FROM GASOLINE TANKS TO DISPENSERS. SLOPE 1/4" PER FOOT MIN. BACK TO TANKS.
12	G.C.	G.C.	REDUCE STAGE II PIPING FROM 3" DIA. FIBERGLASS TO 2" DIA. FIBERGLASS INTO EACH DISPENSER AREA. ATTACH TO STAGE II CONNECTIONS FROM DISPENSER.
13	G.C.	G.C.	UPON COMPLETION OF ALL WORK, ALL PRODUCT LINES ARE TO BE PURGED AND CLEANED OUT. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CALIBRATION OF ALL DISPENSERS AS REQUIRED.
14	G.C.	G.C.	UPON INSTALLATION, TESTING AND APPROVALS OF NEW PIPING, CONDUIT, PLUMBING, ETC. FOR THE TANK INSTALLATION, BACKFILL EXCAVATED AREAS WITH NEW PEA GRAVEL AND PROVIDE CONCRETE PAVING PER CIVIL PLANS. NOTE: 8" THICK, 4000 PSI MIN. REQUIRED AT TANK AREAS WITH NO. 4 REBAR AT 12" O.C. BOTH WAYS (TYP.). PROVIDE CONTROL JOINTS AT APPROXIMATELY 10'-0" O.C. BOTH WAYS AT TANK SLAB. (SEE SHEET F2.1)
15	G.C.	G.C.	PROVIDE NEW 2A20BC FIRE EXTINGUISHERS, IN CABINET AT CANOPY COLUMNS AND AT BUILDING ADJACENT TO CASHIER WINDOW AREA AS SHOWN. (EXACT LOCATION TO BE FIELD VERIFIED WITH FIRE DEPT.)
16	G.C.	G.C.	INSTALL (2) NEW E.S.O. SWITCHES, IN ACCORDANCE WITH 1994 UFC, LOCATED AS SHOWN ON PLAN. LOCATIONS TO BE CLEARLY IDENTIFIED WITH SIGNS LABELED "EMERGENCY FUEL SHUTDOWN DEVICE". LOCATE (1) E.S.O. SWITCH ON BUILDING NO MORE THAN 48" ABOVE FINISHED GRADE OR WALKWAY.
17	G.C.	G.C.	NOT USED
18	G.C.	G.C.	INSTALL NEW SIGNS PROHIBITING SMOKING, PROHIBITING DISPENSING INTO UN-APPROVED CONTAINERS AND REQUIRING VEHICLE ENGINES TO BE SHUT OFF DURING FUELING ON EACH CANOPY COLUMN. (EXACT LOCATION TO BE FIELD VERIFIED WITH FIRE DEPT.)

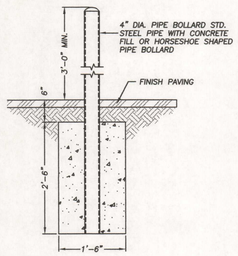


SILT FENCE

NTS

GENERAL NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINUMUM 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 IN (E.G. PAVEMENT), WEIGHT FACBRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. 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 COMPACTED MATERIAL.
4. 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.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE 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.



BOLLARD

NTS

100-YEAR SPILLWAY

Q OUTFLOW =	0.8 CFS
Q DEVELOPED =	1.75 CFS
TYPE =	RECTANGULAR WEIR FLOW
Q =	1.5
WEIR EQUATION :	$Q = C \cdot L \cdot H^{1.5}$
WEIR INVERT =	94.4 FT.
TOP OF SPILLWAY =	94.9 FT.
H =	0.4 FT.
Q WEIR =	0.9 CFS
L REQ'D =	4.6 FT.
FILTERATION REQ'D =	250 CU. FT.
FILTERATION PROVIDED =	288 CU. FT.
DETENTION REQ'D =	767 CU. FT.
DETENTION PROVIDED =	1,017 CU. FT.

SIZING OF DRAINAGE BASIN USING THE RATIONAL METHOD

THE RENOVATION OF THE EXISTING CONVENIENCE STORE WILL ADD NEW IMPERVIOUS COVER TOTALING APPROXIMATELY 4,800 SQUARE FEET (0.115 ACRES) (5,000 SQUARE FEET HAS BEEN USED IN THESE CALCULATIONS). THREE THOUSAND SQUARE FEET WILL BE INSTALLED IN PHASE I DURING REMOVAL AND REPLACEMENT OF THE USTs. THIS WILL CONSIST OF NEW CONCRETE OVER THE NEW TANKS AND ADDITIONAL DRIVEWAY AND PARKING. THE BUILDING WILL BE REMODELED WITH THE ADDITION OF 1,800 SQUARE FEET AT A LATER DATE.

STEP 1

CALCULATE THE 100-YR PEAK DISCHARGE CONDITION AND PROPOSED CONDITIONS:

EXISTING	*PROPOSED*
$A = .115$	$A = .115$
$K = 1.25$	$K = 1.25$
$C_e = 0.38$	$C_p = 0.83$
$T_{ce} = 10$	$T_{op} = 5$
$I100_e = 95.1(T_{ce} + 7.17)^{731}$	$I100_p = 95.1(T_{op} + 7.17)^{731}$
$I100_e = 11.90$	$I100_p = 15.3$
$Q\,100_e = (K)(C_e)(I100_e)(A)$	$Q\,100_p = (K)(C_p)(I100_p)(A)$
$Q\,100_e = 0.65$ MAX. RELEASE RATE (cfs)	$Q\,100_p = 1.82$ cfs

STEP 2

DETERMINE INFLOW HYDROGRAPH FOR VARIOUS STORM DURATIONS IN THE PROPOSED CONDITIONS. THE REQUIRED STORAGE VOLUME IS EQUIVALENT TO THE MAXIMUM DIFFERENCE BETWEEN THE INFLOW HYDROGRAPH & THE OUTFLOW.

$T_d = 5, 10, 20, \ldots 90$	T_d (MIN.) INCREMENTAL INCREASE OF THE STORM DURATION
$I100_{(td)} = 95.1(T_d + 7.17)^{731}$	I100 (IN/HR) AS A FUNCTION OF STORM DURATION f(td)
$Q100_{(td)} = (K)(C_p)(I100_{(td)})(A)$	Q100 (cfs) AS A FUNTION OF STORM DURATION f(tc)
$STORAGE_{(td)} = (T_d)(Q100_{(td)})(60-0.5)(t_c+t_d)(Q100_e)(60)$	
STORAGE = INFLOW – OUTFLOW	STORAGE VOLUME (cf) AS A FUNCTION OF STORM DURATION f(tc)

THE CALCULATION PRESENTED REPRESENTS THE REQUIRED STORAGE VOLUME FOR EACH INCREMENT OF THE STORM DURATION.

T_d	$I100_{(td)}$	$Q100_{(td)}$	$STORAGE_{(td)}$	
5	15.3	1.82	351	
10	11.9	1.417	557	
15	9.87	1.175	667	
20	8.5	1.01	724	
30	6.77	.806	767	MAX. STORAGE VOLUME (cf)
40	5.68	.68	754	
50	4.94	.59	697	
60	4.39	.52	604	
70	3.97	.47	–	
80	3.63	.43	–	
90	3.35	.40	–	

SIZING OF THE SAND FILTER FOR THE EDWARDS AQUIFER RULES

THE RENOVATION OF THE EXISTING CONVENIENCE STORE WILL ADD NEW IMPERVIOUS COVER TOTALING APPROXIMATELY 4,800 SQUARE FEET (0.115 ACRES) (5,000 SQUARE FEET HAS BEEN USED IN THESE CALCULATIONS). THREE THOUSAND SQUARE FEET WILL BE INSTALLED IN PHASE I DURING REMOVAL & REPLACEMENT OF THE USTs. THIS WILL CONSIST OF NEW CONCRETE OVER THE NEW TANKS & ADDITIONAL DRIVEWAY & PARKING. THE BUILDING WILL BE REMODELED WITH THE ADDITION OF 1,800 SQUARE FEET AT A LATER DATE.

1. *THE SITE IS CURRENTLY 47.44% DEVELOPED. THE USTS WILL BE REMOVED AND INSTALLED IN A DIFFERENT TANKHOLD. THE NEW CONCRETE OVER THE TANKS & ADDITIONAL DRIVEWAY & PARKING TOTAL APPROXIMATELY 3,000 SQUARE FEET. PHASE II WILL BE AN ENLARGEMENT OF THE EXISTING CONVENIENCE STORE WITH APPROXIMATELY 1,800 SQUARE FEET. THE PROJECT SITE IS 5,000 SQUARE FEET (0.115 ACRES).*
2. *ALL EXISTING UPGRADIENT AREAS ARE PAVED. THE SOIL IS WELL DRAINED, SURFACE RUNOFF IS MEDIUM, & PERMEABILITY IS MODERATE. AVAILABLE WATER CAPACITY IS HIGH.*
3. *THE SITE IS LOCATED IN COMAL COUNTY WITH AN ANNUAL RAINFALL = 33 INCHES.*
4. *ALL UPGRADIENT RUNOFF IS DIRECTED AROUND THE DEVELOPMENT & DOES NOT ENTER THE BMPs.*
5. *EXISTING LOT IS 1.288 ACRES = 56,105 SQUARE FEET.*
6. *EXISTING IMPERVIOUS COVER IS 0.6114 ACRES = 26,636 SQUARE FEET (47.44*
7. *THE PROPOSED IMPERVIOUS COVER IS 0.7264 ACRES = 31,641 SQUARE FEET (56.39*
8. *ALL BMP RUNOFF LEAVES THE SITE AT A SINGLE POINT. THE PROPOSED BMP WILL NOT ALTER THE POINT OF DISCHARGE FROM THE SITE.*
9. *SLOPES DO NOT EXCEED 5% ON THIS SITE.*
10. *RUNOFF COEFFICIENT FOR 56% IMPERVIOUS COVER IS = 0.35.*

PRE-DEVELOPMENT LOAD WITH 47.44% IMPERVIOUS COVER	*POST-DEVELOPMENT LOAD WITH 56.39% IMPERVIOUS COVER*
$L_a = P \cdot (A_u \cdot 0.54 + A_d \cdot R_v \cdot 38.4)$	$L = A \cdot P \cdot R_v \cdot 38.4$
$P = 33$ INCHES PER YEAR	$P = 33$ INCHES PER YEAR
$A_u = 0.6766$ ACRES	$A = 0.7264$ ACRES
$A_d = 0.6114$ ACRES	$R_v = 0.35$
$R_v = 0.3$	
$L = 84.92$ LBS PER YEAR	$L = 323.17$ LBS PER YEAR
REQUIRED REDUCTION = $0.8(323.17 - 84.92) = 190.6$ LBS PER YEAR REDUCTION	
$L_R = L_1 \cdot F \cdot$ FRACTION OF THE SITE TREATED $\cdot$ (TSS REMOVAL EFFICIENCY)	
190.6 LBS = 323 LBS $\cdot F \cdot 1.0 \cdot 0.89$	$F = 0.66$

THEREFORE, THE FRACTION OF LOAD THAT MUST BE TREATED TO ACHIEVE THE 80% REDUCTION IS 66%. FIGURE 3.8, THE RUNOFF DEPTH ASSOCIATED WITH A FRACTION CAPTURED OF 0.66 & IMPERVIOUS COVER OF 56% IS APPROXIMATELY 0.5 INCHES. THE SITE AREA IS 5,000 SQUARE FEET, THEREFORE, THE WATER QUALITY VOLUME TO BE CAPTURED IS 208 CUBIC FEET PLUS 20% EQUALS 250 CUBIC FEET.

IN ADDITION TO THE FILTRATION OF THESE 250 CUBIC FEET, A TRENCH DRAIN WILL DIVERT ALL FLOW THROUGH A 1,000-GALLON OIL/WATER SEPARATOR PRIOR TO ENTERING THE SAND FILTER. THE MAXIMUM FLOW THROUGH THE SEPARATOR WILL OCCUR WHEN THE STORM WATER IS AT THE TOP OF THE GRATE. IF THE STORM EVENT SHOULD TOP THE GRATED INLET, FLOW WILL BE DIVERTED TO THE SAND FILTER VIA A SECONDARY SPILLWAY INLET. WHEN THE FILTER IS FULL, FLOW WILL THEN BE DIVERTED TO THE DETENTION BASIN.

$Q_{MAX} = C_p \cdot A \cdot (2gh^{0.5})$	*ASSUME NO HEAD LOSS
$Q_4 = 6 \cdot .049 \cdot (2 \cdot 32.2 \cdot 1.5)^{0.5}$	$Q_4 = 0.289$ CFS = MAX. FLOW THROUGH THE SEPARATOR
$I = Q/(C \cdot A) = .289/(.73 \cdot .05) = 7.9$ INCHES/HR	$V = L$/DETENTION TIME = 1.15 FT/MIN / 8.9 MIN. = 1.15 FT/MIN. (MAX. ACCEPTABLE IS 4 FT/MIN.)

GENERAL NOTES:

1. THESE PLANS ARE SCHEMATIC ONLY. GENERAL SCOPE IS DEFINED. VERIFY ALL INSTALLATIONS AND EQUIPMENT WITH OWNER AND/OR REPRESENTATIVE OF THE EQUIPMENT MANUFACTURER.
2. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING THE EXCAVATION AREAS AND LOCATING ANY UNDERGROUND UTILITIES. RE-ROUTE ANY EXISTING UTILITIES AROUND CANOPY AND FUEL SYSTEMS IF REQUIRED.
3. FUEL PIPING DRAWINGS ARE SCHEMATIC ONLY. VERIFY ALL INSTALLATIONS AND EQUIPMENT WITH MANUFACTURER RECOMMENDATIONS AND PER ALL APPLICABLE GOVERNING CODES.
4. ALL VENT AND PRODUCT LINES FROM ISLANDS TO TANKS ARE DRAWN FOR SCHEMATIC PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY BEST AND SHORTEST ROUTE OF ALL VENT AND PRODUCT LINES FROM ISLANDS TO TANKS, MAINTAINING ROUTE OF LINES ON FURTHEST SIDE AWAY FROM BUILDING.
5. UPON COMPLETION OF PIPING SYSTEM, CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL COORDINATE ALL STAGE II VAPOR RECOVERY AND TIGHTNESS TESTS. CONTRACTOR SHALL CALIBRATE ALL DISPENSERS AND SEALS. CONTRACTOR IS RESPONSIBLE FOR START-UP AND SHALL INSTRUCT RETAILER THOROUGHLY IN USE OF ALL NEW EQUIPMENT.
6. SEE SPECIFICATIONS PAGES F7.1 AND F8.1.
7. G.C. TO ESTABLISH THE SURVEYED PROPERTY LINE WITH STAKES AND LINES (OR OTHER VISUAL METHODS), AND LOCATE THE TANK FILL LOCATIONS FROM THE PROPERTY LINES TO ENSURE PROPER TANK LOCATIONS.

REV. NO.	REVISION DESCRIPTION	APPROVED BY	DATE

STATE OF TEXAS · DAVID L. URBAN · 80442 · LICENSED PROFESSIONAL ENGINEER · 10/06/02

DWIGHT C. RUSSELL ASSOCIATES, INC.
7801 North Lamar, Suite D-77
Austin, Texas 78752

MIDTEX OIL COMPANY, INC.
PIT STOP No. 7
1320 RIVER ROAD • NEW BRAUNFELS, TEXAS

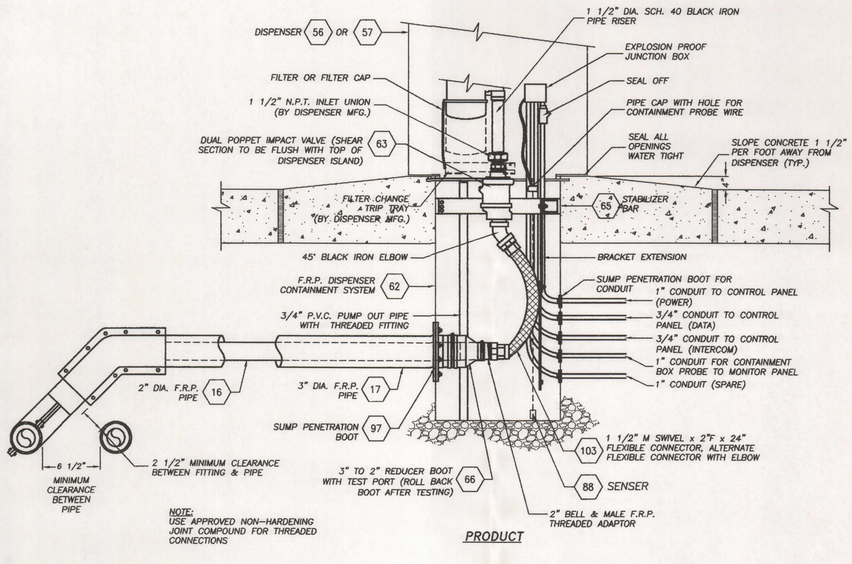
FUEL PIPING PLAN

PROJECT:
ADDRESS:
SHEET NAME:

DRAWN BY: HUNTER CAD SERVICES
CHECKED BY: DAVID L. URBAN
JOB #: 80442
DATE: 10/06/02
FILE: FS1-SITE.dwg

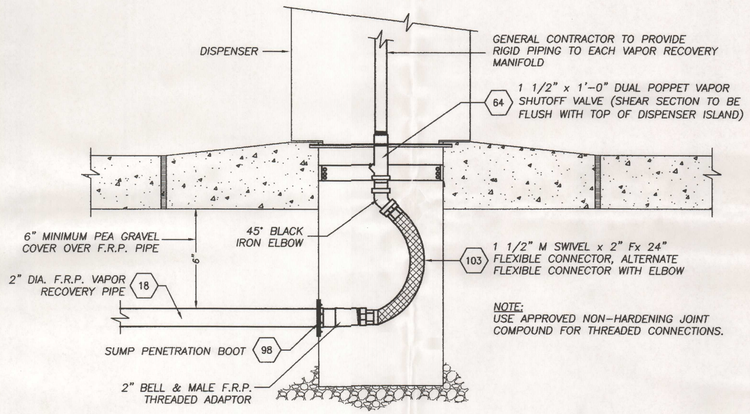
SHEET NUMBER
FS1.1

FS1-SITE.dwg 10/06/02



NOTE:
USE APPROVED NON-HARDENING JOINT COMPOUND FOR THREADED CONNECTIONS

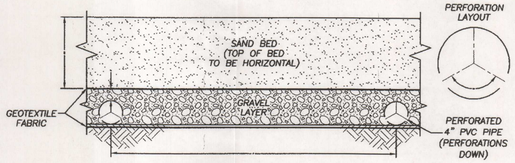
PRODUCT



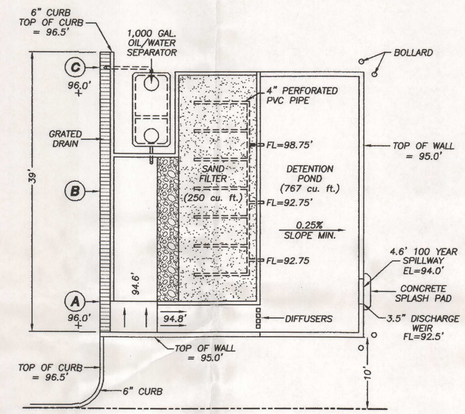
NOTE:
USE APPROVED NON-HARDENING JOINT COMPOUND FOR THREADED CONNECTIONS.

VAPOR RECOVERY

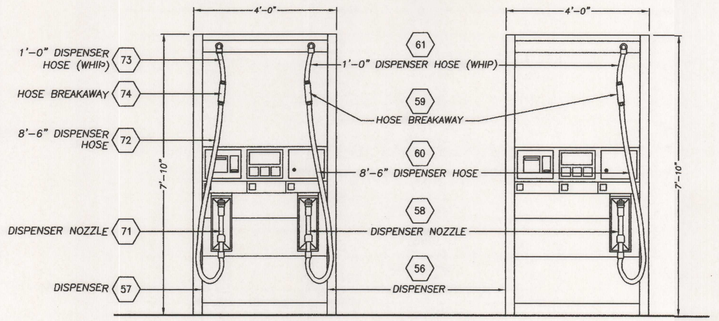
1 DISPENSER CONNECTION & PIPING
3"=1'-0"



3 SAND BED PROFILE WITH GRAVEL FILTER
SCALE: 1"=1'-0"



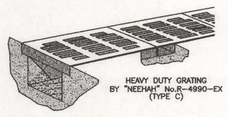
4 SAND FILTER & DETENTION POND
SCALE: 1"=10'-0"

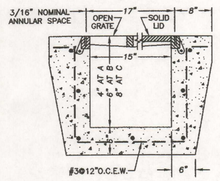


NOTE:
1. DISPENSERS SHOWN HAVE A TOP HOSE MOUNT.
2. SUPER UNLEADED NOZZLE MUST ALWAYS BE ON THE LEFT.
3. PRODUCT PIPING (HARD) MUST ALWAYS PENETRATE THE DISPENSER SUMP FROM THE OPPOSITE SIDE OF THE ELECTRICAL CONDUITS.

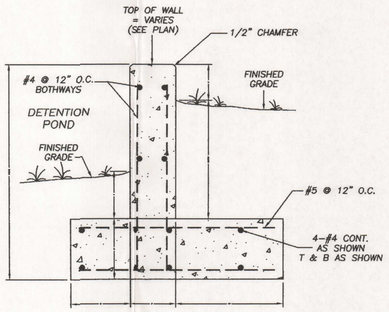
5 DISPENSER ELEVATION (DIESEL) - GILBARCO W/ GRINDS
1/2"=1'-0"

6 DISPENSER ELEVATION - GILBARCO W/ GRINDS
1/2"=1'-0"

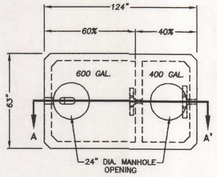




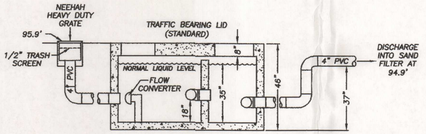
7 TRENCH DRAIN
NTS



8 CONCRETE POND WALL
SCALE: 1"=1'-0"



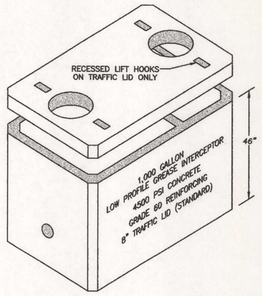
PLAN VIEW



SECTION A-A'
NTS

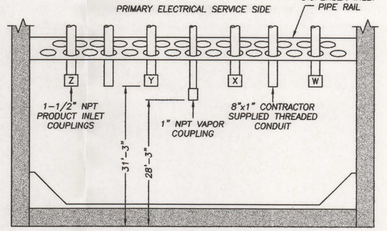
NOTES:
PLEASE ALLOW FOR MANHOLE RING & COVER IN TOTAL HEIGHT

STANDARD INLET & OUTLET FITTINGS ARE 4" SCH 40 PVC



NOTES:
1. THE DRAIN INLET MUST BE PLUGGED DURING DRIVEWAY WASH DOWN & A VACUUM TRUCK MUST BE EMPLOYED TO REMOVE & DISPOSED OF ALL WASH DOWN WATER.
2. THE SEPARATOR WILL BE INSPECTED MONTHLY & PUMPED WHEN HYDROCARBONS ARE OBSERVED.

9 SEPARATOR
NTS



INLETS	MPD MODELS
W	1 GRADE/2 HOSE
W,X	2 GRADE/4 HOSE
W,X,Y	3 GRADE/6 HOSE
W,X,Y,Z	3 GRADE/SINGLE HOSE
W,X,Y,Z	4 GRADE/8 HOSE
W,X,Y,+Z	3+1 SINGLE HOSE MPD

NOTE:
MAXIMUM FIELD RETROFIT RAIN LIP SIZE WITHOUT REQUIRING ADAPTER PLATE: 17"x39-1/2"x1"

INLETS	BLENDER MODELS
W,X	X+0 BLENDER 3 GRADE/MULTI HOSE BLENDER
W,X,Y	X+1 BLENDER 3+1 MULTI HOSE BLENDER

10 DISPENSER BASE - ENCORE
SCALE: 1"=16'.0"

REV. No.	REVISION DESCRIPTION	APPROVED BY	DATE
1			
2			
3			
4			
5			
6			

STATE OF TEXAS DAVID L. URBAN 46245 REGISTERED PROFESSIONAL ENGINEER

DWIGHT C. RUSSELL ASSOCIATES, INC.
7801 North Lamar, Suite D-77
Austin, Texas 78752

MIDTEX OIL COMPANY, INC.
PIT STOP No. 7
1320 RIVER ROAD • NEW BRAUNFELS, TEXAS

DISPENSER SUMP DETAILS

PROJECT:
ADDRESS:
SHEET NAME:

DRAWN BY: HUNTER CAD SERVICES
CHECKED BY: DAVID L. URBAN
JOB #: 80442
DATE: 10/02/02
FILE: F5-DETAILS.dwg

SHEET NUMBER
F5.1

F5-DETAILS.dwg 10/02/02