TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 30, 2008

Mr. Thomas H. Hornseth, P.E.
Comal County Engineer
195 David Jonas Drive
New Braunfels TX 78132-3710

RECEIVED
MAY 0 5 2008
COUNTY ENGINEER

Re: Edwards Aquifer, Comal County
PROJECT NAME: T Bar M restaurant Building, located on the south side of State Highway 46 West approximately .05 miles north of the FM 1863 and State Highway 46 West intersection., Comal County Texas
PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP File No.: 1899.01

Dear Mr. Hornseth:

The enclosed WPAP application received on April 29, 2008, is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval.

Please forward your comments to this office by May 28, 2008.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact the San Antonio Region Office at (210) 490-3096.

Sincerely

Lynn M. Bumguardner
Water Section Work Leader
San Antonio Regional Office

LMB/eg

RECEIVED
JUL 29 2010
COUNTY ENGINEER

Edwards Aquifer Protection Plan Extension Request

X Extension Request for a Water Pollution Prevention Plan (*TCEQ-10260)*

X ATTACHMENT A - Approval Letter or Extension Approval

___ Agent Authorization Form (*TCEQ-0599)*, if application submitted by agent

X Application Fee Form (*TCEQ-0574*)

X Check Payable to the "Texas Commission on Environmental Quality"

X Core Data Form (*TCEQ-10400*)

RECEIVED
JUL 2 9 2010
COUNTY ENGINEER

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant): T Bar M, Inc.

Contact Person: Scott Turpin

Entity: T Bar M, Inc

Mailing Address: 8201 Preston Rd

City, State: Dallas, TX 75225

Telephone: (214) 692-4254 FAX: (830) 608-1765

Agent:
Contact Person:
Mailing Address:
City, State: Zip:
Telephone: FAX:

2. X **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: July 28, 2008
   Expiration date: July 28, 2010

3. X This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. X A completed fee form is attached. The fee for a six-month extension of time is $150.

Scott Turpin
Print Name of Customer/Agent

Scott Turpin
Signature of Customer/Agent

July 22, 2010
Date

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

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.

Exhibit A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 29, 2008

Mr. Scott Turpin
T Bar M Inc.
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: T Bar M; Located on the south side of State Highway 46 West approximately 0.5 mile north of the intersection of FM 1863 and State Highway 46 West; New Braunfels, Texas
TYPE OF PLAN: Request for Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program ID No.: 1899.01; Investigation No.: 656843; Regulated Entity No. RN102745502

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the request for modification of the approved WPAP for the above-referenced project submitted to the San Antonio Regional Office by Carter & Burgess, Inc. on behalf of T Bar M Inc. on April 29, 2008. Final review of the WPAP was completed after additional material was received on July 17, 2008 and July 25, 2008. 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. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The commercial project site was previously approved by letter dated December 20, 2002. The 9.3 acres included the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover was to be 3.46 acres (37.2 percent). Project wastewater was to be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

The permanent pollution abatement measures consisted of five individual permanent vegetative filter strips, which were designed to meet the required 80 percent removal of the increased load in total suspended solids caused by the project. The table below summarized the permanent treatment:

Permanent Best Management Practices (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the addition of a restaurant building, roads and parking. The proposed site layout requires that some of the existing impervious cover (0.23 acres) be removed and restored to landscaping. The new proposed impervious cover added to the site will be 0.60 acres. The net increase of impervious cover will be 0.37 acres. The impervious cover for the 9.3 acres will become 3.83 acres (41.2 percent). Project wastewater will be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, engineered vegetated filter strips, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 332 pounds of TSS generated from the 0.37 acres of net increase in impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The engineered vegetated filter strips will extend along the entire length of the contributing area;
The slope will not exceed 20%;
The minimum dimension of the filter strips (in the direction of flow will not be less than 15 feet;
The maximum width (in the direction of flow) of the contributing impervious area will not exceed 72 feet;
The minimum vegetated cover will be 80%;
The contributing area to the filter strip will be relatively flat so that runoff will be distributed evenly to the vegetated area without the use of a level spreader;
The vegetated filter strip will be free of gullies or rills that can concentrate overland flow.
The 3 foot river rock velocity dissipater receiving roof runoff from the proposed T Bar M Restaurant will be free of gullies or rills that can concentrate overland flow and potentially cause erosion to the engineered vegetated filter strip.

GEOLOGY

The outcropping geologic formation mapped at the site consists of the Person Formation of the Cretaceous Edwards Group. The site specifically lies in the outcrop of the Cyclic and Marine member. According to the geologic assessment included with the application seven features were identified at the site. Five of the features were manmade and ranked non-sensitive. A non-karst closed depression was ranked as non-sensitive and a solution cavity (S-4) was ranked as sensitive. Based on the information

submitted by the project engineer the sensitive feature is situated several hundred feet away from any improvements proposed in this modification. Regional Office did not conduct a site assessment.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated December 20, 2002.

II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

III. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

IV. Unless an exception is requested, justified with documentation as equivalent protection, and approved, the "industry standard" for temporary BMPs to be used for activities regulated by 30 TAC 213 are described in RG-348 (2005), and shall be used.

V. No regulated activities shall take place within the vicinity (200 feet) of feature S-4 without determining the natural drainage area to the sensitive feature and providing appropriate natural buffers to protect the feature in accordance with TCEQ guidance.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.

3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this

notice of approval shall be maintained at the project location until all regulated activities are completed.

6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.

8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

<u>During Construction:</u>

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from

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

13. No wells exist at the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

15. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.

19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new

regulated activity by the executive director is required prior to commencement of the new regulated activity.

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

If you have any questions or require additional information, please contact Agnieszka Hobson of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4075.

Sincerely,

Mark R. Vickery, P.G.
Executive Director
Texas Commission on Environmental Quality

MRV/AMH/eg

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

cc: Mr. David McBeth, P.E., Carter & Burgess, Inc.
Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County
Ms. Velma Reyes Danielson, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC-212

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Application Fee Form

RECEIVED
JUL 2 9 2010
COUNTY ENGINEER

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 W, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: (214) 692-4254
(Please Print)

Customer Reference Number (if issued): CN 600793111 (nine digits)

Regulated Entity Reference Number (if issued): RN **102745502** (nine digits)

Austin Regional Office (3373) ☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362) ☐ Bexar ☒ Comal ☐ Medina ☐ Kinney ☐ Uvalde

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

☐ **Austin Regional Office**

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

☒ **San Antonio Regional Office**

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

Site Location (Check All That Apply): ☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$150

Signature

July 22, 2010
Date

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

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.

TCEQ Use Only

TCEQ Core Data Form

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

RECEIVED
JUL 2 9 2010
COUNTY ENGINEER

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided)*

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

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

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No — WPAP Report and applicable attachments

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 600793111		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) April 2008

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☒ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:	☒ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)*	*If new Customer, enter previous Customer below*	*End Date:*
T Bar M, Inc.		

10. Mailing Address:	8201 Preston Road						
	City	Dallas	State	TX	ZIP	75225	ZIP + 4

11. Country Mailing Information *(if outside USA)*	12. E-Mail Address *(if applicable)*

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(214) 692-4254		(830) ~~625-5959~~ 608-1765

16. Federal Tax ID *(9 digits)*	17. TX State Franchise Tax ID *(11 digits)*	18. DUNS Number *(if applicable)*	19. TX SOS Filing Number *(if applicable)*
741658885	17416588857		

20. Number of Employees

☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☒ No Change** *(See below)*

If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

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

T Bar M, Inc

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 SH 46 West						
	City	New Braunfels	**State**	TX	**ZIP**	78132	**ZIP + 4**
25. Mailing Address:	Same						
	City		**State**		**ZIP**		**ZIP + 4**

RECEIVED
JUL 29 2010
COUNTY ENGINEER

26. E-Mail Address:	sturpin@tbarm.com

27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*
(830) 625-7738		(830) 620-6018

30. Primary SIC Code (4 digits)	**31. Secondary SIC Code** (4 digits)	**32. Primary NAICS Code** (5 or 6 digits)	**33. Secondary NAICS Code** (5 or 6 digits)
7011	7999	721214	71394

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

resort, sports facilities, meeting and dining facilities

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		**38. Longitude (W) In Decimal:**	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	David M McBeth , P.E.	**41. Title:**	Sr Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 494-0088	6352	(210) 494-4525	david.mcbeth@jacobs.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Jacobs Carter Burgess	**Job Title:**	Project Engineer
Name *(In Print)* :	David McBeth	**Phone:**	(210) 494-0088
Signature:		**Date:**	4/24/2008

WATER POLLUTION ABATEMENT PLAN

FOR

T BAR M, INC.

RESTAURANT BUILDING

April 2008

Carter::Burgess

Consultants in Engineering, Architecture,
Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Ste. 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525

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: T BAR M, INC.
COUNTY: Comal STREAM BASIN: Tributary to Blieders Creek

EDWARDS AQUIFER: X RECHARGE ZONE
__ TRANSITION ZONE

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

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Scott Turpin
Entity: T Bar M, Inc. / Center for Christian Growth
Mailing Address: 8201 Preston Road
City, State: Dallas, TX Zip: 75225
Telephone: (214) 692-4254 FAX: (830) 625-5959

Agent/Representative (If any):

Contact Person: David McBeth, P.E
Entity: Carter & Burgess, Inc.
Mailing Address: 911 Central Pkwy N, #425
City, State: San Antonio, TX Zip: 78232
Telephone: (210) 494-0088 FAX: (210) 494-4525

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 TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

Located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West .

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 TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. **The TCEQ 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:
   - ___ Existing commercial site
   - ___ Existing industrial site
   - ___ Existing residential site
   - ___ Existing paved and/or unpaved roads
   - ___ Undeveloped (Cleared)
   - ___ Undeveloped (Undisturbed/Uncleared)
   - X Other: Existing Recreational Camp and Resort

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. X 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.
   - ___ 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 TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

__ TCEQ cashier
__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
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 TCEQ to the local municipality or county, groundwater conservation districts, and the TCEQ'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.

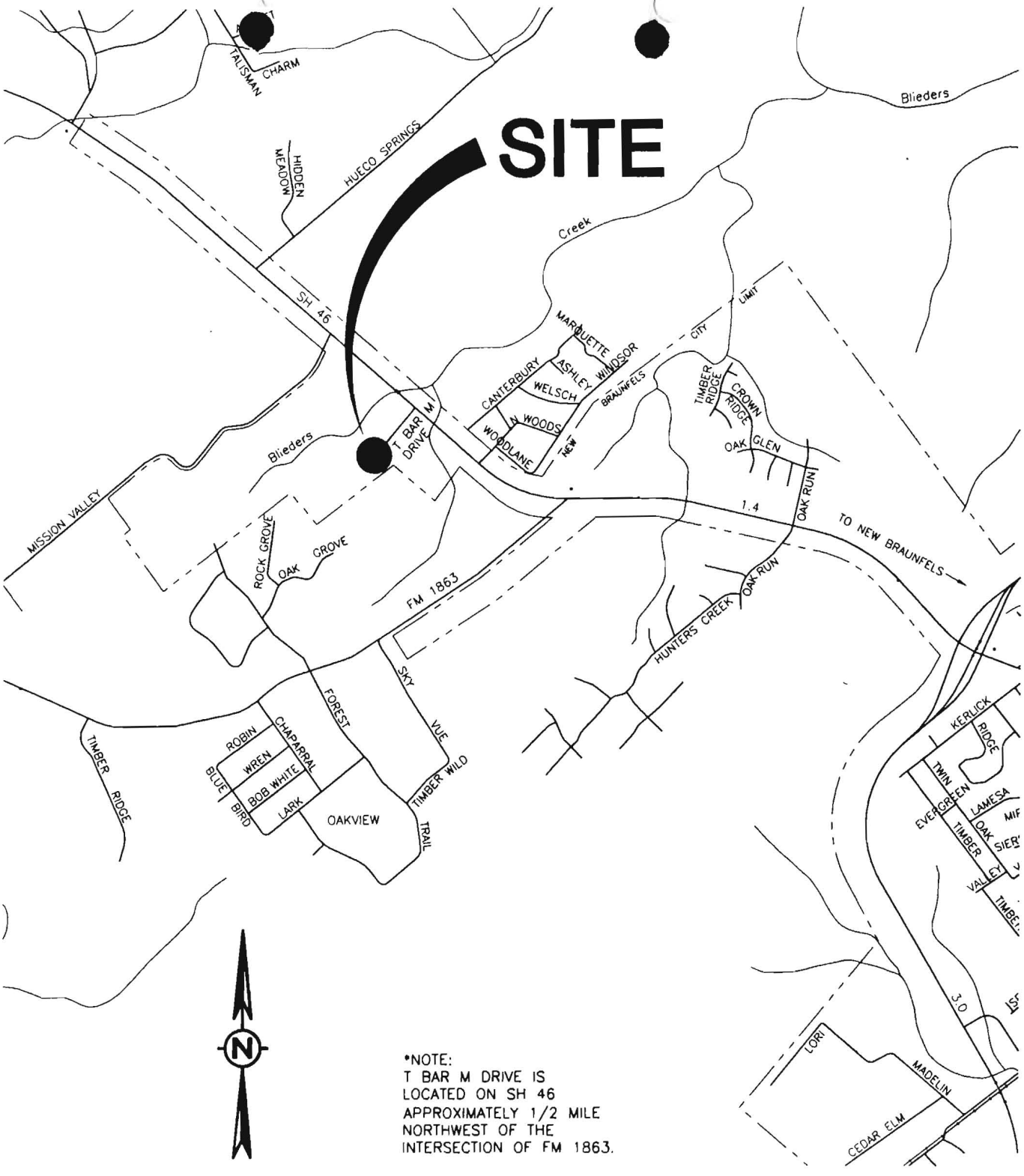
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **GENERAL INFORMATION FORM** is hereby submitted for TCEQ review. The application was prepared by:

David Mcbeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent — Date: 4/8/08

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

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.



*NOTE:
T BAR M DRIVE IS
LOCATED ON SH 46
APPROXIMATELY 1/2 MILE
NORTHWEST OF THE
INTERSECTION OF FM 1863.

NOT-TO-SCALE

Carter :: Burgess

Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.

911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0068 Fax (210) 494-4626

T Bar M
LOCATION MAP

DRAWN BY: R.E.M. CHECKED BY: DM

DATE: 4/23/08 PROJECT NO.: 310627.012

SHEET 1 OF 1

Drawing Name: M:\310627.012_T BAR M\dwg\LOCATION_MAP.dwg User: healthds Apr 23, 2008 - 5:56pm

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS WEST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

SH 46

PROJECT SITE

FM 1863

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS

Produced by the United States Geological Survey
Revised in cooperation with the Texas Water Development Board

Control by USGS, NOS/NOAA, and USCE

Compiled by the Army Map Service by photogrammetric methods from aerial photographs taken 1956. Field checked 1958
Revised from aerial photographs taken 1986. Field checked 1987
Map edited 1988

Projection and 10,000-foot grid ticks: Texas coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 20 meters south and 28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence and field lines generally visible on aerial photographs. This information is unchecked

Gray tint indicates area in which only landmark buildings are shown

UTM GRID AND 1988 MAGNETIC NORTH DECLINATION AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

2998-413

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route · U. S. Route · State Route

NEW BRAUNFELS WEST, TEX.
29098-F2-TF-024

1988

DMA 6343 II NW-SERIES V822

Official Edwards Aquifer Recharge Zone Map
31 Texas Administrative Code Chapter 313
Subchapter A—San Antonio Region

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS EAST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS
(pop 6231)

NEW BRAUNFELS
MUNICIPAL AIRPORT

Freiheit

Clear Springs

Camp Willow

Guadalupe River

Alligator Creek

Long Creek

Dunlap

Comal River

Barbarosa

Geronimo Creek

Mesquite

Thorn Hill

Gruene

Goodwin

Rock Hill

Landa Park

Prince Chr

Mapped by the Army Map Service
Published for civil use by the Geological Survey

Control by USGS, NOS / NOAA, and USCE

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1956. Field check 1958

Polyconic projection. 1927 North American datum
10,000-foot grid based on Texas coordinate system, south central zone
1000-metre Universal Transverse Mercator grid ticks, zone 14, shown in blue

Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1973. This information not field checked

Purple tint indicates extension of urban areas

UTH GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

2998-414

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

NEW BRAUNFELS EAST, TEX.

N2937.5—W9800/7.5

1958
PHOTOREVISED 1973
AMS 6343 II NE SERIES V882

26

ATTACHMENT C – PROJECT DESCRIPTION

T Bar M is a recreational camp and resort with cabins, hotel, tennis courts, cafeteria, baseball field, swimming pools and associated parking and access roads, etc, all approved under an existing WPAP. The site is located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West (see location map). The site has a low density and the rural characteristics are maintained throughout the facility. The proposed improvements will retain the rural setting, keeping much of the surrounding area undisturbed. This WPAP modification is for the addition of a restaurant building and roads/parking. The proposed layout requires that some of the existing impervious cover be removed and restored to landscaping. The existing impervious cover for the site is 3.46 acres. After proposed improvements are completed the impervious cover will be 3.83 acres. The proposed improvements will impact the site with a net increase of 0.37 acres of impervious cover. The area where the new proposed restaurant will be constructed is approximately 1 acre. Existing approved WPAP envelopes and approval dates are shown on Sheet EX1. The permanent BMP's have been designed to treat the net increase of impervious cover for the project site, which is approximately 0.37 acres. A summary of the impervious cover and the areas of treatment are in the tables below.

Impervious Area Summary		
Existing Impervious Area (Approved)	150,664 sf	3.46 ac
Proposed Impervious Area (After Modification)	166,781 sf	3.83 ac
Demolished Impervious Cover	10,018 sf	0.23 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac

Treatment Summary		
Treatment Area	16,553 sf	0.38 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac
Excess Area Treated	436 sf	0.01 ac

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 3 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land and 3 rural single family residences at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary northeasterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow.. Vegetative filter strips will be used to treat stormwater runoff. Additionally, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46 West. The temporary and permanent BMP's will be constructed and maintained by T Bar M

The project limits are those areas within the T Bar M campus that will be disturbed to construct the new restaurant and parking areas, which will be approximately 1.0 acre.

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

PROJECT NAME: **Pool and Cabin Improvements – T Bar M Ranch**

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 **0 to 0.5** feet thick. In general, the soil present appears to have the ability to:

___ transmit fluid flow to the subsurface.
X impede fluid flow to the subsurface.

3. X **SOILS ATTACHMENT**. A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics are attached at the end of this form.

4. 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.

5. X A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY** 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.

6. X Appropriate **SITE GEOLOGIC MAP(S)** are attached:

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" = **50** '
Site Geologic Map Scale 1" = **50** '

7. Method of collecting positional data:
X Global Positioning System (GPS) technology.
___ Other method(s).

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

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

10. 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.

11. X The Recharge Zone boundary is shown and labeled, if appropriate.

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

___ There are _____(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
___ The wells are not in use and have been properly abandoned.
___ The wells are not in use and will be properly abandoned.
___ The wells are in use and comply with 16 TAC §76.
X There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: **August 8, 2002**
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.

Jeffrey S. Neathery — Print Name of Geologist
210-930-5959 — Telephone
210-930-6262 — Fax
Signature of Geologist
August 13, 2002 — Date

Representing: **Arias & Kezar**
(Name of Company)

Site Specific Soils

Most of the site has been previously developed. There are several structures, roads, parking areas and a baseball field. Native soils remaining at the site consist of black and brown calcareous clay. The clay includes rock fragments ranging in size to pebbles. Although the clay content of the soils would tend to impede the downward flow of water, in areas where the rock fragments are more abundant, the water mobility would increase.

The soils on the site are typical of those found on the Edwards. They range up to a maximum thickness of about one half of a foot in some areas. Soils cover most of the undeveloped portions of the site. There are few areas of rock outcrops except for those in the creek area.

According to the U.S. Soil Conservation Service, the soils beneath the SITE are classified as Rumple-Comfort association, undulating.

This association consists of shallow and moderately deep soils on uplands in the Edwards Plateau. Rumple soils make up about 60 percent of the association. Comfort soils make up about 20 percent. The remainder consists mostly of Tarpley soils. These soils are well drained. Surface runoff is medium. Permeability is moderately slow in Rumple soils and slow in Comfort soils. Water erosion is a moderate hazard.

Overall, the soils will provide some protection to the underlying limestone. There are areas where the soil cover is very thin or absent and therefore, no protection exists.

Stratigraphic Column

Group	Formation	Member	Thickness (ft)
Edwards Limestone	Person	Cyclic and Marine	80-90
		Leached and Collapsed	70-90
		Regional Dense	20-24
	Kainer	Grainstone	50-60
		Kirschberg Evaporite	50-60
		Dolomitic	110-130
		Basil Nodular	50-60
Glen Rose Limestone	Upper Glen Rose		350-500

(From U.S.G.S., 1996)

Site Specific Geology

The site lies on the outcrop of the Person Formation of the Edwards Limestone. More specifically, the site lies on the outcrop of the Cyclic and Marine Member.

The undeveloped portion of the site lies along Hwy 46. This portion drains into Blieders Creek. Most of the exposed rock was found in the creek. No portion of the site lies within the 100-year floodplain. Most of the site was covered with soil. Few rock outcrops were visible. Much of the rock visible at the site was float, or weathered bedrock.

There was no evidence of structural faulting or fracturing observed in the field. There were no solution features found. Some of the float rock showed varying signs of pitting, especially in the creek area. There were no open vugs observed.

According to the literature (USGS, 1996), there are faults to the north and south of the site. No evidence of these faults were observed in the field.

Feature Comments

Feature S-1
This feature is hole that was dug to install a flagpole.

Feature S-2
This feature is hole that was dug to install a flagpole.

Feature S-3
This is an excavation made to repair a water line.

Feature S-4
This is a bedding plane feature approximately 5 feet up from the bottom of the creek..

Feature S-5
This is an erosion feature formed where water runs off the asphalt pavement and onto the ground. Some of the pavement itself has eroded.

Feature Locations

Feature	Latitude	Longitude
S-1	29° 43' 24.1"	98° 11' 18.5"
S-2	29° 43' 24.0"	98° 11' 18.6"
S-3	29° 43' 23.0"	98° 11' 15.7"
S-4	29° 43' 28.9"	98° 11' 06.6"
S-5	29° 43' 29.8"	98° 11' 11.1"

of and Cabin Improvements - T Bar M Ranch

FE	PHYSICAL SETTING												
1A			1B						1C	1D			1E
LOCATION	AREA (ACRES)		TOPOGRAPHY (2)						SUB-TOTAL	POTENTIAL RECHARGE			COMMENTS
	10	15	0	5	10	15	20						
	<20	>20	WALL	HILLTOP	HILLSIDE	FLOODPLAIN	STREAM BED			NONE/LOW <15	MODERATE 15-20	HIGH >20	YES
S-1				5					10	10			Yes
S-2				5					10	10			Yes
S-3				5					10	10			Yes
S-4	10					15			25			25	Yes
S-5				5					10	10			Yes

(1) C = 35ommission's Instructions to Geologists. The SC = 10, 3n of the conditions observed in the field.

(2) WALL
FLOODPL_____ Sheet 1 of 1
STREAM

TNRCC-0

References

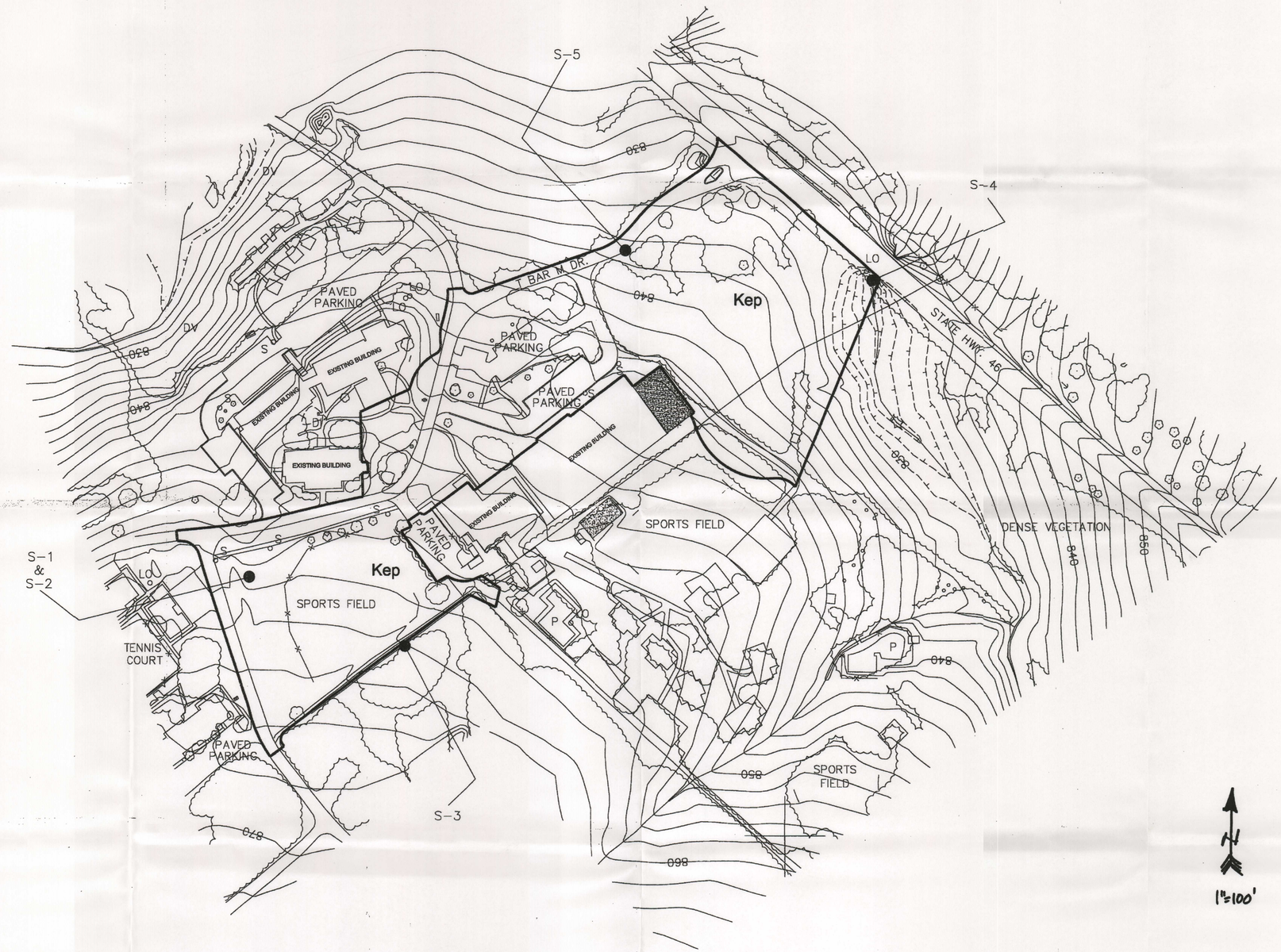
Federal Emergency Management Agency, (1991), *FIRM Flood Insurance Rate Map, Comal County, Texas and Unincorporated Areas*, Panel No. 485493 0100C, September 29, 1986.

Soil Conservation Service (1984), *Soil Survey, Comal and Hays Counties Texas*, US Departmentof Agriculture

Texas Natural Resource Conservation Commission (1999), *Instructions to Geologists*

U.S. Geological Survey (1994), *New Braunfels, West, Texas* 7.5 Minute Series (Topographic)

U.S. Geological Survey (1994), *Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas*, Water Resources Investigations Report 94-4117



Pool and Cabin Improvements T Bar M Inc. Center for Christian Growth 2549 HWY 46 West New Braunfels,Texas 78132	Site Geologic Map	ARIAS & KEZAR INC 10821 Gulfdale San Antonio, Texas 78216 (210)308-5884 Fax(210)308-8731

Modification of a Previously Approved Plan

for Regulated Activities
on the Edwards Aquifer Recharge Zone and Transition Zone
and Relating to 30 TAC §213.4(j), Effective June 1, 1999

1. Regulated Entity Name: **T BAR M, INC**
2. Original Regulated Entity Name: T Bar M, Inc. / Center for Christian Growth
3. X **ATTACHMENT A - Original Approval Letter.** A copy of the original approval letter and copies of any letters approving modifications are found at the end of this form.

4. A modification of a previously approved plan is requested for: (INDICATE ALL THAT APPLY)

   x physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   __ change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   x development of land previously identified as undeveloped in the original water pollution abatement plan;
   __ physical modification of the approved organized sewage collection system;
   __ physical modification of the approved underground storage tank system;
   __ physical modification of the approved aboveground storage tank system.

5. x **ATTACHMENT B - Narrative of Proposed Modification.** A narrative description of the nature of each proposed modification is provided at the end of this form.

6. Original Project:

Type:	X WPAP __ SCS __ UST __ AST
Size:	9.3 acres
Population:	N/A
Wastewater Volume:	4,200 gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	37.2 %

7. Proposed Modification:

Type:	X WPAP __ SCS __ UST __ AST __
Size:	9.3 acres
Population:	N/A
Wastewater Volume:	5,700 gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	41.2 %

8. **ATTACHMENT C - Site Plan.** A Site Plan showing the existing conditions of the site, the location of proposed modification(s), and, as applicable, geologic or man-made features, temporary erosion and sedimentation controls, and permanent BMPs is found at the end of this form.

9. x One (1) original and three (3) copies of a completed application has been provided.

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This request for a **MODIFICATION TO A PREVIOUSLY APPROVED PLAN** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent

Signature of Customer/Agent

4/25/08
Date

Doc # 0306002418

b/c

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Scott A. Turpin who, being duly sworn by me, deposes and says:

(1) That my name is Scott A. Turpin and that T Bar M, Inc. owns the real property described below.

(2) That said real property is subject to an EDWARDS AQUIFER PROTECTION PLAN which was required under the 30 Texas Administrative Code (TAC) Chapter 213.

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the TEXAS NATURAL RESOURCE CONSERVATION COMMISSION (TNRCC) on December 20, 2002.

A copy of the letter of approval from the TNRCC is attached to this affidavit as Exhibit A and is incorporated herein by reference.

(4) The said real property is located in Comal County, Texas, and the legal description of the property is as follows:

A portion of Lot 1, Block 1, T Bar M Ranch Commercial, being 56.626 acres of land.

T Bar M, Inc. by: Scott A. Turpin
LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this 16 day of January, 2003.

JUNE MAYFIELD
MY COMMISSION EXPIRES
November 17, 2005

June Mayfield
NOTARY PUBLIC

THE STATE OF Texas §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Scott A. Turpin 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 16th day of January, 2003

JUNE MAYFIELD
MY COMMISSION EXPIRES
November 17, 2005

June Mayfield
NOTARY PUBLIC

JUNE MAYFIELD
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11-17-2005

TNRCC-0625 (Rev. 5/01/02)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 20, 2002

Mr. Scott Turpin
T Bar M, Inc./ Center for Christian Growth
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: T Bar M; Located at 2549 Highway 46 West; 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.1899.00; Investigation No. 17611.

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Jeff Moeller, P.E. of Carter & Burgess, Inc. on behalf of T Bar M, Inc./ Center for Christian Growth on September 26, 2002. Final review of the application was completed after additional materials were submitted on December 9, 2002, and December 13, 2002. 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. 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 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover will be 3.46 acres (37.2% percent). Project wastewater will be disposed of by conveyance to the existing Gruene Waste Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

Five individual permanent vegetative filter strips will be constructed to treat stormwater runoff. The individual treatment measures will consist of the following:

Permanent Best Management Practice (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

The approved measures are presented to meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

GEOLOGY

According to the geologic assessment included with the application, four possibly sensitive features and one not sensitive feature were identified on the proposed project site. The possibly sensitive features were described by the geologist as four man-made features and one solution cavity. The San Antonio Regional Office did conduct a site inspection on October 18, 2002. The site inspection revealed that the site geology is consistent with the geologic assessment and no additional features were noted.

SPECIAL CONDITIONS

I. All permanent pollution abatement measures shall be operational prior to commencement of any commercial operation for each phase of development.

II. The vegetative filtration areas are 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.

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 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.

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. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

8. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

9. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved

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

10. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

12. 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.

13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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

14. 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.

15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

16. 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.

17. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

18. 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 on Permanent BMPs-Form TCEQ-10263

cc: Mr. Jeff Moeller, P.E., Carter & Burgess, Inc.
Mr. John Bohuslav, TXDOT San Antonio District
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

Doc# 200306002418
Pages 6
01/22/2003 12:29:12 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $19.00

STATE OF TEXAS
COUNTY OF COMAL

This is to certify that this document was FILED and RECORDED in the Official Public Records of Comal County, Texas on the date and time stamped thereon.

Joy Streater
COUNTY CLERK

Doc# 200306002418

ATTACHMENT B – NARRATIVE OF PROPOSED MODIFICATION

T Bar M is a recreational camp and resort with cabins, hotel, tennis courts, cafeteria, baseball field, swimming pools and associated parking and access roads, etc, all approved under an existing WPAP approved on December 20, 2002 for an area of 9.3 acres. The site is located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West (see location map). This WPAP modification is for the addition of a restaurant building and roads/parking. The proposed layout requires that some of the existing impervious cover be removed and restored to landscaping. The existing impervious cover for the site is 3.46 acres. After proposed improvements are completed the impervious cover will be 3.83 acres. The proposed improvements will impact the site with a net increase of 0.37 acres of impervious cover. The area where the new proposed restaurant will be constructed is approximately 1 acre. Existing approved WPAP envelopes and approval dates are shown on Sheet EX1. The permanent BMP's have been designed to treat the net increase of impervious cover for the project site, which is approximately 0.37 acres. A summary of the impervious cover and the areas of treatment are in the tables below.

Impervious Area Summary		
Existing Impervious Area (Approved)	150,664 sf	3.46 ac
Proposed Impervious Area (After Modification)	166,781 sf	3.83 ac
Demolished Impervious Cover	10,018 sf	0.23 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac

Treatment Summary		
Treatment Area	16,553 sf	0.38 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac
Excess Area Treated	436 sf	0.01 ac

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 3 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land and 3 rural single family residences at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary northeasterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow.. Vegetative filter strips will be used to treat stormwater runoff. Additionally, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46 West. The temporary and permanent BMP's will be constructed and maintained by T Bar M

The project limits are those areas within the T Bar M campus that will be disturbed to construct the new restaurant and parking areas, which will be approximately 1.0 acre.

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: **T BAR M, INC. RESTAURANT BUILDING**

REGULATED ENTITY INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots:
   - ___ Residential: # of Living Unit Equivalents:
   - ___ Commercial
   - ___ Industrial
   - X Other: Existing Resort Restaurant Expansion

2. Total site acreage (size of property): Approximate overall site= 9.3 acres
   (Area of site improvements = 1.1 acres)

3. Projected population: N/A

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	27,007	÷ 43,560 =	0.62±
Parking	49,777	÷ 43,560 =	1.14±
Other paved surfaces	89,997	÷ 43,560 =	2.07±
Total Impervious Cover	166,781	÷ 43,560 =	3.83±
Total Impervious Cover ÷ Total Acreage x 100 =			41.2%

Note: Although the overall site is 9.3 acres, only approximately 1.1 acres of the site will be disturbed by the construction of the proposed improvements. In addition, some areas of proposed improvements already have existing impervious cover that will be demolished prior to the construction of the new improvements. Therefore, while there is approximately 26,136 sf of impervious cover proposed with the project, the net addition of impervious cover is only approximately 16,117 sf, as stated in the project description. (Reference Attachment C-General Information Form)

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 TCEQ 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 TCEQ.

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 5,700 gallons/day (See Appendix)
    __ % Industrial _____ gallons/day
    __ % Commingled _____ gallons/day

    TOTAL 5,700 gallons/day

    Note: The addition of the restaurant will add approximately 1,500 gpd to the existing flow approved in the WPAP of 4,200 gpd.

15. Wastewater will be disposed of by:

_ **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 Chapter 285.

X Sewage Collection System (Sewer Lines):

X 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 Gruene Treatment Plant. The treatment facility is :

X existing.

__ proposed.

16. X 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" = 50 '.

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 (FIRM) Panel #4854930430F and Flood Insurance Rate Map (FIRM) Panel #4854930435F, Panel not printed-area in Zone X. Maps are currently in final approval process. The preliminary map date is March 10, 2006**

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.):
    - __ There are __(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
        - __ The wells are not in use and have been properly abandoned.
        - __ The wells are not in use and will be properly abandoned.
        - __ The wells are in use and comply with 30 TAC §238.
    - X 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. NA 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 TCEQ 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 concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **WATER POLLUTION ABATEMENT PLAN APPLICATION FORM** is hereby submitted for TCEQ review and executive director approval. The form was prepared by:

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/25/08
Date

Attachment A – Factors Affecting Water Quality

The development will consist of adding a restaurant, additional parking, and street. This development will produce little pollution due to the small amount of impervious cover being added to the site. Pollution may originate from ordinary cleaning chemicals, normal automobile wastes, and runoff from asphalt streets. In the case of a spill, proper procedures will be taken in accordance with "Complying with Edwards Aquifer Rules: Technical Guidance on Best Management Practices," revised July 2005.

Attachment B – Volume and Character of Stormwater

The development of this site will result in a minimal increase in stormwater runoff. Runoff calculations for the watershed were performed using the Rational Method. The "C" value for the existing conditions is 59, and the "C" value for proposed conditions is 63. For the 100-year storm event, stormwater runoff increased by this 9.3 acre site from 86cfs to 95 cfs. This is an increase of 10%. For the 25-year storm event, stormwater runoff increased from 70 cfs to 78cfs. This is an increase of 11%. City of New Braunfels requires that the additional stormwater be detained and released at a rate not to exceed existing conditions.

Drainage patterns for the site will remain relatively unchanged. Low areas and swales will remain in their original condition, therefore offering natural vegetative filtering capabilities. In addition, permanent vegetative filter strips will be incorporated to offer treatment of runoff as detailed in the Permanent Stormwater Section.

Due to the fact that the majority of the drainage lows will remain in their natural condition and the net increase in impervious cover is 4% , the quality of stormwater runoff leaving the site will remain unchanged after incorporating appropriately sized temporary and permanent BMP's for the project.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".

STATE HWY. 46

T BAR M DR.

EXISTING GRASS FILTER

EXIST. PAVED PARKING

COVERED BY EXISTING WPAP DATED: FEB. 1997

COVERED BY EXISTING WPAP DATED: JUNE 1998

EXIST. HOTEL

EXIST. PAVED PARKING

COVERED BY EXISTING WPAP DATED: DEC. 2002

EXIST. SPORTS CENTER

COMMON

EXISTING CAFETERIA F.F.E. = 105.37 (±)

PROPOSED RESTAURANT F.F.E. = 107.50

PROPOSED BUILDING (FUTURE)

PROPOSED PARKING (FUTURE)

PROPOSED DRIVE (FUTURE)

PROPOSED MODIFICATION AREA

EXIST. SPORTS FIELD

EXIST. SPORTS FIELD

12" OAK

32" OAK

LEGEND

VEGETATIVE FILTER STRIPS

GEOLOGIC FEATURES

N

SCALE: 1"=50'

0 25 50 75 100

NO.	DATE	REVISION	BY

Carter :: Burgess

Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.

911 Central Parkway North, Suite 425
San Antonio, Texas 78232-1509
(210) 494-0088 Fax: (210) 494-4525

EXISTING APPROVED WATER POLLUTION ABATEMENT PLANS FOR SITE

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET
EX1

Drawing Name: M:\310627.012_T BAR M\dwg\WPAP_310627012_PNAP.dwg User: sellorsej Apr 30, 2008 - 4:06pm

AREA 1

Background Load Calculations

Site Area = 4.003ac
Existing Impervious Area = 0.246ac (6.1 % Imp)
Proposed Impervious Area = 1.203ac (30.0 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(.061)^2 + 0.328(0.061) + 0.030
Rv Exist = 0.052

Au = Site Area - Impervious Area
Au = 4.003ac - 0.246ac
Au = 3.757ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(3.757 x 0.54 + 0.246 x 0.052 x 38.4)
L=83.2

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.30)^2 + 0.328(0.30) + 0.030
Rv Prop = 0.178

L = A x P x Rv x 38.4
L = 4.003ac x 33 x 0.178 x 38.4
L = 902.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(902.9 - 83.2)
Lr = 655.8

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
655.8 = 902.9 x FS x 0.85
FS = 0.855

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.885 x 1.203
MF = 1.065ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.065ac/TA
TA = 0.64ac

Proposed Vegetative Filter Strips = 1.15ac

AREA 3

Background Load Calculations

Site Area = 0.411ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.170ac (41.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.411ac - 0.0ac
Au = 0.411ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.411 x 0.54 + 0.0 x 0.030 x 38.4)
L=7.32

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.414)^2 + 0.328(0.414) + 0.030
Rv Prop = 0.259

L = A x P x Rv x 38.4
L = 0.411ac x 33 x 0.259 x 38.4
L = 134.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(134.9 - 7.32)
Lr = 102.1

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
102.1 = 134.9 x FS x 0.85
FS = 0.89

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.89 x 0.170
MF = 0.15ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.15ac/TA
TA = 0.09ac

Proposed Vegetative Filter Strips = 0.10ac

AREA 4

Background Load Calculations

Site Area = 1.157ac
Existing Impervious Area = 0.284ac (24.5 % Imp)
Proposed Impervious Area = 0.726ac (60.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.245)^2 + 0.328(0.245) + 0.030
Rv Exist = 0.143

Au = Site Area - Impervious Area
Au = 1.157ac - 0.284ac
Au = 0.873ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.873 x 0.54 + 0.284 x 0.143 x 38.4)
L=67.0

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.609)^2 + 0.328(0.609) + 0.030
Rv Prop = 0.432

L = A x P x Rv x 38.4
L = 1.192ac x 33 x 0.432 x 38.4
L = 652.5

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(652.5 - 67.0)
Lr = 468.4

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
468.4 = 652.5 x FS x 0.85
FS = 0.844

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.844 x 0.726
MF = 0.613ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.613ac/TA
TA = 0.37ac

Proposed Vegetative Filter Strips = 0.37ac

AREA 5

Background Load Calculations

Site Area = 0.383ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.126ac (32.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.383ac - 0.0ac
Au = 0.383ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.383 x 0.54 + 0.0 x 0.030 x 38.4)
L=6.83

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.329)^2 + 0.328(0.329) + 0.030
Rv Prop = 0.197

L = A x P x Rv x 38.4
L = 0.383ac x 33 x 0.197 x 38.4
L = 95.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(95.6 - 6.83)
Lr = 71.0

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
71.0 = 95.6 x FS x 0.85
FS = 0.874

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.874 x 0.126
MF = 0.110ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.11ac/TA
TA = 0.066ac

Proposed Vegetative Filter Strips = 0.126ac

AREA 2

Background Load Calculations

Site Area = 3.352ac
Existing Impervious Area = 1.262ac (37.6 % Imp)
Proposed Impervious Area = 1.824ac (54.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.376)^2 + 0.328(0.376) + 0.030
Rv Exist = 0.231

Au = Site Area - Impervious Area
Au = 3.352ac - 1.262ac
Au = 2.09ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(2.09 x 0.54 + 1.262 x 0.231 x 38.4)
L=406.7

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(.544)^2 + 0.328(0.544) + 0.030
Rv Prop = 0.37

L = A x P x Rv x 38.4
L = 3.352ac x 33 x 0.37 x 38.4
L = 1571.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(1571.6 - 406.7)
Lr = 931.9

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
931.9 = 1571.6 x FS x 0.85
FS = 0.697

Minimum Fraction of Impervious Area that must be treated is.

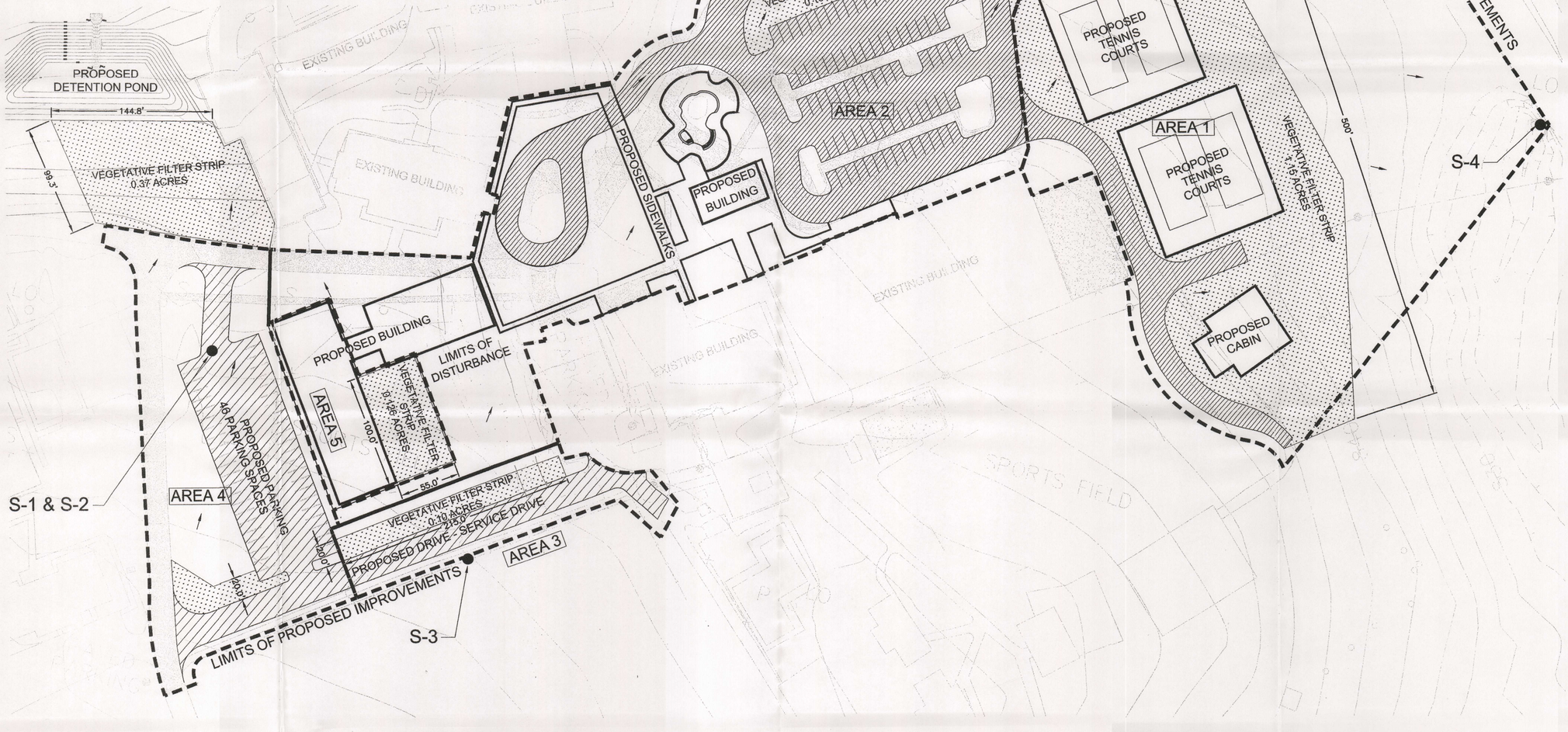
MF = FS x Proposed Impervious Area
MF = 0.697 x 1.824
MF = 1.271ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.271ac/TA
TA = 0.760ac

Proposed Vegetative Filter Strips = 0.77ac



NO.	DATE	REVISION	BY
1	12/09/02	REVISED PER TCEQ COMMENTS	TMS
2	12/11/02	REVISED PER TCEQ COMMENTS	TMS

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525
© COPYRIGHT 2002 - Carter and Burgess, Inc.

JEFFREY D. MOELLER 88588 LICENSED PROFESSIONAL ENGINEER 12-11-02

PERMANENT PLAN

POOL AND CABIN IMPROVEMENTS
T BAR M, INC.

CENTER FOR CHRISTIAN GROWTH
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS 78132

DATE:	6-26-02
DRAWN BY:	JOS
DESIGNED BY:	TMS
CHECKED BY:	JDM
REVIEWED BY:	TMS
PROJECT NUMBER:	31-0147-000

SHEET

OF

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: **T BAR M, INC./**

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 TCEQ 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. **N/A** 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.
   N/A 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 **~~N/A~~** 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: Bulgers 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, TCEQ inspections, or during excavation, blasting, or construction.

8. The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

   __ **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is 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. X **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. N/A **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. N/A 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 TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

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

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/3/09
Date

Attachment A – Spill Response Actions

There will be no above ground fuel storage tanks allowed on this project. Equipment will be fueled using mobile fuel trucks as needed. There is a small chance of a fuel spill occurring due to leaking construction equipment or re-fueling operations. If a minor spill were to occur, the soil impacted would be removed from the site and properly disposed of in an approved landfill site. If a major spill were to occur, where the amounts spilled were equal to, or exceeding, the Reportable Quantity, RQ, as defined by EPA regulations 40 CFR Parts 110, 119, and 302 then the following steps will be taken.

The following steps will help reduce the stormwater impacts of leaks and spills, in accordance with the Technical Guidance on Best Management Practices, Section 1.4.16, pg(s) 1-118 – 1-121:

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills.
Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
(4) Establish a continuing education program to indoctrinate new employees.
(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
(2) Store hazardous materials and wastes in covered containers and protect from vandalism.
(3) Place a stockpile of spill cleanup materials where it will be readily accessible.
(4) Train employees in spill prevention and cleanup.
(5) Designate responsible individuals to oversee and enforce control measures.
(6) Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean up activities.
(7) Do not bury or wash spills with water.
(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.
(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.
(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMP's in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
(2) Use absorbent materials on small spills rather than hosing down or burying the spill.
(3) Absorbent materials should be promptly removed and disposed of properly.
(4) Follow the practice below for a minor spill:
(5) Contain the spread of the spill.
(6) Recover spilled materials.
(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

(1) Contain spread of the spill.
(2) Notify the project foreman immediately.
(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM.

After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
(3) Notification should first be made by telephone and followed up with a written report.
(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
(5) Place drip pans or absorbent materials under paving equipment when not in use.
(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Discourage "topping off" of fuel tanks.
(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Attachment B – Potential Sources of Contamination

Potential sources of contamination are construction equipment leaks, re-fueling spills and asphalt lay down operations, on-site trash, and port-o-lets. There are no other anticipated potential sources of contamination.

Attachment C – Sequence of Major Activities

Stages of Construction:
The following construction sequence will occur for the project:

1. Clearing and Grubbing – removal of concrete, pavement, fences, trees, stumps, brush and other debris within the limits of the project. Approximate disturbed area = 1.1 acres
2. Rough Grading – Cutting and filling of site area to prepare the access road and parking area pavement and construction. Approximate disturbed area = 0.4 acres
3. Construction of restaurant building. Approximate disturbed area = 0.1 acres
4. Utility Installation – There will be underground water, sanitary sewer, telephone and electric lines installed. Approximate disturbed area = 0.1 acres
5. Finished Grading – Final landscaping and asphalt pavement layers are installed. Approximate disturbed area = 1.0 acres
6. Establishment of permanent engineered vegetated filter strips and permanent revegetaion of all disturbed areas. Approximate disturbed area = 0.3 acres

Attachment D – Temporary BMPs and Measures

Soil disturbance will be limited to the building site, access road and parking. No soil disturbance will occur outside of the project limits. Silt fence will be placed on the down gradient side of the site to contain pollutants generated from on-site runoff. A stabilized construction entrance and exit will be installed at the entrance to the project site as shown on the Temporary Pollution Abatement Plan Sheet, to help eliminate contaminants from leaving the site during construction traffic. The temporary measures will be maintained throughout the project, therefore, reducing the potential of polluting streams and the aquifer.

A. Stormwater flow through vegetated areas upgradient of the project site will continue to be intercepted along the southeasterly edge of the project and directed northeasterly. Additional flows upgradient of the site that aren't intercepted will sheet flow northwesterly through the project site. Silt fence will be provided along the downstream side of the proposed parking area to contain pollutants and sediments generated from onsite runoff.

B. Stormwater originating onsite will sheet flow northwesterly through the site. Silt fence will be provided along the downstream side of the proposed parking area to contain pollutants and sediment generated from onsite runoff. A rock berm will be provided along T Bar M Drive as required to limit runoff velocities exiting the site. All of the low areas which collect storm water runoff will remain in a natural state acting as vegetative filter strips. A stabilized construction entrance/exit will be provided near the southerly driveway onto T Bar M Drive. The stabilized construction entrance/exit will reduce the sediment transport onto public roadways. A concrete washout area will be provided near the construction entrance/exit onto T Bar M Drive, which will reduce the amount of concrete waste entering the stormwater runoff. Construction traffic will be required to utilize T Bar M Drive to access Highway 46 and will be cleaned as necessary to prevent tracking of sediment onto Highway 46.

C. Stormwater generated by this project will be further treated as it leaves the project site and crosses a series of existing grassy swales. All of the low areas which collect storm water runoff will remain in a natural state acting as vegetative filter strips prior to the treated runoff entering surface streams, the aquifer or other sensitive features

D. There were no sensitive features identified in the Geologic Assessment. The naturally occurring possibly sensitive features that were identified in the Geologic Assessment will be protected during construction by temporarily diverting runoff away from the features or placing silt fence just upstream of the feature location.

Attachment E – Request to Temporarily Seal a Feature

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

Attachment F – Structural Practices

All temporary controls will be installed in accordance with the Technical Guidance on Best Management Practices (Chapter 1.4) and are shown on the Temporary Stormwater Plan.

The structural practices for this project site are described below:

- Silt fence will be provided along the downstream side of the proposed parking area to protect exposed soils and to prevent contamination from leaving the project site or flowing into the features identified in the Geologic Assessment.
- A rock berm will be provided along T Bar M Drive as required to limit stormwater velocities exiting the site.
- A stabilized construction entrance/exit will be provided near the southerly driveway onto T Bar M Drive. The stabilized construction entrance/exit will reduce the sediment transport onto the roadways.
- A concrete washout area will also be provided near the construction entrance/exit. The concrete washout area will reduce the amount of concrete waste entering the stormwater runoff.
- Construction traffic will be required to utilize T Bar M Drive to access Highway 46. T Bar M Drive will be cleaned as necessary to prevent tracking of sediment onto Highway 46.
- Stormwater generated by this project will be further treated as it leaves the project site and crosses a series of existing grassy swales. All of the low areas which collect storm water runoff will remain in a natural state therefore natural filtration will be allowed to occur

Attachment G – Drainage Area Map

The areas of soil disturbance is approximately 1.1 acres, therefore there will be no areas greater than 10 acres within a common drainage area.

See attached drainage area map.

Attachment H – Temporary Sediment Pond(s) Plans and Calculations

There will not be more than 10-acres of disturbed soil in a common drainage area that will occur at one time. Silt fence will be used for the small drainage areas and sheet flow runoff. No sediment ponds will be used on this project due to the minimal disturbance area.

Attachment I – Inspection and Maintenance for BMPs

Inspection and Maintenance Plan

- The contractor is required to inspect the controls and fences at weekly intervals and after any 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 inches. Contractor is required to maintain the construction exit in a condition that prevents soil from tracking onto public roads via construction equipment and traffic.
- TCEQ staff will be allowed full access to the property during construction of the project for inspecting controls and fences and to verify that the accepted plan is being utilized in the field. TCEQ staff has the right to speak with the contractor to verify plan changes and modifications.
- Any changes made to the location or type of controls shown on the accepted plans, due to onsite conditions, shall be documented on the site plan that is part of this Water Pollution Abatement Plan. No other changes shall be made unless approved by the TCEQ and the Design Engineer. Documentation shall clearly show changes made, date, and person responsible and reason change was made.

Owner's Information:

Owner: T Bar M, Inc. \ Center for Christian Growth
Contact: Scott Turpin
Phone #: (214) 692-4254
Address: 8201 Preston Road
Dallas, Texas 75225

Owner's Engineer:

Company: Carter & Burgess, Inc.
Contact: David McBeth, PE
Phone #: (210) 494-0088
Address: 911 Central Pkwy North, #425
San Antonio, Texas 78232

Person or Firm Responsible For Erosion/Sedimentation Control Maintenance:

Company: _____ Phone #:(___)
Contact:
Address:
_____

Signature of Responsible Party:_____

This portion of the form shall be filled out and signed by the responsible party prior to construction.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

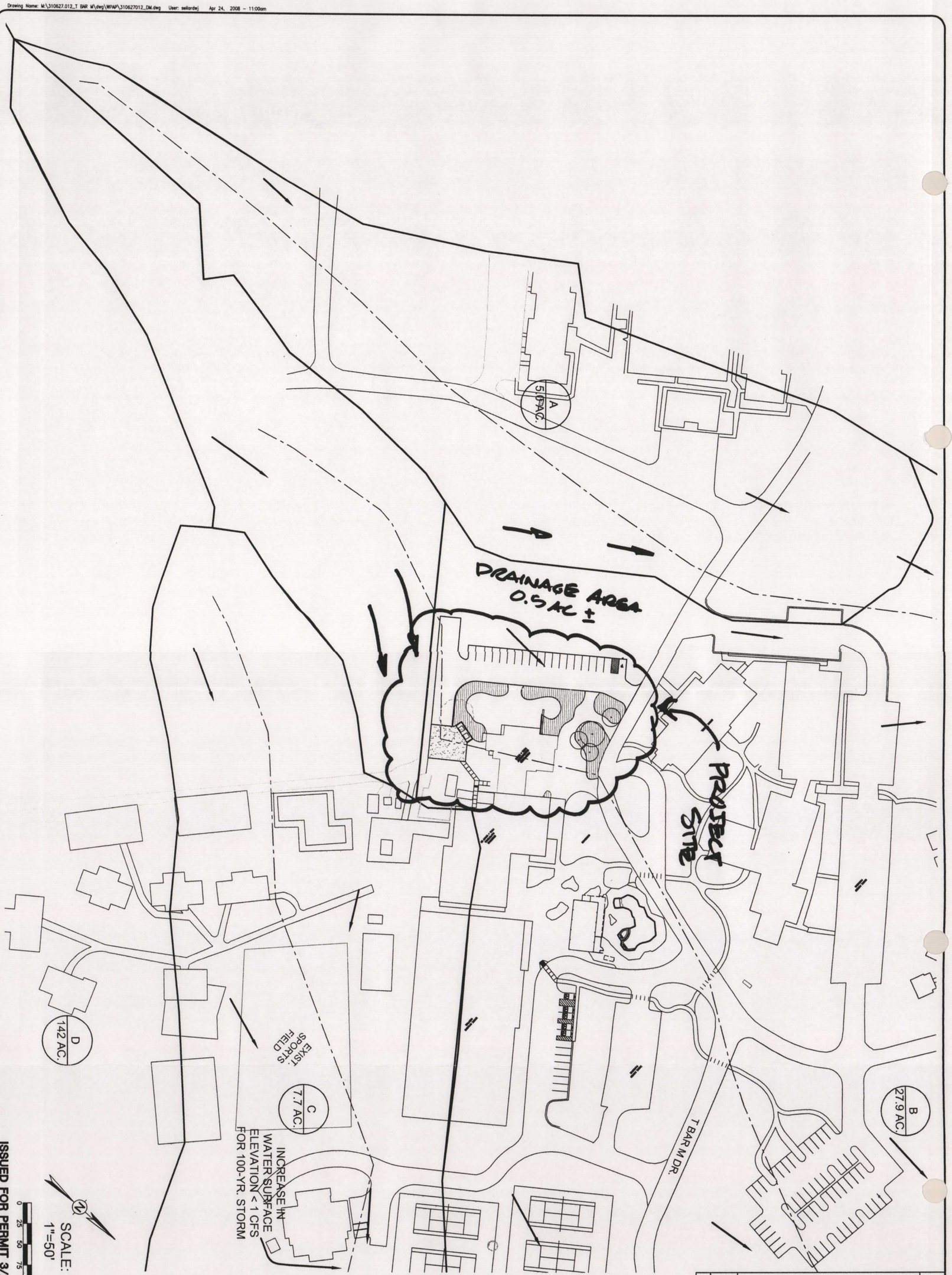
There will be minimal disturbed soil due to construction operations that are not covered by pavement or buildings. The area is currently developed with parking and grass areas around the perimeter. Areas, which are disturbed by construction staging, and storage areas will be hydro mulched with the appropriate seed mixture. Areas between the edge of pavement and right-of-way line will also be hydro mulched if a soil layer exists. Areas within islands and the entrance will be landscaped with appropriate plants and mulched. There will be no fill slopes exceeding a 3:1 slope and all fill slopes will be hydro mulched.

Installation of hydro mulch is as follows:

1. Final grading must be completed and all necessary BMPs should be in place prior to the addition of hydro mulch.
2. Hydro mulch mixture shall be as recommended by the County Agriculture Extension Agent or as shown below for the specific time of year and whether or not irrigation will be utilized.
3. Hydro mulch shall be applied at a rate stipulated by the Extension Agent or as shown below and shall be applied in a uniform manner
4. Other types of seeding applications may be used by the Contractor if approved by the Design Engineer and TCEQ.
5. If blankets or matting are used, they shall conform to the Texas Department of Transportation specifications.

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed with 21 days, temporary stabilization measures do not have to be initiated on that portion of the site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Dates	**Climate**	**Species**	**(lb/ac)**
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheat	30.0
		Total	**55.0**
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0



ISSUED FOR PERMIT 3/27/08

NO.	DATE	REVISION	BY

DATE:	10/12/07
DRAWN BY:	R.E.M.
DESIGNED BY:	R.E.M.
CHECKED BY:	GB
REVIEWED BY:	DM
PROJECT NUMBER:	310627.012

SHEET 4 OF 6

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

ONSITE DRAINAGE AREA MAP

Carter ▪ Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0060 Fax (210) 494-0239

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.

2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.

3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.

4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.

6. 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).

7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.

8. 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).

9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.

10. Stabilization measures shall be initiated as soon as practicable in portions of the site where

construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

11. The following records shall be maintained and made available to the TCEQ 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.

12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office 1921 Cedar Bend, Suite 150 Austin, Texas 78758-5336 Phone (512) 339-2929 Fax (512) 339-3795	San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

VEGETATIVE FILTER STRIPS

NATURAL FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA.

2. THE SLOPE SHOULD NOT EXCEED 10%.

3. THE MINIMUM DIMENSION (IN THE DIRECTION OF FLOW) SHOULD BE 50 FEET.

4. ALL OF THE FILTER STRIP SHOULD LIE ABOVE THE ELEVATION OF THE 2-YR, 3-HR STORM OF ANY ADJACENT DRAINAGE.

5. THERE IS NO REQUIREMENT FOR VEGETATION DENSITY OR TYPE.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD NOT EXCEED 20%. THE MINIMUM DIMENSION OF THE FILTER STRIP (IN THE DIRECTION OF FLOW) SHOULD BE NO LESS THAN 15 FEET. THE MAXIMUM WIDTH (IN THE DIRECTION OF FLOW) OF THE CONTRIBUTING IMPERVIOUS AREA SHOULD NOT EXCEED 72 FEET. FOR ROADWAYS WITH A VEGETATED STRIP ALONG BOTH SIDES, THE TOTAL WIDTH OF THE ROADWAY SHOULD NOT EXCEED 144 FEET (I.E., 72 FEET DRAINING TO EACH SIDE).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED STRIPS IS 80%.

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THAT THE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

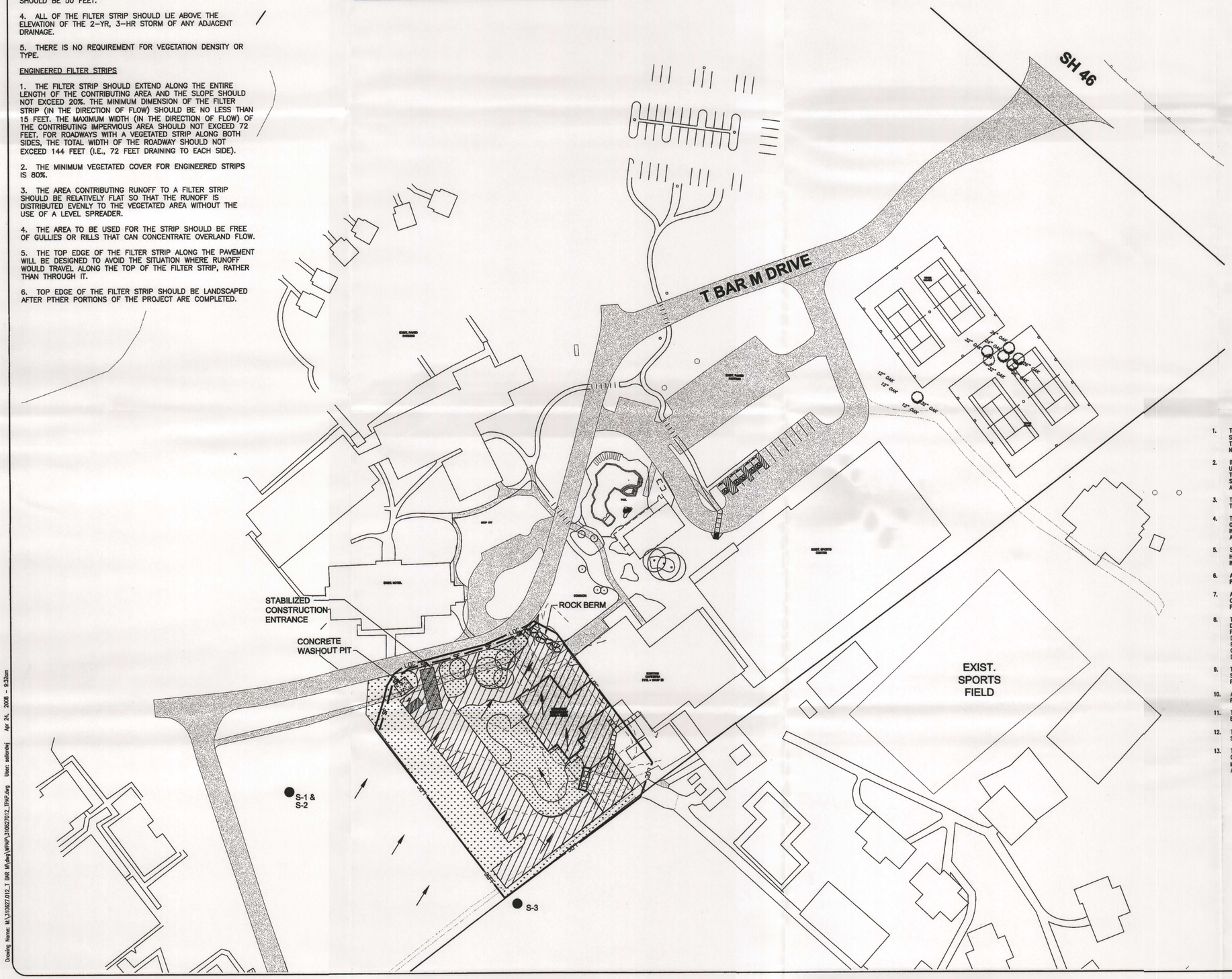
4. THE AREA TO BE USED FOR THE STRIP SHOULD BE FREE OF GULLIES OR RILLS THAT CAN CONCENTRATE OVERLAND FLOW.

5. THE TOP EDGE OF THE FILTER STRIP ALONG THE PAVEMENT WILL BE DESIGNED TO AVOID THE SITUATION WHERE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. TOP EDGE OF THE FILTER STRIP SHOULD BE LANDSCAPED AFTER PTHER PORTIONS OF THE PROJECT ARE COMPLETED.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".

NOTE:
T Bar M DR TO BE MAINTAINED TO PREVENT SEDIMENT/MUD FROM TRACKING ONTO HIGHWAY 46.



N

SCALE: 1"=50'

0 25 50 75 100

LEGEND

- EXISTING IMPERVIOUS COVER TO REMAIN
- EXISTING IMPERVIOUS COVER TO BE REMOVED
- PROPOSED IMPERVIOUS COVER
- AREAS WHERE SOIL STABILIZATION PRACTICES ARE TO OCCUR
- GEOLOGIC FEATURES
- —SF— PROPOSED SILT FENCE
- FLOW ARROW
- ROCK BERM
- —LOC— PROPOSED LIMITS OF CONSTRUCTION
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- CONCRETE TRUCK WASHOUT PIT

S.W.P.P.P. NOTES:

1. THE ESTIMATED AREA OF DISTURBANCE FOR THIS PROJECT IS 1.1 ACRES. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH TPDES GENERAL PERMIT NO. TXR150000 AND POST A SIGNED CONSTRUCTION SITE NOTICE AT THE SITE, AS WELL AS FILE A COPY OF THAT NOTICE WITH THE CITY OF SAN ANTONIO AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
2. IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH FEDERAL REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN AND FOR ANY MODIFICATIONS REQUIRED TO OBTAIN THE TPDES PERMITS.
3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO TCEQ AND LOCAL AGENCIES.
4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS, INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK, SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 1/2". REPAIRS TO INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.
7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.
8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE:
   DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR;
   REGULAR COLLECTION OF WASTES;
   CONVENIENTLY LOCATED WASTE RECEPTACLES; AND
   DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF THE LAW AND THIS PLAN. MODIFICATION SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY. EXIT SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET.
12. THE CONTRACTOR SHALL CONSTRUCT A SILT FENCE (SF) AT ALL LOCATIONS SHOWN ON PLANS. THE SF SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET.
13. THE CONTRACTOR SHALL DESIGNATE MATERIAL AND EQUIPMENT STORAGE AREAS MUTUALLY AGREED TO BY THE OWNER. THE STORAGE AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE AND THE SURFACE STABILIZED WITH A MINIMUM OF 2" OF CRUSHED ROCK OR GRAVEL. SILT FENCE SHALL BE INSTALLED AROUND THE STORAGE AREAS TO PREVENT ANY EROSION FROM LEAVING THE SITE.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 561-4000 Fax: (210) 494-4605
© COPYRIGHT 2008 Carter and Burgess Inc.

STATE OF TEXAS — DAVID M. McBETH — 59223 — REGISTERED PROFESSIONAL ENGINEER

TEMPORARY WATER POLLUTION ABATEMENT PLAN

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET 1 OF 6

Drawing Name: M:\310627.012_T BAR M\dwg\WPAP_310627012_PAP.dwg User: aallendorf Apr 24, 2008 - 9:32am

EROSION / SEDIMENTATION CONTROL:

This project is within the Edwards Aquifer Recharge Zone. All construction procedures within the scope of this contract shall comply with TCEQ regulations for construction work over the Edwards Aquifer Recharge Zone.

The TECQ requires erosion and sedimentation controls for construction over the Edwards Recharge Zone. Contractor shall provide erosion and sedimentation controls as noted on the project's plans. Contractor shall abide by all plan requirements.

At a minimum, these controls shall consist of rock berms and/or silt fences constructed parallel to and down gradient from the trenches. The rock berm or silt fences shall be installed in a manner such that any rainfall runoff shall be filtered. Hay bales shall not be used for temporary erosion and sedimentation controls.

All temporary erosion and sedimentation controls must be installed prior to construction and shall be maintained during construction by the contractor. The contractor shall remove the controls when vegetation is established and the construction area is stabilized per 31 TAC 313.5 (c)(12). Additional protection may be required if excessive solids are being discharged from the site.

All temporary erosion and sedimentation controls shall be removed by the contractor at final acceptance of the project by the owner/engineer.

Placement of temporary erosion and sedimentation controls shall be in accordance with the construction plans. Actual locations may vary slightly from the plans, but will be verified by the engineer/inspector in the field prior to construction. The contractor shall inspect the controls at weekly intervals and after every significant rainfall to insure disturbance of the structures has not occurred. Sediment deposited after a rainfall shall be removed from the site or placed in an engineer approved designated disposal area.

TELEPHONE LOCATOR

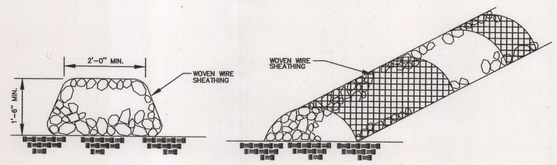
Note: "The existence and location of underground cable indicated on the plans are taken from the best records available and are not guaranteed to be accurate. Contractor to contact the telephone company cable locator 48 hours prior to excavation at 1-800-828-5127. Contractor has the responsibility to protect and support telephone company plant during construction."

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. 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).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. 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).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ 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.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    - A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    - B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    - C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
1921 Cedar Bend, Suite 150
Austin, Texas 78758-5336
Phone (512) 339-2929
Fax (512) 339-3795

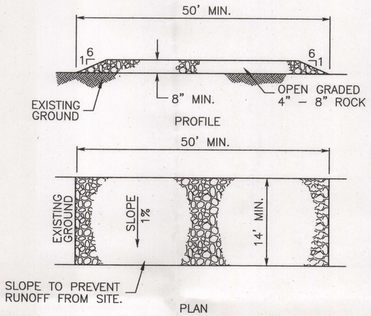
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone (210) 490-3096
Fax (210) 545-4329



ROCK BERM
N.T.S.

GENERAL NOTES:

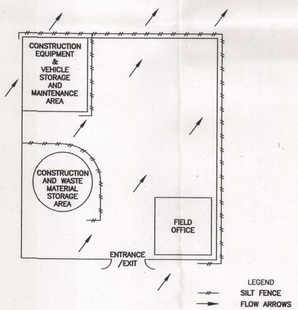
1. USE ONLY OPEN GRADED ROCK 3-5 INCHES DIAMETER.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.



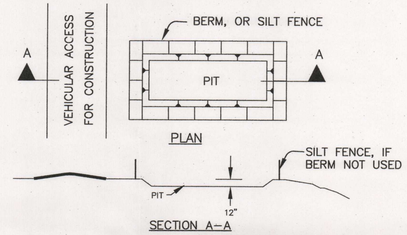
STABILIZED CONSTR. ENTRANCE
N.T.S.

GENERAL NOTES:

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



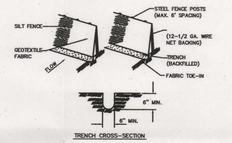
TYP. CONSTRUCTION STAGING AREA
N.T.S.



GENERAL NOTES:

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. IF SILT FENCE IS USED, FENCE SHALL BE PLACED IN ACCORDANCE WITH SILT FENCE DETAILS.
3. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
4. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

CONCRETE TRUCK WASHOUT PIT
N.T.S.



SILT FENCE
N.T.S.

WOVEN WIRE SUPPORT

NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW 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. 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 THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. PROPERTIES OF GEOTEXTILE FABRIC SHALL HAVE A TENSILE STRENGTH OF 90 LBS., PUNCTURE RATING OF 60 LBS., MULLEN BURST RATING OF 280 PSI, AND APPARENT OPENING SIZE, U.S. SIEVE NO. 20.

GENERAL NOTES:

1. HOME BUILDING MATERIALS SHALL BE PLACED ON EACH INDIVIDUAL LOT BEHIND THE SILT FENCE. WHERE THIS IS NOT PRACTICAL, SILT FENCE SHALL BE PLACED DOWN GRADIENT OF THE BUILDING MATERIALS.
2. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.
4. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER FOR ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR FILING ALL NOI's(NOTICE OF INTENT) AND NOT's (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO THE TPDES BOOK FOR THE NECESSARY FORMS.
7. A COPY OF THIS PLAN AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0799 Fax (210) 494-4825
© Copyright 2008 Carter and Burgess, Inc.

STATE OF TEXAS — DAVID M. MOBETH — 69723 — REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES AND DETAILS

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET 1

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: **T BAR M, INC./**

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 TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.
   — A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is 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. X 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.
   X This site will not be used for low density single-family residential development.

5. X 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.

X 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. N/A **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. N/A 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.

N/A 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.

N/A **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, TCEQ 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 TCEQ 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. X **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. X 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 TCEQ review and executive director approval. The application was prepared by:

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/09/09
Date

Attachment A – 20% or Less Impervious Cover Waiver

Not Applicable.

Attachment B – BMPs for Upgradient Stormwater

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 0.5 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary easterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow. Vegetative filter strips will be used to treat stormwater runoff. In addition, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46.

Attachment C – BMPs for On-site Stormwater

Disturbed areas shall be hydromulched upon completion of construction to stabilize the soils. Areas designated as engineered filter strips will be sodded to enhance the establishment of the permanent filter strips. Reference the Temporary Pollution Abatement Plan sheet for areas where soil stabilization practices are expected to occur.

Attachment D – BMPs for Surface Streams

The BMPs that will be used to protect Blieders Creek will be the vegetative filter strips. S-1 & S-2, "possible sensitive" recharge features were identified as a manmade holes for flagpoles in the Geologic Assessment. They are located upstream of the improvements proposed in this WPAP and will not require protection. S-3 a "possible sensitive" recharge feature was identified as an excavated area made to repair a waterline in the Geologic Assessment. It is located upstream of the improvements proposed in this WPAP and will not require protection. S-4 and S-5, "possible sensitive" recharge features were identified as a bedding plane feature near the bottom of the creek and eroded pavement area respectively in the Geologic Assessment. They have been protected with vegetative filter strips for the former and the latter has been repaired and will not require protection

Attachment E – Request to Seal Features

Not applicable

Attachment G– Maintenance and Inspection Plan

Reference the Maintenance Plan and Schedule provided at the end of this section.

Attachment I – Measures for Minimizing Surface Stream Contamination

All surface streams will be protected from erosion by not allowing runoff to exceed existing velocities.

MAINTENANCE PLAN AND SCHEDULE
PERMANENT POLLUTION ABATEMENT MEASURES
T BAR M, INC.
RESTAURANT BUILDING

VEGETATIVE FILTER STRIPS

Maintenance and inspection of the vegetative filter strips is to be conducted in accordance with TCEQ Technical Guidance Manual (2005) Chapter 3.5.8, as described below.

- *Pest Management.* An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *Seasonal Mowing and Lawn Care.* If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.

- *Inspection.* Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

- *Debris and Litter Removal.* Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

- *Sediment Removal.* Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

- *Grass Reseeding and Mulching*. A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.

I acknowledge that I have read the above Maintenance Plan and Schedule for Permanent Pollution Abatement Measures.

Owner or Responsible Party

2/26/08
Date

VEGETATIVE FILTER STRIPS

NATURAL FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA.

2. THE SLOPE SHOULD NOT EXCEED 10%.

3. THE MINIMUM DIMENSION (IN THE DIRECTION OF FLOW) SHOULD BE 50 FEET.

4. ALL OF THE FILTER STRIP SHOULD LIE ABOVE THE ELEVATION OF THE 2-YR, 3-HR STORM OF ANY ADJACENT DRAINAGE.

5. THERE IS NO REQUIREMENT FOR VEGETATION DENSITY OR TYPE.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD NOT EXCEED 20%. THE MINIMUM DIMENSION OF THE FILTER STRIP (IN THE DIRECTION OF FLOW) SHOULD BE NO LESS THAN 15 FEET. THE MAXIMUM WIDTH (IN THE DIRECTION OF FLOW) OF THE CONTRIBUTING IMPERVIOUS AREA SHOULD NOT EXCEED 72 FEET. FOR ROADWAYS WITH A VEGETATED STRIP ALONG BOTH SIDES, THE TOTAL WIDTH OF THE ROADWAY SHOULD NOT EXCEED 144 FEET (I.E., 72 FEET DRAINING TO EACH SIDE).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED STRIPS IS 80%.

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THAT THE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

4. THE AREA TO BE USED FOR THE STRIP SHOULD BE FREE OF GULLIES OR RILLS THAT CAN CONCENTRATE OVERLAND FLOW.

5. THE TOP EDGE OF THE FILTER STRIP ALONG THE PAVEMENT WILL BE DESIGNED TO AVOID THE SITUATION WHERE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. TOP EDGE OF THE FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETED.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".

NOTE:
T Bar M DR TO BE MAINTAINED TO PREVENT SEDIMENT/MUD FROM TRACKING ONTO HIGHWAY 46.

LEGEND

- EXISTING IMPERVIOUS COVER TO REMAIN
- PROPOSED IMPERVIOUS COVER (TREATMENT)
- ENGINEERED VEGETATIVE FILTER STRIPS (SOILD SOD)
- GEOLOGIC FEATURES

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC BARRICADES/CONTROL AS NEEDED.

IMPERVIOUS COVER SUMMARY

EXISTING IMPERVIOUS COVER TO BE REMOVED:	0.23 ACRES
PROPOSED IMPERVIOUS COVER:	0.60 ACRES
NET INCREASE IMPERVIOUS COVER:	0.37 ACRES
AREA TREATED BY ENGINEERED VEGETATED FILTER STRIP:	0.38 ACRES

SCALE: 1"=50'
0 25 50 75 100

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 447-4500 FAX (210) 447-4505

STATE OF TEXAS · DAVID M. McBETH · 59223 · REGISTERED PROFESSIONAL ENGINEER

PERMANENT WATER POLLUTION ABATEMENT PLAN

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET 1

Drawing Name: M:\310627.012_T BAR M\dwg\WPAP\310627012_PPAP.dwg User: forleywp Apr 28, 2008 - 1:37pm

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

I, **Scott Turpin** ,
Print Name

President
Title - Owner/President/Other

Of **T Bar M**
Corporation/Partnership/Entity Name

have authorized **David McBeth**
Print Name of Agent/Engineer

Of **Jacobs Carter Burgess**
Print Name of Firm

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

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

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

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

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

Applicant's Signature — Date: 2/26/08

THE STATE OF Texas §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Scott A. Turpin 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 26 day of February, 2008.

NOTARY PUBLIC June Mayfield Maxey

Typed or Printed Name of Notary JUNE MAYFIELD MAXEY

MY COMMISSION EXPIRES: 11-17-2009

June Mayfield Maxey
Notary Public, State of Texas
My Commission Expires:
November 17, 2009

Texas Commission on Environmental Quality
Edwards Aquifer Protection Plan
Application Fee Form

NAME OF PROPOSED REGULATED ENTITY: **T BAR M, INC.**
REGULATED ENTITY LOCATION: **Located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West**
NAME OF CUSTOMER: **T Bar M**
CONTACT PERSON: **Scott Turpin** PHONE: **(214) 692-4254**

Customer Reference Number (if issued): CN 600793111 (nine digits)
Regulated Entity Reference Number (if issued): RN 102745502 (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 Commission on Environmental Quality. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT**. THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

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

☐ **AUSTIN REGIONAL OFFICE**
☐ **Overnight Delivery to TCEQ**:
TCEQ - 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	**9.3 Acres**	**$ 4,000**
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature

4/25/00
Date

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.
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 Commission on Environmental Quality
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

T Bar M, Inc. 33785

VENDOR NO: 9534 NAME: TEXAS COMMISSION CHECK DATE: 3/31/2008

REFERENCE	INV DATE	INV DESCRIPTION	GROSS AMOUNT	DISCOUNT TAKEN	NET AMOUNT PAID
TBARM WPAP	3/31/2008	1318-08-06	4,000.00	0.00	4,000.00
		TOTAL >	4,000.00	0.00	4,000.00

THIS CHECK IS VOID WITHOUT A BLUE & RED BACKGROUND AND A TRUE WATERMARK - HOLD UP TO THE LIGHT TO VERIFY

T Bar M, Inc.
2549 Hwy 46 W
New Braunfels, TX 78132-3725
(830) 625-7738

Chase Bank of Texas - New Braunfels
111 West San Antonio Street
32-115/1110

33785

DATE 3/31/2008

AMOUNT *** 4,000.00

PAY Four Thousand and 00/100******

TO THE ORDER OF
TEXAS COMMISSION
On Environmental Quality
P.O.Box 13088
Austin,, TX 78711-3088
USA

Annabelle M Baily

CHECK IS PRINTED ON SECURITY PAPER WHICH INCLUDES A MICROPRINT BORDER & FLUORESCENT FIBERS

⑈33785⑈ ⑆111000614⑆ ⑈0580024640 5⑈

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided)*

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

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

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No — WPAP Report and applicable attachments

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 600793111		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) April 2008

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☒ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:	☒ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)*	*If new Customer, enter previous Customer below*	*End Date:*
T Bar M, Inc.		

10. Mailing Address: 8201 Preston Road

City	Dallas	State	TX	ZIP	75225	ZIP + 4	

11. Country Mailing Information *(if outside USA)*	12. E-Mail Address *(if applicable)*

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(214) 692-4254		(830) 625-5959

16. Federal Tax ID *(9 digits)*	17. TX State Franchise Tax ID *(11 digits)*	18. DUNS Number *(if applicable)*	19. TX SOS Filing Number *(if applicable)*
741658885	17416588857		

20. Number of Employees

☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☒ No Change** *(See below)*

**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

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

T Bar M, Inc

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 SH 46 W							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	
25. Mailing Address:	Same							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:	sturpin@tbarm.com

27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(830) 625-7738		(830) 620-6018

30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
7011	7999	721214	71394

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

resort, sports facilities, meeting and dining facilities

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		38. Longitude (W) In Decimal:	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	David M McBeth , P.E.	41. Title:	Sr Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 494-0088	6352	(210) 494-4525	david.mcbeth@jacobs.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Jacobs Carter Burgess	**Job Title:**	Project Engineer
Name *(In Print)* :	David McBeth	**Phone:**	(210) 494-0088
Signature:		**Date:**	4/24/2008