

Kathleen Hartnett White, *Chairman*  
Larry R. Soward, *Commissioner*  
H. S. Buddy Garcia, *Commissioner*  
Glenn Shankle, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

August 6, 2007

Mr. Perry Blanton  
Blanton Development Co.  
4404 W. William Cannon, #P 167  
Austin, Texas 78749

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: River Place at Gruene; Located 200 feet northwest of the intersection of Bretzke Lane and River Forest Drive; 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 ID No.: 2661.00; Investigation No.: 561912; Regulated Entity No.: RN105226005

Dear Mr. Blanton:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the above-referenced project submitted to the San Antonio Regional Office by Ford Engineering, Inc. on behalf of Blanton Development Co. on May 18, 2007. Final review of the application was completed after additional material was received on August 1, 2007 August 3, 2007. As presented to the TCEQ, the Temporary 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.*

### PROJECT DESCRIPTION

The proposed single family residential project will have an area of approximately 95.91 acres. It will include 80 single family residential lots and associated homes, roadways, and driveways. The project will have a total of 510,959 square feet (sq. ft.) of impervious cover, of which 320,000 sq. ft. will be comprised of structures and rooftops. The remaining 190,959 sq. ft. will be utilized for paved surfaces including streets. The impervious cover for the site will be 11.73 acres (12.23%). According to a letter dated, May 3, 2007, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210-490-3096 • FAX 210-545-4329

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • Internet address: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)

Printed on recycled paper using soy-based ink

### PERMANENT POLLUTION ABATEMENT MEASURES

Since this single-family residential project will not have more than 20 percent impervious cover, an exemption from permanent BMPs is approved.

### GEOLOGY

According to the geologic assessment included with the application, the site is located on the Cretaceous Buda Limestone, the Cretaceous Del Rio Clay, the Cretaceous Georgetown Limestone, and the Cretaceous Cyclic and Marine member of the Edwards Person Limestone. Five features were identified on site. One feature, S-1, was rated as sensitive. S-1 is a water well that is not in use and is to be properly abandoned. The San Antonio Regional Office did not conduct a site inspection.

### SPECIAL CONDITIONS

- I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.
- II. 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.
- III. 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.
- IV. Since this project will not have more than 20% impervious cover, an exemption from permanent BMPs is approved. If the percent impervious cover ever increases above 20% or the land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g), may no longer apply and the property owner must notify the appropriate regional office of these changes.

### 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.

#### 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 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.
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.

Mr. Perry Blanton

August 6, 2007

Page 4

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

After Completion of Construction:

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 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.

Mr. Perry Blanton

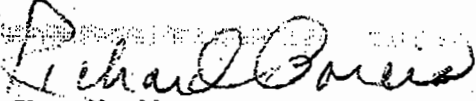
August 6, 2007

Page 5

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 Amy Burroughs of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4073.

Sincerely,



Glenn Shankle

Executive Director

Texas Commission on Environmental Quality

GS/AEB/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Lee Perry, P.E., Ford Engineering, Inc.  
Mr. Bruce Boyer, City of New Braunfels  
Mr. Tom Hornseth, Comal County  
Mr. Robert J. Potts, Edwards Aquifer Authority  
TCEQ Central Records, MC 212

**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

"RECEIVED TCEQ"  
SAN ANTONIO  
REGION  
2007 MAY 17 PM 3:51

REGULATED ENTITY NAME: River Place at Gruene

COUNTY: Comal STREAM BASIN: Guadalupe River

EDWARDS AQUIFER: ☒ RECHARGE ZONE  
☐ TRANSITION ZONE

PLAN TYPE: ☒ WPAP ☐ AST  
☐ SCS ☐ UST

RECEIVED  
MAY 23 2007  
COUNTY ENGINEER  
EXCEPTION  
MODIFICATION

**CUSTOMER INFORMATION**

1. Customer (Applicant):

Contact Person: Perry Blanton  
Entity: Blanton Development Co.  
Mailing Address: 4404 W. William Cannon, #P 167  
City, State: Austin, Texas  
Telephone: (210) 508 1505

Zip: 78749  
FAX: \_\_\_\_\_

Agent/Representative (If any):

Contact Person: Lee Perry  
Entity: Ford Engineering, Inc.  
Mailing Address: 10927 Wye Dr., Ste. 104

City, State: San Antonio, TX Zip: 78217  
Telephone: (210) 590-4777 FAX: (210) 590-4940

2. ☐ This project is inside the city limits of \_\_\_\_\_.  
☒ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of  
New Braunfels.  
☐ 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.

200 feet northwest of the intersection of Bretzke Lane and River Forest Drive.

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)
  - x   Undeveloped (Undisturbed/Uncleared)
  - Other:

#### PROHIBITED ACTIVITIES

9.   x   I am aware that the following activities are prohibited on the **Recharge Zone** and are not proposed for this project:
- (1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
  - (2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
  - (3) land disposal of Class I wastes, as defined in 30 TAC §335.1;
  - (4) the use of sewage holding tanks as parts of organized collection systems; and
  - (5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
10.  n/a  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:

- ☒ 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)
- ☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

13. ☒ 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. ☒ 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:

Lee Perry  
Print Name of Customer/Agent

  
Signature of Customer/Agent

5/10/07  
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.

**ATTACHMENT A TO TCEQ-0587**

ROAD MAP & TRIP DIRECTIONS





Live Search

**Start:** 14250 judson rd, san antonio,  
texas

**End:** Bretzke Lane, New  
Braunfels, Texas

**Distance:** 25.8 mi

**Time:** 26 Minutes





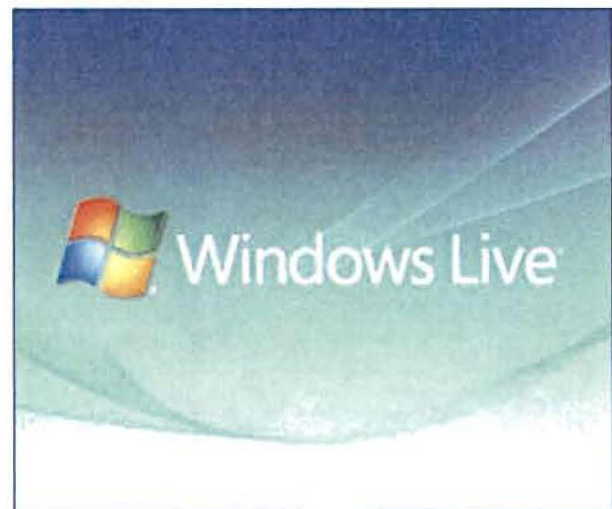
Live Search

**Start:** 14250 judson rd, san antonio,  
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Braunfels, Texas

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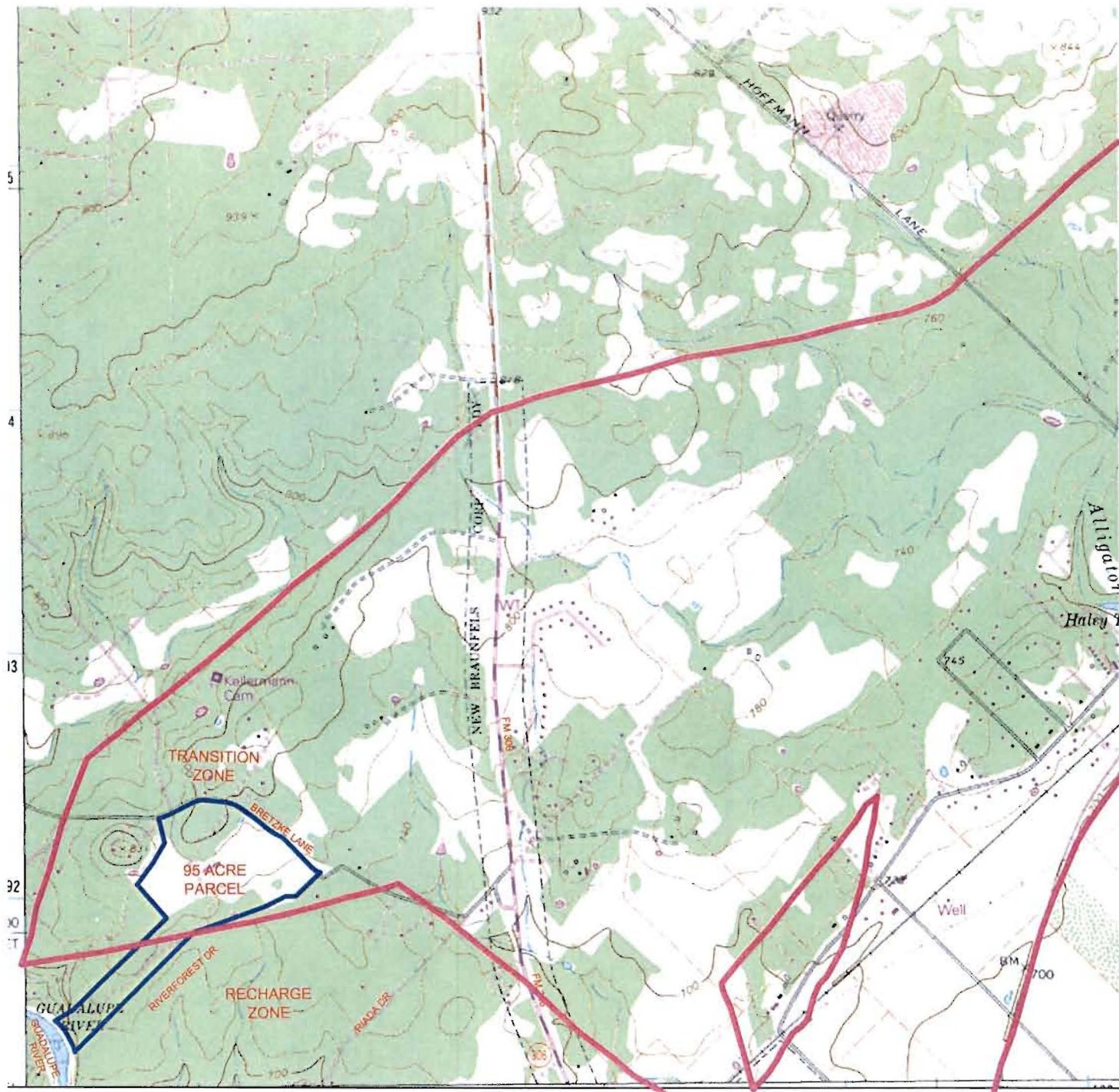


Directions	Distance	Detail Map
<b>Start:</b> Depart <b>Judson Rd</b> (southeast)	1.5 mi	
<b>1:</b> Turn <b>LEFT</b> (east) onto <b>N I-35</b>	0.5 mi	
<b>2:</b> Bear <b>LEFT</b> (northeast) onto <b>ramp</b> toward <b>I-35 / Pan AM Expy North</b>	20.5 mi	
<b>3:</b> Take exit <b>191 RIGHT</b> toward <b>Canyon Lake</b>	0.1 mi	
<b>4:</b> Bear <b>LEFT</b> (northeast) onto <b>N I-35</b>	0.2 mi	
<b>5:</b> Turn <b>LEFT</b> (northwest) onto <b>FM-306</b>	2.7 mi	
<b>6:</b> Turn <b>LEFT</b> (west) onto <b>Bretzke Ln</b>	0.2 mi	
<b>7:</b> Turn <b>RIGHT</b> (west) to stay on <b>Bretzke Ln</b>	0.1 mi	
<b>End:</b> Arrive at Bretzke Lane, New Braunfels, Texas		

**ATTACHMENT B TO TCEQ-0587**

USGS/EDWARDS RECHARGE ZONE MAP





# HUNTER QUADRANGLE



SCALE: 1" = 2000'

## **ATTACHMENT C TO TCEQ-0587**

### **PROJECT DESCRIPTION**

This project, River Place at Gruene, is proposed to be the development of a 95 acre tract into 80 residential lots being one(1) acre minimum in size. The site is located 300 feet to the northwest of the River Forest Drive intersection and fronts on the southside of Bretzke Lane. This development will front along Bretzke Lane and backup to the Guadalupe River. Due to the nature of the subdivision having less than 20% of impervious cover after full development, no permanent BMP's are being proposed. Rather a waiver to this requirement is being requested.

The proposed impervious cover is calculated as follows:

Proposed Street = 24' width x 7,041 linear feet = 169,000 square feet

Proposed Structure size on lot = 4,000 square feet x 80 Lots = 320,000 square feet

Total Impervious Cover = 489,000 square feet = 11.23 acres

**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: River Place at Gruene

**REGULATED ENTITY INFORMATION**

1. The type of project is:  
☒ Residential: # of Lots: 80  
☐ Residential: # of Living Unit Equivalents:  
☐ Commercial  
☐ Industrial  
☐ Other:
2. Total site acreage (size of property): 95
3. Projected population: 240 persons
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	320,000	÷ 43,560 =	7.35
Parking	n/a	÷ 43,560 =	n/a
Other paved surfaces (streets)	169,000	÷ 43,560 =	3.88
Total Impervious Cover	489,000	÷ 43,560 =	11.23
Total Impervious Cover ÷ Total Acreage x 100 =			11.82 %

5. ☒ **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. ☒ 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<sup>2</sup> ÷ 43,560 Ft<sup>2</sup>/Acre = \_\_\_\_\_ acres.

10. Length of pavement area: \_\_\_\_\_ feet.  
Width of pavement area: \_\_\_\_\_ feet.  
L x W = \_\_\_\_\_ Ft<sup>2</sup> ÷ 43,560 Ft<sup>2</sup>/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:

<u>100</u> % Domestic	<u>24,000</u> gallons/day
<input type="checkbox"/> % Industrial	_____ gallons/day
<input type="checkbox"/> % Commingled	_____ gallons/day

TOTAL 24,000 gallons/day

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.

n/a Sewage Collection System (Sewer Lines):

- ☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
- ☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.
- ☐ The SCS was previously submitted on \_\_\_\_\_.
- ☐ The SCS was submitted with this application.
- ☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to executive director approval.

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

- ☐ existing.
- ☐ proposed.

16. n/a 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" = 200'.

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.  
☐ 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):

19. ☐ 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 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)  
☐ The wells are not in use and have been properly abandoned.  
☒ The wells are not in use and will be properly abandoned.  
☐ The wells are in use and comply with 30 TAC §238.  
☐ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:  
☒ 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.   x   Surface waters (including wetlands).
27.   x   Locations where stormwater discharges to surface water or sensitive features.  
— 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:

Lee Perry, P.E.

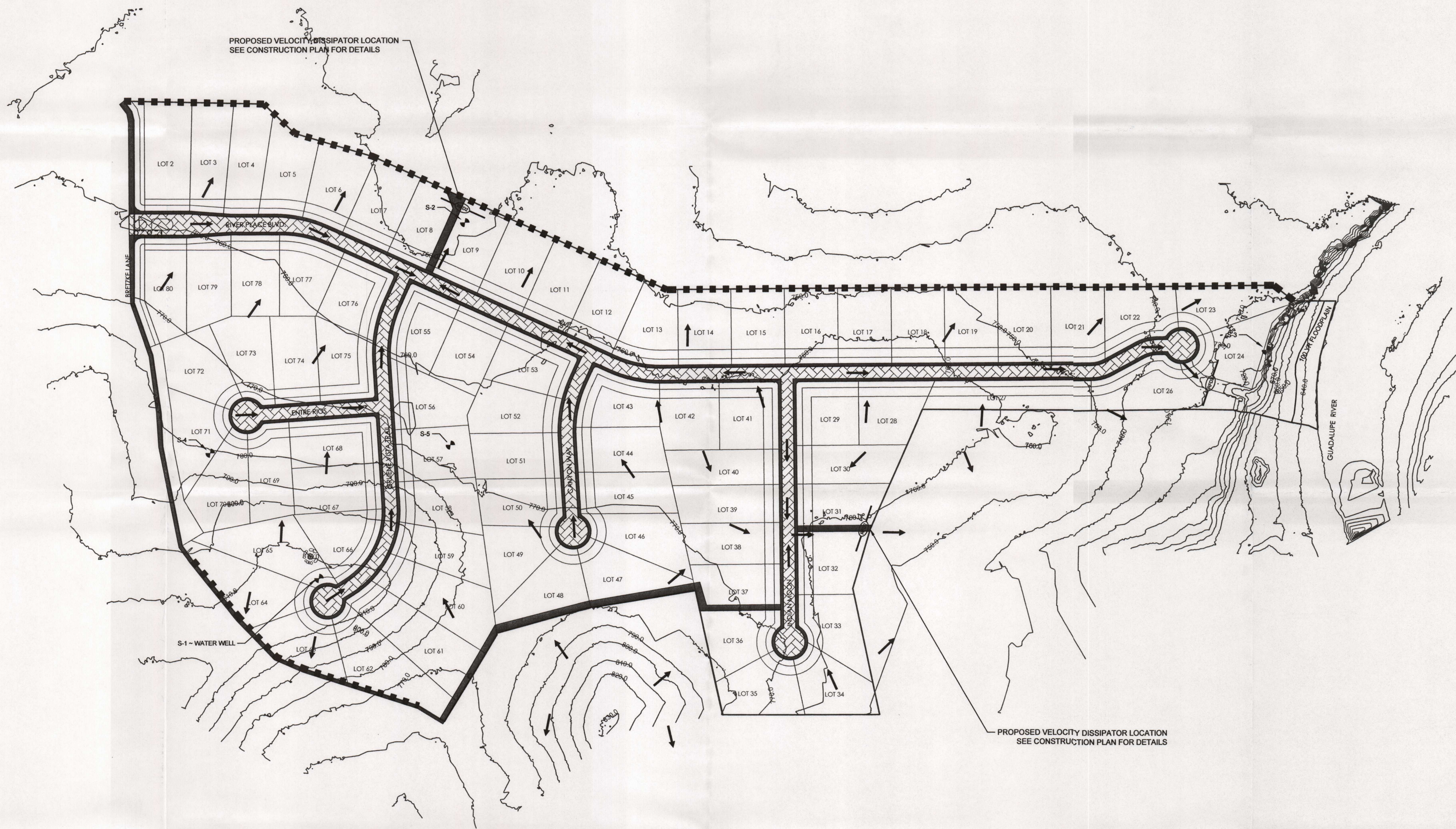
Print Name of Customer/Agent

  
Signature of Customer/Agent

5/10/07

Date





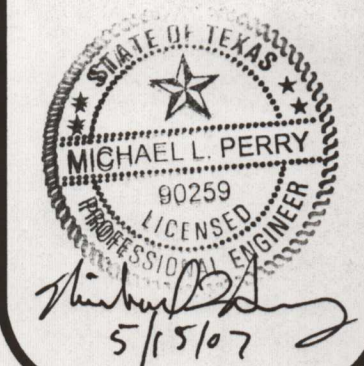
**STABILIZATION MEASURES TO INDIVIDUAL LOT SOIL DISTURBANCE NOTE:**  
Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that 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.

**LEGEND**

- |  |                                 |  |   |
|--|---------------------------------|--|---|
|  | STABILIZED ENTRANCE/EXIT        |  | SOIL STABILIZED AREA - SEEDED, SODDED, OR MULCHED |
|  | PROPOSED SURFACE FLOW DIRECTION |  | SOIL DISTURBANCE AREA                             |
|  | SILT FENCE                      |  |   |
|  | TYPE 2 ROCK FILTER DAM          |  |   |
|  | GRADE BREAK                     |  |   |
|  | GEOLOGIC OR MANMADE FEATURE     |  |   |

**RIVER PLACE AT GRUENE  
NEW BRAUNFELS, TEXAS  
-----  
WPAP SITE PLAN**

PROJECT NO. 2229.00  
MAY 11, 2007  
SHEET 1 OF 1



REVISIONS:	
NO.	DATE

**FORD ENGINEERING INC.**  
ENGINEERING • PLANNING • DEVELOPMENT  
10827 WYE DRIVE, SUITE 104, SAN ANTONIO, TEXAS 78217 (210) 580-4777



## ATTACHMENT A TO TCEQ-0584

### FACTORS AFFECTING WATER QUALITY

#### DURING CONSTRUCTION

- Vehicle maintenance operations
- Excavation and grading
- Paving
- Human generated debris
- Construction trash and debris
- Application of excessive fertilizers, herbicides, and pesticides

#### POST CONSTRUCTION

- Debris and contaminants tracked on site by vehicles
- Human generated debris
- Application of excessive fertilizers, herbicides, and pesticides
- Unusually heavy rainfall events

## ATTACHMENT B TO TCEQ-0584

### Volume and Character of Stormwater

The calculations below are for the entire 95 acre development.

- 1) Pre-construction conditions for 25 year rainfall event:

Area = 95 Acres, Runoff coefficient = 0.50  
Time of concentration = 34 minutes  
Rainfall Intensity = 4.91 in/hr

$$\text{Runoff Volume} = Q = (95)(0.50)(4.91) = 233.23 \text{ cfs}$$

- 2) Post-construction conditions for 25 year rainfall event:

Area = 95 Acres, Runoff coefficient = 0.61  
Time of concentration = 31.85 minutes  
Rainfall Intensity = 5.11 in/hr

$$\text{Runoff Volume} = Q = (95)(0.61)(5.11) = 296.12 \text{ cfs}$$

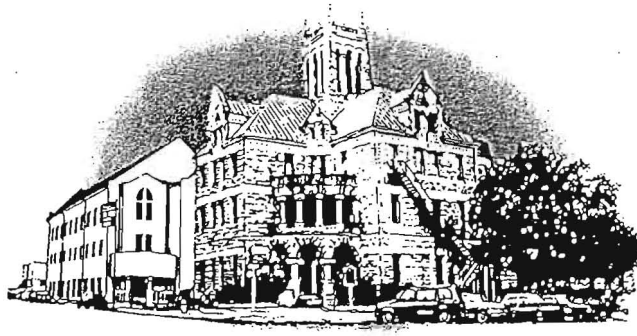
The stormwater will be channeled within the street areas to the Guadalupe River.

**ATTACHMENT C TO TCEQ-0584**

**SUITABILITY LETTER FROM AUTHORIZED AGENT**

Letter is attached.





COPY

## Comal County

OFFICE OF COMAL COUNTY ENGINEER

May 3, 2007

Mr. Perry Blanton  
Blanton Development  
994 Village Shore Dr.  
New Braunfels, TX 78133

Re: Proposed plat of RIVER PLACE AT GRUENE, within Comal County, Texas

Dear Property Owner(s):

We have completed the field inspection of the referenced for the recommendation for private sewage facilities and have found the property to be approved with the condition that individual septic systems permits shall be required for the lots within this subdivision.

Please be advised that these individual permits will be required to meet 30 TAC 285.40, Subchapter E (copy attached). Please specifically reference the one-acre minimum lot size and 150-foot distance requirement to recharge features.

Should you have any questions, please feel free to contact us.

Sincerely,

Thomas H. Hornseth, P.E.  
Comal County Engineer

xc: Lee Perry, P.E., Ford Engineering, Inc.

**SUBCHAPTER E : SPECIAL REQUIREMENTS FOR OSSFS  
LOCATED IN THE EDWARDS AQUIFER RECHARGE ZONE  
§285.40**

**§285.40. OSSFs on the Recharge Zone of the Edwards Aquifer.**

(a) Applicability. In addition to the requirements given in this chapter, the following additional provisions apply to the Edwards Aquifer recharge zone as defined in §285.2 of this title (relating to Definitions) and is not intended to be applied to any other areas in the State of Texas.

(b) Additional application requirements for new OSSFs.

(1) All planning and design materials shall be submitted by a professional engineer or sanitarian registered in Texas.

(2) Site evaluation to be conducted by a certified site evaluator possessing a valid certificate.

(c) Conditions for obtaining a permit to construct. In order to obtain a permit to construct in the Edwards Aquifer recharge zone, the following conditions must be met.

(1) Minimum lot sizes. Each lot or tract of land on the recharge zone on which OSSFs are to be located must have an area of at least one acre (43,560 square feet) per single family dwelling.

(2) Minimum separation distances from recharge features. The following separation distances shall be maintained from recharge features found during a site evaluation or in accordance with a geologic assessment performed in accordance with Chapter 213 of this title (relating to Edwards Aquifer). No sewage treatment tank or holding tank may be located within 50 feet of a recharge feature. No soil absorption system may be located within 150 feet of a recharge feature.

(3) No OSSF may be installed closer than 75 feet from the banks of the Nueces, Dry Frio, Frio, or Sabinal Rivers downstream from the northern Uvalde county line to the recharge zone.

(d) Existing OSSFs. OSSFs licensed by, or registered with, the appropriate permitting authority at the time of adoption of this section shall remain licensed or registered under the terms and conditions of the current license or registration. Any relicensing shall be performed in accordance with §285.3 of this title (relating to Applicability). An OSSF installed on the recharge zone prior to April 11, 1977, in either Uvalde or Kinney Counties is not required to be permitted or licensed, provided the OSSF is not causing pollution, is not a threat to the public health, or is not a nuisance, and has not been substantially modified.

(e) Exceptions for certain lots. Lots platted and recorded with the county in its official plat record, deed, or tax records of the following counties prior to the dates for the counties indicated in this

subsection, are exempted from the one-acre minimum lot size requirement, pursuant to the conditions of subsection (f) of this section.

- (1) Kinney, Uvalde, Medina, Bexar, and Comal Counties—March 26, 1974;
- (2) Hays County—June 21, 1984;
- (3) Travis County—November 21, 1983; and
- (4) Williamson County—May 21, 1985.

(f) Notice. Any person, or his agents or assignees, desiring to construct a residential development with two or more lots in which OSSFs will be utilized in whole or in part on the recharge zone and desiring to sell, lease, or rent the lots therein, must inform in writing each prospective purchaser, lessee, or renter of the following.

- (1) Each lot within the regulated development is subject to the terms and conditions of this section.
- (2) A permit to construct shall be required before an OSSF can be constructed in the subdivision.
- (3) A license to operate shall be required for the operation of an OSSF.
- (4) Whether or not an application for a water pollution abatement plan as defined in Chapter 213 of this title (relating to Edwards Aquifer), has been made, and whether or not it has been approved, and whether any restrictions or conditions have been placed on that approval.

**ATTACHMENT D TO TCEQ-0584**

**EXCEPTION TO THE REQUIRED GEOLOGIC ASSESSMENT**

**NONE IS REQUESTED**



***Geologic Site Assessment (WPAP)  
for Regulated Activities / Development  
on the Edwards Aquifer Recharge / Transition Zone***

***The Bretke Lane Tract  
95.912 Acres  
New Braunfels, Texas***

***FROST GEOSCIENCES CONTROL # FGS-07121***

***MARCH 31, 2007***

---

***Prepared exclusively for***

***Ford Engineering, Inc.  
10927 Wye Drive, Suite 104  
San Antonio, Texas 78217***

***Frost GeoSciences***

***Geotechnical • Construction Materials  
Forensics • Environmental***

***13402 Western Oak Dr. • Helotes, Texas 78023 • Phone: (210) 372-1315 Fax: (210) 372-1318***

# **Frost GeoSciences**

**Geotechnical • Construction Materials  
Forensics • Environmental**

**13402 Western Oak  
Helotes, Texas 78023  
Phone (210) 372-1315  
Fax (210) 372-1318  
[www.frostgeosciences.com](http://www.frostgeosciences.com)**

March 31, 2007

Ford Engineering, Inc.  
10927 Wye Drive, Suite 104  
San Antonio, Texas 78217

Attn: Mr. Lee Perry, P.E.

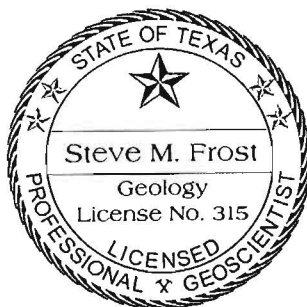
Re: Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Breike Lane Tract  
95.912 Acres  
New Braunfels, Texas

Frost GeoSciences, Inc. Control # FGS-07121

Gentlemen:

Attached is a copy of the Geologic Assessment Report completed for the above referenced project site as it relates to 30 TAC §213.5(b)(3), effective June 1, 1999. Our investigation was conducted, and this report was prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The results of our investigation along with any required recommendations for Best Management Practices (BMP's) are provided in the following report.

If you have any questions regarding this report, or if Frost GeoSciences, Inc. may be of additional assistance to you on this project, please feel free to call our office. It has been a pleasure to work with you and we wish to thank you for the opportunity to be of service to you on this project. We look forward to being of continued service.



Sincerely,  
Frost GeoSciences, Inc.

Steve Frost, C.P.G.  
Executive Vice President

Distribution: (6) Ford Engineering, Inc.

## Table of Contents

GEOLOGIC ASSESSMENT FORM .....	1
STRATIGRAPHIC COLUMN .....	3
GEOLOGIC ASSESSMENT TABLE .....	4
LOCATION .....	5
METHODOLOGY .....	5
RESEARCH & OBSERVATIONS .....	6
7.5 Minute Quadrangle Map Review .....	6
Recharge/Transition Zone .....	7
100-Year Floodplain .....	7
U.S.D.A. Soil Survey Review .....	7
Narrative Description of the Site Geology .....	8
BEST MANAGEMENT PRACTICES .....	11
DISCLAIMER .....	12
REFERENCES .....	12
APPENDIX	
A:    Plate 1:    Site Plan	
Plate 2:    Street Map	
Plate 3:    U.S.G.S. Topographic Map	
Plate 4:    Edwards Underground Water District Reference Map	
Plate 5:    FEMA Flood Map	
Plate 6:    Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle	
Plate 7:    2005 Aerial Photograph, 1"=500'	
Plate 8:    2005 Aerial Photograph with PRF's, 1"=100M	
Plate 9:    1973 Aerial Photograph, 1"=500'	
B:    Site Photographs	
C:    Site Geologic Map	



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

REGULATED ENTITY NAME: The Bretke Lane Tract, 95.912 Acres.

TYPE OF PROJECT: ☒ WPAP    ☐ AST    ☐ SCS    ☐ UST

LOCATION OF PROJECT: ☒ Recharge Zone    ☐ Transition Zone    ☒ Contributing Zone within the Transition Zone

**PROJECT INFORMATION**

1. ☒ Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.
2. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups\* (*Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986*). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Medlin-Eckrant Ass.	D	0.5 to 1.5
Rumple-Comfort Ass.	C/D	0.5 to 2
Boerne Fine Sandy Loam	B	2+
Krum Silty Clay	D	2+

**\* Soil Group Definitions (Abbreviated)**

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

3. ☒ 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.
4. ☒ 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.
5. ☒ 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" = <u>200</u> '
Site Geologic Map Scale	1" = <u>200</u> '
Site Soils Map Scale (if more than 1 soil type)	1" = <u>500</u> '

6. Method of collecting positional data:

- ☒ Global Positioning System (GPS) technology.  
☒ Other method(s). 2005 Aerial Photograph
7. ☒ The project site is shown and labeled on the Site Geologic Map.
8. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
9. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.  
☐ Geologic or manmade features were not discovered on the project site during the field investigation.
10. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):
- ☒ There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)  
☒ The wells are not in use and have been properly abandoned.  
☐ The wells are not in use and will be properly abandoned.  
☐ The wells are in use and comply with 16 TAC Chapter 76.  
☐ There are no wells or test holes of any kind known to exist on the project site.

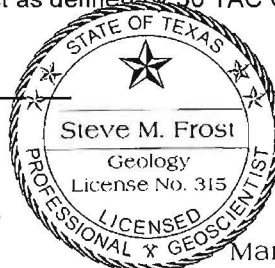
ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: February 9 & 23, 2007  
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 Chapter 213.

Steve Frost, C.P.G.  
Print Name of Geologist



(210) 372-1315

Telephone

(210) 372-1318

Fax

March 31, 2007

*Steve Frost*

Signature of Geologist

Date

Representing: Frost GeoSciences, Inc.  
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 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.

# Stratigraphic Column

[Hydrogeologic subdivisions modified from Maclay and Small (1976); groups, formations, and members modified from Rose (1972); lithology modified from Dunham (1962); and porosity type modified from Choquette and Pray (1970). CU, confining unit; AQ, aquifer]

Hydrogeologic subdivision		Group, formation, or member	Hydro-logic function	Thickness (feet)	Lithology	Field identification	Cavern development	Porosity/ permeability type			
Upper Cretaceous	Upper confining units	Eagle Ford Group	CU	30 – 50	Brown, flaggy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/ low permeability			
		Buda Limestone	CU	40 – 50	Buff, light gray, dense mudstone	Porcelaneous limestone with calcite-filled veins	Minor surface karst	Low porosity/low permeability			
		Del Rio Clay	CU	40 – 50	Blue-green to yellow-brown clay	Fossiliferous; <i>Ilymatogyra arietina</i>	None	None/primary upper confining unit			
Lower Cretaceous	I	Edwards aquifer	Edwards Group	Georgetown Formation	Karst AQ; not karst CU	2 – 20	Reddish-brown, gray to light tan marly limestone	Marker fossil; <i>Waconella wacoensis</i>	None	Low porosity/low permeability	
	II			Person Formation	Cyclic and marine members, undivided	AQ	80 – 90	Mudstone to packstone; <i>miliolid</i> grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	III				Leached and collapsed members, undivided	AQ	70 – 90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
	IV				Regional dense member	CU	20 – 24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
	V				Grainstone member	AQ	50 – 60	<i>Miliolid</i> grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/ recrystallization reduces permeability
	VI			Kainer Formation	Kirschberg evaporite member	AQ	50 – 60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric/one of the most permeable
	VII				Dolomitic member	AQ	110 – 130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane-fabric/water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50 – 60	Shaly, nodular limestone; mudstone and <i>miliolid</i> grainstone	Massive, nodular and mottled, <i>Exogyra texana</i>	Large lateral caves at surface; a few caves near Cibola Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface
		Lower confining unit	Upper member of the Glen Rose Limestone	CU; evaporite beds AQ	350 – 500	Yellowish tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/relatively impermeable		



GEOLOGIC ASSESSMENT TABLE					PROJECT NAME: The Breike Lane Tract										FGS-07121					
LOCATION			FEATURE CHARACTERISTICS										EVALUATION			PHYSICAL SETTING				
1	2*	3*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT³)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						< 40	≥ 40	< 1.6	≥ 1.6	
S-1	N29° 45.584'	W98° 7.030'	MB	30	Kbu	0.8	0.8	?	-	-	-	-	N	30	60		60	Yes		Hilltop
S-2	N29° 45.382'	W98° 6.953'	MB	30	Kcp	75	100	3	-	-	-	-	F	9	39	39		Yes		Hillside
S-3	N29° 38.651'	W98° 28.611'	SCZ	30	Kcp	50	350	-	-	-	-	-	C.N	9	39	39		Yes		Cliff
S-4	N29° 38.797'	W98° 28.521'	MB	30	Kdr	40	100	?	-	-	-	-	F	7	37	37			Yes	Hillside
S-5	N29° 38.788'	W98° 28.504'	MB	30	Kdr	100	120	?	-	-	-	-	F	7	37	37			Yes	Hillside

\* DATUM 1927 North American Datum (NAD27)

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

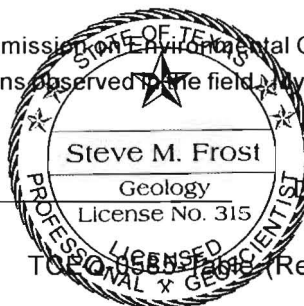
8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave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

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC 213.

Signature

*Steve Frost*



Date March 31, 2007

Sheet 1 of 1



## LOCATION

The project site is located along and south of Bretke Lane immediately south of the intersection of Bretke Lane and Mountain Laurel Drive in New Braunfels, Texas. An overall view of the area is shown on copies of the site plan, a street map, the U.S.G.S. Topographic Map, the Edwards Aquifer Reference Map, the FIRM Map, a geologic map, a 2005 aerial photograph at a scale of 1"=500', a 2005 aerial photograph at a scale of 1"=100M, and a 1973 aerial photograph at a scale of 1"=500', Plates 1, 2, 3, 4, 5, 6, 7, 8, and 9 in Appendix A.

## METHODOLOGY

The Geologic Assessment was performed by Mr. Steve Frost, C.P.G., President of Frost GeoSciences, Inc. Mr. Frost is a Licensed Professional Geoscientist in the State of Texas (License # 315), and is a Certified Professional Geologist with the American Institute of Professional Geologist (Certification # 10176).

Frost GeoSciences, Inc. researched the geology of the area near of the intersection of Bretke Lane and Mountain Laurel Drive. The research included, but was not limited to, the Geologic Atlas of Texas, New Braunfels Sheet, FEMA maps, Edwards Aquifer Recharge Zone Maps, U.S.G.S. 7.5 Minute Quadrangle Maps, the Bureau of Economic Geology-Geologic Atlas of Texas, the Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle, the U.S.G.S. Water-Resources Investigations Report 94-4117, and the U.S.D.A. Soil Survey of Comal & Hays Counties, Texas.

After reviewing the available information, a field investigation was performed to identify any geologic or man made potential recharge features. A transect spacing of approximately 50 feet, or less depending on vegetation thickness, was used to inspect the project area. A 2005 aerial photograph, in conjunction with a hand held Garmin eTrex Summit Global Positioning System with an Estimated Potential Error ranging from 10 to 15 feet, was used to navigate around the property and identify the locations of potential recharge features, as recommended in the "Instructions to

Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The locations of any potential recharge features noted in the field were marked with blue and white flagging. The flagging is numbered with the same potential recharge feature I.D. # that is used on the Site Geologic Map in Appendix C of this report. The Site Geologic Map indicating the limits of the project site and the locations of potential recharge features is included in Appendix C. A copy of a 2005 aerial photograph at an approximate scale of 1"=100M indicating the limits of the project site and the locations of potential recharge features is included on Plate 8 in Appendix A. The Geologic Assessment Form, Stratigraphic Column, and the Geologic Assessment Table have been filled with the appropriate information for this project site and are included on pages 1-4 of this report.

## **RESEARCH & OBSERVATIONS**

### **7.5 Minute Quadrangle Map Review**

According to the U.S.G.S. 7.5 Minute Quadrangle Map, Hunter, Texas Sheet (1994), the elevation across the project site ranges from 640 feet along the Guadalupe River near Area 10 to 810 feet along the northern property line near Area 1. The project site has a total relief of approximately 170 feet. Runoff from the project site flows to the southwest into the Guadalupe River. Bretke Lane is located immediately north of the project site. F.M. 306 is located east of the project site. A copy of the U.S.G.S. 7.5 Minute Quadrangle Map indicating the location of the project site is included on Plate 3 in Appendix A.

### **Recharge / Transition Zone**

According to the Edwards Aquifer Authority's website, and the Official Edwards Aquifer Recharge Zone Map, Hunter, Texas Sheet (1996), the project site is located within the Recharge Zone of the Edwards Aquifer and the Contributing Zone within the Transition Zone. A copy of a map indicating the location of the project site is included on Plate 4 in Appendix A.

### 100-Year Floodplain

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panel # 4854630301C, revised 9/29/86, a portion of the project site is within the 100 year floodplain. The portion of the project site along the Guadalupe River is located within Zone A10. According to the Panel Legend, Zone A10 represents areas determined to be within the 100-year floodplain where base flood elevations have been determined. The remainder of the project site is located within Zone X. According to the Panel Legend, Zone X represents areas of minimal flooding. A copy of the above referenced FIRM panel indicating the location of the project site is included on Plate 5 in Appendix A.

### U.S.D.A. Soil Survey Review

According to the United States Department of Agriculture, Soil Conservation Service, Soil Survey of Bexar County, Texas, (1966), the project site is located on the Medlin-Eckrant Association (MEC & MED), the Rumble-Comfort Association (RUD), the Boerne Fine Sandy Loam (BoB), and the Krum Clay (KrB).

The Medlin-Eckrant Association consists of very shallow to shallow and deep soils on uplands in the Edwards Plateau Land Resource Area. There are narrow limestone ledges at the top of some slopes. The Medlin and Eckrant soils each make up 20 to 80 of a mapped area. Together, on the average, they make up about 95 percent of the mapped area. A typical area is 50 percent Medlin soil and 45 percent Eckrant soil. Typically, the Medlin soil has a grayish brown surface layer about 11 inches thick that is stony clay in the upper part and clay in the lower part. The subsoil, from 11 to 50 inches, is light yellowish brown clay that has yellowish brown and olive yellow mottles. The underlying material to a depth of 80 inches is light gray shaly clay that has yellow and olive yellow mottles. The soil is moderately alkaline and calcareous throughout. The Medlin soils is well drained. Surface runoff is rapid. Permeability is very slow. Water enters rapidly when the soil is dry and cracked and very slow when it is wet. Water

**March 31, 2007  
The Bretke Lane Tract  
page 7**



erosion is a severe hazard. Typically, the surface layer of the Eckrant soil is very dark gray extremely stony clay about 16 inches thick. The underlying material is fractured limestone bedrock. The soil is moderately alkaline and noncalcareous throughout. The Eckrant soil is well drained. Surface runoff is rapid. Permeability is moderately slow. Water erosion is a severe hazard.

The Rumble-Comfort Association consists of shallow and moderately deep soils on uplands in the Edwards Plateau Land Resource Area. The surface layer of the Rumble Soil is dark reddish brown very cherty clay loam about 10 inches thick. Rounded chert and limestone cobbles and gravel cover about 20 percent of the surface. The subsoil to a depth of 14 inches is dark reddish-brown very cherty clay, and to a depth of 28 inches it is dark reddish-brown extremely stony clay. The underlying material is indurated fractured limestone. The Comfort Soil is dark brown, neutral, extremely stony clay about 7 inches thick. The subsoil to a depth of 12 inches is dark reddish-brown, mildly alkaline, extremely stony clay. The underlying material is indurated fractured limestone. The soil is noncalcareous throughout. The soils in this association are well drained. Surface runoff is medium, but varies due to the occurrence of caves, fracture zones, and sinks. Permeability is moderately slow. Water erosion is a moderate hazard. This soil has a USDA Texture Classification of very cherty clay loam, stony clay, very stony clay, extremely stony clay, and weathered bedrock. The Unified Classification is GC, CL or SC. The AASHTO Classification is A-2-6, A-6, and A-2-7. This soil has an average permeability from 0.2 to 0.6 inches/hour.

The Boerne fine sandy loam is a deep, gently sloping soil found on convex slopes of low stream terraces near rivers and large creeks. Most areas are long and narrow; however, some areas are oblong in shape. Most soils of this type range in area from 5 to 40 areas. Typically, the surface layer is grayish brown, moderately alkaline fine sandy loam approximately 17 inches thick. The subsoil, extending to a depth of 41 inches, is pale brown to very pale brown, moderately alkaline fine sandy loam.

March 31, 2007  
The Bretke Lane Tract  
page 8



Approximately 50 percent of this layer is lime (calcium carbonate) by volume. The underlying material, to a depth of 65 inches, is very pale brown, moderately alkaline fine sandy loam. This soil is well drained, surface runoff is slow, permeability is moderately rapid, and the available water capacity is medium. Water erosion is a slight to moderate hazard. The rooting zone is deep and the soil is rarely flooded.

The Krum Clay is a deep gently sloping soil in areas at the base of limestone hills. Typically, the surface layer is firm, very dark grayish brown clay about 11 inches thick. At a depth of 11 to 17 inches is firm, dark grayish brown clay. The next layer at a depth of 17 to 56 inches is firm, brown clay that has soft bodies of calcium carbonate and a few small limestone fragments. Below this, extending to a depth of 72 inches, is firm, brown clay that contains soft bodies of calcium carbonate. This soil is well drained. Runoff is slow. Permeability is moderately slow, and available water capacity is high. The hazard of water erosion is slight. This soil has medium potential for most urban uses. Shrinking and swelling when there are changes in moisture content, low strength, caving of cutbanks, and high corrosivity to uncoated steel are limitations. Most of these limitations can be overcome by good design and careful installation procedures.

A copy of the 1973 aerial photograph (approximate scale: 1"=500') from the U.S.D.A. Soil Survey of Comal & Hays County, Texas indicating the location of the project site and the soil types is included on Plate 9 in Appendix A.

#### **Narrative Description of the Site Geology**

Based on a visual inspection of the ground surface, the overall potential for fluid flow from the project site into the Edwards Aquifer appears to be low.

One zone of natural features, and four man-made features were noted on the project site at the time of the field investigation. The locations of the Potential Recharge Features are identified on the Site Plan on Plate 1 in Appendix A, on the 2005 aerial photograph on Plate 8 in Appendix A, and on the Site Geologic Map provided in Appendix C. Color photos of the project site and some of the Potential Recharge Features are included in Appendix B.

Potential Recharge Feature S-1 is a water well noted near the residence. Frost GeoSciences, Inc. rates the relative infiltration rate of this feature as high on figure 1 of the TCEQ-0585-Instructions (Rev. 10-01-04). This feature scores a 60 on the sensitivity scale, column 10 in the Geologic Assessment Table on page 4 of this report.

Potential Recharge Feature S-2 consists of an area of excavated ground that appears to have been quarried for rock (base) material. The area is approximately 100 feet long and 75 feet wide. Frost GeoSciences, Inc. rates the relative infiltration rate of this feature as low on figure 1 of the TCEQ-0585-Instructions (Rev. 10-01-04). This feature scores a 39 on the sensitivity scale, column 10 in the Geologic Assessment Table on page 4 of this report.

Potential Recharge Feature S-3 consists of a zone of cavities within the cliff face near Area 10. These cavities range in size from 6 inches in diameter to several feet in diameter. Many of these cavities extend several feet into the cliff face. These cavities would not have the potential for recharge unless the river rose well above the FEMA 100-year floodplain. Frost GeoSciences, Inc. is of the opinion that these cavities represent discharge points and would have little value for recharge. Frost GeoSciences, Inc. rates the relative infiltration rate this feature as low on figure 1 of the TCEQ-0585-Instructions (Rev. 10-01-04). This feature scores a 39 on the sensitivity scale, column 10 in the Geologic Assessment Table on page 4 of this report.

Potential Recharge Features S-4 and S-5 consist of excavated stock ponds used to water cattle. These stock ponds are located in the Del Rio Clay and in spite of a lack of rainfall were holding water indicating little or no potential for infiltration. Frost GeoSciences, Inc. rates the relative infiltration rates of these features as low on figure 1 of the TCEQ-0585-Instructions (Rev. 10-01-04). These features score a 37 on the sensitivity scale, column 10 in the Geologic Assessment Table on page 4 of this report.

The property is covered by a sparse to dense stand of vegetative cover with some portions of the property existing as open fields. Overall vegetation on the project site consists of ashe juniper (*Juniperus ashei*), live oak (*Quercus virginiana*), cedar elm (*Ulmus crassifolia*), mesquite

(*Prosopis glandulosa*), and hackberry (*Celtis sp.*), with Texas persimmon (*Diospyros texana*), agarita (*Berberis trifoliolata*), huisache (*Acacia farnesiana*), sage (*Leucophyllum*), mountain laurel, whitebrush (*Aloysia gratissima*), Yucca, and prickly pear cactus (*Opuntia lindheimeri*). The variations in the vegetative cover across the project site are visible in site photographs in Appendix B and on the 2005 aerial photographs.

According to the site plan provided by Ford Engineering, the surveyed elevations on the project site range from 630 feet along the Guadalupe River to 816 feet in the northern portion of the project site near Area 1. According to this survey, the total relief on the project site is approximately 186 feet. A copy of the site plan indicating the boundary of the project site and the elevations is included on the Site Plan on Plate 1 in Appendix A and the Site Geologic Map in Appendix C of this report.

According to the Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle (2000), the project site is located on the Cretaceous Buda Limestone (Kbu), the Cretaceous Del Rio Clay (Kdr), the Cretaceous Georgetown Limestone, and the Cretaceous Cyclic and Marine Member of the Edwards Person Limestone (Kep).

The Buda Limestone consists of buff to light gray dense mudstone to porcelaneous limestone with calcite filled veins. This formation develops minor surface karst. Overall thickness ranges from 40 to 50 feet.

The Del Rio Clay is the upper confining unit of the Edwards Aquifer and consists of blue-green to yellow-brown clay. This formation is fossiliferous with abundant *Ilymatogyra arietina*. This formation generally does not develop karst features. Overall thickness ranges from 40 to 50 feet.

The Georgetown Formation consists of reddish-brown and gray to light tan marly limestone. This formation contain fossils of *Waconell wacoensis*. This formation does not commonly form karst development. Overall thickness ranges from 2 to 20 feet thick.

The Cyclic and Marine Member of the Cretaceous Edwards Person Limestone consists of mudstone to packstone and miliolid grainstone with chert. The member is characterized by massive



beds of limestone to relatively thin beds of limestone with some crossbedding. The Cyclic and Marine Member forms a few caves some that are laterally extensive. Overall thickness ranges from 80 to 90 feet thick.

A copy of the Geologic Map of the New Braunfels Texas 30 X 60 Minute Quadrangle indicating the location of the project site is included on Plate 6 in Appendix A.

#### **BEST MANAGEMENT PRACTICE (BMP)**

The majority of the project site is covered by the Georgetown Limestone, the Del Rio Clay, and the Buda Limestone. These formation rarely form karst features capable of recharging the aquifer. A small area in the southern and eastern portions of the project site is located on the Edwards Person Limestone. These areas would have the highest probability of encountering karst features. Numerous karst features were noted along the cliff face in the southern portion of the project site. These cavities likely exist as bedding plain features that extend laterally. The potential exist to encounter these cavities during the street and utility line excavations. Construction personnel should also be informed of the proper protocol to follow in the event that a solution cavity and/or cave is encountered during the excavation and development of the property.

#### **DISCLAIMER**

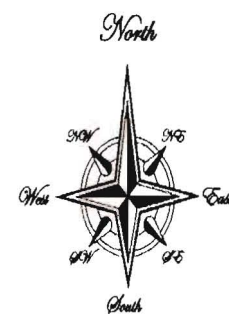
This report has been prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04) by a Licensed Texas Professional Geoscientist. All areas of the project site were carefully inspected for features that could contribute to the recharge of the Edwards Aquifer, however, this survey cannot preclude the presence of subsurface karst features that lack surface expression. This report is not intended to be a definitive investigation of all possible geologic or karst features at this site. All conclusions, opinions, and recommendations for Best Management Practices (BMP's) in this report are based on information obtained while researching the project, and on the site conditions at the time of our field investigation.



This report has been prepared for the exclusive use of Ford Engineering, Inc. This report is based on available known records, a visual inspection of the project site, and the work generally accepted for a Geologic Assessment for Regulated Activities / Developments on the Edwards Aquifer Recharge / Transition Zone, relating to 30 TAC §213.5(b)(3), effective June 1, 1999.

#### REFERENCES

- 1) U.S.G.S. 7.5 Minute Quadrangle Map, Hunter, Texas Sheet (1994).
- 2) Edwards Underground Water District Reference Map, (March 1988).
- 3) Official Edwards Aquifer Recharge Zone Map, Hunter, Texas Sheet (1996).
- 4) Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Comal County, Texas. U.S. Geological Survey Water Resources Investigations 94-4117.
- 5) Barnes, V.L., 1983, Geologic Atlas of Texas, New Braunfels Sheet, Bureau of Economic Geology, The University of Texas at Austin, Texas.
- 6) Federal Emergency Management Agency (FEMA), 9/29/86, Comal County, Texas and Incorporated Areas, Flood Insurance Rate Map (FIRM), Panel # 4854630301C.
- 7) U.S.D.A. Soil Conservation Service, Soil Survey of Comal County, Texas (1977).
- 8) TCEQ-0585-Instructions (Rev. 10-1-04). "Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zone".
- 9) Collins, Edward, W., 2000, Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle, Bureau of Economic Geology, The University of Texas at Austin, Texas.



**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

**Site Plan**

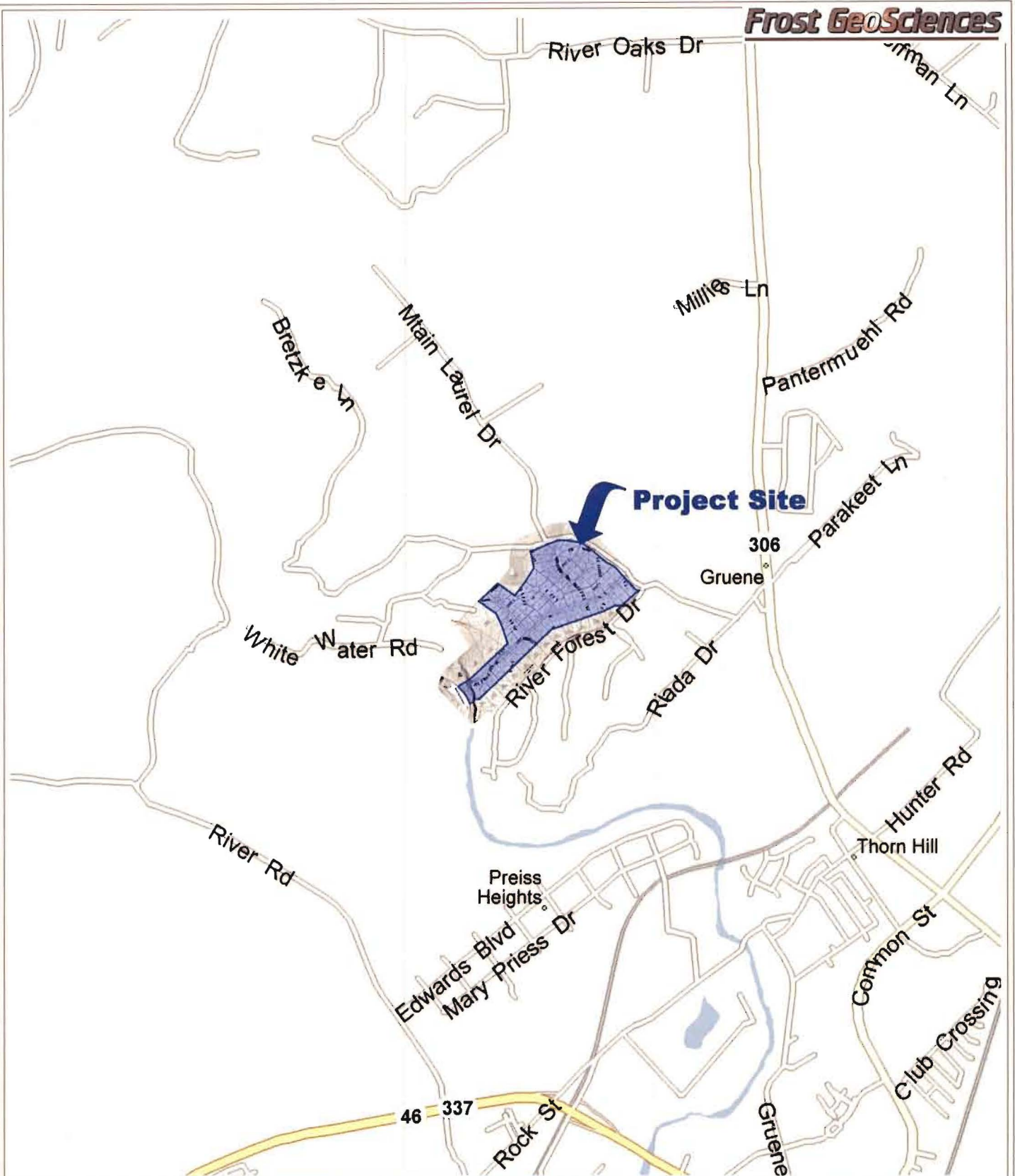
**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**Project Site**

**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

**Street Map**

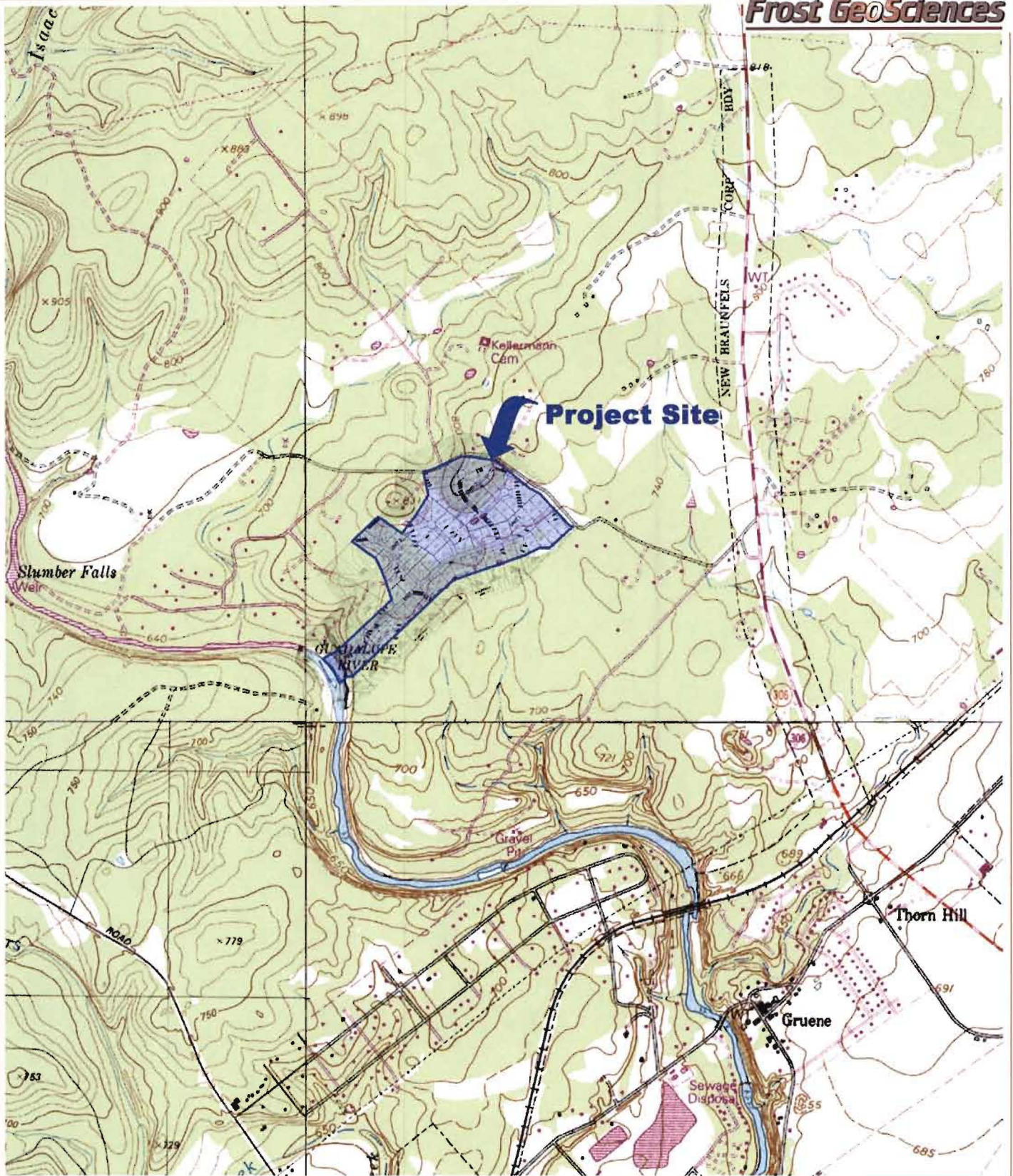
**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

U.S.G.S. 7.5 Minute Quadrangle Map  
Hunter, Texas Sheet (1994)

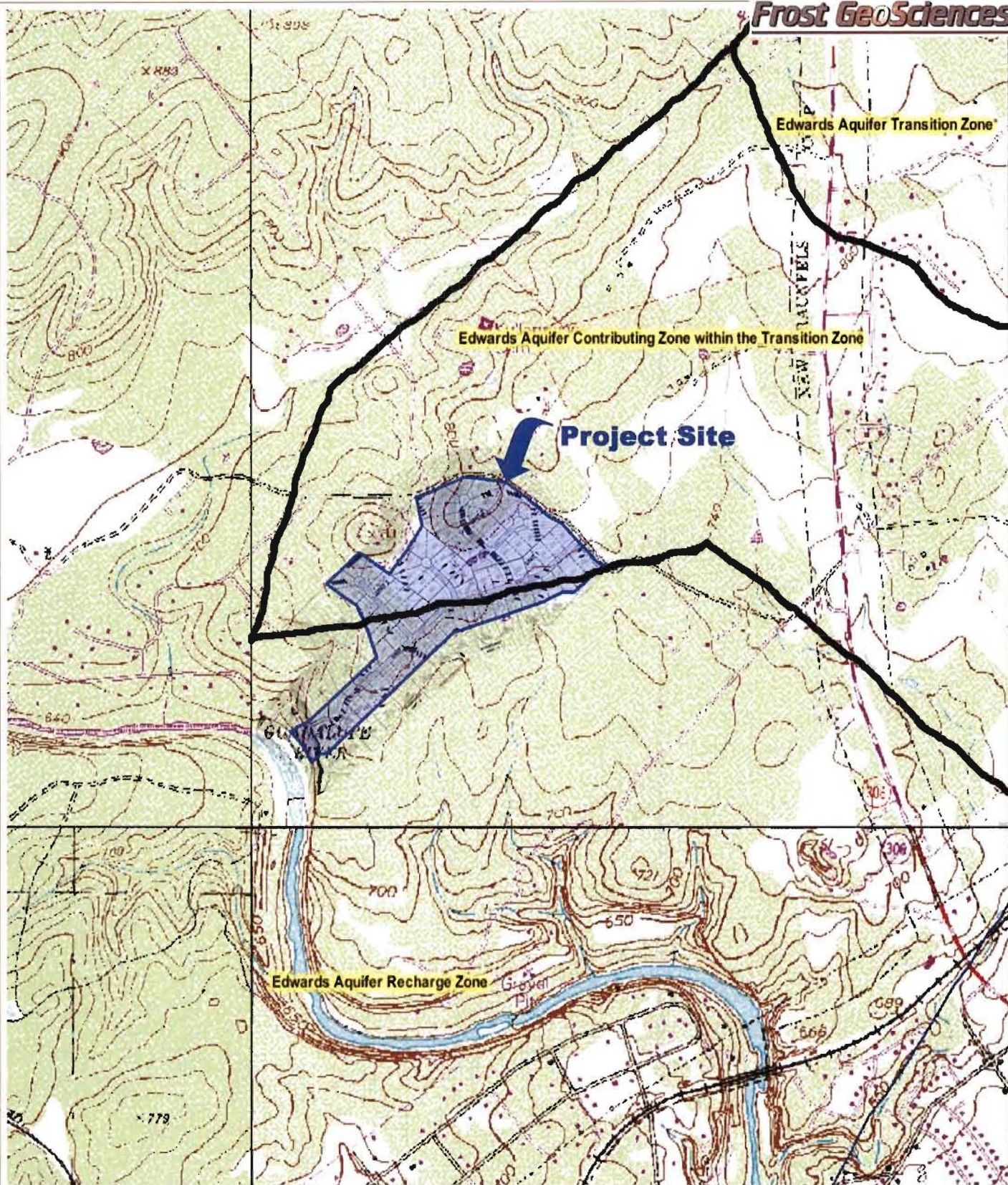
**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

**Edwards Aquifer Recharge Zone  
Reference Map**

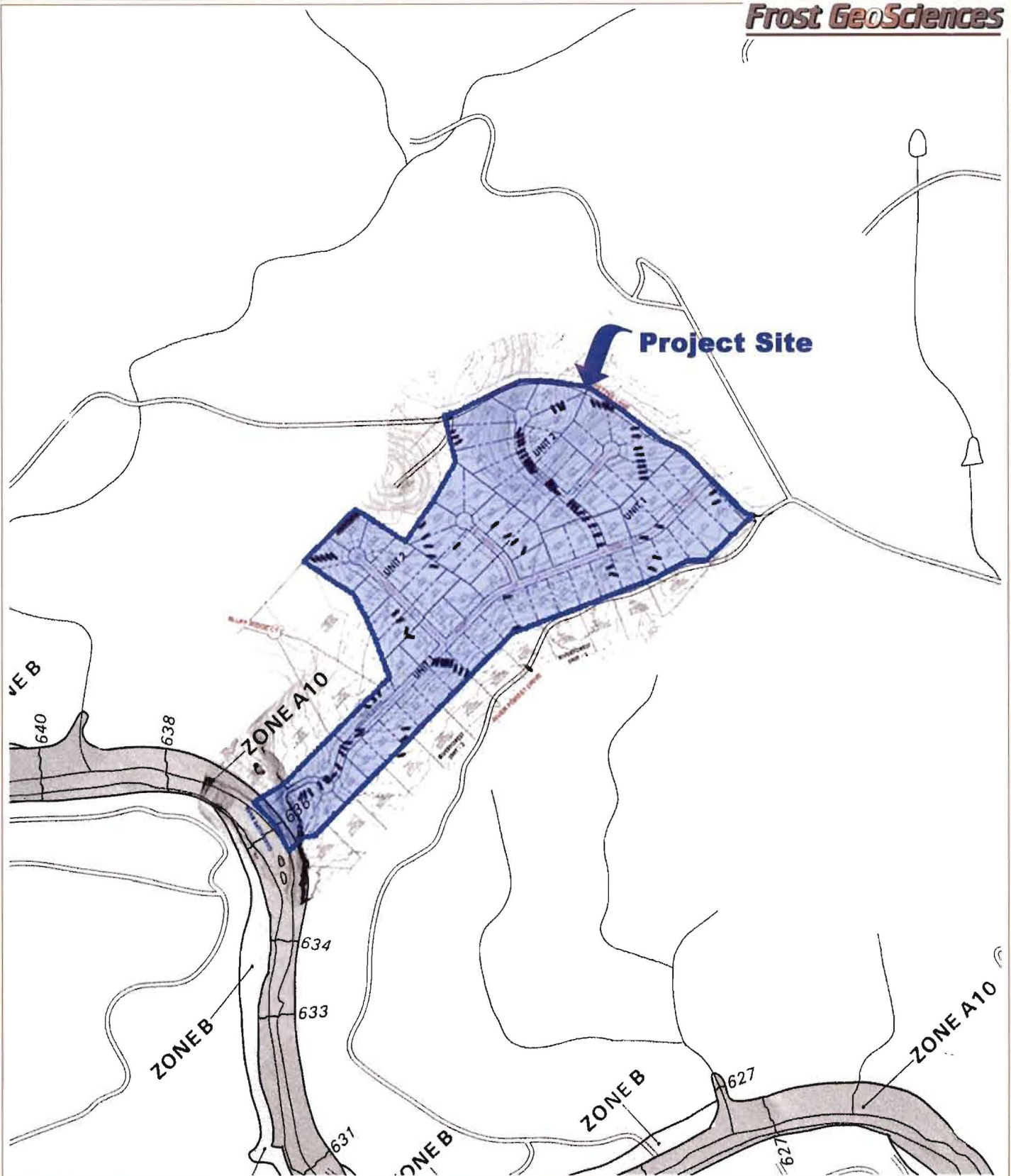
**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

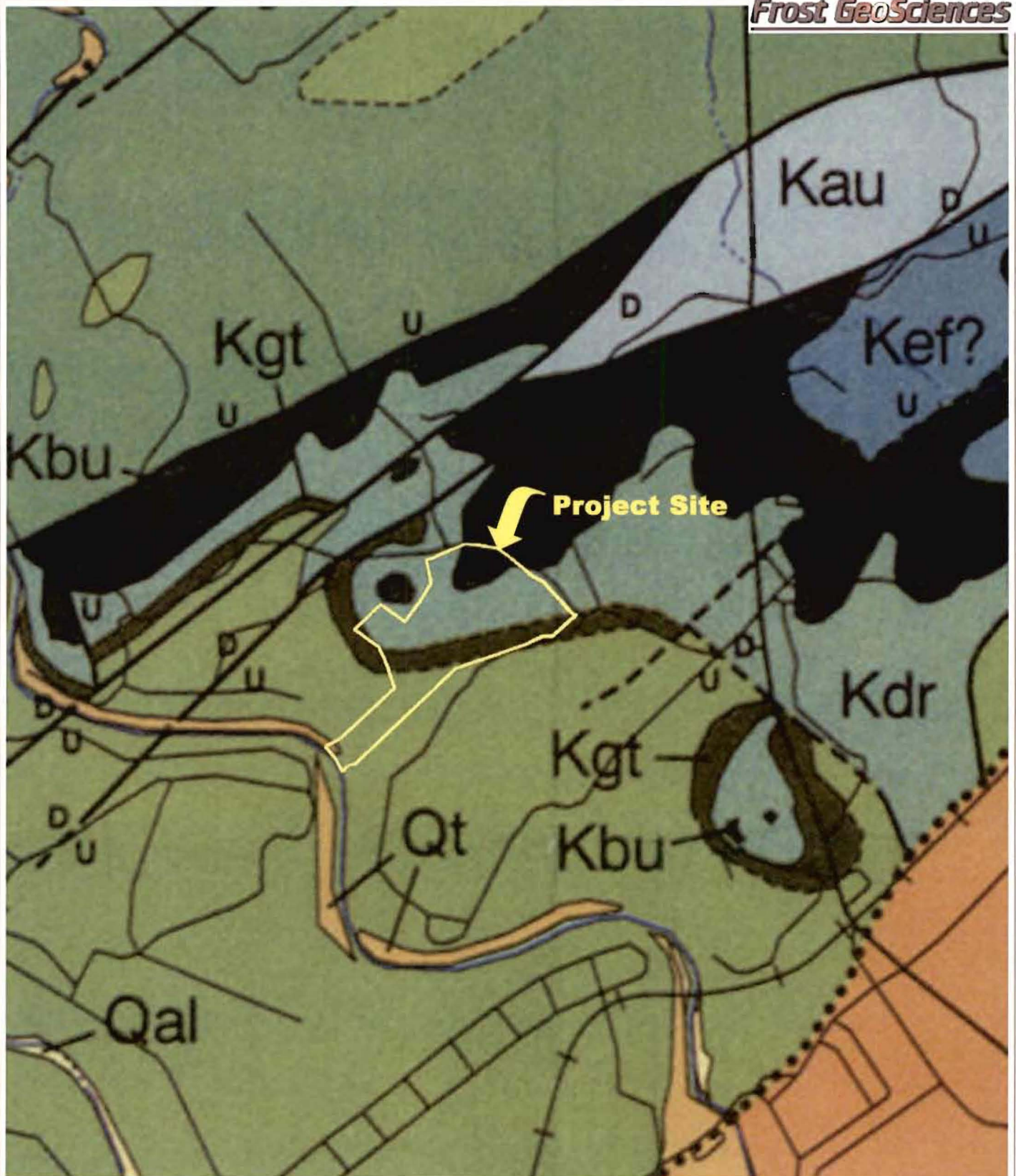
Flood Insurance Rate Map (FIRM)  
Community Panel # 48546301 C Revised (9-29-86)

**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007



**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

Geologic Map  
of the New Braunfels, Texas  
30 X 60 Minute Quadrangle

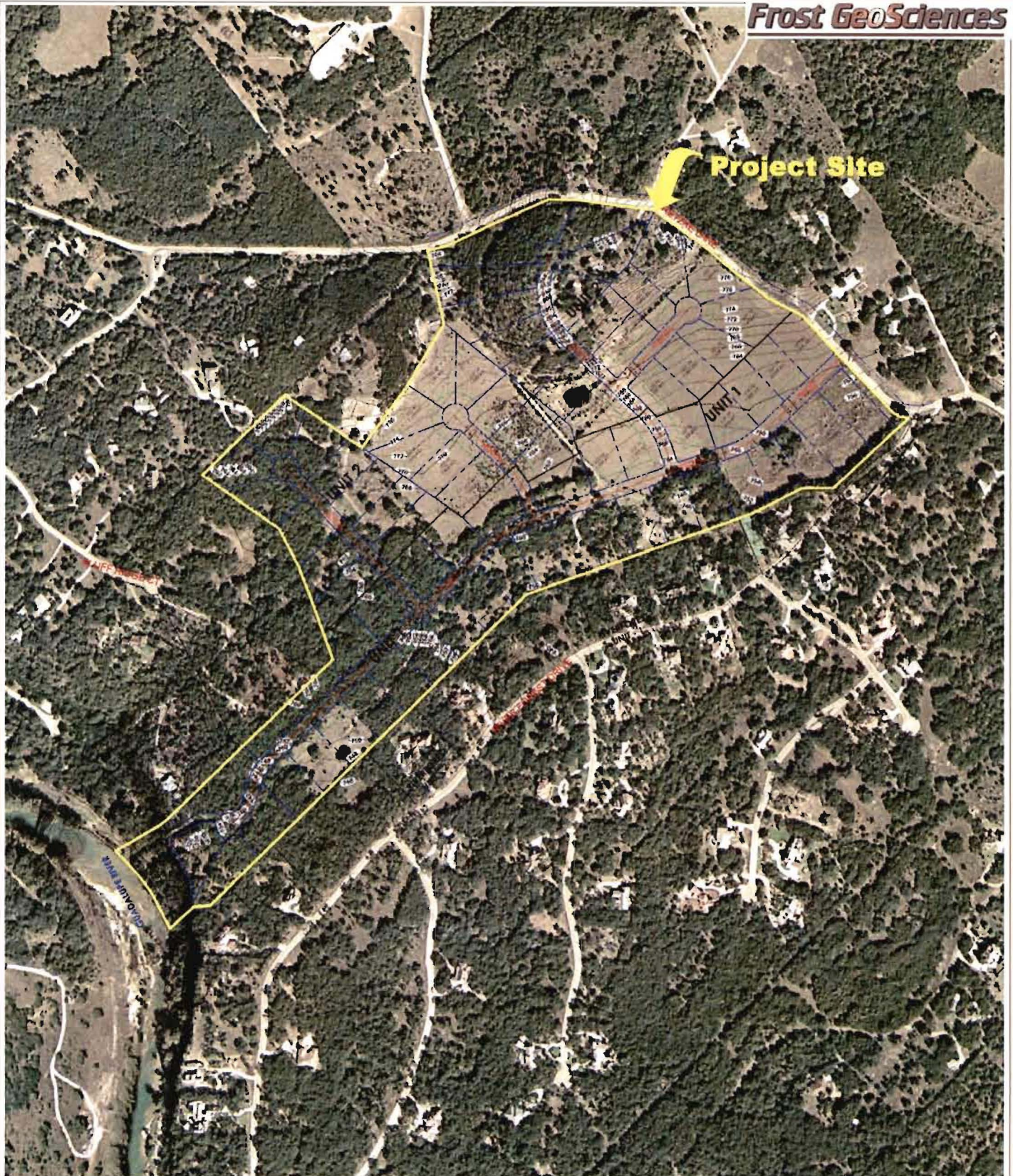
**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

2005 Aerial Photograph  
Landiscor Aerial Information

**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





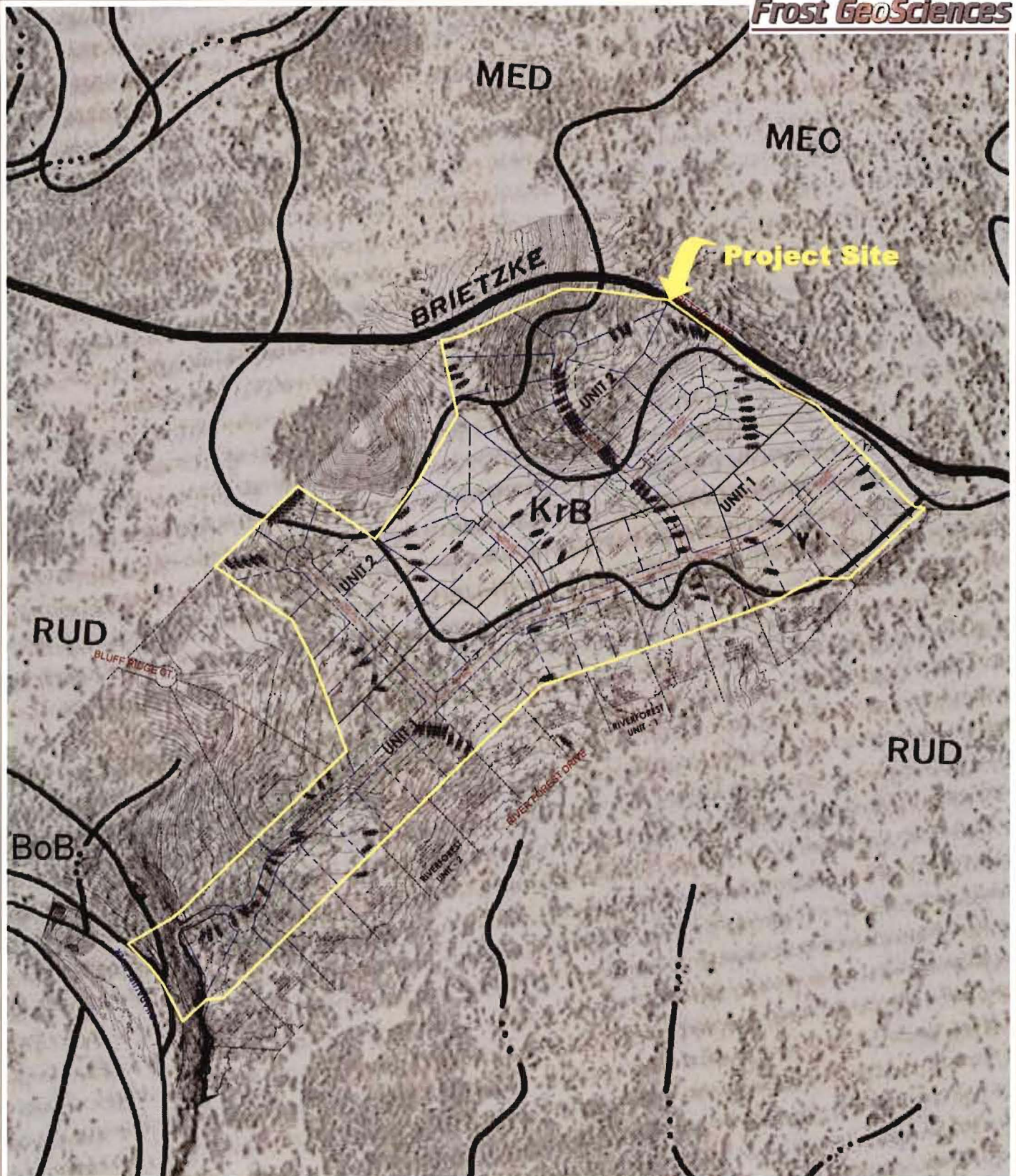
**PROJECT NAME:**  
Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Bretke Lane Tract, 95.912 Acres  
New Braunfels, Texas

1005 Aerial Photograph with Potential Recharge Features  
LandisCor Aerial Information

**PROJECT NO.:** FGS-07121

**DATE:** March 31, 1007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Breike Lane Tract, 95.912 Acres  
New Braunfels, Texas

1973 Aerial Photograph  
United States Department of Agriculture

**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





**PROJECT NAME:**

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
The Brekke Lane Tract, 95.912 Acres  
New Braunfels, Texas

2005 Aerial Photograph with Numbered Areas  
LandisCor Aerial Information

**PROJECT NO.:**

FGS-07121

**DATE:**

March 31, 2007





View of the windmill associated with PRF # S-1.



View of the water well, PRF # S-1, under the above mentioned windmill.





Typical view of the vegetative cover noted near Area 1.



Typical view of the vegetative cover noted near Area 2.





Typical view of the vegetative cover noted near Area 3.



Typical view of the vegetative cover noted near Area 4.





View of Potential Recharge Feature # S-5.



Typical view of the vegetative cover noted near Area 5.





View of Potential Recharge Feature # S-2.



Typical view of the vegetative cover noted near Area 6.





Typical view of the vegetative cover noted near Area 7.



Typical view of the vegetative cover noted near Area 8.





Typical view of the vegetative cover noted near Area 9.



View of Potential Recharge Feature # S-3.





Typical view of the vegetative cover noted above the cliff near Area 10.



Typical view of the vegetative cover noted above the cliff near Area 10.





Typical view of the vegetative cover noted along the side of the cliff near Area 10.



Typical view of the vegetative cover noted along the side of the cliff near Area 10.





Upstream view along the Guadalupe River near Area 10.

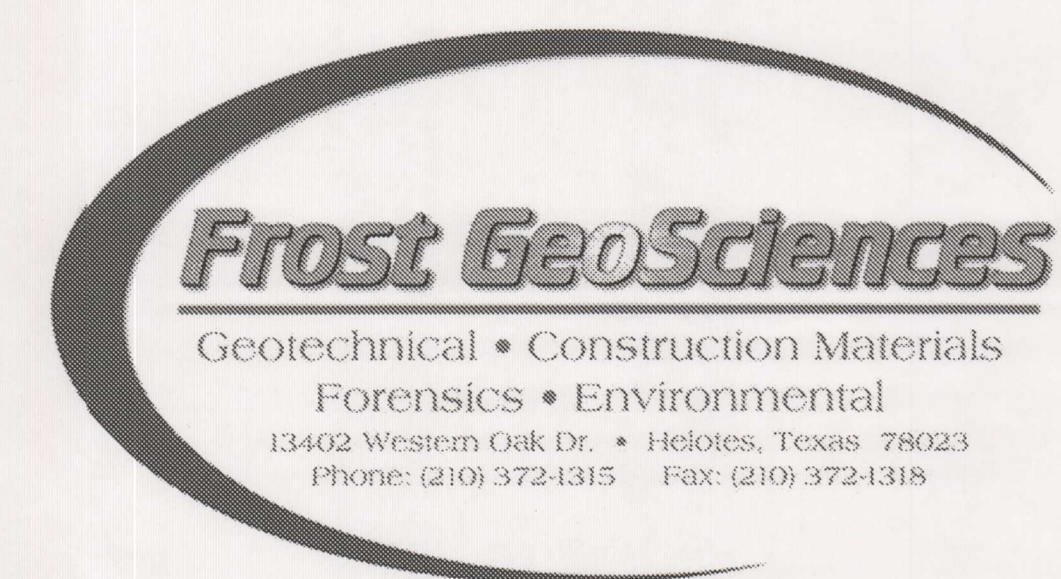


Downstream view along the Guadalupe River near Area 10.





Location Map



## Site Geologic Map

Geologic Site Assessment (WPAP)  
for Regulated Activities / Development on the  
Edwards Aquifer Recharge / Transition Zone  
for the  
Bretke Lane Tract  
95.912 Acres  
New Braunfels, Texas

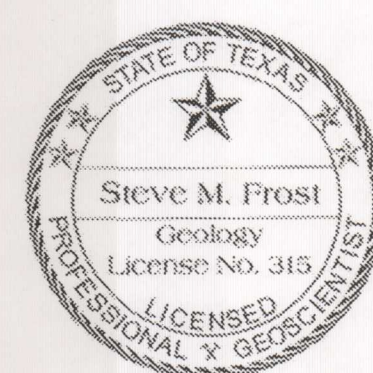
Frost GeoSciences, Inc. Control # FGS-07121

### Legend

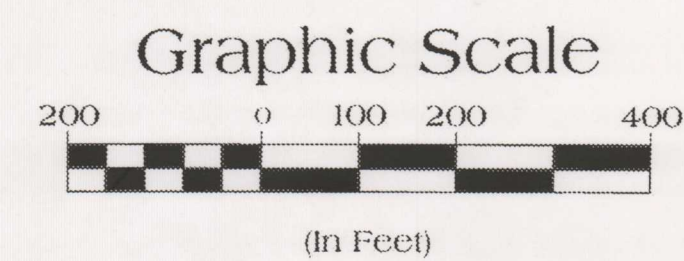
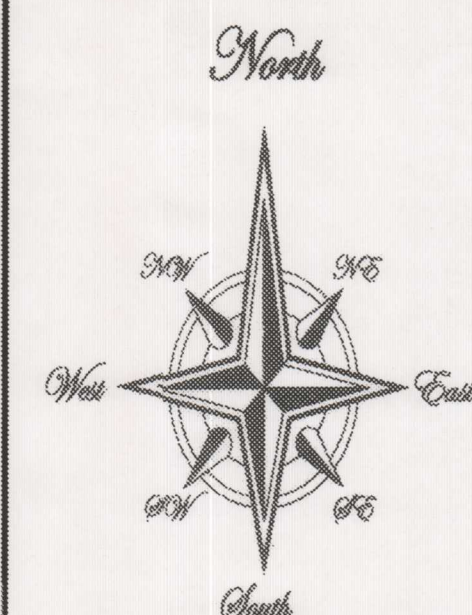
- Fill - Fill Material
- Qal - Alluvium
- Kau - Austin Chalk
- Kef - Eagle Ford Shale
- Kbu - Buda Limestone
- Kdr - Del Rio Clay
- Kgt - Georgetown Limestone
- Kep - Edwards Person Limestone
- Kek - Edwards Kainer Limestone
- Kgr - Glen Rose Formation
- S# - Potential Recharge Feature (PRF)
- - Formation Contact
- ..... - 100-Year Floodplain - Zone A
- - 100-Year Floodplain - Zone A10
- - Other Flood Hazard Area - Zone X (shaded)

Floodplain Information Obtained From  
FIRM: Flood Insurance Rate Map  
Comal County, Texas: Panel # 4854630301C, Revised 9/29/86

Fault Information Obtained From:  
Bureau of Economic Geology, Geologic Atlas of Texas, San Antonio Sheet (1983)  
U.S. Geological Survey, Water Resources Investigations Report 94-4117 (1994)  
Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle (2000)



Signature of Texas Licensed Geoscientist  
Steve Frost, TPG# 315, AIPG # 10176



1 inch = 200 feet  
Representative Fraction 1:2400  
Contour Interval - 2 feet



**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: River Place at Gruene

**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 than 250 gallons will be stored on the site for less than one (1) year.
  - ☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
  - ☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
  - ☒ Fuels and hazardous substances will not be stored on-site.
2. ☒ **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. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4. ☒ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.
  - ☐ There are no other potential sources of contamination.

**SEQUENCE OF CONSTRUCTION**

5. ☒ **ATTACHMENT C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is 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. ☒ 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: GUADALUPE RIVER



## 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:

Lee Perry

Print Name of Customer/Agent

  
Signature of Customer/Agent

5/11/07

Date



## ATTACHMENT A TO TCEQ-0602

### SPILL RESPONSE ACTIONS

#### **General Measures**

- (1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, 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.
- 1-119
- (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 BMPs.
  - (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 BMPs 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.
- 1-120

### ***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](http://www.tnrcc.state.tx.us/enforcement/emergency_response.html)
- 1-121

### ***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 TO TCEQ-0602

### POTENTIAL SOURCES OF CONTAMINATION

- A. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle leakage.  
Remedy: Lubrication and fueling will be performed in a designated area in the staging area. This area will be monitored daily for contamination.
- B. Miscellaneous trash and litter from construction workers.  
Remedy: Designated receptacles will be strategically located and workers will be directed to deposit trash there.
- C. Construction debris.  
Remedy: Debris will be collected weekly and deposited in bins for offsite disposal. Situations requiring immediate attention will be handled on a case by case basis.
- D. Storm water contamination from excess application of fertilizers, herbicides, and pesticides.  
Remedy: Fertilizers, herbicides, and pesticides will only be applied when necessary and in accordance with the manufacturers recommendations.



## **ATTACHMENT C TO TCEQ-0602**

### **SEQUENCE OF MAJOR ACTIVITIES**

- A. Install pollution prevention measures.
- B. Clearing of the site of underbrush and street excavation.  
(Entire 9.64 acres to be disturbed)
- C. Waterline installation.  
(1.15 acres disturbed)
- D. Construction of streets  
(4.18 acres disturbed)



## **ATTACHMENT D TO TCEQ-0602**

### **TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES**

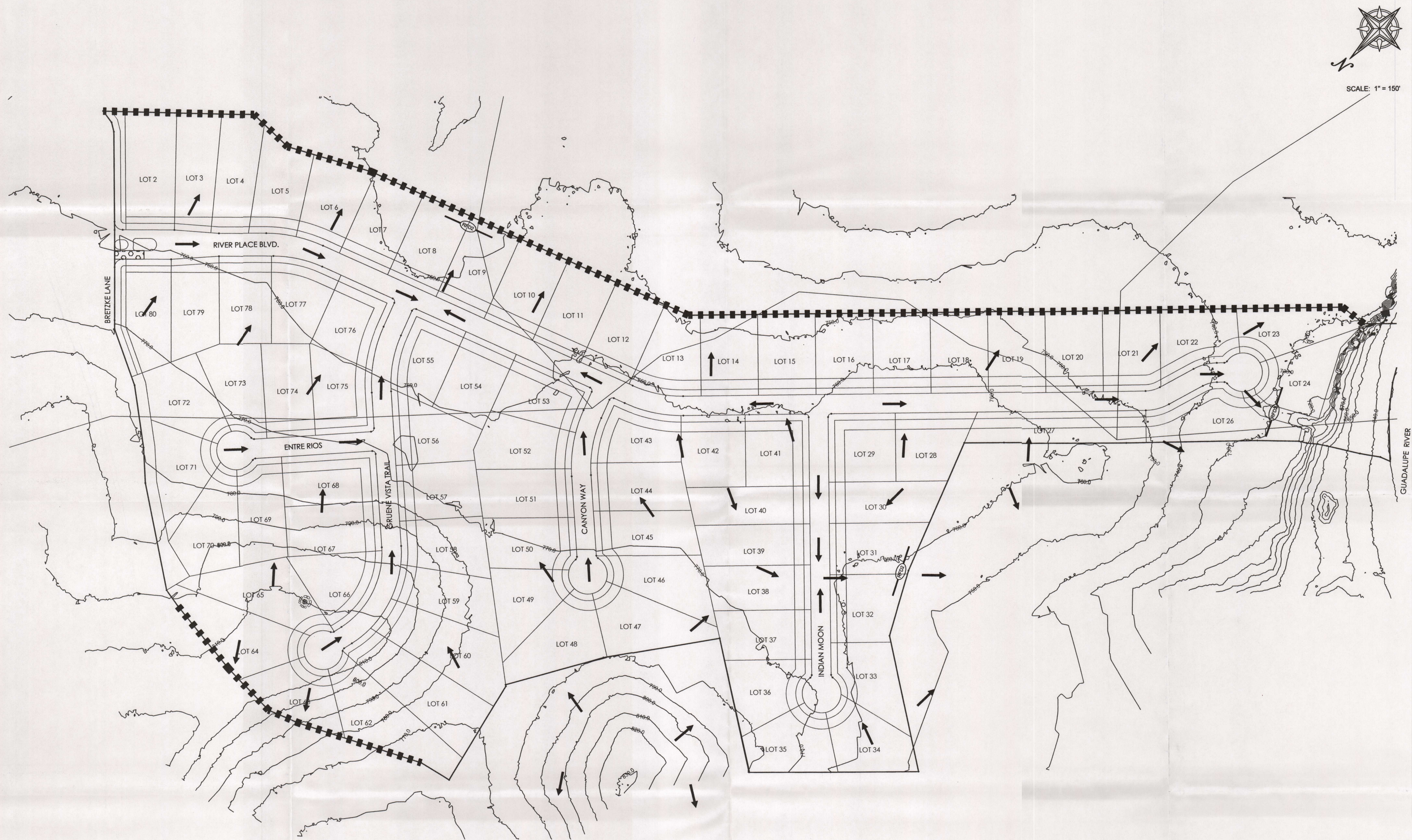
Construction exits will be provided at each entrance off of Bretzke Lane. The stabilized construction exits will prevent sediments collected on the tires of the construction vehicles from being tracked off-site onto the public roadway.

Silt fencing will be installed on the downgradient sides of the property, specifically along the southeast property line. The silt fencing along the southeast boundary would be removed once construction is complete. The on-site runoff will still be directed to the Guadalupe River. The silt fencing will prevent on-site sedimentation from the construction activities to wash downgradient onto the adjacent property and the downgradient surface drainage system. The silt fencing will also minimize downgradient erosion of the disturbed soil area.

The proposed activities and the use of the silt fencing and the stabilized construction exits will not alter the stormwater runoff flows to any naturally-occurring sensitive features identified in the geologic assessment. If any sensitive features are discovered in the process of excavating or trenching, those features will be addressed on an individual basis.



H:\CIVIL\PROJECTS\222500 PERRY BLANTON 82 AC COMAL CO\dwg\222500 POLLUTION PREVENTION PLAN.dwg, POLLUTION PREVENTION PLAN, 4/19/2007 10:39:58 AM



LEGEND

- STABILIZED ENTRANCE/EXIT
- PROPOSED SURFACE FLOW DIRECTION
- SILT FENCE
- TYPE 2 ROCK FILTER DAM
- GRADE BREAK

GENERAL NOTES

- ALL STRUCTURAL CONTROLS IDENTIFIED ON THIS PLAN AS "TYPICAL" ARE TO BE FIELD LOCATED PRIOR TO CLEARING AND GRADING, OR WHEN IS APPROPRIATE DURING THE PHASING OF CONSTRUCTION.
- STRUCTURAL CONTROL LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTROLS MAY REQUIRE MODIFICATION AS CONSTRUCTION PROGRESSES.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND REVEGETATED AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING VEGETATION IN ALL DISTURBED AREAS BY WATERING OR OTHER ACCEPTABLE MEANS.

RIVER PLACE AT GRUENE  
NEW BRAUNFELS, TEXAS  
STORM WATER  
POLLUTION PREVENTION PLAN

PROJECT NO. 22250.00  
APRIL XX, 2007  
SHEET 21 OF XX

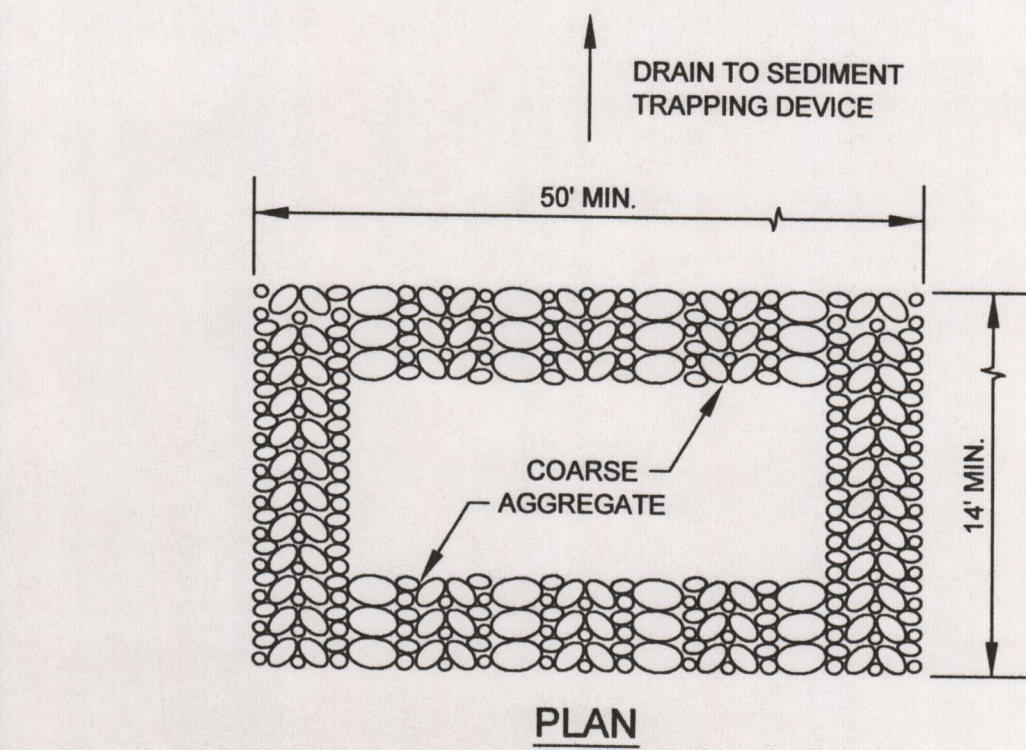
REVISIONS:

NO. DATE



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10927 WYE DRIVE, SUITE 104, SAN ANTONIO, TEXAS 78217, (210) 590-4777

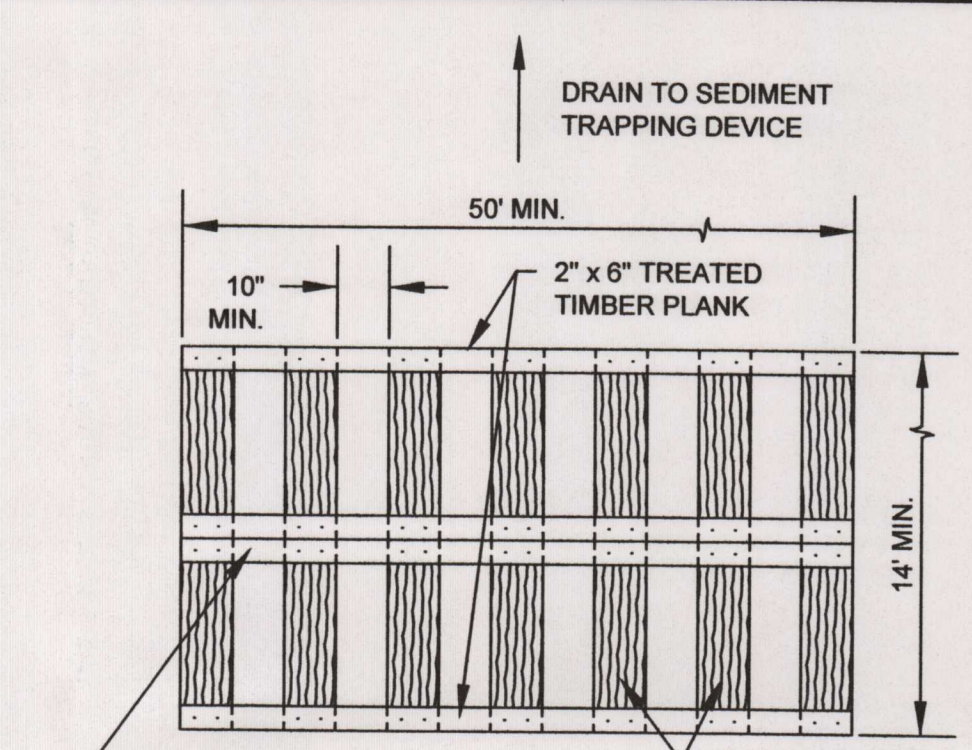




**CONSTRUCTION EXIT (TYPE 1)**

**GENERAL NOTES**

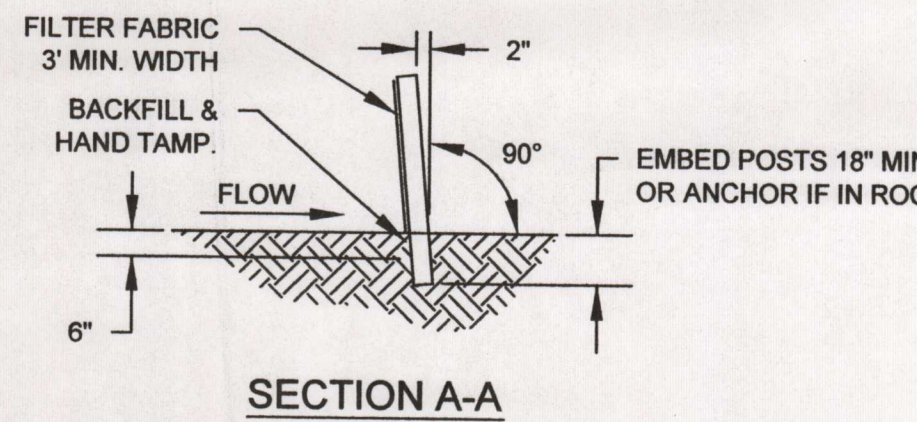
1. THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
3. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



**CONSTRUCTION EXIT (TYPE 2)**

**GENERAL NOTES**

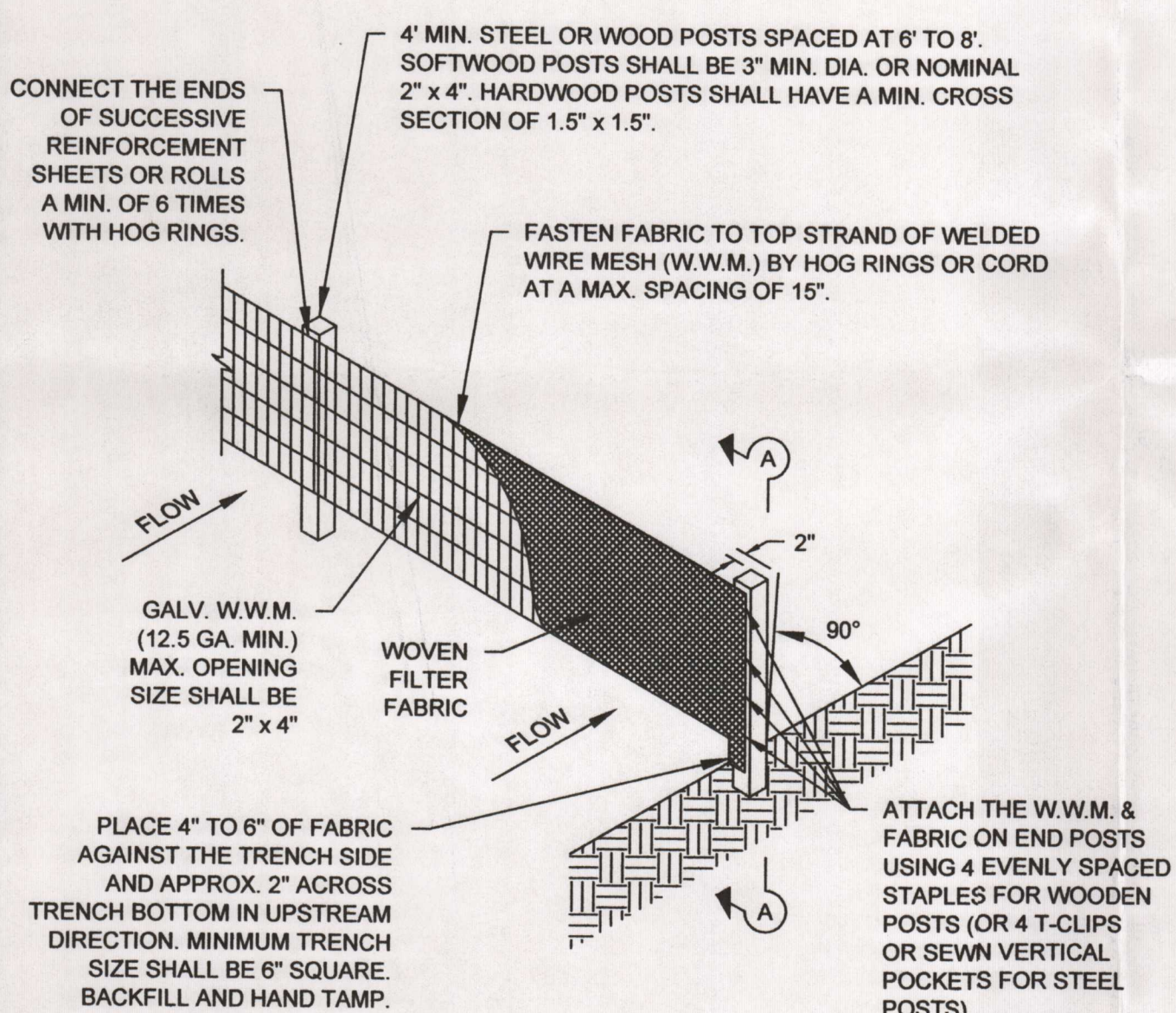
1. THE LENGTH OF THE TYPE 2 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE TREATED TIMBER PLANKS SHALL BE ATTACHED TO THE RAILROAD TIES WITH 1/2" x 6" MIN. LAG BOLTS. OTHER FASTENERS MAY BE USED AS APPROVED BY THE ENGINEER.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MIN., AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
6. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
7. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



**SECTION A-A**

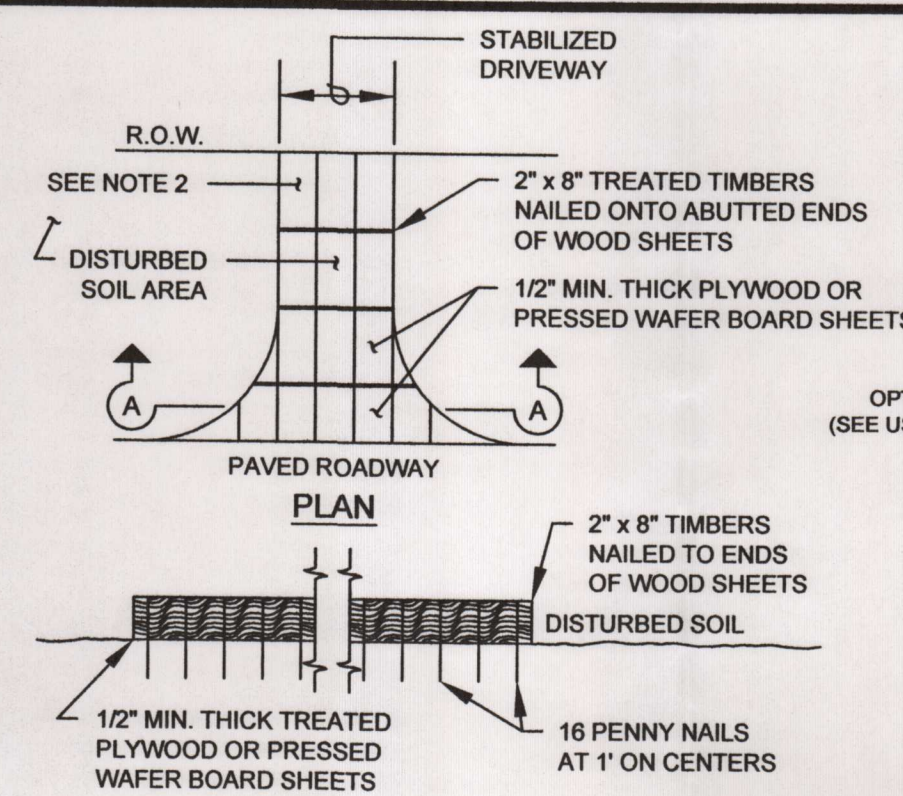
**PLANS SHEET LEGEND**

SEDIMENT CONTROL FENCE (SCF)



**TEMPORARY SEDIMENT CONTROL FENCE**

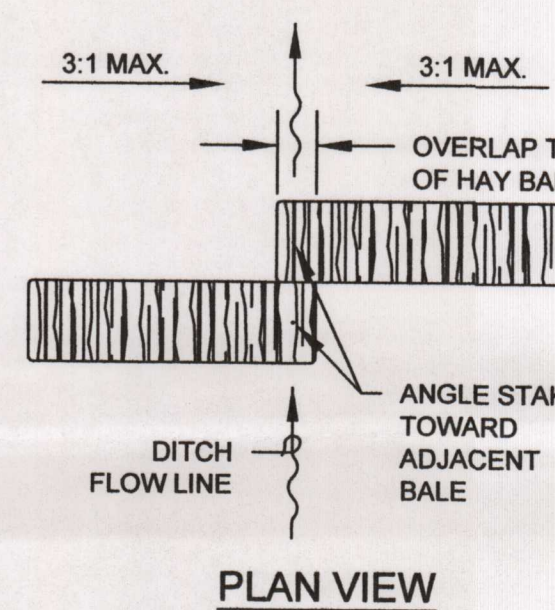
SEDIMENT CONTROL FENCE (SCF)



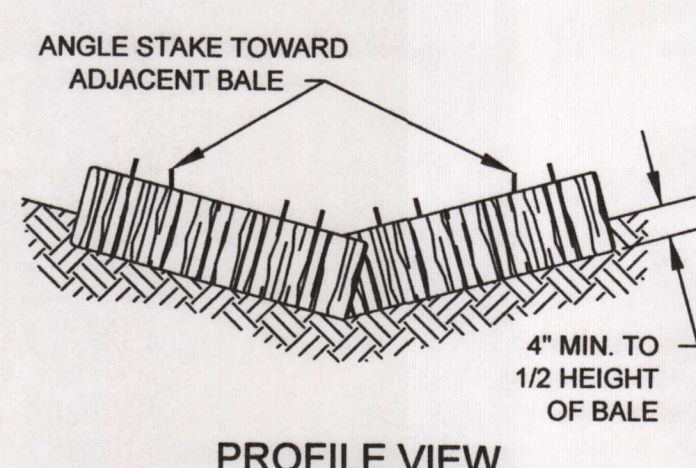
**CONSTRUCTION EXIT (TYPE 3)**

**GENERAL NOTES**

1. THE LENGTH OF THE TYPE 3 CONSTRUCTION EXIT SHALL BE AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
2. THE TYPE 3 CONSTRUCTION EXIT MAY BE CONSTRUCTED FROM OPEN GRADED CRUSHED STONE WITH A SIZE OF TWO TO FOUR INCHES SPREAD A MINIMUM OF 4" THICK TO THE LIMITS SHOWN ON THE PLANS.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MINIMUM, AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



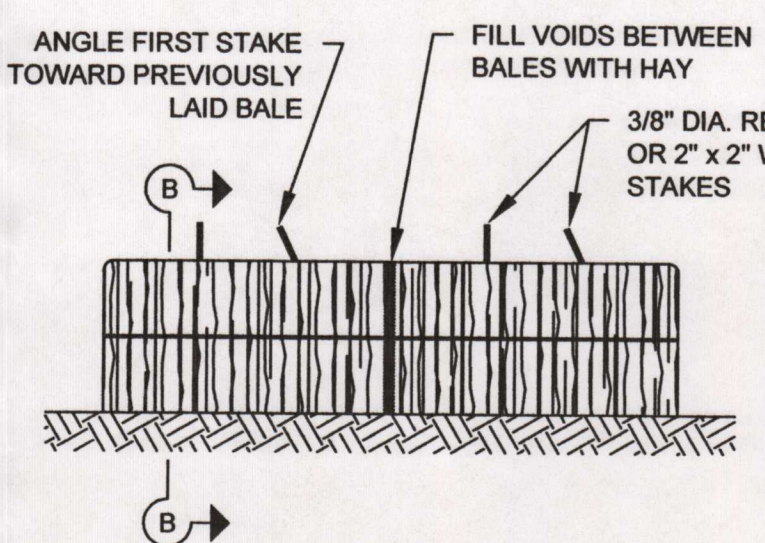
**SECTION A-A**



**SECTION B-B**

**PLANS SHEET LEGEND**

BALED HAY (BH)

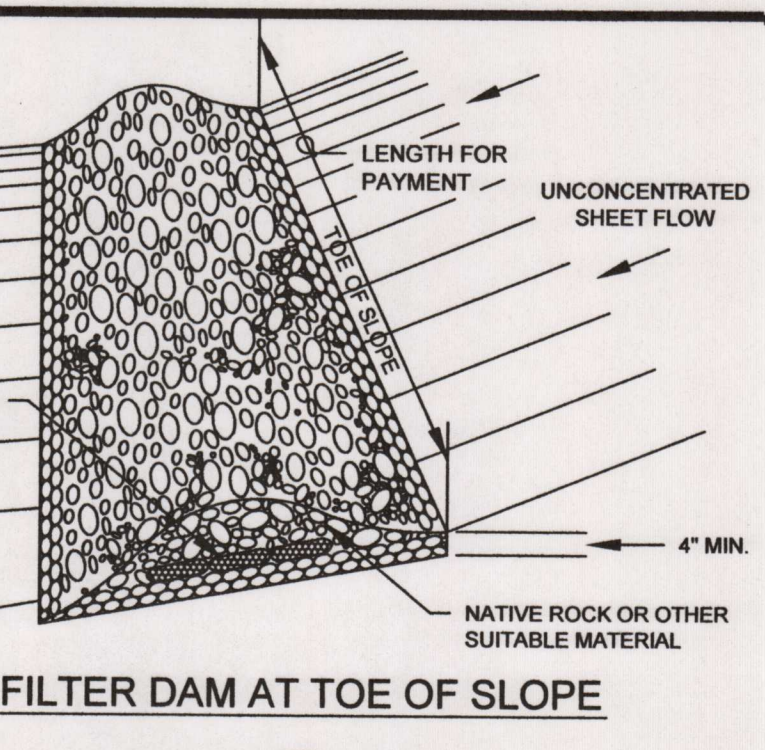


**BALED HAY FOR EROSION CONTROL**

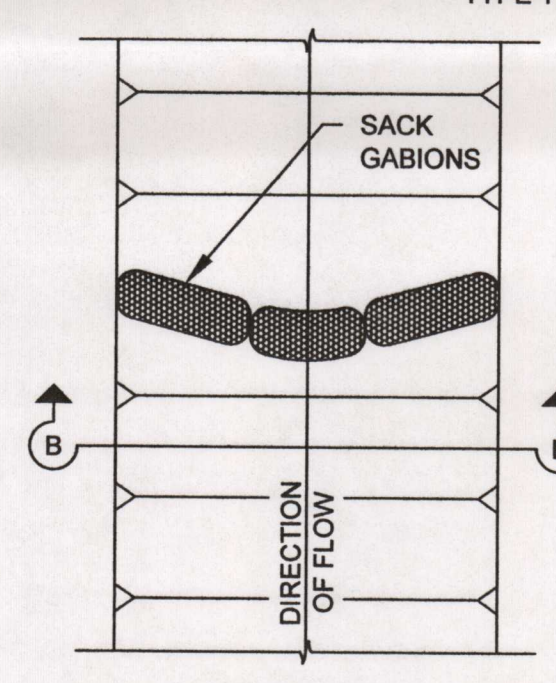
BALED HAY (BH)

**GENERAL NOTES**

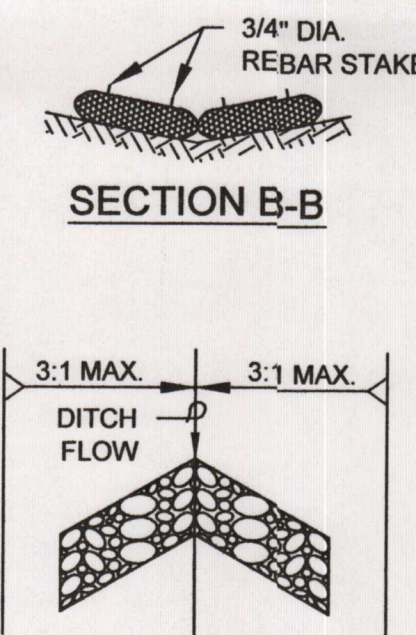
1. HAY BALES SHALL BE A MINIMUM OF 30" IN LENGTH AND WEIGH A MINIMUM OF 50 LBS.
2. HAY BALES SHALL BE BOUND BY EITHER WIRE OR NYLON OR POLYPROPYLENE STRING. THE BALES SHALL BE COMPOSED ENTIRELY OF VEGETABLE MATTER.
3. HAY BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4" AND, WHERE POSSIBLE, 1/2 THE HEIGHT OF THE BALES.
4. HAY BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
5. HAY BALES SHALL BE SECURELY ANCHORED IN PLACE WITH 3/8" DIA. REBAR OR 2" x 2" WOOD STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE SHALL BE ANGLED TOWARDS THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



**FILTER DAM AT TOE OF SLOPE**



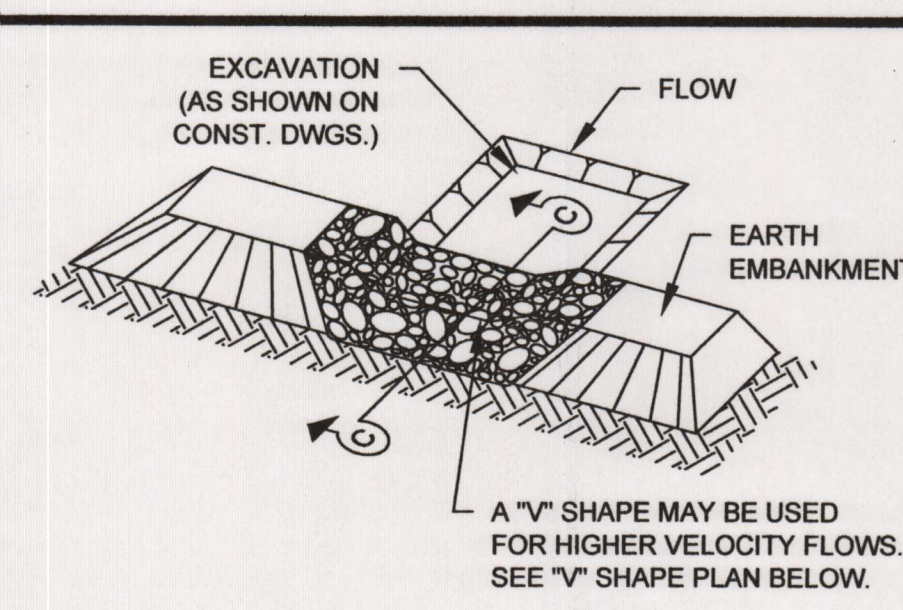
**SECTION A-A**



**SECTION B-B**

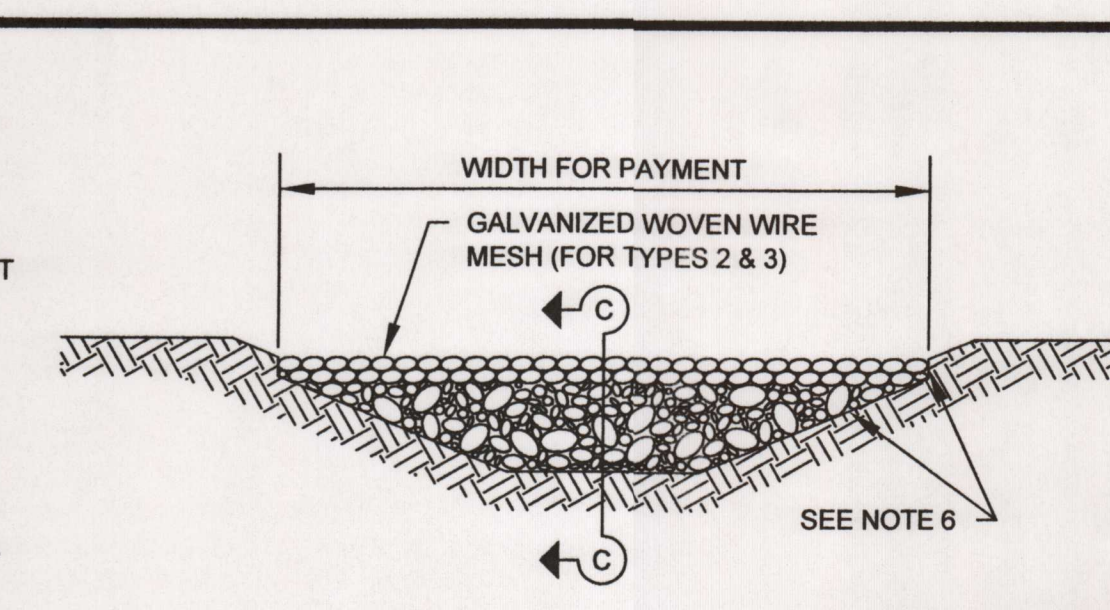
**PLANS SHEET LEGEND**

TYPE 1 ROCK FILTER DAM (RFD1)  
TYPE 2 ROCK FILTER DAM (RFD2)  
TYPE 3 ROCK FILTER DAM (RFD3)



**FILTER DAM AT SEDIMENT TRAP**

TYPE 1 OR TYPE 2



**FILTER DAM AT CHANNEL SECTIONS**

TYPE 1 OR TYPE 2

**GENERAL NOTES**

1. IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, FILTER DAMS SHOULD BE PLACED NEAR THE TOE OF SLOPES WHERE EROSION IS ANTICIPATED, UPSTREAM AND/OR DOWNSTREAM AT DRAINAGE STRUCTURES, AND IN ROADWAY DITCHES AND CHANNELS TO COLLECT SEDIMENT.
2. MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATION FOR ROCK FILTER DAMS FOR EROSION AND SEDIMENTATION CONTROL.
3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE SW3P PLANS.
4. SIDE SLOPES SHOULD BE 2:1 OR FLATTER. DAMS WITHIN THE SAFETY ZONE SHALL HAVE SIDESLOPES OF 6:1 OR FLATTER.
5. MAINTAIN A MINIMUM OF 1' BETWEEN TOP OF ROCK FILTER DAM WEIR AND TOP OF EMBANKMENT FOR FILTER DAMS AT SEDIMENT TRAPS.
6. FILTER DAMS SHOULD BE EMBEDDED A MINIMUM OF 4" INTO EXISTING GROUND.
7. THE SEDIMENT TRAP FOR PONDING OF SEDIMENT LADEN RUNOFF SHALL BE OF THE DIMENSIONS SHOWN ON THE PLANS.
8. ROCK FILTER DAM TYPES 2 & 3 SHALL BE SECURED WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS. THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT AND SLOPES SPECIFIED. THE MESH SHALL BE FOLDED AT THE UPSTREAM SIDE OVER THE AGGREGATE AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS. IN STREAM USE, THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
9. SACK GABIONS SHOULD BE STACKED DOWN WITH 3/4" DIA. REBAR STAKES.
10. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.).
11. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

**ROCK FILTER DAM USAGE GUIDELINES**

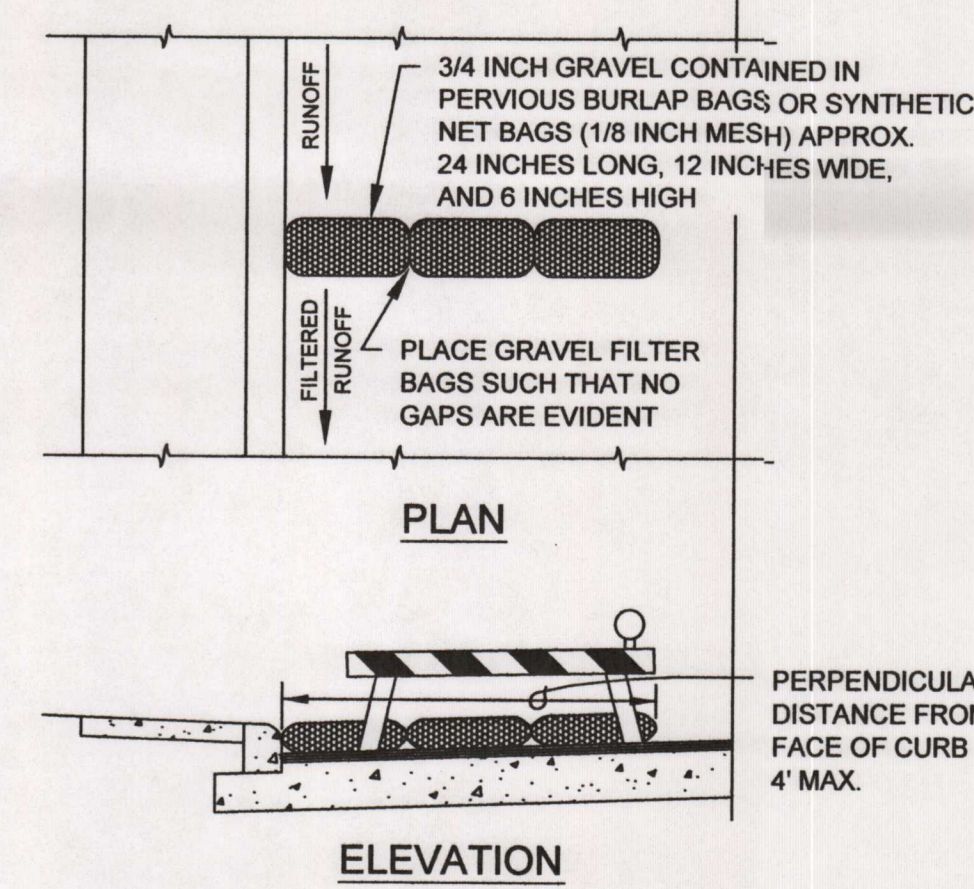
ROCK FILTER DAMS SHOULD BE CONSTRUCTED DOWNSTREAM FROM DISTURBED AREAS TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF AND/OR CONCENTRATED FLOW. THE DAMS SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THROUGH RATE OF 60 GPM/FT OF CROSS SECTIONAL AREA. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE.

TYPE 1 (18" HIGH WITH NO WIRE MESH); TYPE 1 MAY BE USED AT THE TOE OF SLOPES, AROUND INLETS, IN SMALL DITCHES, AND AT DIKE OR SWALE OUTLETS. THIS TYPE OF DAM IS RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA OF 5 ACRES OR LESS. TYPE 1 MAY NOT BE USED IN CONCENTRATED HIGH VELOCITY FLOWS (APPROX. 8 FT/SEC. OR MORE) IN WHICH AGGREGATE WASH OUT MAY OCCUR. SANDBAGS MAY BE USED AT THE EMBEDDED FOUNDATION (4" DEEP MIN.) FOR BETTER FILTERING EFFICIENCY OF LOW FLOWS IF CALLED FOR ON THE PLANS OR DIRECTED BY THE ENGINEER.

TYPE 2 (18" HIGH WITH WIRE MESH); TYPE 2 MAY BE USED IN DITCHES AND AT DIKE OR SWALE OUTLETS.

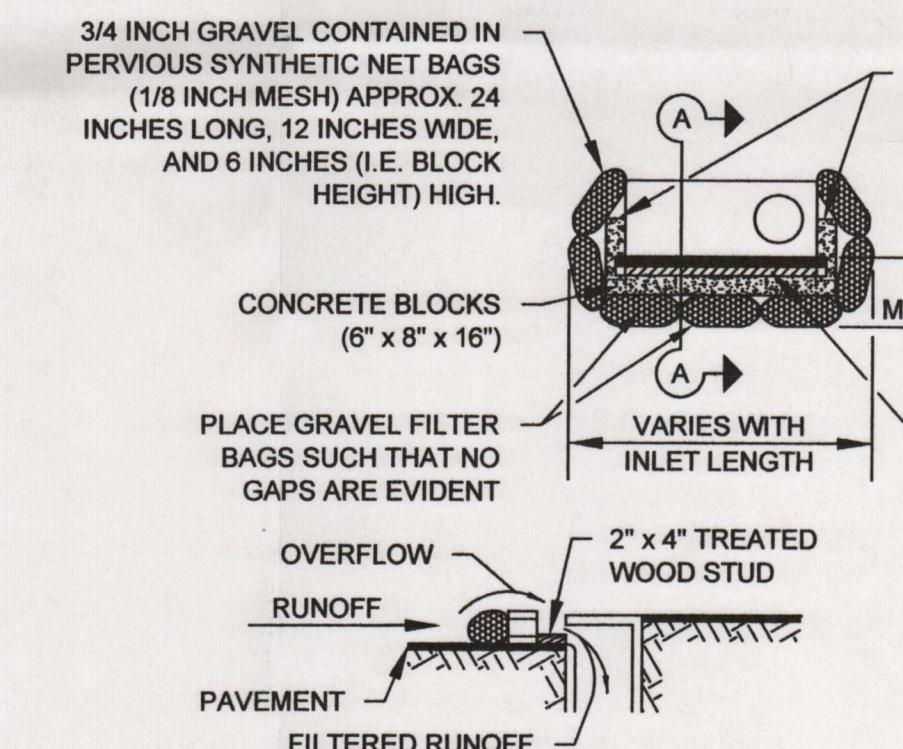
TYPE 3 (36" HIGH WITH WIRE MESH); TYPE 3 MAY BE USED IN STREAM FLOW AND SHOULD BE SECURED TO THE STREAM BED.

TYPE 4 (SACK GABIONS); TYPE 4 MAY BE USED IN DITCHES AND SMALLER CHANNELS TO FORM AN EROSION CONTROL DAM.



**GRAVEL FILTER BAGS**

GRAVEL FILTER BAGS (N.T.S.)



**SECTION A-A**

**CURB INLET GRAVEL FILTER**

N.T.S.

RIVER PLACE AT GRUENE NEW BRAUNFELS, TEXAS PROJECT: 2229.00		
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES		
DN.	CITY OF SAN ANTONIO	DATE
DR.	DEPARTMENT	APRIL XX, 2007
CK.	OF	
TR.	PUBLIC WORKS	SHEET
CK.	ENGINEERING DIVISION	6



**ATTACHMENT E TO TCEQ-0602**

**REQUEST TO TEMPORARILY SEAL A FEATURE**

NOT USED



## **ATTACHMENT F TO TCEQ-0602**

### **Structural Practices**

The development of the site would eliminate flows across exposed soils, other than the rainfall directly on the area of the exposed soil. The relatively small area of disturbance would not be expected to result in significant amounts of pollutant discharge that could not be adequately handled by the silt fencing.



**ATTACHMENT G TO TCEQ-0602**

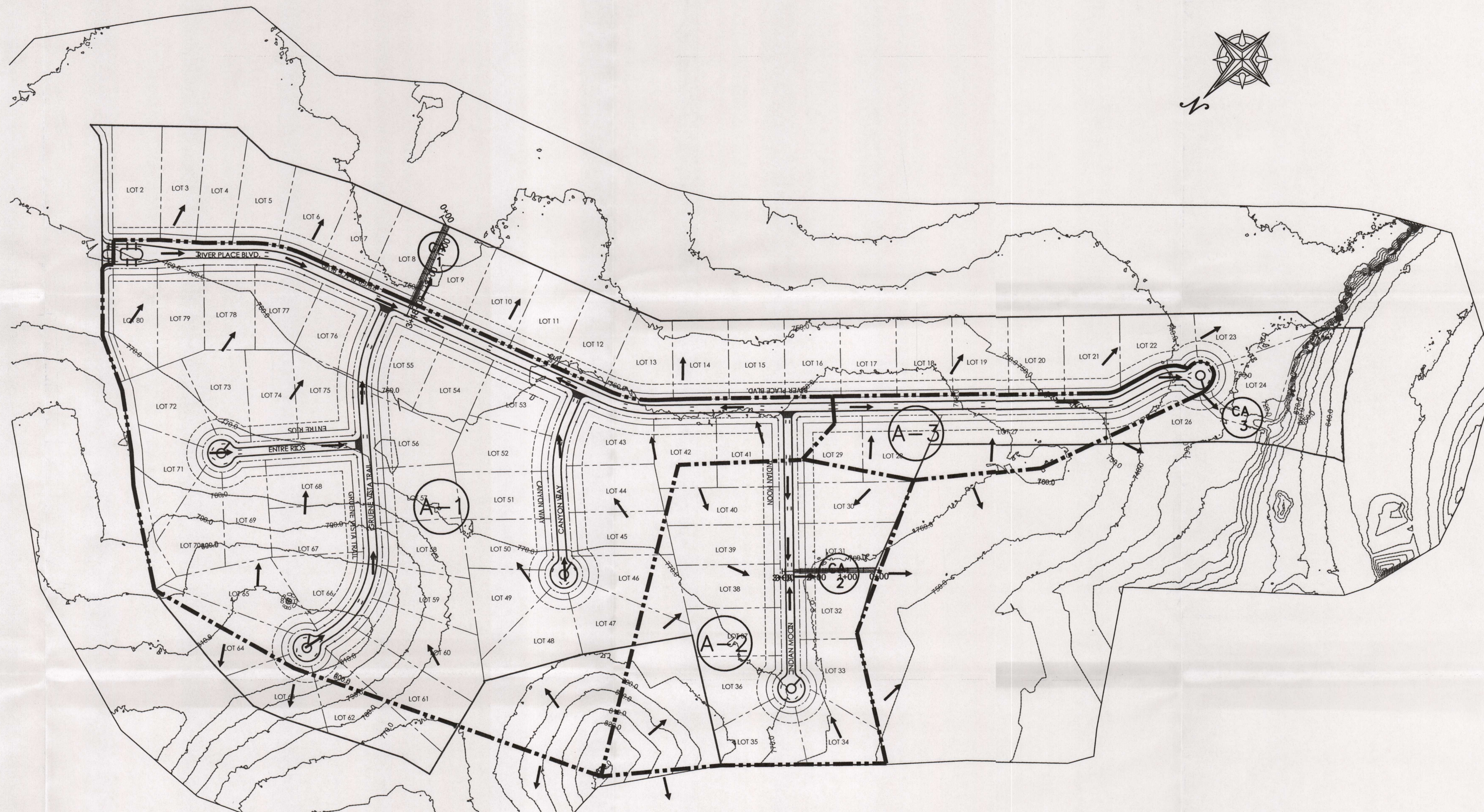
**DRAINAGE AREA MAP**



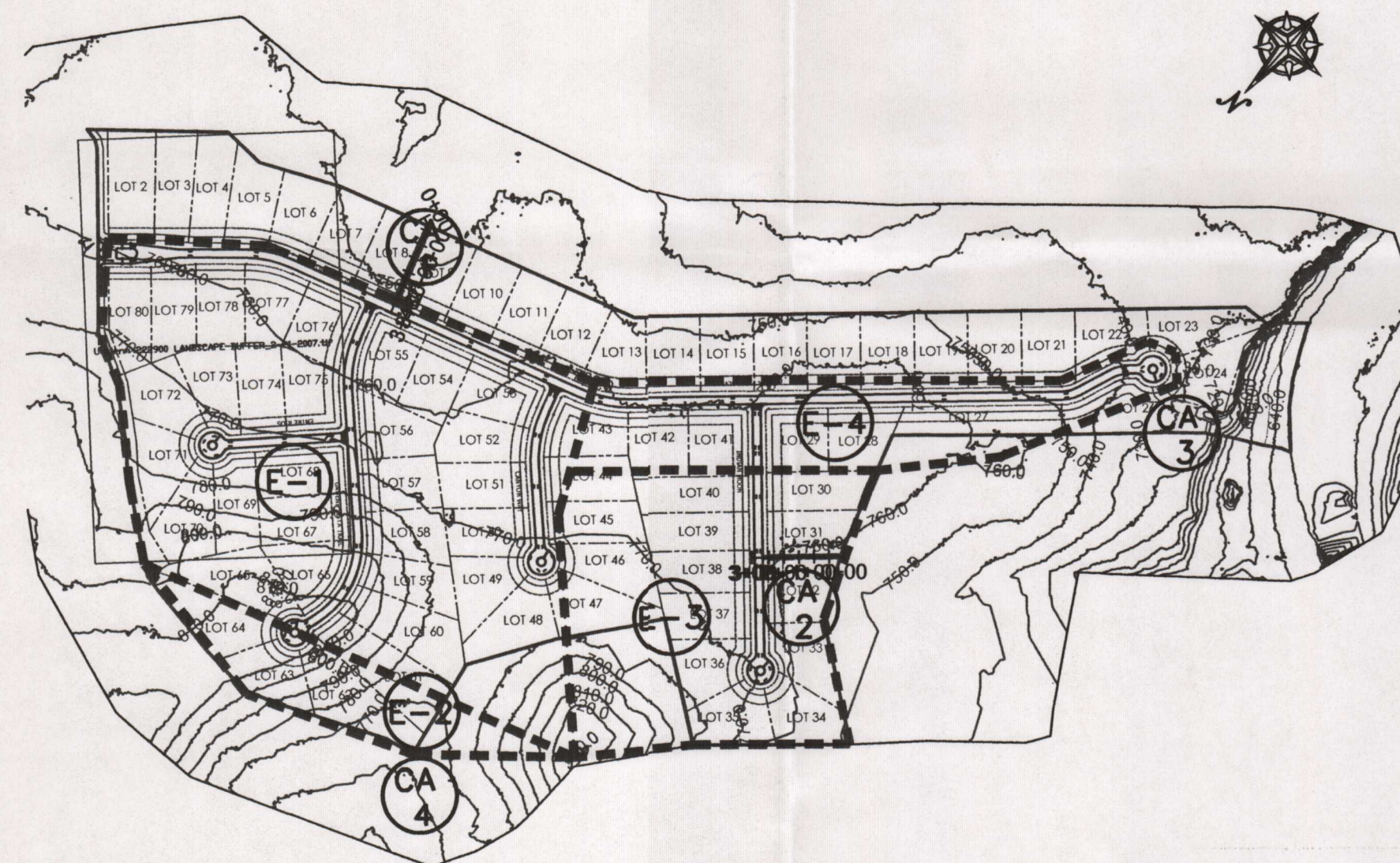
LEGEND

- A-1 PROP. DRAINAGE AREA  
E-1 EXIT. DRAINAGE AREA  
CA 1 CATCHMENT POINT

--- PROP. WATERSHED  
--- EXIST. WATERSHED



PROP. HYDROLOGY  
SCALE: 1"=200'



EXIST. HYDROLOGY  
SCALE: 1"=500'

PROPOSED HYDROLOGY									
AREA NO.	AREA ACRES	C	TIME OF CONC.	I-5	Q-5	I-25	Q-25	I-100	Q-100
A-1	49.84	.61	31.85	3.83	116.44	5.11	155.35	6.38	193.96
A-2	16.69	.61	25.65	4.37	44.49	5.80	59.04	7.00	71.26
A-3	5.78	.61	18.35	4.93	17.38	6.97	24.57	8.69	30.64

EXISTING HYDROLOGY									
AREA NO.	AREA ACRES	C	TIME OF CONC.	I-5	Q-5	I-25	Q-25	I-100	Q-100
E-1	41.10	.50	33.95	3.68	75.60	4.91	100.90	6.14	126.18
E-2	5.58	.50	14.51	5.94	16.57	7.85	21.90	9.77	27.25
E-3	19.32	.50	25.65	4.37	42.21	5.80	56.02	7.00	67.62
E-4	11.58	.50	22.95	4.65	28.92	6.18	35.78	7.71	44.64

RIVER PLACE AT GRUENE  
NEW BRAUNFELS, TEXAS  
---  
OVERALL DRAINAGE PLAN

PROJECT NO. 2229.00  
APRIL XX, 2007  
SHEET 4 OF XX



REVISIONS:	
NO.	DATE

FORD ENGINEERING INC.  
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10927 WYE DRIVE, SUITE 104, SAN ANTONIO, TEXAS 78217, (210) 560-4777



**ATTACHMENT H TO TCEQ-0602**

TEMPORARY SEDIMENT POND(S) PLANS AND CALCULATIONS

NOT USED



## ATTACHMENT I TO TCEQ-0602

### INSPECTION AND MAINTENANCE FOR BMPs

#### SILT FENCE

- Inspect silt fences daily during periods of prolonged rainfall, immediately after each rainfall event, and weekly during periods of no rainfall. Make any required repairs immediately.
- Sediment must be removed when it reaches a depth of 6". Take care to avoid damaging the fence during cleanout.
- Silt fences should not be removed until the upslope area has been permanently stabilized. Contaminated sediment deposits must be removed and disposed of off site in accordance with applicable regulations. Uncontaminated sediment deposits remaining in place after the silt fence has been removed should be dressed to conform with the final grading and stabilized.
- Clean or remove and replace stone filter or filter fabric if they become clogged.
- Maintain records of inspection, routine maintenance and repair for the duration of the project, or longer if required by other regulations.

#### CONSTRUCTION ENTRANCE/EXIT

- The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. 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 rights-of-way should be removed immediately by contractor.
- When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
- When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
- All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

#### ROCK FILTER DAMS

- Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.
- Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
- Repair any loose wire sheathing.
- The berm should be reshaped as needed during inspection.



- The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
- The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.



## ATTACHMENT J TO TCEQ-0602

### SCHEDULE OF INTERIM AND PERMINANT SOIL STABILIZATION PRACTICES

1. After completion of the roadway construction, the new area adjacent to the paving and within the medians will receive 4" of topsoil and be solid sodded, seeded, or mulched to establish a vegetative belt around the site. Existing areas that are disturbed will receive the same treatment to replace vegetation lost during construction.
2. It is not anticipated that, at any time, construction will be halted for a period long enough to require temporary measures be implemented. If this does happen, provisions are made in the plans and specifications, to provide such temporary erosion control plantings as may be necessary.
3. Daily records will be kept, detailing among other things, beginning of major grading operations, cessation of construction, either temporary or permanent, and dates when stabilization measures are implemented.
4. It is not anticipated that interim soil stabilization practices will be required.
5. Since this is a single family residential development, stabilization measures regarding the disturbance on individual lots shall be as follows:

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.



**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: River Place at Gruene

**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.       n/a       These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.  
  
          —     The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.  
          —     A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is provided below
  
3.       n/a       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.  
  
            x       This site will be used for low density single-family residential development and has 20% or less impervious cover.  
          —     This site will be used for low density single-family residential development but has more than 20% impervious cover.  
          —     This site will not be used for low density single-family residential development.
  
5.       n/a       The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover



increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

- ☐ **ATTACHMENT A - 20% or Less Impervious Cover Waiver.** This site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.
- ☐ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
- ☐ This site will not be used for multi-family residential developments, schools, or small business sites.

6. **ATTACHMENT B - BMPs for Upgradient Stormwater.**

- ☐ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is identified as **ATTACHMENT B** at the end of this form.
- ☒ If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.
- ☐ 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.**

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

- ☐ The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.



x   **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.   n/a   **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.   n/a   The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

  n/a   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.   n/a   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. n/a 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:

Lee Perry

Print Name of Customer/Agent

  
Signature of Customer/Agent

5/11/07

Date



**ATTACHMENT A TO TCEQ-0600**

**20% OR LESS IMPERVIOUS COVER WAIVER**

NOT REQUESTED



## **ATTACHMENT B TO TCEQ-0600**

### **BMPs FOR UP-GRADIENT STORMWATER**

This site is at the highpoint of a local drainage area so no upgradient run-off flows across the site.



## **ATTACHMENT C TO TCEQ-0600**

### **BMPS FOR ON-SITE STORMWATER**

Velocity Dissipators are to be installed at the downstream end of the drainage channels that discharge the run-off off-site that is developed on-site. These dissipators will act as an erosion and pollution control device.



## **ATTACHMENT D TO TCEQ-0600**

### **BMPS FOR SURFACE STREAMS**

Velocity Dissipators are to be installed at the downstream end of the drainage channels that discharge the run-off off-site that is developed on-site. These dissipators will act as an erosion and pollution control device.

Five geologic features were identified on the site. One of these features is stated to be naturally sensitive. This feature is a manmade water well that will be abandoned per TCEQ requirements during construction.



## **ATTACHMENT E TO TCEQ-0600**

### **REQUEST TO SEAL FEATURES**

A request is being made to seal feature S-1. The feature is a water well being used by the current owner but will be capped and abandoned during construction due to the installation of a public water system which will serve the site.

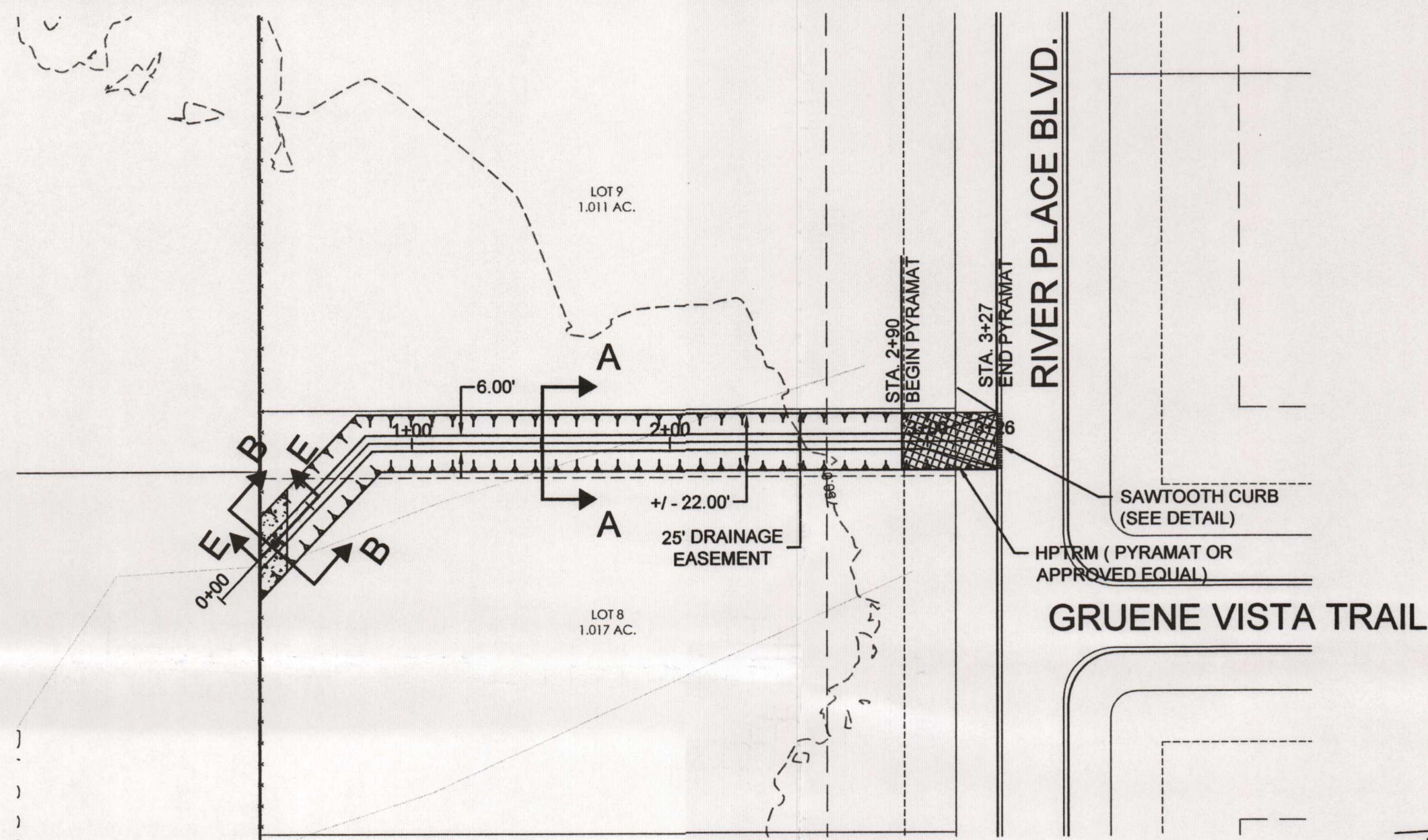


**ATTACHMENT F TO TCEQ-0600**

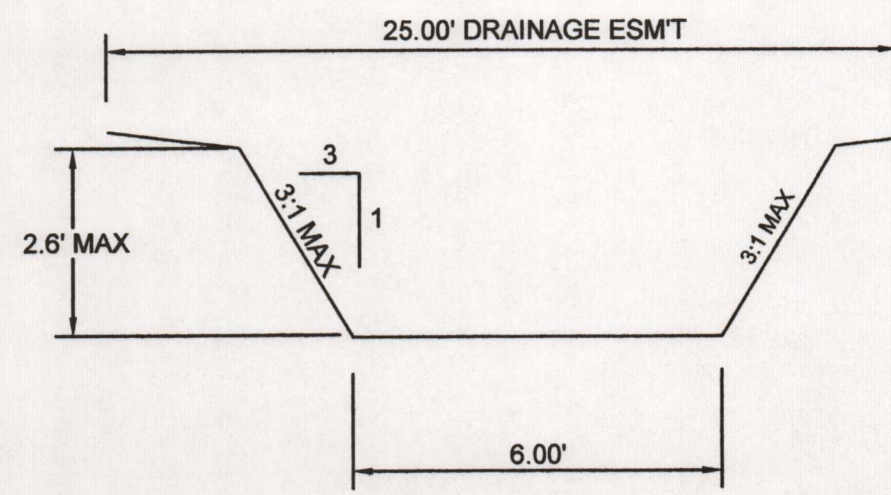
**CONSTRUCTION PLANS**

SEE ATTACHED

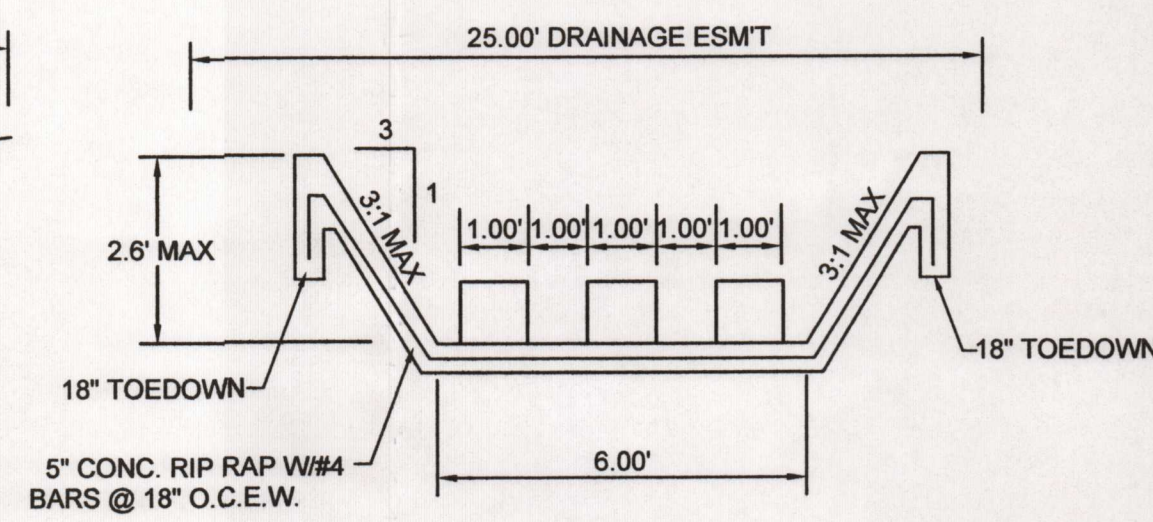




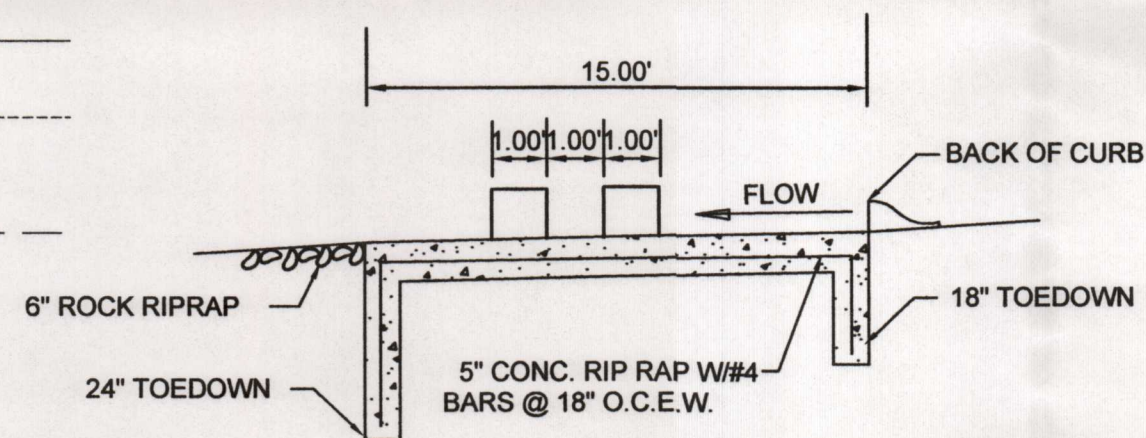
**DRAIN "A"**



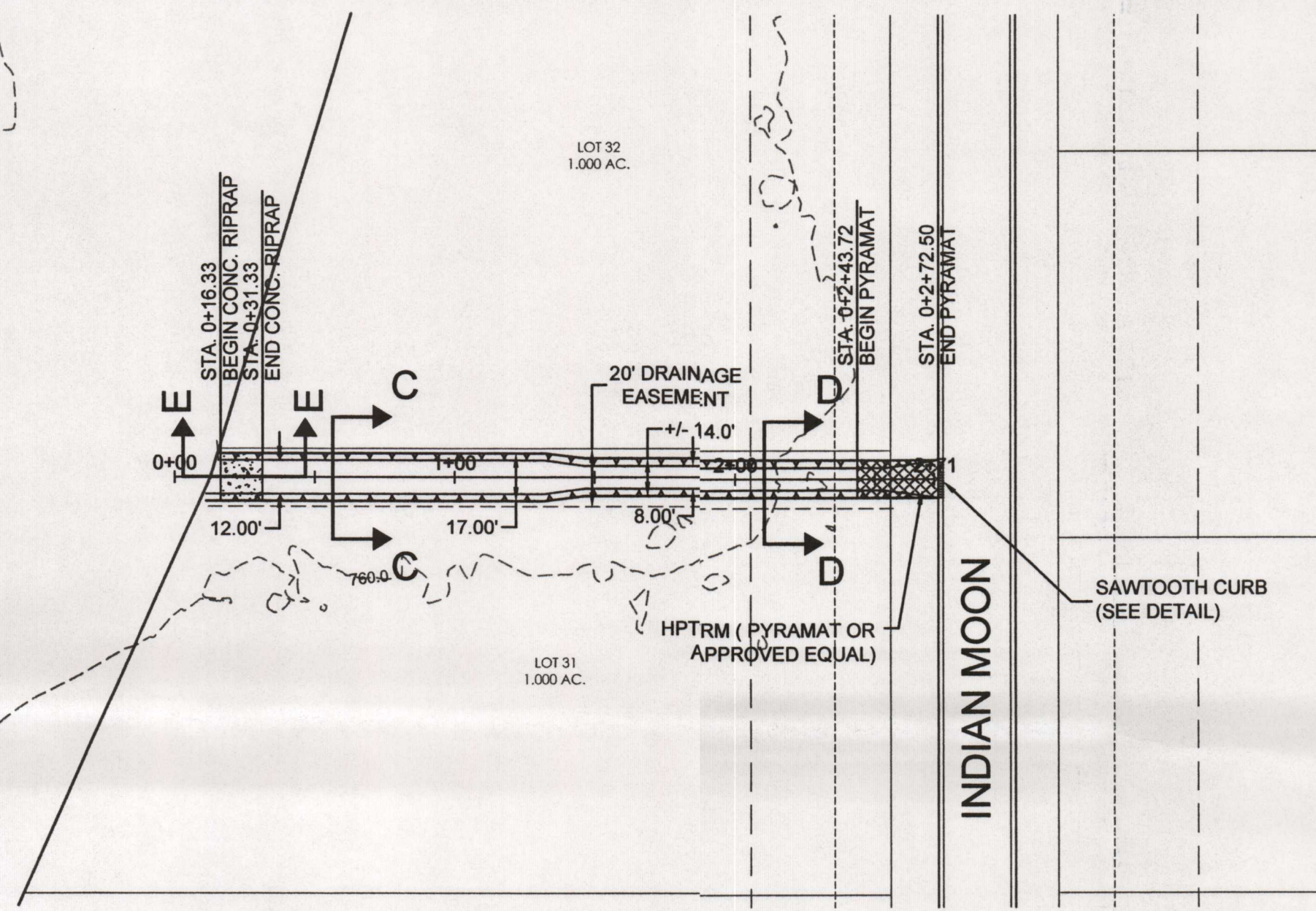
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NOT TO SCALE



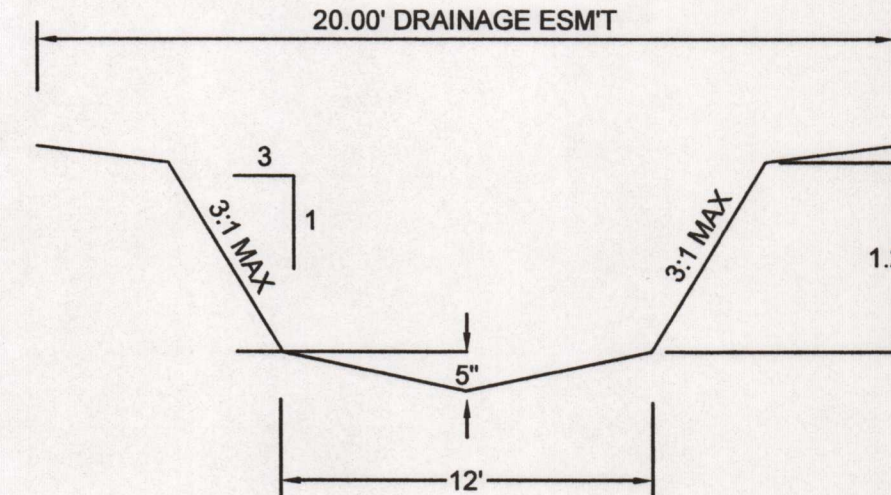
**SEC "B-B" DRAIN "A"**  
NOT TO SCALE



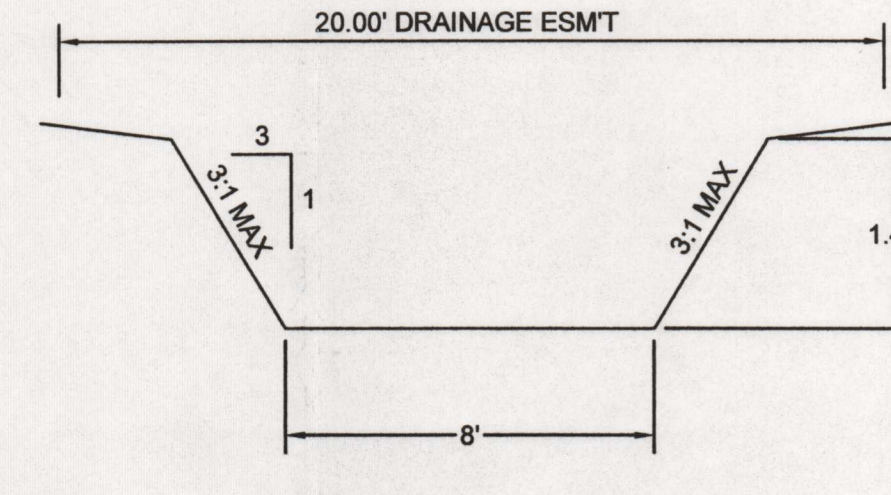
**SEC "E-E" DRAIN**  
NOT TO SCALE  
**SAWTOOTH CURB DETAIL**  
NOT TO SCALE



**DRAIN "B"**

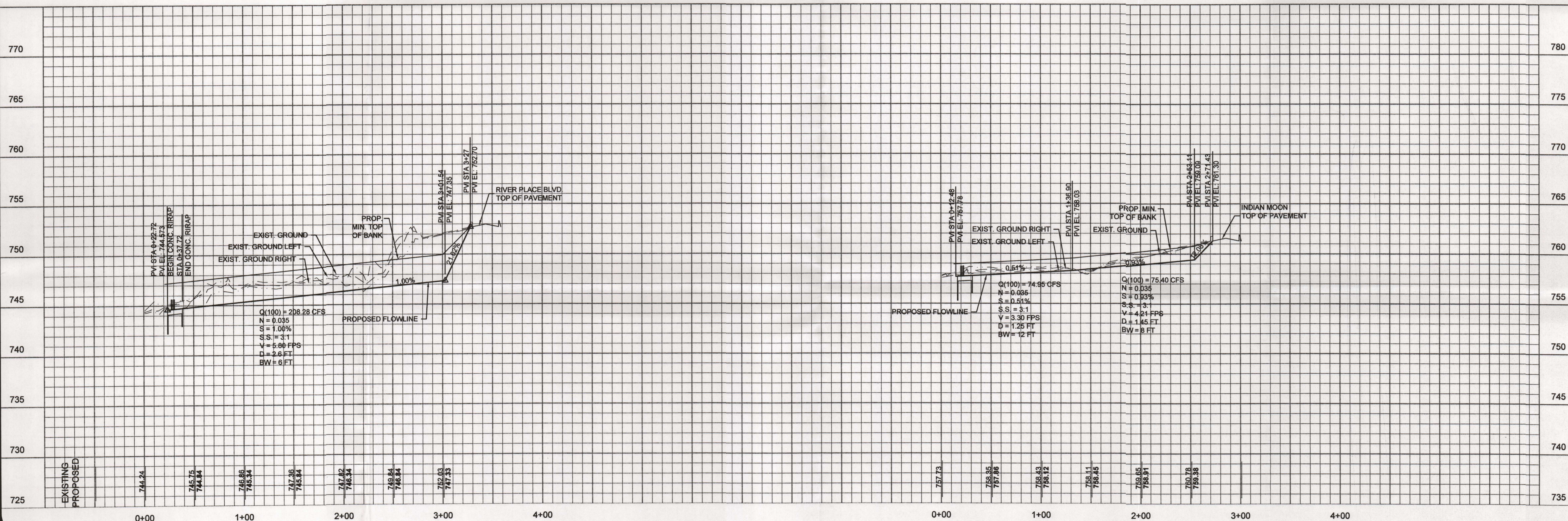


**SEC "C-C" DRAIN "B"**  
NOT TO SCALE



**SEC "D-D" DRAIN "B"**  
NOT TO SCALE

HORIZONTAL SCALE : 1" = 50'  
VERTICAL SCALE : 1" = 5'



**RIVER PLACE AT GRUENE**  
NEW BRAUNFELS, TEXAS  
DRAIN PLAN AND PROFILE  
DRAIN X  
DRAIN A AND B

PROJECT NO. 2229.00  
MAY 15, 2007  
SHEET 19 OF 19



NO.	DATE

**FORD ENGINEERING INC.**  
ENGINEERING • PLANNING • DEVELOPMENT  
10927 WYE DRIVE, SUITE 104, SAN ANTONIO, TEXAS 78217, (210) 590-4777



**ATTACHMENT G TO TCEQ-0600**

**INSPECTION, MAINTENANCE, REPAIR, AND RETROFIT**

NOT USED



**ATTACHMENT H TO TCEQ-0600**

**PILOT-SCALE FIELD TESTING PLAN**

NOT REQUIRED



## **ATTACHMENT I TO TCEQ-0600**

### **MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION**

The proposed development will not alter the natural drainage paths significantly for the storwater run-off. All run-off will still be directed to the Guadalupe River.



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

I \_\_\_\_\_ Perry Blanton \_\_\_\_\_  
Print Name

\_\_\_\_\_ Owner \_\_\_\_\_  
Title - Owner/President/Other

of \_\_\_\_\_ Blanton Development Company \_\_\_\_\_  
Corporation/Partnership/Entity Name

have authorized \_\_\_\_\_ Lee Perry \_\_\_\_\_  
Print Name of Agent/Engineer

Of \_\_\_\_\_ Ford Engineering, Inc. \_\_\_\_\_  
Print Name of Firm

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

I also understand that:

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

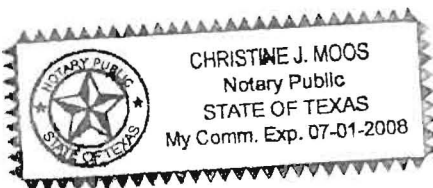
Perry Blanton  
Applicant's Signature

3/19/07  
Date

THE STATE OF TEXAS §  
County of Guadalupe TRAVIS §

BEFORE ME, the undersigned authority, on this day personally appeared Perry Blanton 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 19<sup>th</sup> day of March, 2007



NOTARY PUBLIC

Christine J. Moos  
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 7-1-2008



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

NAME OF PROPOSED REGULATED ENTITY: River Place at Gruene  
REGULATED ENTITY LOCATION: 300 feet northeast of the intersection of Bretzke Lane and River Forest Dr  
NAME OF CUSTOMER: Blanton Development Co.  
CONTACT PERSON: Perry Blanton PHONE: 210-508-1505  
(Please Print)

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

**AUSTIN REGIONAL OFFICE (3373)**

- ☐ Hays  
☐ Travis  
☐ Williamson

**SAN ANTONIO REGIONAL OFFICE (3362)**

- ☐ Bexar ☐ Medina  
☐ Comal ☐ Uvalde  
☐ Kinney

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE Texas Commission on Environmental Quality. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT.** THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

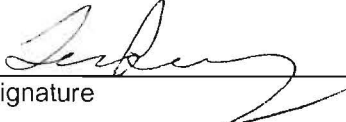
• **SAN ANTONIO REGIONAL OFFICE**

- ☐ **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	95 Acres	\$ 5,000.00
Water Pollution Abatement, 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	\$

  
Signature

5/11/07  
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	\$1,000
	5 < 10	\$2,000
	10 < 50	\$3,000
	≥50	\$5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1	\$2,000
	1 < 5	\$3,000
	5 < 10	\$4,000
	≥10	\$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



**BLANTON DEVELOPMENT COMPANY**

4404 W. WILLIAM CANNON DR., #P-167  
AUSTIN, TX 78749-1423

CITIBANK, N.A.  
AUSTIN, TX 78747  
88-9353/1131

2306

3/12/2007

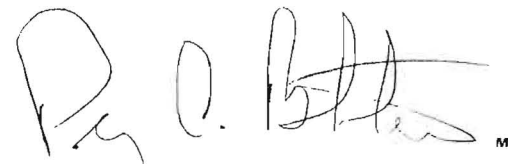
PAY TO THE ORDER OF Texas Commission on Environmental Quality

\$\*\*5,000.00

Five Thousand and 00/100\*\*\*\*\*

DOLLARS 

Texas Commission on Environmental Quality  
P.O. Box 13089  
Austin, TX 78711-3089

 MP

River Place at Guene

⑈002306⑈ ⑆113193532⑆ 0334236362⑈



# TCEQ Core Data Form

TCEQ Use Only

If you have questions on how to fill out this form or about our Central Registry, please contact us at 512-239-5175.

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.

## SECTION I: General Information

**1. Reason for Submission** *Example: new wastewater permit; IHW registration; change in customer information; etc.*

**New registration - Water Pollution Abatement Plan**

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

YES ☒ NO

**3. Customer Reference Number-if issued**

**4. Regulated Entity Reference Number-if issued**

CN

(9 digits)

RN

(9 digits)

## SECTION II: Customer Information

**5. Customer Role (Proposed or Actual) -- As It Relates to the Regulated Entity Listed on This Form**

**Owner**

**Please check one of the following:**

☒

Owner

Operator

Owner and Operator

Occupational Licensee

Volunteer Cleanup Applicant

Other

**TCEQ Use Only**

Superfund

PST

Respondent

**6. General Customer Information**

☒

New Customer

Change to Customer Information

Change in Regulated Entity Ownership

No Change \*

**\*If a No Change and Section I is complete, skip to Section III - Regulated Entity Information.**

**7. Type of Customer:**

Individual

Sole Proprietorship - D.B.A.

Partnership

☒

Corporation

Federal Government

State Government

County Government

City Government

Other Government

Other:

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

*If new name, enter previous name:*

Blanton Development Co.

**9. Mailing Address:**

4404 W. William Cannon, #P-167

City

State

ZIP

ZIP + 4

Austin

TX

78749

**10. Country Mailing Information if outside USA**

**11. E-Mail Address if applicable**

**12. Telephone Number**

**13. Extension or Code**

**14. Fax Number if applicable**

(210) 508-1505

**15. Federal Tax ID (9 digits)**

**16. State Franchise Tax ID Number if applicable**

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

74-2496205

**18. Number of Employees**

☒

0-20

21-100

101-250

251-500

501 and higher

**19. Independently Owned and Operated?**

Yes

No

## SECTION III: Regulated Entity Information

**20. General Regulated Entity Information**

New Regulated Entity

Change to Regulated Entity Information

No Change\*

**\*If "No Change" and Section I is complete, skip to Section IV - Preparer Information.**



<b>21. Regulated Entity Name</b> <i>(If an individual, please print last name first)</i>						
River Place at Gruene						
<b>22. Street Address</b> (No PO Boxes)		300 feet northeast of the intersection of Bretzke Lane and River Forest Dr.				
		City		State	ZIP	ZIP + 4
		New Braunfels -ETJ		TX		
<b>23. Mailing Address</b>		4404 W. William Cannon, #P-167				
		City		State	ZIP	ZIP + 4
		Austin		TX	78749	
<b>24. E-Mail Address:</b>						
<b>25. Telephone Number</b>		<b>26. Extension or Code</b>		<b>27. Fax Number if applicable</b>		
(210) 508-1505						
<b>28. Primary SIC Code</b> (4 digits)		<b>29. Secondary SIC Code</b> (4 digits)		<b>30. Primary NAICS Code</b> (5 or 6 digits)		
6552		9902		237210		
				<b>31. Secondary NAICS Code</b> (5 or 6 digits)		
<b>32. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description)</b>						
Real Estate						
<b>Questions 33 - 37 address geographic location. Please refer to the instructions for applicability.</b>						
<b>33. County</b>		Travis				
<b>34. Description of Physical Location</b>						
4404 W. William Cannon, #P-167						
<b>35. Nearest City</b>			<b>State</b>		<b>Nearest Zip</b>	
Austin			TX		78749	
<b>36. Latitude (N)</b>			<b>37. Longitude (W)</b>			
<i>Degrees</i>	<i>Minutes</i>	<i>Seconds</i>	<i>Degrees</i>	<i>Minutes</i>	<i>Seconds</i>	
30	13	23	97	50	23	
<b>38. TCEQ Programs In Which This Regulated Entity Participates</b> <i>Not all programs have been listed. Please add to this list as needed. If you don't know or are unsure, please mark "Unknown". If you know a permit or registration # for this entity, please write it below the program.</i>						
Animal Feeding Operation		Petroleum Storage Tank		Water Rights		
Title V - Air		Wastewater Permit		x	Edwards Aquifer	
Industrial & Hazardous Waste		Water Districts				
Municipal Solid Waste		Water Utilities		Unknown		
New Source Review - Air		Licensing - TYPE(s)				
<b>Section IV: Preparer Information</b>						
<b>39. Name</b>			<b>40. Title</b>			
Lee Perry – Ford Engineering, Inc.			Project Manager			
<b>41. Telephone Number</b>		<b>42. Extension or Code</b>		<b>43. Fax Number if applicable</b>		
(210) 590-4777				(210) 590-4940		
<b>44. E-mail Address:</b>		lee@fordengineering.com				