TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 15, 2016

Mr. Bill Skeen
Grey Forest Development, LLC
3600 Bee Caves Road, Suite 200
Austin, Texas 78746

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Mission Hills Apartments; Located at 2745 Westpointe Drive; New Braunfels, Texas

TYPE OF PLAN: Request for Modification of an Approved Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No. RN106123755; Additional ID No. 13000181

Dear Mr. Skeen:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP modification for the above-referenced project submitted to the San Antonio Regional Office by Stantec Consulting Services, Inc. on behalf of Grey Forest Development, LLC on June 20, 2016. Final review of the WPAP modification was completed after additional material was received on August 3, 2016. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The Residences at Westpointe WPAP was approved by letter dated July 15, 2011 for a commercial project with an area of approximately 24.50 acres with 17.60 acres (71.83 percent) of impervious cover. The project included the construction of multi-family apartments and a commercial office building.

PROJECT DESCRIPTION

This WPAP modification proposes the modification of the existing sedimentation/filtration basin. The weir height of the overflow structure is being vertically raised from an elevation of 903.00 feet to 903.17 feet to account for the additional 0.33 acres of impervious cover that has been built out under the original WPAP. The impervious cover now totals 17.93 acres. Project wastewater will be disposed of by conveyance to the existing Gruene Road Wastewater Treatment Plant owned by the New Braunfels Utilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, an existing sedimentation/filtration basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), has been constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment is 16,094 pounds of TSS generated from a total of 17.93 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The total capture volume of the sedimentation/filtration basin is 109,880 cubic feet (86,321 cubic feet required). The filtration system for the basin will consist of 17,544 square feet of sand (7,193 square feet required) meeting ASTM C-33, which is 18 inches thick and an underdrain piping system covered with a minimum two inch gravel layer.

GEOLOGY

According to the geologic assessment included with the application, the site is located within the Del Rio Clay. One non-sensitive geologic feature and one non-sensitive manmade feature were noted by the project geologist. The San Antonio Regional Office did not conduct a site assessment for this modification.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated July 15, 2011.

II. All sediment and/or media removed from the permanent pollution abatement measure during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

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

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

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

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

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

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

During Construction:

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

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

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The

applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

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

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

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

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

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

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

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

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

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

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within

ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region
Texas Commission on Environmental Quality

LB/DPM/eg

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

cc: Ms. Mary Jane Phillips, P.E., Stantec Consulting Services, Inc.
Mr. Robert Camareno, City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
Mr. George Wissmann, Comal Trinity Groundwater Conservation District
TCEQ Central Records, Building F, MC 212

LSO
It's all in the delivery.

Airbill No. Z3107616

Lone Star Overnight
1-800-800-8984
www.lso.com

SHIP TO: Thomas Hornpeth
ENGINEERS OFFICE
COMAL COUNTY ROAD DEPT
195 DAVID JONAS DR
NEW BRAUNFELS, TX 78132
2104903096

From:
CYNTHIA VEGA
TCEQ REG 13
14250 JUDSON RD
SAN ANTONIO, TX 78233
2104034003

RECEIVED
JUN 22 2016
COUNTY ENGINEER

2 SAT **LSO 2ND DAY**
2ND DAY DELIVERY

PRINT DATE: 6/21/2016
QUICKCODE: COMAL CO RD DEP WEIGHT: 1.00LBS
REF 1: ELAINE GROSENHEIDER 1D00V.0000

Fold on above line and place shipping label in pouch on package. Please be sure the barcodes and addresses can be read and scanned. Shipping instructions

1. Fold this page along the horizontal line above.
2. Place this Airbill in the shipping label pouch on the package you are shipping. Please be sure the barcodes and addresses can be read and scanned.
3. To locate a drop box near you, click on **Find A Drop Box** from the home page main menu.
4. To schedule a pickup, click on **Request Pickup**.

WARNING: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your Lone Star Overnight account number.
This label is valid for use for 3 months from the date printed. Use of expired labels may result in delayed billing and / or additional research charges.

LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. Additional limitations of liability are contained in our current Service Guide. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR 8:30 AM DELIVERIES OR RESIDENTIAL DELIVERIES.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 20, 2016

RECEIVED
JUN 22 2016
COUNTY ENGINEER

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

Re: Edwards Aquifer, Comal County

PROJECT NAME: Mission Hill Apartments, located at 2745 Westpointe Drive, New Braunfels, Texas

PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program

Dear Mr. Hornseth:

The referenced application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval. More information regarding this project may be obtained from the TCEQ Central Registry website at http://www.tceq.state.tx.us/permitting/central_registry/.

Please forward your comments to this office by July 20, 2016.

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

Sincerely

Todd Jones, Water Section Work Leader
San Antonio Regional Office

TJ/eg

BURY

now

Stantec

WATER POLLUTION ABATEMENT PLAN MODIFICATION

Mission Hill Apartments
f.k.a. Residences at Westpointe
2745 Westpointe Drive
New Braunfels, Texas 78132

June 2016

TBPE #F-6324

6/13/16

LET'S SOLVE IT.

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: Mission Hill Apartments						**2. Regulated Entity No.: RN106123755**			
3. Customer Name: Gray Forest Development, LLC						**4. Customer No.: CN603962275**			
5. Project Type: (Please circle/check one)	New		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential			**8. Site (acres):**		24.50	
9. Application Fee:	$6,500.00		**10. Permanent BMP(s):**			1 Sand Filter Water Quality Pond			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Comal		**14. Watershed:**			Guadalupe River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	_x_	___	___	___
Region (1 req.)	___	_x_	___	___	___
County(ies)	___	_x_	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	_x_Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge _x_New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

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

Charles F. Hedges, Jr.
Print Name of Customer/Authorized Agent

Charles F. Hedges, Jr. 5/9/2016
Signature of Customer/Authorized Agent Date

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

GENERAL INFORMATION

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Charles F. Hedges, Jr.

Date: 5/9/2016

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Mission Hill Apartments
2. County: Comal
3. Stream Basin: Bleiders Creek
4. Groundwater Conservation District (If applicable): Comal Trinity GCD
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☐ WPAP
   ☐ SCS
   ☒ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

Contact Person: Bill Skeen
Entity: Grey Forest Development, LLC
Mailing Address: 3600 Bee Caves Road, Suite 200
City, State: Austin, Texas Zip: 78746
Telephone: (512) 327-8800 FAX: (512) 328-0491
Email Address: bills@forl.com

8. Agent/Representative (If any):

Contact Person: Mary Jane Phillips, PE
Entity: Stantec Consulting Service, Inc
Mailing Address: 70 NE Loop 410, Suite 1100
City, State: San Antonio, Texas Zip: 78216
Telephone: (210) 525-9090 FAX: (210) 525-0529
Email Address: mjphillips@buryinc.com

9. Project Location:

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

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

The 24.50 acre tract is located at the southeast corner of Westpointe Drive and Oak Run Parkway.

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

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

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

☒ Survey staking will be completed by this date: N/A

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

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

15. Existing project site conditions are noted below:

- ☐ Existing commercial site
- ☐ Existing industrial site
- ☐ Existing residential site
- ☐ Existing paved and/or unpaved roads
- ☐ Undeveloped (Cleared)
- ☐ Undeveloped (Undisturbed/Uncleared)
- ☒ Other: Phase 1 Apartments are complete, Commercial parcel is currently under construction, Phase 2 Apartments are set to go to construction

Prohibited Activities

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

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

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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

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

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

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

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

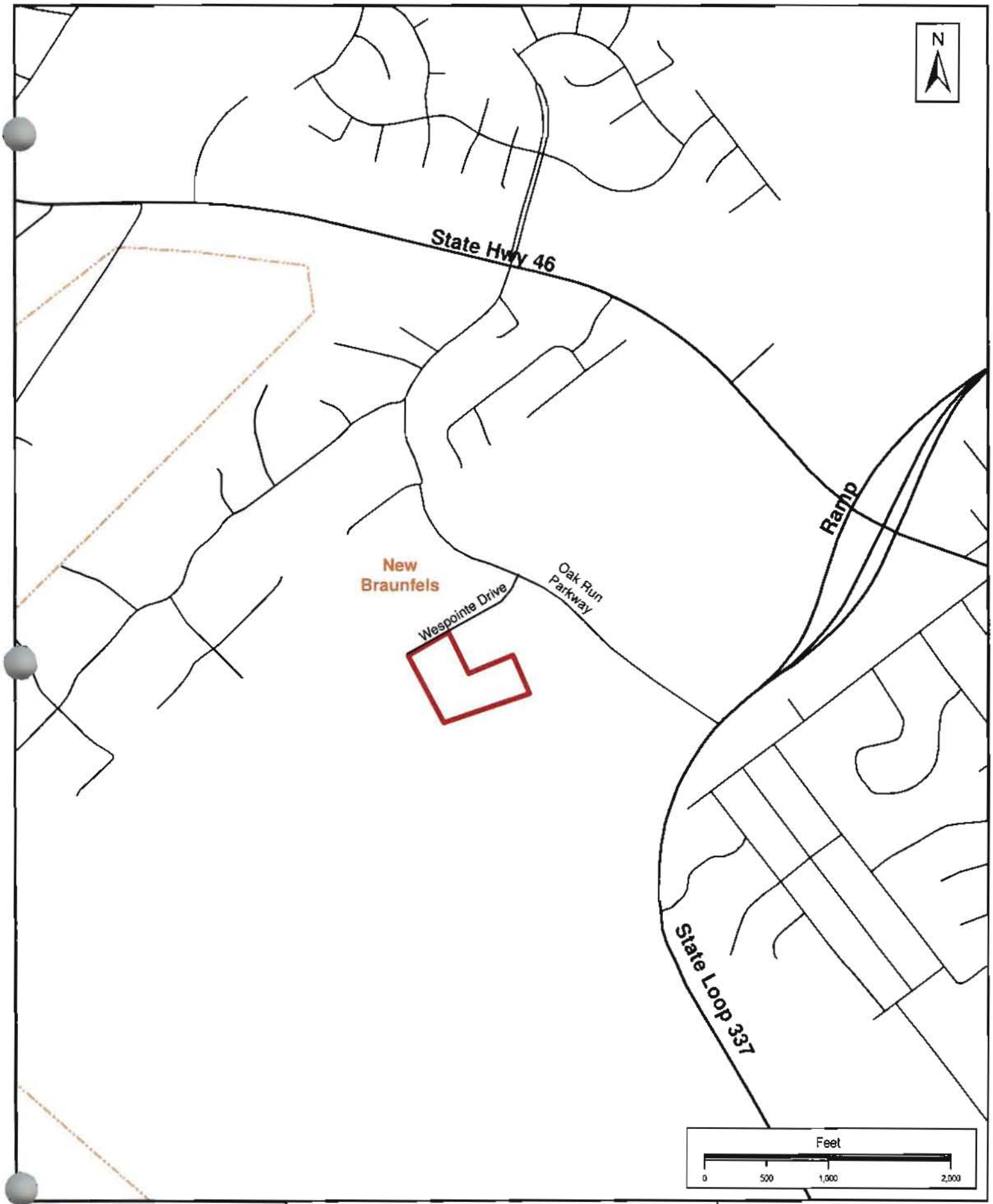
☐ TCEQ cashier
☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

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

ATTACHMENT A

ROAD MAP



Stantec
70 NE Loop 410, Suite 1100
San Antonio, Texas 78216
(210) 525-9090, Phone
TBPE #F-6324

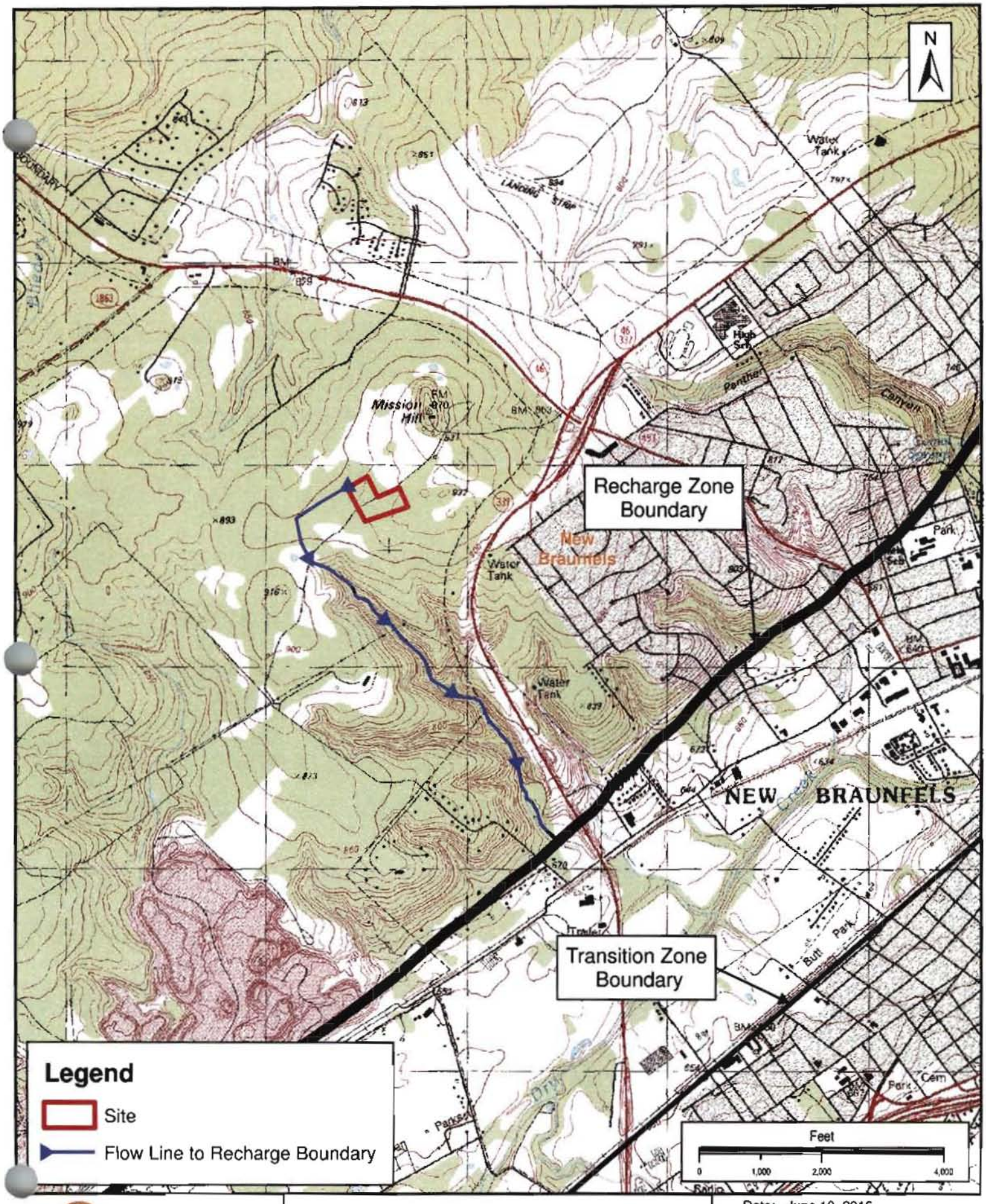
www.stantec.com

Road Map
Mission Hill Apartments Phase II
City of New Braunfels

Date: June 10, 2016
File: Road Map.mxd
Scale: 1 : 12,000
Tech: DMC
Project Number: R0110711-50002

ATTACHMENT B

USGS/EDWARDS RECHARGE ZONE MAP
(Scale 1" = 2,000')



Stantec

70 NE Loop 410, Suite 1100
San Antonio, Texas 78216
(210) 525-9090, Phone

TBPE #F-6324

www.stantec.com

New Braunfels West USGS
Mission Hill Apartments Phase II
City of New Braunfels

Date: June 10, 2016
File: New Braunfels West USGS.mxd
Scale: 1 : 24,000
Tech: DMC
Project Number: R0110711-50002

ATTACHMENT C

PROJECT DESCRIPTION

PROJECT DESCRIPTION

The project is a ±24.50-acre development located near the southwest corner of the intersection of Oak Run Parkway and Wespointe Drive. This entire development lies within the city limits of the City of New Braunfels in Comal County, Texas. The project is located in the Edwards Aquifer Recharge Zone (EARZ), and is within watershed of the Guadalupe River via the Blieders Creek tributary.

This project entails three phases of construction. Currently, the first phase has been constructed and is currently in operation. This consisted of a multi-family development as well as construction of the sand filter water quality pond. Phase 1 totals ±7.72 acres with an approved increase of impervious cover of ±5.25-acres (68%). The water quality pond and detention pond was constructed on ±2.14 acres. Phase 2 consists of a ±6.10 acre commercial development which is currently under construction. Under the approved WPAP, an impervious coverage of 95% (±5.80 acres) was used. The final phase of construction consists of a 195 unit multi-family development on a ±8.338 acre site. Under the approved WPAP, this phase of construction was approved to handle an increase of impervious area of ±5.65 acres (66%). The purpose of this WPAP modification is to update the final phase site plan with a 0.328 increase in impervious area, which in turn increases the total project impervious area to 73%.

A sand filter water quality pond has been constructed as the Permanent Best Management Practice (BMP's) onsite to treat stormwater generated from this development. The water quality pond has been designed in accordance with TCEQ's Technical Guidance Manual to remove 80% of the increased Total Suspended Solids (TSS) for the proposed development in its entirety. Once treated, storm water will be detained by an existing detention pond located within the development. Storm water from this pond will be released to an existing storm system, head northerly and tie into an existing storm drainage system constructed during the development of the Enclave at Westpointe Village. From there, the storm water will be released into an existing drainage easement within the Hunters Creek Subdivision and eventually discharge into Blieders Creek. Temporary BMP's will be constructed and placed throughout the site prior to construction. All areas not covered by the building footprint, sidewalks, or pavement will be stabilized with either sod or landscaping prior to the removal of these Temporary BMP's.

GEOLOGIC ASSESSMENT

GEOLOGIC ASSESSMENT

For

MISSION HILLS II
WESTPOINTE DRIVE
NEW BRAUNFELS, COMAL COUNTY, TEXAS

Prepared for

FASKEN OIL AND RANCH, LTD.
3600 BEE CAVE ROAD
AUSTIN, TEXAS 78746

Prepared by

Professional Service Industries, Inc.
Three Burwood Lane
San Antonio, Texas 78216
Telephone (210) 342-9377

PSI PROJECT NO.: 0435-2490

November 9, 2015

PSI Information To Build On
Engineering • Consulting • Testing

November 9, 2015

Fasken Oil and Ranch Ltd.
3600 Bee Cave Road, Suite 200
Austin, Texas 78746

Attn: Mr. Bill Skeen

Re: Geologic Assessment
Proposed Multifamily Development – Mission Hills II
Westpointe Drive Near Oak Run Parkway
New Braunfels, Comal County, Texas
PSI Project No. 435-2490

Dear Mr. Skeen:

Professional Service Industries, Inc. (PSI) has completed a geologic recharge assessment for the above referenced project in compliance with the Texas Commission on Environmental Quality (TCEQ) requirements for regulated developments located on the Edwards Aquifer Recharge Zone (EARZ). The purpose of this report is to describe surficial geologic units and identify the locations and extent of significant recharge features present in the development area.

AUTHORIZATION

Authorization to perform this assessment was given by a signed copy of PSI Proposal No. 154094 between Fasken Oil & Ranch Ltd. and PSI dated June 5, 2015.

PROJECT DESCRIPTION

The subject site is located on the south side of Westpointe Drive approximately 600' west of Oak Run Parkway in New Braunfels, Comal County, Texas. The Mission Hills II tract is approximately 8.365-acres in size, and is an irregularly shaped parcel of undeveloped land with a gentle slope to the west. A stormwater retention pond borders the tract to the west. The site vegetation consists primarily of native grasses and trees.

REGIONAL GEOLOGY

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone

extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is approximately 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the southeast with near vertical throws. Elevations at the Mission Hills II tract range from approximately 917 feet above mean sea level in the eastern portion of the tract to approximately 902 feet above mean sea level in the western portion of the tract.

Stratigraphy and Structure

The formation mapped at the site is the Upper Cretaceous Del Rio Clay Formation. The site is overlain by an approximate 2' thick veneer of grass covered soil. Rock outcrops were isolated and small, with no significant features noted. According to "The Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County Texas" written by the USGS, the Del Rio Clay ranges in thickness from 40 to 110 feet and forms the upper confining layer for the Edwards Group.

The Del Rio Clay is described as a blue-green to yellow-brown, gypsiferous clay with iron nodules, and abundant fossil oysters (bivalves) characteristic of the formation, *Ilymatogyra arietina*. Minor, thin beds of calcareous siltstone may also occur. The unweathered clay beds contain kaolinite, illite and montmorillonite, which contribute to higher shrink swell potentials. The Del Rio has no recognized cavern development, and no significant porosity or permeability.

No sensitive features scoring more than 40 points on the F-0585 form were observed on the subject tract. One non-sensitive closed depression/solution cavity was observed, but had no subsurface interconnection. The site was predominantly clay and soil covered, approximately 2' thick.

SITE INVESTIGATION

The site investigation was performed by systematically traversing the subject tract, and mapping fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

SUMMARY

No sensitive features were observed on the subject tract. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.

We appreciate this opportunity to be of service to you. If you have any questions, please

do not hesitate to contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Environmental Department Manager

WARRANTY

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for a general geological recharge assessment of this site. PSI warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted geologic methods, only for the site described in this report. These methods have been developed to provide the client with information regarding apparent indications of existing or potential conditions relating to the subject site and are necessarily limited to the conditions observed at the time of the site visit and research. This report is also limited to the information available at the time it was prepared. In the event additional information is provided to PSI following the report, it will be forwarded to the client in the form received for evaluation by the client. There is a possibility that conditions may exist which could not be identified within the scope of the assessment or which were not apparent during the site visit. PSI believes that the information obtained from others during the review of public information is reliable; however, PSI cannot warrant or guarantee that the information provided by others is complete or accurate.

This report has been prepared for the exclusive use of Fasken Oil & Ranch Ltd. for the site discussed herein. Reproductions of this report cannot be made without the expressed approval Fasken Oil & Ranch Ltd. The general terms and conditions under which this assessment was prepared apply solely to Fasken Oil & Ranch Ltd. No other warranties are implied or expressed.

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Geologist: John Langan Telephone: 210/342-9377

Date: November 9, 2015 Fax: 210/342-9401

Representing: PSI TBPG No. 50128 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Mission Hills II

Project Information

1. Date(s) Geologic Assessment was performed: 10/29/15
2. Type of Project:
   - ☒ WPAP
   - ☒ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Rumple-Comfort Asso., 1-8% slopes	B	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.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = 40'
   Site Geologic Map Scale: 1" = 40'
   Site Soils Map Scale (if more than 1 soil type): 1" = _____'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☐ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☒ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☐ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☒ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

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

STRATIGRAPHIC COLUMN

Mission Hills II
Westpointe Drive
New Braunfels, Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Del Rio Clay	40-110	Blue-green to yellow-brown, gypsiferous clay with iron nodules, and abundant fossil oysters (bivalves) characteristic of the formation, *Ilymatogyra arietina*. Minor, thin beds of calcareous siltstone may also occur.
Georgetown Formation	2-20'	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: *waconella wacoensis* brachiopod; low porosity and permeability development.
Person Formation	180-224'	Limestones and dolomites, extensive porosity development in "honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.
Kainer Formation	260-310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Overlies the basal nodular (Walnut) bed.
Glen Rose Limestone (upper)	350-500	Yellowish-tan thinly bedded limestone and marl. Alternating beds of varying hardness erodes to "stairstep" topography. Marine fossils common.

SOILS NARRATIVE

According to the Soil Survey of Comal County, published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Extension Service, reissued in 1984, the soils beneath the subject property have been classified as Rumple-Comfort association, 1 to 8% slopes (RUD).

Rumple-Comfort association soils are shallow to moderately deep soils on uplands in the Edwards Plateau. The surface layer is a dark reddish brown cherty clay loam about 10 inches thick, and overlies a subsoil of reddish brown cherty clay with abundant limestone fragments to a depth of 28 inches. The underlying parent material is an indurated limestone. The soil is well drained, with medium surface runoff, moderately slow permeability, and very low available water capacity. The soil is not suited for cropland, or cultivation, but is used as range land and habitat for wildlife.

SITE GEOLOGIC NARRATIVE

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is approximately 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the southeast with near vertical throws. Elevations at the Mission Hills II tract range from approximately 917 feet above mean sea level in the eastern portion of the tract to approximately 902 feet above mean sea level in the western portion of the tract.

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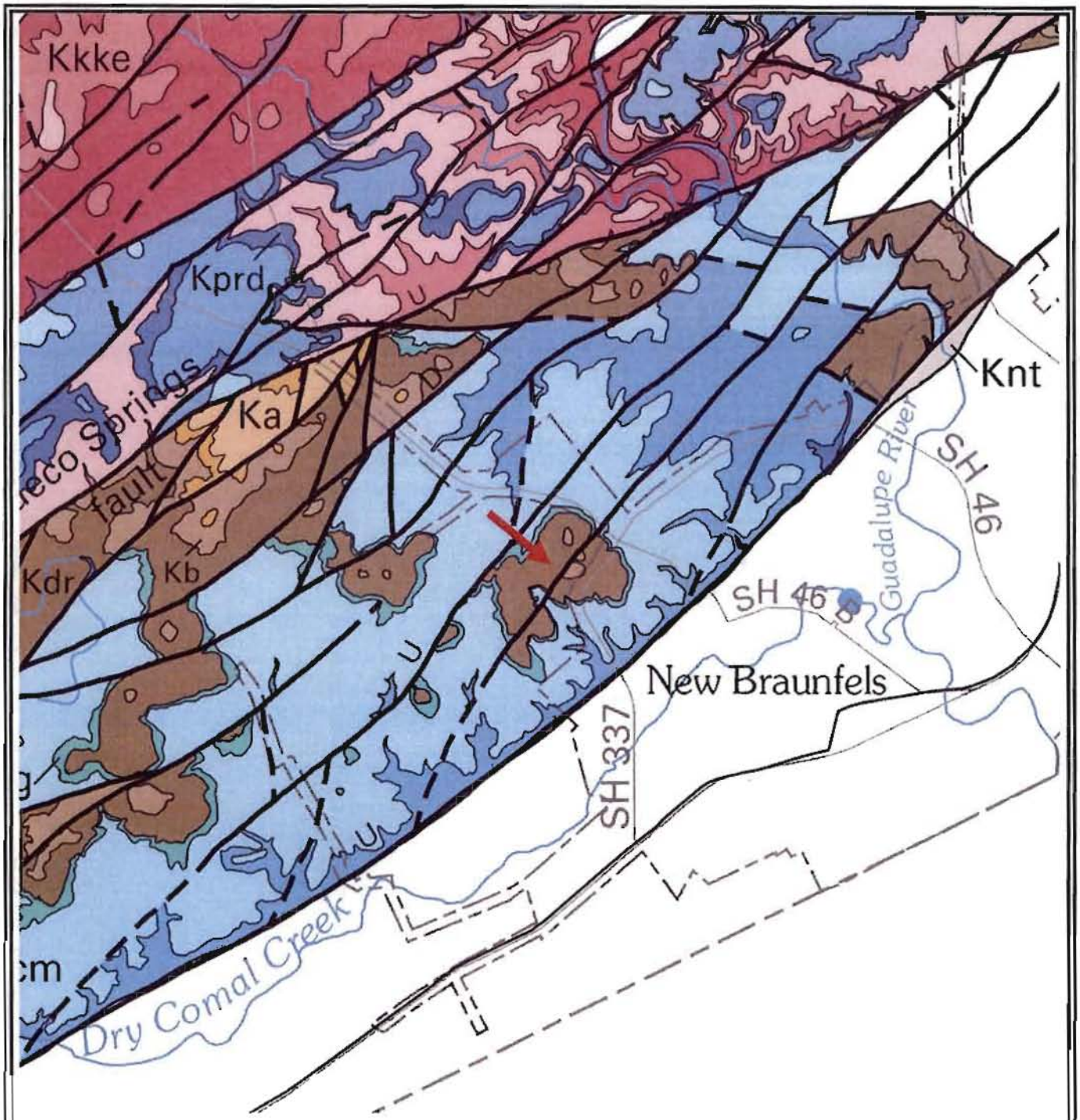


PSI Information To Build On
Engineering • Consulting • Testing
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Mission Hills II
Westpointe Drive
New Braunfels, Comal County, Texas

PROJECT NO.:435-2490

Geologic Map of Edwards Aquifer Recharge Zone, South-Central Texas

(USGS, 2005)

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Mission Hills II Tract

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DIP	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	
S-1	29-42-39.4	98-10-4.4	MB	30	Kdr	150	130	8						3	33	X			X	hillside
S-2	29-42-37.6	98-9-58.3	SC	20	Kdr	2	1	0.5						15	35	X			X	hillside

* DATUM: _____

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

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

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

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

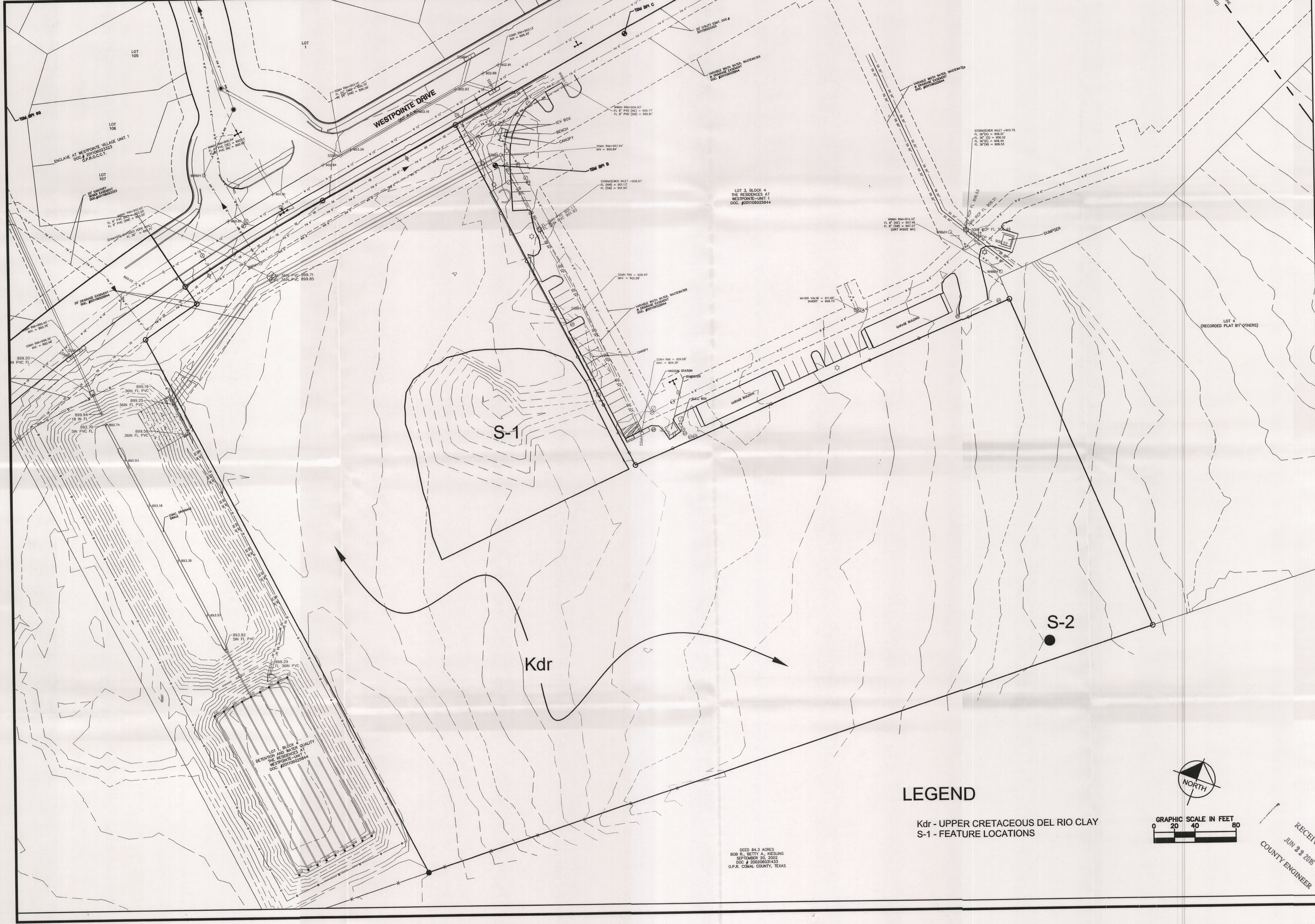
My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date: November 9, 2015

Sheet 1 of 1

STATE OF TEXAS
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST
6/13/16

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



psi Information To Build On

Engineering · Consulting · Testing

3 BURWOOD LANE
SAN ANTONIO, TEXAS 78216

MISSION HILLS II
WESTPOINTE DRIVE

NEW BRAUNFELS, COMAL COUNTY, TEXAS

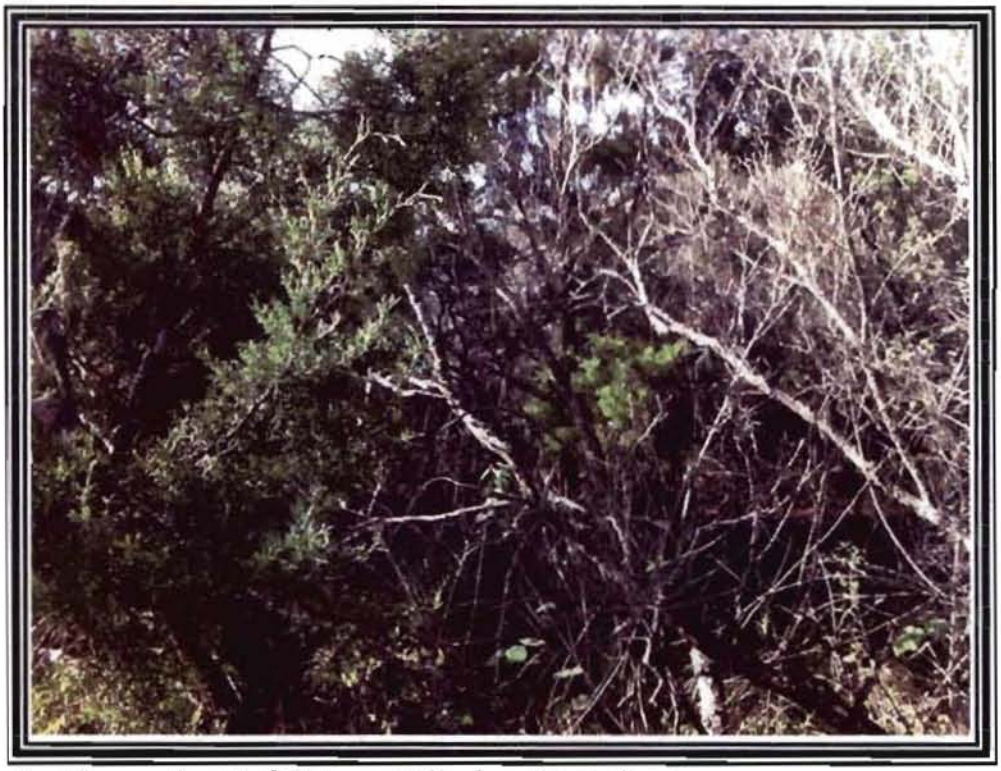
STATE OF TEXAS
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST
6/15/16

RECEIVED
JUN 22 2016
COUNTY ENGINEER

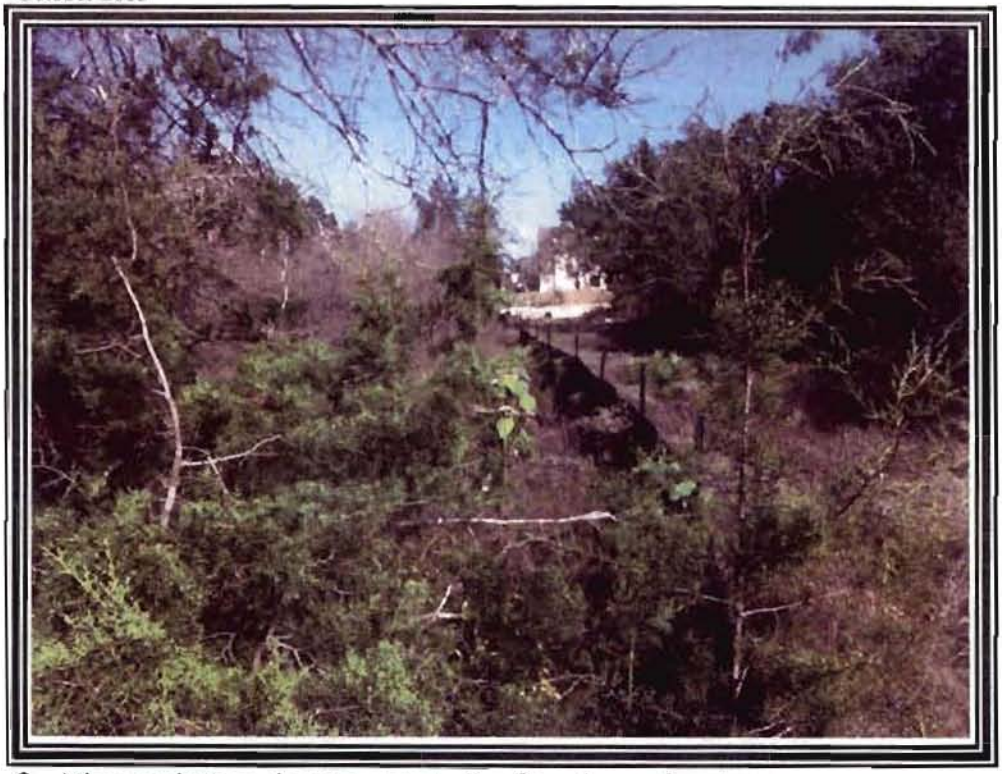
GEOLOGICAL ASSESSMENT

DATE:	11.09.15
PROJECT #:	0435-2490
DWG. NAME:	04352490.01

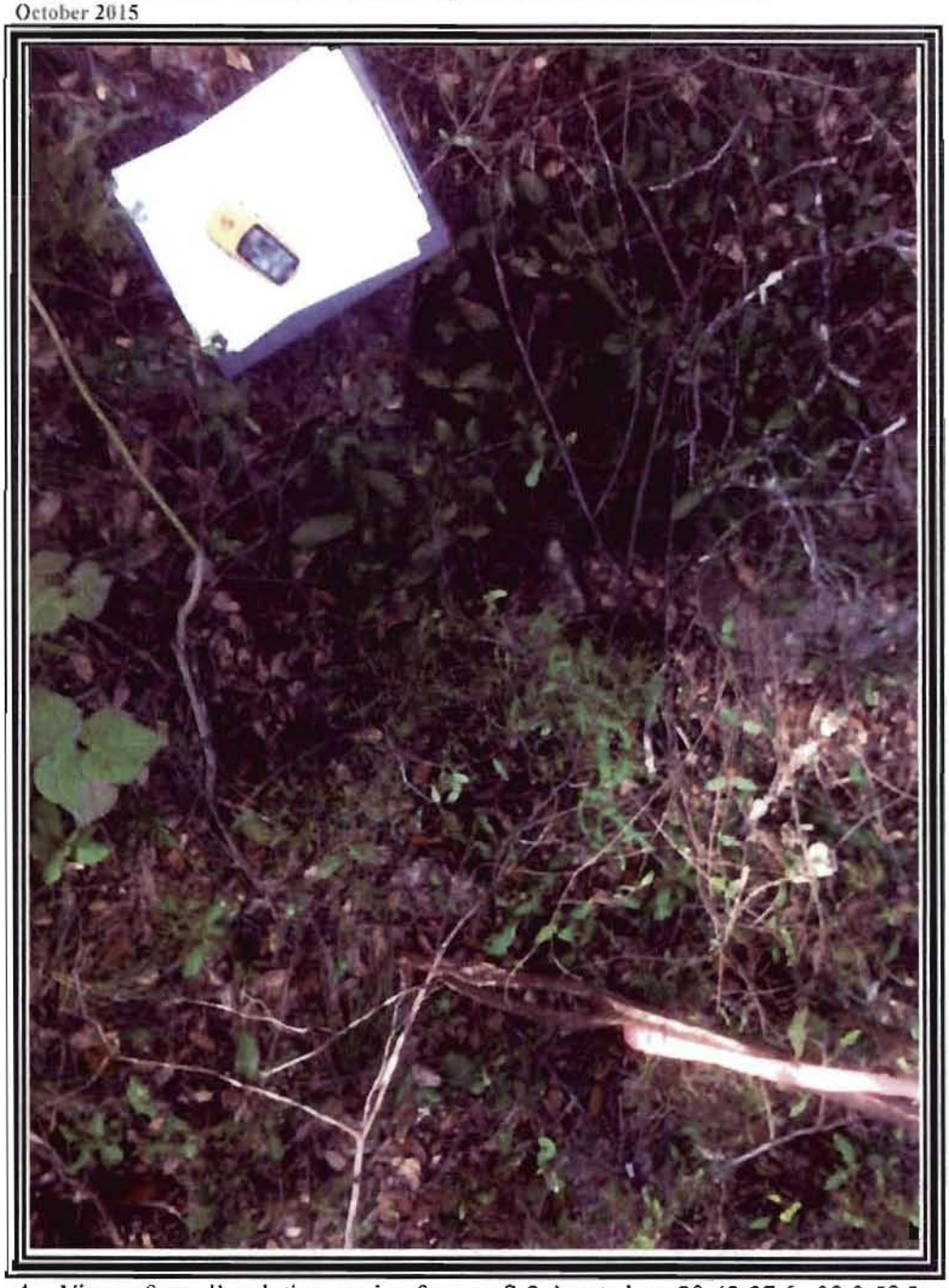
1. View of fill man made fill material feature S-1 in the northern portion of the Mission Hills II tract in New Braunfels, Texas.



2. View southwest of thick vegetation from the northeast corner.



3. View north along the east property line from the southeast corner.



4. View of small solution cavity feature S-2 located at 29-42-37.6; 98-9-58.3, near the southeast corner.

5. View of one of the small outcrops at 29-42-36.8; 98-10-3, in the western portion of the site.

6. View north along the western property line from near the southwest corner of the site. Note storm water retention pond on the left.

7. View east along the northern property line from the northwest corner. Westpointe Drive is on the left.

8. View of the top of the fill pile.

9. View south along the east property line from the northeast corner of the west "arm" of the tract.

10. View southwest of the site interior.

MODIFICATION OF A PREVIOUSLY APPROVED PLAN

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

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

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

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

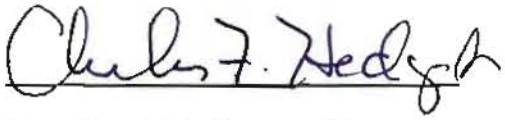
Signature

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

Print Name of Customer/Agent: Charles F. Hedges, Jr.

Date: 5/9/2016

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: Mission Hill Apartments
   Original Regulated Entity Name: The Residences at Westpointe
   Regulated Entity Number(s) (RN): 106123755
   Edwards Aquifer Protection Program ID Number(s): 2978.00
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☒ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

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

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

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

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	24.50	24.50
Type of Development	Commercial	Commercial
Number of Residential Lots	0	0
Impervious Cover (acres)	17.60	17.93
Impervious Cover (%	72	73
Permanent BMPs	1 Sand Filter	1 Sand Filter
Other	____	____

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

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

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	_____	_____
Volume of USTs	_____	_____
Other	_____	_____

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

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

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

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

ATTACHMENT A

ORIGINAL APPROVAL LETTER
AND APPROVED MODIFICATION LETTERS

6/C

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

201106028780 08/18/2011 01:33:43 PM 1/6

COMMONWEALTH OF VIRGINIA §

County of Chesterfield §

BEFORE ME, the undersigned authority, on this day personally appeared Mark Wauford who, being duly sworn by me deposes and says:

(1) That my name is Mark Wauford and I am the Manager of WESTPOINTE GP, L.L.C. which is the general partner of WESTPOINTE COMMERCIAL, LTD, and that as of August 1, 2011, WESTPOINTE COMMERCIAL LTD owned the real property described below.

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

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on July 15, 2011.

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

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

A 24.501 ACRE TRACT OF LAND BEING A PORTION OF THE 205.00 ACRES DEEDED TO INVESTOR GROSENBACHER PARTNERSHIP, RECORDED IN DOCUMENT NO. 200706031735 OF THE OFFICIAL RECORDS, COMAL COUNTY, TEXAS

WESTPOINTE COMMERCIAL LTD
By: WESTPOINTE GP, L.L.C.

By: Mark L Wauford
Mark L. Wauford, Manager

COMMONWEALTH OF VIRGINIA §

County of Chesterfield §

BEFORE ME, the undersigned authority, on this day personally appeared Mark L. Wauford, Manager of WESTPOINTE GP, L.L.C. known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 16th day of August, 2011.

MARIA T. FULTZ NOTARY PUBLIC REG # 198960 MY COMMISSION EXPIRES 06/30/13 COMMONWEALTH OF VIRGINIA

Maria T. Fultz
NOTARY PUBLIC

Maria T. Fultz
Typed or Printed Name of Notary

REGISTRATION #: 198960

MY COMMISSION EXPIRES: 6/30/13

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 15, 2011

Mr. J. L. Guerra, Jr.
Westpointe Residential, Ltd.
P.O. Box 212
Colonial Heights, VA 23834

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: The Residences at Westpointe; Located at the southwest corner of Oak Run Pkwy and Westpointe Drive, New Braunfels, Texas

Type of Plan: Request for the Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program San Antonio File No. 2978.00; Investigation No. 914331; Regulated Entity No. RN106123755

Dear Mr. Guerra:

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 Bury+Partners on behalf of Westpointe Residential, Ltd. on April 19, 2011. Final review of the WPAP was completed after additional material was received on June 21, 2011, July 7, 2011 and July 15, 2011. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

Project Description

The proposed commercial project will have an area of approximately 24.50 acres. It will include the construction of multi-family apartments and a commercial office building. The impervious cover will be 17.60 acres (72 percent). Project wastewater will be disposed of by conveyance to the existing Gruene Wastewater Treatment Plant owned by the New Braunfels Utilities.

Permanent Pollution Abatement Measures

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a sand filter basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 15,798 pounds of TSS generated from the 17.60 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The sand filter basin will have a drainage area of 24.50 acres with 17.60 acres of impervious cover and accounts for 15,800 pounds of TSS. The basin will have a water quality volume of 84,272 cubic feet (83,979 cubic feet required) and a sand filter area of 17,544 square feet (6,998 square feet required). The sand layer for the basin will be at least 18 inches thick and the gravel layer will be at least six inches thick. The underdrain piping system will consist of four inch schedule 40 perforated PVC pipe.

Geology

According to the geologic assessment included with the application, the site is located on the Del Rio Formation and Edwards Group. One manmade feature in bedrock and one natural bedrock feature were evaluated by the project geologist and scored as not sensitive. The San Antonio Regional Office site assessment conducted on June 29, 2011 revealed the other natural bedrock feature.

Special Conditions

1. The permanent BMP shall be operational prior to occupancy of the facility.

2. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

3. Activities observed during the site assessment on June 29, 2011 may constitute construction without prior approval of this proposed WPAP as required by TCEQ rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the project, as provided by this letter, shall not absolve the applicant of any prior violation of TCEQ rules related to this project, and shall not necessarily preclude the TCEQ from pursuing appropriate enforcement actions and administrative penalties associated with such violations as provided in 30 TAC §213.10.

Standard Conditions

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

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

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

Prior to Commencement of Construction:

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

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

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

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

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

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

During Construction:

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

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

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

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

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

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

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

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

After Completion of Construction:

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

19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's

association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

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

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

If you have any questions or require additional information, please contact Charly Fritz of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4065.

Sincerely,

Richard Garcia for

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

MRV/CEF/eg

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

cc: Mr. Aaron Parenica, P.E., Bury+Partners
Mr. James Klein, P.E., City Engineer, City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County Engineer
Mr. Karl Dreher, General Manager, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

Filed and Recorded
Official Public Records
Joy Streater, County Clerk
Comal County, Texas
08/18/2011 01:33:43 PM
CASHONE
201106028780

Joy Streater

ATTACHMENT B

NARRATIVE OF PROPOSED MODIFICATION

NARRATIVE OF PROPOSED MODIFICATION

The proposed modification includes a minor increase in impervious cover for the final phase of apartment's site (±0.33 acres). This increase in impervious cover is entirely on the 8.338 acre Phase II apartment site. This increase in impervious cover will require an additional 2,342 cubic feet of pond volume. The existing water quality pond provided a surplus of 293 cubic feet of volume plus 12" of freeboard. We have confirmed with Mr. Todd Jones of TCEQ that there are no minimum freeboard requirements for sand filter basins. The excess volume required will raise the water surface elevation by approximately 2" and reduce the existing freeboard to 10". Therefore, no additional changes are required to the volume of the water quality pond.

Due to the slight 2" increase in water surface elevation, some minor modifications are required at the existing overflow structure. This includes raising the weir height of the overflow structure from 903.00 to 903.17. This will be accomplished by using epoxy coated dowels and pouring concrete to raise the weir level 2 inches. With these proposed modifications, the existing water quality pond will be modified sufficiently to prevent pollution of the Edwards Aquifers due to the slight increase in impervious cover.

ATTACHMENT C

CURRENT SITE PLAN OF THE APPROVED PROJECT

Stantec

70 NE Loop 410, Suite 1100
San Antonio, Texas 78216
(210) 525-9090, Phone

TBPE #F-6324

www.stantec.com

Current Site Plan Exhibit
Mission Hill Apartments
City of New Braunfels

Date: June 10, 2016
File: TCEQ Current Site Conditions.m
Scale: 1 : 3,600
Tech: DMC
Project Number: R0110711-50002

APPLICATION PLAN

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Charles F. Hedges, Jr.

Date: 5/9/2014

Signature of Customer/Agent:

Charles F. Hedges Jr

Regulated Entity Name: ~~Grey Forest Development LLC~~ MISSION HILL APARTMENTS

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☒ Commercial
   ☐ Industrial
   ☐ Other:_____

2. Total site acreage (size of property):24.50

3. Estimated projected population:±382

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	303613.2	÷ 43,560 =	6.97
Parking	436035.6	÷ 43,560 =	10.01
Other paved surfaces	41382	÷ 43,560 =	0.95
Total Impervious Cover	781030.8	÷ 43,560 =	17.93

Total Impervious Cover 17.93 **÷ Total Acreage** 24.50 **X 100 =** 73**% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

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^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

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

11. ☐ A rest stop will be included in this project.

    ☐ A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

13. ☒ **Attachment B - Volume and Character of Stormwater.** A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

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

100% Domestic	_____Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day
TOTAL gallons/day 168,654	

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 from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

☐ 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.

☒ 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 Gruene Wastewater (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

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

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 40'.

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): FEMA Firm Map #48091C0435F dated 09/02/2009.

19. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

☒ The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.

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

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

☒ 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 geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☒ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.

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

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

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

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

26. ☐ Surface waters (including wetlands).

☒ N/A

27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.

☒ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A

FACTORS AFFECTING WATER QUALITY

FACTORS AFFECTING WATER QUALITY

The materials listed below are anticipated to be present on-site during construction and as such may present a potential pollutant source: (This is not an all inclusive list).

1. Concrete/Masonry
2. Metal studs, Metal reinforcing bars, etc.
3. Tar
4. Fertilizers
5. Petroleum based products
6. Cleaning solvents/Detergents
7. Wood

Material management practices will be utilized to reduce the risk of spills, or other accidental exposure of the materials listed above to storm water runoff, including the following:

1. An effort shall be made to store only enough product required to complete the work as so defined in the approved construction documents.
2. All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3. Products should be kept in their original containers with the original manufacturer's label.
4. Manufactures' recommendations for proper use and disposal shall be followed.
5. Substances shall not be mixed with one another unless recommended by the manufacturer.
6. Whenever possible, all of a product shall be used before disposing of its respective container.
7. The site superintendent should inspect daily to ensure proper use and disposal of on-site materials.

Post-Construction

The materials listed below are anticipated to be present on-site after construction and as such may present a potential pollutant source: (This is not an all inclusive list).

1. Vehicle Fluid and Petroleum based products (Motor Oil, Brake Fluid, Etc.)
2. Trash and Debris (Litter)
3. Discarded Food and Tobacco Products

These and other sources of pollutants which may affect storm water quality will be screened and filtered by proposed water quality ponds that will treat the storm water prior to releasing into the creek. All ponds will undergo periodic maintenance and cleaning to keep the integrity and effectiveness of treatment efficiency.

ATTACHMENT B

VOLUME AND CHARACTER OF STORM WATER

VOLUME AND CHARACTER OF STORM WATER

This entire development is incorporated with the storm water management plan that was conducted for the Enclave at Westpointe Village and submitted to and approved by the City of New Braunfels. This entire site is within a larger ±44.38 drainage watershed that will convey its storm water runoff to an existing drainage easement within the Hunters Creek Subdivision. Upon being treated by the proposed onsite water quality pond, storm water will be detained by the existing detention pond. While detaining in series with a second pond within the Enclave at Westpointe Subdivision to the north, this detention pond will then convey the storm water to the existing storm sewer system. Storm water from this entire system will be released into the existing drainage easement. Using the City of New Braunfels runoff coefficient of 0.85 and incorporating their K-value into the equation, the watershed draining into this easement produces a peak flow of 128.52 Cubic Feet per Second (cfs) during a 100-year storm event.

ATTACHMENT C

SUITABILITY LETTER FROM AUTHORIZED AGENT
(Not Applicable)

ATTACHMENT D

EXCEPTION TO THE REQUIRED GEOLOGIC ASSESSMENT
(Not Applicable)

TEMPORARY STORM WATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Charles F. Hedges, Jr.

Date: 5/9/2016

Signature of Customer/Agent:

Charles F. Hedges

Regulated Entity Name: Mission Hill Apartments

Project Information

Potential Sources of Contamination

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

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

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

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

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

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

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

   ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Blieders Creek

Temporary Best Management Practices (TBMPs)

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

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

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

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

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

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

   ☐ **Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

9. ☒ **Attachment F - Structural Practices.** A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:

   ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

   ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

   ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

   ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

    ☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

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

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

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

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

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

Administrative Information

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

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

ATTACHMENT A

SPILL RESPONSE ACTIONS

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Potential Source:

Spills of Hydrocarbons or other hazardous substances and materials.

Preventative Measures:

The following practices will be used to reduce the risks associated with hazardous materials, if hazardous materials are needed for the work:

Education/General Measures

1. Products will be kept in original containers unless they are not re-sealable.

2. Original labels and material safety data will be retained.

3. Modify the Storm Water Pollution Prevention Plan to include the information dealing with, and the steps needed to correct, the encountered hazardous waste spill.

4. Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.

5. Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

6. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

7. Establish a continuing education program to indoctrinate new employees.

8. Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

9. To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, as well as sanitary and septic wastes should be contained and cleaned up immediately.

10. Store hazardous materials and wastes in covered containers and protect from vandalism.

11. Place a stockpile of spill cleanup materials where it will be readily accessible.

12. Train employees in spill prevention and cleanup.

13. Designate responsible individuals to oversee and enforce control measures.

14. Spills should be covered and protected from storm water run-on during rainfall to the extent that it doesn't compromise clean up activities.

15. Do not bury or wash spills with water.

16. 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.

17. 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.

18. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

19. 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.

20. 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.

If surplus product must be disposed of, manufacturers' or local and state recommended methods for proper disposal will be followed.

Spill Measures:

In the event that hazardous wastes are encountered, they will be disposed of in the manner specified by local or state regulations.

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.

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. T his 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

Spills of hazardous waste in amounts that equal or exceed Reportable Quantity (RQ), as defined by the EPA through issued regulations (40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 119 or 40 CFR Part 302), will be handled in the following steps:

1. Notify the National Response Center immediately at 1-800-424-8802.

2. Notify TCEQ immediately at 1-210-490-3096 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.

3. Submit a written description of the release to the EPA Region 11 office providing the date and circumstances of the release and the steps to be taken to prevent another release:

   Attn: Hazardous Waste Dept.
   1445 Ross Ave. STE 1200
   Dallas, TX 75202
   1-214-665-2224 (Region 6 Emergency Line)

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.tceq.state.tx.us/response/html.

Vehicle Measures:

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 run-on 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 storm water. 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 run-on of storm water and the runoff of spills.

2. Discourage "topping off" of fuel tanks.

3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

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Potential Source:	Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.
Preventative Measures:	Vehicle maintenance when possible will be performed within the construction staging area or at a local maintenance shop.
Potential Source:	Miscellaneous trash and litter from construction workers and material wrappings.
Preventative Measures:	Trash containers will be placed throughout the site to encourage proper trash disposal.
Potential Source:	Construction debris.
Preventative Measures:	Construction debris will be monitored daily by contractor. Debris will be collected and placed in disposal bins. Situations requiring immediate attention will be addressed on a case-by-case basis.
Potential Source:	Silt leaving the site.
Preventative Measures:	Contractor will monitor all vehicles leaving the site to prevent tracking silt and mud onto public streets. The contractor will ensure that trucks will be washed down to minimize the amount of silt leaving the site.
Potential Source:	Connection to existing sewer line.
Preventative Measures:	Contractor shall tie into existing sewer line per NBU regulations and standards via a sanitary sewer manhole. A manhole detail is provided by NBU and shown on the construction details. Any leakage of sewage from the existing waste water line due to the connection will be cleaned up immediately.
Potential Source:	Construction related portable toilets.
Pre-Measures:	Any on-site portable toilets will be in good working order with no defects that cause leaks. All portable toilets will be maintained to ensure no overflowing of sewage.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

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The sequence of work described below will be accomplished through the timing of proposed work relating the maintenance of service (i.e. proposed utility installation as compared to the removal/abandonment of existing utilities). Below is a general sequence of events to be followed for construction of the final phase of multi-family apartments:

1. Obtain all required permits.

2. Install all Erosion Control Measures and Devices that can be installed prior to site clearing. (±8.338 acres)

3. Clear site for storm sewer line. (±0.70 acres)

4. Install any remaining Control Measures and Devices that could not be installed prior to site clearing.

5. Grade site. Install Erosion Control around catch basins. (±8.338 acres)

6. Set Sewage Collection System manholes and install all underground utilities and piping.

7. Install pavement (±2.91 acres)

8. Inspect and maintain all erosion control measures until all disturbed offsite and on-site areas have been hydromulched or sodded in accordance with the landscape plan and a mowable stand of grass is achieved.

9. Inspect and maintain all erosion control measures until all disturbed offsite and on-site areas have been hydromulched or sodded in accordance with the landscape plan and a mowable stand of grass is achieved.

Total Site Area/Total Disturbed Area

The total area of the site is ±24.50 acres. Excavation, grading, or other activities throughout the construction process of the final phase of multi-family will disturb approximately ±8.338 acres. Post-construction impervious coverage will total ±17.93 acres for the entire WPAP site.

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

TEMPORARY BMPs

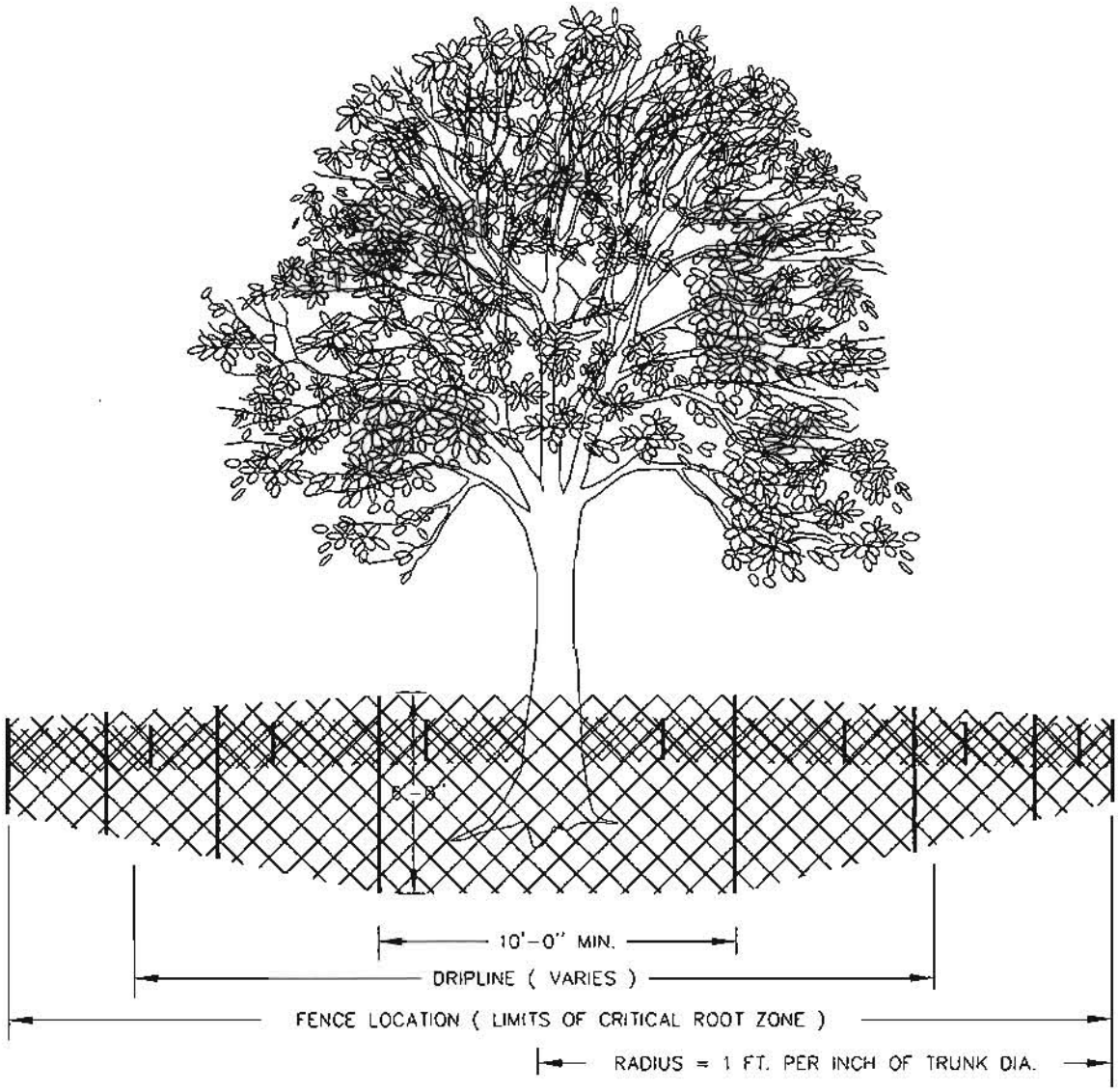
At the beginning of the project, Temporary Best Management Practices (BMPs) will be installed according to the attached Temporary BMP Details and placed as shown on the TBMP Site Plan.

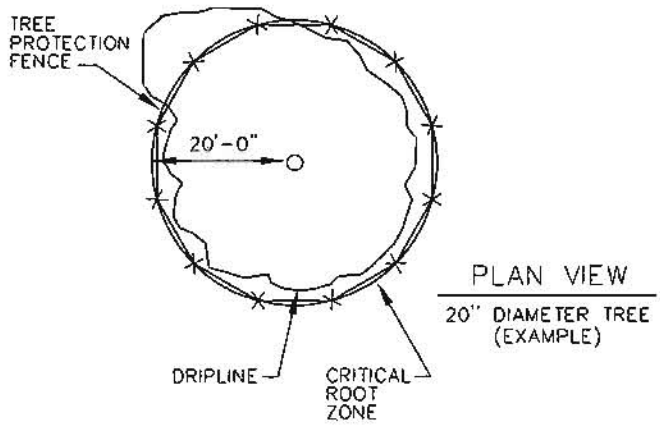
Upgradient Water

The site is located on the southwest corner of Westpointe Drive and Oak Run Parkway. Since the site is located along a natural ridgeline, upgradient storm water is not expected to be conveyed onto the site.

On-site Water

Silt fencing will be placed along the boundary line of the majority of the tract, particularly along Westpointe Drive and Oak Run Parkway. Inlet protection and triangular filter dikes will be placed as necessary during construction of the multi-family site as well as the commercial development. Temporary construction entrances will be installed as necessary to prevent tracking materials offsite into public areas. In addition, a concrete truck washout pit will be placed on-site at each construction entrance and shall be accessible to all exiting traffic leaving the site.





PLAN VIEW

20" DIAMETER TREE (EXAMPLE)

TREE PROTECTION CONSTRUCTION FENCE

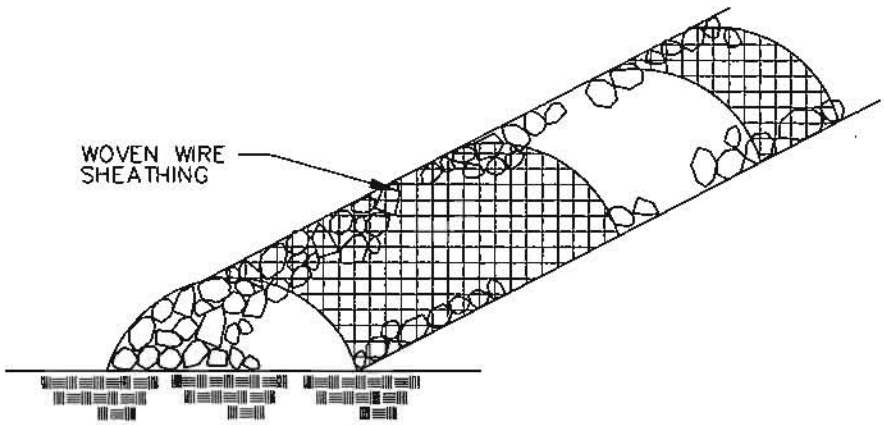
Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

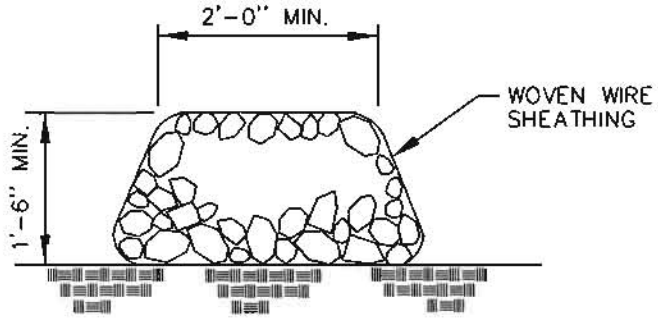
MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

EXHIBIT B1

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: J:\110711\50002\CE Submittal Docs\TCEQ\WPAP Modified.dwg	PROJECT No. R0110711-50002





NOTES:

1. USE ONLY OPEN GRADED ROCK 4-8 INCH DIAMETER FOR STREAMFLOW CONDITION; USE OPEN GRADED ROCK 3-5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

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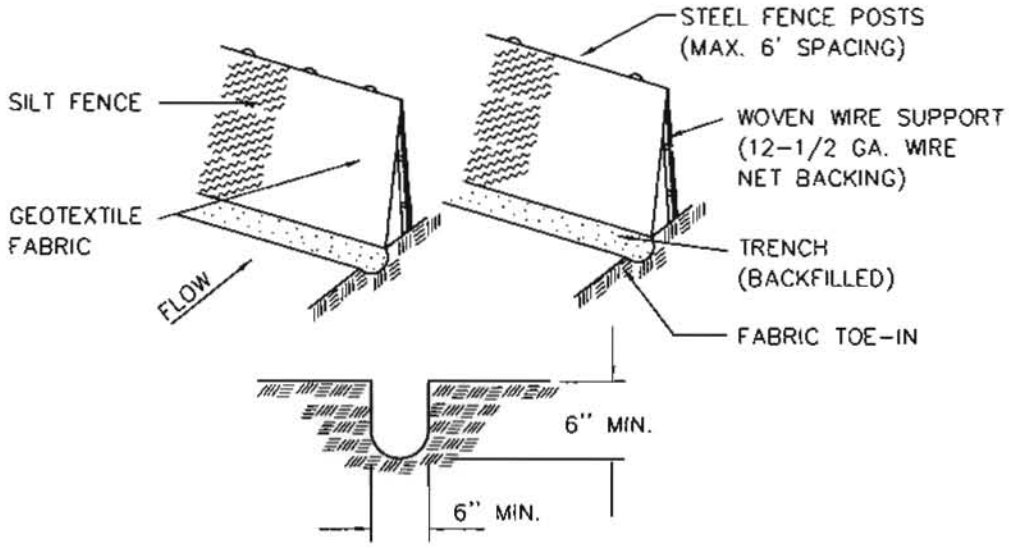
EXHIBIT B2

DATE:Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: J:\110711\50002\CE Submittal Docs\TCEQ\WPAP Modification	PROJECT No. R0110711-50002



TRENCH CROSS-SECTION

GENERAL NOTES:

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

SILT FENCE

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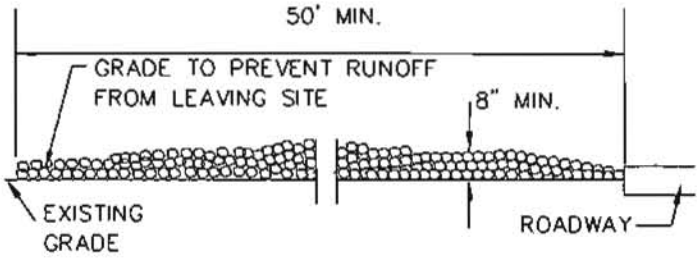
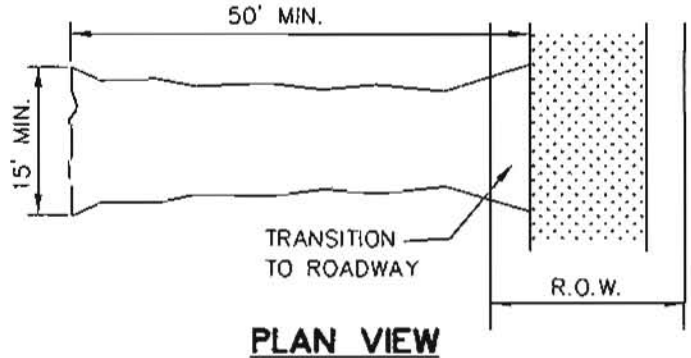
NEW BRAUNFELS, TX

EXHIBIT B3

DATE: Jun 10, 2016 | SCALE NTS | DRAWN BY: MMH | FILE: [illegible] | PROJECT No. R0110711-50002



PROFILE
N.T.S.



PLAN VIEW
N.T.S.

GENERAL NOTES:

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

STABILIZED CONSTRUCTION ENTRANCE

Stantec
70 NE Loop 410, Suite 1100
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TBPE Registration Number F-6324

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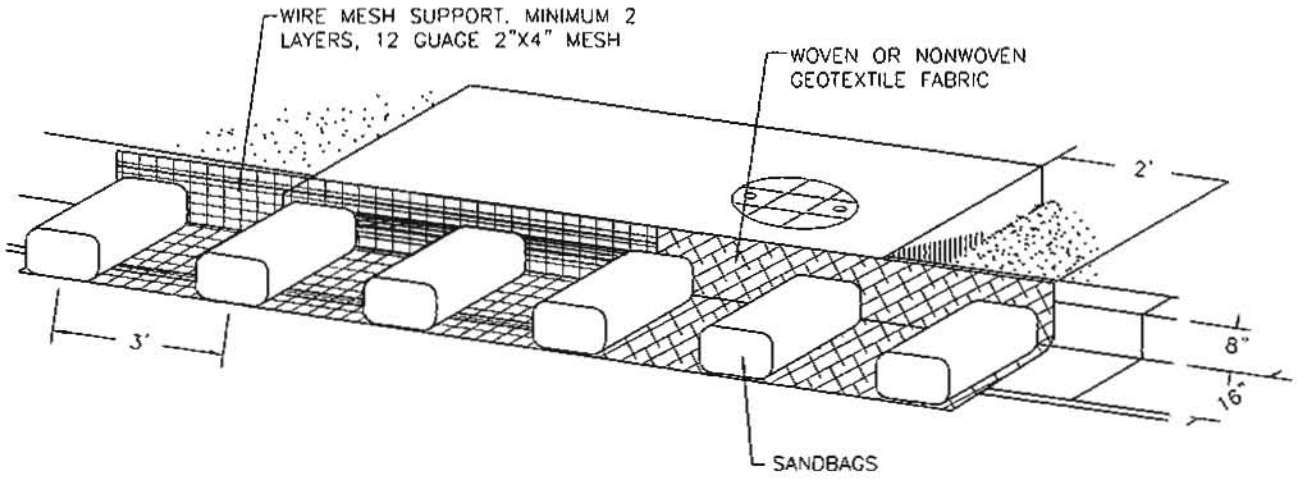
NEW BRAUNFELS, TX

EXHIBIT B4

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: z:\110711\50002\CE Submittal Docs\TCEQ\SWPAP Modified.dwg	PROJECT No. 110711-50002



NOTES:

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

CURB INLET PROTECTION BARRIER

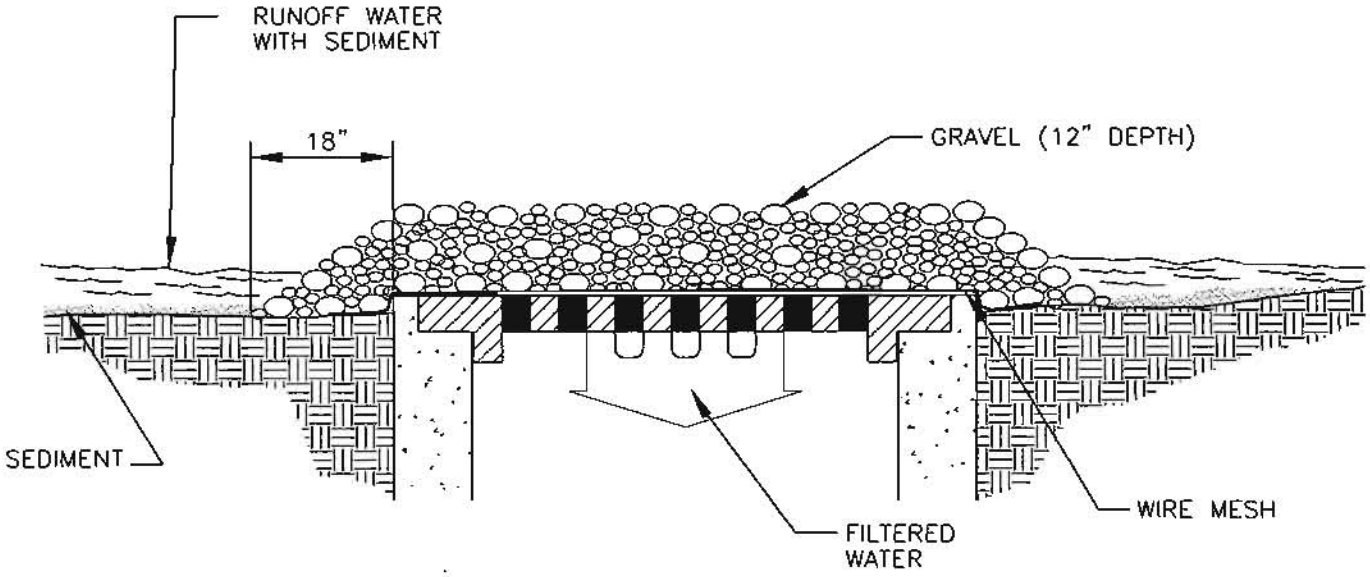
Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

EXHIBIT B5

DATE: Jun 10, 2016 | SCALE: NTS | DRAWN BY: MMH | FILE: z:\r0110711\s0002\CE Submittal Docs\TCEQ\WPAP Modification | PROJECT No. R0110711-S0002



NOTE:

A. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 24 GAUGE SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.

B. AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ABOVE. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.

C. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT'S FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

INLET PROTECTION/SEDIMENT FILTER

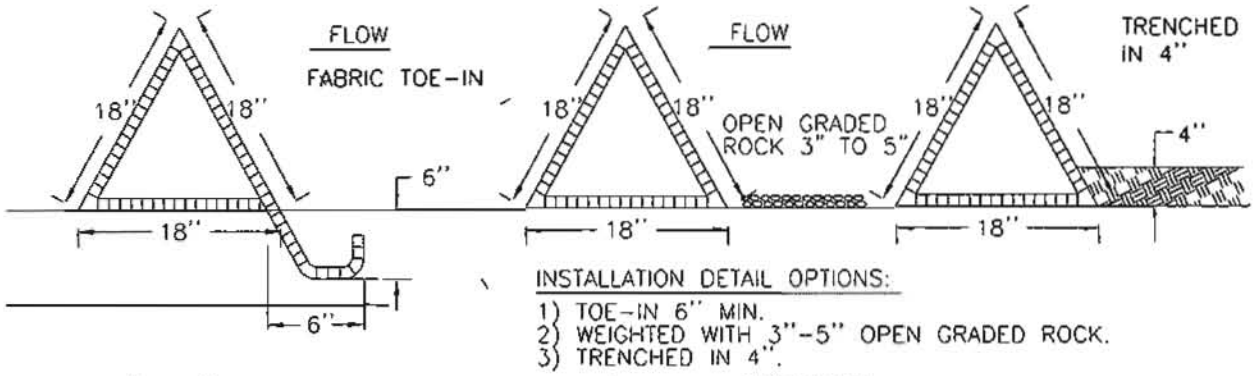
Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

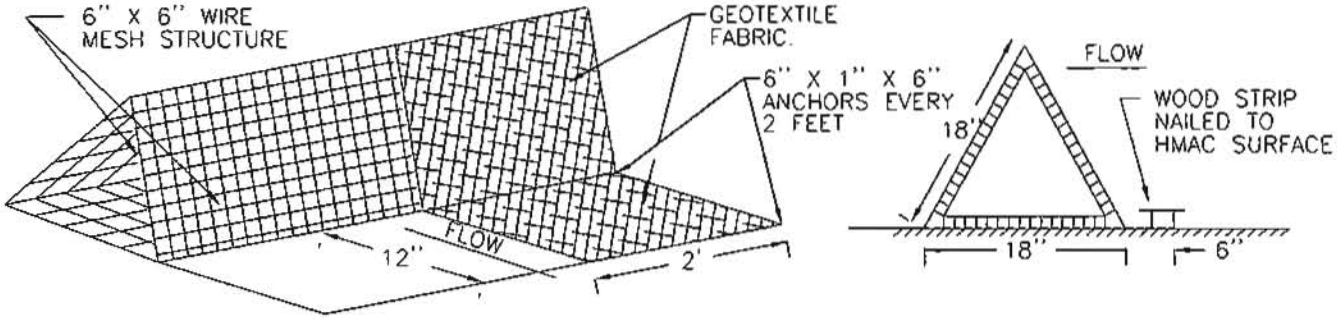
EXHIBIT B6

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE:J:\110711\50002\CE Submittal Docs\TCEQ\WPAP Modification	PROJECT No. R0110711-50002



INSTALLATION DETAIL OPTIONS:

1) TOE-IN 6" MIN.
2) WEIGHTED WITH 3"-5" OPEN GRADED ROCK.
3) TRENCHED IN 4".



NOTES:

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SHIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 3"-5" OPEN GRADED ROCK, OR TOED-IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 4" INCHES.
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6 INCH WIRE STAPLES ON 2 FOOT CENTERS ON BOTH EDGES AND SKIRT, OR STAKED USING 3/8 INCH DIAMETER REBAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6 INCHES TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE 6 GA. 6" X 6" WIRE MESH, 18 INCHES ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF SIX INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 8 ABOVE.

TRIANGULAR FILTER DIKE

Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

EXHIBIT B7

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: J:\110711\30002\CE Submittal Docs\TCEQ\WPAP Modification	PROJECT No. R0110711-50002

CONSTRUCTION SEQUENCE

1. OBTAIN REQUIRED PERMITS.
2. INSTALL ALL EROSION CONTROL MEASURES AND DEVICES THAT CAN BE INSTALLED PRIOR TO SITE CLEARING.
3. CLEAR SITE.
4. INSTALL ANY REMAINING CONTROL MEASURES AND DEVICES THAT COULD NOT BE INSTALLED PRIOR TO SITE CLEARING.
5. GRADE SITE.
6. INSTALL ALL UNDERGROUND UTILITIES. INSTALL EROSION CONTROL AROUND CATCH BASINS AND INLETS.
7. INSTALL PAVEMENT.
8. INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED OFFSITE & ONSITE AREAS HAVE BEEN HYDROMULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLAN AND A MOWABLE STAND OF GRASS IS ACHIEVED.

EROSION AND SEDIMENTATION CONTROL NOTES

1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS FOR THIS PROJECT AS WELL AS THE CITY'S GENERAL REQUIREMENTS, WHICH PERTAIN TO THIS PROJECT.
2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURE OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED. (IN ACCORDANCE WITH LANDSCAPE PLANS)
3. BRUSH BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS, SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. ADDITIONAL MEASURES MAY BE REQUIRED IF, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE CITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE CITY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

TPDES REQUIREMENT NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING NOTICE OF INTENT (NOI) TO TCEQ FOR THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, OR POSTING A CONSTRUCTION SITE NOTICE 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL HAVE THIS PLAN AND THE TPDES STORM WATER POLLUTION PREVENTION PLAN ON SITE AT ALL TIMES THROUGHOUT DURATION OF PROJECT.
3. ALL DISTURBED AREAS NOT ADDRESSED BY LANDSCAPE ARCHITECT SHALL BE HYDROMULCHED PER SPECIFICATION DESCRIBED IN THE GENERAL NOTES.
4. CONTRACTOR SHALL PROVIDE TRIANGULAR SEDIMENT FILTER DIKE PER EXHIBIT B7 WHERE SILT FENCE IS REQUIRED BUT NOT INSTALLABLE.
5. CONTRACTOR SHALL SUBMIT NOTICE OF TERMINATION (NOT) TO THE TCEQ UPON PROJECT COMPLETION AS DESCRIBED IN THE PROJECT TPDES STORM WATER POLLUTION PREVENTION PLAN. IF PROJECT IS A PHASE I PROJECT (> 5 ACRES), ELSE STABALIZE PROJECT TO WITHIN 10% OR COMPLETE CONSTRUCTION.
6. CONTRACTOR TO RETAIN THE TPDES STORM WATER POLLUTION PREVENTION PLAN ALONG WITH ALL COMPLETED INSPECTION REPORTS AND PLAN MODIFICATIONS DOCUMENTATION FOR A PERIOD OF THREE (3) YEARS FROM DATE OF FINAL STABILIZATION, AS REQUIRED BY THE TCEQ.

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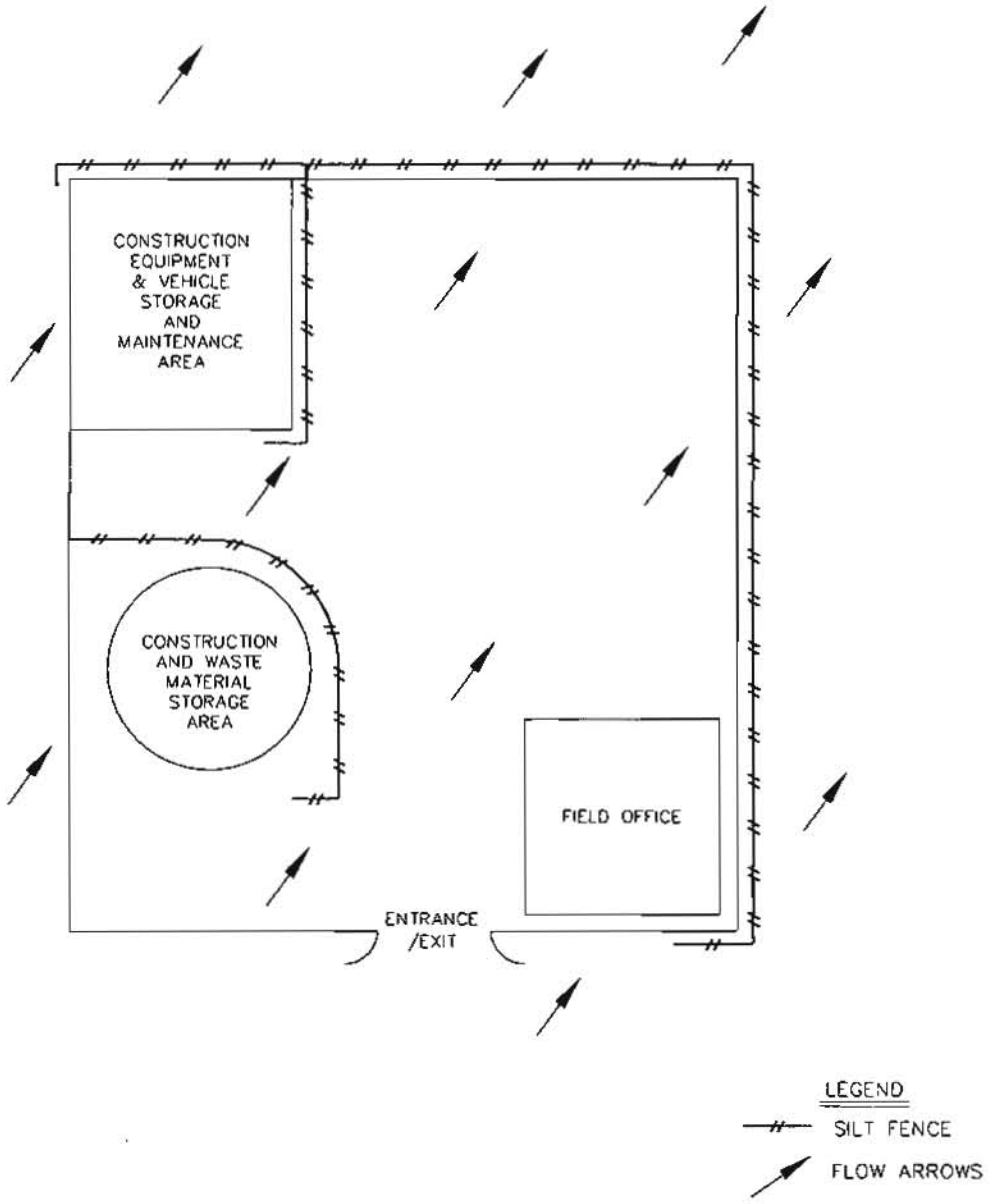
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

EXHIBIT B8

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: J:\110711\50002\CE Submittal Docs\TCEQ\WPAP Modification	PROJECT No. R0110711-50002



TYPICAL CONSTRUCTION STAGING AREA

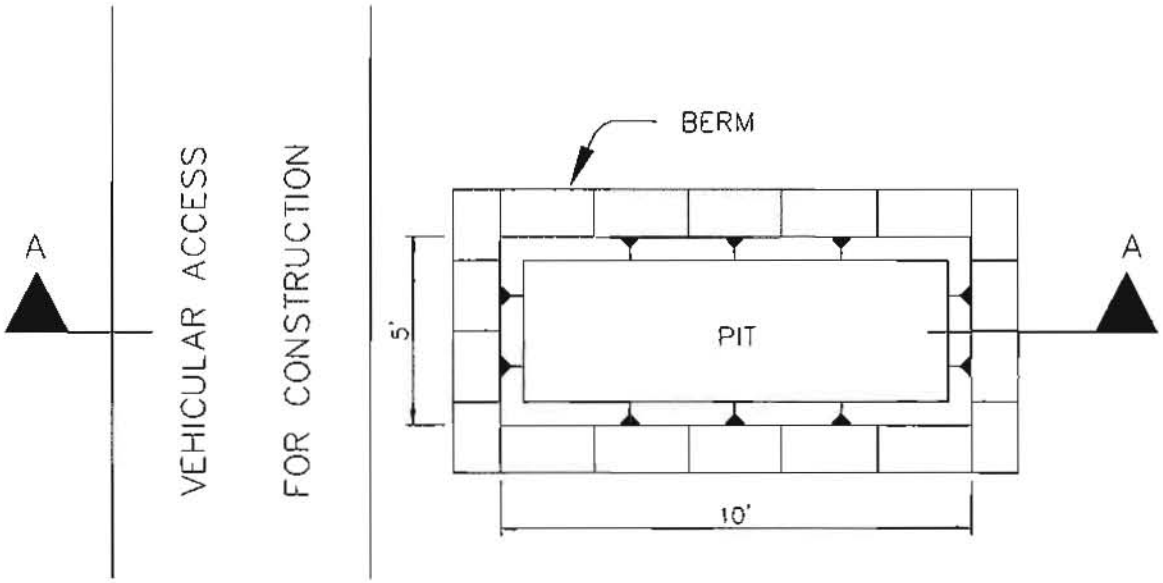
Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

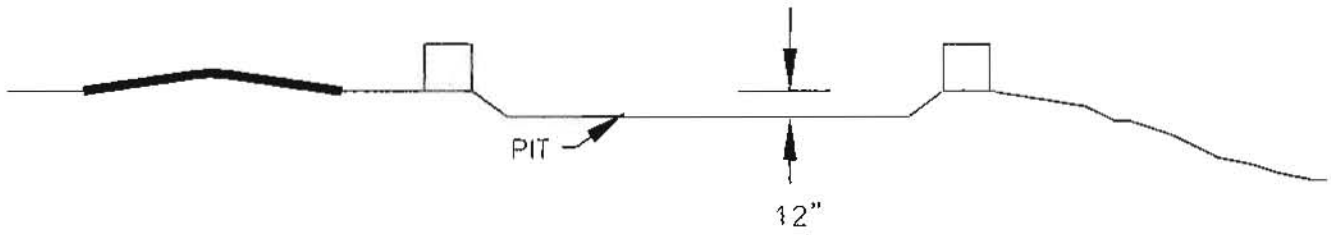
NEW BRAUNFELS, TX

EXHIBIT B9

DATE: Jun 10, 2016	SCALE: NTS	DRAWN BY: MMH	FILE: J:\110711\50002\CE Submittal Docs\TCEQ\SWPAP Modifications	PROJECT No. R0110711-50002



PLAN



SECTION A–A

GENERAL NOTES:

1. Detail illustrates minimum dimensions. Pit can be increased in size depending on expected frequency of use.
2. Washout pit shall be located in an area easily accessible to construction traffic.
3. Washout pit shall not be located in areas subject to inundation from storm water runoff.

CONCRETE TRUCK WASHOUT PIT

Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MISSION HILL APARTMENTS
SOUTH EAST OF OAK RUN
PARKWAY AND WESTPOINTE DRIVE

NEW BRAUNFELS, TX

EXHIBIT B10

DATE: Jun 10, 2016 | SCALE: NTS | DRAWN BY: MMH | FILE: a:\110711\50002\CE Submittal Docs\TCEQ\WPAP Modification | PROJECT No. R0110711-50002

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE
(Not Applicable)

ATTACHMENT F

STRUCTURAL PRACTICES

STRUCTURAL PRACTICES

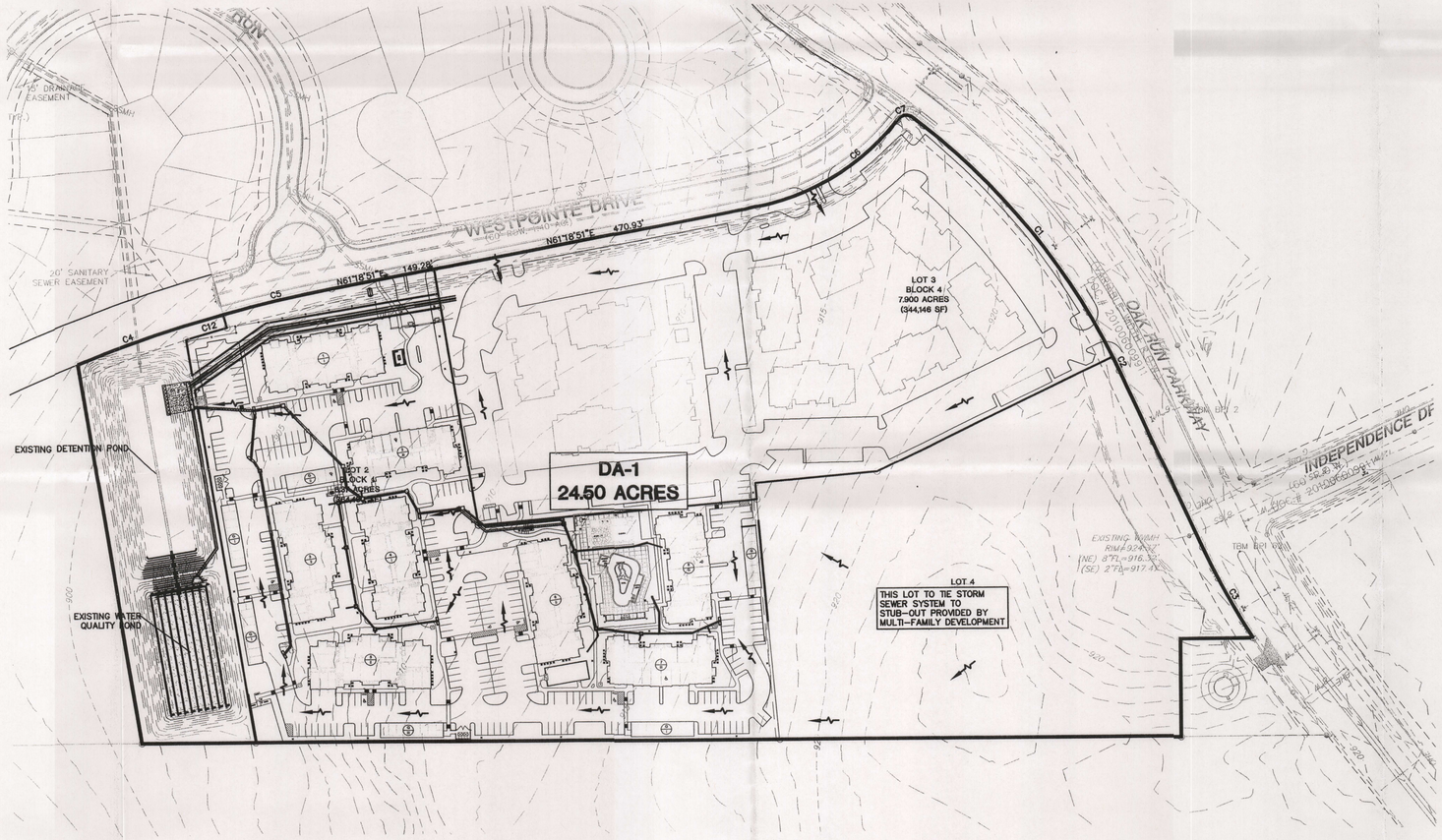
Silt fencing, triangular sediment filter dikes, inlet protection devices, and stabilized construction entrances will be incorporated as temporary erosion control devices and will be removed after permanent stabilization is established.

Silt fencing shall be incorporated throughout the construction process. The placement of the silt fencing shall be perpendicular to runoff flow. Refer to project construction documents for quantity and actual locations of these erosion control devices. In areas where silt fencing is to be situated but is non-installable, triangular filter dikes shall be incorporated.

Stabilized construction entrances will be employed during the construction of this development to help minimize vehicle tracking of sediments. Paved streets adjacent to these site entrances shall be cleaned and/or swept regularly to remove any excess mud, dirt or rock tracked from the site. Refer to the project construction documents for actual locations of these erosion control devices. Staging areas will be utilized in locations as decided by the project general contractor and validated by the civil engineer. If the contractor determines the need for additional stabilized construction entrances, construction staging areas or pits, their locations shall be agreed upon by the contractor and the engineer and annotated in the Storm Water Pollution Prevention Plan (SWPPP) posted on the site during construction.

ATTACHMENT G

DRAINAGE AREA MAP



LEGEND

EXISTING	PROPOSED	DESCRIPTION
▬		PROPERTY (R.O.W.) LINE
— 678 —	— 678 —	CONTOUR
▨	▬	DRAINAGE DIVIDE
1.5% →	1.5% →	DIRECTION OF FLOW
	DA-3 11.74 ACRES	DRAINAGE AREA NUMBER

FLOODPLAIN INFORMATION

ACCORDING TO THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 48091C0435F IN COMAL COUNTY DATED SEPTEMBER 02, 2009, THIS SITE IS NOT WITHIN THE 100-YEAR FLOODPLAIN.

LEGAL DESCRIPTION:

24.50 ACRES OF LAND SITUATED IN THE CITY OF NEW BRAUNFELS, COMAL COUNTY, TEXAS, BEING PART OF THE ANDRES SANCHES SURVEY NO. 286, ABSTRACT NO. 528 AND WILLIAM MOCKFORD SURVEY NO. 285, ABSTRACT NO. 393 AND A PORTION OF THAT CERTAIN 205.00 ACRE TRACT RECORDED IN DOCUMENT NUMBER 200706031735 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS.

BENCHMARK NOTE:

TBM BPI 62 COTTON SPINDLE AT THE NOSE OF AN ISLAND IN OAK RUN PARKWAY AT THE INTERSECTION WITH INDEPENDENCE DRIVE.
ELEV=923.61'

TBM BPI 2 CUT "X" ON NORTH FLANGE BOLT OF FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF OAK RUN PARKWAY AND ±129' WEST OF INDEPENDENCE DRIVE.
ELEV=926.75' (NOT SHOWN)

RECEIVED
JUN 22 2016
COUNTY ENGINEER

DATE	NO.	REVISION	APPROVAL

Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

MARY JANE C. PHILLIPS
102318
MJPhillips 6/13/16

DRAINAGE AREA MAP

MISSION HILL APARTMENTS

NEW BRAUNFELS, TX

PLOTTING SCALE: 1"= 1'
DATE REVISED: June 10, 2016
FILE: 109719DAM.dwg
DRAWN BY: RR
DESIGNED BY: SSL
REVIEWED BY: AKP
PROJECT NO.: 109719001

SHEET
DAM

Date: Jun 10, 2016, 11:49am User ID: mhilbig
File: G:\110711\500002\CD-TCEQ\109719DAM.dwg

ATTACHMENT H

TEMPORARY SEDIMENT POND(S)
PLANS AND CALCULATIONS
(Not Applicable)

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR BMPS

INSPECTIONS

Each contractor will designate a qualified person (or persons) to perform the following inspections:

1. Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system.

2. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly.

3. Where discharge locations or points are accessible, they will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

4. Locations where vehicles enter or exit the site will be inspected for evidence of offsite sediment tracking.

5. Permanent seeding and planting will be inspected for bare spots, washouts and unhealthy growth.

The inspection shall be conducted by the responsible person at least once every seven (7) calendar days and within 24 hours after a storm providing 1/2 inches of rainfall or greater. If one or more of the following conditions apply, the frequency of inspections shall be conducted at least once every month:

1. The site has been either finally or temporarily stabilized.

2. Where runoff is unlikely due to winter conditions (i.e. site is covered with snow, ice, or where frozen ground exists.

3. During seasonal arid periods in arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (areas with an average annual rainfall of 10 to 20 inches).

The information required within an inspection and maintenance report are as follows:

1. Summary of the scope of the inspection.

2. Name(s) and qualifications of personnel making the inspection.

3. The date(s) of the inspection.

4. Major observations relating to the implementation of the storm water pollution prevention plan.

5. Changes required to correct damages or deficiencies in the control measures.

In addition to the required routine inspections, the following record of information will also be maintained:

1. The dates when major sewer construction/and grading activities occur.

2. The dates when construction activities temporarily or permanently cease on a portion of the site.

3. The dates when stabilization measures are initiated.

Inspection and maintenance reports, as well as all records required by a Storm Water Pollution Prevention Plan (SWPPP), shall be included in the onsite SWPPP as part of the Texas Pollution Discharge Elimination System (TPDES) Report. Copies of example forms to be used for the inspection and maintenance reports along with their related records, will be included in the onsite SWPPP and are provided for reference.

MAINTENANCE

Based on the results of the inspection, any changes required to correct damages or deficiencies in the control measures shall be made within seven (7) calendar days after the inspection. If existing stabilization/erosion controls need modification or additional stabilization/erosion controls are necessary, implementation shall be achieved prior to the next anticipated storm event. If, however, the execution of this requirement becomes impractical, then the implementation will occur as soon as possible, with the incident duly noted with an explanation of the impracticality, in the inspection report.

Sediment accumulation at each control will be removed and properly disposed when the depth of accumulation equals or exceeds six (6) inches. If sediment accumulation is found to be contaminated, its disposal shall be off-site in a manner which conforms to the appropriate applicable regulations.

ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

During Construction:

The methodology for handling pollution of on-site or up-gradient storm water during construction will include the following:

1. Silt fencing and rock berms will be used as a temporary erosion and sedimentation controls.

2. Stabilized construction entrances/exits will be put into place to reduce the dispersion of sediment from the site, and to aid in accessibility to the site.

3. A construction staging area will also be put into place for material stockpiles, machinery storage, and machinery maintenance.

4. Concrete truck washout pits will be put into place to prevent contamination of storm water runoff and to aid in the removal of sediments from the site.

5. As required by the TCEQ General Permit, disturbed areas on which construction activity has ceased (temporarily or permanently) and which will be exposed for more than 21 days shall be stabilized within 14 days. Areas receiving less than 20 inches of annual rainfall should be stabilized as soon as practicable and only to pre-project conditions.

6. If construction stops for more than 14 days, hydro-seeding, sod or other TCEQ approved method will be applied to re-stabilize vegetation.

After Construction:

This site will provide the following permanent pollution abatement measures to prevent the pollution of storm water originating on-site or upgradient from the project site:

1. Storm water will be directed to grate inlets via curbing and grading and discharged into the sedimentation/filtration basins. The sedimentation/filtration basins have been designed to capture and filter the required runoff from the individual watersheds. The basin has been designed in accordance with the TCEQ Technical Guidance Manual. Each basin will be constructed as that particular phase is built.

2. Native grasses will be used on-site to help reduce the use of fertilizers and this will in turn reduce the levels of phosphates present in the stormwater runoff.

3. Where possible drainage will be directed across vegetated areas to provide some pretreatment prior to discharge into the filtration basin.

Permanent Erosion Control:

1. All disturbed areas shall be restored as noted below:

    - A minimum of 4" of topsoil shall be placed in all drainage channels (except rock) and between the curb and R.O.W. property lines.

2. Broadcast Seeding:

    - From September 15 to March 1, seeding shall be with a combination of 2 pounds per 1,000 SF of unhulled Bermuda and 7 pounds per 1000 SF of Winter Rye with a purity of 95% with 90% germination.

    - From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 2 pounds per 1000 SF with a purity of 95% with 85% germination.

3. Fertilizer shall be a pelleted or granular slow release with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1 pound per 1,000 SF.

4. Hydraulic Seeding:

    - From September 15 to March 1, seeding shall be with a combination of 1 pound per 1,000 SF of unhulled Bermuda and 7 pounds per 1,000 SF of Winter Rye with a purity of 95% with 90% germination.

    - From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 7 pounds per 1,000 SF with a purity of 95% with 85% germination.

5. Fertilizer shall be a water soluble fertilizer with an analysis of 15-15-15 at a rate of 1 to 1.5 pounds per 1,000 SF (45-65 pounds per acre).

6. Mulch type used shall be hay, straw, or mulch applied at a rate of 45 pounds per 1,000 SF with a soil tackifier at a rate of 1.4 pounds per 1,000 SF.

7. The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil but will sufficiently soak the soil to a depth of 6". The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of ½" or more shall postpone the watering schedule for one week.

8. Restoration shall be acceptable when the grass has grown at least 1½" high with 95% coverage, provided no bare spots larger than 16 square feet exist.

PERMANENT STORM WATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Charles F. Hedges, Jr.

Date: 5/9/2016

Signature of Customer/Agent

Charles F. Hedges Jr

Regulated Entity Name: Mission Hill Apartments

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

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

☐ N/A

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

   ☐ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

☒ Design calculations (TSS removal calculations)
☒ TCEQ construction notes
☒ All geologic features
☒ All proposed structural BMP(s) plans and specifications

☐ N/A

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

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

    ☐ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☐ N/A

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

    ☐ N/A

ATTACHMENT A

20% OR LESS IMPERVIOUS COVER WAIVER
(Not Applicable)

ATTACHMENT B

BMPs FOR UPGRADIENT STORM WATER

BMPS FOR UPGRADIENT STORM WATER

The Permanent BMPs for this project will incorporate are designed to treat the entire ±24.50-acre development. There is no surface water, groundwater, nor storm water that originates up-gradient from the site that flow through or across the project site.

ATTACHMENT C

BMPs FOR ON-SITE STORM WATER

BMPS FOR ON-SITE STORM WATER

The proposed sand filter water quality pond is designed to prevent pollution of surface water or groundwater from runoff that originates on-site or flows off the site.

ATTACHMENT D

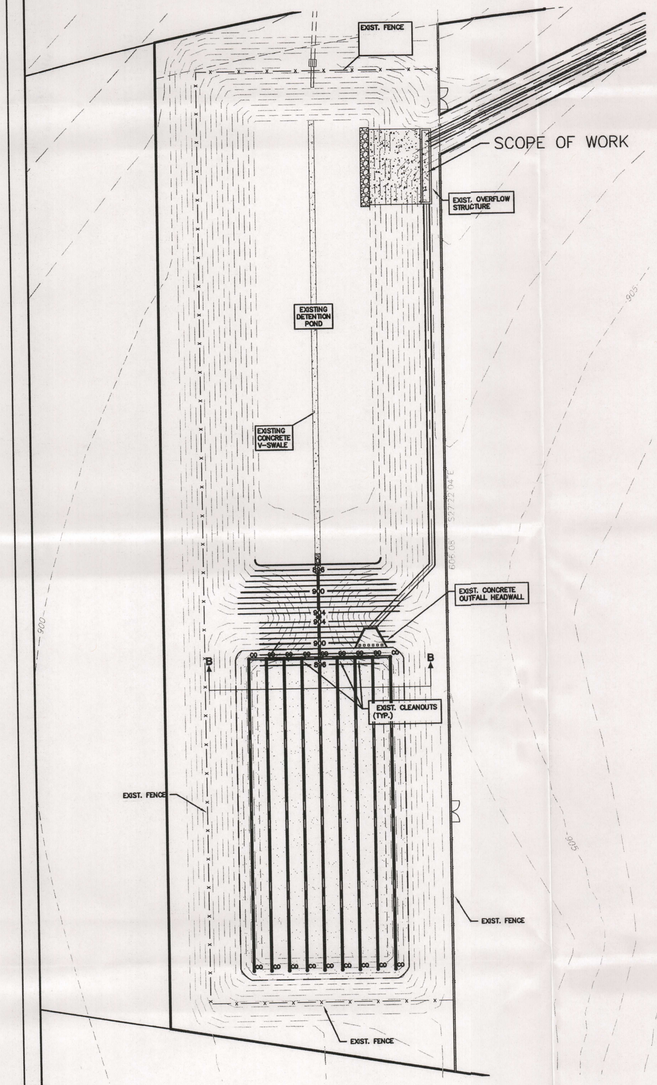
BMPs FOR SURFACE STREAMS
(Not Applicable)

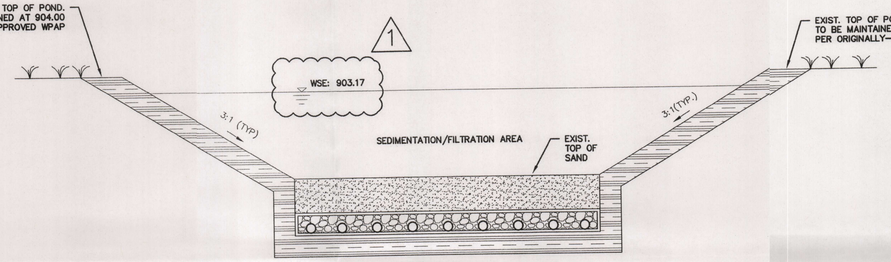
ATTACHMENT E

REQUEST TO SEAL A FEATURE
(Not applicable)

ATTACHMENT F

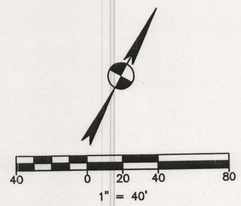
CONSTRUCTION PLANS





WATER QUALITY POND CROSS SECTION B-B

SCALE: NTS

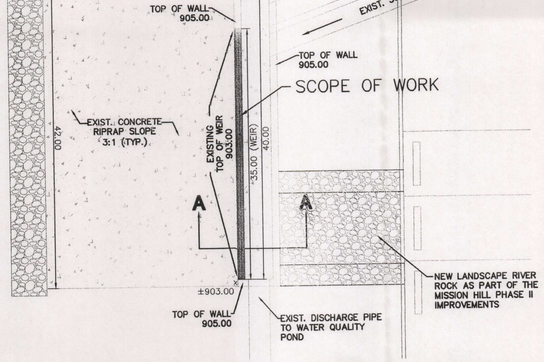


LEGEND

EXISTING	PROPOSED	DESCRIPTION
(xxx)		PROPERTY LINE/ (R.O.W.) LINE RECORD INFORMATION
☼		LIGHT POLE
⌀		POWER POLE
←		DOWN GUY
TMH ○		TELEPHONE MANHOLE
WTRMH ○		WATER MANHOLE
○		WATER LINE MARKER
⊢		FIRE HYDRANT
⊘		WATER VALVE
◪		WATER METER
	WM	WATER METER VAULT
	⊨	BACKFLOW PREVENTER
W	XX"W	WATER LINE
▨	▨	GRATE INLET
▭	▭	CURB INLET (SIZE VARIES)
		STORMSEWER LINE
WW	XX"WW	WASTEWATER LINE
WW	XX"WW	WASTEWATER LATERAL LINE
WWMH ○	○WWMH	WASTEWATER MANHOLE (SIZE VARIES)
SSMH ○	○SSMH	STORMSEWER MANHOLE (SIZE VARIES)
CO ●	CO●	WASTEWATER CLEANOUT
TMH ○	TMH ◉	TELEPHONE MANHOLE (SIZE VARIES)
G		GAS LINE
E	E	UNDERGROUND ELECTRIC LINE
E/T	E/T	ELECTRIC/TELEPHONE LINE
OHE	OHE	OVERHEAD ELECTRIC LINE
UT	XX"UT	UNDERGROUND TELEPHONE
UC	XX"UC	UNDERGROUND CABLE AND INTERNET
TC	TC	TELECOMMUNICATIONS LINE
EMH ○	EMH ●	ELECTRIC MANHOLE (SIZE VARIES)
		CONCRETE CURB
		EDGE OF PAVEMENT
678	678	CONTOUR
		DIRECTION OF FLOW
1170		TREE TO REMAIN
1174		TREE TO BE REMOVED

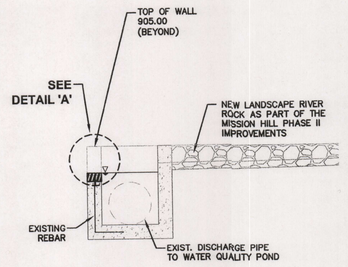
1

THIS SEAL APPLIES TO REVISION 1 ONLY. THE ORIGINAL APPROVED DOCUMENT WAS SIGNED/SEALED BY AARON K. PARENICA, PE #99323 DATED 06-20-11. IT SHALL BE NOTED THAT THE PROPOSED MODIFICATIONS SHOWN ON THIS SHEET SEEKS TO REVISE THE EXISTING CONCRETE WEIR ELEVATION AT THE OVERFLOW STRUCTURE. ALL OTHER INFORMATION ON THIS SHEET IS FOR REFERENCE ONLY.



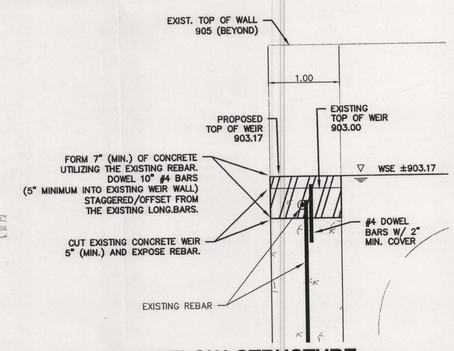
EXISTING OVERFLOW STRUCTURE MODIFICATION PLAN VIEW

SCALE: 1"=10'



OVERFLOW STRUCTURE SECTION A-A

SCALE: 1"=5'



OVERFLOW STRUCTURE DETAIL 'A'

SCALE: 1"=1'

RECEIVED
JUN 22 2016
COUNTY ENGINEER

NO.	DATE	REVISION	APPROVAL
1	06/01/2016	MOD'NS TO TOP OF WEIR AT EXIST. OVERFLOW STRUCTURE	

Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-8629
TBPE Registration Number F-6324

STATE OF TEXAS
MARY JANE C. PHILLIPS
102318
LICENSED PROFESSIONAL ENGINEER
6/14/16

WPAP MODIFICATIONS

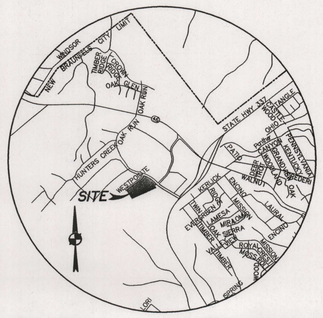
MISSION HILL APARTMENTS

NEW BRAUNFELS, TX

PLOTTING SCALE: 1"= 1'
DATE REVISED: June 14, 2016
FILE: 110711003WPAP.dwg
DRAWN BY: RR
DESIGNED BY: SSL
REVIEWED BY: AKP
PROJECT NO.: 109719001

SHEET
C1.0

Date: Jun 14, 2016, 7:44am User ID: mphillips
File: G:\110711\003\02\110711003WPAP.dwg



VICINITY MAP
NEW BRAUNFELS,
TEXAS
N.T.S.

ENGINEER: STANTEC CONSULTING
70 NE LOOP 410, SUITE 1100
SAN ANTONIO, TEXAS 78216
(210) 525-9090
ATTN.: MARY JANE PHILLIPS, P.E.

SURVEY PROVIDED BY: STANTEC CONSULTING
70 NE LOOP 410, SUITE 1100
SAN ANTONIO, TEXAS 78216
(210) 525-9090
ATTN.: HAL LANE, R.P.L.S.

STANTEC JOB NO: 110711-50001

MISSION HILL APARTMENTS

SWC OAK RUN PKWY & WESTPOINTE DRIVE

NEW BRAUNFELS, TEXAS

WATER QUALITY POND PLANS MODIFICATION

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SHEET INDEX

WATER POLLUTION ABATEMENT PLAN NOTES:

1. CONTRACTOR IS ADVISED THAT TCEQ DOES NOT ALLOW CHANGES TO PERMANENT POLLUTION ABATEMENT MEASURES WITHOUT THEIR PRIOR APPROVAL.

2. TOPS OF CLEANOUTS SHALL BE SET AT SIX INCHES ABOVE THE SAND ELEVATION.

3. SEDIMENT WILL BE REMOVED WHEN THE MATERIAL FILLS THE BASIN TO THE TOPS OF THE CLEANOUTS.

4. CONTRACTOR TO HYDROMULCH EARTHEN SLOPES FOR SLOPE STABILIZATION DURING INITIAL BASIN CONSTRUCTION AND MAINTAIN WATERING UNTIL VEGETATION IS FULLY ESTABLISHED.

5. AS AN ALTERNATE TO ITEM 4, CONTRACTOR MAY USE SEED IMPREGNATED STRAW MATTING FOR SLOPE STABILIZATION. MATTING MATERIAL TO BE APPROVED BY ENGINEER.

6. CONTRACTOR SHALL NOTIFY CERTIFYING ENGINEER WHEN BASIN CONSTRUCTION HAS PROGRESSED TO THE FOLLOWING MILESTONES:

   a.) BASIN LINER IN PLACE AND UNDER DRAIN SYSTEM IS IN PLACE WITHOUT GRAVEL.

   b.) GRAVEL AROUND UNDER DRAIN SYSTEM IS IN PLACE AND FILTER FABRIC IS INSTALLED AND ATTACHED TO WALLS OR RIP-RAP.

   c.) SAND FILTER MEDIA HAS BEEN PLACED & BASIN HAS BEEN COMPLETELY FINISHED INCLUDING SOD OR SEED PLACEMENT ON SIDE SLOPES (WHERE APPLICABLE).

7. WORK SHALL NOT CONTINUE ON THE BASIN UNTIL THE ENGINEER HAS HAD AN OPPORTUNITY TO OBSERVE THE STATUS OF CONSTRUCTION AT EACH STAGE. CONTRACTOR SHALL PROVIDE ENGINEER A MINIMUM OF 24 HOURS ADVANCE NOTICE PRIOR TO TIME THE BASIN WILL BE AT THE REQUIRED STAGE.

8. UPON SUBSTANTIAL COMPLETION CONTRACTOR TO PROVIDE CERTIFYING ENGINEER WITH FIELD SHOTS VERIFYING ELEVATIONS OF THE FOLLOWING:
- TOP OF BANK AT EACH CORNER OF BASIN
- TOE OF SLOPE AT EACH CORNER OF BASIN (INSIDE BASIN TOE)
- SPLASH PAD/INLET PIPE
- OVERFLOW WEIR

9. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH STRUCTURAL ENGINEER SO AS TO PROVIDE APPROPRIATE OPPORTUNITY FOR STRUCTURAL ENGINEER TO MAKE THE NECESSARY CONSTRUCTION OBSERVATIONS DURING INSTALLATION.

10. CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT ALL STRUCTURES HAVE BEEN CONSTRUCTED TO THE DESIGN ELEVATIONS AT THE COMPLETION OF CONSTRUCTION. THIS SHALL INCLUDE ALL STRUCTURAL ELEMENTS, CONCRETE WALLS, BASIN INVERTS, TOP OF EARTH BASIN WALLS, TOP OF SAND ELEVATIONS, INVERTS OF SEDIMENTATION CHAMBER ELEVATIONS, AND ELEVATIONS OF INLET AND OVERFLOW DEVICES.

11. ALL UNDERDRAIN 4" & 6" PVC PIPE WITHIN WATER QUALITY POND TO BE SCHEDULE 40.

GENERAL CONSTRUCTION NOTES:

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE THE NAME OF THE APPROVED PROJECT, THE ACTIVITY START DATE, AND THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;

B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;

C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

SPECIAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CONTACT THE CITY OF NEW BRAUNFELS AND ALL UTILITY COMPANIES LOCATOR 48 HOURS BEFORE BEGINNING ANY EXCAVATION.
2. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181. NEW BRAUNFELS UTILITIES (NBU) MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
3. THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION. CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY PLANT DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL CONTACT CITY OF NEW BRAUNFELS AND/OR NBU, WATER LINE LOCATOR 48 HOURS PRIOR TO EXCAVATION IN THE IMMEDIATE AREA OF WATER LINE.
5. DAMAGE TO ANY UNDERGROUND DRAINAGE SYSTEM SHALL BE REPORTED TO CITY OF NEW BRAUNFELS AND/OR NBU FOR CONSULTATION WITH THE CITY'S DRAINAGE SUPERINTENDENT. THE SUPERINTENDENT WILL INSTRUCT THE DAMAGING PARTY (CONTRACTOR) ON HOW TO REPAIR THE LINE AT THE CONTRACTORS COST.
6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROTECTING THE INTEGRITY OF THE POWER POLES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED AT THEIR EXPENSE TO PROVIDE ACCEPTABLE BRACING OF SPECIFIC NBU POLES DURING THE CONSTRUCTION OF THIS PROJECT AND/OR PROVIDE AT THEIR EXPENSE FOR NBU TO PROVIDE BRACING. IN ADDITION IT IS CRITICAL THE CONTRACTOR WORK CLOSELY WITH NBU CONSTRUCTION FORMAN FOR THE SAKE OF SAFETY TO ISOLATE AND/OR PROTECT CONTRACTOR FROM ENERGIZED ELECTRIC CONDUCTORS ABOVE AREAS OF PROPOSED EXCAVATION.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEM'S PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

FLOODPLAIN INFORMATION

ACCORDING TO THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 48091C0435F IN COMAL COUNTY DATED SEPTEMBER 02, 2009, THIS SITE IS NOT WITHIN THE 100-YEAR FLOODPLAIN.

LEGAL DESCRIPTION:

24.50 ACRES OF LAND SITUATED IN THE CITY OF NEW BRAUNFELS, COMAL COUNTY, TEXAS, BEING PART OF THE ANDRES SANCHES SURVEY NO. 286, ABSTRACT NO. 528 AND WILLIAM MOCKFORD SURVEY NO. 285, ABSTRACT NO. 393 AND A PORTION OF THAT CERTAIN 205.00 ACRE TRACT RECORDED IN DOCUMENT NUMBER 200706031735 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS.

BENCHMARK NOTE:

TBM BPI 62 COTTON SPINDLE AT THE NOSE OF AN ISLAND IN OAK RUN PARKWAY AT THE INTERSECTION WITH INDEPENDENCE DRIVE.
ELEV=923.61'

TBM BPI 2 CUT "X" ON NORTH FLANGE BOLT OF FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF OAK RUN PARKWAY AND ±129' WEST OF INDEPENDENCE DRIVE.
ELEV=926.75' (NOT SHOWN)

SAN ANTONIO REGIONAL OFFICE
14250 JUDSON RD.
SAN ANTONIO, TEXAS 78233-4480
PHONE (210) 490-3096
FAX (210) 545-4329

AUSTIN REGIONAL OFFICE
2800 S. IH-35, SUITE 100
AUSTIN, TEXAS 78704-5712
PHONE (512) 339-2929
FAX (512) 339-3795

SUBMITTED BY:

MARY JANE PHILLIPS, P.E. DATE 6/15/16
STANTEC CONSULTING
70 NE LOOP 410, SUITE 1100
SAN ANTONIO, TEXAS 78216
(210) 525-9090

STATE OF TEXAS
MARY JANE C. PHILLIPS
102318
LICENSED
PROFESSIONAL ENGINEER

RECEIVED
JUN 22 2016
COUNTY ENGINEER

Stantec
70 NE Loop 410, Suite 1100
San Antonio, TX 78216
Tel. (210) 525-9090 Fax (210) 525-0529
TBPE Registration Number F-6324

Date: Jun 10, 2016, 1:02pm User ID: mhilbig
File: c:\110711\50002\CD-TCEQ\110711002C06.dwg

DATE	NO.	REVISION	APPROVAL

SHEET
C0.0

Texas Commission on Environmental Quality
TSS Removal Calculations

Project Name: Mission Hill Apartments
Date Prepared: 3/18/2016

1. The Required Load Reduction for the total project:

Calculations from RG-348 Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$
Pages 3-27 to 3-30

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	**Comal**	
Total project area included in plan * =	**24.50**	acres
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres
Total post-development impervious area within the limits of the plan* =	**17.93**	acres
Total post-development impervious cover fraction * =	**0.73**	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	**16094**	lbs.

Number of drainage basins / outfalls areas leaving the plan area = **1**

2. Drainage Basin Parameters (This Information should be provided for each basin):

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	**24.50**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**17.93**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.73**	
$L_{M\ THIS\ BASIN}$ =	**16094**	lbs.

6/14/16

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**SF**	abbreviation
Removal efficiency =	**89**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7:

$$LR = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$$

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**24.50**	acres
A_I =	**17.93**	acres
A_P =	**6.57**	acres
L_R =	**18325**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**16094**	lbs.
F =	**0.88**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348
Pages 3-34 to 3-36

Rainfall Depth =	**1.50**	inches
Post Development Runoff Coefficient =	**0.54**	
On-site Water Quality Volume =	**71935**	cubic feet

Calculations from RG-348
Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**14387**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**86321**	cubic feet

7. Retention/Irrigation System

Designed as Required in RG-348
Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	**NA**	cubic feet
Irrigation Area Calculations:		
Soil infiltration/permeability rate =	**0.1**	in/hr
Irrigation area =	**NA**	square feet
	NA	acres

8. Extended Detention Basin System

Designed as Required in RG-348
Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	**NA**	cubic feet

9. Filter area for Sand Filters

Designed as Required in RG-348
Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	**86321**	cubic feet
Minimum filter basin area =	**3996**	square feet
Maximum sedimentation basin area (2' Depth) =	**35967**	square feet
Minimum sedimentation basin area (8' Depth) =	**8992**	square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	**86321**	cubic feet
Minimum filter basin area =	**7193**	square feet
Maximum sedimentation basin area (2' Depth) =	**28774**	square feet
Minimum sedimentation basin area (8' Depth) =	**1798**	square feet

ATTACHMENT G

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN
FOR
MISSION HILL APARTMENTS
NEW BRAUNFELS, TEXAS

The owner of the lot where a sedimentation/filtration basin is located is responsible for the inspection, maintenance, and repair of the water quality pond(s).

• ***First year of operation***. The sand filter BMPs will be inspected on a *quarterly basis and after large storms for the first year of operation.*

• ***Inspections***. BMP facilities will be inspected *at least twice a year (once during or immediately following wet weather)* to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BMP will be identified and repaired or re-vegetated immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) will be identified and repaired immediately. Cracks, voids and undermining will be patched/filled to prevent additional structural damage. Trees and root systems will be removed to prevent growth in cracks and joints that can cause structural damage. The inspections should be carried out with as-built pond plans in hand.

• ***Sediment Removal***. Sediment will be removed from the inlet structure and sedimentation chamber *when sediment buildup reaches a depth of 6 inches or when the proper functioning of inlet and outlet structures is impaired. Sediment will be cleared from the inlet structure at least every year and from the sedimentation basin at least every 5 years.*

• ***Media Replacement***. Maintenance of the filter media will be performed *when the drawdown time exceeds 48 hours*. When this occurs, the upper layer of sand will be removed and replaced with new material meeting the original specifications. Any discolored sand will also be removed and replaced. In filters that have been regularly maintained, this will be limited to the top 2 to 3 inches.

• ***Debris and Litter Removal***. Debris and litter that accumulates near the sedimentation basin outlet device will be removed *during regular mowing operations and inspections*. (Particular attention will be paid to floating debris that can eventually clog the control device or riser.)

• ***Filter Underdrain***. The underdrain piping network will be cleaned to remove any sediment buildup *as needed* to maintain design drawdown time.

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN
FOR
MISSION HILL APARTMENTS
NEW BRAUNFELS, TEXAS

• ***Mowing.*** Grass areas in and around sand filters will be mowed *at least twice annually* to limit vegetation height to 18 inches. Vegetation on the pond embankments will be mowed as appropriate to prevent the establishment of woody vegetation.

• ***Rock Gabion.*** Rock gabion structures, when used, will be removed from pond prior to filter media replacement, cleaned and returned to the original location after the filter media replacement is complete.

• ***Nuisance Control.*** Most public agencies surveyed indicate that control of insects, weeds, odors, and algae may be needed in some water quality ponds. Nuisance control is probably the most frequent maintenance item demanded by local residents. If the ponds are properly sized and vegetated, these problems should be rare in water quality ponds except under extremely dry weather conditions. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.). Biological friendly methods of control are preferable to chemical applications.

Non-Routine Maintenance

• ***Structural Repairs and Replacement.*** Eventually, the various inlet/outlet and riser works in the water quality basins will deteriorate and must be replaced. Some public works experts have estimated that corrugated metal pipe (CMP) has a useful life of about 25 years, while concrete barrels and risers may last from 50 to 75 years. The actual life depends on the type of soil, pH of runoff, and other factors. Polyvinyl chloride (PVC) pipe is a corrosion resistant alternative to metal and concrete pipes. Structural repair and/or replacement may be necessary for any structural objects with signs of corrosion or loss of structural integrity.

GREY FOREST DEVELOPMENT LLC
Name of Owner/Agent

Signature of Owner/Agent

6/15/2016
Date

CHARLES F. HEDGES JR.
SENIOR VICE PRESIDENT

ATTACHMENT H

PILOT-SCALE FIELD TESTING PLAN
(Not Applicable)

ATTACHMENT I

MEASURES FOR MINIMIZING
SURFACE STREAM CONTAMINATION
(Not Applicable)

AUTHORIZATION AND APPLICATION FORMS

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

I Charles F. Hedges, Jr.,
Print Name

Senior Vice President,
Title - Owner/President/Other

of Grey Forest Development, LLC,
Corporation/Partnership/Entity Name

have authorized William Skeen
Print Name of Agent/Engineer

of Grey Forest Development, LLC
Print Name of Firm

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

I also understand that:

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

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

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

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

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Charles F. Hodges Jr
Applicant's Signature

12/29/2016
Date

THE STATE OF TEXAS §

County of MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared Charles F. Hodges Jr 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 29th day of January 2016.

JONI CLAY LEWIS
Notary Public, State of Texas
Comm. Expires 01-06-2020
Notary ID 11835437

Joni Clay Lewis
NOTARY PUBLIC

Joni Clay Lewis
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: January 6, 2020

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

I William Skeen,
Print Name

Multifamily Development Manager,
Title - Owner/President/Other

of Grey Forest Development, LLC,
Corporation/Partnership/Entity Name

have authorized Mary Jane Phillips, P.E.
Print Name of Agent/Engineer

of Bury, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

4/23/2015
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared William Skeen 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 23rd day of April, 2015.

NOTARY PUBLIC

Brittany Stanford
Typed or Printed Name of Notary

BRITTANY STANFORD
Notary Public, State of Texas
My Commission Expires
May 23, 2018

MY COMMISSION EXPIRES: May 23, 2018

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Mission Hill Apartments
Regulated Entity Location: 2745 Westpointe Dr., New Braunfels, TX 78132-4770
Name of Customer: Grey Forest Development, LLC.
Contact Person: Charles Hedges Phone: (512) 327-8800
Customer Reference Number (if issued):CN 603962275
Regulated Entity Reference Number (if issued):RN 106123755

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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

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

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	24.5 Acres	$ 6500.00
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: Charles F. Hedges Date: 5/9/2016

TCEQ-0574 (Rev. 02-24-15)

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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

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

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

2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 603962275		RN 106123755

SECTION II: Customer Information

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

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

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John) | If new Customer, enter previous Customer below:

Grey Forest Development, LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0801439366	32044463548		

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

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

13. Independently Owned and Operated?
☒ Yes ☐ No

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

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

15. Mailing Address:	3600 Bee Cave Road, Suite 200							
	City	Austin	State	TX	ZIP	78746	ZIP + 4	5375

16. Country Mailing Information (if outside USA)	17. E-Mail Address (if applicable)
	bskeen@apttx.com

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(512) 327 - 8800		( ) -

SECTION III: Regulated Entity Information

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

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

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

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

Mission Hill Apartments

23. Street Address of the Regulated Entity: *(No PO Boxes)*	2745 Westpointe Drive						
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	4770
24. County	Comal						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	+/- 900 ft SW of the OakRun Pkwy and Westpointe Dr. Intersection

26. Nearest City	State	Nearest ZIP Code
New Braunfels	TX	78132

27. Latitude (N) In Decimal:	29.711227	28. Longitude (W) In Decimal:	98.16711B

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	42	40.42	98	10	1.62

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1522	1623	236117	531110

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

34. Mailing Address:	3600 Bee Cave Road, Suite 200						
	City	Austin	State	TX	ZIP	78746	ZIP + 4	5375
35. E-Mail Address:	bskeen@apttx.com						

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(512) 327-8800		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Mary Jane Phillips, PE	41. Title:	Senior Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 525-9090		(210) 525-0529	mjphillips@buryinc.com

SECTION V: Authorized Signature

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

Company:	Grey Forest Development, LLC	Job Title:	Senior Vice President
Name *(In Print)*:	Charles F. Hedges, Jr.	Phone:	(512) 327-1777
Signature:	Charles F. Hedges Jr.	Date:	5/9/2016