TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 9, 2016

RECEIVED

JAN 13 2017

COUNTY ENGINEER

Mr. William H. Venema
Hanson Aggregates, LLC
300 E. John Carpenter Freeway, Suite 1645
Irving, Texas 75062

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Servtex Quarry, Worley/Heitkamp Tracts; Located on the northeast corner of the intersection of FM 2252 and Schneider Lane; Garden Ridge, Texas.

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity Number: RN102541612; Additional ID No. 13-15050702

Dear Mr. Venema:

On November 8, 2016, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received	Date of Extension Expiration
May 7, 2015	November 16, 2015
October 28, 2015	May 16, 2016
May 12, 2016	November 16, 2016
November 8, 2016	May 16, 2017

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes

or modifications to the originally approved plan. This request for extension expires on May 16, 2017. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

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

cc: Mr. Charles P. Forster, P.E., P.G., Forster Engineering
The Honorable Nadine L. Knaus, City of Garden Ridge
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
Mr. H. L. Saur, Comal Trinity GCD
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 13, 2016

Mr. William Venema
Hanson Aggregates, LLC
300 E. John Carpenter Freeway, Suite 1645
Irving, Texas 75062

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: Servtex Quarry, Worley/Heitkamp Tracts; located on the northeast corner of the intersection of FM 2252 and Schneider Lane, Garden Ridge, Texas.

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No: RN102541612, Additional ID No. 13-15050702

Dear Mr. Venema:

On May 12, 2016, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received	Date of Extension Expiration
May 7, 2015	November 16, 2015
October 28, 2015	May 16, 2016
May 12, 2016	November 16, 2016

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on November 16, 2016. Should construction not commence before the end of the six (6) month

period, another request for extension would be required to keep the Edwards aquifer Protection Plan validated.

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 Mrs. Andra Nava-Garcia of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4052.

Sincerely,

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

LB/ANG/eg

cc: Mr. Charles P. Forster, P.E., Forster Engineering
The Honorable Nadine L. Knaus, City of Garden Ridge
Mr. Thomas H. Hornseth P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
Mr. George Wissmann, Comal Trinity GCD
TCEQ Central Records, Building F, MC 212

FORSTER ENGINEERING

19915 Wittenburg
San Antonio, Texas 78256
p (210) 698-5544 c (210) 771-5721
fforster@forsterengineering.com
www.forsterengineering.com

RECEIVED
MAY 18 2016
COUNTY ENGINEER

May 9, 2016

Mr. Todd Jones
Texas Commission on Environmental Quality (TCEQ)
San Antonio Region 13
14250 Judson Road
San Antonio, Texas 78233

REC'D
MAY 12 2016
Region 13

Subject: Hanson Aggregates LLC
Servtex Quarry, Worley/Heitkamp Tracts
Water Pollution Prevention Plan (WPAP) Extension Application
Investigation No. 1288798, RN 102541612

Dear Mr. Jones:

Hanson Aggregates is submitting this WPAP Extension Application for the Servtex Quarry, Worley/Heitkamp Tracts to comply with the Edwards Aquifer Program Regulations under Texas Administrative Code (30 TAC §213). The original WPAP was approved on May 16, 2013 and expired on May 16, 2015. Two six month extensions were approved extending the expiration to November 16, 2015, and May 16, 2016.

Please find attached one (1) original and five (5) copies of the Hanson Aggregates LLC Servtex Quarry, Worley/Heitkamp Tracts, WPAP Extension Application. This WPAP Application has been prepared in accordance with Texas Administrative Code (30 TAC §213) for development over the Edwards Aquifer Recharge Zone.

We are requesting your review and approval of this WPAP application. The required review fee of $150 is included herewith. If you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Forster Engineering
(TBPE # F-12385)

Charles P. "Frosty" Forster, P.E., P.G.
Principal

1066D-16

CHARLES P. FORSTER
59013
05/09/16

Edwards Aquifer Protection Plan Extension Request

X **Edwards Aquifer Application Cover Page (TCEQ-20705)**

X **Extension Request for an Edwards Aquifer Protection Plan (TCEQ-10260)**

Attachment A - Approval Letter or Extension Approval

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

X **Application Fee Form (TCEQ-0574)**

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

X **Core Data Form (TCEQ-10400)**

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: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS							**2. Regulated Entity No.:** 102541612			
3. Customer Name: Hanson Aggregates LLC							**4. Customer No.:** 603475864			
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):**		131.5		
9. Application Fee:	$150.00		**10. Permanent BMP(s):**			Earthen Berms				
11. SCS (Linear Ft.):	0		**12. AST/UST (No. Tanks):**			0				
13. County:	Comal		**14. Watershed:**			Dry Comal Creek				

Application Distribution

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

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

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

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

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	1	___	___	___
Region (1 req.)	___	1	___	___	___
County(ies)	___	1	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	1 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 1 Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Charles P. "Frosty" Forster, P.E., P.G. Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent Date 05/09/16

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):	

05/09/16

Extension Request for an Edwards Aquifer Protection Plan

Texas Commission on Environmental Quality

Relating to 30 TAC §213.4(g) Effective June 1, 1999

Regulated Entity Information

If requested by an agent, attach the agent authorization form.

1. Regulated Entity Name: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
2. Customer (Applicant):

   Contact Person: Lalit Bhatnagar, P.E.
   Entity: Hanson Aggregates LLC
   Mailing Address: 300 E. John Carpenter Freeway, Suite 1645
   City, State: Irving, TX Zip: 75062
   Telephone: 972-814-4122 Fax: 469-417-1438
   Email Address: Lalit.Bhatnagar@hanson.biz

3. Agent/Representative (if any):

   Contact Person: Charles P. "Frosty" Forster, P.E., P.G.
   Entity: Forster Engineering
   Mailing Address: 19915 Wittenburg
   City, State: San Antonio, TX Zip: 78256
   Telephone: 210-698-5544 Fax: _____
   Email Address: fforster@forsterengineering.com

Extension Request

4. ☒ **Attachment A - Approval Letter or Extension Approval**. A copy of the last approval letter or the last approved extension is attached.

   Date of letter: 11/17/15
   Expiration date: 05/16/16

5. ☒ This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.
6. ☒ A completed fee form is attached. The fee for a six-month extension of time is $150.

Signature

Print Name of Customer/Agent: Charles P. "Frosty" Forster, P.E., P.G.

Date: 05/09/16

Signature of Customer/Agent:

Charles P. Forster

STATE OF TEXAS
CHARLES P. FORSTER
59045
REGISTERED
PROFESSIONAL ENGINEER
Charles P. Forster
05/09/16

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 17, 2015

Mr. Lalit Bhatnagar, P.E.
Hanson Aggregates, LLC
8505 Freeport Parkway, Suite 500
Irving, TX 75063

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: Servtex Quarry, Worley/Heitkamp Tracts; located on the northeast corner of the intersection of FM 2252 and Schneider Lane, Garden Ridge, Texas

Type of Plan: Request for the Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1288798; Regulated Entity No: RN102541612, Additional ID No. 13-15050702

Dear Mr. Bhatnagar:

On October 28, 2015, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received	Date of Extension Expiration
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October 28, 2015	May 16, 2016

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on May 16, 2016. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Joshua Vacek of the Edwards Aquifer Protection Program, San Antonio Regional Office at 210-403-4028.

Sincerely,

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

LMB/JV/eg

cc: Mr. Charles P. Forster, P.E., Forster Engineering
The Honorably Jay F. Feibelrnan, City of Garden Ridge
Mr. Thomas H. Hornseth P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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

I William H. Venema,
Print Name

Vice President,
Title - Owner/President/Other

of Hanson Aggregates LLC,
Corporation/Partnership/Entity Name

have authorized Charles P. "Frosty" Forster, P.E., P.G.
Print Name of Agent/Engineer

of Forster Engineering
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:

William H. Venema

Applicant's Signature

May 9, 2016
Date

William H. Venema
Vice President of Hanson Aggregates LLC

THE STATE OF TEXAS §

County of DALLAS §

BEFORE ME, the undersigned authority, on this day personally appeared William H. Venema, Vice President of Hanson Aggregates LLC 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 9th day of May, 2016.

LINDSIE DALE
Notary Public, State of Texas
My Commission Expires
November 10, 2019

Lindsie Dale
NOTARY PUBLIC

LINDSIE DALE
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11-10-2019

Lehigh Hanson
HEIDELBERGCEMENT Group

Lehigh Hanson, Inc.
Legal Department
P.O. Box 660225
Dallas, Texas 75266
Phn: (972) 653-6272
Fax: (972) 653-6185
www.hanson.com

November 9, 2015

Mr. Alex D. Grant
Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
TCEQ – San Antonio Region
14250 Judson Road
San Antonio, TX 78233

Subject: **Hanson Aggregates West, Inc., Comal County Properties**
Hanson Aggregates LLC TCEQ Applications

Dear Mr. Grant:

I, William H. Venema, am a duly designated officer, Vice President of Hanson Aggregates LLC, formerly known as Hanson Aggregates West, Inc. On December 31, 2008, Hanson Aggregates West, Inc. converted and changed its name to Hanson Aggregates West LLC. Also, on December 31, 2008, Hanson Aggregates West LLC changed its name to Hanson Aggregates LLC. Copies of the filings filed on record with the Delaware Secretary of State are attached.

Therefore, Hanson Aggregates LLC, formerly Hanson Aggregates West, Inc., has full possession and control of the various properties identified or recorded in the Comal County records as owned by Hanson Aggregates West, Inc. by virtue of ownership. Accordingly, Hanson Aggregates LLC has the authority, as owner, to apply for any and all permits required by the Texas Commission on Environmental Quality (TCEQ) for said properties.

Please contact me by phone at (972) 653-5572 or by mail at Hanson Aggregates LLC, 300 E. John Carpenter Freeway, Suite 1645, Irving, TX 75062, for any further assistance.

Sincerely,

William H. Venema
Vice President
Hanson Aggregates LLC

STATE OF TEXAS
COUNTY OF DALLAS

I, Amy C. Yi, a Notary Public, do hereby certify that William H. Venema as Vice President of Hanson Aggregates LLC, formerly Hanson Aggregates West, Inc., personally appeared before me this day, known to me to be the person whose name is subscribed on the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

WITNESS my hand and official seal this 9th day of November, 2015.

_____ Notary Public

My Commission expires: November 12, 2018

AMY C YI
My Commission Expires
November 12, 2018

Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF CONVERSION OF A DELAWARE CORPORATION UNDER THE NAME OF "HANSON AGGREGATES WEST, INC." TO A DELAWARE LIMITED LIABILITY COMPANY, CHANGING ITS NAME FROM "HANSON AGGREGATES WEST, INC." TO "HANSON AGGREGATES WEST LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:52 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF CONVERSION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100V

081235422

AUTHENTICATION: 7057716

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:52 PM 12/29/2008
SRV 081235422 - 0693918 FILE

STATE OF DELAWARE
CERTIFICATE OF CONVERSION
FROM A CORPORATION TO A
LIMITED LIABILITY COMPANY PURSUANT TO
SECTION 18-214 OF THE LIMITED LIABILITY COMPANY ACT

Hanson Aggregates West, Inc., a corporation formed and existing under the General Corporation Law of the State of Delaware (the "***Corporation***"), for purposes of converting the Corporation into a limited liability company existing under the Limited Liability Company Act of the State of Delaware (the "***Limited Liability Company***"), hereby certifies as follows:

1. The jurisdiction where the Corporation was first formed is Delaware.

2. The jurisdiction of the Corporation immediately prior to filing this Certificate is Delaware.

3. The date the Corporation was first formed is November 27, 1968.

4. The name of the Corporation immediately prior to filing this Certificate is Hanson Aggregates West, Inc.

5. The name of the Limited Liability Company as set forth in the Certificate of Formation is Hanson Aggregates West LLC.

6. The conversion is to be effective as of 9:45 p.m., Eastern Time, on December 31, 2008.

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of the 15th day of December, A.D., 2008.

HANSON AGGREGATES WEST, INC.

By: _____
Authorized Person

Name: Michael H. Hyer

Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND CORRECT COPY OF CERTIFICATE OF FORMATION OF "HANSON AGGREGATES WEST LLC" FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:52 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF FORMATION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100V

AUTHENTICATION: 7057716

081235422

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:52 PM 12/29/2008
SRV 081235422 - 0693918 FILE

STATE OF DELAWARE
LIMITED LIABILITY COMPANY
CERTIFICATE OF FORMATION

This Certificate of Formation of Hanson Aggregates West LLC is being duly executed and filed by the undersigned, as an authorized person, to form a limited liability company under the Delaware Limited Liability Company Act (6 Del. C. §18-101 et seq.).

First: The name of the limited liability company formed hereby is Hanson Aggregates West LLC (the "***Company***").

Second: The address of the Company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

Third: The name and address of the registered agent for service of process on the Company in the State of Delaware is The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

Fourth: The Company is being formed in conjunction with the conversion of Hanson Aggregates West, Inc., a Delaware corporation (the "***Converting Entity***"), to a limited liability company.

Fifth: The conversion of the Converting Entity and formation of the limited liability company will be effective as of 9:45 p.m. on December 31, 2008 (the "***Effective Time***").

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation as of the 15th day of December, 2008, to be effective as of the Effective Time.

By: _____
Authorized Person

Name: Michael H. Hyer

Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "HANSON AGGREGATES WEST LLC", CHANGING ITS NAME FROM "HANSON AGGREGATES WEST LLC" TO "HANSON AGGREGATES LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:44 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100

AUTHENTICATION: 7059294

081235465

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:44 PM 12/29/2008
SRV 081235465 - 0693918 FILE

STATE OF DELAWARE
CERTIFICATE OF AMENDMENT

1. Name of Limited Liability Company: Hanson Aggregates West LLC.

2. The Certificate of Formation of the limited liability company is hereby amended as follows:

> The First Article of the Certificate of Formation is deleted in its entirety and the following provision is substituted in its place and stead:
>
> **First:** The name of the limited liability company is Hanson Aggregates LLC (the "***Company***").

3. This Amendment shall be effective at 9:45 p.m., Eastern Time, on December 31, 2008.

IN WITNESS WHEREOF, the undersigned has executed this Certificate on behalf of the limited liability company as of the 29th day of December, A.D. 2008.

By: _____
Authorized Person

Name: Michael H. Hyer
Print or Type

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
Regulated Entity Location: 21303 FM 2252, GARDEN RIDGE, TX 78132
Name of Customer: Hanson Aggregates LLC
Contact Person: Lalit Bhatnagar, P.E. Phone: 972-814-4122
Customer Reference Number (if issued):CN 603475864
Regulated Entity Reference Number (if issued):RN 102541612

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	1 Each	$ 150

Signature: Charles R Forster Date: 05/09/16

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 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

CHARLES P FORSTER, P.E. P.G.
OR JENNIFER JILL DACUS
19915 WITTENBURG
SAN ANTONIO, TX 78256

1949
30-9/1140
4

5/9/16
Date

Pay To The Order Of TEXAS COMMISSION ON ENVIRONMENTAL Quality $ 150.00

One hundred fifty dollars & no cents Dollars

Frost
www.frostbank.com

Signature Checking

For Hanson Aggregates LLC

Charles Forster MP

⑆114000093⑆ 1949 ⑈044238613⑈

Harland Clarke

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 603475864		RN 102541612

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	05/09/16

☐ 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:

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

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

12. Number of Employees	13. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ 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:							
	City		State		ZIP		ZIP + 4

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

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

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.)

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4	
24. County							

Enter Physical Location Description if no street address is provided.

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

27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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)

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

34. Mailing Address:							
	City		State		ZIP		ZIP + 4	
35. E-Mail Address:							

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
( ) -		( ) -

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

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

SECTION IV: Preparer Information

40. Name: Charles P. "Frosty" Forster, P.E., P.G.			41. Title: Principal
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210)698- 5544		( ) -	fforster@forsterengineering.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:	FORSTER ENGINEERING	Job Title:	PRINCIPAL
Name(*In Print*):	Charles P. Forster, P.E.,P.G.	Phone:	( )- 210-698-5544
Signature:	Charles P Forster	Date:	05/09/16

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 17, 2015

RECEIVED

DEC 23 2015

COUNTY ENGINEER

Mr. Lalit Bhatnagar, P.E.
Hanson Aggregates, LLC
8505 Freeport Parkway, Suite 500
Irving, TX 75063

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: Servtex Quarry, Worley/Heitkamp Tracts; located on the northeast corner of the intersection of FM 2252 and Schneider Lane, Garden Ridge, Texas

Type of Plan: Request for the Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1288798; Regulated Entity No: RN102541612, Additional ID No. 13-15050702

Dear Mr. Bhatnagar:

On October 28, 2015, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received	Date of Extension Expiration
May 7, 2015	November 16, 2015
October 28, 2015	May 16, 2016

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on May 16, 2016. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Joshua Vacek of the Edwards Aquifer Protection Program, San Antonio Regional Office at 210-403-4028.

Sincerely,

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

LMB/JV/eg

cc: Mr. Charles P. Forster, P.E., Forster Engineering
The Honorably Jay F. Feibelman, City of Garden Ridge
Mr. Thomas H. Hornseth P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

FORSTER ENGINEERING

19915 Wittenburg
San Antonio, Texas 78256
p (210) 698-5544 c (210) 771-5721
fforster@forsterengineering.com
www.forsterengineering.com

November 16, 2015

Mr. Joshua Vacek
Texas Commission on Environmental Quality (TCEQ)
San Antonio Region 13
14250 Judson Road
San Antonio, Texas 78233

Subject: Hanson Aggregates LLC
Servtex Quarry, Worley/Heitkamp Tracts
Water Pollution Prevention Plan (WPAP) Extension Application
Investigation No. 1288798
Response to NOD 1 Dated November 2, 2015

Dear Mr. Vacek:

In reference to the subject Extension Application, please find attached one (1) original and five (5) copies of an Agent Authorization Form from William Venema, Vice President of Hanson Aggregates LLC to Charles P. "Frosty" Forster, P.E., P.G. of Forster Engineering.

If you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Forster Engineering
(TBPE # F-12385)

Charles P. "Frosty" Forster, P.E., P.G.
Principal

1066C-15

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

I William H. Venema,
Print Name

Vice President,
Title - Owner/President/Other

of Hanson Aggregates LLC,
Corporation/Partnership/Entity Name

have authorized Charles P. "Frosty" Forster, P.E., P.G.
Print Name of Agent/Engineer

of Forster Engineering
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:

William H. Venema 11/13/2015

Applicant's Signature Date

William H. Venema

Vice President

THE STATE OF Texas §

County of Dallas §

William H. Venema, Vice President of Hanson Aggregates LLC

BEFORE ME, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 13th day of November, 2015.

AMY C YI
My Commission Expires
November 12, 2018

NOTARY PUBLIC

Amy C. Yi

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: November 12, 2018

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 15, 2015

Mr. Lalit Bhatnagar, P.E.
Hanson Aggregates LLC
8505 Freeport Parkway, Suite 500
Irving, TX 75063

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: Servtex Quarry, Worley/Heitkamp Tracts; located on the northeast corner of the intersection of FM 2252 and Schneider Lane, Garden Ridge, Comal County, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1251930; Regulated Entity Number: RN102541612; Additional ID No. 13-15050702

Dear Mr. Bhatnagar:

On May 7, 2015, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received:	Date of Extension Expiration:
May 7, 2015	November 16, 2015

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on November 16, 2015. Should construction not commence before the end of the six (6) month

period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or should clarification of this letter be desired, please contact Ms. Lillian I. Butler of the Edwards Aquifer Protection Program, San Antonio Regional Office at (210) 403-4026.

Sincerely,

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

LMB/LIB/eg

cc: Mr. Charles P. Forster, P.E., Forster Engineering
The Honorable Jay F. Feibelman, City of Garden Ridge
Mr. Thomas H. Hornseth P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
May 16, 2013

Mr. Lalit Bhatnagar, P.E.
Hanson Aggregates LLC
8505 Freeport Parkway, Suite 500
Irving, TX 75063

Re: Edwards Aquifer, Comal County

Name of Project: Servtex Quarry, Worley/Heitkamp Tracts; located on the northeast corner of the intersection of FM 2252 and Schneider Lane, Garden Ridge, Comal County, 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. 1839.03; Investigation No. 1076333; Additional ID No. 13-13032102

Dear Mr. Bhatnagar:

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 Forster Engineering on behalf of Servtex Quarry on March 22, 2013. Final review of the WPAP was completed after additional material was received on May 7, 2013. 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 commercial project has an area of approximately 131.5 acres. There will be a 50 foot setback distance between quarry operations and perimeter of property. The Worley/Heitkamp tracts will not have impervious cover. The quarry pit will be excavated to an elevation of 699 feet MSL. Project wastewater will be captured through the use of portable toilets.

Permanent Pollution Abatement Measures

The Heitkamp tract will not have impervious cover. Temporary BMPs like earthen berms will be implemented to control the discharge of sediment during the quarrying activities. There will be a setback of quarry operations from the property limits which will consist of native vegetation.

Geology

According to the geologic assessment included with the application, on-site outcropping units include the Pecan Gap Chalk, Buda Limestone, Del Rio Clay, and cyclic and marine member of the Person Formation. The project geologist scored fourteen natural sensitive features and ten non-sensitive features. Of the fourteen sensitive natural features, all are being proposed to be mined through with the exception of S-17 (solution cavity), and portions of S-8 (solution enlarged fractures) and S-9 (zone, clustered or aligned features). The fourteen sensitive natural features consist of nine solution cavities, two solution enlarged fractures, and three zones, clustered or aligned features. The ten non-sensitive features consist of two manmade features in bedrock, six faults, one closed depression and one solution cavity. The San Antonio Regional Office conducted a site assessment on May 6, 2013. The TCEQ concurred with the project geologist on the representation of observed features as sensitive or non-sensitive.

Special Conditions

1. The on-site Quarry Manager will receive annual training from a licensed Professional Geoscientist on feature identification and protection. Each occurrence of this training must be documented and the documentation must be presented when requested by TCEQ representatives.

2. The on-site Quarry Manager experienced in feature identification will conduct visual surveys to ensure adequate identification and reporting of encountered sensitive features. Results of each visual survey conducted by the on-site Quarry Manager must be documented and then presented when requested by TCEQ representatives.

3. Sensitive feature S-17 (solution cavity) is noted to be on the property line and should be protected through the implementation of the 50 foot wide natural vegetated perimeter buffer. Please verify in the field that this sensitive feature will have at least 50 feet of vegetated buffer within the site. Provide documentation that the buffer has been established in the field and maintain the documentation with visual survey records.

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. One water well is 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.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Michael Isley, P.E. of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4057.

Sincerely,

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

LMB/MI/eg

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

cc: Mr. Charles P. Forster, P.E., Forster Engineering
The Honorable Jay F. Feibelman, City of Garden Ridge
Mr. Thomas H. Hornseth. P.E., Comal County Engineer
Mr. Roland Ruiz, General Manager, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 22, 2013

RECEIVED
MAR 26 2013
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: Servtex Quarry Worley/Heitkamp Tracts, located approximately 5 miles northeast of the Loop 1604 and FM 2252 intersection, Texas
PLAN TYPE: Application for Approval of a Water Pollution Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP File No.: 1839.03

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.

Please forward your comments to this office by April 22, 2013.

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

for

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

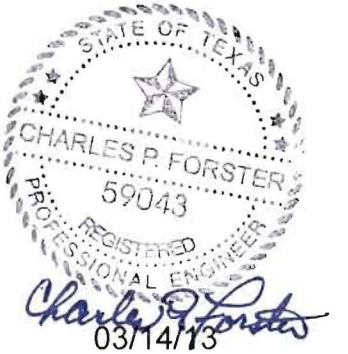
Lehigh Hanson
HEIDELBERGCEMENT Group

WATER POLLUTION PREVENTION PLAN (WPAP)

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
Comal County, Texas
Project No. 1066-12

Prepared for:
Hanson Aggregates LLC
8505 Freeport Parkway, Suite 500
Irving, Texas 75063
(972) 653-5500

Prepared by:
Forster Engineering
TBPE # 12385
19915 Wittenburg
San Antonio, Texas 78256
(210) 698-5544
MARCH 2013



03/14/13

FORSTER ENGINEERING

FORSTER ENGINEERING

19915 Wittenburg
San Antonio, Texas 78256
p (210) 698-5544 c (210) 771-5721
fforster@forsterengineering.com
www.forsterengineering.com

March 13, 2013

Mr. Todd Jones
Texas Commission on Environmental Quality (TCEQ)
San Antonio Region 13
14250 Judson Road
San Antonio, Texas 78233

RECEIVED
MAR 26 2013
COUNTY ENGINEER

Subject: Hanson Aggregates LLC
Servtex Quarry, Worley/Heitkamp Tracts
Water Pollution Prevention Plan (WPAP)

Dear Mr. Jones:

Hanson Aggregates is planning to expand their current Servtex Quarry to the southwest on their Worley Tract, and to the south on their Heitkamp Tract. Neither of these tracts is covered by or subject to a prior WPAP. Because of the proposed quarry expansion, Hanson Aggregates is submitting this WPAP application to comply with the Edwards Aquifer Program Regulations under Texas Administrative Code (30 TAC §213).

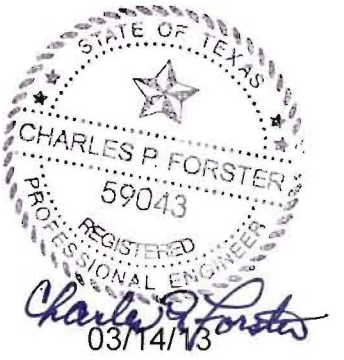
Please find attached one (1) original and four (4) copies of the Hanson Aggregates LLC Servtex Quarry, Worley/Heitkamp Tracts, WPAP Application. This WPAP Application has been prepared in accordance with Texas Administrative Code (30 TAC §213) for development over the Edwards Aquifer Recharge Zone.

We are requesting your review and approval of this WPAP application. The required review fee of $10,000 is included herewith. If you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Forster Engineering
(TBPE # F-12385)

Charles P. "Frosty" Forster, P.E., P.G.
Principal

1066-12



Lehigh Hanson
HEIDELBERGCEMENT Group

WATER POLLUTION PREVENTION PLAN (WPAP)

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
Comal County, Texas
Project No. 1066-12

Prepared for:
Hanson Aggregates LLC
8505 Freeport Parkway, Suite 500
Irving, Texas 75063
(972) 653-5500

Prepared by:
Forster Engineering
TBPE # 12385
19915 Wittenburg
San Antonio, Texas 78256
(210) 698-5544
MARCH 2013

FORSTER ENGINEERING

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

X Application Fee Form (*TCEQ-0574*)

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

X Core Data Form (*TCEQ-10400)*

Section 2.0

GENERAL INFORMATION FORM

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

REGULATED ENTITY NAME: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
COUNTY: Comal STREAM BASIN: Dry Comal Creek, Tributary 30
EDWARDS AQUIFER: X RECHARGE ZONE
__ TRANSITION ZONE

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

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Lalit Bhatnagar, P.E.
Entity: Hanson Aggregates LLC
Mailing Address: 8505 Freeport Parkway, Suite 500
City, State: Irving, TX Zip: 75063
Telephone: (972) 814-4122 FAX: (469) 417-1438

Agent/Representative (If any):

Contact Person: Charles P. "Frosty" Forster, P.E.
Entity: Forster Engineering
Mailing Address: 19915 Wittenburg
City, State: San Antonio, TX Zip: 78256
Telephone: (210) 698-5544 FAX:
Email: fforster@forsterengineering.com

2. X This project is inside the city limits of **Garden Ridge (Worley Tract)**.
X This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of **Garden Ridge (Heitkamp Tract)**.
__ This project is not located within any city's limits or ETJ.

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

The project site is located on the northeast corner of the intersection FM 2252 and Schneider Lane approximately 5.0 miles northeast of the Loop 1604/FM 2252 intersection.

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

5. X **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached ~~behind this sheet~~ **at the end of this form**. The map(s) should clearly show:

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

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

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

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

PROHIBITED ACTIVITIES

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

(1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
(2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
(3) land disposal of Class I wastes, as defined in 30 TAC §335.1;
(4) the use of sewage holding tanks as parts of organized collection systems; and
(5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

10. N/A I am aware that the following activities are prohibited on the **Transition Zone** and are not proposed for this project:

(1) waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
(2) land disposal of Class I wastes, as defined in 30 TAC §335.1; and
(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

ADMINISTRATIVE INFORMATION

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

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
__ For an Organized Sewage Collection System Plans and Modifications, the total linear

footage of all collection system lines.

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

__ A request for an exception to any substantive portion of the regulations related to the protection of water quality.

__ A request for an extension to a previously approved plan.

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

__ TCEQ cashier

__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)

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

13. X Submit one (1) original and 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.

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

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:

Charles P. "Frosty" Forster, P.E.
Print Name of ~~Customer~~/Agent

Signature of ~~Customer~~/Agent

03/14/13
Date

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

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

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
WPAP

FORSTER ENGINEERING

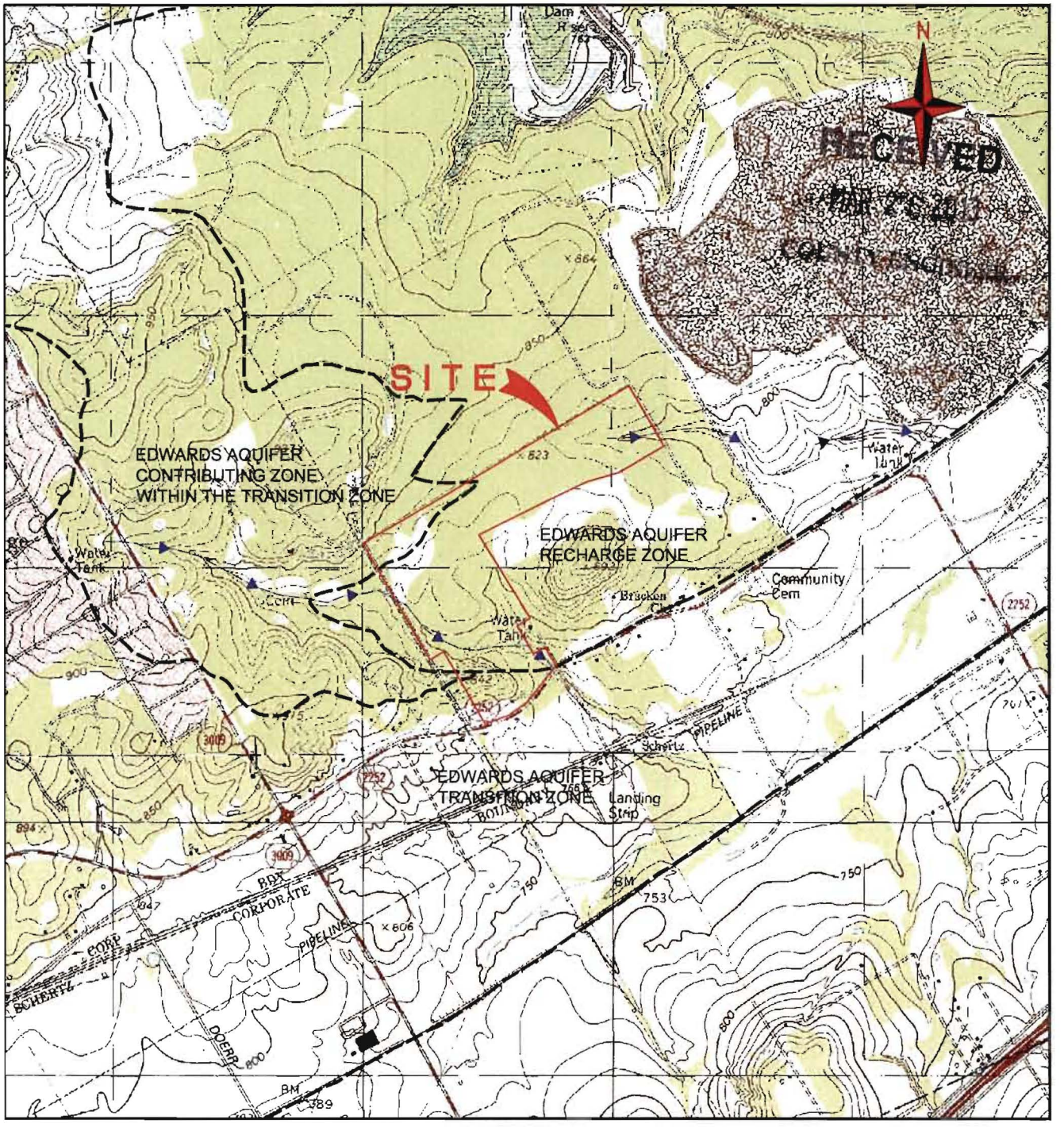
SITE LOCATION MAP
(Base Map: Google Map - 2011)

0' 2,500' 5,000' 10,000'

SCALE: 1" = 5,000'

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
WPAP

FORSTER ENGINEERING



EDWARDS AQUIFER RECHARGE ZONE MAP

(BASE MAP: USGS TOPOGRAPHIC MAPS *BAT CAVE & SHERTZ, TEXAS* 7.5' QUADRANGLES)

LEGEND

- PROJECT LIMITS
- DRAINAGE WAY
- EDWARDS AQUIFER RECHARGE ZONE BOUNDARY

SCALE: 1" = 2,000'

0' 1,000' 2,000' 4,000'

GENERAL INFORMATION FORM TCEQ-0587
ATTACHMENT C
PROJECT DESCRIPTION

Hanson Aggregates LLC (Hanson) operates the Servtex Quarry in Comal County near Garden Ridge, Texas. The Servtex Quarry is an existing limestone quarrying and crushing operation which has been in operation since the late 1930's. Hanson has plans to expand the quarry into adjacent areas south and southwest of the existing quarry. The expansion area is comprised of approximately 131.5± acres contained in two tracts known as the Worley Tract (82.6± acres) and the Heitkamp Tract (48.9± acres). The Worley property was acquired in 2001, and a portion of that property is subject to a WPAP. The Heitkamp Tract was acquired in late 2012, has not been previously quarried, and is not currently subject to a WPAP.

The expansion area will be quarried, but will not include impervious cover, sewage facilities, settling ponds or Above Ground Storage Tanks (AST). Quarry pit excavation limits will be maintained fifty feet from property lines and 100-year flood plain boundaries. To the extent possible, upgradient storm water will be diverted around the proposed mine area and on-site storm water will be captured within the quarry, or maintained on site by perimeter berms.

Temporary BMPs will utilize earthen berms constructed of topsoil material, rock berms, and vegetated buffer areas to control and treat storm water runoff. The earthen berms will be advanced incrementally around the active quarry perimeter in sequence with surface disturbance to control surface runoff. Permanent BMPs will include earthen berms constructed around the ultimate site perimeter.

Quarry activities in the expansion area will be similar to existing quarry activities and include blasting, loading, and hauling. Excavated material will be transported along the pit floor to existing crushing facilities.

2.1 Separation from Groundwater in the Recharge Zone

State Well 6822912 and State Well 6822911 are respectively located approximately 2,000 to 3,000 feet southeast of the Worley and Heitkamp tracts. Based on available Texas Water Development Board Information for these two wells, the surface elevation at Well 6822911 is 768 feet MSL and the highest recorded water level is 678.1 feet MSL. The surface elevation at Well 6822912 is 780 and the highest recorded water level is 669.48 feet MSL.

The average of these two highest recorded water levels is 673.79 feet MSL. The quarry will be mined to an elevation of 699 feet MSL maintaining an approximate 25 foot buffer above the highest recorded water table data.

2.2 Sensitive Features

2.2.2 Setbacks and Buffers for Sensitive Features

A total of 24 features geologic features were identified by the Geological Assessment of the subject site, of which 14 were rated as sensitive. Within the proposed quarry limits, there are a total of 16 features, of which 10 are rated as sensitive.

The geologic features within the proposed quarry limits will be excavated and mined out. Prior to quarry excavation of the features, the sensitive features will be protected by earthen berms or natural vegetation buffers until such time as the area of the quarry containing the sensitive feature will be mined.

The geologic features outside the proposed quarry limits will be protected by earthen berms or natural vegetation buffers.

2.2.3 Sensitive Features Identified in the Geological Assessment

A total of 24 features geologic features were identified by the Geological Assessment of the entire site, of which 14 were rated as sensitive. Within the proposed quarry excavation limits, there are a total of 16 features, of which 10 are rated as sensitive. These 16 features will be excavated by quarry activities.

2.2.4 Sensitive Features Discovered During Quarrying

Sensitive geologic features discovered in the active pit during quarrying operations will be addressed as follows:

1. Sensitive geologic feature recognition training for plant and quarry operators will be conducted.
2. The appropriate TCEQ Regional Office will be immediately notified upon discovery of any additional sensitive features encountered during the quarrying operations.
3. Sensitive features located on the ultimate quarry floor, which will not be excavated or mined out by further quarry activities, will be sealed with flowable

fill before regulated activities near the sensitive feature may proceed. Sensitive features located on the quarry floor of intermediate benches above the ultimate quarry floor, will not be sealed, but will be protected by material berms until such time as this area of the quarry containing the sensitive feature will be mined.

4. Sensitive features located in the highwalls, which are well above the level of potential water ponding in the quarry pit and unlikely to receive contamination from any other logical or recognized source, will not be sealed.
5. If sensitive features located in the highwalls are below the level of potential water ponding in the quarry pit, or likely to receive contamination from any other logical or recognized source, they will be sealed with flowable fill before regulated activities near the sensitive feature may proceed.
6. Large features may be first filled with gravel or large rocks before placement of flowable fill. A minimum of 18-inches of flowable fill will placed above the gravel or rocks. Flowable fill is to be used to provide a reliable seal throughout the sensitive feature as it's characteristics allow it to flow around and between the gravel and large rocks and conform to irregular limits of a sensitive feature. As structural integrity and bearing capacity is not a design concern in these applications, concrete is not recommended or required.

2.2.5 Inspection and Maintenance of Sensitive Features

The geologic features within the proposed quarry limits will be excavated and mined out. Prior to quarry excavation of the features, the sensitive features will be protected by earthen berms or natural vegetation buffers until such time as the area of the quarry containing the sensitive feature will be mined.

The geologic features outside the proposed quarry limits will be protected by earthen berms or natural vegetation buffers.

Sensitive features, protective earthen berms, and natural vegetation buffers will be inspected on an annual basis. If necessary, maintenance will be performed to restore the earthen berms to their original condition.

2.3 Quarry Berms

Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site.

2.4 Haul Roads, Parking Lots, and Tire Washes

There are no proposed parking lots or tire washes in the permit area. Hauling will take place along the quarry floor and connect with existing haul roads outside the permit area.

2.5 Stream Crossings and Buffers

No stream crossings will be constructed on the project site. An area of 100-year flood plain on the south western portion of the project will be not be mined. Earthen berms and natural vegetation buffers will prevent any surface water from flowing off site untreated.

2.6 Dust Control

A water truck will be utilized to control dust in active areas of the quarry. Natural vegetative cover will be left in place as long as practicable to reduce the potential for dust to become airborne. A 50 foot wide natural vegetated buffer around the site will also serve as a wind break to reduce the potential for dust to become airborne.

2.7 Mineral-Exploration Test Holes and Water Wells

There is one existing water well on the subject property, which will be undisturbed and continue to be used.

2.8 Vehicle and Equipment Maintenance

Vehicle and equipment maintenance will not be performed on the Worley/Heitkamp tracts except under extenuating circumstances. Vehicles and equipment will be parked in designated locations, visually checked on a daily basis, and drip pans will be used to catch drips as needed. Chronic drips will be repaired as soon as practicable. When maintenance must be performed, a plastic liner or disposable base pad will be utilized as secondary containment.

2.9 Storage and Movement of Petroleum and Fuel

2.9.1 AST Facility Plan

This site will not have an AST Facility.

2.9.2 Fueling Outside the Pit

The Servtex Quarry has an active Spill Prevention Control and Countermeasure (SPCC) plan in accordance with 40 CFR part 112. Heavy equipment is fueled outside the active pit area by mobile fuel trucks in areas where site topography, diversionary structures, and readily available on-site spill response equipment and materials are practical and effective to prevent a discharge of petroleum products from reaching navigable waters at this facility. Additionally, wheels on mobile fuel truck and heavy equipment will be chocked while refueling.

2.9.3 Fueling of Equipment in the Pit

Heavy equipment may be fueled in the active quarry pit when fueling outside the pit is not practical. Wheels on mobile fuel truck and heavy equipment will be chocked while refueling, and the refueling operation will be continuously monitored by refueling personnel.

2.10 Industrial Facilities on-Site

There are no existing or proposed industrial facilities located on site.

2.11 Sanitary Wastewater Disposal

There is no existing or proposed on-site sewage facility located on site. Domestic project wastewater will be collected in portable toilets and disposed of weekly by a TCEQ registered waste disposal service. Portable toilets will be located on level ground surfaces away from high traffic areas. Portable toilets will be routinely inspected and serviced at a frequency sufficient to maintain sanitary conditions. Employees will be trained on waste water discharging prohibitions.

2.11.1 Portable Toilet BMPs

Transport (industrial activity)

- Empty portable toilets before transporting them.
- Securely fasten the toilers to the transport truck.
- Use band trucks, dollies, and power tailgates whenever possible.

Placement (site activity – construction)

- Locate portable toilets at least 20 feet from the nearest storm-drain inlet or sensitive feature buffer area
- Build an earthen berm or sandbag containment around portable toilets for spill containment and protection from leaks.
- Prepare a level ground surface with clear access to the toilets.
- Secure all portable toilets with a stake driven into the ground to prevent tipping by accident, weather, or vandalism.

Maintenance of portable toilets (site activity – industrial and construction)

- Inspect the toilets frequently (daily during the work-week) for leaks and have the units serviced and sanitized at time intervals that will maintain sanitary conditions of each toilet (typically weekly).
- A licensed waste collector should service all the toilets.
- Suppliers should carry bleach for disinfection in the event of a spill or leak.
- Properly store (cover) and handle chemical materials.
- Train employees on these BMPs, prohibitions on discharging storm water, and wastewater-discharge requirements.

2.12 Spill Prevention and Control

Hanson Aggregates maintains the following required plans and permits onsite which address spill prevention and control and are incorporated herewith by reference.

- Spill Prevention Control and Countermeasure (SPCC) Plan (40CFR Part 112)
- TPDES Storm Water Pollution Prevention Plan

3 BMPs for Areas Discharging to Surface Waters

3.1 Introduction

Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site.

3.2 BMPs for Temporary Erosion and Sediment Control

A discussion of temporary erosion and sediment control practices and measures is provided in Attachment D of the Temporary Section of this WPAP Application.

3.3 Permanent Structural BMPs

A discussion of permanent structural BMPs is provided in the Permanent Section of this WPAP Application.

3.3.1 General Requirements

A discussion of the general requirements is provided in the Permanent Section of this WPAP Application.

3.3.2 Required Calculations

Any required calculations are provided in the Permanent Section of this WPAP Application.

4 BMP Requirements for Areas within Quarry Pits

4.1 Introduction

During the operational life of the quarry, the pit areas will not drain to surface waters. The primary BMPs for areas within the quarry pit have been previously described and include: watering for dust control; vehicle maintenance to minimize oil drips or leaks; proper placement, utilization, and maintenance of portable toilets; and identification and protection of sensitive features discovered during quarrying.

4.2 Permanent Structural BMPs

Upon termination of quarry activities, storm water that falls in the quarry pits will be retained in the pits and will not discharge to surface streams. For this reason, the quarry pits will not generate more TSS than in the original condition. The quarry pits will be surrounded by earthen berms, rock berms, and natural vegetative buffers which will either filter or prevent any on-site surface water from flowing off site untreated. Additionally, the earthen berms will prevent most upgradient storm water from running into the pits. For this reason, the primary source of storm water entering the pits will be direct rainfall, the majority of which is expected to evaporate.

5 Management of Process Water

5.1.1 Dimension-Stone Facilities (and Other Sites with Minor Water Use)

Not applicable to this site.

5.1.2 Innovative Technology for Aggregate-Production Facilities

If applicable, a discussion of innovative technology is provided in Attachment H of the Permanent Section of this WPAP Application.

Section 3.0

GEOLOGIC ASSESSMENT FORM

FORSTER ENGINEERING

19915 Wittenburg
San Antonio, Texas 78256
p (210) 698-5544 c (210) 771-5721
fforster@forsterengineering.com
www.forsterengineering.com

March 5, 2013

Mr. Lalit Bhatnagar
Hanson Aggregates LLC.
21303 FM 2252
San Antonio, Texas 78266

Re: Servtex Quarry, Worley/Heitkamp Tracts
Geologic Assessment

Dear Mr. Bhatnagar:

Forster Engineering has completed the Geologic Assessment for the above-referenced site. A copy of the Geologic Assessment report is attached on current Texas Commission on Environmental Quality (TCEQ) forms.

The surface reconnaissance was performed in two phases in November 2012 and January and February 2013. Transect spacing utilized during the surface reconnaissance was approximately 50-feet. Geologic and man-made features were identified in the project area as discussed herein.

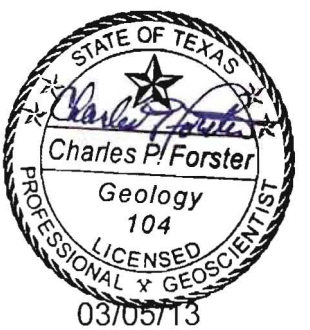
We appreciate the opportunity to be of service to Hanson Aggregates LLC. Please contact us should you need further assistance, require additional services or have any questions.

Sincerely,

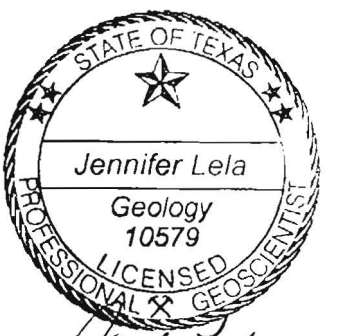
Charles P. "Frosty" Forster, P.E., P.G.
Principal
Forster Engineering
TBPE #12385

Jennifer R. Lela, P.G.
Project Geologist

Attachments



03/05/13



3/5/13

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

REGULATED ENTITY NAME: ***Servtex Quarry, Worley/Heitkamp Tracts***

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

LOCATION OF PROJECT: ✓ Recharge Zone ✓ Transition Zone ✓ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. ✓ Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE *(Attachment A)***.

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Comfort-Rock outcrop complex (CrD)	***D***	***0-2***
Doss silty clay (DoC)	***D***	***0-2***
Heiden clay (HeC3)	***D***	***0-7***
Krum clay (KrB)	***D***	***0-7***
Krum clay (KrC)	***D***	***0-7***
Medlin-Eckrant association (MED)	***D***	***0-7***
Rumple-Comfort association (RUD)	***C***	***0-3***
Tarpley clay (TaB)	***D***	***0-2***

* Soil Group Definitions (Abbreviated)

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

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

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

5. ✓ Appropriate **SITE GEOLOGIC MAP(S)** ***(Attachment B)*** are attached:

The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1" : 400'

Applicant's Site Plan Scale	1" = ***200***
Site Geologic Map Scale	1" = ***200'***
Site Soils Map Scale (if more than 1 soil type)	1" = ***1000'***

6. Method of collecting positional data:
   - ✓ Global Positioning System (GPS) technology.
   - ___ Other method(s).

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

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

9. ✓ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
   ___ Geologic or manmade features were not discovered on the project site during the field investigation.

10. ✓ The Recharge Zone boundary is shown and labeled, if appropriate.

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

✓ There are 2 (#) wells ***and/or test holes*** 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.
- 1 The ~~wells~~ ***test hole is*** ~~are~~ not in use and will be properly abandoned.
- 1 The wells ~~are~~ ***is*** in use and ~~comply~~ ***complies*** with 16 TAC Chapter 76.

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

ADMINISTRATIVE INFORMATION

12. ✓ 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.

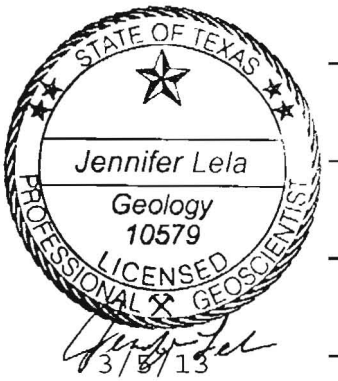
Date(s) Geologic Assessment was performed: ***November 17 & 18, 2012; January 16 & 18, 2013; February 14, 2013***
Date(s)

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

Jennifer R. Lela, P.G.
Print Name of Geologist

(210) 332-7854
Telephone

(210) 698-5544
Fax



Signature of Geologist

Representing: ***Forster Engineering***
(Name of Company)

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

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

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: *Servtex Quarry, Worley/Heitkamp Tracts*																
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)	CODE	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°37'52.8"	98°16'56.8"	SF	20	Kep	8	25	1.5	N60°E	10			O	25	55		X	X		Hillside
S-2	29°37'52.8"	98°16'56.8"	SC	20	Kep	1.5	1.5	0.8	N45°E	10			O	25	55		X	X		Hillside
S-3	29°37'50.0"	98°16'56.7"	MB	30	Kep	2.3	2.3	31	--	0			N	5	35	X		X		Hillside
S-4	29°37'52.0"	98°16'55.5"	SF	20	Kep	7	18	0.3	N80°E	10	0.5	0.5	F	5	35	X		X		Hillside
S-5	29°37'52.2"	98°16'55.3"	SC	20	Kep	1 8	2	4	N65°E	10			O	25	55		X	X		Hillside
S-6	29°37'48.5"	98°16'56 3"	Z	30	Kep	35	90	2	E/W	0	0.5	0.8	O	25	55		X	X		Hillside
S-7	29°37'49.2"	98°16'54.5"	SC	20	Kep	1	1.3	1.3	N35°W	0			O	25	45		X	X		Hillside
S-8	29°37'46.8"	98°16'55.7"	SF	20	Kep	4	2	1	N30°W	0	0.5	0.3	O	25	45		X	X		Hillside
S-9	29°37'44.9"	98°16'55.6"	Z	30	Kep	130	335	1	N/S	0	0.5	1	C,O	35	65		X		X	Streambed
S-10	29°37'46 2"	98°16'51.9"	Z	30	Kep	10	75	0.5	E/W	0	1	0 5	C,O	35	65		X		X	Streambed
S-11	29°37'37 2"	98°16'52 1"	MB	30	Kpg	--	--	--	--	0			N	5	35	X		X		Hillside
S-12	29°37'42.0"	98°16'51 9"	CD	5	Kdr	40	115	--	N30°W	0			F	5	10	X		X		Hillside
S-13	29°38'03.9"	98°16'57.9"	SC	20	Kep	1	4.5	2	N75°E	10			O	20	50		X	X		Hillside
S-14	29°38'03.9"	98°16'58.8"	SC	20	Kep	2	7	2	N45°W	0			O	30	50		X	X		Hillside
S-15	29°38'08.1"	98°16'48.8"	SC	20	Kep	2	4.5	1	N65°E	10			F	10	40		X	X		Hillside
S-16	29°38'08.8"	98°16'46 9"	SC	20	Kep	2	3	1	N60°W	0			F	15	35	X		X		Hillside
S-17	29°38'09.9"	98°16'31.4"	SC	20	Kep	4	5	4	N75°E	10			N	35	65		X	X		Hillside
S-18	29°38'12.1"	98°16'43.4"	SC	20	Kep	1.5	4.5	1.3	N20°W	0			O	30	50		X	X		Hillside
S-19	29°38'07.8"	98°16'38.6"	SH	20	Kep	5	5	1	--	0			F	5	25	X		X		Hillside
S-20	29°37'50.5"	98°16'56.8"	SC	20	Kep	2	4	2	N10°W	0			O	30	50		X	X		Hillside
S-21	29°38'11 9"	98°16'31.5"	F	20	Kep/Kep	--	1500	--	E/W	0			F	5	25	X			X	Drainage
S-22	29°37'43.5"	98°17'00.7"	F	20	Kep/Kbu; Kdr/Kdr	--	1300	--	N79°W	0			F	5	25	X			X	Hillside
S-23	29°37'43.5"	98°16'56.5"	F	20	Kep/Kdr;Kep	--	1000	--	N75°E	10			F	5	35	X			X	Streambed
S-24	29°37'37.4"	98°16'55.3"	F	20	Kbu;Kdr;Kep/Kpg	--	1200	--	N70°E	10			F	5	35	X			X	Streambed

* DATUM. NAD 83

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

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

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

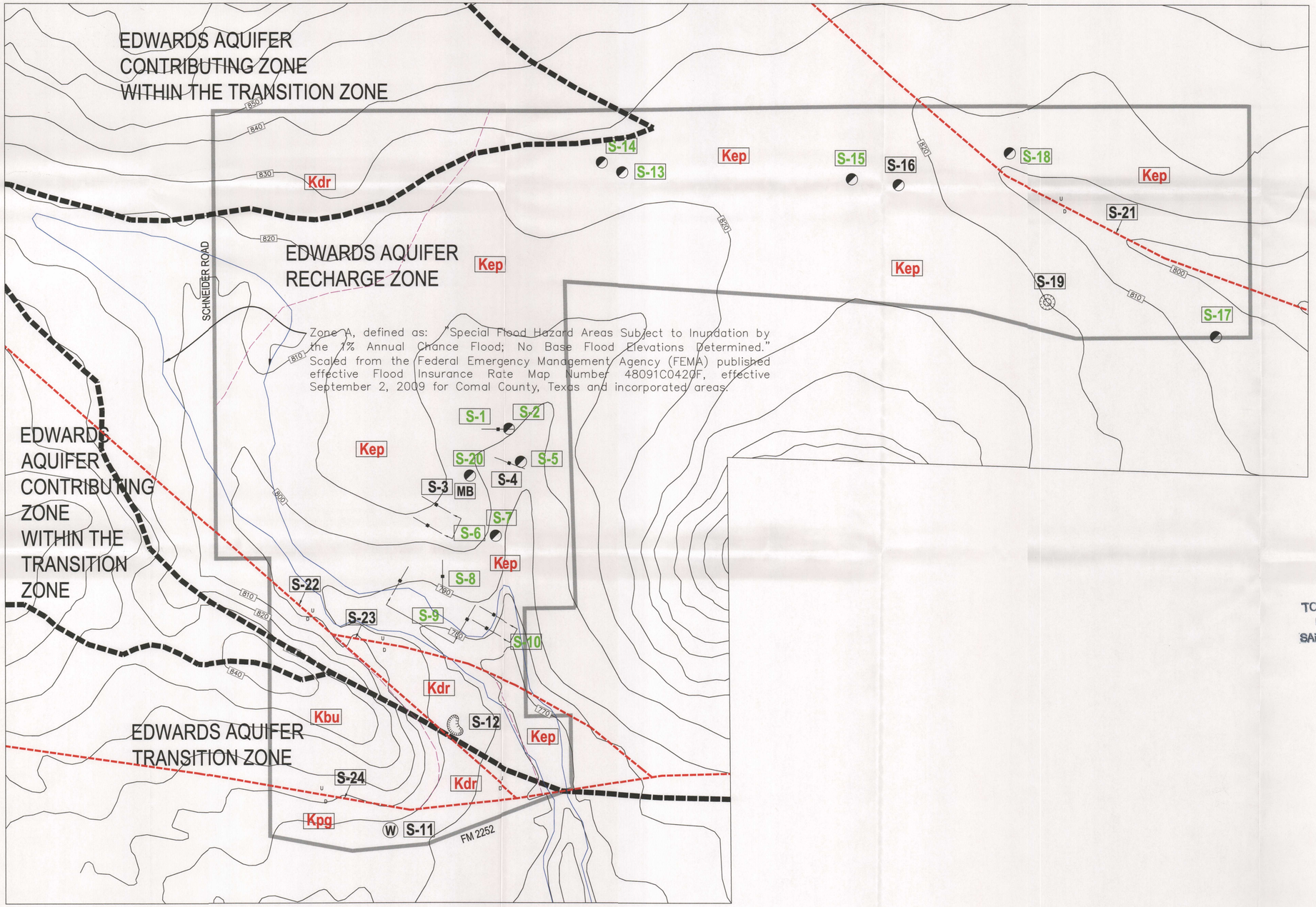
I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.
My signature certifies that I am qualified as a geologist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

_____ Date _____

STATE OF TEXAS
Jennifer Lela
Geology
10579
LICENSED
PROFESSIONAL GEOSCIENTIST
3/12/15

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

ATTACHMENT A
Sheet 1 of 1

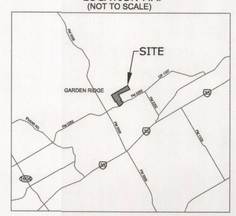


REV. NO.	DESCRIPTION	DATE

Notes:

1. Contour Data: Texas Natural Resources Information System 10 ft Contours - Bat Cave Quadrangle
2. Flood Data: FEMA Flood Insurance Rate Map Number 48091C0420F, effective September 2, 2009

LOCATION MAP
(NOT TO SCALE)



LEGEND

- PROJECT LIMITS
- EDWARDS AQUIFER RECHARGE ZONE BOUNDARY
- Qal — ALLUVIUM
- Kbu — BUDA LIMESTONE
- Kdr — DEL RIO CLAY
- Kgt — GEORGETOWN FORMATION
- Kep — PERSON FORMATION
- Kek — KAINER FORMATION
- S-1 — GEOLOGIC OR MAN-MADE FEATURE (NON-SENSITIVE)
- S-1 — GEOLOGIC OR MAN-MADE FEATURE (SENSITIVE)
- FORMATION CONTACT (LOCATION APPROXIMATE)
- FAULT - LOCATION ACCURATE
- FAULT - LOCATION APPROXIMATE
- FAULT - LOCATION INFERRED
- U/D — UPTHROWN AND DOWNTHROWN SIDES OF FAULT
- FAULT EXISTENCE UNCERTAIN
- VERTICAL JOINT SHOWING STRIKE
- INCLINED BEDDING - SHOWING STRIKE AND DIP
- C — CAVE
- SINKHOLE
- NON-KARST CLOSED DEPRESSION
- SOLUTION CAVITY
- OTHER NATURAL BEDROCK FEATURES
- ZONE
- W — WATER WELL
- MB — MAN-MADE FEATURE IN BEDROCK
- SANITARY SEWER LINE

N
W E
S

200' 100' 0' 200' 400'
SCALE 1"= 200'

TCEQ-R13
MAR 22 2013
SAN ANTONIO

SIGNATURE/SEAL

STATE OF TEXAS
Jennifer Lela
Geology
10579
LICENSED
PROFESSIONAL GEOSCIENTIST
3/5/13

FORSTER ENGINEERING
TBPE firm # 12385
19915 WITTENBURG, SAN ANTONIO, TEXAS 78256
PHONE: (210) 698-5544, Fax (210) 698-5544
WWW.FORSTERENGINEERING.COM

PROJECT DESCRIPTION
SERVTEX QUARRY,
WORLEY/HEITKAMP TRACTS
GEOLOGIC ASSESSMENT

DRAWING
SITE GEOLOGIC MAP

DATE	03/05/2013	JOB NO.	1066-12
SCALE	1"= 200'	DRG NO	ATTACHMENT B
DRAWN BY	JRL		
CHECKED BY	CPF		

Date: Mar 05, 2013, 3:33pm User ID: jlela
File: L:\Forster Engineering\Projects\1066-12\exhibits\GA map-Attch B.dwg

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS

SITE SOILS MAP

FORSTER ENGINEERING

SOURCE: UNITED SATES DEPARTMENT OF AGRICULTURE, 1984, SOIL SURVEY-COMAL COUNTY, TEXAS, USDA, SHEET NUMBER 102

0' 500' 1000' 2000'

SCALE: 1" = 1000'

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS

Stratigraphic Column

Hydrogeologic subdivision			Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field Identification	Cavern development	Porosity/ permeability type
Upper Cretaceous	Upper confining units		Pecan Gap Chalk (Kpg)			CU	100-400	Chalk and chalky marl	Seldom exposed; weathers to form moderately deep soil	None	Low porosity/low permeability
			Austin Chalk (Kau)			CU	200-225	Limestone and argillaceous chalky limestone	Glauconitic; fossiliferous, Gryphaea aucella	Caves related to structure	Some fracture plane and bedding plane
			Eagle Ford Group (Kef)			CU	30-50	Brown, flaggy shale and argillaceous limestone	Thin flagstone; petroliferous	None	Primary porosity lost/low permeability
			Buda Limestone (Kbu)			CU	40-50	Buff, light gray, dense mudstone	Porcelaneous limestone with calcite-filled veins	Minor surface karst	Low porosity/low permeability
			Del Rio Clay (Kdr)			CU	40-50	Blue-green to yellow-brown clay	Fossiliferous; Ilymatogyra arietina	None	None/primary upper confining unit
Lower Cretaceous	I	*Edwards Aquifer*	Georgetown Formation (Kgt)			Karst AQ; no karst CU	2-20	Reddish-brown, gray to light tan marly limestone	Marker fossil; *Waconella wacoensis*	None	Low porosity/low permeability
	II		*Edwards Group*	*Person Formation (Kep)*	Cyclic and marine members, undivided	AQ	80-90	Mudstone to packstone; *miliolid* grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	III				Leached and collapsed members, undivided	AQ	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
	IV				Regional dense member	CU	20-24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
	V			*Kainer Formation (Kek)*	Grainstone member	AQ	50-60	*Miliolid* grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/ recrystallization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric/one of the most permeable
	VII				Dolomitic member	AQ	110 -130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, *Toucasia* abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane-fabric/water-yielding

VIII			Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and *miliolid* grainstone	Massive, nodular and mottled, *Exogyra texana*	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface
Lower confining unit	Upper member of the Glen Rose Limestone (Kgru)			CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds / relatively impermeable

Reference: U.S.G.S. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas; Water-Resources Investigations Report 95-4030

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS

Narrative of Site Specific Geology

The overall potential of recharge to the Edward Aquifer at the site is moderate. Fourteen sensitive geologic features were identified on site. The dominant trend for the site is approximately N65°E, based on an average of the trends of faults identified on site and faults mapped by the BEG (Barnes, 1983) and BEG (Collins, 1993) in the vicinity of the property. On-site outcropping units include the Pecan Gap Chalk (Kpg), Buda Limestone (Kbu), Del Rio Clay (Kdr), and cyclic and marine (Kepcm) member of the Person Formation.

The Pecan Gap Chalk formation consists of chalk and chalky marl, is bluish gray in the subsurface and weathers to tan, gray, and buff. The Pecan Gap Chalk has a blocky structure with closely spaced joints, often filled with calcite and gypsum. The Buda Limestone is characterized by buff, light gray, dense mudstone. The Del Rio clay is a blue-green to yellow-brown waxy clay. There is generally only minor to no karst development in the Kpg, Kbu, and Kdr. The cyclic and marine member is characterized by a mudstone to packstone milliolid grainstone, with chert. Karst development in the Kekcm is characterized by small sinkholes, and caves developed as vertical shafts as well as lateral rooms.

Feature S-1
Feature S-1 is a single solution enlarged fracture located on a hillside. Hand excavation revealed the presence of loose, dark, organic infilling to a depth of 1.5 feet. A persimmon tree was observed growing in the fracture. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-2
Feature S-2 is a solution cavity located at the northeast end of feature S-1. The cavity occurs at the edge of an approximately one-foot thick slab of bedrock. Solutioned bedrock exists around ½ of the opening. The cavity extends laterally under bedrock for approximately 4 feet. The floor and remaining perimeter of the cavity is comprised of loose, organic soil. Probing of the feature revealed loose, organic soil. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-3
Feature S-3 is a man-made feature in bedrock. The feature consists of a hollow core with a diameter of approximately 27 inches. The feature was covered with a metal slab. Based on measurements of cored rock observed at the surface, the depth of the core is approximately 31 feet. A flashlight was used to view the walls and bottom of the feature. The base of the core appeared to be solid rock; no standing water was observed. The walls of the core consisted of solid limestone; no voids were observed. Due to the to the interpreted non-karst origin, the lack of evidence of rapid infiltration, and intact limestone, the probability of rapid infiltration to the subsurface is low.

Feature S-4
Feature S-4 is an outcrop of solution enlarged fractures located on a hillside. The dominate trend of the fractures is N80°E. Secondary fracture sets were observed perpendicular to the primary fractures. Minor hand excavation and probing revealed fine infilling. Due to the presence of fine infilling, the probability of rapid infiltration is low.

Feature S-5
Feature S-5 is a solution cavity. Solutioned bedrock exists around ¾ of the opening. A cedar tree was observed growing within the feature. The cavity extends at an angle for approximately 4 feet. Loose, organic soil has washed into the feature. Probing of the feature revealed loose, organic soil. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-6
Feature S-6 a zone of solution enlarged fractures located on a hillside. The dominate trend of the fractures is east/west. Secondary fracture sets were observed perpendicular to the primary fractures. Hand excavation

revealed the presence of loose, dark, organic infilling to a depth of 2 feet. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-7
Feature S-7 is a solution cavity located within a broken-up slab of bedrock. The cavity extends at an angle for approximately 2 feet. Smooth, solutioned surfaces were observed along the top wall of the feature. Probing and hand excavation of the feature revealed loose, organic soil. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-8
Feature S-8 is an outcrop of solution enlarged fractures located on a hillside. The dominate trend of the fractures is N30°W. Secondary fracture sets were observed nearly perpendicular to the primary fractures (N70°E). Probing and hand excavation of the feature revealed loose, organic soil. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-9
Feature S-9 is a zone of solution enlarged fractures located in three parallel streambed drainages, which converge at the eastern edge of the zone of fractures. The dominate trend of the fractures is north/south. Secondary fracture sets were observed perpendicular to the primary fractures. Hand excavation revealed the presence of coarse and organic infilling. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a large natural catchment area, the probability of rapid infiltration is high. This feature is ranked as sensitive.

Feature S-10
Feature S-10 is a zone of solution enlarged fractures located in a streambed. The dominate trend of the fractures is east/west. Secondary fracture sets were observed perpendicular to the primary fractures. Hand excavation revealed the presence of coarse and organic infilling. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the feature within a large natural catchment area, the probability of rapid infiltration is high. This feature is ranked as sensitive.

Feature S-11
Feature S-11 is a water well. The well has steel casing that extends above the ground surface, is equipped with a submersible pump, and is in operation. The well has a small concrete slab surrounding the casing. Because the well is in operation and has casing that extends above the ground surface, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-12
Feature S-12 is a non-karst closed depression. The depression consists of a man-made stock tank currently holding water, which is located within the Del Rio clay. Due to the interpreted non-karst origin and fine infilling, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-13
Feature S-13 is an elongate solution cavity located in bedrock on a hillside. Prior to hand excavation the feature was filled with loose organic soil and leaves. The feature was excavated by hand to two feet and probed. Probing of the feature revealed loose, organic, slightly sticky soil. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the features within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-14
Feature S-14 is an elongate solution cavity located in bedrock on a hillside. The feature has two solution openings that meet in the subsurface. Prior to hand excavation the feature was filled with loose organic soil and leaves. The feature was excavated by hand to two feet and probed. Probing of the feature revealed loose, organic, slightly sticky soil. An open, cylindrical passage in solid rock was identified within S-14. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the features within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-15
Feature S-15 is a possible solution cavity. Solutioned bedrock was not evident; however, the feature is located within broken slabs of bedrock where sapping of fines has resulted in a slight depression. A persimmon tree was observed growing near the feature. The feature was excavated by hand and probed. Probing of the feature revealed fine infilling. Due to the presence of fine infilling, the probability of rapid infiltration is low. This feature ranks as sensitive due to its dominant trend.

Feature S-16
Feature S-16 is a possible solution cavity. Solutioned bedrock was not evident; however, the feature is located within broken slabs of bedrock where sapping of fines has resulted in a slight depression. A persimmon tree was observed growing near the feature. The feature was excavated by hand and probed. Probing of the feature revealed fine infilling. Due to the presence of fine infilling, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-17
Feature S-17 is a solution cavity in solid bedrock located on a hillside. The surrounding bedrock exhibits a funnel-shape indicative of infiltration. The feature extends vertically for several feet, turns and continues vertically out of sight. Relatively cool air movement was observed in the feature. Algae, a musty smell, and wet walls were also observed in the feature. Due to the karst origin and direct evidence of rapid infiltration, the probability of rapid infiltration is high. This feature is ranked as sensitive.

Feature S-18
Feature S-18 is an elongate solution cavity located in bedrock on a hillside. Prior to hand excavation the features were filled with loose organic soil and leaves. The feature was excavated by hand to three feet and probed. Probing of the feature revealed coarse and organic infilling. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the features within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-19
Feature S-19 is a possible sinkhole located on a hillside. The feature is located in the soil profile near a rock wall. No direct of indirect evidence of infiltration was observed. Probing of the feature revealed fine infilling. Due to the presence of fine infilling, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-20
Feature S-20 is an elongate solution cavity in solid bedrock located on a hillside. The feature has two solution openings that meet in the subsurface. Leaves and organic infilling were observed within the feature. Due to the interpreted karst origin, indirect evidence of rapid infiltration, and the location of the features within a small natural catchment area, the probability of rapid infiltration is intermediate. This feature is ranked as sensitive.

Feature S-21
Feature S-21 is an intraformational fault identified on two published geologic maps (BEG, Barnes and BEG Collins). A drainage has developed along the fault. No karst features or other evidence of enhanced permeability was observed along the fault. Therefore, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-22
Feature S-22 is an interformational fault identified on two published geologic maps (BEG, Barnes and BEG Collins). No karst features or other evidence of enhanced permeability was observed along the fault. Therefore, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-23
Feature S-23 is an interformational fault identified by review of aerial photographs and compulsory based on the juxtaposition of the geologic formations. No karst features or other evidence of enhanced permeability was observed along the fault. Therefore, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Feature S-24

Feature S-24 is an interformational fault identified on two published geologic maps (BEG, Barnes and BEG Collins). No karst features or other evidence of enhanced permeability was observed along the fault. Therefore, the probability of rapid infiltration is low. This feature is ranked as non-sensitive.

Section 4.0

WATER POLLUTION ABATEMENT PLAN APPLICATION

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

REGULATED ENTITY NAME: **SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS**

REGULATED ENTITY INFORMATION

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

2. Total site acreage (size of property): 131.5± Acres

3. Projected population: 0

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

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces	0	÷ 43,560 =	0
Total Impervious Cover	0	÷ 43,560 =	0
Total Impervious Cover ÷ Total Acreage x 100 = 0			0

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

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

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

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

8. Type of pavement or road surface to be used:
   - ___ Concrete
   - ___ Asphaltic concrete pavement
   - ___ Other: _____

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

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

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

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

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

__% Domestic	_____ gallons/day
__% Industrial	_____ gallons/day
__% Commingled	_____ gallons/day

TOTAL_____ gallons/day

15. Wastewater will be disposed of by:

N/A **On-Site** Sewage Facility (OSSF/Septic Tank):

__ **ATTACHMENT C - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.

__ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

__ Sewage Collection System (Sewer Lines):

__ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

__ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

__ The SCS was previously submitted on _____.

__ The SCS was submitted with this application.
__ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

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

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

SITE PLAN REQUIREMENTS

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

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 200'.

18. 100-year floodplain boundaries
X 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 Number 48091C0420F, Panel 420 of 505

19. X The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
__ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

The precise finished contours of the quarry are not known at this time. However, it is anticipated the quarry bottom elevation will be approximately 720 feet, Mean Seal Level.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
X There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
X The wells are in use and comply with 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:
X 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**. An exception to the Geologic Assessment requirement is requested and explained at the end of this form.

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

activities.

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

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

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

26. _X_ Surface waters (including wetlands).

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

ADMINISTRATIVE INFORMATION

28. _X_ 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.

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

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

Charles P. "Frosty" Forster, P.E.
Print Name of ~~Customer~~/Agent

Charles P. Forster
Signature of ~~Customer~~/Agent

03/14/13
Date

WPAP APPLICATION FORM TCEQ-0584
ATTACHMENT A
FACTORS AFFECTING WATER QUALITY

The major factor which could potentially affect surface water quality is sediment in storm water runoff after vegetation clearing. Additional factors include fuels and lubricants from vehicles and equipment, trash or debris, and spills or overflows from portable toilets.

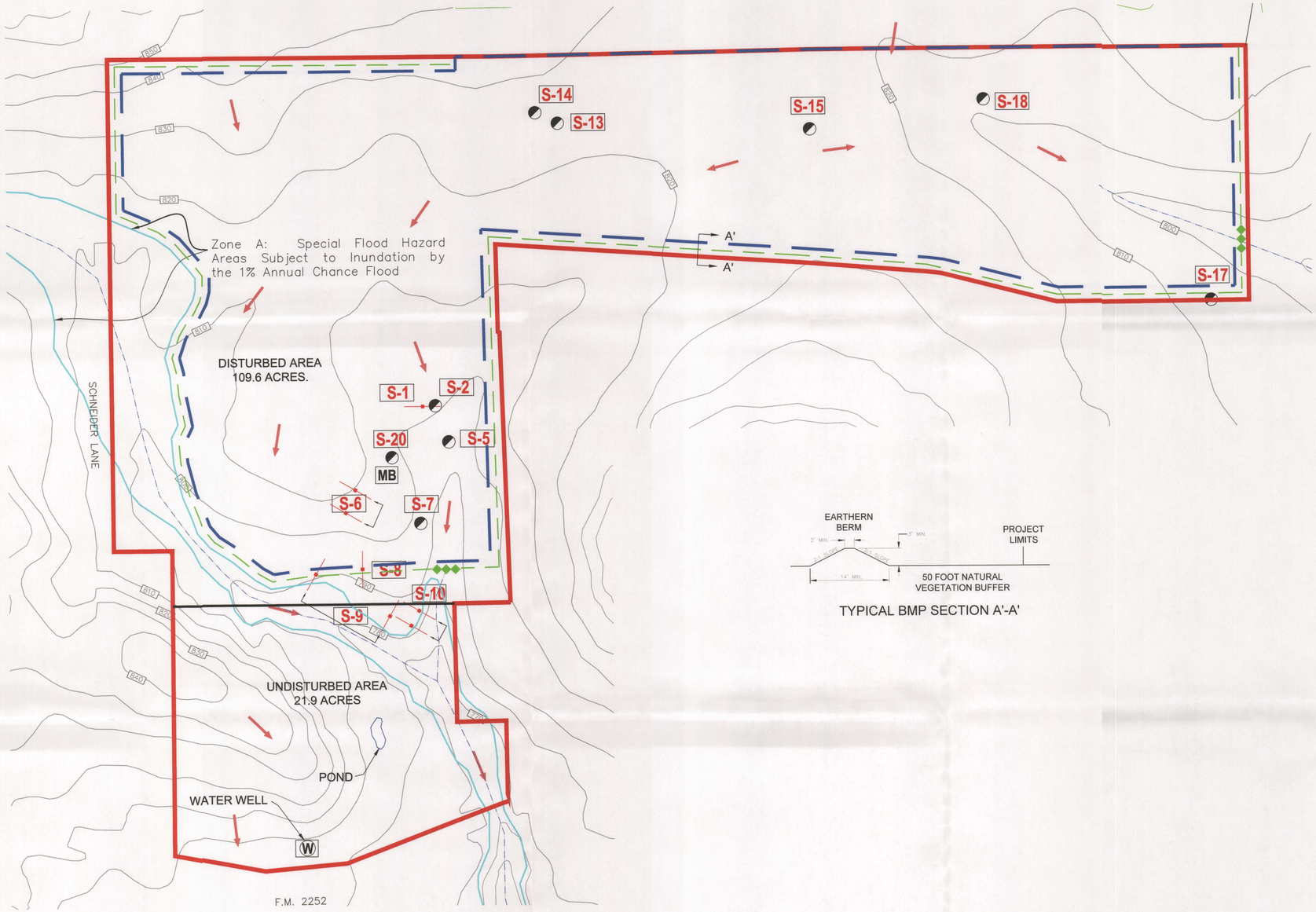
The major factor which could potentially affect groundwater quality is migration of suspended solids through bedrock fractures after quarry activities are completed.

WPAP APPLICATION FORM TCEQ-0584
ATTACHMENT B
VOLUME AND CHARACTER OF STORM WATER

In the pre-quarry condition, limited areas of up-gradient surface water sheet flows onto the project area. Prior to disturbing areas of the project site which will receive up-gradient surface water run-on, earthen berms will be constructed to intercept and prevent off-site water from flowing across disturbed areas, and thence off site.

Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. The entire site will be surrounded by a 50-foot natural vegetation buffer. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site.

The runoff coefficient of the site in the pre-construction condition is estimated to be approximately 0.25. The overall runoff coefficient of the site in the post-construction condition is estimated to be approximately 0.75. However, this overall runoff coefficient is heavily weighted by conditions within the excavated quarry pit, and no runoff will occur from the pit itself. The post-construction runoff coefficient outside the limits of the quarry pit will be similar to pre-construction conditions since these areas will be comprised of vegetated earthen berms and natural vegetation buffers.



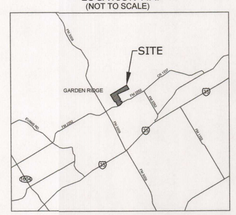
TYPICAL BMP SECTION A'-A'

REV. NO.	DESCRIPTION	DATE

Notes:

1. Contour Data: Texas Natural Resources Information System 10 ft Contours - Bat Cave Quadrangle
2. Flood Data: FEMA Flood Insurance Rate Map Number 48091C0420F, effective September 2, 2009

LOCATION MAP
(NOT TO SCALE)



LEGEND

- PROJECT LIMITS (131.5+/- ACRES)
- QUARRY LIMITS
- NATURAL STREAM
- EXISTING TOPO
- EXISTING FLOW ARROW
- ROCK BERM
- 3FT EARTHEN BERM
- FLOODPLAIN BOUNDARY
  FEMA FIRM MAP No. 48091C0420F
  PANEL No. 420 OF 505
- S-20 SENSITIVE FEATURES

TCEQ-R13
MAR 22 2013
SAN ANTONIO

N
W E
S

200' 100' 0' 200' 400'
SCALE 1"= 200'

SIGNATURE/SEAL

STATE OF TEXAS
CHARLES P FORSTER
59043
REGISTERED
PROFESSIONAL ENGINEER
03/14/13

FORSTER ENGINEERING
TBPE firm # 12385
19915 WITTENBURG, SAN ANTONIO, TEXAS 78256
PHONE: (210) 698-5544, Fax (210) 698-5544
WWW.FORSTERENGINEERING.COM

PROJECT DESCRIPTION

SERVTEX QUARRY,
WORLEY/HEITKAMP TRACTS
WPAP

DRAWING

SITE PLAN
TCEQ f-0584

DATE	03/05/2013	JOB NO.	1066-12
SCALE	1"= 200'	DRG NO	EXHIBIT 1
DRAWN BY	JRL		
CHECKED BY	CPF		

Date: Mar 05, 2013, 5:10pm User ID: steve
File: C:\Users\steve\Documents\Autodesk\Projects-Forster Eng\1066-12 Hanson WPAP\1066-12-Servtex WPAP-Exhibit 1.dwg

Section 5.0

TEMPORARY STORM WATER SECTION

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

REGULATED ENTITY NAME: Servtex Quarry, Worley/Heitkamp Tracts

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

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

   ___ Aboveground storage tanks with a cumulative storage capacity of less that 250 gallons will be stored on the site for less than one (1) year.
   _X_ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons ~~will~~ **may** be stored on the site for less than one (1) year.
   ___ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
   ___ Fuels and hazardous substances will not be stored on-site.

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

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

4. _X_ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.
   ___ There are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. _X_ **ATTACHMENT C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. _X_ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Dry Comal Creek, Tributary 30

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

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

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

_X_ TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information has been provided in the attachment at the end of this form

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

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

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

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

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

N/A **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

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

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

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

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

used.

X 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.

Any activity disturbing more than 10 acres at one time will be the result of mining the quarry pit. The TBMP provided will be containment of runoff within the quarry pit. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site.

11. N/A **ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure has been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are provided as at the end of this form.

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

13. X All control measures must be properly selected, installed, and maintained in accordance with the 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. X If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

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

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

SOIL STABILIZATION PRACTICES

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

17. X **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the

site is attached at the end of this form.

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Charles P. "Frosty" Forster, P.E., P.G.
Print Name of ~~Customer~~/Agent

Signature of ~~Customer~~/Agent

03/14/13
Date

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT A
SPILL RESPONSE ACTIONS

In the event of accidental spills of hazardous materials or hydrocarbons, the following actions will be taken as necessary:

1. In the event of a spill, appropriate actions shall be taken to contain the spill using all available means including absorbent and/or adsorbent materials and readily available mobile equipment. Absorbent and/or adsorbent materials are kept in a readily available location. In the event of an uncontained discharge, available facility equipment shall immediately construct a containment berm down gradient from the discharge and absorb and/or adsorb the discharged material with sand, screenings, and/or other available fines that are on hand. This material shall be properly disposed of in accordance with applicable local, state and federal environmental regulations.

2. After containing the discharge, all media (soil, water, etc.) that came into contact with oil will be collected and stored in such a way that will not continue to affect additional media. Examples of proper materials to use for cleanup include adsorbents and/or absorbents such as: aggregates fines, sand, absorbent pads, booms, socks, etc. Proper cleanup will be deemed complete when all the applicable response requirements are met on all local, state and/or federal levels.

3. Materials that have come into contact with the discharged fluids shall be placed in a temporary staging area until proper methods of disposal can be determined. To prevent additional contamination, impacted materials will be stored on plastic sheets until removal. Plastic sheets will also be used to cover the materials to mitigate contact with rainfall and wind. Sampling of impacted media may be required prior to determining a proper method of disposal. Determining a proper method of disposal will take into consideration all local, state and federal environmental regulatory requirements.

4. In the event of a leak from a tank or piping, as much of the discharge as possible shall be collected manually and stored in an appropriate container until proper disposal or reuse. Immediate action shall be taken to stop or minimize the leak rate. The remaining product in the containment area shall be cleaned up and properly disposed.

5. In the event of a tank, hose or piping failure, arrangements shall be made to empty the tank to a safe level by immediately filling all mobile equipment on the job. The products remaining in the containment shall be handled as previously described.

6. In the event of a fire, the local fire authority shall be contacted immediately.

The following reporting procedures will be implemented after an oil/fuel discharge (of any size) has occurred.

1. Immediately contact the Plant Manager to report the discharge:

Quarry Plant Manager	
Office Phone Number:	(210) 658-7461
Fax Number:	(210) 581-0079
Environmental Contact	
Office Phone Number:	(972) 653-3735
Fax Number:	(469) 417-1438
Mobile Phone Number:	(972) 814-4122

2. Based on the size, nature, and circumstances of the discharge, the Plant Manager shall contact the Environmental Contact who will notify the appropriate regulatory authorities. In addition, federal SPCC regulations require that any discharge with the potential of reaching a navigable waterway in harmful quantities, as defined in 40 CFR 110.3, be immediately reported to the National Response Center (NRC).

   - Any discharge greater than 42 U.S. gallons in volume must be immediately reported to the NRC.

National Response Center:	(800) 424-8802
U.S. EPA, Region 6:	(214) 655-2222

3. Texas State Regulations require that a spill or accidental discharge equal to or greater than the Reportable Quantities listed in Title 30 TAC §327.4 be reported immediately to the TCEQ within 24 hours after the discovery of the spill or discharge. The reportable quantities are listed below:

   - For petroleum product or used oil discharged to land – 25 gallons
   - For petroleum product or used oil discharged to waters in the state – quantity sufficient to cause a sheen

State Emergency Response Center:	(800) 832-8224 (24 hour)
TCEQ Spill Reporting Hotline:	(512) 463-7727 (24 hour)
TCEQ Region 13:	(210) 490-3096 (8am – 5pm)
Edwards Aquifer Authority:	(210) 222-2204
CPS Energy Electric Company	(210) 353-4357

4. If a discharge is too large for facility personnel to handle or the release occurred within a secondary containment structure, the following entity may be contracted to remove oil and oily waste from the facility:

Southwest Land and Marine	(800) 527-9835

5. Pursuant to Texas regulations, the facility must also submit written information, such as a letter, describing the details of the discharge or spill and supporting the adequacy

of the response action, to the appropriate TCEQ regional manager within 30 working days of the discovery of the reportable discharge spill. The written response must document the requirements outlined in 30 TAC §327.5(c).

Regional Director
TCEQ Region 13 Office
14250 Judson Road
San Antonio, TX 78233-4480

6. Transformers located at the facility are the property of CPS Energy. In the event of a spill related to the failure or explosion of a transformer, CPS Energy or specialized clean-up contractor will be contacted so that they can remove spilled material and notify the appropriate regulatory agencies.

DETAILED DISCHARGE REPORT FORM

Reporter's Name and Date: _____

Location of Discharge: _____

Date and Time Discharge Occurred: _____

Material and Amount Discharged: _____

Source of the Release: _____

Cause and Circumstances of Release: _____

Countermeasures to Contain and Clean-up Discharge: _____

_____

_____

_____

_____

Personnel/Agency Contacted Regarding Discharge Procedures: _____

_____

_____

Corrective Actions Implemented to Prevent Recurrence of Discharge: _____

_____

_____

_____

_____

Discharge Report Sent To: _____

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT B
POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination during operations and preventative measures include the following:

Potential Source – Oil, grease, fuel and hydraulic fluid contamination from equipment and vehicle dripping.
Preventative Measure – Vehicle and equipment maintenance will not be performed on the Worley/Heitkamp tracts except under extenuating circumstances. Vehicles and equipment will be parked in designated locations, visually checked on a daily basis, and drip pans will be used to catch drips as needed. Chronic drips will be repaired as soon as practicable. When maintenance must be performed, a plastic liner or disposable base pad will be utilized as secondary containment.

Potential Source – Miscellaneous trash and litter from quarry workers.
Preventive Measure – Trash containers will be placed throughout the site to encourage proper trash disposal.

Potential Source - Accidental leaks or spills of oil, petroleum products, or hazardous substances, which are used or stored temporarily on site.
Preventative Measures – Quarry Operator shall incorporate discussions of spill prevention and response actions into regular safety meetings; proper spill prevention and control measures will be adhered to strictly; oil, petroleum products, or hazardous substances will be properly stored, and spill cleanup materials will be stored and readily accessible on site.

Potential Source – Portable toilet spills or overflows
Preventative Measures - Contractor will locate portable toilets on level ground surfaces away from high traffic areas. Portable toilets will be routinely inspected and serviced at a frequency sufficient to maintain sanitary conditions.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
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) including an estimate of the total area of the site to be disturbed by each activity is as follows:

The sequence of major soil disturbance activities is as follows:

- Installation of Temporary BMPs
- Clearing and stripping of the pit area
- Stockpiling topsoil for perimeter berm construction
- Grading as needed
- Construction of perimeter berms
- Quarry pit mining
- Ramp Construction
- Stabilization of disturbed area

Approximately 109.6± acres of the 131.5± acre site will ultimately be disturbed. Approximately 21.9± acres will be undisturbed or maintained as a natural vegetation buffer which will not be disturbed.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT D
TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

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

No groundwater is expected to be encountered on site. In the pre-quarry condition, limited areas of up-gradient surface water sheet flows onto the project area. Prior to disturbing these portions of the project site, earthen berms will be constructed which prevent off-site water from flowing across disturbed areas, and thence off site.

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

No groundwater is expected to be encountered in the quarry excavation or other activities. Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site.

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

BMPs will be in place prior to up-gradient site disturbance. A combination of earthen berms, rock berms, and natural vegetation buffers will filter storm water or prevent storm water which has contacted disturbed areas from leaving the site and entering surface streams, sensitive features, or the aquifer. The entire site will be surrounded by a 50-foot natural vegetation buffer. Earthen berms will store and prevent water from leaving the site and rock berms will filter surface flows. Sensitive features will be protected by earthen berms or natural vegetation buffers.

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

Flow will be maintained to the natural runoff system, to the maximum extent practicable, by using rock berms and natural vegetated areas. These types of BMPs slow the flow of water allowing for sedimentation, but allow the flow to be maintained. Earthen berms and the quarry pits, which store flows, will be used as pollution prevention measures to mitigate runoff from larger disturbed areas. These larger disturbed areas have a greater potential to contain sediment, therefore retention of these flows will be used to provide a higher level of protection to the water quality of the aquifer.

BMP measures utilized in this plan are intended to allow storm water to continue downstream after passing through the BMPs. This will allow storm water runoff to continue down gradient to streams or features that may exist downstream of the site.

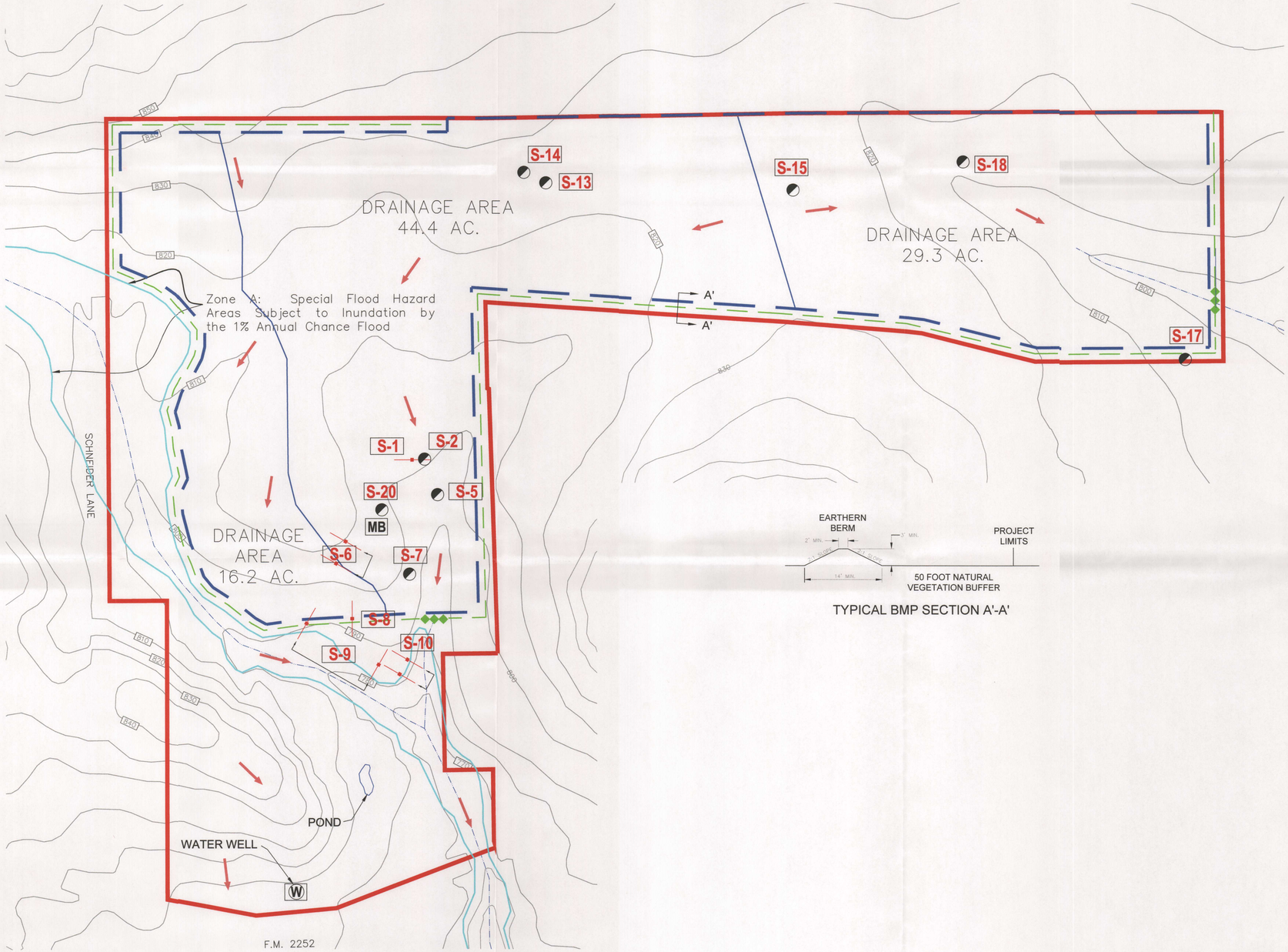
Additional sensitive geologic features discovered in the active pit during quarrying operations will be addressed as follows:

1. Sensitive geologic feature recognition training for plant and quarry operators will be conducted.
2. The appropriate TCEQ Regional Office will be immediately notified upon discovery of any sensitive features encountered during the quarrying operations.
3. Sensitive features located on the ultimate quarry floor, which will not be excavated or mined out by further quarry activities, will be sealed with flowable fill before regulated activities near the sensitive feature may proceed. Sensitive features located on the quarry floor of intermediate benches above the ultimate quarry floor, will not be sealed, but will be protected by material berms until such time as this area of the quarry containing the sensitive feature will be mined.
4. Sensitive features located in the highwalls, which are well above the level of potential water ponding in the quarry pit and unlikely to receive contamination from any other logical or recognized source, will not be sealed.
5. If sensitive features located in the highwalls are below the level of potential water ponding in the quarry pit, or likely to receive contamination from any other logical or recognized source, they will be sealed with flowable fill before regulated activities near the sensitive feature may proceed.
6. Large features may be first filled with gravel or large rocks before placement of flowable fill. A minimum of 18-inches of flowable fill will placed above the gravel or rocks. Flowable fill is to be used to provide a reliable seal throughout the sensitive feature as it's characteristics allow it to flow around and between the gravel and large rocks and conform to irregular limits of a sensitive feature. As structural integrity and bearing capacity is not a design concern in these applications, concrete is not recommended or required.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT F
STRUCTURAL PRACTICES

Temporary best management practices proposed for the quarry includes earthen berms and rock berms. The earthen berms are used to store flows and limit runoff discharge of pollutants from exposed areas of the site as well as to divert flows away from exposed soils. Rock berms will be used to limit storm water runoff discharge of sediment from exposed soils. Undisturbed natural vegetation buffers will be preserved around the site perimeter.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT G
DRAINAGE AREA MAP



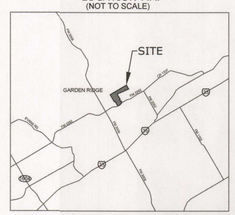
TYPICAL BMP SECTION A'-A'

REV. NO.	DESCRIPTION	DATE

Notes:

1. Contour Data: Texas Natural Resources Information System 10 ft Contours - Bat Cave Quadrangle
2. Flood Data: FEMA Flood Insurance Rate Map Number 48091C0420F, effective September 2, 2009

LOCATION MAP
(NOT TO SCALE)



LEGEND

- PROJECT LIMITS (131.5+/- ACRES)
- QUARRY LIMITS
- NATURAL STREAM
- 460 EXISTING TOPO
- EXISTING FLOW ARROW
- ROCK BERM
- 3FT EARTHEN BERM
- S-20 SENSITIVE FEATURES

N
W E
S

200' 100' 0' 200' 400'
SCALE 1"= 200'

TCEQ-R13
MAR 22 2013
SAN ANTONIO

SIGNATURE/SEAL

STATE OF TEXAS
CHARLES P FORSTER
59043
REGISTERED
PROFESSIONAL ENGINEER
03/14/13

FORSTER ENGINEERING
TBPE firm # 12385
19915 WITTENBURG, SAN ANTONIO, TEXAS 78256
PHONE: (210) 698-5544, Fax (210) 698-5544
WWW.FORSTERENGINEERING.COM

PROJECT DESCRIPTION
SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS WPAP

DRAWING
TEMPORARY STORM WATER

DATE	03/05/2013	JOB NO.	1066-12
SCALE	1"= 200'	DRG NO	ATTACHMENT G
DRAWN BY	JRL		
CHECKED BY	CPF		

Date: Mar 05, 2013, 5:10pm User ID: steve
File: C:\Users\steve\Documents\Autodesk\Projects-Forster Eng\1066-12 Hanson WPAP\1066-12-Servtex WPAP-Attachment G.dwg

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT I
INSPECTION AND MAINTENANCE FOR BMPS

The Servtex Quarry is authorized to discharge storm water under the TPDES General Permit No. TXR050000 for industrial activities. Requirements of the general permit include maintaining a Storm Water Pollution Prevention Plan, which includes provisions for inspections of storm water best management practices and sampling of storm water discharged from the site. Inspections will be conducted in accordance with the Storm Water Pollution Prevention Plan, which is incorporated herewith by reference. A copy of a typical Storm Water Periodic Inspection (Quarterly) form is attached.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (earthen berms and rock berms) for evidence of failure or excess siltation, (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) embankment, spillways, and outlet of sediment basin (where applicable) for erosion damage, and (7) sediment basins (where applicable) for evidence that basin has accumulated 50% of its volume in silt.

The earthen berms, rock berms, and natural vegetated buffers will be inspected on at least a quarterly basis. Written documentation of these inspections will be kept during the course of mining or construction at the project site. Significant erosion of berms should be backfilled and compacted as soon as possible. If a rock berm is no longer able to properly filter the sediment form storm water due to silt contamination, it should be replaced. The original minimum design dimensions of the rock berm should be maintained. Natural vegetated buffers should be treated for erosion by refilling and reseeding and sediment buildup by removal of sediment to maintain vegetation.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT I (CONTINUED)
INSPECTION AND MAINTENANCE FOR BMPS

Storm Water Periodic Inspection (Quarterly)

Name: _____ Year: _____

Signature: _____ Circle the Appropriate Month

Date: _____ Jan Feb Mar Apr May June

Location: _____ Permit No. TXR050000 July Aug Sep Oct Nov Dec

Describe in detail any "YES" responses to these questions on Page 2 in the Comments section.

YES	NO	General
☐	☐	Is the storm water plan unavailable or at an offsite location?
☐	☐	Is there any water leaving the property that wasn't generated from a rain event?
☐	☐	Are there any raw land clearing activities that will disturb one (1) acre or more?
☐	☐	Are there any new activities at the facility that are not described in the facility's storm water plan? (refer to the Descriptive Narrative and Operation Summary in the facility's storm water plan)
☐	☐	Does the site map need to be updated? (refer to the site map in Appendix B of the storm water plan)
☐	☐	Is the Storm Water Log incomplete or missing data? (rainfall data should be kept daily)

YES	NO	Good Housekeeping
☐	☐	Are there any potential sources of pollution in **Loading/Unloading** Areas?
☐	☐	Are there any potential sources of pollution in **Outdoor Storage** Areas? (silos, hoppers, stockpiles, etc)
☐	☐	Are there any potential sources of pollution in **Outdoor Processing** Areas?
☐	☐	Are there any potential sources of pollution in **Waste Disposal** Areas? (dumpster, trash cans, etc)
☐	☐	Are there any potential sources of pollution in **Maintenance, Fueling, or Cleaning** Areas?
☐	☐	Are there any potential sources of pollution in **Liquid Storage Tank** Areas? (admixtures, fuel, etc)
☐	☐	Are **Dust Producing Activities or Areas** in need of housekeeping, maintenance, or repair?
☐	☐	Are there any potential contaminants (containers, open containers, parts, etc) exposed to precipitation that can be covered or moved under a cover?
☐	☐	Are there any dumpster/trash bins that are not closed or covered to prevent precipitation from accumulating in them?
☐	☐	Is there any debris, refuse, or garbage in potential contact with stormwater?
☐	☐	Are scrap material/parts areas in need of housekeeping?

YES	NO	Spill Prevention and Response Measures
☐	☐	Are there any tanks, barrels, or other containers that are not tightly **sealed**; have noticable tears, **leaks** or drips; or are not clearly **labeled**?
☐	☐	Does any onsite equipment show signs of leaking fluids? (Equipment Pre-Shift Inspections and Maintenance Activities should also be available for inspection.)
☐	☐	Have there been any reportable spills or leaks? (If yes, the storm water plan should reflect the event.)
☐	☐	Does the *Spills and Leaks Log* need to be updated for the month?
☐	☐	Do the spill cleanup supplies need to be restocked? (aggregates, booms, absorbent pads, etc.)
☐	☐	Are there any chemical or oil containers outside of secondary containment structural controls?

YES	NO	
		Erosion Control Measures
☐	☐	Are natural vegetative areas in need of maintenance?
☐	☐	Are there any obvious signs of erosion at the facility?
☐	☐	Are there signs of erosion from stormwater run-on or run-off in stockpile areas?
☐	☐	Do existing erosion control best management practices appear to be ineffective?
☐	☐	Are there any new areas with a high potential for erosion?

YES	NO	
		Maintenance Program for Structural Controls
☐	☐	Are there any structural controls in need of maintenance?

Structural Controls include catch basins, diversion channels, natural vegetation, construction entrances, filter berms, channels, rip rap, silt fences, ground slopes and roughening, brush barriers,sediment trap, grass swales, mobile equipment, etc.

☐ ☐ Is the Preventative Maintenance Log incomplete for structural control repairs/maintenance?

YES	NO	N/A	
			Best Management Practices (BMPs)
☐	☐	☐	Are sweeper / water truck use records missing or incomplete?
☐	☐	☐	Do any filter berms, sediment traps, and other BMPs require maintenance or repair? (Records should be on the *Preventative Maintenance Log* in the stormwater plan.)

YES	NO	
		Employee Training and Education Program
☐	☐	Are there any new employees or has any member of the pollution prevention team changed? (If Yes, then call Environmental Services for Training)
☐	☐	Has the facility's required annual training expired? (once a year)

YES	NO	N/A	
			Sampling Requirements
☐	☐		Did a stormwater discharge occur at an authorized outfall during the preceding month?
☐	☐	☐	If a stormwater discharge occurred within the quarter, are required Quarterly Benchmark Monitoring samples pending collection for the quarter?
☐	☐	☐	If a stormwater discharge occurred within the preceding month, are required Monthly Visual Monitoring samples pending collection for the month? (Visual observations of samples should be documented on the Monthly Visual Examination Forms)
☐	☐	☐	If samples have been collected, is sampling documentation missing any of the following required information? date, time, sampling location, name of sampler
☐	☐	☐	Are samples being collected after 30 minutes of discharge? (Samples should be collected within 30 minutes of the beginning of discharge)

Comments: Describe any "Yes" response given above.

Corrective Action: Describe in detail all corrective actions taken.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT J
SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

Conventional stabilization measures are not applicable in a quarry operation, in particular, in relation to a quarry pit. Continuous interim on-site stabilization measures will be implemented consisting of minimizing soil disturbance outside of the pit area and maximizing the use of natural vegetation as a buffer or TBMP.

As the quarry pit is excavated, loose rock will be removed and transported off the Recharge Zone. Interim stabilization will consist of native bedrock excavation. Ultimate final stabilization of the pit will be removal or compaction of loose rock resulting in a permanent native bedrock floor.

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT J (CONTINUED)
SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

PROJECT MILESTONE DATES

Date when major site grading activities **begin**:

Construction Activity	**Date**

Dates when construction activities **temporarily or permanently cease** on all or a portion of the project:

Construction Activity	**Date**

Dates when **stabilization measures are initiated**:

Stabilization Activity	**Date**

Section 6.0

PERMANENT STORM WATER SECTION

Permanent Stormwater Section
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

REGULATED ENTITY NAME: **Servtex Quarry, Worley/Heitkamp Tracts**

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

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

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

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

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

   _____

   _____

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

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

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

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

   __ This site will not be used for low density single-family residential development.

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

   __ **ATTACHMENT A - 20% or Less Impervious Cover Waiver.** This site will be

used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.

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

__ This site will not be used for multi-family residential developments, schools, or small business sites.

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

X A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is identified as **ATTACHMENT B** at the end of this form.

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

__ If permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.

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

X A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is identified as **ATTACHMENT C** at the end of this form.

__ If permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, an explanation is provided as **ATTACHMENT C** at the end of this form.

8. X **ATTACHMENT D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" has been addressed.

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

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

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

10. X **ATTACHMENT F - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TCEQ

Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

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

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

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

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

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

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

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

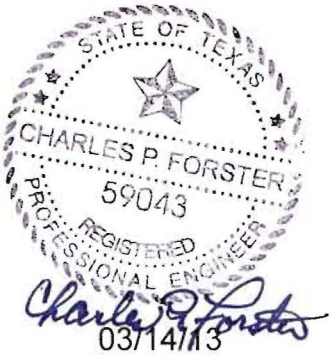
15. X A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development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

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

Charles P. "Frosty" Forster, P.E.
Print Name of ~~Customer~~/Agent

Charles P. Forster
Signature of ~~Customer~~/Agent

03/14/13
Date



PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT B
BMPS FOR UPGRADIENT STORM WATER

No groundwater is expected to be encountered on site. In the pre-quarry condition, limited areas of up-gradient surface water sheet flows onto the project area. Prior to disturbing these portions of the project site, earthen berms will be constructed which prevent off-site water from flowing across disturbed areas, and thence off site.

PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT C
BMPS FOR ON-SITE STORM WATER

No groundwater is expected to be encountered in the quarry excavation or other activities. Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site.

PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT D
BMPS FOR SURFACE STREAMS

BMPs will be in place prior to up-gradient site disturbance. A combination of earthen berms, rock berms, and natural vegetation buffers will filter storm water or prevent storm water which has contacted disturbed areas from leaving the site and entering surface streams, sensitive features, or the aquifer. The entire site will be surrounded by a 50-foot natural vegetation buffer. Earthen berms will store and prevent water from leaving the site and rock berms will filter surface flows. Sensitive features will be protected by earthen berms or natural vegetation buffers.

PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT E
REQUEST TO SEAL FEATURES

This request to mine out naturally-occurring sensitive features is based on the absence of any reasonable or practicable alternatives. Sensitive features discovered during the Geologic Assessment of during the quarry process will be mined out as the pit will be mined to a depth of approximately 150 feet, and it would be unsafe and impractical to preserve a feature and buffer within the quarry pit. Sensitive features identified during the Geologic Assessment which are within the quarry excavation limits are identified in the following table.

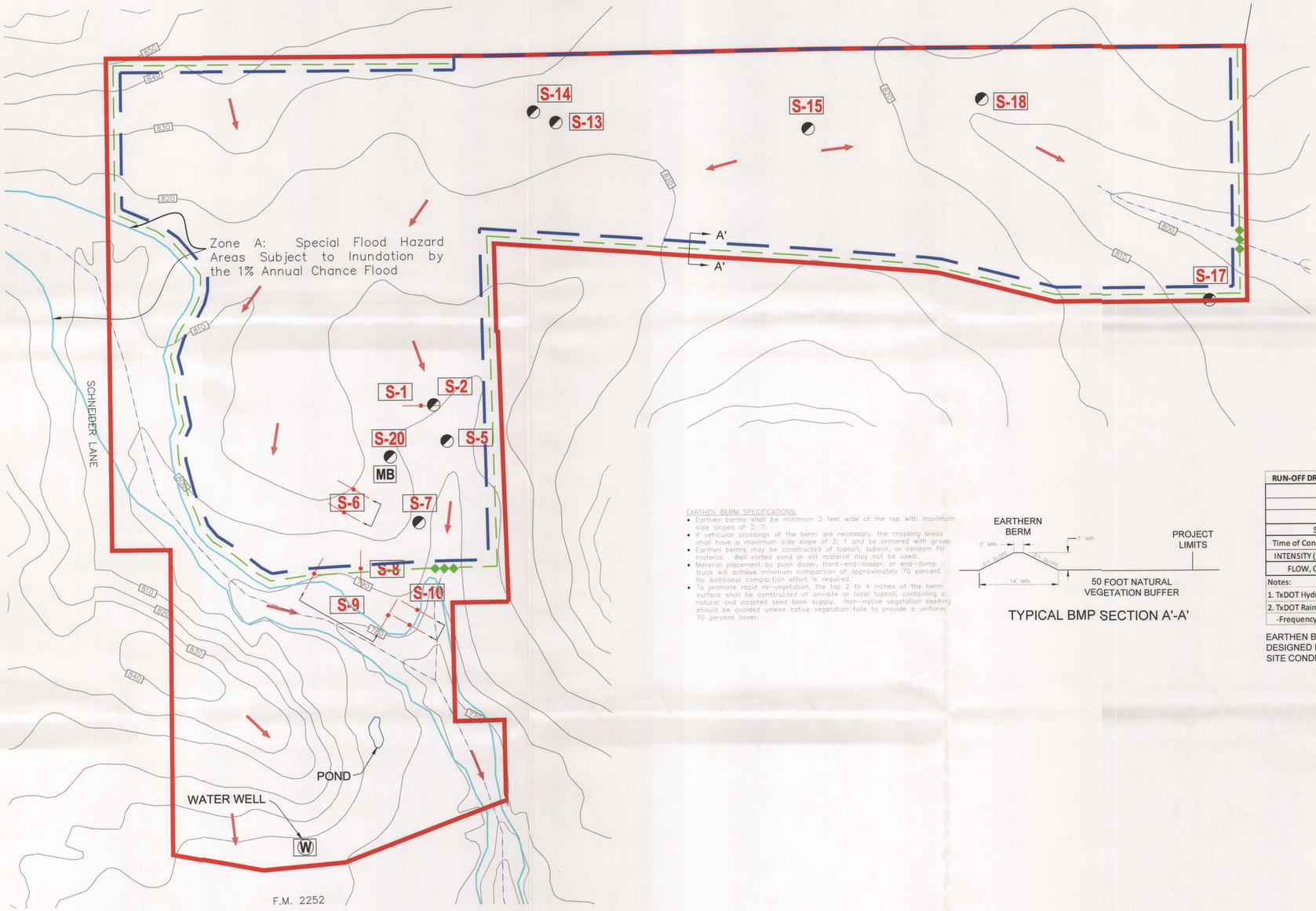
Feature No.	Feature Type	Relative Infiltration Rate (refer to Geologic Assessment	Feature Sensitivity	Permanent Pollution Abatement Measure
S-1	Solution Enlarged Fracture	High	Sensitive	Mine out
S-2	Solution Cavity	High	Sensitive	Mine out
S-3	Manmade Feature	Low	Not Sensitive	Mine out
S-4	Solution Enlarged Fracture	Low	Not Sensitive	Mine out
S-5	Solution Cavity	Low	Not Sensitive	Mine out
S-6	Zone	High	Sensitive	Mine out
S-7	Solution Cavity	High	Sensitive	Mine out
S-8	Solution Enlarged Fracture	High	Sensitive	Mine out
S-13	Solution Cavity	High	Sensitive	Mine out
S-14	Solution Cavity	High	Sensitive	Mine out
S-15	Solution Cavity	High	Sensitive	Mine out
S-16	Solution Cavity	Low	Not Sensitive	Mine out
S-18	Solution Cavity	High	Sensitive	Mine out
S-19	Sink Hole	Low	Not Sensitive	Mine out
S-20	Solution Cavity	High	Sensitive	Mine out
S-21	Fault	Low	Not Sensitive	Mine out

PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT F
CONSTRUCTION PLANS

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

PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT I
MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Any points where discharge from the site is concentrated and erosive velocities exist will include appropriately sized energy dissipators to reduce velocities to non-erosive levels. BMPs will be in place prior to up-gradient site disturbance. A combination of earthen berms, rock berms, and natural vegetation buffers will filter storm water or prevent storm water which has contacted disturbed areas from leaving the site and entering surface streams. Due to the earthen berms surrounding the quarry operation, erosive discharge points are not anticipated.



EARTHEN BERM SPECIFICATIONS:

- Earthen berms shall be minimum 2 feet wide at the top with maximum side slopes of 2: 1.
- If vehicular crossings of the berm are necessary, the crossing areas shall have a maximum side slope of 3: 1 and be armored with gravel.
- Earthen berms may be constructed of topsoil, subsoil, or random fill material. Well sorted sand or silt material may not be used.
- Material placement by push dozer, front-end-loader, or end-dump truck will achieve minimum compaction of approximately 70 percent. No additional compaction effort is required.
- To promote rapid re-vegetation, the top 2 to 4 inches of the berm surface shall be constructed of on-site or local topsoil, containing a natural and adapted seed bank supply. Non-native vegetation seeding should be avoided unless native vegetation fails to provide a uniform 70 percent cover.

TYPICAL BMP SECTION A'-A'

RUN-OFF DRAINAGE CALCULATIONS		
AREA =	27.1	ACRES
C =	0.3	
L =	985	FT
SLOPE =	0.06	FT/FT
Time of Conc (TC) =	33	mins
INTENSITY (10YR) =	4.3	in/hr
FLOW, Q10YR =	35.1	CFS
Notes:		
1. TxDOT Hydraulic Manual Coefficient		
2. TxDOT Rainfall Intensity-Duration -Frequency for Medina County		

EARTHEN BERMS ARE CONSERVATIVELY DESIGNED FOR MOST CRITICAL HYDROLOGIC SITE CONDITIONS AND DRAINAGE AREA

TCEQ-R13
MAR 22 2013
SAN ANTONIO

CONSTRUCTION NOTES

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

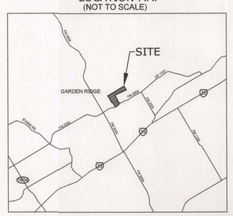
Austin Regional Office	San Antonio Regional Office
2800 S. IH 35, Suite 100	14250 Judson Road
Austin, Texas 78704-5712	San Antonio, Texas 78233-4480
Phone (512) 339-2929	Phone (210) 490-3096
Fax (512) 339-3795	Fax (210) 545-4329

REV. NO.	DESCRIPTION	DATE

Notes:

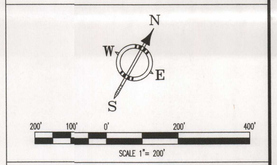
1. Contour Data: Texas Natural Resources Information System 10 ft Contours - Bat Cave Quadrangle
2. Flood Data: FEMA Flood Insurance Rate Map Number 48091C0420F, effective September 2, 2009

LOCATION MAP
(NOT TO SCALE)



LEGEND

- PROJECT LIMITS (131.5+/- ACRES)
- QUARRY LIMITS
- NATURAL STREAM
- 860 EXISTING TOPO
- EXISTING FLOW ARROW
- ROCK BERM
- 3FT EARTHEN BERM
- S-20 SENSITIVE FEATURES



SIGNATURE/SEAL

FORSTER ENGINEERING
TBPE firm # 12385
19915 WITTENBURG, SAN ANTONIO, TEXAS 78256
PHONE: (210) 698-5544, Fax (210) 698-5544
WWW.FORSTERENGINEERING.COM

PROJECT DESCRIPTION

SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS WPAP

DRAWING

PERMANENT STORM WATER

DATE	03/05/2013	JOB NO.	1066-12
SCALE	1"= 200'	DRG NO	ATTACHMENT F
DRAWN BY	JRL		
CHECKED BY	CPF		

Date: Mar 05, 2013, 5:09pm User ID: steve
File: C:\Users\steve\Documents\Autodesk\Projects-Forster Eng\1066-12 Hanson WPAP\1066-12-Servtex WPAP-Attachment F.dwg

Section 7.0

AGENT AUTHORIZATION FORM

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

I Lalit Bhatnagar,
Print Name

Environmental Manager,
Title - Owner/President/Other

of Hanson Aggregates LLC,
Corporation/Partnership/Entity Name

have authorized Charles P. "Frosty" Forster, P.E., P.G.
Print Name of Agent/Engineer

of Forster Engineering
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

3/7/2013
Date

THE STATE OF Texas §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Jalit Bhatnagar 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 7th day of March, 2013.

NOTARY PUBLIC

TAMMIE L. JIMENEZ
Notary Public, State of Texas
My Commission Expires
November 16, 2014

Tammie L. Jimenez
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: Nov. 16, 2014

Section 8.0

APPLICATION FEE FORM AND FEE

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

NAME OF PROPOSED REGULATED ENTITY: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS

REGULATED ENTITY LOCATION: 21303 FM 2252, GARDEN RIDGE, TX 78132
NAME OF CUSTOMER: Hanson Aggregates Central Inc.
CONTACT PERSON: Lalit Bhatnagar,P.E. PHONE: (972) 814-4122
(Please Print)

Customer Reference Number (if issued): CN **602649303** (nine digits)

Regulated Entity Reference Number (if issued): RN **102541612** (nine digits)

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

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

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

☐ **Austin Regional Office**

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

☒ **San Antonio Regional Office**

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

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

Type of Plan	Size		Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling		Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks		Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	131.5	Acres	$10,000
Sewage Collection System		L.F.	$
Lift Stations without sewer lines		Acres	$
Underground or Aboveground Storage Tank Facility		Tanks	$
Piping System(s)(only)		Each	$
Exception		Each	$
Extension of Time		Each	$

Charles D Foster
Signature

03/14/13
Date

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

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

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

Water Pollution Abatement Plans and Modifications
Contributing Zone Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

PROJECT	FEE
Exception Request	$500

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$150

Lehigh Hanson
HEIDELBERGCEMENT Group

Lehigh Hanson Inc.
300 E. John Carpenter Frwy
Suite 1645
Irving, TX 75062

Address inquiries to the accounts payable customer response line at:
E-Mail: lh_vendorsupport@lehighhanson.com

Vendor Name	Vendor Number	Check Date	Check Number
T[redacted]S COMMISSION ON ENV	6391639	03/07/2013	21087216

Invoice Date	Invoice Number	Remarks	Gross Amount	Discount	Net Amount
02/26/2013	MCR02262013		10,000.00		10,000.00
		TOTALS	$10,000.00	$0.00	$10,000.00

Page 1 of 1

THIS IS WATERMARKED PAPER - DO NOT ACCEPT WITHOUT NOTING WATERMARK - HOLD TO LIGHT TO VERIFY WATERMARK

Lehigh Hanson
HEIDELBERGCEMENT Group

Bank of America, N.A.
Dallas, TX 75201

64-1278
611 GA

DATE	CHECK NO.
03/07/2013	21087216

Lehigh Hanson Inc.
300 E. John Carpenter Frwy
Suite 1645
Irving, TX 75062

PAY TEN THOUSAND AND 00/100**********

AMOUNT
$*****10,000.00
Void after 180 days

TO THE [redacted]DER OF TEXAS COMMISSION ON ENV QUALITY
CASHIERS OFFICE
PO BOX 13088
AUSTIN TX 78711

Daniel M. Harrington
MH Ryan

Authorized Signatures

⑈021087216⑈ ⑆061112788⑆ 335916801 3⑈

Section 9.0

CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

☒Yes ☐No WPAP Permit Application

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 603475864		RN 102541612

SECTION II: Customer Information

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

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:

City | State | ZIP | ZIP + 4

11. Country Mailing Information *(if outside USA)*

12. E-Mail Address *(if applicable)*

13. Telephone Number ( ) -

14. Extension or Code

15. Fax Number *(if applicable)* ( ) -

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

20. Number of Employees

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

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

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

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

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

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

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*							
	City		State		ZIP		ZIP + 4	
25. Mailing Address:							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
( ) -		( ) -

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

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

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

35. Description to Physical Location:			
36. Nearest City	County	State	Nearest ZIP Code

37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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

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

SECTION IV: Preparer Information

40. Name:	Charles P. "Frosty" Forster, P.E., P.G.	41. Title:	Principal

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 698-5544		( ) -	fforster@forsterengineering.com

SECTION V: Authorized Signature

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

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

Company:	Forster Engineering	Job Title:	Principal
Name *(In Print)*:	Charles P. "Frosty" Forster, P.E., P.G.	Phone:	(210) 698-5544
Signature:	Charles P. Forster	Date:	03/14/13