EDWARDS AQUIFER APPLICATION ABOVEGROUND STORAGE TANK PLAN

Capitol Aggregates Rio Medina Operation
Medina County, Texas

Submitted to

CAPITOL AGGREGATES INC

11551 Nacogdoches Road
San Antonio, Texas 78217

Submitted by

Geosyntec consultants

engineers | scientists | innovators
Engineering Firm Registration No. 1182
8217 Shoal Creek Blvd, Suite 200
Austin, Texas 78757

Submitted June 2023

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 will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **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:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- 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 denied/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 affected 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: Capitol Aggregates Rio Medina Operation						**2. Regulated Entity No.:** RN108959032			
3. Customer Name: Capitol Aggregates Inc.						**4. Customer No.:** CN604033142			
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):**		503	
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			Secondary containment structure			

11. SCS (Linear Ft.):	0	**12. AST/UST (No. Tanks):**	10 regulated ASTs
13. County:	Medina	**14. Watershed:**	Tributary to Elm Creek within the Frio River Basin

Application Distribution

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

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

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

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

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	_x_	___
Region (1 req.)	___	___	___	_x_	___
County(ies)	___	___	___	_x_	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority ___ Comal Trinity	___Kinney	_x_EAA _x_Medina	___EAA ___Uvalde

City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __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.

J. Brandon Klenzendorf, P.E.

Print Name of Customer/Authorized Agent

J. Brandon Klenzendorf 6·14·2023

Signature of Customer/Authorized Agent Date

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

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 6·14·2023

Signature of Customer/Agent:

J. Brandon Klenzendorf

Project Information

1. Regulated Entity Name: Capitol Aggregates Rio Medina Operation
2. County: Medina
3. Stream Basin: Elm Creek tributary in the Frio River Basin
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority and Medina County GCD
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☐ WPAP
   ☐ SCS
   ☐ Modification
   ☒ AST

☐ UST ☐ Exception Request

7. Customer (Applicant):

Contact Person: Andrew Frye
Entity: Capitol Aggregates, Inc.
Mailing Address: 11551 Nacogdoches Road
City, State: San Antonio, Texas Zip: 78217
Telephone: 210-871-7214 FAX: N/A
Email Address: Andrew.Fyre@CapitolAggregates.com

8. Agent/Representative (If any):

Contact Person: Brandon Klenzendorf
Entity: Geosyntec Consultants
Mailing Address: 8217 Shoal Creek Boulevard, Suite 200
City, State: Austin, Texas Zip: 78757
Telephone: 512-354-3281 FAX: N/A
Email Address: bklenzendorf@geosyntec.com

9. Project Location:

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

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

The project site is located west of County Road 265 and southwest of Mico in Medina County, Texas (Attachment A). The southern boundary of the project site is located approximately 2.5 miles north of County Road 354. The western boundary of the project site is approximately 0.75 miles west of County Road 265. The northern boundary of the site is located approximately 1.5 miles south of County Road 368. The street address of the site is 1576 County Road 265, Hondo, Texas 78861.

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

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

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

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

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

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

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

15. Existing project site conditions are noted below:

☐ Existing commercial site
☒ Existing industrial site
☒ Existing residential site
☒ Existing paved and/or unpaved roads
☒ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Uncleared)
☐ Other: _____

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

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

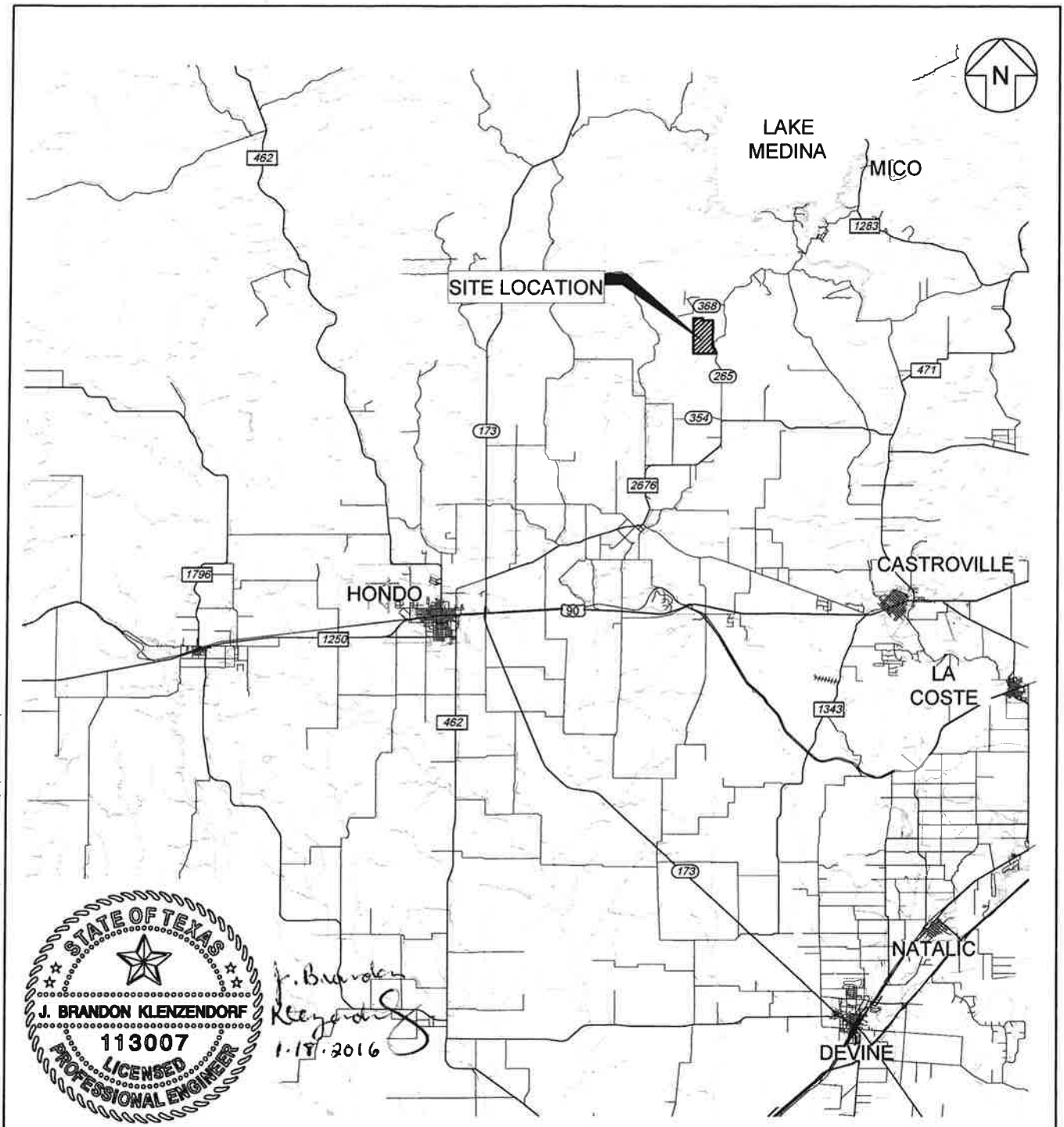
21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

Attachment A – Road Map

See attached Road Map with directions to the Rio Medina Operation Site which includes the Tank Storage Area Project Site and boundaries clearly shown.

Attachment B – USGS/Edwards Recharge Zone Map

See attached USGS/Edwards Recharge Zone Map with the official 7 ½ minute USGS Quadrangle Map (scale: 1" = 2000') of the Edwards Recharge Zone. The map clearly shows the Rio Medina Operation Site and the Tank Storage Area Project Site boundaries, USGS Quadrangle names, boundaries of the Recharge Zone and Transition Zone, and drainage path from the project site to the boundary of the Recharge Zone.



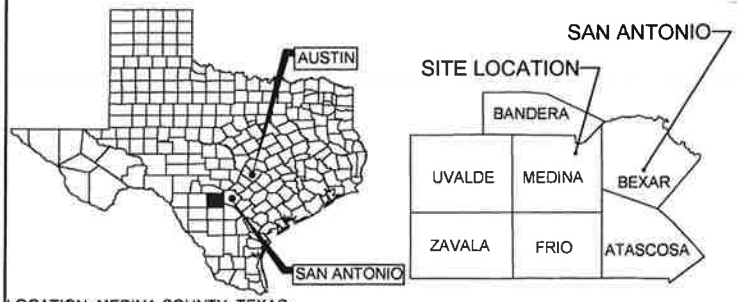
MAP SOURCE: TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) DIGITAL COUNTY/URBAN MAP FILES FOR MEDINA COUNTY TEXAS, OBTAINED ONLINE FROM TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNRIS).

LEGEND

CITY LIMITS

0 5

MILES



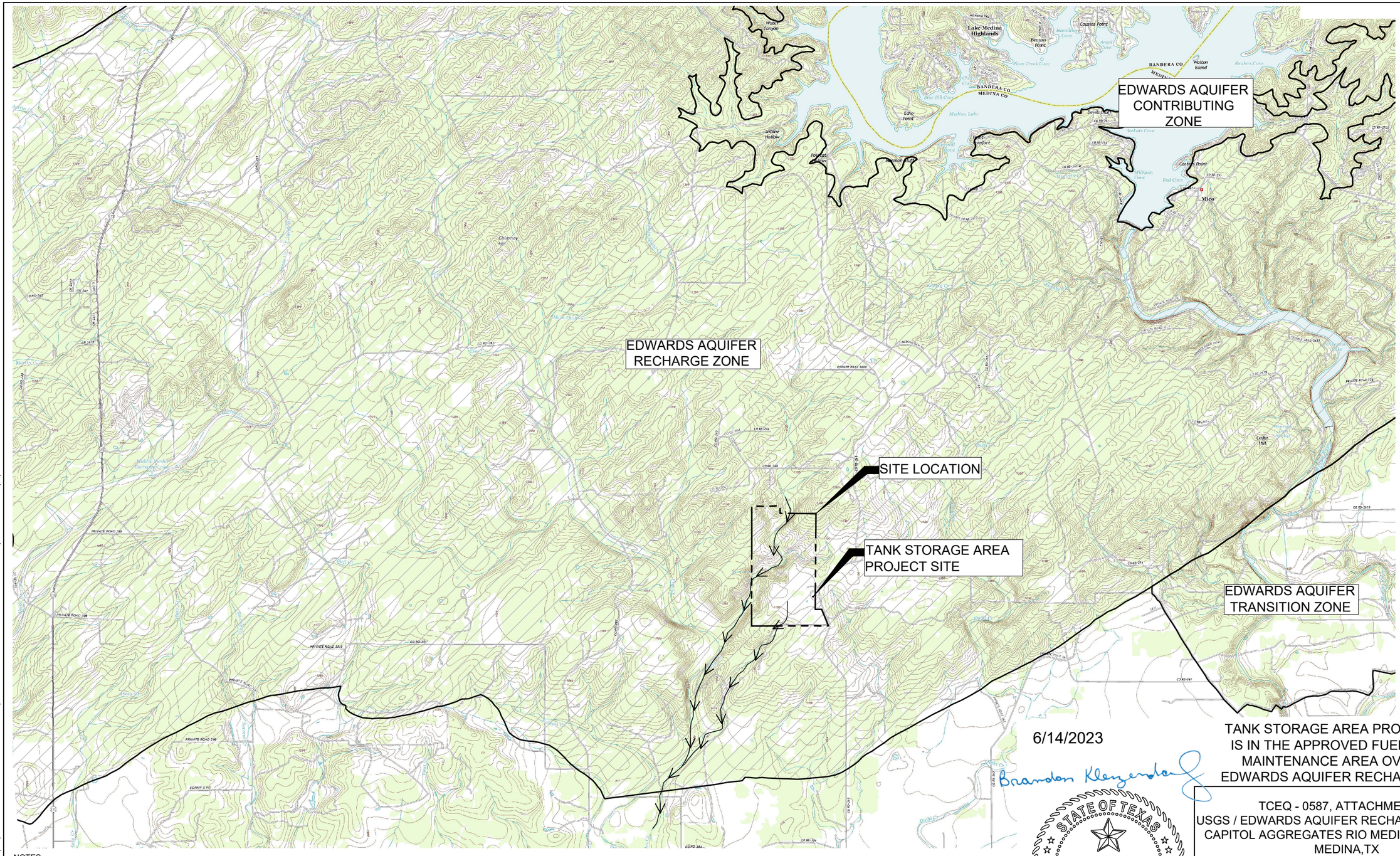
LOCATION: MEDINA COUNTY, TEXAS

TCEQ - 0587, ATTACHMENT A - ROAD MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY,TX

Geosyntec consultants
TX ENG. FIRM REGISTRATION NO. 1182

AUSTIN, TX | JANUARY 2016

P:\CADD\PROJECTS\R\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW049202F01



6/14/2023

Brandon Klenzendorf

TANK STORAGE AREA PROJECT SITE IS IN THE APPROVED FUELING AND MAINTENANCE AREA OVER THE EDWARDS AQUIFER RECHARGE ZONE

NOTES:

1. MAP SOURCE: UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY (USGS), 7 1/2 MINUTE SERIES QUADRANGLE TOPOGRAPHIC MAPS OF QUIHI, TIMBER CREEK, MEDINA LAKE, AND RIOMEDINA TEXAS (USGS, 1964, 1969,1982, 1982b).
2. EDWARDS AQUIFER REGULATORY BOUNDARIES OBTAINED FROM TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) ONLINE DATA (TCEQ, 2005).
3. THE NORTHERN LIMIT OF THE EDWARDS AQUIFER REGULATORY BOUNDARY IN MEDINA COUNTY IS THE COUNTY BOUNDARY.

LEGEND

DRAINAGE PATH FROM SITE TO RECHARGE ZONE BOUNDARY

0 2,000'

SCALE IN FEET

STATE OF TEXAS
J. BRANDON KLENZENDORF
113007
LICENSED PROFESSIONAL ENGINEER

TCEQ - 0587, ATTACHMENT B -
USGS / EDWARDS AQUIFER RECHARGE ZONE MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA,TX

Geosyntec consultants
TX ENG. FIRM REGISTRATION NO. 1182

AUSTIN, TX | JUNE 2023

P:\CADD\PROJECTS\R\RIO MEDINA QUARRY DEVP\ABOVE GROUND STORAGE TANK (TXW0492.05)\TXW049205F05

Attachment C – Project Description

Capitol Aggregates, Inc. (Capitol Aggregates) is submitting this Aboveground Storage Tank (AST) Plan for the Capitol Aggregates Rio Medina Operation at 1576 County Road 265, Hondo, Texas. The overall Rio Medina Operation Site includes areas in the Edwards Aquifer Recharge Zone and has an approved Water Pollution Abatement Plan (WPAP) submitted by Geosyntec Consultants on behalf of Capitol Aggregates. The WPAP was approved on 22 June 2016 (Edwards Aquifer Protection Program ID No. 13000073). The Capitol Aggregates Rio Medina Operation Site consists of 503 acres, all within the Recharge Zone. Permanent pollution abatement measures consist of natural vegetated buffers, earthen berms, rock berms, and an extended detention basin in series with a grassy swale. The Rio Medina Operation Site also has an approved WPAP modification submitted by Geosyntec Consultants on behalf of Century Asphalt (who leases a portion of the Site). The WPAP modification was approved on 24 August 2018 (Additional ID No. 13000715). Additional permanent pollution abatement measures associated with the leased area consist of earthen berms and a wet basin. The AST Plan application will not impact the leased area associated with the WPAP modification.

The proposed Tank Storage Area Project Site is located entirely over the Edwards Aquifer Recharge Zone and consists of operation of ten permanent, regulated ASTs (identified as AST 1 through AST 10) within an impervious concrete dike secondary containment structure (with a roof system), designed to have an available storage volume sufficient to contain one and one-half times the cumulative storage capacity of the regulated tanks plus the volume displaced by unregulated tanks that will be stored within the secondary containment. The containment structure at the Tank Storage Area also includes operation of two permanent unregulated ASTs (identified as AST 11 and AST 12) with unregulated materials (i.e., Diesel Exhaust Fluid Additive and Antifreeze, respectively, which are not classified as hazardous substances under Federal Hazardous Waste Regulations 40 CFR 261) plus eighteen regulated 55-gallon portable drums containing petroleum hydrocarbon material. The cumulative storage volume of the portable drums was accounted for in the required containment volume calculation for one and one-half times the cumulative storage capacity and the displacement volume from unregulated AST 11 and AST 12 were accounted for in the available storage volume provided by the containment structure.

Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST application. A TCEQ Investigator recently conducted a Compliance Investigation at the Site and identified a portable 500-gallon fuel tank as an alleged violation. This AST Plan application includes this 500-gallon fuel tank and additional future tank installations. Capitol

Aggregates will not initiate additional tank installation or transfer of tank contents until approval is received.

Area of the Site

The total area of the Capitol Aggregates Rio Medina Operation Site consists of 503 acres. This AST Plan only applies to the regulated activities associated with the on-site storage tanks. The limits of the new Tank Storage Area Project Site consist of an area of less than 0.05 acres.

Off-Site Areas

Off-site areas surrounding the Tank Storage Area Project Site consist of the existing quarry operations to the west, storage containers and electrical transformer/equipment to the south and east, and undeveloped areas to the north. Off-site areas will not be required for operations associated with this project.

Impervious Cover

The original approved WPAP lists the impervious cover over the Recharge Zone as 4.9% (24.5 acres of impervious cover for the Recharge Zone area of 503 acres). The approved WPAP modification increased the impervious cover to 33.5 acres or 6.7%. Impervious cover associated with the Tank Storage Area Project Site is included as part of the existing fueling and maintenance area and will not result in any additional impervious cover.

Permanent BMPs

The Tank Storage Area Project Site is located within secondary containment within the drainage area associated with the extended detention basin in series with a grassy swale which are designed to mitigate the impervious cover for the existing fueling and maintenance area. Therefore, no additional permanent BMPs are proposed for this project.

Proposed Site Use

The proposed project associated with this AST Plan application consist of operation of ASTs within the secondary containment structure for use as a fuel island. The Rio Medina Operation Site and proposed site use will not be modified as a result of this project.

Site History and Previous Development

The Rio Medina Operation Site was approved for construction as a quarry following approval of the original WPAP on 22 June 2016. The site was primarily undeveloped prior to quarry operations in 2016. Historical land use appears to be primarily cattle ranching, with the majority of the site being undeveloped with natural vegetation aside from a residential house and

associated outbuildings that were located within the existing quarry footprint. A WPAP Modification was submitted and subsequently approved on 24 August 2018 for development of the hot mix asphalt plant area.

Areas to be Demolished

No areas are proposed to be demolished for this project.

Geologic Assessment Form (TCEQ-0585) Supplemental Information

Based on discussions with TCEQ staff, form TCEQ-0585, Geologic Assessment, is not required for this AST Plan application because the original Geologic Assessment approved with the original WPAP provides the necessary information. The original submittal for the Geologic Assessment form TCEQ-0585 (signed by Mark E. Stoker, P.G., for Geosyntec Consultants on 18 March 2016) is provided for reference. Modifications to the Geologic Assessment form beyond the original Geologic Assessment are not proposed as part of the AST Plan application.

No sensitive geologic features were identified near the Tank Storage Area Project Site associated with this AST Plan application. Acreage has not been added or removed from the Plan. Therefore, a reevaluation of the Geologic Assessment is not required.

Attachment A – Geologic Assessment Table

The Geologic Assessment Table from the original approved WPAP will not be modified as a result of this AST Plan application. The original Geologic Assessment from the WPAP modification is provided for reference.

Attachment B – Stratigraphic Column

The original Geologic Assessment approved with the WPAP provides information on the stratigraphic column. Modified information is not required for this AST Plan application.

Attachment C – Site Geology

The original Geologic Assessment approved with the WPAP provides information on the site geology. Modified information is not required for this AST Plan application.

Attachment D – Site Geologic Map(s)

The original Geologic Assessment approved with the WPAP provides the Site Geologic Maps. Modified information is not required for this AST Plan application.

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Geologist: Mark Stoker, P.G. Telephone: 210-510-4176

Date: 4/18/2016 Fax: N/A

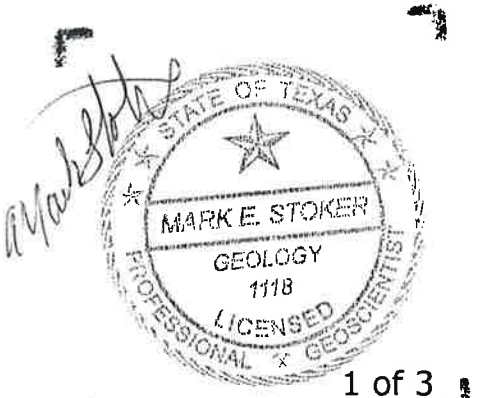
Representing: Geosyntec Consultants, Inc., Texas Geoscience Firm Registration No. 50256
(Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Capitol Aggregates Rio Medina Operations

Project Information

1. Date(s) Geologic Assessment was performed: April 6-10, 2015; April 11, 2016
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone



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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Dina Association	C	1.5 to 3.5
Pratley Clay	C	2.0 to 3.5
Speck Association	D	1.0 to 1.5
Eckrant-Rock outcrop Association - undulating	D	0.5 to 1.5
Eckrant-Rock outcrop Association - hilly	D	0.5 to 1.5

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = 400' at half size, 11"x17''
   Site Geologic Map Scale: 1" = 400'
   Site Soils Map Scale (if more than 1 soil type): 1" = 400'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

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

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☒ There are 8 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☒ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☒ The wells are in use and comply with 16 TAC Chapter 76.

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

Administrative Information

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

GEOLOGIC ASSESSMENT REPORT

Capitol Aggregates Rio Medina Operation
Medina County, Texas

Submitted to

CAPITOL AGGREGATES INC

11551 Nacogdoches Road
San Antonio, Texas 78217

Submitted by

Geosyntec consultants

engineers | scientists | innovators
Texas Geoscience Firm Registration No. 50256
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Submitted January 2016
Revised March 2016, April 2016

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LIST OF ACRONYMS AND ABBREVIATIONS

BMPs	Best Management Practices
EA	Edwards Aquifer
EAA	Edwards Aquifer Authority
Feature ID	Feature Identification Number
ft	feet
ft-msl	feet mean sea level
GA	Geologic Assessment
GA Instructions	Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (TCEQ-0585 Instructions)
Geosyntec	Geosyntec Consultants, Inc.
GPS	Global Positioning System
HSG	Hydrologic Soil Group
Kdvr	Devils River Trend
NRCS	Natural Resources Conservation Service
SB	Soil Boring
Site	Capitol Aggregates Rio Medina Operation
TCEQ	Texas Commission on Environmental Quality
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WPAP	Water Pollution Abatement Plan

SECTION 1

INTRODUCTION

As requested by Capitol Aggregates, Inc., Geosyntec Consultants, Inc. (Geosyntec) has prepared this Geologic Assessment (GA) for a 503-acre tract of ranch land located west of County Road 265 in Medina County, Texas and referred to as the Capitol Aggregates Rio Medina Operation (Site). The Site is located in the Edwards Aquifer (EA) recharge zone (Figure 1) and has been proposed as the location for a limestone quarry. This GA has been prepared in support of this proposed development.

A Water Pollution Abatement Plan (WPAP) is required by the Texas Commission on Environmental Quality (TCEQ) for any regulated activity (construction/development) proposed over the EA recharge zone. This GA was performed as a component of the WPAP. The primary objective of this GA is to identify potential migration pathways for site-related constituents to the EA. In addition, this GA provides sufficient geologic information to develop and implement Best Management Practices (BMPs) during Site development.

Information presented in this GA is based on a review of relevant literature, including aerial photographs, a field survey of geologic features, and a review of logs for six soil borings (B1 to B6) conducted at the Site in July 2014 (see Figure 2). The remainder of this GA is organized into the following sections:

- Section 2 presents the results of a review of historical aerials for the Site and geologic studies relevant to the development of the Site;
- Section 3describes the field survey conducted to identify the presence of geologic and manmade features at the Site;
- Section 4 presents the soil associations found at the site and describes their physical and hydraulic characteristics;
- Section 5 describes the site geology;
- Section 6 describes the Site topography and features observed during the field survey and Geosyntec's investigation of potential karst features;
- Section 7 summarizes the key findings of the GA; and
- Section 8 lists references cited in this GA.

Figures and attachments are provided at the end of the text. The attachments are listed below:

- Attachment A – Geologic Assessment Table
- Attachment B – Stratigraphic Column
- Attachment C – Site Geology
- Attachment D – Site Geologic Maps
- Attachment E – Photo Log
- Attachment F – Soil Boring Logs
- Attachment G – Well Registration and Well Construction Logs

Attachments A to D are required by TCEQ Form 0585.

SECTION 2

LITERATURE REVIEW

The objective of the literature review was to identify site-specific information potentially relevant to Site development and the GA. The review included historical aerials from Google Earth, United States Geological Survey (USGS) data, and other relevant geologic studies. As specified by TCEQ's 2004 Instructions for Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones [GA Instructions (TCEQ, 2004)], the review focused on literature or other sources that identify any of the following features:

- visible karst features (e.g., sink holes, caves, etc.);
- manmade recharge features (e.g., ponds, ditches, etc.);
- creek beds and drainage features;
- former land use practices and modifications; and
- topography.

Technical literature relevant to the Site and GA include the following:

- "Geologic Framework and Hydrogeologic Characteristics of the Outcrops of the Edwards and Trinity Aquifers, Medina Lake Area, Texas" (Small and Lambert, 2008);
- "Hydrogeology, Hydrologic Budget, and Water Chemistry of the Medina Lake Area, Texas" (Lambert et al., 2000);
- "Geology and Groundwater Resources of Medina County, Texas" (Holt, 1959) [not cited];
- "Geologic Map of the Edwards Aquifer Recharge Zone, South-Central Texas" (Blome et al., 2005); and
- historical aerial images from Google Earth (accessed 2015).

This review was conducted prior to the field survey so that the information could be used to help develop and focus the field survey approach.

SECTION 3

FIELD SURVEY

The objective of the field survey was to identify the presence of geologic and manmade features at the Site. The field survey was conducted using the tributary to Elm Creek and other drainage pathways identified in the review of aerial photographs as a means to hypothetically subdivide the Site (Figure 2 at a scale of 1 inch (in.) = 500 feet (ft) and Figures 2a and 2b at a scale of 1 in. = 400 ft). On the morning of April 6, 2015, Mr. Joe Tellez, a Field Geologist with Geosyntec, and Mr. Mark Stoker, P.G., Geosyntec's Geologist-of-Record for the GA, conducted a general vehicular survey of the Site. The land owners accompanied Geosyntec personnel to key Site features (e.g., water wells, former soil boring locations, creek beds, ponds, etc.) and identified various roads, trails, and landmarks. Transects were subsequently walked at right angles to the trails in 50 ft or less intervals. Drainages such as the tributary to Elm Creek were surveyed by walking along the creek bed. Geologic features were assigned a Feature Identification Number (Feature ID), listed in Attachment A in accordance with TCEQ's GA Instructions (TCEQ, 2004) and marked with flags or tape. Most of the Site has been cleared of Ashe Juniper *(Juniperus ashei)* and has been used (historically and currently) for cattle grazing.

The following is a daily summary of field activities:

April 6, 2015:

Mr. Tellez and Mr. Stoker conducted a survey along the bed of the tributary to Elm Creek. Geologic features were identified in the creek bed, photographed, and assigned the following Feature IDs: S-2-O (Limestone Cliff Ledges), S-3-O (Gray Bedrock Ledge), S-4-O (White Rock Exposure), S-5-O (Gray Bedrock), and S-7-O (Jointed Bedrock). A survey of the two hilltops at the northern third of the Site was conducted, as well as a survey of the area surrounding Soil Boring 2 (B2). The North Manmade Pond and the Middle Manmade Pond were also inspected and identified as geologic features (S-8-MB and S-9-MB, respectively) and photographed.

April 7, 2015:

Mr. Tellez surveyed drainages south of the northeastern hilltop (elevation 1180 ft mean sea level (ft-msl)) and identified the Diversion Lake Fault (S-1-F) trace. In addition, the ridge at the east side of the tributary to Elm Creek above feature S-2-O (Limestone Cliff Ledges) and the south central portion of the Site (in the area of the South Water Well [S-14-MB] and Soil Boring B1) were assessed for potential recharge features. Inspection of the upstream portion of the tributary to Elm Creek and the west bank identified two limestone boulders (Attachment E, Photo 14) along

Diversion Lake Fault (S-1-F). A change was observed in the character of the ground surface indicating an apparent trace of the fault. Exposed limestone and limestone rubble was present north of the boulders, while soil with few rock fragments and vegetation extended south of the boulders. An exposed limestone ledge (S-6-O) was identified to the north on the up-thrown side of the fault trace.

April 8, 2015:

Mr. Tellez surveyed the central, southwestern, and southeastern areas of the Site to identify potential recharge features. The Middle Topographic Depression (S-11-CD), South Water Well (S-14-MB), South Manmade Pond (S-10-MB), and South Topographic Depression (S-12-CD) were identified and inspected. In addition, the hilltop between the Middle Manmade Pond (S-9-MB) and tributary to Elm Creek was inspected for general geologic conditions and evidence of potential recharge features. The hilltop was covered with soils of the Eckrant-Rock outcrop association, undulating [United States Department of Agriculture (USDA), 1977] series. Some limestone ledges were exposed through the soil on the slope west of the hilltop.

April 9, 2015:

Features identified during the reconnaissance and marked with flags or tape were revisited by Ms. April Brandon of Geosyntec to obtain Global Positioning System (GPS) coordinates (WGS 1984) using a handheld Trimble® GeoExplorer. Data were collected with a horizontal accuracy ranging from 0.1 to 0.7 ft. A supplemental assessment was performed by Mr. Tellez at the drainages south of the northeastern hilltop (elevation 1180 ft-msl) to verify the absence of karst features along the Diversion Lake Fault trace.

April 10, 2015:

Mr. Tellez conducted a Site visit to assess the Site conditions after an overnight rainfall. Continued rainfall limited access to the entire Site, but observations of drainage and infiltration were made at the Middle Manmade Pond (S-9-MB) and Middle Topographic Depression (S-11-CD). These observations are discussed further in Section 6.1.

April 11, 2016:

Mr. Stoker and Ms. Brandon remobilized to the Site to conduct additional surveys in the limited areas previously surveyed in transects greater than 50 ft. This included sections in the northeastern and southern portions of the property. Personnel documented general geologic features and observed for evidence of potential recharge features. Surveys were performed in transects of 50 ft or less.

Exposed limestone and limestone rubble was present in the northeastern portion of the Site, in addition to steep cliff areas. The steep cliff areas were re-evaluated for karst features in areas subject to infiltration of stormwater. No additional karst features were identified.

Limestone ledges exposed through the topsoil were observed in the southern portion of the Site. Surveys were more intensely focused on areas of dense vegetation and uneven terrain. No additional karst features were identified.

SECTION 4

SOIL SURVEY

The USDA Natural Resources Conservation Service (NRCS) soil classification map for the Site is provided in Figure 3 at a scale of 1 in. = 500 ft and in Figures 3A and 3B at a scale of 1 in. = 400 ft. The Site encompasses three soil associations: the Dina, Speck, and Eckrant [referred to as the Tarrant series in USDA, (1977)]. The Pratley Clay series occurs in the far northern areas of the site and is sometimes included as part of the Dina association. General information presented herein on the soils was derived from USDA (1977, 2015). The Hydrologic Soil Group (HSG) for each soil type is included to provide an indication of the minimum rate of infiltration for the bare soil after prolonged wetting (USDA, 1986).

Dina Association

The Dina association (DNC) at the Site consists of gravelly silt loams on uplands. Slopes are 1 to 5 percent. This association is about 70 percent Dina soils with a similar soil that is 15 to 35 percent gravel occurring in the lower part of the soil profile. The remaining 30 percent consists mainly of Quihi, Speck, and Tarrant (Eckrant) soils with occasional rock outcrops. Surface runoff is medium, and the hazard of erosion is moderate. Coarse fragments on the surface help reduce erosion and evaporation. Dina association soils are classified as HSG C (USDA, 1986). Dina soils are not well suited to cultivation. Nearly all the acreage of this association is used for range and wildlife habitat.

Pratley Clay Series

The Pratley clay series (PrB) consists of moderately deep, well-drained, nearly level to gently sloping soils on uplands. These soils formed in clayey material over limestone. In a representative profile, the surface layer is very dark grayish-brown clay about 10 inches (in.) thick. The next layer is 23 in. thick, with the upper 10 in. consisting of brown clay and a few fine limestone fragments and the lower 13 in. consisting of reddish-brown clay and a few fine limestone and caliche fragments. The underlying material, to a depth of 48 in., is caliche that is indurated and laminar in the upper 1 in. and weakly cemented below that depth. Permeability is moderately slow, and the available water capacity is medium. Pratley clay soils are classified as HSG C (USDA, 1986). Pratley clay soils are used mainly for range and wildlife habitat, but some areas are farmed. The hazard of erosion is moderate.

Speck Association

The Speck association (SPD) consists of shallow soils on uplands, typically between steeper soils on hills and soils on drainage ways. It is mainly found in rounded to irregularly shaped areas. Slopes range from 1 to 8 percent, but are mainly 1 to 3 percent. This association consists of about

50 percent of a Speck clay loam, 10 percent of a Speck soil that is very gravelly, 10 percent of a similar soil that is less than 10 in. deep to limestone, 5 percent of Topia soils, 5 percent of Dina soils, 5 percent of Kavett soils, 5 percent of Tarrant soils, and 10 percent of other soils. Surface runoff is medium, and the hazard of erosion is moderate. Speck association soils are identified as HSG D based on the predominance of clay loam (USDA, 1986). These soils are used mostly for range and wildlife habitat. A few small areas are used for crops.

Eckrant-Rock Outcrop Association

The Eckrant-Rock outcrop association, undulating and hilly (TAD and TAF, respectively), consists of very shallow to shallow, well drained, undulating to steep clayey soils over indurated fractured limestone on limestone ridges. Slopes range from 1 to 30 percent. Surface runoff is rapid, and the hazard of erosion is moderate to high. Eckrant-Rock outcrop soils are classified as HSG D (USDA, 1986). These soils are used for range and wildlife habitat.

SECTION 5

SITE GEOLOGY

As required by TCEQ Form 0585, the Geologic Assessment Table (TCEQ-0585-Table) is provided in Attachment A of this GA, a Stratigraphic Column for the region is presented and described in Attachment B, a narrative description of the Site geology is presented in Attachment C, and Site Geologic Maps are referenced in Attachment D and included as Figures 2, 2A, and 2B of this GA.

SECTION 6

SITE DESCRIPTION

6.1 Site Topography

6.1.1 Overview

The northern area of the Site consists of large hills, hillsides, and dry creek bed drainage systems. The tributary to Elm Creek drains the Site, dividing the northern portion of the site into two hilltops to the east (elevation 1180 ft-msl) and west (elevation 1170 ft-msl) of the tributary (See Figure 2B). An east-west drainage sloping westward towards the tributary to Elm Creek separates the hill at the northeastern corner of the site from a broad hilltop (max elevation 1110 ft-msl) which makes up the relatively flat southern third of the site (Figure 2A). The southern slope of this hilltop forms the southern boundary of the Site (Figures 2A). At the time of the field survey, the tributary to Elm Creek and other drainage pathways appeared dry. A period of rainfall occurred on the night of April 9, 2015 and continued into the morning of 10 April 2015; however, because of the hazardous condition of trails at the Site, it was not possible to observe water flow at the tributary to Elm Creek and other drainage pathways.

6.1.2 Natural Topographical Features

Two natural topographic depressions were found on the Site:

1) Middle Topographic Depression (S-11-CD on Figure 2A) located in a wooded area of the broad hilltop (Attachment E, Photos 17 and 18); and

2) South Topographic Depression (S-12-CD on Figure 2A) located near the southeast corner of the Site (Attachment E, Photos 21 and 22) and initially identified during the literature review (USGS, 1964).

Neither topographic depression was identified as a recharge feature since both locations had evidence that water ponded in the depression and had slow infiltration (e.g., change in vegetation and soil accumulation via runoff). These features are both located on soil classified as Speck association, undulating (USDA, 1977) and have very slow infiltration rates (Figure 3A).

6.1.3 Manmade Topographical Features

Three manmade topographic depressions were found on the Site:

1) North Manmade Pond (S-8-MB on Figure 2B) was dry at the time of the field survey (Attachment E, Photo 7);

2) Middle Manmade Pond (S-9-MB on Figure 2A) was filled with heavy dark clayey soil and had small pools of water at the time of the field survey (Attachment E, Photo 8); and

3) South Manmade Pond (S-10-MB on Figure 2A) was filled with heavy dark clayey soil and had small pools of water at the time of the field survey (Attachment E, Photo 20).

The ponds are located on soil types classified as very low infiltration rates (USDA, 1977). Two of the three ponds had standing water during the field survey.

6.2 Site Features

A brief description of a subset of Site features identified during the literature search, aerial photo review, and field survey are detailed in Attachment A and presented in Figures 2A and 2B. A brief description of each feature is provided below along with example photos.

S-1-F – Fault Trace (Figure 2B)

A 2000 study (Small and Clark, 2000) identified a fault which extends southwest to northeast across the Site. During the field survey the apparent trace of the fault was located and identified (S-1-F). The photos of the fault include limestone boulders appearing to identify the fault trace to the southwest and a limestone ledge marking the fault trace.

S-2-O, S-3-O, S-6-O – Limestone Cliff Ledges (Figure 2B)

Limestone cliff ledges are located along the dry creek bed. Numerous small overhanging ledges occur in this area and extended one to five feet into the limestone formation along the dry creek.

S-4-O, S-5-O, S-7-O – White, Gray and Jointed Bedrock (Figure 2B)

Jointed bedrock is located in the dry creek bed in the northern portion of the Site. The joints and fractures appeared to be within an individual bed with material (organic soil) plugging the expression of the fractures and joints. The fractures may propagate deeply due to prolonged exposure and weathering.

S-8-MB – North Manmade Pond (Figure 2B)

A pond (dry at the time of the field survey) was located in the northern hilly portion of the Site. Based on the presence of an earthen berm and absence of sinkhole relief and features, the pond does not appear to be naturally occurring. Soils were observed in the bottom of the pond.

S-9-MB – Middle Manmade Pond (Figure 2A)

A pond is located in the middle portion of the Site. Based on the presence of an earthen berm and absence of sinkhole relief and features, the pond does not appear to be naturally occurring. Soils were observed in the bottom of the pond.

S-10-MB – South Manmade Pond (Figure 2A)

A pond is located in the southern portion of the Site. Based on the presence of an earthen berm and absence of sinkhole relief and features, the pond does not appear to be naturally occurring. Soils were observed in the bottom of the pond.

6.3 Investigation of Potential Karst Features

6.3.1 Surface Observations

The most prominent exposures of the Devils River Limestone were in the bed of the tributary to Elm Creek and the smaller drainages feeding into the tributary. In addition, resistive ledges of Devils River Limestone (Feature S-2-O) were partially exposed on the slopes at the Site (Attachment E, Photo 1). The reconnaissance of the creek bed provided the best view of the Devils River Limestone, although in many areas of the bedrock is covered by alluvium (Attachment E, Photo 4). No karst features were seen in the bedrock of the creek bed but there were areas of fractured bed rock (Feature S-5-O) (Attachment E, Photo 3) and jointed strata (S-7-O) (Attachment E, Photo 2) particularly in the area of the Diversion Lake Fault.

6.3.2 Subsurface Data

Geosyntec's Field Geologist examined the log for each of the six borings (B1 to B6) conducted at the Site in July 2014 for evidence of karst features. The boring logs are provided in Attachment F and boring locations are shown on Figure 3, 3A, and 3B. The following details characteristics observed within the first 30 ft.

All borings logged 0.5 ft to 20 ft of topsoil, except Boring B2 which recorded no soil cover. The log of Boring B5 (at a ground elevation of 1110.78 ft-msl) and Boring B6 (at a ground elevation of 1171.8 ft-msl, the highest at the Site) were located north of the Diversion Lake Fault and describe primarily hard, dense limestone within the first 20 ft of the surface, with chalk and clay seams. The Boring B5 log identified solution features and leached pockets within 10 ft of the surface, but these are underlain by 20 ft of dense limestone. In both Borings B5 and B6 logs the shallowest porous limestone is logged at 30 ft.

Boring B3 was the only boring with a boring log that indicated groundwater was encountered; groundwater was reported at a depth of 185 ft (corresponding to a water elevation of 839.24 ft-msl). Boring B3 was also the lowest in ground elevation at 1024.24 ft-msl, closest to the tributary to Elm Creek, and very close or on the trace of the Diversion Lake Fault. Boring B3 logged hard dense limestone with some solution features, vertical fractures (both open and healed) within 10 ft of the surface. Two vuggy zones were reported at depths of 23 to 25 ft and 28 to 29.5 ft.

Borings B1 and B2 are at nearly the same ground elevation (1100.19 ft and 1101.4 ft, respectively) and south of the Diversion Lake Fault on the down thrown side. Boring B1 logged hard dense limestone with vuggy zones, iron staining, and some solution features within the first 20 ft the vuggy limestone continued from 20 to 30 ft with the addition of red clay and calcite pockets. Boring B2 encountered similar strata, logging hard dense limestone with some solution cavities to 17 ft. Hard vuggy limestone (sometimes crystalline) was described from 17 to 30 ft where a hard dense limestone bed was encountered.

Boring B4, the southern most boring, logged a hard dense fractured limestone with vuggy zones to 25 ft. A hard dense brecciated limestone (fractures were both open and healed) was reported from 25 to approximately 50 ft.

All borings had been properly grouted to surface (Attachment E, Photos 6 and 12). Soil boring logs are included in Attachment F.

In addition to the six borings, two active water wells were present at the Site. These are given the identifiers North Water Well (S-13-MB) and South Water Well (S-14-MB) and are shown on Figure 2A. The condition of the well heads and associated equipment and sheds of these wells were inspected and documented (Attachment E, Photos 19 and 31). The South Water Well is registered with the Edwards Aquifer Authority (EAA), and the well drilling log is provided in Attachment G. The North Water Well is currently unregistered. In general, the well heads appeared in good working condition with no evidence of direct conduits from the surface.

SECTION 7

CONCLUSIONS

Geosyntec conducted this GA by completing a literature review, aerial photo review, field survey, and review of subsurface conditions as logged in six borings conducted at the Site in 2014. Key findings from the GA are listed below:

- Surface Geology: The Site is located on the Devils River Limestone formation.
- Surface Soils: Site soils are predominately HSG C and D (USDA, 1986), and thus have a very slow to slow infiltration rate when thoroughly wetted; and
- Topographic Features:
    - Three manmade ponds located on soil types classified as having very low infiltration rates,
    - Two active water well,
    - Two natural topographical depressions, neither of which was identified as a recharge feature, and
    - The trace of a fault (Diversion Lake Fault) that crosses the Site, but had no observed karst features other than fractures;
- Fractured, jointed and vuggy limestone was observed at the surface and in soil boring logs;
- The six soil borings conducted at the Site indicated solution cavities, fractures and leached zones to depths of over 150 ft below ground surface.

Based on soils at the Site classified as having either low to moderate (HSG C and D) infiltration rates (USDA, 1986), examined structural features (e.g., the Diversion Lake Fault) not having large solution cavities or solution-enlarged fractures, the lack of any cave or natural sinkhole features, and the Devils River Limestone formation being a more dense member of the Edwards formation, none of the identified features were given a rating of sensitive.

With the development of the Site as a quarry, it is expected that recharge to the Edwards Aquifer will increase over current Site conditions. However, the quantity of recharge is anticipated to be relatively small compared to that of nearby Medina Lake.

SECTION 8

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EDWARDS AQUIFER
CONTRIBUTING ZONE

EDWARDS AQUIFER
RECHARGE ZONE

EDWARDS AQUIFER
TRANSITION ZONE

SITE LOCATION

MEDINA COUNTY BOUNDARY

Tarpley
Bandera Falls
Lake Hills
San Antonio
Riomedina
Quihi
New Fountain

NOTES:

1. MAP SOURCE: COURTESY OF MICROSOFT CORPORATION, BING MAPS, 2016.
2. EDWARDS AQUIFER REGULATORY BOUNDARIES OBTAINED FROM TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) ONLINE DATA (TCEQ, 2005).
3. THE NORTHERN LIMIT OF THE EDWARDS AQUIFER REGULATORY BOUNDARY IN MEDINA COUNTY IS THE COUNTY BOUNDARY.

1/19/2016

0 15,000
SCALE IN FEET

STATE OF TEXAS
MARK E. STOKER
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1118
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PROFESSIONAL GEOSCIENTIST

SITE LOCATION AND EDWARDS AQUIFER RECHARGE ZONE MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY,TX

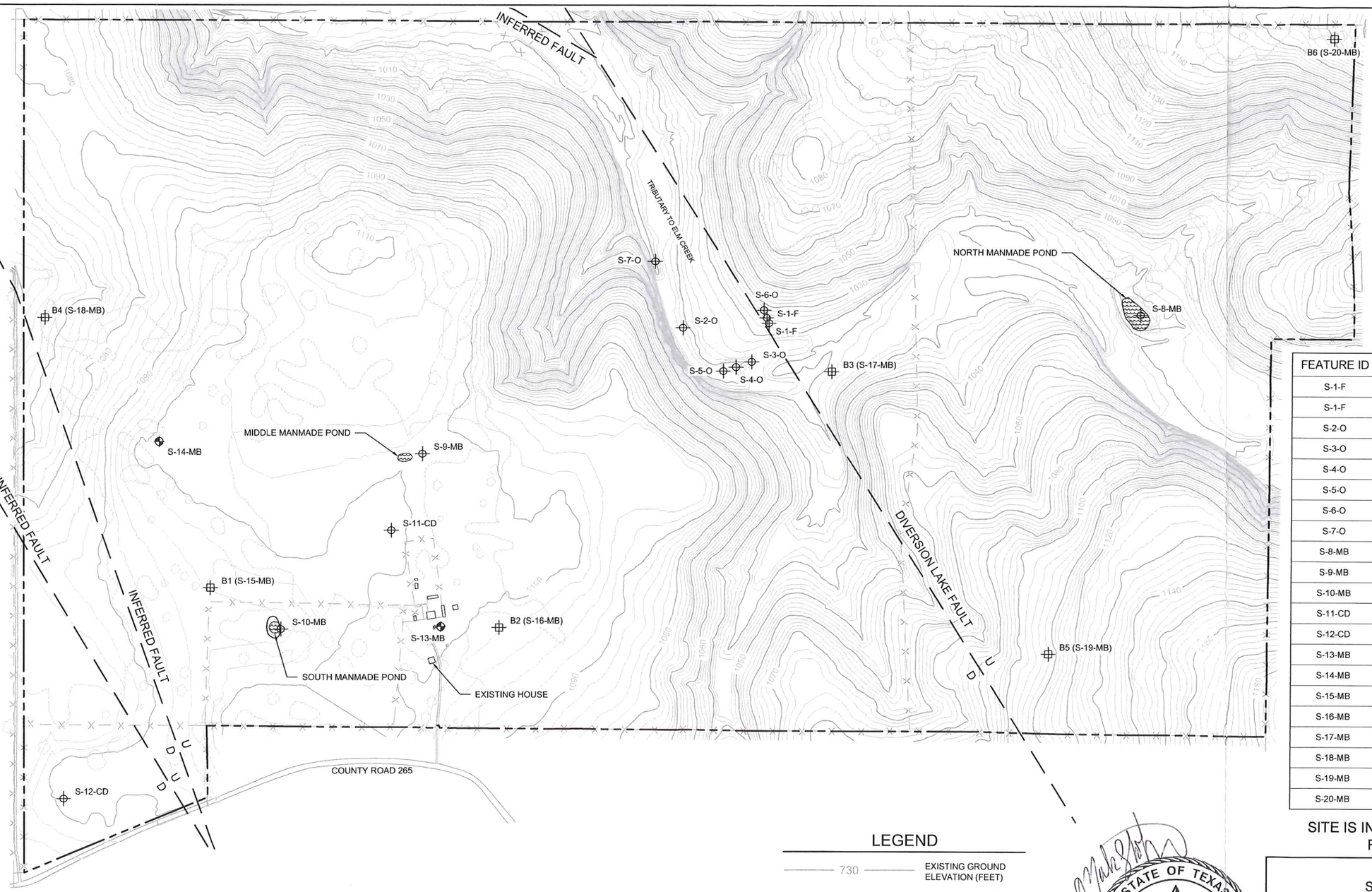
Geosyntec consultants
TX GEOSCIENCE FIRM REGISTRATION NO. 50256

AUSTIN, TX | JANUARY 2016

TCEQ-0585

FIGURE
1

P:\CADD\PROJECTS\R\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW04920103F04A



FEATURE ID	FEATURE NAME
S-1-F	FAULT TRACE
S-1-F	FAULT TRACE
S-2-O	LIMESTONE CLIFF LEDGES
S-3-O	GRAY BEDROCK LEDGE
S-4-O	WHITE ROCK EXPOSURE
S-5-O	GRAY BEDROCK
S-6-O	ROCK LEDGE
S-7-O	JOINTED BEDROCK
S-8-MB	NORTH MANMADE POND
S-9-MB	MIDDLE MANMADE POND
S-10-MB	SOUTH MANMADE POND
S-11-CD	MIDDLE TOPOGRAPHIC DEPRESSION
S-12-CD	SOUTH TOPOGRAPHIC DEPRESSION
S-13-MB	NORTH WATER WELL
S-14-MB	SOUTH WATER WELL
S-15-MB	SOIL BORING B1
S-16-MB	SOIL BORING B2
S-17-MB	SOIL BORING B3
S-18-MB	SOIL BORING B4
S-19-MB	SOIL BORING B5
S-20-MB	SOIL BORING B6

NOTES:

1. TOPOGRAPHIC BASE MAP COMPILED FROM AN AERIAL SURVEY BASED ON PHOTOGRAPHY PERFORMED ON 30 APRIL 2015.
2. FAULT TRACES FROM BLOME ET AL. (2005).
3. UPPERMOST GEOLOGIC UNIT IS THE DEVILS RIVER LIMESTONE FORMATION (Kdvr) (BLOME ET AL., 2005).

LEGEND

- 730 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- MANMADE POND
- FENCE

STATE OF TEXAS
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SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

SITE GEOLOGIC MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY, TX

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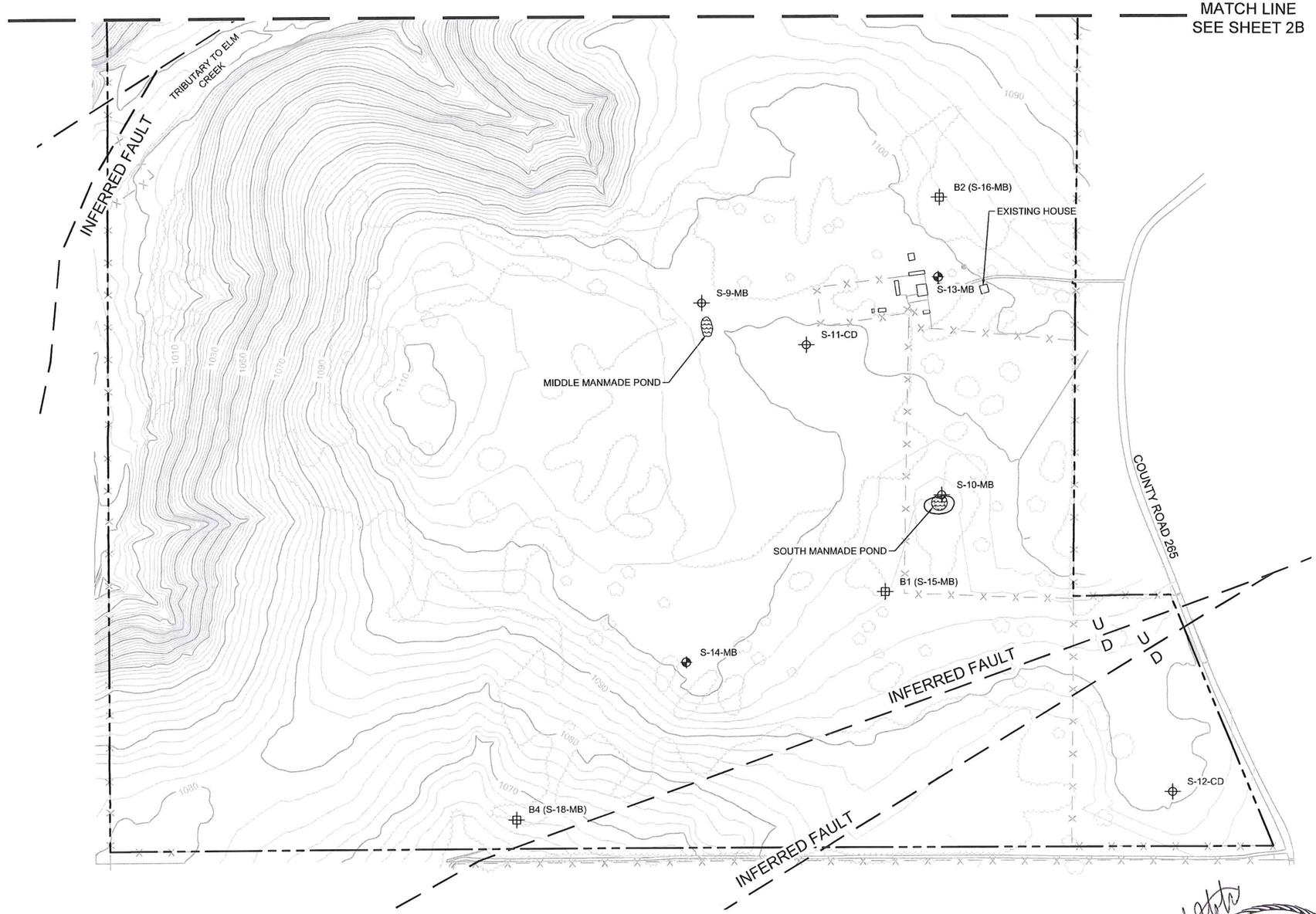
FIGURE 2

P:\CADD\PROJECTS\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW0492010303F04



N

LEGEND

- 1100 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- MANMADE POND
- FENCE

FEATURE ID	FEATURE NAME
S-1-F	FAULT TRACE
S-1-F	FAULT TRACE
S-2-O	LIMESTONE CLIFF LEDGES
S-3-O	GRAY BEDROCK LEDGE
S-4-O	WHITE ROCK EXPOSURE
S-5-O	GRAY BEDROCK
S-6-O	ROCK LEDGE
S-7-O	JOINTED BEDROCK
S-8-MB	NORTH MANMADE POND
S-9-MB	MIDDLE MANMADE POND
S-10-MB	SOUTH MANMADE POND
S-11-CD	MIDDLE TOPOGRAPHIC DEPRESSION
S-12-CD	SOUTH TOPOGRAPHIC DEPRESSION
S-13-MB	NORTH WATER WELL
S-14-MB	SOUTH WATER WELL
S-15-MB	SOIL BORING B1
S-16-MB	SOIL BORING B2
S-17-MB	SOIL BORING B3
S-18-MB	SOIL BORING B4
S-19-MB	SOIL BORING B5
S-20-MB	SOIL BORING B6

0 400'

SCALE IN FEET

SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

NOTES:

1. TOPOGRAPHIC BASE MAP COMPILED FROM AN AERIAL SURVEY BASED ON PHOTOGRAPHY PERFORMED ON 30 APRIL 2015.
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SOUTH SITE
GEOLOGIC MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY, TX

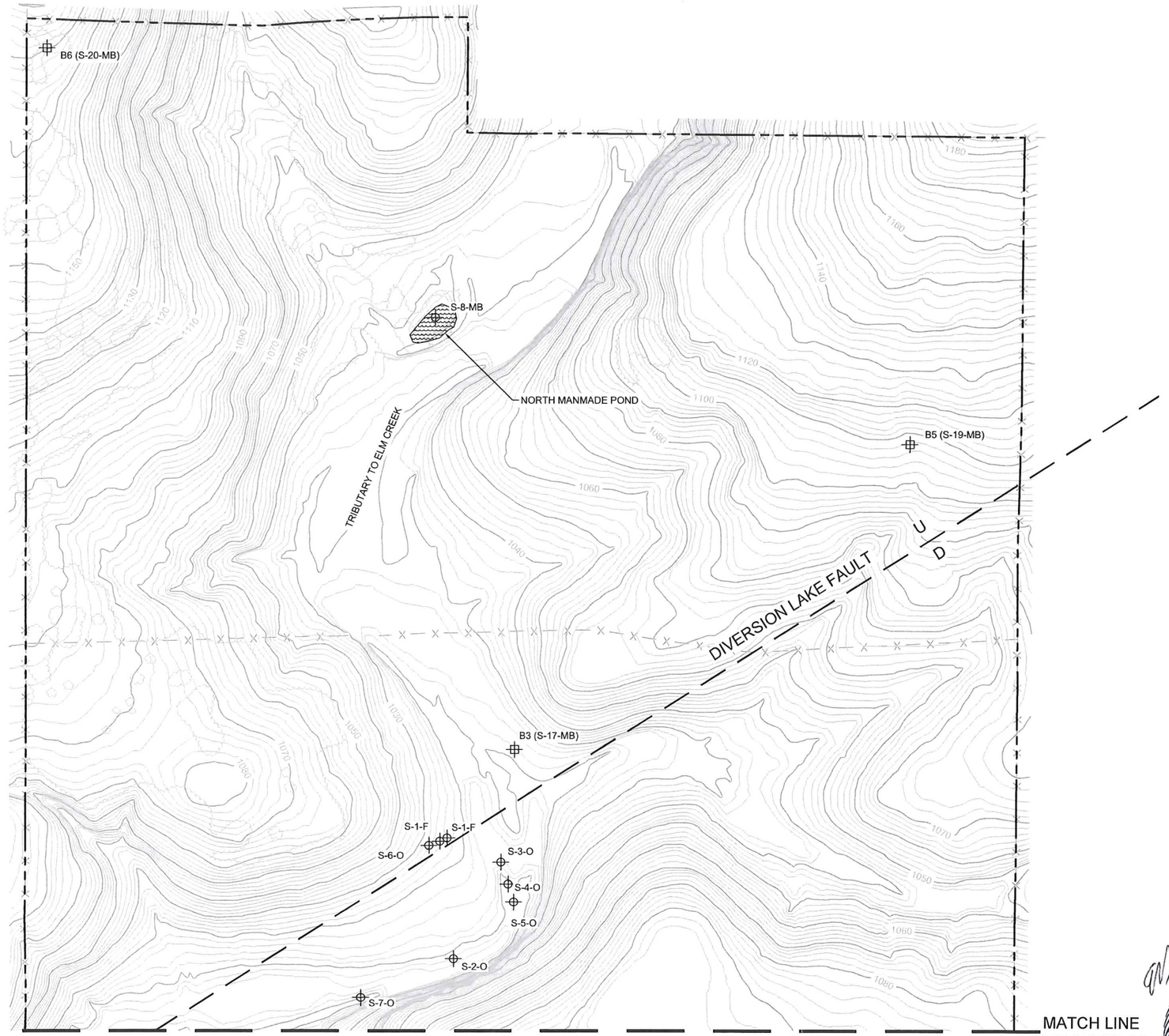
Geosyntec consultants
TX GEOSCIENCE FIRM REGISTRATION NO. 50256

AUSTIN, TX | MARCH 2016

TCEQ-0585

FIGURE 2A

P:\CADD\PROJECTS\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TX\W0492.02)\FIGURES\TXW04920103F04B



MATCH LINE
SEE SHEET 2A

N

LEGEND

- 1100 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- MANMADE POND
- FENCE

FEATURE ID	FEATURE NAME
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S-18-MB	SOIL BORING B4
S-19-MB	SOIL BORING B5
S-20-MB	SOIL BORING B6

0 400'
SCALE IN FEET

SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

NOTES:

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STATE OF TEXAS
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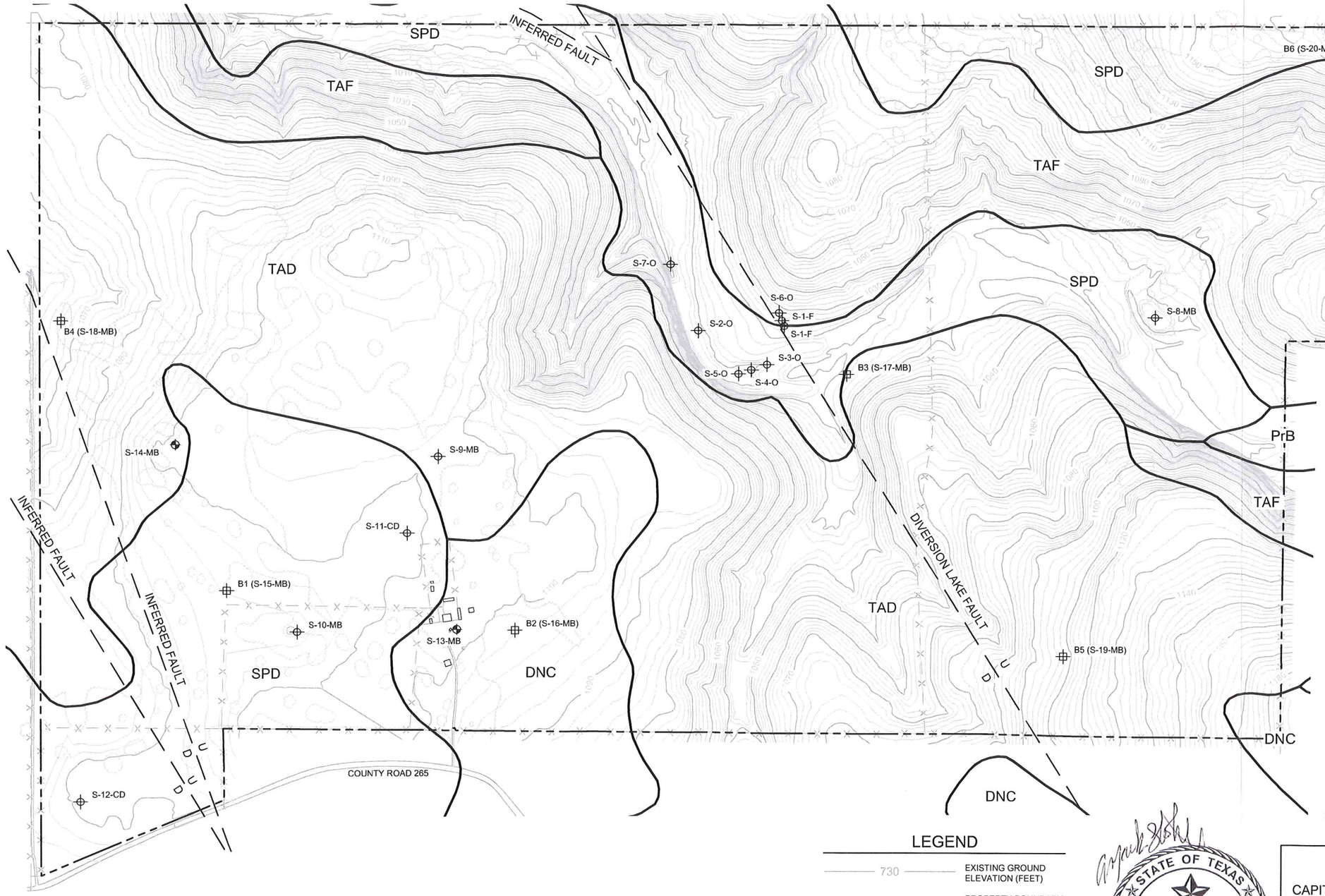
NORTH SITE
GEOLOGIC MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY,TX

Geosyntec consultants
TX GEOSCIENCE FIRM REGISTRATION NO. 50256

AUSTIN, TX | MARCH 2016 | TCEQ-0585 | FIGURE 2B

P:\CADD\PROJECTS\RIO MEDINA QUARRY DEV\PIWATER POLLUTION ABA (TX\W0492.02)\FIGURES\TX\W04920103F04B



MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP
DNC	DINA ASSOCIATION, GENTLY UNDULATING	C
PrB	PRATLEY CLAY, 0 TO 3 PERCENT SLOPES	C
SPD	SPECK ASSOCIATION, UNDULATING	D
TAD	ECKRANT (TARRANT) - ROCK OUTCROP ASSOCIATION, UNDULATING	D
TAF	ECKRANT (TARRANT) - ROCK OUTCROP ASSOCIATION, HILLY	D

SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

LEGEND

- 730 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- FENCE

NOTES:
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2. SOILS INFORMATION OBTAINED FROM THE WEB SOIL SURVEY DATABASE FOR MEDINA COUNTY, TEXAS (USDA, 2015).

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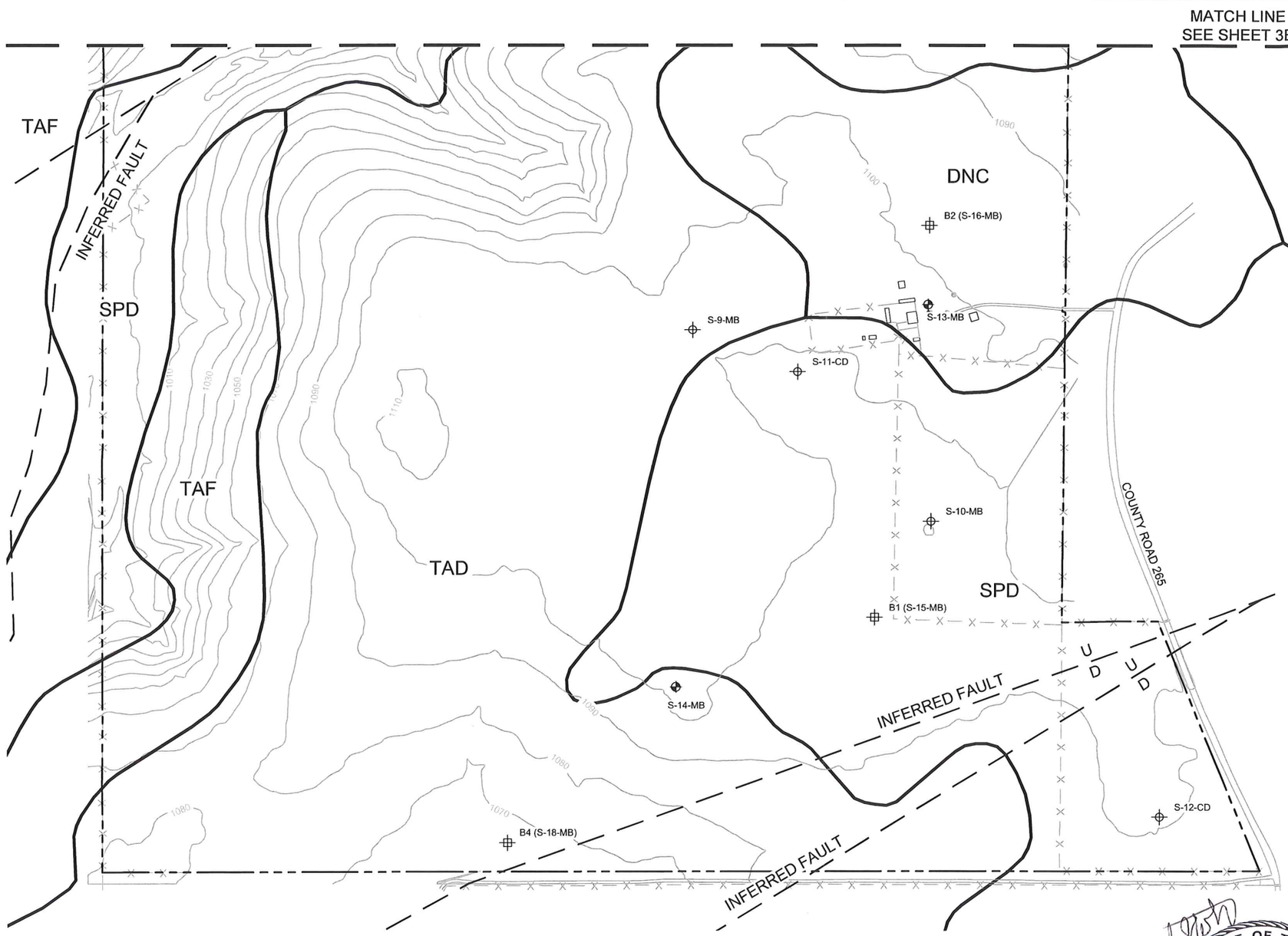
SITE SOILS MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY, TX

Geosyntec consultants
TX GEOSCIENCE FIRM REGISTRATION NO. 50256

AUSTIN, TX | MARCH 2016 | TCEQ-0585 | FIGURE 3

P:\CADD\PROJECTS\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW04920103F05A



N

LEGEND

- 1100 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- FENCE

MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP
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PrB	PRATLEY CLAY, 0 TO 3 PERCENT SLOPES	C
SPD	SPECK ASSOCIATION, UNDULATING	D
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TAF	ECKRANT (TARRANT) - ROCK OUTCROP ASSOCIATION, HILLY	D

0 400'
SCALE IN FEET

SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

NOTES:
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2. SOILS INFORMATION OBTAINED FROM THE WEB SOIL SURVEY DATABASE FOR MEDINA COUNTY, TEXAS (USDA, 2015).

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SOUTH SITE SOILS MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA COUNTY, TX

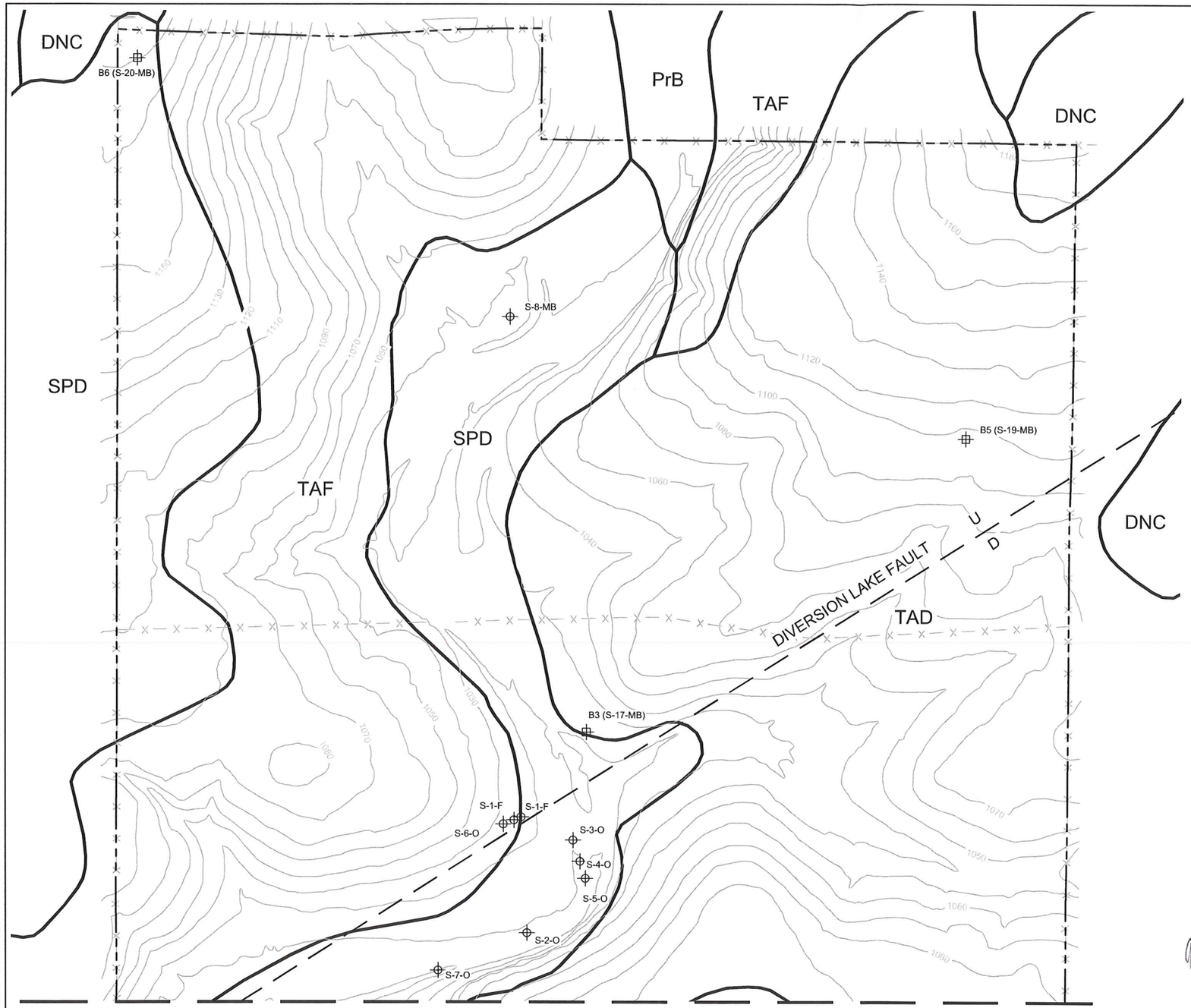
Geosyntec consultants
TX GEOSCIENCE FIRM REGISTRATION NO. 50256

AUSTIN, TX | MARCH 2016

TCEQ-0585

FIGURE 3A

P:\CADD\PROJECTS\R\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW0492020103F05



NOTES:
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2. SOILS INFORMATION OBTAINED FROM THE WEB SOIL SURVEY DATABASE FOR MEDINA COUNTY, TEXAS (USDA, 2015).

N

LEGEND

- 1100 — EXISTING GROUND ELEVATION (FEET)
- PROPERTY BOUNDARY
- WATER WELL
- GEOLOGIC FEATURE
- SOIL BORING
- FENCE

MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP
DNC	DINA ASSOCIATION, GENTLY UNDULATING	C
PrB	PRATLEY CLAY, 0 TO 3 PERCENT SLOPES	C
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0 400'
SCALE IN FEET

SITE IS IN THE EDWARDS AQUIFER RECHARGE ZONE

STATE OF TEXAS
MARK E. STOKER
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NORTH SITE SOILS MAP
CAPITOL AGGREGATES RIO MEDINA OPERATION
MEDINA, TX

Geosyntec consultants
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TCEQ-0585

AUSTIN, TX | MARCH 2016

FIGURE 3B

P:\CADD\PROJECTS\RIO MEDINA QUARRY DEVP\WATER POLLUTION ABA (TXW0492.02)\FIGURES\TXW04920103F05

ATTACHMENTS

ATTACHMENT A

Geologic Assessment Table

Attachment A - Geologic Assessment Table

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Capitol Aggregates Rio Medina Operation, Medina County, Texas																	
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)	FOV	DENSITY (NO./FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	≤16	>16	
S-1-F	29.49104	-98.99411	F	20	Kdvr				N68E				O	5	25	X			X	Hillside
S-1-F	29.49101	-98.99419	F	20	Kdvr				N68E				O	5	25	X			X	Hillside
S-2-O	29.48989	-98.99404	O	5	Kdvr								O	5	10	X		X		Drainage
S-3-O	29.49081	-98.99352	O	5	Kdvr								O	5	10	X		X		Drainage
S-4-O	29.49060	-98.99344	O	5	Kdvr								O	5	10	X		X		Streambed
S-5-O	29.49043	-98.99338	O	5	Kdvr				NW-SE		1	0.1	O	5	10	X		X		Streambed
S-6-O	29.49097	-98.99431	O	5	Kdvr								O	5	10	X		X		Drainage
S-7-O	29.48952	-98.99505	O	5	Kdvr				NE-SW				O	5	10	X		X		Streambed
S-8-MB	29.49601	-98.99425	MB	30	Kdvr	197	132						O	8	38	X			X	NA
S-9-MB	29.48642	-98.99211	MB	30	Kdvr	45	53						O	8	38	X			X	NA
S-10-MB	29.48454	-98.98943	MB	30	Kdvr	64	73						O	8	38	X			X	NA
S-11-CD	29.48601	-98.99094	CD	5	Kdvr								O	5	10	X			X	NA
S-12-CD	29.48164	-98.98684	CD	5	Kdvr								O	5	10	X			X	NA
S-13-MB	29.48667	-98.98947	MB	30	Kdvr								O	5	35	X		X		NA
S-14-MB	29.48291	-98.99229	MB	30	Kdvr								O	5	35	X		X		NA
S-15-MB (B-1)	29.48360	-98.99006	MB	5	Kdvr								X	5	10	X		X		NA
S-16-MB (B-2)	29.48745	-98.98946	MB	5	Kdvr								X	5	10	X		X		NA
S-17-MB (B-3)	29.49188	-98.99337	MB	5	Kdvr								X	5	10	X		X		NA
S-18-MB (B-4)	29.48138	-98.99418	MB	5	Kdvr								X	5	10	X		X		NA
S-19-MB (B-5)	29.49480	-98.98907	MB	5	Kdvr								X	5	10	X		X		NA
S-20-MB (B-6)	29.49859	-98.99849	MB	5	Kdvr								X	5	10	X		X		NA

* DATUM: WGS 1984

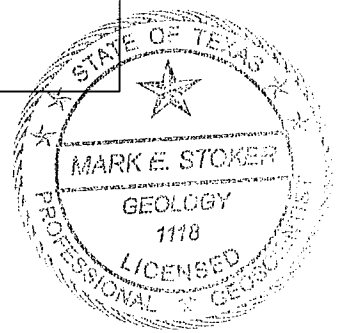
2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

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

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

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

Date 3/18/2016



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

Sheet 1 of 1

ATTACHMENT B

Stratigraphic Column

Stratigraphic Column

The Site is located over the Devils River Limestone formation (Kdvr). Outcrops of this formation are extensive across the hilly northern portion of the Site.

Formation	Thickness
*Kdvr - Devils River Limestone	300 to 390 ft

*Defined as part of the Edwards Aquifer in Title 30 of the Texas Administrative Code (TAC): 30 TAC § 213.3(8).

Stratigraphy of the Devils River Limestone

The Devils River Limestone is the only stratigraphic unit exposed at the site. In the northern area of the Site, alluvium soil covers areas along the streambed and in valleys, while the southern more flat area is predominantly covered by alluvium soil. The Devils River Limestone is equivalent to the Edwards Group exposed approximately one mile north of the Site.

A general description of the Devils River Limestone presented below was derived from Blome et al. (2005). Devils River Limestone is Lower Cretaceous age. The upper 250 ft consists of miliolids, shell-fragment wackestones and grainstones containing rudists and chert. The middle of the formation consists of recrystallized and brecciated mudstones that grade downward into alternating beds of vuggy spar and chert-bearing wackestone and grainstone. The lower 120 to 250 ft contains sparry limestone and nodular, burrowed mudstone to wackestone, with gastropods, miliolids, and *Exogyra texana*.

Geologic maps typically show a dashed boundary separating the San Marcos platform and the Devils River trend exposures because field studies of the San Marcos platform/Devils River trend transition area reveal that the facies boundary is distinct and follows topographic expression in some areas.

Formal subdivision of the Devils River Formation has been lacking to date. Geologic maps of the Texas Bureau of Economic Geology show the Devils River Formation subdivided into upper and lower units, whereas all USGS mapping to date shows the Devils River Formation as a single undifferentiated unit (Blome et al., 2004). Thickness ranges from 540 to 670 ft in Medina and Uvalde Counties.

ATTACHMENT C

Site Geology

Structure

The Site is crossed by Diversion Lake Fault (oriented North 68 degrees E) and downthrown to the southeast. This fault was mapped by the USGS (Small and Lambert, 1997; Small and Clark, 2000; Blome et al., 2005). The trace was identified in the field on the west side of the tributary to Elm Creek (Feature S-1-F on Figure 2B and 3B). The trace of this fault is marked by an area of fractured bedrock but with little observed effect on the topography (Attachment E, Photos 14 and 15). The path of the fault trace was examined for karst features on both west and east sides of the tributary. A detailed reconnaissance of the east side of the tributary was performed since the fault trace aligns with a northeast-southwest trending drainage (Figure 3B); however, with the exception of fractures, no karst features such as solution cavities or other recharge features were observed in association with the fault.

The USGS (Small and Lambert, 1997; Blome et al., 2005; Small and Clark, 2000) mapped two inferred faults at the southeast corner of the Site. The fault traces could not be identified in the field because of the soil cover.

Site Specific Geology

At the Site, the uppermost part of the Devils River Limestone has been removed by erosion. Strata characteristic of the middle part, present at the surface, were observed to be brecciated, or have vuggy porosity and abundant chert. The determination of the extent of erosion was based on the use of an argillaceous limestone marker bed logged in four of six borings conducted at the Site in 2014. The argillaceous limestone was used to divide Devils River Limestone into informal and site specific upper and lower units.

Six borings were drilled at the Site in July 2014; the logs of these borings were reviewed to assist in the interpretation of the Site geology. The following stratigraphic description was based on the boring logs (for boring locations see Figures 2A and 2B).

The two hilltops at the northern part of the Site are on the up-thrown block of the Diversion Lake Fault (see Figure 3B). Surface observations and review of logs for Boring B5 and B6 (Attachment F) indicate only the lower unit of the Devils River Limestone is present north of the fault. The argillaceous limestone marker bed was not logged in the borings, indicating that the upper part of the Devils River Limestone and the argillaceous limestone bed have been removed by erosion.

South and southeast of the Diversion Lake Fault in the area of the broad hilltop, which makes up the southern third of the site, an argillaceous limestone bed was logged in Borings B1, B2, B3, and B4 and was used as a marker bed to correlate the logs. South of the fault the lower unit and a portion the upper unit of the Devils River Limestone is present.

Potential for Fluid Movement from the Site to the Edwards Aquifer

The Site is located in the Recharge Zone of the Edwards Aquifer. In this Zone, highly faulted and fractured Edwards limestones outcrop at the land surface allowing water to infiltrate into the aquifer. The Medina Lake, a 6,066-acre surface water reservoir located north of the Site, was built partially on the Recharge Zone and contributes significant amounts of recharge to the Edwards Aquifer (Slattery and Miller, 2004).

The Devils River Limestone at the Site is primarily overlain by soils with very low to low infiltration rates, although rock outcrops do occur. The soils limit infiltration and allow precipitation to pond in natural topographic depressions and manmade ponds. It is anticipated that most recharge at the Site currently occurs in bed of the tributary to Elm Creek, although it is usually very difficult to detect exactly where recharge occurs.

With the development of the Site as a quarry, it is expected that recharge to the Edwards Aquifer will increase over current Site conditions. However, the quantity of recharge is anticipated to be relatively small compared to that of nearby Medina Lake.

ATTACHMENT D

Site Geologic Maps

Site Geologic Maps are included as Figures 2, 2A, and 2B of this GA.

ATTACHMENT E

Photo Log

Photo 1: S-2-O (Limestone Cliff Ledges)

Photo 2: S-7-O (Jointed Bedrock)

Photo 3: S-5-O (Gray Bedrock)

Photo 4: S-4-O (White Rock Exposure) in foreground and alluvium in background

Photo 5: S-3-O (Gray Bedrock Ledge)

Photo 6: Soil Boring 2 (B2)

Photo 7: North Manmade Pond (S-8-MB) – red line added along earthen berms

Photo 8: Middle Manmade Pond (S-9-MB)

Photo 9: Ridge above Limestone Cliff Ledges (S-2-O) – view to west

Photo 10: View from ridge to west of tributary to Elm Creek

Photo 11: Near Soil Boring 1 (B1) – view to west

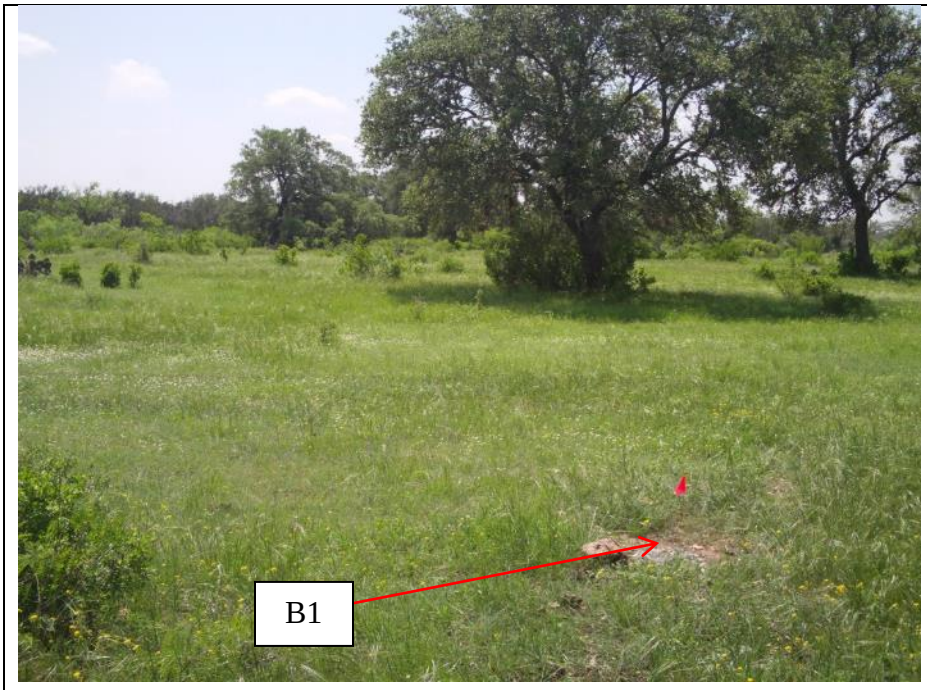


Photo 12: Soil Boring 1 (B1) – view to south

Photo 13: Gray fractured bedrock in tributary to Elm Creek – view to southeast (near of crossing of Fault Trace S-1-F and tributary to Elm Creek)

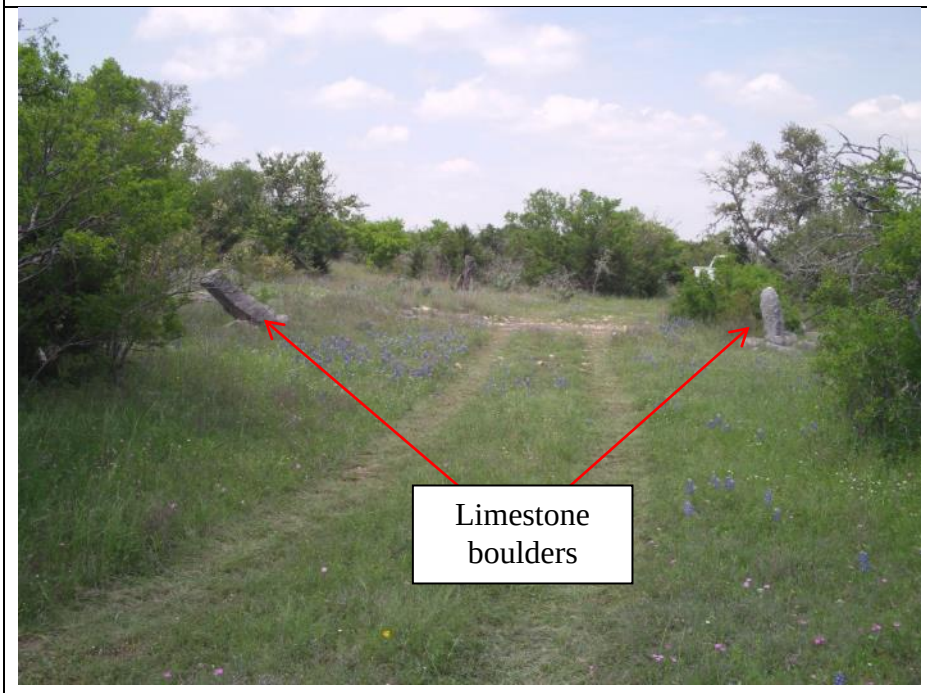


Photo 14: Limestone boulders on Diversion Lake Fault (Feature S-1-F) – view to northwest

Photo 15: Limestone ledge indicates presence of fault trace (S-1-F) - view to northwest

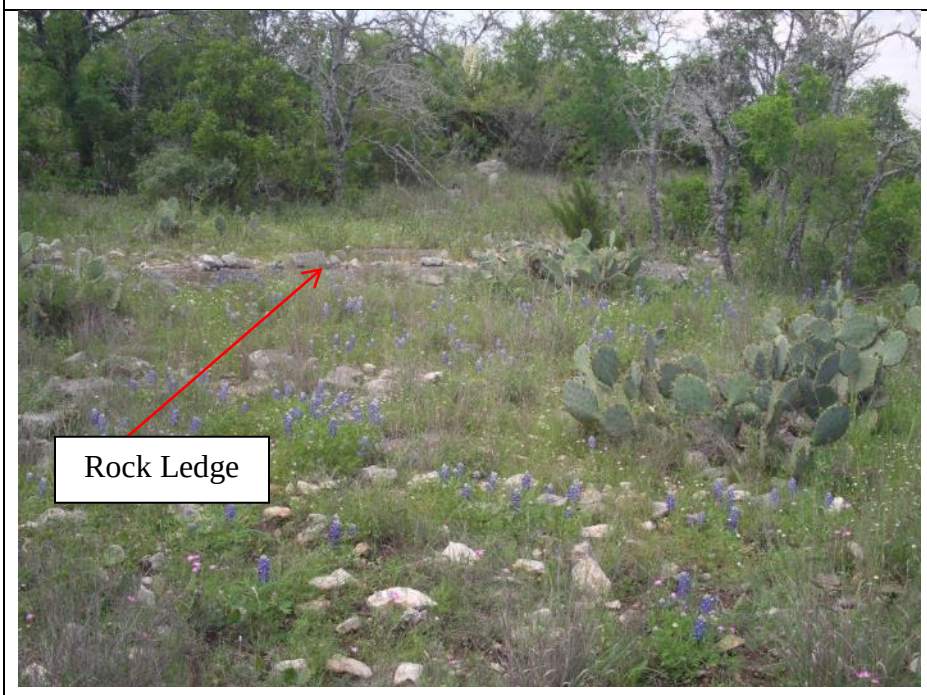


Photo 16: Rock Ledge (S-6-O) on up-thrown side of Diversion Lake Fault.

Photo 17: Middle Topographic Depression (S-11-CD) – view to southeast

Photo 18: Middle Topographic Depression (S-11-CD) – note soil accumulation

Photo 19: South Water Well (S-14-MB) - view to west

Photo 20: South Manmade Pond (S-10-MB) - view to west

Photo 21: South Topographic Depression (S-12-CD) - view to south along interior fence line

Photo 22: South Topographic Depression (S-12-CD) - view to west of depression

Photo 23: General view at southwest portion of Site – view toward southwest corner of property

Photo 24: Limestone ledge at west-facing slope of hilltop located due west of Middle Manmade Pond (S-9-MB)

Photo 25: Floodplain of tributary to Elm Creek (south of feature S-7-O) - view to west

Photo 26: Dry creek of tributary to Elm Creek (south of feature S-7-O) view to southeast (up-stream)

Photo 27: Exposed bedrock in drainages east of tributary to Elm Creek (east of Soil Boring B3)

Photo 28: Limestone ledge in drainages east of tributary to Elm Creek (east of Soil Boring B3)

Photo 29: Middle Manmade Pond (Feature S-9-MB) after rain event - note accumulation of runoff

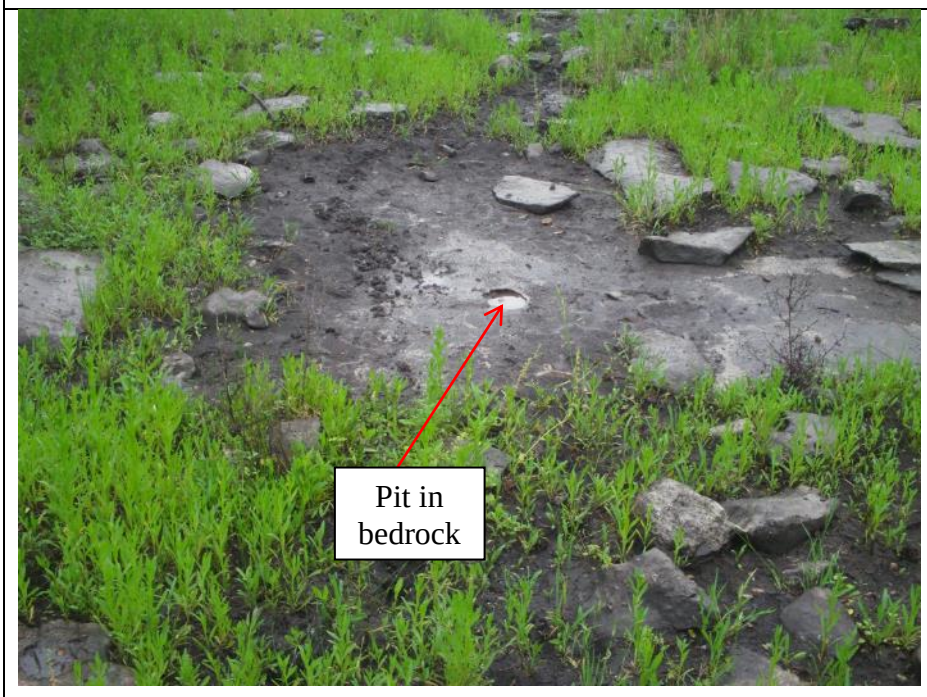


Photo 30: Middle Topographic Depression (S-11-CD) after rain event - note muddy tracks and four inch diameter pit in bedrock that has collected water

Photo 31: North Water Well (S-13-MB) shed and tank

ATTACHMENT F

Soil Boring Logs

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-1

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT% RQD		UNIT DRY WT. LBS/CU FT
		Augered	Clay Topsoil 2'						
5			Hard gray dense limestone w/vuggy zones + occ iron-staining + solution features	5.0'	4.0'	80%	59%	Cyclic + Marine Members 2'-21' (19')	
10				5.0'	4.1'	82%	35%		
15				5.0'	5.0	100%	58%		
20			- moderately hard brown leached zone 20.0-20.2' 21'						
			Hard gray vuggy limestone w/dense seam @ 21.8-22.8' w/red clay pockets below 23.6'	5.0'	5.0	100%	47%	Leached & collapsed members	
25			Mixed hard gray dense limestone, hard slightly vuggy limestone and hard vuggy limestone w/occ calcite pockets, solution features, and iron staining	5.0'	5.0	100%	54%	21'-100.5' (79.5')	
30				5.0'	4.3'	86%	36%		
35			38.3'	5.0'	4.8'	96%	70%		
40			Hard light gray brecciated limestone 43.4'	5.0'	5.0'	100%	88%		
45			Hard lt. gray dense limestone w/occ. solution feature w/partially healed open vertical fracture @ 45.0-46.6 w/occ. solution features below 48'	5.0'	5.0'	100%	83%		
52			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-1

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
-55			- slightly vuggy @ 55'-65.3'	5.0'	5.0	100%	62%		
				5.0'	5.0	100%	70%		
-60									
				5.0'	5.0	100%	75%		
-65			- w/white soft seam @ 64.9'-65' 65'						
			Hard light gray + tan sl. vuggy limestone w/occ. solution feature 67.4'	5.0'	4.8'	96%	57%		
			Hard lt. gray dense limestone w/ 5/8" chert seam @ 67.7' 70'						
-70			Moderately hard brown + tan argillaceous Limestone, crumbly below 70.7' 72'						
			Hard lt. gray dense limestone w/soft pocket of tan silty leached material	5.0'	4.5'	90%	52%		
-75									
				5.0'	4.8	96%	48%		
-80			80'						
			Hard lt. gray dense limestone w/iron-stained open fractures + vugs	5.0'	5.0	100%	78%		
-85			85'						
			Hard red-brown + light gray very vuggy Limestone, brecciated 88.2'	5.0'	3.5	70%	35%		
-90			Hard light gray dense Limestone w/occ. solution features, fossiliferous below 93' w/occ. tan silty leached pockets	5.0'	4.7'	93%	59%		
-95									
				5.0'	4.7'	93%	52%		
-100			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-1

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT %		UNIT DRY WT. LBS/CU FT
105			Moderately hard tan argillaceous Limestone w/soft seams, - porous below 104'	5.0	4.8'	95%	53%	Regional Dense Member 100.5'-140.0 (39.5')	
110			- 1" chert seam @ 108.8' - w/occ. iron-stained open fractures	5.0	4.0	80%	21%		
				5.0	4.2'	85%	28%		
115			- occ. sl. harder, less argillaceous seams	5.0	4.8'	95%	40%		
120				5.0	5.0'	100%	59%		
125				5.0	4.8'	95%	28%		
130				5.0	4.9'	98%	32%		
135				5.0	5.0'	100%	74%		
140			140' Moderately hard lt. tan & white grainy Limestone	5.0	5.0'	100%	72%	Grainstone 140'-150' (10'+)	
145			- occ. tan clayey laminations @ 145'-146.3	5.0	4.5'	90%	32%		
150									

COMPLETION DEPTH: 150.0' **DEPTH TO WATER:** None

DATE: 7/21/2014 **DATE:** 7/21/2014

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-2

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
		1 spoon	Hard light gray dense limestone w/occ. solution cavities	2.5'	1.8'	73%	21%		
-5-			- w/ 3" chert seam @ 6.2'	5.0'	5.0'	100%	58%	Cyclic + marine members 2.5-25.2 (22.7')	
-10-			- w/ 2" chert seam @ 11.0'	5.0'	5.0'	100%	24%		
-15-			17.2'	5.0'	4.8'	96%	92%	17.2	
-20-			Hard light gray slightly vuggy limestone 22.0'	5.0'	5.0'	100%	93%		
-25-			Hard dense light tan crystalline Limestone w/occ. soft seam - 3" chert seam @ 25.0' 25.2'	5.0'	5.0'	100%	61%	Leached + collapsed members 25.2 - 113.5'	
-30-			Hard tan + light gray vuggy limestone 30.0'	5.0'	4.5'	90%	52%	(88.3'	
			Hard tan dense limestone 31.2'						
-35-			Hard lt. gray + tan vuggy limestone 36.8'	5.0'	4.9'	98%	77%		
-40-			Hard lt. gray dense limestone w/occ. vugs 41.5'	5.0'	5.0'	100%	90%		
			Hard lt. gray + tan vuggy limestone 42.1'						
-45-			Hard lt. gray dense limestone w/occ. calcite pocket + Calcite-filled fracture more calcite @ 45.0'-47.5' - gray below 47.5'	5.0'	4.3'	86%	49%		
-50-			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-2

TYPE OF BORING: Continuous Core LOCATION: Bame Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
			- cherty below 51.5'					Leached + collapsed members	
			53.0'	5.0'	5.0'	100%	100%		
-55			Hard light gray slightly vuggy Limestone						
			57.0'						
			Hard lt. gray + tan grainy Limestone w/occ. solution feature + healed vertical fractures	5.0'	5.0'	100%	97%		
-60			60.0'						
			Hard lt. gray fossiliferous limestone - 7" chert seam @ 61.6' w/occ. solution features	5.0'	5.0'	100%	100%		
-65			65.5'						
			Hard tan sl. argillaceous Limestone w/occ. solution features	5.0'	4.5'	90%	79%		
			68.7'						
-70			Hard + moderately hard tan + white argillaceous limestone 70.0'						
			Moderately hard tan + light tan argillaceous limestone w/occ. hard brown porous limestone seams	5.0'	2.0'	40%	0%		
-75				5.0'	4.0	80%	16%		
			80.0'						
-80			Hard lt. gray + tan dense limestone w/occ. calcite-filled seam + 6" chert seam @ 80.7'	5.0'	5.0'	100%	70%		
			84.0'						
-85			Hard tan + gray leached limestone 85.0'						
			Hard lt. gray + tan + red-brown dense limestone w/open + healed inclined fractures + occ. solution features	5.0'	5.0'	100%	92%	Leached + collapsed member	
-90				5.0'	5.0'	100%	38%		
-95				5.0'	4.8'	96%	87%		
-100			(continued)						

COMPLETION DEPTH: _____ DEPTH TO WATER: _____

DATE: _____ DATE: _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-2

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
				5.0'	3.0'	100%	42%		
105				5.0'	4.5'	90%	55%	Leached & collapsed member 117.2'-113.5' (96.3')	
110			-w/calcite below 108.7'	5.0'	5.0'	100%	20%	113.5'	
115			113.5 Soft to moderately hard tan argillaceous limestone	5.0'	3.9'	78%	18%	Regional Dense member 113.5 - 137.0	
120			120.0 Moderately hard tan argillaceous Limestone	5.0'	5.0'	100%	18%		
125				5.0'	1.8'	36%	0%	Regional Dense member	
130				5.0'	4.0'	80%	34%		
135			137.0	5.0'	4.8'	96%	52%	137.0'	
140			Moderately hard lt. tan grainy Limestone	5.0'	4.0'	80%	33%	Grainstone member of Rainer formation	
145				5.0'	5.0'	100%	78%		
150			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-2

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RDD		UNIT DRY WT. LBS/CU FT
155			Moderately hard lt. tan gravy limestone	5.0'	5.0'	100%	65%		
				5.0'	5.0'	100%	72%	Grafton member 137.0' - 181.5' (44.5')	
160				5.0'	5.0'	100%	85%		
165				5.0'	4.8'	96%	77%		
170			171.0'						
			Moderately hard + hard lt. gray + tan dense slightly argillaceous Limestone w/occ. iron-stained fractures	5.0'	4.5'	90%	83%	Grafton member	
175				5.0'	5.0'	100%	62%		
180			181.5'						
			Hard tan + light gray dense Limestone w/iron-stained fractures + occ. solution features	5.0'	5.0'	100%	83%	Kirschberg Evaporite member of Kaiser fm	
185				5.0'	5.0'	100%	89%		
190			190.0'						
			Hard brown vuggy limestone leached w/red clay-filled fractures	5.0'	4.4'	88%	35%	Kirschberg Evaporite	
195			-w/10" chert seam @ 195.0'	5.0'	5.0'	100%	82%		
200									

COMPLETION DEPTH: 200.0' **DEPTH TO WATER:**

DATE: 7-19-2014 **DATE:**

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-3

TYPE OF BORING: Continuous Core LOCATION: Base Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
			Hard light gray dense limestone w/occ. solution features + iron-stained vertical quartz healed fractures + occasional clay pockets	3.5'	3.3'	95%	48%		
5			- 1" chert pocket @ 8.0'	5.0	4.5	90%	66%	Leached + collapsed members	
10				5.0	5.0	100%	100%		
15				5.0	4.0	80%	47%		
20			- 2.5' chert seam @ 20.9'						
			- vuggy zone 23'-25'	5.0	5.0	100%	71%		
25									
			- vuggy zone 28'-29.2'	5.0	4.9	98%	73%		
30				5.0	4.0	80%	77%		
35				5.0	4.2	85%	32%		
40			40.6 Hard light gray very vuggy limestone highly broken	5.0	1.8	35%	25%		
45			47.0' Hard light gray dense limestone	5.0	3.5	70%	19%		
50			(continued)						

COMPLETION DEPTH: _____ DEPTH TO WATER: _____

DATE: _____ DATE: _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-3

TYPE OF BORING: Continuous Core **LOCATION:** Base Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
				5.0	3.9	78%	78%		
-55			55.0'						
			Hard tan + gray very vuggy limestone w/occ. clay in vugs 56.5'	5.0	4.5	90%	48%		
-60			Hard lt. gray fossiliferous dense limestone w/occ. tan argillaceous laminations below 58' & occ. open vertical iron-stained fracture 60.0'						
			Hard lt. gray dense limestone w/vertical + inclined healed + open fractures w/clay in some fractures	5.0	5.0	100%	88%	Leached + collapsed members 2.5'-80.5'	
-65				5.0	5.0	100%	70%		
-70			69.5' Mixed hard + moderately hard tan dense limestone + argillaceous limestone w/iron-stained vertical solution fracture @ 72.5'-73.5'	5.0	5.0	100%	95%	Leached + collapsed members 2.5'-80.5'	
-75			- 5" tan clay seam @ 77.6' - hard + dense below 78.5'	5.0	5.0	100%	77%		
-80			80.4 Moderately hard tan argillaceous limestone w/occ. hard fossiliferous seams	5.0	5.0	100%	74%	Regional dense member 80.5'-105'	
-85				5.0	5.0	100%	52%		
-90				5.0	5.0	100%	62%		
-95				5.0	5.0	100%	47%		
-102			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-3

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
				5.0	5.0	100%	53%	Regional dense member 79.5'-105'	
105			105.0'						
			Moderately hard lt. tan grainy limestone 108.0'	5.0	5.0	100%	50%	Grainstone member 105'-131.8'	
110			Hard mixed lt. gray dense limestone and lt. gray vuggy limestone, brecciated + healed	5.0	4.8	96%	68%		
115				5.0	5.0	100%	77%	Grainstone member 105'-131.8'	
120				5.0	5.0	100%	72%		
125				5.0	2.8	55%	26%		
130			131.8'						
			Hard lt. gray dense limestone	5.0	2.6	52%	22%	Kirschberg Evaporite member 131.8'-205'	
135				5.0	4.2	85%	70%		
140				5.0	4.5	90%	72%		
145			146.7'						
			Hard lt. gray brecciated limestone w/red clay pockets	5.0	5.0	100%	42%		
150			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-3

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
				5.0	2.5	51%	17%		
155			155.0' Hard tan dense + slightly vuggy Limestone w/red clay pockets						
				5.0	3.1	62%	31%	Kirschberg Evaporite 131.8'-205'	
160				5.0	3.2	63%	32%		
165				5.0	5.0	100%	77%		
			- w/occ red clay laminations						
170				5.0	4.2	85%	47%		
175				5.0	5.0	100%	45%		
180				5.0	3.7'	73%	53%		
185				5.0	2.5	100%	32%		
190				5.0	2.6	52%	30%		
195			195.0' Hard tan dense limestone w/occ. solution features + open vertical fractures + red clay laminations + occ. Chert pocket	5.0	3.0	60%	43%		
200			(Continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-3

TYPE OF BORING: Continuous Core LOCATION: Base Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
205			Hard tan dense/limestone w/occ solution features	5.0'	4.2	85%	55%	Kirschberg Evaporite 131.8'-205'	

COMPLETION DEPTH: 205.0' DEPTH TO WATER: 185'

DATE: 7-25-2014 DATE: 7-25-2014

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-4

TYPE OF BORING: Continuous Core **LOCATION:** Base Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
		Augered	Clay Topsoil 1.0'						
			Broken limestone					Cyclic + Marine	
-5-			5.0'						
			Hard lt. gray dense broken limestone, vuggy @ 5.0-6.5', chert pocket @ 7.9'	5.0	4.8	97%	43%	Cyclic + marine members 1.0-25'	
-10-			- brown leached moderately hard pocket @ 11.6'-11.8'	5.0	4.9	98%	75%		
-15-			15.0'						
			Mixed hard dense gray + light gray limestone + hard vuggy limestone	5.0	5.0	100%	53%	Cyclic + Marine members 1.0-25.0'	
-20-				5.0	5.0	100%	62%		
-25-			25.0						
			Hard dense brecciated + reheated lt. gray Limestone w/ fractured + broken zones	5.0	5.0	100%	72%	Leached + collapsed members 25'-108.2'	
-30-				5.0	5.0	100%	75%		
-35-									
			- chert pocket @ 38.5'	5.0	5.0	100%	49%		
-40-			- chert pocket @ 42.7'	5.0	4.3	87%	47%		
-45-									
				5.0	4.9	98%	55%		
-50-			(Continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-4

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
			51.0' Hard dense lt. gray crystalline Limestone	5.0	5.0	100%	69%	Leached + collapsed	
55			55.4' Hard tan + lightgray very dense fine-grained limestone w/brecciated and re healed zones + occ. vugs w/iron stains	5.0	4.2	83%	42%		
60				5.0	4.8	97%	72%	Leached + collapsed	
65				5.0	5.0	100%	75%		
70			- gray below 72'	5.0	3.0	60%	86%		
75			- w/occ. calcite seams + occ. clayey laminations	5.0	5.0	100%	85%		
80				5.0	3.8	75%	56%		
85			85.0' Hard tan dense limestone w/occ. leached seams + inclined open fractures + cherty zones	5.0	5.0	100%	78%		
90				5.0	5.0	100%	89%		
95			96.5' Hard tan calcite and light gray limestone	5.0	3.9	78%	66%		
100			(Continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-4

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
			-2' void 102'-104'	5.0	1.9	38%	32%	Leached + collapsed member 25'-108.2'	
105			-w/solution cavity + open vertical fracture 108.2'	5.0	4.3	86%	77%		
110			Mixed hard + moderately hard tan dense limestone and argillaceous limestone w/wisps of clayey material	5.0	5.0	100%	56%	Regional dense member 108.2'-130' (21.8')	
115				5.0	4.9	98%	16%		
120			123.7'	5.0	5.0	100%	19%		
125			Hard tan dense limestone, w/ solution features + red clay highly broken, mixed w/moderately hard tan argillaceous limestone w/red clay below 125' 130'	5.0	3.8	77%	25%	Regional dense member	
130			Mixed Moderately hard grainy limestone + hard dense lt. gray limestone, iron stained w/red clay + vertical open fractures	5.0	2.4	48%	10%	Grainstone member 130'-145' (15')	
135				5.0	1.7	33%	12%		
140				5.0	3.8	75%	32%		
145			145' Hard light gray dense limestone, broken w/numerous voids	5.0	1.2	23%	0%	Kirschberg Evaporite 145-190'	
150			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-4

TYPE OF BORING: Continuous Core **LOCATION:** Base Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % R&D		UNIT DRY WT. LBS/CU FT
				5.0	1.0	20%	0%	Kirschberg Evaporite 145'-190'	
155			155' Hard gray-brown dense limestone,						
			157' Moderately hard brown + tan leached porous crumbly limestone 160'	5.0	3.7	73%	33%		
160			Hard tan dense limestone w/solution features + red clay + open fractures, - numerous voids below 164'	5.0	3.7	73%	50%		
165				5.0	2.6	52%	13%		
170			170' Hard light gray dense brecciated limestone w/num. voids + red clay	5.0	1.9	38%	15%	Kirschberg Evaporite 145'-190' (45')	
175				5.0	3.1	62%	25%		
180				5.0	2.0	40%	17%		
185				5.0	2.8	57%	32%		
190			190'						

COMPLETION DEPTH: 190.0' **DEPTH TO WATER:** None

DATE: 7/25/2014 **DATE:** 7/28/2014

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-5

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
			clay topsoil 1.0'						
-5-			Mixed hard tan dense limestone and moderately hard lt. tan chalky limestone, w/solution features and leached pockets	4.0	3.8'	95%	42%		
				5.0	3.8'	76%	17%		
-10-			10.0' Hard lt. tan dense limestone	5.0	4.9'	98%	68%		
-15-				5.0	5.0	100%	69%		
-20-			- 5" clay seam @ 19.2' - lt. gray to gray below 20'	5.0	5.0	100%	83%		
-25-				5.0	5.0	100%	77%		
-30-			30.0' Mixed hard and moderately hard lt. tan and white grainy porous limestone	5.0	5.0	100%	61%		
-35-				5.0	5.0	100%	70%		
-40-				5.0	5.0	100%	90%		
-45-				5.0	5.0	100%	64%		
-50-			- soft @ 49.0'-49.4' (continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-5

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
55			Mixed hard and moderately hard lt. tan and white grainy porous limestone	5.0	5.0	100%	82%		
				5.0	5.0	100%	71%		
60				5.0	5.0	100%	71%		
65				5.0	5.0	100%	79%		
70				5.0	5.0	100%	80%		
75			75.0' Moderately hard white grainy porous limestone w/occasional solution features	5.0	5.0	100%	33%		
80			-2" brown clay seam @ 81.6' 82.3'	5.0	5.0	100%	66%		
85			Moderately hard + hard lt. gray dense limestone, brecciated w/ solution features	5.0	5.0	100%	76%		
90			90.0' Hard gray dense limestone w/solution features 2 9" chert @ 92.1	5.0	4.9	98%	59%		
95			96.0' Hard gray slightly vuggy limestone 3.5" chert @ 98.3'	5.0	4.5	90%	8%		
100			(Continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-5

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
105			Hard gray slightly vuggy limestone 105.0'	5.0	5.0	100%	46%		
110			Moderately hard tan porous limestone 110.0'	5.0	5.0	100%	52%		
115			Moderately hard light gray dense limestone w/brecciated zones and solution features	5.0	5.0	100%	44%		
120			120.0'	5.0	5.0	100%	43%		

COMPLETION DEPTH: 120.0' **DEPTH TO WATER:** None

DATE: 7-30-2014 **DATE:** 7-30-2014

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-6

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE RQD		UNIT DRY WT. LBS/CU FT
			Hard light gray dense limestone 0.5						
			↳ soft white chalk @ 1.7'-2.4'	4.5'	4.3'	96%	47%		
-5-			-soft white chalk @ 4.5'-4.7'						
				5.0'	1.7'	33%	12%		
-10-									
				5.0'	2.0'	40%	9%		
-15-			-w/red clay below 14.5'						
				5.0'	3.5'	70%	18%		
-20-			-w/moderately hard porous chalk @ 20.0'-21.6'						
			-fossiliferous below 22' w/solution features	5.0'	5.0'	100%	90%		
-25-									
				5.0'	5.0'	100%	58%		
-30-									
				5.0'	4.5'	90%	45%		
-35-									
			-w 7" chert @ 38.7'	5.0'	4.3'	86%	75%		
-40-									
				5.0'	4.8'	96%	58%		
-45-			-gray & vuggy w/tan moderately hard leached pockets @ 44.2'-45.6'						
				5.0'	4.8'	96%	50%		
-50-			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-6

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina Cnty

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
			Hard light gray dense limestone	5.0'	5.0'	100%	67%		
55				5.0'	4.5'	90%	53%		
			59.0'						
60			Hard light gray dense fossiliferous limestone w/ highly broken zone @ 62'-65.5	5.0'	2.7'	54%	8%		
65				5.0'	1.6'	32%	9%		
70				5.0'	4.7'	94%	34%		
			74.2'						
75			Hard tan vuggy limestone 75.5						
			Moderately hard light tan dense chalky limestone	5.0'	4.0	80%	19%		
80				5.0'	3.8'	76%	24%		
			84.7'						
85			Hard lt. gray dense limestone - 6" chert @ 86.9'	5.0'	2.4'	48%	20%		
90			90.5'						
			Moderately hard light tan chalky limestone w/ tan clayey laminations to 95	5.0'	4.0'	80%	17%		
95			95.0'						
			Hard lt. gray fossiliferous limestone	5.0'	4.1'	82%	22%		
100			(continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.

LOG OF BORING NO. B-6

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
			Hard lt. gray fossiliferous limestone w/open vertical fracture @ 100-101	102.5'					
				5.0'	5.0'	100%	72%		
105			Moderately hard tan chalky limestone w/occ. hard light gray seams						
				5.0'	4.8'	100%	41%		
				109.2'					
110			Moderately hard light tan argillaceous limestone w/tan clayey laminations						
				5.0'	5.0'	100%	86%		
115				116.0'					
			Hard light gray dense limestone w/moderately hard white chalk seams	5.0'	5.0'	100%	74%		
120									
				5.0'	4.3'	86%	54%		
				124.0'					
125			Hard light gray dense + slightly porous limestone w/occasional inclined open fracture						
				5.0'	4.7'	94%	43%		
130				131.0'					
			Hard white slightly vuggy limestone	133.0'					
				5.0'	4.8'	96%	77%		
135			Hard light gray brecciated limestone						
			- gray w/open solution features and calcite below 137.0'	5.0'	5.0'	100%	90%		
140			- light gray and fossiliferous below 139'						
				5.0'	4.9'	98%	84%		
145				146'					
			Mixed hard gray vuggy limestone and moderately hard gray porous limestone, leached + suggary texture w/occ. dense crystalline ls. seams,	5.0'	2.4'	48%	27%		
150			(Continued)						

COMPLETION DEPTH: _____ **DEPTH TO WATER:** _____

DATE: _____ **DATE:** _____

CAPITOL AGGREGATES, LTD.
LOG OF BORING NO. B-6

TYPE OF BORING: Continuous Core **LOCATION:** Bane Property, Medina County

DEPTH FT.	SYMBOLS	SAMPLES	SOIL DESCRIPTION / ELEVATION:	CORE DRILLED	CORE RECOVERED	CORE RECOVERY %	MOISTURE CONTENT % RQD		UNIT DRY WT. LBS/CU FT
				5.0'	4.0'	80%	33%		
155			155.0' Hard tan dense limestone						
				5.0'	4.7'	94%	72%		
160									
				5.0'	0.4'	8%	0%		
165			165.9' Hard light gray brecciated and healed vuggy limestone						
				5.0'	4.0'	80%	32%		
170									
				5.0'	2.3'	46%	18%		
175									
				5.0'	1.2'	24%	8%		
180									
				5.0'	5.0'	100%	22%		
185									
			-w/dense limestone seams below 187'	5.0'	4.1'	82%	14%		
190									
				5.0'	4.5'	90%	47%		
195									
				5.0'	2.3'	46%	7%		
200									

COMPLETION DEPTH: 200.0' **DEPTH TO WATER:** None

DATE: 7-31-2014 **DATE:** 7-31-2014

ATTACHMENT G

Well Registration and Construction Logs

STATE OF TEXAS WELL REPORT for Tracking #121567

Owner:	**BANE LOREN D**	Owner Well #:	**No Data**
Address:	**12623 HUNTER'S CHASE SAN ANTONIO , TX 78230**	Grid #:	**68-33-1**
Well Location:	**1580 CR 265 MICO , TX 78056**	Latitude:	**29° 28' 19" N**
Well County:	**Medina**	Longitude:	**098° 58' 50" W**
Elevation:	**No Data**	GPS Brand Used:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Date: Started: **10/17/2003**
Completed: **10/22/2003**

Diameter of Hole: Diameter: **8 in From Surface To 420 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **No Data**

Annular Seal Data:
1st Interval: **From 0 ft to 226 ft with 12 BENTONILE (#sacks and material)**
2nd Interval: **From (No Data) ft to (No Data) ft with 4 (#sacks and material)**
3rd Interval: **No Data**
Method Used: **BENTONILE POLYMOR GROUT PUMPED THROUGH**
Cemented By: **TREMMIE PIPE BY DRILLER**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **OWNER**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **210 ft. below land surface on (No Data)**
Artesian flow: **No Data**

Packers: **3 220**
MOLDED RUBBER

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **Submersible**
Depth to pump bowl: **340 ft**

Well Tests: **Jetted \ Estimated**
Yield: **20 GPM with (No Data) ft drawdown after (No Data) hours**

Attention Owner: Confidentiality Privilege Notice on reverse side of owner's copy.

Texas Department of License and Regulation

Water Well Driller/Pump Installer Program
P.O. Box 12157 Austin, Texas 78711 (512)463-7880 FAX (512)463-8616
Toll free (800)803-9202
Email address: water.well@license.state.tx.us

This form must be completed and filed with the department and owner within 60 days upon completion of the well.

WELL REPORT

1) OWNER

Name	Address	City	State	Zip
BANE, LOREN D	12623 HUNTER'S CHASE	SAN ANTONIO	TX	78230

2) WELL LOCATION

County	Physical Address	City	State	Zip
MEDINA	1580 CR 265	MICO	TX	78056

Lat. Long. Grid # 68 33 01

3) Type of Work ☑ New Well ☐ Reconditioning ☐ Replacement ☐ Deepening

4) Proposed Use (check) ☐ Monitor ☐ Environmental Soil Boring ☑ Domestic ☐ Industrial ☐ Irrigation ☐ Injection ☐ Public Supply ☐ De-watering ☐ Testwell ☐ Rig Supply
If Public Supply well, were plans submitted? ☐ Yes ☐ No

5) N↑ X

6) Drilling Date
Started 10 / 17 / 03
Completed 10 / 22 / 03

Diameter of Hole

Dia.(in)	From (ft)	To (ft)
8	0	420

7) Drilling Method (check) ☐ Driven ☑ Air Rotary ☐ Mud Rotary ☐ Bored ☐ Air Hammer ☐ Cable Tool ☐ Jetted ☐ Other

0-80 HARD FLINT + Limestone
80-260 LOST Returns
260-320 White Hard Limestone
320-340 LT gray Limestone
340-420 PARTIAL Returns

(Use reverse side of Well Owner's copy, If necessary)

8) Borehole Completion ☐ Open Hole ☐ Straight Wall ☐ Under-reamed ☐ Gravel Packed ☑ Other CMT to bottom
If Gravel Packed give the interval from ft. to ft.

Dia. (in.)	New Or Used	Steel, Plastic, etc. Perf, Slotted, etc Screen Mfr., if commercial	Setting (ft) From	Setting (ft) To	Gage Casing Screen
4½	N	Sch 40 PVC	0	420	
		Slotted	320	420	

9) Cementing Data
Cementing from 226 ft. to 0 ft. # of sacks used 12 Bentonite
ft. to ft. # of sacks used 4 Portland
Method Used Bentonite Polymer Grout Pumped Through
Cementing By Tremmie Pipe by Driller
Distance to septic system field or other concentrated contamination ft. None
Method of verification of above distance

10) Surface Completion
☑ Specified Surface Slab Installed
☐ Specified Surface Sleeve Installed
☐ Pitless Adapter Used
☐ Approved Alternative Procedure Used

11) Water Level
Static level 210 ft. below Date / /
Artesian Flow gpm. Date / /

12) Packers

Type	Depth
3 Molded Rubber	220

13) Plugged ☐ Well plugged within 48 hours
Casing left in well: Cement/Bentonite placed in well:

From (ft)	To (ft)	From (ft)	To (ft)	Sacks used

14) Type Pump 1½-12
☐ Turbine ☐ Jet ☑ Submersible ☐ Cylinder ☐ Other
Depth to pump bowls, cylinder, jet etc., 340 ft.

15) Water Test
Typetest ☐ Pump ☐ Bailer ☑ Jetted ☐ Estimated
Yield: 20 gpm with ft. drawdown after hrs.

16) Water Quality
Did you knowingly penetrate a strata which contain undesirable constituents.
☐ YES ☑ NO If yes, did you submit a REPORT OF UNDESIRABLE WATER
Type of water Depth of Strata
Was a chemical analysis made ☐ Yes ☑ No

Company or individual's Name (type or print) Pipe Creek Water Well INC Lic. No. 2450W1
Address PO Box 63333 City Pipe Creek State TX Zip 78063
Signature Randy Robert 11 / 14 / 03 Signature / /

Policy
No. B 17773

GRUNDFOS®

5 Year Performance PLUS

2 and 3 HP Submersible Pump Protection Application

Dear Grundfos Dealer:

To make certain your customer's Grundfos submersible pump is fully covered under the supplemental *Performance PLUS* protection program, READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY. Please type or print clearly.

Complete this policy application in full. Then sign and date the application.

Your customer should keep the top white copy of the application. Keep the yellow copy for your records and send the two remaining copies (pink and goldenrod) to your Grundfos distributor.

Should the pump fail due to any of the conditions specified under *Performance PLUS* prior to the expiration of the 5-year term of the policy, your customer should contact you. You then pull the pump and determine if the cause of failure is within the terms of the *Performance PLUS* policy. If it is, Grundfos will repair or replace the pump at no charge through your distributor. ***Performance PLUS* does not cover the labor charges involved in pulling and reinstalling the pump.**

The *Performance PLUS* protection policy covers all Grundfos domestic submersible pumps 2 and 3 HP. It is limited to the original owner of the pump and is non-transferable.

Set on 1 1/4 Scad 80 PVC Pipe

Customer Name LOREN D. BANE

Address 12623 Hunters Chase

City S. A. State TEX Zip 78230

Grundfos Dealer Name CASASELER

Address 603 20th

City Hondo State Tex Zip 78861

Pump Model: 16530-24	Serial Number: 96B18 032595
Phase & Volts: 1 Ø 230 V	Horsepower: 3HP
Date Installed: 6/8/99	Application: Stockwell/Loose
Pumping Water Level: 260	Pump Setting: 320
Well Inside Diameter: 5.0	Depth: 346
Flow (GPM): open 21	Lightning Arrestor Type: DE ark gap
New Installation or Replacement:	Brand of Pump Replaced: Dowbls

Press Tank wx 30 2

I certify that a proper lightning arrestor has been installed with this Grundfos submersible, and that the unit has been installed in accordance with the Grundfos Installation and Operating Instructions.

Dealer Signature: [signature] Date: 6/8/99

SP-SL-015 1/26/85
NEW
PRINTED IN U.S.A.

CUSTOMER COPY

Aboveground Storage Tank Facility Plan Application

Texas Commission on Environmental Quality

For Permanent Storage on The Edwards Aquifer Recharge and Transition Zones And Relating to 30 TAC §213.5(e), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 6·14·2023

Signature of Customer/Agent:

J. Brandon Klenzendorf

Regulated Entity Name: Capitol Aggregates Rio Medina Operation

Aboveground Storage Tank (AST) Facility Information

1. Tanks and substance stored:

Table 1 - Tank and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1	10,000	Diesel fuel	Steel
2	600	Grease Lube	Steel
3	250	Hydraulic Oil	Steel
4	250	Gear Oil	Steel

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
5	AST 5 - 250 AST 6 -250 AST 7 - 500 AST 8 - 500 AST 9 - 500 AST 10 - 5,000 AST 11 (unregulated contents; no associated plan fee) - 450 AST 12 (unregulated contents; no associated plan fee) - 250 (18) 55 gallon drums (no associated plan fee) - 990 gallons total	AST 5 - Motor Oil AST 6 - Transmission Oil AST 7 - Used Oil AST 8 - Gasoline AST 9 - Future Undecided Petroleum Product AST 10 - Future Undecided Petroleum Product AST 11 - Diesel Exhaust Fluid Additive AST 12 - Antifreeze Drums 1 through 18 - Used Oil, Hydrualic Fluid, Drive Train Fluid	Steel

Total x 1.5 = regulated tanks AST 1 through AST 10 and 18 55-gal drums plus displacement volume of unregulated tanks AST 11 and AST 12 = 29,335 **Gallons**

2. ☒ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

   ☐ **Attachment A - Alternative Methods of Secondary Containment**. Alternative methods for providing secondary containment are proposed. Specifications that show equivalent protection for the Edwards Aquifer are attached.

3. Inside dimensions and capacity of containment structure(s):

Table 2 - Secondary Containment

Length (L) (Ft.)	*Width (W) (Ft.)*	*Height (H) (Ft.)*	*L x W x H = (Ft3)*	*Gallons*
38.5	35.2	3	4,066	30,413

Length (L) (Ft.)	*Width (W) (Ft.)*	*Height (H) (Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: 30,413 **Gallons**

4. ☒ All piping, hoses, and dispensers will be located inside the containment structure.

   ☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
   - ☒ The piping will be aboveground
   - ☐ The piping will be underground

5. ☒ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of concrete dike and concrete flooring sufficiently impervious to petroleum products plus a roof system.

6. ☒ **Attachment B - Scaled Drawing(s) of Containment Structure**. A scaled drawing of the containment structure that shows the following is attached:

   - ☒ Interior dimensions (length, width, depth and wall and floor thickness).
   - ☒ Internal drainage to a point convenient for the collection of any spillage.
   - ☒ Tanks clearly labeled.
   - ☒ Piping clearly labeled.
   - ☒ Dispenser clearly labeled.

Site Plan Requirements

Items 7 - 18 must be included on the Site Plan.

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

   Site Plan Scale: 1" = 100'.

8. 100-year floodplain boundaries:

   - ☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
   - ☐ No part of the project site is located within the 100-year floodplain.

   ☒ The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Floodplain data obtained from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Medina County, Texas and unincorporated areas, map number 48325C0375D, 15 May 2020.

9. ☐ 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.

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

☒ There are 8 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply):
- ☒ The wells are not in use and have been properly abandoned.
- ☐ The wells are not in use and will be properly abandoned.
- ☒ The wells are in use and comply with 16 TAC § 76.

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

11. Geologic or manmade features which are on the site:

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

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

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

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

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

16. ☒ Surface waters (including wetlands).

☐ N/A

17. ☒ Locations where stormwater discharges to surface water or sensitive features.

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

18. ☒ Legal boundaries of the site are shown.

Best Management Practices

19. ☒ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☒ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

20. ☒ All stormwater accumulating inside the containment structure will be disposed of through an authorized waste disposal contractor.

    ☒ Containment area will be covered by a roof.
    ☐ Containment area will not be covered by a roof.

    ☐ A description of the alternate method of stormwater disposal is submitted for the executive director's review and approval and is attached.

21. ☒ **Attachment D - Spill and Overfill Control**. A site-specific description of the methods to be used at the facility for spill and overfill control is attached.

22. ☒ **Attachment E - Response Actions to Spills**. A site-specific description of the planned response actions to spills that will take place at the facility is attached.

Administrative Information

23. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

    ☒ The WPAP application for this project was approved by letter dated 22 June 2016 for original application; and 24 August 2018 for the WPAP modification. A copy of the approval letter is attached at the end of this application.
    ☐ The WPAP application for this project was submitted to the TCEQ on _____, but has not been approved.
    ☐ A WPAP application is required for an associated project, but it has not been submitted.
    ☐ There will be no building or structure associated with this project. In the event a building or structure is needed in the future, the required WPAP will be submitted to the TCEQ.
    ☐ The proposed AST is located on the Transition Zone and a WPAP is not required. Information requested in 30 TAC 213.5 subsection (b) (4)(B) and (C) and (5) is provided with this application. (Forms TCEQ-0600 Permanent Stormwater Section and TCEQ-0602 Temporary Stormwater Section or Stormwater Pollution Prevention Plan/SW3P).

24. ☒ This facility is subject to the requirements for the reporting and cleanup of surface spills and overfills pursuant to 30 TAC 334 Subchapter D relating to Release Reporting and Corrective Action.

25. ☒ 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.

26. ☒ Any modification of this AST Facility Plan application will require executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Attachment A – Alternative Methods of Secondary Containment

Not applicable. The ASTs will be placed within a containment structure that is sized to capture at least one and one-half (1 ½) times the cumulative storage capacity of all systems.

Attachment B – Scaled Drawing(s) of Containment Structure

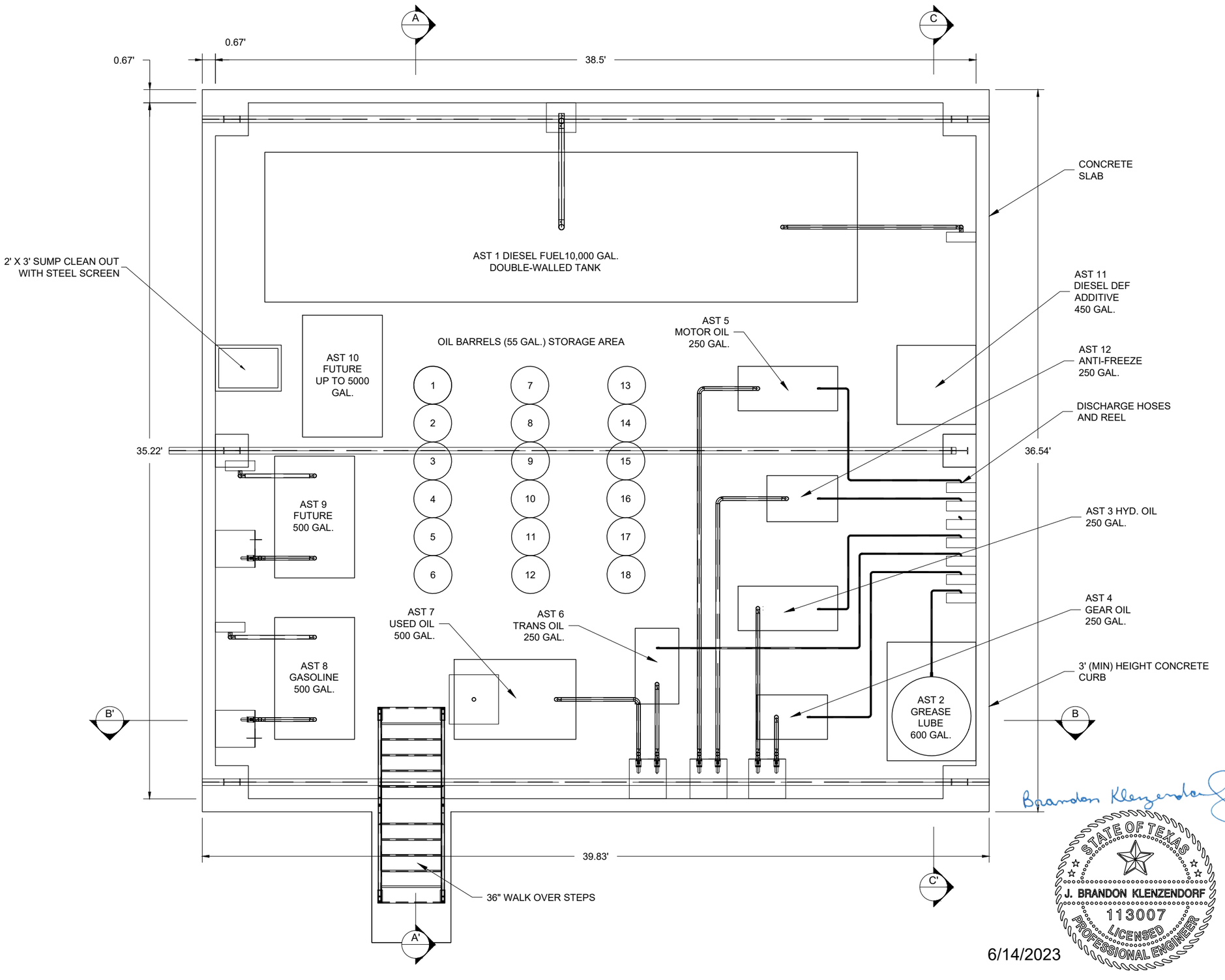
Scaled Drawings of the new containment structure at the Tank Storage Area associated with the new storage tanks (AST 1 through AST 12) are provided below. The Scaled Drawings include the tank locations, tank dimensions, associated piping, overfill alarm, and fuel dispensers clearly labeled. The new tanks that will be housed in the new containment system at Tank Storage Area Project Site, plus planned future tanks, are described below:

- AST 1 is a 10,000-gallon diesel fuel steel permanent tank;
- AST 2 is a 600-gallon grease lubricant steel permanent tank;
- AST 3 is a 250-gallon hydraulic oil steel permanent tank;
- AST 4 is a 250-gallon gear oil steel permeant tank;
- AST 5 is a 250-gallon motor oil steel permanent tank;
- AST 6 is a 250-gallon transmission oil steel permanent tank;
- AST 7 is a 500-gallon used oil steel permanent tank;
- AST 8 is a 500-gallon gasoline steel permanent tank;
- AST 9 is a planned 500-gallon future steel permanent tank with unknown contents at this time but will contain petroleum product;
- AST 10 is a planned future steel permanent tank with unknown storage volume or contents at this time but will contain petroleum product with a volume not to exceed 5,000 gallons;
- AST 11 is a 450-gallon diesel exhaust fluid additive steel permanent tank; the contents of this tank are not regulated under the AST Plan requirements and therefore are not included in the associated plan fee; the displacement volume for this tank is accounted for in the available containment structure volume;
- AST 12 is a 250-gallon antifreeze steel permanent tank; the contents of this tank are not regulated under the AST Plan requirements and therefore are not included in the associated plan fee; the displacement volume for this tank is accounted for in the available containment structure volume; and
- Eighteen (18) 55-gallon portable steel drums containing various petroleum products; the drums are not subject to associated plan fees but because the drums contain regulated contents, the volume is accounted for in required containment volume calculation at one and one-half times the total storage volume.

The Tank Storage Area consists of operation of the proposed ASTs within an impervious concrete dike secondary containment structure, designed to have an available storage volume sufficient to contain one and one-half times the cumulative storage capacity of the regulated tanks and drums plus the displacement volume of unregulated tanks stored within the containment structure. This AST Plan includes regulated tanks and drums containing a cumulative storage volume of up to 19,090 gallons (note: the capacity of AST 10 is unknown at this time but will not exceed 5,000 gallons as proposed in this plan). This total storage volume of the regulated tanks and drums times one and one-half plus the displacement volume of the unregulated tanks AST 11 and AST 12 that are stored in the Tank Storage Area containment structure equals 29,335 gallons (19,090-gal times 1.5 plus 450-gal plus 250-gal = 29,335 gal).

The secondary containment structure at Tank Storage Area Project Site includes a concrete slab sufficiently impervious to petroleum products (inner dimensions approximately 38.5 feet by 35.2 ft), concrete dike (approximately 3 feet in height), and a roof system. The secondary containment structure provides a total containment volume of 30,413 gallons which exceeds the required containment volume of 29,335 gallons.

In addition to the Scaled Drawings of the Tank Storage Area, the Site Plan shows the Tank Storage Area and surrounding areas, including the 100-year floodplain boundary. The Tank Storage Area is not located within the 100-year floodplain. Wells and geologic or manmade features identified in the approved Geologic Assessment are shown and labeled on the Site Plan. A total of two wells (the other six borings are not in use and have been properly abandoned) are present on the Rio Medina Operation Site, and the nearest well (S-13-MB) is greater than 300 feet to the east of the Tank Storage Area Project Site. The nearest geologic or manmade feature (S-10-MB) is not characterized as a sensitive geologic feature and is located approximately 100 feet to the west of the Tank Storage Area Project Site.



NOTES:

1. THE SECONDARY CONTAINMENT STRUCTURE SHALL HAVE A MINIMUM CONTAINMENT VOLUME OF APPROXIMATELY 30,430 GALLONS. FOLLOWING RAINFALL EVENTS, ACCUMULATED STROMWATER WILL BE DISPOSED OF THROUGH AN AUTHORIZED WASTE DISPOSAL CONTRACTOR.
2. CURBED SECONDARY CONTAINMENT SHALL BE CONSTRUCTED OF CONCRETE WITH A MINIMUM HEIGHT OF THREE FEET. ANCHOR PINS MUST BE INSTALLED AND A WATERTIGHT SEAL SHALL BE ACHIEVED WITH THE CONCRETE SLAB.
3. ANCHOR PINS SHALL CONSIST OF #4 REBAR (OR EQUIVALENT) FOR CONCRETE CURB. ANCHOR PINS SPACED 24" (MIN) AND EMBEDDED A MINIMUM OF 2".
4. THE CONTAINMENT STRUCTURE AT TANK STORAGE AREA INCLUDES OPERATION OF TWO PERMANENT ASTS (IDENTIFIED AS AST 11 AND AST 12) WITH UNREGULATED MATERIAL (DIESEL EXHAUST FLUID ADDITIVE AND ANTIFREEZE; NOT CLASSIFIED AS HAZARDOUS SUBSTANCES UNDER FEDERAL HAZARDOUS WASTE REGULATIONS 40 CFR 261) PLUS EIGHTEEN 55-GALLON PORTABLE DRUMS CONTAINING PETROLEUM HYDROCARBON MATERIAL.
5. THE CUMULATIVE STORAGE VOLUME OF THE DRUMS WAS ACCOUNTED FOR IN THE REQUIRED CONTAINMENT VOLUME CALCULATION FOR ONE AND ONE-HALF TIMES THE CUMULATIVE STORAGE CAPACITY AND THE DISPLACEMENT VOLUME FROM AST 11 AND AST 12 WERE ACCOUNTED FOR IN THE AVAILABLE STORAGE VOLUME PROVIDED BY THE CONTAINMENT STRUCTURE

0 10
SCALE IN FEET

Brandon Klenzendorf

STATE OF TEXAS
J. BRANDON KLENZENDORF
113007
LICENSED PROFESSIONAL ENGINEER

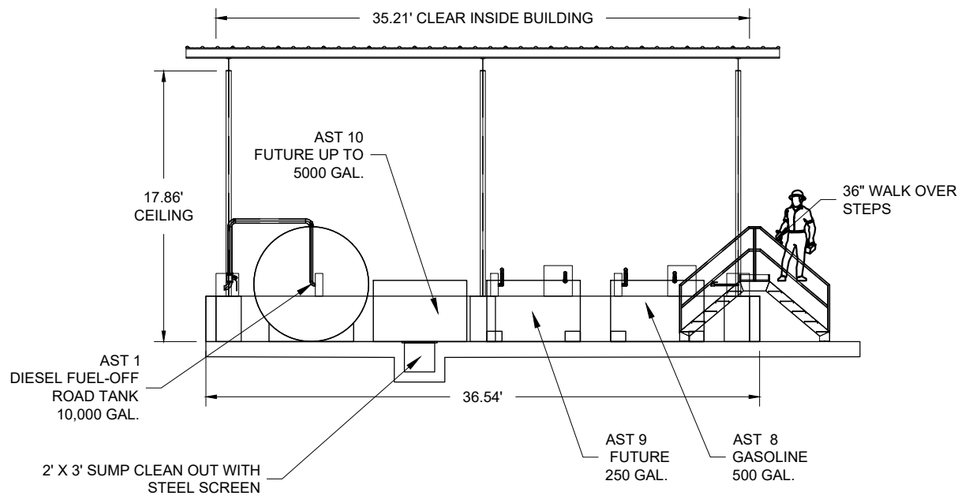
6/14/2023

TCEQ - 0575, ATTACHMENT B - SCALED DRAWING OF CONTAINMENT STRUCTURE; TANK STORAGE AREA PLAN VIEW CAPITOL AGGREGATES RIO MEDINA OPERATION MEDINA , TEXAS

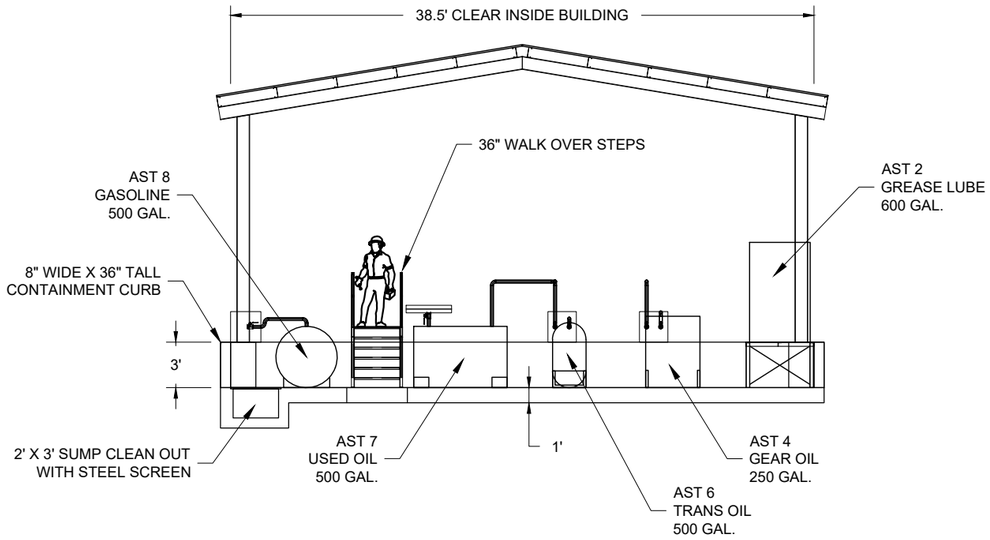
Geosyntec consultants

PROJECT NO: TXW9681 | JUNE 2023

DRAWING NO. 1 OF 2



SECTION A-A'



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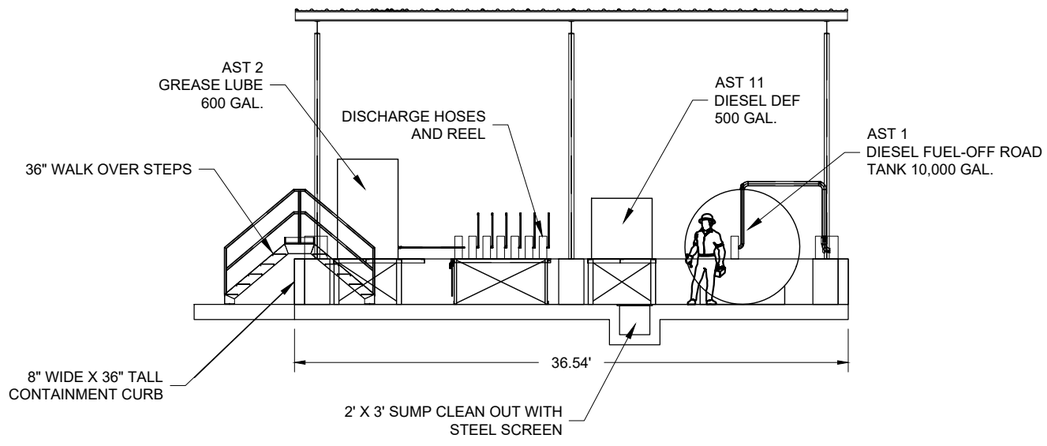

SECTION C-C'

0 10

SCALE IN FEET

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PROFESSIONAL ENGINEER

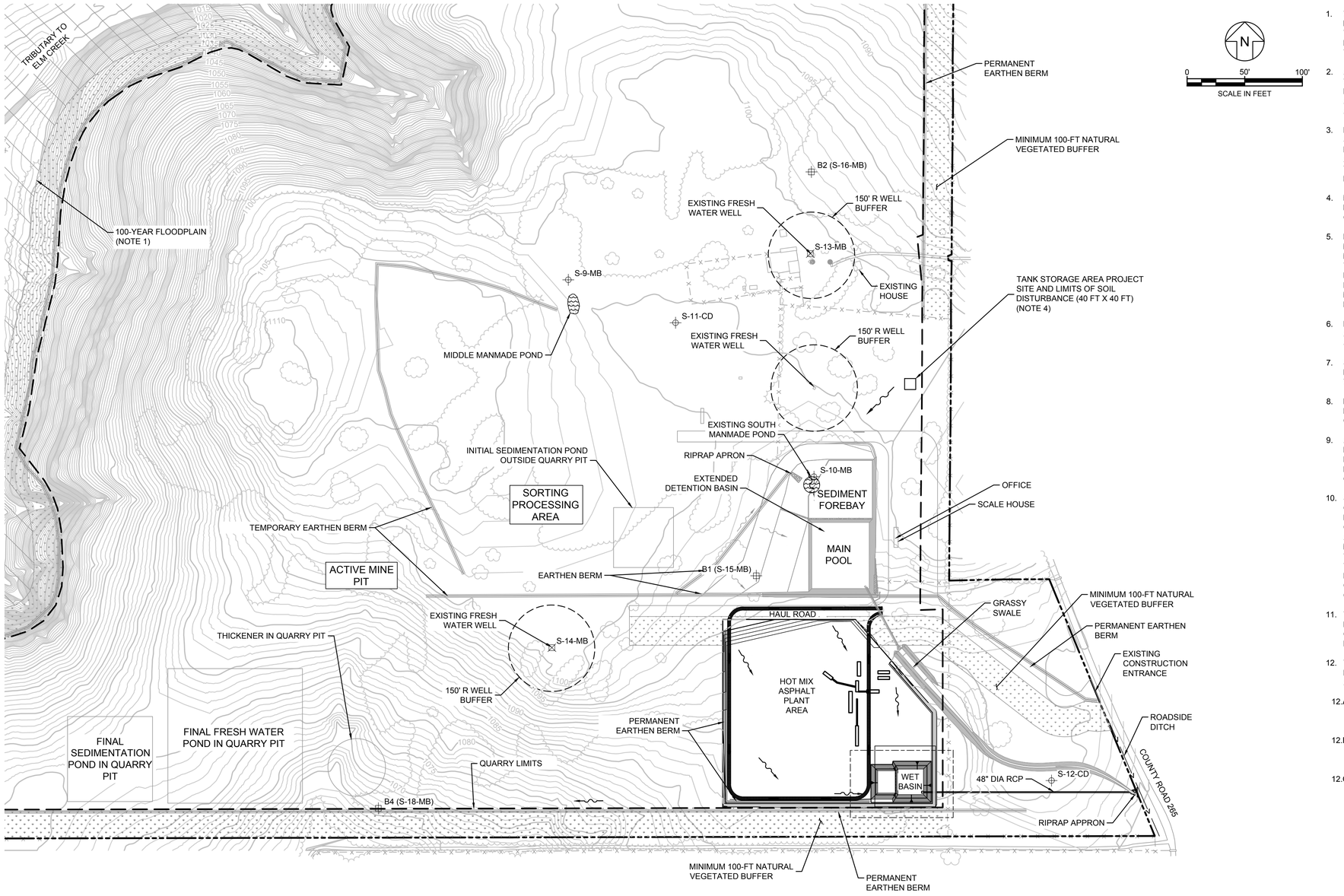
6/14/2023

TCEQ - 0575, ATTACHMENT B - SCALED DRAWING OF CONTAINMENT STRUCTURE; TANK STORAGE AREA SECTION VIEW CAPITOL AGGREGATES
RIO MEDINA OPERATION
MEDINA , TEXAS

Geosyntec consultants

PROJECT NO: TXW9681 | JUNE 2023

DRAWING NO. 2 OF 2



GENERAL CONSTRUCTION NOTES:

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM SHALL BE 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:

12.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;

12.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;

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

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

NOTES:

1. FLOODPLAIN FROM FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR MEDINA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NUMBER 48325C0375D, 15 MAY 2020.
2. TOPOGRAPHIC BASE MAP COMPILED FROM AN AERIAL SURVEY BASED ON PHOTOGRAPHY PERFORMED ON 30 APRIL 2015.
3. ADDITIONAL DETAILS ON GEOLOGIC OR MANMADE FEATURES OBTAINED FROM PREVIOUSLY APPROVED GEOLOGIC ASSESSMENT DATED 18 APRIL 2016 WHICH IS INCLUDED IN THE AST PLAN APPLICATION. ADDITIONAL GEOLOGIC FEATURES AND WELLS ARE PRESENT ON THE RIO MEDINA OPERATION SITE FARTHER AWAY FROM THE TANK STORAGE AREA PROJECT SITE AND ARE IDENTIFIED IN THE APPROVED GEOLOGIC ASSESSMENT.
4. THE TANK STORAGE AREA PROJECT SITE IS LOCATED NEAR THE SORTING/PROCESSING AREA OF THE EXISTING RIO MEDINA OPERATIONS AND WILL NOT RESULT IN ADDITIONAL IMPERVIOUS COVER OR SOIL DISTURBANCE.

LEGEND

- PROPERTY BOUNDARY
- EXISTING GROUND ELEVATION CONTOUR (FT-MSL) (650)
- EXISTING FENCE
- FLOWLINE
- WATER WELL (S-14-MB)
- GEOLOGIC FEATURE (S-12-CD)
- SOIL BORING (B2)
- 100-YEAR FLOODPLAIN (NOTE 1)
- MANMADE POND
- VEGETATED BUFFER
- EARTHEN BERM
- QUARRY LIMITS
- ROADSIDE DITCH

REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants

GEOSYNTEC CONSULTANTS, INC.
TEXAS ENG. FIRM REGISTRATION NO. 1182
8217 SHOAL CREEK BLVD, SUITE 200
AUSTIN, TEXAS 78757
PHONE: 512.451.4003

TITLE: SITE PLAN

PROJECT: CAPITOL AGGREGATES RIO MEDINA OPERATION

SITE: MEDINA COUNTY, TX

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

Brandon Klenzendorf
SIGNATURE
6/14/2023
DATE

STATE OF TEXAS — J. BRANDON KLENZENDORF — 113007 — LICENSED — PROFESSIONAL ENGINEER

DESIGN BY:	OAB	DATE:	JUNE 2023
DRAWN BY:	MDN	PROJECT NO.:	TXW9681
CHECKED BY:	JBK	FORM:	
REVIEWED BY:	JBK	DRAWING NO.:	1 OF 1
APPROVED BY:	JBK		

DRAWING: Austin P:\CADD\Projects\RIO MEDINA QUARRY DEV\P-ABOVE GROUND STORAGE TANK (TXW0482.05)\TXW0482505001.dwg PLOTTED: Jun 14, 2023 - 8:09am

Attachment C – Exception to the Geologic Assessment

Not applicable. All geologic or manmade features identified in the Geologic Assessment (included within this AST Plan application) are shown and labeled in the vicinity of the Tank Storage Area Project Site. Additional geologic or manmade features were identified on-site but are not shown on the Site Plan due to their distance from the Tank Storage Area Project Site. None of the identified features located near the Tank Storage Area Project Site were classified as sensitive. Therefore, an Exception to the Geologic Assessment is not required. Additional geologic or manmade features at the Rio Medina Operation Site are identified in the approved Geologic Assessment.

Attachment D – Spill and Overfill Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or water courses from leaks, spills, and overfills by reducing their probability, training employees, and using BMPs to mitigate releases.

Employee Education

Measures must be implemented to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks, spills, and overfills. Employee training programs must include the following, at a minimum:

- awareness that different materials pollute in different amounts and the definition of a "significant spill" for each material used;
- awareness of the appropriate response for "significant" and "insignificant" spills and when a spill must be reported to the TCEQ;
- potential dangers to humans and the environment from spills and leaks;
- hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into routine safety meetings);
- establish a continuing education program to indoctrinate new employees; and
- have representatives oversee and enforce proper spill prevention and control measures.

General Measures

The following general measures for spill response actions shall be implemented at the Site:

- To the extent that the work can be accomplished safely, contain and immediately clean up spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117 and 302, and sanitary and septic wastes.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Cover spills and protect them from stormwater run-on during rainfall to the extent that it does not compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place Safety Data Sheets (SDSs), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Refilling Operations

This procedure provides guidelines to be used in the safe and environmentally responsible refueling and maintenance of vehicles and equipment with petroleum products stored on-site, refilling of the diesel storage tank, or any other reasonably sized transfer of fuel at the Site. This procedure encompasses those activities involving the transfer of reasonable quantities of fuel at the Site in a manner such that risks to health, safety, and the environment are minimized as much as is practicable.

- Operating personnel must be present at all times when large quantity diesel/fuel transfer is taking place.

- Observe tank capacity and contents and ensure that the volumes being added to the bulk tank are not excessive and that the correct material is being added.
- Make certain that a Safety Data Sheet (SDS) is available.
- Ensure that all pipes and hoses are properly connected and can be observed during any transfer of fuel. Both ends of hoses should be visible and should not be used in unlighted areas at night.
- Capitol Aggregates must approve all locations where refueling or transfer is taking place.
- Portable containment and spill control devices (such as buckets, drip pans, etc.) should be available, should a leak occur, and ready for use.
- Vehicle parking brake should be set prior to any refueling activity.
- Should leaks or spills occur, any transfer must immediately be stopped and the cause of the leak or spill investigated and resolved.
- All pipes and hoses must be voided of contents prior to disassembly and removal from coupling devices.
- Vehicle engines should be shut off during refueling or transfer.

Attachment E – Response Actions to Spills

The objective of this section is to describe the planned response actions to spills that could take place at the facility.

Cleanup

A spill containment kit and cleanup materials shall be stored where they are readily accessible. The Site Spill Coordinator shall be designated to oversee and enforce control measures and maintain and restock the spill containment kit, as needed. Clean up leaks and spills immediately. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill. Use absorbent materials on small spills rather than washing the area with water or burying the spill. Absorbent materials should be promptly removed and disposed of properly. Follow the practice below for a minor spill:

- Contain the spread of the spill.
- Recover spill materials
- Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills that are below reportable quantities, are not hazardous, and can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities in order to contain the spill. Semi-significant spills should be cleaned up immediately using the following practices:

- Contain the spread of the spill.
- Notify the spill cleanup coordinate or project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using dry methods (absorbent materials, cat litter and/or rags provided in the spill containment kit). Contain the spill by encircling it with absorbent materials to prevent the spread of the material.
- If the spill occurs in dirt areas, the spill can be contained by constructing an earthen berm; spilled material can be excavated and properly dispose of.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant or Hazardous Spills

For significant or hazardous spills, reportable quantities include the following limits:

- For spills of hazardous substances, the federal requirements in 40 CFR 302.4 apply.
- For petroleum products or used oil, the reportable quantity for a spill onto land is 25 gallons, and the reportable quantity directly into water is enough to create a sheen on the water.

In the event of a significant or hazardous spill in excess of reportable quantities, Site personnel shall:

- Notify the TCEQ San Antonio Regional Office by telephone as soon as possible and within 24 hours at (210) 490-3096 between 8 AM and 5 PM. After hours, contact the State of Texas Spill-Reporting Hotline and the State Emergency Response Commission (SERC) at 1-800-832-8224. All emergency phone numbers must be posted at the Site.

- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, notify the National Response Center at 1-800-424-8802. Notifying the National Response Center does not constitute notice to TCEQ.
- Notification should first be made by telephone and followed up with a written report. Spills reported to the National Response Center can be reported via an online reporting tool.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up a spill until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be notified include, but are not limited to, City Police Department, County Sheriff Office, Fire Departments, etc.

In the event of a reportable spill, the following Emergency Response Agencies can be contacted for assistance. Always inform your supervisor of a reportable spill immediately. Follow company policy when responding to an emergency.

TCEQ Region 13 office (Includes Medina County)	(210) 490-3096
State Emergency Response Center (Spill Reporting)	(800) 832-8224
TCEQ Main Office	(512) 239-3700
National Response Center	(800) 424-8802
Castroville Fire Department	(830) 931-4751 911
Castroville Police Department	(830) 931-2222 911
Medina County Sherriff's Office	(830) 741-6150
USEPA, Region VI	(214) 665-2200 (800) 887-6063
Medina County Emergency Management Coordinator	(330) 722-9240
Medical Clinic of Hondo	(830) 426-7444

Vehicle or Equipment Fueling and Maintenance

Fuel or hazardous substances will be stored on-site in the ASTs described in this application. Temporary ASTs with a capacity of 250 gallons or more will not be required during project activities. In the event that fuel trucks are used for on-site vehicle fueling, best management practices will be implemented during fueling and maintenance at the site include the following:

- Inspect on-site vehicles and equipment daily for leaks and conduct repairs immediately.
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site.
- Always use secondary containment, such as a drip pan or drop cloth, to catch spills or leaks when removing or changing fluids. Drip pans are to be used where leaks or spills of fuel can occur and where making and breaking hose connections.
- Promptly transfer used fluids to the proper waste or recycling drums; do not leave full drip pans or other open containers lying around.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Fueling hoses should have check valves to prevent hose drainage after filling.
- Spills and vehicle leaks are to be cleaned up with absorbent materials for dry cleanup methods. The use of water for such cleanups is to be minimized.
- "Topping off" of fuel tanks is discouraged.
- Personnel are not to leave fueling equipment unattended during fueling operations.
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until it is verified as not leaking.
- Equipment such as valves, pumps, flanges, and connections shall be checked regularly for leaks and be repaired as needed.

In the event of a leak from the ASTs and associated piping, hoses, and dispensers described in this application into the secondary containment structures, spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly. All stormwater accumulating inside the containment structure will be disposed of through an authorized waste disposal contractor.

Administrative Information

The original WPAP approval letter (dated 22 June 2016) and WPAP modification approval letter (dated 24 August 2018) are attached.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 22, 2016

Mr. Paul Detterline
Capitol Aggregates, Inc.
11551 Nacogdoches Road
San Antonio, Texas 78217

Re: Edwards Aquifer, Medina County

NAME OF PROJECT: Capitol Aggregates Rio Medina Operation; Located at 1576 County Road 265; Hondo, Texas

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

Regulated Entity No. RN108959032; Additional ID No. 13000073

Dear Mr. Detterline:

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 Geosyntec Consultants on behalf of Capitol Aggregates, Inc. on January 22, 2016. Final review of the WPAP was completed after additional material was received on March 18, 2016, April 18, 2016, and June 6, 2016. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed limestone quarry project will have an area of approximately 503 acres. The proposed quarry pit will disturb approximately 356 acres. The proposed activities for the site include quarrying to an elevation no deeper than 872.6 feet above mean sea level (a.m.s.l.). The proposed impervious cover is 24.5 (4.9 percent) acres consisting of a scale house, office, gravel parking areas, fueling and maintenance area, gravel haul roads, and rock crushing equipment. No on-site sewage facility is proposed at this time. Project wastewater (domestic) will be collected in portable toilets and disposed of by a TCEQ registered waste disposal service. Trash generated onsite will be disposed of in a dumpster and handled by a

licensed waste service. A tributary to Elm Creek runs along the north portion of the proposed quarry and a stream crossing will be utilized to access the northwest corner of the property.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating onsite or upgradient of the site and potentially flowing across and off the site, the specific controls described below will be utilized.

An extended detention basin in series with a grassy swale and three (3) natural vegetative filter strips designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 18,659 pounds of TSS generated from the 24.50 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The extended detention basin in series with the grassy swale will treat 16,755 pounds of TSS generated from 22.0 acres of impervious cover. The basin capture volume is 190,032 cubic feet and the grassy swale is minimum length 150 feet, maximum bottom width of 16 feet, side slopes of 3:1 (H:V), slope 1.65 percent, and 80 percent vegetated cover.

The three natural VFS will treat 1,904 pounds of TSS generated from 2.5 acres of impervious cover. The 50 foot undisturbed natural vegetative strips shall not exceed slopes of 10 percent and shall have no flow concentrating areas on the strip. The contributing area will be limited to 72 feet through the use of earthen berms on the upgradient side of the impervious cover.

A minimum 100 foot natural buffer will be maintained along the perimeter of the property and the tributary to Elm Creek to reduce soil erosion and runoff velocities. Expansion of the quarry will occur in 10 acre increments. Expansion in phases will allow vegetation to remain in place and limit the amount of soil that is disturbed.

Earthen berms (safety berm) composed of compacted soil and/or overburden will be constructed during clearing and grubbing activities. Portions of these earthen berms will be permanent near the property boundary and adjacent to the floodplain to divert runoff from upgradient areas.

Process water will be generated from the rock crushing equipment and will be treated onsite for reuse. Initial rock crushing activity will consist of a portable rock crusher, thickener, a sedimentation pond, and steel storage tanks to manage the process water generated. Process water will be sent to the thickener, in which solids are separated through the use of a flocculating agent. Solids will be stored in a lined sedimentation pond and the clean water will be pumped to the steel storage tanks for reuse. The sediment will be dried and used as fill material onsite.

As the quarry expands, the rock crushing activity will be relocated into the quarry pit and will be replaced with a permanent rock crushing plant, high rate thickener, lined sedimentation pond, and lined fresh water pond. The ponds will both be sized to contain the 10-year, 24-hour event with 1 foot of freeboard. The freshwater pond will be approximately 6.5 feet deep and the sedimentation pond will be approximately 4.0 feet deep. The ponds will be constructed with a bottom elevation greater than the minimum quarry pit elevation of 872.6 ft-msl. Both ponds will have 3:1 horizontal to vertical side slopes and will be implemented with a vegetated earthen berm built up around the perimeters. A liner will be provided for both ponds meeting clay liner specifications or geotextile fabric specifications.

Stockpiles will be located outside the quarry pit during initial development of the site. As quarry operations continue and the quarry pit expands, support activities may be relocated within the quarry pit.

A containment area for 150% of the mobile generator fuel volume or a double walled mobile generator tank will be provided.

A stream crossing will be located across a tributary to Elm Creek which runs along the north portion of the proposed quarry. Natural vegetated buffers will be maintained adjacent to the floodplain. The stream

crossing will be paved and include culverts that can convey the 2 year storm without overtopping the road. There is no proposed mining within the floodplain of the tributary to Elm Creek.

GEOLOGY

According to the geologic assessment included with the application, the site is located on the lower Devil Rivers Formation. Ten (10) geologic features and five (5) manmade features were evaluated by the project geologist. No features were rated as sensitive. Features located within the tributary to Elm Creek S-2-O, S-3-O, S-4-O, S-5-O, S-6-O, S-7-O, and S-8-MB will be protected by the 100 foot natural buffer proposed for the tributary to Elm Creek. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffers. The San Antonio Regional Office site assessment conducted on May 13, 2016 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

I. The BMPs and measures proposed in the application and/or described in this approval letter must be operational prior to any soil disturbing activities within a BMP's drainage area.

II. An Aboveground Storage Tank (AST) facility plan will be submitted and approved prior to the installation of ASTs for storing fuel and/or other hydrocarbons or hazardous substances, as required, as the quarry operations progress.

III. This letter does not authorize construction of the future ready mix concrete plant or the hot mix asphalt plant.

IV. The existing conditions of the tributary to Elm Creek are included with the application. The assessment includes photographic (taken May 13, 2016 and June 5, 2016) and narrative documentation that will enable future comparisons for the purposes of determining impact from sediment accumulation. The plan holder must install erosion and sediment controls that have been designed to retain sediment on-site to the extent practicable with consideration for local topography and rainfall. Discharges that would cause or contribute to a violation of water quality standards, or would fail to protect and maintain existing designated areas of receiving waters are not allowed. Routine inspections must be performed following rain events to determine if the tributary to Elm Creek has accumulated any sediment from the quarrying activity. Accumulations of sediment must be removed before the next rain event and may require coordination with other governmental authorities. Records of inspection, maintenance, and repairs of the crossing's control measures must include the date of the inspection, date of regular maintenance, date(s) of discovery of areas in need of sediment removal, and date(s) that the control measure(s) were returned to full function. Those records must be maintained on site and be available for review by TCEQ.

V. Intentional discharges of sediment laden water from regulated activities are not allowed. If dewatering becomes necessary, appropriate measures must be taken.

VI. Pursuant to 30 TAC §213.4(h)(3) and as stated in the Edwards Aquifer protection plan, this protection plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within 10 years from the initial approval of the plan. A new Edwards Aquifer protection plan must be submitted to the TCEQ with the appropriate fees for review and approval by the executive director prior to commencing or continuing any construction or regulated activities beyond 10 years. The Applicant must submit a status report for the project containing information regarding the percentage of the total project construction completed within 180 days prior to the expiration date of this plan approval. If at that time, the total project construction cannot be demonstrated to be at least 50% complete, the Applicant must submit a new Edwards Aquifer protection plan to the TCEQ for review and

approval before continuing any construction or regulated activities beyond 10 years from the date of initial approval of the plan.

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. Two wells and six borings exists on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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 Ms. Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4026.

Sincerely,

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

LB/LB/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Brandon Klenzendorf, P.E., Geosyntec Consultants, Inc.
The Honorable Chris Schuchart, Medina County
Mr. David Caldwell, Medina County UWD
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

August 24, 2018

Mr. Aaron Savell
Century Asphalt, Ltd.
P.O. BOX 187
Houston, Texas 77011

Re: Edwards Aquifer, Medina County

NAME OF PROJECT: Capitol Aggregates Rio Medina Operation; Located at 1576 County Road 265; Hondo, Texas

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

Regulated Entity No. RN108959032; Additional ID No. 13000715

Dear Mr. Savell:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification application for the above-referenced project submitted to the San Antonio Regional Office by Geosyntec Consultants on behalf of Century Asphalt, Ltd. on June 28, 2018. Final review of the WPAP Modification was completed after additional material was received on August 22, 2018. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

Capital Aggregates Rio Medina Operation WPAP (13000073) was approved June 22, 2016, for a limestone quarry project with an area of approximately 503 acres. The proposed quarry pit will disturb approximately 356 acres. The proposed activities for the site include quarrying to an elevation no deeper than 872.6 feet above mean sea level (a.m.s.l.). The proposed impervious cover is 24.5 (4.9-percent) acres consisting of a scale house, office, gravel parking areas, fueling and maintenance area, gravel haul roads, and rock crushing equipment. The approved permanent BMP(s) include an extended detention basin in series with a grassy swale and three (3) natural vegetative filter strips.

PROJECT DESCRIPTION

The proposed modification includes the installation of a hot mix asphalt plant located within 10.57 acres of the overall 503-acre site. The designated area will be exclusively for the hot mix asphalt plant and stormwater runoff from the plant area will be treated by a site specific permanent BMP, in lieu of treatment by Capital Aggregates Rio Medina Operations, as previously approved. In addition, a section of a natural vegetative filter strip previously approved to treat a gravel haul road north of the project site will be removed. This section will provide an access entrance to the hot mix asphalt plant and stormwater treatment for this access drive will be provided by the proposed new PBMP. Vegetated earthen berms will be utilized to route stormwater runoff towards the PBMP. The new impervious cover within the 10.57-acre site will be 9.0 acres (85.15-percent). The overall 503-acre site will result in 33.5 acres of impervious cover. No on-site sewage facility is proposed at the hot mix asphalt plant. Project wastewater (domestic) will be collected in portable toilets and disposed of by a TCEQ registered waste disposal service.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a wet basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be utilized and constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 7,197 pounds of TSS generated from the 9.45 acres of impervious cover, which includes access drive. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The wet basin is an online facility that is configured with a 2-foot depth sediment forebay and 4-foot depth main pool and includes 1.0-foot freeboard emergency spillway. The permanent pool is designed with a water quality volume of 50,498 cubic feet (41,649 cubic feet required) and a designed capacity at water quality elevation of 76,357 cubic feet. The basin will be lined with a 6- inch compacted topsoil overlying a 12-inch thick compacted clay liner, side slopes are constructed at 3:1 (H:V) for grass stabilization and the outflow structure is provided to drain the water quality volume in a minimum of 24 hours. A separate drain pipe with a manual valve is not included because the basin cannot completely drain by gravity; therefore, a pump will be available onsite to completely drain the basin for maintenance purposes as needed.

GEOLOGY

According to the geologic assessment included with the application, the site is located on the lower Devil Rivers Formation. Ten (10) geologic features and five (5) manmade features were evaluated by the project geologist within the previously approved 503-acre area. However, no features were identified within the 10.57-acre project area by the project geologist. The San Antonio Regional Office site assessment conducted on July 19, 2018 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated June 22, 2016.

II. An Aboveground Storage Tank (AST) plan must be submitted for the installation and use of fuel and oil containment required within the Hot Asphalt Plant project area. Installation and use of an AST or AST system is not authorized by this letter.

III. All permanent pollution abatement measures shall be inspected, and all measures be fully operational prior to first use of the newly constructed facilities.

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

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

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

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. Two wells and six bore holes exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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 Ms. Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4026.

Sincerely,

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

LB/LB/eg

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

cc: Mr. Brandon Klenzendorf, P.E., Geosyntec Consultants, Inc.
The Honorable Chris Schuchart, Medina County
Mr. David Caldwell, Medina County UWD
Mr. Roland Ruiz, Edwards Aquifer Authority

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 6·14·2023

Signature of Customer/Agent:

J. Brandon Klenzendorf

Regulated Entity Name: Capitol Aggregates Rio Medina Operation

Project Information

Potential Sources of Contamination

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

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

   ☒ The following fuels and/or hazardous substances will be stored on the site: Diesel fuel, grease lubricant, hydraulic oil, gear oil, motor oil, transmission oil, gasoline, and used oil.

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Temporary Stormwater Section Form (TCEQ-0602) Supplemental Information

The information presented in the attachments to form TCEQ-0602 apply specifically to the Tank Storage Area associated with this AST Plan application. Temporary stormwater control measures identified in the original approved WPAP, which are located outside of the tank storage area, are still applicable and will not be modified.

Attachment A – Spill Response Actions

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or water courses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

Employee Education

Measures must be implemented to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees. Employee training programs must include the following, at a minimum:

- awareness that different materials pollute in different amounts and the definition of a "significant spill" for each material used;
- awareness of the appropriate response for "significant" and "insignificant" spills and when a spill must be reported to the TCEQ;
- potential dangers to humans and the environment from spills and leaks;
- hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into routine safety meetings);
- establish a continuing education program to indoctrinate new employees; and
- have representatives oversee and enforce proper spill prevention and control measures.

General Measures

The following general measures for spill response actions shall be implemented at the Site:

- To the extent that the work can be accomplished safely, contain and immediately clean up spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117 and 302, and sanitary and septic wastes.
- Store hazardous materials and wastes in covered containers and protect from vandalism.

- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Cover spills and protect them from stormwater run-on during rainfall to the extent that it does not compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place Safety Data Sheets (SDSs), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

A spill containment kit and cleanup materials shall be stored where they are readily accessible. The Site's Spill Coordinator shall be designated to oversee and enforce control measures and maintain and restock the spill containment kit, as needed. Clean up leaks and spills immediately. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill. Use absorbent materials on small spills rather than washing the area with water or burying the spill. Absorbent materials should be promptly removed and disposed of properly. Follow the practice below for a minor spill:

- Contain the spread of the spill.
- Recover spill materials
- Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills that are below reportable quantities, are not hazardous, and can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities in order to contain the spill. Semi-significant spills should be cleaned up immediately using the following practices:

- Contain the spread of the spill.
- Notify the Spill Coordinator or project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using dry methods (absorbent materials, cat litter and/or rags provided in the spill containment kit). Contain the spill by encircling it with absorbent materials to prevent the spread of the material.
- If the spill occurs in dirt areas, the spill can be contained by constructing an earthen berm; spilled material can be excavated and properly dispose of.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant or Hazardous Spills

For significant or hazardous spills, reportable quantities include the following limits:

- For spills of hazardous substances, the federal requirements in 40 CFR 302.4 apply.
- For petroleum products or used oil, the reportable quantity for a spill onto land is 25 gallons, and the reportable quantity directly into water is enough to create a sheen on the water.

In the event of a significant or hazardous spill in excess of reportable quantities, Site personnel shall:

- Notify the TCEQ San Antonio Regional Office by telephone as soon as possible, and within 24 hours, at (210) 490-3096 between 8 AM and 5 PM. After hours, contact the State of Texas Spill-Reporting Hotline and the State Emergency Response Commission (SERC) at 1-800-832-8224. All emergency phone numbers must be posted at the Site.

- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, notify the National Response Center at 1-800-424-8802. Notifying the National Response Center does not constitute notice to TCEQ.
- Notification should first be made by telephone and followed up with a written report. Spills reported to the National Response Center can be reported via an online reporting tool.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up a spill until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be notified include, but are not limited to, City Police Department, County Sheriff Office, Fire Departments, etc.

In the event of a reportable spill, the following Emergency Response Agencies can be contacted for assistance. Always inform your supervisor of a reportable spill immediately. Follow company policy when responding to an emergency.

TCEQ Region 13 office (Includes Medina County)	(210) 490-3096
State Emergency Response Center (Spill Reporting)	(800) 832-8224
TCEQ Main Office	(512) 239-3700
National Response Center	(800) 424-8802
Castroville Fire Department	(830) 931-4751 911
Castroville Police Department	(830) 931-2222 911
Medina County Sherriff's Office	(830) 741-6150
USEPA, Region VI	(214) 665-2200 (800) 887-6063
Medina County Emergency Management Coordinator	(330) 722-9240
Medical Clinic of Hondo	(830) 426-7444

Vehicle or Equipment Fueling and Maintenance

Fuel or hazardous substances will be stored on-site in the ASTs described in this application during project activities. Temporary ASTs with a capacity of 250 gallons or more will not be required during project activities. In the event that fuel trucks are used for on-site vehicle fueling, BMPs will be implemented during fueling and maintenance at the Site include the following:

- Inspect on-site vehicles and equipment daily for leaks and conduct repairs immediately.
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site.
- Always use secondary containment, such as a drip pan or drop cloth, to catch spills or leaks when removing or changing fluids. Drip pans are to be used where leaks or spills of fuel can occur and where making and breaking hose connections.
- Promptly transfer used fluids to the proper waste or recycling drums; do not leave full drip pans or other open containers unattended for longer than necessary.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Fueling hoses should have check valves to prevent hose drainage after filling.
- Spills and vehicle leaks are to be cleaned up with absorbent materials for dry cleanup methods. The use of water for such cleanups is to be minimized.
- "Topping off" of fuel tanks is discouraged.
- Personnel are not to leave fueling equipment unattended during fueling operations.
- Oil filters disposed of in trash cans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until it is verified as not leaking.
- Equipment such as valves, pumps, flanges, and connections shall be checked regularly for leaks and be repaired as needed.

Portable Toilet Maintenance

Portable toilets will be used at the Site and will be handled and maintained as follows during construction. Portable toilets must be empty before transporting them. Toilets shall be securely fastened to transport trucks; hand trucks, dollies, or power tailgates shall be used whenever possible. Portable toilets shall be located at least 20 feet from the nearest storm drain inlet or sensitive feature buffer area (note that no sensitive features were identified near the tank storage

area in the Geologic Assessment). Toilets shall be located on a level ground surface, with clear access, and secured with a stake driven into the ground to prevent tipping by accident, weather, or vandalism.

During construction of the Tank Storage Area, portable toilets shall be inspected frequently for leaks (daily during the work week, or on a weekly basis and after rainfall events) and serviced/sanitized at time intervals that will maintain sanitary conditions (typically weekly or on an as-needed basis). A licensed waste collector should service all toilets. Suppliers should carry bleach for disinfection, in the event of a spill or leak, and properly store (or cover)/handle chemical materials. Employees shall be trained on these BMPs, prohibitions of stormwater discharge, and wastewater-discharge requirements.

Attachment B – Potential Sources of Contamination

Potential sources of contamination at the project site include soil, concrete material, fueling operations, material loading areas, trash and debris, spills or leaks, and other waste materials generated on-site. The regulated activities associated with this AST Plan will be located immediately adjacent to the Tank Storage Area.

Attachment C – Sequence of Major Activities

Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST application. A TCEQ Investigator recently conducted a Compliance Investigation at the Site and identified a portable 500-gallon fuel tank as an alleged violation. This AST Plan application includes this 500-gallon fuel tank and additional future tank installations. Capitol Aggregates will not initiate additional tank installation or transfer of tank contents until approval is received. The project consists of constructing Tank Storage Area, which includes installation of a concrete pad (approximately 38.5 feet by 35.2 ft), concrete dike (approximately 3 feet in height), roof system, and ASTs 1 through ASTs 12 northeast of the quarry pit, near the as part of the existing fueling and maintenance area. During construction, BMPs will be utilized in accordance with the approved WPAP, and no additional soil disturbance was added as part of this project. The major activities set to occur during the construction activities are described below. Activities for construction of Tank Storage Area are presented in the order or sequence in which they should be completed.

1) Clear vegetation in Tank Storage Area in preparation of installing concrete pad for the secondary containment structure; approximately 0.05 acres of area will be utilized.
2) Maintain any natural vegetated buffers that are existing down-gradient from cleared tank storage area.
3) Install concrete pad, concrete dike, and roof system.
4) Install gravel around concrete pad for permanent stabilization of adjacent areas.
5) Install AST 1 through AST 12 and associated piping systems.

Attachment D – Temporary Best Management Practices and Measures

Overview

The project consists of constructing the Tank Storage Area, which includes installation of a concrete pad (approximately 38.5 feet by 35.2 ft), concrete dike (approximately 3 feet in height), roof system, and ASTs 1 through ASTs 12 northeast of the quarry pit, as part of the existing fueling and maintenance area. During construction, BMPs will be utilized in accordance with the approved WPAP, and no additional soil disturbance will be added. Stormwater runoff from upgradient, undisturbed areas will be routed around the tank storage area. Only a minimal area, approximately 0.05 acres, will be utilized to install the concrete pad and ASTs associated with the Tank Storage Area. The disturbed area will be stabilized immediately with the concrete pad. Since the Tank Storage Area is located near the existing fueling and maintenance area, which is already designated as a disturbed area, only limited, temporary BMPs during construction were required, as described below. Additionally, the area will drain to the extended detention basin in series with the grassy swale approved in the WPAP.

Erosion Control BMPs

The purpose of soil stabilization is to provide a ground cover that limits the rainfall impact energy, provides a limited amount of water storage through rainfall interception, and limits sheet flow runoff velocity by increasing surface roughness. In the natural condition, soil is stabilized by native vegetation. Details of the soil stabilization BMPs that will be implemented are listed below.

- Concrete – The Tank Storage Area includes a concrete pad, which is an effective form of permanent stabilization.

Dust Control

The purpose of dust control is to prevent blowing and movement of dust from exposed soil surfaces, reduce on-site and off-site damage, reduce health hazards, and improve traffic safety.

Fugitive dust is emitted during construction (i.e., excavation, vehicle traffic, human activity) and as a result of wind erosion over the exposed earth surfaces. Proper management practices for dust control reduce or prevent wind erosion by protecting and roughening the soil surface and reducing the surface wind velocity.

Dust control is not expected to be an issue for the Tank Storage Area due to the small impacted area and limited duration of disturbed conditions. However, specific BMPs for dust control are listed below:

- Sprinkling – Sprinkling ground surfaces with water until it is moist is an effective dust control method. When water is used for dust control, the water should be applied such that runoff does not occur.

Sediment Control BMPs

The purpose of a surface water diversion structure is to limit the length of slope over which surface water runoff can travel as sheet flow or shallow concentrated flow. The diversion concentrates and laterally conveys surface water in a non-erosive manner. Since Tank Storage Area is located upgradient of the existing approved extended detention basin in series with the grassy swale, the main BMP for sediment control is the extended detention basin and grassy swale permanent BMPs associated with runoff from the fueling and maintenance area. No additional disturbed area was added as part of this project.

Non-Structural BMPs

Non-structural BMPs should be identified and integrated into any stormwater management program. As with any long-term program, effective implementation of these BMPs may require establishing specific criteria and standard procedures for various types of facilities or operations, and personnel training. In many cases, these procedures are simply “common sense” applied to routine activities. The primary objective of these measures is to prevent or reduce the amount of contaminants released to surface waters; however, the pollutant reduction that can be attributed to these measures has not been quantified. This discussion of non-structural BMPs emphasizes practices to achieve source control and pollution containment and prevention. These BMPs can also improve the operation and maintenance of structural stormwater management systems.

Non-structural BMPs such as preserving natural runoff conditions and maintaining natural vegetated areas will be implemented at the Site. Good housekeeping practices such as street sweeping will be utilized in the event that tracking of sediment onto public roadways is observed. Proper solid waste management will be used to control the accumulation of litter. Solid wastes and litter that accumulate on the land are easily transported by runoff. Appropriate placement of waste receptacles should be considered by the contractor. Regularly scheduled

maintenance of these receptacles and signage can encourage their use. Spill response and prevention, including employee training, are non-structural BMPs that will be used to reduce potential pollution.

BMPs to Prevent Pollution that Originates Upgradient from the Site

Stormwater runoff that originates upgradient from the Tank Storage Area is expected to be minimal, consisting mostly of runoff from the adjacent undeveloped areas. Since the Tank Storage Area is located upgradient of the existing approved extended detention basin in series with the grassy swale, the main BMP for sediment control is the extended detention basin and grassy swale permanent BMPs associated with runoff from the fueling and maintenance area.

BMPs to Prevent Pollution that Originates On-Site or Flows Off-Site

Since the Tank Storage Area is located upgradient of the existing approved extended detention basin in series with the grassy swale, the main BMP for sediment control is the extended detention basin and grassy swale permanent BMPs associated with runoff from the fueling and maintenance area.

BMPs to Prevent Pollution from Entering Surface Streams, Sensitive Features, or the Aquifer

Sensitive features are not expected to be a concern near the Tank Storage Area, as none were identified in the Geologic Assessment. The BMPs described above will be used to manage runoff that discharges to off-site surface streams.

BMPs to Maintain Flow to Sensitive Features

Sensitive features are not located within the Tank Storage Area, as identified in the Geologic Assessment. Therefore, BMPs are not required to maintain flow to sensitive features since they are not present. In the event that a sensitive feature is identified during TCEQ inspection or during construction activities, work activities will stop in the vicinity of the feature, TCEQ will be notified, temporary sediment and erosion controls will be implemented and remain in place until the feature closure methods have been completed, and a feature protection plan will be submitted to TCEQ for approval before commencing construction activities in the vicinity of the feature.

Attachment E – Request to Temporarily Seal a Feature

Not applicable. Sensitive geologic or manmade features are not located near the tank storage area; therefore, a Request to Temporarily Seal Features is not required.

Attachment F – Structural Practices

Structural practices used to divert flows away from exposed soils, to store flows, or to limit runoff discharge of pollutants from exposed areas of the Site. Since the Tank Storage Area is located upgradient of the existing approved extended detention basin in series with the grassy swale, the main BMP for sediment control is the extended detention basin and grassy swale permanent BMPs associated with runoff from the fueling and maintenance area. Placement of structural practices in the floodplain has been avoided.

Attachment G – Drainage Area Map

Construction activities associated with the Tank Storage Area installation will not disturb additional areas greater than 10 acres at one time. Therefore, a temporary sediment basin is not required for this project.

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

Not applicable. The disturbed acreage is less than 10 acres; therefore, a temporary sediment pond is not required during construction.

Attachment I – Inspection and Maintenance for BMPs

Structural and non-structural BMPs should be inspected weekly and after each rainfall event of 0.5 inches or greater. Written documentation of these inspections should be kept during the course of construction at the project site. A report summarizing the scope of the inspection, the date of the inspection, and major observations relating to the implementation of BMPs must be documented. Major observations include: the location of discharges of sediment or other pollutants from the Site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed. Actions taken as a result of inspections must be described on the inspection report. Reports must identify any incidence of non-compliance. The names and qualifications of personnel making the inspections must be included on each report.

All BMPs must be maintained in effective operating condition. If sediment escapes the Site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts to water quality and prior to the next rain event, if feasible. 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 routinely). Erosion from storms or other damage should be repaired as soon as practical by regrading the area and applying new seed. Any sediment deposited on the roadway shall be swept as necessary and within the same day as discovery.

During construction activities, stormwater will not require authorization to discharge under the TPDES General Permit No. TXR150000 for construction activities since the disturbed area is less than 1.0 acres (approximately 0.05 acres will be disturbed).

If periodic inspections by the contractor or other information indicate a control has been used inappropriately, or incorrectly, the contractor must replace or modify the control for Site situations.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST application. A TCEQ Investigator recently conducted a Compliance Investigation at the Site and identified a portable 500-gallon fuel tank as an alleged violation. This AST Plan application includes this 500-gallon fuel tank and additional future tank installations. Capitol Aggregates will not initiate additional tank installation or transfer of tank contents until approval is received. A schedule of the interim and permanent soil stabilization practices for the Site must be maintained by the contractor. 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. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Interim Stabilization

Temporary stabilization measures must be initiated as soon as practicable in portions of the Site where construction activities have temporarily ceased, but no more than 14 days after the construction activities in that portion of the Site have ceased. In areas where temporary stabilization measures are infeasible, the contractor may alternatively utilize temporary perimeter controls. The contractor must document the reason why stabilization measures are not feasible and must demonstrate that the perimeter controls will retain sediment on-site to the extent practicable.

Permanent Stabilization

Permanent stabilization consists of the concrete pad. Areas shall not remain disturbed for more than 14 days after the permanent completion of construction activities. Natural vegetation shall be preserved to the extent practicable.

Final stabilization is considered to have occurred when all soil disturbing activities have been completed and a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover, with a density of at least 70 percent of the native background vegetative cover for the area, has been established, or equivalent permanent stabilization measures (such as the use of impervious cover) have been employed.

The owner is responsible for the maintenance of these stabilization measures until the applicant informs the TCEQ in writing that another organization or individual has assumed control or ownership of the property.

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 6·14·2023

Signature of Customer/Agent

J. Brandon Klenzendorf

Regulated Entity Name: Capitol Aggregates Rio Medina Operation

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

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

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

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

☒ N/A

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

   ☒ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

☐ Design calculations (TSS removal calculations)

☒ TCEQ construction notes

☒ All geologic features

☐ All proposed structural BMP(s) plans and specifications

☐ N/A

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

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

    ☒ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

Permanent Stormwater Section Form (TCEQ-0600) Supplemental Information

The information presented in the attachments to form TCEQ-0600 applies specifically to the aboveground storage tank facility associated with this AST Plan (Tank Storage Area) at the Capitol Aggregates Rio Medina Operation. Permanent pollution abatement measures identified in the original approved WPAP consist of vegetated buffers, earthen berms, rock berms, an extended detention basin, and a grassy swale. The approved WPAP outlines three ways in which stormwater is managed on site: 1) captured in the quarry pit and allowed to evaporate; 2) routed via earthen berms and discharged through rock berms to the site perimeter or through natural vegetated buffers to the tributary to Elm Creek; or 3) routed to an on-site permanent extended detention basin and grassy swale for the initial support activities area, while those activities are located outside the quarry pit, and discharged off-site.

Capitol Aggregates is submitting an AST Plan to address the new tanks at the Tank Storage Area (AST 1 through AST 12). The project consists of constructing Tank Storage Area, which includes the installation of a concrete pad (approximately 38.5 feet by 35.2 ft), concrete dike (approximately 3 feet in height), roof system, and ASTs 1 through 12 near the existing fueling and maintenance area on-site. The main BMP during construction consists of those included in the approved WPAP, and no additional soil disturbance was added as part of this project. Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST application. A TCEQ Investigator recently conducted a Compliance Investigation at the Site and identified a portable 500-gallon fuel tank as an alleged violation. This AST Plan application includes this 500-gallon fuel tank and additional future tank installations. Capitol Aggregates will not initiate additional tank installation or transfer of tank contents until approval is received.

Attachment A – 20% or Less Impervious Cover Waiver

Not applicable. The site associated with this AST Plan application will not be used for multi-family residential developments, schools, or small business sites.

Attachment B – BMPs for Upgradient Stormwater

No surface water, groundwater, or stormwater originates upgradient from the site and flows across the site. The Tank Storage Area Project Site will be located on a concrete slab with a concrete dike that will be elevated so that any potential upgradient stormwater runoff will flow

around the Tank Storage Area. Stormwater runoff that originates upgradient from the Tank Storage Area is expected to be minimal. Additionally, the containment system at the Tank Storage Area will include a covered roofing system to prevent precipitation from entering the containment structure. Due to the limited upgradient area draining to the Tank Storage Area and coverage from the roof, permanent BMPs are not necessary for upgradient stormwater.

Attachment C – BMPs for On-Site Stormwater

Additional permanent BMPs are not required to treat runoff from the Tank Storage Area because the impervious cover associated with the area has been addressed by the approved WPAP. The Tank Storage Area is in the fueling and maintenance area and, as described in the approved WPAP, stormwater runoff that originates in this area is routed to the approved existing extended detention basin and grassy swale (existing permanent BMPs). Therefore, additional permanent BMPs from those described in the approved WPAP for on-site stormwater will not be necessary due to the construction of the Tank Storage Area.

Attachment D – BMPs for Surface Streams

Not applicable. Permanent BMPs are not required to prevent pollutants from entering surface streams, sensitive features, or the aquifer because the Tank Storage Area Project Site is covered under the approved WPAP. Sensitive features are not located within 800 feet of the Tank Storage Area.

Attachment E – Request to Seal a Features

Not applicable. Sensitive geologic or manmade features are not located near the Tank Storage Area Project Site; therefore, a Request to Seal Features is not required.

Attachment F – Construction Plans

The Construction Plans for the project are submitted as the Scaled Drawings and Site Plan with the Aboveground Storage Tank (AST) Plan application (form TCEQ-0575). All geologic features and structural BMPs in the vicinity of the Tank Storage Area Project Site and TCEQ construction notes are shown on the Site Plan. Design calculations (TSS removal calculations)

are not required for this AST Plan application because the approved WPAP allows for the extended detention basin and grassy swale to address runoff from the Tank Storage Area.

Attachment G – Inspection, Maintenance, Repair and Retrofit Plan

Not applicable. No additional permanent BMPs are proposed. Updates to the Inspection, Maintenance, Repair and Retrofit Plan in the approved WPAP are not required.

Attachment H – Pilot-Scale Field Testing Plan

Not applicable. BMPs that are not recognized by the TCEQ Executive Director are not proposed for the project. Therefore, a Pilot-Scale Field Testing Plan is not required.

Attachment I – Measures for Minimizing Surface Stream Contamination

Not applicable. The Tank Storage Area Project Site will be located at the existing fueling and maintenance area. The impervious cover associated with the Tank Storage Area has been addressed by the approved WPAP. Therefore, additional measures as part of this AST Plan application for minimizing surface stream contamination are not required. The little additional runoff that will be generated from the Tank Storage Area will be attenuated and buffered by the extended detention basin and grassy swale, so stream flashing, stronger flows, and increases in in-stream velocities are not expected to occur as a result of this project.

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

I William Scotty Gerbes,
Print Name

Vice President - Aggregates,
Title - Owner/President/Other

of Capitol Aggregates, Inc.,
Corporation/Partnership/Entity Name

have authorized J. Brandon Klenzendorf
Print Name of Agent/Engineer

of Geosyntec Consultants, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

W Scotty Gerbes
Applicant's Signature

5-9-23
Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared W. Scotty Gerbes 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, 2023.

Kathryn Cordova
NOTARY PUBLIC

KATHRYN CORDOVA
Notary Public
State of Texas
ID # 192282-4
My Comm. Expires 07-26-2023

Kathryn Cordova
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 7-26-2023

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Capitol Aggregates Rio Medina Operation
Regulated Entity Location: 1576 County Road 265, Hondo, Texas 78861
Name of Customer: Capitol Aggregates Inc.
Contact Person: Andrew Frye Phone: 210-871-7214
Customer Reference Number (if issued):CN 604033142
Regulated Entity Reference Number (if issued):RN 108959032

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	0 Acres	$ 0
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	0 Acres	$ 0
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	0 Acres	$ 0
Sewage Collection System	0 L.F.	$ 0
Lift Stations without sewer lines	0 Acres	$ 0
Underground or Aboveground Storage Tank Facility	10 regulated Tanks	$ 6,500
Piping System(s)(only)	0 Each	$ 0
Exception	0 Each	$ 0
Extension of Time	0 Each	$ 0

Signature: J. Brandon Kyle Date: 6-14-2023

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

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing 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 **Modification to existing AST Facility Plan**

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 604033142		**RN 108959032**

SECTION II: Customer Information

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

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

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

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Capitol Aggregates, Inc.

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
801525417	17427312255	742731225	008119422

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

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

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	P.O. Box 33240							
	City	San Antonio	**State**	TX	**ZIP**	78265	**ZIP + 4**	3240

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	andrew.frye@capitolaggregates.com

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

(210) 871-7214		(210) 599-1709

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ 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 Core 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.)*

Capitol Aggregates Rio Medina Operation

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	1576 CR 265							
	City	Hondo	**State**	TX	**ZIP**	78861	**ZIP + 4**	
24. County	Medina							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Project located on the west side of County Road 265 approximately 2.5 miles north of the intersection of County Road 265 and County Road 354.

26. Nearest City	**State**	**Nearest ZIP Code**
Rio Medina	TX	78066

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.48665		**28. Longitude (W) In Decimal:**	-98.98795	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	29	11.95	-98	59	16.61

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)
1422	2951	212312	324121

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

Quarry

34. Mailing Address:	**P.O. Box 33240**							
	City	**San Antonio**	**State**	**TX**	**ZIP**	**78265**	**ZIP + 4**	**3240**
35. E-Mail Address:	**andrew.frye@capitolaggregates.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 871-7214		**(210) 599-1709**

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
		13000073		
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
	138162			
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
	TXR05EG16			
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Kelsey Krueger, P.G.	**41. Title:**	Project Geologist

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(817 **)** 648-9470		**( ) -**	kelsey.krueger@geosyntec.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:	Geosyntec Consultants, Inc.	**Job Title:**	Principal Engineer
Name *(In Print):*	J. Brandon Klenzendorf, P.E.	**Phone:**	**(** 512 **)** 354- **3281**
Signature:	Brandon Klenzendorf	**Date:**	6/7/2023