



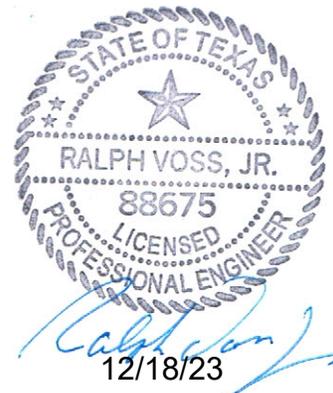
WATER POLLUTION PREVENTION PLAN (WPAP)

211 QUARRY

**Bexar/Medina County, Texas
Project No. 1031D-23**

Prepared for:
Martin Marietta Materials Southwest, LLC
4949 N. Loop 1604 W., Suite 135
San Antonio, Texas 78249
(210) 208-4000

Prepared by:
Forster Engineering
TBPE # 12385
401 Maricopa Drive
Canyon Lake, Texas 78133
(210) 289-0580



DECEMBER 2023

December 18, 2023

Ms. Monica Reyes
Texas Commission on Environmental Quality (TCEQ)
San Antonio Region 13
14250 Judson Road
San Antonio, Texas 78233

Subject: Martin Marietta Materials Southwest, LLC
211 Quarry
Water Pollution Abatement Plan (WPAP)

Dear Ms. Reyes:

Please find attached one (1) electronic copy of the Martin Marietta Materials Southwest, LLC 211 Quarry WPAP Application. This WPAP application has been prepared in accordance with Texas Administrative Code (30 TAC §213) for development over the Edwards Aquifer Recharge Zone.

We are requesting your review and approval of this WPAP application. The required review fee of \$10,000 will be submitted via the TCEQ EPay System once administrative approval and further instructions have been received. If you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Forster Engineering
(TBPE # F-12385)



Ralph Voss Jr., P.E.
Senior Engineer

TABLE OF CONTENTS

SECTION
1.0 Water Pollution Abatement Plan Checklist
2.0 Edwards Aquifer Application Cover Page (TCEQ-20705)
3.0 General Information Form (TCEQ-0587)
Attachment A - Road Map
Attachment B - USGS / Edwards Recharge Zone Map
Attachment C – Project Description & Best Management Practices for Quarry Operations (RG-500)
4.0 Geologic Assessment Form (TCEQ-0585)
5.0 Water Pollution Abatement Plan Application (TCEQ-0584)
Attachment A – Factors Affecting Surface Water Quality
Attachment B – Volume and Character of Stormwater
Site Plan (Exhibit 1)
6.0 Temporary Storm Water Section (TCEQ-0602)
Attachment A – Spill Response Actions
Attachment B – Potential Sources of Contamination
Attachment C – Sequence of Major Activities
Attachment D – Temporary BMP and Measures
Attachment F – Structural Practices
Attachment G – Drainage Area Map (See Exhibit 1, Section 5.0)
Attachment I – Inspection and Maintenance for BMPs
Attachment J – Schedule of Interim and Permanent Soil Stabilization
7.0 Permanent Storm Water Section (TCEQ-0600)
Attachment B – BMPs for Upgradient Stormwater
Attachment C – BMPs for On-site Stormwater
Attachment D – BMPs for Surface Streams
Attachment E – Request to Seal Features
Attachment F – Construction Plan
Attachment I – Measures for Minimizing Surface Stream Contamination
8.0 Agent Authorization Form (TCEQ-0599)
9.0 Application Fee Form (TCEQ-0574) and Fee
10.0 Core Data Form (TCEQ-10400)

Section 1.0

WATER POLLUTION ABATEMENT PLAN CHECKLIST

Water Pollution Abatement Plan Checklist

Edwards Aquifer Application Cover Page (TCEQ-20705)

General Information Form (TCEQ-0587)

Attachment A - Road Map

Attachment B - USGS / Edwards Recharge Zone Map

Attachment C - Project Description

Geologic Assessment Form (TCEQ-0585)

Attachment A - Geologic Assessment Table (TCEQ-0585-Table)

Attachment B - Stratigraphic Column

Attachment C - Site Geology

Attachment D - Site Geologic Map(s)

Water Pollution Abatement Plan Application Form (TCEQ-0584)

Attachment A - Factors Affecting Surface Water Quality

Attachment B - Volume and Character of Stormwater

Attachment C - Suitability Letter from Authorized Agent (if OSSF is proposed)

Attachment D - Exception to the Required Geologic Assessment (if requested)

Site Plan

Temporary Stormwater Section (TCEQ-0602)

Attachment A - Spill Response Actions

Attachment B - Potential Sources of Contamination

Attachment C - Sequence of Major Activities

Attachment D - Temporary Best Management Practices and Measures

Attachment E - Request to Temporarily Seal a Feature (if requested)

Attachment F - Structural Practices

Attachment G - Drainage Area Map

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

Attachment I - Inspection and Maintenance for BMPs

Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Permanent Stormwater Section (TCEQ-0600)

Attachment A - 20% or Less Impervious Cover Waiver (if requested for multi-family, school, or small business site)

Attachment B - BMPs for Upgradient Stormwater

Attachment C - BMPs for On-site Stormwater

Attachment D - BMPs for Surface Streams

Attachment E - Request to Seal Features (if sealing a feature)

Attachment F - Construction Plans

Attachment G - Inspection, Maintenance, Repair and Retrofit Plan

Attachment H - Pilot-Scale Field Testing Plan (if proposed)

Attachment I - Measures for Minimizing Surface Stream Contamination

- Agent Authorization Form (TCEQ-0599), if application submitted by agent**
- Application Fee Form (TCEQ-0574)**
- Check Payable to the "Texas Commission on Environmental Quality"**
(To be paid via TCEQ FTP site upon administrative approval)
- Core Data Form (TCEQ-10400)**

Section 2.0

EDWARDS AQUIFER APPLICATION COVER PAGE

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: 211 Quarry				2. Regulated Entity No.: 102156270			
3. Customer Name: Martin Marietta Materials Southwest, LLC				4. Customer No.: 606114726			
5. Project Type: (Please circle/check one)	<input checked="" type="checkbox"/> New	Modification		Extension		Exception	
6. Plan Type: (Please circle/check one)	<input checked="" type="checkbox"/> WPAP	<input type="checkbox"/> CZP	<input type="checkbox"/> SCS	<input type="checkbox"/> UST	<input type="checkbox"/> AST	<input type="checkbox"/> EXP	<input type="checkbox"/> EXT
7. Land Use: (Please circle/check one)	Residential		<input checked="" type="checkbox"/> Non-residential		8. Site (acres):		613 +/-
9. Application Fee:	\$10,000		10. Permanent BMP(s):			Natural Vegetative Filter Strips Sedimentation Pond	
11. SCS (Linear Ft.):			12. AST/UST (No. Tanks):			6	
13. County:	Medina/ Bexar		14. Watershed:			San Geronimo Creek	

Application Distribution

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	—
Region (1 req.)	—	—	—
County(ies)	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/ Edwards Aquifer <input type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	<input type="checkbox"/> Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	<u>1</u>	—	—	<u>1</u>	—
Region (1 req.)	<u>1</u>	—	—	<u>1</u>	—
County(ies)	<u>1</u>	—	—	<u>1</u>	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Trinity-Glen Rose	<input type="checkbox"/> Edwards Aquifer Authority	<input type="checkbox"/> Kinney	<u>1</u> EAA <u>1</u> Medina	<input type="checkbox"/> EAA <input type="checkbox"/> Uvalde
City(ies) Jurisdiction	<input type="checkbox"/> Castle Hills <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Helotes <input type="checkbox"/> Hill Country Village <input type="checkbox"/> Hollywood Park <input checked="" type="checkbox"/> San Antonio (SAWS) <input type="checkbox"/> Shavano Park	<input type="checkbox"/> Bulverde <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Garden Ridge <input type="checkbox"/> New Braunfels <input type="checkbox"/> Schertz	NA	<u>1</u> 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.

Ralph Voss Jr., P.E.

Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent

Date 12/18/23

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):

Section 3.0

GENERAL INFORMATION FORM

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

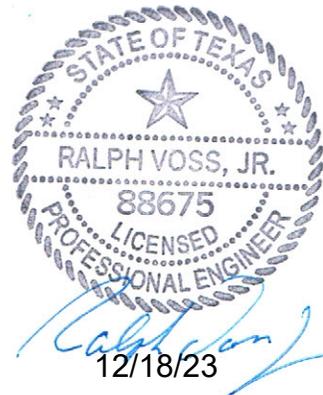
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent: Ralph Voss Jr., P.E.

Date: 12/18/23

Signature of Customer/Agent:

Ralph Voss Jr.



Project Information

1. Regulated Entity Name: 211 Quarry
2. County: Medina/Bexar
3. Stream Basin: San Geronimo Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority
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: Leslie Mackay
Entity: Martin Marietta Materials Southwest, LLC
Mailing Address: 4949 N. Loop 1604 W., Suite 135
City, State: San Antonio, TX Zip: 78249
Telephone: (210) 208-4067 FAX: 210-208-4065
Email Address: Leslie.Mackay@martinmarietta.com

8. Agent/Representative (If any):

Contact Person: Ralph Voss Jr., P.E.
Entity: Forster Engineering
Mailing Address: 401 Maricopa Drive
City, State: Canyon Lake, Tx Zip: 78133
Telephone: 210-289-0580 FAX: _____
Email Address: rvoss@forsterengineering.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 San Antonio, Tx
- 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 entrance to the 211 Quarry is located on the west side of Hwy 211, approximately 2 miles north of the _____ intersection of Hwy 211 and FM 471.

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: _____

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

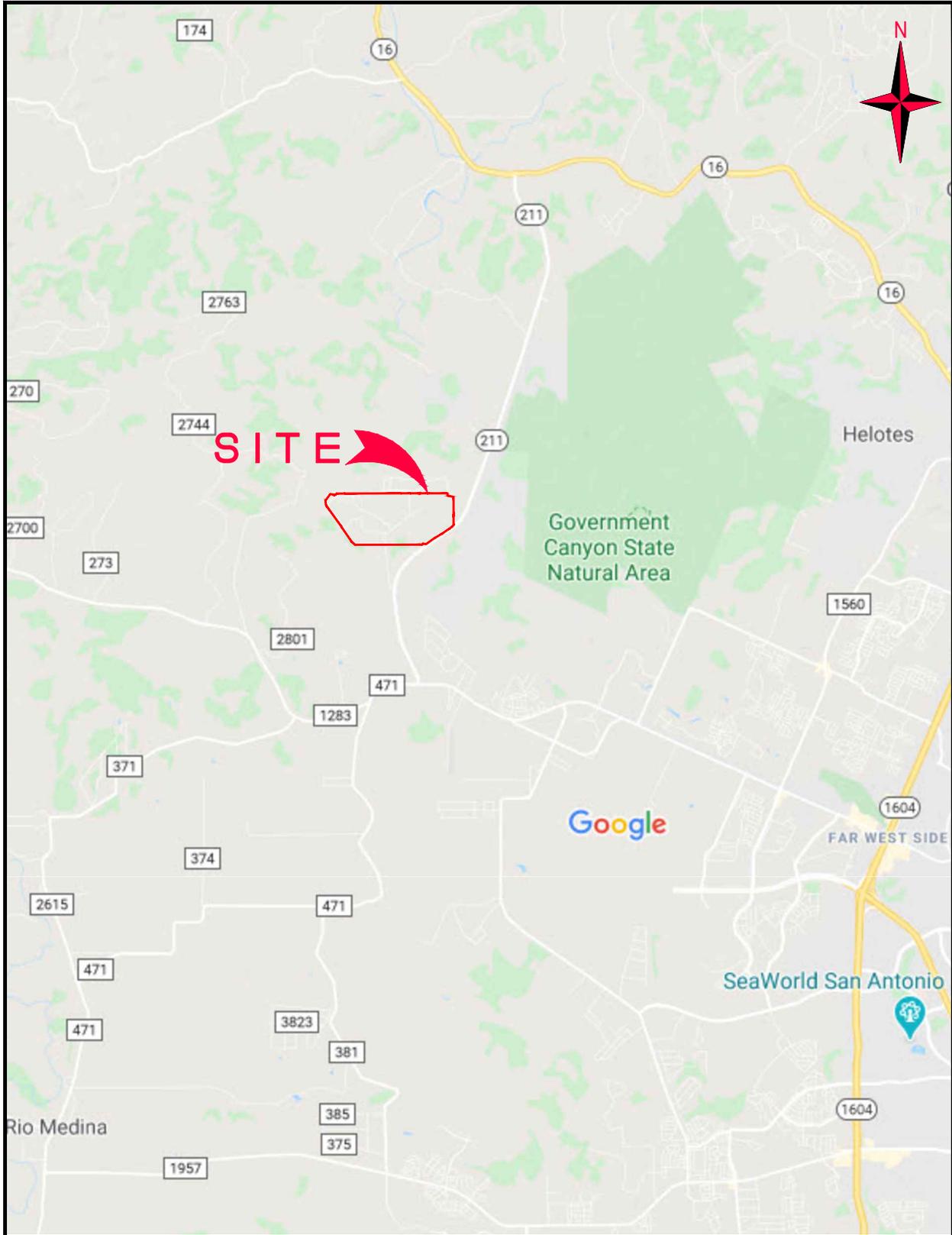
- (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

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)~~ ^{digital} 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.

211 QUARRY
WATER POLLUTION ABATEMENT PLAN

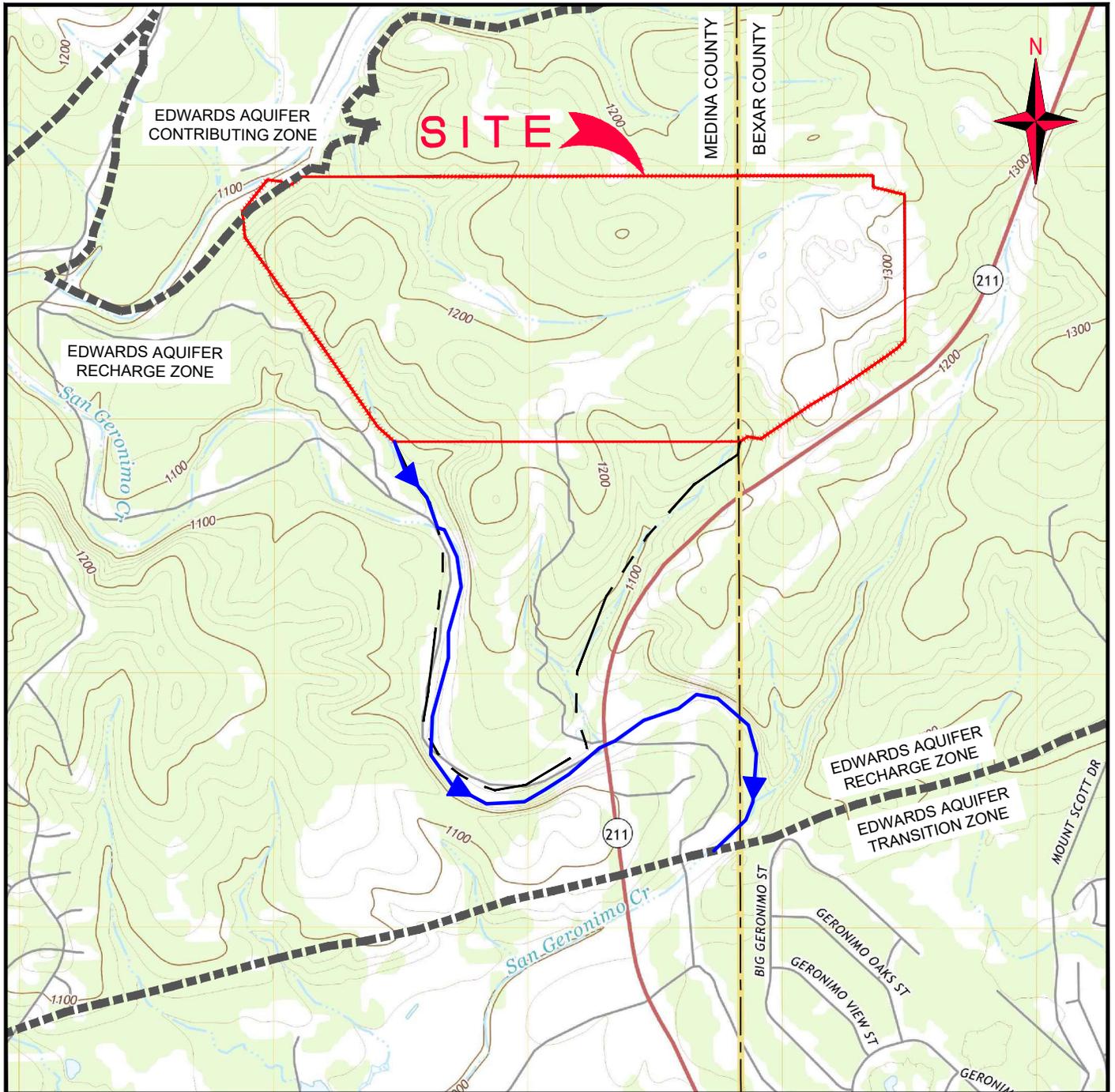


SITE LOCATION MAP
(Base Map: Google Maps - 2020)



SCALE: 1" = 10,000'

**211 QUARRY
WATER POLLUTION ABATEMENT PLAN**

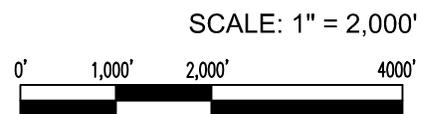


EDWARDS AQUIFER RECHARGE ZONE MAP

(Base Map: USGS TOPOGRAPHIC MAPS
SAN GERONIMO, TEXAS 7.5' QUADRANGLE)

LEGEND

- PROJECT LIMITS
- ▶ DRAINAGE WAY
- - - OVERALL SITE BOUNDARY
- ▬▬▬▬▬▬ EDWARDS AQUIFER RECHARGE ZONE BOUNDARY



GENERAL INFORMATION FORM TCEQ-0587
ATTACHMENT C
PROJECT DESCRIPTION

The 211 Quarry is located on the west side of Hwy 211, approximately 2 miles north of the intersection of Hwy 211 and FM 471 as illustrated on Attachment A. A portion of the site is located in Medina County and a portion in Bexar County.

There have been three (3) previous WPAP/WPAP Modification approvals for this quarry operation as listed below:

- WPAP prepared by Raba-Kistner Consultants, Inc on behalf of Quarry Materials Corporation approved by the Texas Natural Resource Conservation Commission (TNRCC) on February 10, 1995.
- WPAP Modification prepared by Raba-Kistner Consultants, Inc. on behalf of Redland Stone Products Company approved by the TNRCC on August 11, 1997.
- WPAP prepared by Westward Environmental, Inc. on behalf of Martin Marietta Materials approved by the TNRCC on June 7, 1999.

Per instructions from Ms. Lillian Butler, TCEQ Edwards Aquifer Program Section Manager, this application is a new WPAP application that supersedes the previous approvals listed above.

The project site contains approximately 613 acres and is located inside the north boundary of the Edwards Aquifer Recharge Zone, adjacent to the San Geronimo Creek. Property surrounding the site consists of undisturbed land and rural homesteads. Martin Marietta is in the process of quarrying limestone aggregate on the site. An asphalt batch plant that previously existed on the site is no longer in operation and those facilities have been removed.

Impervious cover constitutes approximately 1.1% (6.9 acres) of the 613 acre WPAP project limits. This impervious cover consists of a paved entrance road, an office trailer, laboratory buildings, scale house and scale, AST containment facilities, and various other structures within the project area. The WPAP project area includes an existing on-site sewage facility (Septic tank and drain field) and Above Ground Storage Tanks (ASTs). The site has an active AST plan in place. There are no areas to be demolished.

Existing BMPs include earthen berms constructed of topsoil material, rock berms, and vegetated buffer areas that surround the project area and will continue to control and treat storm water runoff. Quarry pit excavation limits will be maintained sixty feet from property lines and 100-year flood plain boundaries. To the extent possible, upgradient storm water will be diverted around the proposed mine area and on-site storm water will be captured within the quarry; or maintained on site by perimeter berms.

One water re-use pond currently exists on site as well. This pond was established in the mid to late 1990's and is believed to be unlined. Per guidance from TCEQ, in order to ensure the infiltration rate of this pond does not exceed RG-500 guidelines, the pond will be monitored and a water balance procedure will be performed as described in the Permanent Storm Water Section of this application.

Additionally, Martin Marietta proposes to place fine materials resulting from the aggregate washing process in newly constructed sediment ponds. The sediment ponds are proposed to be located in mined-out sections of the quarry, and will be constructed as needed following extraction of the in-situ rock.

The TCEQ guidance Best Management Practices for Quarry Operations RG-500 limits the types of impermeable liners recognized as being effective by TCEQ. It has been demonstrated that the proposed self-sealing settling pond is an equally effective approach for groundwater protection and was most recently approved for Martin Marietta's Medina Rock and Rail Quarry as noted in TCEQ WPAP approval letter dated November 18, 2019, as well as their Rio Medina Quarry as noted in TCEQ WPAP approval letter dated November 5, 2020. This methodology is discussed in detail in the Permanent Storm Water Section of this application.

BEST MANAGEMENT PRACTICES FOR QUARRY OPERATIONS RG-500

2.1 Separation from Groundwater in the Recharge Zone

No groundwater is expected to be encountered on site. The quarry will be mined to the previously approved elevation of 1050 ft MSL.

2.2 Sensitive Features

2.2.2 Setbacks and Buffers for Sensitive Features

There were no geologic features identified as sensitive by the Geological Assessment within the WPAP project limits.

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

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

2.2.3 Sensitive Features Identified in the Geological Assessment

There were no geologic features identified as sensitive by the Geological Assessment within the WPAP project limits. Two man-made, non-sensitive features identified in the Geologic Assessment within the project limits are wells (S-3 and S-4). No vehicle maintenance, storage areas, or other concentrated sources of contamination will be located within 150 feet of the wells.

Feature S-3 is a water well that is currently being used as a water source for livestock on the property. When excavation activities progress within 150 feet of the well, the well will be plugged according to applicable regulations and ultimately mined through. Feature S-4 is an active well currently being used as a water source for plant operations. The well is in compliance with applicable regulations and will continue to be used during plant operations.

2.2.4 Sensitive Features Discovered During Quarrying

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

1. Sensitive geologic feature recognition training for plant and quarry operators will be conducted. An on-site quarry manager and/or designated employees experienced in feature identification will conduct visual surveys after each blast to ensure adequate identification and reporting of sensitive features. The on-site quarry manager and designated employees will receive annual training prepared by a licensed Professional Geologist on feature identification and protection.
2. The appropriate TCEQ Regional Office will be immediately notified upon discovery of any sensitive features encountered during the quarrying operations. Upon discovery, work in the vicinity of the sensitive feature will stop until after protection for the feature is installed. Sensitive features on quarry benches will be sealed with flowable fill or protected with material berms, which will be maintained on a daily basis if necessary.
3. Sensitive features located on the ultimate quarry floor, which will not be excavated or mined out by further quarry activities, will be sealed with flowable fill before regulated activities near the sensitive feature may proceed. Sensitive features located on the quarry floor of intermediate benches above the ultimate quarry floor, will not be sealed, but will be protected by material berms until such time as this area of the quarry containing the sensitive feature will be mined.
4. Sensitive features located in the highwalls, which are well above the level of potential water ponding in the quarry pit and unlikely to receive contamination from any other logical or recognized source, will not be sealed.
5. If sensitive features located in the highwalls are below the level of potential water ponding in the quarry pit, or likely to receive contamination from any other logical or recognized source, they will be sealed with flowable fill before regulated activities near the sensitive feature may proceed.
6. Large features may be first filled with gravel or large rocks before placement of flowable fill. A minimum of 18-inches of flowable fill will be placed above the gravel or rocks. Flowable fill is to be used to provide a reliable seal throughout the sensitive feature as its characteristics allow it to flow around and between the gravel and large rocks and conform to irregular limits of a sensitive feature. As structural integrity and bearing capacity is not a design concern in these applications, concrete is not recommended or required.

2.2.5 Inspection and Maintenance of Sensitive Features

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

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

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

2.3 Quarry Berms

Earthen berms surrounding the disturbed areas of the site, rock berms, and natural vegetation buffers will either filter or prevent any on-site surface water from flowing off site untreated. The earthen berms and rock berms will be constructed in stages in advance of and in coordination with quarry disturbances. Once the quarry pit and earthen berms are established, there will be no significant or untreated discharges from this site. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features which may exist down-gradient of the site. The earthen berms and rock berms will be constructed in accordance with their respective design criteria outlined in TCEQ guidance manual RG-348 Edwards Aquifer Rule Technical Guidance on Best Management Practices (BMPs).

2.4 Haul Roads, Parking Lots, and Tire Washes

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

2.5 Stream Crossings and Buffers

No stream crossings will be constructed on the project site. Earthen berms and natural vegetation buffers will prevent any surface water from flowing off site untreated.

2.6 Dust Control

A water truck and/or dust control chemicals will be utilized to control dust in active areas of the quarry. Natural vegetative cover will be left in place as long as practicable to reduce the potential for dust to become airborne.

2.7 Mineral-Exploration Test Holes and Water Wells

Currently, there are no active test/bore holes in the quarry area. Any future test/bore holes in the quarry area will be managed in accordance with 30 TAC 213.7.

There are two wells located within the project limits. No vehicle maintenance, storage areas, or other concentrated sources of contamination will be located within 150 feet of the wells. Well S-3 is a water well that is currently being used as a water source for livestock on the property. Feature S-4 is an active well currently being used as a water source for plant operations. This well is in compliance with applicable regulations. When excavation activities progress within 150 feet of either well, the respective well will be plugged according to applicable regulations.

2.8 Vehicle and Equipment Maintenance

Vehicles and equipment will be parked in designated locations, visually checked on a daily basis when plant is operating, and drip pans will be used to catch drips as needed. Chronic drips will be repaired as soon as practicable. When maintenance must be performed, a plastic liner or disposable base pad will be utilized as secondary containment. Disposal of all used oil, antifreeze, solvents, and other automotive-related chemicals shall be in accordance to manufacturer instructions. These wastes require special handling and disposal. Used oil, antifreeze, and some solvents can be recycled at designated facilities, but other chemicals must be disposed of at a hazardous-waste disposal site.

2.9 Storage and Movement of Petroleum and Fuel

2.9.1 AST Facility Plan

This site has an AST facility that is covered under an active and approved AST Plan.

2.9.2 Fueling Outside the Pit

The 211 Quarry has an active Spill Prevention Control and Countermeasure (SPCC) plan in accordance with 40 CFR part 112. Heavy equipment is fueled outside the active pit area by mobile fuel trucks in areas where site topography, diversionary structures, and readily available on-site spill response equipment and materials are practical and effective to prevent a discharge of petroleum products from reaching navigable waters at this facility. Secondary containment such as a drain pan shall be used when transferring fuel from the tank truck to the fuel truck. Additionally, wheels on mobile fuel truck and heavy equipment will be chocked while refueling.

2.9.3 Fueling of Equipment in the Pit

Heavy equipment may be fueled in the active quarry pit when fueling outside the pit is not practical. Secondary containment such as a drain pan shall be used when transferring fuel from the tank truck to the fuel truck. Wheels on mobile fuel truck and heavy equipment will be chocked while refueling, and the refueling operation will be continuously monitored by refueling personnel.

2.10 Industrial Facilities on-Site

There are no existing or proposed industrial facilities on site.

2.11 Sanitary Wastewater Disposal

On-site sewage will be handled by portable toilets and an existing septic system located outside of the quarry pits. Domestic project wastewater collected in portable toilets will be disposed of weekly by a TCEQ registered waste disposal service. Portable toilets will be located on level ground surfaces away from high traffic areas. Portable toilets will be routinely inspected and serviced at a frequency sufficient to maintain sanitary conditions. Employees will be trained on waste water discharging prohibitions.

2.11.1 Portable Toilet BMPs

Transport (industrial activity)

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

Placement (site activity – construction)

- Locate portable toilets at least 20 feet from the nearest storm-drain inlet or sensitive feature buffer area
- Prepare a level ground surface with clear access to the toilets.
- Secure all portable toilets with a stake driven into the ground to prevent tipping by accident, weather, or vandalism.

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

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

2.12 Spill Prevention and Control

Martin Marietta Materials Southwest, LLC maintains the following required plans and permits onsite which address spill prevention and control and are incorporated herewith by reference.

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

3 BMPs for Areas Discharging to Surface Waters

3.1 Introduction

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

3.2 BMPs for Temporary Erosion and Sediment Control

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

3.3 Permanent Structural BMPs

No permanent structural BMPs are proposed.

3.3.1 General Requirements

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

3.3.2 Required Calculations

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

4 BMP Requirements for Areas within Quarry Pits

4.1 Introduction

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

4.2 Permanent Structural BMPs

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

5 Management of Process Water

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

Not applicable to this site.

5.1.2 Innovative Technology for Aggregate-Production Facilities

Process water used to wash aggregates will be directed to the proposed sediment ponds. For sedimentation basins, the TCEQ technical guidance manual RG-500 states an impermeable liner should be provided. TCEQ lists clay or geotextile liners as examples, and further recognizes that other materials (such as shotcrete or concrete) may perform equally well. The methodology proposed for this WPAP includes evaluation of sediment pond locations by a Professional Geologist, and grouting of identified sensitive features prior to introduction of process water. The applicant believes the professionally inspected sediment pond with grouted sensitive features provides equivalent water protection to the examples listed in the guidance manual. This methodology was previously approved for similar conditions at Martin Marietta's Medina Rock and Rail Quarry as noted in TCEQ WPAP approval letter dated November 18, 2019 as well as for their Rio Medina Quarry as noted in TCEQ WPAP approval letter dated November 5, 2020. Discussion of the sediment pond construction and monitoring is provided in Attachment C of the Permanent Section of this WPAP.

Section 4.0

GEOLOGIC ASSESSMENT FORM

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: Roman C. Pineda,
P.G.

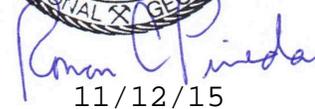
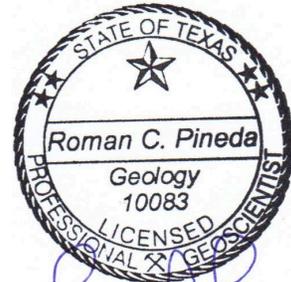
Telephone: (210) 698-5544

Fax: N/A

Date: November 12, 2015

Representing: Forster Engineering, TBPE Firm #12385 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



11/12/15

Regulated Entity Name: Martin Marietta Materials

Project Information

1. Date(s) Geologic Assessment was performed: March 4, 2015

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)
Eckrant cobbly clay (TaC)	D	2-4
Eckrant-Rock outcrop complex (TaD)	C	1-2
Eckrant-Rock outcrop association, hilly (TAF)	C	1-2
Eckrant-Rock outcrop association, undulating (TAD)	D	2-4

Soil Name	Group*	Thickness(feet)
See attached for additional soil types		

** 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'

Site Geologic Map Scale: 1" = 400'

Site Soils Map Scale (if more than 1 soil type): 1" = 1400'

**MARTIN MARIETTA MATERIALS
HIGHWAY 211 QUARRY-WPAP MODIFICATION**

Additional Soil Types

Soil Name	Group*	Thickness (feet)
Kavett-Tarrant association, undulating (KAD)	D	1-2
Orif complex (Or)	A	>5
Speck association, undulating (SPD)	D	1-2

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 three (#) 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 TABLE			PROJECT NAME: Martin Marietta Materials, Highway 211 Quarry																	
LOCATION			FEATURE CHARACTERISTICS											EVALUATION		PHYSICAL SETTING				
1A	1B *	1C *	2A	2B	3	4			5	5A	6	7	8A	8B	9	10	11		12	
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DIP (%)	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY	CATCHMENT AREA (ACRES)		TOPOGRAPHY	
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	
S-1	29°32'35.9"	98°48'55.1"	SH	20	Kek	10	10	2	-	0			O,C	35	55		55	X		Hillside
S-2	29°32'22.1"	98°48'43.9"	MB	30	Kek	0.5	0.5	?	-	0			X	5	35	35		X		Hillside
S-3	29°33'02.9"	98°48'48.2"	MB	30	Kek	0.5	0.5	?	-	0			X	5	35	35		X		Hillside
S-4	29°33'23.4"	98°48'19.9"	MB	30	Kek	0.5	0.5	?	-	0			X	5	35	35		X		Hillside
S-5	29°32'46.5"	98°49'02.9"	SFZ	30	Kek	40	80	<0.1	N80°W	0	1	<0.1-0.2	O,F,C	5	35	35			X	Streambed
S-6	29°32'38.5"	98°49'02.1"	SFZ	30	Kek	65	95	<0.1	N45°W	0	1/3	<0.1-0.2	O,F,C	5	35	35			X	Streambed
S-7	29°32'25.3"	98°49'04.9"	SFZ	30	Kek	95	130	<0.1	N45°E	10	1/5	<0.1-0.2	O,F,C	5	35	35			X	Streambed
S-8	29°32'41.8"	98°48'59.9"	CZ	30	Kek	1320	~50	120	-	0			O,N	5	35	35		X		Cliff
S-9	29°33'01.4"	98°48'54.5"	F	20	Kek/Kgru	7400			N63°E	10			FS	5	35	35			X	Hillside
S-10	29°32'16.5"	98°48'45.9"	F	20	Kek	1300			N48°E	10			FS	5	35	35			X	Hillside
S-11	29°33'19.2"	98°48'08.8"	MB	30	Kek	1300	2800	100+	-	0			F,N	5	35	35			X	Hillside

* DATUM: NAD 83

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

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

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

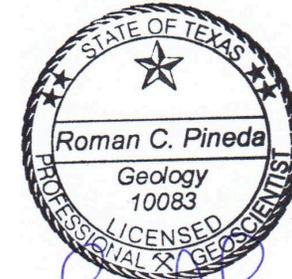
I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist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

Date 11/12/15

Sheet 1 of 1
Attachment A

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

Roman C Pineda



Roman C Pineda
11/12/15

MARTIN MARIETTA MATERIALS HIGHWAY 211 QUARRY – WPAP MODIFICATION

Stratigraphic Column

Hydrogeologic subdivision		Group, formation, or member		Hydrologic function	Thickness (feet)	Lithology	Field Identification	Cavern development	Porosity/ permeability type		
	V	Lower Cretaceous	Edwards Group	Kainer Formation (Kek)	Grainstone member	AQ	50-60	<i>Miliolid</i> grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/ recrystallization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric/one of the most permeable
	VII				Dolomitic member	AQ	110 -130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane-fabric/water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and <i>miliolid</i> grainstone	Massive, nodular and mottled, <i>Exogyra texana</i>	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface
	Lower confining unit				Upper member of the Glen Rose Limestone (Kgru)	CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds / relatively impermeable

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

MARTIN MARIETTA MATERIALS HIGHWAY 211 QUARRY-WPAP MODIFICATION

Narrative Description of Site Geology

The overall potential for fluid migration to the Edwards Aquifer on the site is LOW. The dominant trend for the site is N56°E, based on an average of the trends of faults on the site and from published maps (Stein & Ozuna, 1995). The majority of the site is located within dolomitic member (Kekd) of the Kainer Formation. The basal nodular member (Kekbn) outcrops along Geronimo Creek and within tributaries on the northern area of the property. The Kirschberg evaporate member (Kekk) and grainstone member (Kekg) of the Kainer Formation outcrop on some of the hilltops on the property. The Upper member of the Glen Rose Formation (Kgru) outcrops within Geronimo Creek in a small area in the northwestern corner of the property. Water that infiltrates the Kekbn passes through the bottom on the Edwards Group into the underlying Glen Rose Formation and recharges the Trinity Aquifer. The lower section of the Edwards Group is not saturated on-site.

The Kekg is characterized by a white *miliolid* grainstone, mudstone to wackestone. Karst development within the grainstone member consists of few caves and sinkholes. The Kekk is characterized by highly altered crystalline limestone to chalky mudstone with boxwork voids. Karst development within the Kirschberg member consists of probable extensive cavern development. The Kekd is characterized by massively bedded mudstones and grainstones. Karst development within the dolomitic member is characterized by few, small sinkholes and caves form as vertical shafts. The Kekbn is characterized as massively bedded, shaly, nodular mudstone to limestone. Karst development within the basal nodular member has vertical shafts as well as large lateral caves. The Kgru is characterized as yellowish-tan, thinly bedded limestone and marl. Cave development within the upper member of the Glen Rose (Kgru) is predominately lateral with large rooms.

Feature S-1

Feature S-1 is sinkhole with loose organics and coarse infilling. Therefore, the probability for rapid infiltration is high.

Features S-2 & S-3

Features S-2 and S-3 are water wells utilized as a water source for livestock on the property. The steel well casing extends above the ground surface. Therefore, the probability for rapid infiltration is low. The wells will be plugged in accordance with all applicable regulations.

Feature S-4

Feature S-4 is a water well used for the plant operations. The well is in use and the casing extends about the ground surface surround by a concrete pad. Therefore, the probability for rapid infiltration is low. The well is in compliance with applicable regulations and will continue to be used during plant operations.

Features S-5, S-6 & S-7

Features S-5, S-6 and S-7 are zones of fractured rock exposed within Geronimo Creek. The trend of the vertical joints vary but predominantly trend east/west. The fractures show evidence of calcite cement within the apertures. Therefore, the probability for rapid infiltration is low.

Feature S-8

Feature S-8 is a zone of caves and solution cavities within a cliff face along Geronimo Creek. Several horizontal solution cavities and caves were identified within the cliff face. Evidence of discharge from karst feature openings in the cliff face was observed. Therefore, the probability for rapid infiltration is low.

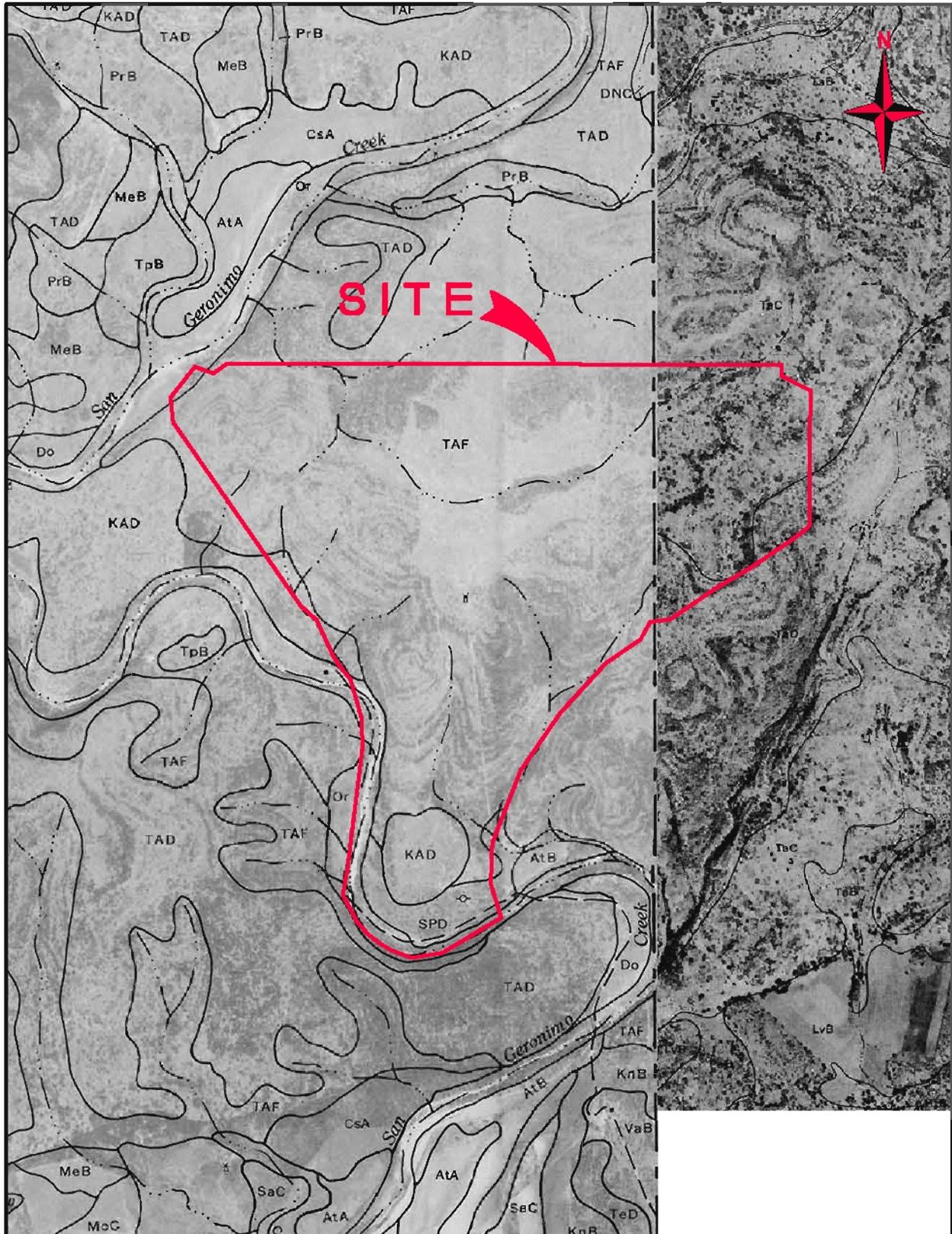
Features S-9 & S-10

Features S-9 and S-10 are faults. Fault S-9 is a fault which juxtaposes the Upper member of the Glen Rose Limestone and the basal nodular and dolomitic members of the Kainer Formation, to the north, with the basal nodular and dolomitic members of the Kainer Formation on the south side of the fault. Fault S-10 is an intraformational fault within the dolomitic member and basal nodular member of the Kainer Formation. The change in lithology was observed in the field. However, the fault was not accurately identified by field evidence. Therefore, the probability for rapid infiltration is low.

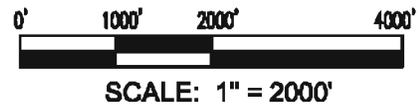
Feature S-11

Feature S-11 is a man-made quarry pit. Limestone rock is exposed and some low areas are filled with fines due to mining operations. The probability for rapid infiltration within the quarry pit ranges from low to background infiltration. No voids displaying evidence of infiltration greater than background were observed.

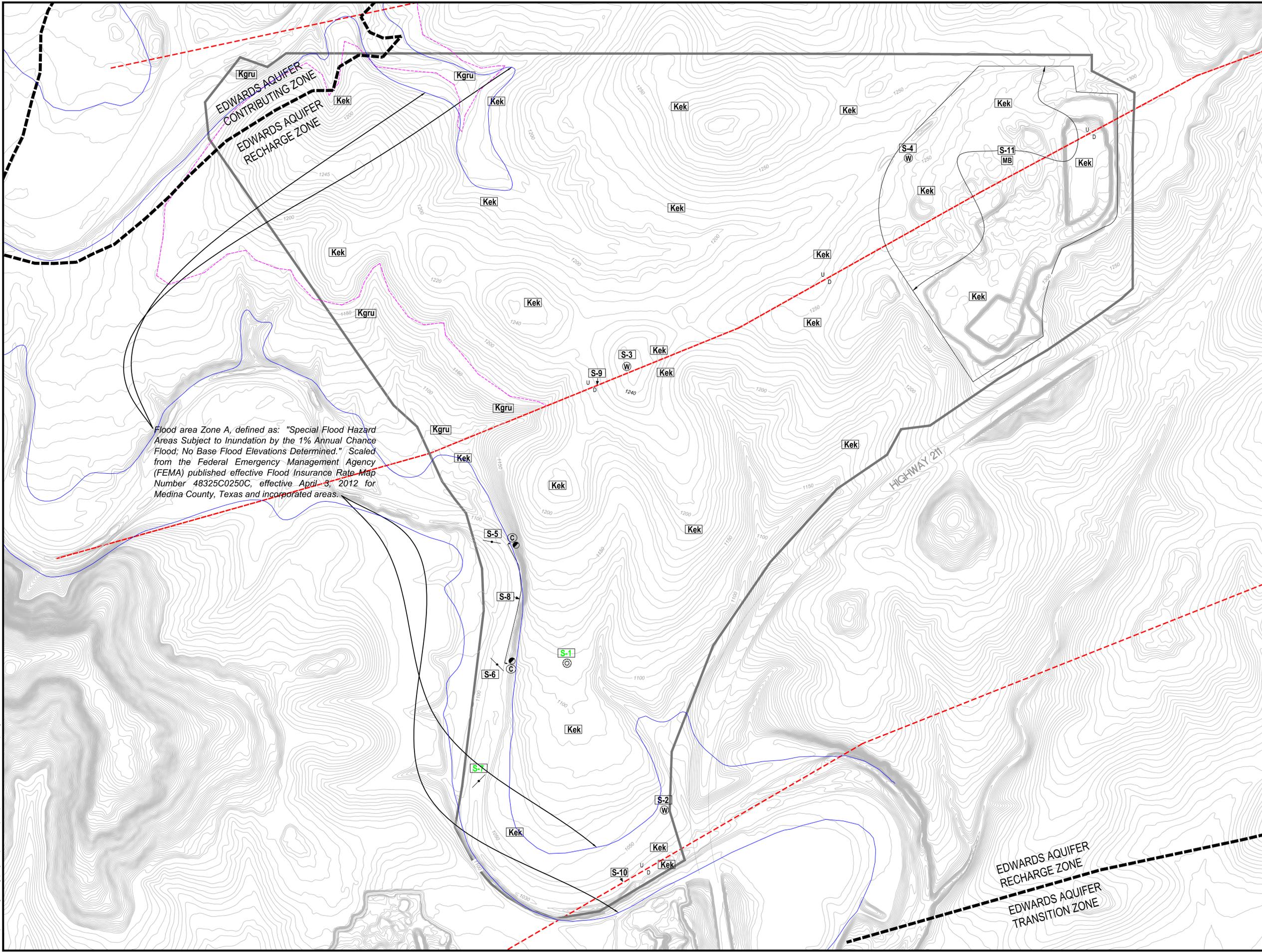
MARTIN MARIETTA MATERIALS HIGHWAY 211 QUARRY SITE SOILS MAP



SOURCE: USDA SOIL SURVEYS
BEXAR COUNTY, SHEET 25
MEDINA COUNTY, SHEET 14

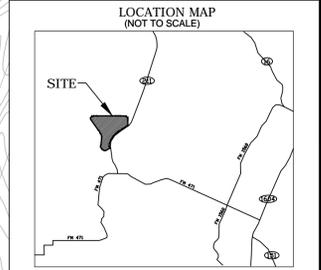


Date: Nov 12, 2015, 8:14am User ID: cdeq
 File: L:\Forster_Engineering\Projects\1031B-15\CAD\211_Attachment_D_GA_mcp.dwg



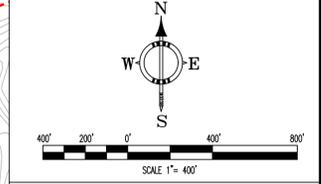
Flood area Zone A, defined as: "Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood; No Base Flood Elevations Determined." Scaled from the Federal Emergency Management Agency (FEMA) published effective Flood Insurance Rate Map Number 48325C0250C, effective April 3, 2012 for Medina County, Texas and incorporated areas.

Notes:
 1. Contour Data: 2010 TNRIS 5 ft Contours for San Geronimo Quadrangle.
 2. Flood Data: FEMA Flood Insurance Rate Map Numbers 48325C0250C, effective April 3, 2012.



LEGEND

- PROJECT LIMITS
- EDWARDS AQUIFER RECHARGE ZONE BOUNDARY
- Qal ALLUVIUM
- Kpgg PECAN GAP CHALK
- Kau AUSTIN CHALK
- Kef EAGLE FORD GROUP
- Kbu BUDA LIMESTONE
- Kdr DEL RIO CLAY
- Kgt GEORGETOWN FORMATION
- Kep PERSON FORMATION
- Kkn KAINER FORMATION
- Kgru GLEN ROSE FORMATION (UPPER)
- S-1 GEOLOGIC OR MAN-MADE FEATURE (NON-SENSITIVE)
- S-1 GEOLOGIC OR MAN-MADE FEATURE (SENSITIVE)
- FORMATION CONTACT (LOCATION APPROXIMATE)
- FAULT - LOCATION ACCURATE
- FAULT - LOCATION APPROXIMATE
- FAULT - LOCATION INFERRED
- UPTHROWN AND DOWNTHROWN SIDES OF FAULT
- VERTICAL JOINT SHOWING STRIKE
- C CAVE
- SINKHOLE
- NON-KARST CLOSED DEPRESSION
- SOLUTION CAVITY
- OTHER NATURAL BEDROCK FEATURES
- ZONE
- W WATER WELL
- MB MAN-MADE FEATURE IN BEDROCK



SIGNATURE/SEAL

 Roman C. Pineda
 11/12/15

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

PROJECT DESCRIPTION
 MARTIN MARIETTA MATERIALS
 HIGHWAY 211 QUARRY
 GEOLOGIC ASSESSMENT

DRAWING SITE GEOLOGIC MAP	
DATE 11/12/2015	JOB NO. 1031B-15
SCALE 1" = 400'	DRG NO.
DRAWN BY RCP	ATTACHMENT D
CHECKED BY CPF	SHEET 1 OF 2

Section 5.0

WATER POLLUTION ABATEMENT PLAN APPLICATION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of ~~Customer~~/Agent: Ralph Voss Jr., P.E.

Date: 12/18/23

Signature of ~~Customer~~/Agent:



Regulated Entity Name: 211 Quarry

Regulated Entity Information

1. The type of project is:

- Residential: Number of Lots: _____
- Residential: Number of Living Unit Equivalents: _____
- Commercial
- Industrial
- Other: Quarry

2. Total site acreage (size of property): 613 +/-

3. Estimated projected population: 15

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

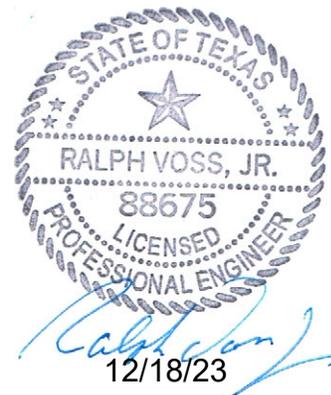


Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	186,300	÷ 43,560 =	4.3
Parking	31,100	÷ 43,560 =	0.7
Other paved surfaces	82,000	÷ 43,560 =	1.9
Total Impervious Cover	299,400	÷ 43,560 =	6.9

Total Impervious Cover 6.9 ÷ **Total Acreage** 613 X 100 = 1.1 % Impervious Cover

5. **Attachment A - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

Complete questions 7 - 12 if this application is exclusively for a road project.

7. Type of project:

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

8. Type of pavement or road surface to be used:

- Concrete
- Asphaltic concrete pavement
- Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.

Width of R.O.W.: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

14. The character and volume of wastewater is shown below: NOT APPLICABLE

_____ % Domestic	_____ Gallons/day
_____ % Industrial	_____ Gallons/day
_____ % Commingled	_____ Gallons/day
TOTAL gallons/day _____	

15. Wastewater will be disposed of by:

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

Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

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

Sewage Collection System (Sewer Lines):

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

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

The SCS was previously submitted on _____.

The SCS was submitted with this application.

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

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

Existing.

Proposed.

16. All private service laterals will be inspected as required in 30 TAC §213.5. NOT APPLICABLE

Site Plan Requirements

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

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

Site Plan Scale: 1" = 400 '.

18. 100-year floodplain boundaries:

Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FIRM Map Number 48325C0250D effective May 15, 2020

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

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

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

There are 2 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

The wells are not in use and have been properly abandoned.

The wells are not in use and will be properly abandoned.

The wells are in use and comply with 16 TAC §76.

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

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

All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

No sensitive geologic or manmade features were identified in the Geologic Assessment.

Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

- 22. The drainage patterns and approximate slopes anticipated after major grading activities.
- 23. Areas of soil disturbance and areas which will not be disturbed.
- 24. Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
- 25. Locations where soil stabilization practices are expected to occur.
^{N/A}
- 26. Surface waters (including wetlands).
 N/A
- 27. Locations where stormwater discharges to surface water or sensitive features are to occur.
 There will be no discharges to surface water or sensitive features.
- 28. Legal boundaries of the site are shown.

Administrative Information

- 29. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 30. Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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

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

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

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

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

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

The runoff coefficient of the site in the pre-construction condition is estimated to be approximately 0.40. The overall runoff coefficient of the site in the post-construction condition is estimated to be approximately 0.75. However, this overall runoff coefficient is heavily weighted by conditions within the excavated quarry pit, and no runoff will occur from the pit itself. The post-construction runoff coefficient outside the limits of the quarry pit will be similar to pre-construction conditions since these areas will be comprised of vegetated earthen berms and natural vegetation buffers.

MEDINA COUNTY HEALTH UNIT
SANITATION DIVISION
3103 AVE. G
HONDO, TEXAS 78861
(210) 426-4391

Date: 8/26/94

RE:

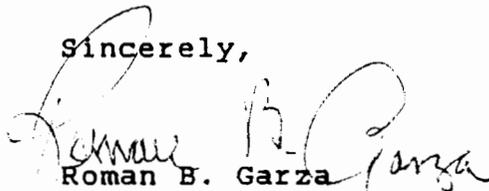
To Whom It May Concern:

This is to advise we have inspected the sewer system at the residence of QUARRY MATERIALS INC. located at Highway 211 S.M.N. 20471.

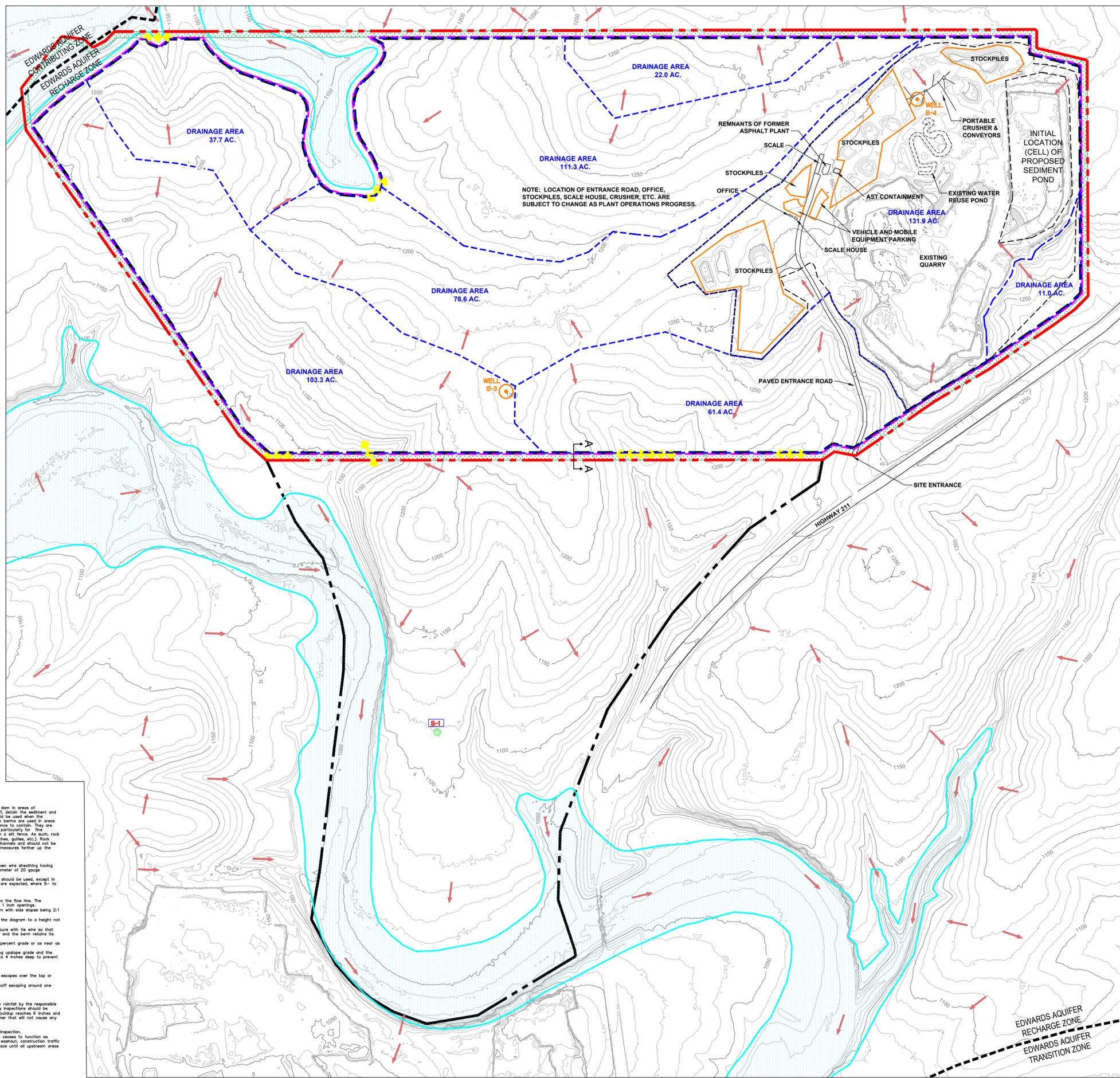
These sanitary facilities have been found to be safe and meet all sanitary standards required in this county.

In the opinion of the local Department of Health, this septic system with proper maintenance can be expected to function satisfactory and is not likely to create unsanitary conditions.

Sincerely,

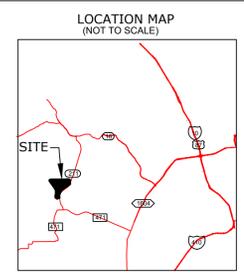

Roman B. Garza
Sanitation Inspector
Medina County, Texas

RBG/



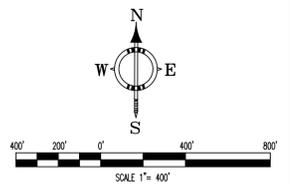
REV. NO.	DESCRIPTION	DATE

Notes:
 1. Contour Data From Aerial Photography Dated January 12, 2020.
 2. Flood Data: FEMA Flood Insurance Rate Map Number 48325C0250D, effective May 15, 2020.



LEGEND

- PROJECT LIMITS
- EARZ BOUNDARY
- EXISTING 10' CONTOURS
- EXISTING 50' CONTOURS
- 100 YEAR FLOODPLAIN
- DRAINAGE AREA
- EXISTING QUARRY LIMITS
- ULTIMATE QUARRY LIMITS
- EXISTING FLOW ARROW
- 50' NATURAL VEGETATED FILTER STRIP
- EARTHEN BERM
- EXISTING WELL
- S-1 SENSITIVE FEATURE
- ROCK BERM



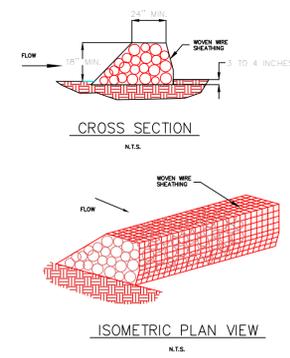
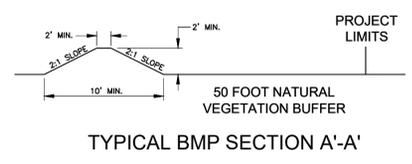
SIGNATURE/SEAL

FORSTER ENGINEERING
 TBPE firm # 12385
 401 MARIOPA DRIVE, CANYON LAKE, TX 78133
 PHONE: (210) 2879-0580
 WWW.FORSTERENGINEERING.COM



PROJECT DESCRIPTION
211 QUARRY
 WATER POLLUTION ABATEMENT PLAN
 DRAWING
SITE PLAN (TCEQ-0584)
ATTACHMENT G (TCEQ-0602)

DATE	12/07/2023	JOB NO.	1031D-23
SCALE	1" = 400'	DRG NO.	
DRAWN BY	RV	EXHIBIT 1	
CHECKED BY	CPF		



ROCK BERMS
 The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the sediment removal from all fences, particularly for final portions, but are able to withstand higher flows than a spill fence. At each rock berm, an earthen berm should be installed to reduce the velocity of flow and should not be substituted for other erosion and sediment control measures further up the watershed.

MATERIALS:
 (1) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 foot and a minimum wire diameter of 20 gauge galvanized and should be secured with short frigs.
 (2) Clean, open graded 3/4- to 2-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

INSTALLATION:
 (1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.
 (2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or steeper.
 (3) Place the rock along the sheathing as shown in the diagram to a height not less than 18".
 (4) Wrap the wire sheathing around the rock and secure with the wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains the shape when walked upon.
 (5) Berm should be built along the contour at zero percent grade or as near as possible.
 (6) The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the contour.

COMMON TROUBLE POINTS:
 (1) Insufficient berm height or length (runoff quickly escapes over the top or around the sides of berm).
 (2) Berm not installed perpendicular to flow line (runoff escaping around one side).

INSPECTION AND MAINTENANCE GUIDELINES:
 (1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streams, additional daily inspections should be made.
 (2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated fill in an approved manner that will not cause any additional siltation.
 (3) Repair any loose wire sheathing.
 (4) The berm should be reshaped as needed during inspection.
 (5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, wearout, construction traffic damage, etc. (6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

ROCK BERM

Date: Dec 07, 2023, 1:19pm, User: (b) Ralph Voss, File: c:\Users\Ralph.Voss\Documents\Foster Engineering (RV)\1031D-20_211 Quarry WPAP Mod_2020\CAD_Files\1031D-20_211 Quarry_Sheets.dwg

Section 6.0

TEMPORARY STORM WATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

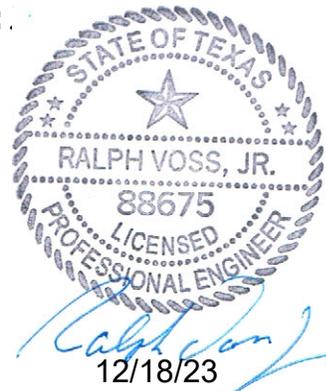
Print Name of ~~Customer~~/Agent: Ralph Voss Jr., P.E.

Date: 12/18/23

Signature of ~~Customer~~/Agent:



Regulated Entity Name: 211 Quarry



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, Oil, Transmission Fluid

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: San Geronimo 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
ATTACHMENT A
SPILL RESPONSE ACTIONS

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

1. In the event of a spill, appropriate actions shall be taken to contain the spill using all available means including absorbent and/or adsorbent materials and readily available mobile equipment. Absorbent and/or adsorbent materials are kept in a readily available location. In the event of an uncontained discharge, available facility equipment shall immediately construct a containment berm down gradient from the discharge and absorb and/or adsorb the discharged material with sand, screenings, and/or other available fines that are on hand. This material shall be properly disposed of in accordance with applicable local, state and federal environmental regulations.
2. After containing the discharge, all media (soil, water, etc.) that came into contact with oil will be collected and stored in such a way that will not continue to affect additional media. Examples of proper materials to use for cleanup include adsorbents and/or absorbents such as: aggregates fines, sand, absorbent pads, booms, socks, etc. Proper cleanup will be deemed complete when all the applicable response requirements are met on all local, state and/or federal levels.
3. Materials that have come into contact with the discharged fluids shall be placed in a temporary staging area until proper methods of disposal can be determined. To prevent additional contamination, impacted materials will be stored on plastic sheets until removal. Plastic sheets will also be used to cover the materials to mitigate contact with rainfall and wind. Sampling of impacted media may be required prior to determining a proper method of disposal. Determining a proper method of disposal will take into consideration all local, state and federal environmental regulatory requirements.
4. In the event of a leak from a tank or piping, as much of the discharge as possible shall be collected manually and stored in an appropriate container until proper disposal or reuse. Immediate action shall be taken to stop or minimize the leak rate. The remaining product in the containment area shall be cleaned up and properly disposed.
5. In the event of a tank, hose or piping failure, arrangements shall be made to empty the tank to a safe level by immediately filling all mobile equipment on the job. The products remaining in the containment shall be handled as previously described.
6. In the event of a fire, the local fire authority shall be contacted immediately.

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

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

Quarry Plant Manager	Kim Brieden
Mobile Phone Number:	(830) 423-4080
Fax Number:	N/A

Environmental Contact	Jessica Bateman
Office Phone Number:	(210) 208-4269
Fax Number:	(210) 208-4065
Mobile Phone Number:	(210) 324-9342

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

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

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

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

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

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

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

CG Environmental	(855) 483-8181
------------------	----------------

5. Pursuant to Texas regulations, the facility must also submit written information, such as a letter, describing the details of the discharge or spill and supporting the adequacy of the response action, to the appropriate TCEQ regional manager within 30 working

days of the discovery of the reportable discharge spill. The written response must document the requirements outlined in 30 TAC §327.5(c).

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

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

DETAILED DISCHARGE REPORT FORM

Reporter's Name and Date: _____

Location of Discharge: _____

Date and Time Discharge Occurred: _____

Material and Amount Discharged: _____

Source of the Release: _____

Cause and Circumstances of Release: _____

Countermeasures to Contain and Clean-up Discharge: _____

Personnel/Agency Contacted Regarding Discharge Procedures: _____

Corrective Actions Implemented to Prevent Recurrence of Discharge: _____

Discharge Report Sent To: _____

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

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

Potential Source – Oil, grease, fuel and hydraulic fluid contamination from equipment and vehicle dripping.

Preventative Measure – Vehicles and equipment will be parked in designated locations, visually checked on a daily basis, and drip pans will be used to catch drips as needed. Chronic drips will be repaired as soon as practicable. When maintenance must be performed, a plastic liner or disposable base pad will be utilized as secondary containment.

Potential Source – Miscellaneous trash and litter from quarry workers.

Preventive Measure – Trash containers will be placed throughout the site to encourage proper trash disposal.

Potential Source - Accidental leaks or spills of oil, petroleum products, or hazardous substances, which are used or stored temporarily on site.

Preventative Measures – Quarry Operator shall incorporate discussions of spill prevention and response actions into annual SPCC training; proper spill prevention and control measures will be adhered to strictly; oil, petroleum products, or hazardous substances will be properly stored, and spill cleanup materials will be stored and readily accessible on site.

Potential Source – Portable toilet spills or overflows

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

TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT C
SEQUENCE OF MAJOR ACTIVITIES

A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) including an estimate of the total area of the site to be disturbed by each activity is as follows:

The sequence of major soil disturbance activities is as follows:

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

Note: Some of the activities above may take place concurrently.

Approximately 563± acres of the 613± acre site will ultimately be disturbed. Approximately 50± acres will be undisturbed or maintained as a natural vegetation buffer which will not be disturbed.

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

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

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

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

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

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

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

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

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

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

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

1. Sensitive geologic feature recognition training for plant and quarry operators will be conducted. An on-site quarry manager and/or designated employees experienced in feature identification will conduct visual surveys after each blast to ensure adequate identification and reporting of sensitive features. The on-site quarry manager and designated employees will receive annual training from a licensed Professional Geologist on feature identification and protection.
2. The appropriate TCEQ Regional Office will be immediately notified upon discovery of any sensitive features encountered during the quarrying operations. Upon discovery, work in the vicinity of the sensitive feature will stop until after protection for the feature is installed. Sensitive features on quarry benches will be sealed with flowable fill or protected with material berms, which will be maintained on a daily basis if necessary.
3. Sensitive features located on the ultimate quarry floor, which will not be excavated or mined out by further quarry activities, will be sealed with flowable fill before regulated activities near the sensitive feature may proceed. Sensitive features located on the quarry floor of intermediate benches above the ultimate quarry floor, will not be sealed, but will be protected by material berms until such time as this area of the quarry containing the sensitive feature will be mined.
4. Sensitive features located in the highwalls, which are well above the level of potential water ponding in the quarry pit and unlikely to receive contamination from any other logical or recognized source, will not be sealed.
5. If sensitive features located in the highwalls are below the level of potential water ponding in the quarry pit, or likely to receive contamination from any other logical or recognized source, they will be sealed with flowable fill before regulated activities near the sensitive feature may proceed.
6. Large features may be first filled with gravel or large rocks before placement of flowable fill. A minimum of 18-inches of flowable fill will be placed above the gravel or rocks. Flowable fill is to be used to provide a reliable seal throughout the sensitive feature as its characteristics allow it to flow around and between the gravel and large rocks and conform to irregular limits of a sensitive feature. As structural integrity and bearing capacity is not a design concern in these applications, concrete is not recommended or required.

**TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT F
STRUCTURAL PRACTICES**

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

**TEMPORARY STORMWATER SECTION FORM TCEQ-0602
ATTACHMENT G
TEMPORARY STORM WATER PLAN/DRAINAGE AREA MAP
(SEE EXHIBIT 1, SECTION 5.0)**

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

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

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

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

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

Storm Water Periodic Inspection (Quarterly)

Name: _____ Year: _____
 Signature: _____ Circle the Appropriate Month
 Date: _____ Jan Feb Mar Apr May June
 Location: _____ Permit No. TXR050000 July Aug Sep Oct Nov Dec

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

	YES	NO	
	<input type="checkbox"/>	<input type="checkbox"/>	General
	<input type="checkbox"/>	<input type="checkbox"/>	Is the storm water plan <u>unavailable</u> or at an offsite location?
	<input type="checkbox"/>	<input type="checkbox"/>	Is there any water leaving the property that wasn't generated from a rain event?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any raw land clearing activities that will disturb one (1) acre or more?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any new activities at the facility that are not described in the facility's storm water plan? <small>(refer to the Descriptive Narrative and Operation Summary in the facility's storm water plan.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Does the site map need to be updated? <small>(refer to the site map in Appendix B of the storm water plan)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Is the Storm Water Log incomplete or missing data? <small>(rainfall data should be kept daily.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Good Housekeeping
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Loading/Unloading Areas ?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Outdoor Storage Areas ? <small>(silos, hoppers, stockpiles, etc.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Outdoor Processing Areas ?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Waste Disposal Areas ? <small>(dumpster, trash cans, etc.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Maintenance, Fueling, or Cleaning Areas ?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential sources of pollution in Liquid Storage Tank Areas ? <small>(admixtures, fuel, etc.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Are Dust Producing Activities or Areas in need of housekeeping, maintenance, or repair?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any potential contaminants <small>(containers, open containers, parts, etc.)</small> exposed to precipitation that can be covered or moved under a cover?
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any dumpster/trash bins that are not closed or covered to prevent precipitation from accumulating in them?
	<input type="checkbox"/>	<input type="checkbox"/>	Is there any debris, refuse, or garbage in potential contact with stormwater?
	<input type="checkbox"/>	<input type="checkbox"/>	Are scrap material/parts areas in need of housekeeping?
	<input type="checkbox"/>	<input type="checkbox"/>	Spill Prevention and Response Measures
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any tanks, barrels, or other containers that are not tightly sealed ; have noticeable tears, leaks or drips; or are not clearly labeled ?
	<input type="checkbox"/>	<input type="checkbox"/>	Does any onsite equipment show signs of leaking fluids? <small>(Equipment Pre-Shift Inspections and Maintenance Activities should also be available for inspection)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Have there been any reportable spills or leaks? <small>(If yes, the storm water plan should reflect the event.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Does the <i>Spills and Leaks Log</i> need to be updated for the month?
	<input type="checkbox"/>	<input type="checkbox"/>	Do the spill cleanup supplies need to be restocked? <small>(aggregates, booms, absorbent pads, etc.)</small>
	<input type="checkbox"/>	<input type="checkbox"/>	Are there any chemical or oil containers outside of secondary containment structural controls?

YES NO

Erosion Control Measures

- Are natural vegetative areas in need of maintenance?
- Are there any obvious signs of erosion at the facility?
- Are there signs of erosion from stormwater run-on or run-off in stockpile areas?
- Do existing erosion control best management practices appear to be ineffective?
- Are there any new areas with a high potential for erosion?

YES NO

Maintenance Program for Structural Controls

Are there any structural controls in need of maintenance?

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

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

YES NO N/A

Best Management Practices (BMPs)

- Are sweeper / water truck use records missing or incomplete?
- Do any filter berms, sediment traps, and other BMPs require maintenance or repair?
(Records should be on the *Preventative Maintenance Log* in the stormwater plan.)

YES NO

Employee Training and Education Program

- Are there any new employees or has any member of the pollution prevention team changed? (If Yes, then call Environmental Services for Training)
- Has the facility's required annual training expired? (once a year)

YES NO N/A

Sampling Requirements

- Did a stormwater discharge occur at an authorized outfall during the preceding month?
- If a stormwater discharge occurred within the quarter, are required Quarterly Benchmark Monitoring samples pending collection for the quarter?
- If a stormwater discharge occurred within the preceding month, are required Monthly Visual Monitoring samples pending collection for the month?
(Visual observations of samples should be documented on the Monthly Visual Examination Form)
- If samples have been collected, is sampling documentation missing any of the following required information?

<small>date</small>	<small>sampling location</small>
<small>time</small>	<small>name of sampler</small>
- Are samples being collected after 30 minutes of discharge?
(Samples should be collected within 30 minutes of the beginning of discharge)

Comments:

Describe any "Yes" response given above.

Corrective Action:

Describe in detail all corrective actions taken.

NOTE: FORM MAY BE REVISED/UPDATED ON A PERIODIC BASIS.

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

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

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

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

PROJECT MILESTONE DATES

Date when major site grading activities begin:

Construction Activity

Date

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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

Construction Activity

Date

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Dates when stabilization measures are initiated:

Stabilization Activity

Date

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Section 7.0

PERMANENT STORM WATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

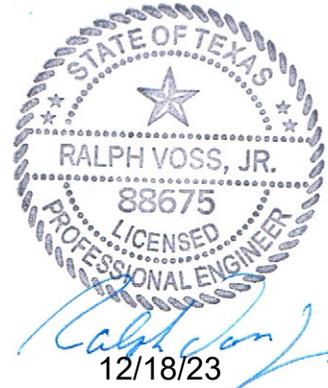
Signature

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

Print Name of Customer/Agent: Ralph Voss Jr., P.E.

Date: 12/18/23

Signature of ~~Customer~~/Agent



Regulated Entity Name: 211 Quarry

Permanent Best Management Practices (BMPs)

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

- Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
 N/A
- These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
 The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

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

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
ATTACHMENT B
BMPS FOR UPGRADIENT STORM WATER**

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 provided below.

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

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

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 provided below.

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

Additionally, Martin Marietta proposes to place fine materials resulting from the aggregate washing process in sediment ponds. The sediment ponds are proposed to be located in mined-out sections of the quarry and will ultimately encompass the entire quarry pit area as shown on the Permanent Storm Water Plan (Attachment F). However, the sediment ponds will initially be constructed in smaller units, or “cells”, as needed following extraction of the in-situ rock. The proposed location of the initial sediment pond “cell” is a previously mined area in the southeast corner of the quarry as shown on the Site Plan (Exhibit 1, Section 5) and Permanent Storm Water Plan (Attachment F).

The TCEQ guidance Best Management Practices for Quarry Operations RG-500 limits the types of impermeable liners recognized as being effective by TCEQ. It has been demonstrated that the proposed self-sealing settling pond is an equally effective approach for groundwater protection and has been approved for Martin Marietta’s Medina Rock and Rail Quarry as noted in TCEQ WPAP approval letter dated November 18, 2019 as well as Martin Marietta’s Rio Medina Quarry as noted in TCEQ WPAP approval letter dated November 5, 2020. Following is a more detailed discussion of this previously approved methodology.

To date, TCEQ has only formally listed types of impermeable liners in its technical guidance RG-500. In 2019 a pilot-scale field testing plan was conducted by Martin Marietta at their

Medina Rock and Rail Quarry that successfully demonstrated that grouting sensitive features identified by a Professional Geologist within a settling pond area and allowing the pond to “self-seal” with fines (washed limestone and clay particles from wash plant process water) is an equally effective, innovative approach for groundwater protection. As an adjunct to this previously approved process, Martin Marietta proposes to amplify the effectiveness of this system by “pre-sealing” the proposed sedimentation pond(s) by lining the ponds with concentrated fines or slurry from a basin near full fines volume prior to introducing the process water. Initially lining the ponds with collected fines is believed to reduce initial infiltration and improve water savings.

Dense limestone beds are prevalent in the project area. However, sensitive karst features may be present which could potentially allow infiltration of process water. These features will be identified by a Professional Geologist and grouted prior to introduction of process water into a sediment pond area.

Technical justification for this methodology of inspection and grouting sensitive features in sediment ponds is based on over 80 years of active quarry operations activities over the recharge zone. During this historical period, quarry operations, including many over the recharge zone, have utilized unlined sediment ponds located within mined-out portions of the quarry to gravity separate fine materials and recycle water as part of the standard quarry operating procedure. Even without inspection and grouting, these sediment ponds have been shown to effectively hold water and pond fines without adverse effects to the Edwards Aquifer quality. As mentioned above, this method was successfully implemented in 2019 at Martin Marietta’s Rock and Rail Quarry and was approved by TCEQ as a viable alternative to conventional clay liners.

CONSTRUCTION SEQUENCE

The sequence of construction for the sediment pond is as follows:

- Complete quarry excavation to final pit floor.
- Remove loose material in the quarry floor in the proposed sediment pond area.
- Conduct detailed geologic assessment of the quarry floor in the proposed sediment pond area to identify karst features with conduit potential to the underlying ground water. Geologic assessment may include use of drone obtained photographs to evaluate geologic conditions of inaccessible highwall areas.
- Voids, fractures, and permeable beds (not excluding the sidewall) that are rated sensitive by a Professional Geologist will be grouted before process water is introduced into the settling pond.
- The specific location of each grout application for protection of sensitive features will be documented and maintained.
- Collected fines will be placed on pond floor to “pre-seal” pond area.
- Any surface drainage with potential to carry hydrocarbons or contaminants other than native soil are prevented from entering the sediment ponds using berms or diversion ditches.
- Sediment pond berms will be constructed in stages, as required to accommodate the increasing sediment level, from the quarry floor to the final pond surface.
- Berms may be constructed to subdivide the pond into smaller units or cells, and clay or base material may be placed and compacted on the sediment pond floor.

- A water line from the wash-plant to the sediment pond area is constructed to transport and discharge the fines into the sediment pond.
- A pump is placed in the sediment pond to recover and recycle water.
- Other than the berms discussed above, no materials other than washed fine limestone particles and clays will be placed in the sediment ponds.

A detailed drawing illustrating cross sections through the proposed sediment pond and maximum water level is provided on the Permanent Storm Water Plan f-0600, Attachment F. Also illustrated on the Permanent Storm Water Plan f-0600, Attachment F are typical cross sections illustrating relationships between settled pond fines and active water levels.

PERMEABILITY

Dense limestone beds are prevalent in the project area. However, these dense beds may be interrupted by voids, fractures, bedding planes, or other features which could potentially allow infiltration of process water. Voids, fractures, and permeable beds (not excluding the sidewall) that are rated sensitive by a Professional Geologist will be grouted before they come in contact with water.

The following documentation is provided to demonstrate the permeability of the settling pond fines material and actual permeability of the limestone formation underlying and surrounding the pond will prevent impact to groundwater:

On June 29, 2020 and July 7, 2020 representative samples of settling pond fines and limestone formation were collected from Martin Marietta's 211 Quarry by Forster Engineering and analyzed for permeability. A remolded sample of the settling pond fines exhibited a permeability of 8.0×10^{-7} cm/sec. The representative sample of limestone exhibited a permeability of 1.1×10^{-9} cm/sec. The permeability for both of the tested samples well exceeds the RG-500 guidance document clay liner recommendation of 1.0×10^{-6} cm/sec. Documentation for results of the laboratory analyses are attached as Exhibit A.

WATER BALANCE PROCEDURE

RG-500 Section 5.1.2 includes a water balance approach as an example of an Innovative Technology for Aggregate Production facilities. This Water Balance Summary provides the strategy that Martin Marietta is proposing to implement in order to monitor the effectiveness of the proposed sediment ponds at the 211 Quarry.

As stated previously in this application, one water re-use pond currently exists on site as well (see Exhibit 1, Section 5.0). This pond was established in the mid to late 1990's and is believed to be unlined. To insure the infiltration rate of this existing water re-use pond does not exceed RG-500 guidelines, this pond will be monitored as well and results will be incorporated into the water balance procedure along with the proposed sediment ponds.

A description of measurements is provided in Table 1.

**TABLE 1
MEASUREMENTS**

ITEM	DESCRIPTION	ACTION	METHOD/EQUIPMENT*	ACCURACY
1	POND FINES AND WATER VOLUME TO SETTLING POND (WATER METER #1) Q1 IN	Continuous Measurement and Recordation by Flow Meter	SIEMENS SITRANS MAG 5100 SLURRY METER (8") - Complete with Transmitter and Data Recorder	0.20%
2	SETTLING POND VOLUME	Determine Initial Pond Volume Calculate Existing Volume Every 6 Months	Control Points and Lidar Survey to Develop 3-D Model of Settling Pond	+/- 10%
3	RAINFALL	Record Daily Rainfall	Weather Station to Measure and Record Rainfall	+/- 5%
4	EVAPORATION RATE	Monthly Measurement and Recordation of Evaporation	Class A Evaporation Pan	+/- 1mm (4%)
5	FRESH WATER VOLUME FROM SETTLING POND (WATER METER #2) Q2 OUT	Continuous Measurement and Recordation by Flow Meter	McCrometer ML100 - 6" Propeller Water Meter (8") – Complete with Transmitter and Data Recorder	+/- 2%

*Note: Actual equipment used may vary as long as the accuracy is equal to or greater than what is shown in the table above.

The following equation is proposed to measure Seepage Loss from the one existing water re-use pond as well as from the proposed sediment ponds:

$$\text{SEEPAGE LOSS} = \text{VOLUME PLACED IN POND} - \text{SURVEYED POND VOLUME}$$

$$\text{VOLUME PLACED IN POND} = \text{Q1 in} + \text{Rainfall} - \text{Evaporation} - \text{Q2 out}$$

SURVEYED POND VOLUME = Calculated volumetric difference between starting surveyed pond volume and ending surveyed pond volume at time of calculation.

$$\text{SEEPAGE LOSS} = \text{Q1 in} + \text{RAINFALL} - \text{EVAPORATION} - \text{Q2 out} - \text{SURVEYED POND VOLUME}$$

Q1 in = Volume of flow from the wash plant measured continuously by a Slurry Meter. See Exhibit B for Meter Technical Specifications.

RAINFALL = Measured daily by onsite weather station. Calculated over the surface area of the basins. See Exhibit C for Rain Gauge Technical Specifications.

EVAPORATION = Class A Evaporation Pan located at onsite weather station. Calculated over the surface area at the surveyed water elevation. See Exhibit E for Evaporation Pan Technical Specifications. Note: Due to its proximity and after consulting with the manufacturer, Martin Marietta is proposing to use the existing weather station located at their Rio Medina Quarry which is located adjacent to the 211 Quarry. This weather station has been installed as part of an Identical "sediment pond" technology previously approved by TCEQ for the Rio Medina Quarry. Using this existing weather station will not only save initial installation and ongoing maintenance costs, but will also eliminate the considerable time and manpower that would be needed to regularly monitor an additional weather station.

Q2 out = Volume of water measured continuously by a Water Meter located after the water recycle pump in basins. See Exhibit D for Fresh Water Flow Meter Technical Specifications.

EXAMPLE SETTLING POND 6 MONTH WATER BALANCE TABLE										
CUMULATIVE DAILY RECORDINGS										
	SURVEYED POND VOLUME	VOLUME IN Q1	RAINFALL R	RAINFALL R	EVAPORAT E	EVAPORATION E	VOLUME OUT Q2	VOLUME PLACED IN POND	SEEPAGE LOSS	CONVENTIONAL LINER LOSS
DATE	(GALLONS)	(GALLONS)	(INCHES)	(GALLONS)	(INCHES)	(GALLONS)	(GALLONS)	(GALLONS)	(GALLONS)	(GALLONS)
1/20/2017	0	0		0		0	0	0	0	-
7/19/2017	19,000,000.00	51,840,000.00	10.00	2,715,240.00	10.00	2,715,240.00	31,840,000.00	20,000,000.00	1,000,000.00	3,989,991.73
TOTAL	19,000,000.00	51,840,000.00	10.00	2,715,240.00	10.00	2,715,240.00	31,840,000.00	20,000,000.00	1,000,000.00	3,989,991.73
10.0	Rainfall Area (Acres)									
10.0	Evaporation Area (Acres)									
12.0	Liner Area (Acres)									
1,847.22	Conventional Liner Loss (Gal/day/ac)									
180	Number of days									
19,000,000	Surveyed Pond Volume (Gallons)									
SEEPAGE LOSS = VOLUME PLACED IN POND - SURVEYED POND VOLUME										
VOLUME PLACE IN POND = Q1 + R - E - Q2										
SURVEYED POND VOLUME = Calculated volumetric difference between starting surveyed pond volume and ending surveyed pond volume at time of calculation.										

WATER BALANCE MONITORING

Daily visual inspections of the sediment pond will be conducted to observe the overall general condition of the pond, and to look for abnormalities such as selective fine settlement, or irregular settlement. An example Daily Inspection Form, which will be maintained on site, is provided below. On a day-to-day operating basis, if the sediment pond is suspected to be leaking as evidenced by sudden water level draw down, a detailed inspection of the pond will be conducted to determine the leakage area.

If the calculated infiltration exceeds the expected infiltration from a conventionally lined pond, the quarry operator may try application of a pond sealer, such as sodium bentonite, to reduce infiltration from the sedimentation basin according to RG 500. It is anticipated application of a pond sealer such sodium bentonite will take approximately 2 to 4 weeks. The effectiveness of the pond sealer will be evaluated at the next scheduled water balance calculation event. If the pond sealer is found to be ineffective, Martin Marietta will stop introducing water into the pond and work with the TCEQ to identify and develop an appropriate and acceptable contingency plan to be utilized in lieu of the innovative technology.

The implementation of the Water Balance Procedure is extremely costly and time-intensive. Martin Marietta proposes to conduct the Water Balance Procedure until such time that the infiltration rate of the initial sediment pond “cell” as shown on Exhibit 1 of Section 5, has reached a level below the RG-500 guidance document clay liner recommendation of 1.0 X 10⁻⁶ cm/sec., and thus validating the effectiveness of the proposed sediment pond methodology for this site. Once the effectiveness of the proposed methodology has been confirmed, Martin Marietta will terminate the Water Balance Procedure and visual inspections of the sediment pond will be performed on a quarterly basis going forward.

211 QUARRY

EXAMPLE SETTLING POND DAILY INSPECTION FORM

MONTH: _____

DATE	ABNORMALITY OBSERVED (YES/NO)	* NOTED ABNORMALITY:
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		

* VISUAL INSPECTION ABNORMALITIES

Evidence of selective fine settlement

Evidence of irregular fine settlement

Evidence of sudden water level drawdown

Observed vortex drainage

Evidence of seepage in berms surrounding settling pond

Any other areas where leakage appears to be occurring

EXHIBIT A
SIEVE ANALYSIS AND PERMEABILITY TESTING



Raba Kistner, Inc.
 12821 West Golden Lane
 San Antonio, TX 78249
 P.O. Box 690287
 San Antonio, TX 78269
 www.rkci.com

P 210.699.9090
 F 210.699.6426
 TBPE Firm F-3257
 TBPLS Firm 10193784

Project No. ASD20-150-00
 July 21, 2020

Mr. Ralph Voss, P.E.
 Forster Engineering
 401 Maricopa Drive
 Canyon Lake, Texas 78133

**RE: Sieve Analysis and Permeability Testing
 Bulk Soil Samples and Limestone Rock (211 Quarry)**

Dear Mr. Voss:

Raba Kistner Consultants, Inc. (RKCI) has completed the requested laboratory testing on two (2) samples which were delivered to our office by Forster Engineering on 6/29/2020 and 7/7/2020. The samples included one (1) bulk soil sample and one (1) limestone rock sample. The limestone rock sample was cored by RKCI to perform the requested testing. The results are summarized below:

Bulk Soil Sample

Sample ID: Bulk Saturated as received	211 Quarry
Visual Description	Light brown clayey silt
Sieve analysis (ASTM D6913)	
% passing No. 4	100
% passing No. 60	100
% passing No. 100	100
% passing No. 140	99.9
% passing No. 200 (silt and clay)	99.67
Remolded permeability (ASTM D5084)	*** 8.0 X 10 ⁻⁷ cm/sec
As received Moisture Content (ASTM D2216)	7.76%
As tested Moisture Content (ASTM D2216)	*** 17.10%
As tested Dry Density	114.7 lbs/ft ³

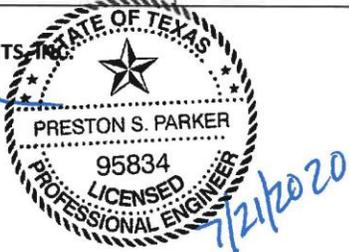
Note: *** Water was added to sample to a moisture content that would allow remolding for permeability testing.

Limestone Rock Samples

Sample ID: Limestone Core	211 Quarry
Visual Description	Limestone core sample
Initial Moisture Content after coring	2.7%
Dry Density after coring	140.2 lbs/ft ³
Permeability (modified for rock per cent) (modified ASTM D5084)	1.1 X 10 ⁻⁹ cm/sec

RABA KISTNER CONSULTANTS, INC.

 Preston S. Parker, P.E., PMP
 Senior Vice President



San Antonio • Austin • Brownsville • Dallas • Freeport • Houston • McAllen • Florida • Nebraska • Utah • Mexico



Martin Marietta Materials Southwest, LLC
 211 Quarry WPAP
 1031D-23

EXHIBIT B

SIEMENS FLOW METER SPECIFICATION Q1

Flow Measurement

SITRANS F M

Flow sensor MAG 5100 W

Overview



The SITRANS F M MAG 5100 W is an electromagnetic flow sensor designed to meet ground water, drinking water, waste water, sewage or sludge applications.

Benefits

- DN 15 to DN 1200 / 2000 (1/2" to 48"7/8")
- Stock program of MAG 5100 W secures short delivery time
- Connection flanges EN 1092-1 (DIN 2501), ANSI, AWWA, AS and JIS.
- NBR Hard Rubber and Ebonite Hard Rubber liner for all water applications
- EPDM liner with drinking water approvals
- Hastelloy integrated grounding and measuring electrodes
- Increased low flow accuracy for water leak detection, due to coned liner design (Article No. 7ME6520, DN 15 to 300 mm (1/2" to 12")).
- Drinking water approvals
- Suitable for direct burial and constant flooding
- Custody transfer approvals
- Build-in length according to ISO 13359; the standard includes sizes up to DN 400.
- Easy commissioning, SENSORPROM unit automatically uploads calibration values and settings.
- Designed so patented in-situ verification can be conducted. Using SENSORPROM fingerprint.
- Custody Transfer option for water billing, with type approval after OIML R 49 and verified according to MI-001 - OD inlet/OD outlet installation
 - pattern approval OIML R 49 (Denmark, Germany)
 - conforms to ISO 4064 and EN 14154 for mechanical flowmeters
 - PTB K 7.2
- FM Fire Service Meter (Class Number 1044) for automatic fire protection systems
- Meets EEC directives: PED, 97/23/EC pressure directive for EN1092-1 flanges
- Simple onsite or factory upgrade to IP68/NEMA 6P of a standard sensor
- MCERTS approval for UK environmental market

Application

The main applications of the SITRANS F M electromagnetic flow sensors can be found in the following fields:

- Water abstraction
- Water treatment
- Water distribution network (leak detection management)
- Custody transfer water meters
- Irrigation
- Waste water treatment
- Filtration plant (e.g. reverse osmosis and ultra filtration)
- Industrial water applications

Mode of operation

The flow measuring principle is based on Faradays law of electromagnetic induction according to which the sensor converts the flow into an electrical voltage proportional to the velocity of the flow.

Integration

The complete flowmeter consists of a flow sensor and an associated transmitter SITRANS F M MAG 5000, MAG 6000 or MAG 6000 I.

The flexible communication concept USM II simplifies integration and update to a variety of fieldbus systems, e.g. HART, DeviceNet, PROFIBUS DP and PA, FOUNDATION Fieldbus H1 or Modbus RTU/RS 485.

EXHIBIT C

WEATHER STATION RAINFALL

Wireless Vantage Pro2™ & Vantage Pro2™ Plus Stations (Including Fan-Aspirated Models)



6152	6162
6153	6163

Vantage Pro2™ (6152, 6153) and Vantage Pro2™ Plus (6162, 6163) Wireless Weather Stations include two components: the Integrated Sensor Suite (ISS) which houses and manages the external sensor array, and the console which provides the user interface, data display, and calculations. The ISS and Vantage Pro2 console communicate via an FCC-certified, license-free, spread-spectrum frequency-hopping (FHSS) transmitter and receiver. User-selectable transmitter ID codes allow up to eight stations to coexist in the same geographic area. The frequency hopping spread spectrum technology provides greater communication strength over longer distances and areas of weaker reception. The Wireless Vantage Pro2 Plus weather station includes two additional sensors that are optional on the Vantage Pro2: the UV sensor and the solar radiation sensor.

The console may be powered by batteries or by the included AC-power adapter. The wireless ISS is solar powered with a battery backup. Use WeatherLink® for Vantage Pro2 and Vantage Vue® to let your weather station interface with a computer, to log weather data, and to upload weather information to the internet.

The 6152 and 6162 rely on passive shielding to reduce solar-radiation induced temperature errors in the outside temperature sensor readings. The Fan-aspirated 6153 and 6163 combine passive shielding with a solar-powered fan that draws outside air in over the temperature and humidity sensors, providing a much more accurate temperature reading than that available using passive shielding alone.

Integrated Sensor Suite (ISS)

(Includes product numbers: 6152, 6153, 6162, 6163, 6322, 6323, 6327 & 6328)

EXHIBIT D

FLOW METER Q2 SPECIFICATIONS



MODEL ML100

CONFIGURATION SHEET FLANGED IRRIGATION FLOWMETER

DESCRIPTION

Model ML100 Irrigation Flowmeters are designed to provide accurate flow measurement at moderate pressure ratings in an inexpensive package. The impeller and drive assembly are removed and replaced through the open end of the meter tube. As with all McCrometer propeller flowmeters, standard features include magnetically coupled drive, instantaneous flowrate indicator and straight-reading, six-digit totalizer.

Impellers are manufactured of high-impact plastic, capable of retaining their shape and accuracy over the life of the meter. Each impeller is individually calibrated at the factory to accommodate the use of any standard McCrometer register. The ML100 can be field-serviced without the need for factory recalibration. Factory lubricated stainless steel bearings are used to support the impeller shaft. The sealed bearing design limits the entry of materials and fluids into the bearing chamber providing maximum bearing protection.

The instantaneous flowrate indicator is standard and available in gallons per minute, cubic feet per second, liters per second and other units. The register is driven by a flexible steel cable encased within a protective vinyl liner. The register housing protects both the register and cable drive system from moisture while allowing clear reading of the flowrate indicator and totalizer.

INSTALLATION

Standard installation is horizontal mount. If the meter is to be mounted in the vertical position, please advise the factory. A straight run of full pipe the length of ten pipe diameters ahead and two diameters behind the meter is the minimum normally recommended for meters without straightening vanes. Meters with straightening vanes require at least five pipe diameters ahead and two diameters behind the meter.



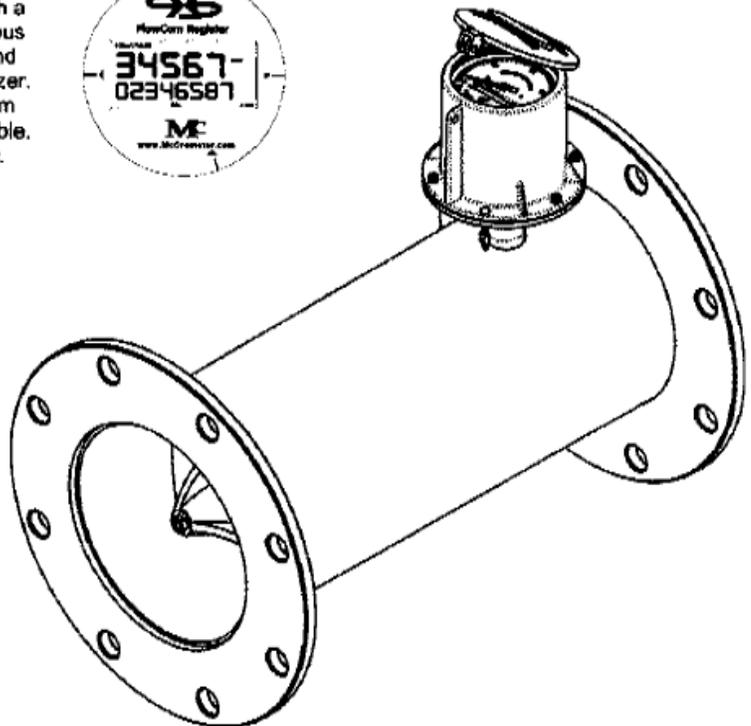
The McCrometer Propeller flowmeter comes with a standard instantaneous flowrate indicator and straight-reading totalizer. An optional FlowCom register is also available.
Typical face plates.



APPLICATIONS

The McCrometer propeller is the most widely used flowmeter for agricultural and turf irrigation measurement. Typical applications include:

- Center pivot systems
- Sprinkler irrigation systems
- Golf course and park water management
- Drip irrigation systems
- Gravity turnouts from underground pipelines
- Commercial nurseries



LOW COST IRRIGATION FLOWMETER MODEL ML100

SPECIFICATIONS

PERFORMANCE

ACCURACY/REPEATABILITY: $\pm 2\%$ of reading guaranteed throughout full range. $\pm 1\%$ over reduced range. Repeatability 0.25% or better

RANGE: See dimensions chart below

HEAD LOSS: See dimensions chart below

MAXIMUM TEMPERATURE: (Standard Construction) 160°F constant.

PRESSURE RATING: 75 psi

MATERIALS

TUBE: Epoxy-coated carbon steel pipe, conforming to ASA pipe standards. Lightweight irrigation flanges with 150 pound drilling

BEARING ASSEMBLY: Impeller shaft is 316 stainless steel. Ball bearings are 440C stainless steel.

MAGNETS: (Permanent type) Alnico

BEARING HOUSING: Brass; Stainless Steel optional

REGISTER: An instantaneous flowrate indicator and six-digit straight-reading totalizer are standard. The register is hermetically sealed within a die cast

aluminum case. This protective housing includes a domed acrylic lens and hinged lens cover with locking hasp.

IMPELLER: Impellers are manufactured of high-impact plastic, retaining their shape and accuracy over the life of the meter. High temperature impeller is optional.

COATING: Fusion-bonded epoxy.

OPTIONS

- Forward/reverse flow measurement
- Register extensions
- Flow straightening vanes
- "Over Run" bearing assembly for higher than normal flowrates
- Electronic propeller meter available in all sizes of this model
- A complete line of flow recording/control instrumentation
- Certified calibration test results
- Stainless steel bearing housing
- Canopy boot

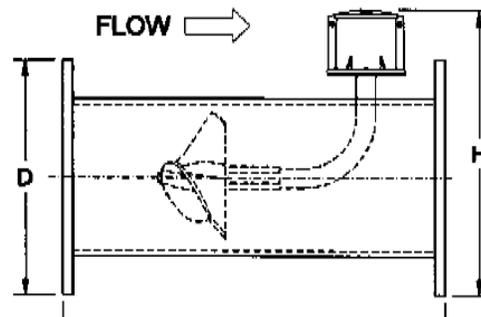
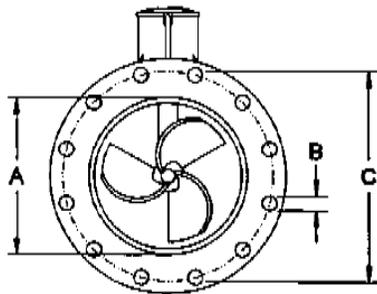


EXHIBIT E

EVAPORATION PAN & PROCEDURES



Rollover image to zoom detail

Class A Evaporation Station

Perfect for Regular Readings of Evaporation Rates

Accurately measure the amount of water evaporation on your site with this complete *Class A Evaporation Station*—designed to measure maximum and minimum temperatures of the water and the ...

[See more details »](#)

Item #: 110375



[Write a Review](#)

Mfr. Model #: 255-500

CLASS A EVAPORATION STATION	
Evaporation Pan	10"D, 47½" dia., low carbon, stainless steel
Hook Gauge	3" span with 0.1" graduations, 7"L x 5¼" dia., nickel-plated brass
Stillwell	9"H x 4" dia., stainless steel
Minimum/Maximum	Can be used floating or submersed. Thermometer range 20–125°F, magnetic reset, built-in solar radiation shield, 1"H x 6"W x 11¼"L without floats, 1"H x 6"W x 13½"L with floats.
Totalizing	Used to monitor air passage, three-cup assembly Anemometer with 4" cups, six-digit mechanical counter with resolution of 0.1 mile, 12" dia. x 16"H.
Analog Output	Used to determine evaporation rate by measuring Evaporation Gauge changing water in evaporation pan. Consists of float, pulley and counterweight attached to a 1000-ohm potentiometer mounted through a gear assembly in a weatherproof housing. Base plate has bubble level. Can be monitored on site using a datalogger or a strip chart recorder, or monitored remotely by telemetry equipment.

DETAILS

ACCESSORIES

Class A Evaporation Station

Perfect for Regular Readings of Evaporation Rates

Accurately measure the amount of water evaporation on your site with this complete *Class A Evaporation Station*—designed to measure maximum and minimum temperatures of the water and the amount of air passage along with evaporation levels. The Class A Station consists of a U.S. National Weather Service Class A evaporation pan, a combination floating-submersible min./max. thermometer, hook gauge, stillwell and totalizing anemometer.

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

A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is provided below. Each feature identified in the Geologic Assessment as “sensitive” has been addressed.

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

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

If applicable, a request to seal a naturally-occurring “sensitive” or “possibly sensitive” feature, that includes a justification as to why no reasonable and practicable alternative exists, is provided for each feature below.

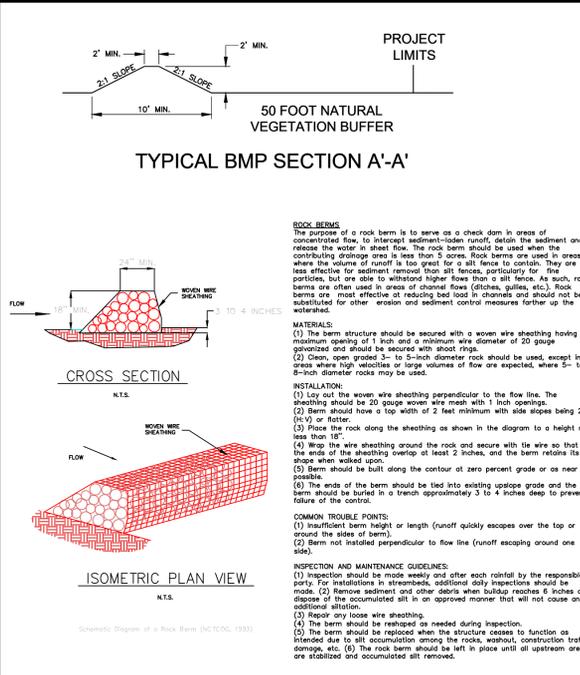
This request to mine out naturally-occurring sensitive features is based on the absence of any reasonable or practicable alternatives. Sensitive features discovered during the Geologic Assessment or during the quarry process will be mined out as the pit will be mined to a depth of approximately 250 feet, and it would be unsafe and impractical to preserve a feature and buffer within the quarry pit.

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

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

**PERMANENT STORMWATER SECTION FORM TCEQ-0600
ATTACHMENT F
CONSTRUCTION PLANS**

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



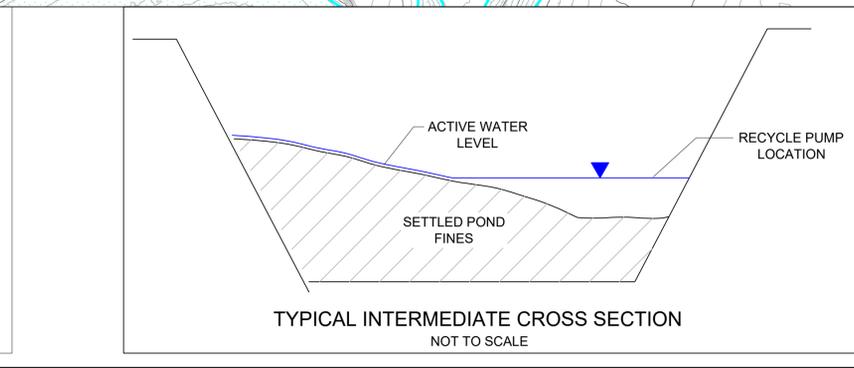
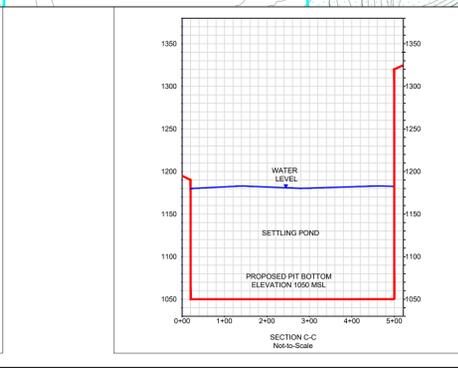
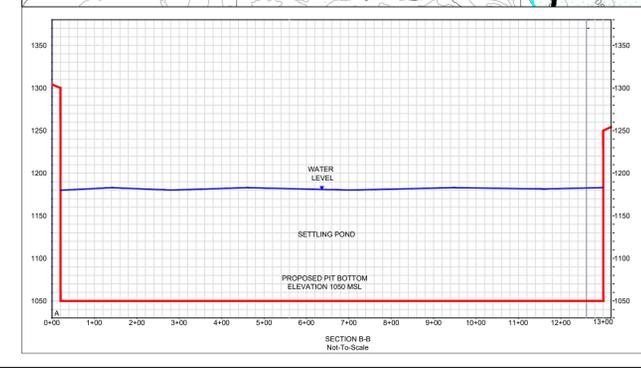
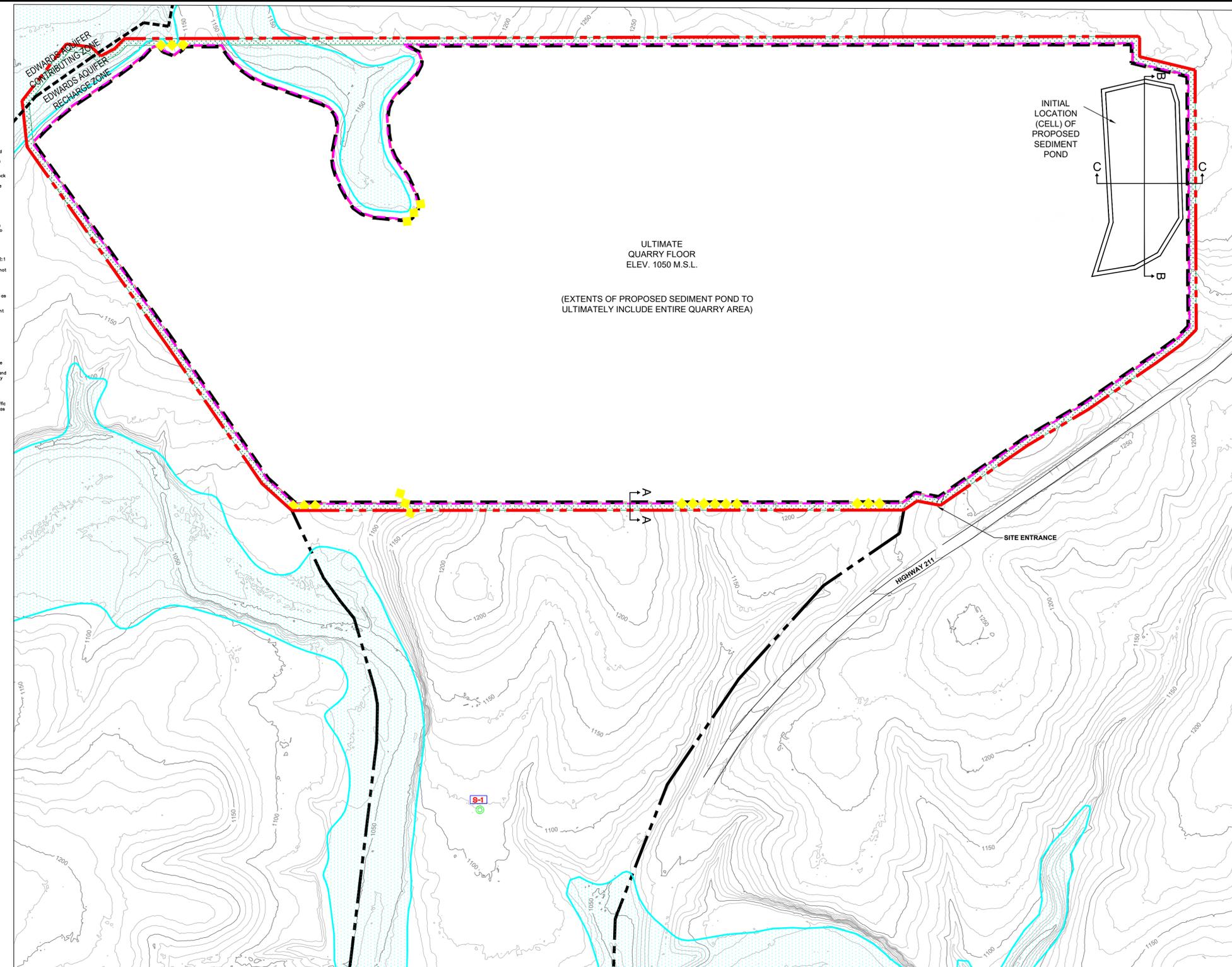
CONSTRUCTION NOTES

- 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.
- 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.
- 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.
- No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 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.
- 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).
- 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.
- 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).
- 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.
- Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases 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.
- 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.
- 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:
 - any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, berms, sewage treatment plants, and diversionary structures;
 - 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;
 - any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
12100 Park 35 Circle, Bldg A, Rm 179
Austin, Texas 78753
Phone (512) 339-2929
Fax (512) 339-3795

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

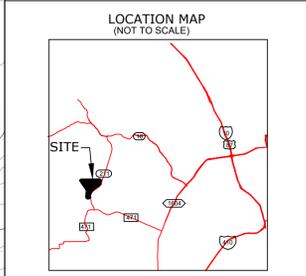
78233-4480



REV. NO.	DESCRIPTION	DATE

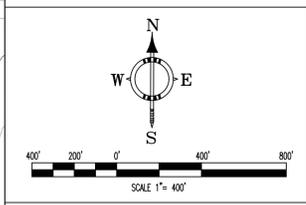
Notes:

- Contour Data From Aerial Photography Dated January 12, 2020.
- Flood Data: FEMA Flood Insurance Rate Map Number 48325C0250D, effective May 15, 2020.



LEGEND

- PROJECT LIMITS
- EARZ BOUNDARY
- EXISTING 10' CONTOURS
- EXISTING 50' CONTOURS
- 100 YEAR FLOODPLAIN
- ULTIMATE QUARRY LIMITS
- EXISTING FLOW ARROW
- 50' NATURAL VEGETATED FILTER STRIP
- EARTHEN BERM
- EXISTING WELL
- SENSITIVE FEATURE
- ROCK BERM



SIGNATURE/SEAL

RALPH VOSS, JR.
88675
LICENSED PROFESSIONAL ENGINEER
12/18/23

FORSTER ENGINEERING
TBPE firm # 12385
401 MARICOPA DRIVE, CANYON LAKE, TX 78133
PHONE: (210) 2879-0580
WWW.FORSTERENGINEERING.COM

Martin Marietta

PROJECT DESCRIPTION
211 QUARRY WATER POLLUTION ABATEMENT PLAN

DRAWING
PERMANENT STORM WATER PLAN (TCEQ-0600)

DATE 12/07/2023 **JOB NO.** 1031D-23
SCALE 1" = 400' **DRG NO.**
DRAWN BY RV **ATTACHMENT F**
CHECKED BY CPF

Date: Dec 07, 2023, 1:27pm, User: Dr. Ralph Voss
 File: C:\Users\Ralph.Voss\Documents\Foster Engineering (RV)\1031D-23\211 Quarry WPAP Mod_2020\CAD_Files\1031D-23_211 Quarry_Streams.dwg

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

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

Section 8.0

AGENT AUTHORIZATION FORM

Owner Authorization Form

Texas Commission on Environmental Quality
for Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

Land Owner Authorization

I, Earl E. Hood III of Quarry Materials Corporation
Land Owner Signatory Name Land Owner Name (Legal Entity or Individual)

am the owner of the property located at
875.379 Acre Tract as described on attached lease documents.

Legal description of the property referenced in the application

and am duly authorized in accordance with §213.4(c)(2) and §213.4(d)(1) or §213.23(c)(2) and §213.23(d) relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Martin Marietta Materials Southwest, LLC
Applicant Name (Legal Entity or Individual)

to conduct Limestone Quarrying Activities & WPAP Submittal

Description of the proposed regulated activities

at 211 Quarry, 11399 State Highway 211, San Antonio, TX 78254

Precise location of the authorized regulated activities

Land Owner Acknowledgement

I understand that Quarry Materials Corporation
Land Owner Name (Legal Entity or Individual)

Is ultimately responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Land Owner Signature

Ean Hood

September 8, 2023

Land Owner Signature

Date

THE STATE OF § Texas

County of § Bexar

BEFORE ME, the undersigned authority, on this day personally appeared Ean Hood 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 08th day of September 2023

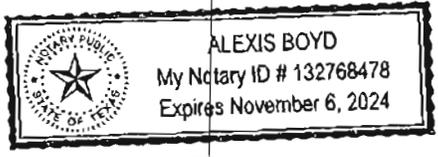
Alexis Boyd

NOTARY PUBLIC

Alexis Boyd

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: NOV 2024



Attached: (Mark all that apply)

- Lease Agreement
- Signed Contract
- Deed Recorded Easement
- Other legally binding document

Applicant Acknowledgement

I, Kirk Light of Martin Marietta Materials Southwest, LLC
Applicant Signatory Name Applicant Name (Legal Entity or Individual)

acknowledge that Quarry Materials Corporation
Land Owner Name (Legal Entity or Individual)

has provided Martin Marietta Materials Southwest, LLC
Applicant Name (Legal Entity or Individual)

with the right to possess and control the property referenced in the Edwards Aquifer protection plan.

I understand that Martin Marietta Materials Southwest, LLC
Applicant Name (Legal Entity or Individual)

is contractually responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation. I further understand that failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Applicant Signature

[Handwritten Signature]
Applicant Signature

9/7/23
Date

THE STATE OF § Texas
County of § Texas

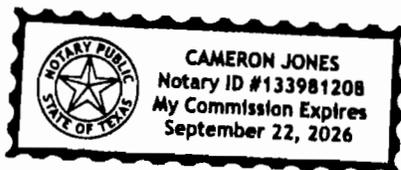
BEFORE ME, the undersigned authority, on this day personally appeared Kirk R. Light
known to me to be the person whose name is subscribed to the foregoing instrument, and
acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 7th day of September

[Handwritten Signature]
NOTARY PUBLIC

Cameron Jones
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 09/22/2026



MEMORANDUM OF LEASE

96- 0029671

This Memorandum of Lease (hereinafter referred to as this "Memorandum"), made and entered into as of the 29th day of February, 1996, by and between QUARRY MATERIALS CORPORATION, a Texas corporation with its principal offices at 17000 Senior Road, Von Ormy, Texas 78073-0010 (hereinafter referred to as "Owner") and REDLAND STONE PRODUCTS COMPANY, a Texas corporation having an office at 17910 IH-10 West, San Antonio, Texas 76257 (hereinafter referred to as "Lessee").

WITNESSETH:

WHEREAS, on or about the date hereof Owner and Lessee have entered into that certain limestone mining lease (hereinafter referred to as the "Lease") pursuant to which Owner has leased and demised unto Lessee and Lessee has leased and rented from Owner certain Property (as defined in the Lease) located in Medina and Bexar Counties, Texas (the "Property"), as more particularly described on Exhibit "A" attached hereto and by this reference made a part hereof (terms defined in the Lease, when used in this Memorandum and not otherwise defined herein, shall have the same meaning as ascribed thereto in the Lease);

WHEREAS, Owner and Lessee desire to enter into this Memorandum which is to be recorded in the Deed Records of Bexar County, Texas and Medina County, Texas for purposes of providing notice to any and all members of the general public as to the existence of the Lease;

NOW, THEREFORE, for and in consideration of the foregoing recital, the sum of TEN AND NO/100 DOLLARS (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Lessee make this Memorandum and covenant and agree as follows:

1. Grant of Lease. Owner does hereby lease the Property to Lessee, and Lessee does hereby lease the Property from Lessor, upon the provisions, conditions and terms of the Lease, all of which are incorporated herein by reference with the same force and effect as if herein set forth in full, which include, without limitation, the following provisions, conditions and terms:

- a. Property. The Property shall comprise all of that tract or parcel of land described on Exhibit "A" attached hereto.
- b. Lease Term. The Term of the Lease is for ten (10) years commencing on March 1, 1996, and terminating on February 28, 2006.

- c. Options. There exist in favor of Lessee six (6) consecutive options to extend the Term for a period of five (5) years each.
- d. Royalty. Lessee is required to pay to Owner a Royalty in the amounts and upon the terms and conditions more specifically set forth in the Lease.

2. Ratification of Lease. Owner and Lessee hereby ratify, approve and confirm all of the terms, conditions and provisions of the Lease and all of the rights, duties, obligations and agreements created thereby or set forth therein, and Lessee and Owner hereby covenant and agree that nothing set forth in this Memorandum is intended nor does amend, modify, or in any way affect any of said terms, conditions and provisions of the Lease or any of said rights, duties, obligations and agreements created thereby or set forth therein, and that all of the same shall remain and continue in full force and effect in accordance with the terms of the Lease.

3. Cancellation. If the Lease is validly cancelled or terminated or expires, for any reason whatsoever, this Memorandum shall become null and void and shall be of no further force and effect. In the event this Memorandum becomes null and void as provided in the immediately preceding sentence, Owner and Lessee agree within thirty (30) days after written request from either party to execute, deliver and record a cancellation of this Memorandum.

4. Successors and Assigns. This Memorandum shall apply to, be binding upon and inure to the benefit of, the parties hereto and their respective successors, administrators, legal representatives and assigns.

5. Texas Law. This Memorandum shall be govern by and construed in accordance with the laws of the State of Texas.

VOL 6682 PG0600

IN WITNESS WHEREOF, the parties have executed this Memorandum under seal as of the date above written.

OWNER:

**QUARRY MATERIALS CORPORATION, a
Texas corporation**

Rayney Hood
By: *Rayney Hood*
Name: *Rayney Hood*
Title: *President*

LESSEE:

**REDLAND STONE PRODUCTS COMPANY,
a Texas corporation**

By: *David L Wenzel*
Name: *DAVID L WENZEL*
Title: *VICE PRESIDENT and TREASURER*

VOL 6682 PG 0601

NOTARY ACKNOWLEDGEMENT

STATE OF TEXAS)
)
COUNTY OF BEXAR) ss.

This instrument was acknowledged before me on this 29 day of Feb, 1996, by RANNEY V. HOOD, known to me to be the person and officer whose name is subscribed to the foregoing instrument, who acknowledged to me that he executed the same as the act and deed of the said Quarry Materials Company, for the purposes and consideration therein expressed and in the capacity therein stated.

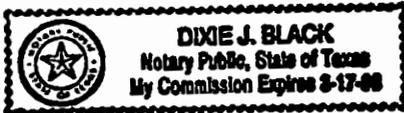
Dixie J. Black
Notary Public

Notary's Printed Name:

DIXIE J. Black

My Commission Expires:

3/17/98



VOL 6682 PG 0602

NOTARY ACKNOWLEDGEMENT

STATE OF TEXAS)
)
COUNTY OF Bexar) ss.

This instrument was acknowledged before me on this 27 day of Feb, 1996 by DAVID J. WENZEL known to me to be the person and officer whose name is subscribed to the foregoing instrument, who acknowledged to me that he executed the same as the act and deed of the said Redland Stone Products Company, for the purposes and consideration therein expressed and in the capacity therein stated.

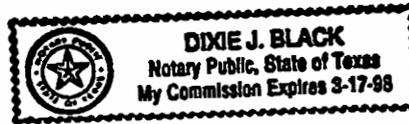
Dixie J. Black
Notary Public

Notary's Printed Name:

DIXIE J. BLACK

My Commission Expires:

3/17/98



VOL 6682 PG 0603

A Field Note description of an 875.379-acre tract of the O. Schuchart Ranch being that portion lying north and west of State Highway No. 211 and situated in the S.E. Thomason Survey No. 403, Abstract No. 1189, the I. & G.N. R.R. Co. Survey No. 255 1/4, the J.M. Glenn Survey No. 256 1/4, Abstract No. 442 and the H. Dahme Survey No. 256 1/4, Abstract No. 1899 Medina Co., being in both Medina and Bexar Counties, Texas and being more particularly described by metes and bounds as follows:

COMMENCING: At an Iron Pin for the original northeast corner of said O. Schuchart Ranch, being the northwest corner of the Benke Ranch shown by Deed recorded in Volume 2843 at Page 549 of the Deed and Plat Records of Bexar County, Texas and being in the south line of the Gallagher Ranch described by deed recorded in Volume 1603 at page 456 of the Deed Records of Medina County, Texas;

THENCE: On the original south boundary of said Gallagher Ranch and north line of the O. Schuchart Ranch and being the north boundary of a tract of land conveyed to the Gallagher Ranch by O. Schuchart for Ingress/Egress to said State Highway No. 211 the following two (2) courses, N 89° 52' 41" W, 369.58 feet and N 89° 57' 02" W, 150.00 feet to an Iron Pin for the northwest corner of said Ingress/Egress tract and the northeast corner and POINT OF BEGINNING of this Tract;

THENCE: Southerly, on the west boundary of said ingress/egress tract the following six (6) calls:
 S 00° 02' 58" W, 150.00 feet to an Iron Pin,
 S 76° 47' 52" E, 441.02 feet to an Iron Pin,
 S 02° 13' 55" E, 111.95 feet to an Iron Pin,
 S 02° 03' 05" W, 424.95 feet to an Iron Pin,
 S 00° 48' 03" W, 188.51 feet to an Iron Pin and S 00° 01' 31" E, 1229.46 feet to an Iron Pin in the northwesterly Right-of-Way (R.O.W. varies) of State Highway No. 211 for the easterly southeast corner of this Tract;

THENCE: In a southwesterly direction on said Right-of-Way the following sixteen (16) calls:
 S 47° 52' 05" W, 147.47 feet to an Iron Pin,
 S 54° 15' 13" W, 226.08 feet to an Iron Pin,
 S 55° 50' 12" W, 625.85 feet to an Iron Pin,
 S 59° 41' 15" W, 521.18 feet to an Iron Pin,

S 55° 50' 12" W, 795.00 feet to an Iron Pin,
 N 79° 09' 48" W, 176.78 feet to an Iron Pin,
 S 55° 50' 12" W, 120.00 feet to an Iron Pin,
 S 10° 50' 12" W, 176.78 feet to an Iron Pin,
 S 55° 50' 12" W, at 120.39 feet pass the Bexar/Medina County Line and in
 all 677.64 feet to an Iron Pin,
 S 55° 48' 57" W, 12.13 feet to an Iron Pin,
 S 42° 32' 13" W, 935.48 feet to an Iron Pin,
 S 34° 28' 11" W, 955.10 feet to an Iron Pin,
 S 21° 27' 21" W, 1071.83 feet to an Iron Pin,
 S 02° 00' 29" W, 560.38 feet to an Iron Pin,
 S 18° 08' 47" E, 435.33 feet to an Iron Pin and S 07° 52' 31" E, 51.27 feet
 to an Iron Pin on the north bluff of San Geronimo Creek for the southerly
 southeast corner of this Tract;

THENCE:

Along the bluff the following nine (9) courses:
 S 59° 24' 34" W, 131.59 feet to an Iron Pin,
 S 59° 09' 19" W, 808.81 feet to a 13" 3-pronged dead cedar,
 S 80° 45' 10" W, for a distance of 424.08 feet, to a set Iron Pin,
 N 70° 01' 51" W, for a distance of 295.31 feet, to a set Iron Pin,
 N 59° 23' 21" W, for a distance of 204.56 feet, to a set P K nail,
 N 50° 56' 04" W for a distance of 189.27 feet, to a set P K nail,
 N 41° 35' 31" W, for a distance of 224.27 feet, to a set P K nail,
 N 28° 18' 38" W, for a distance of 417.59 feet to a set Iron Pin,
 N 10° 01' 46" E, for a distance of 384.91 feet to a set Iron Pin,

THENCE:

Along a fence line and the west boundary line of this tract the following
 eleven (11) courses:
 N 07° 01' 28" E, for a distance of 1672.59 feet to a set Iron Pin,
 N 01° 17' 27" E, for a distance of 278.15 feet to a set Iron Pin,
 N 10° 16' 45" W, for a distance of 120.54 feet to a set Iron Pin,
 N 16° 06' 37" W, for a distance of 543.54 feet to a set Iron Pin,
 N 38° 37' 33" W, for a distance of 174.74 feet to a set Iron Pin,
 N 35° 35' 15" W, for a distance of 202.88 feet to a set Iron Pin,
 N 24° 39' 35" W, for a distance of 564.25 feet to a set Iron Pin,
 N 47° 52' 13" W, for a distance of 302.60 feet, to a set Iron Pin,
 N 34° 48' 45" W, for a distance of 3059.57 feet to a set Iron Pin,
 N 06° 00' 29" W, for a distance of 344.32 feet to a set Iron Pin,
 N 38° 13' 35" E, for a distance of 537.80 feet to a set Iron Pin said point
 being the northwest corner of this Tract;

THENCE:

S 82° 53' 12" E, for a distance of 189.38 feet, along a fence line to a 24"
 Oak;

VOL 6682 PG 605

THENCE: S 45° 36' 19" E, for a distance of 96.39 feet along a fence line to a fence corner post;

THENCE: N 62° 11' 06" E, for a distance of 117.14 feet along a fence line to an 8" Cedar fence post;

THENCE: N 45° 08' 48" E, for a distance of 104.90 feet, to a found Iron Pin set in concrete;

THENCE: Along a fence line and the south line of the said Gallagher Ranch the following six (6) courses:
S 89° 57' 11" E, for a distance of 566.44 feet, to a found Iron Pin set in concrete;
S 89° 57' 29" E, for a distance of 3830.25 feet, to a found Iron Pin set in concrete;
S 89° 54' 43" E, for a distance of 650.53 feet, to a fence corner post;
S 89° 49' 56" E, for a distance of 687.32 feet, passing at 636.39 feet the Bexar/Medina County line, to a found Iron Pin;
S 89° 50' 57" E, for a distance of 458.94 feet to a found Iron Pin and,
S 89° 57' 02" E, for a distance of 1398.06 feet to the POINT OF BEGINNING and containing 875.379 acres of land of which 717.663 acres are in Medina County and 157.716 acres are in Bexar County.



Jack C. Evans

Jack C. Evans
R.P.L.S. No. 1523
June 7, 1994

When Recorded Mail To:

Ticor Title Agency
10010 San Pedro, Suite 100
San Antonio, TX 78216-3856

VOL 6682 PG 0606

Any provision herein which restricts the sale, rental, or use of the described real property, in violation of the laws of the State of Texas, or in violation of the laws of the United States, is hereby null and void. I hereby certify that this instrument was filed in File Number Sequence on the date and at the time indicated hereon by me and was duly RECORDED in the Office Public Record of Real Property of Bexar County, Texas on:

MAR 05 1996



Gerry Rickhoff

COUNTY CLERK BEXAR COUNTY, TEXAS

Filed for Record in
BEXAR COUNTY, TX
GERRY RICKHOFF, COUNTY CLERK

On Mar 01 1996

At 4:39pm

Receipt #: 203212
Recording: 17.00
Doc/Hgt: 6.00

Doc/Num : 96- 0029671

Deputy -Deborah Greiner

RECORDER'S MEMORANDUM

AT THE TIME OF RECORDATION, THIS INSTRUMENT WAS FOUND TO BE INADEQUATE FOR THE BEST PHOTOGRAPHIC REPRODUCTION BECAUSE OF ILLEGIBILITY, CARBON OR PHOTO COPY, DISCOLORED PAPER, ETC.

VOL 6682 PG 0607

AMENDMENT TO MEMORANDUM

This Amendment to Memorandum is made to be effective as of June 1, 2006.

Quarry Materials Corporation, a Texas corporation with its principal place of business in Von Ormy, Texas, has previously entered into a lease agreement with Redland Stone Products Company, predecessor to Martin Marietta Materials Southwest, Ltd. ("Martin Marietta"), a Texas limited liability company with its principal place of business at 8200 IH-10 West, Suite 600, San Antonio, Texas 78230, covering a tract of land situated in Bexar and Medina Counties, Texas. A memorandum of such lease was filed in the real property records of Bexar County at Volume 6712, Pages 0771-0779.

The parties desire to amend the memorandum to correctly describe the real property that is the subject of the lease agreement. The lease agreement covers 875.379 acres that are described on Exhibit A which is attached hereto and incorporated herein. In addition, the parties have recently agreed to modify that lease agreement to extend the term for a total of ten (10) option periods of five (5) years each. All other terms of the lease agreement, as amended, are incorporated by reference as if set out in full herein.

Dated as of the date set forth above.

Quarry Materials Corporation



By: *Ramsey Hand*
Its: *Pres.*



Martin Marietta Materials Southwest, Ltd.
By Southwest I LLC, its general partner
(Successor to Redland Stone Products
Company)

By: *Brian A. Taw*
Its: President

THE STATE OF TEXAS

§

COUNTY OF Bexar

§
§

This instrument was acknowledged before me by Ranney Hood in his capacity as June 12, 20 President of Quarry Materials Corporation on this the 12th day of June 2006.



(PERSONALIZED SEAL)

John Hernandez
Notary Public Signature

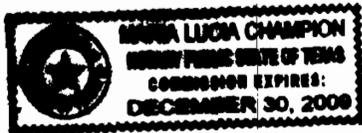
THE STATE OF TEXAS

§

COUNTY OF BEXAR

§
§

This instrument was acknowledged before me on this the 6th day of June, 2006, by Bruce Vaio, President of Southwest I, LLC, the general partner of Martin Marietta Materials Southwest, Ltd., a Texas limited partnership, on behalf of said limited partnership.



(PERSONALIZED SEAL)

Maria Lucia Champion
Notary Public Signature

After recording return to:

John Skogland
Martin Marietta Materials, Inc.
8200 IH-10 West, Suite 600
San Antonio, Texas 78230

Exhibit "A"

A Field Note description of an 875.379-acre tract of the O. Schuchart Ranch being that portion lying north and west of State Highway No. 211 and situated in the S.E. Thomason Survey No. 403, Abstract No. 1189, the I. & G.N. R.R. Co. Survey No. 255¼, the J.M. Glenn Survey No. 256½, Abstract No. 442 and the H. Dahme Survey No. 256¼, Abstract No. 1899 Medina Co., being in both Medina and Bexar Counties, Texas and being more particularly described by metes and bounds as follows:

COMMENCING: At an Iron Pin for the original northeast corner of said O. Schuchart Ranch, being the northwest corner of the Henke Ranch shown by Deed recorded in Volume 2843 at Page 549 of the Deed and Plat Records of Bexar County, Texas and being in the south line of the Gallagher Ranch described by deed recorded in Volume 1603 at page 456 of the Deed Records of Medina County, Texas;

THENCE: On the original south boundary of said Gallagher Ranch and north line of the O. Schuchart Ranch and being the north boundary of a tract of land conveyed to the Gallagher Ranch by O. Schuchart for Ingress/Egress to said State Highway No. 211 the following two (2) courses, N 89° 52' 41" W, 369.58 feet and N 89° 57' 02" W, 150.00 feet to an Iron Pin for the northwest corner of said Ingress/Egress tract and the northeast corner and POINT OF BEGINNING of this Tract;

THENCE: Southerly, on the west boundary of said ingress/egress tract the following six (6) calls:
S 00° 02' 58" W, 150.00 feet to an Iron Pin,
S 76° 47' 52" E, 441.02 feet to an Iron Pin,
S 02° 13' 55" E, 111.95 feet to an Iron Pin,
S 02° 03' 05" W, 424.95 feet to an Iron Pin,
S 00° 48' 03" W, 188.51 feet to an Iron Pin and S 00° 04' 31" E, 1229.46 feet to an Iron Pin in the northwesterly Right-of-Way (R.O.W. varies) of State Highway No. 211 for the easterly southeast corner of this Tract;

THENCE: In a southwesterly direction on said Right-of-Way the following sixteen (16) calls:
S 47° 52' 05" W, 147.47 feet to an Iron Pin,
S 54° 15' 13" W, 226.08 feet to an Iron Pin,
S 55° 50' 12" W, 625.85 feet to an Iron Pin,
S 59° 41' 15" W, 521.18 feet to an Iron Pin,

S 55° 50' 12" W, 795.00 feet to an Iron Pin,
N 79° 09' 48" W, 176.78 feet to an Iron Pin,
S 55° 50' 12" W, 120.00 feet to an Iron Pin,
S 10° 50' 12" W, 176.78 feet to an Iron Pin,
S 55° 50' 12" W, at 120.39 feet pass the Bexar/Medina County Line and in
all 677.64 feet to an Iron Pin,
S 55° 48' 57" W, 12.13 feet to an Iron Pin,
S 42° 32' 13" W, 935.48 feet to an Iron Pin,
S 34° 28' 11" W, 955.10 feet to an Iron Pin,
S 21° 27' 21" W, 1071.83 feet to an Iron Pin,
S 02° 00' 29" W, 560.38 feet to an Iron Pin,
S 18° 08' 47" E, 435.33 feet to an Iron Pin and S 07° 52' 31" E, 51.27 feet
to an Iron Pin on the north bluff of San Geronimo Creek for the southerly
southeast corner of this Tract;

THENCE:

Along the bluff the following nine (9) courses:

S 59° 24' 34" W, 131.59 feet to an Iron Pin,
S 59° 09' 19" W, 808.81 feet to a 13" 3-pronged dead cedar,
S 80° 45' 10" W, for a distance of 424.08 feet, to a set Iron Pin,
N 70° 01' 51" W, for a distance of 295.31 feet, to a set Iron Pin,
N 59° 23' 21" W, for a distance of 204.56 feet, to a set P K nail,
N 50° 56' 04" W for a distance of 189.27 feet, to a set P K nail,
N 41° 35' 31" W, for a distance of 224.27 feet, to a set P K nail,
N 28° 18' 38" W, for a distance of 417.59 feet to a set Iron Pin,
N 10° 01' 46" E, for a distance of 384.91 feet to a set Iron Pin,

THENCE:

Along a fence line and the west boundary line of this tract the following
eleven (11) courses:

N 07° 01' 28" E, for a distance of 1672.59 feet to a set Iron Pin,
N 01° 17' 27" E, for a distance of 278.15 feet to a set Iron Pin,
N 10° 16' 45" W, for a distance of 120.54 feet to a set Iron Pin,
N 16° 06' 37" W, for a distance of 543.54 feet to a set Iron Pin,
N 38° 37' 33" W, for a distance of 174.74 feet to a set Iron Pin,
N 35° 35' 15" W, for a distance of 202.88 feet to a set Iron Pin,
N 24° 39' 35" W, for a distance of 564.25 feet to a set Iron Pin,
N 47° 52' 13" W, for a distance of 302.60 feet, to a set Iron Pin,
N 34° 48' 45" W, for a distance of 3059.57 feet to a set Iron Pin,
N 06° 00' 29" W, for a distance of 344.32 feet to a set Iron Pin,
N 38° 13' 35" E, for a distance of 537.80 feet to a set Iron Pin said point
being the northwest corner of this Tract;

THENCE:

S 82° 53' 12" E, for a distance of 189.38 feet, along a fence line to a 24"
Oak;

THENCE: S 45° 36' 19" E, for a distance of 96.39 feet along a fence line to a fence corner post;

THENCE: N 62° 11' 06" E, for a distance of 117.14 feet along a fence line to an 8" Cedar fence post;

THENCE: N 45° 08' 48" E, for a distance of 104.90 feet, to a found Iron Pin set in concrete;

THENCE: Along a fence line and the south line of the said Gallagher Ranch the following six (6) courses:
 S 89° 57' 11" E, for a distance of 566.44 feet, to a found Iron Pin set in concrete;
 S 89° 57' 29" E, for a distance of 3830.25 feet, to a found Iron Pin set in concrete;
 S 89° 54' 43" E, for a distance of 650.53 feet, to a fence corner post;
 S 89° 49' 56" E, for a distance of 687.32 feet, passing at 636.39 feet the Bexar/Medina County line, to a found Iron Pin;
 S 89° 50' 57" E, for a distance of 458.94 feet to a found Iron Pin and,
 S 89° 57' 02" E, for a distance of 1398.06 feet to the POINT OF BEGINNING and containing 875.379 acres of land of which 717.663 acres are in Medina County and 157.716 acres are in Bexar County.



Jack C. Evans
 Jack C. Evans
 R.P.L.S. No. 1523
 June 7, 1994

Any provision herein which restricts the sale, or use of the described real property because of race is invalid and unenforceable under Federal law STATE OF TEXAS, COUNTY OF BEXAR
 I hereby certify that this instrument was FILED in File Number Sequence on the date and at the time stamped hereon by me and was duly RECORDED in the Official Public Record of Real Property of Bexar County, Texas on:

Doc# 20060147421 Fees: \$32.00
 06/23/2006 10:08AM # Pages 5
 Filed & Recorded in the Official Public
 Records of BEXAR COUNTY
 GERRY RICKHOFF COUNTY CLERK

JUN 23 2006



Gerry Rickhoff
 COUNTY CLERK BEXAR COUNTY TEXAS

ADDENDUM NO. 3

On this 31st day of March 2021, Quarry Materials Corporation (hereinafter "Owner"), and Martin Marietta Materials Southwest, Ltd. (hereinafter "Lessee") make this Addendum to the Limestone Mining Lease, dated February 29, 1996, by and between Owner and a corporate predecessor of the Lessee, Redland Stone Products Company:

WHEREAS, Owner and Lessee entered into a mining lease, on February 29, 1996, for limestone and other materials, covering 875.379 acres in Medina and Bexar Counties, Texas (hereinafter "Lease"); and

WHEREAS, Owner and Lessee amended the Lease, on June 10, 2005, to clarify the rights and obligations of the parties in the Lease, under Addendum No. 1; and

WHEREAS, Owner and Lessee amended the Lease, on June 1, 2006, increasing the option periods to extend the term, increase production royalties, increase annual minimum, and modify the carry forward period, under Addendum No. 2; and

WHEREAS, the parties desire to amend the Lease as provided herein.

NOW, THEREFORE, the parties intending to be legally bound hereby, covenant and agree as follows:

1. Section 2.1 of the Lease is hereby deleted and replaced as follows:

The term of this lease (the "Term") shall commence on March 1, 1996 (the "Commencement Date") and unless this Lease is sooner terminated as hereinafter provided shall terminated on February 28, 2006 (the "Initial Term"). Owner hereby grants to Lessee fourteen (14) consecutive options to extend the Term (each such option being referred to herein as an "Extension Option" and collectively as "Extension Options") for five (5) years each (each such option being referred to herein as an "Extension Term" and collectively as "Extension Terms") on the same terms and conditions contained in this Lease. Whenever the content of this Lease so requires, the term "Term" shall be deemed to include the Initial Term and any Extension Term for which Lessee has exercised an Extension Option. The Lease Extension Options shall automatically renew, unless terminated sooner as otherwise provided in the Lease.

2. The second paragraph of Section 4.1 (as amended under Addendum No. 2) is hereby deleted and replaced as follows:

Effective March 1, 2021, the Royalty shall be



3. The first two (2) sentences of Section 4.3 of the Lease are hereby amended to provide as follows:

Beginning as of January 1, 2021, the minimum amount of Royalty due each Lease Year (as hereinafter defined) during the Term shall be [REDACTED]



4. Prepaid Royalty. Pursuant to section 4.3 of the Lease, Lessee is currently entitled to a credit in the amount of [REDACTED] against any future Royalty that may become due, and Lessee hereby waives its right to such existing credit, however Lessee retains all rights to accumulate new or additional credit against any future Royalty as provided for under section 4.3 of the Lease and going forward from the date of this Addendum.
5. Property Taxes. Lessee shall pay [REDACTED] towards all real property taxes required to be paid by Lessor pursuant to section 9 of the Lease ("Lessee's Tax Contribution") The amount of Lessee's Tax Contribution shall increase at each Term renewal by a percentage equal to the average selling price increase for the previous five-year period.
6. Onsite. Owner shall not access the Mining Property unless accompanied at all times by an employee of Lessee, in compliance with all safety rules and regulations governing the Mining Property. Additionally, as the parties agree that it would be in the interest of both to add on-site subtenant customers, Owner shall provide reasonable support in connection with Lessee's efforts to pursue onsite customers, including written or oral support of any permit applications.
7. Revisit Terms. Parties will renegotiate the Royalty Rate, Minimum Royalty, and property tax considerations on the tenth (10th) and twenty-fifth (25th) anniversaries of this amendment. Property tax adjustment shall only be considered if Lessee relocates the existing processing plant. Royalty rates shall be adjusted to reflect then current market royalty rates in Bexar and Medina counties. In the event the parties are unable to agree on such rates, they shall submit the matter to mediation with a 3rd party mediator in San Antonio, Texas. While such mediation is proceeding, this lease shall remain valid and Lessee shall pay royalties at the then-current rate, and royalties shall be tried up after a mediator's final decision.
8. Terms and Conditions. Except as otherwise provided for in this Addendum, all other terms and conditions of the Lease shall remain unchanged and in full force and effect.

All capitalized terms used herein but not defined shall have the meaning set forth in the Lease.

9. Counterparts. This agreement may be signed in any number of counterparts, each counterpart is an original, together, all counterparts form one single document.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

QUARRY MATERIALS CORPORATION

MARTIN MARIETTA MATERIALS
SOUTHWEST, LTD.

By: 
Name: EARL E HOOD III
Please Print
Title: President
Date: MARCH 31, 2021

By: 
Name: WJ PODRAZIK
Please Print
Title: REG VP/OM
Date: 4/28/2021

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

I _____
Kirk Light
Print Name

President Southwest Division
Title - Owner/President/Other

of _____
Martin Marietta Materials Southwest, LLC
Corporation/Partnership/Entity Name

have authorized _____
Forster Engineering
Print Name of Agent/Engineer

of _____
Forster Engineering
Print Name of Firm

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

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

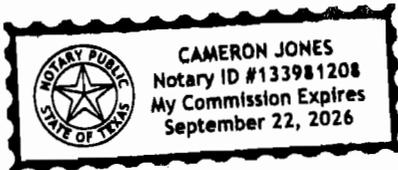
[Signature]
Applicant's Signature

10-06-23
Date

THE STATE OF Texas §
County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Kirk R. Light 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 6th day of October, 2023



[Signature]
NOTARY PUBLIC

Cameron Jones
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 09-22-26

Section 9.0

APPLICATION FEE FORM AND FEE

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: 211 Quarry

Regulated Entity Location: 11399 State Highway 211, San Antonio, TX 78254

Name of Customer: Martin Marietta Materials Southwest, LLC

Contact Person: Leslie Mackay Phone: 210-208-4067

Customer Reference Number (if issued): CN 606114726

Regulated Entity Reference Number (if issued): RN 102156270

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

San Antonio Regional Office

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

12100 Park 35 Circle

Mail Code 214

Building A, 3rd Floor

P.O. Box 13088

Austin, TX 78753

Austin, TX 78711-3088

(512)239-0357

Site Location (Check All That Apply):

Recharge Zone

Contributing Zone

Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	613 +/- Acres	\$ 10,000.00
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 12/18/23

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

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

Organized Sewage Collection Systems and Modifications

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150

Section 10.0

CORE DATA FORM



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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.) WPAP APPLICATION		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 606114726		RN 102156270

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>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).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other: Limited Liability Company	
12. Number of Employees		13. Independently Owned and Operated?	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant			
15. Mailing Address:	Leslie Mackay, c/o Martin Marietta Materials Southwest, LLC		
	4949 N. Loop 1604 W., Suite 135		
	City	State	ZIP
San Antonio	TX	78249	ZIP + 4
			1388
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		Leslie.Mackay@martinmarietta.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)									
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information									
<i>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).</i>									
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)									
211 Quarry									
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>		11399 State Highway 211							
		City	San Antonio	State	Tx	ZIP	78254	ZIP + 4	1742
24. County		Medina/Bexar							

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

25. Description to Physical Location:											
26. Nearest City				State		Nearest ZIP Code					
San Antonio				TX		78254					
<i>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).</i>											
27. Latitude (N) In Decimal:			29.5392			28. Longitude (W) In Decimal:			98.8053		
Degrees		Minutes		Seconds		Degrees		Minutes		Seconds	
29		32		21		98		48		19	
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						212312					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)											
Limestone Quarry											
34. Mailing Address:		Leslie Mackay, c/o Martin Marietta Materials Southwest, LLC									
		4949 N. Loop 1604 W., Suite 135									
		City	San Antonio	State	Tx	ZIP	78249	ZIP + 4	1388		
35. E-Mail Address:		Leslie.Mackay@martinmarietta.com									
36. Telephone Number				37. Extension or Code				38. Fax Number (if applicable)			
() - (210) 208-4067								() - (210) 208-4065			

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.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Ralph Voss Jr., P.E.	41. Title:	Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210)289-0580		() -	rvoss@forsterengineering.com

SECTION V: Authorized Signature

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

Company:	Forster Engineering	Job Title:	Engineer
Name (In Print):	Ralph Voss Jr., P.E.	Phone:	(210)289-0580
Signature:		Date:	12/18/23