TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 8, 2013

Mr. Tom Singley
Colorado Materials, Ltd.
P.O. Box 2109
San Marcos, TX 78667

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Hunter Quarry II; Located approximately 0.1 miles northeast of the intersection of FM1102 and FM 2439; Hunter, Texas

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

Investigation No. 1105493; Regulated Entity No. RN102380250; Additional ID No. 13-13072901

Dear Mr. Singley:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by Westward Environmental, Inc. on behalf of Colorado Materials, Ltd. on July 29, 2013. Final review of the WPAP was completed after additional material was received on October 7, 2013 and November 1, 2013. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed limestone quarry project will have a total area of approximately 845 acres. The proposed quarry pit will disturb approximately 714 acres. The proposed activities for the site include quarrying to an elevation no deeper than 609 feet above mean sea level (a.m.s.l.). Haul roads and stock piles will be contained within the quarry pit. The pits will be excavated in 10 acre sections and separated by existing stream channels. As presented, the stream channels will only be quarried with prior approval from all appropriate jurisdictional agencies. No on-site sewage facility is proposed at this time. Project wastewater

Natural buffers were proposed for eleven natural sensitive features, S-58, S-49, S-60, S-69, S-72, S-70, S-106a, S-106b, S-109, S-110, and S-111. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffers. The size is generally based on the drainage are for each sensitive feature. The natural 200 foot buffer area along the southern side of York Creek (and the final earthen berm) will include all sensitive features.

SPECIAL CONDITIONS

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

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

III. This approval does not authorize the construction or installation of aboveground storage tanks at the site on the Edwards Aquifer recharge zone.

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

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

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

If a new Edwards Aquifer protection plan is submitted to the TCEQ under 30 TAC §213.4(h) (3), the approved plan will continue in effect until the executive director makes a determination on the new plan.

VII. This approval letter is being issued for regulated activities (as defined in Chapter 213) and for best management practices presented in the application. Other authorizations may be necessary. Failure to obtain all necessary authorizations could result in enforcement actions.

STANDARD CONDITIONS

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

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. "No well exist on site." All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. ~~Stabilization measures shall be initiated as soon as practicable in portions of the site where construction~~ activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial

WESTWARD
Environmental. Engineering. Natural Resources.

November 1, 2013

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Region 13 Office – San Antonio
14250 Judson Rd.
San Antonio, Texas 78233

Project No.: 10080-85

RECEIVED
NOV 19 2013
COUNTY ENGINEER

Attn: Ms. Monica Reyes
Subject: Proposed Water Pollution Abatement Plan (WPAP) – **Response to Questions**
Hunter Quarry II – EAPP ID No. 13-13072901, RN102380250
Colorado Materials, Ltd. – CN600522452

Dear Ms. Reyes,

Below please find Westward Environmental Inc.'s (**WESTWARD'S**) response to your second letter dated October 24, 2013 regarding the Colorado Materials, Ltd. WPAP application submitted July 29, 2013. Our response is as follows:

TCEQ Question #1
Will compact roads be a part of the site? If so they will need to be counted as impervious cover, and treatment measures will need to be presented. "Pavement including streets, driveways, parking lots, etc...compacted road base, such as that used for parking areas...other surfaces that prevent the infiltration of water into soil." (RG-348, Section 3.3.2)

Response: The entrance road shown on the Site Plan is a ramp leading into the pit. Runoff from this ramp drains to and is controlled inside the quarry pit. There will be no additional permanent roadways as part of this project. Truck traffic within the pit area will vary based on current quarry operations (equipment layout, stockpile location, etc.). These traffic routes are simply areas within the pit between stockpiles and equipment. No roads will be constructed within the pit. The pit will serve as the BMP for all operations within the pit.

WESTWARD requests to see a draft of the approval conditions before TCEQ officially issues plan approval. If you have any questions regarding this response, or require further information, please call our office at (830) 249-8284.

Respectfully submitted,
WESTWARD ENVIRONMENTAL, INC.

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER
11/1/13

Mary Ellen Schulle, PE, CFM
Project Engineer
TX - License #114545

Distribution: Addressee
Mr. Tom Singley – Colorado Materials, Ltd.
WEI 10080-85 File

WESTWARD
Environmental. Engineering. Natural Resources.

October 7, 2013

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Region 13 Office – San Antonio
14250 Judson Rd.
San Antonio, Texas 78233

Project No.: 10080-85

Attn: Ms. Monica Reyes
Subject: Proposed Water Pollution Abatement Plan (WPAP) – **Response to Questions**
Hunter Quarry II – EAPP ID No. 13-13072901, RN102380250
Colorado Materials, Ltd. – CN600522452

Dear Ms. Reyes,

Attached please find Westward Environmental Inc.'s (WESTWARD'S) response to your letter dated September 27, 2013 regarding the Colorado Materials, Ltd. WPAP application submitted July 29, 2013. Our response is as follows:

TCEQ Question #1
Please show S-60 as feature zone.
Response: Please see the attached revised Geologic Assessment Map and WPAP Site Plan which have been revised to show S-60 as a Feature Zone. Feature Zone S-60 is 45' by 20' and therefore may be difficult to see at the map scale.

TCEQ Question #2
Please show 25' buffer around Bullhead Hollow.
Response: Please see the attached revised WPAP Site Plan which has been revised to include the 25' buffer around Bullhead Hollow.

WESTWARD requests to see a draft of the approval conditions before TCEQ officially issues plan approval. If you have any questions regarding this response, or require further information, please call our office at (830) 249-8284.

Respectfully submitted,
WESTWARD ENVIRONMENTAL

10/7/13

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

Mary Ellen Schulle, PE, CFM
Project Engineer
TX - License #114545

RECEIVED
NOV 19 2013
COUNTY ENGINEER

RECEIVED TCEQ
2013 OCT -7 PM 4:50
SAN ANTONIO REGION

Distribution: Addressee
Mr. Tom Singley – Colorado Materials, Ltd.
WEI 10080-85 File

Attachments

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).
7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
    B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
    C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

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

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

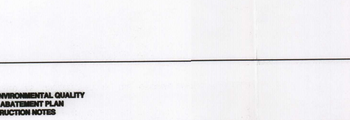
THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

BMP CONSTRUCTION NOTES

1. COMPACTED EARTHEN BERM

INSTALLATION:
COMPRISED OF SOIL AND OVERBURDEN MATTER EITHER GENERATED ONSITE OR DELIVERED FROM OFFSITE. COMPACT WITH HEAVY EQUIPMENT IN 12" (MAX) LIFTS.

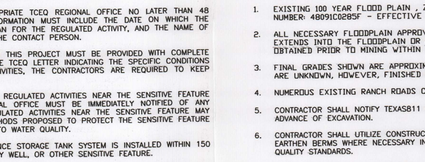
MAINTENANCE:
INSPECT BERMS QUARTERLY UNTIL SUFFICIENTLY VEGETATED. REPLACE AS NECESSARY.



2. ALTERNATE #1 & #2 ROCK BERMS (WEI)

INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

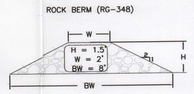


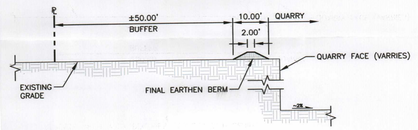
3. ROCK BERM (RG-348)

SHOULD BE SECURED WITH A WOVEN WIRE SHEATING, MAX. OPENING 1" AND MIN. WIRE DIA. 20 GAUGE GALVANIZED. SECURE WITH SHOAT RINGS.

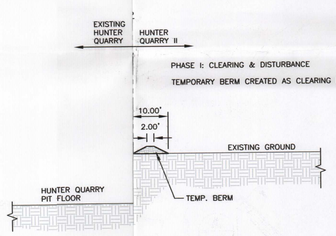
INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE. SIDE SLOPE MUST BE 2:1 OR FLATTER. WIRE SHEATHING MUST BE SECURED WITH TIE WIRE SO THEY OVERLAP AT LEAST 2". BERM SHOULD BE BURIED IN A TRENCH APPROX. 4" DEEP.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

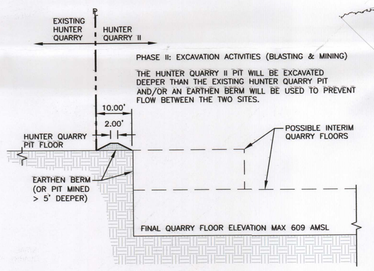




A 1 **TYP. 50' BUFFER**
SCALE : 1"=20'



B 1 **PHASE 1 QUARRY INTERFACE**
SCALE : 1"=20'



B 1 **PHASE 2 QUARRY INTERFACE**
SCALE : 1"=20'

GENERAL NOTES:

1. EXISTING 100 YEAR FLOOD PLAIN , ZONE A BOUNDARY PER FEMA, FIRM MAP COMMUNITY PANEL NUMBER: 48091C0285F - EFFECTIVE SEPTEMBER 2, 2009.
2. ALL NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED IF/WHEN MINING DISTURBACE EXTENDS INTO THE FLOODPLAIN OR 25' BUFFER.NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED PRIOR TO MINING WITHIN THE FLOODPLAIN.
3. FINAL GRADES SHOWN ARE APPROXIMATE AND DEPEND ON ROCK QUALITY . FINAL PIT SLOPES ARE UNKNOWN, HOWEVER, FINISHED QUARRY FLOOR SLOPES WILL BE APPROXIMATELY 2%.
4. NUMEROUS EXISTING RANCH ROADS CRISS CROSS THE PROPERTY.
5. CONTRACTOR SHALL NOTIFY TEXAS811 ONE CALL SYSTEM (1-800-344-8377) 48 HOURS IN ADVANCE OF EXCAVATION.
6. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS ROCK BERMS AND EARTHEN BERMS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
7. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STDS OF TCEQ.
9. TEMPORARY ROCK BERMS SHALL ME INSTALLED PRIOR TO DISTURBANCE WITHIN THE 25' STREAM BUFFER.
10. FOR ALL ADDITIONAL INFORMATION ON FEATURE ZONES SEE THE GEOLOGIC ASSESSMENT.

N

0 200 400 800

SCALE: 1" = 400'

LEGEND

- EXISTING 100 YEAR FLOODPLAIN
- FINAL EARTHEN BERM
- APPROX. PROPERTY BOUNDARY
- S-1 SENSITIVE FEATURE
- W WELL
- FAULT
- INFERRED FAULT
- SENSITIVE FEATURE ZONE
- FLOW ARROW (EXISTING FLOW CONDITIONS)
- STREAM
- BUFFER

IMAGE: NONE	
ISSUE DATE:	07/23/2013
DRAWN BY:	JS
CHECKED BY:	MES
SCALE: 1" =	400'
JOB #:	10080-085

SHEET #: 1 OF 1

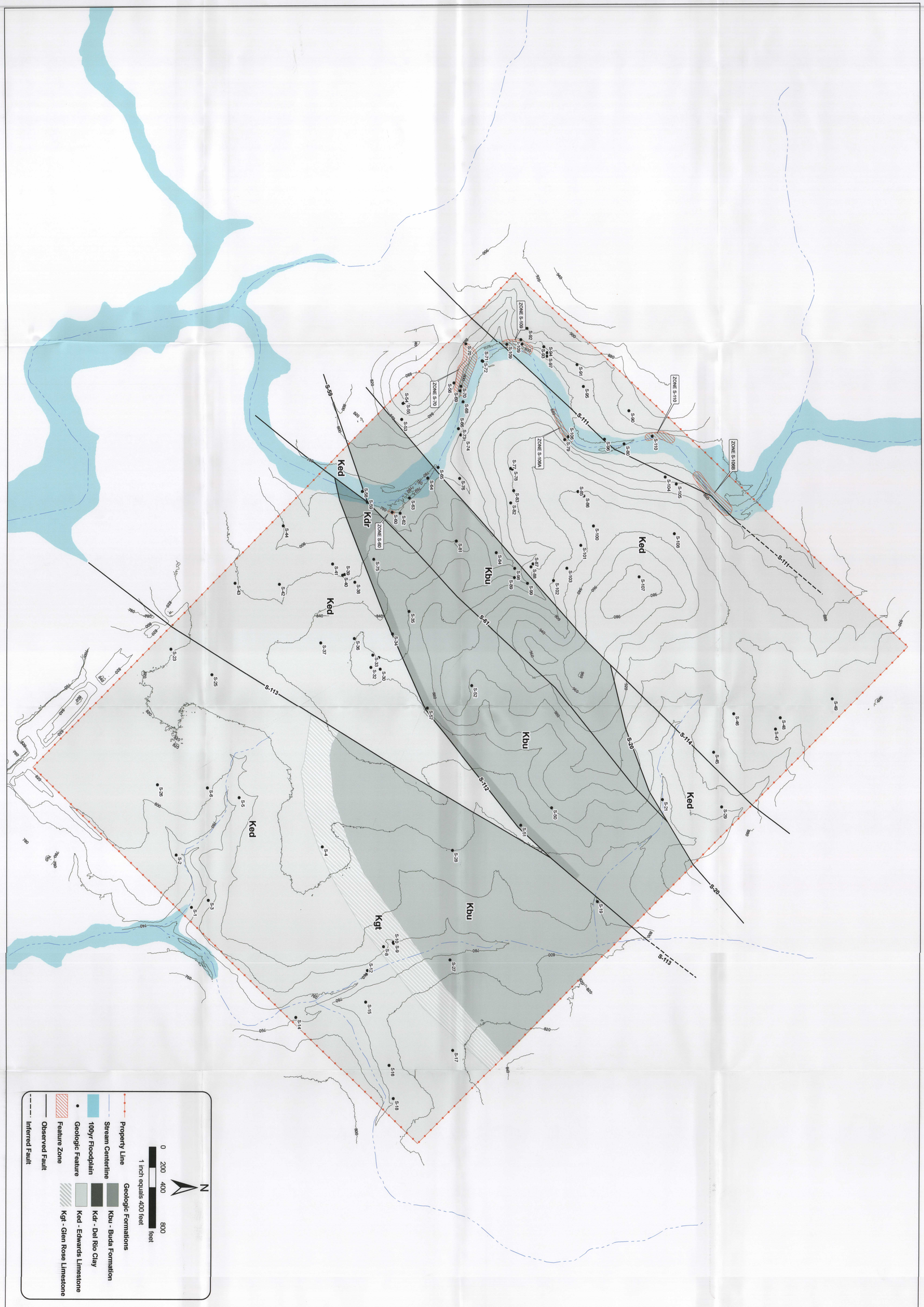
WESTWARD
Environmental Engineering, Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

REV	DESCRIPTION	BY	DATE
1	ADD ZONE S-60	JJS	10/07/2013
2	ADD TEMPORARY 25' BUFFER	JJS	10/07/2013

STATE OF TEXAS — MARY ELLEN F. SCHULLE — 114545 — LICENSED PROFESSIONAL ENGINEER — 10/7/13

WPAP SITE MAP

HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX



GEOLOGIC ASSESSMENT MAP

HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX

P65321
10-7-13

STATE OF TEXAS
THOMAS O. MATHEWS
GEOLOGY
5321
LICENSED
PROFESSIONAL GEOSCIENTIST

REV	DESCRIPTION	BY	DATE
1	ADD ZONE S-80	JJS	10/04/2013

WESTWARD
Environmental. Engineering. Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

SHEET #: 1 OF 1

IMAGE: TNRIS, 2012
ISSUE DATE: 07/23/2013
DRAWN BY: JS
CHECKED BY: TJ
SCALE: 1" = 400'
JOB #: 10093-084

TCEQ
Protecting Texas by Reducing and Preventing Pollution

F A X T R A N S M I T T A L

DATE: **September 27, 2013**

NUMBER OF PAGES *(Including this cover sheet):* **2**

TO: Name **Mr. Tom Singley**
Organization **Colorado Materials, Ltd.**
FAX Number **512-396-1558**

TO: Name **Ms. Mary Ellen Schulle, P.E.**
Organization **Westward Environmental, Inc.**
FAX Number **830-249-0221**

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name **Monica Reyes**
Division/Region **EAPP/San Antonio**
Telephone Number **210-403-4012**
FAX Number **210-545-4329**

NOTES:

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Hunter Quarry II; Located west side of FM2439 approximately 0.1 miles northeast of the intersection of FM 1102 and FM 2439; Comal County, Texas

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

Investigation No. 1105493; Regulated Entity No. RN102380250; Additional ID No. 13-13072901

Dear Ms. Schulle:

We are in the process of technically reviewing the WPAP application you submitted for the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed:

Geologic Assessment Map Comment:

1. Please show S-60 as feature zone.

Water Pollution Abatement Plan Site Map Comments:

1. Please show 25' buffer around Bullhead Hollow.

We ask that you submit **one original and four copies** of the amended materials to supplement the WPAP application to this office by no later than **14 days from the date of this fax** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 14 days from the notice date. If the response to the second is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Neal Denton of the Edwards Aquifer Protection Program of the San Antonio Regional Office at the number listed above.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 31, 2013

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Hunter Quarry II, located at 5080 FM 2439, New Braunfels, Texas

PLAN TYPE: Application for Approval of a Water Pollution Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP File No. and Regulated Entity No.: RN102380250

Dear Mr. Hornseth:

The referenced application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval.

Please forward your comments to this office by August 31, 2013.

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

Sincerely

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

WATER POLLUTION ABATEMENT PLAN (WPAP)

COLORADO MATERIALS, LTD
HUNTER QUARRY II

5080 FM 2439
NEW BRAUNFELS, COMAL COUNTY, TEXAS

Submitted to: TCEQ, Region 13 Office, San Antonio

JULY 2013

Prepared by:
WESTWARD ENVIRONMENTAL, INC.
Boerne, Texas
Project No. 10080-85

Signature: _____
Mary Ellen P. Schulle, P.E. - License No. 114545
Date: 7/18/13

Colorado Materials, Ltd.

Hunter Quarry II

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x Core Data Form (*TCEQ-10400)*

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

REGULATED ENTITY NAME: Hunter Quarry II
COUNTY: Comal STREAM BASIN: Guadalupe

EDWARDS AQUIFER: _x_ RECHARGE ZONE
__ TRANSITION ZONE

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

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Tom Singley
Entity: Colorado Materials, Ltd.
Mailing Address: PO Box 2109
City, State: San Marcos, TX Zip: 78667
Telephone: 512-396-1556 FAX: 512-396-1558

Agent/Representative (If any):

Contact Person: Mary Ellen Schulle, PE
Entity: Westward Environmental, Inc.
Mailing Address: 4 Shooting Club Rd.
City, State: Boerne, TX Zip: 78006
Telephone: 830-249-8284 FAX: 830-249-0221

2. __ This project is inside the city limits of _____.
_x_ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of San Marcos, TX.
__ This project is not located within any city's limits or ETJ.

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

Site entrance is on the west side of FM2439 approximately 0.1 miles northeast of the intersection of FM 1102 and FM 2439 in Hunter, Texas.

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

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

_x_ Project site.

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

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

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

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

PROHIBITED ACTIVITIES

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

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

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

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

ADMINISTRATIVE INFORMATION

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

   - x For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
   - ___ For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.

__ For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.
__ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
__ A request for an extension to a previously approved plan.

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

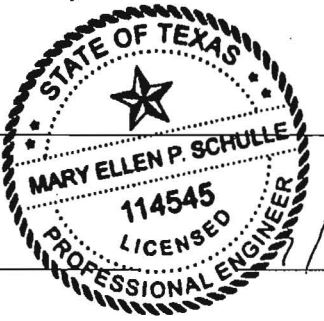
__ TCEQ cashier
__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
_x_ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

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

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

Mary Ellen Schulle, PE
Print Name of Customer/Agent/Engineer

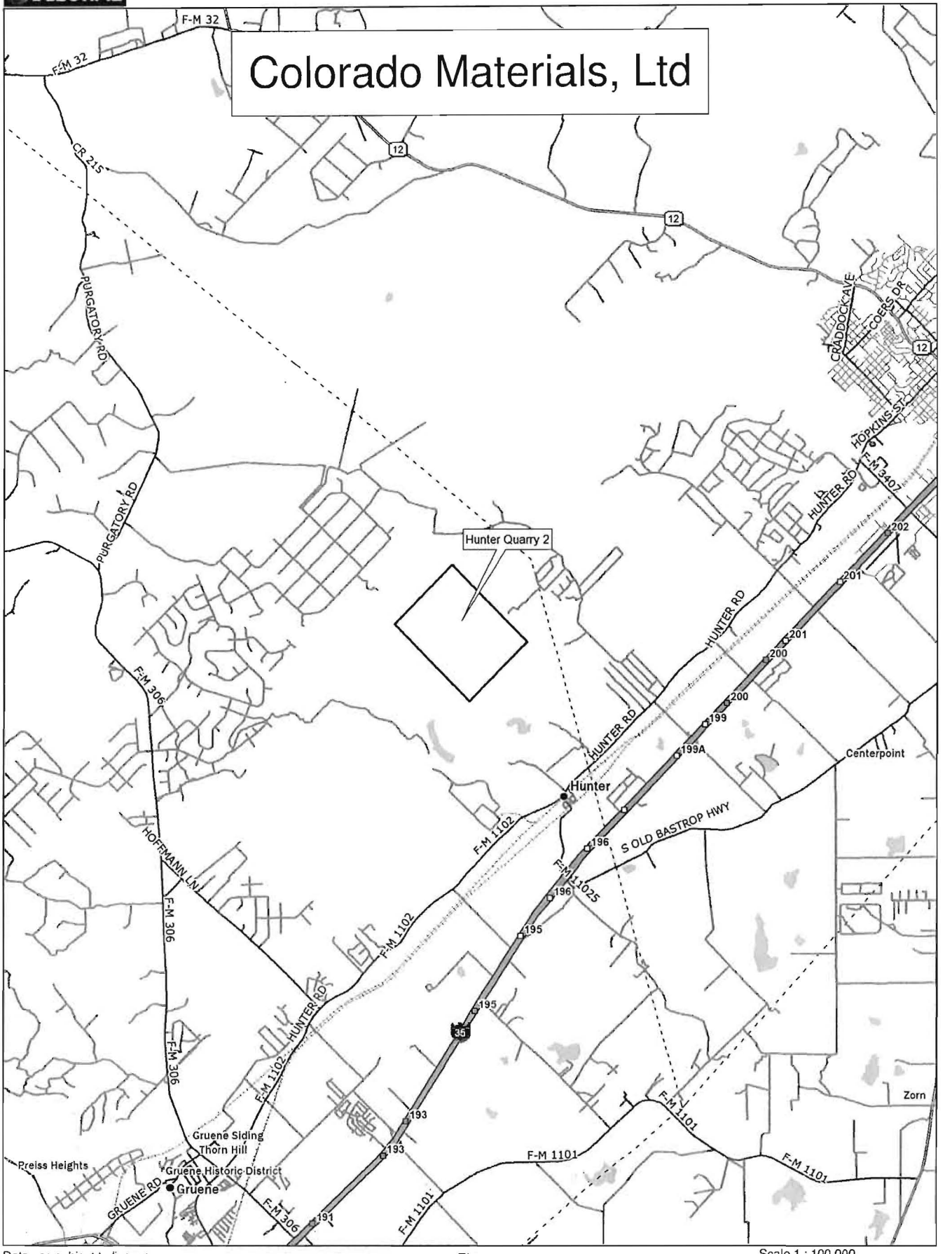


Signature of Customer/Agent/Engineer — Date: 7/18/13

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

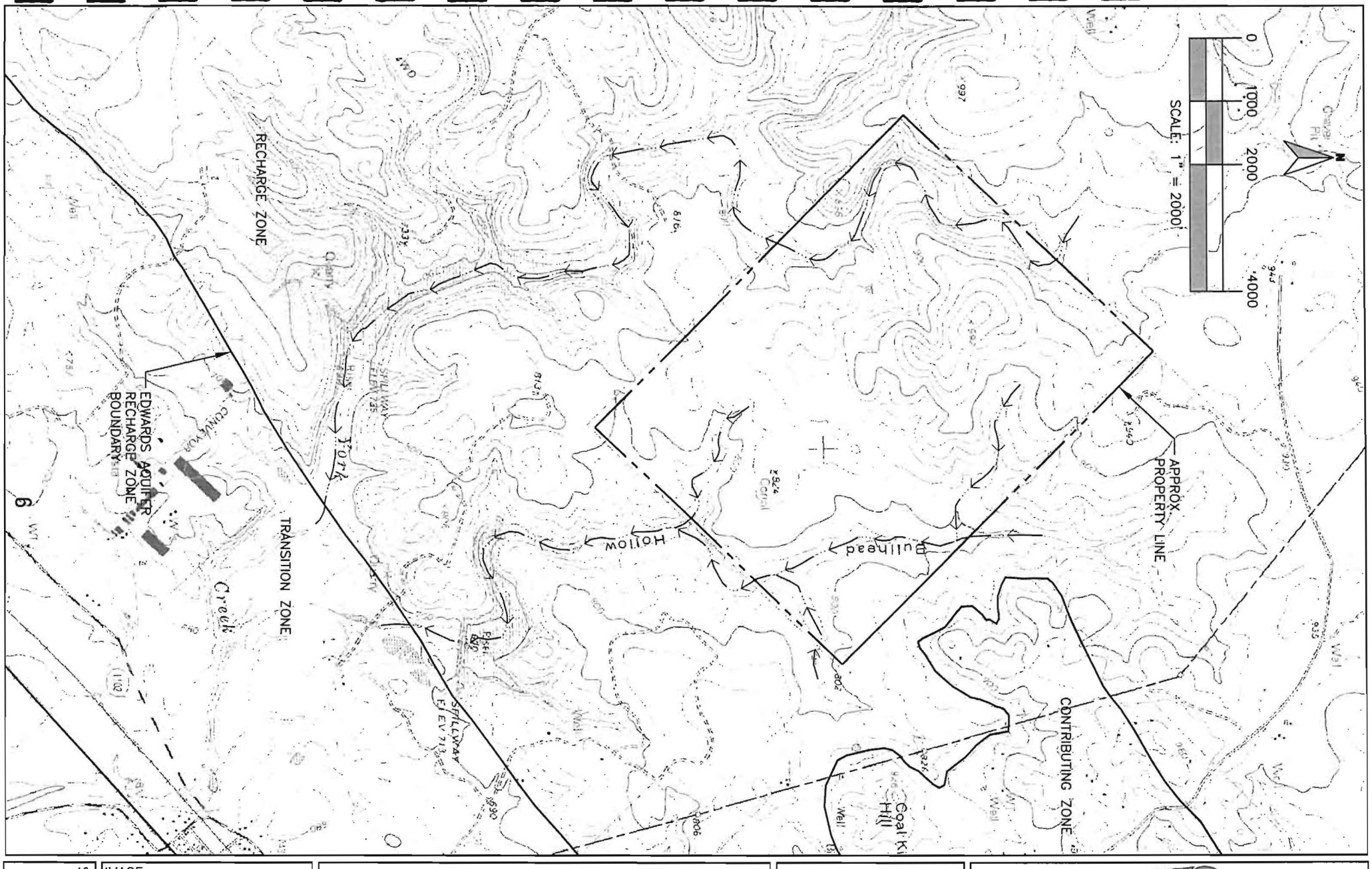
Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

Colorado Materials, Ltd



TN
MN (4.5°E)

Scale 1 : 100,000
1" = 1.58 mi
Data Zoom 11-0



SHEET #: 1 OF 1

IMAGE: HUNTER QUAD	
ISSUE DATE:	12/7/12
DRAWN BY:	MES
CHECKED BY:	CC
SCALE: 1" =	2000'
JOB #:	10080-85

USGS/EDWARDS MAP

HUNTER QUARRY II
COLORADO MATERIALS, LTD.
COMAL COUNTY, TX

REV.	DESCRIPTION	BY	DATE

WESTWARD
Environmental. Engineering. Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

Colorado Materials, Ltd
Hunter Quarry II

General Information Form Attachment C

Project Description

Colorado Materials, Ltd proposes to construct a limestone quarry on the subject tract of approximately 845 acres in Comal County. Of the 845 acre property, approximately 714 acres are proposed to be quarried. Mining will advance from southeast to northwest. The site will connect to the existing limestone quarry (Hunter Quarry) located at 5080 FM 2439 in New Braunfels, Comal County, Texas. An existing road which connects to the original Hunter site quarry pit will be used as the entrance to this site and will drain to the pit. Several existing ranch roads may be utilized.

A 10-acre area will be cleared and used to start the quarry excavation (approx. initial quarry location is shown on the WPAP Site Plan). As the quarry expands to the Final Earthen Berm as shown on the WPAP Site Plan, areas will be cleared in increments of less than 10 acres at a time. Mined material at Hunter Quarry II will be loaded into trucks and hauled or conveyed to the existing Hunter Quarry for processing. A primary crusher maybe located in the Hunter Quarry II pit in the future. Any stockpiles will be located in the pit or drain to the pit.

Nearly the entire site is proposed to be quarried, as shown on the site map. This includes areas located within the floodplain of Unnamed Tributary 1. Prior to mining in the floodplain, Colorado Materials, Ltd. will obtain all applicable floodplain development authorizations from the county and/or FEMA. 25 foot natural vegetated buffers will be left in place around Bullhead Hollow and Unnamed Tributary 1(and associated 100 year floodplain) until they are ready to be quarried. An approximately 200 foot natural vegetated buffer will be maintained along the southern side of York Creek and will serve as a buffer for York Creek as well as a buffer for the sensitive features located there.

Temporary BMPs consisting of earthen berms, and vegetated areas will be utilized to control and treat stormwater runoff in the initial stages of construction. Temporary earthen berms will be built as a result of clearing and will retain stormwater runoff from disturbed areas prior to excavation. Temporary natural existing vegetation will be maintained in a 25 foot buffer along Bullhead Hollow and Unnamed Tributary 1 (and associated 100 year floodplain). These buffers will be maintained until mining begins in these areas. A permanent approximately 200 foot wide buffer will be maintained along the southern side of York Creek and will serve as a buffer for the stream as well as for sensitive features located there. A permanent 50 foot buffer along the property line (except where Hunter Quarry II borders Hunter Quarry as noted on the WPAP site plan) will serve as final treatment for stormwater leaving the site.

Trash generated on-site will be disposed of in a dumpster and handled by a licensed waste service. A water truck will be used as necessary to control dust. Portable toilets will be used at Hunter Quarry II.

Routine maintenance will not occur at the proposed Hunter Quarry II site. To the extent feasible emergency repairs will be performed at the existing Hunter Quarry. Fueling of equipment is not anticipated at the proposed Hunter Quarry II.

It is not expected that any significant amount of groundwater will be encountered in the quarry excavation. A 25 foot separation distance between the pit floor and the groundwater level will be maintained. As noted in the groundwater availability summary the estimated wet-weather groundwater elevation at Hunter Quarry II is 583.65 feet below the surface. To maintain a 25 foot separation from groundwater, the quarry floor will not be lower than 609 feet amsl.

The geologic assessment included in this submittal covers the entire 845 acres of the site. Twelve (12) sensitive features were discovered on-site and are located near York Creek (see WPAP Site Map). These features will be protected by the approximately 200' buffer along the southern side of York Creek (and the final earthen berm).

Geologic Assessment

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

REGULATED ENTITY NAME: Hunter Quarry II

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

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. X Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
BtD	D	0 – 1.5'
CrD	C	0 – 1'
ErG	D	0 – 0.83'
RUD	D	0 – 2.33'

* Soil Group Definitions (Abbreviated)

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

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

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

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

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

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

5. X Appropriate **SITE GEOLOGIC MAP(S)** are attached:

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

Applicant's Site Plan Scale 1" = 400'
Site Geologic Map Scale 1" = 400'
Site Soils Map Scale (if more than 1 soil type) 1" = 400'

6. Method of collecting positional data:
X Global Positioning System (GPS) technology.

__ Other method(s).

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

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

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

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

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

_X_ There are _1_(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
X_ The wells are in use and comply with 16 TAC Chapter 76.
__ There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: Dec. 4,5,6,7,11,12,13,17,18,19,20,26, 2012 & Jan. 2,3,4,7,10,11,23,25,31 & Feb. 1,4 & March 14, 2013
Date(s)

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

Thomas O. Mathews II
Print Name of Geologist

830-249-8284
Telephone

830-249-0221
Fax

Thomas O. Mathews II PG5321
Signature of Geologist

July 12, 2013
Date

Representing: Westward Environmental, Inc.
(Name of Company)

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

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

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Colorado Materials																
LOCATION: Hunter, TX			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)	DOM	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	N29° 49.6849'	W98° 2.3191'	SC	20	Ked	0.7	0.3	3	90				FO	5	25	X		X		HILLSIDE
S-2	N29° 49.6604'	W98° 2.4172'	SC	20	Ked	0.3	0.2	3	vertical				FO	5	25	X		X		HILLTOP
S-3	N29° 49.7126'	W98° 2.3318'	SC	20	Ked	0.4	0.2	0.7	115				FO	10	30	X		X		HILLSIDE
S-4	N29° 49.8994'	W98° 2.4303'	MM	30	Kgt	0.5	0.5	unk	none				X	5	35	X		X		HILLSIDE
S-5	N29° 49.7642'	W98° 2.5235'	SC	20	Ked	1.1	1.4	0.9	vertical				F	5	25	X		X		HILLSIDE
S-6	N29° 49.7124'	W98° 2.5427'	SC	20	Ked	0.9	1	0.6	355				F	5	25	X		X		HILLSIDE
S-7	N29° 49.9873'	W98° 2.2978'	CD	5	Kgt	8	4.5	0.8	90				F	5	10	X		X		HILLTOP
S-8	N29° 49.9982'	W98° 2.2425'	SC	20	Kgt	0.2	0.1	0.1	5				F	10	30	X		X		HILLSIDE
S-9	N29° 50.0145'	W98° 2.2485'	O	5	Kgt	20	11	1.5	45	10			FO	10	25	X		X		HILLSIDE
S-10	N29° 50.014'	W98° 2.2504'	SC	20	Kgt	1.5	1.3	0.8	340				FO	10	30	X		X		HILLSIDE
S-11	N29° 49.9779'	W98° 2.2029'	SC	20	Ked	2	0.5	2	45	10			FO	5	35	X		X		HILLSIDE
S-12	N29° 49.9725'	W98° 2.198'	SC	20	Ked	1.7	0.7	>3	45	10			FO	5	35	X		X		HILLSIDE
S-13	N29° 49.9708'	W98° 2.1906'	CD	5	Ked	13	4	0.7	110				N	5	10	X			X	DRAINAGE
S-14	N29° 49.8549'	W98° 2.1116'	SC	20	Ked	0.7	0.4	1.5	245				FO	10	30	X		X		HILLSIDE
S-15	N29° 49.9693'	W98° 2.139'	CD	5	Ked	6.5	3.7	0.7	38	10			F	5	20	X		X		HILLTOP
S-16	N29° 50.0064'	W98° 2.0201'	SH	20	Ked	8	6	2	45	10			F	5	35	X		X		HILLSIDE
S-17	N29° 50.1105'	W98° 2.047'	SC	20	Ked	1.1	0.8	>3	25				F	10	30	X		X		HILLSIDE
S-18	N29° 50.0129'	W98° 1.956'	SC	20	Ked	2	0.9	>3	110				FO	10	30	X		X		HILLSIDE
S-19	N29° 50.3481'	W98° 2.3236'	CD	5	Kbu	110	9	1.7	90				FO	10	15	X			X	DRAINAGE
S-20	N29° 50.5046'	W98° 2.4028'	F	20	Kbu/Kp	2600	20	unk	48	10			FN	5	35	X			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.

Thomas O Mathews II PG 5321

7/12/13
Date

STATE OF TEXAS
THOMAS O. MATHEWS
GEOLOGY
5321
LICENSED
PROFESSIONAL GEOSCIENTIST

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

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Colorado Materials

LOCATION: Hunter, TX			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)	DOM	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-21	N29° 50.455'	N98° 2.5138'	O	5	Ked	25	7	1.5	80				FO	10	15	X			X	DRAINAGE
S-22	same as S-113																			
S-23	N29° 49.6547'	W98° 2.804'	SC	20	Ked	2.5	1.1	>5	120				O	15	35	X		X		HILLSIDE
S-24	same as S-113																			
S-25	N29° 49.7215'	W98° 2.7556'	CD	5	Ked	6.5	4	0.8	85				F	5	10	X		X		HILLSIDE
S-26	N29° 49.6307'	W98° 2.549'	CD	5	Ked	9	5	0.7	85				F	5	10	X		X		HILLSIDE
S-27	N29° 50.1074'	W98° 2.2166'	SC	20	Kbu	1.1	0.8	0.7	10				FO	10	30	X		X		HILLSIDE
S-28	N29° 50.1116'	W98° 2.4215'	CD	5	Kbu	6	2.5	1	50	10			F	5	20	X		X		HILLSIDE
S-29	N29° 50.5518'	W98° 2.4993'	SC	20	Ked	0.8	0.05	2.5	90				F	10	30	X		X		HILLSIDE
S-30	N29° 49.9961'	W98° 2.7635'	SC	20	Ked	1.2	0.6	>2	10				FO	10	30	X		X		HILLTOP
S-31	N29° 49.9941'	W98° 2.7853'	SC	20	Ked	0.8	2.5	1.1	135				FO	10	30	X		X		HILLSIDE
S-32	N29° 49.9809'	W98° 2.7668'	SH	20	Ked	4	2	0.9	38	10			F	5	35	X		X		HILLSIDE
S-33	N29° 49.9843'	W98° 2.7897'	SC	20	Ked	2.1	1.9	>3	320				F	5	25	X		X		HILLSIDE
S-34	N29° 50.0166'	W98° 2.8292'	CD	5	Kdr	6	3	0.7	50	10			F	5	20	X		X		HILLSIDE
S-35	N29° 50.0434'	W98° 2.8712'	SC	20	Kbu	1.9	0.8	2.2	310				F	5	25	X		X		HILLSIDE
S-36	N29° 49.9542'	W98° 2.8211'	SC	20	Ked	1	4.1	0.4	130				FO	10	30	X		X		HILLSIDE
S-37	N29° 49.8995'	W98° 2.8135'	CD	5	Ked	5.5	3	0.7	90				F	5	10	X		X		HILLSIDE
S-38	N29° 49.9556'	W98° 2.9266'	SH	20	Ked	4.2	3.1	0.8	140				FO	10	30	X		X		HILLSIDE
S-39	N29° 49.9389'	W98° 2.9411'	CD	5	Ked	5.5	3.5	1	130				F	5	10	X		X		HILLSIDE
S-40	N29° 49.9356'	W98° 2.9398'	SC	20	Ked	1.2	0.9	1.9	355				FO	10	30	X		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
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TCEQ-0585-Table (Rev. 10-01-04)

12

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Colorado Materials																
LOCATION: Hunter, TX			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)	DOM	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-41	N29° 49.9195'	W98° 2.9611'	CD	5	Ked	4	8	0.9	60				F	5	10	X		X		HILLSIDE
S-42	N29° 49.8326'	W98° 2.9241'	CD	5	Ked	10	3.5	0.8	350				F	5	10	X		X		HILLSIDE
S-43	N29° 49.7601'	W98° 2.9266'	SC	20	Ked	2.1	0.9	0.3	0				FO	15	35	X		X		HILLSIDE
S-44	N29° 49.8394'	W98° 3.0333'	CD	5	Ked	5.5	3.5	0.9	10				F	5	10	X		X		HILLSIDE
S-45	N29° 50.5391'	W98° 2.6019'	SH	20	Ked	4	2.7	0.8	130				F	8	28	X		X		HILLSIDE
S-46	N29° 50.5726'	W98° 2.6736'	SH	20	Ked	5.5	3.2	1.3	85				F	8	28	X		X		HILLSIDE
S-47	N29° 50.6406'	W98° 2.6444'	CD	5	Ked	7.5	4	0.8	40	10			F	5	20	X		X		HILLTOP
S-48	N29° 50.6483'	W98° 2.6654'	CD	5	Ked	8	4	1.2	75				F	5	10	X		X		HILLSIDE
S-49	N29° 50.7336'	W98° 2.7006'	SC	20	Ked	4.8	1.3	.2.1	30				FO	10	30	X		X		HILLTOP
S-50	N29° 50.2741'	W98° 2.500'	CD	5	Kbu	5	4.5	0.6	20				F	5	10	X		X		HILLSIDE
S-51	N29° 50.2235'	W98° 2.4676'	CD	5	Kdr	5.5	3	0.5	11				F	5	10	X		X		HILLSIDE
S-52	N29° 50.1453'	W98° 2.7311'	CD	5	Kbu	7.5	3.7	0.6	85				F	5	10	X		X		HILLSIDE
S-53	N29° 50.0341'	W98° 3.2308'	CD	5	Ked	7.5	4	1.3	45	10			F	5	20	X		X		HILLSIDE
S-54	N29° 50.0365'	W98° 3.2606'	SC	20	Ked	0.6	0.7	0.4	310				F	5	25	X		X		HILLSIDE
S-55	N29° 50.0392'	W98° 3.2624'	SF	20	Ked	2.7	0.6	1.7	50	10			F	5	35	X		X		HILLSIDE
S-56	N29° 50.1201'	W98° 3.2983'	CD	5	Ked	6	2.5	0.7	130				F	5	10	X		X		HILLSIDE
S-57	N29° 50.0724'	W98° 2.6883'	MB	5	Kdr	36	8	3.5	330				F	5	10	X		X		HILLSIDE
S-58	N29° 49.9687'	W98° 3.0967'	SC	20	Ked	0.7	0.5	>2	80				FO	20	40		X		X	FLOODPLAIN
S-59	N29° 49.9767'	W98° 3.0761'	F	20	Ked	1350	20	unk	50	10			FN	19	49		X		X	FLOODPLAIN
S-60	N29° 42.7566'	W97° 11.4518'	Z SC SF	30	Ked	45	20	.1.5	25				FN	20	50		X		X	FLOODPLAIN

* 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
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GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Colorado Materials																
LOCATION: Hunter, TX			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)	KDD	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-61	N29° 50.0171'	W98° 3.0571'	F	20	Ked/Kbu	4900	20	unk	80	10			NFO	8	38	X		X		HILLSIDE
S-62	N29° 50.0301'	W98° 3.0551'	CD	5	Kbu	6	3.2	0.9	60				F	5	10	X		X		HILLSIDE
S-63	N29° 50.0455'	W98° 3.0835'	CD	5	Kbu	20	7	1.3	120				FOC	10	15	X			X	FLOODPLAIN
S-64	N29° 50.0755'	W98° 3.1205'	O	5	Kbu	4	4	0.6	0				FO	10	15	X			X	FLOODPLAIN
S-65	N29° 50.0924'	W98° 3.1402'	O	5	Ked	11.5	7	3.1	125				FOC	15	20	X			X	FLOODPLAIN
S-66	N29° 50.1265'	W98° 3.2125'	SC	20	Ked	2.1	1	1.6	20				FO	10	30	X			X	FLOODPLAIN
S-67	N29° 50.1398'	W98° 3.2472'	O	5	Ked	2.5	8	1	280				NFO	15	20	X			X	FLOODPLAIN
S-68	N29° 50.1345'	W98° 3.2628'	SC	20	Ked	0.5	0.02	0.8	35				FO	10	30	X			X	FLOODPLAIN
S-69	N29° 50.1298'	W98° 3.2833'	SC	20	Ked	0.9	0.6	2	35				FOV	25	45		X	X		CLIFF
S-70	N29° 50.1314'	W98° 3.292'	Z SC C SF	30	Ked	400	40	>5	315				NCOF	35	65		X		X	CLIFF/FLOOD
S-71	N29° 50.1675'	W98° 3.3382'	O	5	Ked	80	40	4	310				NC	19	24	X			X	FLOODPLAIN
S-72	N29° 50.1664'	W98° 3.3389'	SC	20	Ked	0.7	2.1	>2	45	10			FO	19	49		X		X	FLOODPLAIN
S-73	N29° 50.1302'	W98° 3.2007'	SC	20	Ked	1.1	1.3	>1.8	10				FO	10	30	X		X		HILLSIDE
S-74	N29° 50.1361'	W98° 3.1932'	SC	20	Ked	0.3	0.4	2	30				FO	10	30	X		X		HILLSIDE
S-75	N29° 49.9867'	W98° 2.9692'	SC	20	Kbu	0.7	1.5	0.5	5				FO	10	30	X		X		HILLSIDE
S-76	N29° 50.1275'	W98° 3.1194'	CD	5	Ked	25	10	3.5	20				N	5	10	X			X	DRAINAGE
S-77	N29° 50.211'	W98° 3.1372'	SC	20	Ked	0.2	0.2	0.7	95				FO	10	30	X		X		HILLSIDE
S-78	N29° 50.2137'	W98° 3.1359'	CD	5	Ked	6.5	4	0.7	120				FO	10	15	X		X		HILLSIDE
S-79	N29° 50.2996'	W98° 3.1904'	SF	20	Ked	3	0.6	>3	130				FO	10	30	X		X		CLIFF
S-80	N29° 50.3965'	W98° 3.1814'	SC	20	Ked	0.7	1.5	>1	145				FO	10	30	X		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
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MB	Manmade feature in bedrock	30
SW	Swallow hole	30
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8A INFILLING	
N	None, exposed bedrock
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LOCATION: Hunter, TX			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)	ROD	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-81	N29° 50.1218'	W98° 3.0021'	CD	5	Kdr	355	100	6	40				F	5	10	X			X	DRAINAGE
S-82	N29° 50.2105'	W98° 3.0726'	SC	20	Ked	0.2	0.3	>1.1	345				FO	10	30	X		X		HILLSIDE
S-83	N29° 50.2156'	W98° 3.0956'	SC	20	Ked	1	0.9	>2	310				FO	10	30	X		X		HILLSIDE
S-84	N29° 50.1866'	W98° 2.9797'	SF	20	Kbu	0.3	1.9	1.8	200				FO	10	30	X			X	DRAINAGE
S-85	N29° 50.3206'	W98° 3.0927'	CD	5	Ked	6	4	1.3	350				F	5	10	X		X		HILLSIDE
S-86	N29° 50.3303'	W98° 3.0845'	CD	5	Ked	7	2	0.9	15				F	5	10	X		X		HILLTOP
S-87	N29° 50.2465'	W98° 2.958'	SC	20	Ked	1	0.6	>2	70				FO	10	30	X		X		HILLSIDE
S-88	N29° 50.2432'	W98° 2.9525'	SC	20	Ked	0.1	0.3	>1.5	120				N	5	25	X		X		HILLSIDE
S-89	N29° 50.216'	W98° 2.9328'	SC	20	Kbu	0.2	0.8	>1	80				F	5	25	X		X		HILLSIDE
S-90	N29° 50.4051'	W98° 3.2434'	SC	20	Ked	0.5	0.3	0.6	320				FO	10	30	X		X		HILLSIDE
S-91	N29° 50.3212'	W98° 3.3306'	SC	20	Ked	0.2	0.1	0.6	10				FC	15	35	X		X		HILLSIDE
S-92	N29° 50.24'	W98° 3.4015'	SC	20	Ked	0.6	1.1	0.5	40	10			F	5	35	X		X		HILLSIDE
S-93	N29° 50.2673'	W98° 3.3646'	SF	20	Ked	4.7	0.2	>1.3	315				FO	10	30	X		X		HILLSIDE
S-94	N29° 50.2727'	W98° 3.3534'	SC	20	Ked	1.3	0.7	>2	270				FO	10	30	X		X		HILLSIDE
S-95	N29° 50.3312'	W98° 3.2895'	O	5	Ked	7	5.5	0.7	110				FC	15	20	X			X	DRAINAGE
S-96	N29° 50.3646'	W98° 3.1904'	SF	20	Ked	3	0.6	1.3	265				FO	19	39	X			X	FLOODPLAIN
S-97	N29° 50.2721'	W98° 3.3466'	SC	20	Ked	2.3	1.1	>4	320				NF	10	30	X		X		CLIFF
S-98	N29° 50.2167'	W98° 2.95'	SC	20	Kbu	1.1	0.7	>.7	75				FO	10	30	X			X	DRAINAGE
S-99	N29º 50.2374'	W98º 2.9217'	O	5	Ked	15	7	1.4	310				FOC	15	20	X			X	DRAINAGE
S-100	N29º 50.3456'	W98º 3.0281'	SC	20	Ked	0.1	1.5	>2	0				F	5	25	X		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
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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-101	N29° 50.325'	W98° 2.992'	SC	20	Ked	1.3	0.8	0.9	135				FO	10	30	X		X		HILLSIDE
S-102	N29° 50.2799'	W98° 2.9267'	SC	20	Ked	0.2	0.1	0.7	0				F	5	25	X		X		HILLSIDE
S-103	N29° 50.3017'	W98° 2.9494'	SC	20	Ked	1.3	0.7	1.2	350				F	5	25	X		X		HILLSIDE
S-104	N29° 47.85'	W98° 2.3667'	CD	5	Ked	7	4	0.5	355				F	5	10	X		X		HILLSIDE
S-105	N29° 50.2799'	W98° 2.9267'	SC	20	Ked	4	0.7	>1.5	85				F	5	25	X		X		HILLSIDE
S-106a	N29° 50.5173'	W98° 3.1188'	Z	30	Ked	600	40	>5	48	10			NCF	35	75		X		X	DRAINAGE
S-106b	N29° 50.5396'	W98° 3.082'	Z	30	Ked	500	40	>5	50	10			NCF	35	75		X		X	DRAINAGE
S-107	N29° 50.4196'	W98° 2.9322'	CD	5	Ked	6	4	1	35				F	5	10	X		X		HILLTOP
S-108	N29° 50.4776'	W98° 3.0123'	CD	5	Ked	8	3.5	6	30				F	5	10	X		X		HILLSIDE
S-109	N29° 50.2255'	W98° 3.3705'	Z	30	Ked	400	150	>5	45	10			NCFO	35	75		X		X	CLIFF/FLOOD
S-110	N29° 50.4561'	W98° 3.1968'	Z	30	Ked	250	40	>5	275				NCFO	20	50		X		X	FLODDPLAIN
S-111	N29° 50.4349'	W98° 3.1412'	F	20	Ked	5250	20	?	45	10			NF	25	55		X		X	DRAIN/FLOOD
S-112	N29° 50.051'	W98° 2.7362'	F	20	Ked/Kdr	5275	20	?	270	10			F	5	35	X			X	HILLSIDE
S-113	N29° 49.9811'	W98° 2.6077'	F	20	Ked/Kbu	4400	20	?	45	10			F	5	35	X			X	HILLSIDE
S-114	N29° 50.3102'	W98° 2.8437'	F	20	Ked/Kbu	5050	20	?	45	10			F	5	35	X			X	HILLSIDE
															0					
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* 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.

Thomas O. Mathews III PG 5321 7/12/13

Date

Soils Narrative

Geologic Assessment
Hunter Quarry II
New Braunfels, Comal County, Texas
WEI Proj. No.: 10080-085

In accordance with the United States Department of Agriculture (USDA) Web Soil Survey, There are four different native surficial soils mapped at the site. The primary unit mapped is the Comfort-Rock outcrop complex, undulating (CrD) followed by the Rumble-Comfort association, undulating (RUD); Eckrant-Rock outcrop complex, steep (ErG) and the Brackett-Rock outcrop-Real complex, steep (BtD).

Crd: The Comfort-Rock outcrop complex soil unit has slopes that range from 1% - 8% and is moderately drained. With a maximum calcium carbonate content of 90% this soil type has a typical profile of 0 – 13" extremely stony clay followed by bedrock from 13" – 20".

RUD: The Rumble-comfort association has slopes from 1% - 8% and is moderately drained. RUD has a maximum calcium carbonate content of 5% and is typically a very gravelly clay loam from the surface to 10" then very gravelly clay from 10" – 28" before encountering bedrock.

ErG: This Eckrant-Rock outcrop complex unit occurs in steep areas with slopes ranging from 8% - 30% and is moderately drained. There is an 8% maximum calcium carbonate content in this soil type and a typical profile is mapped as extremely stony clay from the surface to approximately 10" then bedrock.

BtD: The Brackett-Real outcrop-Real complex unit is steep, has slopes from 1% - 8% and a maximum calcium carbonate content of 90%. The soil is moderately drained and this unit will have a gravelly clay loam from the surface to 17" before encountering bedrock.

Stratigraphic Column

Hydrogeologic subdivision			Group formation or member			Hydrologic Function	Thickness (feet)	Lithology	Cavern development	Porosity / permeability type
Upper Cretaceous	Upper confining units		Buda Formation			CU	40-50	Buff, light gray, dense mudstone	Minor surface karst	Low porosity /low permeability
			Del Rio Clay			CU	40-50	Blue-green to yellow-brown clay	None	None / primary upper confining unit
Lower Cretaceous	I	Edwards Aquifer	Georgetown Formation			Karst AQ; not karst CU		Reddish-brown, gray to light tan marly limestone	None	Low porosity / low permeability
	II		Edwards Group	Person Fm	Cyclic & marine members undivided	AQ	89-90	Mudstone to packstone; miliolid grainstone; chert	Many sub-surface	Laterally extensive; water yielding
	III				Leached & collapsed members	AQ	70-90	Crystalline limestone; mudstone to grainstone; chert collapsed breccia	Extensive lateral development; large rooms	Majority not fabric / one of the most permeable
	IV				Regional dense members	CU	20-24	Dense, argillaceous mudstone	Very few; only vertical fracture enlargement	Not fabric / low permeability; vertical barrier
	V			Kainer Fm	Grainstone member	AQ	50-60	Miliolid grainstone; mudstone to wackestone; chert	Few	Not fabric / recrystallization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Probably extensive cave development	Majority fabric / one of the most permeable
	VII				Dolomitic member	AQ	110-130	Mudstone to grainstone; crystalline limestone; chert	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane fabric / water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone; mudstone and miliolid grainstone	Large lateral caves at surface	Fabric; stratigraphically controlled/ large conduit flow at surface; no permeability in subsurface
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	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

Note: CU = Confining Unit; AQ = Aquifer

— — — Indicates Mapped Surface Formation

Geologic Narrative

Geologic Assessment
Hunter Quarry II
New Braunfels, Comal County, Texas
WEI Proj. No.: 10080-085

Introduction

A Geologic Assessment (GA) was performed for the above-referenced site in December 2012 and Jan/Feb 2013 by a Westward Environmental, Inc. (WEI) field crew led by Michelle M. Lee, P.G. #6071; and in March 2013 by Ms. Lee as well as Thomas O. Mathews II, P.G. #5321 of WEI. The GA was performed at the ~800 acre site in accordance with the Texas Commission on Environmental Quality (TCEQ) *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones, TCEQ-0585-Instructions (Rev. 10-01-04).* 113 potential recharge features, as defined by TCEQ-0585, were observed on the surface of the site at the time of this assessment.

Background

The proposed project area is undeveloped and located in the rural area of eastern Comal County near the Hays County line north and west of Hunter Road. The project area is approximately 800 acres in size and encompasses various types of geographical settings. With flat to gently sloping surfaces in the southern portion to very steep rock wall bluffs in the north. The topographic elevations range from a high of ~985 ft above mean sea level (amsl) in the central portion of the tract to a low elevation of ~745ft amsl along the southern perimeter of the property.

Selective clearing has been done across most of the southern half of the site to accommodate a small hunting compound and cattle operation. The northern portion of the site is very rugged, densely vegetated and steep.

Stratigraphy & Structure

According to the *USGS Geologic Map of the New Braunfels, 30 x 60Minute Quadrangle Miscellaneous Map No. 39 (Collins, 2000),* the subject property is located over the Cretaceous aged Buda Formation (Kbu), Del Rio Formation (Kdr), Georgetown Formation (Kgt) and the Edwards Group – Person Formation (Kp). Each of these formations was observed at the surface of the site during field reconnaissance along with scattered Quaternary Terrace deposits (Qt) comprised mainly of limestone in some of the drainage ways.

Although the Kdr formation is mapped at the site by the USGS, very few visual indications of this unit were observed during field reconnaissance. Mesquite trees and Exogyra fossils normally associated with this unit were observed in only two locations on site. The first was at feature S-57, a closed depression where an excavator was used to make a shallow cut into the ground. The exposed Kdr was compacted and cemented, possibly due to the fault S-112 mapped nearby. The second outcrop was exposed on the northern end of a stock pond, a closed depression named feature S-81. The Del Rio Formation (Kdr) was used to construct part of the dam. Mesquite trees were observed in addition to many loose Exogyra fossils that covered the ground in this area.

Several prominent structural features were observed during field reconnaissance. Main faults and associated cross-faults were identified utilizing aerial photography and field verification. The Edwards Group is juxtaposed against the Buda Formation in the northern half of the site along typical northeast to southwest trending normal faults. The northern half of the site is very rugged, steep and has large karstic feature zones along the drainage that enters the site on the northern boundary. The northern area surface dips in a southwesterly direction to the edge of the deep rocky drainage. The other side of the drainage is mostly vertical rock bluffs. Evidence of paleo springs were observed at different elevations as well as high velocity flow of water during flood events. The topographic change from the drainage floor to the top of the bluff in the NW corner is approximately 90 ft.

Feature Discussion

C - Caves

Caves were observed as part of zone features during field reconnaissance. Please refer to the Zone discussion below.

CD – Non-Karst Closed Depressions

S-7, S-15, S-19, S-25, S-26, S-28, S-34, S-37, S-39, S-41, S-42, S-44, S-47, S-48, S-50, S-51, S-52, S-53, S-56, S-57, S-62, S-63, S-78, S-81, S-85, S-86, S-104, S-107 and S-108: Not Sensitive

There were several areas that exhibited evidence of hogs and hog habitat especially in the Kbu areas. Since most of the depressions in this area were caused by animals they were not mapped in unless the depression was large or followed the dominating trend and met the minimum size requirements.

S-7: 8'x4.5'x0.9', fine-grained infilling (fg) & vegetation @90^{O}; S-15:6.5'x3.7'x0.8', fg with grass @38^{O}; S-19: 110'x9'x1.7', fg w/vegetation in a drainage @90^{O}; S-25: 6.5'x4'x0.8', fg w/vegetation @85^{O}; S-26: 9'x5'x0.7', fg w/vegetation @85^{O}; S-28: 6'x2.5x1', fg w/vegetation, cactus & tree @50^{O} located in the Kbu; S-34: 6'x3'x0.7', fg w/grass @50^{O} located in Kdr; S-37: 5.5'x3'x0.7', fg w/grass @90^{O}; S-39: 5.5'x3.5'x1', fg w/grass & vegetation @ 130 ^{O}; S-41: 4'x8'x0.9', fg w/grass and small tree @ 60^{O}; S-42:10'x3.5x0.8', fg w/grass & organics @350^{O}; S-44:5.5'x3.5x0.9', fg w/grass & trees @10^{O}; S-47: 7.5'x4'x0.8', fg w/organics and grass @ 40^{O}; S-48: 8'x4'x1.2' fg w/vegetation & trees @75^{O}; S-50: 5'x4.5'x0.6', fg w/grass and tree in Kbu @20^{O}; S-51: 5.5'x3'x0.5', fg w/grass & organics in Kbu @11^{O}; S-52: 7.5'x3.7'x0.6', fg w/grass & tree in Kbu @85^{O}; S-53: 7.5'x0.4'x1.3', fg w/organics, tree & vegetation @45^{O}; S-56: 6'x2.5'x0.8', fg w/organics, grass & trees @130^{O}; S-62: 6'x3.2'x0.9', fg w/organics & grass in Kbu @60^{O}; S-63: 20'x7'x1.3', caused by stream scour fg w/grass & organics in Kbu @120^{O}; S-78: 6.5'x4'x0.8', fg w/grass & vegetation @ 120^{O};

S-57 appears to be a trench dug with a dozer on a trend of 330^{O}. It measures 36'x8'x3' and is in the Kdr. This is the only outcrop of Kdr observed in the lower portion of the site. The Kdr is cemented and very compact in this feature and along the mapped exposure in this area. Very few mesquite tress and Exogyra fossils were observed in this area probably due to the compacted nature of the outcrop. Probability of rapid infiltration is very low.

S-81: is a stock pond located in the central portion of the site. It measures 355'x100'x6' and is completed in the Kdr. This feature was holding water at the time of field reconnaissance. S-85: 6'x4'x1.3', fg w/grass and cobbles @350^{O}; S-86: 7'x2'x0.9', fg w/grass @15^{O}; S-104: 7'x4x0.5', fg w/grass and rock rim on north side @355^{O}; S-107: 6'x4'x1', fg w/grass & tree @35^{O} and S-108: 8'x3.5'x0.6', fg w/grass and cedar tree @ 30^{O}.

F – Faults

S-20, S-59, S-61, S-112, S-113 and S-114: Not Sensitive

S-20 is visible at the surface along the eastern perimeter where Kbu is juxtaposed to Kep. Exposed bedrock appears cemented and the probability of rapid infiltration is low. S-59 and S-61 intersect to create a drop block of Kep along the western perimeter. Dipping beds are visible at the intersection. S-61 continues across the site before intersecting S-20. Some minor solution cavities and fractures were observed along the fault plane in the western perimeter in the drainage but were horizontal in nature and located above the channel. Dipping beds were also observed in the high wall here. Probability of rapid infiltration is low.

S-112 is located in the center of the site and there is a pronounced change in topography here as the Kdr is juxtaposed to the Kep. S-113 intersects S-112 toward the eastern part of the site. Here Kbu is juxtaposed to the Kep along part of the fault but the only visible outcrop of Kgt was also observed along this fault. With little exposed bedrock and good amounts of soil and vegetation, probability of rapid infiltration is low.

S-114 is a very steep and narrow drainage with Kbu on the up thrown side to the southeast juxtaposed to the Kep on the downthrown side. The steep, rocky creek (near and along S-111) in the upper part of the site appears to dead end into this fault along the western perimeter. It changes from a very rugged and rocky channel to broad flat areas with grass and large amounts of soil and vegetation. The channel becomes difficult to discern at this point due to the soil and vegetation cover. Probability of rapid infiltration at the surface is low.

S-111: Sensitive

S-111 is located in the upper area along the northern perimeter. The offset here appears to be approximately 30' but the creek makes an almost 90^{O} turn at this fault where tall rock cliffs almost 100' tall are present in the northwestern corner of the feature. In stark contrast, across the channel from this same point the topography is a gently sloping hillside. The channel is mostly bedrock with large boulder and cobble float. Evidence of high velocity flood events is visible in channel and along the banks. Zone feature **S-109** is located adjacent to the fault and has a cave and numerous large solution cavities. Probability of rapid infiltration is moderate.

MB - Man-Made Feature in Bedrock

S-4: Not Sensitive

S-4 is a water well located in the central portion of the property near the hunting camp. Although the well was not in operation during the field reconnaissance it did appear completed and to be in compliance with 16 TAC Chapter 76. Probability of rapid infiltration is low.

O – Other Natural Bedrock Features

S-9, S-13, S-21, S-64, S-65, S-67, S-71, S-95 and S-99: Not Sensitive

S-9 is a depression in the bedrock measuring 20'x11'x1.5' located above a drainage with an array of fine & coarse-grained materials, grass and vegetation. Probability of rapid infiltration is low. **S-13** is a depression in bedrock located in a drainage with exposed limestone in the bottom. Some fractures were visible but were thin and filled with organics. Probability of rapid infiltration is low. **S-21** is located in a drainage in the eastern portion of the site. It measures 25'x7'x1.5' with a trend of 80^{O} and is against a small bluff in the drainage. Coarse-grained, organics, rocks and some vegetation were observed here during field reconnaissance. Probability of rapid infiltration is low.

S-67 and **S-71** were mapped in the same drainage in the northwestern portion of the site. These are depressions in bedrock and measured 25'x8'x1' for **S-67** and 80'x40'x4' for **S-71**. Both features had exposed bedrock, organics, cobbles and some fine-grained material infilling. Orientation of the features is 280° and 310°, respectively or roughly perpendicular to faults **S-111** and **S-114**. This is typical of drainages in a relay ramp system. Probability of rapid infiltration is low to slightly moderate.

S-95 and **S-99** are also depressions in bedrock. **S-95** measures 7'x5.5'x0.7' and is located on a hillside at an 110° orientation. Fine-grained sediment and cobbles were observed in this feature during field reconnaissance. **S-99** measured 15'x7'x1.4' with coarse-grained material and cobbles at a 310° orientation. Probability of rapid infiltration for these features is low.

SC – Solution Cavities

S-1, S-2, S-3, S-5, S-6, S-8, S-10, S-11, S-12, S-14, S-17, S-18, S-23, S-27, S-29, S-30, S-33, S-35, S-36, S-40, S-43, S-49, S-54, S-58, S-66, S-68, S-69, S-72, S-73, S-74, S-75, S-77, S-80, S-82, S-83, S-84, S-87, S-88, S-89, S-90, S-91, S-92, S-94, S-97, S-98, S-100, S-101, S-102, S-103 and S-105: Not Sensitive

There are numerous small solution cavities throughout the site. Each has a low probability of rapid infiltration and all are either infilled with fine tight soils or with fine soils and small amounts of organics.

SF – Solution Enlarged Fractures

S-32, S-55, S-79, S-93 and S-96: Not Sensitive

S-32 measures 4 by 2 by 0.9 and trends at 38° and is located on the hillside. Probability of rapid infiltration is low. **S-55** measures ~2.7'X0.6'X1.7' and trends at 50°. It is located in a drainage and extends horizontally into the hillside with fine-grained sediment at the opening. Probability of rapid infiltration is low. **S-79** measures 3'x0.6'x>3' at a trend of 130°. The feature is mostly horizontal but does dip downward slightly around 2.6' into the opening. Some organic material was observed at the opening. The top of the outcrop is heavily vegetated and impedes any downward motion of water. Probability of rapid infiltration is very low.1.3'x

S-93 and **S-96** are located in the upper portion of the site near the drainage. **S-93** is actually two different fractures measuring 4.7'x0.2'x>1.3' and 5'x 0.4'x>1.3'. Both trend at 315° and may intersect past the opening. Fine-grained sediment, organics and spiders were observed in the opening of this feature. **S-96** is 3'x0.7'x1.3' trending at 265°. Fine-grained sediment, organics and a small tree were observed in the feature. Probability of rapid infiltration to these features is very low.

SH – Sink Holes

S-16, S-32, S-38, S-45 and S-46: Not Sensitive

S-16 is a small filled in sink hole measuring 8'x6'x2' and trends at 45°. The rock rim is visible but the interior has been filled with fine-grained sediment, grass and other vegetation. Probability of rapid infiltration is low. **S-32** is also a small infilled sink hole with fine-grained organics, grass and vegetation. The feature measures approximately 4'x2'x0.9' and trends at 38°. Probability of rapid infiltration is very low. **S-38** measures 4.2'x3.1'x0.8' and trends at 140°. The feature is infilled with some fine-grained sediment and cobbles with exposed bedrock. The location of this feature on a hillside near the hill top gives this feature a low probability of rapid infiltration.

S-45 (@130°) and **S-46** (@85°) are located approximately 400' apart near the northeastern perimeter. They measure 4'x2.7'x0.8' and 5.5'x3.2'x1.3', respectively. Both have fine-grained sediment, organics and vegetation in the interior. Probability of rapid infiltration is low.

SW – Swallow Holes

Swallow holes were not observed during field reconnaissance.

Z – Zones

S-60, S-70, S-106a, 106b, S-109 and S-110: SENSITIVE

S-60 is a zone of solution cavities and fractures located near the juncture of faults **S-59** & **S-61**. The zone trends at 25° and measures approximately 45' long by 18' high and is in a limestone bluff. Solution cavity openings vary in size from ~1" up to 1.5' and fractures up to 4' long and 4" high. Most extend horizontal but some features then turn downward past the opening. Probability of rapid infiltration is moderate.

S-70 is a 400 ft. long zone of several large solution cavities, fractures and a cave in a limestone cliff that is approximately 70' – 80' tall. The cave "Too Old for Football" cave is located near the top of the bluff with an opening of ~4'x2.8' that opens up into a room with a height of ~5.5' that trends at 290°. Some solution cavities are over 4' in length at the opening and extend over 6' into the bluff. All features observed in the zone have horizontal openings but then go different directions into the bluff. A rugged, rocky drainage is located at the toe of the bluff that drains to the southeast. Infiltration will be by runoff from the top of the bluff and the area that drains to this zone. Probability of rapid infiltration is high.

S-106 A is a zone of solution cavities and solutions fractures in a 600 ft. long bluff located on the eastern bank of the northernmost drainage. Several of the features are within the floodplain and others are located in the cliff highwall.

S-106 B is a zone of solution cavities and fractures in a long 500 ft long rock bluff. Located on the southwestern bank of the northernmost drainage, the limestone bluffs range from 20' tall to nearly 70'. Numerous large solution cavities, fractures and other features in bedrock were observed in this water worked bluff. Some cavities were over 3' wide at the opening and extended back into the bluff. Fractures were more numerous along bedding planes but were seen as long as 6' and 1.5' tall. Dipping bedrock in the channel of the drainage was observed as part of **S-111**. Two depressions in the bedrock with little infilling were observed along the toe of the bluff. Some features had no infilling while other had some with vegetation.

Because some of the zone features were located in or near the main channel, probability of rapid infiltration is assigned as high.

S-109 is a 400 ft long zone of caves, solution cavities and fractures located in the northwestern corner of the upper area drainage that measures approximately 500' long and 50' high. This zone is adjacent to fault **S-111**. The rock cliff here is ~100 ft high and has numerous solution cavities, fractures with possible paleo springs and two caves. "Odyssey11" cave is located eight feet off the channel floor and has an opening that measures 6'x5' and extends 8' into the cliff at a trend of 45°. The height of the room is almost 8' where the opening extends upwards and tapers to about 11". The walls are highly solutioned and the entrance has other solution cavities around it. Debris was located in a layer about 4' up the cave wall possibly indicating a very large flood event in the past.

Another smaller cave "Bear Man Pig Central" is located approximately 25' above the "Odyseey11" cave and also trends at 45°. The entrance measures approximately 5'x4' and is about 6' deep with highly solutioned walls. Due to the height of the cave off the ground, solutioning here occurs due to water infiltrating from the surface downward.

Rapid infiltration is possible but only during flood events. Probability of rapid infiltration is high.

S-110 is a 250 ft. long zone of very large solution cavities and fractures trending at 275°. The rock bluff varies from 5' in height to almost 50'. There were numerous large fractures and cavities located within 10' of the drainage channel floor. Some cavities measured up to 4'x1.5' at the opening and extended 3' into the bluff. One fracture measured 7.5' long and 2' high with a depth of at least 1.5'. Some features were located high in the bluff and some near the channel. Infilling ranged from none to fine-grained sediment and vegetation.

Because some of the zone features were located in or near the main channel, probability of rapid infiltration is assigned as moderate.

Groundwater Elevation

A measurement of the on-site water well (feature S-4) was used in combination with information from the Hays County Reference Well [LR-67-02-104 (Kyle No. 2)] to determine the estimated local water elevation. The on-site well water level was measured on July 15, 2013 to be 243.95 feet below ground surface (bgs). Existing ground elevation at the well is 824' above mean sea level (amsl). Therefore, the groundwater elevation on July 15, 2013 was 580.05 feet above mean sea level (824' amsl – 243.95' = 580.05' amsl groundwater elevation).

This data was compared, in accordance with RG-500, to the Hays County Reference Well data. As noted in RG-500, sites in Comal County should use the nearest reference well, which in this case is the Hays County Reference well. The Hays County Reference Well water level was last measured on July 1, 2013 to be 101.92 feet bgs. This equates to an elevation of 572.4 feet amsl. The 2007 Wet-Weather High-Water Elevation for this well was 576 feet amsl, indicating a 3.6 feet water level drop from 2007 to 2013. This same change in elevation was applied to the on-site well data to extrapolate the 2007 Wet-Weather High-Water Elevation for the on-site well: 583.65 feet amsl (580.05' + 3.6' = 583.65'). A 25 feet separation will be maintained between the quarry floor and the on-site wet-weather groundwater elevation of 583.65 feet amsl. Based on this information, the Hunter Quarry II will quarry to a maximum depth of approximately 609 feet amsl (583.65' + 25' ≈ 609).

WESTWARD
P.O. Box 2205
Boerne, Texas 78006
(830) 249-8284 Fax: 830-249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

TCEQ-R13
JUL 29 2013
SAN ANTONIO

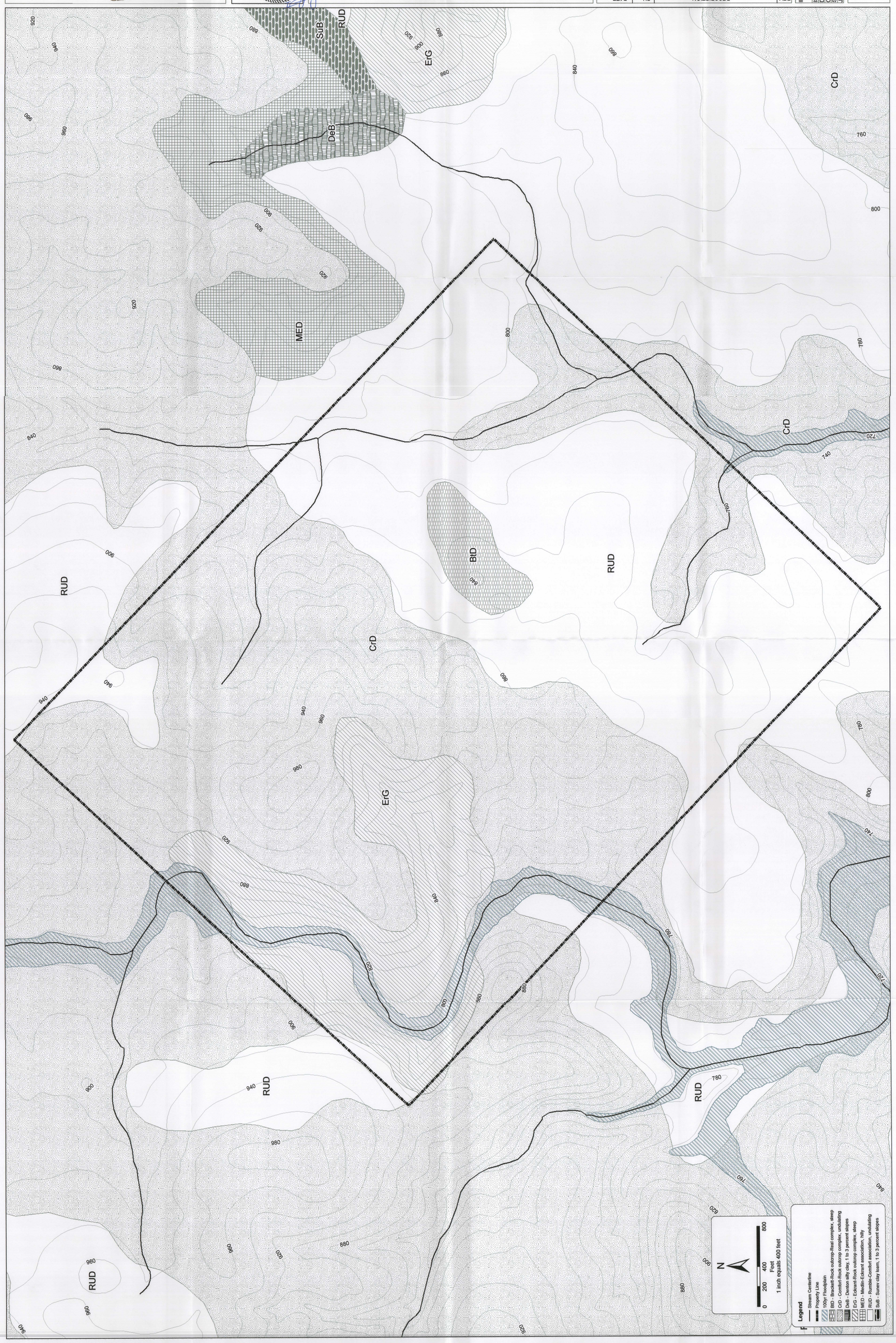
STATE OF TEXAS
THOMAS M. MATHEWS
GEOLOGIST
6321
LICENSED
APPROVED GEOSCIENTIST

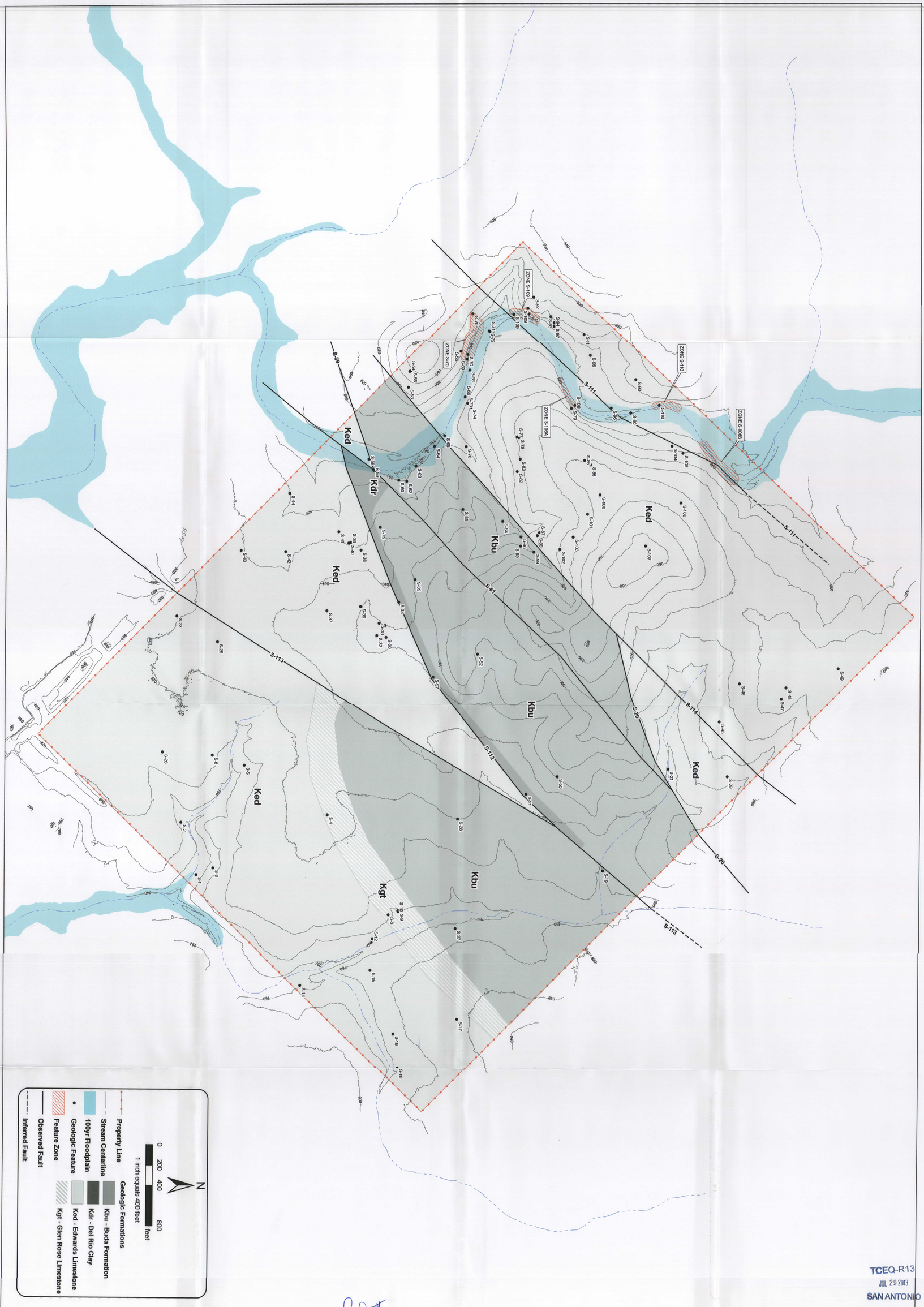
SOILS MAP
HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX

REV.	DESCRIPTION	BY	DATE

IMAGE: NRCS SOIL SURVEY (SSURGO) 2005
ISSUE DATE: 07/23/2013
DRAWN BY: JS
CHECKED BY: TZ
SCALE: 1" = 400'
JOB #: 10080-084

SHEET #: 001 OF 001





TCEQ-R13
JUL 29 2013
SAN ANTONIO

GEOLOGIC ASSESSMENT MAP

HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX

Thomas D. Mathews II PG 5321 7-26-13

STATE OF TEXAS
THOMAS D. MATHEWS
GEOLOGY
5321
LICENSED
PROFESSIONAL GEOSCIENTIST

REV	DESCRIPTION	BY	DATE

WESTWARD
Environmental. Engineering. Natural Resources.
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TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

SHEET #: 1 OF 1

IMAGE: TNRIS, 2012
ISSUE DATE: 07/23/2013
DRAWN BY: JS
CHECKED BY: TJ
SCALE: 1" = 400'
JOB #: 10080-084

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

REGULATED ENTITY NAME: Hunter Quarry II

REGULATED ENTITY INFORMATION

1. The type of project is:
   __ Residential: # of Lots: _____
   __ Residential: # of Living Unit Equivalents: _____
   __ Commercial
   _X_ Industrial
   _X_ Other: Quarry

2. Total site acreage (size of property): ~845

3. Projected population: ~10 employees

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

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

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

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

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

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

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

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

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

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

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

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

__% Domestic	20 gallons/day
__% Industrial	_____ gallons/day
__% Commingled	_____ gallons/day

TOTAL 20 gallons/day

THIS NUMBER IS BASED ON 10 EMPLOYEES

15. Wastewater will be disposed of by:

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

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

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

N/A Sewage Collection System (Sewer Lines):

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

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

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

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

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

SITE PLAN REQUIREMENTS

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

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

18. 100-year floodplain boundaries
X Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
__ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):
FEMA FIRM 48091C0285F – Effective September 2, 2009

19. X The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
LAYOUT IS SHOWN WITH EXISTING CONTOURS. FINAL CONTOURS ARE NOT YET KNOWN; HOWEVER, IT IS ANTICIPATED THAT FINAL SLOPES OF THE COMPLETED QUARRY WILL BE APPROXIMATELY 2%.

__ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
X There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
X The wells are in use and comply with 16 TAC §76.
__ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:
X All **sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.
__ No **sensitive** geologic or manmade features were identified in the Geologic Assessment.
__ **ATTACHMENT D - Exception to the Required Geologic Assessment**. An exception to the Geologic Assessment requirement is requested and explained at the end of this form.

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

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

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

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

26. _X_ Surface waters (including wetlands).

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

ADMINISTRATIVE INFORMATION

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

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

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

Mary Ellen Schulle, PE
Print Name of Customer/Agent/Engineer

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

Signature of Customer/Agent/Engineer Date: 1/10/13

WPAP Attachment A

Factors Affecting Water Quality

The major factor that could potentially affect water quality is sediment in stormwater runoff after the clearing of vegetation. More remote factors include fuels and lubricants from vehicles and equipment and trash/debris items.

Earthen/rock berm(s) and vegetated buffers located downgradient of the disturbed area(s) are proposed to capture sediment and control the flow of stormwater. Upgradient berms prevent run-on to disturbed areas of the site. Any spills or leaks will be cleaned up in a timely manner and will be disposed of properly. A trash receptacle will be placed on-site for use by employees and visitors.

WPAP Attachment B

Volume and Character of Stormwater

The area of the proposed final quarry pit, as shown on the WPAP Site Plan, is approximately 714 acres. The stormwater from this disturbed area will carry an increased level of total suspended solids (TSS); however, stormwater from this area will be retained in the pit.

Due to the use of Temporary BMPs during construction the character of stormwater runoff which is expected to occur from the proposed project will be essentially the same as prior to the site. As quarrying activities continue, the volume of stormwater runoff from the site will be reduced because the quarry pit will ultimately retain the anticipated on-site and upgradient stormwater runoff. The runoff coefficient for the impervious areas is 0.9 and the runoff coefficient for predevelopment is 0.03 per TCEQ guidance.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).
7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    - A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
    - B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
    - C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

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

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

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

GENERAL NOTES:

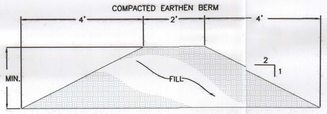
1. EXISTING 100 YEAR FLOOD PLAIN , ZONE A BOUNDARY PER FEMA, FIRM MAP COMMUNITY PANEL NUMBER: 48091C0285F - EFFECTIVE SEPTEMBER 2, 2009.
2. ALL NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED IF/WHEN MINING DISTURBACE EXTENDS INTO THE FLOODPLAIN OR 25' BUFFER NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED PRIOR TO MINING WITHIN THE FLOODPLAIN.
3. FINAL GRADES SHOWN ARE APPROXIMATE AND DEPEND ON ROCK QUALITY . FINAL PIT SLOPES ARE UNKNOWN, HOWEVER, FINISHED QUARRY FLOOR SLOPES WILL BE APPROXIMATELY 2%.
4. NUMEROUS EXISTING RANCH ROADS CRISS CROSS THE PROPERTY.
5. CONTRACTOR SHALL NOTIFY TEXAS811 ONE CALL SYSTEM (1-800-344-8377) 48 HOURS IN ADVANCE OF EXCAVATION.
6. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS ROCK BERMS AND EARTHEN BERMS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
7. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STDS OF TCEQ.
9. TEMPORARY ROCK BERMS SHALL ME INSTALLED PRIOR TO DISTURBANCE WITHIN THE 25' STREAM BUFFER.
10. FOR ALL ADDITIONAL INFORMATION ON FEATURE ZONES SEE THE GEOLOGIC ASSESSMENT.

BMP CONSTRUCTION NOTES

1. COMPACTED EARTHEN BERM

INSTALLATION:
COMPRISED OF SOIL AND OVERBURDEN MATTER EITHER GENERATED ONSITE OR DELIVERED FROM OFFSITE. COMPACT WITH HEAVY EQUIPMENT IN 12" (MAX) LIFTS.

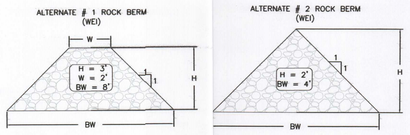
MAINTENANCE:
INSPECT BERMS QUARTERLY UNTIL SUFFICIENTLY VEGETATED. REPLACE AS NECESSARY.



2. ALTERNATE #1 & #2 ROCK BERMS (WEI)

INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

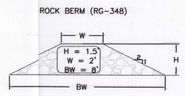


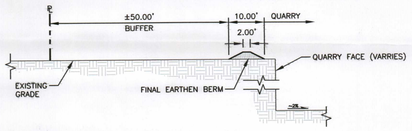
3. ROCK BERM (RG-348)

SHOULD BE SECURED WITH A WOVEN WIRE SHEATING, MAX. OPENING 1" AND MIN. WIRE DIA. 20 GAUGE GALVANIZED. SECURE WITH SHOAT RINGS.

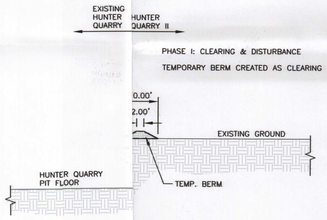
INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE. SIDE SLOPE MUST BE 2:1 OR FLATTER. WIRE SHEATHING MUST BE SECURED WITH TIE WIRE SO THEY OVERLAP AT LEAST 2". BERM SHOULD BE BURIED IN A TRENCH APPROX. 4" DEEP.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

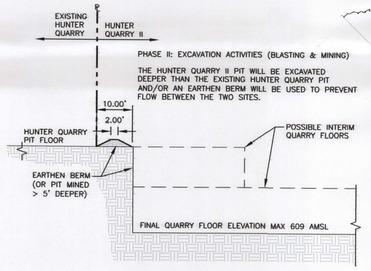




A/1 TYP. 50' BUFFER
SCALE : 1"=20'



B/1 PHAS1 QUARRY INTERFACE
SCALE : 1"=20'



B/1 PHASE 2 QUARRY INTERFACE
SCALE : 1"=20'

IMAGE:	NONE
ISSUE DATE:	07/18/2013
DRAWN BY:	JS
CHECKED BY:	MES
SCALE: 1" =	400'
JOB #:	10080-085

SHEET #: 1 OF 1

WESTWARD
Environmental, Engineering, Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

BY	DATE	DESCRIPTION	REV

STATE OF TEXAS
MARY ELLEN P SCHULLE
114545
LICENSED
PROFESSIONAL
GEOLOGIST
Mary Ellen P Schulle 7-18-13

WPAP SITE MAP
HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX

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

REGULATED ENTITY NAME: Hunter Quarry II

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

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

__ Aboveground storage tanks with a cumulative storage capacity of less that 250 gallons will be stored on the site for less than one (1) year.
__ 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.
_X_ Fuels and hazardous substances will not be stored on-site.

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

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

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

SEQUENCE OF CONSTRUCTION

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

6. _X_ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Bullhead Hollow, York Creek, Unnamed Tributary 1

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)
Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the

Technical Guidance Manual for guidelines and specifications. **All structural BMPs must be shown on the site plan.**

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

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

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

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

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

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

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

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

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

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

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

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

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

__ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not

attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

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

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

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

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

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

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

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

SOIL STABILIZATION PRACTICES

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

17. _X_ **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached at the end of this form.

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Mary Ellen Schulle, PE
Print Name of Customer/Agent/Engineer

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

Signature of Customer/Agent/Engineer

7/18/13
Date

Spill Response Actions

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

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

(4) Establish a continuing education program to indoctrinate new employees.

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

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up in a timely manner.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill clean-up materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn't compromise cleanup activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

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

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills in a timely manner.

(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up in a timely manner:

(1) Contain spread of the spill.

(2) Notify the project foreman in a timely manner.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills
For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained in a timely manner. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

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

State Emergency Response Commission	(512) 463-7727
National Response Center	(800) 424-8802
US EPA Region 6, Dallas, 24-hr Number	(866) 372-7745
National Weather Service	(281) 337-5074
TCEQ 24-hr	(800) 832-8224
TCEQ Region 13	(210) 490-3096

Vehicle and Equipment Maintenance

(1) If maintenance must occur on-site, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.

(2) Regularly inspect on-site vehicles and equipment for leaks and repair in a timely manner.

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

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

Colorado Materials, Ltd
Hunter Quarry II

DETAILED TELEPHONE SPILL REPORT FORM

Date of Incident: _____

Location of Incident: _____

Description of material spilled: _____

Quantity of material spilled: _____

Cause of spill: _____

Authorities notified: _____

Remediation/clean-up action: _____

_____

_____

_____

Corrective measures taken for prevention of reoccurrence: _____

_____

_____

_____

Signature: _____

Notes: _____

_____

_____

_____

Portable Toilet BMPs:
Portable toilets will be used at Hunter Quarry II and will be handled in accordance with the following guidelines:

- A licensed waste collector should service all the toilets. **The following tasks will be performed by the portable toilet supplier:**
  - Empty portable toilets before transporting them.
  - Securely fasten the toilets to the transport truck.
  - Use hand trucks, dollies, and power tailgates whenever possible.
  - Suppliers should carry bleach for disinfection in the event of a spill or leak.
  - Inspect the toilets frequently for leaks and have the units serviced and sanitized at time intervals that will maintain sanitary conditions of each toilet.
- 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 to prevent tipping by accident, weather, or vandalism.

Temporary Stormwater Section Attachment B

Potential Sources of Contamination

Potential sources of contamination in the project area are the soil, fuels and lubricants from vehicles and equipment, and trash/debris items.

Temporary Stormwater Section Attachment C

Sequence of Major Activities

The project will consist of construction of a 714 acre quarry. Clearing will be initiated in the initial 10 acre quarry area, as shown on the attached WPAP Site Plan. The cleared topsoil will be used to construct earthen berms surrounding the cleared area. Berms will be 2-4 feet high. After clearing is completed in the initial 10 acre quarry area, excavation of the quarry pit will begin in this area. Portions of the site, less than 10 acres, will be cleared in stages as quarrying progresses. The earthen berms surrounding the quarry will expand as the quarry expands to the Final Earthen Berm. Temporary rock berms will be constructed near the downgradient end of Bullhead Hollow and York Creek once mining in these areas begins.

Temporary Stormwater Section Attachment D

Temporary Best Management Practices (TBMPs) and Measures

7.a. TBMPs and measures will prevent pollution of surface water, groundwater and stormwater that originates upgradient from the site and flows across the site.

As the initial quarry area is cleared and topsoil is removed, earthen berms will be constructed. Upgradient berms will direct stormwater runoff around disturbed areas of the site.

Temporary natural existing vegetation will be maintained in a 25 foot buffer along Bullhead Hollow and Unnamed Tributary 1 (and associated 100 year floodplain). These buffers will be maintained until mining begins in these areas. A permanent 200 foot buffer will be maintained along the southern side of York Creek and will serve as a buffer for the stream as well as for sensitive features located there.

As the size of the quarry expands, the earthen berms will expand throughout the life of the project, up to the buffer zones to provide additional controls as mining nears the streams. Once all applicable permits have been obtained, Bullhead Hollow and Unnamed Tributary 1 (and the associated buffers and 100-year floodplain) will be mined. Rock berms will be used near the downgradient end of Unnamed Tributary 1 and Bullhead Hollow when mining is set to begin in these areas. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the edge of disturbance for the quarry activities and the property line. This natural vegetated buffer will serve as a final treatment for stormwater runoff leaving the active portion of the site.

The Hunter Quarry II pit will be excavated deeper than the existing Hunter Quarry pit and/or an earthen berm will be used to prevent flow between the two sites.

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

Temporary natural existing vegetation will be maintained in a 25 foot buffer along Bullhead Hollow and Unnamed Tributary 1 (and associated 100 year floodplain). These buffers will be maintained until mining begins in these areas. A permanent approximately 200 foot buffer will be maintained along the southern side of York Creek and will serve as a buffer for the stream as well as for sensitive features located there.

As the size of the quarry expands, the earthen berms will expand throughout the life of the project, up to the buffer zones to provide additional controls as mining nears the streams. Once all applicable permits have been obtained, Bullhead Hollow and Unnamed Tributary 1 (and the associated buffers and 100-year floodplain) will be mined. Rock berms will be used near the downgradient end of Unnamed Tributary 1 and Bullhead Hollow when mining is set to begin in these areas. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the edge of disturbance for the quarry activities and the property line (except

where noted on the WPAP Site Map). This natural vegetated buffer will serve as a final treatment for stormwater runoff leaving the active portion of the site.

The Hunter Quarry II pit will be excavated deeper than the existing Hunter Quarry pit and/or an earthen berm will be used to prevent flow between the two sites.

7. c. TBMPs and measures will prevent pollution of surface streams, sensitive features and the aquifer. Earthen berms and vegetated areas will be constructed/maintained as shown on the attached WPAP Site Plan to prevent pollutants from entering surface streams, sensitive features and the aquifer. Temporary natural existing vegetation will be maintained in a 25 foot buffer along Bullhead Hollow and Unnamed Tributary 1 (and associated 100 year floodplain). These buffers will be maintained until mining begins in these areas. A permanent approximately 200 foot buffer will be maintained along the southern side of York Creek and will serve as a buffer for the stream as well as for sensitive features located there.

As the size of the quarry expands, the earthen berms will expand throughout the life of the project, up to the buffer zones to provide additional controls as mining nears the streams. Once all applicable permits have been obtained, Bullhead Hollow and Unnamed Tributary 1 (and the associated buffers and 100-year floodplain) will be mined. Rock berms will be used near the downgradient end of Unnamed Tributary 1 and Bullhead Hollow when mining is set to begin in these areas. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the edge of disturbance for the quarry activities and the property line (except where noted on the WPAP Site Map). This natural vegetated buffer will serve as a final treatment for stormwater runoff leaving the active portion of the site.

7. d. To the maximum extent practicable TBMPs and measures will maintain flow to naturally-occurring sensitive features identified in the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction. Flow will be maintained to naturally occurring sensitive features, to the maximum extent possible, by using a 200' natural vegetated buffer upgradient of the sensitive features. The vegetated buffer is used to limit runoff discharge of sediment. Earthen berms and the quarry, 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 flows will be used to provide a higher level of protection of water quality of the aquifer.

Any possibly sensitive geologic feature discovered by mining staff will be handled in the following manner. Sediment that can be easily removed from the area adjacent to the feature without disturbing the feature will be removed. Then a rock berm will be placed around the feature to control and filter any potential flows into the feature. After placement of the rock berm, the active work area of the quarry will be moved to another portion of the pit where the feature cannot be impacted by the continuing quarry operations. A Professional Geologist will be called to the site to observe and rate the feature. If the feature is determined to be sensitive in accordance with TAC 213 rules, the TCEQ will be notified and an appropriate method for addressing the feature will be formulated and submitted for TCEQ approval. Work will not resume in the area of the feature until the TCEQ approved method for addressing the feature has been carried out.

Temporary Stormwater Section Attachment F

Structural Practices

Temporary best management practices proposed for the limestone quarry include earthen berms and natural vegetated buffers. The vegetated buffers are used to limit runoff discharge of sediment. 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 (disturbed) soils.

Temporary Stormwater Section Attachment I

Inspection and Maintenance for BMPs

The earthen and rock berms should be inspected quarterly. Written documentation of these inspections should be kept during the course of construction at the project site (see following example Inspection Form.) Any erosion of berms should be backfilled and compacted as soon as possible. If a berm is no longer able to properly filter the sediment from the stormwater due to contamination from silt, it should be replaced.

The vegetated buffers should be inspected quarterly. Written documentation of these inspections should be kept during the course of construction at the project site (see following example Inspection Form.) Trash should be removed and any eroded areas should be reseeded.

Hunter Quarry II will be authorized to discharge stormwater under the TPDES General Permit No. TXR050000 for industrial activities. Requirements of the general permit include maintaining a SWP3 which includes inspections of stormwater best management practices and sampling of stormwater that is discharged from the site.

It is not anticipated that dewatering of the pit will be required. However, if necessary, mine dewatering will be accomplished according to the TCEQ stormwater regulations noted in the TPDES General Permit No. TXR050000 under Sector J for Mineral Mining and Processing Facilities.

Any dewatering required at the site would be accomplished using a pump to remove the water after solids have settled out and the water is tested and found to be in compliance with the numeric effluent limitations of TPDES General Permit No. TXR050000 Section J, (5)(ii) of 45 mg/L for a daily maximum and 25 mg/L for a daily average. These concentrations are lower than the estimated background concentration as stated in the Edwards Aquifer Technical Guidance Manual (RG-348) of 80 mg/L for undeveloped areas. The water would be discharged to a natural drainage area onto a rip rap pad such that soil erosion would be mitigated.

		Rock Berms		Earthen Berms	Natural Vegetated Buffers		
Date	Inspector Signature	>6" Silt Retained	Rock Berm Clogged	Erosion of Earthen Berm	Trash	Vegetative Cover Erosion	Additional Comments

If the answer to any of the above questions is "yes", perform maintenance/repair/replacement as described below or in accordance with TCEQ Technical Guidance on BMPs.

Rock Berm

* >6" of silt retained - remove silt, place in protected area
* Rock berm clogged - the rock berm should be replaced when accumulated silt, washout or damage to berm occurs

Natural Vegetated Buffers

* Remove trash if present
* Reseeed eroded areas to reestablish vegetation

Earthen Berm

* Erosion of earthen berm - fill eroded areas and compact

Temporary Stormwater Section Attachment J

Schedule of Soil Stabilization Practices

Areas Outside The Pit:

Cleared areas and interim earthen berms may be disturbed for more than 14 days without stabilization because it is not practical to be continually stabilizing small areas prior to their excavation and stabilizing the earthen berms that are frequently relocated. The purpose of soil stabilization is to control erosion and prevent pollutants from entering surface waters, streams, and the aquifer through sensitive recharge features. Areas outside of the pit that are disturbed for quarrying are generally drilled and blasted within 90 days. It is not feasible or appropriate to try to stabilize these areas with vegetation because 1) the topsoil has been removed and vegetation will not readily grow; 2) these areas will soon be excavated and; 3) other structural BMPs will be used to protect stormwater runoff quality from these areas in a manner consistent with customary and acceptable mining practices.

Because the soils and overburden in these cleared areas have been removed and placed in an earthen berm adjacent to the cleared areas, erosion of these areas is mitigated. The earthen berms upgradient of the cleared areas divert upgradient stormwater away from cleared areas and earthen berms downgradient of cleared areas retain stormwater runoff from the cleared area. The proposed BMPs provide adequate protection for the area outside of the pit.

Any stockpiles located outside the pit that do not flow to the pit will be mitigated by a downgradient earthen or rock berm and the natural vegetated area along the property line.

For the case when the quarry operations have been completed (permanently ceased) all stormwater will be retained in the pit. The Final Earthen Berm outside the pit will be stabilized with native grasses. The undisturbed vegetated buffers shown on the WPAP Site Plan will remain undisturbed so no additional stabilization practices will be needed.

Areas Inside The Pit:

Stockpile areas inside the pit do not need to be stabilized; the requirement for soil stabilization exists in order to control erosion and prevent pollutants from entering surface waters, streams and the aquifer through sensitive recharge features. The disturbed soils in the quarry pit will be retained in the pit thereby eliminating the need for soil stabilization in the pit to prevent pollutants from entering surface waters or streams. The BMP discussed in the WPAP Temporary Stormwater Section Attachment D (7.d.) will mitigate infiltration of stormwater into the quarry floor. In addition it is not practical to stabilize areas of the pit with vegetation because often times areas of the pit will not be active for some period of time, then be reactivated. Therefore, since the disturbed areas will be located in the pit no soil stabilization is expected to be necessary at the completion of the project.

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

REGULATED ENTITY NAME: Hunter Quarry II

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

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

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

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

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

   _____

   _____

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

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

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

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

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

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

__ **ATTACHMENT A - 20% or Less Impervious Cover Waiver.** This site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

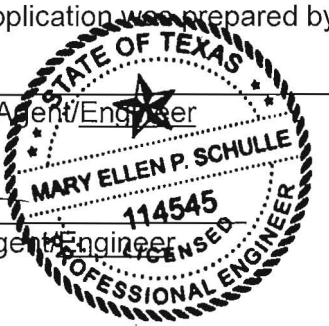
Responsibility for maintenance of permanent BMPs and measures after construction is complete.

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

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

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

Mary Ellen Schulle, PE
Print Name of Customer/Agent/Engineer



Signature of Customer/Agent/Engineer

7/10/13
Date

Permanent Stormwater Section 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:

The temporary earthen berms that are constructed as clearing occurs will expand as the size of the quarry expands. The earthen berms will expand throughout the life of the project to the Final Earthen Berm shown on the WPAP Site Plan. The Final Earthen Berm will be vegetated with native grasses to stabilize soils. During the life of the quarry, runoff will be retained in the pit.

An approximately 200' buffer will be located on the southern side of York Creek (see attached WPAP Site Plan). A 50' vegetative buffer will be maintained between the Final Earthen Berm and the property line (except where noted on the WPAP Site Plan) as a final treatment for any stormwater leaving the site.

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, on-site stormwater will be retained inside the quarry pit. The vegetated Final Earth Berm and the 50 foot vegetated buffer that surround most of the site will be located along the property boundary. An approximately 200 foot buffer will be located along the southern side of York Creek.

Permanent Stormwater Section 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:

Pollution of surface water, groundwater or stormwater that originates on-site or flows off-site during the life of the quarry will be mitigated by the use of temporary earthen berms, vegetated areas, and the pit which will be constructed as shown on the WPAP Site Plan.

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, on-site stormwater will be retained inside the pit. The vegetated Final Earth Berm and the 50 foot vegetated buffer that surround most of the site will be located along the property boundary. An approximately 200 foot buffer will be located along the southern side of York Creek.

Permanent Stormwater Section 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:

During the life of the quarry, temporary earthen and rock berms will be constructed as shown on the WPAP Site Plan to prevent pollutants from entering surface streams, sensitive features and the aquifer. The earthen berms that surround future disturbed areas will expand to protect Bullhead Hollow the Unnamed Tributaries as mining activities approach them (Bullhead Hollow and Unnamed Tributary 1 are proposed to be mined). Disturbed areas will be controlled by earthen berms, undisturbed areas, and the pit.

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, on-site stormwater will be retained inside the pit. The vegetated Final Earth Berm and the 50 foot vegetated buffer that surround most of the site will be located along the property boundary. An approximately 200 foot buffer will be located along the southern side of York Creek (which also protects sensitive features).

Any possibly sensitive geologic feature discovered by mining staff or the Professional Geoscientist will be evaluated by a Professional Geoscientist and if determined to be sensitive, will be reported to TCEQ. An appropriate method for addressing the feature will be formulated by a Professional Geoscientist or a Professional Engineer and upon approval by TCEQ, the method to protect the feature will be implemented. Work will not resume in the area of the feature until the TCEQ approved method for addressing the feature has been carried out.

Permanent Stormwater Section Attachment F

Construction Plans

See WPAP Site Plan.

Colorado Materials, Ltd
Hunter Quarry II

Permanent Stormwater Section Attachment G

Inspection, Maintenance, Repair and Retrofit Plan

Final earthen berms should be inspected quarterly until stabilized with vegetation. Written documentation of these inspections should be kept during the course of construction at the project site. Any erosion of berms should be backfilled and compacted as soon as possible.

Vegetated buffers should be inspected at least twice annually, until the Final Earthen Berm has been vegetated, for erosion or damage to vegetation. Written documentation of these inspections should be kept during the course of construction at the project site. Bare spots and areas of erosion identified during inspections must be replanted. Trash and debris items should be removed.

Name and signature of responsible party for maintenance of permanent BMPs

Print Name: TOM SINGLEY – Colorado Materials, Ltd

Signature _____ Date: 7-18-13

Name and signature of Engineer

Print Name: Mary Ellen P. Schulle, PE – Westward Environmental, Inc.
License No. 114545

Signature _____ Date: 7/18/13

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

Permanent Stormwater Section Attachment I

Measures for Minimizing Surface Stream Contamination

To avoid surface stream contamination, Temporary 25 foot vegetated buffers will be left in place around Bullhead Hollow and Unnamed Tributary 1 to filter sediment in stormwater runoff until quarrying of these areas begins. Earthen berms will expand to these buffers as the quarry expands and will retain flows until quarrying of these areas begins. The permanent approximately 200' buffer on the southern side of York Creek will filter sediment from stormwater runoff and protect sensitive features. Flows from disturbed areas will be retained by earthen berms or directed into the quarry pit. The quarry pit will retain stormwater and any associated contaminants without discharge to surface water or stream channels. The vegetated Final Earthen Berm and 50 foot vegetated buffer will mitigate surface stream contamination. Because little runoff is expected from the site due to the proposed limestone pit, stream flashing, stronger flows, and in-stream velocities are not expected to occur as a result of this project.

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

I WALTER ULBRICHT,
Print Name

SECRETARY,
Title - Owner/President/Other

of Colorado Materials, Ltd;
Corporation/Partnership/Entity Name

have authorized Curt G. Campbell, PE and Mary Ellen Schulle, PE
Print Name of Agent/Engineer

of Westward Environmental, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

W T Ullrich 7-8-13

Applicant's Signature Date

THE STATE OF TEXAS §

County of HAYS §

BEFORE ME, the undersigned authority, on this day personally appeared WALTER ULLRICH 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 8 day of JULY, 2013

Roger Elliot

NOTARY PUBLIC

Roger Elliot

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11/19/2015

NOTARY PUBLIC STATE OF TEXAS

ROGER D. ELLIOT
Notary Public, State of Texas
My Commission Expires
NOV. 19, 2015

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

I WALTER ULBRICHT,
Print Name

SECRETARY,
Title - Owner/President/Other

of Diamond EAW Holdings, LLC,
Corporation/Partnership/Entity Name

have authorized Walter Ulbricht
Print Name of Agent/Engineer

of Colorado Materials, Ltd.
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:

WT Ulbright 7-19-13

Applicant's Signature Date

THE STATE OF TEXAS §

County of HAYS §

BEFORE ME, the undersigned authority, on this day personally appeared WALTER ULBRIGHT 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 19th day of July, 2013.

Roger Elliot

NOTARY PUBLIC

Roger Elliot

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11/19/2015

NOTARY PUBLIC STATE OF TEXAS

ROGER D. ELLIOT
Notary Public, State of Texas
My Commission Expires
NOV. 19, 2015

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

NAME OF PROPOSED REGULATED ENTITY: Hunter Quarry II
REGULATED ENTITY LOCATION: 5080 FM 2439, New Braunfels, TX 78132
NAME OF CUSTOMER: Colorado Materials, Ltd
CONTACT PERSON: Tom Singley PHONE: 512-396-1556
(Please Print)

Customer Reference Number (if issued): CN 600522452 (nine digits)

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

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

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

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

☐ **Austin Regional Office**

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

☐ **San Antonio Regional Office**

☐ **Overnight Delivery to TCEQ:**
TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-1278

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	~845	Acres	$ 10,000
Sewage Collection System		L.F.	$
Lift Stations without sewer lines		Acres	$
Underground or Aboveground Storage Tank Facility		Tanks	$
Piping System(s)(only)		Each	$
Exception		Each	$
Extension of Time		Each	$

Signature

7-8-13
Date

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

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

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

Water Pollution Abatement Plans and Modifications
Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

PROJECT	FEE
Exception Request	$500

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$150

VENDOR NO.	VENDOR NAME	CHECK NO.
1249	TEXAS COMMISSION ON ENVIRONMEN	15253

COLORADO MATERIALS, LTD.

TRANS NO	REFERENCE	DATE	DESCRIPTION	GROSS AMOUNT	DISCOUNT	PREVIOUS	BALANCE	NET AMOUNT
713 83	130708	7/05/13	APP FEE WPAP	10,000.00	0.00	0.00	0.00	10,000.00

VENDOR NO.		GROSS AMOUNT	DISCOUNT	PREVIOUS	BALANCE	NET AMOUNT
1249	Acct No. 20030841	10,000.00	0.00	0.00	0.00	10,000.00

COLORADO MATERIALS, LTD.
P.O. Box 2109
San Marcos, Texas 78667
(512)353-7757

Wells Fargo Bank, N.A.
San Marcos, Texas

37-65/1119

DATE	CHECK NO.	AMOUNT
7/08/13	15253	$10,000.00

****Ten thousand and xx / 100 Dollars****

VOID AFTER 6 MONTHS

PAY TO THE ORDER OF

TEXAS COMMISSION ON ENVIRONMENTAL QUAL
PO BOX 13087
AUSTIN, TX 78711-3089

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⑈015253⑈ ⑆111900659⑆ 5506121237⑈

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

[ ] Renewal *(Core Data Form should be submitted with the renewal form)* [ ] Other

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

[X] Yes [ ] No

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 600522452		RN NEW

SECTION II: Customer Information

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

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

[ ] Owner [ ] Operator [X] Owner & Operator
[ ] Occupational Licensee [ ] Responsible Party [ ] Voluntary Cleanup Applicant [ ] Other:

7. General Customer Information

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

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

8. Type of Customer:			
[ ] City Government	[ ] County Government	[ ] Federal Government	[ ] State Government
[ ] Other Government	[ ] General Partnership	[X] Limited Partnership	[ ] Other:

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

10. Mailing Address:								
P.O. Box 2109								
City	San Marcos	State	TX	ZIP	78667	ZIP + 4	2109	

11. Country Mailing Information *(if outside USA)*	12. E-Mail Address *(if applicable)*

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(512) 396 - 1556		(512) 396 - 1558

16. Federal Tax ID *(9 digits)*	17. TX State Franchise Tax ID *(11 digits)*	18. DUNS Number *(if applicable)*	19. TX SOS Filing Number *(if applicable)*
742824084	17428240844		13459610

20. Number of Employees

[ ] 0-20 [ ] 21-100 [X] 101-250 [ ] 251-500 [ ] 501 and higher

21. Independently Owned and Operated?

[X] Yes [ ] No

SECTION III: Regulated Entity Information

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

[X] New Regulated Entity [ ] Update to Regulated Entity Name [ ] Update to Regulated Entity Information [ ] No Change** *(See below)*

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

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

Hunter Quarry II

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	5080 FM 2439							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	UND
25. Mailing Address:	P.O. Box 2109							
	City	San Marcos	State	TX	ZIP	78667	ZIP + 4	2109

26. E-Mail Address:		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(512) 396 - 1556		(512) 396 - 1558

30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
1422		212312	

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

Construction Materials Manufacturing

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

35. Description to Physical Location:	Site entrance is located on the west side of FM2439 approximately 0.1 miles NE of the intersection of FM1102 and FM2439 in Hunter, Texas

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	Texas	78132

37. Latitude (N) In Decimal:	29.836486		38. Longitude (W) In Decimal:	-98.045862	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	50	11.3496	98	2	45.1026

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

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

SECTION IV: Preparer Information

40. Name:	Mary Ellen Schulle, PE	41. Title:	Project Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 249 - 8284		(830) 249 - 0221	meschulle@westwardenv.com

SECTION V: Authorized Signature

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

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

Company:	Westward Environmental, Inc.	Job Title:	Project Engineer	
Name *(In Print)*:	Mary Ellen Schulle, PE		Phone:	(830) 249 - 8284
Signature:			Date:	7/14/13

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 8, 2013

Mr. Tom Singley
Colorado Materials, Ltd.
P.O. Box 2109
San Marcos, TX 78667

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Hunter Quarry II; Located approximately 0.1 miles northeast of the intersection of FM1102 and FM 2439; Hunter, Texas

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

Investigation No. 1105493; Regulated Entity No. RN102380250; Additional ID No. 13-13072901

Dear Mr. Singley:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by Westward Environmental, Inc. on behalf of Colorado Materials, Ltd. on July 29, 2013. Final review of the WPAP was completed after additional material was received on October 7, 2013 and November 1, 2013. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed limestone quarry project will have a total area of approximately 845 acres. The proposed quarry pit will disturb approximately 714 acres. The proposed activities for the site include quarrying to an elevation no deeper than 609 feet above mean sea level (a.m.s.l.). Haul roads and stock piles will be contained within the quarry pit. The pits will be excavated in 10 acre sections and separated by existing stream channels. As presented, the stream channels will only be quarried with prior approval from all appropriate jurisdictional agencies. No on-site sewage facility is proposed at this time. Project wastewater

(domestic) will be collected in portable toilets and disposed of two times per week by a TCEQ registered waste disposal service. Trash generated on-site will be disposed of in a dumpster and handled by a licensed waste service. Blasting agents will be used in the mining process. The site will not include process water. The site will connect to the existing limestone quarry (Hunter Quarry) located at 5080 FM 2439 in New Braunfels, Comal County.

PERMANENT POLLUTION ABATEMENT MEASURES

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

- A 50 foot natural buffer will be maintained along the perimeter of the property to reduce soil erosion and runoff velocities.
- Expansion of the quarry will occur in phases. The first phase where regulated activities and soil disturbance will occur is a rectangular area adjacent to the recharge zone boundary. As quarry expands to the next phase, another rectangular area will then be disturbed. Expansion in phases will allow vegetation to remain in place and limit the amount of soil that is disturbed at once.
- An earthen berm (safety berm) composed of compacted soil and/or overburden will be constructed. At the full extent of the quarry pit, the earthen berm will encircle the quarry pit. Upgradient strom water will be diverted around the site and onsite flows will be prevented from leaving the site.
- Rock berms will be installed on the downgradient side of the earthen berm in areas of concentrated flow.
- Refueling and maintenance activities for vehicles and equipment will occur off of the recharge zone to maximum extent possible. If emergency maintenance occurs or if refueling on the recharge zone must occur, appropriate protection measures will be implemented. These measures include keeping spill containment kits, front-end loaders and haul trucks available, training equipment operators and having operators monitor equipment during the refueling operation.
- Sensitive features zones S-60, S-70, S-106a, S-106b, S-109, S-110, and S-111 will be protected by a natural 200 foot buffer area along the southern side of York Creek (and the final earthen berm). All other sensitive features are included in the above mentioned zones.
- Areas located within the floodplain of Unnamed Tributary 1 and Bullhead Hollow will obtain all applicable authorizations from proper authorities. A 25 foot vegetated buffers will be left in place around Unnamed Tributary 1 and Bullhead Hollow until authorization is obtained.

GEOLOGY

According to the geologic assessment, included with the application, the Cretaceous aged Buda Formation, Del Rio Formation, Georgetown Formation and the Edwards Group-Person Formation are exposed at the site. One hundred fourteen features were evaluated by the project geologist, with eleven geologic features having a high probability of rapid infiltration and therefore sensitive rating. Six (6) sensitive zones and one (1) sensitive fault were identified during the assessment. All sensitive features will be protected in zone S-60, S-70, S-106a, S-106b, S-109, S-110, and S-111 is a fault. All zones included solution cavities. Zone S-70 includes "Too Old for Football" cave and zone S-109 includes "Bear Man Pig Central" cave. The San Antonio Regional Office site assessment conducted on October 3, 2013 revealed that the site was generally as described in the application.

Natural buffers were proposed for eleven natural sensitive features, S-58, S-49, S-60, S-69, S-72, S-70, S-106a, S-106b, S-109, S-110, and S-111. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffers. The size is generally based on the drainage are for each sensitive feature. The natural 200 foot buffer area along the southern side of York Creek (and the final earthen berm) will include all sensitive features.

SPECIAL CONDITIONS

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

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

III. This approval does not authorize the construction or installation of aboveground storage tanks at the site on the Edwards Aquifer recharge zone.

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

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

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

If a new Edwards Aquifer protection plan is submitted to the TCEQ under 30 TAC §213.4(h) (3), the approved plan will continue in effect until the executive director makes a determination on the new plan.

VII. This approval letter is being issued for regulated activities (as defined in Chapter 213) and for best management practices presented in the application. Other authorizations may be necessary. Failure to obtain all necessary authorizations could result in enforcement actions.

STANDARD CONDITIONS

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

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. "No well exist on site." All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial

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

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

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Monica Reyes of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210)403-4012.

Sincerely,

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

LMB/MR/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Ms. Mary Ellen Schulle, P.E., Westward Environmental, Inc.
Mr. Charlie Thomas, P.E., City Engineer, City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

WESTWARD
Environmental. Engineering. Natural Resources.

October 7, 2013

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Region 13 Office – San Antonio
14250 Judson Rd.
San Antonio, Texas 78233

Project No.: 10080-85

RECEIVED
OCT 15 2013
COUNTY ENGINEER

Attn: Ms. Monica Reyes
Subject: Proposed Water Pollution Abatement Plan (WPAP) – **Response to Questions**
Hunter Quarry II – EAPP ID No. 13-13072901, RN102380250
Colorado Materials, Ltd. – CN600522452

Dear Ms. Reyes,

Attached please find Westward Environmental Inc.'s (WESTWARD'S) response to your letter dated September 27, 2013 regarding the Colorado Materials, Ltd. WPAP application submitted July 29, 2013. Our response is as follows:

TCEQ Question #1
Please show S-60 as feature zone.
Response: Please see the attached revised Geologic Assessment Map and WPAP Site Plan which have been revised to show S-60 as a Feature Zone. Feature Zone S-60 is 45' by 20' and therefore may be difficult to see at the map scale.

TCEQ Question #2
Please show 25' buffer around Bullhead Hollow.
Response: Please see the attached revised WPAP Site Plan which has been revised to include the 25' buffer around Bullhead Hollow.

WESTWARD requests to see a draft of the approval conditions before TCEQ officially issues plan approval. If you have any questions regarding this response, or require further information, please call our office at (830) 249-8284.

RECEIVED TCEQ
2013 OCT -7 PM 4:50
SAN ANTONIO
REGION

Respectfully submitted,
WESTWARD ENVIRONMENTAL

10/7/13

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

Mary Ellen Schulle, PE, CFM
Project Engineer
TX - License #114545

Distribution: Addressee
Mr. Tom Singley – Colorado Materials, Ltd.
WEI 10080-85 File

Attachments

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.

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

3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.

5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS' SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.

6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).

7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.

8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).

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

10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

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

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

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

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

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

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

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

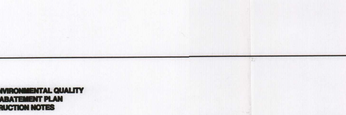
THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

BMP CONSTRUCTION NOTES

1. COMPACTED EARTHEN BERM

INSTALLATION:
COMPRISED OF SOIL AND OVERBURDEN MATTER EITHER GENERATED ONSITE OR DELIVERED FROM OFFSITE. COMPACT WITH HEAVY EQUIPMENT IN 12" (MAX) LIFTS.

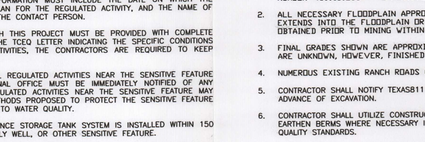
MAINTENANCE:
INSPECT BERMS QUARTERLY UNTIL SUFFICIENTLY VEGETATED. REPLACE AS NECESSARY.



2. ALTERNATE #1 & #2 ROCK BERMS (WEI)

INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

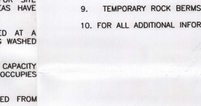


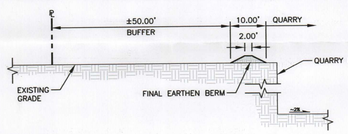
3. ROCK BERM (RG-348)

SHOULD BE SECURED WITH A WOVEN WIRE SHEATING, MAX. OPENING 1" AND MIN. WIRE DIA. 20 GAUGE GALVANIZED. SECURE WITH SHOAT RINGS.

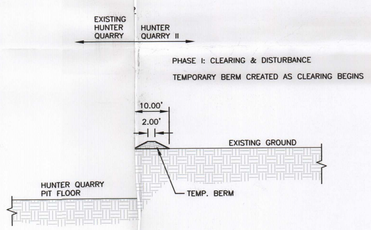
INSTALLATION:
AGGREGATE USED SHOULD BE COMPRISED OF OPEN GRADED 3-5" DIAMETER ROCK. BERM SHOULD BE PLACED PERPENDICULAR TO FLOW LINE. SIDE SLOPE MUST BE 2:1 OR FLATTER. WIRE SHEATHING MUST BE SECURED WITH TIE WIRE SO THEY OVERLAP AT LEAST 2". BERM SHOULD BE BURIED IN A TRENCH APPROX. 4" DEEP.

MAINTENANCE:
INSPECT BERMS QUARTERLY. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6". REPLACE WHEN ROCK BECOMES CLOGGED WITH SEDIMENT.

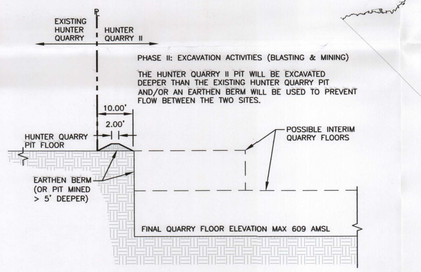




A/1 TYP. 50' BUFFER
SCALE : 1"=20'



B/1 PHASE 1 QUARRY INTERFACE
SCALE : 1"=20'



B/1 PHASE 2 QUARRY INTERFACE
SCALE : 1"=20'

GENERAL NOTES:

1. EXISTING 100 YEAR FLOOD PLAIN , ZONE A BOUNDARY PER FEMA, FIRM MAP COMMUNITY PANEL NUMBER: 48091C0285F - EFFECTIVE SEPTEMBER 2, 2009.
2. ALL NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED IF/WHEN MINING DISTURBACE EXTENDS INTO THE FLOODPLAIN OR 25' BUFFER NECESSARY FLOODPLAIN APPROVALS WILL BE OBTAINED PRIOR TO MINING WITHIN THE FLOODPLAIN.
3. FINAL GRADES SHOWN ARE APPROXIMATE AND DEPEND ON ROCK QUALITY . FINAL PIT SLOPES ARE UNKNOWN, HOWEVER, FINISHED QUARRY FLOOR SLOPES WILL BE APPROXIMATELY 2%.
4. NUMEROUS EXISTING RANCH ROADS CRISS CROSS THE PROPERTY.
5. CONTRACTOR SHALL NOTIFY TEXAS811 ONE CALL SYSTEM (1-800-344-8377) 48 HOURS IN ADVANCE OF EXCAVATION.
6. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS ROCK BERMS AND EARTHEN BERMS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
7. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STDS OF TCEQ.
9. TEMPORARY ROCK BERMS SHALL ME INSTALLED PRIOR TO DISTURBANCE WITHIN THE 25' STREAM BUFFER.
10. FOR ALL ADDITIONAL INFORMATION ON FEATURE ZONES SEE THE GEOLOGIC ASSESSMENT.

N

0 200 400 800

SCALE: 1" = 400'

LEGEND

- EXISTING 100 YEAR FLOODPLAIN
- FINAL EARTHEN BERM
- APPROX. PROPERTY BOUNDARY
- S-1 SENSITIVE FEATURE
- (W) WELL
- FAULT
- INFERRED FAULT
- SENSITIVE FEATURE ZONE
- FLOW ARROW (EXISTING FLOW CONDITIONS)
- STREAM
- BUFFER

IMAGE:	NONE
ISSUE DATE:	07/23/2013
DRAWN BY:	JS
CHECKED BY:	MES
SCALE: 1" =	400'
JOB #:	10080-085

SHEET #: 1 OF 1

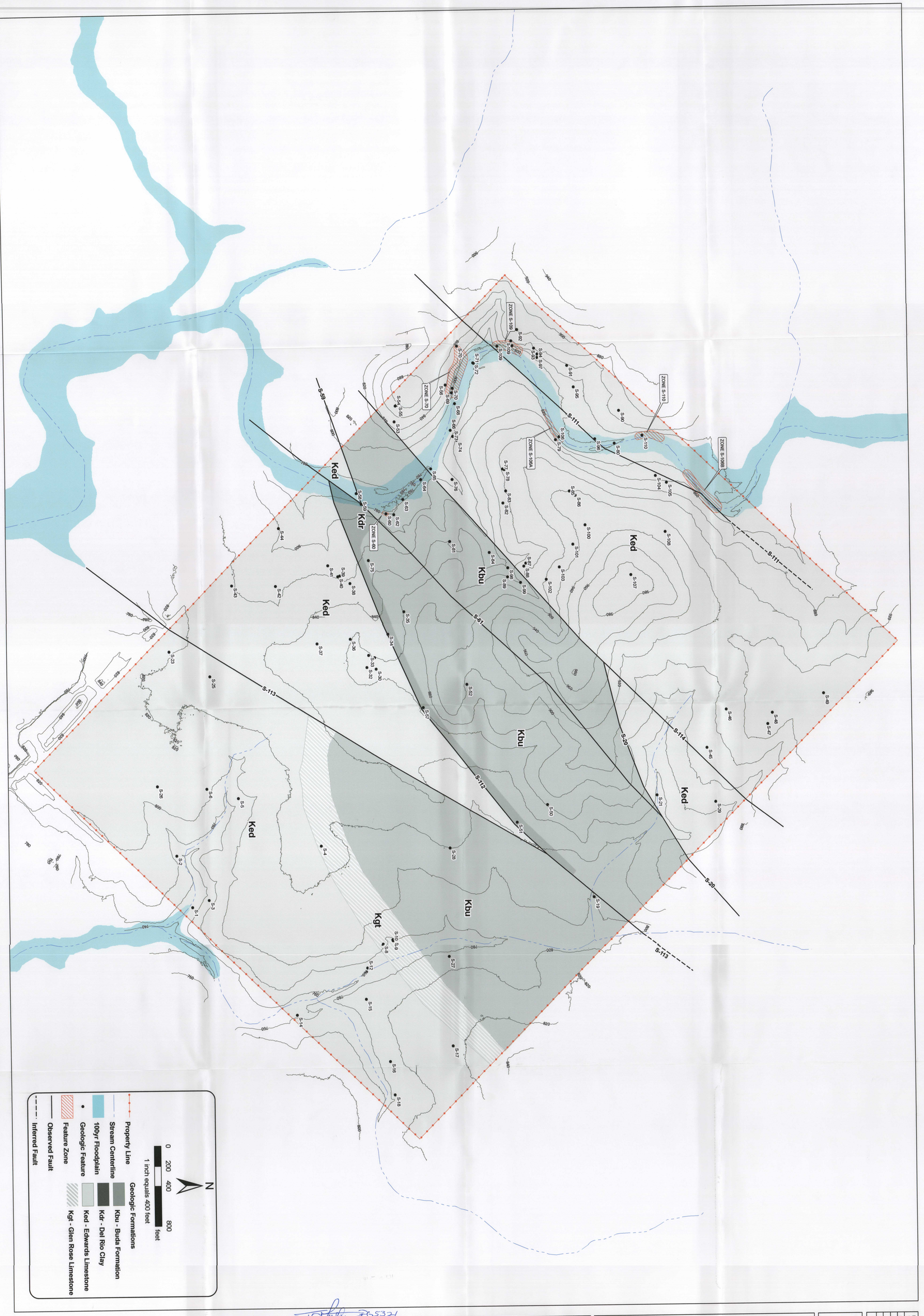
WESTWARD
Environmental Engineering, Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG NO.: F-4524
TBPG REG. NO.: 50112

REV	DESCRIPTION	BY	DATE
1	ADD ZONE S-60	JAS	10/07/2013
2	ADD TEMPORARY 25' BUFFER	JAS	10/07/2013

STATE OF TEXAS
MARY ELLEN P. SCHULLE
114545
LICENSED
PROFESSIONAL ENGINEER

RECEIVED
OCT 15 2013
TCEQ

WPAP SITE MAP
HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX



GEOLOGIC ASSESSMENT MAP

HUNTER QUARRY II
COLORADO MATERIALS, LTD
COMAL COUNTY, TX

10-7-13

STATE OF TEXAS
THOMAS D. MATHEWS
GEOLOGY
5321
LICENSED
PROFESSIONAL GEOSCIENTIST

REV	DESCRIPTION	BY	DATE
1	ADD ZONE S-60	JJS	10/04/2013

WESTWARD
Environmental. Engineering. Natural Resources.
P.O. Box 2205 Boerne, Texas 78006
(830) 249-8284 Fax: (830) 249-0221
TBPE REG. NO.: F-4524
TBPG REG. NO.: 50112

SHEET #: 1 OF 1

IMAGE:	
TNRIS:	2012
ISSUE DATE:	07/29/2013
DRAWN BY:	JS
CHECKED BY:	TM
SCALE:	1" = 400'
JOB #:	10060-004

TCEQ
Protecting Texas by Reducing and Preventing Pollution

F A X T R A N S M I T T A L

DATE: **September 27, 2013** NUMBER OF PAGES *(Including this cover sheet):* **2**

TO: Name **Mr. Tom Singley**
Organization **Colorado Materials, Ltd.**
FAX Number **512-396-1558**

TO: Name **Ms. Mary Ellen Schulle, P.E.**
Organization **Westward Environmental, Inc.**
FAX Number **830-249-0221**

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name **Monica Reyes**
Division/Region **EAPP/San Antonio**
Telephone Number **210-403-4012**
FAX Number **210-545-4329**

NOTES:

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Hunter Quarry II; Located west side of FM2439 approximately 0.1 miles northeast of the intersection of FM 1102 and FM 2439; Comal County, Texas

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

Investigation No. 1105493; Regulated Entity No. RN102380250; Additional ID No. 13-13072901

Dear Ms. Schulle:

We are in the process of technically reviewing the WPAP application you submitted for the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed:

Geologic Assessment Map Comment:

1. Please show S-60 as feature zone.

Water Pollution Abatement Plan Site Map Comments:

1. Please show 25' buffer around Bullhead Hollow.

We ask that you submit **one original and four copies** of the amended materials to supplement the WPAP application to this office by no later than **14 days from the date of this fax** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 14 days from the notice date. If the response to the second is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Neal Denton of the Edwards Aquifer Protection Program of the San Antonio Regional Office at the number listed above.