F-22385

MR. W FIREWORKS SUPERSTORE
MRW BLANCO
WATER POLLUTION ABATEMENT PLAN

09.18.23

23306 Blanco Road

San Antonio, Texas 78260

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: MRW Smithson Valley						**2. Regulated Entity No.:**			
3. Customer Name: Mr. W Fireworks, Inc.						**4. Customer No.: CN600916548**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		2.5 AC	
9. Application Fee:	$4,000		**10. Permanent BMP(s):**			SF BASIN, VFS			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Bexar		**14. Watershed:**			SALADO CREEK			

Application Distribution

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

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

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

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

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

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

Joseph E. Tober, P.E.

Print Name of Customer/Authorized Agent

Joseph E. Tober 7/19/23

Signature of Customer/Authorized Agent Date

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

F-22385

GENERAL INFORMATION SECTION

General Information Form

Texas Commission on Environmental Quality

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

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

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

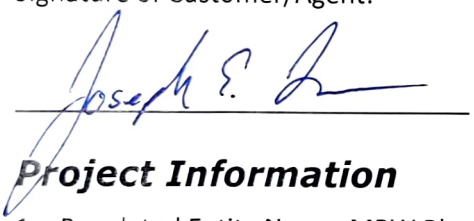
Signature

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

Print Name of Customer/Agent: Joseph E. Tober, P.E.

Date: 07.19.2023

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: MRW Blanco
2. County: Bexar County
3. Stream Basin: Panther Springs Creek (Salado Creek Watershed)
4. Groundwater Conservation District (If applicable): EAA/Trinity Rose Glen GCD
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

   Contact Person: Wayne Wildman
   Entity: Mr. W Fireworks, Inc.
   Mailing Address: P.O. Box 114
   City, State: Somerset, TX Zip: 78069
   Telephone: (210)622-3112 FAX: _____
   Email Address: wildmans@flash.net

8. Agent/Representative (If any):

   Contact Person: Joseph E. Tober, P.E.
   Entity: Mr. W Fireworks, Inc.
   Mailing Address: P.O. Box 114
   City, State: Somerset, TX Zip: 78069
   Telephone: (210)383-6184 FAX: _____
   Email Address: joseph@mrwfireworks.com

9. Project Location:

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

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

    23306 Blanco Road

    From TCEQ regional office, head north on Judson Road approximately 3.0 miles to Loop 1604. Travel west on Loop 1604 approximately 6.4 mile to the exit for Blanco Road/Huebner. Travel north along Blanco Road for 3.7 miles to destination which will be located on the right side of the road.

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

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

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

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

    ☒ Survey staking will be completed by this date: Completed

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

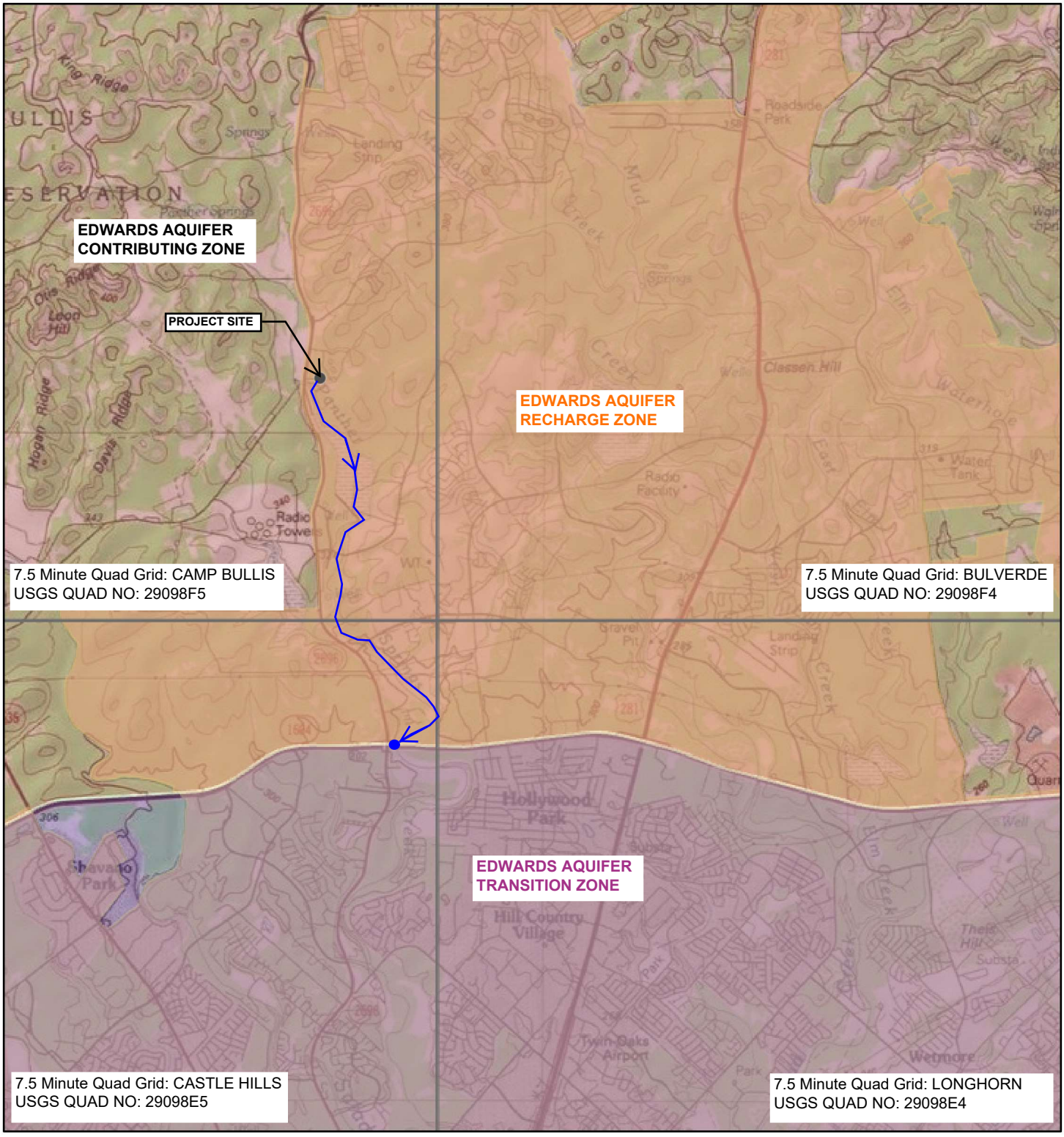
20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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

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

LOCATION MAP

NOT TO SCALE

MR W - 23306 Blanco Rd



7/13/2023, 4:13:47 AM

1:96,299

0 0.5 1 2 mi

0 1 2 4 km

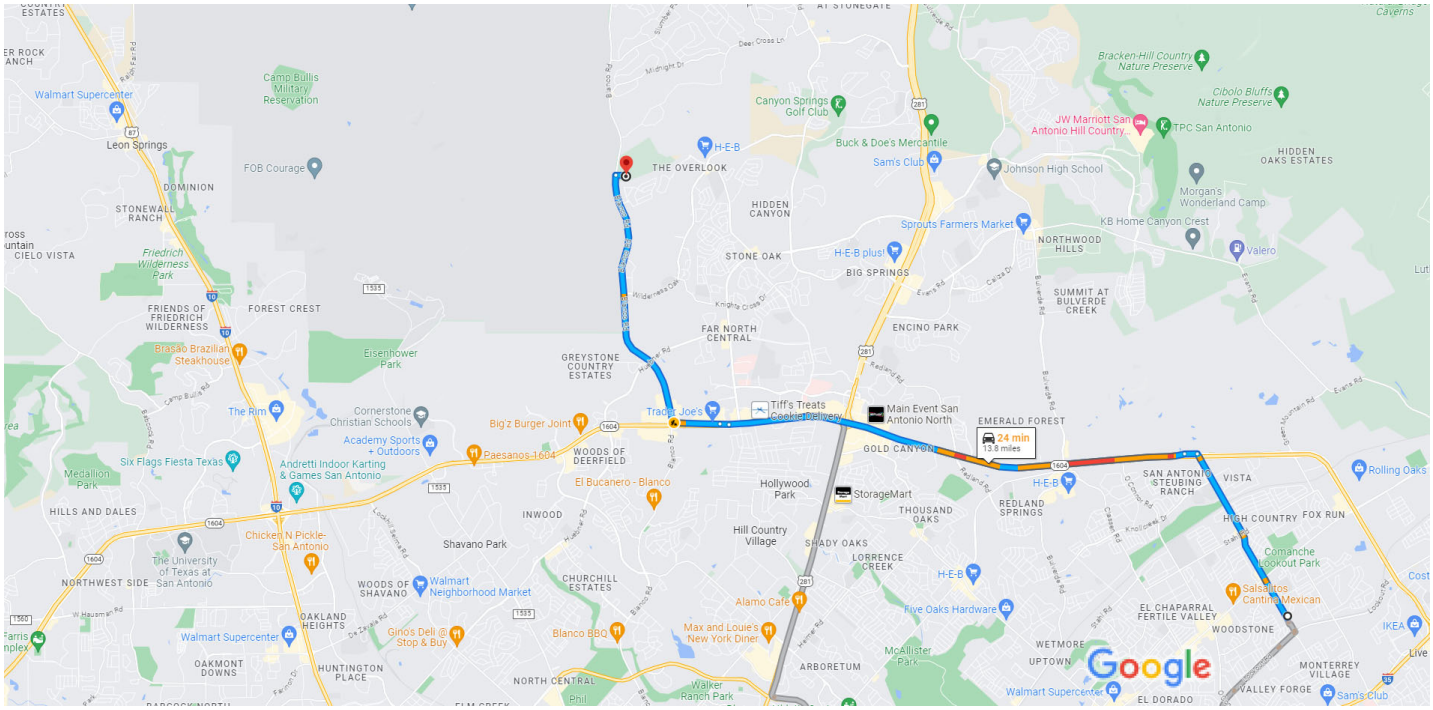
- Edwards Aquifer Label
- Edwards Aquifer Boundary
- Edwards Aquifer Boundary central line
- City/Place

Groundwater Conservation Districts

- Edwards Aquifer Authority
- Trinity Glen Rose GCD
- TX Counties
- 7.5 Minute Quad Grid
- TCEQ_EDWARDS_OFFICIAL_MAPS

Texas Commission-Environmental, 14250 Judson Rd, San Antonio, TX 78233 to 23306 Blanco Rd, San Antonio, TX 78260

Drive 13.8 miles, 24 min



Map data ©2023 Google 1 mi

⚠ This route has restricted usage or private roads.

Texas Commission-Environmental
14250 Judson Rd, San Antonio, TX 78233

Continue to Judson Rd

16 sec (200 ft)

1. Head southeast toward Judson Rd

115 ft

2. Turn right toward Judson Rd

85 ft

Follow Judson Rd, TX-1604 Loop W and Blanco Rd to your destination

20 min (13.6 mi)

3. Turn right onto Judson Rd
ℹ Pass by AutoZone Auto Parts (on the right in 0.6 mi)

2.6 mi

4. Use the left lane to turn left onto N Loop 1604 E

0.2 mi

5. Use the left lane to take the ramp onto TX-1604 Loop W

6.4 mi

6. Take the exit toward Blanco Road/Huebner Road/F.M. 2696

0.1 mi

7. Merge onto N Loop 1604 W

0.7 mi

8. Turn right onto Blanco Rd

3.7 mi

9. Turn right

⚠ Restricted usage road

ⓘ Destination will be on the right

40 sec (0.1 mi)

23306 Blanco Rd

San Antonio, TX 78260

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

August 2, 2023

Attachment C- Project Description

Existing Development:

MRW Blanco is a 2.5-acre tract of undeveloped cleared and grading land located at 2330 Blanco Road on the single commercial lot within the City of San Antonio ETJ. The 2.5 acre site was previously part of an overall 5.006 acre single family lot that included an existing concrete driveway path from Blanco Road to the single family residence in the rear of the overall 5.006 acre lot. The proposed project has subdivided the overall tract into a 2.5 acre tract primarily located near Blanco Road with the remaining 2.506 acre tract to include a flag lot to Blanco and leave the existing residential structure alone. The site is located within the Edwards Aquifer Recharge Zone and does not include any floodplain within the property boundary. The site drains toward the southwest corner of the property to a drainage swale along Blanco Road.

The site has numerous large significant and heritage trees with some previous clearing work and gravel placement along the street right of way. Unknown why the previous owner added the gravel. The property currently has 1.28 acre of impervious cover on the ground with the concrete driveway path and the gravel parking lot. This impervious cover adds up to 51.17% impervious cover over the 2.5 acre tract.

Here is a timeline of the property development associated with the following images:

- **1957** – Single Family home constructed in the adjacent 2.506 acre tract
- **1977 Aerial** – Existing single family home and impervious cover driveway from Blanco to the residence visible.
- **Jan 1995** - Gravel and vehicles parked along the front area
- **Sept 2002** – Gravel and clearing/grading activities
- **Jan 2010** – Gravel and clearing/grading activities
- **Dec 2015** – Numerous vehicles parked
- **Oct 2019** – Numerous vehicles parked
- **March 2021** – Mr. W Fireworks, Inc. purchases property
- **Oct 2021** – Fireworks stands located on existing gravel near the driveway

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

Proposed Development:

The proposed project is to construct a 5,025 SF metal fireworks retail indoor building and utilize the existing gravel parking lot. In addition to this construction, the owner will construct a sand filter water quality basin and an engineered vegetative filter strip to remove TSS load generated from the gravel parking lot and proposed building impervious cover of the building. The project will include a total of 0.82 AC of impervious over the 2.5 ac tract. This will require that areas of gravel to be removed and vegetated with sod/soil.

As stated within the Permanent Stormwater section, we are installing permanent BMP's to treat the impervious cover area that was previously added at some time prior to 2002 by the previous owner of the overall single family residential property. The total impervious cover is being reduced 32.8% of the site for the tract. Please note that the San Antonio Water System has determined this is a Category 3 site, therefore additional impervious cover will not be allowed in the future.

4-22-77_8-245.tif

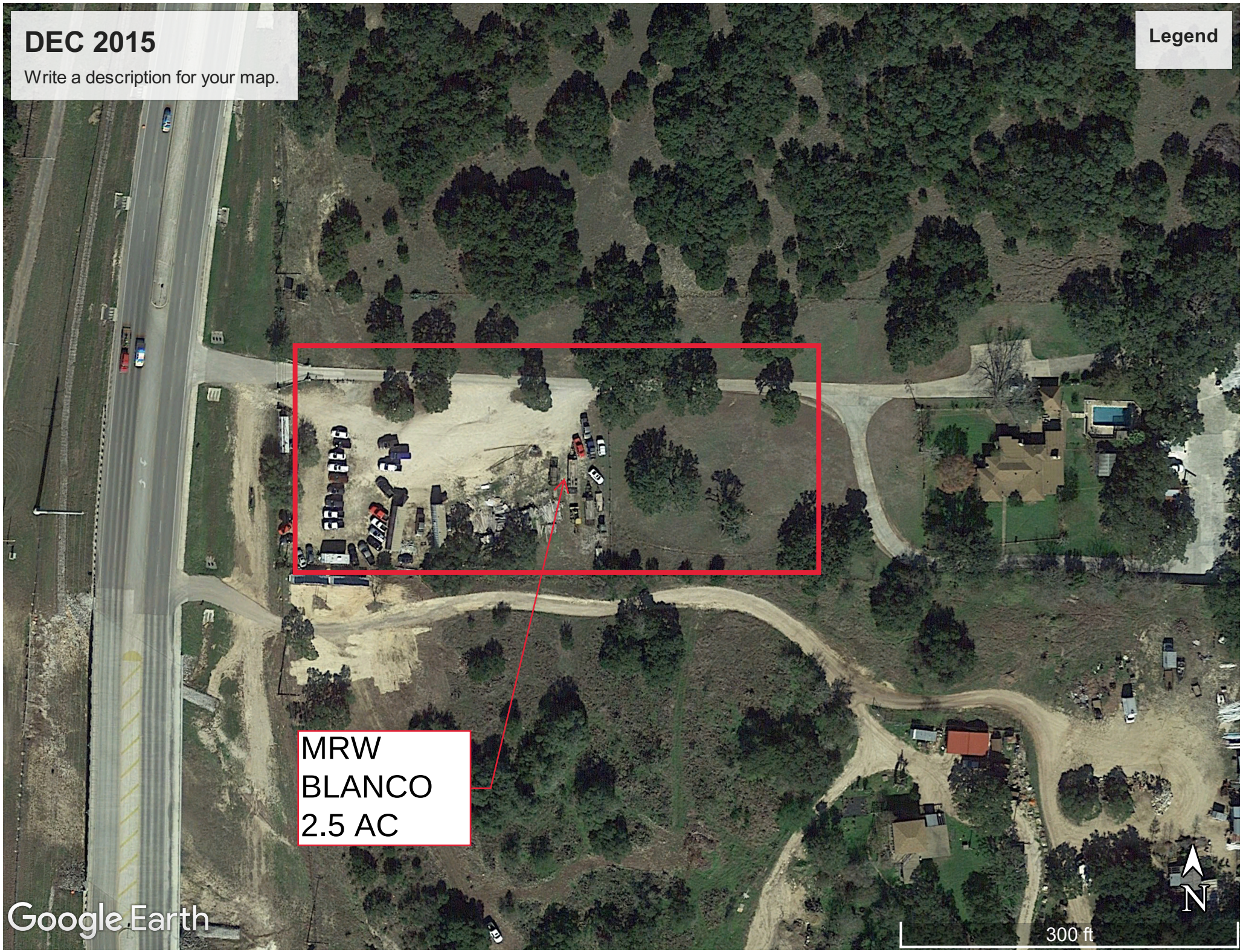
214%

MRW
BLANCO
2.5 AC

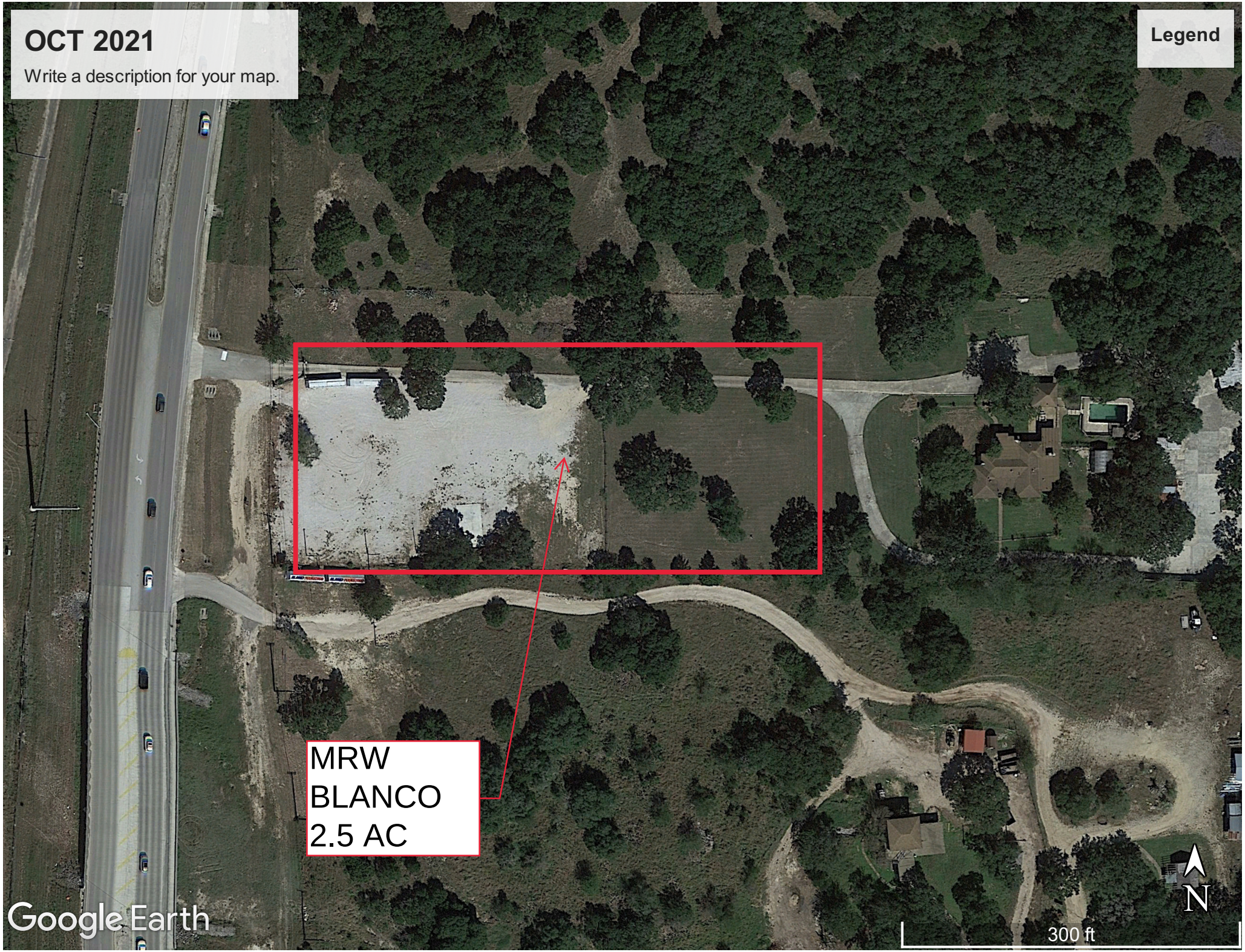

JAN 1995
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
Google Earth
Image U.S. Geological Survey
N
300 ft


SEPT 2002
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
Google Earth
Image © 2023 Maxar Technologies
N
300 ft


JAN 2010
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
N
300 ft
Google Earth


DEC 2015
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
Google Earth
300 ft
N


OCT 2019
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
Google Earth
Image © 2023 CNES / Airbus
N
300 ft


OCT 2021
Write a description for your map.
Legend
MRW
BLANCO
2.5 AC
Google Earth
300 ft
N

F-22385

GEOLOGIC ASSESSMENT SECTION

GEOLOGIC ASSESSMENT (WPAP)

MRW - BLANCO
2.4 ACRES
BEXAR COUNTY, TEXAS

FROST GEOSCIENCES, INC. PROJECT NO.: FGS-E23139
MAY 22, 2023

Prepared exclusively for

Mr. W Fireworks
12221 FM 476
Somerset, Texas 78069

Frost GeoSciences
Geotechnical ▪ Construction Materials
Geologic ▪ Environmental

Frost GeoSciences
Geotechnical ▪ Construction Materials
Geologic ▪ Environmental

Frost Geosciences, Inc.
13406 Western Oak
Helotes, Texas 78023
Office (210)-372-1315
Fax (210)-372-1318
www.frostgeosciences.com
TBPE Firm Registration # F-9227
TBPG Firm Registration # 50040

May 22, 2023

Mr. W Fireworks
12221 FM 476
Somerset, Texas 78069

Attn: Mr. Joseph E. Tober, P.E.

SUBJECT:
Geologic Assessment (WPAP)
for the Regulated Activities / Development on the
Edwards Aquifer Recharge / Transition Zone
MRW - Blanco
2.4 Acres
Bexar County, Texas
FGS Project № FGS-E23139

Dear Mr. Joseph E. Tober, P.E.:

Frost GeoSciences, Inc., (FGS) is pleased to submit the enclosed Geologic Assessment completed for the above referenced project site as it relates to 30 TAC §213.5(b)(3), effective June 1, 1999. Our investigation was conducted, and this report was prepared in general accordance with the Texas Commission on Environmental Quality (TCEQ) "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04).

If you have any questions regarding this report, or if Frost GeoSciences, Inc. may be of additional assistance to you on this project, please feel free to call our office. It has been a pleasure to work with you and we wish to thank you for the opportunity to be of service to you on this project. We look forward to being of continued service.

We appreciate the opportunity to perform these services for Mr. W Fireworks. Please contact the undersigned if you have questions regarding this report.

Respectfully submitted,
Frost GeoSciences, Inc.

Chris Wickman, P.G.
Senior Geologist

Copies Submitted: (1) Mr. Joseph E. Tober, P.E.; Mr. W Fireworks
(1) Electronic (pdf) Copy

TABLE OF CONTENTS

GEOLOGIC ASSESSMENT

Texas Commission on Environmental Quality

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

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

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

Signature

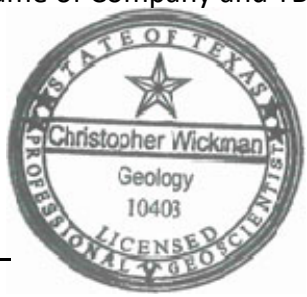
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Chris Wickman, P.G. Telephone: (210) 372-1315

Date: May 22, 2023 Fax: (210) 372-1318

Representing: Frost GeoSciences, Inc. #50040 (Name of Company and TBPG or TBPE registration number)

Signature of the Geologist:



Regulated Entity Name: MRW - Blanco

Project Information

1. Date(s) Geologic Assessment was performed: May 19, 2023
2. Type of Project:

   ☒ WPAP ☐ AST
   ☐ SCS ☐ UST
3. Location of Project:

   ☒ Recharge Zone
   ☐ Transition Zone
   ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Tarrant	C	0-2

**Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.
B. Soils having a moderate infiltration rate when thoroughly wetted.
C. Soils having a slow infiltration rate when thoroughly wetted.
D. Soils having a very slow infiltration rate when thoroughly wetted

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

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

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

   Applicant's Site Plan Scale: 1" = 40'
   Site Geologic Map Scale: 1" = 40'
   Site Soils Map Scale (if more than 1 soil type): 1" = 500'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☒ Other method(s). Please describe method of data collection: 2021 Aerial Photograph

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

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

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

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

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

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

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

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

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

Administrative Information

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

STRATIGRAPHIC COLUMN

EXPLANATION OF HYDROSTRATIGRAPHIC UNITS

Group or Formation	Formal and informal member		Hydrologic unit or Informal hydrostratigraphic unit
Taylor Group (Pecan Gap)		Kpg	Upper Confining Unit (UCU)
Austin Group		Ka	
Eagle Ford Group		Kef	
Buda Limestone		Kb	
Del Rio Clay		Kdr	
Georgetown Formation		Kg	I
Person Formation	Cyclic and marine, undivided	Kpcm	II
	Leached and collapsed	Kplc	III
	Regional dense member	Kprd	IV
Kainer Formation	Grainstone	Kkg	V
	Kirschberg evaporite	Kkke	VI
	Dolomitic	Kkd	VII
	Basal nodular	Kkbn	VIII
Glen Rose Limestone	Upper Glen Rose Limestone	Kgrc	Cavernous
		Kgrcb	Camp Bullis
		Kgrue	Upper evaporite
		Kgruf (Kgrf)	Fossiliferous Upper
		Kgrlf (Kgrf)	Fossiliferous Lower
		Kgrle	Lower evaporite
	Lower Glen Rose Limestone	Kgrb	Bulverde
		Kgrlb	Little Blanco
		Kgrts	Twin Sisters
		Kgrd	Doeppenschmidt
		Kgrr	Rust
		Kgrhc	Honey Creek
Pearsall Formation	Hensell Sand	Kheh	Hensell
	Cow Creek Limestone	Kcccc	Cow Creek
	Hammett Shale	Khah	Hammett

Frost GeoSciences

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: MRW - Blanco | **PROJECT NUMBER:** FGS-E23139

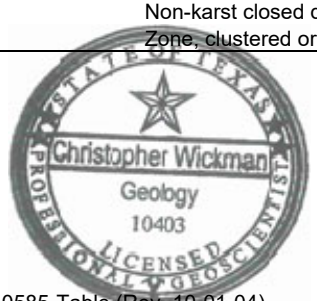
LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
No		Geologic		or					Manmade		Features	Were		Observed		on				Site

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, 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 213.

Chris Wickman, P.G.

Date: May 22, 2023

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

LOCATION

The project site is located along and east of Blanco Road, approximately 1.6 miles north of the intersection of Blanco Road and Wilderness Oak, Texas. An overall view of the area is shown on copies of the site plan, a street map, the U.S.G.S. Topographic Map, the EAA-Edwards Aquifer Recharge Zone and Contributing Zone Map, the FEMA Flood Insurance Rate Map (FIRM), the U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366, U.S. Geological Survey: Water Resources Investigations Report (WRI)-95-4030, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas, a 2021 aerial photograph at a scale of 1"=500' and an NRCS Web Soil Survey aerial photograph at a scale of 1"=500'. These maps are included as Figures 1 through 9 in Appendix A.

METHODOLOGY

The Geologic Assessment was performed by Chris Wickman, P.G., Senior Geologist with Frost GeoSciences, Inc. Mr. Wickman is a Licensed Professional Geoscientist in the State of Texas (License # 10403).

Frost GeoSciences, Inc. researched the geology of the area north and east of the intersection of Blanco Road and Wilderness Oak. The research included, but was not limited to, the Geologic Atlas of Texas, San Antonio Sheet, FEMA Flood Insurance Rate maps, Edwards Aquifer Recharge Zone Maps, U.S.G.S. 7.5 Minute Quadrangle Maps, the Bureau of Economic Geology-Geologic Atlas of Texas, the U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366, the U.S.G.S. Water-Resources Investigations Report 95-4030, the U.S.D.A. Soil Survey of Bexar County, Texas and the NRCS Web Soil Survey website.

After reviewing the available information, a field investigation was performed to identify any geologic or man-made Potential Recharge Features (PRFs). A transect spacing of approximately 50 feet, or less depending on vegetation thickness, was used to inspect the project area. A 2021 aerial photograph, in conjunction with a hand-held Garmin GPS 73 Global Positioning System with an Estimated Potential Error ranging from 8 to 12 feet, was used to navigate around the property and identify the locations of PRFs, as recommended in the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The locations of any PRFs noted in the field were marked with blue and white flagging. The flagging is numbered with the same potential recharge feature I.D. # that is used on the Site Geologic Map. The Site Geologic Map, indicating the limits of the project site, and the locations of any PRFs and/or rock outcrops noted on the project site, is included in the Appendices at the end of this report. The Geologic Assessment Form TCEQ-0585, (Rev. 2-11-15), Stratigraphic Column, and the Geologic Assessment Table have been filled with the appropriate information for this project site and are included on pages 1 through 5.

RESEARCH & OBSERVATIONS

7.5 Minute Quadrangle Map Review

According to the U.S.G.S. 7.5 Minute Quadrangle Map, Camp Bullis Sheet (1992), the elevation across the project site ranges from 1110 to 1130 feet above mean sea level. The project site has a total relief of approximately 20 feet. Runoff from the project site flows to the southwest into Panther Springs Creek located southwest and west of the project site. The topographic map depicts the project site as wooded land with an unimproved road crossing through the northern portion of the project site. Blanco Road is located along the western property line of the project site. A copy of the U.S.G.S. 7.5 Minute Quadrangle Map indicating the location of the project site is included on Figure 3 in Appendix A.

Bexar County Watersheds Map

According to the Bexar County Watersheds Map (2003), the project site is located within the Upper Salado Creek Watershed Area. A copy of the Bexar County Watersheds Map indicating the location of the project site is included on Figure 4 in Appendix A.

Recharge/Transition Zone

According to the E.A.A. Edwards Aquifer Recharge Zone and Contributing Zone Map, Camp Bullis (2014), the Official Edwards Aquifer Recharge Zone Map, Camp Bullis Sheet (1992), and the TCEQ website: Edwards Aquifer Viewer – https://tceq.maps.arcgis.com/apps/webappviewer/index.html, the project site is located within the Recharge Zone of the Edwards Aquifer. A copy of the E.A.A. Edwards Aquifer Recharge Zone and Contributing Zone Map indicating the location of the project site is included in Figure 5 in Appendix A.

100-Year Floodplain

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the Flood Insurance Map, Community Panel Number 48029C0120G, dated September 29, 2010, was reviewed to determine if the project site is located in areas prone to flooding. A review of the above-mentioned Panel Number indicates that the project site is located within "Zone X". According to the Panel Legend, Zone X represents areas determined to be outside the 0.2%annual chance floodplain. In addition, the flood panel indicated floodplain associated with Panther Springs Creek present adjacent to the southwestern corner of the project and on the adjacent property west of the project site. The flood plain area is indicated as "Zone A". According to the map panel legend, Zone A represents areas determined to be within the 100-year floodplain where base flood elevations have been determined. A copy of the above referenced FIRM panel indicating the location of the project site is included on Figure 6 in Appendix A.

Soils

According to the United States Department of Agricultural (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Bexar County (1966) and the USDA NRCS Web Soil Survey (WSS) website: https://websoilsurvey.nrcs.usda.gov, the Site is located on the Tarrant Association (TaC). A copy of the an aerial photo (approximate scale: 1"=500') obtained from the Web Soil Survey (WSS) website: https://websoilsurvey.nrcs.usda.gov has been included on Figure 7 in Appendix A.

Tarrant Association, rolling, 5 to 15 percent slopes (TaC) consists of stony soils that are very shallow, dark colored, and gently undulating to steep. The Tarrant Association occurs on the limestone prairies in the northern third of the county. The surface layer is very dark grayish brown, calcareous clay loam and is about 10" thick. It has moderate, fine, subangular blocky structure. This layer is crumbly and friable when moist. Limestone fragments that range from a quarter of an inch to 24" in diameter cover about 35 percent of the surface. The subsurface layer, about 8" thick, is hard fractured limestone. The cracks and spaces are filled with dark grayish brown clay loam. The bedrock is hard limestone. Tarrant soils have rapid surface drainage and good internal drainage. The capacity to hold water is low. Natural fertility is high. Water erosion is a hazard. This soil has a USDA Texture Classification of Clay Loam. The Unified Classification is CL or CH. The AASHO Classification is A-7. This soil has an average permeability from 1.0 to 1.5 inches/hour.

Narrative Description of the Site Geology

Based on a visual inspection of the ground surface, the overall potential for fluid flow from the project site into the Edwards Aquifer appears to be low. PRFs were not identified during the on-site inspection conducted on May 19, 2023. The Site Geologic Map is provided in Appendix C. Color photos of the project site are included in Appendix B.

The project site is covered by a moderately dense stand of vegetative cover with an open grassy area on the eastern and northern portions of the project site. The western portion of the project site is covered by a gravel laden area. Two closed and locked wood and corrugated metal fireworks stands were observed in the northwestern portion of the project site. Site visit photos indicating the condition of the property at the time of the on-site inspection are included in Appendix B. Overall vegetation on the project site consists of live oak *(Quercus virginiana)*, and native grasses and weeds. The variations in the vegetative cover on the property are visible in the 2021 aerial photo on Figure 9 in Appendix A. A copy of the site layout indicating the boundary of the project site and the elevations is included on the Site Geologic Map in Appendix C of this report.

According to the U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366 and the U.S. Geological Survey: Water Resources Investigations Report (WRI) 95-4030, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas, the project site is located on the Basal Nodular Member of the Cretaceous Edwards Kainer Limestone (Kkbn), as well as the Cretaceous Upper Glen Rose formation (Kgru).

The Basal Nodular Member of the Edwards Kainer Limestone consists of shaly, nodular limestone, mudstone, and milliolid grainstone. This member is massive, nodular, and mottled with fossils of Exogyra texana. This member typically forms large lateral caves at the surface.

Upper member of the Glen Rose Limestone (Kgru) is the lower confining unit for the Edwards Aquifer and consists of yellowish tan, thinly bedded limestone and marl. Stairstep topography results from alternating layers of limestone and marl. Surface cavern development can occur within this formation but is often hindered by the marly seams. Overall thickness ranges from 300 to 500 feet.

A fault was identified on the U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366 and the U.S. Geological Survey: Water Resources Investigations Report (WRI) 95-4030, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas. The fault was indicted crossing the project site from the southwest corner, through central portion of the project site and exiting the northeastern portion of the project site. The U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366 identified the fault as the contact between the Upper Glen Rose limestone to the northwest and the basal nodular member of the Edwards Kainer limestone to the south. Direct visual evidence of the fault was not observed due to gravel paving, thick soil cover and vegetation.

Copies of maps from of the U.S. Geological Survey, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations report and the Water Resources Investigations Report (WRI) 95-4030, are included on Figures 8 and 8B in Appendix A. A copy of the Stratigraphic Column highlighting the outcropping formations is included on Page 3 of this report.

According to the site plan provided by Mr. W Fireworks, the surveyed elevations on the project site range from 1119 to 1139 feet. According to this survey, the total relief on the project site is approximately 20 feet. A copy of the site plan indicating the boundary of the project site and the elevations is included on the Site Plan on Figure 1 in Appendix A and the Site Geologic Map in Appendix C of this report.

BEST MANAGEMENT PRACTICES

Based on a visual inspection of the ground surface, the overall potential for fluid flow from the project site into the Edwards Aquifer appears to range from low to moderate. The potential always exists to encounter solution cavities within the subsurface during excavating activities. Frost GeoSciences, Inc. is of the opinion that it is very important for construction personnel to be informed of the potential to encounter cavities in the subsurface that lack a surface expression. Construction personnel should also be informed of the proper protocol to follow in the event a karst feature is encountered during the development of the project site.

DISCLAIMER

This report has been prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04) by a Licensed Texas Professional Geoscientist. All areas of the project site were carefully inspected for features that could contribute to the recharge of the Edwards Aquifer; however, this survey cannot preclude the presence of subsurface karst features that lack surface expression. This report is not intended to be a definitive investigation of all possible geologic or karst features at this site. All conclusions, opinions, and recommendations for Best Management Practices (BMP's) in this report are based on information obtained while researching the project and on the site conditions at the time of our field investigation.

This report has been prepared for the exclusive use of Mr. W Fireworks. This report is based on available known records, a visual inspection of the project site, and the work generally accepted for a Geologic Assessment for Regulated Activities / Developments on the Edwards Aquifer Recharge / Transition Zone, relating to 30 TAC §213.5(b)(3), effective June 1, 1999.

REFERENCES

1. USGS - 7.5 Minute Topographic Quadrangle of Camp Bullis, 1992

2. E.A.A. Edwards Aquifer Recharge Zone and Contributing Zone Map, Camp Bullis (2014).

3. Official Edwards Aquifer Recharge Zone Map, Camp Bullis, 1992

4. The Texas Commission on Environmental Quality (TCEQ) website: Edwards Aquifer Viewer – https://tceq.maps.arcgis.com/apps/webappviewer/index.html.

5. Clark, A.K., Golab, J.A. and Morris, R.R., 2016, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, Science Investigations Map 3366, United States Geological Survey.

6. Clark, A.K., Golab, J.A. and Morris, R.R., 2016, Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas, United States Geological Survey.

7. Collins, Edward, W., 2000, Geologic Map of the New Braunfels 30 X 60 Minute Quadrangle, Bureau of Economic Geology, The University of Texas at Austin, Texas.

8. Stein, W.G. and Ozuna, G.B., 1995, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas, U.S. Geological Survey Water Resources Investigations 95-4030.

9. Barnes, V.L., 1982, Geologic Atlas of Texas San Antonio Sheet, Bureau of Economic Geology and University of Texas at Austin, Geologic Atlas of Texas.

10. Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, Community Panel Number 48029C0120G, dated September 29, 2010

11. United States Department of Agriculture Soil Conservation Service Soil Survey of Bexar County 1966.

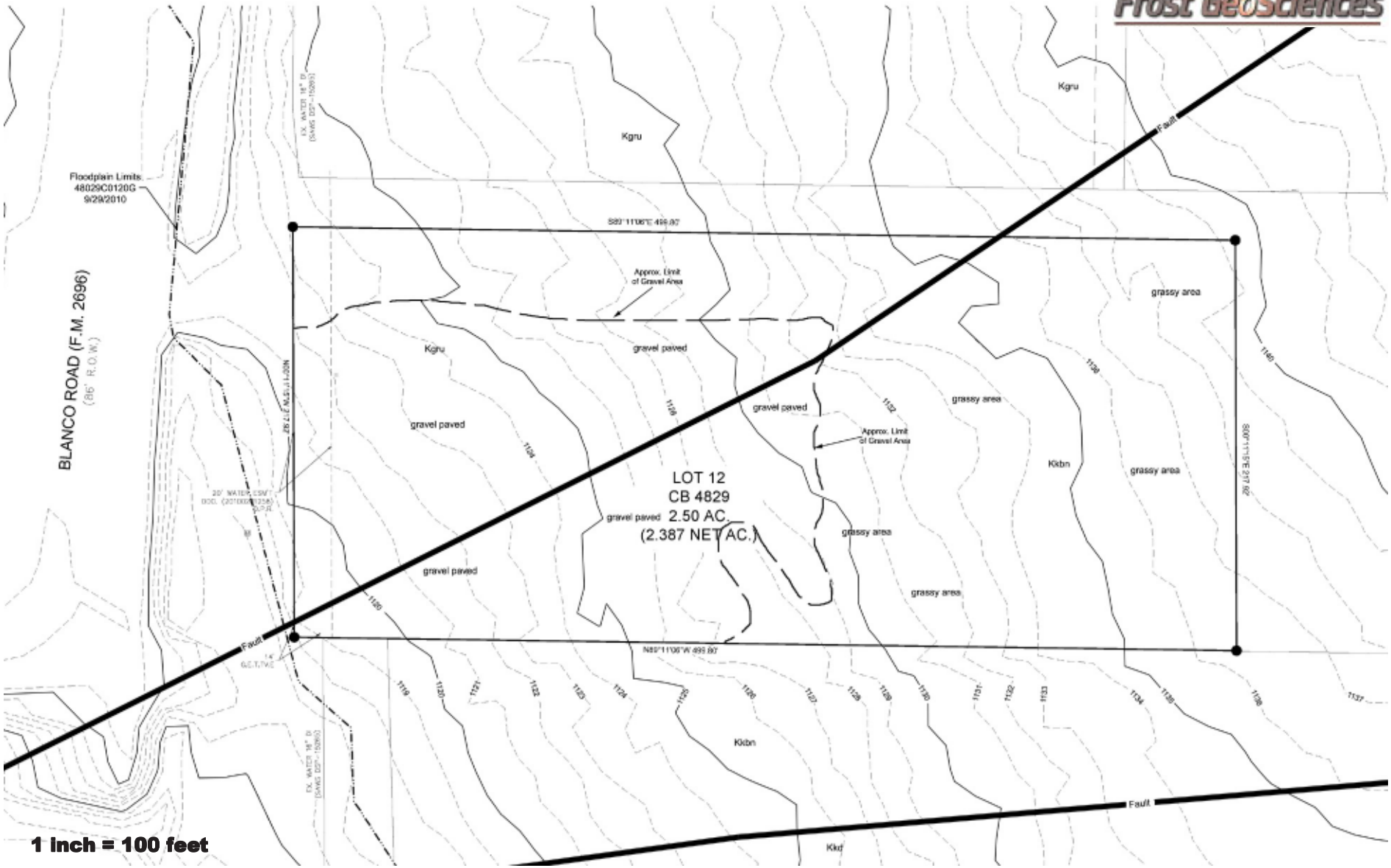
12. USDA NRCS Web Soil Survey (WSS) website: https://websoilsurvey.nrcs.usda.gov (2014)

13. TCEQ-0585-Instructions (Rev. 10-1-04), “Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zone”.

14. San Antonio Water Systems, Bexar County Watersheds Map, 2004.

APPENDIX A

SITE LOCATION FIGURES

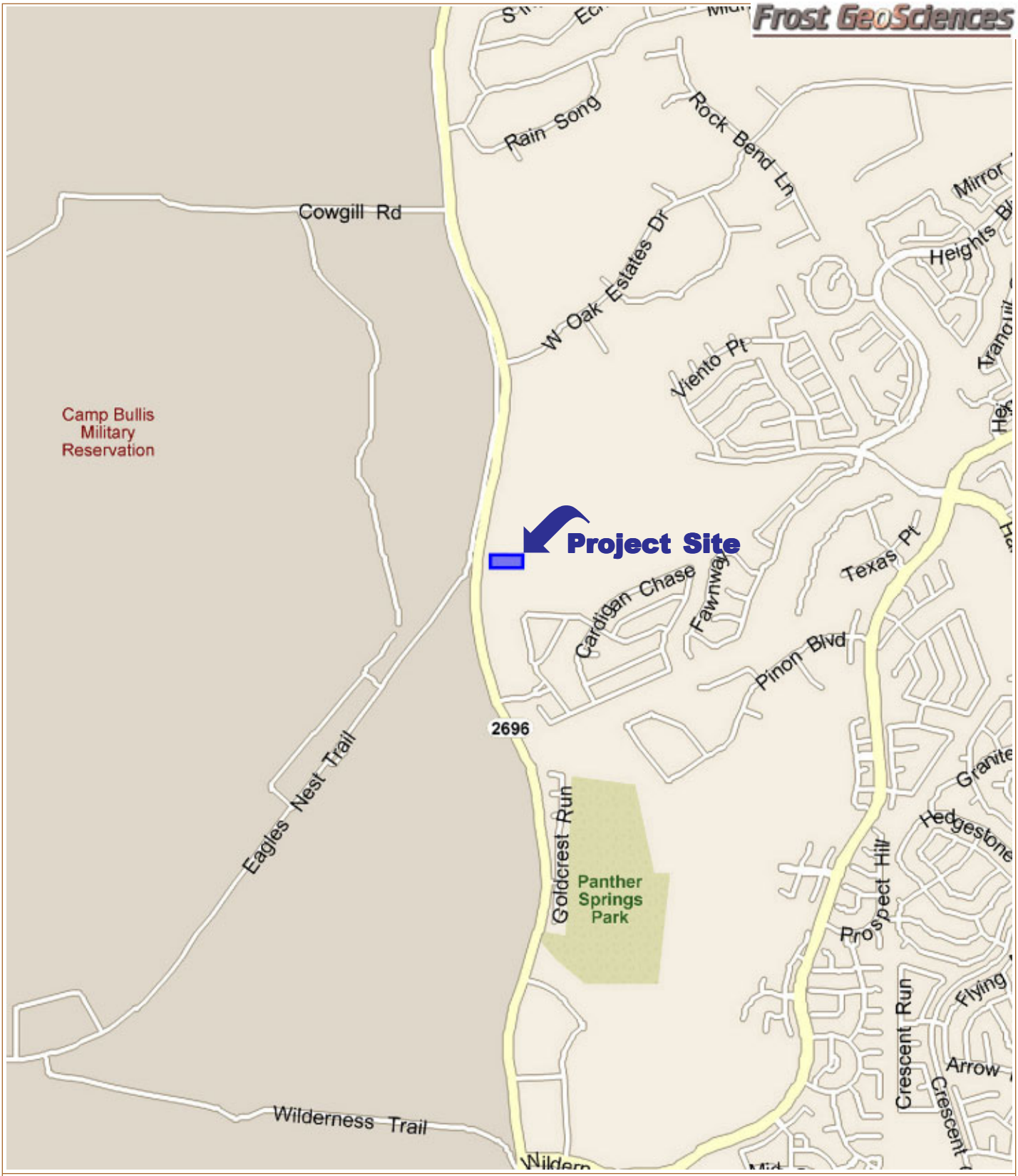


PROJECT NAME:
Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the
Edwards Aquifer Recharge / Transition Zone
MRW-Blanco
Bexar County, Texas

Site Layout

PROJECT NO.: FGS-E23139

DATE: May 22, 2023



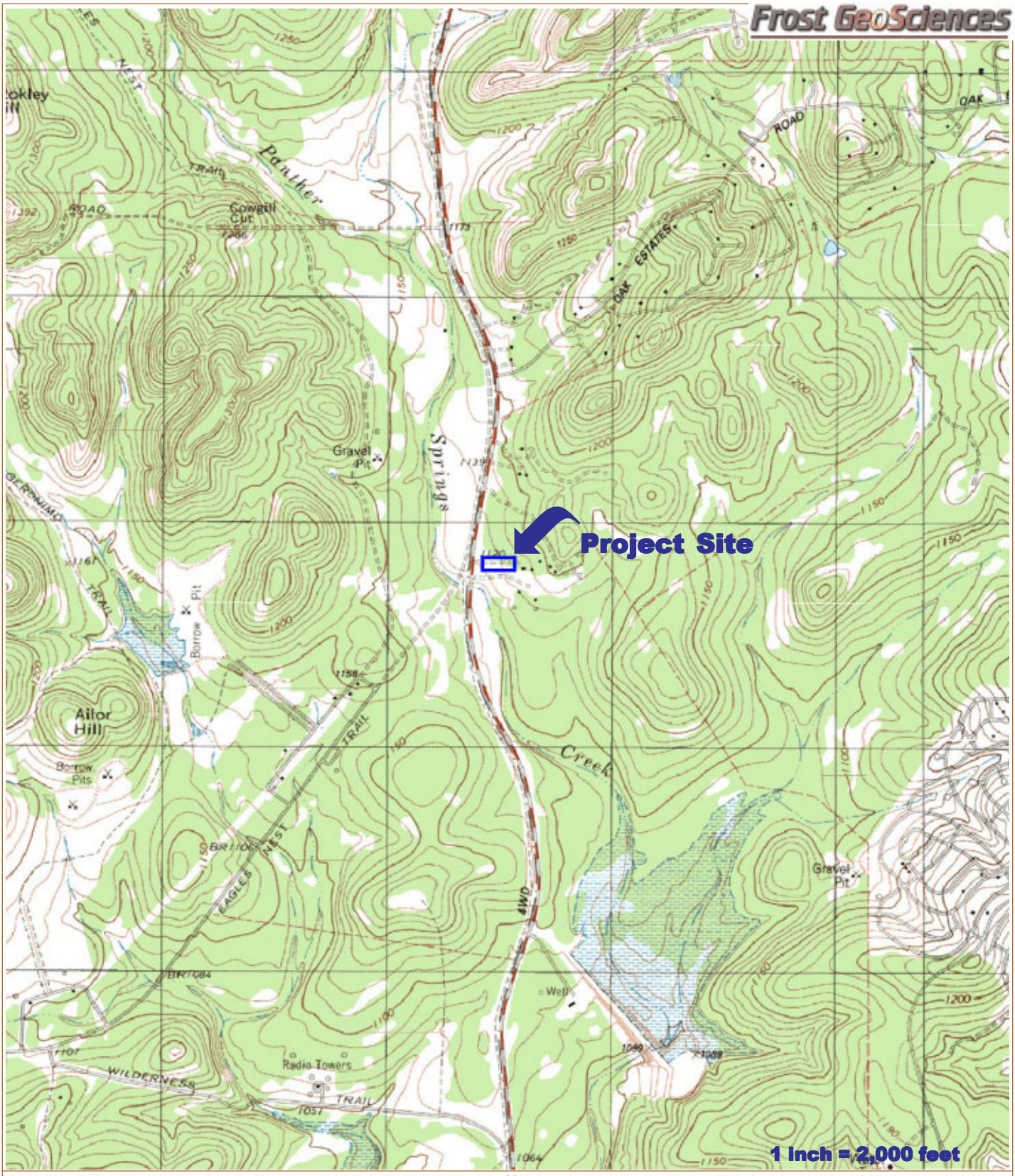
PROJECT NAME:

Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone
MRW-Blanco
Bexar County, Texas

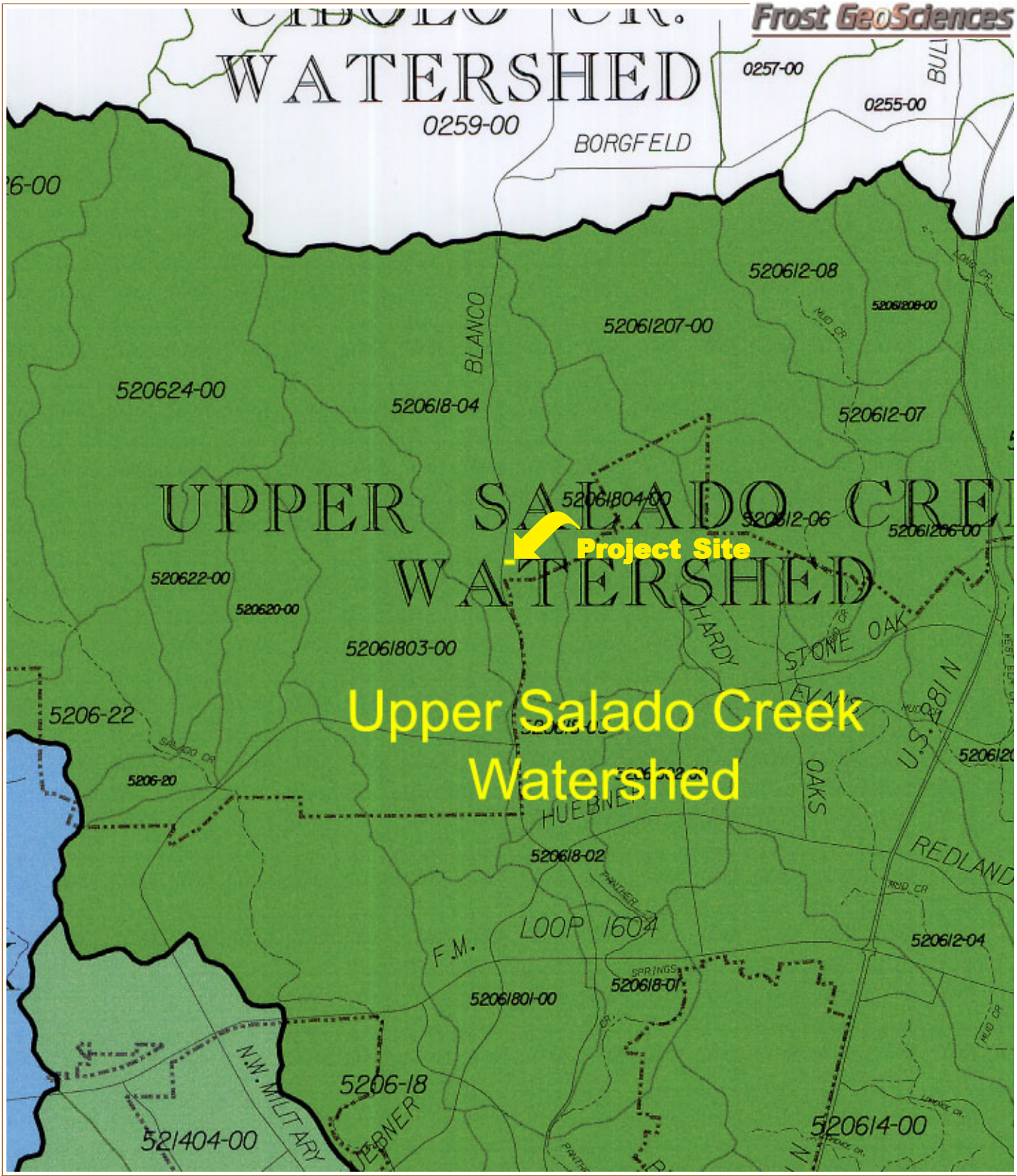
Street Map

PROJECT NO.: FGS-E23139

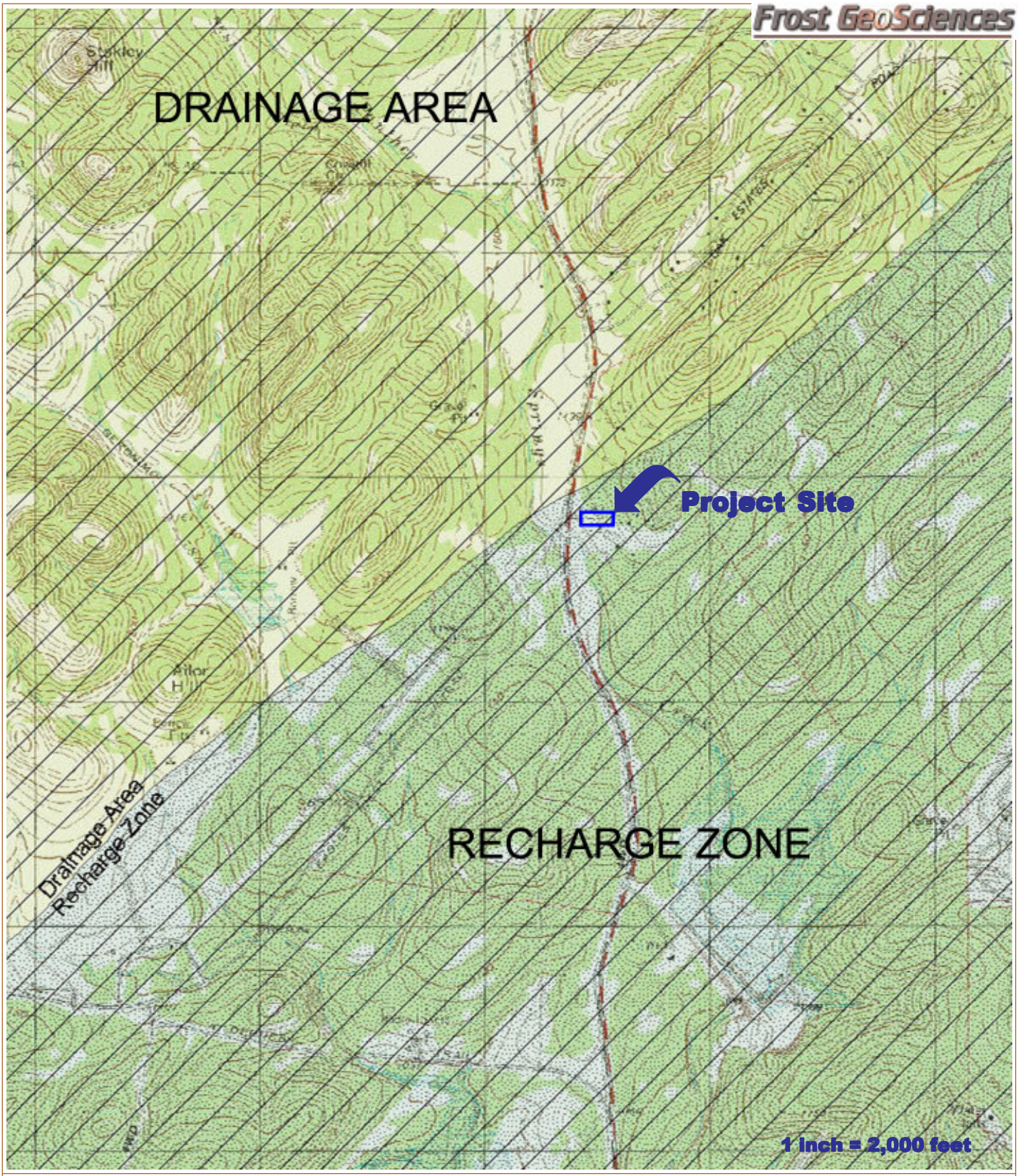
DATE: May 22, 2023



PROJECT NAME: Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	U.S.G.S. 7.5 Minute Quadrangle Map Camp Bullis, Texas (1992)
PROJECT NO.: FGS-E23139	**DATE:** May 22, 2023



PROJECT NAME: Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	Bexar County Watersheds Map San Antonio Water Systems (2004)
PROJECT NO.: FGS-E23139	**DATE:** May 22, 2023

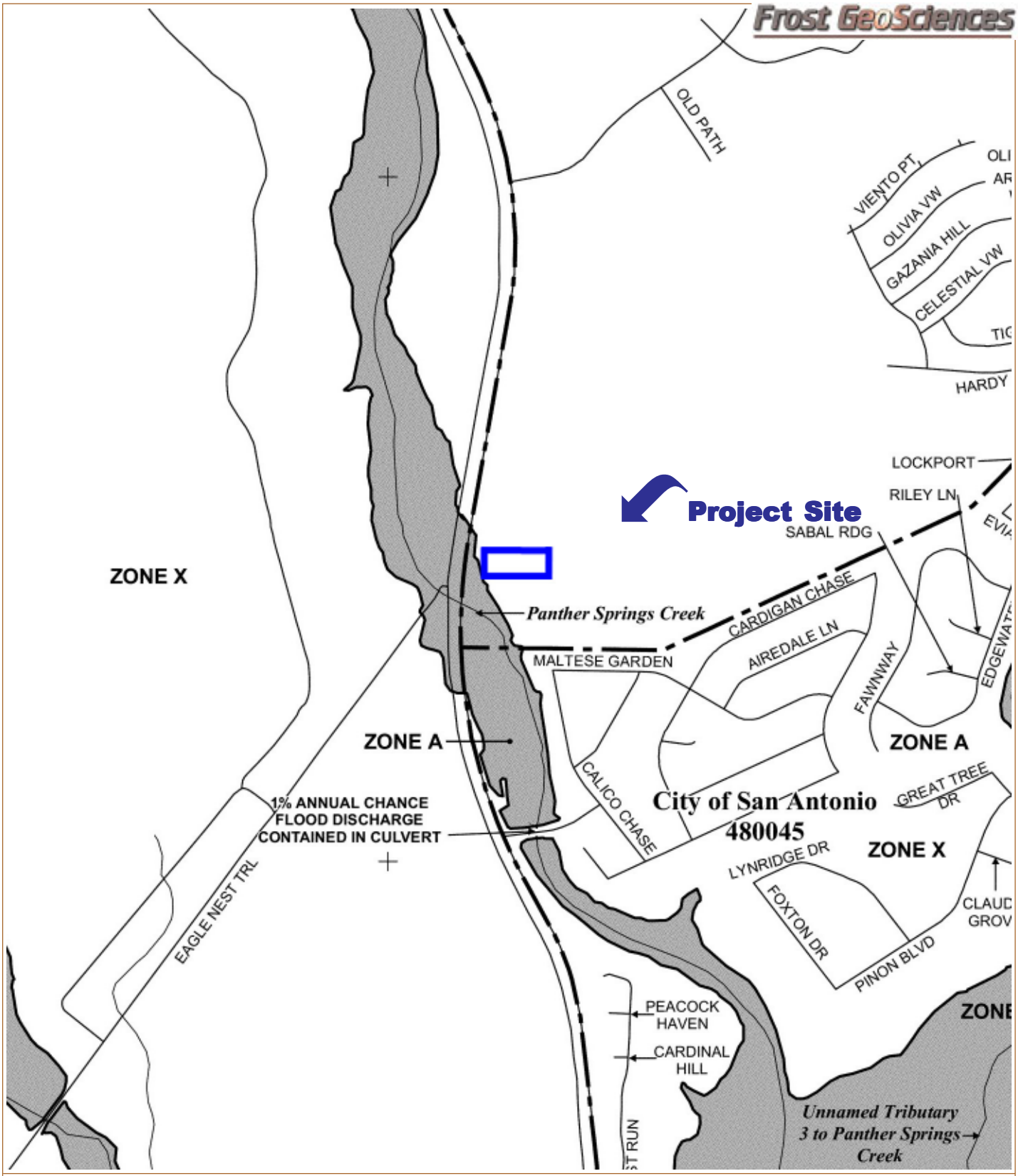


PROJECT NAME:
Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the
Edwards Aquifer Recharge / Transition Zone
MRW-Blanco
Bexar County, Texas

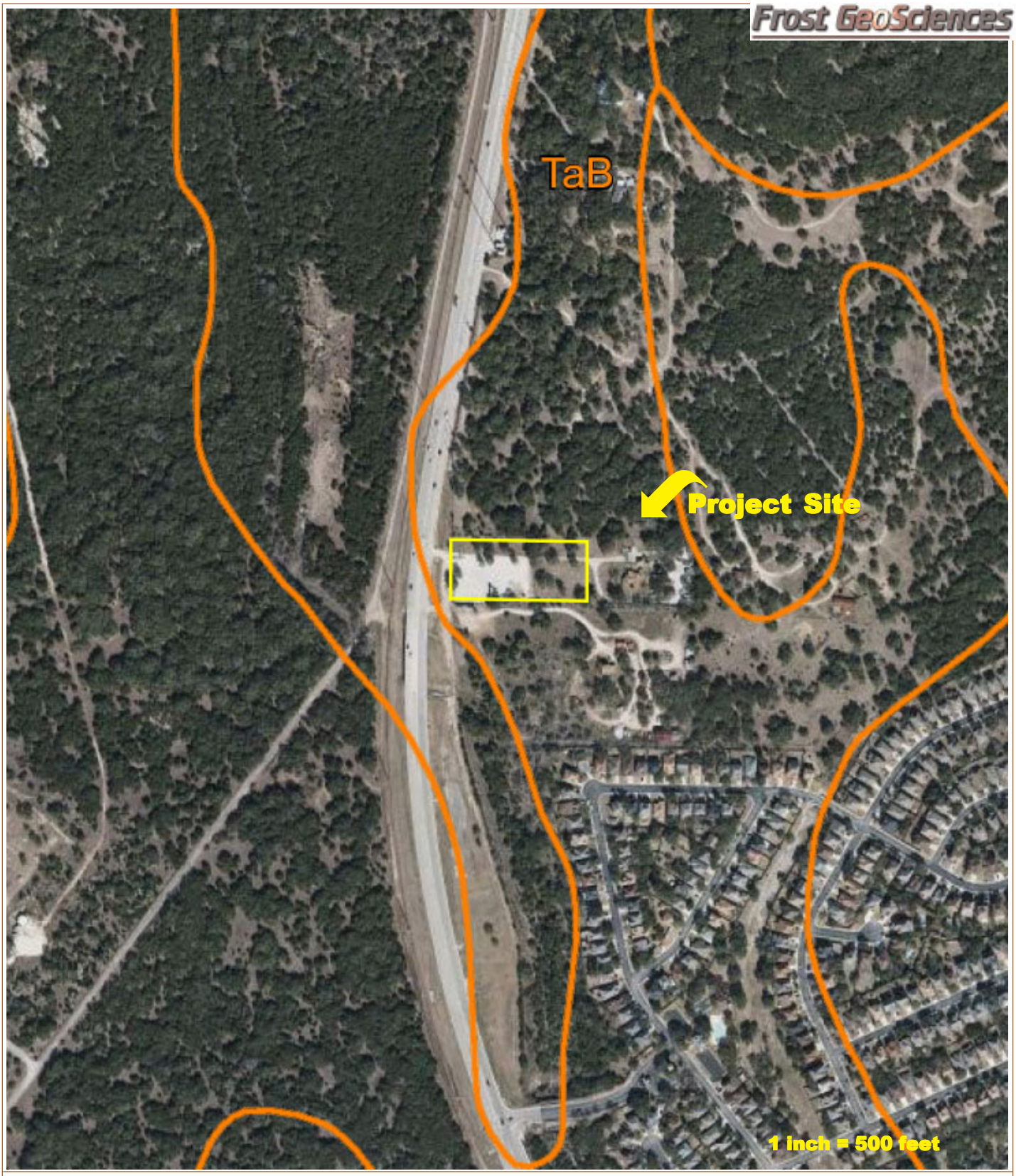
Edwards Aquifer Authority Recharge Zone Map - Camp Bullis, Texas (2014)

PROJECT NO.: FGS-E23139

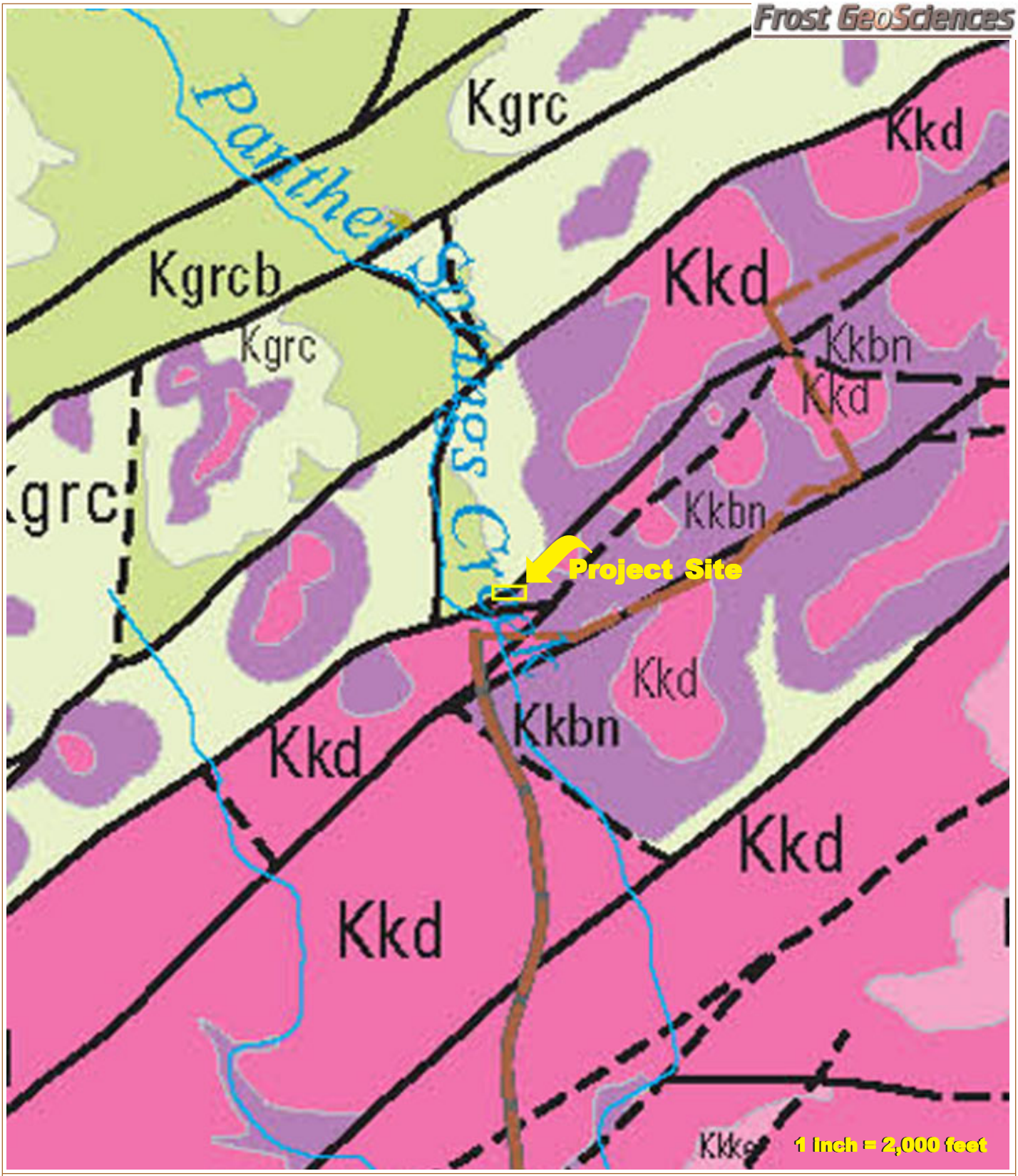
DATE: May 22, 2023



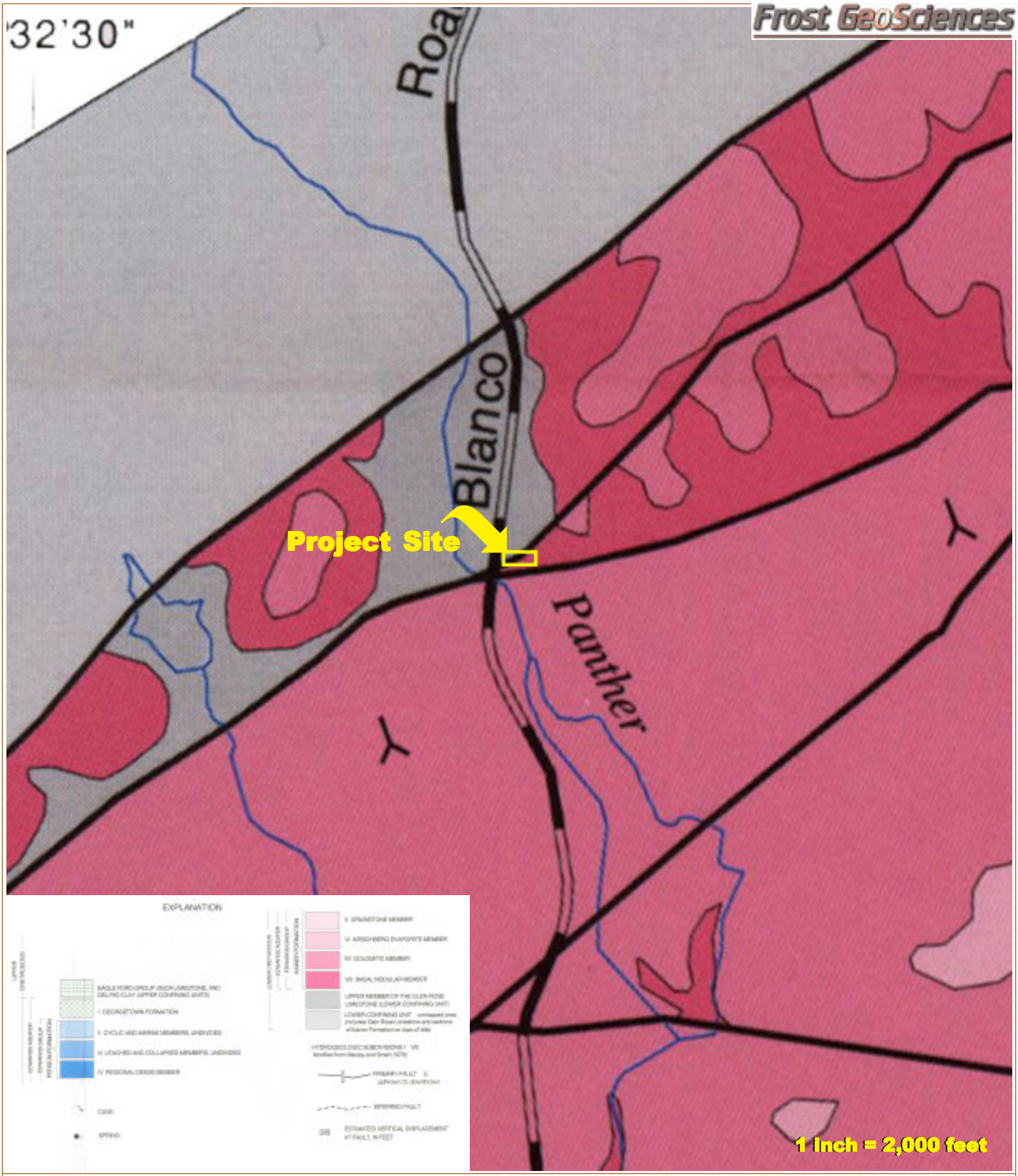
PROJECT NAME:	Flood Insurance Rate Map (FIRM) Community Panel # 48029C0120G (9/29/2010)	
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	PROJECT NO.: FGS-E23139	DATE: May 22, 2023



PROJECT NAME:	Soils Map
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	Bexar County Soil Survey NRCS website: websoilsurvey.nrcs.usda.gov
	PROJECT NO.: FGS-E23139 / DATE: May 22, 2023

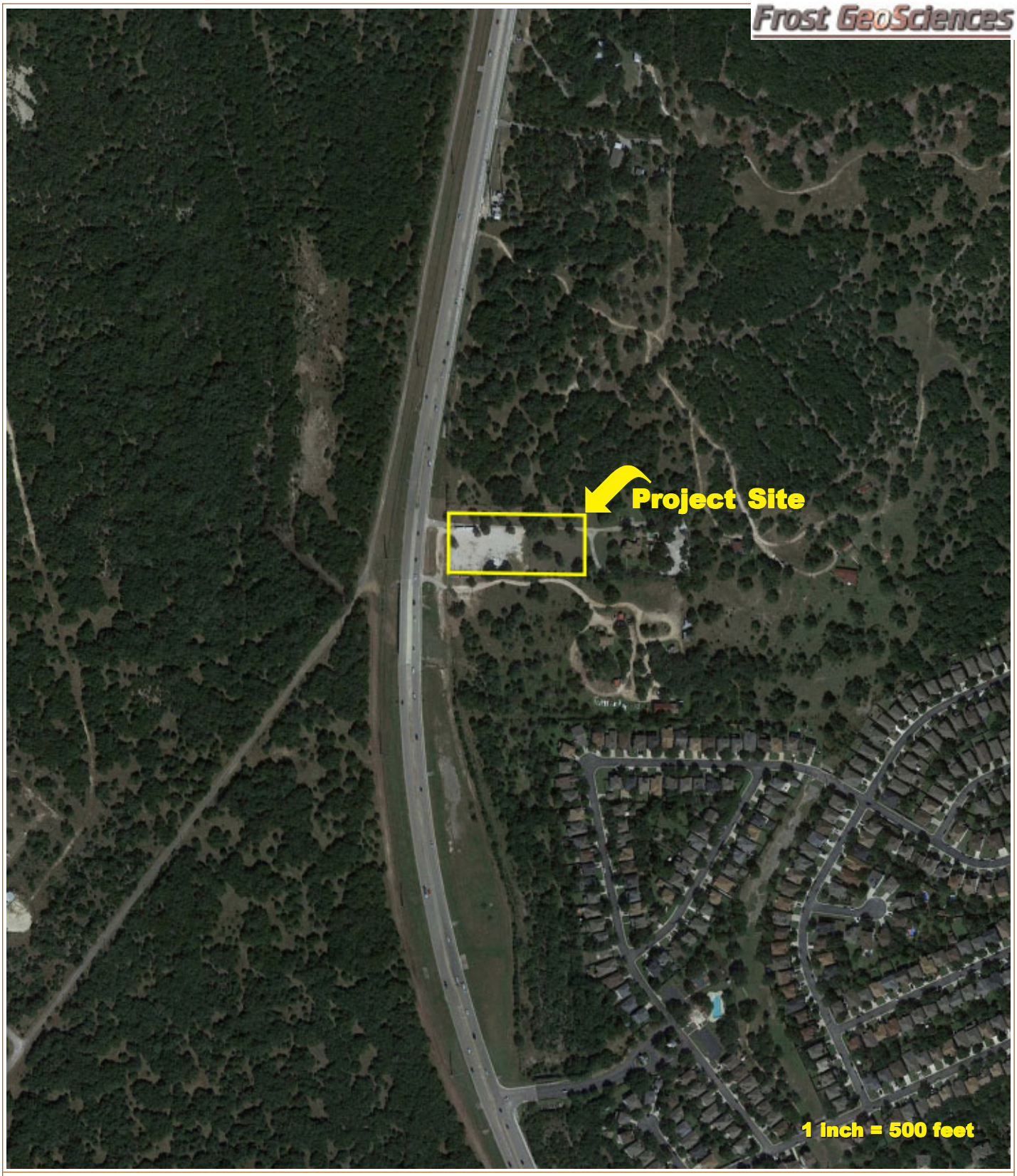


PROJECT NAME:	
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	U.S.Geological Survey Scientific Investigations Map 3366 (2016)
	PROJECT NO.: FGS-E23139 / DATE: May 22, 2023



PROJECT NAME:	United States Geologic Survey Water Resources Investigations #4030-95 Geologic Map of Bexar County, Texas
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone MRW-Blanco Bexar County, Texas	PROJECT NO.: FGS-E23139 DATE: May 22, 2023

Frost GeoSciences



PROJECT NAME:
Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone
MRW-Blanco
Bexar County, Texas

2021 Aerial Photograph
Google Earth Aerial

PROJECT NO.: FGS-E23139

DATE: May 22, 2023

APPENDIX B

SITE PHOTOGRAPHS

Photo #1 – View to the east across the gravel laden area observed in the western portion of the project site.

Photo #2 – View to the north across the gravel laden area observed in the western portion of the project site.

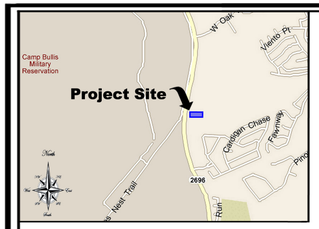
Photo #3 – View to the west across the gravel laden area observed in the western portion of the project site.

Photo #4 – View to the east across the northeastern portion of the project site.

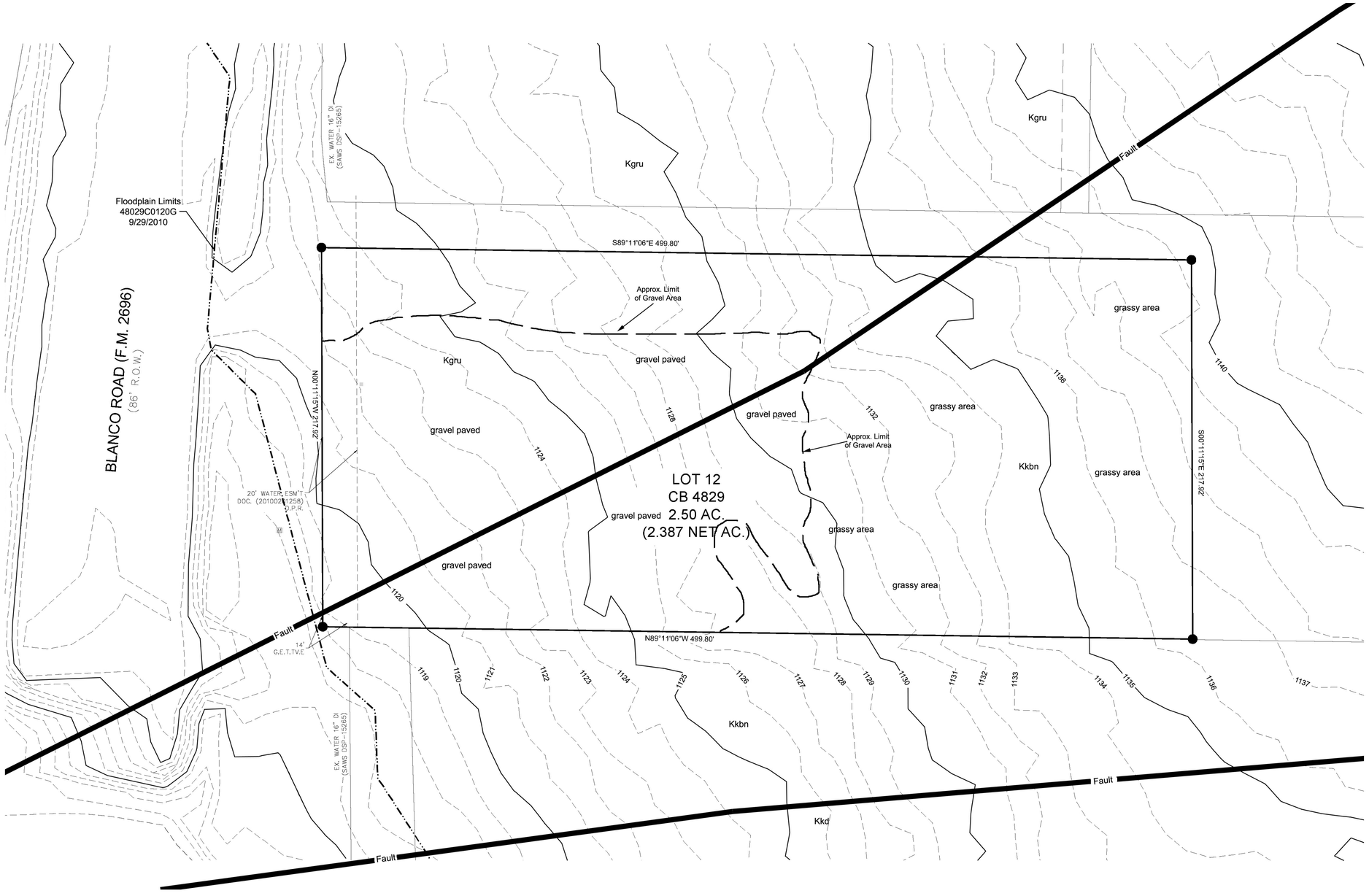
	
Photo #5 – View to the north across the grassy area covering the eastern portion of the project site.	Photo #6 – View to the southwest across the grassy area covering the eastern portion of the project site.

APPENDIX C

GEOLOGIC MAP



Location Map



Signature of Texas Licensed Geoscientist
Chris Wickman License No. 10403

CSW 6/22/2023

STATE OF TEXAS
Christopher Wickman
Geology
10403
LICENSED
PROFESSIONAL GEOSCIENTIST

Frost GeoSciences
Geotechnical ▪ Construction Materials
Geologic ▪ Environmental
13406 Western Oak ▪ Helotes, Texas 78023
Phone: (210) 372-1315 ▪ Fax: (210) 372-1318

Site Geologic Map

Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the
Edwards Aquifer Recharge / Transition Zone
for the

MRW-Blanco
Bexar County, Texas

Frost GeoSciences, Inc. Control # FGS-E23139

Legend

Kkd - dolomitic member - Edwards Kainer limestone

Kkbn - basal nodular member - Edwards Kainer limestone

Kgru - upper Glen Rose limestone

S# - Potential Recharge Feature (PRF)

- ApproximatedGravel Area/Grassy Area boundary

- Fault

Floodplain Information Obtained From
FIRM: Flood Insurance Rate Map
Bexar County, Texas: Panel # 48029C0120G, Revised 9/29/10

Fault Information Obtained From:
Bureau of Economic Geology, Geologic Atlas of Texas, San Antonio Sheet (1983)
U.S. Geological Survey, Water Resources Investigations Report 95-4030 (1995)
Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle (2000)
U.S. Geological Survey Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers within Northern Bexar and Comal Counties, Texas (2016)

North
NW NE
West East
SW SE
South

Graphic Scale

40 0 20 40 80

(In Feet)

1 inch = 40 feet
Representative Fraction 1:480

Contour Interval - 1 foot

F-22385

WATER POLLUTION ABATEMENT PLAN SECTION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

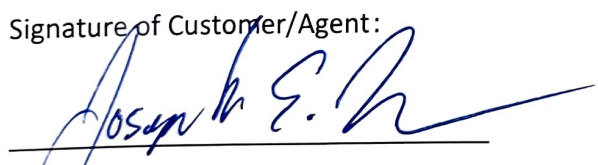
Signature

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

Print Name of Customer/Agent: Joseph E. Tober, P.E.

Date: 07.19.2023

Signature of Customer/Agent:



Regulated Entity Name: MRW BLANCO

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property):2.5

3. Estimated projected population:N/A

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	5,025	÷ 43,560 =	0.12
Parking	25,470.98	÷ 43,560 =	0.58
Other paved surfaces	5,150.24	÷ 43,560 =	0.12
Total Impervious Cover	35,646.2	÷ 43,560 =	0.82

Total Impervious Cover 0.82 **÷ Total Acreage** 2.50 **X 100 =** 32.8**% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

   Width of R.O.W.: _____ feet.
   L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

0% Domestic	0 Gallons/day
0% Industrial	0 Gallons/day
0% Commingled	0 Gallons/day
TOTAL gallons/day 0	

Due to the temporary use of the proposed building, there are no bathrooms constructed inside the building. There will be no septics facilities or public sewer connections. During the temporary use of the building during fireworks seasons, Port-A-Potties will be available for employees only and will be under contract to be disposed of properly by the port-a-potties service provider.

15. Wastewater will be disposed of by:

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

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

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

☐ Sewage Collection System (Sewer Lines):

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

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

☐ The SCS was previously submitted on_____.

☐ The SCS was submitted with this application.

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

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

☐ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 40'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): 48029C0120G, 09/29/2010

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

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

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

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

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

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

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

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

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

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

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

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

26. ☐ Surface waters (including wetlands).

    ☒ N/A

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

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

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

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

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

August 3, 2023

MRW – BLANCO
WPAP SECTION (TCEQ-0584)

Attachment A- Factors Affecting Surface Water Quality

Potential sources of pollution from the construction site that may be expected to affect the quality of storm water discharges of said site include:

a) Soil erosion due to clearing of site for drainage and pavement
b) Oil, grease, fuel & hydraulic fluid contamination from construction vehicle drippings
c) Miscellaneous trash and litter from construction workers and material wrappings
d) Construction debris
e) Concrete truck washout
f) Hydrocarbons from asphalt paving operations

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

August 7, 2023

Attachment B – Volume and Character Storm Water

Quality:

The quality of the stormwater runoff will be that of a retail building with a metal roof and gravel pavement. The majority of the impervious cover is from the roof and parking area where runoff from the roof will be contaminated mostly by airborne pollutants and runoff from the gravel pavement will be caused by oils and other pollutants from vehicles.

Volume:

Existing Conditions:

Total Area = 2.5 ac
Impervious Cover = 1.26 ac
C=0.82
Tc = 9min
I5 = 6.58, I25 = 9.147, I100 = 11.408(PA-2)
Q5= 11.84 cfs, Q25 = 16.46 cfs, Q100 = 20.53 cfs

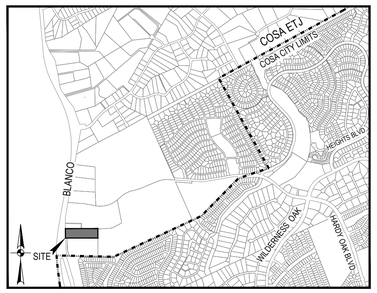
Proposed Conditions:

Total Area = 2.5

DA1 Area = 0.695 ac
C=0.85
Tc = 5 min
I5 = 7.94, I25 = 11.13, I100 = 14.00
Q5= 4.65 cfs, Q25 = 6.53 cfs, Q100 = 8.21 cfs

DA2 Area = 0.223 ac
C=0.96
Tc = 5 min
I5 = 7.94, I25 = 11.13, I100 = 14.00
Q5= 1.75 cfs, Q25 = 2.46 cfs, Q100 = 3.09 cfs

DA3 Area = 1.583 ac
C=0.47
Tc = 8 min
I5 = 6.86, I25 = 9.56, I100 = 11.94
Q5= 5.01 cfs, Q25 = 7.1 cfs, Q100 = 8.86 cfs



LOCATION MAP

NOT TO SCALE

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan (WPAP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.

3. If any sensitive feature(s) (caves, solution cavity, sink hole, etc.) is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. Construction activities may not be resumed until the TCEQ has reviewed and approved the appropriate protective measures in order to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality.

4. No temporary or permanent hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the approved plans and manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

7. Sediment must be removed from the sediment traps or sedimentation basins not later than when it occupies 50% of the basin's design capacity.

8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.

10. If portions of the site will have a temporary or permanent cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

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

12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

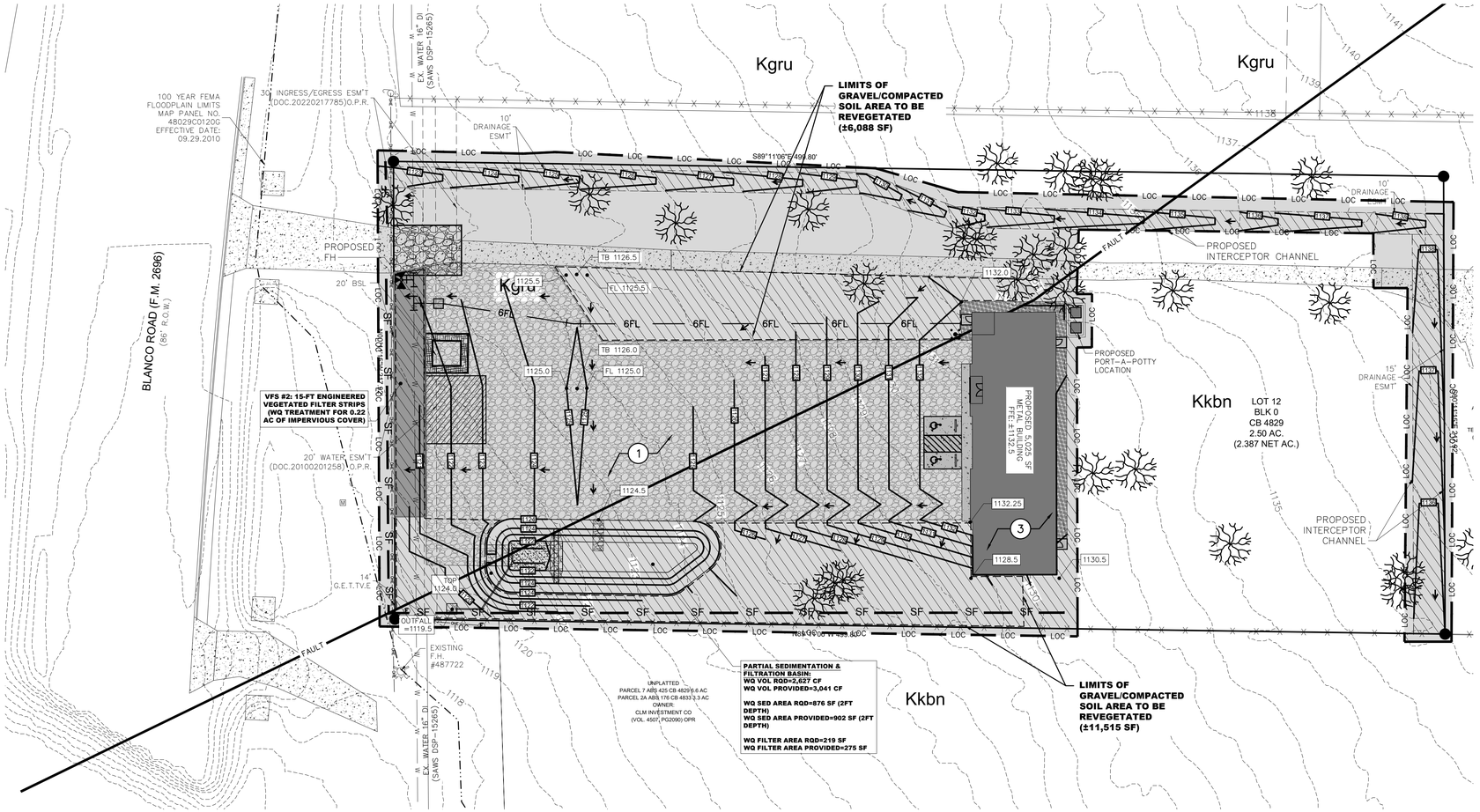
    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
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



DRAINAGE AREAS	BMP	TOTAL (AC)	PRE-DEV IMP COVER (AC)	POST DEV IMP COVER (AC)	TSS LOAD REMOVAL (LBS)
DA1	SF WQ POND	0.70	0.05	0.55	440
DA2	VFS	0.22	0.02	0.22	165
DA3	N/A	1.58	0.05	0.05	0
TOTALS		**2.50**	**0.12**	**0.82**	**605**

OWNER/DEVELOPER:
MR.W FIREWORKS, INC.
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

LEGAL DESCRIPTION

LOT 12
BLK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXX

SCALE: 1"=30'
0 30 60

LEGEND

- PROPERTY LINE
- SILT FENCE — SF — SF
- LIMITS OF CONSTRUCTION — LOC — LOC
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- STAGING AREA
- CONCRETE WASH-OUT PIT
- AREAS OF SOIL STABILIZATION
- AREAS OF SOIL DISTURBANCE
- AREAS TO BE REVEGETATED

KEY NOTES

1	PROPOSED GRAVEL MILLINGS PARKING LOT
2	PROPOSED ENTRANCE LOCATION
3	PROPOSED BUILDING LOCATION

DATE	ISSUE REVISED

OWNER:

MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

MRW - BLANCO

MR. W FIREWORKS SUPERSTORE

23306 BLANCO RD
SAN ANTONIO, TX 78260

ENGINEER:

F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER
Joseph E. Tober
9.18.2023

WATER POLLUTION ABATEMENT PLAN

C2

F-22385

TEMPORARY STORMWATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Joseph E. Tober, P.E.

Date: 08.07.2023

Signature of Customer/Agent:

Regulated Entity Name: MRW BLANCO

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

September 11, 2023

Attachment A- Spill Response Actions

1.4.16 Spill Prevention and Control

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

The following steps will help reduce the stormwater impacts of leaks and spills:

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. Information available in 30 TAC 327.4 and 40 CFR 302.4.

(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). Meeting to include ensuring portable restrooms are properly disposed by subcontracted company.

(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, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately

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

(3) Place a stockpile of spill cleanup 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-off 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.

(13) Ensure earthen berm is intact to properly provide secondary containment of the portable restrooms with sufficient capacity to handle 10% of portable restroom storage.

Cleanup
(1) Clean up leaks and spills immediately.

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

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

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

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

(3) Absorbent materials should be promptly removed and disposed of properly.
(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

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

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill.

(2) Notify the project foreman immediately.

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

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

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

Significant/Hazardous Spills
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 immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc. More information on spill rules and appropriate responses is available on the TCEQ website at:
http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

Vehicle and Equipment Maintenance

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

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

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

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

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

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

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

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute 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 runoff 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.

MR. W FIREWORKS, INC.
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SOMERSET, TEXAS 78069
F-22385

August 7, 2023

Attachment B- Potential Sources of Contamination

Potential sources of contamination from the construction site that may be expected to affect the quality of storm water discharges of said site include:

a) Soil erosion due to clearing of site for drainage and pavement
b) Oil, grease, fuel & hydraulic fluid contamination from construction vehicle drippings
c) Miscellaneous trash and litter from construction workers and material wrappings
d) Construction debris
e) Concrete truck washout
f) Hydrocarbons from asphalt paving operations

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August 7, 2023

Attachment C – Sequences of Major Activities

Major activities for proposed site include:

Implement BMP's: Week 1

- Installation of temporary construction entrance/exit. (1,000 SF)
- Installation of erosion and sedimentation controls. Silt Fence (600 LF)

Construction of building and site work: (Week 2-6)

- Gravel placement and tree removal.
- Installation of underground and overhead utilities.
- Construction of metal firework super store.
- Installation of concrete driveway apron.

Site Stabilization (Week 6-8)

Removal of temporary erosion and sedimentation controls (Week 9-10)

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August 7, 2023

Attachment D – Temporary Best Management Practices and Measures

Stabilized Construction Entrance/Exit

Timing - will be put in place at the beginning of construction, prior to any site work, will be removed at the conclusion of all site work activity.

This BMP will prevent pollution by removing dust, rocks, and other construction debris which is carried on the construction vehicles from entering the right-of-way and potentially draining into the aquifer.

Silt Fence

Timing – will be put in place at the beginning of construction, prior to any site work, will be removed at the conclusion of all site work activity

The silt fence will capture potentially contaminated excess sediment prior to running off site. The excess sediment will be removed periodically as described within this plan.

Concrete Washout Pit

Timing – will be put in place at the beginning of construction, prior to any concrete pour, will be removed at the conclusion of all concrete work

The concrete washout areas will prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors

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August 7, 2023

Attachment F – Structural Practices

The following structural measures will be installed prior to the initiation of site preparation activities:

- Placement of silt fences on property
- Installation of temporary stabilized construction entrance/exit
- Concrete washout pit will be put in place at the beginning of construction.

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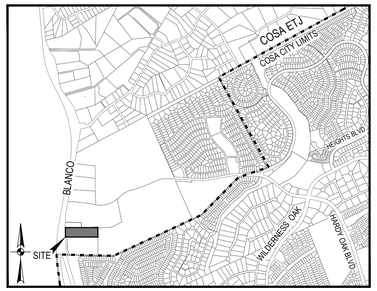
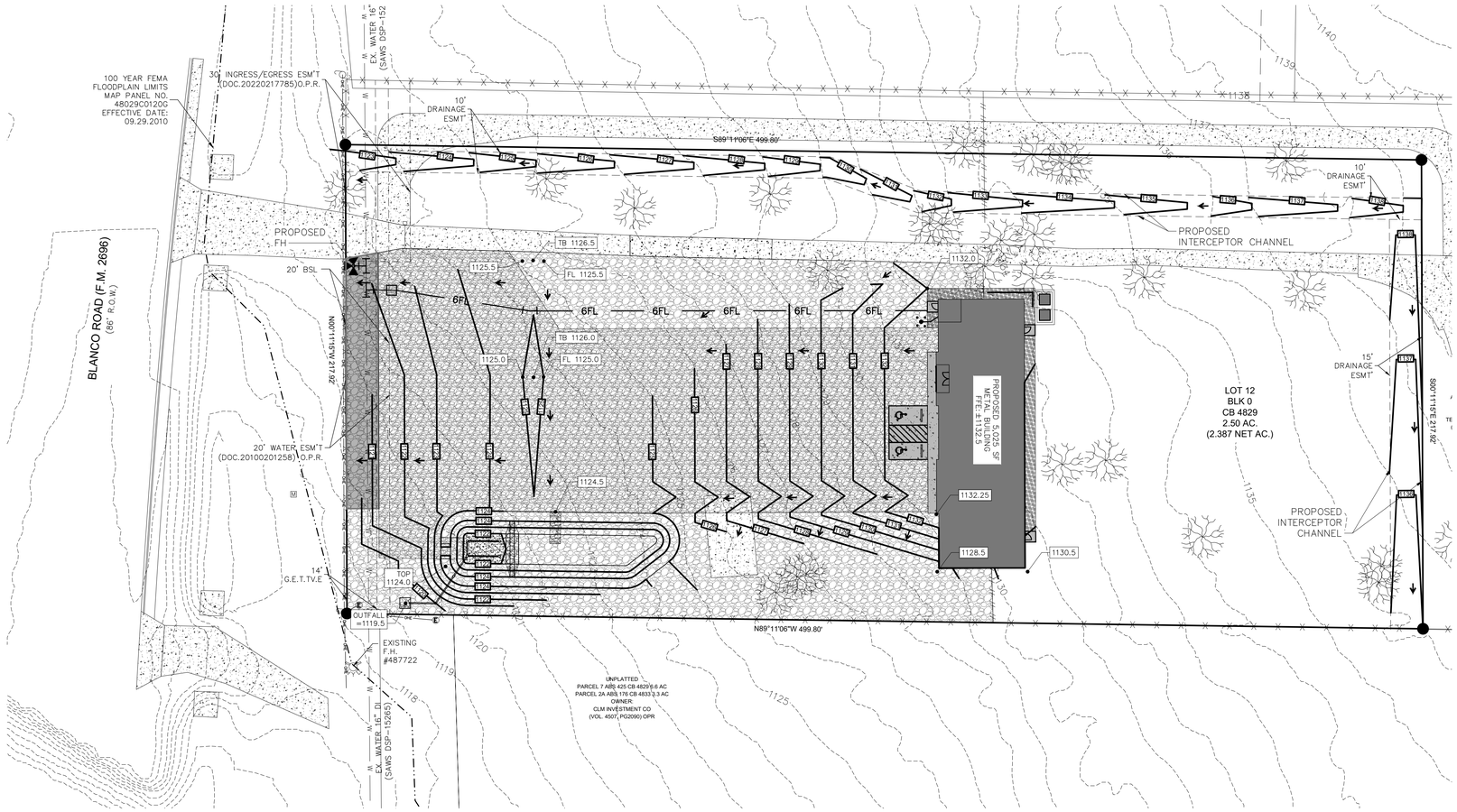
Attachment G – Drainage Area Map

No more than ten (10) acres will be distributed within a common drainage area at one time as construction of civil infrastructure (utilities, roads, drainage, etc.) will be concurrent with preceding building construction. TBMPs will be utilized for sediment control and are adequate for the drainage areas they serve.



LOCATION MAP
NOT TO SCALE

* NOTE: ACTUAL LAYOUT DETERMINED IN FIELD. SHOULD BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE/EXIT AND NOT LOCATED NEAR A WELL, FLOODPLAIN, OR OTHER POTENTIAL SOURCES OF CONTAMINATION.



SCALE: 1"=30'
0 30 60

LEGEND

- GAS VALVE
- FIRE HYDRANT
- LIGHT POLE
- WATER VALVE
- SANITARY SEWER MANHOLE
- STORM WATER MANHOLE
- SIGN
- CONTROL POINT
- POWER POLE
- 1/2" IRON ROD FOUND
- BENCH MARK
- STORM GRATE
- PIN FLAG OR PAINT STRIPE
- 1/2" IRON ROD W/CAP
- ROAD W/NO CURB
- EXISTING CURB
- PROPOSED CURB
- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING GRAVEL
- EXISTING BUILDING
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- PROPOSED GRAVEL
- PROPOSED BUILDING
- EXISTING CONTOURS (1172)
- EXISTING SPOT GRADE (805.50)
- PROPOSED CONTOURS (801)
- 6" FIRE LINE (6FL)
- WATER LINE (W)
- WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- EXISTING TREE
- FLOW ARROWS
- LIMITS OF CONSTRUCTION
- PROPERTY LINE
- PROPOSED SPOT GRADES (9.31.50TC / 9.31.00G)
- SILT FENCE (SF)
- FIRE LANE
- FIRE HOSE HAND PULL (HAND PULL)
- FIRE HOSE TRUCK PULL (TRUCK PULL)

LEGAL DESCRIPTION

LOT 12
BLOCK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXX

OWNER/DEVELOPER:
MR.W FIREWORKS, INC.
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

DATE	ISSUE REVISED

OWNER:
MR. W FIREWORKS, INC
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P.O. BOX 114
SOMERSET, TEXAS 78069

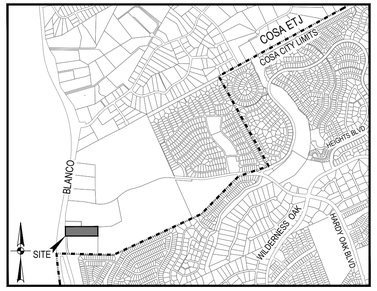
MRW - BLANCO
MR. W FIREWORKS SUPERSTORE
23306 BLANCO RD
SAN ANTONIO, TX 78260

ENGINEER:
F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER
9.18.2023

GRADING PLAN

C3



LOCATION MAP

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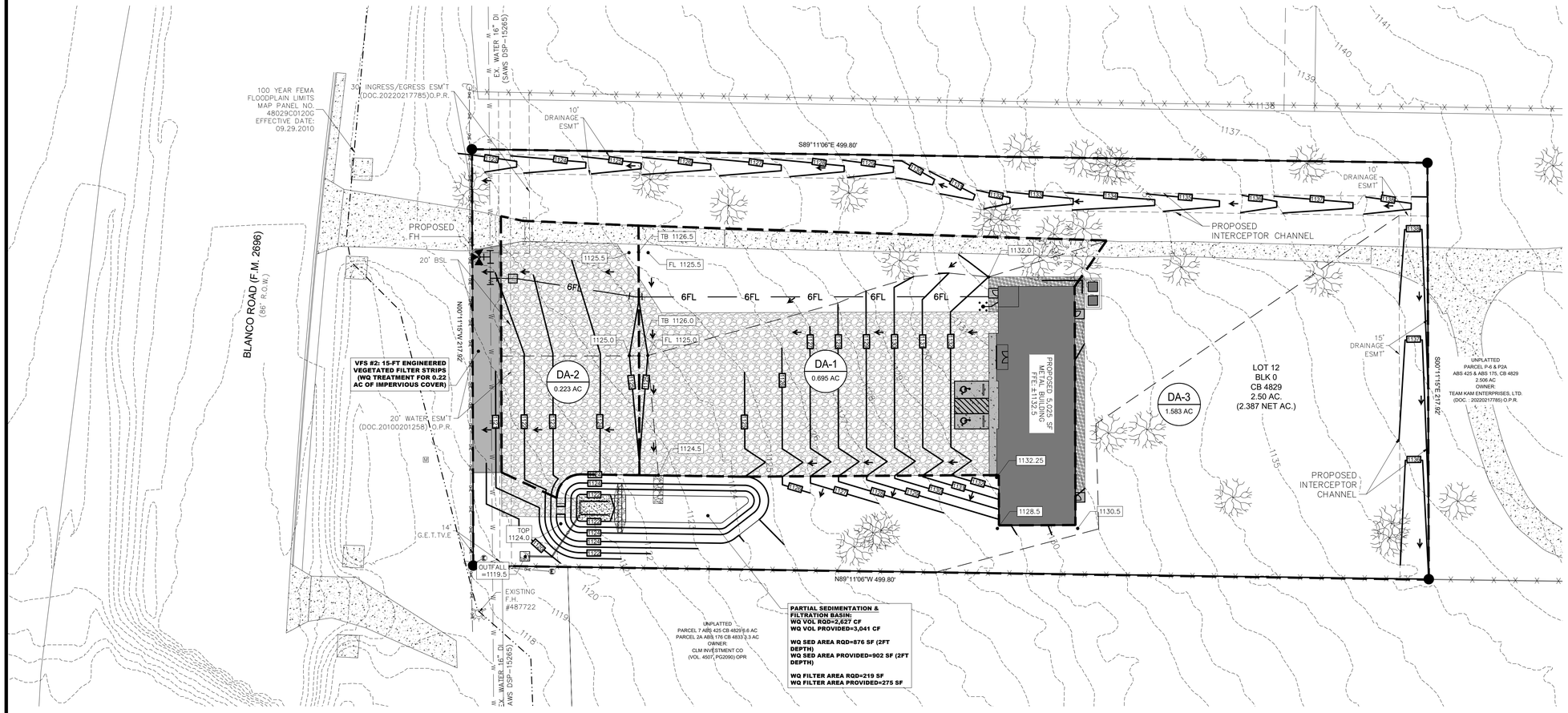
* NOTE: ACTUAL LAYOUT DETERMINED IN FIELD. SHOULD BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE/EXIT AND NOT LOCATED NEAR A WELL, FLOODPLAIN, OR OTHER POTENTIAL SOURCES OF CONTAMINATION.

KEY NOTES

(1)	PROPOSED GRAVEL MILLINGS PARKING LOT
(2)	PROPOSED ENTRANCE LOCATION
(3)	PROPOSED BUILDING LOCATION
(4)	PROPOSED WATER QUALITY POND



LEGEND

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- FIRE HYDRANT
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- SILT FENCE (SF)
- FIRE LANE
- FIRE HOSE HAND PULL (HAND PULL)
- FIRE HOSE TRUCK PULL (TRUCK PULL)
- DRAINAGE AREA

DRAINAGE AREAS	BMP	TOTAL (AC)	PRE-DEV IMP COVER (AC)	POST DEV IMP COVER (AC)
DA1	SF WQ POND	0.70	0.05	0.55
DA2	VFS	0.22	0.02	0.22
DA3	N/A	1.58	0.05	0.05
TOTALS		**2.50**	**0.12**	**0.82**

PROPOSED/ULTIMATE RUNOFF SUMMARY

DRAINAGE AREAS	TOTAL (AC)	TC	C	I5	I25	I100	Q5	Q25	Q100
DA1	0.69	5	0.85	7.94	11.13	14.00	4.65	6.53	8.21
DA2	0.23	5	0.96	7.94	11.13	14.00	1.75	2.46	3.09
DA3	1.58	8	0.47	6.86	9.56	11.94	5.01	7.10	8.87
TOTAL DP1	**2.50**						**11.41**	**16.09**	**20.17**

EXISTING RUNOFF SUMMARY

DRAINAGE AREAS	TOTAL (AC)	TC	C	I5	I25	I100	Q5	Q25	Q100
DA1	2.50	9	0.72	6.58	9.147	11.408	11.84	16.46	20.53
TOTAL DP1	**2.50**						**11.84**	**16.46**	**20.53**

OWNER/DEVELOPER:
MR.W FIREWORKS, INC.
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

LEGAL DESCRIPTION

LOT 12
BLOCK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXX

DATE	ISSUE REVISED

OWNER:

MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

MRW - BLANCO
MR. W FIREWORKS SUPERSTORE

23306 BLANCO RD
SAN ANTONIO, TX 78260

ENGINEER:

F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER

9.18.2023

ON-SITE DRAINAGE AREA MAPS

C3.1

MR. W FIREWORKS, INC.
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August 7, 2023

Attachment I – Inspection and Maintenance for BMPs

Designated and qualified personnel shall inspect Pollution Control Measures weekly and within 24 hours after a storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of Storm Water TPDES data for a period of three years after the date of the inspection. A copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe:

1. Significant disturbed areas for evidence of erosion.
2. Storage areas for evidence of leakage from the exposed stored materials,
3. Structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep).
4. Vehicle exit point for evidence of off-site sediment tracking.
5. Vehicle storage areas for signs of leaking equipment or spills.
6. Concrete truck rinse-out pit for signs of potential failure.

Contractor shall review Sections 1.3 and 1.4 of TCEQ's Technical Guidance Manual for additional BMP inspection and maintenance requirements.

PROJECT MILESTONE DATES

Dates when major site grading activities begin:

Construction Activity	Date

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

Construction Activity	Date

Dates when stabilization measures are initiated:

Stabilization Activity	Date

ON-SITE MATERIALS LIST

List construction and waste materials to be stored on-site. This list is to be kept current and updated. (Examples: topsoil, gravel, sand, base, excess material to be hauled off, demolition or construction waste, bulk chemicals, fuel, lubricants, etc.)

Mr. W Fireworks

Responsible Party Form

Pollution Prevention Measure		Responsible party Name and Phone Number								
General	Revegetation									
	Erosion/Sedimentation Controls									
	Vehicle Exits									
	Material Areas									
	Equipment Areas									
	Concrete Rinse									
	Construction Debris									
	Trash Receptacles									
Infrastructure	Site Clearing									
	Utility Clearing									
	Site Grading									
	Utility Construction									
	Drainage Construction									
	Asphalt Base									
	Asphalt Surface									
	Site Cleanup									

Identify responsible parties and indicate responsible party for each pollution prevention item listed above by marking an X under the Responsible Party Name.

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August 7, 2023

Attachment J
Schedule of Interim and Permanent Soil Stabilization Practices

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased and will be initiated no more than 14 says after the construction in that area has ceased.

At the completion of construction all disturbed areas will be permanently stabilized with sod or other permanent ground cover as directed by the Landscape Architect.

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.

Site Stabilization

Removing the vegetative cover and altering the soil structure by clearing, grading, and compacting the surface increases an area's susceptibility to erosion. Apply stabilizing measures as soon as possible after the land is disturbed (Figure 1-5). Plan and implement temporary or permanent vegetation, mulches, or other protective practices to correspond with construction activities. Protect channels from erosive forces by using protective linings and the appropriate channel design. Consider possible future repairs and maintenance of these practices in the design.

Seeding establishes a vegetative cover on disturbed areas. Seeding is very effective in controlling soil erosion once a vegetative cover of about 80% has been established. However, often seeding and fertilizing do not produce as thick a vegetative cover as do seed and mulch or netting. Newly established vegetation does not have as extensive a root system as existing vegetation and therefore is more prone to erosion, especially on steep slopes. Care should be taken when fertilizing to avoid untimely or excessive application. Since the practice of seeding and fertilizing does not provide any protection during the time of vegetative establishment, it should be used only on favorable soils in very flat areas and not in sensitive areas.

The management of land by using ground cover reduces erosion by reducing the flow rate of runoff and the raindrop impact. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days. In very flat, non-sensitive areas with favorable soils, stabilization may involve simply seeding and fertilizing. Mulch and/or sod may be necessary on steeper slopes, for erodible soils, and near sensitive areas. Sediment that has escaped the site due to the failure of sediment and erosion controls should be removed as soon as possible to minimize offsite impacts. Permission should be obtained from adjacent landowners prior to offsite sediment removal.

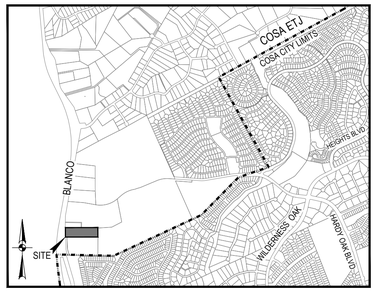
Mulching/mats can be used to protect the disturbed area while vegetation becomes established. Mulching involves applying plant residues or other suitable materials on disturbed soil surfaces. Mulches/mats used include tacked straw, wood chips, and jute netting and are often covered by blankets or netting. Mulching alone should be used only for temporary protection of the soil surface or when permanent seeding is not feasible. The useful life of mulch varies with the material used and the amount of precipitation, but is approximately 2 to 6 months.

During times of year when vegetation cannot be established, soil mulching should be applied to moderate slopes and soils that are not highly erodible. On steep slopes or highly erodible soils, multiple mulching treatments should be used. Interlocking ceramic materials, filter fabric, and netting are available for this purpose. Before stabilizing an area, it is important to have installed all sediment controls and diverted runoff away from the area to be planted. Runoff may be diverted away from denuded areas or newly planted areas using dikes, swales, or pipe slope drains to intercept runoff and convey it to a permanent channel or storm drain. Reserved topsoil may be used to revegetate a site if the stockpile has been covered and stabilized.

Consideration should be given to maintenance when designing mulching and matting schemes. Plastic nets are often used to cover the mulch or mats; however, they can foul lawn mower blades if the area requires mowing.

Sod can be used to permanently stabilize an area. Sodding provides immediate stabilization of an area and should be used in critical areas or where establishment of permanent vegetation by seeding and mulching would be difficult. Sodding is also a preferred option when there is high erosion potential during the period of vegetative establishment from seeding.

Because of the hardy drought-resistant nature of wildflowers, they may be more beneficial as an erosion control practice than turf grass. While not as dense as turfgrass, wildflower thatches and associated grasses are expected to be as effective in erosion control and contaminant absorption. Because thatches of wildflowers do not need fertilizers, pesticides, or herbicides, and the need for watering is minimal, implementation of this practice may result in cost savings. In 1987, Howard County, Maryland, spent $690.00 per acre to maintain turfgrass areas, compared to only $31.00 per acre for wildflower meadows. A wildflower stand requires several years to become established; however, maintenance requirements are minimal once the area is established.



LOCATION MAP

NOT TO SCALE

KEY NOTES

1	PROPOSED GRAVEL MILLINGS PARKING LOT
2	PROPOSED ENTRANCE LOCATION
3	PROPOSED BUILDING LOCATION
4	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
5	PROPOSED CONSTRUCTION STAGING AREA
6	PROPOSED CONCRETE WASH-OUT PIT AREA
7	LIMITS OF CONSTRUCTION
8	PROPOSED SILT FENCE
9	SAND FILTER BASIN. SEE PERM BMP C2.3
10	VEGETATIVE FILTER STRIP. SEE PERM BMP C2.3

LEGAL DESCRIPTION

LOT 12
BLK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXXX

OWNER/DEVELOPER:
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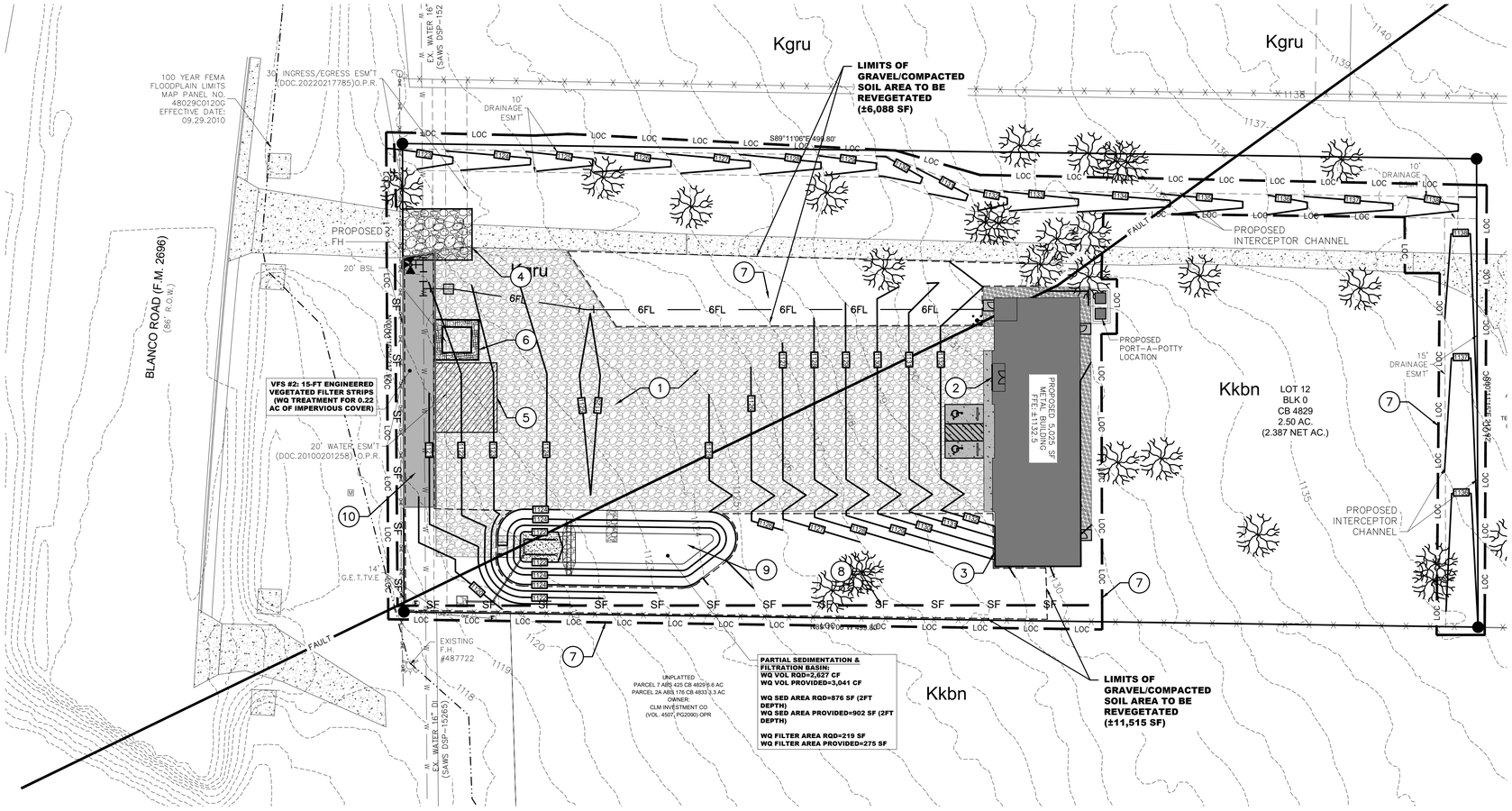
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

SCALE: 1"=30'
0 30 60

LEGEND

- PROPERTY LINE
- SILT FENCE (SF)
- LIMITS OF CONSTRUCTION (LOC)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- STAGING AREA
- CONCRETE WASH-OUT PIT
- AREAS OF SOIL STABILIZATION
- AREAS OF SOIL DISTURBANCE
- AREAS TO BE REVEGETATED



SEQUENCE OF CONSTRUCTION:

1. PLACE SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCE AS SHOWN.
2. PERFORM DEMOLITION, CLEARING, GRUBBING, AND EARTHWORK FOR THE SITE.
3. PERFORM INITIAL SITE GRADING AND BUILDING SUBGRADE PAD PREPARATION PER PLANS.
4. CONSTRUCTION OF PROPOSED BUILDING, WALKWAYS, DRIVEWAYS, AND PAVEMENT.
5. REMOVE TEMPORARY BMP'S AFTER PAVING IS IN PLACE AND/OR AFTER ESTABLISHING VEGETATION.

NOTE:

1. ACTUAL LAYOUT DETERMINED IN FIELD. SHOULD BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE/EXIT AND NOT LOCATED NEAR A WELL, FLOODPLAIN, OR OTHER POTENTIAL SOURCES OF CONTAMINATION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE TEMPORARY BMP'S ARE IN PLACE AND FUNCTIONING AT ALL TIME. NOTIFY ENGINEER IF CITY OF SAN ANTONIO OF SAWS INSPECTION OFFICIALS REQUEST REVISIONS OR MODIFICATIONS TO THE PLAN.

DATE	ISSUE REVISED

OWNER:

MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

MRW - BLANCO
MR. W FIREWORKS SUPERSTORE

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SAN ANTONIO, TX 78260

ENGINEER:

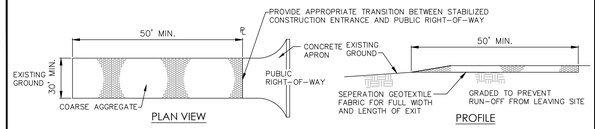
F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER

9.18.2023

TEMPORARY BMP PLAN

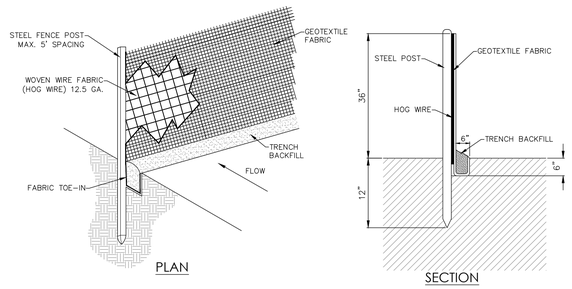
C2.1



TEMPORARY CONSTRUCTION ENTRANCE / EXIT NOTES

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD 2 , A MULLEN BURST RATING OF 140 LB/IN 2 , AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
6. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
7. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
8. PLACE STONE TO DIMENSIONS AND GRADE SHOWN. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
9. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
10. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
11. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
12. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.

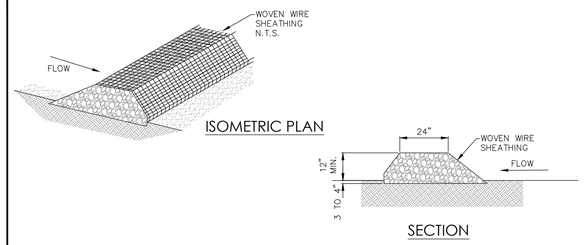
Ⓐ STABILIZED CONSTRUCTION ENTRNANCE / EXIT



SILT FENCE NOTES

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT 2 , AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12.5 GAUGE MINIMUM.
4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT DEEP AND SPACED NOT MORE THAN 5 FEET ON CENTER.
5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
6. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
7. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
9. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
10. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES, OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE OLD FENCE.
11. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
12. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.

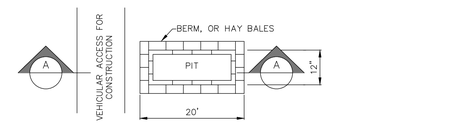
Ⓑ SILT FENCE DETAIL



ROCK BERM NOTES

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3 TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-TO 8-INCH DIAMETER ROCKS MAY BE USED.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
5. PLACE THE ROCK ALONG THE SHEATHING TO A HEIGHT NOT LESS THAN 18".
6. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
8. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
9. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER AND REPAIR ANY LOOSE WIRE SHEATHING.
11. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

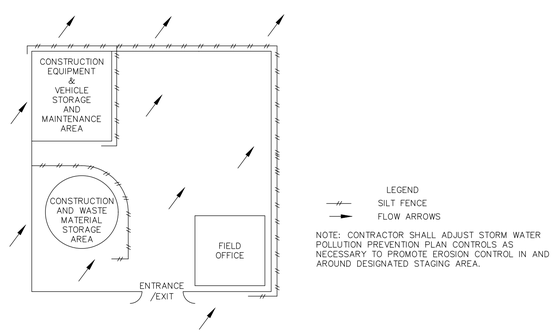
Ⓒ ROCK BERM DETAIL (NOT USED)



GENERAL NOTES:

- DETAIL ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
- IF HAY BALES ARE USED, THEY SHALL BE PLACED IN ACCORDANCE WITH DETAILS SHOWN ON EXHIBIT FOR HAY BALES.
- WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
- WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

Ⓓ CONCRETE TRUCK WASHOUT PIT



NOTE: CONTRACTOR SHALL ADJUST STORM WATER POLLUTION PREVENTION PLAN CONTROLS AS NECESSARY TO PROMOTE EROSION CONTROL IN AND AROUND DESIGNATED STAGING AREA.

Ⓔ TYP. CONSTRUCTION STAGING AREA

DATE	ISSUE REVISED

OWNER:

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12221 FM 476
SOMERSET, TEXAS 78069
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MRW - BLANCO
MR. W FIREWORKS SUPERSTORE

23306 BLANCO RD
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ENGINEER:

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STATE OF TEXAS
JOSEPH E. TOBER
168918
LICENSED
PROFESSIONAL ENGINEER

9.18.2023

TEMPORARY BMP PLAN DETAILS

C2.2

F-22385

PERMANENT STORMWATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Joseph E. Tober, P.E.

Date: 08.07.2023

Signature of Customer/Agent

Joseph E. Tober

Regulated Entity Name: MRW Blanco

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

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

☐ N/A

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

   ☐ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☐ N/A

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

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

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

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

☒ Design calculations (TSS removal calculations)

☒ TCEQ construction notes

☒ All geologic features

☒ All proposed structural BMP(s) plans and specifications

☐ N/A

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

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

    ☐ N/A

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

    ☒ N/A

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

    ☐ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☐ N/A

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

    ☐ N/A

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F-22385

August 7, 2023

Attachment A – 20% or Less Impervious Cover Waiver

n/a

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SOMERSET, TEXAS 78069
F-22385

August 7, 2023

Attachment B – BMPs for Up Gradient Storm Water

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. No runoff is expected to discharge onto the site originating upgradient of the development. There is a proposed interceptor channel that will capture and re-direct the flows from upgradient off site.

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F-22385

August 7, 2023

Attachment C – BMPs for On-site Storm Water

Best Management Practices will be installed on the site to treat the runoff water generated and ensure safe disposal of stormwater downstream. Control measures will be properly selected, installed, and maintained according to the designer's specifications. Controls will be developed to minimize the offsite transport of litter, construction debris, and construction materials.

Partial Sand Filter Basin will be installed on the southwestern portion of the site. The Sand Filter system works as follows:

- The sand filter basin is designed to function in stages. First stage is sedimentation and the second is the filtration.
- Water enters the sedimentation basin area from two locations and begins to pool and settle as the depth increases (see WPAP Site Plan and Basin Plan).
- Water settles and suspended solids are captured by the gabion berm prior to entering the sand filter area.
- Runoff then enters the sand filter area. As water increases in depth it flows through the 18" sand depth and is captured by the perforated underdrain piping.
- The treated runoff then exits the basin through the collector pipe.
- The basin is designed to accept a runoff volume above the required treated volume by utilizing an overflow weir system that allows flows above the required water quality volume to exit the basin. The overflow weir becomes active after the first flush of runoff (2-yr storm event) enters the system for full water quality treatment to remove 80% TSS.
- The pipe system and overflow weir outfall at the same location where runoff spreads and sheet flows as it exits the site.

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F-22385

August 7, 2023

Attachment D – BMPs for Surface Streams

The proposed Mr. W Fireworks is more than 20% impervious cover, therefore filtration is required for the runoff to Upper Salado Creek. The Sand Filter basin installed onsite ensures safe disposal of runoff to surface streams nearby.

According to the geologic assessment, there are no sensitive features on this site.

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August 7, 2023

Attachment E – Request to Seal Features

Not applicable

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

August 7, 2023

Attachment F – Construction Plans

See attached

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: MRW Blanco
Date Prepared: 08.02.23

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

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

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

County =	Bexar	
Total project area included in plan * =	2.50	acres
Predevelopment impervious area within the limits of the plan * =	0.12	acres
Total post-development impervious area within the limits of the plan * =	0.82	acres
Total post-development impervious cover fraction * =	0.33	
P =	30	inches
$L_{M\ TOTAL\ PROJECT}$ =	573	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 3

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	0.70	acres
Predevelopment impervious area within drainage basin/outfall area =	0.05	acres
Post-development impervious area within drainage basin/outfall area =	0.55	acres
Post-development impervious fraction within drainage basin/outfall area =	0.78	
$L_{M\ THIS\ BASIN}$ =	402	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:

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

A_C =	0.70	acres
A_I =	0.55	acres
A_P =	0.15	acres
L_R =	506	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = **440** lbs.

F = **0.87**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = **1.44** inches
Post Development Runoff Coefficient = **0.60**
On-site Water Quality Volume = **2189** cubic feet

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

Off-site area draining to BMP = **0.00** acres
Off-site Impervious cover draining to BMP = **0.00** acres
Impervious fraction of off-site area = **0**
Off-site Runoff Coefficient = **0.00**
Off-site Water Quality Volume = **0** cubic feet

Storage for Sediment = **438**
Total Capture Volume (required water quality volume(s) x 1.20) = **2627** cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr **Enter determined permeability rate or assumed value of 0.1**
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **2627** cubic feet

Minimum filter basin area = **122** square feet

Maximum sedimentation basin area = **1094** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **274** square feet **For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **2627** cubic feet

Minimum filter basin area = **219** square feet

Maximum sedimentation basin area = **876** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **55** square feet **For maximum water depth of 8 feet**

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands Designed as Required in RG-348 Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System Designed as Required in RG-348 Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: MRW Blanco
Date Prepared: 08.02.23

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

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

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

County =	Bexar	
Total project area included in plan * =	2.50	acres
Predevelopment impervious area within the limits of the plan * =	0.12	acres
Total post-development impervious area within the limits of the plan * =	0.82	acres
Total post-development impervious cover fraction * =	0.33	
P =	30	inches
$L_{M\ TOTAL\ PROJECT}$ =	573	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 3

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

Drainage Basin/Outfall Area No. = 3

Total drainage basin/outfall area =	1.58	acres
Predevelopment impervious area within drainage basin/outfall area =	0.05	acres
Post-development impervious area within drainage basin/outfall area =	0.05	acres
Post-development impervious fraction within drainage basin/outfall area =	0.03	
$L_{M\ THIS\ BASIN}$ =	0	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:

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

A_C =	1.58	acres
A_I =	0.05	acres
A_P =	1.53	acres
L_R =	65	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = **0** lbs.

F = **0.00**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = **#N/A** inches
Post Development Runoff Coefficient = **0.06**
On-site Water Quality Volume = **#N/A** cubic feet

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

Off-site area draining to BMP = **0.00** acres
Off-site Impervious cover draining to BMP = **0.00** acres
Impervious fraction of off-site area = **0**
Off-site Runoff Coefficient = **0.00**
Off-site Water Quality Volume = **#N/A** cubic feet

Storage for Sediment = **#N/A**
Total Capture Volume (required water quality volume(s) x 1.20) = **#N/A** cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr **Enter determined permeability rate or assumed value of 0.1**
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands Designed as Required in RG-348 Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System Designed as Required in RG-348 Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: MRW Blanco
Date Prepared: 08.02.23

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
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Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

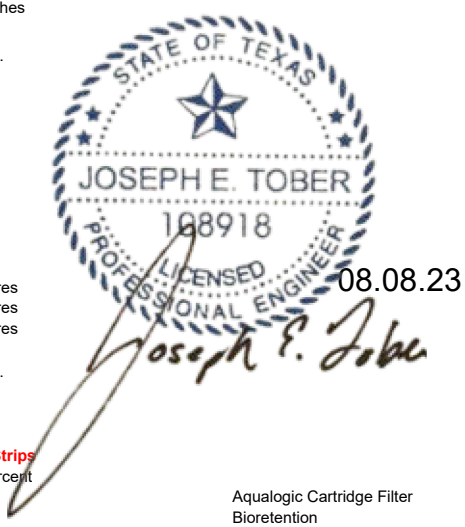
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Bexar	
Total project area included in plan * =	2.50	acres
Predevelopment impervious area within the limits of the plan * =	0.12	acres
Total post-development impervious area within the limits of the plan * =	0.82	acres
Total post-development impervious cover fraction * =	0.33	
P =	30	inches
$L_{M\ TOTAL\ PROJECT}$ =	573	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 3



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

Drainage Basin/Outfall Area No. = 2

Total drainage basin/outfall area =	0.22	acres
Predevelopment impervious area within drainage basin/outfall area =	0.02	acres
Post-development impervious area within drainage basin/outfall area =	0.22	acres
Post-development impervious fraction within drainage basin/outfall area =	0.99	
$L_{M\ THIS\ BASIN}$ =	165	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:

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

A_C =	0.22	acres
A_I =	0.22	acres
A_P =	0.00	acres
L_R =	194	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = **165** lbs.

F = **0.85**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = **1.32** inches
Post Development Runoff Coefficient = **0.81**
On-site Water Quality Volume = **861** cubic feet

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

Off-site area draining to BMP = **0.00** acres
Off-site Impervious cover draining to BMP = **0.00** acres
Impervious fraction of off-site area = **0**
Off-site Runoff Coefficient = **0.00**
Off-site Water Quality Volume = **0** cubic feet

Storage for Sediment = **172**
Total Capture Volume (required water quality volume(s) x 1.20) = **1033** cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr **Enter determined permeability rate or assumed value of 0.1**
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

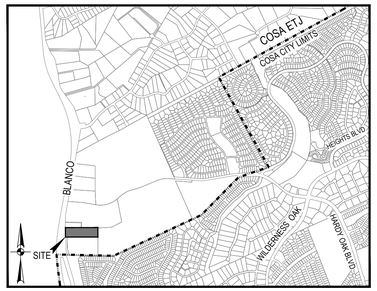
Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands Designed as Required in RG-348 Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System Designed as Required in RG-348 Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**



LOCATION MAP

NOT TO SCALE

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan (WPAP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.

3. If any sensitive feature(s) (caves, solution cavity, sink hole, etc.) is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. Construction activities may not be resumed until the TCEQ has reviewed and approved the appropriate protective measures in order to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality.

4. No temporary or permanent hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the approved plans and manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

7. Sediment must be removed from the sediment traps or sedimentation basins not later than when it occupies 50% of the basin's design capacity.

8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.

10. If portions of the site will have a temporary or permanent cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

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

12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

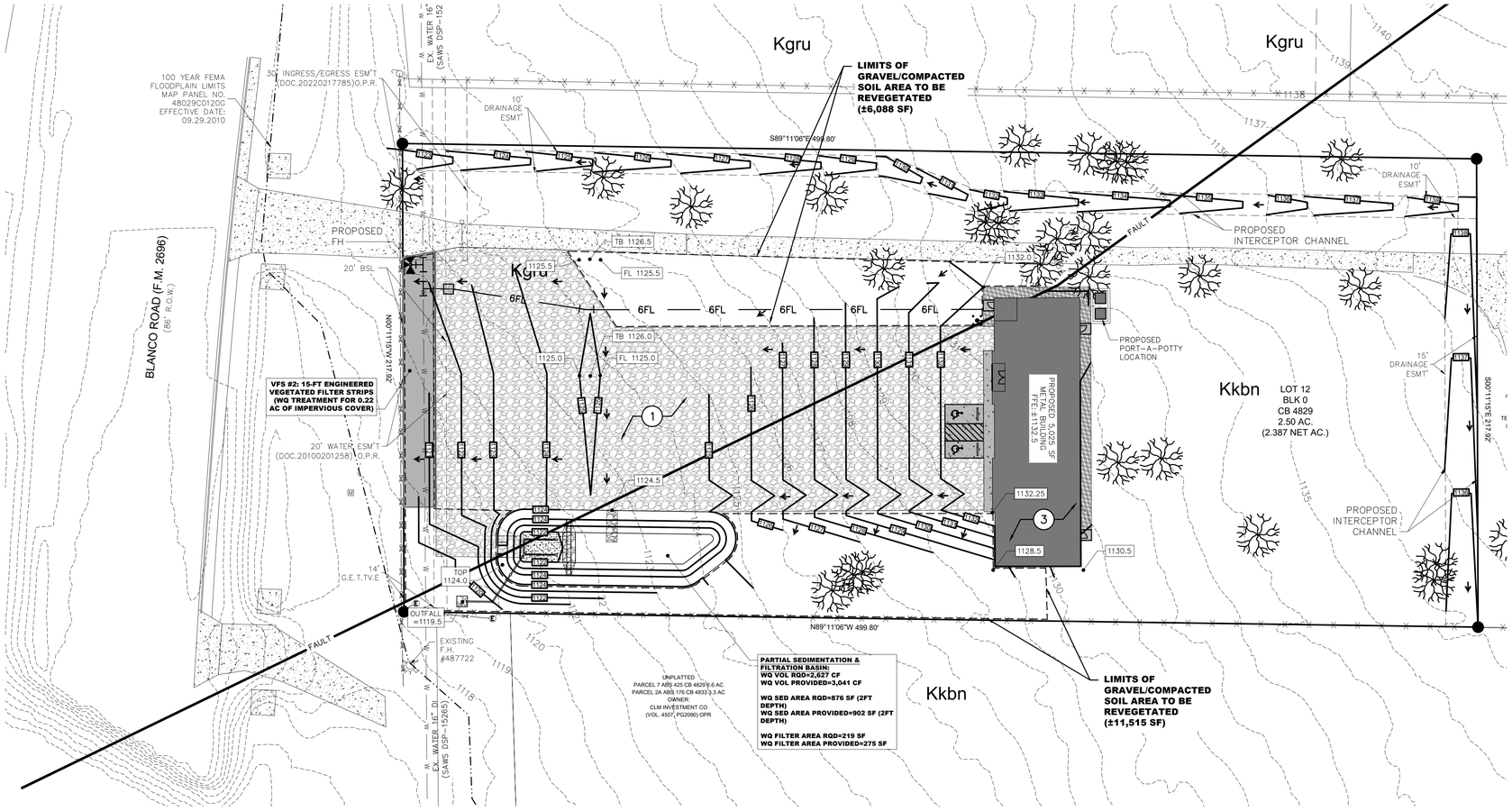
    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
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



SCALE: 1"=30'
0 30 60

LEGEND

- PROPERTY LINE
- SILT FENCE (SF SF)
- LIMITS OF CONSTRUCTION (LOC LOC)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- STAGING AREA
- CONCRETE WASH-OUT PIT
- AREAS OF SOIL STABILIZATION
- AREAS OF SOIL DISTURBANCE
- AREAS TO BE REVEGETATED

KEY NOTES

1	PROPOSED GRAVEL MILLINGS PARKING LOT
2	PROPOSED ENTRANCE LOCATION
3	PROPOSED BUILDING LOCATION

DRAINAGE AREAS	BMP	TOTAL (AC)	PRE-DEV IMP COVER (AC)	POST DEV IMP COVER (AC)	TSS LOAD REMOVAL (LBS)
DA1	SF WQ POND	0.70	0.05	0.55	440
DA2	VFS	0.22	0.02	0.22	165
DA3	N/A	1.58	0.05	0.05	0
TOTALS		**2.50**	**0.12**	**0.82**	**605**

OWNER/DEVELOPER:
MR.W FIREWORKS, INC.
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

LEGAL DESCRIPTION

LOT 12
BLK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXX

DATE	ISSUE REVISED

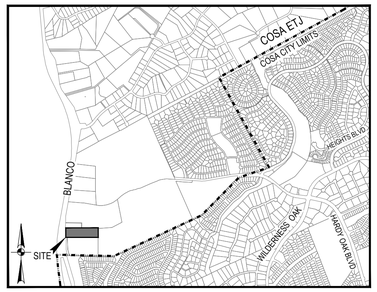
OWNER:
MR. W FIREWORKS
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

MRW - BLANCO
MR. W FIREWORKS SUPERSTORE
23306 BLANCO RD
SAN ANTONIO, TX 78260

ENGINEER:
F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER
9.18.2023

PERM BMP PLAN DETAILS
C2.3



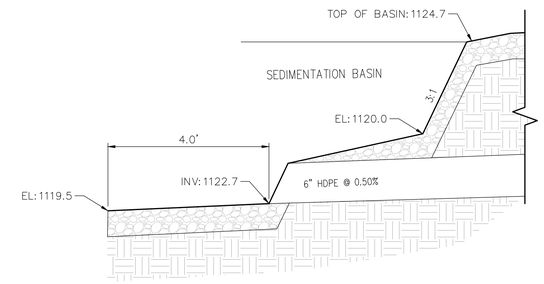
LOCATION MAP

NOT TO SCALE

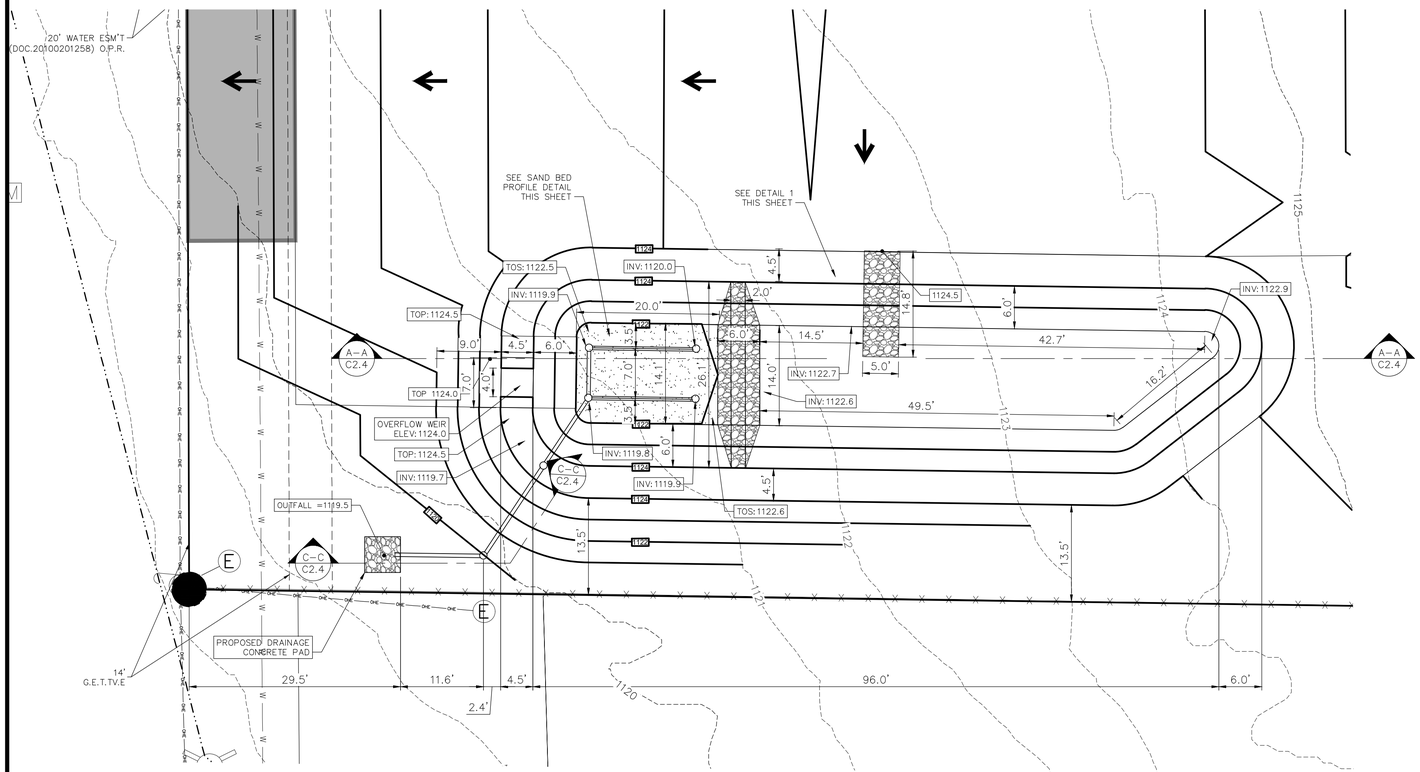
* NOTE: ACTUAL LAYOUT DETERMINED IN FIELD. SHOULD BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE/EXIT AND NOT LOCATED NEAR A WELL, FLOODPLAIN, OR OTHER POTENTIAL SOURCES OF CONTAMINATION.

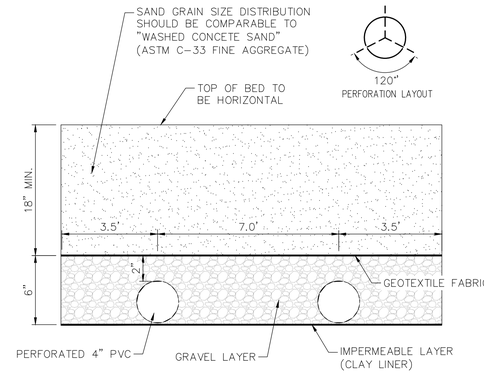
KEY NOTES

1	PROPOSED GRAVEL MILLINGS PARKING LOT
2	PROPOSED ENTRANCE LOCATION
3	PROPOSED BUILDING LOCATION
4	PROPOSED WATER QUALITY POND

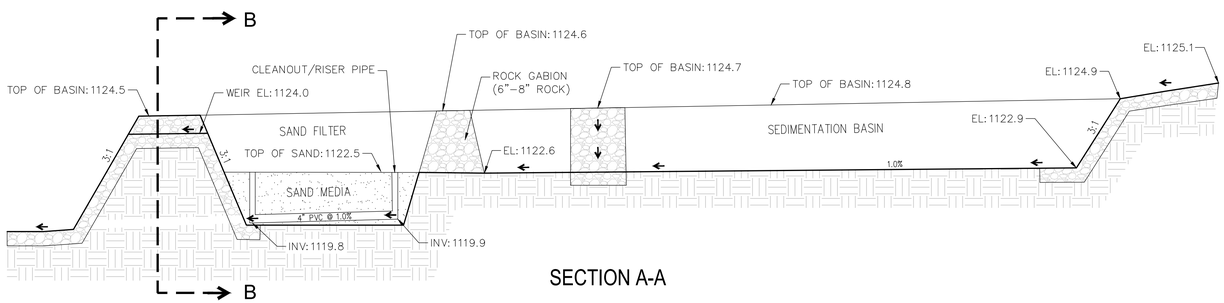


SECTION C-C

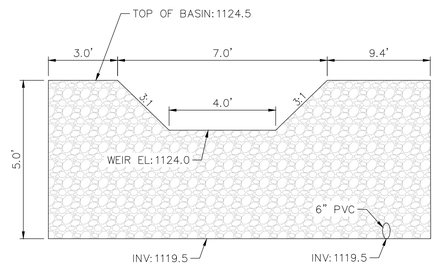




SAND BED PROFILE



SECTION A-A



SECTION B-B

LEGEND

- GAS VALVE
- FIRE HYDRANT
- LIGHT POLE
- WATER VALVE
- SANITARY SEWER MANHOLE
- STORM WATER MANHOLE
- SIGN
- CONTROL POINT
- POWER POLE
- 1/2" IRON ROD FOUND
- BENCH MARK
- STORM GRATE
- PIN FLAG OR PAINT STRIPE
- 1/2" IRON ROD W/CAP
- ROAD W/NO CURB
- EXISTING CURB
- PROPOSED CURB
- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING GRAVEL
- EXISTING BUILDING
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- PROPOSED GRAVEL
- PROPOSED BUILDING
- EXISTING CONTOURS (1172)
- EXISTING SPOT GRADE (805.50)
- PROPOSED CONTOURS (801)
- 6" FIRE LINE (6FL)
- WATER LINE (W)
- WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- EXISTING TREE
- FLOW ARROWS
- LIMITS OF CONSTRUCTION
- PROPERTY LINE
- PROPOSED SPOT GRADES (931.50TC / 931.00G)
- SILT FENCE (SF)
- FIRE LANE
- FIRE HOSE HAND PULL (HAND PULL)
- FIRE HOSE TRUCK PULL (TRUCK PULL)

SCALE: 1"=10'

0 10 20

LEGAL DESCRIPTION

LOT 12
BLOCK 0
CB 4829
AC. 2.5
MRW BLANCO SUBDIVISON
PLAT NO. 22-11800425
VOL. XXXX PG. XXX

OWNER/DEVELOPER:
MR.W FIREWORKS, INC.
12221 FM 476 (P.O. BOX 114)
SOMERSET, TEXAS 78069
ATTN: WAYNE WILDMAN

DATE	ISSUE REVISED

OWNER:

MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

MRW - BLANCO

MR. W FIREWORKS SUPERSTORE

23306 BLANCO RD
SAN ANTONIO, TX 78260

ENGINEER:

F-22385
MR. W FIREWORKS, INC
12221 FM 476
SOMERSET, TEXAS 78069
P.O. BOX 114
SOMERSET, TEXAS 78069

STATE OF TEXAS
JOSEPH E. TOBER
108918
LICENSED
PROFESSIONAL ENGINEER

8.7.2023

WATER QUALITY POND

C2.4

\\MWFSERVER\Users\Engineering\Projects\MWF - Blanco\Drawings\MWR-BLANCO CIVIL.dwg, 8/7/2023 12:38:03 PM, _AutoCAD PDF (High Quality Print).pc3

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

August 8, 2023

Attachment G – Inspection, Maintenance, Repair, and Retrofit Plan

The Permanent BMP for this project will be the installment of a Sand Filter basin and a 15' engineered vegetative filter strip. The following document regarding the inspection and maintenance schedule and procedures has been prepared to provide a description and schedule for the performance of maintenance of permanent pollution prevention measures. The project specific water pollution abatement plan should be reviewed to determine more information regarding the implemented BMP's.

When a project is occupied by the owner, the owner may provide for maintenance with his own skilled forces or contract out to provide the recommended maintenance of Permanent Best Management Practices. Where a project is occupied or leased by a tenant, the owner shall require tenants to contract for such maintenance services either through a lease agreement or other binding documents.

I understand that I am responsible for maintenance of the Permanent Pollution Abatement Measures included in this project until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or ownership is transferred.

I, the owner of Mr. W Fireworks, have read and understand the requirements of the attached Maintenance Plan and Schedule.

Wayne Wildman
President/Owner
Mr. W Fireworks, Inc.

8/8/23
Date

MR. W FIREWORKS, INC.
P.O. BOX 114
SOMERSET, TEXAS 78069
F-22385

INSPECTION AND MAINTENANCE SCHEDULE FOR PERMANENT POLLUTION ABATEMENT MEASURES

MAINTENANCE PROCEDURES FOR PERMANENT POLLUTION ABATEMENT MEASURES

Note: Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 3.5.

Inspections

Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately. *A written record should be kept of inspection results and corrective measures taken.*

Mowing

The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

Litter and Debris Removal

Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

Erosion control

The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

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Level Sensor

The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin.

Nuisance Control

Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

Structural Repairs and Replacement

With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced. *A written record should be kept of inspection results and corrective measures taken*

Discharge Pipe

The basin discharge pipe shall be checked for accumulation of silt, debris or other obstructions which could block flow. Soil accumulations, vegetative overgrowth and other blockages should be cleared from the pipe discharge point. Erosion at the point of discharge shall be monitored. If erosion occurs, the addition of rock rubble to disperse the flow should be accomplished. *A written record should be kept of inspection results and corrective measures taken*

Detention and Drawdown Time

One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. This characteristic can be a sign of the need for maintenance. The minimum drawdown time is 24 hours. If drawdown time is less than 24 hours, the actuator valve shall be checked and partially closed to limit the drawdown time. Extensive drawdown time greater than 48 hours may indicated blockage of the discharge pipe. Corrective actions should be performed and completed within 15 working days. *A written record of the inspection findings and corrective actions performed should be made.*

Sediment Removal

A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation.

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Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

Logic Controller

The Logic Controller should be inspected as part of the twice-yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

Vegetated Filter Strips

Vegetation height for native grasses shall be limited to no more than 18- inches. When vegetation exceeds that height, the filter strip shall be cut to a height of approximately 4 inches. Turf grass shall be limited to a height of 4-inches with regular maintenance that utilizes a mulching mower. Trash and debris shall be removed from filter strip prior to cutting. Check filter strip for signs of concentrated flow and erosion. Areas of filter strip showing signs of erosion shall be repaired by scarifying the eroded area, reshaping, regrading and placement of solid block sod over the affected area. *A written record of the inspection findings and corrective actions performed should be made*

Visually Inspect Security Fencing for Damage or Breach

Check maintenance access gates for proper operation. Damage to fencing or gates shall be repaired within 5 working days. *A written record should be kept of inspection results and maintenance performed.*

Recordkeeping Procedures for Inspections, Maintenance, Repairs, and Retrofits.

- Written records shall be kept by the party responsible for maintenance or a designated representative.
- Written records shall be retained for a minimum of five years.

Attachment H

Pilot-Scale Field Testing Plan

NOT APPLICABLE

F-22385

AGENT AUTHORIZATION FORM

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

I Wayne Wildman
Print Name

President,
Title - Owner/President/Other

of Mr. W Fireworks, Inc.
Corporation/Partnership/Entity Name

have authorized Joseph E. Tober, P.E.
Print Name of Agent/Engineer

of Mr. W Fireworks, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

7-17-2023
Date

THE STATE OF Texas §

County of ____ §~~Atascosa~~

BEFORE ME, the undersigned authority, on this day personally appeared Wayne Wildman 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 17 day of July, 2023.

NOTARY PUBLIC

Typed or Printed Name of Notary

WINTON ROBERSON
Notary Public, State of Texas
Comm. Expires 11-19-2024
Notary ID 126290716

MY COMMISSION EXPIRES: _____

F-22385

APPLICATION FEE

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: MRW Blanco
Regulated Entity Location: 23306 Blanco Rd. San Antonio, TX 78260
Name of Customer: Mr. W Fireworks, Inc.
Contact Person: Joseph E. Tober, P.E. Phone: (210)622-3112
Customer Reference Number (if issued):CN 600916548
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	2.5 Acres	$ 4,000
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: Joseph E. Tober Date: 7.19.23

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

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CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 600916548		RN 111782652

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	9/14/2023

☒ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0036176000	17418267906	741826790	066429333

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

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

13. Independently Owned and Operated?
☒ Yes ☐ No

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

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

15. Mailing Address:	P.O. Box 114						
	City	Somerset	State	TX	ZIP	78069	ZIP + 4

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(210) 622-3112		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

MRW Blanco

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	23306 Blanco Rd.							
	City	San Antonio	**State**	TX	**ZIP**	78260	**ZIP + 4**	
24. County	Bexar							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
San Antonio			TX		78260
27. Latitude (N) In Decimal:	29.65805		**28. Longitude (W) In Decimal:**	-98.518611	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	39	29	98	31	7

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
5092	5999	423920	453998

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

Commercial Firework Super Store

34. Mailing Address:	**P.O. Box 114**							
	City	**Somerset**	**State**	**TX**	**ZIP**	**78069**	**ZIP + 4**	

35. E-Mail Address:		
36. Telephone Number	**37. Extension or Code**	**38. Fax Number** ***(if applicable)***
( ) -		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Joseph E. Tober, P.E.	**41. Title:**	Project Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 622-3112	102	( ) -	joseph@mrwfireworks.com

SECTION V: Authorized Signature

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

Company:	Mr. W Fireworks	**Job Title:**	President
Name *(In Print):*	Wayne Wildman	**Phone:**	(210) 622- **3112**

Signature:	Joseph E. Faber	Date:	09.18.23