MATKINHOOVER
ENGINEERING & SURVEYING
BOERNE | GEORGETOWN
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OFFICE: 830.249.0600 FAX:830.249.0099
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The Worship Place,
Georgetown, Texas

Water Pollution Abatement Plan

January 2024
TBPE # F-4512
MHE 3404.00

MATKINHOOVER
ENGINEERING
& SURVEYING

December 12, 2023

Edwards Aquifer Protection Program
Texas Commission on Environmental Quality
Austin Regional Office
12100 Park 35 Circle
Austin, Texas 78753

Re: The Worship Place
Georgetown, Texas
Water Pollution Abatement Plan

Please find attached one (1) original, one (1) copy, and one (1) digital copy of The Worship Place Water Pollution Abatement Plan (WPAP). This WPAP has been prepared in accordance with the Texas Commission on Environmental Quality (30 TAC 313) and current policies for development over the Edwards Aquifer Recharge Zone.

This WPAP applies to a 10.41-acre tract located in the "EARZ" in Georgetown, TX. just 0.76 miles south of the intersection of HWY 195 and Ronald Reagan Blvd on the south side of Ronald Reagan Blvd.

Please review the attached WPAP information for the items it is intended to address, and if acceptable, provide a written approval of the plan in order that construction may begin at the earliest opportunity.

Appropriate review fees ($6,500.00) and fee application are included. If you have any questions regarding this information, please call our office.

Respectfully Submitted,
Matkin Hoover Engineering & Surveying
TBPE Firm No. #F-4512

Cody Morris, P.E.

Water Pollution Abatement Plan Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)**
- **General Information Form (TCEQ-0587)**

  Attachment A - Road Map
  Attachment B - USGS / Edwards Recharge Zone Map
  Attachment C - Project Description

- **Geologic Assessment Form (TCEQ-0585)**

  Attachment A - Geologic Assessment Table (TCEQ-0585-Table)
  Attachment B - Stratigraphic Column
  Attachment C - Site Geology
  Attachment D - Site Geologic Map(s)

- **Water Pollution Abatement Plan Application Form (TCEQ-0584)**

  Attachment A - Factors Affecting Surface Water Quality
  Attachment B - Volume and Character of Stormwater
  Attachment C - Suitability Letter from Authorized Agent (if OSSF is proposed)
  Attachment D - Exception to the Required Geologic Assessment (if requested)
  Site Plan

- **Temporary Stormwater Section (TCEQ-0602)**

  Attachment A - Spill Response Actions
  Attachment B - Potential Sources of Contamination
  Attachment C - Sequence of Major Activities
  Attachment D - Temporary Best Management Practices and Measures
  Attachment E - Request to Temporarily Seal a Feature (if requested)
  Attachment F - Structural Practices
  Attachment G - Drainage Area Map
  Attachment H - Temporary Sediment Pond(s) Plans and Calculations
  Attachment I - Inspection and Maintenance for BMPs
  Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

- **Permanent Stormwater Section (TCEQ-0600)**

  Attachment A - 20% or Less Impervious Cover Waiver (if requested for multi-family, school, or small business site)
  Attachment B - BMPs for Upgradient Stormwater
  Attachment C - BMPs for On-site Stormwater
  Attachment D - BMPs for Surface Streams
  Attachment E - Request to Seal Features (if sealing a feature)
  Attachment F - Construction Plans
  Attachment G - Inspection, Maintenance, Repair and Retrofit Plan
  Attachment H - Pilot-Scale Field Testing Plan (if proposed)
  Attachment I -Measures for Minimizing Surface Stream Contamination

- **Agent Authorization Form (TCEQ-0599), if application submitted by agent**
- **Application Fee Form (TCEQ-0574)**
- **Check Payable to the "Texas Commission on Environmental Quality"**
- **Core Data Form (TCEQ-10400)**

The Worship Place

Water Pollution Abatement Plan

Section I Edwards Aquifer Application Cover

MATKIN HOOVER ENGINEERING & SURVEYING – 8 SPENCER ROAD, SUITE 100 - BOERNE, TEXAS 78006 – OFFICE (830) 249-0600 – FAX (830) 249-0099 – www.matkinhoover.com

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.
3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: The Worship Place						**2. Regulated Entity No.:**			
3. Customer Name: The Worship Place						**4. Customer No.:**			
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):**			10.41
9. Application Fee:	$6,500.00		**10. Permanent BMP(s):**					Vegetative Filter Strips & Batch Detention	
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**					N/A	
13. County:	Williamson		**14. Watershed:**					Berry Creek	

Application Distribution

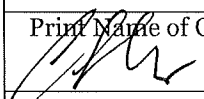
Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which 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.)	___	___	_X_
Region (1 req.)	___	___	_X_
County(ies)	___	___	_X_
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 _X_ Georgetown ___Jarrell ___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. Cody Morris, P.E.
Print Name of Customer/Authorized Agent


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):	

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The Worship Place

WPAP

Section II

General Information

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.

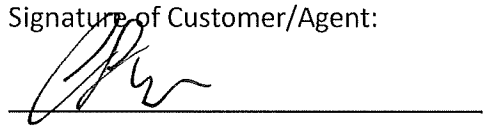
Signature

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: Cody Morris, P.E.

Date: 1/26/24

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: **The Worship Place**
2. County: Williamson
3. Stream Basin: San Gabriel
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

Contact Person: James Willis
Entity: The Worship Place
Mailing Address: 811 Sun City Blvd.
City, State: Georgetown, Tx Zip: 78633
Telephone: 512-869-1310 FAX: N/A
Email Address: Jwillis516@sncglobal.net

8. Agent/Representative (If any):

Contact Person: Cody Morris
Entity: Matkin Hoover Engineering & Surveying
Mailing Address: 8 Spencer Road, Suite 100
City, State: Boerne, Texas Zip: 78006
Telephone: 830 - 249 - 0600 FAX: 830 - 249 - 0099
Email Address: Cmorris@matkinhoover.com

9. Project Location:

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

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

In Georgetown, Texas, 0.76 miles south of the intersection of HWY 195 and Ronald Reagan Blvd on the south side of Ronald Reagan Blvd.

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

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

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

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

☐ Survey staking will be completed by this date: ____

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.

☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.

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

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

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

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

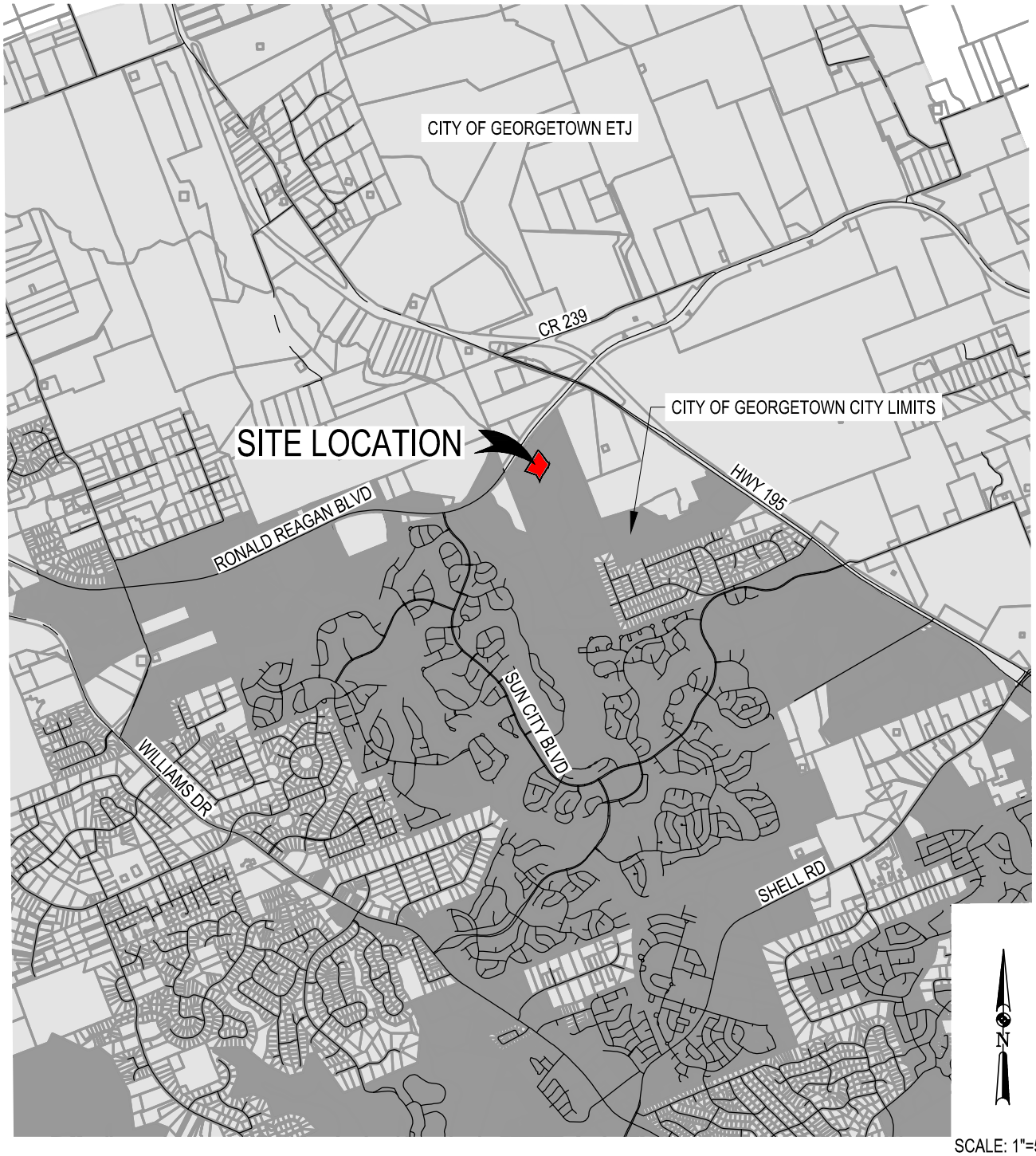
☐ TCEQ cashier

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

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

20. ☒ Submit one (1) original and one (1) 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.



SCALE: 1"=5000'

0 2500' 5000'

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TEXAS REGISTERED ENGINEERING FIRM F-004512
CIVIL ENGINEERS SURVEYORS LAND PLANNERS CONSTRUCTION MANAGERS CONSULTANTS

PROJECT LOCATION MAP

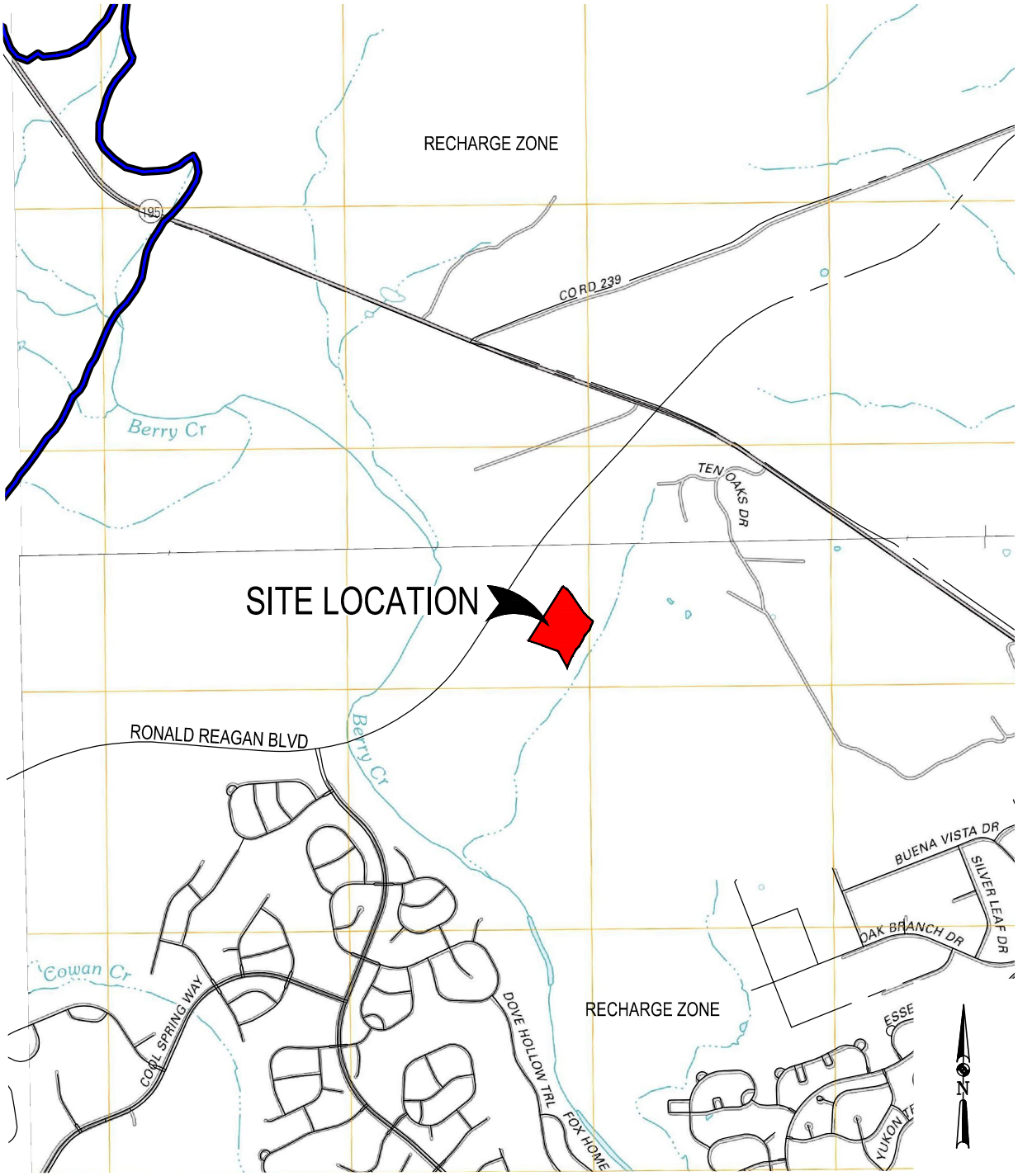
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD.
GEORGETOWN, TX 78633

ATTACHMENT A

PROJECT NO.:	3404.00
DATE:	DEC 2023
DESIGNED:	ALH
CHECKED:	CLM
SHEET:	ATTACH. A

SHEET SIZE: 8.5" x 11"

Date: Dec 12, 2023, 11:05am User ID: ahoward Z:\PROJECTS\3404 - 10 AC, The Worship Place\Submittals\TCEQ\WPAP\2 - General Information\2.2 - Attach A - Road Map.dwg



SCALE: 1"= 2000'

0 1000' 2000'

QUADRANGLE: JARRELL

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P.O. BOX 54
8 SPENCER ROAD SUITE 100
BOERNE, TEXAS 78006
OFFICE: 830.249.0600 FAX:830.249.0099
TEXAS REGISTERED ENGINEERING FIRM F-004512
CIVIL ENGINEERS SURVEYORS LAND PLANNERS CONSTRUCTION MANAGERS CONSULTANTS

USGS QUADRANGLE MAP

FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD.
GEORGETOWN, TX 78633

ATTACHMENT B

PROJECT NO.:	3404.00
DATE:	DEC 2023
DESIGNED:	ALH
CHECKED:	CLM
SHEET:	ATTACH. B

SHEET SIZE: 8.5" x 11"

THE WORSHIP PLACE
PROJECT DESCRIPTION

---

1. Area of the Site

The project area is 10.41 acres of undeveloped/uncleared land in Georgetown, Texas, located within the Edwards Aquifer Recharge Zone and drains to Lower Berry Creek. No portion of this property is located within Zone 'A' of the FEMA Floodplain as denoted herein, and as defined by Federal Emergency Management Administration Flood Hazard Boundary Map, community panel number 48491C0125F, dated effective December 20, 2019. The on-site property is located within Georgetown, TX just 0.76 miles south of the intersection of HWY 195 and Ronald Reagan Blvd on the south side of Ronald Reagan Blvd.; also having a global position of 30° 44' 48.7098" N., -97° 43' 35.2776"W. The property is sided by undeveloped land to the southwest & northwest, Above and Beyond Way to the northeast and an existing creek and low point to the southeast.

2. Offsite Area

Offsite area northwest of the site is primarily undeveloped woods and meadows, and water draining from this neighboring lot will be intercepted by a proposed channel onsite that will divert the water around our site and discharged into the existing natural drainage channel southeast of our property. Northeast of our property lies Above and Beyond Way, an existing roadway that will capture and divert all storm water northeast of our property through an existing storm sewer network. Southeast of the property lies an existing natural drainage channel our site will be discharging into, as per existing drainage conditions.

3. Impervious cover

The total acreage of impervious cover will include pavement, sidewalks, turn lane improvements, and the building footprint. There is an existing sidewalk totaling 3,844 square feet or 0.09 acres of impervious cover on the site. There is a total of 207,296 square feet or 4.76 acres (45.73%) of proposed impervious cover. The existing sidewalk is set to be demolished under proposed conditions resulting with a net increase in impervious cover of 203,452 square feet or 4.67 acres (44.87%) of impervious cover.

4. Permanent BMPs

BMPs being proposed consist of a Batch Detention Water Quality Pond located on the southern corner of the property and will treat the majority of the site. Vegetative Filter Strips will be the other proposed BMP located near the two entry drives that will treat a portion of the entry drives and surrounding sidewalk.

5. Proposed site use

The Worship Place is proposing to develop the 10.41-acre site as a community church and worship center. The site will be developed with a single building for church use, trash enclosure, paved parking, and drive lanes.

6. Site history and previous development

According to topographic maps and satellite imagery, the site remained undeveloped since 1985 or earlier and there are no existing improvements located on the property. The surrounding area consists of low-density residential and undeveloped land.

7. Area to be demolished

There are no structures on the subject tract that require demolition as part of the development, but a portion of the existing sidewalk along Above and Beyond Way will need to be demolished and reconstructed to make room for the two proposed right turn deceleration lanes being proposed.

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The Worship Place

WPAP

Section III

Geological Assessment

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

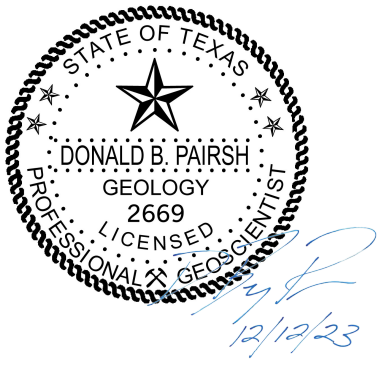
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: D Bryan Pairsh Telephone: 512-535-4368

Date: 12/12/2023 Fax: 512-535-4451

Representing: Capitol Environmental, Inc TBPG Firm Registration #50389 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: The Worship Place

Project Information

1. Date(s) Geologic Assessment was performed: November 28, 2023
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant stony clay (EeB), 0-3 % slope	D	1-10'
Eckrant-Rock outcrop (ErE), rolling	D	1-10'
Georgetown stony clay loam (GsB) 1-3% slope	D	1-10'

Soil Name	Group*	Thickness(feet)

** 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" = 100'
   Site Geologic Map Scale: 1" = 100'
   Site Soils Map Scale (if more than 1 soil type): 1" = 100'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

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

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

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

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

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

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

    ☐ There are _____ (#) 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.

Attachment A – Geologic Table

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: THE WORSHIP PLACE

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	
			To the extent that conditions were																	
			assessed on November 28, 2023, NO																	
			geologic features were identified.																	

***DATUM:** NAD 83 StatePlane Texas Central

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

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

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

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

Date: 12/12/2023

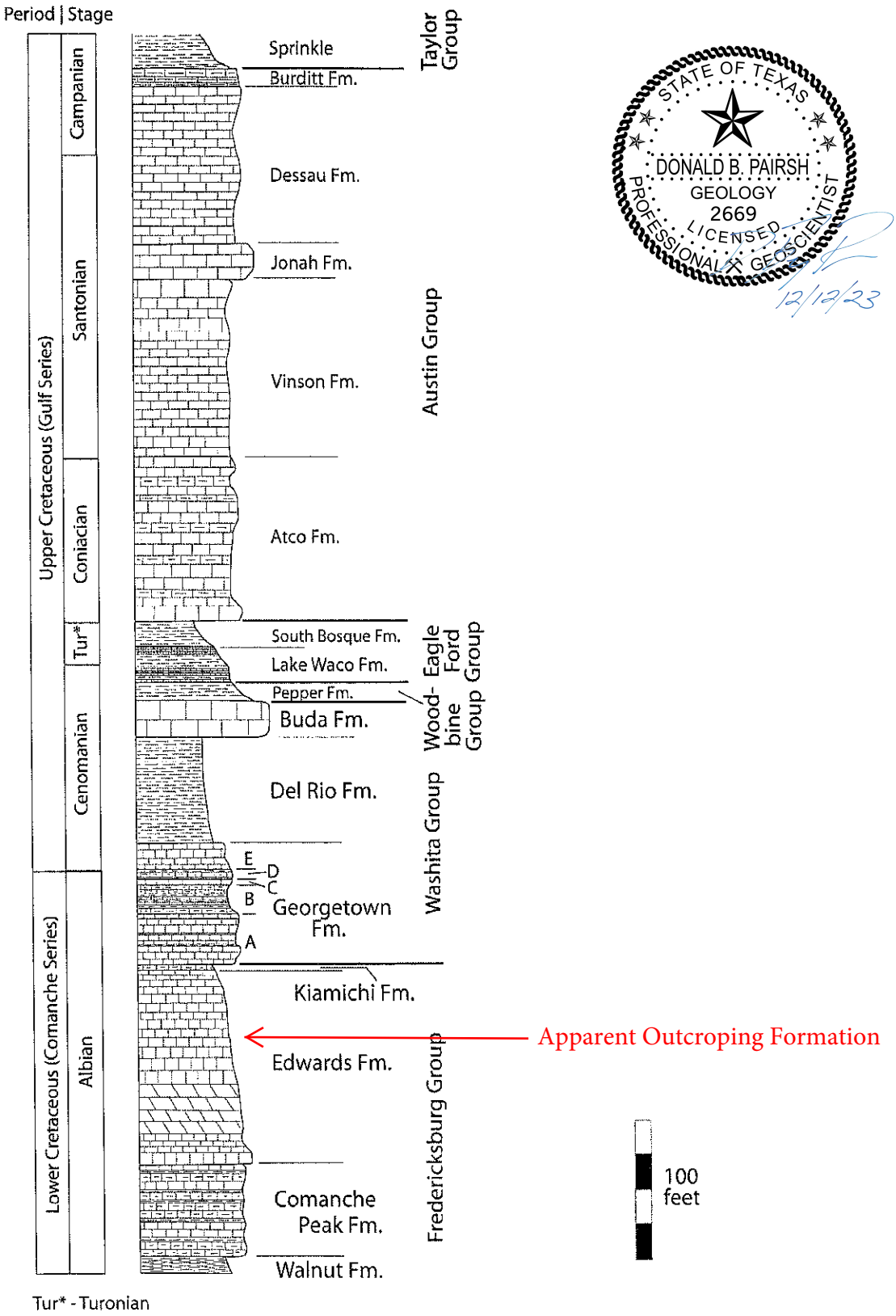
TCEQ-0585-Table (Rev. 10-01-04)

Sheet: 1 of 1

STATE OF TEXAS
DONALD B. PAIRSH
GEOLOGY
2669
LICENSED
PROFESSIONAL GEOSCIENTIST
12/12/23

Attachment B – Stratigraphic Column

Generalized Stratigraphic Column of the Round Rock Area



Source:
Bedrock Geology of Round Rock and Surrounding Areas, Williamson and Travis Counties, Texas
By: Todd B. Housh

Attachment C – Site Geology

NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY
THE WORSHIP PLACE
10.41 ACRE TRACT
GEORGETOWN, WILLIAMSON COUNTY, TEXAS
11/28/2023

LOCATION

The subject site is an approximate 10.41 acres, more or less, tract of land located at Ronald Reagan Blvd. in Georgetown, Williamson County, Texasat approximately 30.7475° North Latitude and approximately -97.7271° West Longitude. This location lies within the designated Edwards Aquifer Recharge Zone. Therefore, future intended development of the site must conform to criteria in accordance with the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program Rules in accordance with Title 30 of the Texas Administrative Code, Section 213 (30 TAC§ 213).

EXPLANATION OF ASSESSMENT

This assessment follows general guidelines contained in Texas Commission on Environmental Quality (TCEQ) "*Instruction for Geologist for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones"* (TCEQ Guidance 0585). The site is located on an area of the recharge zone that may contain karst features formed by selective solutioning of limestone minerals by water. Karst features may be expressed as surface features but more commonly tend to persist with depth. This assessment documents the presence or absence of site conditions that were present at the time the site visit that was performed on 11/28/2023. The site visit consisted of a walk through survey that consisted of a non-intrusive visual observation or survey of readily accessible, easily visible surface property conditions that were present on the subject property at the time of the site visit. Intrusive subsurface testing such as excavation, cave mapping, infiltrometer test, geophysical studies or tracer studies are not required for the geologic assessment of any feature in accordance with this practice.

A sensitive geologic or manmade feature, for the purpose of this practice is a feature on the recharge zone or transition zone of the Edwards Aquifer with a superficial appearance that suggest a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer and that has the apparent potential for rapid infiltration into the subsurface.

PHYSICAL DESCRIPTION OF SITE

The subject site is currently undeveloped range land.

SURFACE DRAINAGE

After reviewing the project site topographic survey, storm water runoff appears to flow toward the South.

SOIL DESCRIPTION

The site soil is composed of:

Eckrant extremely stony clay, 0 to 3 percent slopes (EeB), Hydrologic Group D

The Eckrant series consists of soils that are very shallow and shallow to indurated limestone bedrock and interbedded cryptocrystalline quartz, chert, marl, and chalk. These well drained soils formed in residuum derived from limestone. These nearly level to very steep soils are on summits, shoulders, and backslopes of ridges on dissected plateaus. Slope ranges from 1 to 60 percent. Mean annual air temperature is about 20 degrees C (68 degrees F), and the mean annual precipitation is about 668 mm (26 in). Well drained. Permeability is moderately slow. Runoff is very low on 1 to 3 percent slopes, low on 3 to 5 percent slopes, medium on 5 to 20 percent slopes, and high on 20 to 60 percent slopes.

Eckrant-Rock outcrop complex, rolling (ErE), Hydrologic Group D

The Eckrant series consists of soils that are very shallow and shallow to indurated limestone bedrock and interbedded cryptocrystalline quartz, chert, marl, and chalk. These well drained soils formed in residuum derived from limestone. These nearly level to very steep soils are on summits, shoulders, and backslopes of ridges on dissected plateaus. Slope ranges from 1 to 60 percent. Mean annual air temperature is about 20 degrees C (68 degrees F), and the mean annual precipitation is about 668 mm (26 in). Well drained. Permeability is moderately slow. Runoff is very low on 1 to 3 percent slopes, low on 3 to 5 percent slopes, medium on 5 to 20 percent slopes, and high on 20 to 60 percent slopes.

Georgetown stony clay loam, 1 to 3 percent slopes (GsB), Hydrologic Group D

The Georgetown series consists of moderately deep, well drained, very slowly permeable soils that have formed over indurated limestone of Cretaceous age. These soils occur on nearly level to very gently sloping dissected plateaus. Slope ranges from 0 to 3 percent. Mean annual air temperature is about 19 degrees C (66 degrees F), and mean annual precipitation is about 864 mm (34 in). Well drained. Runoff is very high. Permeability is very slow.

GEOLOGY

The site is located on the:

Edwards Limestone (Ked)

The Edwards Limestone consist of limestone, dolomite, and chert; limestone aphanitic to fine grained, massive to thin bedded, hard, brittle, in part rudistid biostromes, much miliolid biosparite; dolomite fine to very fine grained, porous, medium gray to grayish brown; chert, nodules and plates common, varies in amount from bed to bed, some intervals free of chert, mostly white to light gray; in zone of weathering considerably recrystallized, "honeycombed," and cavernous forming an aquifer; forms flat areas and plateaus bordered by scarps; thickness 60-350 feet, thins northward.

STRUCTURAL TREND and FEATURES:

The subject site is located on the Edwards Plateau within the Balcones / Ouachita structural province in central Texas. The Balcones / Ouachita structural province is an arcuate band of mostly down-to–the-coast normal faults that sub-parallels the Gulf of Mexico. In Williamson County, the regional structural trend of the Balcones / Ouachita province is generally southwest to northeast.

(Source: "*Lineament Analysis and Inference of Geologic Structure-Examples from the Balcones/Ouachita Trend of Texas."* Curan, Woodfruff, Jr, and Thompson, 1982)

The site is located in the vicinity of mapped regional faulting. However, no surface expressions of local structural features were observed onsite during this assessment.

SITE SPECIFIC GEOLOGIC FEATURE DESCRIPTIONS
Identified 11/28/2023

To the extent that surface property features were readily accessible and observable at the time the site was evaluated on 11/28/2023 no geologic features were identified on the subject tract of land that has observed potential to affect recharge to the Edwards Aquifer

OBSERVATIONS

To the extent that surface property features were readily accessible and observable at the time the site was evaluated on 11/28/2023 no sensitive features were identified on the subject tract of land that has observed potential to affect recharge to the Edwards Aquifer.

CONCLUDING STATEMENTS

The Client understands that no non-intrusive visual observation or survey can wholly eliminate uncertainty regarding the possible presence of geologic conditions in connection with the subject property. Due to the inherent limits in connection with the agreed Scope of Work, this report does not address uncertainty about site conditions across those portions of the subject property not specifically addressed in this report.

Development of the site is planned. Additional modification of site surface conditions can be expected as construction proceeds. Unsuspected solution enlarged fractures, caves and cavities may be discovered during construction operations.

This assessment does not address the possible presence of subsurface conditions that may be exposed during construction operations. Should solution features or conditions be exposed during construction operations that indicate a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer, operations in the vicinity of the feature should be halted and the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program should be contacted immediately in accordance with 30 TAC §213.5(f)(2).

Respectfully,

D Bryan Pairsh, P.G.
Project Geologist
Capitol Environmental, Inc
TBPG Firm Registration #50389
Austin, Texas

DISCLAIMER:

Under standard geologic assessment practice, this assessment is an assessment of surface property conditions that were readily accessible and easily visible at the time of the assessment.

Services performed under this contract were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. Under standard geologic assessment practice, information developed in this report represents an assessment of environmental conditions observed as present or absent on portions of the surface of the subject property at the time of the assessment. The field observations, measurements and research reported in this report are considered sufficient in detail and scope to form a contained assessment of discrete portions of the subject property. Capitol warrants that the findings and conclusions contained in this report have been prepared in accordance with generally accepted methods normal for the subject site described in this report.

Not every property will warrant the same level of assessment. Consistent with good commercial and customary practice, the appropriate level of assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the Client and information developed in the course of the inquiry. The Assessment has been developed to provide the Client with information regarding apparent indications of the presence of absence of geologic conditions relating to the surface of the subject site. The Geologic Assessment report is necessarily limited to the conditions observed and to the information available at the time the work was performed. Due to the limited nature of the work, there is a possibility that conditions may exist in connection with the subject site which could not be identified within the scope of this assessment practice or which were not easily visible or not disclosed at the time the report was prepared.

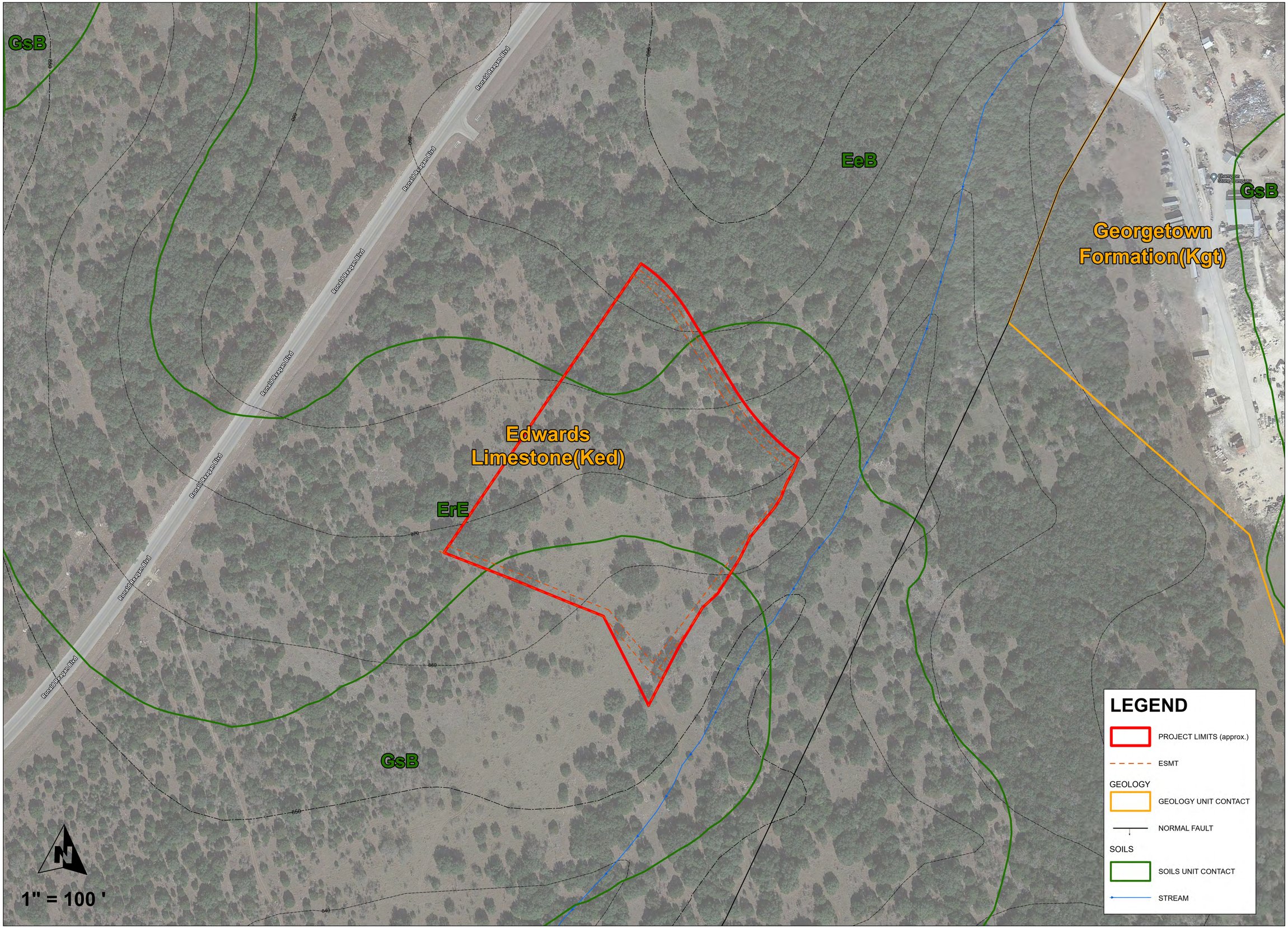
It is also possible that assessment methods employed at the time the report was prepared may be later superseded by more discrete assessment methods. The definition of a “sensitive geologic feature” and / or a “critical environmental feature” can also change statutorily over time. Capitol does not warrant the content or findings of this report in the event of changes in conditions in connection with the subject property; in the event of changes in assessment methods; or in the event of changes in statute that may apply to the subject property in the future.

In preparing this report, Capitol has relied on information derived from third party sources and personal interviews, as well as other investigative work. Except as set forth in this report, Capitol has made no independent investigation as to the accuracy or completeness of the information derived from third party sources.

This report does not address uncertainty about site conditions across those portions of the subject property not specifically assessed in this report. The Client understands that no surface assessment can wholly eliminate uncertainty regarding the possible presence of geologic conditions at depth in connection with the subject property. The Client should recognize that conditions elsewhere in the assessment area may differ from those at the study /sample locations, and that surface conditions described in the assessment practice herein may change at depth. This assessment should not to be used as a basis for engineering design.

This report was prepared for the Client, to identify the presence or absence of geologic conditions on surface portions of the subject property. Any use of this report for other purposes or any use of information presented in this report by other parties other than the Client is the Client’s responsibility.

Attachment D – Site Geologic Map
&
Site Soil Site Map



THE WORSHIP PLACE

GEOLOGIC & SOILS

SITE MAP

Prepared under the supervision of: D. Bryan Pairsh, P. G.

Date: 08/03/2022

TBPG Firm Registration #50389

CAPITOL ENVIRONMENTAL

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512.535.4368

STATE OF TEXAS
DONALD B. PAIRSH
GEOLOGY
2669
LICENSED
PROFESSIONAL GEOSCIENTIST
12/1/23

Not For Construction or Building Purposes

Sheet No. 1 of 1

MATKINHOOVER
ENGINEERING & SURVEYING
BOERNE | GEORGETOWN
CONTACT@MATKINHOOVER.COM
OFFICE: 830.249.0600 FAX:830.249.0099

The Worship Place

WPAP

Section IV

WPAP Application Form

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.

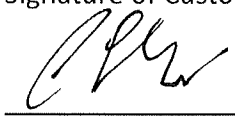
Signature

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: Cody Morris, P.E.

Date: 1/26/24

Signature of Customer/Agent:



Regulated Entity Name: The Worship Place

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):10.41

3. Estimated projected population: NA

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	26,892	÷ 43,560 =	0.62
Parking	155,800	÷ 43,560 =	3.58
Other paved surfaces	24,604	÷ 43,560 =	0.56
Total Impervious Cover	207,296	÷ 43,560 =	4.76

Total Impervious Cover 4.76 **÷ Total Acreage** 10.41 **X 100 =** 45.73**% 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:

100% Domestic	8,700 Gallons/day
_____% Industrial	_____ Gallons/day
_____% Commingled	_____ Gallons/day
TOTAL gallons/day 8,700	

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): No portion of the property is located in the floodplain according to FEMA FIRM Panel No. 48491C0125F Dated December 20, 2019 and FEMA FIRM Panel No. 48491C0280E Dated September 26, 2008

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.

Potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site during construction include:

- Soil erosion due to the clearing of the site
- Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle drippings
- Hydrocarbons from asphalt paving operations
- Miscellaneous trash and litter from construction operations and material wrappings

Potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site after construction include:

- Oil, grease, fuel and hydraulic fluid contamination from vehicle drippings
- Dirt and dust that may fall off vehicles
- Miscellaneous trash and litter

The 10.41 acres of this development included in the 9.69 acres of the regional drainage analysis in the area is part of the Worship Place development. For the regional analysis the development for the 10.41-acre tract was included. The proposed 10.41-acre development will consist of one building, amenities, and construction of driveways, parking area, utilities, and other appurtenances.

The SCS Curve Number method with a type III rainfall distribution was utilized for onsite watersheds A1 & B1 (CP-A & CP-B). Time of concentration values and the SCS curve numbers used for these calculations were established using the City of Georgetown Drainage Criteria Manual. HEC-HMS was used to calculate the storm water runoff for the 100-year storm event for CP-A & CP-B. Below is a summary of the pre-developed and post–developed runoff:

CP-A

Pre-Development Runoff:

	CN	Area (acres)	Runoff (cfs)
Q_{100}	80.3	7.97	**28.0**

Post-Development Runoff:

	CN	Area (acres)	Runoff (cfs)
Q_{100}	89.1	8.00	**24.1**

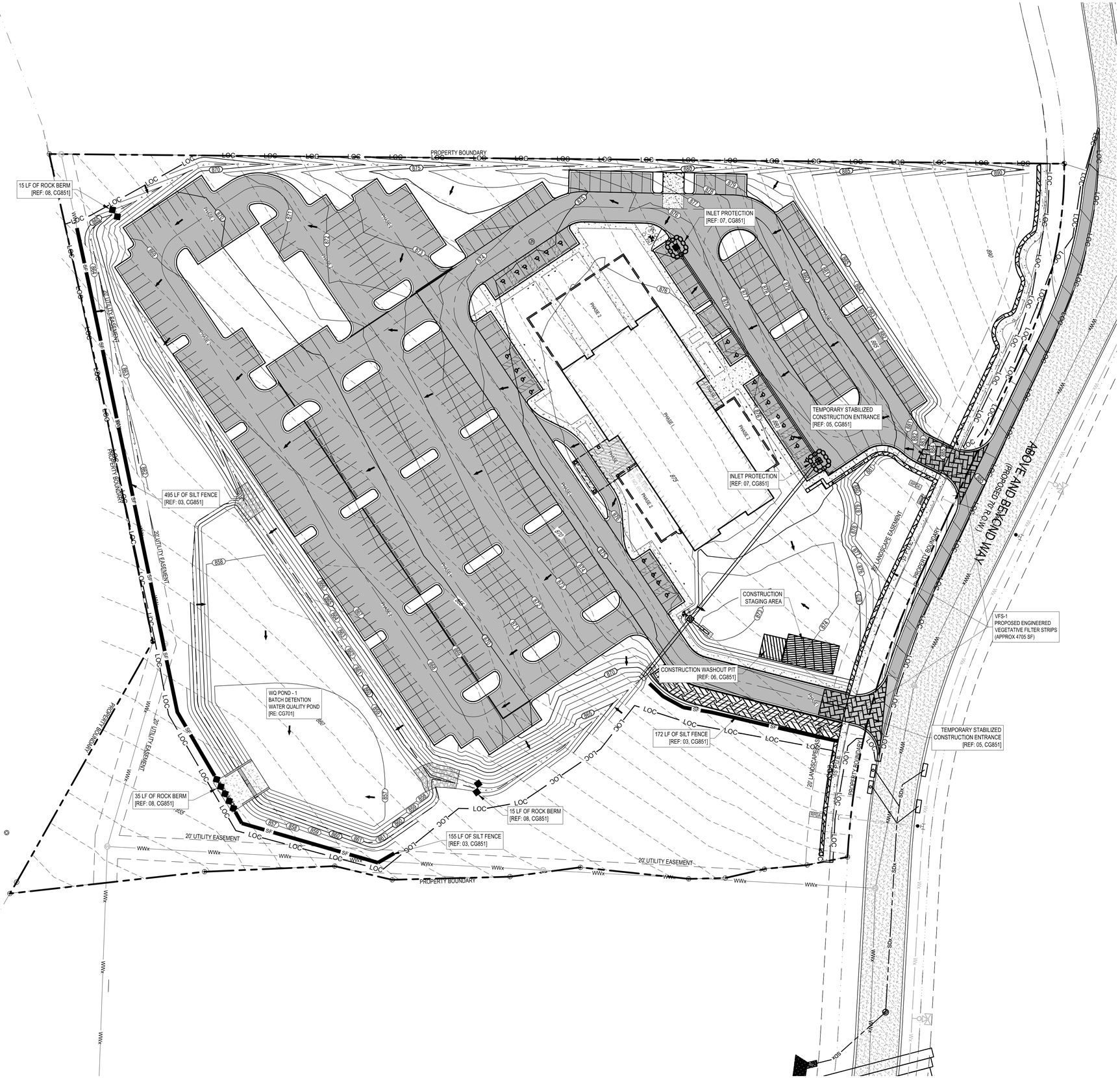
CP-B

Pre-Development Runoff:

	CN	Area (acres)	Runoff (cfs)
Q_{100}	89.3	1.72	**9.4**

Post-Development Runoff:

	CN	Area (acres)	Runoff (cfs)
Q_{100}	90.4	1.64	**8.8**



LEGEND

- PROPERTY BOUNDARY
- ADJOINING PROPERTY LINE
- EXISTING 1' CONTOUR — 971
- EXISTING 5' CONTOUR — 970
- PROPOSED 1' CONTOUR — 1399
- PROPOSED 5' CONTOUR — 1400
- FLOW ARROW
- ROCK BERM
- INLET PROTECTION (SANDBAGS)
- SILT FENCE — SF
- LIMITS OF CONSTRUCTION (DISTURBANCE) AREA [6.81AC] — LOC
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE WASHOUT AREA
- CONCRETE SIDEWALK
- PROPOSED ASPHALT PAVEMENT
- PROPOSED HEAVY DUTY RIGID PAVEMENT
- PROPOSED ROCK RUBBLE
- PROPOSED ENGINEERED VFS
- PROPOSED DITCH FLOWLINE

EROSION CONTROL NOTES:

1. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON THIS PLAN FOR ILLUSTRATIVE PURPOSES ONLY. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AROUND CONCRETE WASH PIT AND MATERIAL STORAGE AREA BASED ON FINAL LOCATION AND SIZE.
2. CONTRACTOR MAY MODIFY STORM WATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK (NO SEPARATE PAY ITEM).
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM WATER CONTROLS.
4. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
5. IF REQUIRED, CONTRACTOR SHALL FILE NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.
6. CONTRACTOR SHALL PERFORM INSPECTIONS OF CONTROLS ONCE EVERY FOURTEEN (14) DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER OR AS AN ALTERNATIVE METHOD CONTRACTOR SHALL PERFORM INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS.
7. A COPY OF THIS PLAN, TPDES BOOK AND INSPECTION REPORTS MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.
8. BARE SOILS SHALL HAVE STABILIZATION MEASURES INSTALLED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.THE ACCUMULATION OF DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND/OR DEMOLITION SHALL BE CONTAINED ON-SITE AND REMOVED IN A TIMELY MANNER.
9. ALL DEBRIS AND CONSTRUCTION MATERIALS SHALL BE REMOVED PRIOR TO FINAL INSPECTION AND THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE CITY RETAINS THE RIGHT TO REQUIRE THE PLACEMENT OF A COMMERCIAL DUMPSTER FOR COLLECTION OF DEBRIS IF THE SITE IS NOT PROPERLY MAINTAINED. THE COST ASSOCIATED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM PRODUCTS BASED UPON TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ADJACENT ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
12. REFER TO THE TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/ DETAILS.

LARGE CONSTRUCTION ACTIVITIES
DISTURBED AREA > THAN FIVE (5) ACRES OR PART OF COMMON PLAN

OPERATORS OF THIS SITE MUST:
(A) DEVELOP A SWP3 ACCORDING TO THE PROVISIONS OF TPDES TXR150000 PERMIT, THAT COVERS EITHER THE ENTIRE SITE OR ALL PORTIONS OF THE SITE FOR WHICH THE APPLICANT IS THE OPERATOR, AND IMPLEMENT THAT PLAN PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES;
(B) SUBMIT A NOTICE OF INTENT (NOI), USING A FORM PROVIDED BY THE EXECUTIVE DIRECTOR, AT LEAST SEVEN (7) DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES; OR
(C) IF THE OPERATOR CHANGES, OR AN ADDITIONAL OPERATOR IS ADDED AFTER THE INITIAL NOI IS SUBMITTED, THE NEW OPERATOR MUST SUBMIT AN NOI AT LEAST SEVEN (7) DAYS BEFORE ASSUMING OPERATIONAL CONTROL, OR IF UTILIZING ELECTRONIC NOI SUBMITTAL, PRIOR TO ASSUMING OPERATIONAL CONTROL. IF THE PRIMARY OPERATOR CHANGES AFTER THE INITIAL NOI IS SUBMITTED, THE NEW PRIMARY OPERATOR MUST SUBMIT A PAPER NOI OR AN ELECTRONIC NOI AT LEAST TEN (10) DAYS BEFORE ASSUMING OPERATIONAL CONTROL;
(D) POST A COPY OF THE NOI AT THE CONSTRUCTION SITE IN A LOCATION WHERE IT IS READILY AVAILABLE FOR VIEWING PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, AND MAINTAIN THE NOTICE IN THAT LOCATION UNTIL COMPLETION OF THE CONSTRUCTION ACTIVITY;
(E) PROVIDE A COPY OF THE SIGNED NOI TO THE OPERATOR OF ANY MUNICIPAL SEPARATE STORM SEWER SYSTEM RECEIVING THE DISCHARGE, AT LEAST SEVEN (7) DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES; AND
(F) IMPLEMENT THE SWP3 PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

SWPPP MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION

WATER POLLUTION ABATEMENT PLAN SITE PLAN

SCALE: 1"=40'
0 20' 40' 60' 80'

1/26/2024
STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED
PROFESSIONAL ENGINEER

REVISIONS:

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TEXAS REGISTERED ENGINEERING FIRM F-004512 SURVEYING FIRM F-10024300
3303 SHELL ROAD SUITE 100
GEORGETOWN, TEXAS 78628
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EROSION AND SEDIMENTATION CONTROL PLAN
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

CG801

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	26

2024-___-SDP

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES

APPROVED NOTE: ADOPTED 6/21/2006 | DRAWING NAME: EC01 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB | 1

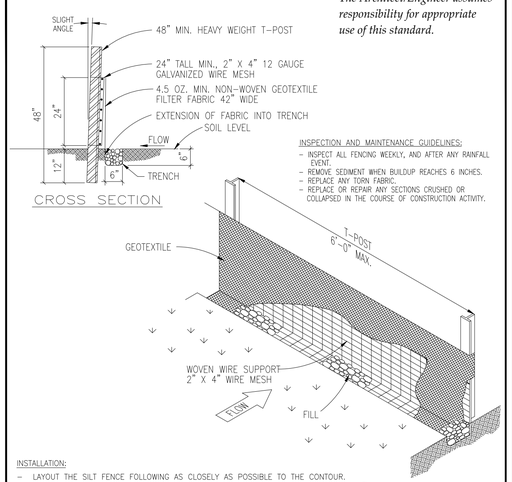
NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 80% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10–DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1–1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED–ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'–4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES

APPROVED NOTE: ADOPTED 6/21/2006 | DRAWING NAME: EC01A | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB | 2



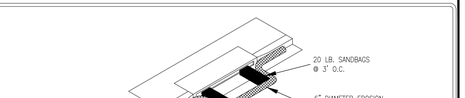
INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T–POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T–POST WITH 11 1/2 GAUGE GALVANIZED T–POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

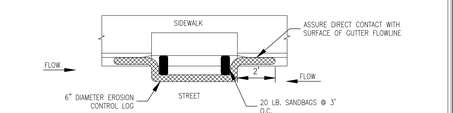
The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SILT FENCE DETAIL

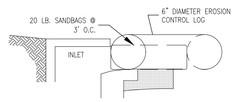
APPROVED NOTE: ADOPTED 6/21/2006 | DRAWING NAME: EC02 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB | 3



ISOMETRIC



PLAN



CROSS SECTION

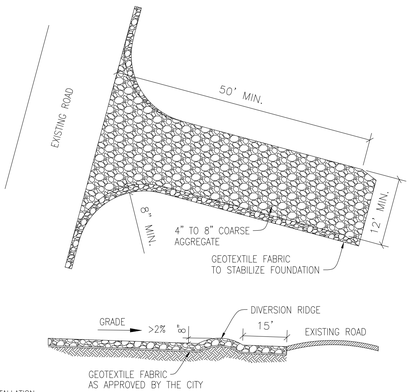
NOTES:
1. EROSION CONTROL LOG CONTAINMENT MESH SHALL BE 100% BIODEGRADABLE, PHOTODEGRADABLE OR RECYCLABLE; AND FILL MATERIAL SHALL CONSIST OF MULCH, ASPEN EXCELSIOR FIBERS, CHIPPED SITE VEGETATION, COCONUT FIBERS, 100% RECYCLABLE FIBERS, OR ANY OTHER ACCEPTABLE MATERIAL EXCLUDING STRAW AND HAY.
2. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
3. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM WATER BEGINS TO OVERTOP THE CURB.
4. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

4

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS
APPROVED
03–25–11
DATE
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)

CITY OF ROUND ROCK
CURB INLET PROTECTION WITH EROSION CONTROL LOG DETAIL

DRAWING NO: EC–13



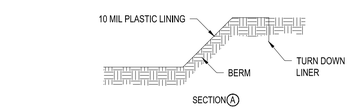
INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

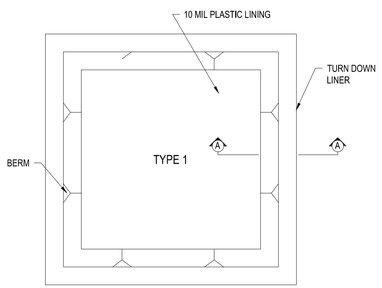
INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS–OF–WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY.
- 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.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
STABILIZED CONSTRUCTION ENTRANCE

APPROVED NOTE: ADOPTED 6/21/2006 | DRAWING NAME: EC06 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB | 5

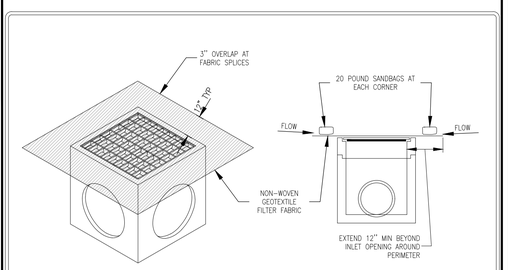




NOTES:
1. THE DIRECT DISCHARGE OF CONCRETE WASH OUT WATER TO SURFACE WATER IS PROHIBITED.
2. WASHOUT OF CONCRETE TRUCKS DURING RAINFALL EVENTS SHALL BE MINIMIZED. THE CONTRACTOR SHALL INSURE THAT BMP'S ARE SUFFICIENT TO PREVENT THE DISCHARGE OF CONCRETE TRUCK WASHOUT AS A RESULT OF RAIN.
3. THE CONCRETE WASH OUT PIT SHALL BE CONSTRUCTED IN AN AREA OF MINIMAL SLOPE AND AWAY FROM CONCENTRATED STORM WATER RUN–OFF FLOWS, AS TO PREVENT DISCHARGE TO SURFACE WATERS.

[COORDINATE EXACT LOCATION WITH PROPERTY OWNER IN FIELD]

6 CONCRETE WASHOUT PIT LAYOUT DETAIL
N.T.S.



ISOMETRIC

CROSS SECTION

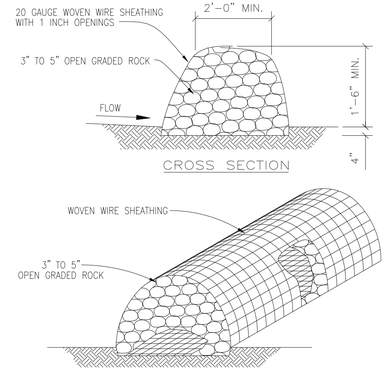
NOTES:
1. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
2. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY CLEAN THE INLET PROTECTION IF EXCESSIVE PONDING OCCURS.
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

7

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS
APPROVED
03–25–11
DATE
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)

CITY OF ROUND ROCK
AREA INLET PROTECTION DETAIL

DRAWING NO: EC–15



INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- 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.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

8

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
ROCK BERM DETAIL

APPROVED NOTE: ADOPTED 6/21/2006 | DRAWING NAME: EC03 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB

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OFFICE: 512.668.2244
CONTACT@MATKINHOOVER.COM
TEXAS REGISTERED ENGINEERING FIRM F-00412 SURVEYING FIRM LS-10024000

1/26/2024
STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED
PROFESSIONAL ENGINEER

REVISIONS:

EROSION AND SEDIMENTATION CONTROL DETAILS
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

CG851

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	27

2024-___-SDP

MATKINHOOVER
ENGINEERING & SURVEYING
BOERNE | GEORGETOWN
CONTACT@MATKINHOOVER.COM
OFFICE: 830.249.0600 FAX:830.249.0099

The Worship Place

WPAP

Section VI

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.

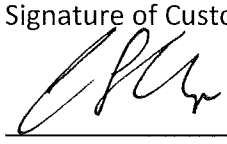
Signature

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: Cody Morris, P.E.

Date: 1/26/24

Signature of Customer/Agent:



Regulated Entity Name: The Worship Place

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: Berry 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.

General Response Actions

1. All leaks and spills should be cleaned immediately.
2. Rags, mops, and absorbent material may all be used to cleanup a spill.
3. If these materials are used to clean a hazardous material, then they must be disposed of as hazardous waste.
4. Never hose down or bury dry material spills.

Minor Spills

If a minor spill occurs (typically small quantities of oil, gasoline, etc.) the following actions should be taken.

1. Contain the spread of the spill
2. Recover spilled materials
3. Clean the contaminated area and properly dispose of contaminated materials

Semi-Significant Spills

If a semi-significant spill occurs the following actions should be taken.

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

If a significant or hazardous spill occurs in reportable quantities the following actions should be taken.

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 contactor should notify the National Response Center at 1-800-424-8802 or via the webpage at https://www.tceq.texas.gov/response/spills/spill_rq.html
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.

THE WORSHIP PLACE
POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination that may occur are:

- Oil, grease, fuel, and hydraulic fluid from construction equipment and vehicle drippings
- Miscellaneous trash and litter from construction workers and material wrappings
- Construction debris
- Excess application of fertilizers, herbicides, and pesticides

Preventative measures that will be taken to reduce contamination are:

- Vehicle maintenance will be performed within the construction staging area
- Trash containers will be placed throughout the site to encourage proper trash disposal if necessary
- Construction debris will be monitored daily be the contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis
- Fertilizers, herbicides, and pesticides will be applied only when necessary and in accordance with manufacturer's directions

Building, Paving and Utility Construction

1. Mobilization of the contractor's equipment: (.5 acres disturbed)
2. Installation of temporary best management practices as described in attachment "D" of this section (Silt Fence, Construction Entrance, and Rock Berms).
3. Construction of permanent best management practices. (Water Quality Pond. See Permanent Stormwater Section attachment "F")
4. Mass Grading:
    a. Within Watershed A1: (7.87 acres disturbed)
    b. Within Watershed A2: (0.28 acres disturbed)
5. Trenching and installation of utilities: (no additional disturbed area)
6. Building Construction: (no additional disturbed area)
7. Paving Construction: (no additional disturbed area)
8. Establishment of permanent soil stabilization: (no additional disturbed area)
9. Final Cleanup

a. All upgradient stormwater entering the site will be treated by the BMPs that will prevent pollution of surface water or groundwater that originates on-site or flows off site. See a list of these BMPs in section "b."

b. The BMPs that will prevent pollution of surface water or groundwater that originates on-site or flows off site are:

i. **Temporary Construction Entrance/Exit** – The installation of a stabilized construction entrance/exit will reduce the dispersion of sediment from the site. See Sheet 2 of the WPAP Site Plan which contains a copy of Section 1.4.2 from the Edwards Aquifer Rules: Technical Guidance on Best Management Practices for materials, installation, common trouble points, inspection and maintenance.

ii. **Silt Fence** – The erection of silt fence along the boundary of construction activities will provide temporary erosion and sedimentation control. See Sheet 2 of the WPAP Site Plan which contains a copy of Section 1.4.3 from the Edwards Aquifer Rules: Technical Guidance on Best Management Practices for materials, installation, common trouble points, inspection and maintenance.

iii. **Rock Berm** – The use of rock berms throughout the site will provide temporary erosion and sedimentation control. See Sheet 2 of the WPAP Site Plan which contains a copy of Section 1.4.5 from the Edwards Aquifer Rules: Technical Guidance on Best Management Practices for materials, installation, common trouble points, inspection and maintenance.

iv. **Inlet Protection –** The installation of inlet protection consisting of permeable barriers will provide removal of sediment prior to it entering storm drain inlets. Install protection at storm sewer inlets that are operable during construction. Inlet protection materials should be approved by local jurisdiction prior to installation and should ensure that flows are treated and able to enter the storm drain without causing local flooding.

v. **Construction Staging Area** – The construction staging area will provide on-site pollution prevention.

vi. **Concrete Truck Washout Pit** – A concrete truck washout pit aids in the final cleanup and prevents unnecessary discharge of concrete residue from contaminating the storm water runoff. See Sheet 2 of the WPAP Site Plan which contains a copy of Section 1.4.18 from the Edwards Aquifer Rules: Technical Guidance on Best Management Practices for materials, installation, common trouble points, inspection and maintenance.

c. Silt fence and rock berms (see section "b") will be used to prevent sediment-laden runoff from entering sensitive features on this site and surface streams off the site.

d. The flow to the natural sensitive features on this site, to a maximum practical extent, will not be disturbed. No clearing, excavation or grading will occur within the buffer zone of the sensitive feature. If another naturally occurring sensitive feature is identified during construction all activity will be stopped and the contractor should notify TCEQ.

THE WORSHIP PLACE
STRUCTURAL PRACTICES

Structural practices installed to prevent the runoff of pollutants from exposed areas of the site are:

- Silt fence
- Stabilized Construction Entrance/Exit
- Construction Staging Area
- Concrete Truck Washout Pit
- Rock Berm
- Inlet Protection

For the majority of the disturbed soil within the limits of this project, silt fence will capture and hold sediment laden runoff.

Since no part of this site is located within the floodplain, placement of these structure practices within the floodplain is avoided.

POST-DEVELOPMENT WATERSHED A1														
Watershed Area	**8.00**							**AC**	**WS Composite CN**	**89.1**	WATERSHED SOIL COVER FOR %			
Curve Number (CN) / Soil Group (SG) (%)	A	(%)	B	(%)	C	(%)	D	(%)	Composite CN	CN Classification	A	B	C	D
Classification Composite CN	36	0.0	60	0.0	73	0.0	79	100.0	79.0	Woods, Fair	0	0	0	81058
	49	0.0	69	0.0	79	0.0	84	100.0	84.0	Pasture Land: Fair condition (grass cover 50% to 75%)	0	0	0	111782
	98	0.0	98	0.0	98	0.0	98	100.0	98.0	Concrete/ Gravel/ Roof	0	0	0	155752

POST-DEVELOPMENT WATERSHED B1														
Watershed Area	**1.64**							**AC**	**WS Composite CN**	**90.4**	WATERSHED SOIL COVER FOR %			
Curve Number (CN) / Soil Group (SG) (%)	A	(%)	B	(%)	C	(%)	D	(%)	Composite CN	CN Classification	A	B	C	D
Classification Composite CN	49	0.0	69	0.0	79	0.0	84	100.0	84.0	Pasture Land: Fair condition (grass cover 50% to 75%)	0	0	0	38628
	98	0.0	98	0.0	98	0.0	98	100.0	98.0	Streets and Roads: Paved; curbs and storm sewers (excluding right-of-way)	0	0	0	32810

POST-DEVELOPMENT DRAINAGE CALCULATIONS (NRCS; SCS Curve Number Method) - City of Georgetown

Governing References:

City of Georgetown Drainage Criteria Manual

Manning's: COG DCM, Table 3-8 — Travel Time: COG DCM, eq. 3-11 — Velocity: COG DCM, Figure 3-12 — Travel Time: COG DCM, EQUATION 3-13 — Travel Time: COG DCM, EQUATION 3-13 — $T_C = T_1 + T_{SC} + T_{CH}$ — $T_{LAG} = 0.6(T_C)$

WATERSHEDS					SHEET FLOW				SHALLOW CONCENTRATED FLOW					CHANNEL / REACH						Q(cfs)			
COMP. POINT	CONTRIB-UTING AREAS	AREA ACREAGE (Ac.)	SQUARE MILES (mi^2)	COMPOSITE CN	n	L	s	T_S	PAVED	L	s	vel.	T_{SC}	L	s	vel.	T_{CH}	T_C	T_{lag}	2	10	25	100
						(ft)	(%)	(Min)	(Y/N)	(ft)	(%)	(ft/s)	(Min)	(ft)	(%)	(ft/s)	(Min)	(Min)	(Min)				
CP-A	A1	8.00	0.012500	89.1	0.40	100	3.7%	14.72	N	246	6.0%	4.0	1.0	896	2.2%	6.0	2.5	18.2	10.9	12.2	20.4	25.3	32.1
CP-B	B1	1.64	0.002563	90.4	0.011	100	2.0%	1.06	N	30	3.0%	2.8	0.2	913	2.6%	6.0	2.5	6.0	3.6	3.7	5.8	7.1	8.8

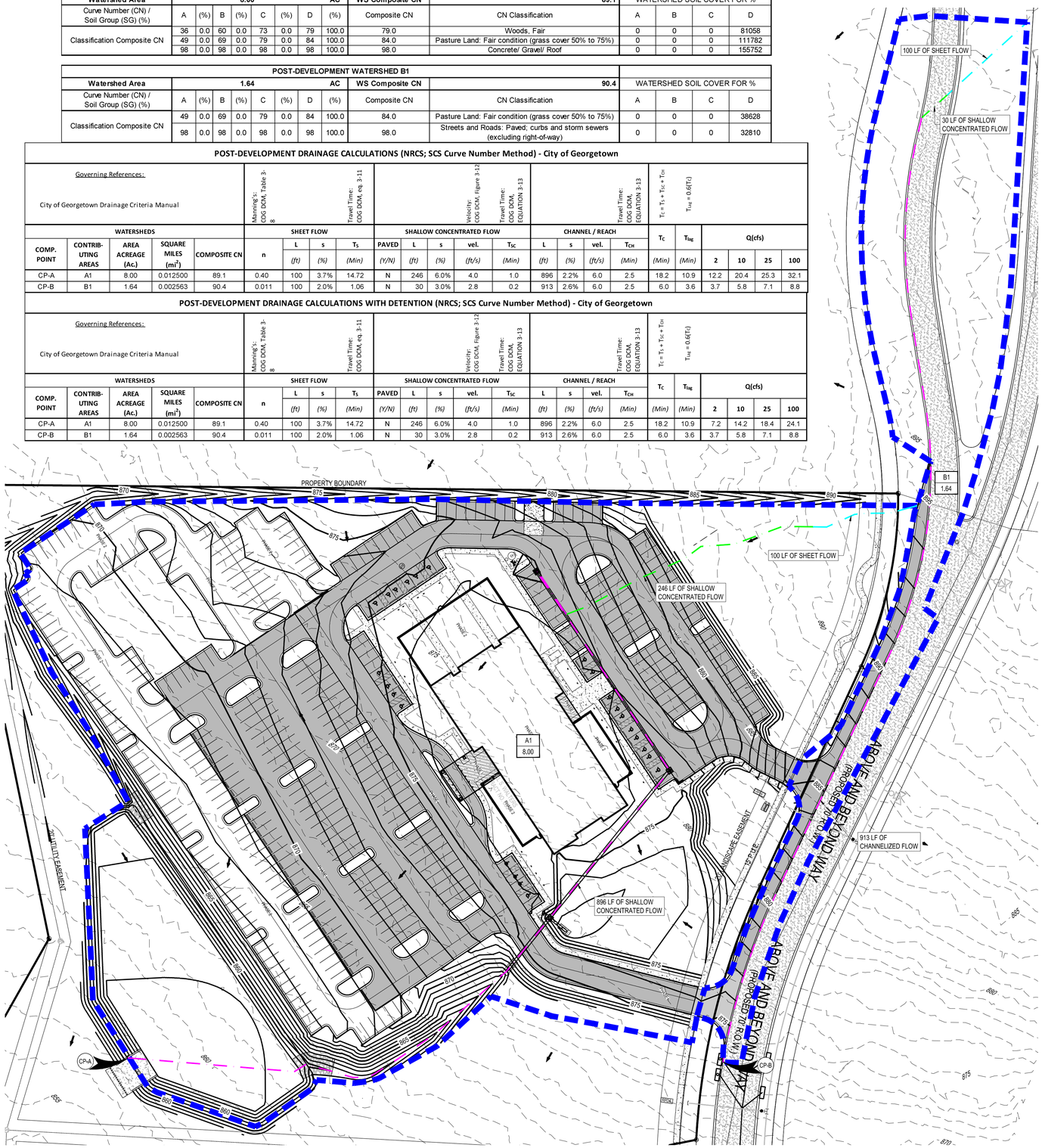
POST-DEVELOPMENT DRAINAGE CALCULATIONS WITH DETENTION (NRCS; SCS Curve Number Method) - City of Georgetown

Governing References:

City of Georgetown Drainage Criteria Manual

Manning's: COG DCM, Table 3-8 — Travel Time: COG DCM, eq. 3-11 — Velocity: COG DCM, Figure 3-12 — Travel Time: COG DCM, EQUATION 3-13 — Travel Time: COG DCM, EQUATION 3-13 — $T_C = T_1 + T_{SC} + T_{CH}$ — $T_{LAG} = 0.6(T_C)$

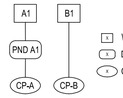
WATERSHEDS					SHEET FLOW				SHALLOW CONCENTRATED FLOW					CHANNEL / REACH						Q(cfs)			
COMP. POINT	CONTRIB-UTING AREAS	AREA ACREAGE (Ac.)	SQUARE MILES (mi^2)	COMPOSITE CN	n	L	s	T_S	PAVED	L	s	vel.	T_{SC}	L	s	vel.	T_{CH}	T_C	T_{lag}	2	10	25	100
						(ft)	(%)	(Min)	(Y/N)	(ft)	(%)	(ft/s)	(Min)	(ft)	(%)	(ft/s)	(Min)	(Min)	(Min)				
CP-A	A1	8.00	0.012500	89.1	0.40	100	3.7%	14.72	N	246	6.0%	4.0	1.0	896	2.2%	6.0	2.5	18.2	10.9	7.2	14.2	18.4	24.1
CP-B	B1	1.64	0.002563	90.4	0.011	100	2.0%	1.06	N	30	3.0%	2.8	0.2	913	2.6%	6.0	2.5	6.0	3.6	3.7	5.8	7.1	8.8



LEGEND

- PROPERTY BOUNDARY
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR (875)
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR (875)
- EXISTING WATERSHED
- SHEET FLOW
- SHALLOW CONCENTRATED FLOW
- CHANNEL FLOW
- FLOW ARROW
- COMPUTATION POINT (X.X)
- WATERSHED IDENTIFICATION (X-X)
- WATERSHED AREA (AC) (X.XXX)

HYDROLOGIC MODEL TREE



KEY NOTES

- x WATERSHED / SUB-BASIN
- x DETENTION POND
- x COMPUTATION POINT

NOTES:

1. SUBJECT TRACT PART OF WOODSIDE WEST PRELIMINARY PLAT BY STEGER BIZZELL, BLOCK A LOT 34.
2. COMPUTATION POINT DERIVED FROM WATERSHEDS C-2C & C-3C FROM STEGER BIZZELL APPROVED PLAN SET FOR WOODSIDE WEST CONSTRUCTION PLANS, LOCATED ON SHEETS 6 & 7.
3. WATERSHED DISCHARGES DOWNSTREAM OF SITE AS DESIGNED IN EXISTING CONDITIONS PER STEGER BIZZELL WOODSIDE WEST PLANS.
4. THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) METHOD (TYPE III RAINFALL DISTRIBUTION) AND THE HEC-HMS 4.8 SOFTWARE PACKAGE WERE USED FOR THE DETERMINATION OF THE RUNOFF, DETENTION AND WATER QUALITY POND DESIGN PER THE CITY OF GEORGETOWN DRAINAGE CRITERIA MANUAL (D.C.M.).
5. WATERSHED BOUNDARIES WERE ESTABLISHED USING A COMBINATION OF LIDAR DATA RECEIVED FROM TNRIS, AERIAL PHOTO EVALUATION, FIELD INVESTIGATIONS AND SURVEY DATA.
6. ACCORDING TO THE NRCS WEB SOIL SURVEY, THE EXISTING ON AND OFF-SITE SOILS WITHIN THE AREA OF INTEREST HAVE BEEN CLASSIFIED AS HYDROLOGIC SOIL GROUP "D".
7. FOR THE HYDROLOGIC COMPUTATION, THE EXISTING AND PROPOSED CURVE NUMBERS WERE TAKEN FROM TABLES 3-4 THROUGH 3-7 OF THE CITY OF GEORGETOWN DCM.
8. THE MANNING'S "N" VALUES WERE TAKEN FROM TABLE 3-8 OF THE CITY OF GEORGETOWN DCM (MANNING'S "N" VALUES FOR SHEET FLOW).
9. FOR THE NRCS METHOD TIME OF CONCENTRATION (T_C) COMPUTATION, EQUATIONS 3-11 THROUGH 3-13 FROM THE CITY OF GEORGETOWN D.C.M. WERE USED.
10. THE EQUATION FOR SOLVING T_{LAG} WAS DERIVED FROM EQUATION 3-10 "NRCS UNIT HYDROGRAPH PARAMETERS"; T_{LAG}= 0.6*(TIME OF CONCENTRATION)
11. ATLAS 14 RAINFALL INTENSITIES WHERE UTILIZING FOR EXISTING PEAK FLOW CALCULATIONS
12. THIS ANALYSIS SHOWS THAT DEVELOPMENT CAN BE MITIGATED WITH THE ONSITE DETENTION PONDS AND STORMWATER WILL NOT INCREASE ON THE ADJACENT PROPERTIES DO TO DEVELOPMENT.
13. 24-HOUR RAINFALL DEPTHS USED TO CALCULATE FLOW RATES WERE DETERMINED UTILIZING NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES

DETENTION ANALYSIS RESULTS

STORM EVENT	PEAK ELEVATION	PEAK STORAGE	PROPOSED DETAINED DISCHARGE FROM CP-A	PROPOSED UNDETAINED DISCHARGE FROM CP-A	EXISTING CONDITIONS DISCHARGE FROM CP-A	DIFFERENCE
2 YEAR STORM	859.1'	52,422 CU FT	7.2 CFS	12.2 CFS	8.6 CFS	-1.4 CFS
10 YEAR STORM	859.5'	63,856 CU FT	14.2 CFS	20.4 CFS	16.5 CFS	-2.3 CFS
25 YEAR STORM	859.7'	69,707 CU FT	18.4 CFS	25.3 CFS	21.3 CFS	-2.9 CFS
100 YEAR STORM	859.9'	75,648 CU FT	24.1 CFS	32.1 CFS	28.0 CFS	-3.9 CFS

SCALE: 1"=50'

0 25' 50' 75' 100'

1/26/2024

STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

MATKINHOOVER ENGINEERING & SURVEYING
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TEXAS REGISTERED ENGINEERING FIRM F-00412 SURVEYING FIRM F-10024000
8 SPENCER ROAD SUITE 100
BOERNE, TEXAS 78006
OFFICE: 830.981.9000
CONTACT@MATKINHOOVER.COM

POST-DEVELOPMENT DRAINAGE AREA MAP
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

CG822

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	41

2024-___-SDP

Z:\PROJECTS\3404 - 10 AC. The Worship Place\Ch41 3404\00 POST-DEVELOPMENT DRAINAGE AREA MAP-CG822.dwg

Date: Jan 26, 2024, 9:07am User ID: ahayward

Designated and qualified person(s) shall inspect Pollution Control Measures every seven days and within 24 hours after a storm event. An inspection report that summarized the scope of the inspection, names and qualifications of personnel conducting the inspection, date of inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of the Storm Water T.P.D.E.S. Plan. A copy of the inspection report form is provided as page 2 of this attachment. Inspection and Maintenance Guidelines are as follows:

Construction Entrance:

(1) 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.
(2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
(4) 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.
(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

Inlet Protection:

(1) Inspection should be made weekly and after each rainfall. Repair or replacement should be made promptly as needed by the contractor.
(2) Remove sediment when buildup reaches a depth of 3 inches. Removed sediment should be deposited in a suitable area and in such a manner that it will not erode.
(3) Check placement of device to prevent gaps between device and curb.
(4) Inspect filter fabric and patch or replace if torn or missing.
(5) Structures should be removed and the area stabilized only after the remaining drainage area has been properly stabilized.

Silt Fence:

(1) Inspect all fencing weekly, and after any rainfall.
(2) Remove sediment when buildup reaches 6 inches.
(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
(4) 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.
(5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

Temporary/Permanent Vegetation:
(1) Permanent vegetation should be inspected weekly and after each rain event to locate and repair any erosion.
(2) Erosion from storms or other damage should be repaired as soon as practical by regrading the area and applying new seed.
(3) If the vegetated cover is less than 80%, the area should be reseeded.

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

Concrete Washout:
(1) The washout should be maintained in a condition, which will prevent leaking or spillage of concrete onto the site.
(2) All concrete spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor
(3) Plastic lining should be inspected weekly for hole, tears or other defects that compromise the impermeability of the material.
(4) The hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

INSPECTION REPORT

Approved Inspection intervals:

i. Conducted once every 7 days AND within 24 hours after rainfall event greater than 0.5 inch

PROJECT NAME _____

REPORT # _____ DATE _____

INSPECTOR _____ TITLE _____

REASON FOR INSPECTION (CHECK ONE) Weekly ____ Or ½" Rain ____

DATE OF LAST RAINFALL _____ AMOUNT _____

SITE CONDITIONS:

EROSION AND SEDIMENTATION CONTROLS	IN CONFORMANCE		EFFECTIVE	
Concrete Washout Area		Yes/No/Na		Yes/No
Construction Entrance		Yes/No/Na		Yes/No
Permanent Vegetation		Yes/No/Na		Yes/No
Silt Fence		Yes/No/Na		Yes/No
Rock Berm		Yes/No/Na		Yes/No

RECOMMENDED REMEDIAL ACTIONS:

COMMENTS:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

INSPECTOR: _____ DATE: _____

THE WORSHIP PLACE
SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Soil stabilization practices will be used to reduce the amount of erosion from the site. Only the areas essential for immediate construction should be cleared. This will keep a buffer zone around the area of construction as these areas will remain undisturbed until construction begins there.

Interim soil stabilization areas are determined in the field. Temporary vegetation will be used as an aid to control erosion on critical sites during establishment period of protective vegetation when construction is temporarily ceased.

Permanent soil stabilization areas are indicated on the included Site Plan. Permanent seeding will take place in these areas when construction is permanently ceased.

Stabilization practices should be installed according to the following rules:

- Stabilization measures shall be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

- Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by weather conditions, stabilization measures shall be initiated as soon as practical.

- In areas experiencing droughts where the initiation of stabilization measure by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practical.

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The Worship Place

WPAP

Section VII

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: Cody Morris, P.E.

Date: 1/26/24

Signature of Customer/Agent

Regulated Entity Name: The Worship Place

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

The proposed land use for this 10.41-acre site is for a church / religious organization. The runoff upgradient of the proposed development originates from adjacent undeveloped lots just north of the property. All upgradient stormwater runoff flowing upgradient and near our site will be intercepted and diverted downstream by a proposed interceptor channel that diverts the water around our site Any upgradient stormwater will be treated by rock berms, silt fence, and vegetative filter strips by reducing the amount of sediment, organic matter, and harmful substances in the runoff and before the runoff enters the offsite surface water.

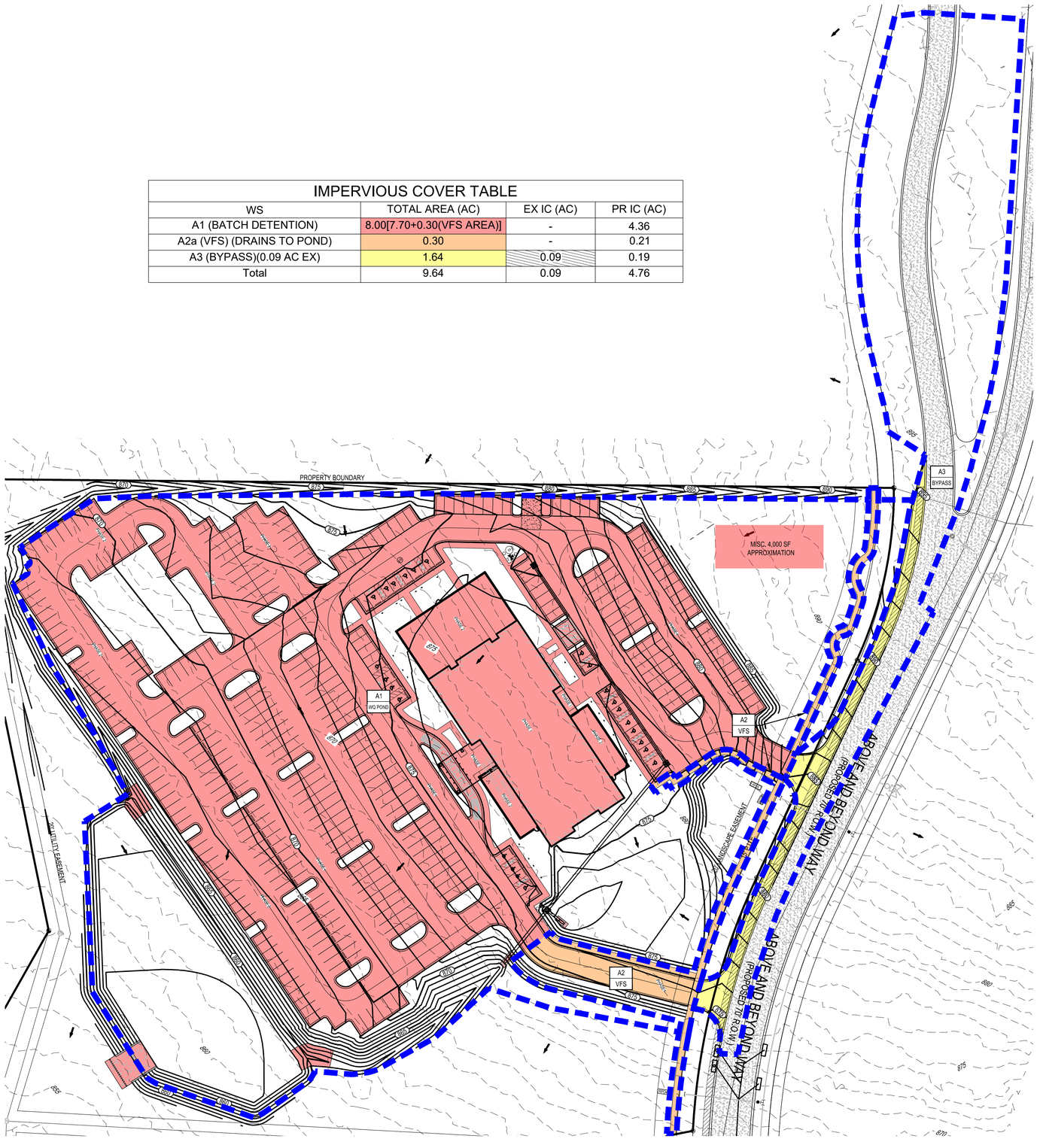
No sensitive features exist on the proposed 10.41-acre Worship Place development.

The proposed land use for this 10.41-acre site is for a church / religious organization. The on-site BMPs for this site will consist of rock berms, silt fence, vegetative filter strips, and a batch detention water quality pond. The on-site runoff of the proposed development will be captured and routed through these proposed BMPs. These BMPs will provide water quality protection by reducing the amount of sediment, organic matter, and harmful substances in the runoff and before the runoff enters the offsite surface water. The proposed water quality pond, along with Vegetative Filter Strips are designed to remove more than 80% of the Total Suspended Solids (TSS) within the Worship Place project development and the proposed 10.41-acre development in accordance with TCEQ's Technical Guidance Manual RG-348.

The BMPs proposed for this site will consist of rock berms, silt fence and a batch detention water quality pond. These BMPs will provide water quality protection by reducing the amount of sediment, organic matter, and harmful substances in the runoff and before the runoff enters the offsite surface water.

See Construction Plans Attached

IMPERVIOUS COVER TABLE			
WS	TOTAL AREA (AC)	EX IC (AC)	PR IC (AC)
A1 (BATCH DETENTION)	8.00[7.70+0.30(VFS AREA)]	-	4.36
A2a (VFS) (DRAINS TO POND)	0.30	-	0.21
A3 (BYPASS)(0.09 AC EX)	1.64	0.09	0.19
Total	9.64	0.09	4.76



LEGEND

- PROPERTY BOUNDARY
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR (875)
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR (875)
- EXISTING WATERSHED
- SHEET FLOW
- SHALLOW CONCENTRATED FLOW
- CHANNEL FLOW
- FLOW ARROW
- X-X / X.XXX — WATERSHED IDENTIFICATION / BMP PROPOSED

SCALE: 1"=50'

0 25' 50' 75' 100'

1/26/2024

STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED
PROFESSIONAL ENGINEER

REVISIONS:

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TEXAS REGISTERED ENGINEERING FIRM F-19924 SURVEYING FIRM F-10124500

IMPERVIOUS COVER EXHIBIT
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	

2024-___-SDP

80% TSS Removal Calculation (TCEQ) As Permitted

Drainage Area			Proposed On-Site Impervious Area				TSS Removed with BMPs
Main WS ID	Sub WS ID	on-site Drainge Area (AC)	*PAVING (AC)*	*BUILDING (AC)*	*MISC (AC)*	*Total (AC)*	*Lbs/Year*
A1	A1 (Batch Detention)	8.00	3.60	0.61	0.15	4.36	4,120
A2a	A2a (VFS)	0.30	0.21	0.00	0.00	0.21	199
A3	A3 (Bypass)	1.64	0.19	0.00	0.00	0.19	-
	Totals:	9.64	4.00	0.61	0.15	4.76	4,319

TCEQ 80% Required Project TSS Removal	4,065	254 over 80% removal
CoG 85% Required Project TSS Removal	4,319	0 over 85% removal

Notes:

1) The "ByPass" Impervious Cover is not being treated by a permanent BMP. Other BMPs are oversized to achieve required removal efficiency.

2)

3)

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: The Worship Place 3404.00
Date Prepared: 1/26/2024

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 =	Williamson	
Total project area included in plan * =	10.41	acres
Predevelopment impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious area within the limits of the plan* =	4.76	acres
Total post-development impervious cover fraction * =	0.46	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4065	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. = A1

Total drainage basin/outfall area =	8.00	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	4.36	acres
Post-development impervious fraction within drainage basin/outfall area =	0.55	
$L_{M\ THIS\ BASIN}$ =	3795	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 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 = (BMP efficiency) x P x (A_I x 34.6 + A_P x 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 =	**8.00**	acres
A_I =	**4.36**	acres
A_P =	**3.64**	acres
L_R =	**4450**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**4120**	lbs.
F =	**0.93**	

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 =	**2.20**	inches
Post Development Runoff Coefficient =	**0.38**	
On-site Water Quality Volume =	**24510**	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 =	**4902**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**29412**	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.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: The Worship Place 3404.00
Date Prepared: 1/26/2024

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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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 =	Williamson	
Total project area included in plan * =	10.41	acres
Predevelopment impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious area within the limits of the plan* =	4.76	acres
Total post-development impervious cover fraction * =	0.46	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4065	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. = A2

Total drainage basin/outfall area =	0.30	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.21	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	183	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:

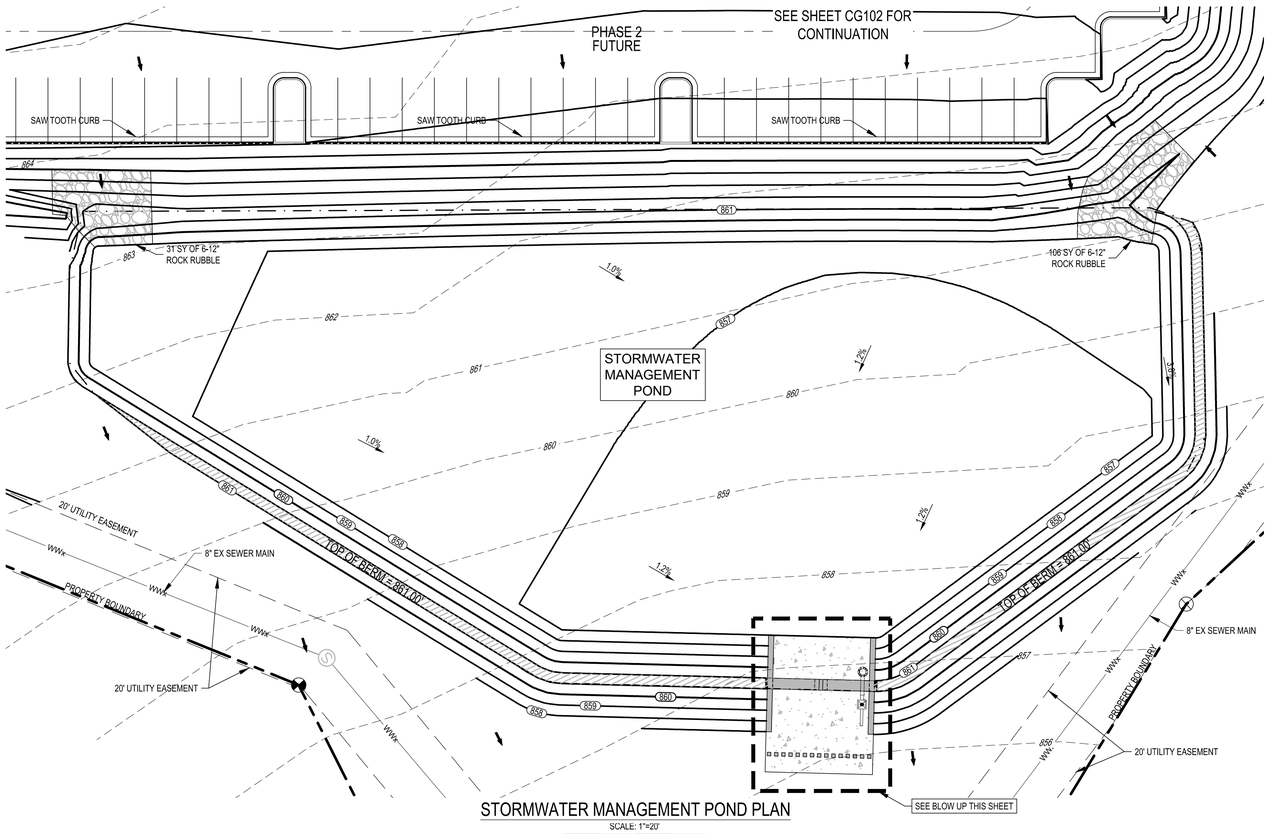
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	0.30	acres
A_I =	0.21	acres
A_P =	0.09	acres
L_R =	199	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 199 lbs.

F = 1.00



STORMWATER MANAGEMENT POND PLAN

SCALE: 1"=20'

0 10' 20' 30' 40'

Contour Elevation	Contour Area (sq. ft.)	Depth (ft)	Incrumental Voulme Avg. End (cu. Ft.)	Cumulative Voulme Avg. End (cu. Ft.)	Incrumental Voulme Conic (cu. Ft.)	Cumulative Voulme Conic (cu. Ft.)
856.1	31.4	N/A	N/A	0	N/A	0
856.2	235.2	0.1	13.33	13.33	11.75	11.75
856.3	763.79	0.1	49.95	63.28	47.43	59.18
856.4	1,509.70	0.1	113.67	176.95	111.58	170.76
856.5	2,494.21	0.1	200.2	377.15	198.15	368.9
856.6	3,740.15	0.1	311.72	688.87	309.62	678.53
856.7	5,272.10	0.1	450.61	1139.48	448.43	1126.95
856.8	7,121.70	0.1	619.69	1759.17	617.38	1744.33
856.9	9,333.91	0.1	822.78	2581.95	820.29	2564.62
857	11,850.07	0.1	1059.2	3641.15	1056.7	3621.32
857.1	14,334.14	0.1	1309.21	4950.36	1307.24	4928.56
857.2	16,171.39	0.1	1525.28	6475.64	1524.35	6452.92
857.3	17,615.69	0.1	1689.35	8164.99	1688.84	8141.76
857.4	18,834.62	0.1	1822.52	9987.51	1822.18	9963.93
857.5	19,942.55	0.1	1938.86	11926.37	1938.59	11902.53
857.6	20,962.28	0.1	2045.24	13971.61	2045.03	13947.56
857.7	21,899.89	0.1	2143.11	16114.72	2142.94	16090.49
857.8	22,768.02	0.1	2233.4	18348.11	2233.26	18323.75
857.9	23,569.09	0.1	2316.86	20664.97	2316.74	20640.49
858	24,312.50	0.1	2394.08	23059.05	2393.98	23034.47
858.1	24,993.29	0.1	2465.29	25524.34	2465.21	25499.68
858.2	25,620.35	0.1	2530.68	28055.02	2530.62	28030.3
858.3	26,199.49	0.1	2590.99	30646.01	2590.94	30621.24
858.4	26,603.02	0.1	2640.13	33286.14	2640.1	33261.34
858.5	26,824.47	0.1	2671.37	35957.51	2671.37	35932.7
858.6	27,042.63	0.1	2693.36	38650.87	2693.35	38626.05
858.7	27,261.34	0.1	2715.2	41366.06	2715.19	41341.24
858.8	27,480.61	0.1	2737.1	44103.16	2737.09	44078.33
858.9	27,700.43	0.1	2759.05	46862.21	2759.04	46837.38
859	27,920.81	0.1	2781.06	49643.28	2781.06	49618.43
859.1	28,141.75	0.1	2803.13	52446.4	2803.12	52421.56
859.2	28,363.24	0.1	2825.25	55271.65	2825.24	55246.8
859.3	28,585.29	0.1	2847.43	58119.08	2847.42	58094.22
859.4	28,807.89	0.1	2869.66	60988.74	2869.65	60963.87
859.5	29,031.05	0.1	2891.95	63880.69	2891.94	63855.81
859.6	29,254.76	0.1	2914.29	66794.98	2914.28	66770.09
859.7	29,479.03	0.1	2936.69	69731.67	2936.68	69706.77
859.8	29,703.86	0.1	2959.14	72690.81	2959.14	72665.91
859.9	29,929.24	0.1	2981.65	75672.47	2981.65	75647.56
860	30,155.18	0.1	3004.22	78676.69	3004.21	78651.77
860.1	30,381.67	0.1	3026.84	81703.53	3026.84	81678.61
860.2	30,608.72	0.1	3049.52	84753.05	3049.51	84728.12
860.3	30,836.32	0.1	3072.25	87825.3	3072.25	87800.37
860.4	31,064.48	0.1	3095.04	90920.34	3095.03	90895.4
860.5	31,293.20	0.1	3117.88	94038.23	3117.88	94013.28
860.6	31,522.47	0.1	3140.78	97179.01	3140.78	97154.05
860.7	31,752.30	0.1	3163.74	100342.75	3163.73	100317.78
860.8	31,982.68	0.1	3186.75	103529.5	3186.74	103504.53
860.9	32,213.62	0.1	3209.82	106739.31	3209.81	106714.33
861	32,213.62	0.1	1610.68	108349.99	1073.85	107788.18

WATER QUALITY SURFACE ELEVATION 858.3'

2 YR WATER SURFACE ELEVATION 859.1'

10 YR WATER SURFACE ELEVATION 859.5'

25 YR WATER SURFACE ELEVATION 859.7'

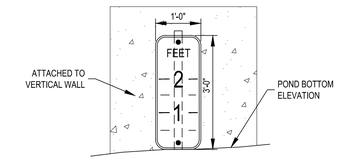
100 YR WATER SURFACE ELEVATION 859.9'

LEGEND - EXISTING

- PROPERTY BOUNDARY
- RIGHT-OF-WAY (ROW)
- BUILDING SETBACK
- PUBLIC UTILITY EASEMENT (P.U.E.)
- ADJOINING PROPERTY LOT LINE
- PROPERTY LOT LINE
- EXISTING WIRE FENCING
- EXISTING OVERHEAD UTILITY
- EXISTING 1 FT CONTOUR
- EXISTING 5 FT CONTOUR

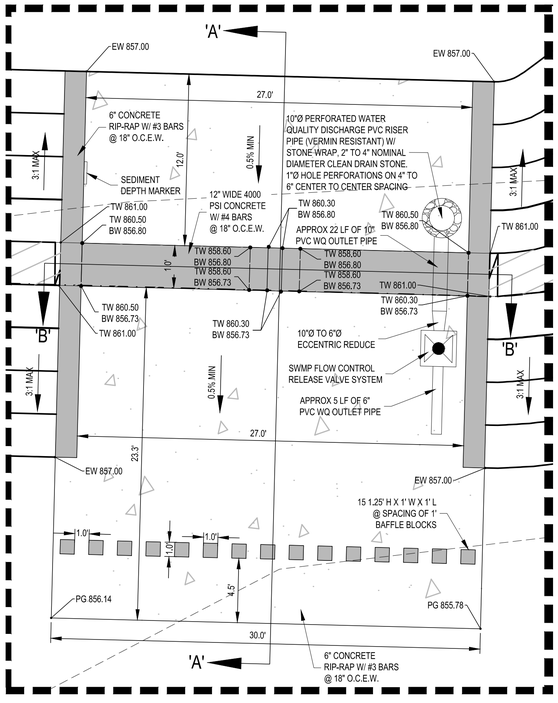
LEGEND - PROPOSED

- PROPOSED ASPHALT ROAD
- PROPOSED CONCRETE SIDEWALK [5 & 6, C-501]
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BUILDING
- PROPOSED ROAD CENTERLINE
- PROPOSED 1 FT CONTOURS
- PROPOSED 5 FT CONTOURS
- PROPOSED DITCH FLOWLINE
- PROPOSED GRADE HIGH POINT
- PROPOSED TREE PROTECTION FENCING [EC-01A AND EC-09, CG851]
- DIRECTION OF FLOW
- PERCENT SLOPE AND DIRECTION
- PROPOSED SPOT ELEVATION RE: [C-001] FOR ABBREVIATIONS
- DETAIL REFERENCE: [DETAIL #, SHEET]



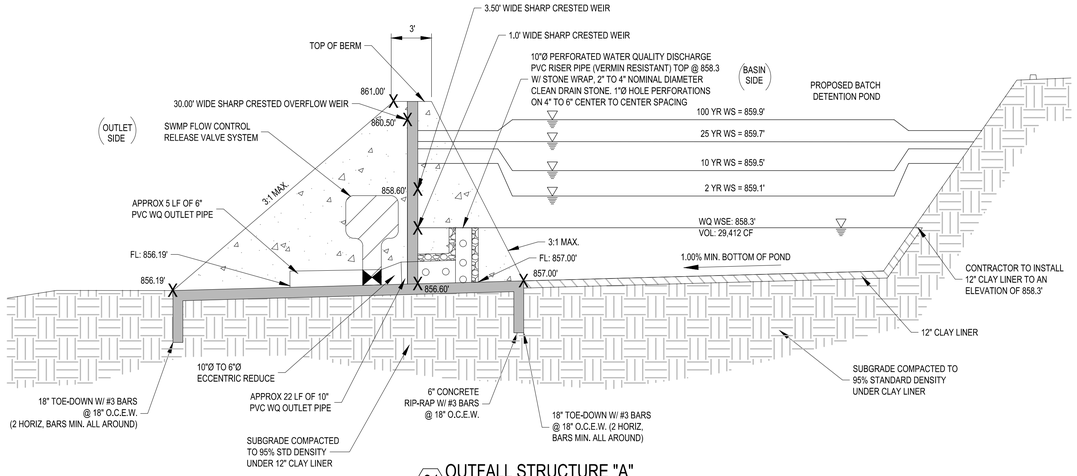
SEDIMENT DEPTH MARKER

NOT TO SCALE



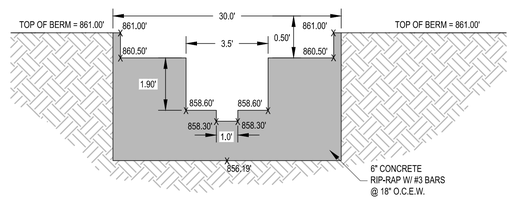
DETENTION POND OUTFALL DETAIL

SCALE: 1"= 5'



01 OUTFALL STRUCTURE "A" SECTION 'A'-'A'

N.T.S.



02 OUTFALL STRUCTURE "A" SECTION 'B'-'B'

N.T.S.

NOTE: ELEVATIONS SHOWN REPRESENT INLET SIDE OF THE OUTFALL STRUCTURE

GENERAL GRADING PLAN NOTES:

1. CONTRACTOR SHALL ENGAGE A LICENSED RAS SPECIALIST TO REVIEW DESIGN PRIOR TO CONSTRUCTION AND CERTIFY COMPLIANCE WITH ALL ADA STANDARDS UPON COMPLETION OF CONSTRUCTION.
2. CONTRACTOR SHALL CLEAR AND GRUB THE ENTIRE STREET RIGHT OF WAY AND COORDINATE WITH OWNER AND ENGINEER TO SELECT CLEAR P.U.E. WHERE APPLICABLE FOR DRY UTILITY INSTALLATION.
3. CONTRACTOR TO GRADE OR REGRADE ALL AREAS WITHIN ROAD ROW FOR POSITIVE DRAINAGE.
4. CONTRACTOR SHALL HYDROMULCH OR WOODMULCH ALL DISTURBED AREAS, INCLUDING RIGHT-OF-WAY, STEEP SLOPES, DRAINAGE DITCHES WHERE SOIL SUBGRADE IS ENCOUNTERED.
5. FUTURE SIDEWALK SHOWN FOR INFORMATION ONLY.
6. ENSURE POSITIVE DRAINAGE TO PROPOSED STORM SEWER CURB INLETS (TYPICAL @ CURB INLET LOW).
7. FIRE HYDRANTS, WATER SERVICES, AND OTHER APPURTENANCES ARE SHOWN SCHEMATICALLY, REFER TO STANDARD DETAILS FOR EXACT PLACEMENT OF THESE FEATURES.

N

SCALE: 1"=20'

0 10' 20' 30' 40'

1/26/2024

STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

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STORMWATER MANAGMENT PLAN
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

CG701

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	38

2024-___-SDP

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Date: Jan 26, 2024, 9:31am User ID: ahoward

80% TSS Removal Calculation (TCEQ) As Permitted

Drainage Area			Proposed On-Site Impervious Area				TSS Removed with BMPs
Main WS ID	Sub WS ID	on-site Drainge Area (AC)	PAVING (AC)	BUILDING (AC)	MISC (AC)	Total (AC)	Lbs/Year
A1	A1 (Batch Detention)	8.00	3.60	0.61	0.15	4.36	4,120
A2a	A2a (VFS)	0.30	0.21	0.00	0.00	0.21	199
A3	A3 (Bypass)	1.64	0.19	0.00	0.00	0.19	-
	Totals:	9.64	4.00	0.61	0.15	4.76	4,319

TCEQ 80% Required Project TSS Removal	4,065	254 over 80% removal
CoG 85% Required Project TSS Removal	4,319	0 over 85% removal

Notes:

1) The "ByPass" Impervious Cover is not being treated by a permanent BMP. Other BMPs are oversized to achieve required removal efficiency.

2)

3)

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: The Worship Place 3404.00
Date Prepared: 1/26/2024

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 =	Williamson	
Total project area included in plan * =	10.41	acres
Predevelopment impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious area within the limits of the plan* =	4.76	acres
Total post-development impervious cover fraction * =	0.46	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4065	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. = A2

Total drainage basin/outfall area =	0.30	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.21	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	183	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_M) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_M = (BMP efficiency) x P x (A_C x 34.6 + A_P x 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_M = TSS Load removed from this catchment area by the proposed BMP

A_C =	0.30	acres
A_I =	0.21	acres
A_P =	0.09	acres
L_M =	199	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 199 lbs.

F = 1.00

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: The Worship Place 3404.00
Date Prepared: 1/26/2024

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

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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 =	Williamson	
Total project area included in plan * =	10.41	acres
Predevelopment impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious area within the limits of the plan* =	4.76	acres
Total post-development impervious cover fraction * =	0.46	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4065	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. = A1

Total drainage basin/outfall area =	8.00	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	4.36	acres
Post-development impervious fraction within drainage basin/outfall area =	0.55	
$L_{M\ THIS\ BASIN}$ =	3795	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 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_M) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_M = (BMP efficiency) x P x (A_C x 34.6 + A_P x 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_M = TSS Load removed from this catchment area by the proposed BMP

A_C =	8.00	acres
A_I =	4.36	acres
A_P =	3.64	acres
L_M =	4450	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 4120 lbs.

F = 0.93

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 =	2.20	inches
Post Development Runoff Coefficient =	0.38	
On-site Water Quality Volume =	24510	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 =	4902	
Total Capture Volume (required water quality volume(s) x 1.20) =	29412	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.

STORMWATER MANAGEMENT POND NOTES:

1. PONDS SHALL BE MAINTAINED BY THE FACILITIES PERSONNEL.
2. 12" CLAY LINER TO BE PLACED WITHIN THE WHOLE OF THE WET PERIMETER OF THE POND. THE WET PERIMETER SURFACE IS THE AREA OF THE POND THAT STARTS AT THE LOWEST, BOTTOM PART OF THE POND AND EXTENDS OUT AND UP TO THE TOP INSIDE EDGE OF THE BERM.
3. A GEOMEMBER LINER CAN BE USED INSTEAD OF A CLAY LINER. THE LINER SHOULD HAVE A MINIMUM THICKNESS OF 30 MILS AND BE ULTRAVIOLET RESISTANT, IT ALSO MUST COVER THE WET PERIMETER SURFACE OF THE POND.

STORMWATER MANAGEMENT POND FLOW CONTROL RELEASE VALVE CIRCUIT DIAGRAM NOTES:

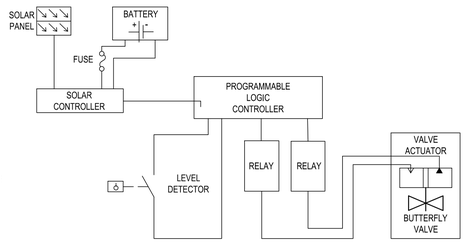
BATCH DETENTION OVERVIEW:
THE BASIN IS TYPICALLY FILLED QUICKLY BY STORMWATER MAKING THE INFLUENCE TIME RELATIVELY SHORT. THE RESIDENCE TIME OF THE STORMWATER IS TWELVE (12) HOURS AND IS CONTROLLED BY THE RELEASE VALVE (NORMALLY SHUT) AND ACTUATOR THAT ARE INSTALLED ON THE OUTLET STRUCTURE OF THW WATER QUALITY POND. THE CONTROL VALVE OPENS ONCE THE DESIRE RESIDENCE TIME IS ACHIEVED AFTER A STORM EVENT. THE TREATED WATER IS RELEASED SLOWLY OVER A TIME OF 24 TO 48 HOURS INTO THE DETENTION POND.

VALVE/ACTUATOR:
THE VALVE/ACTUATOR ASSEMBLY CONSISTS OF A BUTTERFLY VALVE WITH A SMALL 12V DC ACTUATOR. THE VALVE IS A QUARTER TURN VALVE. THE ACTUATOR OPERATES THE VALVE BETWEEN THE FULL OPEN AND FULL CLOSED POSITIONS. A MECHANICAL HAND CRANK ALLOWS A PHYSICAL OVERRIDE OF THE VALVE POSITION.

THE VALVE IS A KEYSTONE 6-INCH (100MM) BUTTERFLY VALVE MOUNTED WITH AN EPI-6 12V DC ACTUATOR. THE EPI-6 ACTUATOR REQUIRES AN OPEN OR CLOSE SIGNAL OF 10 SECONDS. THE ACTUATOR HAS LIMIT SWITCHES THAT DETECT END OF TRAVEL AND SHUT OFF THE INCOMING OPEN OR CLOSE SIGNAL TO THE ACTUATOR ONCE THE VALVE REACHES THE FULL OPEN OR CLOSED POSITION. OVER TORQUE SENSORS WILL SHUT DOWN THE ACTUATOR IN THE EVENT OF AN OVER TORQUE SITUATION.

CONTROLLER SYSTEM SPECIFICATIONS:
POWER - THE CONTROLLER SHALL BE POWERED BY A SELF-CONTAINED, RENEWABLE POWER SOURCE (SUCH AS SOLAR POWER) IF ELECTRICAL POWER IS NOT AVAILABLE. A SINGLE SUPPLY VOLTAGE FOR ALL COMPONENTS IS DESIRABLE.
PROGRAMMABILITY - THE CONTROLLER SHALL BE PROGRAMMABLE. IT SHALL BE POSSIBLE TO UPDATE PROGRAMS IN THE FIELD. THE DETENTION TIME AND DRAW-DOWN TIME SHALL BE ADJUSTABLE IN HOURS FROM 0 HOURS TO 72 HOURS. THE CONTROLLER SHALL BE PROGRAMMED TO HOLD THE STROMWATER EVENT FOR A MINIMUM OF 12 HOURS AND RELEASE THE BASIN AT THE FOLLOWING 6 A.M. TIME PERIOD. IF 6 A.M. FULLS BEFORE THE MINIMUM 12 HOUR RETENTION TIME THAN THE VALVE WILL STAY CLOSED UNTIL THE FOLLOWING 6 A.M. TIME PERIOD. STORMWATER WILL BE HELD IN THE BASIN FOR A FULL OVERNIGHT THERMAL EXCHANGE CYCLE.
EVENT SENSING - THE CONTROLLER SHALL BE ABLE TO SENSE THE BEGINNING OF A STORM (WATER FILLING THE BASIN), AND THE END OF A STORM (WATER HAS DRAINED FROM THE BASIN).
ENVIRONMENT - THE CONTROLLER SHALL OPERATE IN TEMPERATURES FROM 0ºC TO 55ºC, IN HUMIDITY FROM 10% TO 90% (NON-CONDENSING). THE CONTROLLER SHALL OPERATE DURING PERIODS OF RAINFALL.
SAFETY/SECURITY - THE SYSTEM COMPONENTS SHALL BE LOCKED IN AN ENCLOSURE TO PREVENT ACCIDENTAL CONTACT THAT COULD COMPROMISE THE FUNCTION OF THE APPARATUS OR CAUSE INJURY.
COMPONENTS - COMPONENT PARTS OF THE CONTROLLER SHALL BE OFF THE SHELF, MULTIPLE SOURCE PARTS WHERE POSSIBLE.
MAINTENANCE - THE CONTROLLER SHALL REQUIRE MINIMAL PERIODIC MAINTENANCE. THE CONTROLLER PROGRAM SHALL BE FIELD UPGRADEABLE. THE ABILITY TO MANUALLY OPERATE THE VALVE SHALL BE PROVIDED.
RELIABILITY - 40,000 HOURS (4.6 YEARS) OR GREATER.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, DESIGN OF SENSOR, AUTOMATIC VALVE, CONTROLLER, ETC. TO ENGINEER FOR REVIEW AND APPROVAL.



STORMWATER MANAGEMENT POND FLOW CONTROL RELEASE VALVE CIRCUIT DIAGRAM

TABLE 3-6 CLAY LINER SPECIFICATIONS (COA, 2004)			
PROPERTY	TEST METHOD	UNIT	SPECIFICATION
PERMEABILITY	ASTM D-2434	CM/SEC	1 X 10^{-6}
PLASTICITY INDEX OF CLAY	ASTM D-423 & D-424	%	NOT LESS THAN 15
LIQUID LIMIT OF CLAY	ASTM D-2216	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	ASTM D-422	%	NOT LESS THAN 30
CLAY COMPACTION	ASTM D-2216	%	95% OF STANDARD PROCTOR DENSITY

POND CLAY LINER SPECFICATIONS

GENERAL CONCRETE NOTES FOR DRAINAGE STRUCTURES:
1. ALL CONCRETE PRODUCTION AND CONSTRUCTION SHALL MEET ACI 318-14 SPECIFICATIONS.
2. ALL REINFORCEMENT SHALL BE ASTM 615, GRADE 60 AND MAINTAIN A COVER/CLEAR DISTANCE OF 2" (MINIMUM) FROM ALL CONCRETE EDGES.
3. CONTRACTION JOINTS TO BE PARALLEL AND PERPENDICULAR TO CONCRETE SLAB EDGES; HAVING A MINIMUM SPACING OF 10'-0" AND A MAXIMUM SPACING OF 15'-0".

1 STORMWATER MANAGEMENT POND FLOW CONTROL RELEASE VALVE DETAILS
N.T.S.

DETENTION ANALYSIS RESULTS

STORM EVENT	PEAK ELEVATION	PEAK STORAGE	PROPOSED DETAINED DISCHARGE FROM CP-A	PROPOSED UNDETAINED DISCHARGE FROM CP-A	EXISTING CONDITIONS DISCHARGE FROM CP-A	DIFFERENCE
2 YEAR STORM	859.1'	52,422 CU FT	7.2 CFS	12.2 CFS	8.6 CFS	-1.4 CFS
10 YEAR STORM	859.5'	63,856 CU FT	14.2 CFS	20.4 CFS	16.5 CFS	-2.3 CFS
25 YEAR STORM	859.7'	69,707 CU FT	18.4 CFS	25.3 CFS	21.3 CFS	-2.9 CFS
100 YEAR STORM	859.9'	75,648 CU FT	24.1 CFS	32.1 CFS	28.0 CFS	-3.9 CFS

3404.00 The Worship Place Dention Pond Outfall
Baffle Block Calculations
Channel D Outlet Structure
EQUATIONS FROM HEC-14

v_1 = velocity entering basin
g = gravity constant
y_1 = depth entering basin
y_2 = conjugate depth
F_r = Froude Number
h_3 = baffle block height
N_B = number of baffle blocks
w_B = width of basin
w_3= baffle block width
w_4 = baffle block spacing

w_B = 30.00	ft
v_1 = 2.57	ft/s
g= 32.2	ft/s
y_1 = 0.27	ft

Froude Number

$$Fr_1 = \frac{V_1}{\sqrt{gy_1}} =$$ **0.87**

Conjugate Depth

$$y_2 = \frac{Cy_1}{2}\left(\sqrt{1+8Fr_1^2}-1\right)$$ **0.22**

Height of Baffle Blocks

$h_3 = y_1(0.168Fr_1 + 0.58)$ | 1.25 | USE | **1.25** | FEET FOR CONSTRUCTABLITY

Top Thickness of Baffle Blocks

$0.2h_3$ | 0.25 | USE | **0.25** | FEET FOR CONSTRUCTABLITY

Back Slope of Baffle Block
1:1 slope.

Number of Blocks

$$N_B = \frac{W_B}{1.5h_3}$$ | 7.00 | USE | **7** | BAFFLE BLOCKS FOR CONSTRUCTABLITY

Baffle Block Width and Spacing

$$W_3 = W_4 = \frac{W_3}{2N_B}$$ | 1.00 | USE | **1.0** | FEET FOR CONSTRUCTABLITY

Start of Baffle Block Spacing from Edge

$0.8y_2=$ | 4.50 | USE | **4.50** | FEET FOR CONSTRUCTABLITY

USE 7 - 1.25'H X 1'W X 1'D @ SPACING OF 1 FOOT

1/26/2024
STATE OF TEXAS
CODY LEE MORRIS
131472
LICENSED
PROFESSIONAL ENGINEER

REVISIONS:

MATKINHOOVER ENGINEERING & SURVEYING
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CONTACT@MATKINHOOVER.COM
TEXAS REGISTERED ENGINEERING FIRM F-19012 SURVEYING FIRM F-10024000

STORMWATER MANAGMENT DETAILS
FOR
THE WORSHIP PLACE
RONALD REAGAN BLVD
GEORGETOWN, TX 78633

CG751

JOB NO.	3404.00
DESIGNED BY:	DJK
CHECKED BY:	GDK
SHEET NO:	39

2024-___-SDP

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Date: Jan 26, 2024, 9:04am User ID: dhoward

ATTACHMENT G – INSPECTION AND MAINTENANCE PLAN

NAME OF PROPOSED PROJECT: **The Worship Place**
PROJECT LOCATION: **Georgetown, Texas**
NAME OF APPLICANT: **The Worship Place**

Batch Detention Basin

INSPECTIONS

Basins should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. When possible, inspections should be conducted during wet weather to determine if the pond is meeting the target detention times. In particular, the batch detention control device should be regularly inspected for evidence of clogging, or conversely, for too rapid a release. If the design drawdown times are exceeded by more than 24 hours, then repairs should be scheduled immediately. The upper stage pilot channel, if any, and its flow path to the lower stage should be checked for erosion problems. During each inspection, erosion areas inside and downstream of the BMP should be identified and repaired or revegetated immediately. One inspection should occur between storm events so the manual operation of the valve and controller can be verified.

MAINTENANCE

Mowing: The upper stage, side slopes, embankment, and emergency spillway of the detention basin must be mowed regularly to discourage woody growth and control weeds. Grass areas in and around basins should be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing of grass is performed, a mulching mower should be used, or grass clippings should be caught and removed. More frequent mowing may be required if vegetation exceeds 18 inches of height.

Debris and Litter Removal: Debris and litter will accumulate near the detention control device and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

Erosion Control: The pond side slopes, emergency spillway, and embankment all may periodically suffer from slumping and erosion, although this should not occur often if the soils are properly compacted during construction. regrading and revegetation may be required to correct the problems. Similarly, the channel connecting an upper stage with a lower stage may periodically need to be replaced or repaired.

Structural Repairs and Replacement: With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. These repairs should include patching of cracked concrete, sealing of voids, and removal of vegetation from cracks and joints. The various inlet/outlet and riser works in a basin will eventually deteriorate and must be replaced. Public works experts have estimated that corrugated metal pipe (CMP) has a useful life of about 25 yr, whereas reinforced concrete barrels and risers may last from 50 to 75 yr.

Nuisance Controls: Standing water (not desired in the detention basin) or soggy conditions within the lower stage of the basin can create nuisance conditions for nearby residents. Odors, mosquitoes, weeds, and litter are all occasionally perceived to be problems. Most of these problems are generally a sign that regular inspections and maintenance are not being performed (e.g., mowing, debris removal, clearing the outlet control device).

Sediment Removal: When properly designed, dry detention basins will accumulate quantities of sediment over time. Sediment accumulation is a serious maintenance concern in detention dry ponds for several reasons. First, the sediment gradually reduces available stormwater management storage capacity within the basin. Second, unlike wet extended detention basins (which have a permanent pool to conceal deposited sediments), sediment accumulation can make dry detention basins very unsightly. Third, and perhaps most importantly, sediment tends to accumulate around the control device. Sediment deposition increases the risk that the orifice will become clogged, and gradually reduces storage capacity reserved for pollutant removal. Sediment can also be resuspended if allowed to accumulate over time and escape through the hydraulic control to downstream channels and streams. For these reasons, accumulated sediment needs to be removed from the lower stage when sediment buildup exceeds 20% of the volume of the basin, or to a maximum depth of 3’ in the main detention pond and a maximum depth of 2’ in the small detention pond, or at least every 5 years.

Typical Storm Drain Outflow Structure

INSPECTIONS

Typical Storm Drain Outflow Structure should be inspected at least twice a year and after 1/2” rainfall or greater. (once during or immediately following wet weather) to evaluate facility operation. The Typical Storm Drain Outflow Structure should be checked for debris and litter, and areas of sediment accumulation. The Typical Storm Drain Outflow Structure shall be inspected for damage to sheathing and possible reshaping of the berm. During each inspection, erosion areas inside and downstream of the BMP should be identified and repaired or revegetated immediately.

MAINTENANCE

Debris and Litter Removal: Debris and litter will accumulate near the Typical Storm Drain Outflow Structure and should be removed during regular inspections.

Structural Repairs and Replacement: With each inspection, any damage to the structural elements of the system should be identified and repaired immediately. These repairs should include fixing loose wire sheathing and reshaping of the berm.

Sediment Removal: When properly installed, the Typical Storm Drain Outflow Structure will accumulate quantities of sediment over time. Sediment accumulation is a serious maintenance concern in Typical Storm Drain Outflow Structures for couple of reasons. First, the sediment gradually reduces the efficiency of the energy dissipation. Second, sediment accumulation can cause water to build up along the berm. For these reasons, accumulated sediment needs to be removed when sediment buildup exceeds 6 inches and disposed in an approved manner that will not cause any additional siltation.

THE WORSHIP PLACE
INSPECTION AND MAINTENANCE FOR BMPs

A written record should be kept of inspection results and maintenance performed.

I, the owner, have read and understand the requirements of the attached Maintenance Plan and Schedule

Owner

2/19/2024
Date

ATTACHMENT "G"

INSPECTION REPORT

Approved Inspection intervals:

i. Conducted at least twice annually

PROJECT NAME _____

REPORT # _____ DATE _____

INSPECTOR _____ TITLE _____

DATE OF LAST RAINFALL AMOUNT

SITE CONDITIONS:

ACTION	IN CONFORMANCE	EFFECTIVE
BATCH DETENTION BASIN		
Mowing	Yes/No/Na	Yes/No
Debris and Litter Removal	Yes/No/Na	Yes/No
Erosion Control	Yes/No/Na	Yes/No
Structural Repairs and Replacement	Yes/No/Na	Yes/No
Nuisance Control	Yes/No/Na	Yes/No
Sediment Removal	Yes/No/Na	Yes/No
TYPICAL STORM DRAIN OUTFLOW STRUCTURE		
Debris and Litter Removal	Yes/No/Na	Yes/No
Structural Repairs and Replacement	Yes/No/Na	Yes/No
Sediment Removal	Yes/No/Na	Yes/No
ENGINEERED VEGETATIVE FILTER STRIPS		
Pest Management	Yes/No/Na	Yes/No
Seasonal Mowing and Lawn Care	Yes/No/Na	Yes/No
Debris and Litter Removal	Yes/No/Na	Yes/No
Sediment Removal	Yes/No/Na	Yes/No

*Refer to I&M plan for detail descriptions of each Action.

RECOMMENDED REMEDIAL ACTIONS:

COMMENTS:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

INSPECTOR: _____ DATE: _____

THE WORSHIP PLACE
MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Contamination of surface streams will be kept at a minimum during construction by implementing temporary BMPs such as silt fencing, erosion control logs, and rock berms. A NOI will be filed 48 hours prior to the start of any construction and temporary BMPs will be installed as shown on the Water Pollution Abatement Site Plan within this submittal. After construction, the natural vegetation will be used to treat storm water runoff and minimize surface stream contamination.

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The Worship Place

WPAP

Section VIII

Agent Authorization Form

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

I James Willis,
Print Name

Vice Chair,
Title - Owner/President/Other

of The Worship Place,
Corporation/Partnership/Entity Name

have authorized Cody L. Morris, P.E.
Print Name of Agent/Engineer

of Matkin Hoover Engineering and Surveying
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

12/21/2023
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared James Willis 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 21 day of December, 2023.

Shanna Goodnight
NOTARY PUBLIC

Shanna Goodnight
Typed or Printed Name of Notary

SHANNA GOODNIGHT NOTARY PUBLIC STATE OF TEXAS ID 129909759 EXP. 08-05-2026

MY COMMISSION EXPIRES: 08-05-2026

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Section IX

Fee Payment

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: The Worship Place
Regulated Entity Location: Georgetown, Texas
Name of Customer: The Worhsip Place
Contact Person: Cody Morris Phone: (830) 249-0600
Customer Reference Number (if issued):CN _____
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	10.41 Acres	$ 6,500
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 1/26/24

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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Section X

Fee Check

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Section IX

Fee Check

(Placeholder)

Application Fees Payable

To

TCEQ

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Section XI

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		RN

SECTION II: Customer Information

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

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

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

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

The Worship Place

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (*if applicable*)
NA	NA	74-2889382	

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: 811 Sun City Blvd.

City	Georgetown	State	Tx	ZIP	78633	ZIP + 4	

16. Country Mailing Information (*if outside USA*)	17. E-Mail Address (*if applicable*)
	Jwillis516@sbcglobal.net

18. Telephone Number	19. Extension or Code	20. Fax Number (*if applicable*)
(512) 869-1310		( ) -

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.*)

The Worship Place

23. Street Address of the Regulated Entity: *(No PO Boxes)*	NA							
	City	Georgetown	State	TX	ZIP	78633	ZIP + 4	
24. County	Williamson							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Located 0.76 miles south of the intersection of HWY 195 and Ronald Reagan Blvd on the south side of Ronald Reagan Blvd

26. Nearest City	State	Nearest ZIP Code
Georgetown	TX	78633

27. Latitude (N) In Decimal:	30.747007°	28. Longitude (W) In Decimal:	-97.726485°

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	44	49.22	-97	43	35.35

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)
8861		813110	

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

Church/ Religious Orginization

34. Mailing Address:	811 Sun City Blvd.							
	City	Georgetown	State	TX	ZIP	78633	ZIP + 4	

35. E-Mail Address:	Jwillis516@sbcglobal.net

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(512) 869-1310		( ) -

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:	Cody L, Morris, P.E.	41. Title:	Project Manger

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 249-0600		(830) 249-0099	cmorris@matkinhoover.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:	Matkin Hoover Engineering and Surveying	Job Title:	P.E.	
Name *(In Print)*:	Cody Morris	Phone:	(830) 249- 600	
Signature:		Date:	1/26/24	