Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Wortham Oaks Amenity Center						**2. Regulated Entity No.:**			
3. Customer Name: Wortham Oaks Homeowners Association, Inc.						**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):**			2.99
9. Application Fee:	$4,000.00		**10. Permanent BMP(s):**			Vegetative Filter Strip (Existing)			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	BEXAR		**14. Watershed:**			Salado Watershed			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	✓	__	__	__	__
Region (1 req.)	✓	__	__	__	__
County(ies)	✓	__	__	__	__
Groundwater Conservation District(s)	✓ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park ✓ San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.	
FRANK D. COREY Print Name of Customer/Authorized Agent	
F. D. Corey Signature of Customer/Authorized Agent	6/26/25 Date

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

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Water Pollution Abatement Plan Modification

June 19, 2025

Wortham Oaks Amenity Center

Prepared for:

TCEQ Region 13 – San Antonio
14250 Judson Rd.
San Antonio, TX 78233

Prepared by:

6/24/25

Frank D. Corey
TX Professional Engineer
License No. 103068

Colliers Engineering & Design
3421 Paesanos Pkwy, Ste. 200 San
Antonio Texas 78231 US
Main: 877 627 3772
Colliersengineering.com

Project No.1192-01-01

Colliers Engineering & Design

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Colliers Engineering & Design

3421 Paesanos Parkway San Antonio Texas 78231 US
Main: 877 627 3772

TBPLS Reg. 10194550 • TBPE Reg. F-14909 • TBPG 50617

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June 19, 2025

TCEQ Region 13
14250 Judson Rd
San Antonio, TX 78233

Wortham Oaks Amenity Center
Water Pollution Abatement Plan Modification
RN: 106359268
Colliers Engineering & Design Project No. 1192-01-01

To Whom it May Concern,

Please find attached for your review the "Wortham Oaks Amenity Center," Water Pollution Abatement Plan Modification Application. Also included is the appropriate review fee ($4,000). This application has been prepared to be consistent with the Texas Commission on Environmental Quality 30 TAC 213, Subchapter B. Please review the Water Pollution Abatement Plan Modification report for the items it is intended to address and, if acceptable, provide written approval of said plan so that construction may begin at the earliest opportunity.

If you require additional information, please contact our office.

Sincerely,
Colliers Engineering & Design, Inc.

Frank D. Corey, P.E.
Senior Project Manager

K:\1192\01\01\Word\Reports\WPAP MOD\1. F-0587 General Information Section\Cover Letter.docx

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: Wortham Oaks Homeowners Association, Inc.

Date: June 19, 2025

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Wortham Oaks Amenity Center
2. County: Bexar
3. Stream Basin: Elm Waterhole Creek
4. Groundwater Conservation District (If applicable): Edward's Aquifer Authority
5. Edwards Aquifer Zone:
   - [x] Recharge Zone
   - [ ] Transition Zone
6. Plan Type:
   - [x] WPAP
   - [ ] SCS
   - [x] Modification
   - [ ] AST
   - [ ] UST
   - [ ] Exception Request

7. Customer (Applicant):

Contact Person: Katie Cruse
Entity: Wortham Oaks Homeowner's Association, Inc.
Mailing Address: 17319 San Pedro Ave., Ste. 318
City, State: San Antonio, Texas Zip: 78232
Telephone: 210-494-0659 FAX: _____
Email Address: kcruse@spectrumam.com

8. Agent/Representative (If any):

Contact Person: Frank D. Corey, P.E.
Entity: Colliers Engineering & Design
Mailing Address: 3421 Paesanos Pkwy., Ste. 103
City, State: San Antonio, Texas Zip: 78231
Telephone: 210-979-8444 FAX: _____
Email Address: frank.corey@collierseng.com

9. Project Location:

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

10. ☑ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation. From TCEQ San Antonio Regional Office, head north on Judson Rd. Turn right on Nacogdoches Rd. and then a left on Evans Rd. Continue on Evans Rd. until Wortham Oaks Blvd. and take a right. Continue on Wortham Oaks Blvd. until the roundabout and turn left on Carriage Cape. Wortham Oaks Amenity Center will be the first property on the left. (5763 Carriage Cape, San Antonio, TX 78261).

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: October 1, 2025

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:

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

- [ ] TCEQ cashier
- [ ] Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- [x] San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

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

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Attachments

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Attachment A

Road Map

ArcGIS Web Map

5/22/2025, 9:41:18 AM

1:4,800

0 195 390 780 ft

0 55 110 220 m

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, KFW GIS

Gerardo Guerrero

Colliers
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Attachment 1B

USGS

USGS science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

The National Map US Topo

BAT CAVE QUADRANGLE
TEXAS
7.5-MINUTE SERIES

SITE

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 14R
10 000-foot ticks: Texas Coordinate System of 1983
(south central zone)

Imagery.....NAIP, July 2008
Roads.....US Census Bureau TIGER data
with limited USGS updates, 2006
Names.....GNIS, 2008
Hydrography.....National Hydrography Dataset, 1995
Contours.....National Elevation Dataset, 2003

UTM GRID AND 2010 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
NT
Grid Zone Designation
14R

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET

This map was produced to conform with version 0.5.10 of the
draft USGS Standards for 7.5-Minute Quadrangle Maps.
A metadata file associated with this product is also draft version 0.5.10

TEXAS

QUADRANGLE LOCATION

Anhalt	Smithson Valley	Sattler
Bulverde	Bat Cave	New Braunfels West
Longhorn	Schertz	Marion

ADJOINING 7.5' QUADRANGLES
TX 2998-424

ROAD CLASSIFICATION

Interstate Route
US Route
Ramp
State Route
Local Road
4WD

BAT CAVE, TX
2010

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
US Topo

BULVERDE QUADRANGLE
TEXAS
7.5-MINUTE SERIES

Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 14R
10 000-foot ticks: Texas Coordinate System of 1983 (south central zone)

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, June 2014
Roads..... U.S. Census Bureau, 2014 - 2015
Names.....GNIS, 2015
Hydrography.....National Hydrography Dataset, 2014
Contours.....National Elevation Dataset, 2004
Boundaries.....Multiple sources; see metadata file 1972 - 2015

Wetlands.....FWS National Wetlands Inventory 1977 - 2014

MN
GN
4° 27′
79 MILS
0° 17′
5 MILS
UTM GRID AND 2016 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
NT
Grid Zone Designation
14R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.19

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

1	2	3
4		5
6	7	8

1 Bergheim
2 Anhalt
3 Smithson Valley
4 Camp Bullis
5 Bat Cave
6 Castle Hills
7 Longhorn
8 Schertz

ADJOINING QUADRANGLES

BULVERDE, TX
2016

NSN. 7643016395300
NGA REF NO. USGSX24K6180

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Attachment 2B

Edwards Aquifer Exhibit

Edwards Aquifer

6/18/2025, 1:44:51 PM

Edwards Aquifer

Edwards Aquifer Contributing Zone within the Transition Zone

Edwards Aquifer Recharge Zone

Edwards Aquifer Transition Zone

World_Transportation

1:37,407

0 1,250 2,500 5,000 ft

0 450 900 1,800 m

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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Attachment C

Project Description

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Project Description

Wortham Oaks Amenity Center Development is a developed 2.99-acre tract that lies within the City of San Antonio ETJ, in Bexar County, TX, and is located within the Edwards Aquifer Recharge Zone. Project wastewater will be disposed of by conveyance to the existing Salado Creek Recycling Center owned by the San Antonio Water System.

The subject tract of land is currently covered under the previously approved "Wortham Oaks East Phase 2" Water Pollution Abatement Plan. The original WPAP proposed a 50' wide vegetated filter strip (VFS) for the increase of impervious cover of the Amenity Center Lot as BMP. This modification seeks to modify the existing WPAP by proposing an increase of the impervious cover to the existing Amenity Center.

The project will include the demolition of the existing basketball court and the construction of a larger sport court with a net increase of impervious cover of 2,148 SF. The existing 50' wide VFS along the edge of the contributing area will continue to be used to remove TSS. See **Exhibit 2** for the approved Existing drainage areas.

The subject site will be disturbed during construction activities within the limits of construction. These activities will be subject to TPDES requirements. A Storm Water Pollution Prevention Plan will be maintained for the site and temporary BMP's will be implemented to prevent erosion and sedimentation until completion of the permanent BMP. All areas not covered by the new court will be stabilized with either sod, landscaping or gravel when construction is complete and before the removal of temporary BMPs.

There will not be any storage of regulated quantities of hazardous materials. San Antonio Water System (SAWS) will supply potable water and wastewater treatment.

Geologic Assessment

Pursuant to The Texas Commission on Environmental Quality Standard Practice

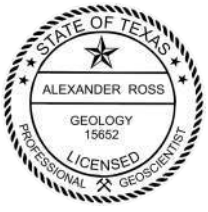
For "Geologic Assessments" (Title 30 Texas Administrative Code (TAC), Part 1, Chapter 213; Texas Water Code, §26.401; and Texas Occupations Code, Chapter 1002)

January 31, 2025

5763 Carriage Cape

Located at 5763 Carriage Cape,
San Antonio, Bexar County, Texas 78261

Colliers Engineering & Design Project Number: 24009528A



Prepared for:

Wortham Oaks Homeowners Association, Inc.
17319 San Pedro Ave., Ste. 318
San Antonio, Texas 78232

Prepared by:

Alexander S. Ross
State of Texas, Professional Geoscientist
License No. 15652

Ezra C. Urigwe
State of Texas, Associate Geoscientist

Colliers Engineering & Design
3421 Paesanos Parkway,
San Antonio, Texas 78231
Main: 210 979 8444
Colliersengineering.com

Project No. 24009528A

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Narrative Description of Site Geology | Attachment C

INTRODUCTION

Colliers Engineering & Design was contacted by Wortham Oaks Homeowners Association, Inc**.** to conduct a Geologic Assessment for the 5763 Carriage Cape project. The project site is located northeast of the intersection of Carriage Cape and Wortham Oaks Boulevard in San Antonio, Bexar County, Texas (i.e., subject property or project site). Bexar County Appraisal District (BCAD) reflects the subject property by the following: *Bexar Parcel:* 1194124; Owner: HOLT TEXAS LTD DBA HOLT CAT & WEST END EXCHANGE TEXAS 1 LLCWORTHAM OAKS HOA INC % SPECTRUM ASSN MGMT.

METHODOLOGY

Colliers Engineering & Design conducted a geologic assessment for the property on January 13th, 2025. The pedestrian survey was completed by walking parallel transects spaced approximately 50 foot spacing under the regulatory guidance by the TCEQ in the *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04).* Closer spacing was used in areas where vegetation inhibited clear observation. Observed potential karst features (i.e., topographic depressions, holes, and animal burrows) were carefully examined for evidence of subsurface extent. The features were also probed and checked for the presence of air flow, which may indicate the presence of a subsurface void space. The locations of identified features were recorded with a handheld GPS unit. The locations of identified features were recorded with a handheld GPS unit with accuracy of +/- 5 feet, and photo-documented.

SITE DESCRIPTION

The subject property is comprised of a single parcel, represented by BCAD property ID: 1194124. The subject property is comprised of approximately 0.21-ac, and is located at 5763 Carriage Cape in San Antonio, Texas 78261. According to BCAD property information, the legal description for the parcel is provided below:

- BCAD ID 1194124: *CB 4913A (WORTHAM OAKS UT-7), BLOCK 11 LOT 96 //COMMON AREA//*

Based on a review of historical aerial photographs, the project site appears to have existed as undeveloped, rural land prior to the early 2000s. Aerial imagery reviewed between 1950 and 2012 depicts a dirt path traversing across the western region of the property. The dirt path terminated at a farmhouse located to the north. Prior to 2010, a property fence traverses across the site in an east-west orientation. In 2013, Carriage Cape is constructed as a primary thoroughfare immediately to the south. The site vicinity appears disturbed in conjunction with residential development in the surrounding area. In 2014, Carriage Cape Park is constructed within boundaries of the subject property. Wortham Oaks Playground is constructed within the park. An outdoor basketball park is constructed within the project boundary. Landscaped areas on property are covered with regularly maintained and mowed grasses.

Geologic Setting

The subject property is located within the **Recharge Zone** of the Edwards Aquifer. The overall potential for fluid migration to the Edwards Aquifer in this area has been characterized as low to intermediate. Regarding bedrock lithology, the site lies within the Georgetown Formation (referred to as Kg in Attachment A and D) and the cyclic and marine members of the Person Formation (referred to as Kpcm in Attachment A and D). The Georgetown Formation is dominantly composed of argillaceous limestone and marl that is light gray to yellowish gray in color. Iron nodules or iron staining is also common within the formation. Following tectonic activity and subsequent erosion in the Cretaceous period, South Central Texas experienced submersion by marine transgression in the Late Cretaceous. As a result, the Georgetown Formation was deposited. Consequently, many marine marker fossils can be found within the formation, including *Waconella wacoensis* and other brachiopods. The formation overlies the Person Formation of the Edwards Group unconformably. The western section of the property overlies the cyclic and marine member of the Person Formation. This formation is locally bioturbated and is mostly composed of limestone beds. Chert is common within the unit and presents as beds and large nodules. The cyclic and marine members of the formation are typically 80 to 90 feet thick. Cavern development for the formation is common, and is many times associated with earlier karst development.

The surrounding area exhibits a dominant fault trend of N51°E, based on the average of the trends of faults within the surrounding area and from published maps (Stein & Ozuna, 1995; Barnes, 1961). Hydrologically,

porosity of the unit is characterized by laterally extensive voids. Field reconnaissance conducted by CED did not readily identify caves, sinkholes, or outcrops of bedrock.

Karst Zone

According to United States Fish and Wildlife Service (USFWS) karst zone maps, the subject property wholly lies within **Karst Zone 2**, which is defined as areas having a high probability of suitable habitat for endangered or other endemic karst invertebrate species. Karst Zone 1 includes areas known to contain endangered cave fauna. In accordance with USFWS guidelines (published in 2015), a karst feature survey is required within Karst Zones 1, 2, and 3 to identify any karst features which may contain potential karst invertebrate habitat. The subject property lies within the Stone Oak Karst Fauna Region (KFR). The nearest critical habitat unit (CHU) is located approximately 3.05-miles southwest of the subject property. This CHU is identified as Unit 13, for the listed species beetle (*Rhadine exilis).* Limiting conditions identified during the site reconnaissance which may affect the ability to identify karst features included dense vegetation and overgrown areas, which limited observations of the ground surface in certain areas.

Soils Table

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).

Table 1: Soil Description Summary

Soil Name	Group	Thickness (feet)
Crawford, stony and Bexar soils, 0 to 5 percent slopes	D	0-3

Soil Group Classifications

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.

In areas where natural soil was exposed, the soil resembled the descriptions in the soil surveys and whose descriptions are listed above.

FEATURES

The following outlines features identified on the subject property by site reconnaissance and review of published geological literature. Examples of the features are described below, and photographs are provided in the appendices.

S-1: Manmade feature in bedrock (MB). Feature is an existing sanitary sewer line that is not located beneath pavement. The utility has been trenched through bedrock and backfilled with a mix of fine and coarse material that may contribute to higher permeability rates than surrounding undisturbed areas. Approximately 105 linear feet of buried sewer line spans the subject property. The sewer utility is buried and the likelihood of storm water migrating through the trenches into the Edwards Aquifer is considered unlikely. Notably, one sanitary manhole was observed during site reconnaissance. (Location: 29°38'51.0"N 98°22'31.3"W). Therefore, the probability for rapid infiltration is low.

CONCLUSIONS

According to United States Fish and Wildlife Service (USFWS) karst zone maps, the subject property wholly lies within **Karst Zone 2**, which is defined as areas having a high probability of suitable habitat for endangered or other endemic karst invertebrate species. CED has conducted a geologic assessment on January 13th, 2025, pursuant to The Texas Commission on Environmental Quality Standard Practice for "Geologic Assessments" (Title 30 Texas Administrative Code (TAC), Part 1, Chapter 213; Texas Water Code, §26.401; and Texas Occupations Code, Chapter 1002).

A sanitary sewer line was identified as the sole feature encountered during the geologic assessment. Limiting conditions identified during site reconnaissance which may affect the ability to identify karst features included dense vegetation, which limited observations of the ground surface and subsurface in certain areas. In the event features are encountered during construction activity, work should cease, and the Texas Commission on Environmental Quality (TCEQ) should be notified to further evaluate features prior to proceeding.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FORM 0585 – TCEQ-0585) Rev. 02-11-15

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: Alexander S. Ross, P.G.

Telephone: (856) 242-2036

Fax: (210) 979-8441

Date: 1/13/2025

Representing: Colliers Engineering & Design, TBPE Firm #9513 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: 5763 Carriage Cape

Project Information

1. Date(s) Geologic Assessment was performed: January 13th, 2025
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)

Soil Name	Group*	Thickness(feet)
Crawford, stony and Bexar soils, 0 to 5 percent slopes	D	0-3

** 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" = N/A'
   Site Geologic Map Scale: 1" = 50'
   Site Soils Map Scale (if more than 1 soil type): 1" = N/A'

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.

GEOLOGIC ASSESSMENT TABLE | ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: 5763 Carriage Cape

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	
S-1	**29.647500°**	**-98.375361°**	MB	30	Kg	105.00	0.83	-	N2.4°W	0	-	-	C,O,F,V	5	35	X		X		Drainage

* DATUM: NAD 83

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

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

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

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

STATE OF TEXAS
ALEXANDER ROSS
GEOLOGY
15652
LICENSED
PROFESSIONAL GEOSCIENTIST

Date

Sheet __1__ of __1__

Attachment A

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

STRATIGRAPHIC COLUMN | ATTACHMENT B

5763 Carriage Cape

Stratigraphic Column

[Hydrogeologic subdivisions modified from Maclay and Small (1976); groups, formations and members modified from Rose (1972); lithology modified from Dunham (1962); and porosity type modified from
Choquette and Pray (1970); CU, confining unit; AQ, aquifer]

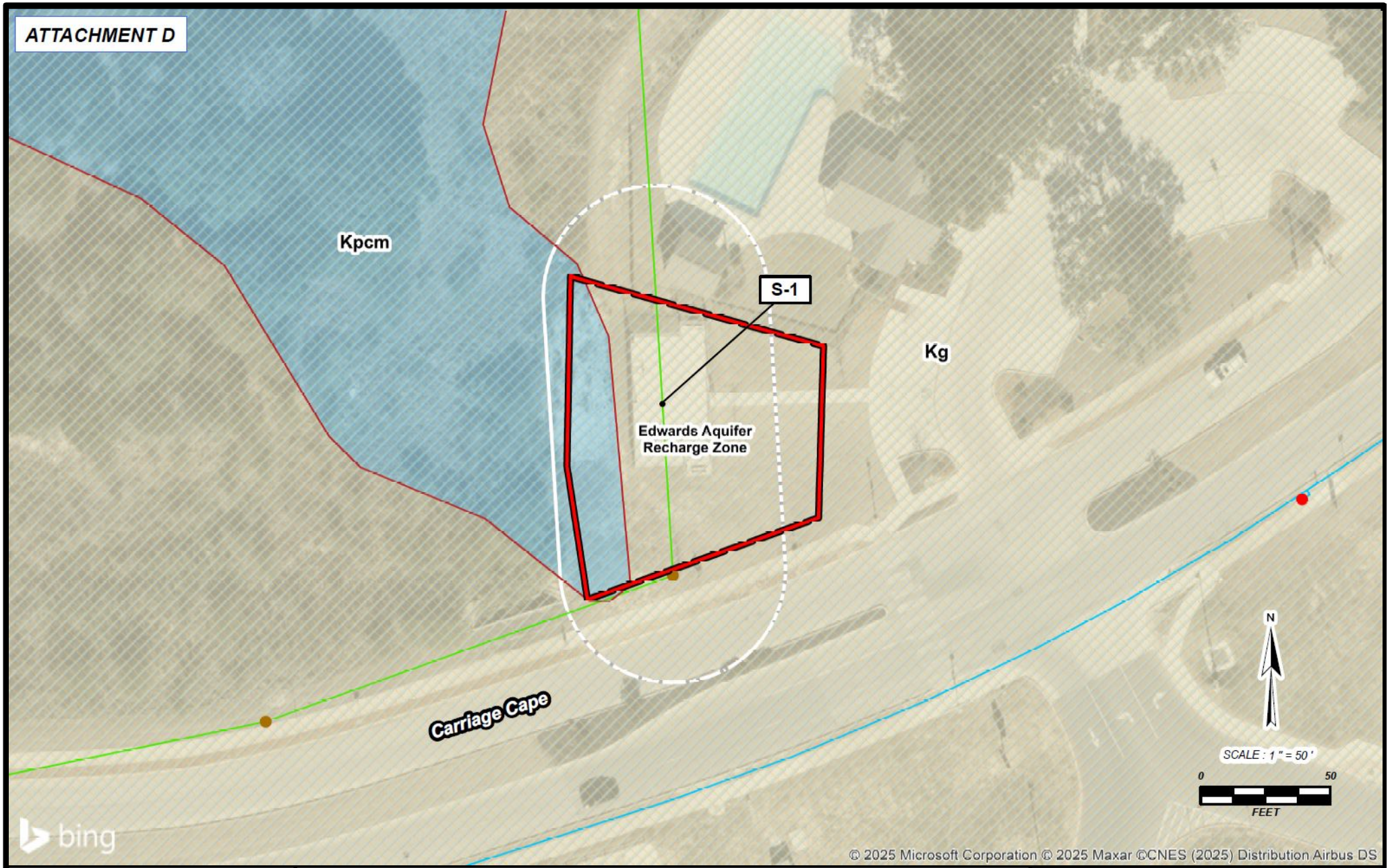
Hydrogeologic subdivision			Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field Identification	Cavern development	Porosity/permeability type
Quaternary	Pleistocene		Fluviatile terrace deposits			N/A	5 - 70	Sand, silt, clay, rounded to angular limestone in various proportions; siliceous, coarse; chert and dolomite	Alluvium; lithic sand and silt to sandy gravel	None	Generally porous, moderate to high permeability
Upper Cretaceous	Upper Confining Units		Austin Chalk			CU; rarely AQ	130-150	White to light-tan to gray limestone; chalk and marl; sparsely glauconitic	White, chalky limestone; *Pycnodonte aucella Inoceramus subquadratus*	Rare	Low porosity; rare water production from fractures/ low permeability
			Eagle Ford Group			CU	30-50	Brown, flaggy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/low permeability
			Buda Limestone			CU	40-50	Buff, light gray, dense mudstone	Limestone with calcite-filled veins	Minor surface karst	Low porosity/low permeability
			Del Rio Clay			CU	40-50	Blue-green to yellow-brown clay	Fossiliferous; Ilymatogyra arietina	None	None/primary upper confining unit
Lower Cretaceous	I	*Edwards Aquifer*	Georgetown Formation (Kgt)			Karst AQ; non-karst CU	2-20	Reddish-brown, gray to light tan marly limestone	Marker fossil; *Waconella wacoensis*	None	Low porosity/low permeability
	II		*Edwards Group*	*Person Formation (Kep)*	Cyclic and marine members, undivided	AQ	80-90	Mudstone to packstone; *miliolid* grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	III				Leached and collapsed members, undivided	AQ	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
	IV				Regional dense member	CU	20-24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
	V			*Kainer Formation (Kek)*	Grainstone member	AQ	50-60	*Miliolid* grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/recrystallization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric selective/one of the most permeable
	VII				Dolomite member	AQ	110-130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, *Toucasia* abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane fabric/water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and miliolid grainstone	Massive, nodular and mottled, *Exogyra texana*	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit now at surface; no permeability in subsurface
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350 – 500	Yellowish-tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/ relatively impermeable

(Modified from Small and Hanson, 1994)

ATTACHMENT A

Geologic Framework and Hydrogeologic Characteristics for the Subject Property based on published data highlighted above.

SITE GEOLOGIC MAP | ATTACHMENT D



Prepared for:
Wortham Oaks Homeowners Association, Inc.
17319 San Pedro Ave., Ste. 318
San Antonio, Texas 78232

Prepared By:

San Antonio Office
3421 Paesanos Pkwy #200
San Antonio, TX 78231
T: 210.979.8444
www.colliersengineering.com

Colliers Engineering & Design

- Subject Property
- SAWS Sewer Manholes
- SAWS Fire Hydrants
- SARA_Manholes
- SAWS Water Mains
- SAWS Sewer Mains
- 50' Sewer Envelope

Geologic Group or Formation
- Kg
- Kpcm

Edwards Aquifer Zones
- Edwards Aquifer Contributing Zone
- Edwards Aquifer Contributing Zone within the Transition Zone
- Edwards Aquifer Recharge Zone
- Edwards Aquifer Transition Zone

STATE OF TEXAS
ALEXANDER ROSS
GEOLOGY
15652
LICENSED
PROFESSIONAL GEOSCIENTIST

SITE GEOLOGIC MAP

5763 CARRIAGE CAPE

BEXAR COUNTY, TEXAS

DATE	PROJ NUMBER	DRAWN BY
February 2025	*24009528A*	*E.U.*

Date: Feb 04, 2025, 4:58:49 PM User ID: ewhyte
File: O:\Users\EU\gwe\5763 Carriage Cape GA\Geologic Assessment\Geologic Assessment\GIS and CAD\GIS\Site Geologic Map 2.mxd

SITE PHOTOGRAPHS

COLLIERS ENGINEERING & DESIGN, INC.
3421 PAESANOS PKWY.
SAN ANTONIO TX, 78231
MAIN: 610 254 9140
COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 1	
Description: An image of the basketball court and associated paved walkway.	

Photo No. 2	
Description: A closer image of the basketball court. No sinkholes or significant depressions were identified on the surface of the court during site reconnaissance.	

COLLIERS ENGINEERING & DESIGN, INC.
3421 PAESANOS PKWY.
SAN ANTONIO TX, 78231
MAIN: 610 254 9140
COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 3	
Description: An image of the northern property boundary as observed from the east.	

Photo No. 4	
Description: A concrete drainage culvert identified west of the subject property.	

COLLIERS ENGINEERING & DESIGN, INC.
3421 PAESANOS PKWY.
SAN ANTONIO TX, 78231
MAIN: 610 254 9140
COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 5	
Description: A wide-angle view of the property extent as captured from the southeast.	

Photo No. 6	
Description: A natural gas pipeline identified south of the adjoining pedestrian walkway.	

COLLIERS ENGINEERING & DESIGN, INC.
3421 PAESANOS PKWY.
SAN ANTONIO TX, 78231
MAIN: 610 254 9140
COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 7	
Description: The western property boundary, and vegetation associated with the drainage channel.	

Photo No. 8	
Description: A representative image of the subject property.	

COLLIERS ENGINEERING & DESIGN, INC.
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SAN ANTONIO TX, 78231
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COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 9	
Description: A representative image of the subject property.	

Photo No. 10	
Description: A survey stake and sanitary sewer manhole identified along the southern property boundary.	

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SAN ANTONIO TX, 78231
MAIN: 610 254 9140
COLLIERSENGINEERING.COM

PROJECT NAME:

SITE LOCATION:
5763 CARRIAGE CAPE ,

PROJECT NO.:
24009528A

Photo No. 11	
Description: A sprinkler connection protruding from ground.	

Photo No. 12	
Description: An overgrown drainage channel west of the property.	

REFERENCES | ATTACHMENT E

Arnow, Ted, 1959, Groundwater Geology of Bexar County, Texas: Texas Board of Water Engineers, Bulletin 5911, 62pp., 18 figs.

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Stein, W.G., and Ozuna, G.B., 1995, Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas: U.S. Geol. Survey, Water – Resources Investigations 95-4030, 8 pp., 2 figs.

Texas Natural Resource Conservation Commission, 1999, Edwards Aquifer Recharge Zone Map, Camp Bullis and Van Raub, TX Quadrangles, TNRCC, San Antonio, Texas.

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Veni, George, and Associates, 1994, Geologic Controls in Cave Development and the Distribution of Cave Fauna in the San Antonio, Texas, Region: Report for the Texas Parks and Wildlife Department and U.S. Fish and Wildlife Service, 99 pp.

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Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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 request for a **Modification of a Previously Approved Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Wortham Oaks Homeowners Association, Inc.

Date: June 19, 2025

Signature of Customer/Agent:

Project Information

1. Current Regulated Entity Name: Wortham Oaks Amenity Center
   Original Regulated Entity Name: Wortham Oaks East, Phase 2
   Regulated Entity Number(s) (RN): 106359268
   Edwards Aquifer Protection Program ID Number(s): N/A
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☑ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☑ **Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):
   - ☐ Physical or operational modification of any water pollution abatement structure(s) including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   - ☐ Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   - ☑ Development of land previously identified as undeveloped in the original water pollution abatement plan;
   - ☐ Physical modification of the approved organized sewage collection system;
   - ☐ Physical modification of the approved underground storage tank system;
   - ☐ Physical modification of the approved aboveground storage tank system.

4. ☑ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	62.33 AC	2.99 AC
Type of Development	Residential & Commercial	Commercial
Number of Residential Lots	245	N/A
Impervious Cover (acres)	32.476 AC	0.90 AC
Impervious Cover (%	52.1%	30.1%
Permanent BMPs	VFS	VFS
Other		

SCS Modification Summary	***Approved Project***	***Proposed Modification***
Linear Feet		
Pipe Diameter		
Other		

AST Modification Summary	*Approved Project*	*Proposed Modification*
Number of ASTs	_____	_____
Volume of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	*Approved Project*	*Proposed Modification*
Number of USTs	_____	_____
Volume of USTs	_____	_____
Other	_____	_____

5. ☑ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.

6. ☑ **Attachment C: Current Site Plan of the Approved Project**. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☑ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. ☐ The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.
   ☑ Acreage has not been added to or removed from the approved plan.

8. ☑ 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.

Colliers
Engineering
& Design

Attachments

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& Design

Attachment 1A

Original Approval Letters

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 10, 2014

Mr. Gordon Hartman
Shaggy Development, LLC
1202 W. Bitters, Bldg. 1, Suite 1200
San Antonio, Texas 78216

Re: Edwards Aquifer, Bexar County

NAME OF PROJECT: Wortham Oaks Phase 2; Located approximately 0.25 miles east of the intersection of Wortham Oaks Boulevard and Carriage Cape; San Antonio, Texas

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

Additional ID No.: 13-14082101; Investigation No. 1192257; Regulated Entity No. RN106359268

Dear Mr. Hartman:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by KFW Engineers on behalf of Shaggy Development, LLC on August 21, 2014. Final review of the WPAP was completed after additional material was received on September 30, October 9, November 12 and December 4, 2014. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed project will have an area of approximately 62.33 acres. It will include the construction of 245 single family residences, streets, driveways, and utilities. The impervious cover will be 32.476 acres (52.10 percent). Project wastewater will be disposed of by conveyance to the existing Dos Rios Water Recycling Center owned by San Antonio Water System.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one sand filtration basin and one natural vegetative filter strip, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 26,500 pounds (26,500 pounds designed) of TSS generated from the 32.476 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

One of the individual treatment measures will consist of a partial sand filtration basin (designed for 26,047 pounds of TSS removed annually). The required sand filter area of the sand filtration basin is 18,226 square feet (18,308 square feet designed) and the water quality volume required is 220,493 cubic feet (270,493 cubic feet designed). The sand filtration basin will have a perforated PVC underdrain system with an 18-inch thick bed of sand meeting ASTM C-33 that lies over a 6-inch layer of gravel. The TSS load designed to be removed is 26,047 pounds of TSS which includes 1,823 pounds from 2.228 acres uncaptured impervious cover.

One natural vegetative filter strip shall have a uniform slope of less than 10 percent and will extend along the entire length of the contributing area and will be free of gullies or rills that can concentrate overland flow. The contributing area shall be relatively flat to evenly distribute runoff, and the impervious cover in the direction of flow shall not exceed 72 feet. The TSS load designed to be removed from the natural vegetative filter strip is 453 pounds.

GEOLOGY

According to the geologic assessment included with the application, the project site is underlain by the Person Formation. The geologic assessment identified one geologic feature (i.e., solution cavity (S-3)) that was assessed as sensitive by the project geologist. The San Antonio Regional Office site assessment conducted on October 7, 2014 indicated that the site is generally as described in the application.

Natural buffers were proposed for the sensitive geological feature. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffer. The size is based on the drainage area for the sensitive feature. The odd shaped setback for the solution cavity is approximately 50 feet to the north, south, east and west but with protrusions of approximately 59 feet to the northwest and the southeast. The buffer area is illustrated on the construction plan (Features S-1, S-3, and S-19 Exhibit – Sheet 1 of 1).

The buffer area described above will encompass and protect the sensitive feature (S-3). Physical barriers and sediment controls are required at the edge of this buffer prior to the commencement of construction.

SPECIAL CONDITIONS

I. All permanent pollution abatement measures shall be operational prior to first occupancy within each drainage area.

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

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

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

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain

responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

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

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

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Michael Isley, P.E. of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4057.

Sincerely,

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

LMB/MI/eg

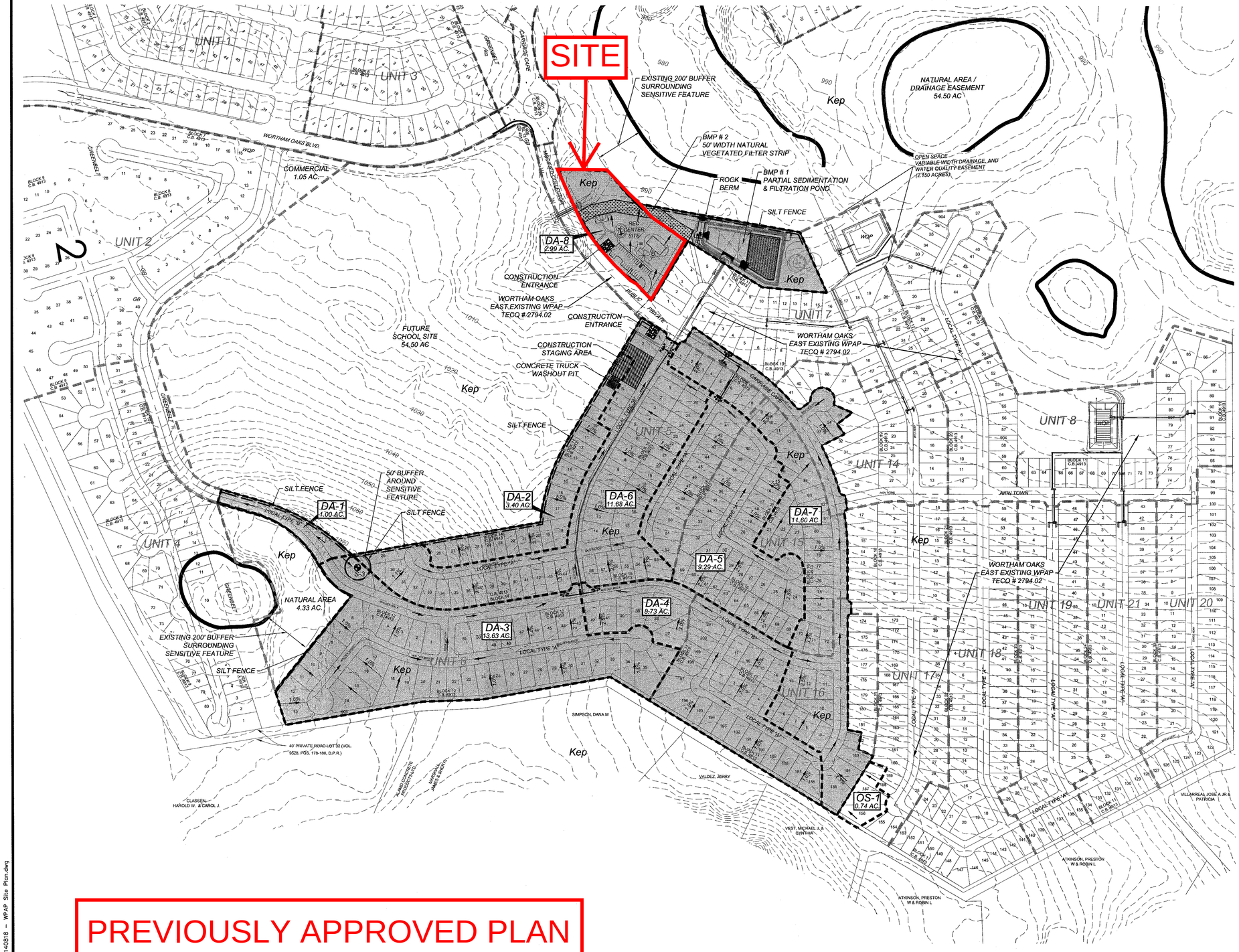
Enclosures: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Travis Elseth, P.E., KFW Engineers
Mr. Scott Halty, San Antonio Water System
Mr. Roland Ruiz, Edwards Aquifer Authority
Ms. Renee Green, P.E., Bexar County Public Works
Mr. George Wissmann, Trinity Glen Rose GWCD
TCEQ Central Records, Building F, MC 212

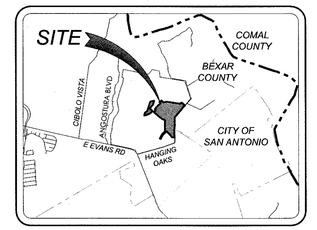
Colliers
Engineering
& Design

Attachment 2A

Previously Approved WPAP Site Plan



PREVIOUSLY APPROVED PLAN



LOCATION MAP
MAPSCO MAP GRID: 485C5
SCALE: 1" = 5000'

SCALE: 1" = 200'

0' 200' 600'

400'

LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS (1130)
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE (S-3)

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off_site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    - A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    - B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    - C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.

KFW ENGINEERS & SURVEYING
FIRM# 9513
14603 HUEBNER RD, BLDG. 40
SAN ANTONIO, TEXAS 78230
PHONE (210) 979-8444
FAX (210) 979-8441

ISSUE DATE

REVISIONS

STATE OF TEXAS
TRAVIS R. ELSETH
99254
LICENSED PROFESSIONAL ENGINEER
10/6/14

WORTHAM OAKS EAST, PHASE 2
WPAP SITE PLAN

JOB NO. 205-16-04
DATE: AUGUST, 2014
DRAWN: SE CHECKED: TE

SHEET NUMBER:

1 OF 2

Date: Oct. 08, 2014, 2:04pm User ID: telseth
File: P:\205\16\04\Design\Exhibits\CAD\WPAP\140818 - WPAP Site Plan.dwg

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Engineering
& Design

Attachment 3A

Previously Approved WPAP Engineer Certificate

KFW
ENGINEERS + SURVEYING

August 24, 2016

Ms. Lynn M. Bumguardner
Texas Commission on Environmental Quality
Region 13
14250 Judson Rd.
San Antonio, TX 78233-4480

Re: **Wortham Oaks, Phase 2**
Plan Type: Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer;
Investigation No. 1192257; Regulated Entity No. RN106359268; Additional ID No. 13-14082101
BMP Certification

Dear Ms. Bumguardner:

This letter is being submitted in accordance with the above referenced pollution abatement plan approved on December 10, 2014. I hereby certify that based upon observations and measurements made after BMP construction completion, the permanent BMP's for this project have been constructed as designed, in accordance with the approved construction plans.

Sincerely,
KFW Engineers

Burt Wellmann, P.E.
Sr. Project Manager

8/24/16

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Engineering
& Design

Attachment B

Narrative of Proposed Modification

Attachment B

Colliers Engineering & Design

Narrative of Proposed Modification

Wortham Oaks Amenity Center is part of a previously approved WPAP for Wortham Oaks East Phase 2 (RN106359268). The original WPAP was approved on December 10, 2014 and included the 2.99-Acre lot of the amenity center with a proposed impervious cover of 0.55 acres to be treated by a 50' vegetated filter strip. The VFS extends along the entire length of the contributing area. With this modification, the existing and proposed impervious cover totals to 39,268 sq. ft. (0.90 Acres), which equates to 30.1% of the total property. Drainage patterns will not change and will continue as approved by the original WPAP.

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& Design

Attachment C

Current Site Plan of Approved Project

LEGAL DESCRIPTION

BEING LOT 96, BLOCK 11, C.B. 4913 OUT OF THE WORTHAM OAKS, UNIT 7 (ENCLAVE) SUBDIVISION PLAT (PLAT NO. 120165), RECORDED IN VOL. 9656, PG. 221 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

COORDINATION NOTE:

1. CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTACT SPECTRUM TO COORDINATE CABLE TV SERVICE. 1-800-222-5355.
3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-225-5288.
4. CONTACT CITY PUBLIC SERVICE TO PLAN ELECTRICAL SERVICES. (210)353-2222.
5. CONTACT CITY PUBLIC SERVICE TO PLAN GAS SERVICES. (210)353-2222.
6. CONTACT SAWS TO PLAN WATER AND SANITARY SEWER SERVICES. (210)704-7297.

BENCHMARK MAP
N.T.S.

BENCHMARKS

BM #50: SET BENCHMARK. ELEVATION = 1001.32'
SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC. ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

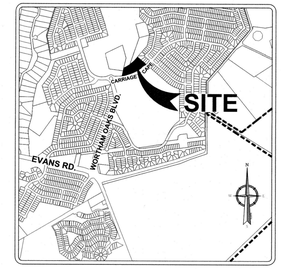
COORDINATES IN GRID.

CAUTION!!: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION.THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

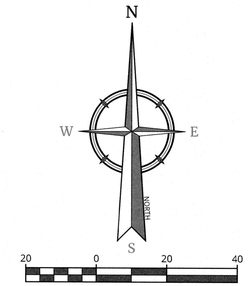
SURVEY CONTACT NOTE:
CONTACT TERESA SEIDEL, RPLS WITH KFW SURVEYING AT (210) 979-8444 FOR CONSTRUCTION STAKING SERVICES ON THIS PROJECT.

EASEMENTS

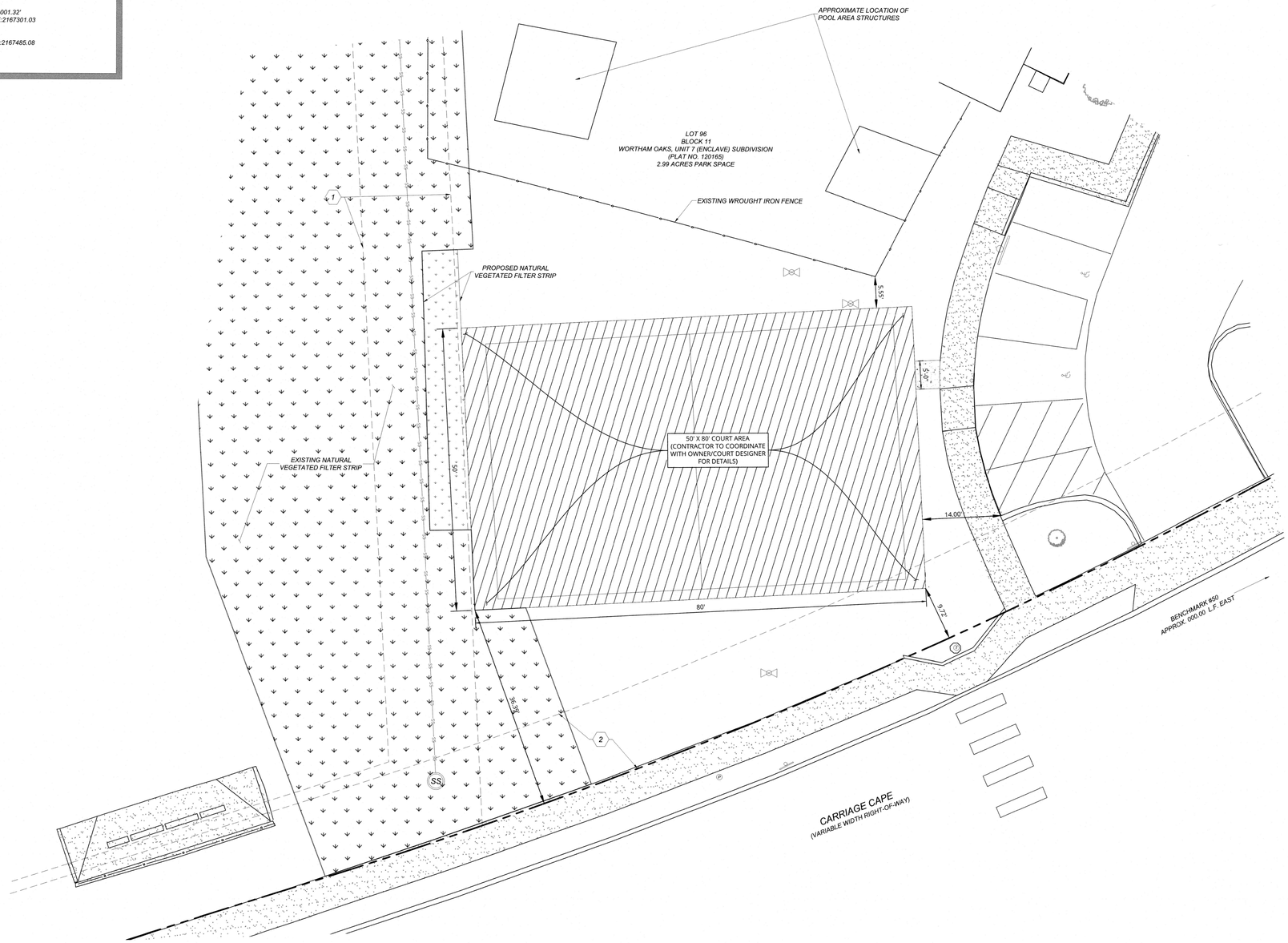
1. 16' SANITARY SEWER EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)
2. 16' GAS, ELEC., TEL. & CA. TV. EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)



LOCATION MAP
N.T.S.



SCALE : 1" = 20'



LEGEND

- PROPERTY LINE
- EXISTING CURB
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING VALVE TO REMAIN
- PROPOSED COURT SURFACE (CONTRACTOR TO COORDINATE WITH OWNER FOR DETAILS)

Colliers Engineering & Design
www.colliersengineering.com

Formerly Known as KFW ENGINEERS + SURVEYING

811 Know what's below. Call before you dig.
PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER
6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

FOR

WORTHAM OAKS HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER:	DRAWING NAME:
1192-01-01	C2.0 SITE PLAN

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C2.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Date: Jun 10, 2025, 10:57am User ID: ggrimmm
File: K:\1192\01\01\Design\Civil\C2.0 SITE PLAN.dwg

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: Wortham Oaks Homeowners Association, Inc.

Date: June 19, 2025

Signature of Customer/Agent:

Regulated Entity Name: Wortham Oaks Amenity Center

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property): 2.99 AC

3. Estimated projected population: N/A

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops		÷ 43,560 =	
Parking		÷ 43,560 =	
Other paved surfaces	2,176 (net increase)	÷ 43,560 =	0.05
Total Impervious Cover	39,268 (existing & proposed)	÷ 43,560 =	0.90

Total Impervious Cover 0.90 **÷ Total Acreage** 2.99 **X 100 =** 30.1 **% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

   Width of R.O.W.: _____ feet.
   L x W = _____ 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:

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

15. Wastewater will be disposed of by:

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

- ☐ **Attachment C - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.
- ☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☐ Sewage Collection System (Sewer Lines):

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

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

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

☐ Existing.
☐ Proposed.

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

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" = 10 '.

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): 48029C0145G & 48029C0165F both with effective date of 09-29-2010

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

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

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

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

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

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

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

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

22. ☑ The drainage patterns and approximate slopes anticipated after major grading activities.
23. ☑ Areas of soil disturbance and areas which will not be disturbed.
24. ☑ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. ☑ Locations where soil stabilization practices are expected to occur.
26. ☐ Surface waters (including wetlands).

    ☑ N/A
27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☑ There will be no discharges to surface water or sensitive features.
28. ☑ Legal boundaries of the site are shown.

Administrative Information

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

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Attachments

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Attachment A

Factors Affecting Water Quality

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Factors Affecting Water Quality

Materials that are anticipated to be used on site that could be a potential source of contamination include the following:

During Construction:

1. Concrete and Masonry Materials
2. Wood, plastic, and metal Materials
3. Tar and hydrocarbons from paving operations
4. Oil, Grease, fuel, and hydraulic fluid from construction equipment and vehicle drippings
5. Fertilizers, Herbicides, and Pesticides
6. Cleaning solutions and detergents
7. Miscellaneous construction trash and debris
8. Soil erosion and sedimentation due to construction activity

Ultimate Use:

1. Fertilizers, Herbicides, and pesticides used to maintain landscaping and lawns
2. Miscellaneous trash and debris generated from the public

(This is not intended to be an all-inclusive list)

Practical management practices will be used to reduce the risk of spills and other exposure of any contaminant to surface or groundwater.

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Attachment B

Volume and Character of Storm Water

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Volume and Character of Stormwater

Existing Conditions

The existing storm water runoff for the subject site consists of 1 drainage area, encompassing the entire 2.99 acre site. Amenity Center Lot is currently developed. A weighted runoff coefficient of 0.61 is calculated for existing conditions. Calculations and results are provided on the Existing Conditions Impervious Cover Exhibit located at the end of this report (***Exhibit 3)***. Existing impervious cover is 0.85 acres.

Proposed Conditions

The proposed development will have a total impervious cover of 0.90 acres which includes an existing impervious cover of 37,092 sq. ft. and a net increase of 2,148 sq. ft. This development will consist of demolition of an existing basketball court and sidewalk, and the construction of a new 80’ x 50’ court. The post-development weighted runoff coefficient for this site will be 0.62 which is well below the approved c-value. The previously approved WPAP assumed a c-value of 0.69 for the Amenity Center lot (Exhibit 2). The site will continue to have the same drainage patterns as the approved WPAP. Calculations and results for the proposed development are provided on the Proposed Impervious Cover Exhibit located at the end of this report (***Exhibit 4)***.

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Attachment C

Suitability Letter from Authorized Agent

Attachment C

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Suitability Letter from Authorized Agent

An on-site sewage facility will not be used to treat and dispose of the wastewater. Therefore, the appropriate licensing authority's (authorized agent) written approval is not required.

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Attachment D

Exception to the Required Geologic Assessment

Attachment D

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Exception to the Required Geologic Assessment

A Geologic Assessment was conducted for this project and has been included in Section 2 of this report. Therefore, an exception to the Geologic Assessment requirement will not be requested.

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: Frank D. Corey, P.E.

Date: June 19, 2025

Signature of Customer/Agent:

F. D. Corey

Regulated Entity Name: Wortham Oaks Amenity Center

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: Elm Waterhole 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.

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Attachments

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Attachment A

Spill Response Actions

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Spill Response Actions

If there is an accidental spill on site, the contractor shall respond with appropriate action. The contractor will be required to contact the owner and in turn the owner will contact the TCEQ in the event of a spill on site. In addition to the following guidance, reference the latest version of TCEQ's Technical Guidance Manual (TGM) RG-348 Section 1.4.16.

General Measures

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

Cleanup

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

3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. Specific spill response procedures are outlined below for each spill category (Minor – Hazardous).

Minor Spills

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
2. Use absorbent materials on small spills rather than hosing down or burying the spill.
3. Absorbent materials should be promptly removed and disposed of properly.
4. Follow the practice below for a minor spill:
   - Contain the spread of the spill.
   - Recover spilled materials.
   - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

1. Contain spread of the spill.
2. Notify the project foreman immediately.
3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

1. Notify the TCEQ by telephone as soon as possible and within 24 hours at (512)339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
3. Notification should first be made by telephone and followed up with a written report.
4. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

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

Vehicle and Equipment Maintenance

1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately
3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
5. Place drip pans or absorbent materials under paving equipment when not in use.
6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
9. Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Discourage "topping off" of fuel tanks.
3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

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Attachment B

Potential Sources of Contamination

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Potential Sources of Contamination

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

Preventative Measures: Vehicle maintenance when possible will be performed within the construction staging area or a local maintenance shop.

Potential Source: Miscellaneous trash and litter from construction workers and material wrappings.

Preventative Measures: Trash containers will be placed throughout the site to encourage proper disposal of trash.

Potential Source: Silt leaving the site.

Preventative Measures: Contractor will install all temporary best management practices prior to start of construction including the stabilized construction entrance to prevent tracking onto adjoining streets.

Potential Source: Construction Debris.

Preventative Measures: Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.

Potential Source: Soil and Mud from Construction Vehicle tires as they leave the site.

Preventative Measures: A stabilized construction exit shall be utilized as vehicles leave the site. Any soil, mud, etc. carried from the project onto public roads shall be cleaned up within 24 hours.

Potential Source: Sediment from soil, sand, gravel and excavated materials stock piled on site.

Preventative Measures: Silt fence shall be installed on the down gradient side of the stock piled materials. Reinforced rock berms shall be installed at all downstream discharge locations.

Potential Source: Portable toilet spill.

Preventative Measures: Toilets on the site will be emptied on a regular basis by the contracted toilet company.

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Attachment C

Sequence Of Major Activities

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Sequence of Major Activities

Intended Schedule or Sequence of Major Activities:

1. Installation of BMPs
   - Appropriate Temporary BMPs:
     - Stabilized Construction Entrance/Exit
     - Construction Staging Area
2. Site Clearing Activities (±0.15 Acres)
   - Appropriate Temporary BMPs:
     - Stabilized Construction Entrance/Exit
     - Silt Fence
     - Inlet Protection/Rock Berm
     - Tree Protection
     - Construction Staging Area
3. Earthwork & Grading (±0.15 Acres)
   - Appropriate Temporary BMPs:
     - Stabilized Construction Entrance/Exit
     - Silt Fence
     - Inlet Protection/Rock Berm
     - Tree Protection
     - Construction Staging Area
4. Construction of Utilities
5. Paving Activities
   - Subgrade
   - Base
   - Pavement
6. Commercial Sitework Construction
7. Soil Stabilization
   - Appropriate Temporary BMPs:
     - Stabilized Construction Entrance/Exit
     - Silt Fence
     - Inlet Protection/Rock Berm
     - Tree Protection
     - Construction Staging Area
8. Site cleanup and Removal of BMPs

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Attachment D

Temporary Best Management Practices and Measures

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Temporary Best Management Practices and Measures

A: Surface and ground water do not originate up-gradient from the site. Therefore, additional Temporary Best Management Practices and Measures to prevent pollution of surface and ground water will not be required.

Perimeter swales, dikes and slope drains will not be required due to no amount of storm water originating up-gradient from the site. Existing trees and vegetation will be protected to help maintain a stable ground surface and prevent loss of valuable topsoil. Stabilizing measures will be applied, to the maximum extent practicable, after the removal of any vegetative cover and/or altering the soil structure by clearing, grading, and compacting.

B: Surface and ground water does not originate from on-site or flows off-site. Therefore, additional Temporary Best Management Practices and Measures to prevent pollution of surface and ground water will not be required.

Temporary Best Management Practices and Measures will be installed prior to soil disturbing construction activity to prevent pollution caused by contaminated storm water runoff from the site. Silt fencing will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. A concrete washout pit will be used to collect all excess concrete during construction. A construction staging area will be used for equipment storage and vehicle maintenance.

Practices may also be implemented on site for interim and permanent stabilization. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

C: As identified in the Geologic Assessment no natural features were found within the boundaries of the project, therefore, Temporary Best Management Practices and Measures to prevent pollutants from entering sensitive features will not be required at this time. The temporary on-site Temporary Best Management Practices and Measures will be used to treat stormwater runoff before it leaves the project and prevent pollutants from entering surface streams or any sensitive features off-site.

D: According to the Geologic Assessment no naturally occurring geologic features were identified during the geologic assessment. Therefore, Temporary Best Management Practices and Measures used for maintaining flow to naturally occurring sensitive features identified in the geologic assessment will not be required. The owner, geologist and engineer of record shall be notified immediately if any naturally occurring sensitive features identified in either an executive director review, or during excavation, blasting, or construction. A Solution Feature Discovery Notification Form will then be submitted to the Texas Commission of Environmental Quality for review.

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Attachment E

Request to Temporarily Seal a Feature

Attachment E

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Request to Temporarily Seal a Feature

There will be no temporary sealing of any naturally occurring features on site.

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Attachment F

Structural Practices

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Structural Practices

Structural practices will be installed to prevent pollution caused by contaminated storm water runoff discharge from exposed areas of the site. Perimeter swales, dikes and slope drains used to divert flows away from exposed soils will not be required due to the small amount of storm water that originates up-gradient from the site. All structural practices will be installed prior to the removal of any vegetative cover and/or altering the soil structure by clearing, grading, and compacting. The location of all structural practices for the subject site is shown on the Erosion Control Plan *(**See TPDES Report**).* Details and specifications for the selected structural practices are provided on ***Exhibit 3***. The following describes the structural practices used.

Concrete Washout Areas

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

The following steps will help reduce storm water pollution from concrete wastes:

1. Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
2. Avoid mixing excess amounts of fresh concrete.
3. Perform washout of concrete trucks in designated areas only.
4. Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
5. Do not allow excess concrete to be dumped onsite, except in designated areas.

For onsite washout:

1. Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
2. Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Below grade concrete washout facilities are typical. These consist of a lined excavation sufficiently large to hold expected volume of washout material. Above grade facilities are used if excavation is not practical. Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this section, with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

When temporary concrete washout facilities are no longer required for the work, 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.

Silt Fence

A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. If not properly installed, silt fences are not likely to be effective.

The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence should remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way. If concentrated flow occurs after installation, corrective action must be taken such as placing a rock berm in the areas of concentrated flow.

Silt fencing within the site may be temporarily moved during the day to allow construction activity provided it is replaced and properly anchored to the ground at the end of the day. Silt fences on the perimeter of the site or around drainage ways should not be moved at any time.

Materials:

1. Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
2. Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft, and Brindell hardness exceeding 140.
3. Woven wire backing to support the fabric should be galvanized 2” x 4” welded wire, 12 gauge minimum.

Installation:

1. Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1-foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
2. Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre/100 feet of fence.
3. The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down-slope face of the trench is flat and perpendicular to the line of flow. Where fence

cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.

4. The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
5. Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
6. Silt fence should be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.

Common Trouble Points:

1. Fence not installed along the contour causing water to concentrate and flow over the fence.
2. Fabric not seated securely to ground (runoff passing under fence)
3. Fence not installed perpendicular to flow line (runoff escaping around sides)
4. Fence treating too large an area, or excessive channel flow (runoff overtops or collapses fence)

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Attachment G

Drainage Area Maps

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Drainage Area Maps

The Existing Drainage Area Maps are provided at the end of this report in ***Exhibit 2*** Erosion and sediment controls will be used within each disturbed drainage area as discussed in ***Attachment D.***

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Attachment H

Temporary Sediment Pond(s) Plans and Calculations

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Temporary Sediment Pond(s) Plans and Calculations

The proposed development will not disturb areas over 10 acres at one time within a common drainage watershed. Therefore, temporary sediment pond(s) plans and calculations will not be required.

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Attachment I

Inspection and Maintenance for BMPs

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Inspection and Maintenance for BMP's

MAINTENANCE

All temporary and permanent erosion and sediment control BMPs will be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair of BMPs will be conducted in accordance with manufacturers' specifications.

All temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil areas resulting from removal of BMPs or vegetation will be permanently stabilized as soon as possible.

Erosion and sediment controls are designed to prevent soil erosion and sediment migration offsite, to the extent practicable, which may result from construction activity. This design considers local topography, soil type, and rainfall.

Control measures must be installed and maintained according to the manufacturer's specifications. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permitee must replace or modify the control for site situations.

Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts, and whenever feasible, prior to the next rain event.

The controls must be installed, maintained, and operated in a manner that will limit, to the extent practicable, offsite transport of litter, construction debris, and construction materials.

INSPECTIONS

An inspection will be performed by the qualified personnel, as designated by the permitee, on a weekly basis and after any rainfall event. An inspection and maintenance report shall be made per inspection. An inspection form has been included in this report. Based on the inspection results, the controls shall be corrected before the next scheduled inspection.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures. Reports of maintenance and inspection activities will be maintained on-site, in conformance with the TPDES permit conditions. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the WPAP. This report must be signed by the responsible party.

Major observations shall, at a minimum, include the following:

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The locations of discharges of sediment or other pollutants from the site;

Locations of BMPs that need to be maintained;

Locations of BMPs that failed to operate as designed or proved inadequate for a particular location;

Location where additional BMP's are needed;

All needed repairs or modifications will be reported to the contractors to permit the timely implementation of required actions. Necessary repairs of modifications will be implemented within seven days of inspection. The WPAP will be modified within seven days to reflect any modifications to measures as a result of inspection.

The WPAP must be amended whenever there is a change in design, construction, operation or maintenance that has a significant effect on the discharge of pollutants to the waters of the United States that was not addressed in the WPAP.

The WPAP must be amended when inspections or investigations by site operations, local, state or federal officials indicate that the WPAP is proving ineffective in eliminating or significantly minimizing pollutants from the construction site or otherwise is not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity.

Attachment I

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INSPECTION FORM

Project Name: **Owner (s)/Operator (s):** **Permit Numbers(s):** **Inspection Date:**	***NOT APPLICABLE***	***IN COMPLIANCE***	***NEEDS***	***COMMENTS***
RECORD KEEPING				
SWP3 Current				
NOI and Permit Posted				
BEST MANAGEMENT PRACTICES (BMPs)				
Vegetative Buffers				
Soil Covering(Including mulch and temporary vegetation)				
Outlet Protection				
Sediment Control Basins				
Silt Fence				
Stabilized Entrances/Exits				
Construction Staging Areas				
Inlet Protection				
Gravel Filter Bags				
Vegetated Filter Strip				
Concrete Truck Washout Pit				
Trash Receptacles				
General Site Cleanliness				
Other _____				
Other _____				
Other _____				

Attachment I

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MAJOR OBSERVATIONS

_____

_____

_____

_____

_____

_____

CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"I further certify I am an authorized signatory in accordance with the provisions of 30 TAC §305.128."

INSPECTOR NAME/SIGNATURE: DATE:

(Inspector must attach a brief summary of qualifications to this report.)

OWNER NAME/SIGNATURE:

DATE:

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Attachment J

Schedule of Interim and Permanent Soil Stabilization Practices

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Schedule of Interim and Permanent Soil Stabilization

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

1. Hydraulic Mulch and Seeding: Disturbed areas subject to erosion shall be stabilized with hydraulic mulch and/or seeded and watered to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.

2. Sodding and Wood Mulch: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained by the permitee in the attached Project Timeline:

a) The dates when major grading activities occur;

b) The dates when construction activities temporarily or permanently cease on a portion of the site;

c) The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (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 snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site. In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.

Attachment J

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PROJECT TIMELINE

DATES WHEN MAJOR GRADING ACTIVITIES OCCUR	
Date	Construction Activity

DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE	
Date	Construction Activity

DATES WHEN STABILIZATION MEASURES ARE INITIATED	
Date	Stabilization Activity

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: Frank D. Corey, P.E.

Date: June 19, 2025

Signature of Customer/Agent

F. D. Corey

Regulated Entity Name: Wortham Oaks Amenity Center

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

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

☒ N/A

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

   ☒ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

☐ Design calculations (TSS removal calculations)
☐ TCEQ construction notes
☐ All geologic features
☐ All proposed structural BMP(s) plans and specifications

☒ N/A

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

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

    ☒ N/A

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

    ☒ N/A

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

    ☐ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

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Attachments

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Attachment A

20% or Less Impervious Cover Waiver

Attachment A

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20% or Less Impervious Cover Waiver

The site will be used for commercial development with impervious cover greater than 20%. Therefore, a 20% or less impervious cover will not be requested for this project.

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Attachment B

BMPs for Upgradient Stormwater

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BMP's for Upgradient Stormwater

There is no up-gradient storm water runoff, therefore, additional Permanent Best Management Practices and Measures used to prevent pollution of surface and ground water will not be required.

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Attachment C

BMPs for On-site Stormwater

Attachment C

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BMP's for On-site Stormwater

There is an existing 50' wide Vegetative Filter Strip (VFS) that was approved on December 10, 2014. Wortham Oaks Amenity Center is part of the originally approved WPAP. The proposed runoff from the Amenity Center continue to be treated by the existing VFS. This MOD does not change the design of the existing VFS.

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Attachment D

BMPs for Surface Streams

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BMP's for Surface Streams

Not applicable. There are no existing surface streams onsite, therefore additional BMP's are not required besides the existing single chamber sand filter basin to treat the water on the proposed site.

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Attachment E

Request to Seal Features

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Request to Seal a Feature

There will be no sealing of any naturally occurring features on site.

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Attachment F

Construction Plans

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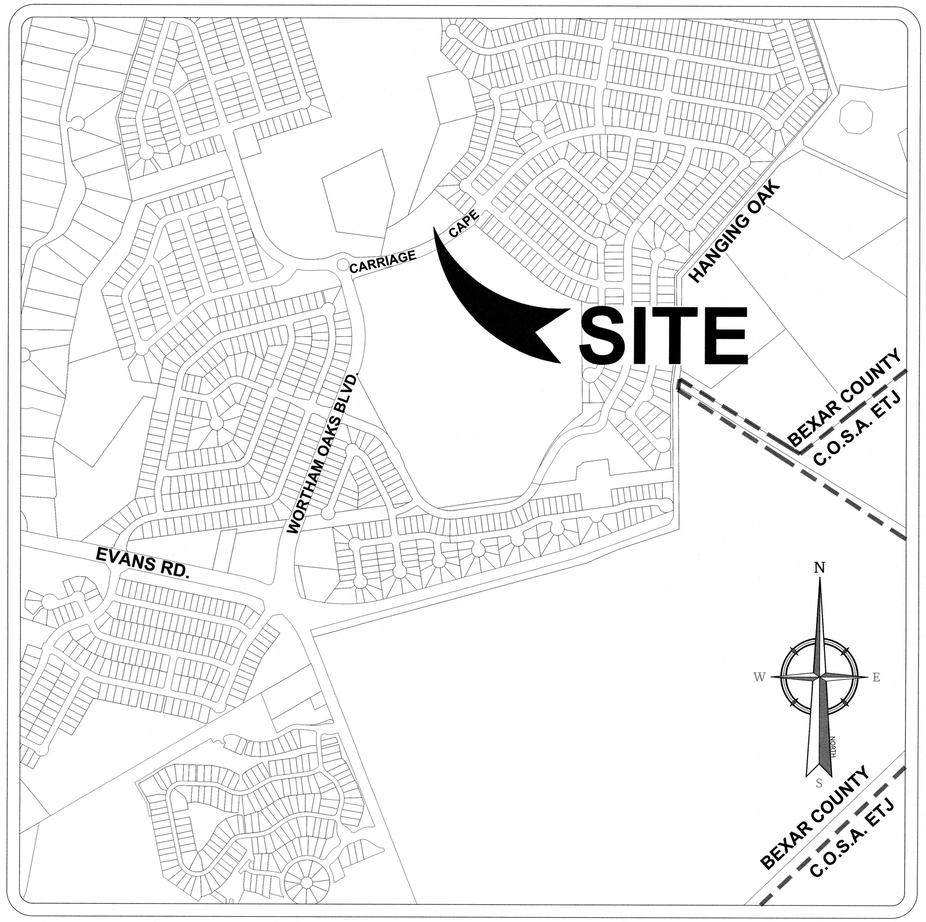
Construction Plans

Existing permanent BMP (Vegetative Filter Strip) that was approved on December 10, 2014 as part of the Wortham Okas East Phase 2 will be used to treat runoff from Wortham Oaks Amenity Center. An additional 12 feet wide and 100 feet long vegetative filter strip is proposed. See attached construction documents. No modifications are being made to the existing permanent BMP.

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

5763 CARRIAGE CAPE, SAN ANTONIO, TEXAS 78261



LOCATION MAP

N.T.S.

INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	C0.0
EXISTING CONDITIONS & DEMOLITION PLAN	C1.0
SITE PLAN	C2.0
GRADING PLAN	C3.0
EROSION CONTROL PLAN	C4.0
EROSION CONTROL DETAILS	C4.1

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REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER
6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS
AMENITY CENTER
COURT EXPANSION
FOR
WORTHAM OAKS
HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers
Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway,
Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER: 1192-01-01
DRAWING NAME: C0.0 COVER SHEET

SHEET TITLE: COVER SHEET

SHEET NUMBER: C0.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

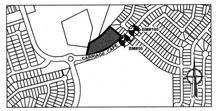
Date: Jun 10, 2025, 10:37am User ID: ggparreno
File: K:\1192\N01\Design\Civil\C0.0 COVER SHEET.dwg

LEGAL DESCRIPTION

BEING LOT 96, BLOCK 11, C.B. 4913 OUT OF THE WORTHAM OAKS, UNIT 7 (ENCLAVE) SUBDIVISION PLAT (PLAT NO. 120165), RECORDED IN VOL. 9656, PG. 221 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

COORDINATION NOTE:

1. CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTACT SPECTRUM TO COORDINATE CABLE TV SERVICE. 1-800-222-5355.
3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-225-5288.
4. CONTACT CITY PUBLIC SERVICE TO PLAN ELECTRICAL SERVICES. (210)353-2222.
5. CONTACT CITY PUBLIC SERVICE TO PLAN GAS SERVICES. (210)353-2222.
6. CONTACT SAWS TO PLAN WATER AND SANITARY SEWER SERVICES. (210)704-7297.



BENCHMARK MAP
N.T.S.

BENCHMARKS

BM #50: SET BENCHMARK. ELEVATION = 1001.32'
SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC. ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

COORDINATES IN GRID.

CAUTION!!: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION.THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

EXISTING UTILITY NOTES:

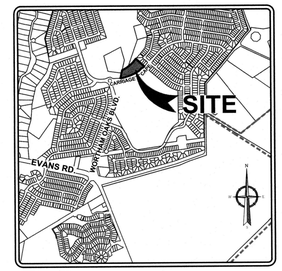
1. THIS PLAN HAS BEEN PREPARED TO THE BEST OF OUR ABILITY USING THE DATA AVAILABLE. EXISTING UTILITY DATA SHOWN ON THIS LAYOUT WAS OBTAINED FROM A SURVEY OF THE VISIBLE FEATURES AT THE SITE AND PUBLIC RECORD MAPS OBTAINED FROM UTILITY COMPANIES.
2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION.
3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES WHETHER SHOWN ON THIS PLANS OR NOT. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.
4. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTING EXISTING UTILITIES DURING CONSTRUCTION WHETHER SHOWN ON THE PLANS OR NOT.

DEMOLITION NOTES

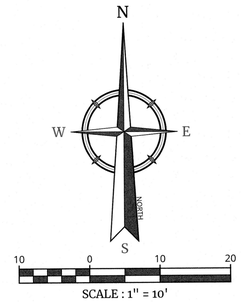
1. LOCATION OF EXISTING UTILITIES AND DRAINAGE SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
2. DEMOLITION CONTRACTOR IS RESPONSIBLE FOR CLEARING THE SITE OF ALL OBSTRUCTIONS THAT EXIST ON THIS SITE PRIOR TO THE START OF CONSTRUCTION OR DURING THE CONSTRUCTION SO AS TO NOT IMPEDE THE SITE WORK CONSTRUCTION PROCESS.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES, POWER POLES TO BE REMOVED, VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED AND ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO IDENTIFY ANY MATERIAL OR EQUIPMENT SCHEDULED FOR REMOVAL TO BE SALVAGED AND REUSED. CONTRACTOR SHALL REPLACE AT HIS EXPENSE ANY DESTROYED MATERIAL OR EQUIPMENT THAT WAS MARKED FOR SALVAGE.
5. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS MUST MAINTAIN ACCESS TO VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT THE WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
6. CONTRACTOR SHALL COORDINATE WITH CPS AND OWNER AS REQUIRED BEFORE REMOVAL OF ANY ELECTRIC FACILITIES.
7. CONTRACTOR SHALL COORDINATE WITH CPS TO REMOVE ANY OVERHEAD ELECTRIC LINES OR POLES DESIGNATED TO BE REMOVED (IF ANY). ANY DISCREPANCIES BETWEEN THIS PLAN AND EXISTING CONDITIONS SHALL BE COMMUNICATED WITH THE ENGINEER.
10. CONTRACTOR SHALL NOT START DEMOLITION OF ANY FEATURE SHOWN ON THIS DRAWING UNTIL A STORM WATER POLLUTION PREVENTION PLAN IS INSTALLED AND COMPLETED.
11. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH ALL REGULATIONS GOVERNING THE DEMOLITION, REMOVAL, TRANSPORTATION, AND DISPOSAL, OF ALL DEMOLISHED OR UNWANTED MATERIAL.
12. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR DEMOLITION.
13. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL PROPERTY CORNERS AND SHALL HAVE AT HIS EXPENSE, ALL CORNERS REPLACED WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES.
14. CONTRACTOR SHALL NOT DEMOLISH ANY WATER OR SANITARY SEWER LINE WITHOUT SAWS APPROVAL.
15. CONTRACTOR SHALL INSTALL A MINIMUM 6-FOOT HIGH, CHAIN LINK, PROTECTIVE FENCE ALONG THE PERIMETER OF THE CONSTRUCTION/DEMOLITION LIMITS. PROTECTIVE FENCE SHALL BE IN PLACE BEFORE ANY DEMOLITION OR CONSTRUCTION BEGINS AND SHALL REMAIN IN PLACE AND IN GOOD REPAIR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL TAKE SPECIAL CARE TO INSTALL VEHICULAR BARRIERS AND FENCING TO PROHIBIT VEHICULAR AND PEDESTRIAN ACCESS-TO THAT AREA CONTRACTOR SHALL COORDINATE WITH THE OWNER TO ENSURE THAT FENCING AND BARRIERS INSTALLED ARE ADEQUATE.

EASEMENTS

1. 16' SANITARY SEWER EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)
2. 16' GAS, ELEC., TEL. & CA. TV. EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)



LOCATION MAP
N.T.S.



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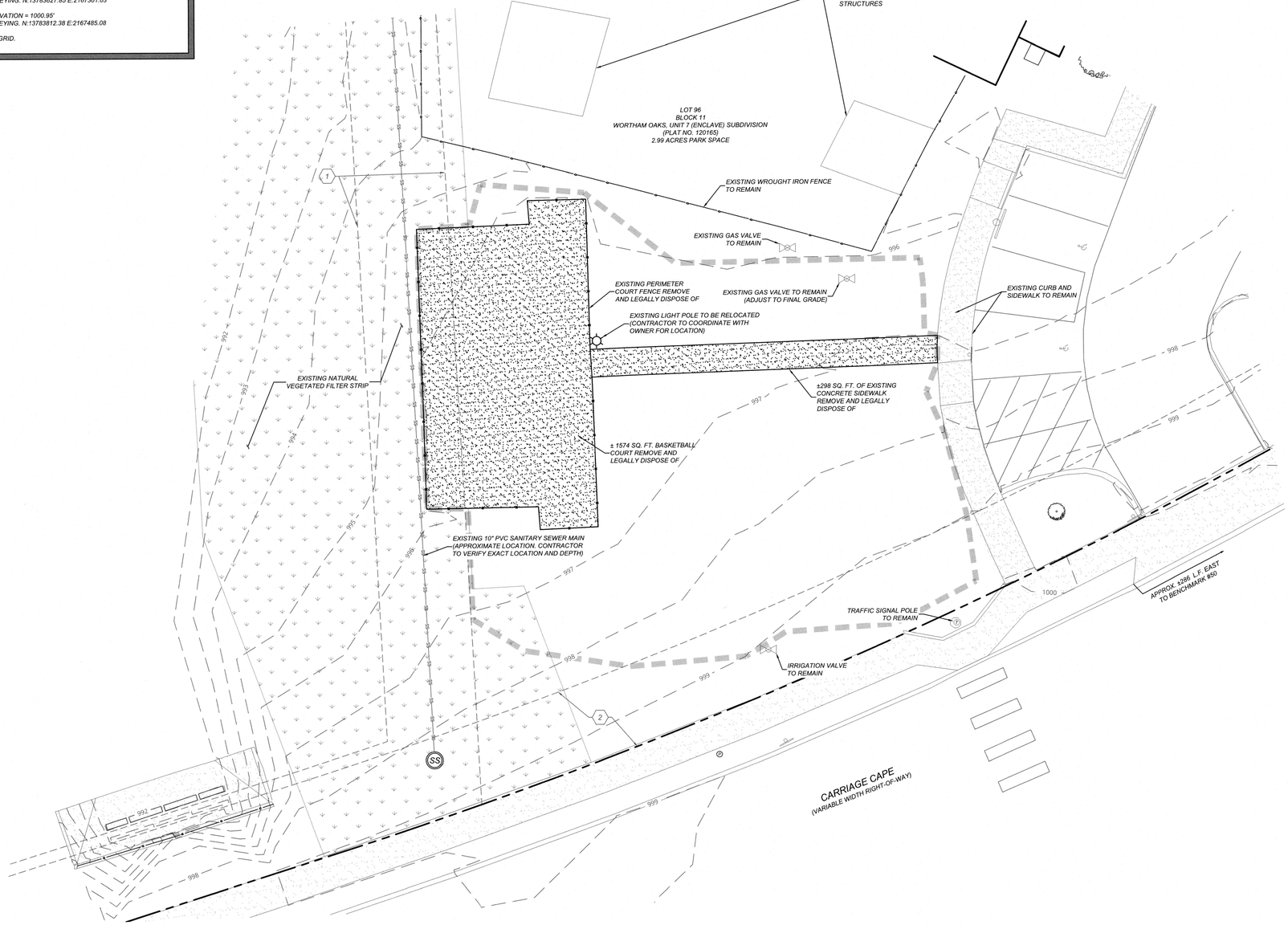

LEGEND

- LIMITS OF CONSTRUCTION
- PROPERTY LINE
- EXISTING CURB
- EXISTING SEWERLINE
- EXISTING MANHOLE
- 790 EXISTING MAJOR CONTOURS
- 791 EXISTING MINOR CONTOURS
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING CONCRETE SIDEWALK TO BE REMOVED

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER
6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

FOR

WORTHAM OAKS HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER: 1192-01-01
DRAWING NAME: EXISTING CONDITIONS & DEMO PLAN

SHEET TITLE: EXISTING CONDITIONS & DEMOLITION PLAN

SHEET NUMBER: C1.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Date: Jun 10, 2025, 10:57am User ID: gguerrero
File: K:\1192\01\01\Design\Civil\C1.0 EXISTING CONDITIONS & DEMO PLAN.dwg

LEGAL DESCRIPTION

BEING LOT 96, BLOCK 11, C.B. 4913 OUT OF THE WORTHAM OAKS, UNIT 7 (ENCLAVE) SUBDIVISION PLAT (PLAT NO. 120165), RECORDED IN VOL. 9656, PG. 221 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

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BENCHMARK MAP
N.T.S.

BENCHMARKS

BM #50: SET BENCHMARK. ELEVATION = 1001.32'
SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC. ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

COORDINATES IN GRID.

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SURVEY CONTACT NOTE:
CONTACT TERESA SEIDEL, RPLS WITH KFW SURVEYING AT (210) 979-8444 FOR CONSTRUCTION STAKING SERVICES ON THIS PROJECT.

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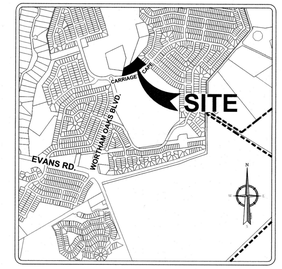

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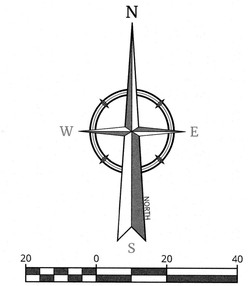
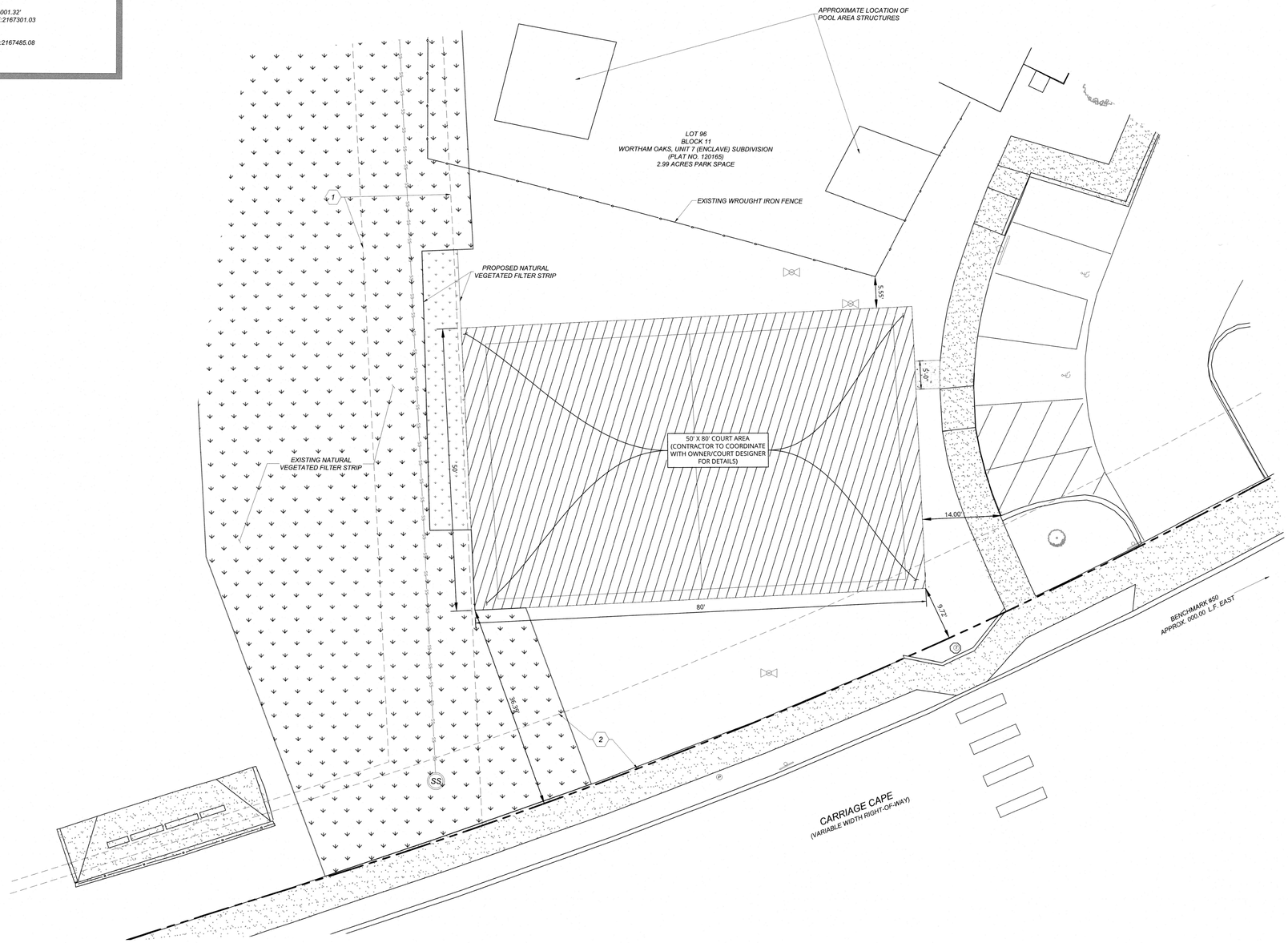


SCALE : 1" = 20'



LEGEND

- PROPERTY LINE
- EXISTING CURB
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING VALVE TO REMAIN
- PROPOSED COURT SURFACE (CONTRACTOR TO COORDINATE WITH OWNER FOR DETAILS)

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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER:	DRAWING NAME:
1192-01-01	C2.0 SITE PLAN

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C2.0

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Date: Jun 10, 2025, 10:57am User ID: ggrimmm
File: K:\1192\01\01\Design\Civil\C2.0 SITE PLAN.dwg

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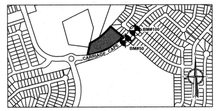

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N.T.S.

BENCHMARKS

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SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC, ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

COORDINATES IN GRID.

GRADING NOTES:

1. ALL GRADES AND CONTOURS SHOWN ARE FINAL, TOP OF FINISHED SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL SUBTRACT THICKNESS OF PAVEMENT, BASE, TOP SOIL, SOD, ETC. TO ACHIEVE SUBGRADE ELEVATION.

2. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.

3. NO ABRUPT CHANGE OF GRADE SHALL OCCUR IN THE ROADWAYS, PARKING AREAS, OR SIDEWALKS.

4. CONTRACTOR SHALL CONSTRUCT TO OBTAIN GRADES SHOWN HEREON ± ONE-TENTH (0.10) FOOT.

5. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND COORDINATION WITH OWNER.

6. UTILITIES SHOWN ON THE PLANS ARE FROM THE BEST INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.

7. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL APPLICABLE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION) AND CPS SERVICE STANDARDS (LATEST EDITION).

8. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL OR BETTER CONDITION ANY DAMAGES DONE TO EXISTING BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, SIDEWALKS, OR DRIVEWAYS (NO SEPARATE PAY ITEM).

9. DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL NECESSARY UTILITY COMPANIES FOR PROVIDING TEMPORARY UTILITY SERVICES DURING CONSTRUCTION. THE CONTRACTOR SHALL PAY FOR ALL TEMPORARY UTILITY SERVICES.

11. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS, AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

13. ALL EXCAVATION IS UNCLASSIFIED.

14. ALL EXCAVATIONS AND BACKFILLING OF UTILITY TRENCHES SHALL BE AS PER CONTRACT SPECIFICATIONS NO. 02221 – EARTHWORK. ALL BACKFILL MUST BE IN COMPACTED 12 - INCH LIFTS MAXIMUM, AND NO WATER JETTING IS ALLOWED.

15. SEE CIVIL DETAIL SHEETS FOR APPLICABLE DETAILS.

16. ALL CONSTRUCTION AREAS WITHIN THE SITE SHALL BE STRIPPED OF ALL VEGETATION AND LOOSE TOPSOIL. ANY POCKETS OF DEBRIS ENCOUNTERED SHOULD ALSO BE REMOVED.

17. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLANS SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

18. REFER TO GEOTECHNICAL REPORT FOR SUBSURFACE INFORMATION AND CONSTRUCTION GUIDELINES.

19. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 2% UNLESS OTHERWISE SHOWN.

TRENCH EXCAVATION SAFETY PROTECTION NOTE:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN / GEOTECHNICAL / SAFETY / EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

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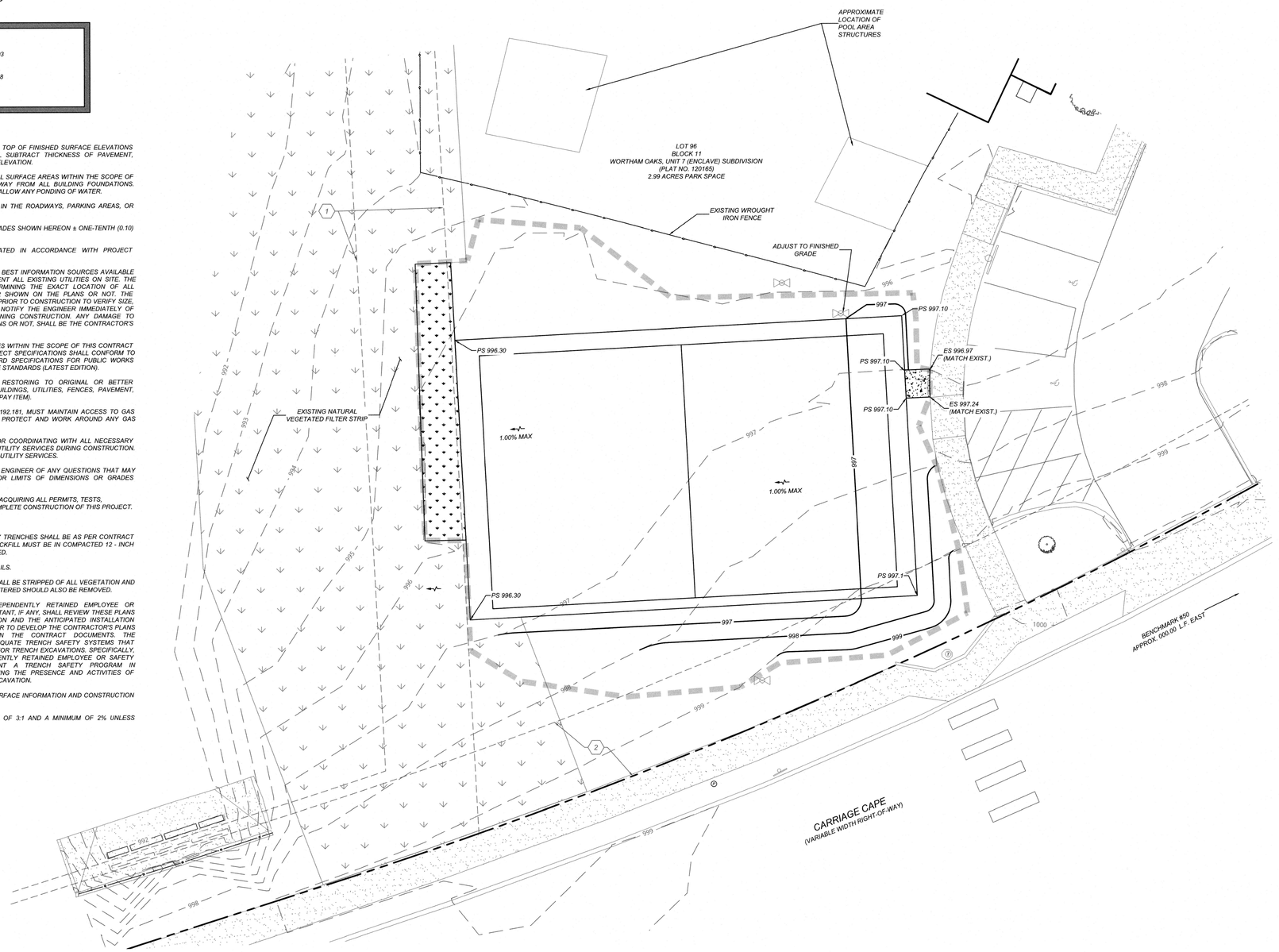
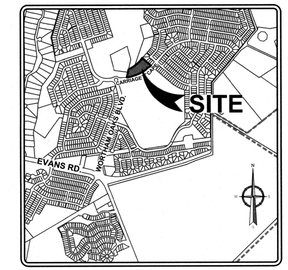
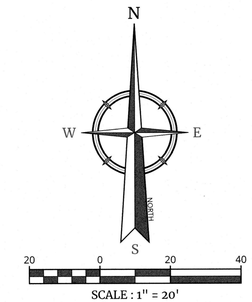




LOCATION MAP
N.T.S.



SCALE : 1" = 20'

LEGEND

- LIMITS OF CONSTRUCTION
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- 790 — EXISTING MAJOR CONTOURS
- 791 — EXISTING MINOR CONTOURS
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING VALVE TO REMAIN
- 999 — PROPOSED CONTOURS
- ES 997.1 (MATCH EXIST.) — EXISTING SPOT GRADE
- PS 997.50 — PROPOSED SPOT GRADE
- FLOW ARROW

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PROJECT NUMBER:	DRAWING NAME:
1192-01-01	C3.0 GRADING PLAN

SHEET TITLE:
GRADING PLAN

SHEET NUMBER:
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File: K:\1192\01\01\Design\Civil\C3.0 GRADING PLAN.dwg

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SW3P MODIFICATIONS

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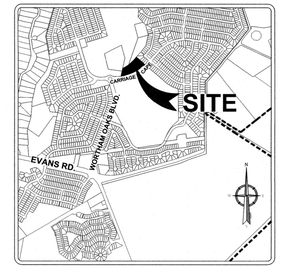

LOCATION MAP
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4. *CONTACT CITY PUBLIC SERVICE TO PLAN ELECTRICAL SERVICES. (210)353-2222.*
5. *CONTACT CITY PUBLIC SERVICE TO PLAN GAS SERVICES. (210)353-2222.*
6. *CONTACT SAWS TO PLAN WATER AND SANITARY SEWER SERVICES. (210)704-7297.*

BENCHMARK MAP
N.T.S.

BENCHMARKS

BM #50: SET BENCHMARK, ELEVATION = 1001.32'
SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC. ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

COORDINATES IN GRID.

GENERAL NOTES:

1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS.

2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORM WATER POLLUTION PREVENTION PLAN REGULATIONS ONLY.

3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH THE REGULATIONS CONTAINED WITHIN IT.

INSTALLATION:

1. ALL OPERATORS SHALL SUBMIT A CONSTRUCTION SITE NOTICE (CSN) AT LEAST 48 HOURS IN ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES.

2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE LIMITS OF THE SITE BOUNDARY.

3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREA. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREA DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

1. CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED, THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE, AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN IN THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

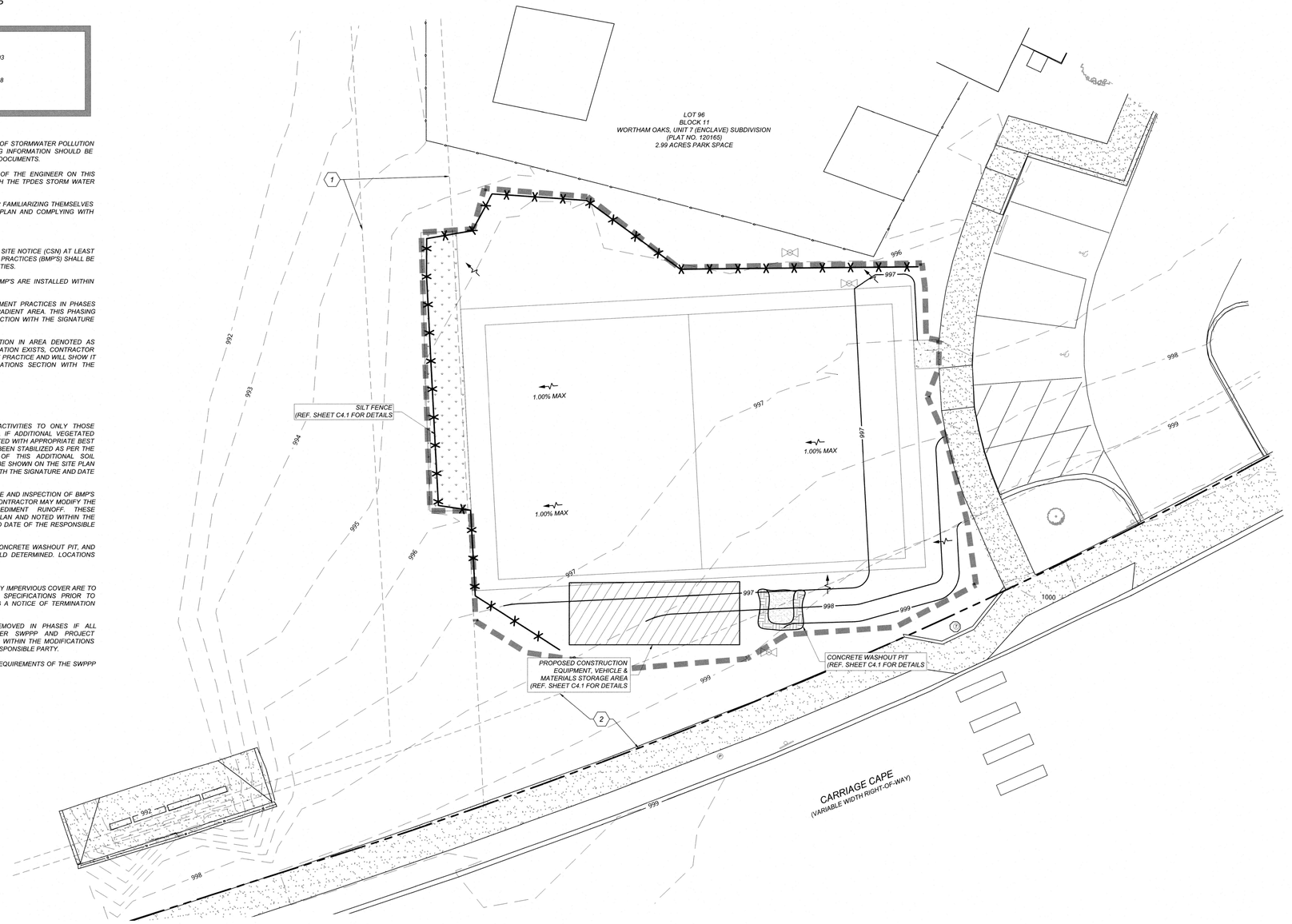
3. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT, AND EQUIPMENT AND STORAGE AREA ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

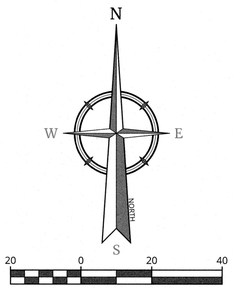
PROJECT COMPLETION:

1. ALL DISTURBED AREAS THAT ARE NOT COVERED BY IMPERVIOUS COVER ARE TO BE STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).

2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL UPGRADIENT AREA HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).





SCALE : 1" = 20'

LEGEND

- *LIMITS OF CONSTRUCTION*
- *PROPERTY LINE*
- *EXISTING CURB*
- *790 EXISTING MAJOR CONTOURS*
- *791 EXISTING MINOR CONTOURS*
- *EXISTING VALVE TO REMAIN*
- *999 PROPOSED CONTOURS*
- *FLOW ARROW*
- *SILT FENCE*
- *CONSTRUCTION STAGING AREA*
- *TRUCK CONCRETE WASHOUT PIT TO BE FIELD LOCATED*

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811 Know what's below. Call before you dig.

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ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER

6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

FOR

WORTHAM OAKS HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER:	DRAWING NAME:
1192-01-01	C4.0 EROSION CONTROL PLAN

SHEET TITLE:

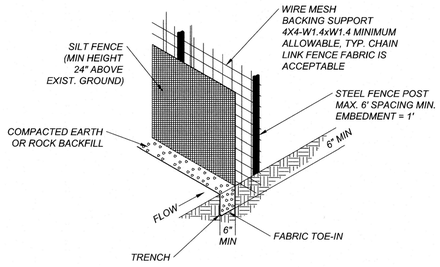
EROSION CONTROL PLAN

SHEET NUMBER:

C4.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Date: Jun 10, 2025, 10:57am User ID: gguerrero
File: K:\1192\01\05design\Civil\C4.0 EROSION CONTROL PLAN.dwg



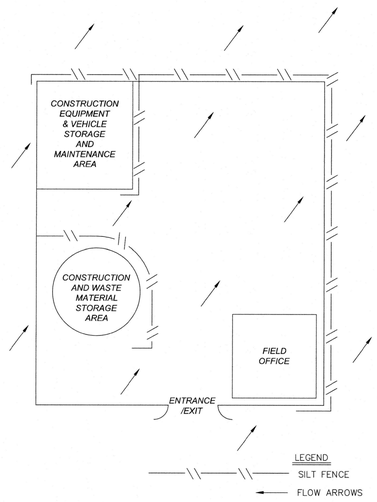
ISOMETRIC PLAN VIEW

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

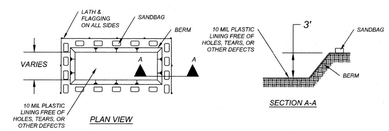
Installation:
(1) Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
(2) Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre/i 00 feet of fence.
(3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down- slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
(5) Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
(6) Silt fence should be removed when the site is completely stabilized so as not to block or impede stone flow or drainage.

Inspection and Maintenance Guidelines:
(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.

SILT FENCE

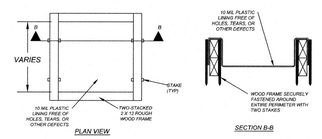


TYPICAL CONSTRUCTION STAGING AREA



PLAN VIEW — SECTION A-A

TYPE "BELOW GRADE"



PLAN VIEW — SECTION B-B

TYPE "ABOVE GRADE"

GENERAL NOTES:

- *DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.*
- *WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC .*
- *WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.*

CONCRETE TRUCK WASHOUT PIT

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Know what's below. Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER
6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION
FOR
WORTHAM OAKS HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER: 1192-01-01
DRAWING NAME: EX EROSION CONTROL DETAIL SHEET_1

SHEET TITLE:
EROSION CONTROL DETAILS

SHEET NUMBER:
C4.1

Date: Jun 11, 2025, 9:12am User ID: andrea.pennington
File: K:\1192\01\01\Design\Civil\C4.1 EROSION CONTROL DETAIL SHEET_1.dwg

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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Attachment G

Inspection and Maintenance Plan

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Inspection and Maintenance Plan

No inspection and maintenance plan are provided because the permanent BMP (Vegetative Filter Strip) is existing. The permanent BMP was approved on December 10, 2014, as part of the Wortham Oaks East Phase 2. No modifications are being made to the permanent BMP.

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Attachment H

Pilot-Scale Field Testing Plan

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Pilot-Scale Field Testing Plan

The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMP's and measures for this site; therefore pilot-scale field testing is not required.

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Attachment I

Measure for Minimizing Surface Stream Contamination

Attachment I

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Measures for Minimizing Surface Stream Contamination

Contaminated stormwater runoff from the proposed site will enter the water quality devices proposed for this project. Storm water will be filtered and be released at a point consistent with existing hydrology conditions. Therefore, there will be no changes in the way in which water enters a stream as a result of the construction and development.

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Additional Forms

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

I Katie Cruse,
Print Name

Manager,
Title - Owner/President/Other

of Wortham Oaks Homeowners association, INC.,
Corporation/Partnership/Entity Name

have authorized Colliers Engineering & Design Representatives,
Print Name of Agent/Engineer

of Colliers Engineering & Design,
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:

Katie Cruse 7/16/2025

Applicant's Signature Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Katie Cruse 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 16 day of July, 2025.

NOTARY PUBLIC

Andrea McFarlan

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 9/1/2025

NOTARY PUBLIC STATE OF TEXAS
ANDREA MCFARLAN DESJARDIN
Notary ID #125420025
My Commission Expires
September 1, 2025

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Wortham Oaks Amenity Center

Regulated Entity Location: +/- 0.54 , miles northeast of the Evans Rd. and Wortham Oaks Blvd. intersection

Name of Customer: Katie Cruse

Contact Person: Frank D. Corey, P.E. Phone: 210-979-8444

Customer Reference Number (if issued):CN _____

Regulated Entity Reference Number (if issued):RN 106359268

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde

☐ Comal ☐ Kinney

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

☐ Austin Regional Office

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

☒ San Antonio Regional Office

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	2.99 Acres	$ 4,000.00
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Katie Cruse Date: 07/30/2025

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

☒ Other — **Modification of impervious cover (increase of 2,148 sq. ft.)**

No changes made to the existing permanent BMP.

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 106359268**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	06/19/2025

☒ 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:*

Wortham Oaks HOA	

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
0800620913	32019249369	20-4973596	

11. Type of Customer:

☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☐ **Yes** ☐ **No**

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

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:	17319 San Pedro Ave						
	Suite 318						
	City	San Antonio	**State**	TX	**ZIP**	78232	**ZIP + 4**

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(210) 507-1521		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Wortham Oaks Amenity Center

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	5763 Carriage Cape							
	City	San Antonio	**State**	TX	**ZIP**	78261	**ZIP + 4**	
24. County	Bexar							

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

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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)
7999		71399	

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

Amenity/Recreational Center

34. Mailing Address:	**17319 San Pedro Ave**							
	Ste. 318							
	City	**San Antonio**	**State**	**TX**	**ZIP**	**78232**	**ZIP + 4**	
35. E-Mail Address:	**kcruse@spectrumam.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*

(210) 507-1521		**( ) -**

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	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Frank D. Corey, P.E.	**41. Title:**	Senior Project Manager
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210 **)** 979-8444		**( ) -**	frank.corey@collierseng.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:	Wortham Oaks Homeowner's Associaiton Inc.	**Job Title:**	Client Relations Manager
Name *(In Print):*	Katie Cruse	**Phone:**	**(** 210 **)** 507- **1521**
Signature:	Katie Cruse	**Date:**	07/30/2025

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Exhibits

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Exhibit 1

Site Plan

LEGAL DESCRIPTION

BEING LOT 96, BLOCK 11, C.B. 4913 OUT OF THE WORTHAM OAKS, UNIT 7 (ENCLAVE) SUBDIVISION PLAT (PLAT NO. 120165), RECORDED IN VOL. 9656, PG. 221 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS.

COORDINATION NOTE:

1. CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTACT SPECTRUM TO COORDINATE CABLE TV SERVICE. 1-800-222-5355.
3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-225-5288.
4. CONTACT CITY PUBLIC SERVICE TO PLAN ELECTRICAL SERVICES. (210)353-2222.
5. CONTACT CITY PUBLIC SERVICE TO PLAN GAS SERVICES. (210)353-2222.
6. CONTACT SAWS TO PLAN WATER AND SANITARY SEWER SERVICES. (210)704-7297.

BENCHMARK MAP
N.T.S.

BENCHMARKS

BM #50: SET BENCHMARK. ELEVATION = 1001.32'
SET BY KFW SURVEYING. N:13783627.85 E:2167301.03

BM #100: SXC. ELEVATION = 1000.95'
SET BY CED SURVEYING. N:13783812.38 E:2167485.08

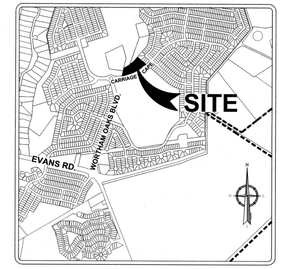
COORDINATES IN GRID.

CAUTION!!: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION.THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

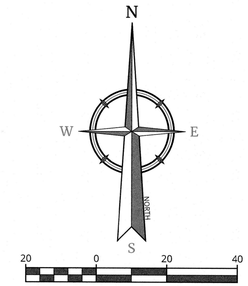
SURVEY CONTACT NOTE:
CONTACT TERESA SEIDEL, RPLS WITH KFW SURVEYING AT (210) 979-8444 FOR CONSTRUCTION STAKING SERVICES ON THIS PROJECT.

EASEMENTS

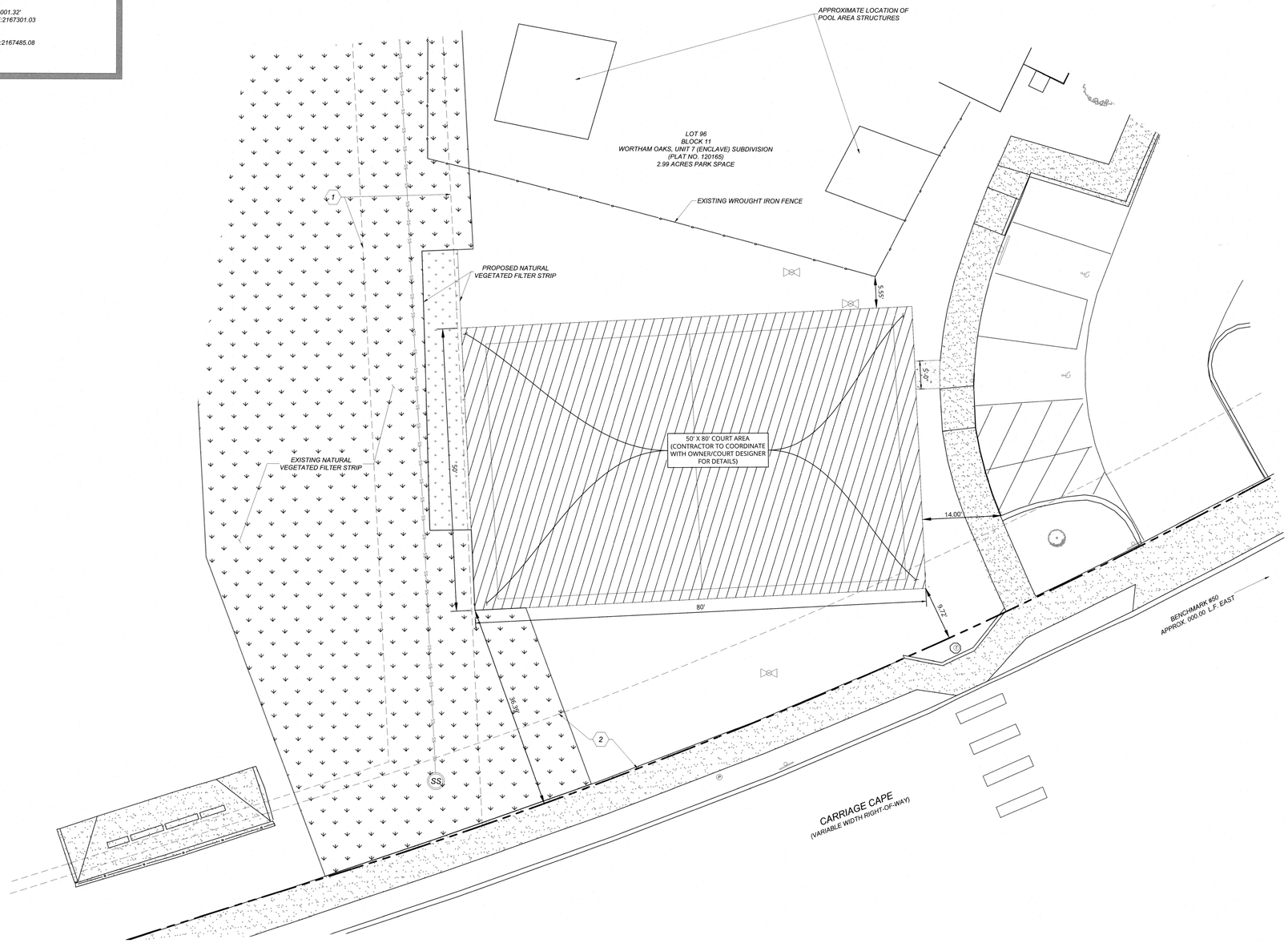
1. 16' SANITARY SEWER EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)
2. 16' GAS, ELEC., TEL. & CA. TV. EASEMENT (VOL. 9656, PGS. 220-222, O.P.R.)



LOCATION MAP
N.T.S.



SCALE : 1" = 20'



LEGEND

- PROPERTY LINE
- EXISTING CURB
- EXISTING SEWERLINE
- EXISTING MANHOLE
- EXISTING CONCRETE SIDEWALK TO REMAIN
- EXISTING VALVE TO REMAIN
- PROPOSED COURT SURFACE (CONTRACTOR TO COORDINATE WITH OWNER FOR DETAILS)

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
FRANK D. COREY
103068
LICENSED PROFESSIONAL ENGINEER
6/10/25

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

FOR

WORTHAM OAKS HOMEOWNER'S ASSOCIATION
ATTN: KATIE CRUSE
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TX 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	6/10/25	GGP	FDC

PROJECT NUMBER:	DRAWING NAME:
1192-01-01	C2.0 SITE PLAN

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C2.0

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

Date: Jun 10, 2025, 10:57am User ID: ggrimmm
File: K:\1192\01\01\Design\Civil\C2.0 SITE PLAN.dwg

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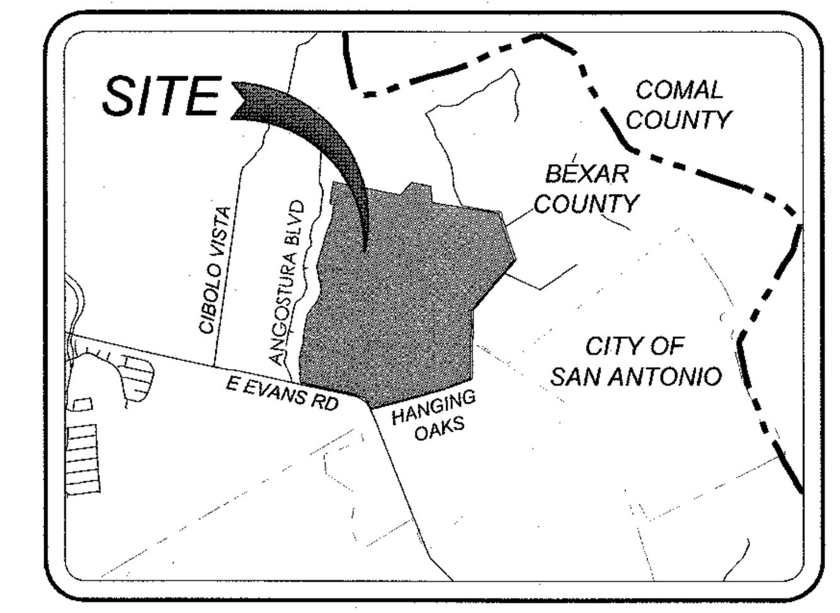
Exhibit 2

Existing Drainage Area Map (Previously Approved)



LOCATION MAP
MAPSCO MAP GRID: 485C5
SCALE: 1" = 5000'

SCALE: 1" = 300'

0' 300' 600' 900'

LEGEND

= MDP LIMITS
= DRAINAGE AREA
= TIME OF CONCENTRATION PATH
WQP = WATER QUALITY POND LOT
= EXISTING 1' CONTOURS
= WPAP DRAINAGE AREA
= FLOW ARROWS

PREVIOUSLY APPROVED PLAN

PROPOSED/ULTIMATE CONDITIONS

HYDROLOGY SUMMARY - RATIONAL METHOD

Study Point	Drainage Area	(Acres)	C	$T_{carryover}$ (min)		T_{ovrl} (min)	T_{sc} (min)	T_{ch} (min)	T_{tot} (min)	I_5 (in/hr)	I_{25} (in/hr)	I_{100} (in/hr)	Q_5 (ft^3/s)	Q_{25} (ft^3/s)	Q_{100} (ft^3/s)
1	DA-1	1.00	0.69			5.0	4.3	0.0	9.3	6.62	8.70	11.42	4.58	6.02	7.90
2	DA-2	3.40	0.69			9.4	0.7	0.0	10.1	6.40	8.42	11.15	15.03	19.76	26.19
3	DA-3	13.63	0.69			13.5	6.6	1.7	21.7	4.50	5.92	7.68	42.37	55.71	72.19
4	DA-4	8.73	0.69			8.7	2.6	1.2	12.5	5.90	7.74	10.52	35.53	46.64	63.38
5	DA-5	9.29	0.69			9.4	4.7	1.7	15.8	5.33	7.01	9.64	34.19	44.92	61.80
6	DA-6	11.68	0.69			14.8	6.3	2.6	23.7	4.30	5.66	7.22	34.68	45.61	58.17
7	DA-7	11.60	0.69			8.7	2.1	3.8	14.6	5.54	7.28	10.08	44.39	58.29	80.68
7A	DA-3 THRU DA-7	54.94	0.69	FROM PT 3	21.7	0.0	0.0	3.5	25.2	4.16	5.48	6.90	157.80	207.55	261.56
8	DA-8	2.99	0.69			0.0	1.4	0.5	5.0	8.40	11.10	13.54	17.35	22.93	27.97
9	OS-1	0.74	0.57			5.0	0.0	0.0	5.0	8.40	11.10	13.54	3.56	4.70	5.74

KFW ENGINEERS & SURVEYING
FIRM# 9513
14603 HUEBNER RD. BLDG. 40
SAN ANTONIO, TEXAS 78230
PHONE (210) 979-8444
FAX (210) 979-8441

ISSUE DATE

REVISIONS

STATE OF TEXAS
TRAVIS R. ELSETH
99254
LICENSED
PROFESSIONAL ENGINEER
9/30/14

WORTHAM OAKS EAST, PHASE 2 WPAP DRAINAGE AREA MAP

JOB NO. 205-16-00
DATE: JUNE, 2014
DRAWN: MG CHECKED: GW

SHEET NUMBER:
1 OF 1

Date: Sep 26, 2014, 2:40pm User ID: telseth
File: P:\205\16\04\Design\Exhibits\CAD\WPAP\140818 – WPAP Drainage Area Map.dwg

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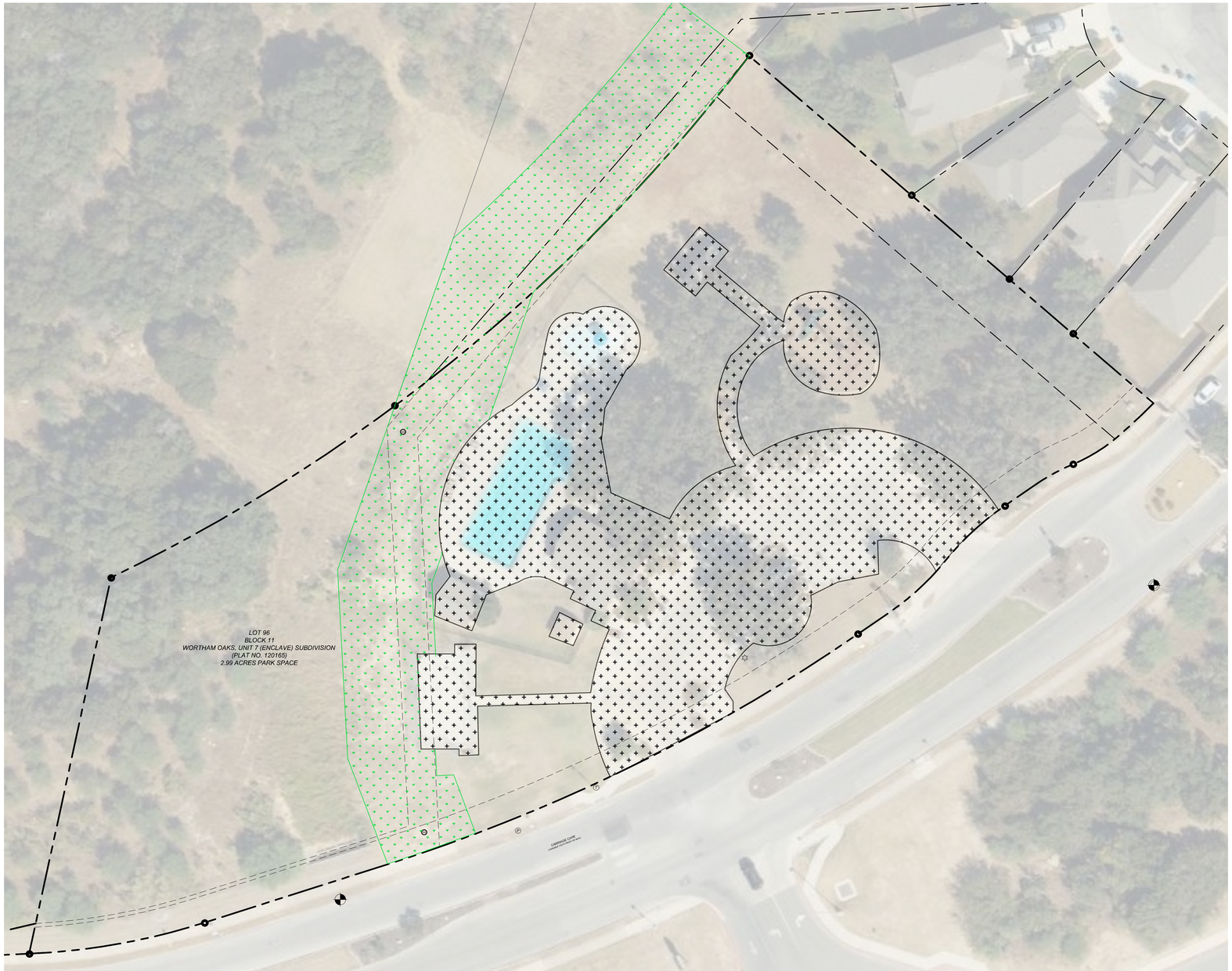
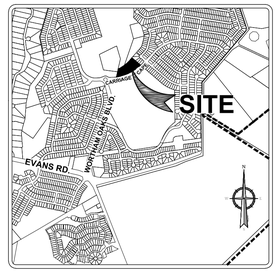
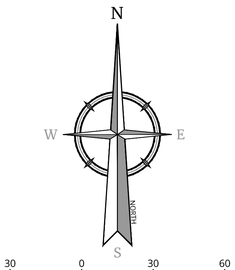
Exhibit 3

Existing Impervious Cover Exhibit





LOCATION MAP
N.T.S.



30 0 30 60

SCALE : 1" = 30'

LEGEND

EXISTING VEGETATIVE FILTER STRIP

EXISTING IMPERVIOUS COVER

TOTAL IMPERVIOUS COVER

TOTAL SITE:	2.99 ACRES
BUILDING/PARKING/SIDEWALK:	37,092 SQ. FT.
TOTAL IMPERVIOUS COVER:	0.852 ACRES
TOTAL IMPERVIOUS COVER %:	28.5 %

C-VALUE CALCULATION

C-VALUE UNDEVELOPED:	0.47
C-VALUE COMMERCIAL:	0.97
WEIGHED C-VALUE =	$\frac{0.47 \times 2.138 + 0.97 \times 0.852}{2.99} = 0.61$

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REV	DATE	DRAWN BY	DESCRIPTION

FRANK D. COREY
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103068
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

WORTHAM OAKS AMENITY CENTER COURT EXPANSION

FOR

WORTHAM OAKS HOA
17319 SAN PEDRO AVE., STE. 318
SAN ANTONIO, TEXAS 78232

LOT 96
BLOCK 11
C.B. 4913A

BEXAR COUNTY
SAN ANTONIO
TEXAS

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San Antonio, TX 78231
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COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/12/25	GGP	FDC

PROJECT NUMBER: 205-48-14
DRAWING NAME: 250514 - IMPERVIOUS COVER EXHIBIT

SHEET TITLE:
IMPERVIOUS COVER EXHIBIT - EXISTING CONDITIONS

SHEET NUMBER:
EXHIBIT - 3

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Date: Jun 27, 2025, 11:50am User ID: andres.guerra@kfwww
File: K:\1192\01\01\Design\Exhibits\CAD\250514 - Impervious Cover Exhibit.dwg

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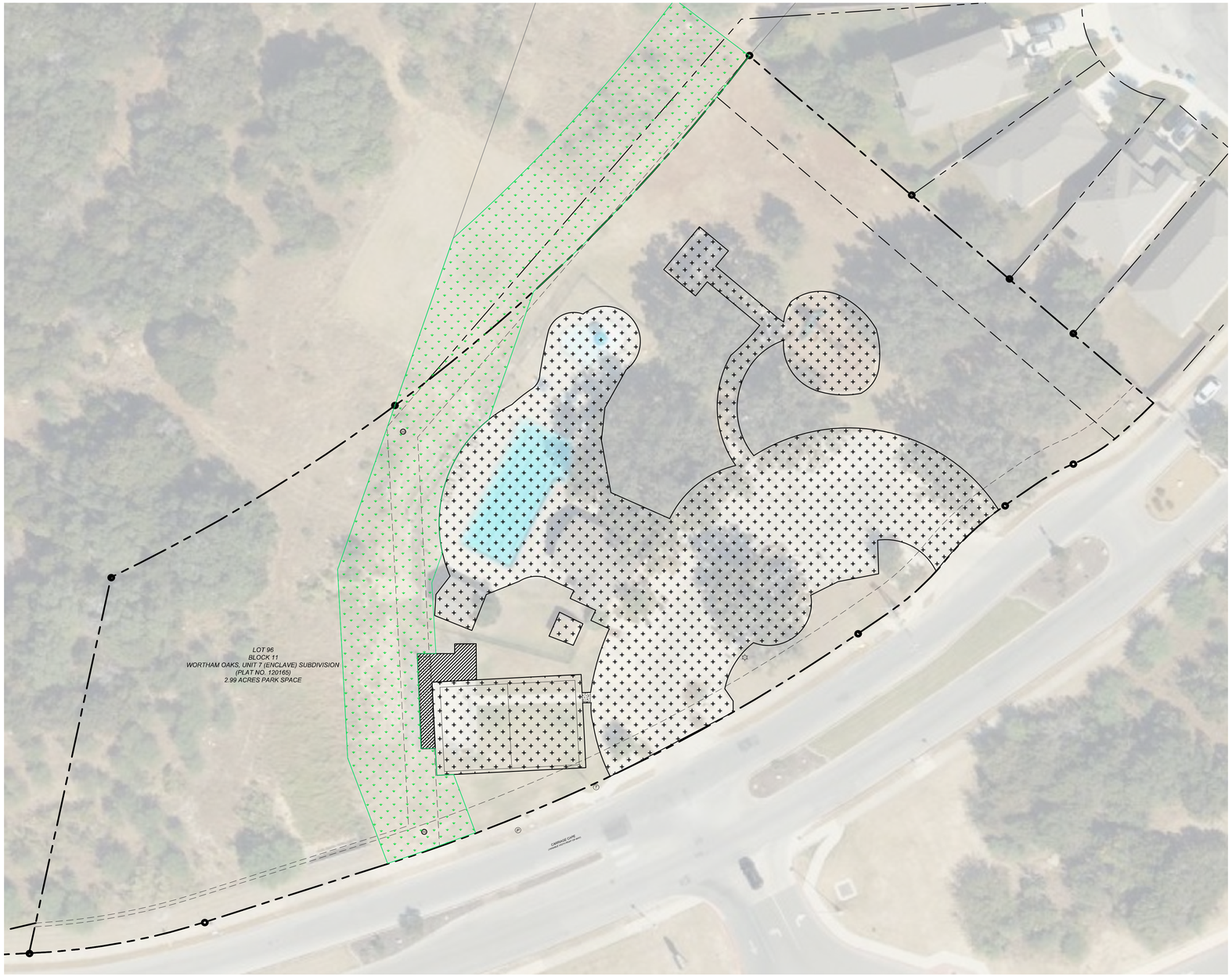
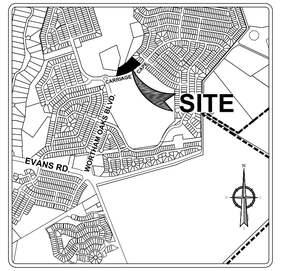
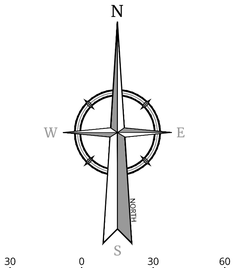
Exhibit 4

Proposed Impervious Cover Exhibit





LOCATION MAP
N.T.S.



30 0 30 60

SCALE : 1" = 30'

LEGEND

TOTAL IMPERVIOUS COVER (PROPOSED + EXISTING)

EXISTING VEGETATIVE FILTER STRIP

EXISTING IMPERVIOUS COVER TO BE REMOVED

TOTAL IMPERVIOUS COVER

TOTAL SITE:	*2.99 ACRES*
EXISTING IMPERVIOUS COVER:	*37,092 SQ. FT.*
IMPERVIOUS COVER TO BE REMOVED:	*1,874 SQ. FT.*
PROPOSED IMPERVIOUS COVER:	*4,022 SQ. FT.*
NET INCREASE IMPERVIOUS COVER:	*2,148 SQ. FT.*
TOTAL IMPERVIOUS COVER:	*39,240 SQ. FT. (0.90) ACRES*
TOTAL IMPERVIOUS COVER %:	*30.1 %*

C - VALUE CALCULATION

C- VALUE UNDEVELOPED:	*0.47*
C- VALUE COMMERCIAL:	*0.97*
WEIGHTED C- VALUE =	*0.47 X 2.09 + 0.97 X 0.90 = 0.62* / *2.99*

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TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

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AMENITY CENTER
COURT EXPANSION

FOR

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TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	5/12/25	GGP	FDC

PROJECT NUMBER: 205-48-14

DRAWING NAME: PROPOSED IMPERVIOUS COVER EXHIBIT (PROPOSED)

SHEET TITLE:
IMPERVIOUS COVER EXHIBIT
- PROPOSED CONDITIONS

SHEET NUMBER:
EXHIBIT - 4

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File: K:\1192\01\01\Design\Exhibits\CAD\250514 - Impervious Cover Exhibit (proposed).dwg

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