



# **COSTABELLA**

## **Water Pollution Abatement Plan Modification**

**January 2024**



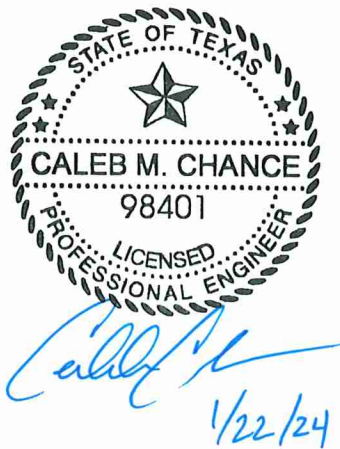
---

Transportation | Water Resources | Land Development | Surveying | Environmental

# COSTABELLA

## Water Pollution Abatement Plan Modification

January 2024



January 9, 2024

Ms. Lillian Butler  
Texas Commission on Environmental Quality (TCEQ)  
Region 13  
14250 Judson Road  
San Antonio, Texas 78233-4480

Re: Costabella  
Water Pollution Abatement Plan Modification

Dear Ms. Butler:

Please find included herein the Costabella Water Pollution Abatement Plan Modification. This Water Pollution Abatement Plan Modification has been prepared in accordance with the regulations of the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Recharge Zone.

This Water Pollution Abatement Plan Modification applies to an approximate 2.0-acre site as identified by the legal limits. Please review the plan information for the items it is intended to address. If acceptable, please provide a written approval of the plan in order that construction may begin at the earliest opportunity.

Appropriate review fees (\$4,000) and fee application are included. If you have questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,  
Pape-Dawson Engineers



Caleb Chance, P.E.  
Vice President

Attachments

P:\60\88\54\Word\Reports\WPAP\240103a1.docx

**EDWARDS AQUIFER  
APPLICATION COVER PAGE  
(TCEQ-20705)**



# 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.

<b>1. Regulated Entity Name:</b>					<b>2. Regulated Entity No.:</b>				
<b>3. Customer Name:</b>					<b>4. Customer No.:</b>				
<b>5. Project Type:</b> (Please circle/check one)	New	<u>Modification</u>			Extension	Exception			
<b>6. Plan Type:</b> (Please circle/check one)	<u>WPAP</u>	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
<b>7. Land Use:</b> (Please circle/check one)	Residential	<u>Non-residential</u>				<b>8. Site (acres):</b>			
<b>9. Application Fee:</b>			<b>10. Permanent BMP(s):</b>						
<b>11. SCS (Linear Ft.):</b>			<b>12. AST/UST (No. Tanks):</b>						
<b>13. County:</b>			<b>14. Watershed:</b>						

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

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

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

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

Caleb Chance, P.E.

Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent

Date

1/22/24

**\*\*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):

**GENERAL INFORMATION  
FORM (TCEQ-0587)**

# 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: Caleb Chance, P.E.

Date: 1/22/24

Signature of Customer/Agent:



## Project Information

1. Regulated Entity Name: Costabella
2. County: Bexar
3. Stream Basin: Salado Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer; Trinity-Glen Rose
5. Edwards Aquifer Zone:
  - ☒ Recharge Zone
  - ☐ Transition Zone
6. Plan Type:
  - ☒ WPAP
  - ☐ SCS
  - ☒ Modification
  - ☐ AST
  - ☐ UST
  - ☐ Exception Request

7. Customer (Applicant):

Contact Person: Patrick Davis

Entity: Chicik-fil-A, Inc.

Mailing Address: 5200 Buffington Rd

City, State: Atlanta, GA

Zip: 30349

Telephone: (404) 353-3819

FAX: \_\_\_\_\_

Email Address: patrick.davis@cfacorp.com

8. Agent/Representative (If any):

Contact Person: Caleb Chance, P.E.

Entity: Pape-Dawson Engineers, Inc.

Mailing Address: 2000 NW Loop 410

City, State: San Antonio, Texas

Zip: 78213

Telephone: (210) 375-9000

FAX: (210) 375-9010

Email Address: cchance@pape-dawson.com

9. Project Location:

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

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

From TCEQ's regional office, turn right onto Judson Rd heading north. Travel approximately 2.6 miles before turning left toward N Loop 1604 W. Travel west on N Loop 1604 W for approximately 6.3 miles. The project site is located on the right, approximately 2,000 LF east of N Loop 1604 and Huebner Rd intersection.

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: when advised by TCEQ

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

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

15. Existing project site conditions are noted below:

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

### ***Prohibited Activities***

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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



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

### ***Administrative Information***

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

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

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

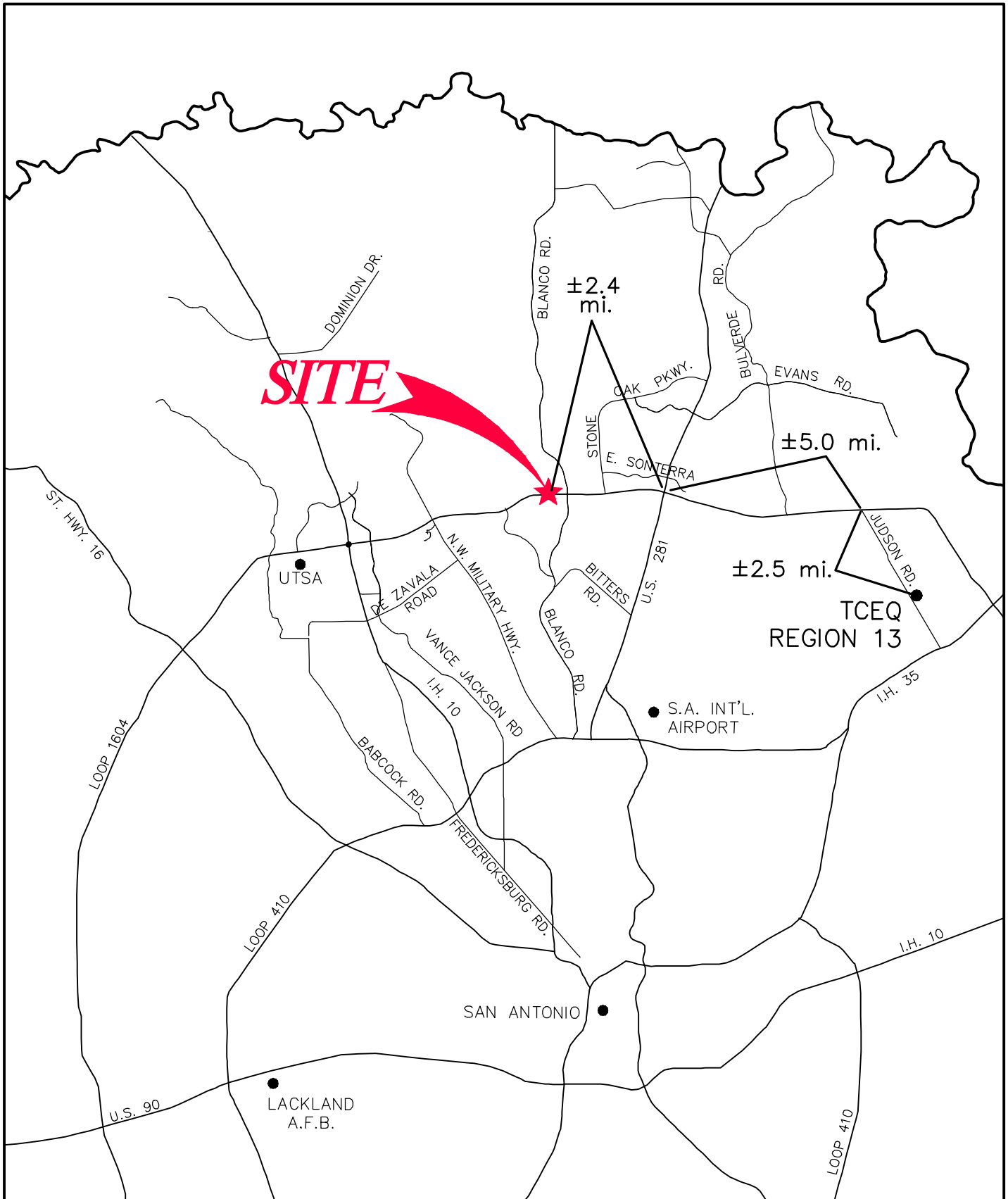
- ☒ TCEQ cashier
- ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

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

**ATTACHMENT A**

**COSTABELLA**  
**Water Pollution Abatement Plan Modification**



**Pape-Dawson Engineers, Inc.**

Date: Jan 03, 2024, 2:00pm User ID: mgregory  
File: P:\60\88\54\Design\Environmental\WPAP\RM 608854.dwg

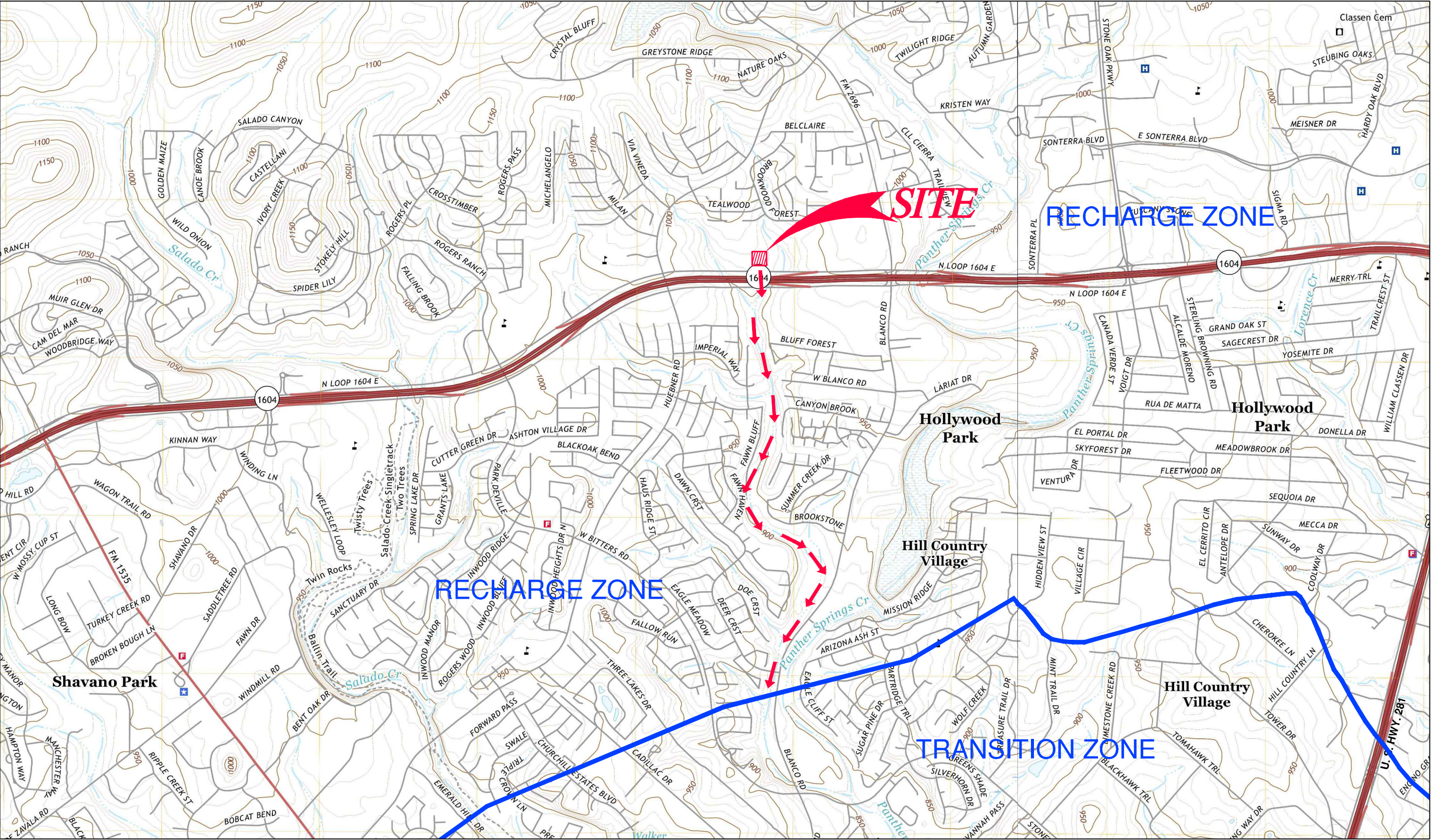
**ATTACHMENT A**  
**Road Map**



**ATTACHMENT B**



COSTABELLA  
Water Pollution Abatement Plan Modification

  
SCALE: 1" = 2000'



GENERAL LOCATION MAP - CASTLE HILLS, TX QUAD  
DRAINAGE FLOW    
Pape-Dawson Engineers, Inc.



**ATTACHMENT C**

# **COSTABELLA**

## **Water Pollution Abatement Plan Modification**

### **Attachment C – Project Description**

The Costabella Water Pollution Abatement Plan Modification (WPAP MOD) is a modification of the previously approved Costabella at the Vineyard Apartments (EAPP ID No. 13-05022302), approved on June 1, 2005. The Costabella at the Vineyard Apartments WPAP previously approved a mixed-use 26.26 acre site, including 18.75 acres of multifamily residential apartments and 7.51 acres of commercial real estate. The site was approved for 17.11 acres of impervious cover, or 65.14% of the overall site. The site is located approximately 2,000 LF east of N Loop 1604 and Huebner Rd intersection, within the City of San Antonio, In Bexar County, Texas. The residential tract is developed, and the commercial tract is cleared and partially developed. The site lies within the Salado Creek watershed and does contain the 100-year floodplain. There were no naturally occurring sensitive geological features and one (1) manmade sensitive feature identified in the Geologic Assessment.

This WPAP MOD proposes additional clearing, grading, and excavation for the construction of a deceleration lane required by a TIA to serve the 2.0-acre Lot 8, previously approved for development in the original WPAP. The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment of the increase in impervious cover is one (1) existing, approved sand filter basin (EAPP ID 13-05022302). Approximately 0.1 acres of additional impervious cover are proposed for construction of the deceleration lane in this WPAP MOD, which will be overtreated by existing, approved Basin "B". The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a designed capture volume of 46,290 cubic feet. There is adequate volume available to overtreat for the 0.1 -ac of impervious cover contributed by the deceleration lane. Refer to updated calculations included with this application.

No wastewater will be generated by this turn lane construction

**GEOLOGIC ASSESSMENT FORM**  
**(TCEQ-0585)**



# 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: Henry E. Stultz III, P.G.

Telephone: 210-375-9000

Date: December 20, 2023

Fax: 210-375-9090

Representing: Pape-Dawson Engineers, Inc., TBPGE registration number 50351

Signature of Geologist:



Regulated Entity Name: COSTABELLA

## Project Information

1. Date(s) Geologic Assessment was performed: December 8, 2023

2. Type of Project:

- ☒ WPAP  
☐ SCS

- ☐ AST  
☐ UST

3. Location of Project:

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

4. ☒ **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups\* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

**Table 1 - Soil Units, Infiltration Characteristics and Thickness**

Soil Name	Group*	Thickness(feet)
Eckrant very cobbly clay, 1-8% slopes (Tab)	D	1-2

*\* Soil Group Definitions (Abbreviated)*

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

6. ☒ **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. ☒ **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. ☒ **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

Applicant's Site Plan Scale: 1" = 60'

Site Geologic Map Scale: 1" = 60'

Site Soils Map Scale (if more than 1 soil type): 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.

**ATTACHMENT A**  
**Geologic Assessment Table**

GEOLOGIC ASSESSMENT TABLE						PROJECT NAME: COSTABELLA														
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												
S-1	29.60911	-98.51827	MB	30	Kep								F,C	20	50		<u>50</u>		<u>X</u>	Floodplain
S-2	29.61107	-98.51723	F	20	Kep				N62W				F,O	5	25	25		X		Hillside

\*\* DATUM: NAD 83



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

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

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

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



Date December 20, 2023

# **ATTACHMENT B**

## **Stratigraphic Column**

# COSTABELLA

## Geologic Assessment (TCEQ-0585)

### Attachment B – Stratigraphic Column

Period	Epoch	Group	Formation	Member	Thickness	Lithology	Hydro-logic Unit	Hydro-stratigraphic Unit	Hydrologic Function	Porosity	Cavern Development
Cretaceous	Early Cretaceous	Edwards	Person	Cyclic and marine, undivided	80–90	Pelletal limestone; ranges from chalk to mudstone and miliolid grainstone; thin to massive beds; some crossbedding evident; a packstone containing large caprinids is present near contact with the overlying Georgetown Formations; chert is common as beds and large nodules	Edwards Aquifer	II	Aquifer	MO, BU, VUG, BP, FR, CV	Many subsurface; might be associated with earlier karst development
				Leached and collapsed, undivided	70–90	Hard, dense, recrystallized limestone; mudstone, wackestone, packstone, and grainstone; contains chert as beds and large nodules; heavily bioturbated with iron-stained beds; often stromatolitic; <i>Toucasia</i> sp. Often found above contact with the underlying regional dense member; <i>Montastrea roemeriana</i> and oysters rare		III	Aquifer	BU, VUG, FR, BP, BR, CV	Extensive lateral development; large rooms
				Regional dense	20–24	Dense, shaly limestone; oyster shell mudstone and iron wackestone; wispy iron staining; chert nodules rarer than in the rest of the chert-bearing Edwards Group		IV	Confining	FR, CV	Very few; only vertical fracture enlargement
			Kainer	Grainstone	40–50	Hard, dense limestone that consists mostly of a tightly cemented miliolid skeletal fragment grainstone; contains interspersed chalky mudstone and wackestone; chert as beds and nodules; crossbedding and ripple marks are common primarily at the contact with the overlying regional dense bed		V	Aquifer	IP, IG, BU, FR, BP, CV	Few
				Kirsch-berg Evaporite	40–50	Highly altered crystalline limestone and chalky mudstone with occasional grainstone associated with tidal channels; chert as beds and nodules, boxwork molds are common, matrix recrystallized to a coarse grain spar; intervals of collapse breccia and travertine deposits		VI	Aquifer	IG, MO, VUG, FR, BR, CV	Probably extensive cave development
				Dolomitic	90–120	Hard, dense to granular, dolomitic limestone; chert as beds and nodules (absent in lower 20 ft); <i>Toucasia</i> sp. abundant; lower three-fourths composed of sucrosic dolomites and grainstones with hard, dense limestones interspersed; upper one-fourth composed mostly of hard, dense mudstone, wackestone, packstone, grainstone, and recrystallized dolomites with bioturbated beds		VII	Aquifer	IP, IC, IG, MO, BU, VUG, FR, BP, CV	Cave development as shafts with minor horizontal extent
				Basal nodular	40–50	Moderately hard, shaly, nodular, burrowed mudstone to miliolid grainstone that also contains dolomite; contains dark, spherical textural features known as black rotund bodies; <i>Ceratostreon texana</i> , <i>Caprina</i> sp., miliolids, and gastropods		VIII	Aquifer, confining unit in areas without caves	IP, MO, BU, BP, FR, CV	Large lateral caves at surface

Source: Clark, Golab, and Morris (2016); Cavern development modified from Stein and Ozuna (1995). Porosity types - Fabric selective: IP, interparticle porosity; IG, intergranular porosity; IC, intercrystalline porosity; SH, shelter porosity; MO, moldic porosity; BU, burrowed porosity; FE, fenestral; BP, bedding plane porosity. Not fabric selective: FR, fracture porosity; CH, channel porosity; BR, breccia; VUG, vug porosity; CV, cave porosity.

# **ATTACHMENT C**

## **Site Geology**



# **COSTABELLA**

## **Geologic Assessment**

### **Attachment C – Site Geology**

#### **SUMMARY**

The Costabella site is located at 1703 N Loop 1604 W Access Road, San Antonio, Bexar County, Texas.

Based on the results of the field survey conducted in accordance with *Instructions for Geologists for Geologic Assessments in the Edwards Aquifer Recharge/Transition Zones (TCEQ-0585 Instructions)*, no naturally occurring sensitive features were identified on site. The overall potential for fluid migration to the Edwards Aquifer for the site is low.

#### **SITE GEOLOGY**

As observed through field evidence, the geologic formation which outcrops at the surface within the subject site is the cyclic and marine (Kepcm), and leached and collapsed (Keplc) members of the Person formation. These units are described in detail below:

- The Kepcm is characterized by a mudstone to pack stone miliolid grainstone, and chert. Karst development within the Kepcm is characterized by small sinkholes and caves developed as vertical shafts as well as lateral rooms.
- The Keplc is characterized by interbedded, iron-stained, massive and bioturbated limestone with abundant chert. Karst development within the Keplc is generally characterized by large sinkholes. Caves often develop as large horizontal rooms.

The predominant trend of faults in the vicinity of the site is approximately N56°E, based on faults identified during the previous mapping of the area.

#### **FEATURE DESCRIPTIONS:**

A description of the features observed onsite is provided below:

# **COSTABELLA**

## **Geologic Assessment**

### Feature S-1

Feature S-1 is a series of existing sewer lines that are partially located beneath pavement. The sewer lines have been trenched through bedrock and backfilled with a mix of fine and coarse fill material that may be more permeable than surrounding undisturbed areas. Therefore, the probability of rapid infiltration is intermediate.

### Feature S-2

Feature S-2 is an intraformational fault within the Kep. It was identified by review of aerial photography and published maps. Lack of evidence of enhanced permeability and the presence of fine-grained soil cover suggests a low probability for rapid infiltration.

## **REFERENCES**

Clark, A.K., Golab, J.A., Morris, R.R., and Pedraza, D.E., 2023, Geologic framework and hydrostratigraphy of the Edwards and Trinity aquifers within northern Bexar and Comal Counties, Texas: U.S. Geological Survey Scientific Investigations Map 3510, 1 sheet, scale 1:24,000, 24-p. pamphlet, <https://doi.org/10.3133/sim3510>

Nationwide Environmental Title Research, LLC. Historical Aerials, [HistoricAerials.com](https://www.historicaerials.com/viewer). <https://www.historicaerials.com/viewer>, December 12, 2023.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. <http://websoilsurvey.sc.egov.usda.gov/>, December 12, 2023.

Stein, W.G., and Ozuna, G.B., 1995, Geologic framework and hydrogeologic characteristics of the Edwards Aquifer recharge zone, Bexar County, Texas: U.S. Geological Survey Water-Resources Investigations Report 95-4030, 8 p.

Texas Water Development Board, Wells in TWDB Groundwater Database Viewer, <https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer>, December 12, 2023.

U.S. Geological Survey, National Water Information System: Mapper, <https://maps.waterdata.usgs.gov/mapper/index.html>, December 12, 2023.

**ATTACHMENT D**  
**Site Geologic Map(s)**



PROJECT LIMITS

100 YEAR FLOODPLAIN

STREAM

SYMBOLS AND LINES

S-1

POTENTIAL RECHARGE FEATURE

CONTACT, LOCATED APPROXIMATELY

CONTACT, INFERRED

FAULT, LOCATED APPROXIMATELY (U, DOWNTHROWN SIDE; D, UPTHROWN SIDE)

FAULT, EXTRAPOLATED

FAULT, INFERRED

STRIKE AND DIP OF BEDDING

STRIKE AND DIP OF JOINTS

STRIKE OF VERTICAL JOINTS

CAVE

SOLUTION CAVITY

GEOLOGIC FORMATIONS

Qal

Eagle Ford

Kbu

BUDA

Kdr

DEL RIO

Kgt

GEORGETOWN

Kep

PERSON

Kek

KAINER

Kgr

GLEN ROSE

SOLUTION ENLARGED FRACTURE

SWALLOW HOLE

SINKHOLE

NON-KARST CLOSED DEPRESSION

ZONE

OTHER NATURAL BEDROCK FEATURES

SPRING/SEEP

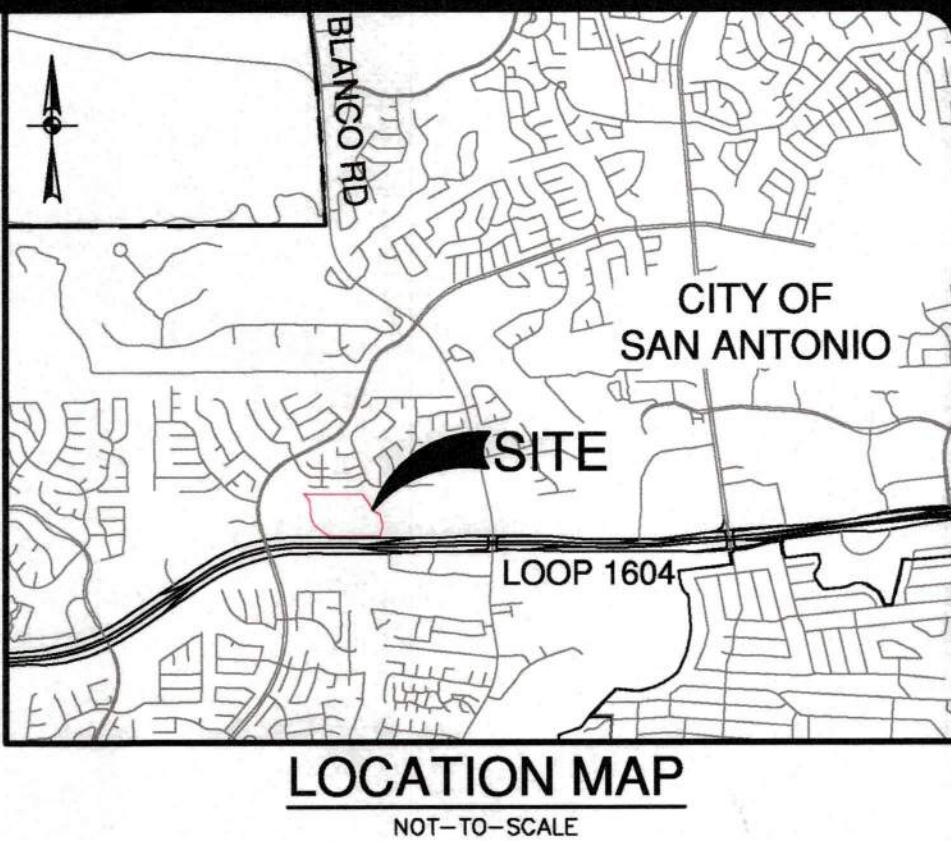
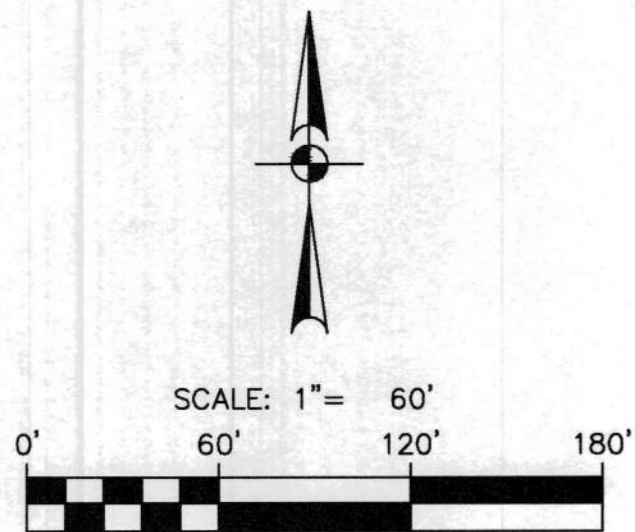
MAN-MADE FEATURE IN BEDROCK

WATER WELL

SANITARY SEWER LINE

NOTE: THE GEOSCIENTIST SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR PURPOSES OF GEOLOGIC INFORMATION. ALL OTHER INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SIGNED AND SEALED CIVIL ENGINEERING DRAWINGS.

NOTE: THE RECHARGE ZONE BOUNDARY IS NOT WITHIN THE AREA SHOWN ON THIS SHEET. THE SITE IS LOCATED ENTIRELY WITHIN THE RECHARGE ZONE.



NO.	REVISION	DATE



**PAPE-DAWSON ENGINEERS**  
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TSPB FIRM REGISTRATION #4270 | TSPB FIRM REGISTRATION #50591

**COSTABELLA**  
SAN ANTONIO, TEXAS  
SITE GEOLOGIC MAP  
WATER POLLUTION ABATEMENT PLAN

JOB NO. 6088-54  
DATE DECEMBER 2023  
DESIGNER HS  
CHECKED HDJ DRAWN HS  
ATTACHMENT D



**MODIFICATION OF A  
PREVIOUSLY APPROVED  
WATER POLLUTION  
ABATEMENT PLAN (TCEQ-  
0590)**

# 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.*

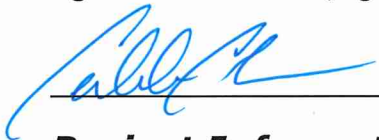
## Signature

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: Caleb Chance, P.E.

Date: 1/22/24

Signature of Customer/Agent:

  
\_\_\_\_\_

## Project Information

1. Current Regulated Entity Name: Costabella  
Original Regulated Entity Name: Costabella at the Vineyard Apartments  
Regulated Entity Number(s) (RN): 104550751  
Edwards Aquifer Protection Program ID Number(s): 13-05022302  
☐ 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.

<b><i>WPAP Modification</i></b>	<b><i>Approved Project</i></b>	<b><i>Proposed Modification</i></b>
<b><i>Summary</i></b>		
Acres	<u>26.26</u>	<u>2.0</u>
Type of Development	<u>Multifamily/Commercial</u>	<u>Commercial</u>
Number of Residential Lots	<u>N/A</u>	<u>N/A</u>
Impervious Cover (acres)	<u>17.11</u>	<u>0.1</u>
Impervious Cover (%)	<u>65.14</u>	<u>5</u>
Permanent BMPs	<u>sand filter basin</u>	<u>existing sand filter basin</u>
Other	_____	_____
<b><i>SCS Modification</i></b>	<b><i>Approved Project</i></b>	<b><i>Proposed Modification</i></b>
<b><i>Summary</i></b>		
Linear Feet	_____	_____
Pipe Diameter	_____	_____
Other	_____	_____

**AST Modification****Approved Project****Proposed Modification****Summary**

Number of ASTs

---

---

Volume of ASTs

---

---

Other

---

---

**UST Modification****Approved Project****Proposed Modification****Summary**

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.



**ATTACHMENT A**

Kathleen Hartnett White, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
Larry R. Soward, *Commissioner*  
Glenn Shankle, *Executive Director*



qela  
Dindley

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

June 1, 2005

Mr. Dennis Elmore  
Embrey Properties, Ltd.  
11 NE Loop 410, Suite 900  
San Antonio, Texas 78209

Re: Edwards Aquifer, Bexar County  
NAME OF PROJECT: Costabella at the Vineyard Apartments; Located on the northeast corner of Loop 1605 and Huebner Road; 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, Edwards Aquifer Protection Program ID No. 2303.00, Regulated Entity No. RN104550751, Investigation No. 380271

Dear Mr. Elmore:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Pape-Dawson Engineers, Inc. on behalf of Multi-Family Properties, Ltd. on February 23, 2005. Additional information was received on May 25, 2005. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

### PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 26.26 acres. A tract of 18.75 acres will include a 344-unit multi-family apartment complex development, including 17 apartment buildings, one clubhouse/leasing office, swimming pool, associated driveway and parking. The impervious cover will be 17.11 acres (65.14 percent).

A 7.51 acre tract adjacent to the southern boundary of the multi-family apartment complex will be developed as four or five tracts for future office and/or retail sites with up to 95% impervious cover. At this time, specific plans for this commercial development have not been determined. When completed, site plans will be forwarded to the TCEQ prior to commencing construction.

Project wastewater will be disposed of by conveyance to the existing Salado Creek Sewage Treatment Plant owned by the San Antonio Water System.

6088-00

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210/490-3096 • FAX 210/545-4329

San Antonio, Texas 78711-3087 • 512/239-1000 • Internet address: www.tceq.state.tx.us

### PERMANENT POLLUTION ABATEMENT MEASURES

Two partial sedimentation/filtration basins will be constructed to treat stormwater runoff. The individual treatment measures will consist of:

Basin A. The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," to treat 5,006 pounds of TSS, and is sized to capture the first 0.95 inches of stormwater run-off from 10.01 acres, providing a total capture volume of 41,542 cubic feet. Basin A is oversized to treat 226.00# TSS from Watershed C (12,000 square feet). The filtration system will consist of:

1. 4,451 square feet of sand, which is 18 inches thick,
2. an underdrain piping covered with geotextile membrane, and
3. an impervious liner.

Basin B. The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," to treat 6,197 pounds of TSS, and is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a total capture volume of 44,034 cubic feet. The filtration system will consist of:

1. 4,403 square feet of sand, which is 18 inches thick,
2. an underdrain piping covered with geotextile membrane, and
3. an impervious liner.

These two sedimentation/filtration basins have also been sized to treat stormwater runoff from the neighboring future commercial developments bordering the apartment complex's southern boundary.

The approved measures meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

### GEOLOGY

According to the geologic assessment included with the application, there are two manmade features (sewer lines) located on the project site. Both features were assessed as sensitive. The San Antonio Regional Office did not conduct a site investigation.

### SPECIAL CONDITIONS

1. The sedimentation/filtration basin is designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.
2. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.
3. All permanent stormwater treatment measures must be operational prior to commencement of any commercial activity.

4. Any use of the undeveloped commercial property, other than retail stores, restaurants, and office space, shall require prior approval from the regional office of the TCEQ and may require submittal and approval of a WPAP.
5. The owner/developer must submit a revised and updated site plan of the 7.51 acre site to the San Antonio Regional Office of the TCEQ, as each lot is developed. The site plan should include project specific temporary erosion and sedimentation controls; proposed and existing building areas; the total impervious cover for each lot (list the square footage); and the name, address and phone number of a contact for each tenant or lot owner, and confirmation of permanent stormwater treatment.
6. Intentional discharges of sediment laden stormwater during construction are not allowed. If dewatering of excavated areas becomes necessary, the discharge will be filtered through appropriately selected temporary best management practices. These may include vegetative filter strips, sediment traps, rock berms, silt fence rings, etc.

#### 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.

#### Prior to Commencement of Construction:

2. 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, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.
3. 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.
4. 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.
5. 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.
6. 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.

7. 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:

8. 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.
9. 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.
10. No wells exist on the 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.
11. 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.
12. 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.
13. 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.

After Completion of Construction:

14. 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.

Mr. Dennis Elmore

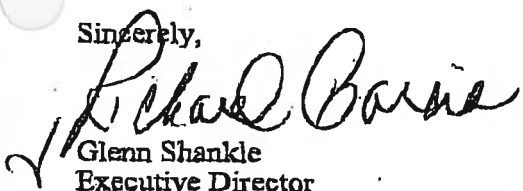
June 1, 2005

Page 5

15. 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 the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TNRCC-10263) is enclosed.
16. 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.
17. 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.
18. 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.

If you have any questions or require additional information, please contact John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

  
Glenn Shankle  
Executive Director  
Texas Commission on Environmental Quality

GS/JKM/eg

Enclosures: Deed Recordation Affidavit, TNRCC-0625  
Change in Responsibility for Maintenance on Permanent BMPs, TNRCC-10263

fc: Ms. Cara Tackett, F.E., Pape-Dawson Engineers, Inc.  
cc: Mr. Scott Halty, San Antonio Water System  
Ms. Renee Green, Bexar County Public Works  
Mr. Robert J. Potts, Edwards Aquifer Authority  
TCEQ Central Records, MC 212

**ATTACHMENT B**

# **COSTABELLA**

## **Water Pollution Abatement Plan Modification**

### **Attachment B – Narrative of Proposed Modification**

The Costabella Water Pollution Abatement Plan Modification (WPAP MOD) is a modification of the previously approved Costabella at the Vineyard Apartments (EAPP ID No. 13-05022302), approved on June 1, 2005. The Costabella at the Vineyard Apartments WPAP previously approved a mixed-use 26.26 acre site, including 18.75 acres of multifamily residential apartments and 7.51 acres of commercial real estate. The site was approved for 17.11 acres of impervious cover, or 65.14% of the overall site. The site is located approximately 2,000 LF east of N Loop 1604 and Huebner Rd intersection, within the City of San Antonio, In Bexar County, Texas. The residential tract is developed, and the commercial tract is cleared and partially developed. The site lies within the Salado Creek watershed and does contain the 100-year floodplain. There were no naturally occurring sensitive geological features and one (1) manmade sensitive feature identified in the Geologic Assessment.

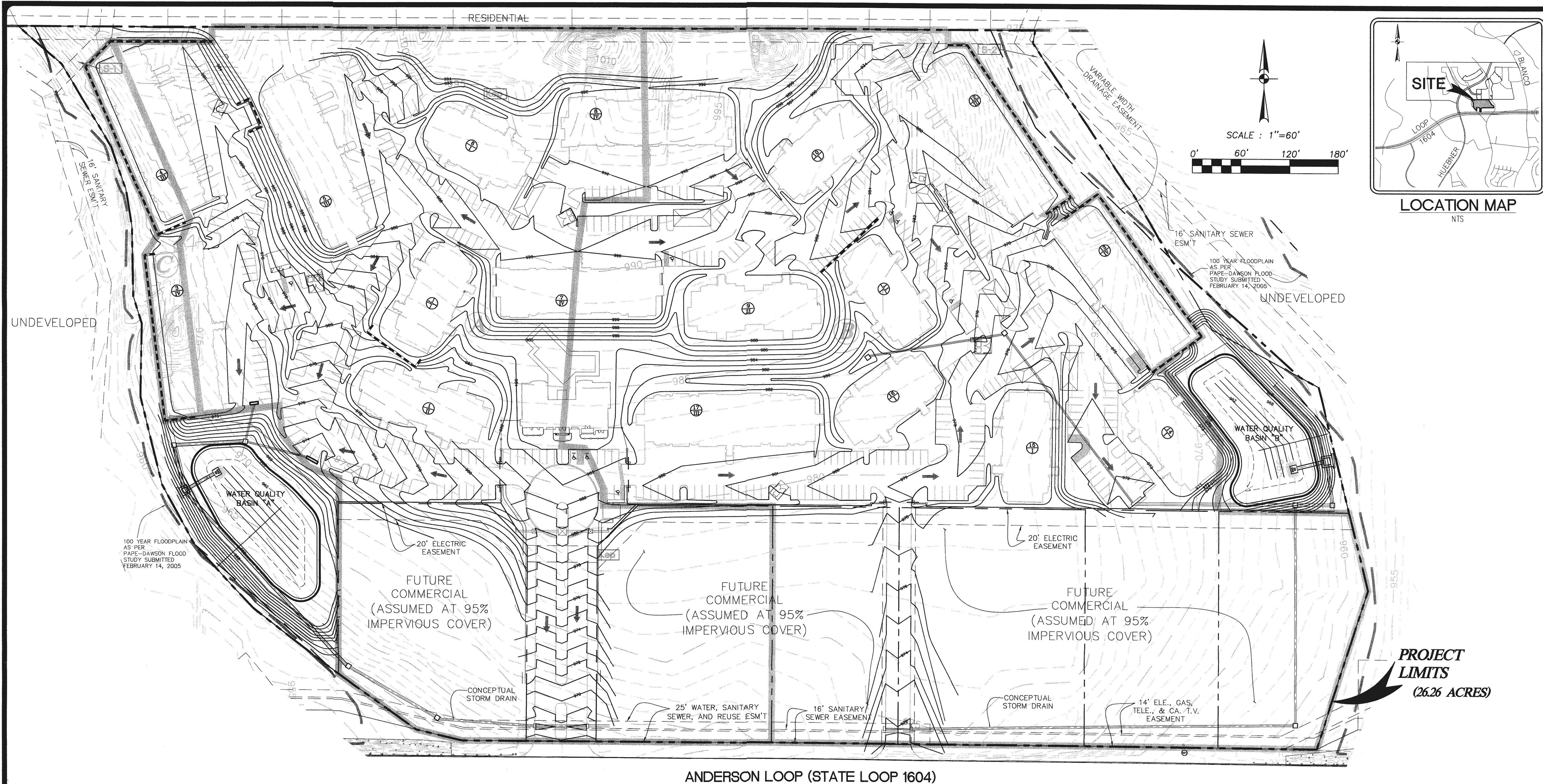
This WPAP MOD proposes additional clearing, grading, and excavation for the construction of a deceleration lane required by a TIA to serve the 2.0-acre Lot 8, previously approved for development in the original WPAP. The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment of the increase in impervious cover is one (1) existing, approved sand filter basin (EAPP ID 13-05022302). Approximately 0.1 acres of additional impervious cover are proposed for construction of the deceleration lane in this WPAP MOD, which will be overtreated by existing, approved Basin “B”. The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC’s “Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices,” is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a designed capture volume of 46,290 cubic feet. There is adequate volume available to overtreat for the 0.1 -ac of impervious cover contributed by the deceleration lane. Refer to updated calculations included with this application.

No wastewater will be generated by this turn lane construction



**ATTACHMENT C**





SUMMARY OF PERMANENT POLLUTION ABATEMENT MEASURES:

- 1.) STORMWATER RUNOFF WITHIN THE MULTI-FAMILY AND COMMERCIAL DEVELOPMENTS WILL BE DISCHARGED TO TWO SEDIMENTATION/FILTRATION BASINS. THE SEDIMENTATION/FILTRATION BASINS HAVE BEEN DESIGNED TO REMOVE 80% OF THE INCREASED TOTAL SUSPENDED SOLIDS (TSS) FROM THE ENTIRE DEVELOPMENT IN ACCORDANCE WITH THE TCEQ'S TECHNICAL GUIDANCE MANUAL RG-348 (1999).
- 2.) TEMPORARY BMP'S FOR EACH PHASE OF CONSTRUCTION WILL BE MAINTAINED UNTIL THE SITE IMPROVEMENTS IN THAT RESPECTIVE PHASE ARE COMPLETED AND THE SITE HAS BEEN STABILIZED, INCLUDING SUFFICIENT VEGETATION BEING ESTABLISHED IN DISTURBED AREAS.
- 3.) SEDIMENTATION/FILTRATION BASINS WILL BE CONVERTED FROM TEMPORARY SEDIMENT TRAPS TO PERMANENT BASINS AND FILTER MEDIA INSTALLED AFTER 70% OF THE PAVEMENT AREA IN THEIR RESPECTIVE WATERSHED HAVE BEEN PAVED.
- 4.) AREAS OF DISTURBED SOIL SHALL BE REVEGETATED TO STABILIZE SOIL USING BLOCK 500 IN A CHECKERBOARD PATTERN. FOR AREAS OUTSIDE OF THE BASINS, THE CONTRACTOR MAY SUBSTITUTE SEED-IMPREGNATED EROSION CONTROL MATS OR PLACEMENT OF TOP SOIL, HYDRAULIC MULCHING, AND WATERING UNTIL VEGETATION IS ESTABLISHED. SEED MIXTURE AND/OR GRASS TYPE TO BE DETERMINED BY OWNER. IRRIGATION MAY BE REQUIRED IN ORDER TO ESTABLISH SUFFICIENT VEGETATION.
- 5.) AFTER COMPLETION OF CONSTRUCTION ACTIVITY, THE CONTRACTOR WILL REMOVE TRASH, DEBRIS, AND ACCUMULATED SILT FROM THE SEDIMENTATION/FILTRATION BASINS AND RE-ESTABLISH TO PROPER OPERATING CONDITION.
- 6.) ALL PERMANENT BMP'S MUST BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.

SEDIMENTATION/FILTRATION BASINS

DRAINAGE AREA	PERM BMP	DRAINAGE AREA (AC.)	REQUIRED SAND AREA (SF)	REQUIRED CAPTURE VOL. (CF)	RUNOFF DEPTH (IN.)	DESIGN SAND AREA (SF)	DESIGN CAPTURE VOL. (CF)
A	BASIN	10.01	3,895	41,542	0.95	8,678	45,567
B	BASIN	13.31	4,128	44,034	0.76	4,665	44,669

BASIN A - COMPENSATORY TREATMENT

WATERSHED/PROJECT AREA (DESCRIPTION)	WATERSHED/PROJECT AREA (ACRES)	IMPERVIOUS COVER (ACRES)	IMPERVIOUS COVER (%)	REQUIRED TSS REMOVAL (lbs/year)	ACTUAL TSS REMOVAL (lbs/year)	REQUIRED BASIN VOLUME (CUBIC FEET)	ACTUAL BASIN VOLUME (CUBIC FEET)
WATERSHED 'A'	10.01	7.05	70.46	4,780.20	5006.14	41,542	45,567
WATERSHED 'C'	0.28	0.28	100.00	225.94	0	N/A	N/A
TOTAL	10.29	7.33	71.23	5,006.14	5,006.14	41,542	45,567

LEGEND

- PROJECT LIMITS
- WATERSHED
- WATERSHED BOUNDARY
- DRAINAGE FLOW (PROPOSED)
- EXISTING CONTOUR
- PROPOSED CONTOUR
- LOT LINES
- PERSON FORMATION
- POTENTIAL RECHARGE FEATURE
- RETAINING WALL

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE POLLUTION ABATEMENT SIZING AND TREATMENT REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF POLLUTION ABATEMENT ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT 2

COSTABELLA AT THE VINEYARD  
PERMANENT POLLUTION ABATEMENT PLAN  
SAN ANTONIO, TEXAS

JOB NO. 6088-00

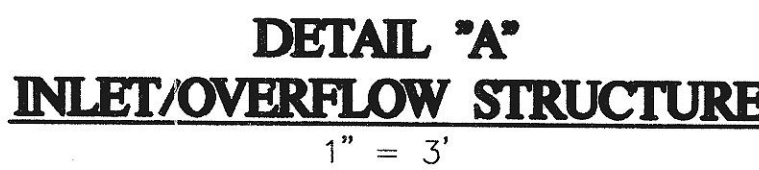
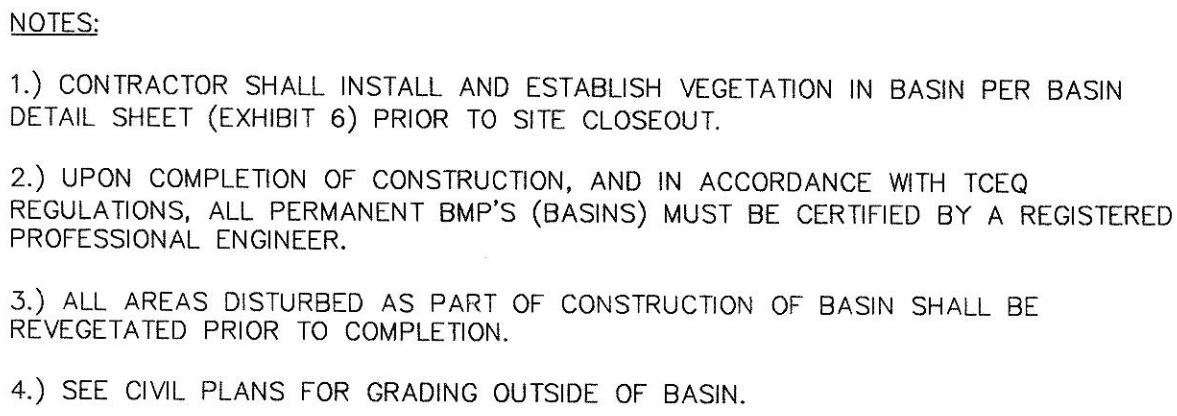
DATE FEBRUARY 2005

DESIGNER NR

CHECKED COT DRAWN MW

SHEET 1 OF 1

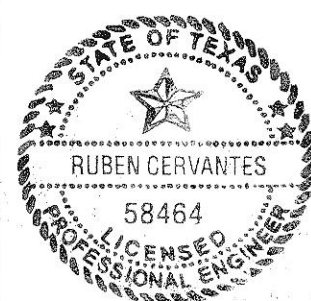




BASIN AREA	=	579,786 SF (13.31AC)
RUN OFF DEPTH	=	0.76 INCH
REQUIRED CAPTURE VOLUME	=	44,034 CF
REQUIRED SAND AREA	=	4,403 SF
BASIN DEPTH	=	4.5 FT
BASIN CAPTURE VOLUME	=	46,290 CF
BASIN SAND AREA	=	7,185 SF (MIDPOINT)
OVERFLOW WEIR HEIGHT	=	1.0 X 32 FT
Q25	=	88 CFS

NOTE:  
ACTUAL BASIN STORAGE VOLUME AND SAND SURFACE  
AREA EXCEED REQUIREMENTS.

REVISIONS:



Ruben Montes 2/23/2005

**PAPE-DAWSON  
ENGINEERS**

555 EAST RAMSEY | SAN ANTONIO TEXAS 78216 | PHONE: 210.375.9000  
FAX: 210.375.9010

**COSTABELLA AT THE VINEYARD  
PERMANENT POLLUTION ABATEMENT PLAN  
BASIN "B" DETAIL SHEET**

JOB NO. 6088-00

DATE FEBRUARY, 2005

DESIGNER NR

CHECKED CCT DRAWN BT

SHEET 1 of 1

EXHIBIT 4



# POLLUTANT LOAD AND REMOVAL CALCULATIONS

(Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices, Section 3.3)

PROJECT NAME: Costabella at the Vineyard  
JOB NUMBER: 6088-00

DATE: February 23, 2005  
WATERSHED: B (no over-treatment)  
PAGE: 1 of 2

## WATERSHED INFORMATION

	WATERSHED AREAS	Existing		Proposed	
		Sq. Ft.	Acres	Sq. Ft.	Acres
1.)	Total Watershed	579,786	13.31	579,786	13.31
2.)	Impervious Cover	0	0.00	401,647	9.22
	% Impervious Cover, I.C.	0.00%		69.28%	

3.) STORMWATER RUNOFF OF 25 YEAR STORM:  $Q_{25} = 88$  cfs  
OVERFLOW DEPTH: 1.5 ft

4.) BACKGROUND LOAD CALCULATION:

5.) Enter (YES) for applicable BMP's:

$$L = P(A_u \times 0.54 + A_d \times R_v \times 38.4) \text{ Eqn 3.4}$$

$A_u = 13.31$  Area undeveloped (ac.)

$A_d = 0.00$  Area developed (ac.)

Total Area = 13.31 ac. OK

$$R_v = 0.546(IC)^2 + 0.328(IC) + 0.030 \text{ Eqn 3.2}$$

$R_v = 0.030$  Runoff coefficient

BACKGROUND LOAD = 215.62 lb/yr

GRASSY SWALES = NO

SAND FILTER BASIN = YES

VEGETATED FILTER STRIPS = NO

RETENTION BASIN = NO

REQUIRED WEIR LENGTH (ft) 80.63

6.) ANNUAL RAINFAL (inches/year) = 30  
Per Table 3.2

COUNTY	AVE. ANNUAL PRECIPITATION	
Bexar	30 in/yr	
Comal	33 in/yr	
Medina	28 in/yr	

## I. ANNUAL POLLUTANT LOAD CALCULATIONS

$$L = (A)(P)(R_v)(C)(0.226) \text{ Eqn 3.1}$$

$$L = (A)(P)(R_v)(38.4) \text{ Eqn 3.3}$$

(L) = ANNUAL POLLUTANT LOAD, lbs.

(A) = AREA, acres

(P) = AVE. ANNUAL PRECIPITATION (in./yr (30 for Bexar County))

(R<sub>v</sub>) = RUNOFF/RAINFALL RATIO (i.e.,  $0.546(IC)^2 + 0.328(IC) + 0.030$ )

(0.226) = CONVERSION FACTOR

(C) = POLLUTANT CONCENTRATION, 170 mg/L

(L) = SEE CHART ON FOLLOWING PAGE

(A) = 13.31 acres

(RF) = 30 in/yr

(R<sub>v</sub>) = 0.519

ANNUAL POLLUTANT LOAD = 7,961.74 lb/yr

## POLLUTANT LOADING RESULTS

	EXISTING (Eqn 3.4)	PROPOSED (Eqn 3.3)	INCREASE:	TARGET REMOVAL
L (TSS)	215.62	7,961.74	7,746.12	80% 6,196.90

## II. TNRCC TECHNICAL GUIDANCE MANUAL TSS REMOVAL RATE EFFICIENCIES

Grassy Swales 70%	Vegetated Filter Strip 85%	Sand Filter Basin 89%	Retention Basin 100%
-------------------------	----------------------------------	-----------------------------	----------------------------

## III. FRACTION OF LOAD CAPTURED FOR OFFLINE BMP'S

$$L_R = L_I \times F \times \text{Fraction of site treated} \times (\text{TSS Removal Efficiency}) \quad \text{Eqn 3.6}$$

$L_R$  = Load Removed (lbs.)

$L_I$  = Post development load for the entire site (lbs.)

F = Fraction of load capture by BMP

$$F = 0.8745$$

Per Table 3.3

BMP Design Capture Volume(%)

DEPTH	20%	30%	40%	50%	60%	70%	80%	90%	100%
0	0	0	0	0	0	0	0	0	0
0.1	57	49	45	40	33	25	21	17	9
0.3	90	79	75	70	61	53	48	43	34
0.5	100	98	92	87	83	78	73	68	64
0.75		100	98	95	91	87	85	82	79
1			100	100	97	93	90	86	83
1.5					100	100	96	92	88
2							100	95	93
3								100	98
4									100

Runoff depth (estimated from above): 0.76 in

## IV. CAPTURE VOLUME REQUIRED

$A_D$  = 13.31 Drainage area (acres)

H = 0.76 Runoff depth (in)

Vol. = 44,034 Capture Volume includes 20% for sediment accumulation

## V. SAND AREA REQUIRED

d = 4.5 Depth of Water (ft)

Af = 4,403 Sand Area Required (sf) = (Vol.)\*(L) / (k(h+L)t)

**WATER POLLUTION  
ABATEMENT PLAN  
APPLICATION FORM (TCEQ-  
0584)**

# 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.*

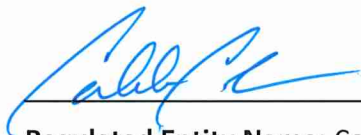
## Signature

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: Caleb Chance, P.E.

Date: 1/22/24

Signature of Customer/Agent:



Regulated Entity Name: Costabella

## 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): 2.0

3. Estimated projected population: \_\_\_\_\_

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		$\div 43,560 =$	
Parking		$\div 43,560 =$	
Other paved surfaces	4,550	$\div 43,560 =$	0.1
Total Impervious Cover	4,550	$\div 43,560 =$	0.1

**Total Impervious Cover 0.1  $\div$  Total Acreage 2.0 X 100 = 5% 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.

$L \times W =$  \_\_\_\_\_  $\text{Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} =$  \_\_\_\_\_ acres.

10. Length of pavement area: \_\_\_\_\_ feet.

Width of pavement area: \_\_\_\_\_ feet.

$L \times W =$  \_\_\_\_\_  $\text{Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} =$  \_\_\_\_\_ acres.

Pavement area \_\_\_\_\_ acres  $\div$  R.O.W. area \_\_\_\_\_ acres  $\times 100 =$  \_\_\_\_\_ % 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 <u>N/A</u>	

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" = 60'.

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): DFIRM (Digital Flood Insurance Rate Map for Bexar County, Texas and Incorporated Areas) Panel No. 48029C0255G, Dated 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.

**ATTACHMENT A**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment A – Factors Affecting Water Quality**

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

- Soil erosion due to the clearing of the site;
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings;
- Hydrocarbons from asphalt paving operations;
- Miscellaneous trash and litter from construction workers and material wrappings;
- Concrete truck washout.
- Potential overflow/spills from portable toilets

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

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

**ATTACHMENT B**



## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment B – Volume and Character of Stormwater**

Stormwater runoff will increase as a result of this development. For a 25-year storm event, the overall project will generate approximately 1 cfs. The runoff coefficient for the site changes from approximately 0.55 before development to 0.95 after development. Values are based on the Rational Method using runoff coefficients per the City of San Antonio Unified Development Code.

**TEMPORARY STORMWATER  
SECTION (TCEQ-0602)**

# 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: Caleb Chance, P.E.

Date: 1/22/24

Signature of Customer/Agent:



Regulated Entity Name: Costabella

## 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: construction staging area

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: Salado 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.

**ATTACHMENT A**



# **COSTABELLA**

## **Water Pollution Abatement Plan Modification**

### **Attachment A – Spill Response Actions**

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the analysis results are known the contaminated soils and cleanup materials will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in the event of a significant hazardous/reportable quantity spill. Additional notifications as required by the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

The contractor will be required to report significant or hazardous spills in reportable quantities to:

- 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. [https://www.tceq.texas.gov/response/spills/spill\\_rq.html](https://www.tceq.texas.gov/response/spills/spill_rq.html)
- 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.

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

- Notification should first be made by telephone and followed up with a written report.
- 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.
- Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.

**ATTACHMENT B**

**Attachment B – Potential Sources of Contamination**

Other potential sources of contamination during construction include:

Potential Source	●	Asphalt products used on this project.
Preventative Measure	■	After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.
Potential Source	●	Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.
Preventative Measure	■	Vehicle maintenance when possible will be performed within the construction staging area.
	■	Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.
Potential Source	●	Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.
Preventative Measure	■	Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.
	■	Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.
	■	Hazardous materials and wastes shall be stored in covered containers and protected from vandalism.
	■	A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.
Potential Source	●	Miscellaneous trash and litter from construction workers and material wrappings.
Preventive Measure	■	Trash containers will be placed throughout the site to encourage proper trash disposal.
Potential Source	●	Construction debris.
Preventive Measure	■	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.

## **COSTABELLA**

### **Water Pollution Abatement Plan**

Potential Source	●	Spills/Overflow of waste from portable toilets
Preventative Measure	■	Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.
	■	Portable toilets will be placed on a level ground surface.
	■	Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.

**ATTACHMENT C**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment C – Sequence of Major Activities**

The sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include installation of TBMPs, clearing and grubbing of vegetation where applicable. This will disturb approximately 0.1 acres. The second is construction that will include the deceleration lane and site cleanup. This will disturb approximately 0.1 acres.

**ATTACHMENT D**



## COSTABELLA

### Water Pollution Abatement Plan Modification

#### Attachment D – Temporary Best Management Practices and Measures

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.

***Upgradient water will be intercepted and routed around the site. All TBMPs are adequate for the drainage areas they serve.***

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

***Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include: (1) Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities for sediment control (2) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (3) installation of construction staging area(s).***

***Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.***

***Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.***

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

***Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.***

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

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

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

**ATTACHMENT F**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment F – Structural Practices**

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

- Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located on Exhibit 1, and illustrated on Exhibit 2.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

- Installation of concrete truck washout pit(s), as required and located on Exhibit 1 and illustrated on Exhibit 2.

**ATTACHMENT G**

# **COSTABELLA**

## **Water Pollution Abatement Plan**

### **Attachment G – Drainage Area Map**

No more than ten (10) acres will be disturbed with this proposed deceleration lane construction. All TBMPs utilized are adequate for the drainage areas served.

**ATTACHMENT I**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **INSPECTIONS**

Designated and qualified person(s) shall inspect Pollution Control Measures weekly and within 24 hours after a storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of Storm Water TPDES data for a period of three years after the Notice of Termination (NOT) has been filed. A copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) concrete truck rinse-out pit for signs of potential failure, (7) embankment, spillways, and outlet of sediment basin (where applicable) for erosion damage, and (8) sediment basins (where applicable) for evidence that basin has accumulated 50% of its volume in silt. Deficiencies noted during the inspection will be corrected and documented within seven calendar days following the inspection or before the next anticipated storm event if practicable.

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



# COSTABELLA

## Water Pollution Abatement Plan Modification

Pollution Prevention Measure	Inspected in Compliance	Corrective Action Required	
		Description (use additional sheet if necessary)	Date Completed
<b>Best Management Practices</b>			
Natural vegetation buffer strips			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Silt fences			
Rock berms			
Gravel filter bags			
Drain inlet protection			
Other structural controls			
Vehicle exits (off-site tracking)			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Concrete washout pit (leaks, failure)			
General site cleanliness			
Trash receptacles			
<b>Evidence of Erosion</b>			
Site preparation			
Roadway or parking lot construction			
Utility construction			
Drainage construction			
Building construction			
<b>Major Observations</b>			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			

\_\_\_\_\_ A brief statement describing the qualifications of the inspector is included in this SWP3.

"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's Name

\_\_\_\_\_  
Inspector's Signature

\_\_\_\_\_  
Date

**COSTABELLA**  
**Water Pollution Abatement Plan Modification**

**PROJECT MILESTONE DATES**

Date when major site grading activities begin:

<u>Construction Activity</u>	<u>Date</u>
Installation of BMPs	

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

<u>Construction Activity</u>	<u>Date</u>

Dates when stabilization measures are initiated:

<u>Stabilization Activity</u>	<u>Date</u>
Removal of BMPs	

**ATTACHMENT J**

# **COSTABELLA**

## **Water Pollution Abatement Plan**

### **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**

Interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. 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 site. In areas experiencing droughts where the initiation of stabilization measures by the 14<sup>th</sup> day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable.

**PERMANENT STORMWATER  
SECTION (TCEQ-0600)**

# Permanent Stormwater Section

## Texas Commission on Environmental Quality

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

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

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

## Signature

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

Print Name of Customer/Agent: Caleb Chance, P.E.

Date: 1/22/24

Signature of Customer/Agent



Regulated Entity Name: Costabella

## 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

**ATTACHMENT B**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment B – BMPs for Upgradient Stormwater**

Upgradient water will be intercepted and routed around the site.

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment of the increase in impervious cover is one (1) existing, approved sand filter basin (EAPP ID 13-05022302). The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a designed capture volume of 46,290 cubic feet. There is adequate volume available to overtreat for the 0.1 -ac of impervious cover contributed by the deceleration lane.

**ATTACHMENT C**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment C – BMPs for On-Site Stormwater**

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment of the increase in impervious cover is one (1) existing, approved sand filter basin (EAPP ID 13-05022302). The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a designed capture volume of 46,290 cubic feet. There is adequate volume available to overtreat for the 0.1 -ac of impervious cover contributed by the deceleration lane.



**ATTACHMENT D**

## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment D – BMPs for Surface Streams**

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment of the increase in impervious cover is one (1) existing, approved sand filter basin (EAPP ID 13-05022302). The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.76 inch of stormwater run-off from 13.31 acres, providing a designed capture volume of 46,290 cubic feet. There is adequate volume available to overtreat for the 0.1 -ac of impervious cover contributed by the deceleration lane.

**ATTACHMENT F**

# **COSTABELLA**

## **Water Pollution Abatement Plan Modification**

### **Attachment F – Construction Plans**

Please refer to the Exhibits Section of this application for the Water Pollution Abatement Site Plans.

**ATTACHMENT I**



## **COSTABELLA**

### **Water Pollution Abatement Plan Modification**

#### **Attachment I – Measures for Minimizing Surface Stream Contamination**

Any points where discharge from the site is concentrated and erosive velocities exist will include appropriately sized energy dissipators to reduce velocities to non-erosive levels.

**AGENT AUTHORIZATION FORM**  
**(TCEQ-0599)**

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

I Patrick Davis,  
Print Name

SW Region Development & Construction, Restaurant Development,  
Title - Owner/President/Other

of Chick-fil-A, Inc.,  
Corporation/Partnership/Entity Name

have authorized **Pape-Dawson Consulting Engineers, LLC**  
Print Name of Agent/Engineer

of **Pape-Dawson Consulting Engineers, LLC**  
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:

Patrick Davis  
Applicant's Signature

01/10/2024  
Date

THE STATE OF Georgia §

County of Fayette §

BEFORE ME, the undersigned authority, on this day personally appeared Patrick Davis 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 10 day of January, 2024

Siohan Boyle-Hill  
NOTARY PUBLIC

Siohan Boyle-Hill  
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: November 8<sup>th</sup>, 2025



**Letter of Intent  
For Work In TxDOT Right Of Way Requiring  
An Edwards Aquifer Protection Plan**

The purpose of this letter is to provide the Texas Commission On Environmental Quality (TCEQ) acknowledgement that TxDOT will be allowing work to occur in TxDOT right of way (ROW) that would require an Edwards Aquifer Protection Plan (EAPP), where the applicant of the EAPP is Chick-fil-A.

Furthermore, by signing this letter, Chick-fil-A certifies that all permanent Best Management Practices (BMP's) required to treat the proposed new impervious cover within TxDOT ROW would be constructed entirely on Chick-fil-A's property and outside of TxDOT ROW, including areas of ROW reservation or dedication.

The work to be performed in TxDOT ROW is part of a larger plan of development by the Permittee, and is not part of a TxDOT roadway project.

Note that this is not an approval from TxDOT for work to proceed to construction. No construction shall begin until all of the following have occurred:

- TxDOT has been provided a copy of the Permittee's TCEQ Authorization Letter
- All of the terms of the Donation Agreement have been met
- An Access Permit has been issued
- The Pre-work Meeting has been held

Signatures:

DocuSigned by:  
Patrick Davis  
4FAFA5B1398F4DE  
Permittee

12/4/2023

Date

DocuSigned by:  
Jason Lambert  
059C433E04B0476...  
TxDOT Area Engineer/District Maintenance Engineer

12/4/2023

Date



**APPLICATION FEE FORM**  
**(TCEQ-0574)**

# Application Fee Form

## Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Costabella

Regulated Entity Location: Approx. 2,000 LF east of N Loop 1604 and Huebner Rd intersection

Name of Customer: Chick-fil-A, Inc.

Contact Person: Patrick Davis

Phone: (404) 353-3819

Customer Reference Number (if issued): CN 601162985

Regulated Entity Reference Number (if issued): RN 104550751

### Austin Regional Office (3373)

☐ Hays

☐ Travis

☐ Williamson

### San Antonio Regional Office (3362)

☒ Bexar

☐ Medina

☐ Uvalde

☐ Comal

☐ Kinney

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

☐ Austin Regional Office

☐ San Antonio Regional Office

☐ Mailed to: TCEQ - Cashier

☒ Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

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	2.0 Acres	\$ 4,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 1/22/24

# Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

## ***Water Pollution Abatement Plans and Modifications***

### ***Contributing Zone Plans and Modifications***

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

### ***Organized Sewage Collection Systems and Modifications***

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

### ***Underground and Aboveground Storage Tank System Facility Plans and Modifications***

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

### ***Exception Requests***

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

### ***Extension of Time Requests***

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

**CORE DATA FORM**  
**(TCEQ-10400)**



TCEQ Use Only

# TCEQ Core Data Form

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

## SECTION I: General Information

<b>1. Reason for Submission</b> (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
<b>2. Customer Reference Number (if issued)</b>	<a href="#">Follow this link to search for CN or RN numbers in Central Registry**</a>	<b>3. Regulated Entity Reference Number (if issued)</b>
CN 601162985		RN 104550751

## SECTION II: Customer Information

<b>4. General Customer Information</b>		<b>5. Effective Date for Customer Information Updates</b> (mm/dd/yyyy)	
<input type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership	
<b>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).</b>			
<b>6. Customer Legal Name</b> (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
Chick-fil-A, Inc.			
<b>7. TX SOS/CPA Filing Number</b>	<b>8. TX State Tax ID</b> (11 digits)	<b>9. Federal Tax ID</b> (9 digits)	<b>10. DUNS Number</b> (if applicable)
<b>11. Type of Customer:</b>	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
<b>12. Number of Employees</b>		<b>13. Independently Owned and Operated?</b>	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>14. Customer Role</b> (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
<b>15. Mailing Address:</b>			
	City	State	ZIP
<b>16. Country Mailing Information</b> (if outside USA)		<b>17. E-Mail Address</b> (if applicable)	
		patrick.davis@cfacorp.com	
<b>18. Telephone Number</b>	<b>19. Extension or Code</b>	<b>20. Fax Number</b> (if applicable)	
( ) -		( ) -	

## SECTION III: Regulated Entity Information

<b>21. General Regulated Entity Information</b> (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input type="checkbox"/> New Regulated Entity <input checked="" type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information	
<b>The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).</b>	
<b>22. Regulated Entity Name</b> (Enter name of the site where the regulated action is taking place.)	
Costabella	



23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:							
26. Nearest City	State				Nearest ZIP Code		
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)	
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)							
34. Mailing Address:							
	City		State		ZIP		ZIP + 4
35. E-Mail Address:		patrick.davis@cfacorp.com					
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)			
( 404 ) 353-3819				( ) -			

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


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

#### SECTION IV: Preparer Information

40. Name:	Jean Autrey, P.E., CESSWI	41. Title:	Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
( 210 ) 375-9000		( 210 ) 375-9010	jautrey@pape-dawson.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:	Pape-Dawson Engineers	Job Title:	Associate Vice President
Name (In Print):	Caleb Chance, P.E.	Phone:	( 210 ) 375- 9000
Signature:		Date:	1/22/21

# **POLLUTANT LOAD AND REMOVAL CALCULATIONS**

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell  
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the

**1. The Required Load Reduction for the total project:**

Calculations from RG-348

Pages 3-27 to 3-31

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

where:

$L_M$  TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80

$A_N$  = Net increase in impervious area for the project

$P$  = Average annual precipitation, inches

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

County =	<b>Bexar</b>	
Total project area included in plan =	<b>0.10</b>	acres
Predevelopment impervious area within the limits of the plan =	<b>0.00</b>	acres
Total post-development impervious area within the limits of the plan =	<b>0.10</b>	acres
Total post-development impervious cover fraction =	<b>17.21</b>	
$P$ =	<b>30</b>	inches

$L_M$  TOTAL PROJECT = **82** lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **1**

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

Drainage Basin/Outfall Area No. = **Basin B**

Total drainage basin/outfall area =	<b>13.31</b>	acres
Predevelopment impervious area within drainage basin/outfall area =	<b>0.00</b>	acres
Post-development impervious area within drainage basin/outfall area =	<b>9.22</b>	acres
Post-development impervious fraction within drainage basin/outfall area =	<b>0.69</b>	
$L_M$ THIS BASIN =	<b>7524</b>	lbs.

**3. Indicate the proposed BMP Code for this basin.**

Proposed BMP = **Sand Filter**  
Removal efficiency = **89** percent

Aqualogic Cartridge  
Wet Vault

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

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

where:

$A_C$  = Total On-Site drainage area in the BMP catchment area

$A_i$  = Impervious area proposed in the BMP catchment area

$A_p$  = Pervious area remaining in the BMP catchment area

$L_R$  = TSS Load removed from this catchment area by the proposed BMP

$A_C$ =	<b>13.31</b>	acres
$A_i$ =	<b>9.22</b>	acres
$A_p$ =	<b>4.09</b>	acres
$L_R$ =	<b>8577</b>	lbs

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

Desired  $L_M$  THIS BASIN = **7605** lbs.

$F$  = **0.89**

**6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.**

Calculations from RG-348

Rainfall Depth =	<b>1.60</b>	inches
Post Development Runoff Coefficient =	<b>0.50</b>	
On-site Water Quality Volume =	<b>38533</b>	cubic feet

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

Off-site area draining to BMP =	<b>0.00</b>	acres
Off-site Impervious cover draining to BMP =	<b>0.00</b>	acres
Impervious fraction of off-site area =	<b>0</b>	
Off-site Runoff Coefficient =	<b>0.00</b>	
Off-site Water Quality Volume =	<b>0</b>	cubic feet
Storage for Sediment =	<b>7707</b>	
Total Capture Volume (required water quality volume(s) x 1.20) =	<b>46239</b>	cubic feet



*Caleb M. Chance*  
1/22/24

# EXHIBITS



Date: January 9, 2024, 10:44 AM - User ID: ucllrrreal  
File: P:\60188\54\Design\Environmental\WPAP\TM 608854.dwg

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARD-COPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE/UNLESS OTHERWISE NOTED. Imagery © 2016/CAPDOCDigital Global/Teas Orthimagery Program, USDA Farm Service Agency.

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

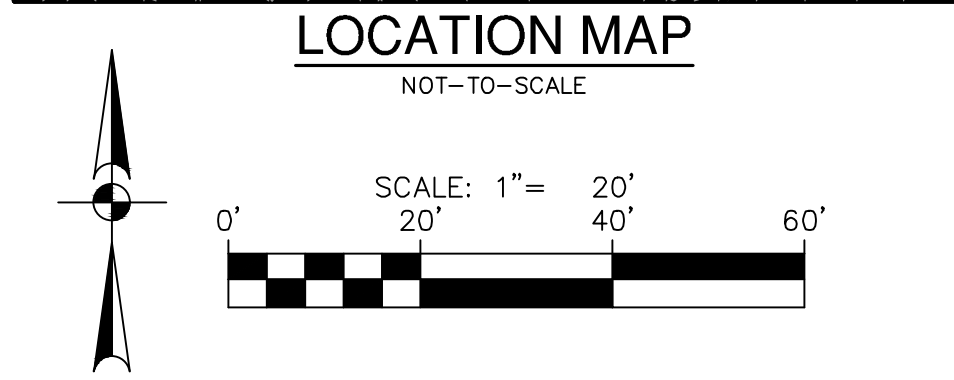
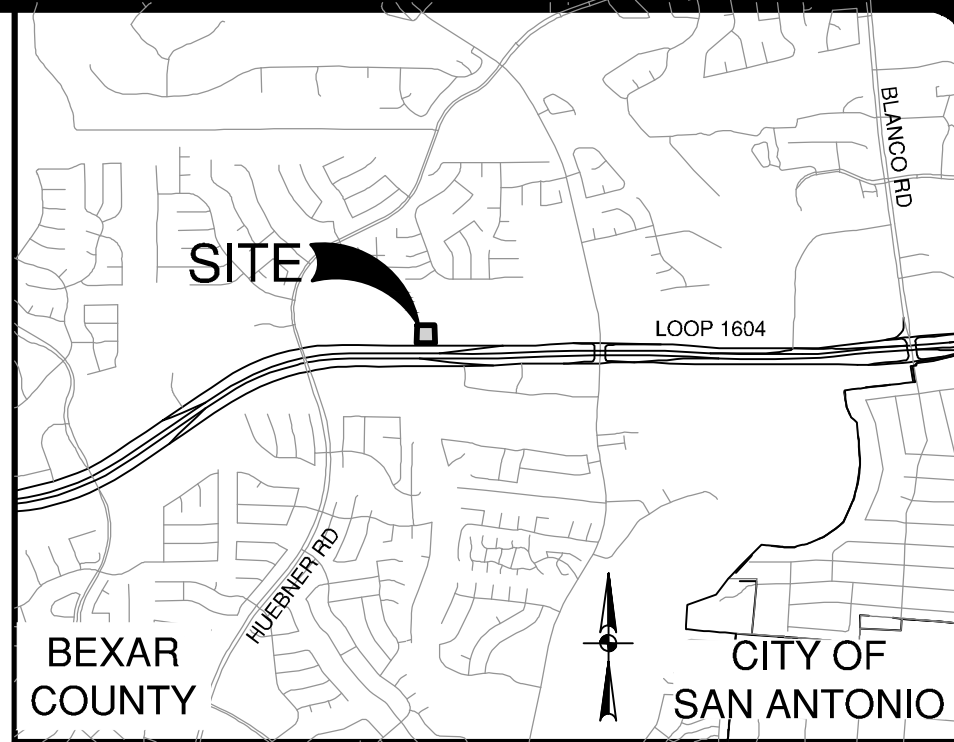
1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
  - THE NAME OF THE APPROVED PROJECT;
  - THE ACTIVITY START DATE; AND
  - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO

- THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
    - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
    - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
    - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
  12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    - A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
    - B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
    - C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.
- SAN ANTONIO REGIONAL OFFICE  
14250 JUDSON ROAD  
SAN ANTONIO, TEXAS 78233-4480  
PHONE (210) 490-3096  
FAX (210) 545-4329

TBMP MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION



SWPPP LEGEND

PROJECT LIMITS	---
EXISTING CONTOUR	- - - - -976-
PROPOSED CONTOUR	- - - - -970-
FLOW ARROW (EXISTING)	→
FLOW ARROW (PROPOSED)	→
SILT FENCE	-  -  -  -  -
ROCK BERM	■ ■ ■ ■ ■
GRAVEL FILTER BAGS	● ● ● ● ●
GRATE INLET PROTECTION	■ ■ ■ ■ ■
SEDIMENT CONTROL ROLLS	■ ■ ■ ■ ■
LIMITS OF DISTURBED AREA	■ ■ ■ ■ ■
STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE)	■ ■ ■ ■ ■
CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE)	■ ■ ■ ■ ■
CONCRETE TRUCK WASH-OUT PIT (FIELD LOCATE)	■ ■ ■ ■ ■

GENERAL NOTES

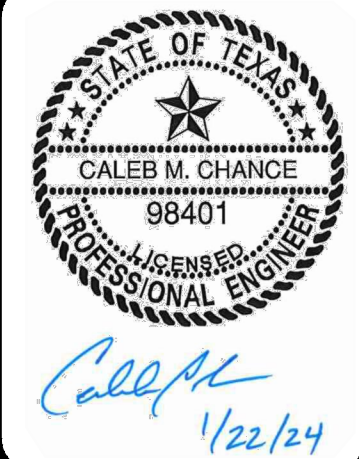
1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.
2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.
3. STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.
4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.
5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.
6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION PREVENTION PLAN.
7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.
8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.
9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.
10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.
11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.
12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.
13. SHADED AREA ■ ■ ■ ■ ■ DENOTES LIMITS OF DISTURBED AREAS. OTHER AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF A CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT A PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWPP) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES.
14. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TxDOT RIGHT-OF-WAY WITH TxDOT.

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE WATER POLLUTION ABATEMENT PLAN (WPAP).

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE WPAP ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT 1

DATE	NO.	REVISION



**PAPE-DAWSON ENGINEERS**  
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

**COSTABELLA**  
SAN ANTONIO, TEXAS  
WATER POLLUTION ABATEMENT PLAN  
TEMPORARY POLLUTION ABATEMENT PLAN

PLAT NO.	6088-54
JOB NO.	6088-54
DATE	JAN 2024
DESIGNER	JA
CHECKED	JA
DRAWN	MG
SHEET	1 OF 1



