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 <u>30 TAC 213</u>.

Administrative Review

1. <u>Edwards Aquifer applications</u> 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: <u>http://www.tceq.texas.gov/field/eapp</u>.

- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

- 1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity N North Phases 1,2, &3	nther	n			2. Regulated Entity No.:							
3. Customer Name: LS-Anthem, LLC							4. Customer No.:					
5. Project Type: (Please circle/check one)	New		Modification			Exter	nsion	Exception				
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures			
7. Land Use: (Please circle/check one)	Resider	ntial	Non-r	esiden	tial		8. Sit	e (acres):	79.044			
9. Application Fee:	\$500		10. Pe	ermar	nent E	BMP(s	5):	Wet Basin				
11. SCS (Linear Ft.):	0		12. AS	ST/US	ST (No	o. Tar	nks):	N/A				
13. County:	Hays		14. W	'aters	hed:			Mustang Branch-Onion Creek				

Application Distribution

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

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

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

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

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

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

Mark Sabella

Print Name of Customer/Authorized Agent

Mar Salell

Signature of Customer/Authorized Agent

3/19/2024

Date

FOR TCEQ INTERNAL USE ONLY								
Date(s)Reviewed:	Da	Date Administratively Complete:						
Received From:	Co	orrect N	lumber of Copies:	•				
Received By:	Di	Distribution Date:						
EAPP File Number:	Co	Complex:						
Admin. Review(s) (No.):	N	No. AR Rounds:						
Delinquent Fees (Y/N):	Re	eview T	ime Spent:					
Lat./Long. Verified:	SC	OS Cust	omer Verification:					
Agent Authorization Complete/Notarized (Y/N):	Fe	ре	Payable to TCEQ (Y/N):					
Core Data Form Complete (Y/N):		neck:	Signed (Y/N):					
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):					

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:

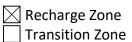
Print Name of Customer/Agent: Mark Sabella, PE

Date: <u>03/18/2024</u> Signature of Customer/Agent:

Mal Shell

Project Information

- 1. Regulated Entity Name: <u>Anthem North Phases 1,2,3</u>
- 2. County: Hays
- 3. Stream Basin: Colorado River
- 4. Groundwater Conservation District (If applicable): <u>Barton Springs/ Edwards Aquifer/</u> <u>Edwards Aquifer Authority</u>
- 5. Edwards Aquifer Zone:



6. Plan Type:

WPAP

SCS

TCEQ-0587 (Rev. 02-11-15)

	Modification AST	UST
7.	Customer (Applicant):	
	Contact Person: <u>Taylor Major</u> Entity: <u>LS-Anthem</u> Mailing Address: <u>4001 Parmer Ln Ste 100</u> City, State: <u>Austin, TX</u> Telephone: <u>3129652794</u> Email Address: <u>tmajor@landseahomes.com</u>	Zip: <u>78701`</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: <u>Mark Sabella</u> Entity: <u>Atwell LLC (Project Engineer)</u> Mailing Address: <u>805 Las Cimas Pkwy Building 3, Su</u> City, State: <u>Austin, TX</u> Telephone: <u>201-400-1650</u> Email Address: <u>msabella@atwell-group.com</u>	<u>uite 310_</u> Zip: <u>78746</u> FAX:
9.	Project Location:	
	 The project site is located inside the city limits of The project site is located outside the city limits jurisdiction) of <u>Mountain City</u>. The project site is not located within any city's 	s but inside the ETJ (extra-territorial
10.	The location of the project site is described belocation and clarity so that the TCEQ's Regional st boundaries for a field investigation.	
11.	Attachment A – Road Map. A road map showi project site is attached. The project location an the map.	-
12.	Attachment B - USGS / Edwards Recharge Zon USGS Quadrangle Map (Scale: 1" = 2000') of the The map(s) clearly show:	
	 Project site boundaries. USGS Quadrangle Name(s). Boundaries of the Recharge Zone (and Tran Drainage path from the project site to the b 	

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

- Survey staking will be completed by this date: _____
- 14. Attachment C Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:
 - Area of the site
 Offsite areas
 Impervious cover
 Permanent BMP(s)
 Proposed site use
 Site history
 Previous development
 - Area(s) to be demolished
- 15. Existing project site conditions are noted below:
 - Existing commercial site
 Existing industrial site
 Existing residential site
 Existing paved and/or unpaved roads
 Undeveloped (Cleared)
 Undeveloped (Undisturbed/Uncleared)
 - ___ Other: _____

Prohibited Activities

- 16. I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:
 - (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
 - (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
 - (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
 - (4) The use of sewage holding tanks as parts of organized collection systems; and
 - (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
 - (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.
- 17. I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

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

Administrative Information

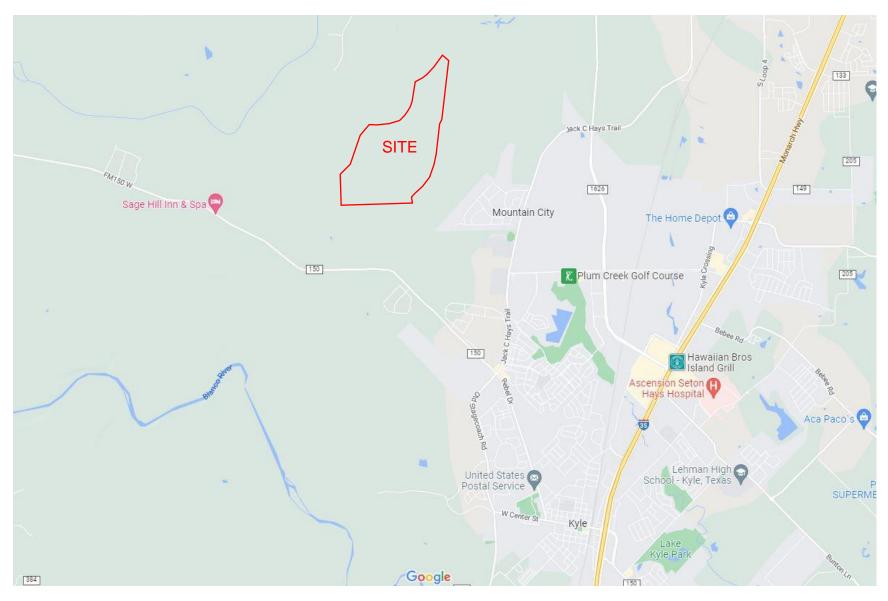
18. The fee for the plan(s) is based on:

- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- A request for an extension to a previously approved plan.
- 19. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

🔀 TCEQ cashier

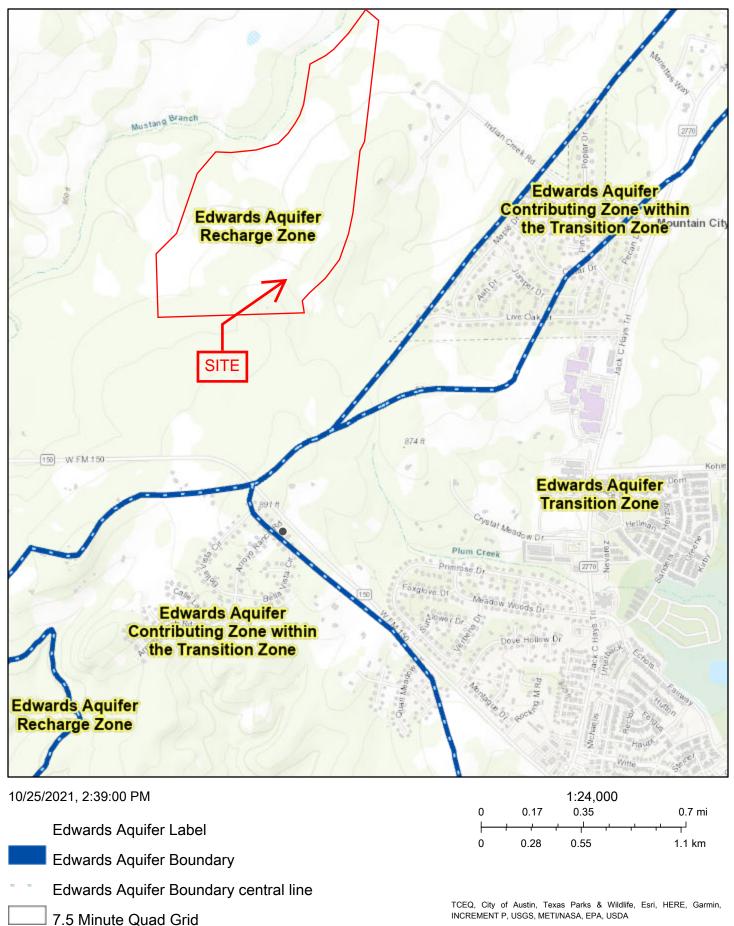
Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)


- 20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.



ATTACHMENT A – ROAD MAP

Edwards Aquifer Viewer









ATTACHMENT C-PROJECT DESCRIPTION

Anthem North Phases 1, 2, and 3 is located on the north side of Anthem Subdivision Phase 4A (currently under construction) at the end of Anthem Parkway. This permit also includes the Hays ISD site across Anthem Parkway from Phase 4A. The site is currently undeveloped. This project will consist of 880 single-family lots and the associated roadways and utilities. The total site acreage is 238.20 acres.

All of Anthem North Phases 1, 2, and 3, as wells as the ISD site are within the Edwards Aquifer Recharge Zone. The total water quality drainage area associated with this project is 159.69 acres. The total impervious cover associated with this drainage basin is 86.15 acres (54% impervious cover of the drainage basin). Water Quality Area 1 is 44.75 acres with 23.39 acres of impervious and Water Quality Area 3 is 114.94 acres with 62.76 acres of impervious. The areas will be treated by two proposed water quality wet basins, one for each water quality area.

Anthem Phases 1, 2, and 3 will include necessary wet utility improvements to the site to serve the future houses. Water and wastewater service will be provided by the City of Kyle through a Water and Wastewater Agreement signed by the City of Kyle and LS-Anthem (the Anthem North subdivision developer). The proposed water distribution system will be routed through the development and connected to a waterline that waws part of the previous Anthem 4A plans. The wastewater generated with Phases 1, 2, and 3 will be collected and routed by gravity sewer to a proposed lift station. The force main from the proposed lift station will ultimately connect to the wastewater force main that was constructed as a part of Phase 4A along Anthem Parkway.



GEOLOGIC ASSESSMENT FOR THE FREEDOM TRACT

Hays County, Texas

May 2022

Submitted to:

Landsea Homes 100 Congress Avenue Suite 2000 Austin, TX 78701

Prepared by:

aci Group, LLC 1001 Mopac Circle Austin, Texas 78746 TBPG Firm License No. 50260

aci project #: 22-21-120

aci consulting

a division of aci group, LLC

Austin (512) 347.9000 • Denver (720) 440.5320

www.aci-consulting.net

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: Mark T. Adams

Telephone: (512) 347-9000

Date: 5/26/2022

Fax: (512) 306-0974

Representing: aci Group LLC TBPG License No. 50260 (Name of Company and TBPG or TBPE registration number) 0

Signature of Geologist:

Regulated Entity Name: Freedom

Project Information

- 1. Date(s) Geologic Assessment was performed: September 2014, March 2017, & August 2021
- 2. Type of Project:

\boxtimes	WPAF
\boxtimes	SCS

- D
- 3. Location of Project:

\ge	Recharge	Zone

- Transition Zone
- Contributing Zone within the Transition Zone

- 4. X 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)
CrD—		
Comfort-Rock		
outcrop		
complex, 1 to		
8 percent		
slopes	D	0-3.33
RUD—		
Rumple-		
Comfort,		
rubbly		
association, 1		
to 8 percent		
slopes	D	0-4.92

Soil Name	Group*	Thickness(feet)
TaB—Tarpley clay, 1 to 3 percent slopes	D	0-5
KrB—Krum clay, 1 to 3 percent slopes	С	0-6.66

* 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: $1'' = \underline{60}'$ Site Geologic Map Scale: $1'' = \underline{60}'$ Site Soils Map Scale (if more than 1 soil type): 1" = 800'

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 <u>0</u> (#) 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.

 \boxtimes 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.



TABLE OF CONTENTS

1.0	INTRODUCTION	.1
2.0	PROJECT INFORMATION	.1
3.0	INVESTIGATION METHODS	.2
4.0	SUMMARY OF FINDINGS	. 2
5.0	RECOMMENDATIONS	.3
6.0	REFERENCES	.4

LIST OF ATTACHMENTS

Attachment A –Geologic Assessment Table	5
Attachment B – Stratigraphic Column	
Attachment C – Site Geology	10
Attachment D – Site Maps	32
Attachment E – Historical Aerial Photographs	37



May 26, 2022

Geologic Assessment for the Freedom Tract located in Hays County, Texas

1.0 INTRODUCTION

The purpose of this assessment is to identify karst or non-karst features and their recharge potential. This report complies with the requirements of Title 30, Texas Administrative Code (TAC) Chapter 213 relating to the protection of the Edwards aquifer recharge zone.

The Freedom Tract, formerly known as "Anthem North" with various phases, hereafter referred to as the subject area or site, is located approximately 1.8 miles northwest of the intersection of Farm to Market Road 150 (FM 150) and Jack C Hays Trail in Hays County, Texas (Attachment D, Figure 1).

2.0 PROJECT INFORMATION

Investigations of the subject area were initiated in 2010 and continued into 2014 by **aci consulting** staff. Pedestrian investigations of the subject area were performed on September 29 and 30, 2014, by Mark Adams, P.G. and Luke Rome, with **aci consulting**. During the spring of 2017, Mark Adams, P.G., Luke Rome, and Jessica Shockley with **aci consulting** were contracted to generate a Geologic Assessment for the entire site, previously known as the "Nance Tract." On August 31, 2021, Marcos Cardenas, Andrew Marlow, and Mark Adams, P.G., visited the site to conduct a visual reinspection. Information from this work done by **aci consulting** was used to generate this report.

The scope of the report consists of a site reconnaissance, field survey, and review of existing aci consulting data and reports dating as far back as 2010. Features identified during the field surveys were ranked utilizing the Texas Commission on Environmental Quality (TCEQ) matrix for Edwards aquifer recharge zone features. The ranking of the features will determine their viability as "sensitive" features.

This report is intended to satisfy the requirements for a Geologic Assessment, which shall be included as a component of a Water Pollution Abatement Plan (WPAP) and Sewage Collection System (SCS). The proposed site use is for low-density, single-family, residential development.



According to the TCEQ Edwards aquifer zone maps, the subject area is within the Barton Springs segment of the Edwards aquifer Recharge Zone (TCEQ 2005).

3.0 INVESTIGATION METHODS

The following investigation methods and activities were used to develop this report:

- Review of existing files and literature to determine the regional geology and any known caves associated with the project area;
- Review of past geological field reports, cave studies, and correspondence regarding the existing geologic features on the project area, if available;
- Site reconnaissance by a registered professional geologist to identify and examine caves, recharge features, and other significant geological structures;
- Evaluation of collected field data and a ranking of features using the TCEQ Ranking Table 0585 for the Edwards Aquifer Recharge Zone; and
- Review of historic aerial photographs to determine if there are any structural features present, and to determine any past disturbances on the subject property.

4.0 SUMMARY OF FINDINGS

This report documents the findings of a geologic assessment conducted by **aci consulting** personnel on September 29 and 30, 2014 and March 2017. A visual re-inspection of the site was conducted by **aci consulting** personnel on August 31, 2021. A total of nineteen naturally occurring features were noted on the site within the limits of the subject area. Seven features (NR-1, NR-14, NR-16, NR-21A NR-27, NR-27A, and NR-40) have been deemed sensitive and will require setbacks. The remaining twelve features (NR-2, NR-3, NR-4, NR-5, NR-6, NR-11, NR-12, NR-15, NR-18, NR-19, NR-20, and NR-28) have been deemed non-sensitive and do not require setbacks. All nine features are located within the Recharge Zone. Detailed descriptions, photographs, locations, and setback recommendations are provided in **Attachment C**.



5.0 RECOMMENDATIONS

Seven features (NR-1, NR-14, NR-16, NR-21A NR-27, NR-27A, and NR-40) have been deemed sensitive and will require setbacks. A buffer of 150 feet upslope and 50 feet across and down slope of the feature is recommended for NR-01. A buffer of 125 feet upslope and 50 feet across and down slope is recommended for feature NR-14. A buffer of 150 feet upslope and 50 feet across and downslope is recommended for feature NR-16. A buffer of 150 feet upslope and 70 feet across at the furthest upslope extent, with 50 feet across and downslope of the central point is recommended for feature NR-21A. A buffer of 100 feet upslope and 50 feet across and down slope of the feature is recommended for NR-27 and NR-27A. A buffer of 50 feet upslope and 50 feet across and down slope of the feature is recommended for NR-27 and NR-27A. A buffer of 50 feet upslope and 50 feet across and down slope of the feature is recommended for NR-27, NR-27A. NR-50, NR-60, NR-11, NR-12, NR-15, NR-18, NR-19, NR-20, and NR-28) have been deemed non-sensitive and there are no buffers recommended for these features.



REFERENCES

- Hauwert, N., et. al. 2002. Geologic Map of the Barton Springs Segment of the Edwards Aquifer. Barton Springs Edwards Aquifer Conservation District and the United States Geologic Survey. Austin, Texas. Scale 1:28,000
- (SCS) Soil Conservation Survey. 1983. Soil Survey of Hays County, Texas. United States Department of Agriculture. Texas Agriculture Experiment Station.
- Small, T.A.; J.A. Hanson; and N.M. Hauwert. 1996. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, (Barton Springs Segment) Northeastern Hays and Southwestern Travis Counties, Texas. U.S. Geological Survey Water Resources Investigations Report 96-4306. p. 1-12
- (TCEQ) Texas Commission on Environmental Quality. 2004. Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. October 1, 2004. Austin, Texas.
- (TCEQ) Texas Commission on Environmental Quality. 2005. "Edwards Aquifer Protection Program, Chapter 213 Rules - Recharge Zone, Transition Zone, Contributing Zone, and Contributing Zone within the Transition Zone." Map. Digital data. September 1, 2005. Austin, Texas.
- (USDA NRCS) U.S. Department of Agriculture Natural Resources Conservation Service. 2021. WebSoilSurvey.com. Soil Survey Area: Hays County, Texas. Date accessed: May 9, 2022.



ATTACHMENT A Geologic Assessment Table

GEOL	OGIC ASS	ESSMENT 1	ABLE				PR	OJE	CT NA	ME	: Fre	edom								
	LOCATIO	N				FE/	ATUF	RE C	HARAC	TEF	ristic	S			EVAL	_UA1	ΓΙΟΝ	PHY	SICAL	SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9		10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS (FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY		ENT AREA RES)	TOPOGRAPHY
						х	Y	Z		10						<40	<u>>40</u>	<1.6	<u>>1.6</u>	
NR 01	30.037617	-97.904395	SF	20	au	10	1	3	15	10	-	-	С, О	20	50		Х	Х		Hilltop
NR 02	30.037765	-97.904707	CD	5	au	5	5	1	-	-	-	-	0	10	15	Х		Х		Hilltop
NR 03	30.039386	-97.904884	CD	5	au	2	2	0.5	-	-	-	-	0	8	13	Х		Х		Hillside
NR 04	30.039825	-97.90733	SF	20	Lc	8	3	3	290	-	-	-	C, O	15	35	Х		Х		Hillside
NR 05	30.037034	-97.907444	SH	20	au	6	6	1.5	-	-	-	-	O,F,V	15	35	Х		Х		Hillside
NR 06	30.03666	-97.90499	SH	20	au	10	10	1.5	-	-	-	-	O,F,V	15	35	Х		Х		Hilltop
NR 11	30.034261	-97.906288	SH	20	au	13	17	1.5	-	-	-	-	C, O	15	35	Х		Х		Hillside
NR 12	30.034075	-97.904022	CD	5	au	20	20	1.5	-	-	-	-	C,F,O	15	20	Х		Х		Hilltop
NR 14	30.037927	-97.910659	SC	20	Lc	2	2	3	-	-	2	1	0	30	50		Х	Х		Hilltop
NR 15	30.0375	-97.911986	SC	20	Lc	7	4	3	-	•	•	-	0, F	15	35	Х		Х		Hilltop
NR 16	30.036297	-97.913186	SF	20	Lc	3	4	1.5	350	•	-	-	N	25	45		Х	Х		Hillside
NR 18	30.036844	-97.914118	SH	20	Lc	7	5	3	-	-	•	-	0, F	10	30	Х		Х		Hillside
NR 20	30.03889	-97.908844	SF	20	Lc	4	6	2	40	10	-	-	O,V,F	8	38	Х		Х		Hillside
NR 21A	30.045007	-97.906827	SF	20	RDM	1	0.8	1	-	-	•	-	C, O	20	40		Х	Х		Hillside
NR 28	30.041982	-97.907682	SF	20	RDM	5	2	3	N58W	-	-	-	O,F	15	35	Х		Х		Hilltop
* [DATUM: NAD 19	83 State Plane 420)3																	
2A TYPE		TYPE		21	B POINTS						8	A INFILLI	ING							
С	Cave				30		Ν	None	, exposed	bedr	ock									
SC	Solution cavity				20		С	Coars	e - cobble	es, br	eakdow	n, sand, g	gravel							
SF	Solution-enlarge	d fracture(s)			20		0	Loose	e or soft m	ud o	r soil, or	ganics, le	aves, stic	ks, dark colo	rs					
F	Fault				20		F					•								
0	Other natural be	drock features			5	20 F Fines, compacted clay-rich sediment, soil profile, gray or red o 5 V Vegetation. Give details in narrative description														
MB	Manmade featur	e in bedrock			30		FS	•	tone, cem											
SW	Swallow hole				30		х	Other	materials			-								
SH	Sinkhole				20															
CD	Non-karst closed	depression			5							12 TO	POGRAPI	HY					1	
z	Zone, clustered	or aligned features	i		30		Cli	ff, H	illtop, H	lills	ide, [Draina	ge, Flo	odplain,	Strea	ambo	ed			
с <u> </u>		gillea leaturoo			50	I		,	, .		,		, · · · ·						1	

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 a specified by 50 TAC phapter 213. 5/26/2022 Date 2 Sheet __1___ of __1____ MARK T. ADAMS TCEQ-0585-Table (Rev. 10-01-04) GF OG

GEOLOGIC ASSESSMENT TABLE PROJECT NAME: Freedom																				
LOCATION					FEATURE CHARACTERISTICS									EVALUATION PHYSI			SICAI	SETTING		
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMEI	NSIONS (FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY		ENT AREA RES)	TOPOGRAPHY
						х	Y	Z		10						<40	<u>>40</u>	<1.6	<u>>1.6</u>	
NR 27	30.04072	-97.908111	SC	20	Lc	1.5	0.8	2	-	-	-	-	С, О	25	45		Х	Х		Hillside
NR 27A	30.040748	-97.908126	SC	20	Lc	2	1	4	-	-	-	-	C, O	30	50		Х	Х		Hillside
NR 40	30.041812	-97.907643	SH	20	Lc	2	1.5	2.5	-	-	-	-	C, O	25	45		Х	Х		Hillside
+		83 State Plane 420																		
2A TYPE	JATUM: NAD 19	TYPE	13	21	B POINTS						0		NG							
C Cave 30						8A INFILLING N None, exposed bedrock														
SC	Solution cavity																			
				20 C Coarse - cobbles, breakdown, sand, gravel																
SF	Solution-enlarge	d fracture(s)	20 O Loose or soft mud or soil, organics, leaves, sticks, dark o																	
·	Fault	20					F Fines, compacted clay-rich sediment, soil profile, gray or red colors													
-	Other natural bedrock features 5 Manmade feature in bedrock 30						V Vegetation. Give details in narrative description													
MB SW							FS Flowstone, cements, cave deposits													
SW	Swallow hole Sinkhole		30 X Other materials 20																	
	Non-karst closed	depression	5 12 TOPOGRAPHY																	
Z	Zone, clustered or aligned features 30 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 settine by 30 TAC chapter 213. Date 5/26/2022 3 Sheet _1___ of _1___ MARK T. ADAMS anna TCEQ-0585-Table (Rev. 10-01-04) 5



ATTACHMENT B Stratigraphic Column



Freedom Tract, Hays County, Texas

Formation	Members	Thickness				
Austin Group	Austin Chalk (au)	130-150 feet				
Eagle Ford Group	Eagle Ford Shale (ef)	30-50 feet				
Edwards Group	Leached and Collapsed Members, undivided					



ATTACHMENT C Site Geology



The following includes a description of the site stratigraphy, geologic structure related to the Edwards aquifer, and karstic characteristics. Also included in this section is a review of historic aerials for presence of geologic changes or changes to manmade features in bedrock, and a short feature summary. The final portion of this attachment contains full feature descriptions and photos.

Stratigraphy

au – Austin Group – *Upper Cretaceous*

The Austin Group overlies the Eagle Ford Group, and lies just below the Taylor Group. Austin Group is described by Small and Hanson (1996) as light-tan to white-to-gray, chalky, variably marly, generally fossiliferous limestone commonly containing the fossil oyster Pycnodonte aucella, formerly Gryphaea aucella. The pelecypod Inoceramus subquadratus is found in the lower 100 ft of the formation. Average thickness is 130 to 150 feet.

ef – Eagle Ford Shale - Upper Cretaceous

Eagle Ford Group or Eagle Ford Shale overlies the Washita Group. The Eagle Ford Group is described by Small et al, 1996 as brown, flaggy sandy shale and argillaceous limestone with low permeability. Average thickness of the group ranges from 30 to 50 feet.

LC – Leached and Collapsed Members, Undivided – Lower Cretaceous

The Leached and Collapsed Members of the Person formation of the Edwards Group are described by Small et al (1996) as having lithology consisting of light-gray to light-tan wackestone with lesser amounts of variably burrowed mudstone, grainstone, and crystalline limestone; with chert lenses also common. The collapsed zones common in this member were caused by the collapse of the overlying limestone into voids created by earlier dissolution of the thin evaporate layers and lenses (Small et al, 1996). The lower 15 ft of the member commonly contains a large collapsed zone. *Toucasia, Chondrodonta,* and *miliolid* fossils are characteristic to this member. The base of the member is particularly fossiliferous and contains packstones or grainstones consisting of *Toucasia, Chondrodonta, Caprinid, miliolid,* and rarely *Cladophyllia* fossils. Cavern development is extensive and lateral with large rooms. Porosity and permeability are majority not fabric—this member is one of the most porous and permeable. Average thickness is 30 to 80 feet.



Structure

The subject area is underlain by au and ef (Hauwert et al., 2012). Locally, the dominant structural trend of the area is 035°, as demonstrated by the mapped fault patterns (**Attachment D, Figure 2**). Thus, all features that have a trend ranging from 020° to 050° are considered on trend and were awarded the additional 10 points in the Geologic Assessment Table. The geologic strata associated with the Edwards aquifer include the Austin Chalk and Eagle Ford Shale Formations overlying the Washita Group. These rocks are underlain by the by the Person Formation, which has members including the Cyclic and Marine, Leached and Collapsed and Regional Dense. The Kainer Formation is located below the Person Formation.

Karstic Characteristics

In limestone terrains, karst is expressed by erratically developed cavernous porosity and the manifestations of sinkholes, voids, and erratic surface drainage. Karst landscapes are typical of the Edwards Limestone, occurring across a vast region of Central Texas, west of the Balcones Escarpment, and these processes are critical to understanding the Edwards aquifer within its various segments. The features produced by karst processes (voids, holes, and solution layers) eventually provide conduits for surface water runoff and "point recharge" for the Edwards aquifer. The identification and protection of these features in established recharge areas is critical to maintaining groundwater quality and species habitat. The TCEQ require protective strategies within these areas to maintain quantity and quality of recharge prior to, during, and upon completion of construction activities.

Review of Historic Aerials

Aerial photographs were reviewed for the site, and it was determined that site had been cleared of vegetation prior to the first aerial photograph dated 1953. There is a pipeline easement, offsite, to the south of the site that is most clearly seen in the 1953 aerial. This pipeline was not located in the field during site investigations. A stock pond has existed on site since the 1953 aerial. The aerial photographs from 1953 to 2016 show no major changes other than regrowth of vegetation (**Attachment E**).

Feature Summary

Nineteen features were identified during site investigations and are detailed below, and are shown on **Figure 3** in **Attachment D**. Two features (NR-03 and NR-12) are non karst closed depressions. Six features (NR-01, NR-04, NR-16, NR-20, NR-21A and NR-28) are



solution enlarged fractures. Five features (NR-05, NR-06, NR-11, NR-18, and NR-40) are sinkholes. Four features (NR-14, NR-15, NR-27, and NR-27A) are solution cavities. Features NR-01, NR-14, NR-16, NR-21A, NR-27, NR-27A, and NR-40 have been deemed sensitive and will require setbacks. The remaining twelve features (NR-2, NR-3, NR-4, NR-5, NR-06, NR-11, NR-12, NR-15, NR-18, NR-19, NR-20, and NR-28) have been deemed non-sensitive and there are no buffers recommended for these features.

Soils discussed on the Geologic Assessment Form are delineated in **Attachment D**, **Figure 4**.



NR 01 GPS: N. 30.037617 W. -97.904395

This feature is solution-enlarged fracture with a length, width and vertical depth of 10 feet, 1 foot, and 3 feet, respectively. The feature is mapped within the Austin Chalk rock unit. The feature is positioned on a hilltop, and the fracture trend is 015°. The aperture measures 3 feet, and infill material consists of coarse cobbles, breakdown material, loose soil and organic litter. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 20 points due to the infill material and small catchment area.

Recommendation: A buffer 150 feet upslope and 50 feet across and down slope of the feature is recommended.



View of NR 01



NR 02 GPS: N. 30.037765 W. -97.904707

This feature is a non-karst closed depression with a length, width and vertical depth of 5 feet, 5 feet, and 1 foot, respectively. The feature is mapped within the Austin Chalk rock unit. The infill material consists of loose soil and organic litter. Remnants of tree and root decay are present in the depression. Drainage area appears to be less than 1.6 acres. The feature is positioned on a hilltop. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 10 points due to being a non-karst feature.



View of NR 02.



NR 03 GPS: N. 30.039386 W. -97.904884

This feature is a non-karst closed depression with a length, width and vertical depth of 2 feet, 2 feet, and 0.5 feet, respectively. The feature is located within the Austin Chalk rock unit. The aperture is 0.5 foot at the largest, and the infill material consists of loose soil and organic litter. After light excavations, it was determined that this feature has no connection to bedrock. The feature is positioned on a hillside. The drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has a low infiltration rate of 8 points due to its lack of connection to bedrock being a non-karst closed depression.



View of NR03 after hand excavation.



NR 04 GPS: N. 30.039825 W. -97.90733

This feature is a solution-enlarged fracture with a length, width and vertical depth of 8 feet, 3 feet, and 3 feet, respectively. The feature is mapped within the Leached and Collapsed rock unit. The fracture trend is N 70° W. The infill material consists of coarse cobbles and breakdown material. Drainage area appears to be less than 1.6 acres (0.75). The feature is positioned on a hillside. The feature was hand excavated and was determined to be epikarst and limited to 2.5 feet below the surface. The epikarst features were underlain by compacted clays. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an intermediate infiltration rate of 15 points due to it being clay lined and epikarst.



NR04 after hand excavations.



NR 05 GPS: N. 30.037034 W. -97.907444

This feature is a sinkhole with a length, width and vertical depth of 6 feet, 6 feet, and 1.5 feet, respectively. The feature is mapped within the Austin Chalk rock unit. The feature was hand excavated to a depth of 2.5 feet until hard compacted clays were reached. The infill material from 0 to 1 foot deep consists of brown moderately compacted soils supported by roots and the underlying infill material from 1 foot to 2.5 feet consisted of dark brown compacted clays and weathered limestone. The feature is positioned on a hillside. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 15 points due to it having a clay lining and small catchment area.



View of NR 05.



NR 06 GPS: N. 30.03666 W. -97.90499

This feature is a sink hole with a length, width and vertical depth of 10 feet, 10 feet, and 1.5 feet, respectively. The feature is mapped within the Austin Chalk rock unit. A trend of N 46° E measured along a joint associated with this feature align with the dominate regional trend. The infill material consists of loose soil, breakdown material, and organic litter. Local vegetation includes pencil cactus. The feature was excavated in two areas until hard compact clays were reached at a depth of 1.5 feet below the surface. The feature is limited to the surface and is considered to be epikarst. The feature is positioned on a hilltop and the drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has a relative infiltration rate of 15 points due to its clay lining and small catchment area.



View of NR06 after the western portion was excavated.



NR 11 GPS: N. 30.034261 W. -97.906288

This feature is a sinkhole or human excavation site with a length, width and vertical depth of 13 feet, 17 feet, and 1.5 feet, respectively. The feature is located in the Austin Chalk rock unit. The infill material consists of breakdown material, loose soil, organic litter and underlying clay lining. The feature is positioned on a hillside. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 15 points due to the clay lining and small catchment area.



View of NR 11



NR 12 GPS: N. 30.034075 W. -97.904022

This feature is a non-karst closed depression with a length, width and vertical depth of 20 feet, 20 feet, and 1.5 feet, respectively. The feature is located in the Austin Chalk rock unit. The infill material consists of coarse cobbles, breakdown material, loose soil and organic litter, and fine compacted clay and sand. Vegetation includes Texas Persimmon and grasses. The feature is positioned on a hilltop. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 15 points due its non-karst origin and clay and the relative infiltration rate of this feature is low (15 points).



View of NR 12



NR 14 GPS: N. 30.037927 W. -97.910659

This feature is a solution-enlarged cavity with two apertures 3 feet apart oriented East to West. The apertures measure 2 feet and 1 foot in diameter, with depths of 3 feet. The feature is mapped in the Leached/Collapsed rock unit. The infill material consists of breakdown material and loose soil. The feature is positioned on a hilltop. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 30 points due to its ability to rapidly intake water.

Recommendation: A buffer 125 feet upslope and 50 feet across and down slope of the feature is recommended.



View of NR 14



NR 15 GPS: N. 30.0375 W. -97.911986

This feature is a solution cavity with a length, width, and depth of 7 feet, 4 feet, and 3 feet, respectively. The feature is mapped in the Leached/Collapsed rock unit and is located along a hilltop. The infill material consists of loose soil, organic litter, and compacted clays. After hand excavations, this feature was determined to be epikarst and limited to the surface. Vegetation in the vicinity includes Texas Persimmon and grasses. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 15 point due to its epikarst origin, clay lining, mounded soils from animal burrows surrounding the perimeter of the feature.



View of NR 15



NR 16 GPS: N. 30.036297 W. -97.913186

This feature is a solution-enlarged fracture with a length, width and vertical depth of 3 feet, 4 feet, and 1.5 feet, respectively. The feature is positioned along a fracture trending 350° and does not align with the regional trend. The feature is mapped in the Leached/Collapsed rock unit. There was no infill material, clean rock siding was exposed. The feature is positioned on a hillside. Drainage area appears to be less than 1.6 acres. Vegetation in the vicinity includes cactus and grasses. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 25 points due to the feature being rock lined.

Recommendation: A buffer 150 feet upslope and 50 feet across and down slope of the feature is recommended.



View of NR 16



NR 18 GPS: N. 30.036844 W. -97.914118

This feature is a sinkhole with length, width, and depth of 7 feet, 5 feet, and 3 feet. The feature is mapped in the Leached/Collapsed rock unit. The feature was hand excavated and was determined to be of epikarst nature. The fractured limestone slabs were approximately 1.5 feet thick overlying compacted clays. The infill material consists of organic litter and compacted clay. The feature is positioned on a hillside. Drainage area appears to be less than 1.6 acres (0.5). In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 10 points due to the compacted clay lining below the epikarst feature.



View of NR 18



NR 20 GPS: N. 30.03889 W. -97.908844

This feature is a solution-enlarged fracture with a length, width and vertical depth of 4 feet, 6 feet, and 2 feet, respectively. It is positioned along the convergence of two fractures trending 040. The aperture averages 6 inches. The feature is mapped in the Leached/Collapsed rock unit. Hand excavations were conducted along the exposed rock joints until the underlying compact clays were reached approximately 2.5 feet below the surface. It was determined that this feature was limited to the surface as epikarst and is not connected to bedrock. The infill material consists of roots, breakdown material, organic litter, and compacted clays. The feature is positioned on a hillside. Drainage area appears to be less than 1.6 acres (0.5) Vegetation in the vicinity includes Texas Persimmon, Agarita, green briar, and mature live oaks. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 8 points due to it being epikarst infilled with compacted clays.



View of NR 20



NR-21A GPS: N. 30.045007 W. -97.906827

This feature is a solution-enlarged fracture with a length, width and vertical depth of 1 foot, 0.75 feet, and 1 foot, respectively. The feature is mapped in the Regional Dense Member rock unit. The feature is positioned on a hillside. The feature was hand excavated to a depth of 2 feet where compacted clay materials were encountered lined with limestone blocks. From 0 to 2 feet the infill material consisted of coarse cobbles and breakdown material. Drainage area appears to be less than 1.6 acres (.25). In using Figure 1 in Instructions to Geologist, it was determined that after excavations, it appears this feature has potential for rapid infiltration however may be plugged with compacted clay sediments, therefore, at this time the relative infiltration rate of this feature is intermediate (20 points).

Recommendation: A buffer 150 feet upslope and 70 feet across at the furthest upslope extent with 50 feet across and down slope of the feature's central point is recommended.



View of NR 21A after hand excavations.



NR-27 GPS: N. 30.04072 W. -97.908111

This feature is a solution cavity with a length, width and vertical depth of 1.5 feet, 0.75 foot, and 2 feet, respectively. The feature is mapped within the Leached-Collapsed rock unit. The feature is positioned on a hillside. During excavations, there were two areas of focus and were pursued until an accurate evaluation of the infiltration rate could be determined. Upon the excavation, it was determined that the infill material consists of coarse cobbles, breakdown material, loose soil and organics. Drainage area appears to be less than 1.6 acres (0.25). In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 25 points due to the continuation of loose infill material encountered while excavating.

Recommendation: A buffer 100 feet upslope and 50 feet across and down slope of the feature is recommended.



View of NR 27 after hand excavations



NR-27A GPS: N. 30.040748 W. -97.908126

This feature is a solution cavity with a length, width and vertical depth of 2 feet, 1 foot, and 4 feet, respectively. The feature is mapped within the Leached-Collapsed rock unit. The feature is positioned on a hillside. The was minor amounts of infill material consisting of coarse cobbles and organics, in conjunction with the exposed rock lining. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 30 points due the rock lining and limited infill material.

Recommendation: A buffer 100 feet upslope and 50 feet across and down slope of the feature is recommended.



View of NR 27A after hand excavation.



NR-28 GPS: N. 30.041982 W. -97.907682

This feature is a solution-enlarged fracture with a length, width and vertical depth of 5 feet, 2 feet, and 3 feet, respectively. The feature is mapped within the Regional Dense Member rock unit. The feature is positioned on a hilltop, and the major fracture trend is N 03° E and the minor fracture trend is N 58 ° W. The feature was hand excavated. The large blocks at the surface were removed and the soil complex below was dug until a thick compacted clay material was encountered at approximately 3 feet. The infill material consists of soil, organics, and compacted clays. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 15 points due to the thick complex of compacted clay sediments below.



View of NR 28 before excavation.



NR-40 GPS: N. 30.041812 W. -97.907643

This feature is a sinkhole with a length, width and vertical depth of 2 feet, 1.5 feet, and 2.5 feet, respectively. The feature is mapped within the Leached and Collapsed rock unit. The feature is positioned on a hillside. The infill material consists of coarse cobbles, breakdown material, loose soil and organics. Drainage area appears to be less than 1.6 acres. In using Figure 1 in Instructions to Geologist, it was determined that this feature has an infiltration rate of 25 points due to the lack of infill materials and prominent rock lining.

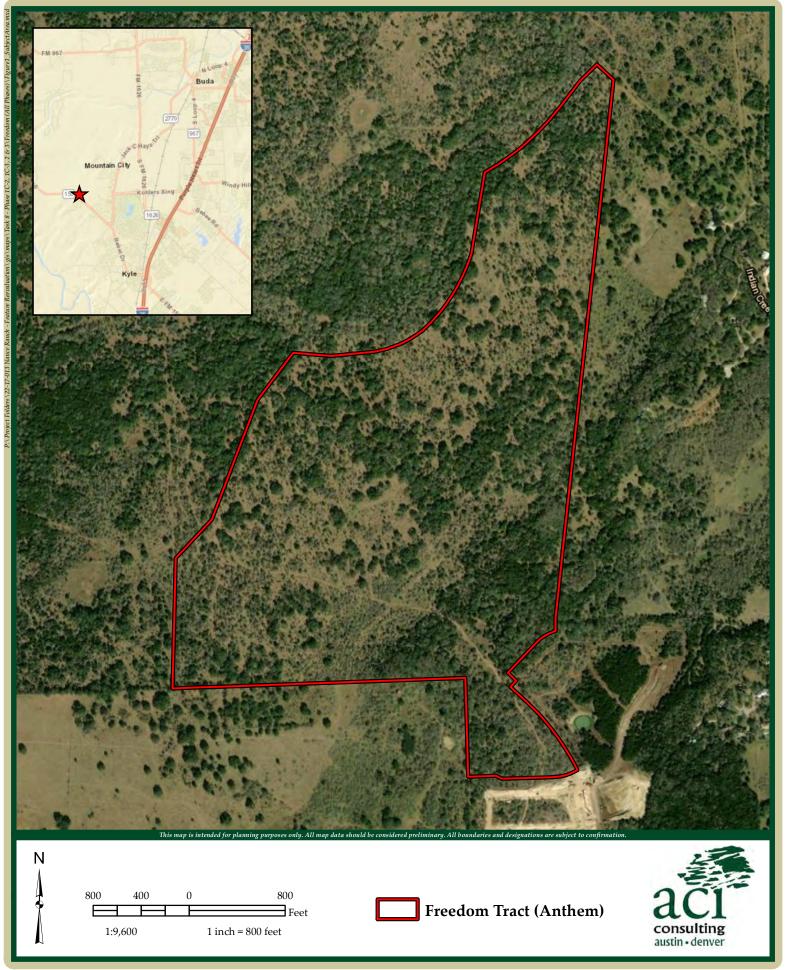
Recommendation: A buffer 50 feet upslope and 50 feet across and down slope of the feature is recommended.



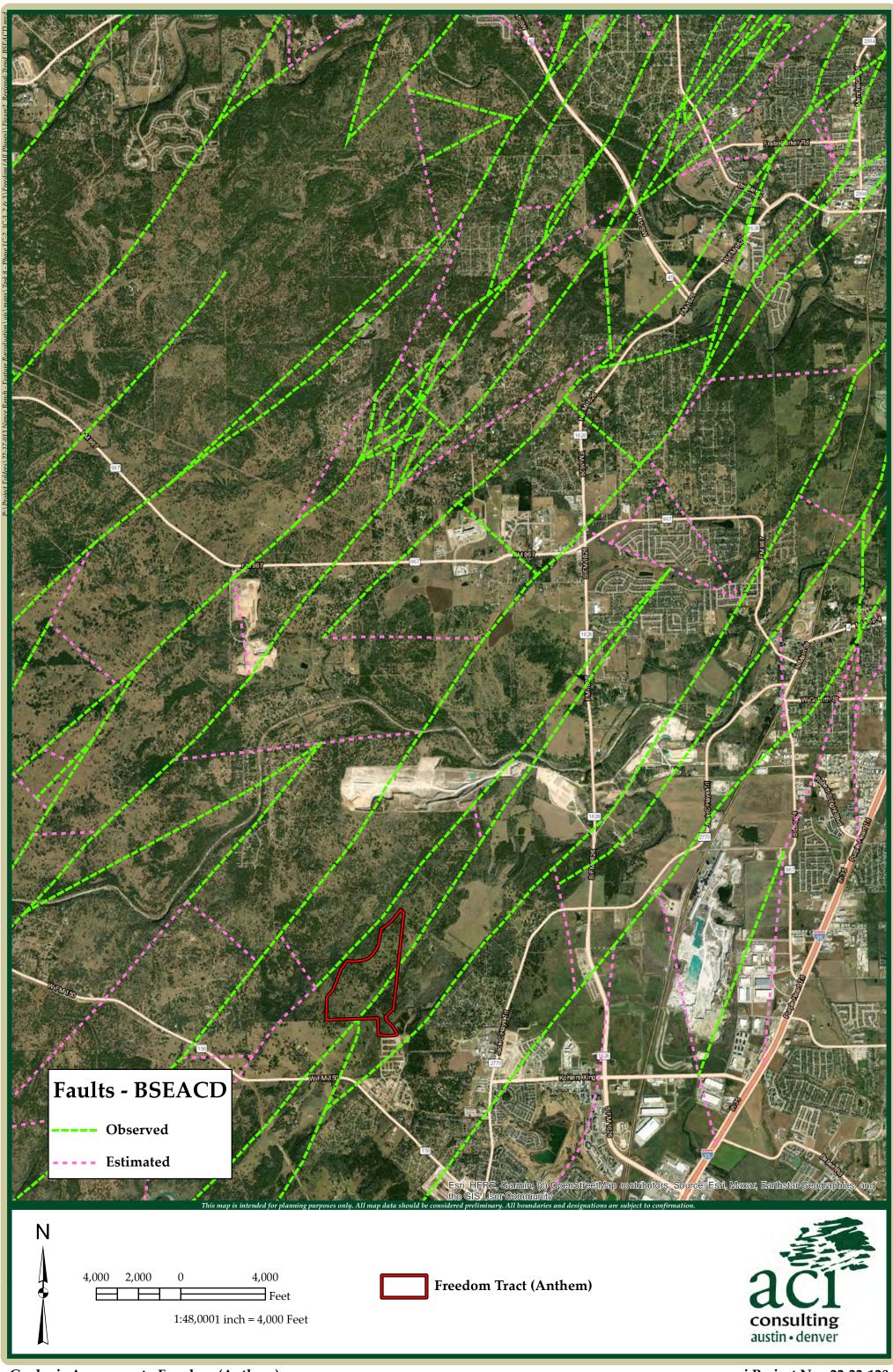
View of NR 40 after excavation



ATTACHMENT D Site Maps



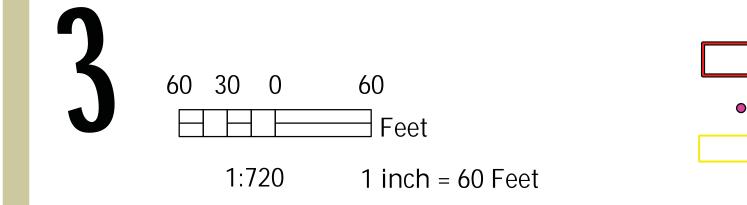
Geologic Assessment - Freedom (Anthem) Figure 1: Subject Area



Geologic Assessment - Freedom (Anthem) Figure 2: Regional Trend - (BSEACD) aci Project No.: 22-22-120

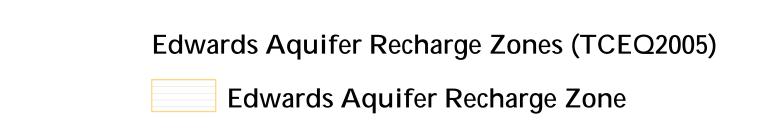
May 2022





Features

Buffer

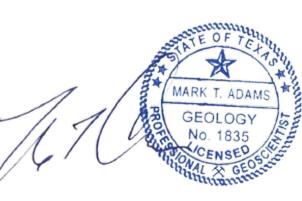


Abandoned Pipeline

Observed Faults

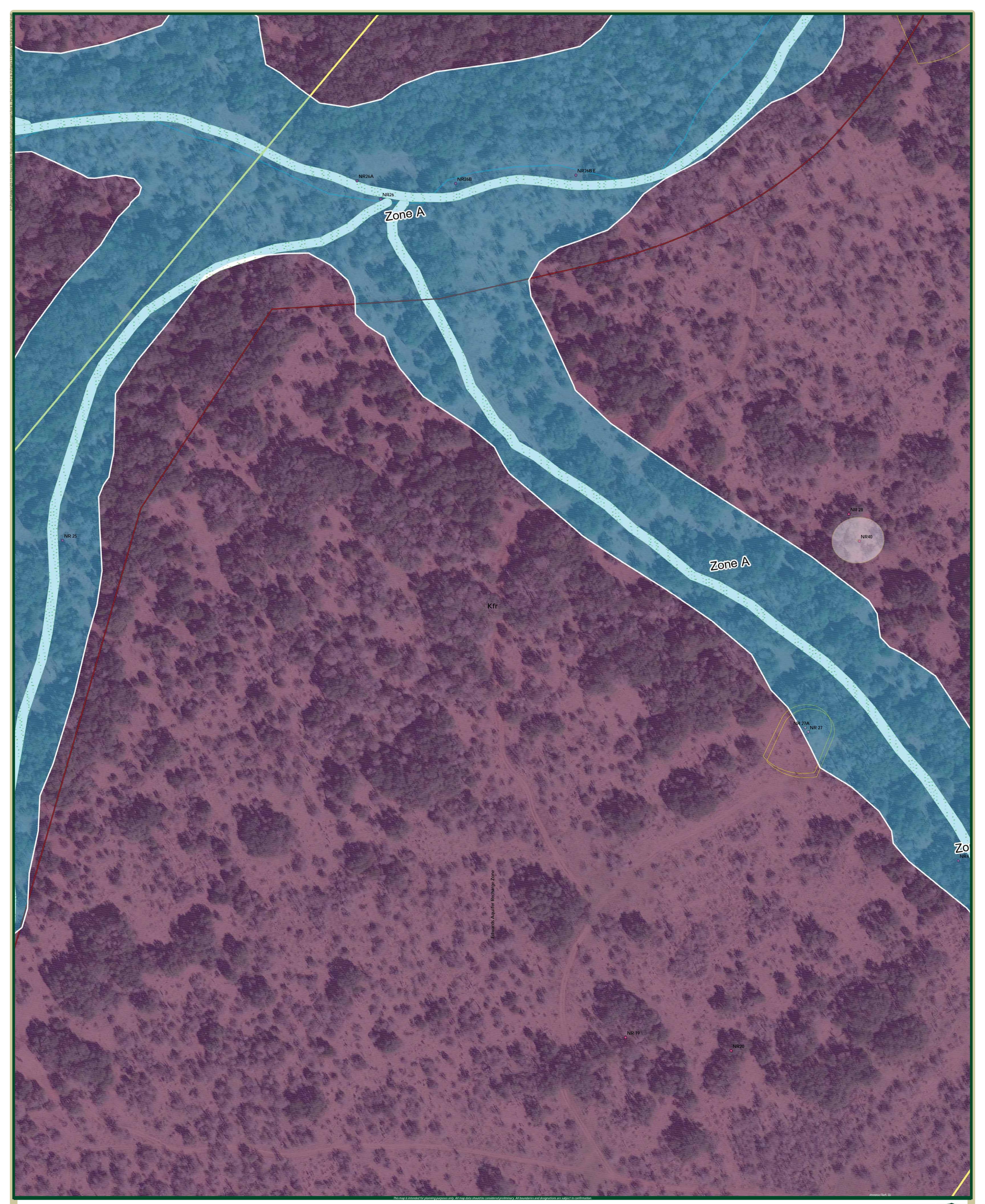
Wetlands (NWI)

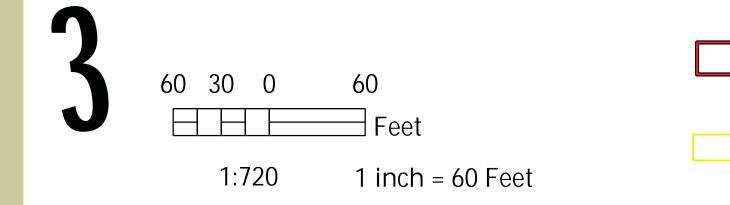
Waterbodies (NHD)





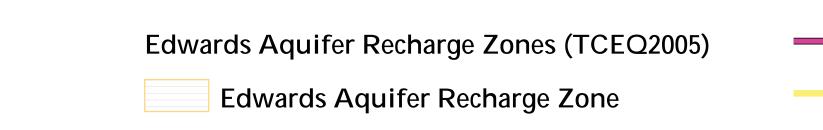
Geologic Assessment - Freedom (Anthem) Figure 3: Geologic Feature Map (Page 1 of 5)





Features

Buffer

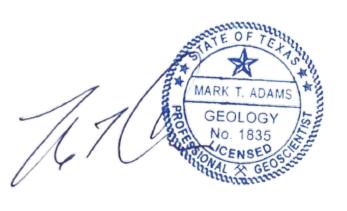


Abandoned Pipeline
Observed Faults

Flowlines (NHD)

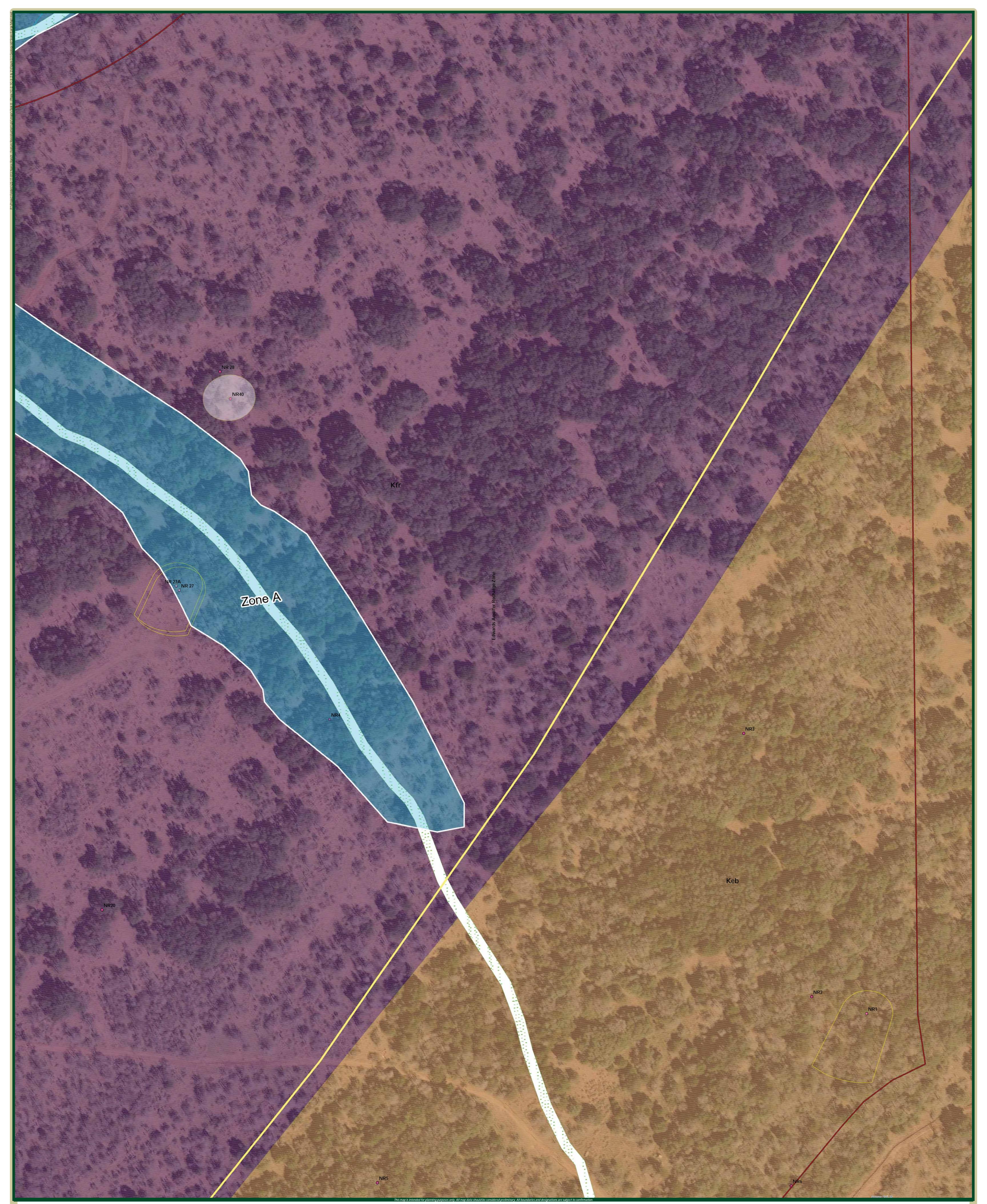
Wetlands (NWI)

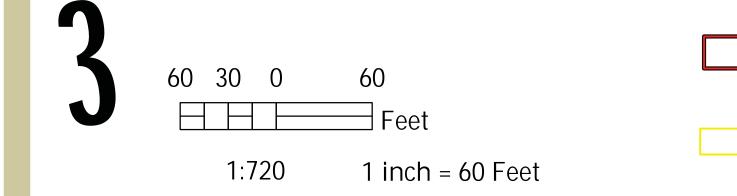
Waterbodies (NHD)

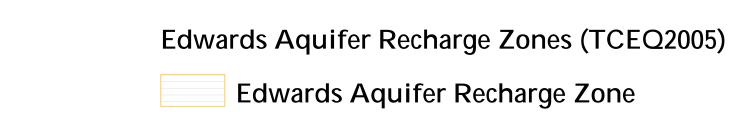




Geologic Assessment - Freedom (Anthem) Figure 3: Geologic Feature Map (Page 2 of 5)







Features

Buffer

Abandoned Pipeline

Wetlands (NWI) Observed Faults _____

Waterbodies (NHD)

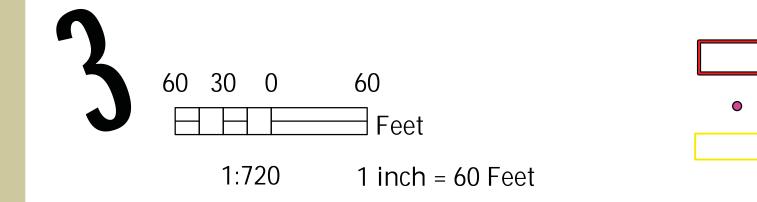
Flowlines (NHD)





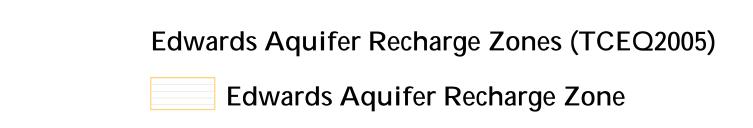
Geologic Assessment - Freedom (Anthem) Figure 3: Geologic Feature Map (Page 3 of 5)





Features

Buffer

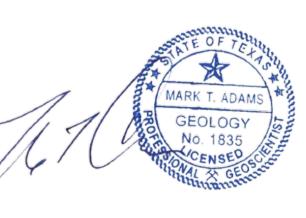


Abandoned Pipeline

Observed Faults

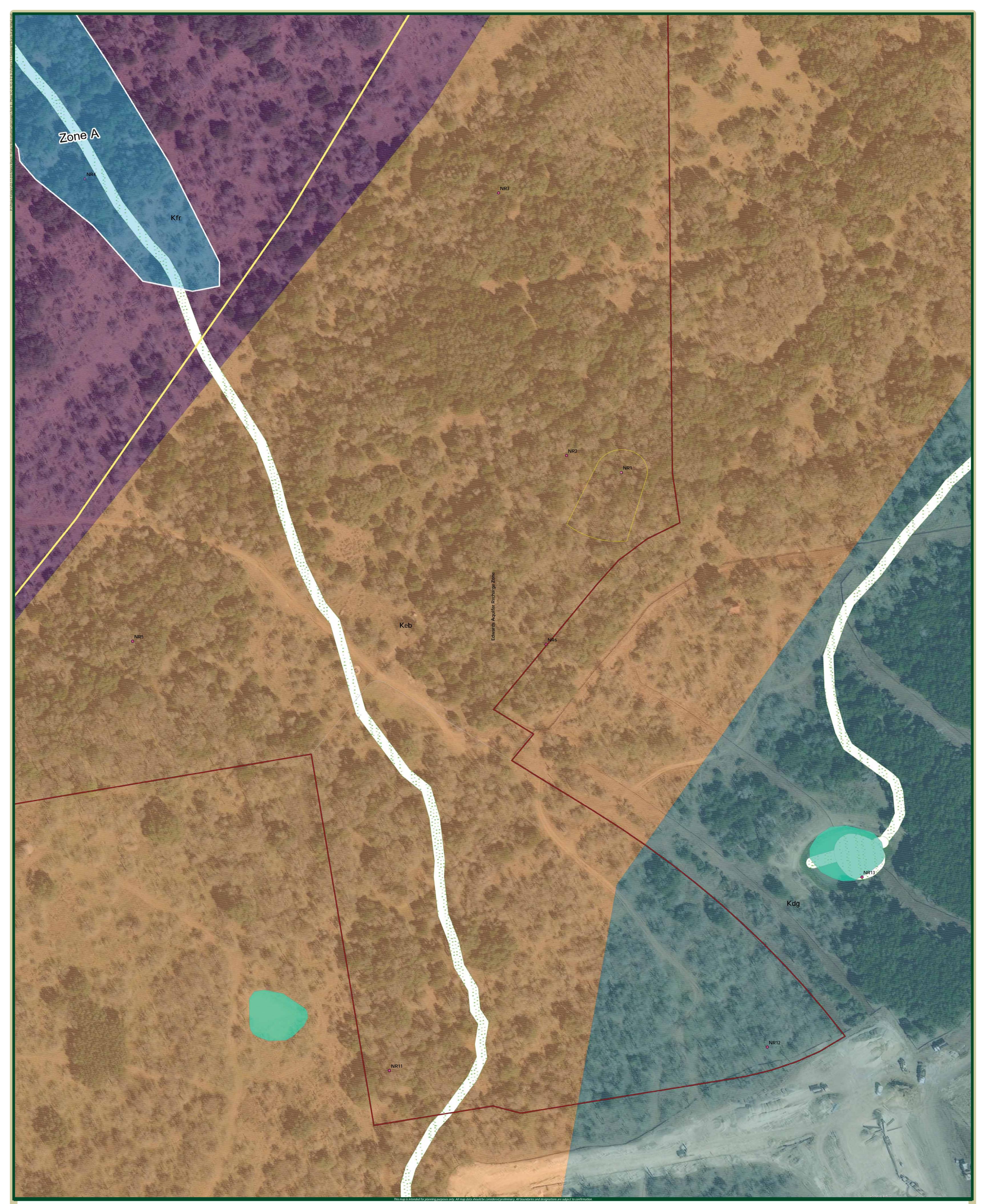
Wetlands (NWI) Flowlines (NHD)

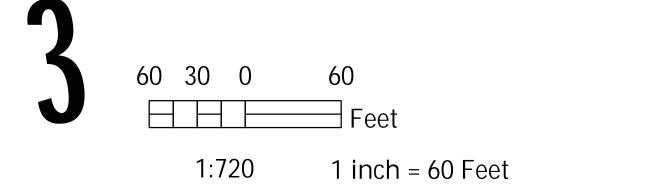
Waterbodies (NHD)

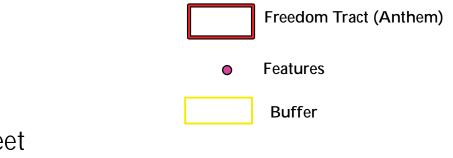


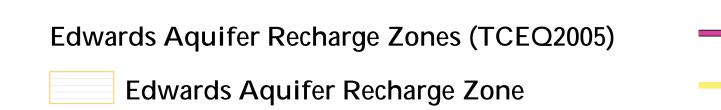


Geologic Assessment - Freedom (Anthem) Figure 3: Geologic Feature Map (Page 4 of 5)







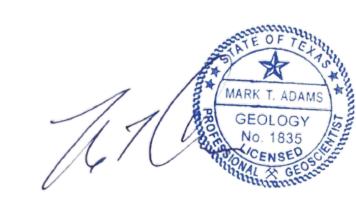


Abandoned Pipeline

Wetlands (NWI) Observed Faults _____

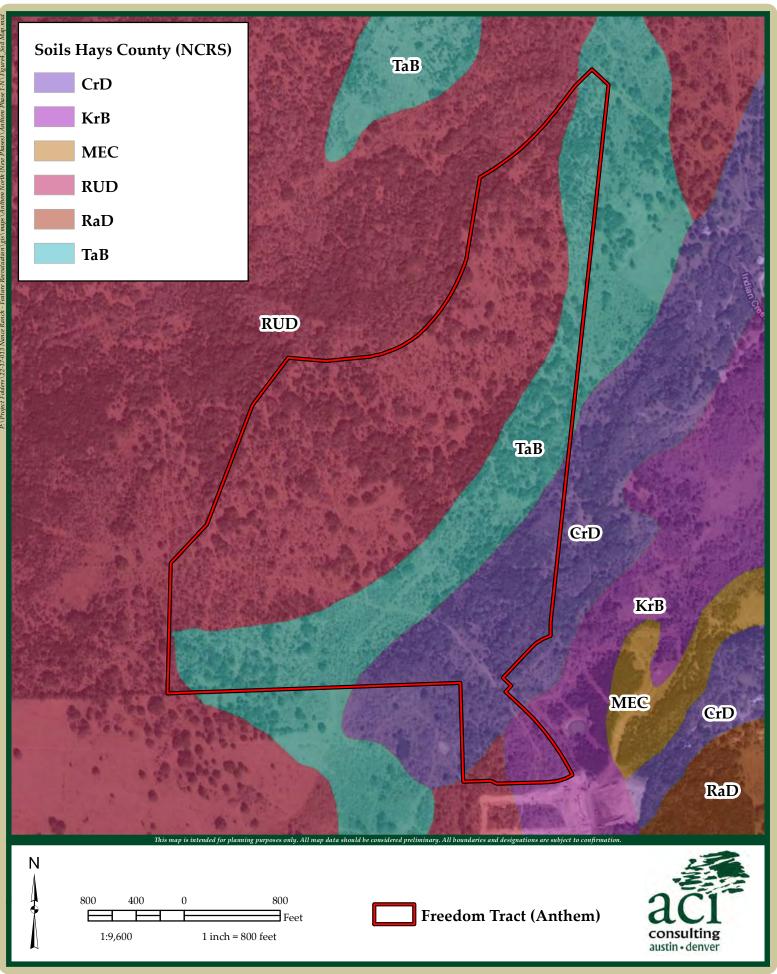
Waterbodies (NHD)

Flowlines (NHD)





Geologic Assessment - Freedom (Anthem) Figure 3: Geologic Feature Map (Page 5 of 5)



Geologic Assessment - Freedom (Anthem) Figure 4: Soil Map

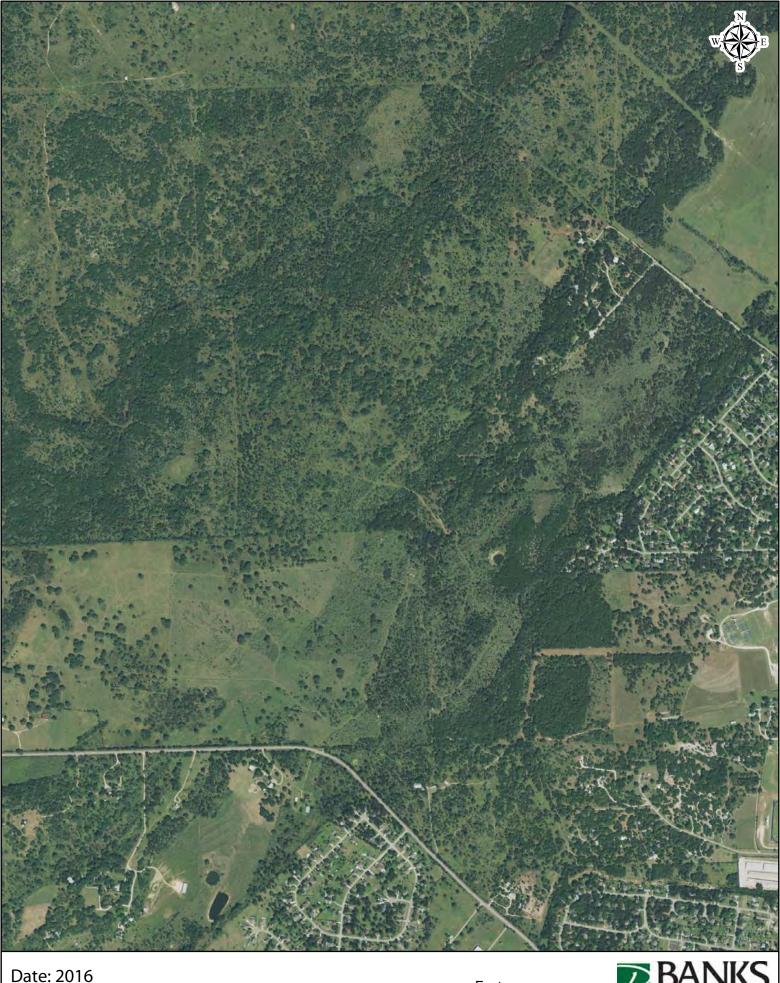


ATTACHMENT E Historical Aerial Photographs ACI CONSULTING 1001 Mopac Circle Austin TX 78746

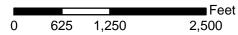


Historical Anthem Photographs

Aerial Hays County, TX PO #: 22-17-112 ES-125618 Monday, September 18, 2017

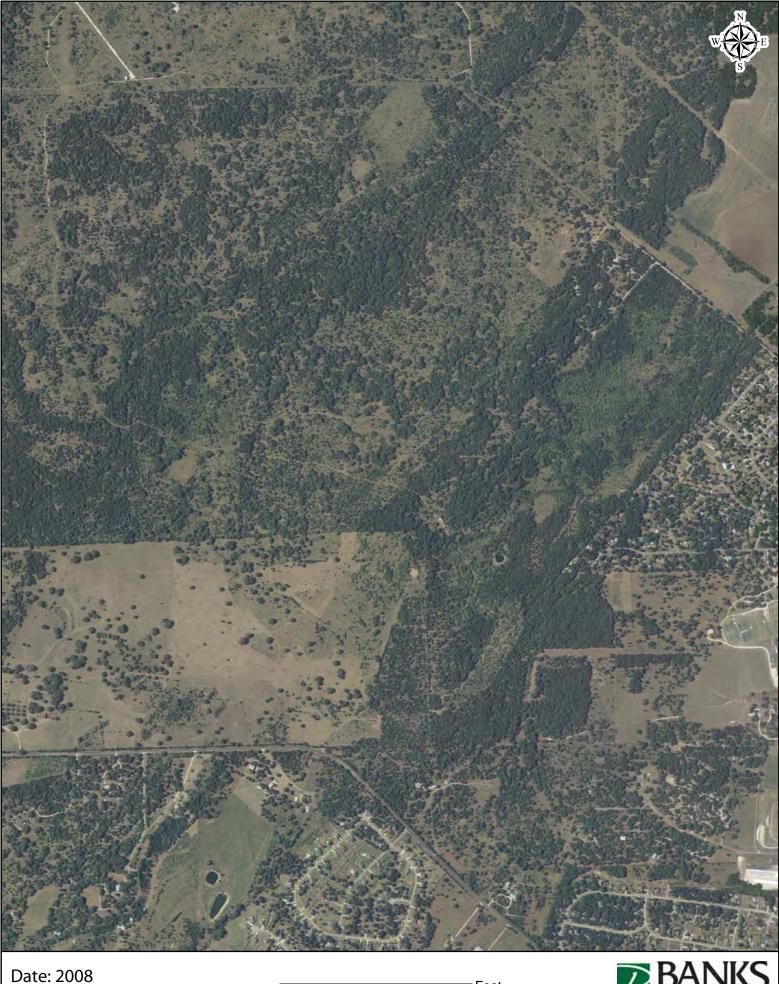


Date: 2016		
Source: USDA		

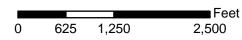








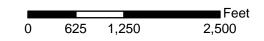
Date: 2008	
Source: USDA	





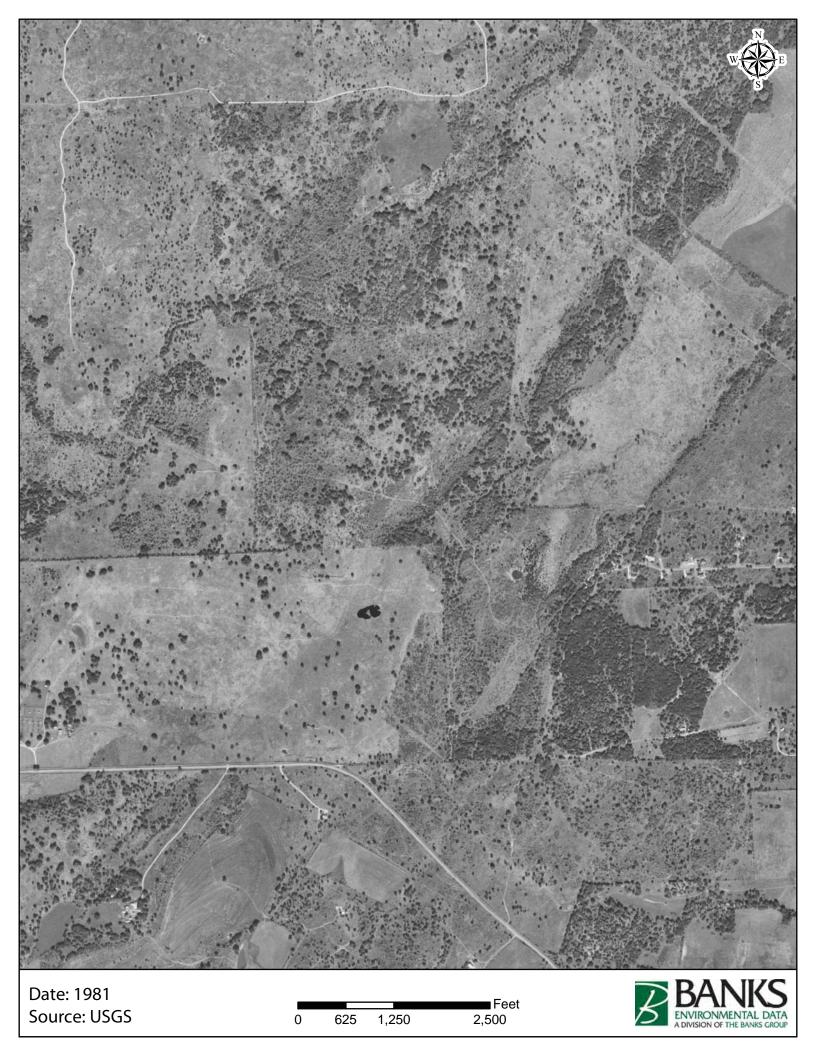


Date: 2004 Source: USDA



















AERIAL SOURCE DEFINITIONS

Acronym	Agency
AerialOK	Aerial Oklahoma
AMS	Army Mapping Service
ASCS	Agricultural Stabilization & Conservation Service
EDAC	Earth Data Analysis Center
Fairchild	Fairchild Aerial Surveys
LDOT	Louisiana Department of Transportation
ТХДОТ	Texas Department of Transportation
USNavy	United States Navy
USAF	United States Air Force
USCOE	United States Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WALLACE	Wallace-Zingery Aerial Surveys
WSDOT	Washington State Department of Transportation

HISTORICAL AERIA	AL PHOTOGRAPHS
ES-125618	September 18, 2017



COPYRIGHT POLICY & DISCLAIMER

This report is solely for the limited use of the client and its customers. Banks Environmental Data, Inc. makes no warranties as to accuracy, validity, completeness, merchantability, quality, condition, suitability or fitness for a particular use or purpose in respect to this report and any information contained herein. All risk is assumed by the user. Banks Environmental Data, Inc. assumes no liability to any party for loss or damage whether rising out of errors or omissions, negligence, accident, or any other cause. In no event shall Banks Environmental Data, Inc., its affiliates or agents, be liable to anyone for special incidental, consequential or exemplary damages.

Recharge and Transition Zone Exception Request Form

Texas Commission on Environmental Quality

30 TAC §213.9 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 **Recharge and Transition Zone Exception Request Form** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: <u>Mark Sabella, PE</u> Date: <u>2024-03-18</u> Signature of Customer/Agent:

Mal Selett

Regulated Entity Name: Edwards Aquifer Authority/ Barton Springs/ Edwards Aquifer

Exception Request

- 1. Attachment A Nature of Exception. A narrative description of the nature of each exception requested is attached. All provisions of 30 TAC §213 Subchapter A for which an exception is being requested have been identified in the description.
- 2. X Attachment B Documentation of Equivalent Water Quality Protection. Documentation demonstrating equivalent water quality protection for the Edwards Aquifer is attached.

Administrative Information

- 3. 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.
- 4. The applicant understands that no exception will be granted for a prohibited activity in Chapter 213.
- 5. The applicant understands that prior approval under this section must be obtained from the executive director for the exception to be authorized.

ATTACHMENT A-NATURE OF EXCEPTION

The proposed project is for the temporary storage of spoils at approximately 4.81 acres outside of the original permitted area in the TCEQ approved Water Pollution Abatement Plan (Edwards Aquifer Protection Program ID No. 11003343; Regulated Entity No. RN111252235). The placement of the spoils will not increase impervious cover, although will require minor soil disturbance and stabilization.

This is an exception to 30 TAC Subchapter A §213.8 to extend the limits of disturbance listed in the original Water Pollution Abatement Plan but does not violate any of the prohibited activities listed in TAC 30 Subchapter A §213.8.

Access to the clearing will be provided by the constructed roads in Phase 1-A of the Freedom at Anthem subdivision. Soil stabilization and sediment control measurements will be installed for the clearing, and sheet flow from the disturbed area will be captured in the water quality wet basin constructed in Phase 1-A of the Freedom at Anthem subdivision.

Jon Niermann, *Chairman* Emily Lindley, *Commissioner* Bobby Janecka, *Commissioner* Erin E. Chancellor, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 15, 2023

Mr. Greg Balen LS-Anthem, LLC 100 Congress Ave., Suite 2000 Austin, Texas 78701-4072

Re: Edwards Aquifer, Williamson County

NAME OF PROJECT: Anthem North Phase 1, 2, and 3; Located North of Anthem Phase 4A and FM 150 West of Anthem Parkway, ETJ of Mountain City, 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. 11003343; Regulated Entity No. RN111252235

Dear Mr. Balen:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the above-referenced project submitted to the Austin Regional Office by Austin Atwell, LLC on behalf of LS-Anthem, LLC on November 8, 2022. Final review was completed after additional material was received on February 15, 2023. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless. prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The proposed single-family residential project will have a total area of approximately 238.20 acres. It will include the development of 569 single-family residential lots, roads and drives, utilities, and associated appurtenances, a Hays County Independent School District school site, and two water quality basins. The impervious cover will be 86.15 acres (36 percent).

Project wastewater will be disposed of by conveyance to the existing City of Kyle Wastewater Treatment Plant and will comply with the City of Kyle specifications.

TCEQ Region 11 • P.O. Box 13087 • Austin, Texas 78711-3087 • 512-339-2929 • Fax 512-339-3795

Mr. Greg Balen Page 2 February 15, 2023

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, two wet basins (Pond 1 and Pond 3) designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 77,328 pounds of TSS generated from the 86.15 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

GEOLOGY

According to the Geologic Assessment (GA) included with the application, a total of three sensitive geological feature, two solution cavities (NR-27, NR-27A) and a sinkhole (NR-40), are located on site. Natural buffers were proposed for the sensitive feature which are depicted on the constructions plans of the applications. A natural buffer was also proposed for the adjacent offsite sensitive feature NR-21A. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffers. The surface geology of the site consists of Austin Chalk, Eagle Ford and Edwards Group Formations and is located entirely in the Edwards Aquifer Recharge Zone. The TCEQ site assessment conducted on February 14, 2023, revealed the site to be generally as described by the GA.

SPECIAL CONDITIONS

- I. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.
- II. All sediment and/or media removed from the water quality basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the Austin Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

Mr. Greg Balen Page 3 February 15, 2023

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

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. 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.

Mr. Greg Balen Page 4 February 15, 2023

- 14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

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

Mr. Greg Balen Page 5 February 15, 2023

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mihaela (Miki) Chilarescu, P.E. of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely,

Lillian Butter

Lillian Butler, Section Manager Edwards Aquifer Protection Program Texas Commission on Environmental Quality

LIB/mec

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

Cc: Mr. Mark Sabella, P.E., Atwell LLC.

Change in Responsibility for Maintenance on Permanent Best Management Practices and Measures

The applicant is no longer responsible for maintaining the permanent best management practice (BMP) and other measures. The project information and the new entity responsible for maintenance is listed below.

Customer:					_
Regulated Entity Name:					_
Site Address:					
City, Texas, Zip: _					
County: _					
Approval Letter Date:					
BMPs for the project: _					
New Responsible Party:	·				_
Name of contact:					
Mailing Address:					
City, State:				Zip:	
Telephone:			FAX:		
Signature of New Respo	onsible Party	 Date			

I acknowledge and understand that I am assuming full responsibility for maintaining all permanent best management practices and measures approved by the TCEQ for the site, until another entity assumes such obligations in writing or ownership is transferred.

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

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

Deed Recordation Affidavit Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of _____ §

BEFORE ME, the undersigned authority, on this day personally appeared ______ who, being duly sworn by me, deposes and says:

- (1) That my name is ______and that I own the real property described below.
- (2) That said real property is subject to an EDWARDS AQUIFER PROTECTION PLAN which was required under the 30 Texas Administrative Code (TAC) Chapter 213.
- (3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on _____.

A copy of the letter of approval from the TCEQ is attached to this affidavit as Exhibit A and is incorporated herein by reference.

(4) The said real property is located in _____ County, Texas, and the legal description of the property is as follows:

LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this __ day of _____, ____.

NOTARY PUBLIC

THE STATE OF ______ §

County of _____ §

BEFORE ME, the undersigned authority, on this day personally appeared ______ 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 _ day of _____, ____.

NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES:

Agent Authorization Form

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

l	Taylor Major Print Name	•
	Print Name	
	Senior Manager of Land Development Title - Owner/President/Other	,
	Title - Owner/President/Other	
of	LS-ANTHEM LLC Corporation/Partnership/Entity Name	
have authorized	MARK SABELLA, PE Print Name of Agent/Engineer	د
of	ATWELL 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:

Applicant's Signature

Date

THE STATE OF TRYAS

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared $\underline{Taylor} \underline{Major}$ 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 $\underline{19^{th}}$ day of $\underline{Ma_{rch}}$, $\underline{24}$.

RACHELLE MINJARES Notary ID #734557353 My Commission Expires September 15, 2027 20.00

Rachelle Minjarcs

MY COMMISSION EXPIRES: 09 15 27

٢

Application Fee Form

Texas Commission on Environme			
Name of Proposed Regulated Entit	ty: Anthem North Ph	ases 1,2,3	
Regulated Entity Location: EDWAR	DS AQUIFER AUTH	ORITY/ BARTON SPRINGS	<u>/ EDWARDS</u>
<u>AQUIFER</u>			
Name of Customer: LS-ANTHEM, L	<u>.LC</u>		
Contact Person: <u>Taylor Major</u>	Pi	none: <u>312-965-2794</u>	
Customer Reference Number (if is	sued):CN		
Regulated Entity Reference Numb	er (if issued):RN		
Austin Regional Office (3373)			
🔀 Hays	Travis		/illiamson
San Antonio Regional Office (336	2)		
Bexar	Medina 🗌	Πu	valde
 Comal	Kinney		
Application fees must be paid by o	heck. certified chec	k, or mone v order, p a val	ole to the Texas
Commission on Environmental Qu			
form must be submitted with you	•	•	
🛛 Austin Regional Office	Γ] San Antonio Regional (Office
Mailed to: TCEQ - Cashier		Overnight Delivery to:	
Revenues Section		12100 Park 35 Circle	
Mail Code 214		Building A, 3rd Floor	
P.O. Box 13088		Austin, TX 78753	
Austin, TX 78711-3088		(512)239-0357	
Site Location (Check All That Appl	y):		
🔀 Recharge Zone	Contributing Zo	ne 🗌 Trans	ition Zone
Type of Pla	1	Size	Fee Due
Water Pollution Abatement Plan,	Contributing Zone		
Plan: One Single Family Residentia	l Dwelling	Acres	\$
Water Pollution Abatement Plan,	Contributing Zone		
Plan: Multiple Single Family Reside	ential and Parks	Acres	\$
Water Pollution Abatement Plan,	Contributing Zone		
Plan: Non-residential		Acres	\$
Sewage Collection System		L.F.	\$
Lift Stations without sewer lines		Acres	\$
Underground or Aboveground Sto	rage Tank Facility	Tanks	\$
Piping System(s)(only)		Each	\$
Exception		1 Each	\$ 500
Extension of Time		Eách	\$
	Si	gnature: $-/-1///$	<u> / //</u>
		· • • • • • • • • • • • • • • • • • • •	V

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500

Extension of Time Requests

	Project	Fee
--	---------	-----

Project	Fee
Extension of Time Request	\$150



TCEQ Core Data Form

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

SECTION I: General Information

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

SECTION II: Customer Information

4. General Customer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy)													
	Image: Inclusion Image: Inclusion <td< td=""></td<>												
The Custome	r Name sı	ubmitted l	here may l	be updated d	utomatical	lly base	ed or	n what is c	urrent	and active	with tl	he Texas Sec	retary of State
(SOS) or Texa	is Comptr	oller of Pu	ıblic Accou	ınts (CPA).									
6. Customer	Legal Nam	ne (If an ind	dividual, prii	nt last name fi	rst: eg: Doe, .	Iohn)			<u>lf nev</u>	v Customer,	enter pro	evious Custom	er below:
7. TX SOS/CP	A Filing N	umber		8. TX State	Tax ID (11 c	ligits)			9. Fe	deral Tax I	D	10. DUNS	Number (if
0804330195				3208203873	1				(9 dig	its)		applicable)	
							N/A N/A			N/A			
11. Type of Customer: Corporation							Individ	ridual Partnership: 🗌 General 🔀 Limited				eral 🔀 Limited	
Government: City County Federal Local State Other Government: City County Federal Local State Other													
12. Number of Employees						13. Independently Owned and Operated?				erated?			
🛛 0-20 🔲 21-100 🗌 101-250 🗌 251-500 🗌 501 and higher					🖾 Yes 🗌 No								
14. Customer	Role (Pro	posed or A	ctual) – <i>as i</i>	t relates to the	Regulated E	ntity lis	ted o	n this form.	Please	check one oj	f the follo	owing	
Owner Occupation	al Licensee	Opera	ator ponsible Pai		vner & Opera VCP/BSA Apj					Other:			
4001 Parmer Lane, Suite 100 15. Mailing													
Address:													
City Austin State TX					ТХ		ZIP 78727 ZIP + 4						
16. Country Mailing Information (if outside USA)					17. E-Mail Address (if applicable)				·				
							tmajor@landseahomes.com						
18. Telephone Number 19. Extension of				on or C	ode 20. Fax Number (if applicable)								

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)									
New Regulated Entity Update to Regulated Entity Name Update to Regulated Entity Information									
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).									
22. Regulated Entity Nar	ne (Enter nam	ne of the site where	the regulated act	ion is taking	place.)				
Anthem North Phase 1,2,3									
23. Street Address of the Regulated Entity:	ANTHEM PAP	NTHEM PARKWAY							
<u>(No PO Boxes)</u>	City	KYLE	State	TX	ZIP	78644	ZIP + 4		
24. County									
If no Street Address is provided, fields 25-28 are required.									
25. Description to							PARKWAY,		

Physical Location:	MOUNTAIN CITY ETJ , HAYS COUNTY, TEXAS.								
26. Nearest City				State			Nearest ZIP Code		
Mountain City						ТХ		78610	
Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).									
27. Latitude (N) In Decimal:				28. Longitude (W) In Deci			al:		
Degrees	Minutes	S	econds	Degr	Degrees N		nutes		Seconds
30		02	14.6		97		54		35
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)			31. Primary NAICS Code (5 or 6 digits)			32. Secondary NAICS Code (5 or 6 digits)		
1521	161	1	236116				237310		
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)									
Single Family Subdivision									
4001 Parmer Lane, Suite 100									
34. Mailing									
Address:	City	Austin	State	тх	ZIP	78727		ZIP + 4	
35. E-Mail Address:	tma	jor@landseahome	s.com						
36. Telephone Number 37. Extension or Code 38. Fax Number (if applicable)									
(312) 965-2794					()) -			

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

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

SECTION IV: Preparer Information

40. Name:	Mark Sabella			41. Title:	SENIOR PROJECT MANAGER
42. Telephone Number 43. Ext./Code 44. Fax Number		44. Fax Number	45. E-Mail Address		
(512) 904-0505			() -	msabella@at	twell-group.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:	Atwell, LLC Job Title: SENI			PROJECT MANAGER			
Name (In Print):	MARK SABELLA, PE			Phone:	(201) 400- 1650		
Signature:	Mart Saleth			Date:	03/18/2024		

