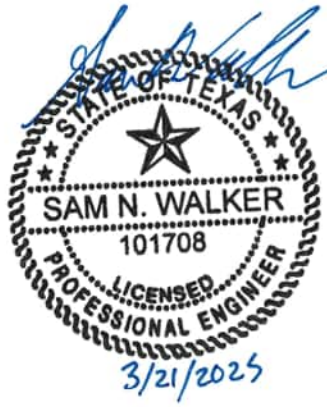
WATER POLLUTION ABATEMENT PLAN
FOR
INDUSTRIAL FLUFF K9 FACILITY – GEORGETOWN ETJ

Prepared For:

The Kendra Verhagen Living Trust
6901 N Lakewoods Drive
Georgetown, TX 78663

Prepared By:

Eckermann Engineering, Inc.
P.O. Box 388
Lampasas, TX 76550
TBPE Firm No. F-10496



Job No. 24015
March 2025

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I. Edwards Aquifer Application Cover Page (TCEQ-20705)

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Industrial Fluff K9 Facility						**2. Regulated Entity No.:**			
3. Customer Name: Kendra Mathis Verhagen						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**			4.97 acres
9. Application Fee:	$4,000		**10. Permanent BMP(s):**			N/A per Waiver with Batch Detention to meet City requirements			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Williamson		**14. Watershed:**			Berry Creek (San Gabriel)			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	X
Region (1 req.)	__	__	X
County(ies)	__	__	X
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence X Georgetown __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. Eckermann Engineering, Inc. (Sam N. Walker, P.E.)
Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 3/21/2025

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

II. General Information Form (TCEQ-0585)

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: Eckermann Engineering, Inc. (Sam N. Walker, P.E.)

Date: 3/21/2025

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Industrial Fluff K9 Facility
2. County: Williamson
3. Stream Basin: Berry Creek (San Gabriel)
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   [X] Recharge Zone
   [ ] Transition Zone

6. Plan Type:

   [X] WPAP
   [ ] SCS
   [ ] Modification
   [ ] AST
   [ ] UST
   [ ] Exception Request

7. Customer (Applicant):

Contact Person: The Kendra Verhagen Living Trust (Attn: Kendra Mathis Verhagen)
Entity: Owner
Mailing Address: 6901 N Lakewoods Dr
City, State: Georgetown, Tx Zip: 78633
Telephone: 737-300-5808 FAX: N/A
Email Address: N/A

8. Agent/Representative (If any):

Contact Person: Sam N. Walker, P.E.
Entity: Eckermann Engineering, Inc. (Firm No. F-10496)
Mailing Address: P.O. Box 388
City, State: Lampasas, Tx Zip: 76550
Telephone: 512-556-8160 FAX: N/A
Email Address: sam@eckermannengineering.com

9. Project Location:

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

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

6901 N Lakewoods Drive, Georgetown Texas, 78633

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

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

☒ Project site boundaries.
☒ USGS Quadrangle Name(s). GEORGETOWN (30097F6)
☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
☒ Drainage path from the project site to the boundary of the Recharge Zone.

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

☒ Survey staking will be completed by this date: Completed 6/10/2024

14. [X] **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:

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

16. [X] 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. [X] I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

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

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

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

Administrative Information

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

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

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

- [ ] TCEQ cashier
- [X] 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)

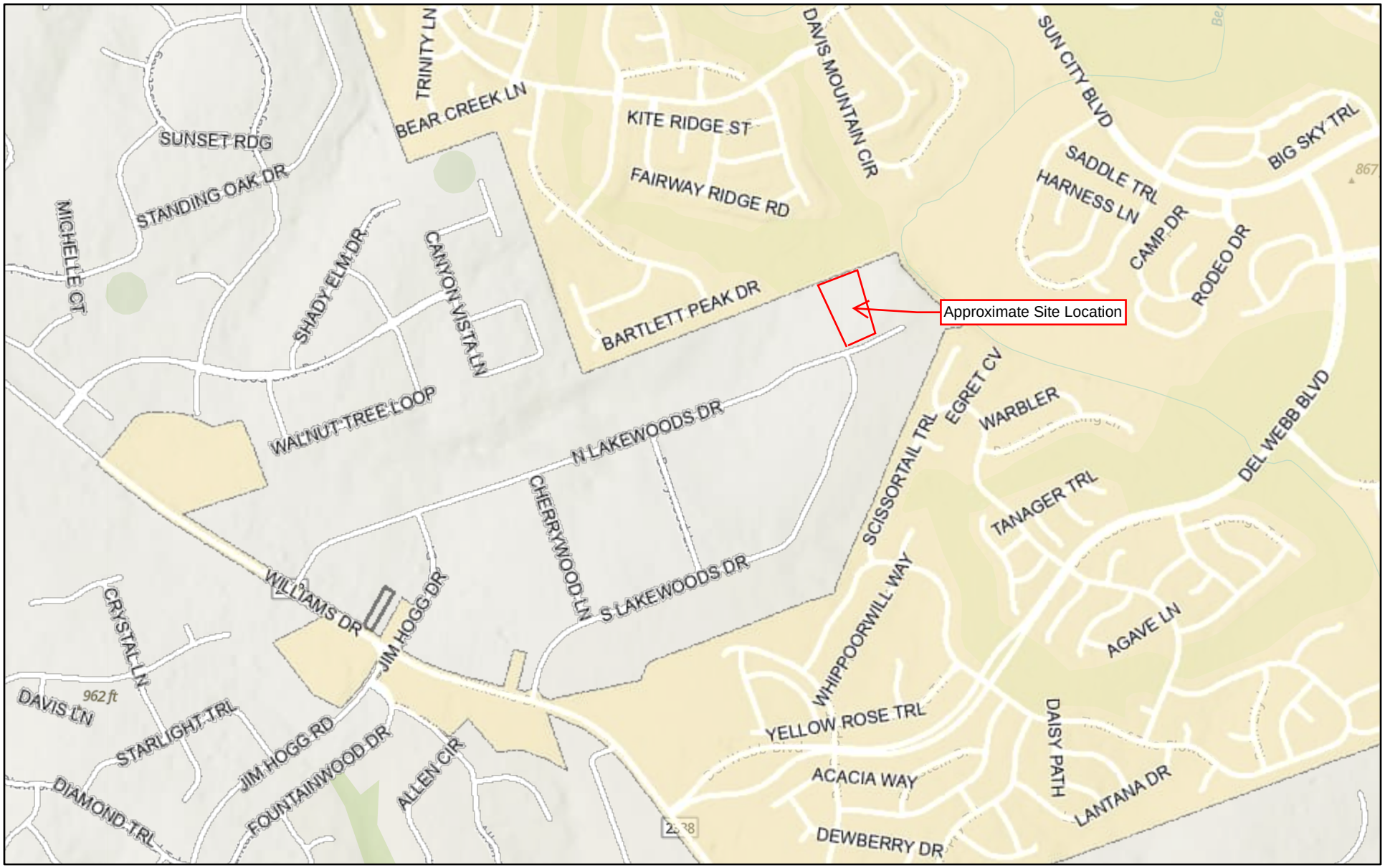
20. [X] Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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

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

ATTACHMENT A

ROAD MAP

Georgetown Map



3/6/2025, 4:42:13 PM

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Extra-Territorial Jurisdiction

Streets

Georgetown City Limits

Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community,

Web AppBuilder for ArcGIS

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, County of Williamson, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census

ATTACHMENT B

USGS / EDWARDS RECHARGE ZONE MAP

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GEORGETOWN QUADRANGLE
TEXAS–WILLIAMSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

SITE LOCATION

Edwards Aquifer Recharge Zone

Edwards Aquifer Contributing Zone

Edwards Aquifer
Transition Zone

LAKE GEORGETOWN
ELEVATION 791

GEORGETOWN

Produced by the United States Geological Survey
Control by USGS and NOS/NOAA
Compiled from aerial photographs taken 1974. Field checked 1975
Map edited 1982
North American Datum of 1927 (NAD 27). Projection and 10000-foot ticks: Texas Coordinate System, central zone (Lambert Conformal Conic)
Blue 1000-meter Universal Transverse Mercator ticks, zone 14
North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software
Red tint indicates areas in which only landmark buildings are shown
Fine red dashed lines indicate selected fence lines
Areas covered by dashed light-blue pattern are subject to controlled inundation

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION
3097-313

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

GEORGETOWN, TX
30097-H6-TF-024
1982
DMA 6445 II NW-SERIES V882

ISBN 0-607-51004-6

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program

Regulatory Zones

30 TAC Chapter 213- Edwards Aquifer
Effective March 1990

This map was produced by the Groundwater Planning and Assessment Team of the Texas Commission on Environmental Quality to detail the boundaries of the regulatory zones of the Edwards Aquifer Protection Program, as described in Texas Administrative Code Title 30, Part 1, §213.3. No other claims are made to the accuracy or completeness of the data or to its suitability for a particular use. For more information about the Edwards Aquifer Protection Program, please contact the TCEQ Regional Offices in San Antonio or Austin. Printed June 2006.

ATTACHMENT C

PROJECT DESCRIPTION

The Industrial Fluff K9 project is a 4.97-acre legal lot located at 6901 North Lakewoods Drive in Williamson County, Texas. Refer to the Road Map in Attachment A for the site location. The subject site is located within the Extra Territorial Jurisdiction (ETJ) of the city of Georgetown and no portion of the site lies within the FEMA 100-year floodplain per map number 48491C0280E, dated September 26, 2008. The proposed development is located within the Edwards Aquifer Recharge Zone. The project consists of the construction/development of a new +/-5,212 square foot commercial K9 grooming and training facility. The project will also include the development of a covered carport, sidewalks, gravel drive, associated parking, utility services, water quality and detention pond facilities, and ancillary improvements to support the development. The existing development consists of a single-family residence with a separate garage building structure. Existing impervious cover for the site is approximately 0.30 acres, including an asphalt drive for access to the right-of-way. A portion of the existing drive will be demolished, and the entry drive off of North Lakewoods Drive will be relocated to the east. The proposed development will include approximately +/-27,800 square feet of impervious cover on-site in addition to +/-13,000 square feet of impervious cover proposed within the County right-of-way for the site driveway and City of Georgetown required 6-foot-wide sidewalk. Of the total proposed impervious cover within the property line (0.638 acres or 12.8%), 0.36 acres will be routed through the on-site BMP. Per 30 TAC §213.4(g), a permanent BMP is not required by TCEQ as the total site impervious cover is less than 20% of the total site area. An impervious cover waiver is included in this application as Attachment A, under TCEQ Form 0600. The development proposes a batch detention facility to treat flows from the project and remove 85% of the increase in total suspended solids to satisfy City of Georgetown requirements. The existing drainage channel that conveys upstream flows around the development and pond facilities via an existing open channel and sheet flow will not be disturbed. A drainage analysis was performed for the overall drainage basin to size the proposed detention pond and to ensure that peak flows for the 2, 10, 25, and 100-year events are not increased above existing conditions flow rates. No negative impact to downstream properties is anticipated. Water service shall be provided by an existing water main from the City of Georgetown and electric service shall be provided by the Pedernales Electric Cooperative. Per discussion with Williamson County and TCEQ, wastewater from the site shall be treated by an industrial reclaim water system and permitted per Chapter 210.E due to the use of kennels.

III. Geologic Assessment Form (TCEQ-0585)

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

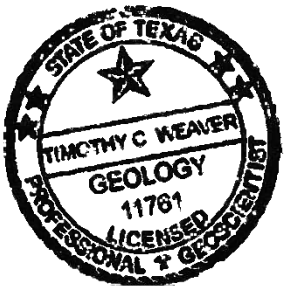
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Timothy C. Weaver Telephone: 806-773-9326

Date: 8/23/24 Fax: --

Representing: SQ Environmental LLC, F-50464 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: TBD

Project Information

1. Date(s) Geologic Assessment was performed: 8/19/24
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
ErE	D	6.67
EeB	D	6.67

** 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" = 150'
   Site Geologic Map Scale: 1" = 150'
   Site Soils Map Scale (if more than 1 soil type): 1" = 150'

9. Method of collecting positional data:

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

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

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

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

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

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

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

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

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

Administrative Information

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

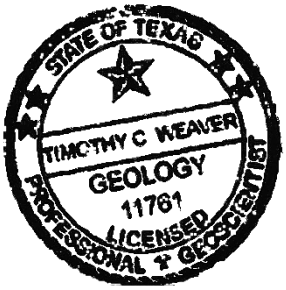
GEOLOGIC ASSESSMENT

6901 N LAKEWOOD DR
GEORGETOWN, WILLIAMSON COUNTY, TEXAS 78633

Prepared for:

Harrison Construction Co.
c/o Eckerman Engineering, Inc.
PO Box 388
202 Spring Ho Avenue
Lampasas, Texas 76550

23 August 2024



Clint Weaver, P.G.
Project Geoscientist
Texas P.G. No. 11761, F-50464
Signed electronically on 8/23/2024

Quintin McNulty, P.E.
Principal
Signed electronically on 8/23/2024

PN: 1241.001.001

SQ Environmental, LLC
PO Box 1991
Austin, Texas 78767-1991
(512) 900-7731
www.SQEnv.com

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APPENDICES

1 OBJECTIVES AND PURPOSE

SQ Environmental, LLC (SQE) conducted a Geologic Assessment of a 4.96-acre property located at 6901 North (N) Lakewood Drive (Dr) in Georgetown, Williamson County, Texas (subject property). This Geologic Assessment was conducted in general accordance with the Edwards Aquifer Rules described in 30 Texas Administrative Code (TAC) Chapter 213 and Texas Commission on Environmental Quality (TCEQ) Guidance Document TCEQ-0585, *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones* (TCEQ, 2004). This document also incorporates an evaluation of potential karst features consistent with the *Williamson County Regional Habitat Conservation Plan* (WCCF, 2008).

1.1 PROPERTY LOCATION AND DESCRIPTION

The subject property is located approximately 6 miles northwest of downtown Georgetown, Texas. The location of the subject property is shown on **Figure 1**. According to Williamson Central Appraisal District (WCAD) online records, the property consists of one parcel, R042924, with two single-family residential improvements. Surrounding properties are residential. The property is being considered for commercial development (pet grooming facility). The proposed location of the commercial structure is shown on **Figure 5**.

The subject property is located within the Edwards Aquifer Recharge Zone. The Recharge Zone is an approximately 1,250 square mile (mi^2) area comprised of highly faulted and fractured Edwards Limestone bedrock and is defined by areas where surface water is likely to enter the subsurface through conduits of exposed Edwards Limestone bedrock containing faults, fractures, sinkholes, swallow holes, solution cavities, or man-made features. The location of the Recharge Zone in relation to the subject property is presented in **Figure 2**.

1.2 REGULATORY FRAMEWORK

Development in the Edwards Aquifer Recharge Zone requires compliance with the Edwards Aquifer Rules described in 30 TAC §213. These rules are intended to protect the Edwards Aquifer and hydraulically connected surface streams. Due to the presence of the subject property within the Recharge Zone, any development plans must be reviewed and approved by the TCEQ Edwards Aquifer Protection Program, which includes completion of an EAPP Plan. As part of the EAPP Plan, a Geologic Assessment is required, and a Water Pollution Abatement Plan (WPAP) will likely be required for development of the property. This Geologic Assessment is intended to satisfy a portion of the EAPP Plan.

Additionally, the subject property falls within Zone 1 of the designated Karst Zones of the Williamson County Conservation Foundation (WCCF). A Zone 1 designation indicates an area that is known to contain habitat suitable for endangered karst invertebrates that the United States Fish and Wildlife Service (USFWS) lists as threatened or endangered. The location of the subject property relative to the designated WCCF zones is provided on **Figure 3**.

Development of the subject property may include participation in the WCCF Regional Habitat Conservation Plan (RHCP) to mitigate habitat take of potential endangered species including karst invertebrates and Golden Cheeked Warbler migratory birds. A Geologic Assessment performed by a registered Texas Professional Geologist, and a Threatened and Endangered (T&E) habitat assessment performed by a Federally-permitted biologist, are required components for participation in this program. This Geologic

Assessment was conducted in general accordance with the RHCP document dated 15 August 2008. A preliminary assessment on the presence or absence of likely T&E habitat was also performed during the Geologic Assessment; however, as discussed in greater detail in **Section 2.6**, a habitat assessment by a Federally-permitted biologist will be needed, since the potential for T&E habitat could not be ruled out as part of the Geologic Assessment.

2 GEOLOGIC DESCRIPTION

2.1 SITE TOPOGRAPHY AND GEOLOGY

The topography of the subject property is relatively flat with an elevation of 820 feet (ft) above mean sea level (AMSL). The surrounding area generally slopes to the east towards Berry Creek, located approximately 500 ft to the east. The location of the subject property in relation to Berry Creek is shown on **Figure 1.**

The subject property is depicted on a Geologic Map on **Figure 4**. The surface of the subject property is comprised of the Edwards Limestone (Ked) and is underlain by the Comanche Peak Limestone (Kc). The Ked consists of Cretaceous, aphanitic to fine grained limestone, dolomite, and chert beds ranging from 60 to 350 ft thick. Chemical weathering zones have created “honeycombed” and cavernous features which have formed the Edwards Aquifer (Housh, 2007). The Kc consists of 80-ft thick hard limestone. The geologic unit observed at ground surface of the subject property is depicted in **Figure 4**, and a stratigraphic column of the bedrock within the subject property and surrounding area is provided in **Table 1**.

2.2 SITE HYDROLOGY

The subject property is located in the Lower Berry Creek watershed (USGS NH, 2022). Surface water was not identified on the subject property during the Geologic Assessment. A drainage swale is located along the western subject property boundary in a north-south orientation. Precipitation falling on the subject property travels by sheetflow offsite to the north, then to the east and ultimately drains east into Berry Creek. The subject property is located within Zone X of the Federal Emergency Management Agency (FEMA) Flood Plain Map, which indicates an area of minimal flood hazard (FEMA, 2008).

2.3 SOIL ASSESSMENT

A review of soils data from the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) web soil survey indicates that six soil map units are present on the subject property, as depicted on **Figure 5**. A summary of the soil types is provided below.

Soil Name	Location on Property / Landform Type	Formation process	Profile thickness (inches)	Water transmissibility (inches/hour)	Hydrologic Group	Infiltration Rate	Runoff Potential
Eckrant-Rock Outcrop Assoc (ErE)	North / Ridge	Residuum weathered from limestone	0 to 11 (cobbly clay) 11 to 80 (bedrock)	0.06 to 0.57	D	Very slow	Medium
Eckrant Stony Clay (EeB)	South / Ridge	Residuum weathered from limestone	0 to 11 (cobbly clay) 11 to 80 (bedrock)	0.06 to 0.57	D	Very slow	Medium

2.4 GEOLOGIC ASSESSMENT

The Geologic Assessment was performed on 19 August 2024 by Quintin McNulty, P.E. with SQE. The assessment was completed by walking spaced transects 50 ft apart. There are two single-family residential units on the northern portion of the subject property and the proposed commercial development is on the southern portion. The location of the proposed development area during this Geologic Assessment is shown on **Figure 6**.

The goal of the assessment was to evaluate the presence of geologic and manmade features which could represent potential pathways for surface water movement into the Edwards Aquifer. Karstic features including bedrock, faults, fractures, sinkholes, swallow holes, solution cavities, water wells, streams/springs, or man-made features were evaluated and Global Positioning System (GPS) coordinates (latitude and longitude) for each feature were recorded. Other features including depressions, holes, animal burrows, and up-rooted vegetation were also noted, when applicable.

The dominant geologic feature observed on the subject property included loose unconsolidated, well-graded limestone (coarse grained sand to cobble and occasionally boulder-size fractions) comingled with a soil consistent with the descriptions provided in **Section 2.3.** While in-situ limestone was observed, no karstic features indicative of a surface to subsurface groundwater conduit were observed on the subject property. The potential for fluid movement from the surface to the Edwards Aquifer via karstic conduits is considered low based on observations during the Geologic Assessment. Generally, drainage ditches, gullies, and swales are preferential locations for sensitive geologic features to be exposed at the surface. No geologic features were observed in the drainage swale located along the western subject property boundary or at any other location onsite. If during development geologic void features are uncovered, work should stop immediately, and the feature investigated by a Texas registered Professional Geologist.

Based on information collected during the Geologic Assessment performed on 19 August 2024, SQE completed a Geologic Assessment form, which is included in **Appendix B**. A Geologic Assessment Table is included in **Attachment A** to the Geologic Assessment form.

2.5 GEOLOGIC ASSESSMENT RESULTS

A Geologic Assessment was performed on 19 August 2024. The dominant geologic features observed on the subject property included loose unconsolidated, well-graded limestone (coarse grained sand to cobble and occasionally boulder-size fractions) comingled with soil**.** No karstic features indicative of a surface to subsurface groundwater conduit were observed on the subject property. Overall, the potential for fluid movement from the surface to the Edwards Aquifer through karstic features is considered low. If potentially sensitive geologic features are encountered during development, work should stop immediately, and the feature investigated by a Texas registered Professional Geologist.

The subject property is wholly located within the Edwards Aquifer Recharge Zone and therefore development on the property requires review and approval by the TCEQ EAPP. All portions of the EAPP Plan applicable to development on the subject property must be completed and submitted to TCEQ, and compliance with the Edwards Aquifer Rules described in 30 TAC §213 is required.

2.6 THREATENED & ENDANGERED SPECIES PRELIMINARY ASSESSMENT

Geologic features that could represent likely habitat for cave invertebrates were not observed during the Geologic Assessment. Therefore, a habitat assessment for cave invertebrates is not recommended unless karstic void features are encountered during development. If geologic voids are exposed during

development, work should stop immediately, and the feature investigated by a Texas registered Professional Geologist. The northern portion of the subject property consists of cedar and/ or ash juniper trees. This vegetation may be habitat for the endangered Golden Cheeked Warbler migratory bird. As such, a habitat assessment for the Golden Cheeked Warbler is recommended, and development of the property may include participation in the WCCF RHCP.

3 REFERENCES

FEMA (Federal Emergency Management Agency). 2008. *FIRM, Flood Insurance Rate Map, Williamson County Unincorporated Areas and City of Georgetown, Map Number 48491C0280E*. Map effective 26 September 2008.

Housh, T.B., 2007. *Bedrock Geology of Round Rock and Surrounding Areas, Williamson and Travis Counties, Texas*.

Texas Commission on Environmental Quality (TCEQ). 2004. *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones*.

TCEQ Edwards Aquifer Protection Program (EAPP). https://www.tceq.texas.gov/permitting/eapp

Texas Administrative Code (TAC) §213.5(b)(3), effective June 1, 1999. *Required Edwards Aquifer Protection Plans, Notification, and Exemptions*.

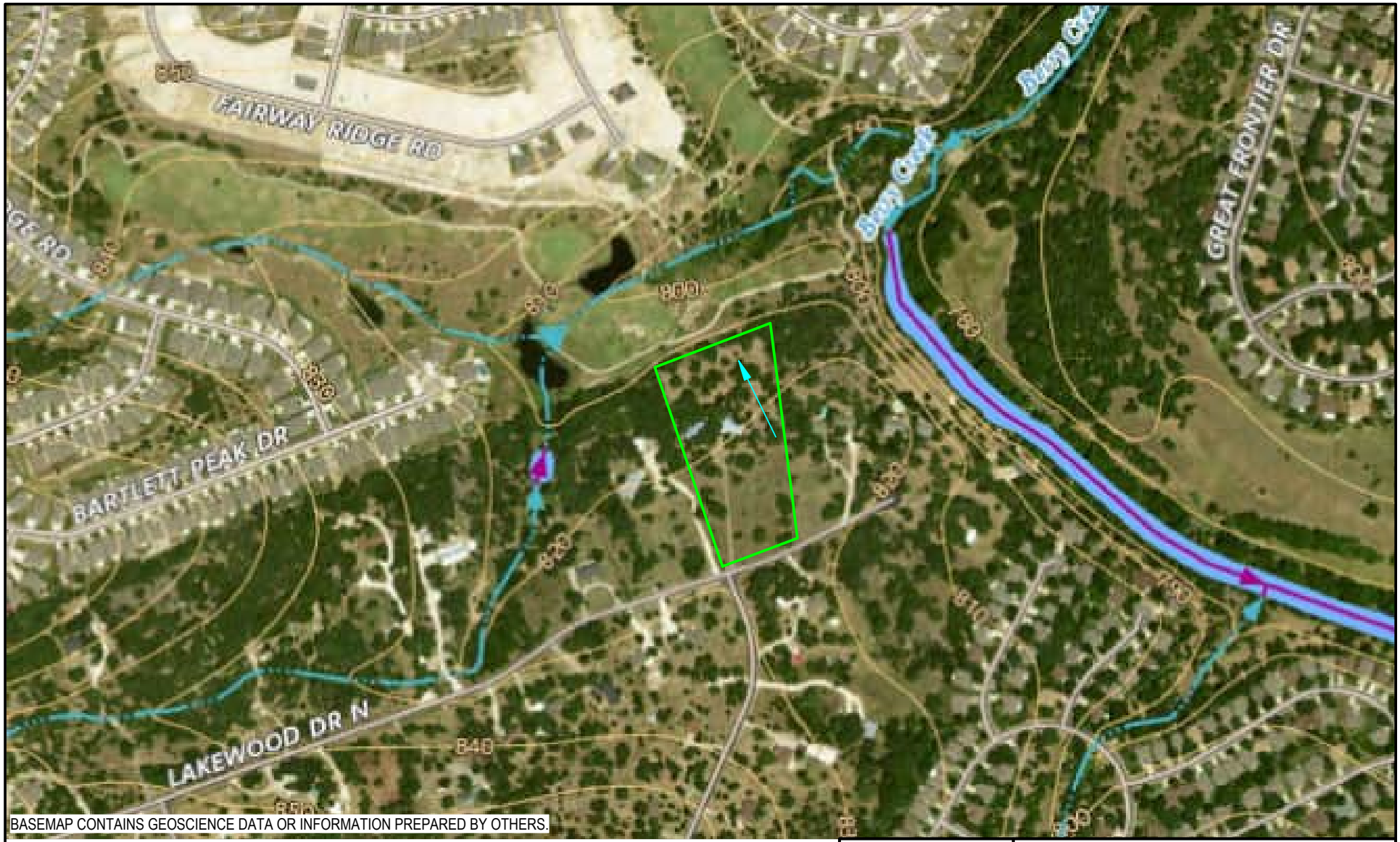
United States Geological Survey Texas Water Science Center (USGS TWSC). 2014-02-01. *Geologic Database of Texas.* Web. 2024-08-20. https://www.usgs.gov/centers/oklahoma-texas-water-science-center

United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS). 2019-07-3.1 *Web Soil Survey*. Web. 2024-08-20. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

United States Geological Survey National Hydrography (USGS NH). 2022. *HydroAdd*. Web. 2024-08-20. https://www.usgs.gov/national-hydrography

USGS Bureau of Economic Geology. 1974. *Geologic Atlas of Texas, Austin Sheet.* National Geologic Map Database.

Williamson County Conservation Foundation (WCCF). August 15, 2008. *Williamson County Regional Habitat Conservation Plan (RHCP)*.



BASEMAP CONTAINS GEOSCIENCE DATA OR INFORMATION PREPARED BY OTHERS.

LEGEND

SUBJECT PROPERTY BOUNDARIES, APPROXIMATE

SURFACE WATER FLOW DIRECTION

SOURCE: THE NATIONAL MAP, ACCESSED 8/20/24

N

8/23/24

STATE OF TEXAS
TIMOTHY C WEAVER
GEOLOGY
11761
LICENSED
PROFESSIONAL GEOSCIENTIST

0 200 400

SCALE IN FEET

SQ Environmental, LLC

FIGURE 1

PROPERTY LOCATION MAP

6901 N LAKEWOOD DR
GEORGETOWN, TEXAS 78633

SCALE:	DATE:	PN:
1 IN = 400 FT	AUG 2024	1241.001.001

BASEMAP CONTAINS GEOSCIENCE DATA OR INFORMATION PREPARED BY OTHERS.

LEGEND

SUBJECT PROPERTY BOUNDARIES, APPROXIMATE

EDWARDS AQUIFER RECHARGE ZONE

EDWARDS AQUIFER CONTRIBUTING ZONE

SOURCE: TCEQ EDWARDS AQUIFER MAPPER, ACCESSED 8/20/24

N

8/23/24

STATE OF TEXAS
TIMOTHY C WEAVER
GEOLOGY
11761
LICENSED
PROFESSIONAL GEOSCIENTIST

0 1,500 3,000

SCALE IN FEET

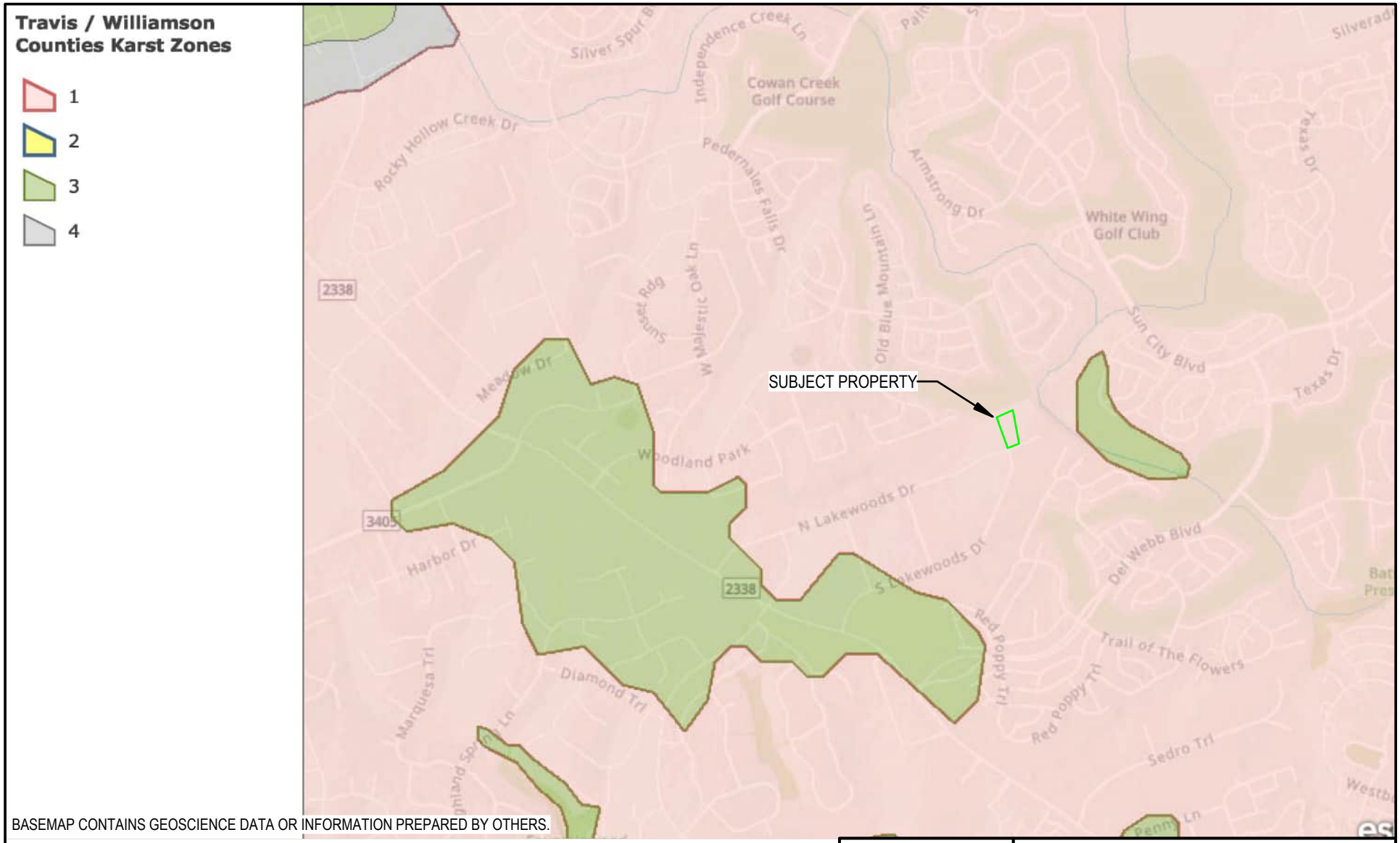
SQ Environmental, LLC

FIGURE 2

EDWARDS AQUIFER RECHARGE ZONE BOUNDARY MAP

6901 N LAKEWOOD DR
GEORGETOWN, TEXAS 78633

SCALE:	DATE:	PN:
1 IN = 3,000 FT	AUG 2024	1241.001.001



BASEMAP CONTAINS GEOSCIENCE DATA OR INFORMATION PREPARED BY OTHERS.

LEGEND

SUBJECT PROPERTY BOUNDARIES, APPROXIMATE

SOURCE: WILLIAMSON & TRAVIS COUNTIES KARST ZONE MAP, ACCESSED 8/20/24

N

8/23/24

STATE OF TEXAS
TIMOTHY C WEAVER
GEOLOGY
11761
LICENSED
PROFESSIONAL GEOSCIENTIST

0 1,250 2,500

SCALE IN FEET

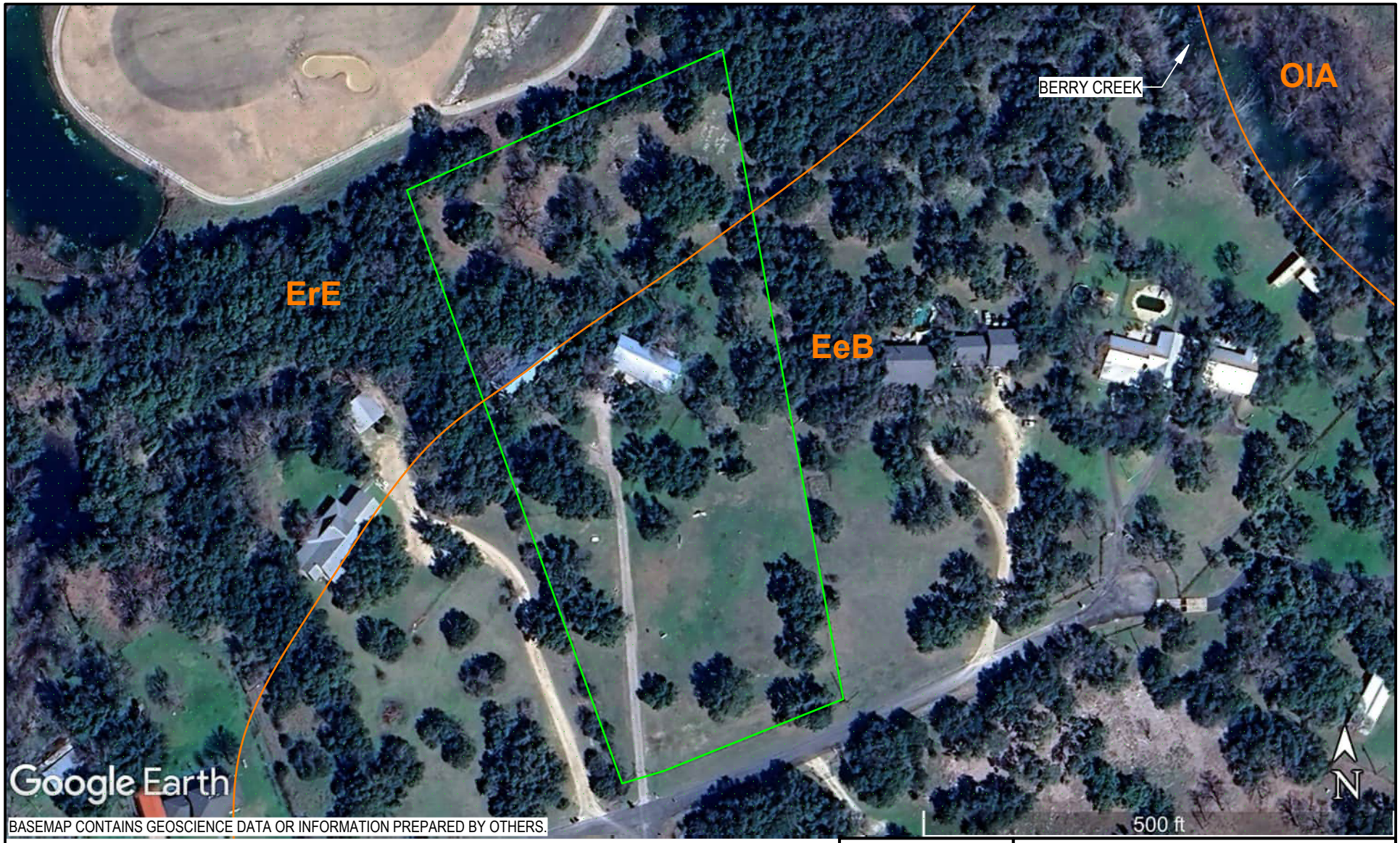
SQ Environmental, LLC

FIGURE 3

KARST ZONE MAP

6901 N LAKEWOOD DR
GEORGETOWN, TEXAS 78633

SCALE:	DATE:	PN:
1 IN = 2,500 FT	AUG 2024	1241.001.001



BASEMAP CONTAINS GEOSCIENCE DATA OR INFORMATION PREPARED BY OTHERS.

LEGEND

SOURCE: USDA WEB SOIL SURVEY & USGS TX GEOLOGY MAPPER, ACCESSED 8/20/24

SUBJECT PROPERTY BOUNDARIES, APPROXIMATE

Ked - EDWARDS LIMESTONE

SOILS BOUNDARY

ErE - ECKRANT-ROCK OUTCROP ASSOCIATION
EeB - ECKRANT STONY CLAY
OIA - OAKALLA SOILS

N

NOTE: ENTIRE SUBJECT PROPERTY LOCATED WITHIN EDWARDS AQUIFER RECHARGE ZONE.

8/23/24

STATE OF TEXAS
TIMOTHY C WEAVER
GEOLOGY
11761
LICENSED
PROFESSIONAL GEOSCIENTIST

0 75 150
SCALE IN FEET

SQ Environmental, LLC

FIGURE 4

GEOLOGIC & SOIL MAP

6901 N LAKEWOOD DR
GEORGETOWN, TEXAS 78633

SCALE:	DATE:	PN:
1 IN = 150 FT	AUG 2024	1241.001.001

LEGEND

SUBJECT PROPERTY BOUNDARIES, APPROXIMATE

SOURCE: GOOGLE EARTH IMAGE DATED FEB 2024

N

8/23/24

STATE OF TEXAS
TIMOTHY C WEAVER
GEOLOGY
11761
LICENSED
PROFESSIONAL GEOSCIENTIST

0 75 150

SCALE IN FEET

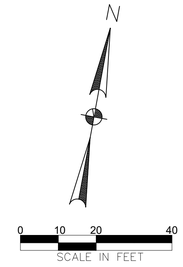
SQ Environmental, LLC

FIGURE 5

GEOLOGIC ASSESSMENT

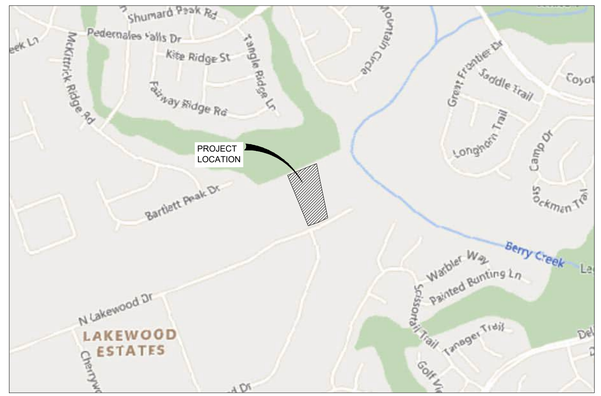
6901 N LAKEWOOD DR
GEORGETOWN, TEXAS 78633

SCALE:	DATE:	PN:
1 IN = 150 FT	AUG 2024	1241.001.001



NOTES:

1. THIS EXHIBIT IS FOR PLANNING PURPOSES ONLY. NOT FOR CONSTRUCTION.



VICINITY MAP
(NOT TO SCALE)

BEFORE YOU DIG Texas811.com

No.	Date	Revisions	App.

ECKERMANN ENGINEERING, INC.
202 SPRING HO AVENUE
LAMPASAS, TEXAS 76550
PHONE: 512-556-8160
TBPELS FIRM NO. F-10496

INDUSTRIAL FLUFF
K9 FACILITY

6901 N LAKEWOODS DRIVE
GEORGETOWN, TEXAS 78633

K9 FACILITY EXHIBIT

PRELIMINARY

FOR INTERIM REVIEW ONLY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

SAM N. WALKER, P.E. — 101708
NAME — P.E. NO.

6/28/2024
DATE

Project No.:	24015
Issued:	6/28/2024
Drawn By:	QS
Checked By:	SW

EX 1B

Sheet 1 OF 1

6/28/2024 11:24:38 AM

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TABLE 1

GENERAL STRATIGRAPHIC COLUMN

6901 N LAKEWOOD DR

GEORGETOWN, TEXAS 78633

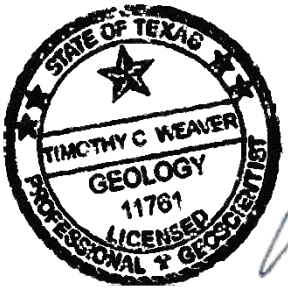
Quaternary	Alluvium	Fluvatile Terrace Deposits
Lower Cretaceous	Edwards Aquifer	Georgetown Formation; 30 to 80 feet thick
		Edwards Formation; 60 to 350 feet thick
	Lower Confining Units	Comanche Peak Formation; 80 feet thick

NOTES:

Stratigraphy sourced from USGS Bureau of Economic Geology, Geologic Atlas of Texas, Austin Sheet, 1974.

National Geologic Map Database.

Shaded blue cells represents the observed geology on the subject property.



8/23/24

APPENDIX A

PHOTOGRAPHIC LOG

APPENDIX A
PHOTOGRAPHIC LOG

Photographs taken on 8/19/2024 by Q. McNulty of SQE.

Photo 1. South end of subject property along N. Lakewood Dr. Looking east.

Photo 2. Entrance to residential portion of subject property. Looking north.

Photo 3. Proposed development area. Central. Looking east.

Photo 4. Proposed development area. Central. Looking south.

APPENDIX A
PHOTOGRAPHIC LOG

Photographs taken on 8/19/2024 by Q. McNulty of SQE.

Photo 5. Proposed development area. Trees closer to N Lakewood Dr. Looking south.

Photo 6. Utility (water spigot) in central-south portion of development area.

Photo 7. Southeast corner of property. Looking southeast.

Photo 8. Shed on southern portion of property. Looking north.

APPENDIX A
PHOTOGRAPHIC LOG

Photographs taken on 8/19/2024 by Q. McNulty of SQE.

Photo 9. Drainage swale along western property boundary. Weathered limestone.

Photo 10. Drainage swale on western property line closer to residential structures. Looking north.

Photo 11. Homestead.

Photo 12. Homestead.

APPENDIX A
PHOTOGRAPHIC LOG

Photographs taken on 8/19/2024 by Q. McNulty of SQE.

Photo 13. Boarding kennels near homestead. Looking northeast.

Photo 14. Limestone at surface in northern portion of property.

Photo 15. Northwest portion of subject property. Looking east.

Photo 16. Northeast portion of subject property. Looking east.

APPENDIX B

GEOLOGIC ASSESSMENT APPLICATION FORM

ATTACHMENT A
GEOLOGIC ASSESSMENT TABLE

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: 6901 N Lakewood Dr, Georgetown, Williamson County, TX																
LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING	
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)	TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
None identified.																			

* DATUM:_____

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

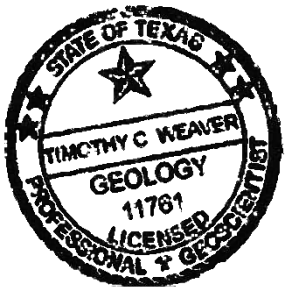
8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave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

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

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

_____ Date 8/23/24

Sheet __1____ of __1____



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

ATTACHMENT B
STRATIGRAPHIC COLUMN

Please refer to Table 1.

ATTACHMENT C
NARRATIVE DESCRIPTION OF SITE GEOLOGY

Please refer to Section 2.1 Site Topography and Geology and Section 2.4 Geologic Assessment.

ATTACHMENT D
SITE PLAN

Please refer to Figures 4, 5, and 6.

IV. Water Pollution Abatement Plan (TCEQ-0584)

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Eckermann Engineering, Inc. (Sam N. Walker, P.E.)

Date: 3/21/2025

Signature of Customer/Agent:

Regulated Entity Name: Industrial Fluff K9 Facility

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property): 4.97

3. Estimated projected population: N/A Commercial

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	6,873	÷ 43,560 =	0.158
Parking	7,936	÷ 43,560 =	0.182
Other paved surfaces	(Existing impervious cover) 13,000	÷ 43,560 =	0.298
Total Impervious Cover	27,809	÷ 43,560 =	0.638

Total Impervious Cover 0.638 **÷ Total Acreage** 4.97 **X 100 =** 12.8 **% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

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

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

Stormwater to be generated by the Proposed Project

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

NOTE: Site run-off quantities were analyzed using the SCS Method therefore curve numbers are provided in-lieu of run-off coefficients.

Wastewater to be generated by the Proposed Project

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

_____% Domestic	_____Gallons/day
_____% Industrial	_____Gallons/day
100 % Commingled	565 Gallons/day

TOTAL gallons/day 565

15. Wastewater will be disposed of by: *Disposal system shall be permitted under Industrial Reclaim Water Permit per TAC 210.E by others

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

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

☐ Sewage Collection System (Sewer Lines):

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

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

☒ The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is: Industrial Reclaim Water System per TAC 210.E

☐ Existing.
☒ Proposed. *By others

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 20 '.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): September 26, 2008 panel no. 48491C0280E

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

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

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

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

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

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

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

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

22. [X] The drainage patterns and approximate slopes anticipated after major grading activities.

23. [X] Areas of soil disturbance and areas which will not be disturbed.

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

25. [X] Locations where soil stabilization practices are expected to occur.

26. [ ] Surface waters (including wetlands).

    [X] N/A

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

    [X] There will be no discharges to surface water or sensitive features.

28. [X] Legal boundaries of the site are shown.

Administrative Information

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

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

ATTACHMENT A

FACTORS AFFECTING SURFACE WATER QUALITY

Potential Sources of Contamination associated with this project may include:

1. Oil and grease from runoff pollutants associated with paving operations,
2. Asphalt emulsion from streets just after construction is complete,
3. Construction equipment pollutants including hydraulic fluid, machine oil, and diesel,
4. Sediment from earth moving activities, and
5. Construction materials such as wood, paint, fertilizers, and concrete.

ATTACHMENT B

VOLUME AND CHARACTER OF STORMWATER

The project site is located on a 4.97-acre tract of land with a current use of single-family residential. Storm runoff generally drains from south to north and northwest across the site with a small portion of the site draining to the southeast corner. The site currently receives and conveys off-site storm water from an upstream drainage area consisting of single-family residential properties to the southwest of the roadway via channelized flow within a roadside ditch and a culvert that crosses under North Lakewoods Drive near the southwestern corner of the site. Flows from the culvert are then discharged into a drainage channel located on the western property line. The site also conveys off-site storm water from the existing roadway up to the mid-point of the ROW to the southeast. Existing drainage patterns convey the majority of on-site and off-site flows via sheet and channelized flow to the north through the existing channel that ultimately drains to the northwest corner of the site and onto an adjacent golf course property. The remaining on-site and off-site flows convey east and southeast from a highpoint surrounding an existing plot of trees at the site frontage. Utilizing the NRCS SCS method, the existing 100-year storm event flows were calculated for two analysis points, analysis point one (1) and analysis point two (2) and were approximated to 97 cfs and 4 cfs respectively. In proposed conditions a water quality and detention pond will be installed to treat and detain on-site flows that were increased by additional impervious cover to support the development. Based on data from the TR-55 handbook, the average curve number for the basins detained by the proposed pond increased from 85 to 89. Off-site flows conveyed within the existing drainage channel will continue to be routed around the pond facilities, matching existing conditions flow rates. The detention facility will receive on-site flows via overland sheet flow and a network of storm sewer pipes. The pond will detain those flows so that combined on and off-site proposed flows at the analysis point one (1) will remain equal at 97 cfs in the 100-year storm event. Flows to analysis point two (2) have been designed such that there is a decrease to 2 cfs in the 100-year storm.

ATTACHMENT C

SUITABILITY LETTER FROM AUTHORIZED AGENT

(Not Applicable)

ATTACHMENT D

EXCEPTION TO REQUIRED GEOLOGICAL ASSESSMENT

(Not Applicable)

V. Temporary Stormwater Section (TCEQ-0602)

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Eckermann Engineering, Inc. (Sam N. Walker, P.E.)

Date: 3/21/2025

Signature of Customer/Agent:

Regulated Entity Name: Industrial Fluff K9 Facility

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached. *No storage of over 250 gallons will be stored on-site

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

N/A [ ] A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer. *No discharge to surface waters proposed

N/A [ ] A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction. *No sensitive features are located on the project site

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

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

[X] There will be no temporary sealing of naturally-occurring sensitive features on the site. *No sensitive features on project site

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

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

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

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

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

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

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

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

    [X] N/A

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

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

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

15. [X] Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.*No sediment ponds proposed

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

ATTACHMENT A

SPILL RESPONSE ACTIONS

Fuels and hazardous substances are not anticipated to the stored on-site. In the event of a spill:

Spills will be prevented utilizing Best Management Practices such as proper material storage, handling, and disposal practices. However, despite such efforts, a spill may occur on site. If a spill occurs, the following procedures will be utilized.

- ***Stop the spill, if possible.*** This can include shutting off power to a pump, righting an overturned container, or plugging a hole in a damaged container.

- ***Contain the spill, safely.*** Spill containment can be accomplished using a variety of materials and methods such as the use of absorbents (i.e. sawdust, Oil Dri, rags, soil, polypropylene pads or booms, etc.) to dike the area around the spill, or placing a leaking container inside one which is not leaking. Spill containment should only be attempted if it is safe to do so. Proper safety equipment such as gloves and eye protection should be used as directed on the Material Safety Data Sheet for the spilled material.

- ***Report the spill, if necessary.*** Certain quantities of hazardous or toxic materials such as pesticides, paint thinners, gasoline, etc. are required by Federal Law to be reported to the National Response Center (NRC) at 1-800-424-8802 as soon as you have knowledge of the spill. Since most of the quantities which require reporting to the NRC are larger than that found on a typical construction site, spill reporting to the State or Local authorities is more likely. When in doubt, report the spill.

The reporting requirements which may apply to the sites covered in this WPAP are:

Texas Commission on Environmental Quality (TCEQ)
1-800-832-8224

TCEQ requires reporting of spills of 25 gallons or greater, especially those which might impact a waterway.

- ***Clean the spill up, properly.*** Spill cleanup should be performed in accordance with applicable regulations or according to the manufacturer's recommendations on the Material Safety Data Sheet. In most cases, proper spill cleanup is to use a dry method such as absorbing the spill and containerize for disposal via a licensed disposal company. For non-hazardous and non-toxic materials this may be through your solid waste disposal service with prior approval.

- ***Fill in table on next page.***

The WPAP must be modified within 14 days of a release to provide a description of the spill, the circumstances leading to the spill, and the date of the spill. Spill clean-up materials, methods, and additional Best Management Practices addressing spill prevention should also be included.

Spill Date	Material Spilled	Amount of spill (in gallons)	Circumstance of Spill (what caused the spill)	Corrective Action	Correction Date & Sign-off

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

Potential Sources of Contamination associated with this project may include:

1. Oil and grease from runoff pollutants associated with paving operations,
2. Asphalt emulsion from streets just after construction is complete,
3. Construction equipment pollutants including hydraulic fluid, machine oil, and diesel,
4. Sediment from earth moving activities, and
5. Construction materials such as wood, paint, fertilizers, and concrete.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

1. Install construction fencing, stabilized construction entrance, erosion controls, and tree protection fencing per approved erosion and sedimentation control/tree protection plan.
    a. Approximately 0.07 acres disturbed
2. The contractor shall arrange and coordinate acceptable meeting times for an on-site pre-construction meeting with the Owner, Project Engineer, relevant contractors, and the City Environmental Inspector. The Environmental Inspector shall be contacted 72 hours prior to the required on-site preconstruction meeting.
3. Begin site clearing/demolition.
    a. Silt Fence and SCE must be installed prior to and maintained during operations.
    b. Approximately 1.85 acres disturbed
4. Rough grade the site and construct water quality pond, detention pond, and drainage swales in accordance with plans and specifications.
    a. Silt Fence, Rock Berms, and SCE must be maintained during operations.
    b. Approximately 1.93 acres disturbed
5. Complete Water Quality and Pond Improvements.
    a. Silt Fence, Rock Berms, Inlet Protection, and SCE must be maintained during operations.
    b. Approximately 1.93 acres disturbed
6. Install utility improvements.
    a. Silt Fence, Rock Berms, Inlet Protection, and SCE must be maintained during operations.
    b. Approximately 1.00 acres disturbed
7. Construct all-weather driving surface.
    a. Silt Fence, Rock Berms, Inlet Protection, and SCE must be maintained during operations.
    b. Approximately 0.55 acres disturbed
8. Construct building foundations.
    a. Silt Fence, Rock Berms, Inlet Protection, and SCE must be maintained during operations.
    b. Approximately 0.12 acres disturbed
9. Complete final grading, drainage, and pavement.
    a. Silt Fence, Rock Berms, and Inlet Protection must be maintained during operations.
    b. Approximately 1.93 acres disturbed
10. Construct building.
    a. Silt Fence, Rock Berms, Inlet Protection, and SCE must be maintained during operations.
    b. Approximately 0.40 acres disturbed

11. Hydromulch or sod all disturbed areas and general site cleanup.
    a. Silt Fence, Rock Berms, and Inlet Protection must be maintained during operations.
    b. Approximately 1.85 acres disturbed
12. Final clearing of erosion and sedimentation controls and storm drain structures.
    a. Approximately 0.07 acres disturbed
13. City environmental inspector visits site and issues certificate of acceptance only if all construction is in substantial conformance to the plans.

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

- Silt Fence – Approximately 840 linear feet of silt fence will be installed along the property line or limits of construction prior to the start of demolition or construction activities. The silt fence will prevent total suspended solids from leaving the site via sheet flow.

- Stabilized Construction Entrance – One (1) stabilized construction entrance will be installed at the driveway into the site prior to the start of construction activities. The construction entrance will be located as shown on the erosion control plan and will prevent the tracking of mud onto the public road.

- Rock Berm – One (1) rock berm will be installed along the drainage channel at pond out fall headwall to prevent erosion & sediment deposits during construction.

- Inlet Protection – Inlet protection will be installed on all proposed inlets during construction activities to prevent pollution and debris from entering the proposed pond & existing channel.

- Concrete Washout – A concrete washout area to be located near the Stabilized Construction Entrance.

  All of the above listed temporary BMPs will be removed upon the completion of site construction activities and the establishment of permanent stabilization on the site.

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE

(Not Applicable)

ATTACHMENT F

STRUCTURAL PRACTICES

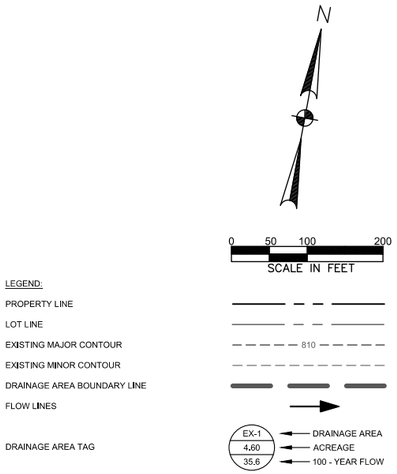
Upgradient flows from the North Lakewoods Drive right-of-way will be routed around the major construction activities and permanent vegetation will be re-established upon completion of grading activities. All on-site drainage during construction will flow through the proposed temporary BMP's listed in Attachment D.

ATTACHMENT G

DRAINAGE AREA MAPS

(EXISTING AND PROPOSED)

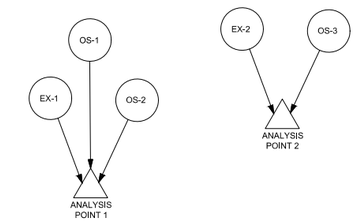
(REFER TO COMPLETE CONSTRUCTION PLANS UNDER SEPARATE COVER FOR MORE INFORMATION)



NOTES:

1. SURVEY INFORMATION PROVIDED BY CUPLIN & ASSOCIATES, INC. RECEIVED ELECTRONICALLY JUNE 2024. NO WARRANTY IS EXPRESSED AS TO ITS ACCURACY.
2. REFER TO ENGINEERING REPORT & SUMMARY LETTER FOR SUPPORTING CALCULATIONS.
3. THIS SHEET IS USED SOLELY FOR THE PURPOSE OF DETENTION POND DESIGN, NOT FOR CONSTRUCTION.

EXISTING



EXISTING CONDITIONS (SCS METHOD)

Area ID	DA (ac.)	TC(min.)	TC(hr.)	CN	Q2(cfs)	Q10(cfs)	Q25(cfs)	Q100(cfs)
EX-1	4.60	22.1	0.37	85	9.6	18.0	24.2	35.6
EX-2	0.37	16.2	0.27	84	0.7	1.3	1.7	2.5
OS-1	1.63	20.3	0.34	82	2.8	5.6	7.6	11.4
OS-2	8.32	25.7	0.43	82	13.1	25.8	35.3	52.8
OS-3	0.22	19.9	0.33	91	0.5	0.9	1.2	1.7

CN CALCULATIONS

WATERSHED CONDITIONS

Area ID	Area Acres	Area sq. mi.	Soil Group %	Weighted CN	CN Description
EX-1	4.60	0.0072	1.0-D	85.0	7% Impervious 93% Fair Condition Grassland
EX-2	0.37	0.0006	1.0-D	84.1	1% Impervious 99% Fair Condition Grassland
OS-1	1.63	0.0025	1.0-D	82.0	100% 3-Acre Lots
OS-2	8.32	0.0130	1.0-D	82.0	100% 3-Acre Lots
OS-3	0.22	0.0003	1.0-D	91.3	52% Impervious 48% Fair Condition Grassland

Using TR-55: Fair Condition Grassland Areas (D Soil): CN=84
Impervious Areas: CN=98
Residential 2 Acre Lots= 82

BENCHMARK INFORMATION:

BM 1: COTTON SPINDLE
N: 10232151,19
E: 3113318,61
ELEV: 826.13
BM 2: COTTON SPINDLE
N: 10232505,32
E: 3113187,34
ELEV: 819,05

VERTICAL DATUM: NAVD 88

BEFORE YOU DIG Texas811.com

No.	Date	Revisions	App.

ECKERMANN ENGINEERING, INC.
202 SPRING HO AVENUE
LAMPASAS, TEXAS 76550
PHONE: 512-556-8160
TBPELS FIRM NO. F-10496

INDUSTRIAL FLUFF K9 FACILITY

6901 N LAKEWOODS DRIVE
GEORGETOWN, TEXAS 78633

EXISTING DRAINAGE AREA MAP

STATE OF TEXAS
SAM N. WALKER
101708
LICENSED PROFESSIONAL ENGINEER
3/20/2025

Project No.:	24015
Issued:	3/20/2025
Drawn By:	QS
Checked By:	SW

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Sheet 8 OF 22

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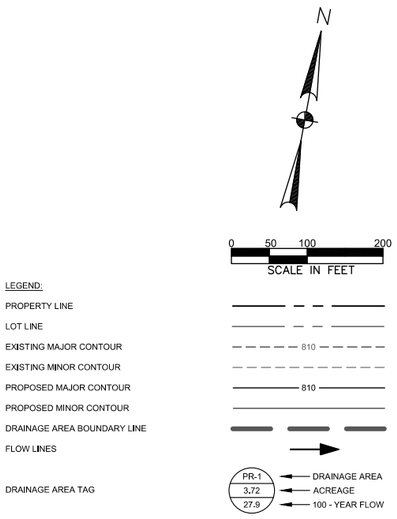

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3. THIS SHEET IS USED SOLELY FOR THE PURPOSE OF DETENTION POND DESIGN, NOT FOR CONSTRUCTION.

PROPOSED

PROPOSED CONDITIONS (SCS METHOD)

Area ID	DA (ac.)	TC(min.)	TC(hr.)	CN	Q_2(cfs)	Q_{10}(cfs)	Q_{25}(cfs)	Q_{100}(cfs)
PR-1	3.72	17.8	0.30	85	7.5	14.1	19.0	27.9
PR-2	0.15	9.9	0.16	86	0.4	0.7	0.9	1.3
PR-3	1.09	13.9	0.23	89	2.7	4.8	6.3	9.1
OS-1	1.63	20.3	0.34	82	2.8	5.6	7.6	11.4
OS-2	8.42	25.7	0.43	82	13.3	26.1	35.8	53.5
OS-3	0.12	12.3	0.20	94	0.4	0.6	0.8	1.1

CN CALCULATIONS

WATERSHED CONDITIONS

Area ID	Area	Area	Soil Group %	Weighted CN	CN Description
	Acres	sq. mi.			
PR-1	3.72	0.0058	1.0-D	85.0	7% Impervious 93% Fair Condition Grassland
PR-2	0.15	0.0002	1.0-D	85.8	13% Impervious 87% Fair Condition Grassland
PR-3	1.09	0.0017	1.0-D	88.9	35% Impervious 65% Fair Condition Grassland
OS-1	1.63	0.0025	1.0-D	82.0	100% 3-Acre Lots
OS-2	8.42	0.0132	1.0-D	82.0	100% 3-Acre Lots
OS-3	0.12	0.0002	1.0-D	93.9	71% Impervious 29% Fair Condition Grassland

Using TR-55: Fair Condition Grassland Areas (D Soil): CN=84
Impervious Areas: CN=98
Residential 2 Acre Lots= 82

ANALYSIS POINT 1 (CFS) ROUTED FLOWS

Condition	2-year	10-year	25-year	100-year
Existing	24.6	47.7	64.9	96.5
Developed	24.4	47.4	64.6	96.1

ANALYSIS POINT 2 (CFS) ROUTED FLOWS

Condition	2-year	10-year	25-year	100-year
Existing	1.2	2.2	2.9	4.2
Developed	0.7	1.3	1.7	2.4

BENCHMARK INFORMATION:

BM 1: COTTON SPINDLE
N: 10232151.19
E: 3113318.61
ELEV: 826.13
BM 2: COTTON SPINDLE
N: 10232505.32
E: 3113187.34
ELEV: 819.05

VERTICAL DATUM: NAVD 88

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PHONE: 512-556-8160
TBPELS FIRM NO. F-10496

INDUSTRIAL FLUFF K9 FACILITY

6901 N LAKEWOODS DRIVE
GEORGETOWN, TEXAS 78633

PROPOSED DRAINAGE AREA MAP

STATE OF TEXAS
SAM N. WALKER
101708
LICENSED PROFESSIONAL ENGINEER
3/20/2025

Project No.: 24015
Issued: 3/20/2025
Drawn By: QS
Checked By: SW

C.09

Sheet 9 OF 22

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ATTACHMENT H
TEMPORARY SEDIMENT POND PLANS AND CALCULATIONS

(Not Applicable)

ATTACHMENT I
INSPECTION AND MAINTENANCE FOR BMPs

PROJECT NAME: **Industrial Fluff K9 Facility**
ADDRESS: **6901 N Lakewoods Drive**
CITY, STATE: **Georgetown ETJ, TX**

SILT FENCE

- Inspections: Inspections shall be made weekly and after each rainfall event.
- Repair and Replacement: Repair or replacement of torn fabric shall be made promptly as needed or a second line of fencing parallel to the torn section shall be installed. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
- Sediment Removal: Accumulated silt shall be removed when it reaches a depth of 150mm (6 inches). The silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

Silt fence shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.

ROCK BERM

- Inspections: Inspections shall be made weekly and after each rainfall event. Daily inspections shall be made on high-service rock berms or rock berms within streambeds.
- Repair and Replacement: Repair any loose wire sheathing as needed. The stone and/or fabric core-woven sheathing shall be replaced or reshaped when the structure ceases to function as intended, due to silt accumulation among the rocks, washout, construction traffic damage, etc.
- Sediment Removal: Accumulated silt shall be removed when it reaches a depth of 150mm (6 inches). The silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

Rock berms shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.

INLET PROTECTION

- Inspections: Inspections shall be made weekly and after each rainfall event.
- Repair and Replacement: Repair or replacement shall be made promptly as needed. Check placement of the inlet protection to prevent gaps between the device and curb/inlet. Replace/patch torn or missing filter fabric.
- Sediment Removal: Accumulated silt shall be removed when it reaches a depth of 75mm (3 inches). The silt shall be disposed of on an approved site and in a manner that will not contribute to additional siltation.

Inlet Protection shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.

STABILIZED CONSTRUCTION ENTRANCE

- Maintenance: The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public roadway. This may require periodic top dressing with additional stone as conditions demand, as well as repair and clean out of any measure devices used to trap sediment.

- All sediment that is spilled, dropped, washed or tracked onto public roadway must be removed immediately.

- When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it should be done on an area stabilized with crushed stone that drains into another approved BMP.

The stabilized construction entrance will be removed once the driveway to the proposed site is complete.

CONCRETE WASHOUT AREAS

- When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of.

- Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of.

- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality guidelines and specifications.

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Kendra Verhagen Living Trust (Attn: Kendra Mathis Verhagen)
Mailing Address: 6901 N Lakewoods Drive
City, State: Georgetown, TX Zip: 78633
Telephone: (737) 300-5808 Fax: _____

Signature of Responsible Party Kendra Mathis Verhagen Date 12/2/24

ATTACHMENT J

SCHEDULE FOR INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Interim stabilization shall be achieved through the temporary erosion controls. All disturbed pervious areas shall receive permanent hydromulch or sod after final grading is completed or if construction activities stop for more than 14 days. The remaining disturbed areas will be stabilized by the installation of pavement or building structures.

VI. Permanent Stormwater Section (TCEQ-0600)

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Eckermann Engineering, Inc. (Sam N. Walker, P.E.)

Date: 3/21/2025

Signature of Customer/Agent

Regulated Entity Name: Industrial Fluff K9 Facility

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A *See attached 20% Impervious Cover Waiver

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

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

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

☒ N/A *BMP provided to remove TSS at a rate of 85% per City of Georgetown requirements

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

   ☒ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A *No sensitive features identified for this site per Geologic Assessment

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

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

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

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

☒ Design calculations (TSS removal calculations)*See sheet C.13 of Civil Construction Plans

☒ TCEQ construction notes

☐ All geologic features*No geological features identified per Geologic Assesment

☒ All proposed structural BMP(s) plans and specifications

☐ N/A

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

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

    ☒ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

ATTACHMENT A
20% OR LESS IMPERVIOUS COVER WAIVER

(Refer To Attached Waiver Letter)

ECKERMANN ENGINEERING, INC.

March 21, 2025

Kelly Keel
Executive Director – TCEQ
MC - 109
P.O. Box 13087
Austin, TX 78711-3087

Re: ***Impervious Cover Waiver Request***
Attachment A – Permanent Stormwater Section
Water Pollution Abatement Plan (TCEQ Form 0600)
Industrial Fluff K9 Facility – Georgetown ETJ, Texas 78633

Dear Ms. Keel:

Please accept this impervious cover waiver request to support the Water Pollution Abatement Plan (WPAP) application for the proposed Industrial Fluff K9 Facility located within the City of Georgetown Extra Territorial Jurisdiction (ETJ), Williamson County.

The existing development has an entry drive and two residential structures that account for a total impervious cover amount of ±13,000 square feet which equates to 6.0% of the total site area. The addition of the proposed commercial improvements including parking spaces, drives, a pre-engineering metal building structure with sidewalks, and miscellaneous concrete pads will add approximately ±14,809 square feet of impervious cover. Additionally, a portion of the existing entry drive will be removed and a City sidewalk will be installed bringing the site total to ±27,809 square feet of impervious cover or 12.8% impervious cover. Therefore, the subject development is below the 20% impervious cover threshold and a permanent BMP is not required by TCEQ per 30 TAC §213.4(g). A batch detention structure will still be installed to satisfy the City of Georgetown ETJ requirements to remove 85% of the increase in TSS. Refer to the site plan table on sheet C.06 in attachment F for more impervious cover information.

If you should have any questions regarding this impervious cover waiver request or need additional information regarding the Industrial Fluff K9 development, please feel free to contact us at 512-556-8160.

Sincerely,

Eckermann Engineering, Inc.

Sam Walker, P.E.
Vice President

STATE OF TEXAS
SAM N. WALKER
101708
LICENSED
PROFESSIONAL ENGINEER
3/21/2025

ATTACHMENT B

BMPS FOR UPGRADIENT STORMWATER

Disclaimer: Per the 20% impervious cover waiver, the subject site is not required to install permanent BMPs however a water quality pond shall be installed to satisfy City of Georgetown requirements. A batch detention facility has been sized to remove 85% (per City of Georgetown requirements) of the increase in TSS generated by the proposed development and work within the North Lakewoods Drive right-of-way.

Upgradient flows to the south of North Lakewoods Drive are conveyed under North Lakewoods Drive via an existing culvert near the southwest corner of the 4.97-acre property. These flows are from off-site areas and no additional impervious cover is anticipated south of North Lakewoods Drive as part of this project therefore no BMPs are proposed. Existing flows are discharged into an existing drainage channel along the western property line and will continue around proposed improvements within the grassed channel unimpeded. Additional impervious cover contained within the right-of-way will either sheet flow across a grassed area and continue east or continue into the existing grassed channel on the western property line.

ATTACHMENT C

BMPS FOR ON-SITE STORMWATER

Disclaimer: Per the 20% impervious cover waiver, the subject site is not required to install permanent BMPs however a water quality pond shall be installed to satisfy City of Georgetown requirements. A batch detention facility has been sized to remove 85% (per City of Georgetown requirements) of the increase in TSS generated by the proposed development and work within the N Lakewoods Drive right-of-way.

The water quality volume for extended batch detention will be located within the bottom of the proposed runoff detention pond area and will be located to the northwest of the proposed pre-engineered metal building. The efficiency of the batch detention facility to remove TSS is 91% per the TCEQ Complying with Edwards Aquifer Rules Manual. The pond has been designed to detain flows for a minimum of 24 hours after the storm event and then release flows via a 6-inch pipe with automated valve to the downstream side of detention pond outfall. Flows will be released within 48 hours after the initial delay and the valve will remain open for an additional two (2) hours after the floats sense that the pond is empty.

The required Total Capture Volume is 1,204 cubic feet and the proposed volume of the batch detention pond is 1,556 cubic feet which exceeds the required amount. Please refer to the construction documents contained within Attachment M and the TCEQ water quality calculation spreadsheet on the following construction document page for more information.

ATTACHMENT D
BMPS FOR SURFACE STREAMS

(Not Applicable, No Discharge to Surface Streams Proposed)

ATTACHMENT E

REQUEST TO SEAL FEATURES

(Not Applicable, No Sealing of Features is Proposed)

ATTACHMENT F

CONSTRUCTION PLANS

(UNDER SEPARATE COVER)

ATTACHMENT G
INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

PROJECT NAME: **Industrial Fluff K9 Facility**
ADDRESS: **6901 N Lakewoods Drive**
CITY, STATE: **Georgetown ETJ, TX**

BATCH DETENTION BASIN

Batch detention basin maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet. Refer to the Edward's Aquifer Technical Guidance Manual if additional information is required.

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

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

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

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

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

- Structural Repairs and Replacement: With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

- Sediment Removal: A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 150 mm (6 inches), when the sediment interferes with

the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance. The silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

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

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Kendra Verhagen Living Trust (Attn: Kendra Mathis Verhagen)
Mailing Address: 6901 N Lakewoods Drive
City, State: Georgetown ETJ, TX Zip: 78633
Telephone: (737) 300-5808 Fax: _____

Signature of Responsible Party Kendra Mathis Verhagen Date 12/2/24

Engineer: Sam N. Walker, P.E.
Firm: Eckermann Engineering, Inc.
TBPE Firm No.: F-10496
Mailing Address: P.O. Box 388
City, State: Lampasas, TX 76550
Telephone: (512) 556-8160

Disclaimer: Per the 20% impervious cover waiver, the subject site is not required to install permanent BMPs however a water quality pond shall be installed to satisfy City of Georgetown requirements. A batch detention facility has been sized to remove 85% (per City of Georgetown requirements) of the increase in TSS generated by the proposed development and work within the N Lakewoods Drive right-of-way.

ATTACHMENT H
PILOT-SCALE FIELD TESTING PLAN
(Not Applicable)

ATTACHMENT I

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

(Not Applicable)

VII. Agent Authorization Forms (TCEQ-0599)

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

I Kendra Mathis Verhagen,
Print Name

Owner/Trustee,
Title - Owner/President/Other

of Verhagen, Kendra Trustee of Kendra Verhagen Living Trust,
Corporation/Partnership/Entity Name

have authorized Sam N. Walker, P.E.
Print Name of Agent/Engineer

of Eckermann Engineering, Inc. (Firm No. F-10496)
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

12/2/24
Date

THE STATE OF Texas §

County of Hamo §

BEFORE ME, the undersigned authority, on this day personally appeared Kendra Verhagen 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 2nd day of December, 2024

NOTARY PUBLIC

Kay Lynn Schlichting
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 1/9/2028

KAY LYNN SCHLICHTING
NOTARY PUBLIC
STATE OF TEXAS
ID 12480857-4
EXP. 01-09-2028

November 18, 2024

Sam N. Walker, P.E.
Eckermann Engineering, Inc.
P.O. Box 388
Lampasas, TX 76550

Re: ***Owner's Authorization***
Industrial Fluff K9 Facility Development
6901 N Lakewoods Drive
Georgetown ETJ, Texas 78633

Dear Mr. Walker:

This letter shall serve as authorization for Eckermann Engineering, Inc. to submit all required applications associated with the development of Lot 18, Block A of the Lakewoods Estates subdivision. Associated applications may include but are not limited to variances, subdivision & platting, site development, driveway permits, drainage impact analysis, tree preservation, City of Georgetown permits, State permits, Williamson County permits, and storm water permit applications for the subject tract.

Please contact me at 737-300-5808, if additional information is required.

Very truly yours,

Kendra Mathis Verhagen

The Kendra Verhagen Living Trust
Trustee: Kendra Mathis Verhagen
Owner

STATE OF TEXAS

County of Travis

This instrument was acknowledged before me this 2nd day of December, 2024., by Kendra Mathis Verhagen, as Owner & Trustee, on behalf of the Kendra Verhagen Living Trust.

Kay Lynn Schlichting
Notary Public for Texas

My Commission Expires:

KAY LYNN SCHLICHTING
NOTARY PUBLIC
STATE OF TEXAS
ID 124808574
EXP. 01-09-2028

VIII. Application Fee Form (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Industrial Fluff K9 Facility
Regulated Entity Location: 6901 N Lakewoods Drive, Georgetown ETJ, Tx 78633
Name of Customer: Kendra Mathis Verhagen
Contact Person: Sam N. Walker, P.E. Phone: 512-525-9270
Customer Reference Number (if issued):CN N/A Not issued
Regulated Entity Reference Number (if issued):RN N/A Not issued
Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	4.97	$4,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Kendra Mathis Verhagen Date: 12/21/2021

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

IX. Core Data Form (TCEQ-10400)

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number (*if issued*)	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** (*if issued*)
CN N/A Not issued		**RN** N/A Not issued

SECTION II: Customer Information

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

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

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

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

Kendra Verhagen Living Trust, Attn: Kendra Mathis Verhagen

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits) 013549141	**10. DUNS Number** (*if applicable*)

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

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

13. Independently Owned and Operated?
☒ Yes ☐ No

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

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:	6901 N Lakewoods Drive						
	City	Georgetown (ETJ)	**State**	TX	**ZIP**	78633	**ZIP + 4**

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

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** (*if applicable*)

(737)300-5808		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Industrial Fluff K9 Facility

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	6901 N Lakewoods Drive							
	City	Georgetown (ETJ)	**State**	TX	**ZIP**	78633	**ZIP + 4**	
24. County	Williamson County							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	44	43.91	97	44	1.84

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)
0752	7389	812910	

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

K9 Boarding, Grooming, & Training Facility

34. Mailing Address:	6901 N Lakewoods Drive							
	City	Georgetown (ETJ)	**State**	TX	**ZIP**	78633	**ZIP + 4**	
35. E-Mail Address:	N/A							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(737)300-5808		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Eckermann Engineering Inc. (Attn: Sam N. Walker, P.E.)	41. Title:	Civil Engineering Firm/ Vice President
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512)556-8160		( ) -	sam@eckermannengineering.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:		Job Title:	
Name *(In Print)*:	Kendra Mathis Verhagen	**Phone:**	(737)300-5808
Signature:	Kendra Mathis Verhagen	**Date:**	12/2/24