

**WATER POLLUTION ABATEMENT PLAN**  
**FOR**  
**PINK HOUSE STORAGE & MARKETPLACE**

PREPARED FOR  
Texas Commission on Environmental Quality  
Region 13 – San Antonio  
14250 Judson Road  
San Antonio, Texas 78233  
210-490-3096 (office)  
210-545-4329 (fax)

PREPARED BY



Shane Klar, P.E.  
2021 SH 46W, Ste. 105  
New Braunfels, TX 78132

Prepared  
April 12, 2023



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# Texas Commission on Environmental Quality

## Edwards Aquifer Application Cover Page

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### Our Review of Your Application

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

### Administrative Review

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

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

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

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

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

### Technical Review

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



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

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

**Mid-Review Modifications**

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

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

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

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

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

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

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

<b>1. Regulated Entity Name:</b> Pink House Storage and Marketplace					<b>2. Regulated Entity No.:</b>				
<b>3. Customer Name:</b> Zach Quisenberry					<b>4. Customer No.:</b>				
<b>5. Project Type:</b> (Please circle/check one)	<input checked="" type="radio"/> New	Modification			Extension		Exception		
<b>6. Plan Type:</b> (Please circle/check one)	<input checked="" type="radio"/> WPAP	<input type="radio"/> CZP	<input type="radio"/> SCS	<input type="radio"/> UST	<input type="radio"/> AST	<input type="radio"/> EXP	<input type="radio"/> EXT	Technical Clarification	Optional Enhanced Measures
<b>7. Land Use:</b> (Please circle/check one)	<input type="radio"/> Residential		<input checked="" type="radio"/> Non-residential			<b>8. Site (acres):</b>		5.0	
<b>9. Application Fee:</b>	\$4,000		<b>10. Permanent BMP(s):</b>			Hydro Int'l Up-Flo Filter			
<b>11. SCS (Linear Ft.):</b>	N/A		<b>12. AST/UST (No. Tanks):</b>			N/A			
<b>13. County:</b>	Comal		<b>14. Watershed:</b>			Cibolo Creek			

# Application Distribution

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

[http://www.tceq.texas.gov/assets/public/compliance/field\\_ops/eapp/EAPP%20GWCD%20map.pdf](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.

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

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

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

Shane Klar, PE *Zach Quisenberry*

Print Name of ~~Customer~~ **Authorized Agent**

*Zach Quisenberry*

*4-6-23*

Signature of Customer/Authorized Agent

Date

**\*\*FOR TCEQ INTERNAL USE ONLY\*\***

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

# 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: ~~Shane Klar, PE~~ Zach Quisenberry

Date: 4-6-23

Signature of ~~Customer~~/Agent:



## Project Information

1. Regulated Entity Name: Pink House Storage and Marketplace
2. County: Comal
3. Stream Basin: Cibolo Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority
5. Edwards Aquifer Zone:
  - Recharge Zone
  - Transition Zone
6. Plan Type:
  - WPAP
  - SCS
  - Modification
  - AST
  - UST
  - Exception Request

7. Customer (Applicant):

Contact Person: Zach Quisenberry

Entity: Individual

Mailing Address: 4640 FM 1863

City, State: Bulverde, TX

Zip: 78163

Telephone: 432-770-5171

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

Email Address: Zachquis05@yahoo.com

8. Agent/Representative (If any):

Contact Person: Shane Klar, P.E.

Entity: INK Civil

Mailing Address: 2021 SH46 W, Suite 105

City, State: New Braunfels, TX

Zip: 78132

Telephone: 830-358-7127

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

Email Address: contact@ink-civil.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 Bulverde

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.

Approx. 2.43 miles from FM 1863 and Hwy 281 intersection. Physical Address: 4640 FM 1863 Bulverde, TX 78163

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

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

Project site boundaries.

USGS Quadrangle Name(s).

Boundaries of the Recharge Zone (and Transition Zone, if applicable).

Drainage path from the project site to the boundary of the Recharge Zone.

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

Survey staking will be completed by this date: 5/10/2023

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

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

15. Existing project site conditions are noted below:

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

### ***Prohibited Activities***

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

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

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and



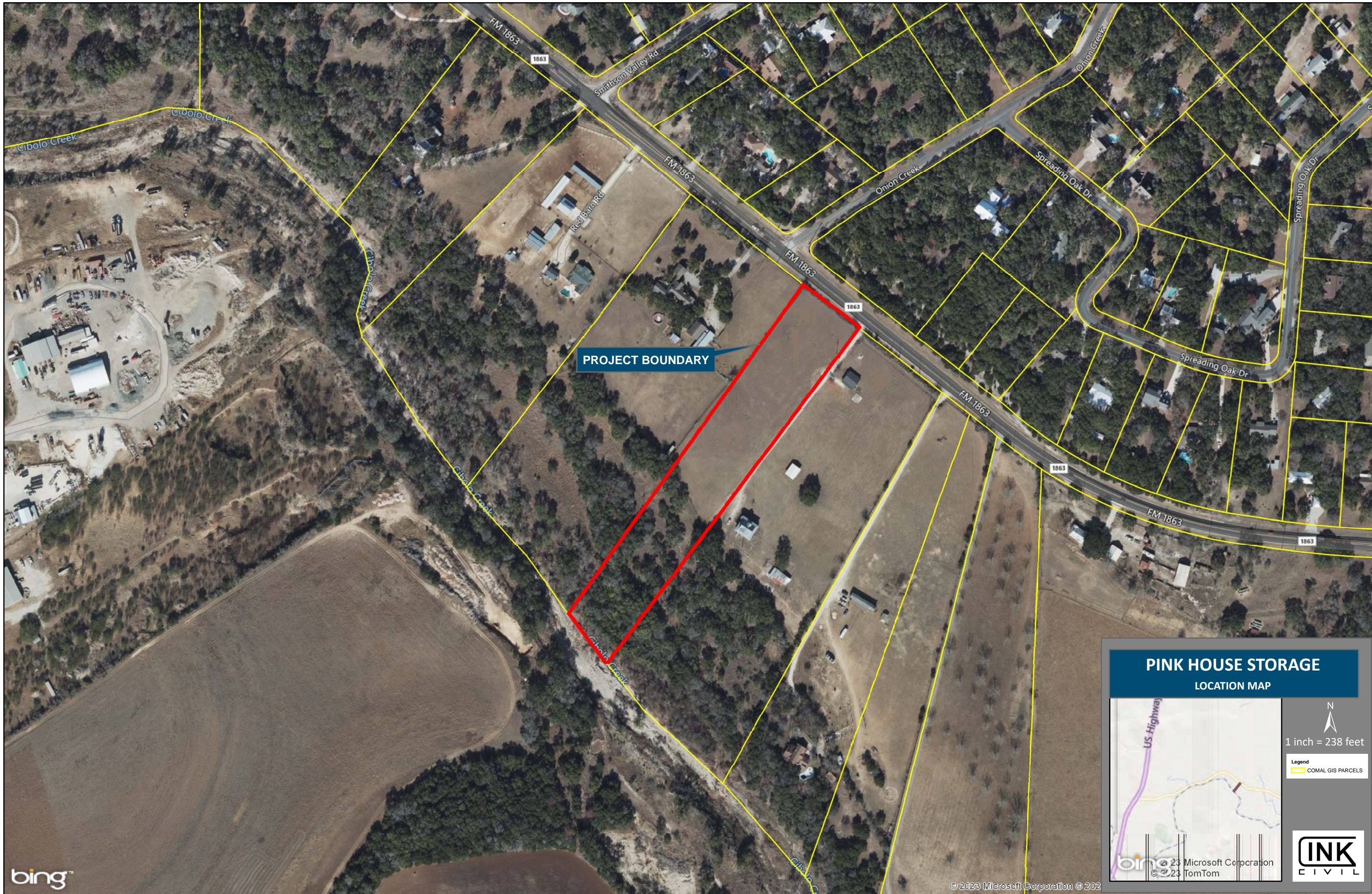
- (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

### ***Administrative Information***

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

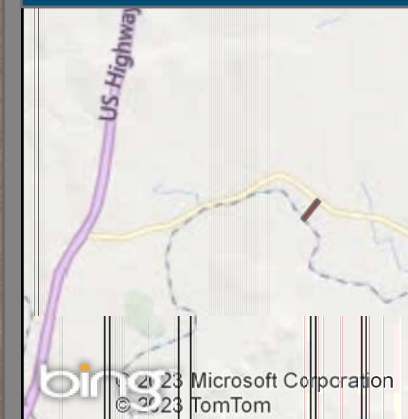
- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
  - For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
  - For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
  - A request for an exception to any substantive portion of the regulations related to the protection of water quality.
  - A request for an extension to a previously approved plan.
19.  Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:
- TCEQ cashier
  - Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
  - San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)
20.  Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
21.  No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.





PROJECT BOUNDARY

### PINK HOUSE STORAGE LOCATION MAP



N  
1 inch = 238 feet

Legend  
COMAL GIS PARCELS







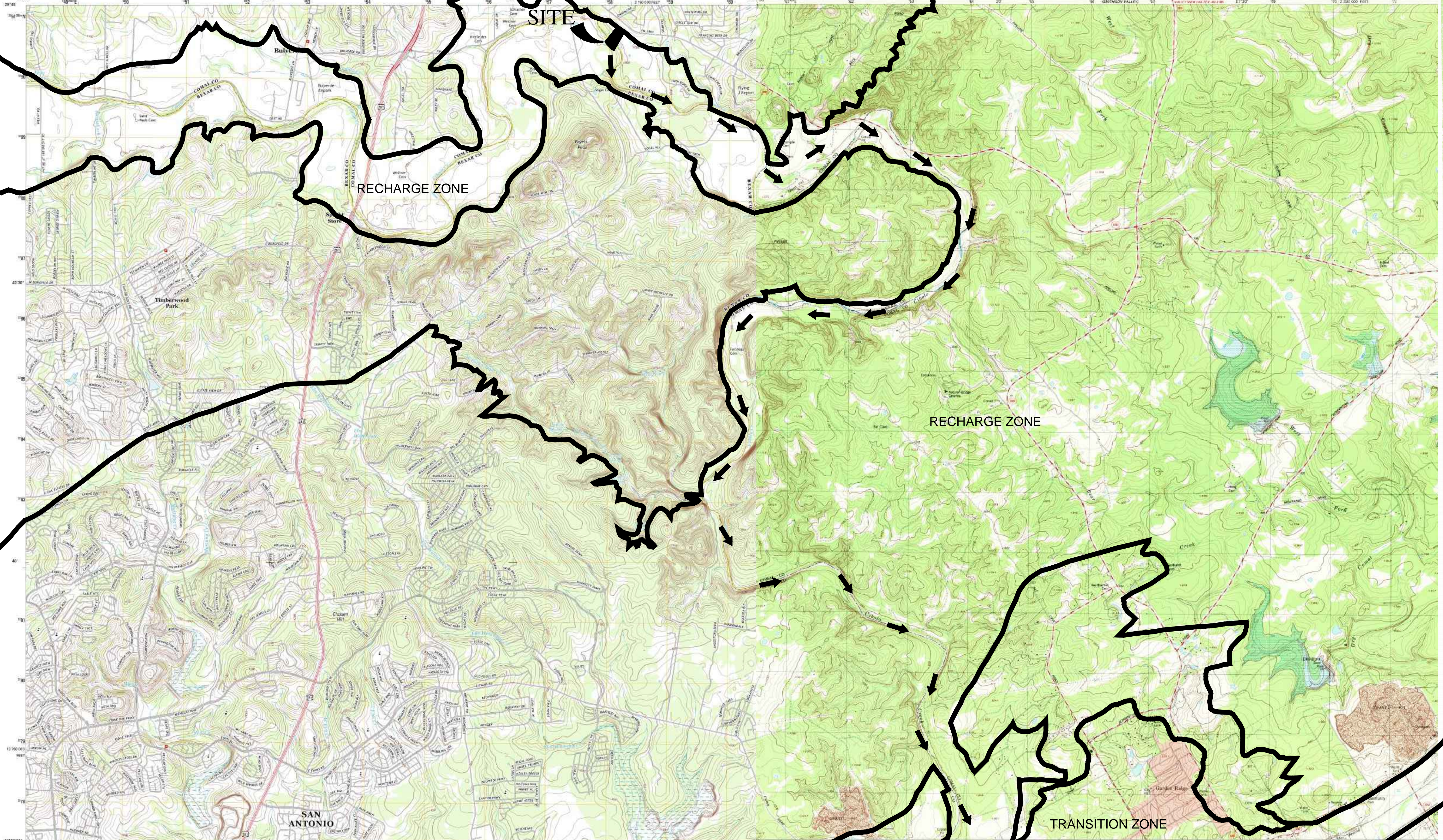
U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY



BULVERDE QUADRANGLE  
TEXAS  
7.5-MINUTE SERIES

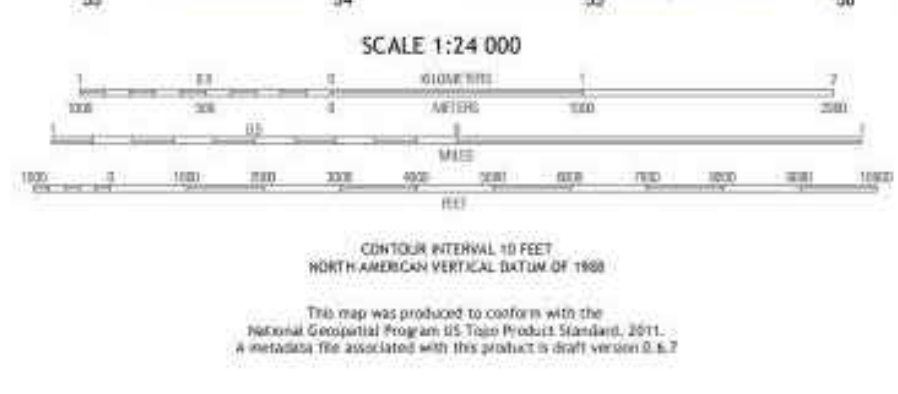
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

BAT CAVE Q  
TEX  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84)  
1:24,000-scale map, derived from 1:50,000-scale map, Zone 16E  
10,000-foot contour, Texas Coordinate System of 1983 (south  
central zone)

UTM GRID AND 2011 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET



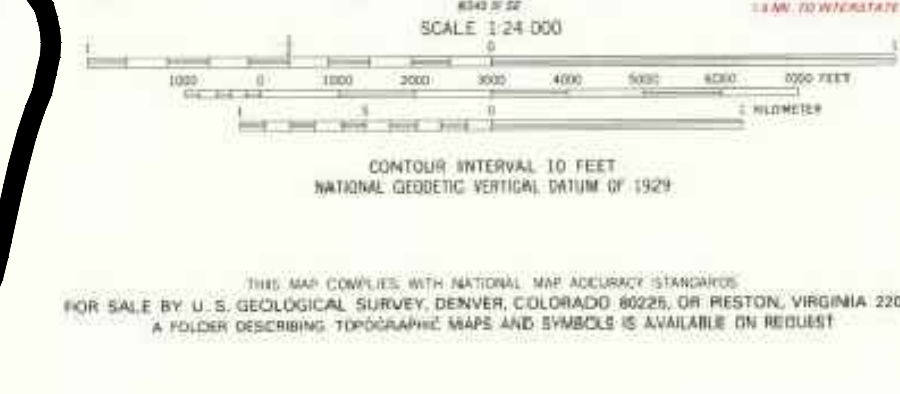
STATE OF TEXAS

Brewster	Arbuckle	Texas	Ward
Comal	Brewster	San	Ward
Comal	Comal	San	Ward

BULVERDE, TX  
2013

Revised, edited, and published by the Geological Survey  
in cooperation with the Texas Water Development Board  
by the Army Map Service by photogrammetric methods  
on aerial photographs taken 1952. Field checked 1953. Revised  
by USGS from aerial photographs taken 1986. Field checked 1987.  
Revised 1988.

Projection and 10,000-foot grid ticks. Texas  
coordinate system, south central zone (Lambert conformal conic)  
1000-meter Universal Transverse Mercator of 4, zone 14  
1927 North American Datum  
to give on the projected North American Datum 1983  
true the projection lines 20 meters south and  
10 meters east as shown by dashed corner ticks.  
Line and dashed lines indicate selected fence lines.  
Red tint indicates areas in which only landmark buildings are shown.



ROAD CLASSIFICATION  
Primary Highway  
Light Imp  
Secondary Highway  
Hard Surface  
Unimproved  
US Route

USGS DATA INFORMATION ACQUISITION  
MAR 15 1980  
REC'D FILE COPY

2098-424  
B4  
DMA



**ATTACHMENT “C”**  
**Project Description**

Pink House Storage is a 5.00-acre development of a larger 15.46-acre tract located within Comal County, Bulverde, Texas. Site access is at the address 4640 FM 1863, Bulverde, TX 78163 approximately 2.4 miles from the US-281 and FM 1863 intersection. The previous use of this property was for single family residential and agricultural use. According to the Flood Insurance Rate Map No. 48091C0385F effective date 9/02/2009, a portion of the site is located within the floodplain. The entire site drains to the Cibolo Creek.

The development will be constructed in two phases with self-storage units. The proposed construction will include minor grading for the parking spaces, building pads, utility service lines and building infrastructure. The entire site will be disturbed with 2.76-acres of impervious cover (55.2%). On-site stormwater will be treated by a Hydro-International Up-Flo filtration device sized to accommodate both phases of the development.



## **GEOLOGIC ASSESSMENT**

For

**PINK HOUSE STORAGE & MARKETPLACE TRACT  
4640 F.M. 1863  
BULVERDE, COMAL COUNTY, TEXAS**

Prepared for  
**INK CIVIL  
2021 SH 46W  
NEW BRAUNFELS, TX 78132**

Prepared by

**Professional Service Industries, Inc.  
3 Burwood Lane  
San Antonio, Texas 78216  
Telephone (210) 342-9377**

**PSI PROJECT NO.: 0435-5868**

**March 31, 2023**





Professional Service Industries, Inc.  
3 Burwood Lane, San Antonio, TX 78216  
Phone: (210) 342-9377  
Fax: (210) 342-9401

March 31, 2023

Ink Civil  
2021 SH 46W, Suite 105  
New Braunfels, TX 78132

Attn: Mr. Shane Klar  
Email: [ShaneKlar@ink-civil.com](mailto:ShaneKlar@ink-civil.com)

RE: Geologic Assessment  
Pink House Storage & Marketplace  
15-Acre Bulverde Tract  
4640 F.M. 1863  
Bulverde, Comal County, Texas  
PSI Project No. 435-5868

Dear Mr. Klar:

Professional Service Industries, Inc. (PSI) has completed a geologic recharge assessment for the above referenced project in compliance with the Texas Commission on Environmental Quality (TCEQ) requirements for regulated developments located on the Edwards Aquifer Recharge Zone (EARZ). The purpose of this report is to describe surficial geologic units and identify the locations and extent of significant recharge features present in the development area.

#### **PROJECT DESCRIPTION**

The property consists of an approximate 15-acre tract of predominantly agricultural land located at 4640 F.M. 1863 in Bulverde, Comal County, Texas. The subject property is located on the Edwards Aquifer Recharge Zone (EARZ), and therefore subject to special rules promulgated by the Texas Commission on Environmental Quality (TCEQ) designed to protect environmentally sensitive areas. The site is currently cultivated agricultural land.

#### **REGIONAL GEOLOGY**

##### **Physiography**

From northwest to southeast, the three physiographic provinces in Comal County are: the Edwards Plateau, the Blackland Prairie, and the West Gulf Coastal Plain. The Edwards Plateau terrain is rugged and hilly, with elevations ranging from 1,100 feet to 1,900 feet above sea level. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Bexar County and is composed of fault blocks of limestone, chalk, shale, and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 700 feet to 1100 feet above sea level. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. The West Gulf Coastal Plain lies southeast of the Blackland Prairie and is composed of relatively flat-lying beds of marl, clay, and sandy clay. According to topographic maps, elevations at the subject range from approximately 1,018 feet above mean sea level along F.M. 1863,

to approximately 985 feet ASL in Cibolo Creek.

### **Stratigraphy and Structure**

Rocks at the site are mapped as the Pleistocene Fluvial Terrace deposits (Qt) on the majority of the site and the Lower Cretaceous Upper Glen Rose Formation on the far north portion of the site.

Fluvial Terrace deposits consist of gravel, sand, silt, and clay; adjacent to Edwards Plateau, predominantly gravel, limestone, dolomite, and chert; southeastward in vicinity of Tertiary rocks, increasing amounts of sand, silt, and clay; contiguous terraces are separated by a solid line. These low terrace deposits are mostly above flood level along entrenched streams; Fluvial morphology well preserved with point bars, oxbows, and abandoned channel segments; most rivers below Balcones escarpment are entrenched and do not have active floodplains; some exceptions are Nueces River, part of Medina River, and San Antonio River below mouth of Medina.

The Glen Rose has the *Corbula* bed, C, dividing the formation into upper, (Kgru), and lower, (Kgrl). The Glen Rose contains limestone, dolomite, and marl as alternating resistant and recessive beds forming stairstep topography; limestone, aphanitic to fine grained, hard to soft and marly, light gray to yellowish gray; dolomite, fine grained, porous, yellowish brown; marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids. Upper part, Kgru, relatively thinner bedded, more dolomitic, and less fossiliferous; thickness about 220 feet, the lower Glen Rose is approximately 160 feet thick.

### **SITE INVESTIGATION**

The site investigation was performed by systematically traversing the subject tract, and mapping fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

### **SUMMARY**

No sensitive features were noted on the subject tract. A water well is located in the east-central portion of the site, but is not considered a sensitive feature. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.

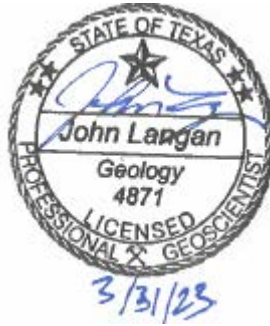


We appreciate this opportunity to be of service to you. If you have any questions, please do not hesitate to contact our office.

Respectfully submitted,  
**PROFESSIONAL SERVICE INDUSTRIES, INC.**



John Langan, P.G.  
Environmental Department Manager



## **WARRANTY**

The field observations and research reported herein are considered enough in detail and scope to form a reasonable basis for a general geological recharge assessment of this site. PSI warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted geologic methods, only for the site described in this report. These methods have been developed to provide the client with information regarding apparent indications of existing or potential conditions relating to the subject site and are necessarily limited to the conditions observed at the time of the site visit and research. This report is also limited to the information available at the time it was prepared. In the event additional information is provided to PSI following the report, it will be forwarded to the client in the form received for evaluation by the client. There is a possibility that conditions may exist which could not be identified within the scope of the assessment, or which were not apparent during the site visit. PSI believes that the information obtained from others during the review of public information is reliable; however, PSI cannot warrant or guarantee that the information provided by others is complete or accurate.

This report has been prepared for the exclusive use of Ink Civil for the site discussed herein. Reproductions of this report cannot be made without the expressed approval of Ink Civil. The general terms and conditions under which this assessment was prepared apply solely to Ink Civil. No other warranties are implied or expressed.



# 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: John Langan

Telephone: 210/342-9377

Date: 03/31/23

Fax: 210/342-9401

Representing: PSI TBPG No. 50128 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Pink House Storage & Marketplace Tract

## Project Information

1. Date(s) Geologic Assessment was performed: 09/07/22

2. Type of Project:

WPAP

AST

SCS

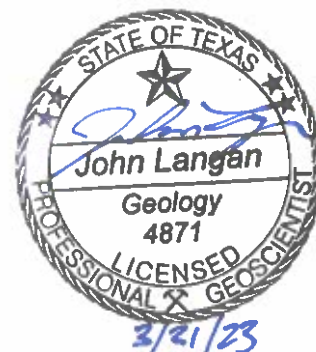
UST

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)
Comfort-Rock outcrops	B	2-3
Eckrant-Rock outcrop	B	2-3
Krum clay	B	2-3
Sunev clay loam	B	2.3

Soil Name	Group*	Thickness(feet)

*\* Soil Group Definitions (Abbreviated)*

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

6.  **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7.  **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8.  **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'
- Applicant's Site Plan Scale: 1" = 100'
- Site Geologic Map Scale: 1" = 100'
- Site Soils Map Scale (if more than 1 soil type): 1" = 192.5'
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 1 (#) 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.

**STRATIGRAPHIC COLUMN**  
**Pink House Storage & Marketplace Tract**  
**4640 F.M. 1863**  
**Bulverde, Comal County, Texas**

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Fluviatile Terrace Deposits	10-40'	gravel, sand, silt, and clay; adjacent to Edwards Plateau, predominantly gravel, limestone, dolomite, and chert; southeastward in vicinity of Tertiary rocks, increasing amounts of sand, silt, and clay; the low terrace deposits are mostly above flood level along entrenched streams; Fluvial morphology well preserved with point bars, oxbows, and abandoned channel segments
Georgetown Formation	10-40'	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: <i>waconella wacoensis</i> brachiopod; low porosity and permeability development.
Person Formation	180-224'	Limestones and dolomites, extensive porosity development in "honeycomb" sections, interbedded with massive, recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations).
Kainer Formation	260-310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Overlies the basal nodular (Walnut) bed.
Glen Rose Limestone (upper)	200-400	limestone, dolomite, and marl as alternation resistant and recessive beds forming stairstep topography; limestone, aphanitic to fine grained, hard to soft and marly, light gray to yellowish gray; dolomite, fine grained, porous, yellowish brown; marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids. Upper part, Kgru, relatively thinner bedded, more dolomitic, and less fossiliferous;



## **SOILS NARRATIVE**

According to the Soil Survey of Comal County, published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Extension Service, reissued in 1984, the soils beneath the subject property have been classified as Comfort-Rock outcrop complex, undulating (CrD), Eckrant-Rock outcrop complex, steep (ErD), Krum clay 1-3% slopes (KrB), and Sunev clay loam 1-3% slopes (SuB).



## Comal and Hays Counties, Texas

### KrB—Krum clay, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t2j5

*Elevation:* 550 to 1,750 feet

*Mean annual precipitation:* 31 to 37 inches

*Mean annual air temperature:* 65 to 69 degrees F

*Frost-free period:* 230 to 250 days

*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Krum and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Krum

##### Setting

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Parent material:* Calcareous silty and clayey alluvium derived from limestone

##### Typical profile

*A - 0 to 16 inches:* clay

*Bk1 - 16 to 58 inches:* clay

*Bk2 - 58 to 66 inches:* clay

*Ck - 66 to 80 inches:* clay

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 50 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 3.0

*Available water supply, 0 to 60 inches:* High (about 9.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated): 3e*  
*Hydrologic Soil Group: C*  
*Ecological site: R081CY357TX - Clay Loam 29-35 PZ*  
*Hydric soil rating: No*

### **Minor Components**

#### **Bolar**

*Percent of map unit: 5 percent*  
*Landform: Hillslopes*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: R081CY357TX - Clay Loam 29-35 PZ*  
*Hydric soil rating: No*

#### **Doss**

*Percent of map unit: 3 percent*  
*Landform: Hillslopes*  
*Landform position (two-dimensional): Footslope*  
*Landform position (three-dimensional): Base slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Linear*  
*Ecological site: R081CY574TX - Shallow 29-35 PZ*  
*Hydric soil rating: No*

#### **Lewisville**

*Percent of map unit: 2 percent*  
*Landform: Stream terraces*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Concave*  
*Across-slope shape: Linear*  
*Ecological site: R081CY357TX - Clay Loam 29-35 PZ*  
*Hydric soil rating: No*

## **Data Source Information**

Soil Survey Area: Comal and Hays Counties, Texas  
Survey Area Data: Version 19, Aug 24, 2022

## Comal and Hays Counties, Texas

### SuB—Sunev clay loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* f6mf

*Elevation:* 430 to 1,500 feet

*Mean annual precipitation:* 28 to 34 inches

*Mean annual air temperature:* 63 to 70 degrees F

*Frost-free period:* 230 to 245 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Sunev and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Sunev

##### Setting

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from limestone

##### Typical profile

*H1 - 0 to 11 inches:* clay loam

*H2 - 11 to 35 inches:* clay loam

*H3 - 35 to 45 inches:* clay loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 70 percent

*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* B

*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ

*Hydric soil rating:* No

### **Minor Components**

#### **Unnamed**

*Percent of map unit:* 15 percent

*Hydric soil rating:* No

### **Data Source Information**

Soil Survey Area: Comal and Hays Counties, Texas

Survey Area Data: Version 19, Aug 24, 2022



## Comal and Hays Counties, Texas

### ErG—Eckrant-Rock outcrop association, 8 to 30 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t0sb  
*Elevation:* 750 to 2,400 feet  
*Mean annual precipitation:* 28 to 37 inches  
*Mean annual air temperature:* 64 to 68 degrees F  
*Frost-free period:* 210 to 250 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Eckrant and similar soils:* 65 percent  
*Rock outcrop:* 27 percent  
*Minor components:* 8 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Eckrant

##### Setting

*Landform:* Ridges  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Side slope, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from limestone

##### Typical profile

*A1 - 0 to 7 inches:* very cobbly clay  
*A2 - 7 to 12 inches:* extremely cobbly clay  
*R - 12 to 80 inches:* bedrock

##### Properties and qualities

*Slope:* 8 to 30 percent  
*Surface area covered with cobbles, stones or boulders:* 2.3 percent  
*Depth to restrictive feature:* 4 to 20 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 1.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* R081CY363TX - Steep Rocky 29-35 PZ  
*Hydric soil rating:* No

### Description of Rock Outcrop

#### Setting

*Landform:* Ridges  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Limestone

#### Typical profile

*R - 0 to 80 inches:* bedrock

#### Properties and qualities

*Slope:* 8 to 30 percent  
*Depth to restrictive feature:* 0 to 2 inches to lithic bedrock  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to very high (0.06 to 19.98 in/hr)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### Brackett

*Percent of map unit:* 4 percent  
*Landform:* Ridges  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Side slope, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ  
*Hydric soil rating:* No

#### Kerrville

*Percent of map unit:* 2 percent  
*Landform:* Ridges  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Side slope, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ  
*Hydric soil rating:* No

### **Krum**

*Percent of map unit:* 1 percent

*Landform:* Ridges

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ

*Hydric soil rating:* No

### **Tarpley**

*Percent of map unit:* 1 percent

*Landform:* Ridges

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Ecological site:* R081CY361TX - Redland 29-35 PZ

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Comal and Hays Counties, Texas

Survey Area Data: Version 19, Aug 24, 2022

## Comal and Hays Counties, Texas

### Or—Orif soils, moist, 0 to 3 percent slopes, frequently flooded

#### Map Unit Setting

*National map unit symbol:* 2t0sp  
*Elevation:* 500 to 1,270 feet  
*Mean annual precipitation:* 33 to 37 inches  
*Mean annual air temperature:* 66 to 69 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Orif, moist, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Orif, Moist

##### Setting

*Landform:* Flood plains on river valleys  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, concave  
*Parent material:* Calcareous sandy and gravelly alluvium derived from limestone

##### Typical profile

*A - 0 to 20 inches:* gravelly loamy sand  
*2C1 - 20 to 60 inches:* extremely gravelly loamy sand  
*3C2 - 60 to 80 inches:* coarse sand

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* FrequentNone  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 95 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* A  
*Ecological site:* R081CY561TX - Loamy Bottomland 29-35 PZ  
*Hydric soil rating:* No

### Minor Components

#### Oakalla

*Percent of map unit:* 8 percent  
*Landform:* Flood plains on river valleys  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R081CY561TX - Loamy Bottomland 29-35 PZ  
*Hydric soil rating:* No

#### Riverwash

*Percent of map unit:* 4 percent  
*Landform:* Flood plains on river valleys  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, concave  
*Hydric soil rating:* No

#### Frio

*Percent of map unit:* 2 percent  
*Landform:* Flood plains on river valleys  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R081CY561TX - Loamy Bottomland 29-35 PZ  
*Hydric soil rating:* No

#### Unnamed, hydric

*Percent of map unit:* 1 percent  
*Landform:* Depressions on flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Comal and Hays Counties, Texas  
Survey Area Data: Version 19, Aug 24, 2022

## **SITE GEOLOGIC NARRATIVE**

### **Physiography**

From northwest to southeast, the three physiographic provinces in Comal County are: the Edwards Plateau, the Blackland Prairie, and the West Gulf Coastal Plain. The Edwards Plateau terrain is rugged and hilly, with elevations ranging from 1,100 feet to 1,900 feet above sea level. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Bexar County and is composed of fault blocks of limestone, chalk, shale, and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 700 feet to 1100 feet above sea level. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. The West Gulf Coastal Plain lies southeast of the Blackland Prairie and is composed of relatively flat-lying beds of marl, clay, and sandy clay. According to topographic maps, elevations at the subject range from approximately 1,018 feet above mean sea level along F.M. 1863, to approximately 985 feet ASL in Cibolo Creek.

### **Stratigraphy and Structure**

Rocks at the site are mapped as the Pleistocene Fluvial Terrace deposits (Qt) on the majority of the site and the Lower Cretaceous Upper Glen Rose Formation on the far north portion of the site.

Fluvial Terrace deposits consist of gravel, sand, silt, and clay; adjacent to Edwards Plateau, predominantly gravel, limestone, dolomite, and chert; southeastward in vicinity of Tertiary rocks, increasing amounts of sand, silt, and clay; contiguous terraces are separated by a solid line. These low terrace deposits are mostly above flood level along entrenched streams; Fluvial morphology well preserved with point bars, oxbows, and abandoned channel segments; most rivers below Balcones escarpment are entrenched and do not have active floodplains; some exceptions are Nueces River, part of Medina River, and San Antonio River below mouth of Medina.

The Glen Rose has the *Corbula* bed, C, dividing the formation into upper, (Kgru), and lower, (Kgrl). The Glen Rose contains limestone, dolomite, and marl as alternating resistant and recessive beds forming staircase topography; limestone, aphanitic to fine grained, hard to soft and marly, light gray to yellowish gray; dolomite, fine grained, porous, yellowish brown; marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids. Upper part, Kgru, relatively thinner bedded, more dolomitic, and less fossiliferous; thickness about 220 feet, the lower Glen Rose is approximately 160 feet thick.

### **SITE INVESTIGATION**

The site investigation was performed by systematically traversing the subject tract, and mapping fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture



zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

#### **SUMMARY**

No sensitive features were noted on the subject tract. A water well is located in the east-central portion of the site, but is not considered a sensitive feature. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.


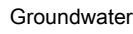






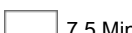


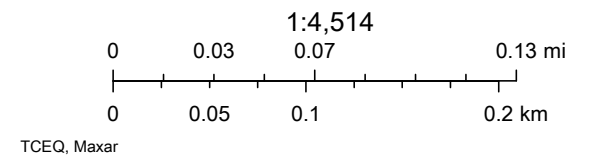


# Edwards Aquifer Viewer Custom Print



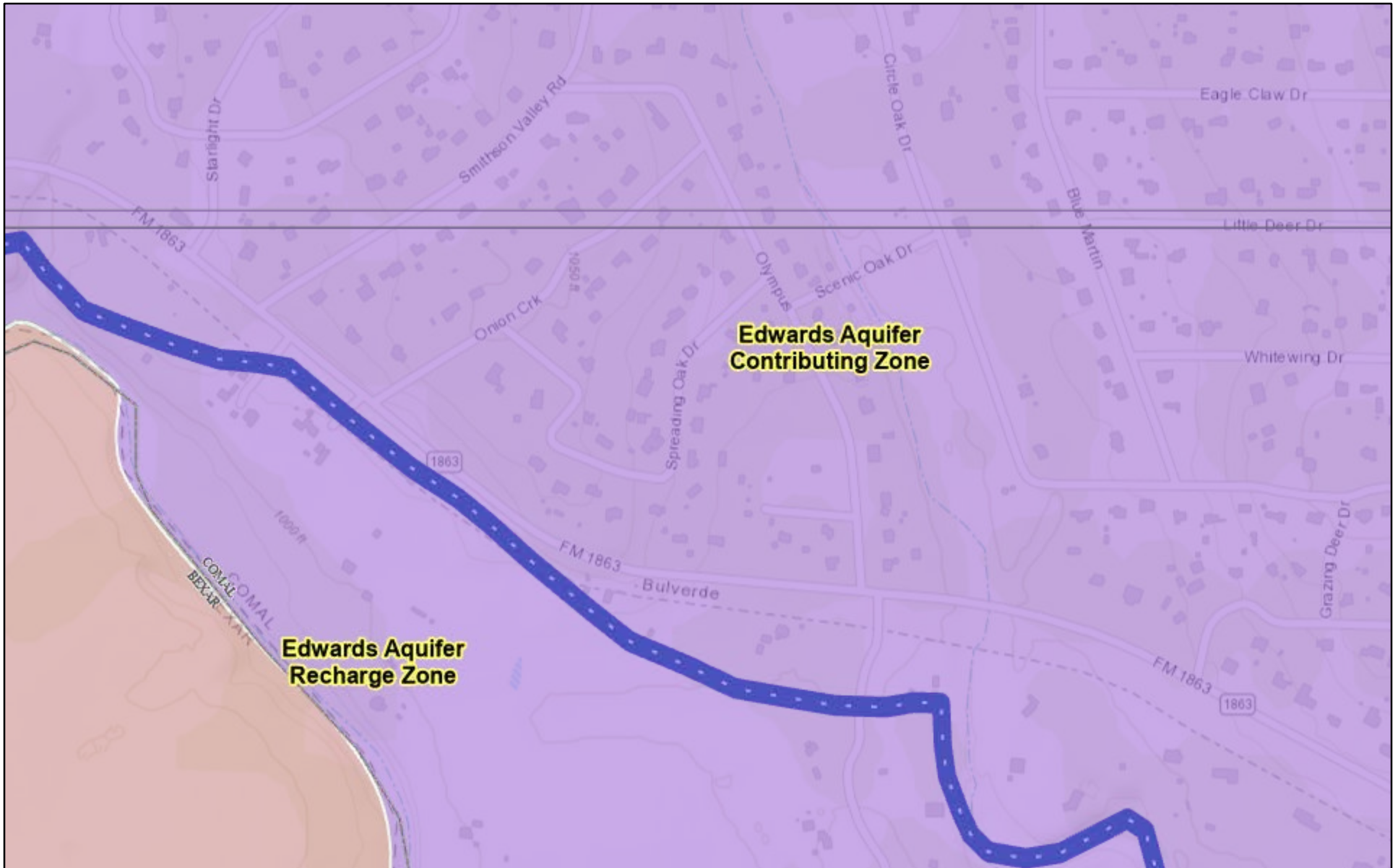
3/31/2023, 10:54:39 AM

- |  |  |  |
|--|--|--|
|  Edwards Aquifer Label                 |  Groundwater Conservation Districts |  Trinity Glen Rose GCD |
|  Edwards Aquifer Boundary              |  Comal Trinity GCD                  |  TX Counties           |
|  Edwards Aquifer Boundary central line |  Edwards Aquifer Authority          |  7.5 Minute Quad Grid  |


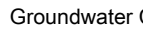











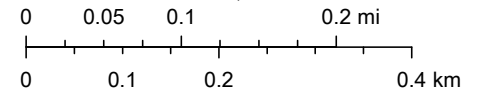
# Pink House Storage & Marketplace



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|--|--|---|
|  Edwards Aquifer Label                 |  Groundwater Conservation Districts |  Trinity Glen Rose GCD |
|  Edwards Aquifer Boundary              |  Comal Trinity GCD                  |  TX Counties           |
|  Edwards Aquifer Boundary central line |  Edwards Aquifer Authority          |  7.5 Minute Quad Grid  |

1:9,028



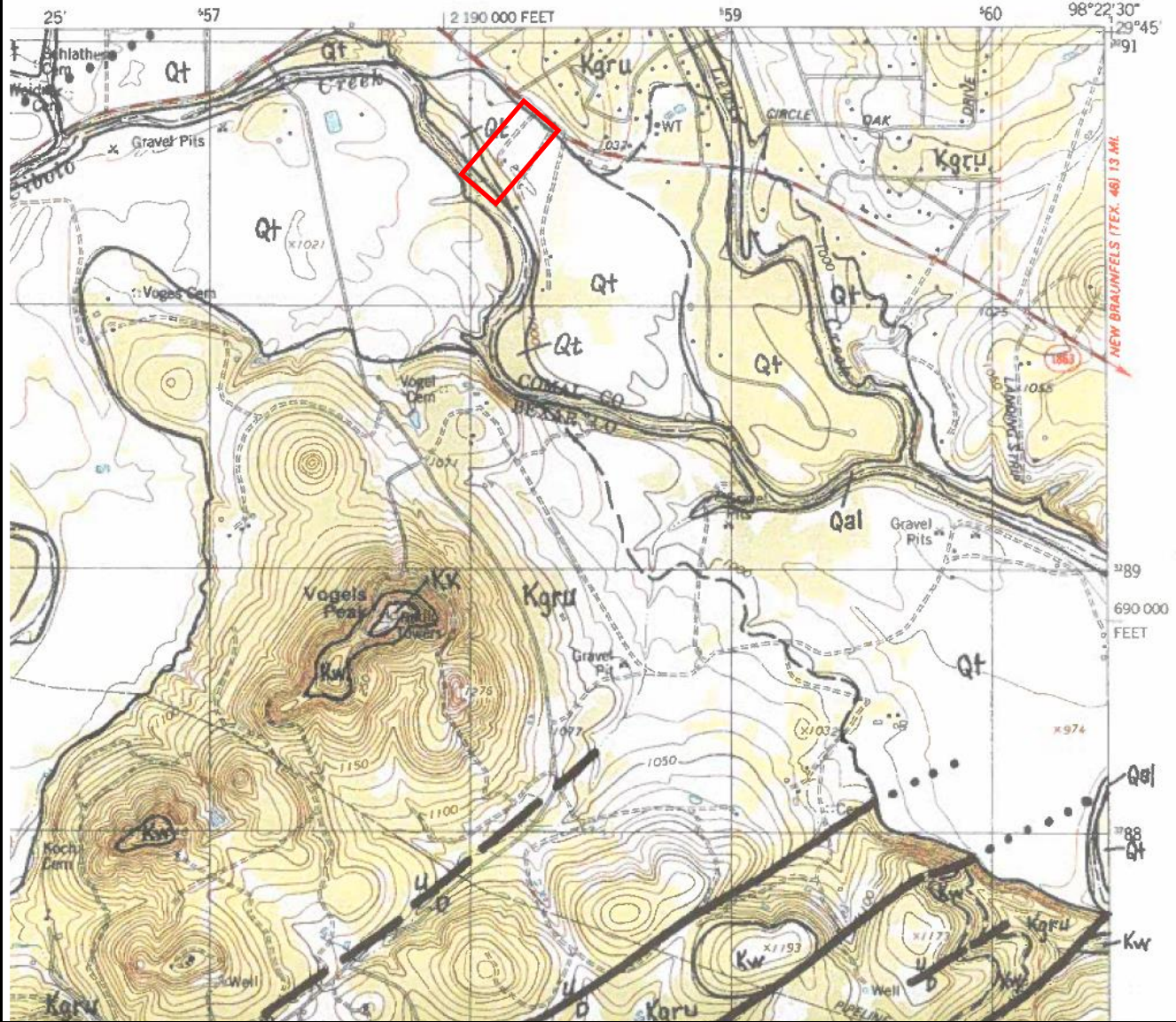
BCAD, Comal County, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, TCEQ

Web AppBuilder for ArcGIS

TCEQ | BCAD, Comal County, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA |

OFM 0022  
 BULVERDE QUADRANGLE  
 TEXAS  
 7.5 MINUTE SERIES (TOPOGRAPHIC)

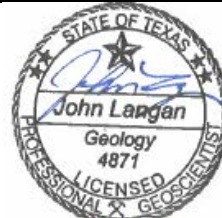
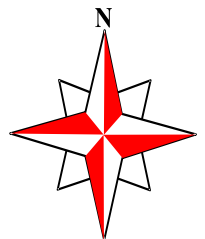
6343 IV S  
 (SMITHSONIAN)



**intertek**  
**psi**  
 PSI, Inc.  
 3 Burwood Lane  
 San Antonio, Texas 78216

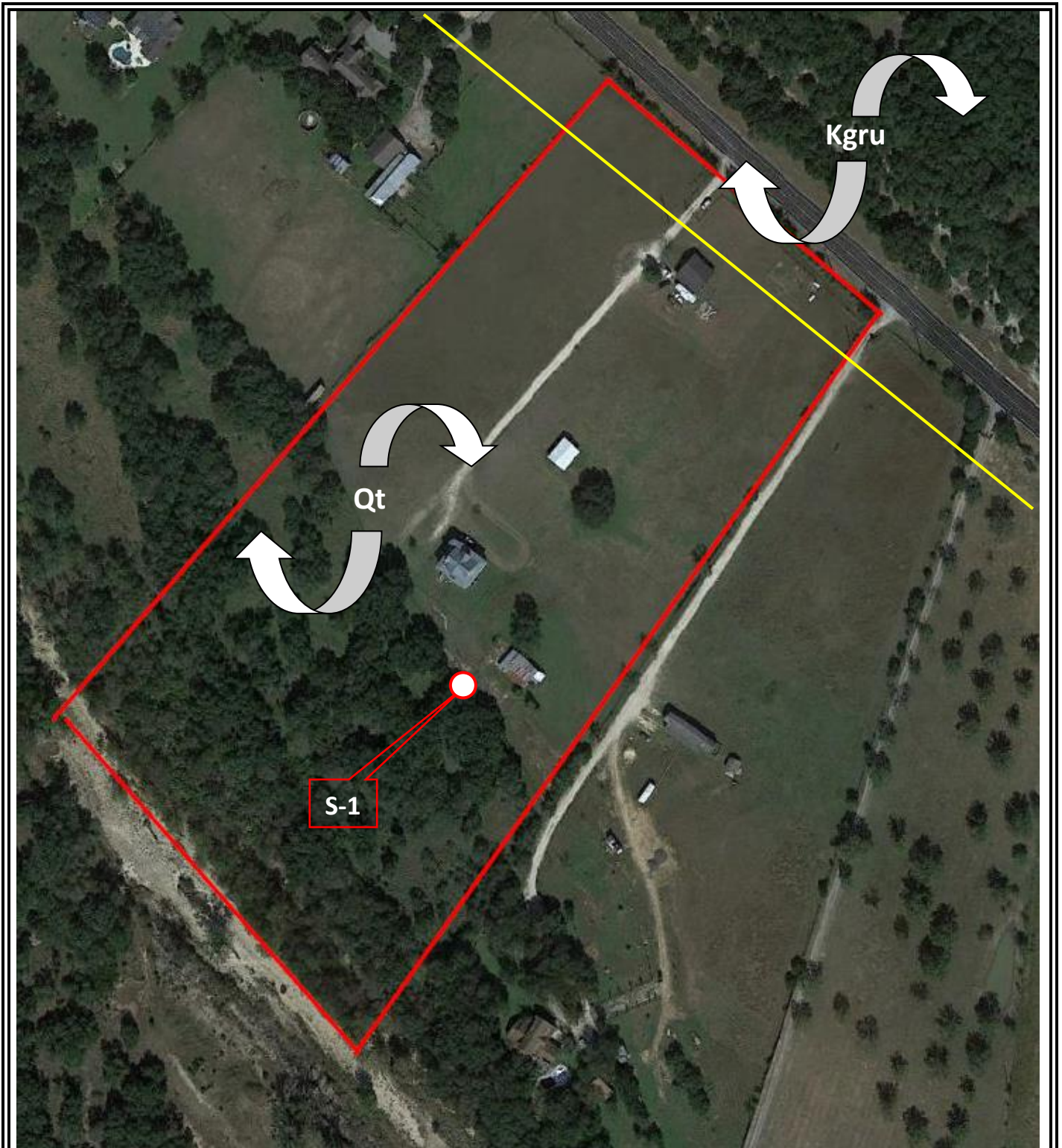
**PROJECT NAME:**  
 Pink House Storage &  
 Marketplace Tract  
 4640 F.M. 1863  
 Bulverde, Comal County, Texas  
 PROJECT NO.:435-5868

**Geologic Map of the  
 Bulverde, Texas Quadrangle**  
 (Bureau of Economic Geology,  
 UT-Austin1993) Geology from  
 Abbot (1973) and E.W. Collins  
 (1993)



3/31/23





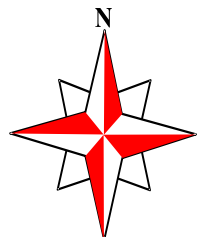
PSI, Inc.  
 3 Burwood Lane  
 San Antonio, Texas 78216

**PROJECT NAME:**  
 Pink House Storage &  
 Marketplace Tract  
 4640 F.M. 1863  
 Bulverde, Comal County, Texas  
 PROJECT NO.:435-5868

**Geologic Feature Map**

Key

- Qt- Quaternary Fluvialite Terrace Deposits
- Kgru-Lower Cretaceous Glen Rose Fm. Upper Member
- S-1 Feature Location



GEOLOGIC ASSESSMENT TABLE					PROJECT NAME: $\text{\$}$ Pink House Storage & Marketplace														
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)	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z							<40	$\geq 40$	<1.6	$\geq 1.6$	
S-1	29-44-43.4	98-23-56.3	MB	30	Qt	0.8	0.8	500					3	33	X			X	Hillside

\* DATUM: \_\_\_\_\_

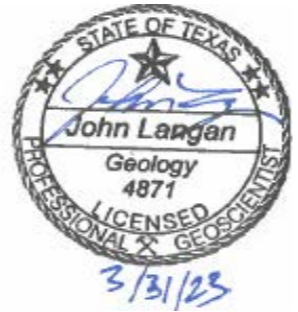
2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

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.

\_\_\_\_\_ *John Lagan*



Date 3/31/23  
 Sheet  1  of  1

jj





1. View southeast along the south property line (Salado Creek) from the southwest corner of the Pink House Storage and Marketplace Tract, 4640 F.M. 1863, Bulverde, Texas.



2. View northwest along the south property line (Salado Creek) from the SEC.





3. View northeast of the site interior from the SEC of the site.

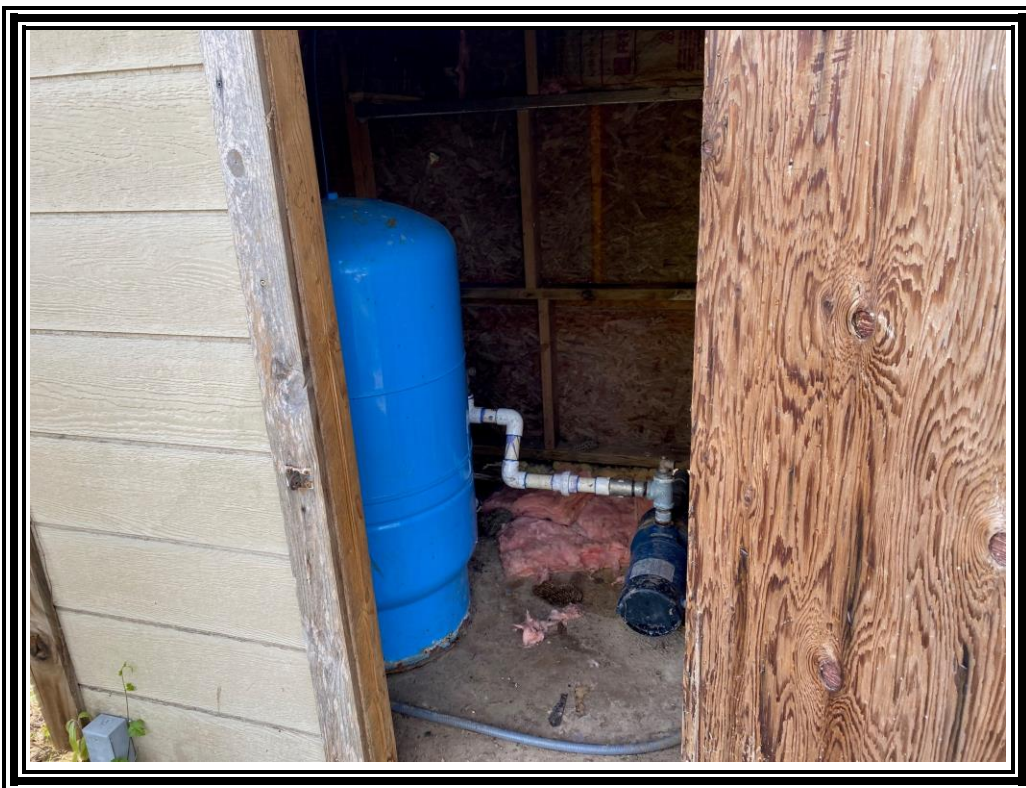


4. View of thick vegetation in the site interior, north of Salado Creek.





5. View of slope to Salado Creek, with thick soil and vegetation.



6. View of water well on-site.





7. View south of the site interior from the NWC of the tract. Prior cultivated agricultural use is evident.



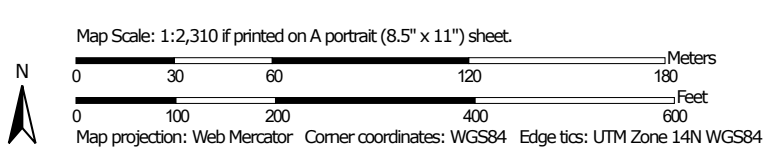
8. View southwest along the west property line from the NWC of the tract. Note lack of outcrops, as site is located on Quaternary Fluvial Terrace Deposits.



Soil Map—Comal and Hays Counties, Texas



Soil Map may not be valid at this scale.



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Comal and Hays Counties, Texas

Survey Area Data: Version 19, Aug 24, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 10, 2020—Dec 17, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CrD	Comfort-Rock outcrop complex, 1 to 8 percent slopes	0.0	0.0%
ErG	Eckrant-Rock outcrop association, 8 to 30 percent slopes	3.5	26.8%
KrB	Krum clay, 1 to 3 percent slopes	6.1	46.9%
Or	Orif soils, moist, 0 to 3 percent slopes, frequently flooded	0.5	3.7%
SuB	Sunev clay loam, 1 to 3 percent slopes	2.9	22.6%
<b>Totals for Area of Interest</b>		<b>12.9</b>	<b>100.0%</b>



# 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: ~~Shane Klar, P.E.~~ *Zach Quisenberry*

Date: *4-6-23*

Signature of Customer/Agent:

*Zach Quisenberry*

Regulated Entity Name: Pink House Storage and Marketplace

## 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): 5.00 acres

3. Estimated projected population: 0

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	56,650	÷ 43,560 =	1.30
Parking	56,272	÷ 43,560 =	1.29
Other paved surfaces	7,185	÷ 43,560 =	0.17
Total Impervious Cover	120,107	÷ 43,560 =	2.76

**Total Impervious Cover** 2.76 ÷ **Total Acreage** 5.0 X 100 = 55.2 % 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<sup>2</sup> ÷ 43,560 Ft<sup>2</sup>/Acre = \_\_\_\_\_ acres.

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

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

L x W = \_\_\_\_\_ Ft<sup>2</sup> ÷ 43,560 Ft<sup>2</sup>/Acre = \_\_\_\_\_ acres.

Pavement area \_\_\_\_\_ acres ÷ R.O.W. area \_\_\_\_\_ acres x 100 = \_\_\_\_\_% impervious cover.

11.  A rest stop will be included in this project.
- A rest stop will not be included in this project.



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

### ***Stormwater to be generated by the Proposed Project***

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

### ***Wastewater to be generated by the Proposed Project***

14. The character and volume of wastewater is shown below: **No proposed wastewater generation**

_____ % Domestic	_____ Gallons/day
_____ % Industrial	_____ Gallons/day
_____ % Commingled	_____ Gallons/day
TOTAL gallons/day <b>0</b>	

15. Wastewater will be disposed of by:

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

**Attachment C - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

Sewage Collection System (Sewer Lines):

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

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

The SCS was previously submitted on \_\_\_\_\_.

The SCS was submitted with this application.

The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

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

- Existing.  
 Proposed.

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

## **Site Plan Requirements**

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

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

Site Plan Scale: 1" = 100 '.

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): FEMA FIRMETTE: 48091C0385F eff. date 9/02/2009

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 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply) *Well onsite, outside of project boundary*

The wells are not in use and have been properly abandoned.

The wells are not in use and will be properly abandoned.

The wells are in use and comply with 16 TAC §76.

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

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

All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

No sensitive geologic or manmade features were identified in the Geologic Assessment.

**Attachment D - Exception to the Required Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.

- 22.  The drainage patterns and approximate slopes anticipated after major grading activities.
- 23.  Areas of soil disturbance and areas which will not be disturbed.
- 24.  Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
- 25.  Locations where soil stabilization practices are expected to occur.
- 26.  Surface waters (including wetlands).
  - N/A
- 27.  Locations where stormwater discharges to surface water or sensitive features are to occur.
  - There will be no discharges to surface water or sensitive features.
- 28.  Legal boundaries of the site are shown.

### ***Administrative Information***

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

**ATTACHMENT “A”**  
**Factors Affecting Water Quality**

The development may introduce pollution from the asphalt streets and drives, automobile waste, household cleaning chemicals, or improperly disposed of waste or litter. To mitigate the increase in TSS load generated by the development, an Up-Flo filtration device has been designed to remove the necessary TSS load per TCEQ Technical Guidance on BMPs RG-348.

**ATTACHMENT “B”**  
**Volume and Character of Stormwater**

The development of this site will result in a minimal increase in stormwater run-off. The drainage area for the site consists of approximately 2.89-acres. All the stormwater runoff drains to the Cibolo Creek.

**ATTACHMENT “C”**  
**Suitability Letter from Authorized Agent**

No OSSF is proposed for this project.

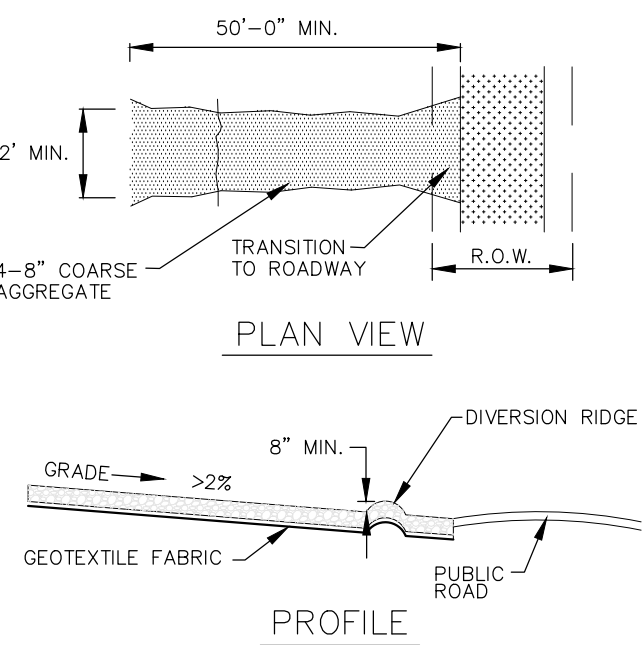
**ATTACHMENT “D”**  
**Exception to the Required Geologic Assessment**

No exception will be requested.



1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).
7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARDS AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
  - A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
  - B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
  - C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

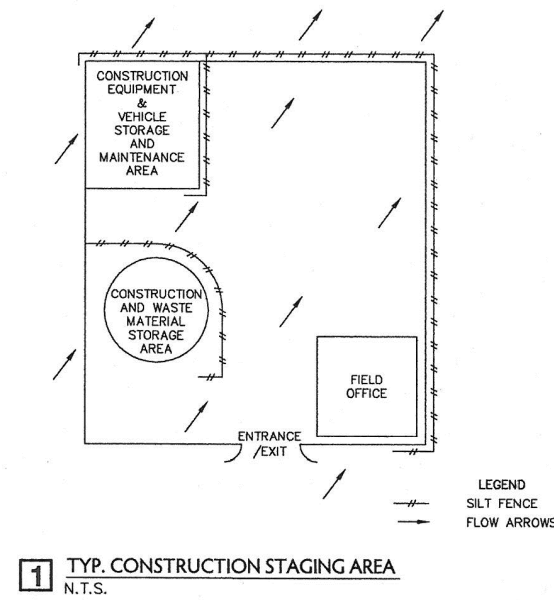
AUSTIN REGIONAL OFFICE      SAN ANTONIO REGIONAL OFFICE  
 2800 S. IH 35, SUITE 100      14250 JUDSON ROAD  
 AUSTIN, TEXAS 78704-5712      SAN ANTONIO, TEXAS 78233-4480  
 PHONE (512) 339-2929      PHONE (210) 490-5096  
 FAX (512) 339-3795      FAX (210) 545-4329



**STABILIZED CONSTRUCTION ENTRANCE / EXIT**

- MATERIALS:**
- (1) THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
  - (2) THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
  - (3) THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD<sup>2</sup>, A MULLEN BURST RATING OF 140 LB/IN<sup>2</sup>, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
  - (4) IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.
- INSTALLATION:**
- (1) AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
  - (2) THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
  - (3) THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
  - (4) IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
  - (5) PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
  - (6) PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
  - (7) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
  - (8) INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
- INSPECTION AND MAINTENANCE GUIDELINES:**
- (1) THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR LOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  - (2) ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
  - (3) WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
  - (4) WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
  - (5) ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

IMPERVIOUS COVER	
DESCRIPTION	ACRES
TOTAL LAND AREA	5.00
TOTAL IMPERVIOUS AREA	2.76
% IMPERVIOUS	55.2%



**TYPICAL CONSTRUCTION STAGING AREA**

**SOIL STABILIZATION NOTE**  
 ALL DISTURBED SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITH 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.

**GRAVEL FILTER BAGS**  
**MATERIALS:**  
 INLET GRAVEL FILTER BAGS TO BE 3/4" GRAVEL CONTAINED IN PERVIOUS BURLAP BAGS OR SYNTHETIC NET BAGS (1/8" MESH) APPROX. 24" LONG, 12" WIDE AND 6" HIGH.

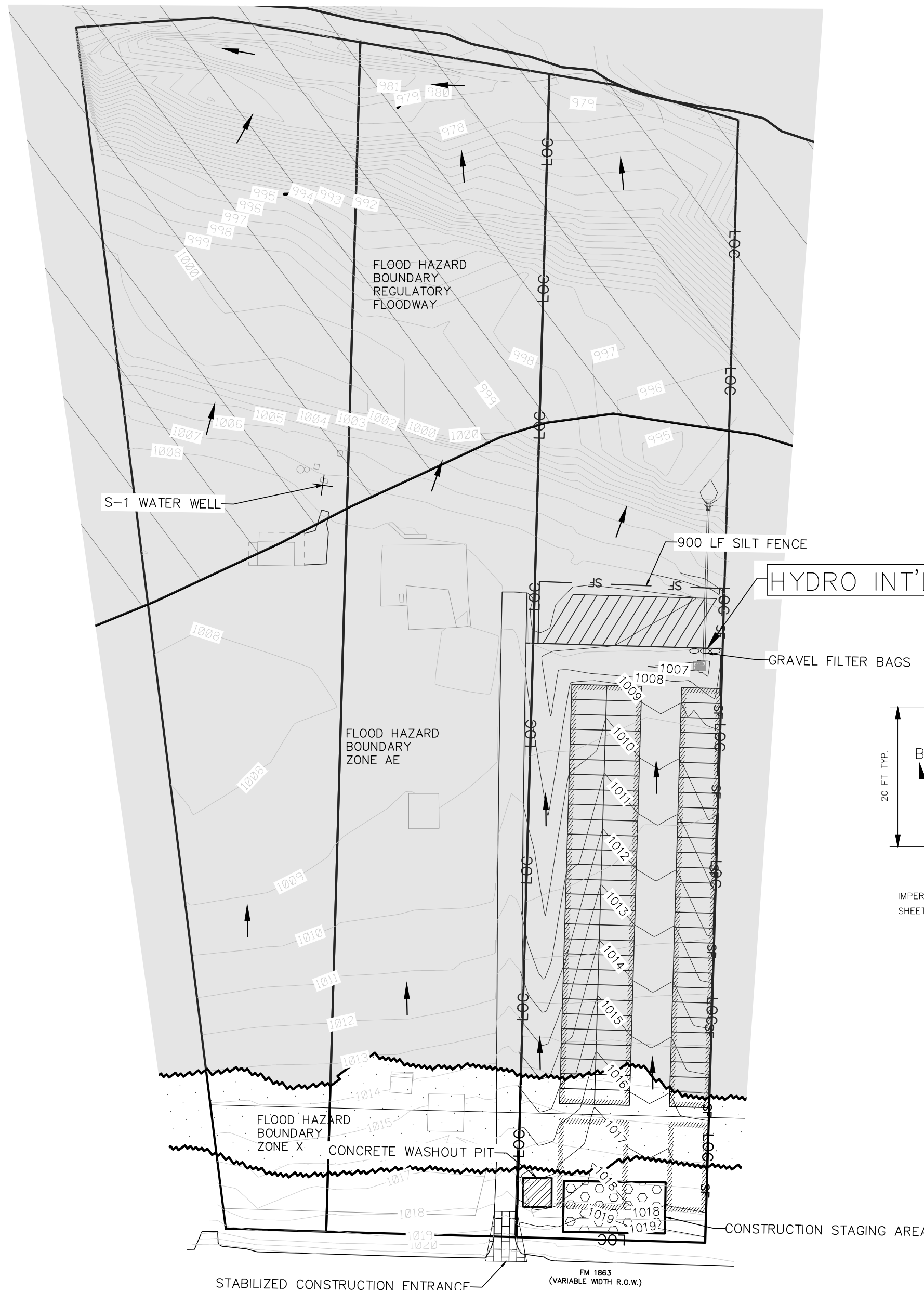
**HYDRAULIC MULCH**  
**MATERIALS:**  
 HYDRAULIC MULCHES: WOOD FIBER MULCH CAN BE APPLIED ALONE OR AS A COMPONENT OF HYDRAULIC MATRICES. WOOD FIBER APPLIED ALONE IS TYPICALLY APPLIED AT THE RATE OF 2,000 TO 4,000 LB/ACRE. WOOD FIBER MULCH IS MANUFACTURED FROM WOOD OR WOOD WASTE FROM LUMBER MILLS OR FROM URBAN SOURCES.  
 HYDRAULIC MATRICES: HYDRAULIC MATRICES INCLUDE A MIXTURE OF WOOD FIBER AND ACRYLIC POLYMER OR OTHER TACKFERS AS BINDER. APPLY AS A LIQUID SLURRY USING A HYDRAULIC APPLICATION MACHINE (I.E., HYDRO SEEDER) AT THE FOLLOWING MINIMUM RATES, OR AS SPECIFIED BY THE MANUFACTURER TO ACHIEVE COMPLETE COVERAGE OF THE TARGET AREA: 2,000 TO 4,000 LB/ACRE WOOD FIBER MULCH, AND 5 TO 10% (BY WEIGHT) OF TACKIFIER (ACRYLIC COPOLYMER, GUAR, PESTICIDE, ETC.).  
 BONDED FIBER MATRIX: BONDED FIBER MATRIX (BFM) IS A HYDRAULICALLY APPLIED SYSTEM OF FIBERS AND ADHESIVES THAT UPON DRYING FORMS AN EROSION RESISTANT BLANKET THAT PROMOTES VEGETATION, AND PREVENTS SOIL EROSION. BFMS ARE TYPICALLY APPLIED AT RATES FROM 3,000 LB/ACRE TO 4,000 LB/ACRE BASED ON THE MANUFACTURER'S RECOMMENDATION. A BIODEGRADABLE BFM IS COMPOSED OF MATERIALS THAT ARE 100% BIODEGRADABLE. THE BINDER IN THE BFM SHOULD ALSO BE BIODEGRADABLE AND SHOULD NOT DISSOLVE OR DISPERSE UPON RE-WETTING. TYPICALLY, BIODEGRADABLE BFMS SHOULD NOT BE APPLIED IMMEDIATELY BEFORE, DURING OR IMMEDIATELY AFTER RAINFALL IF THE SOIL IS SATURATED. DEPENDING ON THE PRODUCT, BFMS TYPICALLY REQUIRE 12 TO 24 HOURS TO DRY AND BECOME EFFECTIVE.

**INSTALLATION:**

1. PRIOR TO APPLICATION, ROUGHEN EMBANKMENT AND FILL AREAS BY ROLLING WITH A CRIMPING OR PUNCHING TYPE ROLLER OR BY TRACK WALKING. TRACK WALKING SHALL ONLY BE USED WHERE OTHER METHODS ARE IMPRACTICAL.
2. TO BE EFFECTIVE, HYDRAULIC MATRICES REQUIRE 24 HOURS TO DRY BEFORE RAINFALL OCCURS.
3. AVOID MULCH OVER SPRAY ONTO ROADS, SIDEWALKS, DRAINAGE CHANNELS, EXISTING VEGETATION, ETC.
4. 4" OF TOP SOIL SHALL BE PLACED.

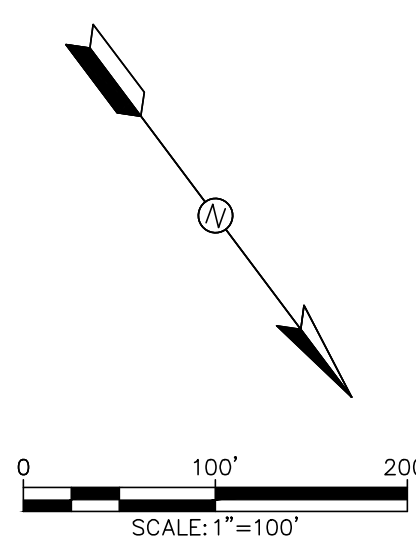
**INSPECTION AND MAINTENANCE GUIDELINES:**

1. MULCHED AREAS SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.
2. AREAS DAMAGED BY STORMS OR NORMAL CONSTRUCTION ACTIVITIES SHOULD BE REGRADED AND HYDRAULIC MULCH REAPPLIED AS SOON AS PRACTICAL.



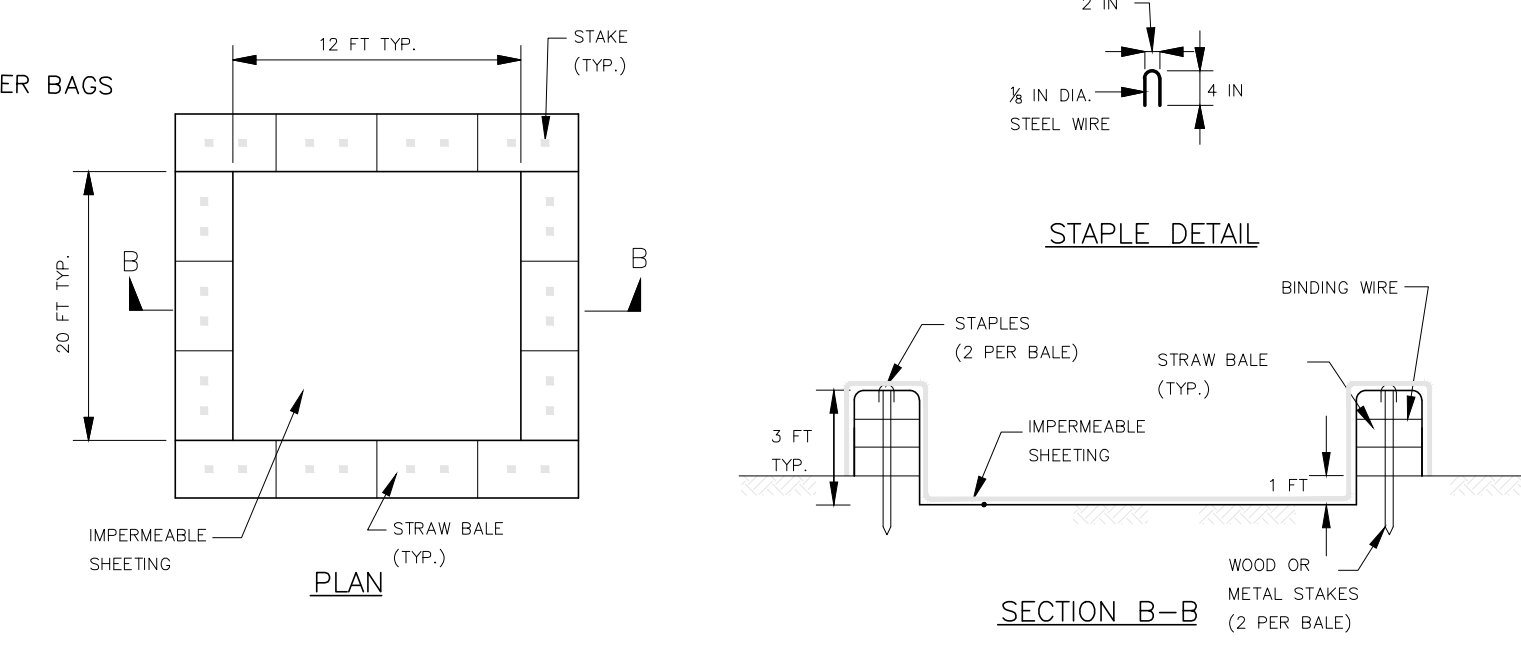
**SEQUENCE OF CONSTRUCTION:**

1. OBTAIN CITY APPROVED SITE PREPARATION PLANS, AND TPDES PERMIT (NOT A COPY OF THE TPDES APPLICATION TO TCEQ), IF APPLICABLE.
2. INSTALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS.
3. SCHEDULE PRE-CON MEETING WITH THE CITY.
4. BEGIN DEMOLITION ACTIVITIES, IF APPLICABLE.
5. BEGIN SITE CLEARING AND GRADING.
6. INSTALL TEMPORARY SEED POND AS APPROPRIATE.
7. RESTORE AND REVEGETATE ALL DISTURBED AREAS NOT UNDER IMPERMEABLE IMPROVEMENTS.
8. COMPLETE ANY REMAINING "PUNCH LIST" ITEMS.
9. CITY OF NEW BRAUNFELS FINAL INSPECTION.
10. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROLS AFTER PERMANENT STABILIZATION IS AT LEAST 70% EVENLY ESTABLISHED. RYE IS NOT ACCEPTED.
11. CITY ISSUES CERTIFICATE OF ACCEPTANCE OR OCCUPANCY.

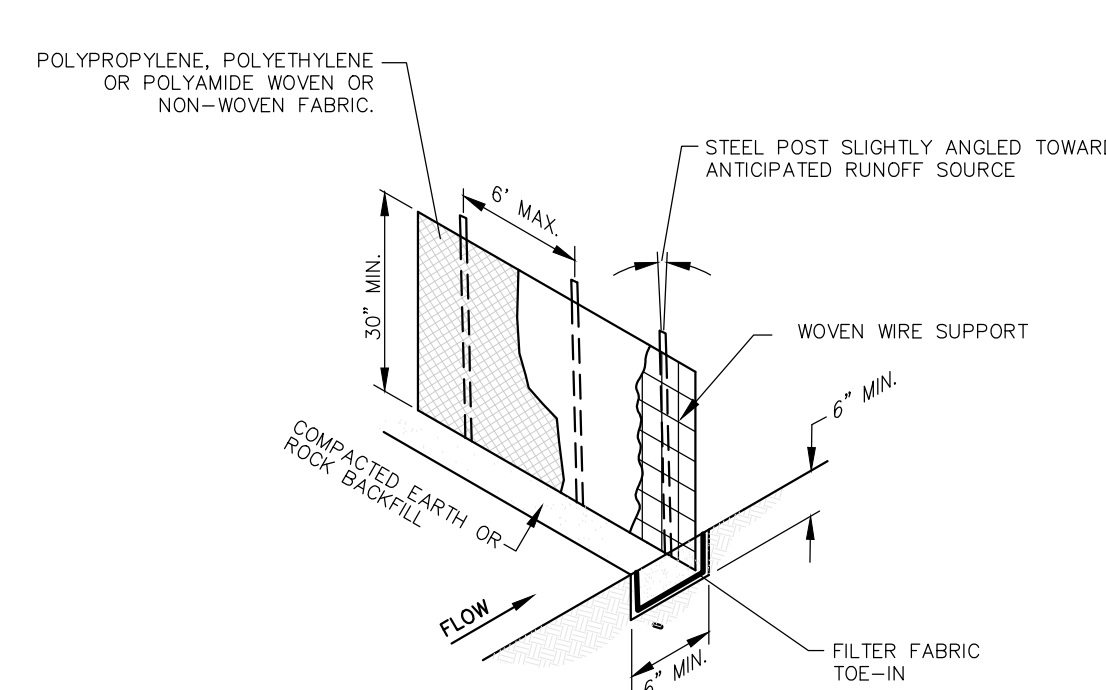


**LEGEND**

- SF — SILT FENCE
- LOC — LIMITS OF CONSTRUCTION
- 900 — EXISTING CONTOURS
- 900 — PROPOSED CONTOURS
- FLOW ARROWS
- GRAVEL FILTER BAGS (INLET PROTECTION)
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- TRUCK WASH OUT PIT
- CONSTRUCTION STAGING AREA
- FLOOD HAZARD BOUNDARY: REGULATORY FLOODWAY
- FLOOD HAZARD BOUNDARY: ZONE AE
- FLOOD HAZARD BOUNDARY: ZONE X



**TYPICAL CONCRETE TRUCK WASHOUT PIT**



**SILT FENCE**

- MATERIALS:**
- (1) SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN<sup>2</sup>, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 50.
  - (2) FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YBAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT<sup>2</sup>, AND BRINDELL HARDNESS EXCEEDING 140.
  - (3) WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.
- INSTALLATION:**
- (1) STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1- FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER, WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
  - (2) LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.
  - (3) THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROPS), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
  - (4) THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
  - (5) SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
  - (6) SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- INSPECTION AND MAINTENANCE GUIDELINES:**
- (1) INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
  - (2) REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
  - (3) REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
  - (4) REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DUNE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
  - (5) WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



**ZACH QUISENBERRY**  
 4640 FM 1863  
 BULVERDE, TX 78163

**PINK HOUSE STORAGE & MARKETPLACE**

**WPAP SITE PLAN**

**SHEET**

1 OF 1

NO	DATE	ISSUES AND REVISIONS

2021 W SH46, STE 105  
 NEW BRAUNFELS, TX. 78132  
 PH: 830-358-7127      ink-civil.com  
 TBPE FIRM F-13351



# 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.*

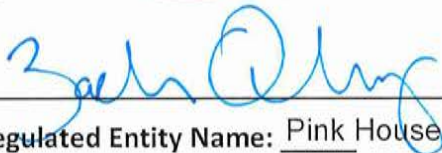
## Signature

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: Shane Klar, P.E. *Zach Quisenberry*

Date: 4-6-23

Signature of Customer/Agent:

  
\_\_\_\_\_

Regulated Entity Name: Pink House Storage and Marketplace

## Project Information

### Potential Sources of Contamination

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

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

The following fuels and/or hazardous substances will be stored on the site: \_\_\_\_\_

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

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

- Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
- Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- Fuels and hazardous substances will not be stored on the site.
- 2.  **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3.  Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4.  **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

### ***Sequence of Construction***

- 5.  **Attachment C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
  - For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
  - For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6.  Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Cibolo Creek

### ***Temporary Best Management Practices (TBMPs)***

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

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

- A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
  - A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
  - A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
  - A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8.  The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
- Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
  - There will be no temporary sealing of naturally-occurring sensitive features on the site.
9.  **Attachment F - Structural Practices.** A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10.  **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:
- For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
  - For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
  - For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
  - There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.



- There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11.  **Attachment H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
- N/A
12.  **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13.  All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14.  If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15.  Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16.  Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

### ***Soil Stabilization Practices***

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

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

18.  Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
19.  Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

### ***Administrative Information***

20.  All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
21.  If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
22.  Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.



**ATTACHMENT “A”**  
**Spill Response Actions**

Spill Prevention and Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The following steps will help reduce the stormwater impacts of leaks and spills:

***Education***

- (1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a “significant spill” is for each material they use, and what is the appropriate response for “significant” and “insignificant” spills. Employees should also be aware of when spills must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
- (2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- (3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- (4) Establish a continuing education program to indoctrinate new employees.
- (5) Have contractor’s superintendent or representative oversee and enforce proper spill prevention and control measures.

***General Measures***

- (1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- (2) Store hazardous materials and wastes in covered containers and protect from vandalism.
- (3) Place a stockpile of spill cleanup materials where it will be readily accessible.
- (4) Train employees in spill prevention and cleanup.
- (5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage, and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

### ***Cleanup***

(1) Clean up leaks and spills immediately.

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

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMP's in this section for specific information.

### ***Minor Spills***

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.



- (4) Follow the practice below for a minor spill:
- (5) Contain the spread of the spill.
- (6) Recover spilled materials.
- (7) Clean the contaminated area and properly dispose of contaminated materials.

### ***Semi-Significant Spills***

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

Spills should be cleaned up immediately:

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

### ***Significant/Hazardous Spills***

For significant or hazardous spills that are in reportable quantities:

- (1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
- (2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- (3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

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

More information on spill rules and appropriate responses is available on the TCEQ website at: [http://www.tnrcc.state.tx.us/enforcement/emergency\\_response.html](http://www.tnrcc.state.tx.us/enforcement/emergency_response.html)

### ***Vehicle and Equipment Maintenance***

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

### ***Vehicle and Equipment Fueling***

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.



**ATTACHMENT “B”**  
**Potential Sources of Contamination**

Potential sources of contamination are construction equipment leaks, re-fueling spills, port-o-lets, and the total suspended solids (TSS) due to the construction activities on-site. There are no other anticipated potential sources of contamination.

**ATTACHMENT “C”**  
**Sequence of Major Activities**

Stages of Construction:

1. Installation of temporary BMP's.
2. Minor site grading: This includes the removal of organic material and other debris within the proposed parking and building site. Approximate total disturbed area = 3.0 acres
3. Grading: Cutting and filling of the proposed site to prepare the site for parking and foundation construction. Approximate total disturbed area = 3.0 acres
4. Utility installation: All primary utility mains have already been installed and are available at the site. Sewer, water, gas, and electrical services will be installed at this time.
5. Finished grading: Final landscaping, parking and building infrastructure are installed. Approximate total disturbed area = 2.76 acres

**ATTACHMENT “D”**  
**Temporary BMP's and Measures**

The following sequence will be followed for installing temporary BMP's:

1. Silt fence will be constructed on the downgradient side of proposed site.
2. A stabilized construction exit will be installed prior to any site work.

A. Silt Fence will be installed on the most downgradient side of the site and will reduce potential pollution from any stormwater that originates onsite or offsite. A stabilized construction exit will be constructed at the entrance of the site; this will reduce the amount of contaminants leaving the site.

B. Silt fence will be placed on the downgradient side of each proposed improvement to contain pollutants generated from onsite runoff. Disturbed areas will be seeded to replace destroyed vegetation. The existing vegetation located downgradient of each proposed improvement will work in conjunction with the silt fence and stabilized construction entrance to prevent pollution of water originating onsite and/or flowing offsite.

C. The proposed silt fences, and stabilized construction entrance constructed upgradient of the existing streams will prevent pollutants from entering them, as well as the aquifer. According to the Geologic Assessment, there are no sensitive features with the project boundary.

D. There were no sensitive features identified in the Geologic Assessment.

#### **ATTACHMENT “E”**

##### **Request to Temporarily Seal a Feature**

There will be no request to temporarily seal a geologic feature.

#### **ATTACHMENT “F”**

##### **Structural Practices**

Stabilized Construction Entrance/Exit, rock gabions, and silt fence will be used to protect disturbed soils and to prevent contamination from leaving the project site.

#### **ATTACHMENT “G”**

##### **Drainage Area Map**

See Drainage Area Map at the end of this section.

#### **ATTACHMENT “H”**

##### **Temporary Sediment Pond Plans and Calculations**

There will not be more than 10 acres of disturbed soil in one common drainage area that will occur at one time. Silt fence will be used for small drainage areas. No sediment ponds will be constructed due to the minimal amount of soil disturbance.

#### **ATTACHMENT “I”**

##### **Inspection and Maintenance for BMP’s**

Inspection and Maintenance Plan: The contractor is required to inspect the control and fences at weekly intervals and after any rainfall events to ensure that they are functioning properly. The contractor is required to document any changes on the Site Plan, documentation must include person performing task, task performed, and date. The contractor must also document if proper inspection measures have been taken while making changes. The person(s) responsible for maintenance controls and fences shall immediately make any necessary repairs to damaged areas.

Temporary Construction Entrance/Exit: The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor. 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 an



approved sediment trap or sediment basin. All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

Silt Fence: Remove sediment when buildup reaches 6 inches. Replace any torn fabric or install a second line of fencing parallel to the torn section. Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points. When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

TCEQ staff will be allowed full access to the property during construction of the project for inspecting controls and fences and to verify that the accepted plan is being utilized in the field. TCEQ staff has the right to speak with the contractor to verify plan changes and modifications.

Documentation: All scheduled inspection and maintenance measures made to the temporary BMPs must be documented clearly on the WPAP Site Plan showing inspection/maintenance measures performed, date, and person responsible for inspection and maintenance. Any changes made to the location or type of controls shown on the accepted plans, due to onsite conditions, shall be documented on the site plan that is part of this Water Pollution Abatement Plan. No other changes shall be made unless approved by TCEQ and the Design Engineer. Documentation shall clearly show changes made, date, person responsible for the change, and the reason for the change.

**Owner's Information:**

Owner: Zach Quisenberry  
Phone: (432) 770-5171  
Address: 4640 FM 1863  
New Braunfels, TX 78163

**Design Engineer:**

Company: INK Civil  
Contact: Shane Klar, P.E.  
Phone: (830) 358-7127  
Address: 2021 SH 46W, Ste. 105  
New Braunfels, Texas 78132

**Person or Firm Responsible for Erosion/Sedimentation Control Maintenance:**

Company: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Address: \_\_\_\_\_

Signature of Responsible Party: \_\_\_\_\_

**This portion of the form shall be filled out and signed by the responsible party prior to construction.**

**ATTACHMENT “J”**  
**Schedule of Interim and Permanent Soil Stabilization Practices**

Areas which are disturbed by construction staging and storage areas will be hydro mulched with the appropriate seed mixture. Areas between the edge of pavement and property line will also be hydro mulched. There will be no fill slopes exceeding a 3:1 slope, and all fill slopes will be hydro mulched. Installation and acceptable mixtures of hydro mulch are as follows:

**Materials:**

Hydraulic Mulches: Wood fiber mulch can be applied alone or as a component of hydraulic matrices. Wood fiber applied alone is typically applied at the rate of 2,000 to 4,000 lb/acre. Wood fiber mulch is manufactured from wood or wood waste from lumber mills or from urban sources.

Hydraulic Matrices: Hydraulic matrices include a mixture of wood fiber and acrylic polymer or other tackifier as binder. Apply as a liquid slurry using a hydraulic application machine (i.e., hydro seeder) at the following minimum rates, or as specified by the manufacturer to achieve complete coverage of the target area: 2,000 to 4,000 lb/acre wood fiber mulch, and 5 to 10% (by weight) of tackifier (acrylic copolymer, guar, psyllium, etc.)

Bonded Fiber Matrix: Bonded fiber matrix (BFM) is a hydraulically applied system of fibers and adhesives that upon drying forms an erosion resistant blanket that promotes vegetation, and prevents soil erosion. BFMs are typically applied at rates from 3,000 lb/acre to 4,000 lb/acre based on the manufacturer’s recommendation. A biodegradable BFM is composed of materials that are 100% biodegradable. The binder in the BFM should also be biodegradable and should not dissolve or disperse upon re-wetting. Typically, biodegradable BFMs should not be applied immediately before, during or immediately after rainfall if the soil is saturated. Depending on the product, BFMs typically require 12 to 24 hours to dry and become effective.

Seed Mixtures:

<b>Dates</b>	<b>Climate</b>	<b>Species</b>	<b>(lb/ac.)</b>
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheats	30.0
		<b>Total</b>	<b>55.0</b>
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0

Fertilizer: Fertilizer should be applied at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus per acre, which is equivalent to about 1.0 pounds of nitrogen and phosphorus per 1000 square feet.

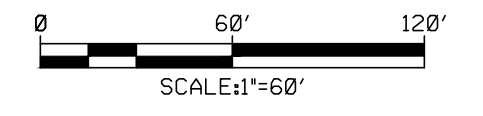
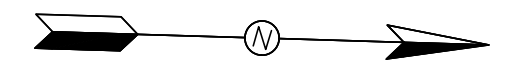


**Installation:**

- (1) Prior to application, roughen embankment and fill areas by rolling with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical.
- (2) To be effective, hydraulic matrices require 24 hours to dry before rainfall occurs.
- (3) Avoid mulch over spray onto roads, sidewalks, drainage channels, existing vegetation, etc.

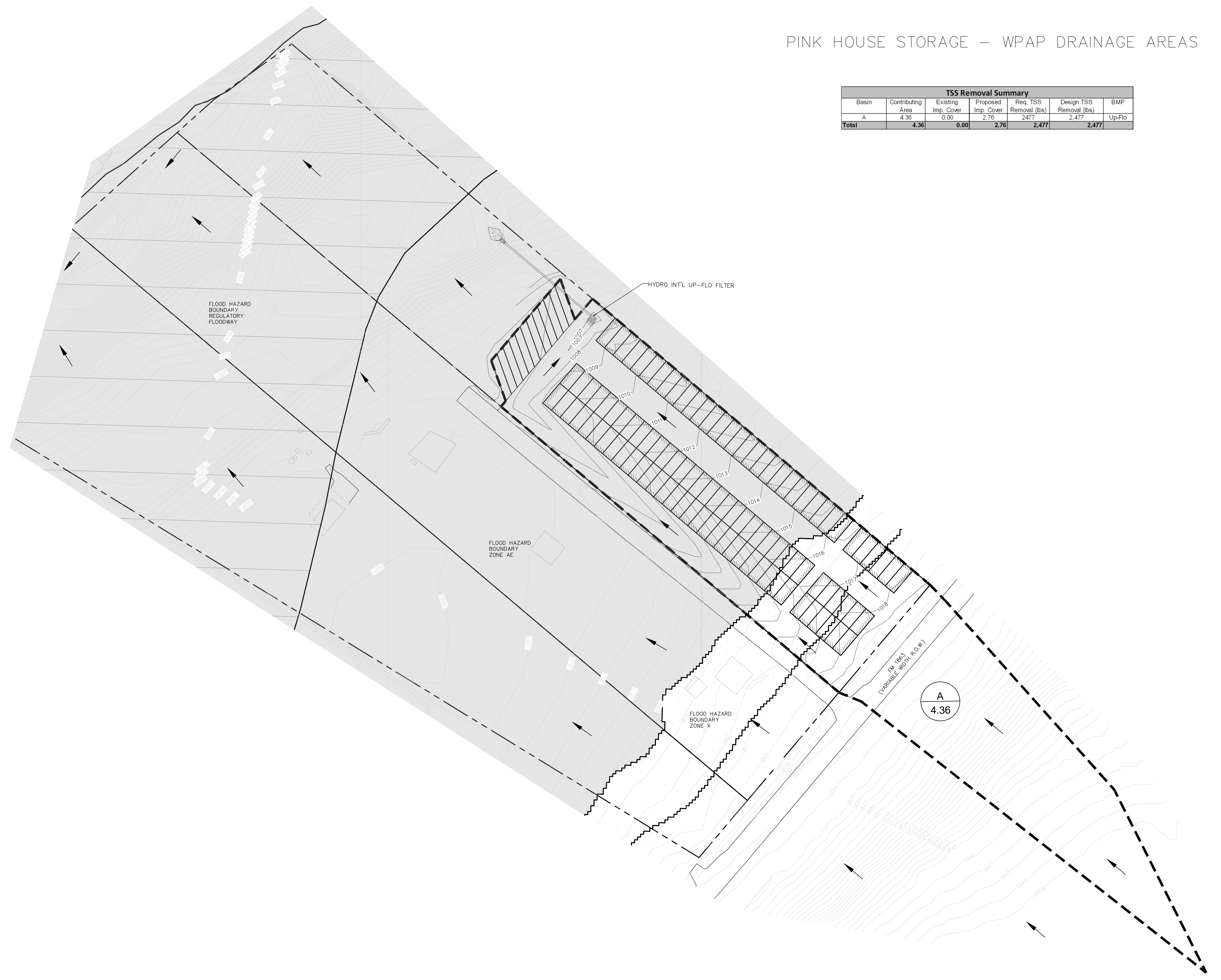
PINK HOUSE STORAGE – WPAP DRAINAGE AREAS

TSS Removal Summary						
Basin	Contributing Area	Existing Imp. Cover	Proposed Imp. Cover	Req. TSS Removal (lbs)	Design TSS Removal (lbs)	BMP
A	4.36	0.00	2.76	2477	2,477	Up-Flo
<b>Total</b>	<b>4.36</b>	<b>0.00</b>	<b>2.76</b>	<b>2,477</b>	<b>2,477</b>	



**LEGEND**

- PROPOSED DRAINAGE AREA BOUNDARY
- DRAINAGE BASIN LABEL  
BASIN AREA (AC)
- FLOW ARROWS
- FLOOD HAZARD BOUNDARY: REGULATORY FLOODWAY
- FLOOD HAZARD BOUNDARY: ZONE AE
- FLOOD HAZARD BOUNDARY: ZONE X



**ZACH QUISENBERRY**  
4640 FM 1863  
BULVERDE, TX 78163

**PINK HOUSE STORAGE & MARKETPLACE**

**WPAP DRAINAGE AREA MAP**

SHEET **1** OF **1**

NO	DATE	ISSUES AND REVISIONS



2021 W SH46, STE 105  
NEW BRAUNFELS, TX. 78132  
PH: 830-358-7127 ink-civil.com  
TBPE FIRM F-13351

Drawing Name: R:\Projects\010201 1863 Storage\Engineering Reports\WPAP\CAD Support DWG\Pink House Storage - Drainage Areas.dwg User: abalif@pinkhouse.com Apr 10, 2023 - 8:56am



# 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: Shane Klar, P.E. *Zach Quisenberry*

Date: 4-6-23

Signature of ~~Customer~~/Agent

  
\_\_\_\_\_

Regulated Entity Name: Pink House Storage and Marketplace

## Permanent Best Management Practices (BMPs)

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

- Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.  
 N/A
- These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.  
 The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.



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

N/A

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

N/A

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

The site will be used for low density single-family residential development and has 20% or less impervious cover.

The site will be used for low density single-family residential development but has more than 20% impervious cover.

The site will not be used for low density single-family residential development.

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

**Attachment A - 20% or Less Impervious Cover Waiver.** The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.

The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

The site will not be used for multi-family residential developments, schools, or small business sites.

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

- A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
  - No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
  - Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.
7.  **Attachment C - BMPs for On-site Stormwater.**
- A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
  - Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.
8.  **Attachment D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
- N/A
9.  The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
- The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.
  - Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10.  **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
- Design calculations (TSS removal calculations)
  - TCEQ construction notes
  - All geologic features
  - All proposed structural BMP(s) plans and specifications
- N/A

11.  **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
- Prepared and certified by the engineer designing the permanent BMPs and measures
  - Signed by the owner or responsible party
  - Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
  - A discussion of record keeping procedures
- N/A
12.  **Attachment H - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
- N/A
13.  **Attachment I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.
- N/A

### ***Responsibility for Maintenance of Permanent BMP(s)***

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

14.  The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
- N/A
15.  A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.
- N/A



**ATTACHMENT “A”**

**20% or Less Impervious Cover Waiver**

20% Impervious Cover Waiver does not apply.

**ATTACHMENT “B”**

**BMP’s for Upgradient Stormwater**

The site receives minimal upgradient storm water flow. Much of the upgradient stormwater is diverted by roadside ditches that routes the water around the site.

**ATTACHMENT “C”**

**BMP’s for On-Site Stormwater**

On-site stormwater will be routed through the drive aisles to the low of the drainage area where a stormwater filtration device is located to accommodate the runoff.

**ATTACHMENT “D”**

**BMP’s for Surface Streams**

No surface streams are near the site. All stormwater runoff drains to the Cibolo Creek.

**ATTACHMENT “E”**

**Request to Seal Feature**

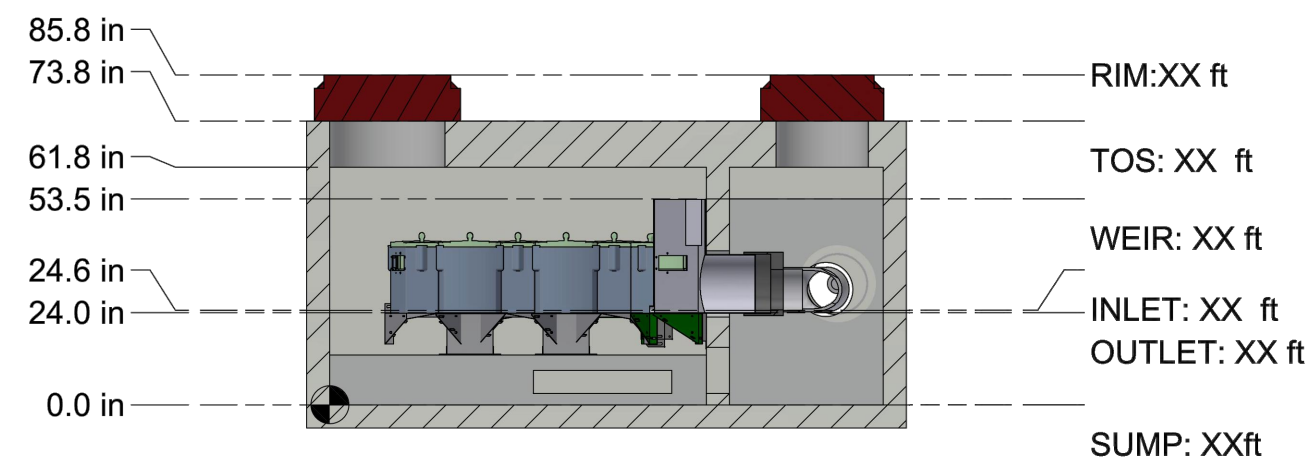
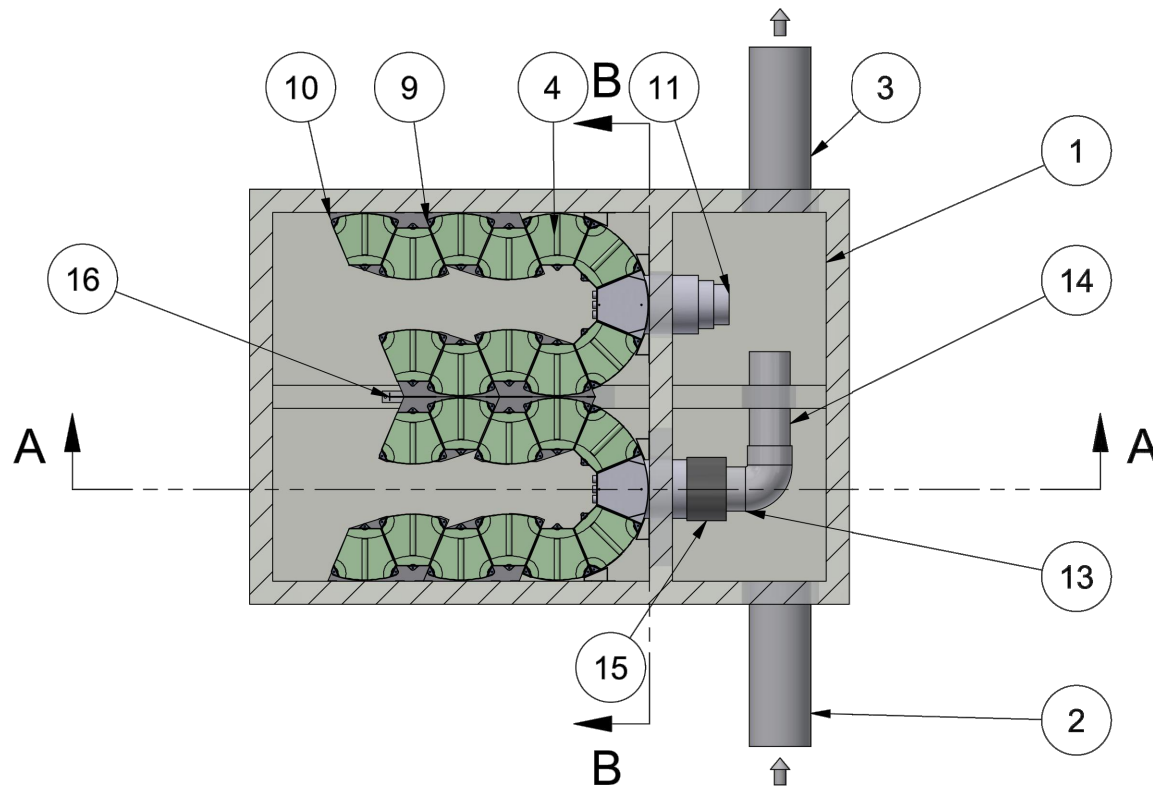
N/A

**ATTACHMENT “F”**

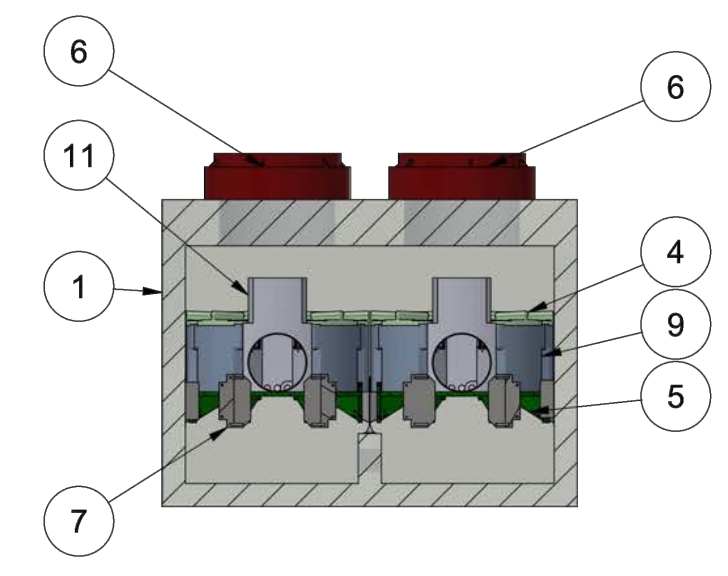
**Construction Plans**

Please see Construction Plans at the end of this section.





SECTION A-A  
SCALE 1:50



SECTION B-B  
SCALE 1:50

**NOT FOR CONSTRUCTION**

ITEM	QTY	DESCRIPTION	TYPE	SIZE (in)
1	1	PRECAST VAULT		8R X 12ft
2	1	UFF INLET PIPE	PVC	15
3	1	UFF OUTLET PIPE	PVC	15
4	22	MODULE LID		
5	8	SUPPORT FRAME		
6	2	COVER 30 IN		30
7	6	WEDGE WALL MOUNT		
8	2	COVER 24 IN		24
9	22	MODULE BODY		
10	4	SUPPORT FRAME LH		
11	2	OUTLET MODULE		
12	4	SUPPORT FRAME RH		
13	1	MCMMASTER-CARR 4880K173		
14	1	MCMMASTER-CARR 48925K27		
15	1	FERNCO 1056-1515 & 15.2-10.6 EB		
16	2	FOOT WALL MOUNTING BRACKET		

NOTE:  
1. STRUCTURE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.  
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING THE STRUCTURE

REVISION HISTORY  
REV BY DESCRIPTION DATE  
A EHR FIRST RELEASE 10/15/2021

PROJECTION

IF IN DOUBT ASK

DATE: 10/15/2021 SCALE: 1:50  
DRAWN BY: EHR CHECKED BY: APPROVED BY:

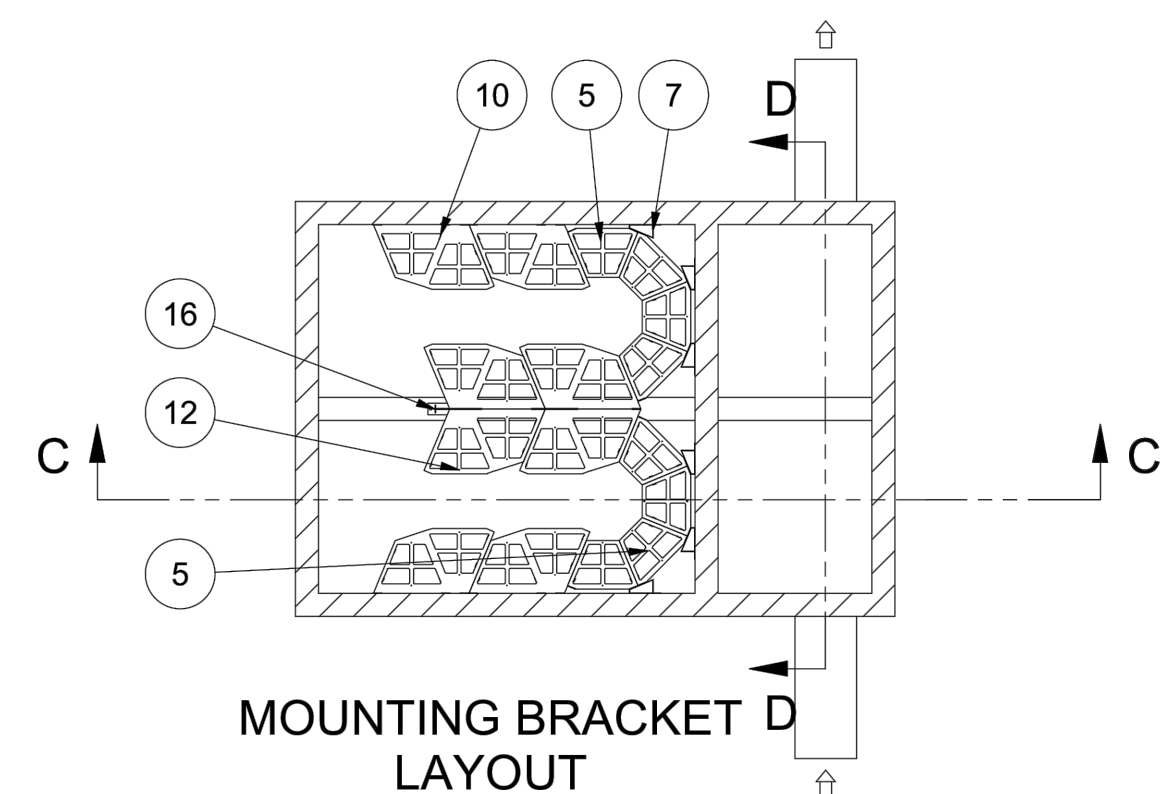
TITLE: UP-FLO FILTER 8R X 12ft  
24 MODULES MAX SHOWN W/ 22

GENERAL ARRANGMENT

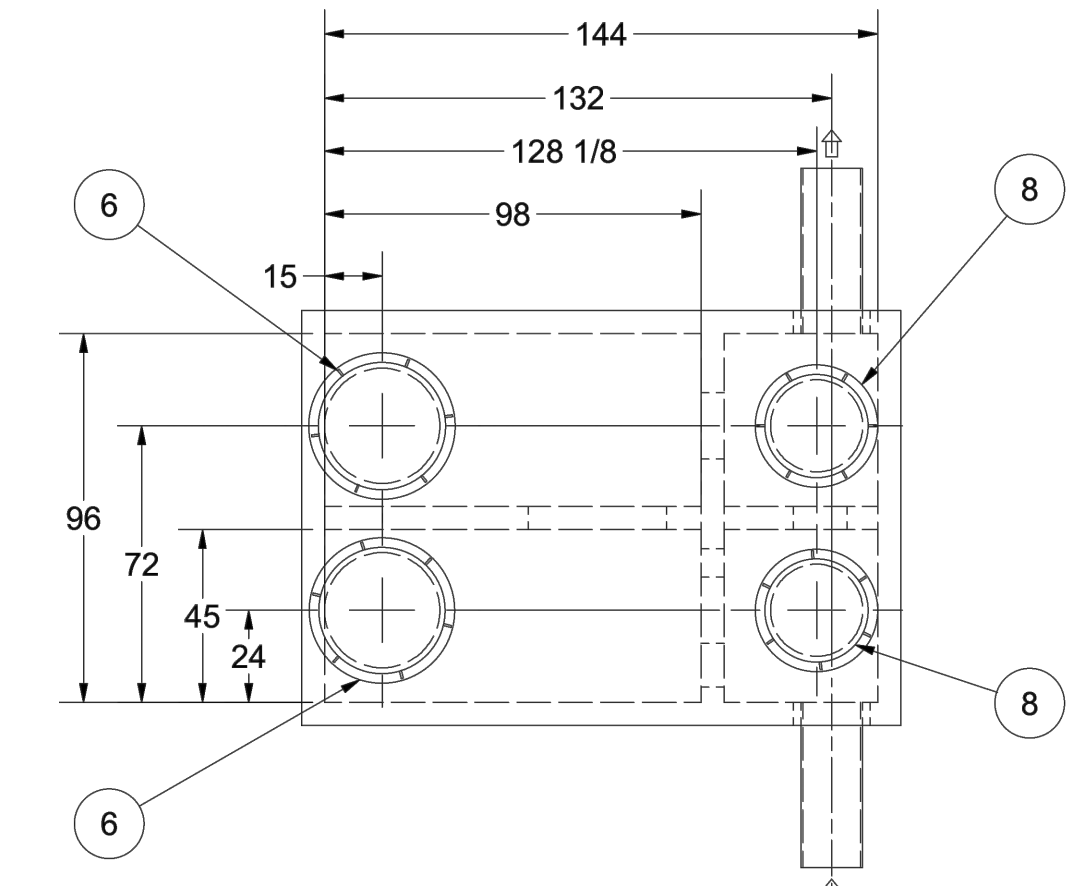
Patent: www.hydro-int.com/patents

**Hydro International**  
hydro-int.com  
©2021 HYDRO INTERNATIONAL

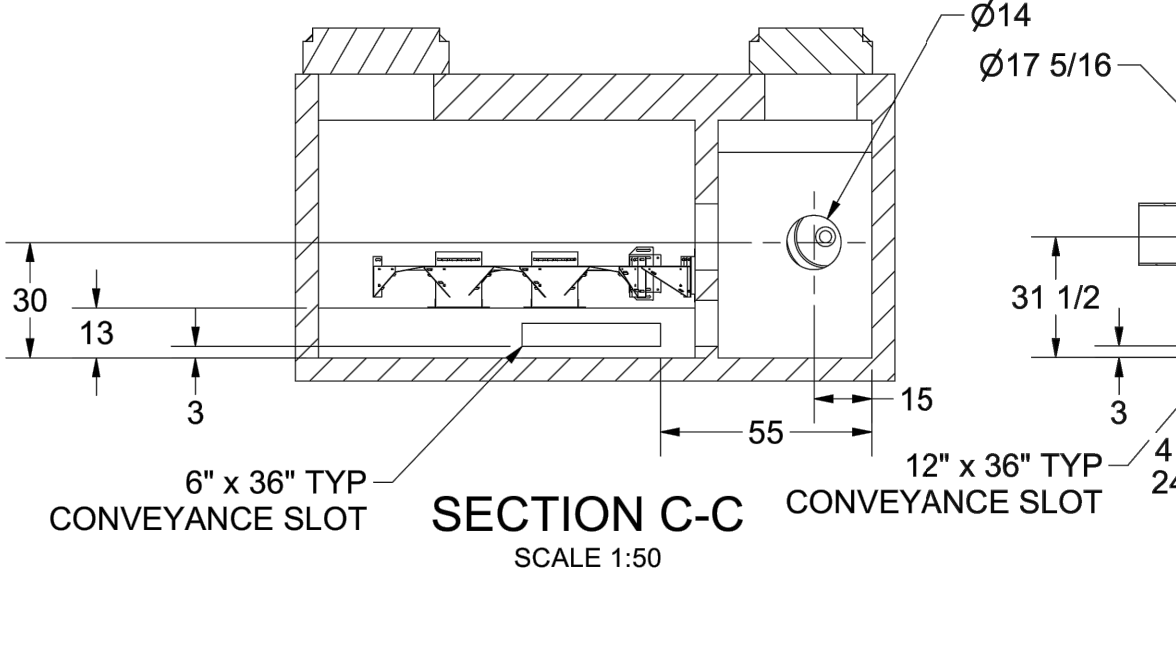
WEIGHT: MATERIAL:  
STOCK NUMBER: 2  
DRAWING NO: 21\_12\_3566-UFF-2  
SHEET SIZE: B SHEET: 1 OF 2



MOUNTING BRACKET LAYOUT



PRECAST DETAIL



SECTION C-C SCALE 1:50

SECTION D-D SCALE 1:50

ITEM	QTY	DESCRIPTION	SIZE (in)
1	1	PRECAST VAULT	8R X 12ft
2	1	UFF INLET PIPE	15
3	1	UFF OUTLET PIPE	15
4	22	MODULE LID	
5	8	SUPPORT FRAME	
6	2	COVER 30 IN	30
7	6	WEDGE WALL MOUNT	
8	2	COVER 24 IN	24
9	22	MODULE BODY	
10	4	SUPPORT FRAME LH	
11	2	OUTLET MODULE	
12	4	SUPPORT FRAME RH	
13	1	MCMMASTER-CARR 4880K173	
14	1	MCMMASTER-CARR 48925K27	
15	1	FERNCO 1056-1515 & 15.2-10.6 EB	
16	2	FOOT WALL MOUNTING BRACKET	

1. STRUCTURE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.  
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING THE STRUCTURE

PROJECTION

IF IN DOUBT ASK

DATE: 10/15/2021 SCALE: 1:50  
DRAWN BY: EHR CHECKED BY: APPROVED BY:

TITLE: UP-FLO FILTER 8R X 12ft  
22 MODULES

GENERAL ARRANGMENT

Patent: www.hydro-int.com/patents

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hydro-int.com  
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WEIGHT: MATERIAL:  
STOCK NUMBER: 2  
DRAWING NO: 21\_12\_3566-UFF-2  
SHEET SIZE: B SHEET: 2 OF 2

**CAPACITIES:**

- Minimum performance: 80% removal. NJDEP - NJDEP Blend; NJCAT, Sil-Co-Sil 106 (d50 = 22 microns) at the peak treatment flow.
- Maximum number of modules per outlet module: 38 \*\*
- NJDEP peak treatment flow: .056 cfs (25 gpm) per module, CPZ
- FL SIZING 9 GPM FOR 50% TP & 70% TN

**ADDITIONAL DESIGN INFORMATION:**

- \* Normal operating W.S.E. is 2.46' above the outlet invert at the peak treatment flow of .056 cfs (25 gpm) per module. For a given flow the head requirement can be reduced by adding additional filters.
- \*\* Treatment flows that require more modules will require a larger vault design or different arrangement.
- Media Types Available: New Jersey - Ribbons; Elsewhere - CPZ

**Calculations for Texas Commission on Environmental Quality TSS Removal Calculations**  
**Hydro International Up-Flo® Filter - Sizing Spreadsheet Revision 1.0**

Project Name: Pink House Storage  
Date Prepared: 3/23/2023

**1. The Required Load Reduction for the Total Project.**

Calculations from RG-348, Pages 3-27 to 3-30  
Page 3-29 Equation 3.3:  
 $L_{R1} = 27.2(A_{N1} \times P)$

Where:  
 $L_{R1}$  TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load  
 $A_{N1}$  = Net increase in impervious area for the project  
 $P$  = Average annual precipitation, inches

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

County =	Comal
Total project area included in plan =	5.00 acres
Predevelopment impervious area within the limits of the plan =	0.00 acres
Total post-development impervious area within the limits of the plan =	2.76 acres
Total post-development impervious cover fraction =	0.55
P =	33 inches
$L_{R1}$ TOTAL PROJECT =	2477 lb
Number of drainage basins / outfalls areas leaving the plan area =	1

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

Drainage Basin/Outfall Area No. =	1
Total drainage basin/outfall area =	2.89 acres
Predevelopment impervious area within drainage basin/outfall area =	0.00 acres
Post-development impervious area within drainage basin/outfall area =	2.76 acres
Post-development impervious fraction within drainage basin/outfall area =	0.96
$L_{R1}$ THIS BASIN =	2,477 lb

**3. Indicate the Proposed BMP Code for this Basin.**

Proposed BMP = Up-Flo® Filter CPZ  
Removal efficiency = 78 percent

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

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

Where:  
 $A_c$  = Total On-Site drainage area in the BMP catchment area  
 $A_i$  = Impervious area proposed in the BMP catchment area  
 $A_p$  = Pervious area remaining in the BMP catchment area  
 $L_R$  = TSS Load removed from this catchment area by the proposed BMP

$A_c$ =	2.76 acres
$A_i$ =	2.76 acres
$A_p$ =	0.00 acres

**5. Calculate Fraction of Annual Runoff to Treat the Drainage Basin / Outfall Area.**

Desired  $L_{R1}$  THIS BASIN = 2,477 lb  
 $F = 1.008$

**6. Calculate Capture Volume Required by the BMP Type for this Drainage Basin / Outfall Area.**

Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	4.00 inches
Post Development Runoff Coefficient =	0.82
On-site Water Quality Volume =	32,713 cubic feet

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

Off-site area draining to BMP =	0.13 acres
Off-site Impervious cover draining to BMP =	0.04 acres
Impervious fraction of off-site area =	0.31
Off-site Runoff Coefficient =	0.26
Off-site Water Quality Volume =	495 cubic feet
Storage for Sediment =	6,642 cubic feet
Total Capture Volume (required water quality volume x 1.20) =	39,849 cubic feet

**7. Up-Flo® Filter TSS Load Based Sizing.**

Minimum Filter Modules based on $L_R$ =	19 modules
Maximum Filter Release Rate =	1.04 cfs

**7a. Additional Filter Modules to Increase Filter TSS Load Capacity:**

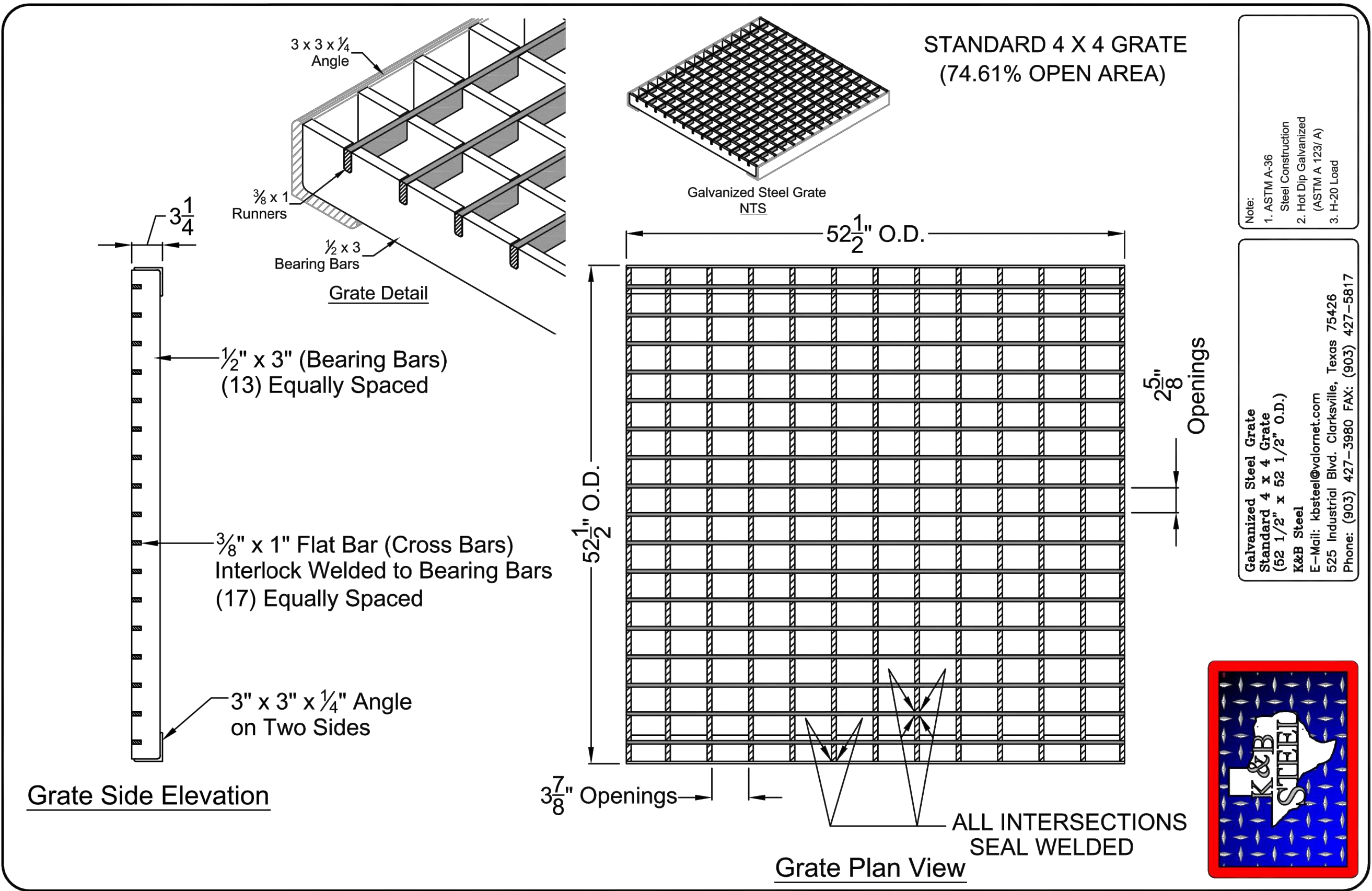
Enter number of additional Modules =	6 modules
Total Number of Modules =	25 modules
Maximum Filter Release Rate =	1.38 cfs
Annual TSS Load Capacity for Filter =	3,250 lb

**Recalculated Capture Volume Required:**

F =	0.752
Rainfall Depth =	0.94 inches
On-site Water Quality Volume =	7,720 cubic feet
Off-site Water Quality Volume =	495 cubic feet
Storage for Sediment =	1,643 cubic feet
Total Capture Volume (required water quality volume x 1.20) =	9,858 cubic feet

**8. Up-Flo® Filter Sizing Based on Design Storm (No Storage).**

Rainfall Intensity i =	0.48 in/hr
On Site Inflow Rate =	1.08 cfs
Offsite Inflow Rate =	0.02 cfs
Total Inflow Rate =	1.10 cfs



Grate Side Elevation

Grate Plan View

(Date: 04-19-16)



**ZACH QUISENBERRY**  
4640 FM 1863  
BULVERDE, TX 78163

**PINK HOUSE STORAGE & MARKETPLACE**

**WATER QUALITY DETAILS**

SHEET 1 OF 1

NO	DATE	ISSUES AND REVISIONS



2021 W SH46, STE 105  
NEW BRAUNFELS, TX. 78132  
PH: 830-358-7127 ink-civil.com  
TBPE FIRM F-13351



**ATTACHMENT “G”**

**Inspection, Maintenance, Repair, and Retrofit Plan**

**Up-Flo Filter Maintenance Guidelines**

**Recommended maintenance guidelines include:**

- Inspections. Inspection of the storage component (and sedimentation manhole, if appropriate) should occur at a minimum of twice a year. It is recommended to wait 7 – 14 days after the last storm event, prior to making an inspection. This should allow for improved water clarity for observations in the storage facility. Sediment depth can be measured with a rod or other means. If sediment depth is greater than 1 foot, sediment removal in the storage facility is warranted.
- Cartridge Replacement. Cartridges should initially be replaced annually. If inspection of the removed cartridges indicates that their life expectancy exceeds one year, a modified maintenance plan should be provided to TCEQ specifying the new replacement schedule. Cartridge replacement also may be required in the event of a chemical spill or due to excessive sediment loading from site erosion or extreme storms.
- Sediment Removal. Sediment removal should occur before the accumulated sediment occupies 20% of the settling chamber. Typically includes cartridge replacement and sediment removal from the vault.
- Debris and Litter Removal. Debris and litter must be removed when its presence threatens the proper operation of the system.

**Maintenance and Monitoring Procedures**

- Refer to Hydro-International Up-Flo Filter Inspection and Maintenance Procedures Guide attached below.



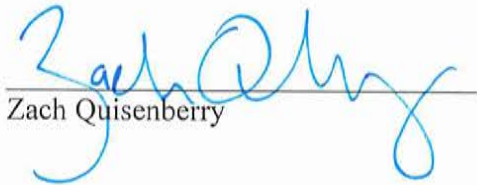
**Attachment "G"**

**Maintenance Plan for Up-Flo Filter**

Filter Location: The Up-Flo Filter will be located in the drive aisle towards the back of the site, along the west property line.

Owner: Zach Quisenberry  
4640 FM 1863  
Bulverde, TX 78163  
Phone: 432-770-5171

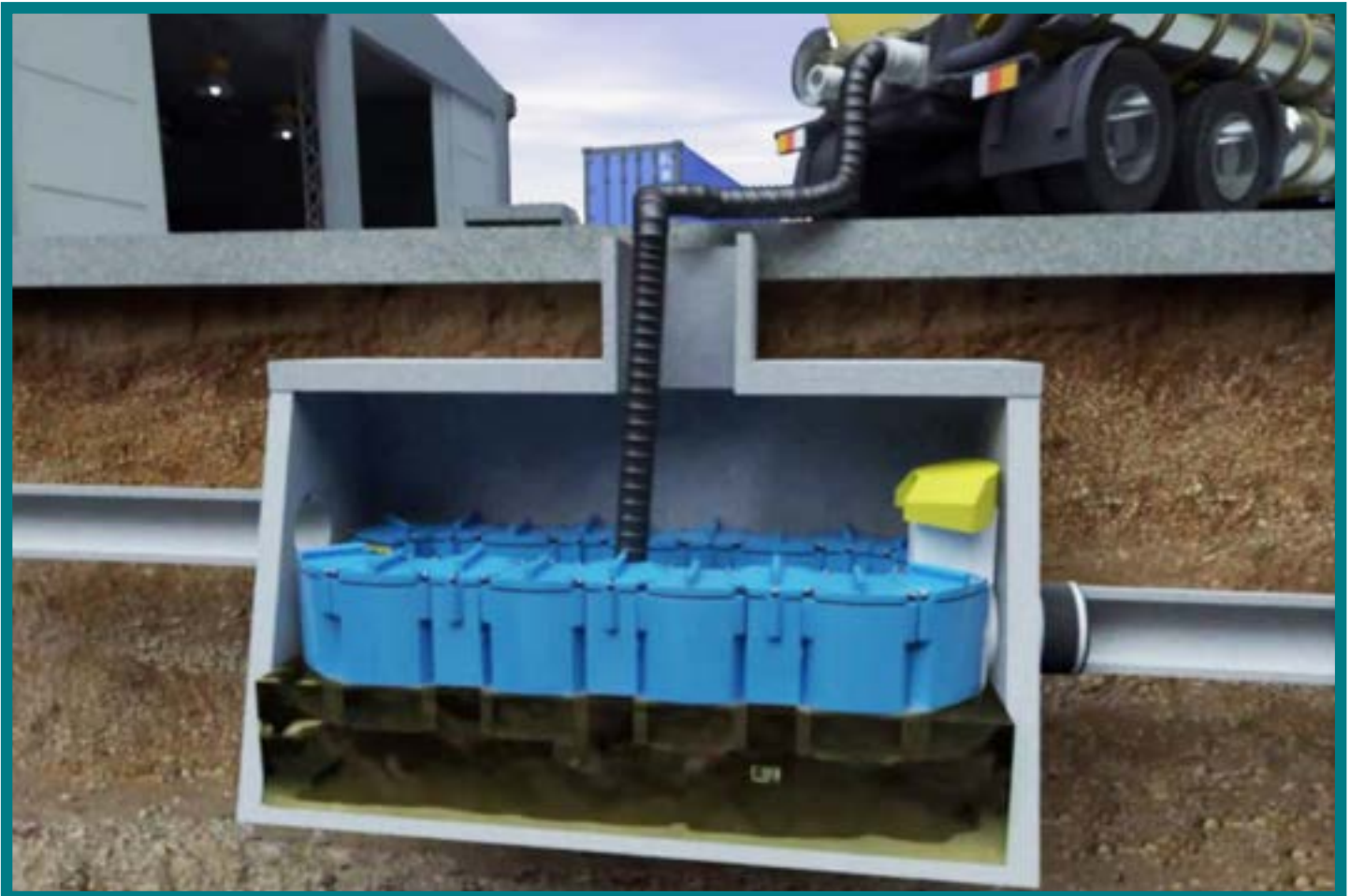
Up-Flo Filter Maintenance and Monitoring Procedures will be implemented to ensure that the proposed BMP functions as designed.

  
Zach Quisenberry

4-6-23  
Date

I have reviewed the attached maintenance and monitoring procedures and to the best of my knowledge certify that, if they are followed as outlined, the Up-Flo filter will function as designed.

  
Shane Klar, P.E.



## Operation and Maintenance Manual

### Up-Flo® Filter

---

### Filtration System for Stormwater Treatment

### Stormwater Solutions

94 Hutchins Drive  
Portland, ME 04102

Tel: (207) 756-6200  
Fax: (207) 756-6212  
stormwaterinquiry@hydro-int.com

[www.hydro-int.com](http://www.hydro-int.com)

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### IMPORTANT - ORDER REPLACEMENT PARTS FOR MAINTENANCE - IMPORTANT

Annual maintenance requires replacement of the Media Packs and the Drain Down Filter. Contact Hydro International to order replacements. Allow 2-4 weeks for delivery.

Office hours Monday thru Friday 8:00 A.M. to 5:00 P.M. EST

Toll free: 1-888-382-7808

Phone: 207-756-6200

Fax: 207-756-6212

Email: [services@hydro-int.com](mailto:services@hydro-int.com)

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**DISCLAIMER:** Information and data contained in this manual is exclusively for the purpose of assisting in the operation and maintenance of Hydro International plc's Up-Flo® Filter. No warranty is given nor can liability be accepted for use of this information for any other purpose. Hydro International plc have a policy of continuous product development and reserve the right to amend specifications without notice.

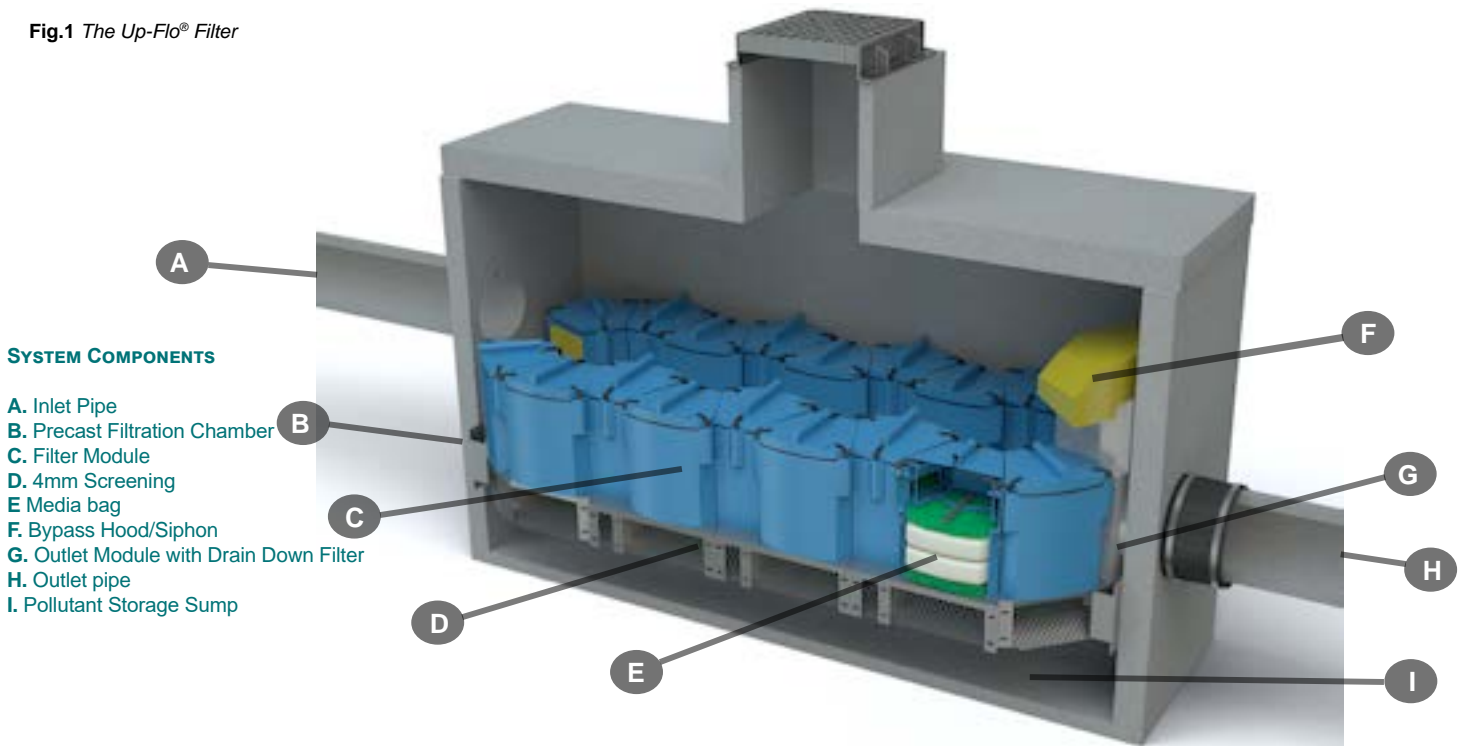


## OVERVIEW & PRODUCT DESCRIPTION

The Up-Flo® Filter is a modular high-rate stormwater filtration device designed to capture trash, oil, sediment and remove fine pollutants such as dissolved and particulate metals and nutrients from stormwater runoff. Designed with efficiency, longevity and upkeep in mind, this high performance, low maintenance filter option that offers higher loading rates and longer media life for higher quality stormwater for longer periods between servicings.

In general, a minimum of two inspections are required per year to monitor sediment and gross pollutant accumulations. In order to achieve an annual TSS removal rate of 80% for the Up-Flo® Filter, the minimum maintenance frequency specified in the maintenance section for replacement of the Media Pack and removal of accumulated sediment from the sump is mandatory.

Fig.1 The Up-Flo® Filter



## PRODUCT CONFIGURATIONS



Fig.2 The Up-Flo® Filter is installed in a) 4-ft (1.2m) round manholes or b) in rectangular precast vaults. Both configurations have a wide central opening in the Up-Flo® Filter.

## HYDRO MAINTENANCE SERVICES

Hydro International has been engineering stormwater treatment systems for over 30 years. We understand the mechanics of removing pollutants from stormwater and how to keep systems running at an optimal level.

### NOBODY KNOWS OUR SYSTEMS BETTER THAN WE DO



### AVOID SERVICE NEGLIGENCE

Sanitation services providers not intimately familiar with stormwater treatment systems are at risk of the following:

- Inadvertently breaking parts or failing to clean/replace system components appropriately.
- Charging you for more frequent maintenance because they lacked the tools to service your system properly in the first place.
- Billing you for replacement parts that might have been covered under your Hydro warranty plan
- Charging for maintenance that may not yet have been required.

### LEAVE THE DIRTY WORK TO US

Trash, sediment and polluted water is stored inside treatment systems until they are removed by our team with a vactor truck. Sometimes teams must physically enter the system chambers in order to prepare the system for maintenance and install any replacement parts. Services include are are not limited to:

- Solids removal
- Removal of liquid pollutants
- Replacement media installation (when applicable)



## BETTER TOOLS, BETTER RESULTS

Not all vacor trucks are created equal. Appropriate tools and suction power are needed to service stormwater systems appropriately. Companies who don't specialize in stormwater treatment won't have the tools to properly clean systems or install new parts.



## SERVICE WARRANTY

Make sure you're not paying for service that is covered under your warranty plan. Only Hydro International's service teams can identify tune-ups that should be on us, not you.

## TREATMENT SYSTEMS SERVICED BY HYDRO:

- Stormwater filters
- Stormwater separators
- Baffle boxes
- Biofilters/biorention systems
- Storage structures
- Catch basins
- Stormwater ponds
- Permeable pavement



SAVE TIME & MONEY: CALL HYDRO FOR A QUOTE

**1 (800) 382-7808**

LEARN MORE AT [HYDRO-INT.COM/SERVICE](http://HYDRO-INT.COM/SERVICE)



## OPERATION

### INTRODUCTION

The Up-Flo® Filter operates on simple fluid hydraulics. It is self-activating, has no moving parts, no external power requirements and is fabricated with durable non-corrosive components. Personnel are not required to operate the unit and maintenance is limited to periodic inspections, sediment and floatables removal, Media Pack replacement and Drain Down Filter replacement.

### POLLUTANT CAPTURE

The Up-Flo® Filter is designed to operate as a “treatment train” by incorporating multiple treatment technologies into a single device. Trash and gross debris are removed by sedimentation and screening before they are introduced to the filtration media, preventing surface blinding of the filter media. The Up-Flo® Filter is a wet-sump device. Between storm events, oil and floatables are stored on the water surface separate from the sediment storage volume in the sump (see **Fig.1**). The high-capacity bypass siphon acts as a floatables baffle to prevent washout of captured floatable pollutants during high intensity events.

### REDUCED CLOGGING

The Up-Flo® Filter has been designed to minimize the occurrence of clogging and blinding and employs a unique Drain Down Filter that allows the water level in the chamber to drop below the filter media between events. The Drain Down Filter mechanism creates a reverse flow that flushes captured pollutants off the surface of the Media Bag, helping to prevent blinding. By allowing the water to drain out, the Drain Down Filter also reduces the weight of the Media Bags. This makes the bags easier and safer to remove during maintenance operations.

### OVERFLOW PROTECTION

The Angled Screens are designed to prevent ragging and blinding and are situated below the Filter Modules, sheltering them from the direct path of the influent. Coarse debris settles in the sump before the runoff flows up through the screens, protecting them from blinding. In the unlikely event of a blockage, the high capacity siphonic Bypass Hood is designed to convey high enough flow to minimize the risk of large storm creating upstream flooding.

### BEST PRACTICES

Good housekeeping upstream of the Up-Flo® Filter can significantly extend Media Bag life. For example, sweeping paved surfaces, collecting leaves and grass trimmings, and protecting bare ground from erosion will reduce loading to the system. Media Packs should not be installed in the Filter Modules until construction activities are complete and site stabilization is effective.

### DAMAGE DUE TO LACK OF MAINTENANCE

Delayed maintenance would result in clogged Media Bags and/or blinded Angled Screens. In that situation, the Up-Flo® Filter would go into bypass and there would be no treatment of the incoming stormwater. Because the Bypass Weir can easily convey all of the flow to the Outlet Module, there would be no lasting damage to the system. Replacement of the Media Bags and removal of sediment from the sump would restore the Up-Flo® Filter to its original treatment efficiency. Establishing and adhering to a regular maintenance schedule ensures optimal performance of the system.

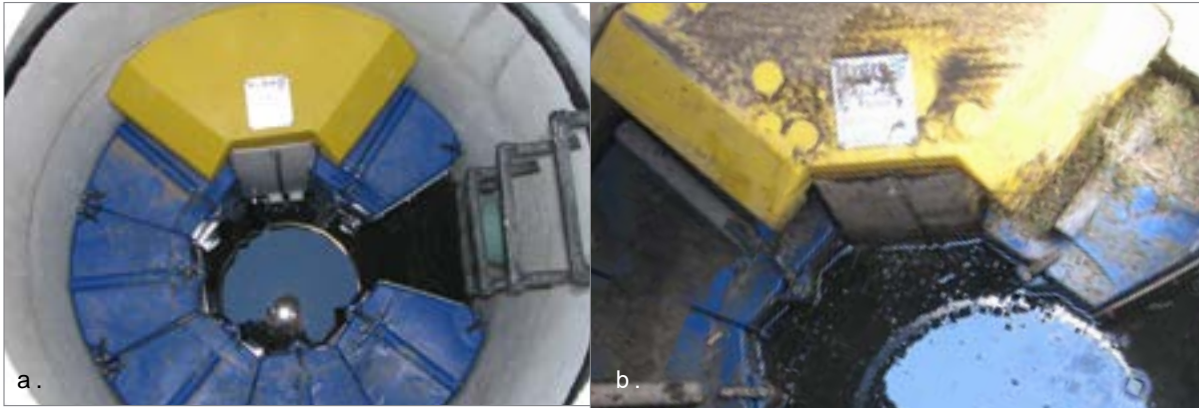


Fig.3 a) The water level in a properly functioning Up-Flo® Filter will drain down to the base of the Filter Modules. b) When the Drain Down Filter becomes clogged, the base of the Filter Modules will be submerged in standing water. Note, above right, that the Drain Down Filter is submerged in standing water.

## INSPECTION & MAINTENANCE

### OVERVIEW

The Up-Flo® Filter protects the environment by removing a wide range of pollutants from stormwater runoff. Periodic removal of these captured pollutants is essential to the proper functioning of the Up-Flo® Filter.

Maintenance activities can be categorized as those that may be performed from outside the Up-Flo® vessel and those that are performed inside the vessel. Maintenance performed from outside the modules includes removal of floatables and oils that have accumulated on the water surface and removal of sediment from the sump. Maintenance performed inside the vessel includes removal and replacement of Media Bags, Flow Distribution Media and the Drain Down Filter. A vactor truck is required for removal of oils, water, sediment, and to completely pump out the vessel to allow for maintenance inside. If you are not using Hydro International or a trained service provider you must follow OSHA Confined Space Entry procedures when entering the Up-Flo® vessel.

The Up-Flo® Filter design has a wide central opening between the Filter Modules for easy access to all of the components (see **Fig.3**). In the case of inspection and floatables removal, a vactor truck is not required. Otherwise, a vactor truck is normally required for oil removal, removal of sediment from the sump, and replacement of the Media Packs and Drain Down Filter. In most cases, entry into the Up-Flo® Filter vessel is required for replacement of the Media Packs and Drain Down Filter.

**The minimum required frequency for replacement of the Media Pack is annually**, whereas the minimum required frequency for removal of accumulated sediment from the sump is dependent on the Up-Flo® Filter configuration. Configurations with a larger sediment storage volume per module will require less frequent removal of accumulated sediment. Regardless, whenever sediment depth in the sump is found to be greater than 16 inches, sediment removal is required.



Fig.4 a) A new Media Bag of Hydro Filter Sand. b) A spent media bag of Hydro Filter Sand.

**AT A MINIMUM, MEDIA BAGS MUST BE REPLACED AT LEAST ONCE A YEAR.**

## MAKE SURE YOUR SYSTEM WAS INSTALLED CORRECTLY

### First Year Inspection and Maintenance

The frequency of inspection and maintenance can be determined in the field after installation. The frequency of ongoing maintenance needs is based on site characteristics such as contributing area, types of surfaces (e.g., paved and/or landscaped), site activities (e.g., short-term or long-term parking), and other site maintenance (e.g., sanding and sweeping). At a minimum, inspection and maintenance should be conducted at intervals of no more than six months during the first year of operation. Maintenance personnel should observe and record pollutant accumulations during the first year of service in order to benchmark the maintenance intervals that will later be established for the site. Pollutant accumulations should be measured or monitored using the following procedures:

- **Measurement of sediment depth in the sump:** A minimum of 8 inches (20 cm) should separate the Drain Down Filter inlet from stored sediment in the sump in order to minimize sediment migration into the Drain Down Filter. A simple probe, such as the Sludge-Judge®, can be used to determine the depth of the solids in the sump. In a typical 4-ft (1.2m) diameter manhole installation, the sediment depth should be no more than 16 inches (41 cm).
- **Maintenance personnel should then enter the structure, remove the Media Pack from one of the Filter Modules, and weigh the Media Bags.** Media Bags with a wet weight of approximately 40 lbs (18 kg) or more are an indication that the filter media has become full and that the Media Packs in all of the Filter Modules will require replacement (Fig.4). Minimum filtration rate is generally reached when the Media Bags have accumulated approximately 20 lbs (9 kg) of sediment. Determining the amount of accumulated sediment will be accomplished by removing both of the Media Bags from one of the Media Packs and weighing the bags separately. Since a new Media Bag weighs approximately 30 lbs (14 kg) wet, the difference in weight will approximately equal the weight of solids that have accumulated in the bag. A spent Media Bag weighs approximately 50 lbs (23 kg) wet.
- **Measurement of oil layer on water surface:** Since water in the Up-Flo® vessel drains down to an elevation below the bottom of the Filter Modules when the system is idle, the amount of accumulated oil must be minimized so that oil is not entrained in the Media Pack when stormwater begins to fill the vessel at the start of a storm event. Oil accumulation should be limited to 1.5 inches (4 cm) or less. Probes can be used to measure oil thickness.
- **Monitoring for Drain Down Filter clogging:** The water level in the Up-Flo® Filter should be monitored to ensure that the Drain Down Filter is operating properly. The Drain Down Filter is designed to lower the water level in the Up-Flo® vessel to an elevation below the bottom of the Filter Modules between storm events. Periodically conduct an inspection one to two days after a storm event during the first year of operation. Approximately 36 hours after a 1-in (2.5-cm) rainfall, the water level inside the vessel should have dropped to a point where it is equal with the base of the Filter Modules. If the water level has not reached that point, then the Drain Down Filter has either become clogged or blinded by trash or debris (Fig.5 a and b). If there is no evidence of trash or debris around the Drain Down Filter inlet, then it has likely become clogged with particles.
- **Monitoring for slime and debris covering the Flow Distribution Media or Angled Screens:** After removal of the Media Bags, the bottom Flow Distribution Media should be removed and inspected to determine if it is coated with slime or debris. Similarly, the Angled Screen should be inspected for blockages and ragging.

## FIND OUT HOW FREQUENTLY YOUR SYSTEM NEEDS MAINTENANCE



Monitoring for floatables on the water surface: Similar to oil, the amount of accumulated floatables must be minimized to prevent trash and loose debris from becoming trapped on the Angled Screens when stormwater begins to fill the Up-Flo® vessel at the start of a storm event. Visual inspection is adequate to determine the amount of floatables. Floatables should be removed before they form a mat on the surface of the water.

The solids loading rate in the sump will be calculated by measuring the sediment depth in the sump and dividing the depth by the correlating interval of time since the sump was last cleaned. Similarly, starting with fresh Media Bags, the solids loading rate in the Media Packs will be calculated by weighing the Media Bags and dividing the weights by the correlating interval of time since they were installed. The wet weight of the heaviest bag will be used to determine the loading rate. As previously mentioned, a spent Media Bag weighs approximately 50 lbs (23 kg) wet. The spent Media Bag weight estimate was based on calculations of sediment loading in an Up-Flo® Filter that was run to exhaustion during laboratory testing.

The rate of oil accumulation will be calculated by measuring the thickness of the oil layer and dividing the thickness by the correlating interval of time since the sump was last cleaned. Ordinarily, oil thickness will not be measurable unless a spill has occurred. Consequently, any oil will typically be removed along with water when cleaning the sump.

Monitoring the Drain Down Filter for clogging, monitoring the Flow Distribution Media and Angled Screens for slime and debris, and monitoring the accumulation of floatables will provide an estimate of how long the Up-Flo® Filter can operate before its performance can become impaired by one of these factors.

### Routine Inspection and Maintenance

After completion of the first year of operation, determining and then following the established inspection and maintenance intervals will keep pollutant loadings within their respective limits. Removal of oils and floatables, replacement of the Drain Down Filter, replacement of Flow Distribution Media (see Fig.9, pg 11), and cleaning of Angled Screens will occur at the same frequency as cleaning of the sump and replacement of Media Bags unless the first year of operation indicates otherwise. Keeping to the established maintenance intervals will keep treatment flow rates at, or above, the design flow rate. Typically, annual maintenance is adequate.

In addition to scheduled maintenance, occasional checks for Up-Flo® Filter clogging can be performed by removing the manhole cover during a storm, monitoring the water level in the manhole or vault, and determining whether the filter is in bypass. A properly-sized filter (on-line or off-line) that is in bypass during a storm that is producing runoff at, or below, the filter's design filtration rate needs maintenance.

**DON'T WANT TO GO IT ALONE? CALL HYDRO AND WE'LL TAKE CARE OF INSPECTION, REPLACEMENT MEDIA AND CLEANOUT.**

**CALL 1 (888) 382-7808 FOR A QUOTE**

## INSPECTION & MAINTENANCE

### ROUTINE INSPECTION

Inspection is a simple process that requires monitoring pollutant accumulations. Maintenance crews should be familiar with the Up-Flo® Filter and its components prior to inspection.

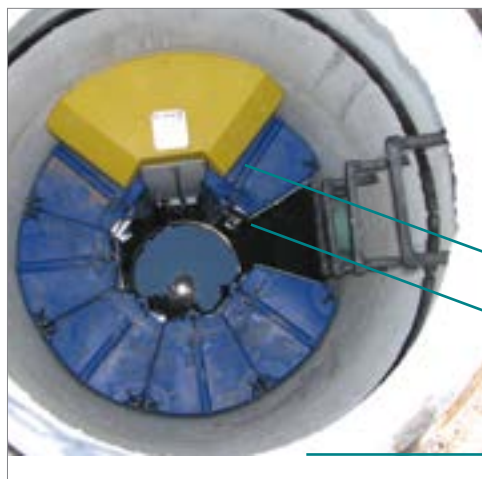
**THE FOLLOWING INSTRUCTIONS ARE INTENDED FOR NON-HYDRO MAINTENANCE SERVICE PROVIDERS AND/OR THOSE INTENDING TO MAINTAIN THEIR OWN UP-FLO® FILTER:**

#### SCHEDULING

- Inspection may be conducted during any season of the year but should occur shortly after a predicted rainfall to ensure components are operating properly.

#### NECESSARY EQUIPMENT

- Safety Equipment and Personal Protective Equipment (traffic cones, work gloves, etc.)
- Scale to measure the weight of the Media Bags
- Crow bar to remove grate or lid
- Pole with skimmer or net
- Sediment probe (such as a Sludge-Judge®)
- Hydro International Up-Flo® Filter Maintenance Log
- Trash bags for removed floatables



Bypass siphon sits evenly on Outlet Module.

Standing water level is no higher than the base of the Filter Module. The Drain Down Filter will be visible if the water level is correct.

Filter Module Lids are closed.

### ROUTINE INSPECTION PROCEDURES

1. Set up any necessary safety equipment (such as traffic cones) to provide access to the Up-Flo® Filter. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the grate or lid to the manhole or vault.
3. Without entering the vessel, look down into the chamber to inspect the inside and to determine whether the high-water level indicator has been activated. Make note of any irregularities. See Fig.6 for a typical Inspection View.
4. Without entering the vessel, use the pole with the skimmer net to remove floatables and loose debris from the chamber.
5. Using a sediment probe such as a Sludge-Judge®, measure the depth of sediment that has collected in the sump of the vessel. Maximum sediment depth is 16 inches (41 cm).
6. If the high-water level indicator has been activated after two consecutive storms, remove the Filter Module lid by turning the cam latch and remove the Filter Media Pack (*refer to page 11 Replacement Procedures*). Weigh the Media Bags from one or two modules. Media Bags should be replaced if the wet weight exceeds 40 lbs (18 kg).
7. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or a high standing water level (see Fig.6 for the standard standing water level).
8. Securely replace the grate or lid.
9. Remove safety equipment.
10. Contact Hydro International at (800) 848-2706 to discuss any irregularities noted during inspection.

Fig.6 Inspection view of the Up-Flo® Filter.

## ROUTINE MAINTENANCE

Maintenance activities are grouped into two categories:

- **Activities *Not Requiring Man Entry Into the Up-Flo® Filter***  
These activities include floatables removal, oil removal and removal of sediment from the sump.
- **Activities *Requiring Man Entry Into the Up-Flo® Filter***  
Media Pack replacement and Drain Down Filter replacement.

Maintenance intervals are determined from monitoring the Up-Flo® Filter during its first year of operation. Depending on the site, some maintenance activities may have to be performed on a more frequent basis than others. In the case of floatables removal, a vactor truck is not required. Floatables and loose debris can be netted with a skimmer and pole.

A vactor truck is normally required for oil removal, removal of sediment from the sump, and to dewater the vessel for replacement of the Media Packs and Drain Down Filter (Fig.7). All inspection and maintenance activities would be recorded in an Inspection and Maintenance Log.

Completion of all the maintenance activities for a typical 4-ft (1.2m) diameter manhole installation takes less than one hour. Approximately 360 gallons of water and up to 0.6 yd<sup>3</sup> (0.5 m<sup>3</sup>) of sediment may be removed in the process. In an installation equipped with six Filter Modules, 12 Media Bags (2 bags per module) would be removed and replaced. Assuming a spent Media Bag weight of 50 lbs (23 kg), up to 600 lbs (272 kg) of spent Media Bags would be removed. All consumables, including Media Bags, Flow Distribution Media, and replacement Drain Down Filters are supplied by Hydro International.

The access port located at the top of the manhole provides unobstructed access for a vactor hose and/or skimmer pole to be lowered to the base of the sump.

## MAINTENANCE ACTIVITIES NOT REQUIRING MAN ENTRY

These activities include floatables removal, oil removal and removal of sediment from the sump.

### SCHEDULING

- Floatables and sump cleanout may typically be done during any season of the year - before and after rainy season
- Floatables and sump cleanout should occur as soon as possible following a contaminated spill in the contributing drainage area

### RECOMMENDED EQUIPMENT

- Safety Equipment (traffic cones, etc)
- Crow bar to remove grate or lid
- Pole with skimmer or net (if only floatables are being removed)
- Sediment probe (such as a Sludge-Judge®)
- Vactor truck (flexible hose preferred)
- Pressure nozzle attachment or other screen-cleaning device

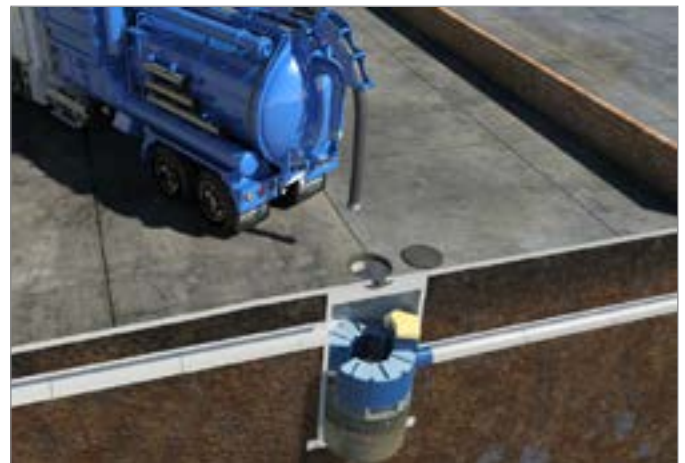


Fig.7 Sediment is removed from the sump with a vactor hose. Man entry is not required for this step.



**NO MAN ENTRY REQUIRED: FLOATABLES, OIL AND SEDIMENT:**

1. Set up any necessary safety equipment (such as traffic cones) around the access of the Up-Flo® Filter. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the grate or lid to the manhole or vault.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities.
4. If the standing water level in the sump is above the base of the Filter Modules (see Fig.8), tug the Pull Chain(s) to release the Drain Down Filter plug(s). Allow the excess water to drain out of the chamber.
5. Use the skimmer pole to fit the Drain Down Filter plug back into the open port.
6. Once all floatables and oil have been removed, drop the vactor hose to the base of the sump. Vactor out the sediment and gross debris from the sump floor. Up to 0.3 yd<sup>3</sup> (0.2 m<sup>3</sup>) of sediment and 360 gallons (1,363 L) of water will be removed from a typical manhole Up-Flo® Filter during this process.
7. Retract the vactor hose from the vessel.
8. Inspect the Angled Screens for blockages and ragging. If present, remove the obstruction or ragging materials from the surface using a hose or other screen-cleaning device.
9. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables, oils, and gross debris removed, and the depth of sediment measured. Note any apparent irregularities such as damaged components or blockages.
10. Securely replace the grate or lid. Remove safety equipment.
11. Dispose of sediment and gross debris following local regulations.
12. Dispose of oil and sump water at a licensed water treatment facility or following local regulations.
13. Contact Hydro International at (800) 848-2706 to discuss any irregularities noted during cleanup.

These activities include replacement of the Media Packs and Drain Down Filter.

Unless the Up-Flo® Filter has been installed as a very shallow unit, it is necessary to have an OSHA-confined space entry trained person enter the vessel to replace Media Packs.

The access port located at the top of the manhole or vault provides access to the Up-Flo® vessel for maintenance personnel to enter the vessel and remove and replace Media Packs. The same access would be used for maintenance personnel working from the surface to net or skim debris and floatables or to vactor out sediment, oil, and water. Unless the Up-Flo® Filter has been installed in a very shallow configuration, it is necessary to have personnel with OSHA Confined Space Entry training performing the maintenance that occurs inside the vessel.

**SCHEDULING**

- Call Hydro International to order replacement Media Packs and Drain Down Filter prior to scheduling maintenance.
- Because Media Pack replacement requires entry into the Up-Flo® chamber, maintenance events should be scheduled during dry weather.
- Media Pack replacement should occur immediately after a contaminated spill in the contributing drainage area.

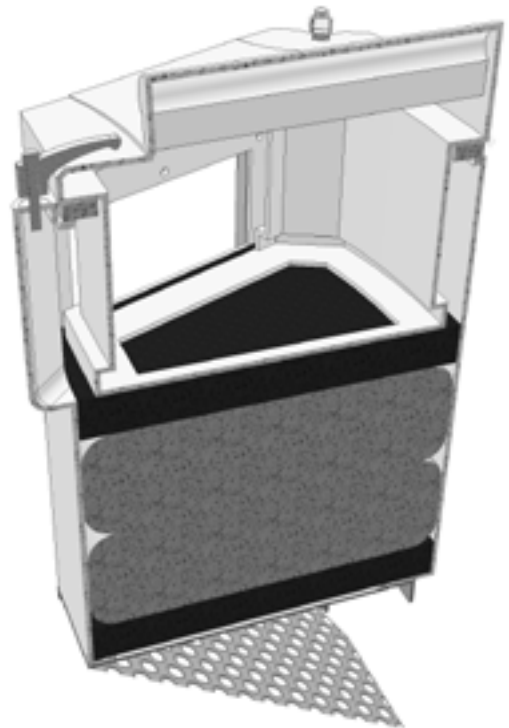


Fig.8 Cutaway view of the Filter Module

**MAINTENANCE ACTIVITIES REQUIRING MAN ENTRY**

### Recommended Equipment

- Safety Equipment (traffic cones, etc.)
- Crow bar to remove grate or lid
- Pole with skimmer or net (if floatables removal is not to be done with vacator hose)
- Sediment probe (such as a Sludge-Judge®)
- Vacator truck (flexible hose preferred)
- OSHA Confined Space Entry Equipment
- Up-Flo® Filter Replacement Media Packs (available from Hydro International)
- Hydro International Up-Flo® Filter Maintenance Log
- Screwdriver (flat head)
- Replacement Drain Down Filter components supplied by Hydro International

### Man Entry Required: Media Pack and Drain Down Filter

1. Follow Floatables and Sump Cleanout Procedures, 1 – 13.
2. Following OSHA Confined Space Entry procedures, enter the

Up-Flo® Filter Chamber.

3. Open the Filter Module by turning the three cam latches on the front and sides of the module. Remove the lid **1** to gain access to the Media Pack (Fig.9).
4. Remove and discard the spent Media Pack. The Media Pack contents include:
  - A top layer of **A** Flow Distributing Sheets
  - Two (2) Media Bags **B** equipped with nylon handles.
  - A bottom layer of **A** Flow Distributing Media.
5. Insert a new Media Pack, supplied by Hydro International.
  - First, insert a bottom layer of green Flow Distributing Media. Be sure that the media sits snugly and level at the bottom of the Filter Module.
  - Next, insert the first of two (2) replacement Media Bags. Smooth the bag out with your hands to make sure that the bag extends snugly to the walls and corners of the Filter Module.
  - Insert the second Media Bag, following the same procedure.
  - Insert the top layer of green Flow Distributing Media.

1. Filter Module Cover and Media Restraint

2. Replaceable Media Pack:

- a) Flow distribution sheets
- b) Filter Media Bags

3. Cam Latch

4. Conveyance Channel

5. Filter Module

6. Support Bracket / Angled Screen

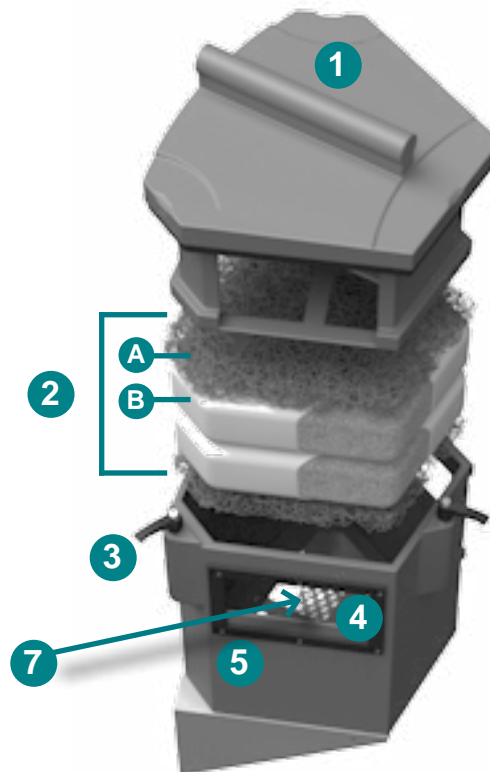


Fig.9 The Filter Module houses the Media Restraint and the Media Pack.

Be sure that the piece fits snugly against the walls and corners of the Filter Module.

- Put the lid on and secure the three latches. Check to make sure that the latches are closed properly.

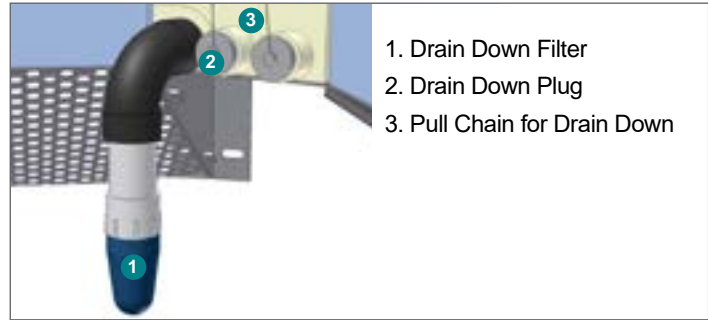
6. Use a screwdriver to unscrew the Drain Down Filter from the face of the Outlet Module (see Fig.10). **DO NOT DISCARD THIS PIECE.**

7. Install new Drain Down Filter supplied by Hydro International.

8. Exit the Up-Flo® Filter chamber and securely replace the grate \_\_\_or lid.

9. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables, oil and gross debris removed, and the depth of sediment measured. Note the number of Media Packs replaced. Note any irregularities such as damaged components or blockages.

**Fig.10** The Drain Down Filter.



1. Drain Down Filter
2. Drain Down Plug
3. Pull Chain for Drain Down

10. Remove safety equipment.

11. Dispose of spent media packs at your local landfill, following local regulations.

12. Return the spent Drain Down Filter to Hydro International.

13. Contact Hydro International to discuss any irregularities noted during annual maintenance.

### Solids Disposal

Sediment, floatables, gross debris, and spent Media Bags can generally be disposed of at the local landfill in accordance with local regulations. The toxicity of the residues captured will depend on the activities in the contributing drainage area, and testing of the residues may be required if they are considered potentially hazardous.

Sump water can generally be disposed of at a licensed water treatment facility but the local sewer authority should be contacted for permission prior to discharging the liquid. Significant accumulations of oil removed separately from sump water should be transported to a licensed hazardous waste treatment facility for treatment or disposal. **In all cases, local regulators should be contacted about disposal requirements.**

## MAINTENANCE AT A GLANCE

Activity	Frequency
Inspection	- Regularly during first year of installation - Every 6 months after the first year of installation
Floatables/Oils Removal	- Twice per year or as needed - Following a contaminated spill in the drainage area
Sediment Removal	- Every six to 12 months, depending on the Up-Flo® Filter Configuration - The maximum allowable sediment depth in any Up-Flo Filter configuration is 16 inches (41 cm) - Following a contaminated spill in the drainage area
Media Pack Replacement	- Once per year - Replacement is required anytime inspection reveals that the high-water level indicator has been activated after two consecutive storms and the subsequent weighing of the Media Bags shows a wet weight greater than 40 lbs - Following a contaminated spill in the drainage area
Drain Down Filter Replacement	- Once per year with Media Pack replacement - Replacement is required anytime inspection reveals that the water level inside the vessel has not reached a level equal with the base of the Filter Modules approximately 36 hours after a 1-inch (2.5 cm) rainfall - As needed, in the event of continuous base flow conditions



**UP-FLO® FILTER INSTALLATION LOG**



<b>SITE REFERENCE NAME OR NUMBER FOR THIS UP-FLO® FILTER LOCATION:</b>	
<b>SITE NAME:</b>	
<b>SITE LOCATION:</b>	
<b>OWNER:</b>	<b>SITE CONTRACTOR:</b>
<b>CONTACT NAME:</b>	<b>CONTACT NAME:</b>
<b>COMPANY NAME:</b>	<b>COMPANY NAME:</b>
<b>ADDRESS:</b>	<b>ADDRESS:</b>
<b>TELEPHONE:</b>	<b>TELEPHONE:</b>
<b>FAX:</b>	<b>FAX:</b>

**INSTALLATION DATE:**    /    /

**CONFIGURATION (CIRCLE ONE):**      **MANHOLE**      **VAULT SYSTEM**

**TOTAL NUMBER OF UP-FLO® FILTER MODULES:** \_\_\_\_\_



# UP-FLO® FILTER INSPECTION LOG

Site Name: \_\_\_\_\_ Owner Change since last inspection? Y N

Location: \_\_\_\_\_

Owner Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Site Status: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Site conditions\*: \_\_\_\_\_  
 \*(Stable, Under Construction, Needing Maintenance, etc.)

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
<b>Debris Removal</b>				
Adjacent area free of debris?	M			
Inlets and Outlets free of debris?	M			
Facility (internally) free of debris?	M			
<b>Vegetation</b>				
Surrounding area fully stabilized? (no evidence of eroding material into Up-Flo® Filter)	A			
Grass mowed?	M			
<b>Water retention where required</b>				
Water holding chamber(s) at normal pool?	A			
Evidence of erosion?	A			
<b>Sediment Deposition</b>				
Filtration Chamber free of sediments?	A			
Sedimentation sump not more than 50% full?	A			
<b>Structural Components</b>				
Any evidence of structural deterioration?	A			
Grates in good condition?	A			
Spalling or cracking of structural parts?	A			
Outlet/Overflow Spillway	A			
<b>Other</b>				
Noticeable odors?	A			
Any evidence of filter(s) clogging?	M			
Evidence of flow bypassing facility?	A			



Inspector Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Overall Condition of Up-Flo® Filter\*\*:  Acceptable  Unacceptable

\*\*"Acceptable" would mean properly functioning; "unacceptable" would mean damaged or required further maintenance.

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed", list Maintenance actions and their completion dates below or on the Maintenance Log provided on page 15 of the Up-Flo® Filter Operation & Maintenance Manual:

Maintenance Action Needed	Due Date

The next routine inspection is schedule for approximately: (date) \_\_\_\_\_

Inspected by: (signature) \_\_\_\_\_

Inspected by: (printed) \_\_\_\_\_





# UP-FLO® FILTER MAINTENANCE LOG

Site Name: \_\_\_\_\_ Owner Change since last inspection? Y N

Location: \_\_\_\_\_

Owner Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Site Status: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Site conditions: \_\_\_\_\_  
*\*(Stable, Under Construction, Needing Maintenance, etc.)*

Estimated volume of oil/floatable trash removed: \_\_\_\_\_

Sediment depth measured in sump prior to removal: \_\_\_\_\_

Number of Filter Modules fitted with new media packs: \_\_\_\_\_

Inspector Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Overall Condition of Up-Flo® Filter:  Acceptable  Unacceptable  
*\*\*"Acceptable" would mean properly functioning; "unacceptable" would mean damaged or required further maintenance.*

Maintained by: (signature) \_\_\_\_\_

Maintained by: (printed) \_\_\_\_\_

# DO IT RIGHT THE FIRST TIME

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CALL 1 (888) 382-7808 TO SCHEDULE AN INSPECTION

## Stormwater Solutions

94 Hutchins Drive  
Portland, ME 04102

Tel: (207) 756-6200

Fax: (207) 756-6212

[stormwaterinquiry@hydro-int.com](mailto:stormwaterinquiry@hydro-int.com)

[www.hydro-int.com](http://www.hydro-int.com)

Turning Water Around...®

UFF\_OMM\_D1608

**ATTACHMENT “H”**  
**Pilot-Scale Field Testing Plan**

N/A

**ATTACHMENT “I”**  
**Measures for Minimizing Surface Stream Contamination**

All surface streams will be protected from erosion by not allowing runoff to exceed existing velocities. All stormwater runoff will continue to flow using the natural flow patterns that existed prior to the development.



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

I \_\_\_\_\_ Zach Quisenberry \_\_\_\_\_,  
Print Name  
Owner \_\_\_\_\_,  
Title - Owner/President/Other  
of \_\_\_\_\_ Pink House Storage and Marketplace \_\_\_\_\_,  
Corporation/Partnership/Entity Name  
have authorized \_\_\_\_\_ Shane Klar, P.E. \_\_\_\_\_  
Print Name of Agent/Engineer  
of \_\_\_\_\_ INK Civil \_\_\_\_\_  
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:

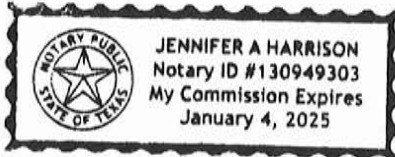
Zach Quisenberry  
Applicant's Signature

4-6-23  
Date

THE STATE OF TX §  
County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared Zach Quisenberry 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 6 day of April, 2023



Jennifer A Harrison  
NOTARY PUBLIC

Jennifer A Harrison  
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 01-04-2025

**FATCO**  
2532018

## WARRANTY DEED WITH VENDOR'S LIEN

**NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.**

October 28, 2020

Loan Number: 3349644

Grantor (whether one or more): **JACK LYNN M NOLAN TRUST**

Grantee (whether one or more): **ZACHARY QUISENBERRY and JAMIE T QUISENBERRY**

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF COMAL

THAT JACK-LYNN MEEHAN NOLAN, TRUSTEE, OR SUCCESSORS IN TRUST, UNDER THE NOLAN LIVING TRUST DATED MARCH 20, 2008 AND ANY AMENDMENTS THERETO hereinafter called "Grantor" (whether one or more), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration to Grantor paid by ZACHARY QUISENBERRY and JAMIE T QUISENBERRY, whose mailing address is, **4640 FM 1863, BULVERDE, TX 78163**, hereinafter called "Grantee" (whether one or more), the receipt of which is hereby acknowledged and confessed, and the further consideration of the execution and delivery by Grantee of one certain Promissory Note in the principal sum of **(\$508,000.00) FIVE HUNDRED EIGHT THOUSAND AND NO/100**, of even date herewith, payable to the order of **FIRST UNITED BANK & TRUST COMPANY** hereinafter called "Mortgagee," bearing interest at the rate therein provided; said Note containing the usual reasonable attorney's fee clause and various acceleration of maturity clauses in case of default, and being secured by Vendor's Lien and superior title retained herein in favor of said Mortgagee, and being also secured by a Deed of Trust of even date herewith from Grantee to **GREG MASSEY, Trustee; and**

WHEREAS, Mortgagee has, at the special instance and request of Grantee, paid to Grantor a portion of the purchase price of the property hereinafter described, as evidenced by the above-described note, said Vendor's Lien and Deed of Trust lien against said property securing the payment of said Note are hereby assigned, transferred and delivered to Mortgagee, Grantor hereby conveying to said Mortgagee the said superior title to said property, subrogating said Mortgagee to all the rights and remedies of Grantor in the premises by virtue of said liens; and

Grantor has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY unto said Grantee, the following described property, to-wit:

**SEE LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".**

TO HAVE AND TO HOLD the above-described premises, together with all and singular, the rights and appurtenances thereunto in anywise belonging unto said Grantee, his heirs and assigns, forever. And Grantor does hereby bind himself, his heirs, executors and administrators, to warrant and forever defend all and singular the said



premises unto said Grantee, his heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

Taxes for the current year have been prorated and their payment is assumed by Grantee.

This conveyance is made subject to any and all valid and subsisting restrictions, easements, rights of way, reservations, maintenance charges together with any lien securing said maintenance charges, zoning laws, ordinances of municipal and/or other governmental authorities, conditions and covenants, if any, applicable to and enforceable against the above-described property as shown by the records of the County Clerk of said County.

The use of any pronoun herein to refer to Grantor or Grantee shall be deemed a proper reference even though Grantor and/or Grantee may be an individual (either male or female), a corporation, a partnership or a group of two or more individuals, corporations and/or partnerships, and when this Deed is executed by or to a corporation, or trustee, the words "heirs, executors and administrators" or "heirs and assigns" shall, with respect to such corporation or trustee, be construed to mean "successors and assigns."

It is expressly agreed that the Vendor's lien is retained in favor of the payee of said Note against the above-described property, premises and improvements, until said Note and all interest thereon shall have been fully paid according to the terms thereof, when this deed shall become absolute.

EXECUTED this 28th day of Oct, 2020

JACK LYNN M NOLAN TRUST

BY [Signature]  
JACK LYNN M NOLAN

10/28/2020  
Date

Date

STATE OF TEXAS

County of

*Morley*

This Instrument was acknowledged before me on

10/28/2020  
(date)

by JACK LYNN M NOLAN  
(name of officer)

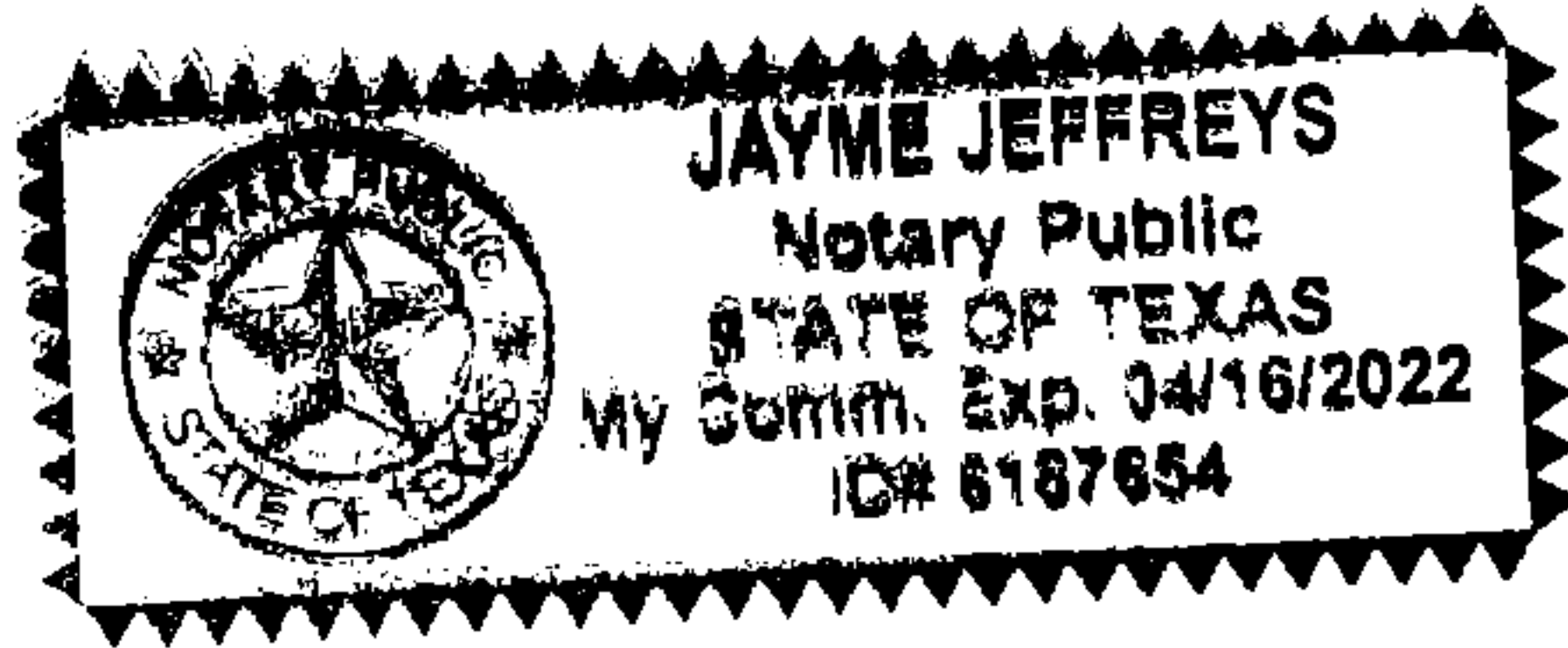
Escrow Officer  
(title of officer)

of

JACK LYNN M NOLAN TRUST  
(name of corporation acknowledging)

a —, on behalf of said corporation.  
(state of incorporation)

(Seal)



Notary Public

*Jayme Jeffreys*

Title of Notarial Officer

My Commission Expires:

4/14/2022

After Recording, Please Mail To Grantee: **ZACHARY QUISENBERRY**  
**4640 FM 1863**  
**BULVERDE, TX 78163**

**EXHIBIT 'A'**

File No.: **2532018-SA71 (JJ)**

Property: **4640 FM 1863, Bulverde, TX 78163**

**TRACT I:**

**5.33 ACRES OF LAND IN COMAL COUNTY, TEXAS, KNOWN AS TRACT NO. 4, BEING PART OF THE AGAPITA GAYTAN SURVEY NO. 194, ABSTRACT NO. 174, AND BEING PART OF THAT 143.3 ACRE TRACT OF LAND, DESIGNATED AS "TRACT THREE" IN DEED THAT WAS CONVEYED FROM IDA KAPPELMANN, ET AL TO CANYON LAKE SHORES, INC. BY DEED DATED JUNE 10, 1968, RECORDED . IN VOL. 163, PAGES 624-631 OF THE DEED RECORDS OF COMAL COUNTY, TEXAS.**

**SAID TRACT OF 5.33 ACRES OF LAND IS DESCRIBED BY METES AND BOUNDS AS FOLLOWS, TO -WIT; BEGINNING AT A STEEL BAR SET, IN THE S.W... RIGHT-OF-WAY LINE OF F.M.. HIGHWAY NO. 1863, BEING A POINT 100.0 FEET N. 55° 39' W.; 62.7 FEET N. 52° 23' W. AND 200.0 FEET N. 51° 04' W. FROM THE N.E. CORNER OF THE AFORESAID MENTIONED 143.3 ACRE TRACT OF LAND THAT WAS CONVEYED TO CANYON LAKE SHORES, INC. FOR THE N. E. CORNER OF THIS TRACT;**

**THENCE S. 30° 06' W. 1212.3 FEET TO A STEEL BAR SET IN THE CENTER OF CIBOLO RIVER FOR THE S.E. CORNER OF THIS TRACT;**

**THENCE UP THE CENTER OF CIBOLO RIVER  
N. 56° 59' W. 137.3 FEET TO A STEEL BAR SET FOR CORNER;  
N. 43° 14' W. 150.0 FEET TO A STEEL BAR SET FOR THE S.W. CORNER OF THIS TRACT.**

**THENCE N. 38° 53' E. 1191.8 FEET TO A STEEL BAR SET IN THE S.W. RIGHT-OF-WAY LINE OF F. M. HIGHWAY NO. 1863 FOR THE N.W. CORNER OF THIS TRACT;**

**THENCE WITH THE S.W. RIGHT-OF-WAY LINE OF SAID HIGHWAY, S. 51° 04' E. 100.0 FEET TO THE PLACE OF BEGINNING.**

**TRACT II:**

**5.14 ACRES OF LAND IN COMAL COUNTY, TEXAS, KNOWN AS TRACT NO. 5, BEING PART OF THE AGAPITA GAYTAN SURVEY NO. 194, ABSTRACT NO. 174, AND BEING PART OF THAT 143.3 ACRE TRACT OF LAND, DESIGNATED AS "TRACT THREE" IN DEED THAT WAS CONVEYED FROM IDA KAPPELMANN, ET AL TO CANYON LAKE SHORES, INC. BY DEED DATED JUNE 10, 1968, RECORDED IN VOL. 163, PAGES 624-631 OF THE DEED RECORDS OF COMAL COUNTY, TEXAS.**

**SAID TRACT OF 5.14 ACRES OF LAND IS DESCRIBED, BY METES AND BOUNDS AS FOLLOWS, TO -WIT:**

**BEGINNING AT A STEEL BAR SET IN THE S.W. RIGHT-OF-WAY LINE OF F.M. HIGHWAY NO. 1863, BEING A POINT 100.0 FEET N. 55° 39' W.; 62.7 FEET N. 52° 23' W. AND 300.0 FEET N. 51° 04' W. FROM THE N.E. CORNER OF THE AFORESAID MENTIONED 143.3 ACRE TRACT OF LAND THAT WAS CONVEYED TO CANYON LAKE SHORES, INC. FOR THE N. E. CORNER OF THIS TRACT;**

**THENCE S. 38° 53' W. 1191.8 FEET TO A STEEL BAR SET IN THE CENTER OF CIBOLO RIVER**



**FOR THE S.E. CORNER OF THIS TRACT;**

**THENCE UP THE CENTER OF CIBOLO RIVER, N. 43° 14' W. 192.0 FEET TO A STEEL BAR SET FOR THE S.W. CORNER OF THIS TRACT;**

**THENCE N. 38° 53' E. 1165.7 FEET TO A STEEL BAR SET IN THE S.W. RIGHT-OF-WAY LINE OF F.M. HIGHWAY NO. 1863 FOR THE N. W. CORNER OF THIS TRACT;**

**THENCE WITH THE S.W. RIGHT-OF-WAY LINE OF SAID HIGHWAY S. 51° 04' E. 190.0 FEET TO THE PLACE OF BEGINNING;**

**TRACT III:**

**5.01 ACRES OF LAND OUT OF THE AGAPITA GAYTAN SURVEY NO. 194, ABSTRACT NO. 174, AND BEING PART OF THAT 143.3 ACRE TRACT OF LAND DESIGNATED AS "TRACT THREE" IN DEED FROM IDA KAPPELMANN, ET AL, TO CANYON LAKE SHORES, INC. DATED JUNE 10, 1968, RECORDED IN VOL. 163, PAGES 624-631, OF THE DEED RECORDS OF COMAL COUNTY, TEXAS, SAID 5.01 ACRES OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:**

**BEGINNING AT A STEEL BAR SET IN THE S.W. RIGHT-OF-WAY LINE OF F.M. HIGHWAY NO. 1863, BEING A POINT 100.0 FEET N. 55° 39' W., 62.7 FEET N. 52° 23' W. AND 490.0 FEET N. 51° 04' W. FROM THE N.E. CORNER OF THE AFORESAID MENTIONED 143.3 ACRE TRACT OF LAND THAT WAS CONVEYED TO CANYON LAKE SHORES, INC. FOR THE N.E. CORNER OF THIS TRACT;**

**THENCE S. 38°53' W. 1165.7 FEET TO A STEEL BAR SET IN THE CENTER OF CIBOLO RIVER FOR THE S. E. CORNER OF THIS TRACT;**

**THENCE UP THE CENTER OF CIBOLO RIVER:**

**N. 43° 14' W. 65.0 FEET TO A STEEL BAR SET FOR CORNER;**

**N. 37° 04' W. 130.0 FEET TO A STEEL BAR SET FOR THE S.W. CORNER OF THIS TRACT;**

**THENCE N. 38° 54' E. 1125.3 FEET TO A STEEL BAR SET IN THE S.W. RIGHT -OF -WAY LINE OF F.M. HIGHWAY NO. 1863 FOR THE N.W. CORNER OF THIS TRACT;**

**THENCE WITH THE S.W. RIGHT-OF-WAY LINE OF SAID HIGHWAY, S 51° 04' E. 190.0 FEET TO THE PLACE OF BEGINNING.**

**A.P.N. 75182**

Filed and Recorded  
Official Public Records  
Bobbie Koepp, County Clerk  
Comal County, Texas  
11/02/2020 08:54:34 AM  
JESSICA 5 Pages(s)  
202006048757



*Bobbie Koepp*

VOL 341 PAGE 288

222054

WARRANTY DEED WITH VENDOR'S LIEN

THE STATE OF TEXAS  
COUNTY OF COMAL

} KNOW ALL MEN BY THESE PRESENTS:

That we, ANNE DICK WATERS, aka ANNE WATERS, and husband, FRED WATERS,  
of the County of Comal and State of Texas, for and in  
consideration of the sum of -----TEN AND NO/100 (\$10.00)-----  
-----DOLLARS

and other valuable consideration to the undersigned paid by the grantee s herein named, the receipt of which  
is hereby acknowledged, and the further consideration of the execution and delivery by Grantees of  
their one certain promissory note of even date herewith in the principal sum of  
\$95,000.00, payable to the order of ANNE DICK WATERS, aka ANNE WATERS, and husband, FRED  
WATERS, as therein provided and bearing interest at the rate therein specified and pro-  
viding for acceleration of maturity in event of default and for attorney's fees,

FILED FOR RECORD

1983 MAR -1 PM 3:11

ROSIE BOSENEBURY  
COUNTY CLERK COMAL COUNTY

*Robert M. Munn*  
\$11.00 pd

the payment of which note is secured by the vendor's lien herein retained, and is additionally secured by a deed  
of trust of even date herewith to O'NEAL MUNN, Trustee,

have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto  
ROBERT A. ALEXANDER and wife, WILLENE ALEXANDER, whose mailing  
address is 509 Southtrail, San Antonio, Texas 78216,

of the County of Bexar, and State of Texas, all of the following described real  
property in Comal County, Texas, to-wit:

TRACT I: Being 5.01 acres of land, more or less, out of the Agapita Gaytan Survey No.  
194, Abstract No. 174, Comal County, Texas; TRACT II: Being 5.33 acres of land, more  
or less, out of the Agapita Gaytan Survey No. 194, Abstract No. 174, Comal County, Texas;  
and TRACT III: Being 5.14 acres of land, more or less, out of the Agapita Gaytan Survey  
No. 194, Abstract No. 174, Comal County, Texas; all of said tracts being more particularly  
described by metes and bounds in Exhibit "A" attached hereto and made a part hereof for  
all purposes.

This conveyance is made and accepted subject to the conditions and restrictions of record as follows: TRACT I: Restrictions in Volume 248, Page 238, Deed Records of Comal County, Texas; AND Reservation of all oil, gas and other minerals contained in Deed dated October 6, 1976, from Lakecroft, Inc., to Robert Milton Schreier, recorded in Volume 248, Page 238, Deed Records of Comal County, Texas; TRACTS II AND III: Restrictions in Volume 246, Page 342, Deed Records of Comal County, Texas; Channel easement granted to State of Texas as recorded in Volume 114, Page 106, Deed Records of Comal County, Texas; AND Reservation of all oil, gas and other minerals contained in Deed dated November 5, 1976, from Lakecroft, Inc., to William J. Bidy and wife, Mildred I. Bidy, recorded in Volume 246, Page 342, Deed Records of Comal County, Texas.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said grantees, their heirs and assigns forever; and we do hereby bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantees, their heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

But it is expressly agreed that the VENDOR'S LIEN, as well as the Superior Title in and to the above described premises, is retained against the above described property, premises and improvements until the above described note and all interest thereon are fully paid according to the face, tenor, effect and reading thereof, when this Deed shall become absolute.

EXECUTED this 22nd day of

February, A. D. 19 83.

*Anne Dick Waters*  
Anne Dick Waters, aka Anne Waters

*Fred Waters*  
Fred Waters

341-522

83000



Mailing address of each grantee:

Name: Robert A. Alexander  
Address: 509 Southtrail  
San Antonio, Texas 78216

Name: Willene Alexander  
Address: 509 Southtrail  
San Antonio, Texas 78216

(Acknowledgment)

STATE OF TEXAS  
COUNTY OF BEXAR }

This instrument was acknowledged before me on the 22nd day of February, 1983, by ANNE DICK WATERS, aka ANNE WATERS, and husband, FRED WATERS.

My commission expires:

Notary Public, State of Texas  
Notary's printed name:

PATRICIA D. SMITH

(Acknowledgment)

STATE OF TEXAS  
COUNTY OF }

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_

My commission expires:

Notary Public, State of Texas  
Notary's printed name:

(Acknowledgment)

STATE OF TEXAS  
COUNTY OF }

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_

My commission expires:

Notary Public, State of Texas  
Notary's printed name:

(Corporate Acknowledgment)

STATE OF TEXAS  
COUNTY OF }

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_ of \_\_\_\_\_ a \_\_\_\_\_ corporation, on behalf of said corporation.

My commission expires:

Notary Public, State of Texas  
Notary's printed name:

AFTER RECORDING RETURN TO:

MR. AND MRS. ROBERT A. ALEXANDER  
509 SOUTHTRAIL  
SAN ANTONIO, TEXAS 78216

TRACT I.  
411 that certain tract, piece or parcel of land lying and being situated in Comal County, Texas, being 5.01 acres of land out of the AGAPITA GAYTAN SURVEY NO. 194, Abstract No. 174, and being part of that 143.4 acre tract of land designated as "Tract Three", in deed from Ida Kappelmann, et al to Canyon Lake Shores, Inc. dated June 10, 1968 and recorded in Vol. 163, pages 624-31, Comal County, Texas Deed Records; said 5.01 acres of land being more particularly described by metes and bounds as follows:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N.  $55^{\circ}39'$  W.; 62.7 feet N.  $52^{\circ}23'$  W. and 140.0 feet N.  $51^{\circ}04'$  W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S.  $38^{\circ}53'$  W. 1165.7 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River:  
N.  $43^{\circ}14'$  W. 65.0 feet to a steel bar set for corner; N.  $37^{\circ}04'$  W. 130.0 feet to a steel bar set for the S.W. corner of this tract;

THENCE N.  $38^{\circ}54'$  E. 1125.3 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway, S.  $51^{\circ}04'$  E. 190.0 feet to the place of beginning.

## TRACT II.

5.33 acres of land in Comal County, Texas, known as TRACT No. 4, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.

Said Tract of 5.33 acres of land is described by metes and bounds as follows, to-wit:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N.  $55^{\circ} 39'$  W.; 62.7 feet N.  $52^{\circ} 23'$  W. and 200.0 feet N.  $51^{\circ} 04'$  W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S.  $30^{\circ} 06'$  W. 1212.3 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River

N.  $56^{\circ} 59'$  W. 137.3 feet to a steel bar set for corner;

N.  $43^{\circ} 14'$  W. 150.0 feet to a steel bar set for the S.W. corner of this tract.

THENCE N.  $38^{\circ} 53'$  E. 1191.8 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway, S.  $51^{\circ} 04'$  E. 100.0 feet to the place of BEGINNING.

## TRACT III.

5.14 acres of land in Comal County, Texas, known as TRACT No. 5, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.

Said Tract of 5.14 acres of land is described by metes and bounds as follows, to-wit:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N.  $55^{\circ} 39'$  W.; 62.7 feet N.  $52^{\circ} 23'$  W. and 300.0 feet N.  $51^{\circ} 04'$  W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S.  $38^{\circ} 53'$  W. 1191.8 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River, N.  $43^{\circ} 14'$  W. 192.0 feet to a steel bar set for the S.W. corner of this tract;

THENCE N.  $38^{\circ} 53'$  E. 1165.7 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway S.  $51^{\circ} 04'$  E. 190.0 feet to the place of BEGINNING.



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STC GF#91804088 7/18.0  
FILED FOR RECORD

92 FEB 12 PM 3:34

COUNTY CLERK, COMAL COUNTY

BY Patricia A. Hanks  
1018

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ROBERT A. ALEXANDER TO ROYAL B. LEA AND JACKLYNN LEA

WARRANTY DEED WITH VENDOR'S LIEN

STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF BEXAR

The Guardianship of WILLENE G. ALEXANDER (hereinafter referred to as the estate) is now pending under Cause No. 90-PC-9021, in the Probate Court of Comal County, Texas. The estate owns the hereinafter described property.

LT. COL. ROBERT A. ALEXANDER, Guardian, is the duly appointed, qualified, and acting guardian of the estate.

The Guardian applied to the Court for an Order to sell the property, and the Court entered an Order on December 30, 1991, directing the sale of the property. Guardian entered into a contract for sale of the property to ROYAL B. AND JACKLYNN LEA, Purchasers.

Guardian filed his report of sale with the Court on December 30, 1991, after which the sale was in all respects confirmed by a Decree of the Court entered on January 6, 1992.

Purchasers have complied with the terms of such sale.

NOW, THEREFORE, I, ROBERT A. ALEXANDER, Individually, and as Guardian of the Person and Estate of WILLENE G. ALEXANDER, HC 51, Box 1282, Bulverde, Bexar County and State of Texas for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other valuable consideration to the

WARRANTY DEED W/VENDOR'S LIEN -- ALEXANDER/LEA  
PAGE 1 OF 5 PAGES

undersigned paid by the grantees herein named, the receipt of which is hereby acknowledged, and the further consideration of the execution and delivery by grantees of that one certain note of even date herewith in the principal sum of ONE HUNDRED THIRTY FIVE THOUSAND AND NO/100 DOLLARS (\$135,000.00), payable to the order of ROBERT A. ALEXANDER, ET AL at the Bank of the Hills, at its office in Cedar Park, Travis County, Texas, and one certain wraparound note of even date herewith in the principal amount of EIGHT THOUSAND AND NO/100 DOLLARS (\$8,000.00), payable to ROBERT A. ALEXANDER, ET AL in two (2) installments of \$4,000.00 to be paid on February 15, 1992 and March 15, 1992, as therein provided and bearing interest at the rates therein specified and providing for acceleration of maturity in event of default and for attorney's fees, the payment of which note is secured by the vendor's lien herein retained, and is additionally secured by a deed of trust of even date herewith to PATRICIA A. FINCH, Trustee, have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto ROYAL B. LEA and wife, JACKLYNN LEA, c/o Neill Boldrick, Jr., 700 N. St. Mary's, Suite 620, San Antonio, Texas 78205 and and State of Texas, all of the following described real property in Comal County, Texas, to-wit:

Three (3) tracts of land totaling 15.48 acres more or less out of the AGAPITA GAYTAN SURVEY NO. 194, Abstract No. 174, as further described on Exhibit A attached hereto and made a part hereof for all purposes.

0805 0568

Further included in this conveyance are all improvements situated on the herein described property including a Palm Harbor 28x56, 3 bedroom home, serial number PH05-1238, A and B, Texas Decal number TEX0240835/6. Grantor further agrees to execute and deliver such other documents as may be necessary or proper to transfer and convey to Grantee such home.

TOGETHER WITH all and singular the rights and appurtenances thereto in anywise belonging unto the said grantees, their heirs and assigns forever; and they do hereby bind themselves, their heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantees, their heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

But it is expressly agreed that the VENDOR'S LIEN, as well as the Superior Title in and to the above described premises, is retained against the above described property, and improvements until the above described note and all interest thereon are fully paid according to the face, tenor, effect and reading thereof, when this Deed shall become absolute.

This conveyance is made and accepted subject to any and all conditions and restrictions, if any, relating to the hereinabove described property, to the extent, and only to the extent, that the same may still be in force and effect, shown of record in the office of the County Clerk of Guadalupe County, Texas, including but not limited to:

1. Restrictive covenants in Volume 240, Page 342, and Volume 248, Page 238 of the Deed Records of Comal County, Texas.
2. Standby fees and taxes being State and County and Comal Independent School District for the year 1992 and subsequent years, and subsequent assessments for prior years due to change

WARRANTY DEED W/VENDOR'S LIEN -- ALEXANDER/LEA  
PAGE 3 OF 5 PAGES



in land usage or ownership.

3. 50' front and 5' side setback line as recorded in Volume 240, Page 342, and in Volume 248, Page 238, Deed Records of Comal County, Texas.

4. Channel easement as set out in Volume 114, Page 106, Deed Records of Comal County, Texas.

5. Any visible and apparent roadway or easement over or across the subject property, the existence of which does not appear of record.

6. All oil, gas and other minerals reserved in Deeds recorded in Volume 240, Page 342, and in Volume 248, Page 238, Deed Records of Comal County, Texas.

7. Mineral and Royalty interest as set out in Volume 1147, Page 94 of the Real Property Records of Bexar County, Texas, and in Volume 57, Page 281, Deed Records of Comal County, Texas.

This conveyance is made subject to (1) the unpaid balance of a promissory note in the original principal amount of \$95,000.00 executed by Robert A. Alexander and wife, Willene G. Alexander, payable to the order of Anne Dick Waters a/k/a Anne Waters and husband, Fred Waters, secured by a vendor's lien retained in a Deed dated February 22, 1983, recorded in Volume 341, Page 288, of the Deed Records of Comal County, Texas, and additionally secured by a Deed of Trust of even date therewith to O'Neal Munn, Trustee, recorded in Volume 236, Page 280, of the Deed of Trust Records of Comal County, Texas, and (2) the unpaid balance of a note in the original principal amount of \$39,290.00 executed by Robert A. Alexander and wife, Willene G. Alexander, payable to the order of The First Financial Corporation, the payment of which \$95,000.00 note and \$39,290.00 note are not assumed by Grantee and the payment of both of which \$95,000.00 note and \$39,290.00 note Grantor herein is obligated to pay as therein set forth and to secure releases thereof. In the event of default in the payment of either the \$95,000.00 note or the \$39,290.00 note, Grantee shall have the right to cure any such default as long as Grantee is not in default in the payment of the \$135,000.00 wrap-around note herein described or in the performance of the covenants of the Deed of Trust securing it. If Grantee cures any default in payment of either the \$95,000.00 note or the \$39,290.00 note, Grantee may receive credit on the \$135,000.00 wrap-around note herein described for all amounts so paid as of the date of payment of same in the manner that Grantee directs.

0805 0570

EXECUTED this the 29<sup>th</sup> day of January, 1992.

Robert A. Alexander  
ROBERT A. ALEXANDER, Individually

Robert A. Alexander  
ROBERT A. ALEXANDER, Guardian of  
the Person and Estate of  
WILLENE G. ALEXANDER

STATE OF TEXAS

COUNTY OF BEXAR

This instrument was acknowledged before me on this the 29  
day of January, 1992 by ROBERT A. ALEXANDER,  
Individually.



Christine Marie Luna  
Notary Public, State of Texas  
Notary's Printed Name:

My commission expires: \_\_\_\_\_

STATE OF TEXAS

COUNTY OF BEXAR

This instrument was acknowledged before me on this the 29  
day of January, 1992 by LT. COL. ROBERT A.  
ALEXANDER, Guardian of the Person and Estate of WILLENE G.  
ALEXANDER.



Christine Marie Luna  
Notary Public, State of Texas  
Notary's Printed Name:

My commission expires: \_\_\_\_\_

Return to:  
Dr. and Mrs. Royal Lea  
11835 Greenwood Village  
San Antonio, Texas 78249

WARRANTY DEED W/VENDOR'S LIEN -- ALEXANDER/LEA  
PAGE 5 OF 5 PAGES

Stewart Title Company

All that certain tract, piece or parcel of land lying and being situated in Comal County, Texas, being 5.01 acres of land out of the AGAPITA GAYTAN SURVEY NO. 194, Abstract No. 174, and being part of that 143.4 acre tract of land designated as "Tract Three", in deed from Ida Kappelmann, et al to Canyon Lake Shores, Inc. dated June 10, 1968 and recorded in Volume 163, Pages 624-31, Comal County, Texas Deed Records; said 5.01 acres

0805 0571

of land being more particularly described by metes and bounds as follows:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55 degrees 39' West; 62.7 feet W. 33 degrees 23' west, and 480.0 feet north 51 deg 04' west from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S. 38 deg 33' W. 1165.7 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River; W. 43 deg 14' W. 65.0 feet to a steel bar set for corner; W. 37 deg. 04' W. 130.0 feet to a steel bar set for the S.W. corner of this tract;

THENCE N. 38 deg 54' E. 1125.3 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway S. 51 deg. 04' E. 190.0 feet to the place of beginning.

TRACT II:

5.33 acres of land in Comal County, Texas, known as Tract No. 4, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, et al to Canyon Lake Shores, Inc. by Deed dated June 10, 1968, recorded in Volume 163, Pages 624-631 of the Deed Records of Comal County, Texas.

Said tract of 5.33 acres of land is described by metes and bounds as follows, to-wit:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55 deg 39' W.; 62.7 feet W. 52 deg 23' W. of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract.

THENCE S. 30 deg 06' W. 1212.3 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of the Cibolo River;

N. 56 deg 59' W. 137.3 feet to a steel bar set for corner;

N. 43 deg 14' W. 150.0 feet to a steel bar set for the S.W. corner of this tract.

THENCE N. 38 deg 53' E. 1191.8 feet to a steel bar set in the S. W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway, S. 51 deg 04' E. 100.0 feet to the place of BEGINNING.

TRACT III:

5.14 acres of land in Comal County, Texas known as Tract No. 5 being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, et al to Canyon Lake Shores, Inc. by Deed dated June 10, 1968, recorded in Volume 163, Pages 624-631 of the Deed Records of Comal County, Texas.

Said tract of 5.14 acres of land is described by metes and bounds as follows, to-wit:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55 deg 39' W.; 62.7 feet W. 52 deg 23' W. and 300.0 feet N. 51 deg 04' W. from the N.E. corner of the aforementioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S. 38 deg 53' W. 1191.8 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River N. 43 deg 14' W. 192.0 feet to a steel bar set for the S.W. corner of this tract;

THENCE N. 38 deg 53' E. 1165.7 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said Highway S. 51 deg. 04' E. 190.0 feet to the place of BEGINNING.

EXHIBIT "A"

RECORDER'S MEMORANDUM  
AT THE TIME OF RECORDATION THIS  
INSTRUMENT WAS FOUND TO BE INADEQUATE  
FOR THE BEST PHOTOGRAPHIC REPRODUCTION  
BECAUSE OF ILLEGIBILITY, CARBON OR  
PHOTO COPY, DISCOLORED PAPER ETC.



SCANNED



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LTSA/ RR/ RK/ 1211005150

**Notice of confidentiality rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your Social Security number or your driver's license number.**

### Special Warranty Deed

Date: August <sup>1st</sup>\_\_\_\_, 2007

Grantor: Royal B. Lea III, Independent Executor and Trustee under the Last Will and Testament of Royal B. Lea, M.D.

Grantor's Mailing Address: 319 Maverick Street  
San Antonio, Bexar County, Texas 78212

Grantee: Frank Richard Nolan

Grantee's Mailing Address: 4640 FM 1863  
Bulverde, Texas 78163-2441

Consideration: Ten dollars and other good and valuable consideration.

Property (including any improvements): A undivided one half (½) interest in the real property described in Exhibit "A" attached hereto.

#### Reservations from Conveyance:

(1) easements, rights of way and prescriptive rights, whether of record or not; all presently recorded restrictions, reservations, covenants, conditions, oil and gas leases, mineral severances, and other instruments, other than liens and conveyances, that affect the Property; rights of adjoining owners in any walls and fences situated on a common boundary; discrepancies, conflicts, and shortages in area or boundary lines; any encroachments or overlapping of improvements; all rights, obligations and other matters emanating from and existing by reason of the creation, establishment, maintenance, and operation of any County Water Improvement District, Municipal Utility District, or similar government or quasi-governmental agency; taxes for the year during which this conveyance takes place, the payment of which Grantee shall assume; and subsequent assessments for that year and prior years due to change in land usage, ownership, or both, the payment of which Grantee assumes; (2) existing building and zoning ordinances and environmental regulations; (3) rights of parties in possession and (4) rights of tenants in possession under unrecorded leases or rental agreements.

#### Exceptions to Conveyance and Warranty:

1. Channel easement granted to the State of Texas by instrument recorded in Volume 114, Page 106 of the Deed Records of Comal County, Texas.
2. Mineral conveyance recorded in Volume 57, Page 281 of the Deed Records of Comal County, Texas.



LT2-13039-1406-4

3. Any portion of the property described herein within the limits or boundaries of any public or private roadway and/or highway.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof when the claim is by, through, or under Grantor but not otherwise, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

When the context requires, singular nouns and pronouns include the plural.

Grantor:

Royal B. Lea III, Independent Executor and Trustee under the Last Will and Testament of Royal B. Lea, M.D.

Grantee:

Frank Richard Nolan

STATE OF TEXAS

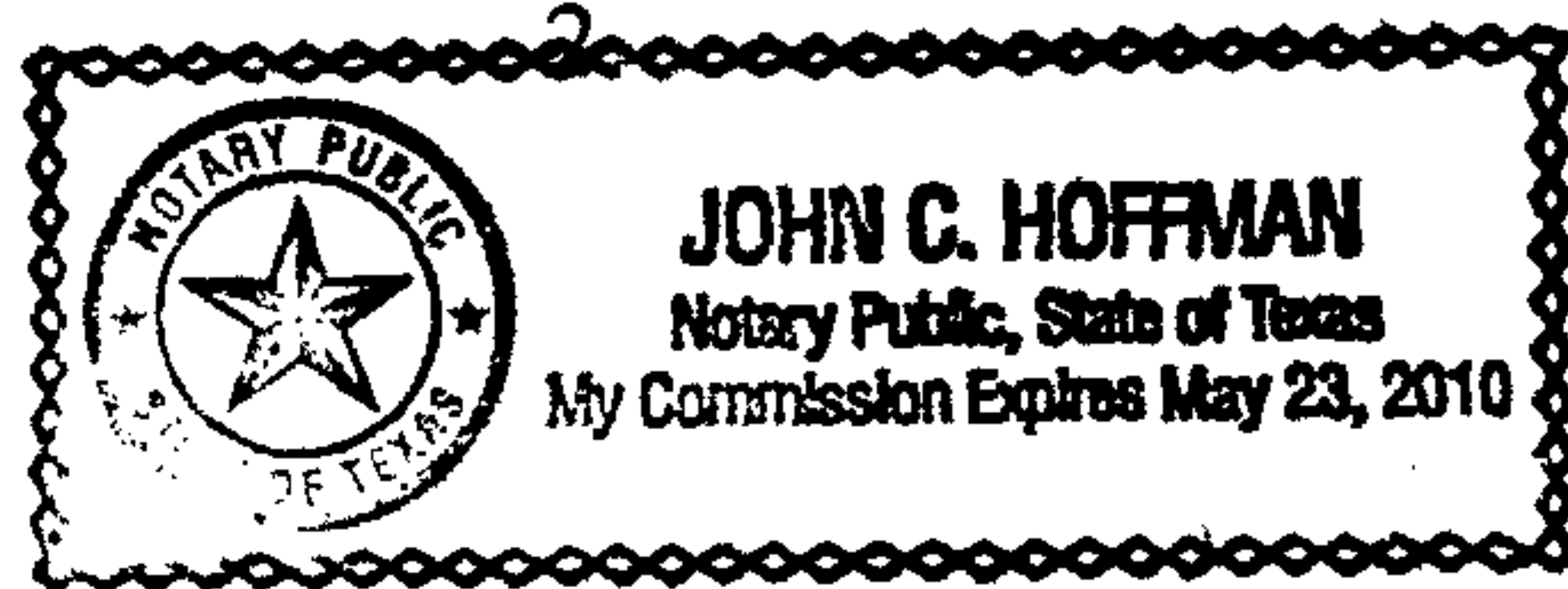
COUNTY OF BEXAR

§  
§  
§

This instrument was acknowledged before me on this the 1st day of August, 2007 by Royal B. Lea III, Independent Executor and Trustee under the Last Will and Testament of Royal B. Lea, M.D.

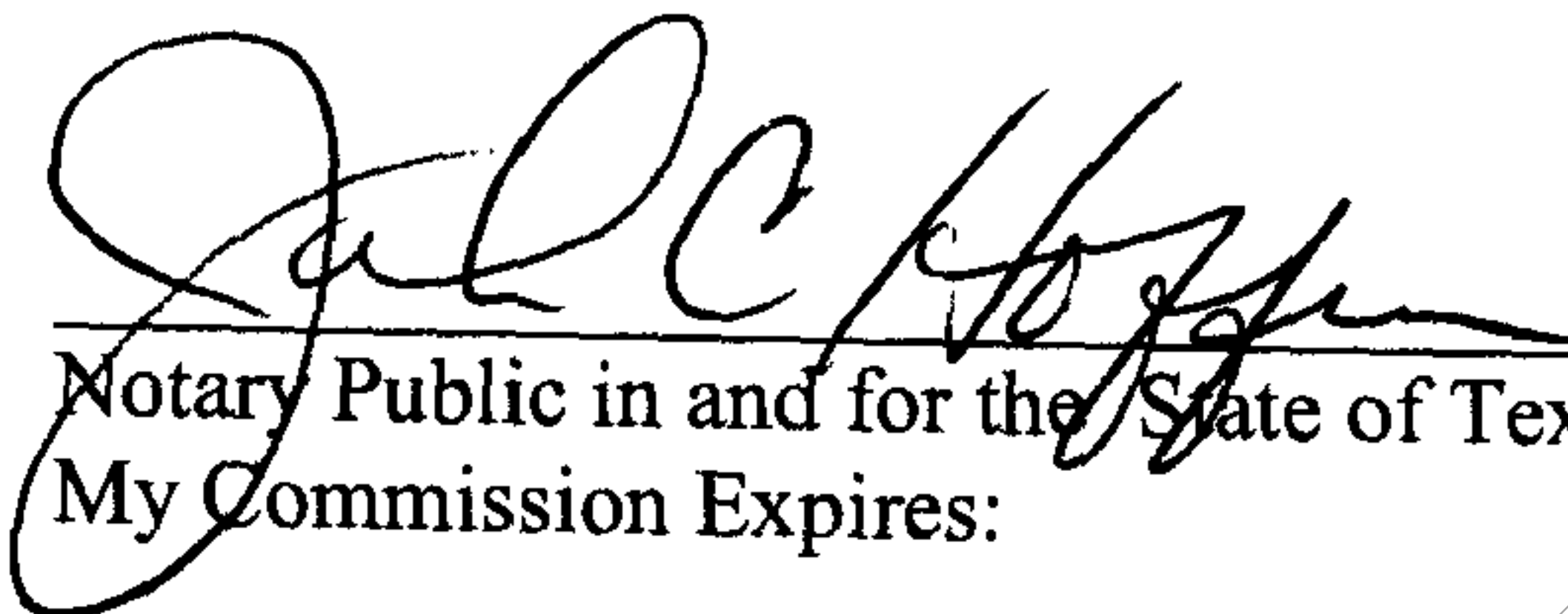
Notary Public in and for the State of Texas  
My Commission Expires:

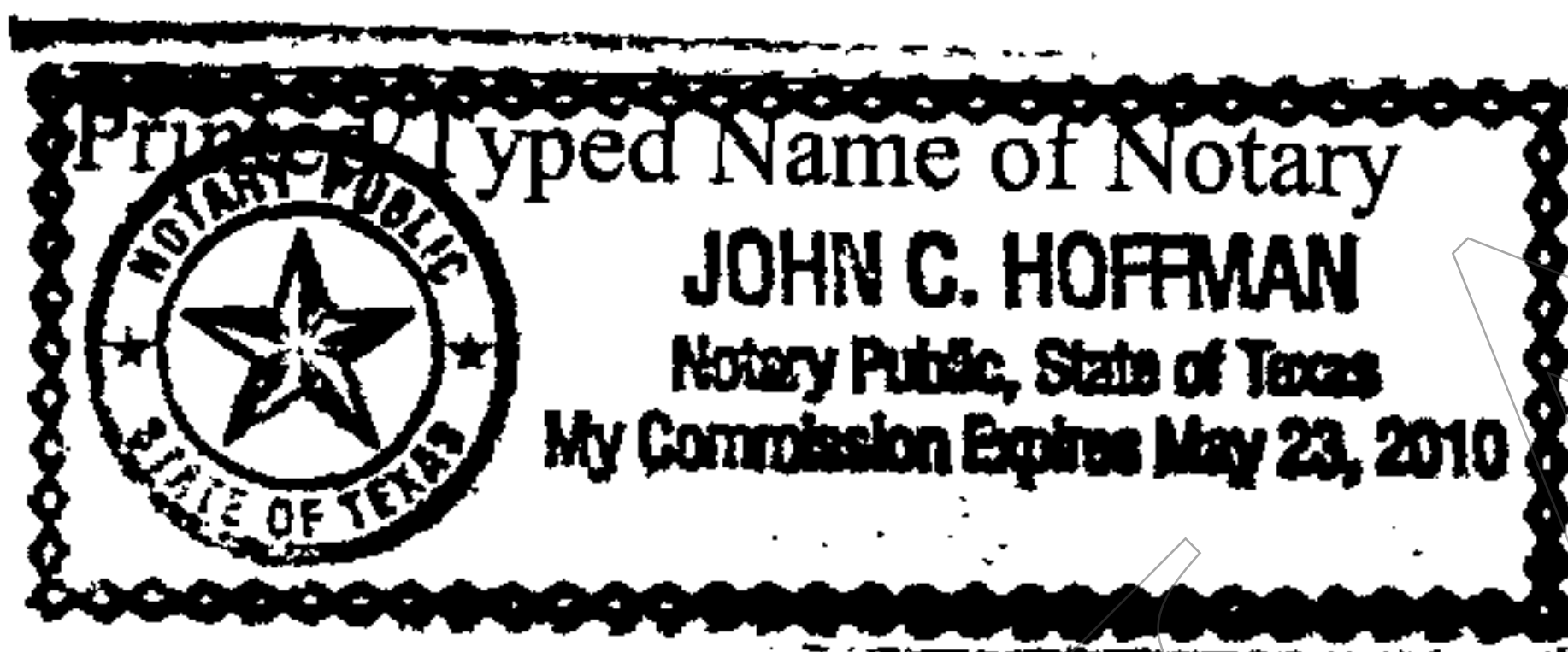
Printed/Typed Name of Notary



STATE OF TEXAS       §  
                                  §  
COUNTY OF BEXAR    §

This instrument was acknowledged before me on this the 1st day of August, 2007  
by Frank Richard Nolan.

  
\_\_\_\_\_  
Notary Public in and for the State of Texas  
My Commission Expires:



AFTER RECORDING, RETURN:  
Frank Richard Nolan  
4640 FM 1863  
Bulverde, TX 78163-2441



EXHIBIT "A"

Recorder's Memorandum-Comal County  
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility.

Doc# 200706035194

**TRACT I:** 5.33 acres of land in Comal County, Texas, known as TRACT No. 4, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelman, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.  
Said Tract of 5.33 acres of land is described by metes and bounds as follows, to-wit:  
BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55° 39' W.; 62.7 feet N. 52° 23' W. and 200.0 feet N. 51° 04' W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N. E. corner of this tract;  
THENCE S. 30° 06' W. 1212.3 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;  
THENCE up the center of Cibolo River N. 56° 59' W. 137.3 feet to a steel bar set for corner; N. 43° 14' W. 150.0 feet to a steel bar set for the S.W. corner of this tract.  
THENCE N. 38° 53' E. 1191.8 feet to a steel bar set in the S.W. right-of-way line of F. M. Highway No. 1863 for the N.W. corner of this tract;  
THENCE with the S.W. right-of-way line of said highway, S. 51° 04' E. 100.0 feet to the place of BEGINNING.

**TRACT II:** 5.14 acres of land in Comal County, Texas, known as TRACT No. 5, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelman, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.  
Said Tract of 5.14 acres of land is described by metes and bounds as follows, to-wit:  
BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55° 39' W.; 62.7 feet N. 52° 23' W. and 300.0 feet N. 51° 04' W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N. E. corner of this tract;  
THENCE S. 38° 53' W. 1191.8 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;  
THENCE up the center of Cibolo River, N. 43° 14' W. 192.0 feet to a steel bar set for the S.W. corner of this tract;  
THENCE N. 38° 53' E. 1165.7 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N. W. corner of this tract;  
THENCE with the S.W. right-of-way line of said highway S. 51° 04' E. 190.0 feet to the place of BEGINNING.

**TRACT III:** 5.01 acres of land out of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land designated as "Tract Three" in Deed from Ida Kappelman, et al, to Canyon Lake Shores, Inc. dated June 10, 1968, recorded in Vol. 163, pages 624-631, of the Deed Records of Comal County, Texas, said 5.01 acres of land being more particularly described by metes and bounds as follows:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55° 39' W.; 62.7 feet N. 52° 23' W. and 490.0 feet N. 51° 04' W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

THENCE S. 38° 53' W. 1165.7 feet to a steel bar set in the center of Cibolo River for the S. E. corner of this tract;

THENCE up the center of Cibolo River; N. 43° 14' W. 65.0 feet to a steel bar set for corner; N. 37° 04' W. 130.0 feet to a steel bar set for the S.W. corner of this tract;

THENCE N. 38° 54' E. 1125.3 feet to a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway, S. 51° 04' E. 190.0 feet to the place of beginning.

**RECORDER'S MEMORANDUM**  
AT THE TIME OF RECORDATION, THIS INSTRUMENT WAS FOUND TO BE INADEQUATE FOR THE BEST PHOTOGRAPHIC REPRODUCTION BECAUSE OF ILLEGIBILITY, CARBON OR PHOTO COPY DISCOLORED PAPER ETC.

Any provision herein which restricts the sale, or use of the described real property because of race is invalid and unenforceable under Federal law  
STATE OF TEXAS, COUNTY OF BEXAR  
I hereby certify that this instrument was FILED in File Number Sequence on the date and at the time stamped hereon by me and was duly RECORDED in the Official Public Record of Real Property of Bexar County, Texas on:

AUG - 3 2007



*Gerry Rickhoff*  
COUNTY CLERK BEXAR COUNTY, TEXAS

Doc# 200706035194  
# Pages 4  
08/22/2007 10:35AM  
Official Records of  
COMAL COUNTY  
JOY STREATER  
COUNTY CLERK  
Fees \$28.00



*Joy Streater*

Doc# 20070184222 Fees: \$28.00  
08/03/2007 3:01PM # Pages 4  
Filed & Recorded in the Official Public  
Records of BEXAR COUNTY  
GERRY RICKHOFF COUNTY CLERK

Doc# 200706035194

GF# 1211005150

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

3

## SPECIAL WARRANTY DEED

Date: MAR 20 2008



201306031609 07/26/2013 07:31:04 AM 1/3

Grantor: FRANK R. NOLAN and JACK-LYNN MEEHAN NOLAN

Grantor's Mailing Address (including County):

4640 FM 1863  
BULVERDE, TEXAS 78163-2441 (COMAL COUNTY)

Grantee: FRANK R. NOLAN and JACK-LYNN MEEHAN NOLAN, Trustees,  
or their successors in trust, under the  
NOLAN LIVING TRUST dated MAR 20 2008,  
and any amendments thereto.

Grantee's Mailing Address (including County):

4640 FM 1863  
BULVERDE, TEXAS 78163-2441 (COMAL COUNTY)

Consideration: TEN AND NO/100 DOLLARS (\$10.00), and other good and valuable consideration.

Property (including any improvements):

The property more fully described on Exhibit "A", attached hereto for all purposes.

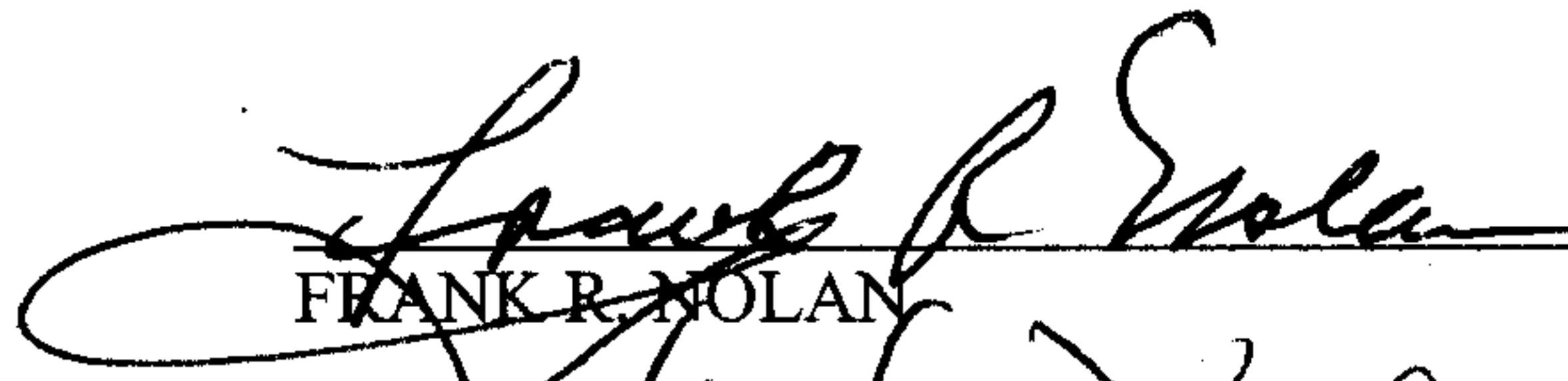
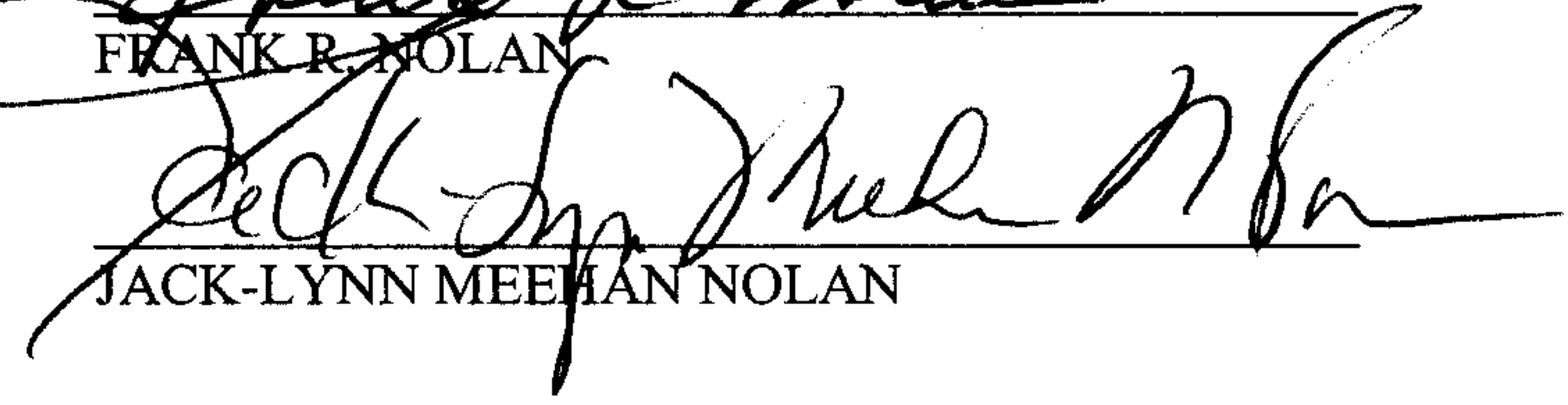
Reservations from and exceptions to conveyance and warranty:

Any and all of record, if any.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and to hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under us, but not otherwise, except as to the reservations from and exceptions to conveyance and warranty.



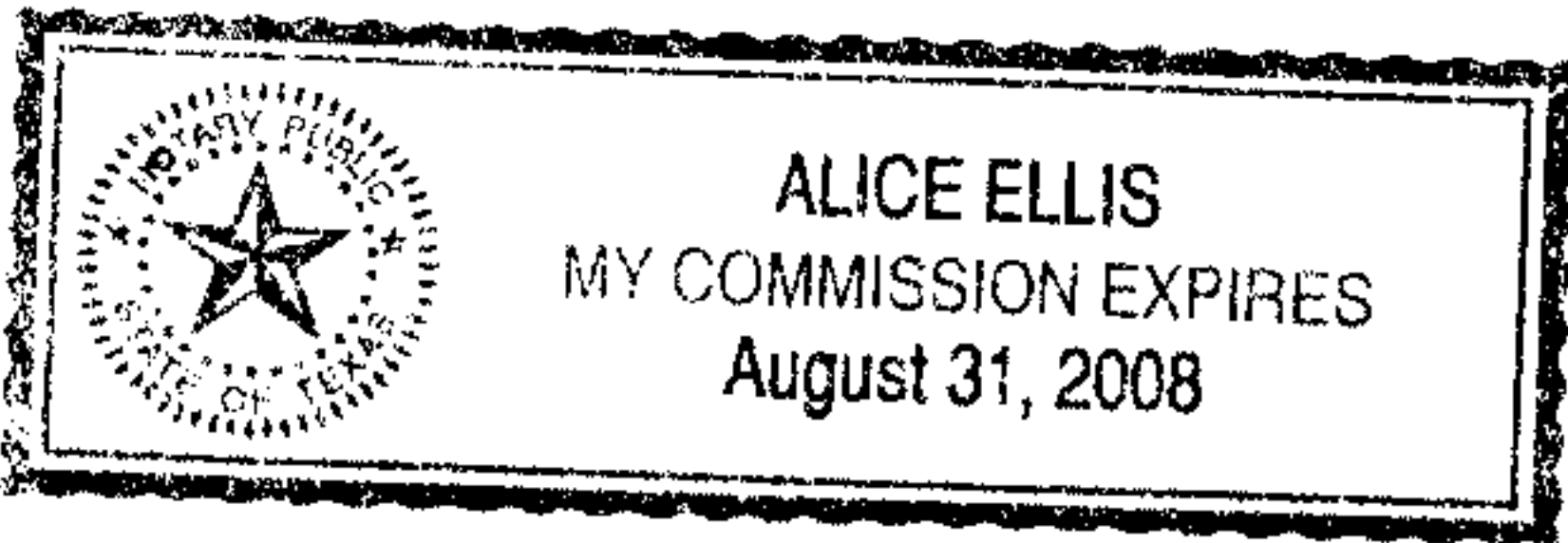
When the context requires, singular nouns and pronouns include the plural.

  
FRANK R. NOLAN  
  
JACK-LYNN MEEHAN NOLAN

**Acknowledgment**

State of Texas           §  
                                  §  
County of Bexar       §

This instrument was acknowledged before me on           MAR 20 2008          , by FRANK R. NOLAN and JACK-LYNN MEEHAN NOLAN.



  
Notary Public, State of Texas

**AFTER RECORDING RETURN TO:**  
FRANK R. NOLAN and JACK-LYNN MEEHAN NOLAN  
4640 FM 1863  
BULVERDE, TEXAS 78163-2441

UNOFFICIAL



## EXHIBIT "A"

TRACT I: 5.33 acres of land in Comal County, Texas, known as TRACT No. 4, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.

Said Tract of 5.33 acres of land is described by metes and bounds as follows, to-wit:

BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55° 39' W.; 62.7 feet N. 52° 23' W. and 200.0 feet N. 51° 04' W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N. E. corner of this tract;

THENCE S. 30° 06' W. 1212.3 feet to a steel bar set in the center of Cibolo River for the S.E. corner of this tract;

THENCE up the center of Cibolo River  
N. 56° 59' W. 137.3 feet to a steel bar set for corner;  
N. 43° 14' W. 150.0 feet to a steel bar set for the S.W. corner of this tract.

THENCE N. 38° 53' E. 1191.8 feet to a steel bar set in the S.W. right-of-way line of F. M. Highway No. 1863 for the N.W. corner of this tract;

THENCE with the S.W. right-of-way line of said highway, S. 51° 04' E. 100.0 feet to the place of BEGINNING.

TRACT II: 5.14 acres of land in Comal County, Texas, known as TRACT No. 5, being part of the Agapita Gaytan Survey No. 194, Abstract No. 174, and being part of that 143.3 acre tract of land, designated as "Tract Three" in deed that was conveyed from Ida Kappelmann, Et Al to Canyon Lake Shores, Inc. by deed dated June 10, 1968, recorded in Vol. 163, Pages 624-631 of the Deed Records of Comal County, Texas.

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BEGINNING at a steel bar set in the S.W. right-of-way line of F.M. Highway No. 1863, being a point 100.0 feet N. 55° 39' W.; 62.7 feet N. 52° 23' W. and 490.0 feet N. 51° 04' W. from the N.E. corner of the aforesaid mentioned 143.3 acre tract of land that was conveyed to Canyon Lake Shores, Inc. for the N.E. corner of this tract;

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N. 43° 14' W. 65.0 feet to a steel bar set for corner;  
N. 37° 04' W. 130.0 feet to a steel bar set for the S.W. corner of this tract;

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THENCE with the S.W. right-of-way line of said highway, S. 51° 04' E. 190.0 feet to the place of beginning.

Filed and Recorded  
Official Public Records  
Joy Streater, County Clerk  
Comal County, Texas  
07/26/2013 07:31:04 AM  
CASHONE 3 Page(s)  
201306031609



*Joy Streater*

# Application Fee Form

## Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Pink House Storage and Marketplace

Regulated Entity Location: 4640 FM 1863 Bulverde, TX 78163

Name of Customer: Zach Quisenberry

Contact Person: Zach Quisenberry

Phone: 432-770-5171

Customer Reference Number (if issued):CN \_\_\_\_\_

Regulated Entity Reference Number (if issued):RN \_\_\_\_\_

### Austin Regional Office (3373)

Hays

Travis

Williamson

### San Antonio Regional Office (3362)

Bexar

Medina

Uvalde

Comal

Kinney

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

Austin Regional Office

San Antonio Regional Office Online ePay

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

12100 Park 35 Circle

Mail Code 214

Building A, 3rd Floor

P.O. Box 13088

Austin, TX 78753

Austin, TX 78711-3088

(512)239-0357

### Site Location (Check All That 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	5.0 Acres	\$ 4,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: \_\_\_\_\_

Date: 4-6-23

# Application Fee Schedule

## Texas Commission on Environmental Quality

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

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

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

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

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

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

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

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

#### ***Exception Requests***

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

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

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





# 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

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

## SECTION II: Customer Information

<b>4. General Customer Information</b>		<b>5. Effective Date for Customer Information Updates</b> (mm/dd/yyyy)	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>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).</i>			
<b>6. Customer Legal Name</b> (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
QUISENBERRY, ZACHARY			
<b>7. TX SOS/CPA Filing Number</b>	<b>8. TX State Tax ID</b> (11 digits)	<b>9. Federal Tax ID</b> (9 digits)	<b>10. DUNS Number</b> (if applicable)
N/A	N/A	N/A	N/A
<b>11. Type of Customer:</b>	<input type="checkbox"/> Corporation	<input checked="" type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
<b>12. Number of Employees</b>		<b>13. Independently Owned and Operated?</b>	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>14. Customer Role</b> (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant			
<b>15. Mailing Address:</b>	4640 FM 1863		
	<b>City</b>	BULVERDE	<b>State</b> TX
	<b>ZIP</b>	78163	<b>ZIP + 4</b>
<b>16. Country Mailing Information</b> (if outside USA)		<b>17. E-Mail Address</b> (if applicable)	
		Zachquis05@yahoo.com	
<b>18. Telephone Number</b>	<b>19. Extension or Code</b>	<b>20. Fax Number</b> (if applicable)	

**SECTION III: Regulated Entity Information**

<b>21. General Regulated Entity Information</b> (If 'New Regulated Entity' is selected, a new permit application is also required.)							
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information							
<i>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).</i>							
<b>22. Regulated Entity Name</b> (Enter name of the site where the regulated action is taking place.)							
PINK HOUSE STORAGE AND MARKETPLACE							
<b>23. Street Address of the Regulated Entity:</b> <i>(No PO Boxes)</i>		4640 FM 1863					
<b>City</b>	BULVERDE	<b>State</b>	TX	<b>ZIP</b>	78163	<b>ZIP + 4</b>	
<b>24. County</b>	COMAL						

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

<b>25. Description to Physical Location:</b>		APPROX. 2.4 MILES FROM US-281 AND FM 1863 INTERSECTION					
<b>26. Nearest City</b>				<b>State</b>		<b>Nearest ZIP Code</b>	
BULVERDE				TX		78163	
<i>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).</i>							
<b>27. Latitude (N) In Decimal:</b>			<b>28. Longitude (W) In Decimal:</b>				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
<b>29. Primary SIC Code</b> (4 digits)		<b>30. Secondary SIC Code</b> (4 digits)		<b>31. Primary NAICS Code</b> (5 or 6 digits)		<b>32. Secondary NAICS Code</b> (5 or 6 digits)	
4225		N/A		493110		N/A	
<b>33. What is the Primary Business of this entity?</b> (Do not repeat the SIC or NAICS description.)							
SELF STORAGE							
<b>34. Mailing Address:</b>		4640 FM 1863					
<b>City</b>	BULVERDE	<b>State</b>	TX	<b>ZIP</b>	78163	<b>ZIP + 4</b>	
<b>35. E-Mail Address:</b>		Zachquis05@yahoo.com					
<b>36. Telephone Number</b>			<b>37. Extension or Code</b>		<b>38. Fax Number</b> (if applicable)		
( 432 ) 770-5171					( ) -		

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


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

### **SECTION IV: Preparer Information**

<b>40. Name:</b>	CHAD FRIESENHAHN	<b>41. Title:</b>	GRADUATE ENGINEER
<b>42. Telephone Number</b>	<b>43. Ext./Code</b>	<b>44. Fax Number</b>	<b>45. E-Mail Address</b>
( 830 ) 358-7127		( ) -	chadfriesenhahn@ink-civil.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.

<b>Company:</b>	INK CIVIL	<b>Job Title:</b>	PROFESSIONAL ENGINEER
<b>Name (In Print):</b>	SHANE KLAR, P.E.	<b>Phone:</b>	( 830 ) 358- 7127
<b>Signature:</b>		<b>Date:</b>	4-5-23