

# Texas Commission on Environmental Quality

## Edwards Aquifer Application Cover Page

---

### Our Review of Your Application

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

### Administrative Review

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

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

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

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

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

### Technical Review

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

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

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

**Mid-Review Modifications**

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

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

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

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

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

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

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

<b>1. Regulated Entity Name: Snack Time #4</b>		<b>2. Regulated Entity No.:</b>			
<b>3. Customer Name: CR 305 REAL ESTATE LLC.</b>		<b>4. Customer No.:</b>			
<b>5. Project Type:</b> (Please circle/check one)	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Modification	<input type="checkbox"/> Extension	<input type="checkbox"/> Exception	<input type="checkbox"/>

<b>6. Plan Type:</b> (Please circle/check one)	WPAP	CZP	<input checked="" type="checkbox"/> SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
<b>7. Land Use:</b> (Please circle/check one)	Residential	<input checked="" type="checkbox"/> Non-residential		<b>8. Site (acres):</b>				3.886	
<b>9. Application Fee:</b>	\$1,174.50	<b>10. Permanent BMP(s):</b>				Sand Filter			
<b>11. SCS (Linear Ft.):</b>	2349 lf	<b>12. AST/UST (No. Tanks):</b>							
<b>13. County:</b>	Williamson	<b>14. Watershed:</b>				Salado 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.

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	1__
Region (1 req.)	—	—	1__
County(ies)	—	—	1__
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"/> 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 checked="" type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill

	<input type="checkbox"/> Woodcreek		<input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock
--	------------------------------------	--	--

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.	
Ahmed El Seweify	
Print Name of Customer/Authorized Agent	11/12/2024
	Date
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):

Jon Niermann, *Chairman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

October 18, 2024

Mr. Sameer Umatiya  
CR 305 Real Estate LLC  
4313 Mezzaluna Pass  
Leander, Texas 78641

Re: Approval of a Water Pollution Abatement Plan (WPAP)  
Snack Time 4; Located NE of CR 305 and 307; Jarrell, Williamson County, Texas Edwards  
Aquifer Protection Program ID: 11004098 Regulated Entity No. RN112022108

Dear Mr. Umatiya

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by AES Engineering Consultant on behalf of the applicant, CR 305 Real Estate LLC on August 5, 2024. Final review of the application was completed after additional material was received on September 18, 2024, September 27, 2024, and October 15, 2024.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are **approved**, subject to applicable state rules and the conditions in this letter.

**This approval expires two years from the date of this letter**, unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of this letter.

The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

### PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 3.89 acres. The project will include the construction of a gas station with a convenience store, fuel pumping stations, three office warehouses, associated parking and drives, utilities and associated appurtenances. The impervious cover will be 2.88 acres (74.06 percent). Project wastewater will be disposed of by conveyance to the existing Jarrell Wastewater Treatment Plant.

### PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a partial sedimentation/filtration basin designed using the TCEQ technical guidance, *RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices*, will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 2,503 pounds of TSS generated from the 2.88 acres of impervious cover. The approved permanent BMPs and measures meet the required 80 percent removal of the increased load in TSS caused by the project.

**The permanent BMPS shall be operational prior to occupancy or use of the proposed project.** Inspection, maintenance, repair, and retrofit of the permanent BMPs shall be in accordance with the approved application.

### GEOLOGY

According to the Geologic Assessment (GA) included with the application, the surficial unit of the site is the Georgetown Formation (Kgt). No sensitive geologic features were identified in the GA. The site assessment conducted on September 3, 2024, by TCEQ staff determined the site to be generally as described by the GA.

### SPECIAL CONDITIONS

- I. This letter does not include the approval of an Organized Sewage Collection System (SCS) Plan Underground Storage Tank (UST) Facility Plan.

### STANDARD CONDITIONS

1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.
2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

### Prior to Commencement of Construction:

3. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the plan holder must submit to the EAPP proof of recordation of notice in the county deed records, with the volume and page number(s) of the county record. A description of the property boundaries shall be included in the deed recordation in the county deed records. TCEQ form, Deed Recordation Affidavit (TCEQ-0625), may be used.
4. The plan holder of any approved Edwards Aquifer protection plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.
5. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
6. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, must be installed prior to construction, and maintained during construction.

Temporary E&S controls may be removed when vegetation is established, and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

7. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring or gravel. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation.

During Construction:

8. This approval does not authorize the installation of temporary or permanent aboveground storage tanks on this project that will have a total storage capacity of five hundred gallons or more of static hydrocarbons or hazardous substances without prior approval of an Aboveground Storage Tank facility application.
9. If any sensitive feature is encountered during construction, replacement, or rehabilitation on this project, all regulated activities must be **immediately** suspended near it and notification must be made to TCEQ EAPP staff. Temporary BMPs must be installed and maintained to protect the feature from pollution and contamination. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality.
10. All water wells, including injection, dewatering, and monitoring wells shall be identified in the geologic assessment and must be in compliance with the requirements of the Texas Department of Licensing and Regulation 16 TAC Chapter §76 and all other locally applicable rules, as appropriate.
11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
12. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.
13. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
14. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

Mr. Sameer Umatiya

Page 4

October 18, 2024

After Completion of Construction:

15. Owners of permanent BMPs and temporary measures must ensure that the BMPs and measures are constructed and function as designed. A Texas licensed PE must certify in writing that the **permanent** BMPs or measures were constructed as designed. The certification letter must be submitted to the EAPP within 30 days of site completion.
16. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or the ownership of the property is transferred to the entity. A copy of the transfer of responsibility must be filed with the executive director through the EAPP within 30 days of the transfer. TCEQ form, Change in Responsibility for Maintenance on Permanent BMPs and Measures (TCEQ-10263), may be used.

The holder of the approved Edwards Aquifer protection plan is responsible for compliance with Chapter §213 and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 and is subject to administrative rule or orders and penalties as provided under §213.10 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved Edwards Aquifer protection plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Arturo Maldonado of the Edwards Aquifer Protection Program at 512-239-7087 or the regional office at 512-339-2929.

Sincerely,



Monica Reyes, Section Manager  
Edwards Aquifer Protection Program  
Texas Commission on Environmental Quality

MR / am

cc: Mr. Ahmed El Seweify, P.E. AES Engineering Consulting

# 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.**

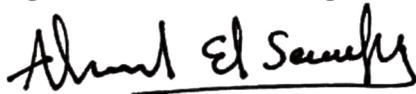
## Signature

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: Ahmed El Seweify

Date: 11/12/2024

Signature of Customer/Agent:



---

## Project Information

1. Regulated Entity Name: Snack Time #4
2. County: Williamson
3. Stream Basin: Salado Creek
4. Groundwater Conservation District (If applicable): \_\_\_\_\_
5. Edwards Aquifer Zone:  
 Recharge Zone  
 Transition Zone
6. Plan Type:  
 WPAP  
 SCS  
 Modification  
 AST  
 UST  
 Exception Request

7. Customer (Applicant):

Contact Person: Sameer Umatiya  
Entity: CR 305 Real Estate LLC.  
Mailing Address: 4313 Mezzaluna Pass,  
City, State: Leander, TX Zip: 78641  
Telephone: 5125638790 FAX: \_\_\_\_\_  
Email Address: sameerumatiya@yahoo.com

8. Agent/Representative (If any):

Contact Person: Ahmed El Seweify  
Entity: AES Engineering Consultant  
Mailing Address: 2514 Preserve Trail,  
City, State: Cedar Park, TX Zip: 78613  
Telephone: 5127859034 FAX: \_\_\_\_\_  
Email Address: aelseweify@aesengineeringservices.com

9. Project Location:

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

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

1412 CR 305 Jarrell Texas

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: 01/01/2025

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

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

15. Existing project site conditions are noted below:

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

### ***Prohibited Activities***

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

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

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

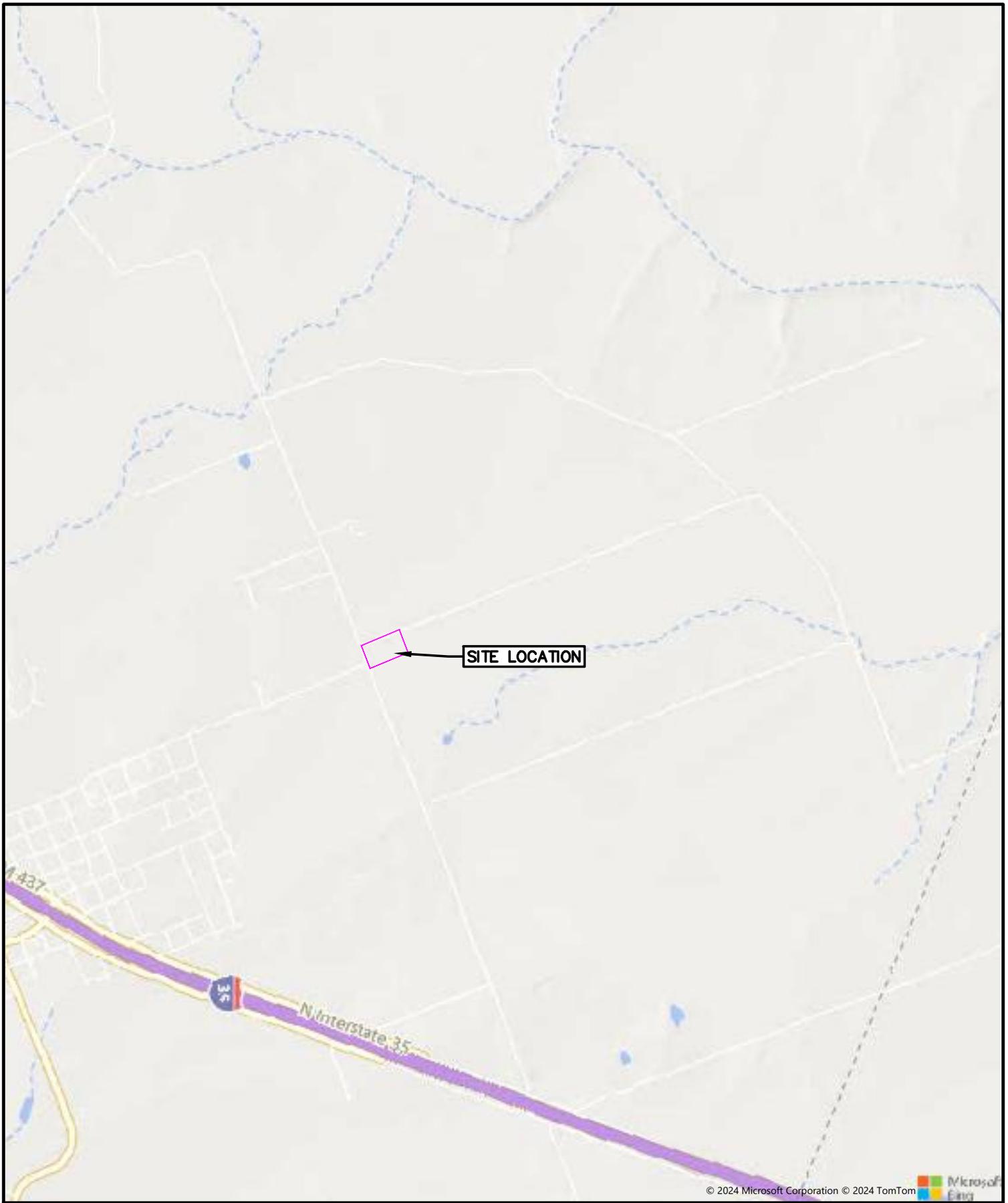
- (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

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

### ***Administrative Information***

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

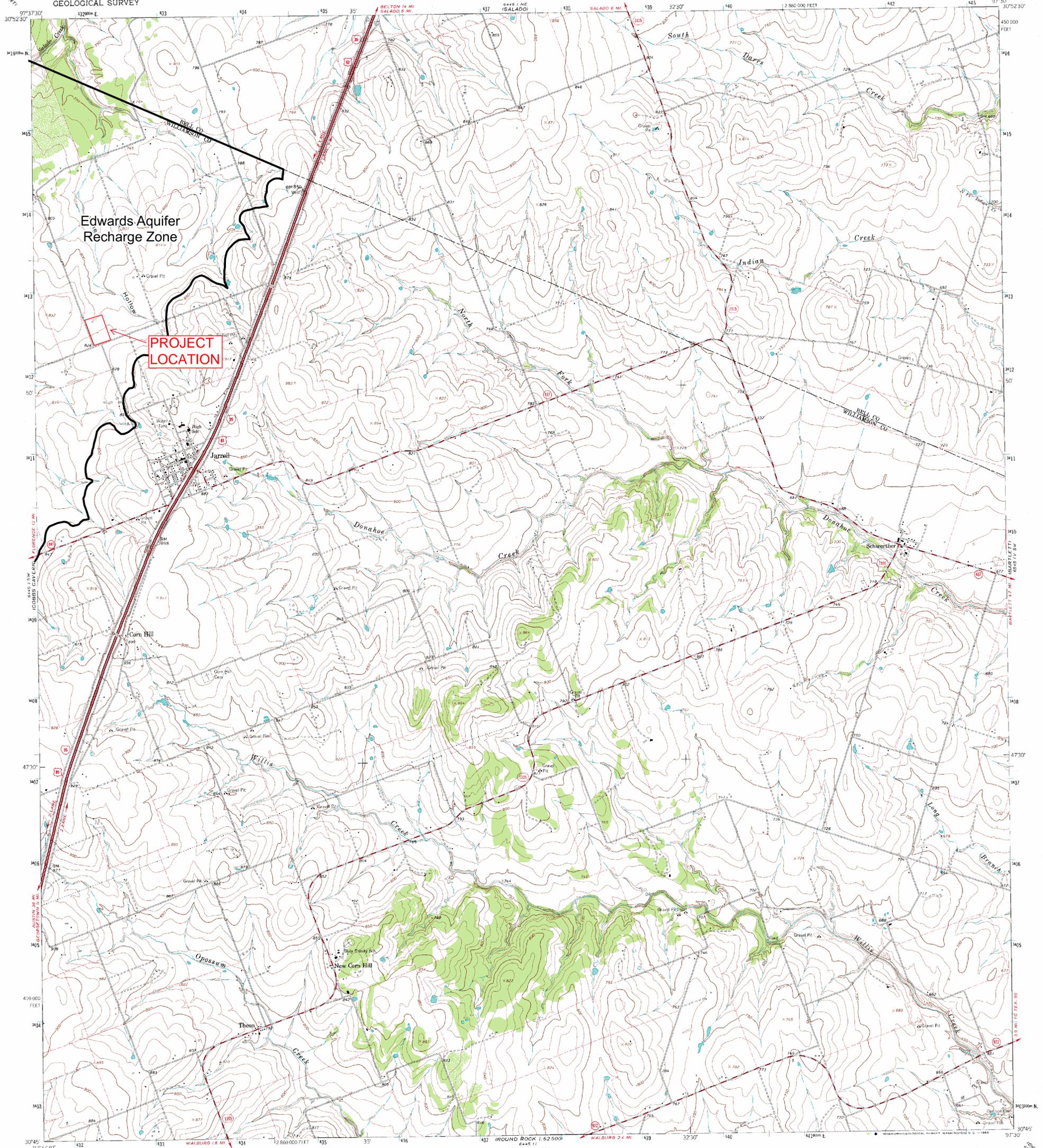
- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
  - For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
  - For a UST Facility Plan or Modification or an AST 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.



VICINITY MAP

SNACK TIME #4  
1412 CR 305  
JARRELL TX

PAGE  
1 OF 1



Edwards Aquifer  
Recharge Zone

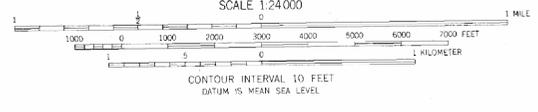
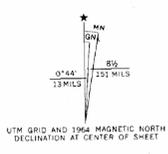
PROJECT  
LOCATION

Jarrell

New Corn Hill

Theon

Mapped, edited, and published by the Geological Survey  
Control by USGS and USC&GS  
Topography by photogrammetric methods from aerial  
photographs taken 1963. Field checked 1964.  
Polyconic projection. 1927 North American datum.  
10,000-foot grid based on Texas coordinate system, central zone.  
1000-meter Universal Transverse Mercator grid ticks,  
zone 14 shown in blue.  
Fine red dashed lines indicate selected fence lines.



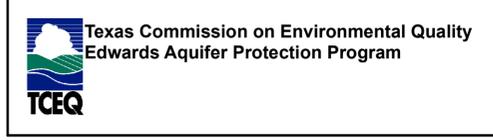
SCALE 1:24,000  
CONTOUR INTERVAL 10 FEET  
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION  
Heavy duty ——— Light-duty ———  
Medium-duty ——— Unimproved dirt ———  
Interstate Route U.S. Route State Route



JARRELL, TEX  
N3045-W9730/7.5  
1964  
AMS 6445 1 SE-SERIES V882

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22082  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



## Regulatory Zones

### 30 TAC Chapter 213- Edwards Aquifer Effective May 1985

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

## **Snack Time #4**

### **Project Description-Attachment C**

---

This 3.886 -acre project site is located at 1412 CR 305 Jarrell TX. We are proposing a gas station with a 11,750 square foot convenience store and retail and 26,525 square foot office warehouses. We are providing water quality pond, the paving will be concrete.

#### Existing Conditions:

The existing site is covered with native grass/weeds with no trees. There is no existing impervious cover.

#### Proposed Conditions:

The proposed development of 3.886 acres (169,274 sf) includes gas pumps, 11,750 square foot convenience store and retail spaces, and 26,525 square foot office warehouses. The limit of construction is 3.873 acres and proposed impervious cover is 74.06%

Soil Condition: Clayey Sand.

#### **Disturbance activities:**

Grading and excavation on the entire site.

The pavement on the entire site.

Building at the building areas.

Landscaping.

Geologic Assessment  
TCEQ-0585

# Geologic Assessment

## Texas Commission on Environmental Quality

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

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

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

## Signature

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

Print Name of Geologist: Mr. Chad M. Copeland, P.G.

Telephone: (512) 335-1785 x 124

Fax: (512) 335-0527

Date: 05/29/2024

Representing: Ranger Environmental Services, LLC (Reg No. 50140) (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:







05/29/2024

Regulated Entity Name: Snack Time #4

## Project Information

1. Date(s) Geologic Assessment was performed: 04/24/2024

2. Type of Project:

WPAP  
 SCS

AST  
 UST

3. Location of Project:

Recharge Zone  
 Transition Zone  
 Contributing Zone within the Transition Zone

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

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

Soil Name	Group*	Thickness(feet)
Denton silty clay, 1 to 3 percent slopes (DnB)	D	1.83 - 5.0
Houston Black clay, 0 to 1 percent slopes (HoA)	D	>6.67

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" = 30'  
 Site Geologic Map Scale: 1" = 30'  
 Site Soils Map Scale (if more than 1 soil type): 1" = ~91' & ~100'
9. Method of collecting positional data:
  - Global Positioning System (GPS) technology.
  - Other method(s). Please describe method of data collection: \_\_\_\_\_

10.  The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11.  Surface geologic units are shown and labeled on the Site Geologic Map.
12.  Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
- Geologic or manmade features were not discovered on the project site during the field investigation.
13.  The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
- There are \_\_\_\_\_ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
- The wells are not in use and have been properly abandoned.
- The wells are not in use and will be properly abandoned.
- The wells are in use and comply with 16 TAC Chapter 76.
- There are no wells or test holes of any kind known to exist on the project site.

### ***Administrative Information***

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

ATTACHMENT A

Geological Assessment Table  
TCEQ-0585 Table

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Snack Time #4																
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)	DIP (D)	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)	TOPOGRAPHY
						X	Y	Z								<40	≥40		
G-1	30.839021	-97.617752	MB	30	Kgt	2	2	unknown	--		--	--	--	5	35	X		X	Hilltop
G-2	30.839088	-97.617811	MB	30	Kgt	6	4	unknown	--		--	--	--	5	35	X		X	Hilltop
G-3	30.840068	-97.618251	MB	30	Kgt	1	1	unknown	--		--	--	--	5	35	X		X	Hilltop
G-4	30.840075	-97.618440	MB	30	Kgt	2	2	unknown	--		--	--	--	5	35	X		X	Hilltop
G-5	30.839193	-97.616890	MB	30	Kgt	1.5	1	unknown	--		--	--	--	5	35	X		X	Hilltop

\* DATUM WGS84

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

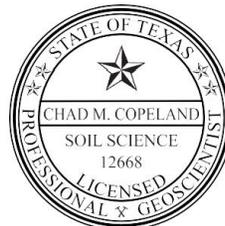
I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

*CMC*

Date 05/29/2024

Sheet 1 of 1

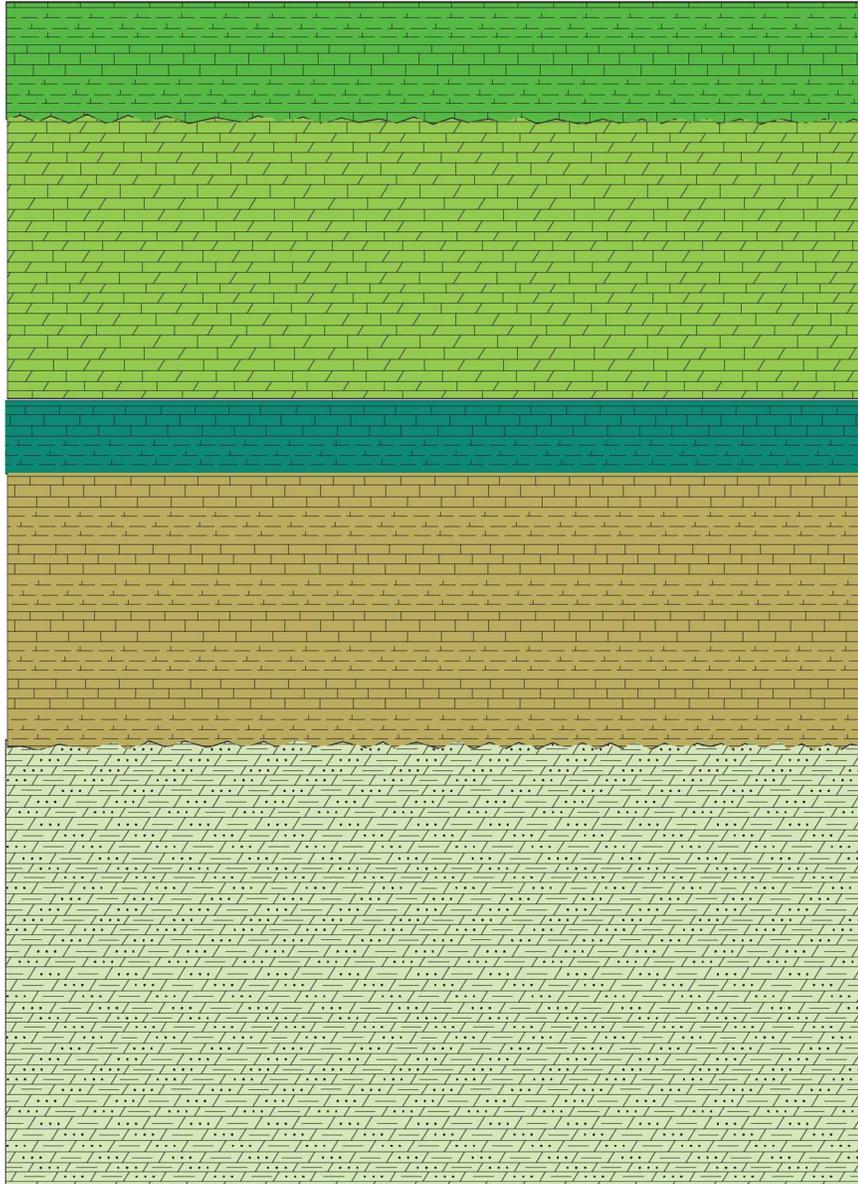


*CMC*  
05/29/2024

ATTACHMENT B

Stratigraphic Column

# Edwards Aquifer



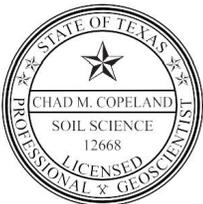
**Georgetown Formation (Kgt)**  
Limestone and marl

**Edwards Limestone (Ked)**  
Limestone and dolostone

**Comanche Peak Formation (Kc)**  
Limestone and marl

**Walnut Formation (Kwa)**  
Limestone and marl  
(Includes Kkv, Kcp, Kbc)

**Glen Rose Formation (Kgr)**  
Limestone, dolostone, and marl



*CMC*

05/29/2024

## RANGER ENVIRONMENTAL SERVICES

Stratigraphic Column

1412 County Road

Jarrell, Texas

Ranger Project No. 6958

COMMENTS: NOT FOR CONSTRUCTION

Adapted from the Bureau of Economic Geology, 1990, Hydrogeology of the Northern Segment of the Edwards Aquifer, Austin Region, Report of Investigations No. 192, Figure 4

ATTACHMENT C

Site Geology



## **GEOLOGIC ASSESSMENT**

**Snack Time #4**

**1412 County Road 305**

**Jarrell, Texas**

**Williamson County**

**May 2024**

### **INTRODUCTION**

Ranger Environmental Services, LLC (Ranger) was contracted to conduct a Geologic Assessment of the referenced property. This location lies within the designated Edwards Aquifer Recharge Zone. The site is undeveloped and was previously used for agricultural purposes. Since the subject site is located over the Edwards Aquifer Recharge Zone, site development should adhere to the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program Rules in accordance with Title 30 of the Texas Administrative Code, Section 213 (30 TAC§ 213).

### **PROJECT DESCRIPTION**

The subject site consists of one approximate 3.887-acre lot, more or less, located at 1412 County Road 305, Jarrell, in Williamson County, Texas at approximately 30.83978° N and approximately 97.617350° W.

The site is undeveloped land with native vegetation and was previously used for agricultural purposes. The surrounding area is a mix of residential and agricultural land.

### **METHODOLOGY**

This assessment follows general guidelines contained in Texas Commission on Environmental Quality (TCEQ) guidance “*Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones*” (TCEQ Guidance 0585). The site is located on an area of the recharge zone that may contain karst features within the outcropping limestone. Karst features may be expressed as surface features but more commonly tend to persist with depth.

A field geologic assessment was conducted by Mr. Chad M. Copeland P.G. and Ms. Caroline Hamilton, GIT on April 24, 2024. The site is undeveloped and there are no permanent structures on-site.

The walking geologic survey was conducted on 50-foot center transects, where possible. No intrusive testing was conducted. If present, features identified in the field were photographed and recorded with a hand held global positioning system (GPS). Features include, but were not limited to, caves, solution cavities, solution-enlarged fractures, faults, manmade features in bedrock,

swallow holes, sinkholes, non-karst closed depressions, and zone clustered or aligned features. The geologic assessment table, stratigraphic column, geologic, soils and topographic maps are included herein.

## RESEARCH INFORMATION

Prior to conducting the geologic survey, Ranger conducted a review of existing geologic data and maps to prepare for the field survey. Reviewed references included, but are not limited to:

- Barnes, V.E. 1974. *Geologic Atlas of Texas, Austin Sheet*. The University of Texas at Austin, Bureau of Economic Geology.
- Senger, R.K., E.W. Collins and C.W. Kreidler. 1990. Hydrogeology of the Northern Segment of the Edwards Aquifer, Austin Region, Report of Investigations 192. The University of Texas at Austin, Bureau of Economic Geology.
- Texas Commission on Environmental Quality. 1999. Complying with the Edwards Aquifer Rules: Administrative Guidance.
- Texas Commission on Environmental Quality. Revised 2004. Instructions to Geologist for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones.
- Sellards, E.H., W.S. Adkins and F.B. Plummer. 1932. The University of Texas Bulletin No. 3232. The Geology of Texas. Volume 1, Stratigraphy.
- U.S. Department of Agriculture National Resources Conservation Services ([www.nrcs.usda.gov](http://www.nrcs.usda.gov)).
- Texas Commission on Environmental Quality ([www.tceq.state.tx.us](http://www.tceq.state.tx.us)).
- FEMA Flood Plain Maps.
- Center for Geospatial Technology, Texas Tech University, obtained from the Texas Geologic Atlas of Texas.
- USGS Topographic Maps – Terrain Navigator Pro 2015.
- ESRI

## SITE GEOLOGY

The subject site is underlain by Cretaceous sedimentary strata. In general, the Cretaceous strata dip regionally one degree towards the east-southeast. The area lies within the Balcones Fault Zone, a geologic province characterized in this region by north-northeast trending en echelon normal faults with the downthrown side most commonly to the east of the fault planes.

The Balcones Fault Zone trend closely follows the structural trend of the late Paleozoic Ouachita fold and thrust belt. Faulting may have been initiated in the Late Cretaceous with the majority of movement taking place during the late Oligocene and early Miocene. Minor isostatic adjustments resulting from sediment loading in the Gulf of Mexico continue to the present.

Referencing the Geologic Atlas of Texas, Austin Sheet, and The University of Texas Bulletin No. 3232, The Geology of Texas, Volume 1 the local stratigraphic unit that outcrops at the site is the Georgetown Formation (Kgt).

The Cretaceous age Georgetown Formation unconformably overlies the Edwards Limestone in Williamson County. The Georgetown Formation consists primarily of nodular limestones interbedded with marls and is typically light gray to white, massive, indurated, and fossiliferous. Small vugs may be present within the formation but are not common. The formation thickens to the north from approximately 65 feet to 110 feet. The Georgetown Formation represents the uppermost Edwards aquifer strata.

## **SITE SPECIFIC GEOLOGIC FEATURES**

The following geologic features, as defined in Texas Commission on Environmental Quality (TCEQ) guidance “*Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones*” (TCEQ Guidance 0585), were observed at the site:

### **G-1 (MB) Man-made Feature in Bedrock, Water Main**

The manmade feature in bedrock was observed at approximately 30.839021° N. 097.617752° W. The dimensions of the feature were measured to be approximately 2 ft long by 2 ft wide. The depth of the feature is unknown. The probability of rapid infiltration was low, and the catchment area was less than 1.6 acres.

### **G-2 (MB) Man-made Feature in Bedrock, Water Main**

The manmade feature in bedrock was observed at approximately 30.839088° N. 097.617811° W. The dimensions of the feature were measured to be approximately 6 ft long by 4 ft wide. The depth of the feature is unknown. The probability of rapid infiltration was low, and the catchment area was less than 1.6 acres.

### **G-3 (MB) Man-made Feature in Bedrock, Fire Hydrant**

The manmade feature in bedrock was observed at approximately 30.840068° N. 097.618251° W. The dimensions of the feature were measured to be approximately 1 ft long by 1 ft wide. The depth of the feature is unknown. The probability of rapid infiltration was low, and the catchment area was less than 1.6 acres.

### **G-4 (MB) Man-made Feature in Bedrock, Water Main**

The manmade feature in bedrock was observed at approximately 30.840075° N. 097.618440° W. The dimensions of the feature were measured to be approximately 2 ft long by 2 ft wide. The depth of the feature is unknown. The probability of rapid infiltration was low, and the catchment area was less than 1.6 acres.

### **G-5 (MB) Man-made Feature in Bedrock, Water Meter**

The manmade feature in bedrock was observed at approximately 30.839193° N. 097.616890° W. The dimensions of the feature were measured to be approximately 1.5 ft long by 1 ft wide. The depth of the feature is unknown. The probability of rapid infiltration was low, and the catchment

area was less than 1.6 acres.

## SOIL DESCRIPTION

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Web Soil Survey*, the soil at the subject site was noted to be Denton silty clay, 1 to 3 percent slopes (DnB) and Houston Black clay, 0 to 1 percent slopes (HoA).

Please see attached USDA NRCS Custom Soil Resource Report.

## TOPOGRAPHY AND DRAINAGE

The site has minimal topographic variation and drains to the northwest.

## CONCLUSIONS AND RECOMMENDATIONS

Ranger Environmental Services, LLC conducted a Geologic Assessment of the site in accordance with 30 TAC§ 213. Ranger concludes that no sensitive features as defined by the TCEQ (30 TAC§ 213) were observed at the site.

This assessment does not address the possible presence of subsurface conditions that may be exposed during future construction and/or development. Should solution features or conditions be exposed during site construction activities that indicate a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer, operations in the vicinity of the feature should be halted and the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program should be contacted immediately in accordance with 30 TAC §213.5(f)(2).

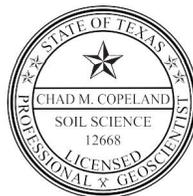
## LIMITATIONS

It should be noted that only areas readily accessible were inspected. There may be geologic features present that were not identified as part of this study. This non-intrusive visual field assessment cannot wholly eliminate the possibility of sensitive features at the site.

Prepared by:



Chad M. Copeland, P.G.



05/29/2024



Photograph 1:  
Photograph documenting G-1, Water Main.



Photograph 2:  
Photograph documenting G-2, Water Main.



Photograph 3:  
Photograph documenting G-3, Water Main.



Photograph 4:  
Photograph documenting G-4, Water Main.

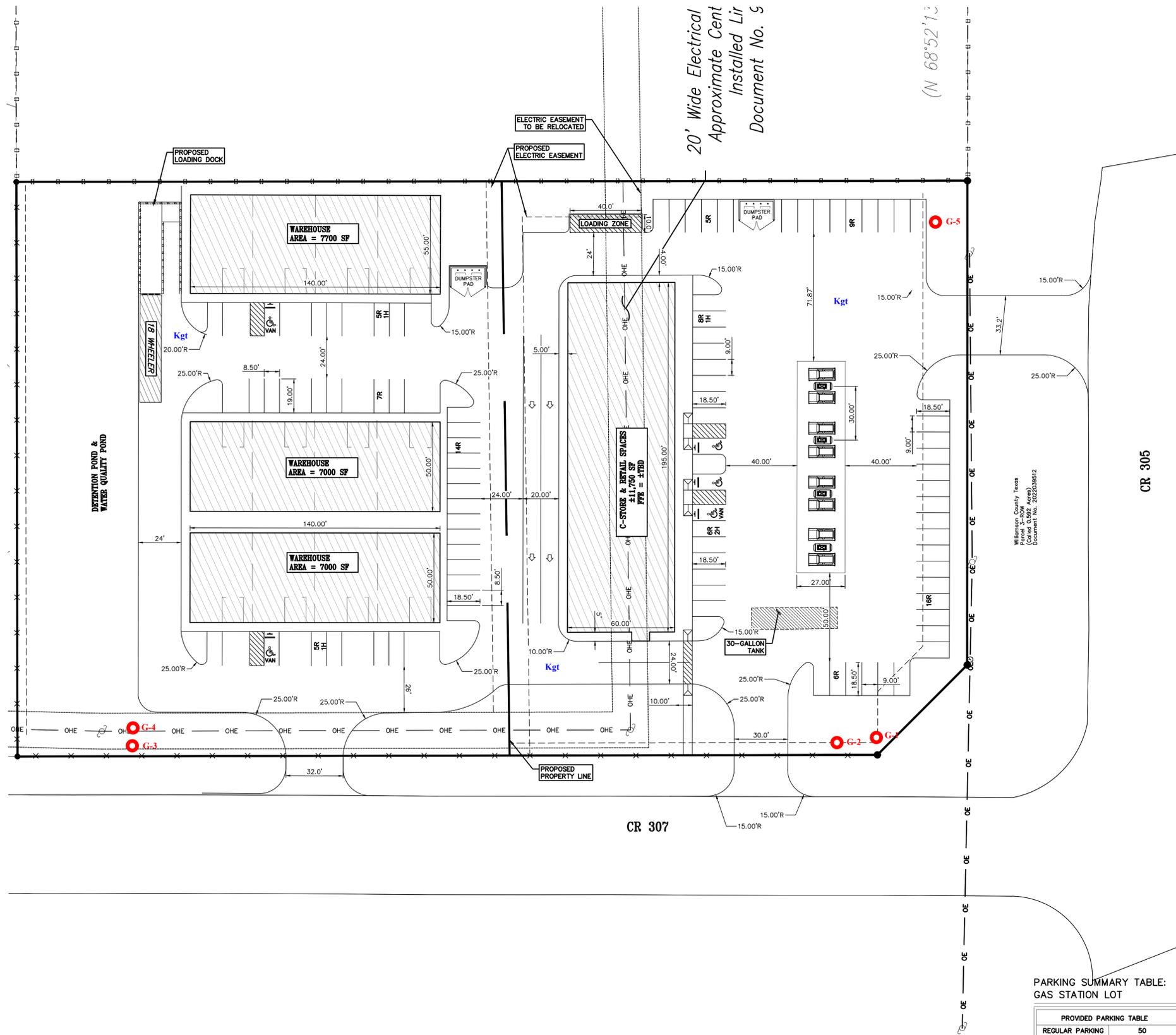
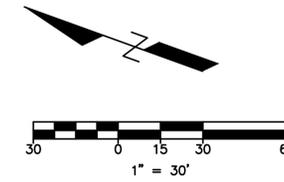


Photograph 5:  
Photograph documenting G-5, Water Main.

ATTACHMENT D

Site Geologic Map(s)

● X-# Geologic Feature  
 Kgt Georgetown Formation Geologic Unit



LEGEND

EXISTING	PROPOSED	DESCRIPTION
(XXX)		PROPERTY LINE / (R.O.W.) LINE
		RECORD INFORMATION
		LIGHT POLE
		GROUND LIGHT
		POWER POLE
		DOWN GUY
		TRANSFORMER (SIZE VARIES)
		FIRE HYDRANT
		WATER VALVE
		WATER METER
		WATER METER VAULT (SIZE VARIES)
		CABLE TV RISER
		ELECTRIC BOX
		ELECTRIC METER
		GRATE INLET
		CURB INLET (SIZE VARIES)
		OVERHEAD ELECTRIC
		ELECTRIC MANHOLE (SIZE VARIES)
		WASTEWATER MANHOLE (SIZE VARIES)
		STORMSEWER MANHOLE (SIZE VARIES)
		TELEPHONE MANHOLE (SIZE VARIES)
		WASTEWATER CLEANOUT
		CURB & GUTTER
		EDGE OF PAVEMENT
		FIRE LANE DESIGNATION
		HANDICAP ACCESS ROUTE
		CONCRETE SIDEWALKS
		SIGN
		WHEELSTOP
		FINISH FLOOR ELEVATION
		PARKING COUNT (REGULAR SPACES)
		PARKING COUNT (HANDICAP SPACES)
		HANDICAP SPACE
		LIMITS OF CONSTRUCTION



PROJECT:  
**GAS STATION**  
 LOCATION:  
 1412 CR 305  
 JARRELL TEXAS



**project team**  
 OWNER:  
 SAMEER UMATIYA  
 LAND DEVELOPER AND BUILDER  
 512-563-8790  
 SAMEERUMATIYA@YAHOO.COM  
 CIVIL/STRUCTURAL ENGINEER:  
 AES Engineering Consultant  
 Ahmed El Sewify P.E.  
 2514 PRESERVE TRAIL,  
 CEDAR PARK, TX 78613  
 Ph. (512) 785-9034  
 email: contact@aes-engs.com  
 Texas Firm F-22721

**IMPERVIOUS COVER CALCULATION**

DESCRIPTION	AREA SQUARE FOOT	AREA ACRE	PERCENTAGE %
GRASS	83,199 S.F.	1.910 ACRE	
PAVEMENT	65,198 S.F.	1.497 ACRE	
BUILDING	61,950 S.F.	1.422 ACRE	
<b>TOTAL</b>	<b>210,351 S.F.</b>	<b>4.829 ACRE</b>	<b>60.45%</b>

**PARKING SUMMARY TABLE:  
 GAS STATION LOT**

PROVIDED PARKING TABLE	
REGULAR PARKING	50
ADA PARKING	3
<b>TOTAL</b>	<b>53</b>

**PARKING SUMMARY TABLE:  
 WAREHOUSE LOT**

PROVIDED PARKING TABLE	
REGULAR PARKING	30
ADA PARKING	3
<b>TOTAL</b>	<b>33</b>

**SIGNS AND OUTDOOR ADVERTISING DISPLAY**  
 1. SIGNS AND OUTDOOR ADVERTISING DISPLAY SHALL BE UNDER SEPARATE PERMIT.

**ADA COMPLIANCE**  
 1. ALL INTERIOR AND EXTERIOR ADA DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CURRENT ADA GUIDELINES AND COMPLIANCE OF SAME SHALL BE THE SOLE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR AND PROJECT ARCHITECT. CONTRACTOR SHALL REVIEW PLANS AND NOTIFY PROJECT ARCHITECT/ENGINEER WITH ANY MODIFICATIONS REQUIRED FOR SUBSTANTIAL COMPLIANCE.  
 2. APPROVAL OF THESE PLANS BY THE CITY OF BEE CAVE INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATION ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.  
 3. SLOPES ON ACCESSIBLE ROUTE MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]  
 4. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50. [ANSI 403.3]

**GENERAL NOTES:**  
 1. NOTE THAT ALL SITE HAS BEEN BUILT EXCEPT FOR THE DETENTION POND AND 18" HDPE PIPE.  
 2. PAVERS MAY BE USED ON THE ADA ROUTE WITH THE FOLLOWING CONDITIONS:  
 • JOINTS BETWEEN PAVERS 1/2" MAXIMUM  
 • VERTICAL DIFFERENCES BETWEEN PAVERS 1/4" MAXIMUM  
 • RUNNING SLOPE (IN THE DIRECTION OF TRAVEL) 1:20 (5%) MAXIMUM  
 • CROSS SLOPE (PERPENDICULAR TO THE DIRECTION OF TRAVEL) 1/4" PER FOOT (2%) MAXIMUM.  
 • REFERENCE ARCHITECTURAL PLANS FOR BUILDING LAYOUT.

REVISION	DATE	ISSUE TITLE

**DRAWING TITLE:**  
 PROPOSED SITE LAYOUT

PROJECT NO: 10-1080	DRAWN BY: / CHECKED BY: ABS
DATE: 2024-03-01	SCALE: 1"=30'

SHEET NUMBER:  
**EXH 1**

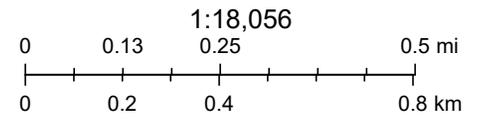
DRAWING PATH: G:\M\T DRIVE\AES ENGINEERING\10-1082 JARRELL GAS STATION\CAD\SITE PLAN & DIMENSION.DWG

# Edwards Aquifer Viewer Custom Print



5/29/2024, 1:49:05 PM

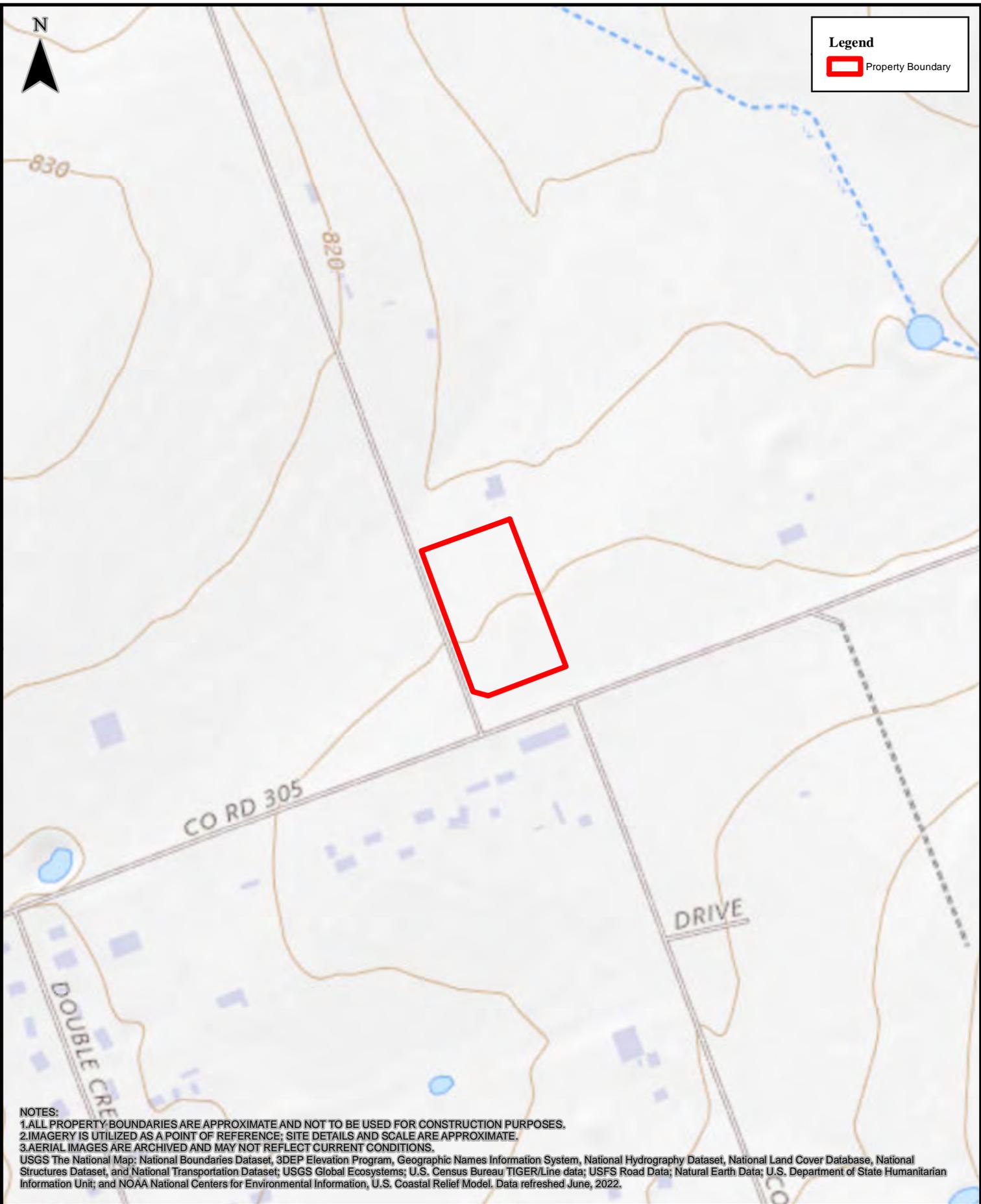
-  Edwards Aquifer Label
-  Edwards Aquifer Boundary
-  Edwards Aquifer Boundary central line
-  TX Counties
-  7.5 Minute Quad Grid
-  TCEQ\_EDWARDS\_OFFICIAL\_MAPS



County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, TCEQ

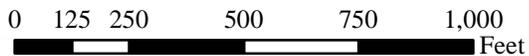


**Legend**  
 Property Boundary



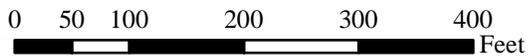
- NOTES:  
1. ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.  
2. IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.  
3. AERIAL IMAGES ARE ARCHIVED AND MAY NOT REFLECT CURRENT CONDITIONS.

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2022.



1:5,000

**Topographic Map (Jarrell Quadrangle)**  
Ranger Project No. 6958  
1412 County Road 305  
Jarrell, Texas



1:2,000

**Geologic Unit Map**  
 Ranger Project No. 6958  
 1412 County Road 305  
 Jarrell, Texas

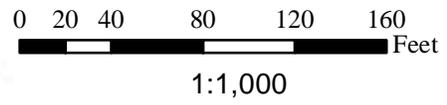
**Legend**

- Property Boundary
- AuB - Austin silty clay (1-3% slopes)
- CaC - Castephen silty clay (3-5% slopes)
- DnA - Denton silty clay (0-1% slopes)
- DnB - Denton silty clay (1-3% slopes)
- DoC - Doss Silty Clay (1-5% slopes)
- GsB - Georgetown stony clay loam (1-3% slopes)
- HeB - Heiden clay (1-3% slopes)
- HeC2 - Heiden clay (3-5% slopes) eroded
- HuA - Houston black clay (0-1% slopes)
- HuB - Houston black clay (1-3% slopes)

**DnB**

**HuA**

NOTES:  
1. ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.  
2. IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.  
3. AERIAL IMAGES ARE ARCHIVED AND MAY NOT REFLECT CURRENT CONDITIONS.  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**Soil Map**  
Ranger Project No. 6958  
1412 County Road 305  
Jarrell, Texas

# Custom Soil Resource Report for **Williamson County, Texas**



# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map (1412 County Road 305, Jarrell, Texas 76537).....	9
Legend.....	10
Map Unit Legend (1412 County Road 305, Jarrell, Texas 76537).....	11
Map Unit Descriptions (1412 County Road 305, Jarrell, Texas 76537).....	11
Williamson County, Texas.....	13
DnB—Denton silty clay, 1 to 3 percent slopes.....	13
HoA—Houston Black clay, 0 to 1 percent slopes.....	14
<b>References</b> .....	17

# How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

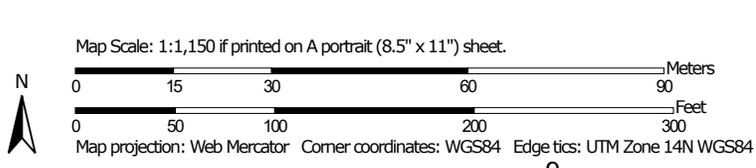
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report  
Soil Map (1412 County Road 305, Jarrell, Texas 76537)



### 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: Williamson County, Texas  
 Survey Area Data: Version 24, Sep 5, 2023

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

Date(s) aerial images were photographed: Data not available.

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 (1412 County Road 305, Jarrell, Texas 76537)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DnB	Denton silty clay, 1 to 3 percent slopes	2.4	60.4%
HoA	Houston Black clay, 0 to 1 percent slopes	1.6	39.6%
<b>Totals for Area of Interest</b>		<b>4.0</b>	<b>100.0%</b>

## Map Unit Descriptions (1412 County Road 305, Jarrell, Texas 76537)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

## Custom Soil Resource Report

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Williamson County, Texas

### DnB—Denton silty clay, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t26l  
*Elevation:* 570 to 1,870 feet  
*Mean annual precipitation:* 31 to 36 inches  
*Mean annual air temperature:* 65 to 68 degrees F  
*Frost-free period:* 220 to 260 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Denton and similar soils:* 88 percent  
*Minor components:* 12 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Denton

##### Setting

*Landform:* Hillslopes  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Silty and clayey slope alluvium over residuum weathered from limestone

##### Typical profile

*A - 0 to 14 inches:* silty clay  
*Bw - 14 to 25 inches:* silty clay  
*Bk - 25 to 33 inches:* silty clay  
*Ck - 33 to 36 inches:* gravelly silty clay  
*R - 36 to 80 inches:* bedrock

##### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 22 to 60 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 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 80 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 4.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* D  
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ  
*Hydric soil rating:* No

## Minor Components

### Krum

*Percent of map unit:* 6 percent  
*Landform:* Drainageways  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ  
*Hydric soil rating:* No

### Doss

*Percent of map unit:* 4 percent  
*Landform:* Hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* R081BY343TX - Shallow 23-31 PZ  
*Hydric soil rating:* No

### Anhalt

*Percent of map unit:* 2 percent  
*Landform:* Hillslopes  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R081CY358TX - Deep Redland 29-35 PZ  
*Hydric soil rating:* No

## HoA—Houston Black clay, 0 to 1 percent slopes

### Map Unit Setting

*National map unit symbol:* 2shgy  
*Elevation:* 300 to 870 feet  
*Mean annual precipitation:* 31 to 39 inches  
*Mean annual air temperature:* 65 to 70 degrees F  
*Frost-free period:* 238 to 288 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

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

## Description of Houston Black

### Setting

*Landform:* Plains

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Interfluve

*Microfeatures of landform position:* Linear gilgai

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Parent material:* Clayey residuum weathered from calcareous mudstone of upper cretaceous age

### Typical profile

*Ap - 0 to 6 inches:* clay

*Bkss - 6 to 70 inches:* clay

*BCKss - 70 to 80 inches:* clay

### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 35 percent

*Gypsum, maximum content:* 5 percent

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

*Sodium adsorption ratio, maximum:* 2.0

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

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group:* D

*Ecological site:* R086AY011TX - Southern Blackland

*Hydric soil rating:* No

## Minor Components

### Wilson

*Percent of map unit:* 8 percent

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Ecological site:* R086AY004TX - Southern Claypan Prairie

*Hydric soil rating:* No

### Heiden

*Percent of map unit:* 7 percent

*Landform:* Plains

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Interfluve

## Custom Soil Resource Report

*Microfeatures of landform position:* Linear gilgai  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Ecological site:* R086AY011TX - Southern Blackland  
*Hydric soil rating:* No

# References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

# Organized Sewage Collection System Application

## Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c), 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.***

**Regulated Entity Name:** Snack Time 4

1.  **Attachment A – SCS Engineering Design Report.** This Engineering Design Report is provided to fulfill the requirements of 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable, and is required to be submitted with this SCS Application Form.

## ***Customer Information***

2. The entity and contact person responsible for providing the required engineering certification of testing for this sewage collection system upon completion (including private service connections) and every five years thereafter to the appropriate TCEQ region office pursuant to 30 TAC §213.5(c) is:

Contact Person: Abid Umatiya

Entity: CR 305 Real Estate, LLC

Mailing Address: 5210 Manor Road

City, State: Austin, TX

Zip: 78723

Telephone: 512-300-9990

Fax: \_\_\_\_\_

Email Address: uaa1977@yahoo.com

***The appropriate regional office must be informed of any changes in this information within 30 days of the change.***

3. The engineer responsible for the design of this sewage collection system is:

Contact Person: Ahmed El Seweify

Texas Licensed Professional Engineer's Number: 141828

Entity: AES Engineering Consultant

Mailing Address: 2514 Preserve Trail

City, State: Cedar Park, TX

Zip: 78613

Telephone: 512-785-9034

Fax: \_\_\_\_\_

Email Address: contact@aes-engs.com

## Project Information

4. Anticipated type of development to be served (estimated future population to be served, plus adequate allowance for institutional and commercial flows):

- Residential: Number of single-family lots: \_\_\_\_\_  
 Multi-family: Number of residential units: \_\_\_\_\_  
 Commercial  
 Industrial  
 Off-site system (not associated with any development)  
 Other: \_\_\_\_\_

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

100% Domestic 764 gallons/day  
 \_\_\_\_\_% Industrial \_\_\_\_\_ gallons/day  
 \_\_\_\_\_% Commingled \_\_\_\_\_ gallons/day  
 Total gallons/day: 764

6. Existing and anticipated infiltration/inflow is 750 gallons/day. This will be addressed by: adequate sizing of sewer main.

7. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

- The WPAP application for this development was approved by letter dated 10/18/2024. A copy of the approval letter is attached.  
 The WPAP application for this development was submitted to the TCEQ on \_\_\_\_\_, but has not been approved.  
 A WPAP application is required for an associated project, but it has not been submitted.  
 There is no associated project requiring a WPAP application.

8. Pipe description:

**Table 1 - Pipe Description**

<i>Pipe Diameter(Inches)</i>	<i>Linear Feet (1)</i>	<i>Pipe Material (2)</i>	<i>Specifications (3)</i>
6 Gravity	1272	PVC SDR-26	ASTM D3034
8 Gravity	1077	PVC SDR-26	ASTM D3034

**Total Linear Feet: 2349**

- (1) Linear feet - Include stub-outs and double service connections. Do not include private service laterals.  
 (2) Pipe Material - If PVC, state SDR value.  
 (3) Specifications - ASTM / ANSI / AWWA specification and class numbers should be included.

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

- Existing
- Proposed

10. All components of this sewage collection system will comply with:

- The City of Jarrell standard specifications.
- Other. Specifications are attached.

11.  No force main(s) and/or lift station(s) are associated with this sewage collection system.
- A force main(s) and/or lift station(s) is associated with this sewage collection system and the **Lift Station/Force Main System Application** form (TCEQ-0624) is included with this application.

***Alignment***

12.  There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.
13.  There are no deviations from straight alignment in this sewage collection system without manholes.
- Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes.** A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.
- For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.

***Manholes and Cleanouts***

14.  Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed below: (Please attach additional sheet if necessary)

**Table 2 - Manholes and Cleanouts**

<i>Line</i>	<i>Shown on Sheet</i>	<i>Station</i>	<i>Manhole or Clean-out?</i>
WASTEWATER SITE	21 Of 28	0+00	CLEANOUT - 1
	Of		

<i>Line</i>	<i>Shown on Sheet</i>	<i>Station</i>	<i>Manhole or Clean-out?</i>
	Of		
	Of		
	Of		

15.  Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.
16.  The maximum spacing between manholes on this project for each pipe diameter is no greater than:

<b>Pipe Diameter (inches)</b>	<b>Max. Manhole Spacing (feet)</b>
6 - 15	500
16 - 30	800
36 - 48	1000
≥54	2000

- Attachment C – Justification for Variance from Maximum Manhole Spacing.** The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached, and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.
17.  All manholes will be monolithic, cast-in-place concrete.
- The use of pre-cast manholes is requested for this project. The manufacturer's specifications and construction drawings, showing the method of sealing the joints, are attached.

## **Site Plan Requirements**

**Items 18 - 25 must be included on the Site Plan.**

18.  The Site Plan must have a minimum scale of 1" = 400'.  
Site Plan Scale: 1" = 30'.
19.  The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.
20. Lateral stub-outs:
- The location of all lateral stub-outs are shown and labeled.
- No lateral stub-outs will be installed during the construction of this sewer collection system.

21. Location of existing and proposed water lines:

- The entire water distribution system for this project is shown and labeled.
- If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.
- There will be no water lines associated with this project.

22. 100-year floodplain:

- After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)
- After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

**Table 3 - 100-Year Floodplain**

<i>Line</i>	<i>Sheet</i>	<i>Station</i>
	of	to

23. 5-year floodplain:

- After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or man-made. (Do not include streets or concrete-lined channels constructed above sewer lines.)
- After construction is complete, all sections located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

**Table 4 - 5-Year Floodplain**

<i>Line</i>	<i>Sheet</i>	<i>Station</i>
	of	to

- 24.  Legal boundaries of the site are shown.
- 25.  The ***final plans and technical specifications*** are submitted for the TCEQ’s review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

**Items 26 - 33 must be included on the Plan and Profile sheets.**

26.  All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290.
- There will be no water line crossings.
- There will be no water lines within 9 feet of proposed sewer lines.

**Table 5 - Water Line Crossings**

<i>Line</i>	<i>Station or Closest Point</i>	<i>Crossing or Parallel</i>	<i>Horizontal Separation Distance</i>	<i>Vertical Separation Distance</i>

27. Vented Manholes:

- No part** of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217.
- A portion** of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500 foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets.
- A portion** of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.
- A portion** of this sewer line is within the 100-year floodplain; however, there is no interval longer than 1500 feet located within. No vented manholes will be used.

**Table 6 - Vented Manholes**

<i>Line</i>	<i>Manhole</i>	<i>Station</i>	<i>Sheet</i>

<i>Line</i>	<i>Manhole</i>	<i>Station</i>	<i>Sheet</i>

28. Drop manholes:

- There are no drop manholes associated with this project.
- Sewer lines which enter new or existing manholes or "manhole structures" higher than 24 inches above the manhole invert are listed in the table below and labeled on the appropriate profile sheets. These lines meet the requirements of 30 TAC §217.55(l)(2)(H).

**Table 7 - Drop Manholes**

<i>Line</i>	<i>Manhole</i>	<i>Station</i>	<i>Sheet</i>

29. Sewer line stub-outs (For proposed extensions):

- The placement and markings of all sewer line stub-outs are shown and labeled.
- No sewer line stub-outs are to be installed during the construction of this sewage collection system.

30. Lateral stub-outs (For proposed private service connections):

- The placement and markings of all lateral stub-outs are shown and labeled.
- No lateral stub-outs are to be installed during the construction of this sewage collection system.

31. Minimum flow velocity (From Appendix A)

- Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.

32. Maximum flow velocity/slopes (From Appendix A)

- Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.
- Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second.** Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.

**Table 8 - Flows Greater Than 10 Feet per Second**

<i>Line</i>	<i>Profile Sheet</i>	<i>Station to Station</i>	<i>FPS</i>	<i>% Slope</i>	<i>Erosion/Shock Protection</i>

33. Assuming pipes are flowing full, where flows are  $\geq 10$  feet per second, the provisions noted below have been made to protect against pipe displacement by erosion and/or shock under 30 TAC §217.53(l)(2)(B).

- Concrete encasement shown on appropriate Plan and Profile sheets for the locations listed in the table above.
- Steel-reinforced, anchored concrete baffles/retards placed every 50 feet shown on appropriate Plan and Profile sheets for the locations listed in the table above.
- N/A

### **Administrative Information**

34.  The final plans and technical specifications are submitted for TCEQ review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.
35.  Standard details are shown on the detail sheets, which are dated, signed, and sealed by the Texas Licensed Professional Engineer, as listed in the table below:

**Table 9 - Standard Details**

<i>Standard Details</i>	<i>Shown on Sheet</i>
Lateral stub-out marking <b>[Required]</b>	24 of 28
Manhole, showing inverts comply with 30 TAC §217.55(l)(2) <b>[Required]</b>	25 of 28
Alternate method of joining lateral to existing SCS line for potential future connections <b>[Required]</b>	25 of 28
Typical trench cross-sections <b>[Required]</b>	24 of 28
Bolted manholes <b>[Required]</b>	24 of 28
Sewer Service lateral standard details <b>[Required]</b>	25 of 28
Clean-out at end of line <b>[Required, if used]</b>	24 of 28
Baffles or concrete encasement for shock/erosion protection <b>[Required, if flow velocity of any section of pipe &gt;10 fps]</b>	n/a of n/a
Detail showing Wastewater Line/Water Line Crossing <b>[Required, if crossings are proposed]</b>	n/a of n/a
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) <b>[Required, if Flexible Pipe is used]</b>	n/a of n/a

<b>Standard Details</b>	<b>Shown on Sheet</b>
Drop manholes [Required, if a pipe entering a manhole is more than 24 inches above manhole invert]	n/a of n/a

36.  All organized sewage collection system general construction notes (TCEQ-0596) are included on the construction plans for this sewage collection system.
37.  All proposed sewer lines will be sufficiently surveyed/staked to allow an assessment prior to TCEQ executive director approval. If the alignments of the proposed sewer lines are not walkable on that date, the application will be deemed incomplete and returned.
- Survey staking was completed on this date: \_\_\_\_\_
38.  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.
39.  Any modification of this SCS application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

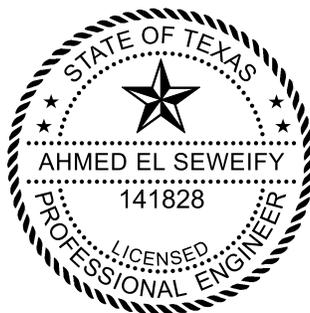
## **Signature**

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 **Organized Sewage Collection System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c) and 30 TAC §217 and prepared by:

Print Name of Licensed Professional Engineer: Ahmed El Seweify

Date: 11/06/2024

Place engineer's seal here:



Signature of Licensed Professional Engineer:

Ahmed El Seweify

## Appendix A-Flow Velocity Table

**Flow Velocity (Flowing Full)** All gravity sewer lines on the Edwards Aquifer Recharge Zone shall be designed and constructed with hydraulic slopes sufficient to give a velocity when flowing full of not less than 2.0 feet per second, and not greater than 10 feet per second. The grades shown in the following table are based on Manning's formula and an n factor of 0.013 and shall be the minimum and maximum acceptable slopes unless provisions are made otherwise.

**Table 10 - Slope Velocity**

Pipe Diameter(Inches)	% Slope required for minimum flow velocity of 2.0 fps	% Slope which produces flow velocity of 10.0 fps
6	0.50	12.35
8	0.33	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.11	2.83
21	0.09	2.30
24	0.08	1.93
27	0.06	1.65
30	0.055	1.43
33	0.05	1.26
36	0.045	1.12
39	0.04	1.01
>39	*	*

\*For lines larger than 39 inches in diameter, the slope may be determined by Manning's formula (as shown below) to maintain a minimum velocity greater than 2.0 feet per second when flowing full and a maximum velocity less than 10 feet per second when flowing full.

$$v = \frac{1.49}{n} \times R_h^{0.67} \times \sqrt{S}$$

**Figure 1 - Manning's Formula**

Where:

$v$  = velocity (ft/sec)

$n$  = Manning's roughness coefficient (0.013)

$R_h$  = hydraulic radius (ft)

$S$  = slope (ft/ft)

11/06/2024

## **ATTACHMENT A SCS ENGINEERING DESIGN REPORT**

**Project Location:**

1412 CR 305,  
JARRELL, TX 76537

**Prepared by:**

AES Engineering Consultant  
Ahmed El Seweify, P.E.  
2514 Preserve Trail,  
Cedar Park TX 78613

11/06/2024



*Ahmed El Seweify*



## Table of Contents

1.0 Introduction.....	3
2.0 PROJECT INFORMATION.....	3
3.0 Flow Calculation.....	3
3.1 Average daily dry weather flow: .....	4
3.2 Average daily wet weather flow .....	4
4.0 Structural Component.....	4
4.1 Pipes.....	4
4.2 Manholes.....	4
5.0 Conclusion .....	5
Appendix A: Vicinity Map.....	6
APPENDIX B.....	7
APPENDIX C.....	8
STANDARD SPECS AND PRE-CAST MANHOLES SPECS .....	8

### **1.0 Introduction**

This Engineering report has been prepared to comply with the Texas Commission on Environmental Quality's Design Criteria for Domestic Wastewater System (30 TAC 217), and regulations over the Edwards Aquifer Recharge Zone (30 TAC 213).

### **2.0 PROJECT INFORMATION**

The subject site is located at 1412 County Road 305, Jarrell, Williamson County, Texas. The site is located within the Jarrell city limit and within Edwards Aquifer Recharge Zone. The subject site is a vacant lot. The proposed activities include the construction of a retail fueling facility and convenience store. A new canopy will be constructed over the dispenser islands. 3 warehouses are being proposed with a total square footage of 26,525 sf. The areas surrounding the subject site supports residential properties.

The Snack #4 project Sewage Collection System (SCS) application proposes the construction of a total of 2,349 linear feet of sewer main to serve future development. The proposed alignment will consist of 1272 linear feet of 6-inch, and 1,077 linear feet of 8-inch (8") PVC, SDR 35 gravity sewer main. Approximately 0.25-acre of the project may be disturbed for the SCS installation. No naturally occurring sensitive features were identified in the sewer envelope in the Geologic Assessment.

This system is designed to have a minimum structural life of 50 years. Safety considerations are the responsibility of the contractor. Safety protection shall be accomplished in accordance with the most recent requirements of the Occupational Safety and Health Administration (OSHA) Standards and Interpretations.

Odor Control is not required on this project as it is a gravity line and there will be no conditions where sewage is standing and will become septic.

### **3.0 Flow Calculation**

The proposed development consists of an 11,750 sq.ft. convenience store and 26,525 sq.ft. of warehouses, we estimate the wastewater production from our development to be as follows:

---

**3.1 Average daily dry weather flow:**

- 476 Gallon per day for the convenience store, (451 GPD highest monthly average) and
- 12 warehouse rentable spaces x 3 employees per space x 8 Gallon per Day per person = 288 Gallon per Day

Total = 476 gpd + 288 gpd = **764 gallons per day = 0.53 gpm** total wastewater produced from the convenience store and warehouses combined.

**3.2 Average daily wet weather flow**

The infiltration is 750 gallons per acre served, the number of acres served is 4-acres.

$$0.53 \text{ gpm} + [750 \text{ gpd/acre}] \times 4 \text{ acres} / 1440 = 21.36 \text{ gpm}$$

**4.0 Structural Component**

Watertight, size on size resilient connectors conforming to ASTM C-923 have been specified for connecting pipe to manholes.

**4.1 Pipes**

The following are the minimum and maximum slopes for each pipe diameter:

Pipe Diameter: 6": Min. Slope: 0.5% Max. Slope: 12.35%

Pipe Diameter: 8": Min. Slope: 0.33% Max. Slope: 8.40%

The proposed project complies with this requirement.

**4.2 Manholes**

Section 217.55 (f) prohibits the use of bricks to adjust a manhole cover to grade or construct a manhole. The proposed project will comply with this requirement. The inside diameter of a manhole must be no less than 48 inches. Section 217.55 (n) requires watertight, size-on-size resilient connectors that allow for differential settlement and must conform to American Society for Testing and Materials C-923. The proposed project complies with this requirement. Under 30 TAC 213.5(C)(3)(A), all manholes over the Recharge Zone must be watertight, with watertight rings and covers. The proposed project complies with this requirement. The materials specified for manhole construction are precast concrete.

Manholes maximum spacing shown on our plans is 400 linear feet, the project complies with the maximum manhole spacing allowed by the TCEQ

---



**AES Engineering consultant**

2514 Preserve Trail,  
Cedar Park TX 78613  
Phone: (512) 785-9034  
Firm Reg. F-22721

---

of 500 linear feet.

## **5.0 Conclusion**

This assessment is limited to the observable elements noted above. Our professional services and recommendations are in accordance with generally accepted engineering principles and practices in the local area. We have used our best engineering judgment based on the information provided to us.

If you have any questions, or if additional information is required, please do not hesitate to contact us.

Respectfully Submitted,

A handwritten signature in black ink that reads "Ahmed El Seweify".

---

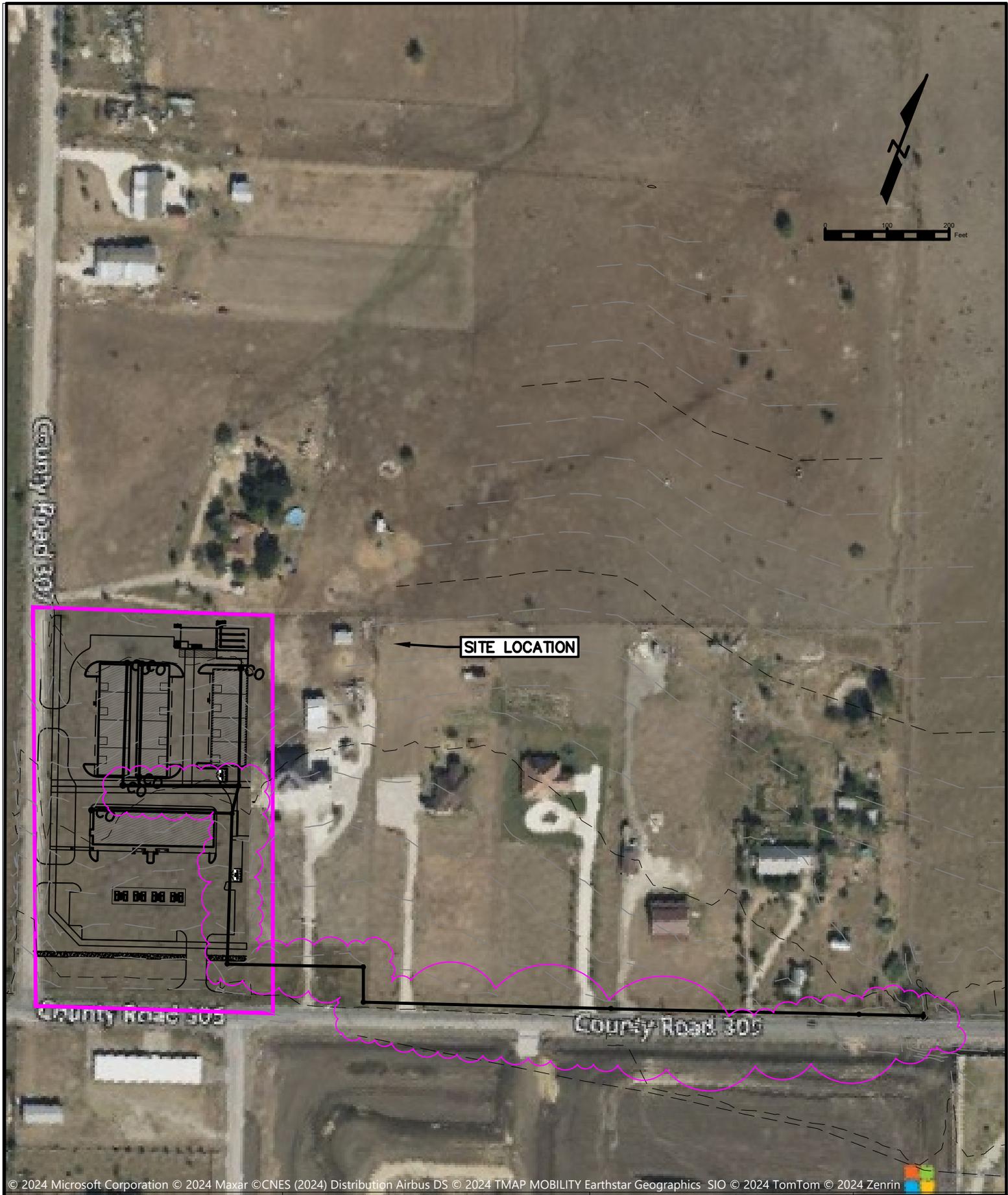
**Ahmed El Seweify, P.E.**  
**AES Engineering Consultant**  
2514 Preserve Trail,  
Cedar Park, TX 78613  
Firm Registration no. F-22721



**AES Engineering consultant**  
2514 Preserve Trail, Cedar Park, TX 78613  
Phone: (512) 785-9034  
Firm Reg. F-22721

---

**Appendix A: Vicinity Map**



© 2024 Microsoft Corporation © 2024 Maxar ©CNES (2024) Distribution Airbus DS © 2024 TMAP MOBILITY Earthstar Geographics SIO © 2024 TomTom © 2024 Zenrin



**PROPOSED  
WASTEWATER  
LINE**

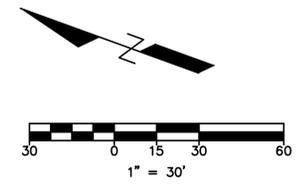
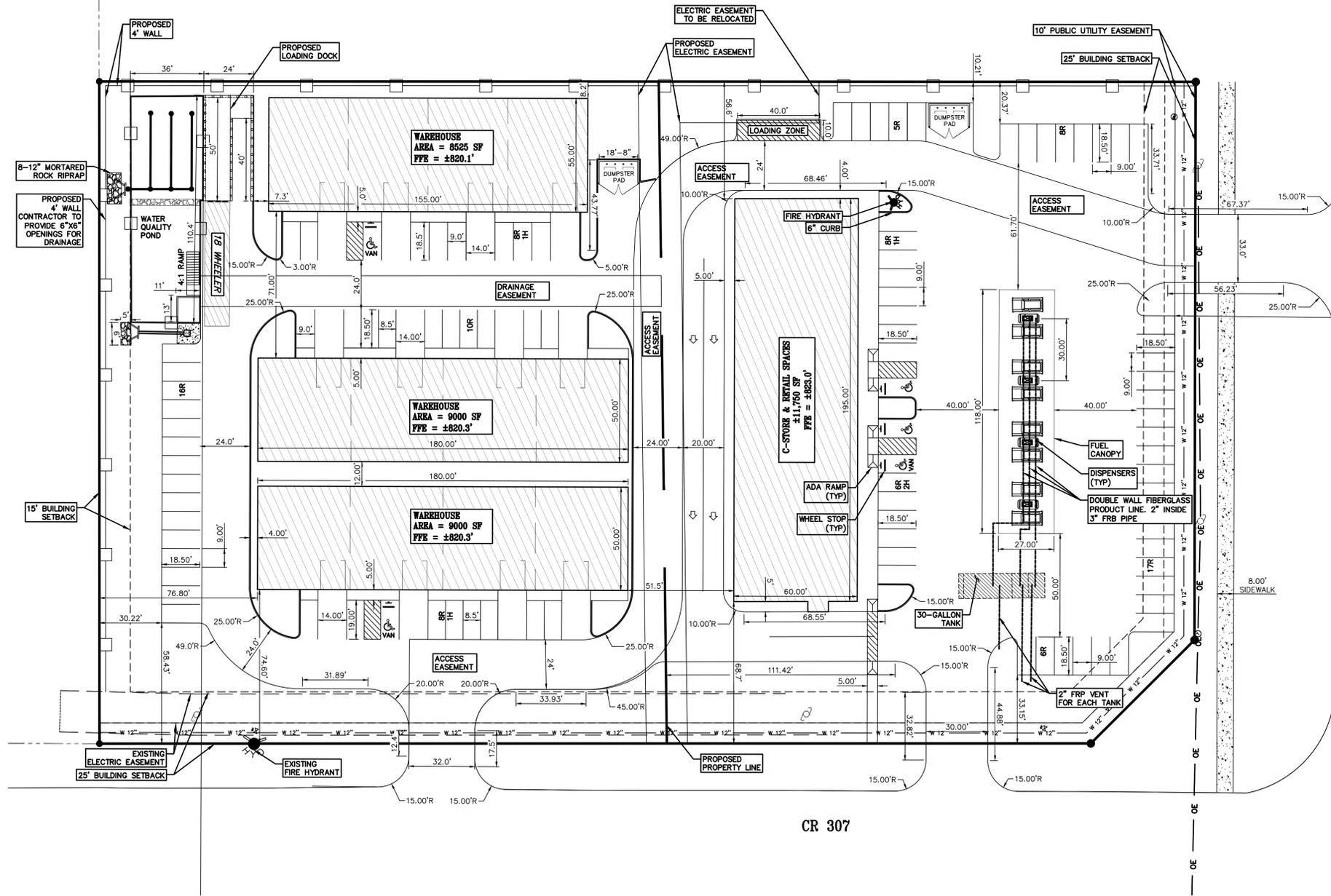
**SNACK TIME #4  
1412 CR 305  
JARRELL TX**

**PAGE  
1 OF 1**



**AES Engineering consultant**  
2514 Preserve Trail, Cedar Park, TX 78613  
Phone: (512) 785-9034  
Firm Reg. F-22721

**APPENDIX B**  
**CONSTRUCTION PLAN**



**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(---)	(---)	PROPERTY LINE / (R.O.W.) LINE
(---)	(---)	RECORD INFORMATION
(---)	(---)	LIGHT POLE
(---)	(---)	GROUND LIGHT
(---)	(---)	POWER POLE
(---)	(---)	DOWN GUY
(---)	(---)	TRANSFORMER (SIZE VARIES)
(---)	(---)	FIRE HYDRANT
(---)	(---)	WATER VALVE
(---)	(---)	WATER METER
(---)	(---)	WATER METER VAULT (SIZE VARIES)
(---)	(---)	CABLE TV RISER
(---)	(---)	ELECTRIC BOX
(---)	(---)	ELECTRIC METER
(---)	(---)	GRATE INLET
(---)	(---)	CURB INLET (SIZE VARIES)
(---)	(---)	OVERHEAD ELECTRIC
(---)	(---)	ELECTRIC MANHOLE (SIZE VARIES)
(---)	(---)	WASTEWATER MANHOLE (SIZE VARIES)
(---)	(---)	STORMSEWER MANHOLE (SIZE VARIES)
(---)	(---)	TELEPHONE MANHOLE (SIZE VARIES)
(---)	(---)	WASTEWATER CLEANOUT
(---)	(---)	CURB & GUTTER
(---)	(---)	EDGE OF PAVEMENT
(---)	(---)	FIRE LANE DESIGNATION
(---)	(---)	HANDICAP ACCESS ROUTE
(---)	(---)	CONCRETE SIDEWALKS
(---)	(---)	SIGN
(---)	(---)	WHEELSTOP
(---)	(---)	FINISH FLOOR ELEVATION
(---)	(---)	PARKING COUNT (REGULAR SPACES)
(---)	(---)	PARKING COUNT (HANDICAP SPACES)
(---)	(---)	HANDICAP SPACE
(---)	(---)	LIMITS OF CONSTRUCTION

8-12" MORTARED ROCK RIPRAP  
PROPOSED 4" WALL CONTRACTOR TO PROVIDE 6"x6" OPENINGS FOR DRAINAGE

CR 307

CR 305

**IMPERVIOUS COVER CALCULATION**

DESCRIPTION	AREA SQUARE FOOT	AREA ACRE	PERCENTAGE %
GRASS	43,560 S.F.	1.008 ACRE	
PAVEMENT	87,105 S.F.	2.000 ACRE	
BUILDING	38,275 S.F.	0.878 ACRE	
<b>TOTAL</b>	<b>169,274 S.F.</b>	<b>3.886 ACRE</b>	<b>74.06%</b>

**PARKING SUMMARY TABLE:  
GAS STATION LOT**

PROVIDED PARKING TABLE	
REGULAR PARKING	50
ADA PARKING	3
<b>TOTAL</b>	<b>53</b>

**PARKING SUMMARY TABLE:  
WAREHOUSE LOT**

PROVIDED PARKING TABLE	
REGULAR PARKING	42
ADA PARKING	2
<b>TOTAL</b>	<b>44</b>

**SIGNS AND OUTDOOR ADVERTISING DISPLAY**  
1. SIGNS AND OUTDOOR ADVERTISING DISPLAY SHALL BE UNDER SEPARATE PERMIT.

**ADA COMPLIANCE**

- ALL INTERIOR AND EXTERIOR ADA DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CURRENT ADA GUIDELINES AND COMPLIANCE OF SAME SHALL BE THE SOLE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR AND PROJECT ARCHITECT. CONTRACTOR SHALL REVIEW PLANS AND NOTIFY PROJECT ARCHITECT/ENGINEER WITH ANY MODIFICATIONS REQUIRED FOR SUBSTANTIAL COMPLIANCE.
- APPROVAL OF THESE PLANS BY THE CITY OF BEE CAVE INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATION ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.
- SLOPES ON ACCESSIBLE ROUTE MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]
- ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50. [ANSI 403.3]

**GENERAL NOTES:**  
PAVERS MAY BE USED ON THE ADA ROUTE WITH THE FOLLOWING CONDITIONS:

- JOINTS BETWEEN PAVERS 1/4" MAXIMUM
- VERTICAL DIFFERENCES BETWEEN PAVERS 1/4" MAXIMUM
- RUNNING SLOPE (IN THE DIRECTION OF TRAVEL) 1:20 (5%) MAXIMUM
- CROSS SLOPE (PERPENDICULAR TO THE DIRECTION OF TRAVEL) 1/4" PER FOOT (2%) MAXIMUM.
- REFERENCE ARCHITECTURAL PLANS FOR BUILDING LAYOUT.

PROJECT:  
**SNACK TIME #4**  
LOCATION:  
**1412 CR 305  
JARRELL TEXAS 76537**



**project team**  
**OWNER:**  
SAMEER UMATIYA  
CR 305 REAL ESTATE LLC  
512-563-8790  
SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
AES Engineering Consultant  
Ahmed El Seweify P.E.  
2514 PRESERVE TRAIL,  
CEDAR PARK, TX 78613  
Ph. (512) 785-9034  
email: contact@aes-engs.com  
Texas Firm F-22721

**SURVEY**  
FOREST SURVEYING AND MAPPING  
1002 ASH STREET  
GEORGETOWN, TX 78626  
512.930.5927  
CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
CAPITAL GEOTECHNICAL SERVICES PLLC  
AUSTIN, TX  
512.271.9749  
NICKK@CAPITALGEOTECHNICAL.COM



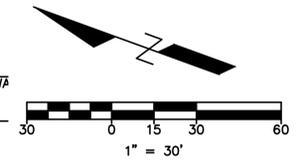
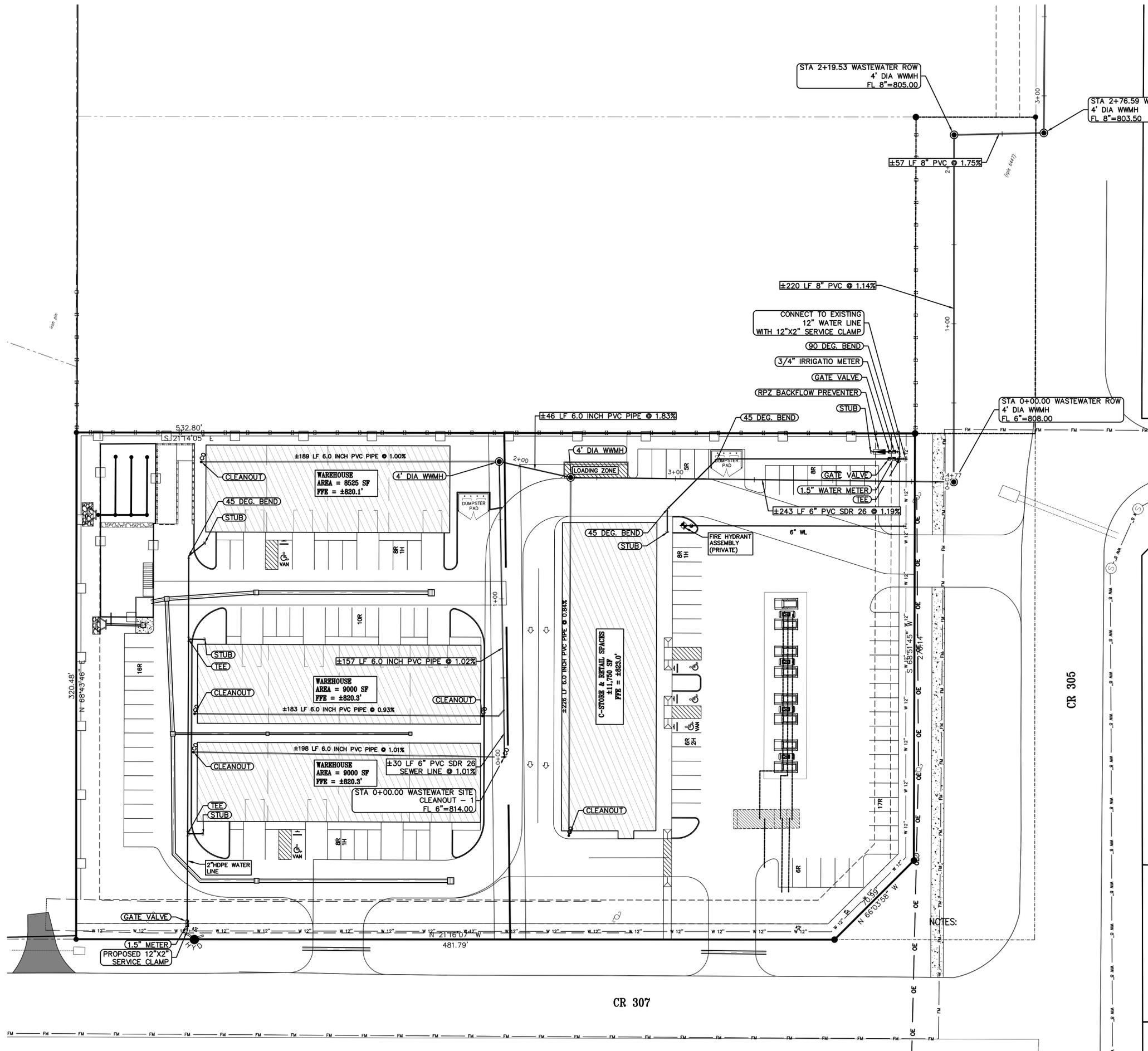
*Ahmed El Seweify*

REVISION	DATE	ISSUE TITLE

DRAWING TITLE:  
**SITE PLAN AND DIMENSIONS**

PROJECT NO: **10-1082** DRAWN BY: / CHECKED BY: **ABS**  
DATE: **2024-11-06** SCALE: **1"=30'**  
SHEET NUMBER:

DRAWING PATH - G:\MY DRIVE\AES ENGINEERING\10-1082 JARRELL GAS STATION\CAD\SITE PLAN & DIMENSION.DWG



**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
0000		PROPERTY (R.O.W.) LINE
1		RECORD INFORMATION
2		LIGHT POLE
3		UTILITY POLE
4		TRANSFORMER (SIZE VARIES)
5		FIRE HYDRANT
6		WATER VALVE
7		WATER METER
8		WATER METER VAULT
9		WATER MANHOLE
10		ELECTRIC BOX
11		ELECTRIC METER
12		GAS METER
13		GAS VALVE
14		GRATE INLET
15		CURB INLET (SIZE VARIES)
16		STORMSEWER LINE
17		WATER LINE
18		FIRE LINE
19		CHILLED WATER
20		WASTEWATER LINE
21		ELECTRIC LINE
22		OVERHEAD ELECTRIC
23		UNDERGROUND TELEPHONE
24		UNDERGROUND CABLE AND INTERNET
25		TELECOMMUNICATIONS LINE
26		ELECTRIC MANHOLE (SIZE VARIES)
27		WASTEWATER MANHOLE (SIZE VARIES)
28		TELEPHONE MANHOLE (SIZE VARIES)
29		WASTEWATER CLEANOUT
30		CURB & GUTTER
31		HANDICAP SPACE
32		BISS
33		WHEELSTOP
34		BOLLARD
35		DIRECTION OF FLOW
36		CONTOUR
37		HIGH POINT
38		LOW POINT
39		SPOT ELEVATION
40		TOP OF WALK ELEVATION
41		FINISH FLOOR ELEVATION

PROJECT:  
**SNACK TIME #4**

LOCATION:  
**1412 CR 305  
JARRELL TEXAS 76537**



**project team**

**OWNER:**  
SAMEER UMATIYA  
CR 305 REAL ESTATE LLC  
512-563-8790  
SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
AES Engineering Consultant  
Ahmed El Seweify P.E.  
2514 PRESERVE TRAIL,  
CEDAR PARK, TX 78613  
Ph. (512) 785-9034  
email: contact@aes-engs.com  
Texas Firm F-22721

**SURVEY**  
FOREST SURVEYING AND MAPPING  
1002 ASH STREET  
GEORGETOWN, TX 78626  
512.930.5927  
CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
CAPITAL GEOTECHNICAL SERVICES PLLC  
AUSTIN, TX  
512.271.9749  
NICKK@CAPITALGEOTECHNICAL.COM



*Ahmed El Seweify*

REVISION	DATE	ISSUE TITLE

DRAWING TITLE:  
**UTILITY PLAN  
(WATER &  
WASTEWATER)**

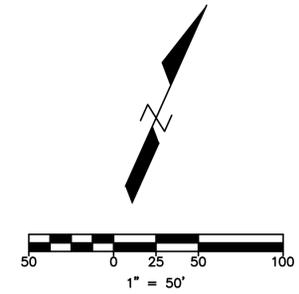
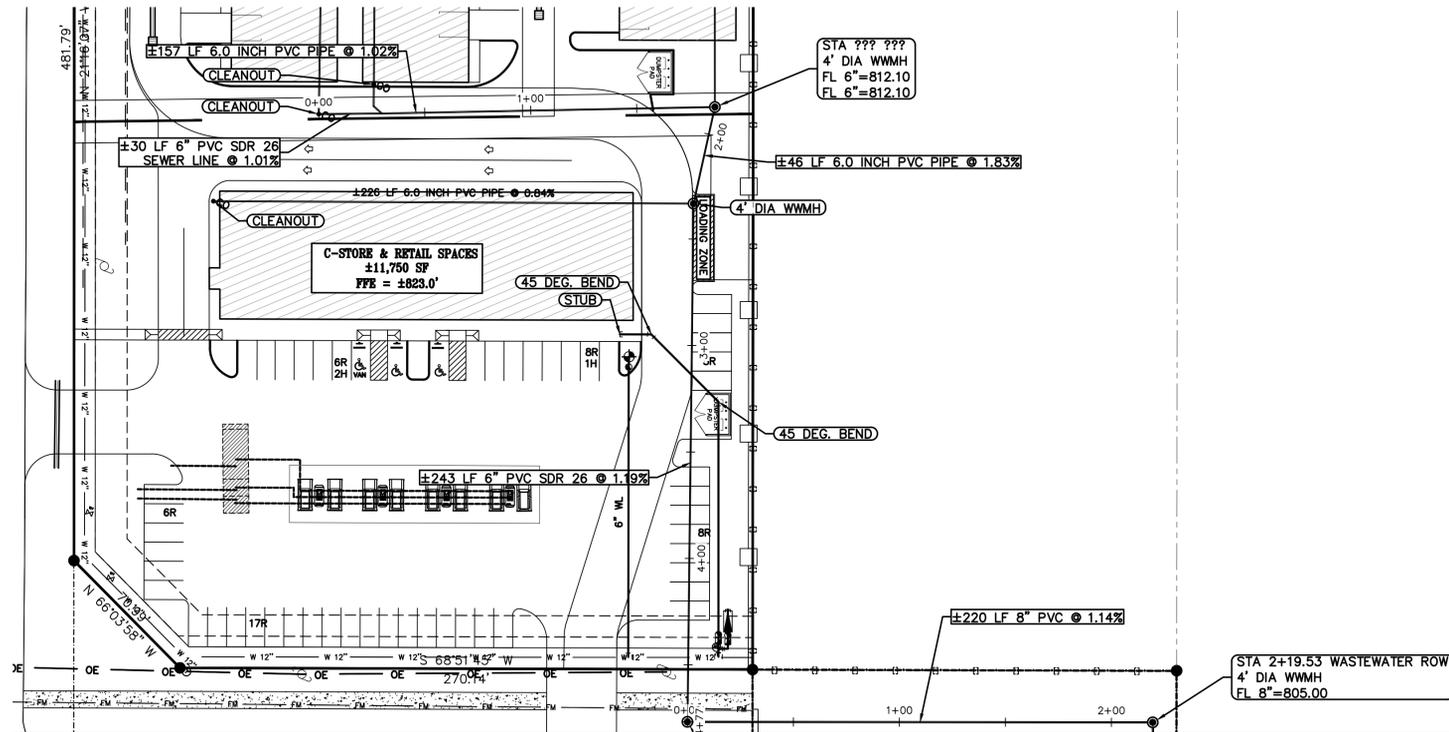
PROJECT NO: <b>10-1082</b>	DRAWN BY: / CHECKED BY: AES
DATE: <b>2024-11-06</b>	SCALE: 1"=30'

SHEET NUMBER:  
**21 of 28**

**SAFETY NOTE:**  
CONTRACTOR IS RESPONSIBLE OF FOLLOWING OSHA GUIDELINE/REQUIREMENTS BY INSTALLING PROTECTIVE SYSTEM TO PREVENT CAVE-INS INTO THE TRENCH.

**SPECIAL EASEMENT NOTE:**  
== INDICATES A UTILITY OR PASSAGE EASEMENT PER PLAN AMENDMENT.

**SPECIAL NOTE:**  
1. ANY WORK COMMENCED PRIOR TO THE ISSUANCE OF CITY BUILDING PERMIT WITH PUBLIC WORKS APPROVALS WILL BE AT THE SOLE RISK OF THE CONTRACTOR.  
2. THIS SHEET HAS BEEN REVISED. PREVIOUSLY ISSUED SHEETS IS NO LONGER VALID AND MUST BE DESTROYED OR RETURNED TO THE ENGINEER.



PROJECT:  
**SNACK TIME #4**

LOCATION:  
**1412 CR 305  
 JARRELL TEXAS 76537**



**project team**

**OWNER:**  
 SAMEER UMATIYA  
 CR 305 REAL ESTATE LLC  
 512-563-8790  
 SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
 AES Engineering Consultant  
 Ahmed El Seweify P.E.  
 2514 PRESERVE TRAIL,  
 CEDAR PARK, TX 78613  
 Ph. (512) 785-9034  
 email: contact@aes-engs.com  
 Texas Firm F-22721

**SURVEY**  
 FOREST SURVEYING AND MAPPING  
 1002 ASH STREET  
 GEORGETOWN, TX 78626  
 512.930.5927  
 CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
 CAPITAL GEOTECHNICAL SERVICES PLLC  
 AUSTIN, TX  
 512.271.9749  
 NICKK@CAPITALGEOTECHNICAL.COM



*Ahmed El Seweify*

REVISION	DATE	ISSUE TITLE

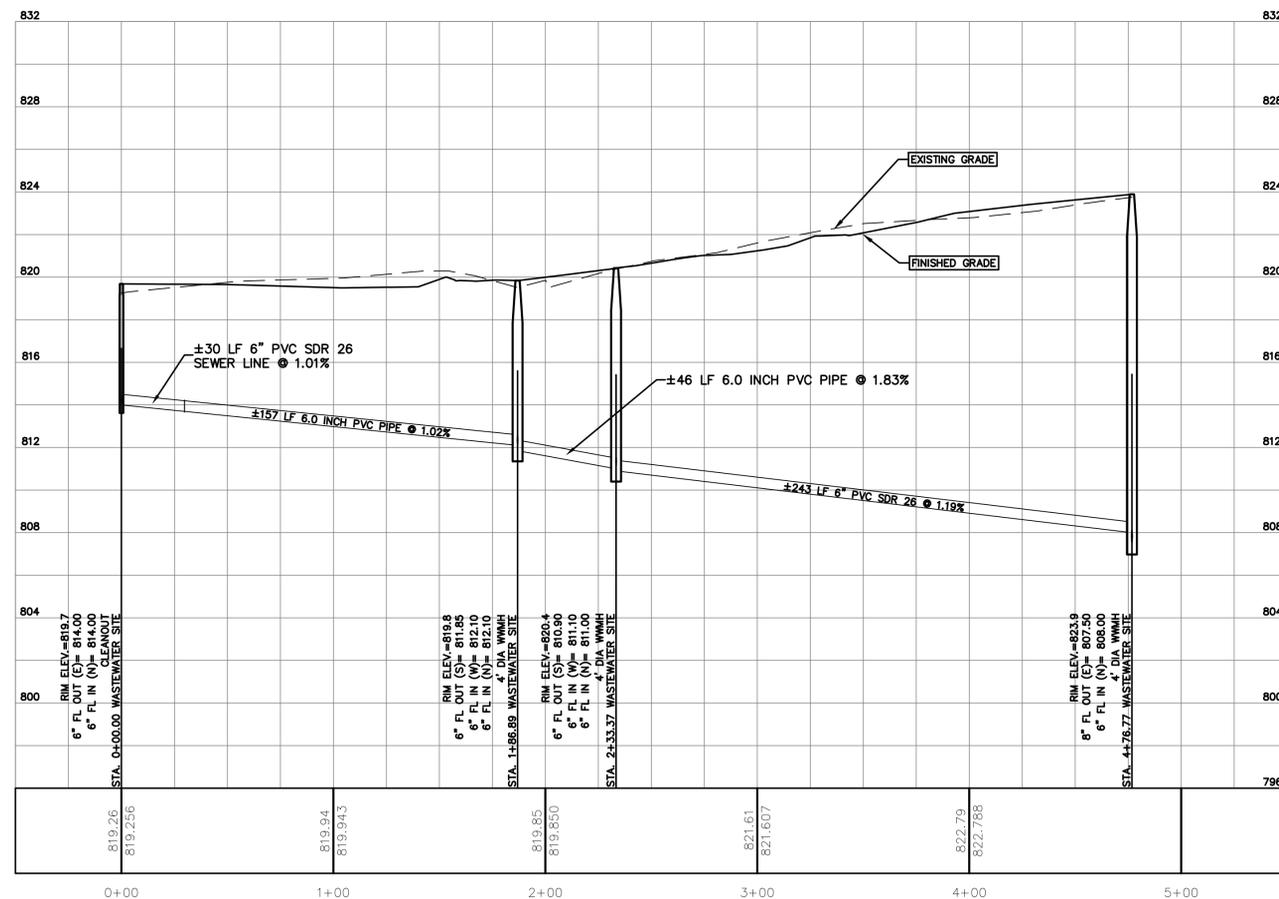
DRAWING TITLE:  
**WASTEWATER PLAN  
 AND PROFILE-1**

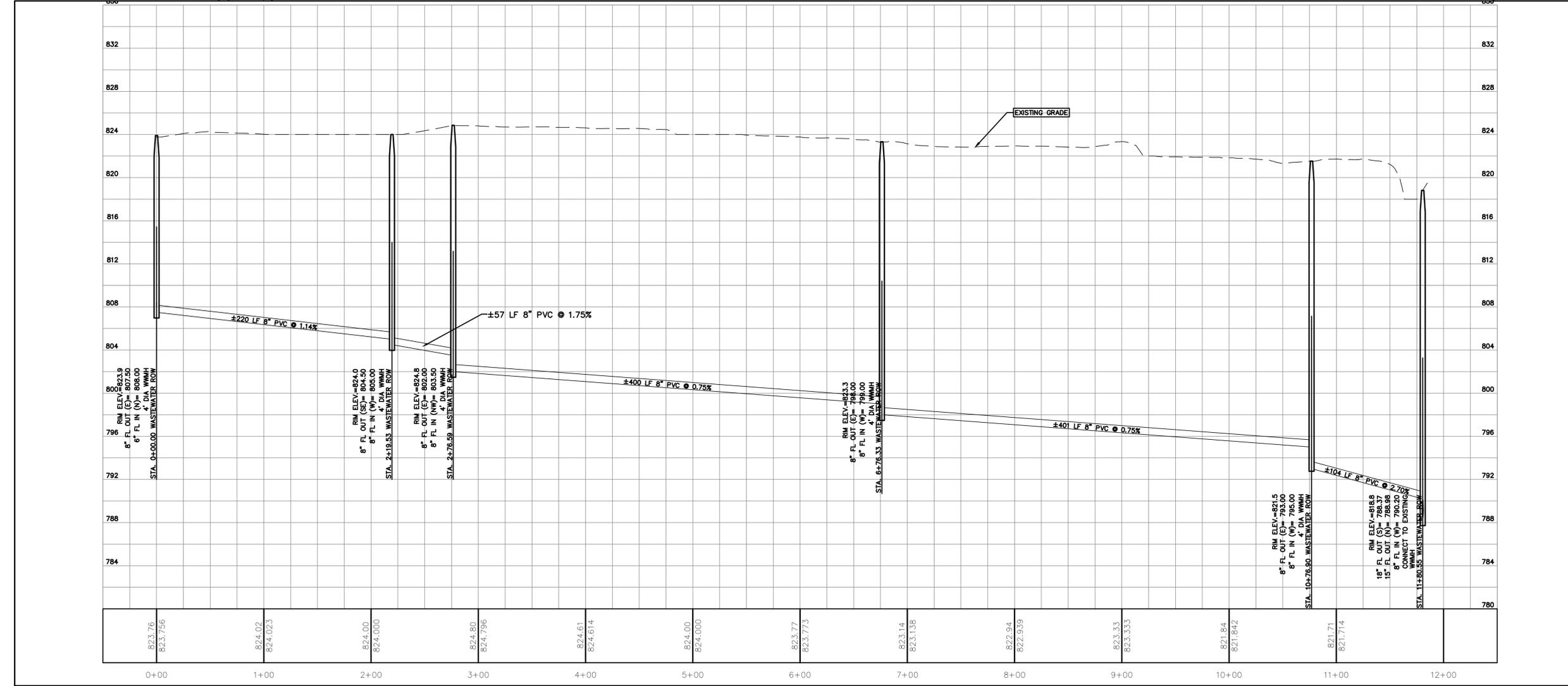
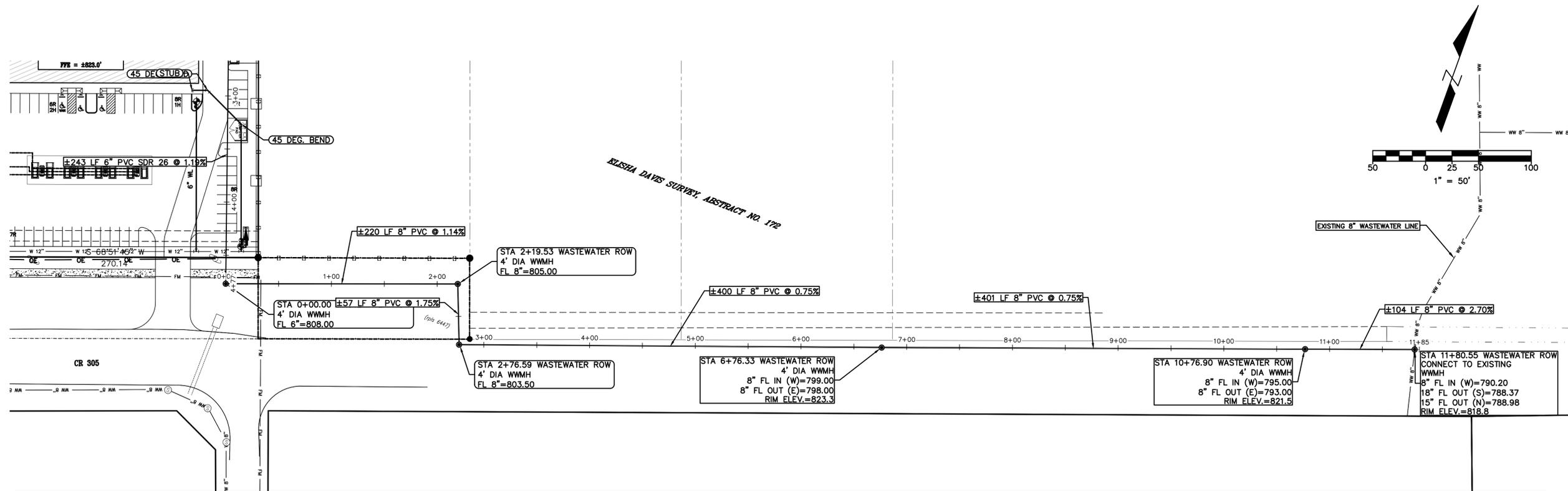
PROJECT NO: **10-1082**      DRAWN BY: / CHECKED BY: AES  
 DATE: **2024-11-06**      SCALE: 1"=50'

SHEET NUMBER:  
**22 of 28**

**SPECIAL NOTE:**  
 1. ANY WORK COMMENCED PRIOR TO THE ISSUANCE OF CITY BUILDING PERMIT WITH PUBLIC WORKS APPROVALS WILL BE AT THE SOLE RISK OF THE CONTRACTOR.  
 2. THIS SHEET HAS BEEN REVISED. PREVIOUSLY ISSUED SHEETS IS NO LONGER VALID AND MUST BE DESTROYED OR RETURNED TO THE ENGINEER.

# WASTEWATER SITE





PROJECT:  
**SNACK TIME #4**

LOCATION:  
**1412 CR 305  
JARRELL TEXAS 76537**



**project team**

**OWNER:**  
SAMEER UMATIYA  
CR 305 REAL ESTATE LLC  
512-563-8790  
SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
AES Engineering Consultant  
Ahmed El Seweify P.E.  
2514 PRESERVE TRAIL,  
CEDAR PARK, TX 78613  
Ph. (512) 785-9034  
email: contact@aes-engs.com  
Texas Firm F-22721

**SURVEY**  
FOREST SURVEYING AND MAPPING  
1002 ASH STREET  
GEORGETOWN, TX 78626  
512.930.5927  
CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
CAPITAL GEOTECHNICAL SERVICES PLLC  
AUSTIN, TX  
512.271.9749  
NICKK@CAPITALGEOTECHNICAL.COM



*Ahmed El Seweify*

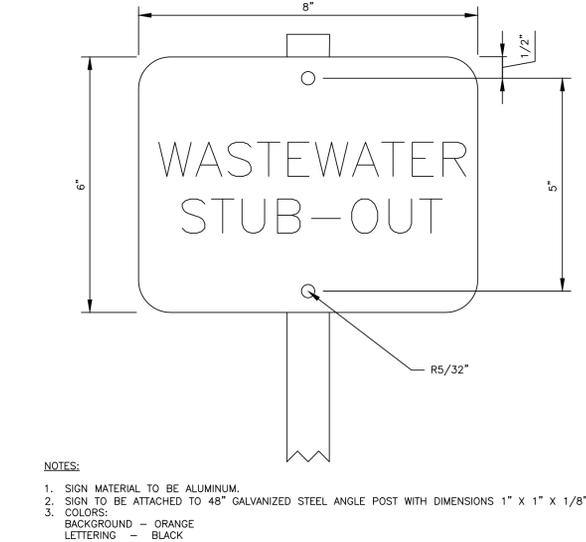
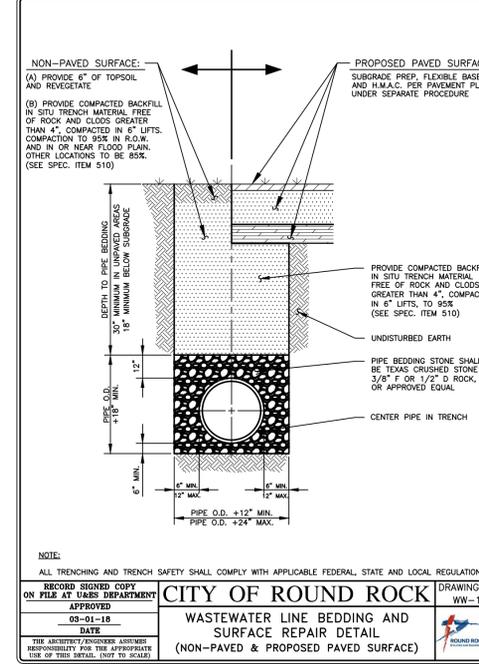
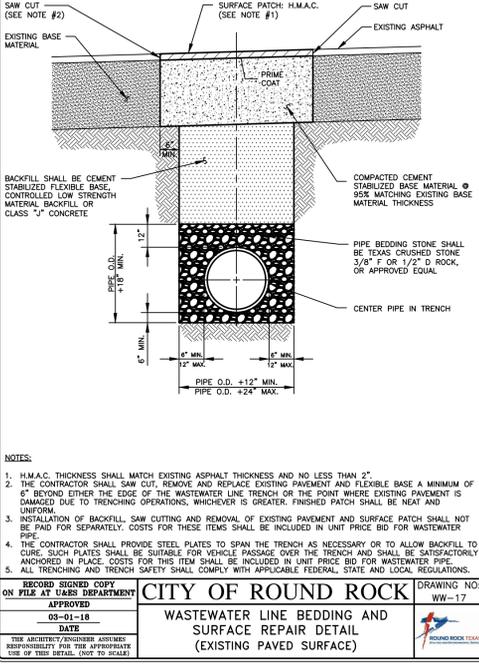
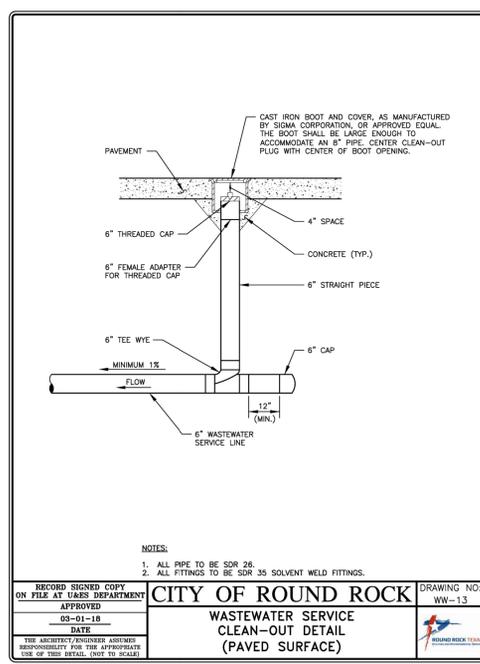
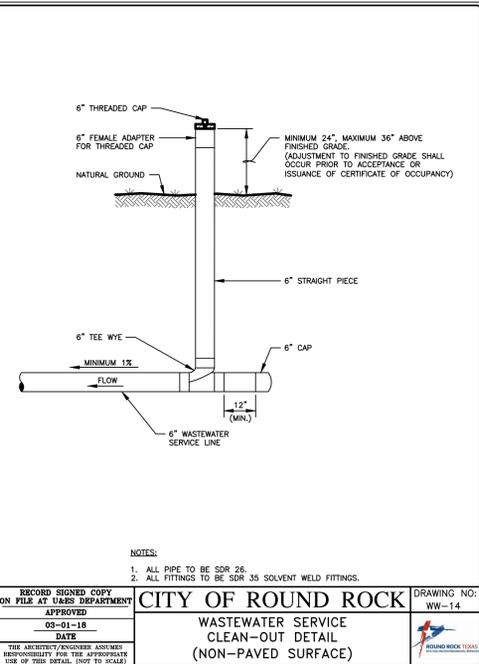
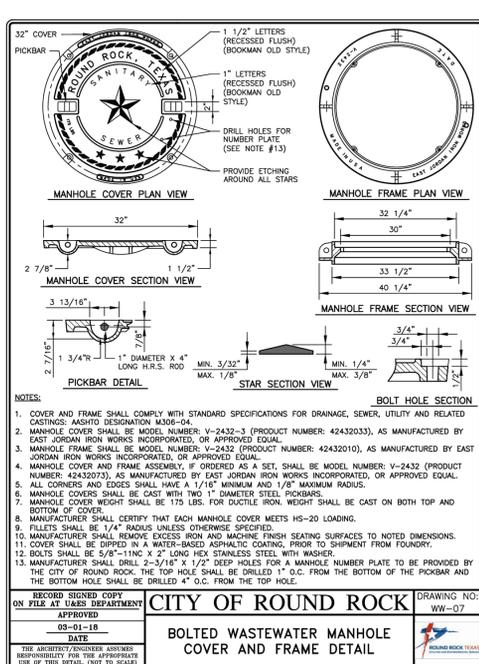
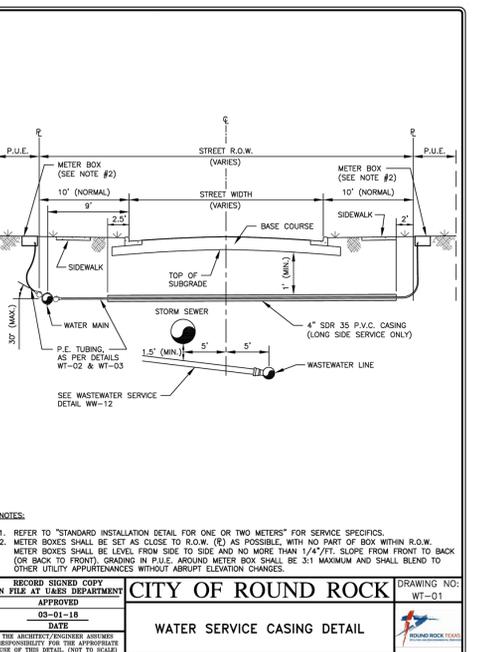
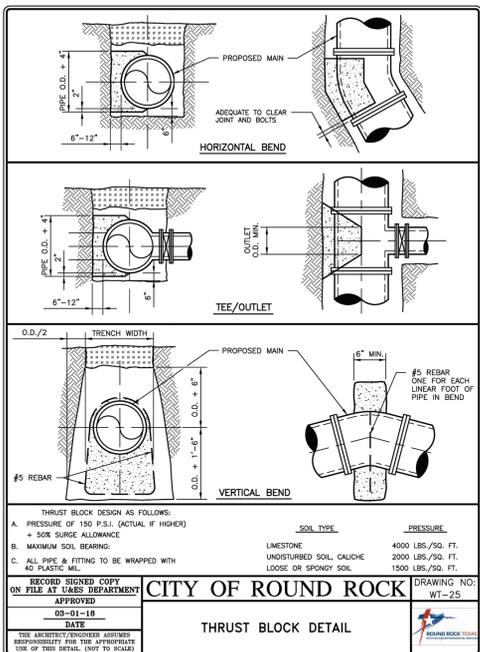
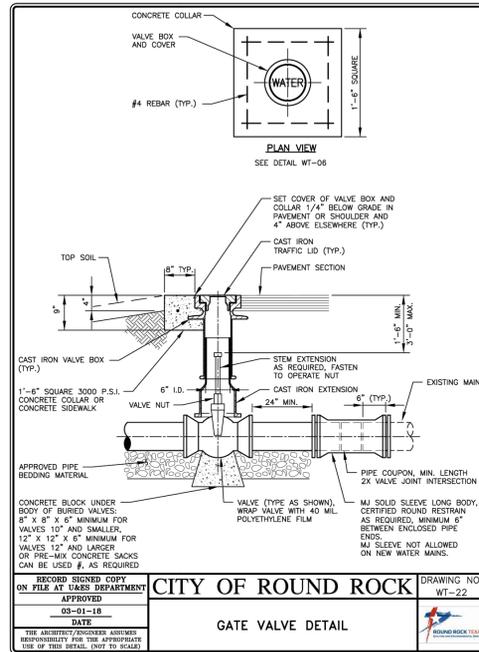
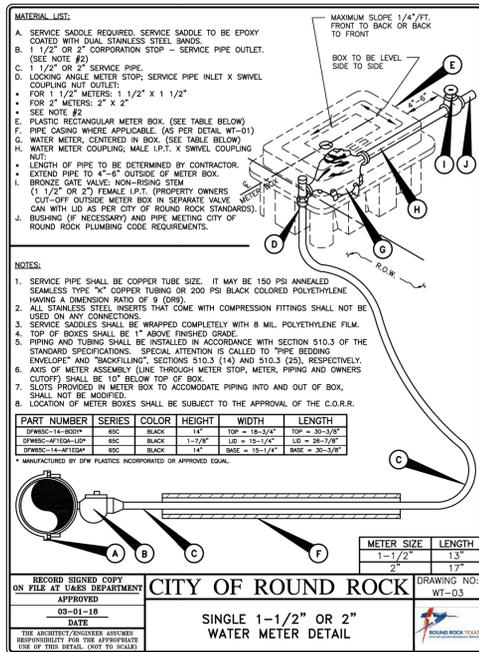
REVISION	DATE	ISSUE TITLE

DRAWING TITLE:  
**WASTEWATER PLAN  
AND PROFILE -2**

PROJECT NO: <b>10-1082</b>	DRAWN BY: / CHECKED BY: AES
DATE: <b>2024-11-06</b>	SCALE: 1"=50'

SHEET NUMBER:  
**23 of 28**

DRAWING PATH - G:\MY DRIVE\AES ENGINEERING\10-1082-JARRELL GAS STATION\CAD\UTILITY PLAN.DWG



**PROJECT:**

**SNACK TIME #4**

**LOCATION:**

**1412 CR 305**  
**JARRELL TEXAS 76537**



**project team**

**OWNER:**  
 SAMEER UMATIA  
 CR 305 REAL ESTATE LLC  
 512-563-8790  
 email: SAMEERUMATIA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
 AES Engineering Consultant  
 Ahmed El Sewify P.E.  
 2514 PRESERVE TRAIL,  
 CEDAR PARK, TX 78613  
 Ph. (512) 785-9034  
 email: contact@aes-engs.com  
 Texas Firm F-22721

**SURVEY**  
 FOREST SURVEYING AND MAPPING  
 1002 ASH STREET  
 GEORGETOWN, TX 78626  
 512.930.5927  
 CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
 CAPITAL GEOTECHNICAL SERVICES PLLC  
 AUSTIN, TX  
 512.271.9749  
 NICKK@CAPITALGEOTECHNICAL.COM



**Ahmed El Sewify**

REVISION	DATE	ISSUE TITLE

**DRAWING TITLE:**

**WATER & WASTEWATER DETAILS**

**PROJECT NO:** 10-1082 **DRAWN BY: / CHECKED BY:** ABS

**DATE:** 2024-11-06 **SCALE:** 1"=30'

**SHEET NUMBER:**

DRAWING PATH - G:\MY DRIVE\AES ENGINEERING\10-1082-JARRELL GAS STATION\CAD\UTILITY PLAN.DWG

PROJECT:  
**SNACK TIME #4**

LOCATION:  
**1412 CR 305  
JARRELL TEXAS 76537**

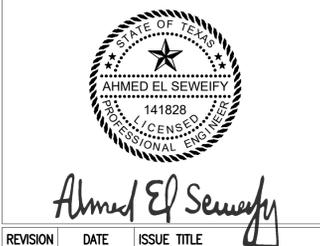


**project team**  
OWNER:  
SAMEER UMATIA  
CR 305 REAL ESTATE LLC  
512-563-8790  
SAMEERUMATIA@YAHOO.COM

CIVIL/STRUCTURAL ENGINEER:  
AES Engineering Consultant  
Ahmed El Sewefy P.E.  
2514 PRESERVE TRAIL,  
CEDAR PARK, TX 78613  
Ph. (512) 785-9034  
email: contact@aes-engs.com  
Texas Firm F-22721

SURVEY  
FOREST SURVEYING AND MAPPING  
1002 ASH STREET  
GEORGETOWN, TX 78626  
512.930.5927  
CASEY.BUTLER@FORESTSURVEYING.COM

GEOTECHNICAL ENGINEER  
CAPITAL GEOTECHNICAL SERVICES PLLC  
AUSTIN, TX  
512.271.9749  
NICKK@CAPITALGEOTECHNICAL.COM



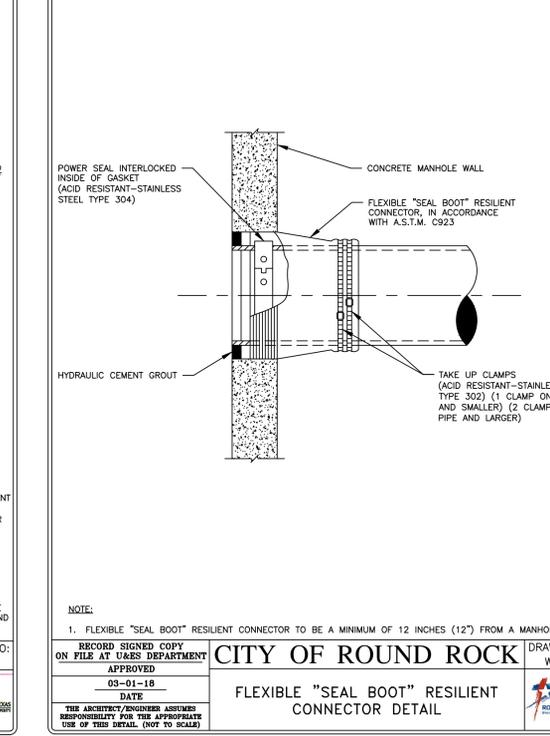
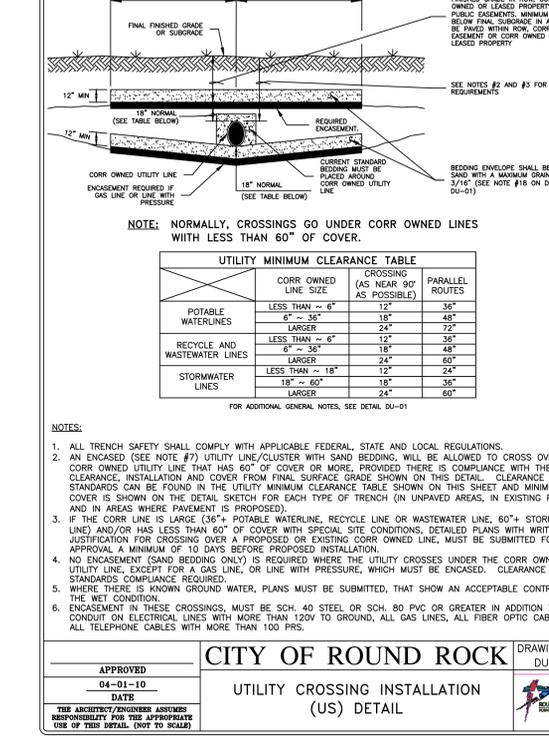
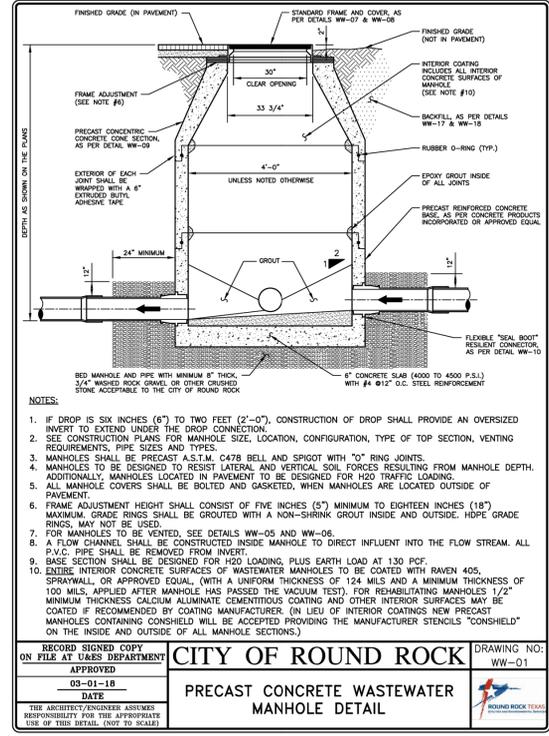
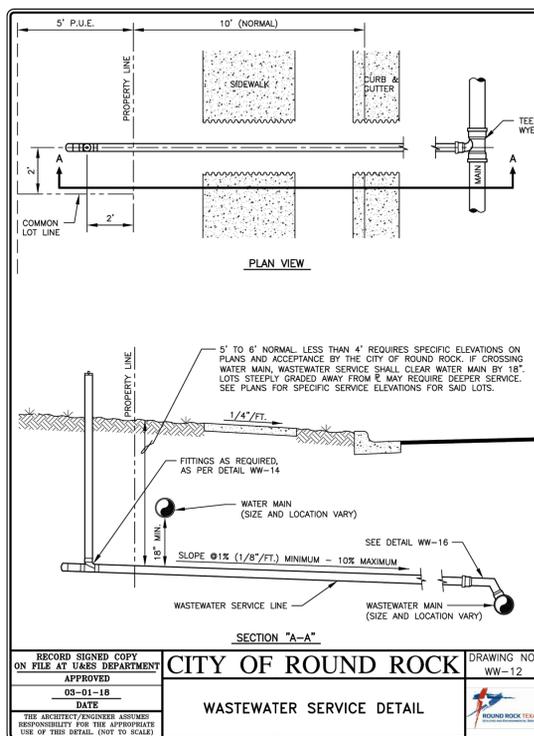
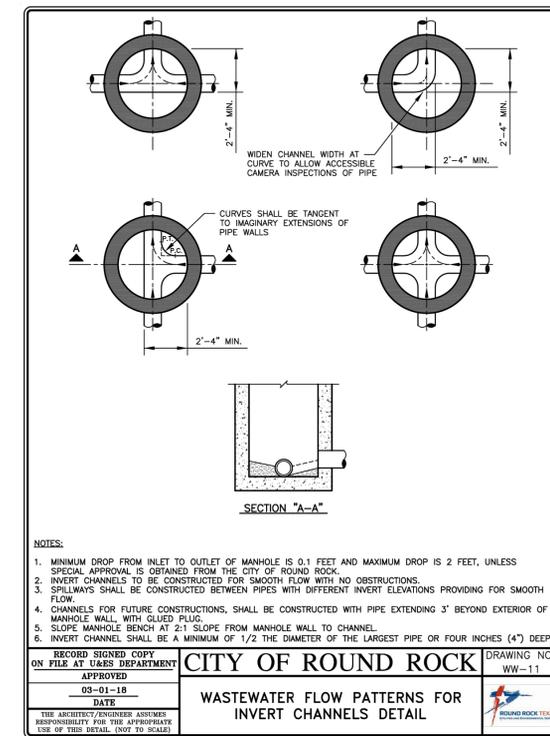
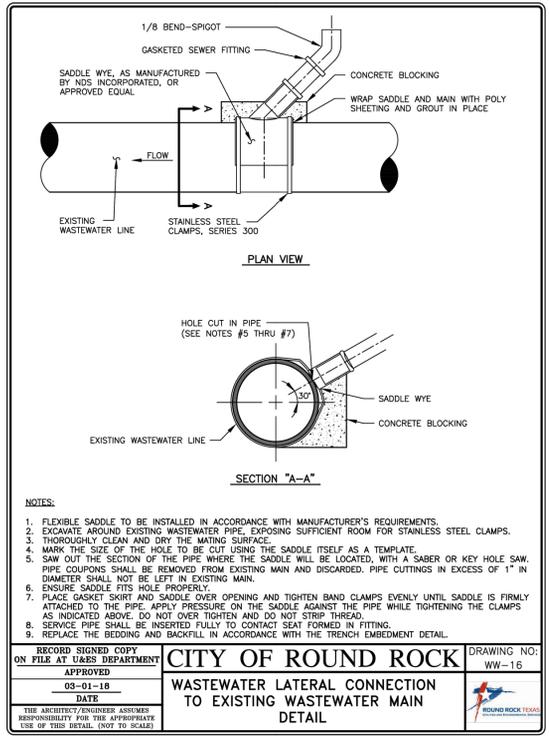
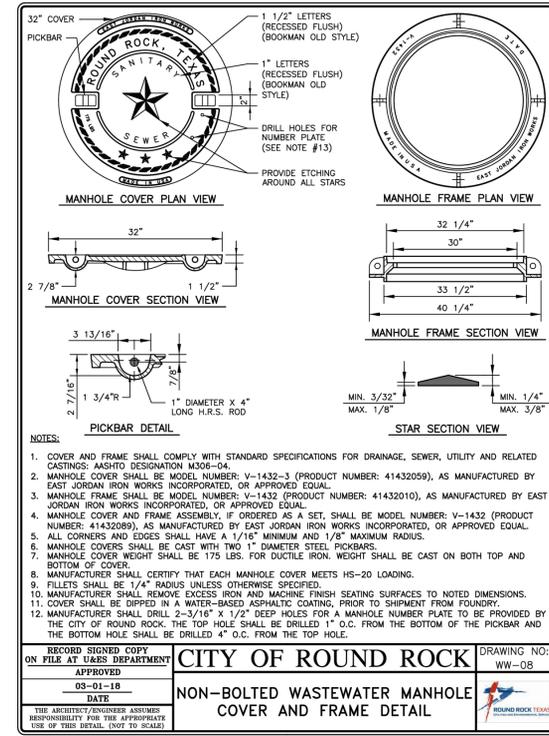
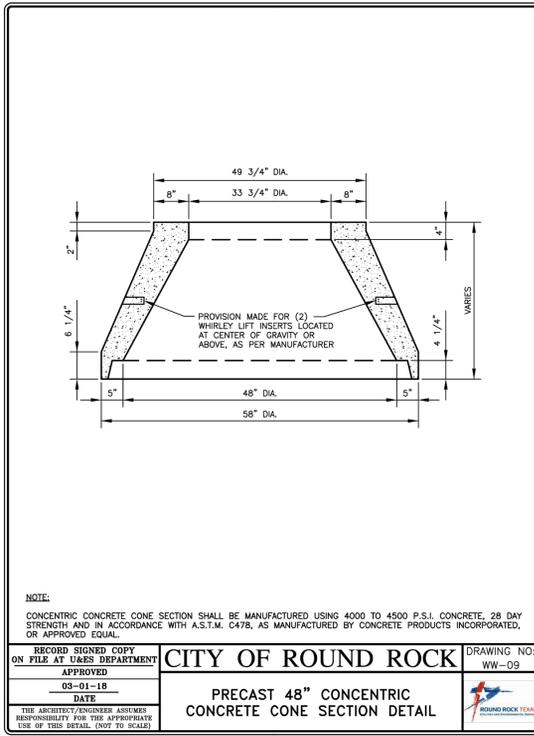
REVISION	DATE	ISSUE TITLE

DRAWING TITLE:  
**WATER & WASTEWATER DETAILS (2)**

PROJECT NO: **10-1082** DRAWN BY: / CHECKED BY: **AES**

DATE: **2024-11-06** SCALE: **1"=30'**

SHEET NUMBER:



DRAWING PATH - G:\MY DRIVE\AES ENGINEERING\10-1082-JARRELL GAS STATION\CAD\UTILITY PLAN.DWG

**Texas Commission on Environmental Quality  
Organized Sewage Collection System  
General Construction Notes**

**Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer**

*The following listed "construction notes" are intended to be advisory in nature only and do not constitute an approval or conditional approval by the Executive Director, nor do they constitute a comprehensive listing of rules or conditions to be followed during construction. Further actions may be required to achieve compliance with TCEQ regulations found in Title 30, Texas Administrative Code, Chapters 213 and 217, as well as local ordinances and regulations providing for the protection of water quality. Additionally, nothing contained in the following listed "construction notes" restricts the powers of the Executive Director, the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. The holder of any Edwards Aquifer Protection Plan containing "construction notes" is still responsible for compliance with Title 30, Texas Administrative Code, Chapters 213 or any other applicable TCEQ regulation, as well as all conditions of an Edwards Aquifer Protection Plan through all phases of plan implementation. Failure to comply with any condition of the Executive Director's approval, whether or not in contradiction of any "construction notes" is a violation of TCEQ regulations and any violation is subject to administrative rules, orders, and penalties as provided under Title 30, Texas Administrative Code § 213.10 (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. The following listed "construction notes" in no way represent an approved exception by the Executive Director to any part of Title 30 Texas Administrative Code, Chapters 213 and 217, or any other TCEQ applicable regulation.*

- This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.
- All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.
- A written notice of construction must be submitted to the presiding TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
  - the name of the approved project;
  - the activity start date; and
  - the contact information of the prime contractor.
- Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
- Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.
- If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the

- L = length of line of same size being tested, in feet  
 Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface
- (C) Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

Pipe Diameter (inches)	Minimum Time (seconds)	Maximum Length for Minimum Time (feet)	Time for Longer Length (seconds/foot)
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

- (D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
- (E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
- (F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
- (G) A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.
- (2) **Infiltration/Exfiltration Test.**
- (A) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole.
- (B) An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.
- (C) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.
- (D) For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.
- (E) If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce

executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.

- Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.
  - Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.
  - All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.
- The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet \_\_\_ of \_\_\_.
- It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.
- Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
  - Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: \_\_\_\_\_.
- If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: \_\_\_\_\_.
- Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.
  - New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

- the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.
- (b) If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:
- (1) For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.
- (A) **Mandrel Sizing.**
- (i) A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
- (ii) If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.
- (iii) All dimensions must meet the appropriate standard.
- (B) **Mandrel Design.**
- (i) A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
- (ii) A mandrel must have nine or more odd number of runners or legs.
- (iii) A barrel section length must equal at least 75% of the inside diameter of a pipe.
- (iv) Each size mandrel must use a separate proving ring.
- (C) **Method Options.**
- (i) An adjustable or flexible mandrel is prohibited.
- (ii) A test may not use television inspection as a substitute for a deflection test.
- (iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.
- (2) For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
- (3) A deflection test method must be accurate to within plus or minus 0.2% deflection.
- (4) An owner shall not conduct a deflection test until at least 30 days after the final backfill.
- (5) Gravity collection system pipe deflection must not exceed five percent (5%).
- (6) If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.
- All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
    - All manholes must pass a leakage test.
    - An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.
      - Hydrostatic Testing.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet \_\_\_ of \_\_\_ (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet \_\_\_ of \_\_\_ and marked after backfilling as shown in the detail on Plan Sheet \_\_\_ of \_\_\_.

- Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.
- Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).
- All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:
  - For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements:
    - Low Pressure Air Test.**
      - A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(i) of this paragraph.
      - For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.
        - A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the pipe.
        - Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3

$$T = \frac{0.085 \times D \times K}{Q}$$

Where:

- T = time for pressure to drop 1.0 pound per square inch gauge in seconds  
 K = 0.000419 X D X L, but not less than 1.0  
 D = average inside pipe diameter in inches

- (A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.
- (B) To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one hour.
- (C) A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.
- (2) **Vacuum Testing.**
- (A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.
- (B) No grout must be placed in horizontal joints before testing.
- (C) Stub-outs, manhole boots, and pipe plugs must be secured to prevent movement while a vacuum is drawn.
- (D) An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.
- (E) A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.
- (F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
- (G) A test does not begin until after the vacuum pump is off.
- (H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.
- All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

Austin Regional Office 12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone (512) 339-2929 Fax (512) 339-3795	San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329
--	---

**THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.**

PROJECT:

**SNACK TIME #4**

LOCATION:

**1412 CR 305  
JARRELL TEXAS 76537**



**project team**

**OWNER:**  
 SAMEER UMATIYA  
 CR 305 REAL ESTATE LLC  
 512-563-8790  
 SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
 AES Engineering Consultant  
 Ahmed El Seweify P.E.  
 2514 PRESERVE TRAIL,  
 CEDAR PARK, TX 78613  
 Ph. (512) 785-9034  
 email: contact@aes-engs.com  
 Texas Firm F-22721

**SURVEY**  
 FOREST SURVEYING AND MAPPING  
 1002 ASH STREET  
 GEORGETOWN, TX 78626  
 512.930.5927  
 CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
 CAPITAL GEOTECHNICAL SERVICES PLLC  
 AUSTIN, TX  
 512.271.9749  
 NICKK@CAPITALGEOTECHNICAL.COM



*Ahmed El Seweify*

REVISION	DATE	ISSUE TITLE

DRAWING TITLE:

**TCEQ-0596  
CONSTRUCTION NOTES**

PROJECT NO:	<b>10-1062</b>	DRAWN BY: / CHECKED BY:	AES
DATE:	<b>2024-11-06</b>	SCALE:	1"=30'

SHEET NUMBER:

**26 of 28**

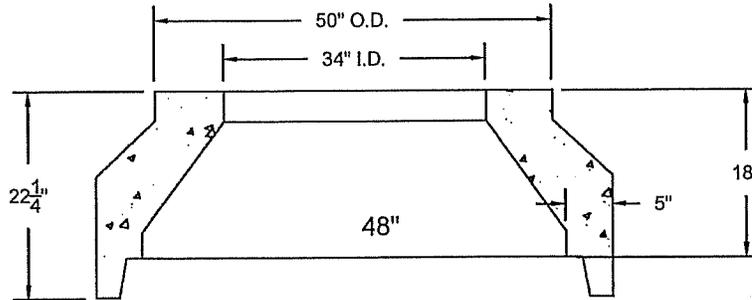


**AES Engineering consultant**  
2514 Preserve Trail, Cedar Park, TX 78613  
Phone: (512) 785-9034  
Firm Reg. F-22721

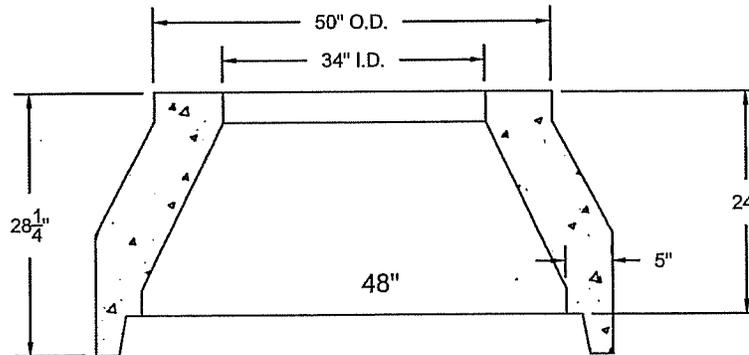
**APPENDIX C**  
**STANDARD SPECS AND PRE-CAST MANHOLES SPECS**

# 48" Dia. Concentric Cones

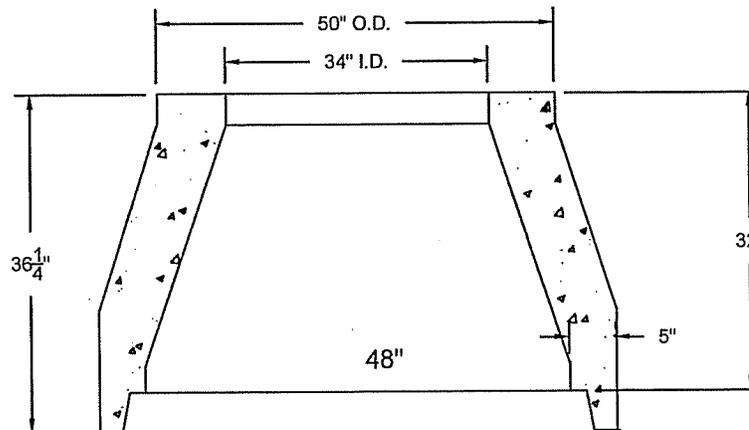
18" Yeild



24" Yeild



32" Yeild



NOTES:

1. Concrete: 4,000 PSI, 28 day Strength. Exceeds ASTM C - 478 - 11
2. Welded wire fabric strength  $f_y = 65,000$  psi.
3. Live Load - AASHOT HS-20.

*Charlotte's  
Concrete, Inc.*

Charlotte's Concrete, Inc.

4950 Lane Dr.  
San Antonio, Tx. 78263  
Ph: (210) 648-4774



FOR 18", 24" & 32" Concentric Cones

JOB

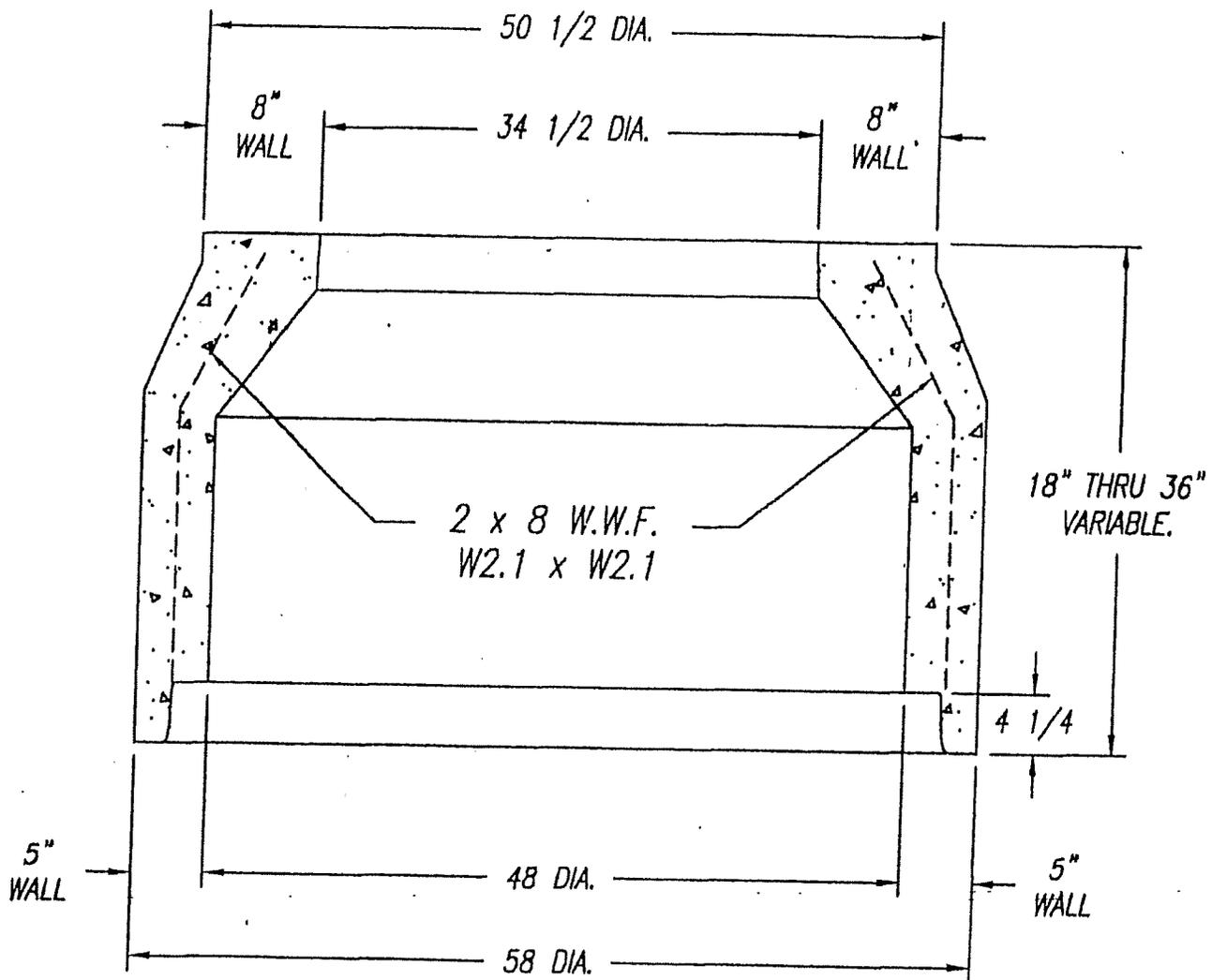
DRAWN BY CA

DATE 08-06-15

REV. NO. -

SHEET

1 of 1

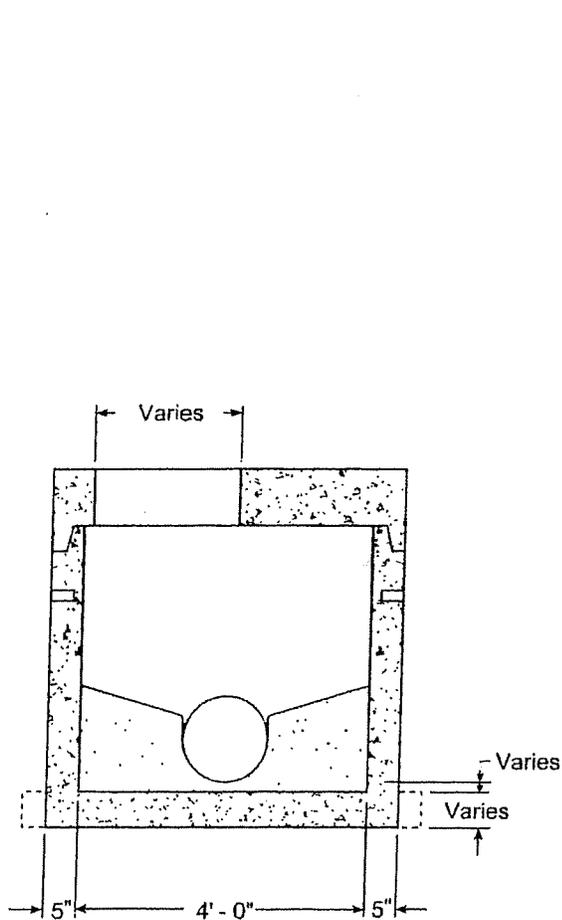


(7R JOINT)

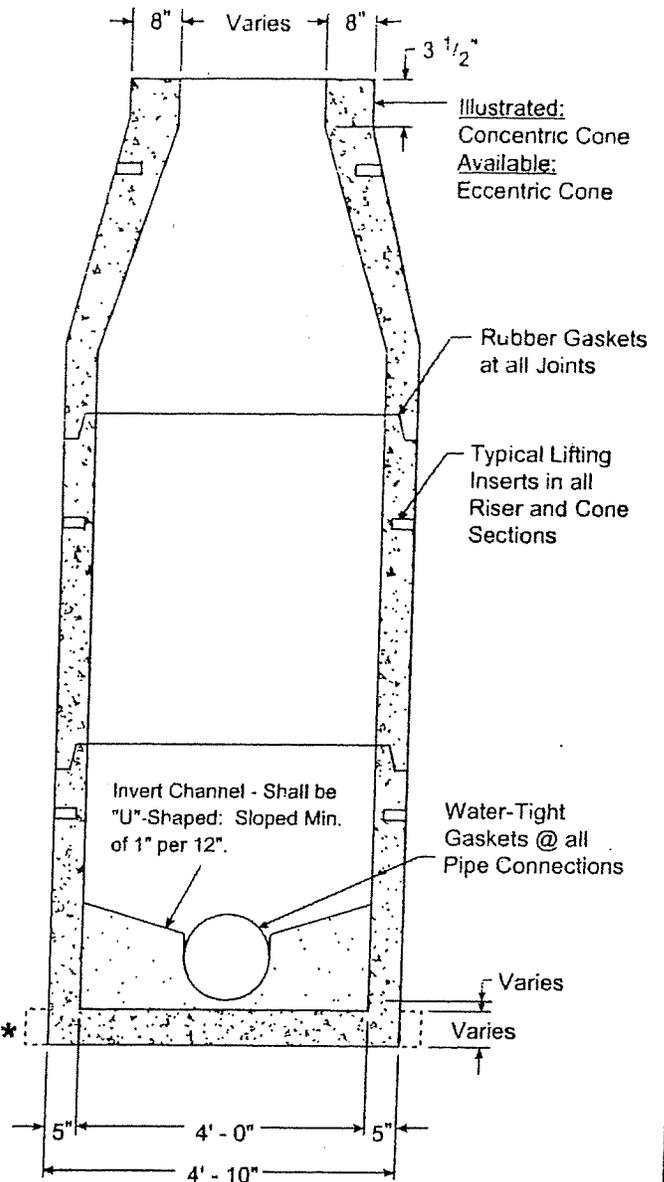
REF. FORM DWG. 3-303-5561

		<p><b>QUINN</b>  <b>MACHINE &amp; FOUNDRY CORP.</b>          A MEMBER OF THE BESSER FAMILY OF COMPANIES          BOONE, IOWA U.S.A.</p>	
<p><small>THIS PRINT IS THE PROPERTY OF INTERNATIONAL PIPE MACHINERY CORP. IT IS CONFIDENTIAL AND NOT TO BE REPRODUCED WITHOUT OUR EXPRESS PERMISSION AND MUST BE RETURNED UPON REQUEST.</small></p>			
<p><b>CHARLOTTE</b></p>			
<p>48 x 5 x 34 1/2 x 8 x 36 &amp; 18          CONCENTRIC CONCRETE SECTION</p>			
<p>DRAFTER          CHECKED          SCALE: 1/16" = 1"</p>	<p>JJK          4/19/02</p>	<p><b>CONCENTRIC</b></p>	<p>REV.</p>

# Precast Manholes



**Flattop Illustration**  
for Shallow Manhole



**Section View**  
4' I.D. Manhole - Regular Base  
with Reducing Cone

## Materials & Features

HOLES AS SPECIFIED: Max diameter = 32"  
 CONCRETE: 5,000 PSI, 28 day strength.  
 REINFORCING: Meets or exceeds ASTM C478 requirements.  
 Average weight of 24" depth base w/ 8" invert = 4,500 lbs.  
 Estimated weight of riser and cone sections = 870 lbs. / vt. ft.

\* - Extended base is available to meet local requirements.

In the event a boot is loose contact your Hanson representative to resolve.

"Manufactured to your specifications."

-No Scale-  
 All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
4' I.D. Manhole Regular Base w/ Reducing Cone	All Plants	TX	5.5	08-15-06

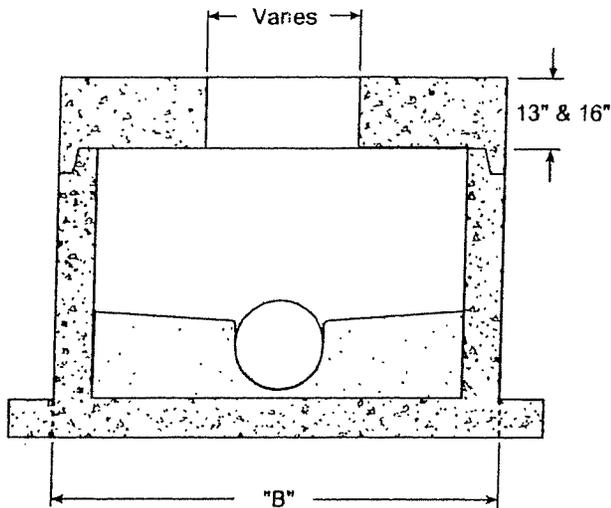


Contact Hanson

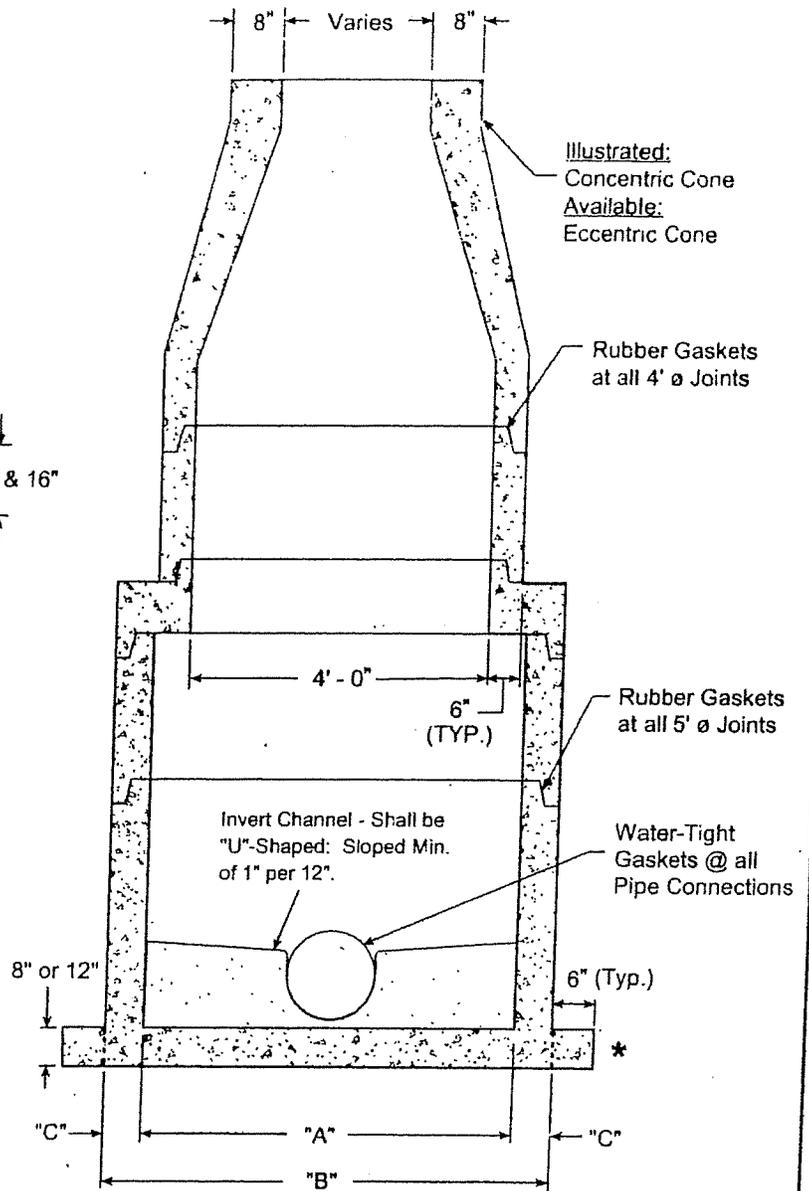
Go to Index

EXIT

# Precast Manholes



**Flattop Illustration**  
for Shallow Manhole



**Section View**  
5'4' & 6'4' I.D. Manhole  
Extended Base with Reducing Cone

## Materials & Features

HOLES AS SPECIFIED: for 5' I.D. max diameter = 40"  
for 6' I.D. max diameter = 54"

CONCRETE: 5,000 PSI, 28 day strength.

REINFORCING: Meets or exceeds ASTM C478 requirements.

Average weight of 24" depth base w/8" invert:

for 5' I.D. = 7,500 lbs.

for 6' I.D. = 10,600 lbs.

Estimated weight of riser and sections:

for 5' I.D. = 1,325 lbs. / vt. ft.

for 6' I.D. = 1,800 lbs. / vt. ft.

For pipe sizes 15" and larger, invert shall be equal to the larger pipe diameter.

\* - Extended base shown: Regular base also available."

In the event a boot is loose contact your Hanson representative to resolve.

*"Manufactured to your specifications."*

Pipe Size	I.D. "A"	O.D. "B"	Wall Thk. "C"
5'	5' - 0"	6' - 0"	6"
6'	6' - 0"	7' - 2"	7"

-No Scale-

All dimensions subject to allowable specification tolerances.

TITLE

PLANT

STATE

SECTION/PAGE

DATE

**5'4' & 6'4' I.D. Manhole**  
Extended Base w/Reducing Cone

All Plants

TX

5.6

08-15-06

**Hanson**

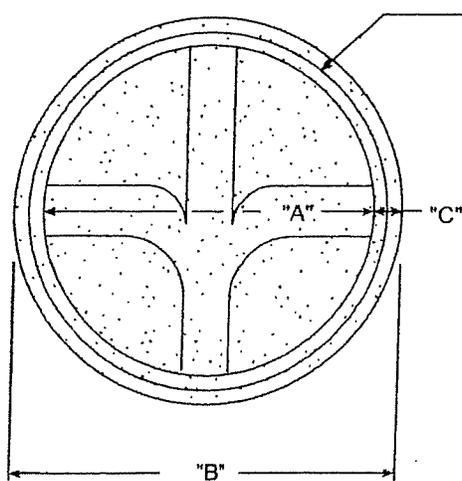
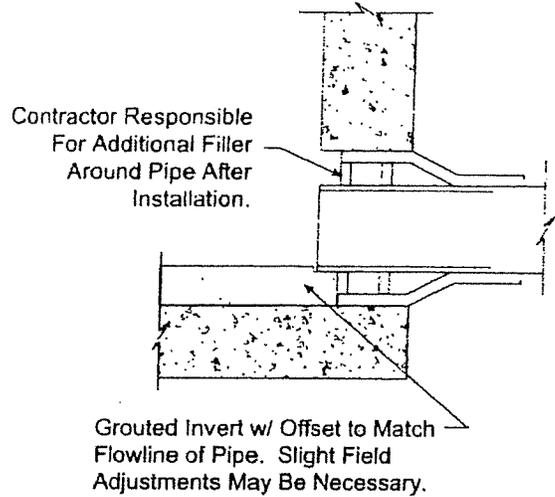
Contact Hanson

Go to Index

EXIT

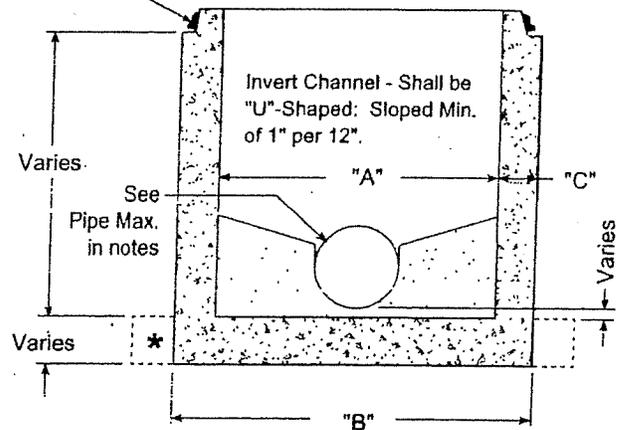
# Precast Manholes

For Pipe Entering the Manhole at Excessive Depths Above the Flow Line Out, the Contractor May be Responsible for Grout Work Necessary to Bring Channel up to Flow Line on Inlet Pipe.



**Plan View**

Rubber Gasket



**Section View**

## Materials & Features

### HOLES AS SPECIFIED:

For 4' I.D. max. diameter = 32"

For 5' I.D. max. diameter = 40"

For 6' I.D. max. diameter = 54"

CONCRETE: 5,000 PSI, 28 day strength

REINFORCING: Meets or exceeds ASTM C478 requirements.

Average weight of 24" depth base w/8" invert = 4,500 lbs

Water-tight gaskets at all pipe connections.

\* - Regular base shown: Extended base also available.

In the event a boot is loose contact your Hanson representative to resolve.

Pipe Size	I.D. "A"	O.D. "B"	Wall Thk. "C"
4'	4'-0"	4'-10"	5"
5'	5'-0"	6'-0"	6"
6'	6'-0"	7'-2"	7"

-No Scale-  
All dimensions subject to allowable specification tolerances.

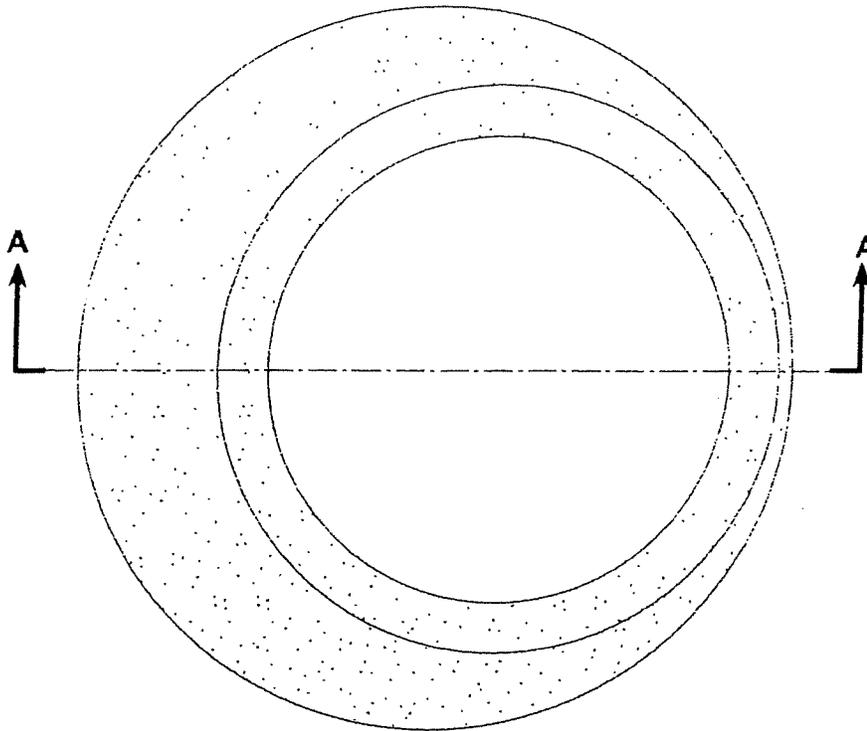
TITLE	PLANT	STATE	SECT.ON.PAGE	DATE	
Details: 4', 5' & 6' I.D. Precast Regular Manhole Base	All Plants	TX	5.7	08-15-06	

Contact Hanson

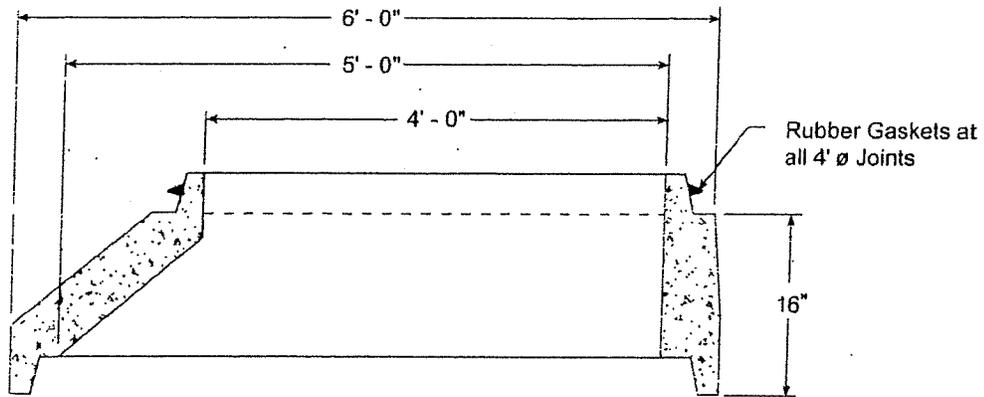
Go to Index

EXIT

**Precast Manholes**



**Plan View**



**Section View**

**Materials & Features**

CONCRETE. 5,000 PSI, 28 day strength.  
 REINFORCING: Meets or exceeds ASTM C478 requirements.  
 CONSTRUCTION OF PRECAST is in accordance with ASTM C478.  
 Concrete is poured according to ACI-500.

-No Scale-  
 All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
5' x 4' Conical Adaptor	Waco	TX	5 8	08-15-06

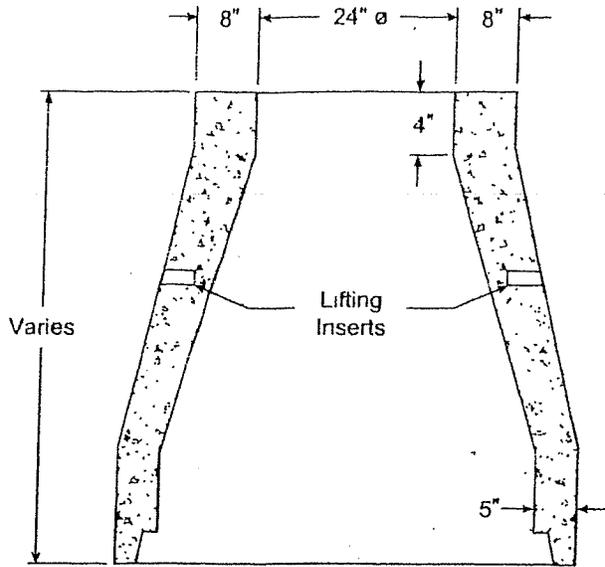


**Contact Hanson**

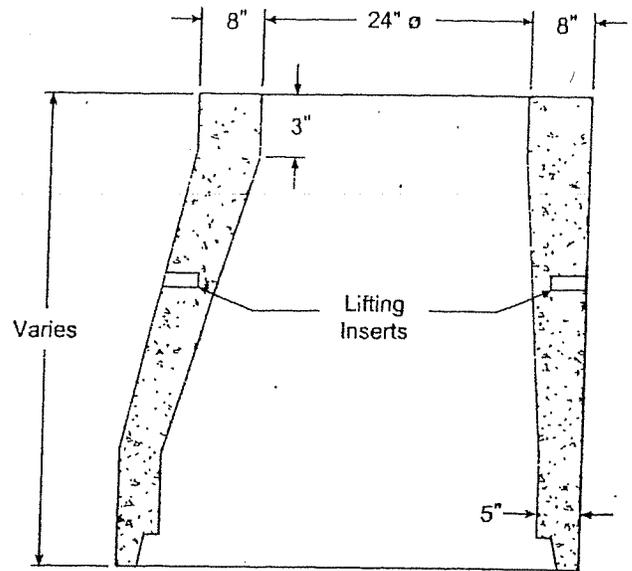
**Go to Index**

**EXIT**

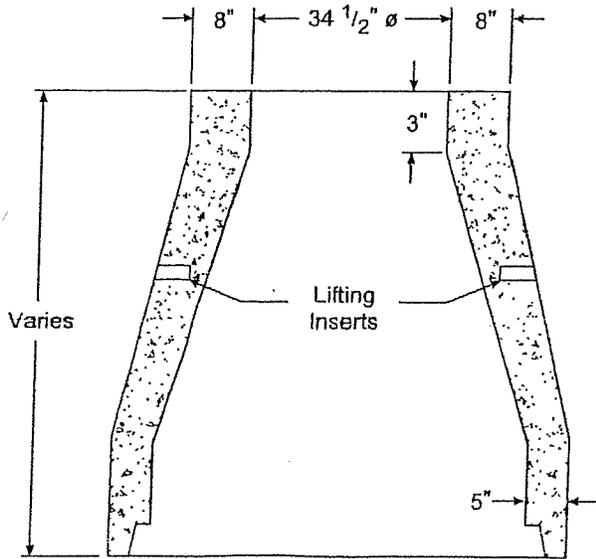
# Precast Manholes



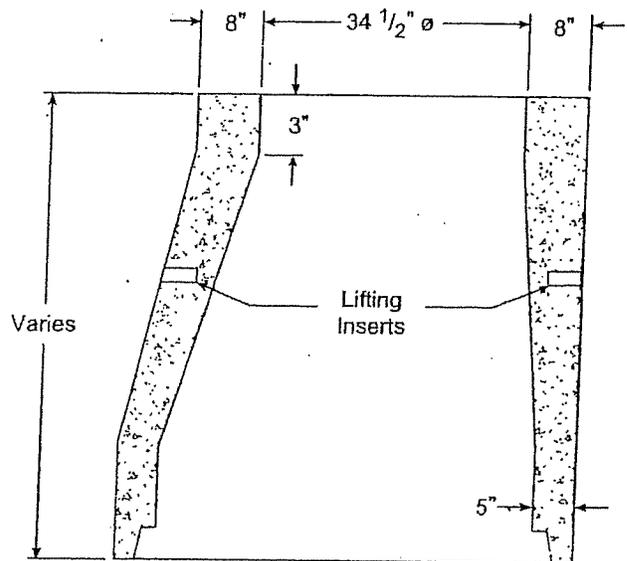
**Concentric Cone**  
24" ø Opening



**Eccentric Cone**  
24" ø Opening



**Concentric Cone**  
34 1/2" ø Opening



**Eccentric Cone**  
34 1/2" ø Opening

## Materials & Features

CONCRETE: 5,000 PSI, 28 day strength.  
 REINFORCING: Meets or exceeds ASTM C478 requirements.  
 30" ø also available in North Texas.

-No Scale-  
 All dimensions subject to allowable  
 specification tolerances.

TITLE	PLANT	STATE	SECTION, PAGE	DATE
Hanson 48" Manhole Reducing Cone Detail	Waco Houston	TX	5.9	08-15-06

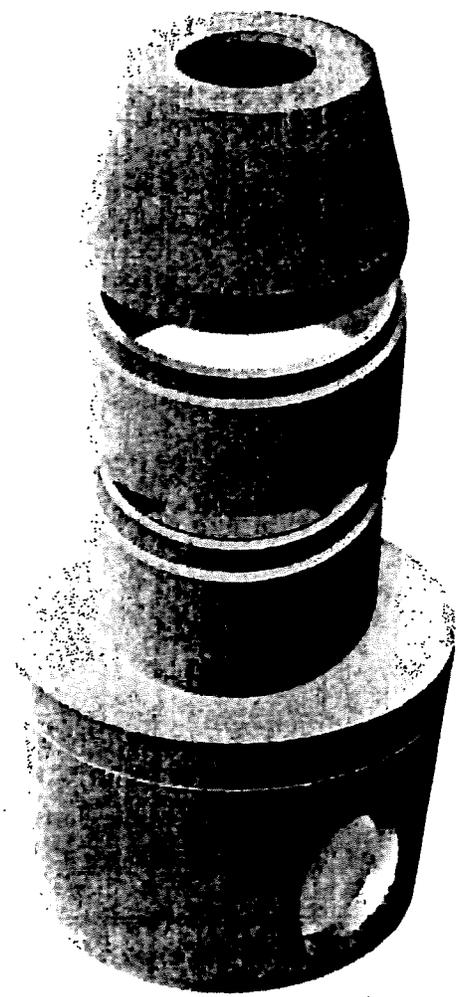
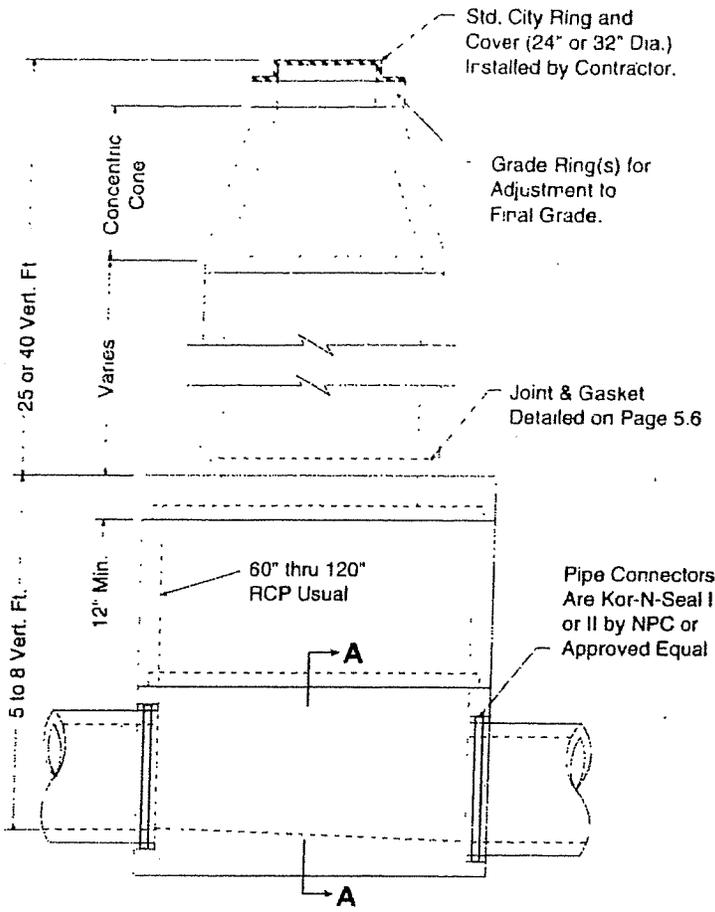


Contact Hanson

Go to Index

EXIT

# Precast Manholes



**Isometric View**

**w/ Precast Base**



**Section A-A**

- ... **Base Slab Reinforcing**
- 30' Deep Structure**  
 60"ø - 6" Thick Slab min. - #5 @ 8" ea.way  
 72"ø - 8" Thick Slab min. - #5 @ 8" ea.way  
 84"ø - 8" Thick Slab min. - #5 @ 6" ea.way  
 96"ø - 10" Thick Slab min. - #5 @ 6" ea.way
- 45' Deep Structure**  
 60"ø - 8" Thick Slab min. - #5 @ 8" ea.way  
 72"ø - 8" Thick Slab min. - #5 @ 8" ea.way  
 84"ø - 10" Thick Slab min. - #5 @ 6" ea.way  
 96"ø - 12" Thick Slab min. - #5 @ 6" ea.way
- All Reinforcing has 1 1/2" cover from top of slab.

**Materials & Features**

CONCRETE: 5,000 PSI in 28 days.  
 REINFORCING STEEL, per ASTM A-615, Grade 60.  
 REINFORCING to meet AASHTO HS 20-44 Loading.  
 DESIGN EQUAL TO OR EXCEEDS ASTM C-478  
 In the event a boot is loose contact your Hanson representative to resolve.

**Note:**

- Inverts shall be specifically sized for connecting pipes; and shall be U-Shaped with the min. depth 3/4 of the largest pipe diameter.

-No Scale-  
 All dimensions subject to allowable specification tolerances.

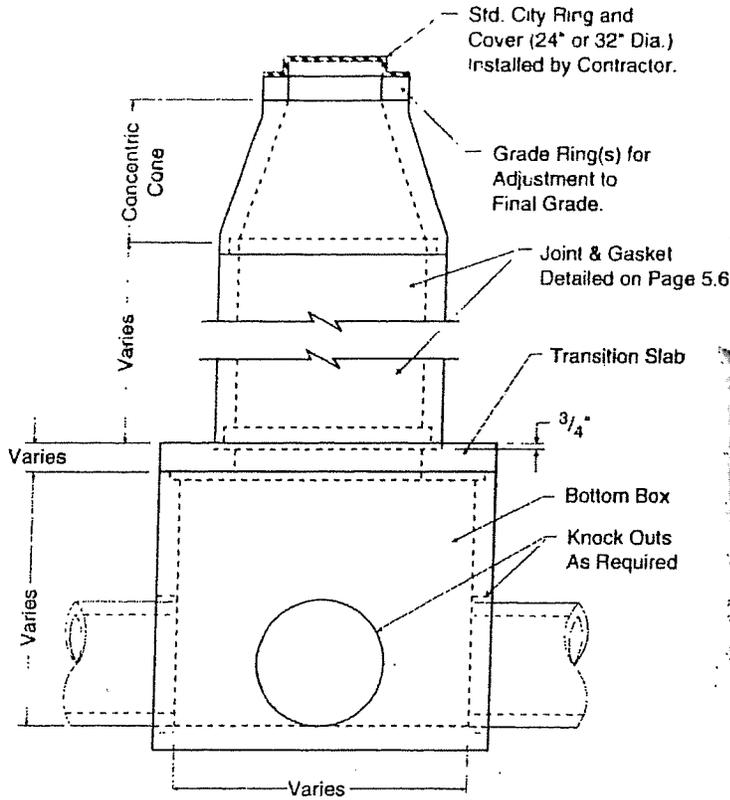
TITLE	PLANT	STATE	SECTION/PAGE	DATE	
30 & 45 Ft. Depth 60" thru 96" Large Base Manhole	Houston San Antonio	TX	5.10	08-15-06	

**Contact Hanson**

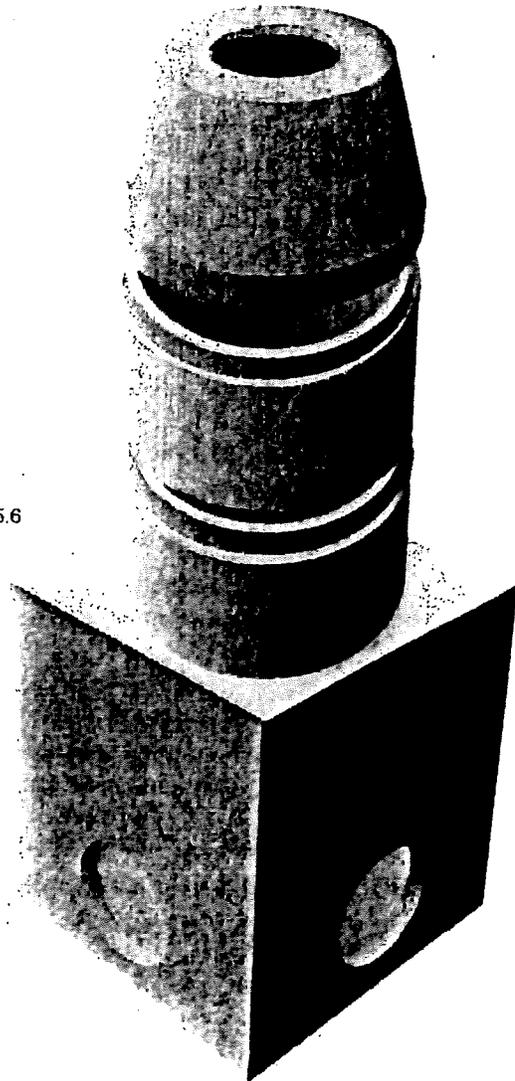
**Go to Index**

**EXIT**

# Precast Manholes



**Side View**



**Isometric View**

## Materials & Features

CONCRETE: 5,000 PSI in 28 days.

REINFORCING STEEL: per ASTM A-615 / A-185

REINFORCING to meet AASHTO HS 20-44 Loading.

BASE DESIGN EQUAL TO OR EXCEEDS ASTM C-357

RISER DESIGN EQUAL TO OR EXCEEDS ASTM C-478

In the event a boot is loose contact your Hanson representative to resolve.

-No Scale-  
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
Type "C" Manhole	Houston San Antonio	TX	5.11	08-15-06

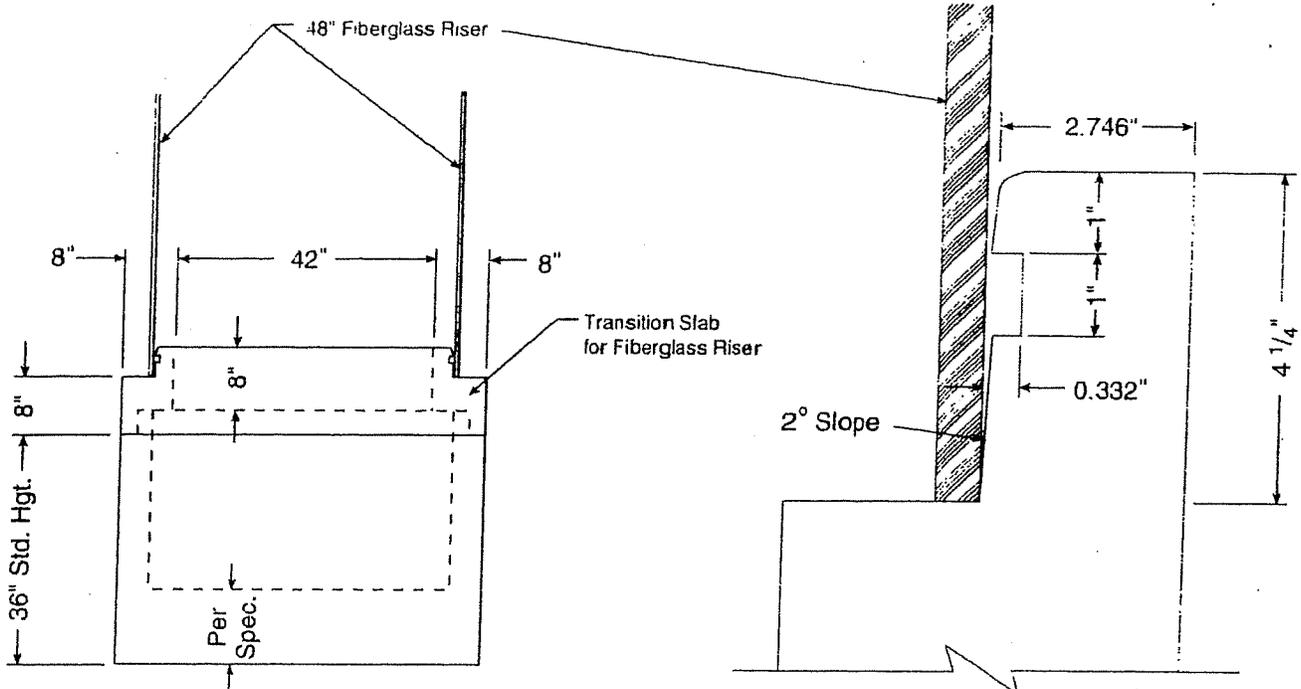


**Contact Hanson**

**Go to Index**

**EXIT**

# Precast Manholes



**Profile**

**Joint Detail**

## Materials & Features

CONCRETE: 5,000 PSI in 28 days.  
 REINFORCING STEEL: per ASTM A-615, Grade 60.  
 REINFORCING to meet AASHTO HS 20-44 Loading.  
 DESIGN EQUAL TO OR EXCEEDS ASTM C-478

-No Scale-  
 All dimensions subject to allowable specification tolerances.

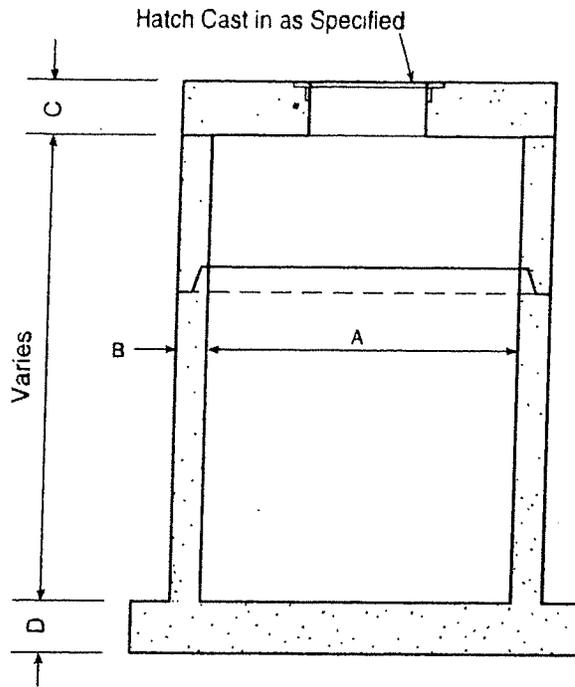
TITLE	PLANT	STATE	SECTION, PAGE	DATE	
ASTM C-478 Special Base	Houston	TX	5.12	08-15-06	

**Contact Hanson**

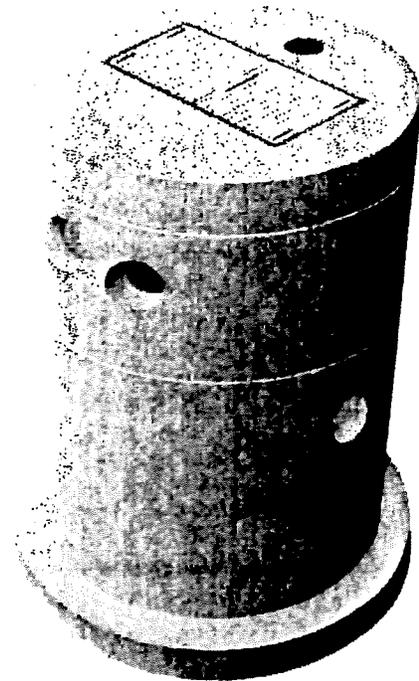
**Go to Index**

**EXIT** 

# Precast Manholes

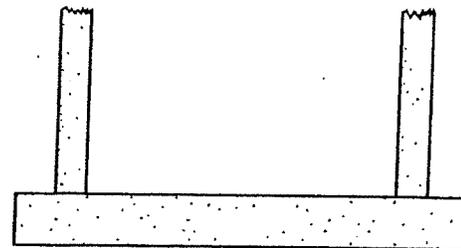


**Section View**  
(Base configuration for 60", 72" & 84")

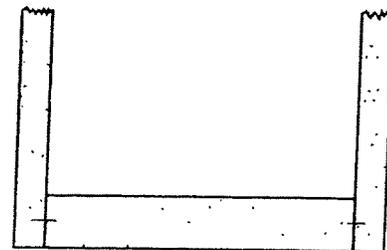


**Isometric View**

Product Dimensions				
A	B	C	D	
60"	Contact your local Hanson representative for product dimensions.			
72"				
84"				
96"				
108"				
120"				
132"				
144"				



**Section View**  
Base configuration for 96"



**Section View**  
Base configuration for 108"-144"

## Materials & Features

CONCRETE: 5,000 PSI in 28 days.

REINFORCING STEEL: per ASTM A-615 / A-185

REINFORCING to meet AASHTO HS 20-44 Loading.

BASE DESIGN EQUAL TO OR EXCEEDS ASTM C-357

RISER DESIGN EQUAL TO OR EXCEEDS ASTM C-478

(A). Hatches as specified by Engineer.

In the event a boot is loose contact your Hanson representative to resolve.

-No Scale-  
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECT ON. PAGE	DATE
Typical Wetwells - Various Diameters	All Plants	TX	5.13	08-15-06



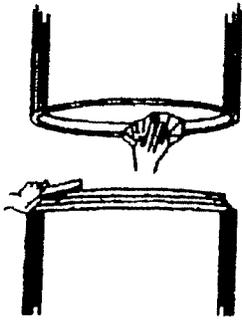
Contact Hanson

Go to Index

EXIT

①

### "O"-Ring Gasket

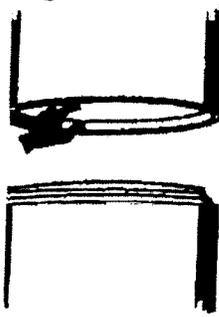


Carefully clean all dirt & foreign objects from the joining surface of the bell or groove end of pipe.

Carefully clean spigot or tongue end of pipe, including the gasket recess. Inspect the bell and spigot ends of each section to make sure they are free from cracks, chips or voids that will interfere with gasket.

Improperly prepared bell and spigot surfaces may prevent homing of the pipe or keep the gasket from sealing.

②



Lubricate bell joint surface liberally, covering entire inside surface using proper pipe gasket lubricant.

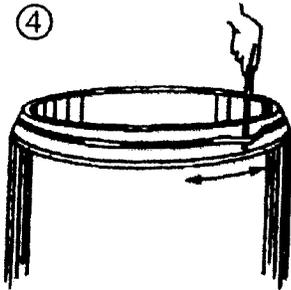
③



Lubricate the gasket thoroughly before it is placed on the spigot or tongue.

Bell and Gasket not lubricated or improperly lubricated may cause the gasket to roll and leak or possibly damage the bell.

④

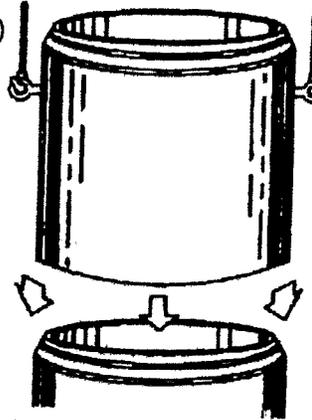


#### \*\*IMPORTANT\*\*

Fit the gasket carefully, equalizing the rubber gasket stretch by running a smooth, round object (inserted between the gasket & spigot) around the entire circumference several times.

Unequal stretch could cause bunching of the gasket and may cause leaks in the joint or crack the bell.

⑤



Align the bell & spigot to be joined. Before homing the joint, check that the gasket is in contact with the bell end entrance taper around the entire circumference.

Do not force sections together. If sections do not seat properly, unstack and contact your Hanson Sales Representative.

Improper alignment can dislodge gasket, causing leaks or possibly breaking the bell.

### Profile Gasket

1. Manhole sections should be handed with extreme caution to avoid chipping of the bell or spigot ends. Proper lifting devices must be used on all sections.
2. Inspect gasket sealing area for any voids or rough edges that may interfere with the seal.
3. Place the 4-G Gasket in the step of the spigot. (Making sure that the pointed end of the gasket is toward the end of the pipe as shown in Fig A.)
4. **\*\*IMPORTANT\*\*** Equalize the stretch on the gasket by pulling the sealing lube away from the spigot at least one inch and then releasing the gasket. Repeat this every three or four inches around the circumference of the pipe. Equalization of stretch makes sure that the gasket has the same stretched cross-section and tension throughout. **\*\*Do not lube the gasket or spigot end of the pipe.\*\***
5. Remove all dirt and other foreign matter from the inside surface of the bell. Apply lube to the inner surface of the bell including the

lead-in taper surface on the outer edge of the bell. Align spigot with the bell. Gasket should touch lead-in taper around the entire circumference before pushing the pipe home.

6. Push the manhole section carefully, until the spigot is all the way home. (Fig B) Do not force sections together. If sections do not seat properly, unstack and contact your Hanson Sales Representative.
7. Every manhole will not come home exactly the same. Differences in application, consistency of lubricants, dimensions in the spigot and groove will cause variations in installation. If joining problems arise, please contact the manhole manufacturer immediately rather than forcing manhole sections together with subsequent damage to the manhole.
8. All testing should be performed prior to backfill of the manhole. Problems can not be detected after the manhole is backfilled. **Testing the manhole after backfill voids all warranties.**

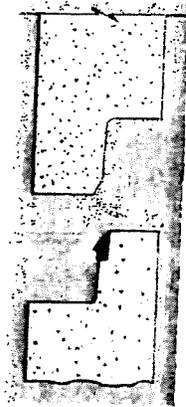


Fig. A

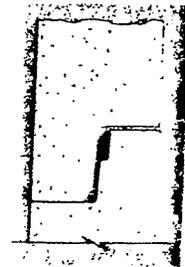


Fig. B

**Note:** Manholes in excess of 30' in depth must be vacuum tested prior to backfill. The loads presented by soils and possible groundwater at 30' in addition to the load from the vacuum may exceed the design capacity of the pipe to manhole connector.

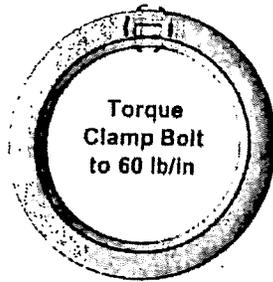
TITLE	PLANT	STATE	SECTOR/PAGE	DATE	
O-Ring & Profile Gasket Installation on Manholes	All P'lants	TX	5.14	08-15-C6	

Contact Hanson

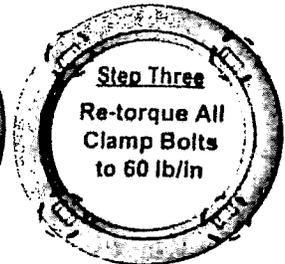
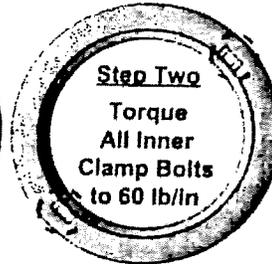
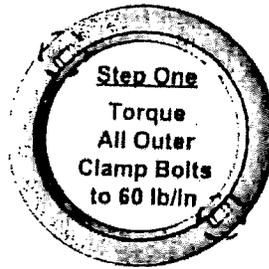
Go to Index

EXIT

## Precast Manholes

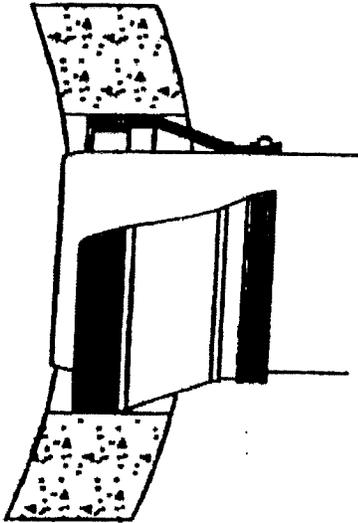


**Single Clamp**



**Multiple Clamps**

### Instructions



1. Clean pipe and boot to ensure no dirt or foreign materials are present.
2. Clamping surface on pipe must be clean and smooth.
3. Center pipe in opening and insert until pipe is at least equal to the inside plane of the manhole.
4. Attach take-up clamps(s) and stagger screw(s) of clamps(s) around the groove of the gasket so that take-up pressure will be equalized. Make sure each clamp is completely in the correct groove.
5. Using a torque ratchet or torque wrench, gradually tighten all screw(s) of clamp(s) in an alternating pattern to 60 lbs/in torque.
6. After reaching 60 lbs/in torque on final screw, check all screws again to ensure equal compression of all clamps.
7. If system is to be tested, testing shall be completed prior to backfilling, following all recommendations and requirements of the test system manufacturer. Vacuum testing shall be conducted in accordance with ASTM C-1244.
8. Adjust pipe to line and grade. Use proper bedding, backfill materials and techniques so that pipe deflection and deformation is minimized.
9. Any pipe stubs installed in the manhole must be positively restrained from movement.
10. Vacuum testing after backfill voids warranty.

*For more information contact your local Hanson Representative.*

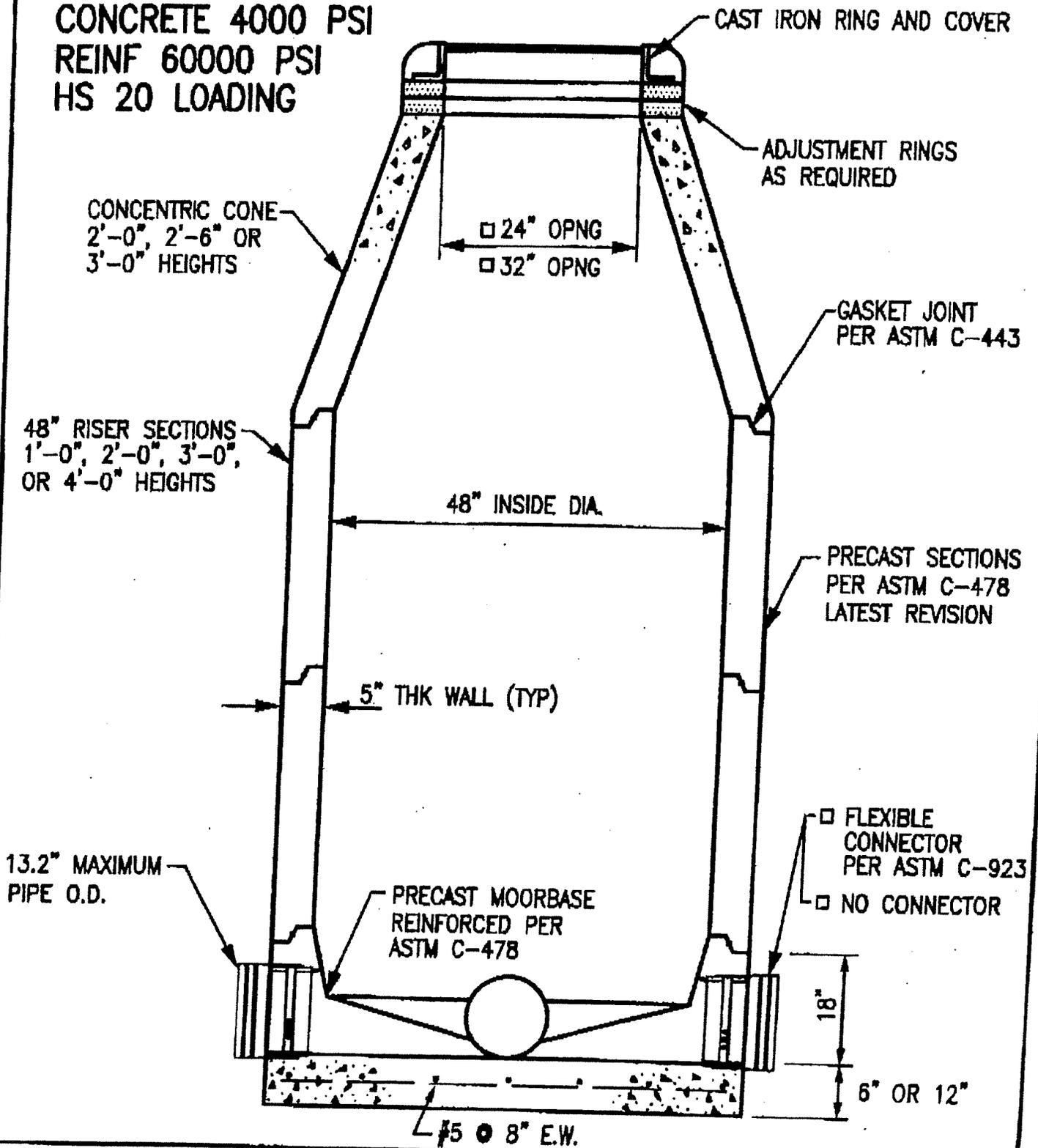
TITLE	PLANT	STATE	SECTION/PAGE	DATE	
Pipe to Manhole Connector Installation Guide	All Plants	TX	5.15	08-15-06	

**Contact Hanson**

**Go to Index**

**EXIT** 

**CONCRETE 4000 PSI  
REINF 60000 PSI  
HS 20 LOADING**



**Rinker**  
MATERIALS  
**Moor-Tex**

2735 HWY. 36 NORTH  
MAILING: P.O. BOX 1088  
SEALY, TEXAS 77474  
PH: (979) 885-7403  
(281) 375-6121  
FAX: (979) 885-7001

REV.	DESCRIPTION	DATE
DATE: 8-09-02	SCALE: 3/4"=1'-0"	BY: RB
<b>48" PRECAST CONCENTRIC MANHOLE WITH MOORBASE</b>		
JOB: 2002	FILE: 1001	DATE: 10/28/07

# 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.**

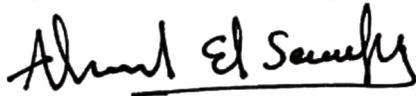
## Signature

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: Ahmed El Seweify

Date: 07/17/2024

Signature of Customer/Agent:



Regulated Entity Name: CR 305 REAL ESTATE LLC.

## 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: SALADO Creek

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

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

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

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

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

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

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

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

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

### ***Administrative Information***

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

**Snack Time #4**  
**Spill Response Action Attachment A**

---

**Major Spills:**

Only trained personnel should ever approach a spill. Containment, clean up, or neutralization of the hazardous material be accomplished by individuals or organizations familiar with or trained in such activities. The following steps should be considered general guidelines and may not apply to all circumstances.

1. Notify responsible site contact for spill management and control.
2. Survey the scene and assess extent of spill, determine the existence or possibility of runoff, determine if any dead animals are near, and evaluate the distressed nature of surrounding vegetation. Evaluate any markings on containers. Assess the physical characteristics of the material (color, solid, liquid, powder, or granules).
3. Restrict access to the spill site. Keep the public away from the hazard. Provide traffic control, as needed.
4. Notify supervisor by radio or telephone.
5. Supervisor should notify local fire department, Department of Public Safety, and district hazardous materials coordinator. Supervisors should ensure that field personnel only conduct traffic control from a safe distance from the spill.
6. Determine if a reportable discharge or spill has occurred and if so, the district hazardous materials coordinator should ensure TCEQ has been notified of the spill or release as soon as possible but not later than 24 hours after the discovery of the spill or discharge. Provide the following information, if possible:
  - the name, address, and phone number of the person making the report.
  - the date, time, and location of the spill or discharge.
  - a specific description of the hazardous substance discharged or spilled, or an estimate of the quantity discharged or spilled.
  - the duration of the incident.
  - the name of the surface water affected or threatened by the discharge or spill.
  - the source of the discharge or spill.
  - a description of the extent of actual or potential harmful impact on the environment and an identification of any environmentally sensitive areas or natural resources at risk.
  - the names, addresses, and telephone numbers of the responsible person and the contact person at the location of the discharge or spill.
  - a description of any actions that have been taken, are being taken and will be taken to contain and respond to the discharge or spill any known or anticipated health risks.
  - the identity of any governmental representatives, including local authorities or third parties, responding to the discharge or spill
  - any other information that may be significant to the response action.



**AES ENGINEERING CONSULTANT**  
**2514 Preserve Trail, Cedar Park, TX**  
**Firm Reg. F-22721**

In addition to the good housekeeping and material management practices discussed above, the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly
- posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and material will include, but not be limited to, brooms, dustpans, mops, rags, gloves, goggles, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

**Minor Spills:**

The responsible site contact person shall designate an area as spill storage location prepared with sand and containment device such as silt fence to store spilled material and removal to a facility for further handling. Minor spills are defined as minor equipment leakage of oil and gasoline.

Spill response Link: "<https://www.tceq.texas.gov/response/spills>"  
Texas Spill Reporting Hotline (1-800-832-8224)

**Snack Time #4****Potential Source of Contamination-Attachment B**

---

<b>Pollutant-Generating Activity</b>	<b>Pollutants or Pollutant Constituents</b> (that could be discharged if exposed to stormwater)	<b>Location on Site</b>
Grading, Excavation	Oil, Gasoline, grease, hydraulic fluid, rock, gravel, sand, and soil	Entire site
Pavement	Concrete & Conc. Product, reinforcement bars	Entire site
Building	Stucco, paint	At Building
Landscaping	Fertilizer, pesticide	All landscape areas
Utility Work	PVC pipe	Site, Front building
Temporary portable restroom	Wastewater	On CR 305

---

**Snack Time #4****Sequence of Major Activities- Attachment C**

---

Order of work shall be as follows:

- 1- Installation of the exterior silt fence along property line downstream of site.  
Area of disturbance 0.1 acre
- 2- Installation of interior erosion control measures such as sediment trap, concrete wash-out area, storage, and staging areas as shown on plan (Erosion Control Sheet).  
Area of disturbance 0.08 acres
- 3- Construct underground utilities. Area of Disturbance 0.8 acres
- 4- Construct foundations and buildings. Area of Disturbance 0.9 acres
- 5- Construct concrete pavement and striping. area of disturbance 2 acres
- 6- Install landscaping. area of disturbance 1 acres
- 7- Construct permanent water-quality pond. area of disturbance 0.1 acres

---

**Snack Time #4****Temporary BMP and Measures-Attachment D**

---

**These TBMP's shall be considered and followed:**

Temporary silt fence, spoils area, and construction entrance are installed and designated to protect natural streams, sensitive features, and surface and groundwater. These protection measures will be installed prior to the start of any construction and shall be inspected after each rain and every week, any damaged areas shall be repaired or replaced if necessary. Remove siltation as required when siltation reaches ½ of its design depth or one foot. Inspect after each rain or every week.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment basin/trap. All sediment shall be prevented from entering any storm drain, ditch, or watercourse using approved method.

A sediment trap will be constructed and inspected after each rainfall or every six (6) months. Designate a spoil area (shown on plan) for handling waste, and inspect and secure the silt fence to prevent pollution spills. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Contractor's staging area and construction material are designated on the plans. This area is enclosed with silt fence and inspected regularly. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Designated washout area will also be enclosed with silt fence. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Important factor in this area is to transport contaminated soil due to fuel and oil to spoil areas frequently and as required by the city/TCEQ. This area is designated on the plan and enclosed with a silt fence.

All equipment will be washed in the designated area as shown on the plan.

Silt fences will be inspected and properly maintained as required.

Gravel, stone, reinforcement bars for concrete foundation and retaining wall, sand, rock, construction equipment and/or any mechanical equipment will be stored on site.

A silt fence area adjacent to material storage area is set up for washout area where concrete mix trucks, will be washed and handled.

All equipment/vehicle fueling, and discharge are handled within this area. In event of spills, contractor shall have sand and/or hay available on-site to apply to the contaminated areas in order to contain and clean up possible spills. Contaminated sand shall be transported to the spoil area and disposed of off-site at a disposal site by the contractor.

Measures taken to prevent pollution: A construction exit/entrance will be installed to reduce tracking dirt on the pavement after exiting the construction area. Silt fences at critical locations are installed to reduce run-off velocity and retain sediments. All drainage inlets or culverts affected by this project's site activities shall be covered with silt fence, hay bale or rock berm.

a. Sensitive feature(s):

If any sensitive feature is discovered during construction, replacement, or rehabilitation, all regulated activities near the sensitive feature must be suspended immediately.

(A) The holder of an approved Edwards Aquifer protection plan must immediately notify the appropriate regional office of any sensitive features encountered during construction. This notice must be given before continuing construction.

(B) Regulated activities near the sensitive feature may not proceed until the executive director has reviewed a geologic assessment report prepared by a geologist that consists of information required under subsection (b)(3)(C) and (D) of this section for the sensitive feature and has reviewed and approved the methods proposed to protect the sensitive

feature and the Edwards Aquifer from potentially adverse impacts to water quality. The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(C) The holder of an approved sewage collection system plan, must meet the following.

(i) Upon completion of any lift station excavation, a geologist must certify that the excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the geologist preparing the certification.

Certification that the excavation has been inspected must be submitted to the appropriate regional office.

(i) Further activities may not proceed until the executive director has reviewed and approved the methods proposed to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality from the lift station.

(ii) Construction may continue if the geologist certifies that no sensitive feature or features were present.

(iii) The applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The plan must be certified by a Texas licensed professional engineer. These plans must be submitted to the appropriate regional office for review and approval.

(D) For an approved underground storage tank facility plan, a geologist must certify that a completed tankhold excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the geologist preparing the certification.

(i) Certification that the tankhold excavation has been inspected must be submitted to the appropriate regional office.

(ii) If a sensitive feature is discovered, the applicant must propose methods to protect the feature and the Edwards Aquifer from potentially adverse impacts to water quality from the underground storage tank system. Installation activities may not proceed until the executive director has reviewed and approved the proposed methods. The protection methods must be consistent with subsection (d)(1)(B) of this section.

(iii) Construction may continue if the geologist certifies that no sensitive feature or features were present.

---

**Snack Time #4**  
**Request to Seal a Feature-Attachment E**

---

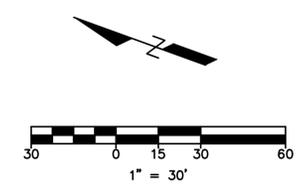
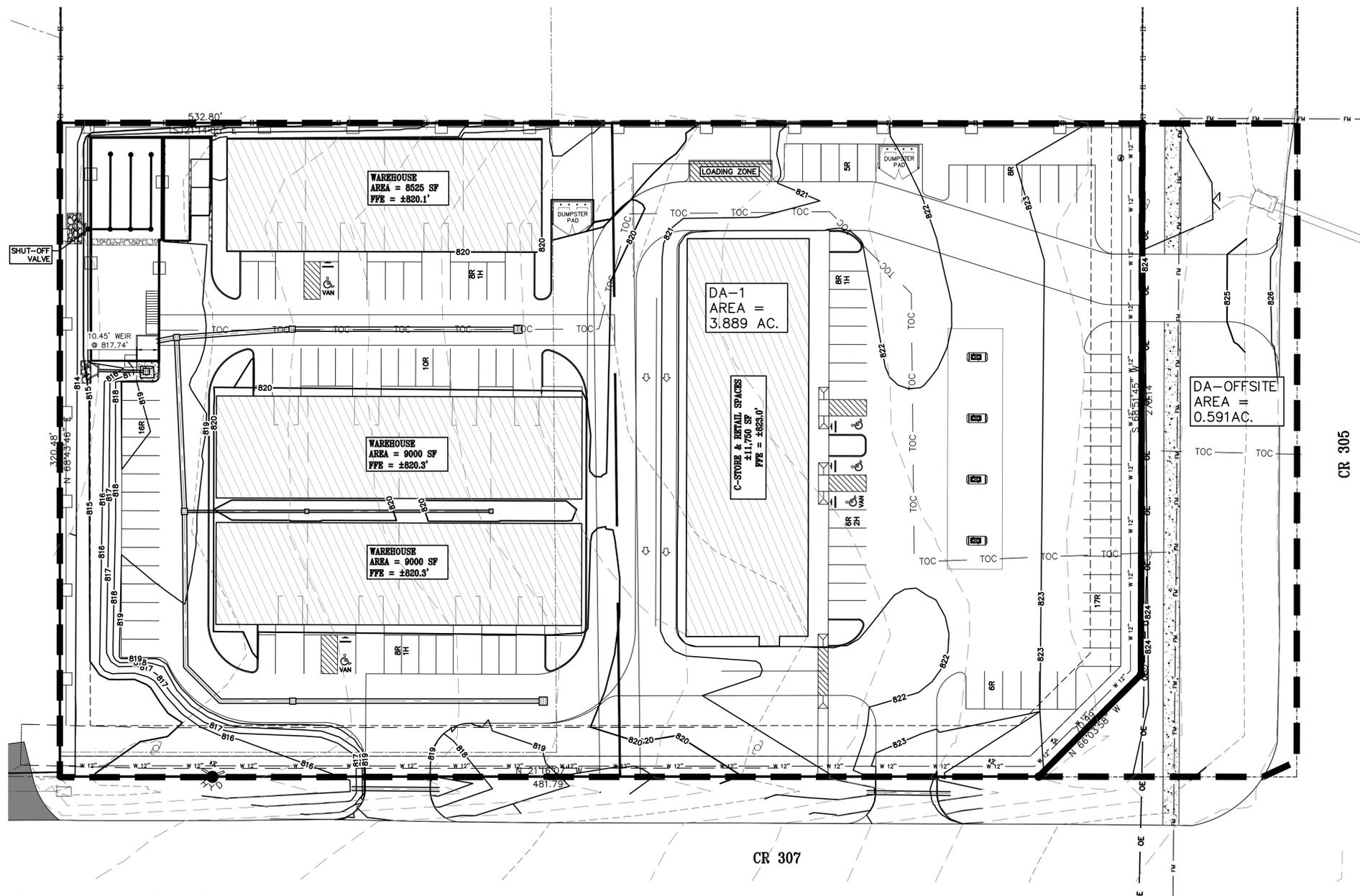
If required per Attachment D, a Request will be filed.

---

**Snack Time #4****Structural Practices- Attachment F**

---

1. Silt Fence will be installed as shown on the plan, silt fence will be regularly checked and maintained per attachment D.
  2. Stabilized construction entrance: The exit will be inspected weekly and after storm events or heavy use. The exit will be maintained in a condition that will prevent tracking or flowing of sediment onto Bell Blvd. This could require adding additional crushed stone to the exit. All sediment tracked, spilled dropped, or washed onto Bell Blvd. will be swept up immediately and hauled off-site for disposal at landfill determined by "Site Contractor". Sediment will be swept from the anti-tracking pad at least weekly, or more often if necessary.
  3. Concrete and Washing Applicator Washout area: A concrete and washing applicator washout pit will be placed on site A natural ground berm or straw bale maybe used to construct the pit. The lining of the pit will be at least a 4 mil. plastic. A sign will be posted near the washout and the concrete delivery company will be informed of the washout location. The concrete and washing applicator washout will be installed before any concrete poured.
-



**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(---)	(---)	PROPERTY (R.O.W.) LINE
(---)	(---)	RECORD INFORMATION
(---)	(---)	LIGHT POLE
(---)	(---)	UTILITY POLE
(---)	(---)	DOWN GUY
(---)	(---)	GROUND LIGHT
(---)	(---)	TRANSFORMER (SIZE VARIES)
(---)	(---)	CABLE TV RISER
(---)	(---)	FIRE HYDRANT
(---)	(---)	WATER VALVE
(---)	(---)	WATER METER
(---)	(---)	WATER METER VAULT
(---)	(---)	WATER MANHOLE
(---)	(---)	SPRINKLER CONTROL BOX
(---)	(---)	TELEPHONE RISER
(---)	(---)	ELECTRIC RISER
(---)	(---)	ELECTRIC METER
(---)	(---)	GAS METER
(---)	(---)	GAS VALVE
(---)	(---)	TRAFFIC CONTROL BOX
(---)	(---)	TRAFFIC SIGNAL POST
(---)	(---)	UNDERGROUND CABLE MARKER
(---)	(---)	UNDERGROUND FIBER OPTIC MARKER
(---)	(---)	UNDERGROUND GAS LINE MARKER
(---)	(---)	UNDERGROUND TELEPHONE MARKER
(---)	(---)	GAS RISER
(---)	(---)	GRATE INLET
(---)	(---)	CURB INLET (SIZE VARIES)
(---)	(---)	CHAIN LINK FENCE
(---)	(---)	WATER LINE
(---)	(---)	FIRE LINE
(---)	(---)	CHILLED WATER
(---)	(---)	WASTEWATER LINE
(---)	(---)	ELECTRIC LINE
(---)	(---)	OVERHEAD ELECTRIC
(---)	(---)	UNDERGROUND TELEPHONE
(---)	(---)	UNDERGROUND CABLE AND INTERNET
(---)	(---)	UNDERGROUND CABLE AND INTERNET
(---)	(---)	TELECOMMUNICATIONS LINE
(---)	(---)	ELECTRIC MANHOLE (SIZE VARIES)
(---)	(---)	WASTEWATER MANHOLE (SIZE VARIES)
(---)	(---)	STORMSEWER MANHOLE (SIZE VARIES)
(---)	(---)	TELEPHONE MANHOLE (SIZE VARIES)
(---)	(---)	WASTEWATER CLEANOUT
(---)	(---)	LIMITS OF CONSTRUCTION
(---)	(---)	LIMITS OF CONSTRUCTION
(---)	(---)	TRASH COMPACTOR
(---)	(---)	CURB & GUTTER
(---)	(---)	VERTICAL CURB
(---)	(---)	EDGE OF PAVEMENT
(---)	(---)	IMPERVIOUS WALKWAYS
(---)	(---)	CRUSHED GRANITE WALKWAYS
(---)	(---)	HANDICAP ACCESS ROUTE
(---)	(---)	WALL
(---)	(---)	INFLECTOR
(---)	(---)	BOLLARD
(---)	(---)	DIRECTION OF FLOW
(---)	(---)	CONTOUR
(---)	(---)	HIGH POINT
(---)	(---)	LOW POINT
(---)	(---)	SPOT ELEVATION
(---)	(---)	TOP OF WALK ELEVATION
(---)	(---)	FINISH FLOOR ELEVATION
(---)	(---)	ROCK BERM
(---)	(---)	ROCK RIPRAP
(---)	(---)	BOTTOM OF CURB
(---)	(---)	TOP OF CURB
(---)	(---)	FINISHED GRADE

PROJECT:  
**SNACK TIME #4**

LOCATION:  
**1412 CR 305  
JARRELL TEXAS 76537**



**project team**

**OWNER:**  
SAMEER UMATIYA  
CR 305 REAL ESTATE LLC  
512-563-8790  
SAMEERUMATIYA@YAHOO.COM

**CIVIL/STRUCTURAL ENGINEER:**  
AES Engineering Consultant  
Ahmed El Seweify P.E.  
2514 PRESERVE TRAIL,  
CEDAR PARK, TX 78613  
Ph. (512) 785-9034  
email: contact@aes-engs.com  
Texas Firm F-22721

**SURVEY**  
FOREST SURVEYING AND MAPPING  
1002 ASH STREET  
GEORGETOWN, TX 78626  
512.930.5927  
CASEY.BUTLER@FORESTSURVEYING.COM

**GEOTECHNICAL ENGINEER**  
CAPITAL GEOTECHNICAL SERVICES PLLC  
AUSTIN, TX  
512.271.9749  
NICKK@CAPITALGEOTECHNICAL.COM



*Ahmed El Seweify*

REVISION	DATE	ISSUE TITLE

DRAWING TITLE:

**PROPOSED DRAINAGE PLAN**

PROJECT NO: **10-1082** DRAWN BY: / CHECKED BY: **AES**

DATE: **2024-07-19** SCALE: **1"=30'**

SHEET NUMBER:

**Tc Calculations (SCS Unit Hydrograph Model)**

AREA No.	Sheet Flow					Shallow Concentrated Flow					Total Tc (minimum 5 min)		T lag
	L (ft)	n	s (ft/ft)	Pz (in)	t <sub>sheet</sub> min	L (ft)	Surface	s (ft/ft)	V (fps)	t <sub>shallow</sub> min	min	hrs	
OFFSITE	69	0.30	0.0300	4.08	9.55	0	Unpaved	0.0100	1.61	0.00	9.55	0.16	5.7
PRE DA-1	100	0.30	0.0250	4.08	13.82	433	Unpaved	0.0260	2.60	2.77	16.59	0.28	10.0
POST-DA1	100	0.02	0.0400	3.96	1.33	586	Paved	0.0060	1.57	6.20	17.03	0.28	10.2

**PROPOSED CONDITIONS**

BASIN	AREA ACRE	AREA SQ.MILE	TC MIN	LAG	CN	2-YRS CFS	10-YRS CFS	25-YRS CFS	100-YRS CFS
OFFSITE	0.492	0.000769	9.55	5.73	84	1.65	2.91	3.75	5.1
DA-1	3.886	0.006072	17.03	10.22	94.37	14.05	21.6	26.6	34.61
<b>TOTAL</b>						<b>15.7</b>	<b>24.51</b>	<b>30.35</b>	<b>39.71</b>

**CN CALCULATION**

DESC	AREA	CN	A*CN
PERVIOUS	1,008	84	84,672
IMPERVIOUS	2,878	98	282,044
<b>TOTAL</b>	<b>3,886</b>		<b>94,368</b>

**EXISTING CONDITIONS**

BASIN	AREA ACRE	AREA SQ.MILE	TC MIN	LAG	CN	2-YRS CFS	10-YRS CFS	25-YRS CFS	100-YRS CFS
OFFSITE	0.492	0.000769	9.55	5.73	84	1.65	2.91	3.75	5.1
DA-1	3.886	0.006072	16.59	9.954	84	10.5	18.59	24.02	32.71
<b>TOTAL</b>						<b>12.15</b>	<b>21.5</b>	<b>27.77</b>	<b>37.81</b>

**DEPTH-DURATION VALUES**

STORM EVENT	DCM DEPTH
2-YEAR SCS TYPE III, 24-HOUR	4.08
10-YEAR SCS TYPE III, 24-HOUR	6.72
25-YEAR SCS TYPE III, 24-HOUR	7.92
100-YEAR SCS TYPE III, 24-HOUR	10.08

**IMPERVIOUS COVER CALCULATION**

DESCRIPTION	AREA SQUARE FOOT	AREA ACRE	PERCENTAGE %
GRASS	43,560 S.F.	1.008 ACRE	
PAVEMENT	87,105 S.F.	2.000 ACRE	
BUILDING	38,275 S.F.	0.878 ACRE	
<b>TOTAL</b>	<b>169,274 S.F.</b>	<b>3.886 ACRE</b>	<b>74.06%</b>

**SPECIAL EASEMENT NOTE:**  
\*\*\* INDICATES A UTILITY OR PASSAGE EASEMENT PER PLAT AMENDMENT.

**SPECIAL NOTE:**  
1. ANY WORK COMMENCED PRIOR TO THE ISSUANCE OF CITY BUILDING PERMIT WITH PUBLIC WORKS APPROVALS WILL BE AT THE SOLE RISK OF THE CONTRACTOR.  
2. THIS SHEET HAS BEEN REVISED. PREVIOUSLY ISSUED SHEETS IS NO LONGER VALID AND MUST BE DESTROYED OR RETURNED TO THE ENGINEER.

DRAWING PATH - PROPOSED DRAINAGE PLAN.DWG

**Snack Time #4**

**Temporary Sediment Pond Plans and Calculation- Attachment H**

---

Sediment Pond has been proposed.

## **Snack Time #4**

### **Inspection and maintenance for BMPs- Attachment I**

---

#### I) Maintenance Procedures

The Contractor will be responsible for ensuring the maintenance of the erosion and sedimentation controls. Repairs will be made to damaged areas as soon as practicable after damage is discovered, but no later than seven (7) days after the inspection. Built-up sediment will be removed when the depth reaches six inches.

Temporary and permanent seeding shall be irrigated or sprinkled in a manner that will not erode the topsoil but will sufficiently soak the soil to a depth of six inches. Irrigation shall occur at 10-day intervals during the first two months.

Rainfall of 1/2 inch or more shall postpone the watering schedule by one week.

#### II) Inspection Procedures

The Contractor will inspect the control measures weekly and within 24 hours after rainfall events on 1/2 inch or more.

The Contractor will also be responsible for inspections, maintenance, and repair activities as well as preparing the inspection and maintenance forms. Major observations to be made during inspections include:

- Locations of discharges of sediment or other pollutants from the site.
- Locations of BMPs that need maintenance.
- Locations of BMPs that are not performing, failing to operate, or were inadequate.
- Locations where additional BMPs are needed.

#### III) Additional Maintenance Procedure

Keep necessary equipment in working order ready for sediment/pollutant cleanup which may possibly escape the construction site and onto streets, drainage inlets, or streams.

All construction debris and litter shall be picked up and area cleaned on a daily basis. All construction materials and/or chemicals shall be stored in designated areas as shown on the plan. Inspect all equipment on a daily basis for potential leaks and repair as required.

---

#### **Snack Time #4**

#### **Inspection and maintenance for BMP's- Attachment I**

---

Inspect all seeded areas for failures and reseed within planting season if necessary. (See below for more information).

Inspect on monthly basis. Maintain width and length and if required add rock to keep required thickness.

In event of spills, contractor shall have sand and/or hay available on site to apply to the contaminated areas in order to contain and clean up possible spills. Contaminated sand shall be transported to the spoil area and disposed of offsite to a disposal site by the contractor.

#### **Inspection and Maintenance Guidelines:**

##### **Outlet Stabilization:**

Inspect riprap outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage.

##### **Level Spreaders:**

- (1) The measure should be inspected after every rainfall and repairs made, if required.
- (2) Level spreader lip should remain at 0% slope to allow proper function of measure.
- (3) The contractor should avoid the placement of any material on and prevent construction traffic across the structure. If the measure is damaged by construction traffic, it should be repaired immediately.

##### **Sod:**

Sod should be inspected weekly and after each rain event to locate and repair any damage. Damage from storms or normal construction activities such as tire ruts or disturbance of swale stabilization should be repaired as soon as practical.

##### **Temporary Construction Entrance:**

- (1) 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.
- (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.

##### **Silt Fence:**

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

##### **Inlet Protection:**

- (1) Inspection should be made weekly and after each rainfall. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement. Repair should be made promptly as needed by the contractor.
- (2) Trash and other debris should be removed after each rainfall to prevent clogging of the outlet structure.
- (3) Sediment should be removed and the trap restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- (4) Sediment removed from the trap should be deposited in an approved spoils area and in such a manner that it will not cause additional siltation.



---

**Snack Time #4****Schedule of Interim and Permanent Soil Stabilization Practices- Attachment J**

---

Disturbed areas including spoils disposal sites where construction activity temporarily ceases for at least 21 days will be stabilized with seeding and mulching by the 14th day after the last disturbance. Seeding shall be as follows:

**1.** Grasses:

Un-hulled Bermuda and Winter Rye from September 15 to March Hulled Bermuda from March 2 to September 14.

**4.** Application:

Broadcast seeding or hydro-mulch

**5.** Fertilization:

Fertilization shall have an analysis of 15-15-15 and shall be applied at the rate of 1.5 pounds per 1,000 square feet.

**6. Mulch:** Mulch type used shall be hay, straw, or mulch applied at a rate of 45 pounds per 1,000 square feet.

**7. Sprinkling:** The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at 10-day intervals during the first two months.

**8.** Rainfall occurrences of  $\frac{1}{2}$  inch or more shall postpone the watering schedule for one week.

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

I ABID UMATIYA,  
Print Name

OWNER  
Title - Owner/President/Other

of CR305 Real Estate LLC,  
Corporation/Partnership/Entity Name

have authorized Ahmed El Seweify  
Print Name of Agent/Engineer

of AES Engineering Consultant  
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:

[Signature]  
Applicant's Signature

07/05/24  
Date

THE STATE OF TEXAS §

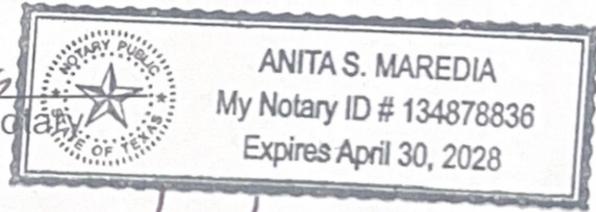
County of TRAVIS §

BEFORE ME, the undersigned authority, on this day personally appeared Abid Janatiya 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 5<sup>th</sup> day of July, 2024.

[Signature]  
NOTARY PUBLIC

Anita S. Maredia  
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 04/30/2028

# Application Fee Form

## Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: CR 305 Real Estate LLC.

Regulated Entity Location: 1412 CR 305 Jarrell Tx

Name of Customer: Ahmed El Seweify

Contact Person: Ahmed El Seweify

Phone: 512-785-9034

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

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

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
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	Acres	\$
Sewage Collection System	2349 L.F.	\$ 1,174.50
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: Ahmed El Seweify

Date: 11/07/2024

## 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**

<i>Project</i>	<i>Project Area in Acres</i>	<i>Fee</i>
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**

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

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

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

#### **Exception Requests**

<i>Project</i>	<i>Fee</i>
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)		7/17/2024	
<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>	
CR 305 Real Estate LLC.					
<b>7. TX SOS/CPA Filing Number</b>		<b>8. TX State Tax ID</b> (11 digits)		<b>9. Federal Tax ID</b>	<b>10. DUNS Number</b> (if applicable)
0805462102		32094192310		(9 digits) 991918726	
<b>11. Type of Customer:</b>		<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input checked="" 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 checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input 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>		4313 Mezzaluna Pass			
City		Leander	State	TX	ZIP
				78641	ZIP + 4
<b>16. Country Mailing Information</b> (if outside USA)			<b>17. E-Mail Address</b> (if applicable)		
			Uaa1977@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> <i>(If 'New Regulated Entity' is selected, a new permit application is also required.)</i>							
<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> <i>(Enter name of the site where the regulated action is taking place.)</i>							
CR 305 Real Estate LLC							
<b>23. Street Address of the Regulated Entity:</b> <i>(No PO Boxes)</i>		4313 Mezzaluna Pass					
<b>City</b>	Leander	<b>State</b>	TX	<b>ZIP</b>	78641	<b>ZIP + 4</b>	
<b>24. County</b>	USA						

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

<b>25. Description to Physical Location:</b>		1412 CR 305 Jarrell Texas					
<b>26. Nearest City</b>				<b>State</b>		<b>Nearest ZIP Code</b>	
Jarrell				Tx		76537	
<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>		30.839523		<b>28. Longitude (W) In Decimal:</b>		-97.617342	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	83	95	97	61	73		
<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)	
4932				475110		493110	
<b>33. What is the Primary Business of this entity?</b> <i>(Do not repeat the SIC or NAICS description.)</i>							
<b>34. Mailing Address:</b>		4313 Mezzaluna Pass					
<b>City</b>	Leander	<b>State</b>	TX	<b>ZIP</b>	78641	<b>ZIP + 4</b>	
<b>35. E-Mail Address:</b>		Uaa1977@yahoo.com					
<b>36. Telephone Number</b>			<b>37. Extension or Code</b>			<b>38. Fax Number</b> <i>(if applicable)</i>	
( 512 ) 563-8790						( ) -	

**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.

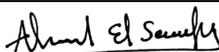
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input checked="" 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>	Ahmed El Seweify			<b>41. Title:</b>	Professional Engineer
<b>42. Telephone Number</b>	<b>43. Ext./Code</b>	<b>44. Fax Number</b>	<b>45. E-Mail Address</b>		
( 512 ) 785-9034		( ) -	contact@aes-engs.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>	AES Engineering Consultant		<b>Job Title:</b>	Professional Engineer	
<b>Name (In Print):</b>	Ahmed El Seweify			<b>Phone:</b>	( 512 ) 785- 9034
<b>Signature:</b>				<b>Date:</b>	7/17/2024