### **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**

- 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: <a href="http://www.tceq.texas.gov/field/eapp">http://www.tceq.texas.gov/field/eapp</a>.
- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
  - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

#### **Technical Review**

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

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

#### **Mid-Review Modifications**

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

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

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

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

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

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

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

1. Regulated Entity Name: Vista Oaks MUD				2. Regulated Entity No.: 101423564					
3. Customer Name: Heath Green				4. Cı	<b>4. Customer No.:</b> 603939893				
5. Project Type: (Please circle/check one)			Extension		Exception				
6. Plan Type: (Please circle/check one)	WPAP CZP SCS UST AST		EXP	EXT	Technical Clarification	Optional Enhanced Measures			
7. Land Use: (Please circle/check one)	Residential (	Non-r	Non-residential			8. Sit	e (acres):	2.21 AC	
9. Application Fee:	\$4,000	10. Permanent l			BMP(s	s):	N/A		
11. SCS (Linear Ft.):	N/A	12. AST/UST (No			No. Tanks): N/A		N/A	I/A	
13. County:	Williamson	14. Watershed:					Turkey Creek-I	Brushy Creek	

# **Application Distribution**

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	_	_	_ <u>X</u> _
Region (1 req.)	_	_	_ <u>X</u> _
County(ies)	_		_ <u>X</u> _
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek	Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugerville X Round Rock

	Sa	an Antonio Region			
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	_	_	_	_	_
Region (1 req.)	_			_	_
County(ies)		_			
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz	NA	San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that application is hereby submitted to TCEQ for a		
TI y		
Chelsea Osbourn, P.E.		
Print Name of Customer/Authorized Agent		
(Melson Osterno	9/10/2025	
Signature of Customer/Authorized Agent	Date	

**FOR TCEQ INTERNAL USE ONLY	7**	
Date(s)Reviewed:	Date .	Administratively Complete:
Received From:	Corre	ect Number of Copies:
Received By:	Distri	ibution Date:
EAPP File Number:	Comp	plex:
Admin. Review(s) (No.):	No. A	AR Rounds:
Delinquent Fees (Y/N):	Revie	ew Time Spent:
Lat./Long. Verified:	SOS	Customer Verification:
Agent Authorization Complete/Notarized (Y/N):	Fee	Payable to TCEQ (Y/N):
Core Data Form Complete (Y/N):	Check	k: Signed (Y/N):
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):

# **General Information Form**

Print Name of Customer/Agent: Chelsea Osbourn, P.E.

**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

Date: 9/10/2025

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:

Sig	nature of Customer/Agent:
	helsen Ostenn
Pı	oject Information
1.	Regulated Entity Name: Vista Oaks MUD
2.	County: Williamson
3.	Stream Basin: Turkey Creek - Brush Creek
4.	Groundwater Conservation District (If applicable): N/A
5.	Edwards Aquifer Zone:
	Recharge Zone Transition Zone
6.	Plan Type:
	<ul><li>WPAP</li><li>SCS</li><li>☐ Modification</li><li>☐ Exception Request</li></ul>

7.	Cus	stomer (Applicant):	
	Ent Ma City Tel	ntact Person: <u>Heath Green</u> city: <u>Vista Oaks MUD</u> niling Address: <u>100 Congress Ave, Suite 1300</u> y, State: <u>Austin, TX</u> ephone: <u>512-435-2360</u> nail Address: <u>ischoll@abaustin.com</u>	Zip: <u>78701</u> FAX: <u>N/A</u>
8.	Age	ent/Representative (If any):	
	Ent Ma City Tel	ntact Person: <u>Chelsea Osbourn, P.E.</u> city: <u>Gray Civil, Inc.</u> ciling Address: <u>8834 N. Capital of Texas Highway,</u> y, State: <u>Austin, TX</u> ephone: <u>830-660-5657</u> cail Address: <u>cosbourn@gray-civil.com</u>	<u>Suite 140</u> Zip: <u>78759</u> FAX: <u>N/A</u>
9.	Pro	eject Location:	
		The project site is located inside the city limits of the project site is located outside the city limits jurisdiction) of Round Rock.  The project site is not located within any city's limits.	but inside the ETJ (extra-territorial
10.		The location of the project site is described belongeral and clarity so that the TCEQ's Regional st boundaries for a field investigation.	
		North of FM 1431 and east of Sam Bass Road of	n the edge of the City of Round Rock ETJ.
11.		<b>Attachment A – Road Map</b> . A road map showing project site is attached. The project location and the map.	_
12.		Attachment B - USGS / Edwards Recharge Zone USGS Quadrangle Map (Scale: 1" = 2000') of the The map(s) clearly show:	
		<ul> <li>☑ Project site boundaries.</li> <li>☑ USGS Quadrangle Name(s).</li> <li>☑ Boundaries of the Recharge Zone (and Transport of the project site to the boundaries)</li> </ul>	• • • •
13.		The TCEQ must be able to inspect the project so Sufficient survey staking is provided on the project the boundaries and alignment of the regulated features noted in the Geologic Assessment.	ect to allow TCEQ regional staff to locate
	$\boxtimes$	Survey staking will be completed by this date: 9	<u>/29/2025</u>

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:
<ul> <li>Area of the site</li> <li>○ Offsite areas</li> <li>○ Impervious cover</li> <li>○ Permanent BMP(s)</li> <li>○ Proposed site use</li> <li>○ Site history</li> <li>○ Previous development</li> <li>○ Area(s) to be demolished</li> </ul>
15. Existing project site conditions are noted below:
Existing commercial site Existing industrial site Existing residential site
<ul><li>Existing paved and/or unpaved roads</li><li>Undeveloped (Cleared)</li></ul>
Undeveloped (Cleared)  Other:
Prohibited Activities
16. I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:
<ol> <li>Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);</li> </ol>
(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);

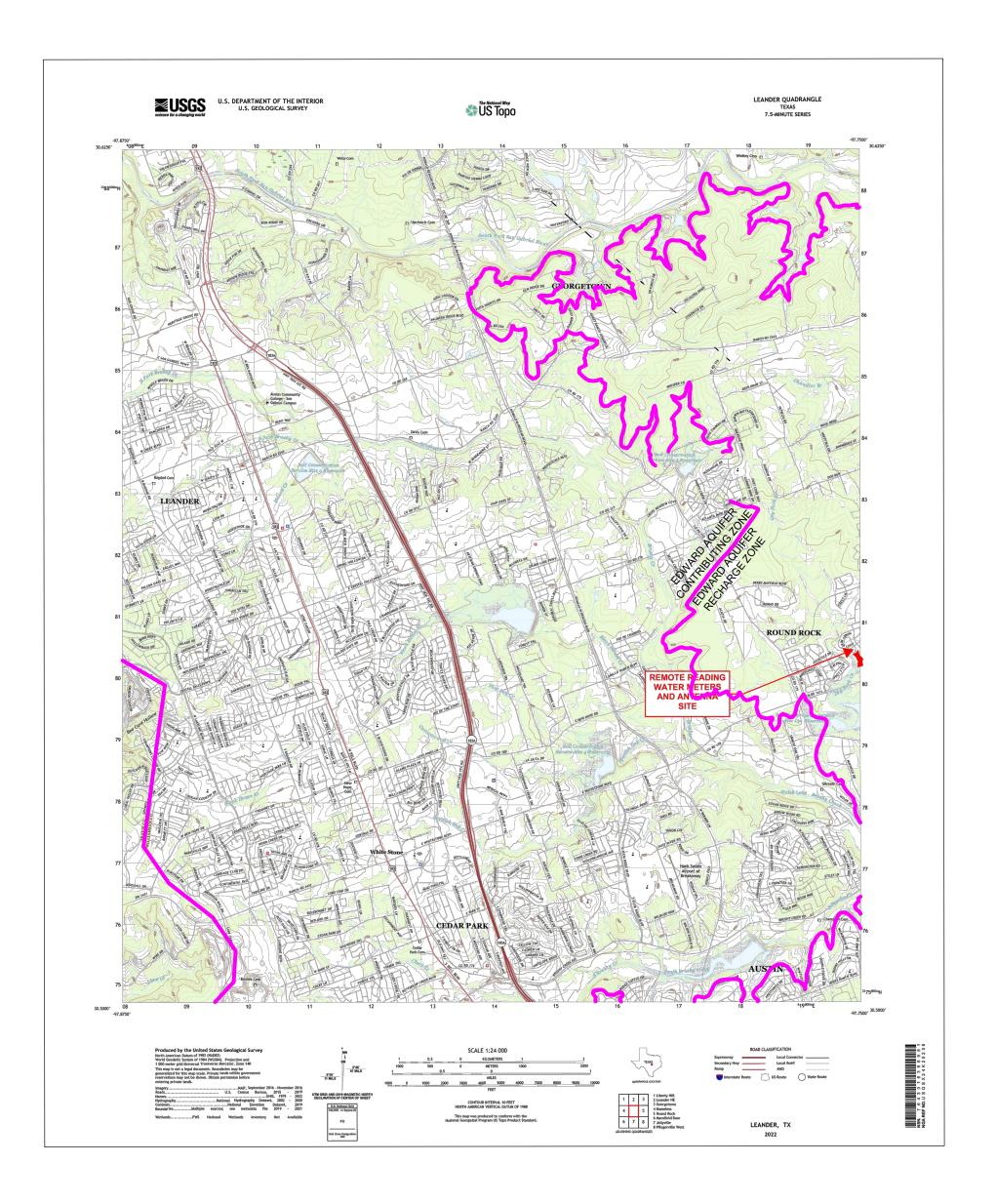
(2) Land disposal of Class I wastes, as defined in 30 TAC  $\S 335.1$ ; and

(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	e 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:
		<ul> <li>☐ TCEQ cashier</li> <li>☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)</li> <li>☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)</li> </ul>
20.		Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
21.		No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.





## Attachment C - Project Description

Remote Reading Water Meter Antenna site lies within the Vista Oaks MUD totaling 2.21-acres in Williamson County, Texas. The site is located approximately 0.73 miles northeast of the intersection of FM 1431 and Sam Bass Rd. Based on FEMA FIRM Maps 48491C0470F a portion of the lot is within the 100-year FEMA floodplain, but the improvements are located outside of the floodplain.

The site is currently undeveloped with a granite gravel trail through the open space that was permitted with the subdivision development. The site will now include an antenna site and pad for the remote reading water meters (smart meters) that will be placed within the MUD district.

The proposed site contains no impervious cover at pre-development and will include 0.058-acres of impervious cover once the antenna site is completed. Since the site is less than 20% impervious cover no permanent BMPs are required. In accordance with the design constraints, we are requesting an exemption from stormwater treatment requirements.

# Water Pollution Abatement Plan Application

**Texas Commission on Environmental Quality** 

Print Name of Customer/Agent: Chelsea Osbourn, P.E.

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

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

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

# Signature

Date: 8/21/2025

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

Sig	nature of Customer/Agent:
	helsen Ostenn
Reg	gulated Entity Name: Vista Oaks MUD
Re	egulated Entity Information
1.	The type of project is:
	Residential: Number of Lots: Residential: Number of Living Unit Equivalents: Commercial Industrial Other:X
2.	Total site acreage (size of property): 2.21 ac
3.	Estimated projected population:
4.	The amount and type of impervious cover expected after construction are shown below:

**Table 1 - Impervious Cover Table** 

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces	2,528.11	÷ 43,560 =	0.058
Total Impervious Cover	2,528.11	÷ 43,560 =	0.058

Total Impervious Cover  $0.058 \div$  Total Acreage  $2.21 \times 100 = 2.62\%$  Impervious Cover

- 5. Attachment A Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
- 6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

# For Road Projects Only

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

CUI	inplete questions 7 - 12 if this application is exclusively for a road project.
7.	Type of project:
	<ul> <li>TXDOT road project.</li> <li>County road or roads built to county specifications.</li> <li>City thoroughfare or roads to be dedicated to a municipality.</li> <li>Street or road providing access to private driveways.</li> </ul>
8.	Type of pavement or road surface to be used:
	Concrete Asphaltic concrete pavement Other:
9.	Length of Right of Way (R.O.W.): feet.
	Width of R.O.W.: feet. $L \times W = $ $Ft^2 \div 43,560 Ft^2/Acre = acres.$
10.	Length of pavement area: feet.
	Width of pavement area: feet. L x W = $Ft^2 \div 43,560 Ft^2/Acre = acres.$ Pavement area acres $\div$ R.O.W. area acres x 100 = % impervious cover.
11.	A rest stop will be included in this project.
	A rest stop will not be included in this project.

TCEQ Executive Director. Modi	ting roadways that do not require approval from the fications to existing roadways such as widening g more than one-half (1/2) the width of one (1) existing m the TCEQ.
Stormwater to be gener	rated by the Proposed Project
volume (quantity) and characte occur from the proposed proje quality and quantity are based	naracter of Stormwater. A detailed description of the er (quality) of the stormwater runoff which is expected to ct is attached. The estimates of stormwater runoff on the area and type of impervious cover. Include the r both pre-construction and post-construction conditions.
Wastewater to be gener	rated by the Proposed Project
14. The character and volume of waste	ewater is shown below:
% Domestic % Industrial % Commingled TOTAL gallons/day	Gallons/day Gallons/day Gallons/day
15. Wastewater will be disposed of by	:
On-Site Sewage Facility (OSSF/S	Septic Tank):
will be used to treat and dis licensing authority's (autho the land is suitable for the the requirements for on-sit relating to On-site Sewage Each lot in this project/deve size. The system will be de	Letter from Authorized Agent. An on-site sewage facility spose of the wastewater from this site. The appropriate rized agent) written approval is attached. It states that use of private sewage facilities and will meet or exceed e sewage facilities as specified under 30 TAC Chapter 285 Facilities.  Elopment is at least one (1) acre (43,560 square feet) in signed by a licensed professional engineer or registered a licensed installer in compliance with 30 TAC Chapter
Sewage Collection System (Sew	ver Lines):
to an existing SCS.	the wastewater generating facilities will be connected the wastewater generating facilities will be connected
<ul><li>The SCS was previously sub</li><li>The SCS was submitted with</li><li>The SCS will be submitted a be installed prior to Execution</li></ul>	n this application. t a later date. The owner is aware that the SCS may not

The sewage collection system will convey the wastewater to the (name) Treatment Plant. The treatment facility is:	
Existing. Proposed.	
16. All private service laterals will be inspected as required in 30 TAC §213.5.	
Site Plan Requirements	
Items 17 – 28 must be included on the Site Plan.	
17. $\square$ The Site Plan must have a minimum scale of 1" = 400'.	
Site Plan Scale: 1" = <u>100</u> '.	
18. 100-year floodplain boundaries:	
<ul> <li>Some part(s) of the project site is located within the 100-year floodplain. The flood is shown and labeled.</li> <li>No part of the project site is located within the 100-year floodplain.</li> <li>The 100-year floodplain boundaries are based on the following specific (including date material) sources(s):</li> </ul>	
19. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation cent buildings, roads, open space, etc. are shown on the plan.	ers,
The layout of the development is shown with existing contours at appropriate, but greater than ten-foot intervals. Finished topographic contours will not differ from existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.	
20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):	
There are (#) wells present on the project site and the locations are shown a labeled. (Check all of the following that apply)	ınd
<ul> <li>The wells are not in use and have been properly abandoned.</li> <li>The wells are not in use and will be properly abandoned.</li> <li>The wells are in use and comply with 16 TAC §76.</li> </ul>	
igstyle There are no wells or test holes of any kind known to exist on the project site.	
21. Geologic or manmade features which are on the site:	
<ul> <li>All sensitive geologic or manmade features identified in the Geologic Assessme shown and labeled.</li> <li>No sensitive geologic or manmade features were identified in the Geologic</li> </ul>	nt are
Assessment.  Attachment D - Exception to the Required Geologic Assessment. A request an justification for an exception to a portion of the Geologic Assessment is attached.	

22. 🔀	The drainage patterns and approximate slopes anticipated after major grading activities
23. 🔀	Areas of soil disturbance and areas which will not be disturbed.
24. 🔀	Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. 🔀	Locations where soil stabilization practices are expected to occur.
26. 🗌	Surface waters (including wetlands).
$\boxtimes$	N/A
27.	Locations where stormwater discharges to surface water or sensitive features are to occur.
	There will be no discharges to surface water or sensitive features.
28. 🔀	Legal boundaries of the site are shown.
Adm	ninistrative Information
29. 🔀	Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
30. 🔀	Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees

# Attachment A – Factors Affecting Surface Water Quality

Many factors have the potential of affecting surface water quality during construction, including oil, grease, gas, transmission fluids, and/or other vehicular fluids, as well as shifts in sediment that will occur during excavation and fill operations. Upon completion of construction, normal traffic on the site could be responsible for many similar pollutants.

# Attachment B – Volume and Character of Stormwater

The impervious cover for this site is less than 20%; therefore, permanent BMPs are not required in accordance with applicable regulations.

The overall proposed impervious cover is adding negligible amounts of runoff to the overall drainage area, as shown in the grading and drainage map, Attachment 5G.

# **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: <u>Chelsea Osbourn, P.E.</u> Date: <u>8/21/2025</u>		
Signature of Customer/Agent:		
Chelson Ostrum		
Regulated Entity Name: <u>Vista Oaks MUD</u>		
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.	<ol> <li>Fuels for construction equipment and hazardous substances which will be used during construction:</li> </ol>	
	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.	

	<ul> <li>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.</li> <li>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.</li> </ul>
	Evels 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.
S	equence 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.
	<ul> <li>For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.</li> <li>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.</li> </ul>
6.	Name the receiving water(s) at or near the site which will be disturbed or which will

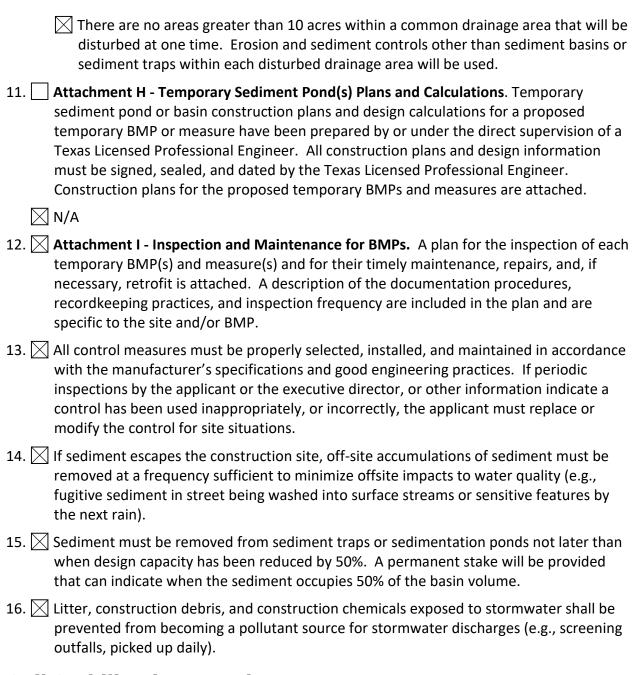
# Temporary Best Management Practices (TBMPs)

receive discharges from disturbed areas of the project: Brushy Creek

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.
	<ul> <li>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.</li> <li>A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.</li> </ul>
	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.
	<ul> <li>☐ 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.</li> <li>☐ There will be no temporary sealing of naturally-occurring sensitive features on the</li> </ul>
	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.



#### Soil Stabilization Practices

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

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

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

#### **Administrative Information**

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

### Attachment A – Spill Response Action

No spills of hydrocarbons or hazardous substances are expected. However, in the event that such an incidence does occur, the contractor should carefully follow the following TCEQ guidelines:

#### Cleanup:

- 1. Clean up leaks and spills immediately.
- 2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
- 3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

#### **Minor Spills:**

- 1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- 2. Use absorbent materials on small spills rather than hosing down or burying the spill.
- 3. Absorbent materials should be promptly removed and disposed of properly.
- 4. Follow the practice below for a minor spill:
  - Contain the spread of the spill.
  - Recover spilled materials.
  - Clean the contaminated area and properly dispose of contaminated materials.

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

Semi-significant spills can still be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities. Spills should be cleaned up immediately, using the following practices:

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

#### Significant/Hazardous Spills

For highly toxic materials, the Reportable Quantity (RQ) > 25 gallons. For petroleum/hydrocarbon liquids, RQ > 250 gallons (on land) or any amount which creates a "sheen" on water. Only certified Haz-Mat teams will be responsible for handling the material at the site.

For significant or hazardous spills that are in reportable quantities:

- Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site. Additionally, in the event of a hazardous material spill, local Williamson County police, fire, and potentially EMS should be contacted in order to initiate the hazardous material response team.
- 2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 191, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- 3. Notification should first be made by telephone and followed up with a written report of which on copy is to be kept on-site in the report binder and one copy is to be provided to the TCEQ.
- 4. The services of a spill contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
- 5. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff's Office, Fire Department, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at:

http://www.tceq.state.tx.us/response/spills.html

#### Attachment B – Potential Sources of Contamination

No particular activity or process during construction of the project is anticipated to present a significant risk of being a potential source of contamination. However, during regular construction operations, several common and minor risks of contamination are anticipated. Should any unforeseen mishaps occur during construction, the contractor shall follow the guidelines set forth in "Attachment A – Spill Response Action".

#### Potential sources of sediment to stormwater runoff:

- Clearing and grubbing
- Grading and excavation
- Vehicle tracking
- Topsoil stripping and stockpiling
- Landscaping

#### Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area small fueling, minor equipment maintenance, sanitary facility.
- Materials Storage Area solvents, adhesives, paving materials, aggregates, trash, etc.
- Construction Activities paving, concrete pouring
- Concrete washout areas

#### Potential on-site pollutants:

- Fertilizer
- Concrete
- Glue, adhesives
- Gasoline, diesel fuel, hydraulic fluids, antifreeze
- Sanitary toilets

## Attachment C - Sequence of Major Activities

- Temporary erosion and sedimentation controls are to be installed as indicated on the approved subdivision construction plans and in accordance with the stormwater pollution prevention plan (SWPPP) that is required to be posted on the site. Install tree protection and initiate tree mitigation measures.
- 2. The environmental project manager, and/or site supervisor, and/or designated responsible party, and the general contractor will follow the stormwater pollution prevention plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with city inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion and sedimentation plan.
- 3. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the stormwater pollution prevention plan (SWPPP) posted on the site.
- 4. A sequence of major construction activities, as well as an estimated area of disturbance for each, is listed below:
  - I. Clearing and grubbing 0.058 acres
  - II. Grading and excavation 0.058 acres
  - III. Re-vegetation 0.058 acres
- 5. Upon completion of construction and re-vegetation, the design engineer shall submit an engineer's letter of concurrence to Williamson County indicating that construction, including re-vegetation, is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate city inspector.
- 6. After construction is complete and all disturbed areas have been re-vegetated per plan to at least 90 percent established, remove the temporary erosion and sedimentation controls and complete any necessary final re-vegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the permanent BMPs.

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

Prior to the commencement of any construction activity, the contractor shall install silt fence, construction entrances, and inlet protection, per the Erosion and Sedimentation Control Plan. All temporary BMPs are to be installed per TCEQ and local requirements.

As surface water flows from and through disturbed areas, the proposed temporary BMPs will prevent pollution by filtering the increased sediment loads and other pollutant sources (listed in "Attachment B — Potential Sources of Contamination") prior to any runoff leaving the site. As shown in the attached site plan, silt fence will be utilized downstream of any grading and construction activities to remove debris and sediment from run-off in the area (activities here will primarily involve road grading and storm sewer excavation. Concrete washout basins will contain pollutants discharged when concrete trucks are washed out, and stabilized construction entrances will prevent the transport of sediment off-site.

In using the aforementioned treatment methods and maintaining natural drainage patterns downgradient of the proposed site, any flow to naturally occurring sensitive features, both known and unknown, will be maintained.

## Attachment F – Structural Practices

The following temporary BMP structural practices will be employed on the site:

- A. Silt Fence Used for sediment filtration along the downslope perimeter of portions of the project, as well as to prevent runoff from storage of excavated materials during utility construction. The fence retains sediment primarily by retarding flow and promoting deposition of sediment on the uphill side of the slope. Runoff is filtered as it passes through the geotextile.
- B. Construction Entrance Stone pads will be constructed at entrances and exits to the project to prevent off-site transport of sediment by construction vehicles. The pads are a minimum of 50' long and 8" deep. They will be graded to prevent runoff from leaving the site.

# Attachment G – Drainage Area Map

Existing and proposed drainage area maps are shown in the attached construction plans with this submittal.

## Attachment I – Inspection and Maintenance for BMPs

The inspection and maintenance of temporary BMPs will be made according to TCEQ RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices.

#### **Inspection Personnel:**

Inspections shall be conducted by qualified representatives of the contractor acting on behalf of the owner or a designated party, if hired separately by the owner. Each operator must delegate authority to the specifically described position or person performing inspections, as provided by 30 TAC 305.128, as an authorized person for signing reports and performing certain activities requested by the director or required by the TPDES general permit. This delegation of authority must be provided to the director of TCEQ in writing and a copy shall be kept along with the signed effective copy of the SWPPP.

#### **Inspection Schedule and Procedures:**

An inspection shall occur weekly and after any rain event.

The authorized party shall inspect all disturbed areas of the site, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site.

Disturbed areas and areas used for storage of materials that are exposed to precipitation or within limits of the 1% annual chance (100 year) floodplain must be inspected for evidence of, or the potential for, pollutants entering the runoff from the site. Erosion and sediment control measures identified in the plan must be observed to ensure that they are operating correctly. Observations can be made during wet or dry weather conditions. Where discharge locations or points are accessible, they must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. This can be done by inspecting receiving waters to see where vehicles enter or exit the site for evidence of off-site sediment tracking.

Based on the results of the inspection, the site description and the pollution prevention measures identified in the plan must be revised as soon as possible after an inspection that reveals inadequacies. The inspection and plan review process must provide for timely implementation of any changes to the plan within 7 calendar days of the inspection.

An inspection report shall be completed, which summarizes the scope of the inspection, name(s) and qualifications of personnel conducting the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWPPP. Major observations shall include, at a minimum, location of discharges of sediment or other pollutants from the site, location of BMPs that need to be maintained, location of BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where BMPs are needed.

Actions taken as a result of the inspections must be described within, and retained as a part of, the SWPPP. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the

SWPPP and the TPDES general permit. The report must be signed by the authorized representative delegated by the operators in accordance with TAC 305.128.

**Maintenance and Corrective Actions** – Maintenance of erosion control facilities shall consist of the minimum requirements as follows:

- A. In ongoing construction areas, inspect erosion control improvements to confirm facilities are in place and operable. Where facilities have been temporarily set aside or damaged due to construction activity, place facilities in service before leaving job site.
- B. If weather forecast predicts a possibility of rain, check entire facilities throughout the site to ensure they are in place and operable. If job site weather conditions indicate a high probability of rain, make special inspection of erosion control facilities.
- C. After rainfall events, review erosion control facilities as soon as the site is accessible. Clean rock berms, construction entrances, and other structural facilities. Determine where additional facilities or alternative techniques are needed to control sediment leaving the site.
- D. After portions of the site have been seeded, review these areas on a regular basis in accordance with project specifications to assure property watering until grass is established. Re-seed areas where grass is not well-established.
- E. Spills are to be handled as specified by the manufacturer of the product in a timely and safe manner by qualified personnel. The site superintendent will be responsible for coordinate spill prevention and cleanup operations.
- F. Concrete trucks will discharge extra concrete or wash out drum only at an approved location on site. Residual product shall be properly disposed of.
- G. Inspect vehicle entrances and exits for evidence of off-site tracking and correct as needed.
- H. Remove sediment from traps and ponds no later than when the design capacity has been reduced by 50%.
- If sediment escapes the site, the contractor, where feasible and where access is available, shall
  collect and remove sedimentation material by appropriate non-damaging methods. Additionally, the
  contractor shall correct the condition causing discharges.
- J. If inspections or other information sources reveal a control has been used incorrectly, or that control is performing inadequately, the contractor must replace, correct, or modify the control as soon as practical after discovery of the deficiency.

#### Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

The following is a schedule of interim and permanent soil stabilization practices:

- Prior to site disturbance
  - o Install all temporary erosion and sedimentation control features.
- During construction
  - Maintain all temporary erosion and sedimentation control structures. Inspect all temporary
    erosion and sedimentation control structures on a weekly and/or daily basis and after all
    rain events.
- After completion of construction
  - o Install all permanent erosion and sedimentation controls.
- After completion of permanent controls
  - o Remove all temporary erosion and sedimentation control features.

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

Stabilization measure will be limited as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity in that portion of the site has temporarily or permanently ceased, and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site. In areas experiencing droughts where the initiation of stabilization measures by the 14<sup>th</sup> day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as possible.

# **Permanent Stormwater Section**

**Texas Commission on Environmental Quality** 

Print Name of Customer/Agent: Chelsea Osbourn, P.E.

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

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

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

# Signature

Date: 8/21/2025

Signature of Customer/Agent

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

	Chelsen Ostenn
Re	gulated Entity Name: Vista Oaks MUD
P	ermanent Best Management Practices (BMPs)
	rmanent best management practices and measures that will be used during and after nstruction is completed.
1.	Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
	⊠ N/A
2.	These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
	The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

	A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is:
	⊠ N/A
3.	Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.
	⊠ N/A
4.	Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	<ul> <li>The site will be used for low density single-family residential development and has 20% or less impervious cover.</li> <li>The site will be used for low density single-family residential development but has more than 20% impervious cover.</li> <li>The site will not be used for low density single-family residential development.</li> </ul>
5.	The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.  The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.  The site will not be used for multi-family residential developments, schools, or small business sites.
6	Attachment B - BMPs for Ungradient Stormwater

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

11.	Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
	<ul> <li>Prepared and certified by the engineer designing the permanent BMPs and measures</li> <li>Signed by the owner or responsible party</li> <li>Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit</li> </ul>
	A discussion of record keeping procedures
$\succeq$	] N/A
12	Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
$\geq$	] N/A
13.	Attachment I -Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.
$\geq$	] N/A
Res	ponsibility for Maintenance of Permanent BMP(s)
_	nsibility for maintenance of best management practices and measures after ruction is complete.
14.	The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
	N/A
15.	A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.
$\boxtimes$	] N/A

#### **Agent Authorization Form**

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

l	Heath Green	
	Print Name	
	D 11 (	
	President	
	Title - Owner/President/Other	
of	Vista Oaks MUD	
	Corporation/Partnership/Entity Name	
have authorized	Chelsea Osbourn, P.E	
	Print Name of Agent/Engineer	
of	Gray Civil, Inc.	
	Print Name of Firm	
	1 1111 1441110 01 1 11111	

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

#### I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- 2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

#### SIGNATURE PAGE:

Applicant's Signature B/19/Date

THE STATE OF TX §
County of William SDN §

BEFORE ME, the undersigned authority, on this day personally appeared Hearth Red Green 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 19th day of August

LISA HOLMAN Notary ID #135116595 My Commission Expires October 3, 2028 NOTARY PUBLIC LISA HOLMAN

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 10 3 86

# **Application Fee Form**

#### **Texas Commission on Environmental Quality**

Name of Proposed Regulated Entity: Vista Oaks MUD

Regulated Entity Location: North West of the intersection of Sam Bass Road and FM 1431

Name of Customer: Vista Oaks MUD

Phone: (512) 435-2360 Contact Person: Heath Green

Customer Reference Number (if issued):CN 603939893

Regulated Entity Reference Number (if issued):RN 101423564

Austin Regional Office (3373)	1501 (11 155ded).1111 <u>151 12556</u>	<u>-</u>
Hays San Antonio Regional Office (33	☐ Travis <b>362)</b>	Williamson
Bexar Comal	☐ Medina ☐ Kinney	Uvalde
Application fees must be paid by Commission on Environmental form must be submitted with y	Quality. Your canceled check	will serve as your receipt. This
Austin Regional Office  Mailed to: TCEQ - Cashier Revenues Section Mail Code 214 P.O. Box 13088 Austin, TX 78711-3088  Site Location (Check All That Ap	Overn 12100 Buildi Austir (512)2	ntonio Regional Office hight Delivery to: TCEQ - Cashier D Park 35 Circle ng A, 3rd Floor n, TX 78753 239-0357
Recharge Zone	Contributing Zone	Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone		
Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone		
Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone		
Plan: Non-residential	2.1 Acres	\$ \$4,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: Mlsew Oshuw

Date:	

# **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

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

Organized Sewage Collection Systems and Modifications

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

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

**Exception Requests** 

Project	Fee
Exception Request	\$500

Extension of Time Requests

Project	Fee
Extension of Time Request	\$150



# **TCEQ Core Data Form**

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

### **SECTION I: General Information**

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

Renewal (Core Data Form should be subn	nitted with the renewal form)	_ o	ther			
Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	<u>n</u>	3. Regulated Entity Reference Number (if issued) RN 101423564			
CTION II: Custome		formation	Hadataa (m. v. /slal/			
. General Customer Information	5. Effective Date for Customer In	normation	opuates (mm/dd/	уууу)		
	Update to Customer Information	_	ge in Regulated Ent	ity Owne	ership	
Change in Legal Name (Verifiable with the T	exas Secretary of State or Texas Comptro	oller of Public	Accounts)			
the Customer Name submitted here may SOS) or Texas Comptroller of Public Acco	ounts (CPA).	n what is c				
. Customer Legal Name (If an individual, p	rint last name first: eg: Doe, John)		<u>If new Customer,</u>	enter pre	vious Customer below:	
ista Oaks MUD						
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)			10. DUNS Number (if applicable)	
1. Type of Customer: Corpor	ration	☐ Individ	ridual Partnership: 🗌 General 🔲 Lin			
overnment:	Local State Other	☐ Sole Pr	roprietorship	⊠ Otł	ner:	
2. Number of Employees			13. Independer	ıtly Owı	ned and Operated?	
☑ 0-20 ☐ 21-100 ☐ 101-250 ☐ 25	1-500		☐ Yes	□ No		
<b>14. Customer Role</b> (Proposed or Actual) – as	s it relates to the Regulated Entity listed o	on this form.	Please check one of	the follo	wing	
☑Owner ☐ Operator ☐ Coccupational Licensee ☐ Responsible F	Owner & Operator Ourty VCP/BSA Applicant		Other:			
<u> </u>	Party VCP/BSA Applicant		∐ Other:			
Occupational Licensee Responsible F  100 Congress Ave, Suite 1500  Address:	Party VCP/BSA Applicant		_			
Occupational Licensee Responsible F  100 Congress Ave, Suite 1500  5. Mailing	Party VCP/BSA Applicant	ZIP	☐ Other:		ZIP + 4	

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,						, ,			
ECTION III:	Regul	ated En	tity Infor	mation	<u> </u>				
21. General Regulated En	tity Inform	nation (If 'New Re	gulated Entity" is sel	ected, a new p	ermit applica	tion is also i	required.)		
☐ New Regulated Entity	Update t	to Regulated Entity	/ Name	e to Regulated	Entity Inform	ation			
The Regulated Entity Nar as Inc, LP, or LLC).	ne submitt	ted may be updo	ated, in order to m	eet TCEQ Cor	e Data Star	ndards (rei	moval of or	ganizatior	nal endings such
22. Regulated Entity Nam	ne (Enter na	me of the site whe	re the regulated acti	on is taking pla	ice.)				
Vista Oaks MUD									
23. Street Address of									
the Regulated Entity:									
(No PO Boxes)	City		State		ZIP			ZIP + 4	
24. County						1			
		If no Stre	et Address is prov	rided, fields 2	25-28 are re	quired.			
25. Description to									
Physical Location:	Located at	the intersection o	of Sam Bass Road and	I FM 1431 outs	ide the Roun	d Rock ETJ			
26. Nearest City						State		Nea	rest ZIP Code
Round Rock						TX		7868	81
Latitude/Longitude are re used to supply coordinate	-	-	-		ata Standa	rds. (Geod	oding of th	e Physical	Address may be
27. Latitude (N) In Decim	al:	30.549778		28. L	ongitude (V	V) In Decin	nal:	97.74983	33
Degrees	Minutes		Seconds	Degre	es	M	inutes		Seconds
30		32	59.2		97		44		59.4
29. Primary SIC Code	30	). Secondary SIC	Code	31. Primai	ry NAICS Co	de	32. Seco	ndary NAI	CS Code
(4 digits)	(4	digits)		(5 or 6 digits) (5 or 6 digits)			gits)		
				237210					
33. What is the Primary E	Business of	this entity? (E	Do not repeat the SIC	or NAICS descr	iption.)				
34. Mailing	100 Cong	gress Ave, Suite 15	60 c/o Jenn Scholl						
-									
Address:	City	Austin	State	тх	ZIP	78701		ZIP + 4	
35. E-Mail Address:	со	sbourn@gray-civi	l.com						
36. Telephone Number			37. Extension o	r Code	38. F	ax Numbe	<b>r</b> (if applicab	ole)	
( ) -					(	) -			
. ,					`	,			

19. Extension or Code

20. Fax Number (if applicable)

18. Telephone Number

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39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance. ☐ Dam Safety Districts Edwards Aquifer ☐ Emissions Inventory Air ☐ Industrial Hazardous Waste ☐ New Source OSSF Petroleum Storage Tank ☐ PWS Review Air Sludge Storm Water ☐ Title V Air ☐ Tires Used Oil ☐ Voluntary Cleanup ■ Wastewater ■ Wastewater Agriculture ■ Water Rights Other: **SECTION IV: Preparer Information** 40. Name: Chelsea Osbourn, P.E. 41. Title: Project Manager 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (830)660-5657 cosbourn@gray-civil.com **SECTION V: Authorized Signature** 46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39. Company: Job Title: Gray Civil, Inc. Project Manager Name (In Print): Chelsea Osbourn, P.E. Phone: (830)660-5657 Signature: Date: 8/21/2025

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OWNER: VISTA OAKS MUD

919 CONGRESS AVE **SUITE 1500** AUSTIN, TX 78701

**ENGINEER:** GRAY CIVIL, INC.

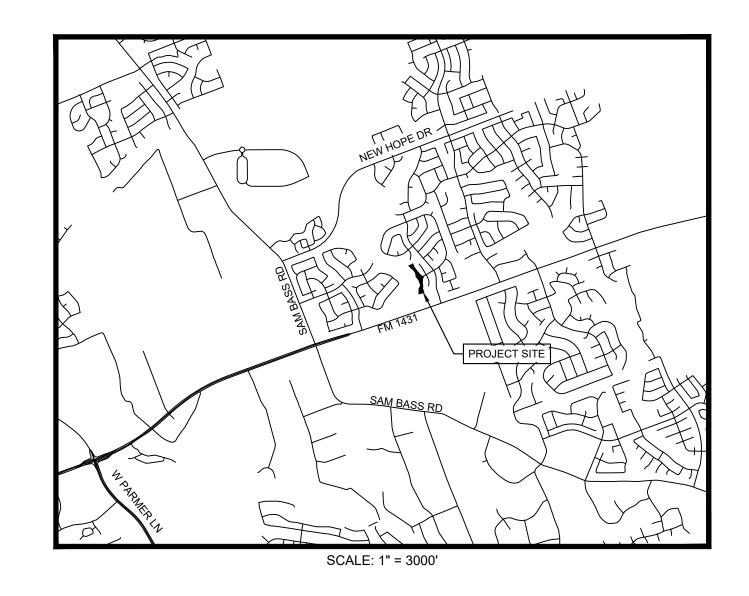
8834 N. CAPITAL OF TEXAS HWY., SUITE 140 AUSTIN, TEXAS 78759 (512) 452-0371 FAX (512) 454-9933

CONSTRUCTION PLANS FOR

# REMOTE READING WATER METER ANTENNA SITE PROJECT TYPE

CITY OF ROUND ROCK ETJ, WILLIAMSON COUNTY, TEXAS

JULY 2025



Sheet List Table

EROSION SEDIMENTATION CONTROL AND TREE PROTECTION PLAN

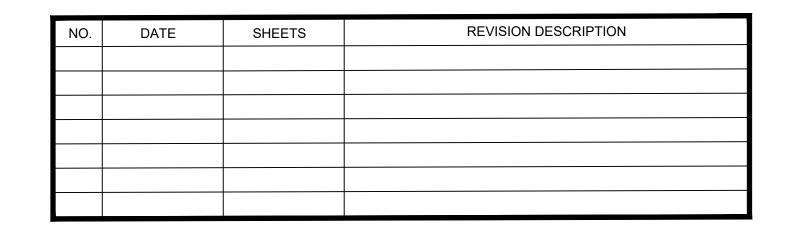
SITE DIMENSIONAL CONTROL PLAN

**EROSION CONTROL DETAILS** 

FENCE DETAILS



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946



#### **GENERAL NOTES**

- 1. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS,
- 2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR DESTRUCTION OR REMOVAL THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 3. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS ARE APPROPRIATE.
- 4. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION
- 5. THE CONTRACTOR SHALL GIVE THE WILLIAMSON COUNTY 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE (512) 943-3367 (ENGINEERING AND
- 6. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S OPTION. HOWEVER, THE TYPE OF REVEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION.
- 7. THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH WILLIAMSON COUNTY ACCURATE "AS-BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
- 8. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.
- 9. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.

#### TRENCH SAFETY NOTES

- 1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT (WILL BE PROVIDED BY THE CONTRACTOR).
- 2. IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4-FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
- 3. IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN 5 FEET IN DEPTH AND DURING CONSTRUCTION IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH OR TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO WILLIAMSON

## STREET AND DRAINAGE NOTES

- 1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE COUNTY INSPECTOR AND HE SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE PRIOR TO ANY TESTING. TELEPHONE (512) 943-3367 (INSPECTIONS).
- . BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.
- 3. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC., SHALL BE A MINIMUM OF 30" BELOW

4. BARRICADES BUILT TO WILLIAMSON COUNTY STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB

- ALL R.C.P. SHALL BE MINIMUM CLASS III.
- 6. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY MLA LABS AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS DATED DECEMBER 26, 2024. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS:

## **CLASSIFICATION - ALLEYS:**

CONCRETE PAVEMENT (JRCP) LIME STABILIZED SUBGRADE 8.0 INCHES

# CLASSIFICATION - LOCAL STREETS (20<PI<35):

ASHWOOD BANKS DRIVE (8+42 TO 12+40 & 16+60 TO 22+55), AUTUMN ALCOVE LANE, BLOSSOM COTTAGE DRIVE, DAISY HILL DRIVE (1+00 TO 4+45), FALLEN MOSS COVE, HICKORY ARBOR (1+00 TO 8+15 & 17+25 TO END), ILIMA LANE, LAZY HOLLY LANE, MAGNOLIA BEECH STREET, MANTIS ELM DRIVE, MEDWAY POINT DRIVE (1+00 TO 5+40), PEARTREE BRIDGE WAY(1+00 TO 7+25 & 10+15 TO 11+31), PEONY OAK DRIVE, PINE LILLY COVE, SANDY STONE DRIVE, POPPY PASTURE ROAD (6+75 TO END), REDBERRY ROAD

**THICKNESS** CRUSHED LIMESTONE BASE 12.0 INCHES HOT MIX ASPHALTIC CONCRETE 2.0 INCHES LIME STABILIZED SUBGRADE 8.0 INCHES

# CLASSIFICATION - LOCAL STREETS (35<PI<55):

ASHWOOD BANKS DRIVE (22+55 TO END), HICKORY ARBOR (8+15 TO 17+25), PEARTREE BRIDGE WAY (7+25 TO 10+15) <u>MATERIALS</u> THICKNESS 14.0 INCHES CRUSHED LIMESTONE BASE

# CLASSIFICATION - LOCAL STREETS (55<PI):

HOT MIX ASPHALTIC CONCRETE

LIME STABILIZED SUBGRADE

ASHWOOD BANKS DRIVE (12+40 TO 16+60), DAISY HILL DRIVE (4+45 TO END)

**THICKNESS** CRUSHED LIMESTONE BASE 14.0 INCHES HOT MIX ASPHALTIC CONCRETE 2.0 INCHES 10.0 INCHES LIME STABILIZED SUBGRADE

# CLASSIFICATION - RESIDENTIAL COLLECTOR STREETS (20<PI<35):

DESERT MAPLE DRIVE, MANTIS ELM DRIVE (1+00 TO 3+57), MEDWAY POINT DRIVE (5+40 TO END), PEARTREE BRIDGE WAY (11+31 TO END)

2.0 INCHES

8.0 INCHES

MATERIALS CRUSHED LIMESTONE BASE 14.0 INCHES HOT MIX ASPHALTIC CONCRETE 2.0 INCHES LIME STABILIZED SUBGRADE 8.0 INCHES

# CLASSIFICATION - RESIDENTIAL COLLECTOR STREETS (35<PI<55):

POPPY PASTURE ROAD (1+36 TO 6+75)

**THICKNESS** CRUSHED LIMESTONE BASE 16.0 INCHES HOT MIX ASPHALTIC CONCRETE 2.0 INCHES LIME STABILIZED SUBGRADE 8.0 INCHES

#### CLASSIFICATION - URBAN ARTERIAL (20<PI<55): FLORA BOULEVARD, AURORA MEADOW

THICKNESS **MATERIALS** CRUSHED LIMESTONE BASE 18.0 INCHES HOT MIX ASPHALTIC CONCRETE 3.0 INCHES LIME STABILIZED SUBGRADE 10.0 INCHES

A SINGLE LAYER OF TENSAR 130S OR EQUIVALENT TO BE APPROVED BY THE GEOTECHNICAL ENGINEER PLACED BELOW CRUSHED LIMESTONE BASE LAYER

- THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS.
- 8. WHERE PI'S ARE OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE COUNTY ENGINEER. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT.
- 9. ANY EXPANSIVE FILL (PI > 20) PLACED IN THE SUBGRADE SHALL BE CONSIDERED EXPANSIVE SUBGRADE.

10. THE PRIMARY PAVEMENT DESIGN OPTION FOR AREAS WITH MORE THAN 2 FEET OF EXPANSIVE CLAY SHALL BE THE LOW PLASTICITY SUB-BASE OPTION. IF NOT FEASIBLE, AN ALTERNATE STABILIZING DESIGN SHALL BE PROPOSED & SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL

- 11. DELINEATION BETWEEN THESE DIFFERENT PAVEMENT THICKNESS SECTIONS SHOULD BE COMPLETED IN THE FIELD BY OBSERVATION OF OPEN UTILITIES TRENCHES AND THE PAVEMENT SUBGRADE BY THE GEOTECHNICAL ENGINEER OR HIS DESIGNATE. GIVEN THE KNOWN VARIABILITY OF SURFACE SOILS AND THE PRESENCE OF FAULTS AT THIS SITE, THE GEOTECHNICAL ENGINEER MUST VERIFY THE SUBGRADE BEFORE INSTALLATION OF THE PAVEMENT SYSTEM CAN PROCEED. MULTIPLE SITE VISITS MAY BE REQUIRED DEPENDING UPON THE CONSTRUCTION SCHEDULE. FINALIZED DISTINCTION BETWEEN PAVEMENT SECTIONS SHALL BE PROVIDED AS ADDENDUMS TO THIS REPORT AS THESE OBSERVATIONS ARE COMPLETED. PLEASE CONTACT THE GEOTECHNICAL ENGINEER WHEN THE UTILITY TRENCHES ARE OPEN.
- 12. THE FLEX BASE AND GEOGRID SHOULD BE EXTENDED 3 FEET BEYOND THE BACK OF CURB LINE. THE LIME TREATED SUBGRADE SHOULD BE EXTENDED 3 FEET BEYOND THE BACK OF THE CURB LINE. CONTRACTOR TO AVOID INSTALLATION OF IRRIGATION, PLANTINGS, SILT FENCE, ETC. IN THE OVERBUILD.
- 13. THESE PAVEMENT THICKNESS DESIGNS ARE INTENDED TO TRANSFER THE LOAD FROM THE ANTICIPATED TRAFFIC CONDITIONS.
- 14. THE RESPONSIBILITY OF ASSIGNING STREET CLASSIFICATION TO THE STREETS IN THIS PROJECT IS LEFT TO THE CIVIL ENGINEER.
- 15. IF PAVEMENT DESIGNS OTHER THAN THOSE LISTED ABOVE ARE DESIRED, PLEASE CONTACT MLA LABS.
- 16. CONTRACTOR IS TO AVOID INSTALLATION OF UTILITIES, IRRIGATION LINES, PLANTINGS, ETC. IN THE BASE OVERBUILD.

#### TRAFFIC MARKING NOTES

17. ALL PAVEMENT MARKINGS, MARKERS, PAINT, TRAFFIC BUTTONS, TRAFFIC CONTROLS AND SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITIONS.

### EROSION AND SEDIMENTATION CONTROL NOTES

- 1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH WILLIAMSON COUNTY EROSION AND SEDIMENTATION CONTROL ORDINANCE.
- 2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
- 3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY WILLIAMSON COUNTY FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED
- 4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.

#### CONSTRUCTION SEQUENCE OF EVENTS

- 1. CALL DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION, DEVELOPMENT ENGINEER CONSTRUCTION INSPECTION AND THE ENVIRONMENTAL AND CONSERVATION SERVICES DEPARTMENT 48 HOURS PRIOR TO BEGINNING ANY WORK. CALL THE ONE CALL CENTER FOR UTILITY LOCATIONS AND OBTAIN PERMIT FOR ANY WORK WITHIN CITY OF HUTTO OR WILLIAMSON COUNTY R.O.W. TREE PROTECTION WILL ALSO BE INSTALLED.
- 2. INSTALL TEMPORARY EROSION CONTROL MEASURES AND STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH LOCATIONS AND DETAILS SHOWN ON THE PLANS. PRIOR TO CLEARING AND GRUBBING, NOTIFY WILLIAMSON COUNTY INSPECTORS WHEN EROSION CONTROLS ARE INSTALLED.
- 3. HOLD PRE-CONSTRUCTION CONFERENCE ON SITE WITH THE CONTRACTOR, DESIGN ENGINEER, OWNERS REPRESENTATIVE AND THE CITY'S ENVIRONMENTAL INSPECTOR (UTILITY DEPARTMENT DEVELOPMENT ENGINEER, (512) 930-3582. REQUIRES 72 HOURS ADVANCE NOTICE) AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND PRIOR TO
- BEGIN CONSTRUCTION OF PROJECT AS FOLLOWS:
- A. ROUGH CUT/GRADE STREET, CHANNELS, PONDS, DRAINAGE FACILITIES TO INSURE NO MAJOR DEVIATIONS TO PROPOSED DRAINAGE PATTERNS OCCUR
- CONSTRUCTION. B. INSTALL ALL UTILITIES

BEGINNING ANY WORK.

- C. INSTALL ALL CROSSINGS WITHIN STREET RIGHT-OF-WAYS
- D. PREPARE SUBGRADE E. CONSTRUCT STREET BASE
- F. INSTALL CURB AND GUTTER
- G. COMPLETE ALL ROUGH GRADING AND UNDERGROUND UTILITIES IN STREET RIGHT-OF-WAYS H. LAY FINAL BASE COURSE
- J. COMPLETE ALL NECESSARY FINAL GRADING AND DRESS UP OF AREAS DISTURBED DURING CONSTRUCTION
- 5. HOLD OWNERS POST-CONSTRUCTION CONFERENCE ON SITE WITH THE CONTRACTOR, DESIGN ENGINEER, OWNER'S REPRESENTATIVE AND THE CITY'S ENVIRONMENTAL ENGINEER.
- AFTER ACCEPTANCE OF REVEGETATION BY THE OWNER AND THE CITY'S INSPECTOR. REMOVE TEMPORARY SEDIMENTATION AND EROSION CONTROLS
- 7. FINAL INSPECTION BY COUNTY AND CITY WITH CONTRACTOR AND ENGINEER

# **WILLIAMSON COUNTY NOTES:**

# **B4 CONSTRUCTION-GENERAL**

- B4.1 A PRECONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO THE START OF CONSTRUCTION. THE DESIGN ENGINEER, OWNER, CONTRACTOR, SUBCONTRACTORS, AND COUNTY ENGINEER SHALL ATTEND THIS MEETING. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES" UNLESS OTHERWISE STATED ON THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY
- B4.2 ALL MATERIALS SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER. THE OWNER SHALL PAY FOR ALL TESTING SERVICES AND SHALL FURNISH THE COUNTY ENGINEER WITH CERTIFIED COPIES OF THESE TEST RESULTS. THE COUNTY ENGINEER MUST APPROVE THE TEST RESULTS PRIOR TO CONSTRUCTING THE NEXT COURSE OF THE ROADWAY STRUCTURE. ANY MATERIAL WHICH DOES NOT MEET THE MINIMUM REQUIRED TEST SPECIFICATIONS SHALL BE REMOVED AND RECOMPACTED OR REPLACED UNLESS ALTERNATIVE REMEDIAL ACTION IS APPROVED IN WRITING FROM THE COUNTY ENGINEER.
- B4.3 EXCEPT FOR ELECTRICAL LINES, ALL UNDERGROUND NONFERROUS UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT MUST BE ACCOMPANIED BY FERROUS METAL LINES TO AID IN TRACING THE LOCATION OF SAID UTILITIES THROUGH THE USE OF A METAL DETECTOR.
- B4.4 ALL PROPOSED PAVEMENTS (FLEXIBLE AND RIGID) ARE TO BE SPECIFIED IN THE GEOTECH REPORT. THE GEOTECH REPORT IS TO BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. PAVEMENT DESIGNS SHALL FOLLOW THE BELOW COUNTY REQUIREMENTS BASED UPON SOIL CONDITIONS FROM SAMPLES TAKEN ALONG THE PROPOSED ROADWAYS. TEST BORINGS SHALL BE PLACED AT A MAXIMUM SPACING OF 500 FEET OR OTHER SAMPLING FREQUENCY APPROVED BY THE COUNTY ENGINEER BASED ON RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER. BORINGS SHALL BE TO A DEPTH OF TEN FT OR, IF SOLID ROCK IS ENCOUNTERED, ONE FT WILLIAMSON COUNTY, TEXAS - SUBDIVISION REGULATIONS PAGE 38 BELOW NON-FRACTURED ROCK OR 3 FT BELOW FRACTURED ROCK. THE PAVEMENT DESIGN MUST MEET AT LEAST THE MINIMUM OF ONE OF THE APPROVED COUNTY DESIGNS AND PROVIDED IN THE GEOTECHNICAL REPORT FOR REVIEW AND APPROVAL PRIOR TO THE REVIEW AND APPROVAL OF THE CONSTRUCTION PLANS. IN ADDITION TO THE BASIS OF THE PAVEMENT DESIGN, THE SOILS REPORT SHALL CONTAIN THE RESULTS OF SAMPLED AND TESTED SUBGRADE FOR
- B4.5 FLEXIBLE PAVEMENT DESIGNS BASED ON ROADWAY CLASSIFICATION (REVISED PER GEOTECHNICAL ENGINEER: SEE STREET AND DRAINAGE NOTE 6 (THIS SHEET).
- B4.6 RIGID PAVEMENT DESIGNS BASED ON ROADWAY CLASSIFICATION (NOT APPLICABLE)

# **B5 - SUBGRADE**

- B5.1 THE PREPARATION OF THE SUBGRADE SHALL FOLLOW GOOD ENGINEERING PRACTICES AS DIRECTED BY THE COUNTY ENGINEER IN CONJUNCTION WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT. WHEN THE PLASTICITY INDEX (PI) IS GREATER THAN 20, A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNTIL THE PLIS LESS THAN 20. IF THE ADDITION OF LIME AS DESCRIBED IN ITEM 260 IS NOT FEASIBLE, AN ALTERNATE STABILIZING DESIGN SHALL BE PROPOSED AND SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL. THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY ENGINEER.
- B5.2 IF LIME IS NECESSARY, THEN A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED, AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION TO PROPERLY STABILIZE SUBGRADE. THE USE OF HYDRATED LIME OR LIME SLURRY IS APPROVED; HOWEVER, THE USE OF PELLETIZED LIME IS NOT
- B5.3 PRIOR TO LIME STABILIZATION, A SULFATE TEST OF IN SITU SOILS SHALL BE PERFORMED BY DEVELOPER TO CONFIRM THE APPROPRIATE MEANS AND METHODS OF STABILIZATION. PROVIDE SULFATE TEST TO COUNTY ENGINEER PRIOR TO STABILIZATION.
- B5.4 ANY VARIATION TO THE COUNTY'S STABILIZATION REQUIREMENTS MUST BE APPROVED BY THE COUNTY ENGINEER.
- B5.5 THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY
- B5.6 THE SUBGRADE SHALL BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF ALL INSPECTION REPORTS FURNISHED TO THE COUNTY ENGINEER. THE COUNTY ENGINEER MUST APPROVE THE REPORT PRIOR TO APPLICATION OF THE BASE MATERIAL. ALL DENSITY TEST REPORTS SHALL INCLUDE A COPY OF THE WORK SHEET SHOWING THE PERCENTAGE OF THE MAXIMUM DRY (PROCTOR) DENSITY. THE NUMBER AND LOCATION OF ALL SUBGRADE TESTS SHALL BE DETERMINED BY

#### **B6 - BASE MATERIAL**

B6.1 BASE MATERIAL SHALL CONFORM TO ITEM 247 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, "FLEXIBLE BASE". THE BASE MATERIAL SHALL BE TYPE A GRADE 4, OR AS APPROVED BY THE COUNTY ENGINEER. GRADE 4 MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF

TABLE B6.1 BELOW;	
Master gradation sieve size	Cumulative % Retained
2 1/2"	-
1 ¾"	0
7/8"	10% - 35%
3/8"	30% - 65%
#4	45% - 75%
#40	70% - 90%
#200	87% - 95%

B6.2 EACH LAYER OF BASE COURSE SHALL BE TESTED FOR IN-PLACE DRY DENSITY AND MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF

B6.3 THE BASE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A MINIMUM OF 100% OF THE MAXIMUM (PROCTOR) DRY DENSITY OR AS APPROVED BY THE COUNTY ENGINEER UPON RECOMMENDATION BY THE TESTING LABORATORY. THE MAXIMUM LIFT SHALL NOT EXCEED SIX INCHES. THE BASE MUST BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF THE TEST RESULTS FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL. PRIOR TO THE PLACEMENT OF THE FIRST LIFT OF BASE, THE STOCKPILE SHALL BE TESTED FOR THE SPECIFICATIONS FOUND IN ITEM 247 TABLE 1 AND THE RESULT FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL.

#### **B7-BITUMINOUS PAVEMENT**

- B7.1 URBAN ROADS REQUIRE A MINIMUM 2 INCH WEARING SURFACE OF HMAC TYPE D. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT AND THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.
- B7.2 IF PROVIDING MIXTURE TYPE C OR D, USE PERFORMANCE GRADE (PG) BINDER 70-22. PROVIDE PG BINDER THAT DOES NOT CONTAIN RECYCLED ENGINE OIL BOTTOMS (REOBS) OR POLY PHOSPHORIC ACID (PPA). RECYCLED ASPHALT PAVEMENT (RAP) IS NOT PERMITTED FOR USE AS A COMPONENT OF THE HMACP. HE CONTRACTOR IS ALSO NOT PERMITTED THE USÉ RECYCLED ASPHALT SHINGLES (RAS) ÁS A COMPONENT OF THE HMACP.
- B7.3 IF PROVIDING MIXTURE TYPE B, USE PG BINDER 64-22. PROVIDE PG BINDERS THAT DO NOT CONTAIN REOBS OR PPA. FOR SUBSURFACE COURSE TYPE B, THE USE OF TWENTY PERCENT (20%) RAP IS PERMITTED IN THE MIX DESIGN. THE CONTRACTOR IS NOT PERMITTED TO USE RAS AS A COMPONENT OF THE HMACP.
- B7.4 TARGET LABORATORY MOLDED DENSITY IS 96.5% FOR ALL MIXTURES WITHOUT RAP AND WHEN USING A TEXAS GYRATORY COMPACTOR (TGC) FOR DESIGNING THE MIXTURE. WHEN USING SUPERPAVE GYRATORY COMPACTOR (SGC) TO DESIGN MIXTURES, SUBMIT THE SGC MIX DESIGN TO THE ENGINEER FOR

B7.5 ALL MIXTURES MUST MEET THE HAMBURG REQUIREMENT AS STATED IN THE TABLE BELOW

High-Temperature Binder Grade Test Method	Hamburg Wheel Test Requirements*	
	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F	
PG 64 or lower	Tex-242-F	7,000
PG 70	Tex-242-F	15,000
PG 76 or higher	Tex-242-F	20,000

\* The County Engineer may accept Hamburg Wheel test results for production and placement if no more than 1of the 5 most recent tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

B7.6 SUBMIT ANY PROPOSED ADJUSTMENTS OR CHANGES TO A JOB MIX FORMULA TO THE COUNTY ENGINEER BEFORE PRODUCTION OF THE NEW JOB MIX

B7.7 UNLESS OTHERWISE APPROVED, PROVIDE TYPE B MIXTURES THAT HAVE NO LESS THAN 4.5% ASPHALT BINDER, AND TY C AND D MIXTURES WITH NO LESS

- B7.8 FOR MIXTURE DESIGN VERIFICATION, PROVIDE THE ENGINEER WITH TWO 5-GALLON BUCKETS OF EACH AGGREGATE STOCKPILE TO BE USED ON THE PROJECT AND THREE GALLONS OF EACH PG BINDER TO BE USED ON THE PROJECT. ALSO PROVIDE SUFFICIENT QUANTITIES OF ANY OTHER ADDITIVES THAT WILL BE JSED IN THE HMA MIXTURE. THIS MUST BE DONE PRIOR TO APPROVAL OF THE MIX DESIGN, UNLESS ALREADY PERFORMED WITHIN A ONE-YEAR TIME PERIOD.
- B7.9 PRIOR TO ALLOWING PRODUCTION OF THE TRIAL BATCH, THE ENGINEER WILL USE THE MATERIALS PROVIDED BY THE CONTRACTOR TO PERFORM THE FOLLOWING TESTS TO VERIFY THE HMA MIXTURE DESIGN.
- INDIRECT TENSILE TEST IN ACCORDANCE WITH TEX-226-F
- HAMBURG WHEEL TEST IN ACCORDANCE WITH TEX-242-F OVERLAY TEST IN ACCORDANCE WITH TEX-248-F
- CANTABRO TEST IN ACCORDANCE WITH TEX-245-F

FOR MIXTURES DESIGNED WITH A TEXAS GYRATORY COMPACTOR (TGC), THE ENGINEER MAY REQUIRE THAT THE TARGET LABORATORY MOLDED DENSITY BE RAISED TO NO MORE THAN 97.5% OR MAY LOWER THE DESIGN NUMBER OF GYRATIONS TO NO LESS THAN 35 FOR MIXTURES DESIGNED WITH AN SGC IF ANY OF THE FOLLOWING

- THE INDIRECT TENSII E TEST RESULTS IN A VALUE GREATER THAN 200 PSI
- THE HAMBURG WHEEL TEST RESULTS IN A VALUE LESS THAN 3.0 MM
- 4. THE CANTABRO TEST RESULTS IN A VALUE OF MORE THAN 20% LOSS

IN LIEU OF, OR IN ADDITION TO EVALUATING THE MIXTURE DESIGN PRIOR TO ALLOWING A TRIAL BATCH TO BE PRODUCED, THE ENGINEER MAY ALSO EVALUATE THE MIXTURE PRODUCED DURING THE TRIAL BATCH FOR COMPLIANCE WITH THE 4 TESTS LISTED ABOVE.

- B7.10 CONTRACTOR'S QUALITY CONTROL (CQC) TEST REPORTS SHALL BE SUBMITTED TO THE COUNTY ENGINEER ON A DAILY BASIS. AS A MINIMUM, DAILY CQC TESTING ON THE PRODUCED MIX SHALL INCLUDE: SIEVE ANALYSIS TEX-200-E, ASPHALT CONTENT TEX-236-E, HVEEM STABILITY TEX-208-E, LABORATORY COMPACTED DENSITY TEX-207-F, AND MAXIMUM SPECIFIC GRAVITY TEX-227-F. THE NUMBER AND LOCATION OF ALL HMAC TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER WITH A MINIMUM OF THREE, 6-INCH DIAMETER FIELD CORES SECURED AND TESTED BY THE CONTRACTOR FROM EACH DAY'S PAVING. EACH HMAC COURSE SHALL BE TESTED FOR IN-PLACE DENSITY, BITUMINOUS CONTENT AND AGGREGATE GRADATION, AND SHALL BE MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL HMAC TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.
- B7.11 RURAL ROADS MAY USE EITHER THE SPECIFICATIONS FOUND IN SECTION B7.1 OR A TWO-COURSE SURFACE IN ACCORDANCE WITH ITEM 316, TREATMENT WEARING SURFACE, OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE TYPE AND RATE OF ASPHALT AND AGGREGATE SHALL BE INDICATED ON THE PLANS AS A BASIS OF ESTIMATE AND SHALL BE DETERMINED AT THE PRECONSTRUCTION CONFERENCE. AGGREGATE USED IN THE MIX SHALL BE ON THE TXDOT QUALITY MONITORING SCHEDULE. AGGREGATE SHALL BE TYPE B GRADE 4. GRADATION TESTS SHALL BE REQUIRED FOR EACH 300 CUBIC YARDS OF MATERIAL PLACED WITH A MINIMUM OF TWO TESTS PER EACH GRADE PER EACH PROJECT. TEST RESULTS SHALL BE REVIEWED BY THE COUNTY ENGINEER PRIOR TO APPLICATION OF THE MATERIAL.

B8.1 IN LIEU OF BITUMINOUS PAVEMENT, PORTLAND CEMENT CONCRETE PAVEMENT MAY BE USED. IN SUCH CASES, THE PAVEMENT THICKNESS SHALL BE A MINIMUM OF 9 INCHES OF CONCRETE, AND SHALL BE JOINTED AND REINFORCED IN ACCORDANCE WITH THE DETAIL INCLUDED IN APPENDIX I. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT. THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.

# **B9 - CONCRETE - GENERAL**

**B8 - CONCRETE PAVEMENT** 

- B9.1 UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 421 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND BE PLACED IN ACCORDANCE WITH THE APPLICABLE ITEM.
- B9.2 ALL CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH. ONE SET OF THREE CONCRETE TEST CYLINDERS SHALL BE MOLDED FOR EVERY 50 CUBIC YARDS OF CONCRETE PLACED FOR EACH CLASS OF CONCRETE PER DAY, OR AT ANY OTHER INTERVAL AS DETERMINED BY THE COUNTY ENGINEER. A SLUMP TEST SHALL BE REQUIRED WITH EACH SET OF TEST CYLINDERS. ONE CYLINDER SHALL BE TESTED FOR COMPRESSIVE STRENGTH AT AN AGE OF SEVEN DAYS AND THE REMAINING TWO CYLINDERS SHALL BE TESTED AT 28 DAYS OF AGE.

PROJECT NO: 1399-11878 DESIGNED BY: CLO

DRAWN BY: CLO CHECKED BY: CLO

ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.



#### TCEQ WPAP NOTES:

- 1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
  - THE NAME OF THE APPROVED PROJECT;
  - THE ACTIVITY START DATE; AND
     THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
- 2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
- 3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER
- 4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
- 5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- 6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
- 7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN TCEQ-0592 (REV. JULY 15, 2015) PAGE 2 OF 2 WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
- 8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
- 9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
- 10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH
- DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

  11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
  - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
     THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE
  - ON A PORTION OF THE SITE; AND
     THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
- A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
- B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
- C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

PROJECT NO: 1399-11878

DESIGNED BY: CLO

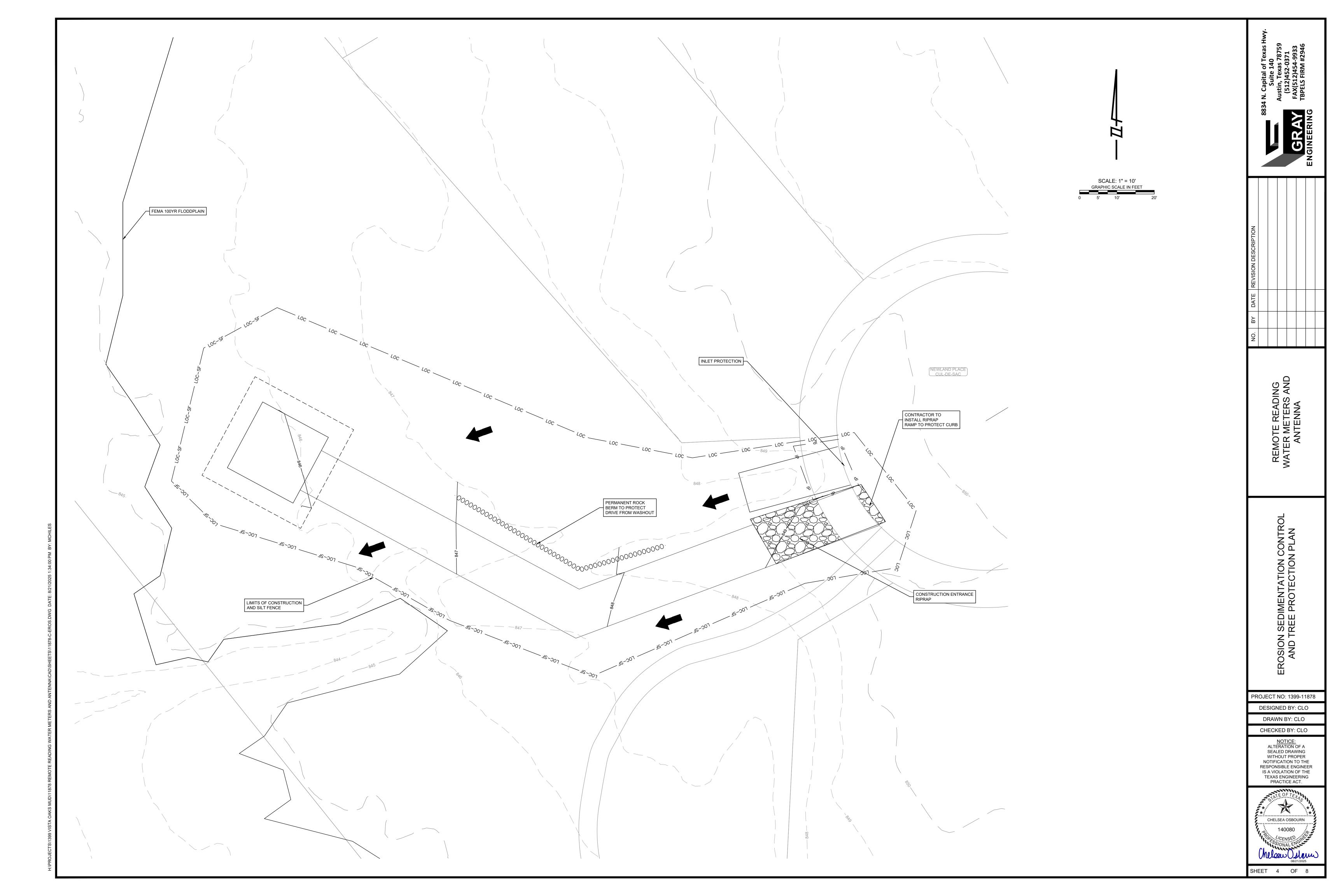
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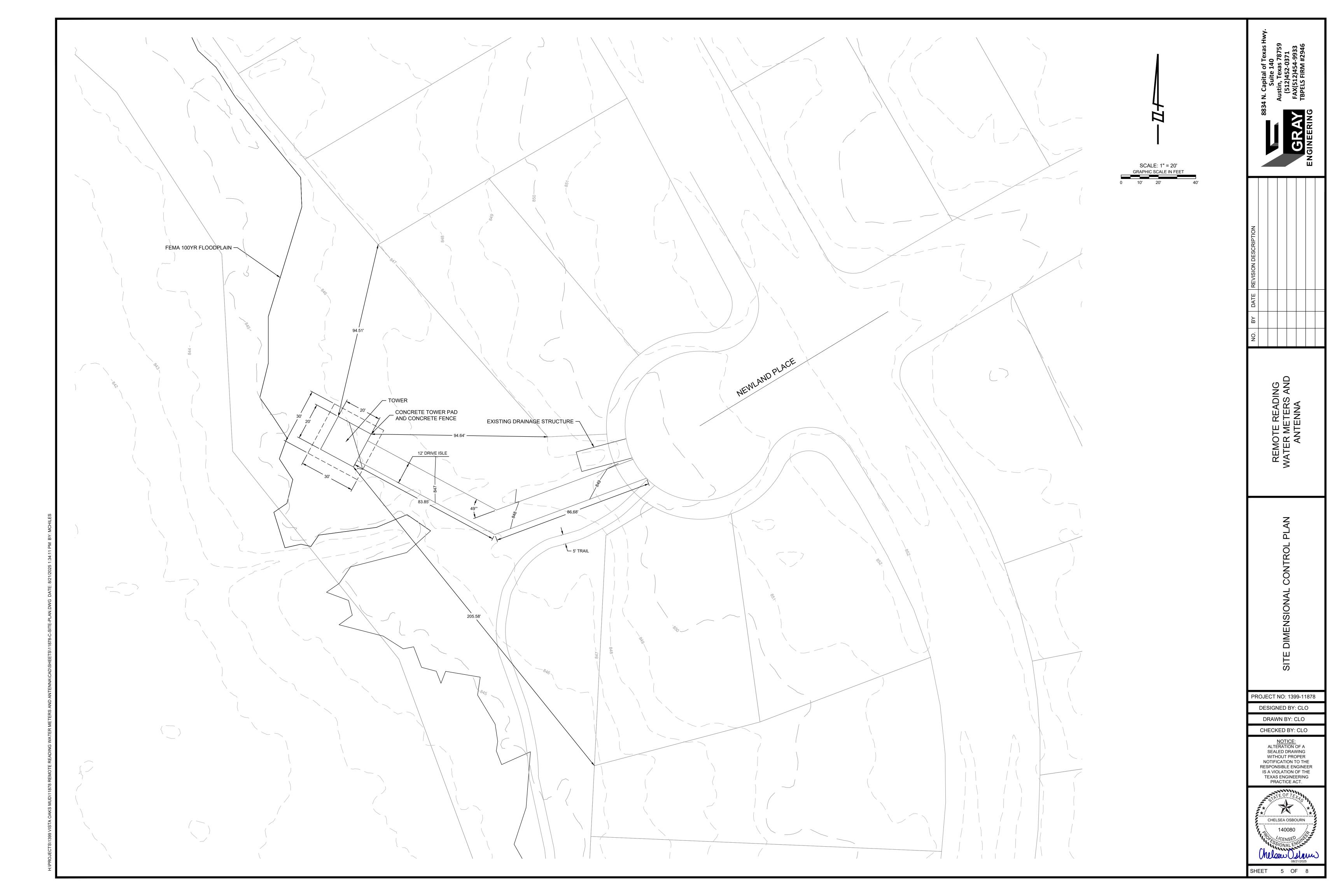
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NOTICE:
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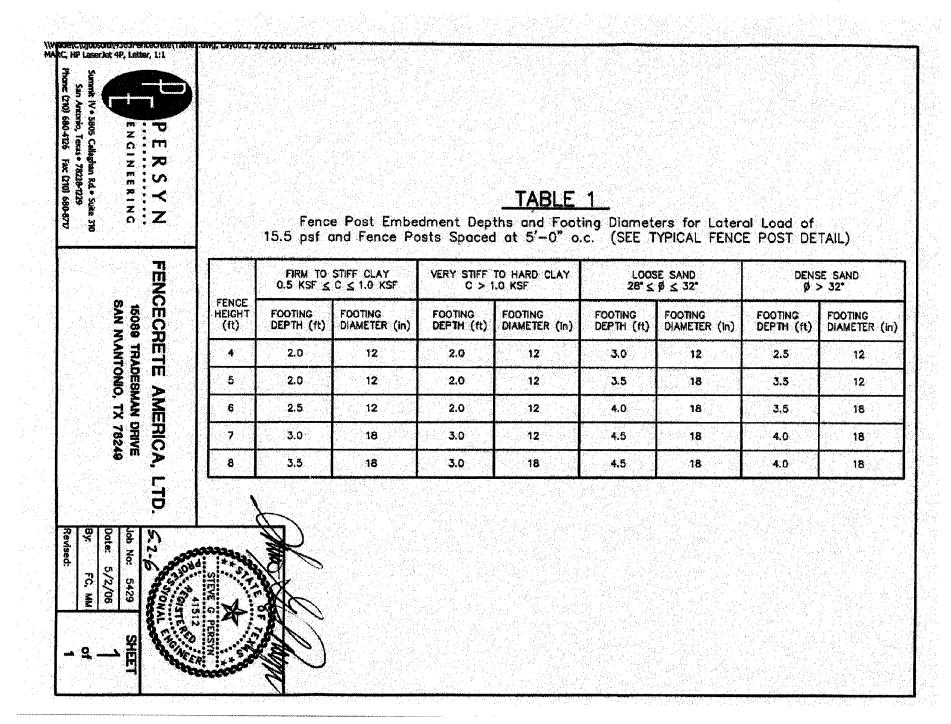
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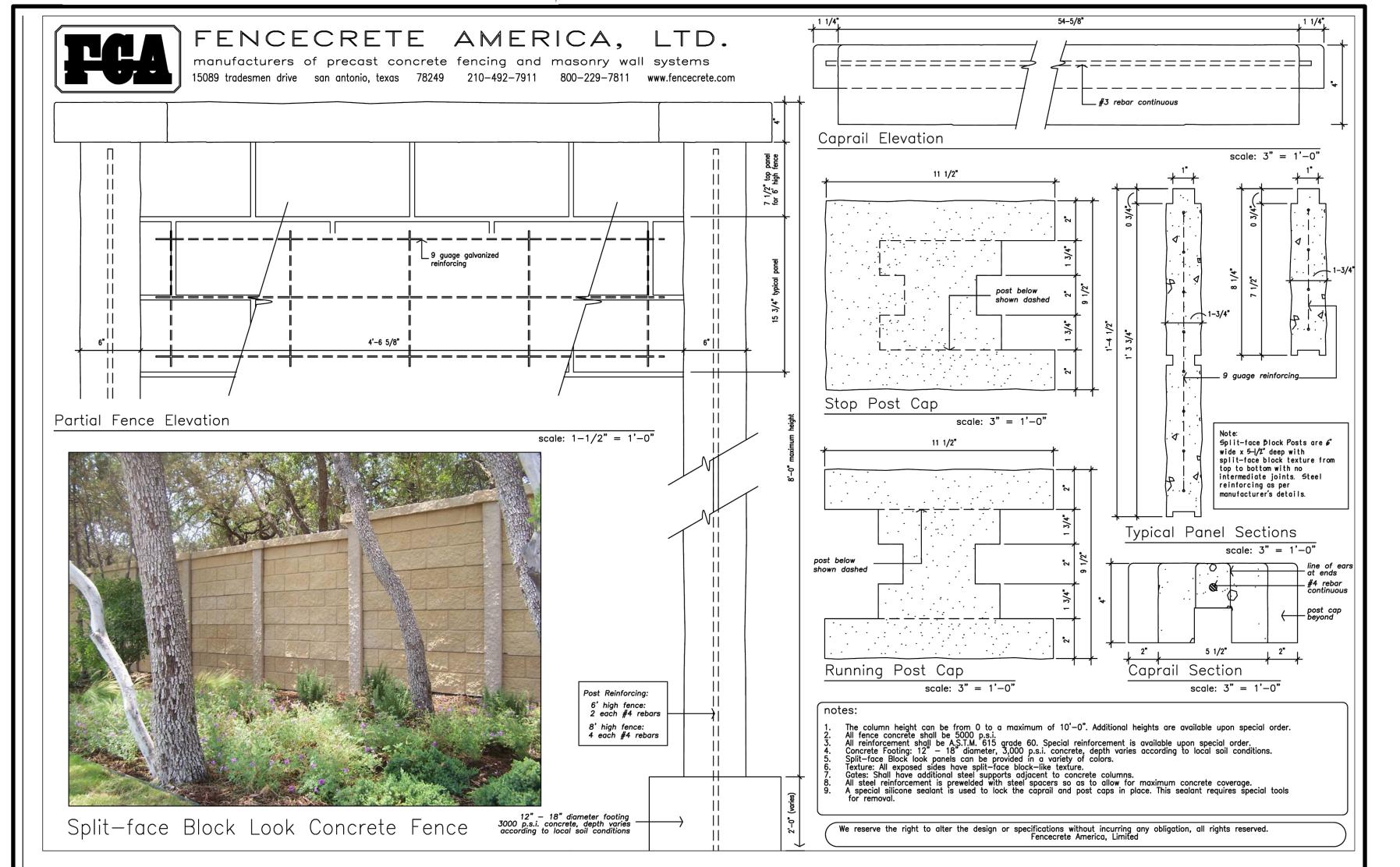


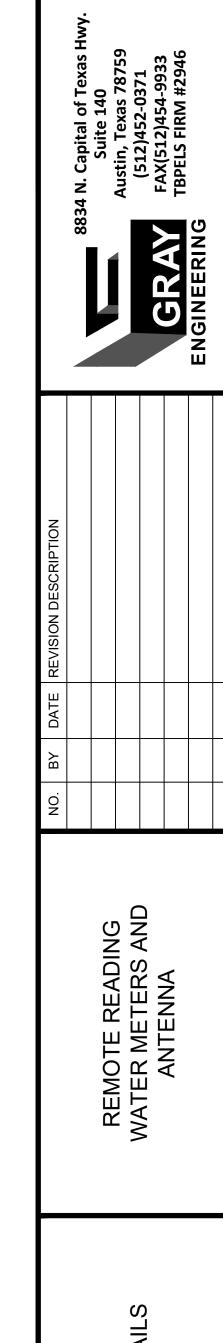




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EROSION CONTROL DETA

PROJECT NO: 1399-11878

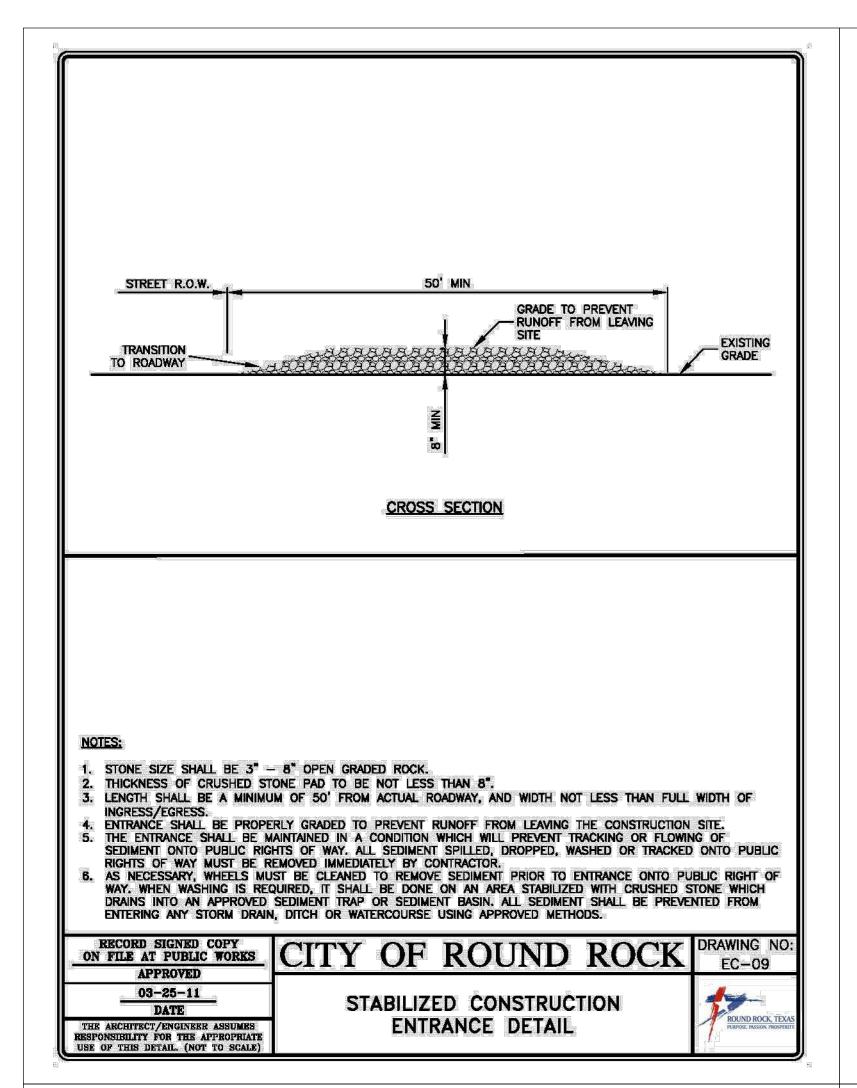
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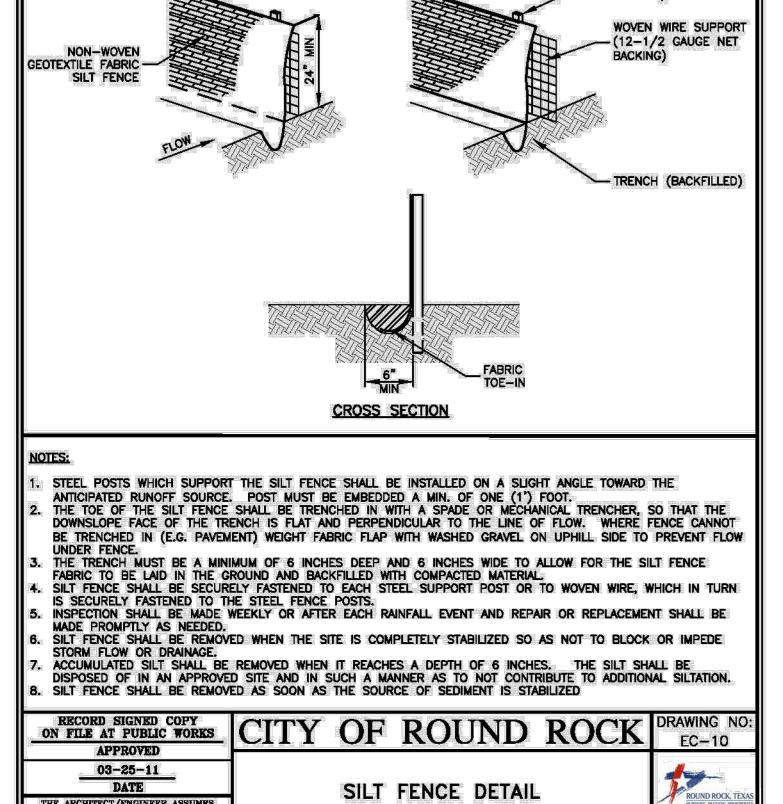
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SHEET 7 OF 8





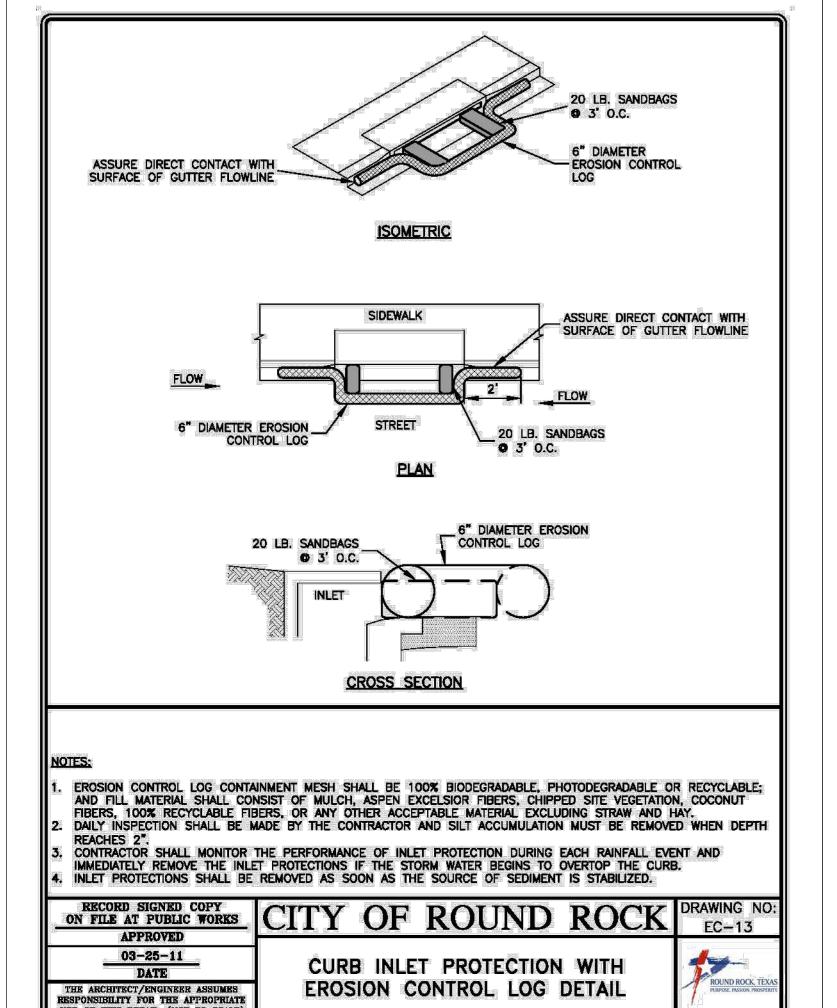
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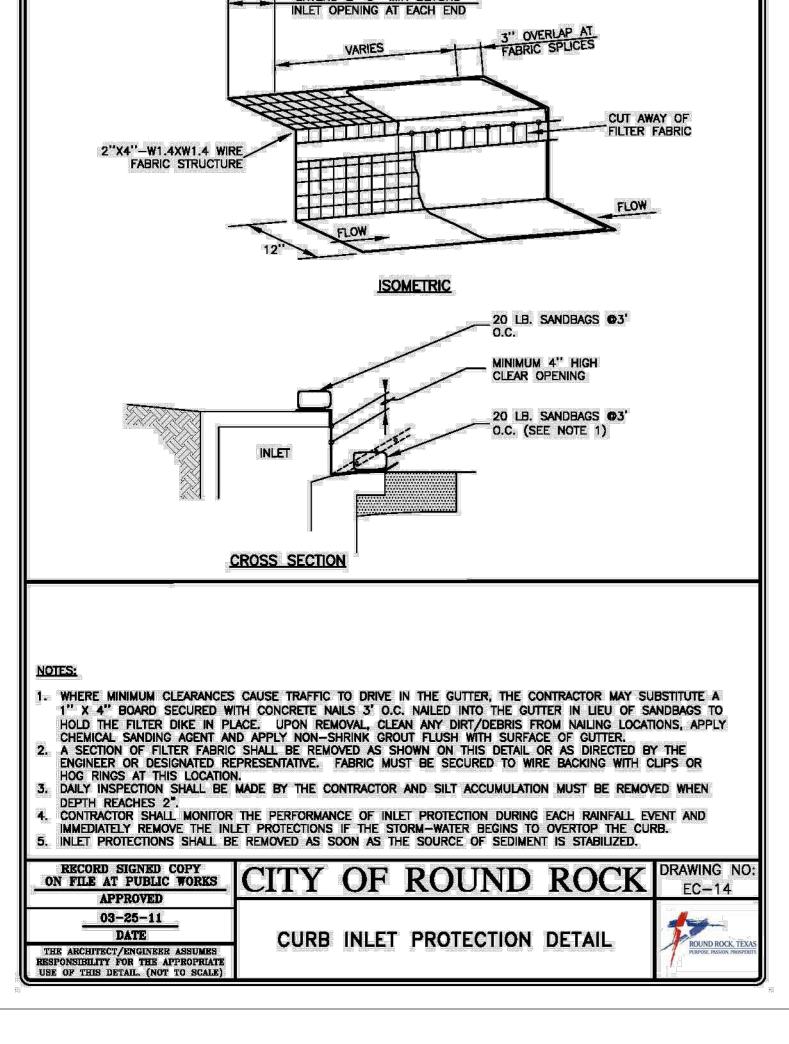
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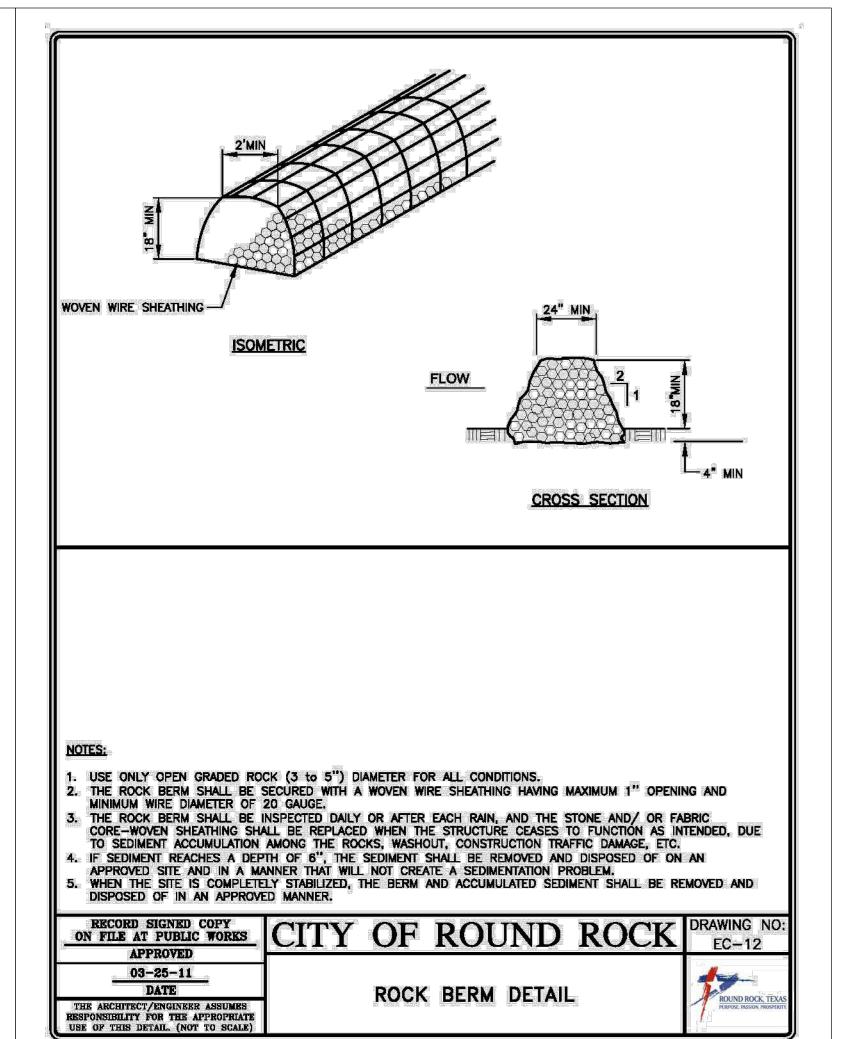
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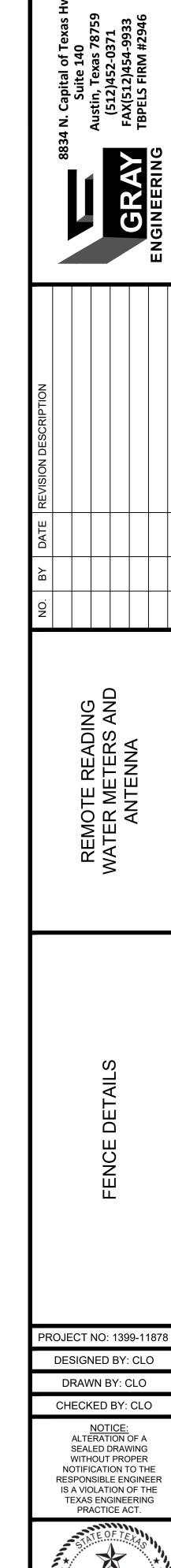
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SHEET 8 OF 8