DDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626	EB STEGERBIZZELL.COM	TEXAS REGISTERED ENGINEERING FIRM F-181	Job Number: 22223-Phase 10
TEGER  BIZZELL		SERVICES >> ENGINEERS >> PLANNERS	For Ronald Reagan Blvd Bike Lane Expansion In the City of Georgetown Williamson County, Texas
PHONE 512.930.9412	FAX 512.930.9416	> > SURVEYORS	Contributing Zone Plan Exception

**Contributing Zone Plan Exception** 

For

# **Ronald Reagan Blvd Bike Lane Expansion**

In

City of Georgetown

Williamson County, Texas

Job Number: 22223-Phase 10



My



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# **Contributing Zone Exception Request Checklist**

- Edwards Aquifer Application Cover Page (TCEQ-20705)
- Contributing Zone Exception Request Form (TCEQ-10262)

Attachment A - Road Map Attachment B - USGS Quadrangle Map Attachment C - Project Description Attachment D - Nature of Exception Attachment E - Equivalent Water Quality Protection

- Storm Water Pollution Prevention Plan (SWPPP), if necessary

#### -OR-

- Temporary Stormwater Section (TCEQ-0602), if necessary
- Agent Authorization Form (TCEQ-0599), if application submitted by agent
- Application Fee Form (TCEQ-0574)
- Check Payable to the "Texas Commission on Environmental Quality"
- Core Data Form (TCEQ-10400)

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# Texas Commission on Environmental Quality Edwards Aquifer Application Cover Page

#### **Our Review of Your Application**

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

#### **Administrative Review**

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

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

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

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

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

#### **Technical Review**

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

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

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

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

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

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

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

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

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

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

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

1. Regulated Entity Name: Ronald Reagan Blvd Bike Lane Expansion					2. Regulated Entity No.: 111665238			
3. Customer Name: PR South, Inc.			2.		4. Customer No.: 605816313		5313	
5. Project Type: (Please circle/check one)	New		Modif	ication	Extension Exc		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Resider	ntial	Non-r	esidential	8. Site		e (acres):	1.39
9. Application Fee:	\$500		10. Permanent H		BMP(s):		VFS	
11. SCS (Linear Ft.):         N/A         12. AST/UST (2)		ST/UST (N	o. Tar	. Tanks): N/A				
13. County:	William	ison	14. W	atershed:	shed:		Cowan 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 Authority Barton Springs/ Edwards Aquifer Hays Trinity Plum Creek	Barton Springs/ Edwards Aquifer	NA			
City(ies) Jurisdiction	Austin Buda Dripping Springs Kyle Mountain City San Marcos Wimberley Woodcreek	Austin Bee Cave Pflugerville Rollingwood Round Rock Sunset Valley West Lake Hills	Austin Cedar Park Florence _X Georgetown Jerrell Leander Liberty Hill Pflugerville Round Rock			

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

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

 Bryan E. Moore, P.E.

 Print Name of Customer/Authorized Agent

 Image: Market Strength of Customer/Authorized Agent

 O7/31/2023

 Date

**FOR TCEQ INTERNAL USE ONLY**						
Date(s)Reviewed:	Date(s)Reviewed: Date Administratively Complete:					
Received From:		Correct N	Number of Copies:			
Received By:		Distribut	ion Date:			
EAPP File Number:		Complex:				
Admin. Review(s) (No.):		No. AR Rounds:				
Delinquent Fees (Y/N):		Review T	ime 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: Signed (Y/N): Less than 90 days old (Y/N):				
Core Data Form Incomplete Nos.:						

# **Contributing Zone Exception Request** Form

## **Texas Commission on Environmental Quality**

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), 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 **Contributing Zone Exception Request Form** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: PR South, Inc. / Bryan Moore, P.E.

Date: <u>07/31/2023</u>

Signature of Customer/Agent:

ENon

Regulated Entity Name: Ronald Reagan Blvd Bike Lane Expansion

# **Project Information**

- 1. County: Williamson
- 2. Stream Basin: Cowan Creek
- 3. Groundwater Conservation District (if applicable): n/a
- 4. Customer (Applicant):

Contact Person: Joe OwenEntity: PR South, Inc.Mailing Address: 502 Goodnight DrCity, State: Georgetown, TXZTelephone: 972-866-0300FEmail Address: joe@owenholdings.com

Zip: <u>78628</u> Fax: <u>n/a</u>

TCEQ-10262 (Rev. 03-13-15)

5. Agent/Representative (If any):

Contact Person: <u>Bryan Moore, P.E.</u> Entity: <u>Steger Bizzell</u> Mailing Address: <u>1978 S Austin Ave</u> City, State: <u>Georgetown, TX</u> Telephone: <u>512-930-9412</u> Email Address: <u>bmoore@stegerbizzell.com</u>

Zip: <u>78626</u> Fax: <u>n/a</u>

6. Project Location

This project is inside the city limits of \_\_\_\_\_.

- This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of <u>Georgetown</u>.
- This project is not located within any city limits or ETJ.
- 7. The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

FROM AUSTIN: TRAVELLING NORTH ON I-35, TAKE EXIT 262 TO WILLIAMS DRIVE. FOLLOW WILLIAMS DRIVE FOR APPROXIMATELY 11 MILES. THE SITE IS LOCATED ON THE LEFT AT THE INTERSECTION OF R.M. 2338 AND RONALD REAGAN BOULEVARD.

- 8. Attachment A Road Map. A road map showing directions to and location of the project site is attached. The map clearly shows the boundary of the project site.
- 9. Attachment B USGS Quadrangle Map. A copy of the USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) should clearly show:

Project site boundaries.
 USGS Quadrangle Name(s).

- 10. Attachment C Project Narrative. A detailed narrative description of the proposed project is provided at the end of this form. The project description is consistent throughout the application and contains, at a minimum, the following details:
  - Area of the site
     Offsite areas
     Impervious cover
     Permanent BMP(s)
     Proposed site use
     Site history
     Previous development
     Area(s) to be demolished
- 11. Existing project site conditions are noted below:

Existing commercial site Existing industrial site Existing residential site

 $\boxtimes$  Existing paved and/or unpaved roads

Undeveloped (Cleared)

Undeveloped (Undisturbed/Not cleared)

- Other:
- 12. Attachment D Nature Of Exception. A narrative description of the nature of each exception requested is attached. All provisions of 30 TAC §213 Subchapter B for which an exception is being requested have been identified in the description.
- 13. Attachment E Equivalent Water Quality Protection. Documentation demonstrating equivalent water quality protection for surface streams which enter the Edwards Aquifer is attached.

# Administrative Information

- 14. 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.
- 15. The applicant understands that prior approval under this section must be obtained from the executive director for the exception to be authorized.





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#### Attachment C – Project Narrative

This Contributing Zone Plan (CZP) application is for the expansion of the West Bound Access Road along Ronald Reagan Blvd located within the Edwards Aquifer Contributing Zone. The Ronald Reagan ROW is currently developed. No demolition activities will be required as a part of the project.

Ronald Reagan Frontage Road was previously approved by TCEQ with the use of Vegetative Filter Strips. 0.15 acres of impervious cover will be added to Ronald Reagan Frontage and will be treated by Vegetative Filter Strips as shown on the Future West Bound Access Road Plan sheet on the Construction plans attached. The Proposed impervious cover for Ronald Reagan Blvd Bike Lane Expansion is approximately 0.94 acres and 67.63% of the limits of this project.

The project site is commonly referred to as the northside of Parmer Ranch located in Georgetown, Texas. It is comprised of the 250.58 acres of land north of Ronald Reagan Boulevard and west of RM 2338 shown on the previously approved contributing zone site plan, approved on April 21, 2023. Roadway expansion to include a bike lane is associated with Parmer Ranch Northside Development Williamson County Comments after Contributing Zone Plan for Reese Way was approved (Edwards Aquifer Protection Program ID No. 11003488). Construction of the bike lane expansion is within the scope of the Reese Way Project. The limits of construction for *Ronald Reagan Blvd Bike Lane Expansion*, shown on the CZP Site Plan, encompass approximately 1.39 acres. The map in the inset below indicates the limits of the contributing drainage basin to each pond. The use and type of development of Phase 16 is unknown and has been assumed will provide its own on-site permanent BMPs once developed.

The project and CZP application will include grading, drainage, paving and associated improvements for the development.



#### Attachment D – Nature of Exception

This Contributing Zone Exception Request is for the development of the West Bound Access Road of Ronald Reagan Blvd located within the Edwards Aquifer Contributing Zone. The site is currently developed right of way, and no demolition activities will be required as a part of the project.

Ronald Reagan Frontage Road was previously approved by TCEQ with the use of Vegetative Filter Strips. 0.15 acres of impervious cover will be added to Ronald Reagan Frontage and will be treated by existing Vegetative Filter Strips as shown on the Future West Bound Access Road Plan sheet on the Construction plans attached. The Future West Bound Access Road is being widened by 10' at its max for a total road width of 35' for a bike lane. The Proposed impervious cover for Parmer Ranch -Area West of R.M. 2338 is approximately 0.94 acres and 67.63% of the limits of this project.

#### Attachment E - Documentation of Equivalent Water Quality Protection

The increase in impervious cover on the site is 0.15 acres. The equivalent water quality protection is the existing Vegetative Filter Strip. The site will receive sufficient water quality protection as the area is being treated for 85% TSS removal and the width of the roadway is 35' and does not exceed the 72' maximum as stated in Section 3.4.6 of RG-348.

# **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: PR South, Inc. / Steger Bizzell, Bryan Moore, P.E.

Date: <u>July 31, 2023</u>

Signature of Customer/Agent:

F Non

Regulated Entity Name: Ronald Reagan Blvd Bike Lane Expansion

# **Project Information**

# Potential Sources of Contamination

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

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

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

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

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

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

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

# Sequence of Construction

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

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

- For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: <u>Cowan Creek</u>

# Temporary Best Management Practices (TBMPs)

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

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

<ul> <li>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.</li> <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> <li>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</li> </ul>
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 site.</li> </ul>
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.
Attachment G - Drainage Area Map. A drainage area map supporting the following requirements is attached:
<ul> <li>For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.</li> <li>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.</li> <li>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.</li> <li>There are no areas greater than 10 acres within a common drainage area that will be used in combination with other erosion and sediment controls within each 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</li> </ul>

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

- 11. Attachment H Temporary Sediment Pond(s) Plans and Calculations. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
  - 🛛 N/A
- 12. Attachment I Inspection and Maintenance for BMPs. A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
- 13. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
- 14. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
- 15. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
- 16. 🖂 Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

# Soil Stabilization Practices

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

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

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

# Administrative Information

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

# Attachment A – Spill Response Actions

Because fuels and hazardous substances will be provided by an off-site facility, no on-site containment procedures are provided for in this CZP.

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

# Education

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

# **General Measures**

- 1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- 2. Store hazardous materials and wastes in covered containers and protect from vandalism.
- 3. Place a stockpile of spill cleanup materials where it will be readily accessible.
- 4. Train employees in spill prevention and cleanup.
- 5. Designate responsible individuals to oversee and enforce control measures.
- 6. Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn't compromise clean-up activities.
- 7. Do not bury or wash spills with water.
- 8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- 9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- 10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- 11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

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

# Cleanup

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

# **Minor Spills**

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

# Semi-Significant Spills

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

Spills should be cleaned up immediately:

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

# Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

 Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

- 2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- 3. Notification should first be made by telephone and followed up with a written report.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
- 5. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: <a href="http://www.tceq.texas.gov/response/">http://www.tceq.texas.gov/response/</a>

# Vehicle and Equipment Maintenance

- 1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.
- 2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately.
- 3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- 4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- 5. Place drip pans or absorbent materials under paving equipment when not in use.
- 6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- 7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- 8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- 9. Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

# Vehicle and Equipment Fueling

- 1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.
- 2. Discourage "topping off" of fuel tanks.
- 3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

If a spill should occur, the person responsible for the spill should contact the TCEQ at (512) 339-2929 or call 911. Soil contaminated by spills that occur on-site will be removed and disposed at an approved disposal site.

# Attachment B – Potential Sources of Contamination

- Hydraulic and diesel
- Portable toilet systems (Sanitary Waste)
- Trash from construction workers
- Paints, Paint Solvents, glues, concrete and other building materials
- Plant fertilizers and Pesticides
- Inadequate maintenance of temporary water pollution abatement measures
- Stock piles or spoils of materials

# Attachment C – Sequence of Major Activities

The following sequence of activities is suggested. The sequence of construction will take place in one phase in Ronald Reagan Blvd Bike Lane Expansion. The actual sequence may vary slightly depending on the contractor or weather conditions.

- 1. Construction activities will commence with the installation of the required silt fence and erosion and sedimentation control measures.
- Excavation will take place where the roads and ditches will be situated. Spoils of this material may be placed at a location on the project site as directed by the contractor or hauled off-site. These spoils and any other loose granular material will be enclosed by a silt fence.
- 3. No utility improvements are associated with this project.
- 4. Grading on the site will consist of the placement and compaction of base or select fill material under and/or around the roads and ditches and excavation and fill for the proposed roads and ditches.
- 5. Paving of the site will consist of the roads.
- 6. After the roads are installed, finish grading around the site will be completed.
- 7. Subsequent to the construction of the civil infrastructure disturbed areas will be hydromulched or seeded.
- 8. Once vegetation is established on the site, Temporary BMPs will be removed as allowed by the engineer.

Temporary BMPs will include installing silt fences.

All surface runoff originating up-gradient or on site will be contained within the proposed silt fence. The silt fence will trap most pollutants and prevent them from entering off-site surface streams, sensitive features, or the aquifer.

# Attachment E – Request to Temporarily Seal a Feature

There will be no temporary sealing of naturally occurring sensitive features on the site.

# Attachment F – Structural Practices

Construction will also be phased to minimize areas of unstabilized disturbance. Silt fences will be used to limit the runoff discharge of sediments from exposed areas on the site during construction. Drainage off the site is typically in a sheet flow or shallow concentrated flow condition.

# <u>Attachment G – Drainage Area Map</u>

The limits of construction for Ronald Reagan Blvd Bike Lane Expansion are 1.39 acres. A drainage map can be provided if required. The total increase in impervious cover within the project area is 0.15 acres.

# Attachment I – Inspection and Maintenance for BMPs

## Silt Fence

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

The following sample forms should be utilized to document the inspection and maintenance of the proposed temporary BMPs as described above. This form shall be kept on site with the WPAP until the project is completed.

# Temporary BMP Logs – Silt Fence

Date	Date of Last Inspection	Inspection Performed By	Title	Company	Status of BMP(s)	Corrective Action Required (if any)	Date Corrective Action Completed

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

Vehicular traffic should be limited to areas of the project site where construction will take place. The contractor should endeavor to preserve existing vegetation as much as practicable to reduce erosion and lower the cost associated with stabilization. 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.

All disturbed areas shall be stabilized as described below.

Except as provided for below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

- A. Where the initiation of stabilization measures by the 14<sup>th</sup> day after construction activity temporarily or permanently ceases is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable.
- B. Where construction activity on a portion of the site has temporarily ceased, and earthdisturbing activities will be resumed with 21 days, temporary stabilization measures do not have to be initiated on that portion of the site.
- C. In areas experiencing drought, where the initiation of stabilization measures by the 14<sup>th</sup> day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Stabilization measures as described as follows:

All disturbed grass areas should be planted in drought resistant species normally grown as permanent lawns, such as Zoysia, Bermuda and Buffalo. Grass areas may be sodded, plugged, sprigged or seeded except that solid sod shall be used in swales or other areas subject to erosion. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of this section. This Page Left Intentionally Blank

	Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999
1_ U. TERI	20N EVERTSON
	Print Name
County	ENGINEER, WILLIAMSON COUNTY, TX
/	
OT	Williamson County
	Corporation/Partnership/Entity Name
have authorized	Mr. Bryan E. Moore, P.E. Print Name of Agent/Engineer
of	Steger Bizzell
	Print Name of Firm

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

I also understand that:

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

SIGNATURE PAGE:



**Applicant's Signature** 

THE STATE OF TEXAS §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared <u>James T. Evertson</u> 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 <u>5</u> day of <u>April</u>, <u>2023</u>.

Jabatha Chaney NOTARY PUBLIC

Tabatha chaney Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 12/14/2026



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

	Joe Owen	
	Print Name	······································
	President	,
	Title - Owner/President/Other	
of	PR South, Inc. Corporation/Partnership/Entity Name	,
have authorized	Bryan Moore Print Name of Agent/Engineer	
of	Steger & Bizzell Engineering Print Name of Firm	

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

I also understand that:

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

DocuSigned by: 412876CEFB574A1

Applicant's Signature

1/18/2023

Date

THE STATE OF \_\_\_\_\_\_§

County of \_\_\_\_\_\_§

BEFORE ME, the undersigned authority, on this day personally appeared <u>JOE OWEN</u> 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 <u>18TH</u> day of <u>JANUARY</u>, 2023.



Junifer Sparks
NOTARY PUBLIC
Jennifer J Sparks
Typed or Printed Name of Notary

MY COMMISSION EXPIRES:	N	22	2024	0
	2			

# **Application Fee Form**

<b>Texas Commission on Environmen</b>	Texas Commission on Environmental Quality						
Name of Proposed Regulated Entil	ty: <u>Ronald Reagan Blvd</u>	Bike Laneof R.M. 233	<u>8</u>				
Regulated Entity Location: George	town, TX						
Name of Customer: PR South, Inc.							
Contact Person: Joe Owen	Phon	e: <u>972-866-0300</u>					
Customer Reference Number (if is	sued):CN <u>605816313</u>						
Regulated Entity Reference Number	er (if issued):RN <u>11166</u>	<u>5238</u>					
Austin Regional Office (3373)							
Hays	Travis	⊠w	illiamson				
San Antonio Regional Office (3362	2)						
Bexar	Medina		valde				
	Kinney						
Application fees must be paid by c	heck certified check o	yr money order navah	le to the <b>Tevas</b>				
Commission on Environmental O	<b>Jality</b> Vour canceled c	heck will serve as you	r receint <b>This</b>				
form must be submitted with you	<b>r fee navment</b> This na	avment is heing suhmi	itted to:				
		an Antonio Regional Office					
Mailed to: ICEQ - Cashier		Overnight Delivery to: TCEQ - Cashier					
Revenues Section	1	12100 Park 35 Circle					
Mail Code 214	В	Building A, Brd Floor					
P.O. Box 13088	A	ustin, TX 78753					
Austin, TX 78711-3088	(5	512)239-0357					
Site Location (Check All That Appl	y):						
Recharge Zone	Contributing Zone	Transi	tion Zone				
Type of Plar	า	Size	Fee Due				
Water Pollution Abatement Plan, 0	Contributing Zone						
Plan: One Single Family Residentia	l Dwelling	n/a Acres	\$0				
Water Pollution Abatement Plan, G	Contributing Zone						
Plan: Multiple Single Family Reside	ential and Parks	n/a Acres	\$0				
Water Pollution Abatement Plan, (	Contributing Zone						
Plan: Non-residential		n/a Acres	\$0				
Sewage Collection System		n/a L.F.	\$0				
Lift Stations without sewer lines	n/a Acres	\$0					
Underground or Aboveground Sto	n/a Tanks	\$0					
Piping System(s)(only)	n/a Each	\$0					
Exception		1 Each	\$ 500				
Extension of Time		n/a Each	\$ O				
NE No							
	Data	. I.J. 21 2022					

# **Application Fee Schedule**

**Texas Commission on Environmental Quality** 

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

# Water Pollution Abatement Plans and Modifications

# Contributing Zone Plans and Modifications

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

# **Organized Sewage Collection Systems and Modifications**

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

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

Droject	Cost per Tank or	Minimum Fee-
Project	Piping System	waximum ree
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



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

# **SECTION I: General Information**

1. Reason fo	<b>1. Reason for Submission</b> (If other is checked please describe in space provided)										
New Permit, Registration or Authorization (Core Data Form should be submitted with the program application)											
2 Attachmo	i (Core Dat	a Form snould be submitted with	n the renew	val torr	n)			lication at	(a.)		
		Describe Any Allachments. (6	ex. Tille V A	opiicalio	on, wasi		isponer App	nication, et	<i>C.)</i>		
2 Customor		Number (if issued)	Follow this	link to a	ooroh	4 0	Dogulated	Entity D	oforono	o Numbou	(if issued)
J. Customer	Reference		for CN or F	N num	bers in	4. 1	Regulated		elerenc		(II Issued)
CN 6058	16313		<u>Central</u>	Registr	<u>~y**</u>	R	RN 11166	65238			
SECTION	N II: Cu	stomer Information									
5. Effective I	Date for Cu	stomer Information Updates (r	nm/dd/yyy	y)	7/31/2	2023					
6. Customer	Role (Propo	sed or Actual) – as it relates to the	Regulated E	<u>ntity</u> lis	ted on th	his forn	n. Please ch	neck only <u>o</u>	one of the	following:	
Owner	nal License	Operator     Responsible Party	⊠ 0 □ V	wner 8 oluntar	opera y Clean	itor nup Ap	oplicant	□Oth	ner:		
7. General C	ustomer Inf	ormation									
New Cus Change in **If "No Cha	tomer Legal Nam <b>nge" and S</b> o	Up e (Verifiable with the Texas Sec ection I is complete, skip to Se	date to Cus retary of St ection III –	stomer ate) <b>Regul</b>	Informa ated Er	ation <b>ntity l</b> i	nformatior	☐ Chan ☐ <u>No Cł</u> n.	ige in Re hange**	egulated E	ntity Ownership
8. Type of C	ustomer:	Corporation	l Ir	ndividu	al		□ So	le Proprie	etorship-	D.B.A	
City Gove	ernment	County Government	F	ederal	Govern	nment	🗌 Sta	ate Gover	rnment		
Other Go	vernment	General Partnership	ΣL	imited	Partner	ship	🗌 Otl	her:			
9. Customer	Legal Nam	<b>e</b> (If an individual, print last name fi	rst: ex: Doe,	John)	<u>lf r</u> be	new Ci elow	ustomer, en	nter previo	ous Custo	omer	End Date:
PR South,	, Inc.										
	502 Goo	odnight Dr									
10. Mailing											
Auuress.	City	Georgetown	State	ΤХ		ZIP	78628		z	(IP + 4	
11 Country	Mailing Info	rmation (if outside USA)			12 F-	Mail <i>I</i>	Adress /if	annlicable)			
N/A	maning into				ioe@	Dowe	enholdin	gs.com	<u> </u>		
13. Telephor	ne Number	14	1. Extensio	on or C	Code		1	5. Fax Nu	umber (/	if applicab	le)
(972)86	66-0300						(	)	-		
16. Federal	Fax ID (9 digits	17. TX State Franchise Ta	<b>x ID</b> (11 digi	ts)	18. DU	NS Nı	umber(if appl	licable) <b>1</b>	19. TX S	OS Filing	Number (if applicable)
85296046	2	32075249527						(	08037	05642	
20. Number	of Employe	es						21. Inde	epender	tly Owne	d and Operated?
<b>⊠</b> 0-20 [	21-100	101-250 251-500	🗌 501 ar	nd high	er				🛛 Yes	6	🗌 No

# **SECTION III: Regulated Entity Information**

<b>22. General Regulated Entity Information</b> (If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)					
New Regulated Entity	Update to Regulated Entity Name	Update to Regulated Entity Information	No Change** (See below)		
**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.					
23. Regulated Entity Name (name of the site where the regulated action is taking place)					
Ronald Reagan Blvd Bike Lane Expansion					



NOTE: CONTRACTOR IS TO FURNISH A SET OF CONSTRUCTION PLANS BACK TO THE ENGINEER AT THE END OF THE PROJECT WITH ALL DEVIATIONS NOTED IN RED INK ON THE PLAN SHEETS. CONTRACTOR SHALL NOT RECEIVE FINAL PAYMENT UNTIL COMPLETE "AS-BUILT" SET IS RETURNED TO ENGINEER.

# **CONSTRUCTION PLANS FOR** NORTHWEST WILLIAMSON CO. MUNICIPAL UTILITY DISTRICT NO.2 **REESE WAY** DRAINAGE, PAVING, & WATER SYSTEM IMPROVEMENTS CITY OF GEORGETOWN, WILLIAMSON COUNTY, TEXAS 2022-37-CON

he City of Georgetown:	Office of the Fire Marshal         Williamson County, Texas         3189 SE Inner Loop, Georgetown, Texas 78626         (512)943-3601 I         firemarshal@wilco.org
PLANNING AND ZONING COMMISSION Certificate of Approval	Plan Review Status <b>APPROVED</b> Submittal was reviewed for design conformity and general conformance to the fire code as adopted by Williamson County. It is the responsibility of the applicant to receive approval from all applicable authorities having jurisdiction (AHJs). The contractor is responsible for ensuring full compliance with applicable sections of the code and shall schedule any necessary inspections with the fire code official to verify conformance.
February 7, 2023IUMBER:2022-37-CONRTY OWNER:PR South, Inc – Joe OwenON:10128 Ronald Reagan BlvdDESCRIPTION:13.4 acres of land out of the Lewis P. Dyches survey, abstract no. 171,	Reviewed Bly: <u>Keeling Neves</u> , Assistant Fire Marshal Signature: <u>Keeling Neves</u> Date:
and the Charles H. Delaney survey, abstract no. 181 ST: Approval based on the findings that the request meets the City of Georgetown ordinances, rules and regulations identified in the Exhibits. Ever referenced request was <b>APPROVED</b> by the Georgetown Planning and Zoning ssion ("Commission") on February 7, 2023, by a vote of <u>9</u> in favor and <u>0</u> in tion with <u>0</u> abstaining.	Submitted By:
ission:	Bryan E. Moore, P.E.       Date       PARMER RANCH         Bryan E. Moore, P.E.       Date       PARMER RANCH         REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS       Date       PARMER CANCH         OWNER       AUSTIN, TEXAS       972-866-0300         JOE@OWENHO       JOE@OWENHO
s Perthuis,	Adam D. Boatigat 04/21/2023 For Williamson County Date Texas Land Survi TBPLS FIRM NO 3613 WILLIAMS GEORGETOWN,
vickey, iry	Chris S. Ulmann       6/7/2023       512-930-1600       CONTACT: KEN         Ken Heroy, M.U.D. Engineer       Date       Date       ENGINEE         Review limited to water, wastewater, and drainage and does       Date       ENGINEE         In approving these plans the district must rely on the adequacy of the design engineer.       CONTACT: KEN       ENGINEE
	BENCHMARKS: B.M. A COTTON SPINDLE THAT IS IN THE NORTHEAST EDGE OF PAVEMENT ELEV= 949.32' N=10,242,694.572 E=3,125,783.534 STEGER BIZZEL TBPLS FIRM NO 1978 S. AUSTIN , GEORGETOWN, OFFICE: 512-93i CONTACT: BRY
STEGER       BIZZ         1978 S. AUSTIN AVENUE       GEORGETOWN,         1978 S. AUSTIN AVENUE       GEORGETOWN,         1978 S. AUSTIN AVENUE       SEGISTERED ENGINEERING FIRM F-181         1978 S. AUSTIN AVENUE       SEGISTERED ENGINEERING FIRM F-181	There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.         TX 78626         WEB         Stepse

# Sheet List Table



# **OWNER / DEVELOPER**

PARMER RANCH PARTNERS, L.P. JOE OWEN - GENERAL PARTNER 6706 W COURTYARD, AUSTIN, TEXAS 78730 972-866-0300 JOE@OWENHOLDINGS.COM

# SURVEYOR

Texas Land Surveying, Inc. TBPLS FIRM NO. 10056200 3613 WILLIAMS DRIVE, STE. 903 GEORGETOWN, TEXAS 78628 512-930-1600 CONTACT: KENNETH CRIDER, R.P.L.S

# **ENGINEER/APPLICANT**



STEGER BIZZELL TBPLS FIRM NO. 10003700 1978 S. AUSTIN AVE GEORGETOWN, TEXAS 78626 OFFICE: 512-930-9412 CONTACT: BRYAN MOORE

Sheet	Sheet Title
Number	
01	COVER SHEET
02	GENERAL NOTES (1 OF 2)
03	GENERAL NOTES (2 OF 2)
04	PRELIMINARY PLAT (1 OF 3)
05	PRELIMINARY PLAT (2 OF 3)
06	PRELIMINARY PLAT (3 OF 3)
07	PHASING AND DEMOLITION PLAN
08	DEVELOPED DRAINAGE PLAN
09	EXISTING DRAINAGE PLAN
10	WATER QUALITY PLAN
11	INLET CALCULATIONS
12	EROSION AND SEDIMENTATION CONTROL PLAN (1 OF 2
13	EROSION AND SEDIMENTATION CONTROL PLAN (2 OF 2
14	<b>EROSION &amp; SEDIMENTATION DETAILS</b>
15	REESE WAY PLAN & PROFILE (1 OF 2)
16	REESE WAY PLAN & PROFILE (2 OF 2)
17	WEST BOUND ACCESS ROAD IMPROVEMENTS (1 OF 3)
18	WEST BOUND ACCESS ROAD IMPROVEMENTS (2 OF 3)
19	WEST BOUND ACCESS ROAD IMPROVEMENTS (3 OF 3)
20	STREET F PLAN & PROFILE
21	TRAFFIC CONTROL PLAN (1 OF 6)
22	TRAFFIC CONTROL PLAN (2 OF 6)
23	TRAFFIC CONTROL PLAN (3 OF 6)
24	TRAFFIC CONTROL PLAN (4 OF 6)
25	TRAFFIC CONTROL PLAN (5 OF 6)
26	TRAFFIC CONTROL PLAN (6 OF 6)
27	GF-(31)-19 METAL BEAM GUARD FENCE
28	GF (31) TR TL2-19
29	OVERALL STORMWATER PLAN
30	SS-A01 & LATERALS PLAN & PROFILE
31	SS-B01 & LATERALS PLAN & PROFILE
32	CULVERT RW PLAN PROFILE & CALCULATION
33	CULVERT D2 PLAN, PROFILE & CALCULATION
34	EXISTING CULVERT EXTENSION
35	SWALE B PLAN & PROFILE
36	B-101 SWALE PLAN & PROFILE
37	SETP-FW-15 (1 OF 3)
20	SETP-FW-15 (2 OF 3)
40	PAVING & DRAINAGE DETAILS (1 OF 3)
40	PAVING & DRAINAGE DETAILS (2 OF 3)
42	PAVING & DRAINAGE DETAILS (2 OF 3)
43	OVERALL WATER
44	12 IN WL P&P (BEGIN TO STA 11+00)
45	12 IN WL P&P (STA 11+00 TO END)
46	24 IN WL P&P (BEGIN TO 10+50)
47	24 IN WL P&P (10+50 TO 21+00)
48	24 IN WL P&P (21+00 TO 31+50)
49	24 IN WL P&P (31+50 TO END)
50	WATER DETAILS (1 OF 2)
51	WATER DETAILS (2 OF 2)
52	STRIPING AND SIGNAGE PLAN (1 OF 2)
53	STRIPING AND SIGNAGE PLAN (2 OF 2)
54	STRIPING & SIGNAGE DETAILS
55	INTERSECTION DETAILS

NORTHWEST WILLIAMSON CO.MUNICIPAL UTILITY DISTRICT NO.2: 2019-4-PP SEPTEMBER 3, 2019

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FUTURE WEST BOUND ACCESS ROAD

GUARDRAIL END TREATMENT DETAIL

Project Number: 22223-PHASE 10 1 OF 57

# SEQUENCE OF CONSTRUCTION

- 1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved construction plan 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. Prior to beginning construction, the Owner or his authorized representative, shall convene a Pre-Construction Conference between the City of Georgetown, Engineer, Contractor, County Engineer (if applicable), Texas Commission on Environmental Quality Field Office, and any other affected parties. Notify all such parties at least 48 hours prior to the time of the conference and 48 hours prior to beginning construction.
- The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Storm Water 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 plan.
- Rough grade the pond(s) at 100% proposed capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).
- Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Storm Water Pollution Prevention Plan (SWPPP) posted on the
- Begin site clearing/construction activities.
- Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.
- 8. Complete construction and start revegetation of the site and installation of landscaping.
- 9. Upon completion of the site construction and revegetation of a project site, a final inspection will be scheduled by the appropriate City Inspector.
- 10. After a final inspection has been conducted by the City Inspector and with approval from the City Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

#### ACCESSIBILITY NOTES

- Project shall be constructed in full compliance with the Texas Accessibility Standards (TAS) 2012
- Slopes in the direction of pedestrian travel shall not exceed 5% (1:20) or have a cross slope greater than 2% (1:48). This shall include routes that cross-vehicular ways including but not limited pedestrian/ vehicular ways such as street intersections.
- A. Exception: Per TAS 405.8 and 68.102 (1) grades at the new sidewalks parallel to the streets shall be equal to, or less than, the street grade. Should the new sidewalks exceed the street grade, and the new sidewalk grades exceed 5% in the direction of travel, ramps complying with TAS 405 are required at these conditions. Curb Ramps:
- A. Curb ramps shall not exceed 8.3% (1:12) in the direction of pedestrian travel. B. Curb ramps flares (wings) shall not exceed 1:10.
- C. Minimum width of a curb ramp is 36".
- D. Top of the curb ramp must be 2% in all directions for an area 36" wide and 48" deep. E. When truncated domes are used, the truncated dome system shall extend the full width of the curb ramp and for a minimum depth of 24" at the bottom of the curb ramp.
- F. Returned curb ramps shall only be used where the adjacent surface on one or both sides of the curb ramp do not allow pedestrian travel such as but not limited to stop lights, stop signs and permanently mounted waste receptacles.
- 4. There shall be no changes in level greater than  $\frac{1}{4}$  on any accessible route or  $\frac{1}{2}$  with a 1:2 bevel.
- 5. Decomposed granite surfaces, or similar Engineer-approved surfaces shall be compacted tight and maintained by the Owner at all times.
- 6. Provide directional signage using the international symbol of accessibility when not all routes are accessible. Signage shall be placed at the beginning of the route to avoid a patron from proceeding on a non-accessible route.
- 7. Verify that no plantings or other site elements on circulation paths would be protruding objects based on TAS 307 (protrudes more 4" and is higher than 27" from the surface and less than 80" from the surface).

Contractor shall notify the Engineer before proceeding with any Work, which is in conflict with the Texas Accessibility Standards. Contractor is financially responsible for proceeding with any Work without written direction on any clarification from the Engineer.

#### GENERAL CONSTRUCTION NOTES

- Prior to beginning construction, the Owner or his authorized representative, shall convene a Pre-Construction Conference between the City of Georgetown, Engineer, Contractor, County Engineer (if applicable), Texas Commission on Environmental Quality Field Office, and any other affected parties. Notify all such parties at least 48 hours prior to the time of the conference and 48 hours prior to beginning construction.
- Any existing utilities, pavement, curbs, and/or sidewalks damaged or removed shall be repaired by the Contractor at his expense before acceptance of the project.
- The location of any existing water, wastewater lines or other utilities shall be verified by the City of Georgetown & other utility providers prior to construction.
- 4. Manhole frames, covers, water valve covers, etc., shall be raised to finished pavement grade at the Contractor's expense by a qualified contractor with City inspection. All utility adjustments shall be completed prior to final paving construction.
- Steger Bizzell has endeavored to design these plans compliant with ADA/TDLR and other accessibility requirements. However, the contractor shall not be relieved of any responsibility for constructing these improvements compliant with all applicable accessibility standards. If the contractor notices any discrepancies between these plans and accessibility laws/rules, he is to stop work in the area of conflict and notify Steger Bizzell immediately for a resolution and/or revision to these plans. Steger Bizzell shall not be held responsible for constructing this site compliant with accessibility laws/rules regardless of what is shown in these plans.
- Topography based upon mapping, dated August 8, 2016 by Texas Land Surveying. The contractor shall notify the design engineer in writing of any discrepancies discovered during construction prior to proceeding.
- All work within the Ronald Reagan Boulevard right-of-way shall be governed by the TxDOT Standard Specifications for Construction of Highways, Streets and Bridges adopted on November 1, 2014 and all applicable special provisions and special specifications.

# TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

- 1. This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. Construction for public water systems must always, at a minimum, meet TCEQ's "Rules and Regulations for Public Water Systems
- 2. An appointed engineer shall notify in writing the local TCEQ's Regional Office when construction will start. Please keep in mind that upon completion of the water works project, the engineer or owner shall notify the commission's Water Supply Division, in writing, as to its completion and attest to the fact that the work has been completed essentially according to the plans and change orders on file with the commission as required in 30 TAC §290.39(h)(3).
- 3. All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI, as required by 30 TAC §290.44(a)(1).
- 4. Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less, as required by 30 TAC §290.44(a)(2)
- 5. No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply, as required by 30 TAC §290.44(a)(3).
- 6. Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface, as required by 30 TAC §290.44(a)(4).
- 7. Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.
  - The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-605 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;
  - $Q = L x D x P^{1/2}$
  - 148.000
  - Q = the quantity of makeup water in gallons per hour,
  - L = the length of the pipe section being tested, in feet, D = the nominal diameter of the pipe in inches, and
  - P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
  - The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;
  - $L = S \times D \times P^{1/2}$
  - 148.000
  - L = the quantity of makeup water in gallons per hour,
  - S = the length of the pipe section being tested, in feet, D = the nominal diameter of the pipe in inches, and
  - P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
- 8. The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent.
- 9. The system must be designed to maintain a minimum pressure of 35 psi at all points within the distribution network at flow rates of at least 1.5 gallons per minute per connection. When the system is intended to provide firefighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions as required by 30 TAC §290.44(d).
- 10. The contractor shall install appropriate air release devices in the distribution system at all points where topography or other factors may create air locks in the lines. All vent openings to the atmosphere shall be covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent as required by 30 TAC §290.44(d)(1).
- 11. Pursuant to 30 TAC §290.44(d)(4), accurate water meters shall be provided. Service connections and meter locations should be shown on the plans.
- 12. Pursuant to 30 TAC §290.44(d)(5), sufficient valves and blowoffs to make repairs. The engineering report shall establish criteria for this design. 13. Pursuant to 30 TAC §290.44(d)(6), the system shall be designed to afford
- effective circulation of water with a minimum of dead ends. All dead-end mains shall be provided with acceptable flush valves and discharge piping. All dead-end lines less than two inches in diameter will not require flush valves if they end at a customer service. Where dead ends are necessary as a stage in the growth of the system, they shall be located and arranged to ultimately connect the ends to provide circulation.
- 14. The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes and septic tank drainfields. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet 30 TAC §290.44(e)(1-4) of the current rules.
- 15. Pursuant to 30 TAC §290.44(e)(5), the separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at

	NO.	REVISION	BY	DATE	
WARNING! There are existing water pipelines, underground telephone					EJH, TG, NN DESIGNED BY:
cables and other above and below ground utilities in the vicinity of this project. The contractor shall contact all appropriate utility companies prior to any construction in the					EJH, SJT, TG, NN DRAWN BY:
area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer, who shall revise the design as necessary.					CHECKED BY:

five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.

- 16. Pursuant to 30 TAC §290.44(e)(6), fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction.
- 17. Pursuant to 30 TAC §290.44(e)(7), suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line.
- 18. Pursuant to 30 TAC §290.44(e)(8), waterlines shall not be installed closer than ten feet to septic tank drainfields.
- 19. Pursuant to 30 TAC §290.44(f)(1), the contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation.
- 20. Pursuant to 30 TAC §290.44(f)(2), when waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the water main shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested.
- 21. The contractor shall disinfect the new water mains in accordance with AWWA Standard C-651 and then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed water line will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer, in accordance with 30 TAC §290.44(f)(3).

# **CITY OF GEORGETOWN GENERAL NOTES**

- 1. These construction plans were prepared, sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes. 2. This project is subject to all City Standard Specifications and Details in effect at the
- time of submittal of the project to the City. 3. The site construction plans shall meet all requirements of the approved site plan.
- 4. Wastewater mains and service lines shall be SDR 26 PVC.
- 5. Wastewater mains shall be installed without horizontal or vertical bends.
- Maximum distance between wastewater manholes is 500 feet. 7. Wastewater mains shall be low pressure air tested and mandrel tested by the
- contractor according to the City of Georgetown and TCEQ requirements.
- 8. Wastewater manholes shall be vacuum tested and coated by the contractor according to City of Georgetown and TCEQ requirements. 9. Wastewater mains shall be camera tested by the contractor and submitted to the City
- on DVD format prior to paving the streets. 10. Private water system fire lines shall be tested by the contractor to 200 psi for 2 hours.
- 11. Private water system fire lines shall be ductile iron piping from the water main to the building sprinkler system, and 200 psi C900 PVC for all others.
- 12. Public water system mains shall be 150 psi C900 PVC and tested by the contractor at 150 psi for 4 hours.
- 13. All bends and changes in direction on water mains shall be restrained and thrust blocked. 14. Long fire hydrant leads shall be restrained.
- 15. All water lines are to be bacteria tested by the contractor according to the City standards and specifications.
- 16. Water and Sewer main crossings shall meet all requirements of the TCEQ and the
- 17. Flexible base material for public streets shall be TXDOT Type A Grade 1. 18. Hot mix asphaltic concrete pavement shall be Type D unless otherwise specified and shall be a minimum of 2 inches thick on public streets and roadways.
- 19. All sidewalk ramps and sidewalks not intended to be constructed with the individual houses shall be installed with the public infrastructure.
- 20. A maintenance bond is required to be submitted to the City prior to acceptance of the public improvements. This bond shall be established for 2 years in the amount of 10% of the cost of the public improvements and shall follow the City format.
- 21. Record drawings of the public improvements shall be submitted to the City by the design engineer prior to acceptance of the project. These drawings shall be TIFF or PDF disk (300 dpi).
- 22. All electrical distribution lines and individual services shall be installed underground. If overhead lines existed prior to underground installation, such poles, guy wires and related structures shall be removed following construction of the underground
- infrastructure 23. All electric and communication infrastructure shall comply with UDC section 13.06

# PERMANENT EROSION CONTROL NOTES

1. All disturbed areas shall be restored as noted below:

- a. A minimum of four inches of imported sandy loam topsoil or approved equal shall be placed in all drainage channels (except rock) and on all cleared areas. b. Grass areas may be sodded, plugged, sprigged or seeded except that solid sod shall be
- used in swales or other areas subject to erosion. The seeding for permanent erosion control shall be applied over areas disturbed by
- construction as follows, unless specified elsewhere: i. From September 15 to March 1, seeding shall be with a combination of 1 pound per 1,000 square feet of unhulled Bermuda and 7 pounds per 1,000 square feet of Winter Rye with a purity of 95% with 90% germination.
- ii.From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 3 pounds per 1,000 square feet with a purity of 95% with 85% germination.
- c. Fertilizer shall be slow release granular or pelleted type and shall have an analysis of 15-15-15 and shall be applied at the rate of 23 pounds per acre once at the time of planting and again once during the time of establishment.
- d. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. The planted area shall be irrigated or sprinkled in a manner that will not erode the top soil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of 1/2 inch or more shall postpone the watering schedule for one week.
- e. Mulch type used shall be Mulch, applied at a rate of 1,500 pounds per acre. 2. Disturbed areas within areas to become public shall be re-vegetated to the City of Georgetown requirements. See section G7 of the City of Georgetown Specifications.



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# WILLIAMSON COUNTY CONSTRUCTION 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 Engineer.
- 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 pavements are to be designed by a Registered Professional Engineer. The design shall be based on a 20-year design life and in conjunction with recommendations based upon a soils report of 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. The soils report and pavement design shall be submitted to the County Engineer for review. The pavement design must be approved by the County Engineer prior to or concurrently with 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 plasticity index, pH, sulfate content, and maximum density.

# 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 PI is 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 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, who 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 the County Engineer.

# 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 1, Type A Grade 2, or as approved by the County Engineer.
- 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 all base test samples shall be determined by the County Engineer.
- 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. The mix design shall be submitted to the County Engineer for approval prior to placement of the material. 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-F, Asphalt Content TEX-210-F, Hveem Stability TEX-208-F, 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.
- B7.2 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.

# B9 - Concrete - General

- 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.



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY CONTRIBUTING ZONE PLAN **GENERAL CONSTRUCTION NOTES**

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

- 1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
  - the name of the approved project;
  - the activity start date; and - the contact information of the prime contractor.
- All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on-site.
- 3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
- 4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. 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.
- 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.
- 6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.
- 7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
- All excavated material that will be stored on-site must have proper E&S controls.
- 9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14<sup>th</sup> day of inactivity. If activity will resume prior to the 21<sup>st</sup> day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14<sup>th</sup> day, stabilization measures shall be initiated as soon as possible
- 10. The following records should be maintained and made available to the TCEQ upon reauest: - 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.
- 11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the followina:
- any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
- B. any change in the nature or character of the regulated activity from that which was originally approved;
- C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or D. any development of land previously identified as undeveloped in the
- approved
- contributing zone plan.

Austin Regional Office 12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone(512) 339-2929 Fax (512) 339-3795

# TEMPORARY EROSION CONTROL NOTES

- 1. The Contractor shall install erosion/sedimentation controls and tree protective fencing prior to any site preparation work (clearing grubbing or excavation).
- 2. The placement of erosion/sedimentation controls shall be in accordance with the **EROSION & SEDIMENTATION CONTROL PLAN**
- 3. Any significant variation in materials or locations of controls or fences from those shown on the approved plans must be approved by the City Engineer.
- 4. The Contractor is required to inspect all controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
- Prior to final acceptance, haul roads and waterway crossings constructed for temporary Contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.
- Field revisions to the EROSION & SEDIMENTATION CONTROL PLAN required by the Engineer or field inspector with the Texas Commission may be on Environmental Quality (TCEQ) during the course of construction to correct control inadequacies. Major revisions must be approved by the (TCEQ).
- 7. Add feature information upon receipt of Geologic Assessment.

GENERAL NOTES (1 OF 2) REESE WAY AND 24 INCH WATERLINE City of Georgetown Williamson County, Texas

Project Number: 22223 AS NOTED SCALE: Project Path: P\22000-22999\22223 Project Name: Parmer Ranch Drawing Path: CAD\Plans Xref DWG FILE eet Number: 02 of 57 sheets

2022-37-CON

- 1. This Organized Sewage Collection System must be designed and constructed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules 30 Texas Administrative Code (TAC) §§213.5(c) and 217.51 - 217.70 and 30 TAC Chapter 217, Subchapter D, and the City of Georgetown Standard Specifications.
- 2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the Sewage Collection System plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.
- 3. No later than 48 hours prior to commencing any regulated activity, the applicant or his agent must notify the Austin Regional Office, in writing, of the date on which the regulated activity will begin
- 4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
- All temporary erosion and sedimentation controls must be installed prior to construction, must be maintained during construction, and must be removed when sufficient vegetation is established to control the erosion and sedimentation and the construction area is stabilized.
- 6. The sewer line trench details showing the cross section with the dimensions, pipe placement, and backfill instructions are included on Plan Sheet <u>NA</u> of these plans. All sewer pipes joints must meet the requirements in 30 TAC §217.53(c) an 217.65.
- 7. Gravity lines must have a <u>SDR-26</u> or less. Pressurized sewer systems must have pipe with a minimum working pressure rating of 150 psi.

The ASTM. ANSI. or AWWA specification numbers for the pipe(s) and joints are: ASTM D 3034, F679, AWWAC900, CL150.

The pipe material, the pressure classes, and the SDR and/or DR designations are: PVC SDR-26, PS-115, DR-18.

- 8. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the Texas Commission on Environmental Quality of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing within two working days. The applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.
- 9. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of six (6) inches.
- 10. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.
- 11. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet NA.

It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.

- 12. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
- 13. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe

manufacturer: NOT APPLICABLE

If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: NOT APPLICABLE.

Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

14. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet <u>NA</u>. (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet <u>NA</u> and marked after backfilling as shown in the detail on Plan Sheet NA.

- 15. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.
- 16. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC 213.5(c)(3)(E).
- 17. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines

have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:

- 17.a. For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements: 17.a.1. Low Pressure Air Test.
- 17.a.1.A. A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph. 17.a.1.B. For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this
- subsection. 17.a.1.B.a. A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the 17.a.1.B.b. Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed

from the following equation: Equation C.3  $T = 0.085 \times D \times K$ 

Where:

- T = time for pressure to drop 1.0 pound per square
- inch gauge in seconds  $K = 0.000419 \times D \times L$ , but not less than 1.0
- D = average inside pipe diameter in inches
- L = length of line of same size being tested, in feet Q = rate of loss, 0.0015 cubic feet per minute per
  - square foot internal surface

17.b.1.B. 17.b.1.B.a.

- 17.b.1.B.b.
- 17.b.1.B.c.
- 17.b.1.B.d.

17.b.1.C.

	NO.	REVISION	BY	DATE	
WARNING! There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The contractor shall contact all appropriate utility companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer, who shall revise the design as necessary.					EJH, TO DESIGI EJH, S. DRAWI CHECK

EJH, TG, NN	
DESIGNED BY:	
EJH, SJT, TG, NN	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

File Name: P:\22000-22999\22223 Joe Owen NW WMCO MUD#2\10-Reese Way\CAD\Plans\03 GENERAL NOTES (2 OF 2).dwg By: Erik Haberman Date: 3/22/2023 2:35 PM

# Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table

C.3:

PIPE DIAMETER (IN)	MINIMUM TIME (SEC)	MAXIMUM LENGTH FOR MINIMUM TIME (FT)	TIME FOR LONGER LENGTH (SEC/FT)
6	340	398	0.8550
8	454	298	1.5200
10	567	239	2.3740
12	680	199	3.4190
15	850	159	5.3420
18	1020	133	7.6930
21	1190	114	10.4710
24	1360	100	13.6760
27	1530	88	17.3090
30	1700	80	21.3690
33	1870	72	25.8560

17.a.1.C. An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.

- 17.a.1.D. If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
- 17.a.1.E. Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.

17.a.1.F. A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

17.a.2. Infiltration/Exfiltration Test.

- 17.a.2.A. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole. 17.a.2.B. An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the
- groundwater level. 17.a.2.C. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at
- a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater. 17.a.2.D. For construction within a 25-year flood plain, the
  - infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subpargraph (C) of this paragraph.
- 17.a.2.E. If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

17.b. If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:

17.b.1. For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.

# 17.b.1.A. Mandrel Sizing.

17.b.1.A.a. A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix. 17.b.1.A.b. If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled 17.b.1.A.c. All dimensions must meet the appropriate

#### standard. Mandrel Design. A rigid mandrel must be constructed of a

- metal or a rigid plastic material that can withstand 200 psi without being deformed. A mandrel must have nine or more odd number of runners or legs.
- A barrel section length must equal at least 75% of the inside diameter of a pipe. Each size mandrel must use a separate proving ring.
- Method Options.
- An adjustable or flexible mandrel is 17.b.1.C.a. prohibited.



- 17.b.1.C.b. A test may not use television inspection as a substitute for a deflection test. 17.b.1.C.c. If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis. 17.b.2. For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection. 17.b.3. A deflection test method must be accurate to within plus or minus 0.2% deflection. 17.b.4. An owner shall not conduct a deflection test until at least 30 days after the final backfill. 17.b.5. Gravity collection system pipe deflection must not exceed five percent (5%).
- 17.b.6. If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.
- 18. All manholes must be tested to meet or exceed the requirements of 30 TAC §217 58.
- 19. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city Inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system

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

# MANHOLE TESTING

All manholes must pass a leakage test. An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.

# HYDROSTATIC TESTING

The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour. To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water and maintain the test for at least one hour. A test for concrete manholes may use a 24 hour wetting period before testing to allow saturation of the concrete.

# VACUUM TESTING

To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole. No grout must be placed in horizontal joints before testing. Stub outs, manhole boots and pipe plugs must be secured to prevent movement while a vacuum is drawn. An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole. A test head must be placed at the inside of the top of a cone section and the seal inflated in accordance with the manufacturer's recommendations. There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test. A test does not begin until after the vacuum pump is off. A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is a least 9.0 inches of mercury.

# NORTHWEST WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 2 NOTES:

The District Engineer, Jones-Heroy & Associates, Inc. (Ken Heroy, Ph:512/989-2200) shall be contacted 48 hours prior to:

- Pre-construction meetings; Beginning each phase of construction; ii)
- iii) Testing; and, iv) Final walk-through of facilities.

# ADDITIONAL WASTEWATER NOTES

- 1. If a conflict exists between the various documents, the documents will take precedence in the following order: a. Municipal Utility Specifications
- b. Change Orders
- c. Addenda Issue During Bidding
- d. Construction Plans e. Project Specifications
- 2. The following pipe diameters, pipe material and national standard specifications are proposed for this project:

PIPE DIAMETER (IN)	LINEAR FEET (FT)	PIPE MATERIAL	NATIONAL STANDARD FOR PIPE MATERIAL	NATIONAL STANDARD FOR PIPE JOINTS
8	0	PVC SDR-26	ASTM D 3034	ASTM D 3212
8	0	PVC DR-18	ASTM D 3034	ASTM D 3212
12	0	PVC SDR-26	ASTM D 3034	ASTM D 3212

- 3. Watertight, size on size resilient connectors conforming to ASTM C 923 must be used for connecting pipe to manholes.
- 4. The bedding class for each diameter of flexible pipe and each flexible pipe material is as follows

PIPE DIAMETER (IN)	PIPE MATERIAL	BEDDING CLASS
8	PVC SDR-26/DR-18	1B
12	PVC SDR-26/DR-18	1B
15	PVC SDR-26/DR-18	1B
18	PVC PS-115/DR-18	1B
21	PVC PS-115/DR-18	1B

- 5. Brick manhole construction is not allowed. Use of brick for adjusting manhole overs to grade is also prohibited.
- 6. All manholes shall be of precast concrete construction.
- 7. The structural integrity of the collection line due to high soil P.I.'s will require the bedding around the pipe to be 6" minimum below the pipe, 6" minimum on each side of the pipe, and 12" minimum above the pipe.
- 8. If faults, caverns, or subsidence are discovered during construction, construction shall be halted to allow the features to be inspected by the design engineer or a geological or geotechnical engineer. Based on this inspection, revisions approval to the design may be required.
- 9. The trench walls shall be vertical to at least one foot above the pipe.
- 10. The trench backfill shall be free of stones greater than 6 inches in diameter and free of organic or any other unstable material.
- 11. Manholes shown on the plans with sealed and gasketed covers are provided as protection against inflow for those manholes which lie 1) within a 100 year flood plain, 2) lie with a drainageway, 3) lie within a street subject to carrying drainage flows, and 4) additional locations as determined necessary by the Engineer.
- 12. No drop connections are proposed in these plans.
- 13. The minimum allowable tensile strength and cell class for each flexible pipe shall be as follows:

PIPE MATERIAL	TENSILE STRENGTH	CEI (PV
SDR-26	7,000	12
PS-115	7,000	12

- 14. All gravity lines utilizing flexible pipe must be tested for deflection by pulling a rigid mandrel through the installed pipe. The test must be conducted at least 30 days after placement and compaction of final backfill. No pipe shall exceed a deflection of 5 rigid mandrel shall be used to measure deflection. The test must be performed without mechanical pulling devices. The mandrel's minimum outside diameter is 95 inside diameter. The mandrel must have an odd number of runners, totaling nine or more. The barrel section of the mandrel must have a length at least 75 inside diameter. A TV test cannot substitute for the deflection
- 15. A leakage test is required for all gravity lines. For line that is not horizontally curved, a hydrostatic test and/or a low pressure air test must be performed on all proposed gravity sanitary sewer collection piping. These tests must comply with Section 217.57(a) of the TCEQ's rules. The contractor shall have the option of utilizing either a hydrostatic test or a low pressure air test.
- 16. Manholes must be tested for leakage. Manholes will be tested with a hydrostatic test, or with a vacuum test, Contractor's Option.
- 17. The hydrostatic manhole test shall comply with the test requirements detailed in Section 217.58(b)(1) of the TCEQ's rules.
- 18. Each manhole shall be tested immediately after assembly and prior to backfilling. Manholes which have been backfilled shall either be excavated to expose the entire exterior prior to vacuum testing or the manhole shall be tested for leakage by means of a hydrostatic test.
- 19. All lift holes and exterior joints shall be plugged with an approved non-shrink grout.
- 20. No grout shall be placed in horizontal joints before testing.
- 21. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole.



ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626 TEXAS REGISTERED ENGINEERING FIRM F-181 TBPLS FIRM No.10003700 STEGERBIZZELL.COM 512.930.9412 SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

STEGER BIZZELL

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- 22. Stubouts, manhole boots and pipe plugs shall be secured to prevent movement while the vacuum is drawn.
- 23. A minimum 60-inch/lb torque wrench shall be used to tighten the external clamps that secure the test cover to the top of the manhole.
- 24. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.
- 25. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches of mercury. The manhole shall pass if the time is greater than 2 minutes. If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. If the manhole fails a second time, repairs should again be made and the manhole shall be tested by means of a hydrostatic test which complies with Section 217.58(b)(1) of the TCEQ's rules. If any manhole fails the hydrostatic test, after failing the vacuum test twice, the contractor should consider replacing that manhole. If the contractor chooses to attempt to repair that manhole, the manhole must be retested by means of the hydrostatic test outlined in Section 217.58(b)(1) of the TCEQ's rules, until it passes.
- 26. Inspection must be provided during critical phases of construction by a qualified inspector under the direction of a P.E. Critical phases of construction are deemed at a minimum to include testing of pipe and manholes for leakage, testing of flexible pipe for installed deflection, and any other as directed by the City. The City and design engineer shall provide inspection as appropriate.
- 27. TCEQ approval letters for plans and specifications review contain the requirement that once the project is completed, a P.E. registered in the state of Texas must certify that the construction was performed substantially in accordance with the approved plans and specifications. If flexible pipe was installed, a P.E. must also certify that all pipe was subjected to and passed the required deflection test. The design engineer, with concurrence of the City, will certify the installation.
- 28. The project plans and specifications must ensure that the pipe installation will adhere to the minimum separation distances allowed by 217.53 (d), TCEQ's rules.

Separation Distances.

The following rules apply to separation distances between potable water and wastewater treatment plants, and waterlines and sanitary sewers.

- (a) Water line/new sewer line separation. When new sanitary sewers are installed, they shall be installed no closer to waterlines than nine feet in all directions. Sewers that parallel waterlines must be installed in separate trenches. Where the nine foot separation distance cannot be achieved, the following guidelines will apply: (b) SDF
- (1) Where a sanitary sewer parallels a waterline, the sewer shall be constructed of cast iron, ductile iron or PVC meeting ASTM specifications with a pressure rating for both the pipe and joints of 150 psi. The vertical separation shall be a minimum of two feet between outside diameters and the horizontal separation shall be a minimum of four feet between outside diameters. The sewer shall be located below the waterline.
- (2) Where a sanitary sewer crosses a waterline and the sewer is constructed of cast iron, ductile iron or PVC with a minimum pressure rating of 150 psi, an absolute minimum distance of 6 inches between outside diameters shall be maintained. In addition the sewer shall be located below the waterline where possible and one length of the sewer pipe must be centered on the waterline.
- (3) Where a sewer crosses under a waterline and the sewer is con-structed of ABS truss pipe, similar semi-rigid plastic composite pipe, clay pipe or concrete pipe with gasketed joints, a minimum two foot separation distance shall be maintained. The initial backfill shall be cement stabilized sand (two or more bags of cement per cubic yard of sand) for all sections of sewer within nine feet of the waterline. This initial backfill shall be from one quarter diameter below the centerline of the pipe to one pipe diameter (but not less than 12 inches) above the top of the pipe.
- (4) Where a sewer crosses over a waterline all portions of the sewer within nine feet of the waterline shall be constructed of cast iron, ductile iron, or PVC pipe with a pressure rating of at least 150 psi using appropriate adapters. In lieu of this procedure the new conveyance may be encased in a joint of 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at 5 feet intervals with spacers or be filled to the springline with washed sand. The encasement pipe should be centered on the crossing and both ends sealed with cement grout or manufactured seal.
- b) Water line/manhole separation. Unless sanitary sewer manholes and the connecting sewer can be made watertight and tested for no leakage, they must be installed so as to provide a minimum of nine feet of horizontal clearance from an existing or proposed waterline. Where the nine foot separation distance cannot be achieved, a carrier pipe as des- cribed in subsection (a)(4) of this section may be used where appropriate.

The separation distance between any unknown water lines which are discovered during the installation phase of the project, and, the gravity sanitary sewer pipe which will be installed, shall be sufficient to comply with the minimum separation distances allowed by 217.53(d) of the TCEQ's rules as stated above.

- 29. AN EROSION AND SEDIMENTATION CONTROL PLAN is included with these plans. These provisions are intended to control erosion and sedimentation due to runoff during construction. These provisions must be installed prior to any other construction activities.
- 30. It is the intent of this project that portable ladders be used to access manholes during construction by the Contractor as well as for maintenance purposes after construction is complete by the City.
- 31. It is the intent of this project that personal gas detectors are required for wear by all personnel whose jobs require entering enclosed spaces (such as manholes and lift stations) capable of accumulations of hydrogen sulfide or other harmful gases. It shall be the responsibility of the Contractor to ensure these detectors are provided to the appropriate personnel during the construction of this project. It shall be the responsibility of the City to ensure these detectors are provided to the appropriate personnel during the maintenance of this project after construction.

GENERAL NOTES (2 OF 2)
AY AND 24 INCH WATERLINE
City of Georgetown
/illiamson County, Texas

Project Number: 22223 SCALE: Project Path: Project Name: Drawing Path:

AS NOTED P\22000-22999\22223 Parmer Ranch CAD\Plans

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PUMP

CHARGE HOSE

Minimum Bag Size - 6' x 6'

Sediment Dewatering Bag

FILTERED WATER

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WARNING!					EJH, TG, NN
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the					
vicinity of this project. The contractor shall contact all					EJH, SJT, TG, NN DRAWN BY:
area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who					
shall revise the design as necessary.					CHECKED BY:

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EROSION & SEDIMENTATION DETAILS REESE WAY AND 24 INCH WATERLINE City of Georgetown Williamson County, Texas

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22223 AS NOTED P\22000-22999\22223 Parmer Ranch CAD\Plans

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26. E-Mail Address:	jo	e@owenhold	ings.co	m							
27. Telephone Number     28. Extension or Code     29. Fax Number (if applicable)											
(972) 866-0300 N/A (N/A) -											
30. Primary SIC Code	30. Primary SIC Code (4 digits)       31. Secondary SIC Code (4 digits)       32. Primary NAICS Code (5 or 6 digits)       33. Secondary NAICS Code (5 or 6 digits)										
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Land Developme	nt an	d Residential	Homes	1							
Q	uestio	ns 34 – 37 addre:	ss geogr	aphic locatior	n. Please refer	r to the	e instr	uctions for	applica	bility.	
35. Description to Physical Location:	We TX	st of the inters	section	of Ronald	Reagan Bo	uleva	ard an	id Ranch	Road	2338 -	Georgetown,
36. Nearest City				County			State			Nearest	ZIP Code
Georgetown				Williamson	n		ΤX			78633	
37. Latitude (N) In D	ecima	: 30.745789	)		38. Longitu	ude (N	/) In	Decimal:	-97.7	97061	
Degrees	Minutes	;	Seconds		Degrees			Minutes		Sec	conds
30	44		29.50		-97	-97 47				49.41	
<b>39. TCEQ Programs an</b> updates may not be made. If	<b>d ID N</b> your Prog	umbers Check all P gram is not listed, chec	rograms an k other and	d write in the perm write it in. See th	its/registration num e Core Data Form	nbers th instructi	at will be ions for a	affected by th additional guida	e updates ance.	submitted o	n this form or the
Dam Safety		Districts		Edwards A	Aquifer	Industrial Hazardous Waste			Waste	🗌 Muni	cipal Solid Waste

		CZP Exception			
New Source Review – Air	OSSF OSSF	Petroleum Storage Tank	🗌 PWS	Sludge	
Stormwater	🔲 Title V – Air	Tires	Used Oil	Utilities	
Voluntary Cleanup	Waste Water	Wastewater Agriculture	Water Rights	Other:	

# **SECTION IV: Preparer Information**

40. Name: Steger Bizzell - Bryan E. Moore, P.E.					Principal
42. Telephon	e Number	43. Ext./Code	45. E-Mail A	Address	
(512)930	-9412	N/A	(N/A) -	bmoore@	stegerbizzell.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 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Steger Bizzell	Job Title:	Princip	al	
Name(In Print) :	Mr. Bryan E. Moore, P.E.			Phone:	(512)930-9412
Signature:	NEM-			Date:	7/31/2023